urmet

IPERVOICE SYSTEM

INSTALLATION MANUAL

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IPERVOICE SYSTEM

SUMMARY

MT124-025E Version 5.30

1 IPERVOICE IN BRIEF

Ipervoice is the first digital video door phone system that uses **CAT5** cables throughout, both for the building common parts, and also for riser columns to which the apartments are connected. While network in the common areas of the building is always fully **IP** compatible, in the riser columns either an IP network is deployed, or a specifically dedicated protocol is used. In the first case Ipervoice will become a very flexible Full IP system, while in the second case the use of dedicated protocol on **CAT5** cables allows for cost saving. The Ipervoice structure is designed to satisfy the needs of any residential building even with a large number of users: there are no limits for system extension and number of riser columns that can be managed.

Describing Ipervoice simply as a last-generation digital video door phone system is not enough. The versatility of the system and its modular features can be exploited not only to manage audio and video communication, but also access control, video surveillance, intrusion alarms and fire alarms.

Ipervoice is a system based on an "open" communication standard. The use of the **SIP** protocol (*Session Initiation Protocol*) allows the connection of third party devices that use the same standard. However, to ensure the system correct operation, it is advisable to use only URMET certified devices.

Warning: The IP network used by Ipervoice should be isolated from other IP networks existing inside the same building, in order to avoid the correct working of the system. But Ipervoice can work also with VLANs. VLAN (Virtual LAN) refers to a set of technologies allowing to segment the broadcast domain that builds in a switch-based local network (typically IEEE 802.3), in more local networks which do not communicate each other logically, but that globally share the same physical infrastructure of the local network. In Figure A an example is shown. On the market there are several switches having this technology. Configuring and putting VLAN on use must be done by the switch provider or a qualified personnel. **Urmet will not help for configuring VLAN.**

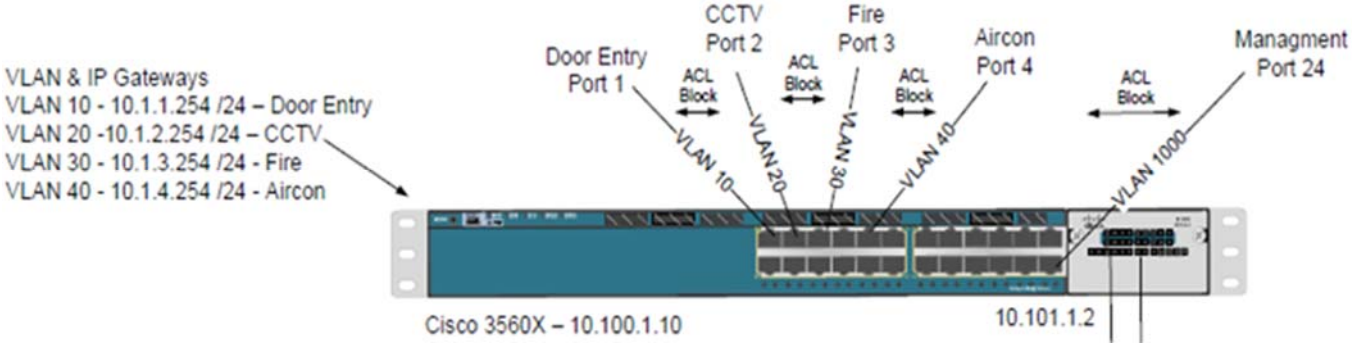


Figure A: VLAN example

2 DIGITAL AUDIO/VIDEO TRANSMISSION

In Ipervoice, audio and video signals are digitally transmitted through the IP network. This means that sounds and images are converted into numbers, or ***digits***, before they are sent from one device to another.

To make the videos fluid enough, the system must capture many images, called *frames*, in one second. Typically, 25 frames per second at least are needed to allow the human eye to observe images and perceive movements continuously and fluidly between one frame and the next one. It is also necessary that the resolution of the captured images is good enough to obtain satisfactory detail. All these features would require the transfer of a lot of data (the digits) on the IP network, that would soon overwhelm its capacity to send more data at the same time.

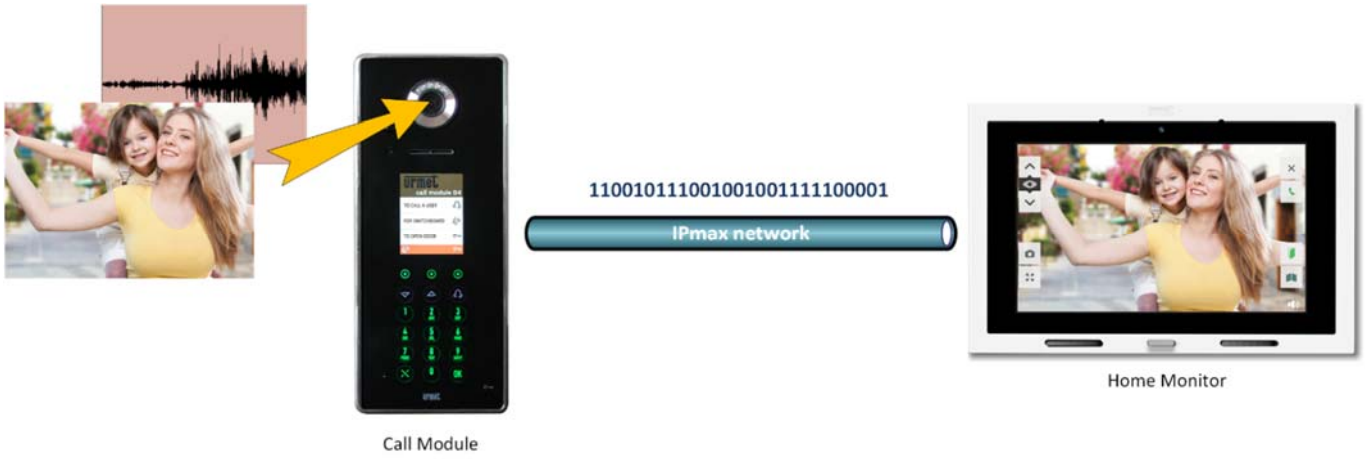


Figure 1 : Digital audio/video transmission

To solve this problem appropriate mathematic algorithms are used, that allow the information to be "compressed" while it is sent through the network. Once arrived, this information can be "decompressed" using an inverse process and is then ready for use.

These algorithms are called "CODEC" (**cod**e-**dec**ode) and are substantially software programs or hardware devices that digitally encode and/or decode an audio or video signal, in order to save it on a storage support, from where it can later be recalled for reading or, as in the typical case of Ipervoice, transmitted on the IP communication channel. In encoding/decoding phase, the codecs also perform the compression (and/or decompression) of the data, reducing the data volume, in order to make the stream of encoded data easier to be transmitted.

The compression of the data allows us to use less channel bandwidth for their transmission, leaving more space for similar transmissions or other data necessary for the system operation. Technological progress has permitted the development of even more efficient codecs, able to ensure a high quality level (high resolution of images, number of frames per second), keeping the amount of data needed in order to send the information on the network very low.

Ipervoice uses two different standard codecs; the first one is specific for video information, the second is for audio data:

H.264: Originally developed by Apple Computers, it is a very efficient codec, used in last-generation cellular phones (3G) and also for transmitting high definition (HD) films. In fact, this codec is able to ensure the same quality as the MPEG-2 standard used in DVD supports, reducing from a third to a half the requested speed (data-rate) for sending information. Using the

H.264 codec, Ipervoice can manage a high number of simultaneous conversations, maintaining the high quality and fluidity of the images (640 x 480 pixels with 30 frame/sec).

G.711: It is one of the main codecs used in this field. G.711 allows an excellent audio quality with a rather low *data-rate* (64 Kbit/sec) and a minimum processing time is required for the compression/decompression algorithm.

3 GENERAL CHARACTERISTICS

Ipervoice can provide many features that make it possible to create solutions for residential building complexes of considerable size. The potential and the strong points of Ipervoice are illustrated in the following list, which includes the main characteristics of Ipervoice in different areas of competence.

WIRING AND INSTALLATION

- Ipervoice uses an UTP[1] CAT5 cable for both the IP network and the building risers, making the wiring and the installation of the system easier.
- The highly flexible architecture of Ipervoice allows to create a fully IP networked system (for both backbones and building risers) or mixed mode (IP network for backbones and CAT5 network for risers) or hybrid mode (IP for backbones, IP and CAT5 for risers).
- All the Ipervoice devices present on the IP network, except the concierge switchboard, are directly powered through the data cable via PoE (Power Over Ethernet). Also for this reason the installation is simpler and more economical.
- The possibility of using optical fibre to cover long distances means that Ipervoice does not have distance limits between the IP network devices.

AUDIO AND VIDEO QUALITY

- As already described, Ipervoice uses the H.264 standard as video codec. The result is a high quality Ipervoice digital video, with 30 frame/sec, that gives the images excellent fluidity.
- In the same way, the audio streams are dealt at maximum speed, according to G.711 standards.

EXPANDABILITY

The use of the digital technology allows Ipervoice to be unlimited with regards to:

- IP network extension and distances (the use of optical fibre is supported).
- Number of riser columns.
- Number of concierge switchboards.
- Number of connectable users.
- Number of simultaneous conversations: a fundamental requirement in large residential complexes.

[1] UTP: Unshielded Twisted Pair

If the IP network is also used for riser columns, no limits are imposed on the number of users by the system addressing capacity, that is virtually unlimited. Notice that when the number of user grows, also the traffic volume managed by the IP network will increase. So the IP network must be properly designed[2] in order to ensure the features needed for the proper operation.

If a dedicated CAT5 non-IP network has been chosen for the risers, in each building and for each riser column the system can be expanded up to:

- 900 metres for each riser column.
- 1080 users for each riser column.
- 16 video door phone apartment stations for each apartment.

[2] The IP network used by IPervoice must be private and isolated from other IP networks present in the building, in order not to compromise the features and the proper operation of the system.

4 SYSTEM ARCHITECTURE

Observing the architecture of the Ipervoice network, it can be noted that the system, as a whole, is composed of two parts:

- The common areas part, used to create the backbone of the system. The network used for communication between devices is fully IP-compatible.
- The riser columns part, that also includes the respective apartments. As already mentioned, Ipervoice allows to create this part of the system in two different modes:
  - Using an IP network with the same characteristics as the common areas part.
  - Using a CAT5 network. In this case, even if the same cable (CAT5) and the same connectors (RJ45) type is used to make wiring and installation operations easier, the communication protocol is dedicated, in order to obtain high performance at low price.

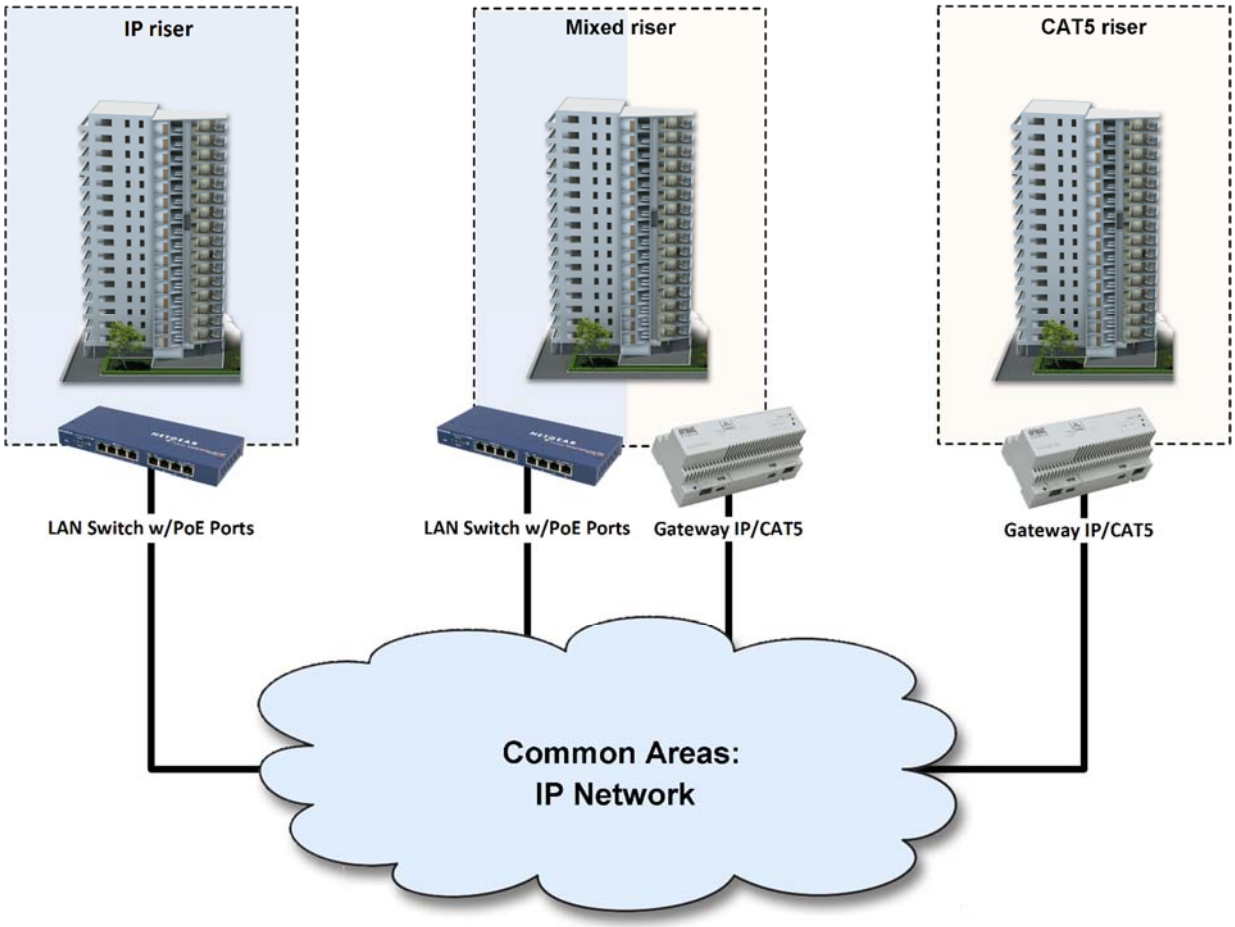


Figure 2: System architecture

If CAT5 network solution is used for the risers, the communication between the common areas and the riser columns is made by means of dedicated devices, called Gateway IP-CAT5, which transfer data and audio/video streams, adapting them to the respective requirements.

4.1 COMMON AREAS: THE IP NETWORK

The framework of Ipervoice is made by the IP network, used to connect all the digital devices of the system. On the common areas of Ipervoice devices that perform operations concerning the building structure are usually present. For the laying of the network, a cable available on the market can be used, provided that it is CAT5 certified. Urmet provides the installer with a special CAT5 cable (1039/90), protected by a reinforced black sheath, that allows the coexistence between the CAT5 cable for Ipervoice and 230V cables in the same ducts, allowing also the use in cable pipes outside the building (typically road pipes).

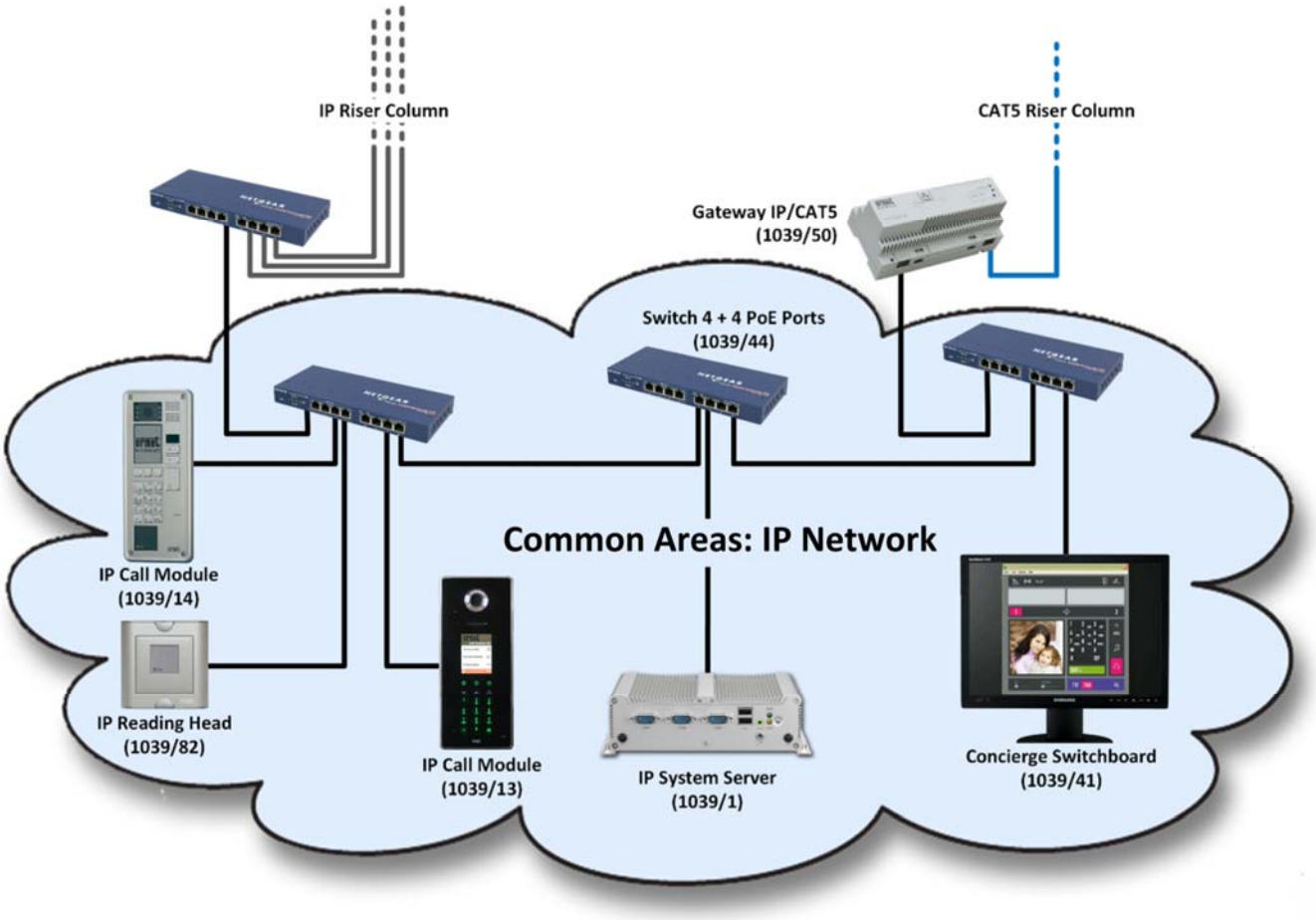


Figure 3: the common areas IP network

The topology used is typical for LAN networks, that is star point-to-point. The star centres are constituted by PoE switches (1039/44), that also carry out the function of **P**ower **O**ver **E**thernet for many Ipervoice devices. The maximum allowed length for each segment is 100m, in compliance with IEEE 802.3 regulations. To cover longer distances and satisfy the requirements of large buildings, segments in POF (**P**lastic **O**ptical **F**ibre), or FO (**O**ptical **F**ibre) can also be installed; in the first case, the fibre is made of plastic, that is more economical, but does not reach long distances; in the second case, the fibre is made of glass and allows considerable distances.

4.1.1 THE COMMON AREAS IP DEVICES

On the Common Areas IP network of Ipervoice there are many devices that have different characteristics and features. Some of them are optional and depend on the required features, some are fundamental for the correct operation of the whole system. One of them, for example, is the system server 1039/1 that coordinates and manages the services provided by Ipervoice. Other devices are as follows:

- Call modules, made of tempered glass or vandal resistant steel; they incorporate a colour camera, a 3,5" TFT display and a proximity key reader for access control.
- Video door units with buttons.
- IP key readers: used to manage access control by proximity keys or wireless remote controls.
- Concierge switchboards (Windows 7 PC).
- Video servers to which up to 4 traditional analogue cameras can be connected.
- IP/CAT5 gateways, used to connect the IP network to the riser column inside a building.
- PoE switches for powering Ipervoice devices.
- Special decoders: relay output modules that can be programmed by the system.

The following list includes all the devices with their main characteristics.

ELEKTA IP Call Module

1039/13

The call module 1039/13 is characterized by a special front panel made of smoked glass. All the buttons are “soft-touch” and there are no movable mechanical elements.
It can independently manage two different outputs, the first one used to open a pedestrian door (both with capacitive discharge and with relay contacts), the second to control for example an automatic gate or barrier. The call module has an embedded proximity key reader for access control.
It is equipped with a colour camera with wide-angle lens and presence detector for energy saving. The graphic display allows access with a guided procedure to the different functions provided by the device, for example:

- Easy access to the name directory
- Reading of absence messages
- Map of access path
- Easy user code entry

The call module allows entry to the building also by entering a user code on the alphanumeric keypad; in this case it is also possible to manage a duress function that allows a silent alarm to be sent to the concierge switchboard at the same time as the door being opened.
Specific functions for disabled people are also available.

Main technical characteristics

- CMOS colour camera with wide-angle lens (108°H x 87°V) and VGA resolution.
- Embedded proximity key reader (compatible with keys 1125/50).
- Infrared proximity detector for user detection.
- Management of audio repeater device for the hard of hearing.
- 3.5” colour graphic display with advanced Graphical User Interface (GUI).
- Simultaneous management of electrical lock with pulse capacitive discharge (SE+; SE-) a relay contact (C-NC-NO), 30V @ 3.5 A max.
- Second relay for operating an automatic gate (C-NO), 30V @ 200 mA max.
- Input for entrance hall button (exit switch)
- Input for open door contact
- Alphanumeric keypad with 18 buttons; 3 of them are multifunction
- 1 RJ45 Ethernet port for the connection to the IP network
- Power supply: PoE (48V nominal)
- Current consumption: 80 mA min – 120 mA max
- Connection for local power supply, if needed.
- Operating temperature range: -10° to + 50°C
- Dimensions: 130 (W) x 310 (H) x 15 (D) mm (wall protrusion)
- Installation: in plastic flush mounting box 1145/53
- Protection degree: IP42

ELEKTA STEEL IP Call Module

1039/18

Provided with a front panel made of vandal-proof stainless steel, the call module 1039/18 is specifically designed for Ipervoice. It can independently manage two different outputs, the first one used to open a pedestrian door (both with capacitive discharge and with relay contacts), the second to control for example an automatic gate or barrier. The call module has an embedded proximity key reader for access control.

It is equipped with a colour camera with wide-angle lens and presence detector for energy saving. The graphic display allows access with a guided procedure to the different functions provided by the device, for example:

- Easy access to the name directory
- Reading of absence messages
- Map of access path
- Easy user code entry

The call module allows entry to the building also by entering a user code on the alphanumeric keypad; in this case it is also possible to manage a duress function that allows a silent alarm to be sent to the concierge switchboard at the same time as the door being opened.

Specific functions for disabled people are also available.

Main technical characteristics

- CMOS colour camera with wide-angle lens (108°H x 87°V) and VGA resolution.
- Embedded proximity key reader (compatible with keys 1125/50).
- Infrared proximity detector for user detection.
- Management of audio repeater device for the hard of hearing.
- 3.5” colour graphic display with advanced Graphical User Interface (GUI).
- Simultaneous management of electrical lock with pulse capacitive discharge (SE+; SE-) and a relay contact (C-NC-NO), 30V @ 3.5 A max.
- Second relay for operating an automatic gate (C-NO), 30V @ 200 mA max.
- Input for entrance hall button (exit switch)
- Input for open door contact
- Alphanumeric keypad with 18 buttons; 3 of them are multifunction
- 1 RJ45 Ethernet port for the connection to the IP network
- Power supply: PoE (48V nominal)
- Current consumption: 80 mA min – 120 mA max
- Connection for local power supply, if needed.
- Operating temperature range: -10° to + 50°C
- Dimensions: 130 (W) x 310 (H) x 15 (D) mm (wall protrusion)
- Installation: in metal flush mounting box 1158/43
- Protection degree and impact resistance: IP45 – IK09

IP video 2-button door unit
1039/78

The video door unit 1039/78 is dedicated to the Ipervoice system and is designed on two-module Sinthesi S2 style. It is equipped with a CCD colour camera and two configurable call buttons.
If needed, the number of call buttons can be increased by means of the expansion module 1083/17. The door unit can manage 2 expansion modules max., to reach a total of 32 buttons.

Main technical characteristics

- CMOS colour camera with VGA resolution
- 2 call buttons
- Button expansion: by means of max 2 1083/17 modules, with 16 buttons each.
- Power supply: PoE (48 V nominal)
- Current consumption: 140 mA min – 180 mA max
- Operating temperature range: -10° - + 50°C
- Dimensions : 125 (W) x 250 (H) x 13 (D) mm
- Installation: in flush mounting box 1145/52
- Protection degree: IP42

IP video 2-button door unit
1039/74

The video door unit 1039/74 is dedicated to the Ipervoice system and is designed on two-module Sinthesi S2 style. It is equipped with a CCD colour camera and two configurable call buttons.
If needed, the number of call buttons can be increased by means of the expansion module 1083/17. The door unit can manage 2 expansion modules max., to reach a total of 32 buttons.
The device can manage Ref. 1158/48 audio repeater module for hard of hearing people and Ref. 1158/47 voice messages module.

Main technical characteristics

- CCD colour camera
- 2 call buttons
- Button expansion: by means of max 2 1083/17 modules, with 16 buttons each.
- Power supply: PoE (48 V nominal)
- Current consumption: 140 mA min – 180 mA max
- Operating temperature range: -10° - + 50°C
- Dimensions : 125 (W) x 250 (H) x 13 (D) mm
- Installation: in flush mounting box 1145/52
- Protection degree: IP45

IP Key Reader

1039/82

- The key reader 1039/82 is used to read the proximity keys 1125/50. The device is equipped with a relay output able to control an electrical lock and also with an input available for a door lock release button (exit switch).

Main technical characteristics

- 125kHz proximity key reader, (compatible with keys 1125/50).
- Management of electrical lock with a clean contact relay output (C-NC-NO) 30V @ 3,5A max
- Input for entrance hall button (exit switch)
- Input for open door contact.
- Power supply: PoE (48 V nominal)
- Current consumption: 100 mA
- Operating temperature range: -20° - + 80°C
- Dimensions : 125 (W) x 125 (H) x 13 (D) mm
- Installation: in flush mounting box 1145/51 or wall mounting with enclosure 1145/311
- Protection degree: IP42

REF : GB-020-098 REF : FD-020-137

Wiegand IP reading heads

- The Wiegand reading heads are used to read keys at 13.56MHz. Also the radio readers for remotes at 866MHz belong to the same range.

Main technical characteristics

- Key reader at 13.56MHz
- Dimensions : 78mmx78mmx18mm (FD-020-137) / 100x45x16mm (GB-020-098)
- Power supply: 12Vdc
- Reading distance: Up to 30mm
- Wiring: 8 wires
- Max distance: 100m from PIO controller
- Installation: On DIN rail or to the wall

IP Module

- IP Module is used to manage connection between the PIO module and the Ipervoice system.
- The PIO module manages the Wiegand reading heads.

Using these devices allows you to manage the base access control also when you cannot connect to the Ipervoice server.

Main technical characteristics

- 2 ports for the controller
- You can add a hub with 2 additional ports.
- Dimensions: 210mm x 145mm x 65mm (PIO) / 70mm x 90mm x 75mm (IP Module)
- Power supply: 12Vdc
- Max distance: 1000m from IP Module to PIO controller
- Working temperature range: -20°÷+60°C
- Installation: On DIN rail or to the wall

PC Concierge switchboard

1039/41

Ipervoice system implements the concierge switchboard function using a Personal Computer and a specific software application. The PC must be equipped with an audio card, in order to perform audio communications with the call modules and terminals inside the apartments. These communications can be carried out by the door phone provided (connected to the PC USB port and audio mini-jack connectors) or by a headset with microphone (in this case, the USB port is not needed). A "touch-screen PC" can be used to manage the switchboard.

Main technical characteristics

- Competence areas management, to associate the switchboard to a specific group of users
- Call forwarding to another switchboard, in case of operator absence.
- Sending of audio messages for single user, group of users and all users.
- Management of intrusion, panic and hold-up alarms

Minimum requirements

- 1 GHz compatible with Windows 7, with 1 Gbyte RAM and 250 MByte disk
- Audio card: compatible with Windows 7
- Video card: compatible with Windows 7 minimum resolution: 1024 x 768 pixel
- Webcam: compatible with Windows 7
- 1 USB port for the connection of the door phone
- 10 / 100 Mbit/s Ethernet interface

System IP Server

1039/1

The server 1039/1 is the Ipervoice system core. It is housed in a wall mounting metal box.

All the services provided by the Ipervoice system are managed and controlled by the server. The connection to the IP network, that is the main facility of Ipervoice, is made by means of an Ethernet port embedded in the server. There are two other USB ports that can be used to update the application software or to add expansions.

System programming, configuration and control operations are fully available through the embedded Web server.

The server is also involved in configuration and periodic checking of the system devices, signalling tampering or malfunctioning.

All the information needed for the system configuration is stored in the Ipervoice server. Any system device can be replaced easily and quickly. A backup of the configuration data stored in the server can also be performed, in order to restore the whole system in case of failure.

Main technical characteristics

- 1 GHz Intel Pentium processor with 512 MByte RAM and 2 GByte Solid State Disk
- 1 RJ45 Ethernet port for connection to the IP network
- 4 USB ports
- ON/OFF button and signalling led
- Embedded DHCP Server to automatically assign the IP addresses to the Ethernet devices
- Embedded Web Server for system configuration
- Power supply: by means of a provided power supply unit (in: 100 ÷ 240 Vac - 50 ÷ 60 Hz out: 12 Vdc – 5 A)
- Operating temperature range: -20° - + 70°C
- Dimensions : 172 (W) x 55 (H) x 114 (D) mm
- Installation: wall mounting

IP CAT5 Gateway

1039/50

The IP/CAT5 gateway performs the interface function between the building common areas (digital section based on Ethernet – PoE network) and the analogue CAT5 riser column. The gateway implements the analogue/digital conversion of audio and video signals between the two communication buses. On the device front panel there is a button used to activate a video signal adjusting phase for the analogue column.

Main technical characteristics

- 1 RJ45 Ethernet port for connection to the IP network
- 1 CAT5 RJ45 port for connection to the analogue riser
- Power supply: PoE (48 V nominal)
- Current consumption: in standby 52 mA –70 mA max
- Operating temperature range: -5° - + 45°C
- Dimensions: 180 (W) x 90 (H) x 80 (D) mm (10 DIN modules)
- Installation: on DIN rail

4 PoE ports + 4 Ethernet ports Switch

1039/44

The switch 1039/44 is provided with Power over Ethernet (PoE) function, has 8 ports and can operate both in 100Mbps Fast Ethernet and in 10Mbps Ethernet. The ports from 1 to 4 use the PoE standard and automatically detect the presence of PoE compatible devices.
The switch provides a total of 32W on the 4 PoE ports, that powers all the Ipervoice system devices designed for PoE standard.

Warning: More than 2 call modules 1039/13 or 1039/18 cannot be connected to one switch.

Main technical characteristics

- 4 x 10-100 Mbit/s PoE Ethernet ports able to provide 15,4 W each port, but no more than a total of 32 W.
- 4 x 10-100 Mbit/s Ethernet ports
- Power supply: by a provided power supply unit (in: in: 100 ÷ 240 Vac - 50 ÷ 60 Hz out: 48 Vdc – 0,8 A)
- Operating temperature range: 0° - + 40°C
- Dimensions : 235 (W) x 28 (H) x 100 (D) mm
- Installation: table-top or wall mounting

Special Decoder

1039/81

The special decoder 1039/81 is used in the Ipervoice system to activate two electric loads with double-pole relays that can operate in bistable or timed monostable mode.
The device is directly connected to the IP network that powers it via PoE.

Main technical characteristics

- 2 clean contact relay outputs (C-NC-NO) 230 V @ 5 A max resistive load
- 2 inputs for control buttons
- Power supply: PoE (48 V nominal)
- Current consumption: 50 mA
- Operating temperature range: -20° - + 80°C
- Dimensions : 108 (W) x 142 (H) x 37 (D) mm
- Installation: wall mounting or in flush mounting box

4.2 IP RISER COLUMNS

Ipervoice has been designed as IP based digital video door phone system, so, besides the system part that manages the common areas of the building, also the riser structure can follow the same principle. This is not the only option; as described below, the risers can be realized with the dedicated Ipervoice CAT5 bus.

Figure 4 e Figure 5 show two typical IP riser structures. In the first one, in the riser base, there is an Ethernet switch[3], where the risers for the floors start; branches to apartments are made by switches with PoE ports, as for example the model 1039/44. PoE ports are necessary to provide power supply to video door phones installed in apartments.

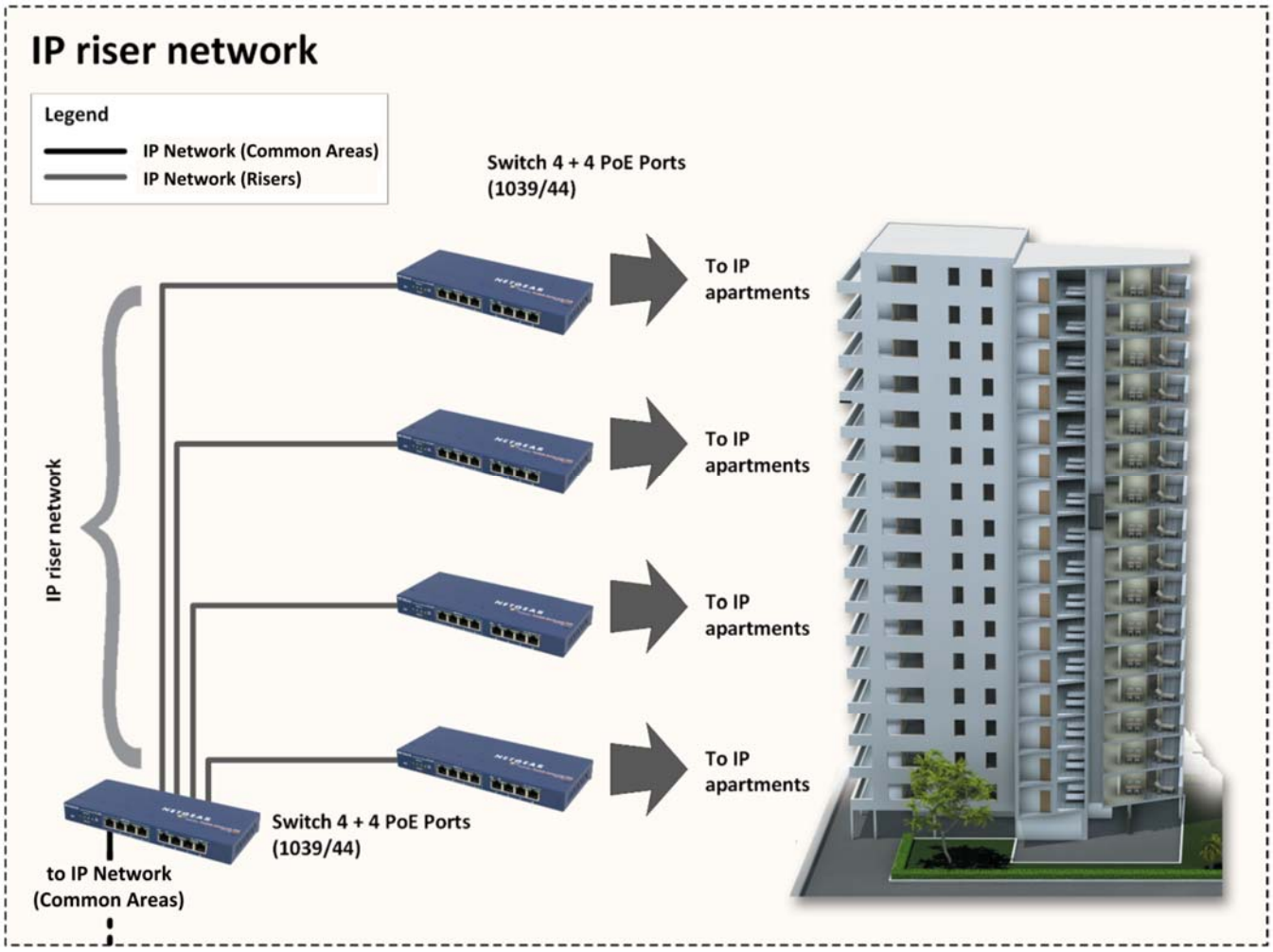


Figure 4: IP riser – typical solution

[3] It is possible to connect other Ethernet switches to the first one, if the number of switch ports is not sufficient.

In the second case, the Figure 4 shows a minimal solution, that can be used when the number of apartments is limited. In this way, the number of devices is lower, allowing to reduce system costs and consumption.

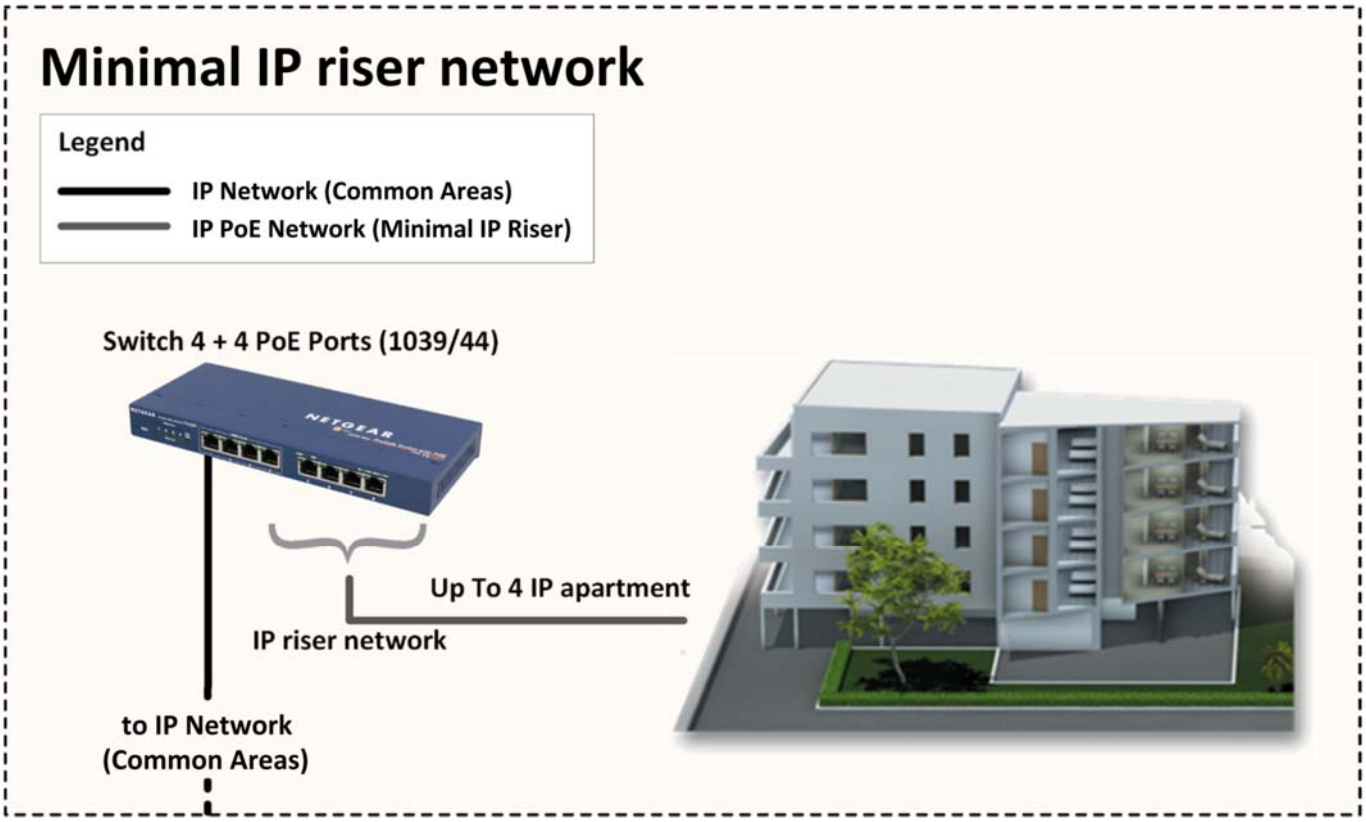


Figure 5: IP riser – reduced solution

4.3 THE DEDICATED CAT5 RISER COLUMNS

At the base of every building, or of each stair, if inside the building there is more than one stair, an IP Gateway is located, from which the riser starts. This column is used to perform the signal distribution inside the apartments. The topology used for wiring is “BUS” type, to make the laying of cables easier and reduce installation time. The whole system, both in riser columns and in apartments, uses a CAT5 cable. Also in this case, Urmet provides a specific cable, with a blue sheath (1069/91), suitable for laying it in ducts with 230V cables inside. The flexibility of Ipervoice is unlimited regarding the number of riser columns in a system, so it is possible to make installations with a large number of users. On the riser column a second audio channel can be present by adding a twisted pair cable (e.g. another CAT5 cable).

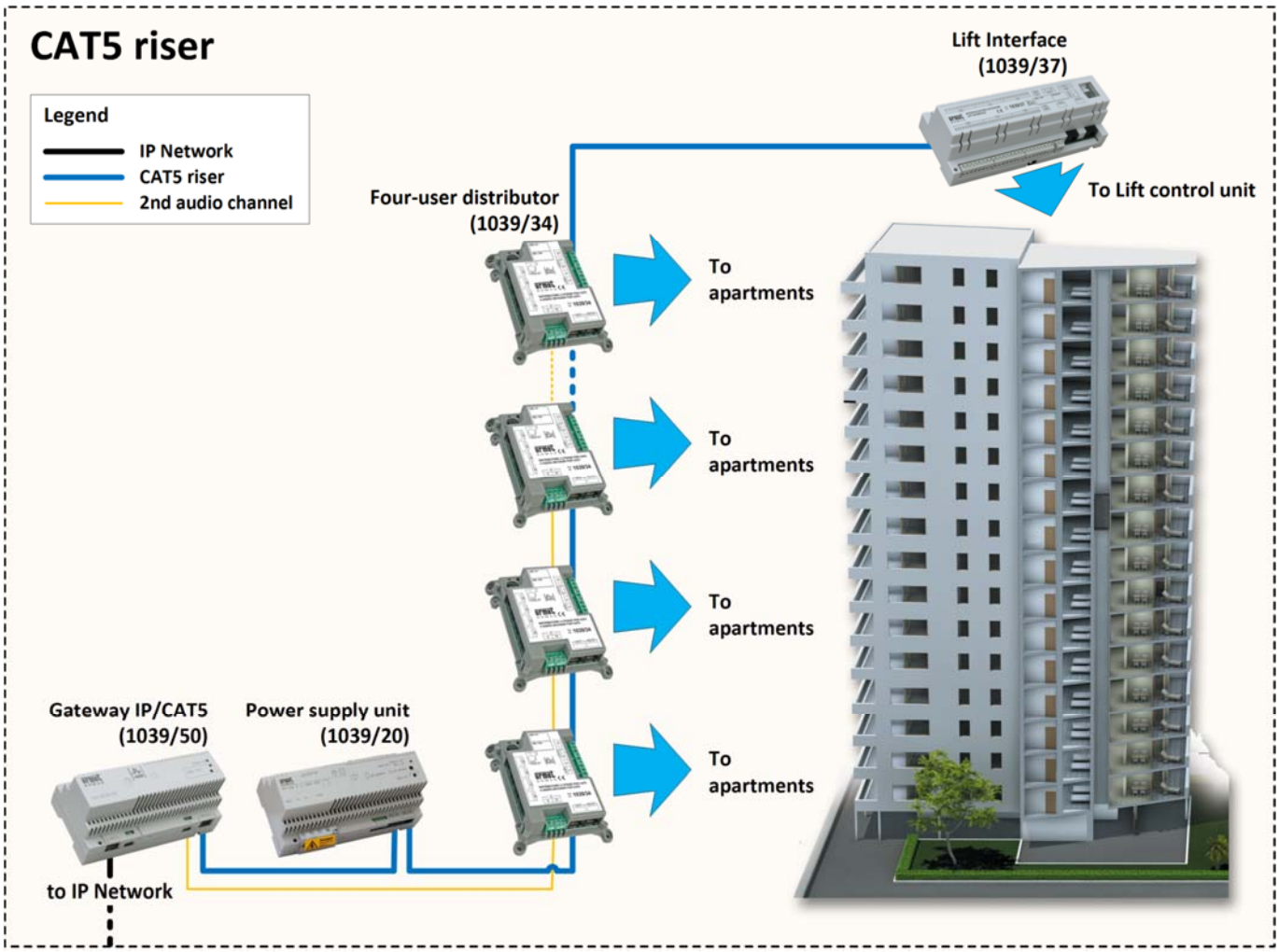


Figure 6: the dedicated CAT5 riser column

Figure 7: distribution on multiple CAT5 risers

With the riser distributor 1039/54, it is possible to install more than one riser column for the apartments. The 1039/54 can provide a maximum of four riser columns making installation in larger building more flexible.

Warning: the riser distributor allows the wiring of several riser columns instead of a single riser. The maximum distance between one device and another, and the logic characteristics, that is the number of devices that the system can address in the column, are the same with a single riser column.

Column power supply unit for CAT5
1039/20

The power supply unit 1039/20 is used to power the devices of the riser column and the apartment devices.
The power supply is directly injected on the communication BUS.

Warning: to extend the CAT5 BUS up to the maximum distance of 900 metres, a power supply unit must be installed every 100 metres.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the analogue riser (BUS IN, BUS OUT)
- Button to activate video adjusting phase
- Input: 100 ÷ 240 Vac - 50 ÷ 60 Hz
- Output: 54 Vdc @ 0,6 A with electronic protection against overloads
- Operating temperature range: -5° - + 45°C
- Dimensions: 180 (W) x 80 (H) x 90 (D) mm (10 DIN modules)
- Installation: DIN rail

CAT5 Riser distributor
1039/54

The riser distributor 1039/54 is connected to the column BUS and allows the distribution of up to 4 riser columns. The device is a passive splitter.

The following devices can be connected to its outputs:

- 4-user decoders (1039/34)
- Lift interfaces (1039/37)
- Column power supply units (1039/20)

Note: The riser distributor 1039/54 distributes a staircase on four columns (it does not create four stairs).

Main technical characteristics

- 1 x CAT5 RJ45 input port for the connection to the incoming riser column (BUS IN)
- 4 x CAT5 RJ45 output ports for the distribution of the outgoing riser columns (OUT1…OUT4)
- Power supply: BUS CAT5
- Current consumption: max 25 mA
- Operating temperature range: -5° - + 45°C
- Dimensions: 108 (W) x 64 (H) x 90 (D) mm (6 DIN modules)
- Installation: DIN rail

4-user decoder for CAT5

1039/34

The decoder 1039/34 allows the connection of up to 4 apartments max., where 4 apartment stations max. or up to 16 intercom apartment stations can be daisy-chain connected, using the intercom interface 1039/36.
The decoder provides a floor call function for each apartment, an auxiliary alarm signal – one per decoder; it can also manage an optional second audio channel to allow an additional door phone conversation in the riser column.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the analogue riser column (BUS IN, BUS OUT)
- 4 x CAT5 RJ45 ports for the distribution in the apartments
- 4 floor call inputs (FC1…FC4)
- 1 output for auxiliary alarm signalling (AL)
- 1 optional audio channel (A2 IN, A2 OUT)
- 1 connector dedicated for the Bluetooth programming interface 1039/56
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 35 mA max.
- Operating temperature range: -5° - + 45°C
- Dimensions: 108 (W) x 142 (H) x 37 (D) mm
- Installation: wall mounting or in flush mounting box

Lift Interface for CAT5

1039/37

The Lift Interface is directly connected to the riser column and is provided with a matrix of 24 relays that can be individually activated. It is directly managed by the system server; the relays activate the lift control unit after user actions on different devices. It cannot be directly accessed by the user. The operating parameters are programmed with the Bluetooth programming interface 1039/56. It is also provided with a RS485 serial line, fully isolated, which can be used for future expansions.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the analogue riser column (BUS IN, BUS OUT)
- 24 relay outputs max (C –NC-NO) 30 V @ 1 A
- 1 connector dedicated for the Bluetooth programming interface 1039/56
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 10 mA max
- Operating temperature range: -5° - + 45°C
- Dimensions: 216 (W) x 80 (H) x 90 (D) mm (12 DIN modules)
- Installation: DIN rail

4.4 THE IP APARTMENTS

Figure 8 shows the wiring inside the apartments connected to Ipervoice IP network. From the IP switch, that must be provided with PoE Ethernet ports (e.g. the 1039/44), it is possible to reach apartments (up to 4, in this case). Now it is possible to connect the MAX (1717/31) as advanced apartment video doorphone, used to access all Ipervoice basic and advanced functions. At the same time, using the apartment "Home network", MAX 1717/31 can manage Urmet "Yokis" domotic system.

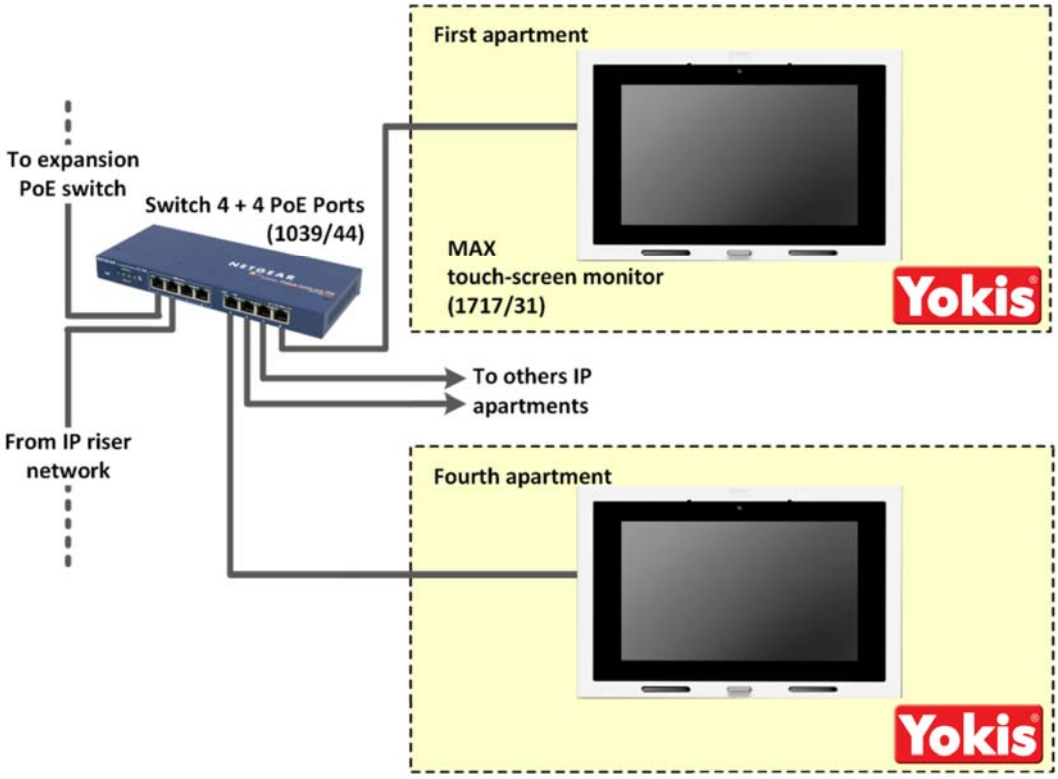


Figure 8: IP apartments

Figure 9 shows some typical features of MAX terminal.

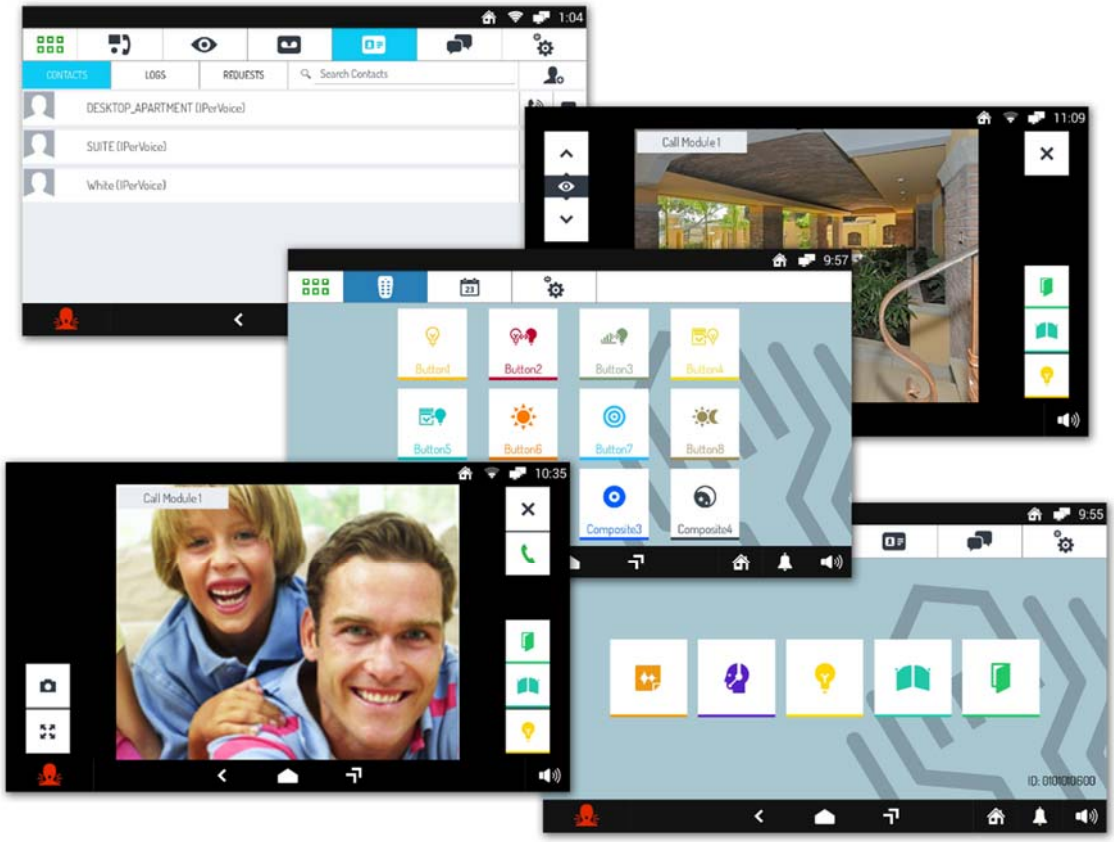


Figure 9: MAX 1717/31 Video doorphone – main features

MAX touch-screen IP terminal1717/31

The 1717/31 apartment terminal is equipped with a 7" colour touch-screen display. The sophisticated full graphics user interface is directly accessible from the touch-sensitive screen and allows all the device functions to be controlled.

MAX is not only a sophisticated video door phone station: in addition to traditional video door phone functions, it can be used to control other Ipervoice system features.

Via additional LAN or WiFi connections, it is possible to connect to the local apartment network through which, for example, Max also allows to interact with the Yokis Home Automation and the of MIFARE system.

The 1717/31 terminal requires no local power supply for its operation since this is provided in the PoE mode directly from the Ipervoice IP network

Main technical characteristics

- 7" colour graphics display with capacitive touch screen
- Resolution: 1024H x 600 V (RGB)
- 2Megapixels 30fps CMOS Frontal Camera
- 1 RJ45 Ethernet port for connection to the Ipervoice IP network
- 1 extra RJ45 Ethernet port for connection to the apartment LAN network
- 1 extra WiFi connection for connection to the apartment LAN network
- 2GB RAM Memory
- 8GB internal storage
- Up to 128GB storage with sd card
- Power supply: Via PoE (48 rated volts)
- Dimensions: 210 (W) x 138 (H) x 20 (D) mm
- Installation: wall-mounted using the included bracket

MAX LITE touch-screen IP terminal
1717/41

The 1717/41 apartment terminal is equipped with a 7" colour touch-screen display. The sophisticated full graphics user interface is directly accessible from the touch-sensitive screen and allows all the device functions to be controlled.
MAX LITE is a sophisticated video door phone station: it can be used to control Ipervoice system features.
The 1717/41 terminal requires no local power supply for its operation since this is provided in the PoE mode directly from the Ipervoice IP network

Main technical characteristics

- 7" colour graphics display with capacitive touch screen
- Resolution: 1024H x 600 V (RGB)
- 1 RJ45 Ethernet port for connection to the Ipervoice IP network
- 1 extra RJ45 Ethernet port for connection to the apartment LAN network
- 1 extra WiFi connection for connection to the apartment LAN network
- 1GB RAM Memory
- 8GB internal storage
- Up to 128GB storage with sd card
- Power supply: Via PoE (48 rated volts)
- Dimensions: 210 (W) x 138 (H) x 20 (D) mm
- Installation: wall-mounted using the included bracket

Miro IP door phone 1139/3

The audio doorphone Miro 1139/3 is an IP device of the IPerVoice system.
The 1139/3 terminal requires no local power supply for its operation since this is provided in the PoE mode directly from the Ipervoice IP network.

Main technical characteristics

- 1 RJ45 Ethernet port for connection to the Ipervoice IP network
- Power supply: Via PoE (48 rated volts)
- Operating temperature range: -10° - + 55°C
- Dimensions: 110(L) x 80 (H) x 9 (P) mm
- Installation: wall-mounted using the included bracket

IP Private Apartment Call Module PACM

1039/22

The IP Private Apartment Call Module is a panel installed directly outside the apartment main door. It can call the monitors in the associated apatment or it can receive calls (self insertion). The 1039/22 panel requires no local power supply for its operation since this is provided in the PoE mode directly from the Ipervoice IP network.

Main technical characteristics

- VGA resolution 640x480
- 1 RJ45 Ethernet port for the connection to the IP network
- Power supply: Via PoE (48 rated volts)
- Dimensions: 100 (L) x 1800 (H) x 25 (P) mm
- Operating temperature range: -20° ÷ +55°C
- Installation: surface mounted or flush mounted

IP Home Gateway Terminal

1071/2

The Home Gateway 1071/2 is an IP interface that allows access via the user's Android or iOS mobile phone or tablet - connected to the local house Wi-Fi - to the main Ipervoice functions such as receiving a voice/video call, opening doors, or call the switchboard.
The 1071/2 terminal requires local power supply for correct operation.

Main technical characteristics

- 1 RJ45 Ethernet port for connection to the Ipervoice IP network
- 1 extra RJ45 Ethernet port for connection to the apartment LAN network
- Power: Via power supply (12 V, 4.5A)
- Operating temperature: -5° to +55°C
- Dimensions: 160 (W) x 98 (H) x 62 (D) mm
- Installation: DIN module

4.5 THE DISTRIBUTION IN TRADITIONAL APARTMENTS

If the traditional CAT5 dedicated solution has been chosen, Ipervoice offers two options for installing devices inside an apartment. In the first case, as shown in the upper area of Figure 10 each device is connected in series to the next one, starting from the 4-user decoder. When the "intercom" function is not required inside the apartments, a configuration with up to four terminals can be used. If more than four terminals must be installed, or the "intercom" function is required, the wiring configuration must be as shown in the lower area of Figure 10. In this case, up to four derived buses are connected to an intercom interface (1039/36), which, through a column power supply unit (1039/20), is connected to the respective 4-user decoder. If required, up to 4 interfaces 1039/36 can be installed, allowing each apartment to have up to 16 derived buses.

It is important to note that an intercom conversation between two derived buses does not use the building riser column.

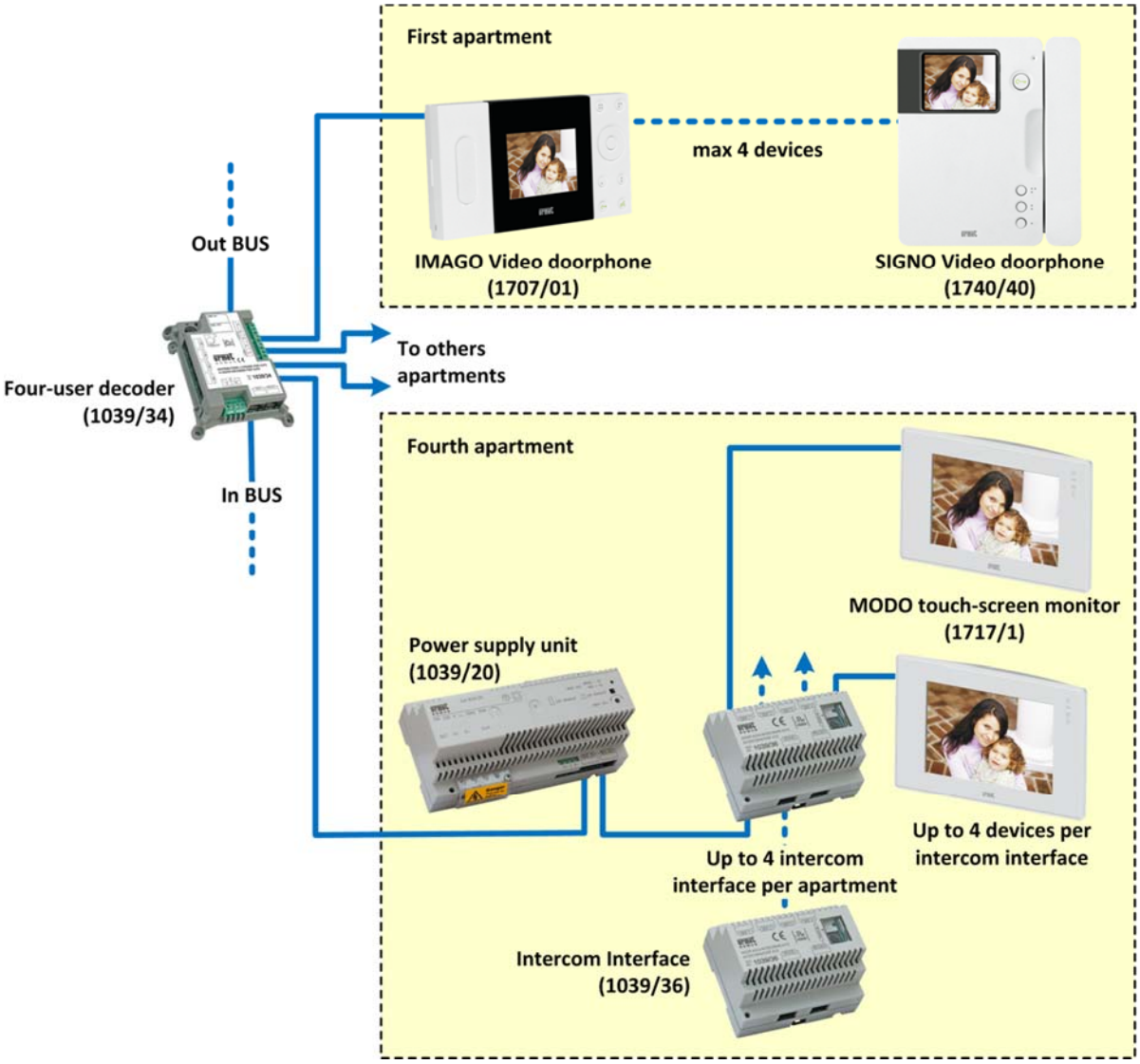


Figure 10: Distribution inside the apartments

AIKO hands-free video door phone

1716/3 (black) 1716/4 (white)

The video door phone 1716/3 (or /4) is equipped with a 4.3" LCD.
The user interface is simple and user-friendly. Soft-touch capacitance button are used for access.
The device implements various other functions in addition to traditional video door phone features. The most important are:

- Address book containing up to 32 users
- Intercom call to any user of the same column
- Intercom call to any apartment door phones (using intercom interface 1039/36)
- Call to any of the switchboards (1039/41) present in the building
- Activating commands for any special decoder (1039/81) present on the IP network

The AIKO hands-free video door phone requires firmware version 3.0 or higher on 4-user decoder 1039/34

Main technical characteristics

- 4.3" TFT LCD colour graphic display
- Resolution: 480H x 272V (RGB dot)
- Horizontal viewing angle: +75° ÷ -75°
- Vertical viewing angle: +60° ÷ -70°
- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- Power supply: BUS CAT5
- Current consumption: standby 1 mA, 160 mA max
- Operating temperature range: -5° - +45°C
- Dimensions: 130(W) x 160 (H) x 29.7 (D) mm
- Installation: wall, flush-mounted with box 1716/80 and table-mounted with stand 1716/50
- Accessories: set of coloured front panels 1716/51

FOLIO hands-free video door phone

1706/7 (black) 1706/8 (white)

FOLIO is a colour video door phone. Two versions are available: white (1706/8) and black (1706/7). It has a 3.5" LCD allowing installation with minimal protrusion from the wall. The user interface is simple and user-friendly. Backlit soft-touch capacitance button are used for access. The device implements various other functions in addition to traditional video door phone features. The most important are:

- Address book containing up to 32 users
- Intercom call to any user of the same column
- Intercom call to any apartment door phones (using intercom interface 1039/36)
- Call to any of the switchboards (1039/41) present in the building
- Activating commands for any special decoder (1039/81) present on the IP network

The FOLIO hands-free video door phone requires firmware version 3.0 or higher on 4-user decoder 1039/34

Main technical characteristics

- 3.5" TFT LCD colour graphic display
- Resolution: 960H x 240V (RGB dot)
- Horizontal viewing angle: +60° ÷ -60°
- Vertical viewing angle: +55° ÷ -55°
- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- Power supply: BUS CAT5
- Current consumption: standby 1 mA, 160 mA max
- Operating temperature range: -5° - +45°C
- Dimensions: 148(W) x 170 (H) x 54 (D) mm
- Installation: flush-mounted with box 1706/60 on plasterboard with kit 1706/61

IMAGO hands-free video door phone
1707/1

The device 1701/1 is a colour hands-free video door phone with 4” display. IMAGO can manage not only the functions of a standard video door phone system (call, audio and door opening), but also other additional services provided by Ipervoice system, such as: differentiated floor call, signalling of entrance door opened, or other functions, by means of its configurable buttons.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 200 mA max
- Operating temperature range: -5° - +45°C
- Dimensions: 218(W) x 123 (H) x 38 (D) mm
- Installation: wall mounting, with bracket 1707/95 or flush mounting with kit 1707/60

MODO touch-screen video door phone
1717/11

The video door phone 1717/11 is provided with a large, touch-screen, 7” display. The GUI is user-friendly and can be directly accessed from the touch-screen display.
In addition to the traditional video door phone functions, other features offered by the Ipervoice system are available; among these the most relevant ones are the following:

- Intercom call to any user of the same column
- Intercom call to any apartment door phones (using intercom interface 1039/36)
- Call to any of the switchboards (1039/41) or present in the building
- Activating commands for any special decoder (1039/81) present on the IP network

If there are one or more video door phones MODO 1717/11, a power supply 1039/20 must always be installed inside the apartment.

Main technical characteristics

- 7” TFT colour graphic display with advanced Graphical User Interface (GUI)
- Resolution: 480H x 234V (RGB dot)
- Horizontal viewing angle: +60° ÷ -60°
- Vertical viewing angle: +60° ÷ -60°
- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- Power supply: BUS CAT5
- Current consumption: in standby 40 mA – 130 mA max
- Operating temperature range: -5° - +45°C
- Dimensions: 225(W) x 134 (H) x 36 (D) mm
- Installation: wall mounting with bracket 1717/95

SIGNO video door phone

1740/1 (b/w monitor) – 1740/40 (colour monitor)

The video door phone SIGNO is designed to have a minimal extra-slim style. In fact, it is the slimmest on the market. In the version with black and white monitor (1740/1), it is provided with a 4" display, in the colour version (1740/40) with a 4" ½ display.
In addition to the door lock release button, SIGNO is equipped with 3 auxiliary buttons which can be programmed by the system.
Features for the hard of hearing are embedded in the device.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 1740/1: 200 mA max, 1740/40: 120 mA
- Operating temperature range: -5° - +45°C
- Dimensions: 205(W) x 225 (H) x 50 (D) mm
- Installation: wall mounting with bracket 1740/95

Door phone for CAT5

1139/2

The door phone for CAT5 1139/2 is dedicated exclusively for use in the analogue columns of the Ipervoice system.
It is provided with a door lock release button and 3 buttons for optional functions.
It has the same extra-slim style as SIGNO series

Main technical characteristics

- 1 x CAT5 RJ45 port for the connection to the decoder 1039/34
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 35 mA max
- Operating temperature range: -5° - +45°C
- Dimensions: 100 (W) x 225 (H) x 50 (D) mm
- Installation: wall mounting

Intercom interface for CAT5
1039/36

This device allows the intercom function among different stations of the same apartment, so an intercom communication can be made without using the riser column.
The device can be exclusively connected to the derived bus of the 4-user decoder 1039/34, through a power supply 1039/20.
To increase the apartment stations number, up to 4 interfaces 1039/36 can be daisy-chain connected.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the daisy-chain connection to the decoder 1039/34 (BUS IN, BUS OUT)
- 4 x CAT5 ports for the connection of 4 apartment stations (DER1…DER4)
- Power supply: BUS CAT5
- Current consumption: in standby 1 mA – 35 mA max
- Operating temperature range: -5° - + 45°C
- Dimensions: 108 (W) x 64 (H) x 90 (D) mm (6 DIN modules)
- Installation: DIN rail

Alarm interface for CAT5
1039/61

This device allows the alarm signals generated by the alarm control panel 1061 to be sent to the concierge switchboard of Ipervoice system.

Warning: The interface works only if used with the control panel 1061/4 or 1061/6 and not with other intruder alarm systems.

Main technical characteristics

- 2 x CAT5 RJ45 ports for the connection to the decoder 1039/34 (BUS IN, BUS OUT)
- 1 connector used for control panels 1061 connection
- Power supply: BUS CAT5
- Current consumption: 1.5 mA
- Operating temperature range: -5° - + 45°C
- Dimensions: 108 (W) x 142 (H) x 37 (D) mm
- Installation: inside the control panels 1061

5 IPERVOICE SERVICES

Ipervoice features are provided as services. Each service has its specific function, but at the same time it also interacts, if necessary, with the other services active in the system; for example, the *CCTV* service manages the cameras and interacts with the *Video door phone* service during user activity.

5.1 THE VIDEO DOOR PHONE SERVICE

It is the main service of Ipervoice system.The system can be developed according to various installation models, that make it possible to satisfy different requirements. For example, a typical model as shown in Figure 11 can be implemented, in which there are one or more call modules (1039/13 or /18), an IP/CAT5 gateway (1039/50) for every riser column, the 4-user decoders (1039/34) and finally the apartment stations, as 1707/1.

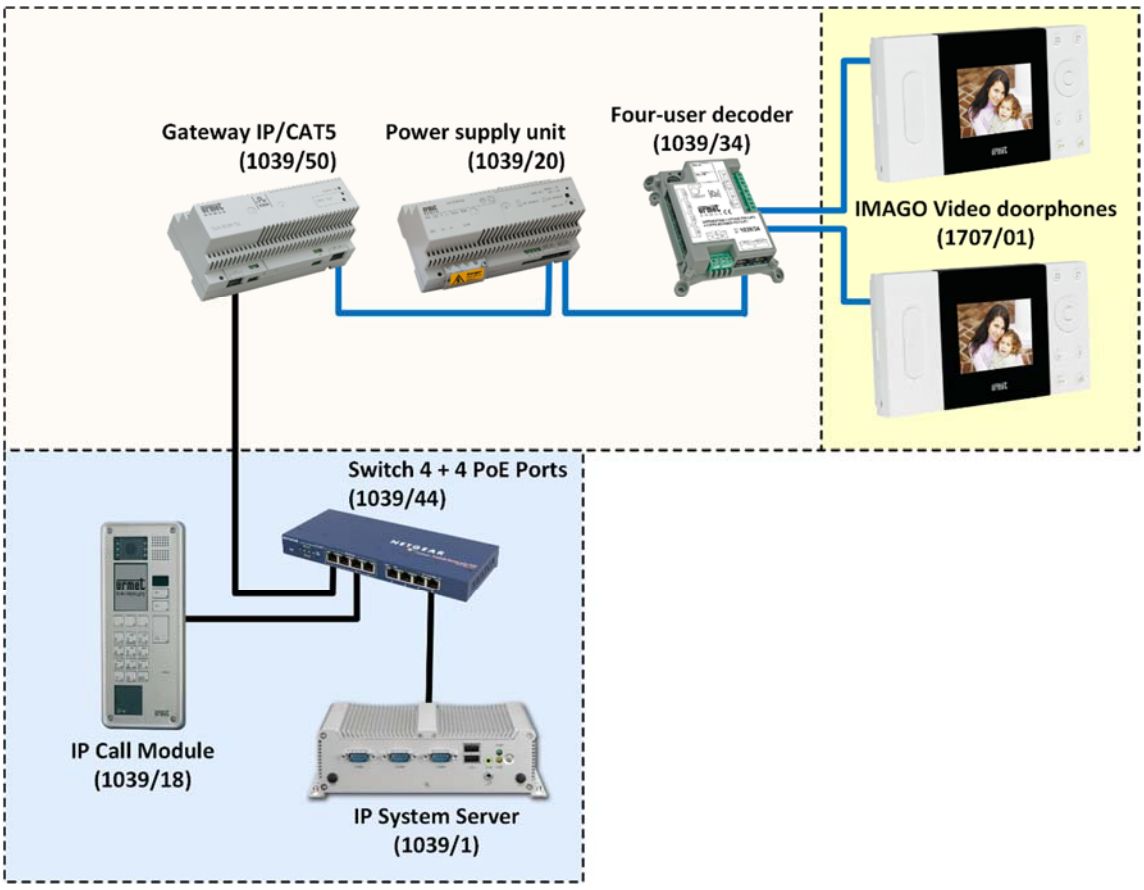


Figure 11: Video door phone service – Basic diagram

Alternative options are possible: a configuration in which the system is fully implemented on the IP network and the apartment stations are MAX monitors (1717/31) (Figure 12).

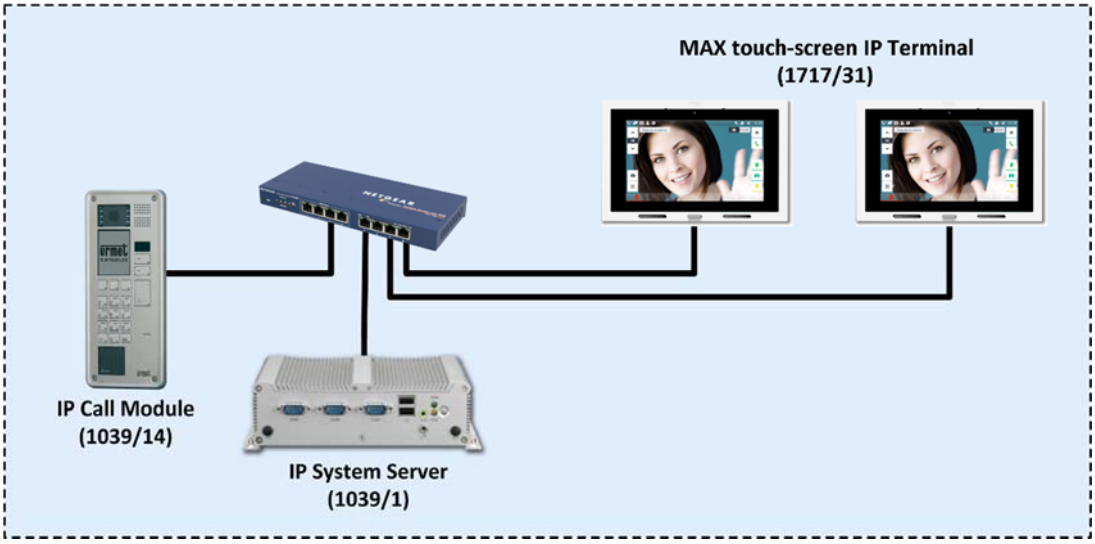


Figure 12: Video door phone service – MAX monitors

Or another configuration, where there are no apartment stations, but only concierge switchboards 1039/41 and, if necessary, call modules and door units such as 1039/78 (Figure 13). In practice, the basic configurations described above can be combined to create mixed installations.

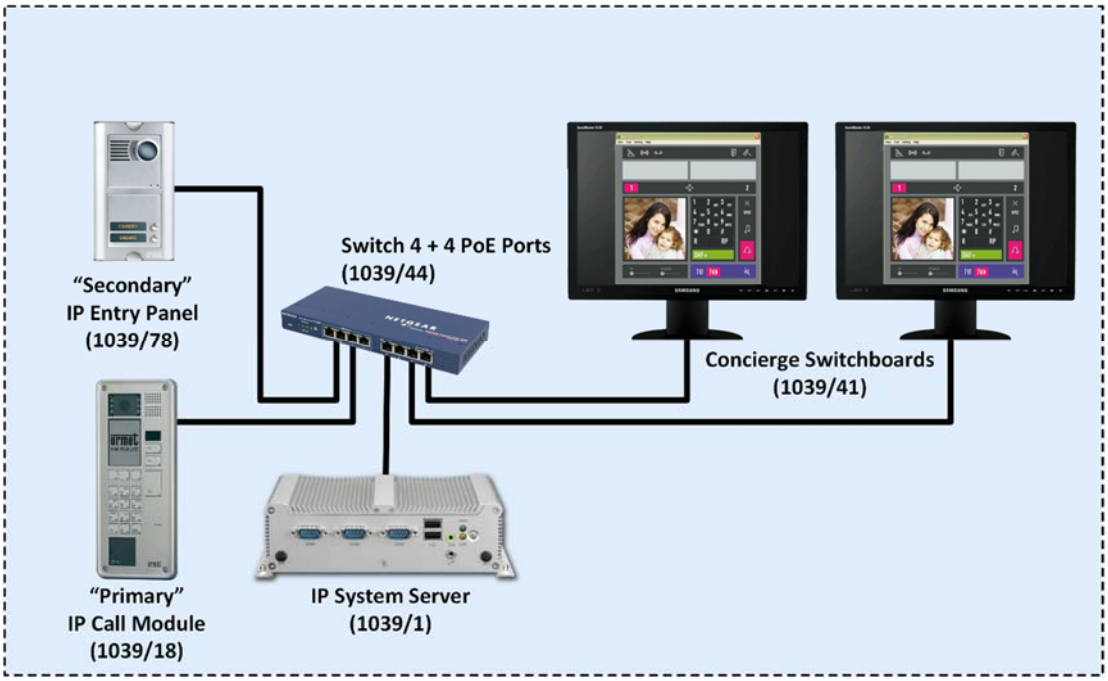


Figure 13: Video door phone service – "Configuration with concierge switchboards"

5.1.1 SERVICES FUNCTIONS

The main functions provided by the video door phone service are the following:

- Call code configuration (topologic, logic, numeric or block prefix).
- Call priority, off-hook waiting time and assured communication time
- Call module lock management
- Intercom function between the apartments
- Floor call management
- Ringer and call source management
- Audio channel management on the riser column (choice methods)
- Communications to the IP network
- Call forwarding
- Intercom function inside the apartment

CALL CODE CONFIGURATION

To “call” an apartment, a concierge switchboard or simply a system user, these devices must be uniquely identified; this identifier is named “call code”. Ipervoice provides the installer with three modes for assigning the call codes. The first one is based on the system topologic diagram, and it is also the system basic logic; the second one, used as an alternative method, makes it possible to associate every topologic code to an arbitrary name which has a clear meaning for the user. Letters and numbers can be used to create the code; both the codes can contain 8 digits max. The third one allows you to associate a numeric code having a logic meaning for the user to every topological codes.

In the model based on the topologic code, the eight digits are divided into 4 pairs; each pair is used to identify a hierarchical portion of the system, as shown in Figure 14.

In the example, the first pair identifies the building or block (**B1**), the second the stair (**S2**), the third the floor (**F4**) and the fourth and last the apartment (**A1**). If the system is properly structured and the apartment position inside the system is known, the code for calling an apartment is easy to find.

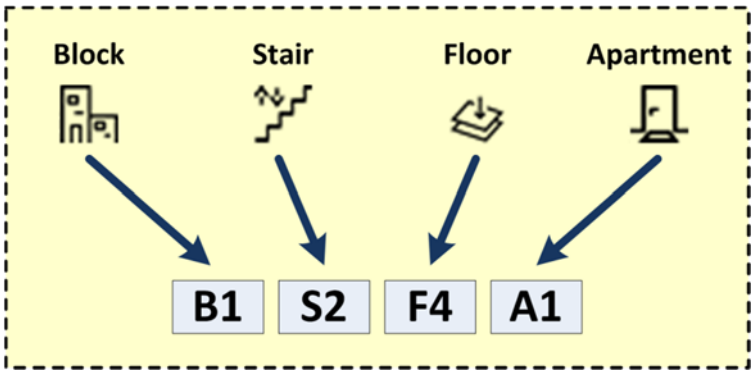


Figure 14: Call code – Topologic diagram

The “logic” and “numeric” models are totally independent from the system structure; in this case, the diagram is totally free and can be adapted to any requirement.

Warning: the system accepts the call codes only in the selected mode. Nevertheless, by changing the mode, the codes defined in the mode not being used are not deleted from the system and can be used again by restoring the previous mode.

BLOCK-PREFIX FUNCTION

You can connect an additional feature to the “numeric” addressing mode: the “Block-Prefix” function. In this mode, if you press the “UP” and “DOWN” arrow buttons on the calling module you will not display the address book, but you will see the system block list. So the user must select the block which the apartment to be called is connected to and then type the apartment code. This allows you to protect the lodger privacy because their names are not displayed in the address book. In effect you can call an apartment only if you know its code. This mode applies to the main door units only, while it is not intended for the secondary door units. You can enable the Block-Prefix function in the “Advanced Info” page on the front-end.

Figure 15: Addressing Mode

Select “Numeric codes” for the Addressing method option and select “Yes” for the “Use a prefix” option.

Now you have to assign a code to every blocks.

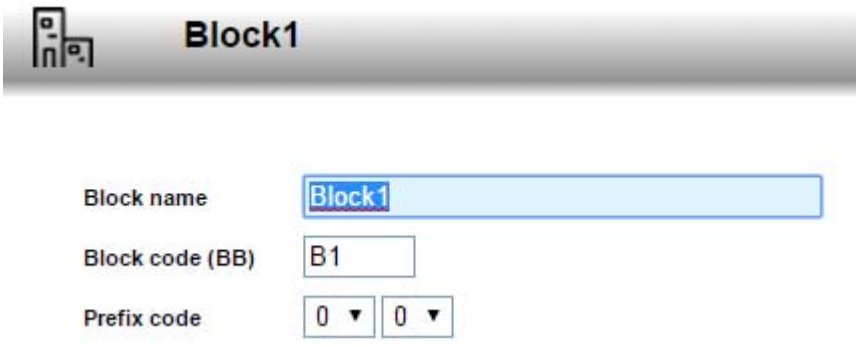


Figure 16: Adding a numeric code to the block

You can do this in the block page on the front-end.

RINGER MANAGEMENT AND CALL SOURCE

Every door phone or video door phone has a set of 5 different ring tones, which can be freely selected by the user[4]. For example, the first ring tone can be associated to the incoming door phone call and one of the other four ring tones to the floor call. In this case, the floor call will ring using the selected tone for three consecutive seconds. For the door phone call, in order to identify its source, i.e. from the main or secondary call module, from the switchboard or another apartment station, the selected ring tone is emitted by inserting a series of pauses, according to the diagram shown in the next Table 1. This table contains the tone and pause times and a graphic scheme, useful to identify the call ring tone according to its source.

Source	Audio/video call	Audio call
Main Call Module	 Selected door phone ring tone for 3 consecutive seconds	Addition of a “beep-beep” at the end of the ring tone sequence
Secondary Call Module	 0,4 sec ON 0,2 sec OFF repeated for 5 times	Addition of a “beep-beep” at the end of the ring tone sequence
Switchboard	 0,1 sec ON 0,5 sec OFF for 3 times, pause 0,2 sec repeated for 5 times	Addition of a “beep-beep” at the end of the ring tone sequence
Intercom apartment station	 0,5 sec ON 0,5 sec OFF for 3 times	Addition of a “beep-beep” at the end of the ring tone sequence

Table 1: Door phone call source

RING DELAY

When more than one derived station is installed inside the apartment, after receiving a call, the system does not make the derived stations ring at the same time, but in sequence, by inserting a 1 second pause between a station and the next.

If there are one or more intercom interfaces 1039/36 (as shown in Figure 10 at page 36), another variation is introduced: the derived stations ring in sequence according to the interface to which they

[4] The procedure used to select the tone is described in the user manual provided with each device.

are connected, and in parallel on different interfaces. In a condition of maximum expansion, there are 16 derived stations connected to 4 interfaces 1039/36, according to the following diagram, that contains the number of the station to be connected to the different ports of the interfaces.

Intercom Interface 1039/36	Der. 1 Port	Der. 2 Port	Der. 3 Port	Der. 4 Port
First interface	1	2	3	4
Second interface	5	6	7	8
Third interface	9	10	11	12
Fourth interface	13	14	15	16

Table 2: Assignment of derived stations to the intercom interfaces

After a call, the derived stations 1, 5, 9, 13 will ring at the same time, then the stations 2, 6, 10, 14, then the 3, 7, 11, 15 and finally the 4, 8, 12, 16.

CALL PRIORITY, CALL PICKUP TIME AND GUARANTEED CONVERSATION TIME

Ipervoice system manages 7 call priority levels, as shown in Table 3. A higher number means that the call is more important and has higher priority.

Priority	Type of communication with the apartment station
7	Switchboard during "*Room monitor*"
6	IP call module or IP video door unit
5	Switchboard during standard communication
4	Apartment station (outside the apartment)
3	Apartment station (inside the apartment)
2	Auto-on, CCTV Cyclic
1	Video door phone answering machine

Table 3: Call priority

To define the logic implemented in the priority table, it is necessary to consider the different phases of a call during its life cycle. These three phases are the following:

Call pickup time (Time T1)

The call has been forwarded to the apartment station, which has emitted the ringer tone selected by the user; the system is waiting for the user to answer. This time can be configured by the installer via web frontend resident on the Ipervoice server. By default its value is 60 seconds. Starting from this moment, the communication is "UNINTERRUPTIBLE", i.e. it cannot be interrupted by a communication with the same or lower priority.

Note: If you are using the Call2U call forwarding application (both remotely and locally via the Home Gateway), the

time T1 has a maximum duration of 60 seconds, after which the call module displays a message reading "BUSY". To view the “TIME OUT” message, a time slightly below 60 seconds must be set on the frontend.

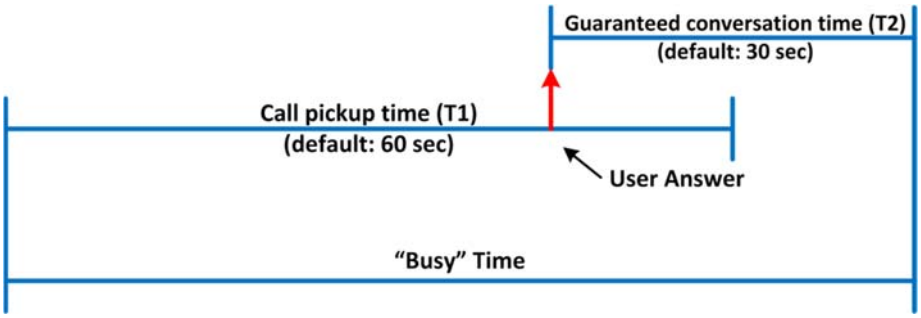
Guaranteed conversation time (Time T2)

If the user answers, the call enters in this state for a time that can be configured, By default 30 seconds. When this time is elapsed, the communication is defined as “INTERRUPTIBLE”, i.e. it can be interrupted by a communication with the same or higher priority.

Maximum communication length (Time T3)

When the user answers, a “timeout” timer starts, after which the communication is always closed by the system. This time is fixed and is equal to 10 minutes.

Note: If you are using the Call2U application for call forwarding (both remotely and locally via Home Gateway), the time T3 has a maximum fixed duration of 2 minutes.



Note: the sum of time T1 (*call pickup time)* and time T2 (*Guaranteed conversation time)* is the “*Busy time*”.

The Table 4 shows the call management according to priority, call state and related timeout.

Priority	Type of communication with the apartment station	Call pickup time (T1)	Guaranteed conversation time (T2)	Maximum communication length (T3)
7	Switchboard during “*Room monitor*”	0	10 min[5]	10 min
6	IP call module or IP video door unit	Max: programmed T1	Max: programmed T2	10 min
5	Switchboard during standard communication	Max: programmed T1	Max: programmed T2	10 min
4	Apartment station (outside the apartment)	Max: programmed T1	Max: programmed T2 / 2	10 min
3	Apartment station (inside the apartment)	Max: programmed T1	0	10 min
2	Auto-on, CCTV cyclic	Not available	Max: programmed T1	10 min
1	Video door phone answering machine	0	0	10 min

[5] T2 and T3 times are reduced to 45 seconds in case of room monitor on an apartment station of a CAT5 analogue riser.

Table 4: Priority and call state diagram

During Call pickup time (**T1**) and Guaranteed conversation time (**T2**):

- A priority 7 communication cannot be interrupted
- A priority 5 or 6 communication can only be interrupted by a priority 7 communication
- A priority 1, 2, 3, 4 communication can only be interrupted by a priority 5 or higher communication

After the Guaranteed conversation Time (**T2**) is elapsed:

- a priority 7 communication cannot be interrupted
- a priority 6 communication can only be interrupted by a priority 5 communication or higher
- a priority 5 communication can only be interrupted by a priority 5 communication or higher
- a priority 4 communication can only be interrupted by a priority 4 communication or higher
- a priority 3 communication can only be interrupted by a priority 3 communication or higher
- a priority 2 communication can only be interrupted by a priority 3 communication or higher
- a priority 1 communication can always be interrupted

AUDIO CHANNEL MANAGEMENT ON THE RISER COLUMN (CHOICE METHODS)

Ipervoice allows a second audio channel to be wired on each riser column. This optional function is useful in order to increase the number of simultaneous communications in the same riser column (Figure 6 at page 27), in particular when a video door phone call and an apartment station call for the switchboard occur at the same time.

Warning: to make the second audio channel available, a telephone cable twisted pair or a pair of a CAT5 cable must be installed in the riser column, starting from the IP/CAT5 riser column gateway to the first 4-user decoder, from which the pair restarts to the next decoder and so on.

In any case, the use of the second audio channel, if present, or the closing of a communication on the main channel in case of a new incoming call, is managed by the system using a series of choice methods. There are two application diagrams: the first is used if the incoming call is a video door phone call (audio and video), the second if the call is a door phone call (audio only).

The Table 5 e la Table 6, indicate the application of the choice methods for the two conditions described above. Typically, the system tries to establish the new communication with the same required characteristics, i.e. if the incoming call is a video door phone type, the system will try to establish an audio/video communication, closing, if possible, another communication in progress on the channel 1. If this is not possible, the system will degrade the incoming call to an audio only call and will use the second audio channel, if present. Only if this method cannot be applied, the system will notify to the user the busy state.

Diagram 1: Video door phone incoming call (audio/video)

Channel2 / Channel1	In standby	Interruptible	Uninterruptible Not available
In standby	Channel 1	Channel 1	Channel 1
Interruptible	Channel 1	Channel 1	Channel 1
Uninterruptible	Channel 2 (audio)	Channel 2 (audio)	Busy

Table 5: Choice method in case of video door phone call

Diagram 2: Door phone incoming call (audio only)

Channel2 / Channel1	In standby	Interruptible	Uninterruptible Not available
In standby	Channel 2	Channel 2	Channel 1
Interruptible	Channel 2	Channel 2	Channel 1
Uninterruptible	Channel 2	Channel 2	Busy

Table 6: Choice method in case of door phone call

MANAGEMENT OF CALL MODULE LOCKS AND DOOR LOCK RELEASE CODES

The call modules 1039/13 and 1039/18 have two separate lock outputs. The first output can be used to directly activate a fail locked type electric release. The second output is via a relay contact and can be used to control for example an automatic gate or barrier.

On the call modules, two door lock release modes are available:

Free — In this case, by pressing the "door lock release" button on the apartment station, all the doors of the associated call modules are opened, even if there are no calls in progress with that apartment station.

> **Note:** if the call module is a secondary one, the door is opened only if the command comes from an apartment station of the same riser, but the "main" call modules always open the door.

Secret — The door lock release function can only be activated by the apartment station which has received a call; only the door managed by the call module from which the call comes will be opened.

> **Note:** this is the default and suggested system configuration

Warning: in installations with main and secondary call modules, or if there is more than one main call module, the main modules door lock release function must be configured in "secret" mode.

The opening of the call module door can also be performed by a door lock release numeric code, or "Door Code". For each user enabled for this function, a unique code can be defined that must be associated to the passages to be opened[6] on the relevant call modules.

AUTOMATIC DOOR LOCK RELEASE

This function is managed by the user from his apartment station[7] and allows to automatically open the door of the call module that issued the call; the communication is active for the call pickup time, after which it is interrupted, if the user has not answered.

[6] A code can be programmed to allow the opening of the pedestrian door only, of the driveway gate only or both.

[7] The configuration modes can be different according to the model of the installed apartment station. Please refer to the booklets provided with the device-

DOOR OPEN SIGNALLING

Some apartment stations, such as 1707/1 (IMAGO) or 1717/11 (MODO), are able to signal to the user that the door is open. This information is sent from the door unit through a suitable input, that can be connected to a magnetic micro-contact installed on the entrance door. When the visitor opens the door and comes in, the micro-contact is opened, and the call module immediately sends the state information to the apartment station in communication. On the apartment station, the led that signals the open door is on until the door is closed.

COMMUNICATIONS TO THE IP NETWORK

The audio and video door phone calls are mainly originated by the call modules installed on the IP network, such as the 1039/18, and reach the selected apartment station such as the 1740/40 on the CAT5 riser. An inverse communication can also be performed, i.e. from a device installed on the CAT5 riser column to a device of the IP network. For example, the user can call a concierge switchboard.

VIDEO DOOR PHONE MESSAGING SERVICE

The video door service allows you to record a 10 second call if the user is not at home. In order to use this function, the apartment must be setup to either the “Recording” mode for IP apartments or the “Voicemail recording” mode for analogic apartments.

Note: In case of IP apartment, only the iModo that is setup as master will ring. All other devices that were setup as slave do not receive that call. In case of analogic apartments, no devices will ring.

CALL FORWARDING

When the end user is absent, a video door phone call from a call module to an apartment station can be forwarded to a mobile device, such as a smartphone or tablet. The Ipervoice system must be permanently connected to the Internet via a ***broadband***[8] to use this function. Install the Urmet app available free of charge for iPhone, iPad and Android devices on your smartphone to use the call forwarding function. See paragraphs 11.3.1, 11.7.1 and 12.8 on pages 186, 214 and 237 for how to configure the system.

INTERCOM FUNCTION BETWEEN THE APARTMENTS

Besides communications to the IP network, a communication between two apartments of the same riser column can be established[9]. The call is managed according to the priority diagram of Table 4 on page 47; since it is a door phone call (audio only), the second audio channel will be used, if available.

INTERCOM FUNCTION INSIDE THE APARTMENT

In this case, the call is established inside the apartment, and so the intercom door phone communication does not use the riser column, leaving it available for other communications. This function is available using the intercom interface modules 1039/36. (See the diagram on Figure 10 on page 36). Each interface can manage 4 derived stations and up to 4 interfaces for each apartment can be installed, allowing 16 derived stations. The intercom function is available between derived stations connected to the same interface 1039/36 or also between derived stations connected to different interfaces.

FLOOR CALL

On the 4-user decoder 1039/34, 4 inputs are available, used for the floor call function for the four apartments. When a visitor presses the doorbell button outside the apartment (connected to the related floor call input), the apartment station emits the dedicated ring tone[10].

[8] A broadband connection (ADSL or VDSL) is needed to ensure good audio-video transmission quality.
[9] All the apartments connected to the decoders which are connected to the same IP/CAT5 gateway belong to the same column.
[10] The floor call does not change the audio channel state, which remains in the same condition as before the call.

5.2 THE SWITCHBOARD SERVICE

In the Ipervoice system, the service that makes it possible to manage the Concierge Switchboard is performed by a software application called “Switchboard”, developed for Windows 7[11] operating systems (Figure 17).

Figure 17: "Switchboard" application

Ipervoice is unlimited regarding the number of switchboards that can be installed in the building, so, if required, the concierge service can be distributed to more local units, according to competence areas.

The personal computer minimum requirements are described in the product list at page 21 ; for the configuration of the optional devices, two solutions are available. The first one, described in Figure 18, uses the provided USB door phone; the second one, described in Figure 19, uses a traditional “handset”, composed by headset and embedded microphone. In both cases a common webcam is also used, that must be compatible with Windows 7, in order to send also the video signal during the conversation.

[11] Windows 7 Home Premium, Professional e Ultimate version

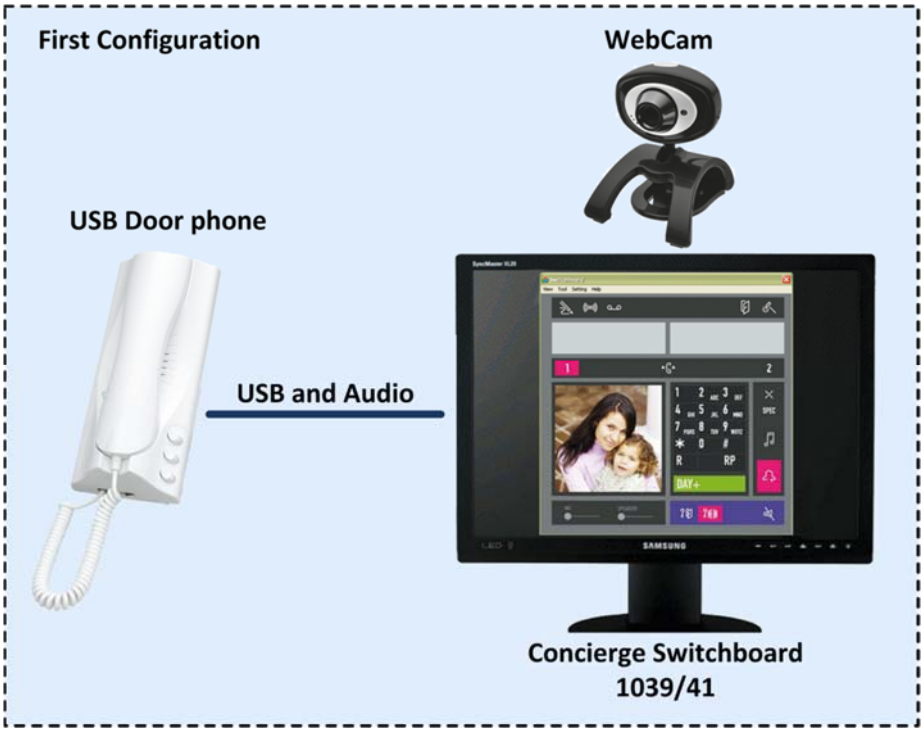


Figure 18: Concierge switchboard – use of USB door phone

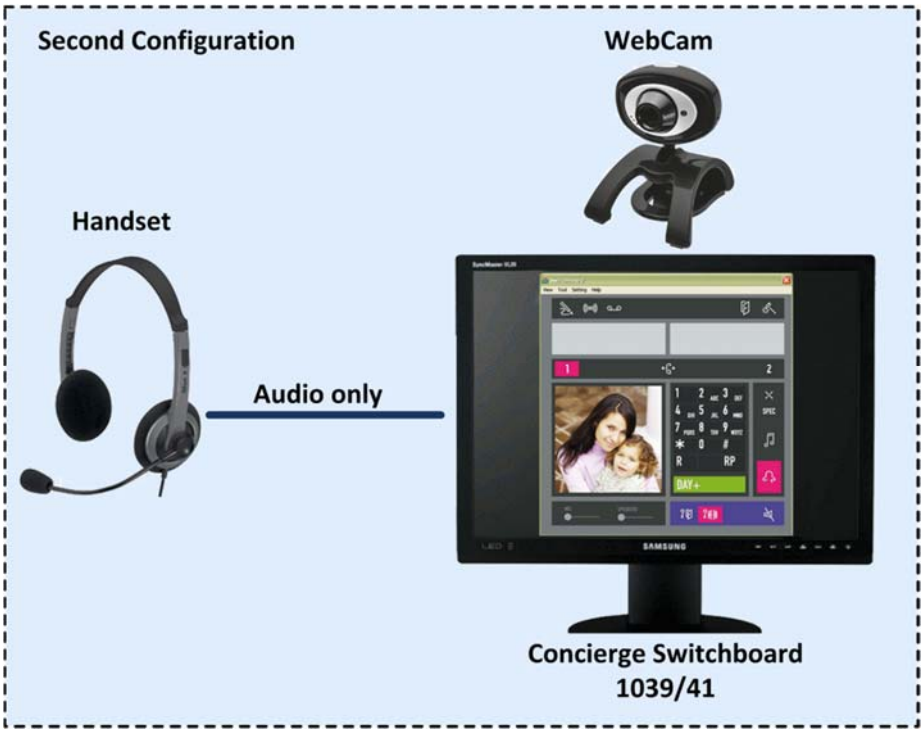


Figure 19: Concierge switchboard – use of handset (headset + microphone)

5.2.1 SERVICE FUNCTIONS

CALLS TO THE SWITCHBOARD

The concierge switchboard is identified by a “topologic code” or a “logic code”, so it can be reached by the devices installed on the IP network, such as call modules and switchboards, or by the stations installed inside the apartments. In case of IP devices, the call is directly performed by entering the identifier code from the keypad, or searching in the address directory. If the call comes from an apartment station, a call button must be configured to associate it to the selected switchboard[12].

CALLS FROM THE SWITCHBOARD

The switchboard can call any other system user, a resident or also another switchboard inside the building. The call is performed by entering the code or using the address directory, that can be read by the switchboard software. By using the “auto-on” function, the switchboard can at any time establish an audio/video communication with a call module.

COMPETENCE AREAS

For each switchboard a competence area can be defined, in which can be added a group of call modules, logically combined with a group of apartment stations. In this way, the switchboard will have “competence” over the calls coming from the call modules addressed to an apartment station in the previously defined zone, or also over the call coming from an apartment station included in the same zone.

CONCIERGE SERVICE

The switchboard can perform the concierge service in the three different modes, as follows:

- DAY
- NIGHT
- STAND BY

The switchboard attendant can activate, as needed, the concierge service by selecting one of the above mentioned modes; the switchboard competence area will be managed according to the area configurations.

[12]This operation is performed by the installer via the configuration web frontend, present on the IPervoice server

In DAY mode, all the calls addressed to apartment stations, coming from main and secondary call stations or other apartment stations, are routed to the switchboard which has competence on that apartment station area. In this way, each call is not sent to the user, but it is intercepted by the switchboard. The attendant can speak with the visitor and transfer the communication to the user or act as an intermediary, speaking with the user and the visitor.

In NIGHT mode, the switchboard does not perform the concierge service for main call stations, that will directly send the call to the desired apartment station[13]. Calls coming from apartment stations are normally forwarded to the switchboard. Alternatively the attendant, after selecting NIGHT mode, can transfer its competence area to another switchboard present in the building. By selecting DAY mode, the transferred competence area will be automatically restored on the first switchboard.

In STANDBY mode, the concierge service is disabled and calls directed to apartment stations are not intercepted. Calls coming from apartment stations are not forwarded to the switchboard (an alert tone on the apartment station notifies the user that the call has not been sent). Nevertheless it is possible to directly call the switchboard using its logic or topological code. The switchboard can call apartment stations or other switchboards of the building. In this mode, the switchboard acts as an apartment station.

CALLS LOG

Storage of calls performed by apartment stations and other switchboards is another available system function. All the switchboard unanswered calls are saved in a list, containing the call date and time, the device identifier code (i.e. the topologic or logic code), and the name, if the call comes from an apartment. The switchboard attendant can read this list and recall the users.

[13] If "Concierge Call in Night Mode" has been selected in site configuration (for further details, see paragraph "Site Configuration" on page 98), the Switchboard will receive anyway the competence call.

5.3 PANIC SERVICE (PANIC ALARM)

The Panic Service present in Ipervoice system allows to send a rescue request from apartment stations to their competence area switchboards. This alarm has no effects on audio/video communications active in the column from which it comes; the alarm sent to the switchboard is stored in the system log, in order to allow the attendant to manage it according to the system configuration. The alarm log is available for future browsing. The alarm activates the local alarm output on the 4-user decoder (1039/34) associated to the apartment.

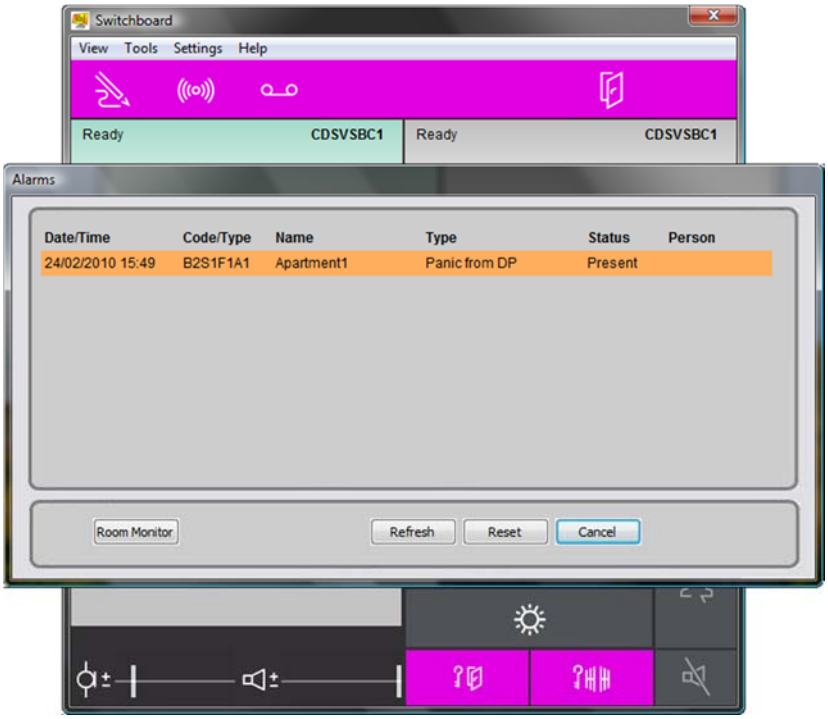


Figure 20: Panic Service – Alarm displaying on the Concierge Switchboard

The operations performed by the switchboard attendant to "reset" the panic alarm indication depend on the mode selected during the system configuration ("Site Configuration" on page 98). These operations can be:

- Unconditional reset
- Conditional reset
- Conditional reset with timeout

In the first case, to reset the indication, the attendant must only press the button "reset" in the alarm window (as shown in Figure 20); in the second case he must first pressing "pre-reset" button and then complete the procedure by pressing the reset button present on the decoder of the apartment from which the alarm comes (keep the reset button pressed for at least 5 seconds). Therefore the attendant

can perform the reset operation only after going to the alarmed apartment. In the last case, all the procedure must be completed within the time specified in configuration. If this time is not respected, the alarm will be activated again and the attendant must repeat all the reset procedure.

Note: All URMET door phone or video door phone apartment stations are provided with an input dedicated to panic alarm management. A simple button or a remote control 1033/212 can be connected to this input. The remote control is composed by a radio transmitter with a button[14] and a receiver with an output contact to be connected to that input.

ROOM MONITOR ACTIVATED BY PANIC ALARM

After a panic alarm, the switchboard attendant can activate the “room monitor” function, that allows to listen what it is happening inside the apartment from which the alarm has been sent. This service, described below, can be activated if the corresponding option has been enabled on the apartment station (“Apartment Stations Configuration” on page 207) and only after an alarm indication. **The attendant cannot deliberately activate the room monitor inside an apartment.**

5.4 ROOM MONITOR SERVICE

The room monitor service allows the switchboard attendant to establish an audio communication with an apartment, in order to listen what happens inside. The attendant can establish an audio communication with an apartment station only if the following conditions are met:

- A panic or intrusion alarm has been sent from the apartment.
- In the apartment there is at least one “hands-free” station, as for example the model 1707/1.
- The room monitor has been enabled on the apartment station by Ipervoice FrontEnd.
- The hands-free apartment station, enabled for "room-monitor" feature, must be configured as "Master" door phone into the analogic apartment, while it can be also setup as secondary one for an IP apartment.

The audio communication can be mono-directional (from apartment station to switchboard), both in case of panic alarm and intrusion alarm; inall cases the audio communication is activated with the hands-free apartment station configured as “Master”.

[14] To facilitate the use in case of need, the radio transmitter can be hung around the neck of the person that needs help.

ACTIVATION, DEACTIVATION, PRIORITY, ENGAGE

As above described, room monitor activation[15] is performed by the switchboard attendant; after the communication has been established, this can be interrupted only by the attendant that has activated it; the “off-hook” button on the apartment station has not any effect.

Room monitor priority is the highest available in the system, because it must not be interrupted by any other audio or video communications (for further information “Call priority, Call pickup time and Guaranteed conversation time“ on page 46).

If more than one Switchboard is defined in the system, the alarm will be sent to all the switchboards belonging to the same “competence” area. Only the switchboard who will activate room monitor will take charge of managing the alarm, silencing the acoustic signal on the other switchboards; no one is entitled to reset or re-activate room monitor for this alarm. Any other alarms received from other apartments, may be handled by other switchboards.

[15] If the room monitor is activated on an indoor station belonging to a CAT5 analog riser, the duration will be limited to 45 seconds, whereafter the system will perform the deactivation in an automatic way. The switchboard operator can still reactivate it, whenever it deems it necessary.

5.5 LOCAL ACTIVATIONS SERVICE

This service allows to activate relay outputs according to events that can occur in Ipervoice system. The devices with usable relays are the “special decoder” modules 1039/81, that have two independent relay outputs, also associated to two inputs which allow the local control of outputs, then allow you to connect the two inputs to one or more outputs of any other special decoders 1039/81 in the system. Modules 1039/81 are directly connected to the IP network and so can be installed in any place of the residential building.

There are many sources that can generate an event to be associated to one or more outputs; the most important are described in Table 7.

Source or Device	Events (Special Functions)
All IP call stations ***(for example: 1039/13, 1039/18 or 1039/78)***	Call, Duress, Tampering, Special code, Door Opening (main and secondary)
Concierge switchboard ***(1039/41)***	Call, Special Code
IP key reader ***(1039/82)***	Door Opening
Apartment (by apartment stations)	Special Buttons, Passage opening (pedestrian and driveway gate), Auto-on, Absence/Presence Status, Alarm (Panic or Intrusion)

Table 7: Local Activations Service - Main command events

5.6 THE CCTV SERVICE

Via the TVCC service, users can view on their video door phones images from the system cameras. The cameras can either be those installed at the call stations, or those connected via the video IP servers. Displaying occurs according to a cyclic scheme: by pressing the "auto-on" button provided at the Apartment Station, the user will view the first camera, then the next camera and so on. If the camera is equipped with a microphone, too (a typical case at call stations), auto-on will be automatically activated in the Ambient Listening mode if the user is using an IP monitor, while with an analog monitor, this mode can be manually activated by disconnecting the handset or pressing the hands-free listening button. The iModo monitor, unlike the Max 1717/31, does not offer cyclic options, but it will display a list of the cameras to which the user can connect, allowing for the selection of the camera to view.

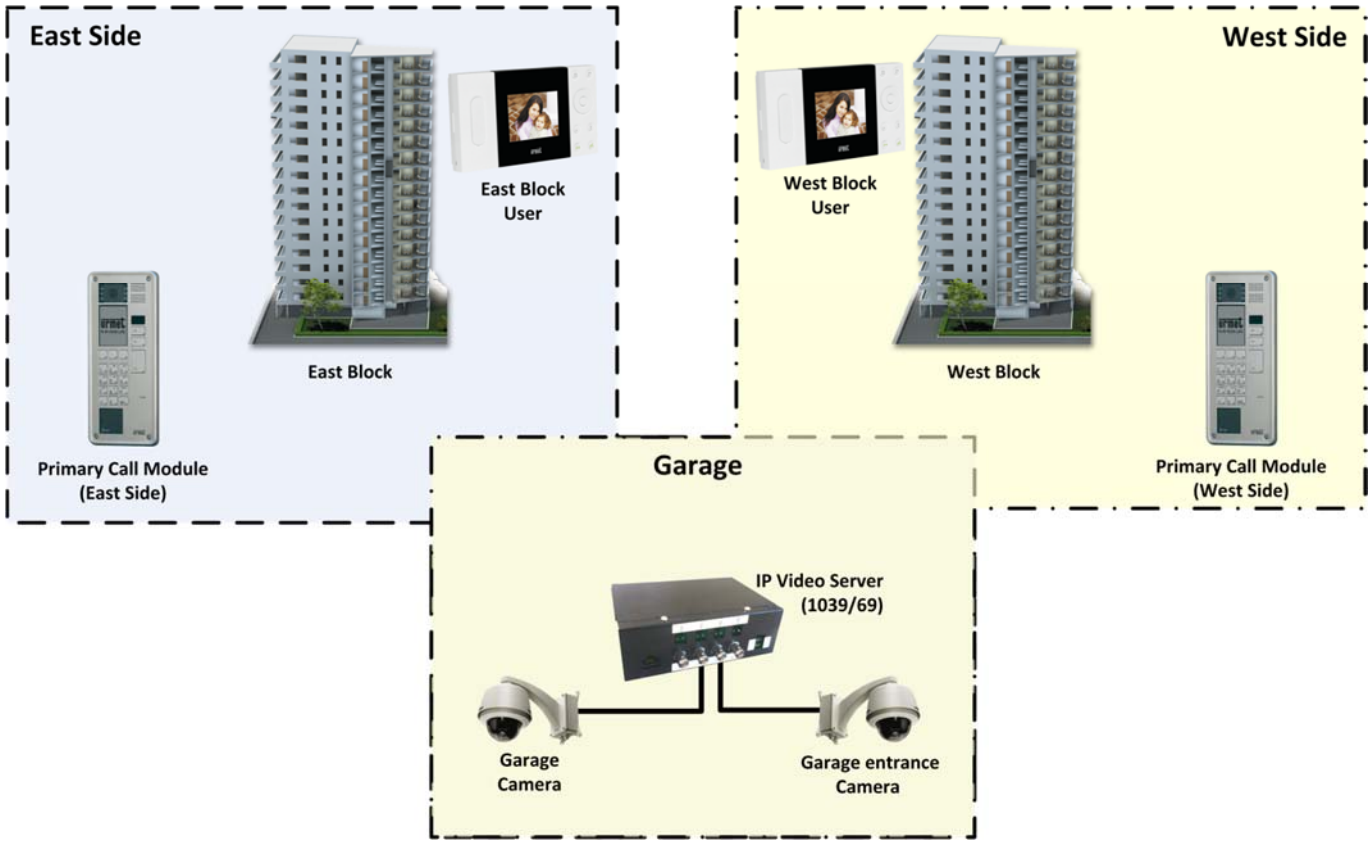


Figure 21: CCTV service

CAMERA SELECTION

The association among cameras and users or groups of users is configured by the installer with the configuration web frontend present on the Ipervoice server. By pressing the button on his apartment station, the user will request the system to select the next camera present in the list associated to that user. Groups of cameras specific for some users and other groups shared among different users can be defined. The Figure 21 shows a typical example:

East Side — The users living in this zone, i.e. in the East building, can see the images coming from the camera of their main call module and the images coming from the cameras installed inside the garage and on the garage entrance.

West Side — The users living in the West building can see the images coming from the camera of their main call module and the images coming from the cameras installed inside the garage and on the garage entrance.

AUTO-ON, CYCLIC, MONO AND BIDIRECTIONAL AUDIO

The CCTV service is activated by pressing the auto-on button; by pressing again the button again, the user performs the cyclic displaying of the next configured camera. To perform the "environmental listening" function with a selected camera, the user can activate the mono-directional audio by picking the handset up or pressing the specific button of a hands-free apartment station. By pressing the auto-on button for at least 3 seconds (a beep will confirm this operation), the user can activate the bidirectional audio, in order to speak with the person who is in front of the camera. During auto-on you can open the doors.

Warning: once activated, the audio communication remains active with the selected call module, even if the user presses the button to proceed with the cyclic display.To explain this feature, two different examples can be used:

- A visitor arrives at the main entrance and calls an apartment. The user answers and speaks to the visitor before opening the door; by pressing repeatedly the auto-on button on the apartment station, the user activates the cyclic mode to perform a video control on the other cameras. The audio communication remains locked with the call module to allow the conversation with the visitor. After the control, the user can decide whether or not to press the door lock release button to let the visitor in.
- The user activates the auto-on function to perform a check with the system cameras. If the user sees somebody, he picks the handset up to activate the mono-directional audio. Then he presses again the button and proceeds with the cyclic function, the audio link does not move to the other cameras. By pressing for 3 seconds the auto-on button, he activates the bidirectional audio, the video link is moved back to the visitor camera and he speaks with him.

5.7 THE ACCESS CONTROL SERVICE

The Ipervoice system is provided with an embedded access control service, used to control the opening of different passages, such as doors, gates, barriers and so on, after identification of proximity keys 1125/50. To control the way opening, both the call modules 1039/13 and 1039/18 can be used, which are provided with an embedded proximity reader or the IP key reader 1039/82 can be used.

In Figure 22 a typical example for the reader location is shown: on the left there is a main call module, placed near the pedestrian gate on the building perimeter and a secondary call module, installed on the building entrance door. The IP key reader, on the right, is used to open the parking barrier placed in front of the garage entrance.

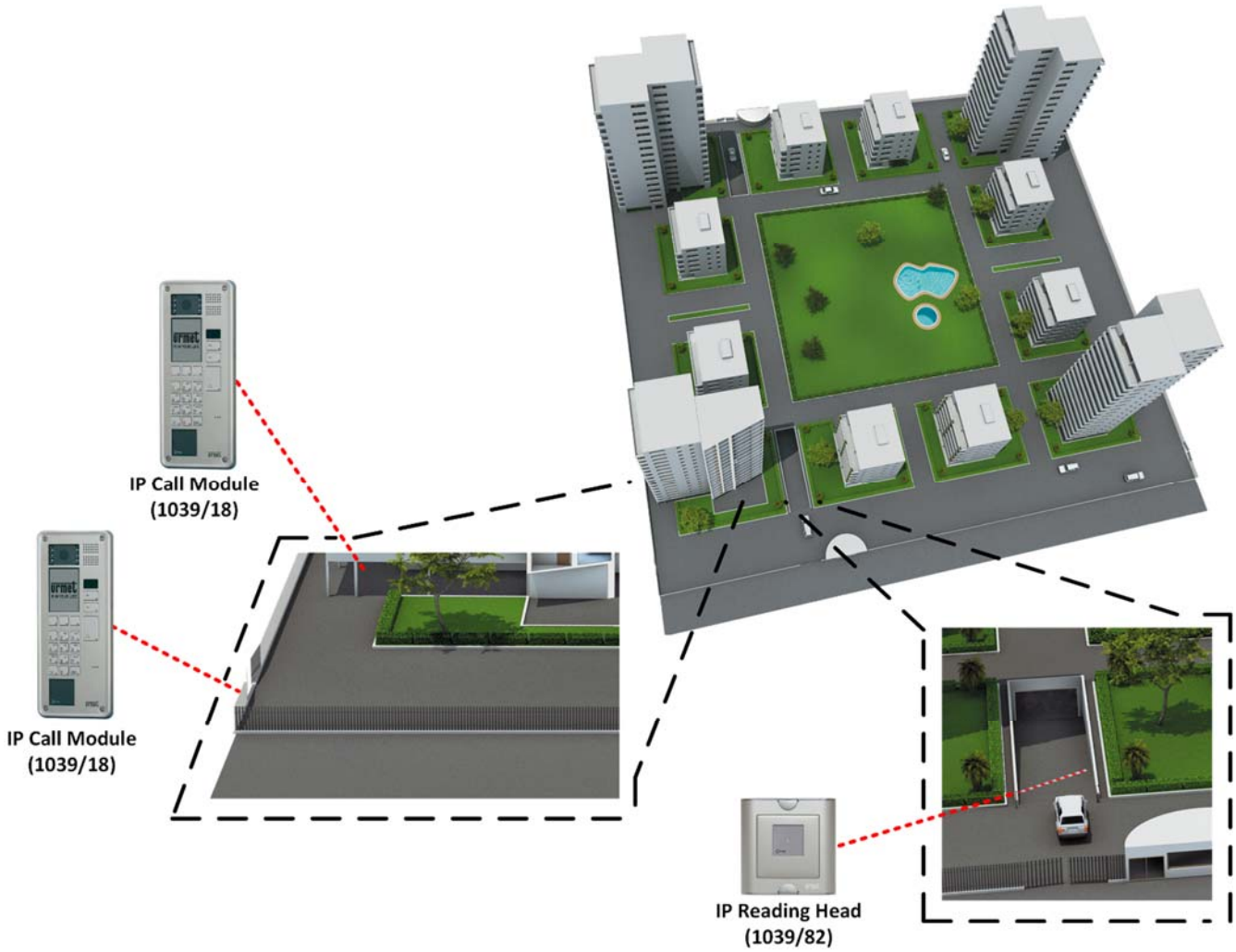


Figure 22: Control Access Service – Position of controlled passages

The devices used and their functions are shown in the following Figure 23.

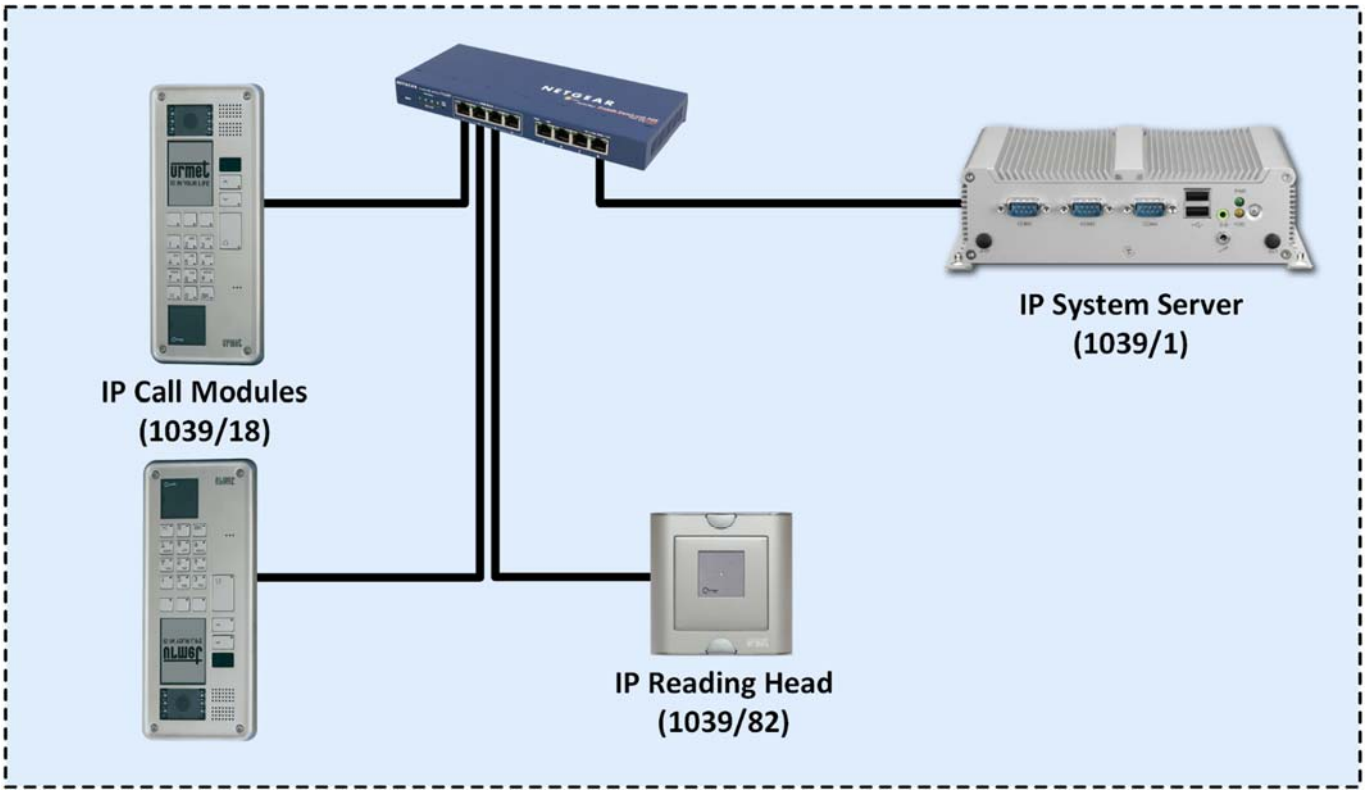


Figure 23: Control Access Service – Used devices

5.7.1 PROXIMITY KEY MANAGEMENT

A passage is opened only if the proximity reader (embedded in the call module or stand-alone) identifies a valid key. A key is valid and enabled to open a passage if its identification code is associated to a resident or an external person authorized to come into the building (for example a maintenance man or a supplier); the passages that can be opened must be specified for each key[16]. In this way, the accesses can be individually managed, for example allowing the service staff to come in only using a reserved entrance door.

5.7.2 TIME BANDS

Ipervoice makes it possible to define one or more time bands to limit the access to the building. For example, the maintenance men must not be enabled to enter during the night, weekends or holidays. Three time profiles can be configured:

[16]The management operations of keys and associated passages are performed using the web application available through the system server.

Door Profile	These profiles are used to define the time band in which a passage can be opened. For every profile more time bands can be defined (for example, morning, afternoon and evening). Each profile is week based, so different operating modes can be defined for every day. These profiles can be associated to one or more doors of the building.
Access Profile	With the same methods used for passages, it is possible to define profiles associated to door lock release codes, proximity keys or both of them.
Holiday Profile	These profiles, which are used in the previous profiles, allow definingof specific dates in which the standard time profile can be changed.

5.7.3 ANTI PASS-BACK

With this feature one or more zones in the system can be created, where “entry” and “exit” passages will be defined; so, if a user comes into the building using a passage defined as “entry” in an anti pass-back zone, he will not be able to get through that door again before he has left the zone through an “exit” door. With this feature, it is not possible to come into a zone using a key, if the user has not left that zone using the same key.

5.7.4 THIRD PARTIES ACCESS CONTROL

With this feature third parties can accessIpervoice remotely using their own app. To do this, it is mandatory that both server and user enable third party access control management, as indicated on paragraphs 12.8 and 12.9.3:

- To access to Ipervoice server, app has to use valid authentication credentials; these are managed from administrator of Ipervoice Sustem and must therefore be enabled to be used by third parties;
- To create new records or use already existing Ipervoice records, the server has to be enabled to manage third parties.

Enable only one of these two entities makes impossible for third parties to use access control on Ipervoice server.

Third parties access control can only access the following entities, some of them have to be enabled by Ipervoice system administrator to be used:

Resident	At first access, existing Ipervoice records are automatically visualized from third parties. Newly created Ipervoice records must be enabled to be seen and used bu third parties, but this is not mandatory.

External person	At first access, existing Ipervoice records are automatically visualized from third parties. Newly created Ipervoice records must be enabled to be seen and used bu third parties, but this is not mandatory.
External person group	Both existing and newly Ipervoice created records must be enabled in order to be used by third parties. Enabling is not mandatory.
Doors	Both existing and newly Ipervoice created records must be enabled in order to be used by third parties. Enabling is mandatory.
Time Profile Access	Both existing and newly Ipervoice created records must be enabled in order to be used by third parties. Enabling is not mandatory **Warning:** Time profile door will never be accessible by third parties.
Time Access	Both existing and newly Ipervoice created records must be enabled in order to be used by third parties. Enabling is not mandatory

Third parties access control app can create all entities in previous table, except for the doors that can be created only on Ipervoice server.

Note: any entity that has been created on Ipervoice server and is enabled to third party cannot be modified or deleted by third parties.
All entities created on third parties app can be modified and deleted both on Ipervoice server and on third parties app that has created them.

6 TECHNICAL PRESCRIPTIONS

Ipervoice system, as already described in the chapter “System Architecture” on page 14, can be seen as composed by two strictly interconnected parts: the Common Areas part, where the IP network is implemented, and the Column Riser part, where either an IP network or a CAT5 network is implemented. In both cases it is suggested to follow the information below, in order to make the system reliable and assure correct operation also in large buildings.

6.1 PRESCRIPTIONS FOR COMMON AREAS

The Common Areas require a dedicated or VPN 100 Mb/s Ethernet network, so the topology is star point-to-point. In each center, there is a PoE switch (1039/44). Each star centre is the PoE switch (1039/44), where all IP Ipervoice devices are connected.

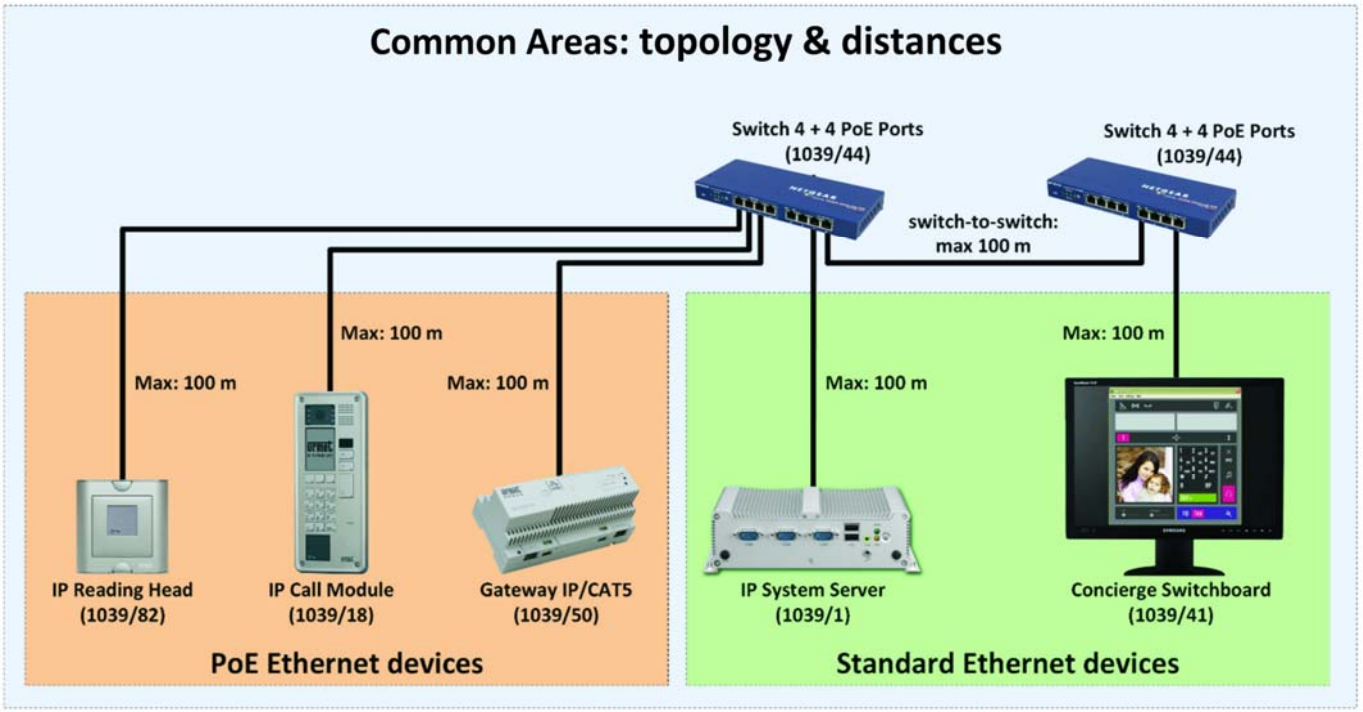


Figure 24: Common areas, IP network – topology and distances

In the Figure 24 different kinds of branch are shown:

- PoE devices branch, as the Call module 1039/18 or the IP Gateway 1039/50.
- Standard Ethernet devices branch, as the Concierge switchboard 1039/41 or the Ipervoice Server 1039/1.

- Switch-to-switch branch, used to connect PoE switches in order to extend the Ethernet network.

In all cases, the max. allowed distance is that defined by IEEE 802.3 standards for Fast Ethernet networks (100 Mb/s), connected with UTP CAT5 cable: according to these standards, the distance between two Ethernet devices must not be longer than 100 m[17].

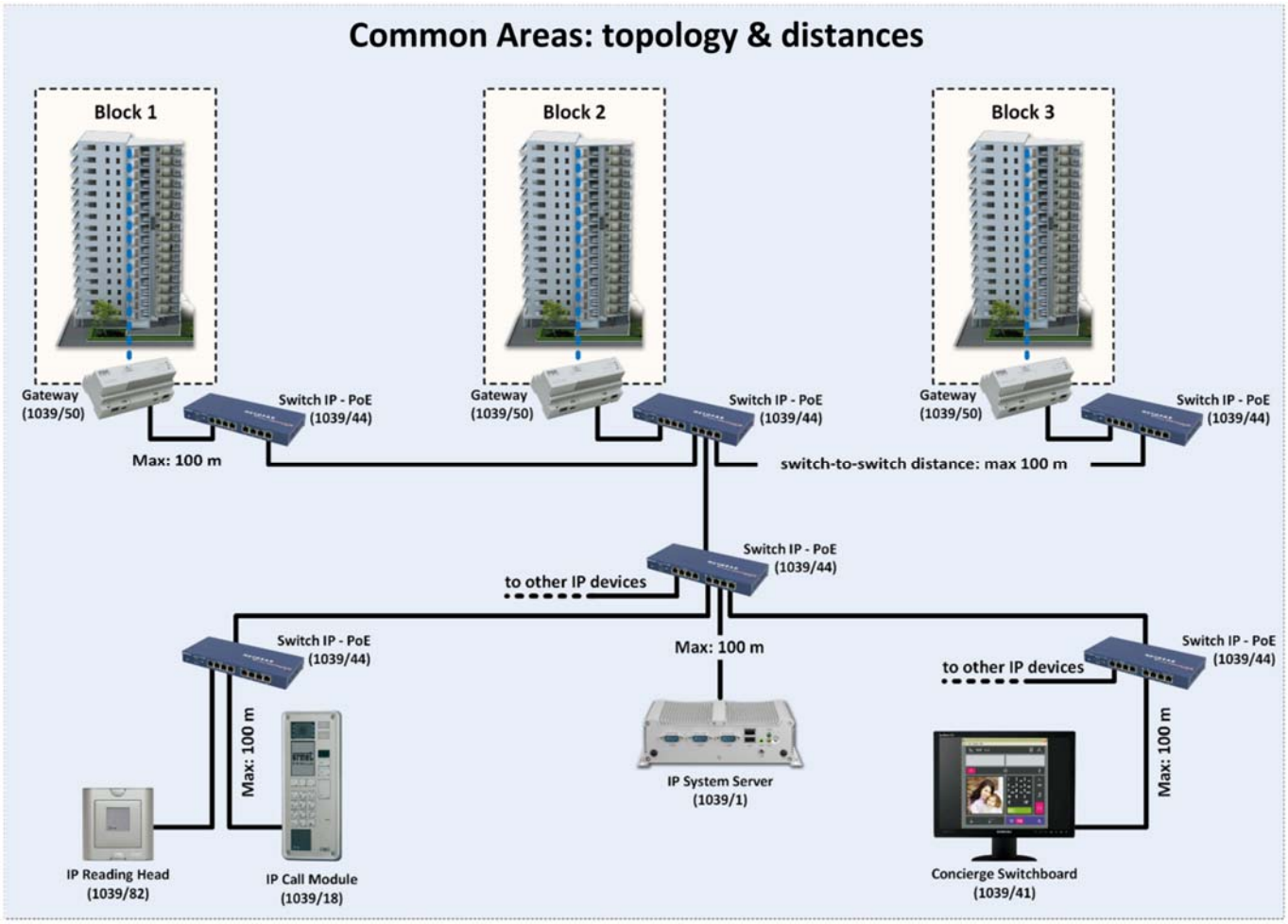


Figure 25: Common Areas: IP network – topology and distances, extension

[17] However, as shown in the Figure 25, more Ethernet switches can be daisy-chain connected, in order to connect, for example, more buildings among them. In this way, long distances can be reached, because from each switch output another 100m segment can start to reach another switch, and so on. It is recommended not to exceed the maximum number of 10 Ethernet switches daisy-chain connected over the entire IP network. For larger network configurations, please contact the URMET Customer Service.

6.2 PRESCRIPTIONS FOR COLUMN RISERS

As regards the Column Risers, devices are connected in series: in each device there is one “input” and one “output” RJ45 socket; the last one is used to connect the next device. This is the mode generally used on all the riser, except for intercom interfaces (1039/36) used inside the apartments, that use a star topology for their connected apartment stations.

To correctly perform the riser dimensioning, verify that the constraints concerning the following values are respected:

- **Max Distance** itdefinesthe max “length” for a network branch.
- **Extension** the extension is the sum of all branches lengths that compose a specific network section. Three extensions are important: the riser extension, the extension after 4-user decoders (1039/34) and the extension after intercom interfaces (1039/36).
- **Devices number** it is the max. allowed number of devices that can be connected to riser and derived stations.

Figure 26 shows a typical riser with the main constraints to be respected; the following two figures highlight relevant details if a decoder 1039/54 is installed at a riser base (Figure 27), or when one or more intercom interfaces are used (Figure 28).

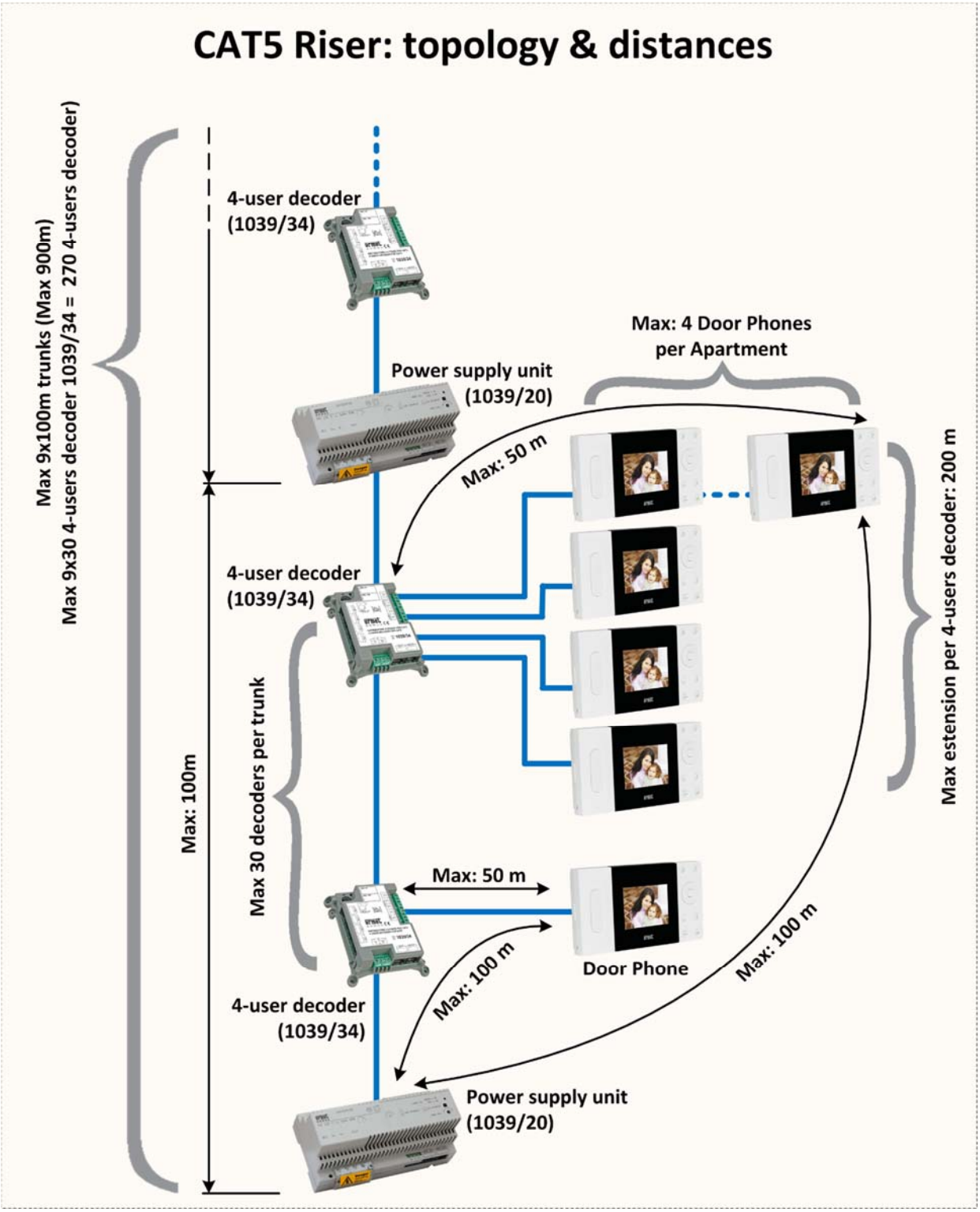


Figure 26: Riser – topology and distances

The main rules to be respected that are always valid are the following:

- The max. extension of a riser, except derived stations inside apartments, must not be greater than 900 m.

- On the riser, the max. distance between a power supply (1039/20) and the next one must be shorter or equal to 100 m.
- The max. number of power supply units that can be installed in a riser is 9.
- The max. number of 4-user decoders (1039/34) that can be installed between a power supply and the next one (i.e. for each segment) is 30, so the max. number of decoders allowed in each riser is 270.
- Each power supply unit can power 30 decoders and 120 apartment stations, so this is the max. number of apartment stations that can be installed in each segment.

Notes concerning segment dimensioning

→ If only one apartment station can be connected to each derived branch, the max. segment extension will be composed by 30 decoders and 120 Apartment Stations (AS).
(120 AS / 4) = 30.

→ If 2 video door phone apartment stations are connected to each derived branch, i.e. for each apartment, the max. number of decoders that can be installed will be:
(120 / 2) / 4 = 15

→ In brief, the main constraint depends on the apartment station number, that cannot be higher than 120; if the number of AS needed for each apartment is known, it is possible to define the number of decoders that can be installed on that segment and the number of apartments.

- The max. number of video door phone apartment stations that can be installed on each 4-user decoder derived branch is 4.
- The max. number of door phone apartment stations (1139/2) that can be installed on each 4-user decoder derived branch or intercom interface is 1[18].
- The max. distance between a column power supply and the last apartment station installed on the same segment is 100 m. (in case of several video door phone apartment stations installed in series on the same derived branch, the calculation for distance must be done starting from the last apartment station of the series).
- The max. distance between a 4-user decoder output and the last of its apartment stations must be shorter or equal to 50 m.
- The max. extension between all the devices connected to a 4-user decoder derived branch must not exceed 200 m.

[18] Contrary to video door phones 1707/1, 1717/11, 1740/1 and 1740/40, the door phone 1139/2 is not equipped with an RJ45 output connector, so it is not possible to connect in series another apartment station.

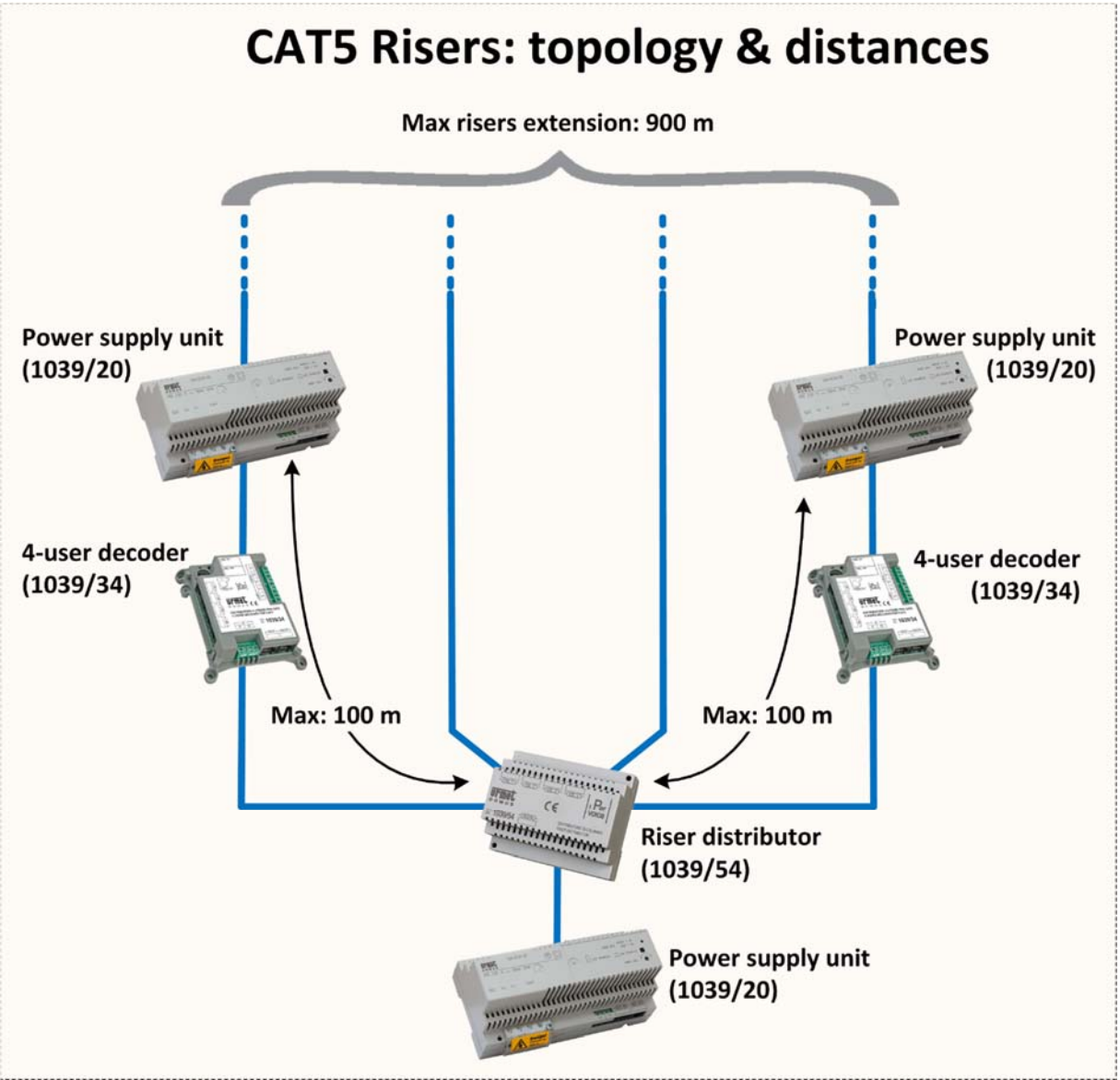


Figure 27: Riser – topology and distances with riser distributor

If more than one riser is needed, a riser distributor (1039/54) can be installed on the output of the first power supply. Even though the available risers are four, remember that the distributor, that is a passive component, does not change riser dimensioning parameters, that remain the same.

For example, the total extension must be calculated by adding all the four risers distances and is always 900 m.; the same for the max. number of 4-user decoders, that is always 270.

Note: The riser distributor 1039/54 distributes a staircase on four columns (it does not create four stairs).

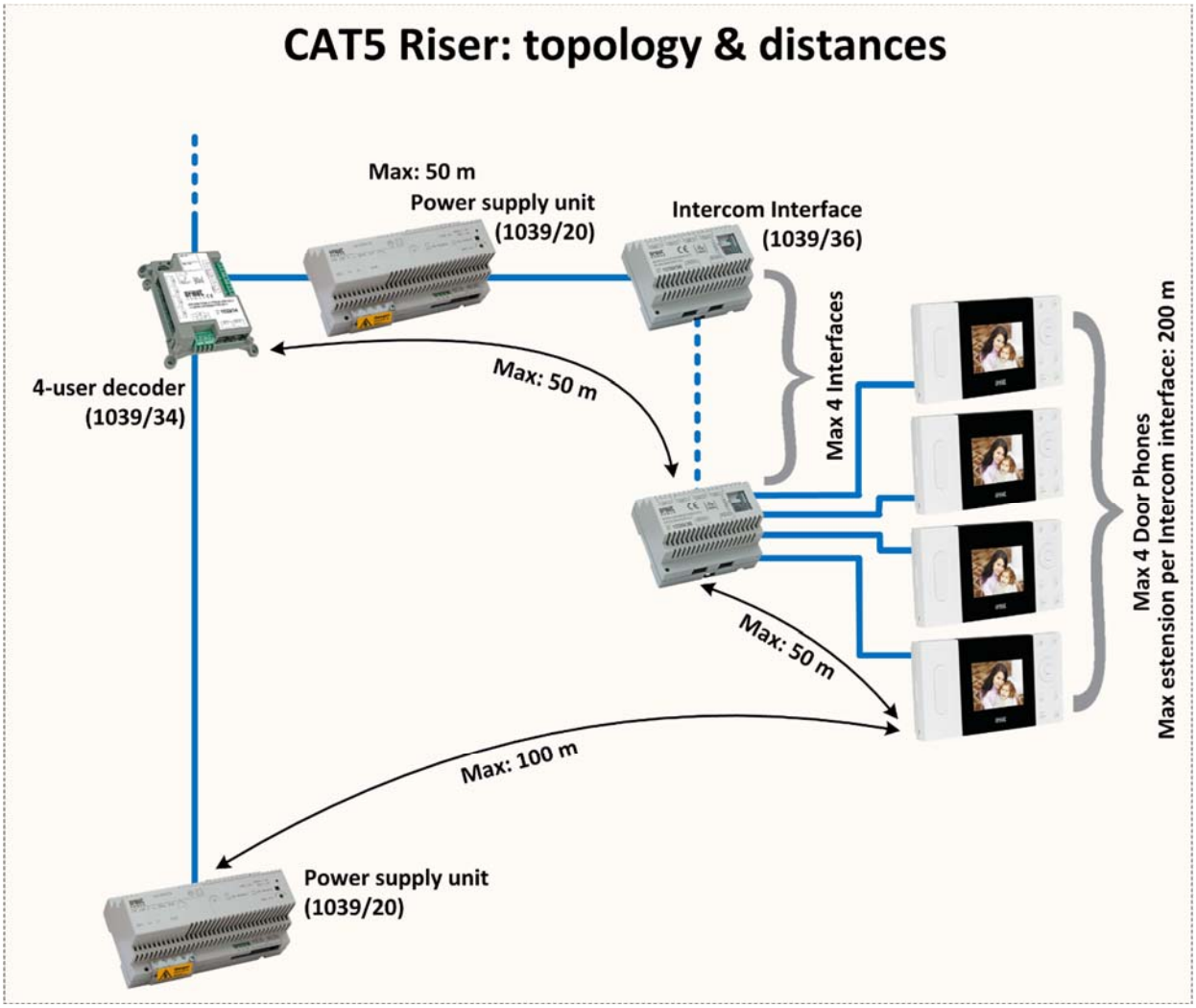


Figure 28: Riser – topology and distances with intercom interface

If in apartments one or more intercom interface 1039/36 is needed, install a power supply 1039/20 on the derived branch of the 4-user decoder. This in order to power apartment stations and intercom interfaces. Besides the constraints above described, consider the following specific rules:

- The max. number of apartment stations that can be installed on each intercom interface derived branch is 4, so the number of apartment stations is extended to 16 max.
- The max. distance between an intercom interface output and an apartment station is 50 m.
- The max. extension among all the devices connected on each intercom interface derived branch must be shorter or equal to 200 m.

The Table 8 summarizes all the above mentioned constraints.

Riser distances and extensions	
Max. distance between two column power supply units (1039/20)	100 m
Max. distance between IP Gateway (1039/50) and the last 4-user decoder (1039/34)	900 m
Max. distance between IP Gateway and the last apartment station	900 m
Riser max. extension, also if a riser distributor 1039/54 is present	900 m
Max. distance between the riser power supply and the last apartment station connected without intercom interface (1039/36)	100 m
Apartment derived branch distances and extensions	
Max. distance between 4-user decoder and apartment station or intercom interface	50 m
Max. distance between intercom interface and apartment station	50 m
Max. extension among devices connected on derived branches of a 4-user decoder	200 m
Max. extension among devices connected on derived branches of an intercom interface	200 m
Max. number of devices on the riser and on the apartment derived branch	
Max. number of4-user decoders	270
Max. number of4-user decoders installed between two riser power supply units	30
Max. number ofapartment stations that can be installed on 30 decoders max.	120
Max. number ofvideo door phoneapartment stations for each derived branch without intercom interface	4
Max. number ofdoor phones(e. g. 1139/2) that can be installed on each derived branch[19]	1
Max. number ofalarm interfaces1039/61 for each apartment derived branch, associated to alarm control panel 1061/004 or 1061/006	1

Table 8: Technical prescriptions – distances, extensions and max. number of devices in a riser

Max. distances of main auxiliary connections[20]		
Description	**Wire section (minimum)**	**Max Distance**
4-user decoder: floor call buttons	0.5 mm^2	50 m
4-user decoder: floor alarm signaling device	0.5 mm^2	50 m
Call module: pedestrian door electric lock (main passage)[21]	1.5 mm^2	100 m
Call module: entrance hall button	0.5 mm^2	100 m
Call module: open door sensor	0.5 mm^2	100 m
IP key reader: entrance hall button	0.5 mm^2	100 m
IP key reader: open door sensor	0.5 mm^2	100 m

Table 9: Technical prescriptions – max. distances of main auxiliary connections

[19] This because the door phone is not provided with an RJ45 port used to connect another device in series.
[20] For further information, refer to user manuals of each device.
[21] Referred to capacitive discharge output, with 12Vac electric lock.

7 INSTALLATION PRESCRIPTIONS

In order to ensure correct operation of Ipervoice system, the following installation prescriptions must be respected; they will be described in this chapter. However, besides this specific information, standard rules for a "good" installation must be followed, for ensuring a sufficient protection against noise and a good system reliability. All devices must be correctly installed and wired, according to national installation standards. Pay special attention to wiring operations and particularly to crimp operations of RJ45 connectors on CAT5 cable, in order to ensure a correct and reliable electric connection, that is fundamental for correct operation of the system.

It is also highly recommended to connect a UPS to the IPerVoice server since the first power on, to avoid permanent damages caused by power shorages. The UPS models actually supported are BK350EI / BK500EI / BK650EI. The management is done through the server USB port.

7.1 COMMON AREAS

As per Common Areas we consider all the building areas except the Riser Column. They normally include common building premises, courtyards, gardens up to the main building entrances near the street. The cable used for the data is usually laid in conduits that can even be partially buried under the street, so more exposed to humidity and seepage.

It is suggested to use a black Urmet cable 1039/90 protected by a humidity-proof polyurethane sheath, that provides the strength needed to install it in road pipes. Other cables can be used only if they are CAT5[22] certified. Please remember that the standard CAT5 cable normally used (contrary to Urmet cable 1039/90), can NOT be placed inside conduits where other 230V cables are laid. The use of a cable with characteristics different from those described below is not allowed.

Warning: The cable 1039/90 must always be laid in suitable pipes, it must never be directly buried.

In the following Table 10 are summarized all the main characteristics of 1039/90 cable:

[22] Or a higher category, as for example CAT5e.

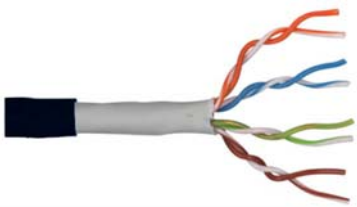
	**Cable type** • Double sheathed cable with 4 unshielded twisted pairs UTP CAT 5E • Polyurethane sheath • Use allowed also in pipes containing 230 V conductors **Electric and physical characteristics** • Sheath diameter and colour: 5,7 ± 0,25mm / BLACK • Solid copper wires • Red copper wire diameter: 0,51mm - 24AWG • Min. radius of curvature: 80 mm

Table 10: Technical prescriptions – Cable 1039/90 technical characteristics

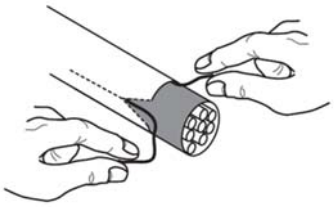
Even though the double sheath allows the coexistence with 230V cables, ensuring the correct electric insulation, it is suggested not to lay the CAT5 cable near 230V and 400V power supply cables, that generate strong electromagnetic fields. If the above mentioned rules are not respected, the following problems may occur, typical of all video door phone systems, that cannot be foreseen:

- Errors during data transmission among devices, resulting in impossibility to perform calls
- Poor image quality with loss of details, double image, etc.
- Noisy video image
- Noisy audio signal

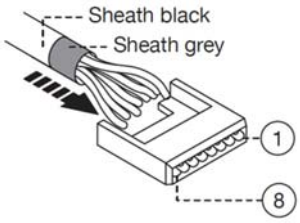
7.1.1 WIRING INSTRUCTIONS

To crimp RJ45 connectors on IP 1039/90 black cable, it is necessary to follow some advices, in order to ensure a correct electric connection for all conductors. Follow the procedure below:

- Crimp the black cable 1039/90 only on RJ45 connectors with “URMET” logo (1039/100).
- Remove the black insulating sheath by pulling the two rip cords in order to crimp the RJ45 connector and easily insert the cable into the flush mounting box.

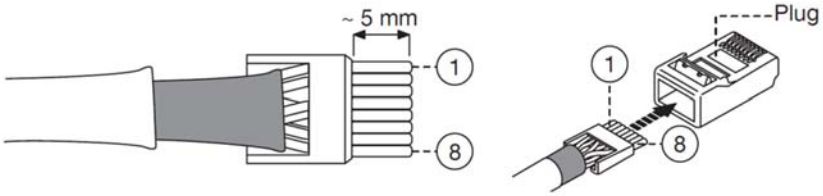


- Insert the conductor into the wire guide, respecting indicated colours (EIA/TIA-568B Standard).



Cable No.	Cable Colour	Cable No.	Cable Colour
1	White - Orange	**5**	White - Blue
2	Orange	**6**	Green
3	White - Green	**7**	White - Brown
4	Blue	**8**	Brown

- Cut the cables, in order they stick out about 5mm. from the wire guide, insert the guide into the plug and crimp the plug using the suitable tool.



- Verify that the grey sheath is inside the plug.

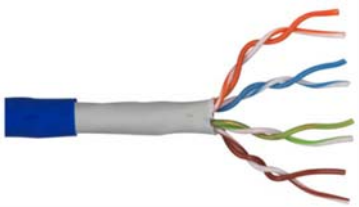
7.2 COLUMN RISER

The Column Riser normal involves the stairs, floor corridors and apartments. In this case, cables are laid in ducts inside the structure, in shaft for the riser and in pipes inside apartments or for floor distribution. URMET 1069/91 blue cable also allows cables to be laid in ducts with 230V cables inside. However, it is suggested not to lay data wire with other 230V cables together for long distance, in order to keep a high level of immunity to electromagnetic noise.

Other cables can be used, only if they are CAT5[23] certified. Warning: standard CAT5 cable in the market can NOT be laid in ducts with other 230V cables inside. The use of cables with characteristics different from the following is not allowed.

Main characteristics are described in Table 11:

[23] Or of a higher category, as for example CAT5e.



Cable type

- Double sheathed cable with 4 unshielded twisted pairs UTP CAT 5E
- PVC sheath
- Use allowed also in pipes containing 230 V conductors

Electric and physical characteristics

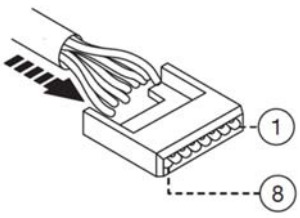
- Sheath diameter and colour: 5,7 ± 0,25mm / RAL 5017
- Solid copper wires
- Red copper wire diameter: 0,51mm - 24AWG
- Min. radius of curvature: 45 mm

Table 11 Technical prescriptions – Cable 1039/91 technical characteristics

7.2.1 WIRING INSTRUCTIONS

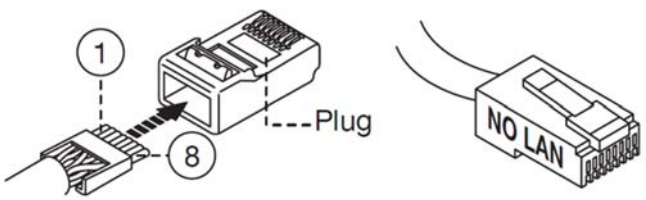
The instructions to correctly use the blue CAT5 1069/91 cable are similar to those already described for IP black cable: also in this case it is suggested to follow them carefully in order to ensure the correct operation of column devices.

- Crimp the black cable 1039/91 only on RJ45 connectors with "NOLAN" logo (1039/101).
- Insert the conductor into the wire guide, respecting indicated colours (EIA/TIA-568B Standard).



Cable No.	Cable Colour	Cable No.	Cable Colour
1	White - Orange	**5**	White - Blue
2	Orange	**6**	Green
3	White - Green	**7**	White - Brown
4	Blue	**8**	Brown

- Cut the cables, in order they stick out about 5mm. from the wire guide, insert the guide into the plug and crimp the plug using the suitable tool.



- Verify that the blue sheath is inside the plug.

7.3 WARNING ABOUT RJ45 CONNECTORS USE

CAT5 Ethernet cables have 8 conductors inside that can be:

- stranded wire (also named flexible conductors)
- solid plain copper wire

Cables with stranded conductors (flexible) are those normally used for mobile cables that allow a personal computer to be connected to a wall socket. These cables are flexible, but not suitable for fixed installations. Cables with solid copper conductors are normally used for installations in raceways or inside corrugated tubings.

WARNING: 1039/90 and 1069/91 cables, as the other commercial cables, are cables with solid copper wires

Modular connectors (RJ45 Plug) that are commonly on the market, are suitable only for cable with stranded wire (flexible) and must not be used for cable with solid plain copper wire because they not ensure electric contact. The use of male connectors (RJ45 Plug) for cable with stranded wire (flexible) on cables 1039/90 and 1069/91 or on other cables CAT5 with solid plain copper wire IS NOT ALLOWED and automatically voids system guarantee.

Urmet provides male connectors (RJ45 Plug) specially designed to be crimped on cable with solid plain copper wire. These RJ45 Plugs have been tested and certified by Urmet; they are suitable (if properly used) to ensure the correct operation of electric connection.

This plugs can be easily identified by the customer and Urmet technical service because they are silk-printed with a non-erasable mark "URMET" – 1039/100 connectors – and "NOLAN" – 1039/101 connectors.

7.4 ADVICES FOR DEVICES INSTALLATION

As already mentioned, all devices must be correctly wired, according to national standards in force. Also the position of "command modules", as for example call modules and apartment stations, is important for the correct operation, especially for an easy use of Ipervoice system.

7.4.1 CALL MODULES AND ACCESS CONTROL INSTALLATION

The Figure 29 shows the correct installation from the ground level of call modules and IP key reader.

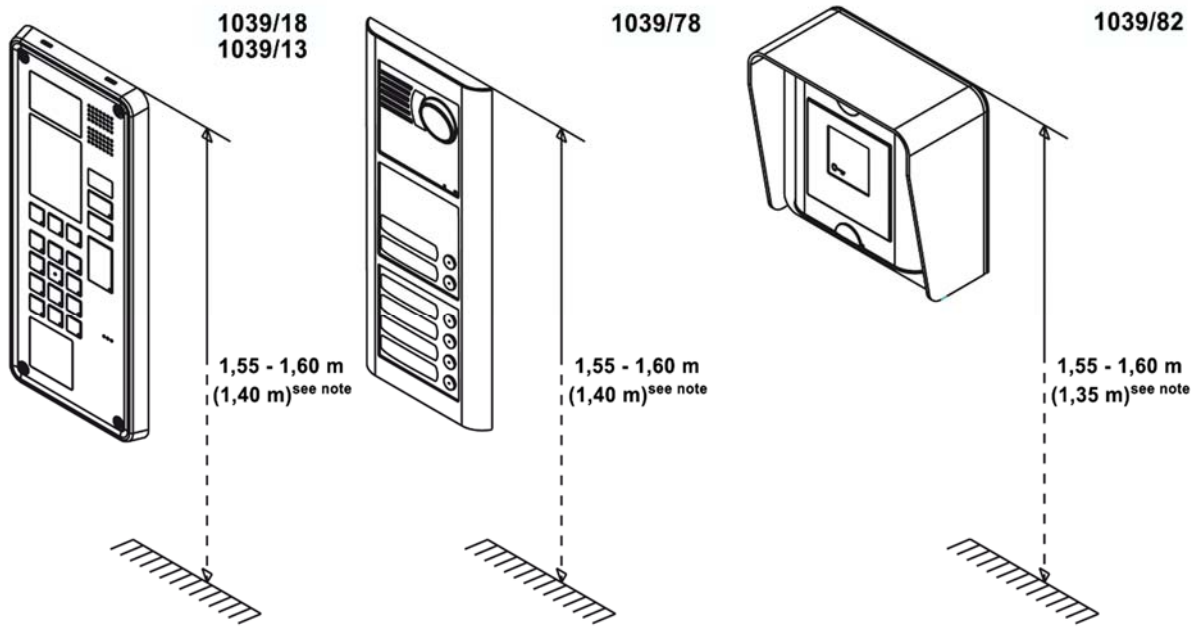


Figure 29: Devices Installation – Call modules and access control installation

1039/18 and 1039/13 devices are provided with special functions for helping disabled people (wide-angle lens, specific audio repeater device for the hard of hearing, simplified call). If these features are required, for correct installation refer to standards in force in the country where the system[24] will be installed. When these features are not required, it is suggested to install the modules 1039/18 and /13 at a height of about 1,55 – 1,60 m, as for the other devices shown in the figure.

[24] 1,40 m (1039/13 and 1039/18) and 1,35 m (1039/82) from the floor is the measure to be respected according to Directive for disabled people (for example, in France these norms are included in Law 2005-102 of 11/02/2005, in Decree 2006-555 of 17/05/2006 and following amendments of 1/08/2006, 26/02/2007 and 21/03 2007).

7.4.2 APARTMENT STATIONS INSTALLATION

As regards installation of wall mounting door phones and video door phones inside apartments, it is suggested to follow the instructions shown in the Figure 30.

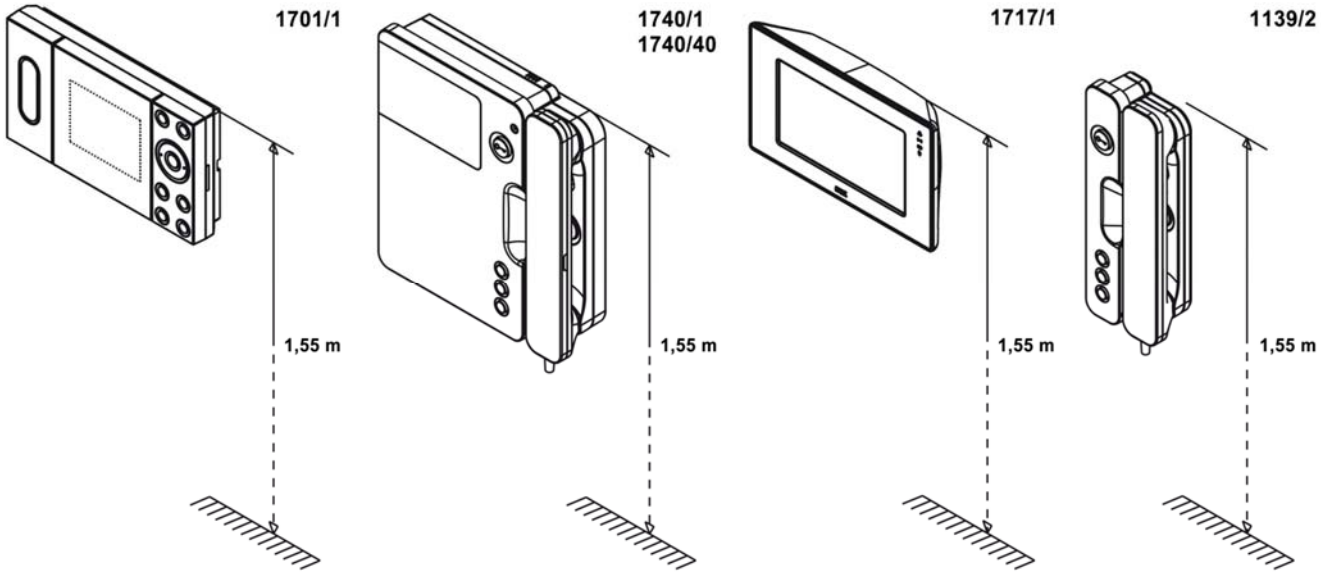
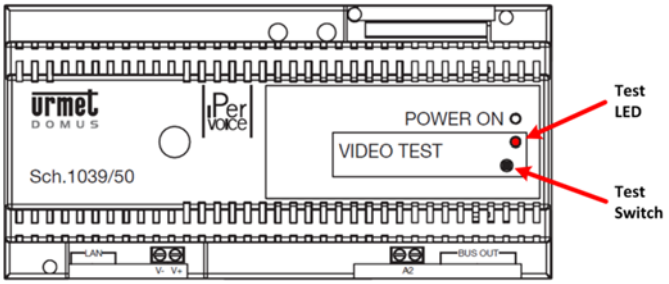


Figure 30: Devices installation – Apartment stations installation

7.5 VIDEO SIGNAL ADJUSTMENT

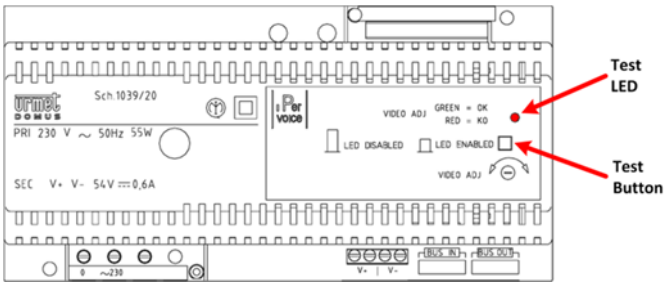
Before riser startup, the video signal must be adjusted. This procedure is used to ensure the correct signal level of all system devices. To adjust the video signal, the installer must do all necessary electrical connections; once this operation is completed, he must follow the procedure below:

1) Put the riser to be adjusted in "Video adjustment" mode: to do this, on the IP Gateway 1039/50 press the button placed on the gateway top, to activate the test signal. The red led on the button starts blinking to indicate that test mode is active

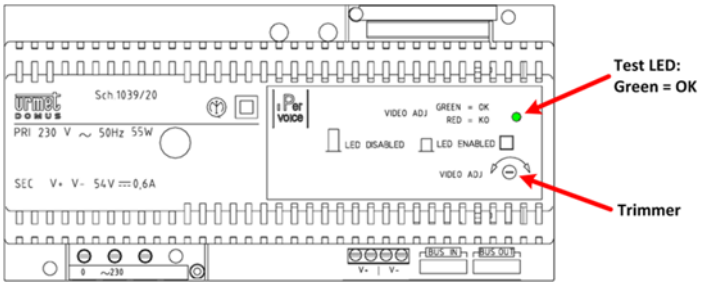


2) Perform the following adjustment operations, starting from the 1039/20 power supply nearest to the gateway, up to the most distant

3) Press the bistable button used for adjustment operations on the power supply top to switch on the bicolour led (red-green) (the button will stay pressed)



4) Rotate the adjustment trimmer "*Video-Adj*", as shown in the following figure, until the bicolour led becomes green: in this way the output video signal amplified by the power supply will be correctly adjusted



5) Once the adjustment procedure is completed, release the bistable button on the power supply to switch the led off

6) Repeat steps 3, 4, 5 for each riser power supply

7) Once the adjustment procedure is completed, press the switch placed on the IP gateway to exit from "Video adjustment" mode.

Warning: if the system is not in "Video adjustment" mode, after releasing the button on power supply units, the test led will always turn on red, even if the video signal has been correctly adjusted. For this reason, during the normal operation, keep the button on the power supply units pressed, in order to disable the led.

7.6 APARTMENT STATIONS CONFIGURATION

As described in the next chapters, Ipervoice system configuration is almost totally performed with a laptop and a PDA[25] Phone or a Netbook, except for apartment stations, that are provided with micro switches (dip-switches on the video door phone bracket) that must be locally programmed on the device. Apartment stations are also provided with buttons that can be associated to specific functions; in some models additional button modules can also be installed to perform other functions.

7.6.1 DIP SWITCH CONFIGURATION

All door phones and video door phones available at the moment for Ipervoice[26] are provided, in their wall mounting bracket, with two dip-switch groups, that the installer must correctly set, in order to allow the system to correctly "address" video/door phones.

The first group is composed by two dip-switches, used to set the number of 4-user decoder port to which the apartment station is connected; the second group, composed by four dip-switches, allows to assign to the apartment station the identification number inside the apartment (from 0 to 15).

[25] PDA: acronym of **P**ersonal **D**igital **A**ssistant.
[26] These models are the following: MODO 1717/11, IMAGO 1701/1, SIGNO 1740/1 and 1740/40 and door phone 1139/2

In both cases, the numbering follows the binary system: the Figure 31 and the Figure 32 show the possible configurations concerning decoder and apartment.

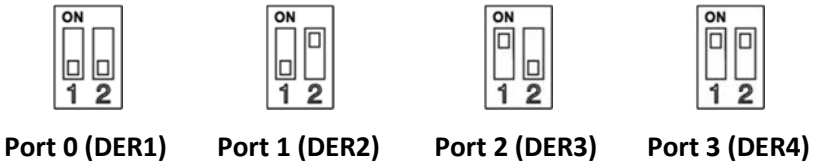


Figure 31: Apartment stations configuration – Dip-switch for programming 4-user decoder port number

Warning: if in the apartment there is only one apartment station, its identification number must always be 0 (zero), because it is the Master station. If there are no intercom interfaces 1039/36, 3 apartment stations max. can be added; their identification number must be between 1 and 3

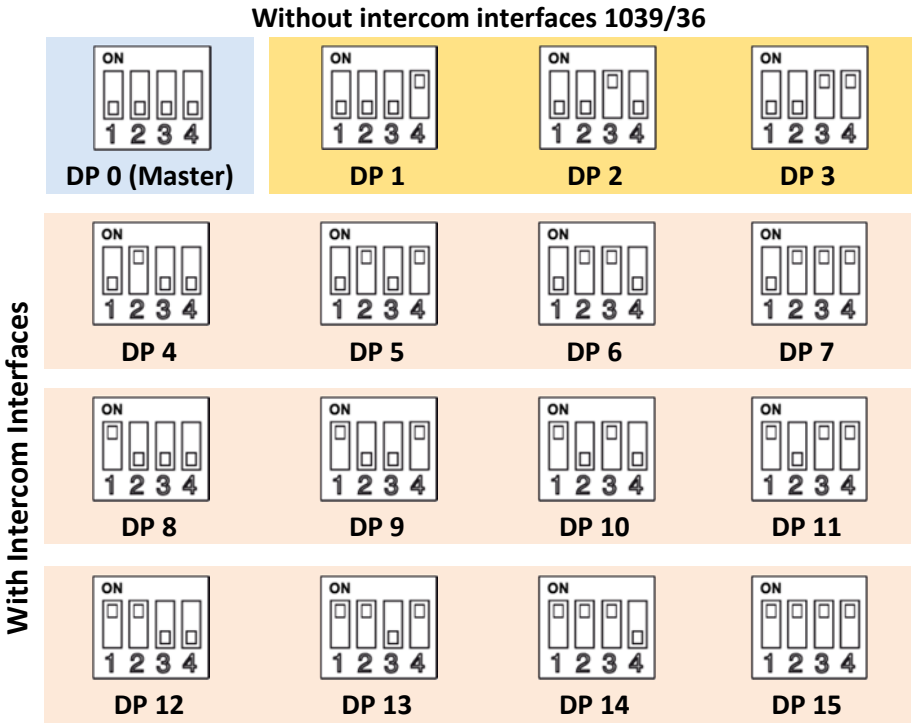


Figure 32: Apartment stations configuration – Dip-switch for programming apartment station number

7.6.2 BUTTON FUNCTION ASSIGNMENT

In Ipervoice system, apartment stations are provided with some buttons, used to perform special functions. For some buttons, these functions are configured by default and cannot be changed; other buttons, as described in the chapter “Apartments Configuration”, paragraphs “Call Buttons” on page 189 and “Special Functions” on page 191, can be programmed according to user requirements. If more buttons are needed, an additional button module (1083/96) can be added to video door phones SIGNO 1740/1 and 1740/40. The Figure 33 shows the position of each function button for the three apartment stations models in use[27].

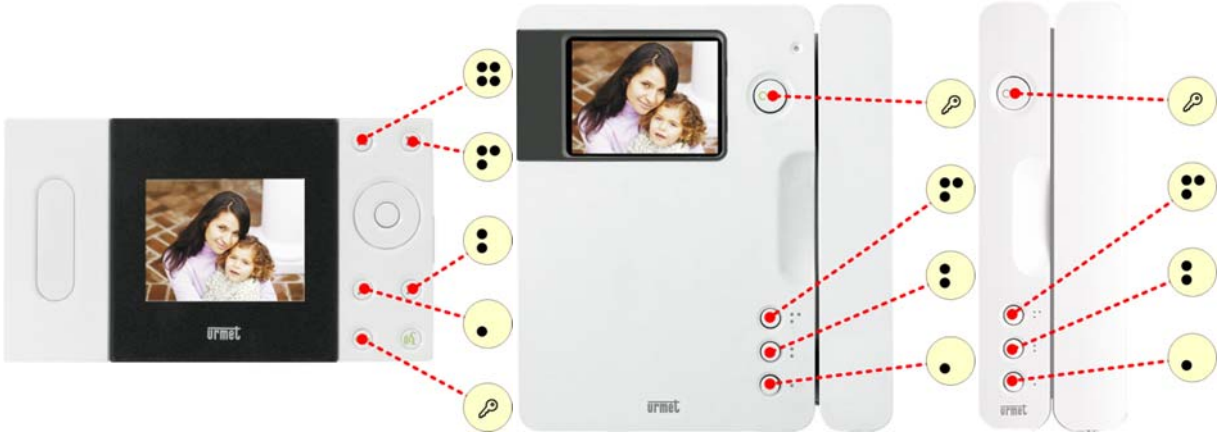


Figure 33: Apartment stations configuration – Main buttons position

Each button can be associated to two different functions, that are activated according to current operating status. In idle state, when the apartment station is not in communication with other devices, two different conditions are possible:

- Handset on-hook
- Handset off-hook[28]

In this way, the number of possible functions is almost twice as the number of available buttons. The Table 12 shows the associations available for each apartment station. The highlighted functions can be changed during system configuration phase, as previously described.

[27] The video door phone MODO 1717/11 is not included, because all functions can be accessed by touch-screen graphic interface.

[28] For hands-free devices, this condition is activated with the dedicated button: “Conversation”.

IMAGO 1717/11	SIGNO 1740/1 and /40	SIGNO 1139/2	Idle state Handset on-hook	Idle state Handset off-hook	Audio/Video communication with Handset off-hook
🔑	🔑	🔑	Door lock release 1	Door lock release 1	Door lock release 1
•	•	•	Door lock release 2	Call button 7	Door lock release 2
••	••	••	Special button 6	Call button 6	Special button 6
•••	•••		Auto-on, next camera cycle	Video answering machine	Bidirectional audio on Auto-on
		•••	Special button 5	Call button 5	Special button 5
••••	ND	ND	Presence/Absence button	Call button 5	Presence/Absence button
🔑+••	🔑+••	🔑+••	Floor call ring tone change[29]	NA	NA
🔑+•••	🔑+•••	🔑+•••	Video door phone call ring tone change29	NA	NA

Table 12: Apartment stations configuration – Functions assigned to main buttons

The Table 13 shows the functions available in presence of additional button module 1083/96; as in the previous case, the highlighted functions are those that can be programmed by the installer.

Additional buttons SIGNO 1740/1 and /2	Idle state Handset on-hook	Idle state Handset off-hook	Audio/Video communication with Handset off-hook
■	Automatic door lock release	Automatic door lock release	Automatic door lock release
1	Special button 1	Call button 1	Special button 1
2	Special button 2	Call button 2	Special button 2
3	Special button 3	Call button 3	Special button 3
4	Special button 4	Call button 4	Special button 4
5	Special button 5	Call button 5	Special button 5
6	Presence/Absence button	Presence/Absence button	Presence/Absence button

Table 13: Apartment stations configuration – Functions assigned to additional buttons

[29] For call ring tones programming (floor and video door phone calls), refer to user manuals of each device.

8 IPERVOICE CONFIGURATION

After describing the Ipervoice system installation, it is possible to deal with the system functions configuration, according to specific customer requirements.

8.1 GENERAL INFORMATION

For Ipervoice system set-up, the installer must perform some configurations, to make the system work as required. In particular, two main steps are needed:

1. Configuration of the devices on the IP network.
2. Configuration of the column devices.

The first phase is performed using a personal computer, which allows all the devices connected to the IP network to be installed and configured by the same unit; at the same time the configuration data for the column devices is defined. This data is then downloaded to a PDA or to a *SmartPhone* provided with a Bluetooth interface, used to perform the second phase of configuration. This is performed on each column device that needs configuration parameters for its operation, for example the 4-user decoder 1039/34 or the intercom interface module 1039/36.

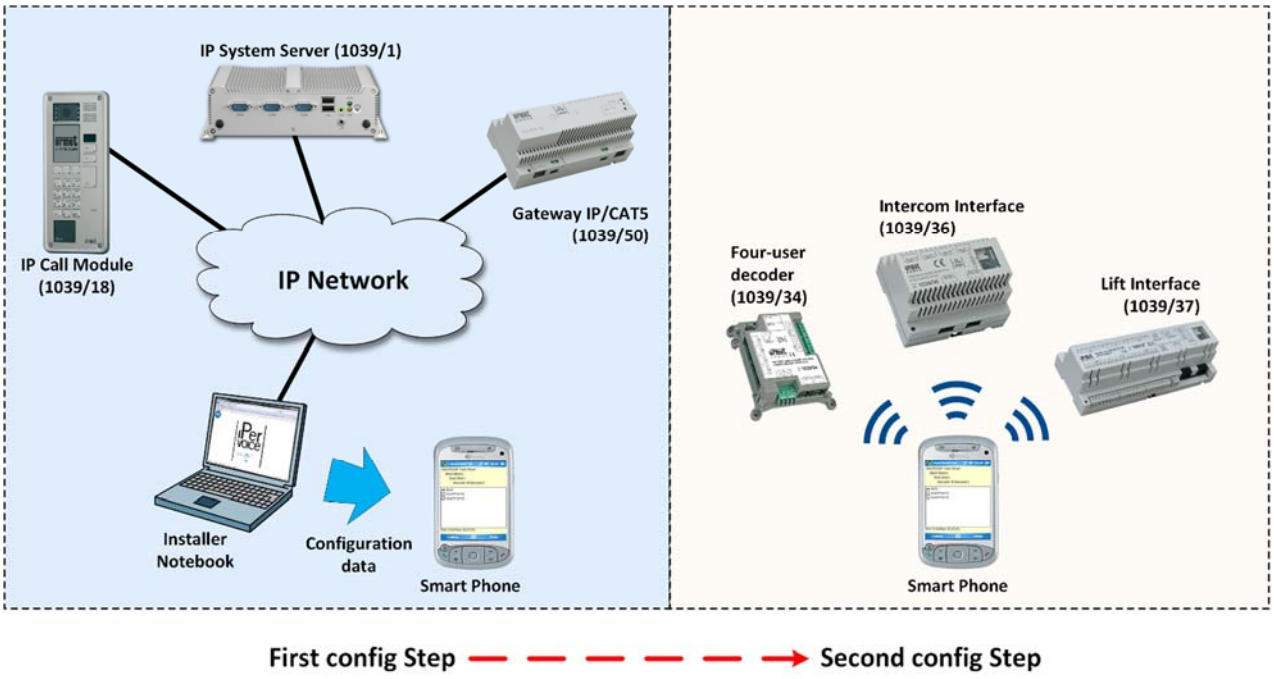


Figure 34: Ipervoice configuration steps

8.2 THE FRONTEND

The fundamental tool used to configure the Ipervoice system is a Web based application resident on the server 1039/1, called "***FrontEnd***". To use this application, connect a laptop (Notebook or Netbook)[30] to the Ipervoice IP network, and access to the ***FrontEnd*** with a browser[31]. The installation is easy, no additional specific programs are needed on the installer's computer, and, in case of server software update, the last system version is always available. If the system includes at least one concierge switchboard 1039/41, it can also be used for configuring operations.

To access to the Ipervoice***FrontEnd***, enter in the browser address bar the following address: **http://192.168.1.1**; as shown in Figure 35, , the login page of the configuration software will be displayed: by entering username and password[32] the user is authorized to access to the main page.

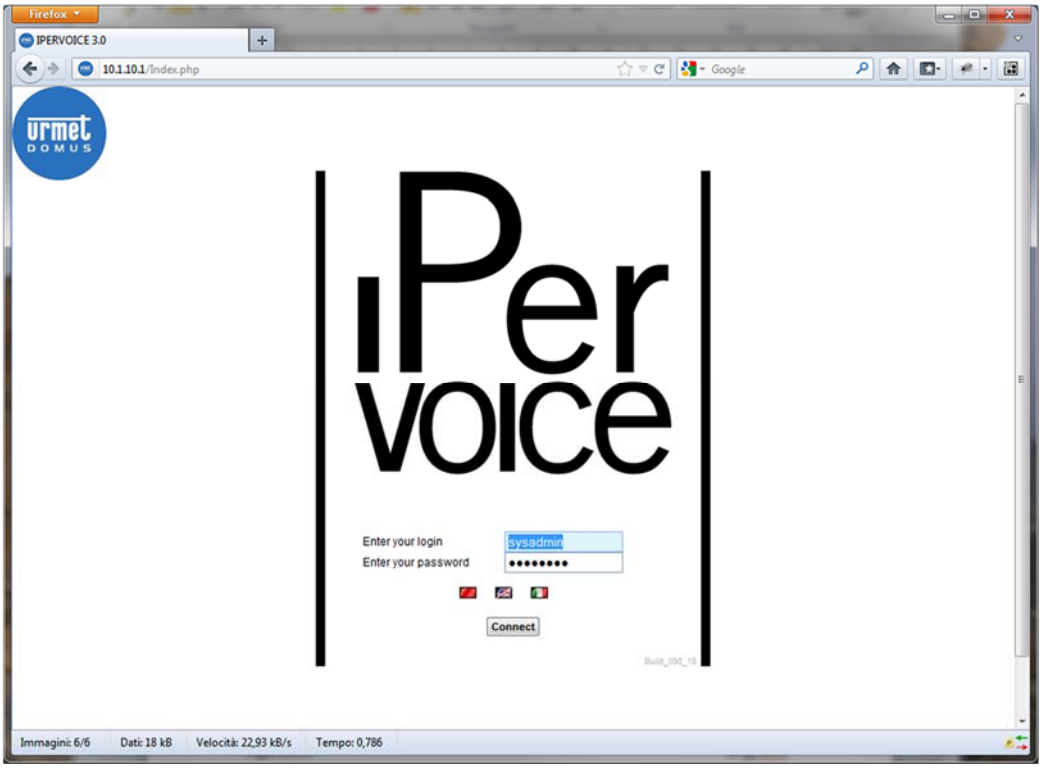


Figure 35: Login page of Ipervoice Frontend

[30] The PC used to connect to the FrontEnd must have the network interface configured for IP address automatic assignment, otherwise the IPervoice server cannot be reached.

[31] It is suggested to use Microsoft Internet Explorer 7 or greater or Mozilla Firefox 3 or greater.

[32] Default username and password for a user with installer rights are: **installer** and **dacirrye**. Enter them in login and password fields and press the button "Connect". To access with different user name and password, see paragraph "Software Users Configuration" on page 243.

Warning: for the ***FrontEnd*** correct operation, the browser must support "javascript" features, that must be activated. Also *"Cookies"* must be enabled.

The ***Frontend*** web page structure is split into three main areas (see Figure 36). The first area, indicated by number **1**, is dedicated to the application menu, where all the Frontend functions can be called; the second area, indicated in the figure by number **2,** is on the left side of the page. In this zone there is the functions tree related to the selected menu item or the list of system devices, hierarchically organized; finally in the centre of the page, indicated by number **3**, the contents of the selected function or the device under configuration are displayed. In login page, shown in the figure, the root element of zone **2** contains the site name; the central area (zone **3**) shows the system basic information.

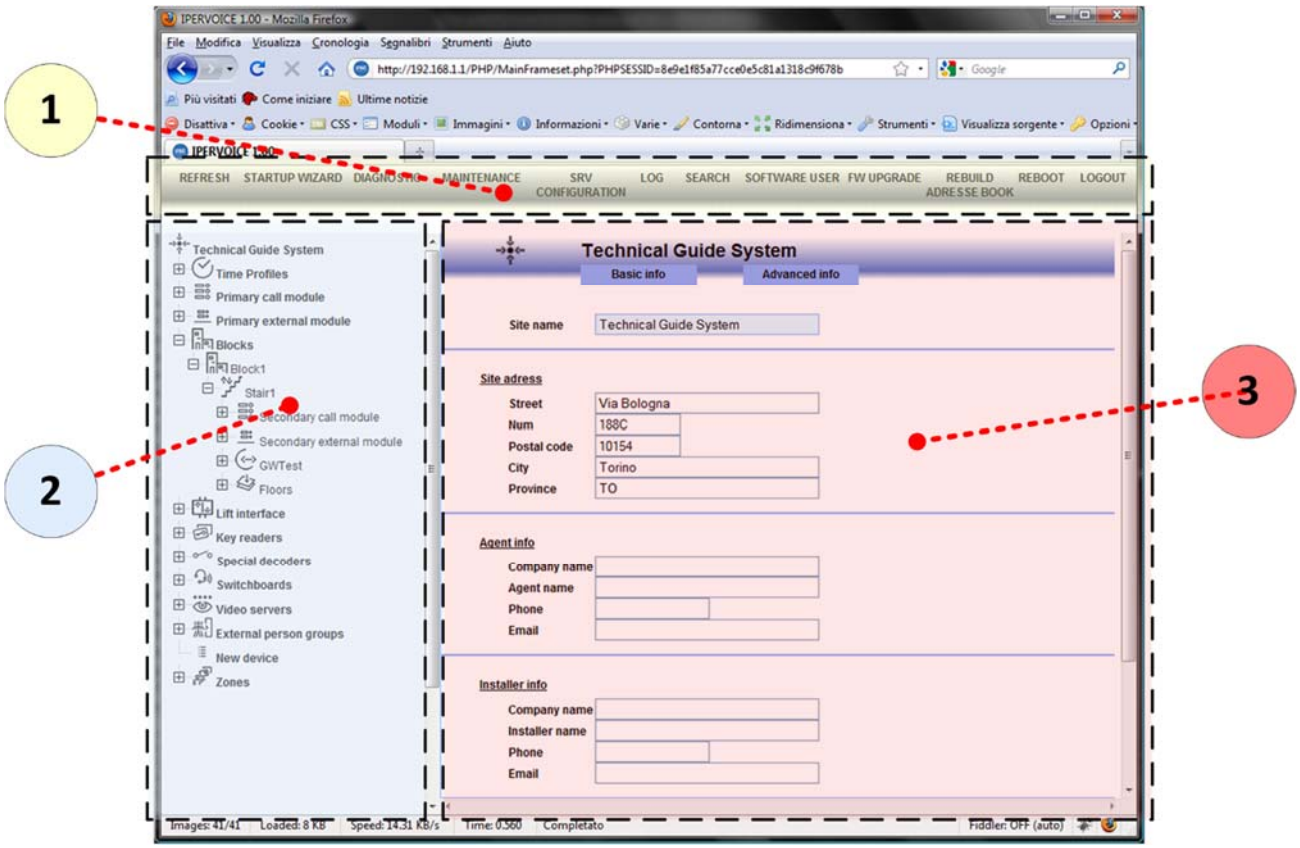


Figure 36: Frontend – user interface

8.2.1 THE MAIN MENU

From the main menu the following functions can be accessed:

REFRESH	It forces the update of contents displayed in the page.
WIZARD	It shows the submenu of the following configuration functions: • **Startup wizard:** starts the guided configuration of Ipervoice system • **Automatic Key Code wizard:** starts the guided configuration of proximity keys. ✋ **Warning**: in Multi-Site mode, Startup Wizard is not available
DIAGNOSTIC	It recalls the system Automatic and Manual diagnostic functions.
MAINTENANCE	It shows the submenu of the functions dedicated to the system maintenance, i.e.: • **Device change:** access to replacement functions for damaged devices • **Backup and restore:** backup and restore of system configuration data (also available in FW UPGRADE menu) • **Write to Mobile:** download of column devices configuration data toNetbook or PDA Phone • **Import Data:** activation of data import function (resident and external persons) • **Export template:** export of data template forresident and external persons
SRV CONFIGURATION	Change of Ipervoice server date and time and configuration of system remote management.
LOG	It displays the system log.
SEARCH	It activates the search functions available in the Ipervoice system, for example: search of a resident, of a device by topological or logic code, by key code and so on.
SOFTWARE USER	Access to user management functions.

FW UPGRADE	It shows the submenu of the functions dedicated to the update of the system application software (firmware): • **Check System consistency:** checking of firmware versions on the configured devices • **Upgrade system firmware:** update of the Ipervoice server firmware • **Backup and Restore:** backup and restore of the system configuration data (also available in MAINTENANCE menu).
UPDATE SYSTEM	System data update
SWITCH TO MOBILE MODE	Switch of FrontEnd operating mode (Mobile and Server)
REBUILD ADDRESS BOOKS	Rebuild of residents address books.
REBOOT	Ipervoice server reboot.
LOGOUT	Exit from Frontend.

8.2.2 DEVICES TREE

On the left side of ***Frontend*** user interface, the system hierarchical structure is shown, associated to a list of system configuration functions. Beside each item there is an icon, to make the identification easier.

At the top of the list there is the name assigned to the system, in this specific example "*Technical Guide System*", that is the starting root; then the items allowing the access to the respective functions are displayed. Because the structure is a "tree", each menu item can contain other items, as in "***Blocks***", shown in the figure on the left. This condition is represented by the icon ⊞ beside the item: by clicking on this icon, the tree will be expanded, showing its contents; to close it, click the icon ⊟.

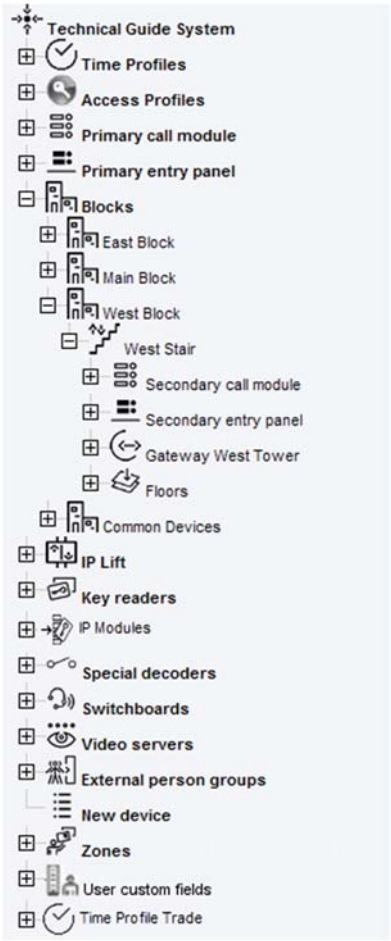


Figure 37: Ipervoice Devices tree

The first level items, present on the tree structure, are the following:

	Return to Frontend main page containing identification data.
Time Profiles	Functions concerning the time profiles management (Passages and Users).
Access Profiles	Functions for access profiles management (doors and users)
Door Profiles	Functions concerning door management (Call modules and IP key readers)
Primary call module	Management of Primary Call Modules (1039/13 and 1039/18), present in the system.
Primary entry panel	Management of Primary IP video entry panels (1039/78).
Blocks	Management of the system topologic structure (Buildings, Stairs, Floors), of associated devices (including the secondary call modules 1039/13 and 1039/18 and the residents).
IP Lift interface	Configuration of IP lift interface modules.
Key readers	Management of IP key readers (1039/82).
IP Modules	Module configuration for advanced access control on IP network.
Special decoders	Configuration of Special Decoder Modules (1039/81).
Switchboards	Configuration of concierge switchboards (1039/41).
Video servers	Management of video server devices (1039/69).
External person group	Configuration of groups and external people (maintenance men and suppliers) authorized to access to the residential building.
User custom fields	Configuration of additional fields used in management of users belonging to the External person group
New device	Access to the search functions for new IP devices to be configured.
Zones	Definition of access zones with specific functions (Anti pass back, user count and so on).
Time Profile Trade	Call module automatic door opener profile configuration.

8.2.3 SYSTEM STRUCTURE

The Ipervoice Frontend allows the system information to be entered, according to the system topologic structure. The result is a hierarchical structure that contains the buildings (***Blocks)***, the stairs inside each block (***Stairs***), and the respective ***Floors*** (Figure 38). This figure shows the different devices that are

associated to their position. Knowing the system topological location of a device, it is easy to identify a gateway, a 4-user decoder or also the single apartments and the devices present inside them.

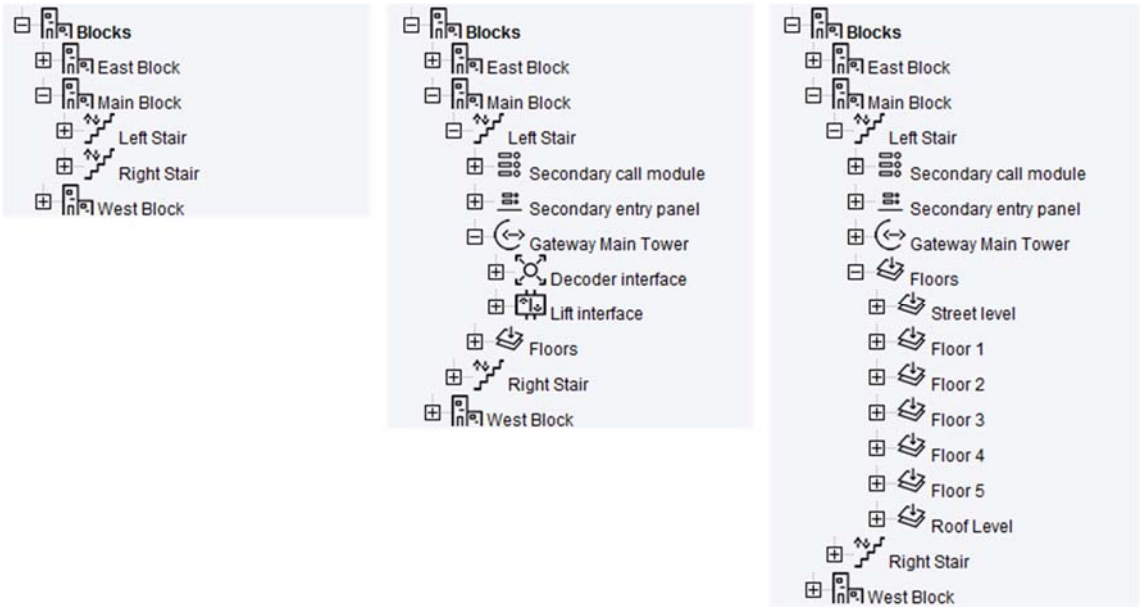


Figure 38: System structure - Blocks, Stairs, Floors

Other devices, such as main call modules, video servers or IP key readers, are not associated to a specific building. They are placed on the building perimeter and they can be seen on the root, i.e. on the structure first level.

The hierarchical structure defined above is also used to fill in the residents data (i.e. people living in the apartments), for populating the user directory. In the Ipervoice system, the residents are “included” in the apartments, so the data entry is performed apartment by apartment and is more user-friendly. The link between the residents and the hierarchical and topologic system structure (block, stair, floor, apartment) can be used, as shown later, to make visible on the main and secondary call modules, only the related residents. In this way, when the visitor uses the functions available on the call module to scroll the residents address book, he will see only the residents associated to that module, so the search will become easier.

8.2.4 PRELIMINARY CHECKING

Before starting Ipervoice system configuration and start-up, make sure that all the system checking described in chapters “Installation Prescriptions” and “Advices for devices installation” have been performed.

The following points must also be checked:

- To have the MAC address list of IP devices to be configured, specifying their location in the system (the MAC Address is printed on the device identification label).
- If in the system there are concierge switchboards, make sure that the “Switchboard” application that performs the switchboard functions is running on all the PCs dedicated to that service.

8.3 THE “STARTUP WIZARD”

To make the system configuring operations easier, especially for the first system start-up, the Ipervoice system provides a guided procedure that, once activated from the *Frontend*, helps the user, “step by step”, to set up the data necessary for the correct operation of the system. This procedure is called ***StartUp Wizard*** and is launched by clicking with the mouse on the respective menu item (Paragraph “The main menu” on page 90).

Warning: the *StartUp Wizard* makes it possible to perform the basic configuring operations of the Ipervoice system IP devices, following the best pre-ordered sequence and leading the user through a series of steps to be performed. To make the system functions active, it will be necessary, at the end of “Wizard”, to configure the single devices with additional settings.

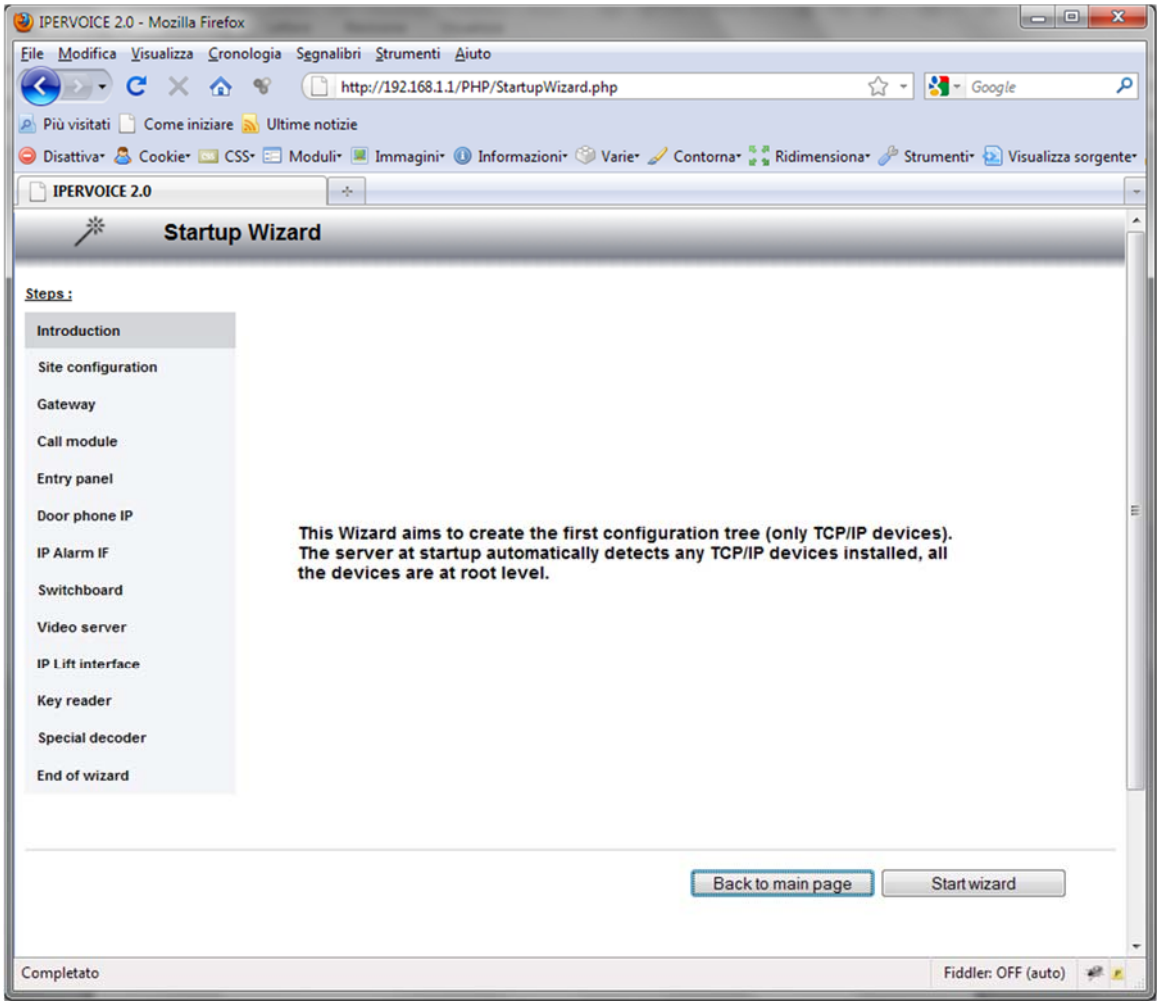


Figure 39: Startup Wizard – Procedure splash screen

Once launched, the StartUp Wizard will present its main page, where the installer is reminded that the guided procedure will create the system basic structure only for the system IP devices. As shown in Figure 39, the user interface displays the list of steps on the left side, following a specific order (the current step is highlighted); in the centre the detailed information concerning the step in progress is displayed. By pressing the button “Start Wizard”, the procedure starts.

Although the StartUp Wizard is a guided procedure, the user can “move” inside it with a certain flexibility. At the bottom of each page there are three buttons, that allow you to return to the previous step (***Previous Page***), stop the wizard and return to the main page (***Back to main page***) and finally go to the next step (***Next page***) (Figure 40).

Figure 40: Startup Wizard – Command buttons

CONFIGURATION CONSTRAINTS

As described later, the *Startup Wizard* defines a fixed order for installation and configuration of the system devices. It is suggested to follow this order, even if the installation is performed without the Wizard. In particular, there are some devices that cannot be installed if they depend on other ones; this is the case of devices present in the building riser column and inside the apartments. The following table can be useful to check the dependencies between the different devices and the system structure.

Device	Depends on
IP/CAT5 Gateway ***(1039/50)***	Associated Block and Stair
Secondary IP Call Module ***(1039/13 or 1039/18)***	IP/CAT5 Gateway
IP secondary video door unit ***(1039/78)***	IP/CAT5 Gateway
4-user decoder ***(1039/34)***	IP/CAT5 Gateway and associated Floor
Apartment devices (door phones, video door phones, alarm interfaces, intercom interfaces)	Associated 4-user decoder
Concierge switchboard ***(1039/41)***	Associated Block, Stair and Floor
Lift interface ***(1039/37)***	IP/CAT5 Gateway
Main IP Call Module ***(1039/13 or 1039/18)***	None
Main IP video door unit ***(1039/78)***	None
Video Server ***(1039/69)***	None
IP key reader ***(1039/82)***	None
IP Special Decoder ***(1039/81)***	None

Table 14: Dependency constraints for Ipervoice devices configuration

8.3.2 SITE CONFIGURATION

Once the wizard has started, the first step to be performed concerns the input of system configuration parameters.

Note: the information required by the Startup Wizard during this configuration step can also be changed later in the Frontend main page.

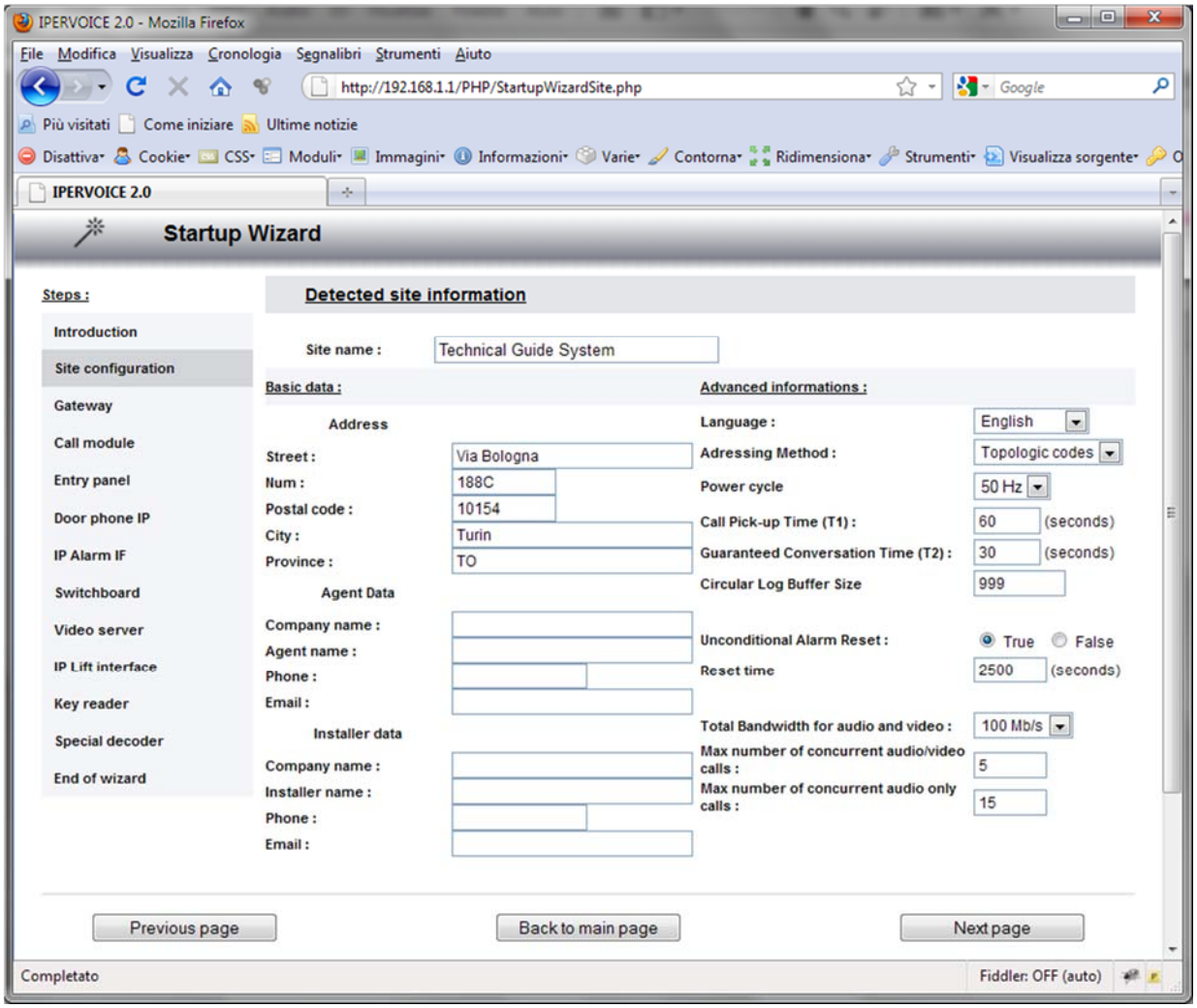


Figure 41: Startup Wizard – Configuration of system identification data

Besides the site name, which is compulsory to go on with the procedure, the required data is split into two sections: Basic and Advanced Information. The first are optional, but it is suggested to enter them for maintenance purposes; this data concerns the system location and the business and technical reference. The second makes it possible to set the function behaviours and some data that affects the system performance. The Table 15 includes all the data and their default values.

Parameter	Meaning	Default value
Language	Language used by the system. It can be selected from the pull-down menu. Refer to Frontend to get the updated list of supported languages.	English
Addressing method	Method used to determine the devices addressing in the call codes. It can be selected from the pull-down menu. ***Allowed values: Topological codes, Logic codes***	Topologic codes
Use a prefix	This option is only available when "Numeric Codes" addressing is enabled. If set to "Yes", it allows to assign a numeric prefix to each system "Block" to speed up the selection from call module ***Allowed values: No, Yes***	No
Concierge Call in night mode	Call to switchboard is enabled also in night mode[33]. ***Allowed values: Enabled, Disabled***	Disable
Power cycle	Frequency (in Hertz) of power supply mains. It can be selected from the pull-down menu. **Allowed values*: 50 Hz, 60 Hz***	50 Hz
Call Pickup time (T1)	Call Pickup time. ***min: 30, max: 540 seconds***	60 seconds
Guaranteed conversation time (T2)	Guaranteed conversation time. ***min: 1, max: 540 seconds***	30 seconds
Circular log buffer size	Size of circular log buffer. ***min:1, max: 100.000 events***	999 events
Unconditional Alarm Reset	Alarm reset without local actions. ***Allowed values: True, False***	True
Reset time	Time available for the switchboard attendant to reset the alarm where it is generated. The value is used only if the previous condition is set to ***False***	2550 seconds
Total Bandwidth for audio and video	IP network bandwidth used for audio and video communications. It can be selected from the pull-down menu. ***Allowed values: 10 Mb/s, 100 Mb/s, unlimited***	100 Mb/s
Max number of concurrent audio/video calls	Maximum number of concurrent audio/video communications. ***Allowed values: from 1 to maxV: where "maxV" is calculated by the system according to the assigned bandwidth on the IP network***	5
Max number of concurrent audio only calls	Maximum number of concurrent audio communications. ***Allowed values: from 1 to maxA: where "maxA" is calculated by the system according to the assigned bandwidth on the IP network***	15

Table 15: "Advanced" parameters for system configuration

Once all the required data has been entered, by clicking the button "*Next page*" the wizard goes to the IP/CAT5 Gateways configuration step.

[33] To change this feature, the user must access the FrontEnd with **System Administrator** rights. For further details, see paragraph "Software Users Configuration" on page 246.

8.3.3 IP/CAT5 GATEWAY CONFIGURATION

With the IP/CAT5 gateways configuration, the Startup Wizard starts the real devices installation. The list displayed to the installer is shown in Figure 42. Only devices not yet configured are in the list: to configure them, select the desired device and click the button “Next page”. The system will display in sequence, for each selected gateway, the detail page where all the required data can be entered.

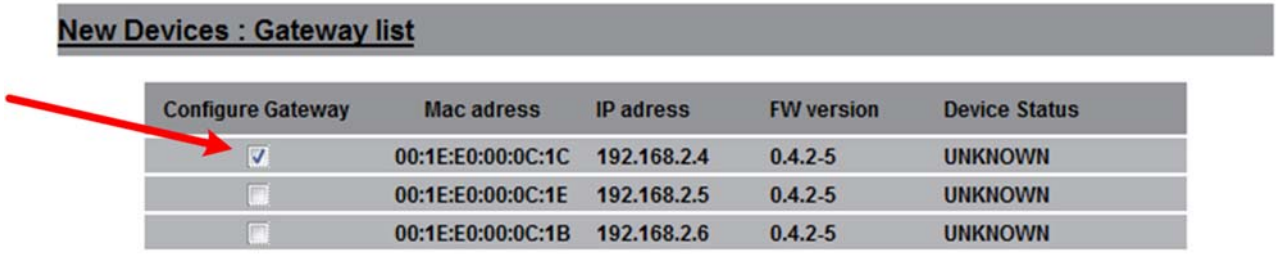


Figure 42: Startup Wizard - List of new detected Gateways

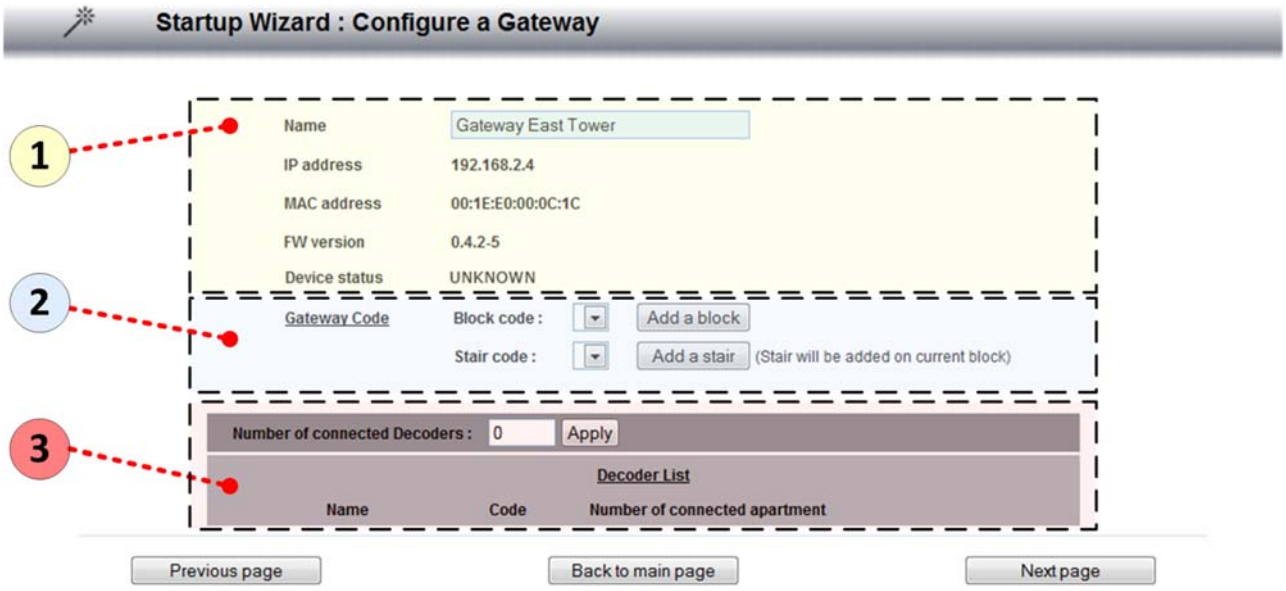


Figure 43: Startup Wizard - Configuration of a new Gateway

In the configuration page there are three sections, highlighted in Figure 43 with the areas indicated by numbers **1**, **2** and **3**. In the first one there are status and identification data, in the second one the gateway data related to the system physical structure and in the third one there are the riser column devices connected to this gateway.

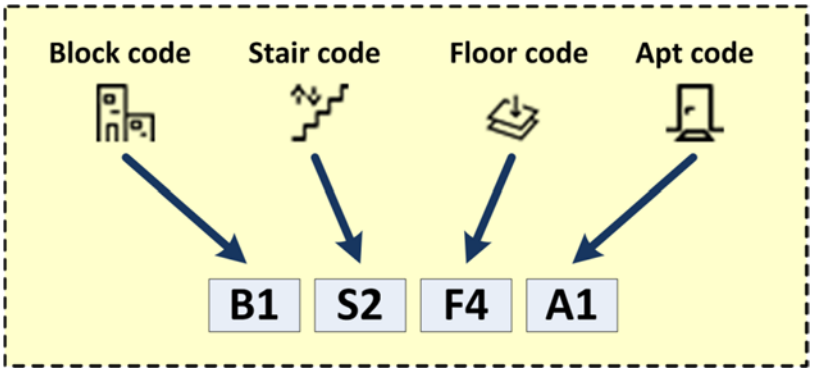


Figure 44: "Topological code" structure

The "Block code" and the "Stair code" assigned to the gateway specify its block and stair. These codes are the first part of the system "Topological code", as shown in Figure 44.

IDENTIFICATION DATA

In this section, the only data required to be entered by the installer is the "name" assigned to the gateway; this name must be unique in the system. The other information, shown in Table 16, is some technical data.

Name	Gateway identifier, required field. Max. length: 32 characters
IP address	IP address automatically assigned by the system server to the gateway.
MAC address	Device unique physical address. Used to identify each device during the configuration phase.
FW version	Version of gateway application Firmware.
Device status	Device status detected by the system. The status can be: • **UNKNOWN**: The device is not configured or not yet polled by the system. • **POLL IN PROGRESS**: The server is polling the device to obtain the status information. • **ALIVE**: The device has been configured and operates correctly. • **DEAD**: The device has been configured, but it does not communicate with the server.

Table 16: IP/CAT5 Gateway – identification data

GATEWAY - BLOCK AND STAIR ASSIGNMENT

Each gateway is always associated to a building (Block) and to a Stair, so it is necessary to select from the two pull-down lists the "*Block Code*" and the "*Stair Code*", that identify the block and the stair. If the block code, the stair code or both of them are not included in the lists, they need to be added and then selected. If the system is completely new, the first time both lists will be empty, so the block must be added first and then the stair. By clicking the button "*Add a block*", the area "New block" (Figure 45) will be displayed, where the block name and code can be entered.

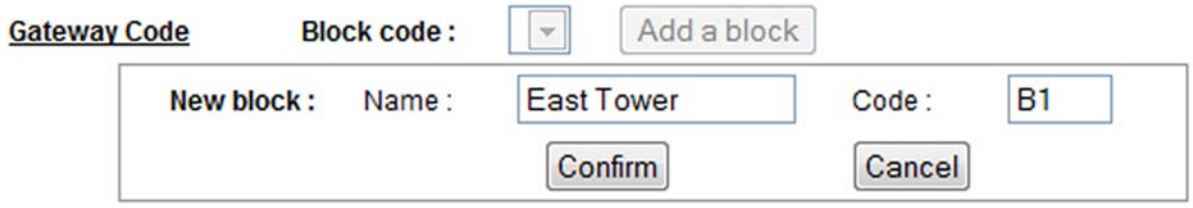


Figure 45: Startup Wizard – Block adding

Name	Block identifier, required field. Maximum length: 32 alphanumeric characters
Code	Block code, required field. It must be unique in the system. It is the first two characters for the topological call code. Fixed length: 2 alphanumeric characters (e.g. B1, 01, 1B, etc.)

Table 17: Identification data of a new building (Block)

By clicking the button "Confirm", the block is saved and a new stair can be added. The procedure is the same; by clicking the button "*Add a stair*", in the area "New stair" the required information can be entered. The following Figure 46 and Table 18 show in detail the necessary data.

Figure 46: Startup Wizard - Aggiunta di una Scala (Stair)

Name	Stair identifier, required field. Maximum length: 32 alphanumeric characters
Code	Stair code, required field. It must be unique for each block. It is the second pair of characters for the topological call code. Fixed length: 2 alphanumeric characters (for ex. S1, 01, 1S, etc.)

Table 18: Identification data of a new Stair

Warning: To add a new stair, a block, identified by the item "Block code", must be selected from the pull-down list.

COLUMN DEVICES DEFINITION

The third last phase needed to completely configure the gateway concerns the column devices that it manages. The data to be entered concerns many aspects of the column structure.

Warning: Once saved, all the data concerning the devices installed on the riser columns is not directly sent to the column devices. The data will be transmitted later with a SmartPhone, as described in the paragraph "Column " on page 153.

In this section the riser column structure is defined, composed by:

- Number of 4-user decoders (1039/34), present on the column (for example one decoder for each floor).
- Number of apartments managed by each 4-user decoder (from 1 to 4).
- Presence of alarm interface (1039/61) in the apartment.
- Number of door phones and/or video door phones in each apartment.
- Number of intercom interfaces (1039/36) in the apartment.
- If in the system there are one or more intercom interfaces, number of door phones and/or video door phones associated to each interface.

The Figure 47 shows the section **3**, concerning the column devices, that is split into three areas identified as follows:

- **A** Area dedicated to the definition of 4-user decoders connected to the gateway.
- **B** Area for adding new floors.
- **C** Area dedicated to the definition of apartments and respective terminals.

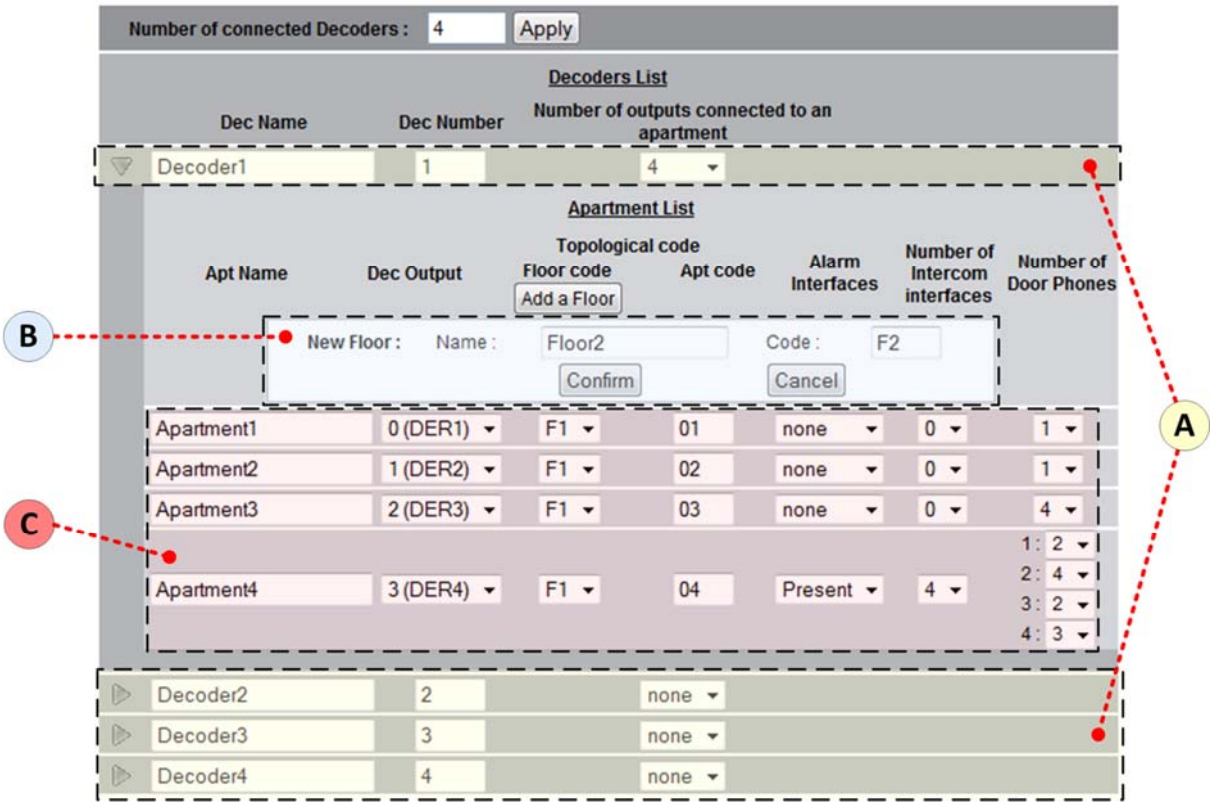


Figure 47: Startup Wizard – Configuration of column devices associated to the gateway

In order to configure the column devices, enter the number of 4-user decoders. This operation is performed by entering the decoder number in the respective text field named "*Number of connected Decoders*" and clicking the button "*Apply*".

Note: The maximum number of decoders for each gateway is 270.

Once this operation has been performed, the system updates the page and displays the list of the requested decoders (**A**). For each element there are the following fields:

Dec Name	Decoder name. Required field. The system assigns a default name like *Decoder* **n**, where **n** is a progressive number .
Code	Decoder code, mandatory, unique in its gateway domain. It is a numeric identifier; also in this case the system assigns a progressive default value. Values between **1** and **270**.
Number of outputs connected to an apartment	It defines the decoder output (ports) number to which the apartments are physically connected. The value can be selected by a pull-down menu; the available values are: **none**, **1**, **2**, **3**, **4**

Table 19: 4-user decoder identification data

To expand the detail section of each 4-user decoder, click on the image near “Dec Name”. The list of the outputs (ports) connected to the apartments will be displayed for the user.

To configure each apartment, select the Floor to which it must be associated. If the desired floor has not been added yet, it is possible to add it during the apartment definition, by pressing the button “Add a floor”. As before, the system will display the area where it can be added.

Figure 48: Startup Wizard – Floor adding

Name	Floor identifier, required field. Maximum length: 32 alphanumeric characters.
Code	Floor code, required field. It must be unique in the respective Block-Stair codes. It is the third pair of characters for the topological call code. Fixed length: 2 alphanumeric characters (e.g. F1, 01, 1F, etc.).

Table 20: Identification data of a new floor

Note: the new floor will be added in the Block-Stair assigned to the gateway during the configuration phase.

After adding the requested floors, it is possible to enter information concerning the structure of each apartment (**C**). For each of them there are the following fields:

Port	The decoder port to which the apartment is connected. It is an RJ45 socket called DER1, DER2, DER3, DER4. The value can be selected from a pull-down menu, the available values are: **0(DER1)**, **1(DER2)**, **2(DER3)**, **3(DER4)**. **Warning:** The selected value must be different for each decoder apartment .
Floor Code	Code of the apartment floor. Required field, that can be selected from the pull-down menu .

Apt Name	Name of the apartment. Required field. The system assigns a default name like *Apartment***n**, where **n** is a progressive number .
Apt code	Code of the apartment. Required, numeric and unique field in the assigned floor. Fixed length: 2 alphanumeric characters (e.g.. 01, A1, 1A, AB).
Alarm Interface	Alarm interface 1039/61 installed in the apartment. The value can be selected from a pull-down menu; the available values are: **none**, **present** .
Number of Intercom Interfaces	Number of intercom interfaces 1039/36 installed in the apartment. The value can be selected from a pull-down menu; the available values are: **0**, **1**, **2**, **3**, **4**. **Warning:** If in the apartment there are more than one intercom interface, a column power supply 1039/20 must be installed inside the apartment .
Number of Door Phones	Number of door phones/video door phones installed in the apartment. The value can be selected from a pull-down menu; the available values are: **0**, **1**, **2**, **3**, **4**. **Warning:** If there are two or more intercom interfaces, for each of them the number of connected door phones/video door phones must be defined .

Table 21: Apartment configuration data

Once all required information has been entered, by clicking the button “Next page”, the Startup Wizard saves the data and goes to the next step.

Warning: The Startup Wizard does not require the type of each configured apartment station (door phone, video door phone, hands-free). This information must be entered by changing the settings of each device, as described in the chapter “Apartment Stations Configuration“ on page. 207.

8.3.4 IP CALL MODULE CONFIGURATION

After configuring the IP/CAT5 gateways, the next Wizard step displays the list of detected Call Modules (Figure 49). They are configured using the previously described procedures.

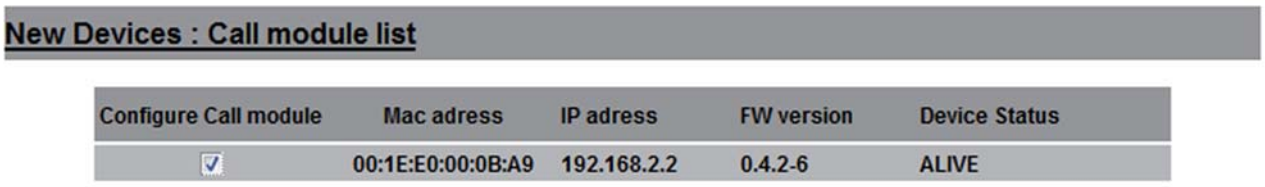


Figure 49: Startup Wizard – List of new IP Call Modules

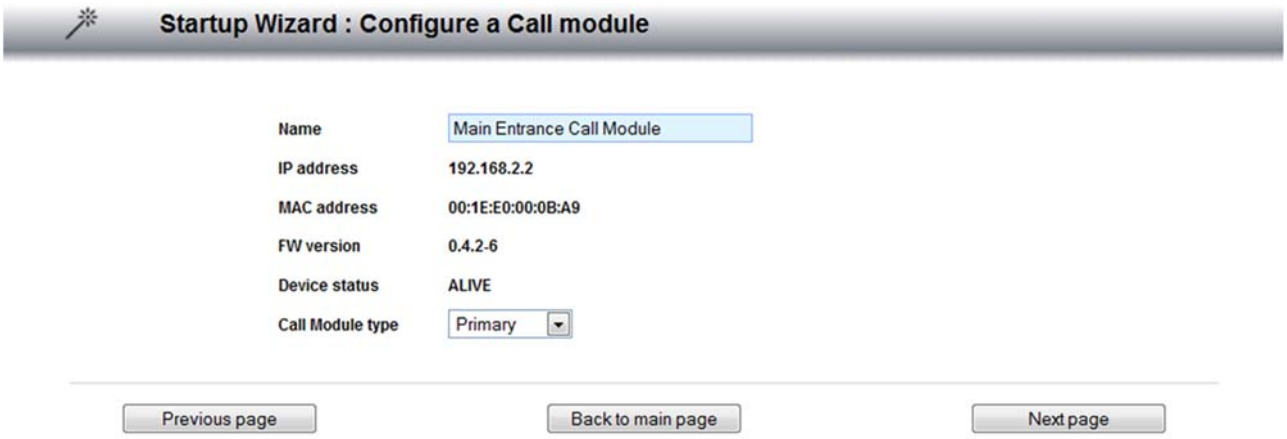


Figure 50: Startup Wizard – Configuration of a new IP Call Module

To configure Call Modules with the StartUp Wizard, enter only the main data concerning identification and type. This is the minimum required data for the configuration; to obtain the correct operation, the installer must complete the configuration by entering the other data, as described in the chapter "Ipervoice Devices advanced Configuration - IP Call Module" on page 120.

Name	Call Module identifier, required field. Max. length: 32 characters
IP address	IP address automatically assigned by the system server to the call module.
MAC address	Device unique physical address. Used to identify each device in the configuration phase.
FW version	Version of application Firmware on the call module.

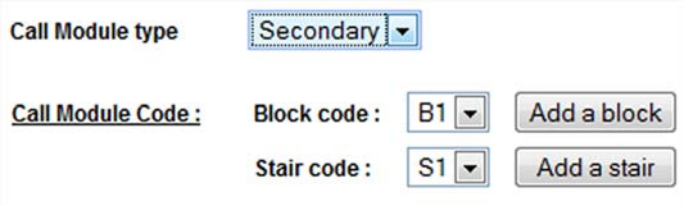
Device status	Device status detected by the system. The status can be: • **UNKNOWN**: The device is not configured or not yet polled by the system. • **POLL IN PROGRESS**: The server is polling the device to obtain status information. • **ALIVE**: The device has been configured and operates correctly. • **DEAD**: The device has been configured, but it does not communicate with the server.
Call Module type	Call module use mode, that can be selected from a pull-down menu; the available values are: **Primary**, **Secondary** **Warning:** if the option "Secondary" is selected, the respective block and stair must be added, as shown in the following figure: 

Table 22: IP Call Module – identification data

Warning: in order to activate the electrical lock of the passage to be controlled, the "Door" must be added to the IP Call Module. Perform this operation following the procedure described in the chapter "Ipervoice Devices advanced Configuration - IP Call Module – Doors" on page 125.

8.3.5 IP VIDEO DOOR UNIT CONFIGURATION (ENTRY PANEL)

After the call module configuration has been completed, Wizard shows the list of IP Video door units 1039/78, also called Entry Panel (Figure 51). As in the previous case, select the devices from the list shown by the system, click on “Next page” button to start configuration.

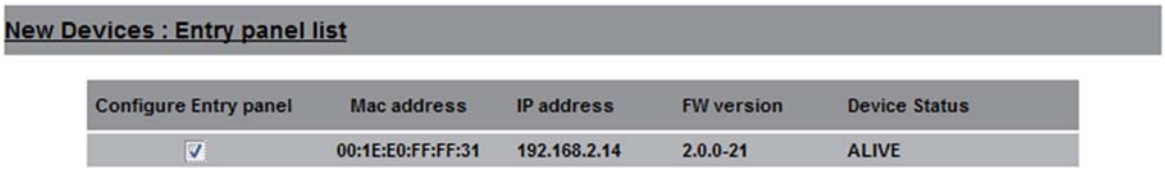


Figure 51: Startup Wizard – List of new IP Video door units

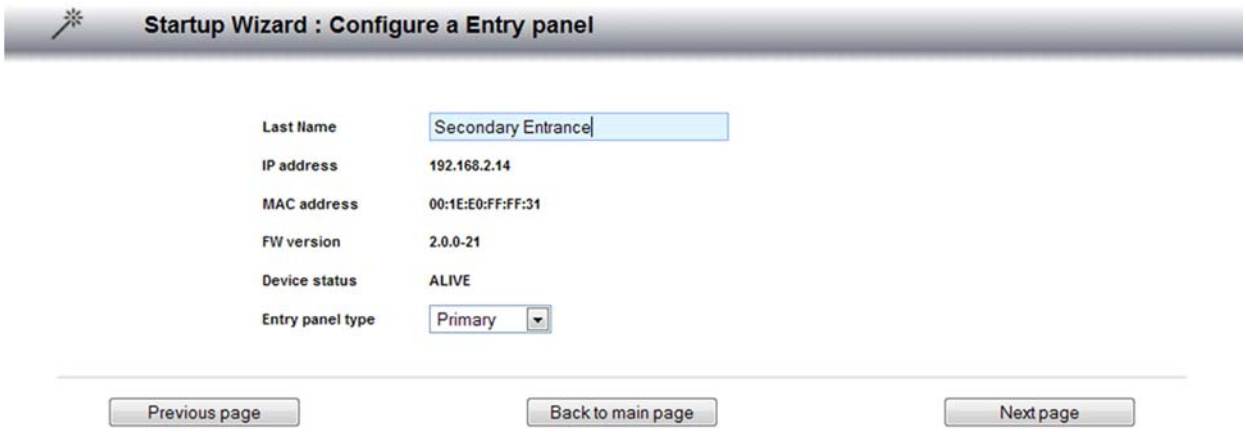


Figure 52: Startup Wizard - Configuration of a new IP Video door unit

For the first “Entry Panel” configuration made with StartUp Wizard, only the data used to identify the device and its type are needed. In order to use this device in the system, the installer must complete the configuration by entering other data, as described in the chapter “Ipervoice Devices advanced Configuration - IP Video Door Unit (Entry Panel)” on page 120.

Name	Entry panel identifier, required field. Max. length: 32 characters
IP address	IP address automatically assigned by the system server to the call module
MAC address	Device unique physical address. Used to identify the devices during configuration
FW version	Application software version of the call module
Device status	Device status detected by the system; the status can be: • **UNKNOWN**: The device is not configured or not yet polled by the system.

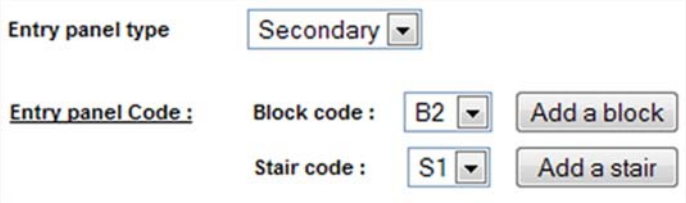
	• **POLL IN PROGRESS**: The server is polling the device to obtain status information. • **ALIVE**: The device has been configured and operates correctly. • **DEAD**: The device has been configured, but it does not communicate with the server.
Entry panel type	Kind of call module use; it can be selected from a pull-down menu; available values are: **Primary**, **Secondary** **Warning:** if the option "Secondary" is selected, enter the belonging block and the stair as shown in the figure below. 

Table 23: IP Video door unit – Identification data

Warning: in order to activate the electric lock of doors or gates to be controlled, it is necessary to add the "Door" to the IP Video door unit. This operation must be performed as described in the chapter "Ipervoice Devices advanced Configuration - IP Video Door Unit (Entry Panel) - Doors" on page 133.

8.3.6 CONCIERGE SWITCHBOARD CONFIGURATION

New Devices : Switchboard list

Configure Switchboard	Mac adress	IP adress	FW version	Device Status
☐	00:23:5A:1E:B8:62	192.168.2.6	1.0.9-5	DEAD
☐	00:21:6B:4F:DA:E0	192.168.1.132	1.0.9-5	UNKNOWN

Figure 53: Startup Wizard – List of new Concierge Switchboards

The Wizard next step is the concierge switchboards configuration (Figure 53). If in the system there is more than one installed switchboard, their locations must be identified with the "MAC address", as for the other devices. This address is displayed in the Switchboard application main page in the area dedicated to calls, as shown in Figure 54[34]. If the switchboard has already been configured, that field will contain the Identification code (Topological code or Logic code).

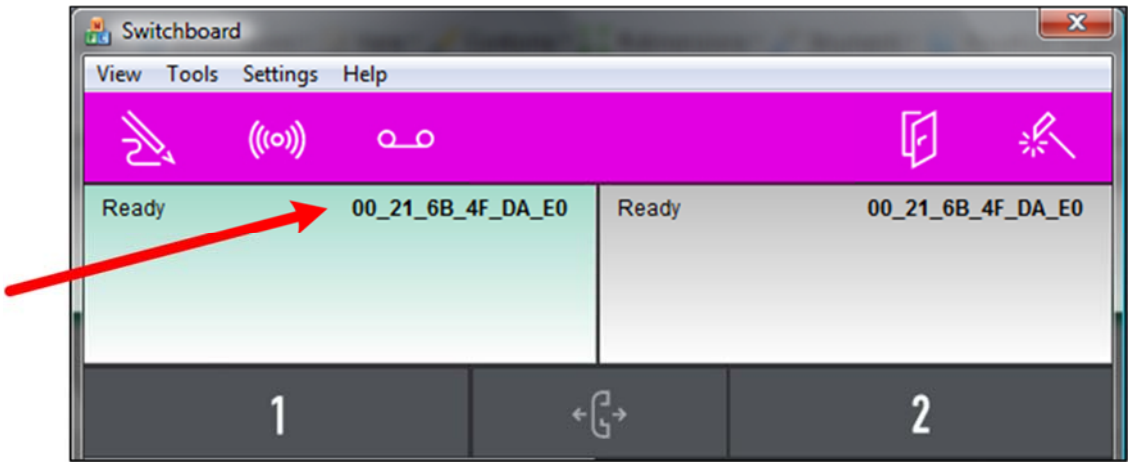


Figure 54: Startup Wizard – Switchboard, MAC address highlighting

To configure the concierge switchboards, the StartUp Wizard requires the associated name and the identifier used in the topological code to be entered. The data entry form also displays some information shown for the other Ipervoice devices described above.

[34] After configuration, it is always possible to know the switchboard MAC Address, by selecting from the menu the item "Help" and then "About".

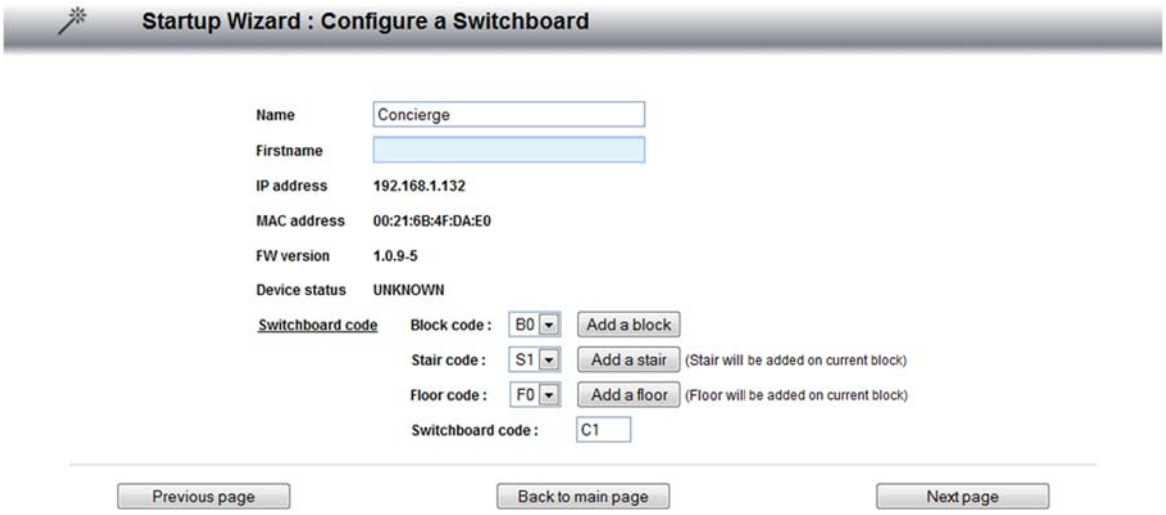


Figure 55: Wizard – Configuration of a new switchboard

Name	Name assigned to the switchboard, required field. Maximum length: 32 characters
Firstname	First name of the concierge, if both first name and surname must be entered. This is an optional field. Maximum length: 32 characters
IP address	IP address automatically assigned by the system server to the switchboard.
MAC address	Device unique physical address. Obtained as shown in the previous Figure 54.
FW version	Application software version of the concierge switchboard.
Device status	Device status detected by the system; the status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**.
Switchboard code	Even though a switchboard usually does not belong to a Block, a Stair and a Floor, it must be provided with a topological code, in order to be called by the other system devices. The switchboard code is composed by all the four parts of the "Topological code": Block, Stair and Floor can be selected from the pull-down menus displayed near the single item (to add an element, click the respective button, for ex "Add Floor"), the last part must be entered by the installer and is composed by a unique alphanumeric code associated to the respective floor. Fixed length: 2 alphanumeric characters (e.g. 01, C1, 1C, CS). **Note:** it is suggested tocreate a virtual Block, Stair and Floor, where all the system switchboards will be included. For example: *Block*: Common Devices **CD** *Stair*: Switchboards **SB** *Floor*: Switchboard Floor **SF**

Table 24: Concierge Switchboard – identification data

As for the Call Modules, the entry of configuration data with the *StartUp Wizard* may not be enough for the required operation; the installer must complete the configuration by entering the other data, as described in the chapter “Ipervoice Devices advanced Configuration - Concierge Switchboard” on page 134.

8.3.7 VIDEO SERVER CONFIGURATION

As for the other devices, to start the configuration select the desired video server from the list of new detected devices and press the button “Next” to access the details page where to enter the requested configuration data. Table 25 describes data to be entered and their meaning.

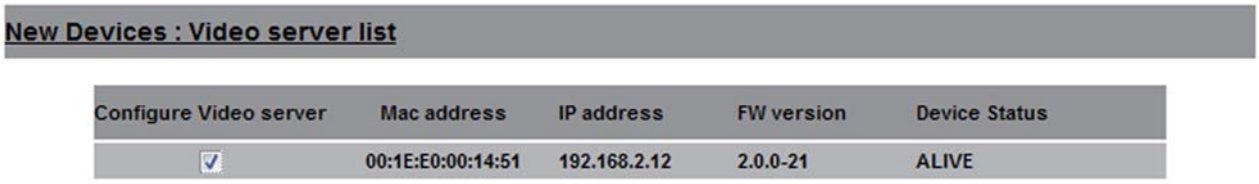


Figure 56: Startup Wizard: List of new Video Servers

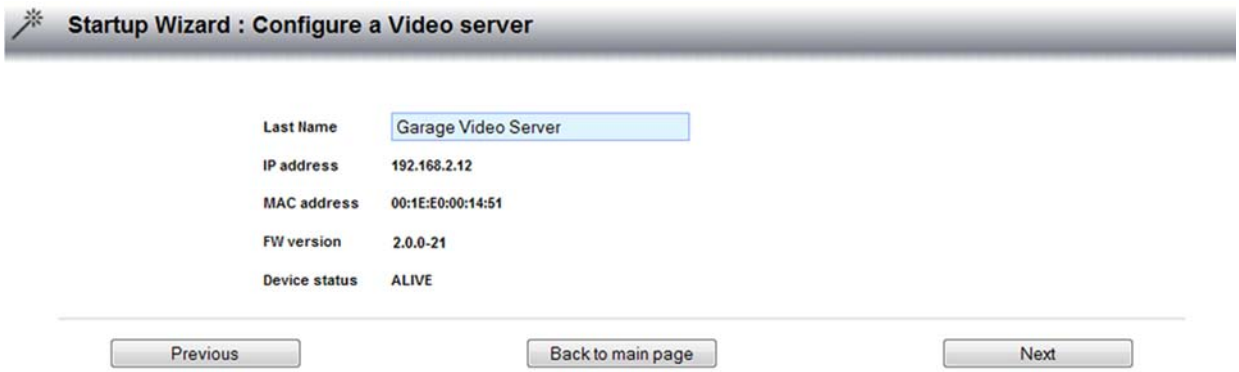


Figure 57: Startup Wizard – Configuration of a new Video Server

Name	Device identifier, required field. Max. length: 32 characters.
IP address	IP address automatically assigned by the system server to the reader
MAC address	Device unique physical address. Used to identify the devices during configuration.
FW version	Application software version of the Video Server.
Device status	Device status detected by the system; the status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**

Table 25: Video Server - Identification data

8.3.8 RTSP CAMERAS CONFIGURATION

Like for other devices, configuration starts by selecting the new camera from the list of new detected "devices" and pressing the "Next" button to access the detail page where to enter the required configuration data. Table 26: RTSP cameras - ID data describes the required data and their meaning.

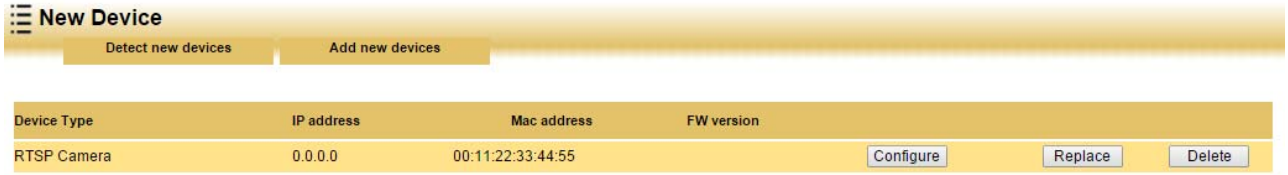


Figure 58: Startup Wizard: List of new RTSP cameras

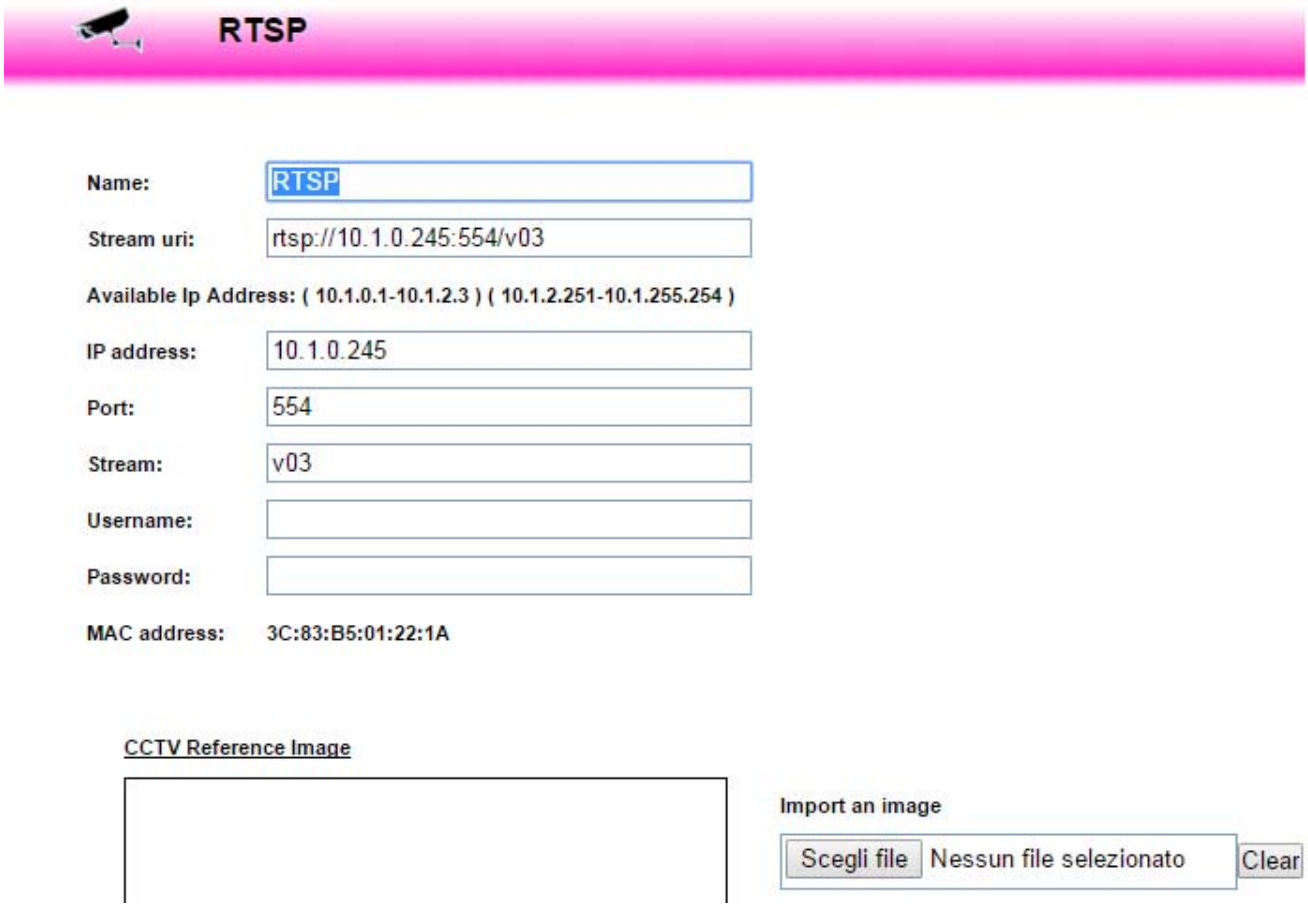


Figure 59: Startup Wizard – New RTSP camera configuration

Name	Device ID, required field. Max length: 32 characters.
Stream uri:	Complete URI of the video stream This field cannot be edited and is automatically generated based on the data entered in the IP address, Port and Stream fields.
IP address	IP address manually assigned to the camera by the installer. The address must be outside the dhcp range set on the "SRV CONFIGURATION" page.

	An information note above this field shows the range of available addresses.
Port	RTSP flow port. It should always be set to 554.
Stream	Suffix configured during the camera installation phase. This string can be viewed and/or edited in the camera control panel.
Username	User name set during the camera installation phase.
Password	Password set during the camera installation phase.
MAC address	Device unique physical address. Used to refer to individual devices during their configuration process.
CCTV reference image	It is possible to associate each device to an image that will be viewed next to the name of the device on the IP monitor in the list of available CCTV cameras.

Table 26: RTSP cameras - ID data

8.3.9 IP KEY READER CONFIGURATION

Also in this case, the procedure is the same: select from the list the devices to be configured and press the button “Next” to go to the detail page, where the required configuration data must be entered. The Table 27 describes the required data and its meaning.

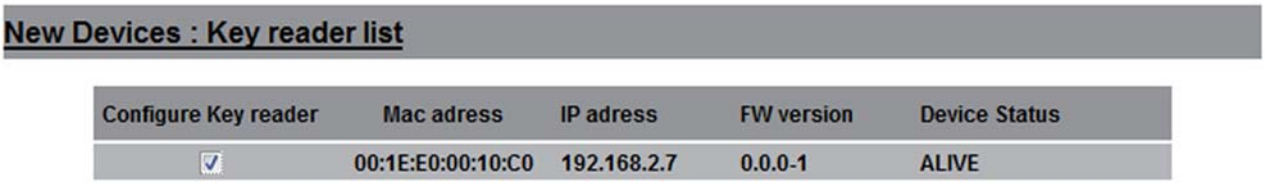


Figure 60: Startup Wizard – List of new IP key readers

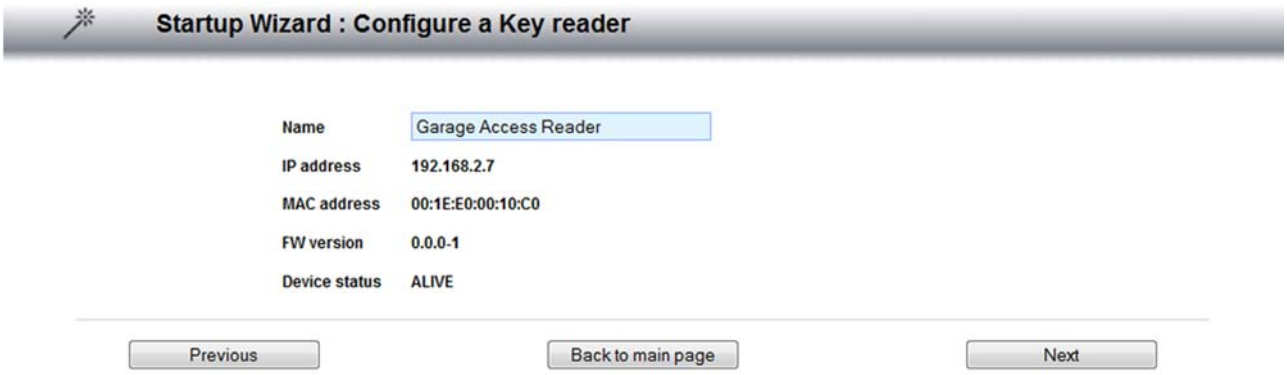


Figure 61: Startup Wizard – Configuration of a new IP key reader

Warning: in order to activate the electrical lock of the passage to be controlled, the “Door” must be added to the IP Key reader. This operation must be manually performed, as shown in the chapter “Ipervoice Devices advanced Configuration - IP Key Reader” on page 137.

Name	Device identifier, required field. Maximum length: 32 characters.
IP address	IP address automatically assigned by the system server to the key reader.
MAC address	Device unique physical address. Obtained to identify the devices in the configuration phase.
FW version	Application software version of the IP key reader.
Device status	Device status detected by the system; the status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**

Table 27: IP Key reader – identification data

8.3.10 SPECIAL DECODER CONFIGURATION

After configuring the IP key readers, press the button “Next” to access the list of the new special decoders detected in the system. Select from the list the devices to be configured and press the button “Next” to access the detail page to enter the required configuration data. Required data and their meaning are summarized in Table 28 on page 117.

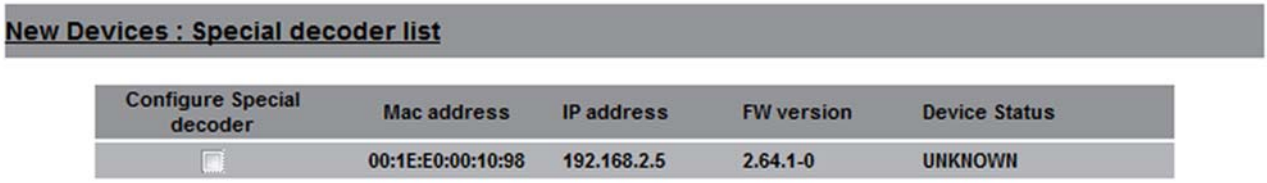


Figure 62: Startup Wizard- List of new Special decoders

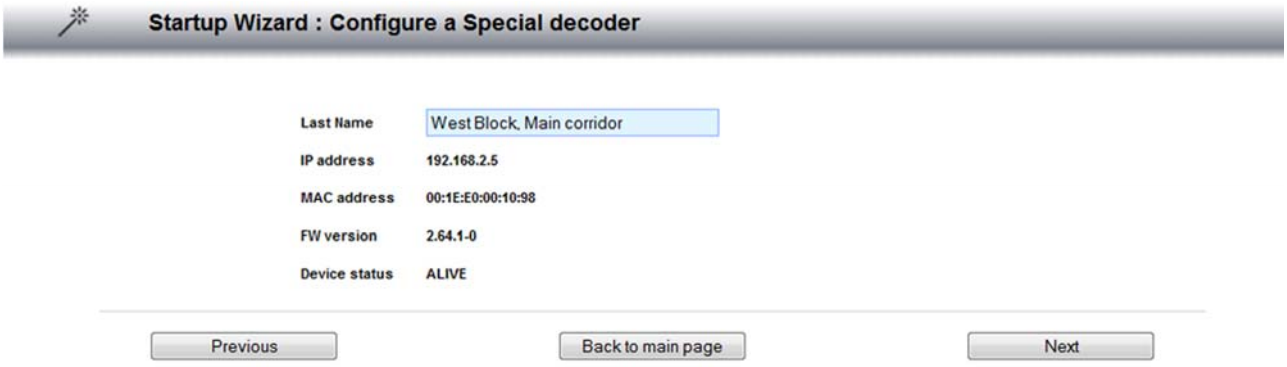


Figure 63: Startup Wizard – Configuration of a new Special Decoder

Name	Device identifier, required field. Maximum length: 32 characters.
IP address	IP address automatically assigned by the system server to the special decoder.
MAC address	Device unique physical address. Used to distinguish devices during configuration procedure.
FW version	Application firmware version of the special decoder.
Device status	Device status detected by the system; the status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**

Table 28: Special Decoder – configuration data

8.3.11 END OF CONFIGURATION WITH STARTUP WIZARD

By clicking the button “Next page”, the StartUp Wizard displays the page that informs the user that the guided configuration has been completed. By pressing the button “Back to main page”, the browser goes back to the main page. Here, it will possible to access to the single devices to complete the configuring operations, as previously described.

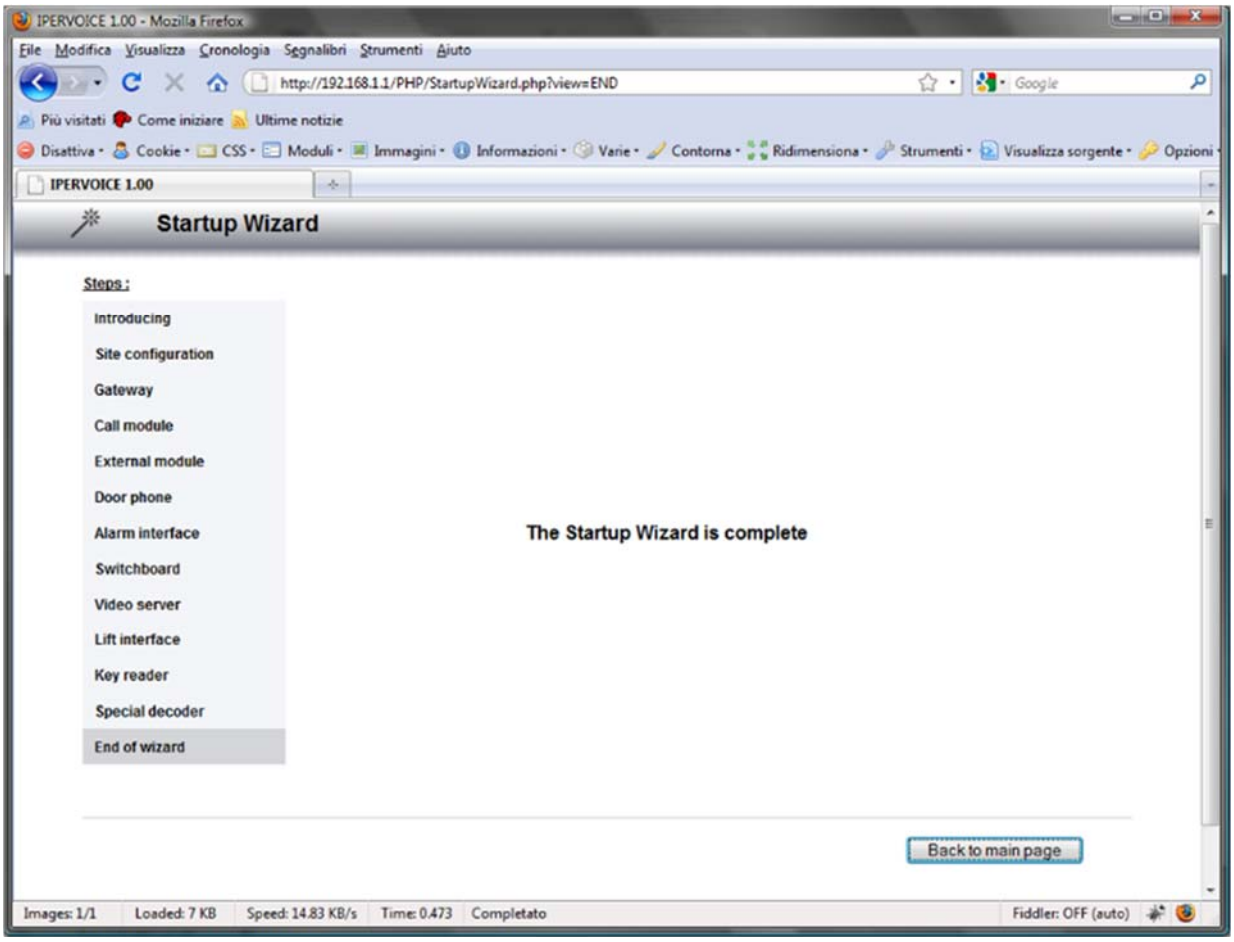


Figure 64: Startup Wizard – End of configuration

9 IPERVOICE DEVICES ADVANCED CONFIGURATION

All the Ipervoice devices have some “advanced” configuration parameters, that must be explicitly set for the correct operation of the system. This chapter describes these parameters showing, for each device, its meaning and programming mode.

9.1 IP/CAT5 GATEWAY

Differently from other devices, described later, IP Gateways (1039/50) do not need any direct configuration of further parameters in order to operate correctly, except if the second audio channel is installed in the building riser. To add this feature, access the configuration page by selecting the desired module from the devices tree, as shown in Figure 65.

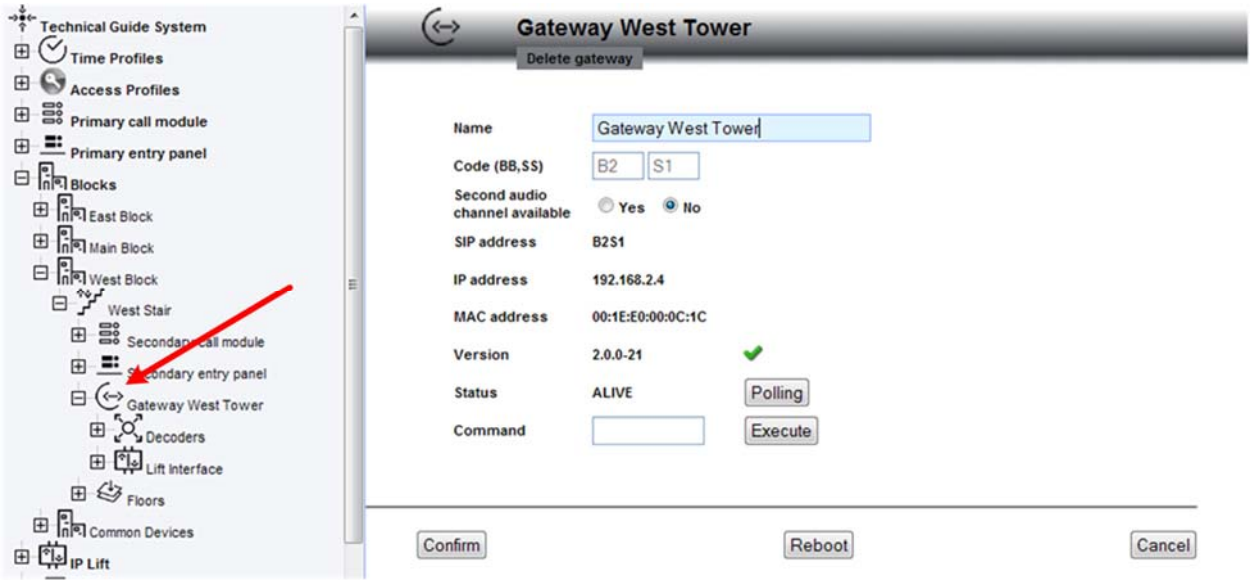


Figure 65: Advanced Configuration - IP/CAT5 Gateway

The presence/absence condition of the second audio channel is defined by the setting of the option near “Second channel available”. Select the desired option, press the button “Confirm” to save the change.

Remember that, as described in the paragraph “Audio channel management on the riser column (Choice methods)” on page. 48, in order to make the second audio channel available, a telephone pair must be installed on the riser, or use one of the CAT5 cable pairs, from the IP/CAT5 column gateway to the first 4-user decoder. The pair starts from this decoder and connects the next decoder and so on.

Warning: the change of this parameter requires to program again, via Bluetooth, all 4-user decoders 1039/34 present on that riser column.

9.2 IP CALL MODULE

IP call modules (such as 1039/13 or 1039/18) have a large number of parameters that can be changed by the installer. To access to the parameters configuration page, select the desired module in the devices tree (Figure 66).

Warning: if the operations concern a main module, it must be searched in the section "Primary Call Module", in the first tree level; if the operations concern a secondary module, it must be searched in the respective block/stair, in the item "Blocks".

The advanced configuration parameters are grouped in three different sections: the **1st**, only present in primary modules, used for the association of one or more residents directories; the **2nd**, dedicated to the call module user interface and the **3rd**, used to deal with the IP special decoders (1039/81).

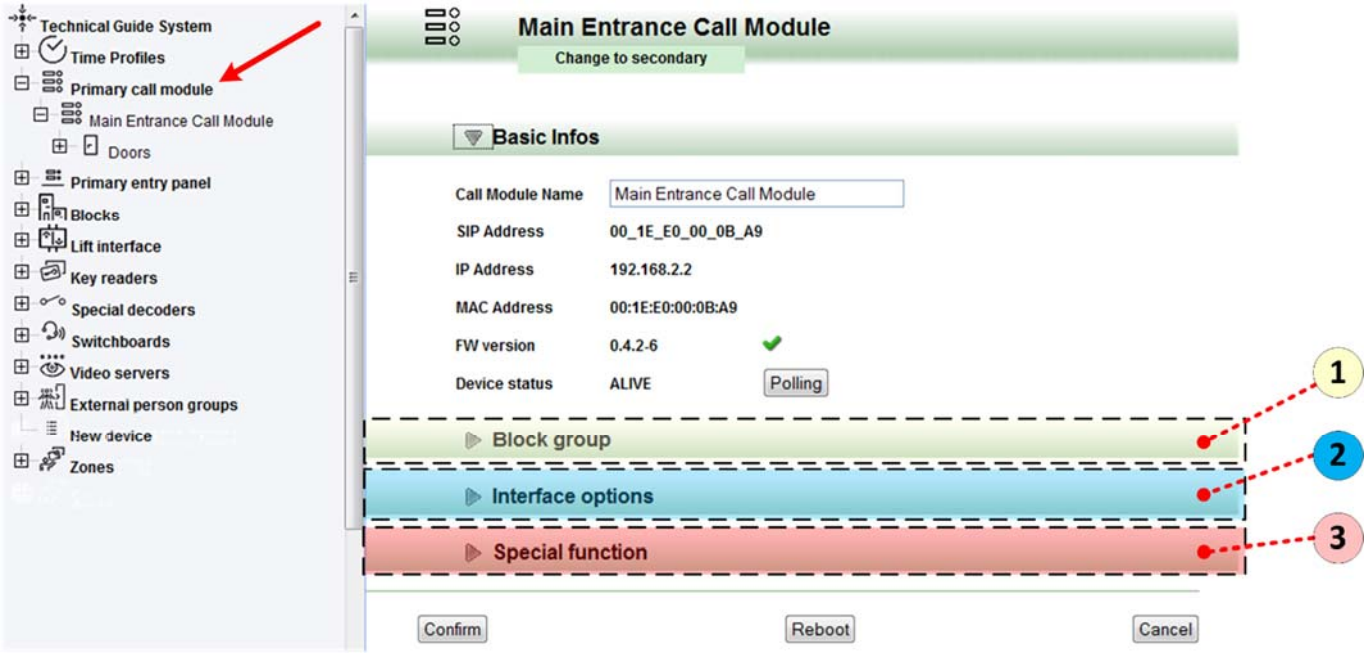


Figure 66: Advanced configuration – IP Call Module

9.2.1 BLOCK GROUP

As already mentioned, this section can be configured only if the call module is specified as Main; it allows the rules used by the system to assign residents address books to system call modules to be defined[35].

In a large complex there may be thousands of residents, so call modules must manage only their specific part of the residents directory. A practical example can be useful to explain this:

In the complex there are three buildings called "*East Block*", "*Main Block*" and "*West Block*". The visitors of the ***East Block*** come in through the gate controlled by the call module "*Primary East Call Module*", the visitors of the other two buildings go through the door managed by the module "*Primary Main Call Module*". In this scenario, the ***Primary East Call Module*** must have access to ***East Block*** residents address book, but the ***Primary Main Call Module*** only to ***Main Block*** and ***West Block*** address book.

To associate a call module to its respective buildings, as shown in the example, in the section "*Block Group*" (Figure 67), select the desired item/s and click the button "Confirm" on the bottom side of the page. All the residents associated to the apartments included in the selected buildings (Blocks) will be automatically accessible for the call module and for the visitors that will use this module.

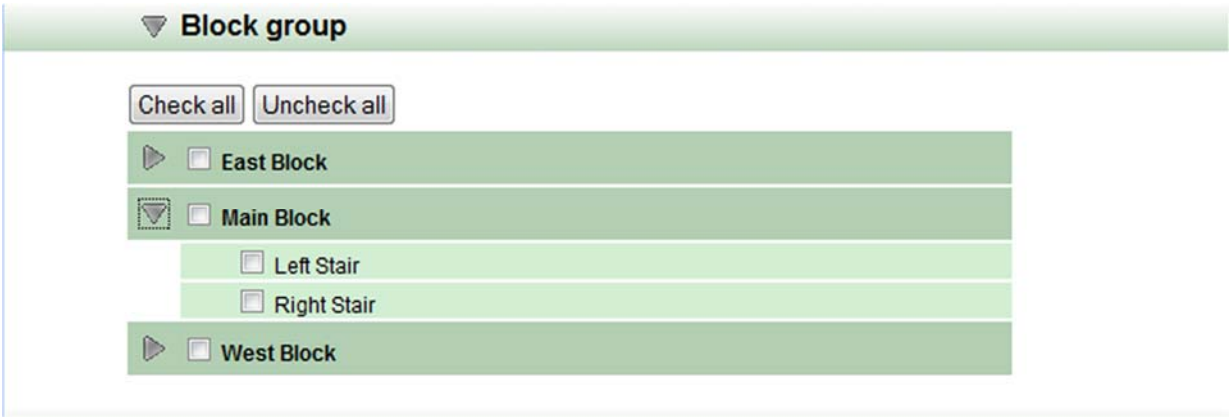


Figure 67: Configurazione Avanzata – Gestione gruppi sui Moduli di Chiamata Principali

Note: for buildings with more than one stair, the residents of a specific stair can be associated to a call module.

[35] In the IPervoice system, contrary to the usual procedure, the resident names are associated to the apartments and so the "residents address books" are block and stair lists. For further details concerning the resident names/apartments association, see the paragraph "Resident Management" on page 207.

9.2.2 REMARKS ABOUT SECONDARY CALL MODULES

The "Secondary" call modules are automatically configured by the system in order to show only the names of residents associated to the competence Block or Stair. If the visitor knows the code (logic/topological), he can call any system apartment, in any Block – Stair.

For this reason, a resident of Stair A, called by the Secondary Call Module of Stair B, can also open the door of Stair B. In some systems, this feature is not accepted and so it is possible to disable this function with a suitable setting on the secondary call module configuration page.

The system allows to set two call restriction levels, according to needs:

- **Call restricted to Block**
- **Call restricted to Stair**

By selecting the item from the pull-down menu "***Call restricted to***" as shown in Figure 68, calls are restricted according own needs.

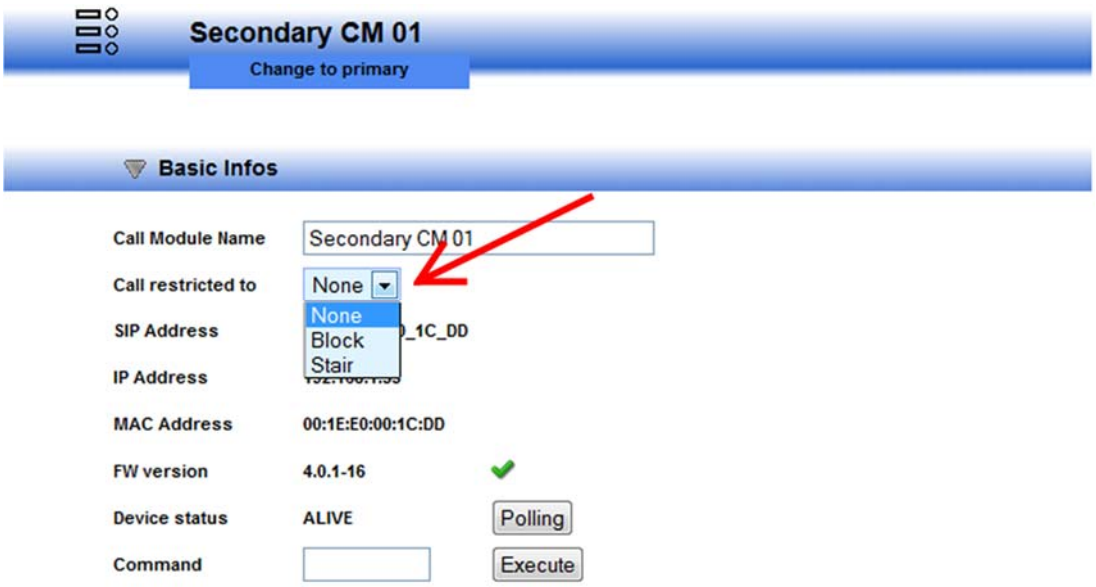


Figure 68: Advanced Configuration – Secondary Call Module call restriction

9.2.3 INTERFACE OPTIONS

This section is dedicated to the configuration parameters setting of the IP call modules user interface. The Figure 69 shows on the Frontend the dedicated section, after it has been expanded with the button placed beside “Interface options”.

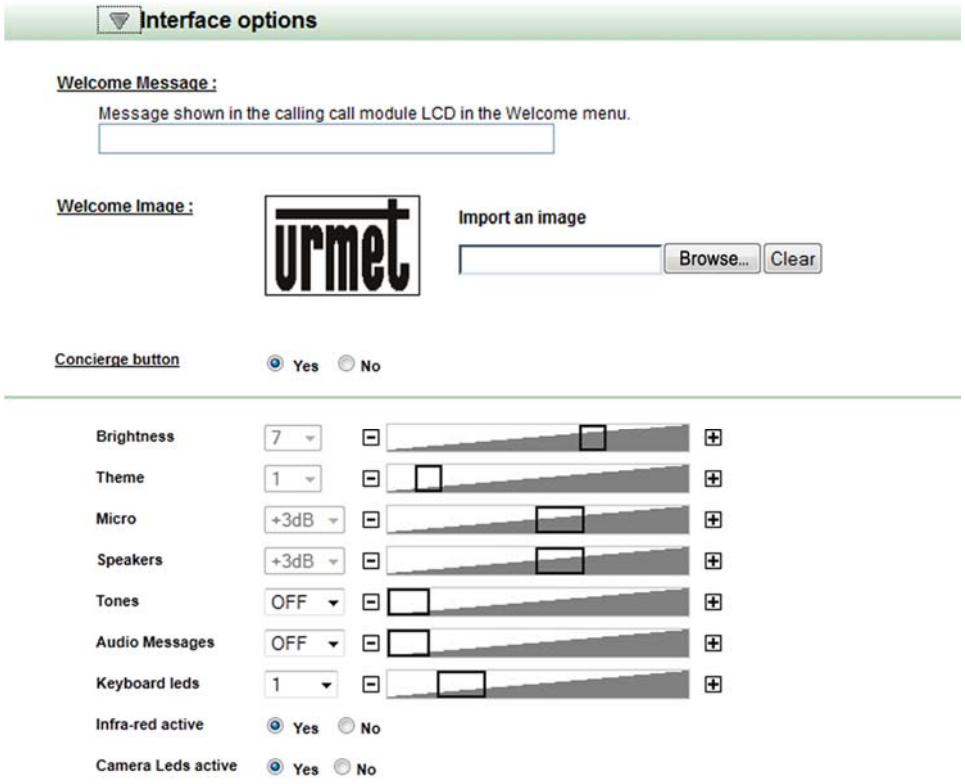


Figure 69: Advanced Configuration – User interface options for the IP Call Module

The section is split into two parts: the first one is dedicated to the user interface customization, the second one concerns the user interface operating settings. The Table 29 describes all the information.

Parameter	Meaning	Default value
Welcome Message	Text message shown by the call module in the welcome display. ***Max. dimension: 60 characters***	None
Welcome Image	Image in png format [36] (Portable Network Graphics) shown by the call module in the welcome display. ***Image max. size: 110 x 170 pixel***	Urmet Logo
Concierge button	Enabling the call to the competence area switchboard. ***Allowed values: Yes, No***	Yes

[36] To convert from other graphic formats, as jpeg, gif or bmp to png, it is possible to use the application "Paint" provided with Windows operating systems, or other similar utilities.

Brightness	Camera brightness, it cannot be changed ***min: 0, max: 10***	7
Theme	Identifier of colour theme used by the user interface, it cannot be changed	1
Micro	Microphone audio level, it cannot be changed. ***Available values: -5dB, -3dB, 0dB, +3dB, +4dB, +5dB***	+3dB
Speakers	Loudspeaker audio level, it cannot be changed. ***Available values: -5dB, -3dB, 0dB, +3dB, +4dB, +5dB***	+3dB
Tones	Key-click volume. ***Allowed values: OFF, -5dB, -3dB, 0dB, +4dB +3dB, +5dB***	OFF
Audio Messages	Audio messages volume. ***Allowed values: OFF, -5dB, -3dB, 0dB, +4dB +3dB, +5dB***	OFF
Keyboard leds	Keyboard backlight intensity ***Allowed values: OFF, 1, 2, 3, 4, 5***	1
Infra-red active	User presence detection with embedded infra-red sensor enabling. ***Allowed values: Yes, No***	Yes
Camera Leds active	Camera led illuminator enabling. ***Allowed values: Yes, No***	Yes

Table 29: Advanced Configuration – Meaning of "interface options" parameters

9.2.4 SPECIAL FUNCTIONS

Almost all the devices that generate an event after a status change, an alarm or an action, can activate a command for one or more system outputs. These outputs are usually on the IP special decoders (1039/81).

Figure 70: Advanced configuration – Special Decoder Functions that can be associated to the IP call module

Each command function can have two operating states:

Not assigned	Default condition, the function has no effect on the system outputs.
Outputs	The function is active: if it occurs, the outputs selected from the list "Output List" are activated (Figure 70). The available command modes are the following: • **ON**: when the event occurs, the output is activated • **OFF**: when the event occurs, the output is deactivated • **TOGGLE**: when the event occurs, the output changes its status **Warning:** the options ON and OFF are valid only if the output on the command device has been configured in bistable mode

The special functions that can activate a command event for the configured outputs are the following:

Drive output on call	The system performs the command on the configured outputs when a video door phone call occurs.
Drive output on Coercion Alarm	The system performs the command on the outputs when a hold-up alarm is generated.
Drive output on Tamper Alarm	The system performs the command in case of call module tampering (available on 1039/18 and 1039/13) (e.g. opening attempt).
Drive output on Special Code	The system performs the command if a "special code" is entered on the call module keypad.

9.2.5 DOORS

The IP call modules can manage two on-board outputs, which are used to open for example a pedestrian door or control automation equipment. To enable the call module to perform these operations, access to the Frontend function in order to add the doors to be controlled. This operation must be performed for each call module that must be enabled to use these functions. To access to these functions, expand in the devices tree the concerned call module[37] and select the item "Doors". The Figure 71 shows the doors list before and after the configuration.

[37] The operation must be performed both for the main call modules included in the item "Primary call modules" and for the secondary ones, included in the related item "Blocks".

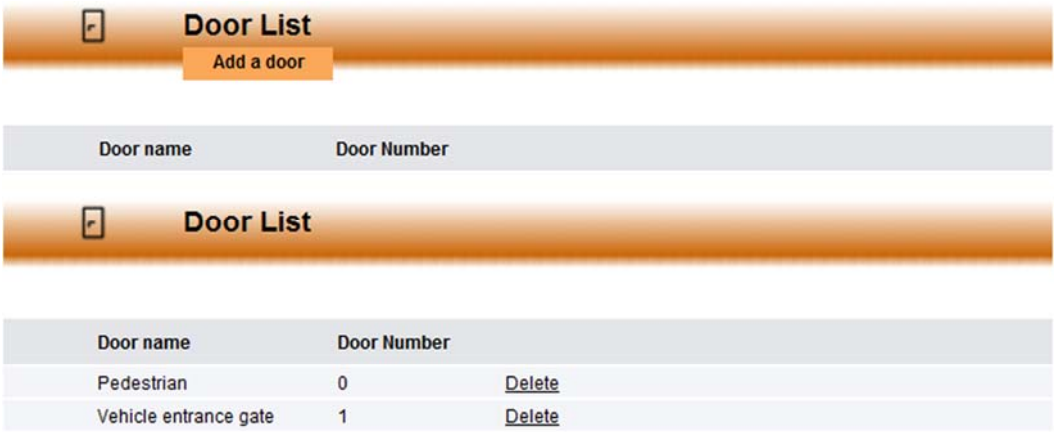


Figure 71: Advanced configuration – List of doors managed by the IP Call Module

By pressing the button "Add a door", access to the page where the configuration data can be entered (Figure 72 – Main door; Figure 73 - Vehicle entrance); the installer has two options:

- Enter the required data: this is the typical case, the system will create a new door with the data entered by the user
- Press the button "Use existing door": this case is used in case of advanced functions dedicated to the access control. In particular, it is used if there are zones where it is necessary to have entry and exit doors sharing the same control unit, that is the call module output or the IP key reader output.

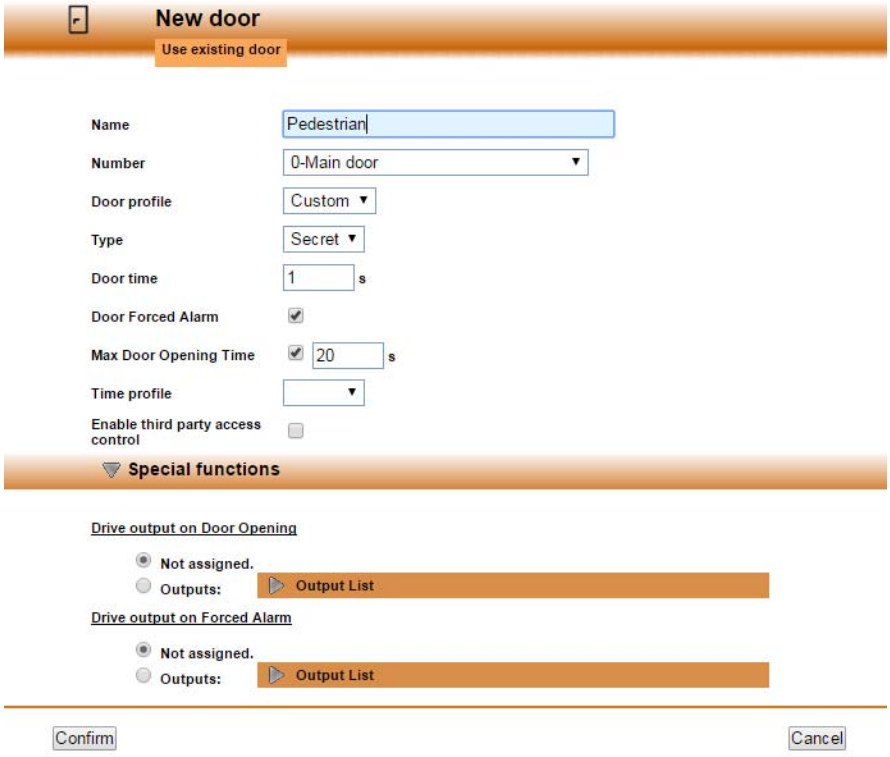


Figure 72: Advanced configuration – Adding a new pedestrian door to the IP Call Module

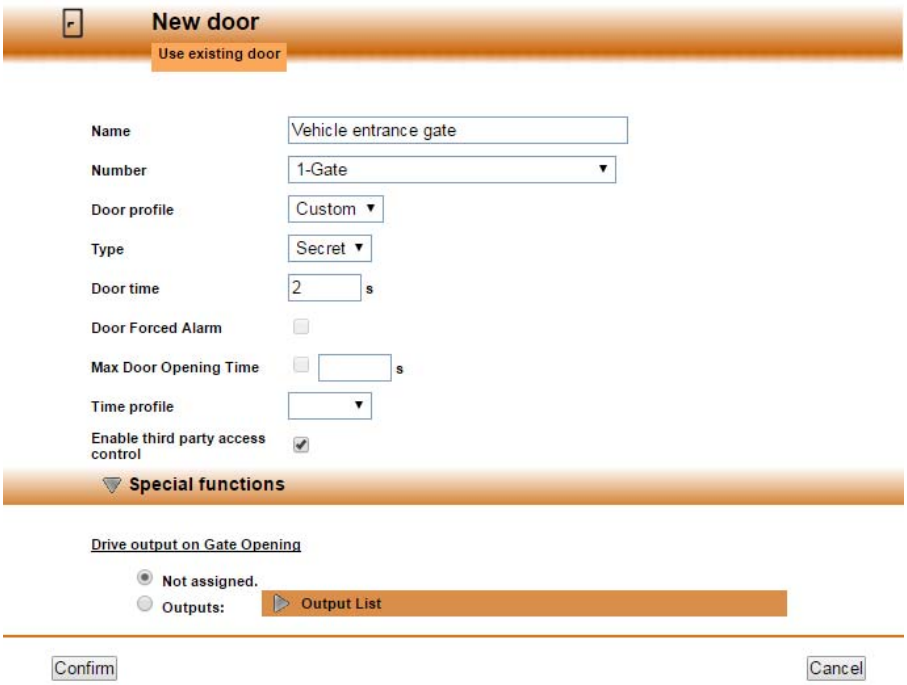


Figure 73: Advanced configuration – Adding a new vehicle entrance gate to the IP Call Module

Name	Door identifier, alphanumeric required field. Maximum length: 32 characters.
Number	Number of the door of the call module. The value can be selected from a pull-down menu; the available values are: **0-MainDoor**, **1-Gate**. **Warning:** the door number 0-MainDoor must be used to activate a pedestrian door electrical lock (terminal pins SE+/SE- if capacitive type or terminal pins C/NO/NC if the call module relay is used). The door number 1-Gate is used to open a vehicle entrance gate (terminal pins SE2/SE2). This opening must always be performed by an automation equipment control unit dedicated to this purpose. In no case the opening must be directly activated.
Door Profile	Selection of door profile (if available). The value can be selected from a pull-down menu. For information about door profile definition refer to chapter “Advanced functions configuration - Door Profiles” on page 224. Default value: **Custom**.

Type	Type of door opening. The value can be selected from a pull-down menu, the available values are: • **Secret:** the apartment station door lock release button will only activate the electrical lock if the apartment is in audio conversation or in video connection with the call module, or has been called and is waiting to be answered. • **Free:** if the apartment station door lock release button is pressed, the call module electrical lock can be activated if the call module is configured as main or is configured as secondary and the user belongs to the same column as the call module.This feature is typically used in the secondary call. Default value: **Secret**.
Door Time	Lock relay time. Default value: 1 second. Each door is independent, so different values can be assigned to each one. **min: 1 sec, max: 999 sec** Default value: **1 sec**
Door Forced Alarm	If selected, this means that the door generates an alarm if it has been forced. Default value**: Not selected**. **Warning:** to use this function, connect an open door sensor to the call module.
Max Door opening Time	It defines the max. time of door opening, after which a door open signal is generated. **Min: 1 sec, max: 999 sec** Default value**: not enabled**. **Warning:** to use this function, connect an open door sensor to the call module.
Time Profile	Selection of Time Profile assigned to the passage (if available) (See chapter “Time Bands” on page 64). The value can be selected from a pull-down menu which contains other profiles previously programmed. For information about time profiles definition, refer to chapter “Advanced functions configuration - Time Profile Door” on page 218. Default value: **No time profile applied**
Enable third party access control	If selected, this means that the door can be visualized and used in third party app configuration process. Default value**: Not selected**.

Table 30: Advanced configuration – Programming of IP call modules door

9.3 IP VIDEO DOOR UNIT (ENTRY PANEL)

IP Video door units, also called “Entry Panel” (1039/78), have the same functions as IP call modules previously described, but they have no graphic display and numeric keyboard. To access the configuration page, select the desired module from the devices tree, as shown in the following Figure 74.

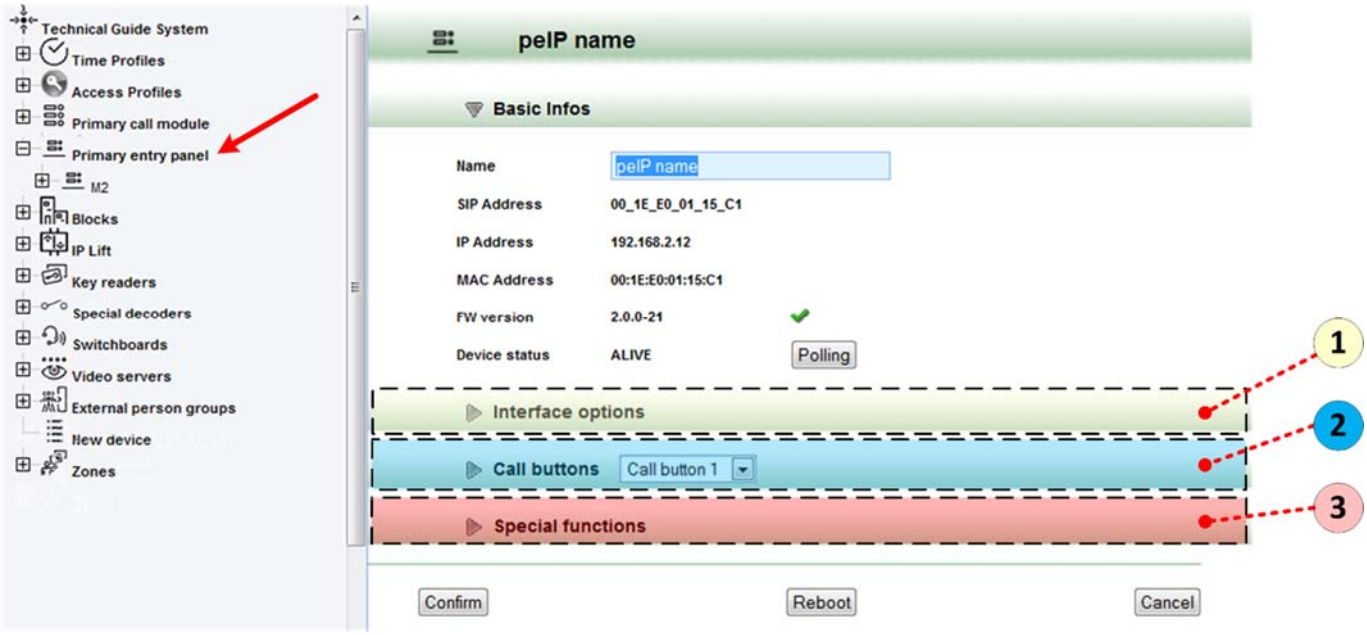


Figure 74: Advanced Configuration – IP Video Door Unit

Warning: If operations concern a main module, search for the desired module in the section "Primary entry panel" in the first level of the tree; if operations concern a secondary module, search for it in the belonging block/stair, in the item "Blocks".

As for IP call module, advanced configuration parameters are grouped into three different sections: the **1st** one, dedicated to the user interface of the video door unit, the **2nd** section used to assign "Call buttons" on the device and the **3**rd section, used to operate with IP special decoders (1039/81).

9.3.1 INTERFACE OPTIONS

This section is used to set configuration parameters of IP Video door unit user interface. The next one shows the dedicated section on the FrontEnd, when it has been expanded with the button near "Interface options".

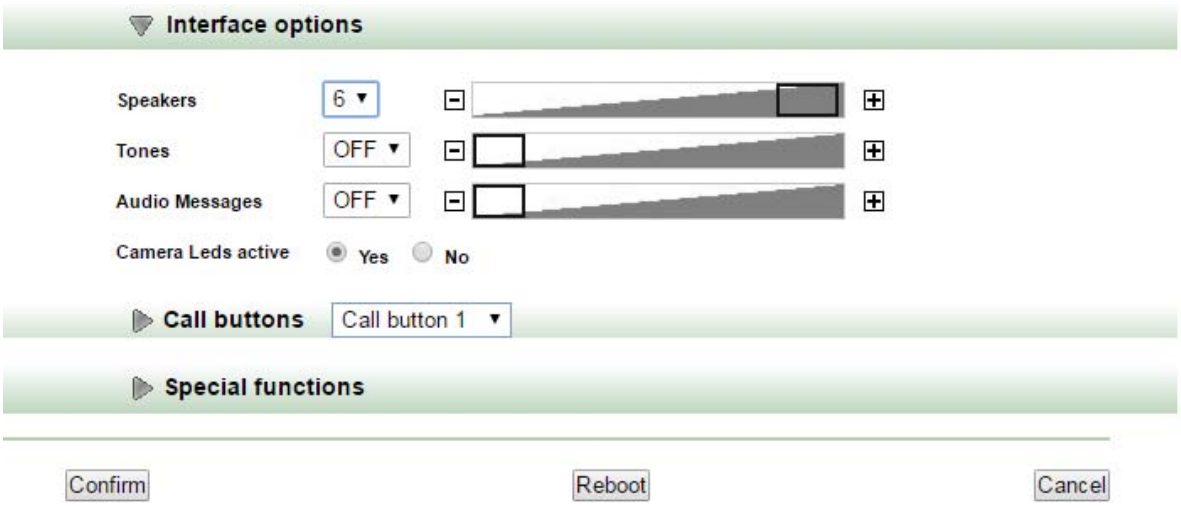


Figure 75: Advanced Configuration – Options of IP video door unit user interface

Table 31 describe information present in this section and respective values which can be changed.

Parameter	Meaning	Default value
Speakers	Loudspeaker audio level ***Available values: 1, 2, 3, 4, 5, 6***	6
Tones	Button tone volume ***Available values: OFF, 1, 2, 3, 4, 5, 6***	OFF
Audio Messages	Audio message volume ***Available values: OFF, 1, 2, 3, 4, 5, 6***	OFF
Camera Leds active	Enabling of camera led illuminator ***Available values: Yes, No***	Yes

Table 31: Advanced Configuration – Entry Panel – Meaning of "Interface Options" parameters

9.3.2 CALL BUTTONS

Each module 1039/78 is provided with 2 call buttons, that can be up to 32 max. by installing modules 1083/17. In order to associate the desired function to each button, select, from the pull-down menu in the section header, the button to be configured and expand the section “Call buttons” (Figure 76).

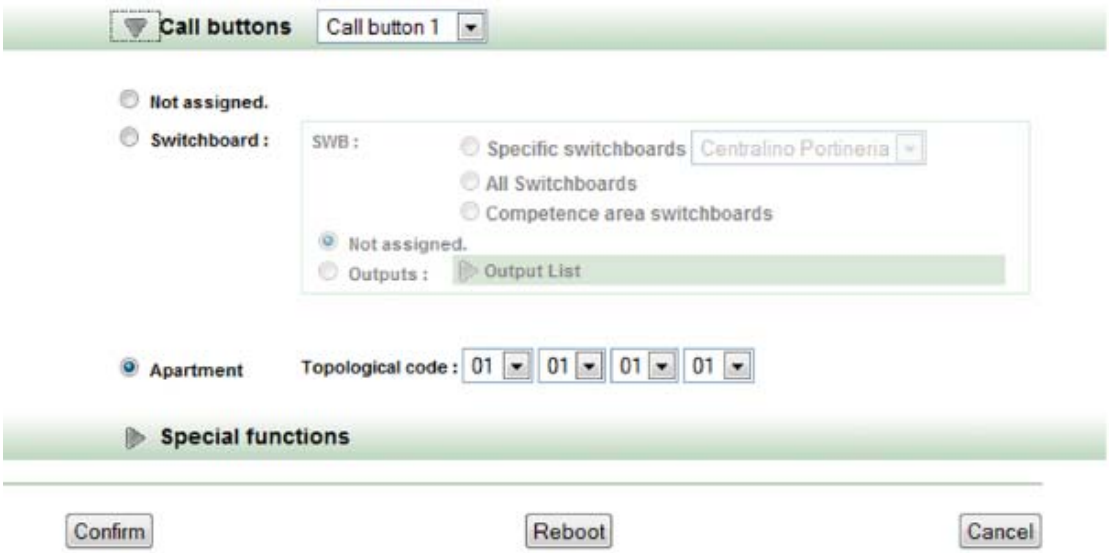


Figure 76: Advanced Configuration – Call Button setting on the IP video door unit

Table 32 describes call button configuration programming.

Call Buttons	The system executes the command configured when the call button, selected from the pull-down menu, is pressed. Available values are from **Call button 1** up to **Call button 34** max[38]
Not assigned	Default condition, when the button is pressed, the system doesn’t send any command.
Switchboard	This command is used to call a switchboard or activate special decoder outputs. For switchboards there are three different options: ➢ **Specific Switchboard** — select from the pull-down menu the switchboard to which the call must be sent ➢ **All Switchboards** — The call is sent to all switchboards ➢ **Competence area switchboards** — The call is sent only to switchboards which have competence in the apartment

[38] The max. number of available buttons depends on expansion modules 1083/17 installed on the IP video door unit.

Apartment	This is the most used function. In this case the call is sent to a special apartment. The selection is made by indicating the apartment topological code with the respective pull-down menus.

Table 32: Advanced Configuration - Call Button configuration parameters on IP video door unit

9.3.3 SPECIAL FUNCTIONS

Also the IP video door unit can send special commands when a specific event occurs, which in this case is linked to a call button press. The outputs which can be controlled are the IP special decoder ones (1039/81).

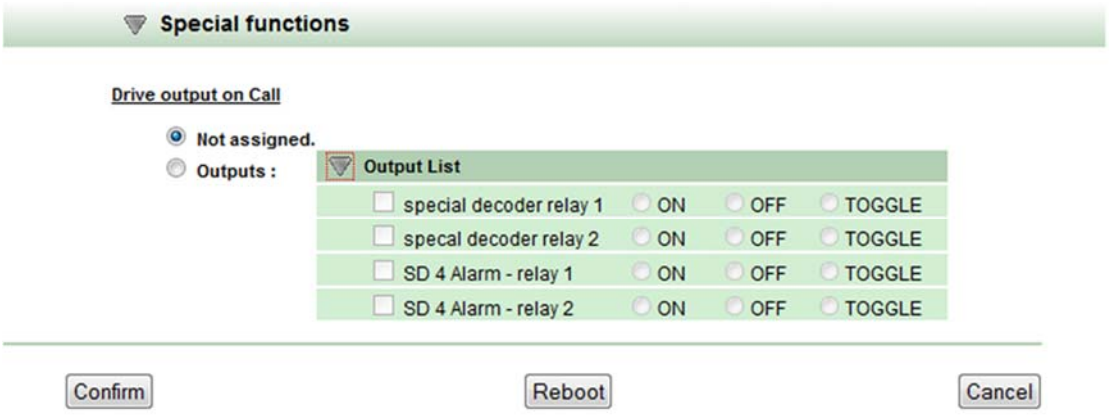


Figure 77: Advanced Configuration – Special Functions configuration on IP video door units

The available commands and respective configuration parameters are the following:

Drive output on call	The system executes the command on the configured outputs after a video door phone call.
Not assigned	Default condition, this function doesn't affect system outputs.
Outputs	The function is active: when it occurs, the outputs selected from the list "Output List" (Figure 77) are activated. Command modes can be: • **ON**: the output is activated when the event occurs • **OFF**: the output is deactivated when the event occurs • **TOGGLE**: when the event occurs the output toggles its status **Warning:** ON and OFF options are available only if the output has been configured in bistable mode

9.3.4 DOORS

Also the IP video door unit can command two doors (usually pedestrian door and gate) with the same modes and characteristics as the previously described IP call module. For programming procedures, see the paragraph 9.2.5 "Doors" on page 125. Figure 78 shows the mask used to configure passages on module 1039/78.

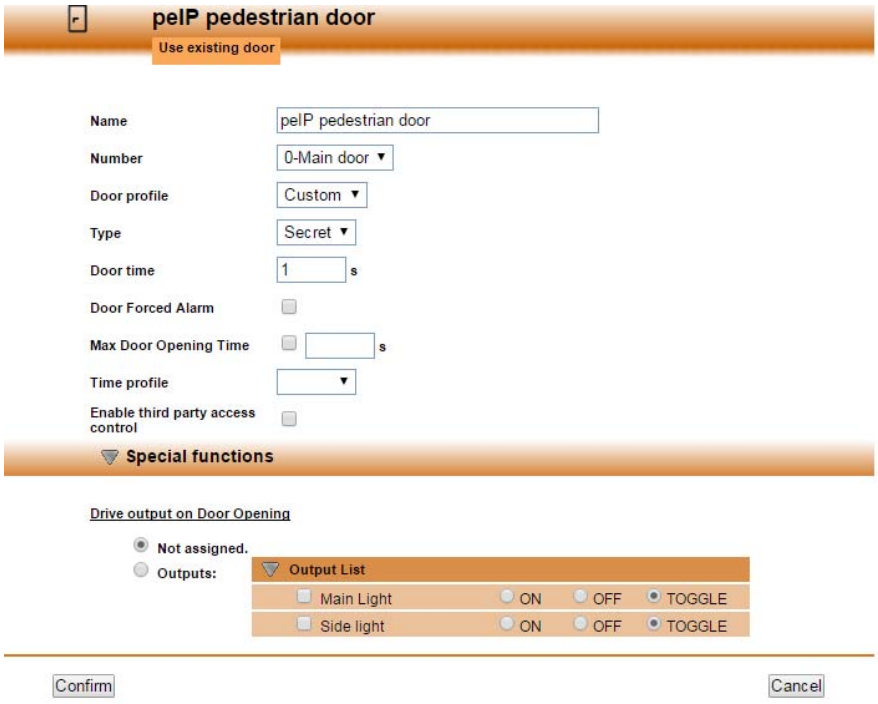


Figure 78: Advanced Configuration – Door programming of IP video door units

9.4 CONCIERGE SWITCHBOARD

The concierge switchboard advanced configuration parameters are split into two sections: the **1st**, where the "Competence Area" is defined, and the **2nd**, used to define the interactions with the IP special decoders (1039/81). Select in the devices tree the section "Switchboard", as indicated by the red arrow, choose the switchboard to be configured and access the page shown in Figure 79.

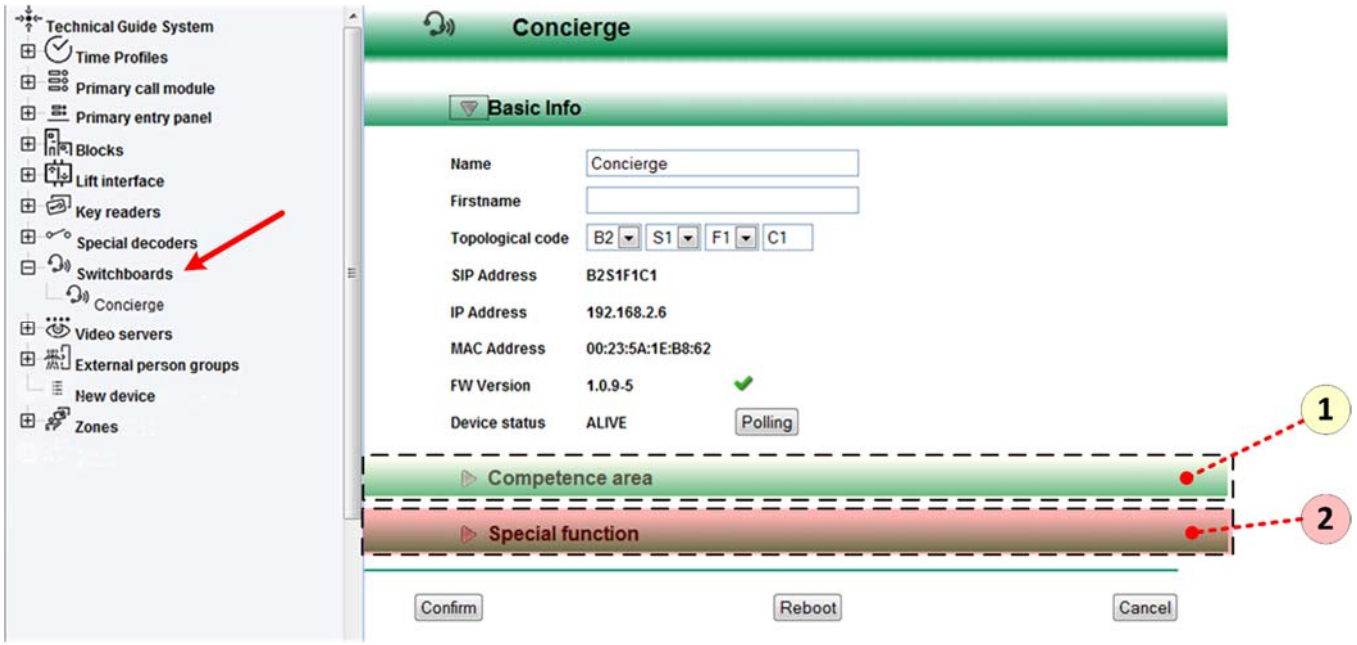


Figure 79: Advanced configuration – Concierge switchboard

9.4.1 COMPETENCE AREA

The competence area, as described in the chapter "Competence Areas" on page 55, allows a logic group to be defined, in which to add main and secondary call modules and apartments. These are now included in the switchboard competence area. The selection can be performed by single selection: only one apartment and so on, or by category groups: all the main call modules or all the devices of a single stair or a building. The section shown in Figure 80 is a useful example.

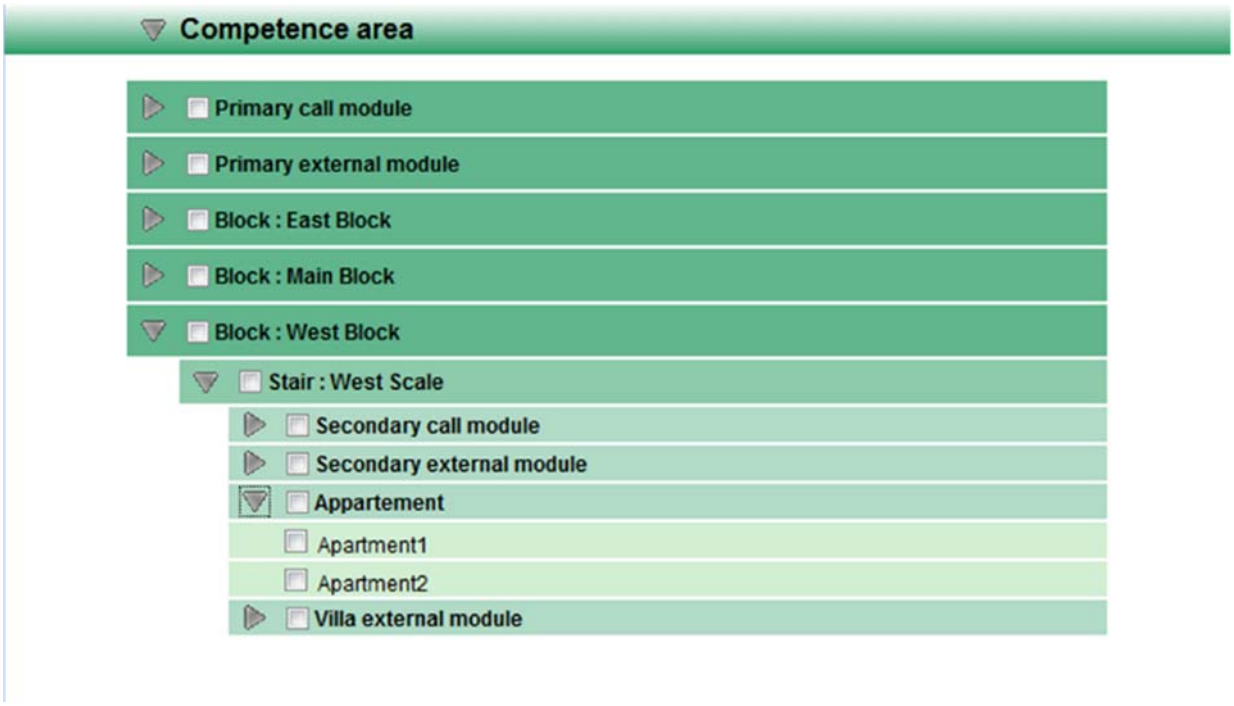


Figure 80: Advanced configuration – Management of concierge switchboard competence areas

9.4.2 SPECIAL FUNCTIONS

Also the switchboard can activate one or more system outputs, if an event occurs.

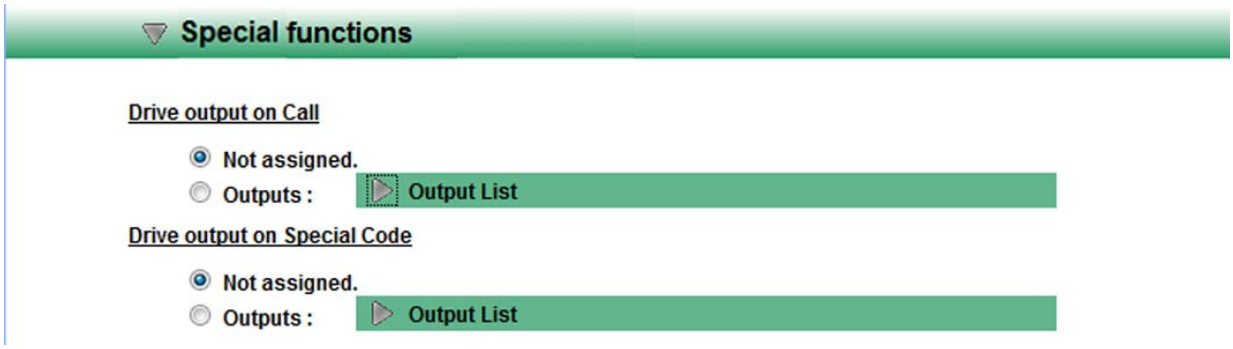


Figure 81: Advanced configuration – Special Decoder Functions that can be associated to the IP call module

The outputs operating modes are the same as those indicated in the section concerning the call module, but the special functions that can activate a command for the configured outputs are the following:

Drive output on call	The system executes the command on the configured outputs when a video door phone call occurs.
Drive output on Special Code	The system executes the command in case of a “special code” entered from the call module keypad.

9.5 VIDEO SERVER

In order to activate a video server (1039/69), enable on the device the controlled cameras; to perform this operation, access Ipervoice system advanced configuration. Select the item “Video Server” from the devices tree and choose the desired device, then press the button “Add a camera” near the item “Camera list”, as shown in Figure 82.

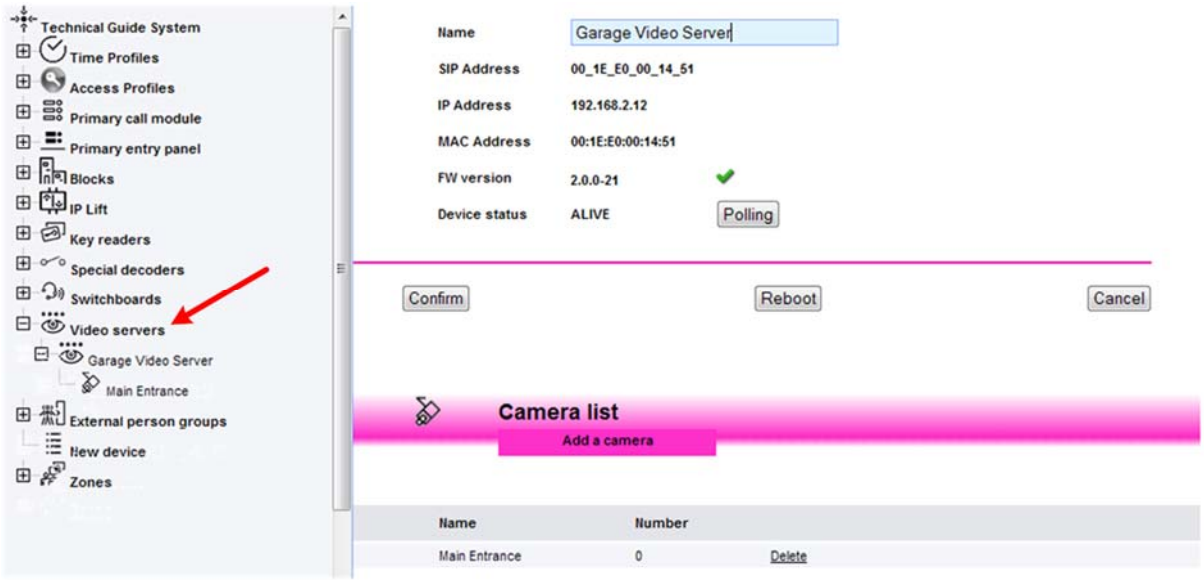


Figure 82: Advanced Configuration - Video Server

The next page (Figure 83), allows to assign a mnemonic name to the camera and select the video input which it is connected to. Table 33 shows meaning and values of each parameter.

Figure 83: Advanced Configuration – Adding a new camera to the Video Server

Name	Camera identifier, required alphanumeric field. Max. length: 32 characters. **Note:** it is suggested to assign to each camera an identifier which contains also the reference to the belonging module, so it will be easier to identify the camera during selection.
Number	Video input number. The value can be selected from the pull-down menu. Available values are: **0**, **1, 2, 3**.

Table 33: Advanced Configuration – Configuration data of the camera associated to the Video Server

9.6 IP KEY READER

The IP key reader has no direct parameters to be configured. As for the call module, the door controlled by the device must be added to the configuration to allow its opening. To add a door, after selecting the item “Key Readers” and the desired device from the devices tree, click the button “Add a door”, in the upper side of the page (Figure 84).

Figure 84: Advanced configuration – IP key reader

Setting and entry modes are the same as those described in the chapter “Ipervoice Devices advanced Configuration - IP Call Module, Doors” on page 125.

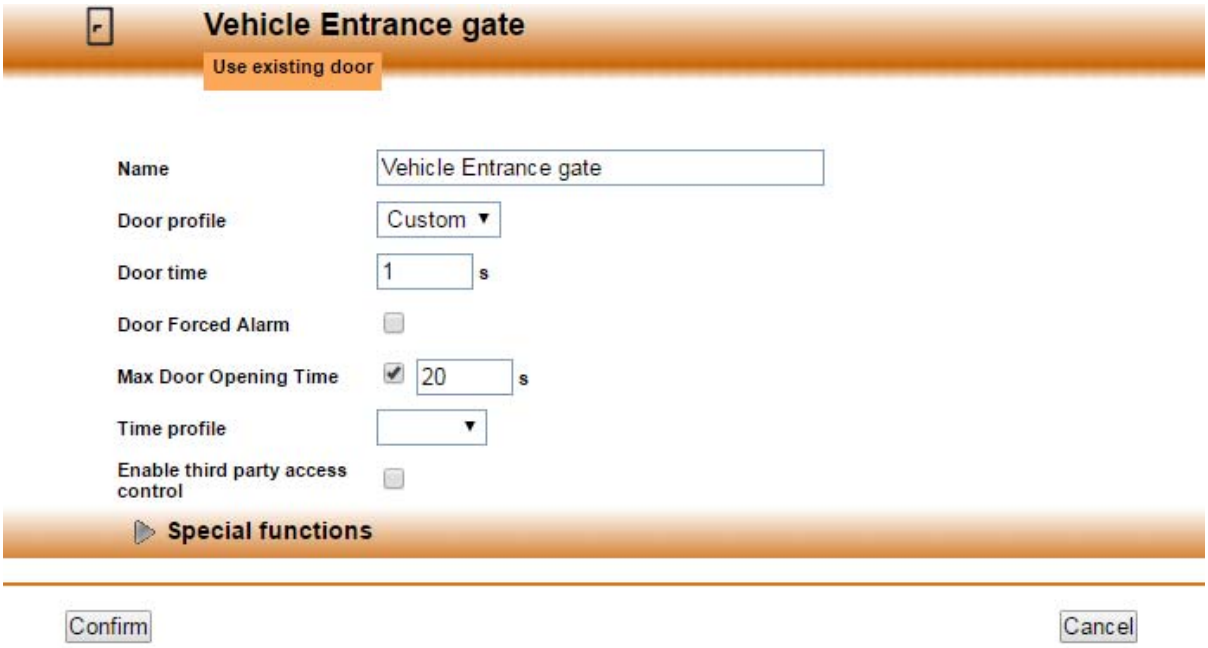


Figure 85: Advanced configuration – Adding a new door to the IP Key Reader

warning: the relay output of 1039/82 can directly drive an electrical lock, but if the relay is used to open a vehicle entrance gate, for security reasons, the command must always be carried out by an automation equipment control unit dedicated for this purpose. The gate opening must never be directly activated by the relay output.

9.6.1 SPECIAL FUNCTIONS

The special command performed by the IP key reader is the following:

Drive output on Door Opening	The system executes the function on the configured outputs when the door lock release command is sent (using the proximity key or the "Exit switch" input).

9.7 ADVANCED ACCESS CONTROL ON IP NETWORK (IP MODULES)

The Ipervoice has two more devices, in addition to the IP key reader described above, which can be used to implement an access control system with superior features. In brief, each functional unit consists of a controller connected to the Ipervoice IP network (IP Module), and a door control unit (PIO Module). The latter can manage up to four doors and four proximity readers. The main functions are:

- 12 Vdc power with possibility of installing backup battery in case of blackouts
- Control unit on IP network with local key and access profile database
- Internal clock for autonomously managing access time profiles
- Local storage of access ledger
- Control of up to four doors which can be connected to the IP Module on the bus RS485
- RFD MIFARE proximity readers[39]

From the Ipervoice Frontend point of view, each functional unit is configured via the IP Module. To access configuration after having added the device to the system using the same procedure used for all the other IP devices, simply select “IP Modules” on the Devices Tree and click on the required device to select it: the page like the one shown below will appear (Figure 86).

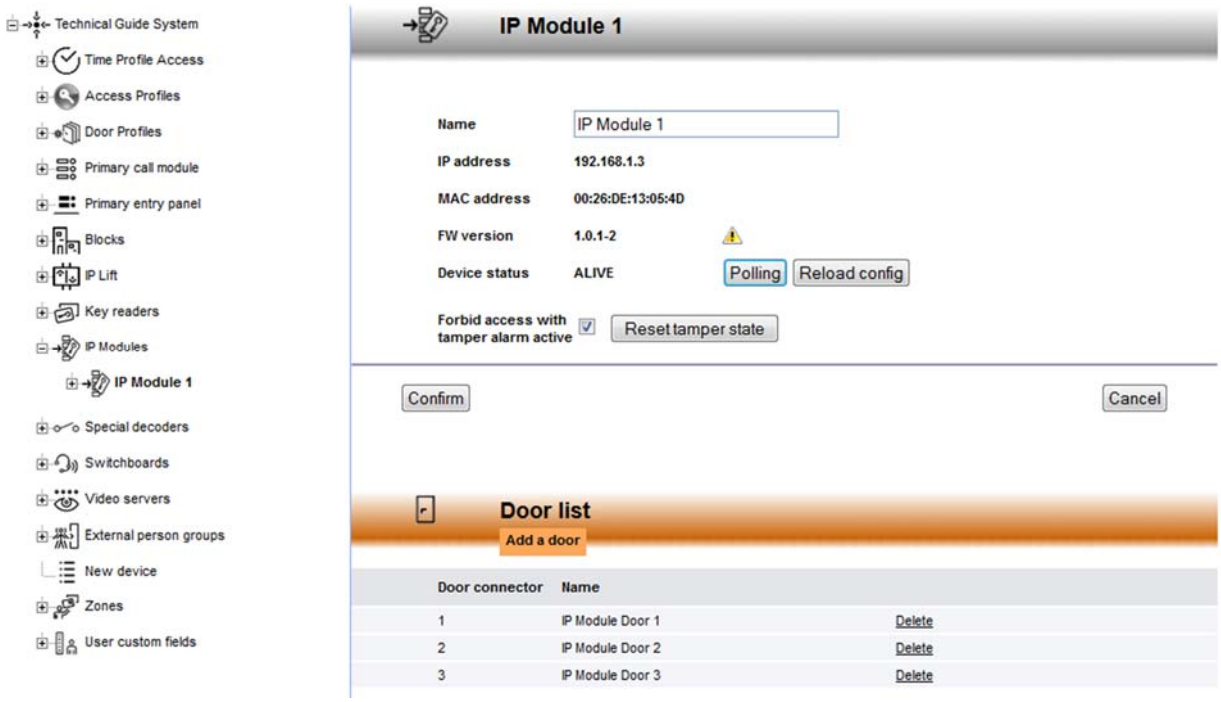


Figure 86: Advanced Configuration – IP Modules

[39] MIFARE is one of the most common contactless smart card in the world. It is based on the ISO 14443 standard, type A (passive RFID at 13.56 MHz).

The meaning of the various available fields is shown in the following table.

Name	Device ID, mandatory field. Maximum length: 32 characters.
IP address	IP address automatically attributed by the system server to the IP Module.
MAC address	Univocal physical address of the device. This is used to discriminate the devices from one another during configuration.
FW version	Application firmware version installed on the device.
Device status	Operating state, detected by the system. The possible states are: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD.**
Forbidden access with tamper alarm active	In case of tamper alarm detected by the IP Module, opening of the door is deactivated until the device is reset by the operator. Default setting: **Selected.**

The following buttons are provided in addition to the typical “Confirm”, “Cancel” and “Polling”, which behave as seen for the other devices:

- “**Reload config**” this is used to download the configured key, time profile and access database to the IP module.
- “**Reset Tamper State**” this resets the tamper alarm on the device to restore door control operation.

9.7.1 ADDITION OF A NEW DOOR

The doors to be controlled can be added by means of the control unit. Each device can manage up to four in entirely independent manner. To add a new door, press “Add a door” in the “Door list” section (Figure 86). A page similar to the one shown in Figure 89 will open.

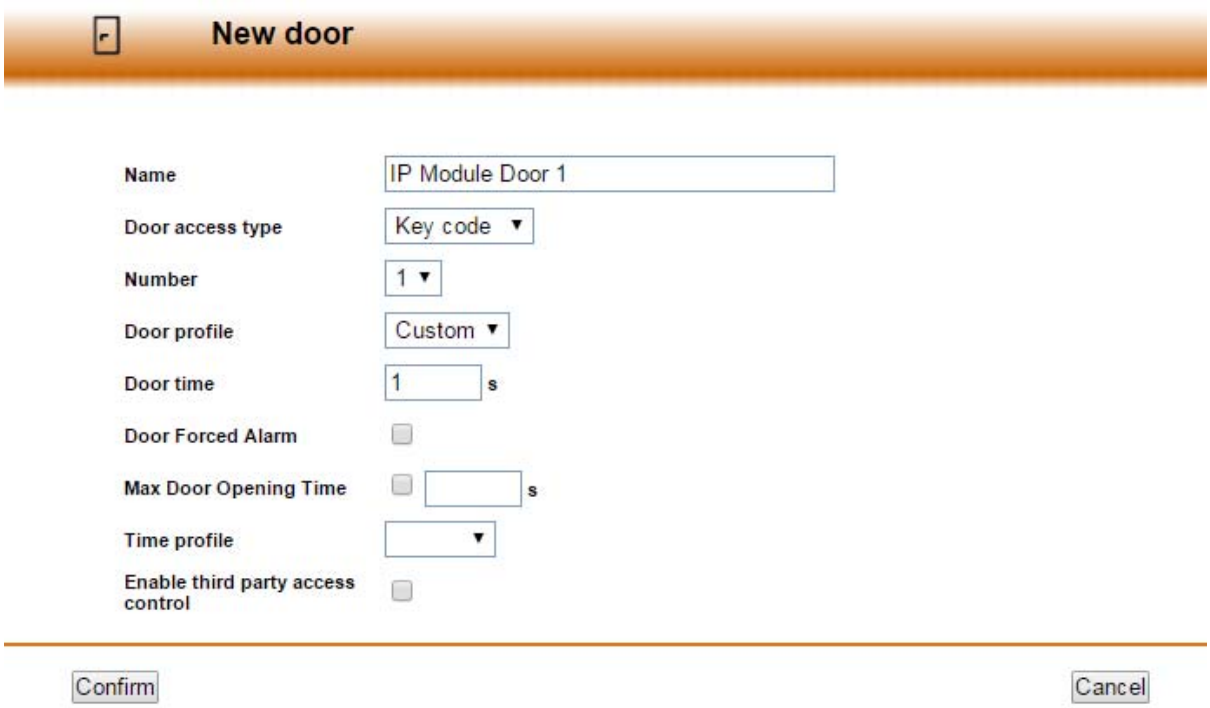


Figure 87: Advanced configuration – Adding a new door to the IP Module

Name	Door ID, mandatory alphanumeric field. Maximum length: 32 characters.
Door access type	Door type. The possible settings are: • **Key Code:** access by means of proximity key • **Door Code:** access by means of keypad
Number	Number of the door on the call module. The setting can be selected from a drop-down menu. The possible settings are: **1**, **2, 3, 4**.
Door Profile	Door profile to which the door must be associated (if available). The setting can be selected from a drop-down menu. For more information on door profile definition, see “Door Profiles” on page 224. Default setting: **Custom**.
Door Time	Control relay pulse time. Each door is independent, which means that different settings can be assigned to each one. **min: 1 sec, max: 999 sec** Default setting: **1 sec**.
Door Forced Alarm	If selected, this means that the door will generate an alarm if it is forced opened. Default setting: **Not selected**. **Warning:** An appropriate open door sensor must be connected to the door control module to use this function.

Max Door opening Time	This is the maximum opening time of the door after which an open door notification is generated. **min: 1 sec, max: 999 sec** Default setting: **Not enabled**. **Warning:** An appropriate open door sensor must be connected to the door control module to use this function.
Time Profile	Time profile to be assigned to the door (if available) (see “Time Bands” on page 64 The setting can be selected from a drop-down menu containing the previously programmed profiles. For more information on time profile definition, see “Time Profile Door” on page 218. Default setting: **No applied time profile**
Enable third party access control	If selected, this means that the door can be visualized and used in third party app configuration process Default setting: **Not selected**

Tabella 34 Configurazione Avanzata - Programmazione Porte IP Modules

9.8 SPECIAL DECODER

The special decoder advanced configuration concerns operation modes of the two inputs (only for 1039/81) and the two relay outputs present in the device (1039/81). To access the configuration page, select the item “Special decoders” from the devices tree, identify the desired device and select the number of the input or output to be configured (Figure 88).

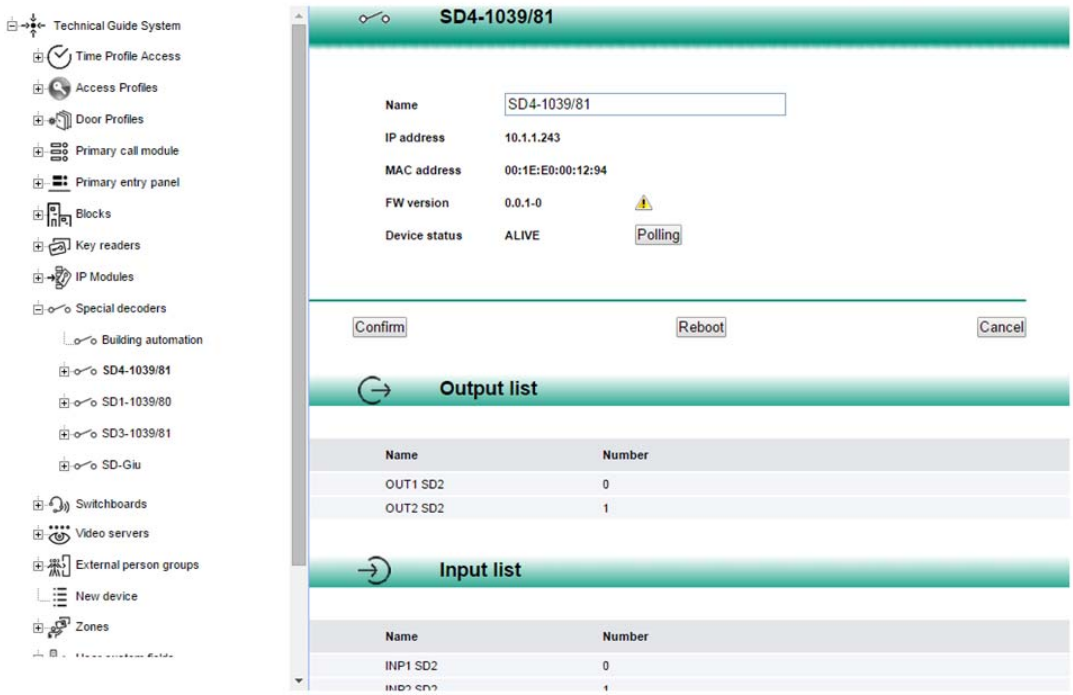


Figure 88: Advanced Configuration – Special Decoder

OUTPUT LIST

Each special decoder is provided with 2 independent relay outputs, the first one with identification number 0, the second one with identification number 1. To configure the behaviour of each output, access the configuration page shown in Figure 89; the following table describes configuration specific data. Outputs can be activated by the system when one or more events occur, as for example the opening of a passage on a call module, a command sent by the concierge switchboard and so on [40]. The device is also provided with two inputs that can be activated by buttons or switches installed near the device; the inputs can locally manage the respective outputs. A typical example where a local command can be useful is the stair light management: the opening of the entrance door by the electric lock of the call module generates the event which activates an output on the special decoder and turns the stair

[40] For the configuration of events able to activate special decoder 1039/81 outputs, see “IP call modules advanced configuration” on page 104, “Concierge Switchboard” on page 109, “IP key reader” on page 111 and “Apartment Configuration” on page 149.

light on. Also a button installed in the entrance hall and connected to the input of the same special decoder allows to turn the light on.

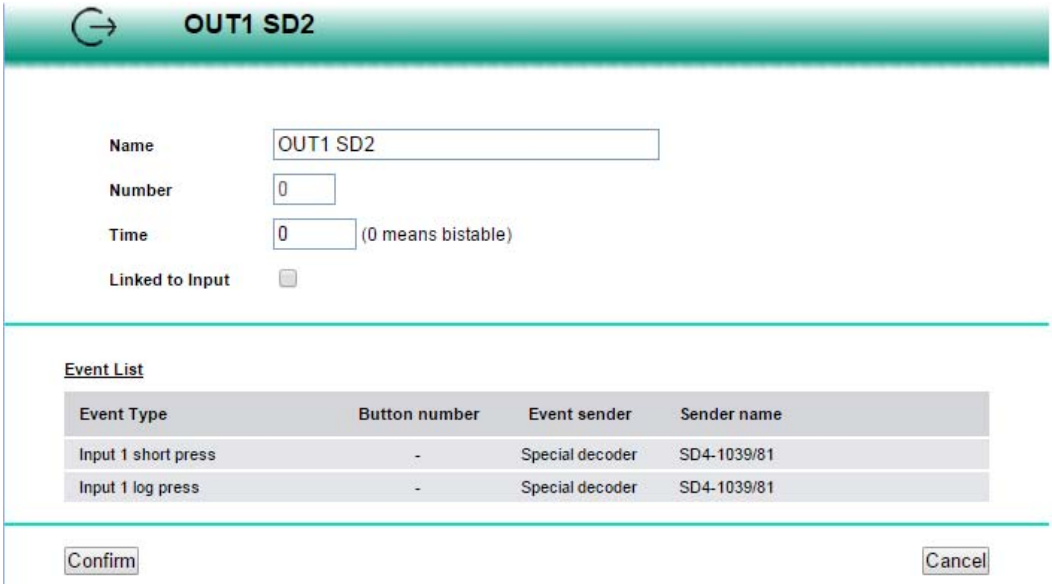


Figure 89 : Advanced Configuration – Special Decoder outputs configuration

Name	Output identifier, required alphanumeric field. Maximum length: 32 characters. **Note:** it is suggested to assign an identifier to each output, which must contain the reference to the belonging module, for an easier identification during the procedure used to associate it to the command event. For example, to define the name of an output used to switch a light of the special decoder "*West Block, Main corridor*", its identifier could be: ***WB-MC-Light1.***
Number	Output number. Read only field. Allowed values: **0, 1**
Time	Pulse length of the relay output. Each output is independent, so it is possible to assign different values for each of them. **min: 0 sec, max: 999 sec** Default value: 0, in this case the output operates in bistable mode.
Linked to input	This field exists in the device 1039/81 only. If selected, it automatically connects the selected output to the corresponding input. If it is not selected, it allows to connect the selected output to another input of any 1039/81 devices in the system.

INPUT LIST

On the special decoders 1039/81 you can program also 2 inputs: the first one with 0 identifier, while the second one with 1 identifier. Access to the configuration page shown in Figure 90: Advanced Configuration – Setting Special Decoder Inputs

in order to configure every input behaviours. The following table shows the specific config data.

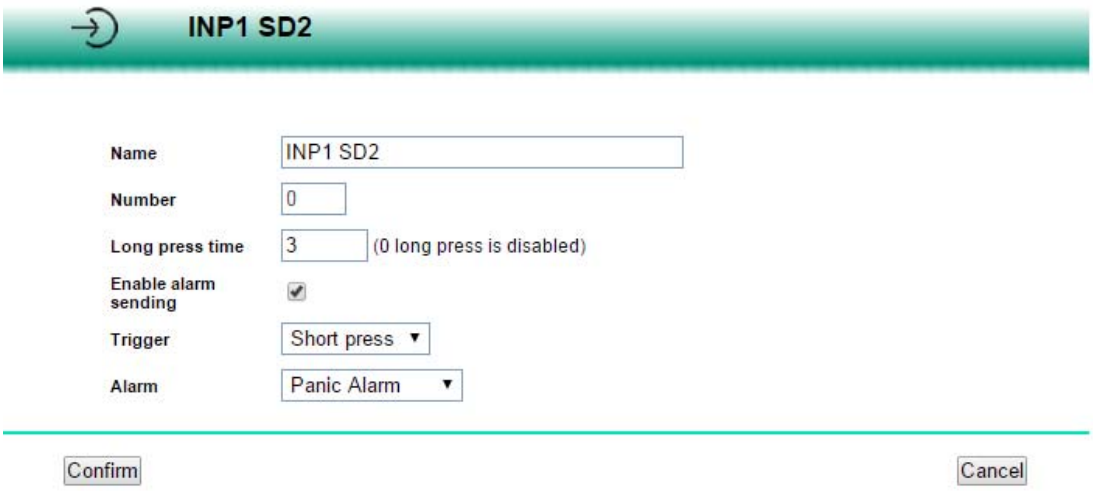


Figure 90: Advanced Configuration – Setting Special Decoder Inputs

Name	Input identifier, that is a mandatory alphanumeric field. Max length: 32 characters. **Note:** To every inputs it is recommended to attribute an identifier which contains the reference to the module it belongs to as well. So it will be easier to identify it during the connection step with the control event. For example, if you have to define an input name which has been setup to control a special decoder light "*West Block, Main corridor*", its identifier may be: ***WB-MC-Light1***
Number	Input number. This field is read only. Allowed values: **0, 1**
Long press time	Necessary time for input closing so that a long press event is generated. Each inputs are independent so you can assign different values to each of them. **Min: 0 sec, Max: 999 sec** If that value is 0, the generated events may be: • Pressed • Released If that value is not 0, the generated events may be: • Short Press

	• Long Press
Enable alarm sending	If selected, this sends an alarm to the relative switchboards when the setup event is generated.
Alarm	Alarm type that is sent to the relative switchboards.

INPUT-OUTPUT ASSOCIATION

On the special decoder 1039/81 you can connect an input to any outputs, also belonging to other special decoders 1039/81. The connection must be done in the “Building Automation” page (Figure 91).

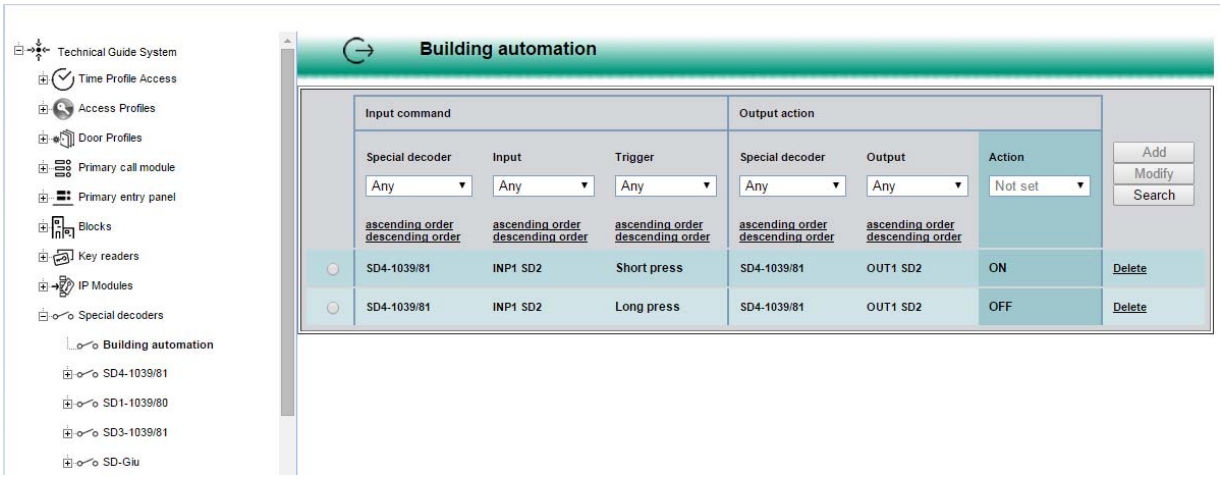


Figure 91: Input-Output Connection

In order to create a new connection, select the source special decoder 1039/81, the inputs number, and the event type. Then select the target special decoder 1039/81, the outputs number and the action type, and then click the “Add” button. From that list you can also select a connection that has been programmed before and change it using the “Modify” button.

EVENT-OUTPUT ASSOCIATION

The procedure used to associate an output to an event used to control the output status consists in some steps. For example, to activate an output of a decoder with a "special code" entered on the keypad of a call module, follow the four steps shown in Figure 92. First of all, select the Special Decoder to which the command must be sent (Step 1) and then define the desired output with its timing parameters (Step 2). Identify the Call Module where the user will enter the special code, select in the section "Special Functions" the previously defined output and the command type to be sent (Step 3). At the end, go back to the Special Decoder and enter the special code [41] entered by the user on the keypad[42] of the Call Module (Step 4).

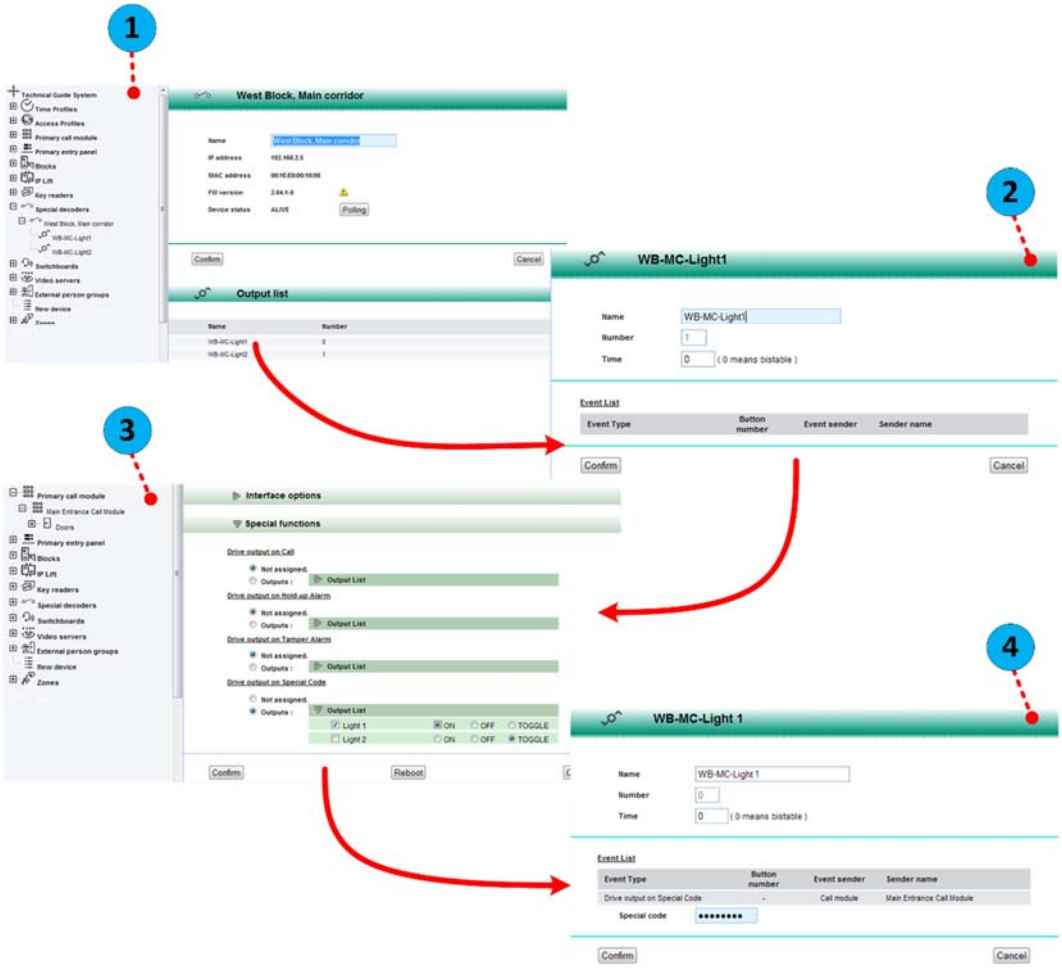


Figure 92: Advanced Configuration - Association of the Command Event to the Special Decoder

[41] The special code must be numeric; its length must not exceed 8 digits.

[42] To activate the special code entering mode on the Call Module, press at the same time the button **X** and the button **0**.

9.9 STAIRS PRESET COMMANDS

To make system configurations easier, Ipervoice allows to use some preset configurations which will be used by the system if there are no specific settings. For each block and for each stair, a preset profile can be assigned to some types of commands and behaviors. In order to configure the apartment stations of the stair, Ipervoice will use the stair profile to automatically assign to the apartment stations the preset parameters. So the installer doesn't need to configure them in manual mode[43].

Available commands are grouped into three sections: the **1**st one defines images shown on call modules for the block access; the **2**nd is used to assign call buttons and the **3**rd for IP special decoders (1039/81) operations. To access the page shown in Figure 93 , select "Blocks" from the devices tree, select the block as shown by the red arrow and then select the stair for which preset parameters must be configured.

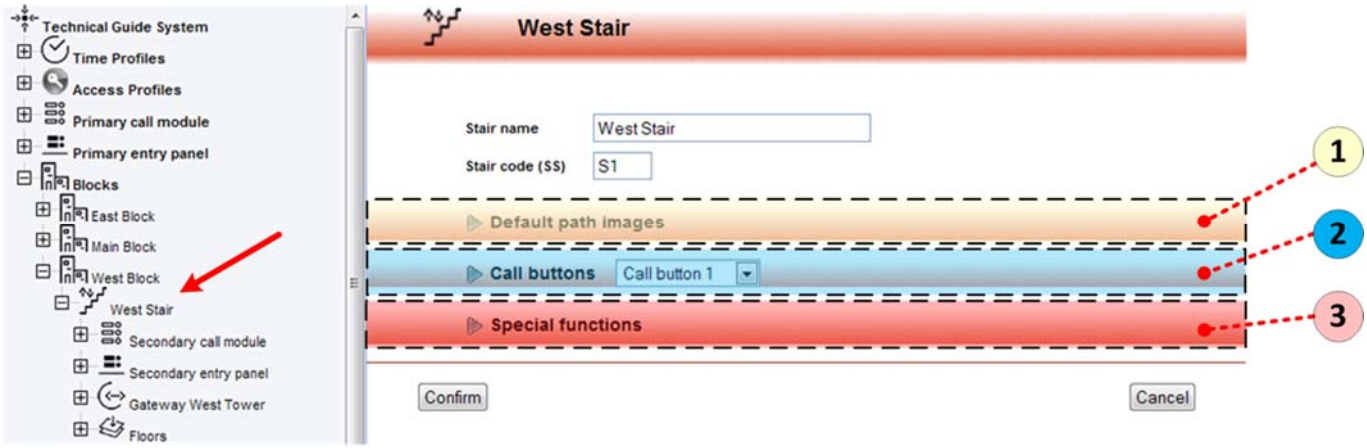


Figure 93: Advanced Configuration – Stairs preset commands

9.9.1 DEFAULT PATH IMAGES

This features helps the visitor to reach the Block where the called apartment is located. For each call module associated to the stair, an image can be selected; this image will be shown on the display when the door is opened to let the visitor in. The image will usually be a graphic map, i.e. a plan, used to highlight the path to be followed to reach the desired block.

[43] Further details about apartment configuration are in the chapter "Apartment advanced configuration" on page 172 and following.

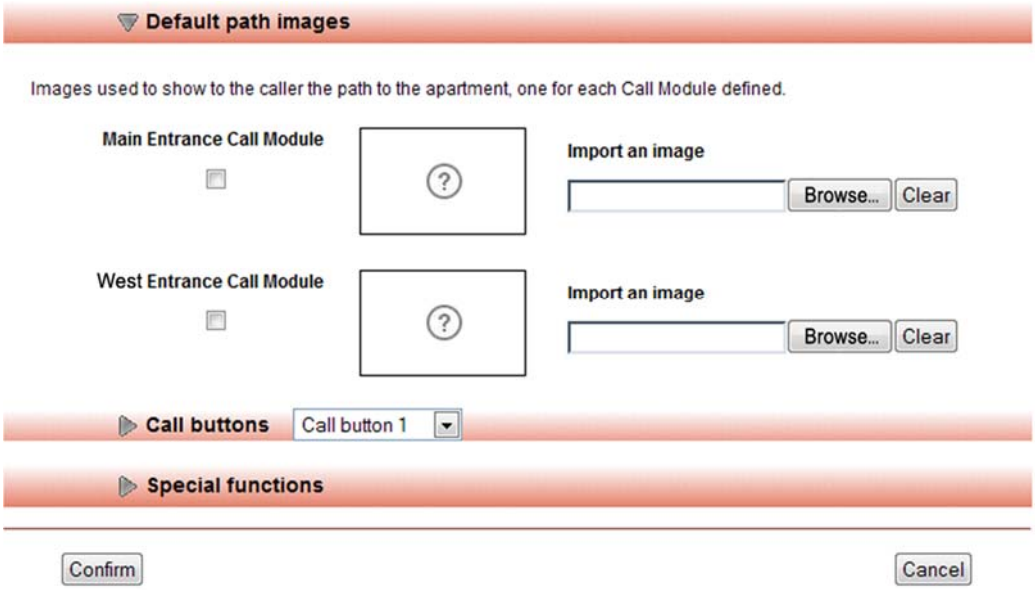


Figure 94: Configurazione avanzata scale – Impostazione mappe grafiche predefinite

The configuration page will contain a list of the call modules where the plan can be set (Figure 94). See the following table to receive information to set required parameters.

Call module name	Under the call module item (in the example of Figure 94 "*Main Entrance Call Module*" or "*West Entrance Call Module*") there is a selection box; if selected, this enables the display of the map (the system doesn't allow to save if the file is not present and the box is selected).
Import an image	Field used to load the image in png, jpeg or gif[44] format, shown by the call module after the entrance door has been opened. As in other similar cases, press the button "Browse" to select the desired image file. Press the button "Clear" to delete the selected image. Image max. size: 240 x 250 pixel.

Table 35: Stair advanced configuration – Access path graphic maps – Meaning of configuration parameters

[44]In order to convert from other graphic formats, use the application "Paint" provided with Windows operating systems or other similar utilities.

9.9.2 CALL BUTTONS

On apartment stations there are some configurable buttons[45], which can send commands also outside the apartment. They are usually used when the handset of the apartment station has been picked up (or the conversation button has been pressed on hands-free models) to call a switchboard, another apartment of the same riser column (connected to the same IP gateway) (Figure 95).

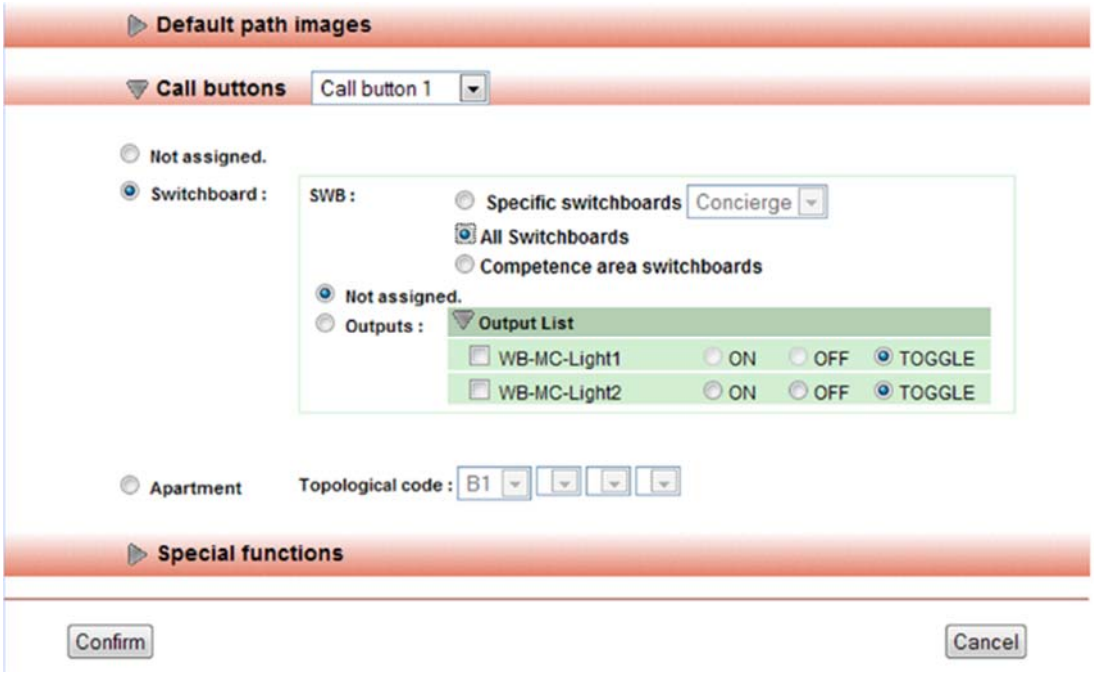


Figure 95: Stair advanced configuration – Preset call buttons

Programming information are in Table 44.

Call Buttons	The system executes the command configured below when the call button, selected from the pull-down menu, is pressed. Available values are from **Call button 1** to **Call button 250**. These are configurable buttons[46] used when the apartment station handset is picked up (or the conversation button on hands-free models has been pressed.
Not assigned	Default condition, when the button is pressed the system doesn't send any command.
Switchboard	This command is used to call a switchboard or activate outputs of a special

[45] The number of available buttons can change according to apartment station model used in apartments; in this case the system uses the max. number of 250, specific for Modo and iModo Touch models.

[46] For information about button on apartment stations, see the paragraph "Button Function Assignment" on page 87.

	decoder. For switchboards there are three different choices: ➢ **Specific Switchboard** — select from the pull-down menu the switchboard to which the call must be sent ➢ **All Switchboards** — The call is sent to all switchboards ➢ **Competence area switchboards** — The call is sent only to switchboards which have competence in the apartment
Apartment	In this case the call is sent to an apartment. The selection is made by indicating the topologic code of the apartment, which must belong to the same IP Gateway.

Table 36: Stair Advanced Configuration, call buttons – Configuration parameters meaning

9.9.3 SPECIAL FUNCTIONS

The last section is dedicated to commands which an apartment can execute to one or more system outputs: Figure 96 shows the options available.

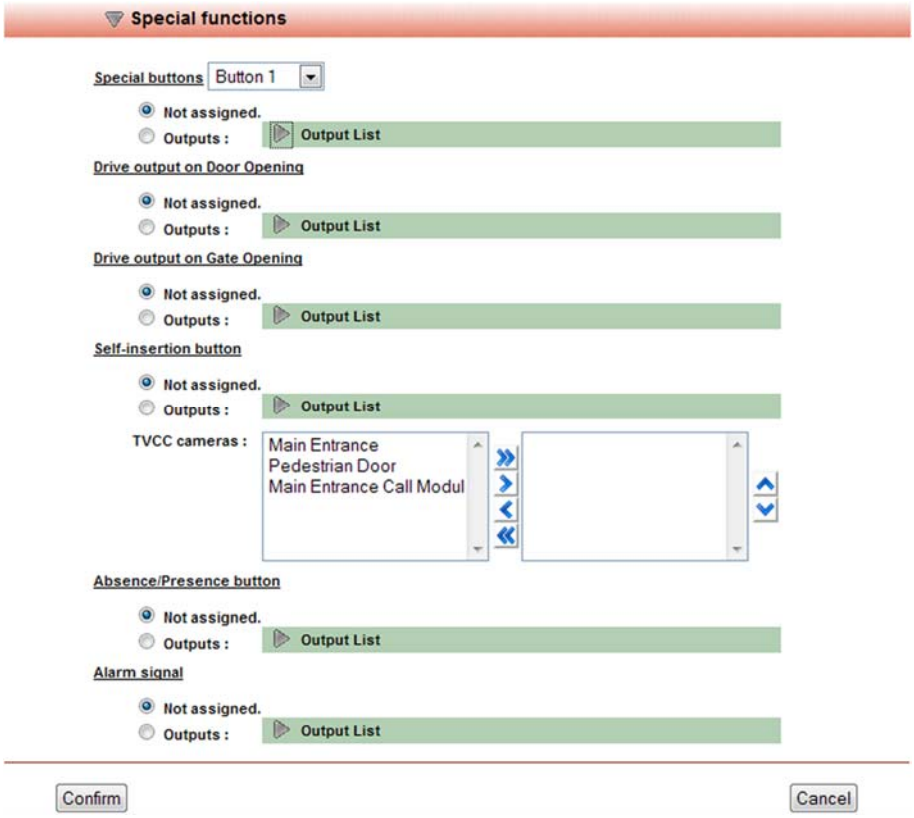


Figure 96: Stair Advanced Configuration – Setting of special preset commands

Command types for outputs of 1039/81 special decoder are similar to the previously described ones (for ex: page 124 or 135), but there are other commands specific for apartments. The following table shows the list of different options.

Special buttons	The system executes the command on the configured outputs when the special button, selected from the pull-down menu, is pressed. The available values are: **Button 1** to **Button 250**[47]. These are configurable buttons.
Drive output on Door Opening	The system executes the command when the user in the apartment station requests a door lock release. **Note**: The output of the special decoder will not be operated if the door opening command is sent from a mobile device via the Call2U application.
Drive output on Gate Opening	Command similar to the previous one, executed when the vehicle entrance gate is opened. **Note**: The output of the special decoder will not be operated if the gate opening command is sent from a mobile device via the Call2U application.
Self-insertion button	The system executes the command when the auto-on button is pressed (see the paragraph “Auto-on, cyclic, mono and bidirectional audio” on page 62 for more information about the auto-on function). In this section it is possible to configure the cameras; the images coming from these cameras are displayed in the apartment during the auto-on “cyclic” function. There are two lists: the left one contains the cameras available in the system (call modules and video servers cameras), the right one contains the selected cameras.
Absence/Presence button	When the user changes the resident absence/presence status, by pressing the absence/presence button in the apartment, the system executes the command on the configured outputs.
Alarm signal	The system executes the command in case of alarm event coming from the apartment (issued from the “panic alarm” button of apartment stations or alarm interface 1039/61).

Table 37: Stair advanced configuration – Meaning of configuration parameters of preset special commands

[47] The number of available special buttons depends on the station model used in the apartment; in this case the max. number is 250, specific for Modo and iModo Touch models.

10 COLUMN DEVICES CONFIGURATION

The configuring operations performed with the StartUp Wizard, described in the chapter “Ipervoice Devices advanced Configuration” on page 119, do not exhaust the subject of the devices belonging to Ipervoice system riser columns. In particular, this chapter describes how to program the column devices by means of SmartPhone or Netbook, how to configure the column lift interface 1039/37 and how to add new 4-user decoders.

10.1 COLUMN DEVICES PROGRAMMING

The operations concerning the configuration data download to “column devices”, such as decoders 1039/34, intercom interfaces 1039/36 and lift interfaces 1039/37, must be performed on each device. The system configuration data stored on the server and collected by the Frontend must be downloaded to a “Mobile” device. The required data is sent to each single device by Bluetooth.

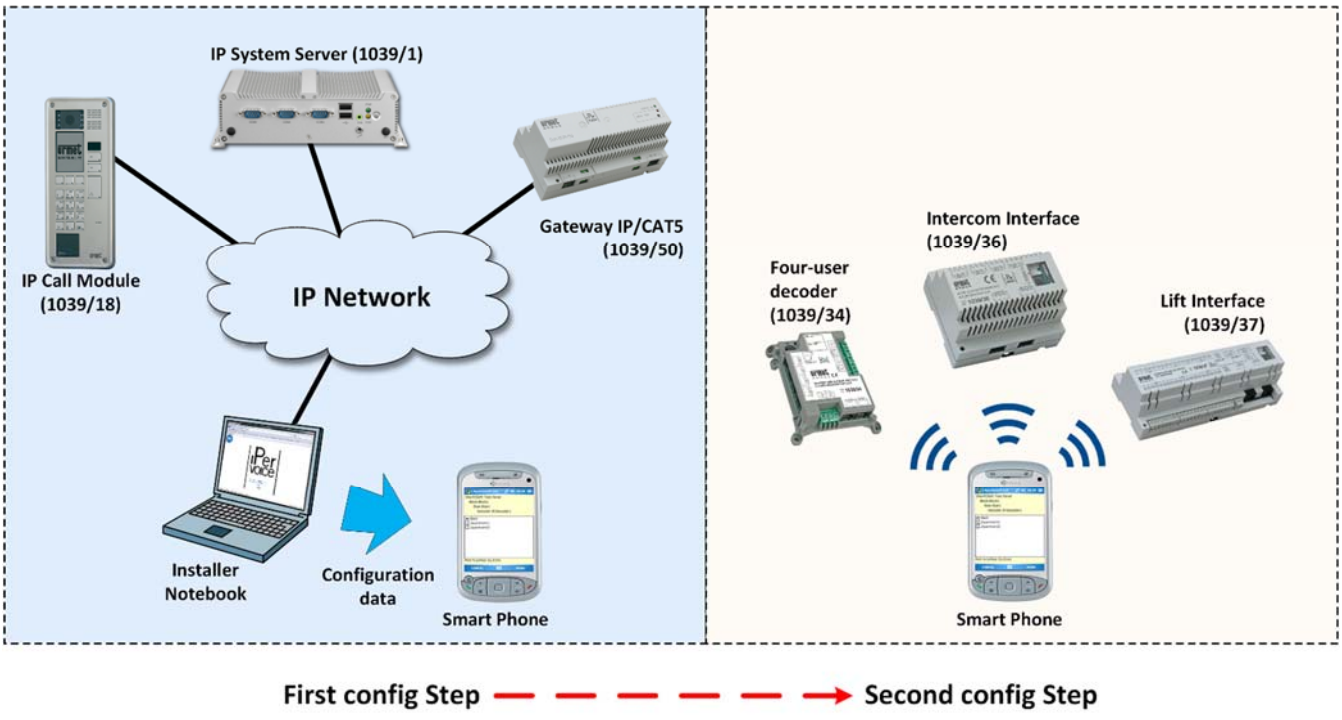


Figure 97: Column devices programming procedure – configuration steps

At present, the following "*Mobile*" products are supported by Ipervoice:

- PDA or PDAPhone with Symbian operating system[48] (e.g. Nokia)
- PDA or PDAPhone with Windows Mobile[49] operating system (e.g. HTC, Samsung)
- Netbook and Notebook with Windows operating system (XP, Seven)
- Smartphone with Android operating system.

Warning: all the listed products must be provided with a Bluetooth communication interface, in order to download data to column devices by means of the Bluetooth programming device 1039/56; PDA phones must also have a USB port for connection with the PC used to access the FrontEnd.

10.1.1 SOFTWARE INSTALLATION

You can transfer data from PDA to the column device by using a software application which must be installed on the PDA as well. The first time you have to do this, or if you need to use a new "*Mobile*" device, you need to install the dedicated software. Consider the following indications before installing:

PDA with Symbian operating system	*SoftMobile* software installation must always be performed on the "*memory card*", never on the device main memory. Also the file containing the system data (config.dat), used to program the column devices, must be saved on the "*memory card*", not in the application folder (e.g. in a folder named Ipervoice).
PDA with Windows Mobile operating system	There are no constraints for *SoftMobile* software installation, nor for the folder of config.dat file containing the system data (e.g. Ipervoice). At present, the Ipervoice system supports Classic or Professional Version 6 of Windows Mobile operating system, the standard and windows 8 mobile versions are not yet supported.
Netbook or Notebook	There are no constraints, they are portable Personal Computers. Windows XP and Vista operating systems are supported in the available versions.

[48] Warning: Current version of *SoftMobile* application support only UIQ 3 and S60 3rd Edition, Feature Pack 1 and S60 5th edition (AKA Symbian^1), of Symbian operating system. For this last one, on "touch-screen" devices, the *SoftMobile* application only operates in "keyboard emulation" mode.

[49] Warning: Dev ices using WIDCOMM implementation for Bluetooth interface, as iPAQ Hewlett Packard (HP) devices or PDA HTC Touch2 are not compatible with the current *SoftMobile* application.

Smartphone with Android operating system	There are no restrictions for both installing Ipervoice app and the folder containing the config.dat file with the system data (e.g. Ipervoice). Currently the Ipervoice app is compatible with the devices version 4.0 or later of the Android OS.

Table 38: SoftMobile Software – Installation and use information

INSTALLING IPERVOICE SOFTWARE FOR ANDROID SMARTPHONE

You can install the Ipervoice software by connecting to the Google play store with your device and searching for the "Ipervoice" app. Installing starts automatically by selecting the "Install" button. As an alternative, you can download the.apk file directly from the "Download" section on the website www.urmet.com.

INSTALLING SOFTMOBILE SOFTWARE FOR SYMBIAN AND WINDOWS MOBILE

In the Ipervoice FrontEnd you can select the proper version for the used PDA, and then download it on your PC for installation. In order to do this you must select the "MAINTENANCE" item in the main menu, and then "Write to Mobile" (Figure 98). A page will be displayed containing other two buttons, besides the button to download the config.dat file we will explain later: You can use the first one to download the proper version for Symbian PDA, while the second one to select the software for Windows Mobile devices (Figure 99).

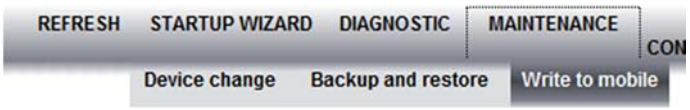


Figure 98: Download of system data to PDA – Procedure start-up

Figure 99: Download of system data to PDA – config.dat file download

Since the installing procedure may considerably differ based on device type and model, please refer to the user document provided with your Netbook or PDA.

10.1.2 System Data Download to PDA and Smartphone device

Once you have completed the configuration procedure by using FrontEnd, you can take the system data to send them to your PDA or smartphone. Since you cannot transfer data from the frontend to devices, first you have to transfer data from Ipervoice server to PC, and then from PC to Mobile device. From the FrontEnd main menu select the "MAINTENANCE" option, and then "Write to Mobile" (Figure 100).

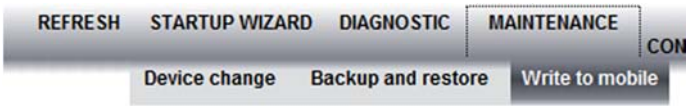


Figure 100: Download of system data– Procedure start-up

FrontEnd shows a page that prompts you to start transferring (Figure 101): If you press the "Download Dat file" button, the browser opens a dialogue where you can select the target folder, for example select the Desktop folder and press Save without changing the filename suggested by Ipervoice[50].

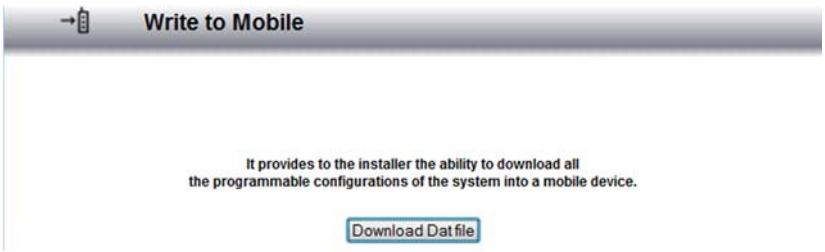


Figure 101: Download of system data – Download of file config.dat

Warning: In order to generate the config.dat file properly, the system must not contain blank blocks.

[50] The config file is called **config.dat**. This name cannot be changed, in order to be identified and loaded correctly by the PDA software. But it i possible to rename that file if you use an Android smartphone.

Finally you have to move the ***config.dat*** file just saved on the PC into a proper PDA or smartphone folder. For more details on transferring file from PC to a mobile device, please refer to the device user manual.

10.1.3 TRANSFERRING SYSTEM DATA TO COLUMN DEVICES

Once you have completed the previous step, the connection (either USB or Bluetooth) between the PC and PDA or smartphone is not necessary any longer. So you can disconnect them in order to proceed with transferring data to the Ipervoice device.

DEVICE SELECTION AND SYSTEM DATA DOWNLOAD

Every time system data must be downloaded to column devices, the Bluetooth interface 1039/56 must be connected to the device to be configured.

Figure 102: Bluetooth programming interface

For the connection, use the provided cable without down powering the device to be programmed[51]. If the connection is correct, the green led on the interface, near the connector, turns on.

[51] The device must be powered in order to perform the programming procedure.

PROGRAMMING COLUMN DEVICES (ANDROID SMARTPHONE)

When the app starts, it will display a screen like that in Figure 103.

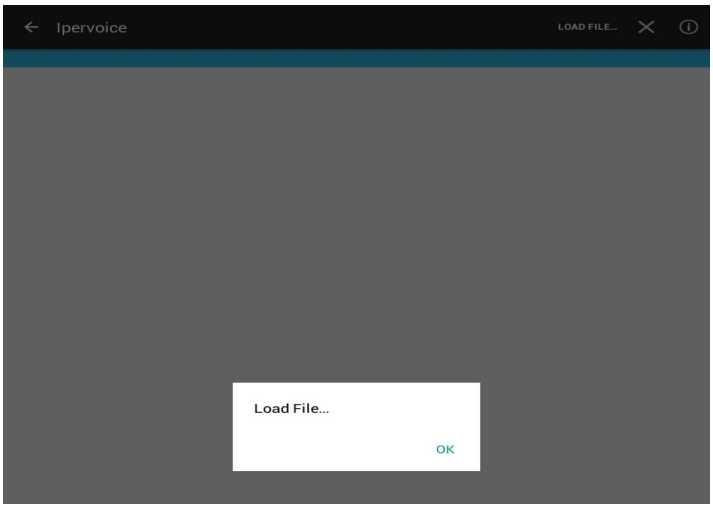


Figure 103: Transferring system data to column devices – Starting Ipervoice app

First you have to upload the config file that was previously downloaded from the Ipervoice frontend and copied into the device. Press the OK button to browse the device folders. Identify and select the config file. The file will be automatically uploaded and decoded by the app, and a screen like in Figure 104 will be displayed.

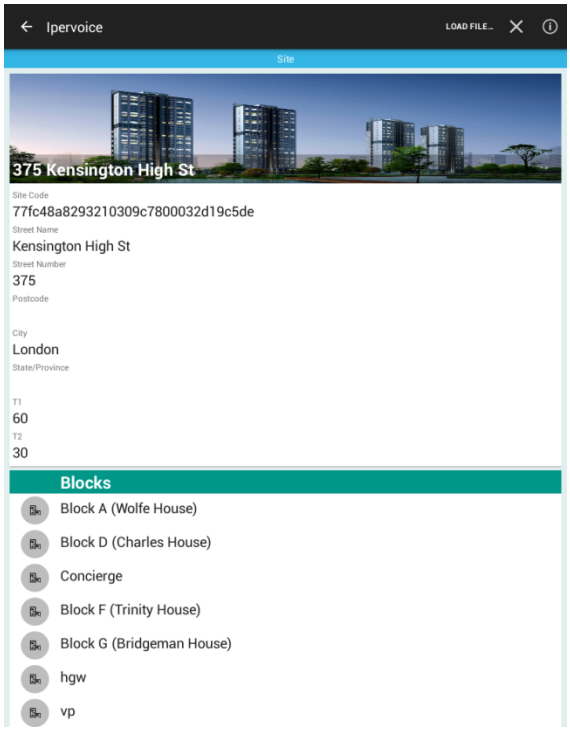


Figure 104 – Main screen of the Ipervoice app

In order to transfer the config data to a column device, you have to select the Block and the Stairs where the device to be programmed is: In the device tree touch once first the Block and then the Stairs (steps 1 and 2 inFigure 105). The displayed list shows the IP gateway and all 4-user decoders and the connected lift interfaces. If you touch the desired decoder[52] once (step 3), you select and make it available for programming (step 4).

[52]The technician is responsible for selecting the proper device to be programmed and for connecting Bluetooth programming interface to it. This system cannot identify a wrong selection and so the parameters will be transmitted to the device in any case.

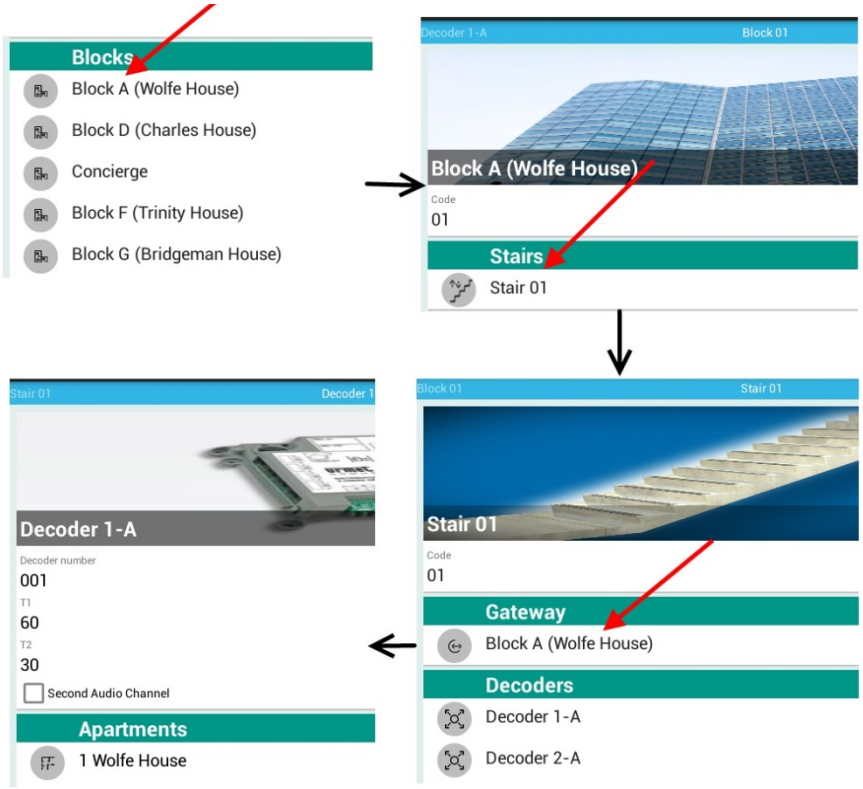


Figure 105 – Selecting the device to be programmed

In the bottom of the 4-user decoder summary screen there are an upload button and a download button (we will explain downloading procedure later). Touch the upload button to write the selected decoder programming (Figure 106).

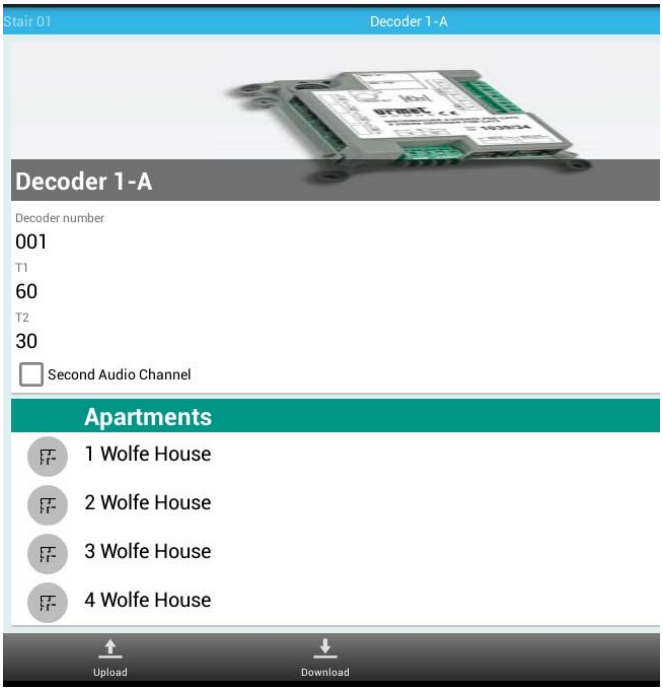


Figure 106 - Uploading data on 4-user decoder

The user will be prompted to enable the Bluetooth function on the Android device (Figure 107 on the left). Approve Bluetooth enabling and wait until the search of visible and reachable devices ends. The Bluetooth devices list will show “1039/56 Programming Device” (Figure 107 on the right). Touch it only once and then enter the code 0000, if required.

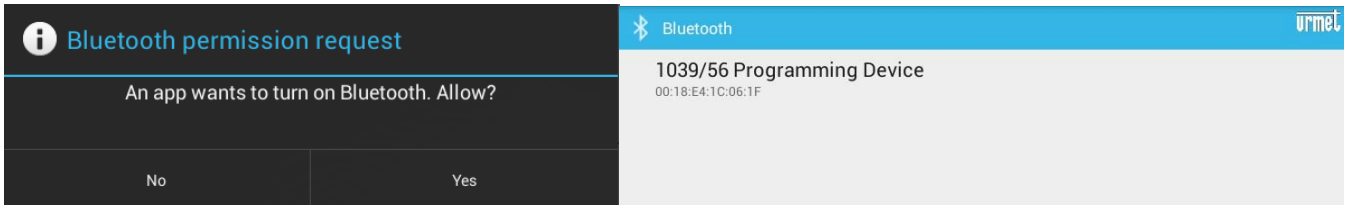


Figure 107 – Enabling and searching for BT

A popup will be displayed to inform the user about correct device programming (Figure 108).

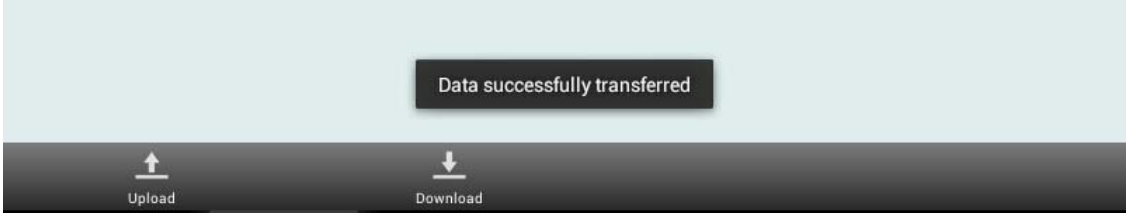


Figure 108 – Programming confirmation

Now the transferring procedure has been completed. So you can disconnect the Bluetooth programming interface 1039/56 and repeat the procedure with the next column device to be configured.

Note: If some apartments where there are intercom interfaces (1039/36) are detected in the 4-user Decoder just programmed, in order to complete apartments programming you have to program the interfaces 1039/36 as well. Otherwise the programming procedure is considered complete and you can program the next decoder.

PROGRAMMING COLUMN DEVICES (WINDOWS MOBILE)

Start the app. If you run it for the first time, it will display a screen like in Figure 109.

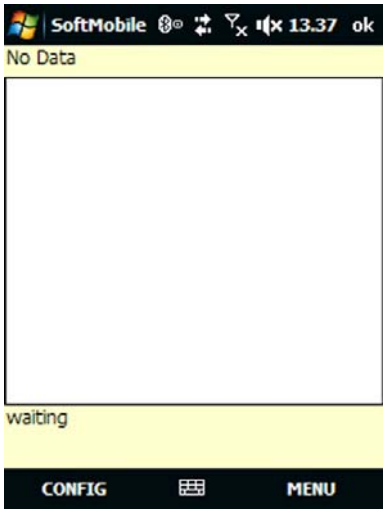


Figure 109 – Main screen of the SoftMobile sw on Windows Mobile

In the top of the screen the message "No Data" will be displayed in order to indicate the information in the ***config.dat*** file are not available for the app yet. So you have to select it;

Select the config.dat file by clicking the "*MENU*" option, and then "*Config*" as you can see in this figure explains. Next step to be done: First the user will see the screen in the left side of the figure. Press the "select" button to access the page in the right, where you can select the proper config.dat[53] file. In this example the user selected the file row of the file contained in the *Ipervoice*folder. After selecting the file, the app will

[53] The app will search for all the files stored in the "memory card" and having.dat extension

go back to the previous screen. If you press the "*Submit*" button, the config.dat[54] file will be uploaded and displayed in simplified format, as a device tree.

Figure 110: SoftMobile, Windows Mobile version – Selecting the config.dat file

In order to transfer the config data to a column device, e.g. a 4-user decoder, select the Block and the Stairs where the device to be programmed is: From the device tree first "click" Block twice, and then Stairs (step 1 in Figure 111).

The displayed list shows the IP gateway and all connected 4-user decoders. If you "double click" the desired decoder[55] (step 2), you will select and make it available for programming. Now, if you "click" the "MENU" option and then select "WRITE TO BT" (step 3), you will enable the transferring procedure.

[54]You have to select the config.dat file only when using first or if you need to select one from different folder and not in previously setup one. In effect the app saves the setup favourite and loads its content automatically whenever you run it.

[55]The technician is responsible for selecting the proper device to be programmed and for connecting Bluetooth programming interface to it. This system cannot identify a wrong selection and so the parameters will be transmitted to the device in any case.

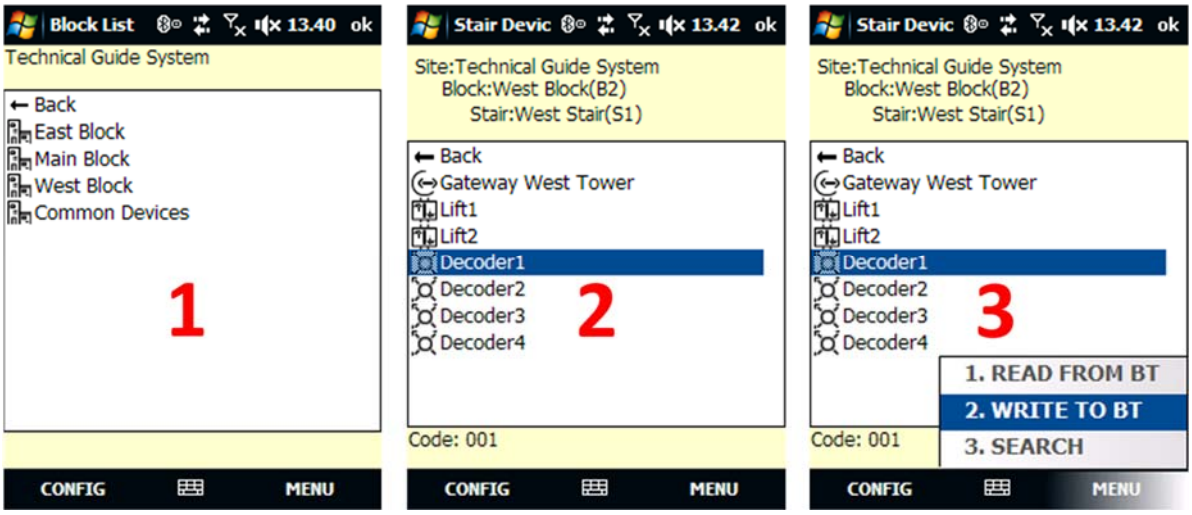


Figure 111: SoftMobile for Windows Mobile – Transferring system data to 4-user decoder

So you will access to the page in the left side of Figure 112: Here you have to press the "Search Device" button: If it is the first time, if the Bluetooth device has not been recognised yet, your PDA will automatically prompt the recognizing procedure. If so, enter the passkey 0000 when required. But if the Bluetooth device is already known to the PDA, its name is displayed in the drop down menu in the middle of the screen (Figure 112 *Figure 112: SoftMobile for Windows Mobile - Selecting Bluetooth device and transferring data*

on the left): If you press the "Connect" button, the data transfer to the 4-user decoder starts: If transferring ends successfully with a Windows Mobile device, it is indicated in the dialogue with "Write successfully"[56] that you can see in the right side of Figure 112.

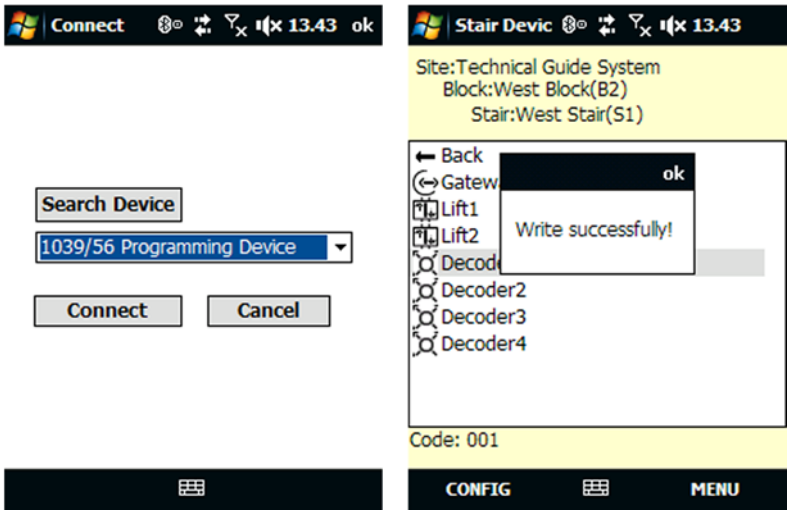


Figure 112: SoftMobile for Windows Mobile - Selecting Bluetooth device and transferring data

[56] Only with SoftMobile app for PDA with Windows Mobile. With Symbian PDA, once you have completed the transferring step, if there were no errors, the app will go back to the page that shows the 4-user decoders list.

Now the transferring procedure is completed. So you can disconnect the Bluetooth programming interface 1039/56 and repeat the procedure with the next column device to be configured.

Note: If some apartments where there are intercom interfaces (1039/36) are detected in the 4-user Decoder just programmed, in order to complete the apartments programming procedure you have to program the interfaces 1039/36 as well. Otherwise the programming is considered complete and you can program the next decoder.

PROGRAMMING COLUMN DEVICES (SYMBIAN)

Start the app. If you run it for the first time, it will display a screen like in Figure 113.

Figure 113: Main screen of SoftMobile sw on Symbian

In the top of the screen the message "*Site List:*" will be displayed in order to indicate the information in the ***config.dat*** file (previously downloaded in the PDA) are not available for the app yet. So you have to select it;

The *SoftMobile* appin the version for Symbian uses a dedicated utility for uploading the config.dat file. This app name is "*Database Manager*"[57] and it is installed in the same folder that contains the main *SoftMobile* app. In order to upload the config.dat file, first the user has to close the *SoftMobile* app, if

[57]The Database Manager app is part of SoftMobile software for Symbian and is installed automatically with it.

running on the PDA, and then run *Database Manager*. Once completed, the technician will see a page like in Figure 114. The following options are available:

Change Path	Allows to select the folder where you uploaded the config.dat file.
Fill Database	Once you have selected the desired config.dat file, it allows to either upload or update the database containing the system structure.
Bluetooth	Allows to receive the configuration through a Bluetooth[58] connection.
Exit	Closes the Database Manager app.

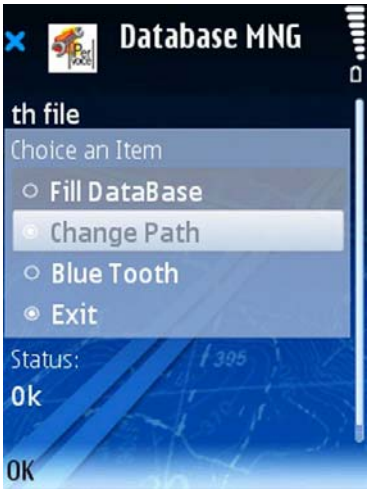


Figure 114: Database Manager – Starting the app

The first step to do concerns the selection of the config.dat file, which as previously indicated (“Software Installation” on page 154), must compulsorily have been saved in the PDA “*memory card*” but not in the folder containing the *SoftMobile* app. That procedure starts by selecting the “*Change Path*” option and, if you press “*OK*”, you will enable the file search function that allows you to select the folder where the config.dat file was previously downloaded. Once completed, the app will go back to the main screen and will preselect the “*Fill Database*” option. Once this is confirmed, it will make the data available for the *SoftMobile* app. The images inFigure 115 show the two necessary steps for uploading.

[58]This function will be available in the next software releases for PDA.

Figure 115: Database Manager – Uploading the config file

Once you have completed this step, that is necessary whenever you upload a config file on the PDA, you can close the *Database Manager* and start the main app (*SoftMobile*) again in order to start programming.Figure 116

In order to transfer the config data to a column device, e.g. a 4-user decoder, select the Block and the Stairs where the device to be programmed is: From the device tree first "click" Block twice, and then Stairs (step 1 in Figure 116). The displayed list shows the IP gateway and all connected 4-user decoders. If you "double click" the desired decoder[59] (step 2), you select and make it available for programming. Now, if you "click" "Options" and then "Write To BT" (step 3), you will enable the transferring procedure.

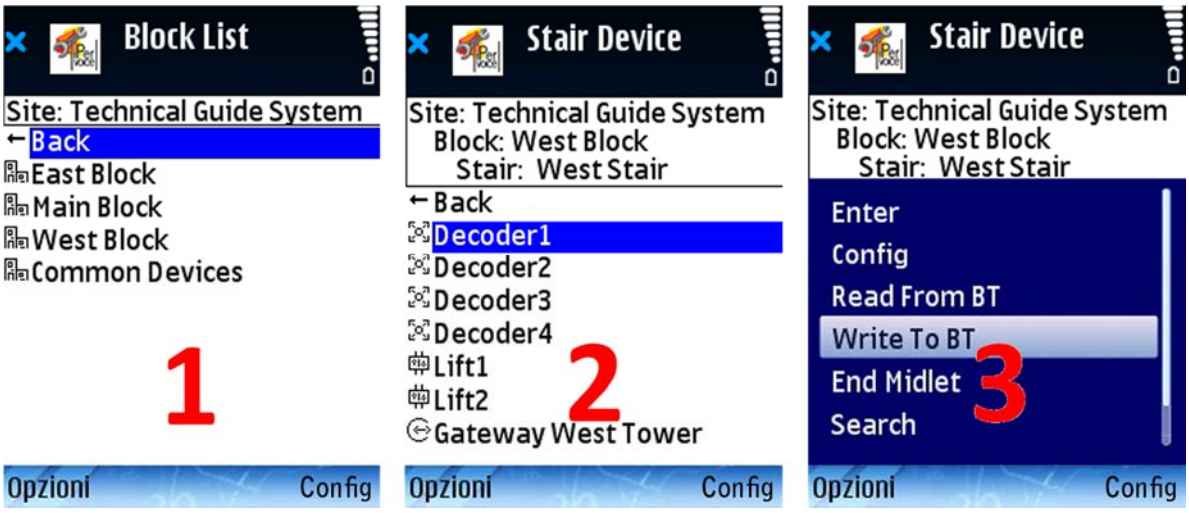


Figure 116: SoftMobile version for Symbian – Transferring system data to 4-user decoder

[59]The technician is responsible for selecting the proper device to be programmed and for connecting Bluetooth programming interface to it. This system cannot identify a wrong selection and so the parameters will be transmitted to the device in any case.

So you will access to the page in the left side of Figure 117: Here you have to select the device “1039/56 Programming device” and then press the “Conn” button. If it is the first time, if the Bluetooth device has not been recognised yet, your PDA will automatically prompt the recognizing procedure. If so, enter the passkey 0000 when required. But if the Bluetooth device is already known by the PDA, press the “*Conn*” button to start data transferring to the 4-user decoder. If transferring ends successfully, it is indicated in the dialogue with “Write successfully” that you can see in the right side of Figure 117. Once you have completed the transferring step, if there were no errors, the app will go back to the page that shows the 4-user decoder list.

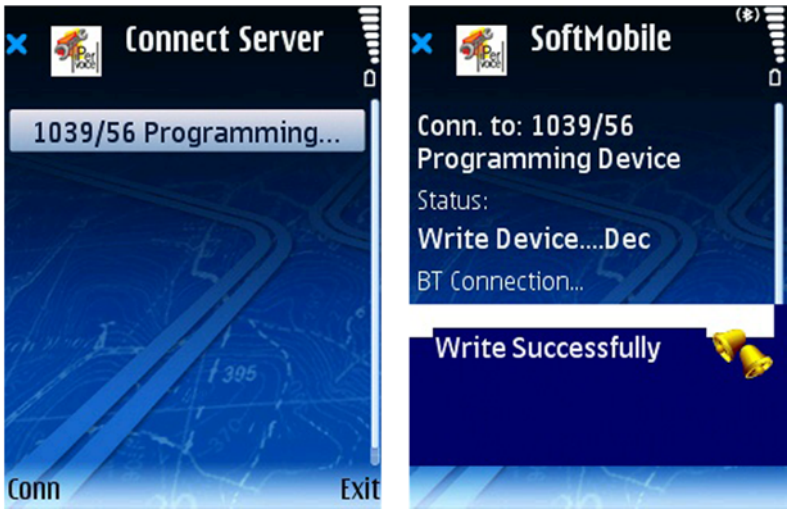


Figure 117: SoftMobile version for Symbian - Selecting Bluetooth device and transferring data

Now the transferring procedure has been completed. So you can disconnect the Bluetooth programming interface 1039/56 and repeat the procedure with the next column device to be configured.

Note: If some apartments where there are intercom interfaces (1039/36) are detected in the 4-user Decoder just programmed, in order to complete the apartments programming you have to program the interfaces 1039/36 as well. Otherwise the programming procedure is considered complete and you can program the next decoder.

10.1.4 CHECKING THE PARAMETERS SENT TO THE COLUMN DEVICE

Although the app indicates the config parameters transferring has been properly completed, checking how many parameters have been actually transferred to the device may be helpful.

CHECKING THE PARAMETERS SENT TO THE COLUMN DEVICE (ANDROID)

In order to check the parameters that were written in the device you simply have to move to the device screen and touch the “download” button (the example in Figure 118 refers to the download of a 4-user decoder programming).

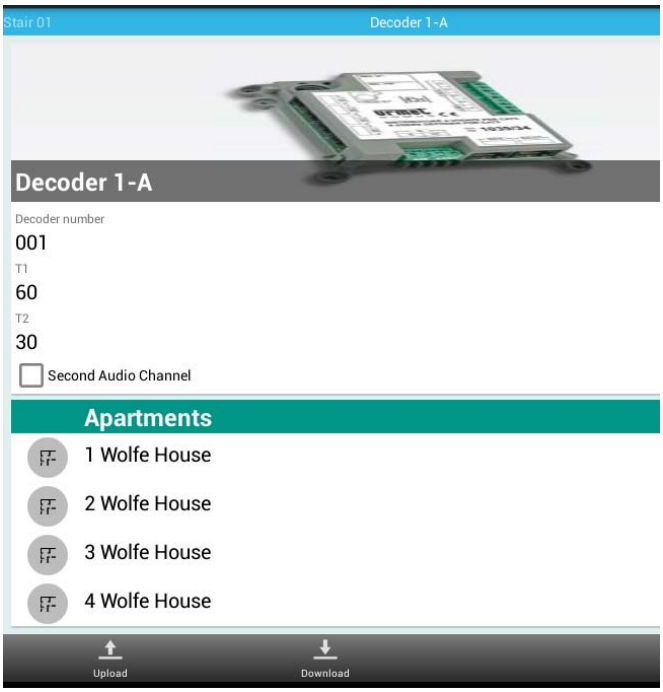


Figure 118 - Downloading data from 4-user decoder

In the lower right corner there will be a “Device-File” switch (Figure 119). You can touch this button to toggle the “Device” and “File” modes. If you place this button on “File”, all texts will be black (Figure 120 on the left), while they will be green or red in Device mode (Figure 120 in the middle and on the right). The text will be green when the configuration read by the device matches that one in the config.dat file which was uploaded when the programming step started. The text will be red if there are some differences between the data read by the device and the data in the config file.

Figure 119 - "Device-File" Switch

If you place this button on “File”, all texts will be black (Figure 120 on the left), while they will be green or red in Device mode (Figure 120 in the middle and on the right). The text will be green if the configuration read by the device matches that one in the config.dat file which was uploaded when the programming step started. The text will be red if there are some differences between the data read by the device and the data in the config file.

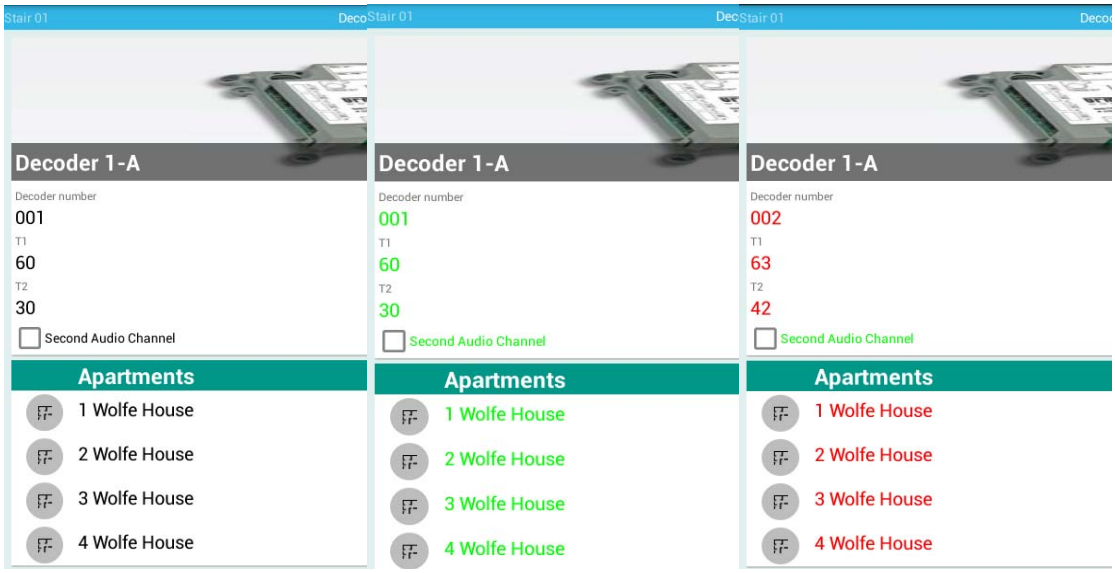


Figure 120 – Checking the programming in the device

CHECKING OF PARAMETERS DOWNLOADED TO THE COLUMN DEVICE

Even though the application has confirmed the correct download of configuration parameters, it can be useful to check the data already downloaded to the device. To perform this operation, click on the item “MENU”, if Windows Mobile PDA is used, or on the item “Options” for Symbian PDA. In both cases, after this operation select the item “READ FROM BT”. The application will require connection to the Bluetooth interface using the previously described modes. After reading, a page will be displayed, as shown in Figure 121.

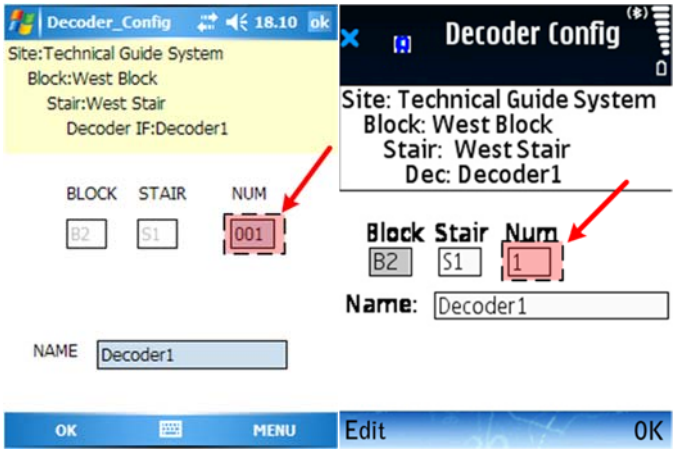


Figure 121: SoftMobile, Windows Mobile and Symbian versions – 4-user decoder parameters reading

Mnemonic names used in the FrontEnd are not downloaded to column devices (in the example, "*Decoder1*"), so the PDA will read this name from its database and show the data to the user. It follows that the name cannot be used to check if data has been downloaded to the right device. The checking must be performed, for the 4-user decoder, comparing the number assigned to the device; regarding an apartment, using its special parameters, for example those highlighted in , i.e. the lower part of topological code (Floor and Apt), and the call codes assigned to the apartment stations buttons; this subject will be dealt with in the chapter "Apartment advanced configuration - Call Buttons" on page 189.

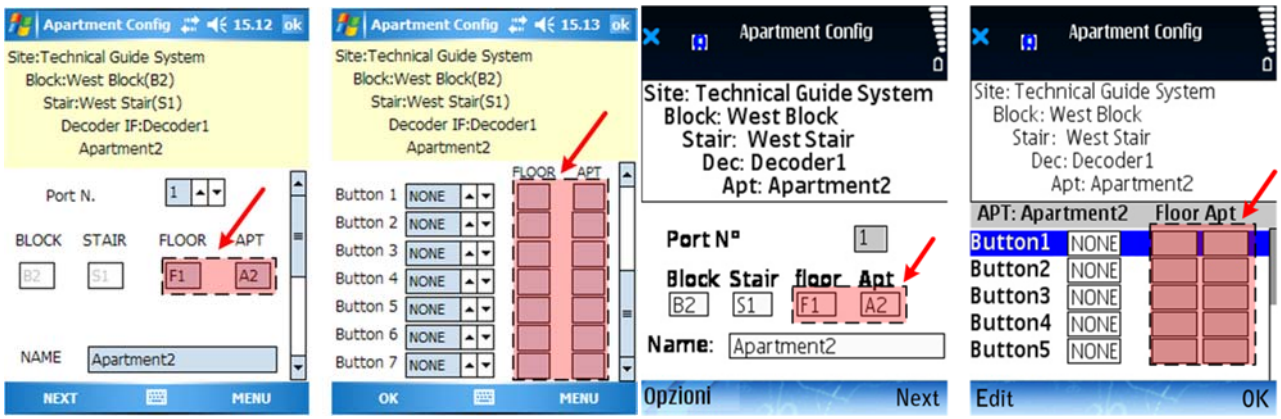


Figure 122: SoftMobile, Windows Mobile and Symbian versions – Apartment parameters reading

SEARCH FEATURE

The SoftMobile application is provided with a search function that allows to easily identify a device in the system. To use this function, the procedure changes, according to Windows Mobile or Symbian version. In the first case, click on the "*MENU*" item (right bottom) and then on the "Search" item. In the

second case, click on the item “Options” (left bottom) and then on the “Search” item. Figure 123 shows both the situations.

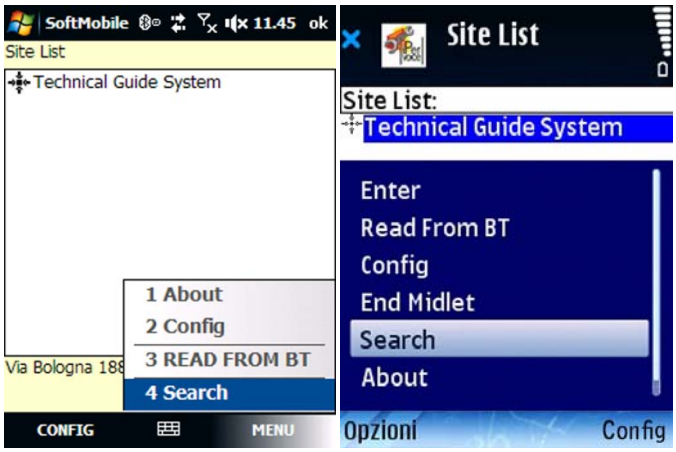


Figure 123: SoftMobile, Windows Mobile and Symbian versions – Device search feature

For both PDA models, the search can be performed by “Topological Code” and by “Device Name and Type” (Figure 124). To start searching, select the item “Search”.

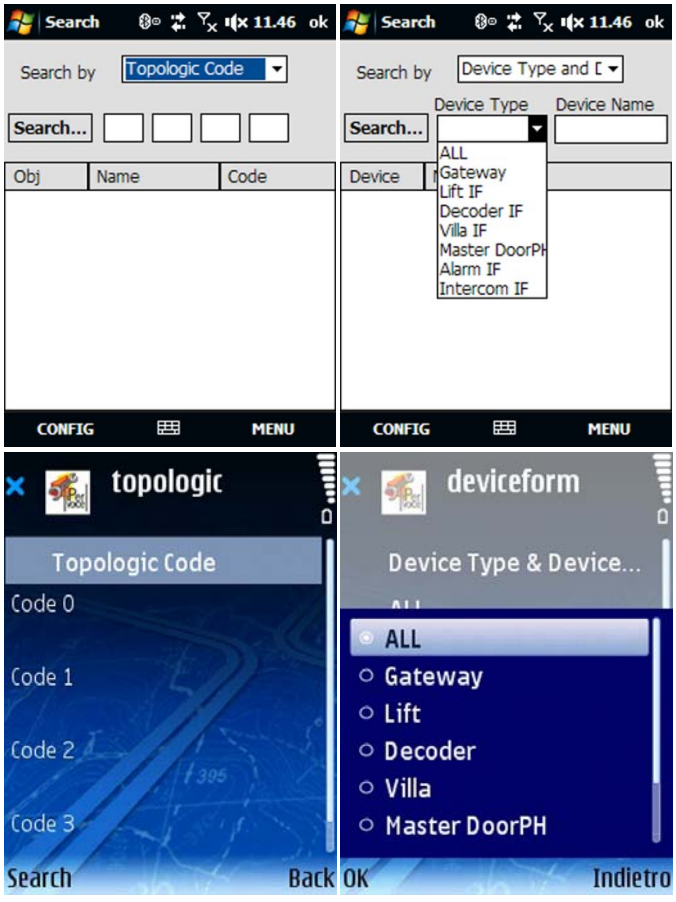


Figure 124 : SoftMobile, Windows Mobile and Symbian versions – Search mode

The list displayed depends on the search mode[60]: in the first case, the display will show the items identified by a Topological Code according to the configured search method, typically Blocks, Stairs, Floors and Apartments. Double click on the desired item to access the list of its devices[61]. In the second case [62] the list of devices belonging to the selected type will be directly accessed: in this case, double click on the desired item to directly display its detailed data.

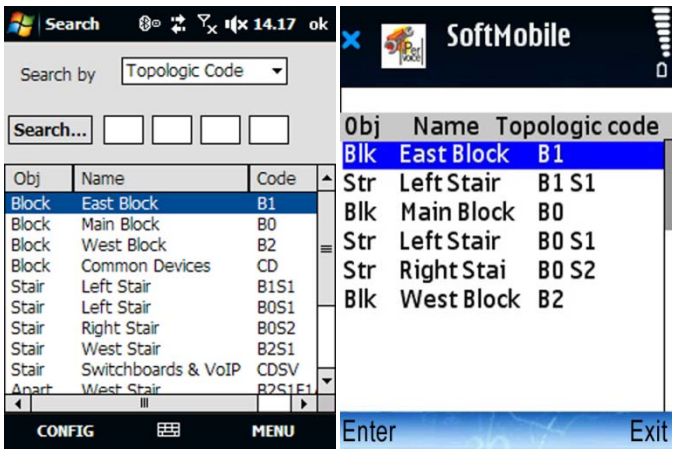


Figura 125 : SoftMobile, versioni Windows Mobile e Symbian - Risultati ricerca per Codice Topologico

10.1.5 PARAMETERS FOR COLUMN DEVICES CONFIGURATION

Ipervoice configuration data, required for correct operation of the system, is of a different type. It is programmed in the Ipervoice server by means of the FrontEnd, as already described.

Warning: column devices must be programmed only AFTER all configuration data has been stored in the FrontEnd database. Otherwise, if some system data are changed in the FrontEnd database, many column devices may need to be reprogrammed, in order to operate correctly.

The following table shows what devices need to be reprogrammed, according to changed parameters. If one or more parameters in the table are changed, the column devices configuration file **config.dat** must

[60] System elements can be searched also by filling partially the search field; for example, the first two digits of the topological code or the first characters of the device name.
[61] When accessing a stair item, the display will show its gateways, 4-user decoders and lift interfaces.
[62] On Symbian devices, to select the search mode by "Topological code" or by "Type and device name" press the button "Selection" (in models with joystick, this is the central button of the device).

be regenerated, as described later, and downloaded to the PDA; all the devices subject to changes must be reprogrammed.

Parameter	Concerned device	Configuration at page	Devices to be programmed
Time T1 (Call Pickup time)	1039/34 and 1039/36	Pag. 99 "Site Configuration"	All the devices 1039/34 and 1039/36 in the system
Time T2 (guaranteed conversation time)	1039/34 and 1039/36	Page 99 "Site Configuration"	All the devices 1039/34 and 1039/36 in the system
Decoder Number (4-user decoder identifier)	1039/34	Wizard: page 104 Devices configuration: page 176	The devices 1039/34, where the parameter *Number* has changed
Floor and Apartment Code	1039/34	Wizard: Page 105 and 106	The devices 1039/34, where the parameters *Floor Code and/or Apt Code* have changed
Call codes of apartment station programmable buttons	1039/34 and 1039/36	Devices configuration: page 189	There are the following cases: • Only the devices 1039/34 of apartments, where the parameters *Call Buttons* have changed, for apartment stations connected to 1039/34 • The devices 1039/34 and 1039/36 of apartments, where the parameters *Call* Buttons have changed, for apartment stations connected to 1039/36
Alarm Interface presence	1039/34	Wizard: page 106	The devices 1039/34 of apartments, where the parameter *Alarm Interface* has been changed
Intercom Number (Intercom interface identifier)	1039/36	Devices configuration: page 210	The devices 1039/36 where the parameter *Number* has been changed
Decoder Port Number (Apartment identifier)	1039/36	Devices configuration: page 185	The devices 1039/36 of apartments, where the parameter Decoder *Port Number* has been changed
Lift Interface Code (Lift interface identifier)	1039/37	Devices configuration: page 178	The devices 1039/37 of apartments, where the parameter *Code* has been changed
Second audio channel present	1039/50	Devices configuration: page 119	All devices 1039/34 present on the involved riser column

Table 39: Column devices programming – table of parameters / devices programming dependencies

10.2 4-USER DECODERS CONFIGURATION

4-user decoders are associated to a Block and a Stair and are physically and logically connected to an IP gateway. To select the device to be configured, its respective IP gateway must be identified; then expand the item “Decoders”, that includes the devices 1039/34 (Figure 126).

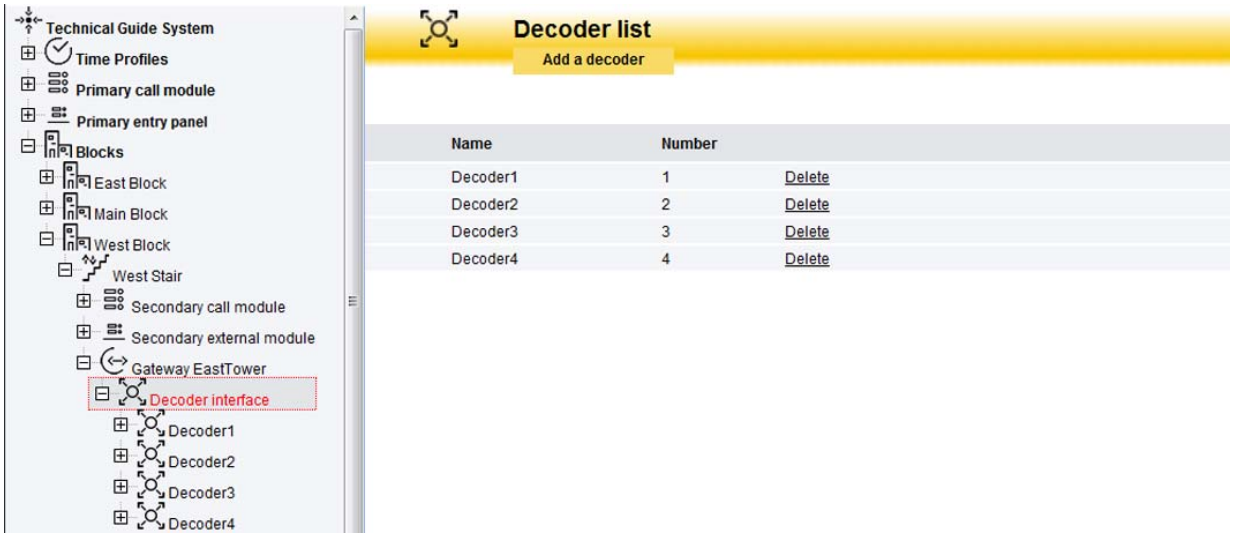


Figure 126: 4-user Decoders configuration – Devices list

Click on the desired decoder name to access to its configuration page, as shown in Figure 127.

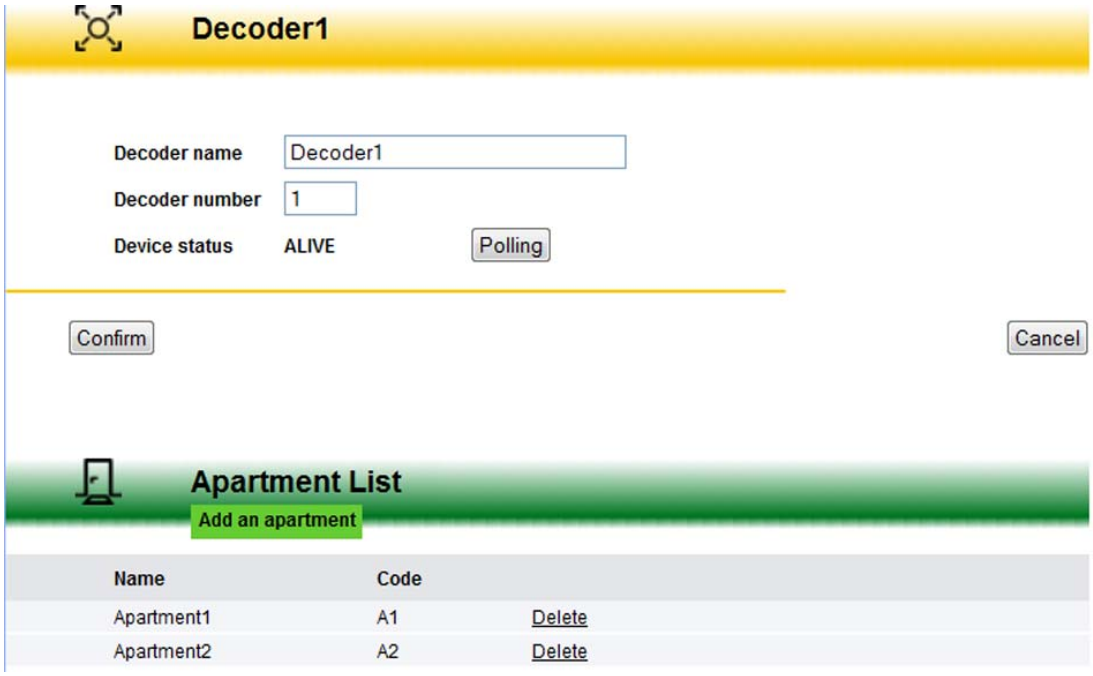


Figure 127: 4-user Decoders configuration – Configuration data

The following table shows the modifiable data, the same data that can be configured with the StartUp Wizard. Up to four apartments can be associated to each decoder; in this configuration page it is possible to add, delete or change data. For all information concerning the apartments configuration, refer to the chapter “Apartments Configuration” on page 182.

Decoder Name	Name assigned to the decoder, required field. Maximum length: 32 characters.
Decoder Number	Decoder unique numeric code, in the respective gateway domain. Required field. Values from **1** to **270.**
Device status	Device status detected by the system. The status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**.

Table 40: 4-user Decoders configuration – Parameters meaning

10.3 LIFT INTERFACE CONFIGURATION

Lift interface modules 1039/37 are used to command lift control units, in order to enable visitors to go up only to some floors, according to the called apartment. Lift control units are driven by changing the status of one or more inputs of these control units with corresponding command relays.

10.3.1 OPERATING MODE

Ipervoice allows to configure two operating modes for the lift interface:

- **Floor Mode** – default
- **Apartment Mode**

The configuration is performed for each stair, as shown in Figure 128. The first mode (Floor Mode) allows to configure the interface commands according to the apartment floor: in this case, several apartments of the same floor will have the same relay activation diagram. The second mode allows to set a different configuration of commands for each apartment of the same stair: this is useful if there are several apartments on the same floor, each one with its own lift.

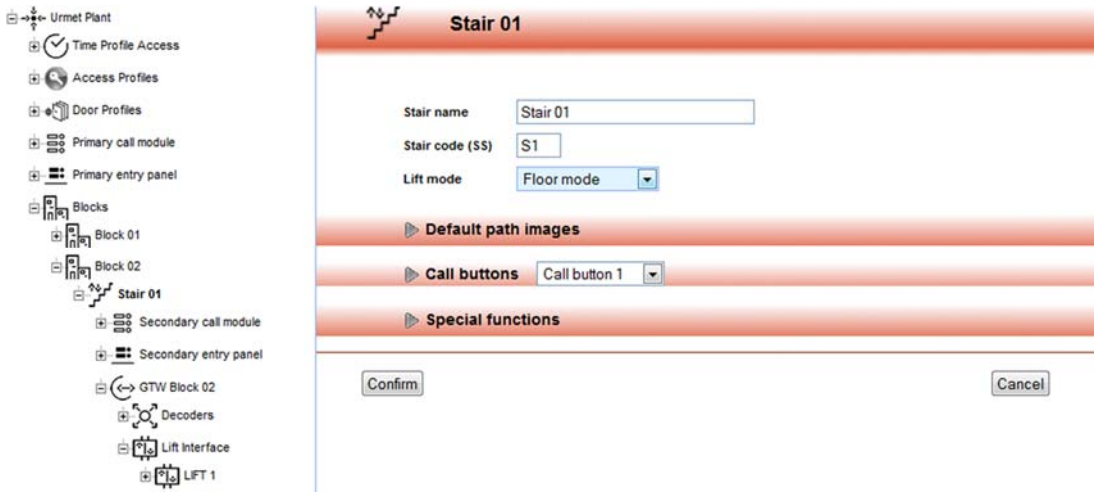


Figure 128: Lift Interface Configuration - Lift mode setting

Also lift interface modules are associated to a Block and a Stair and so they are connected to an IP gateway. To select the device to be configured, identify the IP gateway to which the lift interface is associated, expand the item “Lift Interface” that contains this type of devices and click on the desired module (Figure 129).

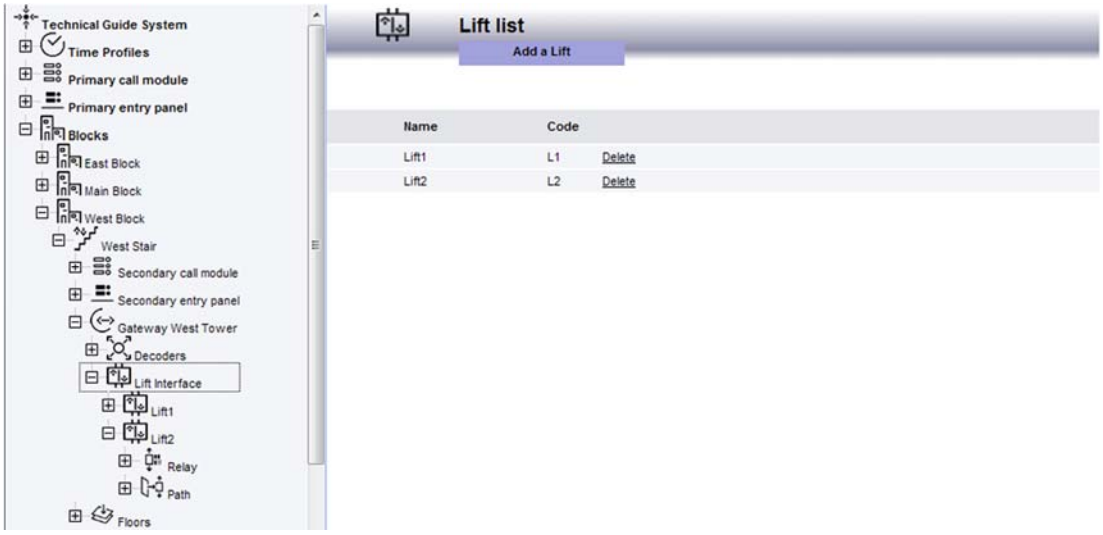


Figure 129: Lift Interface Configuration – Devices List

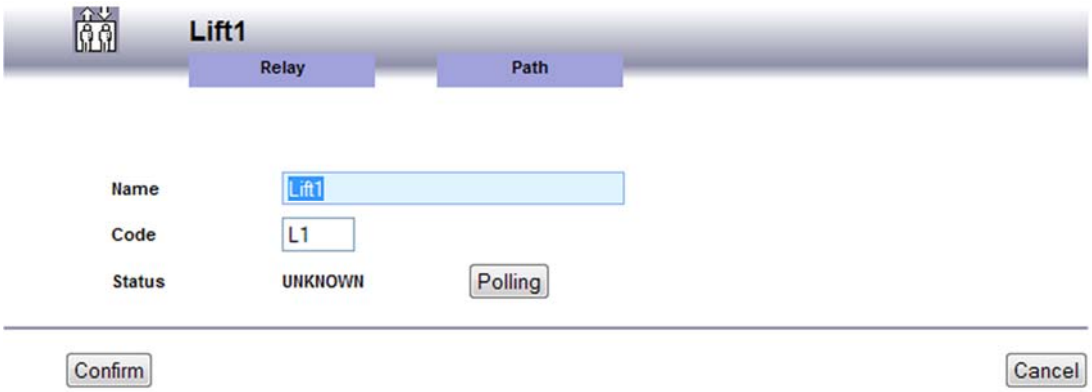


Figure 130: Lift Interface Configuration - Main configuration data

The display shows the configuration page, similar to that shown in Figure 130; besides main data, shown in the following table, to complete the configuration perform the following two operations:

- Creation of access path
- Association of command relays

Name	Name assigned to the lift interface, required field. Maximum length: 32 characters.
Code	Device unique alphanumeric code, composed according to the respective gateway. Required field. Fixed length: 2 alphanumeric characters (ex. L1, 01, 1L, etc.).
Status	Device operating status detected by the system. The status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**.

CREATING THE ACCESS PATH

The lift interface is provided with 24 relays which can be configured, with the FrontEnd, in order they close after an event is occurred in the system. A typical case is enabling the visitor, that enters the residential building, to use a lift only to go up to the floor or apartment according to the lift operation mode, where the resident with the selected name lives. To do this, it is necessary to create a path, that is an association between the device used to enter the building (for example a main or secondary call station or an IP key reader placed near a driveway gate) and the destination of the visitor, that is the floor/apartment[63].

[63] In the example, only the **Floor** o **Apartment** are mentioned, because **Block** and **Stair** depend on the gateway to which this lift interface is connected.

To access the path configuration, click on “Path” item under the device name, as shown in Figure 130: the display will show the page with the list of the paths already configured. To change an existing path, click on the linked device type or name; to add a path, click “Add a path” in the upper side of the page.

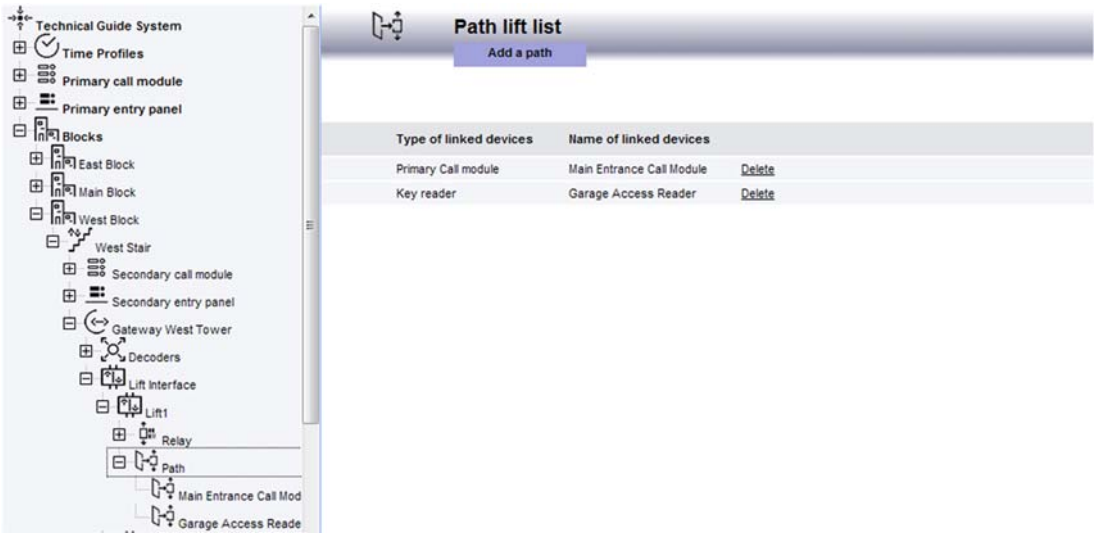


Figure 131: Lift Interface Configuration – Path list

In both cases, the display shows the configuration page, as shown in Figure 132.

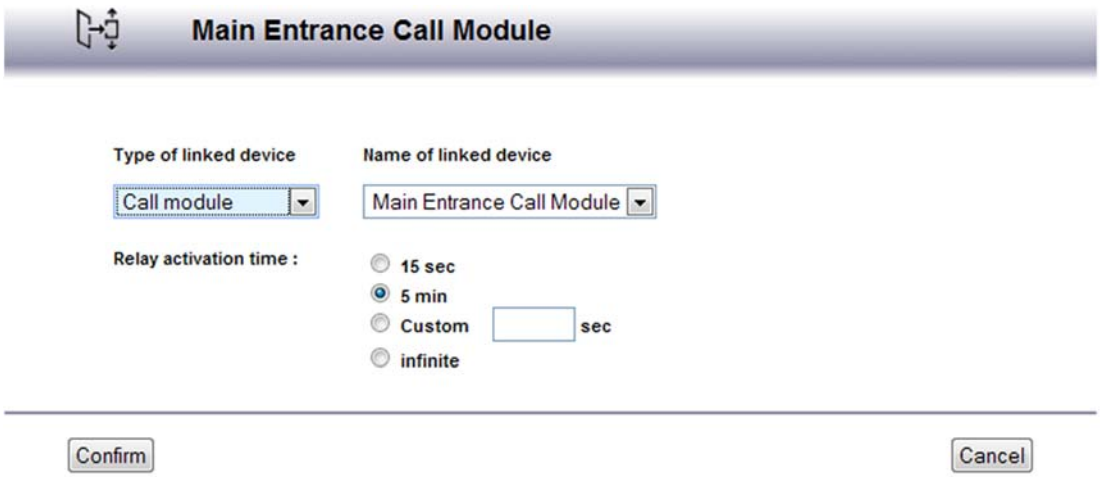


Figure 132: Lift Interface Configuration – Creation of access path

The data available for the configuration are summarized in the following table:

Type of linked device	List of device types to which the path must be linked. Allowed values: **Call module**, **Entry panel**, **key reader**, **Switchboard**.
Name of linked device	List of system devices of the selected type. The selection of a device is required.
Relay activation time	Activation time of relays associated to the path, in seconds. The following options are available: • **15 sec** • **5 min** • **Custom** • **Infinite** In the third case, it is necessary to specify the relay excitation time, in seconds.

Warning: It is important to remember when creating an access path that the "IP Module" type device cannot differentiate paths according to the door (from 1 to 4). The path will thus be considered "by device" and not "by door".

ASSOCIATING COMMAND RELAYS

To complete the lift interface configuration, command relays must be associated to floors/apartments. Both in "Floor mode" and in "Apartment mode", the association is performed in the same mode, the only difference is the section where the configuration is performed, in the first case in the floor section, in the second case in the apartment section. For each floor/apartment to be enabled, it is necessary to associate the switching of one or more relays, which enable the lift to go up[64].

ASSOCIATING IN FLOOR MODE

In order to associate relays to floors, it is necessary to configure the floor parameters: to do this, select from the devices list the desired floor/apartment[65], identify the interface to be configured and select the relays to be activated. This operation must be repeated for each floor to be managed. Figure 133 shows, for example, the activation of the relay "LIFT RELAY 1" if the lift must be enabled for "Floor 1".

[64] It is possible to activate more than one relay for each floor/apartment, in order to perform complex selections, if needed by the lift control unit (for example, if a several digits binary code must be used).
[65] Each lift interface operates only on its block/stair, so select only floors of the right block and stair.

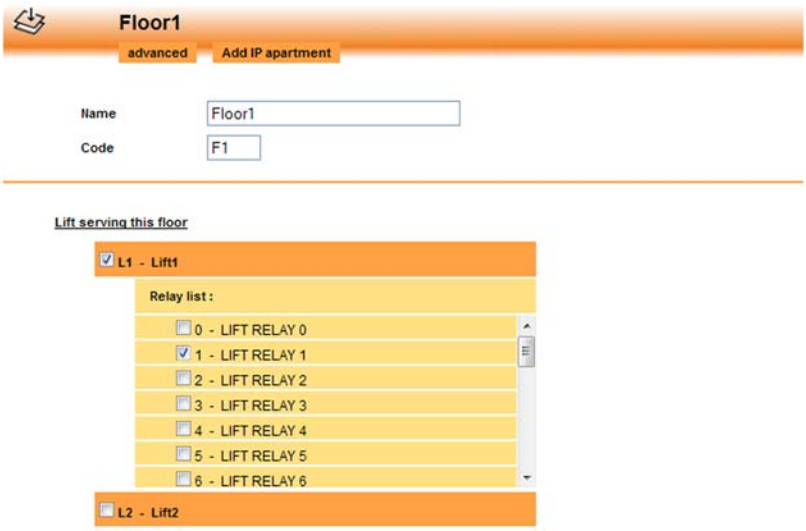


Figure 133 : Lift Interface Configuration – Command relay association in Floor Mode

ASSOCIATING IN APARTMENT MODE

In this case, the operation is performed by configuring the settings of each apartment. First select the desired apartment[66] from the devices list, then select the interface to be configured in the section "Lifts serving this apartment" and select the relays to be activated. As shown in the previous case, this operation will be repeated for each apartment. Figure 134 shows, for example, the activation of "LIFT RELAY 1, LIFT RELAY 2" relays, if the lift must be linked to "Apartment 1".

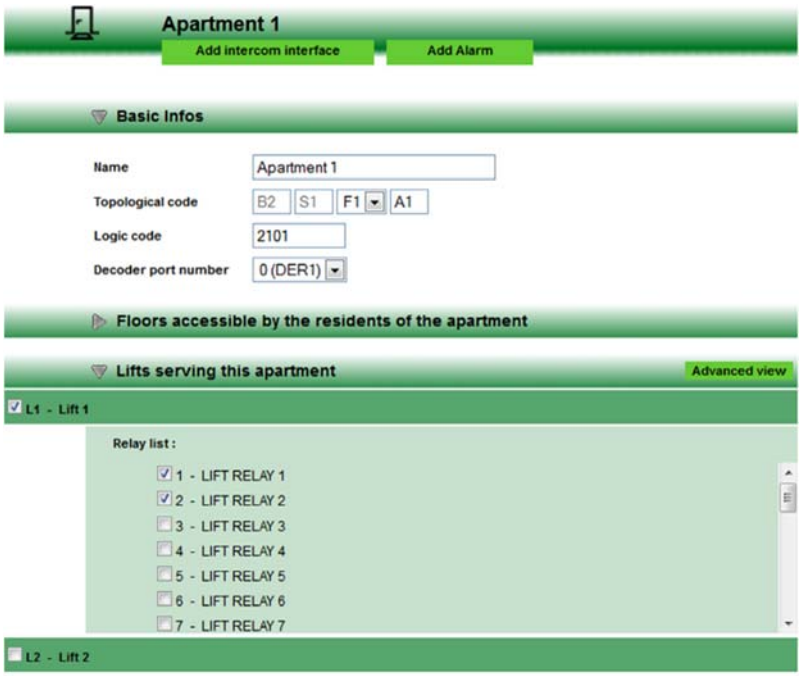


Figure 134: Lift Interface Configuration – Command relay association in Apartment Mode

[66] Each lift interface operates only on its block/stair, so select only apartments of the right block and stair.

11 APARTMENTS CONFIGURATION

An important chapter for the Ipervoice start-up concerns the apartments configuration. These can be connected to a CAT5 dedicated network or to an IP network, according to the type of riser. The system provides many functions; these will be described by category, starting from the device involved with use in configuration phases. The following subjects will be treated:

- Apartment selection
- Adding of an apartment in minimal configuration
- Advanced configuration of apartment functions
- Management of Residents associated to an apartment
- Apartment stations configuration.
- Intercom interfaces configuration

After the procedures used to configure traditional apartments, the chapter will describe special details about management of apartments composed by IP devices.

11.1 APARTMENT SELECTION

To select an apartment in the devices tree, two different modes are available:

- Selection by the respective 4-user Decoder
- Selection by the respective Floor

In the first case, identify, inside the block-stair, the IP Gateway that manages the riser column, then select the 4-user decoder to which the apartment is connected (Figure 135). The same operation must be performed to add a new apartment to an existing decoder.

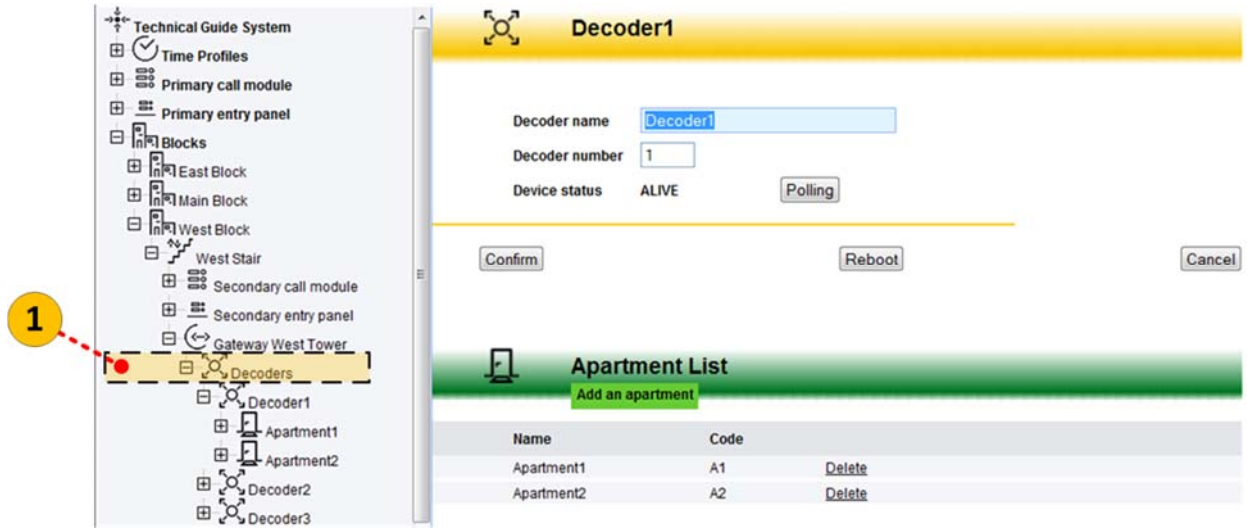


Figure 135: Apartment selection – by 4-user decoder

In the second case, identify the desired floor inside the respective block-stair, then apartments are displayed, as shown in Figure 136.

Warning: The function “Add IP apartment”, shown in the page, is used to add an apartment equipped with IP devices only. This function will be soon available; at the moment, to add an apartment, select the 4-user decoder. For further information about “IP apartment” configuration, see the paragraph “IP Apartments Configuration” on page 212.

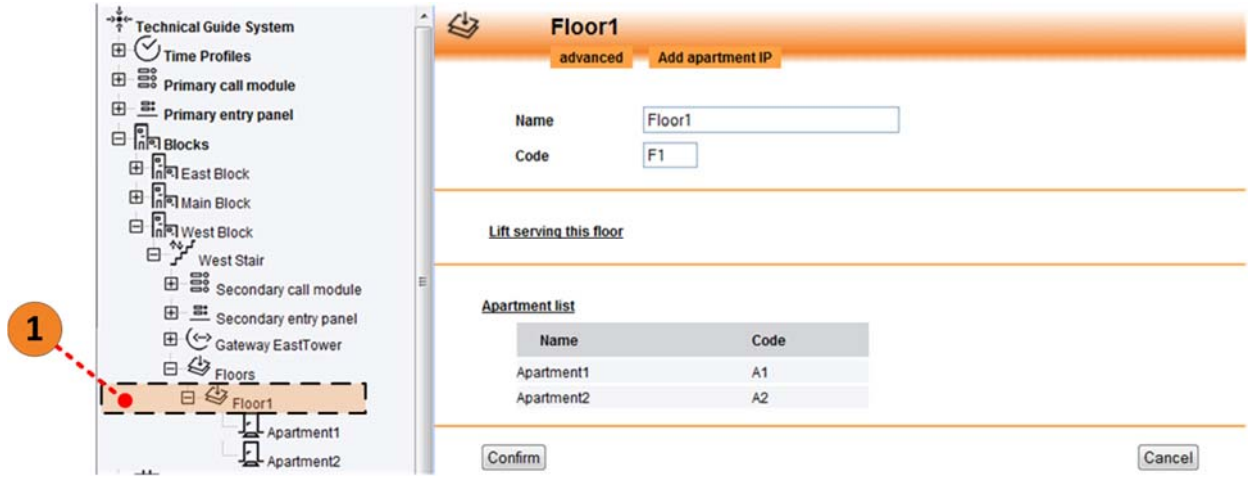


Figure 136: Apartment selection – by respective Floor

11.2 ADDING AN APARTMENT

To add an apartment to a 4-user decoder, click the button "*Add apartment*" under "*Apartment List*", as shown in Figure 135.

Note: The function "Add apartment" is only available if there are currently one or more free outputs on the selected 4-user decoder.

The FrontEnd displays the data entry page, as shown in Figure 137. Because this paragraph concerns the minimum data that allows Ipervoice to manage a new apartment, only the parameters concerning the "*Basic Info*" section of the configuration page will be described. The other functions will be described later in the section "Apartment advanced configuration" on page 185.

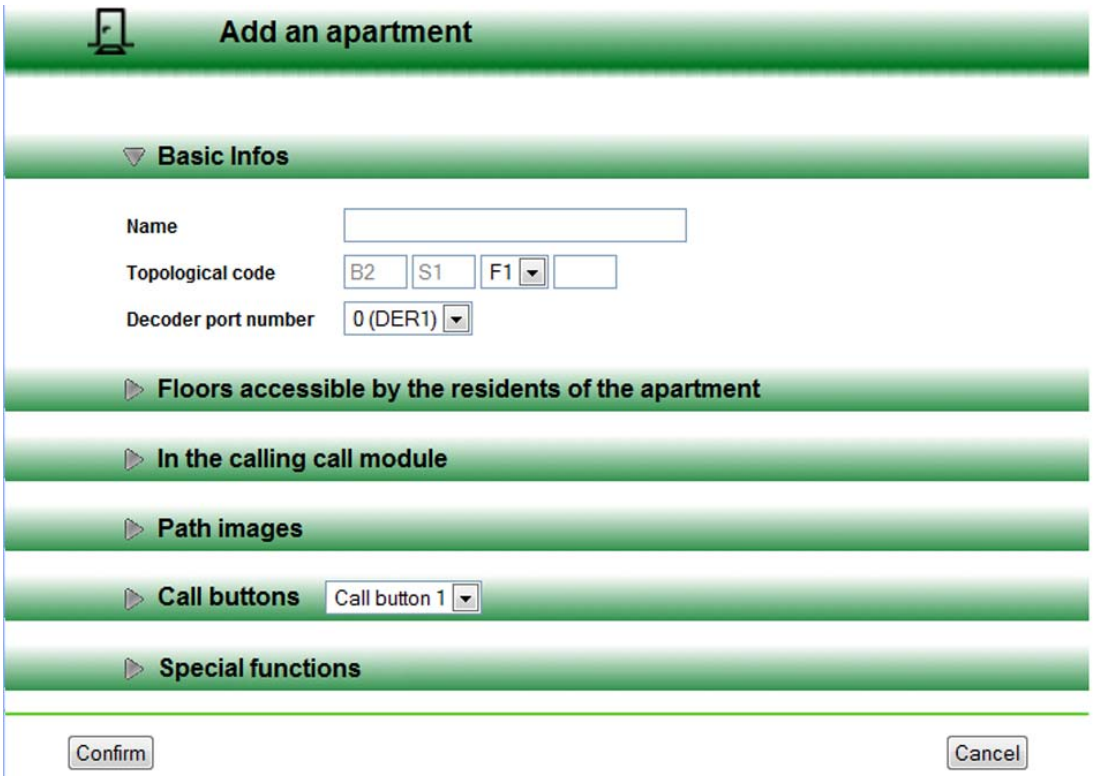


Figure 137: Apartments configuration – adding an apartment

The following table shows the data to be entered. After entering the desired values, press the button "*Confirm*" to permanently save the information.

Name	Apartment name. Required field. Maximum length: 32 characters.
Topological code	It is the apartment unique code. The user must specify the Floor, by selecting it from the pull-down menu and must enter the last part of the real topological code. Required field. Fixed length: 2 alphanumeric characters (e.g. 01, A1, 1A, AB).
Logical Code	Unique logic code for the apartment. Available only if the system is configured in logic addressing mode. Required field. Length from 2 to 8 alphanumeric characters.
Decoder Port Number	Apartment decoder port. It is an RJ45 socket named DER1, DER2, DER3, DER4. The value can be selected form a pull-down menu, the available values are: **0 (DER1), 1 (DER2), 2 (DER3), 3 (DER4)**. The FrontEnd only shows the ports not yet assigned.

Table 41: Adding an apartment – Meaning of basic configuration data

11.3 APARTMENT ADVANCED CONFIGURATION

Even though the previously entered "basic" information is enough to make an apartment active, it is possible to enter other configuration data, concerning the following functions:

- ***Call Forwarding***
- Floors that can be accessed by the residents of the specific apartment(***Floors accessible by the residents of the apartment***)
- Interaction with the call module (***In the calling call module***)
- Graphic maps of access paths (***Path Images***)
- Buttons used to call other devices (***Call buttons***)
- Special functions (***Special functions***)

11.3.1 CALL FORWARDING

This section, shown in Figure 138 , is used to select behaviour of the main terminal in the apartment in case of calls[67]. There are two operating modes:

- Voicemail recording
- Call Forwarding

The first mode is used to forward incoming calls to the video door phone voicemail service. The second is instead used to transfer the incoming call to an SIP device (typically a smartphone or a tablet). Enter the SIP name to be contacted in the specific text box to forward the call. The name must be a user registered on the Urmet SIP server at ***sip.urmet.com***.

Note: An Internet connection with upload bandwidth of at least 1Mbs and a download bandwidth of at least 2Mbs is an essential prerequisite for correct operation of the call forwarding function.

Warning: The two operating modes are mutually exclusively. Both are activated on the apartment station by enabling the voicemail function.

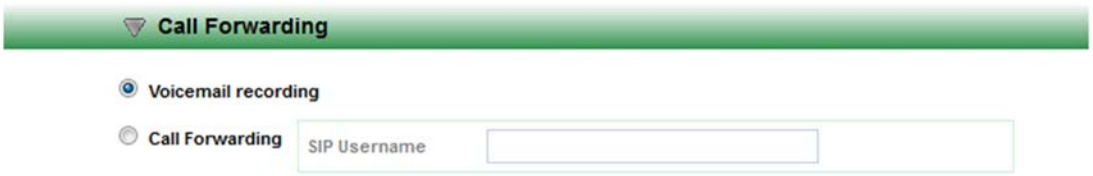


Figure 138: Advanced apartment configuration – Call forwarding setup

11.3.2 FLOORS ACCESSIBLE BY THE RESIDENTS OF THE APARTMENT

This section, that is shown expanded in Figure 139, makes it possible to select the floors to which the apartment residents can access. This function is related to the use of the lift interface 1039/37, that allows residents to be associated to a list of floors enabled for the use of the lift. By selecting the box near the name, the installer can add the floors accessible to the residents.

Once the configuration is completed, press the button "*Confirm*" to save information.

[67] This section is only available if the call forwarding function is configured on the IPerVoice system. See12.8 – "Server Configuration" on page251.

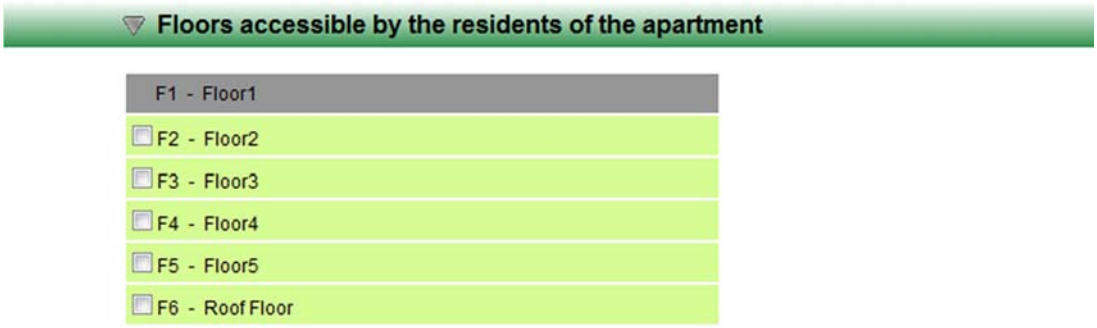


Figure 139: Apartment advanced configuration – Setting of floors accessible by residents

Note: The floor where the apartment is located, in this case F1 – Floor1, is shown, but it cannot be de-selected from the list of floors.

11.3.3 IN THE CALLING CALL MODULE

This section describes the configuration data concerning the interaction between apartment and call modules and vice versa. This data is related to two main functions: the first one, provided by the devices 1039/13 and 1039/18, allows some apartment parameters to be changed from the door unit; the second one allows a specific message to be shown to visitors, that will be displayed on the call module when the resident is absent.

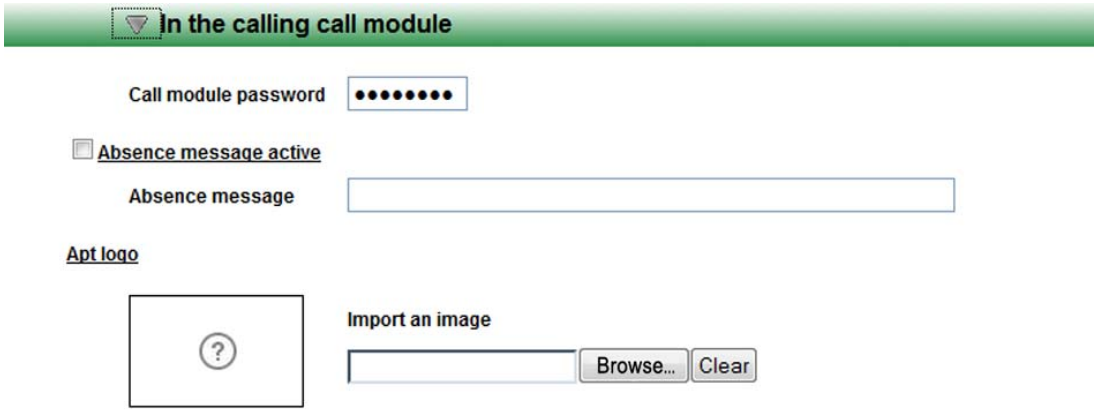


Figure 140: Apartment advanced configuration – Setting of relation parameters between apartment and call modules

The Table 42 shows the meaning of data to be entered.

Call module password	A password can be used on the call module to configure some apartment functions. In this field it is possible to change the password from the default value to the value required. To perform this function on the call module, enter as username the apartment topological code, followed by the password set using this function[68]. Numeric field. Minimum length: fixed, 8 characters.
Absence message active	If selected, an absence message, described below, is displayed on the call module when the apartment is called.
Absence message	Absence message displayed on call modules. Maximum length: 60 alphanumeric characters.
Apt Logo	Image in png[69] format (Portable Network Graphics) shown by the call module when the apartment is called. Image max. size[70]: 110 x 170 pixel

Table 42: Call modules settings – meaning of configuration parameters

11.3.4 PATH IMAGES

This paragraph will deal with subjects already described in the previous section. In this case, the target is the visitor, helping them to visually find the Block that includes the apartment they are visiting. For each call module associated to the apartment, it is possible to choose an image, that will appear on the display when the door is opened to let the visitor in. The image, usually a map, is used to highlight the path to be followed to reach the desired Block.

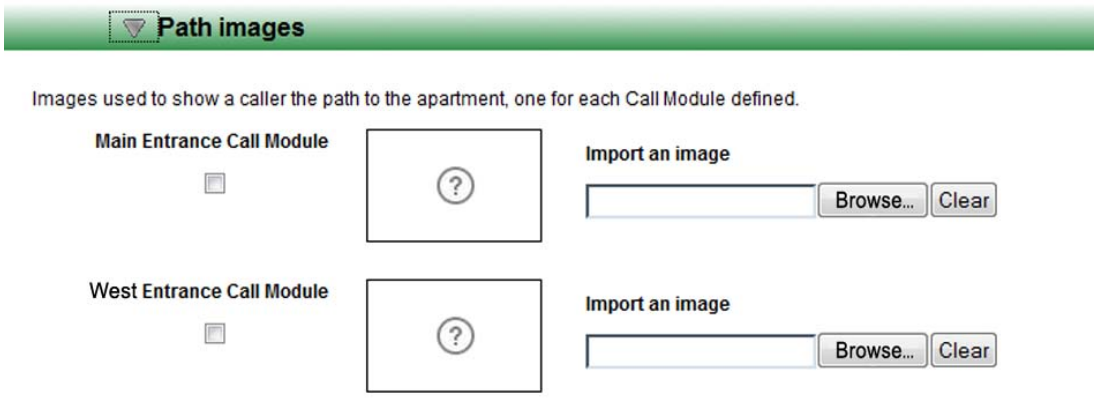


Figure 141: Apartment advanced configuration – Choosing Graphic maps

[68]The default password is: **12345678** for all the apartments. By changing the default password, the system also allows to configure a different password for each apartment of the building.

[69]To convert an image from other graphic formats, as jpeg, gif or bmp to png, the application "Paint", provided with Windows operating systems can be used, or other similar utilities.

[70] This is the size of the image shown by the call module display; bigger images will automatically be scaled..

In the configuration page there is a list of call modules where the help map can be set (Figure 141). The following table contains all the information needed to set the required parameters.

Name of the call module	Under the call module name, shown in the example of Figure 141 "*Main Entrance Call Module*" or "*West Entrance Call Module*", there is a selection box: if selected, path map visualization is enabled.. (The system disables the saving, if the file is not present and the cell is selected).
Import an image	Field used to import the image in png[71] format (Portable Network Graphics), displayed by the call module after the entrance door has been opened. As for all other similar cases, click the "Browse" button to select the desired image file..

Table 43: Graphic maps of access paths – meaning of configuration parameters

11.3.5 CALL BUTTONS

On the apartment stations there are some configurable buttons[72] (seven max.), that can send commands outside the apartment. They are mostly used, when the apartment station handset is off-hook (or the conversation button has been pressed, in hands-free models), to call a switchboard or to call another apartment in the same riser column (managed by the same IP gateway) (Figure 142).

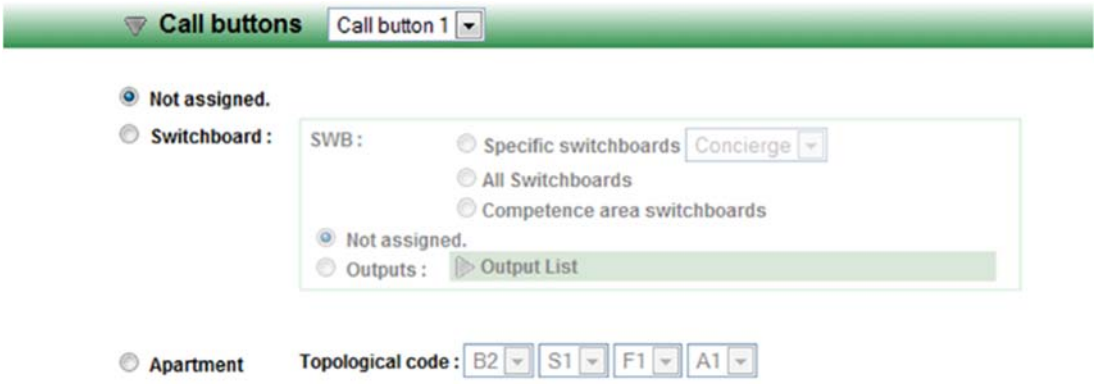


Figure 142: Apartment advanced configuration – Call buttons

The Table 44 contains the programming indications.

[71] To convert an image from other graphic formats, as jpeg, gif or bmp to png, the application "Paint", provided with Windows operating systems can be used, or other similar utilities

[72] The number of available buttons can change, according to the apartment station model the presence of "additional buttons" module.

Call Buttons	The system executes the command, configured as described below, when the same call button selected from the pull-down menu is pressed. The available values are: **Call button 1** to **Call button 7**. These are configurable buttons[73]; they are active if pressed when the apartment station handset is off-hook (or the conversation button has been pressed, in hands-free models).
Not assigned	Default condition, when the button is pressed, the system does not execute any command.
Switchboard	The command is used to call a switchboard or activate special decoder outputs. Three options are available for switchboards: ➢ **Specific Switchboard** From the pull-down menu, select the switchboard to be called ➢ **All Switchboards** The call is sent to all the switchboards ➢ **Competence area switchboards** The call is sent only toswitchboards with competence on the apartment For new generation analog apartments the call button to be programmed to call the switchboard in one of the above otpion is the n. 250.
Apartment	In this case, the call is sent to an apartment. The selection is made by entering the topological code of the apartment to be called, which must be managed by the same IP gateway.

Table 44: Call buttons – Meaning of configuration parameters

[73] For further information about door phone buttons, please refer to the paragraph "Button Function Assignment" on page 87.

11.3.6 SPECIAL FUNCTIONS

When an event occurs, the commands performed by an apartment station, directed to one or more system outputs, are many and various, as shown in Figure 143.

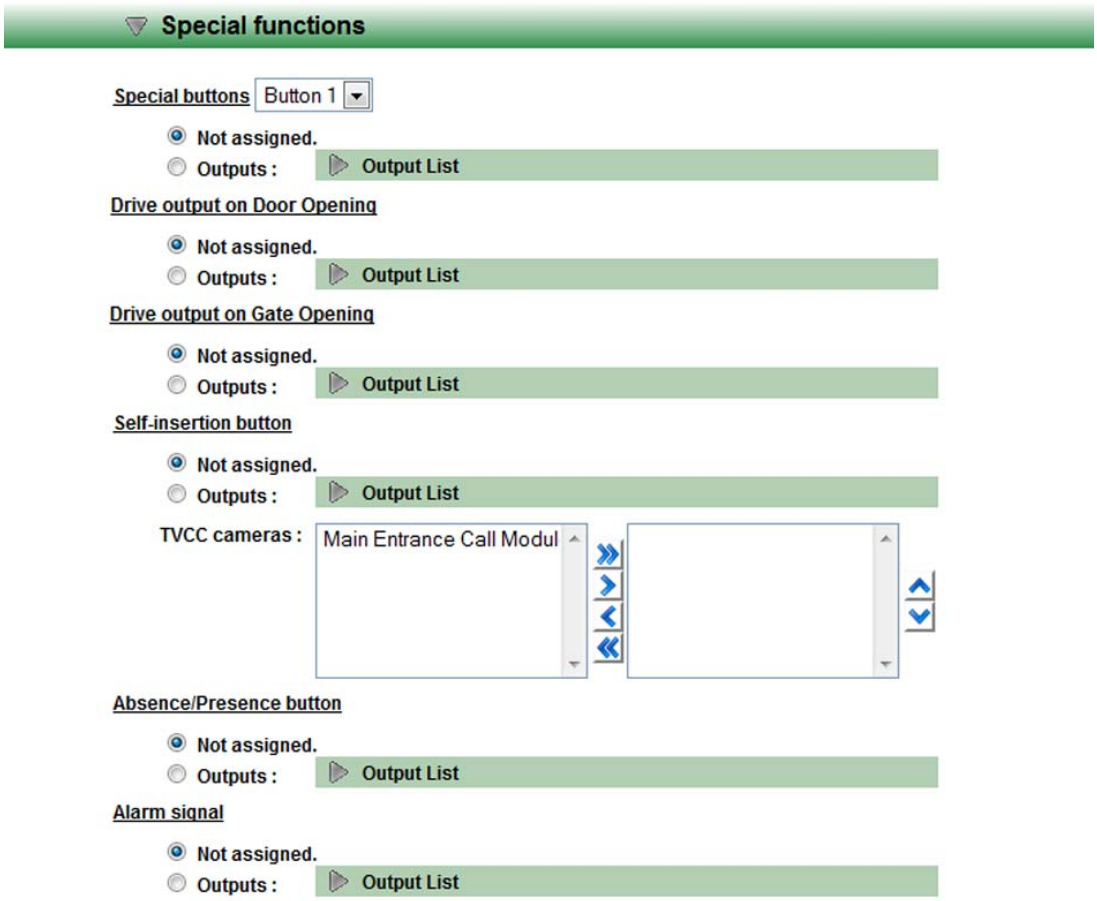


Figure 143: advanced configuration – Special functions setting

Even though the commands for special decoders 1039/81 outputs are similar to those already described (for example, on page 124 or page 135), there are two options, described in the following table and concerning two new aspects: the “special buttons” and the cameras, activated in auto-on cycle.

Special buttons	The system executes the command on the configured outputs when the special button, the same selected from the pull-down menu, is pressed. The available values are: **Button 1** to **Button 6**. These are configurable buttons[74]; they are active if pressed when the apartment station is in stand-by (the handset is on-hook).
Drive output on Door Opening	The system executes the command when the user in the apartment station requests a door lock release.
Drive output on Gate Opening	Command similar to the previous one, executed when the vehicle entrance gate is opened.
Auto-on button	The system executes the command when the auto-on button is pressed (see the paragraph "Auto-on, cyclic, mono and bidirectional audio" on page 62 for more information about the auto-on function). In this section it is possible to configure the cameras; the images coming from these cameras are displayed in the apartment during the auto-on "cyclic" function. There are two lists: the left one contains the cameras available in the system (call modules and video servers cameras), the right one contains the selected cameras.
Absence/Presence button	When the user changes the resident absence/presence status, by pressing the dedicated button in the apartment, the system executes the command on the configured outputs. **Warning:** the absence/presence button is only available on the Master apartment station (i.e. on the apartment station with identification number **0**).
Alarm signal	The system executes the command in case of alarm event coming from the apartment (issued from the "panic alarm" button of apartment stations or alarm interface 1039/61).

Table 45: Command setting for special decoders – meaning of configuration parameters

[74] For further information about door phone buttons, please refer to the paragraph "Button Function Assignment" on page 87.

11.4 RESIDENT MANAGEMENT

As already described, the Ipervoice system manages the residents data, by associating them to the apartments. So, the system creates “residents address books” linked to their respective blocks and stairs, instead of a single general directory.

To add a new resident, select, in the devices tree, the item “Resident” related to the apartment where the name is to be saved. (Figure 144).

Note: Two options are available to select an apartment in the devices tree: select the IP gateway and then the 4-user decoder to which the apartment is connected, as shown in the example, or select the apartment from the floors list (the item “Floors” and then the apartment floor).

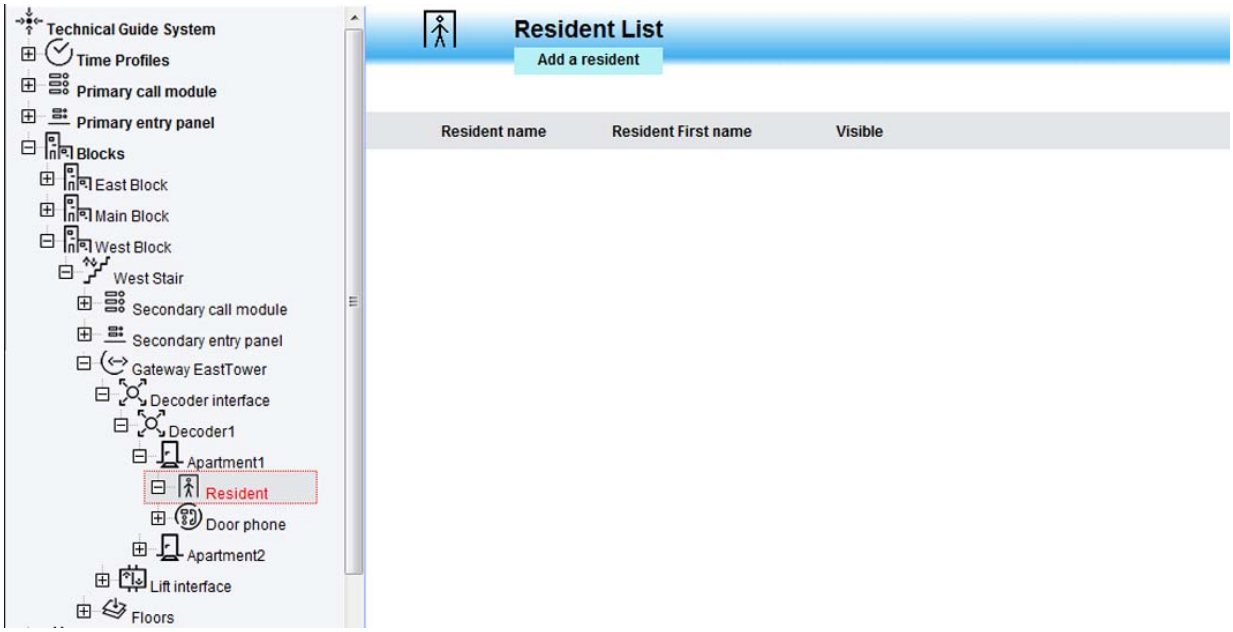


Figure 144: Apartment configuration – Adding a new resident

Figure 145: Apartment configuration – Residents list

Click on “Add a resident”, under the title, to gain access to the data entry page. If some residents have already been added, they will appear in the list, as shown in Figure 145.

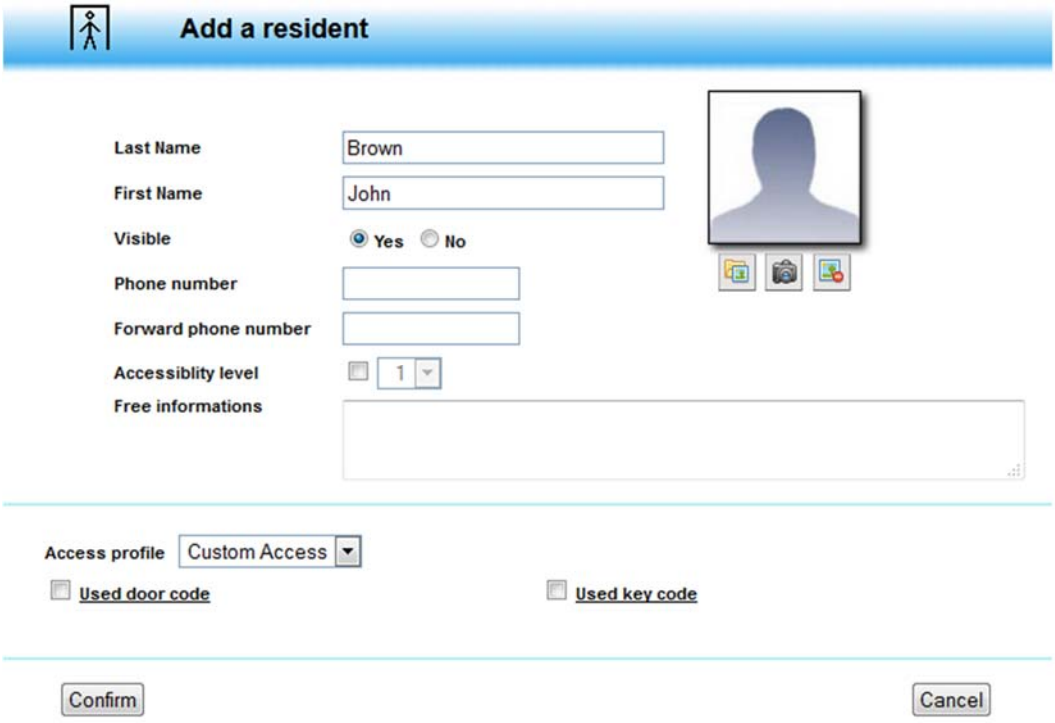


Figure 146: Apartment configuration – Entering the main data of a new resident

Table 46 helps to understand the meaning of the main values to be entered; click the button “Confirm” to add the new resident to the directory.

Name	Name, required field. Maximum length: 32 characters.
Firstname	First name, required field. Maximum length: 32 characters.
Visible	Visible resident: if set to Yes, it allows the name (surname and first name) to be displayed on the call modules. Available values: Yes, No. Default value: **No**.
Phone number	Telephone number associated to the resident. This field is optional. Maximum length: 16 numeric characters.
Forward phone number	Not used. For future purposes.
Accessibility Level	When selected it allows, from the pull-down menu, to multiply by the indicated factor the door opening time programmed on the device. Allowed values: min: **1**, max: **10**. Default value: **Not selected**.
Free information	Field available for adding notes and information.

Access profile	Selection of user access profile (if available). The value can be selected from a pull-down menu which contains the previously programmed profiles, if present. For information about access profile definition, refer to chapter “Advanced functions configuration - Access Profile” on page 221.
Used door code	If selected, it means that a door lock release code is associated to the resident. For programming procedure, see the paragraph “Door Code Configuration” on page Door Code Configuration. Default value: **Not selected**
Used key code	If selected, it means that a proximity key is associated to the resident. For programming procedure, see the paragraph “Key Code Configuration” on page 198. Default value: **Not selected**

Table 46: Residents management – Basic data programming

An image or passport photograph can be associated, if required.

11.4.1 Residents Address Book Updating

Once the residents data has been entered, the residents address book must be rebuilt. This operation is performed by the Ipervoice server to update the call modules directories. To activate the function, select the item “UPDATE SYSTEM” on the main menu: the result is displayed in a pop-up window, as shown in Figure 147.

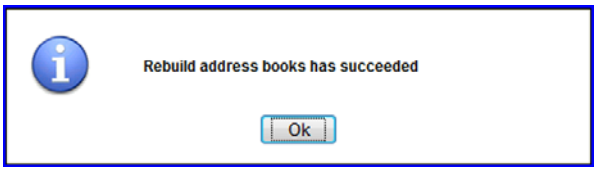


Figure 147: Residents address book updating – operation result

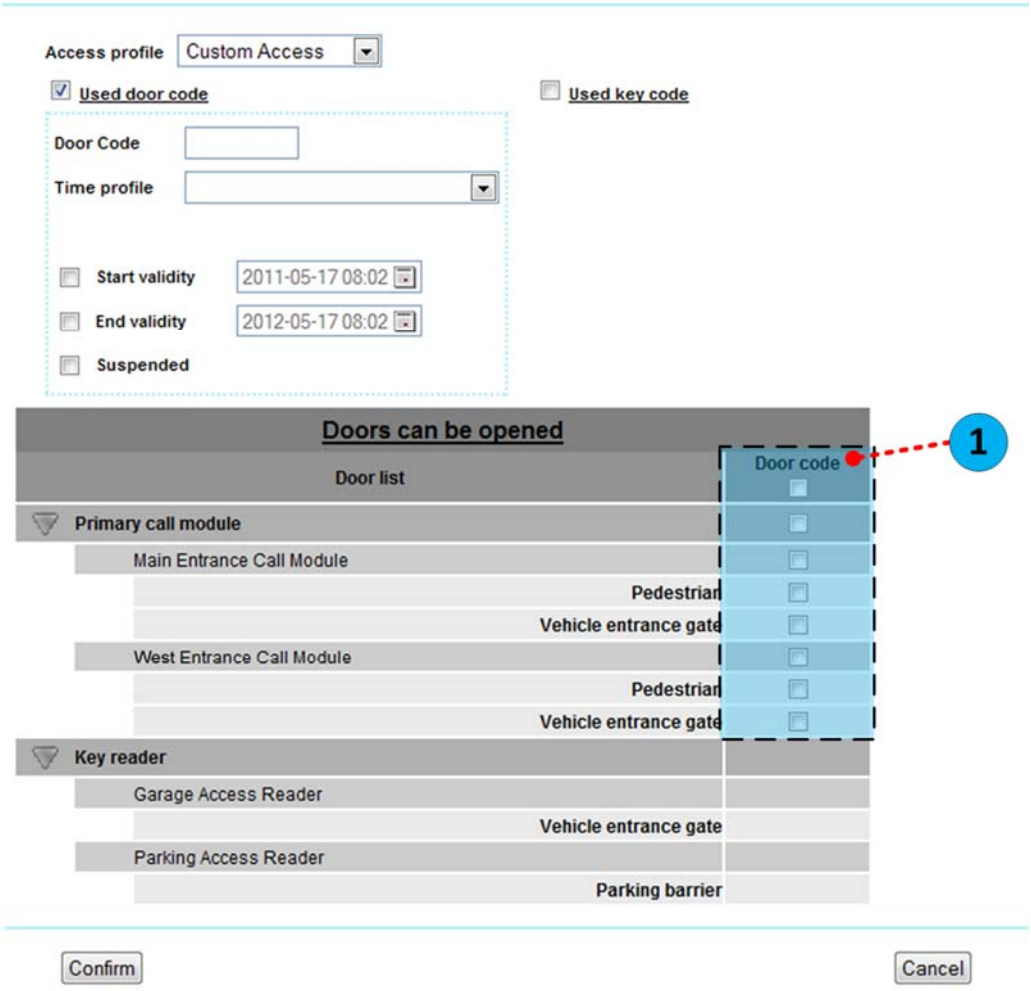
Warning: this operation must be performed each time the residents address books are changed. Otherwise, the call modules and the respective switchboards will not show these updates.

The system will inform the user each time an operation is performed, which requires an Address Book rebuild and when a system configuration update is needed, highlighting the item “UPDATE SYSTEM” on the main menu, as shown in Figure 148.

Figure 148: System updating – update request

11.4.2 DOOR CODE CONFIGURATION

To open a door from a main or secondary call module, a "Door code" can be used. A code, unique in all the system, can be assigned to each resident; when this code is entered on the keypad of one or more call modules, the relay used to open the door or the vehicle entrance gate[75] is activated. During configuration, it is possible to select, among the available devices, those enabled for the opening with this code. The section indicated by number **1** of Figure 149 shows how to select devices and door types that can be used to enter in the building. Notice that IP key readers, if present, cannot be selected because they are not equipped with a keypad.



[75] If the door code is configured for opening both the passages managed by the call module (pedestrian door and vehicle entrance), once the code has been entered, a message on the call module will ask the user to select the passage to be opened: by entering **1**, the first passage will be opened, by entering **2** the second one will be opened.

Figure 149: Door Code configuration – Data entry

The following table shows the meaning of the available fields:

Door Code	Numeric door lock release code, required field. Minimum length: 4 characters, 8 characters max. **Note:** to activate the "hold-up" code, enter a valid door code increased by one unit, e.g.: door code: **123456**, associated hold-up: **123457**.
Time Profile	Selection of Door lock release time profile (if available) (see paragraph "Time Bands" on page 64). The value can be selected from a pull-down menu which contains the previously programmed profiles, if present. For information about time profiles, refer to chapter "Advanced functions configuration - Time Profile Access" on page 219. Default value: **No time profile applied**
Start validity	If selected, it allows to define the validity start date of door lock release code. Before this date the code will not open the passage. Default value: **Not selected**
End validity	If selected, it allows to define the validity end date of door lock release code. After this date the code will not open the passage. Default value: **Not selected**
Suspended	If selected, the door lock release code will be disabled and will not allow to open the passage. Default value: **Not selected**
Selected Door For Door Code	Selection of doors enabled to be opened. If the "check-box" at the top of the list is selected, the doors of all devices are enabled, then those of a specific device type, and so on.

Table 47: Door Code configuration – Meaning of data

11.4.3 KEY CODE CONFIGURATION

Using the same method, one or more passages can be opened with a proximity key (model 1125/50). In this case, a key is associated to the selected resident. It is possible to select doors related to call modules, as for door codes, or doors managed by IP key readers. Figure 150, in the section indicated by number **2**, shows this condition.

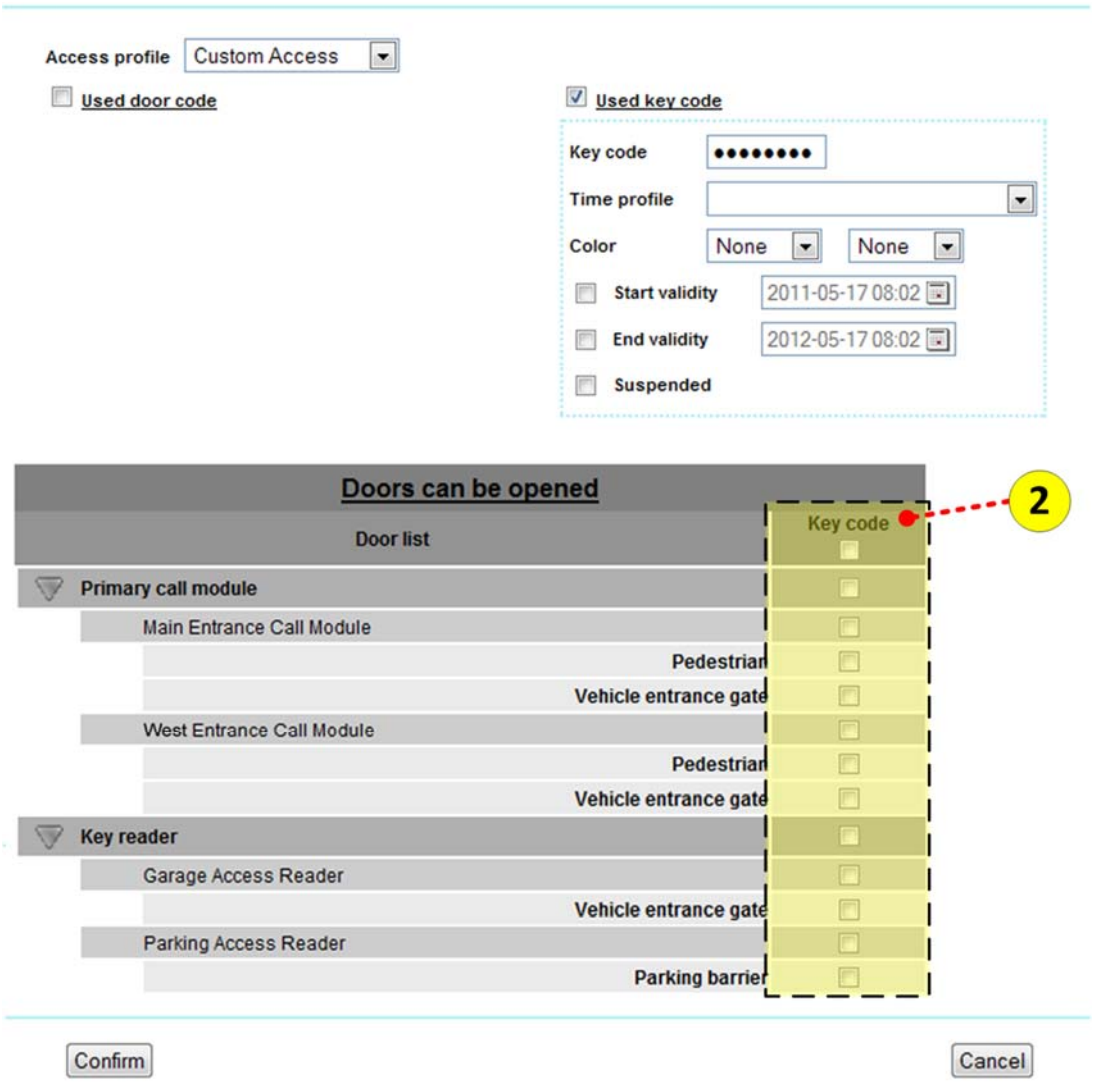


Figure 150: Key Code configuration – Data entry

Note: It is also possible to assign proximity keys to residents with a guided procedure, using the device "Encoder 125" as described in the paragraph "Automatic Key Code Wizard" on page 200.

Key Code	Proximity key identification code. Required field in hexadecimal format. Fixed length: 8 characters. **Note:** the identification code is engraved on the back of the key. 
Time Profile	Selection of Door lock release time profile (if available) (see paragraph “Time Bands” on page 64). The value can be selected from a pull-down menu which contains the previously programmed profiles, if present. For information about time profiles, refer to the chapter “Advanced functions configuration - Time Profile Access” on page 219. Default value: **No time profile applied**
Start validity	If selected, it allows to define the validity start date of the proximity key. Before this date the code will not open the passage. Default value: **Not selected**
End validity	If selected, it allows to define the validity start date of the proximity key. After this date the code will not open the passage. Default value: **Not selected**
Suspended	If selected, the proximity key will be disabled and will not allow to open the passage. Default value: **Not selected**
Color	Colour code, used to identify the proximity key. The final code is composed by the two colours that can be selected from the pull-down menus (Figure 151). The available colours are: **None, White, Blue, Red, Green, Yellow, Orange** Default value: **None** **Note:** to put the selected colour code on the proximity key, insert the provided coloured insets in the suitable slots on the back of the key.
Selected Door For Key Code	Selection of doors enabled to be opened. If the “check-box” at the top of the list is selected, the doors of all devices are enabled, then those of a specific device type, and so on.

Table 48: Door Code configuration – Meaning of configuration data

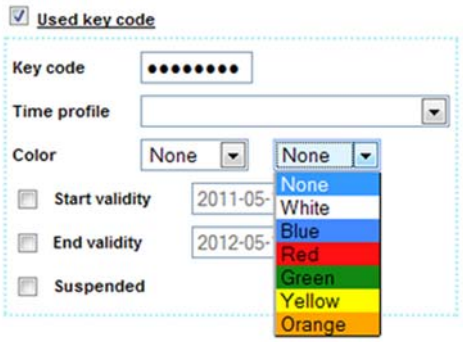


Figure 151: Key Code configuration – Colour code assignment

11.4.4 AUTOMATIC KEY CODE WIZARD

In order to assign the identification code of a proximity key, it is also possible to follow a guided procedure with the "Wizard", which can be activated by the FrontEnd main menu (Figure 152).

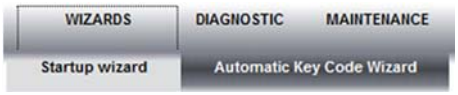


Figure 152: Automatic Key Code Wizard - Function selection

To use this function, the device "Encoder 125" is needed, which is used to read proximity key codes. The Encoder 125 must be connected, with the provided cable, to a USB port of the computer, where the Ipervoice FrontEnd is being used. The device is directly powered by the PC and so it doesn't need any additional power supply[76]. Remember to connect the Encoder before starting Wizard, so the system can correctly identify it. In the first Wizard page it is possible to define some search criteria and options which will be used to assign identification codes. The table describes the meaning of available items.

[76] The device is correctly powered by the PC USB port if the bicolor led on the device is RED.

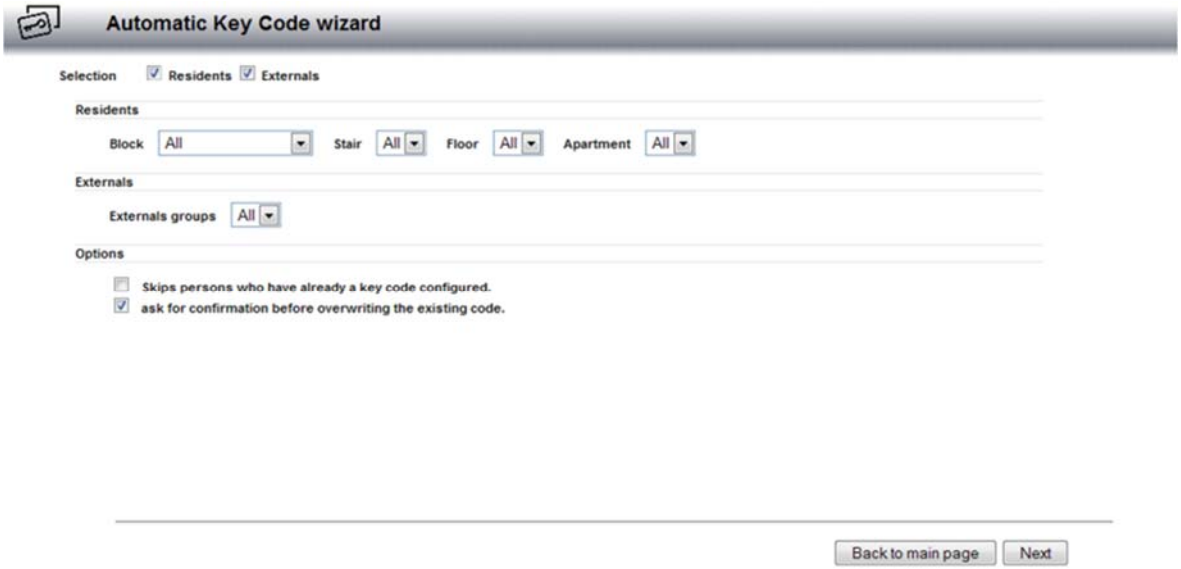


Figure 153: Automatic Key Code Wizard - Search criteria selection

After search criteria have been defined, press the button "Next". The system activates the Encoder and is ready to read proximity keys. If this operation is performed for the first time, follow instructions described in the previous paragraph.

Selection	Two options are available as search filter: **Residents** and **External People**. If selected, the first one allows to assign keys to residents, the second one to external people. **Note:** To continue, one of the available options must be selected.
Residents	The section is shown if this item has been selected. There are four filter categories, which can be activated by four pull-down menus. These allow to refine the search of residents to be assigned. They are: • **Block:** to select a special block • **Stairs:** to limit the search to a specific stair • **Floor:** to limit the search to a single floor • **Apartment:** to select a special apartment
Externals	As in the previous case, the section is shown only if this item has been selected. In this case, the restriction is applied to the belonging group of external people. The selection is performed from a pull-down menu.

Options	In this section there are two options: • **Skips persons who have already a key code configured** • **ask for confirmation before overwriting the existing code** The first one allows to select if to skip or not persons who have already an assigned code, the second one to asks for confirmation before overwriting an existing code.

ENCODER CONFIGURATION

The first time the Automatic Key Code Wizard is used, some preliminary operations must be performed in order to use the encoder device. The Encoder 125 doesn't need any special configuration, but the connected PC must be provided with "*Java 2 Platform, Standard Edition*". This can be freely downloaded from the Internet site Oracle.com[77]. If this operation has been correctly performed, a page as the one shown in Figure 154 will be displayed. The user must select the item "Always trust content from this publisher[78] as shown by the arrow, in order to start the application[79] which will read identification data of proximity keys.

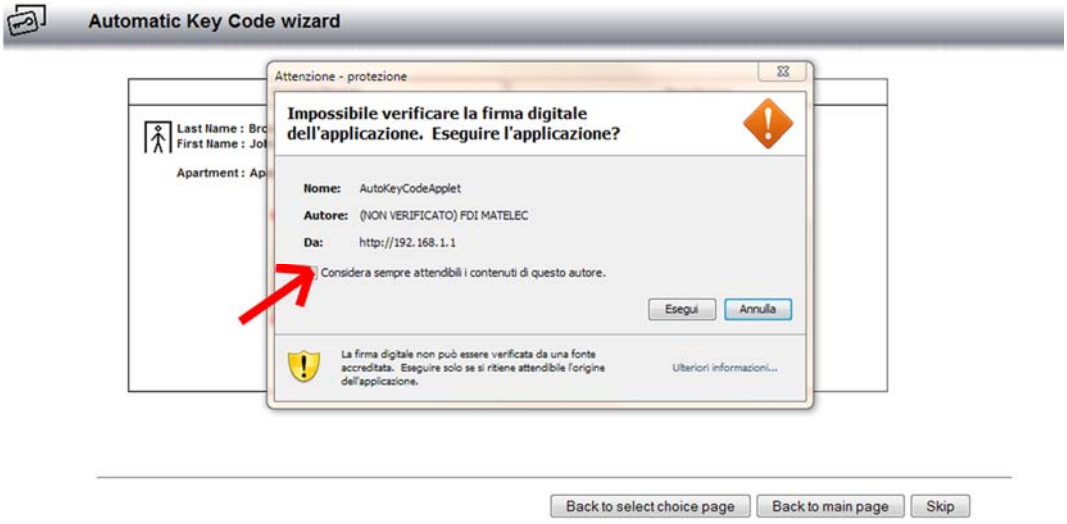


Figure 154: Automatic Key Code Wizard - Encoder activation

If the activation phase has been successful, when the button "Execute" is pressed, the encoder image will be displayed, with the device firmware version (Figure 155) under the image. Otherwise, the image shown in Figure 156 will be displayed. If the second image appears, check that devices are properly connected, requirements have been met and repeat the operation following the described sequence.

[77] Now it can be downloaded following information on: **http://www.oracle.com/technetwork/java/javase/downloads**
[78] If the check mark (tick) is not selected, the Encoder will not work properly
[79] The application which controls the Encoder 125 is based on a Java Applet inside the Internet browser used to connect to IPervoice FrontEnd.

Figure 155: Automatic Key Code Wizard – Encoder activated

Figure 156: Automatic Key Code Wizard – Encoder not connected

JAVA PANEL CONFIGURATION

Java application (Applet) used to manage the encoder could be updated after a new version of Ipervoice is installed (see "Ipervoice Server Upgrade" on page 250). The PC used for connection to FrontEnd downloads the Applet from Ipervoice server. Only the first time it is used, the old version must be deleted before downloading the new one. This operation is performed from "Java control panel" inside "Windows control panel", shown by the following icon: Java (32 bit)

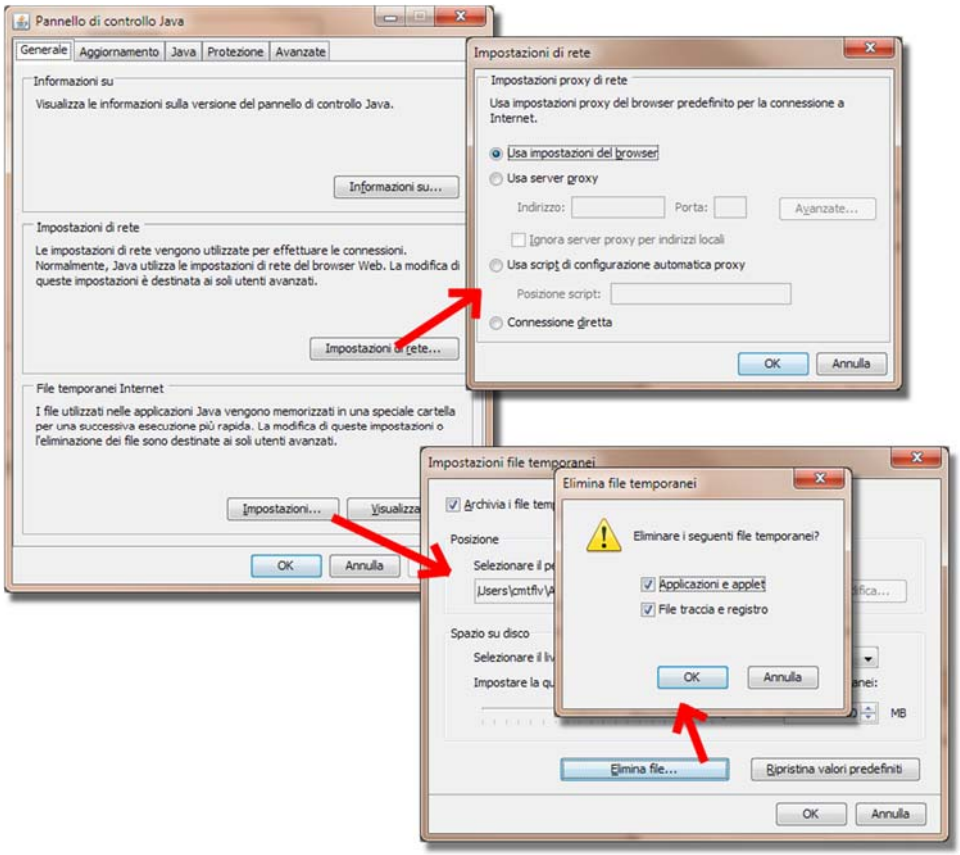


Figure 157: Java configuration – Network settings and temporary files

Double click with the mouse to see the control panel where two operations must be performed:

- Checking network settings
- Deleting Internet temporary files

The first operation can be performed once, and its purpose is to check that Java environment uses the same network settings as those used by the Browser: as shown in the upper side of Figure 157, after pressing the button “Network settings” check that the item “Use Browser settings” is selected and then press “OK”.

The second operation must be performed each time the Ipervoice server is updated; after pressing the button “Settings…” and “Delete file…” a dialog window will appear, asking to confirm temporary files deletion; check that both tick boxes are selected and press “OK”.

When this operation has been completed, it is possible to execute Automatic Key Wizard or download to the PC the new version of Encoder management application.

IDENTIFICATION CODES ASSIGNMENT (KEY CODE)

Figure 158 is the Wizard page where to assign Resident – Proximity key. In the page there are two sections:

- Current Person
- Next Person

The first one shows the person (resident or external person) whom the code acquired by the encoder will be assigned. The second one shows the next person selected by Wizard according to search criteria specified before. To go to the next person with no changes, press the button “Skip” on the right bottom side of the page.

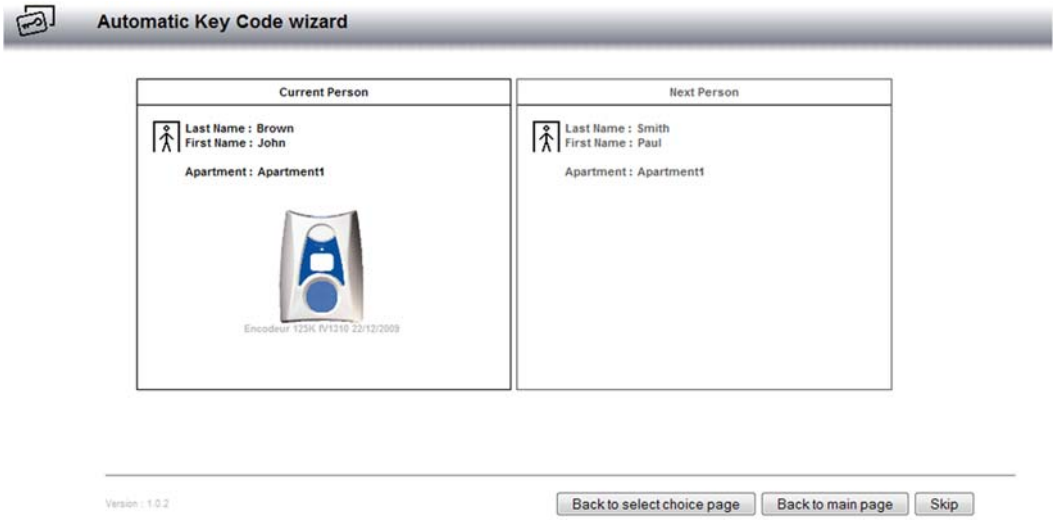


Figure 158: Automatic Key Code Wizard – resident selection

To assign a proximity key, put the key in the seat on the Encoder and wait for the confirmation "beep" emitted by the device: if the proximity key is not assigned to another user and the selected person has not an assigned key, the Wizard executes the operation and suggests the next person. If the person is already assigned to a key, the system asks for a confirmation, showing the Popup window Figure 159.

Figure 159: Automatic Key Code Wizard – Code change

If the key is already assigned to another user, before changing the assignment from the old to the new user the system will ask for a confirmation (Figure 160). In both cases press "Yes" to confirm the operation and "No" to skip and go to the next person.

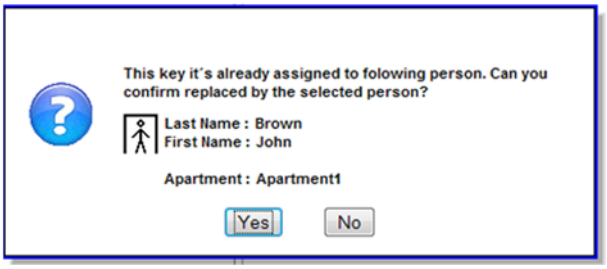


Figure 160: Automatic Key Code Wizard – Changing code assignment

Repeat the operation until the list of selected persons is completed. This condition is shown by the button “Skip” which becomes dimmed. However, the user can reboot the Wizard to assign keys to other groups of people or correct the group previously selected.

11.5 APARTMENT STATIONS CONFIGURATION

The Ipervoice system supports three types of apartment stations:

- Door phones
- Video door phones
- Hands-free video door phones

If the initial configuration has been performed with the StartUp Wizard, to each apartment station of the system is assigned the **Video door phone** category; in this way, the system can establish audio and video communications. In order to assign the correct typology to devices, access with the Ipervoice FrontEnd to the section dedicated to apartment station configuration. Apartment stations are considered to be devices included in the apartments; to select the desired apartment stations, identify in the devices tree the apartment that includes them, and expand the item “Door phone”. The system will display the list: click on the desired apartment station in the column “Number” or “Type” to access to the modify page (Figure 161). To add a new apartment station, press the button “Add a door phone” under the title.

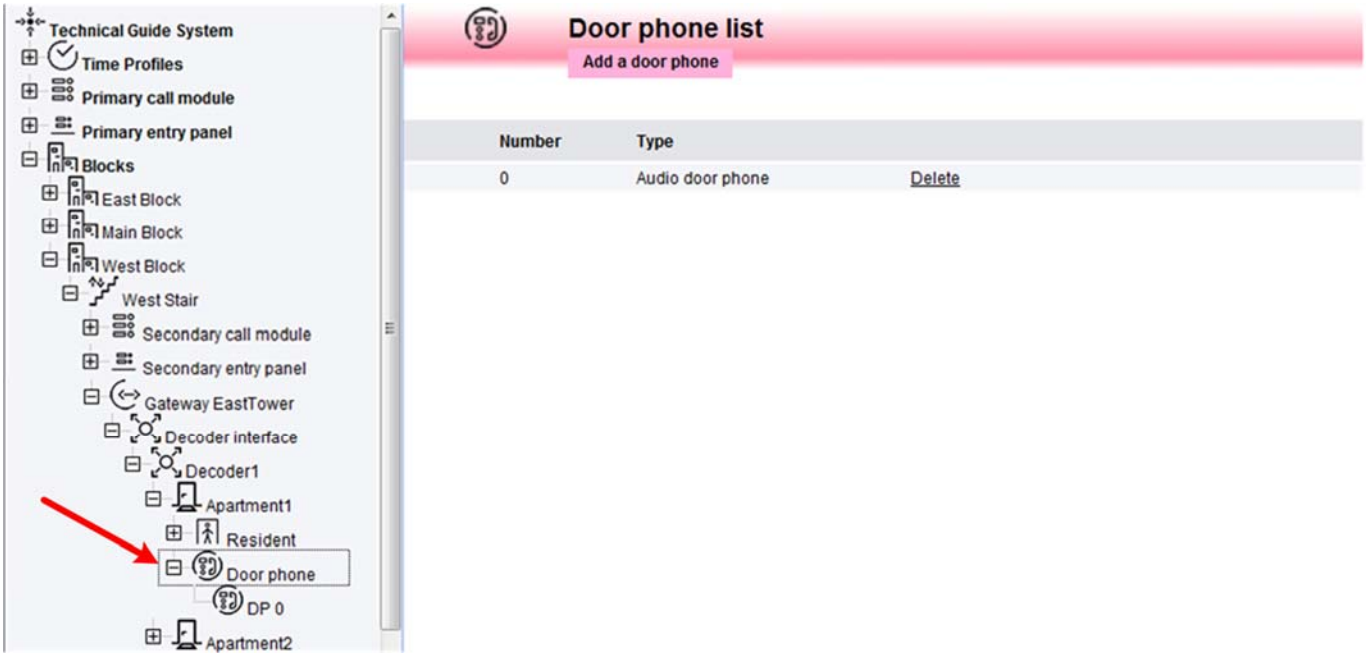


Figure 161: Apartment stations configuration – Devices list

Apartment station configuration data is shown in Figure 162, their meaning in Table 49.

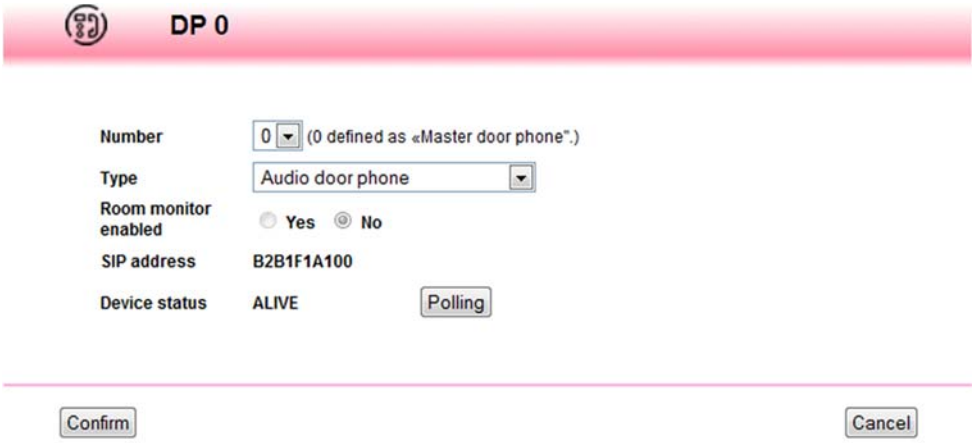


Figure 162: Apartment stations configuration – configuration data

Number	Apartment station identification number. The value is selected from the pull-down menu. **Warning:** Each apartment must always have an apartment station with identification number **0**: this is the "Master door phone", used by the system for automatic diagnostic operations.
Type	Apartment station type. The selection is made from a pull-down menu; the available values are: • **Audio door phone:** Door phone– audio only. • **Video door phone:** Video door phone– audio and video • **Hands free Video door phone:** Hands-free– Hands-freeaudio and video Default value: **Video door phone**
Room monitor enabled	Room monitor enabling[80]. Available values: Yes, No. Default value: **No**
Topological Code	Topological code assigned by the system (it cannot be changed by the user). **Note:** The last two digits are obtained by the apartment station identification number (from 00 up to 15).
Device status	Device status detected by the system. The status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**.

Table 49: Apartment stations configuration – Meaning of configuration data

[80]If enabled, this function allows the concierge switchboard, in case of an alarm coming from the apartment, to activate, on the apartment station, a mono-directional audio link, in order to listen what is happening in that apartment.

11.6 INTERCOM INTERFACE CONFIGURATION

If four stations per apartment are not enough to meet system requirements, Ipervoice allows to extend this limit up to a max. of sixteen, using intercom interfaces. One to four intercom interfaces (1039/36) can be added for each apartment; each interface allows to connect up to four apartment stations. To add a new intercom interface, first of all select the desired apartment from the devices list and click on "Add intercom interface", as shown in Figure 163.

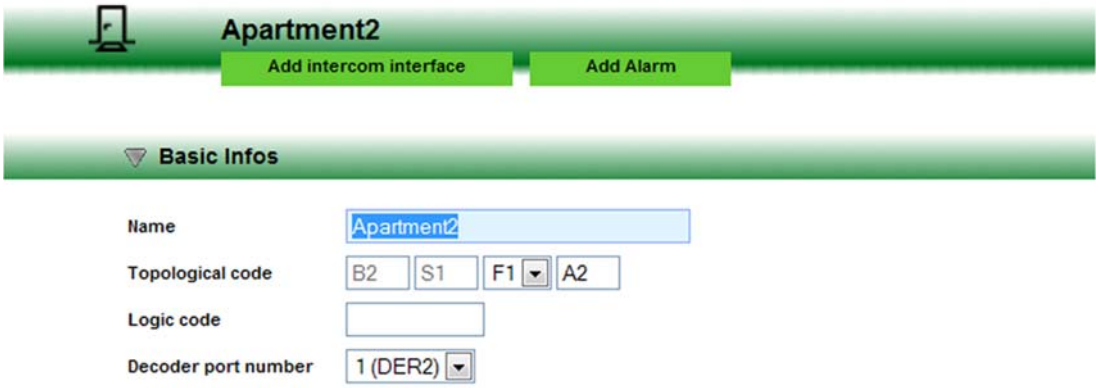


Figure 163: Intercom Interface Configuration – Adding a new interface

If an interface 1039/36 has already been added to the apartment, in order to add other similar devices, use the interfaces list, as shown in Figure 164. Access to the same list to change or delete previously added interfaces.

Figure 164: Intercom Interface Configuration – Intercom Interface List

In both cases, the user must enter the name and the number of the new device; Figure 165 e la Table 50 describe meaning and allowed values of the parameters for this operation.

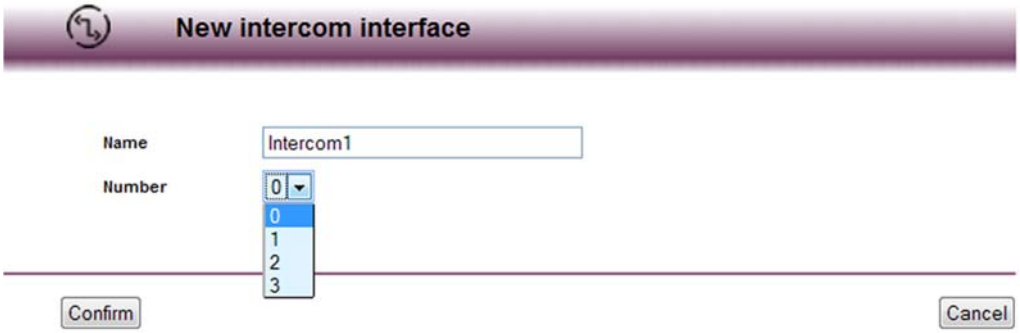


Figure 165: Intercom Interface Configuration – Intercom Interface configuration data

Name	Name assigned to the intercom interface. Required field. Max. length: 32 characters.
Number	Intercom interface number inside the apartment. The number can be selected from a pull-down menu; available values are: **0, 1, 2, 3**. The FrontEnd only show not assigned numbers.

Table 50: Intercom Interface – Configuration data

After this preliminary phase, it is possible to configure apartment stations. As shown in Figure 166, to add a new apartment station associated to the interface 1039/36 click on "Add a door phone". The FrontEnd will show the apartment station configuration page.

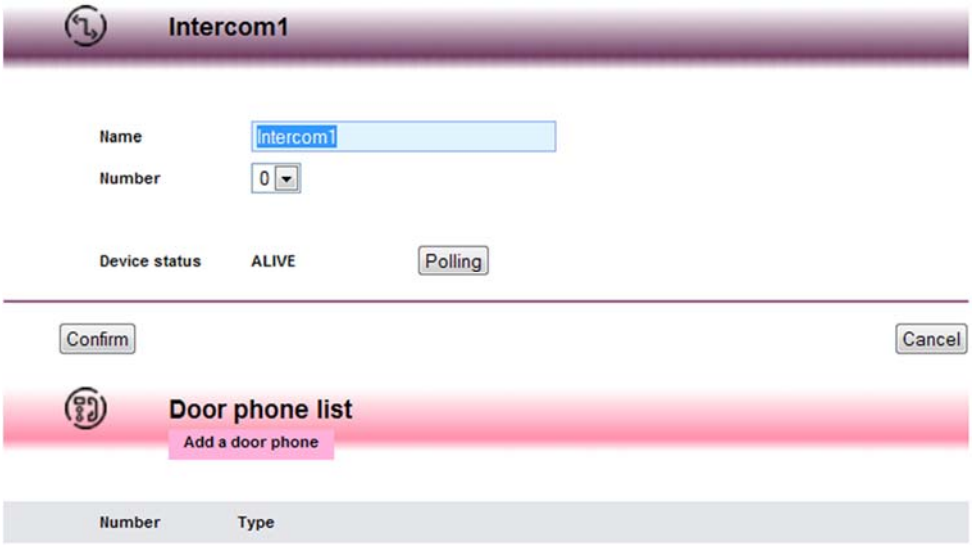


Figure 166: Intercom Interface Configuration – Adding an apartment station

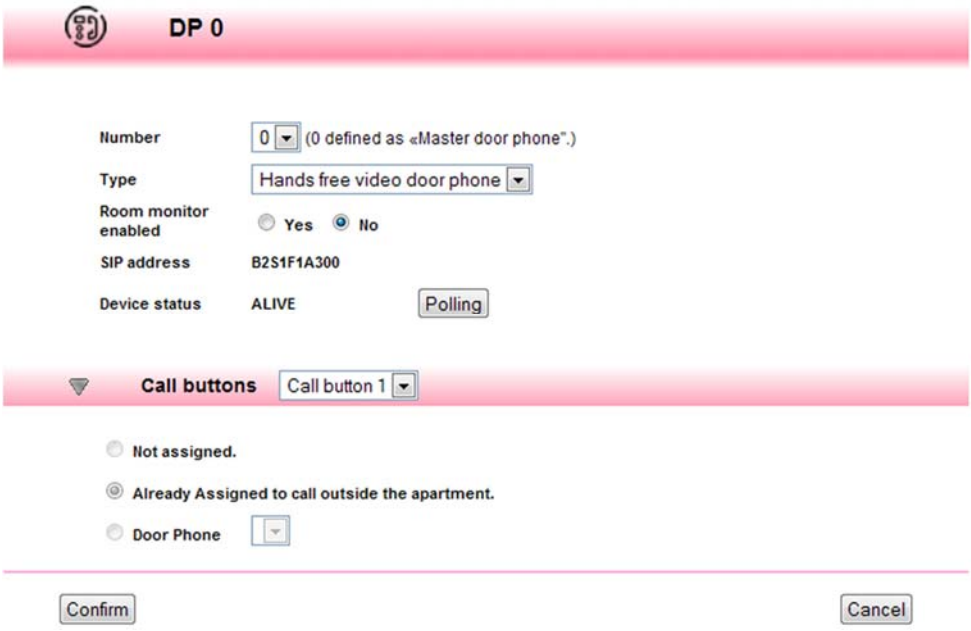


Figure 167: Intercom Interface Configuration – Apartment Stations configuration data

Besides data described in Table 49 in the chapter "Apartment Stations Configuration" (page 207), in case of apartment station associated to an intercom interface, it is possible to configure the call buttons behaviour present in the apartment station.

Call Buttons	The system performs the configured command, selected from the pull-down menu, when the intercom call button is pressed. Available values are: **Call button 1** to **Call button 7**. These buttons can be configured [81] and the configuration will be activated when the buttons are pressed with the apartment station handset off-hook (or the audio button pressed in hands-free models).
Not assigned	Default condition; when the button is pressed, the system does not send any command.
Already Assigned to call outside the apartment	The button is already used for calls (for ex. to switchboards), and it cannot be used for other purposes.
Door Phone	The call is sent, by the intercom interface, to the apartment station selected in the pull-down menu. Because the conversation use apartment resources only, the riser column audio channel will not be occupied.

Table 51: Intercom Interface – Apartment station configuration data

[81] For information about buttons in apartment stations, see the paragraph "Button Function Assignment" on page 87.

11.7 IP APARTMENTS CONFIGURATION

In order to add or configure an IP apartment, select the desired floor inside the belonging block/stair from the devices tree, as shown in Figure 168.

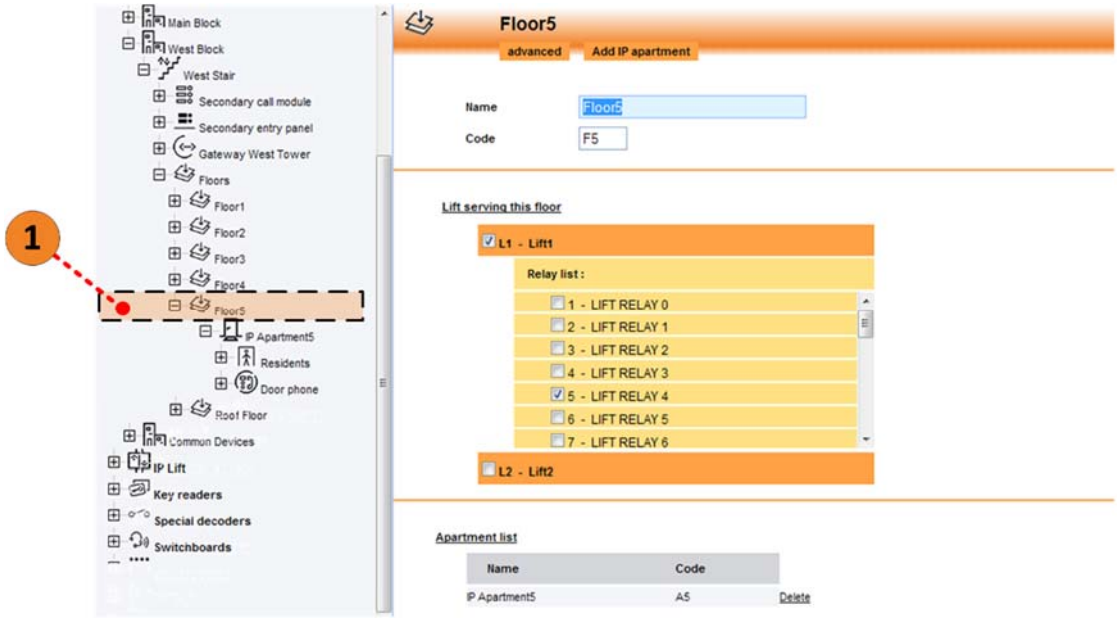


Figure 168: IP apartments configuration – Selection of belonging floor

To add an apartment to the selected floor, press the button "*Add IP apartment*" under the title.

The FrontEnd shows the page used to enter data, composed by six sections. The first one, "Basic Infos", allows to enter the data needed by Ipervoice to add the apartment in the system. La Figure 169 and Table 52 show configuration data to be entered by the user and their meaning.

Note: Except for installation and configuration modes of devices inside an IP apartment which have the same functions as a video door phone (for example iModo 1717/2 terminal), other functions of resident/access code management and residents address book update are managed like CAT5 dedicated network apartments procedures. See paragraphs 11.4.1, 11.4.2, 11.4.3 of this chapter. Information about "Apartment advanced configuration" are in paragraphs 11.3.1, 11.3.3, 11.3.4, 11.3.5 and 11.3.6. See the following paragraph for call forwarding functions.

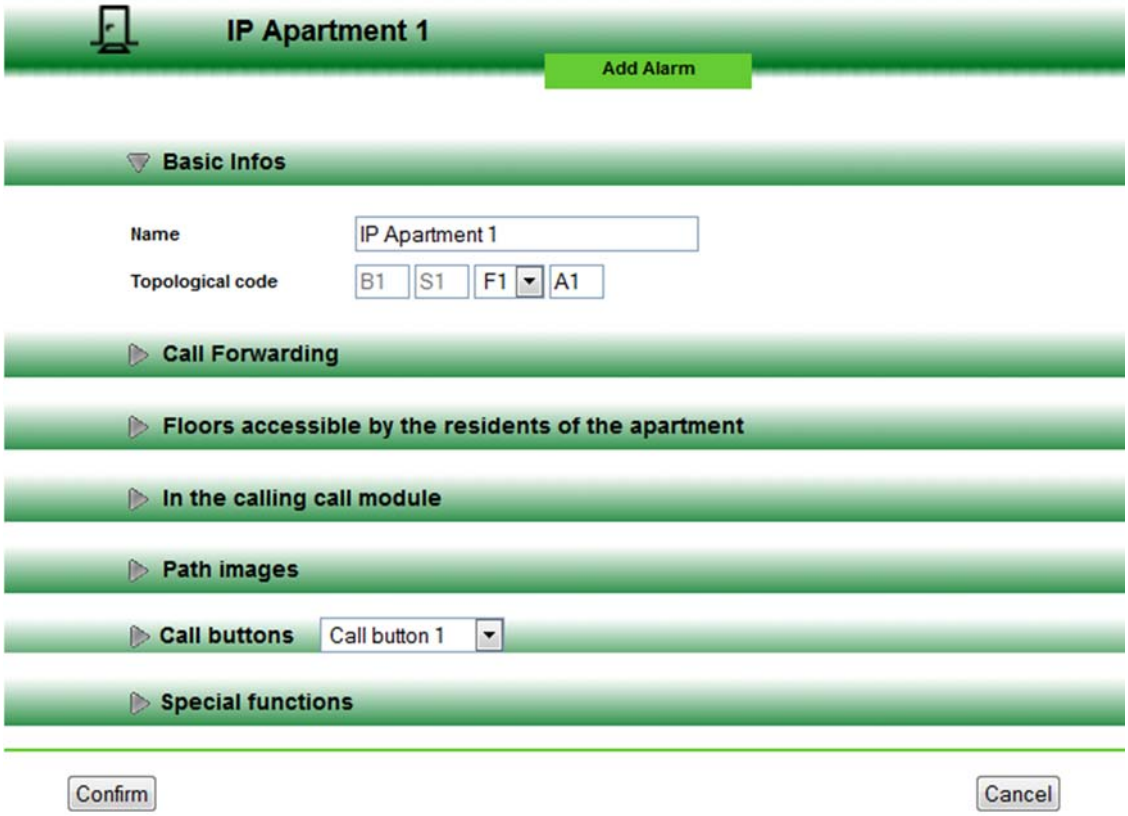


Figure 169: IP apartment configuration – Adding an apartment

Name	Apartment name. Max. length: 32 characters.
Topological code	It is the unique code of the apartment. The user selects the floor from the pull-down menu and enters the last part of the topological code. Required field, fixed length: 2 alphanumeric characters (ex. 01, A1, 1A, AB)
Logical Code	Unique logical code of the apartment. Available only if the system is configured in logical addressing mode. Required field, length from 2 to 8 alphanumeric codes.

Table 52: Adding an IP apartment – Meaning of basic configuration data

11.7.1 CALL FORWARDING INSIDE AN IP APARTMENT

As seen in paragraph 11.3.1 – "Call Forwarding" on page 186, , this function allows users to forward a call directed to the apartment to an SIP device (e.g. to a smartphone or tablet). The configuration for an IP apartment provided with an iModo video door phone (1717/2), for instance, is shown in Figure 170. The possible settings are:

Enable Call Forwarding	If selected, this allows to enable the apartment for call forwarding. Default setting: **Not selected**.
Set Remote Mode	If selected, call forwarding is operational (the behaviour can be changed also by operating directly on the video door phone terminal). Default setting: **Not selected**.
SIP Username	SIP user to which the call made to the apartment will be transferred. The user must be registered on the Urmet SIP server at sip.urmet.com.

Table 53: Adding an IP apartment – Call forwarding configuration

Figure 170: IP apartment configuration IP – Call forwarding

12 ADVANCED FUNCTIONS CONFIGURATION

This chapter describes Ipervoice system special or advanced functions used to realize specific tasks.

This section will treat the following arguments:

- "Numeric code" addressing mode with prefix
- Time profile management (Doors, Passages, Holidays)
- Access profile management
- Door profile management (Call modules, IP key readers)
- Group configuration for external people
- User custom fields configuration
- Access zones configuration
- Ipervoice server configuration
- FrontEnd users management

12.1 "NUMERIC CODE" ADDRESSING MODE WITH PREFIX

If "numeric code" addressing mode has been selected (similar to "Logic code" mode, except for the code assigned to devices, that will only be numeric), the installer can choose to activate Block selection with a prefix (par. 8.3.2 "Site Configuration" on page 98). This mode is useful if the installer wants to assign the same numeric code to different apartments in different blocks, in order to follow the same logic rule when assigning the codes. For example: a residential complex is composed by four buildings (Blocks A, B, C and D), where each building has 5 floors (1 to 5), with 2 apartments for each floor (Apartment 01 and 02). In this case, it would be useful to always call the apartment 02 of floor 4 with the same numeric code, for all the blocks: in this example, 402. This is not possible because the apartment numeric code must be unique in the system.

With block selection with prefix it is possible to obtain this result: the system will automatically add the block prefix to uniquely identify the apartment. To call the apartment, the user must only enter the code, as described in the example

This mode is used by 1039/13 or 1039/18 main and secondary call modules. In case of main module, the user will select the desired Block from the list and then will enter the apartment code; in case of secondary module, the user will directly enter the apartment code, because the Block prefix is already saved in the call module (Figure 171).

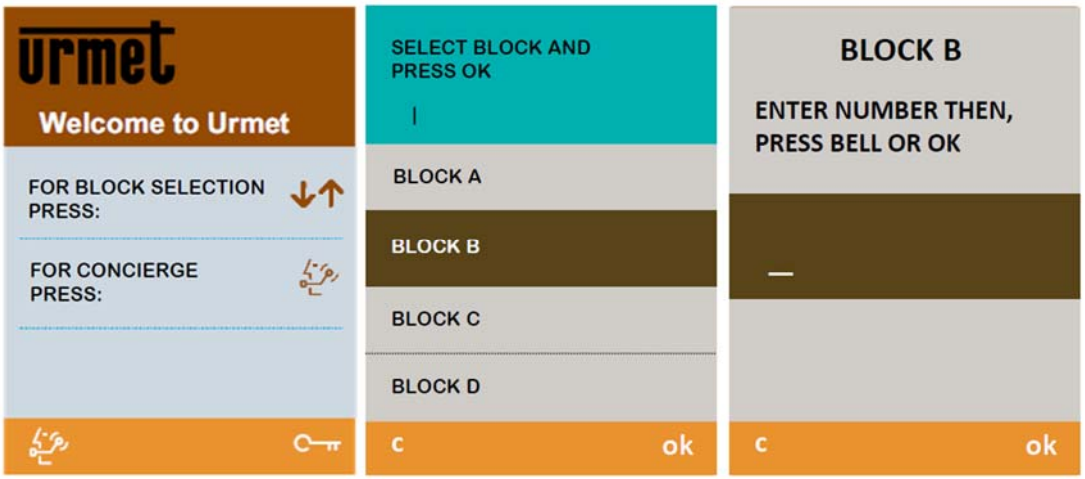


Figure 171: Advanced functions configuration - Prefix mode, example of selection from call module

To make this addressing mode active, enable it in system configuration (par. 8.3.2 “Site Configuration” on page 98), and assign the desired prefix to the blocks. To perform this step, access the block configuration page where it is possible to enter the prefix. Figure 172 is a typical example.

Note: the blocks without “prefix” will not be visible to call modules and for this reason they cannot be reached in the system.

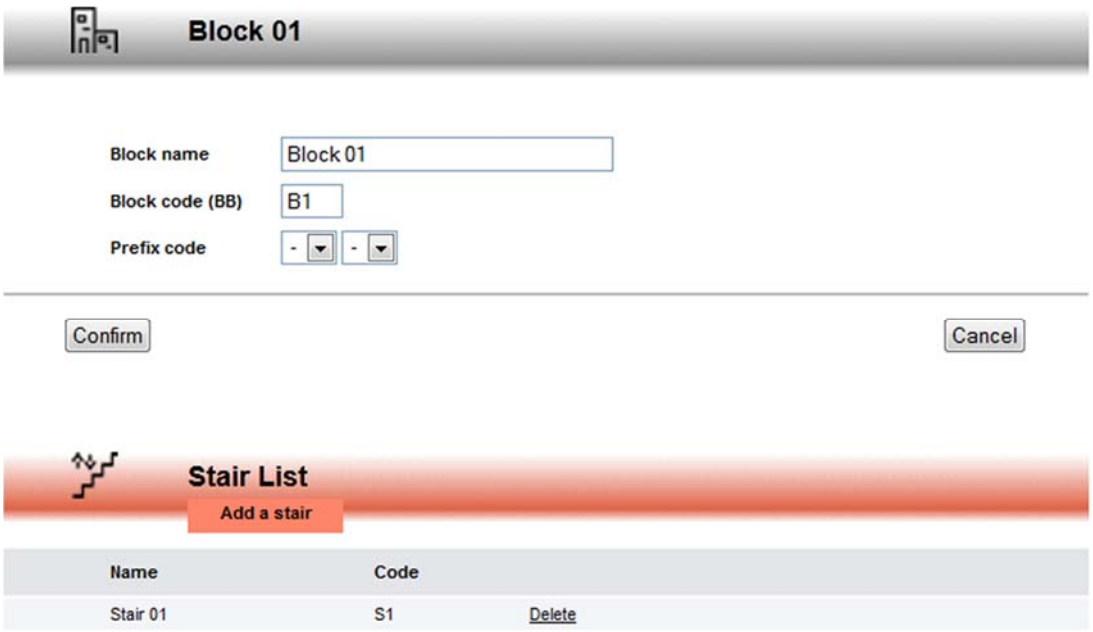


Figure 172: Advanced functions configuration - Prefix mode, assignment to Block

Prefix code	Numeric code assigned to the block. Allowed values: from **00** to **99** Default value: **--** (the block won’t be visible in the system)

12.2 TIME PROFILES

As already mentioned in the chapter “The Access Control Service - Time Bands” on page 64, Ipervoice system allows to define one or more time bands to limit the access to the building. The main purpose is to perform a centralized management of time bands; in this way, if required, the desired profile can be easily selected instead of manually configured. There are three profile categories, as shown in Table 54:

Door profile	These profiles are used to define the time band within which a door, i.e. a passage, can be opened. Several time bands can be defined for each profile (for ex., morning, afternoon and evening). Each profile is week-based, so different operating modes can be configured for each day. These profiles can be assigned to one or more doors present in the building.
Access profile	The user can define these profiles as the previous ones; they will be applied to door lock release codes, proximity keys or both.
Holiday profile	These settings, also used in the previous profiles, allow to define special dates with particular time profiles.

Table 54: Advanced functions configuration – Time profiles

To access time profile management, select from the devices tree the item “Time Profile Access”. The FrontEnd will open a page, shown in Figure 173 in standard mode. To change a profile, click on the profile name; to add a profile, press the button “Add a profile” under the desired name category.

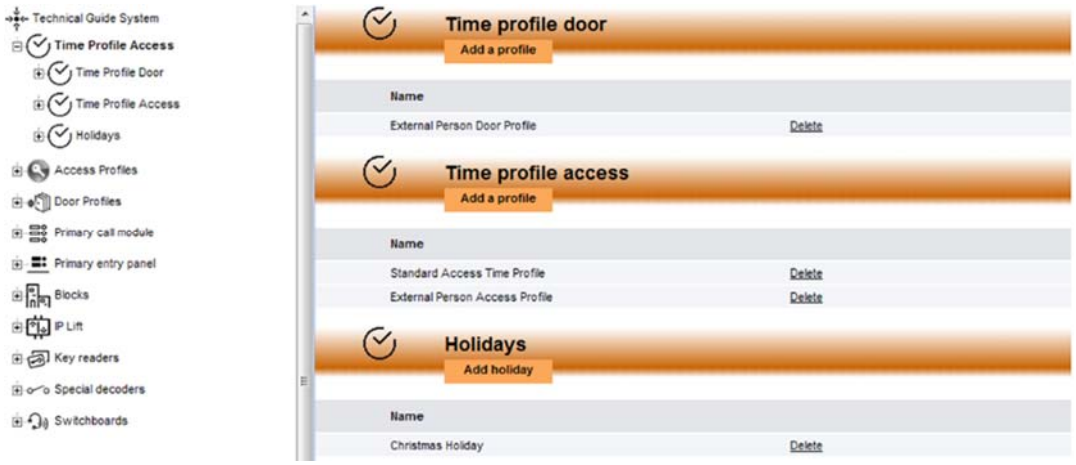


Figure 173: Advanced functions configuration – Time profiles list

12.2.1 TIME PROFILE DOOR

After entering the door time profile management function, the installer will access a page as shown in Figure 174, used to enter data needed for profile definition.

Figure 174: Advanced functions configuration – Adding a new door profile

Name	Profile name. Required field. Max. length: 32 characters.
Monday, Tuesday, …, Sunday	Day of the week of the time profile
Frame1, Frame2, …	Time bands in which the door can be opened. Each band is defined by a start/end time expressed in hours/minutes. More than one band can be defined for the same day of the week. These bands must not overlap.

The time profile is always week-based, so data must be configured for each day. To do this, press the button “Add” near each day of the week; after each click, a “Frame” will be added, which allows to define the valid time band.

The example in the figure defines two access time bands (*Frame1* and *Frame2*), for working days (Monday… Friday), which allow to open the door from 8 a.m. to 1 p.m. and from 2 p.m. to 8 p.m. and a single time band on Saturday from 8 a.m. to 1 p.m. On Sunday (holiday) the door will not be opened.

To make data input easier, use buttons “Copy” and “Paste” to copy and paste band values defined for each day. Use the button “Delete” to delete all time bands defined in a day.

HOLIDAYS LIST

If holidays have been defined (as described in paragraph “Holidays” on page 220), click on the arrow besides the title to open the list of holidays and select the ones to be assigned to the time profile. For each holiday selected, a new row will be added in the week programming area, where to define operating time bands, as previously described (see the example of Figure 175).

Figure 175: Advanced functions configuration - Adding holidays to time bands

12.2.2 TIME PROFILE ACCESS

The management of time profiles for door lock release codes and proximity keys is the same as door profile management, described before. For programming, refer to paragraph 12.2.1.

Despite what happens after conferming a time profile door creation, time profile access confirmation determines the adding of flag “Enable third party access control”: if selected, this time access profile can be used on third party app configuration process.

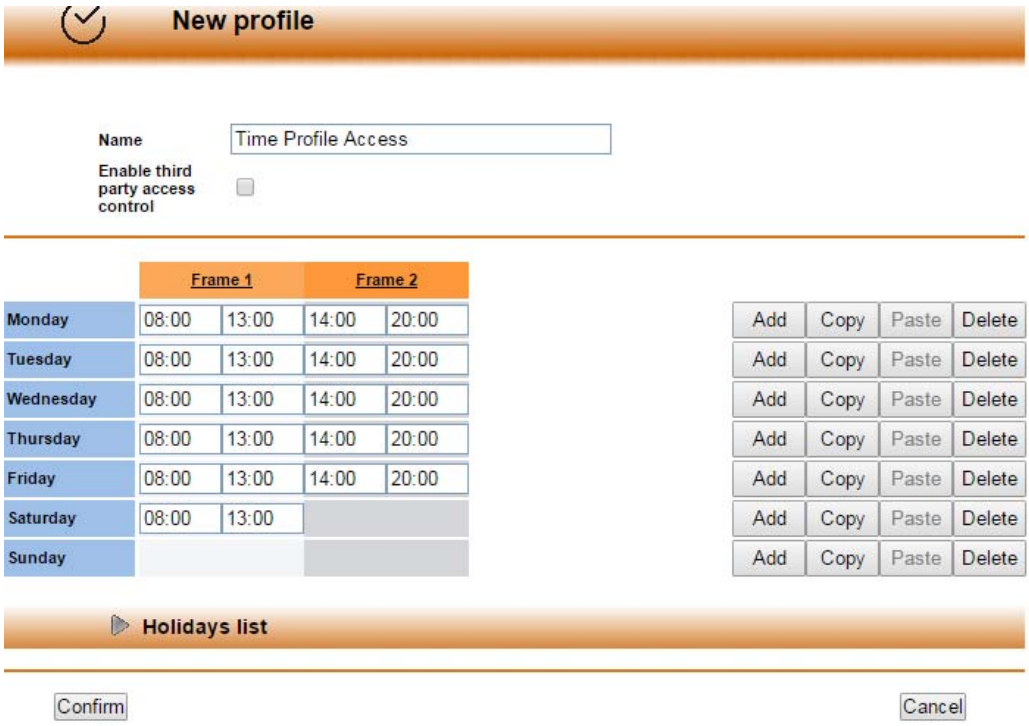


Figure 176: Advanced functions configuration - Adding a new Time profile access

12.2.3 HOLIDAYS

Entering holidays allows to define special dates, as for example the 25th December or a specific period, changing the week profile used for Door and Access Profiles.

Figure 177 shows the configuration page, the following table describes field meaning and entering modes.

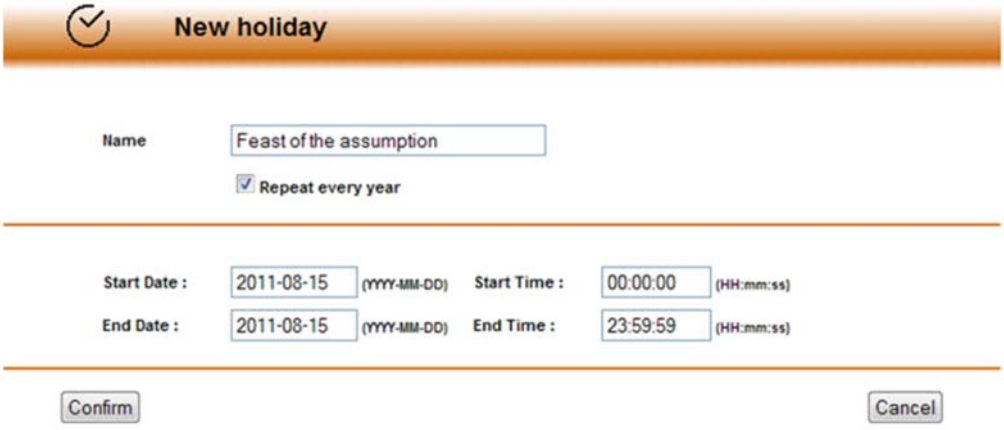


Figure 177: Advanced functions configuration - Holidays programming

Name	Profile name. Required field. Max. length: 32 characters.
Repeat every year	If selected, it means that the holiday is recurring. Default value: **Not selected**
Start Date, Start Time	Holiday start date and start time. Required field. Default value: Date: **today's date**, Time: **00:00:00**
End Date, End Time	Holiday end date and end time. Required field. Default value: Date: **today's date**, Time: **23:59:59**

12.3 ACCESS PROFILE

As already mentioned, also door lock release code and proximity key management can be performed by defining one or more profiles, according to requirements.

To access this function, select from the devices tree the item "Access Profiles". (See Figure 178).

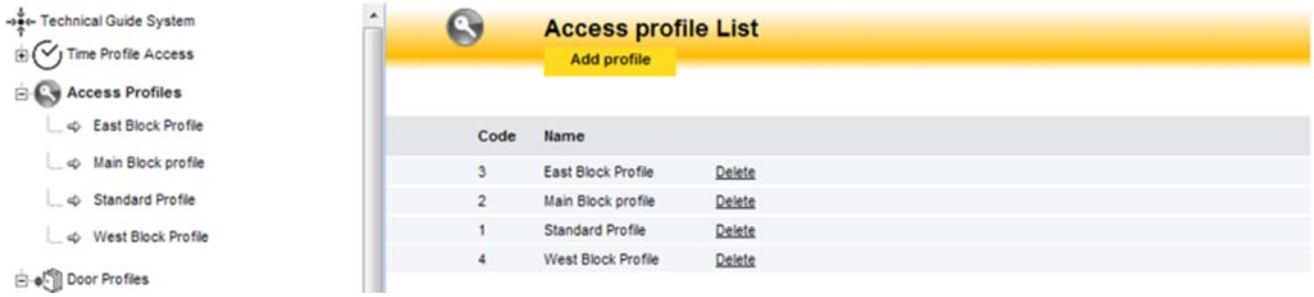


Figure 178: Advanced functions configuration - List of access profiles

The FrontEnd will show the list of existing profiles, which can be changed by clicking on the profile name. To create a new profile, click on "Add profile" under the page title.

Note: the column "Code" contains the profile code; this is used to add residents to access profiles during data import phase, described in paragraph "System Maintenance and Utility Functions - Data Import" on page 266.

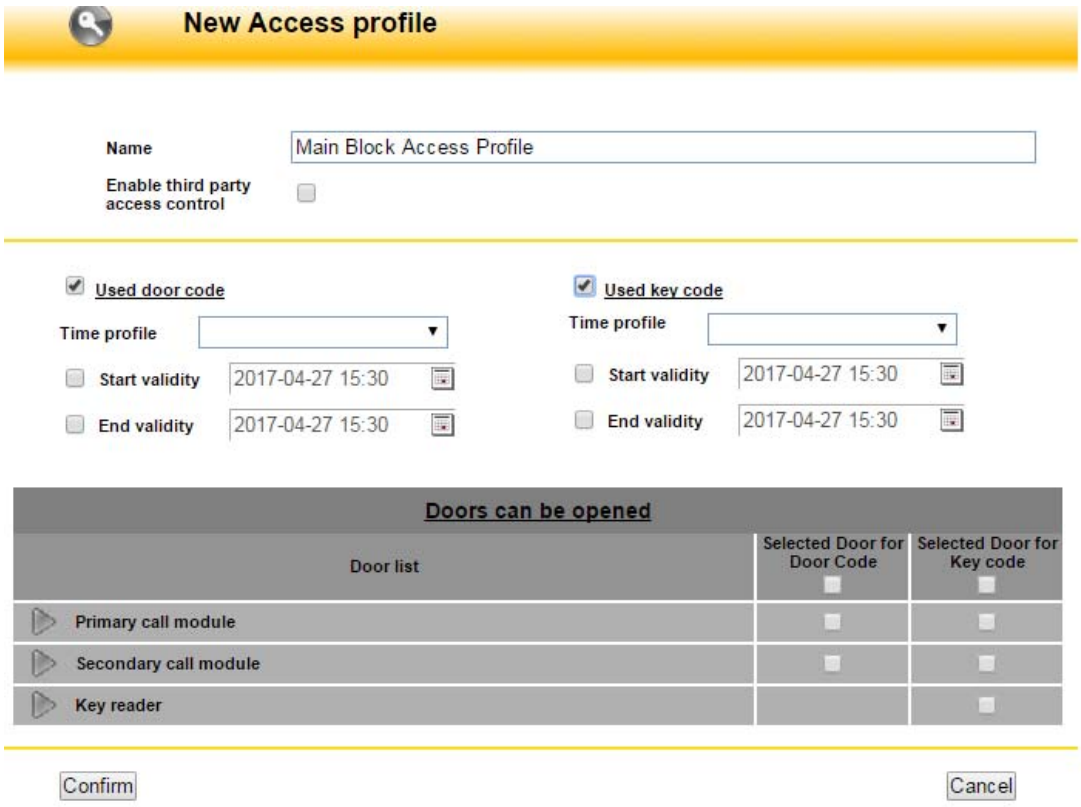


Figure 179: Advanced functions configuration - Access profile definition

As already mentioned, each access profile allows to define a standard behaviour for management of door lock release codes, proximity keys or both. According to selections, one or more passages (doors) can be assigned to the profile; to do this, doors must be selected from the system list. The following table shows which data can be configured and their meaning.

Enable third party access control	If selected, this means that the access profile can be visualized and used in third party app configuration process Default setting: **Not selected**
Used door code	If selected, this means that the profile concerns door lock release codes. Default value: **Not selected**
Used Key code	If selected, this means that the profile concerns proximity keys. Default value: **Not selected**
Time profile	Selection of time profile assigned to door lock release codes or proximity keys which will select this access profile. For information about access profile refer to chapter “Advanced functions configuration - Time Profile Access” on page 219 Default value: **No time profile applied**
Start validity	If selected, it allows to define the validity start date assigned to door lock release codes or proximity keys which will select this access profile. Before

	this date the passage will not open. Default value: **Not selected**
End validity	If selected, it allows to define the validity end date assigned to door lock release codes or proximity keys which will select this access profile. After this date the passage will not open. Default value: **Not selected**
Selected Door for Door Code	Selection of doors enabled to be opened by a door lock release code. Selecting the “check-box” on the top of the list, the doors of all devices are enabled, then the ones belonging to a type of devices, and so on.
Selected Door for Key Code	Selection of doors enabled to be opened by proximity keys. Selecting the “check-box” on the top of the list, the doors of all devices are enabled, then the ones belonging to a type of devices, and so on.

12.4 DOOR PROFILES

The third and last profile category concerns doors used to access the building. Two categories can be configured:

- Door profiles for call modules
- Door profiles for IP key readers

To access the door profiles list, select from the devices tree the item “Door Profiles” as shown in Figure 180. In the upper side of the page, the system will show the list of profiles configured for call modules, in the lower side the list of IP key readers (1039/82). To add a new profile, press the button “Add a door profile” under the title of the desired category.

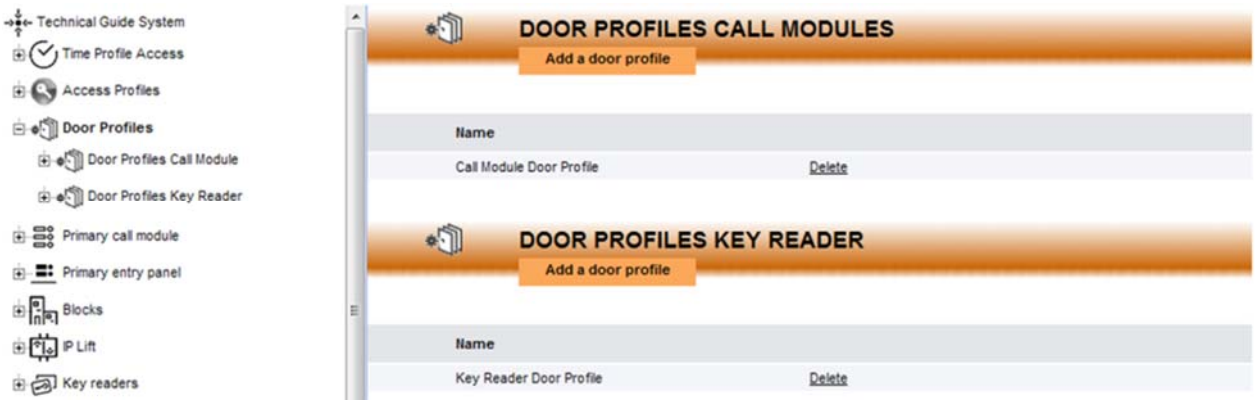


Figure 180: Advanced functions configuration – List of doors profiles

12.4.1 DOOR PROFILES CALL MODULE

Figure 181 shows the page used by the installer to create a new profile or change an existing profile.

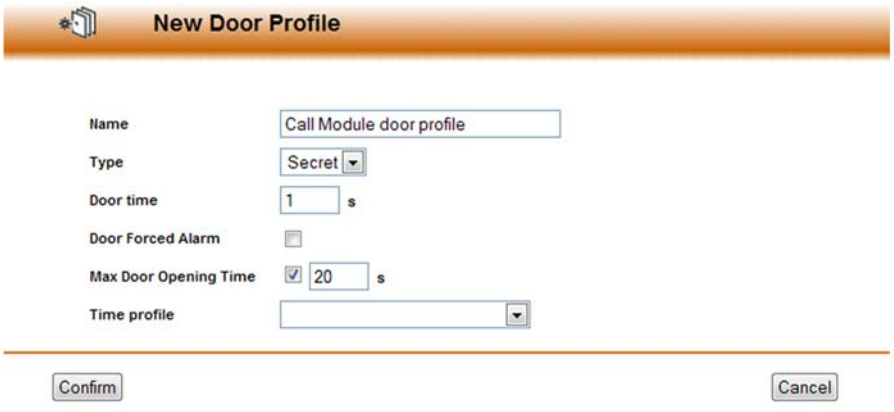


Figure 181: Advanced functions configuration – Entering call modules door profile

The following table describes the field meaning and limits for data input.

Code	Door profile code, value assigned by the system.
Name	Door profile identifier, alphanumeric required field. Max. length: 32 characters.
Type	Door opening mode. The value can be selected from a pull-down menu. Available values are: • **Secret:** the apartment station door lock release button will only activate the electrical lock if the apartment is in audio conversation or in video connection with the call module, or has been called and is waiting to be answered. • **Free:** if the apartment station door lock release button is pressed, the call module electrical lock can be activated if the call module is configured as main or is configured as secondary and the user belongs to the same column as the call module (even if there is no call in progress with the door unit). This feature is typically used in secondary call modules. Default value: **Secret**.
Door Time	Pulse length on the command relay. Default values: 1 second. Each passage is independently treated, so different values can be assigned to each of them. **Min: 1 sec, max: 999 sec** Default value: **1 sec**.
Door Forced Alarm	If selected, this means that the door generates an alarm if it has been forced. Default value**: Not selected**. **Warning:** to use this function, connect an open door sensor to the call module.
Max Door opening Time	It defines the max. time of door opening, after which a door open signal is generated. M**in: 1 sec, max: 999 sec** Default value**: Not selected.** **Warning:** to use this function, connect an open door sensor to the call module.
Time Profile	Selection of Time Profile assigned to the passage (if available) (See chapter “Time Bands” on page 64). The value can be selected from a pull-down menu which contains other profiles previously programmed. For information about time profiles definition, refer to chapter “Advanced functions configuration - Time Profile Door” on page 218. Default value**: No time profile applied**

12.4.2 Door Profiles Key Reader

The page used to create and change profiles for IP key readers is similar to the one used for call modules (See Figure 182).

Figure 182: Advanced functions configuration – Entering IP key reader door profile

The following table describes the field meaning.

Code	Door profile code, value assigned by the system.
Name	Door profile identifier, alphanumeric required field. Max. length: 32 characters.
Door Time	Pulse length on the command relay. Default values: 1 second. Each passage is independently treated, so different values can be assigned to each of them. **Min: 1 sec, max: 999 sec** Default value: **1 sec**.
Door Forced Alarm	If selected, this means that the door generates an alarm if it has been forced. Default value**: Not selected**. **Warning:** to use this function, connect an open door sensor to the IP key reader.
Max Door opening Time	It defines the max. time of door opening, after which a door open signal is generated. **Min: 1 sec, max: 999 sec** Default value**: Not selected.** **Warning:** to use this function, connect an open door sensor to the IP key reader.

Time Profile	Selection of Time Profile assigned to the passage (if available) (See chapter “Time Bands” on page 64). The value can be selected from a pull-down menu which contains other profiles previously programmed. For information about time profiles definition, refer to chapter “Advanced functions configuration - Time Profile Door” on page 218. Default value**: No time profile applied**

12.5 EXTERNAL PERSON GROUPS

Ipervoice system can manage the controlled access to the building also for external people (maintenance men, suppliers, etc.). For an accurate access management, it is possible to define one or more groups, each one composed by respective users. According to requirements, these groups can be specific for firms, service areas, etc.

In order to define groups, access to the devices tree and select the item “External person groups”, as shown in Figure 183 , if the system is configured in standard mode.

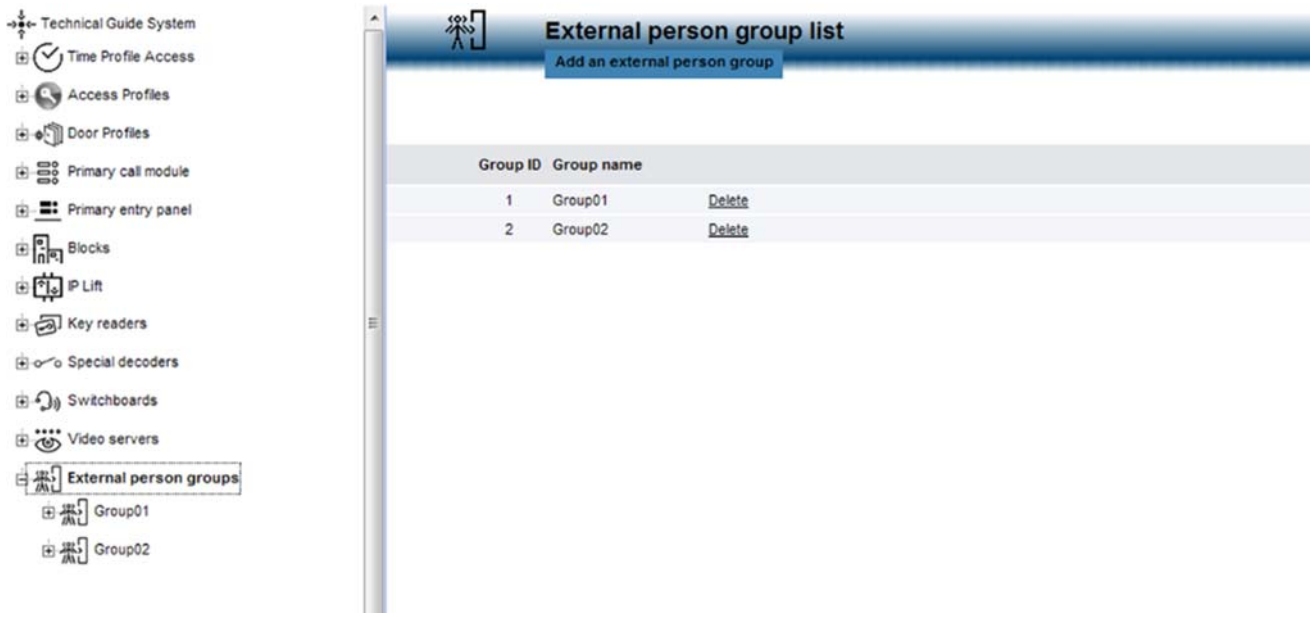


Figure 183: Advanced functions configuration – List of external person group

Note: The column “ID Group” contains the group code, used to assign access profiles to external people during data import phase, as described in chapter “System Maintenance and Utility Functions - Data Import” on page 266.

To change an existing group, click on the group name; to create a new one, press the button “Add an external person group”. In the second case, the procedure is composed by two steps: first create the group, then select this group and add the name of external people. Figure 184 and Figure 185 show these operations.

CREATING A NEW GROUP

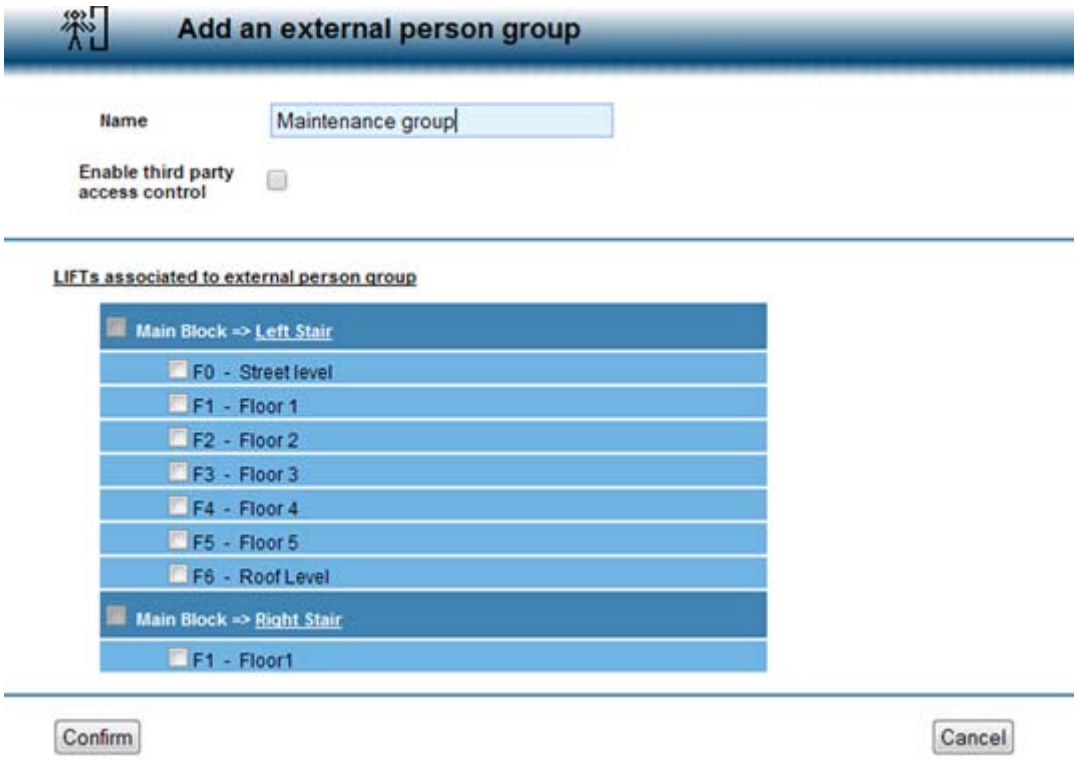


Figure 184: Advanced functions configuration – Adding an external person group

Enable third party access control	If selected, this means that the group can be visualized and used in third party app configuration process Default setting: **Not selected**
Name	Group name, required alphanumeric field. Max. length: 32 characters.
Lift associated to External person group	If there are one or more Lift interfaces configured in the system (as for example 1039/37), it is possible to specify the blocks and the floors where the access is enabled for that group.

Note: If the user number in the same group is higher than 10, the FrontEnd will automatically group them in “sub-groups”, identified by the first letter of the last name. This identification will be used also in the devices tree.

ADDING NAMES

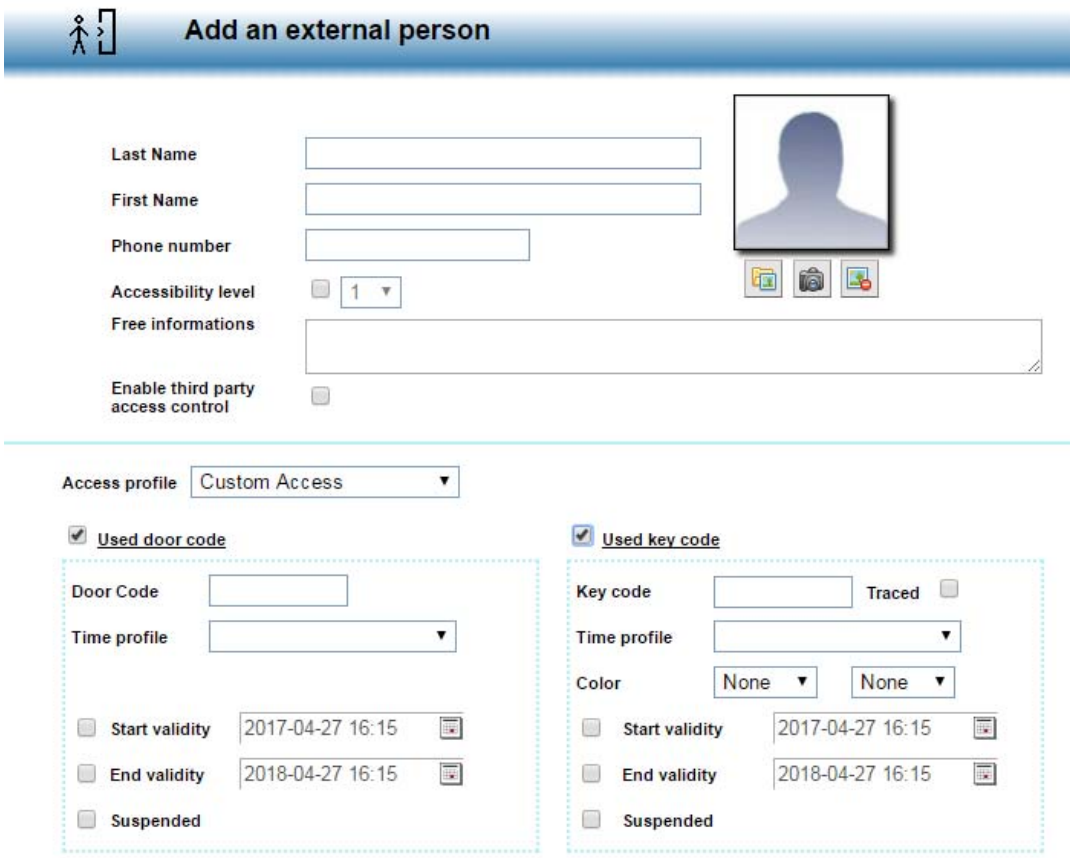


Figure 185: Advanced functions configuration- Adding an external person

To enter identification data for external people, follow the procedure already described for residents (see paragraph "Resident Management" on page 193). The following table describes fields and references for further details.

Last Name	Last name, required field. Max. length: 32 characters
Firstname	First name, required field. Max. length: 32 character
Phone number	Telephone number associated to the name. Optional field. Max. length: 16 alphanumeric characters
Accessibility Level	If selected, it allows, from the pull-down menu, to multiply by the indicated factor the door opening time programmed on the device. Allowed values: min: **1**, max: **10**. Default value: **Not selected**
Free informations	Additional free informations
Enable third party access control	If selected, this means that the external person can be visualized and used in third party app configuration process Default setting: **Not selected**

Access profile	Selection of the user access profile (if available). The value can be selected from a pull-down menu which contains the previously programmed profiles, if present. For information about access profile definition, refer to chapter “Advanced functions configuration - Access Profile” on page 221
Used door code	If selected, this means that a door lock release code has been assigned to the name. For programming procedure, see paragraph “Door Code Configuration” on page 196. Default value: **Not selected**
Used Key code	If selected, this means that a proximity key has been assigned to the name. For programming procedure, see paragraph “Key Code Configuration” on page 198. Default value: **Not selected**
Door Code	Door lock release numeric code, required field if the user has selected “Used door code”. Min. length: 4 characters, max.: 8 characters.
Key Code	Proximity key identification code. Required field if the user has selected “Used key code”; in hexadecimal format. Fixed length: 8 characters.
Time profile	Time profile assigned to door lock release codes or proximity keys that will select this access profile. For information about time profiles access definition, see chapter “Advanced functions configuration - Time Profile Access” on page 219 Default value: **No time profile applied**
Start validity	If selected, it allows to define the validity start date of the door lock release code. Before this date, the code will not open the door. Default value: **Not selected**
End validity	If selected, it allows to define the validity end date of the door lock release code. After this date, the code will not open the door. Default value: **Not selected**
Suspended	If selected, the door lock release code will be disabled and will not allow to open the door. Default value: **Not selected**

12.6 USER CUSTOM FIELDS

Ipervoice allows to extend External Persons data model with customized information. These data are not relevant for Ipervoice system, which will store and associate them to each user defined in the system. To access “User custom fields” management, select the related item from the devices tree, as shown in Figure 186.

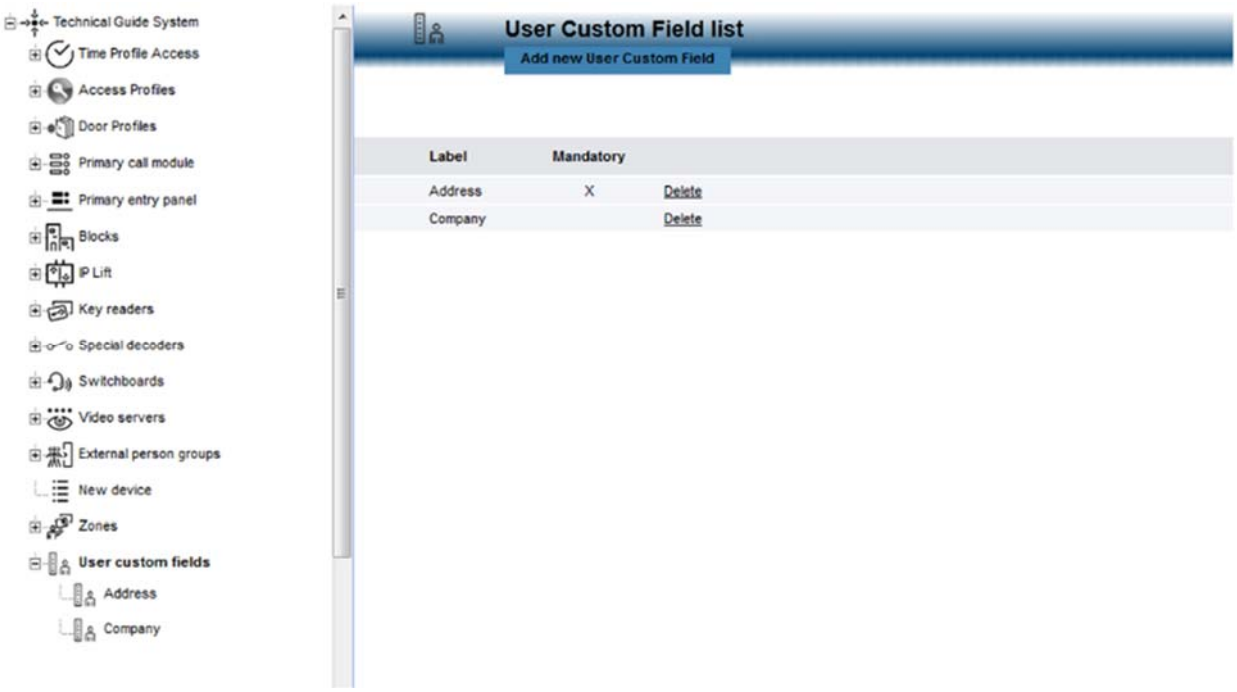


Figure 186: Advanced functions configuration - User custom fields list

Previously entered fields are shown in the list in the centre of the page; to change one of them, click on the name; to add a new field, select “Add new User Custom Field” under the title.Press the button “Add new User Custom Field”: the FrontEnd will open the page used to enter/change data, as shown in Figure 187.

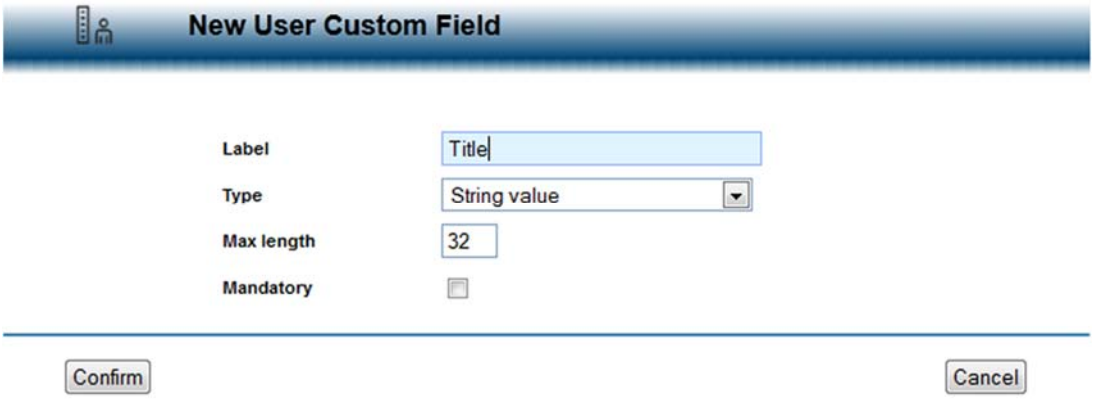


Figure 187: Advanced functions configuration – Entering Custom fields

The following table describes the concerned fields and shows usage limits.

Label	Custom field identifier, required field. Max. length: 32 characters
Type	Data type. It can be selected from the pull-down menu, values: • **String value:** alphanumeric field; all printable characters are allowed. • **Integer value:** Numeric field; only integers from 0 to 9 are allowed. Default value: **String value**
Max length	Max. length allowed for custom field contents. The FrontEnd checks this data during entering
Mandatory	If selected, it indicates that the field is mandatory and must always be filled. Default value: **Not selected**

Once custom fields have been filled, these will be displayed in detail pages of users belonging to the External person group, as shown the figure on the left. If in Multi-Site mode, this additional information will be available for all the concerned servers.

12.7 ZONES

Ipervoice system access control allows to manage also advanced functions concerning restricted access zones. Available features are "*anti pass-back"* and "counting", which can be tuned during configuration.

Anti pass-back control avoids that a person, just entered in a controlled zone, allows another person to enter, using the same access identity (Key or Door code). Without this control, several persons could enter a controlled area using a single access code.

Using access control functions, Ipervoice system can control:

- The same Key-code/Door-code, after entering the zone, must go out before entering again.
- The same Key-code/Door-code, after entering the zone, can enter again in the same zone even if he hasn't left the zone only after a configurable time.
- The number of persons present in a zone is not higher than the max. configured number.

To use these features, the first step is to create at least one zone and define its behaviour in the system. To access zone management, select the item "Zones" from the devices tree. The FrontEnd shows the zones already present in the system (Figure 188).

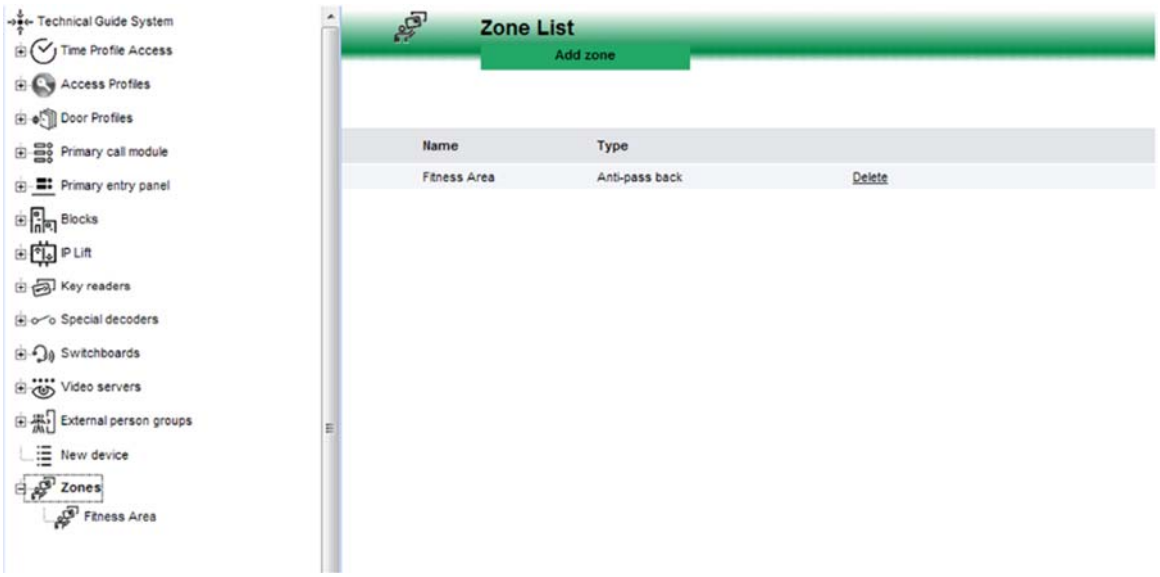


Figure 188: Advanced functions configuration - Zone List

To add a new zone, click on the button “Add zone” in the page title. Figure 189 shows the page used to enter data, the table shows the fields and their meaning.

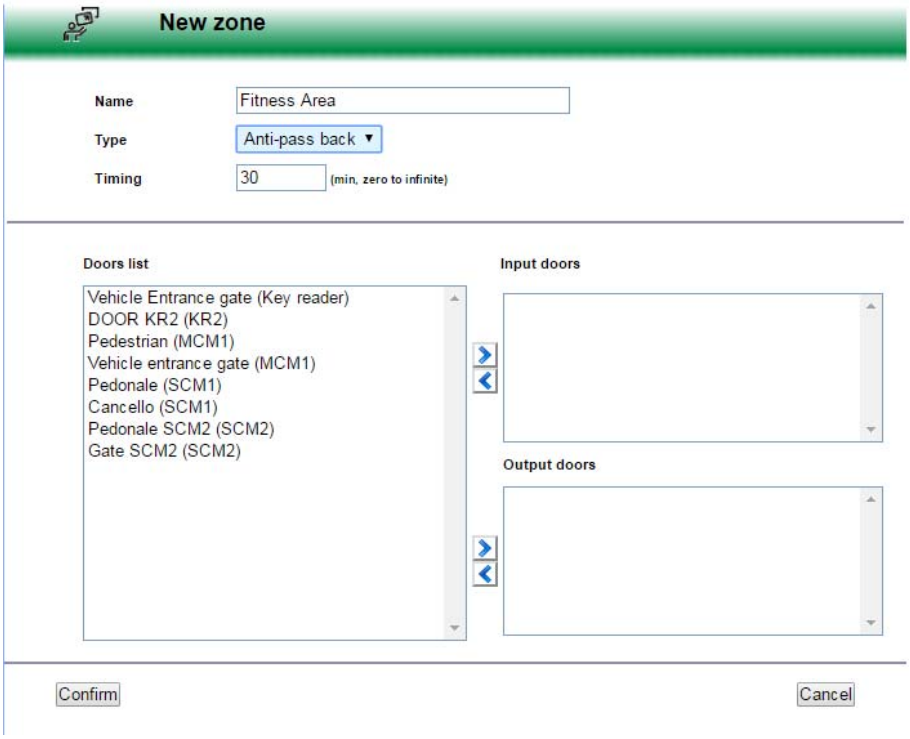


Figure 189: Advanced functions configuration - Anti pass-back zone data entering

Name	Zone name, required field. Max. length: 32 characters
Type	Zone type. It can be selected from the pull-down menu. Available values: • **Anti pass-back:** Typical operating mode: if a user enter the zone, he must go out before entering again. The behaviour can be modified adding a timing. • **Counting:** In this mode, persons present in the zone are counted. The counter is incremented during access and decremented during exit. There are no limits for an identified user who wants to enter another zone without leaving the first one. The counter is not incremented. • **Both:** Both previous modes are applied. • **Suspend:** The zone is disabled, but keeps the previously configured settings. The zone can be enabled again at any time. Default values: **Anti pass-back**.

Timing	Available only in *Anti pass-back* and *Both* mode; it is the time, in minutes, which must elapse in order that the same user can pass any entrance door without leaving the zone. Default value: **30 min**. The value **0** indicates infinite
Doors list	List of doors (passages) which can be used as entrance or exit doors. **Warning:** a door can't be an entrance and exit door for the same zone. When a door is added to one of the following list (input doors or output doors), the system deletes the door from the other lists of available doors.
Input doors	List of doors used to enter the zone.
Output doors	List of doors used to leave the zone.

Note: For security reasons, an exit door can always be used also when the same door allows to enter an adjacent zone. For this reason, consider it when defining the service model (for ex., the door P1 is the exit door for the zone A and at the same time is the entrance door for the zone B. The user U1 can enter the zone A, but not the zone B. If the user must pass through the door P1 to exit from the zone A, the door P1 will open, allowing an unauthorized user to access the zone B).

Note: The advanced functionalities for zones management are not available if the IP module is not connected to the server.

12.8 SERVER CONFIGURATION

In the main menu, select the item “SRV CONFIGURATION” to access Ipervoice server configuration page (Figure 190).

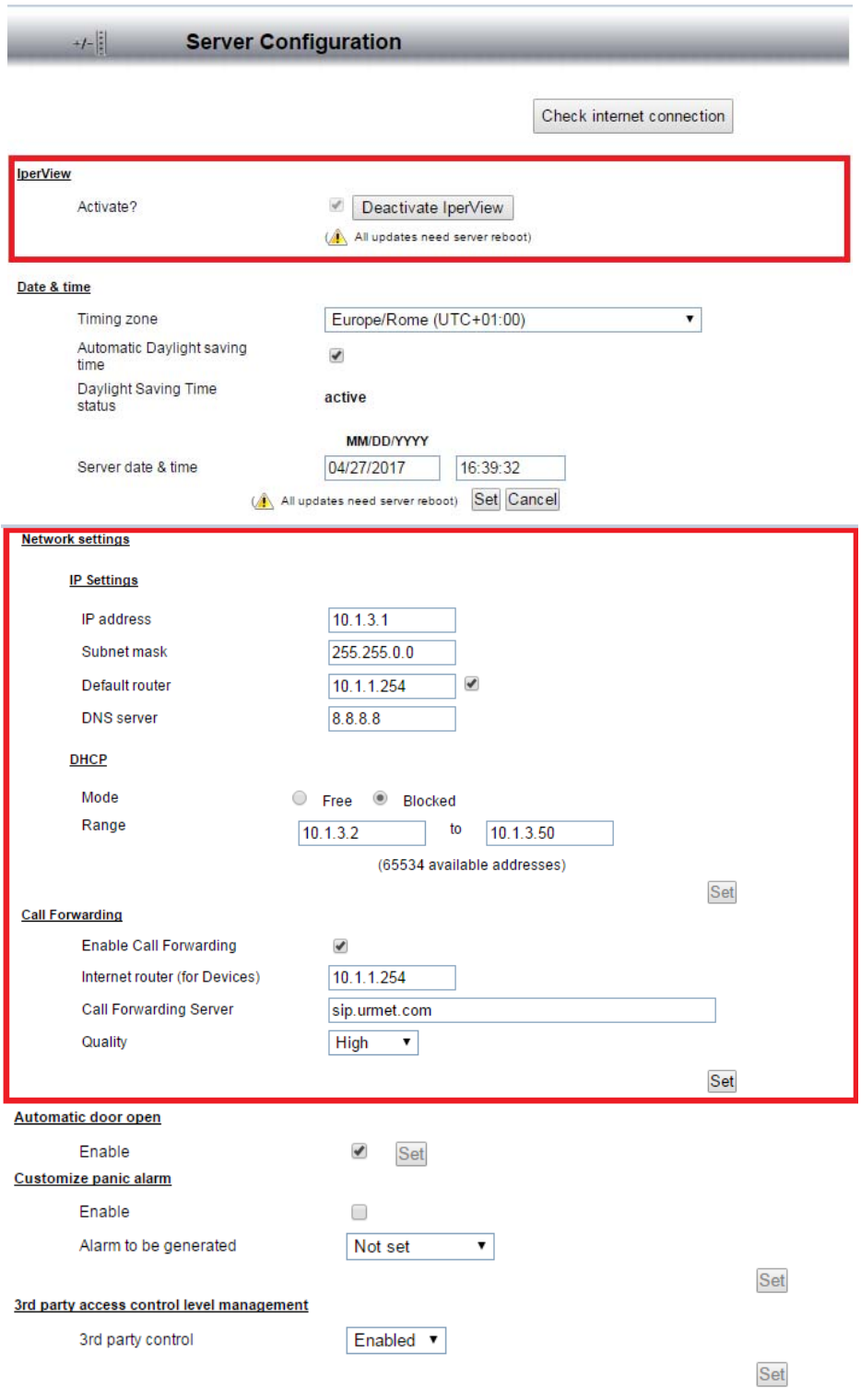


Figure 190: Advanced functions configuration - Ipervoice Server parameter configuration

System date and time additional parameters are configurable. The following table describes their meaning:

Check internet connection	This button performs a check to verify that the server is correctly configured to access Internet.
Iperview	The check-box allows to enable integration with Urmet – iPerView control graphic system. Default value: **not selected**
Date & Time - Timing Zone	It can be selected from the pull-down menu and allows to set the correct time zone of the server measured from Greenwich time.
Date & Time - Automatic Daylight Saving time	The check-box allows to switch automatically from daylight saving time and vice versa. Default value: **not selected**
Date & Time - Daylight Saving time status	If the previous option has been selected, it indicates if the system is using the daylight saving time.
Date & Time - Server date & time	The two text boxes allow to set server date and time. **Warning:** to enter the date, pay attention to the format, as described by the text box label.
IP Settings - IP address[82]	Ipervoice server IP address. Default value: **10.2.1.1**
IP Settings - Subnet mask	Net mask used in Ipervoice IP network. Default value: **255.255.0.0**
IP Settings - Default router	Router IP address used by Ipervoice server to access Internet, used for the "Call Forwarding" function. Default value: **none**
IP Settings - DNS server	DNS server IP address for names resolution; used only by Ipervoice server to access Internet for "Call Forwrding" function. Default value: **none**
DHCP - Mode	DHCP server operating mode for Ipervoice system IP addresses assignment; values: • **Free:** the server assigns IP addresses to any network device that performs a request • **Blocked:** the server assigns IP addresses only to those devices with MAC addresses previously registered into DHCP server. Not mandatory but strongly recommended

[82] Only a user with **System Administrator** rights can change features indicated in boxes. For further details, see paragraph "Software Users Configuration" on page 254.

[82]It is advisable to use a public server IP address, such as the one made available by Google (8.8.8.8).

	to prevent assigning IP addresses to devices which do not belong to the Ipervoice system. Default value: **Free**
DHCP - Range	The two text boxes allow to set start IP address and end IP address, assigned to devices by DHCP.
Call Forwarding - Enable Call Forwarding	The checkbox is used to enable the "Call Forwarding" function. Default setting: **Not selected.**
Call Forwarding - Internet router (Devices)	IP address of the router used in case of access to the Internet for "Call Forwarding" function. Default setting: **Not set.**
Call Forwarding - Call Forwarding Server	Name of the Internet SIP server used for call forwarding. Default setting: **sip.urmet.com**
Quality	From this dropdown menu it is possible to select the quality of video sent with the call forwarding functionality, depending on the quality of the upload of the internet connection.
Automatic door open	If selected, from the apartment you can enable the auto door opening when receiving a call.
Customize panic alarm – Enable	If selected, this option allows to customise the alarm type that is sent to the switchboard.
Customize panic alarm – Alarm to be generated	The following alarm type are available: • Fire alarm • Gas alarm • Flood alarm • Intrusion alarm • Hold-up alarm • Tampering alarm • Help • System failure alarm • Forced door alarm **Warning:** If you set an alarm type other than the panic alarm (default), you will not be able to room monitor from the switchboard.
3rd party access control level management - **3rd party control**	If enabled along with the same flag on software user modity page (see par 12.9.3) this means that 3rd party access control application can access to Ipervoice in order to manage access control Default setting: **Disabled**

Warning: To make changes effective, reboot the Ipervoice server. Perform this operation carefully.

12.9 SOFTWARE USERS CONFIGURATION

Select the menu item "SOFTWARE USER" to access the section dedicated to rights and users management of Ipervoice FrontEnd.

Figure 191: Advanced functions configuration – List of users

Figure 191 shows the list of users automatically created by the system. Ipervoice manages also five different profiles, called "*User Rights*", used to define which actions can be performed on the system, as described later (Figure 192).

Figure 192: Advanced functions configuration – List of User Rights

12.9.1 PREDEFINED USERS

Each time a new Ipervoice system is installed, four users and five profiles with different rights used to operate inside the FrontEnd are automatically created. They are listed in the following table, starting from "User Rights" with less restrictions.

User / Password	User Rights	Characteristics
sysadmin / yourevip	System Administrator	Whole system control
Installer / dacirrye	Installer	User enabled to installation and configuration
remote	Installer	User enabled to system remote management
administrator / venikegs	Site Administrator	User enabled to system management
	Site Manager	No predefined user. Dedicated to system management
	Maintenance	No preset user. Dedicated to maintenance service

Warning: To change existing rights and users or create new ones, access the FrontEnd with a user identity with System Administrator rights.

12.9.2 Software User Rights

Ipervoice defines five different user rights, which cannot be deleted. No new rights can be created, but it is possible to rename the profile and change its rights[83]. The following figure and table show the page used to change "Site Administrator" and rights meaning.

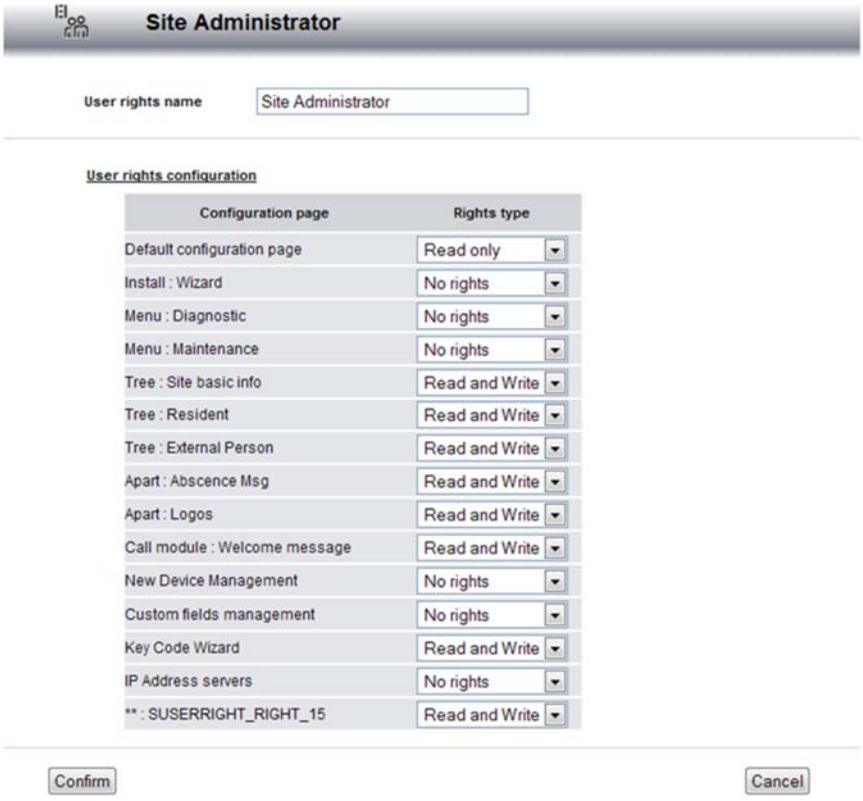


Figure 193: Advanced functions configuration – Changing Site Administrator rights

User rights name	Name of the role. Required field. Max. length: 32 characters
User rights configuration	List of rights which can be configured in Ipervoice system. For each one there is a pull-down menu used to select the allowed operation. Available values: • **No rights:** no possible actions for this function • **Read only:** the function can be read, but not changed by the user • **Read and Write:** the user can configure the function

[83] Except **System Administrator**, which cannot be changed.

12.9.3 SOFTWARE USER

Differently from the previously described user rights, it is possible to add new users and change or delete existing users[84]. To add a new user, press the button "Add software user" under the page title (Figure 191). To change a user, click on the name of the user. In both cases, a change page will appear, as shown in Figure 194.

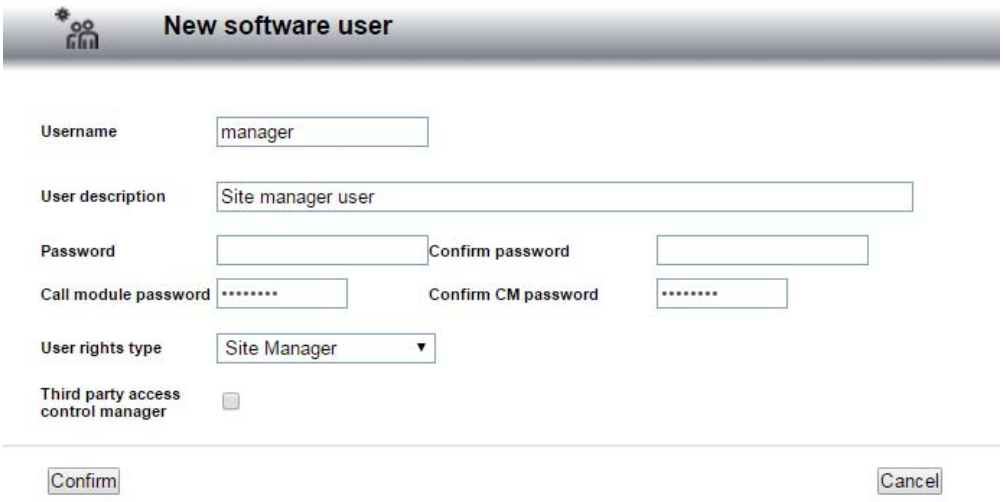


Figure 194: Advanced functions configuration – Adding a new user

The following table shows the field meaning and data limits.

Username	Username used to access the system. Max. length: 16 characters. Required alphanumeric code
User description	Description of the user. Optional field. Max length: 64 characters
Password / Confirm Password	Password and password confirmation. Required masked fields. To be valid they must be identical. Max. length: 16 characters
Call module password / Confirm Call module password	Password and password confirmation used to perform some configuring operations from call modules. Required numeric masked fields. To be valid they must be identical. Max. length: 8 characters. This data can be accessed and changed only if the user is provided with *Installer* or *System Administrator* rights. Otherwise, the field will be dimmed
User rights type	The value can be selected from a pull-down menu. Allowed values are indicated in paragraph "Predefined Users" on page 240
Third party access control manager	If enabled, along with related flag on Server Configuration page (par 12.8), grants 3rd party access control application to Ipervoice in order to manage access control Default setting: **not selected**

[84] The user **sysadmin** cannot be deleted from the system

12.9.4 CHANGING THE PASSWORD

To access the password change page, press the button “Modify password” in the upper side of the user configuration main page[85]. This page is the same used to change the password, but with some restrictions according to user rights. Select the function, enter the new password according to rules described in paragraph “Software User” and save the new configuration.

[85] The users with **System Administrator** rights can change the password of all system users. The other users can only change their own password.

13 System Maintenance and Utility Functions

The operations to be performed for Ipervoice system maintenance mainly concern the following points:

- Saving and restoring system operating data
- Checking firmware version of server and IP devices
- Upgrade of Ipervoice firmware resident on the server
- Adding, replacing and deleting system devices
- Exporting Resident and External Person template
- Importing and exporting residents and external persons data

In utility section, there is:

- System Log
- Searching names and devices

All these operations are performed using the Ipervoice FrontEnd, so in the following explanations is assumed that the PC is connected to Ipervoice IP network and the user has gained access to the FrontEnd with the browser. For details, refer to the chapter “The Frontend” on page 88.

13.1 Backup of system configuration data

Backup is used to save a copy of system data on the user PC. You can either backup manually if necessary or schedule a periodic auto backup. For more details about configuring auto backup please refer to section 13.1.1. To access to this function, select the item “MAINTENANCE”[86] from FrontEnd main menu and then choose “Backup and Restore”. Select “Backup all data” at the centre of the page and press the button “Next” to start the data saving procedure (Figure 195).

[86]Backup and Restore functions are present also in the menu item “FW UPGRADE”.

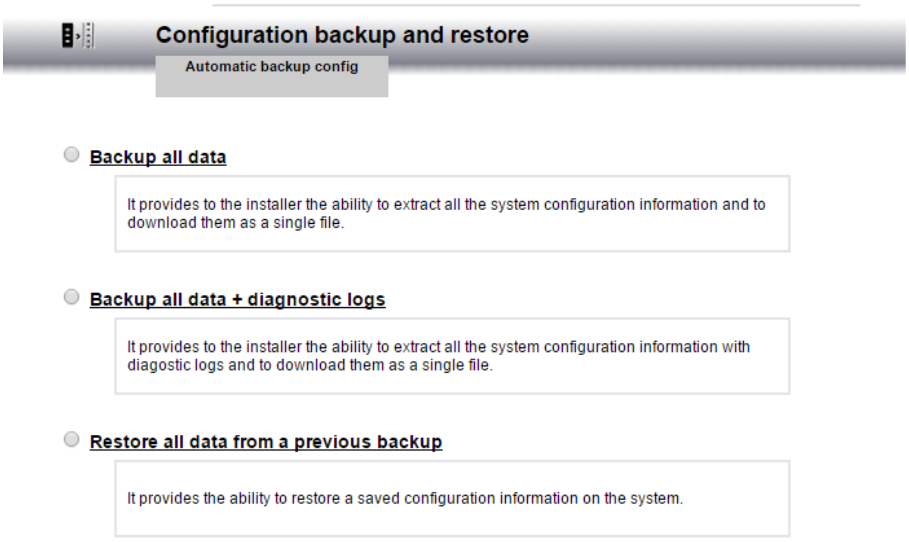


Figure 195: System maintenance – System configuration backup – procedure start

Configuration data are stored in a compressed file[87], that the installer must save in a PC folder, as shown in Figure 196[88]. Once the operation is complete, the display shows the following screen Figure 197.

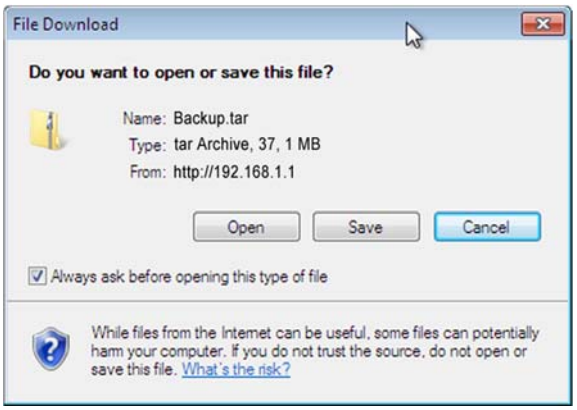


Figure 196: System maintenance – System configuration backup, compressed archive save

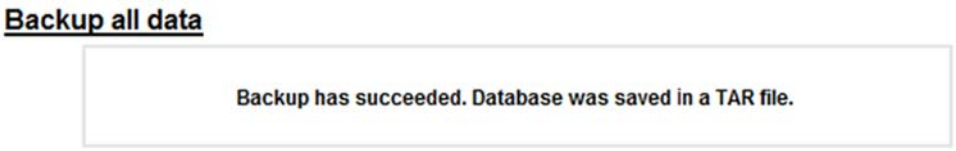


Figure 197: System maintenance – System configuration backup, procedure completed

[87] The name of the backup file is as follows: **Backup_yyyyMMddhhmm.tar.gz**; where characters ***yyyyMMddhhmm*** indicate: year, month, day, hour and minute in which the backup was created.

[88]The figure refers to Mozilla Firefox Browser; other Internet browsers, such as Opera or Internet Explorer, could need different procedures to perform save operations.

Warning: It is suggested to always perform the data backup every time the system is changed, in order to restore its configuration, if it is necessary to go back to the previous condition. It is also suggested to perform a backup after the changes have been made, in order to restore the system if the Ipervoice server is replaced.

13.1.1 BACKUP OF SYSTEM CONFIGURATION IN AUTOMATIC MODE

Warning: This feature applies to the Ipervoice systems shipped with native firmware version 4.2.0 and newer. For all older systems undergoing a firmware upgrade, please contact the technical support.

The automatic backup needs a USB drive attached to the server, with enough free space.

Figure 198: Accessing the config page for auto backup

Once in the automatic backup configuration page, the user may choose to enable one backup schedule per time, on a daily or weekly basis, or eventually disable the existing scheduled backup:

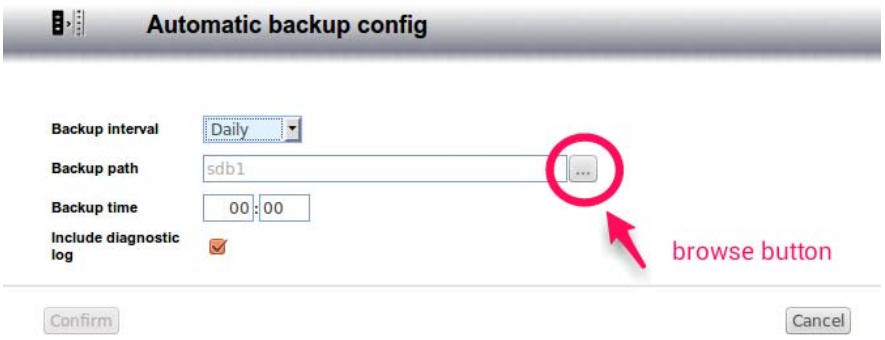


Figure 199: Configuring auto backup

The user must select the backup path among the available USB storage drives listed in the directory browser page, accessed via the browse button:

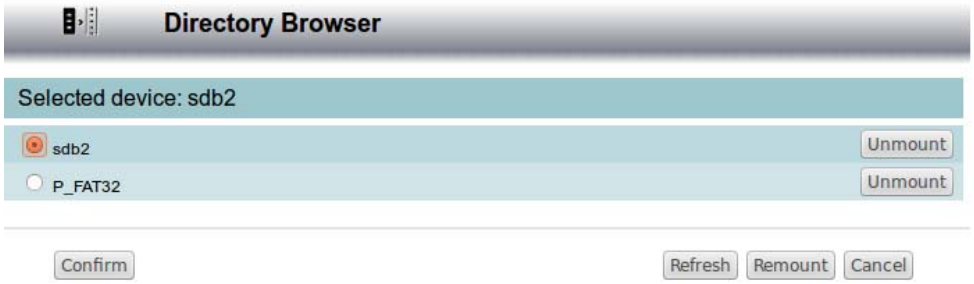


Figure 200: Selecting the filing device

Unmount	Unmounts the selected drive in order to safely remove the USB drive from the server. The unmount of a partition will safely remove all the other partitions of the device, if present.
Confirm	Saves changes and brings back to the configuration page
Refresh	Refreshes the available drive list.
Remount	Remounts all previously unmounted drives (all the drives correctly remounted will be listed again, otherwise no new drive will be shown).
Cancel	Discards changes and brings back to the configuration page

The user is only allowed to select which drive to save the backups to, not a specific path in it. All scheduled backups will be stored in the dedicated directory AUTO_BACKUP_IPERVOICE, which will be created in the root path of the drive, if missing.
Once selected a drive, clicking on the Confirm button will bring back to the configuration page.
Now, the user must select the desired backup time of the day, and whether to include the diagnostic logs in the backups or not by selecting the dedicated checkbox (beware, including the logs may increase considerably the required backup space on the drive).
In order to save the desired backup schedule, the user must click on the Confirm button, then on the flashing Update System button.

Note: Each and every time the user needs to remove the USB drive from the server, it's ***highly recommended*** to first ***unmount*** it from the dedicated button, as described before, as this will remove the drive in the safest way, otherwise data lost may occur. The removal of the drive will cause the disabling of the automatic backup, if set, which will need to be reconfigured in case of reinsertion of an USB drive, even if it's the same physical USB drive just removed.

Note: The user should pay attention to the free drive space available on the selected backup USB drive. If the amount of the backups is enough to fill all the drive space,

each time a new backup schedule is triggered a variable number of backups are removed, starting from the oldest, until there is enough room to store the new backup file. The dimension of logs is fixed and automatically kept up to a maximum of 500KB each.

Warning: A placeholder file will be created in the AUTO_BACKUP_IPERVOCE folder, which will be named after the following naming pattern: *ID_SRV_<eth0_mac_address>*, e.g.: *ID_SRV_AA_BB_CC_DD_EE_FF* given that eth0 has "aa:bb:cc:dd:ee:ff" as MAC address. Such file MUST NOT be removed manually.

Warning: If automatic backup has been enabled on a version earlier than 5.0, after completing the upgrade the automatic backup settings must be reconfigured.

13.2 RESTORE OF SYSTEM CONFIGURATION DATA

To restore configuration data saved with the backup procedure, select the item "MAINTENANCE" from the FrontEnd main menu and then "Backup and Restore". Select "Restore all data from a previous backup" and press the button "Next" to start the restore procedure.

The installer must select the file with the data to be restored, as shown in Figure 201. Press the button "Browse" to open a dialog window and select the desired file.

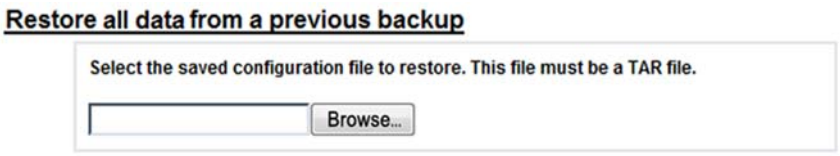


Figure 201: System maintenance – System configuration restore, backup file selection

After the selection, Ipervoice will load the file on the server and restore operations will start. At the end, the user is notified about the operation result: to complete the procedure, the last operation to be performed is a complete manual reboot, by switching off and on all the IP system devices.

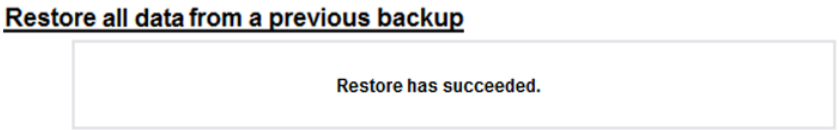


Figure 202: System maintenance – System configuration restore, operation completed

Warning: **It is not possible** to restore a configuration using a backup performed with a server version different from the current one. It is suggested, before each firmware upgrade, to always perform a first backup to save system data and, after updating, perform a second one, in order to have a backup performed with the updated version of the system. If it is needed to restore a configuration using a backup performed with a server version different from the current one, first of all restore the firmware version used to perform the backup and then restore configuration data.

13.3 CHECKING SERVER AND IP DEVICES FIRMWARE VERSION

Before performing operations for updating the system (server and other IP devices firmware), it is suggested to verify the system status. This function is available with the FrontEnd, by selecting from the main menu the item "FW UPGRADE" and then "Check system consistency". A screen, as the one shown in Figure 203 will be shown.

Figure 203: System maintenance – Checking of IP devices firmware version (standard installation)

The list includes the main information about system IP devices, useful to check their operating status, before performing updating operations. The Table 55 explains the meaning of the columns in the list.

Device Name	Name of the device.
Device Type	Type of the device.
Status	Device operating status, detected by the system. The status can be: **UNKNOWN**, **POLL IN PROGRESS, ALIVE**, **DEAD**.
Actual fw	Version of firmware (running) on the device.
Expected fw	Version expected for the device. This data is used, after a server updating operation, to know if all the devices have been correctly updated. In this case, the version displayed in this column is the one that will appear in the column "Actual fw", after upgrade.

Date	Release date of the firmware version installed on the device. It refers to the column “Actual fw”.
Status fw	Firmware upgrade status. Used during the “Firmware Upgrade” phase to verify the operation state. Once the phase is completed, the display will show “Completed”.

Table 55: System maintenance – Meaning of system consistency data

In case of Multi-Site installations the information relating to the others Ipervoice servers are also indicated; in this way the operator can verify the state of operation before proceeding to any updates to the system.

13.4 IPERVOICE SERVER UPGRADE

The upgrade of Ipervoice server firmware allows to install new versions of system applications if new functions and improvements to existent features have been released. To perform the procedure the file containing the upgrade[89] must be available on the PC connected to the FrontEnd. In order to access to the section dedicated to server upgrade, select the item “FW UPGRADE” from the FrontEnd main menu and then the item “Upgrade System Firmware”. Before starting, the user is reminded to perform a backup, in order to avoid data losses (Figure 204) and it is recommended to perform a restart of the server (via the FrontEnd selecting the "REBOOT" on the main menu).

By pressing the button “Backup system”, the installer is redirected to data saving procedure previously described in the paragraph “Backup of system configuration ” on page 244.

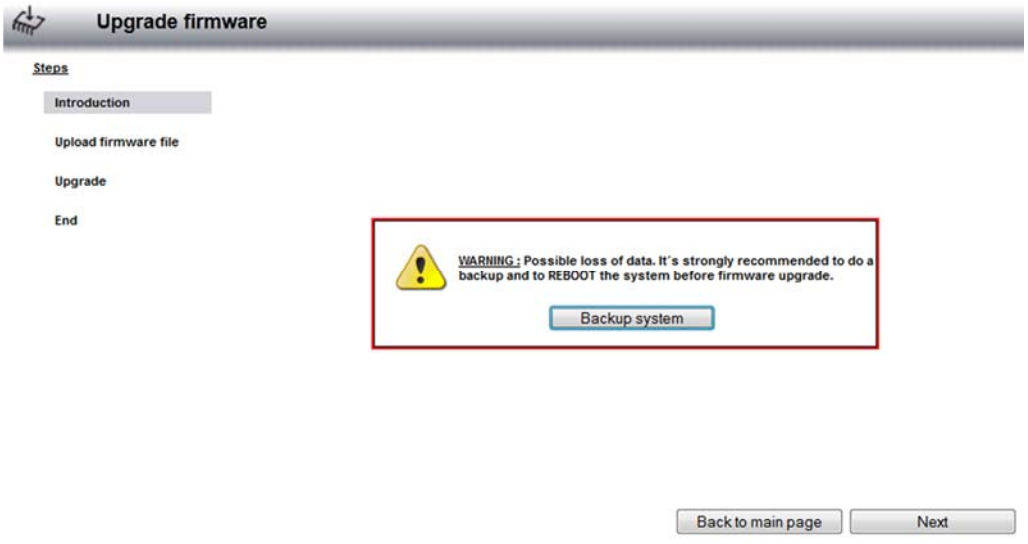


Figure 204: System maintenance – Server upgrade, procedure start

[89] IPervoice firmware updates are available on URMET internet site ***www.urmet.com*** or directly on the site **www.ipervoice.com**.

If the backup has already been performed, press the button “Next” to go the next phase. Select the file (Figure 205), containing the update package (FUP[90]), that must have been downloaded to the PC connected to the FrontEnd, as already described. Select this file, as usual, in the dialog window, that is opened by pressing the button “Browse”.

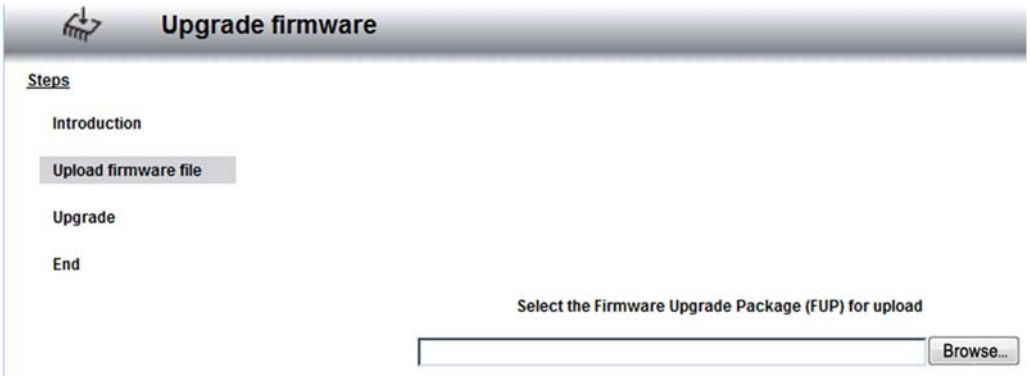


Figure 205: System maintenance –Server upgrade, FUP selection

If the file is valid, the system will be ready for upgrade only after asking the user for a final confirmation: till this moment, the procedure can be interrupted without changing the system status. After confirming by pressing the button “Yes, continue”, the operation cannot be interrupted.

Figure 206: System maintenance – Server upgrade, upgrade confirmation

The firmware upgrade phase may last for some minutes. Do not disconnect the PC from the FrontEnd or switch the server off during this phase; wait until the system asks to reboot the server (Figure 207), to make the upgrade active.

[90] FUP: **F**irmware **U**pdate **P**ackage

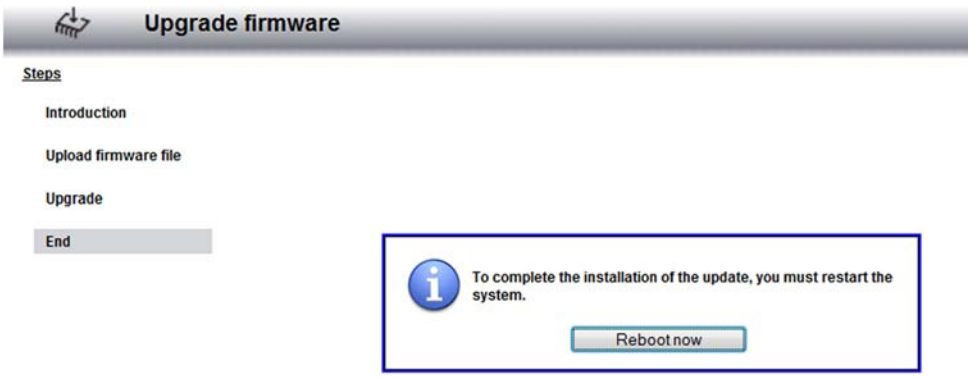


Figure 207: System maintenance – Server upgrade, system reboot

Warning: once the server reboot is completed, the FrontEnd page is reloaded to inform the user that the operation has been completed. In some cases, the automatic reload is not performed. If this happens, close the browser and reconnect to the FrontEnd.

13.4.1 IP DEVICES AUTOMATIC UPGRADE

Once the upgrade is completed, the system asks to reboot the server to make the new firmware active. Once the reboot is completed, the server checks the firmware consistency on main IP devices, then automatically updates them, if needed. With the function “Check system consistency”, contained in the item “FW UPGRADE” of the FrontEnd main menu, it is possible to control the progress of the upgrade phase (for further details, see the paragraph “Checking server and IP devices firmware version” on page 249). In the Figure 208, for example, the firmware upgrade for the devices “Main Entrance Call Module” and “Gateway East Tower” is in progress.

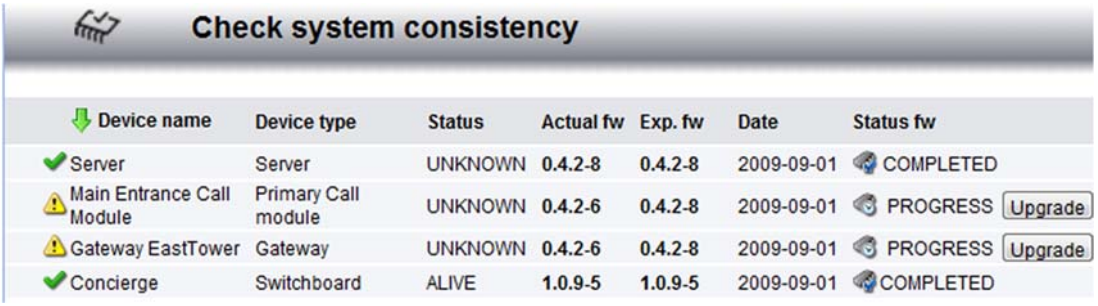


Figure 208: System maintenance – Checking of IP devices firmware

Warning: the automatic upgrade phase of IP devices depends on devices number and type and may last some minutes. During this time, all devices are unusable, e.g. the call module display is off and the door lock release command is deactivated (also the one performed using the “exit switch” button). The upgrade phase is performed by the server in “parallel” on all devices, in order to minimize the time in which the system is not available.

To check that the automatic upgrade has been successful, verify on all listed IP devices the columns “Actual fw” and “Expected Fw”: they must contain the same version. The column “*Status fw*” must display “Completed”[91].

[91] Because the FrontEnd can detect if the upgrade has been successful, but not if it has failed, if the upgrade state of a device remains in condition “PROGRESS” for more than 10 minutes, it is possible to force a manual upgrade, by pressing the button “Upgrade” near the concerned device.

13.5 IPERVOICE DEVICES REPLACEMENT

A device must sometimes be replaced because of a failure or when a new model is installed (for example, when a call module 1039/18 is replaced by 1039/13).

If a replacement is needed, remember that in Ipervoice system there are two groups of devices:

- IP devices
- Column devices

The replacement procedure depends on the device to be changed, that is a call module, a gateway and another IP device or a 4-user decoder and a video door phone.

In the first case, IP devices, the replacement is performed exclusively with the FrontEnd; in the second case, a PDA Phone or a Netbook is mainly used; the procedure is the same as in "Column Devices Configuration" described on page 153.

In the second case, the Ipervoice server does not need to identify the column devices before their configuration. The programming procedure, if necessary, is performed with the mobile device through the Bluetooth interface or, only for apartment stations, with the "dip-switches" placed on the wall mounting bracket (for the configuration procedure, refer to the paragraph "Apartment Stations Configuration – Dip Switch Configuration" on page 83).

13.5.1 IP DEVICES REPLACEMENT

For these devices, the procedure is composed by the following steps:

1) Installation of the new device instead of the old one.
2) Automatic identification of the new device by the Ipervoice server.
3) Replacement with FrontEnd.

The first step concerns the physical replacement of the device, included wiring operations.

The installer is not involved in the second step.

The third last step concerns the procedure to be performed with the Ipervoice FrontEnd and allows to transfer the configuration from the old device to the new one just replaced.

Note: The following example will describe the procedure to be used with the FrontEnd, assuming that a call module must be replaced. Note that this procedure is the same as in case of replacement of other IP devices.

The list of new devices detected by the Ipervoice server is displayed by the FrontEnd[92], by selecting the item "*New device*", as shown in Figure 209. In the centre of the page there is the list of all the new IP devices identified by the server; near each one there are information about device type, IP address, MAC address, firmware version and its status.

Note: The Ipervoice server automatically detects the new IP devices when these require the assignment of the address. However, the list can be manually updated, by pressing the button "*Detect new devices*" under "New Device".

With the fields **Device Type** and **MAC address** the device to be replaced can be uniquely identified, in the example a call module; press the button "Replace" to start the replacement procedure.

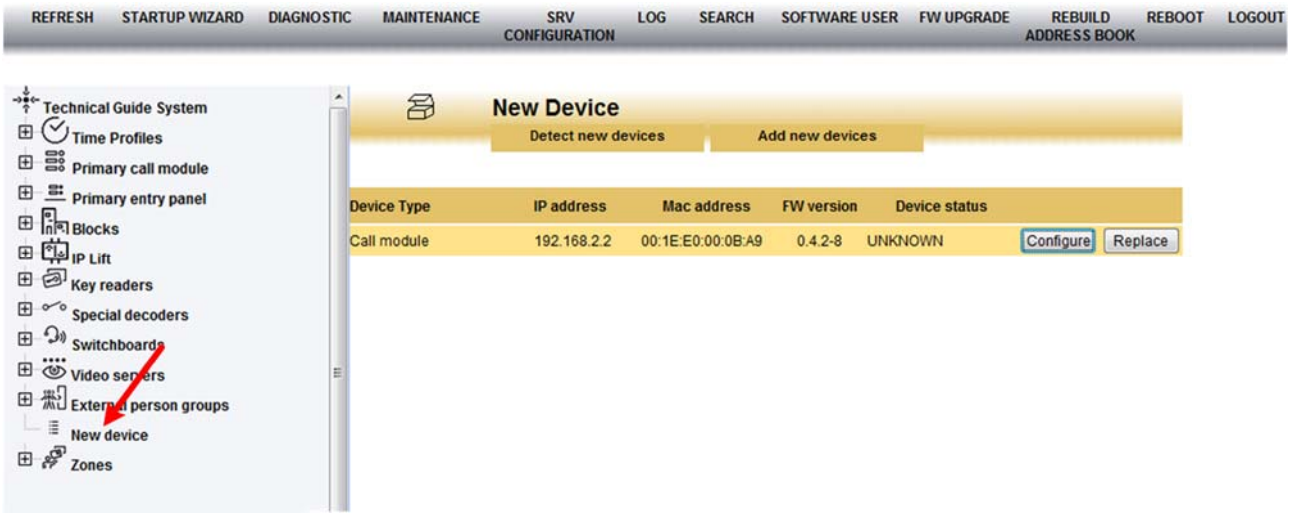


Figure 209: System maintenance – List of new IP devices

The FrontEnd shows the user a new page, where information about the new device are displayed (section **1** of Figure 210) and the list of call modules with **DEAD** status (section **2**) that must be replaced. In case of call module replacement, there are two lists, the first for main modules and the second for the secondary ones. The user must select the module to be replaced from the right list; the system can not automatically choose. Once the device has been identified, press the button "Replace" to execute the procedure.

[92] To access to the IPervoice FrontEnd, see the chapter "The Frontend" on page 90

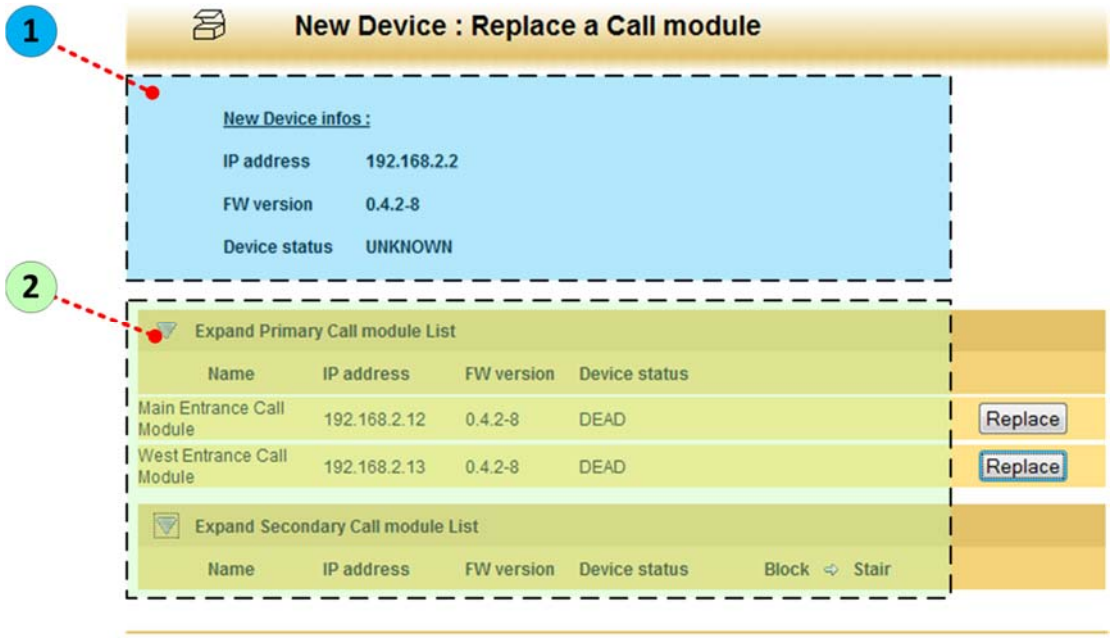


Figure 210: System maintenance – Selection of the call module to be replaced

Warning: After the replacement and the new configuration have been performed, the Ipervoice server checks the consistency of the firmware version installed in the new device and updates it automatically, if necessary. During this time, the device will be out of order, as described in the paragraph “IP devices automatic upgrade” on page 253.

FURTHER NOTES ABOUT IP DEVICES REPLACEMENT

In case of replacement of IP Gateway 1039/50 or column power supply units 1039/20, it could be necessary to repeat the procedure for adjusting the video signal, as described in the paragraph “Video Signal Adjustment” on page 82.

13.5.2 COLUMN DEVICES REPLACEMENT

The procedure for replacing a column device, as for example a 4-user decoder (1039/34), consists in the following steps:

1) Installation of the new device instead of the old one.
2) Download of system configuration data to a SmartPhone or another mobile device.
3) Programming with SmartPhone through Bluetooth interface.
4) Checking of system data download to the column device

The first step concerns, as in the previous case, the replacement of the device, included wiring operations.

To download system data (file config.dat) to the mobile device, refer to paragraph “System Data Download to PDA and Smartphone device” on page 156.

The programming procedure of the 4-user decoder with the Bluetooth interface is described in the paragraph “Transferring System Data to Column Devices” on page 157.

The last step concerns the checking of system data downloaded to the replaced device. This operation is described in the paragraph “Checking the parameters sent to the column device” on page 169.

13.6 ADDING NEW DEVICES

As in the previous case, the operation for adding devices is different, according to device type (IP or column devices). The two procedures are the following:

- **IP devices**

  → The operation for adding a device and downloading the configuration is exclusively performed with the FrontEnd.

- **Column and apartment devices**

  → The operation for adding a device and setting configuration data is performed with the FrontEnd; a Smartphone or a Netbook is used to download data.

The above described procedures are, in brief, the same used during the first phase of system configuration, described in the following chapters:

- The “StartUp Wizard” on page 95
- Ipervoice Devices advanced Configuration on page 119
- Column Devices Configuration on page 153

So, instead of describing every single case, two examples will be detailed, one for IP devices and the other for column devices, in order to highlight the differences between the two procedures. In both cases, the first step to add a new device is the button “Add …” in the related list page, under the title. The Figure 211 shows some examples.

Figure 211: System maintenance – Access to the function for adding devices

13.6.1 ADDING NEW IP DEVICES

In the example an IP key reader (1039/82) is added, but, as already said, the procedure is the same as for the other IP devices. From the devices tree select the item “Key Readers”[93]: the FrontEnd shows the list of existing devices (Figure 212); by pressing the button “Add a key reader”, the user is redirected to the page “New Device”[94] (Figure 213), already described for replacement, where the device to be added must be selected.

Figure 212: System maintenance – Adding a new IP reader

[93] It is also possible to directly access to the item “New Device” from the devices tree and then select the device to be added.
[94] The current FrontEnd version allows to add IP devices only if they are already included in the list “New Device”.

Figure 213: System maintenance – Selecting a device to be added

Warning: the list always shows all the devices detected by the system. The user must select the device to be added by considering the "Device Type", but first of all the "MAC Address", that is the unique identifier of each IP device.

Press the button "Configure" near the IP key reader to be added and access to data entry page. This page contains, as shown in Figure 214, the data already described in Table 27 on page 116, the chapter about the Startup Wizard. To execute the operation, press the button "Add Device".

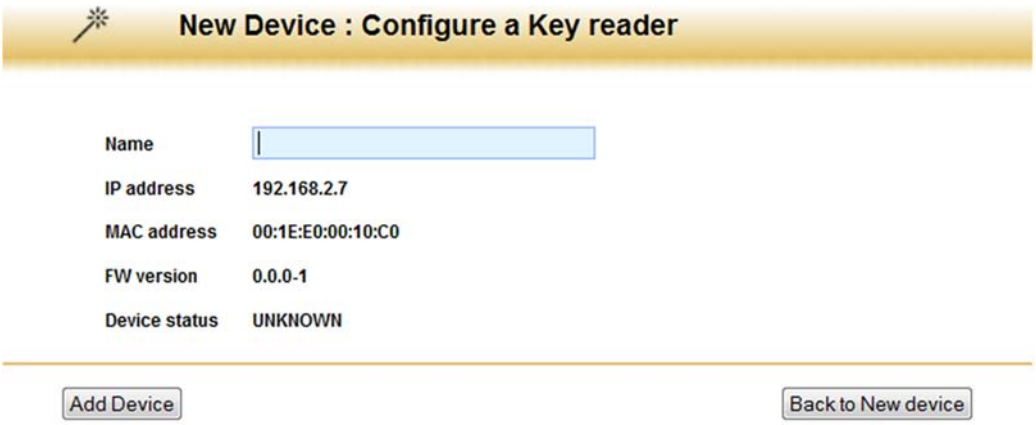


Figure 214: System maintenance – Entry of IP key reader data

Note: The status of all the new IP devices in the list "New Device" remains UNKNOWN until the device is added to the system and configured.

13.6.2 ADDING NEW IP DEVICES USING THEIR MAC ADDRESS

Ipervoice FrontEnd allows to add new devices also by MAC address. This mode is the only that can be used if DHCP module has been configured in "**Blocked"** mode (see paragraph 12.8 - "Server Configuration" on page 237 and following) and allows to achieve the operation by entering the device type and its MAC address. To use this feature, click on the button "Add new device" near the summary page title "New Device".

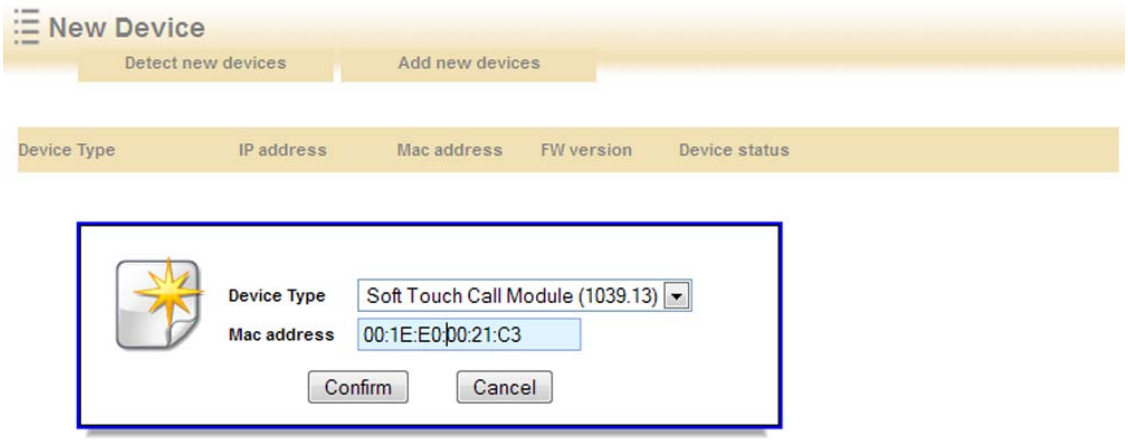


Figure 215: System maintenance - Adding new devices by MAC address

Figure 215 displays the Popup window used to enter data, the following table shows the fields and their meaning.

Device Type	Device type value can be selected from a pull-down menu that contains the list of IP devices available in Ipervoice system.
Mac Address	Device MAC address, required field. **Warning:** address hexadecimal digits pairs must be separated by the character ":"

13.6.3 ADDING NEW COLUMN OR APARTMENT DEVICES

To add a new column device, in the following example a 4-user decoder (1039/34), first of all identify the IP Gateway to which the decoder must be associated; to do this, search in the devices tree the block and the stair where the gateway has been installed, select it and expand the item “Decoders”: the FrontEnd displays a page as shown in Figure 217. Press the button “Add a decoder” to enter data.

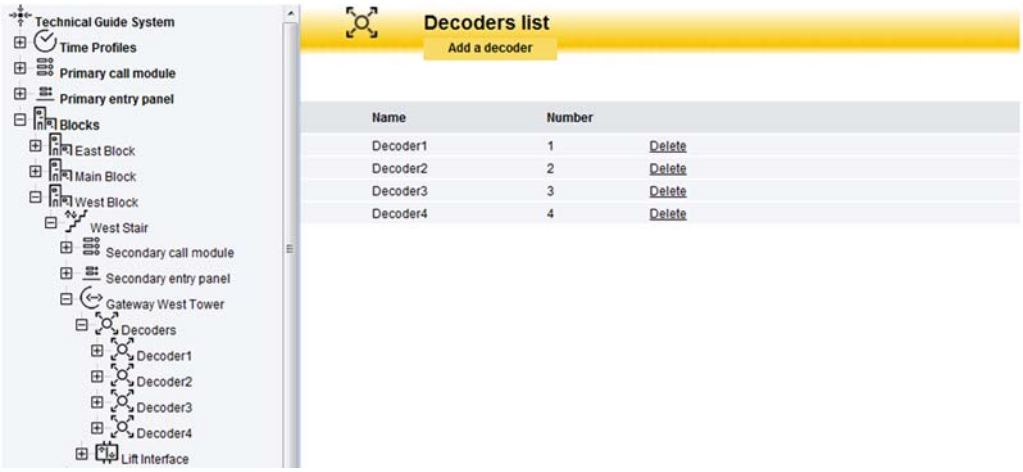


Figure 216: System maintenance – Adding a new Decoder

Also in this case, the data to be entered are the same as those described during the configuration phase with the Startup Wizard in Table 40 on page 176. To execute the operation, press the button “Confirm”.

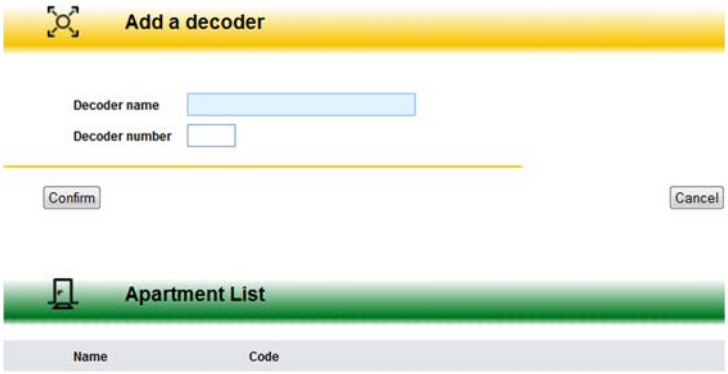


Figure 217: System maintenance –Entry of Decoder data

Warning: after adding a column device, the system data must be downloaded to the device, if required, using a Netbook or a SmartPhone, as described in the chapter “Column Devices Configuration” on page 153.

13.7 DELETING DEVICES (AND OTHER SYSTEM COMPONENTS)

Differently from devices replacement and adding operations, there are no different procedures to delete IP devices or column devices. The same procedure is also used for other system components that are not hardware devices, but are used to describe the Ipervoice system structure. These are, in this case, blocks, stairs, floors and apartments.

13.7.1 DELETING IP AND COLUMN DEVICES

The first step is performed by selecting the device to be deleted from the devices tree of Ipervoice FrontEnd: in Figure 218, as an example, there is the list of decoders associated to the “Gateway West Tower”.

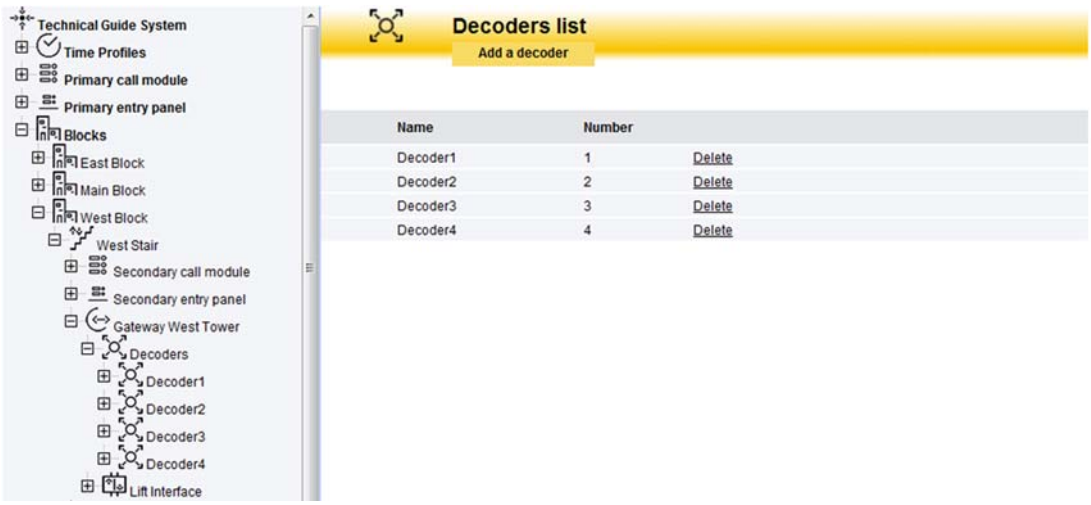


Figure 218: System maintenance – Selection of a device to be deleted

To delete a device, click on the button “Delete” near the device: the system will require a confirmation (Figure 219), if the answer is “Yes”, the device will be deleted.

Figure 219: System maintenance – confirmation to delete a device

If in the system there are other devices or components connected to the device to be deleted, Ipervoice informs the user that the operation is impossible, explaining why the deleting operation has not been performed.

Warning: theFrontEnd provides details only about the direct cause that prevents from deleting the device. For example, a decoder deleting depends on the presence of apartments associated to it, where there could be other devices, as video door phones or intercom interfaces and also residents associated to that apartment. The user must first of all delete all these devices in the right sequence and then delete the main device.

13.7.2 DELETING OTHER SYSTEM COMPONENTS

The procedure is the same: select from the devices tree the component to be deleted and click on "Delete" to delete it. To verify if other devices depend on that component, follow the above described rules.

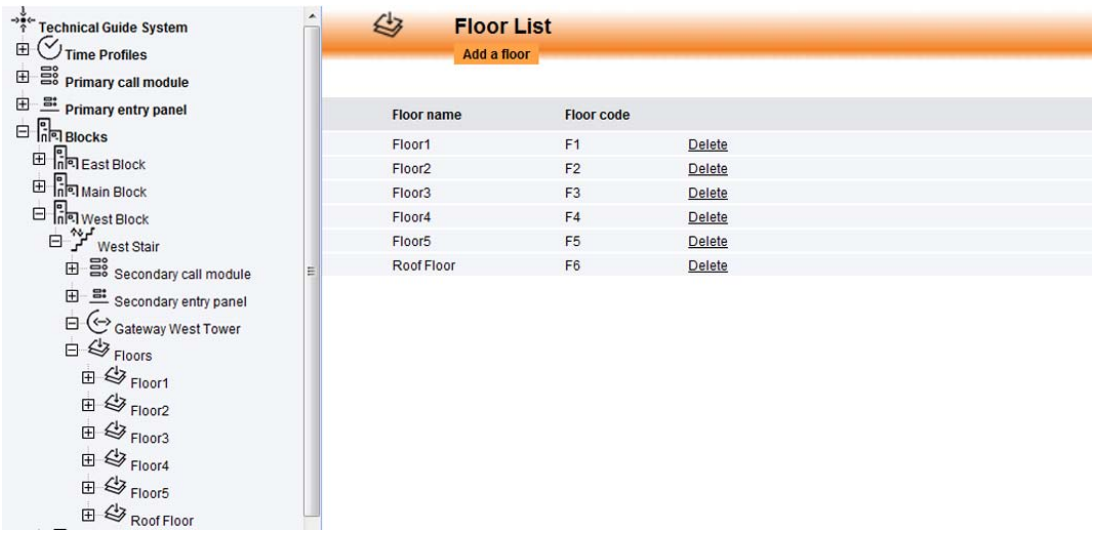


Figure 220: System maintenance – Selection of system component to be deleted

13.8 TEMPLATE EXPORT

The two functions described below allow the installer to load residents and external people data by importing data from a text file. This feature is very useful if many data must be entered or the same information must be entered many times (for ex., the assignment to an access profile).

Before importing data, it is needed to export the template[95]. To do this, select the item "Export template" in the menu "Maintenance", as shown in Figure 221.

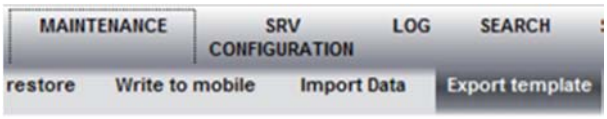


Figure 221: System Maintenance – Template export

The user will be asked to save the file with the template, which will be used later to import data to the PC. The name suggested by the system is **Ipervoice_import.csv**[96]; select the desired folder and save the file. The file structure is as follows:

Resident/External	Imported name type. Available values: **Resident, External**. Required field.
Topo code/Group ID	Imported name identifier. Available values: **Topo Code**[97]**, Group ID**. The first one is always associated to the Resident type and identifies the resident apartment, the second one the External type and identifies the External person group where to add the name. Required field.
Last Name	Imported resident or external surname, required field. Max. length: 32 characters.
First Name	First name of the resident or external to be imported, required field. Max. length: 32 characters.
Visibile	Resident visibility: if set to Yes, the name (last name and first name) will be displayed on call modules. Allowed values: **Yes**, **No**. Default value, if no specified: **Yes**.
Phone number	Telephone number associated to the resident. Optional field. Max. length: 16 numeric characters.
Forward phone number	Not used. For future purposes.
Door code	Door lock release numeric code. Min. length: 4 characters, max. 8 characters.

[95] Exported template is a csv (**c**omma-**s**eparated **v**alues) standard file.
[96] Import process doesn't care about the file name; if needed, the file can be renamed.
[97] The assignment must always be made using the apartment topological code, even if the system addressing mode is "Logical Code".

Key code	Proximity key identification code. Required field in hexadecimal[98]. Fixed length: 8 characters
Access profile ID	Identification code assigned by the system to the access profile. Required field, if Door Code or Key Code data have been entered

Table 56: System maintenance– Resident and External people data import log

Warning: thetemplate export doesn't generate a static model, but a log file that represents the system configuration. For this reason, it is necessary to perform the export procedure each time it is needed to enter new names or update previously loaded data.

Open the file with a generic text editor; the structure is shown in the following figure:

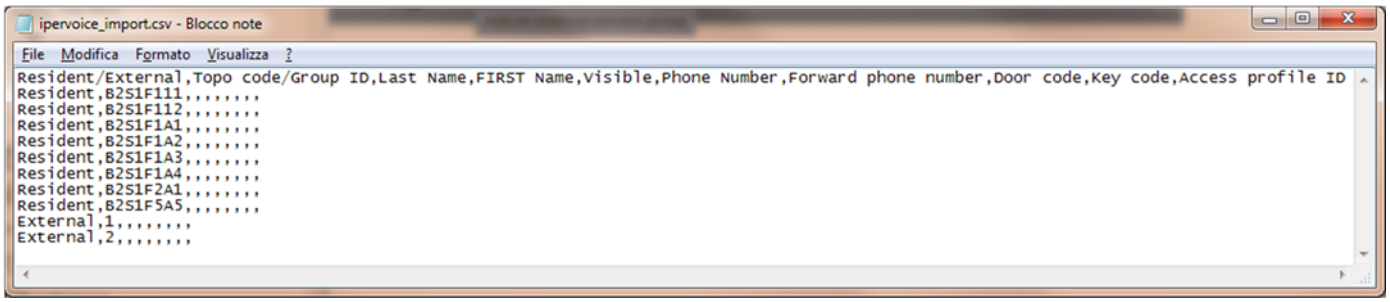


Figure 222: System maintenance– Export file

For "Resident" group, the system exports a row[99] for each system apartment; for "External" a row for each "External persons groups" member configured during the installation.

13.8.1 COMPILING THE IMPORT FILE

Open the file and enter data, according to structure and limits shown in Table 56. If more than one resident must be added in the same apartment, enter data of the first name, then duplicate the row and change data (for ex, name and surname, Key code, etc.).

[98] The format is hexadecimal. Letter case doesn't matter.

[99] The first row of the file must not be changed or deleted; it is used by the system to describe the imported log file. The fields are separated by the character "," (comma).

When the editing phase is ended, save the file and close it to proceed with import phase.

Warning: ifa csv editor is used for file editing, check that the editor doesn't change any data. For ex., the hexadecimal Key code field could contain "zeroes". These could appear not significant, but if these data are considered as numeric values, they could be deleted, generating a code different from the original one.

13.9 DATA IMPORT

The import process is guided by a two steps Wizard. To start the process, select the item "Import data" in "Maintenance" menu. In the displayed page, the user can select the previously compiled file to be imported to the system (Figure 223).

Figure 223: System Maintenance – Data import, file selection

After this operation, press the button "Next" to start the import process; the user will be asked for a confirmation:

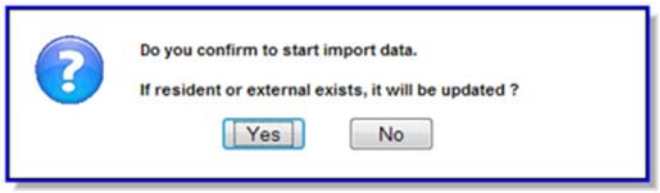


Figure 224: System Maintenance – Data import, import confirmation

Confirm the operation by pressing the button "Yes"; if there are names already present, they will be updated with the new data of the import file. This procedure doesn't perform any deletion operation, but it is only possible to add new names or update the existing ones. This is important, because it is possible to perform incremental import and split this operation by building or area.

At the end of the procedure, a page will inform the user about the result of the operation, as shown in Figure 225.

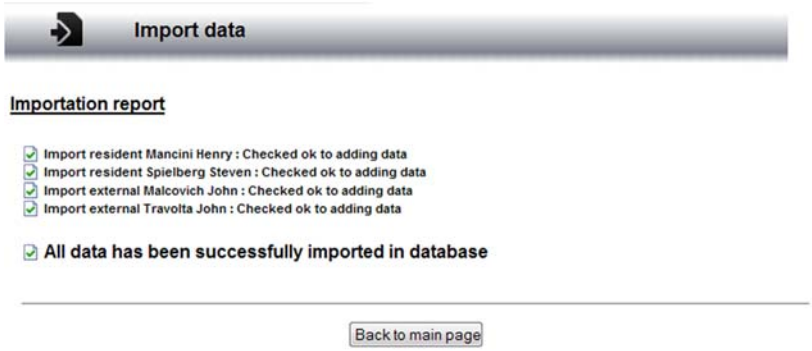
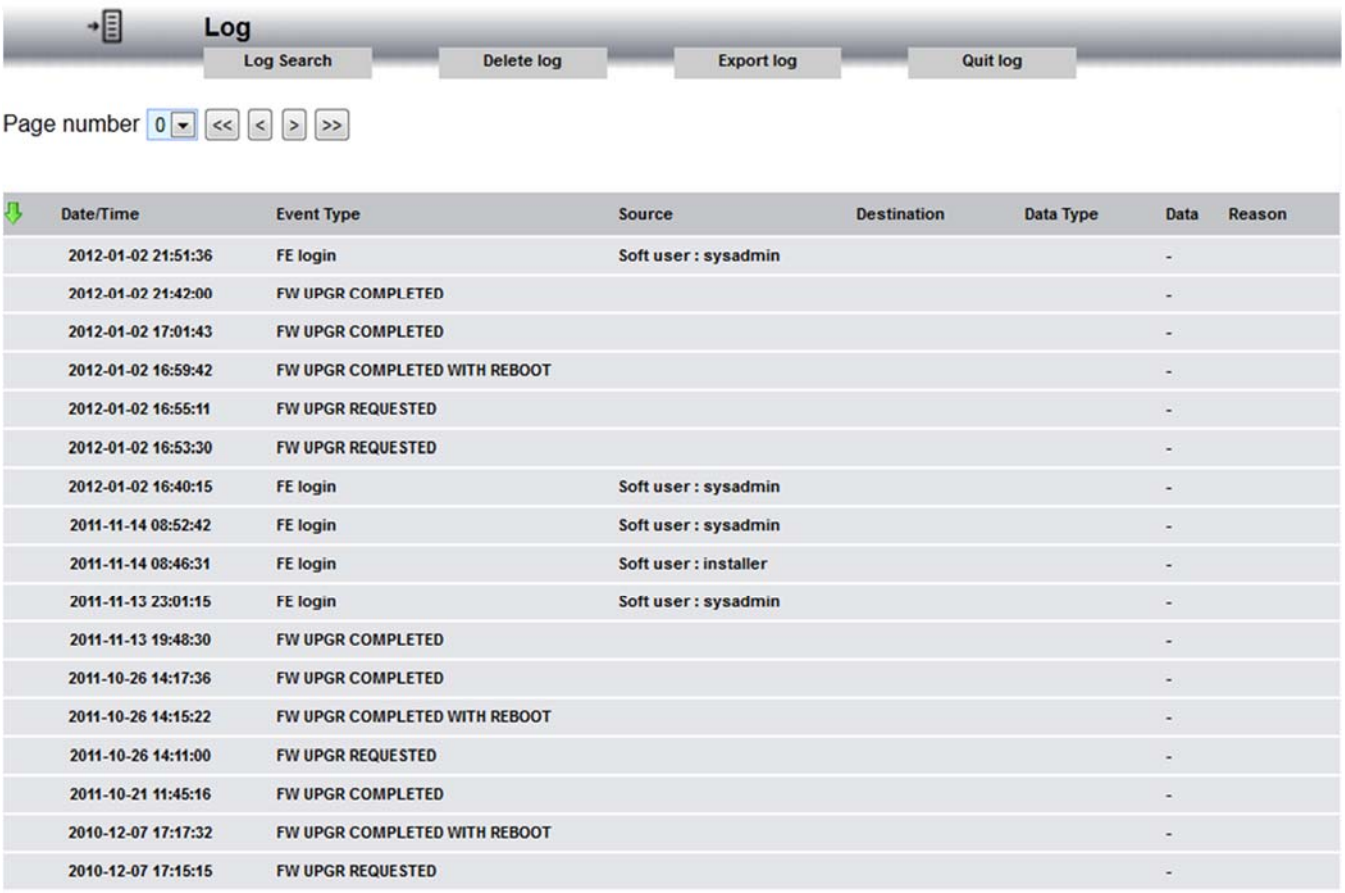


Figure 225: System Maintenance – Data import result

Warning: If during the import process there are one or more rows with wrong data,the system will notify the user about wrong rows and fields without making any change in the system.

13.10 System Log

Ipervoice system records operating information in an event log. To see this information by the FrontEnd, select the item “Log” from the main menu. Figure 226 displays an example of the summary page, that shows the contents.



Date/Time	Event Type	Source	Destination	Data Type	Data	Reason
2012-01-02 21:51:36	FE login	Soft user : sysadmin			-	
2012-01-02 21:42:00	FW UPGR COMPLETED				-	
2012-01-02 17:01:43	FW UPGR COMPLETED				-	
2012-01-02 16:59:42	FW UPGR COMPLETED WITH REBOOT				-	
2012-01-02 16:55:11	FW UPGR REQUESTED				-	
2012-01-02 16:53:30	FW UPGR REQUESTED				-	
2012-01-02 16:40:15	FE login	Soft user : sysadmin			-	
2011-11-14 08:52:42	FE login	Soft user : sysadmin			-	
2011-11-14 08:46:31	FE login	Soft user : installer			-	
2011-11-13 23:01:15	FE login	Soft user : sysadmin			-	
2011-11-13 19:48:30	FW UPGR COMPLETED				-	
2011-10-26 14:17:36	FW UPGR COMPLETED				-	
2011-10-26 14:15:22	FW UPGR COMPLETED WITH REBOOT				-	
2011-10-26 14:11:00	FW UPGR REQUESTED				-	
2011-10-21 11:45:16	FW UPGR COMPLETED				-	
2010-12-07 17:17:32	FW UPGR COMPLETED WITH REBOOT				-	
2010-12-07 17:15:15	FW UPGR REQUESTED				-	

Figure 226: Utility functions – System Log management

The list shows some events stored by the system; for each one, there are all specific data, useful to identify it. Some data are always present, as Date and Time or event type, while others are saved coherently with the information type. Click on the top of the column to change the order. Default sort key is date and time of the event.

In the menu bar there are some buttons used for the following functions:

- **Log Search** — It shows search fields used to “filter” the events list saved by Ipervoice; for details, seeparagraph 13.10.1 on page 269
- **Delete Log** — It deletes all the records in the system log. The FrontEnd asks the user for a confirmation before deleting.

- **Export Log** This function allows to export the events log in CSV format(**C**omma **S**eparated **V**alues), which can be easily read by programs as Excel or similar ones
- **Quit Log** Usedto exit from log management and return to FrontEnd main menu

13.10.1 CUSTOMIZED LOG SEARCH

After pressing the button "Log Search", the page shows some fields, that can be used to perform specific searches in the event log. The user can enter search keys in the page shown in Figure 227.

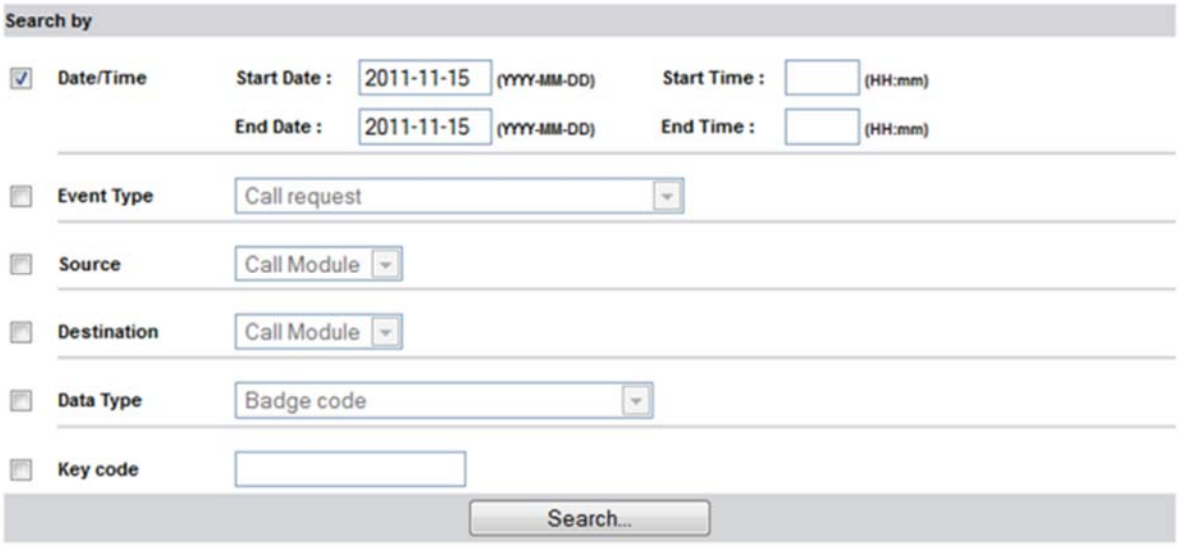


Figure 227: Utility functions – Customized search in system log

The following table describes the fields available to create the search filter and their meaning:

Date/Time	If selected, it allows to set a date interval where to search the event; it is also possible to enter start time and end time
Event Type	With the pull-down menu it is possible to set a filter for the event type. Some of the available values are: **Call request, Door Opening, Authentication error or Alarm reset**
Source	Some events are originated by a device or a specific function; they can be selected with the pull-down menu, for instance: **Call Module, Apartment or Switchboard**
Destination	The same as above for event destination
Data Type	Some events have additional data; the type changes according to the event. The pull-down menu is used to limit the search to a specific type, for instance: **Badge Code, Coercion Alarm**

Key code	This field is used to search a specific Key Code. The data can be entered also in a driven mode, using the "Encoder 125" device. For further information, see the paragraph "Automatic Key Code Wizard" on page 200.

After selecting the desired search methods, press the button "***Search***"; the FrontEnd will query the Ipervoice server for the events that meet the configured filter criteria.

13.11 SEARCH

In the FrontEnd main menu, select the item "Search" to access the search page, as shown in Figure 228.

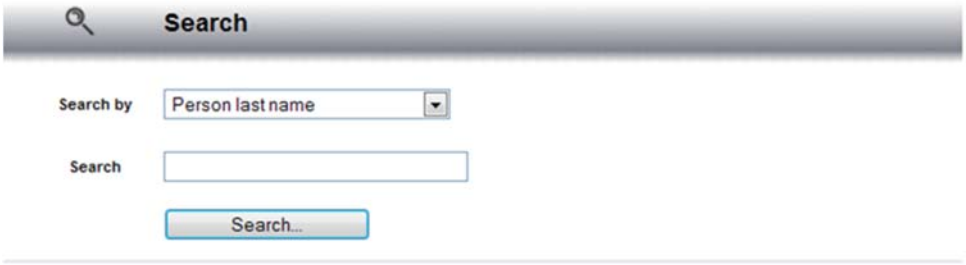


Figure 228: Utility functions – Search

This function allows to search system users and devices in different modes. These can be selected from the pull-down menu called "Search by". The available search modes are shown below, with the result of the search performed.

13.11.1 SEARCH BY ACCESS PROFILE

This is the default search mode, performed by selecting the item "Access Profile" from the pull-down menu "Search by", then the profile name from the menu "Search". Figure 229 shows all the extracted names with "Door Access Profile 01" access profile. Click on a name of the list, Ipervoice will show the respective page where data can be changed.

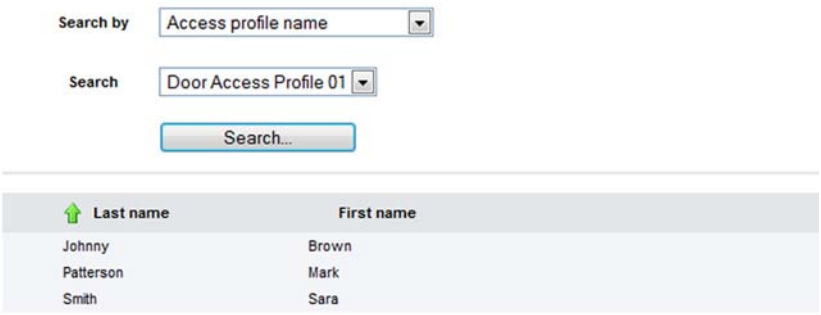


Figure 229: Utility functions - Search by Access Profile

13.11.2 SEARCH BY LAST NAME

To use this search, select the item "Person last name" and enter the name in the text box near "Search". The user can enter only some letters of the name, Ipervoice will show all users with the name starting with these letters. In the example (Figure 230), there are all the names starting with "S"[100]. Click on the name to access the page used to change data.

Figure 230: Utility functions - Search by last name

13.11.3 SEARCH BY TOPOLOGICAL CODE

Use this search mode to find the list of "objects" with a topological code matching with the selected criteria. As shown in Figure 231, four text boxes are available. Each one can be used to specify a code part (block, stair, floor, apartment).

[100] The search is not case sensitive

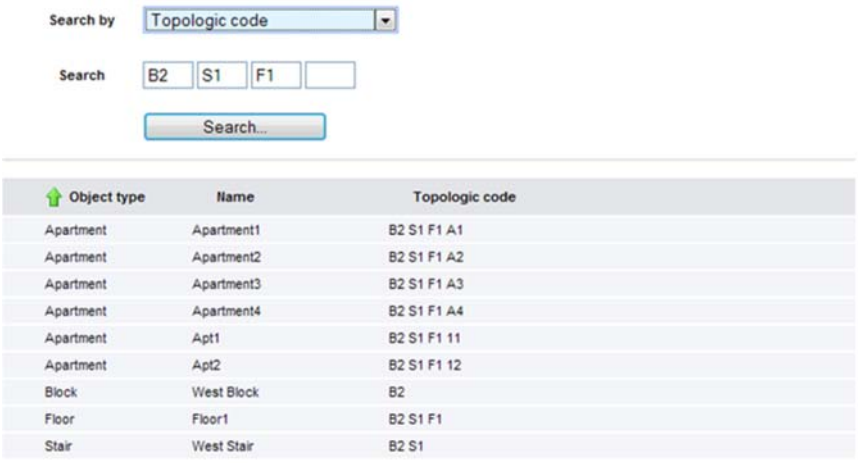


Figure 231: Utility functions - Search by topological code

Topological search returns also the objects that are hierarchically over the found ones. The example shows that besides the apartments, also belonging floor, stair and block are returned.

13.11.4 Search by Logic Code or Numeric Code

This search is used instead of topological code mode when the system is configured to operate in Logic or Numeric addressing mode. In the text box enter the code to be searched or part of it.

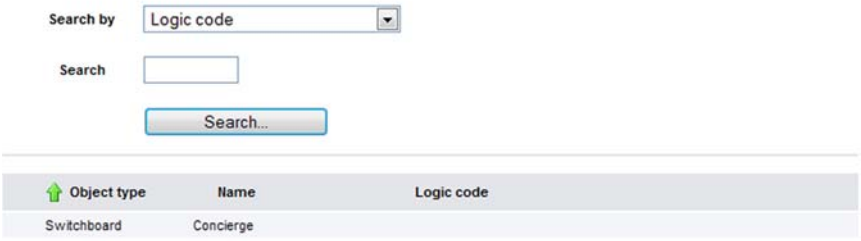


Figure 232: Utility functions – Search by logic code

13.11.5 Search by Type and Device Name

This search is useful to find one or more devices of a specific type, for ex. call modules, video server, lift interfaces, decoder and so on. A specific mask used to enter data guides the user to enter the device type with a pull-down menu and enter the name in the text box. Figure 233 shows an example:

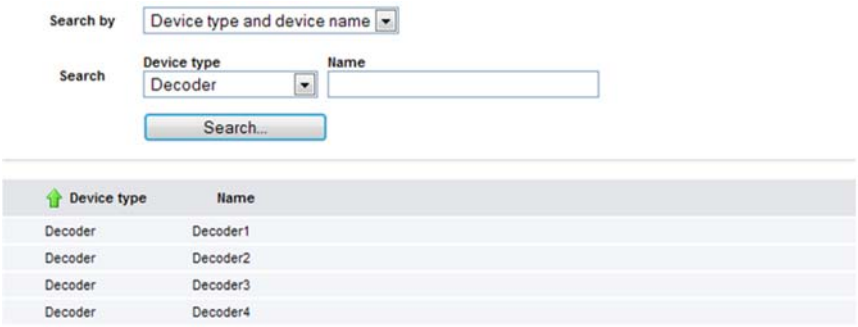


Figure 233: Utility functions – Search by type and device name

13.11.6 SEARCH BY DOOR CODE

This option allows to search a user by using the associated door lock release code. To search the user, input all the door lock release code in Search field.

Figure 234: Utility functions – Search by door code

13.11.7 SEARCH BY KEY CODE (BADGE CODE)

This search mode allows to find one or more users by the proximity key code. In order to perform this search, enter the hexadecimal key code in the field Search.

Figure 235: Utility functions – Search by badge code

Note: The search by key code can also be performed in a guided mode, with the “Encoder 125”. For further information, see paragraph “Automatic Key Code Wizard” on page 200.