

PREVIDIA | ULTRA

Addressable analogue control panel for fire detection, alarm and evacuation systems



Modular control panel for constructing fire detection, alarm and extinguishing systems, combined with "PA-VA" systems for the management of audio entertainment (Public Address systems) and voice evacuation (Voice Alarm/EVAC systems).

Thanks to its modular architecture, this control panel can be configured in accordance with the functions and dimensions required as follows. Each Previdia Ultra control panel can be made up of a single cabinet or of multiple cabinets (maximum 4 add-on PRCAB+ cabinets) joined together to form a single unit capable of housing up to 32 (8 per cabinet) IFM and IFAM modules (see list of functional modules below) and 8 (2 per cabinet) FPM or FPAM front panel modules (see list of front panel modules below). The IFM and IFAM modules, which connect to

the CANDRIVE+ bar inside the cabinet, are "hot swap" modules, therefore, can be replaced or added without shutting down the system, thus providing fast and secure intervention with no service interruption.

The control panels can be used individually or interconnected in a network. The network connection can be made via Hornet+ technology (BUS RS485), IDANET technology (Ethernet cable or fiber), via TCP-IP connection or by using a combination of these. Thanks to a distributed-intelligence structure which uses a microprocessor inside each module, redundant microprocessors in the main unit and the possibility of having a backup CPU, Previdia Ultra guarantees unmatched reliability.

Fire detection



The Previdia system began life as a fire detection system and still maintains fire detection as its main function. All the various models are capable of managing up to 16 loops per control panel, each of which is capable of supporting up to 240 devices selectable from the product lineup of the Inim offer: smoke detectors, heat detectors, combined heat and smoke detectors, addressable call points, alarm signalers, single or multiple input/output modules, modules with supervised outputs, relays or relays for mains voltages.

Voice EVAC



The Previdia Ultra control panel includes EN54-16 certified voice evacuation functions. Each cabinet houses a 1000W power supply and can contain up to 8 amplifiers of 250W each. The control panel allows reproduction of pre-recorded messages in the various evacuation zones (up to 1000 zones managed) and the broadcasting of live announcements via the on-board PTT microphones or via remote emergency microphone bases. The system architecture, which is based on latest generation DSP processors, is capable of digitizing external audio sources, reproducing different audios on the various zones, adjusting the volume and equalization of each source and each amplifier.

Extinguishment



The control panel is certified according to the EN12094-1 standard and is capable of managing up to 24 gas extinguishing channels.

Alarm signalling



The visual/audible alarm signalers of the ES1000 and ES2000 series can be connected directly to the loops. The vast product lineup offers devices that mount to walls, ceilings or are included in the detector bases. The different models can manage audible signals with tones certified according to EN54-3, visual signals certified according to EN54-23, audible warnings via pre-recorded messages.

Public address



The audio broadcasting system, in non-emergency conditions, can be used for playing music (connectable via various analog inputs or from digital or web sources via the IASS server), pre-recorded announcements activatable by timers or external conditions and voice announcements via microphone bases. Different audios can be sent to each zone, the volume and equalization of each source and each speaker line can be adjusted thanks to digital DSP processing.

Emergency telephones



The system can manage a series of emergency telephones, to be installed in quiet places, through which the building occupants can contact the central console and communicate with the rescue personnel. Each control panel can manage up to 16 emergency telephone lines.

Previdia Ultra

Emergency lighting



The loops of Previdia control panels support the connection of Inim Electronics emergency lighting devices (security lights and escape route signs). These devices are equipped with internal batteries as well as connected to the mains network, they can be activated or dimmed to suit requirements, perform periodic function and battery life tests as specified in the schedule set in the control panel and also report to the system the test results, any faults and the detected battery life. All data is collected, stored and provided in reports compliant with the regulations, accessible directly from the Cloud.

Video verification



Previdia control panels are capable of interacting with building video surveillance systems, by simply connecting the system to the same LAN network these control panels will be able to, via ONVIF protocol, manoeuvre the cameras and take shots of the exact point that triggered the alarm. The images are shown on the control panel displays, on remote keypads (repeaters), on the Cloud web page accessible from any PC and on smartphones via the Inim Fire App.

Networking

The Previdia range of control panels can be networked together using different technologies, these different technologies can coexist within the same system:

IDANET



Allows network connection of Previdia Ultra control panels, based on a token ring, each section can be made using a CAT5 ethernet cable (up to 100m) or optical fiber (by means of an appropriate SFP module depending on the type of fiber used). The IDANET network, in addition to sharing all the information with the various control panels, which effectively makes it into a single system, is also capable of sharing up to 20 audio tracks, thus allowing sound sources to be conveyed from one node to another in the system.

TCP/IP

Each "cluster" created using IDANET or Hornet+ technology (or single control panel) can be connected via TCP-IP with up to a maximum of 20 other clusters. This type of networking makes it possible to take advantage of existing LAN networks in order to interconnect control panels with each other.

Inim Cloud Fire

All the Previdia series control panels can be connected to Inim Cloud Fire. The Cloud service applied to fire detection and alarm systems is completely free of charge. It allows two profiles, "installer" and "user", to remotely control their systems and overcomes all types of networking problems by making all the control panels reachable from any location. The Inim Cloud Fire provides video verification functions via IP cameras and event location and system management via topographic maps. Thanks to these features, the Web interface of the Cloud is configured as an actual Building Management System for the monitoring of an unlimited number of installations, points and zones involved in signalling, function buttons and customizable status icons. Additionally, the videoverification function allows instant real-time verification of the conditions in areas affected by signalling, thus ensuring secure, fast and effective management of alarms even from remote locations. Moreover, the Inim Cloud Fire

Gas detection



Inim Electronics gas detectors can be connected directly to the control panel loops. Available in IP55, ATEX or ATEX formats with touch display, they are based on sensitive elements of different technologies depending on the type of gas to be detected: semiconductor, catalytic, pellistor, electrochemical, infrared. Inim Electronics gas detectors are capable of detecting a long list of different gases and of reporting the detected value directly to the control panel, thus allowing different thresholds settings (3 different thresholds that can be individually programmed on each detector) and the integration of gas detection into the programmable logics.

Graphic maps

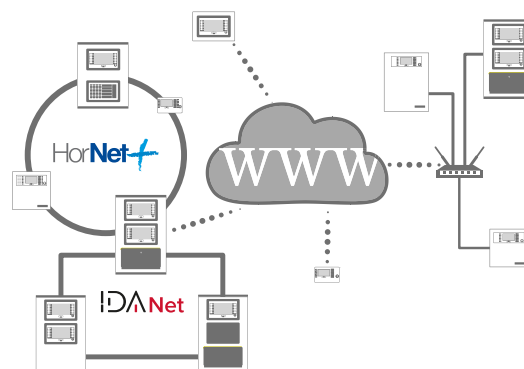


The information provided to the end user through the detailed texts entered when configuring the system can be accompanied by interactive graphic maps that allow immediate understanding and localization of the danger. The graphic maps are shown on the control panel displays, on the remote keypads (repeaters), on the web page of the Cloud accessible from any PC, on smartphones via the Inim Fire App.

Hornet+



Network connection technology for Previdia Ultra, Previdia Max and Previdia Compact control panels. Based on token ring architecture, each section is based on RS485 and must be made using a shielded twisted pair (Ethernet cable) up to a distance of 500m. Hornet+ technology allows the sharing of all the system information on a par with the IDANET network but not the audio tracks.

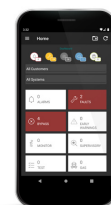


allows you to keep your systems log continuously updated, as required by law, in fact all the events recorded by the control panel (to which notes can be added and signed), such as maintenance, tests and any relevant events encountered by the system operators (entered manually) are saved automatically. Finally, the Inim Cloud Fire records in detail the tests performed on each individual detector and provides an archive of test reports which can be consulted both by the installer and the user. It automatically provides diagnostic reports capable of indicating whether all periodic maintenance operations on each individual system element have been carried out, thus allowing the installer to make a work plan and the user to keep check on system maintenance.



Inim Fire App

Inim Fire is the free App that you can download from the iOS and Android stores, aimed at both professionals (installers and maintenance technicians) and end users (installation managers, security supervisors, etc.), it allows you to manage all Previdia series control panels that are connected to the Inim Cloud Fire. Thanks to its simple, intuitive interface and the use of 'push notifications,' the Inim Fire App provides an instantly understandable overview of what is happening on all the systems you have access to.



Inim Audio System Server (IASS)

The IASS server adds highly advanced "entertainment" audio functions to the system. Through access via web or app by an unlimited number of users, each with their own access rights, the server maintains a TCP-IP connection with the Ultra control panels and allows reproduction on the various audio zones of: playlists consisting of audio files, TCP audio stream sources (such as web radio), audio tracks triggered by timers, voice announcements via smartphone, etc. All the functions made available by the IASS server are obviously stopped when an emergency condition activates, in order to free up the system for the voice evacuation functions.

Inim Audio Control App

IACAPP, in combination with the IASS server, allows operating activities on the audio zones pertaining to each user in order to: adjust volumes and equalizations, select and adjust the various physical sources available to the system, reproduce existing playlists or create new ones, reproduce TCP-IP streaming audio (web radio), send voice announcements from a smartphone, activate pre-recorded messages, etc. The user interface can be customized for each user thanks to widgets that allow instant recall of the most frequently used functions.

Optional Front Panel Modules (FPM) to be housed on the front panel (maximum 2 per cabinet, 8 per control panel)

FPMCPU

Main control panel for fire detection functions. To be connected to the CANDRIVE+ bar inside the metal cabinets and equipped with a graphic colour touchscreen. This device manages the control panel and co-ordinates the various function modules. A single control panel can house 2 of these units (a main unit and a secondary unit as backup).

- FPMCPU-L light-grey plastic
- FPMCPU-G dark-grey plastic



FPAMIAS

Main control panel for voice EVAC functions. To be connected to the CANDRIVE+ bar inside the metal cabinets and equipped with a graphic colour touchscreen. It deals with the management and coordination of the various function modules assigned to it. Each Previdia Ultra control panel can house only one of these units.

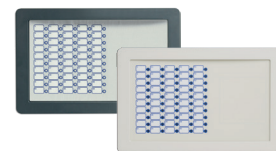
- FPAMIAS-L light-grey plastic
- FPAMIAS-G dark-grey plastic



FPAMIAS

Module equipped with 50 configurable tri-colour LEDs (green, yellow and red), it provides instant visual signals relating to the status of the various system elements (zones, points, etc.). Each control panel can manage up to a maximum of 7 FPMLLED modules (maximum two per cabinet).

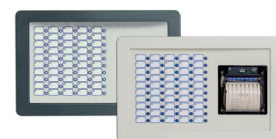
- FPMLLED-L light-grey plastic
- FPMLLED-G dark-grey plastic



FPMLEDPRN

Module equipped with 50 tri-colour LEDs as per the FPMLLED module and an 80mm printer. It provides real-time printouts of all system events. Mounts to the front plate and connects to the CAN DRIVE+ bar. Each control panel manages one FPMLEDPRN module only.

- FPMLEDPRN-L light-grey plastic
- FPMLEDPRN-G dark-grey plastic



FPMEXT

LED signalling module for fire extinguishment systems. If IFMEXT function modules are housed inside the control panel, it is mandatory to use one or more FPMEXT modules to visualize the status as indications separate from the display. Each FPMEXT module provides the signals from 5 IFMEXT extinction modules. Mounts to the front plate and connects to the CAN DRIVE+ bar.

- FPMEXT-L light-grey plastic
- FPMEXT-G dark-grey plastic



Previdia Ultra

FPMNUL

Blind module to be used to seal the apertures on the doors of the metal cabinet when certain functions are not required.

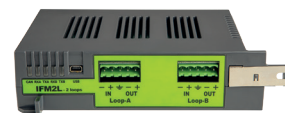
- FPMNUL-L light-grey plastic
- FPMNUL-G dark-grey plastic



IFM (Internal Fire Module) and IFAM (Internal Fire Audio Module) modules to be housed on the front panel (maximum 8 per cabinet, 32 per control panel)

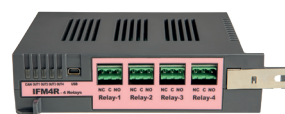
IFM2L

Module for the management of two loops. Each loop is capable of managing 240 devices. The module contains a step-up switching power-supply module for each Loop, capable of maintaining the operating voltage (during alarm and stand-by conditions) at the set values. Each control panel manages up to 8 IFM2L modules



IFMR

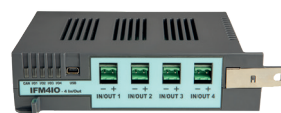
4 configurable relay module. Each relay supports a maximum load of 5A@MAX. 30V. Each control panel manages a maximum of 16 IFM4R



IFM4IO

4 power input/output module. Each of the 4 channels can be configured as:

- supervised output capable of supplying a maximum current of 1A@27.6V
- supervised input capable of activating warning, pre-alarm and alarm signals
- conventional zone capable of managing a line of conventional detectors, maximum 32 detectors
- 4-20mA input capable of reading 4-20mA detector signals; settable intervention thresholds. Each control panel can manage a maximum of 16 IFM4IO modules.



IFMDIAL

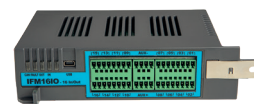
Remote dialer module communicates over the PSTN landline and GSM network, it is capable of sending voice calls resulting from on-board recorded messages and digital calls via the most widely used protocols (SIA, Contact ID, etc.). This module is also capable of sending SMS messages with detailed texts relating to the saved events. Each control panel manages one IFMDIAL module only.



IFM16IO

16 low-power Input/Outputs module. Each channel can be configured as:

- digital input (non supervised) activated with voltage present
 - digital output (non supervised) capable of supporting a maximum load of 100mA@30Vdc
- Each control panel is capable of managing up to 4 IFM16IO modules.



IFMNET

Module for the connection of two or more control panels in a Hornet+ network, up to a maximum of 48. This module provides two RS485 ports for connection to other control panels. The wiring is completed as closed ring. RS485 speed settable from 9600 to 512k baud, a 12V output is provided for the power supply to eventual RS485 fiber-optic converters. Each control panel manages one IFMNET module only. All the interconnected control panels in the network must be equipped with an IFMNET module.



IFMLAN

Advanced TCP-IP service management module. Allows a second control panel connection to the Ethernet network and provides the following services:

- web Server for system control, management and maintenance
- e-mails containing events details

- IP ONVIF camera interface for video verification
- remote communications via SIA-IP protocol
- BACnet protocol (subject to licence)
- ESPA444 protocol

Each control panel manages one IFMLAN module only.



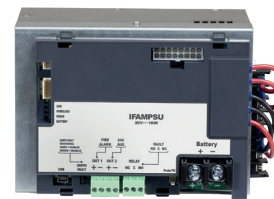
IFMEXT

Gas extinguishment-system management module Provides terminals for the management of devices which are commonly requested in this type of installation together with the adequate activation logic. The various functions available on the terminals can be replicated on devices connected to the loop (with the exception of the control of the electrovalve). Each control panel manages up to 24 IFMEXT modules. The modules must be associated with the FPMEXT signalling panel. Each FPMEXT module reports the visual signals of a maximum of 5 IFMEXT modules.



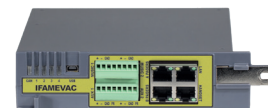
IFAMPSU

1000W switching power supply module. It connects to the mains power supply and supplies a maximum 38A current to the system. It houses a 3A battery-charger capable of maintaining under charge two 17Ah, 24Ah or 40Ah batteries. It has two supervised outputs and a configurable relay output (at factory default configured as Alarm output, AUX output and fault signalling relay). Accepts 230Vac or 115 Vac 50/60 Hz input voltage Only one power supply module can be housed inside each metal cabinet. Each control panel manages a maximum of 4 power supply modules (one for each eventual cabinet).



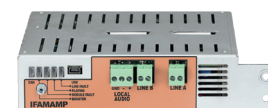
IFAMEVAC

Audio matrix module, manages the digital processing of all audio sources. It has 2 analog inputs for external sound sources (MUSIC1 and MUSIC 2), 2 analog inputs for external sound sources with priority request (AUX1 and AUX2), internal flash memory containing emergency messages and user-definable messages, SD card slot for user-defined audio files, 2 lines for standard or emergency microphone bases (max 64 per line). Connection to the Ethernet network for interaction with IASS and IAS-APP servers. Each control panel manages only one IFAMEVAC module.



IFAMAMP

250W audio amplifier module, it provides two lines for connecting speakers configurable in A/B mode or in loop mode, each line is protected separately against short circuit. The impedance of the speaker line is supervised by a high frequency tone. Includes an analogue input for an audio source with adjustable priority for the amplifier line only. Automatic management of any backup amplifier included in the cabinet. Each control panel manages a maximum of 30 IFAMAMP modules (maximum 8 for each cabinet).



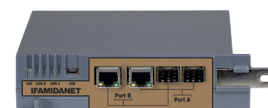
IFAMFFT

Module for managing emergency telephones, provides 4 lines for connecting emergency telephones (maximum 64 per line), by picking up one of the telephones connected to the lines, the conversation request is notified on the front panel, the conversation can be accepted by operating on the display and it is possible to create a chat with a maximum of 4 incoming calls. Each control panel manages up to 4 IFAMFFT modules.



IFAMIDANET

Module for the connection in IDANET network of Previdia Ultra control panels. Provides two RJ45 sockets for the connection via CAT5 Ethernet cable (for distances up to 100m) and two sockets for housing SFP modules for the fiber optic connection. It allows the connection of up to 48 control panels and can share, along with all the system information, up to a maximum of 20 audio tracks.



Accessories

PRCAB+

Add-on cabinet complete with door, CANDRIVE+ bar for the connection of function modules, battery shelves. The front door has two apertures into which two FPM modules can be inserted. The cabinet is supplied without the housing for the PTT microphone.

- PRCAB+: grey colour RAL7042
- PRCAB+R: red colour RAL3001



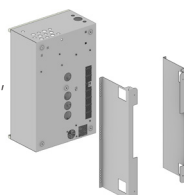
Microphone bases

Microphone bases, available in standard or emergency models, can be connected to the IFAMEVAC module via FTP CAT6 cable on the two dedicated lines. Refer to the reference technical documentation for further details.



PRCABRK+

Bracket for mounting the PRCAB+ cabinet to a 19' rack.



Speakers

A wide range of speakers is available all compatible with the 100V RMS lines of the IFAMAMP modules, certified EN54-24 for applications in voice evacuation systems. Refer to the reference technical documentation for further details.



IAS-ADAPT1000

Module for adapting and decoupling audio signals input into the Previdia Ultravox control panel (on analog inputs of the IFAMEVAC or IFAMAMP module). Input for 1VRMS, 70 VRMS, 100 VRMS signals. Filter for the 20KHZ included.



IAS-EOL1000

End of line for speaker lines with power less than 20W.

Previdia Ultra

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

Power supply voltage	230V~ (+10% -15%) 115V~ (+10% -15%) 50/60 Hz
Maximum current draw	5A @230V~ 8.5A @115V~
Output voltage	26Vdc nominal $\pm 10\%$
Output voltage on speaker lines	100 Vrms
Maximum current output by the power-supply module	38A @230V~ 32A @115V~
Current available for the system	35A @230V~ 29A @115V~
Maximum battery-charge current	3A
Batteries	2 x 12V 38Ah, NP38-121 or 2 x 12 V 24Ah, NPL24-121 or 2 x 12 V 17 Ah, NP 17 -12-FR or equivalent
Operating temperature	from -5°C to +40°C
Maximum power manageable	1000W for each power-supply module (max 4000 W with 4 cabinets e 4 power-supply modules)
Speaker lines supervision	By means of 20KHz tone without need of EOL (end of line IAS-EOL1000 only with a load of less than 20W)

CONNECTIONS

Hornet+ network	RS485 connection, STP CAT 5 cable max 500m, fire resistance as per the reference standard
IDANET network	Ethernet connection UTP CAT 5 cable max. 100m Fiber connection via SFP 100 base FX converter (no 1000 or G BASE converters) Fire resistance as per the reference standard
Loop connections	2-pole twisted shielded cable, sect. 0.5mm to 2.5mm (depending on load and distance) Fire resistance as per the reference standard

MECHANICAL FEATURES

IP protection grade	IP30
Dimensions	433 x 677 x 258 mm
Weight (without batteries)	23 Kg
Cabinet colour	Grey RAL7042 Red RAL3001

HARDWARE TECHNICAL SPECIFICATIONS

Maximum number of loops	16 per control panel
Maximum number of addressable devices per loop	240
Maximum number of control panels in a network per cluster	48 in token ring network
Maximum number of clusters connected via TCP-IP	20
Number of cabinets per control panel	Max. 4
Maximum number of internal modules	8 per cabinet, 32 per control panel
Maximum number of front panel modules	2 per cabinet, 8 per control panel
Maximum number of amplifiers	30 per control panel
CPU redundancy for fire detection	Dual CPU (main and emergency) inside the FPMCPU module in compliance with the provisions of the EN54-2 standard for the management of more than 512 field devices. Possibility of adding a second FPMCPU module for complete redundancy of functions

SOFTWARE TECHNICAL SPECIFICATIONS

Detection zones	Max. 1000 per control panel
Audio Zones	Max. 1000 per cluster
Output groups for cause/effect management	Max. 1000 per control panel
Logical equations with AND, OR, XOR, NOT, etc., functions	Max. 256 per control panel
Pre-configurable actions	Max. 100 for fire detection and alarm functions Max. 100 for PA-VA functions
Trigger activation	Max. 500 per control panel
Events memory	Last 2000 events per control panel
Users access codes	Max. 100 per control panel
“Walk test” function	Activable through control panel or via application
Addressing of Loop devices	Autoaddressing or manual addressing via EITK2000
Timers	Max. 32 with weekly programming and max. 5 with a frequency of less than 12h for fire detection and PA-VA functions
Management of alternating sounders-voice messages	Correlation of each alarm signaller by audio zone
Customizable display	Function buttons, still images and dynamic images
Audio messages	Internal memory (IFAMEVAC module) max. 5 minutes with pre-configured emergency messages Optional SD card memory
Chime functions	Programmable on each audio or message source
Audio source priority	Pre-assigned and redefinable for each source and each message

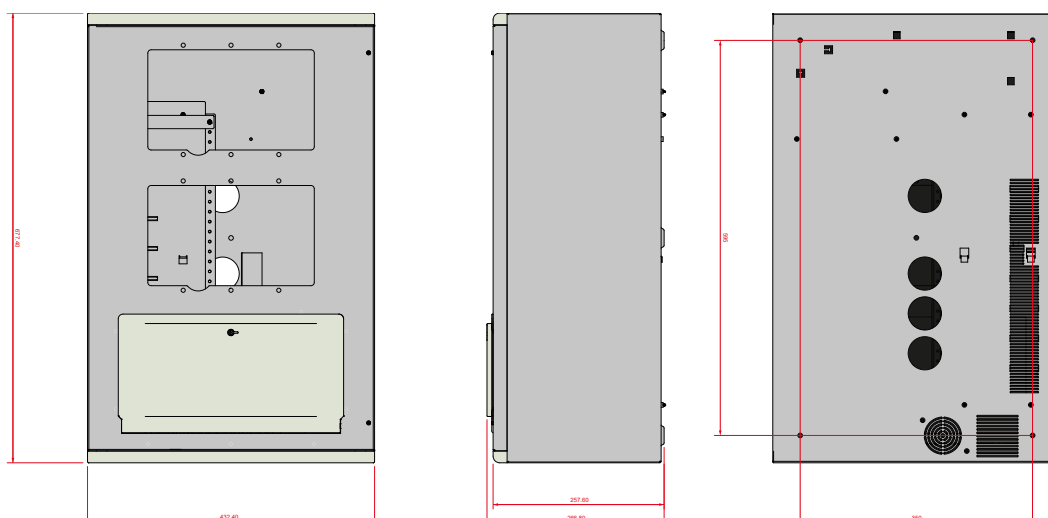
PROTOCOLS TO BMS

RTU Modbus on RS485	On FPMCPU module
Modbus on TCP-IP	On FPMCPU module
BACnet (subject to PRECBACLIT licence)	On IFMNET module

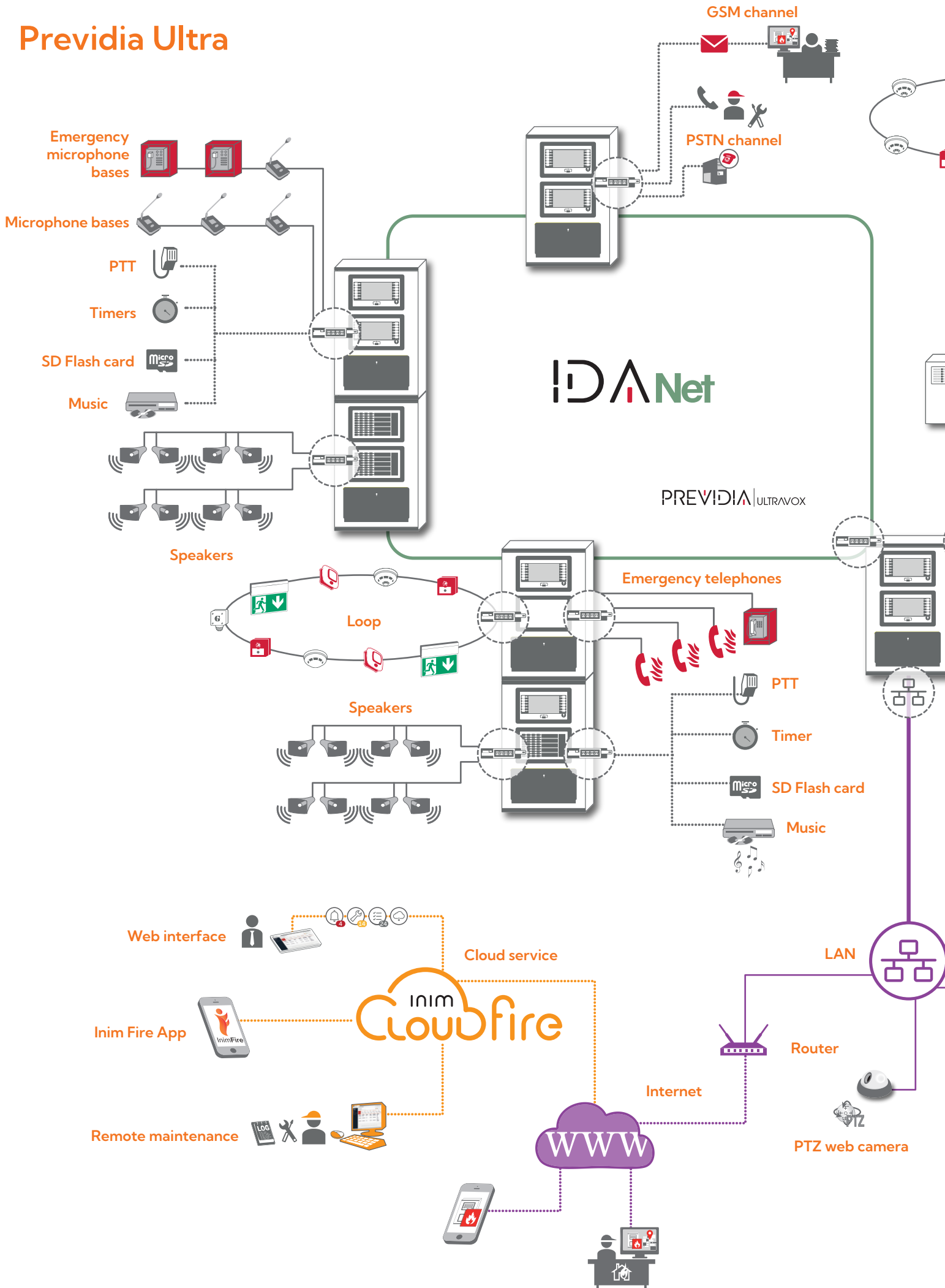
REMOTE COMMUNICATOR PROTOCOLS

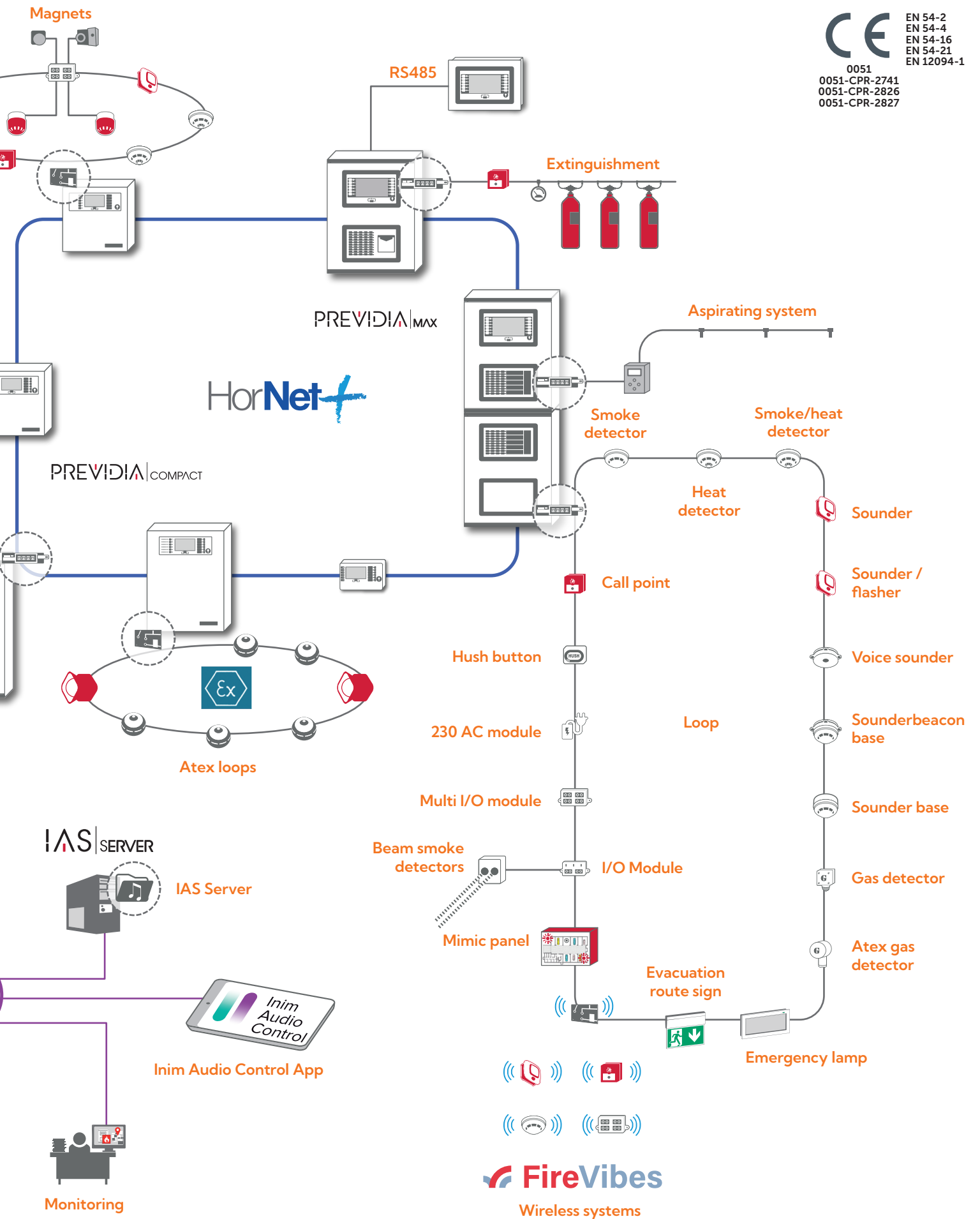
Voice calls with recordable messages	On IFMDIAL module – PSTN or GSM network
CONTACT-ID	On IFMDIAL module – PSTN or GSM network
SIA	On IFMDIAL module – PSTN or GSM network
SIA-IP	On IFMNET module – Ethernet network
ESPA444	On IFMNET module – On RS485 or RS232
SMD	On IFMDIAL module – PSTN or GSM network
email	On IFMNET module – Ethernet network
‘Push’ notifications	On IFMNET module – Via the Inim Cloud Fire

DIMENSIONS



Previdia Ultra





ORDER CODES

Previdia Ultravox

Basic control panel with fire detection and voice evacuation functions, to which the FPM, FPAM, IFM and IFAM function modules can be added. The cabinet, model PRCAB+, is complete with plastic door and housing for the PTT microphone and emergency telephone.

Includes:

- 1 FPMCPU module, control panel with display for fire detection and alarm functions
- 1 FPAMIAS module, control panel with display for Evac voice functions and public address
- 1 IFAMPSU, 1000W power-supply module with battery charger
- 1 IFAMEVAC, audio matrix module for signals processing
- 1 IFAMAMP, 250W amplifier module
- 1 IFM2L, 2-loop module
- 1 PTT microphone



Previdia Ultra216

Basic control panel with fire detection functions only to which the FPM, FPAM, IFM and IFAM function modules can be added. The cabinet, model PRCAB+, has no plastic door or housing for the PTT microphone and emergency telephone.

Includes:

- 1 FPMCPU module, control panel with display for fire detection and alarm functions
- 1 IFAMPSU, 1000W power-supply module with battery charger
- 1 IFM2L, 2-loop module



Previdia Vox

Basic control panel with only voice evacuation functions to which the FPM, FPAM, IFM and IFAM function modules can be added. The cabinet, model PRCAB+, is complete with plastic door and housing for the PTT microphone and emergency telephone.

Includes:

- 1 FPAMIAS module, control panel with display for Evac voice functions and public address
- 1 IFAMPSU, 1000W power-supply module with battery charger
- 1 IFAMEVAC, audio matrix module for signals processing
- 1 IFAMAMP, 250W amplifier module
- 1 PTT microphone





Via Dei Lavoratori 10
63076 Montepandone (AP) – Italy
Tel. (+39) 0735 705007 – Fax (+39) 0735 704912

info@inim.it – www.inim.it



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EN 54-2
EN 54-4
EN 54-16
EN 54-21
EN 12094-1



PREVIDIA|ULTRA

CONTROL PANEL FOR FIRE DETECTION AND ALARM,
FIRE EXTINCTION AND VOICE-EVACUATION SYSTEMS



USER'S MANUAL



Warranty

INIM Electronics s.r.l. warrants that this product shall be free of defects in material and workmanship for a period of 24 months from the date of production. In consideration of the fact that INIM Electronics s.r.l. does not install directly the products here indicated, and due to the possibility they may be used with other products not manufactured by INIM Electronics, INIM Electronics cannot guarantee the performance of the security installation. Seller obligation and liability under this warranty are expressly limited to repairing or replacing, at seller's option, any product not meeting its stated specifications. In no case can INIM Electronics s.r.l. be held responsible or liable by the buyer or any other person for any loss or damage, direct or indirect, consequential or incidental.

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- Damage arising from improper use or negligence;
- Damage caused by fire, flood, wind or lightning;
- Vandalism;
- Fair wear and tear.

INIM Electronics s.r.l. shall, at its option, repair or replace any defective products. Improper use, that is, use for purposes other than those mentioned herein will void this warranty. For further details regarding this warranty contact the authorized dealer.

Limited Warranty

INIM Electronics s.r.l. shall not be liable for any damage caused by improper use of this product.

The installation and use of the products indicated herein must be carried out by authorized persons only. Moreover, the installation procedure must be carried out in full respect of the instructions provided in this manual.

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General information

1.1 Manufacturer's details

Manufacturer: INIM ELECTRONICS S.R.L.

Production plant: Centobuchi, via Dei Lavoratori 10

Municipality: 63076, Montepandone (AP), Italy

Tel.: +39 0735 705007

Fax: +39 0735 704912

E-mail: info@inim.biz

Web: www.inim.biz

The personnel authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work only on devices marketed under the INIM Electronics brand.

1.2 About this manual

Manual code: DCMUINEOPREVIDIAU

Revision: 1.00

This manual is a guide for the end user and is intended to assist in the correct interpretation of the indications provided by the Previdia Ultra fire detection control panel.

Part of the information available on the screen and also the correct activation of some of the visual signals on the LEDs will be subject to the configuration carried out by the installer; who, by following the instructions for configuration, commissioning, maintenance and programming operations in the respective manuals, ensures the proper partitioning of the zones and the classification, addressing and configuration of the various system elements.

1.3 Operator classification - Access Levels

The control panel has 4 distinct access levels:

Level 1: Public level - this is the normal access level of the control panel and is the access level for building inhabitants who are neither authorized to use the system nor instructed in its use.

At this level it is possible to view the information on the display and on the signalling LEDs, as well as to interact using the buttons and the touch screen to scroll through the information. Level 1 allows the following operations only:

- mute buzzer
- test signalling LEDs
- activate alarm signalling when an early-warning process is running

Level 2: Authorized users - this access level is for the system supervisors and is for authorized personnel who are adequately instructed in the use of the system and its functions.

Access requires the use of a key or entry of a valid access code with sufficient access rights. In addition to the operations described for level 1 it is also possible to carry out the following operations:

- mute alarm signalling devices
- rearm the control panel
- activate alarm signalling devices manually
- disable control panel elements
- place in test status one or more of the system elements
- manual activation of emergency

The system provides two additional sub-levels of authorized user:

- **Superuser level**, las for the previous one, with the added possibility of replacing a loop device and registering control panels to their account with the Inim Cloud service
- **Maintenance level**, same as the previous level with the added possibility of stopping the valve pulse for those models that support extinction functions

Level 3: Programming - this access level is for specialized technical operators who carry out system configuration, commissioning and maintenance.


Access requires entry of a valid access code with sufficient access rights after inserting a jumper which enables programming. Refer to the manual for system configuration, commissioning and maintenance.

Level 4: only authorized technicians, appointed by the Manufacturer can, by means of special tools, carry out repair work on the motherboard.

1.4 CE Mark


1.4.1 Regulation (EU) No. 305/2011

These products comply with requirements stated by standards listed here below in compliance with Regulation (EU) No. 305/2011.

 0051
INIM Electronics s.r.l. Via Dei Lavoratori 10 - Fraz. Centobuchi 63076 Montepandone (AP) - Italy 22 0051-CPR-2741
EN 54-2:1997 + A1:2006 EN 54-4:1997 + A1:2002 + A2:2006 EN 54-16:2008 EN 54-21:2006 EN 12094-1:2003 PREVIDIA-ULTRAVOX PREVIDIA-ULTRAVOXR PREVIDIA-ULTRAVOXD <i>Control and signalling panel with power-supply equipment, alarm transmission and fault signalling equipment, automatic electrical device for control and management of switch off and delay, control and signalling equipment for integrated voice alarm systems for fire detection and signalling in buildings and for gas extinguishing systems installed in buildings as part of a complete operating system.</i>

Essential features		Performance
Performance in the event of fire		PASS
Power supply performance		PASS
Response delay (response time in the event of fire)		PASS
Transmission performance		PASS
Operating reliability		PASS
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS


Options provided in accordance with EN54-2	Performance
7.8 Output to fire alarm devices	PASS
7.9 Output to fire alarm routing equipment	PASS
7.10 Output to fire protection equipment	PASS
7.11 Delay on outputs	PASS
7.12 Co-incident detection (Type A, B and C)	PASS
7.13 Alarm counter	PASS
8.3 Point fault signal	PASS
8.9 Output to remote fault or warning signalling devices	PASS
9.5 Addressable points out-of-service	PASS
10.0 Test condition	PASS
Options provided in accordance with EN12094-1	Performance
4.17 Delay of extinguishing signal	PASS
4.18 Signal representing the flow of extinguishing agent	PASS
4.19 Monitoring of the status of components	PASS
4.20 Emergency hold device	PASS
4.21 Control of flooding time	PASS
4.22 Initiation of secondary flooding	PASS
4.24 Triggering signals to equipment within the system	PASS
4.26 Triggering of equipment outside the system	PASS
4.27 Emergency abort device	PASS
4.28 Control of extended discharge	PASS
4.29 Release of the extinguishing media for selected flooding zones	PASS
Options provided in accordance with EN 54-16	Performance
7.3 Audible warning	PASS
7.5 Phased evacuation	PASS
7.6.2 Manual silencing of voice alarm status	PASS
7.7.2 Manual reset of voice alarm status	PASS
7.8 Output to fire signalling devices	PASS
7.9 Voice alarm status output	PASS
8.3 Fault signalling related to the transmission path to the CCS	PASS
8.4 Fault signalling related to voice alarm zones	PASS
9 Out-of-service condition	PASS
10 Manual command of the voice alarm system	PASS
12 Emergency microphone(s)	PASS
13.14 Redundant power amplifiers	PASS
Additional information according to EN 54-2	
About information required at point 12.2.1, see data contained in this manual.	
Additional information according to EN 54-4	
For the information required by point 7.1, see data contained in this manual.	
Additional information according to EN 54-21	
For the information required by point 7.2.1, see data contained in this manual.	
Additional information according to EN 12094-1	
Environmental class: A	
Degree of protection: IP30	
Flooding zones: up to 24	
Zones from 1 a 24 for CO2, inert gas or halogenated hydrocarbons.	
Response delay activation condition: max 3s	
Response delay triggering of outputs: max 1s	

 0051	
INIM Electronics s.r.l. Via Dei Laboratori 10 - Fraz. Centobuchi 63076 Monteprandone (AP) - Italy 22 0051-CPR-2826	
EN 54-2:1997 + A1:2006 EN 54-4:1997 + A1:2002 + A2:2006 EN 54-21:2006 EN 12094-1:2003 PREVIDIA-ULTRA216 PREVIDIA-ULTRA216R PREVIDIA-ULTRA216D <i>Control and signalling panel with power-supply equipment, alarm transmission and fault signalling equipment, automatic electrical device for control and management of switch off and delay for fire detection and signalling in buildings and for gas extinguishing systems installed in buildings as part of a complete operating system.</i>	

Options provided in accordance with EN54-2		Performance
7.8 Output to fire alarm devices		PASS
7.9 Output to fire alarm routing equipment		PASS
7.10 Output to fire protection equipment		PASS
7.11 Delay on outputs		PASS
7.12 Co-incident detection (Type A, B and C)		PASS
7.13 Alarm counter		PASS
8.3 Point fault signal		PASS
8.9 Output to remote fault or warning signalling devices		PASS
9.5 Addressable points out-of-service		PASS
10.0 Test condition		PASS
Options provided in accordance with EN12094-1		Performance
4.17 Delay of extinguishing signal		PASS
4.18 Signal representing the flow of extinguishing agent		PASS
4.19 Monitoring of the status of components		PASS
4.20 Emergency hold device		PASS
4.21 Control of flooding time		PASS
4.22 Initiation of secondary flooding		PASS
4.24 Triggering signals to equipment within the system		PASS
4.26 Triggering of equipment outside the system		PASS
4.27 Emergency abort device		PASS
4.28 Control of extended discharge		PASS
4.29 Release of the extinguishing media for selected flooding zones		PASS
Additional information according to EN 54-2		
About information required at point 12.2.1, see data contained in this manual.		
Additional information according to EN 54-4		
For the information required by point 7.1, see data contained in this manual.		
Additional information according to EN 54-21		
For the information required by point 7.2.1, see data contained in this manual.		
Additional information according to EN 12094-1		
Environmental class: A		
Degree of protection: IP30		
Flooding zones: up to 24		
Zones from 1 a 24 for CO2, inert gas or halogenated hydrocarbons.		
Response delay activation condition: max 3s		
Response delay triggering of outputs: max 1s		

Essential features	Performance	
Performance in the event of fire	PASS	
Power supply performance	PASS	
Response delay (response time in the event of fire)	PASS	
Transmission performance	PASS	
Operating reliability	PASS	
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS

Options provided in accordance with EN 54-16		Performance
7.3 Audible warning		PASS
7.5 Phased evacuation		PASS
7.6.2 Manual silencing of voice alarm status		PASS
7.7.2 Manual reset of voice alarm status		PASS
7.8 Output to fire signalling devices		PASS
7.9 Voice alarm status output		PASS
8.3 Fault signalling related to the transmission path to the CCS		PASS
8.4 Fault signalling related to voice alarm zones		PASS
9 Out-of-service condition		PASS
10 Manual command of the voice alarm system		PASS
12 Emergency microphone(s)		PASS
13.14 Redundant power amplifiers		PASS
Additional information according to EN 54-4		
For the information required by point 7.1, see data contained in this manual.		

 0051	
INIM Electronics s.r.l. Via Dei Laboratori 10 - Fraz. Centobuchi 63076 Monteprandone (AP) - Italy 22 0051-CPR-2827	
EN 54-4:1997 + A1:2002 + A2:2006 EN 54-16:2008 PREVIDIA-VOX PREVIDIA-VOXR PREVIDIA-VOXD <i>Control and signalling panel for voice alarm systems with integrated power-supply equipment for fire detection and signalling systems installed in buildings</i>	

Essential features	Performance	
Performance in the event of fire	PASS	
Power supply performance	PASS	
Response delay (response time in the event of fire)	PASS	
Transmission performance	PASS	
Operating reliability	PASS	
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS

1.4.2 Directive 2014/53/EU

Hereby INIM Electronics S.r.l. declares that the above mentioned control panel models with the optional modules comply with the essential requirements and other relevant provisions established by directive 2014/53/EU.

Following paragraph explains how to download the complete Declaration of Conformity.

This product may be used in all EU Countries.

1.4.3 Documents for the users

Declarations of Performance, Declarations of Conformity and Certificates concerning to INIM Electronics S.r.l. products may be downloaded free of charge from the web address www.inim.biz, getting access to Extended Access and then selecting "Certifications" or requested to the e-mail address info@inim.biz or requested by ordinary mail to the address shown in the *paragraph 1.4.1*.

Manuals may be downloaded free of charge from the web address www.inim.biz, getting access to Extended Access and then selecting "Manuals".

1.5 Operative statuses of the Previdia Ultra system

Standby: Operating status of the control panel when there is no ongoing alarm or fault signalling.

This status is altered by the occurrence of an event, that is, an operative status which is characterized by an activation (when the event occurs) and a reset (when the event ends).

Reset: This operator-activated command annuls the current status of the control panel (and the relative signalling and activations) and resets the system to standby.

This command can be disabled in order to prevent users from activating it by mistake and annulling active signals.

Disable: This command disables part of the system

Fault: Condition of the control panel caused by a malfunction or tamper on the operating functions of the control panel or one of the parts of the system.

Relative to the fire extinguishing system

Alarm: Status of the control panel generated by manual activation (for instance, from a call point) or automatic activation (signal from a detector). This is followed by an alarm signal.

Pre-alarm: This is the status of the control panel during the interval (delay) which runs between the detection of an alarm condition and the actual signalling of the alarm (delay).

Investigate: This command is activated by a supervisor, during an early-warning condition, it provides an extension of the early-warning delay and allows the supervisor to verify the cause of the alarm.

Fire evacuation: This command is activated by a supervisor, during an early-warning condition, it cancels the delay and instantly activates alarm signalling (evacuation).

CPU emergency: Operating status of the control panel in the event of fault on the main CPU of the FPMCPU module and therefore of automatic activation of the backup CPU.

The backup CPU ensures the basic functions of the system (receiving alarms from the points and activating the outputs). However, it does not ensure all the configured activation logic. For total redundancy of all the configured functions, it is necessary to add and configure a second FPMCPU unit to the control panel.

Relative to the voice emergency system

Voice evacuation: status of the control panel following the activation of an evacuation message by an authorized operator or the fire prevention system, intended for the final user of the protected area.

Alert: status of the control panel following the activation of an alert message by an authorized operator or the fire prevention system, intended for the final user of the protected area.

Staff Alert: status of the control panel following the activation of an alert message by an authorized operator or the fire prevention system, intended for personnel working within the protected area.

Voice emergency: Operating status of the control panel following communication of voice evacuation, alert or staff alert, for which low priority voice communications are interrupted and emergency audio sources are activated on the programmed or selected loudspeaker lines.

1.6 Elements of the voice emergency system

Following is the description of the terminology used to define the elements of the voice emergency system:

Speakers line: they identify themselves with the modules connected to an output of the IFAMAMP amplifier module. Generally these are loudspeakers connected in parallel on an open line or in a ring.

Audio zone: the control panel identifies itself as an audio zone, a set of loudspeaker lines that transmit the same audio reproduction at the same time.

Audio sector: indicates a logical grouping of audio zones. Utilized if the use of zones with geographical groupings is desired or in accordance with the system configuration needs.

Chapter 2

Inim Cloud Fire

The Cloud service provided by INIM Electronics offers Previdia users a way to manage their fire alarm control panels via the Internet, in addition to that already possible via direct access to the control panel display.



The connection of control panels to the Cloud service is achieved via a web interface (App or any browser) without any need to configure the network on which the control panel is installed. In particular, it is not necessary to program a router to perform port-forwarding and the like in order to reach the control panel.

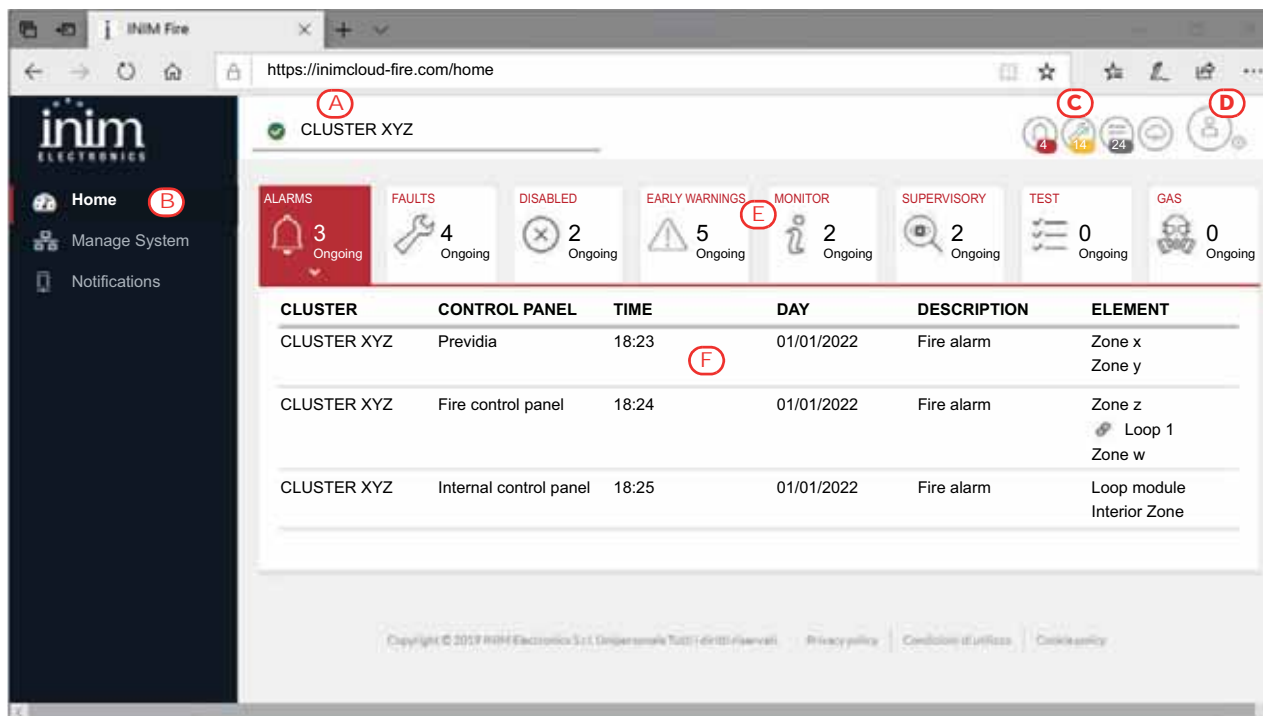
In order to use the Cloud service, the user must have their own account at www.inimcloud.com, registered as "User".

After login, the user will have access to a customized web interface which provides all the tools required for supervision of all the control panels registered by the user.





In order to access Inim Cloud services as a user, registration must be carried out also by the user (paragraph 2.2).

2.1 User interface, home page

Following is the description of the home page; the presence of each of the following elements described depends on the activated functions and the page you are accessing:




[A]	Button for the selection of one of the registered control panels or clusters to which it belongs and description of the selected control panel
[B]	Buttons for access to the management sections of the selected control panel

[C]	Buttons for quick viewing These are always present and overlaid show the number of unsigned events present in the System Register.		Alarms This button opens a window listing the last 4 alarm or tamper events.
			Faults The button opens a window listing the last 4 fault events.
			Other events This button opens a window listing the last 4 control panel events in addition to alarms and faults.
			Cloud events This button opens a window listing the last 4 cloud events.
[D]	Buttons for user profile management		
[E]	Section for visualization of all ongoing signalling		
[F]	Text section relating to the button pressed		

2.2 Registration of a control panel to the Inim Cloud user account

After logging in to the relevant Inim Cloud service user account, a user can request the registration of a new control panel in addition to those the user can access via the web interface.

The control panel that a user wants to register to their account must first be registered to the Cloud service by an installer.

1. Access the Inim Cloud service as a user.
2. By clicking on the profile management button, you access a page where you can set the parameters of the account and the registered control panels. In the lower section, below the list of control panels, you have the "New INIM system" section. 
3. The **Add** button will allow you start the registration process. The Cloud service will send an OTP (One Time Password) number consisting of 6 digits to the user. This number has a limited time duration of 15 minutes.
4. Enter your user code at the control panel you want to register

Note: *In order to be able to register control panels to your Inim Cloud user account, you must have a user code (level 2) and a "superuser" code, or higher.*

5. Access the "System status" section, then "Cloud", then under "Enroll User"
6. Enter the OTP password and wait for the outcome of the registration.

The outcome of the procedure will be shown with one of the following messages:

- "Account created!": the control panel has been successfully registered to Cloud
- "Communicat.Error": generic communication error.

The possible causes may be:

- no Internet connection
- date of manufacture of the control panel is earlier than dd/mm/yyyy
- date/time of control panel different, ahead of or behind the exact date/time by more than 15 minutes
- "Already enrolled": the control panel is already registered to Cloud
- "Bad/expired OTP": the entered password is incorrect or expired
- "Panel notEnabled": the control panel cannot be registered to Cloud.

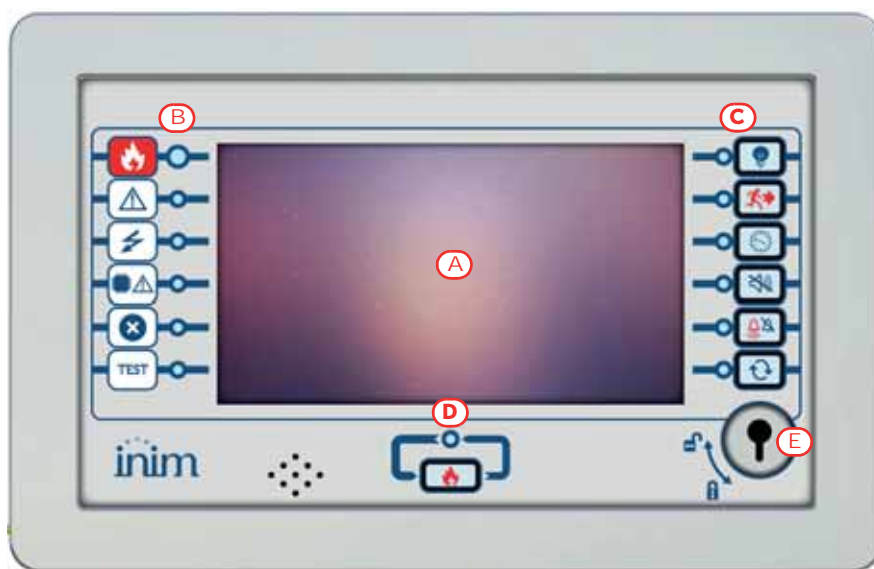
Fire detection system user interface

3.1 Function buttons and indicators of the FPMCPU module

The LEDs on the sides and below the screen provide visual signals which indicate the general status of the system, whereas the function buttons allow fast execution of all the main operations.








The key permits level 1 (public level) to pass to level 2 (supervisor level). When turned clockwise the key will generate a pulse which places the control panel in level 2 status. The control panel will return to level 1 if no buttons are pushed within 20 seconds.

[A]	Touchscreen display
[B]	Status LED
[C]	LED and function button
[D]	LED and multiple-alarm button
[E]	Access-key slot



Status LED		Colour	On solid	Flashing
	Alarm	Red	Fire alarm running.	Fire alarm memory.
	Fault	Yellow	A fault (of any type) is present on the system. The details of any active faults are shown on the screen.	Fault memory. A fault has been solved.
	ON	Green	The system is functioning.	
	CPU Fault	Yellow	The CPU of the FPMCPU module is out of service. In this condition, the backup CPU comes into operation to guarantee the minimum safety functions. Contact your service dealer.	CPU fault memory. The CPU of the FPMCPU module has reset and restarted.
	Disabled	Yellow	One or more of the system elements has been disabled.	

Status LED		Colour	On solid	Flashing
TEST	Test	Yellow	One or more of the system elements has been put in test mode.	



















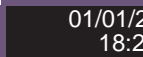

Function LEDs		Colour	Activation	Button	
				access level	function
	Signalling test	Yellow	The test on the visual signalling devices is running.	1	If this button is pressed and held all the LEDs on the control panel will light.
	Evacuate	Red	The evacuation phase has been activated manually.	2	Button for manual activation of the signalling devices (audible and visual) for evacuation of the premises.
	Investigate	Yellow	The investigation time has been activated.	2	Button to request supplementary investigation time and thus lengthen the early-warning period.
	Silence buzzer	Yellow	The buzzer has been silenced.	1	This button silences the control panel buzzer. Events which occur after silencing will reactivate the buzzer.
	Silence sounder	Yellow	The sounders have been silenced.	2	During alarm status, this button can be used to stop the audible and visual signalling devices. Pressing this button again will reactivate the silenced audible and visual signalling devices.
	Reset	Yellow	The reset function is disabled. The sounders must be silenced before the Reset function can be re-enabled.	2	Button for the annulment of active events and the reset of standby conditions.
	Multiple alarms	Red	More than one alarm is active on the system.	2	This button allows you to scroll through the active alarm events on the screen.

3.2 Screen in standby status

[A]	Buttons to access the events logs, system status and programming.	
[B]	Status bar (always present) shows essential information regarding the system.	
[C]	Customizable area (customizable during the programming phase) for images relating to the status of the system elements or customized function buttons .	

3.3 Status Bar

Icon	Function
	Selection of this area will allow you to enter a code and change the current user-access level. <ul style="list-style-type: none"> - 1 = Public level (no code entry) - 2 = Supervision level (turn key or code entry) - 3 = Programming level (installer code entry)
Language selection	If required by the configuration, this button will appear on the status bar. Selection of one of the icons changes the language of the control panel.
Day/Night status	Day Mode: <ul style="list-style-type: none"> - The control panel runs the early warning phase before activating an alarm triggered by a detector - the sensitivity of the detectors is set in day mode
	Night Mode: <ul style="list-style-type: none"> - early warnings are not run - the sensitivity of the detectors is set in night mode - in the event of an alarm, if the sounders are silenced they will reactivate automatically after a set time.
Mains network	Mains power-supply functioning properly
	Indicates that at least one power-supply module has detected mains failure.

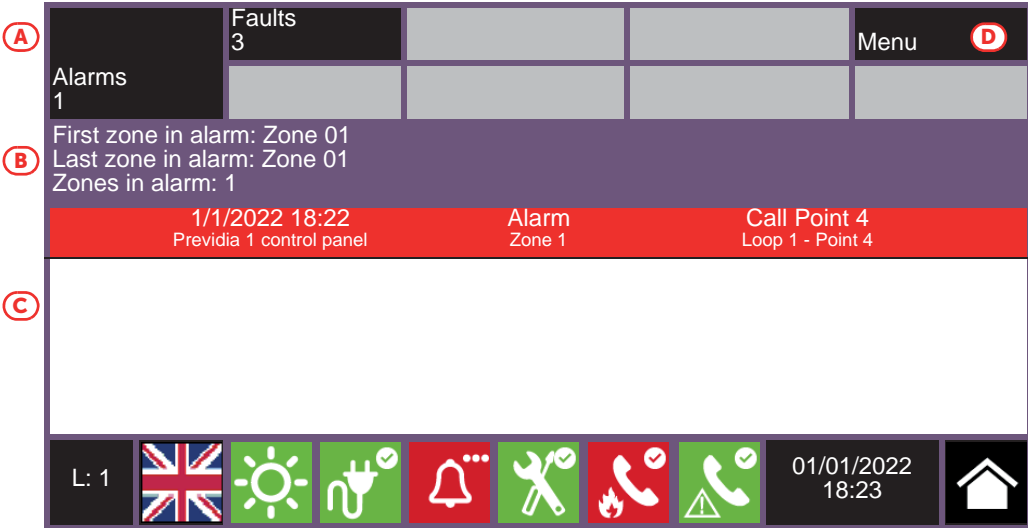
Icon	Function
Sounder status	Selection of this icon accesses (at level 2) a menu which allows manual deactivation, activation and silencing of all fire alarm signalling devices.
	 Fire-alarm signalling devices (sounders, etc.) are in standby status and are operating properly.
	 At least one fire alarm signalling device is in fault status. Contact your service dealer.
	 At least one fire alarm signalling device is disabled
	 At least one fire alarm signalling device has been activated
Configuration status	 No hardware anomalies on the control panel
	 A hardware problem has been detected inside the control panel (module malfunction). Contact your service dealer.
Alarm communicator status	 If installed, remote alarm-signalling devices (telephone dialers or communicators to alarm receiving centres) are in standby status and operating efficiently.
	 A fault has occurred on a remote alarm-signalling device. Contact your service dealer.
	 An alarm communicator has been disabled.
	 A remote alarm-signalling device is operating (transmitting a communication)
	 An alarm communication has been sent and confirmed by the recipient
	 An alarm communication has been sent but not confirmed by the recipient
Fault-communicator status	 If installed, remote fault-signalling devices (telephone dialers or communicators to alarm receiving centres) are in standby status and operating efficiently.
	 A fault has occurred on a remote fault-communicator device.
	 A fault communicator has been disabled.
	 A remote fault-signalling device is operating (transmitting a communication)
	 A fault communication has been sent and confirmed by the recipient
	 A fault communication has been sent but not confirmed by the recipient
	Indicates the current date and time, selection of this area accesses (at level 2) the date and time setting section.
Home	 Allows users to go directly to the home screen or, when events are active, from the home screen to the active events screen.

Chapter 4

Visualization of the fire-fighting system

4.1 Viewing active events

When events are active, or at least a condition is momentarily active and requires notification, the standby screen on the display (*paragraph 3.2 Screen in standby status*) will be replaced by a screen which provides the respective notifications.

[A]	Buttons for event categories	
[B]	Additional information for the last alarm event	
[C]	List of active events in the selected category	
[D]	Button to return to the standby screen	

The screen shows the active events on the system grouped in categories. These are represented by buttons at the top ([A]) which are enabled and indicate the number of events of this type active at that moment.

Touching any one of these buttons will allow you to view all the events in the respective category. These are listed in order of occurrence. If the event has been generated by a device, tapping the respective line will allow you to access and view the section relating to the device concerned (*paragraph 5.2 Device management*).

Buttons associated with the events which are not active will remain grey.

After 30 seconds of inactivity the screen will automatically go to the page containing the category of events with the highest priority. The priority is given as follows:

1. **Fire Alarm:** signal associated with fire-alarm conditions. These indicate potentially dangerous conditions which require maximum attention.
When an alarm occurs, the section directly below the event buttons ([B]) shows the early-warning countdown and, after the alarm, a summary of the data relating to the zones involved.
2. **Gas Alarm:** signal associated with gas-alarm conditions. These indicate potentially dangerous conditions which require maximum attention.
3. **Early Warning:** signal triggered by detectors with an early warning threshold which is set below the alarm threshold. Cautionary alert which must be evaluated with attention and verified.
4. **Supervisory:** signal indicating that a device or function controlled by the system is in a condition of failure. Indicates a risk which may jeopardize the proper operating capacity of the system. Verify the signalled condition carefully.
5. **Fault:** signal indicating the presence of an anomaly which might jeopardize the proper operating capacity of the system. Contact your service dealer.
6. **Monitor:** signal which is not associated with alarm or fault status, configurable during the installation phase, normally used to provide indications to the user. They are signals of minor importance and the level of attention required depends on the use made of these signals during the system configuration phase.

7. **Disables**: signal indicating the disablement of one or more of the system elements. Indicates that it is necessary to pay attention to extent of the non-operative parts and the possible consequences.
8. **Test**: signal indicating that at least one of the system elements is in test status. This condition, to be applied during maintenance operations, maintains parts of the system in non-operative status, therefore, putting the premises in danger as the protection level of the system is reduced.

Inim Cloud: This function is available via:

Home select one of the available control panels



4.2 View events log

The "Log" button (*paragraph 3.2 - [A]*, accessible at level 1) accesses the section which contains all the saved system-events.

[A]	Arrow buttons to scroll through the events list	
[B]	Button to mark the selected event	
[C]	Button to exit the open section	
[D]	Events list	

Each line in the list [D] represents an event which has been saved to the log.

The log shows the date and time of each event, the control panel (to the left), the event description (in the center) and the event details (to the right). A second tap on a previously selected event (with details) accesses a page which shows all the relative information.

It is possible to distinguish the event type by the background colour of the line:

- White, indicates events relating to normal operating status
- Red, indicates events relating to alarm status
- Yellow, indicates events relating to fault status
- Blue, indicates an event selected by tapping on the screen

Inim Cloud: This function is available via the fast viewing buttons (*paragraph 2.1 - [C]*) or via:

System Management > Events Log



4.3 View system status

The "System Status" button (*paragraph 3.2 - [A]*, accessible at level 1) accesses a section which allows you to view the status of the various system elements. A superior access level (2 or 3) allows the user to work on the elements being viewed and carry out operations such as enable, disable, activation or test.

Access to these functions is reserved to persons with supervisor level access who have been instructed in system management and who have knowledge of the system parts.

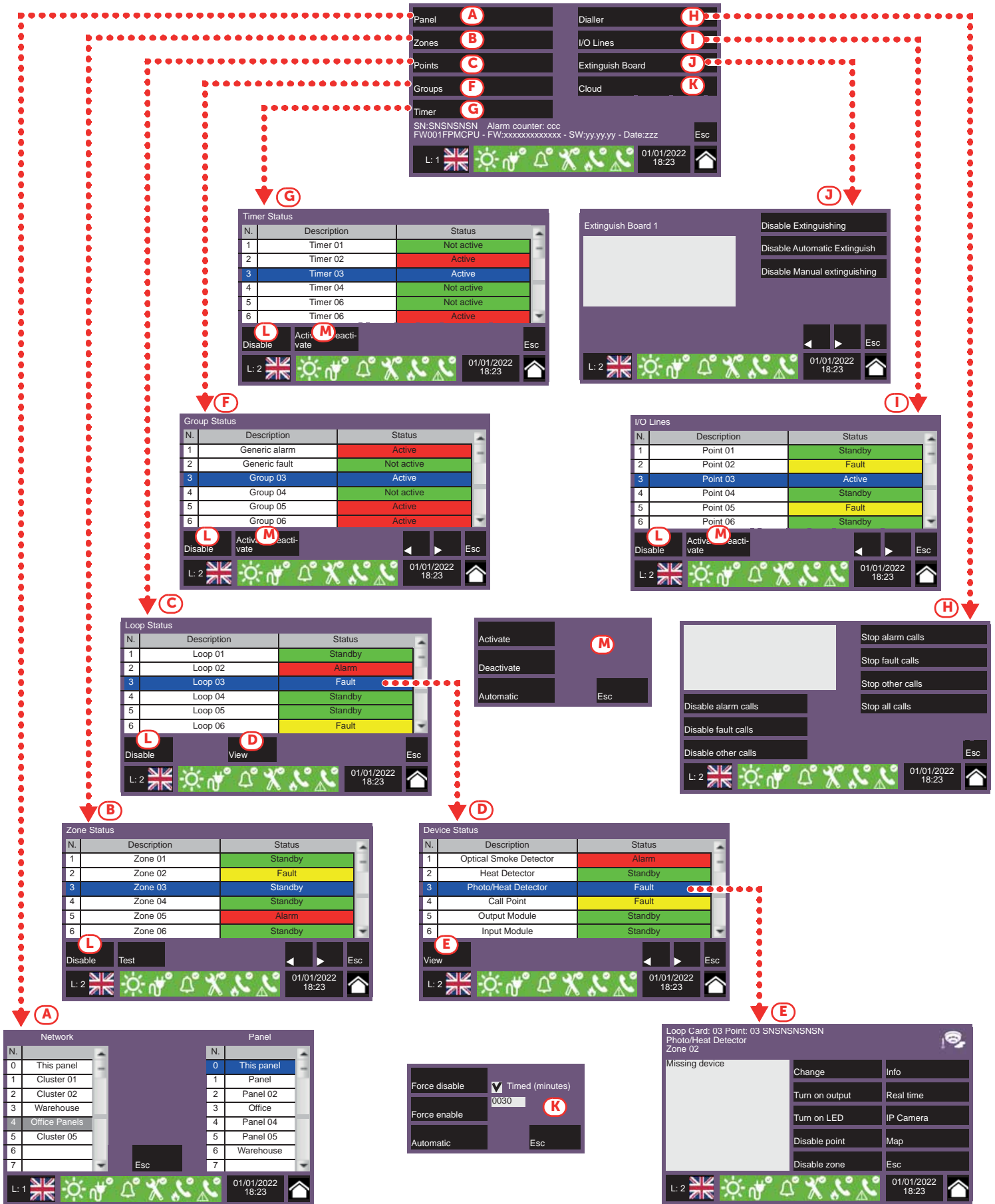
[A]	Access buttons to view the status of the system elements	
[B]	Serial number of the FPMCPU module, indicators of the number of alarms and system revisions	
[C]	Button to exit the open section	


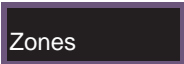




The section dedicated to the visualization of the system status also provides the installer with the following information, shown in the lower left corner of the section [B]:



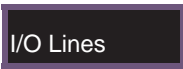






- counter of the number of alarms starting from system installation
- firmware of the FPMCPU module (FW of the main unit and backup unit)
- minimum required revision of Previdia/STUDIO configuration software (SW)
- site specific data release (Data), progressive number of system configuration upgrades

Note: *The sections here described and the relative elements are those relating solely to the fire-fighting system and not to the homologous elements belonging to the voice emergency system.*

The following diagram is a view of the various screens:



[A]		<p>Buttons to access the section for the selection of the control panel whose parts you wish to view. It is possible to select a cluster (group of control panels connected through a LAN network) and a single control panel from the selected cluster.</p> <p>After selecting the Esc button, you will be able to view the elements in the various sections described below. If, instead, the Home button is selected or no control panel is selected the elements shown will be those of the control panel in use.</p>
[B]		<p>Button to access the zones viewing section of the selected control panel. This section is divided into pages which show a maximum of 100 zones. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each zone is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, zone in standby - Yellow, zone in fault status - Red, zone in alarm status - Light yellow, zone disabled - Blue, zone selected by tapping on the screen <p>By selecting a zone, it is possible for access level 2 users to place it in test status and/or change its operating mode (refer to this table - [L]).</p>
[C]		<p>Button to access the section for the selection of the loops of the selected control panel. The status of each loop is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, loop in standby - Yellow, loop in fault status - Red, loop in alarm status - Light yellow, loop disabled - Blue, loop selected by tapping on the screen <p>By selecting a loop and tapping on the View button it will be possible to access the loop devices (refer to this table - [D]). The Disable button allows you to change the operating mode (refer to this table - [L]).</p>
[D]	 Device status	<p>Button to access the section for the selection of the devices on selected loop. This section is divided into pages which show a maximum of 80 devices. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each device is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, device in standby - Yellow, device in fault status - Red, device in alarm status - Light yellow, device disabled - Blue, device selected by tapping on the screen <p>By selecting a device and tapping on the View button it will be possible to access the loop devices (refer to this table - [E]).</p>
[E]	 Device module	<p>Button to access and view the section of the selected device module. The section shown provides all the information regarding the device as well as access to the respective functions (<i>paragraph 5.2 Device management</i>).</p>
[F]		<p>Button to access the section for the management of the output groups of the selected control panel. This section is divided into pages which contain a maximum of 80 groups. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each group is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, group activated - Red, group disabled - Blue, group selected by tapping on the screen <p>By selecting a group and tapping on the Activate/Deactivate button, it will be possible to change its operating status (refer to this table - [M]). The Disable button allows you to change the operating mode (refer to this table - [L]).</p>

[G]		<p>Button to access the section for the management of the timers programmed for the selected control panel.</p> <p>The activation status of each timer is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, timer activated - Red, timer disabled - Blue, timer selected by tapping on the screen <p>By selecting a timer and tapping on the Activate/Deactivate button, it will be possible to change its operating mode (refer to this table - [M]). The Disable button allows you to change the operating mode (refer to this table - [L]).</p>
[H]		<p>Button for access to the section for communicator management and access to the telephone functions of the selected control panel (refer to the Programming manual).</p>
[I]		<p>Button to access the section for the visualization of the devices connected to the I/O terminals of the selected control panel.</p> <p>This section is divided into pages which contain a maximum of 80 groups. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each line is shown and made distinctive by colour:</p> <ul style="list-style-type: none"> - Green, line in standby - Yellow, line in fault status - Red, line in alarm status - Light yellow, line disabled - Blue, line selected by tapping on the screen <p>By selecting a line and tapping on the Activate/Deactivate button, it will be possible to change its status (refer to this table - [M]). The Disable button allows you to change the operating mode (refer to this table - [L]).</p>
[J]		<p>Button to access the section for the management of the extinction module of the selected control panel.</p> <p>The section allows you to view the data of an extinction module and access its functions. The arrow buttons allow you to scroll through the various modules installed on the system.</p>
[K]		<p>Button to access the section for the configuration of the Inim Cloud service.</p> <p>A window opens containing the following buttons:</p> <ul style="list-style-type: none"> - Enroll user, for the registration procedure of the control panel to the user's account (refer to <i>paragraph 2.2 Registration of a control panel to the Inim Cloud user account</i>) - Network diagnostics, for the process that checks the various network functions required to communicate with the Cloud and obtain useful information in the event of problems. The information obtained is displayed in the left pane.
[L]		<p>Button to open a window which allows you to change the enabled/disabled status of the selected element.</p> <p>This window provides the following buttons:</p> <ul style="list-style-type: none"> - Disable, to disable the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot enable it. Where available, it is possible to select the "Timed" option and indicate the time, in minutes, during which the element must hold disabled status. - Enable, to enable the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot disable it. - Esc, to close the window without changing the setting.
[M]		<p>Button to open a window where it is possible to change the activation status of the selected element.</p> <p>This window provides the following buttons:</p> <ul style="list-style-type: none"> - Activate, for the activation of the selected element. - Deactivate, for the deactivation of the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot activate it. - Esc, to close the window without changing the setting.
		<p>Arrow buttons</p>
		<p>Button to step back</p>

Inim Cloud: Part of the functions described and the visualization of the system status are available via:

Manage System > *select one of the available control panels*



4.4 Extinction module LED panel (FPMEXT)

If the control panel is set up to manage fire extinguishing systems, one or more modules (external FPMEXT modules) will be installed on the front plate of the control panel cabinet.

Each module has 40 tricolour LEDs which replicate the signals of up to 5 IFMEXT.extinction modules on the control panel front plate.

FPMEXT LED		Colour	On solid	Flashing
	Extinction channel activation LED	Red	Discharge activated	Pre-extinction condition running
	Bypass extinction channel LED	Yellow	Channel bypassed	/
	Automatic activation indicator LED	Red	Automatic discharge command activated	Automatic discharge command partially activated
	Manual activation LED	Red	Manual discharge command activated	/
	Manual stop extinction LED	Yellow	Lock extinction command activated	Fault on stop-extinction circuit
	Stop extinction LED from non-electrical-devices	Yellow	Lock extinction command activated	Fault on stop-extinction circuit
	Generic fault LED	Yellow	/	Generic fault on extinction channel
	CPU fault LED	Yellow	Generic CPU fault on extinction module	/

Inim Cloud: Some of the indications described above can be viewed via:

System management> *select one of the available control panels* > **Extinguishing**



Chapter 5

Using the fire detection system

5.1 Access to programming

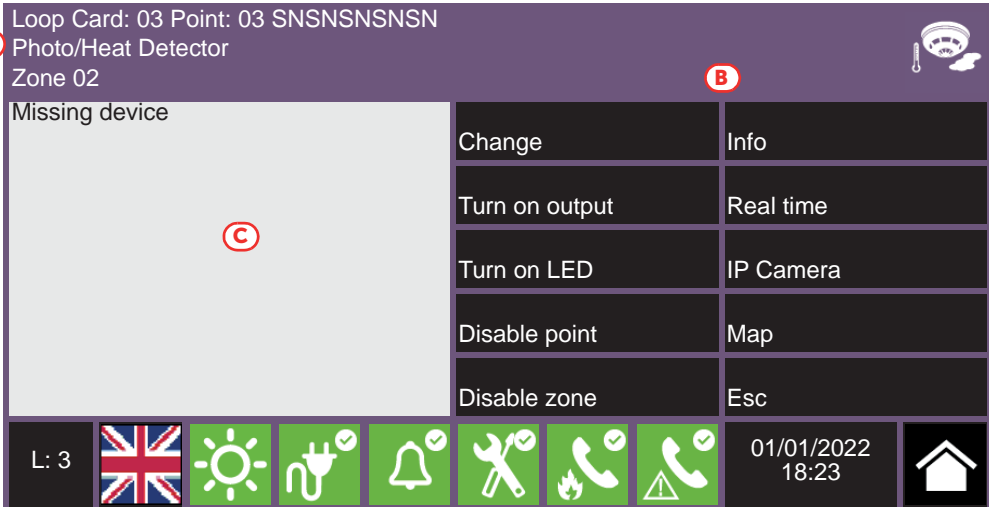
The "Programming" button (*paragraph 3.2 - [A]*) accesses the system configuration functions.

These functions are reserved for specialized technical personnel only and require entry of the installer code. Refer to the Configuration and Programming manuals.

5.2 Device management

The management section of a specific device provides all the information regarding the device itself and a series of commands which influence its status.

This section can be accessed by selecting the respective line in the list of devices involved in a specific event (refer to *paragraph 4.1 Viewing active events*) or via the relative section selected by means of the System status button. (*paragraph 4.3 View system status*).

[A]	Strings which indicate the device loop module, the zone it belongs to, its type, serial number and a description of the device.	
[B]	Button to activate the commands and functions of the device	
[C]	Section for viewing all the activated functions by means of the buttons on the right.	

Following are the function buttons of the device; access and activation of these depend on the access level of the user.

- **Change:** command to be used during the replacement procedure of devices which result faulty when selected. When the replacement of a device is required, it is first necessary to replace the device then tap on the "Change" button. The control panel will recognize automatically that the device has been replaced, but only if the new device is the same as the old one will it proceed with the replacement in the configuration data.
- **Turn on/Turn off output:** button to switch the device output On/Off manually.
- **Turn on/Turn off LED:** button to switch the green device LED On/Off manually.
- **Disable/Enable point:** button to change the status of the selected point.
- **Disable/Enable zone:** button to change the status of the zone the selected device belong to.
- **Info:** if you press this button, the section on the left will provide information relating to any faults or conditions other than stand-by which are detected on the device
- **Real time:** the section on the left provides a graph showing all the values detected by the selected device through time.
- **IP Camera:** if set up, this button will open a window showing images recorded by a camera with an opportunely configured specific preset, a renewed set of the images will be shown every 5 seconds. This function allows video verification of the ambient conditions. A single tap on the screen will close the window.

- **Map:** if set up, this button will open a window showing an image of the layout of the partition where the device is installed, with a point indicating the location of the device itself. A single tap on the screen will close the window.

Inim Cloud: Access to the points of the system and some of these functions are available via:

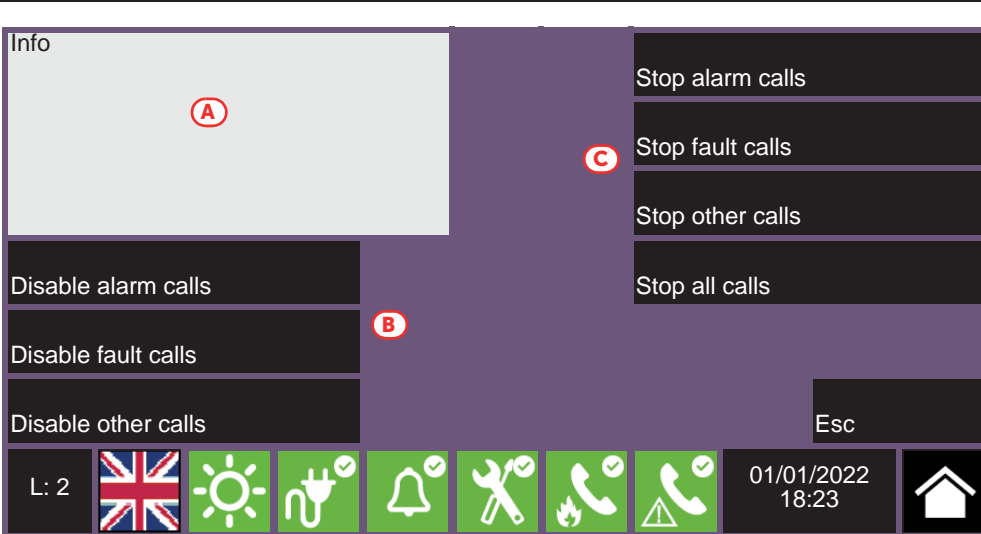
System management > *select one of the available control panels* > **Zones**



5.3 Telephone Dialer Management (IFMDIAL)

From the "Dialler" section, accessible via the system display menu (*paragraph 4.3 View system status*), it is possible to manage the functions of the IFMDIAL telephone communication module.

There is also a section which provides information regarding the status of the module and telephone communications.

[A]	Section for viewing IFMDIAL module data	
[B]	Function buttons for disable/enable operations	
[C]	Function buttons for delete operations	

Following are the function buttons of the IFMDIAL module; access and activation of these depend on the access level of the user.

- **Disable/Enable alarm calls:** button to disable/enable the calls programmed to be sent after the detection of an alarm.
- **Disable/Enable fault calls:** button to disable/enable the calls programmed to be sent after the detection of a fault.
- **Disable/Enable other calls:** button to disable/enable the calls programmed to be sent on the occurrence of other events.
- **Stop alarm calls:** button to stop the calls in the queue which forms after the signalling of an alarm.
- **Stop fault calls:** button to stop the calls in the queue which forms after the signalling of a fault.
- **Stop other calls:** button to stop the calls in the queue which forms after the signalling of other types of event.
- **Stop all calls:** button to stop all calls.

Inim Cloud: This function is available via:

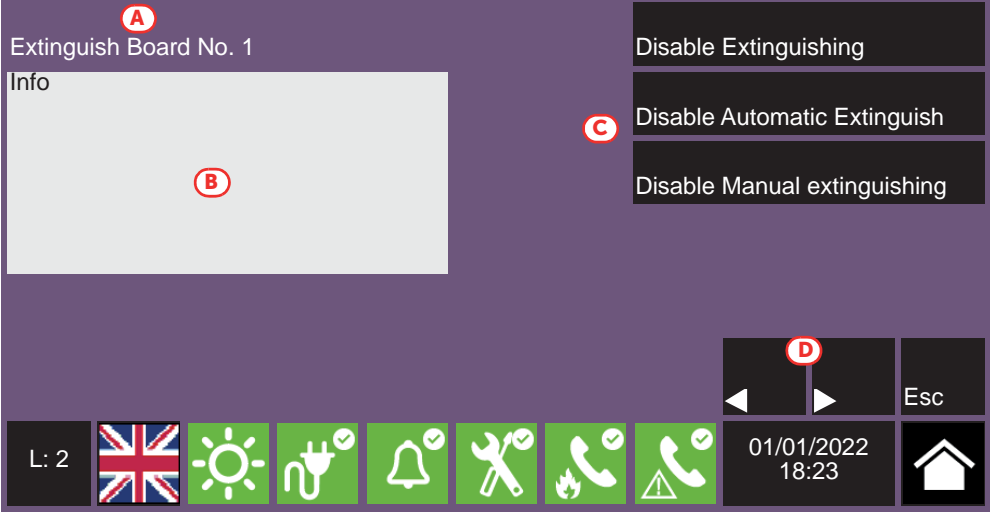
Manage System > *select one of the available control panels* > **Dialler**



5.4 Management of the extinction module (IFMEXT)

The functions of the IFMEXT extinguishment module can be managed via the “Extinguish Board” template, accessible through the Panel Status button on the home page (*paragraph 4.3 View system status*).

It is possible to operate on all the modules installed in the Previdia control panel and, for each one, view the data relating to its status and extinguishment operations.

[A]	Description of current IFMEXT module	
[B]	Section for viewing the IFMDIAL module data	
[C]	Function buttons for disable/enable extinction operations	
[D]	Arrow buttons for navigating through the IFMEXT modules.	

Following are the function buttons of the IFMEXT module; access and activation of these depend on the access level of the user.

- **Disable/Enable Extinguishing:** button to disable/enable an ongoing fire extinction procedure.
- **Disable/Enable Automatic Extinguish:** button to disable/enable automatic activation of fire extinction commands.
- **Disable/Enable Manual extinguishing:** button to disable/enable manual activation of fire extinction commands.

Inim Cloud: These functions are available via:

System management > *select one of the available control panels* > **Extinguishing**



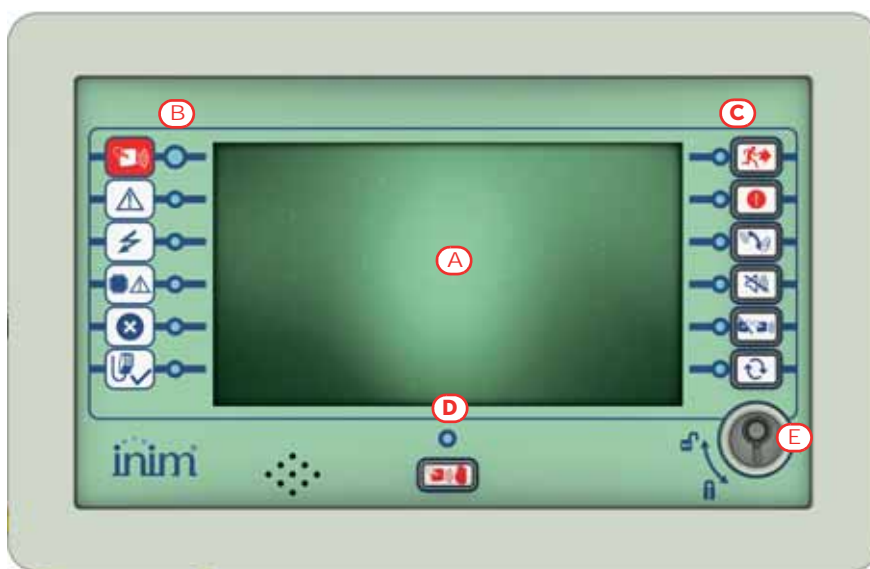
Voice emergency system user interface

6.1 Function buttons and indicators of the FPAMIAS module



The LEDs on the sides and below the screen provide visual signals which indicate the general status of the system, whereas the function buttons allow fast execution of all the main operations.








The key permits level 1 (public level) to pass to level 2 (supervisor level). When turned clockwise the key will generate a pulse which places the control panel in level 2 status. The control panel will return to level 1 if no buttons are pushed within 20 seconds.

[A]	Touchscreen display
[B]	Status LED
[C]	LED and function button
[D]	Manual emergency push button with LED (paragraph 8.2)
[E]	Access-key slot



Status LED	Colour	On solid	Flashing
	Emergency	Red	The control panel is in emergency mode. The emergency mode may have been activated by the fire control panel, by external inputs or by an operator acting from the front panel (Manual emergency).
	Fault	Yellow	A fault of any type is present on the voice emergency system. The details of any active faults are shown on the screen.
	ON	Green	The system is functioning.
	CPU Fault	Yellow	The CPU of the FPMAMIAS module is out of service.
			CPU fault memory. The CPU of the FPMAMIAS module has reset and restarted.

Status LED		Colour	On solid	Flashing
	Disabled	Yellow	One or more of the system elements has been disabled.	
	PTT open	Yellow	The PTT microphone is functioning.	The attention message is playing, wait before speaking.

Function LEDs	Colour	Activation	Button		
			access level	function	
	Evacuate	Red	Manual emergency condition activated	2	The button allows the activation of the evacuation message on all audio zones indicated in the configuration (unless otherwise specified in the manual emergency maneuver).
	Alert	Red	Manual emergency condition activated	2	The button allows the activation of the alert message on all audio zones indicated in the configuration (unless otherwise specified in the manual emergency maneuver).
	FFT	Red	On solid: there are active calls. Flashing: there are new calls in progress.	1	In the absence of emergency calls, by pressing this button all the control panel LEDs will light up. In the case of emergency calls, passes to the active or incoming calls visualization screen. Pressing the button when on this screen allows you to immediately return to the higher priority screen.
	Silence buzzer	Yellow	The buzzer has been silenced.	1	This button silences the control panel buzzer. Events which occur after silencing will reactivate the buzzer.
	Mute speaker	Yellow	The speaker have been silenced.	2	Using this button during emergency conditions mutes the loudspeakers. If the speakers are muted, pressing the button again will reactivate them.
	Reset	Yellow	The reset function is disabled. In order to enable it, the speakers must first be muted.	2	Button for the annulment of active events and the reset of standby conditions.
	Manual emergency	Red	On solid: manual emergency mode has been activated on this control panel. Flashing: the manual emergency has been activated at another point in the system	2	The control panel stops all sound sources at the lowest emergency level and enters emergency mode.

6.2 Screen in standby status

[A]	Buttons to access the events log, system status, programming and audio adjustment	
[B]	Status bar (always present) shows essential information regarding the system.	
[C]	Customizable area (customizable during the programming phase) for images relating to the status of the system elements or customized function buttons.	

6.3 Status Bar

Icon	Function
	Selection of this area will allow you to enter a code and change the current user-access level. <ul style="list-style-type: none"> - 1 = Public level (no code entry) - 2 = Supervision level (turn key or code entry) - 3 = Programming level (installer code entry)
Language selection	If required by the configuration, this button will appear on the status bar. Selection of one of the icons changes the language of the FPMAMIAS module.
Mains network 	Mains power-supply functioning properly Indicates that at least one power-supply module has detected mains failure.
Configuration status 	No hardware anomalies on the FPMAMIAS module A hardware problem has been detected (module malfunction). Contact your service dealer.
	Indicates the current date and time, selection of this area accesses (at level 2) the date and time setting section.
Home	Allows users to go directly to the home screen or, when events are active, from the home screen to the active events screen.

Chapter 7

Visualization of the emergency voice system

7.1 Viewing active events

When events are active, or at least a condition is momentarily active and requires notification, the standby template on the screen (*paragraph 6.2 Screen in standby status*) will be replaced by a template which provides the respective notification.

[A]	Buttons for event categories	<div style="display: flex; justify-content: space-between; border-bottom: 1px solid black;"> <div style="border: 1px solid black; padding: 2px;"> A Emergencies 1 </div> <div style="border: 1px solid black; padding: 2px;"> Faults 3 </div> <div style="border: 1px solid black; padding: 2px; background-color: #cccccc;"> Disablesments </div> <div style="border: 1px solid black; padding: 2px; background-color: #cccccc;"> FFT waiting </div> <div style="border: 1px solid black; padding: 2px; background-color: #cccccc;"> FFT talking </div> </div>
[B]	List of active events in the selected category	<div style="border: 1px solid black; padding: 2px; background-color: #0056b3; color: white;"> 1/1/2022 18:21 Ultra 1 Panel MISSING Audio Zone 1 </div>
[C]	Function buttons visible for the emergency category	<div style="border: 1px solid black; padding: 2px; background-color: #ffff00;"> B 1/1/2022 18:22 Ultra 1 Panel GENERIC FAULT Fire System </div> <div style="border: 1px solid black; padding: 2px; background-color: #ffff00;"> 1/1/2022 18:23 Ultra 1 Panel MISSING Speaker Line </div>
		<div style="border: 1px solid black; padding: 2px; background-color: #008080; color: white;"> C System Parts Select Actions on single zone Actions on many zones </div> <div style="border: 1px solid black; padding: 2px; background-color: #000000; color: white; display: flex; justify-content: space-between; align-items: center;"> L: 1 <div style="display: flex; gap: 10px;"> </div> 01/01/2022 18:23 </div>

The screen shows the active events on the system grouped in categories. These are represented by buttons at the top ([A]) which are enabled and indicate the number of events of this type active at that moment.

Touching any one of these buttons will allow you to view all the events in the respective category. These are listed in order of occurrence.

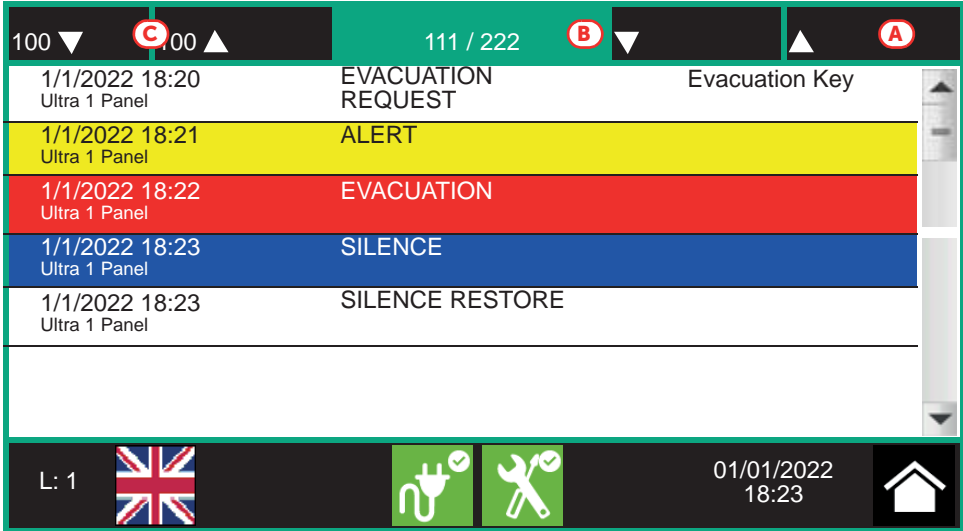
Buttons associated with the events which are not active will remain grey.

After 30 seconds of inactivity the screen will automatically go to the page containing the category of events with the highest priority. The priority is given as follows:

1. **Emergencies:** signalling relating to voice emergency conditions. These indicate potentially dangerous conditions which require maximum attention.
2. **Faults:** signal indicating the presence of an anomaly which might jeopardize the proper operating capacity of the system. Contact your service dealer.
3. **Disablesments:** signal indicating the disablement of one or more of the system elements. Indicates that it is necessary to pay attention to extent of the non-operative parts and the possible consequences.
4. **FFT waiting:** signalling of incoming calls from emergency telephones. These indicate potentially dangerous conditions which require maximum attention.
5. **FFT talking:** signalling of communications in progress with emergency telephones. These indicate potentially dangerous conditions which require maximum attention.

7.2 View events log

The "Log" button (*paragraph 6.2 - [A]*, accessible at level 1) accesses the section which contains all the saved system-events.

[A]	Keys for scrolling the events in the log	
[B]	Number of the selected event out of the total events	
[C]	Scrolling keys (100 events)	
[D]	Events list	

Each line in the list *[D]* represents an event which has been saved to the log.

The log shows the date and time of each event, the control panel (to the left), the event description (in the center) and the event details (to the right).

It is possible to distinguish the event type by the background colour of the line:





- White, indicates events relating to normal operating status
- Red, indicates events relating to evacuation status
- Yellow, indicates events relating to fault status
- Ivory, alert events or staff alert
- Blue, indicates an event selected by tapping on the screen

By tapping an event that has involved several audio zones, the "Audio zone" button on the bottom left will activate and allow viewing of all the zones involved.

7.3 View system status

The "System Status" button (*paragraph 6.2 - [A]*, accessible at level 1) accesses a section which allows you to view the status of the various system elements. A superior access level (2 or 3) allows the user to work on the elements being viewed and carry out operations such as enable, disable, activation.

Access to these functions is reserved to persons with supervisor level access who have been instructed in system management and who have knowledge of the system parts.

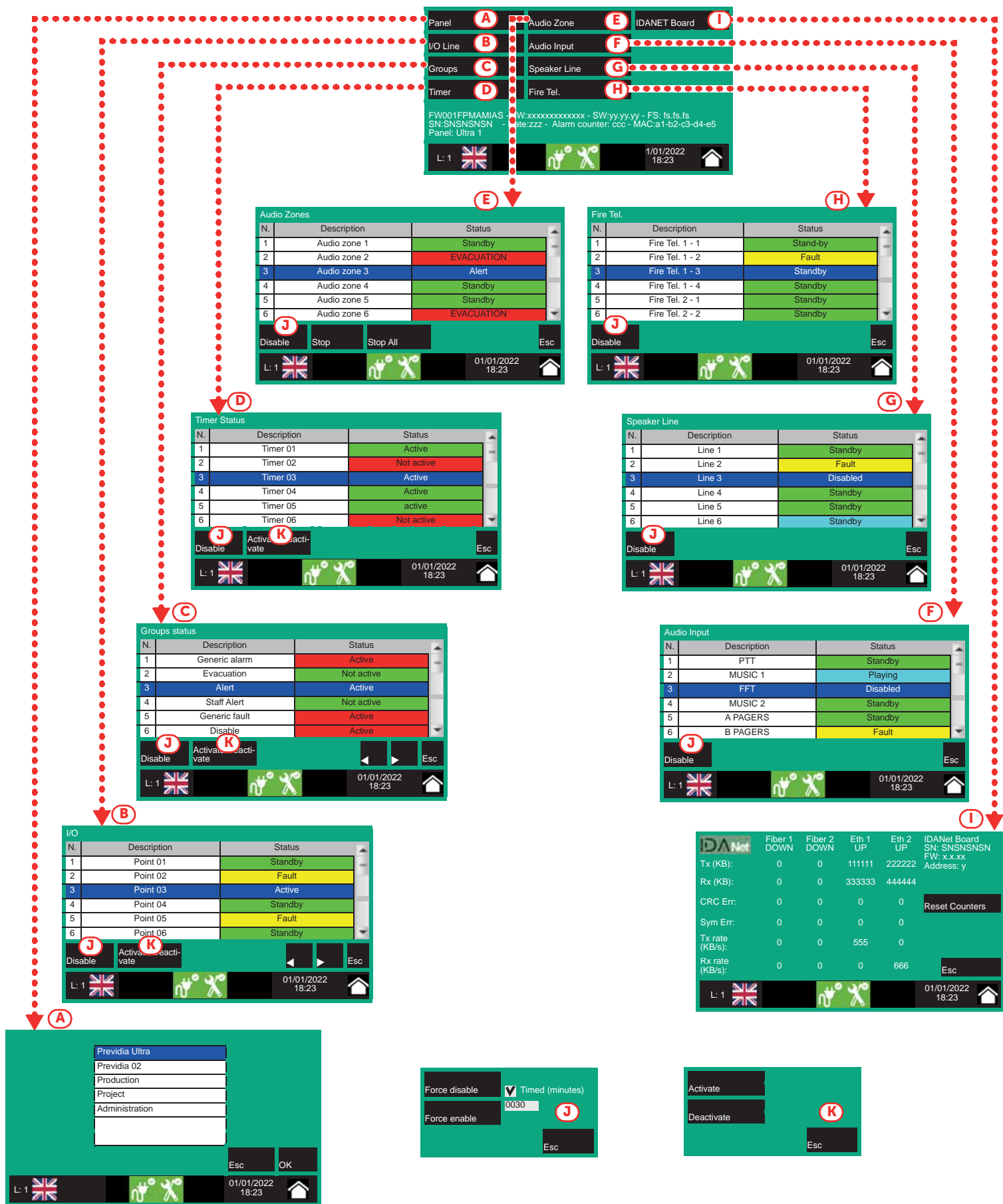
[A]	Access buttons to view the status of the system elements	<table border="1"> <tr> <td>Panel</td> <td>Audio Zone</td> <td>IDANet Board</td> </tr> </table>	Panel	Audio Zone	IDANet Board				
Panel	Audio Zone	IDANet Board							
[B]	Serial number of the FPMAMIAS module, indicators of the number of alarms and system revisions	<div style="border: 1px solid black; padding: 5px;"> <table border="1"> <tr> <td>I/O Line</td> <td>Audio Input</td> <td rowspan="3"></td> </tr> <tr> <td>Group</td> <td>Speaker Line</td> </tr> <tr> <td>Timer</td> <td>Fire Tel.</td> </tr> </table> <p>B FW001FPMAMIAS - FW:xxxxxxxxxxxxx - SW:yy.yy.yy - FS: fs.fs.fs SN:SNSNSNSN - Date:zzz - Alarm counter: ccc - MAC:a1-b2-c3-d4-e5 Panel: Ultra 1</p> <div style="display: flex; justify-content: space-between; align-items: center;"> L: 1    01/01/2022 18:23  </div> </div>	I/O Line	Audio Input		Group	Speaker Line	Timer	Fire Tel.
I/O Line	Audio Input								
Group	Speaker Line								
Timer	Fire Tel.								


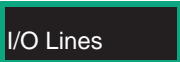




The section dedicated to the visualization of the system status also provides the installer with the following information, shown in the lower left corner of the section [B]:



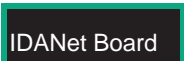




- firmware version of the FPMAMIAS module (FW)
- minimum required revision of Previdia/STUDIO configuration software (SW)
- Serial number (SN)
- site specific data release (Data)
- counter of the number of voice emergencies reported since the system was started
- MAC Address
- description of the control panel

Note: *The sections here described and the relative elements are those relating solely to the emergency voice system and not to the homologous elements belonging to the fire detection system.*

The following diagram is a view of the various screens:



[A]		<p>Buttons to access the section for the selection of one of the control panels in the network whose parts are to be visualized.</p> <p>After selecting the OK button, you will be able to view the elements in the various sections described below. If, instead, the Home or Esc button is pressed, no control panel will be selected therefore the elements visualized will be those of the control panel in use</p>
[B]		<p>Button to access the section for the visualization of the devices connected to the I/O terminals of the selected control panel.</p> <p>This section is divided into pages which contain a maximum of 80 groups. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each line is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, line in standby - Yellow, line in fault status - Red, line in emergency status - Light yellow, line disabled - Blue, line selected by tapping on the screen <p>By selecting a line and tapping on the Activate/Deactivate button, it will be possible to change its status (refer to this table - [K]). The Disable button allows you to change the operating mode (refer to this table - [J]).</p>
[C]		<p>Button to access the section for the management of the output groups of the selected control panel.</p> <p>The arrow buttons allow you to scroll through the pages.</p> <p>The activation status of each group is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, group activated - Red, group disabled - Blue, group selected by tapping on the screen <p>By selecting a group and tapping on the Activate/Deactivate button, it will be possible to change its operating status (refer to this table - [K]). The Disable button allows you to change the operating mode (refer to this table - [J]).</p>
[D]		<p>Button to access the section for the management of the timers programmed for the selected control panel.</p> <p>The activation status of each timer is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, timer activated - Red, timer disabled - Blue, timer selected by tapping on the screen <p>By selecting a timer and tapping on the Activate/Deactivate button, it will be possible to change its operating mode (refer to this table - [K]). The Disable button allows you to change the operating mode (refer to this table - [J]).</p>
[E]		<p>Button to access the audio zones viewing section of the selected control panel.</p> <p>This section is divided into pages which show a maximum of 100 zones. The arrow buttons allow you to scroll through the pages.</p> <p>The status of each zone is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, zone in standby - Yellow, zone in fault status - Red, zone in voice emergency status - Light yellow, zone disabled - Ivory, zone in alert or staff alert - Light blue, active zone for non-emergency communication - Blue, zone selected by tapping on the screen <p>By selecting a zone, it is possible for a user with access level 2 to change its bypassed/unbypassed status (refer to this table - [J]).</p> <p>By pressing the Stop button it is possible to interrupt the audio playback in progress on the selected zone. The Stop All button interrupts both the audio being played and those in the queue (with lower priority).</p>
[F]		<p>Button to access the section for the selection of the audio inputs of the selected control panel.</p> <p>The status of each input is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, input in standby - Yellow, input in fault status - Light yellow, input disabled - Celeste, input active (playing) - Blue, input selected by tapping on the screen <p>The Disable button allows you to change the operating mode (refer to this table - [J]).</p>

<p>[G]</p>		<p>Button to access the section for the selection of the configured speakers lines. The status of each line is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, line in standby - Yellow, line in fault status - Light yellow, line disabled - Blue, line selected by tapping on the screen <p>The Disable button allows you to change the operating mode (refer to this table - [J]).</p>
<p>[H]</p>		<p>Button to access the section for the selection of the emergency telephone lines. The status of each line is shown, recognizable by the colour:</p> <ul style="list-style-type: none"> - Green, line in standby - Yellow, line in fault status - Light yellow, line disabled - Blue, line selected by tapping on the screen <p>The Disable button allows you to change the operating mode (refer to this table - [J]).</p>
<p>[I]</p>		<p>If an IFAMIDANET network module is configured, this button will allow access to the section for viewing information on received and transmitted packets and errors, which can be useful for solving communication problems on the IDANet network.</p>
<p>[J]</p>		<p>Button to open a window which allows you to change the enabled/disabled status of the selected element. This window provides the following buttons:</p> <ul style="list-style-type: none"> - Force disable, to disable the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot enable it. Where available, it is possible to select the "Timed" option and indicate the time, in minutes, during which the element must hold disabled status. - Force enable, to enable the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot disable it. - Esc, to close the window without changing the setting.
<p>[K]</p>		<p>Button to open a window where it is possible to change the activation status of the selected element. This window provides the following buttons:</p> <ul style="list-style-type: none"> - Activate, for the activation of the selected element. - Deactivate, for the deactivation of the selected element. Other system elements which influence the selected element (timers, inputs, detectors, etc.) cannot activate it. - Esc, to close the window without changing the setting.
		<p>Arrow buttons</p>
		<p>Button to step back</p>

Chapter 8

Using the emergency voice system

8.1 Access to programming

The "Programming" button (*paragraph 6.2 - [A]*) accesses the system configuration functions.

These functions are reserved for specialized technical personnel only and require entry of the installer code. Refer to the Configuration and Programming manuals.

8.2 Manual emergency activation procedure

To activate manually the emergency status on the system, follow these steps:

1. Access to access level 2 (via code or key, *paragraph 6.1 - [E]*).
2. Press the manual emergency button (*paragraph 6.1 - [D]*).



Depending on what is set during the system programming phase, the user will be faced with one of the following two situations:

- Visualization of the "Help" page
A screen containing a detailed description of the procedure.
The user can continue with the instructions provided by the guide.
 - Standard procedure
The user is shown screens (which can be eliminated during the configuration phase) in order to select the parts of the system (audio zones or their groupings) involved in the emergency, warning and evacuation messages:
3. Select the audio zones and press the **Ok** button.
 4. Select the attention request message. Press the **Ok** button to start playback of the selected message.
 5. Select the emergency message. Press the **Ok** button to start playback of the selected message.

[A]	Audio zones to be selected.	
[B]	Buttons for selecting audio zones or their groupings	
[C]	Icon to indicate that the PTT microphone can be used for voices transmission over the selected audio zones	
[D]	Evacuation and Alert buttons enabled	

By pressing the PTT microphone button or the "Evacuation" and "Alert" buttons (*paragraph 6.1 - [C]*) at any point during the above-described procedure, the voice of the operator on the microphone or the programmed messages will be transmitted on the selected audio zones.

8.3 Audio adjustment

The Previdia Ultra control panel has a section for adjusting the audio parameters of the system. These adjustments are relative to non-emergency messages and communications, so that the quality level obtained during the design and commissioning of the system, for alert or evacuation situations, is preserved.

1. Access to access level 2 (via code or key, *paragraph 6.1 - [E]*).
2. Press the "Audio Settings" button on the display during stand-by status (*paragraph 6.2 - [A]*).

A window opens that allows the selection of one of the following options:

- **Audio input**

A screen is shown for the selection of one of the control panels in the system. Once the control panel has been selected, for each non-emergency input configured on the IFAMEVAC module of the selected control panel, the following will be shown:

- a volume bar
- three bars for equalization
- a "Audio Zones" button to associate the source to the zones configured in the system
- a cell to select whether to display the volumes in dB or as a percentage

- **Speakers**

A screen is shown for the selection of one of the control panels in the system. For each speaker line configured for the selected control panel, the following will be shown:

- four bars to adjust volume and equalization during music playback
- a cell to choose whether to display the volumes in dB or as a percentage

- **Integrated Speaker**

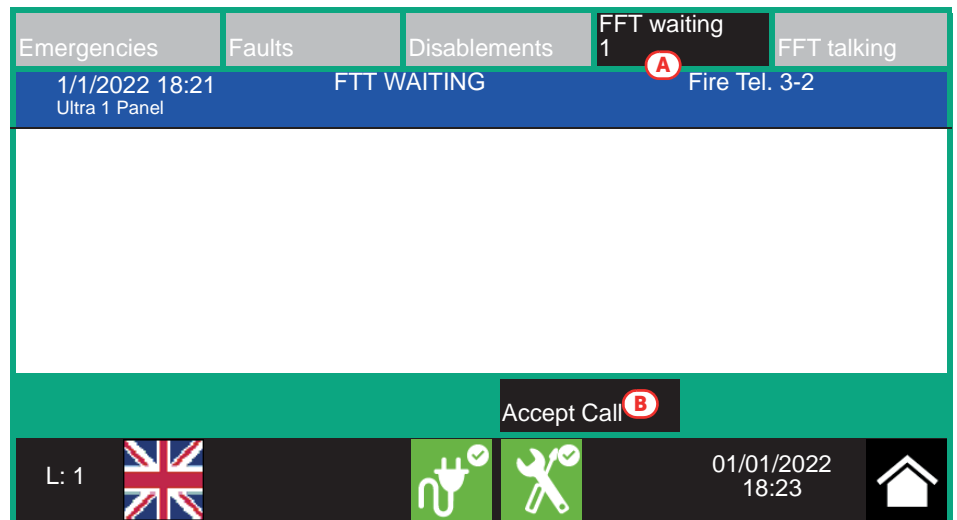
A screen is shown for the selection of one of the control panel audio sources to be listened to on the built-in speaker of the control panel.

Once the playback has started, it will be possible to pause, stop and adjust the volume.

8.4 Management of emergency telephones

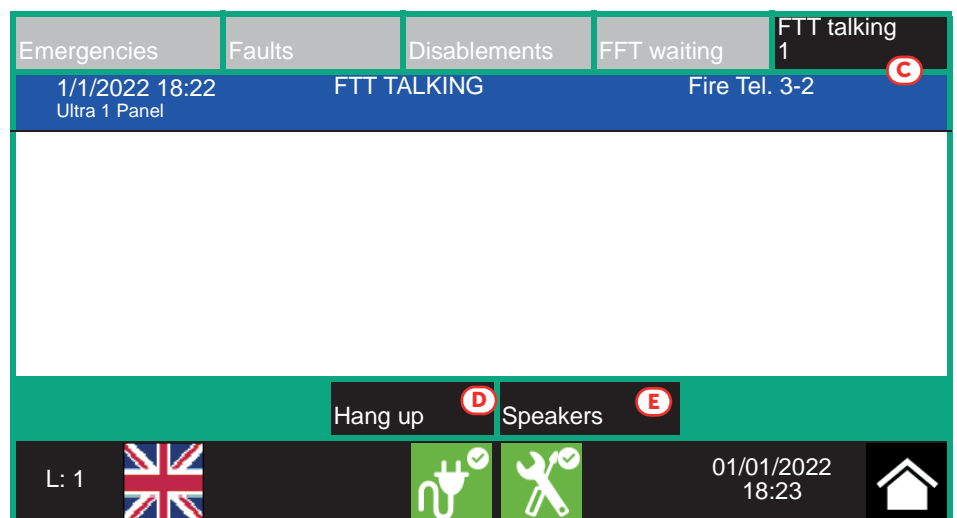
If a line for emergency telephone calls is activated, a call waiting event will be generated *[A]*.

At this point it is possible to press the **Accept Call** button *[B]* and put the audio channel reserved for emergency calls in communication with the line from which the request is coming.



By lifting the handset in the cradle of the control panel, it will be possible to speak with the person who activated the line. A voice call event will be generated *[C]*.

In the event of further calls, it will be possible to accept the requests (as described above) and include the callers in the conversation (up to a maximum of 5).



In the event of ongoing calls, it is possible to:

- Select a line and press the **Hang up** button *[D]* to disconnect it from the channel
- Press the **Speakers** button *[E]* to put the channel in communication with all the loudspeakers in the system

System Test

INIM Electronics recommends that the entire system be checked completely at regular intervals.

For testing and maintenance procedures, refer to the *Manual for system configuration, commissioning and maintenance*.

WEEE

Pursuant to art. 26 of the Legislative Decree 14 March 2014, n. 49 "Implementation of Directive 2012/19 / EU on waste electrical and electronic equipment".



The crossed-out bin symbol on the equipment or on its packaging indicates that the product must be disposed of correctly at the end of its working life and should never be disposed of together with general household waste.

The user, therefore, must take the equipment that has reached the end of its working life to the appropriate civic amenities site designated to the differentiated collection of electrical and electronic waste.

As an alternative to the autonomous-management of electrical and electronic waste, you can hand over the equipment you wish to dispose of to a dealer when purchasing new equipment of the same type.

You are also entitled to convey for disposal small electronic-waste products with dimensions of less than 25cm to the premises of electronic retail outlets with sales areas of at least 400m², free of charge and without any obligation to buy.

Appropriate differentiated waste collection for the subsequent recycling of the discarded equipment, its treatment and its environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and/or recycling of the materials it is made of.

Information about disposal of batteries and accumulators (applicable in Countries with separate collection systems)



This marking on batteries and/or their manual and/or their packaging, indicates that batteries of these products, at the end of their working life, should not be disposed of as unsorted municipal waste, but must be object of a separate collection. Where marked, the chemical symbols Hg, Cd o Pb indicate that the battery contains mercury, cadmium or lead above the reference levels of the directive 2006/66/EC. If batteries are not properly disposed of, these substances, together with other ones contained, can cause harm to human health and to the environment.








To protect human health and the environment, to facilitate treatment and recycling of materials, separate batteries from other kind of waste and use the collection scheme stated in your area, in accordance to current laws.






This product contains a lithium metal button cell type CR2032. Furthermore, for proper operation and compliance with product standards, the installer must install a couple of lead-acid accumulators for backup use type NPL24-12I or NP 17 -12-FR or equivalent (not supplied).

Before disposing of the above, it's appropriate to remove them from their holders avoiding to damage them or causing short circuits.







Appendix



Quick management of fire emergencies


Sequence	in the event of ALARM	
1	Mute the buzzer	
2	Pass to access level 2 by turning the key clockwise (one pulse sufficient)	
3	Silence the sounders	
4	Verify signalling on the display	
5	In the event of false alarm press the reset button	
	In the event of danger, implement evacuation manually	

Sequence	in the event of FAULT	
1	Mute the buzzer	
2	Pass to access level 2 by turning the key clockwise (one pulse sufficient)	
3	Verify signalling on the display	
4	Repair the fault If necessary, contact the service manager	
5	Press the reset button to clear the fault memory	

Quick management of voice emergencies

Sequence	in the event of an EMERGENCY	
1	Mute the buzzer	
2	Verify signalling on the display	
3 - 1	In the event of false alarm: Pass to access level 2 by turning the key clockwise (one pulse sufficient)	
3 - 2	Silence the speakers	
3 - 3	Press the reset button	
3	In the event of danger: Perform the actions set out in the emergency management plan	

Sequence	MANUAL VOICE EMERGENCY	
1	Pass to access level 2 by turning the key clockwise (one pulse sufficient)	
2	Press the manual emergency button	

	WITH VOICE MESSAGES	
3	Select the audio zones to be placed in emergency status	
4	Select the attention request message	
5	Select the emergency message	

	WITH PTT MICROPHONE	
3	Open the door of the PTT microphone housing	
4	Push the PTT microphone button and speak	



Evolving Security

ISO 9001 Quality Management Certificate issued by BSI
with number FM530352

Inim Electronics S.r.l.

Centobuchi, via Dei Lavoratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.biz _ www.inim.biz





EN 54-2
EN 54-4
EN 54-16
EN 54-21
EN 12094-1



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0051-CPR-2741
0051-CPR-2826
0051-CPR-2827

CONTROL PANEL FOR FIRE DETECTION AND ALARM,
FIRE EXTINCTION AND VOICE-EVACUATION SYSTEMS

PREVIDIA **ULTRA**

CONTROL PANEL FOR FIRE DETECTION AND ALARM, FIRE
EXTINCTION AND VOICE-EVACUATION SYSTEMS

INSTALLATION MANUAL



PREVIDIA | ULTRA

inim[®]

Warranty

INIM Electronics s.r.l. warrants that this product shall be free of defects in material and workmanship for a period of 24 months from the date of production. In consideration of the fact that INIM Electronics s.r.l. does not install directly the products here indicated, and due to the possibility they may be used with other products not manufactured by INIM Electronics, INIM Electronics cannot guarantee the performance of the security installation. Seller obligation and liability under this warranty are expressly limited to repairing or replacing, at seller's option, any product not meeting its stated specifications. In no case can INIM Electronics s.r.l. be held responsible or liable by the buyer or any other person for any loss or damage, direct or indirect, consequential or incidental.

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- Damage arising from improper use or negligence;
- Damage caused by fire, flood, wind or lightning;
- Vandalism;
- Fair wear and tear.

INIM Electronics s.r.l. shall, at its option, repair or replace any defective products. Improper use, that is, use for purposes other than those mentioned herein will void this warranty. For further details regarding this warranty contact the authorized dealer.

Limited Warranty

INIM Electronics s.r.l. shall not be liable for any damage caused by improper use of this product.

The installation and use of the products indicated herein must be carried out by authorized persons only. Moreover, the installation procedure must be carried out in full respect of the instructions provided in this manual.

Copyright

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General information

1.1 Manufacturer's details

Manufacturer: INIM ELECTRONICS S.R.L.

Production plant: Centobuchi, via Dei Lavoratori 10

Municipality: 63076, Montepandone (AP), Italy

Tel.: +39 0735 705007

Fax: +39 0735 704912

E-mail: info@inim.it

Web: www.inim.it

The personnel authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work only on devices marketed under the INIM Electronics brand.

1.2 Supplied Documentation

Previdia Ultra User's Manual: contains the identification of the parts on the front plate and the end-user operating instructions for use.

Previdia Ultra control panel Installation Manual: contains the technical specifications of the Previdia Ultra control panels and the mounting, installation and wiring instructions.

Manual for system configuration, commissioning and maintenance: contains the instructions for system commissioning and the operations to be carried out during commissioning, maintenance and troubleshooting sessions.

Previdia Ultra Programming Manual: contains the control panel configuration guide and a detailed description of the various options contained in the programming software.

Installation manual for internal modules: contains instructions for installation and the wiring diagrams for the various IFAM and IFM internal modules (IFAMPSU, IFAMAMP, IFAMEVAC, IFAMIDANET, IFAMFFT, IFM2L, IFMNET, IFM4R, IFM4IO, IFMDIAL, IFM16IO, IFMLAN, IFMEXT)

Installation manual for FPM modules: contains instructions for installation and the wiring diagrams for the various front-plate modules (FPAMIAS, FPMCPU, FPMLED, FPMLEDPRN, FPMEXT, FPMNUL)

Installation manual for accessory modules: contains instructions for installation and the wiring diagrams for the various IAS-ADAPT1000 accessory modules

Installation manual for microphone bases: contains technical specifications and the instructions for use of the Microphone bases (IPG12, IPG24, IPGE06, IPGE18)

Instructions for the installation of cabinets: instructions for mounting cabinets and respective accessory components (PRCAB+, PRCABRK+)

Guide to Networking: manual containing the instructions for the connection of control panels in a Hornet+ network, IDANet network or via IP, as well as the description of the limitations and responsibilities relating to the use of networks.

BMS Manual: provides the installer with the guidelines relating to the integration of Previdia control panels with external supervision systems.

The manuals which are not supplied with the apparatus can be ordered, making reference to their respective codes, or downloaded from www.inim.it.

1.3 About this manual

Manual code: DCMIINE0PREVIDIAU

Revision: 1.40

1.3.1 Terminology

Control panel, System, Device: The main supervisory unit or any constituent part of the fire detection system.

Left, Right, Behind, Above, Below: Directions as seen by the operator when directly in front of the mounted device.

Qualified personnel: Personnel whose training, expertise and knowledge of the products and laws regarding security systems, are capable of creating, in accordance with the requirements of the purchaser, the most suitable solution for the protected premises.

Select: Click on a specific item on the interface (drop-down menu, options box, graphic object, etc.).

Press: Push a button/key or tap on a video button on a touchscreen or display.

1.3.2 Graphic conventions

Following are the graphic conventions used in this manual.

Conventions	Example	Description
Text in italics	Refer to <i>paragraph 1.3.2 Graphic conventions</i>	Directs you to the title of a chapter, section, paragraph, table or figure in this manual or other published reference.
<text>	<AccountCode>	Editable field
[Uppercase letter] or [number]	[A] or [1]	Reference relating to a part of the system or video object.

Note: *The notes contain important information relating to the text.*

Attention: *The "Attention" prompts indicate that total or partial disregard of the procedure could damage the device or its peripherals.*

EN54: Such indications indicate that the information and instructions refer to European standards.

Cables: Such indications state the types and specifications of the cables which must be used for the wiring in accordance with the manufacturer's advice or the standard concerned.

1.4 Operator classification - Access Levels

The control panel has 4 distinct access levels:

Level 1: Public level - this is the normal access level of the control panel and is the access level for building inhabitants who are neither authorized to use the system nor instructed in its use.

At this level it is possible to view the information on the display and on the signalling LEDs, as well as to interact using the buttons and the touch screen to scroll through the information. Level 1 allows the following operations only:

- mute buzzer
- test signalling LEDs
- activate alarm signalling when an early-warning process is running

Level 2: Authorized users - this access level is for the system supervisors and is for authorized personnel who are adequately instructed in the use of the system and its functions.

Access requires the use of a key or entry of a valid access code with sufficient access rights. In addition to the operations described for level 1 it is also possible to carry out the following operations:

- mute alarm signalling devices
- rearm the control panel
- activate alarm signalling devices manually
- disable control panel elements
- place in test status one or more of the system elements
- manual activation of emergency

The system provides two additional sub-levels of authorized user:

- **Superuser level**, las for the previous one, with the added possibility of replacing a loop device and registering control panels to their account with the Inim Cloud service
- **Maintenance level**, same as the previous level with the added possibility of stopping the valve pulse for those models that support extinction functions

Level 3: Programming - this access level is for specialized technical operators who carry out system configuration, commissioning and maintenance.

Access requires entry of a valid access code with sufficient access rights after inserting a jumper which enables programming. Refer to the manual for system configuration, commissioning and maintenance.


Only authorized technicians, appointed by the Manufacturer can, by means of special tools, carry out repair work on the motherboard.

Level 4: Only authorized technicians, appointed by the Manufacturer can, by means of special tools, carry out repair work on the motherboard.

1.5 CE Mark


1.5.1 Regulation (EU) No. 305/2011

These products comply with requirements stated by standards listed here below in compliance with Regulation (EU) No. 305/2011.

 0051
INIM Electronics s.r.l. Via Dei Lavoratori 10 - Fraz. Centobuchi 63076 Montepandone (AP) - Italy 22 0051-CPR-2741
EN 54-2:1997 + A1:2006 EN 54-4:1997 + A1:2002 + A2:2006 EN 54-16:2008 EN 54-21:2006 EN 12094-1:2003 PREVIDIA-ULTRAVOX PREVIDIA-ULTRAVOXR PREVIDIA-ULTRAVOXD <i>Control and signalling panel with power-supply equipment, alarm transmission and fault signalling equipment, automatic electrical device for control and management of switch off and delay, control and signalling equipment for integrated voice alarm systems for fire detection and signalling in buildings and for gas extinguishing systems installed in buildings as part of a complete operating system.</i>


Essential features	Performance	
Performance in the event of fire	PASS	
Power supply performance	PASS	
Response delay (response time in the event of fire)	PASS	
Transmission performance	PASS	
Operating reliability	PASS	
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS

Options provided in accordance with EN54-2	Performance
7.8 Output to fire alarm devices	PASS
7.9 Output to fire alarm routing equipment	PASS
7.10 Output to fire protection equipment	PASS
7.11 Delay on outputs	PASS
7.12 Co-incident detection (Type A, B and C)	PASS
7.13 Alarm counter	PASS
8.3 Point fault signal	PASS
8.9 Output to remote fault or warning signalling devices	PASS
9.5 Addressable points out-of-service	PASS
10.0 Test condition	PASS
Options provided in accordance with EN12094-1	Performance
4.17 Delay of extinguishing signal	PASS
4.18 Signal representing the flow of extinguishing agent	PASS
4.19 Monitoring of the status of components	PASS
4.20 Emergency hold device	PASS
4.21 Control of flooding time	PASS
4.22 Initiation of secondary flooding	PASS
4.24 Triggering signals to equipment within the system	PASS
4.26 Triggering of equipment outside the system	PASS
4.27 Emergency abort device	PASS
4.28 Control of extended discharge	PASS
4.29 Release of the extinguishing media for selected flooding zones	PASS
Options provided in accordance with EN 54-16	Performance
7.3 Audible warning	PASS
7.5 Phased evacuation	PASS
7.6.2 Manual silencing of voice alarm status	PASS
7.7.2 Manual reset of voice alarm status	PASS
7.8 Output to fire signalling devices	PASS
7.9 Voice alarm status output	PASS
8.3 Fault signalling related to the transmission path to the CCS	PASS
8.4 Fault signalling related to voice alarm zones	PASS
9 Out-of-service condition	PASS
10 Manual command of the voice alarm system	PASS
12 Emergency microphone(s)	PASS
13.14 Redundant power amplifiers	PASS
Additional information according to EN 54-2	
About information required at point 12.2.1, see data contained in this manual.	
Additional information according to EN 54-4	
For the information required by point 7.1, see data contained in this manual.	
Additional information according to EN 54-21	
For the information required by point 7.2.1, see data contained in this manual.	
Additional information according to EN 12094-1	
Environmental class: A	
Degree of protection: IP30	
Flooding zones: up to 24	
Zones from 1 a 24 for CO2, inert gas or halogenated hydrocarbons.	
Response delay activation condition: max 3s	
Response delay triggering of outputs: max 1s	

 0051	
INIM Electronics s.r.l. Via Dei Laboratori 10 - Fraz. Centobuchi 63076 Monteprandone (AP) - Italy 22 0051-CPR-2826	
EN 54-2:1997 + A1:2006 EN 54-4:1997 + A1:2002 + A2:2006 EN 54-21:2006 EN 12094-1:2003 PREVIDIA-ULTRA216 PREVIDIA-ULTRA216R PREVIDIA-ULTRA216D <i>Control and signalling panel with power-supply equipment, alarm transmission and fault signalling equipment, automatic electrical device for control and management of switch off and delay for fire detection and signalling in buildings and for gas extinguishing systems installed in buildings as part of a complete operating system.</i>	

Essential features	Performance	
Performance in the event of fire	PASS	
Power supply performance	PASS	
Response delay (response time in the event of fire)	PASS	
Transmission performance	PASS	
Operating reliability	PASS	
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS

Options provided in accordance with EN54-2	Performance
7.8 Output to fire alarm devices	PASS
7.9 Output to fire alarm routing equipment	PASS
7.10 Output to fire protection equipment	PASS
7.11 Delay on outputs	PASS
7.12 Co-incident detection (Type A, B and C)	PASS
7.13 Alarm counter	PASS
8.3 Point fault signal	PASS
8.9 Output to remote fault or warning signalling devices	PASS
9.5 Addressable points out-of-service	PASS
10.0 Test condition	PASS
Options provided in accordance with EN12094-1	Performance
4.17 Delay of extinguishing signal	PASS
4.18 Signal representing the flow of extinguishing agent	PASS
4.19 Monitoring of the status of components	PASS
4.20 Emergency hold device	PASS
4.21 Control of flooding time	PASS
4.22 Initiation of secondary flooding	PASS
4.24 Triggering signals to equipment within the system	PASS
4.26 Triggering of equipment outside the system	PASS
4.27 Emergency abort device	PASS
4.28 Control of extended discharge	PASS
4.29 Release of the extinguishing media for selected flooding zones	PASS
Additional information according to EN 54-2	
About information required at point 12.2.1, see data contained in this manual.	
Additional information according to EN 54-4	
For the information required by point 7.1, see data contained in this manual.	
Additional information according to EN 54-21	
For the information required by point 7.2.1, see data contained in this manual.	
Additional information according to EN 12094-1	
Environmental class: A	
Degree of protection: IP30	
Flooding zones: up to 24	
Zones from 1 a 24 for CO2, inert gas or halogenated hydrocarbons.	
Response delay activation condition: max 3s	
Response delay triggering of outputs: max 1s	

 0051	
INIM Electronics s.r.l. Via Dei Laboratori 10 - Fraz. Centobuchi 63076 Monteprandone (AP) - Italy 22 0051-CPR-2827	
EN 54-4:1997 + A1:2002 + A2:2006 EN 54-16:2008 PREVIDIA-VOX PREVIDIA-VOXR PREVIDIA-VOXD <i>Control and signalling panel for voice alarm systems with integrated power-supply equipment for fire detection and signalling systems installed in buildings</i>	

Options provided in accordance with EN 54-16	Performance
7.3 Audible warning	PASS
7.5 Phased evacuation	PASS
7.6.2 Manual silencing of voice alarm status	PASS
7.7.2 Manual reset of voice alarm status	PASS
7.8 Output to fire signalling devices	PASS
7.9 Voice alarm status output	PASS
8.3 Fault signalling related to the transmission path to the CCS	PASS
8.4 Fault signalling related to voice alarm zones	PASS
9 Out-of-service condition	PASS
10 Manual command of the voice alarm system	PASS
12 Emergency microphone(s)	PASS
13.14 Redundant power amplifiers	PASS
Additional information according to EN 54-4	
For the information required by point 7.1, see data contained in this manual.	

Essential features	Performance	
Performance in the event of fire	PASS	
Power supply performance	PASS	
Response delay (response time in the event of fire)	PASS	
Transmission performance	PASS	
Operating reliability	PASS	
Durability of operating reliability:	Thermal resistance	PASS
	Vibration resistance	PASS
	Humidity resistance	PASS
	Electrical stability	PASS

1.5.2 Directive 2014/53/EU

Hereby INIM Electronics S.r.l. declares that the above mentioned control panel models with the optional modules comply with the essential requirements and other relevant provisions established by directive 2014/53/EU.

Following paragraph explains how to download the complete Declaration of Conformity.

This product may be used in all EU Countries.

1.5.3 Documents for the users



Declarations of Performance, Declarations of Conformity and Certificates concerning to INIM Electronics S.r.l. products may be downloaded free of charge from the web address www.inim.it, getting access to Extended Access and then selecting "Certifications" or requested to the e-mail address info@inim.it or requested by ordinary mail to the address shown in the *paragraph 1.5.1*.

Manuals may be downloaded free of charge from the web address www.inim.it, getting access to Extended Access and then selecting "Manuals".

1.5.4 Safeguard instructions

The following symbol shown on the product and/or on its packaging indicates to refer to this manual for further information on the electrical safety of the product.



  EN IEC 62368-1		
Isolation class		I
Terminal type	AC INPUT	ES3, PS3
	BATTERY	ES1, PS3
	RELAY (IFAMPSU and IFM24160)	ES1, PS2
	OUT1, OUT2 (IFAMPSU and IFM24160)	ES1, PS2
	ESPANSION BOARD	ES1, PS2
	RS485-BMS, RS485-REPEATER	ES1, PS2
	CAN-IN, CAN-OUT	ES1, PS2
	TAMPER	ES1, PS1
	USB	ES1, PS1
	CR2032 (J2)	ES1, PS1
	RS232	ES1, PS1
	LOOP-A and B (IFM2L)	ES1, PS2
	ETHERNET (FPMCPU, FPAMIAS, IFAMIDANET and IFAMEVAC)	ES1, PS1
	MUSIC 1/2 (IFAMEVAC)	ES1, PS1
	AUX 1/2 (IFAMEVAC)	ES1, PS1
	A/B PAGERS (IFAMEVAC)	ES1, PS2
	LINE A/B (IFAMAMP)	ES3, PS3
LOCAL AUDIO (IFAMAMP)	ES1, PS1	
RISER 1/2/3/4 (IFAMFFT)	ES2, PS1	

Chapter 2

General Description

2.1 Previdia Ultra System

Previdia Ultra is a modular system for constructing fire detection, alarm, extinguishing and voice alarm systems. A voice evacuation system (commonly named "EVAC" standing for Emergency Voice Alarm and Communication) is a system that uses loudspeakers and amplifiers with characteristics suitable for alerting building occupants to imminent danger in the event of a fire. In addition to this specific function, a voice system can also be used for common "PA" (Public Addressing) purposes, that is, for the diffusion of music or non-emergency communications.

These functions can be activated and used in accordance with the combination of modules which make up the system.

The three typical system applications are:

- control panel in single cabinet
- control panel in several cabinets (multi-cabinet system)
- control panels in a network (RS485 connection, Ethernet point-to-point, optic fiber)

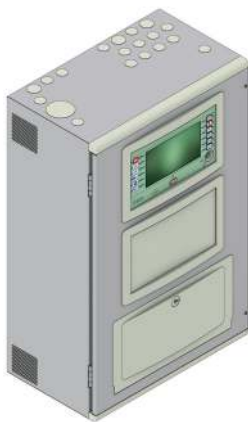
There are three basic control panel models which can be developed and expanded through the use and installation of additional modules.

The basic control panel models are:

• Previdia-Ultra216

control panel in single cabinet with fire detection functions. The control panel includes the modules:

- FPMCPU, main CPU unit with display
- IFAMPSU, power-supply module capable of supplying current up to 1KWatt at 27.6V
- IFM2L - module for the management of two loop circuits for devices distributed in the protected area.



•Previdia-Vox

control panel in single cabinet with voice evacuation functions. The control panel includes the modules:

- FPAMIAS: control panel with display for EVAC/PA voice functions
- IFAMPSU, power-supply module capable of supplying current up to 1KWatt at 27.6V
- IFAMEVAC: audio matrix module for signals processing
- IFAMAMP: 250W audio amplifier module
- PTT microphone

• Previdia-Ultravox

control panel in single cabinet with fire detection and voice evacuation functions The control panel includes the modules:

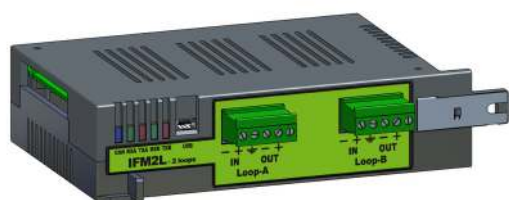
- FPMCPU, main CPU unit with display
- FPAMIAS: control panel with display for EVAC/PA voice functions
- IFAMPSU, power-supply module capable of supplying current up to 1KWatt at 27.6V
- IFAMEVAC: audio matrix module for signals processing
- IFAMAMP: 250W audio amplifier module
- PTT microphone
- IFM2L - module for the management of two loop circuits for devices distributed in the protected area.

Two types of modules can be added to the basic control panels:

• Front-plate modules

modules to be mounted on the cabinet front plate:

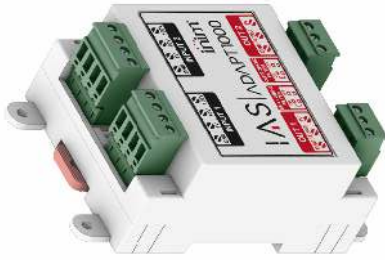
- FPMCPU, main CPU unit with display, essential for the fire detection functions
if required, a second CPU unit can be installed inside the cabinet. This second CPU will take over in the event of fault status on the main unit and by so doing will disable the main CPU completely.
- FPAMIAS: control panel with display for EVAC/PA voice functions.
- FPMNUL - plastic support (provide no functions other than support)
- FPMLED - signalling module with 50 individually programmable tricolour LEDs
- FPMLEDPRN - signalling module with 50 individually programmable tricolour LEDs and an 80mm printer
- FPMEXT - extinguishant channel status module, to be used when the control panel is equipped with modules for the management of automatic fire-extinguishant systems (IFMEXT).



•IFAM and IFM modules

internal modules, which must be mounted inside the cabinet through the use of an interconnection bar:

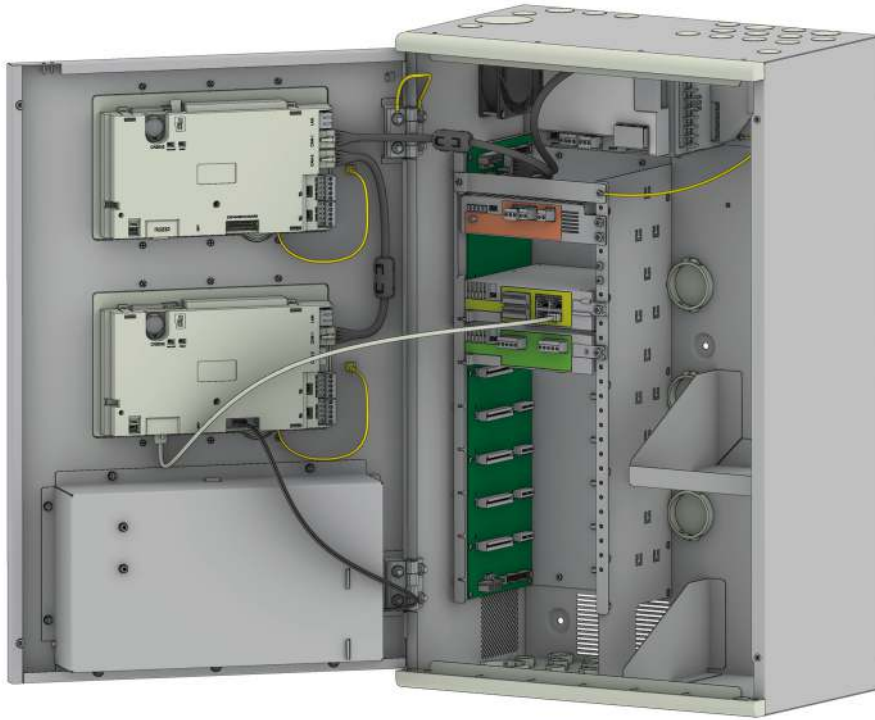
- IFAMPSU, power-supply module capable of supplying current up to 1KWatt at 27.6V
- IFAMEVAC: audio matrix module for signals processing
- IFAMAMP: 250W audio amplifier module
- IFAMIDANET, module for connecting the control panel to the IDANet network
- IFAMFFT, module with 4 lines for emergency telephones
- IFM24160, power-supply module, to be mounted in the first position at the top on the bar
- IFM2L - module for the management of two loop circuits for devices distributed in the protected area.
- IFM4R - module with 4 programmable relays
- IFM4IO - module with 4 supervised power inputs/outputs
- IFMDIAL - module for dialler communications over PSTN or GSM networks and GPRS connection management
- IFM16IO - module with 16 low-power inputs/outputs
- IFMNET - module for the connection of control panels in a Hornet+ network
- IFMLAN - module for advanced TCP-IP service management (Video verification, Web Interface Web, e-mail, etc.)
- IFMEXT - module for gas-extinguishant system management



•Accessory modules

modules to be used optionally in support of modules with audio functions:

-IAS-ADAPT1000: module for adapting and decoupling audio signals input into the control panel



The Previdia Ultra control panel can be mounted in up to 4 cabinets that can be affixed together. In a system with more than one cabinet, the maximum number of modules is as follows:

Front-plate module	maximum number	IFAM Module	maximum number	IFM Module	maximum number
FPAMIAS	1	IFAMPSU	4 one per cabinet	IFM24160	4 one per cabinet
FPMCPU	2	IFAMAMP	30	IFM2L	8
FPMNUL	7	IFAMEVAC	1	IFM4R	16
FPMLED	7	IFAMIDANET	1	IFM4IO	16
FPMLEDPRN	1	IFAMFFT	4	IFMDIAL	1
FPMEXT	5			IFM16IO	4
				IFMNET	1
				IFMLAN	1
				IFMEXT	24

2.2 Single cabinet control panel

If the Previdia control panel is a single cabinet configuration, it will be possible to install a second front panel module on the front panel, in addition to the FPMCPU unit, a primary essential component for the proper functioning of the Previdia-Ultra216, or the FPAMIAS unit for the Previdia-Vox control panel.

Positioned inside the cabinet is the interconnection bar, distribution of power and the signals of the CAN DRIVE+, for housing up to 8 IFM and IFAM modules, depending on the needs of the system.



2.3 Multi-cabinet control panels

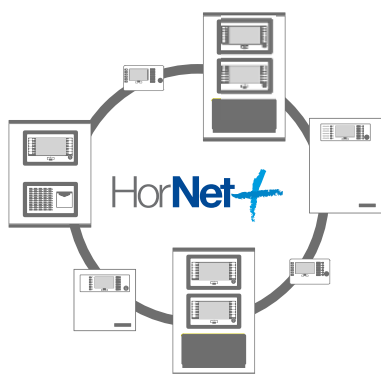
The capacity of the control panel can be expanded by affixing as many as 4 cabinets together.

The cabinets can be affixed together by securing the bottom of one cabinet to the top of another by means of the supplied bolts. Once the cabinets are affixed to one another, all the CAN DRIVE+ bars must be connected together by means of the supplied BUS cable.

The number of housings available for front-plate and internal modules increases with the number of cabinets installed.

A control panel with several cabinets can use several IFAMPSU power-supply modules or IFM24160, mounted one in each of its cabinets, as long as they are of one model and not both models together. In this way the control panel has a total current equal to the sum of the maximum currents of the power-supply modules installed which automatically share the load current.

2.4 Control panels in a Hornet+ network

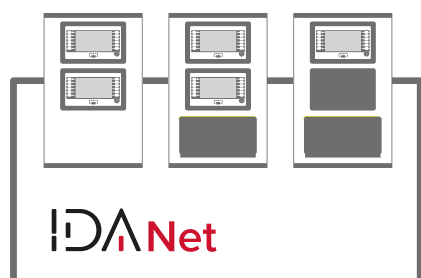


To increase the extension of the system with fire-fighting functions, it is possible to network several Previdia control panels (Ultravox, Vox, Ultra, Max or Compact up to a maximum of 48) in order to form a system of increased capacity (Hornet+ network).

When connecting two or more control panels in a Hornet+, it will be necessary to install an IFMNET module inside each control panel. This module provides two RS485 ports for the ring connection.

For further information regarding the method used for connecting control panels in a network refer to the Previdia Networking Guide available at www.inim.it.

2.5 IDANet



Through IDANet network-connection technology, Previdia Ultra control panels can be connected in a ring via a CAT5 ethernet cable (up to 100m) or optical fiber (by means of an appropriate SFP module according to the type of fiber used).

The IDANet network allows the sharing of all the information with the various control panels, which effectively makes it into a single system. In the case of control panels with voice functions in IDANet network, they are capable of sharing up to 20 audio tracks, thus allowing sound sources to be conveyed from one node to another in the system.

2.6 Control Panels in an IP network

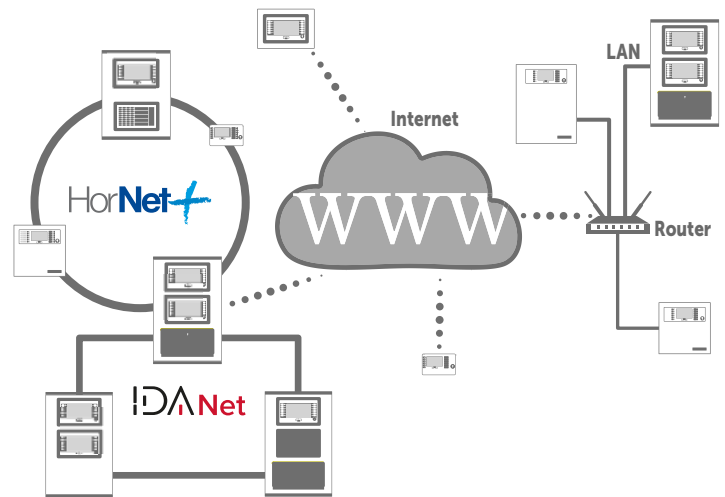
Multiple control panels, or Hornet+ networks of control panels with fire functions, or IDANet networks of control panels with fire and voice functions, can be connected to each other via a TCP-IP connection.

Each node in a connection of this type is identified as a "cluster". Each cluster can consist of:

- a single control panel
- a repeater
- a Hornet+ network
- a IDANet network
- a network consisting of a Hornet+ ring and an IDANet ring

By means of a TCP-IP connection, it is then possible to connect several clusters together.

For further information regarding the method used for connecting control panels in a network refer to the Networking Guide available at www.inim.it



Attention: *The control panel that acts as a gateway for TCP-IP networking must include the FPMCPU module.*

2.7 Inim Cloud fire

The INIM Electronics Cloud service provides Previdia system users with a further method of intrusion panel management via Internet.

The connection of the control panels to the Cloud service is achieved via the Ethernet connection of the IFMLAN module and access for the user is possible with a web interface (App or any browser) without the need to configure the network on which the control panel is installed. In particular, it is not necessary to program a router to perform port-forwarding and the like in order to reach the control panel.



Each cluster, equipped with at least one FPMCPU control panel, can be connected to the Inim cloud, allowing you to take advantage of the following features:

- Remote system monitoring (thus overcoming local network configuration difficulties)
- System register management (in accordance with local regulations in force)
- Management of the maintenance register

2.8 List of Previdia Ultra system components

Following is a list of the elements available for the Previdia Ultra system:

- Standard models of Previdia Ultra control panels:
 - Previdia-Ultravox control panel in single cabinet with fire detection and voice evacuation functions
 - Previdia-Vox control panel in single cabinet with voice evacuation functions
 - Previdia-Ultra216 control panel in single cabinet with fire detection functions
 - Previdia-UltravoxR control panel in single cabinet with fire detection and voice evacuation functions, in red
 - Previdia-VoxR control panel in single cabinet with voice evacuation functions, in red
 - Previdia-Ultra216R control panel in single cabinet with fire detection functions, in red
- Front-plate modules:
 - FPMCPU CPU / Repeater module
 - FPAMIAS Main control module for voice functions
 - FPMLED LED module
 - FPMLEDPRN LED module with printer
 - FPMEXT LED module for extinguishant module
 - FPMNUL Blind-plate module

- IFAM internal modules:
 - IFAMPSU 1KW power-supply module
 - IFAMEVAC Audio matrix module
 - IFAMAMP 250W audio amplifier module
 - IFAMIDANET Module for the connection in IDANET network
 - IFAMFFT Module with 4 lines for emergency telephones
- IFM internal modules:
 - IFM24160 5.2A power-supply CAN module
 - IFM2L CAN module with 2 loops
 - IFMNET CAN module for Hornet+ network connections
 - IFM4R CAN module with 4 relays
 - IFM4IO CAN module with 4 I/O
 - IFMDIAL CAN dialler module
 - IFM16IO CAN module with 16 I/O
 - IFMLAN CAN LAN module
 - IFMEXT CAN extinguishant module
- Accessory modules:
 - IAS-ADAPT1000 Module for adapting and decoupling audio signals input into the control panel
- Cabinets:
 - PRCAB+ Metal cabinet complete with front plate and CAN DRIVE+ bar
 - PRCAB+R Metal cabinet complete with front plate and CAN DRIVE+ bar, in red
- Microphone bases:
 - IPG12 Microphone base for announcements equipped with 12 configurable buttons
 - IPG24 Microphone base for announcements equipped with 24 configurable buttons
 - IPGE06 Emergency microphone base equipped with 6 configurable buttons
 - IPGE18 Emergency microphone base equipped with 18 configurable buttons
- Accessories:
 - PRREP Enclosure and front plate in aluminium for repeaters
 - PRCABRK+ Bracket for mounting the PRCAB+ cabinet to a 19' rack
 - FTLF1217P2BLT SFP module for multimode optical fiber connection
 - IPG-GOOSENECK Flexible gooseneck microphone stand
 - IPG-PTT PTT microphone
 - IPGECAB Red metal cabinet with a keyswitch for the housing of the microphone bases
 - IPS24024DT 24V local power-supply for microphone bases
 - IFFT-PHONE Emergency telephone handset
 - IFFT-SOCKET Jack socket
 - IAS-EOL1000 End of line for speaker line with total power less than 20W
 - PRCAB-Boostfan Additional fan for PRCAB + cabinet

Chapter 3

Description of the Previdia Ultra system parts

3.1 Basic control panel models

The Previdia Ultra system includes three basic control panel models, distinct from each other with regard their available functions and assembled modules:

- Previdia-Ultravox
- Previdia-Vox
- Previdia-Ultra216

These control panels are supplied assembled in a single metal cabinet, with characteristics identical to those of the PRCAB+ cabinet model (see *paragraph 3.2*). For control panel models with voice functions, a niche is added, which can be closed with a plastic door, for the housing and the connection of the PTT microphone and a telephone handset (optional accessory).

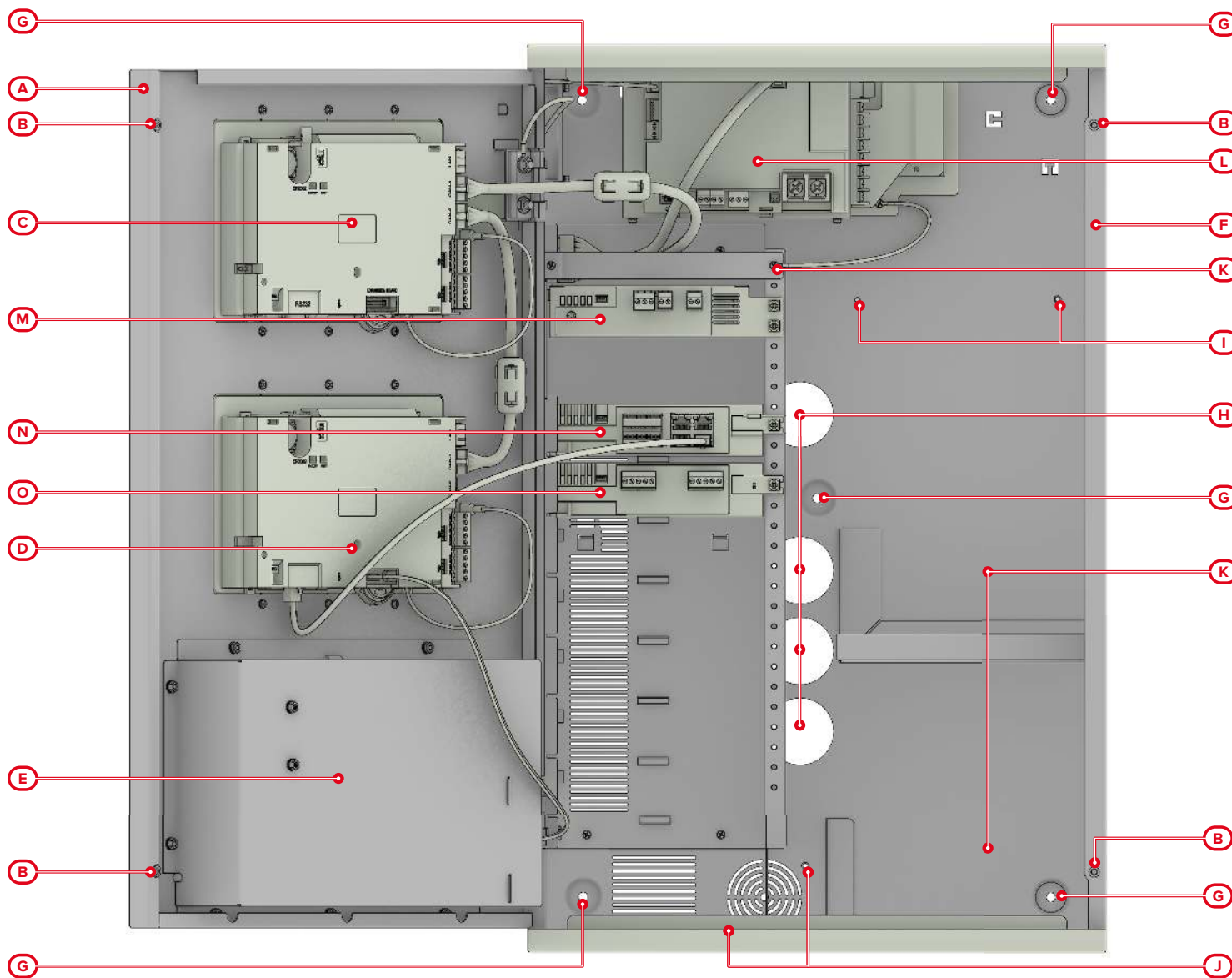
Inside the box are the already assembled modules for operating the control panel, depending on the model, and the space for mounting the batteries and the possible assembly of additional optional modules.

Each control panel module is also available in red colour.

3.1.1 Previdia-Ultravox control panel

Previdia-Ultravox comes with:

- battery connection wire
- 2 metal keys
- 5 ferrites (1 for the mains cable, 2 for the speaker lines and 2 for the OUT1/2 outputs)
- bag with components for line terminations
- Hole covers (inserted)
- installation guide
- user's manual



[A]	Frontplate
[B]	Screw locations for the cover screws
[C]	FPMCPU module (<i>paragraph 3.4</i>)
[D]	FPAMIAS module (<i>paragraph 3.5</i>)
[E]	Housing for the PTT microphone (included)
[F]	Back
[G]	Wall-mount screw locations
[H]	Cable entry

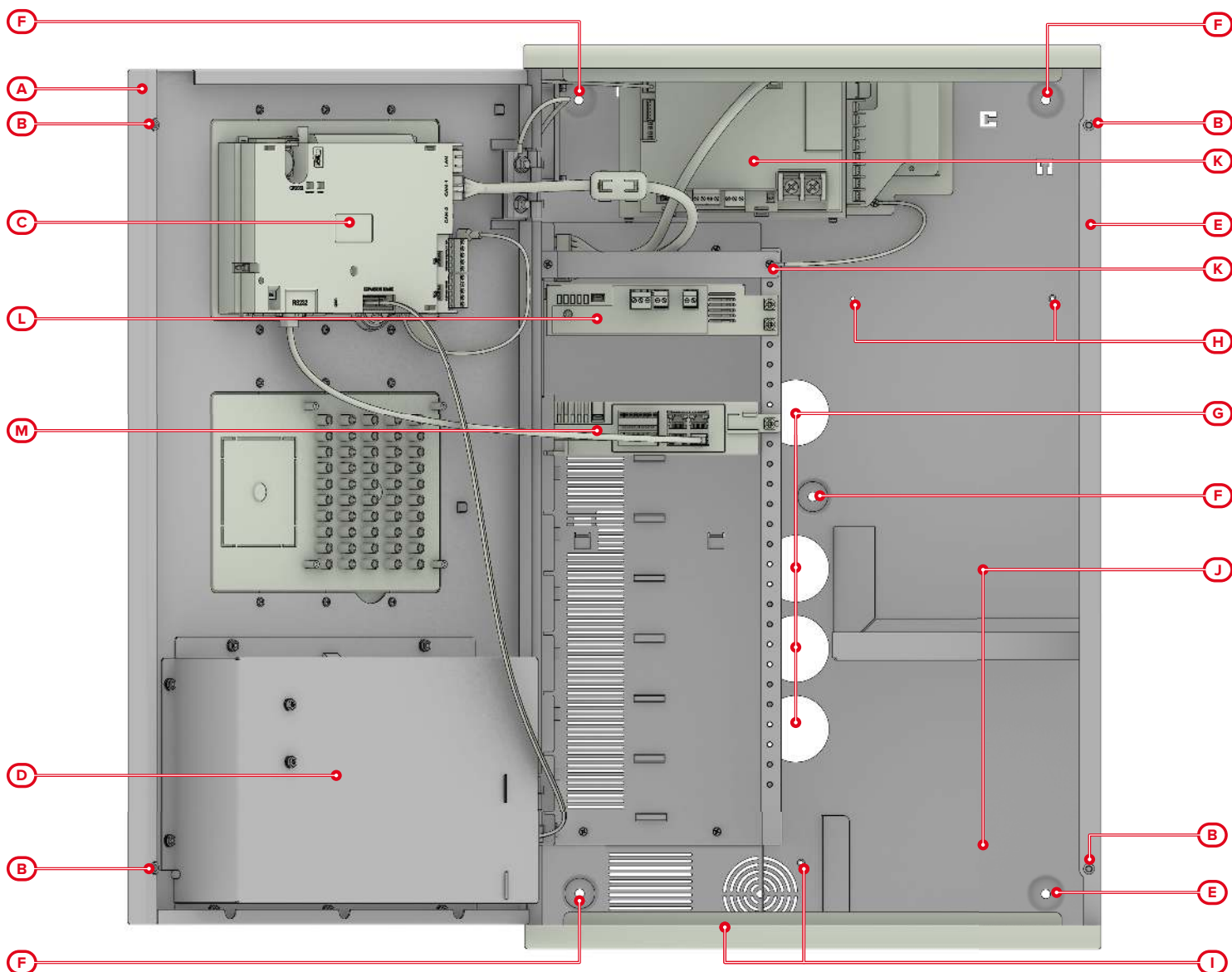
[I]	Fixing holes for DIN rail
[J]	Fixing holes for PRCAB-Boostfan
[K]	Backup battery housing
[L]	IFAMPSU power-supply module (<i>paragraph 3.7</i>)
[M]	IFAMAMP module (<i>paragraph 3.10</i>)
[N]	IFAMEVAC module (<i>paragraph 3.9</i>)
[O]	IFM2L module (<i>paragraph 3.13</i>)

Control panel technical specifications	Previdia-Ultravox
Dimensions	433 x 677 x 258 mm
Weight	23 Kg
Protection grade	IP30
Accepted Batteries	2 x 12V 38Ah, NP38-121 or 2 x 12V 24Ah, NPL24-121 or 2 x 12V 17 Ah, NP 17 -12-FR or equivalent

3.1.2 Previdia-Vox control panel

Previdia-Vox comes with:

- battery connection wire
- 2 metal keys
- 5 ferrites (1 for the mains cable, 2 for the speaker lines and 2 for the OUT1/2 outputs)
- bag with components for line terminations
- Hole covers (inserted)
- installation guide
- user's manual



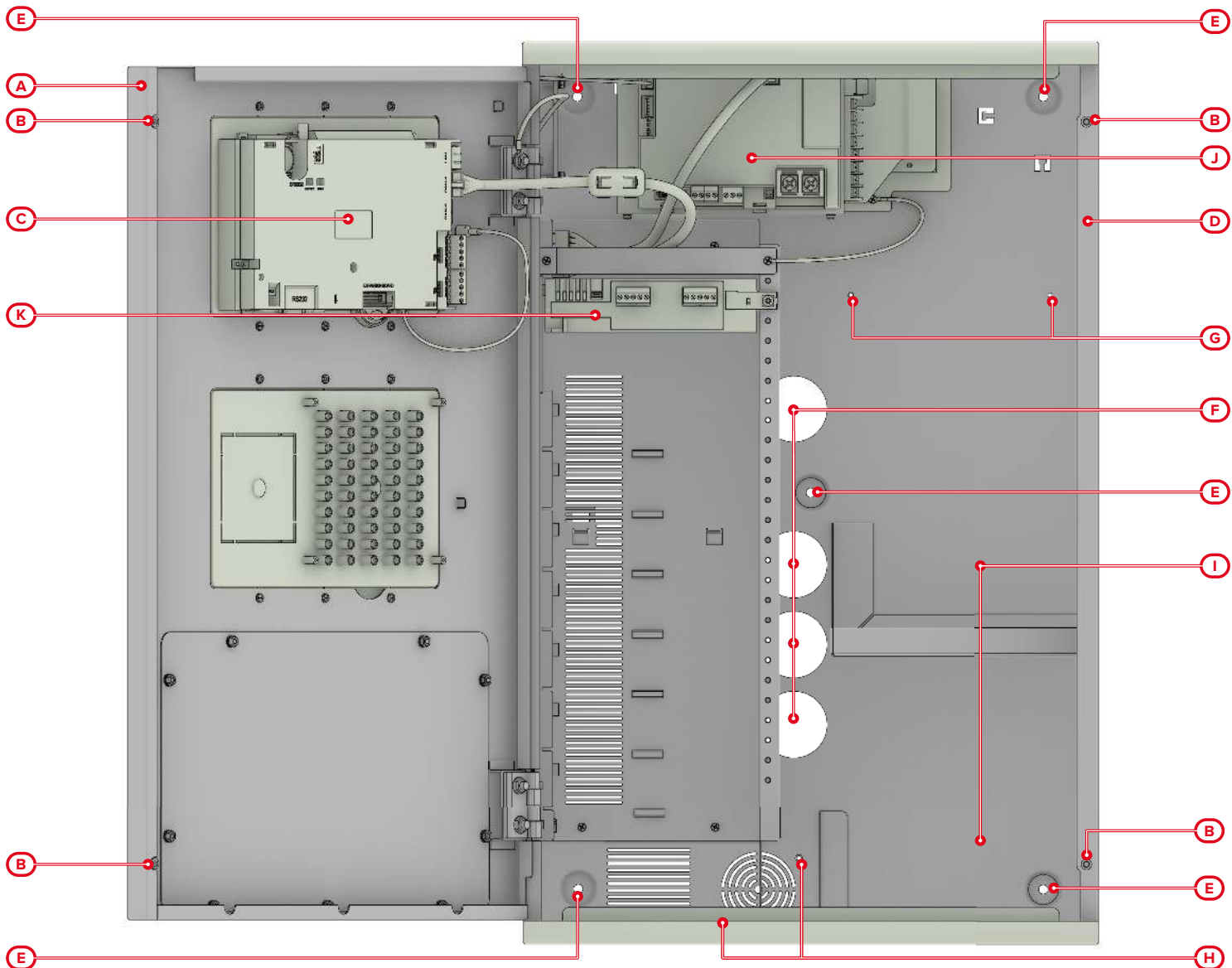
[A]	Frontplate	[H]	Fixing holes for DIN rail
[B]	Screw locations for the cover screws	[I]	Fixing holes for PRCAB-Boostfan
[C]	FPAMIAS module (<i>paragraph 3.5</i>)	[J]	Backup battery housing
[D]	Housing for the PTT microphone (included)	[K]	IFAMPSU power-supply module (<i>paragraph 3.7</i>)
[E]	Back	[L]	IFAMAMP module (<i>paragraph 3.10</i>)
[F]	Wall-mount screw locations	[M]	IFAMEVAC module (<i>paragraph 3.9</i>)
[G]	Cable entry		

Control panel technical specifications	Previdia-Vox
Dimensions	433 x 677 x 258 mm
Weight	22 Kg
Protection grade	IP30
Accepted Batteries	2 x 12V 38Ah, NP38-121 or 2 x 12V 24Ah, NPL24-121 or 2 x 12V 17 Ah, NP 17 -12-FR or equivalent

3.1.3 Previdia-Ultra216 control panel

Previdia-Ultra216 comes with:

- battery connection wire
- 2 metal keys
- 1 ferrite for the mains cable
- bag with components for line terminations
- Hole covers (inserted)
- installation guide
- user's manual



[A]	Frontplate
[B]	Screw locations for the cover screws
[C]	FPMCPU module (<i>paragraph 3.4</i>)
[D]	Back
[E]	Wall-mount screw locations
[F]	Cable entry

[G]	Fixing holes for DIN rail
[H]	Fixing holes for PRCAB-Boostfan
[I]	Backup battery housing
[J]	IFAMPSU power-supply module (<i>paragraph 3.7</i>)
[K]	IFM2L module (<i>paragraph 3.13</i>)

Control panel technical specifications	Previdia-Ultra216
Dimensions	433 x 677 x 258 mm
Weight	20 Kg
Protection grade	IP30
Accepted Batteries	2 x 12V 38Ah, NP38-121 or 2 x 12V 24Ah, NPL24-121 or 2 x 12V 17 Ah, NP 17 -12-FR or equivalent

3.2 PRCAB+, cabinet

The PRCAB+ cabinets offer a metal casing with a door. The cabinet can be wall mounted and anchored in place using the holes on the back of the enclosure or can be affixed to another cabinet by means of two bolts and the holes on the top and bottom sides of the enclosure.

The front of the cabinet provides two apertures for mounting of two front-plate modules and the grounding connections.

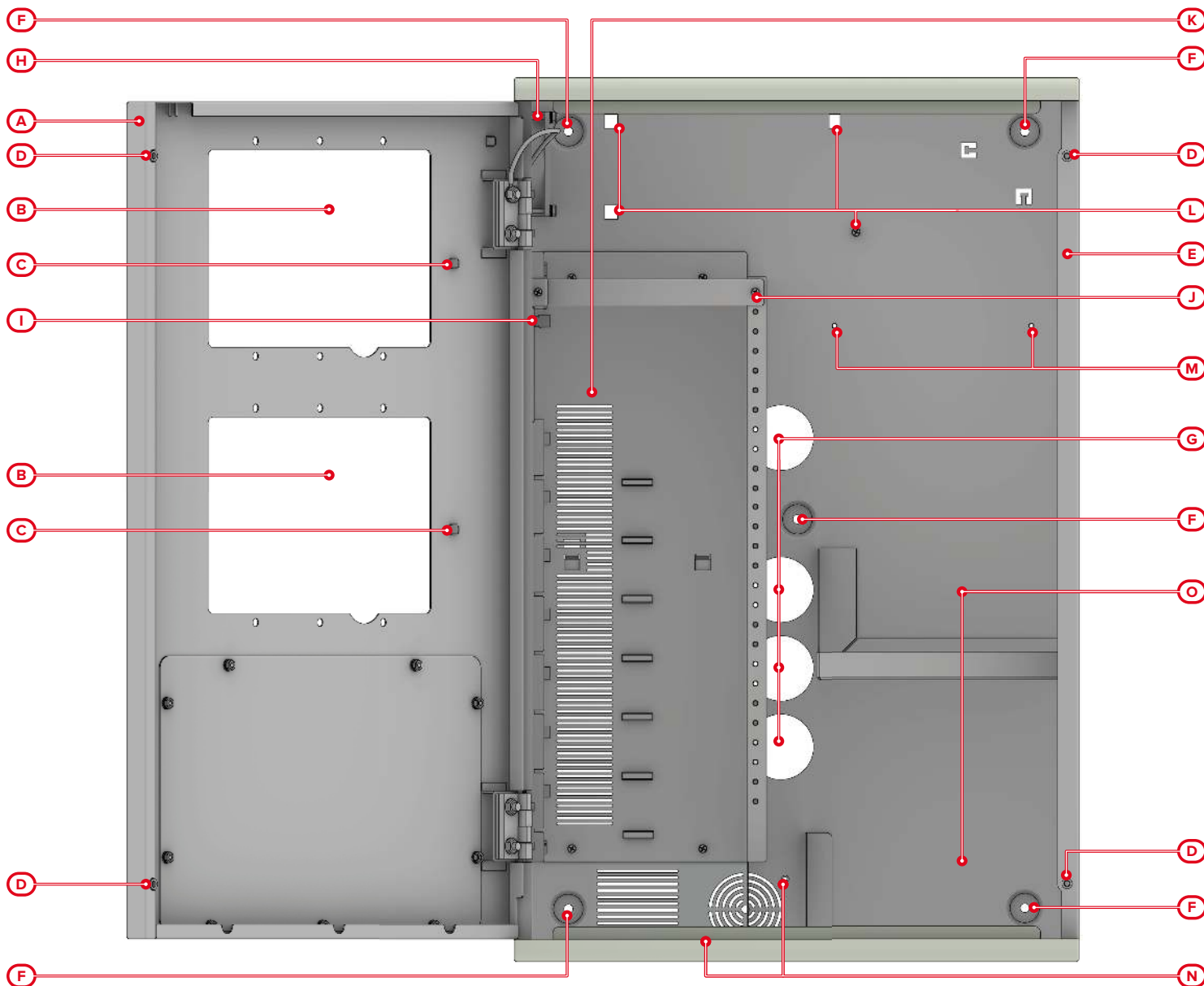
Inside the enclosure is a compartment for mounting up to 8 internal modules, via a connection and power and signal distribution bar (CAN DRIVE+) equipped with suitable connectors for the IFM and IFAM internal modules and for the CAN bus cable for communication with the front-plate modules or with the affixed cabinets. The compartment has a bar which serves to hold the modules in place and allows the grounding connections. There is also space and a shelf for the placement of two 12V, 17Ah, 24Ah or 38Ah batteries.

The cabinet has hooks for the cable ties and cable entries on the top and bottom sides. Appropriate hole covers are provided.

The PRCAB+ cabinets are also available in red and can be ordered using the PRCAB+R code.

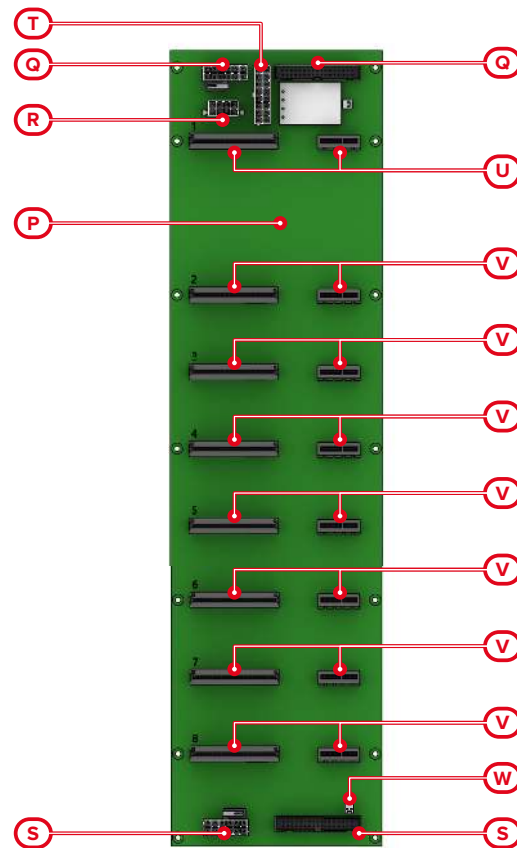
PRCAB+ comes with:

- CAN DRIVE+ bar (inserted)
- Hole covers (inserted)
- 2 bolts for affixing cabinets together
- a CAN bus cable and a flat cable for cabinet interconnection
- ground connection wire
- Instructions manual



[A]	Frontplate	[I]	CAN DRIVE+ bar
[B]	Apertures for FPM front-plate modules	[J]	Earth connection bar
[C]	Connections for grounding the front-plate modules	[K]	Compartment for internal modules
[D]	Screw locations for the cover screws	[L]	Connection points for IFAMPSU power supply
[E]	Back	[M]	Fixing holes for DIN rail
[F]	Wall-mount screw locations	[N]	Fixing holes for PRCAB-Boostfan
[G]	Cable entry	[O]	Backup battery housing
[H]	Fan		

[P]	PCB CAN DRIVE+	
[Q]	CAN connector	to the CAN DRIVE+ bar of an upper cabinet
[R]		toward the module on the front plate
[S]		to the CAN DRIVE+ bar of a lower cabinet
[T]	IFAMPSU power-supply module connector	
[U]	Connector for internal module	to the IFM24160 power-supply module, if present or any module
[V]		for all modules except the IFM24160 power-supply module
[W]	Connector for PRCAB-Boostfan	



PRACAB+- technical specifications

Dimensions	433 x 677 x 258 mm
Weight	17 Kg
Protection grade	IP30
Accepted Batteries	2 x 12V 38Ah, NP38-121 or 2 x 12V 24Ah, NPL24-121 or 2 x 12V 17 Ah, NP 17 -12-FR or equivalent

3.3 PRCABRK+, accessories for mounting the cabinet

The PRCABRK+ kit allows you to mount the cabinet to a 19" rack by means of two support brackets at each side of the cabinet.

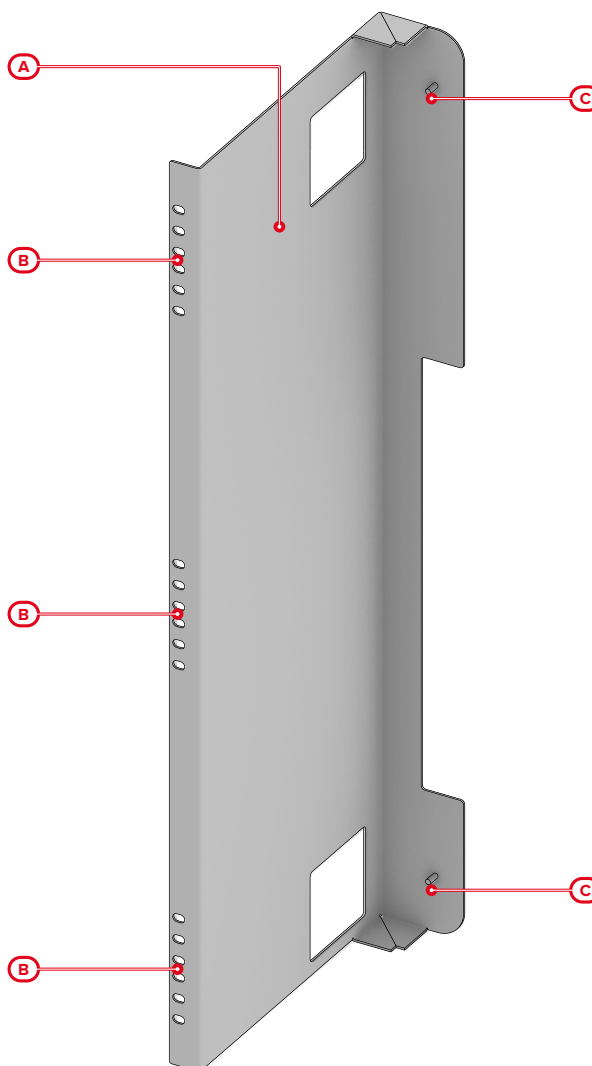
PRCABRK come complete with:

- 4 nuts with washers
- Instructions manual

PRCABRK+ - technical specifications

Dimensions	237 x 683 x 86 mm (x2)
Weight	4 Kg

[A]	Support bracket (2)
[B]	Rack anchor-screw locations
[C]	Threaded rivet



3.4 FPMCPU, front-plate CPU module and repeater

The FPMCPU module constitutes the main unit of the control panel with fire detection functions where the main CPU resides with the system configuration data.

Inside the FPMCPU unit there are two CPUs: the main CPU and a secondary backup CPU capable of intervening in the event of failure of the main CPU.

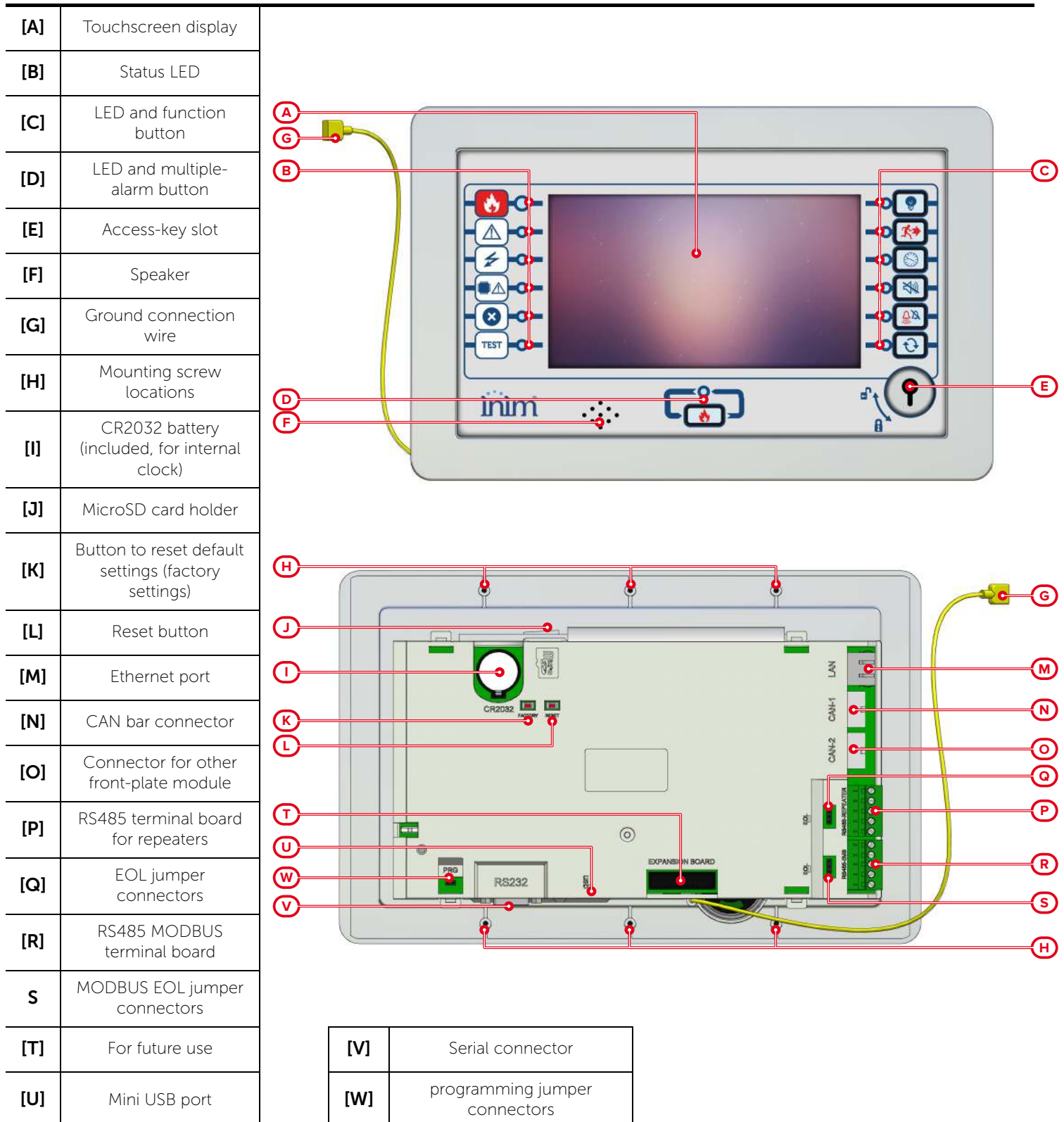
The backup CPU ensures the basic functions of the system (receiving alarms from the points and activating the outputs). However, it does not ensure all the configured activation logic. For total redundancy of all the configured functions, it is necessary to add and configure a second FPMCPU unit to the control panel.

The FPMCPU front-plate module has three operating modes:

- main unit of the control panel
- backup unit
- remote repeater user-interface

FPMCPU comes with:

- CAN BUS cable
- 6 screws with washers for securing the module
- 2 system access keys
- 2 ferrites
- Instructions manual



FPM-CPU module - technical specifications

Supply voltage		19-30V ^{DC}
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	130mA
	maximum	140mA
	mains fault	110mA
Maximum voltage on RS485-REPEATER		1A @27.6V ^{DC}
Maximum voltage on RS485-BMS		1A @27.6V ^{DC}

3.5 FPAMIAS, front-plate voice module

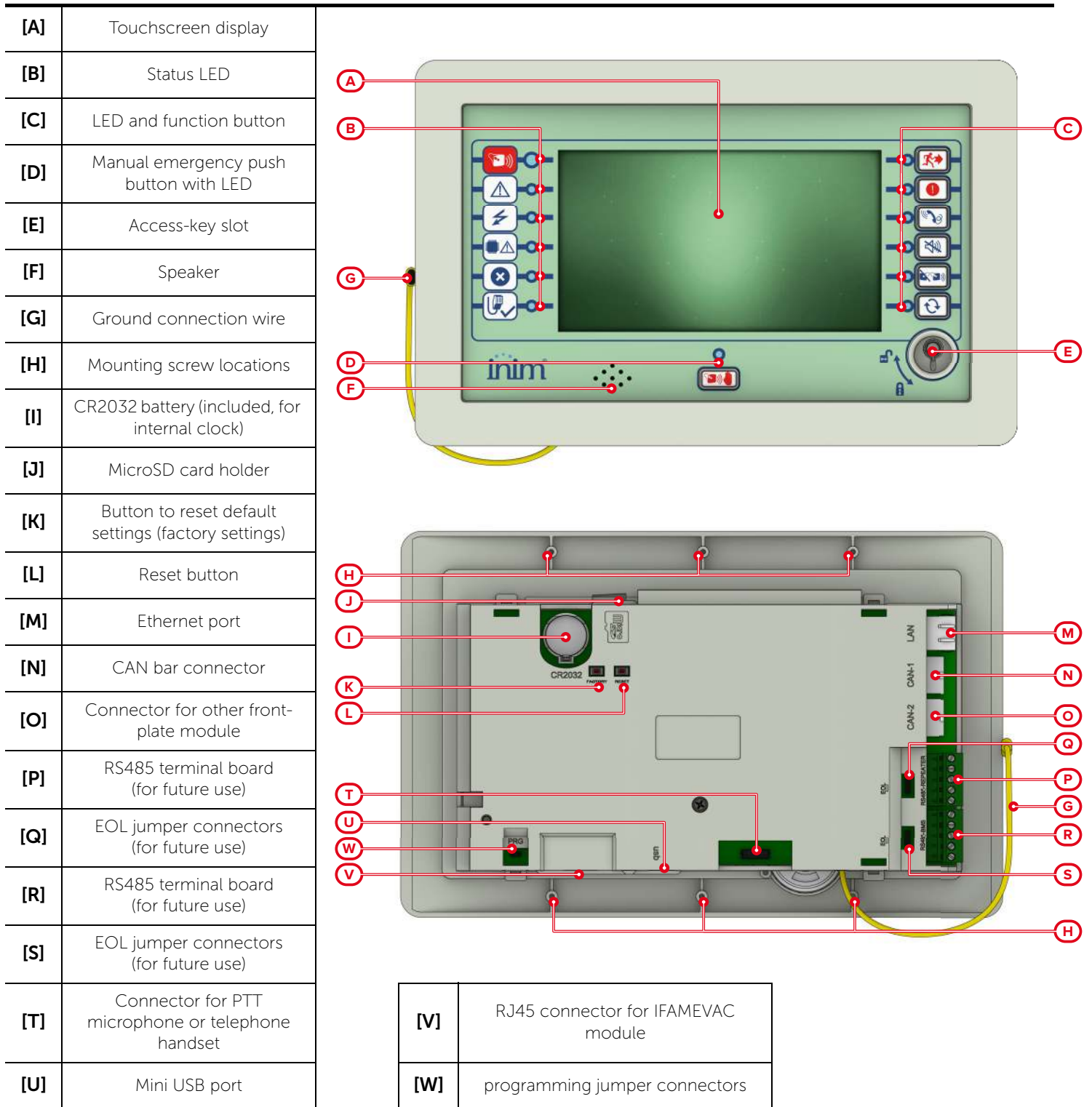
Main control unit for voice and evacuation functions equipped with touchscreen colour graphic display.

It deals with the management and coordination of the various voice modules.

A single Previdia Ultra control panel can house only one of these modules. Mounts to the front plate and, if housed in the upper opening, connects to the CAN DRIVE+ bar. If housed in the lower opening, it connects to the FPMCPU module in the upper opening.

FPAMIAS comes with:

- CAN BUS cable
- 6 screws with washers for securing the module
- 2 system access keys
- 2 ferrites
- Instructions manual



FPAMIAS module - technical specifications

Power supply voltage		20-30V $\overline{\text{---}}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	maximum	110mA
	mains fault	60mA

3.6 FPMLED, FPMLEDPRN, LED and printer front-plate module

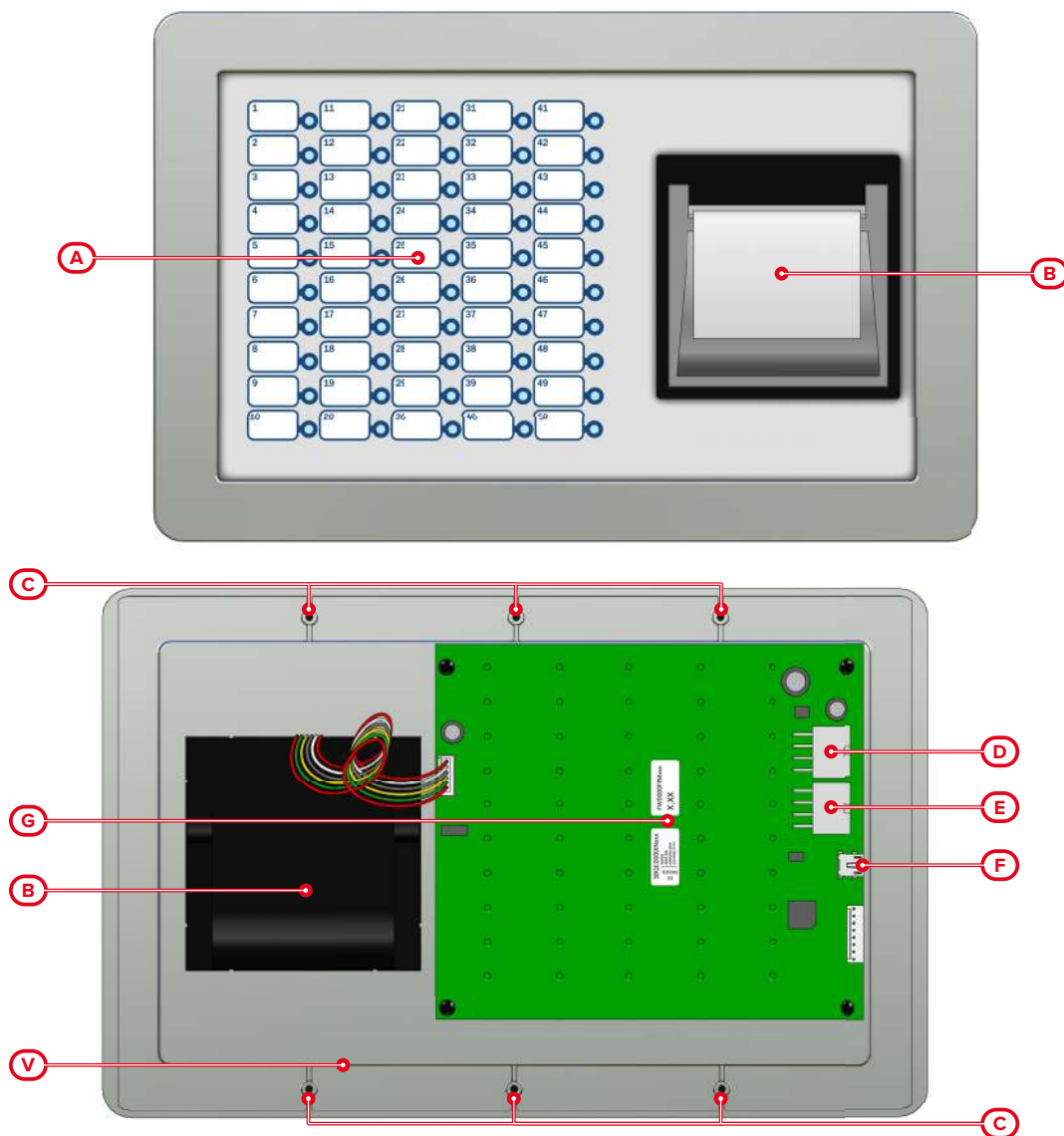
The FPMLED and FPMLEDPRN front-plate modules are equipped with 50 tricolour LEDs which replicate the signals generated by the system.

The FPMLEDPRN module is equipped with an 80mm thermal printer.

This module mounts to either of the two apertures on the front of the cabinet and connects to the system via the CAN bus cable. Each module is equipped with:

- CAN BUS cable
- 6 screws with washers for securing the module
- 1 ferrite
- Instructions manual

[A]	LED
[B]	Thermal printer
[C]	Mounting screw locations
[D]	Connector for the CAN drive bar or other front-plate module
[E]	Connector for front-plate module
[F]	Mini USB port
[G]	Label with firmware revision of the module



Technical specifications		FPMLED module	FPMLEDPRN module
Supply voltage		19-30 V ⁻⁻⁻ supplied by IFM24160 module	
Operating temperature		from -5°C to +40°C	
Consumption @ 27.6V	stand-by	12mA	35mA
	maximum	45mA	400mA

3.7 IFAMPSU, internal power-supply module

1000W switching power supply module. Connects to the mains, supports 230Vac or 115 Vac, 50/60 Hz input voltages and supplies the system with a maximum current of 40A.

Provides a 3A battery-charger capable of maintaining under charge 17Ah, 24Ah or 38Ah batteries.

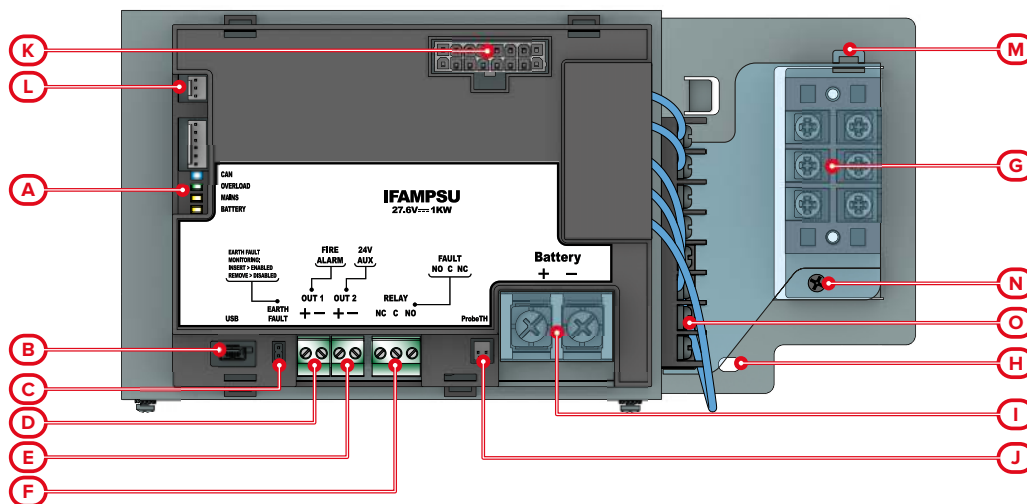
The IFAMPSU module supplies power to the system by distributing it through the CAN DRIVE+ connection bar and through two supervised outputs and a configurable relay output (configured at factory as alarm output, AUX output and fault signalling relay).

Only one IFAMPSU module can be housed inside each metal cabinet, while each control panel can manage a maximum of 4 modules (one for each cabinet).

Attention: *The installation of this module excludes the use of the IFM24160 power-supply module for the control panel.*

IFAMPSU comes with:

- battery connection wire
- battery to battery connection wire
- screw for securing the module to the back of the cabinet
- wire with eyelet terminal for connection to earth
- 1 ferrite
- instructions manual



[A]	Status LED	
[B]	Mini USB port	
[C]	Jumper connectors for enablement of the ground-fault test	
[D]	OUT1	Supervised output
[E]	OUT 2	Supervised output
[F]	RELAY	Relay - voltage free contact
[G]	L N	AC Mains input terminals
[H]		Hole for the Earth bar screw and for the Earth conductor

[I]	Battery	Battery connector
[J]	Connector for additional optional thermal probe	
[K]	CAN bar connector	
[L]	Fan connector	
[M]	AC terminals protection	Retaining hook
[N]		Retaining screw
[O]	Ancillary terminals	

IFAMPSU LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
OVERLOAD	Green	No overheating or over-absorption trouble	Slow flashing: overheating Fast flashing: overvoltage
MAINS	Yellow	Mains failure fault	Fast flashing: system ground fault
BATTERY	Yellow	Battery inefficiency or fault	-

IFAMPSU module - technical specifications

Power supply voltage	230V~ (+10% -15%) 115V~ (+10% -15%) 50/60 Hz	
Maximum current draw from mains	5A @230V~ 8.5A @115V~	
Output voltage	26V \overline{DC} nominal $\pm 10\%$	
Maximum output ripple	200mV pp	
Maximum output current of the power group (I _{max b} according to EN54-4)	38A @230V~ 32A @115V~	
Maximum current for external loads (I _{max a} according to EN54-4)	35A @230V~ 29A @115V~	
I _{min}	100mA	
Power factor	0.95 @ 230V ~ at full load 0.99 @ 115V ~ at full load	
Overvoltage protection	105 /135% of the declared potential (constant current limit, automatic reset to the reset of the overload conditions)	
Overvoltage category	CAT II 2500 V	
Overload protection	29 / 33 V	
Overheating protection	Output voltage suspension, reactivation to reset temperature	
Batteries	Type	2 x 12V 38Ah, NP38-121 or 2 x 12 V 24Ah, NPL24-121 or 2 x 12 V 17 Ah, NP 17 -12-FR or equivalent with UL94-V1 flame class enclosure or higher
	Maximum voltage charge adapted to temperature	28V
	Battery charger	3A
	Maximum internal resistance of battery (R _i Max)	0,1Ohm
	Battery shutdown voltage	19.5V
Operating temperature	from -5°C to +40°C	
Isolation class	I	
Consumption @ 27.6V	stand-by	20mA
	maximum	40mA
	mains fault	30mA
Maximum voltage on OUT 1	1.5A @27.6V \overline{DC}	
Maximum voltage on OUT 2	1.5A @27.6V \overline{DC}	
Maximum voltage on RELAY	5A, 30V \overline{DC}	

3.8 IFM24160, internal power-supply module

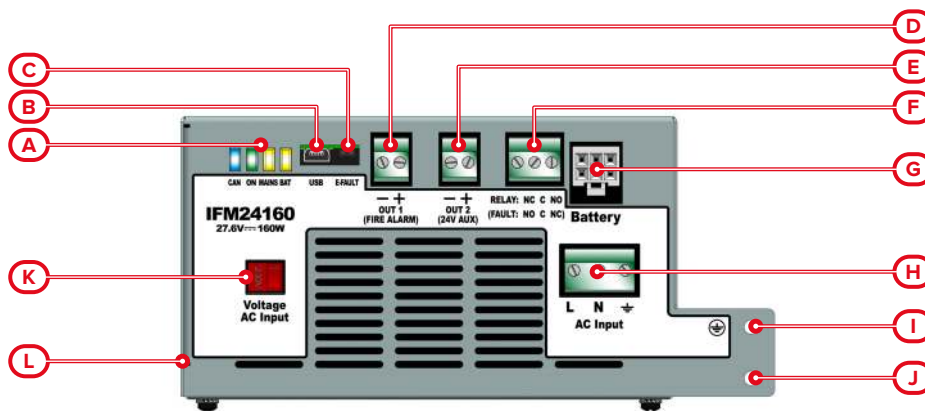
The IFM24160 internal module supplies and distributes power through the CAN drive connection bar and through the two outputs, OUT 1 and OUT 2.

In installations where several control panels are connected in a network, it is necessary to use an IFM24160 power-supply module for each control panel.

In installations where the control panel comprises more than one cabinet, you can install a power supply in each cabinet. The total voltage available equals the sum of the voltages of each power supply added together minus 1A for correct cable balance.

FPMCPU comes with:

- battery connection wire with thermal probe
- battery to battery connection wire
- 3 screws for securing the module to the grounding bar
- wire with eyelet terminal for connection to earth
- 1 ferrite
- Instructions manual



[A]	Status LED	
[B]	Mini USB port	
[C]	Jumper connectors for enablement of the ground-fault test	
[D]	OUT1	Supervised output
[E]	OUT 2	
[F]	RELAY	Relay - voltage free contact
[G]	Battery connector	

[H]	L N +	AC Mains input terminals
[I]	⊕	Hole for the Earth bar screw and for the Earth conductor
[J]	Hole for the grounding bar screw and for the wire with the eyelet terminal	
[K]	230/115 V	Input voltage selector
[L]	CAN DRIVE/CAN DRIVE+ connector (opposite)	

The indications in brackets below terminals OUT1, OUT2 and RELAY [D, E, F] show the respective factory default settings.

LED IFM24160	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
ON	Green	Module operating normally	Slow flashing: overload (system voltage draw is excessive) Fast flashing: PSU unit overheated
MAINS	Yellow	Mains failure fault	Fast flashing: system ground fault
BATT	Yellow	Battery inefficiency or fault	

IFM24160 module - technical specifications

Operating voltage	230V~ (+10% - 15%) 115V~ (+10% - 15%)	
Nominal power frequency	50/60 Hz	
Maximum current draw from mains	1.1A @ 230V 2A @ 115V	
Output voltage	27.6 V $\overline{\text{---}}$ nominal 20 - 27,6 V $\overline{\text{---}}$	
Maximum output ripple	1%	
Maximum available current	5.2A	
I _{max a} (as per EN54-4)	4A	
I _{max b} (as per EN54-4)	4A	
I _{min}	185mA	
Batteries	2 x 12 V 24Ah, NPL24-12I or 2 x 12 V 17 Ah, NP 17 -12-FR or equivalent with UL94-V1 flame class enclosure or higher	
Battery charger Maximum voltage charge adapted to temperature	1.2A	
Maximum internal resistance of battery (R _i Max)	10 Ω	
Battery shutdown voltage	19.5V	
Operating temperature	from -5°C to +40°C	
Isolation class	I	
Consumption @ 27.6V	stand-by	20mA
	maximum	40mA
Maximum voltage on OUT 1	1.5A @27.6V $\overline{\text{---}}$	
Maximum voltage on OUT 2	1.5A @27.6V $\overline{\text{---}}$	
Maximum voltage on RELAY	5 A, 30V $\overline{\text{---}}$	
Maximum output current of the power group	38A @230V~ 32A @115V~	
Maximum current for external loads	35A @230V~ 29A @115V~	

3.9 IFAMEVAC, audio matrix module

The IFAMEVAC module manages the digital processing of all audio sources.

Provides 2 analogue inputs for external sound sources and 2 analogue inputs for external sound sources with priority request.

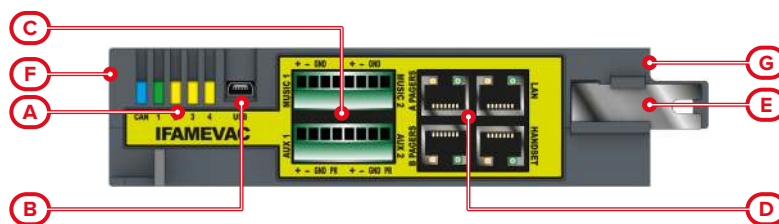
The module can manage emergency messages and user-definable messages by means of an internal flash memory or the use of an optional microSD card.

Also provides the control panel with 2 lines for standard or emergency microphone bases, with a maximum of 64 bases per line, and a connection to the Ethernet network for interaction with IAC and IAS-APP servers.

Each control panel manages only one IFAMEVAC module.

IFAMEVAC comes with:

- 3 screws for securing the module to the grounding bar
- connection wire to the FPAMIAS module
- Instructions manual



[A]	Status LED		[D]	A PAGERS	Microphone-base line connector
[B]	Mini USB port			B PAGERS	
[C]	MUSIC 1	Analog input terminals		LAN	Ethernet network connector
	MUSIC 2			HANDSET	Connector for FPAMIAS module
	AUX 1	Analog input terminal with priority	[E]	Holes for the Earth bar screws	
	AUX 2		[F]	CAN DRIVE+ connector (opposite)	
			[G]	MicroSD card holder (side)	

IFAMEVAC LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
1	Green	Packets sent by the DSP	
2	Yellow	Fault PAGERS A	Enrolling in progress on the A PAGERS line
3	Yellow	Fault PAGERS B	Enrolling in progress on the B PAGERS line
4	Yellow	Fault DSP	-

IFAMEVAC module - technical specifications

Power supply voltage	20-30 V $\overline{\text{---}}$	
Operating temperature	from -5°C to +40°C	
Consumption @ 27.6V	100mA	
AUX 1/2 "PR" inputs	Clean contact to "GND"	
A /B PAGER lines	Microphone bases per line	Max. 64
	Current per line	Max 1A
	Total cable length per line	Max. 500m
MUSIC 1/2 and AUX 1/2 input voltage	Max. 1 Vrms non balanced between "+" and "GND" and between "-" and "GND"	
MUSIC 1/2 and AUX 1/2 input impedance	10K Ohm	

3.10 IFAMAMP, audio amplifier module

The IFMAMP audio amplifier module provides two lines for connecting speakers, configurable in A B mode or in loop mode, each line at 100Vrms, individually protected from short circuits and with a maximum of 250W of power supplied.

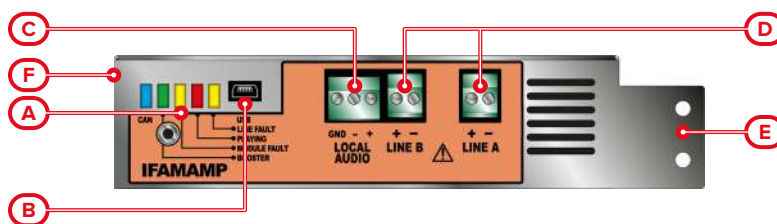
The impedance of the speaker line is supervised by a high frequency tone. Includes an analogue input for an audio source with adjustable priority for the amplifier line only.

IFMAMP can manage any other amplifier module, in backup function, included in the cabinet.

Each control panel manages a maximum of 30 IFAMAMP modules (maximum 8 for each cabinet).

IFAMAMP comes with:

- 3 screws for securing the module to the grounding bar
- 2 ferrites
- Instructions manual



[A]	Status LED		[D]	LINE A	Terminals for connecting the speaker lines
[B]	Mini USB port			LINE B	
[C]	LOCAL AUDIO	Local audio source input for the line managed by the amplifier	[E]	Holes for the Earth bar screws	
			[F]	CAN DRIVE+ connector (opposite)	

IFAMAMP LED	Colour	On solid
CAN	Blue	Activity on the CAN communication BUS
BOOSTER	Green	Booster access
MODULE FAULT	Yellow	Fault board
PLAYING	Red	Audio being played
LINE FAULT	Yellow	Fault on speaker-connection line

IFAMAMP module - technical specifications

Power supply voltage		20-30 V ^{DC}
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	530mA
	during mains failure and not in an emergency situation	Max. 100mA (2.5W)
	maximum	10A (250W + 14W)
Speaker lines LINE A / B	voltage of outputs	Max. 100 Vrms
	Maximum load	250W total
	Minimum resistance	400ohm total

IFAMAMP module - technical specifications

Audio input LOCAL AUDIO	Input voltage	Max. 1 Vrms non balanced between "+" and "GND" and between "-" and "GND"
	Input impedance	10K Ohm
Frequency response		50 - 20000 Hz
Separate volume adjustment for MUSIC 1/2 sources, voice and emergency announcements		+6 / -40 dB
Separate 3-band equalization for MUSIC 1/2 sources, voice and emergency announcements		+6 / -40 dB

3.11 IFAMFFT, emergency telephones module

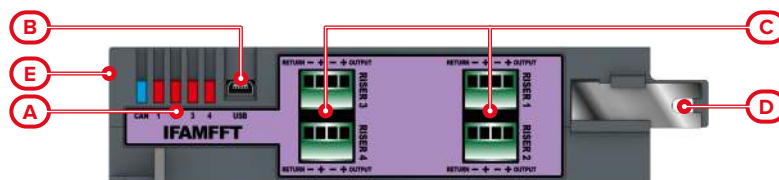
The IFAMFFT module provides 4 lines for connecting emergency telephones up to a maximum of 64 telephones for each line.

By picking up one of the telephones connected to the lines, the request for a conversation is notified on the FPAMIAS front panel and the call can be accepted by via the display. It is possible to create a chat with up to 5 incoming calls.

Each control panel manages up to 4 IFAMFFT modules.

IFAMFFT comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED		[D]	Holes for the Earth bar screws	
[B]	Mini USB port		[E]	CAN DRIVE+ connector (opposite)	
[C]	RISER n	Telephone line connection terminals			

IFAMFFT LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
1	Green	The request initiated by a telephone on line "1" was rejected automatically (maximum number of calls already reached) or accepted by the FPAMIAS front panel.	Slow flashing: short circuit or open circuit on line "1". Fast flashing: communication request initiated by one of the telephones of line "1" and not yet processed.
2	Yellow	As for line "1", but, respectively, for lines "2", "3" e "4".	
3	Yellow		
4	Yellow		

IFAMFFT module - technical specifications

Power supply voltage	20-30 V ^{DC}
Operating temperature	from -5°C to +40°C
Consumption @ 27.6V maximum	80mA
Maximum number of telephone for each line	64

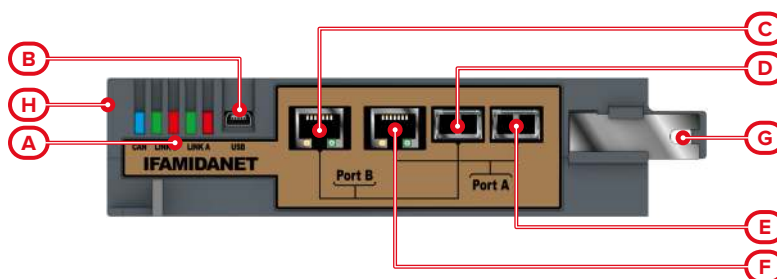
3.12 IFAMIDANET, IDANet network connection module

The IFAMIDANET module for the connection to the IDANet network provides two RJ45 ports for connection via CAT5 Ethernet cable (for distances up to 100m) and two ports for SFP modules for fiber optic connection.

The module allows the connection of up to 48 control panels and the sharing of all system information and up to 20 audio tracks.

IFAMIDANET comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED
[B]	Mini USB port
[C]	RJ45 connector for port B
[D]	BASE 100 FX base SFP connector for port B
[E]	RJ45 connector for port A
[F]	BASE 100 FX base SFP connector for port A

[G]	Holes for the Earth bar screws
[H]	CAN DRIVE+ connector (opposite)

IFAMIDANET LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
LINK A	Red	No connection	RJ45 and SFP are both connected
	Green	Correct connection	Packet received
LINK B	Red	No connection	RJ45 and SFP are both connected
	Green	Correct connection	Packet received

IFAMIDANET module - technical specifications

Power supply voltage		20-30 V _{DC}
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	maximum with Ethernet connection	80mA
	maximum with fiber connection	80 mA + consumption SFP modules (@ 3.3V) divided by 7 (typically about 15mA x each converter)

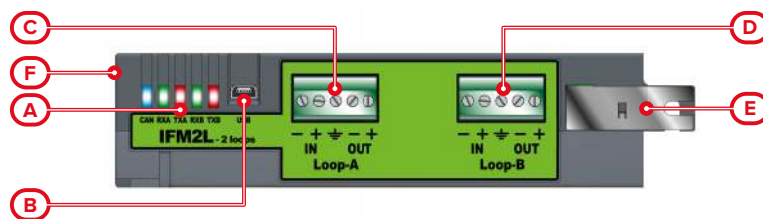
3.13 IFM2L, internal module with 2 loops

All the peripheral devices of the system must be connected in parallel to the loop circuit (2 pole shielded cable). The control panel communicates with the loop devices via a digital protocol which allows their complete control. The loop utilizes the same two wires for the power supply to devices and for two-way communication.

Each IFM2L module contains circuits for the management of two loops. Previdia control panels are capable of managing up to 16 loops through a maximum of 8 IFM2L modules.

IFM2L comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED	
[B]	Mini USB port	
[C]	Loop-A	Loop A connection terminals
[D]	Loop-B	Loop-B connection terminals

[E]	Holes for the Earth bar screws
[F]	CAN DRIVE/CAN DRIVE+ connector (opposite)

LED IFM2L	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
RXA	Green	Reception activity - receiving data from devices on loop A	
TXA	Red	Transmission activity - transmitting data to devices on loop A	
RXB	Green	Reception activity - receiving data from devices on loop B	
TXB	Red	Transmission activity - transmitting data to devices on loop B	

IFM2L module - technical specifications

Supply voltage	20-30 V _{DC}	
Operating temperature	from -5°C to +40°C	
Maximum number of devices managed by a loop	240	
Consumption @ 27.6V	stand-by	35mA
	maximum	50mA
Maximum voltage on Loop-A	0.5A	
Maximum voltage on Loop-B	0.5A	

3.14 IFMLAN, internal Ethernet module

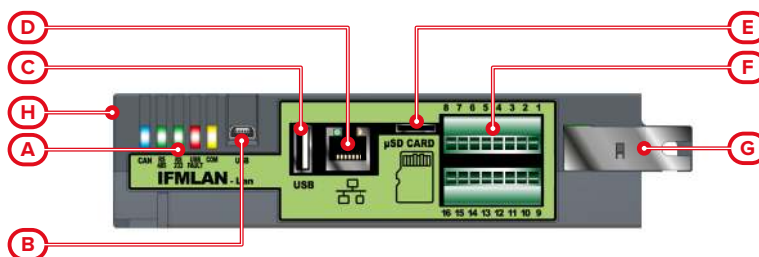
The IFMLAN module provides the Previdia with communication ports:

- USB Host
- Mini USB
- Ethernet
- RS485
- RS232

Connecting the Ethernet port establishes a second connection between the control panel and the network for access to the advanced TCP-IP functions (sending of event-related e-mails, communications via SIA-IP, video verification and browser-accessible Web server).

IFMLAN comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual
- SD card not included



[A]	Status LED	[E]	MicroSD card holder
[B]	Mini USB port	[F]	1 - 16 Terminals for serial link
[C]	USB port	[G]	Holes for the Earth bar screws
[D]	Ethernet port	[H]	CAN DRIVE/CAN DRIVE+ connector (opposite)

Serial	Terminal	
RS232	1	Programmable ancillary power output
	2	RS232 TX
	3	RS232 RX
	4	RS232 RTS
	5	RS232 CTS
	6	Negative (GND, ⊕)
	7, 8	Earth

Serial	Terminal	
RS485	9	Programmable ancillary power output
	10	RS485 B (negative)
	11	RS485 A (positive)
	12, 13	EOL
	14	Negative (GND, ⊕)
	15, 16	Earth

IFMLAN LED	Colour	On solid
CAN	Blue	Activity on the CAN communication BUS
RS485	Green	Activity on the RS485 communication BUS
RS232	Green	Activity on the RS232 communication BUS
USB FAULT	Red	Fault detected on USB port
COM	Yellow	Communicator CPU operating

IFMLAN module - technical specifications

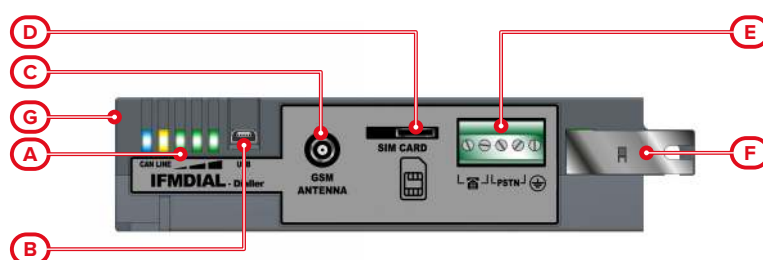
Supply voltage	19-30 V ⁼⁼⁼
Operating temperature	from -5°C to +40°C
Consumption @ 27.6V	45mA
Maximum capacity of SD-card	32Gbyte
Security protocol	8bit proprietary encryption
IP access address at default	192.168.1.200



3.15 IFMDIAL, internal dialler module


The IFMDIAL internal module allows Previdia control panels to connect to the landline (PSTN) and the GSM network. It manages reporting protocols used by alarm receiving centres. This module allows the control panel to make voice calls and send SMS text messages.

IFMDIAL comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual
- SIM card and GSM antenna not included



[A]	Status LED	[E]		Internal telephone line terminals
[B]	Mini USB port		PSTN	Telephone line connection terminals
[C]	GSM antenna connector			Ground terminal
[D]	SIM card holder		[F]	Holes for the Earth bar screws
		[G]	CAN DRIVE/CAN DRIVE+ connector (opposite)	

IFMDIAL LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
LINE	Yellow	Ongoing call	
	Green	GSM signal reception level	

IFMDIAL module - technical specifications

Supply voltage		19-30 V $\overline{---}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	30mA
	maximum	250mA
GSM band frequency		850, 900 / 1800, 1900 MHz
Maximum RF output power		2W / 1W

3.16 IFMEXT, FPMEXT, internal module and LED panel for extinction control

The IFMEXT and FPMEXT are fire-extinguishant system control modules and must be combined.

The internal IFMEXT module allows management of a gas extinguishant channel. Complies with EN12094-1 and provides the inputs, outputs and control logic required by fire-extinguishant systems.

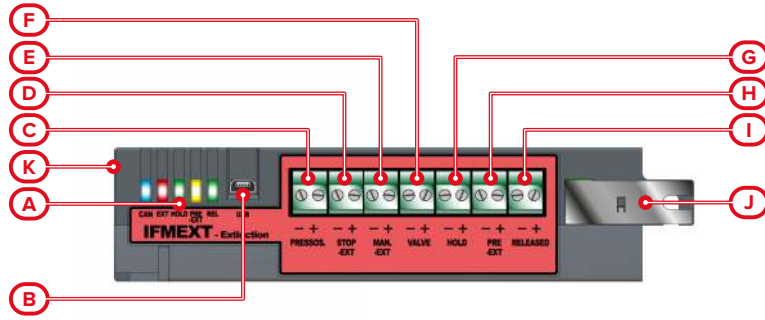
The indications provided by the IFMEXT module, as well as being visualized on the FPMCPU module display, can also be seen on the LEDs on the front-plate FPMEXT module. This module has 40 tricolour LEDs which replicate the signals of up to 5 IFMEXT.extinguishant modules on the control panel front plate.

IFMEXT comes with:

- 3 screws for securing the module to the grounding bar
- 7 resistors @1kOhm 1w
- 3 resistors @ 3k9Ohm
- 3 resistors @ 470Ohm
- 4 diodes -1n4007
- Instructions manual

FPMEXT comes with:

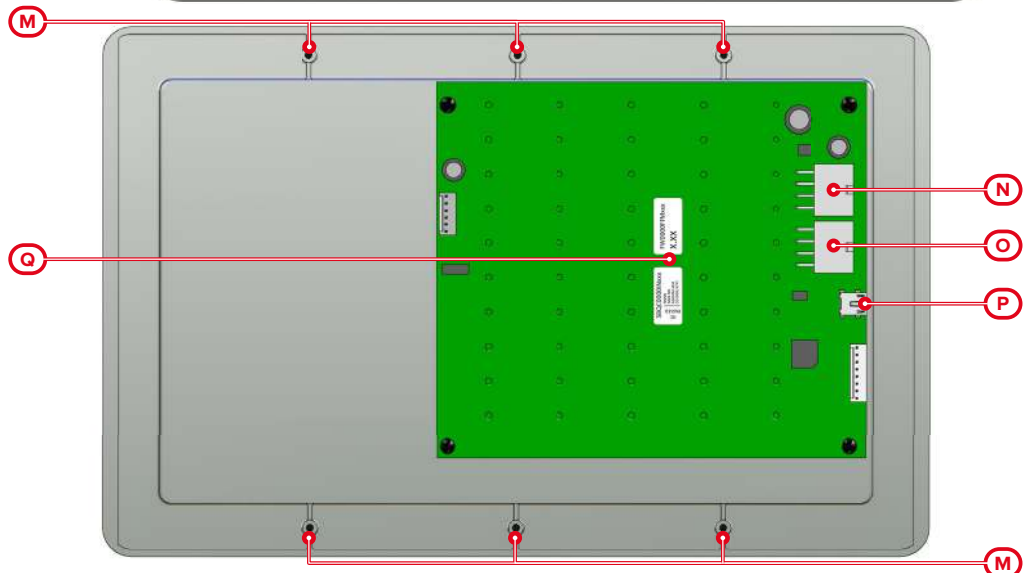
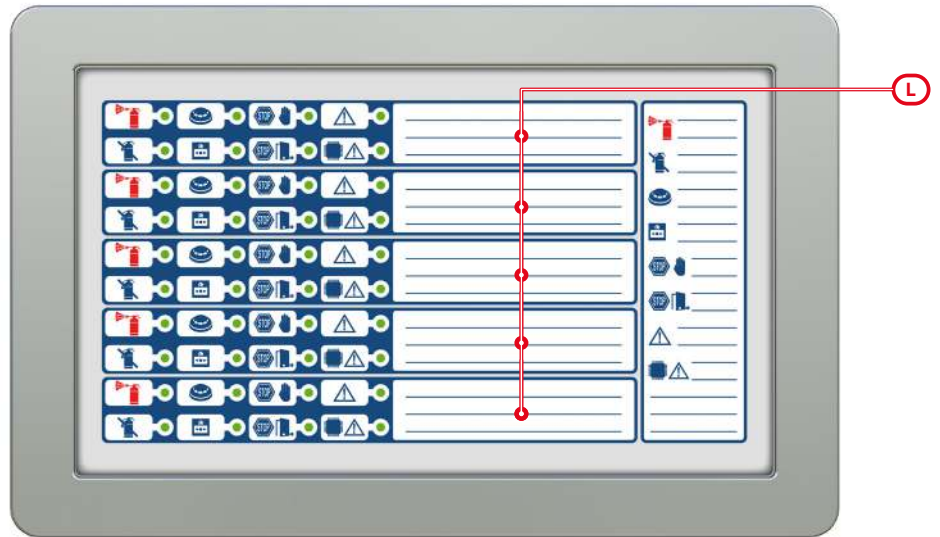
- CAN BUS cable
- 6 screws with washers for securing the module
- 1 ferrite
- Instructions manual











[A]	Status LED	
[B]	Mini USB port	
[C]	PRESSOS.	Connection terminals
[D]	STOP-EXT	
[E]	MAN.-EXT	
[F]	VALVE	
[G]	HOLD	
[H]	PRE-EXT	
[I]	RELEASED	

[J]	Holes for the Earth bar screws
[K]	CAN DRIVE/CAN DRIVE+ connector (opposite)

[L]	Visual signalling of IFMEXT modules
[M]	Mounting screw locations
[N]	Connector for the CAN drive bar or other front-plate module
[O]	Connector for front-plate module
[P]	Mini USB port
[Q]	Label with firmware revision of the module



IFMEXT LED	Colour	On solid
CAN	Blue	Activity on the CAN communication BUS
EXT	Red	Extinction activated (running or ended)
	Yellow	Fault on VALVE terminal line
HOLD	Red	Extinction stopped manually or automatically
	Yellow	Fault on the line of the HOLD terminal
PRE-EXT	Red	Pre-extinction phase running
	Yellow	Fault on the line of the PRE-EXT terminal
REL	Red	Extinction terminated
	Yellow	Fault on the RELEASED terminal line

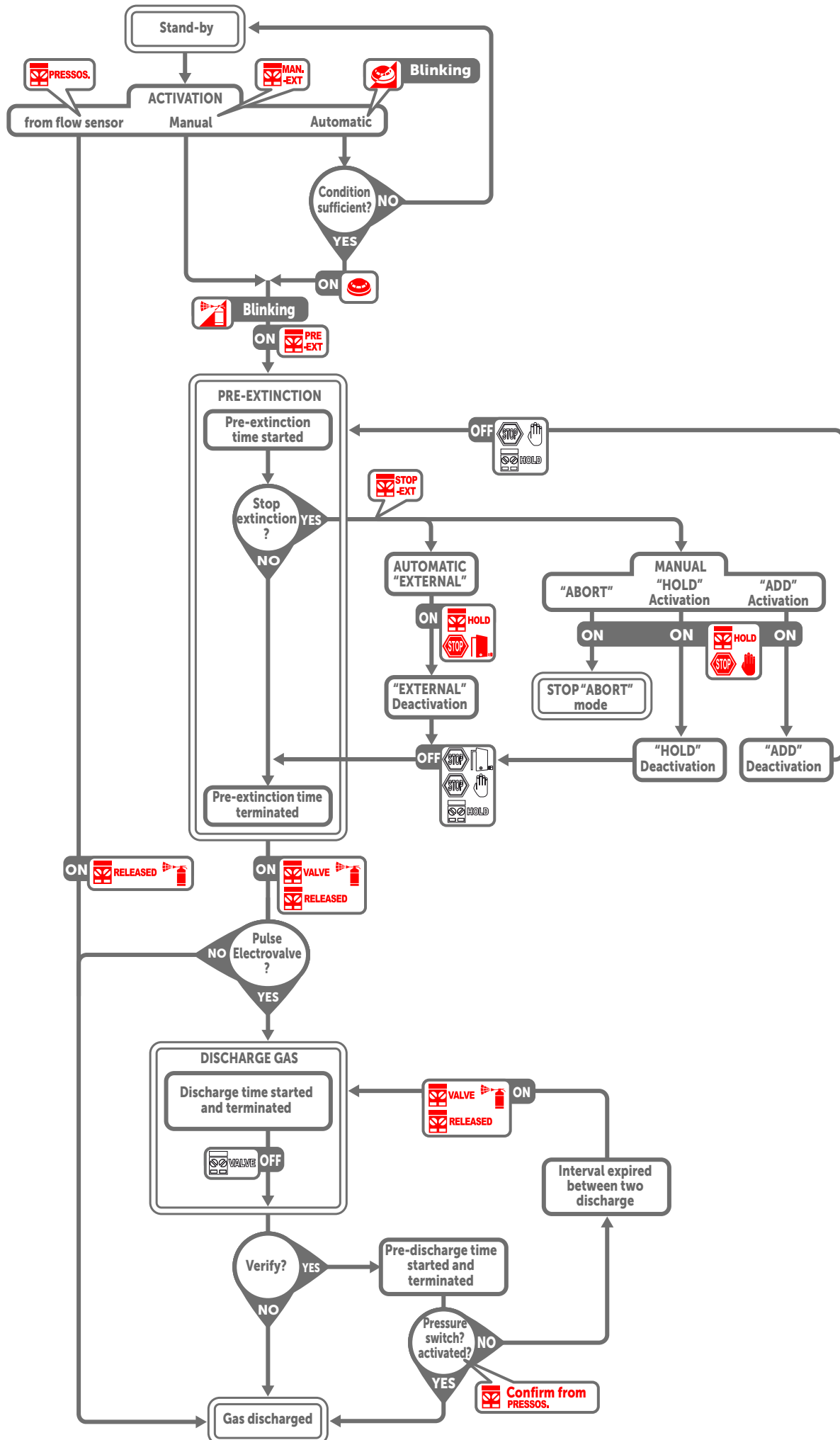
FPMEXT LED		Colour	On solid	Flashing
	Extinction channel activation LED	Red	Discharge activated	Pre-extinction condition running
	Bypass extinction channel LED	Yellow	Channel bypassed	/
	Automatic activation indicator LED	Red	Automatic discharge command activated	Automatic discharge command partially activated
	Manual activation LED	Red	Manual discharge command activated	/
	Manual stop extinction LED	Yellow	Lock extinction command activated	Fault on stop-extinction circuit
	Stop extinction LED from non-electrical-devices	Yellow	Lock extinction command activated	Fault on stop-extinction circuit
	Generic fault LED	Yellow	/	Generic fault on extinction channel
	CPU fault LED	Yellow	Generic CPU fault on extinction module	/

IFMEXT module - technical specifications

Supply voltage		19-30 V $\overline{---}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	30mA
	maximum	80mA
Maximum voltage @ 27.6V	on VALVE output	2A
	on outputs	1A

FPMEXT module - technical specifications

Supply voltage		19-30 V $\overline{---}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	12mA
	maximum	45mA



Terminal	Function	Activation	
PRESSOS.	The pressure-switch input is for the connection of a pressure switch which will close the contact in the event of low pressure in the cylinders.	If the electrovalve opens when the "verify" procedure is enabled, its activation confirms the discharge of extinguishant gas (refer to the "confirm" option below). During stand-by status, its activation generates a fault warning.	
STOP-EXT	This input stops the extinction procedure in accordance with the activation mode described opposite.	Abort	If this input is activated during the pre-extinction phase, the extinction procedure will be aborted even if the input resets. The procedure can be restarted only after control panel reset. If this input is activated during stand-by, it will generate a fault warning.
		Add	If this input activated during pre-extinction status, the extinction procedure will remain locked until the input resets. On input reset the pre-extinction countdown will refresh and restart. If this input is activated during stand-by, it will generate a fault warning.
		Hold	If this input is activated during pre-extinction status, the extinction procedure will remain locked but the pre-extinction countdown will continue running. On input reset, if the early warning countdown has terminated, the extinguishant gas will be discharged. If this input is activated during stand-by, it will generate a fault warning.
		External	This function is identical to the "Hold" function but refers to mechanical or electrical intervention (for example, a door contact that inhibits gas discharge, etc.). This activation will be signalled separately. If activated during stand-by, it will not generate a fault warning.
MAN.-EXT	This input is for the connection of one or more manual call points for the activation of extinguishing-agent discharge.		
VALVE	Output for the connection of the electrovalve which discharges the extinguishing agent.	It will activate only when the pre-extinction time expires	
HOLD	Output for the connection of stop-extinction signalling devices.	It will activate when the extinguishing channel is locked by one or more inputs connected to a "STOP-EXT" input.	
PRE-EXT	Output for the connection of a signal relating to imminent discharge of the extinguishing agent.	It will activate during the pre-extinction time which runs before the discharge of the extinguishing agent.	
RELEASED	Output for the connection of signalling devices which warn building inhabitants of the actual discharge of the extinguishing agent.	It will activate on activation of the electrovalve.	

Note:

The functions shown in the table, with the exception of the "VALVE" output, can be replicated on the input/output devices of the loop or IFM internal modules.

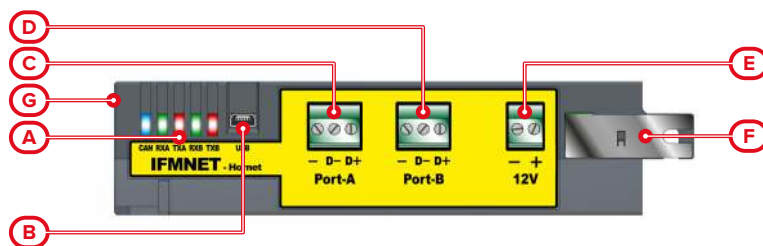
3.17 IFMNET, internal network connection module

The IFMNET module allows you to connect two or more control panels in a Hornet+ network by means of two RS485 communication ports (A and B).

In cases where a fiber optic cable is used over long BUS lengths, it is necessary to use a RS485/fiber converter (non-INIM brand product). The module has a 12V output for the power supply to the converter in use.

IFMNET comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED		[F]	Holes for the Earth bar screws	
[B]	Mini USB port		[G]	CAN DRIVE/CAN DRIVE+ connector (opposite)	
[C]	Port-A	Connection terminal for port A			
[D]	Port-B	Connection terminal for port B			
[E]	12V	Terminals for the power supply to the RS485/fiber converter			

IFMNET LED	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
RXA	Green	Data reception activity on port A	
TXA	Red	Transmission activity on port A	
RXB	Green	Data reception activity on port B	
TXB	Red	Transmission activity on port B	

IFMNET module - technical specifications

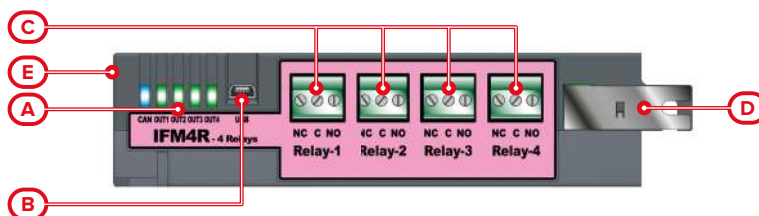
Supply voltage	19-30 V ^{DC}
Operating temperature	from -5°C to +40°C
Consumption @ 27.6V	60mA
Maximum voltage on OUT 12V	0.8A for use inside the cabinet

3.18 IFM4R, internal module with 4 relays

The IFM4R module provides 4 relay outputs with voltage-free contacts (Common, Normally Open and Normally Closed). The activation mode of each relay can be defined during the system configuration phase using the configuration software.

IFM4R comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED		[D]	Holes for the Earth bar screws
[B]	Mini USB port		[E]	CAN DRIVE/CAN DRIVE+ connector (opposite)
[C]	Relay-x	Connection terminals for relay output x		

LED IFM4R	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
OUTx	Green	Output x activated	

IFM4R module - technical specifications

Supply voltage		19-30 V $\overline{=}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	10mA
	maximum	80mA
Maximum voltage on outputs		5A, 30V $\overline{=}$

3.19 IFM4IO, internal module with 4 input/output terminals

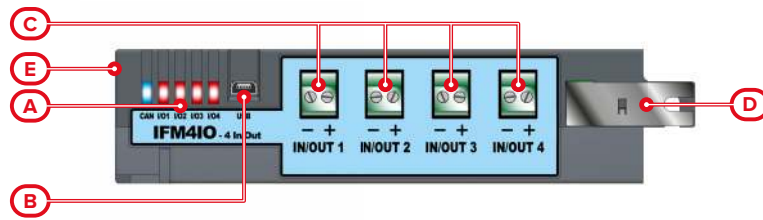
The IFM4IO module provides 4 input/output channels (IN/OUT 1, ..., IN/OUT 4) each of which, by means of the configuration software, can be configured as:

- Supervised output, to drive alarm signalling devices or similar (also indicated as a NAC output)
- Supervised input, to control the status of a device or the acquisition of a command
- Conventional line, for interfacing with a conventional line
- 4-20mA gas detector input

IFM4IO comes with:

- 3 screws for securing the module to the grounding bar
- 4 resistors @1kOhm 1w
- 4 resistors @ 3k9Ohm
- 4 resistors @ 470Ohm

- 4 diodes -1n4007
- Instructions manual



[A]	Status LED	
[B]	Mini USB port	
[C]	IN/OUT x	Connection terminals for input/output x

[D]	Holes for the Earth bar screws
[E]	CAN DRIVE/CAN DRIVE+ connector (opposite)

LED IFM4IO	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
I/Ox	Red	The respective channel, configured as "input", is in alarm or activated status	
	Green	The channel configured as "output" is active	
	Yellow	The channel is in fault status	

IFM4IO module - technical specifications

Supply voltage		19-30 V ⁻⁻⁻
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	22mA
	maximum	170mA
Maximum voltage on I/O		1A @27.6V ⁻⁻⁻

3.20 IFM16IO, internal module with 16 input/output terminals

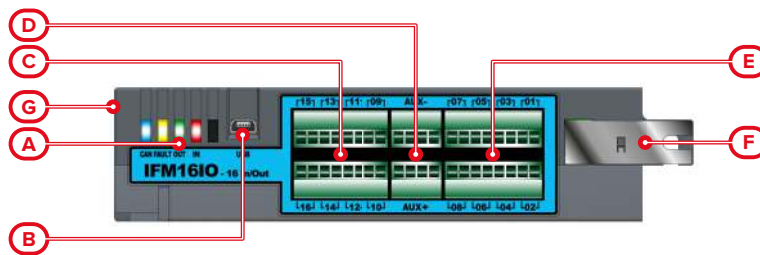
The IFM16IO module provides 16 channels, each of which, by means of the configuration software, can be configured as:

- Non-supervised low power output for low-demand loads
- Non-supervised input

This module also provides terminals for the ancillary power @ 27V.

IFM16IO comes with:

- 3 screws for securing the module to the grounding bar
- Instructions manual



[A]	Status LED		[E]	Holes for the Earth bar screws
[B]	Mini USB port		[F]	CAN DRIVE/CAN DRIVE+ connector (opposite)
[C]	1 - 16	Input/Output connection terminals		
[D]	AUX -/+	Ancillary power-supply terminal		

LED IFM16IO	Colour	On solid	Flashing
CAN	Blue	Activity on the CAN communication BUS	
FAULT	Yellow	Short circuit on AUX terminals	
OUT	Green	At least one of the outputs on terminals 1-16 is active	
IN	Red	At least one of the inputs on terminals 1-16 is active	

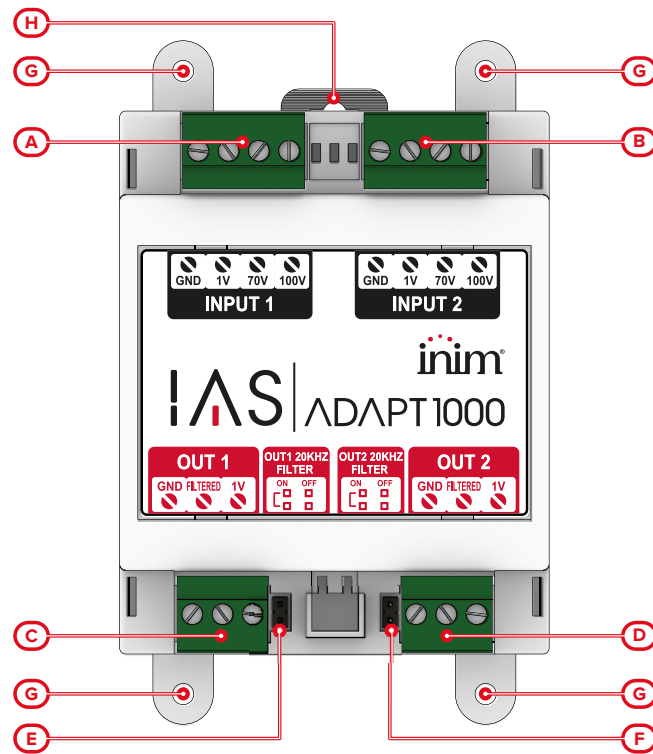
IFM16IO module - technical specifications

Supply voltage		19-30 V $\overline{=}$
Operating temperature		from -5°C to +40°C
Consumption @ 27.6V	stand-by	12mA
	maximum	25mA
Maximum voltage on I/O		0.1A 30V $\overline{=}$

3.21 IAS-ADAPT1000, audio signal adaptation module

The IAS-ADAPT1000 module has the function of adapting and decoupling the audio signals input to the Previdia control panel through the IFAMEVAC or IFAMAMP modules.

Provides an input for 1VRMS, 70 VRMS or 100 VRMS signals. Also includes a filter for 20KHZ.



[A]	INPUT 1	Line 1 input terminals	[E]	Connector for activation jumper filter line 1
[B]	INPUT 2	Line 2 input terminals	[F]	Connector for activation jumper filter line 2
[C]	OUT 1	Line 1 output terminals	[G]	Mounting screw hole
[D]	OUT 2	Line 2 output terminals	[H]	Backlocking grip to the DIN bar

The jumpers (paragraph 3.21 - [E], paragraph 3.21 - [F]) must be inserted if the respective outputs are to be filtered at 20KHz. Otherwise the jumpers must be removed.

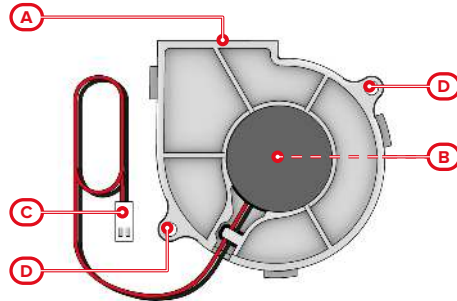
IAS-ADAPT1000 module - technical specifications

Height	with anchor locations	113mm
	without anchor locations	90mm
Width		71mm
Depth	with terminal boards	43mm
	without terminal boards	40.5mm
DIN modules		4
Weight		130g

3.22 PRCAB-Boostfan, fan

The PRCAB-Boostfan fan is an accessory item to be installed inside the PRCAB+ metal cabinet, in order to prevent any overheating of the modules mounted inside the cabinet.

Once mounted on the back of the cabinet through the appropriate screw locations, it is powered by the CAN DRIVE+ bar and automatically activated at the suitable level of temperature, as programmed for the IFAMAMP modules.



[A]	Airflow exit hole (at sides)
[B]	Airflow entry hole (on rear)
[C]	Power-supply cable
[D]	Mounting holes

PRCAB-Boostfan - technical specifications

Power-supply voltage	12-26 V ⁼⁼⁼
Consumption @ 24V	0,12A
Input power rate@ 24V	2,88W ⁼⁼⁼
Fan speed rate	3500 RPM \pm 10%

Chapter 4

Installation

Note: *The installation of these control panels must be carried out in full compliance with national design regulations, local fire regulations, laws and provisions in place, and in accordance with the relative instructions and guidelines.*

This Fire control panel should be located in a place that is:

- Dry
- Far from electromagnetic interference (electrical equipment, heating units, air-conditioning units, radio transmitters, etc.)

The mounting location must satisfy all the requirements of the respective laws and bylaws in force for technical installations. When choosing the position, it is necessary to ensure that the holes for the fan in the control panel cabinet (*paragraph 3.2 - [I]*) are not obstructed.

The system must be installed in accordance with the following procedure:

1. Lay the cables
2. Complete the connections on the BUS, loops and field devices
3. Install system peripherals
4. Mount the control panel to the wall
5. Install accessory modules
6. Power up the system
7. Test the system

4.1 Mounting a PRCAB+ cabinet

1. Remove the securing screws and door (*paragraph 3.2 - [D]*).
2. Remove the seals from the cable entries you intend using (*paragraph 3.2 - [G]*).

Note: *In order to guarantee the IP30 protection grade, do not remove any other seals.*

3. Pull the cables through the open cable entries.
4. Using the holes on the back, mount the cabinet to the wall (*paragraph 3.2 - [F]*).
The manufacturer strongly recommends the use of 8mm diameter minimum anchor screws (stop screws).

Note: *The equipment is suitable for mounting at heights of below 2 meters.*

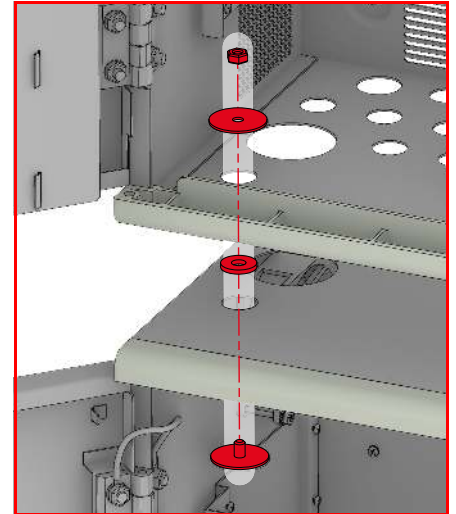
5. Insert and secure the various modules inside the cabinet and on the front plate.
6. Complete the wiring of the internal modules.
7. Replace the front plate.

4.1.1 Affixing cabinets to one another

The cabinets can be attached together by aligning the bottom of one cabinet with the top of another.

This operation allows you to join together up to 4 cabinets.

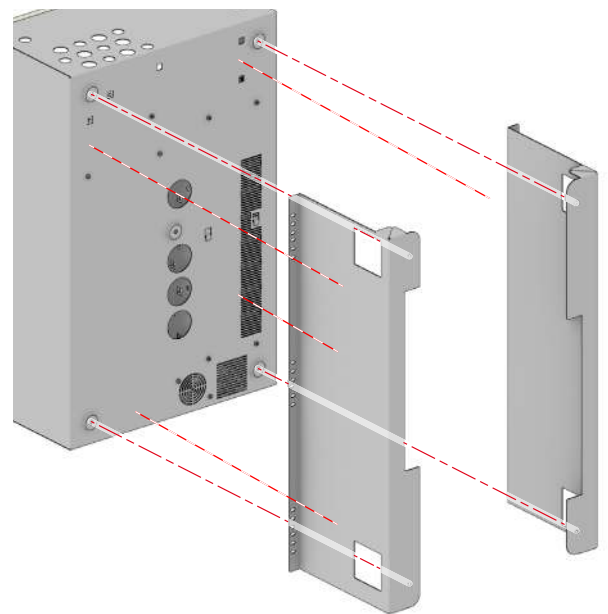
1. Remove all modules and wire/cables from the cabinets,
2. Remove the seals from holes used for affixing cabinets together.
3. Align the cabinets and, using the bolts (supplied with each cabinet), secure them together.
4. Connect the CAN DRIVE+ bars of each cabinet to each other with the CAN cables and flat cables supplied with the cabinet (*paragraph 4.6.4 Multi-PRCAB+ cabinet wiring*).
5. Install the necessary modules and proceed with the installation of the control panel.



4.1.2 Mounting the PRCABRK+ kit

This accessory kit must be mounted to the 19" rack before the Previdia Ultra control panel is installed.

1. Attach one of the two support brackets to each bar on the rack, using the available holes.
2. Mount the cabinet to the bracket by inserting the threaded rivets through the holes on the back of the enclosure, then secure it in place using the supplied nuts.



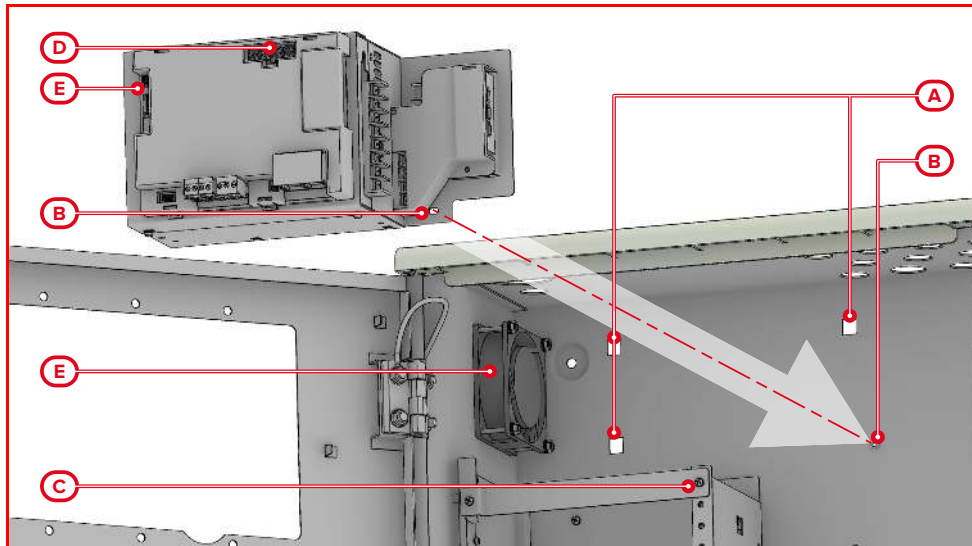
4.2 Mounting the IFAMPSU power supply

The IFAMPSU power supply module must be mounted in the allotted space inside the PRCAB+ metal cabinet:

1. Pair up the three tabs on the back of the power supply with the fixing holes on the back of the cabinet (*[A]*, *paragraph 3.2 - [M]*).
2. Move the module to the right until the Grounding hole for the power supply is properly positioned (*[B]*).
3. Secure the provided Ground cable in the hole in the cabinet (*[B]*) and to the special bar (*[C]*, *paragraph 3.2 - [K]*).
4. Connect the CAN BUS cable (supplied) to the connectors on the power supply (*[D]*) and on the CAN DRIVE+ bar (*paragraph 3.2 - [T]*).
5. Connect the fan (*[E]*, *paragraph 3.7 - [L]*).

Attention: *The power-supply modules inside each control panel must be of the same type. IFAMPSU and IFM24160 modules cannot be used together in the same control panel.*

Note: *The power supply which, once installed, is subject to transient voltages higher than those of the design overvoltage category (CAT II 2500 V), requires additional protection against transient voltages external to the equipment.*



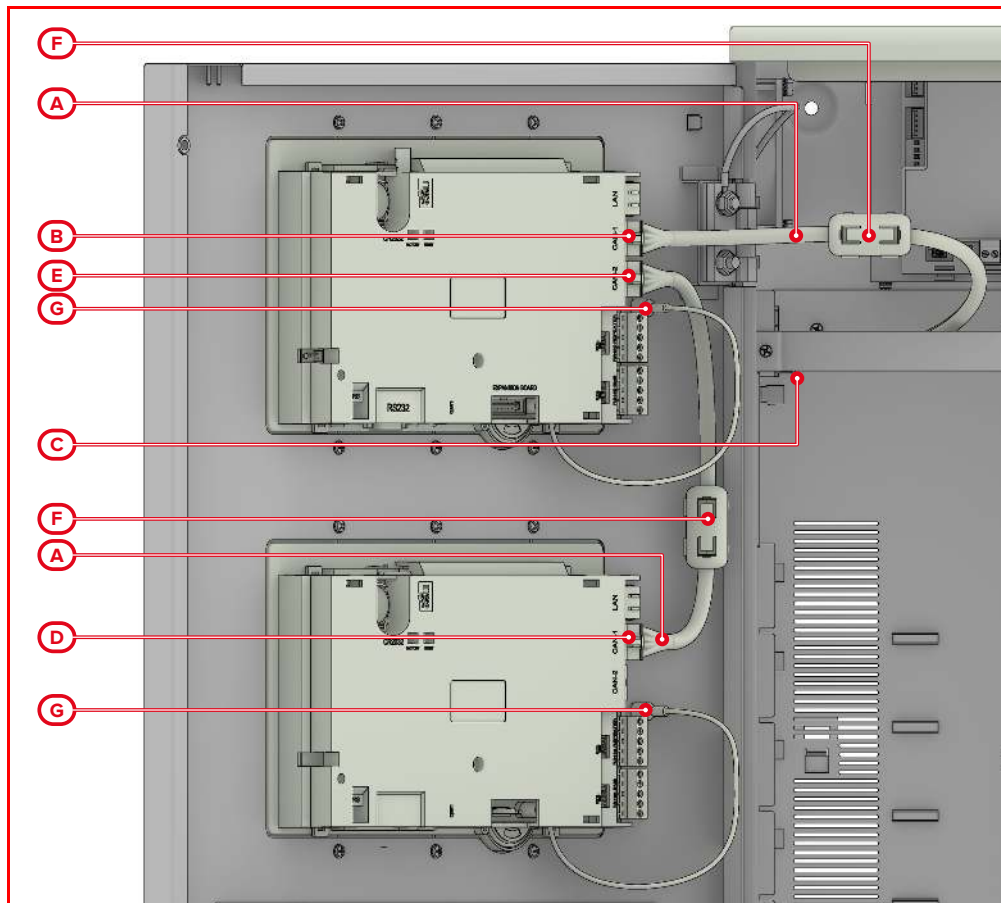
4.3 Mounting the front-plate modules

The front-plate modules (FPAMIAS, FPMCPU, FPMNUL, FPMLED, FPMLEDPRN, FPMEXT) can be mounted to one of the apertures on the cabinet front plate (*paragraph 3.2 - [B]*). The FPMCPU module can also be mounted to front plate of the PRREP repeater enclosure.

1. Align the 6 holes on the module frame (*paragraph 3.4 - [H]* e *paragraph 3.5 - [H]*) with the 6 holes on the cabinet front-plate or repeater enclosure.
2. Secure the module in place by fastening the supplied screws into the aligned holes.
3. Connect the CAN BUS wire (*[A]* supplied):
 - if the module is mounted in the upper aperture, the CAN BUS wire must be connected between the module port (*[B]*, *paragraph 3.4 - [N]*, *paragraph 3.5 - [N]*) and the CAN bar port (*[C]*, *paragraph 3.2 - [R]*)
 - if the module is mounted in the lower aperture and another module is mounted in the upper aperture, the CAN BUS wire must be connected between module port (*[D]*, *paragraph 3.4 - [N]*, *paragraph 3.5 - [N]*) and the appropriate port on the upper module (*[E]*, *paragraph 3.4 - [O]*, *paragraph 3.5 - [O]*)

Attention: The CAN BUS cables must not be connected or disconnected when the control panel is powered up.

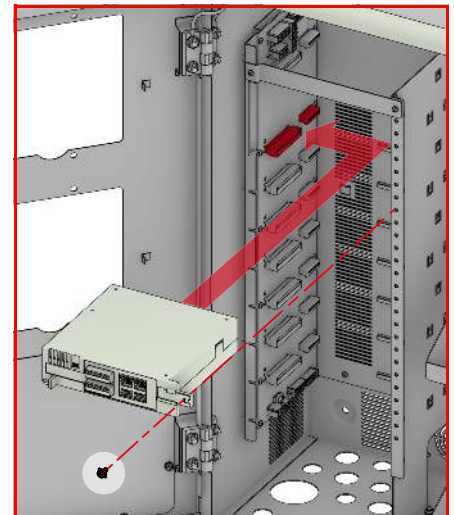
4. Fit the ferrite (*[F]*, supplied) to the connected CAN BUS cable.
5. Connect the Ground cable of the module (*paragraph 3.4 - [G]* and *paragraph 3.5 - [G]*) to the appropriate fitment (*[F]*, *paragraph 3.2 - [C]*).
6. Complete the wiring.



4.4 Mounting the internal modules

The internal modules (IFAMEVAC, IFAMAMP, IFAMIDANET, IFAMFFT, IFM24160, IFM2L, IFM4R, IFM4IO, IFMDIAL, IFM16IO, IFMNET, IFMLAN, IFMEXT) must be mounted in the special compartment inside the cabinet (*paragraph 3.2 - [L]*). There are two bars on either side of the compartment for mounting and connecting modules (*paragraph 3.2 - [J] - [L]*), up to 8 per cabinet.

1. Inside the compartment, find the position of the module that corresponds to one of the connectors on the PCB bar (*paragraph 3.2 - [P]*).
If you are installing an IFM24160 power-supply module, you must use the first connector at the top (*paragraph 3.2 - [U]*). When installing any other type of internal module, you can use this or any other connector that is free (*paragraph 3.2 - [V]*).
2. Position the module in such a way that it is on level with the desired connector on the bar then insert it in place by pushing it carefully to the left.
3. Affix the module to one of the holes on the grounding bar (*paragraph 3.2 - [L]*) using one of the supplied screws.
4. Complete the wiring on the internal module (refer to *paragraph 4.6.1 Cable entry* and the paragraphs regarding the wiring of each internal module).



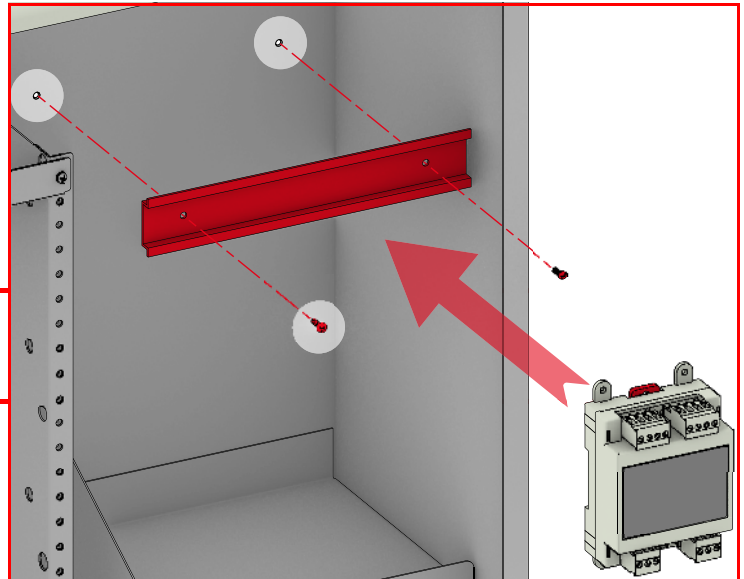
4.5 Mounting the optional modules

4.5.1 IAS-ADAPT1000

The IAS-ADAPT1000 optional modules are contained inside a plastic box that can be installed inside a 4-module DIN type container (*paragraph 3.21 - [H]*), or by using the fixing holes it is provided with (*paragraph 3.21 - [G]*).

If necessary, the modules can be mounted inside the cabinet of the PRCAB+ control panel, using the DIN bar supplied with the module and the appropriate holes on the back (*paragraph 3.2 - [N]*).

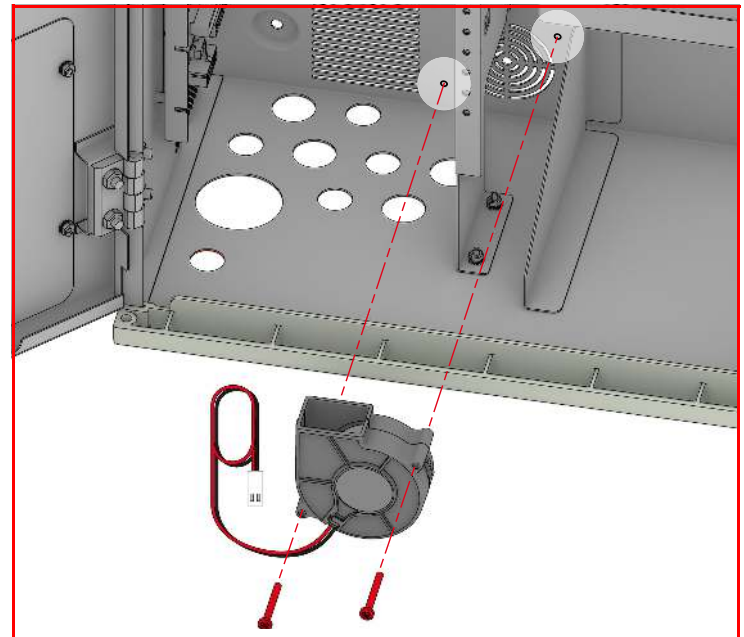
Note: *Mounting the IAS-ADPT1000 module inside the control panel cabinet is mandatory.*



4.5.2 PRCAB-Boosfan

The optional PRCAB-Boosfan fan must be mounted on the back of the PRCAB+ cabinet using the supplied mounting holes (*paragraph 3.2 - [N]*), taking care that the airflow entry is positioned toward the grating on the back.

Once mounted, connect the power-supply cable of the fan (*paragraph 3.22 - [C]*) to the appropriate connector on the PCB of the cabinet (*paragraph 3.2 - [W]*).



4.6 Control panel wiring

Attention: *Take care to remove all sources of power, including the batteries before starting any wiring operations.*

Cables: The cables used for the wiring of the product must have an adequate section and comply with the IEC 60332-1-2 or IEC 60332-2-2 standards.
The ends of wires must not be soft soldered in points where they are subject to clamping.

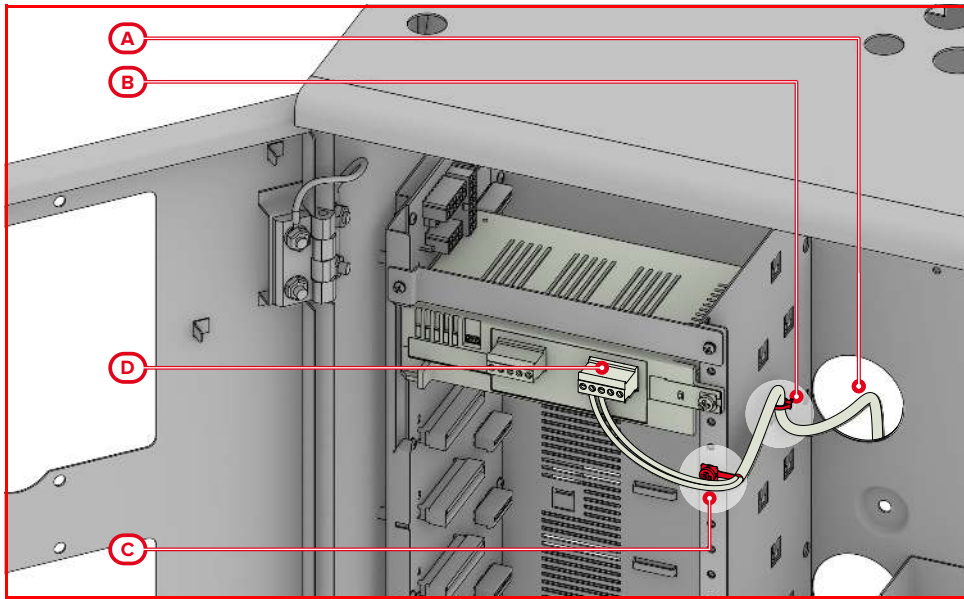
4.6.1 Cable entry

Use only the provided cable entries (remove the respective cable-entry covers) on the upper and lower sides of the cabinet and on the back *[A]*.

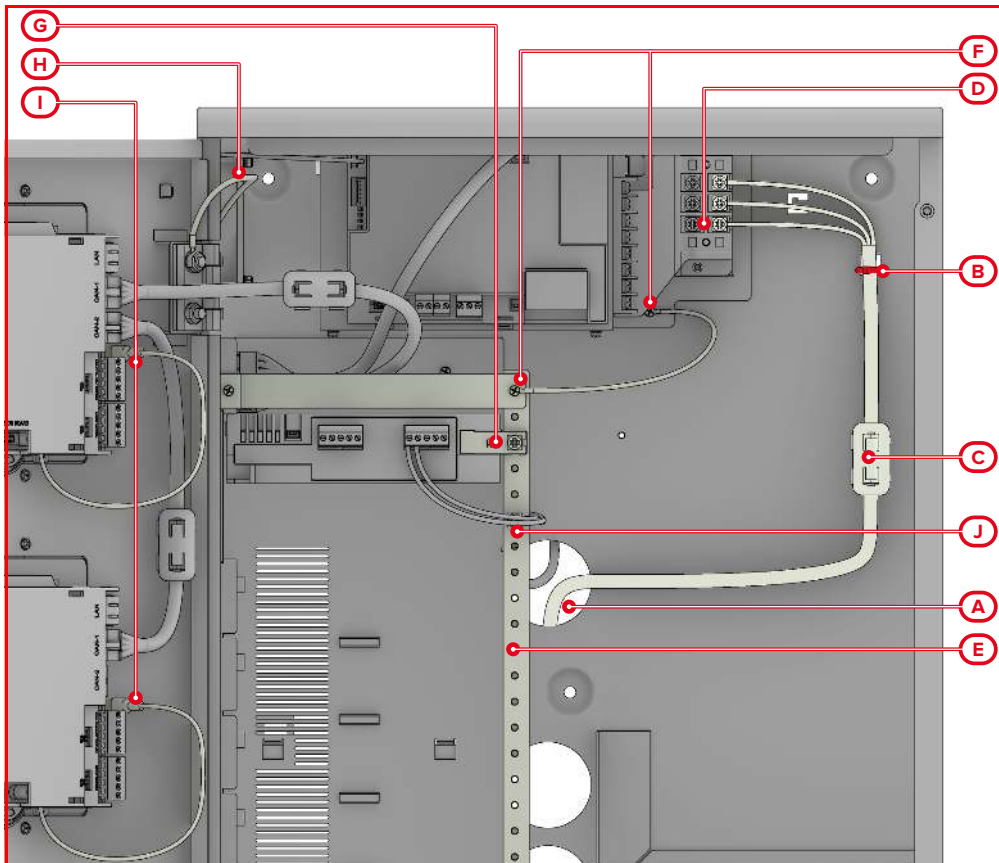
The cables must run vertically behind the Earth bar (*paragraph 3.2 - [K]*) and must be secured to the appropriate hooks by cable ties *[B]*.

The cable must run level with the terminal board of the module it is to be connected and its shield must be connected to the Earth bar [C]. Conductors without shields must be conveyed to the appropriate terminal board [D].

The unused cable entries must be closed by the supplied plastic covers.



4.6.2 Mains connection



A dedicated input [A] must be provided for the mains power input terminal (230-115V~). The cable must be secured to the appropriate hooks by a plastic cable tie in order to avoid accidental dislodgement [B]. The cable must be protected by a ferrite (supplied) which must be affixed in the proximity of the terminals [C].

Ensure that the network cable runs along a separate route and that it does not interfere with any other cables.

This panel must be connected to a separate line on the Electrical Switchboard (Mains power supply). The line must be protected by a sectioning device which must be labeled and of "16A curve C" type.

The power source must be provided through a bipolar protection device.

Cables: Connection cable type NYM 3 x 1.5 mm² or similar
Protected by ferrites (supplied)

4.6.3 Connection of the Earth conductors of the system

The ground conductor of the power-supply cable must be connected to the control panel via the appropriate terminal on the IFAMPSU unit terminal board (⚡, [D], paragraph 3.7 - [G]).

The earth conductor must be connected to earth on the electrical panel which supplies the control panel.

The Earth bar ([E], paragraph 3.2 - [K]) ensures that the control panel and its peripherals are taken to ground potential. Therefore, to ensure proper functioning of the connection to Earth, make certain the Earth bar is connected properly to:

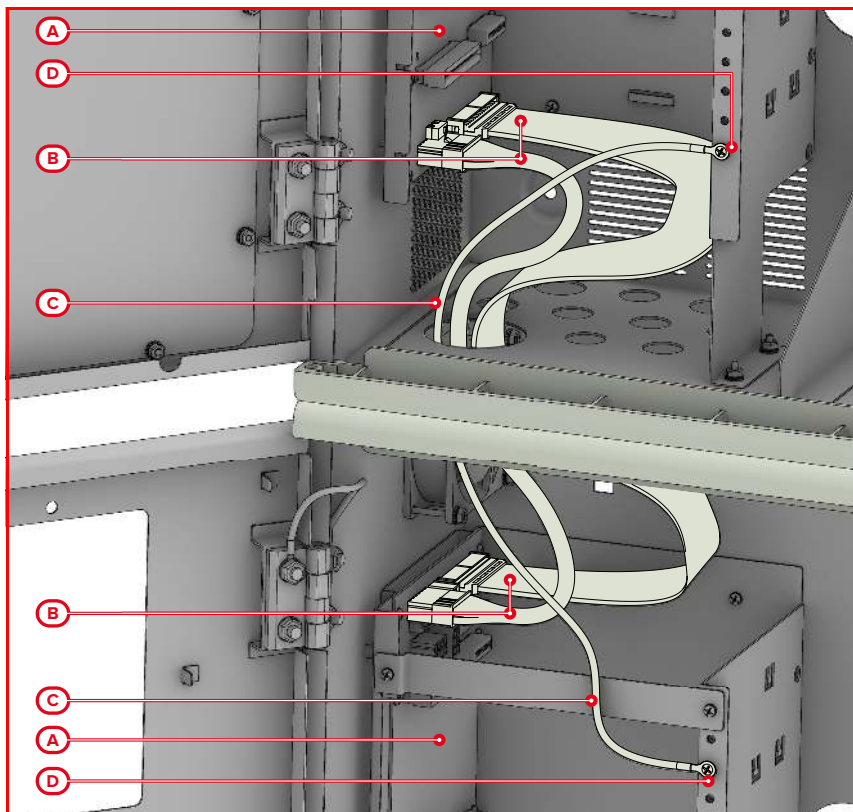
- the wire with eyelet terminal, by means of the appropriate hole (⊕ [F], paragraph 3.7 - [H])
- the internal modules, by means of the appropriate screws duly inserted and fastened in place [G]
- the cover, using the supplied wire already in place [H]; the Grounding cables of the front-plate modules must be adequately connected to the cover ([I], paragraph 3.4 - [G] and paragraph 3.5 - [G])
- the cable shields, by means of cable-gland screws [J].

4.6.4 Multi-PRCAB+ cabinet wiring

Once the cabinets are affixed to one another, all the CAN DRIVE+ bars of each cabinet ([A], paragraph 3.2 - [J]) must be connected together. To connect the CAN DRIVE+ bars, use the BUS cables supplied with every PRCAB+ [B].

The two wires of this cable must be inserted, one into the lower connector of the CAN DRIVE+ bar of the cabinet above (paragraph 3.2 - [S]), and the other into the upper connector of the CAN DRIVE+ bar of the cabinet below (paragraph 3.2 - [Q]).

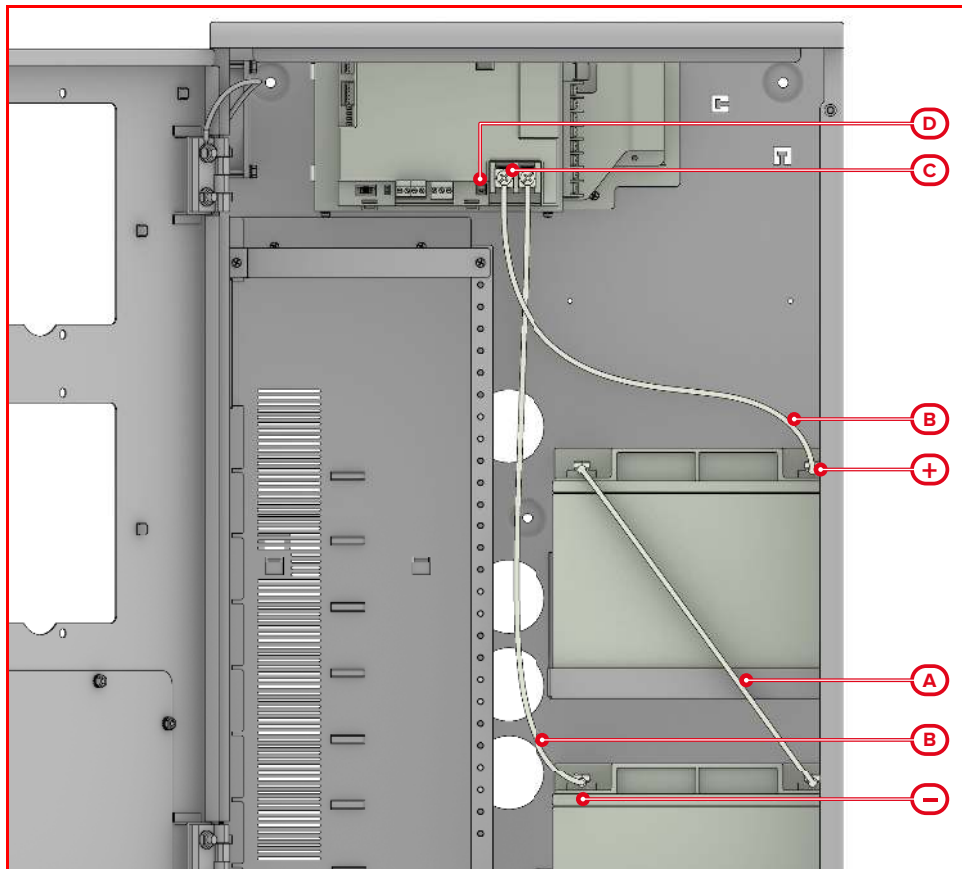
In the same way, it is convenient to connect the grounding wires of the cabinets that are attached together. For this purpose, use the proper cable supplied with every PRCAB+ [C] and connect to each other the grounding bars of the two adjacent cabinets ([D], paragraph 3.2 - [K]).



4.7 IFAMPSU and IFM24160 power-supply module wiring

As well as the terminal board for the mains power supply and the connector for the batteries, the power-supply module also provides two supervised outputs capable of supplying 27.6V in active status and a relay (voltage-free contacts C,NC,NO).

4.7.1 Battery connection



The batteries must be connected to the power-supply module by means of the supplied wires. They consist of two cables with connectors for the battery terminals and, for IFM24160 only, also a thermal probe (NTC) for temperature related charging voltage compensation.

The backup power batteries are not included.

1. Insert the batteries into the battery compartment inside the cabinet (*paragraph 3.2 - [O]*).
2. Using the battery wire (*[A]*), connect the batteries together.
3. Connect the wire with the eyelet terminals to the terminals of the batteries (*[B]*).

Attention: *Ensure that the polarity is correct.*
Red - positive
Black - negative

4. Connect the battery wire connector to the connector on the power-supply module (*[C]*).

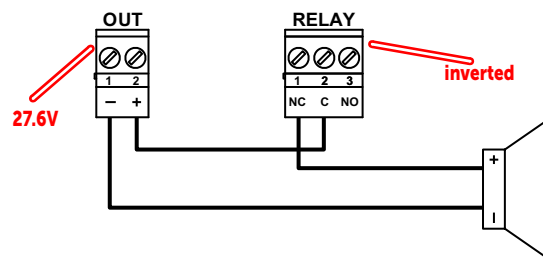
Connection of the batteries before the mains voltage is present will not activate the system. Once the mains voltage is supplied, the power-supply module will connect the batteries automatically and initialize the circuits which manage them.

5. If use of an additional thermal probe is required, it must be inserted on the power-supply module (*[D]*) and secured on the side of a battery with a piece of tape.

Note: *The installer must use only valve regulated lead-acid batteries (VRLA) for stationary use, compliant with IEC 60896-21 and IEC 60896-22 standards. Such batteries must have a V-1 or higher firestop casing. For the internal clock battery replacement, the installer must use only non-rechargeable CR2032 lithium batteries compliant with IEC 60086-4 standard. The batteries must be replaced by sector experts only.*

All voltage free relay contact can only be connected to SELV circuits.

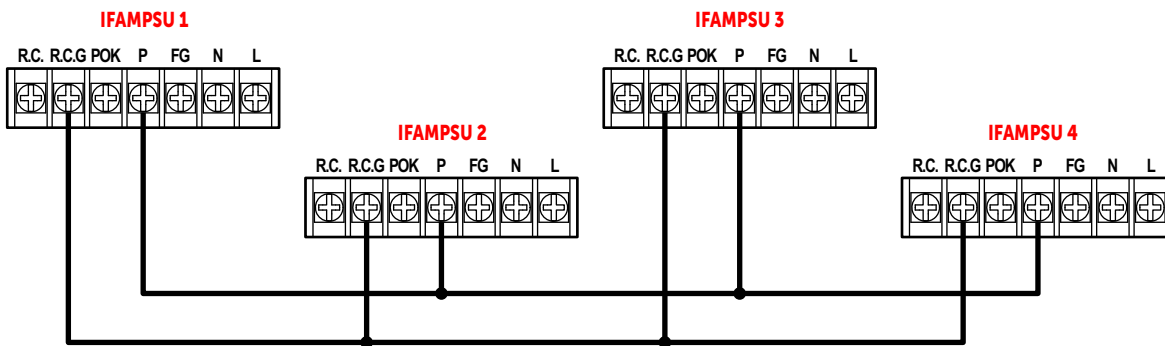
EN54: If the control panel default settings are left unchanged, the RELAY output will result as being configured as a fault signalling output. In compliance with regulations the output will also result "inverted" in order to switch to fault condition when the system is completely without power. Therefore, in stand-by status (no faults present on the system) terminals C and NC will be closed, whereas terminals C and NO will be open.



4.7.3 Connection of more IFAMPSU modules

In the case of installations with more cabinets for a single control panel that uses more than one IFAMPSU module, work through the following procedure:

1. Remove the protection of the AC mains input terminals of each power-supply unit by unlocking the retaining hook (paragraph 3.7 - [M]) and removing the retaining screw (paragraph 3.7 - [N]).
2. Identify the ancillary "R.C.G" and "P" terminals.
3. Connect these terminals as herein indicated:



Attention: *During the connecting phase of the ancillary terminals, factory connections must not be modified.*

4. Refit the protections removed.

4.8 IFAMEVAC internal module wiring

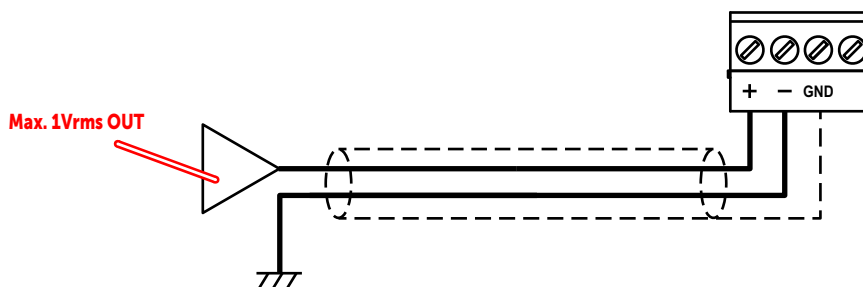
This paragraph illustrates the wiring possible through the IFAMEVAC module, necessary for connection with external audio sources and microphone bases.

4.8.1 Connection of audio sources (MUSIC 1/2, AUX 1/2)

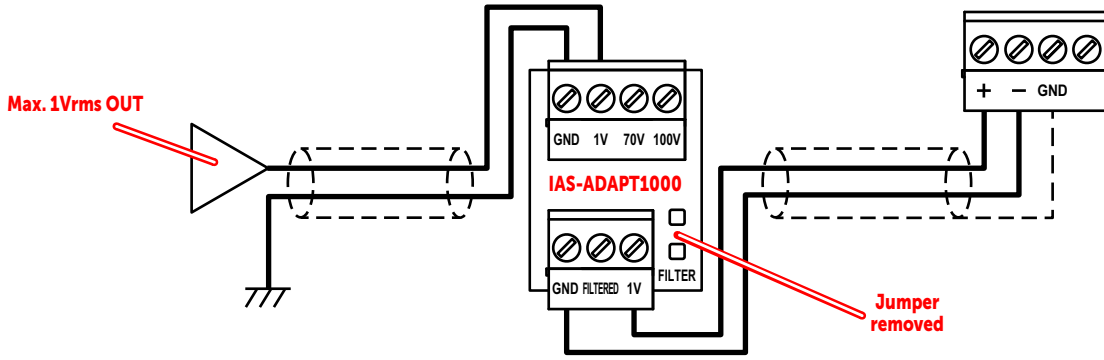
Cables: Shielded Twisted Pair (STP) cable

Note: *The cable segment outside of the shield must be short as possible.*

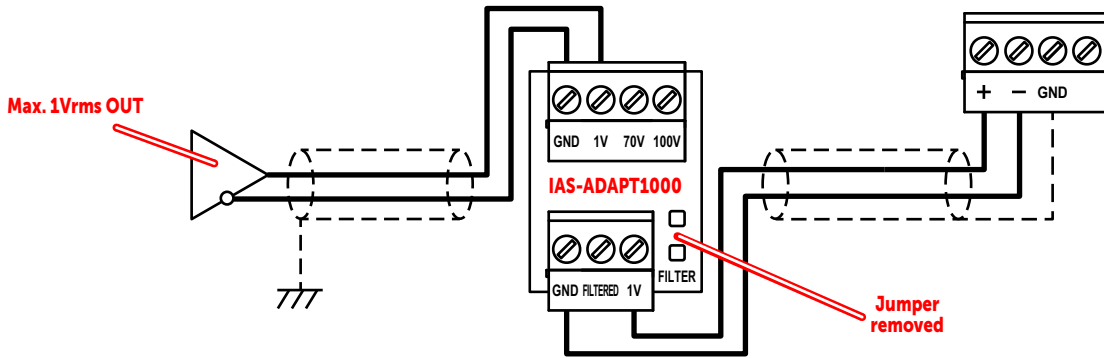
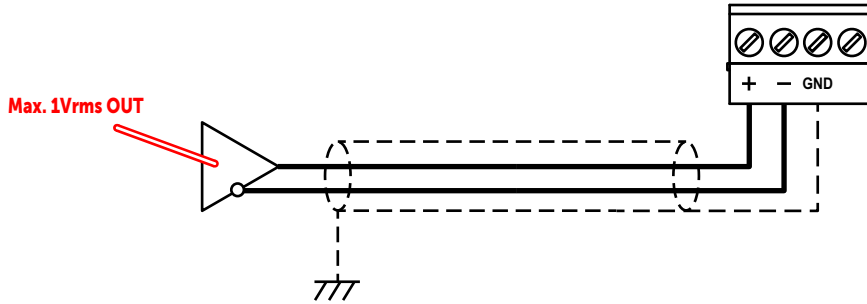
Non balanced source



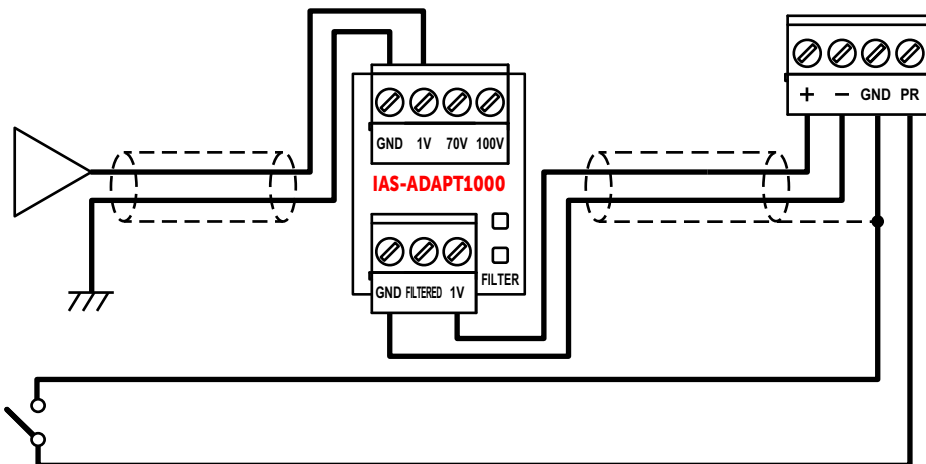
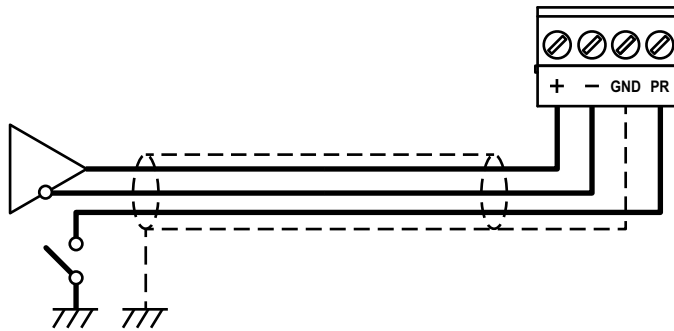
To avoid humming caused by ground loops, we recommend using the IAS-ADAPT1000 decoupling module.



Balanced source

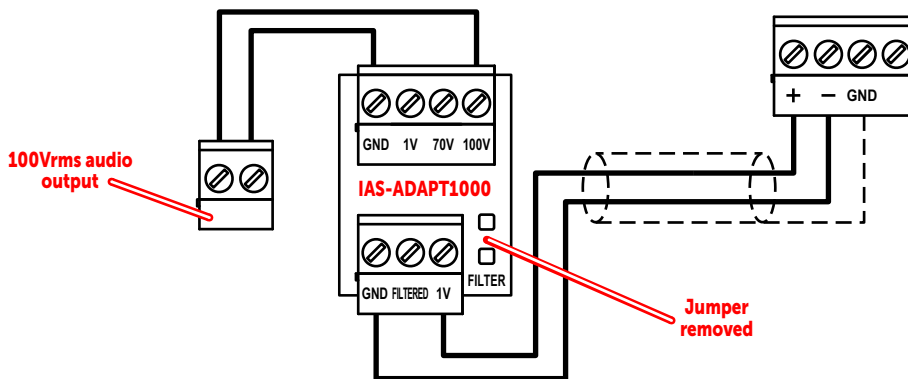


Source with priority request



Note: *The priority request on AUX inputs can be detected on the audio signal level (option to be configured)*

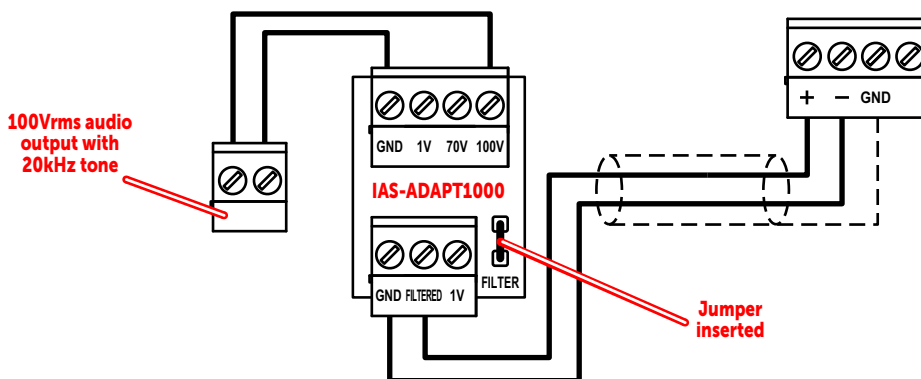
100Vrms non-supervised speaker output



100Vrms supervised speaker output

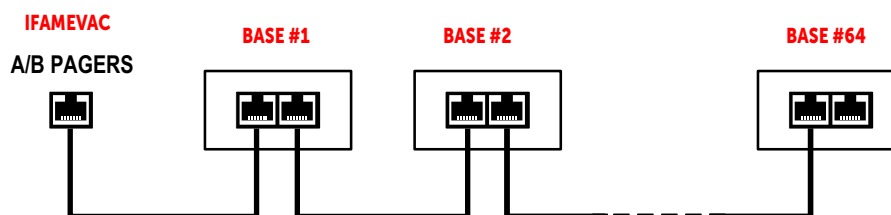
In the case of a supervised line, this presents an additional tone of 20kHz, for impedance measurement.

The IAS-ADAPT module provides, by inserting a jumper (paragraph 3.21 - [E], paragraph 3.21 - [F]), a filter to eliminate the supervision tone from the audio output.



4.8.2 Microphone bases connection

Cables: Double shielded not crossed cat. 5E SF/UTP cable



4.9 IFAMAMP internal module wiring

This paragraph illustrates the wiring possibilities via the IFAMAMP module, necessary for the connection for speaker lines driven with a maximum signal of 100 Vrms.

Note: *The sum of the power of all the speakers connected to the module must be less than or equal to 250W.*

4.9.1 Audio output connection (LINE A/B)

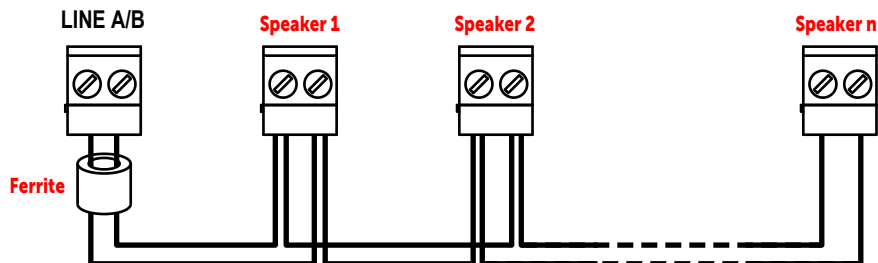
Cables: 2 pole cable as per the reference standard

EN IEC 62368-1:

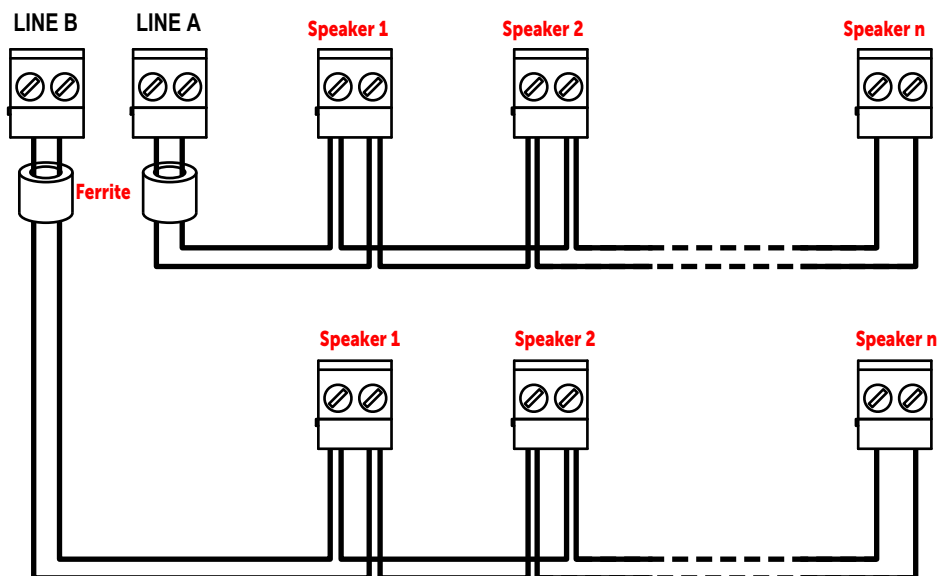
Touching uninsulated terminals or live wiring with bare hands can cause electric shock.



Speaker outputs, single line connection



Speaker outputs, dual line connection



4.9.2 LOCAL AUDIO input connection

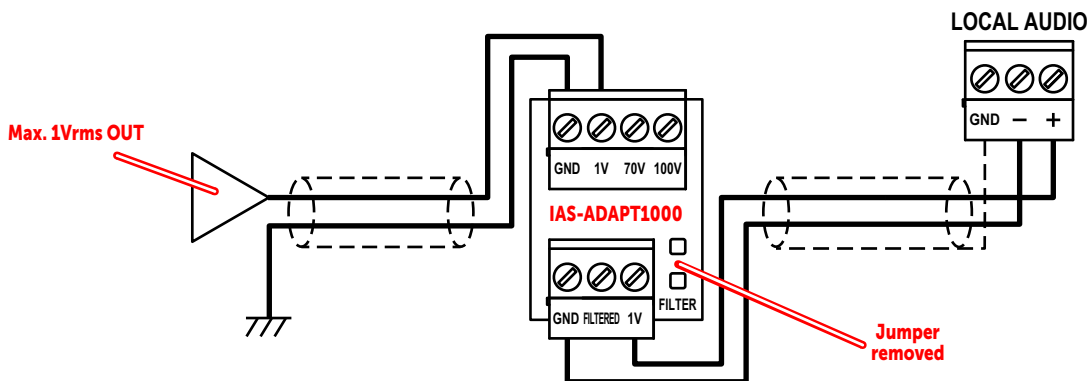
The IFAMAMP provides a "LOCAL AUDIO" input with configurable priority for audio sources intended for the power-supply speaker line only.

Cables: 2-pole Shielded Twisted Pair (STP) cable

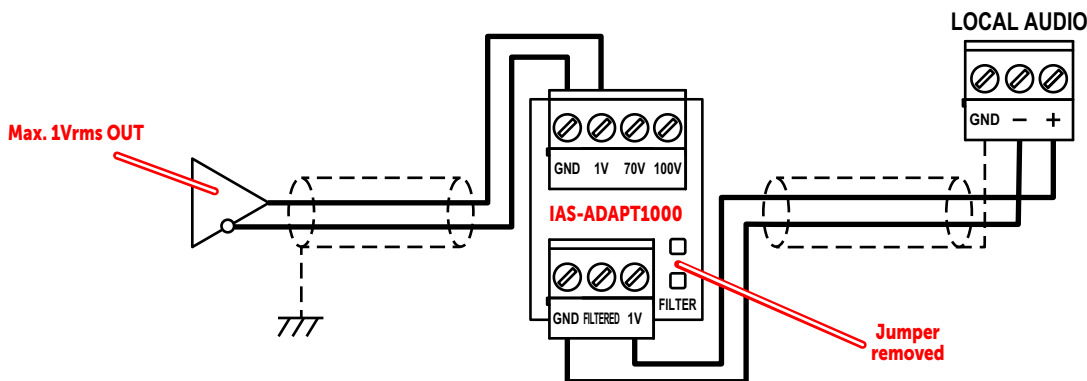
Attention: To connect an audio source to the LOCAL AUDIO input, the use of the IAS-ADAPT1000 adapter is mandatory.

Note: The cable segment outside of the shield must be short as possible.

Unbalanced source with IAS-ADAPT1000



Balanced source with IAS-ADAPT1000



4.10 IFAMIDANET internal module wiring

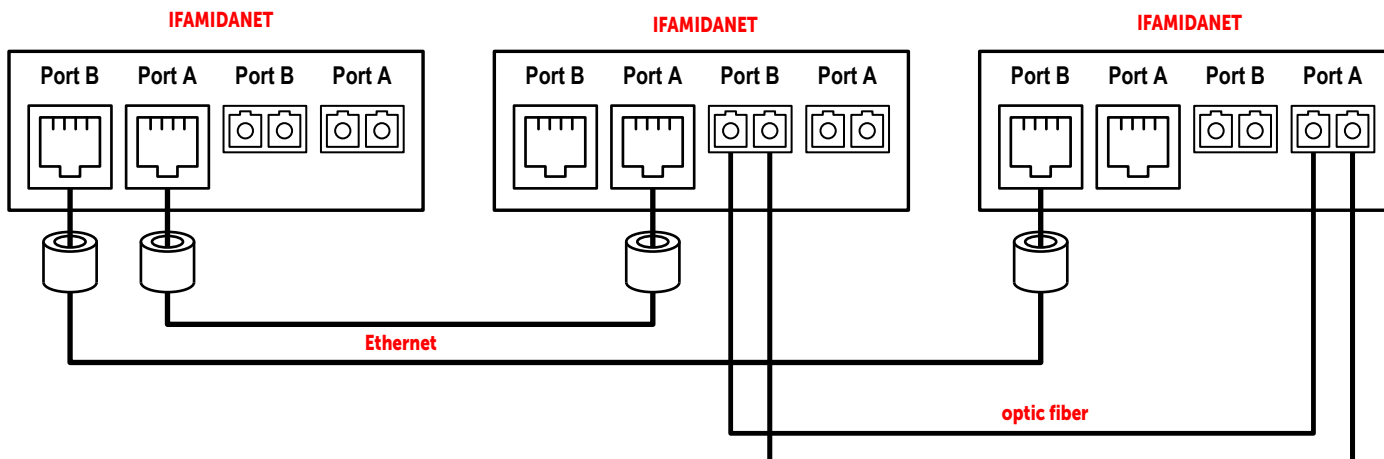
The IFAMIDANET module allows for the connection of several Previdia Ultra control panels, up to a maximum of 48 in an IDANet network.

The module has two ports (“PORT-A” and “PORT-B”) for making the ring connection. For each of the two ports, an RJ45 socket is available for connection via UTP CAT5 cable (Ethernet protocol) or alternatively a socket for an SFP fiber optic converter for making the fiber optic connection.

Each of the two connections can be made independently in fiber or copper, ensuring that both ports are used.

Note: Do not use Ethernet and fiber at the same time from the same port.
The SFP converters used for the fiber optic connection must be 100 Base FX type.

Cables: Ethernet: UTP CAT 5, maximum 100m
Fiber: depending on the SFP module used



4.11 IFAMFFT internal module wiring

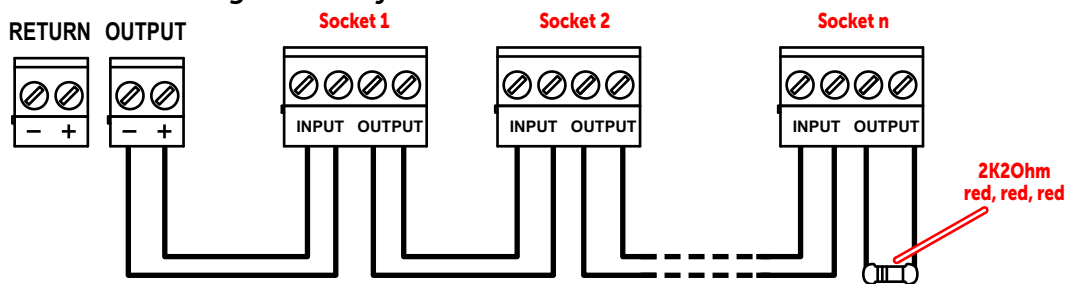
Each IFAMFFT module manages up to 4 socket risers for the connection of emergency telephones. A socket riser consists of a twisted bipolar cable (telephone twisted pair cable) to which all the emergency telephone sockets are connected in parallel and terminated with a 2.2 KOhm resistor.

When an emergency telephone is plugged into one of the riser sockets, an emergency call will be signalled on the control panel. Accepting the call will establish a telephone connection between the central console and the remote telephone plugged into the riser socket.

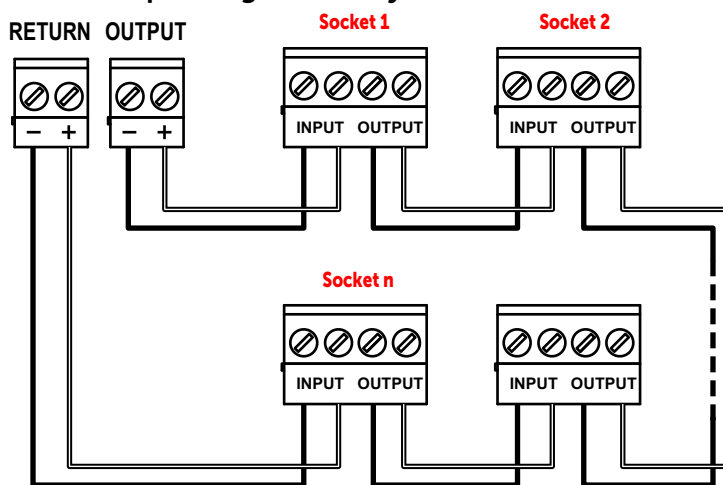
More emergency telephones inserted in the same riser socket will automatically go into group chat mode (maximum 4). From the control panel it is possible to accept calls from different riser sockets (up to a maximum of 4) for a call in chat mode.

Cables: Line connection via twisted pair cable with a maximum length of 500m.

Socket IFFT-PHONE line wiring - "Polarity insensitive"

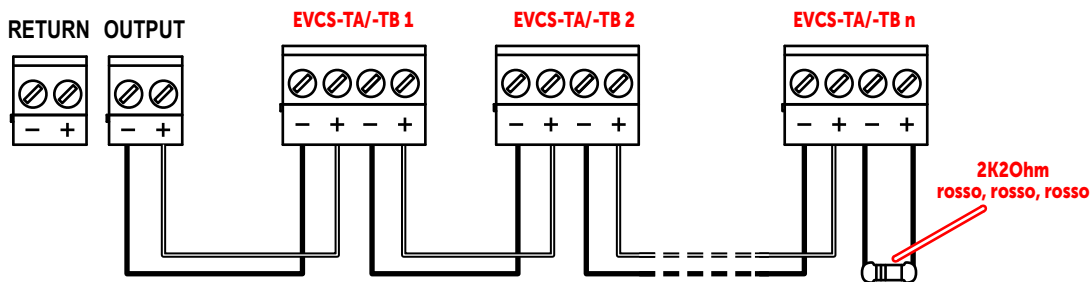


Socket IFFT-PHONE loop wiring - "Polarity sensitive"

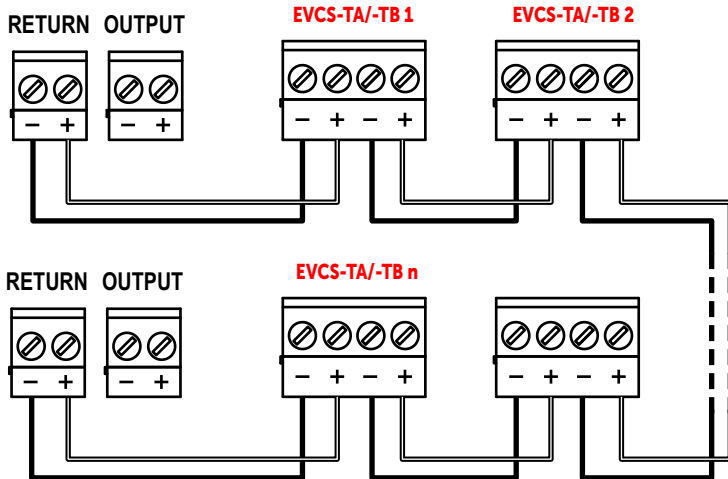


Attention: Maintain the polarity of the lines between socket and IFAMFFT.

EVCS-TA / EVCS-TB emergency telephone line wiring - "Polarity sensitive"



EVCS-TA / EVCS-TB emergency telephone loop wiring - "Polarity sensitive"



4.12 IFM2L internal module wiring - loop connection

The connection circuits of the peripheral detection/activation devices are defined as "loops". These loops start from the output terminals, run through the entire protected area connecting in parallel all the system devices before re-entering on the input terminals.

The loop utilizes the same two wires for the power supply to devices and for two-way communication. Due to electrical incompatibility, different brand devices (i.e. devices using different protocols) cannot co-exist on the same loop. However, the loops can be programmed separately in such a way as to allow the system to manage different brand devices on different loops.

Loops are made by means of a two-wire shielded cable with proper wire section (refer to the following cable specifications) and in compliance with local laws in force.

The wiring must be completed in a loop in order to guarantee the tolerance of wire-cutting or short-circuit on the cable.

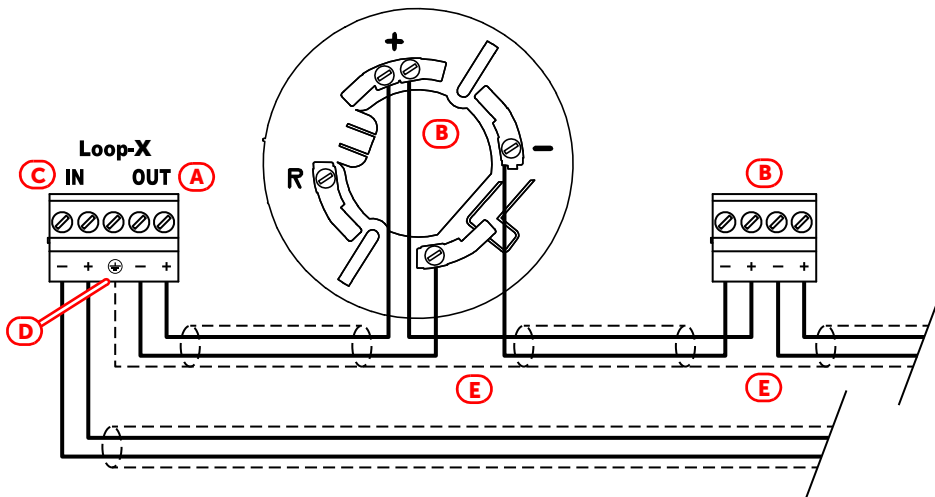
- Cables:**
- 2 wire shielded cable
 - Twisted 5/10cm
 - Total maximum capacity 0.5uF
 - Maximum length 2000m
 - Maximum resistance (considering the sum of the positive and negative conductor) 40Ohm
- It is necessary to consult the configuration software, Previdia/STUDIO, for the proper cable sizing in relation to the power consumption of the connected devices, or to the following table for a rough estimate:

Total loop length	Wire section	American Wire Gauge
Up to 1000m	2 x 1 mm ²	17 AWG
Up to 1500m	2 x 1.5 mm ²	16 AWG
Up to 2000m	2 x 2 mm ²	14 AWG

The cable shield must be connected to the Earth bar at one end only.

For the connections of the various devices refer to the instructions supplied with the devices themselves.

The following diagram illustrates the proper completion of the loop wiring. Starting from Loop-A/B OUT terminals on the IFM2L module (*[A]*, *paragraph 3.13 - [C] - [D]*) proceed with the connection of the peripheral devices located in the area protected by the system (*[B]*) and re-enter on Loop-A/B IN terminals (*[C]*).



When connecting the loop devices it is not necessary to follow the input/output order indicated in the figure. Connect the cable shield only at the start of the loop (*[D]*, the shield can be connected to the terminal indicated in the figure or directly to the grounding bar). Take care to link the interrupted shields in correspondence with the device connections (*[E]*).

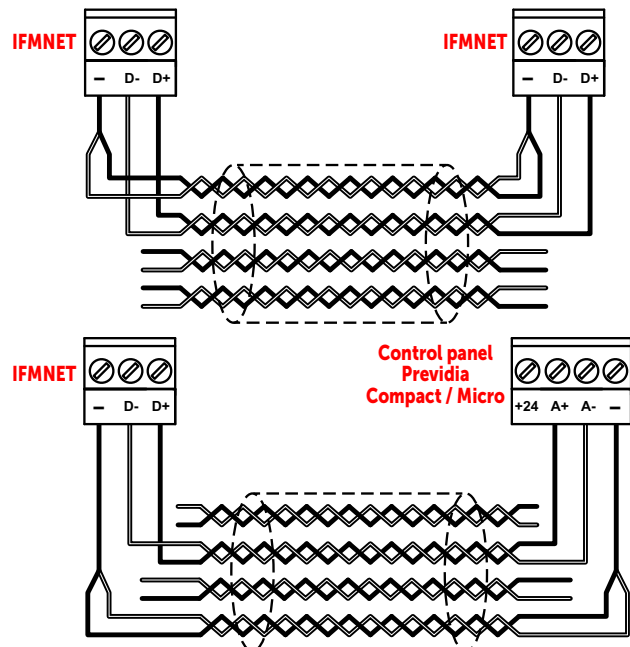
EN54: A Previdia Ultra control panel can manage up to 3840 fire detection/signalling devices (240 devices per loop).

4.13 IFMNET internal module wiring - Hornet+ network connection

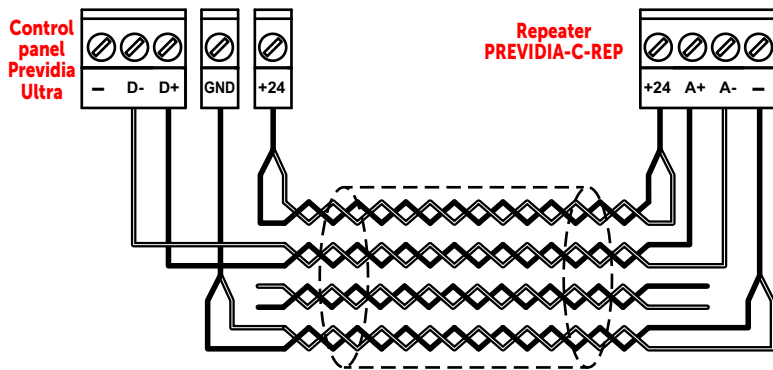
The connection of two or more control panels in a Hornet+ network can be achieved by means of two RS485 communication ports (*paragraph 3.17 - [C] - [D]*).

Each connection in the network must be completed in accordance with the instructions in *paragraph 4.6.1*.

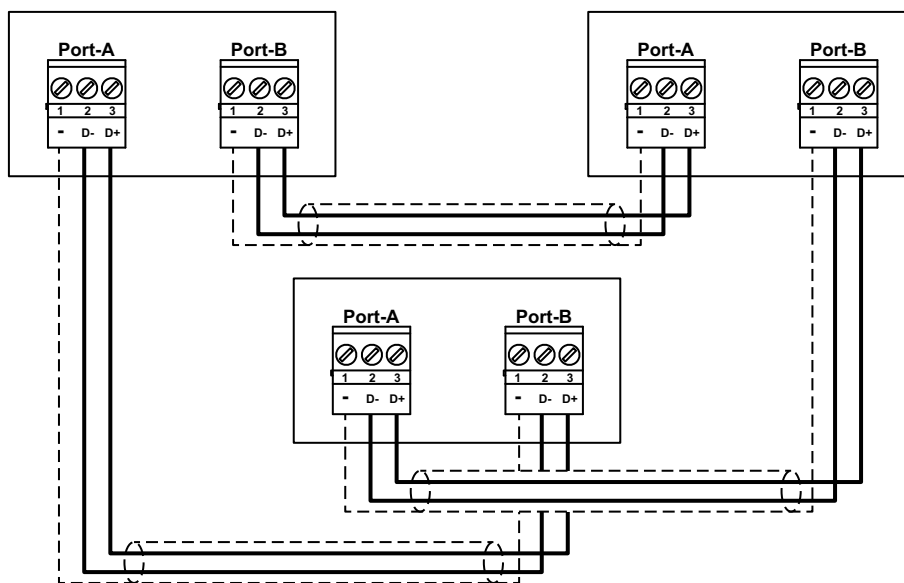
Cables: Cat.5 S/FTP FR PH(120) Ethernet cable
Maximum length (between two successive control panels): 1000m for speeds up to 230kbps, 500m for higher speeds (512kbps)



Cables: If the cable is used to power repeaters, the section of the conductors used for the power supply must be appropriately evaluated.



The connection must be a loop connection and must respect the direction of the wiring: the terminals on the terminal board of PORT-B must be connected with their counterparts on the terminal board of PORT-A of the next control panel; whereas, the terminals on the terminal board of PORT-A must be connected to their counterparts on the terminal board of PORT-B of the previous control panel.



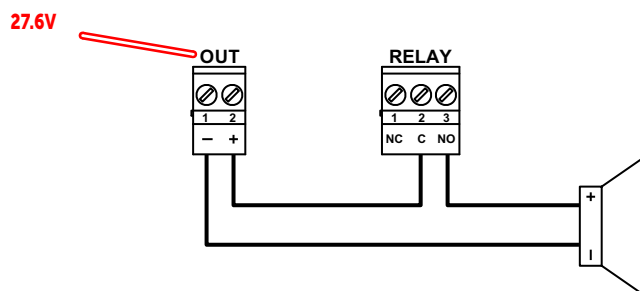
4.14 IFM4R internal module wiring

Cables: 2/3 wire shielded cable
 Proper section (minimum 0.5mm², maximum 2.5 mm²)
 Compliant with local laws and regulations in force

Each connection to this output must be completed in accordance with the instructions in *paragraph 4.6.1*.

All voltage free relay contact can only be connected to SELV circuits.

Each of the 4 relay outputs on the module must be connected in accordance with the following wiring diagram:



The OUT output illustrated in the diagram is used as a power source and is programmed as continuously active.

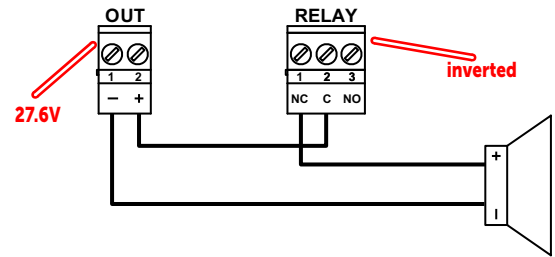
The illustrated connection does not supervise the cable and does not signal connection faults.

EN54:

If you wish to configure a RELAY output as a fault signalling output, you must complete the connections as shown in the wiring diagram opposite.

In compliance with the regulations in force, the output must be configured as "inverted" in order to switch to fault condition when the system is completely without power.

Therefore, in stand-by status (no faults present on the system) terminals C and NC will be closed, whereas terminals C and NO will be open.



4.15 IFM4IO internal module wiring

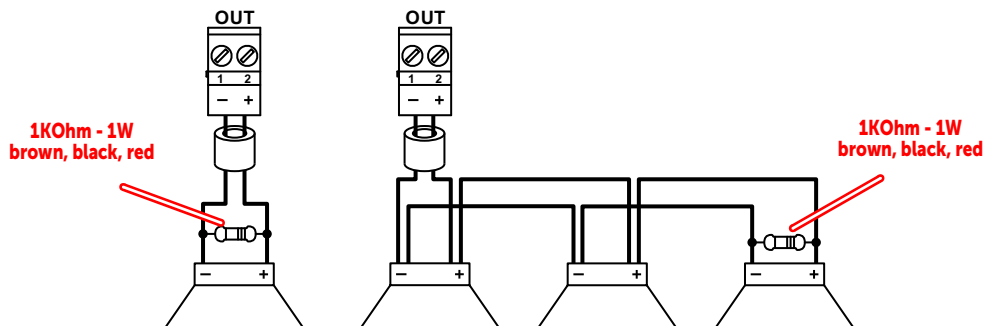
Each of the 4 IN/OUT channels of the IFM4IO module (*paragraph 3.19 - [C]*) must be configured as:

- supervised output
- input
- conventional zone
- 4-20m gas input

Each connection to this channel must be carried out in accordance with the indications in *paragraph 4.6.1*.

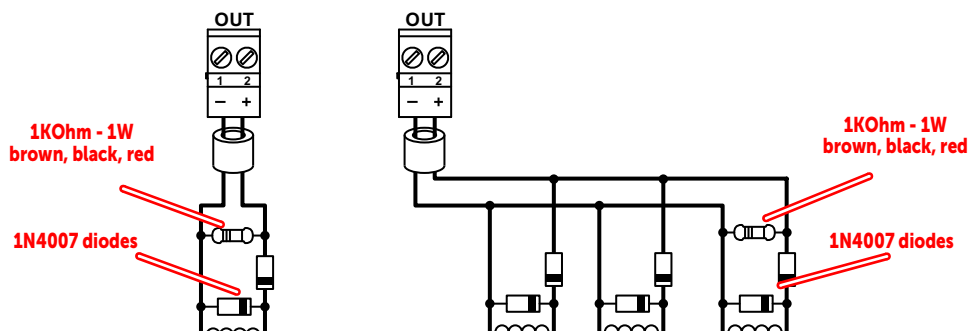
Cables: 2 wire shielded cable
 Proper section (minimum 0.5mm², maximum 2.5 mm²)
 Compliant with local laws and regulations in force

Connection of polarized devices (sounders, etc.) to channels configured as outputs



The polarities refer to the active status of the output, the polarities invert for stand-by status.

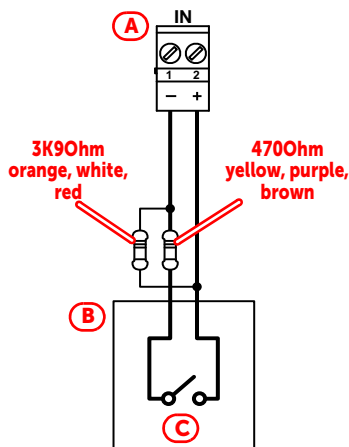
Connection of non-polarized devices (relays, etc.) to channels configured as outputs



The polarities refer to the active status of the output, the polarities invert for stand-by status.

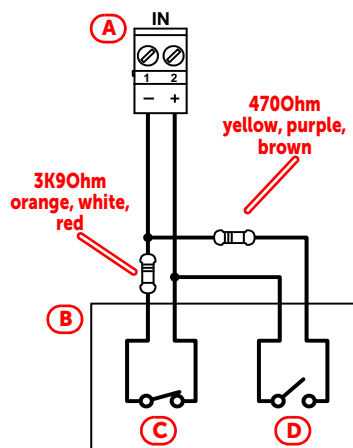
Connection of devices with an alarm output to channels configured as input

The wiring diagram illustrates a connection made to one of the channels of the IFM4IO module [A], configured as input. The connected device [B] is equipped with a normally open output for alarm signalling [C].



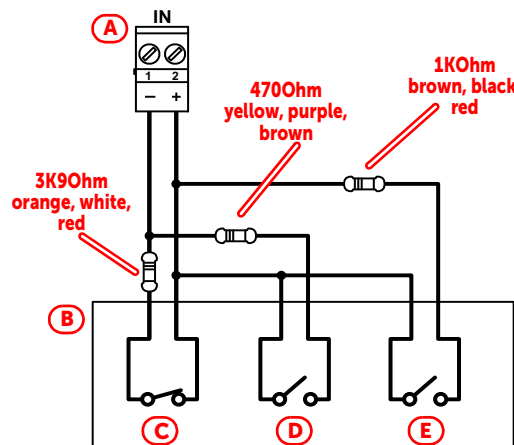
Connection of devices with alarm and fault outputs to channels configured as input

The wiring diagram illustrates a connection made to one of the channels of the IFM4IO module [A], configured as input. The connected device [B] is equipped with a normally closed fault signalling output [C] and a normally open alarm signalling output [D].

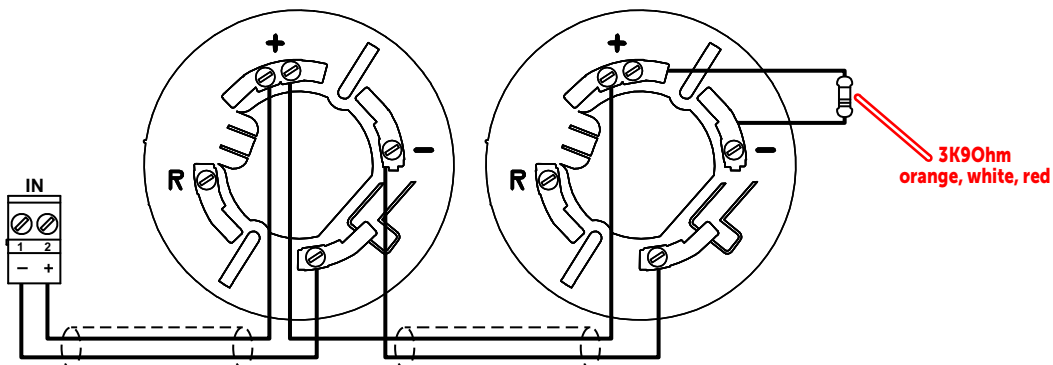


Connection of devices with alarm, early warning and fault outputs to channels configured as input

The wiring diagram illustrates a connection made to one of the channels of the IFM4IO module [A], configured as input. The connected device [B] is equipped with a normally-closed fault signalling output [C], a normally-open alarm signalling output [D] and a normally-open early warning signalling output [E].

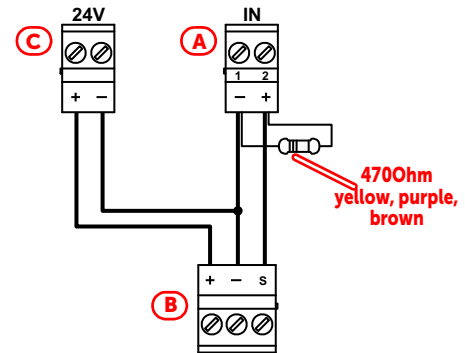


Connection to channels configured as conventional line



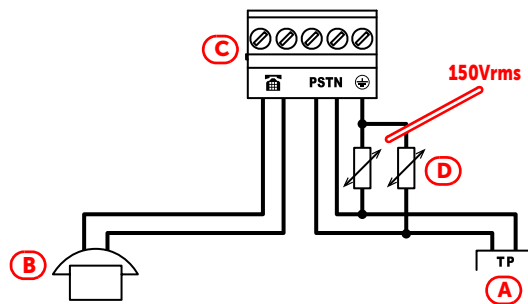
Connection to channels configured as 4-20mA gas input


The wiring diagram illustrates a connection made to one of the channels of the IFM4IO module [A], configured as gas output inclusive of a generic device with a 4-20mA output [B] powered from a 24V source [C].




4.16 IFMDIAL internal module wiring

Cables: Compliant with local regulations in force



Connect the telephone line [A] to the PSTN terminals and telephone device or the internal phone line [B] to the terminals  on the IFMDIAL module ([C], paragraph 3.15 - [E]).

In order to protect the control panel against the discharge of atmospheric electricity, the manufacture strongly advises the use of the two 150Vrms varistors [D]; these varistors must be connected between the grounding terminal  and the PSTN terminals.

4.17 IFM16IO internal module wiring

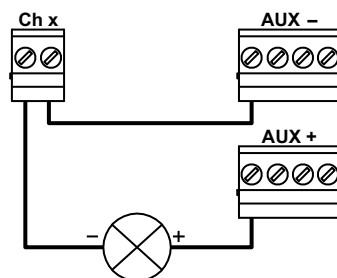
Each of the 16 IN/OUT channels of the IFM16IO module (paragraph 3.20 - [C]) can be configured as non-supervised input or output.

If the connection requires, the module has AUX terminals (paragraph 3.20 - [D]) for a 27V ancillary power supply.

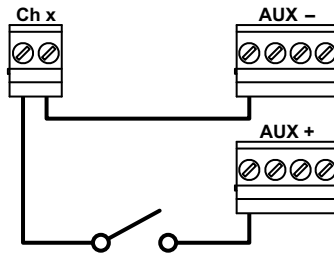
Each connection to this channel must be carried out in accordance with the indications in paragraph 4.6.1.

Cables: 2 wire shielded cable
Proper section (minimum 0.5mm², maximum 2.5 mm²)
Compliant with local laws and regulations in force

Connection of devices to channels configured as output



Connection of devices to channels configured as input



4.18 IFMLAN internal module wiring

The screw terminals of the IFMLAN module (paragraph 3.14 - [F]) are not available for any type of connection. For future use

4.19 IFMEXT internal module wiring

The IFMEXT module provides 7 terminals for the connection of signalling, activation and control devices linked to the apparatus of the fire extinction system.

- 3 input terminals:
 - PRESSOS. (paragraph 3.16 - [C])
 - STOP-EXT (paragraph 3.16 - [D])
 - MAN-EXT (paragraph 3.16 - [E])
- 4 output terminals:
 - VALVE (paragraph 3.16 - [F])
 - HOLD (paragraph 3.16 - [G])
 - PRE-EXT (paragraph 3.16 - [H])
 - RELEASED (paragraph 3.16 - [I])

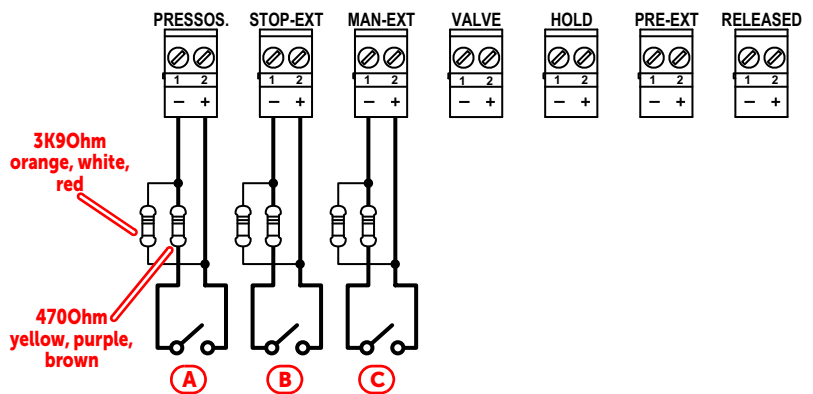
Each connection to these terminals must be completed following the instructions in paragraph 4.6.1.

Cables: 2 wire shielded cable
 Proper section (minimum 0.5mm², maximum 2.5 mm²)
 Compliant with local laws and regulations in force

Note: *In order to comply with EN12094-1 standard requirement, if more than one extinction channel is managed by a single Previdia control panel (more than one IFMEXT module installed on a single control panel) a backup FPMCPU unit have to be installed in the system, this backup unit will provide the disablement function for each extinction channel also in the unlikely event of main FPMCPU system fault.*

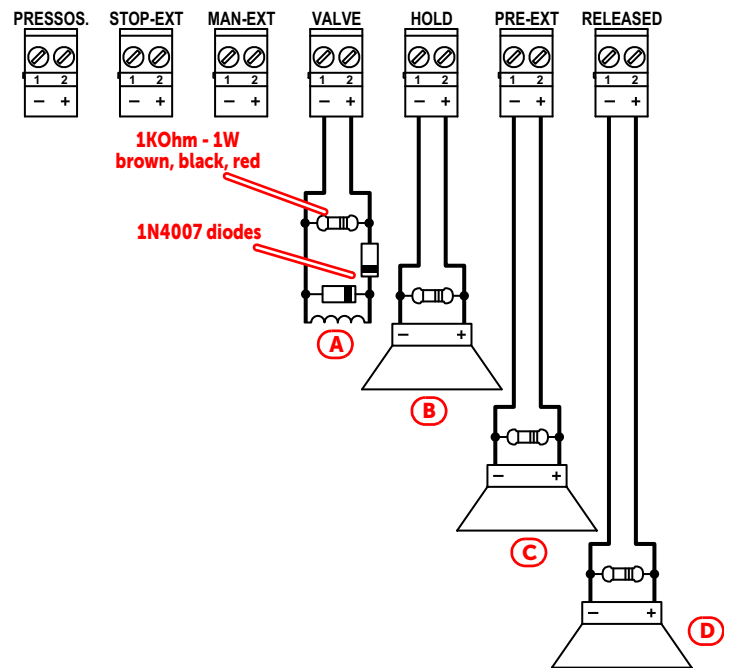
Connection of Input terminals

The wiring diagram illustrates the connection to be completed on the input terminals. The devices to be connected are: the normally open input of a pressure switch [A], a normally-open output of a command which interrupts extinction [B] and a normally-open output of an alarm activation command [C]. The resistances to be utilized are the same for each channel



Connection of output channels

The wiring diagram illustrates the connection to be completed on the input channels. The connectible devices are: a valve for extinguishant gas discharge [A], a device which signals the suspension of the extinction procedure [B], a device which signals the activation of the pre-extinction time [C] and a device which signals the completed extinguishant gas discharge operation [D]. The resistances to be utilized are the same for each channel

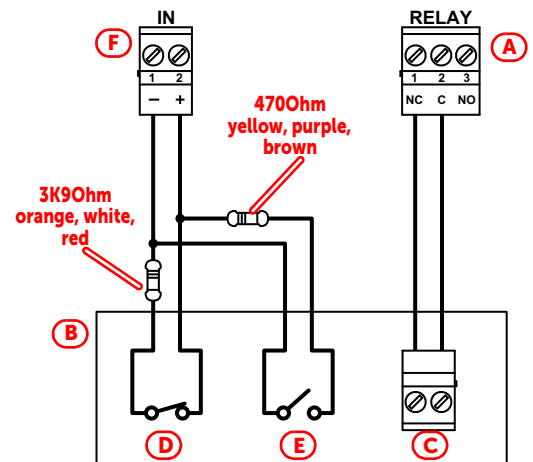


4.20 J and E type relay output wiring (EN54)

Cables: 2-wire shielded cable
Proper section (minimum 0.5mm², maximum 2.5 mm²)
Compliant with local laws and regulations in force

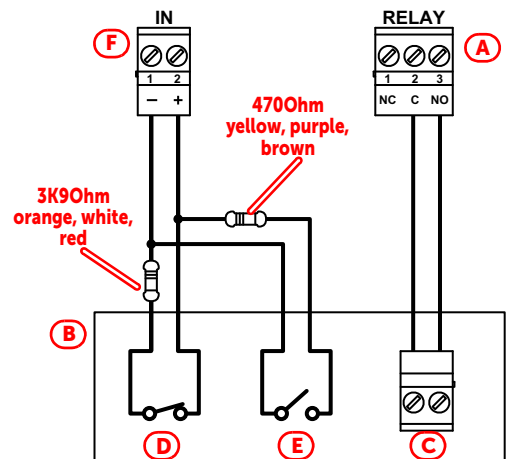
EN54: To make a type J output (output for the activation of a remote fault-signalling device as required by EN54-2, [A]), you must use a remote communication device which is compliant with EN54-21 regulations [B] and which must have a normally-open supervised activation input [C], a normally-closed fault signalling output [D] and a normally-open output to provide feedback indicating successful communication [E].

This is done by making the connection illustrated in the figure, using a relay output (of an IFM24160 module, IFM4R module or relay module) [A] configured as "communicator fault condition output" and an input of an I/O module [F] configured as "communicator fault condition input".



EN54: To construct a type E output (output for the activation of a remote alarm-signalling device as required by EN54-2, [A]), you must use a remote communication device which is compliant with EN54-21 regulations [B] and which has a normally-open supervised activation input [C], a normally-closed fault signalling output [D] and a normally-open output to provide feedback indicating the successful communication [E].

This is done by making the connection illustrated in the figure, using a relay output (of an IFM24160 module, IFM4R module or relay module) [A] configured as "communicator alarm condition output" and an input of an I/O module [F] configured as "communicator fault condition input".



4.21 FPMCPU front-plate module wiring - repeater connection

The wiring for the FPMCPU module provides for a connection to the Ethernet network via LAN cable and to the RS485 BUS which must be set up between the Previdia control panel and the system repeaters. The connection to the Ethernet network is obtained through the LAN port on the module (paragraph 3.4 - [M]).

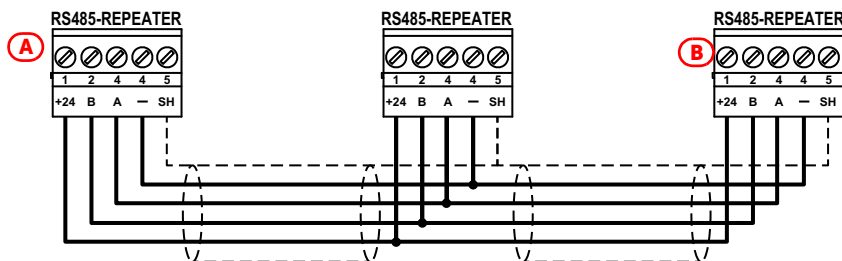
Cables: UTP cable with RJ45 connectors
 Protected by ferrites (supplied)
 Compliant with local laws and regulations in force

The BUS connection is achieved through the RS485 communication port on the module PCB (paragraph 3.4 - [P]). Two connection methods are possible, depending on whether the power supplied to the control panel is sufficient enough to power the repeaters, due to the loads required or the length of the cables.

Cables: 4 wire shielded cable
 Maximum length (from control panel to last repeater)
 1000m
 Protected by ferrites (supplied)
 Compliant with local laws and regulations in force

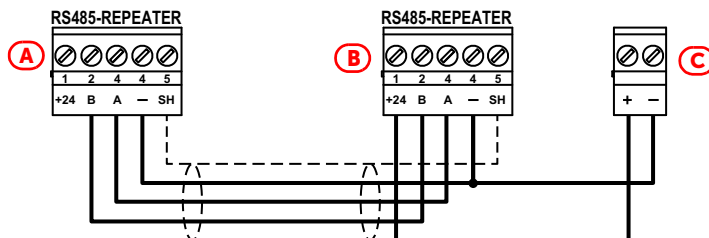
Each connection in the network must be completed in accordance with the instructions in paragraph 4.6.1.

Connection of repeaters using power supplied by the control panel



The jumper for the position on the BUS (paragraph 3.4 - [Q]) must be inserted in the EOL position EOL for the control panel [A] and for the end-of-line repeater [B].

Connection of repeaters using power supplied by an external power-supply



In this case the power to the repeaters [B] is not supplied by the control panel [A] but by an external power supply [C].

EN54: The power-supply unit employed must be EN54 standard compliant.

System Test

INIM Electronics recommends that the entire system be checked completely at regular intervals.

For testing and maintenance procedures, refer to the *Manual for system configuration, commissioning and maintenance*.

WEEE

Pursuant to art. 26 of the Legislative Decree 14 March 2014, n. 49 "Implementation of Directive 2012/19 / EU on waste electrical and electronic equipment".



The crossed-out bin symbol on the equipment or on its packaging indicates that the product must be disposed of correctly at the end of its working life and should never be disposed of together with general household waste.

The user, therefore, must take the equipment that has reached the end of its working life to the appropriate civic amenities site designated to the differentiated collection of electrical and electronic waste.

As an alternative to the autonomous-management of electrical and electronic waste, you can hand over the equipment you wish to dispose of to a dealer when purchasing new equipment of the same type.

You are also entitled to convey for disposal small electronic-waste products with dimensions of less than 25cm to the premises of electronic retail outlets with sales areas of at least 400m², free of charge and without any obligation to buy.

Appropriate differentiated waste collection for the subsequent recycling of the discarded equipment, its treatment and its environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and/or recycling of the materials it is made of.

Information about disposal of batteries and accumulators (applicable in Countries with separate collection systems)



This marking on batteries and/or their manual and/or their packaging, indicates that batteries of these products, at the end of their working life, should not be disposed of as unsorted municipal waste, but must be object of a separate collection. Where marked, the chemical symbols Hg, Cd o Pb indicate that the battery contains mercury, cadmium or lead above the reference levels of the directive 2006/66/EC. If batteries are not properly disposed of, these substances, together with other ones contained, can cause harm to human health and to the environment.

To protect human health and the environment, to facilitate treatment and recycling of materials, separate batteries from other kind of waste and use the collection scheme stated in your area, in accordance to current laws.

This product contains a lithium metal button cell type CR2032. Furthermore, for proper operation and compliance with product standards, the installer must install a couple of lead-acid accumulators for backup use type NPL24-12I or NP 17 -12-FR or equivalent (not supplied).

Before disposing of the above, it's appropriate to remove them from their holders avoiding to damage them or causing short circuits.



Inim Electronics S.r.l.

ISO 9001 Quality Management
certified by BSI with certificate number FM530352

Centobuchi, via Dei Laboratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ www.inim.it



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EN 54-2
EN 54-4
EN 54-16
EN 54-21
EN 12094-1



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0051-CPR-2741

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PREVIDIA **ULTRA**

CONTROL PANEL FOR FIRE DETECTION AND ALARM, FIRE
EXTINCTION AND VOICE-EVACUATION SYSTEMS

MANUAL FOR SYSTEM
CONFIGURATION, COMMISSIONING
AND MAINTENANCE



PREVIDIA | ULTRA

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General information

1.1 Manufacturer's details

Manufacturer: INIM ELECTRONICS S.R.L.

Production plant: Centobuchi, via Dei Lavoratori 10

Municipality: 63076, Montepandone (AP), Italy

Tel.: +39 0735 705007

Fax: +39 0735 704912

E-mail: info@inim.it

Web: www.inim.it

The personnel authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work only on devices marketed under the INIM Electronics brand.

1.2 About this manual

Manual code: DCMCINEOPREVIDIAU

Revision: 1.10

This manual describes the procedures for the configuration, commissioning and maintenance of the Previdia Ultra fire-detection system.

1.2.1 Terminology

Control panel, System, Device: The main supervisory unit or any constituent part of the fire detection system.

Left, Right, Behind, Above, Below: Refer to the directions as perceived by the operator when directly in front of the mounted device.

Qualified personnel: Personnel whose training, expertise and knowledge of the products and laws regarding security systems, are capable of creating, in accordance with the requirements of the purchaser, the most suitable solution for the protected premises.

Select: Means click-on a specific item on the interface (drop-down menu, options box, graphic object, etc.).

Press: Push a button/key or tap on a video button on a touchscreen or display.

1.2.2 Graphic conventions

Following are the graphic conventions used in this manual.

Conventions	Example	Description
Text in italics	Refer to <i>paragraph 1.2.2 Graphic conventions</i>	Directs you to the title of a chapter, section, paragraph, table or figure in this manual or other published reference.
<text>	<AccountCode>	Editable field.
[Uppercase letter] or [number]	[A] or [1]	Reference relating to a part of the system or video object.

Note: *The notes contain important information relating to the text.*

Attention: *The "Attention" prompts indicate that total or partial disregard of the procedure could damage the device or its peripherals.*

1.3 Description of the configuration and programming procedures

Following is a flow chart which summarizes the operations to be carried out during the installation and commissioning phases of the Previdia Ultra system and indications regarding the manuals to refer to for each operation:

1. Installation and cabling (refer to the Installation Manual)
2. Initializing (refer to the Installation Manual)
3. Configuration from the front plate (operations described in this manual)
4. Troubleshooting (operations described in this manual)
5. Connection to a PC and reading (refer to the Programming Manual)
6. Configuring the parameters (editing data, refer to the Programming Manual)
7. Writing data on the control panel and test (refer to the Programming Manual)
8. Commissioning (operations described in this manual)
9. System handover
10. Maintenance (operations described in this manual)

1.4 Operator classification - Access Levels

The control panel has 4 distinct access levels:

Level 1: Public level - this is the normal access level of the control panel and is the access level for building inhabitants who are neither authorized to use the system nor instructed in its use.

At this level it is possible to view the information on the display and on the signalling LEDs, as well as to interact using the buttons and the touch screen to scroll through the information. Level 1 allows the following operations only:

- mute buzzer
- test signalling LEDs
- activate alarm signalling when an early-warning process is running

Level 2: Authorized users - this access level is for the system supervisors and is for authorized personnel who are adequately instructed in the use of the system and its functions.

Access requires the use of a key or entry of a valid access code with sufficient access rights. In addition to the operations described for level 1 it is also possible to carry out the following operations:

- mute alarm signalling devices
- rearm the control panel
- activate alarm signalling devices manually
- disable control panel elements
- place in test status one or more of the system elements
- manual activation of emergency

The system provides two additional sub-levels of authorized user:

- **Superuser level**, las for the previous one, with the added possibility of replacing a loop device and registering control panels to their account with the Inim Cloud service
- **Maintenance level**, same as the previous level with the added possibility of stopping the valve pulse for those models that support extinction functions

Level 3: Programming - this access level is for specialized technical operators who carry out system configuration, commissioning and maintenance.

Access requires entry of a valid access code with sufficient access rights after inserting a jumper which enables programming. Refer to the manual for system configuration, commissioning and maintenance.

Only authorized technicians, appointed by the Manufacturer can, by means of special tools, carry out repair work on the motherboard.

Level 4: only authorized technicians, appointed by the Manufacturer can, by means of special tools, carry out repair work on the motherboard.

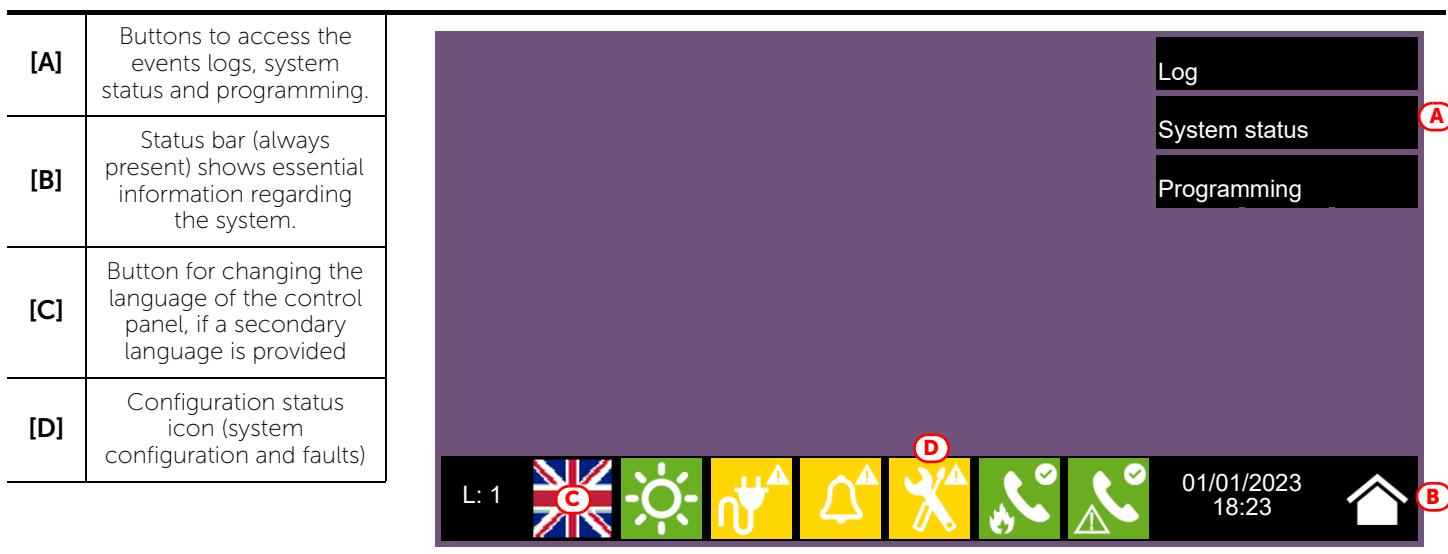
Chapter 2

Configuring the fire detection system

Once the installation and cabling procedures have been completed (refer to the Installation Manual of the Previdia Ultra system) the system is ready for first startup.

In the case of first start-up, the selection of the control panel languages is requested, a compulsory main language and an optional secondary language (see *paragraph 4.5*).

The control panel screen will be as follows:



In this condition the control panel has no acquired configuration, all the modules connected to the CAN drive bar or front plate have the same address and are not included in the configuration.

The configuration status icon on the status bar indicates a fault condition, due to the fact that modules have been detected but are not present in the configuration saved in the memory.

In order to configure the control panel it is necessary to work through the following procedure:

1. Access to programming (*paragraph 2.1*)
2. Setting the IP network address (*paragraph 2.2*)
3. Access the configuration menu (*paragraph 2.3*)
4. Assign addresses to the system modules (*paragraph 2.4*)
5. Enroll loop devices on IFM2L modules and respective troubleshooting procedure (*paragraph 2.6*)
6. Acquiring the configuration (*paragraph 4.3*)
7. Check eventual signalling and search for faults (*paragraph 4.4*)
8. Setting the date and time (*paragraph 4.6*)

Note:

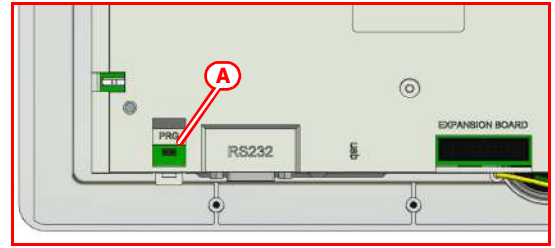
Once the configuration operations have been completed correctly, the control panel will be ready to operate. The control panel is configured to consider each input point (detector, module, terminal) as a fire-alarm point. Therefore, in the event of a fire alarm it will activate all the outputs available on its loops or terminals.

At this point it is necessary to proceed with eventual changes to the configuration data for the distribution of points in zones, edit descriptions of the various system elements, define specific activation sequences, etc. Refer to the Programming manual.

2.1 Access to programming

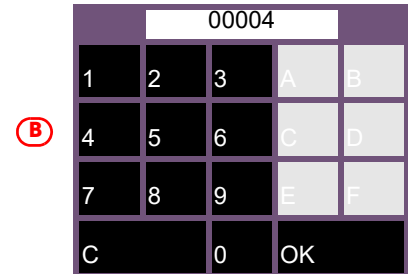
In order to access the programming session of the fire detection system, it is necessary to work through the following procedure:

1. Insert the programming jumper on the back of the FPMCPU module (see opposite, [A]).
2. Press the **Programming** button on the stand-by screen (see above - [A]).
3. A keypad will appear (see opposite, [B]) for the entry of a code with installation privileges.



Note: *The default access code to level 3 is "00004".*

4. You access the programming menu, where the following items are available:
 - Configuration
 - Network
 - Factory data



2.2 Setting the IP network address

If an Ethernet network connection is used, it will be necessary to set up the IP address and parameters of the network.

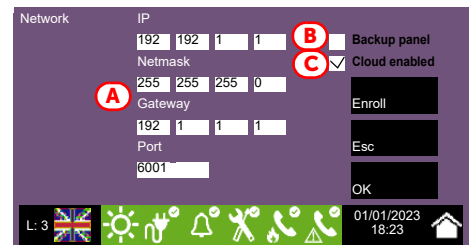
This operation must be done for anyone of the following devices:

- the Previdia Ultra control panel, via the main FPMCPU module
- the backup FPMCPU module, via the FPMCPU module itself
- the FPMCPU repeater module, when connected to an Ethernet network, via the FPMCPU module itself

In order to set the network parameters, it is first necessary to access the programming phase of the control panel (*paragraph 2.1*) and then tap on the **Network** button which appears on the screen.

The network parameters screen will be shown [A].

Beside these there is the **Backup panel** option [B]. If enabled, the FPMCPU module you are using will be set as control panel backup CPU unit. In this case, the network parameters must be the same as the parameters set for the main FPMCPU module.



Once set, it will be necessary to tap on the **Ok** button and save the data.

If the module has been set as a backup CPU unit, the message "In backup" will appear on the display

In the same section you have the tools to register the control panel to the installer profile at the Inim Cloud service ([C] refer to *paragraph 4.8 Registration of the control panel to Inim Cloud*).

2.3 Accessing the configuration menu

To access the configuration menu it is necessary to first access the programming phase of the control panel (*paragraph 2.1*) and then tap on the **Configure** button which appears on the screen.

Alternatively, it is possible to tap directly on the configuration status icon (see above, [C]).

Entry of a valid access code is necessary In both cases.



Once the configuration menu has been accessed, the control panel screen will provide a layout of the control panel and its parts.

[A]	Internal layout of the selected cabinet	
[B]	Internal module detected	
[C]	Position empty	
[D]	Address and firmware revision of detected module	
[E]	Modules assigned to the fire detection and voice emergency system	
[F]	Modules not assigned to the fire detection system	
[G]	Map of the entire control panel	
[H]	Layout of the selected cabinet	
[I]	Button to change the network address	
[J]	Buttons to carry out setting changes or to exit without saving	

Selection of one of the cabinets from the control panel layout ([G]) will show it both on the left ([A]), where the installed IFM modules with their addresses and firmware revision are shown, and on the right ([H]), where the installed FPM external modules are shown. From this section you can access the configuration phase of each module by tapping on the icon which represents it.

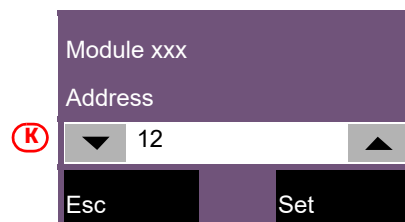
The control panel also marks with an asterisk (“*”, [F]) the modules not assigned to the associated system of the front plate module we are working on (in this case, the fire protection system). Association is established by assigning an address to the module.

2.4 Modules addressing

In order for the control panel to identify each module individually, it is necessary to assign an address to each one. It is possible to assign the same address to modules of different types, however, modules of the same type must have different addresses.

To assign an address to a module, it is necessary to tap on the module shown in the section it belongs to (internal modules on the left [A]; front-plate modules on the right [G]).

A window will open ([K]), select the desired address in the “Address” field, then tap on **Set**.



Note: *Addresses which exceed the maximum number of modules supported by the control panel will not be considered valid. The modules that can be used by both the fire-fighting system and the voice system (FPMLED, IFM24160, IFAMPSU, IFM4R, IFM4IO, IFM16IO, [F]) must be addressed in such a way as to assign their management exclusively to one of the two systems.*

Following is a table containing the addresses allowed for each type:

FPM Module	Maximum number	Address		IFM Module	Maximum number	Address	
		from	to			from	to
FPMLED	7	1	7	IFM24160	4	1	4
FPMLEDPRN	1	/		IFM2L	8	1	8
FPMEXT	5	1	5	IFM4R	16	1	16
				IFM4IO	16	1	16
				IFMDIAL	1	/	
				IFM16IO	4	1	4
				IFMNET	1	/	
				IFMLAN	1	/	
				IFMEXT	24	1	24

Due to the fact that each FPMEXT front plate module is associated automatically with 5 internal IFMEXT modules at precise addresses, the FPMEXT modules must have an address which respects the IFMEXT - FPMEXT module association table which follows:

Addressing the extinction module					
IFMEXT	FPMEXT	IFMEXT	FPMEXT	IFMEXT	FPMEXT
1	1	11	3	21	5
2	1	12	3	22	5
3	1	13	3	23	5
4	1	14	3	24	5
5	1	15	3		
6	2	16	4		
7	2	17	4		
8	2	18	4		
9	2	19	4		
10	2	20	4		

On returning to the control-panel configuration section, the assigned address (*ID*) will be shown at the side of the previously selected internal module.

2.5 Addressing the repeaters

The procedure to configure the FPMCPU modules as repeaters depends on the type of connection between the modules and the control panel.

Connection via Ethernet network

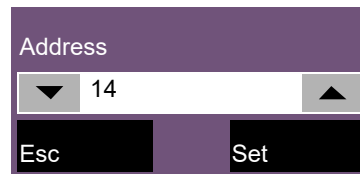
The Ethernet connection needs network parameters setting. The procedure must be done via the display of the module itself, following the indications described in the *paragraph 2.2 Setting the IP network address*.

Connection via RS485 BUS

The BUS connection needs the addressing of any repeater in configuration, in order for the control panel to identify each module individually.

To assign an address to a repeater, it is necessary to enter the configuration procedure starting from the display of the module itself, as described in the *paragraph 2.3*.

A window will open, select the desired address in the programming field, then tap on **Set**. The available addresses are from 1 to 14.

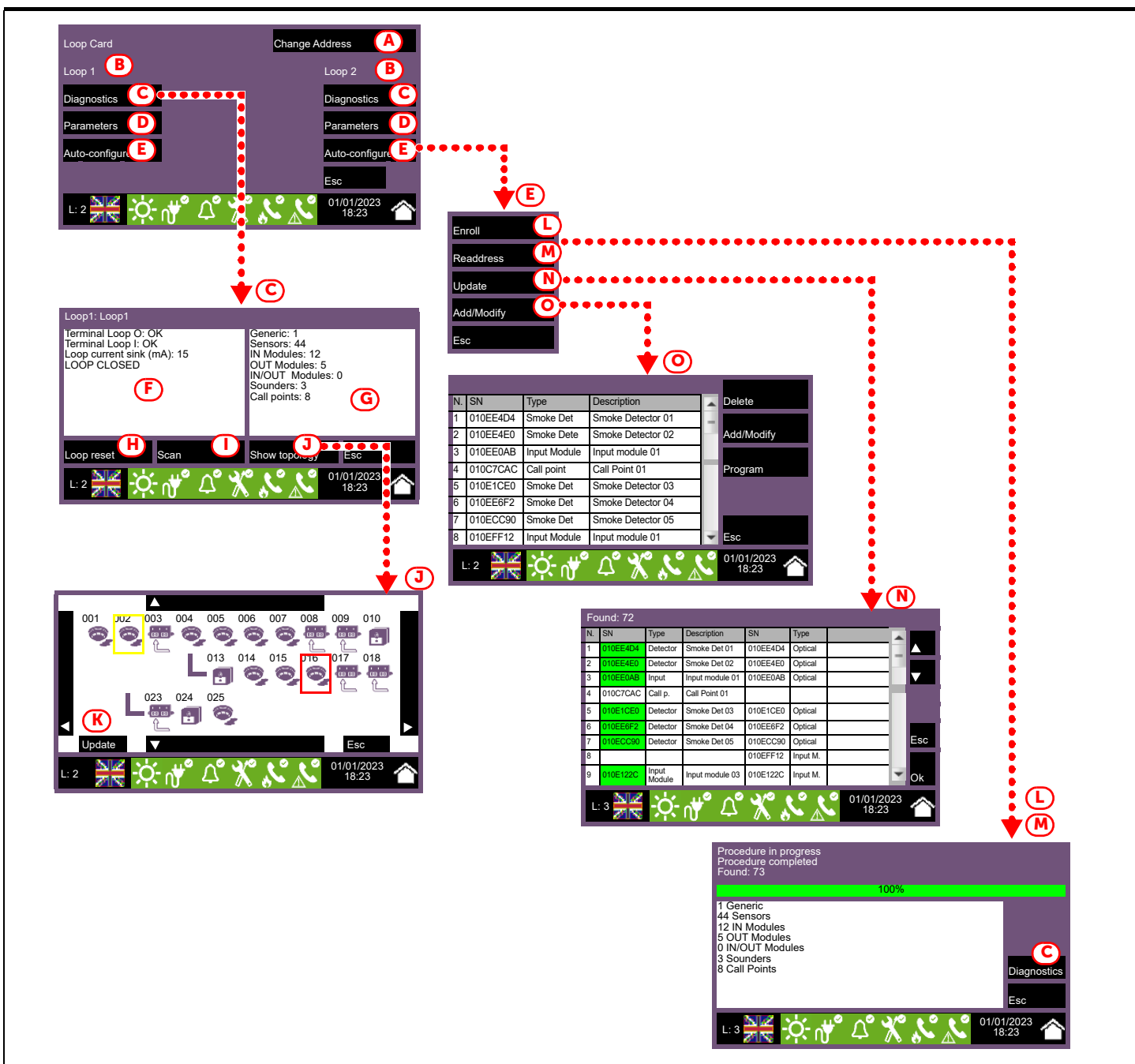


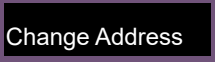
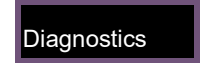

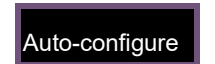
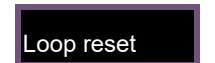

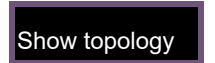
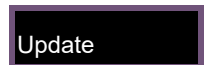


Attention: *The "0" address is reserved to the main FPMCPU module. Do not use.*





2.6 Enrolling loop devices (IFM2L)

The operations required for the configuration of the IFM2L network modules involve the configuration of the devices connected to the loops.

The selection of the module from the internal layout section of the cabinet (*paragraph 2.1 Access to programming, (A)*) will access the configuration section which, in addition to providing the change address button (at the top) also provides two identical sections for each of the two loops (connected to the Loop-A and Loop-B terminals). The present document describes the operations necessary for the configuration of a single loop, however, it is implicit that the operations be repeated for each of the two loop.



[A]		Button to access the section for IFM2L module address assignment (<i>paragraph 2.4 Modules addressing</i>).
[B]	Sections containing the configuration menu of the single loops. Section on the left for the loop connected to the Loop-A terminals, on the right for the Loop-B terminals.	
[C]		Button to access the section for loop diagnosis.
[D]		Button to access the section for the selection of the type of devices installed on the loop. It provides a check box for option selection " 4 wires " (if the cabling has been completed as a ring circuit, as required by the fire control standards). Tap on Ok to confirm and exit.
[E]		Button to access the automatic loop-configuration procedure.
[F]	Section which provides data regarding the electrical status of the loop circuit: <ul style="list-style-type: none"> - Loop Status: indicates whether the loop is a closed ring circuit or open - Terminal Loop O: indicates eventual short-circuits or anomalies instantly on the "OUT" terminals - Terminal Loop I: indicates eventual short-circuits or anomalies instantly on the "IN" terminals - Loop current sink: indicates the current absorbed by the loop - Cable resistance: indicates the cable resistance value 	
[G]	Section which provides the number and type of devices currently in the configuration.	
[H]		Button to rearm the loop and reassess the status. In the event of a "Loop open" fault, it will be necessary to tap on this button in order to check whether or not the interruption has been cleared.
[I]		Button to start a check on an already enrolled loop. The procedure verifies whether there are any connected devices which are not in the configuration, if devices have been lost or if there are any other anomalies. The result of the scan can be viewed in the section on the right (<i>(G)</i>).
[J]		Button which passes to the map of the devices in the configuration of the enrolled loop. The display provides an exact diagram of the device connections. Any devices in alarm or fault status will be outlined in red or yellow. The selection of a device will access its management page (refer to the Device management section in the Installation manual).
[K]		Button to refresh the screen by updating the alarm and fault indications of the devices shown (restored fault events will not be shown).
[L]		Button to perform a scan which will search the loop for devices and their serial numbers and place those found in the configuration. A report of the devices will be shown when the scan terminates. The "Diagnostics" button will allow you to pass to the technical report, as shown in the previous points (<i>(C)</i>). For loops operating with Inim or Argus protocol, it is possible to use this procedure only after completion of an automatic or manual addressing procedure by means of a programmer (EDRV1000 for Inim loops and VPU100 for Argus).
[M]		Button to perform a scan which will search the loop for devices and their serial numbers and assign automatically an address to each of those found in order of their connection to the loop. This operation may take several minutes depending on the size and composition of the loop. A report of the devices will be shown when the scan terminates. The "Diagnostics" button will allow you to pass to the technical report, as shown in the previous points (<i>(C)</i>). For Apollo devices, where the address is assigned by means of the microswitch on the device, these operations coincide with those previously described ("Enroll").

<p>[N]</p>		<p>Button to start the procedure which is to be performed after changes have been carried out on a previously configured loop (add, remove or replace devices).</p> <p>The control panel will provide a table with the previously acquired configuration in the columns on the left, and the newly detected configuration in the columns on the right. Positions in which changes have not been detected will be outlined in green. Changes will be indicated in white. This operation may take some minutes depending on the size and composition of the loop.</p> <p>The OK button will allow you to accept the new configuration which will become the configuration saved to the memory.</p> <p>Procedure available for loops with Inim protocol only.</p>
<p>[O]</p>		<p>Button to access a section which will allow you to select a specific address and change, remove or add a device manually.</p> <p>At the side of the loop device list are a series of buttons which will allow you to work on the device selected by a screen tap gesture, as follows:</p> <ul style="list-style-type: none"> - Delete: button to delete the selected device. - Add/Modify: button to change or add a device manually. After completing the connection of a new device or replacing an old device, it is necessary to select the address involved then tap on the Add/Modify button. When using Inim protocol, it is necessary to enter the serial number of the new device. - Program: button to access a section where it is possible to change some of the device parameters. <p>Once this operation has been completed the control panel will communicate with the new device. The appearance of the type of device detected is the confirmation of its presence.</p>
		<p>Arrow buttons</p>
		<p>Button to step back</p>

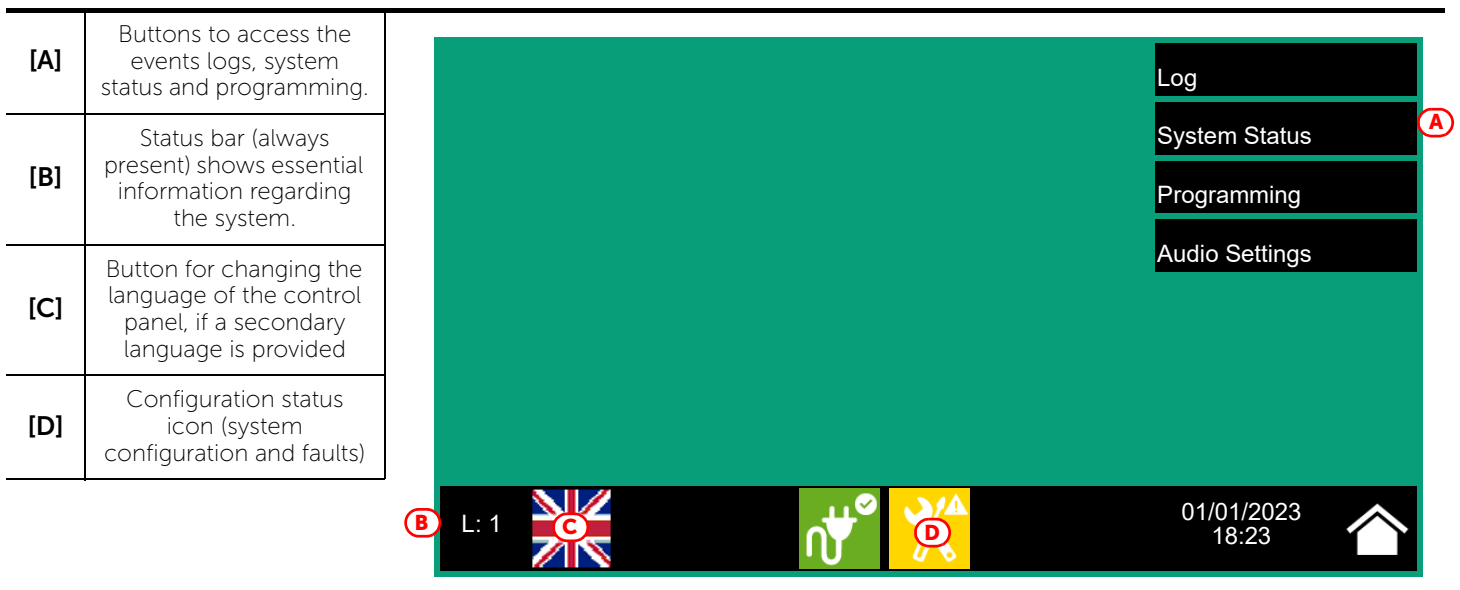
Chapter 3

Configuration of the emergency voice system

Once the installation and cabling procedures have been completed (refer to the Installation Manual of the Previdia Ultra system) the system is ready for first startup.

In the case of first start-up, the selection of the control panel languages is requested (see *paragraph 4.5*).

The control panel screen will be as follows:



In this condition the control panel has no acquired configuration, all the modules connected to the CAN drive bar or front plate have the same address and are not included in the configuration.

The configuration status icon on the status bar indicates a fault condition, due to the fact that modules have been detected but are not present in the configuration saved in the memory.

In order to configure the control panel it is necessary to work through the following procedure:

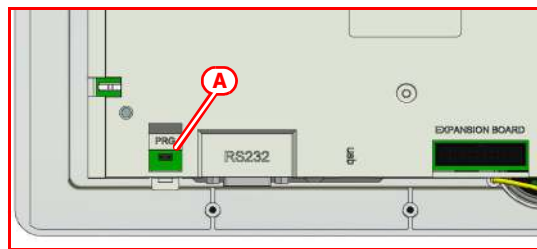
1. Access programming (*paragraph 3.1*)
2. Set the IP network address (*paragraph 3.6*)
3. Access the configuration menu (*paragraph 3.2*)
4. Assign addresses to the system modules (*paragraph 3.3*)
5. Set the defined configuration (*paragraph 4.3*)
6. Check eventual signalling and search for faults (*paragraph 4.4*)
7. Set the date and time (*paragraph 4.6*)

Note: *Once the configuration operations have been completed correctly, the control panel will be ready to operate. At this point it is necessary to proceed with any configuration data modification operations to enter significant descriptions for the various elements of the system, and define sequences of particular activations, etc. Refer to the Programming manual.*

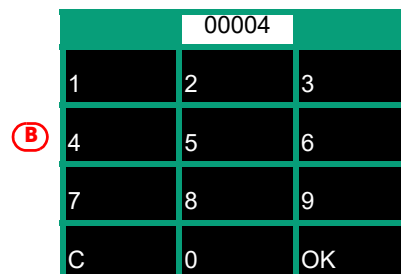
3.1 Access to programming

In order to access the programming session of the voice emergency system, it is necessary to work through the following procedure:

1. Insert the programming jumper on the back of the FPAMIAS module (see opposite, [A]).
2. Press the **Programming** button on the stand-by screen (see above - [A]).
3. A keypad will appear (see opposite, [B]) for the entry of a code with installation privileges.



Note: The default access code to level 3 is "00004".



4. You access the programming menu, where the following items are available:
 - Configuration (paragraph 3.2)
 - Modify (paragraph 3.7.1)
 - Factory data (paragraph 4.5)

3.2 Accessing the configuration menu

To access the configuration menu it is necessary to first access the programming phase of the control panel (paragraph 3.1) and then tap on the **Configure** button which appears on the screen.

Alternatively, it is possible to tap directly on the configuration status icon (see above - [D]).

Entry of a valid access code is necessary In both cases.



Once the configuration menu has been accessed, the control panel screen will provide a layout of the control panel and its parts.

[A]	Internal layout of the selected cabinet
[B]	Internal module detected
[C]	Position empty
[D]	Address and firmware revision of detected module
[E]	Modules assigned to the fire detection and voice emergency system
[F]	Modules not assigned to the voice emergency system
[G]	Map of the entire control panel
[H]	Arrow button to navigate among the cabinets
[I]	Layout of the selected cabinet
[J]	Button to change the network address
[K]	Buttons to carry out setting changes or to exit without saving

The screenshot shows a configuration menu with a list of modules on the left and a cabinet map on the right. Labels A through K point to specific elements: A (cabinet layout), B (module details), C (empty slot), D (firmware), E (assigned modules), F (unassigned modules), G (cabinet map), H (navigation arrow), I (selected cabinet layout), J (network address field), and K (Set and Esc buttons). A status bar at the bottom shows 'L: 3', a UK flag, a power icon, a wrench icon, the date '01/01/2023', the time '18:23', and a home icon.

Selection of one of the cabinets from the control panel layout ([G]) will show it both on the left ([A]), where the installed modules with their addresses and firmware revision are shown, and on the right ([I]), where the installed external modules with their network address are shown. From this section you can access the configuration phase of each module by tapping on the icon which represents it.

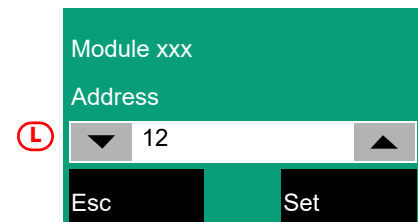
The control panel also marks with an asterisk ("*", [F]) the modules not assigned to the associated system of the front plate module we are working on (in this case, the voice emergency system). Association is established by assigning an address to the module.

3.3 Modules addressing

In order for the control panel to identify each module individually, it is necessary to assign an address to each one. It is possible to assign the same address to modules of different types, however, modules of the same type must have different addresses.

To assign an address to a module, it is necessary to tap on the module shown in the section it belongs to (internal modules on the left [A]; front-plate modules on the right [I]).

A window will open ([L]), select the desired address in the "Address" field, then tap on **Set**.



Note: *Addresses which exceed the maximum number of modules supported by the control panel will not be considered valid.
The modules that can be used by both the fire-fighting system and the voice system (FPMLED, IFM24160, IFAMPSU, IFM4R, IFM4IO, IFM16IO, [F]) must be addressed in such a way as to assign their management exclusively to one of the two systems.*

Following is a table containing the addresses allowed for each type:

Module	Maximum number	Address	
		from	to
FPMLED	7	1	7
IFM24160	4	1	4
IFAMPSU	4	1	4
IFM4R	16	1	16
IFM4IO	16	1	16
IFM16IO	4	1	4
IFAMEVAC	1	/	
IFAMIDANET	1	/	
IFAMAMP	30	1	30
IFAMFFT	16	1	16

On returning to the control-panel configuration section, the assigned address ([D]) will be shown at the side of the previously selected internal module.

3.4 Configuration of the IFAMEVAC module

The configuration of the IFAMEVAC module is accessible through the main system configuration section of the emergency voice system (paragraph 3.2). The module can then be selected by tapping on the relevant icon in the section on the left, if the module is properly installed.



The section opens showing the following layout of the module:

[A]	Module layout	
[B]	Information on the module	
[C]	Button to access the microphone bases of line A/B	
[D]	Information regarding the microphone bases of line A/B	
[E]	Button to access the messages saved to the flash memory	
[F]	Button to access the messages saved to the micro SD card	
[G]	Buttons to carry out setting changes or to exit without saving	

Tapping on the buttons that access the configuration of the voice messages in the memory of the IFAMEVAC module or the micro SD card, if present, will display the list of available messages.



By selecting a message from the list it is possible to set the following parameters for playback purposes:

- number of repetitions
- pause between two repetitions
- priority
- message to be associated, to be used to attract the attention of those present in the building

In correspondence with the icons of the connection terminals of "MUSIC 1", "MUSIC 2", "A PAGERS", "B PAGERS" are buttons that allow you to program, for the connected audio sources concerned, the following parameters:



- description
- volume and treble/mid /bass balance
- priority

To the "AUX1" and "AUX2" inputs, furthermore, you can associate:

- an alert warning message
- the audio zones on which to execute the communication, in the case of the "PR" input

In correspondence with the icon pertaining to the "HANDSET" input, it is possible to program the parameters of the PTT microphone and telephone calls:



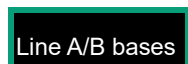
- description
- volume and treble/mid/bass balance
- priority (for the PTT microphone only)
- an alert warning message (for the PTT microphone only)

In correspondence with the LAN network terminal icon, it is possible to access the programming of the TCP/IP connection parameters of the module and the setup of the IAS server. If this is present, it will be possible to configure the following parameters by pressing the appropriate button:



- priority
- reception and transmission ports for UDP communication
- list of four IP addresses from which the server can receive commands and audio streams (optional, active only if the "IP Check" checkbox is selected)

Tapping on none of the access buttons to the configuration of the microphone bases displays a pop-up to start the enrolling of the bases on a line or to select one and configure the following parameters:



- description
- priority of non-emergency communications
- priority of emergency communications (if applicable for the selected base model)

- filtering algorithm for hands-free communications
- volume

3.5 Configuration of the IFAMFFT module

The configuration of the IFAMFFT module is accessible through the main system configuration section of the emergency voice system (*paragraph 3.2*). The module can then be selected by tapping on the relevant icon in the section on the left, if the module is properly installed.



The section opens showing the following layout of the module:

[A]	Module layout
[B]	Information on the module
[C]	Button for addressing the module
[D]	Terminal information
[E]	Buttons to carry out setting changes or to exit without saving

In correspondence with the icons of the connection terminals of "Riser 1/2/3/4" are buttons that allow you to program, for the connected telephone lines concerned, the following parameters:

- description
- validity threshold of the impedance reading, when exceeded the open-circuit fault will be signalled
- tripping threshold, value of the current on the line, when exceeded the line is considered active
- selection of the type of circuit connected, if 4-wire or open circuit

The information for each of the 4 telephone lines is shown next to these icons. The voltage and current values are displayed and, in the event of a fault, the appropriate icon appears.



By tapping on the **Change Address** button it is possible to change the address of the module on the CAN BUS, which is shown in the section with the module information, together with the serial number and firmware version.

Change Address

3.6 Configuration of the FPAMIAS panel

The configuration of the FPAMIAS module and the voice emergency control panel is accessible through the main system configuration section of the emergency voice system (*paragraph 3.2*). The module can then be selected by tapping on the relevant icon in the section on the right.



The section opens showing the following layout of the module:

[A]	Module layout	
[B]	Information on the module	
[C]	Button to access the settings	
[D]	Button to access the PTT microphone configuration	
[E]	Button to access the TCP/IP settings	
[F]	Button to access the SD micro card functions	
[G]	Buttons for setting the manual emergency procedures	
[H]	Buttons for setting evacuation and alert messages	
[I]	Buttons to carry out setting changes or to exit without saving	

Tapping on the button with the settings icon in the centre accesses a screen for the programming of the following voice-emergency control panel parameters.

- description of the control panel
- number of audio zones in the system
- number of audio sectors in the system
- buzzer enablement
- PTT microphone supervision
Option that if enabled, generates a fault in the event of disconnection of the PTT microphone.
- possibility to reactivate or not the emergency messages, when a new activation request is received after the system has been silenced following a first emergency
- possibility to change the playback volumes of voice and emergency messages with control panel not in programming status (see *paragraph 3.6.2*).



Tapping on the button corresponding to the PTT microphone icon accesses a screen for setting the audio zones on which the PTT microphone signal will be transmitted by default during the manual emergency procedure (see Manual emergency procedure).



Tapping on the button corresponding to the Ethernet network icon accesses a screen for programming the TCP/IP connection parameters.



Tapping on the button with the microSD card icon accesses several functions available thanks to the card, if present (*paragraph 3.6.1*).



Tapping on the button corresponding to the Manual emergency icon accesses a screen where it is possible to select whether or not to display the Help page in the Manual emergency procedure.



In the case that you choose not to display it will be possible to configure the Wizard parameters:

- parts of the system to select: you can define how the user can select the parts of the system to send in an emergency (all, audio zones, sectors or a combination of them)
- preset messages: you can define whether the user can select the alert warning call and the actual emergency message, or whether the default messages will be used

By tapping on the buttons with the "Evacuation" and "Alert" icons it is possible to set the audio zones on which the respective evacuation and alert messages will be transmitted by default during manual emergency procedure .



3.6.1 SD card functions via FPAMIAS

In the programming section of the functions available thanks to the SD card, A list is shown with the following buttons:



- **Save Program Data**, saves the control panel programming data to the SD card in a .dat file, the name of which coincides with the serial number of the control panel.
- **Save Log**, saves the contents of the events log to the SD card in a file named "xxxx_log.csv", where "xxxx" is the serial number of the control panel.
You can import the data contained in the file into a spreadsheet
- **Read Program Data**, if there is a .dat file on the SD card whose name coincides with the serial number of the control panel, the programming data contained in it will overwrite that currently used.
- **Read Display Config**, if the "Desktop.Bin" file is on the SD card, the data contained in it (images, buttons and labels to be displayed in the stand-by screen) will overwrite that currently used. If the previously-mentioned file is not present on the SD card, and there is the file "Logo. bmp" file is, the image contained in it (580x400 pixel) will be shown on the stand-by screen.

The **Esc** and **Set** buttons will allow you to exit the section without changing the programming or saving it.

3.6.2 Change playback volumes with the control panel not in programming status

The programming section of the voice-emergency control panel parameters via the FPMAMIAS module has, furthermore, an option that allows the operator to change the playback volumes of the voice and emergency messages without placing the Previdia Ultra control panel in programming status.

The procedure to follow is described here.

1. Access the programming of the control panel, then the programming of the FPAMIAS module.
2. Enter the parameter programming section of the voice-emergency control panel and activate the option "Change emergency and voice volumes remotely".
The background colour of the status bar will change to yellow.
3. Exit the programming session.
With this activation carried out, an operator can change the playback volumes of voice and emergency messages from the App or from the programming software even when the control panel is not in programming status.
4. Make the appropriate changes to the volumes.
These changes will be saved in the system without having to save the system solution.
5. Return the control panel to programming status and disable the "Change emergency and voice volumes remotely" option.
The background colour of the status bar will return to the default colour.



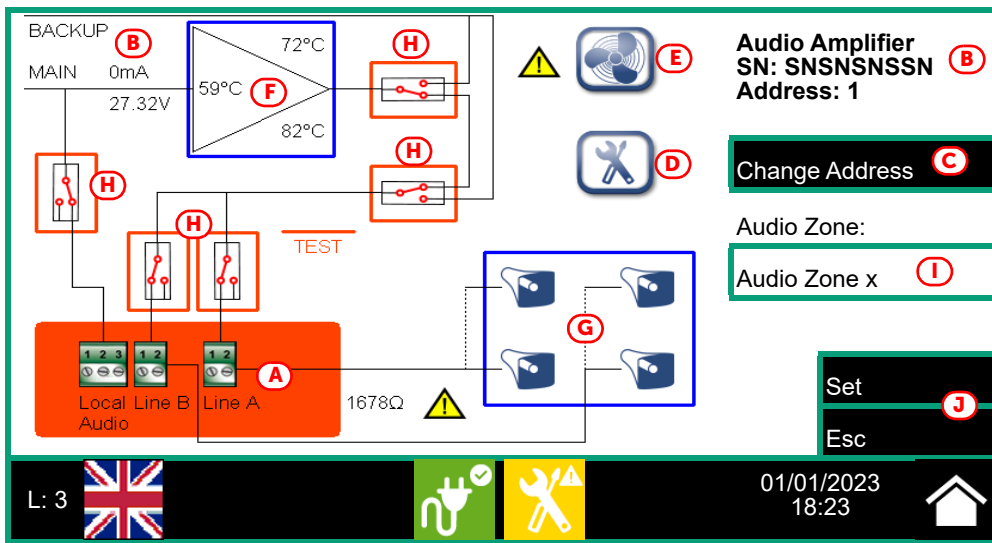
3.7 Configuration of the IFAMAMP module

The configuration of the IFAMAMP module is accessible through the main system configuration section of the emergency voice system (*paragraph 3.2*). The module can then be selected by tapping on the relevant icon in the section on the left, if the module is properly installed.



The section showing the following screen will open:

[A]	Module layout
[B]	Information on the module
[C]	Button for addressing the module
[D]	Button to access the settings
[E]	Fan configuration button
[F]	Amplifier configuration button
[G]	Speaker line configuration buttons
[H]	Relay test buttons
[I]	Checkbox for the selection of the audio zone the amplifier belongs to
[J]	Buttons to carry out setting changes or to exit without saving



By tapping on the **Change Address** button it is possible to change the address of the module on the CAN BUS, which is shown in the section with the module information, together with the serial number and firmware version.



Other information, i.e. module temperature, voltage and current values, are shown in the upper left section.

By means of the fan button it is possible to configure the activation and deactivation temperatures of the fan. Additionally, the icon on this button changes in accordance with the fan activation status.



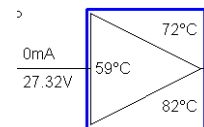
Tapping on the button with the settings icon accesses a screen for the programming of the following amplifier module parameters.

- description of the module
- priority of the optional "Local Audio" input
- speakers to module connection type



Other parameters of the amplifier module can be reached via the button on the top left:

- for each of the three types of communication (emergency messages, non-emergency audio or hands-free) you can program volume and balance (high, medium and low)



Tapping on one of the buttons with the speaker icon accesses the section where you can program the monitoring parameters for the speaker line impedance:

- test signal level
- thresholds within which the line resistance is considered correct
- delay in signalling the relative fault



The resistance currently measured is also displayed and, by means of the appropriate button, the fault signalling thresholds can be set to tolerate a deviation from this value of 20%.

By tapping on the audio zone box it is possible to select the zone the IFAMAMP amplifier is assigned to. The speaker lines connected to the amplifier will all belong to this audio zone. The amplifier will play the audio stream with the highest priority, among those available on the CAN bar of its control panel and assigned to the zone it belongs to.



By tapping on the relay buttons it is possible to change their status solely for test purposes. Once programming is exited, the status of the relays will be determined by the options set and the system status.



3.7.1 Configuration of zones and audio sectors

The configuration of the logical groupings of the loudspeaker lines (audio zones and audio sectors) necessarily involves all the Previdia Ultra control panels connected to a network. In this case it is possible to program only via the software.

In the case that the Previdia Ultra control panel is not connected to a network (network address equal to "0"), a programming section is available from the panel via the **Modify** button on the programming menu (*paragraph 3.1*).

The section you access will show the list containing the access buttons to the programming subsections:

- Audio Zones
- Audio Sectors

Pressing one of these buttons will allow you to view the list of the respective elements. The list shows the index, description and status of each element, by tapping on one of the lines you will be able to program the parameters of the individual element.

The editable parameters are:

- description of the audio zone or the audio sector
- the messages that will be played by default if one of the three emergency statuses is activated for the audio zone
- the audio zones that belong to the sector

Chapter 4

Generic configuration of the control panel

This chapter describes the control panel configuration phases that can involve both the fire alarm system and the voice emergency system when both are present.

4.1 Setting the network address (Hornet+ and IDANet)

In the event that the installation involves more than one control panel connected to the network (through a Hornet+ connection or an IDANet connection, or both for the integration of the two systems), the network address must be set for each control panel.

The presence of a control panel in the network is determined by the presence in the configuration of an IFMNET or IFAMIDANET module and by a network address other than "0". To change this address, tap the appropriate button in the system configuration (*paragraph 2.3 - [I], paragraph 3.2 - [J]*). In the section which appears, enter the network address and the bit rate.

By selecting the single IFMNET or IFAMIDANET module in the section with the layout of the inside of the cabinet (*paragraph 2.3 - [A], paragraph 3.2 - [A]*), it will also be possible to enter the network communication bit rate and gateway of the module (only for IFMNET from FPMCPU).



Note:

Each control panel in the same Hornet+ or Idanet network must be set with the same bit rate and univocal address.

If different network addresses are programmed on the FPMCPU and FPAMIAS of the same control panel, these addresses are coloured yellow, as is the configuration icon on the bottom bar.

4.2 Configuration of the IFAMPSU and IFM24160 power-supply modules

The power-supply modules installed in the Previdia control panel power the entire system, both fire and voice emergency. Nevertheless, the management of each of these modules must be entrusted to one of the two sub-parts, proceeding with addressing via the relative front plate module (FPMCPU or FPAMIAS).

The configuration of the power-supply modules is accessible through the main system configuration section (*paragraph 2.3, paragraph 3.2*). The module can then be selected by tapping on the relevant icon in the section on the left, if the module is properly installed.

The section opens showing the following layout of the module:



[A]	Information on the module	
[B]	Button for addressing the module	
[C]	Section containing a list of current faults	
[D]	Voltage and output current of the module	
[E]	Battery parameters (internal resistance, voltage, status and current)	
[F]	Internal temperature and battery charge voltages	
[G]	Fan configuration button (IFAMPSU only and by FPAMIAS only)	
[H]	Buttons for selecting the delay time (in minutes) for network delay signalling (only from FPAMIAS)	
[I]	Button for instant battery test, normally performed every 10 minutes (only from FPAMIAS)	
[J]	Buttons to carry out setting changes or to exit without saving	

By means of the fan button it is possible to configure the activation and deactivation temperatures of the fan.



By tapping on the **Change Address** button it is possible to change the address of the module on the CAN BUS, which is shown in the section with the module information, together with the serial number and firmware version.

Change Address

Note: *Addresses which exceed the maximum number of modules supported by the control panel will not be considered valid.*

4.3 Acquiring the configuration

Once the previously described operations have been completed, it will be necessary to save the defined configuration to the control panel memory. This operation can be done via the configuration screen, by means of the **"Set"** button (paragraph 2.3 - [J], paragraph 3.2 - [K]).

A progress bar will confirm data saving in course.

Once this operation has been completed and valid addresses have been assigned to all the devices, the configuration status icon will turn green. Any successive changes to the hardware configuration (for example, the loss of a module or addition of a new module) will turn the icon yellow to signal that the control panel configuration is different to the one saved to the memory.



4.4 Signal check and fault search

Once the configuration setup has been completed, the control panel will check the status of the devices and input/output terminals.

Eventual faults on these elements will be shown on the screen. In this case, it is necessary to remove the causes of the fault until you return to the stand-by screen that shows no fault messages (refer to the Previdia Ultra system installation manual).

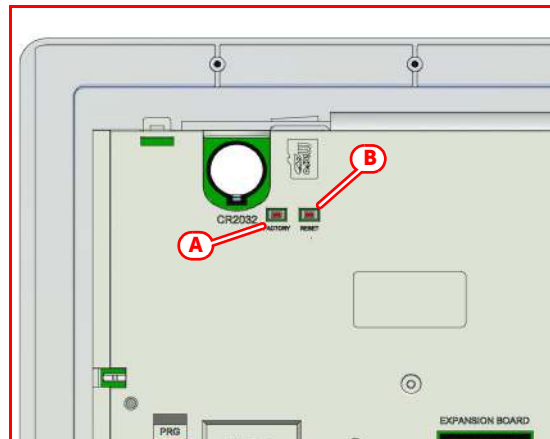
4.5 Factory data

The **Factory data** button from the programming menu (*paragraph 2.3 - [J]*, *paragraph 3.2 - [K]*) deletes all the configuration data and resets the control panel to the factory default settings.

As an alternative to using the Factory data button, it is possible to reset the factory default settings by means of the buttons on the back of the front-plate module. Press and hold the "Factory data" button [A] and press and release the "Reset" button [B].

Following confirmation of the request to reset to the factory data, the selection of the control panel languages will be requested (a mandatory main language and an optional secondary language).

A progress bar will confirm factory data resetting in course.



4.6 Setting the date and time

When setting this parameter, it is necessary to tap on the respective field in the bottom right-hand corner of the screen, enter an access code with either supervisor or installer capabilities then, by means of the scroll keys, navigate through the programming fields and set the desired date and time.

4.7 Firmware revision

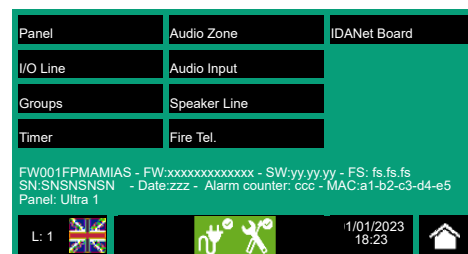
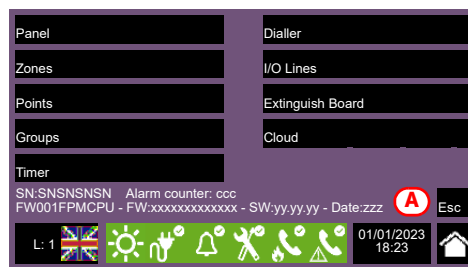
The installer of Previdia Ultra system can see the firmware revision of each control panel module in order to facilitate any upgrade or configuration procedure.

Such information can be achieved depending on the type of the module:

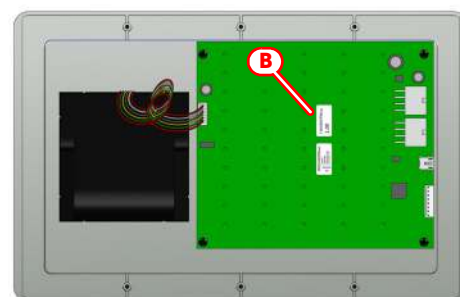
Front-plate module: by means of the **System Status** button on the display in the stand-by condition, you can access a section where it is possible to view the status of the various system elements.

In the lower left corner of this section [A] you can see:

- serial number of the front plate module in use
- counter of the number of alarms starting from system installation
- firmware version of the front-plate module (FW, both the main and the emergency backup CPU.)
- minimum required revision of Previdia/STUDIO configuration software (SW)
- site specific data release (Data), progressive number of system configuration upgrades

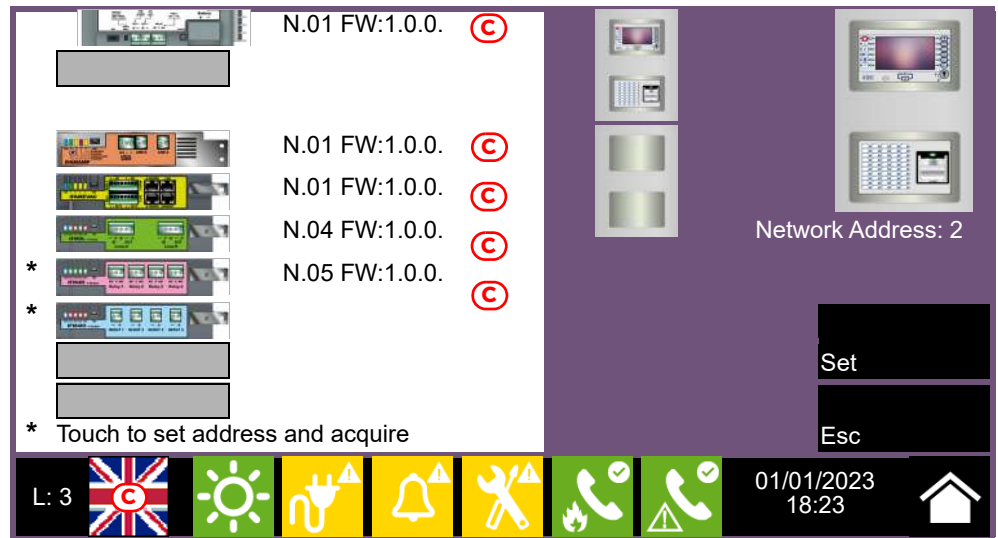


FPMLD, FPMPRN, FPMEXT front-plate modules: the module firmware revision is written on a label on the back of the module [B]; the label can be seen by opening the cabinet door when the module is already installed.



Internal modules: the firmware of each internal module (already installed) can be seen by accessing to the configuration menu (paragraph 2.3 - [J], paragraph 3.2 - [K]).

The address and the firmware revision of the detected modules are shown in the proper section [C].



4.8 Registration of the control panel to Inim Cloud

The registration of a control panel is an operation that allows its accessibility to all Inim Cloud service users. It is therefore necessary that the registration is carried out first by the installer, registered with the Inim Cloud service, so that later users can add the already registered control panel to their own account.

1. Access the programming phase of the control panel (paragraph 2.1) and then press the **Network** button on the menu that appears on the screen.
2. Enable the "Cloud enabled" option.
3. Access the "Enroll" section via the button that appears below.
4. Enter the 8-digit ID-installer number contained in the confirmation email received during registration to the Cloud as an installer.

In this section you can activate the "Installer Property" option. If activated, the installer reserves the management of accesses to the system by the Cloud. If not activated, this property is assigned to the first user enrolled

5. Press the **Enroll** button. The control panel will carry out the registration of the control panel on the Cloud and the display will show the "WAIT" message.
If the control panel date/time differs by more than 15 minutes from the exact date/time, the registration process may result negative.
6. The screen will show the outcome of the procedure via one of the following messages:
 - "Account created!": the control panel has been successfully registered to Cloud
 - "Communicat.Error": generic communication error.

The possible causes may be:

- no Internet connection
- date of manufacture of the control panel is earlier than dd/mm/yyyy
- date/time of control panel different, ahead of or behind the exact date/time by more than 15 minutes
- "Already enrolled": the control panel is already registered to Cloud
- "Panel notEnabled": the control panel cannot be registered to Cloud.

Chapter 5

Commissioning

The commissioning phase is a set of tests and inspections which are necessary to ensure the full efficiency and proper functioning of the system as specified in the system project. This phase is essential and must be performed in a scrupulous way in accordance the regulatory requirements of the country where the system is installed and in full respect of the recommendations in the following section.

Ensure the test and inspection procedures are performed only after checking the safety of the system and after having verified that any device activations controlled by the system will not cause any conditions of danger, and that all the building occupants who can be reached by the audible and visual signalling have been informed.

Ensure that the person who is responsible for the security of the building where the tests and inspections are to be carried out has taken countermeasures to avoid any situations of panic or distress for the building occupants.

5.1 Testing the Control panel

It is necessary to check the functionality status of the frontplate by first checking the information supplied on the screen and LEDs and then by inspecting the efficiency of the command devices (user-interface buttons, access keys, etc.):

- Check the functionality status of the screen and ensure that the information provided is clear.
- Ensure that the descriptions of the various zones, points and system elements entered during the data-entry phase are correct, and that the information provided on the screen clearly indicates any detectable conditions of danger.
- Check that there are no indications present of faults, alarms or anomalies of any type whatsoever. In the event of such indications, proceed with the removal of the causes of faults and anomalies.
- Check the status the functionality of the LEDs and buzzer. The front panel provides a button for the simultaneous activation of all the LEDs and buzzer thus allowing evaluation of their efficiency (refer to the description of the User Interface).
- Check the efficiency of the front-plate buttons and keys.
- Check the status of the power-supply sources (mains and batteries) and the consumption conditions of the control panel. The power-supply parameters can be checked by accessing the configuration menu (*paragraph 2.3, paragraph 3.2*) and selecting the configured IFM24160 or IFAMPASU modules.

The sections show the voltages, currents and temperatures of the various elements:

[A]	Button for addressing the module	
[B]	Section containing a list of current faults	
[C]	Voltage and output current of the power supply	
[D]	Battery parameters (internal resistance, voltage, status and current)	
[E]	Internal temperature and battery charge voltages	

5.2 Testing to detectors and manual activations

All the installed detectors must be tested during the commissioning phase. It is necessary to check the capacity of each detector to react to a simulated condition of fire, and to check the precision of the signals transmitted to the control panel in response to its activation (description of the point and zone).

For this purpose it is possible to use the **Test** button of the control panel ((/A)) on the "Zone Status" screen, accessible via the "System Status" menu on the home page.

By tapping this button it is possible to place one or more zones in test status. The activation of a detector which belongs to a zone in test status will not generate any alarm signalling or activate the outputs or signalling devices. However, the control panel will activate the signalling LEDs on the detectors and will perform automatic reset after a few seconds without any need of further intervention by the operator on the control panel.

N.	Description	Status
1	Zone 01	Standby
2	Zone 02	Fault
3	Zone 03	Standby
4	Zone 04	Standby
5	Zone 05	Alarm
6	Zone 06	Standby

Buttons: Disable, Test (A), Esc

Footer: L: 2, 01/01/2023 18:23

The activation of a point which belongs to a zone in test status will be recorded in the events log. Therefore, on completion of the test on all the zone devices, the operator can check the congruence of the various indications by means of the log.

The activation of all the manual call points (alarm buttons) must be tested in the same way as described for the detectors.

5.3 Testing signalling and activations

The functionality and efficiency of all the signalling devices must be checked thoroughly.

It is possible to test such devices by activating the relative LEDs and outputs manually at the control panel via the respective management page ((/B)).

To reach this page you must access the "Point" section via the "System Status" menu on the homepage. Select the desired loop and point to be tested from the lists shown then, by means of the relative **View** buttons go to the management screen where you will find the **Turn on output** and **Turn on LED** buttons.

Loop Card: 03 Point: 03 SNSNSNSNSN Photo/Heat Detector Zone 02	
Missing device	Change
	Turn on output (B)
	Turn on LED
	Disable point
	Disable zone
	Info
	Real time
	IP Camera
	Map
	Esc

Footer: L: 2, 01/01/2023 18:23

Note: *Testing devices by means of manual activation does not test functionality and efficiency of the cause/effect association which determines their activation (programming coherence of groups), therefore, it is necessary to perform real functionality tests.*

5.4 Speaker test

The functionality and efficiency of all the speakers must be checked thoroughly.

For this purpose, carry out the operations set up for the manual activation of the emergency, according to the provisions of the emergency management plan of the supervised installation.

In the case of the presence of a fire detection system, check that its activation causes the transmission of the appropriate voice messages, according to what is set up in the plan of the two systems (fire prevention and voice evacuation).

5.5 Testing the extinction system

Particular attention must be paid to the testing of eventual fire extinction systems.

Special attention must be paid to the functionality and safety of the extinguishing-agent release devices before proceeding with the testing of all activation and stop-extinction procedures in accordance with the requirements of the executive project.

5.6 Maximum time settings. Normative restrictions

During programming via the Previdia/STUDIO software you can set the time length or delay of many control panel functions. The normative reference standards require maximum duration for the following parameters:

- **Prealarm time**, the maximum delay time is 10min (EN 54-2 - clause 7.11.1 (c)).
- **Verification time OFF (s)**, if the verification function is enabled for an input device, the time for which the device remains deactivated after the first activation must be 60 seconds maximum (EN 54-2 - clause 7.12.1 [b]).

- **Verification time (s)**, if an input device has the alarm verification option enabled, the maximum verification time is 30 minutes (EN 54-2 - clause 7.12.1 [c]).
- **Lock reset time after released (min)**, the maximum time is 30 minutes (EN 12094-1:2003 - clause 4.12.2).
- **Pre-extinction time on automatic/manual activation**, the maximum time is 60 seconds (EN 12094-1:2003 - clause 4.17.2).
- **Valve ON time**, the maximum time is 300 seconds (EN 12094-1:2003 - clause 4.21).

Refer to the Previdiala/STUDIO software programming manual for more details about the parameters listed above.

Chapter 6

Maintenance

For correct and efficient management of the system it is necessary to carry out periodic maintenance in accordance with the regulatory requirements of the country where the system is installed and in full respect of the recommendations contained in this section.

For the frequency of the maintenance operations it is necessary to adhere to the applicable regulations. However, the manufacturer recommends that tests are performed on each point, component and element of the system at least once a year.

6.1 Testing the control panel

Work through the steps for control-panel test procedure as described in the commissioning section (*paragrafo 5.1 Testing the Control panel*).

Additionally, consult the events log and check for the presence of fault or alarm conditions which must be investigated.

6.2 Testing the detectors

As well as the tests which must be performed during the commissioning phase (*paragrafo 5.2 Testing to detectors and manual activations*), it is also necessary to check the contamination level in smoke detectors.

The management and configuration software provides a loop diagnostic function which allows you to gather the contamination values of the various devices in such a way to decide when cleaning is necessary.

Refer to the Programming manual for details regarding the diagnostic function and the detector manual for the instructions regarding cleaning operations.

6.3 Manual activation test

Work through the same tests as recommended in the commissioning section (*paragrafo 5.2 Testing to detectors and manual activations*).

6.4 Testing signalling and activations

Work through the same tests as indicated in the commissioning section (*paragrafo 5.3 Testing signalling and activations*).



Inim Electronics S.r.l.

ISO 9001 Quality Management
certified by BSI with certificate number FM530352

Centobuchi, via Dei Laboratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ www.inim.it





IFAMAMP



MODULO AMPLIFICATORE AUDIO 250W

250W AUDIO AMPLIFIER MODULE

MODULE AMPLIFICATEUR AUDIO 250W

MÓDULO AMPLIFICADOR AUDIO 250W

MÓDULO AMPLIFICADOR ÁUDIO 250W

MODULO AMPLIFICATORE AUDIO 250W

MANUALE ISTRUZIONI
INSTRUCTIONS MANUAL
MANUEL D'INSTRUCTIONS
MANUAL DE INSTRUCCIONES
MANUAL DE INSTRUÇÕES
HANDLEIDING MET INSTRUCITIES

REV. 1.20

Specifiche tecniche		Technical specifications		Caractéristiques techniques		
Tensione di alimentazione		Power supply voltage		Tension d'alimentation		20-30 V $\overline{\text{---}}$
Temperatura di funzionamento		Operating temperature		Température de fonctionnement		-5°C +40°C
Consumo @ 27.6V	stand-by	Consumption @ 27.6V	stand-by	Consommation @ 27.6V	veille	530mA
	in mancanza di rete e non in emergenza		during mains failure and not in an emergency situation		en absence de réseau et non en urgence	Max 100mA (2.5W)
	massimo		maximum		maximum	10A (250W + 14W)
Linee speaker LINE A / B	tensione uscite	Speaker lines LINE A / B	voltage of outputs	Lignes haut-parleurs LINE A / B	tension sorties	Max 100 Vrms
	carico massimo		maximum load		charge maximum	250W
	resistenza minima		minimum resistance		résistance minimum	40Ohm
Ingresso audio LOCAL AUDIO	tensione di ingresso	Audio input LOCAL AUDIO	input voltage	Entrée audio LOCAL AUDIO	tension d'entrée	Max 1 Vrms
	impedenza di ingresso		input impedance		impédance d'entrée	10K Ohm
Risposta in frequenza		Frequency response		Réponse en fréquence		50 - 20000 Hz
Regolazione volume separato per le sorgenti MUSIC 1/2, annunci vocali e d'emergenza		Separate volume adjustment for MUSIC 1/2 sources, voice and emergency announcements		Réglage volume séparé pour les sources MUSIC 1/2, annonces vocales et d'urgence		+6 / -40 dB
Equalizzazione a 3 bande separata per le sorgenti MUSIC 1/2, annunci vocali e d'emergenza		Separate 3-band equalization for MUSIC 1/2 sources, voice and emergency announcements		Égalisation à 3 bandes séparée pour les sources MUSIC 1/2, les annonces vocales et d'urgence		+6 / -40 dB

It

En

Fr

Especificaciones técnicas		Especificações técnica		Technische specificaties		
Tensión de alimentación		Tensão de alimentação		Voedingsspanning		20-30V $\overline{\text{---}}$
Temperatura de funcionamiento		Temperatura de funcionamento		Bedrijfstemperatuur		-5°C +40°C
Consumo @ 27,6V	stand-by	Consumo @ 27,6V	stand-by	Verbruik @ 27,6V	stand-by	530mA
	en ausencia de red y no en emergencia		em ausência de rede e não em emergência		als de netvoeding ontbreekt en niet in noodtoestand	Max 100mA (2.5W)
	máximo		máximo		maximum	10A (250W + 14W)
Lineas altavoces LINE A / B	tensión de las salidas	Linhas altifalante LINE A / B	tensão das saídas	Lijnen luidspreker LINE A / B	uitgangsspanning	Max 100 Vrms
	carga máxima		carga máxima		maximum belasting	250W
	resistencia mínima		resistência mínima		minimum weerstand	40Ohm
Entrada audio LOCAL AUDIO	tensión de entrada	Entrada audio LOCAL AUDIO	tensão de entrada	Ingang audio LOCAL AUDIO	ingangsspanning	Max 1 Vrms
	impedancia de entrada		impedância de entrada		ingangsimpedantie	10K Ohm
Respuesta en frecuencia		Resposta em frequência		Antwoord in frequentie		50 - 20000 Hz
Regulación del volumen separado para las fuentes MUSIC 1/2, anuncios de voz y de emergencia		Regulação volume separado para as fontes MUSIC 1/2, anúncios vocais e de emergência		Afstelling volume apart voor de bronnen MUSIC 1/2 en spraak(nood)meldingen		+6 / -40 dB
Ecuálización separada de 3 bandas para las fuentes MUSIC 1/2, anuncios de voz y de emergencia		Equalização de 3 bandas separada para as fontes MUSIC 1/2, anúncios vocais e de emergência		3-Bands equalisatie apart voor de bronnen MUSIC 1/2 en spraak(nood)meldingen		+6 / -40 dB

Es

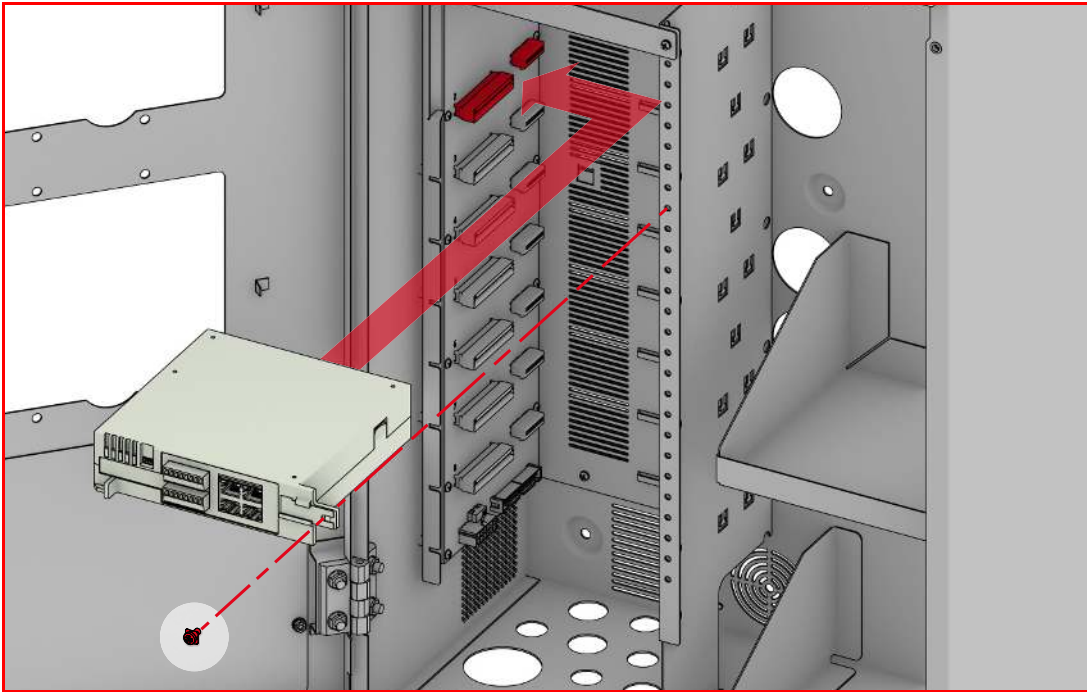
Pt

NL

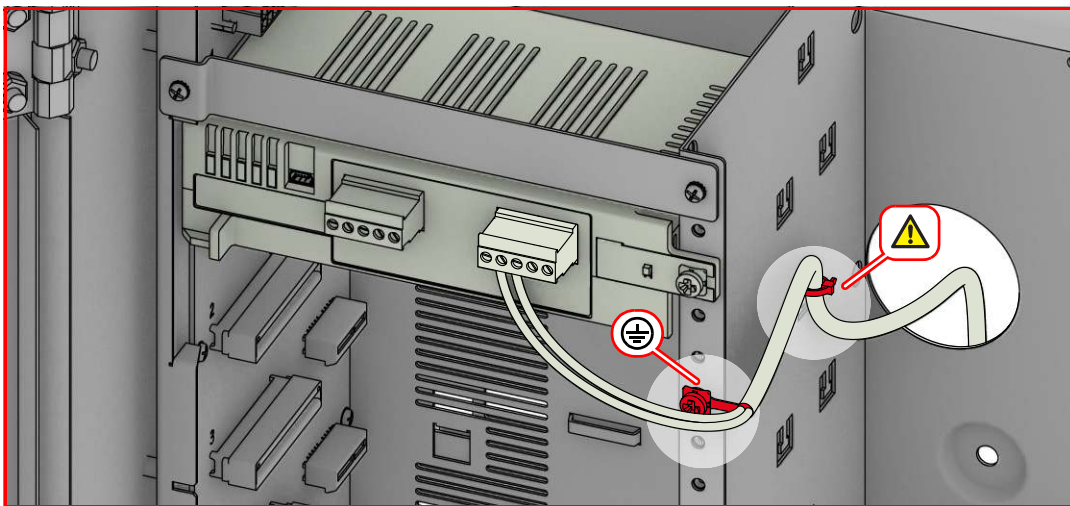


EN IEC 62368-1

Classe d'isolamento / Isolation class / Classe d'isolement / Clase de aislamiento / Classe de isolamento / Isolatieklasse		I
Tipo di terminali / Terminal type / Type de borniers / Tipo de terminales / Tipo de terminais / Type aansluitklemmen	LINE A/B	ES3, PS3
	LOCAL AUDIO	ES1, PS1
	USB	ES1, PS1



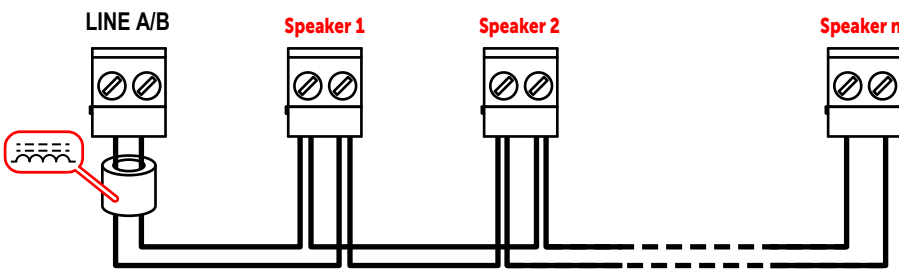
Montaggio modulo interno	Mounting of the internal module	Montage du module interne	Montaje del módulo interno	Montagem do módulo interno	Montage van de interne module
-----------------------------	------------------------------------	------------------------------	-------------------------------	-------------------------------	----------------------------------



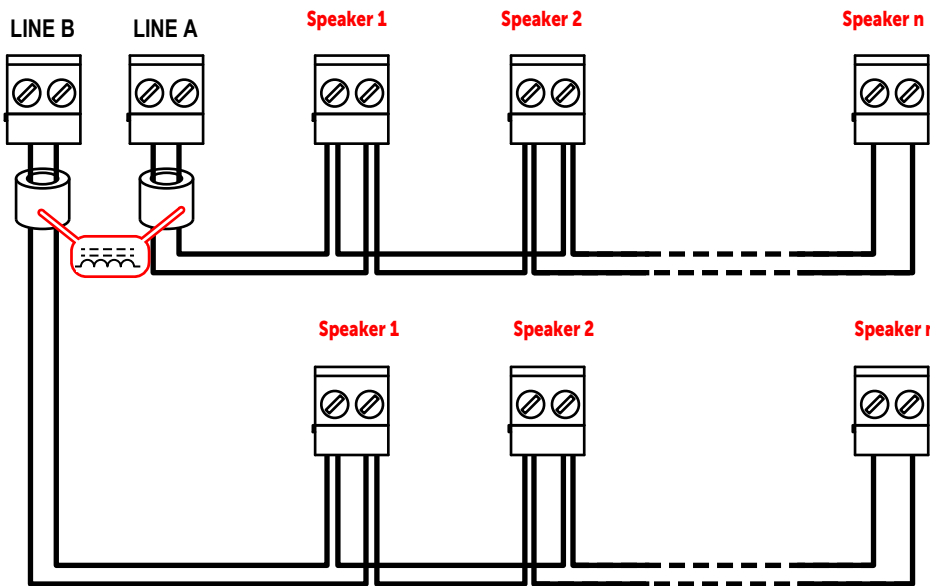
Ingresso cavi	Cable entry	Entrée câbles	Entrada cables	Entrada de cabos	Kabelinvoer
---------------	-------------	---------------	----------------	------------------	-------------

LINE A/B

Cavo a 2 poli come da normativa di riferimento	2 pole cable, as required by the reference legislation	Câble 2 pôles comme prévu par la norme de référence	Cable 2 polos de conformidad con la normativa de referencia	Cabo 2 polos como previsto pela norma de referência	Kabel met 2 polen, zoals voorzien door de referentienormen
Cavi	Cables	Câbles	Cables	Cabos	Kabels



Uscite speaker, collegamento a linea singola	Speaker outputs, single line connection	Sorties haut-parleur, connexion à une ligne unique	Salidas altavoz, conexión a línea simple	Saídas altifalante, conexão a linha individual	Luidsprekeruitgangen, aansluiting op enkele lijn
--	---	--	--	--	--



Uscite speaker, collegamento a linea doppia

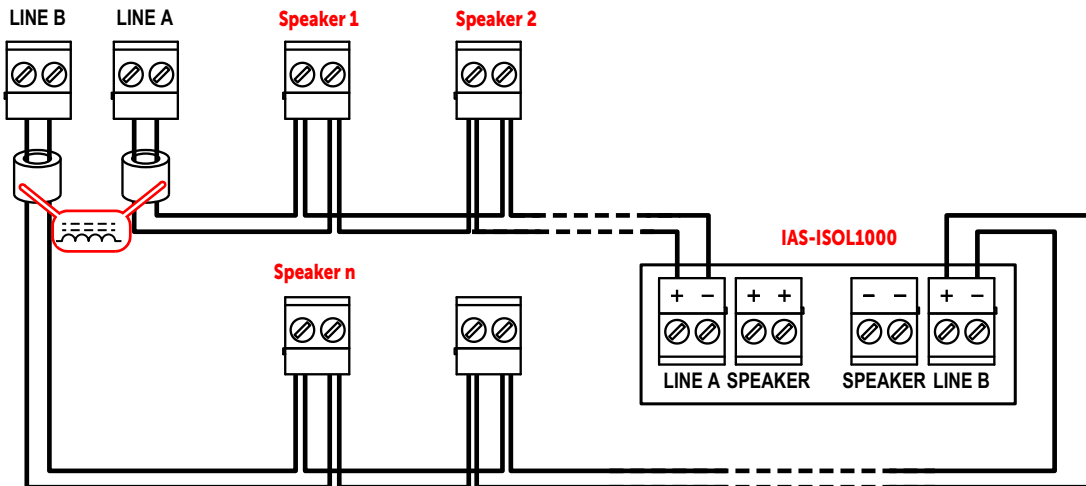
Speaker outputs, dual line connection

Sorties haut-parleur, connexion à une ligne double

Salidas altavoz, conexión a línea doble

Saídas altifalante, conexão a linha dupla

Luidsprekeruitgangen, aansluiting op dubbele lijn



Uscite speaker, collegamento ad anello

Speaker outputs, loop connection

Sorties haut-parleur, connexion en boucle

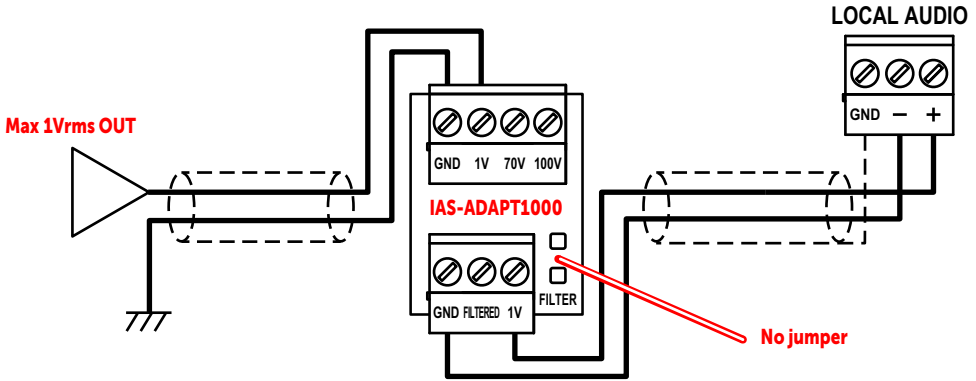
Salidas altavoz, conexión de anillo

Saídas altifalante, conexão em anel

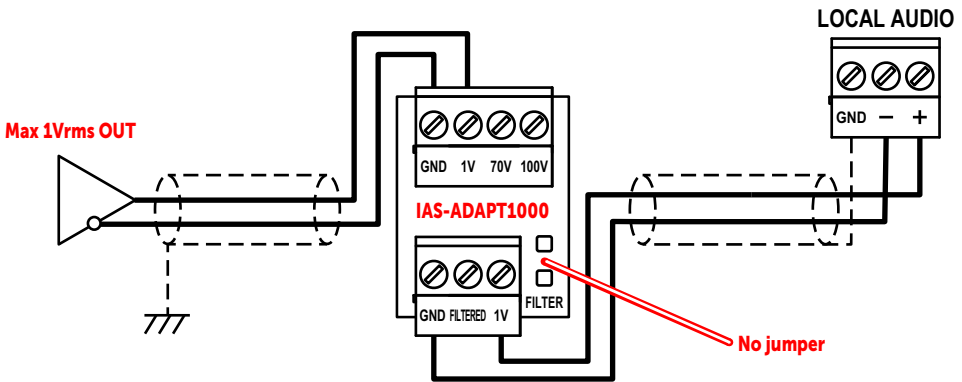
Luidsprekeruitgangen, kringaansluiting

LOCAL AUDIO

Cavo 2 poli schermato e twistato	2 pole twisted shielded pair cable	Câble 2 pôles protégé et torsadé	Cable 2 polos apantallado y twistado	Cabo 2 polos blindado e entrelaçado	Twisted en afgeschermde kabel met 2 polen
Cavi	Cables	Câbles	Cables	Cabos	Kabels



Sorgente non bilanciata con IAS-ADAPT1000	Unbalanced source with IAS-ADAPT1000	Source non équilibrée avec IAS-ADAPT1000	Fuente no balanceada con IAS-ADAPT1000	Fonte não balanceada com IAS-ADAPT1000	Niet-uitgebalanceerde bron met IAS-ADAPT1000
---	--------------------------------------	--	--	--	--



Sorgente bilanciata con IAS-ADAPT1000	Balanced source with IAS-ADAPT1000	Source équilibrée avec IAS-ADAPT1000	Fuente balanceada con IAS-ADAPT1000	Fontes balanceada com IAS-ADAPT1000	Uitgebalanceerd e bron met IAS-ADAPT1000
---------------------------------------	------------------------------------	--------------------------------------	-------------------------------------	-------------------------------------	--

Nota	Note	Note	Nota	Nota	Nota
Il tratto di cavo fuori calza deve essere il più corto possibile	The cable segment outside of the shield must be short as possible	Le parcours du câble en dehors de la gaine doit être le plus court possible.	El segmento de cable fuera de la vaina debe ser lo más corto posible	O segmento do cabo fora da bainha deve ser o mais curto possível	De segment van de kabel buiten de kabelhuls zo korte mogelijk moet worden



Questo simbolo indica all'installatore di far riferimento al manuale istruzioni.

Direttiva 2014/53/UE

Con la presente INIM Electronics s.r.l. dichiara che le centrali Previdia sono conformi ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/UE. Questo prodotto può essere utilizzato in tutti i Paesi UE.

Documentazione per gli utenti

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RAEE

Ai sensi dell'art. 26 del Decreto Legislativo 14 marzo 2014, n. 49 "Attuazione della direttiva 2012/19/UE sui rifiuti di apparecchiature elettriche ed elettroniche"

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti. L'utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita agli idonei centri comunali di raccolta differenziata dei rifiuti elettrotecnici ed elettronici. In alternativa alla gestione autonoma è possibile consegnare l'apparecchiatura che si desidera smaltire al rivenditore, al momento dell'acquisto di una nuova apparecchiatura di tipo equivalente. Presso i rivenditori di prodotti elettronici con superficie di vendita di almeno 400m² è inoltre possibile consegnare gratuitamente, senza obbligo di acquisto, i prodotti elettronici da smaltire con dimensioni inferiori a 25cm.

L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura.



This symbol indicates to installer to refer to the instructions manual.

Directive 2014/53/EU

Hereby, INIM Electronics S.r.l. declares that the Previdia control panels are in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. This product may be used in all EU Countries.

Documents for the users

Declarations of Performance, Declarations of Conformity and Certificates concerning to INIM Electronics S.r.l. products may be downloaded free of charge from the web address www.inim.it, getting access to Extended Access and then selecting "Certifications" or requested to the e-mail address info@inim.it or requested by ordinary mail to the address shown in this manual.

Manuals may be downloaded free of charge from the web address www.inim.it, getting access to Extended Access and then selecting "Manuals".

Warranty

INIM Electronics S.r.l. (Seller, Our, Us) warrants the original purchaser that this product shall be free from defects in materials and workmanship under normal use for a period of 24 months.

As Inim Electronics does not install this product directly, and due to the possibility that it may be used with other equipment not approved by Us; Inim Electronics does not warrant against loss of quality, degradation of performance of this product or actual damage that results from the use of products, parts or other replaceable items (such as consumables) that are neither made nor recommended by Inim Electronics. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. In no event shall Inim Electronics be liable to the purchaser or any other person for any loss or damage whether direct or indirect or consequential or incidental, including without limitation, any damages for lost profits, stolen goods, or claims by any other party caused by defective products or otherwise arising from the incorrect or otherwise improper installation or use of this product.

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INIM Electronics S.r.l. shall, at its option, repair or replace any defective products. Improper use, that is, use for purposes other than those mentioned in this manual will void the warranty. Contact Our authorized dealer, or visit our website for further information regarding this warranty.

Limited warranty

INIM Electronics S.r.l. shall not be liable to the purchaser or any other person for damage arising from improper storage, handling or use of this product.

Installation of this Product must be carried out by qualified persons appointed by Inim Electronics. Installation of this Product must be carried out in accordance with Our instructions in the product manual.

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WEEE

Informative notice regarding the disposal of electrical and electronic equipment (applicable in countries with differentiated waste collection systems)

The crossed-out bin symbol on the equipment or on its packaging indicates that the product must be disposed of correctly at the end of its working life and should never be disposed of together with general household waste. The user, therefore, must take the equipment that has reached the end of its working life to the appropriate civic amenities site designated to the differentiated collection of electrical and electronic waste. As an alternative to the autonomous management of electrical and electronic waste, you can hand over the equipment you wish to dispose of to a dealer when purchasing new equipment of the same type. You are also entitled to convey for disposal small electronic-waste products with dimensions of less than 25cm to the premises of electronic retail outlets with sales areas of at least 400m², free of charge and without any obligation to buy.

Appropriate differentiated waste collection for the subsequent recycling of the discarded equipment, its treatment and its environmentally compatible disposal helps to avoid possible negative effects on the environment and on health and favours the re-use and/or recycling of the materials it is made of.



Ce symbole indique à l'installateur de faire référence au manuel d'instructions.

Directive 2014/53/UE

Par la présente INIM Electronics S.r.l. déclare que les Previdia centrales sont conformes aux exigences essentielles et aux autres dispositions pertinentes établies par la directive 2014/53/UE. Ce produit peut être utilisé dans tous les pays de l'UE.

Documentation pour les utilisateurs

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DEEE



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Le symbole de la poubelle barrée sur l'appareil ou sur son emballage indique que le produit à la fin de sa durée de vie utile doit être collecté séparément des autres déchets. L'utilisateur devra donc confier l'appareil en fin de vie aux centres de collecte municipaux appropriés pour le tri sélectif des déchets électroniques et électriques. Comme alternative à la gestion autonome, il est possible de remettre l'appareil que l'on souhaite éliminer au revendeur, lors de l'achat d'un nouvel appareil équivalent. Chez les détaillants de matériel électronique disposant d'une surface de vente d'au moins 400m², il est également possible de remettre gratuitement, sans obligation d'achat, les produits électroniques à éliminer de dimensions inférieures à 25cm.

La collecte séparée adéquate de l'appareil hors service aux fins du recyclage, traitement et élimination compatible avec l'environnement contribue à éviter les effets négatifs possibles sur l'environnement et la santé humaine et aide au réemploi et/ou recyclage des matériaux dont l'appareil est constitué.



Este símbolo indica al instalador de remitirse al manual de instrucciones.

Directiva 2014/53/UE

Con la presente, INIM Electronics S.r.l. declara que las centrales Previdia son conformes con los requisitos esenciales y las demás disposiciones pertinentes establecidas por la Directiva 2014/53/UE. Este producto puede ser utilizado en todos los países de la UE.

Documentación para los usuarios

Las declaraciones de Prestación, Declaraciones de Conformidad y Certificados relativos a los productos INIM Electronics S.r.l. pueden descargarse gratuitamente de la dirección web www.inim.it, accediendo al área reservada y después seleccionando "Certificaciones" o también solicitarse a la dirección e-mail info@inim.it o pedirse por correo ordinario a la dirección indicada en este manual. Los manuales pueden descargarse gratuitamente de la dirección web www.inim.it, accediendo al área reservada y después seleccionando "Los manuales de los productos".

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RAEE



Información sobre la eliminación de equipos eléctricos y electrónicos (aplicable en los Países con sistemas de recogida selectiva)

El símbolo del contenedor tachado que figura en el aparato o en el embalaje indica que el producto, al final de su vida útil, debe ser desechado por separado de los demás residuos. El usuario deberá, por tanto, llevar el equipo llegado al final de su vida a los centros municipales específicos de recogida selectiva para desechos electrodomésticos y electrónicos. Como alternativa a la gestión autónoma, es posible entregar el equipo que se desea eliminar al revendedor, cuando se adquiera un nuevo equipo de tipo equivalente. En los comercios de productos electrónicos con superficie de venta mínima de 400 m² también es posible entregar gratuitamente, sin obligación de compra, los productos electrónicos con dimensiones inferiores a 25 cm que se deseen deschar.

La adecuada recogida selectiva para enviar posteriormente el equipo desechado al reciclaje, al tratamiento y a la eliminación ambientalmente compatible, contribuye a evitar posibles efectos negativos en el medio ambiente y en la salud, y favorece la reutilización y/o reciclaje de los materiales de los que está compuesto el equipo.



Este símbolo indica ao instalador de consultar o manual de instruções.

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A recolha seletiva adequada para a ativação sucessiva da aparelhagem entregue à reciclagem, tratamento e eliminação compatível com o ambiente contribui para evitar possíveis efeitos negativos no próprio ambiente e para a saúde, favorecendo a reutilização e ou reciclagem dos materiais com os quais a aparelhagem é composta.



Dit symbol geeft de installateur naar de instructiehandleiding raadpleeg aan.

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AEEA Informatie over de verwijdering van elektrische en elektronische apparatuur (van toepassing in landen met gescheiden inzamelingsystemen)

Het symbool van de doorgestreepte vuilnisbak op de apparatuur of de verpakking geeft aan dat het product aan het einde van zijn nuttige levensduur gescheiden van ander afval moet worden ingezameld. Daarom moet de gebruiker de apparatuur aan het einde van de levensduur ervan afgeven aan de daarvoor in aanmerking komende gemeentelijke centra voor de gescheiden inzameling van elektrotechnisch en elektronisch afval. Als alternatief voor eigen beheer kunt u bij de aankoop van nieuwe apparatuur van een gelijkwaardig type de apparatuur waarover u wilt beschikken, aan uw dealer overdragen. Bovendien kunnen elektronische producten gratis en zonder enige verplichting tot aankoop aan de detailhandelaars worden geleverd die een verkoopoppervlakte van ten minste 400 m² hebben voor verwijdering van formaten van minder dan 25 cm.

Een adequate gescheiden inzameling met het oog op recycling, verwerking en milieuvriendelijke verwijdering van afgedankte apparatuur helpt mogelijke negatieve gevolgen voor het milieu en de gezondheid te voorkomen en bevordert het hergebruik en/of de recycling van de materialen waaruit de apparatuur is samengesteld.

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Centobuchi, via Dei Lavoratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ www.inim.it



DCGIINIPIFAMAMP-120-20230531

CE



PREVIDIA

CONTROL PANEL FOR FIRE DETECTION AND ALARM, FIRE
EXTINCTION AND VOICE-EVACUATION SYSTEMS

GUIDE FOR INTEGRATION WITH
SUPERVISION SYSTEMS



PREVIDIA

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General information

1.1 Manufacturer's details

Manufacturer:INIM ELECTRONICS S.R.L.

Production plant:Centobuchi, via Dei Lavoratori 10

Municipality:63076, Montepandone (AP) - Italy

Tel.:+39 0735 705007

Fax:+39 0735 704912

E-mailinfo@inim.it

Web:www.inim.it

The personnel authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work only on devices marketed under the INIM Electronics brand.

1.2 About this manual

Manual codeDCMBINEOPREVIDIA

Revision1.61

This manual provides the installer with the guidelines relating to the integration of Previdia control panels with external supervision systems.

1.2.1 Graphic conventions

Following are the graphic conventions used in this manual.

Conventions	Example	Description
Text in italics	Refer to <i>paragraph 1.2.1</i> <i>Graphic conventions</i>	Directs you to the title of a chapter, section, paragraph, table or figure in this manual or other published reference.
[Uppercase letter] or [number]	[A] or [1]	Reference relating to a part of the system or video object.

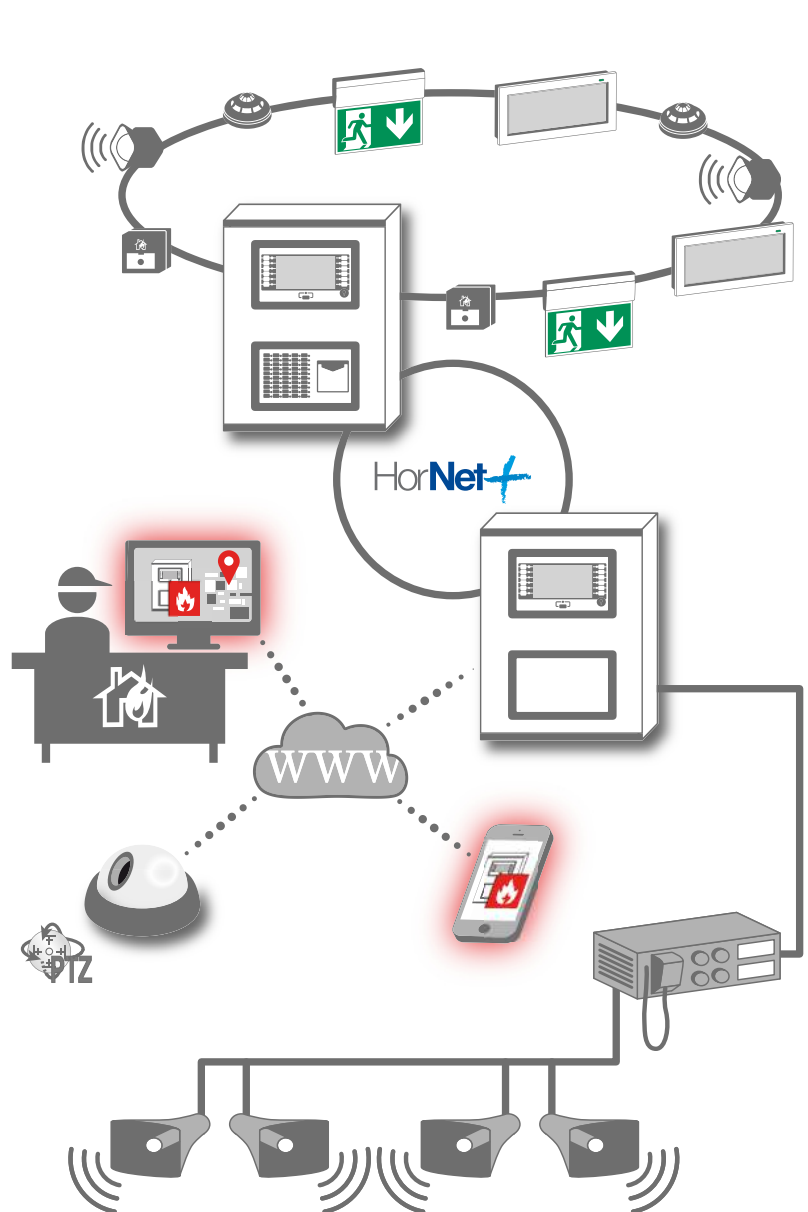
Note: *The notes contain important information relating to the text.*

Chapter 2

Connectible external systems

Previdia series control panels have been especially developed and designed for connection to various systems which are external to the fire detection system itself, such as:

- **BMS (Building Management System):** monitoring systems, usually comprising software installed on a PC platform, capable of monitoring and managing the system through graphic maps, function keys, etc. These systems constitute an easy-to-use interface for end users.
- **Pager:** systems comprising a PABX capable of receiving text messages from other systems (in our case from fire-detection control panels) and forwarding them to remote devices such as pagers or displays of cordless telephones.
- **Video surveillance with IP cameras with Onvif protocol:** cameras installed in the same Ethernet network can be interconnected with the fire-detection control panel in order to provide images captured in ambients where dangerous situations have been detected (in the case of PTZ by positioning the camera at the correct angle). The images, visible on the control-panel console or from remote locations (via e-mail or web browser), provide a valid verification tool that allows the user to establish the seriousness or irrelevance of fire signalling.
- **Voice Evac:** voice evacuation systems comprise one or more control units (controller, amplifiers, power supplies) and a series of sound diffusion lines. These systems have the task of warning occupants of the necessity to evacuate the building and are more effective than sounders, as they are capable of providing detailed information regarding the fire. The interconnection of these systems and the fire detection system allows the activation of accurate voice messages relating specifically to the various zones in the building.



Chapter 3

Building Management System

The connection of Previdia control panels with supervision systems (BMS, Building Management Systems) allows users to supervise and interact with their systems.

For this purpose Previdia control panels manage some of the most widely used communication protocols available on the market:

- **Modbus RTU:** protocol based on RS485 standard (for Previdia Max control panels only, available on the RS485-BMS port of the FPMCPU module)
- **Modbus over TCP/IP:** Modbus protocol based on TCP/IP standard, implemented on the Ethernet connection of the control panel
- **BACnet:** protocol based on TCP/IP (for Previdia Max and Ultra control panels transmitted over the Ethernet port of the IFMLAN module and for Previdia Compact control panels, over the Ethernet port of the PREVIDIA-C-COM-LAN module).
This protocol is subject to licencing.
- **SmartLook interface:** protocol property of Inim Electronics used by SmartLook software (implemented on the Ethernet port, RS232 and USB located on the FPMCPU module for Previdia Max control panels and on the Ethernet and USB ports located on the Previdia Compact and Micro control panels main board)

Following are the specifications of each of the previously-mentioned protocols.

3.1 Modbus RTU and Modbus over TCP/IP

A BMS software connected to a Previdia control panel via Modbus protocol is capable of monitoring and managing the control panel itself and all the control panels interconnected with it via Hornet+ network or IDANet network (for further details regarding networking refer to the Previdia networking guide).

For this reason it is necessary to configure a Modbus address for each control panel to be reached.

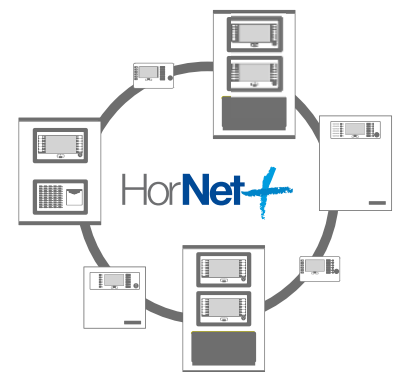
This setting must be done through the configuration software Previdia/Studio.

1. Open the Previdia/Studio solution that represents the system.
2. Select, from the control panels configured in the network, the control panel the BMS is connected to (via TCP/IP or RS485).
3. Access to the control panel CPU programming section:
 - for Previdia Max/Ultra:** Click first on the FPMCPU or FPAMIAS module icon and then on the display.
 - for Previdia Compact/Micro:** Click first on the display.
 - for PREVIDIA-C-REP:** You access directly to the section of interests.
4. The section shows the **Modbus address** button. Click on the button.

For each of the control panels connected in the Hornet+ or IDANet network, the software will allow you to set on the Modbus the address to which to respond. If you select the "No Address" setting the control panel in question will not respond to Modbus commands (protocol disabled).

For the MODBUS RTU protocol available on the RS485 port of the FPMCPU module, the RS485 serial parameters are set as follows:

- BitRate: 115200
- DataBit: 8
- Parity: Peer
- Stop bit: 1



Note: *Modbus RTU and Modbus TCP/IP protocols are available and are not subject to an activation licence.*

The Previdia control panel carries out the following commands via the Modbus:

- READ INPUT REGISTERS
- WRITE SINGLE COIL

With a single reading the maximum number of readable registers is 125.

3.1.1 Register Mapping

The “READ INPUT REGISTERS” command serves to interrogate the control panel in relation to its status and the status of its connected components in accordance with the register mapping as shown below:

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)																	
Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Control panel details Status 1	Access with level 1-4				Silenced Buzzer	Investigation	Mute	Night mode				Disabled	Fault	Early warning	Pre-alarm	Alarm
1	Control panel details Status 2						Fault on +24 RS485-2	Fault on +24 RS485-1					Fault on ground (earth)	RT network	Fault on network	Low battery	Fault on battery
2	Modules fault	Module fault IFMDIAL	Module fault IFMNET	Fault CPU emergency	Module fault IFMLAN	Module fault IFM16IO 4	Module fault IFM16IO 3	Module fault IFM16IO 2	Module fault IFM16IO 1	Module fault IFM2L 8	Module fault IFM2L 7	Module fault IFM2L 6	Module fault IFM2L 5	Module fault IFM2L 4	Module fault IFM2L 3	Module fault IFM2L 2	Module fault IFM2L 1
3	Module fault IFMEXT 1-16	Module fault IFMEXT 16	Module fault IFMEXT 15	Module fault IFMEXT 14	Module fault IFMEXT 13	Module fault IFMEXT 12	Module fault IFMEXT 11	Module fault IFMEXT 10	Module fault IFMEXT 9	Module fault IFMEXT 8	Module fault IFMEXT 7	Module fault IFMEXT 6	Module fault IFMEXT 5	Module fault IFMEXT 4	Module fault IFMEXT 3	Module fault IFMEXT 2	Module fault IFMEXT 1
4	Module fault IFMEXT 17-24									Module fault IFMEXT 24	Module fault IFMEXT 23	Module fault IFMEXT 22	Module fault IFMEXT 21	Module fault IFMEXT 20	Module fault IFMEXT 19	Module fault IFMEXT 18	Module fault IFMEXT 17
5	Module fault IFM4IO	Module fault IFM4IO 16	Module fault IFM4IO 15	Module fault IFM4IO 14	Module fault IFM4IO 13	Module fault IFM4IO 12	Module fault IFM4IO 11	Module fault IFM4IO 10	Module fault IFM4IO 9	Module fault IFM4IO 8	Module fault IFM4IO 7	Module fault IFM4IO 6	Module fault IFM4IO 5	Module fault IFM4IO 4	Module fault IFM4IO 3	Module fault IFM4IO 2	Module fault IFM4IO 1
6	Front-plate modules fault					Module fault power supply 4	Module fault power supply 3	Module fault power supply 2	Module fault power supply 1		Module fault FPMLED 7	Module fault FPMLED 6	Module fault FPMLED 5	Module fault FPMLED 4	Module fault FPMLED 3	Module fault FPMLED 2	Module fault FPMLED 1
7	Module fault IFM4R	Module fault IFM4R 16	Module fault IFM4R 15	Module fault IFM4R 14	Module fault IFM4R 13	Module fault IFM4R 12	Module fault IFM4R 11	Module fault IFM4R 10	Module fault IFM4R 9	Module fault IFM4R 8	Module fault IFM4R 7	Module fault IFM4R 6	Module fault IFM4R 5	Module fault IFM4R 4	Module fault IFM4R 3	Module fault IFM4R 2	Module fault IFM4R 1
8	Active Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
9	Active Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
10	Disabled Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
11	Disabled Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
12	Loop fault	Fault loop 16	Fault loop 15	Fault loop 14	Fault loop 13	Fault loop 12	Fault loop 11	Fault loop 10	Fault loop 9	Fault loop 8	Fault loop 7	Fault loop 6	Fault loop 5	Fault loop 4	Fault loop 3	Fault loop 2	Fault loop 1
13	Loop disabled	Loop 16 disabled	Loop 15 disabled	Loop 14 disabled	Loop 13 disabled	Loop 12 disabled	Loop 11 disabled	Loop 10 disabled	Loop 9 disabled	Loop 8 disabled	Loop 7 disabled	Loop 6 disabled	Loop 5 disabled	Loop 4 disabled	Loop 3 disabled	Loop 2 disabled	Loop 1 disabled
20	Status of telephone communicator 1	Monitoring failed	Call queue full	SMS fault	SMS OK	Fault call failed	Fault call OK	Alarm call failed	Alarm call OK	Ongoing fault call	Ongoing alarm call				GPRS Fault	PSTN Fault	GSM Fault
21	Status of telephone communicator 2					Fault GSM module	Provider unavailable	Fault on SIM Card	Weak signal						Info call disabled	Fault call disabled	Alarm call disabled
22	Communicator status icons	Status icons Alarm communicator								Status icons communicator fault							
25	Fire extinguishment module 1									Fault	Automatic stop	Manual stop	Pre-extinction	Extinction	Manual disabled	Automatic disabled	Disabled
...	...																
48	Fire extinguishment module 24									Fault	Automatic stop	Manual stop	Pre-extinction	Extinction	Manual disabled	Automatic disabled	Disabled
49	Extinction module 1 terminals faults			Short circuit on HOLD	HOLD open	Short circuit on MAN.-EXT	MAN.-EXT open	Short circuit on PRESSOS.	PRESSOS. open	Short circuit on STOP-EXT	STOP-EXT open	Short circuit on PRE-EXT	PRE-EXT open	Short circuit on RELEASED	RELEASED open	Short circuit on VALVE	VALVE open
...	...																
72	Extinction module 24 terminals faults			Short circuit on HOLD	HOLD open	Short circuit on MAN.-EXT	MAN.-EXT open	Short circuit on PRESSOS.	PRESSOS. open	Short circuit on STOP-EXT	STOP-EXT open	Short circuit on PRE-EXT	PRE-EXT open	Short circuit on RELEASED	RELEASED open	Short circuit on VALVE	VALVE open
100	Zone 1 Zone 2	Zone 2								Zone 1							
		Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
599	Zone 999 Zone 1000	Zone 1000								Zone 999							
		Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
600	Group 1 Group 2	Group 2								Group 1							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
719	Group 239 Group 240	Group 240								Group 239							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
868	IFM16IO 1 Module channels 1, 2	IFM16IO 1 Module, channel 2								IFM16IO 1 Module, channel 1							
		Do not use	Input activated in test mode	Output status	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
899	IFM16IO 4 Module channels 15, 16	IFM16IO 4 Module, channel 16								IFM16IO 4 Module, channel 15							
		Do not use	Input activated in test mode	Output status	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
900	IFM4IO 1 Module channels 1, 2	IFM4IO 1 Module, channel 2								IFM4IO 1 Module, channel 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
931	IFM4IO 16 Module channels 3, 4	IFM4IO 16 Module, channel 4								IFM4IO 16 Module, channel 3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
932	IFM4R 1 Module channels 1, 2	IFM4R 1 Module, channel 2								IFM4R 1 Module, channel 1							
		Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
...	...																
963	IFM4R 16 Module channels 3, 4	IFM4R 16 Module, channel 4								IFM4R 16 Module, channel 3							
		Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
...	...																
964	Power-supply module 1 output 1 output 2	Power-supply module 1, output 2								Power-supply module 1, output 1							
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte								
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
965	Power-supply module 1, output 3 Power-supply module 2, output 1	Power-supply module 2, output 1								Power-supply module 1, output 3								
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
966	Power-supply module 2 output 2 output 3	Power-supply module 2, output 3								Power-supply module 2, output 2								
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
967	Power-supply module 3 output 1 output 2	Power-supply module 3, output 2								Power-supply module 3, output 1								
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
968	Power-supply module 3, output 3 Power-supply module 4, output 1	Power-supply module 4, output 1								Power-supply module 3, output 3								
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
969	Power-supply module 4 output 2 output 3	Power-supply module 4, output 3								Power-supply module 4, output 2								
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
1000	Information not shared over Hornet																	Re-arm the control panel
1001	Loop 1 Address 1 Address 2	Loop1 address 2								Loop1 address 1								
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	
...	...																	
1120	Loop 1 Address 239 Address 240	Loop1 address 240								Loop1 address 239								
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	
1121	Loop 2 Address 1 Address 2	Loop 2 address 2								Loop 2 address 1								
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	
...	...																	
1240	Loop 2 Address 239 Address 240	Loop 2 address 240								Loop 2 address 239								
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	
1241	Loop 3 Address 1 Address 2	Loop 3 address 2								Loop 3 address 1								
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	
...	...																	

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
1360	Loop 3 Address 239 Address 240	Loop 3 address 240								Loop 3 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1361	Loop 4 Address 1 Address 2	Loop 4 address 2								Loop 4 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1480	Loop 4 Address 239 Address 240	Loop 4 address 240								Loop 4 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1481	Loop 5 Address 1 Address 2	Loop 5 address 2								Loop 5 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1600	Loop 5 Address 239 Address 240	Loop 5 address 240								Loop 5 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1601	Loop 6 Address 1 Address 2	Loop 6 address 2								Loop 6 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1720	Loop 6 Address 239 Address 240	Loop 6 address 240								Loop 6 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1721	Loop 7 Address 1 Address 2	Loop 7 address 2								Loop 7 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1840	Loop 7 Address 239 Address 240	Loop 7 address 240								Loop 7 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1841	Loop 8 Address 1 Address 2	Loop 8 address 2								Loop 8 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
1960	Loop 8 Address 239 Address 240	Loop 8 address 240								Loop 8 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
1961	Loop 9 Address 1 Address 2	Loop 9 address 2								Loop 9 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2080	Loop 9 Address 239 Address 240	Loop 9 address 240								Loop 9 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2081	Loop 10 Address 1 Address 2	Loop 10 address 2								Loop 10 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2200	Loop 10 Address 239 Address 240	Loop 10 address 240								Loop 10 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2201	Loop 11 Address 1 Address 2	Loop 11 address 2								Loop 11 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2320	Loop 11 Address 239 Address 240	Loop 11 address 240								Loop 11 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2321	Loop 12 Address 1 Address 2	Loop 12 address 2								Loop 12 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2440	Loop 12 Address 239 Address 240	Loop 12 address 240								Loop 12 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2441	Loop 13 Address 1 Address 2	Loop 13 address 2								Loop 13 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																

Registers for Previdia Max and Ultra fire-control panel (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
2560	Loop 13 Address 239 Address 240	Loop 13 address 240								Loop 13 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2561	Loop 14 Address 1 Address 2	Loop 14 address 2								Loop 14 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2680	Loop 14 Address 239 Address 240	Loop 14 address 240								Loop 14 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2681	Loop 15 Address 1 Address 2	Loop 15 address 2								Loop 15 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2800	Loop 15 Address 239 Address 240	Loop 15 address 240								Loop 15 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
2801	Loop 16 Address 1 Address 2	Loop 16 address 2								Loop 16 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
2920	Loop 16 Address 239 Address 240	Loop 16 address 240								Loop 16 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Compact control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Control panel details Status 1	Access with levels 1-4				Silenced Buzzer	Investigation	Mute	Night mode	Sounder-flasher faults	Sounder-flashers disabled	Sounder-flashers active	Disabled System	System Fault	Early warning System	Pre-alarm System	Alarm System
1	Control panel details Status 2	Control panel disabled	Control panel fault	Control panel notification	Control panel pre-alarm	Control panel alarm		Fault on +24 RS485-2	Fault on +24 RS485-1				Fault on ground (earth)	RT network	Fault on network	Low battery	Fault on battery
2	Fault on boards 1	PREVIDIA-C-DIAL board fault															I/O board fault
6	Fault on boards 2							Power-supply module fault	PREVIDIA-C-COM module fault								LED module fault
8	Active Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
9	Active Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
10	Disabled Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
11	Disabled Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
12	Loop fault															Loop 2 fault	Loop 1 fault
13	Loop disabled															Loop 2 disabled	Loop 1 disabled
20	Status of telephone communicator 1	Monitoring failed	Call queue full	SMS fault	SMS OK	Fault call failed	Fault call OK	Alarm call failed	Alarm call OK	Ongoing Fault call	Ongoing Alarm call				GPRS Fault	PSTN Fault	GSM Fault
21	Status of telephone communicator 2	S/A fault over Ethernet				PREVIDIA-C-DIAL board fault	Provider unavailable	Fault on SIM Card	Weak signal						Info call disabled	Fault call disabled	Alarm call disabled

Registers for Previdia Compact control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
22	Communicator status icons	Status icons alarm communicator								Status icons fault communicator							
23	Status of the PREVIDIA-C-COM module	Fault on second WW pathway	Fault on first WW pathway	Configuration on second WW pathway	Configuration on first WW pathway				0: faults on WW 1: WW functioning	WW loss	Smart485In not present	EVAC disabled	Ethernet processor not present	Fault on +24 RS485-2	Fault on +24 RS485-1	EVAC Fault	ESPA 4.4.4 fault
25	Fire extinguishment module									Fault	Automatic stop	Manual stop	Pre-extinction	Extinction	Manual disabled	Automatic disabled	Disabled
49	Faults on electrovalve terminal (I/O 4)															Short circuit	Open
100	Zone 1 Zone 2	Zone 2								Zone 1							
		Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
599	Zone 999 Zone 1000	Zone 1000								Zone 999							
		Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Smoke detection disabled	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm
600	Group 1 Group 2	Group 2								Group 1							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
719	Group 239 Group 240	Group 240								Group 239							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
900	Channels I/O 1, I/O 2	Channel I/O 2								Channel I/O 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
901	Channels I/O 3, I/O 4	Channel I/O 4								Channel I/O 3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Compact control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
932	Relay output									Relay output							
										Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
1000	Information not shared over Hornet																Re-arm the control panel
1001	Loop 1 Address 1 Address 2	Loop1 address 2								Loop1 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1120	Loop 1 Address 239 Address 240	Loop1 address 240								Loop1 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1121	Loop 2 Address 1 Address 2	Loop 2 address 2								Loop 2 address 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
1240	Loop 2 Address 239 Address 240	Loop 2 address 240								Loop 2 address 239							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Control panel details Status 1	Access with levels 1-4			Silenced Buzzer	Investigation	Mute	Night mode		Sounder-flashers disabled	Sounder-flashers active	Disabled System	System Fault	Early warning System	Pre-alarm System	Alarm System	
1	Control panel details Status 2	Control panel disabled	Control panel fault	Control panel notification	Control panel pre-alarm	Control panel alarm	Fault on +24 RS485-2	Fault on +24 RS485-1	Control panel sounders fault	Control panel sounders disabled	Control panel sounders active	Fault on ground (earth)	RT network	Fault on network	Low battery	Fault on battery	
2	Fault on boards 1	PREVIDIA-C-DIAL board fault														I/O board fault	

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
6	Fault on boards 2								Power-supply module fault	PREVIDIA-C-COM module fault							LED module fault
8	Active Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
9	Active Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
10	Disabled Timers 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
11	Disabled Timers 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
16	SPS24x60G 1 Power station status		Output C disabled	Output B disabled	Output A disabled		Output C overcurrent	Output B overcurrent	Output A overcurrent		Missing	Generic fault	inefficient battery	Low battery	Missing battery	Ground fault	Mains fault
17	SPS24x60G 2 Power station status		Output C disabled	Output B disabled	Output A disabled		Output C overcurrent	Output B overcurrent	Output A overcurrent		Missing	Generic fault	inefficient battery	Low battery	Missing battery	Ground fault	Mains fault
18	SPS24x60G 3 Power station status		Output C disabled	Output B disabled	Output A disabled		Output C overcurrent	Output B overcurrent	Output A overcurrent		Missing	Generic fault	inefficient battery	Low battery	Missing battery	Ground fault	Mains fault
19	SPS24x60G 4 Power station status		Output C disabled	Output B disabled	Output A disabled		Output C overcurrent	Output B overcurrent	Output A overcurrent		Missing	Generic fault	inefficient battery	Low battery	Missing battery	Ground fault	Mains fault
20	Status of telephone communicator 1	Monitoring failed	Call queue full	SMS fault	SMS OK	Fault call failed	Fault call OK	Alarm call failed	Alarm call OK	Ongoing Fault call	Ongoing Alarm call				GPRS Fault	PSTN Fault	GSM Fault
21	Status of telephone communicator 2	SIA fault over Ethernet				PREVIDIA-C-DIAL board fault	Provider unavailable	Fault on SIM Card	Weak signal						Info call disabled	Fault call disabled	Alarm call disabled
22	Communicator status icons	Status icons alarm communicator								Status icons fault communicator							
23	Status of the PREVIDIA-C-COM module	Fault on second WW pathway	Fault on first WW pathway	Configuration on second WW pathway	Configuration on first WW pathway				0: faults on WW 1: WW functioning	WW loss	Smart485In not present	EVAC disabled	Ethernet processor not present	Fault on +24 RS485-2	Fault on +24 RS485-1	EVAC Fault	ESPA 4:4:4 fault

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
25	Fire extinguishment module									Fault	Automatic stop	Manual stop	Pre-extinction	Extinction	Manual disabled	Automatic disabled	Disabled
49	Fire extinguishment channel status			Stop extinction Output shorted	Stop extinction Output open	Manual extinction shorted	Manual extinction open	Pressure switch shorted	Pressure switch open	Stop extinction Input shorted	Stop extinction Input open	Pre-extinction shorted	Pre-extinction open	Release shorted	Release open	Electrovalve shorted	Electrovalve open
100	Zone 1 Zone 2	Zone 2								Zone 1							
		Do not use	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
599	Zone 999 Zone 1000	Zone 1000								Zone 999							
		Do not use	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Test	Do not use	Disabled	Fault	Early warning	Pre-alarm	Alarm
600	Group 1 Group 2	Group 2								Group 1							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
719	Group 239 Group 240	Group 240								Group 239							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
720	Control panel terminals L1, L2	Terminal L2								Terminal L1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
721	Control panel terminals L3, L4	Terminal L4								Terminal L3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
722	Terminals LINE1, LINE2 PREVIDIA-M-EXP 1	Terminal LINE2								Terminal LINE1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
723	Terminals LINE3, LINE4 PREVIDIA-M-EXP 1	Terminal LINE4								Terminal LINE3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
724	Terminals LINE5, LINE6 PREVIDIA-M-EXP 1	Terminal LINE6								Terminal LINE5							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
725	Terminals LINE7, LINE8 PREVIDIA-M- EXP 1	Terminal LINE8								Terminal LINE7							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
734	Terminals LINE1, LINE2 PREVIDIA-M- EXP 4	Terminal LINE2								Terminal LINE1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
735	Terminals LINE3, LINE4 PREVIDIA-M- EXP 4	Terminal LINE4								Terminal LINE3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
736	Terminals LINE5, LINE6 PREVIDIA-M- EXP 4	Terminal LINE6								Terminal LINE5							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
737	Terminals LINE7, LINE8 PREVIDIA-M- EXP 4	Terminal LINE8								Terminal LINE7							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
738	Control panel terminals T1, T2	Terminal T2								Terminal T1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
739	Control panel terminals T3, T4	Terminal T4								Terminal T3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
740	Terminals T1, T2 PREVIDIA-M- EXP 1	Terminal T2								Terminal T1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
741	Terminals T3, T4 PREVIDIA-M- EXP 1	Terminal T4								Terminal T3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
742	Terminals T5, T6 PREVIDIA-M- EXP 1	Terminal T6								Terminal T5							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
749	Terminals T1, T2 PREVIDIA-M- EXP 4	Terminal T2								Terminal T1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
750	Terminals T3, T4 PREVIDIA-M-EXP 4	Terminal T4								Terminal T3							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
751	Terminals T5, T6 PREVIDIA-M-EXP 4	Terminal T6								Terminal T5							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
900	Control panel channels I/O 1, I/O 2	Channel I/O 2								Channel I/O 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
901	Control panel channel AUX Channel I/O PREVIDIA-M-EXP 1	Channel I/O PREVIDIA-M-EXP 1								Channel AUX							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
902	Channels I/O PREVIDIA-M-EXP 2 PREVIDIA-M-EXP 3	Channel I/O PREVIDIA-M-EXP 3								Channel I/O PREVIDIA-M-EXP 2							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
903	Channel I/O PREVIDIA-M-EXP 4									Channel I/O PREVIDIA-M-EXP 4							
										Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
932	Relay output									Relay output							
										Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
1000	Information not shared over Hornet																Re-arm control panel
1001	Gas zone control panel terminal L1	Gas value															
1002		TWA1 value															
1003		TWA2 value															
1004		TWA3 value															
...	...																
1013	Gas zone control panel terminal L4	Gas value															
1014		TWA1 value															
1015		TWA2 value															
1016		TWA3 value															
1017	Gas zone control panel terminal T1	Gas value															
1018		TWA1 value															
1019		TWA2 value															
1020		TWA3 value															
...	...																

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
1029	Gas zone control panel terminal T4	Gas value															
1030		TWA1 value															
1031		TWA2 value															
1032		TWA3 value															
1033	Gas zone Terminal LINE1 PREVIDIA-M- EXP 1	Gas value															
1034		TWA1 value															
1035		TWA2 value															
1036		TWA3 value															
...	...																
1061	Gas zone Terminal LINE8 PREVIDIA-M- EXP 1	Gas value															
1062		TWA1 value															
1063		TWA2 value															
1064		TWA3 value															
1065	Gas zone Terminal T1 PREVIDIA-M- EXP 1	Gas value															
1066		TWA1 value															
1067		TWA2 value															
1068		TWA3 value															
...	...																
1085	Gas zone Terminal T6 PREVIDIA-M- EXP 1	Gas value															
1086		TWA1 value															
1087		TWA2 value															
1088		TWA3 value															
1089	Gas zone Terminal LINE1 PREVIDIA-M- EXP 2	Gas value															
1090		TWA1 value															
1091		TWA2 value															
1092		TWA3 value															
...	...																
1117	Gas zone Terminal LINE8 PREVIDIA-M- EXP 2	Gas value															
1118		TWA1 value															
1119		TWA2 value															
1120		TWA3 value															
1121	Gas zone Terminal T1 PREVIDIA-M- EXP 2	Gas value															
1122		TWA1 value															
1123		TWA2 value															
1124		TWA3 value															
...	...																
1141	Gas zone Terminal T6 PREVIDIA-M- EXP 2	Gas value															
1142		TWA1 value															
1143		TWA2 value															
1144		TWA3 value															
1145	Gas zone Terminal LINE1 PREVIDIA-M- EXP 3	Gas value															
1146		TWA1 value															
1147		TWA2 value															
1148		TWA3 value															

Registers for Previdia Micro control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
...	...																
1173	Gas zone Terminal LINE8 PREVIDIA-M- EXP 3	Gas value															
1174		TWA1 value															
1175		TWA2 value															
1176		TWA3 value															
1177	Gas zone Terminal T1 PREVIDIA-M- EXP 3	Gas value															
1178		TWA1 value															
1179		TWA2 value															
1180		TWA3 value															
...	...																
1197	Gas zone Terminal T6 PREVIDIA-M- EXP 3	Gas value															
1198		TWA1 value															
1199		TWA2 value															
1200		TWA3 value															
1201	Gas zone Terminal LINE1 PREVIDIA-M- EXP 4	Gas value															
1202		TWA1 value															
1203		TWA2 value															
1204		TWA3 value															
...	...																
1229	Gas zone Terminal LINE8 PREVIDIA-M- EXP 4	Gas value															
1230		TWA1 value															
1231		TWA2 value															
1232		TWA3 value															
1233	Gas zone Terminal T1 PREVIDIA-M- EXP 4	Gas value															
1234		TWA1 value															
1235		TWA2 value															
1236		TWA3 value															
...	...																
1253	Gas zone Terminal T6 PREVIDIA-M- EXP 4	Gas value															
1254		TWA1 value															
1255		TWA2 value															
1256		TWA3 value															

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	Control panel details Status 1	Access with levels 1-4				Silenced Buzzer		Silenced					Disabled	Fault	Staff Alert	Alert	Evacuation
1	Control panel details Status 2	Local disablement	Local fault	Local alert	Local evacuation	Emergency						Fault on ground (earth)	RT network	Fault on network	Low battery	Fault on battery	
2	Modules fault		Missing IHornet module			IFM16IO 4 module fault	IFM16IO 3 module fault	IFM16IO 2 module fault	IFM16IO 1 module fault								
5	IFM4IO module fault	IFM4IO 16 module fault	IFM4IO 15 module fault	IFM4IO 14 module fault	IFM4IO 13 module fault	IFM4IO 12 module fault	IFM4IO 11 module fault	IFM4IO 10 module fault	IFM4IO 9 module fault	IFM4IO 8 module fault	IFM4IO 7 module fault	IFM4IO 6 module fault	IFM4IO 5 module fault	IFM4IO 4 module fault	IFM4IO 3 module fault	IFM4IO 2 module fault	IFM4IO 1 module fault
6	Front-plate modules fault					Power-supply module 4 fault	Power-supply module 3 fault	Power-supply module 2 fault	Power-supply module 1 fault		FPMLED 7 module fault	FPMLED 6 module fault	FPMLED 5 module fault	FPMLED 4 module fault	FPMLED 3 module fault	FPMLED 2 module fault	FPMLED 1 module fault
7	IFM4R module fault	IFM4R 16 module fault	IFM4R 15 module fault	IFM4R 14 module fault	IFM4R 13 module fault	IFM4R 12 module fault	IFM4R 11 module fault	IFM4R 10 module fault	IFM4R 9 module fault	IFM4R 8 module fault	IFM4R 7 module fault	IFM4R 6 module fault	IFM4R 5 module fault	IFM4R 4 module fault	IFM4R 3 module fault	IFM4R 2 module fault	IFM4R 1 module fault
600	Outputs group 1	Group 2								Group 1							
	Outputs group 2	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
719	Outputs group 239	Group 240								Group 239							
	Outputs group 240	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
868	IFM16IO 1 Module channels 1, 2	IFM16IO 1 Module, channel 2								IFM16IO 1 Module, channel 1							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm
...	...																
899	IFM16IO 4 Module channels 15, 16	IFM16IO 4 Module, channel 16								IFM16IO 4 Module, channel 15							
		Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Do not use	Disabled	Do not use	Early warning	Pre-alarm	Alarm

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
900	IFM4IO 1 Module channels 1, 2	IFM4IO 1 Module, channel 2								IFM4IO 1 Module, channel 1							
		Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Input activated in test mode	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
931	IFM4IO 16 Module channels 3, 4	IFM4IO 16 Module, channel 4								IFM4IO 16 Module, channel 3							
		Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
...	...																
932	Module IFM4R 1 channels 1, 2	IFM4R 1 Module, channel 2								IFM4R 1 Module, channel 1							
		Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
...	...																
963	Module IFM4R 16 channels 3, 4	IFM4R 16 Module, channel 4								IFM4R 16 Module, channel 3							
		Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
...	...																
964	Power-supply module 1 output 1 Output 2	Power-supply module 1, output 2								Power-supply module 1, output 1							
		Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
965	Power-supply module 1, output 3 Power-supply module 2, output 1	Power-supply module 2, output 1								Power-supply module 1, output 3							
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
966	Power-supply module 2 output 2 output 3	Power-supply module 2, output 3								Power-supply module 2, output 2							
		Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
967	Power-supply module 3 output 1 output 2	Power-supply module 3, output 2								Power-supply module 3, output 1							
		Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Output status	Disabled	Do not use	Do not use	Do not use	Do not use
968	Power-supply module 3, output 3 Power-supply module 4, output 1	Power-supply module 4, output 1								Power-supply module 3, output 3							
		Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm	Do not use	Do not use	Output status	Disabled	Fault	Early warning	Pre-alarm	Alarm
969	Power-supply module 4 output 2 output 3	Power-supply module 4, output 3								Power-supply module 4, output 2							
		Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use	Do not use	Do not use	Output status	Disabled	Fault	Do not use	Do not use	Do not use
1000	Information not shared over Hornet/IDANet															Re-arm the control panel	

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte								
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	
3000	Audio zone 1 Byte 1 Byte 2	Status																
		Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Now playing	Pause	Speakerphone	Disabled	Fault	Staff Alert	Alert	Evacuation
3001	Audio zone 1 Byte 3 Byte 4	Source																
		Identifier								Control panel								
3002	Audio zone 1 Byte 5 Byte 6	Do not use																
		Do not use								Priority								
...																		
5997	Audio zone 1000 Byte 1 Byte 2	Status																
		Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Now playing	Pause	Speakerphone	Disabled	Fault	Staff Alert	Alert	Evacuation
5998	Audio zone 1000 Byte 3 Byte 4	Source																
		Identifier								Control panel								
5999	Audio zone 1000 Byte 5 Byte 6	Do not use																
		Do not use								Priority								
6000	Internal audio channel 1 Byte 1 Byte 2	Source																
		Identifier								Control panel								
6001	Internal audio channel 1 Byte 3 Byte 4	Byte mask zone 1								Status								
		Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1	Do not use	Do not use	Now playing	Message playback finished	Silenced	Pause	Message playback	Speakerphone	
...																		
6063	Internal audio channel 1 Byte 127 Byte 128	Byte mask zone 125								Byte mask zone 124								
		Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993	Audio Zone 992	Audio Zone 991	Audio Zone 990	Audio Zone 989	Audio Zone 988	Audio Zone 987	Audio Zone 986	Audio Zone 985	
6064	Internal audio channel 1 Byte 129 Byte 130	Do not use																
		Do not use								Priority								
6065	Internal audio channel 1 Byte 131 Byte 132	Source																
		Character Label 1								Character Label 0								
6066	Internal audio channel 1 Byte 133 Byte 134	Source																
		Character Label 3								Character Label 2								
...																		

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
6074	Internal audio channel 1 Byte 149 Byte 150	Source															
		Character Label 19								Character Label 18							
6075	Internal audio channel 1 Byte 151 Byte 152	Cause identifier Control panel															
		Identifier								Control panel							
6076	Internal audio channel 1 Byte 153 Byte 154	Cause															
		Character Label 1								Character Label 0							
6077	Internal audio channel 1 Byte 155 Byte 156	Cause															
		Character Label 3								Character Label 2							
...																	
6085	Internal audio channel 1 Byte 171 Byte 172	Cause															
		Character Label 19								Character Label 18							
6086	Internal audio channel 1 Byte 1 Byte 2	Source identifier Control panel															
		Identifier								Control panel							
...																	
6087	Internal audio channel 2 Byte 3 Byte 4	Byte mask zone 1								Status							
		Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1	Do not use	Do not use	Now playing	Message playback finished	Silenced	Pause	Message playback	Speakerphone
...																	
6149	Internal audio channel 2 Byte 127 Byte 128	Byte mask zone 125								Byte mask zone 124							
		Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993	Audio Zone 992	Audio Zone 991	Audio Zone 990	Audio Zone 989	Audio Zone 988	Audio Zone 987	Audio Zone 986	Audio Zone 985
6150	Internal audio channel 2 Byte 129 Byte 130	Do not use								Priority							
6151	Internal audio channel 2 Byte 131 Byte 132	Source															
		Character Label 1								Character Label 0							
6152	Internal audio channel 2 Byte 133 Byte 134	Source															
		Character Label 3								Character Label 2							
...																	
6160	Internal audio channel 2 Byte 149 Byte 150	Source															
		Character Label 19								Character Label 18							
6161	Internal audio channel 2 Byte 151 Byte 152	Cause															
		Identifier								Control panel							

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
6162	Internal audio channel 2 Byte 153 Byte 154	Cause															
		Character Label 1								Character Label 0							
6163	Internal audio channel 2 Byte 155 Byte 156	Cause															
		Character Label 3								Character Label 2							
...																	
6171	Internal audio channel 2 Byte 171 Byte 172	Cause															
		Character Label 19								Character Label 18							
...																	
6602	Internal audio channel 8 Byte 1 Byte 2	Source															
		Identifier								Control panel							
6603	Internal audio channel 8 Byte 3 Byte 4	Byte mask zone 1								Status							
		Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1	Do not use	Do not use	Now playing	Message playback finished	Silenced	Pause	Message playback	Speakerphone
...																	
6665	Internal audio channel 8 Byte 127 Byte 128	Byte mask zone 125								Byte mask zone 124							
		Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993	Audio Zone 992	Audio Zone 991	Audio Zone 990	Audio Zone 989	Audio Zone 988	Audio Zone 987	Audio Zone 986	Audio Zone 985
6666	Internal audio channel 8 Byte 129 Byte 130	Do not use								Priority							
6667	Internal audio channel 8 Byte 131 Byte 132	Source															
		Character Label 1								Character Label 0							
6668	Internal audio channel 8 Byte 133 Byte 134	Source															
		Character Label 3								Character Label 2							
...																	
6676	Internal audio channel 8 Byte 149 Byte 150	Source															
		Character Label 19								Character Label 18							
6677	Internal audio channel 8 Byte 151 Byte 152	Cause															
		Identifier								Control panel							
6678	Internal audio channel 8 Byte 153 Byte 154	Cause															
		Character Label 1								Character Label 0							

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
6679	Internal audio channel 8 Byte 155 Byte 156	Cause															
		Character Label 3								Character Label 2							
...																	
6687	Internal audio channel 8 Byte 171 Byte 172	Cause															
		Character Label 19								Character Label 18							
6688	External audio channel 1 Byte 1 Byte 2	Source															
		Identifier								Control panel							
6689	External audio channel 1 Byte 3 Byte 4	Byte mask zone 1								Status							
		Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1	Do not use	Do not use	Now playing	Message playback finished	Silenced	Pause	Message playback	Speakerphone
...																	
6751	External audio channel 1 Byte 127 Byte 128	Byte mask zone 125								Byte mask zone 124							
		Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993	Audio Zone 992	Audio Zone 991	Audio Zone 990	Audio Zone 989	Audio Zone 988	Audio Zone 987	Audio Zone 986	Audio Zone 985
6752	External audio channel 1 Byte 129 Byte 130	Do not use								Priority							
		Source															
6753	External audio channel 1 Byte 131 Byte 132	Do not use								Character Label 0							
		Source															
6754	External audio channel 1 Byte 133 Byte 134	Character Label 3								Character Label 2							
6762	External audio channel 1 Byte 149 Byte 150	Source															
		Character Label 19								Character Label 18							
6763	External audio channel 1 Byte 151 Byte 152	Cause (Do not use)															
		Identifier								Control panel							
6764	External audio channel 1 Byte 153 Byte 154	Cause															
		Do not use								Character Label 0							
6765	External audio channel 1 Byte 155 Byte 156	Cause															
		Character Label 3								Character Label 2							
...																	
6773	External audio channel 1 Byte 171 Byte 172	Cause															
		Character Label 19								Character Label 18							

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
...																	
7290	External audio channel 8 Byte 1 Byte 2	Source								Control panel							
		Identifier															
7291	External audio channel 8 Byte 3 Byte 4	Byte mask zone 1								Status							
		Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1	Do not use	Do not use	Now playing	Message playback finished	Silenced	Pause	Message playback	Speakerphone
...																	
7353	External audio channel 8 Byte 127 Byte 128	Byte mask zone 125								Byte mask zone 124							
		Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993	Audio Zone 992	Audio Zone 991	Audio Zone 990	Audio Zone 989	Audio Zone 988	Audio Zone 987	Audio Zone 986	Audio Zone 985
7354	External audio channel 8 Byte 129 Byte 130	Do not use								Priority							
7355	External audio channel 8 Byte 131 Byte 132	Source								Character Label 0							
		Do not use															
7356	External audio channel 8 Byte 133 Byte 134	Source								Character Label 2							
		Character Label 3															
...																	
7364	External audio channel 8 Byte 149 Byte 150	Source								Character Label 18							
		Character Label 19															
7365	External audio channel 8 Byte 151 Byte 152	Cause (Do not use)								Control panel							
		Identifier															
7366	External audio channel 8 Byte 153 Byte 154	Cause								Character Label 0							
		Do not use															
7367	External audio channel 8 Byte 155 Byte 156	Cause								Character Label 2							
		Character Label 3															
...																	
7375	External audio channel 8 Byte 171 Byte 172	Cause								Character Label 18							
		Character Label 19															
7376	Audio timers active 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1
7377	Audio timers active 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
7378	Audio timers disabled 1	Timer 16	Timer 15	Timer 14	Timer 13	Timer 12	Timer 11	Timer 10	Timer 9	Timer 8	Timer 7	Timer 6	Timer 5	Timer 4	Timer 3	Timer 2	Timer 1

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
7379	Audio timers disabled 2	Timer 32	Timer 31	Timer 30	Timer 29	Timer 28	Timer 27	Timer 26	Timer 25	Timer 24	Timer 23	Timer 22	Timer 21	Timer 20	Timer 19	Timer 18	Timer 17
7380	Audio sources fault	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Source 10	Source 9	Source 8	Source 7	Source 6	Source 5	Source 4	Source 3	Source 2	Source 1
7381	Audio sources disabled	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Source 10	Source 9	Source 8	Source 7	Source 6	Source 5	Source 4	Source 3	Source 2	Source 1
7382	Audio sources playing	Do not use	Do not use	Do not use	Do not use	Do not use	Do not use	Source 10	Source 9	Source 8	Source 7	Source 6	Source 5	Source 4	Source 3	Source 2	Source 1
7383	Audio Amplifiers fault 1	Amplifier 16	Amplifier 15	Amplifier 14	Amplifier 13	Amplifier 12	Amplifier 11	Amplifier 10	Amplifier 9	Amplifier 8	Amplifier 7	Amplifier 6	Amplifier 5	Amplifier 4	Amplifier 3	Amplifier 2	Amplifier 1
7384	Audio Amplifiers fault 2	Amplifier 32	Amplifier 31	Amplifier 30	Amplifier 29	Amplifier 28	Amplifier 27	Amplifier 26	Amplifier 25	Amplifier 24	Amplifier 23	Amplifier 22	Amplifier 21	Amplifier 20	Amplifier 19	Amplifier 18	Amplifier 17
7385	Audio Amplifiers disabled 1	Amplifier 16	Amplifier 15	Amplifier 14	Amplifier 13	Amplifier 12	Amplifier 11	Amplifier 10	Amplifier 9	Amplifier 8	Amplifier 7	Amplifier 6	Amplifier 5	Amplifier 4	Amplifier 3	Amplifier 2	Amplifier 1
7386	Audio Amplifiers disabled 2	Amplifier 32	Amplifier 31	Amplifier 30	Amplifier 29	Amplifier 28	Amplifier 27	Amplifier 26	Amplifier 25	Amplifier 24	Amplifier 23	Amplifier 22	Amplifier 21	Amplifier 20	Amplifier 19	Amplifier 18	Amplifier 17
7387	FFT audio faults 1	FFT 4				FFT 3				FFT 2				FFT 1			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7388	FFT audio faults 2	FFT 8				FFT 7				FFT 6				FFT 5			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7389	FFT audio faults 3	FFT 12				FFT 11				FFT 10				FFT 9			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7390	FFT audio faults 4	FFT 16				FFT 15				FFT 14				FFT 13			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7391	FFT audio disabled 1	FFT 4				FFT 3				FFT 2				FFT 1			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7392	FFT audio disabled 2	FFT 8				FFT 7				FFT 6				FFT 5			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7393	FFT audio disabled 3	FFT 12				FFT 11				FFT 10				FFT 9			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7394	FFT audio disabled 4	FFT 16				FFT 15				FFT 14				FFT 13			
		Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1	Riser 4	Riser 3	Riser 2	Riser 1
7395	Control panel Label Byte 1 Byte 2	Character Label 1								Character Label 0							
7396	Control panel label Byte 133 Byte 134	Character Label 3								Character Label 2							

Registers for the Previdia Ultra emergency voice control panels (use Modbus 0x04 command to read)

Address	Name	High byte								Low byte							
		Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
...																	
7404	Control panel Label Byte 149 Byte 150	Character Label 19								Character Label 19							
7405	Local faults audio zone Byte 1 Byte 2	Byte mask zone 2								Byte mask zone 1							
		Audio Zone 16	Audio Zone 15	Audio Zone 14	Audio Zone 13	Audio Zone 12	Audio Zone 11	Audio Zone 10	Audio Zone 9	Audio Zone 8	Audio Zone 7	Audio Zone 6	Audio Zone 5	Audio Zone 4	Audio Zone 3	Audio Zone 2	Audio Zone 1
...																	
7467	Local faults audio zone Byte 125 Byte 126	Do not use								Byte mask zone 125							
										Audio Zone 1000	Audio Zone 999	Audio Zone 998	Audio Zone 997	Audio Zone 996	Audio Zone 995	Audio Zone 994	Audio Zone 993
7469	Line A Byte 1 Byte 2	Microphone base 2								Microphone base 1							
		Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost	Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost
...																	
7500	Line A Byte 63 Byte 64	Microphone base 64								Microphone base 63							
		Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost	Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost
7501	Line B Byte 1 Byte 2	Microphone base 2								Microphone base 1							
		Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost	Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost
...																	
7532	Line B Byte 63 Byte 64	Microphone base 64								Microphone base 63							
		Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost	Do not use	Do not use	Do not use	Do not use	Emergency	Microphone fault	Enrolled	Lost

3.1.2 COIL Mapping

By means of the "WRITE SINGLE COIL" command it is possible to carry out operations on the addressed control panel. To activate a COIL command relative to the implementation of an operation it is necessary to set it to "ON".

Following is the map of COIL registers:

FPMCPU COIL (use the Modbus 0x05 command)

Address	Name for Previdia Max and Ultra	Address	Name for Previdia Max and Ultra
0	Activate "Action 1"	5500	Enable/Disable relay 1 of the IFM4R 1 module
...
99	Activate "Action 100"	5563	Enable/Disable relay 4 of the IFM4R 16 module
100	Enable/Disable Zone 1	5600	Enable/Disable output 1 of power-supply 1
...
1099	Enable/Disable Zone 1000	5611	Enable/Disable output 1 of power-supply 4
1100	Activate/Deactivate I/O 1 of IFM4IO 1 module	5700	Enable/Disable address 1 of loop 1
...
1163	Activate/Deactivate I/O 4 of IFM4IO 16 module	9540	Enable/Disable address 240 of loop 16
1200	Activate/Deactivate relay 1 of the IFM4R 1 module	20000	Perform test for zone 1
...
1263	Activate/Deactivate relay 4 of the IFM4R 16 module	20999	Perform test for zone 1000
1300	Activate/Deactivate output 1 of power-supply module 1	21000	Set day mode
...	...	21001	Switch off buzzer
1311	Activate/Deactivate output 3 of power-supply module 4	21002	Silence
1400	Activate/Deactivate output of device with address 1 of loop 1	21003	Investigation
...	...	21004	End pre-alarms
5239	Activate/Deactivate output of device with address 240 of loop 16	21005	Re-arm
5400	Enable/Disable I/O 1 of IFM4IO 1 module		
...	...		
5463	Enable/Disable I/O 4 of IFM4IO 16 module		

Previdia Compact COIL (use the Modbus 0x05 command)

Address	Name for Previdia Compact
0	Activate "Action 1"
...	...
99	Activate "Action 100"
100	Enable/Disable Zone 1
...	...
1099	Enable/Disable Zone 1000
1100	Activate/Deactivate I/O 1
...	...
1103	Activate/Deactivate I/O 4
1200	Activate/Deactivate relay
1400	Activate/Deactivate output of device with address 1 of loop 1
...	...
1879	Activate/Deactivate loop 2 address 240 device's output
5400	Enable/Disable I/O 1
...	...
5403	Enable/Disable I/O 4

Address	Name for Previdia Compact
5500	Enable/Disable relay
5700	Enable/Disable address 1 of loop 1
...	...
6179	Enable/Disable address 240 of loop 2
20000	Perform test for zone 1
...	...
20999	Perform test for zone 1000
21000	Set day mode
21001	Switch off buzzer
21002	Silence
21003	Investigation
21004	End pre-alarms
21005	Re-arm

Previdia Micro COIL (use the Modbus 0x05 command)

Address	Name for Previdia Micro	Address	Name for Previdia Micro
0	Activate "Action 1"	10100	Enable/Disable control panel L1
...
99	Activate "Action 100"	10103	Enable/Disable control panel L4
100	Enable/Disable Zone 1	10104	Enable/Disable LINE1 PREVIDIA-M-EXP 1
...
169	Enable/Disable Zone 70	10111	Enable/Disable LINE8 PREVIDIA-M-EXP 1
1100	Activate/Deactivate control panel I/O 1	10112	Enable/Disable LINE1 PREVIDIA-M-EXP 2
1101	Activate/Deactivate control panel I/O 2	...	...
1102	Activate/Deactivate control panel AUX	10119	Enable/Disable LINE8 PREVIDIA-M-EXP 2
1103	Activate/Deactivate I/O PREVIDIA-M-EXP 1	10120	Enable/Disable LINE1 PREVIDIA-M-EXP 3
1104	Activate/Deactivate I/O PREVIDIA-M-EXP 2	...	...
1105	Activate/Deactivate I/O PREVIDIA-M-EXP 3	10127	Enable/Disable LINE8 PREVIDIA-M-EXP 3
1106	Activate/Deactivate I/O PREVIDIA-M-EXP 4	10128	Enable/Disable LINE1 PREVIDIA-M-EXP 4
1200	Activate/Deactivate relay	...	...
5400	Enable/Disable control panel I/O 1	10135	Enable/Disable LINE8 PREVIDIA-M-EXP 4
5401	Enable/Disable control panel I/O 2	10200	Enable/Disable control panel T1
5402	Enable/Disable control panel AUX	...	...
5403	Enable/Disable I/O PREVIDIA-M-EXP 1	10203	Enable/Disable control panel T4
5404	Enable/Disable I/O PREVIDIA-M-EXP 2	10204	Enable/Disable T1 PREVIDIA-M-EXP 1
5405	Enable/Disable I/O PREVIDIA-M-EXP 3	...	...
5406	Enable/Disable I/O PREVIDIA-M-EXP 4	10209	Enable/Disable T6 PREVIDIA-M-EXP 1
5500	Enable/Disable relay	10210	Enable/Disable T1 PREVIDIA-M-EXP 2
10000	Activate/Deactivate control panel output T1	...	...
...	...	10215	Enable/Disable T6 PREVIDIA-M-EXP 2
10003	Activate/Deactivate control panel output T4	10216	Enable/Disable T1 PREVIDIA-M-EXP 3
10004	Activate/Deactivate output T1 PREVIDIA-M-EXP 1	...	...
...	...	10221	Enable/Disable T6 PREVIDIA-M-EXP 3
10009	Activate/Deactivate output T6 PREVIDIA-M-EXP 1	10222	Enable/Disable T1 PREVIDIA-M-EXP 4
10010	Activate/Deactivate output T1 PREVIDIA-M-EXP 2	...	...
...	...	10227	Enable/Disable T6 PREVIDIA-M-EXP 4
10015	Activate/Deactivate output T6 PREVIDIA-M-EXP 2	20000	Perform test for zone 1
10016	Activate/Deactivate output T1 PREVIDIA-M-EXP 3	...	...
...	...	20069	Perform test for zone 70
10021	Activate/Deactivate output T6 PREVIDIA-M-EXP 3	21000	Set day mode
10022	Activate/Deactivate output T1 PREVIDIA-M-EXP 4	21001	Switch off buzzer
...	...	21002	Silence
10027	Activate/Deactivate output T6 PREVIDIA-M-EXP 4	21003	Investigation
		21004	End pre-alarms
		21005	Re-arm

FPAMIAS COIL (use the Modbus 0x05 command)

Address	Name for Previdia Ultra	Address	Name for Previdia Ultra
1100	Enable/Disable I/O 1 of IFM4IO 1 module	5500	Enable/Disable relay 1 of the IFM4R 1 module
...
1163	Activate/Deactivate I/O 4 of IFM4IO 16 module	5563	Enable/Disable relay 4 of the IFM4R 16 module
1200	Enable/Disable relay 1 of the IFM4R 1 module	5600	Enable/Disable output 1 of power-supply 1
...
1263	Activate/Deactivate relay 4 of the IFM4R 16 module	5611	Enable/Disable output 1 of power-supply 4
1300	Activate/Deactivate output 1 of the power-supply module 1	30000	Enable/Disable audio zone 1
...
1311	Activate/Deactivate output 3 of power-supply module 4	30999	Enable/Disable audio zone 1000
1400	Activate/Deactivate output of device with address 1 of loop 1	34000	Enable/Disable audio action 1
...
5239	Activate/Deactivate output of device with address 240 of loop 16	34999	Enable/Disable audio action 1000
5400	Enable/Disable I/O 1 of IFM4IO 1 module	35000	Audio emergency
...	...	35001	Switch off audio buzzer
5463	Enable/Disable I/O 4 of IFM4IO 16 module	35002	Switch off audio
		35004	Reset audio

3.2 BACnet

BACnet is a building-automation-network communication protocol developed by ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers). BACnet, as a result of its versatility and flexibility, is now extensively used as a standard communication protocol between devices and building-automation systems made by various manufacturers.

BACnet protocol is implemented on the IFMLAN module for Previdia Max and Ultra control panels and on the PREVIDIA-C-COM-LAN module for Previdia Compact and Micro control panels, and its use is subject to a licence.

3.2.1 BACnet licence

The licences for use of the BACnet protocol on Previdia control panels must be purchased from Inim Electronics.

The order codes are as follows:

- **PRALICBAC500**, BACnet protocol licence Previdia, 500 points
- **PRALICBAC1000**, BACnet protocol licence Previdia, 1000 points
- **PRALICBAC1500**, BACnet protocol licence Previdia, 1500 points
- **PRALICBAC2000**, BACnet protocol licence Previdia, 2000 points

3.2.2 Licence activation procedure

1. In order to activate the licence you must communicate the following data to Inim:

- the licence number shown in the letter *[A]*
- the serial number of the LAN module in use *[B]* (IFMLAN for Previdia Max or Ultra and PREVIDIA-C-COM for Previdia Compact or Micro). This data can be found in the software solution of the Previdia being configured, by going to the programming section of the module in the control panel.

2. The activation of the licence can be carried via e-mail or web.brower.

Via e-mail: send an e-mail to service-previdia@inim.it containing the numbers previously indicated. You will receive an e-mail containing a file block which corresponds to the actual licence, required to block BACnet functionality.

Via web: by connecting to the service-previdia.inimcloud.com website it is possible to request the activation of a BACnet licence. After providing the previously mentioned data, the website will send you a file which corresponds to the actual licence.

3. After receiving the block file you must go back to the software solution associated with the control panel you are configuring. In the LAN module programming section you must go to the "Settings" subsection and enable the "Enable BACnet" option *[C]*.

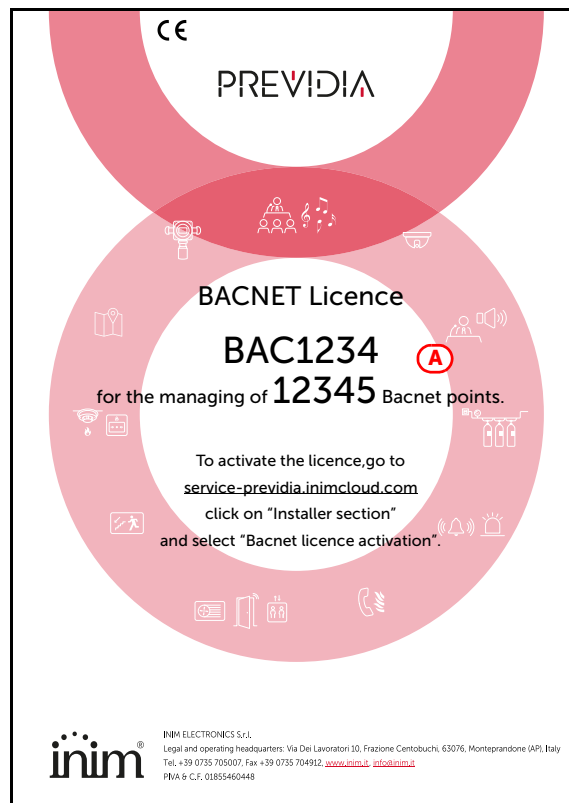
4. Enter the following data in the fields below *[D]*, for communication with the provider:

- BACnet device name
- BACnet device ID
- Password BACnet

5. Go to the "BACnet" subsection *[E]*. This section provides the **Load licence file** button which allows you to inform the software of the location of the received file inside the computer.

6. Clicking on the **Activate licence** button, sends the licence to the LAN module.

Following the activation of the licence it is possible to perform the integration of the Previdia system using the BACnet protocol.



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PREVIDIA

System > Control panel xyz > IFMLAN

Serial No. SNSNSNSN

IP 192.100.1.100

Netmask 255.255.255.0

Gateway 192.100.1.200

DNS server 192.100.1.300

Time zone Europe

Enable Silence via web Enable reset via web

Enable SSL

Communication port 6001

Web server port 80

Read control panel status via IP

BACNET SETTINGS

Enable BACNET

Name of the device Control panel BACNET

ID device XYZ

Password pass

MAIL SETTINGS

DYNAMIC DNS SETTINGS

NTP SERVER SETTINGS

SIA-IP PROTOCOL SETTINGS

WEB SERVER SETTINGS

ESPA444 SETTINGS

SLOOP LOG

SMART484IN

3.2.3 BACnet objects

Following are the BACnet objects made available by Previdia and their essential features. For licencing purposes, each of the objects belonging to the typology listed below constitutes a "point".

- Life Safety Point
- Binary Input
- Binary Output
- Life Safety Zone

Life Safety Point

The "life safety point" comprises objects that represent the "status" and the "mode" of a specific point included in the following:

- Loop point
- I/O channel (on board or as an accessory module)
- Extinguishment channel (only one point for each module in the case of IFMEXT module)

The "status" is a numeric value that provides info about the alarm or fault status of the point. This value can be:

- Status = 0 (LIFE_SAFETY_STATE_QUIET): the point is "ready" or bypassed
- Status = 1 (LIFE_SAFETY_STATE_PRE_ALARM): the point is in pre-alarm status
- Status = 2 (LIFE_SAFETY_STATE_ALARM): the point is in alarm status
- Status = 3 (LIFE_SAFETY_STATE_FAULT): the point is in fault status
- Status = 4 (LIFE_SAFETY_STATE_FAULT_PRE_ALARM): the point is in fault and pre-alarm status both
- Status = 5 (LIFE_SAFETY_STATE_FAULT_ALARM): the point is in fault and alarm status both

In the case of an extinguishment channel, the status parameter can be:

- Status = 0 (LIFE_SAFETY_STATE_QUIET): the channel is "ready" or bypassed
- Status = 1 (LIFE_SAFETY_STATE_PRE_ALARM): the channel is in pre-extinguish timeout
- Status = 2 (LIFE_SAFETY_STATE_ALARM): the channel status is in "extinguish released"
- Status = 3 (LIFE_SAFETY_STATE_FAULT): the channel is in fault status
- Status = 4 (LIFE_SAFETY_STATE_FAULT_PRE_ALARM): the channel is in fault status and pre-extinguish timeout both
- Status = 5 (LIFE_SAFETY_STATE_FAULT_ALARM): If the channel is in fault and "extinguish released" status both

The "mode" is a numeric value that shows the point bypassing status. This value can be:

- Mode = 1 (LIFE_SAFETY_MODE_ON): the point is not bypassed
- Mode = 12 (LIFE_SAFETY_MODE_DISABLED): the point is bypassed

In the case of an extinction channel, the mode parameter can be:

- Mode = 1 (LIFE_SAFETY_MODE_ON): the extinction is not bypassed
- Mode = 12 (LIFE_SAFETY_MODE_DISABLED): the channel is disabled automatically or manually
- Mode = 13 (LIFE_SAFETY_MODE_AUTOMATIC_RELEASE_DISABLED): only the automatic extinction of the channel is disabled

It is possible to change this value, in order to bypassed or not the point or the extinction channel.

Life Safety Zone

The "life safety zone" comprises objects that indicate the "status" and the "mode" of a zone. Therefore, they can be associated with the zones of the control panel that are linked to points.

The "status" is a numeric value that provides info about the alarm or fault status of the zone. This value can be:

- Status = 0 (LIFE_SAFETY_STATE_QUIET): the zone is "ready" or bypassed
- Status = 1 (LIFE_SAFETY_STATE_PRE_ALARM): the zone is in pre-alarm status
- Status = 2 (LIFE_SAFETY_STATE_ALARM): the zone is in alarm status
- Status = 3 (LIFE_SAFETY_STATE_FAULT): the zone is in fault status
- Status = 4 (LIFE_SAFETY_STATE_FAULT_PRE_ALARM): the zone is in fault and pre-alarm status both
- Status = 5 (LIFE_SAFETY_STATE_FAULT_ALARM): the zone is in fault and alarm status both

The "mode" is a numeric value that shows the zone bypassing status. This value can be:

- Mode = 1 (LIFE_SAFETY_MODE_ON): the zone is not bypassed
- Mode = 12 (LIFE_SAFETY_MODE_DISABLED): the zone is bypassed

It is possible to change this value, in order to bypassed or not the zone.

Binary Output

This object represents the status of any of the control panel outputs.

It is possible to change the status through the BACnet protocol. The "Binary output" objects of the Previdia control panel are the:

- Loop point
- I/O channel (on board or as an accessory module)
- Relay output (on board or as an accessory module)
- Actions on control panel

The actions on the control panel allow you to interact with the system. These are actions such as "silence sounders", "rearm control panel" or "investigate".

Binary Input

These objects represent the status of any of the control panel inputs, therefore, is possible to view the status but not set it. On the Previdia control panel they are used for the viewing of some control panel conditions.

- Alarm
- Pre-alarm
- Fault
- Disable
- Night mode
- Sounder silenced
- Investigate

3.2.4 Creation of BACnet points via software

To create BACnet points it is necessary to open the software, load the Hornet+ control panel software solution concerned, access the respective page for programming a LAN module and, finally, access the "BACnet" section.

This section provides the tools for the creation of life safety points. The other three sections ("Life safety zone", "Binary input" and "Binary output") function in the same way.

1. Select the control-panel point typology by means of the appropriate check boxes with dropdown menus [A]. In the section below [B] a list of points that correspond to the selection made will appear.
2. From the list select or deselect the BACnet points you wish to create.

- Click on **Add** [C]. From this moment on, the selected points will be shown in the "Life safety point" list[D]. The points in this section can be removed from the list by simply unticking the corresponding boxes.
- Click on the **Write** button [E] to send the programming to the control panel.

This procedure is valid for all BACnet point typologies.

System > Control panel xyz > IFMLAN

Control panel: Control panel xyz
 ID device: IFM2L
 Module: IFM2Lx

Point	Label	Index
Control panel xyz	Room 1	1
Control panel xyz	Room 2	2
Control panel xyz	Room 3	3
Control panel xyz	Room 4	4
Control panel xyz	Room 5	5
Control panel xyz	Room 6	6

Point	Label	Index
Centrale xyz	Office 1	1
Control panel xyz	Office 2	2
Control panel xyz	Office 3	3
Control panel xyz	Office 4	4
Control panel xyz	Office 5	5
Control panel xyz	Office 6	6
Control panel xyz	Room 1	7
Control panel xyz	Room 2	8
Control panel xyz	Room 3	9
Control panel xyz	Room 4	10
Control panel xyz	Room 5	11
Control panel xyz	Room 6	12

3.3 SmartLook Software

The Previdia control panels can be supervised through the SmartLook software program created by Inim Electronics.

The SmartLook program is capable of enrolling the elements installed on the system either by reading the control panel directly or through the importation of data from the configuration software. At this point all that is necessary is to provide the graphic maps with image files and drag the icons of the objects installed on the system onto them.



SmartLook uses Modbus over TCP/IP to communicate with the control panel (refer to *paragraph 3.1 Modbus RTU and Modbus over TCP/IP*). During the configuration phase, SmartLook asks for the addresses of Previdia control panels on the Modbus and Hornet+ or IDANet networks.

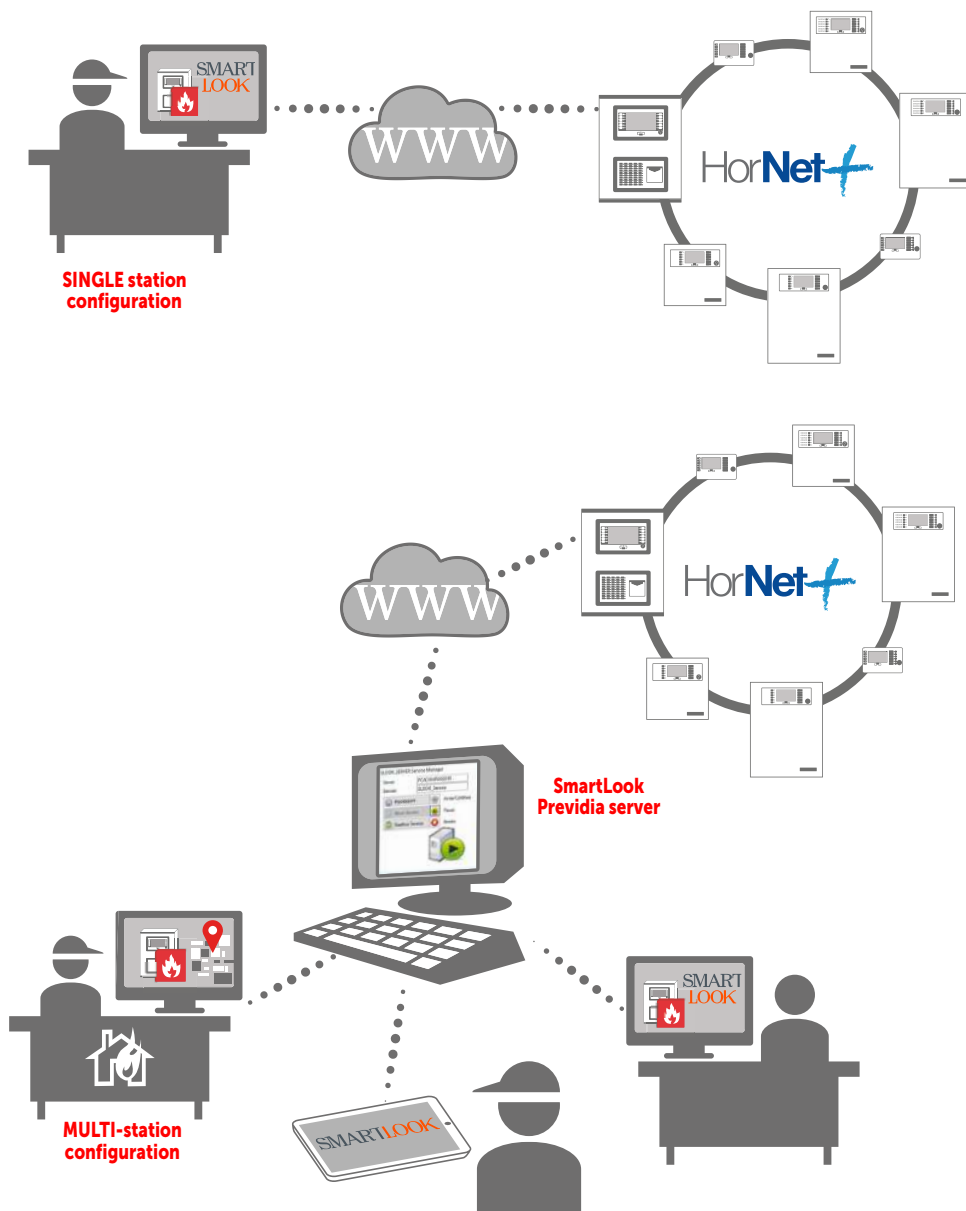
Note: *The address of a control panel on Modbus must coincide with that on the network.*

For further information refer to the SmartLook software manual.

3.4 SmartLook Previdia server

The "SmartLook Previdia server" software allows the supervision of a fire detection and alarm system created using Previdia series control panels by several PCs, up to a maximum of 10, on which the SmartLook software is installed.

The SmartLook software can operate as a client of the Previdia SmartLook server. In such cases, it is necessary to indicate in the SmartLook settings the address of the server rather than the address of a control panel as the connection address.



For further information, refer to the documentation relating to the SmartLook monitoring software.

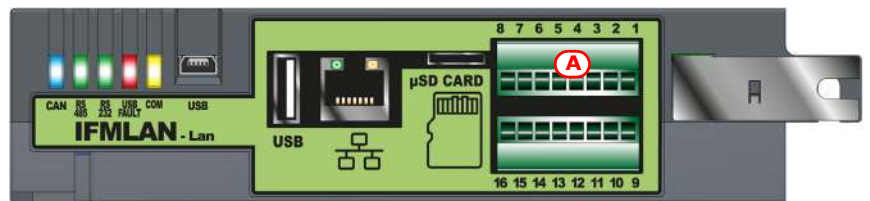
Chapter 4

Pager systems

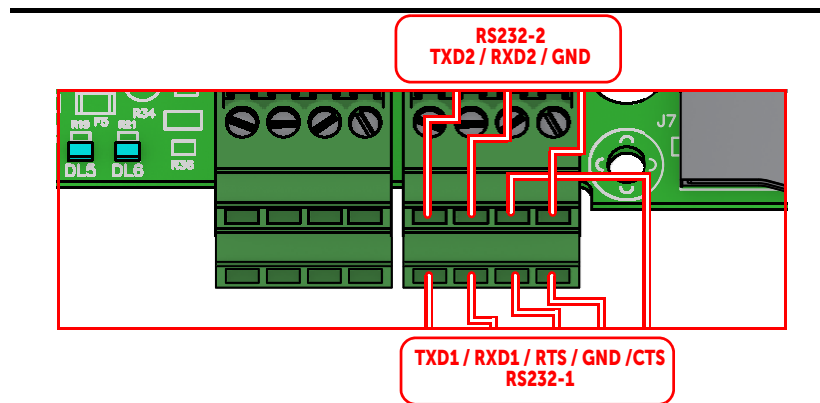
ESPA 4.4.4 is a standard protocol for the interconnection of paging systems, PABXs and automatic fire-detection systems. This protocol allows the exchange/sending of text messages between mobile devices such as pagers, cordless telephones, etc.

ESPA 4.4.4 protocol is implemented for Previdia Max and Ultra control panels within the IFMLAN module, through the RS232 communication port [A].

Serial	Terminal	
RS232	1	Programmable ancillary power output
	2	RS232 TX
	3	RS232 RX
	4	RS232 RTS
	5	RS232 CTS
	6	Negative (GND, ⊖)
	7, 8	Earth



For Previdia Compact and Micro control panels the ESPA 4.4.4 protocol is implemented inside the PREVIDIA-C-COM accessory module, through its two RS232 ports [B].



The protocol communication parameters can be configured through the Previdia control-panel configuration software. Access the module programming page, then in the "Settings" sub-section and click on "ESPA 4.4.4"

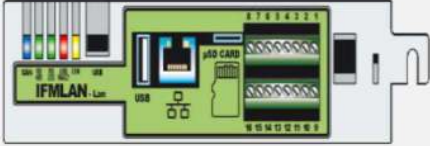
1.0.0.0 01/01/2023 18:23

PREVIDIA

System > Control panel xyz > IFMLAN

SETTINGS CONTACTS ACTIONS CAMERA BACNET EVAC GRAPHIC MAPS CLOUD

Serial No. SNSNSNSN



IP

Netmask

Gateway

DNS server

Time zone

Enable Silence via web Enable reset via web

Enable SSL

Communication port

Web server port

Read control panel status via IP

- ▶ -BACNET SETTINGS
- ▶ -MAIL SETTINGS
- ▶ -DYNAMIC DNS SETTINGS
- ▶ -NTP SERVER SETTINGS
- ▶ -SIA-IP PROTOCOL SETTINGS
- ▶ -WEB SERVER SETTINGS
- ▼ -ESPA444 SETTINGS
 - Serial port
 - Parity
 - Stop bit
 - Data bit
 - Bits per second
 - Address
 - Microphone bases address
 - Hand shake
 - Add zone label
 - Add control panel label
 - Master
 - Delete event label
 - Supervision type
- ▶ -SLOOP LOG
- ▶ -SMART484IN

Refer to the Previdia programming manual for further details.

Chapter 5

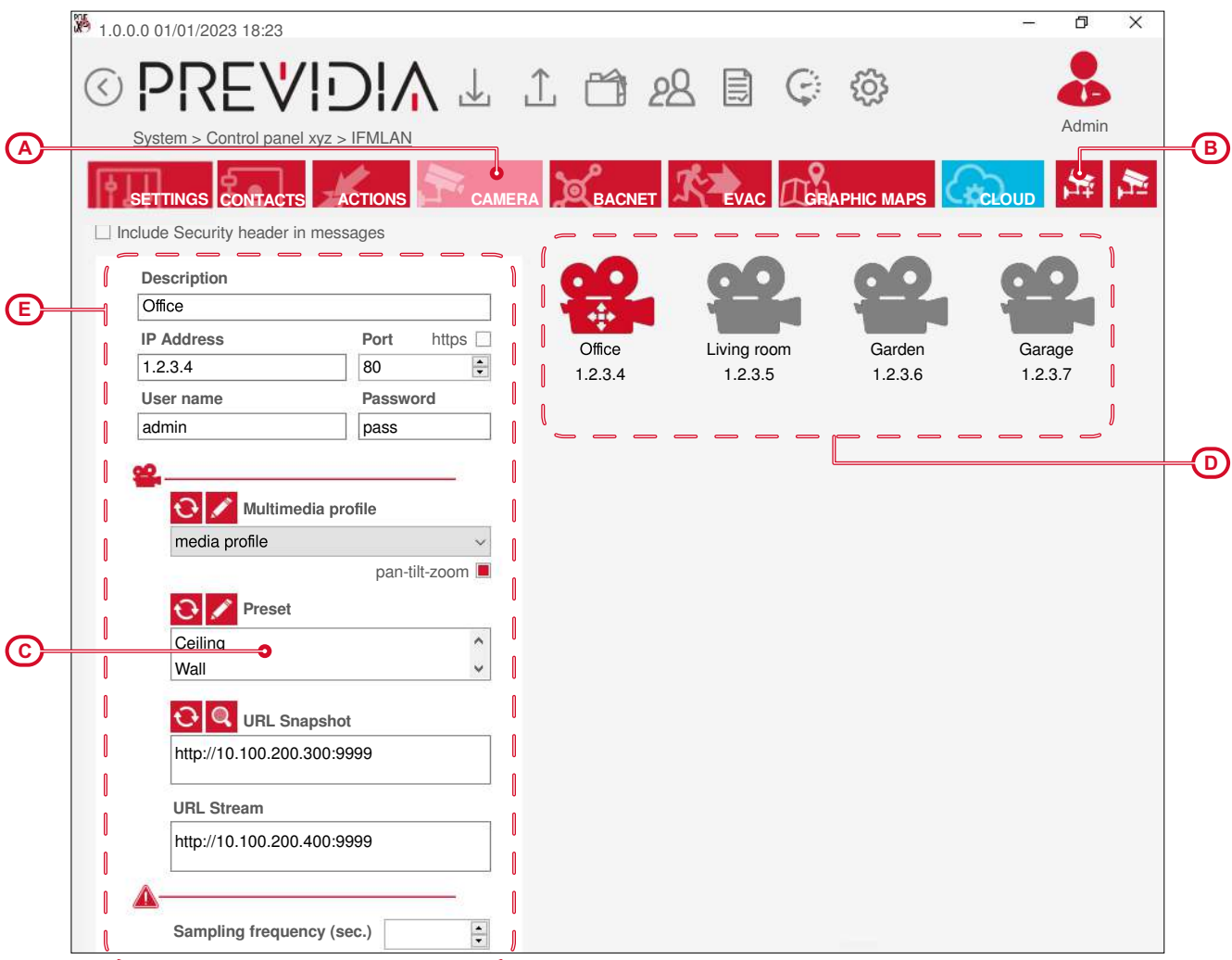
Video verification

Control panels from the Previdia series are capable of capturing images from IP cameras equipped with ONVIF. These images can be displayed on screens or forwarded from a remote location via e-mail to provide the end-user with a clear understanding of what is happening in the environment signalling the alarm.

The video verification function is implemented inside the IFMLAN module for Previdia Max and Ultra control panels, and inside the PREVIDIA-C-COM-LAN module for Previdia Compact and Micro control panels. Using the configuration software it is possible to define the list of IP cameras (up to 200) with which the Previdia system is to interact.

Access the module programming page, then the "Onvif camera" sub-section [A].

To add the cameras to the configuration simply click-on the **Add** button[B]. Each camera will acquire the various available "preset" parameters [C].



The section on the right [D] contains a list of all the configured IP cameras, while the section on the left [E] contains the parameters of the selected camera.

Once the IP camera list has been defined, the configuration software will allow you to establish a series of presettings that permit the identification of the specific IP camera and the correct preset in accordance with each event.

To program the presettings go to the programming section of the graphic maps. To reach the IP Camera section you must first access the programming section of the FPMCPU front plate module, click-on the "Graphic maps" button then access the "Cameras" sub-section.





Refer to the Previdia programming manual for further details.

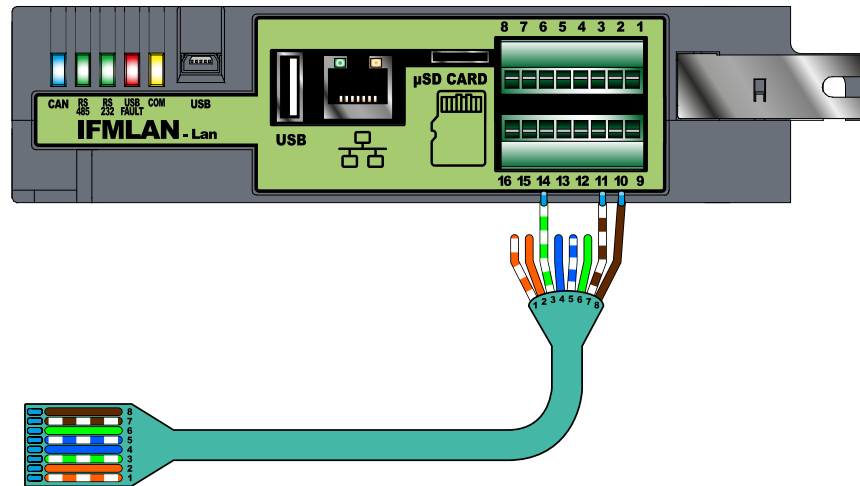
Chapter 6

Voice Evac-systems

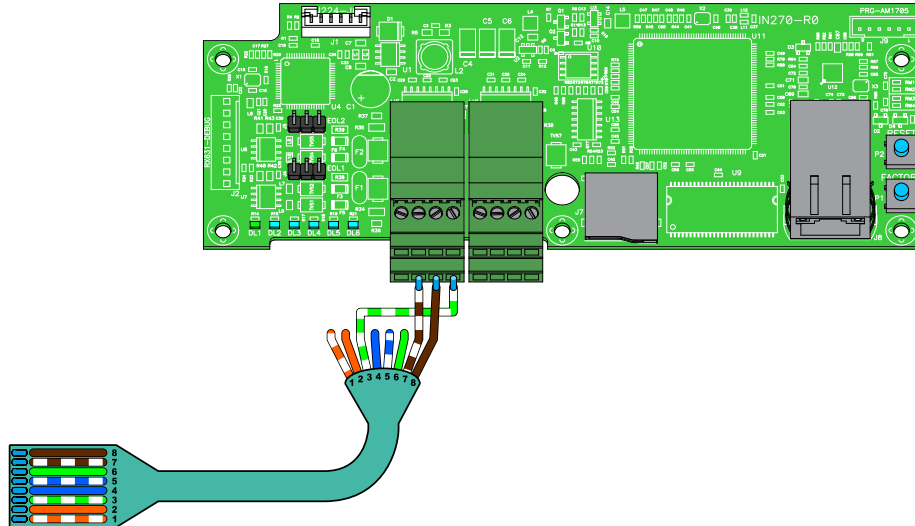
Previdia control panels can be interconnected with the following voice evacuation systems:

- Paso

The voice evacuation systems made by Paso can be connected to the IFMLAN module through the RS485 port.



PREVIDIA-C-COM has two RS485 ports, both usable with a connection such as the following:



- Tutondo

Via TCP-IP connection, the voice evacuation systems produced by Tutondo can be connected to the IFMLAN module, for the Previdia Max control panel, and to the PREVIDIA-C-COM-LAN module, for the Previdia Compact and Micro control panel.

6.1 Voice Evac configuration

Once the control panel has been connected to the voice evacuation system, the configuration software will allow you to configure each speaker line (evacuation zone) as an output capable of activating warning and evacuation messages.

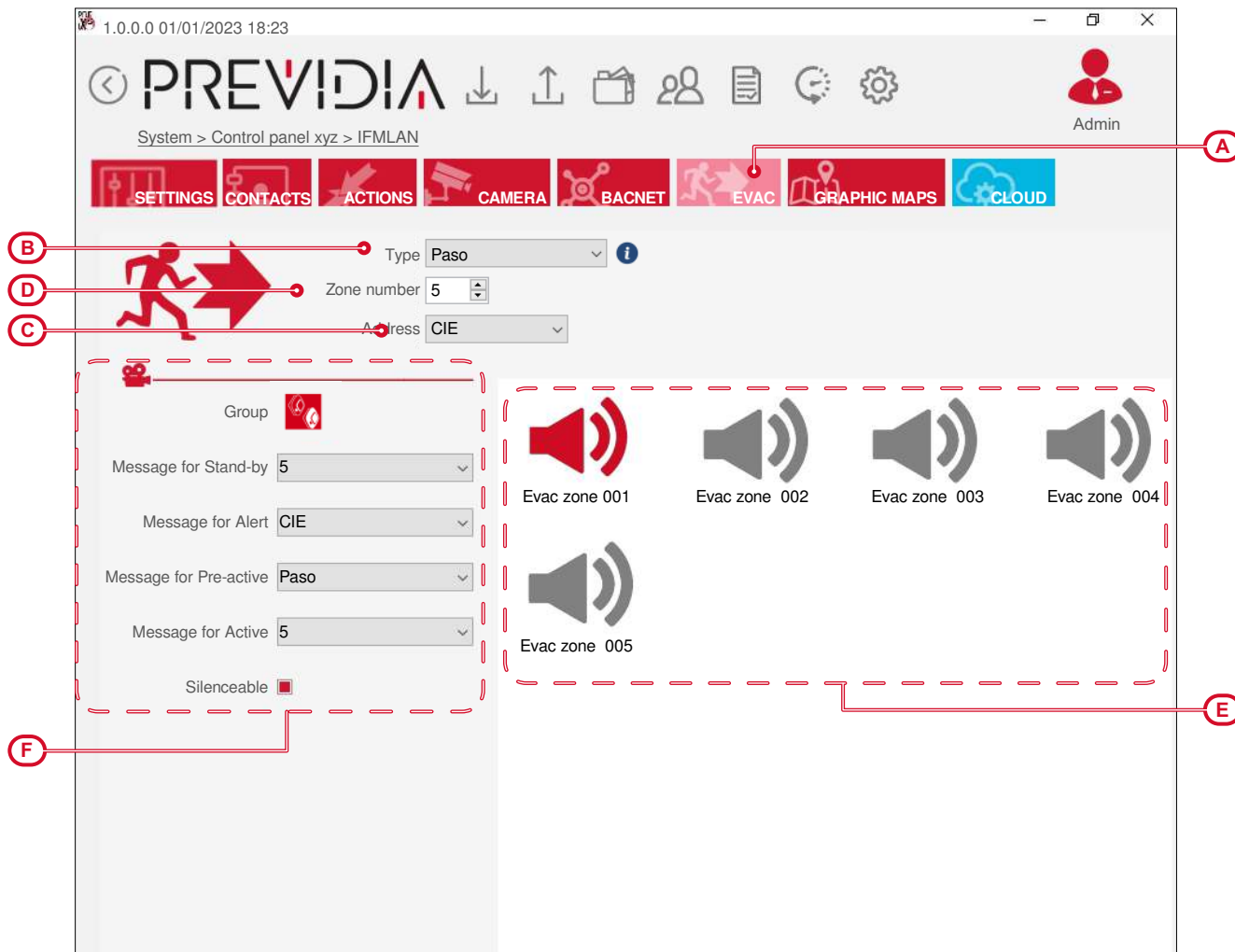
Access the page relative to the programming of the IFMLAN module, then access the "Evac" sub-section [A].

1. Select the typology of voice-evacuation system [B].
2. Indicate the address of the Previdia control panel on the selected evacuation system [C]:

- for "Paso" it is necessary to indicate the address on the RS485 connection BUS
 - for "Tutondo" it is necessary to indicate the IP address and the port
3. Indicate the number of evacuation zones (speaker lines) in the "Number of zones" box [D].

An icon will be added to the list at the bottom of the section for each added zone. For "Tutondo", it is necessary to add "End evacuation" to all zones, a message common to all zones.

4. Select the individual evacuation zone from the list [E] and program the parameters [F].





Inim Electronics S.r.l.

ISO 9001 Quality Management
certified by BSI with certificate number FM530352

Centobuchi, via Dei Laboratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ www.inim.it



CE



PREVIDIA

CONTROL PANELS FOR FIRE DETECTION AND ALARM,
FIRE EXTINCTION AND VOICE-EVACUATION SYSTEMS

GUIDE TO NETWORKING



PREVIDIA

inim[®]

Warranty

INIM Electronics s.r.l. warrants that this product shall be free of defects in material and workmanship for a period of 24 months from the date of production. In consideration of the fact that INIM Electronics s.r.l. does not install directly the products here indicated, and due to the possibility they may be used with other products not manufactured by INIM Electronics, INIM Electronics cannot guarantee the performance of the security installation. Seller obligation and liability under this warranty are expressly limited to repairing or replacing, at seller's option, any product not meeting its stated specifications. In no case can INIM Electronics s.r.l. be held responsible or liable by the buyer or any other person for any loss or damage, direct or indirect, consequential or incidental.

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- Damage caused by fire, flood, wind or lightning;
- Vandalism;
- Fair wear and tear.

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The installation and use of the products indicated herein must be carried out by authorized persons only. Moreover, the installation procedure must be carried out in full respect of the instructions provided in this manual.

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General information

1.1 Manufacturer's details

Manufacturer: INIM ELECTRONICS S.R.L.

Production plant: Centobuchi, via Dei Lavoratori 10

Municipality: 63076, Montepandone (AP) - Italy

Tel.: +39 0735 705007

Fax: +39 0735 704912

E-mail: info@inim.it

Web: www.inim.it

The personnel authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work only on devices marketed under the INIM Electronics brand.

1.2 About this manual

Manual code: DCMNINE0PREVIDIA

Revision: 1.50

This manual describes the procedures for the configuration, commissioning and maintenance of the Previdia fire-detection system.

1.2.1 Graphic conventions

Following are the graphic conventions used in this manual.

Conventions	Example	Description
Text in italics	Refer to <i>paragraph 1.2.1 Graphic conventions</i>	Directs you to the title of a chapter, section, paragraph, table or figure in this manual or other published reference.
<text>	<AccountCode>	Editable field
[Uppercase letter] or [number]	[A] or [1]	Reference relating to a part of the system or video object.

Note: *The notes contain important information relating to the text.*

Chapter 2

Introduction to networking

Previdia fire-detection control panels are capable of operating in an interconnected network.

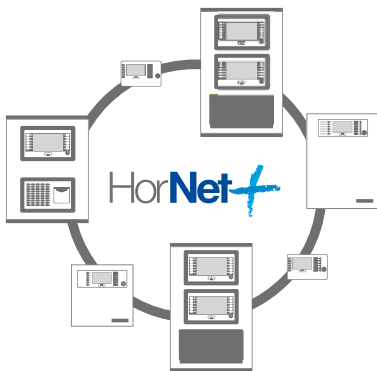
This document describes the interconnection modes, the available functions and also how to start a network of Previdia control panels. For this purpose the term "network node" will be used in reference to each of the control panels or repeaters connected in the network.

The connection of several control panels in a network allows:

- the exchange of information among the various control panels; viewing, from any node, the events that have occurred on other nodes in the network, or sub-networks defined during system configuration;
- the management of functions among control panels; from any node, credentials permitting, you can operate on each of the control panels in the network (in order to enable, disable, interact with each and every element);
- the sharing of activation groups; it is possible to share the output groups within the network in order to associate activations with conditions detected on various nodes;
- the supervision of the entire network; by connecting to a single node it is possible to supervise the entire network by means of the appropriate supervision software (e.g. supervisory software with graphic maps);
- the configuration of the entire network; by connecting to a single node it is possible to configure the entire network via the appropriate configuration software;
- the maintenance and diagnostics of the entire network; by connecting to a single node it is possible to use the diagnostic and maintenance functions provided by the configuration software.
- the sharing of audio streams; it is possible to share the audio files to be reproduced over all the emergency voice communication control panels within the IDANet network.

2.1 Network connection mode

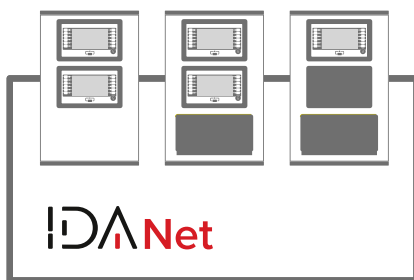
The network connection of Previdia control panels can be achieved in three ways:



Connection via a Hornet+ network

The Hornet+ network is based on an RS485 physical layer (convertible in optical fiber by means of appropriate converters) structured in a ring. This structure allows you to interconnect up to 48 control panels.

A group of control panels interconnected through a Hornet+ network is identified as a "cluster".



Connection via a IDANet network

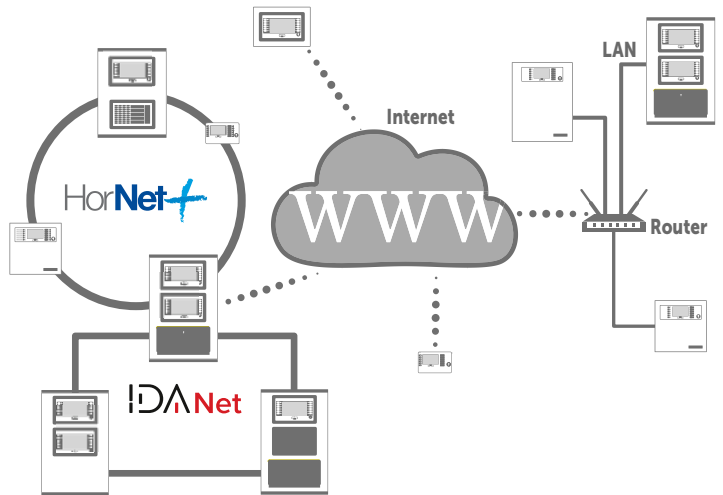
Through the IDANet network, Previdia Ultra control panels can be connected in a ring via a CAT5 ethernet cable (up to 100m) or optical fiber (by means of an appropriate SFP module depending on the type of fiber used).

A group of control panels interconnected through a IDANet network is identified as a "cluster".

Connection based on TCP/IP

Use of an Ethernet connection, based on TCP/IP protocol, as the cluster-interconnect allows you to build up to 20 clusters.

A cluster can be made up of a single Previdia control panel or an FPMCPU module configured as a repeater panel.



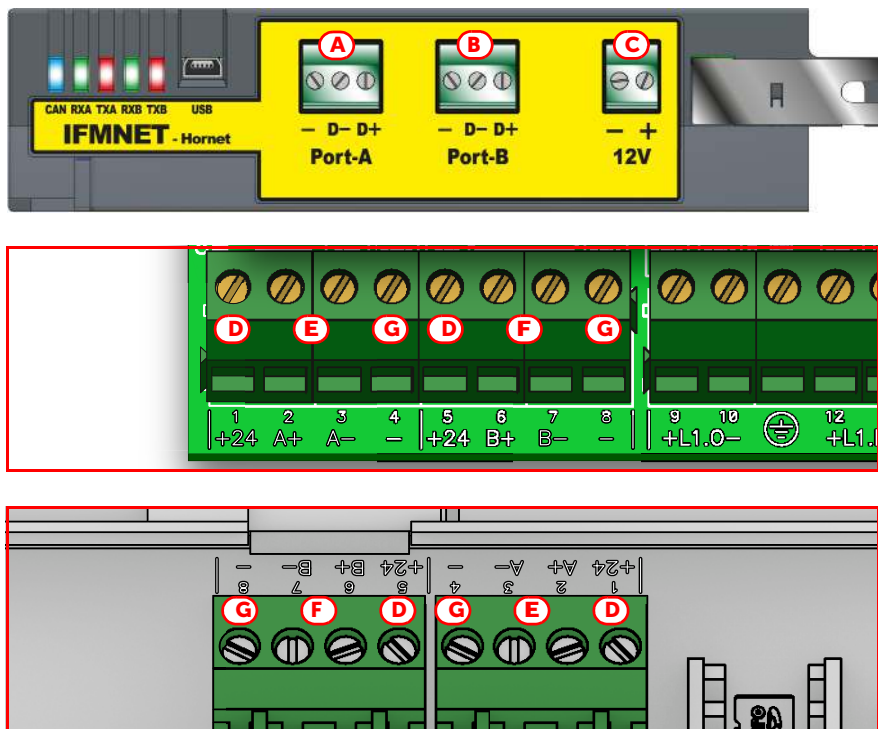
Chapter 3

The Hornet+ and IDANet networks

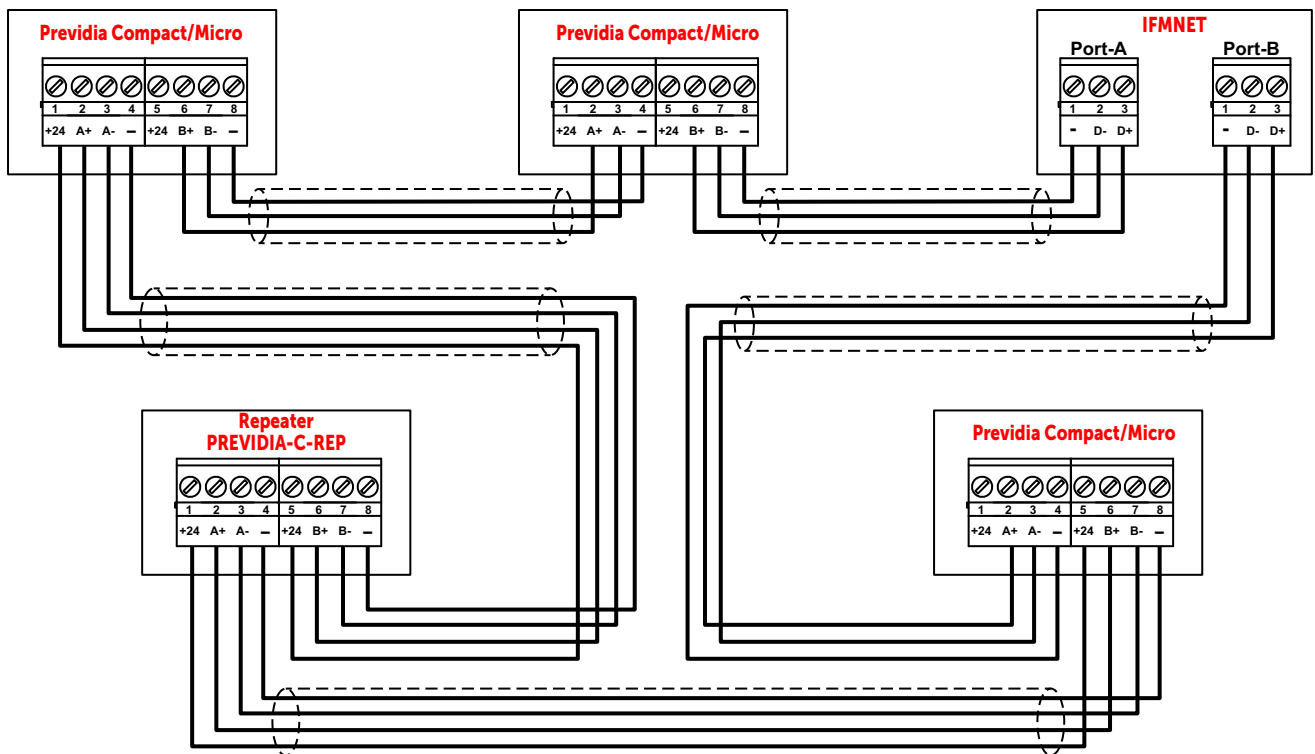
3.1 The Hornet+ network

The connection of several control panels in Hornet+ network is based on an RS485 network, which must be structured in ring topology in order to guarantee the appropriate fault tolerance along the cable lines.

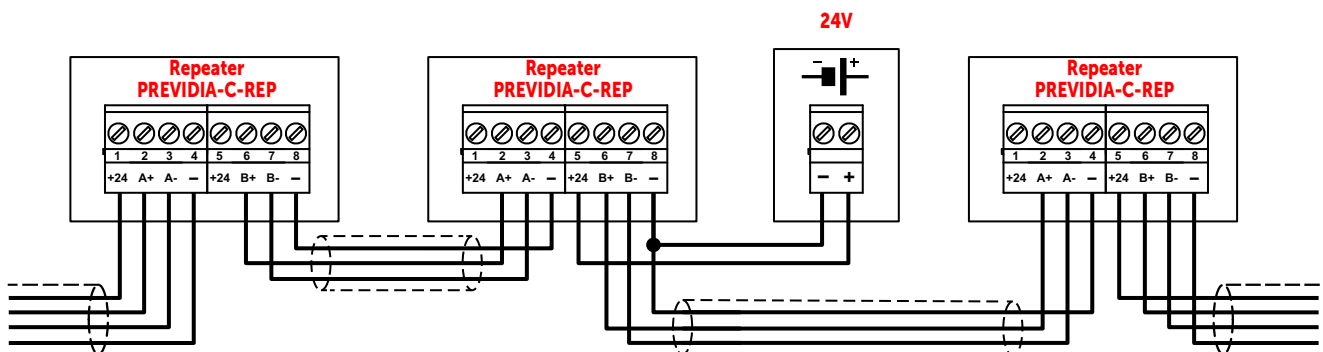
Each Previdia Max or Ultra control panel connected in Hornet+ network must be equipped with an IFMNET module. Previdia Compact or Micro control panels and PREVIDIA-C-REP repeaters provide connection terminals on the main board PCB.



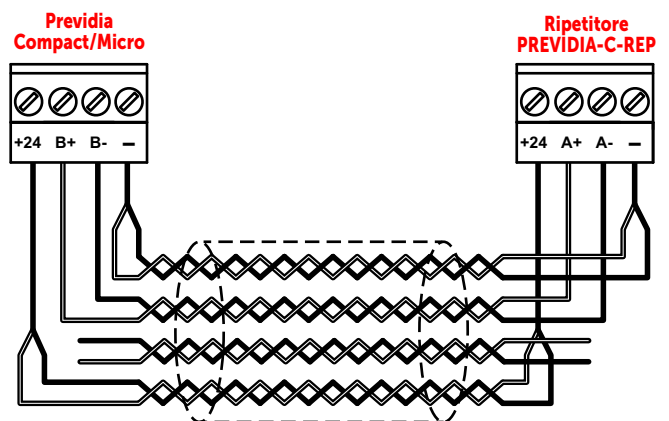
[A]	Port-A	D-, D+	IFMNET	Port A (negative and positive)
		-		Negative
[B]	Port-B	D-, D+		Port B (negative and positive)
		-		Negative
[C]	12V	-, +		Terminals for the power supply to the RS485/fiber converter
[D]	1, 5	+24		Previdia Compact Previdia Micro PREVIDIA-C-REP	Positive
[E]	2, 3	A+, A-	Port A (positive and negative)	
[F]	6, 7	B+, B-	Port B (positive and negative)	
[G]	4, 8	-	Negative	



Note: *It is necessary to use an external power supply for the PREVIDIA-C-REP repeater if there are 3 or more repeaters in series, as the power supply is not distributed from port A to B and vice versa.*

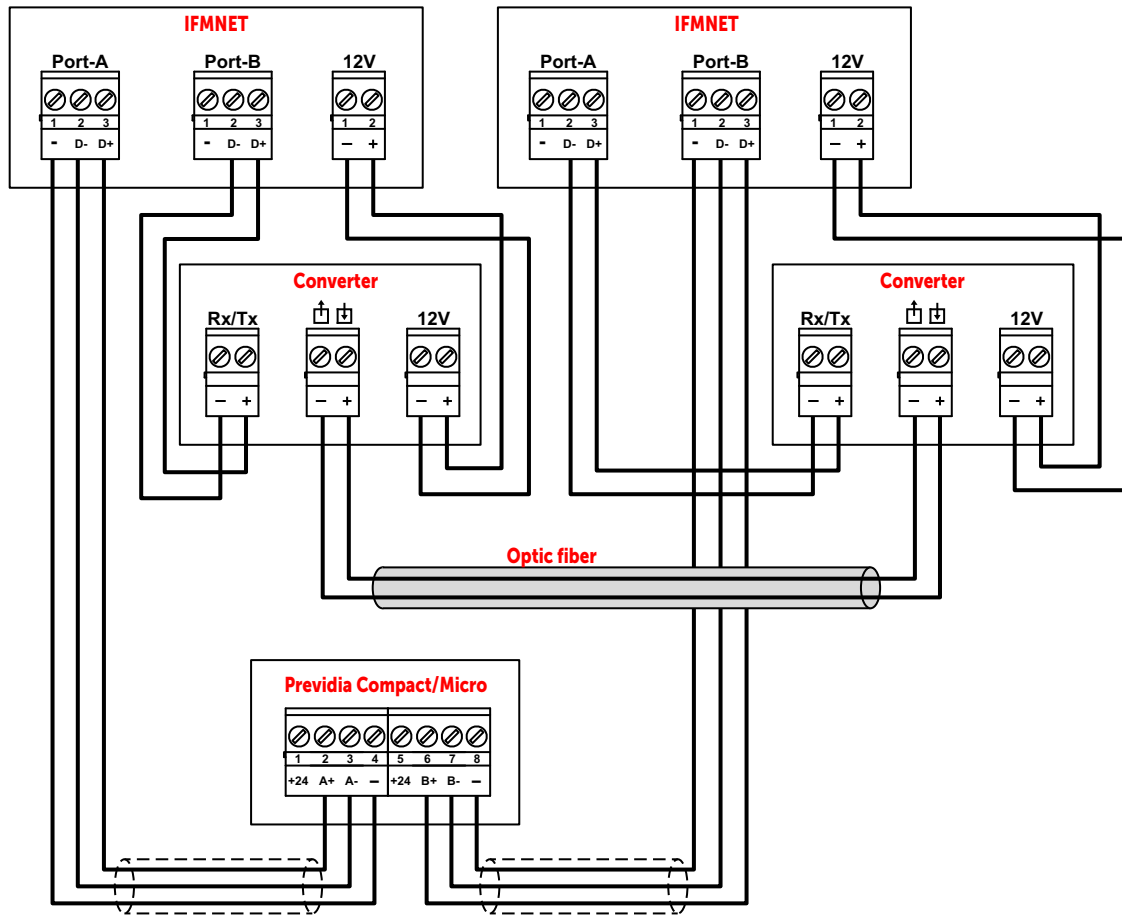


Cables: Ethernet cable Cat.5 S/FTP FR PH(120)
 Maximum length (between two successive control panels, see paragraph 3.4, point 2):
 1000m for speeds up to 230kbps, 500m for higher speeds (512kbps)
 If the cable is used to power repeaters, the section of the power conductors must be appropriately evaluated.



3.1.1 Use of optic fiber connections

The connection of the various nodes in the Hornet+ network can be achieved through optic fiber using the appropriate converters, as in the following example.

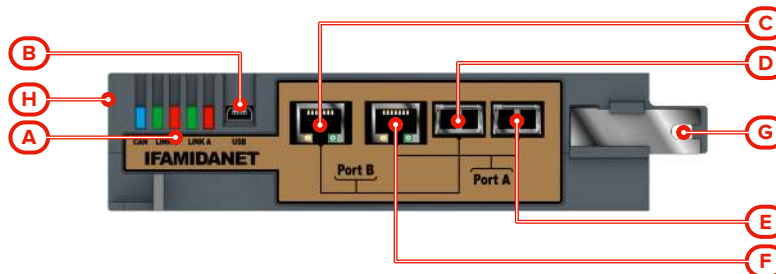


In cases where a fiber optic cable is used over long BUS lengths, it is necessary to use a RS485/fiber converter (non-INIM brand product). The module IFMNET has a 12V output (*paragraph 3.1 - [C]*) for the power supply to the converter in use.

3.2 The IDANet network

The connection of several control panels in an IDANet network is based on an Ethernet network or fiber optic, which must be structured in a ring to guarantee suitable cable fault tolerance.

Each Previdia Ultra control panel connected in IDANet network must be equipped with an IFAMIDANET module:



[A]	Status LED
[B]	Mini USB port
[C]	RJ45 connector for port B
[D]	BASE 100 FX base SFP connector for port B

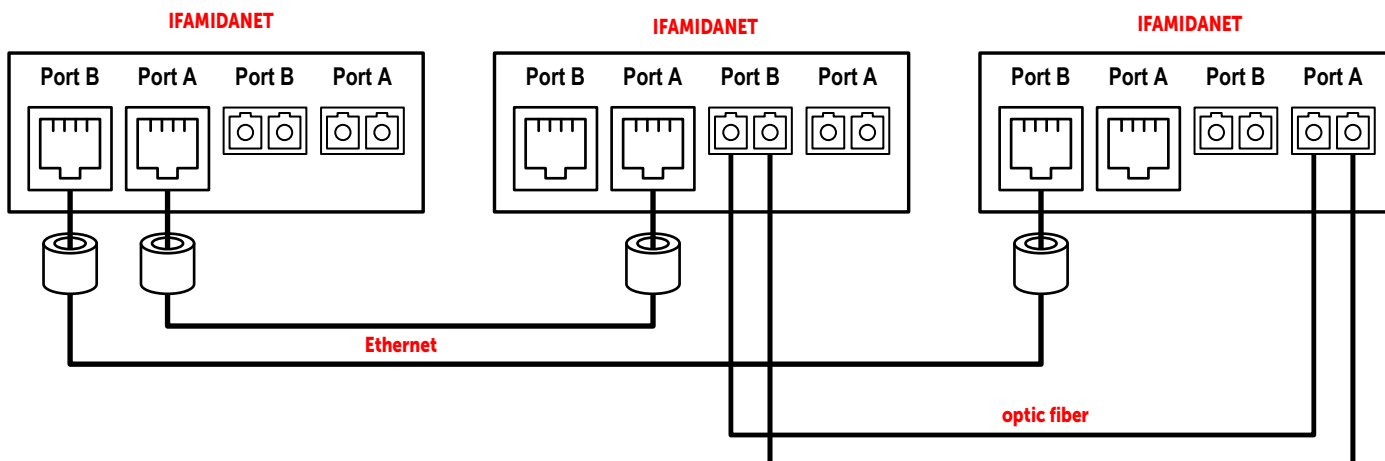
[E]	RJ45 connector for port A
[F]	BASE 100 FX base SFP connector for port A
[G]	Holes for the Earth bar screws
[H]	CAN DRIVE+ connector (opposite)

The module has two ports (“PORT-A” and “PORT-B”) for making the ring connection. For each of the two ports, an RJ45 socket is available for connection via UTP CAT5 cable (Ethernet protocol) or alternatively a socket for an SFP fiber optic converter for making the fiber optic connection.

Each of the two connections can be made independently in fiber or copper, ensuring that both ports are used.

Note: *Do not use Ethernet and fiber at the same time from the same port.
The SFP converters used for the fiber optic connection must be 100 Base FX type.*

Cables: Ethernet: UTP CAT 5, maximum 100m
Fiber: depending on the SFP module used



3.3 Supervision of the network

Once the Hornet+ or IDANet network is configured, in the event of interruption of a single connection, each node will signal the fault but the network will continue to function, albeit at a reduced speed.

In the event of a lost node (complete shutdown or fault on the IFMNET or IFAMIDANET module) all the other nodes in the network will signal the fault.

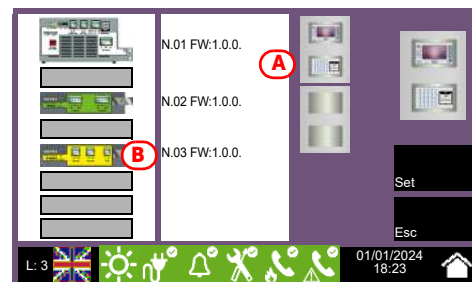
3.4 Commissioning of a Hornet+ network

Once several control panels have been connected in a Hornet+ network, as indicated in the diagrams shown in the previous paragraphs, it will be necessary to work through the following points.

1. Supply power to each node in the network.
2. Configure each node in the cluster.

for Previdia Max/Ultra: Access the programming phase of the control panel and then press the **Configuration** button on the menu on the screen. Alternatively, it is possible to tap directly on the configuration status icon. Entry of a valid access code is necessary in both cases.

Once the configuration menu has been accessed, the control panel screen will provide a layout of the control panel and its parts ((A)). Select the IFMNET module ((B)).



for Previdia Compact/Micro: Access to control panel programming and press the **Configuration** button.
In the configuration section, touch the networking programming access icon.

for PREVIDIA-C-REP: Access to repeater programming and press the **Configuration** button.
In the configuration section, touch the repeater programming access icon.



3. Set the communication speed to be used by the Hornet+ network.

The diagram at the side shows the theoretical maximum distances reachable with an RS485 based on the communication baud rate/speed.

The data refers to an ideal communication achieved through a perfectly adapted line.

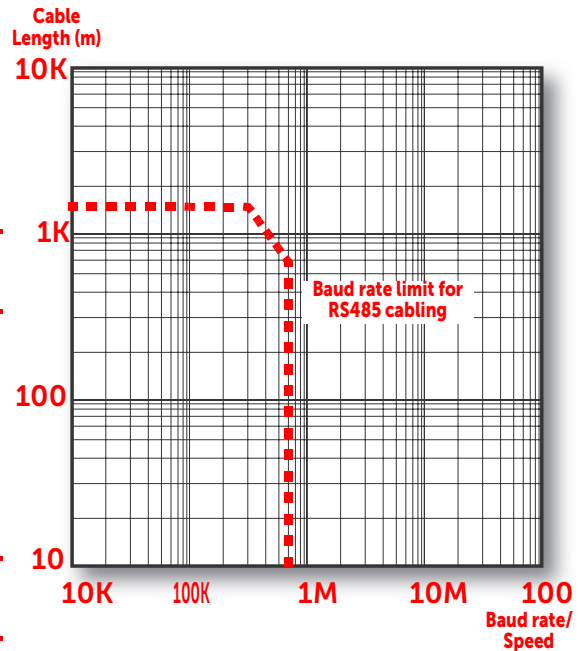
Note: *The set communication speed must be the same for all nodes in the same Hornet+ cluster.*

4. Assign a univocal address to each node in the cluster.

The valid addresses are from 1 to 48. Address "0" is equivalent to the disconnection of the control panel from the network.

5. Set the network "gateway" control panel by means of the appropriate option.

Note: *Only one point can be set as the gateway to a Hornet+ network.*

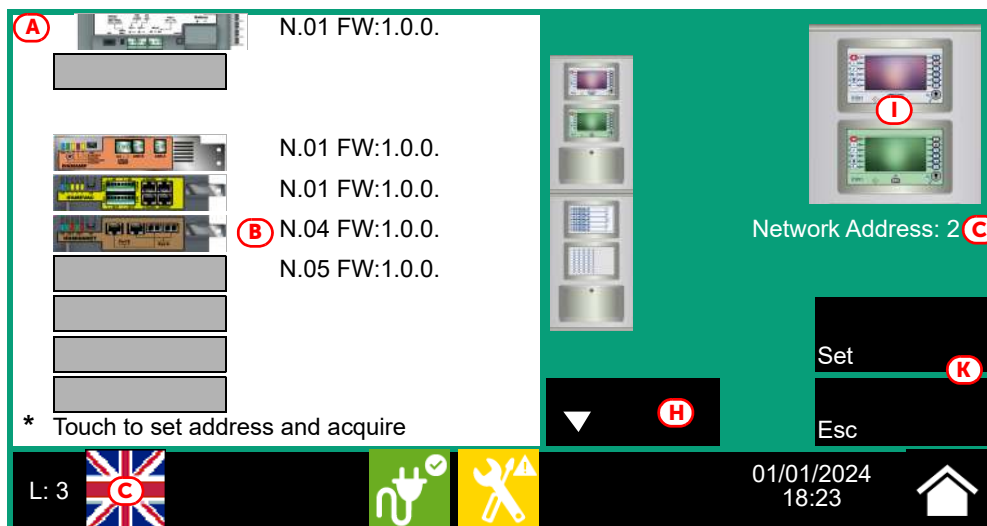


When a Hornet+ address is assigned to a Previdia Max or Ultra control panel, the IFMNET module activates the blue LED to indicate that the control panel is in the cluster and has started to communicate with the other control panels. The LEDs on the IFMNET module indicate activity on the two communication channels.

3.5 Commissioning of an IDANet network

Once several control panels have been connected in an IDANet network, as shown in the diagram, it is necessary to work through the following steps:

1. Supply power to each node in the network.
2. Configure each node in the cluster (this operation can be carried out both from FPAMIAS and FPMCPU).
Access the programming phase of the control panel and then press the **Configuration** button on the menu on the screen.
Alternatively, it is possible to tap directly on the configuration status icon.
Entry of a valid access code is necessary in both cases.
3. Once the configuration menu has been accessed, the control panel screen will provide a layout of the control panel and its parts (A).



4. Select the IFAMIDANET module ((B)).
5. Set the communication speed to be used by the IDANet network.

Note: *The set communication speed must be the same for all nodes in the same IDANet cluster.*

6. Assign a univocal address to each node in the cluster ((C)).

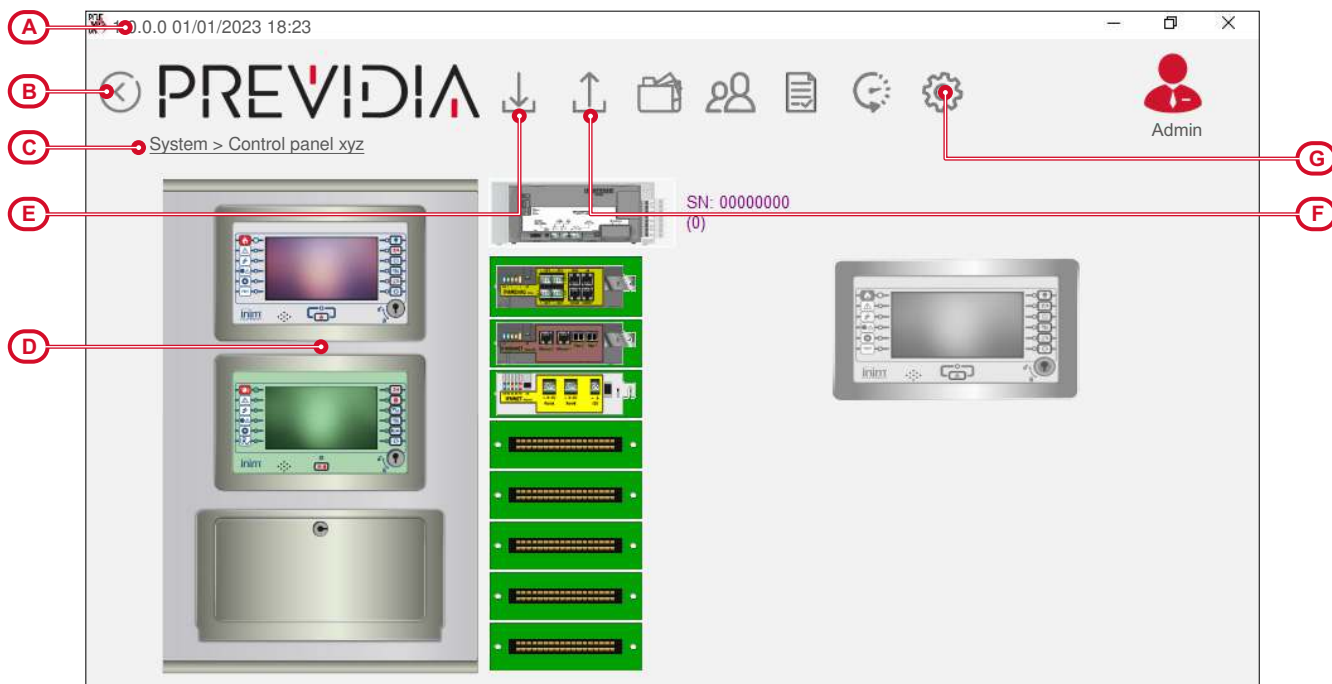
The valid addresses are from 1 to 48. Address "0" is equivalent to the disconnection of the control panel from the network.

When a Hornet+ address is assigned to a Previdia Ultra control panel, the IFAMIDANET module activates the blue LED to indicate that the control panel is in the cluster and has started to communicate with the other control panels. The LEDs on the IFAMIDANET module indicate activity on the two communication channels.

3.6 Connecting to a PC

From a PC running the Previdia/Studio configuration software, you must read the network configuration in order to have the consistent data on the PC and thus proceed with the configuration in accordance with the needs of the installation

1. Start the Previdia/Studio configuration software.
The interface of the Previdia/Studio software is presented in the following way:



[A]	Software revision, current date and time
[B]	Button to go up to the system layer
[C]	Layer
[D]	Control panel image

[E]	Read button
[F]	Write button
[G]	Settings button

2. Click-on the **Settings** button ((G)).
In the window that opens, select the communication channel to be used:
 - **IP** - if selected, you must enter the IP address and the port of the control panel. There is also a button that launches a test on the set channel and parameters.
 - Hornet network **Gateway**
 - **Serial** - if selected, you must select the serial port used from the connected PC in use.
 - **Cloud** - if selected, the credentials of the programmer will be requested.



3. Navigate to the visualization of the system at network layer using the appropriate button ([B]).
4. Click-on the **Read** button ([E]) to read the system configuration. Once the Read procedure ends, the entire control-panel network will be shown.



The control panel the PC connected to for the read operation, and to which the "gateway" functions are assigned, will be identified by the symbol here at the side. The control panel with this function is the one that allows the interconnection with any other clusters via IP.



Note: *Only one FPMCPU panel can be used as a gateway.*

5. At this point it is possible to select each control panel, edit the parameters and rewrite the edited configuration on the system by means of the **Write** button ([F]).

3.7 Sharing the events on the network

On each node of the Hornet+ network or IDANet network it is possible to define which events coming from other control panels are to be displayed.

This is possible with the Previdia/Studio software by duly configuring the **Events filter** section. This section allows you to program up to 5 events filters.



The access is allowed by the Previdia/Studio solution, after the selection of the control panel inside the Hornet+ network.

for Previdia Max/Ultra: The **Events filter** section is available in the FPMCPU frontal module programming section, by means of the appropriate button.

for Previdia Compact/Micro: The **Events filter** section is available in the control panel main programming section, by means of the appropriate button.

for PREVIDIA-C-REP: The **Events filter** section is available in the repeater main programming section, by means of the appropriate button.

[A]	Buttons to change the priority of the events
[B]	Filter selection buttons
[C]	Category of event factors

Each event is defined by 4 categories of factors by which it is characterized:

- cluster group

- control panel in the Hornet+ network
- zone of origin
- typology

In order to setup a filter, after selecting it, you must first indicate its composing events, by enabling the factors that characterize it, that is the type and origin.

The events coming from the network are acknowledged and shown on the display only when they satisfy all the enabled factors of at least one of the 5 filters.

The control panel self-configures at filter n°0. This setting accepts any event, from any zone, belonging to any control panel of any cluster, therefore, such a filter accepts all events from the entire network.

3.8 Activation of groups of outputs in the network

Hornet+ and IDANet systems allow the activation of outputs connected to a specific node of the network when certain conditions are verified on other nodes.

The configuration of these activations is possible through the appropriate programming of the groups of outputs. Each of the first 240 groups of each control panel can be configured as "network group".

This is possible with the Previdia/Studio software by duly configuring the **Outputs group** section.

For access, it is necessary to select the control panel in question within the network of the open Previdia/Studio solution.



for Previdia Max/Ultra: The **Outputs group** section is made available, by means of the appropriate button, in the FPMCPU module or the FPAMIAS module programming section.

for Previdia Compact/Micro: The **Outputs group** section is available in the control panel main programming section, by means of the appropriate button.

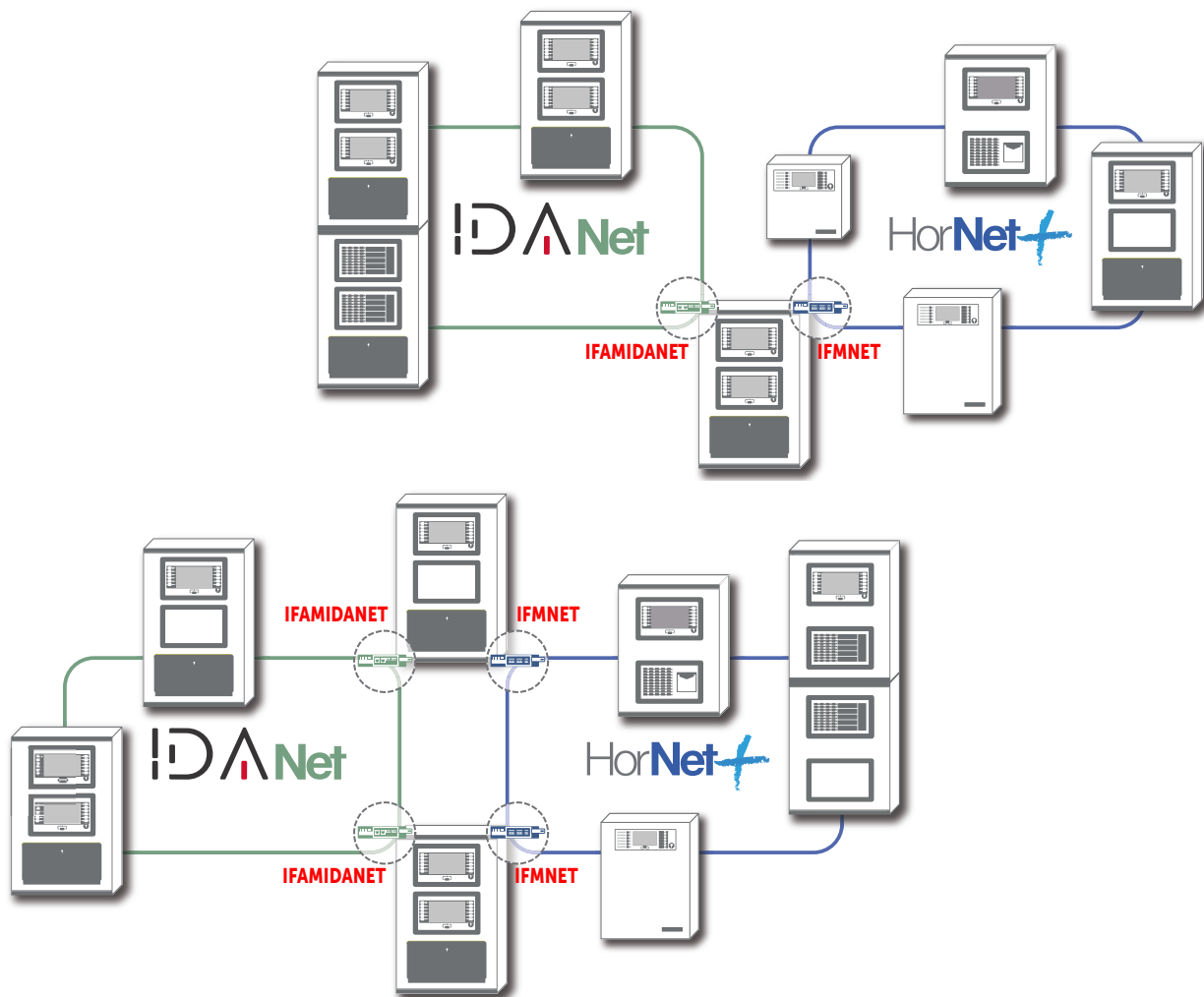
[A]	List of groups of outputs	[C]	]List of devices that activate the selected group
[B]	Programming parameters of the selected group	[D]	List of devices activated by the selected group

Once one of the **Repeat shared group setting** options is activated, available in the parameters section of the selected group (*[B]*), the group programmed in this way will be the same for all the control panels in the single cluster or all the clusters connected in the network. The outputs associated with the group will activate regardless of control panel they are connected to. In the same way, the devices of any network control panel can activate the shared group.

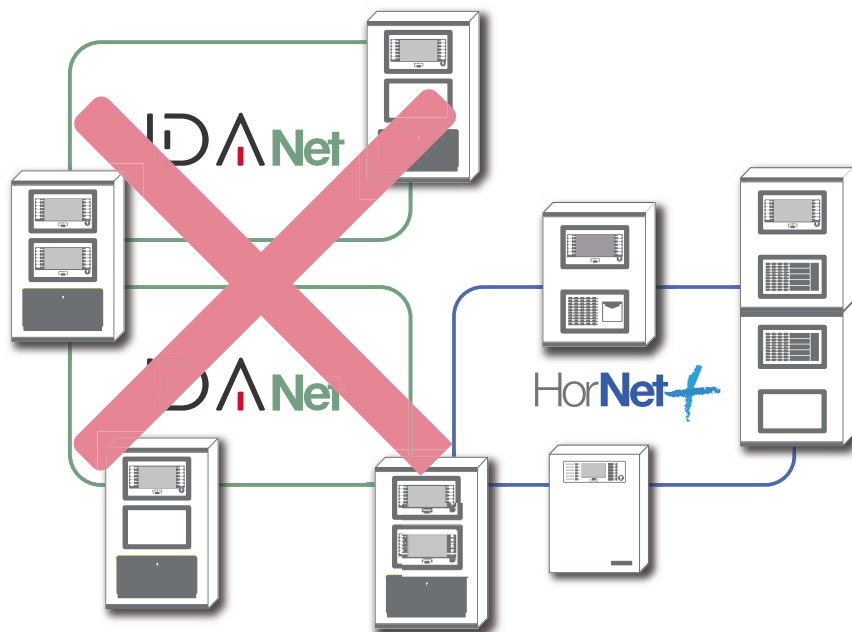
Once one of the **Repeat shared group setting** options is enabled on a control panel in the network, the software will ask if you want to share the group with all the control panels. If your answer is affirmative, the software will automatically enable the option on all the control panels in the network for the selected group.

3.9 IDANet and Hornet+ in the same cluster

It is possible to have both an IDANet ring and a Hornet+ ring in the same cluster. There can be one or more control panels that are part of both networks in the cluster. These control panels support both IFMNET and IFAMIDANET modules, and allow the transfer of information from one node to another.



Attention: *There must be only one IDANet ring and one Hornet+ ring:*



Multiple rings of the same technology are not allowed.

The cluster operates effectively as a single network, therefore, each of its nodes must have a unique address.

via FPMCPU: As far as data sharing is concerned, it should be noted that from an FPMCPU module it is possible to navigate on remote nodes and manage the various objects relating to the FPMCPU module. FPMCPU modules share all the information already shared in the Hornet+ network and in addition the exchange of the two structures for reciprocal conditioning with the world of audio:

- **Status of audio zones** required by the fire system
- **Real time of audio zones**, required by the FPAMIA module.

via FPAMIAS: From a FPAMIAS module it is possible to navigate only on the remote FPAMIAS nodes in which the IFAMIDANET is present, and to manage the various IAS objects. The FPAMIAS module does not show the existence of any remote nodes behind a Hornet+ network. Therefore, it is necessary to consider as a design constraint the connection in the IDANet network of several Previdia-Vox or Previdia-Ultravox nodes in the same cluster.

Chapter 4

TCP/IP

4.1 Physical layer

To interconnect several clusters together via TCP/IP protocol, it is necessary that at least one control panel is connected to the Ethernet network.

This control panel will be indicated as the "gateway" of the cluster and will manage information sharing among the clusters, as well as the supervision of the TCP/IP network integrity. The icon of this control panel will show the symbol here at the side.



Note: *For Ultravox control panels, only one node with an FPMCPU panel can be the gateway of its cluster.*

If instead the icon of a control panel acquires the symbol here beside, it means it is connected to the network with its own IP address.



4.2 Limits and precautions

The connection of several clusters via the Ethernet network is based on hardware that is not supplied by INIM Electronics. Therefore, if the connection in the network is based on TCP/IP, it is the sole responsibility of the project manager who designs the installation to evaluate the use made of it (supervision, display of cross events, cross activations, etc.). Therefore, it is necessary to define the eventual characteristics of the Ethernet network, introducing, where appropriate, switches capable of managing dual paths with automatic fault recovery capacity, wiring with different paths, and to take all the necessary precautions to ensure that the Ethernet physical layer provides fully secure and redundant capabilities.

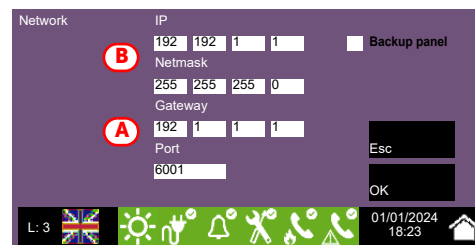
4.3 Supervision of the TCP/IP network

Once the TCP-IP network has been configured, in the event of the loss of a cluster (complete shutdown or fault on the FPMCPU module that represents its gateway) all the remaining nodes of the network will signal the fault.

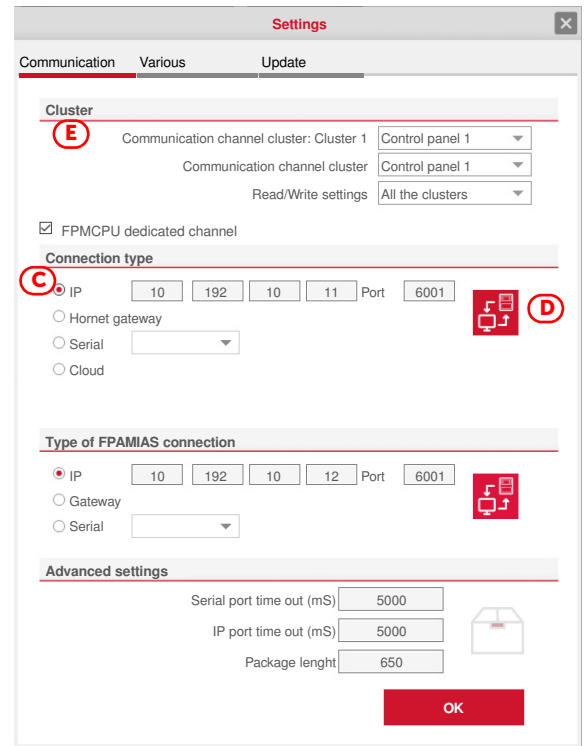
4.4 Commissioning the TCP/IP network

For the configuration of a control panel network based on TCP/IP protocol, proceed in accordance with the following points:

1. On each cluster of control panels it is necessary to perform the Hornet+ network or IDANet network configuration setup in accordance with the procedures described in the previous chapter.
2. Make sure that each cluster is equipped with an FPMCPU module or a Previdia Compact or Micro control panel connected to the Ethernet network.
If more than one control panel per cluster is connected to the Ethernet network, it is necessary to select the one that will serve as the gateway to the cluster (*(A)*). In such cases you must make a note of the IP addresses of each gateway.
3. Ensure that the IP address of each control panel and its net mask (*(B)*) are configured in such a way that they belong to the same class of addresses as the others.
4. Using a PC, running the Previdia/Studio configuration software, connected to the same Ethernet network and configured with a netmask consistent with the control panels, click-on the **Settings** button.



5. Select "IP" as the communication channel and enter the address of the first gateway on the list ([C]).
6. By means of the **Check connection** button ([D]) it is possible to test the communication in order to verify that the TCP/IP parameters are configured correctly.
7. Go up through the Previdia installation until you reach the highest layer, by means of the button on the top-right of the window (paragraph 3.6 - [B]).
8. Click-on the **Add** button to add a new cluster. The software will show the new cluster, comprising a single control panel, added to those already configured. Repeat the operation for each cluster that you intend adding to the network.
9. For each added cluster, enter the IP address as follows:
 - 9.1 Double click-on the control panel of the cluster.
 - 9.2 When you reach the control panel layer click-on the **Settings** button.
 - 9.3 In the window that opens, select "IP" and enter the address.
 - 9.4 Check the communication capacity by means of the **Check connection** button ([D]).
 - 9.5 Return to the "System" layer and proceed in the same way for the successive clusters.
10. Once the address has been assigned and the communication capacity tested on the gateway of each cluster, proceed with the read operation by going up to the System layer and clicking-on the **Read** button.



The read operation can be simplified by indicating to the software which cluster to read, by means of the appropriate option from the **Settings** window, selected on the "System" layer.

Once the read operation terminates (this operation may take several minutes depending on the size of the system), the software will show the clusters complete with all their components. At this point the software will have read all the elements of the network and will contain the actual data of each control panel ([E]).

However, warning icons will be shown to indicate that it is necessary to perform a write operation in order to communicate to each component in the network the existence of all the other elements.

11. To set the programming of the entire installation click-on the **Write** button. This operation may take quite some time due to the quantity of data that has to be transferred for each single control panel.

If you intend to write only the networking settings, you must first double click-on the network icon. In this way you will access the **Network configuration** section, where you can click-on the **Write** button.

4.5 Sharing the events on the TCP/IP network

By appropriately configuring the **Events filter** section as described in *paragraph 3.7 Sharing the events on the network*, it is possible to define which events coming from other control panels are to be visualized for each node in the network. Please refer to the said paragraph for instructions.

4.6 Activations of groups of outputs on the TCP/IP network

The Previdia allows the activation of outputs connected to a specific node in the TCP/IP network when verified conditions on other nodes occur.

The configuration of these activations is possible through the appropriate programming of the groups of outputs. Each of the first 240 groups of each control panel can be configured as "Cluster group".

The option required for this operation can be found in the programming area of the FPMCPU frontplate module, after accessing the **"Outputs group"** section follow the instructions in *paragraph 3.8 Activation of groups of outputs in the network*.

Once the **Cluster group** option is enabled, available in the parameters section of the selected group, the group programmed in this way will be the same for all the control panels connected in the TCP/IP network. The outputs

associated with the group will activate regardless of control panel they are connected to. In the same way, the devices of any network control panel can activate the shared group.

Chapter 5

Repeater based on TCP/IP

If you wish to configure a repeater of a Previdia control panel with fire functions on a TCP-IP network, it is necessary to have an FPMCPU module for Previdia Max and Ultra control panels and a PREVIDIA-C-REP module for Previdia Compact, Micro, Max and Ultra control panels.

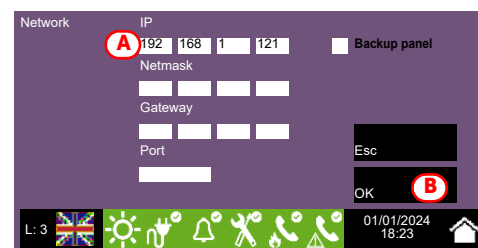
After proper installation of the module, you must connect the Ethernet cable then proceed with the configuration process, first via the repeater touch screen then, successively, via the Previdia/Studio programming software.

Via the display

First of all you must assign an IP address to the repeater:

1. Press the **Programming** button on the home page of the display and enter an access code valid for level 3 (code "00004" at default)
2. Access the **Network** section and assign a valid IP address ([A], 192.168.1.121 at default).
3. Press the **OK** button [A] to exit and save.

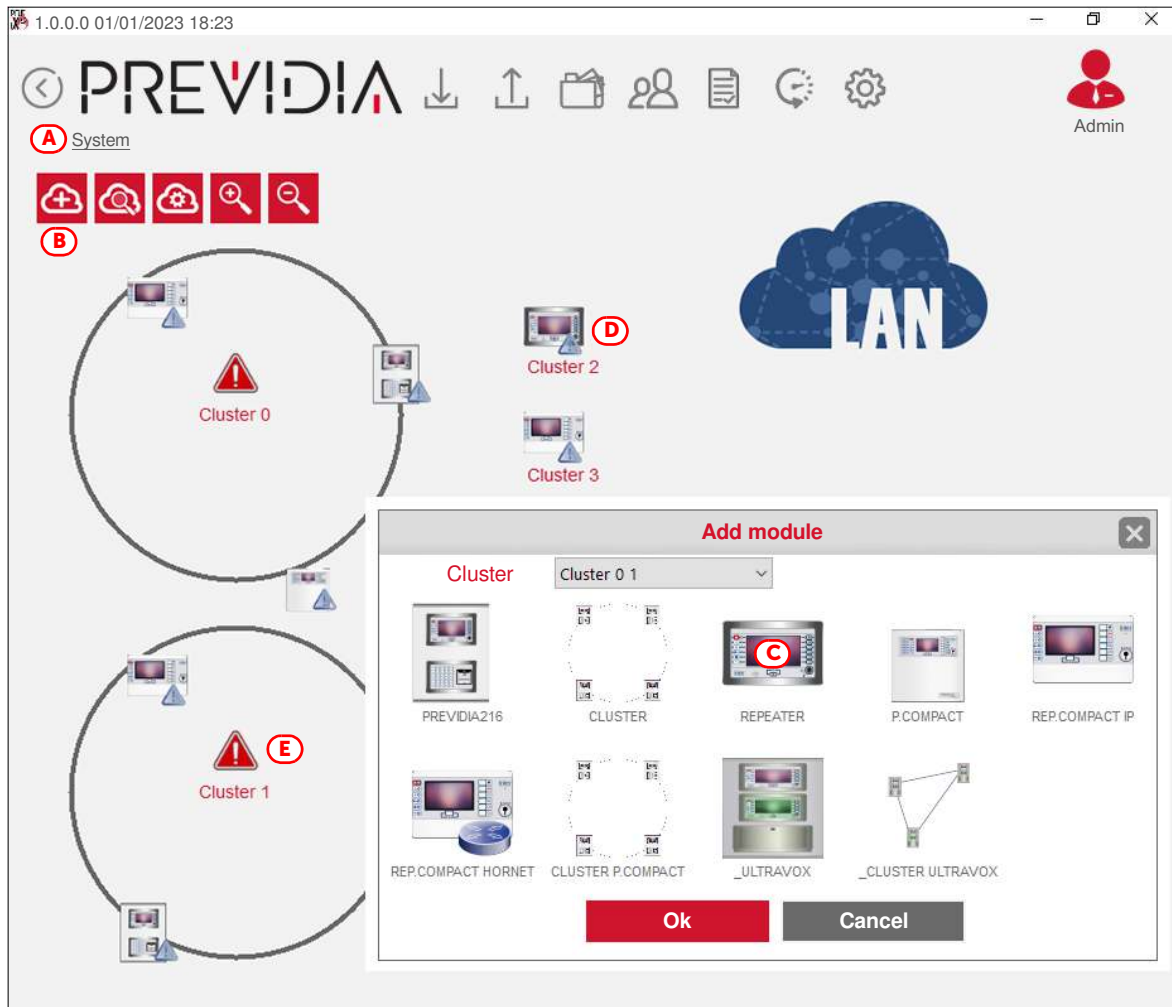
After doing so, it is necessary to check that the address of the repeater is "0". To do this it is necessary to access the **Programming** section, as indicated above, then access the **Configuration** section.



The configuration process continues through the control pane programming software.

Via Previdia/Studio

To configure an IP repeater, it is necessary to start from a solution that already exists.

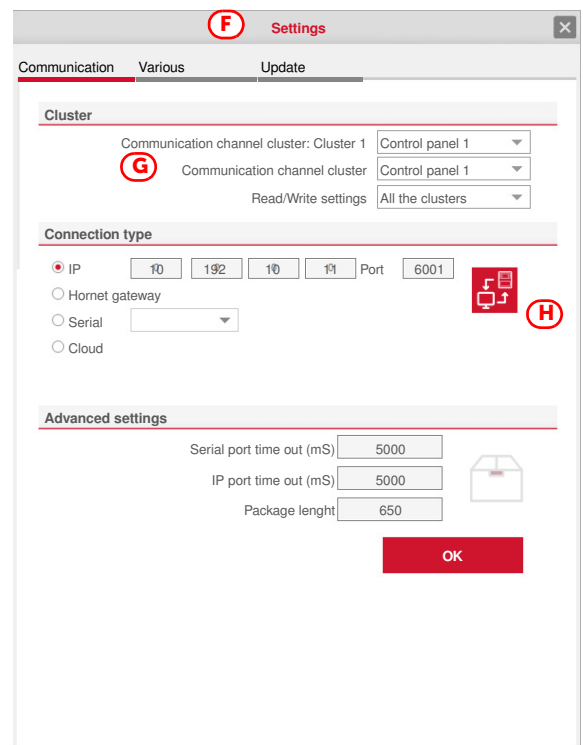


1. Go up to the "System" section [A] and click-on the **Add** button [B].
2. On the window that opens, double click-on the repeater icon [C]. The repeater will be added at the side of the first cluster in the top part of the section [D].

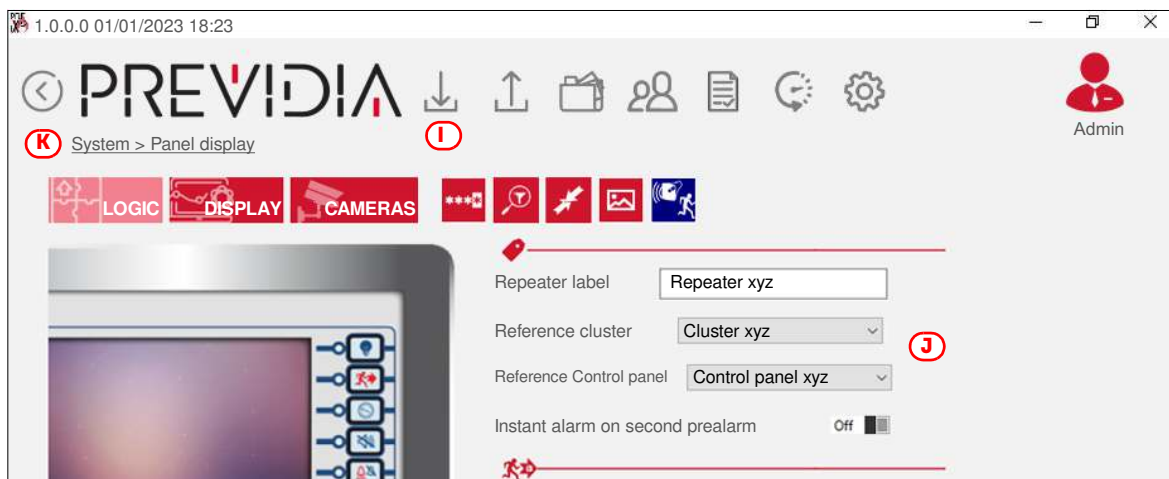
The warning icons [E] inside clusters 1 and 2 indicate that it is necessary to perform a write operation in order to communicate to each component in the network the existence of the other elements.

Therefore, you must select the type of communication connection with the repeater.

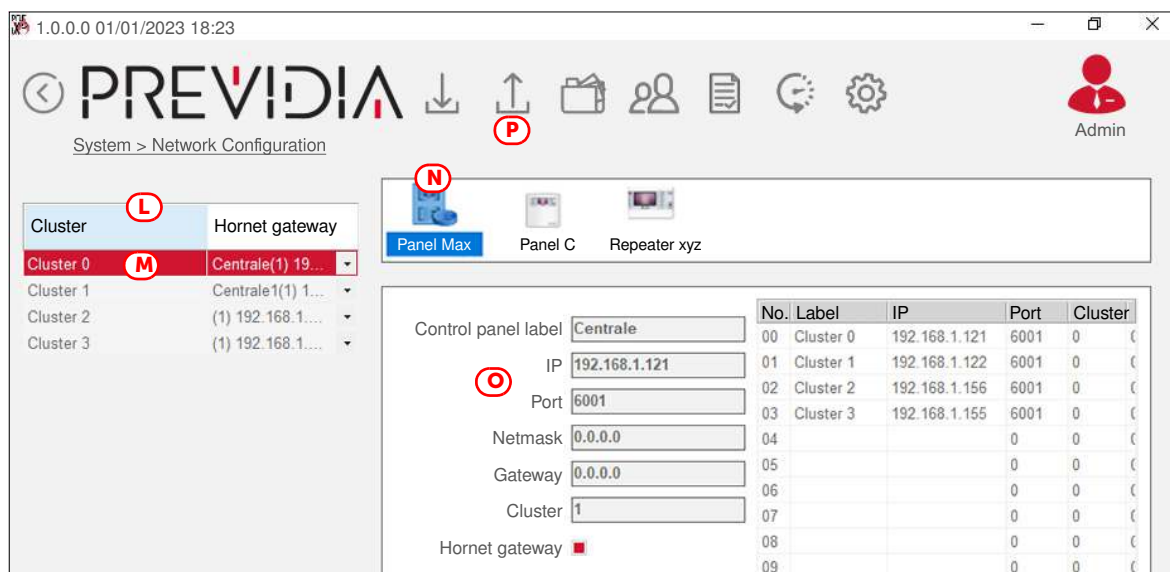
3. Right-click on the repeater icon [D] and select "Settings". The respective window will open [F].
4. Select "IP" as the communication channel and enter the IP address of the repeater and the communication port (6001) [G].
5. The **Check connection** button [H] will allow you to test the communication and verify that the TCP/IP network parameter are configured correctly.



At this point you must associate the repeater with a control panel.



6. Access the repeater programming screen by double clicking-on the respective icon and perform a read operation using the **Read** button [I].
7. Select, in the respective programming fields [J], the cluster and the control panel you want to associate the repeater with.
8. Using the [K] button, return to the "System" section. You will note that the icon of the repeater is positioned at the side the cluster it is associated with.
9. Access the "Network Configuration" section by double clicking-on the "LAN" icon on the right of the window.



10. In the clusters list on the left [L], the "Gateway not defined" message will be shown in the field corresponding to the repeater being configured. Click on the "Gateway not defined" message to open a dropdown menu where you can select an IP address for the repeater.
11. In the same list, first click-on the cluster the repeater is associated with [M] and then on the relative control panel [N].
12. In the column on the right, in the row of the cluster the repeater is associated with [O], check that the cluster and the control panel (you want to associate the repeater with) are correct.
13. Click-on the **Write** button [P].

If everything is correct, all the control panels in the network and their relative IP repeaters will go into programming status.





Inim Electronics S.r.l.

ISO 9001 Quality Management

Certificate issued by BSI with number FM530352

Centobuchi, via Dei Laboratori 10

63076 Montepandone (AP), Italy

Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ **www.inim.it**





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REV. 1.10

Specifiche tecniche	Technical specifications	Caractéristiques techniques	
Tensione di alimentazione	Power supply voltage	Tension d'alimentation	12 - 26 V ^{***}
Consumo @ 24V	Consumption @ 24V	Consommation @ 24V	0.12A
Potenza di ingresso media @ 24V	Average input power @ 24V	Average input power @ 24V	2.88W
Velocità media ventola	Average fan speed	Average fan speed	3500 RPM±10%

It

En

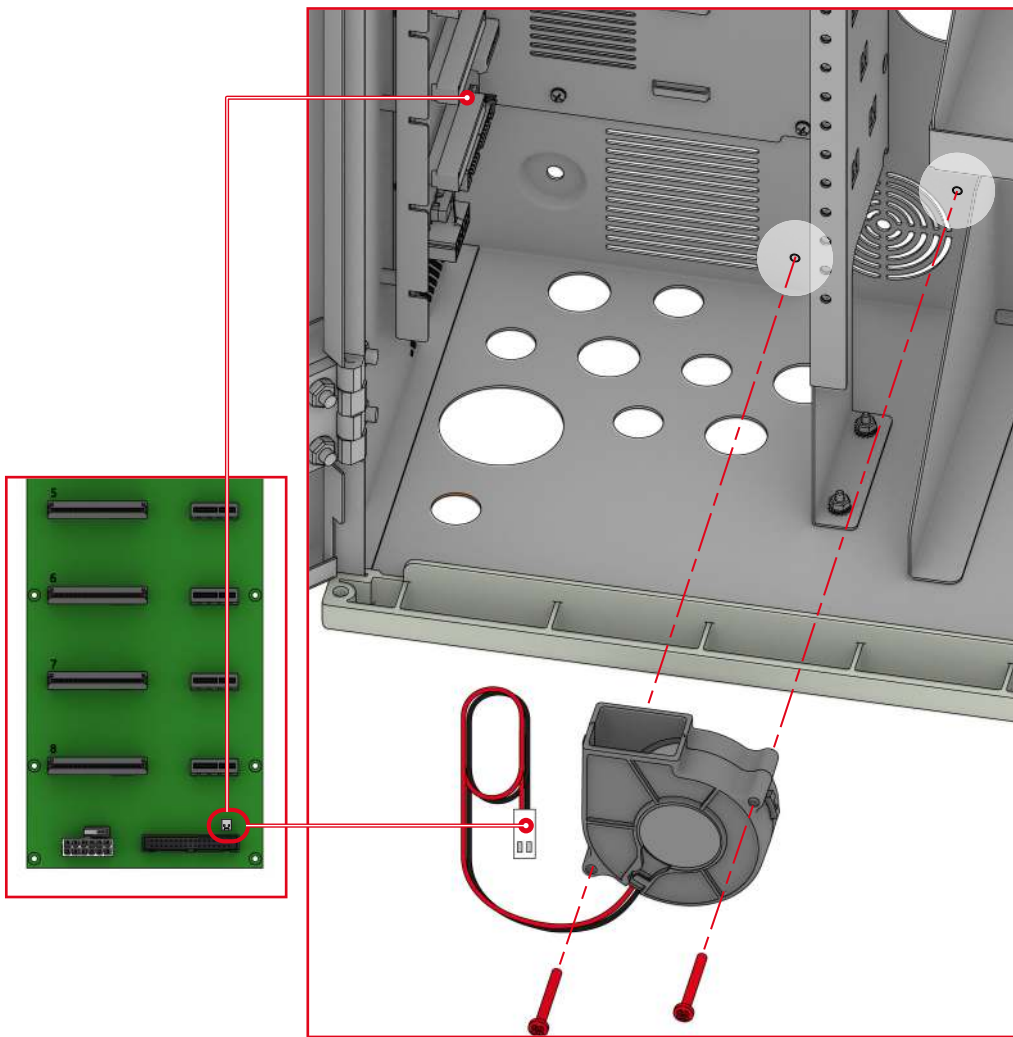
Fr

Especificaciones técnicas	Especificações técnica	Technische specificaties	
Tensión de alimentación	Tensão de alimentação	Voedingsspanning	12 - 26 V ^{***}
Consumo @ 24V	Consumo @ 24V	Verbruik @ 24V	0.12A
Potencia de entrada @ 24V	Potência de entrada @ 24V	Ingangsvermogen @ 24V	2.88W
Velocidad media del ventilador	Velocidade média da ventoinha	Gemiddeld ventilator snelheid	3500 RPM±10%

Es

Pt

Nl



Montaggio

Mounting

Montage

Montaje

Montagem

Montage



Questo simbolo indica all'installatore di far riferimento al manuale istruzioni.

Direttiva 2014/53/UE

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This symbol indicates to installer to refer to the instructions manual.

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Ce symbole indique à l'installateur de faire référence au manuel d'instructions.

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DEEE

Informations sur l'élimination des équipements électriques et électroniques (applicable dans les Pays avec systèmes de récolte sélective)

Le symbole de la poubelle barrée sur l'appareil ou sur son emballage indique que le produit à la fin de sa durée de vie utile doit être collecté séparément des autres déchets. L'utilisateur devra donc confier l'appareil en fin de vie aux centres de collecte municipaux appropriés pour le tri sélectif des déchets électroniques et électriques. Comme alternative à la gestion autonome, il est possible de remettre l'appareil que l'on souhaite éliminer au revendeur, lors de l'achat d'un nouvel appareil équivalent. Chez les détaillants de matériel électronique disposant d'une surface de vente d'au moins 400m², il est également possible de remettre gratuitement, sans obligation d'achat, les produits électroniques à éliminer de dimensions inférieures à 25cm.

La collecte séparée adéquate de l'appareil hors service aux fins du recyclage, traitement et élimination compatible avec l'environnement contribue à éviter les effets négatifs possibles sur l'environnement et la santé humaine et aide au réemploi et/ou recyclage des matériaux dont l'appareil est constitué.



Este símbolo indica al instalador de remitirse al manual de instrucciones.

Directiva 2014/53/UE

Con la presente, INIM Electronics S.r.l. declara que las centrales Previdia son conformes con los requisitos esenciales y las demás disposiciones pertinentes establecidas por la Directiva 2014/53/UE. Este producto puede ser utilizado en todos los países de la UE.

Documentación para los usuarios

Las declaraciones de Prestación, Declaraciones de Conformidad y Certificados relativos a los productos INIM Electronics S.r.l. pueden descargarse gratuitamente de la dirección web www.inim.it, accediendo al área reservada y después seleccionando "Certificaciones" o también solicitarse a la dirección e-mail info@inim.it o pedirse por correo ordinario a la dirección indicada en este manual. Los manuales pueden descargarse gratuitamente de la dirección web www.inim.it, accediendo al área reservada y después seleccionando "Los manuales de los productos".

Garantía

INIM Electronics S.r.l. garantiza al comprador original que este producto estará libre de defectos de material y mano de obra para su uso normal durante un periodo de 24 meses.

Debido al hecho de que Inim Electronics no realiza la instalación de este producto directamente, y debido a la posibilidad de que el producto sea utilizado con otros equipos no aprobados por Inim Electronics, no podemos garantizar el producto contra la pérdida de calidad, rendimiento o degradación de este producto o pManual de Instalación y Programación daños que resulten del uso de productos, piezas u otros elementos reemplazables (como los consumibles) que no hayan sido hechos o recomendados por Inim Electronics. La obligación y responsabilidad del Vendedor bajo esta garantía está expresamente limitada a reparación o sustitución del producto, conforme al criterio del Vendedor, de aquellos productos que no cumplan las especificaciones. En ningún caso Inim Electronics será responsable ante el comprador o ante terceros, por cualquier pérdida o daño, sea directa o indirecta, como consecuencia directa del uso o accidental, incluyendo, sin limitación, cualesquiera daños por pérdida de beneficios, bienes robados, o reclamaciones por cualquier tercero ocasionadas por productos defectuosos o por la instalación o uso inapropiado o incorrecto de este producto.

Esta garantía se aplica solamente a defectos en piezas y a la mano de obra que correspondan al uso normal. No cubre daños causados por utilización indebida o negligencia, daños causados por incendios, inundaciones, vientos o relámpagos, vandalismo, uso y desgastar.

INIM Electronics S.r.l. tendrá la opción entre reparar o sustituir cualquier producto defectuoso. La utilización indebida o para fines distintos a los aquí mencionados causará la anulación de esta garantía. Para obtener más información acerca de esta garantía, contacte con su distribuidor autorizado o visite nuestra página web.

Garantía limitada

INIM Electronics S.r.l. no se hace responsable ante el comprador ni ninguna otra persona, por daños resultantes de almacenamiento inadecuado, ni por el uso o manipulación indebidos de este producto.

La instalación de este Producto debe realizarse únicamente por personas indicadas por Inim Electronics. Dicha instalación debe hacerse de acuerdo con Nuestras instrucciones en el manual del producto.

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RAEE

Información sobre la eliminación de equipos eléctricos y electrónicos (aplicable en los Países con sistemas de recogida selectiva)

El símbolo del contenedor tachado que figura en el aparato o en el embalaje indica que el producto, al final de su vida útil, debe ser desechado por separado de los demás residuos. El usuario deberá, por tanto, llevar el equipo llegado al final de su vida a los centros municipales específicos de recogida selectiva para desechos electrodomésticos y electrónicos. Como alternativa a la gestión autónoma, es posible entregar el equipo que se desea eliminar al revendedor, cuando se adquiera un nuevo equipo de tipo equivalente. En los comercios de productos electrónicos con superficie de venta mínima de 400 m² también es posible entregar gratuitamente, sin obligación de compra, los productos electrónicos con dimensiones inferiores a 25 cm que se deseen deschar.

La adecuada recogida selectiva para enviar posteriormente el equipo desechado al reciclaje, al tratamiento y a la eliminación ambientalmente compatible, contribuye a evitar posibles efectos negativos en el medio ambiente y en la salud, y favorece la reutilización y/o reciclaje de los materiales de los que está compuesto el equipo.



Este símbolo indica ao instalador de consultar o manual de instruções.

Diretiva 2014/53/EU Com a presente, INIM Electronics S.r.l. declara que as centrais Previdia estão em conformidade com os requisitos essenciais e outras prescrições pertinentes estabelecidas pela diretiva 2014/53/EU. Este produto pode ser utilizado em todos os países UE.

Documentação para os utilizadores Declarações de desempenho, Declarações de Conformidade e Certificados relativos aos produtos INIM Electronics S.r.l. podem ser descarregados gratuitamente no endereço da internet www.inim.it, acedendo à área reservada e seleccionando "Certificações" ou requisições ao endereço e-mail info@inim.it ou requisições por carta enviadas ao endereço indicado neste manual. Os manuais podem ser descarregados gratuitamente no endereço da internet www.inim.it, acedendo à área reservada e seleccionando "Os manuais dos produtos"

Garantia Inim Electronics S.r.l. garante ao comprador original que este produto estará livre de defeitos de material e mão de obra para a sua utilização normal durante um período de 24 meses. Como a Inim Electronics não faz a instalação de este produto de forma directa e devido à possibilidade de que o produto seja utilizado com outros equipamentos não aprovados pela Inim Electronics, não podemos garantir o produto contra a perda de qualidade, desempenho, degradação ou por danos que sejam resultado do uso de produtos, peças ou outros elementos substituíveis (como os consumíveis) que não tenham sido fabricados ou recomendados pela Inim Electronics. A obrigação e a responsabilidade do Vendedor sob esta garantia está expressamente limitada à reparação ou substituição, conforme o critério do Vendedor, dos produtos que não cumpram as especificações. Em nenhum caso, a Inim Electronics será responsável perante o comprador ou perante terceiros, por qualquer perda ou dano, directa ou indirectamente, decorrente do uso ou acidente, incluindo, de forma limitada, qualquer prejuízo por cese de lucro, bens roubados ou reclamações de terceiros, ocasionados por produtos defeituosos, pela instalação ou pela utilização imprópria ou incorrecta deste produto. Esta garantia é aplicável somente para defeitos nas peças e mão de obra que correspondam à utilização normal. Não cobre danos causados por utilização imprópria ou negligente, incêndios, cheias, vendavais ou relâmpagos, actos de vandalismo, utilização e desgaste. A Inim Electronics S.r.l. poderá optar entre a reparação ou a substituição dos produtos com defeitos. A utilização indevida ou com fins diferentes aos aqui mencionados causará a anulação desta garantia. Para obter mais informação sobre esta garantia, entre em contacto com o distribuidor autorizado ou visite a nossa página web.

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REEE Informações sobre a eliminação dos equipamentos eléctricos e electrónicos (aplicável nos Países com sistemas de recolha seletiva)

O símbolo do bidão barrado presente na aparelhagem ou na embalagem indica que o produto deve ser recolhido separadamente dos outros detritos no final de sua vida útil. Portanto, o utilizador deverá entregar o equipamento cuja vida útil terminou em centros de recolha seletiva dos resíduos eletrotécnicos e electrónicos da própria zona. Como alternativa à gestão autónoma é possível entregar o equipamento a eliminar ao revendedor, ao adquirir um novo equipamento de tipo equivalente. Junto aos revendedores de produtos electrónicos cuja superfície de venda seja de pelo menos 400 m², para além disso é possível entregar gratuitamente, sem obrigação de compra, os produtos electrónicos a eliminar com dimensões inferiores a 25 cm.

A recolha seletiva adequada para a ativação sucessiva da aparelhagem entregue à reciclagem, tratamento e eliminação compatível com o ambiente contribui para evitar possíveis efeitos negativos no próprio ambiente e para a saúde, favorecendo a reutilização e ou reciclagem dos materiais com os quais a aparelhagem é composta.



Dit symbol geeft de installateur naar de instructiehandleiding raadpleeg aan.

Richtlijn 2014/53/EU Hierbij verklaart INIM Electronics S.r.l. dat deze Previdia zijn met de fundamentele vereisten en andere pertinente voorschriften opgelegd door de richtlijn 2014/53/EU. Dit product mag in alle landen van de EU worden gebruikt.

Documentatie voor de gebruikers DPrestatieverklaringen, conformiteitsverklaringen en certificaten met betrekking tot de producten van

INIM Electronics S.r.l. kunt u gratis downloaden via de website www.inim.it, waar u naar de voorbehouden zone gaat en vervolgens "Certificaties" selecteert, ofwel vraagt u die aan op het e-mailadres info@inim.it of via gewone post op het adres aangegeven in deze handleiding. U kunt de handleidingen gratis downloaden via de website www.inim.it, waar u naar de voorbehouden zone gaat en vervolgens "Handleidingen van de producten" selecteert.

Garantie Inim Electronics S.r.l. (Verkoper, Ons, wij) garanderen de originele koper dat dit product bij normaal gebruik vrij zal zijn van defecten in materialen en werkmanschap over een periode van 24 maanden.

Aangezien Inim Electronics dit product niet zelf installeert, en daardoor de mogelijkheid bestaat dat het gebruikt wordt met andere materialen niet goedgekeurd door ons; geeft Inim Electronics geen garantie tegen verlies van kwaliteit, vermindering in prestatie van dit product of actuele beschadigingen tegen materialen, onderdelen of andere te vervangen goederen (verbruiksgoederen) die niet gemaakt of aanbevolen zijn door Inim Electronics. De verplichting en aansprakelijkheid van de verkoper in deze garantie is nadrukkelijk beperkt tot herstel of vervanging, (keuze van de verkoper) van producten die niet voldoen aan de door ons vooropgestelde specificaties. Op geen enkel moment kan Inim Electronics verantwoordelijk gehouden worden door de aankoper of een ander persoon voor verlies of beschadiging hetzij direct, indirect, ten gevolge van of incidentieel, inbegrepen zonder beperking door schade gederfde winst, gestolen goederen of schadevergoeding van een ander partij veroorzaakt door defecte producten of ten gevolge van onjuiste installatie of gebruik van dit product.

Dit product wordt met ingang van de keuringsdatum 24 maanden lang tegen eventuele defecten in de bewerking of het materiaal gedekt. De garantie dekt geen schade veroorzaakt door: onjuist gebruik of nalatigheid, schade veroorzaakt door weersinvloeden, vandalisme, slijtage.

Inim Electronics w behouden ons het recht voor om defecte producten naar ons inzichten te repareren of te vervangen. De garantie is niet langer geldig als het defect te wijten is aan een onjuist gebruik of een gebruikswijze die niet in deze handleiding beschreven is. Raadpleeg het verkoopcontract voor overige informatie omtrent de garantie.

Uitsluiting van garantie Inim Electronics S.r.l. acht zich niet verantwoordelijk voor directe of indirecte schade aan personen of voorwerpen

veroorzaakt door het gebruik van het apparaat in andere omstandigheden dan voorzien. De installatie van deze centrale moet in overeenstemming met de aanwijzingen van deze handleiding en de van kracht zijnde voorschriften, normen en reglementen op het gebied van brandbestrijding door ervaren personeel verricht worden.

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AEEA Informatie over de verwijdering van elektrische en elektronische apparatuur (van toepassing in landen met gescheiden inzamelingsystemen)

Het symbool van de doorgestreepte vuilnisbak op de apparatuur of de verpakking geeft aan dat het product aan het einde van zijn nuttige levensduur gescheiden van ander afval moet worden ingezameld. Daarom moet de gebruiker de apparatuur aan het einde van de levensduur ervan afgeven aan de daarvoor in aanmerking komende gemeentelijke centra voor de gescheiden inzameling van elektrotechnisch en elektronisch afval. Als alternatief voor eigen beheer kunt u bij de aankoop van nieuwe apparatuur van een gelijkwaardig type de apparatuur waarover u wilt beschikken, aan uw dealer overdragen. Bovendien kunnen elektronische producten gratis en zonder enige verplichting tot aankoop aan de detailhandelaars worden geleverd die een verkoopoppervlakte van ten minste 400 m² hebben voor verwijdering van formaten van minder dan 25 cm.

Een adequate gescheiden inzameling met het oog op recycling, verwerking en milieuvriendelijke verwijdering van afgedankte apparatuur helpt mogelijke negatieve gevolgen voor het milieu en de gezondheid te voorkomen en bevordert het hergebruik en/of de recycling van de materialen waaruit de apparatuur is samengesteld.

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Inim Electronics S.r.l.

ISO 9001 Quality Management
certified by BSI with certificate number FM530352

Centobuchi, via Dei Lavoratori 10
63076 Montepandone (AP), Italy
Tel. +39 0735 705007 _ Fax +39 0735 704912

info@inim.it _ www.inim.it



DCGIIN1PPRCABBOOSTFAN-110-20231205



CERTIFICATE OF CONFORMITY

CERTIFICATO DI CONFORMITÀ

CERTIFICATE No.	1767
<i>CERTIFICATO No.:</i>	
APPLICANT:	INIM ELECTRONICS SRL
<i>RICHIEDENTE:</i>	Via dei Lavoratori, 10 – Frazione Centobuchi – 63076 Monteprandone (AP) Italy
MANUFACTURER:	Various (see next pages – Articles)
<i>CoSTRUTTORE:</i>	Vari (vedere pagine seguenti – Articoli)
PRODUCT:	Fire detection and fire alarm systems
<i>ProDOTTO:</i>	Sistemi di rivelazione e di segnalazione d'incendio
MODEL(S):	Various (see next pages – Articles)
<i>MoDELLO(I):</i>	Vari (vedere pagine seguenti – Articoli)
TRADE MARK:	Various (see next pages – Articles)
<i>MaRCA CoMMERCIaLE:</i>	Vari (vedere pagine seguenti – Articoli)

IMQ declares that a sample of the above product was found to be in compliance with the Technical specification / standard listed below: / *IMQ dichiara che un campione del prodotto qui sopra specificato è risultato conforme alle seguenti norme / specifiche tecniche:*

EN 54-13:2017+A1:2019

Compatibility and connectability assessment of system components

Valutazione della compatibilità e connettività dei componenti di un sistema

FIRST ISSUE:	2024-06-17
<i>PRIMA EMISSIONE:</i>	
REPLACES:	-
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CURRENT ISSUE:	2024-06-17
<i>EMISSIONE CORRENTE</i>	
EXPIRES:	2028-06-16
<i>SCADE:</i>	

PRODUCT CONFORMITY ASSESSMENT B.U.
CERTIFICATION MANAGER

This Certificate is the result of testing a sample of the product submitted, in accordance with the provisions of the specified Technical Specifications / Standards. It is issued according to product certification system 1a of ISO/IEC 17067; therefore, it does not imply any judgment on the production and it does not permit the use of a mark of conformity. Only full reproductions of this Certificate are allowed without written permission of IMQ.
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PRD N° 005B

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TEST REPORT(S) | RAPPORTO(I) DI PROVA

SS24-0102028-01

ARTICLES (WITH DETAILS) | ARTICOLI (CON DETTAGLI)

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION
01	INIM ELECTRONICS	Control and indicating equipment with power supply and alarm transmission and fault warning routing equipment and electrical automatic control and delay device	PREVIDIA-C200LZEX	0051-CPR-1498	TYPE 1
02			PREVIDIA-C200SZEX	0051-CPR-1499	TYPE 1
03			PREVIDIA216 PREVIDA216R	0051-CPR-1863	TYPE 1
04		Control and indicating equipment with power supply, alarm transmission and fault warning routing equipment, voice alarm control and indicating equipment and electrical automatic control and delay device	PREVIDIA-ULTRAVOX PREVIDIA-ULTRAVOXR PREVIDIA-ULTRAVOXD	0051-CPR-2741	TYPE 1
05		Control and indicating equipment with power supply, alarm transmission and fault warning routing equipment and electrical automatic control and delay device	PREVIDIA-ULTRA216 PREVIDIA-ULTRA216R PREVIDIA-ULTRA216D	0051-CPR-2826	TYPE 1
06		Voice alarm control and indicating equipment with integrated power supply equipment	PREVIDIA-VOX PREVIDIA-VOXR PREVIDIA-VOXD	0051-CPR-2827	TYPE 1
07		Control and indicating equipment with power supply and alarm transmission and fault warning routing equipment and electrical automatic control and delay device	PREVIDIA-MLZEG	0051-CPR-3155	TYPE 1
08			PREVIDIA-MSZEG	0051-CPR-3156	TYPE 1
09		Aspirating smoke detector	FA100	2831-CPR-F4883	TYPE 1
10		Smoke detector with short circuit isolator	ED100	0051-CPR-1878	TYPE 1
11		Heat detector with short circuit isolator	ED200	0051-CPR-1877	TYPE 1
12		Heat and smoke detector with short circuit isolator	ED300	0051-CPR-1876	TYPE 1
13		I/O device with short circuit isolator	EM312SR	0051-CPR-1872	TYPE 1
14			EU311	0051-CPR-1871	TYPE 1
15			EM344R	0051-CPR-1870	TYPE 1

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION
16	INIM ELECTRONICS	I/O device with short circuit isolator	EM344S	0051-CPR-1869	TYPE 1
17			EM322AC	0051-CPR-2257	TYPE 1
18			EM411R	0051-CPR-2029	TYPE 1
19			EM110	0051-CPR-2028	TYPE 1
20			EM500	0051-CPR-2027	TYPE 1
21		Input device with short circuit isolator	EM340	0051-CPR-1868	TYPE 1
22		Output device with short circuit isolator	EM304S	0051-CPR-1866	TYPE 1
23			EM304R	0051-CPR-1867	TYPE 1
24		Silence button	EM600	CE	TYPE 2
25		Manual call point with short circuit isolator	EC0020	0051-CPR-1865	TYPE 1
26		Power supply equipment	SPS24060S	0051-CPR-0434	TYPE 1
27			SPS24160S	0051-CPR-0433	TYPE 1
28		Sounders and visual alarm device with short circuit isolator	ESB1020, ESB1050, ES1020, ES1050, ES2020xE, ES2050xE	0051-CPR-1316	TYPE 1
29		Sounders with short circuit isolator	ESB1030, ESB1010, ES1030, ES1010, ES2030xE, ES2010xE	0051-CPR-1317	TYPE 1
30		Sounders and visual alarm device with short circuit isolator	ESB1021 ES1021 ES2021xE	0051-CPR-2035	TYPE 1
31		Sounders with short circuit isolator	ESB1011 ES1011 ES2011xE	0051-CPR-2036	TYPE 1
32		Sounders and visual alarm device	ISB1021 IS1021 IS2021xE	0051-CPR-2037	TYPE 1
33		Sounders	ISB1011 IS1011 IS2011xE	0051-CPR-2038	TYPE 1
34		Smoke detector	ID100	0051-CPR-1875	TYPE 1
35		Heat detector	ID200	0051-CPR-1874	TYPE 1
36		Heat and smoke detector	ID300	0051-CPR-1873	TYPE 1
37		Manual call point	IC0020	0051-CPR-1864	TYPE 1
38		Sounder	ISB1030, ISB1010, IS1030, IS1010, IS2030xE, IS2010xE	0051-CPR-1319	TYPE 1
39		Sounder and visual alarm device	ISB1020, ISB1050, IS1020, IS1050, IS2020xE, IS2050xE	0051-CPR-1318	TYPE 1

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION
40	INIM ELECTRONICS	Power supply equipment	SPS24060G	0051-CPR-0170	TYPE 1
41			SPS24160G	0051-CPR-0171	TYPE 1
42		Smoke detectors – Line detectors using an optical beam	BDH160	0786-CPR-21736	TYPE 1
43		I/O with short circuit isolator device using radio links	EWT100, EWT100B	0051-CPR-2844	TYPE 1
44		I/O device using radio links	XWT100, XWT100B	0051-CPR-2786	TYPE 1
45		Smoke detector using radio links	WD100; WD100B	0051-CPR-2765	TYPE 1
46		Heat detector using radio links	WD200; WD200B	0051-CPR-2764	TYPE 1
47		Heat and smoke detector using radio links	WD300; WD300B	0051-CPR-2763	TYPE 1
48		Manual call point using radio links	WC00100	0051-CPR-2778	TYPE 1
49		Output device using radio links	WM202SR	0051-CPR-2779	TYPE 1
50		Input device using radio links	WM110	0051-CPR-2780	TYPE 1
51		Sounder using radio links	WSB1010, WSB1010B	0051-CPR-2781	TYPE 1
52		Sounder and visual alarm device using radio links	WSB1020, WSB1020B, WSB1021, WSB1021B	0051-CPR-2782	TYPE 1
53		Sounder using radio links	WS2010RE, WS2010WE	0051-CPR-2783	TYPE 1
54		Sounder and visual alarm device using radio links	WS2020RE, WS2020WE	0051-CPR-2784	TYPE 1
55		Remote indicator using radio link	WIL0010	CE	TYPE 2
56		Loudspeakers	SPI-C56100	0068-CPR-197/2024	TYPE 1
57			SPI-C66100	0068-CPR-200/2024	TYPE 1
58			SPI-C810100	0068-CPR-199/2024	TYPE 1
59			SPI-DP40110	0068-CPR-201/2024	TYPE 1
60			SPI-CP620100	0051-CPR-3008	TYPE 1
61			SPI-P620100	0051-CPR-3006	TYPE 1
62			SPI-P620110	0051-CPR-3007	TYPE 1
63			SPI-W56100	0068-CPR-198/2024	TYPE 1
64			SPI-W420200	0051-CPR-3003	TYPE 1
65			SPI-W520200	0051-CPR-3004	TYPE 1
66			SPI-W640200	0051-CPR-3005	TYPE 1

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION
67	SYNAPS TECHNOLOGY	Manual call point	CWC99	2831-CPR-F2708	TYPE 1
68		Sounder and visual alarm device	LF24W	0370-CPR-6119	TYPE 1
69		Sounder	LF20W	0370-CPR-6121	TYPE 1
70	ARGUS SECURITY	I/O device using radio links	VW2W100	2831-CPR-F2170	TYPE 1
71			SGWE100	2831-CPR-F2169	TYPE 1
72		Smoke detector	L-OP-SG	2831-CPR-F1303	TYPE 1
73		Heat detector	L-HT-SG	2831-CPR-F1302	TYPE 1
74		Heat and smoke detector	L-MC-SG	2831-CPR-F1304	TYPE 1
75		Manual call point using radio link	SGCP200	2831-CPR-F2651	TYPE 1
76		Output module using radio link	SGMCB200	2831-CPR-F0690	TYPE 1
77		Input module using radio link	SGMI200	2831-CPR-F0691	TYPE 1
78		Sounder	SGWS-MOD+CWS100	0051-CPR-0464	TYPE 1
79		Sounder and visual alarm device using radio link	SGWS-MOD+CWS100-AV	0051-CPR-0465	TYPE 1
80		Sounder using radio link	SGRBS100/L SGRBS100-AV/L	0051-CPR-1815	TYPE 1
81	APOLLO FIRE DETECTORS	Smoke detector	55000-885	2531-CPR-CSP10930	TYPE 1
82		Heat detector	55000-401	2531-CPR-CSP10916	TYPE 1
83		Smoke detector	55000-620 55000-600	2531-CPR-CSP10924	TYPE 1
84		Heat detector	55000-400 55000-420	2531-CPR-CSP10913	TYPE 1
85		Sounder	45681-278	2531-CPR-CSP11034	TYPE 1
86			45681-276	2531-CPR-CSP11122	TYPE 1
87		Sounder with short circuit isolator	45681-277	2531-CPR-CSP11032	TYPE 1
88		Visual alarm device with short circuit isolator	45681-709	2531-CPR-CSP11169	TYPE 1
89		Sounder and visual alarm device with short circuit isolator	45681-707	2531-CPR-CSP11168	TYPE 1
90			45681-705	2531-CPR-CSP11167	TYPE 1
91		Sounder	45681-331	2531-CPR-CSP11170	TYPE 1

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION	
92	APOLLO FIRE DETECTORS	Sounder with short circuit isolator	45681-330	2531-CPR-CSP11177	TYPE 1	
93			45681-332	2531-CPR-CSP11171	TYPE 1	
94		Manual call point	55100-905	2531-CPR-CSP11011	TYPE 1	
95			58100-910	2531-CPR-CSP11018	TYPE 1	
96		Manual call point with short circuit isolator	55100-908	2531-CPR-CSP11013	TYPE 1	
97		Heat detector	58000-305	2531-CPR-CSP10932	TYPE 1	
98			58000-400	2531-CPR-CSP10936	TYPE 1	
99			58000-600	2531-CPR-CSP10942	TYPE 1	
100		Heat and smoke detector	58000-700	2531-CPR-CSP10946	TYPE 1	
101		Manual call point with short circuit isolator	58100-908	2531-CPR-CSP11017	TYPE 1	
102		Sounder with short circuit isolator	58000-030	2531-CPR-CSP11148	TYPE 1	
103			58000-040	2531-CPR-CSP11147	TYPE 1	
			58000-010			
			58000-020			
104		Sounder	58000-005 58000-007	2831-CPR-F1494	TYPE 1	
105		Sounder with short circuit isolator	45681-702	2531-CPR-CSP11166	TYPE 1	
106		Sounder and visual alarm device with short circuit isolator	45681-700	2531-CPR-CSP11165	TYPE 1	
107		Heat detector	55000-440	2531-CPR-CSP10920	TYPE 1	
108		Smoke detector	55000-640	2531-CPR-CSP10929	TYPE 1	
109		Manual call point	55200-940	0905-CPR-00188	TYPE 1	
110	Heat detector	ORB-HT-11016-APO ORB-HT-11004-APO	2531-CPR-CSP10961	TYPE 1		
111		ORB-HT-11003-APO ORB-HT-11015-APO	2531-CPR-CSP10960	TYPE 1		
112	Smoke detector	ORB-OP-12001-APO ORB-OP-12003-APO	2531-CPR-CSP10968	TYPE 1		
113	Heat detector	ORB-HT-11166-APO ORB-HT-11167-APO	2531-CPR-CSP10966	TYPE 1		

No.	MANUFACTURER	DESCRIPTION	MODEL	CERTIFICATE No.	CLASSIFICATION	
114	APOLLO FIRE DETECTORS		ORB-HT-11006-APO ORB-HT-11018-APO	2531-CPR- CSP10963	TYPE 1	
115			ORB-HT-11013-APO ORB-HT-11001-APO	2531-CPR- CSP10954	TYPE 1	
116		Smoke detector	ORB-OH-13001-APO ORB-OH-13003-APO	2531-CPR- CSP11156	TYPE 1	
1127		Heat detector	ORB-HT-11014-APO ORB-HT-11002-APO	2531-CPR- CSP10959	TYPE 1	
118		I/O with short circuit isolator device	SA6700-100	2531-CPR- CSP11050	TYPE 1	
119			55000-760	2531-CPR- CSP11042	TYPE 1	
120			55000-845	2531-CPR- CSP11143	TYPE 1	
121			SA4700-100 SA4700-302 SA4700-300 SA4700-102	2531-CPR- CSP10991	TYPE 1	
122		I/O device	55000-182	2531-CPR- CSP11127	TYPE 1	
123			55000-856	2531-CPR- CSP11048	TYPE 1	
124			55000-855	2531-CPR- CSP11047	TYPE 1	
125			55000-797	2531-CPR- CSP11043	TYPE 1	
126		I/O with short circuit isolator device	55000-852	2531-CPR- CSP11144	TYPE 1	
127			55000-812	2531-CPR- CSP11045	TYPE 1	
128		Short circuit isolator device	55000-802	2531-CPR- CSP11044	TYPE 1	
129		I/O with short circuit isolator device	SA4700-103	2531-CPR- CSP11049	TYPE 1	
130		THE FIRE BEAM COMPANY	Smoke detectors – Line detectors using an optical beam	FIREBEAM XTRA	0786-CPR-20241	TYPE 1
131				FIREBEAM BLUE	0786-CPR-21735	TYPE 1
132		HORING LIH IND. CO.		EDB01	2831-CPR-F2179	TYPE 1

ADDITIONAL INFORMATION | INFORMAZIONI SUPPLEMENTARI

Classification Options / *Opzioni di classificazione:*

Components Type 1: devices performing EN 54-1 defined functionality

Componenti di tipo 1: dispositivi che eseguono funzionalità definite dalla EN 54-1

Components Type 2: other types of devices connected to component type 1

Componenti di tipo 2: altri tipi di dispositivi collegati al componente di tipo

CERTIFICATION SCHEME INFORMATION / INFORMAZIONI RELATIVE ALLO SCHEMA DI CERTIFICAZIONE

This certificate has been issued according to the IMQ Rules Ref. Reg. PRD/IMQ/TIPO - "General Regulation for the issuing of Type Certificates on products" (ISO 17067; Certification System Type 1a) / *Questo certificato è stato emesso in accordo al Regolamento IMQ Rif. Reg. PRD / IMQ / TIPO - "Regolamento generale per il rilascio dei Certificati di Tipo sui prodotti" (ISO 17067; Schema di Certificazione Tipo 1a).*

Despite the expiring date mentioned in the first page, this certificate has to be considered expired if the standard(s) (or Technical document) has been withdrawal by the Standardisation Organisation or by the Owner of the document.

A prescindere dalla data di scadenza indicata nella prima pagina, questo certificato è da considerarsi scaduto se la norma (o il documento tecnico) è stato ritirato dall'Organismo di Standardizzazione o dal Proprietario del documento.

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product

Control and indicating equipment for fire detection and alarm systems

Name and address of the applicant

INIM ELECTRONICS S.r.l.
Via dei Lavoratori 10, fraz. Centobuchi
63076 Montepandone (AP)
Italy

Name and address of the manufacturer

INIM ELECTRONICS S.r.l.
Via dei Lavoratori 10, fraz. Centobuchi
63076 Montepandone (AP)
Italy

Name and address of the factory

Note: When more than one factory, please report on page 2

INIM ELECTRONICS S.r.l.
Via dei Lavoratori 10, fraz. Centobuchi
63076 Montepandone (AP)
Italy

Additional information on page 2

Ratings and principal characteristics

115 Vac , 8.5 A or 230 Vac , 5 A ; -15 /+10 % ; 50/60 Hz

Trademark / Brand (if any)



INIM

Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

PREVIDIA-ULTRAVOXC - PREVIDIA-ULTRAVOX - PREVIDIA-ULTRA216C -
PREVIDIA-ULTRA216
(where "C" identifies the color of enclosure)

Additional information (if necessary may also be reported on page 2)

Additional information on page 2

A sample of the product was tested and found to be in conformity with

IEC 62368-1:2018

National differences:
EU Group Differences

As shown in the Test Report Ref. No. which forms part of this Certificate

SS21-0071611-01

This CB Test Certificate is issued by the National Certification Body

IMQ S.p.A.
Via Quintiliano 43
Milano, 20138
Italy



Date: 2023-05-09

Signature: Giorgio Belussi

PID:
12100070

Certificato di approvazione

CID:
CN.G00076

Approval certificate



IMQ, ente di certificazione accreditato,
autorizza la ditta

IMQ, accredited certification body, grants to

PRD N° 005B

Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

INIM ELECTRONICS SRL
VIA DEI LAVORATORI 10-FRAZ. CENTOBUCHI
63076 MONTEPRANDONE AP
IT - Italy

all'uso del marchio

the licence to use the mark

IMQ-SISTEMI DI SICUREZZA

Il presente certificato è
soggetto alle condizioni
previste nel Regolamento
"MARCHI IMQ - Regolamento
per la certificazione di prodotti"
ed è relativo ai prodotti descritti
nell'Allegato al presente
certificato.



per i seguenti prodotti

for the following products

**Centrali antincendio con
dispositivo di controllo e
segnalazione per i sistemi di
allarme vocale
(Modd. PREVIDIA-ULTRAVOX -
PREVIDIA-ULTRAVOXC)**

*Control and indicating equipments
for fire and voice alarm systems
(Models PREVIDIA-ULTRAVOX -
PREVIDIA-ULTRAVOXC)*

*This certificate is subjected to the
conditions foreseen by Rules
"IMQ MARKS - RULES for
product certification" and is
relevant to the products listed in
the annex to this certificate.*

Emesso il | Issued on **2023-09-30**
Aggiornato il | Updated on **2024-10-21**
Sostituisce | Replaces **2023-09-30**
Scade il | Expires on **2026-09-29**



IMQ S.p.A.

Allegato - Certificato di approvazione
Annex - Approval certificate

Emesso il | Issued on 2023-09-30
Aggiornato il | Updated on 2024-10-21
Sostituisce | Replaces 2023-09-30
Scade il | Expires on 2026-09-29

Prodotto | Product

Centrali antincendio con dispositivo di controllo e segnalazione per i sistemi di allarme vocale Control and indicating equipments for fire and voice alarm systems

Concessionario | Licence Holder

INIM ELECTRONICS SRL
VIA DEI LAVORATORI 10-FRAZ. CENTOBUCHI
63076 MONTEPRANDONE AP
IT - Italy

Marchio | Mark



IMQ-SISTEMI DI
SICUREZZA

Costruito a | Manufactured at

PI.G000ST C05877577 63076 MONTEPRANDONE AP Italy

Copia del presente certificato deve essere conservata presso i luoghi di produzione sopra elencati.

Copy of this certificate must be available at the manufacturing places listed above

Norme / Specifiche tecniche

Prodotto/i conforme/i alle Norme/Specifiche tecniche:

EN 54-2:1997 + A1:2006
EN 54-4:1997 + A1:2002 + A2:2006
EN 54-16:2008
EN 12094-1:2003
EN 54-21:2006
EN IEC 62368-1:2020 + A11:2020
EN 50130-4:2011 + A1:2014

Standards / Technical specifications

Product/s complying to Standards/Technical specifications:

EN 54-2:1997 + A1:2006
EN 54-4:1997 + A1:2002 + A2:2006
EN 54-16:2008
EN 12094-1:2003
EN 54-21:2006
EN IEC 62368-1:2020 + A11:2020
EN 50130-4:2011 + A1:2014

Rapporti | Test Reports

SS21-0071605-01; SS21-0071605-02; SS21-0071605-03; SS21-0071605-04; SS21-0071605-05; SS21-0071611-01; SS21-0071610-01

Caratteristiche tecniche | Technical characteristics

Serie | Series	PREVIDIA
Tensione nominale di alimentazione | Supply rated voltage	115 Vac or 230 Vac
Frequenza nominale di alimentazione | Supply rated frequency	50/60 Hz
Corrente massima assorbita | Rated current	2 A or 8.5 A
Temperatura ambiente di funzionamento | Operating ambient temperature	-5°C + 40°C
Tensione stabilizzata fornita alle apparecchiature esterne | Output voltage for external appliances	26 V or 27.6 V
Corrente nominale alimentatore | Power supply rated output current	5.2 A or 32 A or 38 A
Numero massimo di rivelatori | Maximum number of detectors	3840 su 16 linee loop (240 ciascuna) / 3840 on 16 loop line (240 each)

Articoli (con dettagli) | Articles (with details)

AR.X0053P

Marca | Trade mark **INIM**

Modello | Model **PREVIDIA-ULTRAVOX**

Grado di protezione contro il contatto elettrico | Degree of protection against electric shock **Classe I**

Tipo e capacità massima della batteria di accumulatori allocabile | Type and maximum capacitance of the battery **2 x 12 V - 38 Ah or 17 Ah**

Altre caratteristiche | Further characteristics **vedere ulteriori informazioni / see additional information**

AR.X0053Q

Marca | Trade mark **INIM**

Modello | Model **PREVIDIA-ULTRAVOXC**

Grado di protezione contro il contatto elettrico | Degree of protection against electric shock **Classe I**

Tipo e capacità massima della batteria di accumulatori allocabile | Type and maximum capacitance of the battery **2 x 12 V - 38 Ah or 24 Ah or 17 Ah**

Altre caratteristiche | Further characteristics **vedere ulteriori informazioni / see additional information**

Ulteriori informazioni | Additional Information

Modello PREVIDIA-ULTRAVOX

Configurazione: L'unità centrale è costituita da un involucro di metallo color grigio standard (dimensioni: 675 x 430 x 250 mm), con grado di protezione IP30. Internamente è dotata delle seguenti parti principali completamente configurabile in più involucri, estendibile fino a 4 involucri adiacenti uno sopra l'altro:

- N. 1 Modulo CPU tipo FPMCPU (codice PCB IN136-R4) con integrato un LCD alfanumerico touch;
- N. 1 Modulo CPU tipo FPAMIAS (codice PCB IN307-R2) con integrato un LCD alfanumerico touch;
- N. 1 Modulo di controllo e segnalazione per allarmi vocali tipo IFAMEVAC (codice PCB IN305-R1);
- N. 2 Modulo amplificatore tipo IFAMAMP (codice PCB IN303-R2) da 250 W / 40 ohm (con PU tipo IFAMPSU) o 80 W / 125 ohm (con PU tipo IFM24160), fino ad un massimo di 30;
- N. 1 Modulo audio locale tipo IAS-ADAPT1000 (codice PCB IN352-R0);
- N. 1 Modulo loop tipo IFM2L (codice PCB IN132-R3), con 2 linee loop, fino massimo 8 per unità centrale;
- N. 1 Modulo di uscite tipo IFM4R (codice PCB IN151-R1), con 4 relays, fino massimo 16 per unità centrale;
- N. 1 Modulo ingressi/uscite tipo IFM4IO (codice PCB IN152-R1), con 4 circuiti di ingressi/uscite, fino ad un massimo di 16 per unità centrale;
- N. 1 Modulo ingressi/uscite tipo IFM16IO (codice PCB IN155-R1), con 16 circuiti ingressi/uscite, fino ad un massimo di 4 per unità centrale;
- N. 1 Modulo di trasmissione allarme e di segnalazione remota di guasto e avvertimento tipo IFMDIAL (codice PCB IN153-R1), usando le reti PSTN e GSM/GPRS, fino ad un massimo di 1 per unità centrale;
- N. 1 Modulo LAN tipo IFMLAN (codice PCB IN175-R1), usando il protocollo TCP-IP e la rete LAN, fino ad un massimo di 1 per unità centrale;
- N. 1 Microfono locale tipo IPG-PTT;
- N. 1 Modulo telefonico per vigili del fuoco tipo IFAMFFT (codice PCB IN309-R1). Non contemplato dalla serie EN 54; sono stati eseguiti solo test ambientali, test di vibrazione e test EMC;
- N. 1 Cornetta telefonica di emergenza tipo IFFT-PHONE. Non contemplata dalla serie EN 54; sono stati eseguiti solo test ambientali, test di vibrazione e test EMC;
- N. 1 Apparecchiatura elettrica automatica di controllo e temporizzazione per impianti di estinzione incendio tipo IFMEXT (codice PCB IN184-R0), fino ad un massimo di 24 per unità centrale;
- N. 1 Modulo LED e stampante tipo FPMLEDPRN (codice PCB IN149-R0), fino ad un massimo di 1 per unità centrale;
- N. 1 Modulo LED tipo FPMEXT (codice PCB IN149-R0) per apparecchiatura elettrica automatica di controllo e temporizzazione per impianti di estinzione incendio, fino ad un massimo di 5 per unità centrale;
- N. 1 Modulo LED tipo FPMLED (codice PCB IN149-R0), fino ad un massimo di 7 per unità centrale;
- N. 1 Modulo per connessione Hornet network tipo IFMNET (codice PCB IN150-R1), fino massimo di 1 per unità centrale;
- N. 1 Modulo per connessione audio network tipo IFAMIDANET (codice PCB IN308-R1), fino massimo di 1 per unità centrale;
- N. 1 Scheda CANDRIVE+ (codice PCB IN306-R2);
- N. 1 Unità di alimentazione switching marca INIM, tipo IFAMPSU costituita da una scheda di controllo (codice PCB IN304-R2) e da un alimentatore switching marca MEAN WELL tipo PSPA-1000-24, da 27.6 V - 32 A o 38 A con N. 2 batterie allocabili da 12 V - 38 Ah o 24 Ah o 17 Ah, o
- N. 1 Unità di alimentazione switching marca INIM, tipo IFM24160 da 27.6 V - 5.2 A con N. 2 batterie allocabili da 12 V - 24 Ah or 17 Ah.

L'unità centrale è anche provvista dei seguenti dispositivi esterni:

- Base microfonica di emergenza marca INIM, tipo IPGE06 (codice PCB IN333-R1 + IN334-R1);
- Base microfonica di emergenza marca INIM, tipo IPGE18 (codice PCB IN333-R1 + IN334-R1);
- Base microfonica marca INIM, tipo IPG12 (codice PCB IN333-R1 + IN334-R1). Non contemplata dalla serie EN 54; sono stati eseguiti solo test ambientali e test EMC;
- Base microfonica marca INIM, tipo IPG24 (codice PCB IN333-R1 + IN334-R1). Non contemplata dalla serie EN 54; sono stati eseguiti solo test ambientali e test EMC;
- Microfono a stelo tipo IPG-GOOSNECK. Identificazione hardware del microcontrollore (U1) utilizzato sul modulo CPU tipo FPMCPU: NXP, LPC1788FBD208;

Identificazione firmware del microcontrollore (U1) utilizzato sul modulo CPU tipo FPMCPU: 1.00;
Identificazione hardware del microcontrollore (U1) utilizzato sul modulo CPU tipo FPAMIAS: NXP,

LPC1788FBD208;

Identificazione firmware del microcontrollore (U1) utilizzato sul modulo CPU tipo FPAMIAS: 1.00.

Modello PREVIDIA-ULTRAVOXC: Configurazione: Come il modello PREVIDIA-ULTRAVOX, ma di colore differente. Il parametro C sostituito da una lettera maiuscola identifica il colore in alternativa al grigio standard (esempio: PREVIDIA-ULTRAVOXR identifica il colore ROSSO)

Model PREVIDIA-ULTRAVOX Configuration:

The equipment consists of a standard grey metal enclosure (dimensions: 675 x 430 x 250 mm) with IP30 degree of protection. Internally they are fitted with the following main parts fully configurable in multiple enclosures, extendable up to 4 adjacent one above the other:

- No. 1 CPU module type FPMCPU (PCB code IN136-R4) with integrated alphanumeric touch LCD;
- No. 1 CPU module type FPAMIAS (PCB code IN307-R2) with integrated alphanumeric touch LCD;
- No. 1 Voice Alarm Control and Indicating module type IFAMEVAC (PCB code IN305-R1);
- No. 2 Amplifier module type IFAMAMP (PCB code IN303-R2) rated 250 W / 40 ohm (with PU type IFAMPSU) or 80 W / 125 ohm (with PU type IFM24160), up to 30 maximum;
- No. 1 Local Audio module type IAS-ADAPT1000 (PCB code IN352-R0);
- No. 1 Loop module type IFM2L (PCB code IN132-R3), with 2 loop lines, up to 8 maximum for equipment;
- No. 1 Outputs module type IFM4R (PCB code IN151-R1), with 4 relays, up to 16 maximum for equipment;
- No. 1 Inputs/outputs module type IFM4IO (PCB code IN152-R1), with 4 input/output circuits, up to 16 maximum for equipment;
- No. 1 Inputs/outputs module type IFM16IO (PCB code IN155-R1), with 16 input/output circuits, up to 4 maximum for equipment;
- No. 1 Alarm transmission and fault warning routing equipment module type IFMDIAL (PCB code IN153-R1), using PSTN and GSM/GPRS network, up to 1 maximum for equipment;
- No. 1 LAN module type IFMLAN (PCB code IN175-R1), using TCP-IP protocol and Local Area, up to 1 maximum for equipment;
- No. 1 Local microphone type IPG-PTT;
- No. 1 Phone firefighters module type IFAMFFT (PCB code IN309-R1). It is not covered by the EN 54 series. Only environmental, vibration and EMC tests were performed;
- No. 1 Emergency telephone handset type IFFT-PHONE. It is not covered by the EN 54 series. Only environmental, vibration and EMC tests were performed;
- No. 1 Electrical automatic control and delay device type IFMEXT (PCB code IN184-R0), up to 24 maximum for equipment;
- No. 1 LED and printer module type FPMLEDPRN (PCB code IN149-R0), up to 1 maximum for equipment;
- No. 1 LED module type FPMEXT (PCB code IN149-R0) for electrical automatic control and delay device, up to 5 maximum for equipment;
- No. 1 LED module type FPMLED (PCB code IN149-R0), up to 7 maximum for equipment;
- No. 1 Module for hornet network connection type IFMNET (PCB code IN150-R1), up to 1 maximum for equipment;
- No. 1 Module for audio network connection type IFAMIDANET (PCB code IN308-R1), up to 1 maximum for equipment;
- No. 1 CANDRIVE+ board (PCB code IN306-R2);
- No. 1 Switching Power Unit trademark INIM, type IFAMPSU composed of the control board (PCB code IN304-R2) and the switching power supply trademark MEAN WELL type PSPA-1000-24, rated 27.6 V - 32 A or 38 A with No. 2 Allocable batteries rated 12 V - 38 Ah or 24 Ah or 17 Ah, or
- No. 1 Switching Power Unit trademark INIM, type IFM24160 (PCB code IN144-R2), rated 27.6 V-5.2 A with No. 2 Allocable batteries rated 12 V - 24Ah or 17 Ah.

The equipment is also provided of the following external devices:

- Emergency microphone base trademark INIM, type IPGE06 (PCB code IN333-R1 + IN334-R1);
- Emergency microphone base trademark INIM, type IPGE18 (PCB code IN333-R1 + IN334-R1);
- Microphone base trademark INIM, type IPG12 (PCB code IN333-R1 + IN334-R1). It is not covered by the EN 54 series. Only environmental, vibration and EMC tests were performed;
- Microphone base trademark INIM, type IPG24 (PCB code IN333-R1 + IN334-R1). It is not covered by the EN 54 series. Only environmental, vibration and EMC tests were performed;
- Stem microphone type IPG-GOOSENECK.

Hardware identification of the microcontroller (U1) used on the module type FPMCPU: NXP, LPC1788FBD208.

Firmware identification of the microcontroller (U1) used on the module type FPMCPU: 1.00. Hardware

identification of the microcontroller (U1) used on the module type FPAMIAS: NXP, LPC1788FBD208. Firmware

identification of the microcontroller (U1) used on the module type FPAMIAS: 1.00.

Model PREVIDIA-ULTRAVOXC Configuration: As model PREVIDIA-ULTRAVOX but with a different color. The C parameter replaced by an uppercase letter identifies the color as an alternative to the standard gray (example: PREVIDIA-ULTRAVOXR identifies the RED)

Componenti | Component List

Vedere apposto elenco /See relevant annex

Emesso il | Issued on 2023-09-30

Aggiornato il | Updated on ---

Sostituisce | Replaces ---

Scade il | Expires on 2026-09-29



IMQ S.p.A. - Società con Socio Unico
I20138 Milano - via Quintiliano, 43
tel. 0250731 (r.a.)
e-mail: info@imq.it - www.imq.it

Rea Milano 1595884
Registro Imprese Milano 12898410159
C.F./P.I. 12898410159
Capitale Sociale € 4.000.000

CA12.02114

SN.X000QK

Diritti di concessione | Annual Fees

SN.X000QK

EMY.121000.DA2N

*Importo modelli IMQ - centrali - 1210 - Centrali ed apparati ausiliari | IMQ models - control panel - 1210
- Central processing units and auxiliary apparatus*

1



CERTIFICATE OF CONSTANCY OF PERFORMANCE

0051-CPR-2741

In compliance with Regulation (EU) No. 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation, or CPR), this Certificate applies to the construction product

Product: **CONTROL AND INDICATING EQUIPMENT WITH INTEGRATED:
- POWER SUPPLY EQUIPMENT,
- ALARM TRANSMISSION AND FAULT WARNING ROUTING EQUIPMENT,
- ELECTRICAL AUTOMATIC CONTROL AND DELAY DEVICE,
- VOICE ALARM CONTROL AND INDICATING EQUIPMENT**

Models: **PREVIDIA-ULTRAVOX; PREVIDIA-ULTRAVOXR; PREVIDIA-ULTRAVOXD**

Trademark: **INIM**

Other information: **See ANNEX**

Produced by:

INIM ELECTRONICS S.r.l.

Via Dei Lavoratori 10 – Frazione Centobuchi
63076 Monteprandone (AP), Italy

in the manufacturing plant:

PI.H0000J

This Certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard(s)

EN 54-2:1997 + A1:2006;

EN 54-4:1997 + A1:2002 + A2:2006;

EN 54-16:2008; EN 54-21:2006; EN 12094-1:2003

Under system **1** are applied and that **the product fulfills all the prescribed requirements set out above**

ISSUED ON 01/09/2022

REVISION 0

B.U. PRODUCT CONFORMITY ASSESSMENT
CPR TECHNICAL DIRECTOR

(ENG. VALBERTO BAGGIO)

This certificate was first issued on 01/09/2022 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonized standard, used to assess the performance of the declared characteristics, do not change, and the products, and the manufacturing conditions in the plant are not modified significantly.

This Certificate was issued by IMQ S.p.A., a Notified Body according to Regulation (EU) No. 305/2011. IMQ S.p.A. Identification Number is: **0051**. This certificate is subjected to the Regulation of Assessment and Verification of Constancy of Performance of the Construction Products as Notified Body, according to Regulation (EU) no. 305/2011 and Legislative Decree n.106/ 2017 (REG. ON / CPR)

ANNEX

0051-CPR-2741

Model **PREVIDIA-ULTRAVOX**

Configuration:

The equipment consists of one standard grey metal enclosure (dimensions: 675 x 430 x 250 mm) with IP30 degree of protection. Internally they are fitted with the following main parts fully configurable in multiple enclosures, extendable up to 4 adjacent one above the other:

- No. 1 CPU module type FPMCPU with integrated alphanumeric touch LCD;
- No. 1 CPU module type FPAMIAS with integrated alphanumeric touch LCD;
- No. 1 Voice Alarm Control and Indicating module type IFAMEVAC;
- No. 2 Amplifier module type IFAMAMP rated 250 W / 40 Ω (with PU type IFAMPSU) or 80 W / 125 Ω (with PU type IFM24160), up to 30 maximum;
- No. 1 Local Audio module type IAS-ADAPT1000;
- No. 1 Loop module type IFM2L, with 2 loop lines, up to 8 maximum for equipment;
- No. 1 Outputs module type IFM4R, with 4 relays, up to 16 maximum for equipment;
- No. 1 Inputs/outputs module type IFM4IO, with 4 input/output circuits, up to 16 maximum for equipment;
- No. 1 Inputs/outputs module type IFM16IO, with 16 input/output circuits, up to 4 maximum for equipment;
- No. 1 Alarm transmission and fault warning routing equipment module type IFMDIAL, using PSTN and GSM/GPRS network, up to 1 maximum for equipment;
- No. 1 LAN module type IFMLAN, using TCP-IP protocol and Local Area, up to 1 maximum for equipment;
- No. 1 Local microphone type IPG-PTT;
- No. 1 Electrical automatic control and delay device type IFMEXT, up to 24 maximum for equipment;
- No. 1 LED and printer module type FPMLEDPRN, up to 1 maximum for equipment;
- No. 1 LED module type FPMEXT for electrical automatic control and delay device, up to 5 maximum for equipment
- No. 1 LED module type FPMLED, up to 7 maximum for equipment;
- No. 1 Module for hornet network connection type IFMNET, up to 1 maximum for equipment;
- No. 1 Module for audio network connection type IFAMIDANET, up to 1 maximum for equipment;
- No. 1 CANDRIVE+ board;
- No. 1 Switching Power Unit trademark INIM, type IFAMPSU composed of the control board and the switching power supply trademark MEAN WELL type PSPA-1000-24, rated 27.6 V – 32 A or 38 A with No. 2 Allocable batteries rated 12 V – 38 Ah or 24 Ah or 17 Ah, or
- No. 1 Switching Power Unit trademark INIM, type IFM24160, rated 27.6 V – 5.2 A with No. 2 Allocable batteries rated 12 V – 24 Ah or 17 Ah.

This Certificate was issued by IMQ S.p.A., a Notified Body according to Regulation (EU) No. 305/2011. IMQ S.p.A. Identification Number is: **0051**. This certificate is subjected to the Regulation of Assessment and Verification of Constancy of Performance of the Construction Products as Notified Body, according to Regulation (EU) no. 305/2011 and Legislative Decree n.106/ 2017 (REG. ON / CPR)

The equipment is also provided with the following external devices:

- Emergency microphone base trademark INIM, type IPGE06;
- Emergency microphone base trademark INIM, type IPGE18;
- Stem microphone type IPG-GOOSENECK.

Models **PREVIDIA-ULTRAVOXR and PREVIDIA-ULTRAVOXD**

Configuration:

As model PREVIDIA-ULTRAVOX but with a different color of the enclosure.

- "R": Red;
- "D": Dark Grey.

Technical Characteristics

- Number of detectors and/or manual call points: 3840 on 16 loop line (240 each);
- Hardware identification of the microcontroller (U1) used on the CPU module type FPMCPU: NXP, LPC1788FBD208;
- Firmware identification of the microcontroller (U1) used on the CPU module type FPMCPU: 1.00;
- Hardware identification of the microcontroller (U1) used on the CPU module type FPAMIAS: NXP, LPC1788FBD208;
- Firmware identification of the microcontroller (U1) used on the CPU module type FPAMIAS: 1.00.

List of optional functions with requirements (EN 54-2)

- 7.8 Output to fire alarm device
- 7.9 Output to fire alarm routing equipment
- 7.10 Output to fire protection equipment
- 7.11 Delay to outputs
- 7.12 Dependencies on more than one alarm signal Type A – B – C
- 7.13 Alarm counter
- 8.3 Fault signals from points
- 8.9 Output to fault warning routing equipment
- 9.5 Disablement of addressable points
- 10 Test condition

List of optional functions with requirements (EN 12094-1)

- 4.17 Delay of extinguishing signal

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- 4.18 Signal representing the flow of extinguishing agent
- 4.19 Monitoring of the status of components
- 4.20 Emergency hold device
- 4.21 Control of flooding time
- 4.22 Initiation of secondary flooding
- 4.24 Triggering signals to equipment within the system
- 4.26 Triggering of equipment outside the system
- 4.27 Emergency abort device
- 4.28 Control of extended discharge
- 4.29 Release of the extinguishing media for selected flooding zones
- 4.30 Activation of alarm devices with different signals

List of optional functions with requirements (EN 54-16)

- 7.3 Audible warning
- 7.5 Phased evacuation
- 7.6.2 Manual silencing of the voice alarm condition
- 7.7.2 Manual reset of the voice alarm condition
- 7.8 Output to fire alarm devices
- 7.9 Voice alarm condition output
- 8.3 Indication of faults related to the transmission path to the CIE
- 8.4 Indication of faults related to voice alarm zones
- 9 Disablement condition
- 10 Voice alarm manual control
- 12 Emergency microphone(s)
- 13.14 Redundant power amplifiers

Note:

The Electrical Automatic Control and Delay Device is approved to EN 12094-1 for more than 1 flooding zone when 2 CPU modules type FPMCPU are used.

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DICHIARAZIONE DI PRESTAZIONE

N. 0051-CPR-2741

Codice di identificazione unico del prodotto-tipo:

PREVIDIA-ULTRAVOX

Modello/i: **PREVIDIA-ULTRAVOX, PREVIDIA-ULTRAVOXR, PREVIDIA-ULTRAVOXD**

Uso/i previsti:

**Centrale di controllo e segnalazione con apparecchiatura di alimentazione,
apparecchiatura di trasmissione allarme e segnalazione guasto,
dispositivo elettrico automatico di comando e gestione spegnimento e di ritardo ed
apparecchiatura di controllo e segnalazione per sistemi di allarme vocale integrati
per sistemi di rivelazione e di segnalazione d'incendio per edifici e
per sistemi di estinzione a gas installati in edifici come parte di un sistema operativo completo**

Fabbricante:

INIM ELECTRONICS S.R.L.
VIA DEI LAVORATORI 10 - FRAZIONE CENTOBUCHI
63076 MONTEPRANDONE (AP) - ITALY
tel.: +39 0735 705007, fax. +39 0735 704912
web: www.inim.biz, e-mail: info@inim.biz

Sistema/i di VVCP:

Sistema 1

Norma/e armonizzate:

EN 54-2:1997 + A1:2006
EN 54-4:1997 + A1:2002 + A2:2006
EN 54-16:2008
EN 54-21:2006
EN 12094-1:2003

Organismo/i Notificati:

IMQ S.p.A., N. 0051

Prestazione/i dichiarate:

Caratteristiche essenziali	Prestazione	Specifica tecnica armonizzata	§	Note
Prestazioni in caso d'incendio				
Requisiti generali	PASS	EN 54-2:1997 + A1:2006	4	
	PASS	EN 54-16:2008		
Requisiti generali per le segnalazioni	PASS	EN 54-2:1997 + A1:2006	5	
	PASS	EN 54-16:2008		
Condizione di allarme incendio	PASS	EN 54-2:1997 + A1:2006	7	
Condizione di allarme vocale	PASS	EN 54-16:2008	10	
Comando manuale del sistema di allarme vocale (opzione con requisiti)	PASS			
Microfono(i) d'emergenza (opzione con requisiti)	PASS			
Rapporto segnale-rumore	PASS			
Risposta in frequenza della ACSSAV	PASS			
Risposta in frequenza della ACSSAV con microfono (i)	PASS			
Elaborazione di segnali e segnalazione	PASS			
Ricezione ed elaborazione dei segnali di azionamento in entrata	PASS	EN 12094-1:2003	4.3	
	PASS		4.4	
Trasmissione del segnale di estinzione	PASS			4.5



Azionamento dei dispositivi di allarme	PASS		4.6	
Ritardo del segnale di estinzione (opzione con requisiti)	PASS		4.17	
Segnale che rappresenta il flusso dell'agente estinguente (opzione con requisiti)	PASS		4.18	
Sorveglianza dello stato dei componenti (opzione con requisiti)	PASS		4.19	
Dispositivo di prolungamento emergenza (opzione con requisiti)	PASS		4.20	
Controllo del tempo di allagamento (opzione con requisiti)	PASS		4.21	
Avvio di un allagamento secondario (opzione con requisiti)	PASS		4.22	
Segnalazione di azionamento ad apparecchiatura all'interno del sistema (opzione con requisiti)	PASS		4.24	
Azionamento dell'apparecchiatura all'esterno del sistema (opzione con requisiti)	PASS		4.26	
Dispositivo di interruzione emergenza (opzione con requisiti)	PASS		4.27	
Controllo della scarica prolungata (opzione con requisiti)	PASS		4.28	
Rilascio degli agenti estinguenti per zone di scarica selezionate (opzione con requisiti)	PASS		4.29	
Attivazione dei dispositivi di allarme con segnali diversi (opzione con requisiti)	PASS		4.30	
Prestazione di alimentazione				
Requisiti generali	PASS		4	
Funzioni	PASS	EN 54-4:1997 + A1:2002 + A2:2006	5	
Materiali, progetto e costruzione	PASS		6	
Prestazione della trasmissione				
Requisiti generali	PASS		4	
Requisiti funzionali	PASS	EN 54-21:2006	5	
Ritardo nella risposta (tempo di risposta all'incendio)				
Ricezione ed elaborazione di segnali d'incendio	PASS	EN 54-2:1997 + A1:2006	7.1	
Avvertimento acustico (opzione con requisiti)	PASS		7.3	
Ritardi di attivazione della condizione di allarme vocale (opzione con requisiti)	NPD		7.4	
Evacuazione in fasi (opzione con requisiti)	PASS	EN 54-16:2008	7.5	
Tacitazione manuale della condizione di allarme vocale (opzione con requisiti)	PASS		7.6.2	
Ripristino manuale della condizione di allarme vocale (opzione con requisiti)	PASS		7.7.2	
Uscita in condizione di allarme incendio	PASS		7.7	
Uscita verso i dispositivi di allarme incendio (opzione con requisiti)	PASS	EN 54-2:1997 + A1:2006	7.8	
	PASS	EN 54-16:2008		
Comando dei dispositivi di trasmissione di allarme incendio (opzione con requisiti)	PASS		7.9	
Uscita verso i dispositivi di trasmissione di allarme incendio (opzione con requisito)	PASS	EN 54-2:1997 + A1:2006	7.9.1	
Ingresso di conferma allarme da dispositivi di trasmissione di allarme incendio (opzione con requisito)	PASS		7.9.2	
Uscita della condizione di allarme vocale (opzione con requisiti)	PASS	EN 54-16:2008	7.9	
Uscite verso i sistemi automatici antincendio (opzione con requisiti)	PASS		7.10	
Uscita tipo A (opzione con requisito)	PASS		7.10.1	
Uscita tipo B (opzione con requisito)	PASS		7.10.2	
Uscita tipo C (opzione con requisito)	PASS		7.10.3	
Sorveglianza guasti dei sistemi automatici antincendio (opzione con requisito)	PASS	EN 54-2:1997 + A1:2006	7.10.4	
Ritardo delle uscite (opzione con requisiti)	PASS		7.11	
Correlazione su più di un segnale d'allarme (opzione con requisito)	PASS		7.12	



Correlazione di tipo A (opzione con requisito)	PASS		7.12.1	
Correlazione di tipo B (opzione con requisito)	PASS		7.12.2	
Correlazione di tipo C (opzione con requisito)	PASS		7.12.3	
Contatore di allarme (opzione con requisiti)	PASS		7.13	
Microfono(i) d'emergenza (opzione con requisiti)	PASS	EN 54-16:2008	12	
Condizione attivata	PASS	EN 12094-1:2003	4.8	
Affidabilità di funzionamento				
Requisiti generali	PASS	EN 54-2:1997 + A1:2006	4	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006		
	PASS	EN 54-16:2008		
	PASS	EN 54-21:2006		
Requisiti generali per le segnalazioni	PASS	EN 54-2:1997 + A1:2006	5	
	PASS	EN 54-16:2008		
Funzioni	PASS	EN 54-4:1997 + A1:2002 + A2:2006	5	
Requisiti funzionali	PASS	EN 54-21:2006	4	
	PASS	EN 12094-1:2003		
Condizione di riposo	PASS	EN 54-2:1997 + A1:2006	6	
	PASS	EN 54-16:2008		
Condizione di allarme incendio	PASS	EN 54-2:1997 + A1:2006	7	
Condizione di allarme vocale	PASS	EN 54-16:2008		
Condizione di guasto	PASS		8	
Segnale di guasto dai punti (opzione con requisiti)	PASS	EN 54-2:1997 + A1:2006	8.3	
Uscita verso l'apparecchiatura di segnalazione remota di guasto e avvertimento (opzione con requisiti)	PASS		8.9	
Condizione di allarme guasto	PASS		8	
Segnalazione di guasti relativi al percorso di trasmissione alla CIE (opzione con requisiti)	PASS	EN 54-16:2008	8.3	
Segnalazione di guasti relativi a zone del sistema di allarme vocale (opzione con requisiti)	PASS		8.4	
Condizione di fuori servizio	PASS		9	
Fuori servizio dei punti indirizzabili (opzione con requisiti)	PASS	EN 54-2:1997 + A1:2006	9.5	
Condizione di fuori servizio (opzione con requisiti)	PASS	EN 54-16:2008	9	
Condizione di test (opzione con requisiti)	PASS	EN 54-2:1997 + A1:2006	10	
Interfaccia normalizzata ingresso/uscita (opzione con requisiti)	NPD	EN 54-2:1997 + A1:2006	11	
	NPD	EN 54-16:2008		
Requisiti costruttivi	PASS		12	
Requisiti costruttivi addizionali per apparecchiature di comando e segnalazione controllate mediante software	PASS	EN 54-2:1997 + A1:2006	13	
Materiali, progetto e costruzione	PASS	EN 54-4:1997 + A1:2002 + A2:2006	6	
Documentazione	PASS		7	
Microfono(i) d'emergenza (opzione con requisiti)	PASS	EN 54-16:2008	12	
Requisiti di progettazione	PASS		13	
Amplificatori di potenza ridondanti (opzione con requisiti)	PASS		13.14	
Requisiti di progettazione aggiuntivi per ACS SAV controllata da software	PASS		14	
Requisiti di progetto	PASS	EN 54-21:2006	7	
	PASS		5	
Requisiti aggiuntivi di progetto per D.E.C. controllati da software	PASS	EN 12094-1:2003	6	
Marcatatura	PASS	EN 54-2:1997 + A1:2006	14	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	8	
	PASS			
Alimentazione	PASS	EN 54-21:2006	9	
Durabilità dell'affidabilità di funzionamento: resistenza termica				
Freddo (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.4	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.5	
	PASS	EN 54-16:2008	16.8	
	PASS	EN 54-21:2006	10.4	



	PASS	EN 12094-1:2003	9	
Durabilità dell'affidabilità di funzionamento: resistenza alle vibrazioni				
Urto (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.6	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.7	
	PASS	EN 54-16:2008	16.11	
	PASS	EN 54-21:2006	10.6	
	PASS	EN 12094-1:2003	9	
Vibrazioni sinusoidali (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.7	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.8	
	PASS	EN 54-16:2008	16.12	
	PASS	EN 54-21:2006	10.7	
	PASS	EN 12094-1:2003	9	
Vibrazioni sinusoidali (prova di durata)	PASS	EN 54-2:1997 + A1:2006	15.15	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.15	
	PASS	EN 54-16:2008	16.13	
	PASS	EN 54-21:2006	10.11	
	PASS	EN 12094-1:2003	9	
Durabilità dell'affidabilità di funzionamento: stabilità elettrica				
Compatibilità elettromagnetica (EMC) prove di immunità (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.8	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.9	
	PASS	EN 54-16:2008	16.15	
	PASS	EN 54-21:2006	10.8	
	PASS	EN 12094-1:2003	9	
Variazione della tensione di alimentazione (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.13	
	PASS	EN 54-16:2008	16.14	
	PASS	EN 54-21:2006	10.9	
	PASS	EN 12094-1:2003	9	
Durabilità dell'affidabilità di funzionamento: resistenza all'umidità				
Caldo umido, continuo (prova funzionale)	PASS	EN 54-2:1997 + A1:2006	15.5	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.6	
	PASS	EN 54-16:2008	16.9	
	PASS	EN 54-21:2006	10.5	
	PASS	EN 12094-1:2003	9	
Caldo umido, continuo (prova di durata)	PASS	EN 54-2:1997 + A1:2006	15.14	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.14	
	PASS	EN 54-16:2008	16.10	
	PASS	EN 54-21:2006	10.10	
	PASS	EN 12094-1:2003	9	

Moduli installabili in centrale:

FPMCPU-c	modulo CPU
FPAMIAS-c	modulo CPU controllo funzioni EVAC
FPMLLED-c	modulo LED
FPMLLEDPRN-c	modulo LED con stampante
FPMEXT-c	modulo LED per modulo estinzione
IFAMPSPU	modulo CAN alimentatore da 1000W
IFM24160	modulo CAN alimentatore
IFAMEVAC	modulo CAN matrice audio
IFAMAMP	modulo CAN amplificatore
IAS-ADAPT1000	modulo adattatore audio
IPG-PTT	microfono locale
IFAMFFT	modulo CAN telefoni di emergenza
IFAMIDANET	modulo CAN per connessione in rete IDANET
IFM2L	modulo CAN 2 loop
IFM4R	modulo CAN 4 relè
IFM4IO	modulo CAN 4 I/O
IFM16IO	modulo CAN 16 I/O



IFMDIAL	modulo CAN comunicatore
IFMLAN	modulo CAN per connessione LAN
IFMNET	modulo CAN per connessione in rete Hornet+
IFMEXT	modulo CAN estinzione

Dispositivi esterni utilizzabili con la centrale:

IPG-GOOSNECK	microfono a stelo
IPG-PTT	microfono locale
IPGE06	base microfonica d'emergenza
IPGE18	base microfonica d'emergenza
IPG12	base microfonica non d'emergenza
IPG24	base microfonica non d'emergenza
IAS-EOL1000	fine linea per linee altoparlanti
IFFT-SOCKET	presa di piano per telefono d'emergenza, colore bianco
IFFT-SOCKETR	presa di piano per telefono d'emergenza, colore rosso

Parti meccaniche utilizzabili con la centrale:

FPMNUL-c	tappo cieco in plastica
PRCAB+	cabinet aggiuntivo
PRCAB+R	cabinet aggiuntivo rosso
PRCAB+D	cabinet aggiuntivo grigio scuro
PRREP	contenitore metallico per FPMCPU nella configurazione repeater
PRCAB+SP	kit per montaggio cabinet distanziato
PRCAB+SPR	kit per montaggio cabinet distanziato rosso
PRCAB+SPD	kit per montaggio cabinet distanziato grigio scuro
PRCAB-RK+	staffe per il fissaggio dell'armadio PRCAB+ ad un rack 19" per centrali serie PREVIDIA-ULTRA
IPGECAB-S	armadio metallico per l'alloggiamento delle basi microfoniche di emergenza IPGE06
IPGECAB-SR	armadio metallico rosso per l'alloggiamento delle basi microfoniche di emergenza IPGE06
IPGECAB-D	armadio metallico per l'alloggiamento delle basi microfoniche di emergenza IPGE18
IPGECAB-DR	armadio metallico rosso per l'alloggiamento delle basi microfoniche di emergenza IPGE18

dove "c" è un parametro colore.

La prestazione del prodotto sopra identificato è conforme all'insieme delle prestazioni dichiarate. La presente dichiarazione di responsabilità viene emessa, in conformità al regolamento (UE) N. 305/2011, sotto la sola responsabilità del fabbricante sopra identificato.

Firmato a nome e per conto del fabbricante da:

Baldovino Ruggieri
(Amministratore Delegato)

In Monteprandone, addì 13/10/2022



DECLARATION OF PERFORMANCE

No. 0051-CPR-2741

Unique identification code of the product-type:

PREVIDIA-ULTRAVOX

Model/s: **PREVIDIA-ULTRAVOX, PREVIDIA-ULTRAVOXR, PREVIDIA-ULTRAVOXD**

Intended use/es

**Control and indicating equipment with power supply equipment,
alarm transmission and fault warning routing equipment,
electrical automatic control and delay device and
voice alarm control and indicating equipment integrated
for fire detection and fire alarm systems installed in buildings and
for gas extinguishing systems installed in buildings and part of a complete system**

Manufacturer:

INIM ELECTRONICS S.R.L.
VIA DEI LAVORATORI 10 - FRAZIONE CENTOBUCHI
63076 MONTEPRANDONE (AP) - ITALY
tel.: +39 0735 705007, fax. +39 0735 704912
web: www.inim.biz, e-mail: info@inim.biz

System/s of AVCP:

System 1

Harmonized standard/s:

EN 54-2:1997 + A1:2006
EN 54-4:1997 + A1:2002 + A2:2006
EN 54-16:2008
EN 54-21:2006
EN 12094-1:2003

Notified Body/ies:

IMQ S.p.A., No. 0051

Declared performance/es:

Essential Characteristics	Performance	Harmonized technical specification	§	Note
Performance under fire conditions				
General requirements	PASS	EN 54-2:1997 + A1:2006	4	
	PASS	EN 54-16:2008		
General requirements for indications	PASS	EN 54-2:1997 + A1:2006	5	
	PASS	EN 54-16:2008		
The fire alarm condition	PASS	EN 54-2:1997 + A1:2006	7	
The voice alarm condition	PASS	EN 54-16:2008	10	
Voice alarm manual control (option with requirements)	PASS			
Emergency microphone(s) (option with requirements)	PASS			12
Signal-to-noise ratio	PASS			16.5
Frequency response of VACIE without microphone(s)	PASS			16.6
Frequency response of VACIE with microphone(s)	PASS			16.7
Signal processing and indication	PASS			4.3
Reception and processing of input triggering signals	PASS	EN 12094-1:2003	4.4	
Transmission of extinguishing signal	PASS		4.5	



Activation of alarm devices	PASS		4.6	
Delay of extinguishing signal (option with requirements)	PASS		4.17	
Signal representing the flow of extinguishing agent (option with requirements)	PASS		4.18	
Monitoring the status of components (option with requirements)	PASS		4.19	
Emergency hold device (option with requirements)	PASS		4.20	
Control of flooding time (option with requirements)	PASS		4.21	
Initiation of secondary flooding (option with requirements)	PASS		4.22	
Triggering signal to equipment within the system (option with requirements)	PASS		4.24	
Triggering of equipment outside the system (option with requirements)	PASS		4.26	
Emergency abort device (option with requirements)	PASS		4.27	
Control of extended discharge (option with requirements)	PASS		4.28	
Release of the extinguishing media for selected flooding zones (option with requirements)	PASS		4.29	
Activation of alarm devices with different signals (option with requirements)	PASS		4.30	
Performance of power supply				
General requirements	PASS		4	
Functions	PASS	EN 54-4:1997 + A1:2002 + A2:2006	5	
Materials, design and manufacture	PASS		6	
Performance of transmission				
General requirements	PASS		4	
Functional requirements	PASS	EN 54-21:2006	5	
Response delay (response time to fire)				
Reception and processing of fire signals	PASS	EN 54-2:1997 + A1:2006	7.1	
	PASS			
Audible warning (option with requirements)	PASS		7.3	
Delays to entering the voice alarm condition (option with requirements)	NPD		7.4	
Phased evacuation (option with requirements)	PASS	EN 54-16:2008	7.5	
Manual silencing of the voice alarm condition (option with requirements)	PASS		7.6.2	
Manual reset of the voice alarm condition (option with requirements)	PASS		7.7.2	
Output of the fire alarm condition	PASS		7.7	
Output to the fire alarm device (option with requirements)	PASS	EN 54-2:1997 + A1:2006	7.8	
	PASS	EN 54-16:2008		
Output to the fire alarm device (option with requirements)	PASS		7.9	
Output to fire alarm routing devices (option with requirements)	PASS	EN 54-2:1997 + A1:2006	7.9.1	
Alarm confirmation input from fire alarm routing equipment (option with requirements)	PASS		7.9.2	
Voice alarm condition output (option with requirements)	PASS	EN 54-16:2008	7.9	
Outputs to fire protection equipment (option with requirements)	PASS		7.10	
Output type A (option with requirements)	PASS		7.10.1	
Output type B (option with requirements)	PASS		7.10.2	
Output type C (option with requirements)	PASS	EN 54-2:1997 + A1:2006	7.10.3	
Fault monitoring of fire protection equipment (option with requirements)	PASS		7.10.4	
Delays to outputs (option with requirements)	PASS		7.11	
Dependencies on more than one signal (option with requirement)	PASS		7.12	



Type A dependency (option with requirements)	PASS		7.12.1	
Type B dependency (option with requirements)	PASS		7.12.2	
Type C dependency (option with requirements)	PASS		7.12.3	
Alarm counter (option with requirements)	PASS		7.13	
Emergency microphone(s) (option with requirements)	PASS	EN 54-16:2008	12	
Activated condition	PASS	EN 12094-1:2003	4.8	
Operational reliability				
General requirements	PASS	EN 54-2:1997 + A1:2006	4	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006		
	PASS	EN 54-16:2008		
	PASS	EN 54-21:2006		
General requirements for indications	PASS	EN 54-2:1997 + A1:2006	5	
	PASS	EN 54-16:2008		
Functions	PASS	EN 54-4:1997 + A1:2002 + A2:2006	5	
Functional requirements	PASS	EN 54-21:2006	4	
	PASS	EN 12094-1:2003		
The quiescent condition	PASS	EN 54-2:1997 + A1:2006	6	
	PASS	EN 54-16:2008		
The quiescent condition	PASS	EN 54-2:1997 + A1:2006	7	
The voice alarm condition	PASS	EN 54-16:2008		
Fault warning condition	PASS		8	
Fault signals from points (option with requirements)	PASS	EN 54-2:1997 + A1:2006	8.3	
Output to warning routing equipment (option with requirements)	PASS		8.9	
Fault warning condition	PASS		8	
Indication of faults related to the transmission path to the CIE (option with requirements)	PASS	EN 54-16:2008	8.3	
Indication of faults related to voice alarm zones (option with requirements)	PASS		8.4	
Disabled condition	PASS		9	
Disabling of addressable points (option with requirements)	PASS	EN 54-2:1997 + A1:2006	9.5	
Disabling condition (option with requirements)	PASS	EN 54-16:2008	9	
Test condition (option with requirements)	PASS	EN 54-2:1997 + A1:2006	10	
Standardized input/output interface (option with requirements)	NPD		11	
	NPD	EN 54-16:2008		
Design requirements	PASS	EN 54-2:1997 + A1:2006	12	
Additional design requirements for software controlled control and indicating equipments	PASS	EN 54-2:1997 + A1:2006	13	
Materials, design and manufacture	PASS	EN 54-4:1997 + A1:2002 + A2:2006	6	
Documentation	PASS		7	
Emergency microphone(s) (option with requirements)	PASS	EN 54-16:2008	12	
Design requirements	PASS		13	
Redundant power amplifiers (option with requirements)	PASS		13.14	
Additional design requirements for software controlled VACIE	PASS		14	
Design requirements	PASS	EN 54-21:2006	7	
	PASS		5	
Additional design requirements for software controlled E.C.D.S.	PASS	EN 12094-1:2003	6	
Marking	PASS	EN 54-2:1997 + A1:2006	14	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	8	
	PASS	EN 54-21:2006		
Power supply	PASS		9	
Durability of operational reliability: temperature resistance				
Cold (operational)	PASS	EN 54-2:1997 + A1:2006	15.4	
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.5	
	PASS	EN 54-16:2008	16.8	
	PASS	EN 54-21:2006	10.4	
	PASS	EN 12094-1:2003	9	



Durability of operational reliability: vibration resistance			
<i>Impact (operational)</i>	PASS	EN 54-2:1997 + A1:2006	15.6
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.7
	PASS	EN 54-16:2008	16.11
	PASS	EN 54-21:2006	10.6
	PASS	EN 12094-1:2003	9
<i>Vibration, sinusoidal (operational)</i>	PASS	EN 54-2:1997 + A1:2006	15.7
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.8
	PASS	EN 54-16:2008	16.12
	PASS	EN 54-21:2006	10.7
	PASS	EN 12094-1:2003	9
<i>Vibration, sinusoidal (endurance)</i>	PASS	EN 54-2:1997 + A1:2006	15.15
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.15
	PASS	EN 54-16:2008	16.13
	PASS	EN 54-21:2006	10.11
	PASS	EN 12094-1:2003	9
Durability of operational reliability: electrical stability			
<i>Electromagnetic compatibility (EMC), immunity tests (operational)</i>	PASS	EN 54-2:1997 + A1:2006	15.8
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.9
	PASS	EN 54-16:2008	16.15
	PASS	EN 54-21:2006	10.8
	PASS	EN 12094-1:2003	9
<i>Supply voltage variation (operational)</i>	PASS	EN 54-2:1997 + A1:2006	15.13
	PASS	EN 54-16:2008	16.14
	PASS	EN 54-21:2006	10.9
	PASS	EN 12094-1:2003	9
Durability of operational reliability: humidity resistance			
<i>Damp heat, steady state (operational)</i>	PASS	EN 54-2:1997 + A1:2006	15.5
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.6
	PASS	EN 54-16:2008	16.9
	PASS	EN 54-21:2006	10.5
	PASS	EN 12094-1:2003	9
<i>Damp heat, steady state (endurance)</i>	PASS	EN 54-2:1997 + A1:2006	15.14
	PASS	EN 54-4:1997 + A1:2002 + A2:2006	9.14
	PASS	EN 54-16:2008	16.10
	PASS	EN 54-21:2006	10.10
	PASS	EN 12094-1:2003	9

Modules installable in the control panel:

- FPMCPU-c CPU module
- FPAMIAS-c EVAC functions control CPU module
- FPMLED-c LED module
- FPMLEDPRN-c LED module with printer
- FPMEXT-c LED module for extinguishant CAN module
- IFAMPSU 1000W power-supply CAN module
- IFM24160 power-supply CAN module
- IFAMEVAC audio matrix CAN module
- IFAMAMP amplifier CAN module
- IAS-ADAPT1000 audio adapter module
- IPG-PTT local microphone
- IFAMFFT emergency telephones CAN module
- IFAMIDANET IDANET network connection CAN module
- IFM2L 2 loops CAN module
- IFM4R 4 relays CAN module
- IFM4IO 4 I/O CAN module
- IFM16IO 16 I/O CAN module



IFMDIAL	dialler CAN module
IFMLAN	LAN connection CAN module
IFMNET	Hornet+ network connection CAN module
IFMEXT	extinguishant CAN module

External devices usable with the control panel:

IPG-GOOSNECK	stem microphone
IPG-PTT	local microphone
IPGE06	emergency microphonic base
IPGE18	emergency microphonic base
IPG12	non-emergency microphonic base
IPG24	non-emergency microphonic base
IAS-EOL1000	end of line for speaker lines
IFFT-SOCKET	floor socket for emergency telephone, white
IFFT-SOCKETR	floor socket for emergency telephone, red

Mechanical parts usable with the control panel:

FPMNUL-c	plastic blind-plate
PRCAB+	spare cabinet
PRCAB+R	spare cabinet, red
PRCAB+D	spare cabinet, dark grey
PRREP	metal box for FPMCPU assembly in repeater configuration
PRCAB+SP	mounting kit for back cabinet spacing
PRCAB+SPR	mounting kit for back cabinet spacing, red
PRCAB+SPD	mounting kit for back cabinet spacing, dark grey
PRCAB-RK+	staffe per il fissaggio dell'armadio PRCAB+ ad un rack 19" per centrali serie PREVIDIA-ULTRA
IPGECAB-S	metal cabinet for housing IPGE06 emergency microphonic bases
IPGECAB-SR	red metal cabinet for housing IPGE06 emergency microphonic bases
IPGECAB-D	metal cabinet for housing IPGE18 emergency microphonic bases
IPGECAB-DR	red metal cabinet for housing IPGE18 emergency microphonic bases

where "c" is a colour parameter.

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No. 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Baldovino Ruggieri
(Managing Director)

At Monteprandone, on 13/10/2022



DICHIARAZIONE DI CONFORMITA' UE

N. 0051-CPR-2741

Modello di prodotto/prodotto:

PREVIDIA-ULTRAVOX

Fabbricante:

INIM ELECTRONICS S.R.L.
 VIA DEI LAVORATORI 10 - FRAZIONE CENTOBUCHI
 63076 MONTEPRANDONE (AP) - ITALY
 tel.: +39 0735 705007, fax. +39 0735 704912
 web: www.inim.biz, e-mail: info@inim.biz

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.

Oggetto della dichiarazione:

Modello di prodotto/prodotto: **PREVIDIA-ULTRAVOX**

Variante/i: **PREVIDIA-ULTRAVOXR, PREVIDIA-ULTRAVOXD (1)**

Descrizione: **Centrale di controllo e segnalazione con apparecchiatura di alimentazione, apparecchiatura di trasmissione allarme e segnalazione guasto, dispositivo elettrico automatico di comando e gestione spegnimento e di ritardo ed apparecchiatura di controllo e segnalazione per sistemi di allarme vocale integrati per sistemi di rivelazione e di segnalazione d'incendio per edifici e per sistemi di estinzione a gas installati in edifici come parte di un sistema operativo completo**

L'oggetto della dichiarazione di cui sopra è conforme alla pertinente normativa di armonizzazione dell'Unione:

2011/65/UE (RoHSD)

2014/53/UE (RED)

Riferimento alle pertinenti norme armonizzate o riferimenti alle altre specifiche tecniche usate in relazione alle quali è dichiarata la conformità:

RoHSD

EN IEC 63000:2018

RED

SALUTE E SICUREZZA (art. 3.1a)

EN 62311:2008

(2)

EN IEC 62368-1:2020 + A11:2020

COMPATIBILITA' ELETTROMAGNETICA (art. 3.1b)



EN 301 489-1 V2.2.3	(2)
EN 301 489-52 V1.2.1	(2)
USO EFFICACE ED EFFICIENTE DELLO SPETTRO RADIO (art. 3.2)	
EN 301 511 V12.5.1	(2)
ALTRI REQUISITI ESSENZIALI (art. 3.3)	
NON APPLICABILE	

L'oggetto della dichiarazione di cui sopra è anche conforme alle seguenti norme:

EN 61000-6-3:2007 + A1:2011	
EN 50130-4:2011 + A1:2014	
EN 54-2:1997 + A1:2006	
EN 54-4:1997 + A1:2002 + A2:2006	
EN 54-16:2008	
EN 54-21:2006	(3)
EN 12094-1:2003	(4)

Informazioni supplementari:

Moduli installabili in centrale:

FPMCPU-c	modulo CPU
FPAMIAS-c	modulo CPU controllo funzioni EVAC
FPMLED-c	modulo LED
FPMLEDPRN-c	modulo LED con stampante
FPMEXT-c	modulo LED per estinzione
IFAMPSU	modulo CAN alimentatore da 1000W
IFM24160	modulo CAN alimentatore
IFAMEVAC	modulo CAN matrice audio
IFAMAMP	modulo CAN amplificatore
IAS-ADAPT1000	modulo adattatore audio
IPG-PTT	microfono locale
IFAMFFT	modulo CAN telefoni di emergenza
IFAMIDANET	modulo CAN per connessione in rete IDANET
IFM2L	modulo CAN 2 loop
IFM4R	modulo CAN 4 relè
IFM4IO	modulo CAN 4 I/O
IFM16IO	modulo CAN 16 I/O
IFMDIAL	modulo CAN comunicatore
IFMLAN	modulo CAN per connessione LAN
IFMNET	modulo CAN per connessione in rete Hornet+



IFMEXT modulo CAN estinzione

Dispositivi esterni utilizzabili con la centrale:

IPG-GOOSNECK microfono a stelo

IPG-PTT microfono locale

IPGE06 base microfonica d'emergenza

IPGE18 base microfonica d'emergenza

IPG12 base microfonica non d'emergenza

IPG24 base microfonica non d'emergenza

IAS-EOL1000 fine linea per linee altoparlanti

IFFT-SOCKET presa di piano per telefono d'emergenza, colore bianco

IFFT-SOCKETR presa di piano per telefono d'emergenza, colore rosso

Parti meccaniche utilizzabili con la centrale:

FPMNUL-c tappo cieco in plastica

PRCAB+ cabinet aggiuntivo

PRCAB+R cabinet aggiuntivo rosso

PRCAB+D cabinet aggiuntivo grigio scuro

PRREP contenitore metallico per FPMCPU nella configurazione repeater

PRCAB+SP kit per montaggio cabinet distanziato

PRCAB+SPR kit per montaggio cabinet distanziato rosso

PRCAB+SPD kit per montaggio cabinet distanziato grigio scuro

PRCAB-RK+ staffe per il fissaggio dell'armadio PRCAB+ ad un rack 19" per centrali serie PREVIDIA-ULTRA

IPGECAB-S armadio metallico per l'alloggiamento delle basi microfoniche di emergenza IPGE06

IPGECAB-SR armadio metallico rosso per l'alloggiamento delle basi microfoniche di emergenza IPGE06

IPGECAB-D armadio metallico per l'alloggiamento delle basi microfoniche di emergenza IPGE18

IPGECAB-DR armadio metallico rosso per l'alloggiamento delle basi microfoniche di emergenza IPGE18

dove "c" è un parametro colore.

Evolving Security

Note:

(1) Sono varianti di colore.

(2) Applicabile quando è installato il modulo IFMDIAL.

(3) Richiede l'installazione del modulo IFMDIAL e/o IFMLAN.

(4) Richiede l'installazione dei moduli IFMEXT ed FPMEXT.

Monteprandone, 13/10/2022

Firmato a nome e per conto del fabbricante da:


Baldovino Ruggieri
(Amministratore Delegato)



EU DECLARATION OF CONFORMITY

No. **0051-CPR-2741**

Product model/product:

PREVIDIA-ULTRAVOX

Manufacturer:

INIM ELECTRONICS S.R.L.
 VIA DEI LAVORATORI 10 - FRAZIONE CENTOBUCHI
 63076 MONTEPRANDONE (AP) - ITALY
 tel.: +39 0735 705007, fax. +39 0735 704912
 web: www.inim.biz, e-mail: info@inim.biz

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Object of the declaration:

Product model/product:

PREVIDIA-ULTRAVOX

Variant(s):

PREVIDIA-ULTRAVOXR, PREVIDIA-ULTRAVOXD (1)

Description: **Control and indicating equipment with power supply equipment, alarm transmission and fault warning routing equipment, electrical automatic control and delay device and voice alarm control and indicating equipment integrated for fire detection and fire alarm systems installed in buildings and for gas extinguishing systems installed in buildings and part of a complete system**

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

2011/65/EU (RoHSD)

2014/53/EU (RED)

References to the relevant harmonised standards or references to the other technical specifications in relation to which conformity is declared:

RoHSD

EN IEC 63000:2018

RED

HEALTH & SAFETY (art. 3.1a)

EN 62311:2008

(2)

EN IEC 62368-1:2020 + A11:2020

ELECTROMAGNETIC COMPATIBILITY (art. 3.1b)

EN 301 489-1 V2.2.3

(2)

EN 301 489-52 V1.2.1

(2)



EFFECTIVE AND EFFICIENT USE OF RADIO SPECTRUM (art. 3.2)

EN 301 511 V12.5.1

(2)

OTHER ESSENTIAL REQUIREMENTS (art. 3.3)

NOT APPLICABLE

The object of the declaration described above is also in conformity with the following standards:

EN 61000-6-3:2007 + A1:2011

EN 50130-4:2011 + A1:2014

EN 54-2:1997 + A1:2006

EN 54-4:1997 + A1:2002 + A2:2006

EN 54-16:2008

EN 54-21:2006

(3)

EN 12094-1:2003

(4)

Additional information:

Modules installable in the control panel:

FPMCPU-c	CPU module
FPAMIAS-c	EVAC functions control CPU module
FPMLED-c	LED module
FPMLEDPRN-c	LED module with printer
FPMEXT-c	LED module for extinguishant CAN module
IFAMPSU	1000W power-supply CAN module
IFM24160	power-supply CAN module
IFAMEVAC	audio matrix CAN module
IFAMAMP	amplifier CAN module
IAS-ADAPT1000	audio adapter module
IPG-PTT	local microphone
IFAMFFT	emergency telephones CAN module
IFAMIDANET	IDANET network connection CAN module
IFM2L	2 loops CAN module
IFM4R	4 relays CAN module
IFM4IO	4 I/O CAN module
IFM16IO	16 I/O CAN module
IFMDIAL	dialler CAN module
IFMLAN	LAN connection CAN module
IFMNET	Hornet+ network connection CAN module
IFMEXT	extinguishant CAN module



External devices usable with the control panel:

IPG-GOOSNECK	stem microphone
IPG-PTT	local microphone
IPGE06	emergency microphonic base
IPGE18	emergency microphonic base
IPG12	non-emergency microphonic base
IPG24	non-emergency microphonic base
IAS-EOL1000	end of line for speaker lines
IFFT-SOCKET	floor socket for emergency telephone, white
IFFT-SOCKETR	floor socket for emergency telephone, red

Mechanical parts usable with the control panel:

FPMNUL-c	plastic blind-plate
PRCAB+	spare cabinet
PRCAB+R	spare cabinet, red
PRCAB+D	spare cabinet, dark grey
PRREP	metal box for FPMCPU assembly in repeater configuration
PRCAB+SP	mounting kit for back cabinet spacing
PRCAB+SPR	mounting kit for back cabinet spacing, red
PRCAB+SPD	mounting kit for back cabinet spacing, dark grey
PRCAB-RK+	staffe per il fissaggio dell'armadio PRCAB+ ad un rack 19" per centrali serie PREVIDIA-ULTRA
IPGECAB-S	metal cabinet for housing IPGE06 emergency microphonic bases
IPGECAB-SR	red metal cabinet for housing IPGE06 emergency microphonic bases
IPGECAB-D	metal cabinet for housing IPGE18 emergency microphonic bases
IPGECAB-DR	red metal cabinet for housing IPGE18 emergency microphonic bases

where "c" is a colour parameter.

Evolving Security

Notes:

- (1) They are colour variants.
- (2) Applicable when IFMDIAL is installed.
- (3) It requires the installation of IFMDIAL and/or IFMLAN module.
- (4) It requires the installation of IFMEXT and FPMEXT modules.

Monteprandone, 13/10/2022

Signed for and on behalf of the manufacturer by:

Baldovino Ruggieri
(Managing Director)