Entrance Panel 10"

374000/02

User and installation manual

RA00188AB-01/23-PC

Entrance Panel 10"

User and installation manual

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General information

Warnings and recommendations

It is important to read this manual carefully before proceeding with the installation.
The warranty becomes automatically void in case of negligence, improper use, tampering by unauthorised personnel.
The Entrance Panel must not be exposed to water drops or splashes; it must be used only on IP DES digital systems.

Warnings and consumer rights

	Read carefully before use and keep for future reference.
	Touching the units with wet hands is forbidden. Using liquid cleaners or aerosols is forbidden. Blocking the ventilation openings is forbidden. Modifying the devices is forbidden. Removing protective parts from the devices is forbidden. Exposing the unit to water drops or splashes is forbidden. Installing the units near heat/cold sources or hot/cold air emission points is forbidden. Installing the units near heat/cold sources is forbidden. Installing the units near harmful gases and powders is forbidden. Fastening the units on unsuitable surfaces is forbidden.
	Danger of electrical shock.
	Risk of devices falling because the surface on which they are installed collapses or inappropriate installation. Switch the power supply OFF before any work on the system.
	Caution: Installation, configuration, starting-up and maintenance must be performed exclusively by qualified personnel. Check that the wall installation has been carried out correctly according to the installation instructions. Check that the unit installation complies with the standards in force. Connect the power supply wires as indicated. Use only the items indicated in the technical specifications for any system expansions.

Fundamental concepts

Naming of the devices

In this manual, for easy reading, the abbreviated device name is used as in the list:

– IU: Indoor Unit
– EP: Entrance Panel
– GS: Guard Station
– SD: Server DES
– SEP: Small Entrance Panel
– AB: Address book
– SW: IP DES SYSTEM

Community

The term Community means the housing complex reproduced in the project design made using the SW.
The structure in its maximum extension includes:

AREA → BUILDING → RISER → FLOOR → APARTMENT

Call addressing procedures

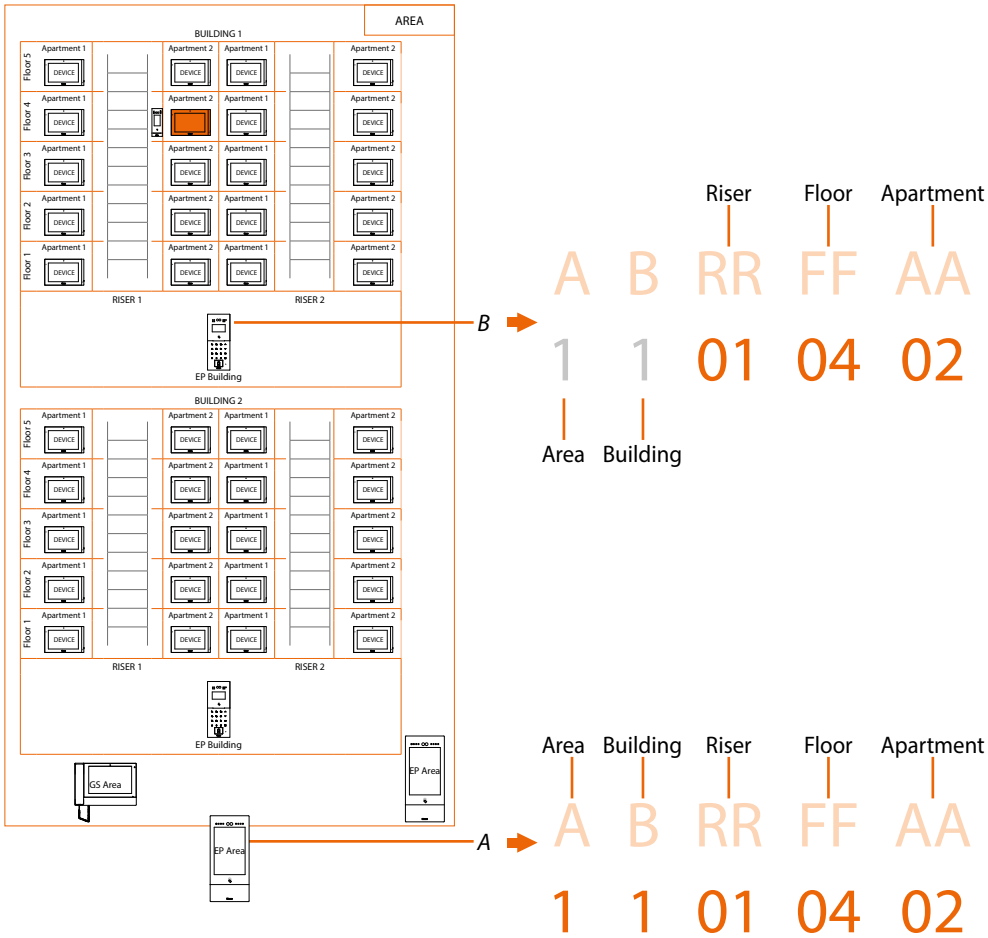
On the basis of data recorded in the AB and the Community structure the calls can be made using various methods:

– call using the address in the Community;
– call using the Alias (alphanumeric code);
– call using the Phonebook.

Call using the address in the Community

To make this type of call you must know the address of the person being called, which depends on the community structure, for example:

– to call the IU highlighted in the diagram from the «*A*» EP, enter the corresponding address «**11010402**»;
– to call the IU highlighted in the diagram from the «*B*» EP, enter the corresponding address «**010402**», as the IU is positioned inside building 1 and therefore it is sufficient to type the Riser, Floor and Apartment number.



***Note**: during the configuration phase, the number of digits to be used for each call sector (Area/Building/Riser/Floor/Apartment) must be set.*
Example: I have to call an apartment inside building 2
– if there are from 1 to 9 buildings in the area, I must enter «2» (one digit used for the Building call sector);
– if there are more than 10 buildings in the area, I must enter «02» (two digits used for the Building call sector).

The system will automatically show the correct number of digits to type and which data to enter on the basis of the EP position you are calling from, for example Area (2 01 06 02) or Building (01 06 02)

System configuration (default)
Areas 9, Building 99, Riser 99, Floor 99, Apartment 99
It is possible to modify the limits using the SW (see SW manual for details)

Call using the Alias (alphanumeric code)

The alphanumeric code, by default, is the same address as in the Community but it is possible to replace it with an alias using the SW. For more details see the Software manual.

Example:

1 1 01 04 02 ➡ B12

Call using the Phonebook

In this way it is possible to use the phonebook key and select the contact to call or it is possible to make a call by typing the code (Alias), with the advantage that during typing the system will autocomplete the address; see the software Manual for more detail.

Example:

1 1 01 04 02 ➡ JOHN SMITH

Lift control function

The Lift control function allows a command to be sent to the lift control centre to simulate a lift call.
The lift action depends on the functions of the lift control unit (BTicino cannot define these functions. They depend on the lift manufacturers).
It is necessary to enable the function in **Setting**

It is possible to display some wiring diagram examples in the **lift control** section

For more information, see the «Lift Control Interface item 375010 software manual».

Fire linkage

It enables the door lock opening function in case of fire.
The Fire linkage function allows the automatic opening of EP door locks in the event of a fire.
The use of this function requires a clean contact in the GND FIRE LINKAGE input clamp from the fire fighting system.
It is necessary to enable the function in **Setting**

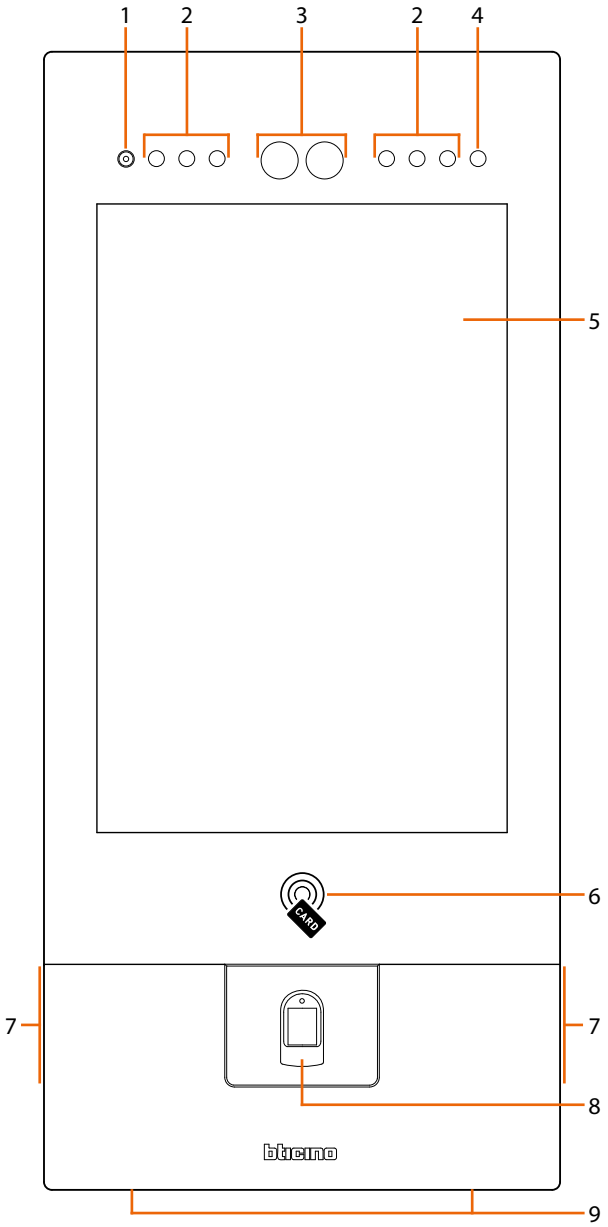
CCTV cameras

CCTV cameras for passive video surveillance.

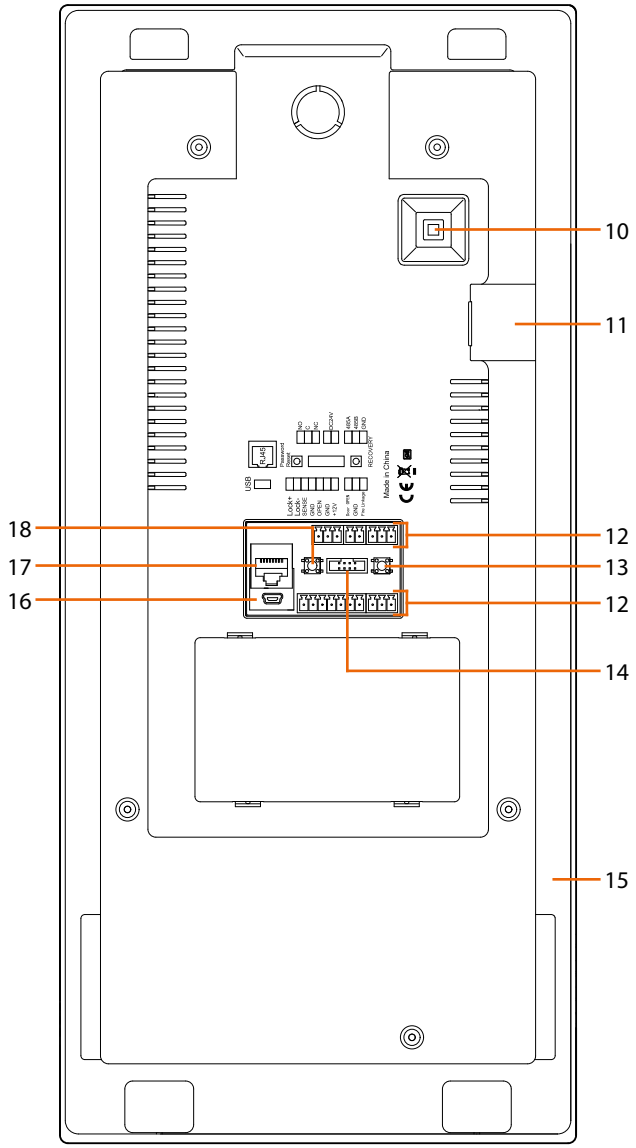
Address book

Phonebook, created using the SW, containing the addresses of all the system devices.

Front and rear view

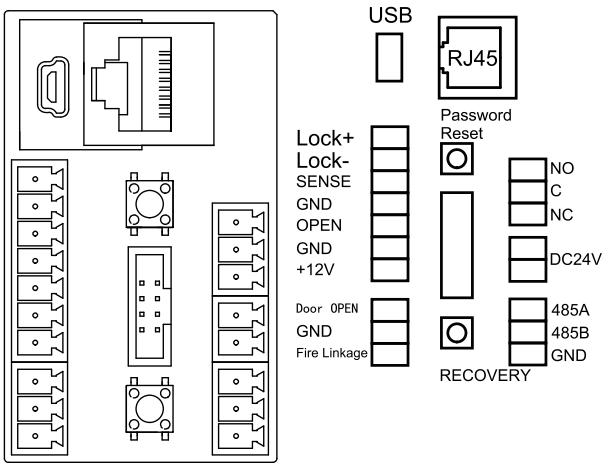


1. Microphone
2. LED for the shooting field lighting
3. Camera
4. Light sensor
5. Display 10" (touch screen)
6. Badge reader for door lock opening
7. Loudspeaker
8. Finger print reader (only 374000)
9. Locking screws



10. Tamper switch
11. SD card
12. Connection clamp
13. Not used
14. Not used
15. Mounting bracket
16. USB Connector (not used)
17. RJ45 Connector (*)
18. Reset the "local access code" and the "setting access code" to the factory values

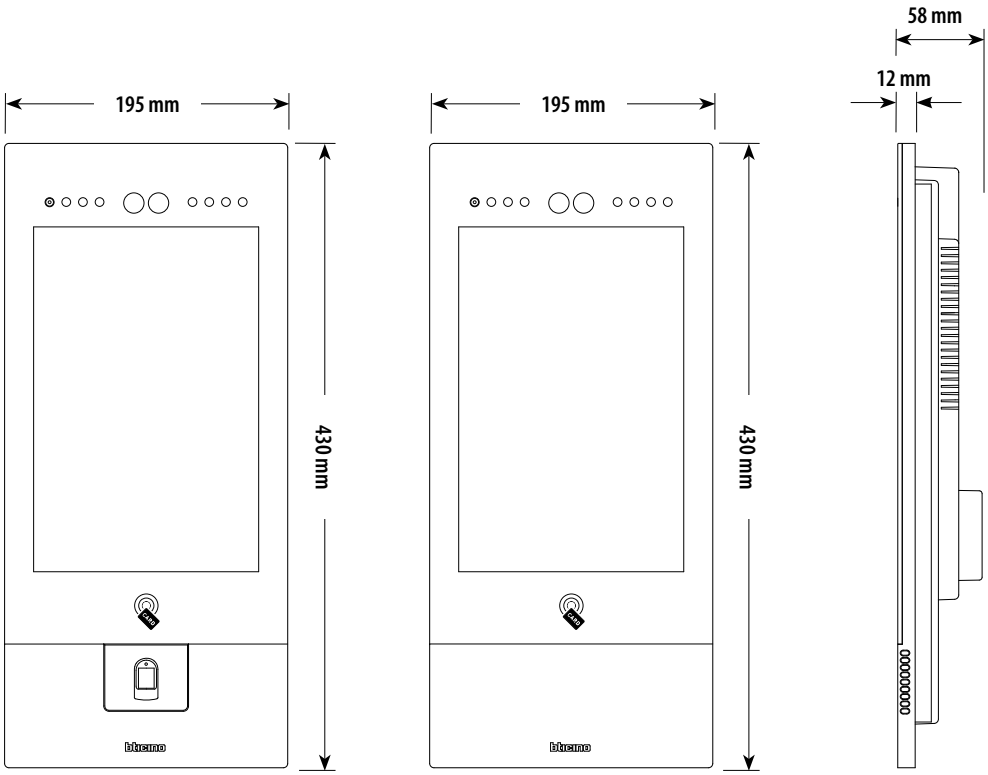
(*) This device does not support standard POE power supplies, but only POE power supplies identified with item no. 375002.
Connect the cat5/5e/6 FTP or cat5/5e/6 UTP cable with ferrite supplied to the connector



Connection clamps				
LOCK+	electric door lock connection and control (12V - 4A impulsive on 3 Ohm maximum)	Door OPEN – GND		local door lock release pushbutton connection
LOCK-		FIRE Linkage – GND		local door lock release pushbutton connection for firealarm system
SENSE	door lock status signal input	NO		interlocked dry contact for electric door lock connection
GND	system common ground terminal for third party connection	C		
OPEN	third party access control signal input for door lock opening (+12Vdc pulse)	NC		
GND	access control devices power supply	DC24V		additional power supply clamps (not polarized)
+12V		RS485A	Lift Control	terminal A
		RS485B		terminal B
		GND		system common ground terminal for RS485 connection

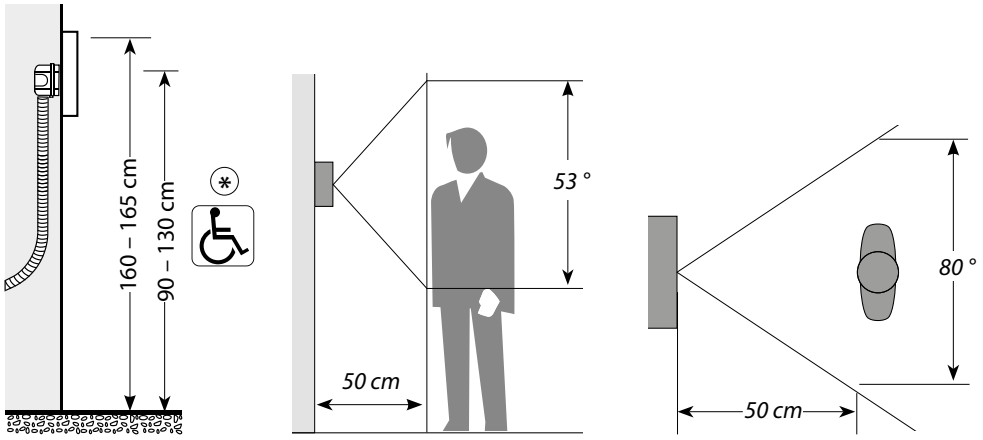
It is possible to display some wiring diagram examples in the Example diagrams/functions section

Dimensional data and installation heights



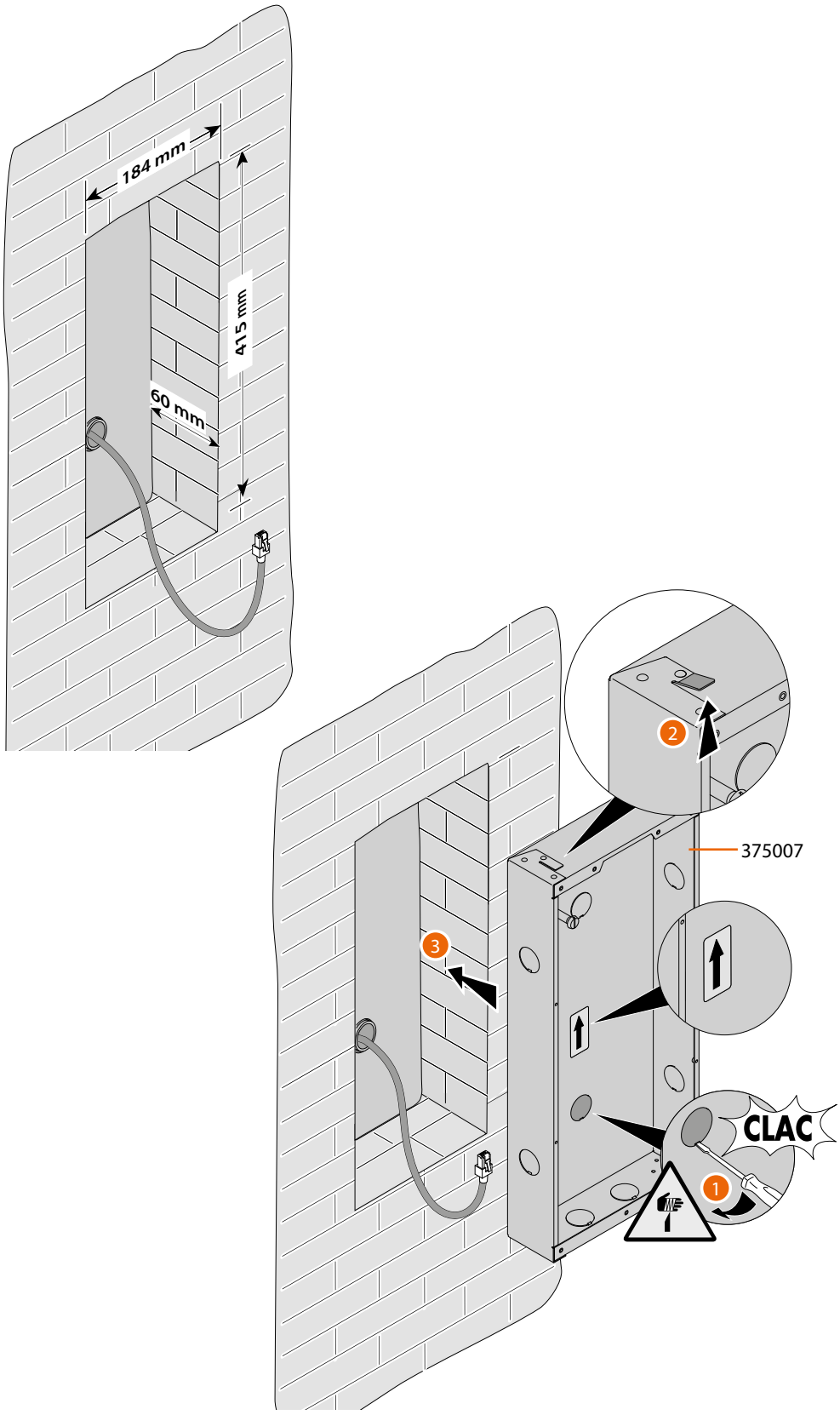
374000 **374002**

To ensure proper operation, the Fingerprint Reader must be installed in a location protected from rain.

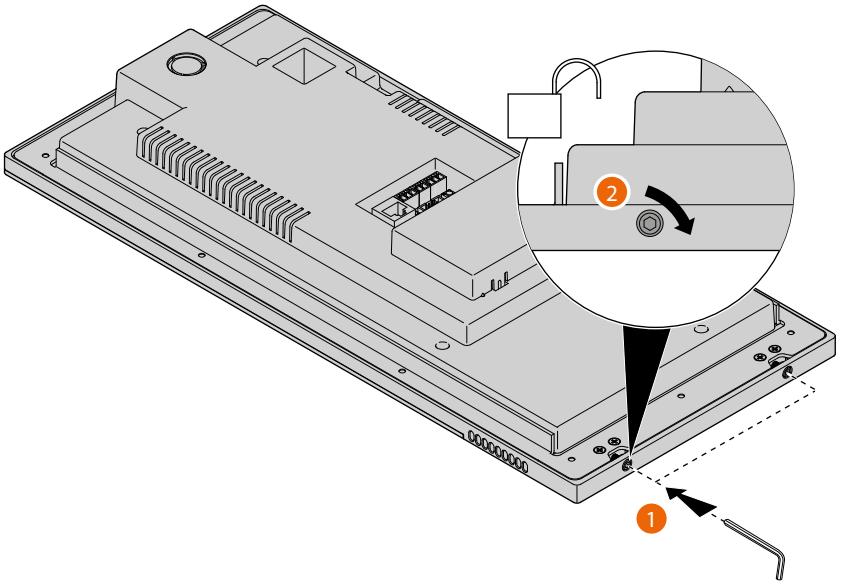


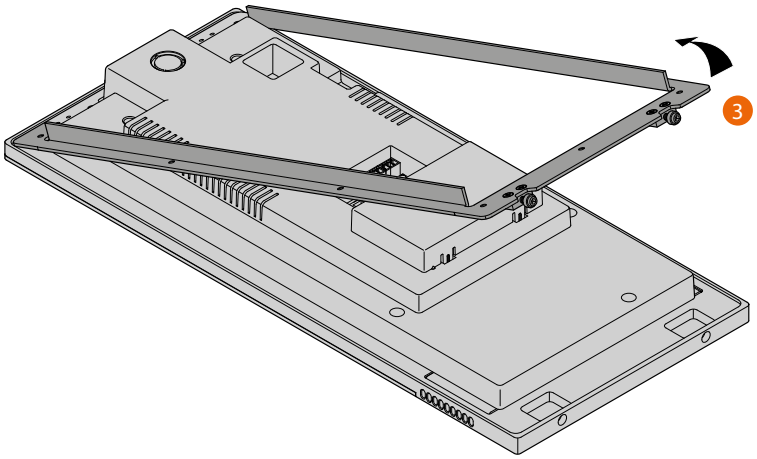
(*) Recommended height, unless different regulations are specified.

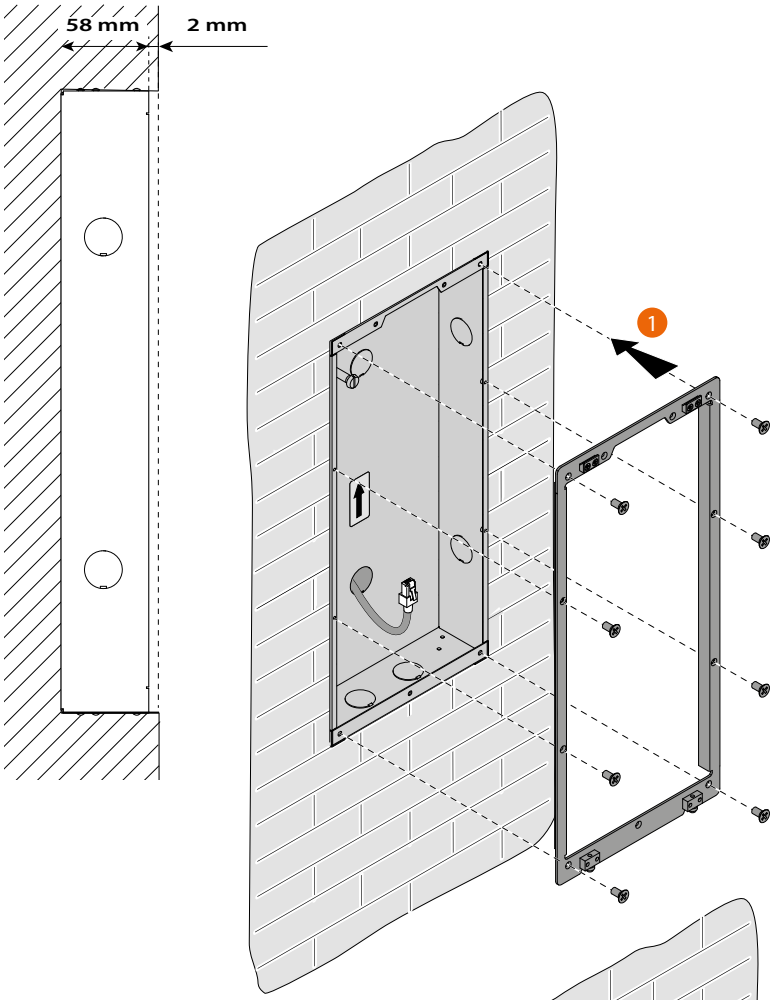
Installation

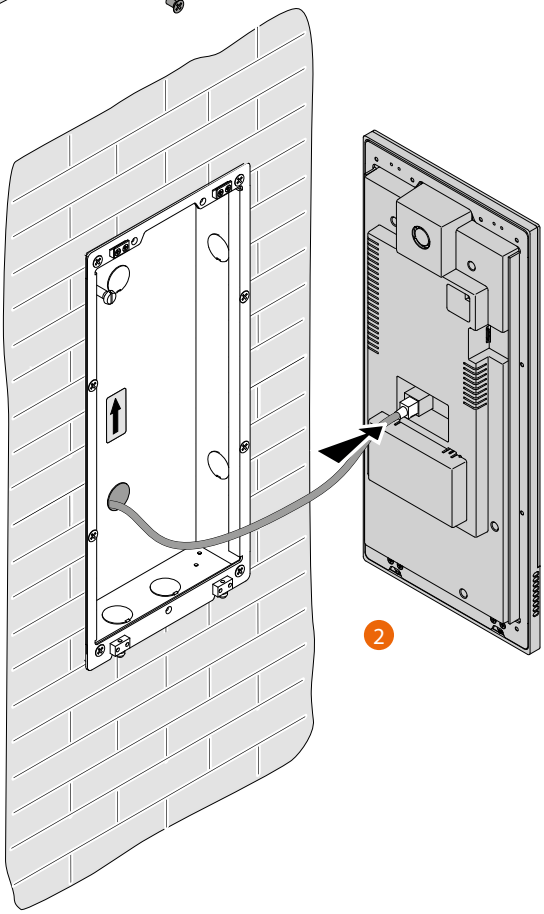


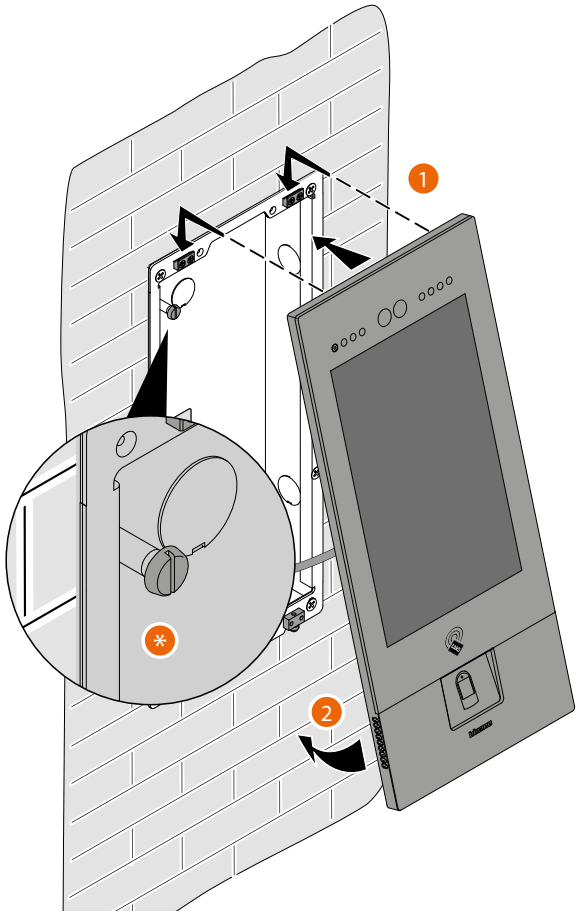
***Attention**: The wrong wiring of the Ethernet cable connecting the device to the Poe Switch 375002 could damage the device itself..*
The RJ45 cable must be at least 200 mm long.


2
1

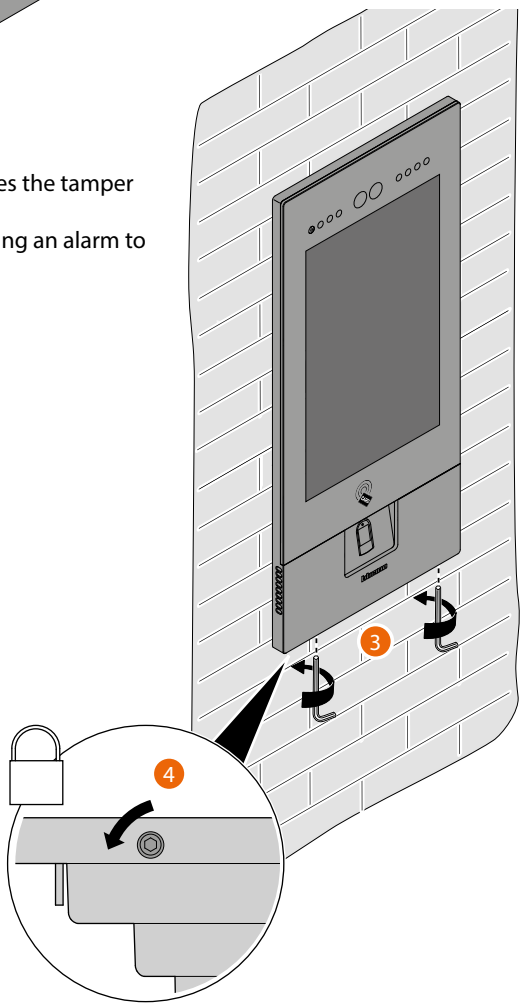

3


58 mm
2 mm
1

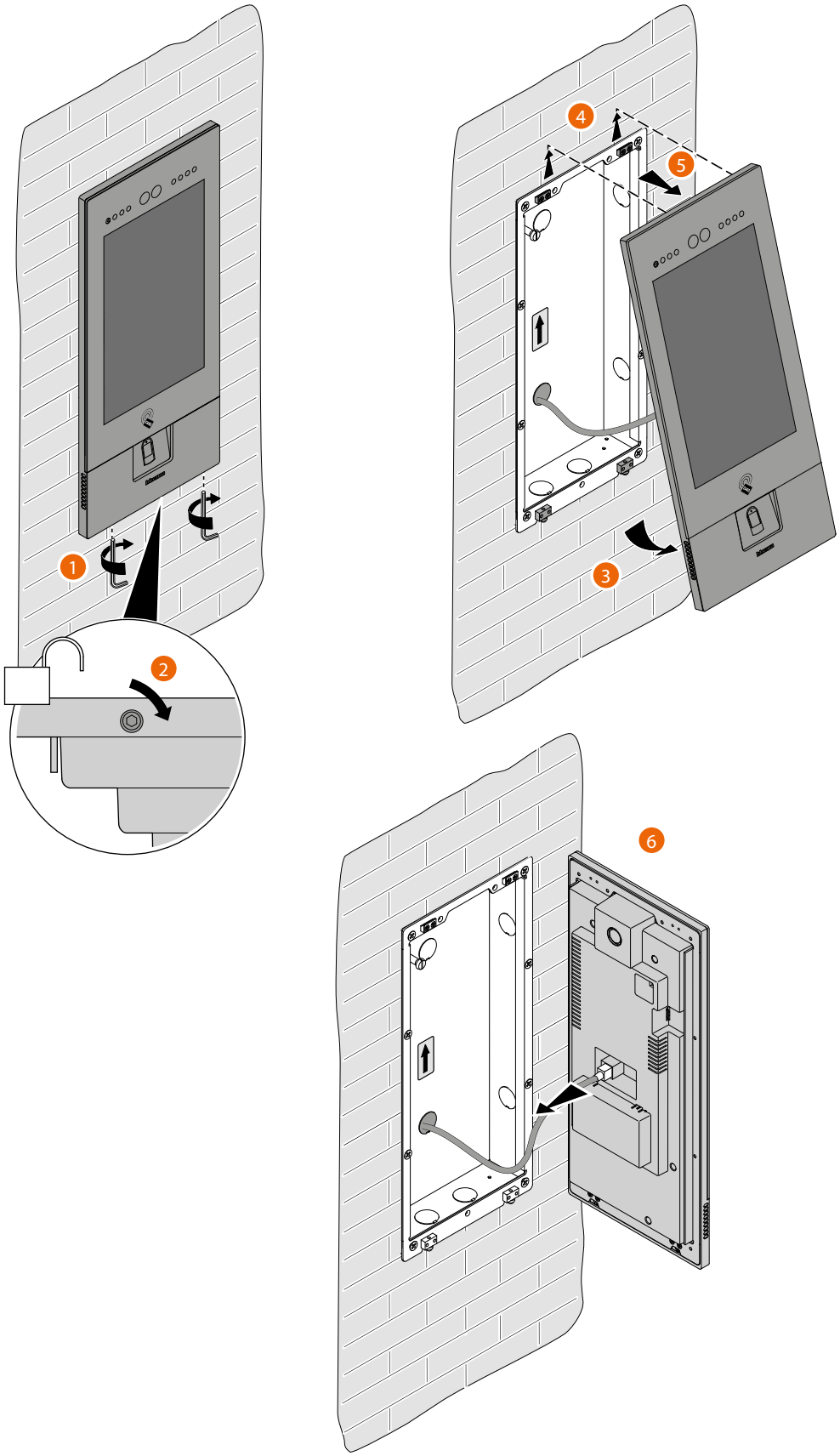

2



(*) Adjust the tamper screw so that it presses the tamper switch of the device and activates the anti-theft function in case of removal sending an alarm to the GS.



Uninstall

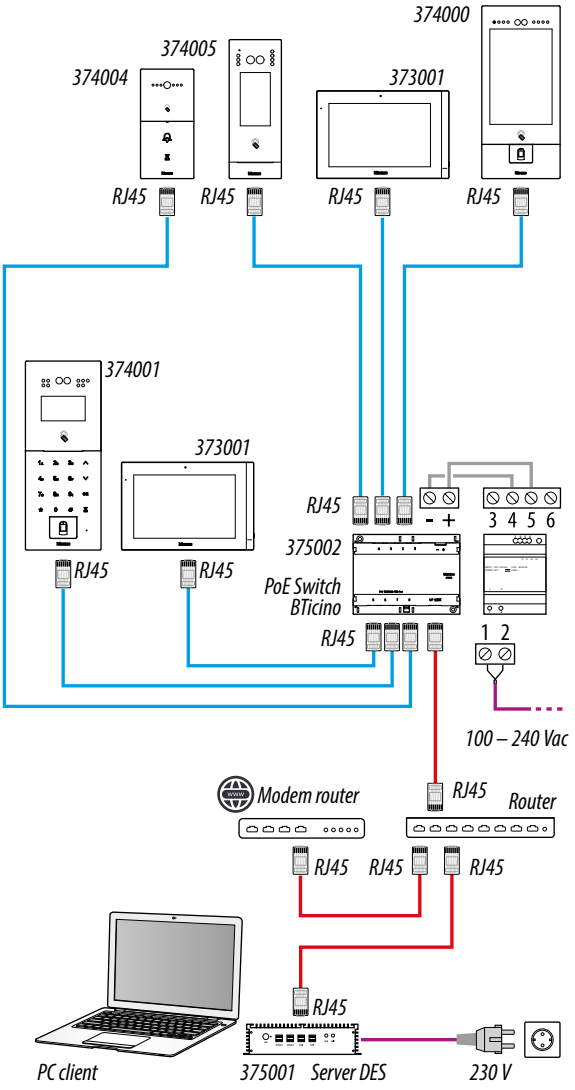


Example diagrams

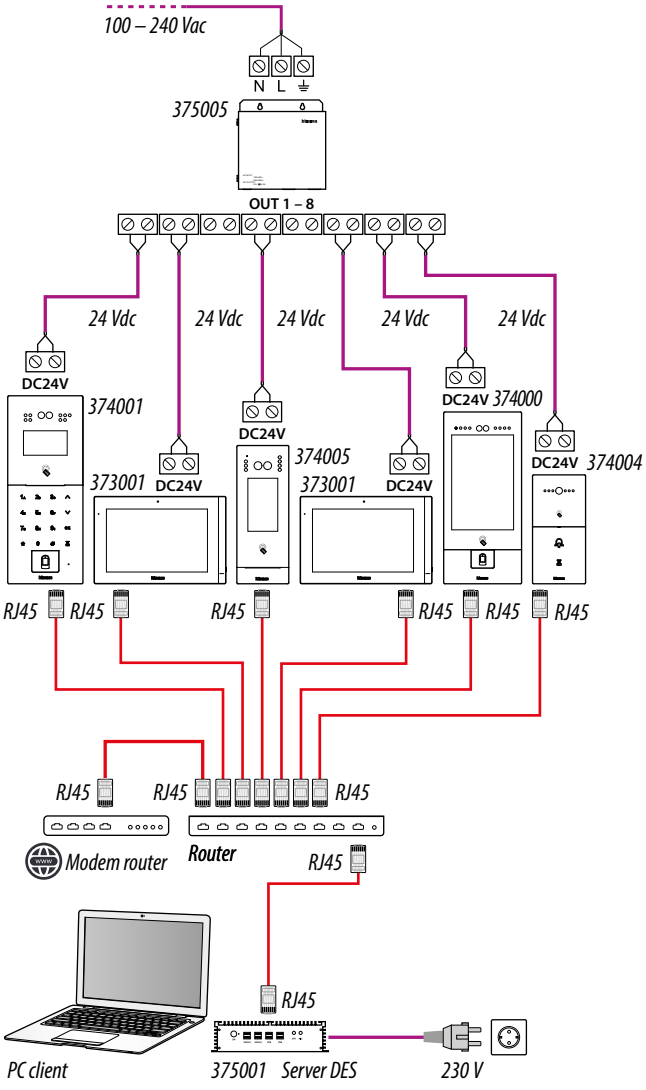
CABLES LEGEND	LAN PoE BTicino	LAN Ethernet	Copper cables	2 x Copper cables

It is possible to use two different types of connection according to installation situation:

A - Diagram with power supply by BTicino PoE Switch



B - Diagram with local power supply

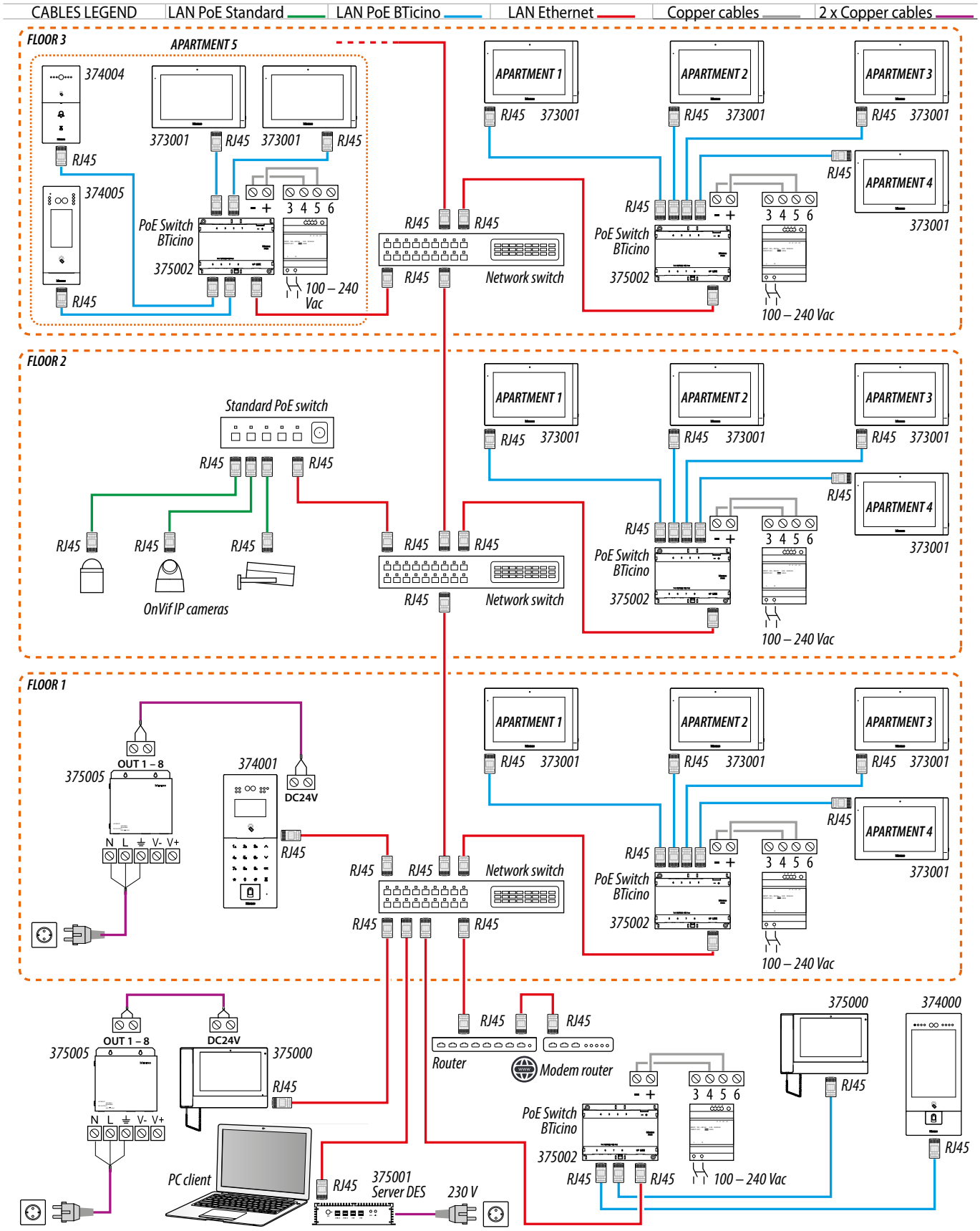


***Attention**: this device does not support standard POE power supplies, but only POE power supplies identified with 375002. Connect the cat5/5e/6 FTP or cat5/5e/6 UTP cable with ferrite supplied to the connector.*

***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Ethernet connection

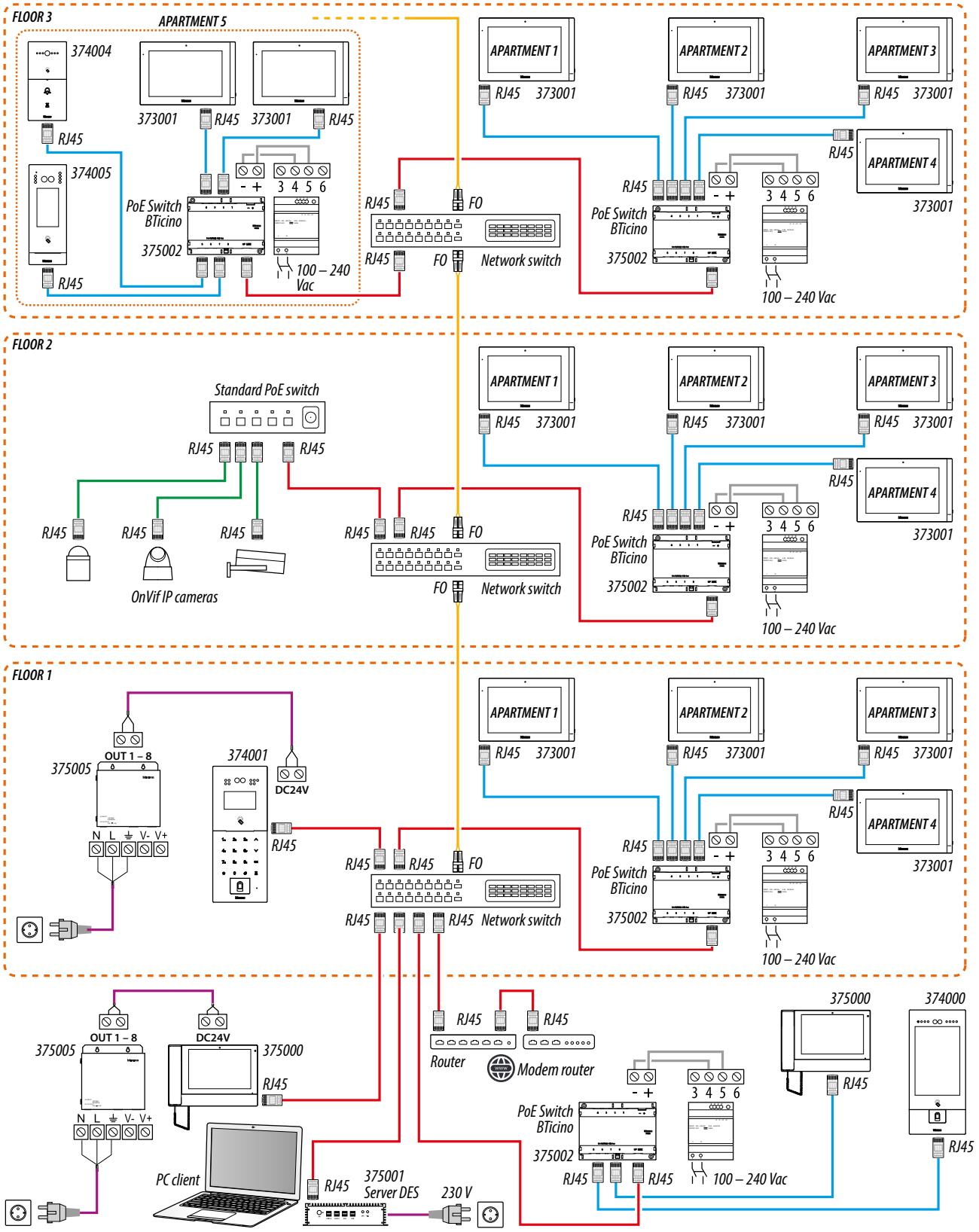


Attention: *do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

Note: *to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Fiber optic riser connection (case of higher bandwidth demand)

CABLES LEGEND	LAN PoE Standard	LAN PoE BTicino	LAN Ethernet	Optical fiber	Copper cables	2 x Copper cables

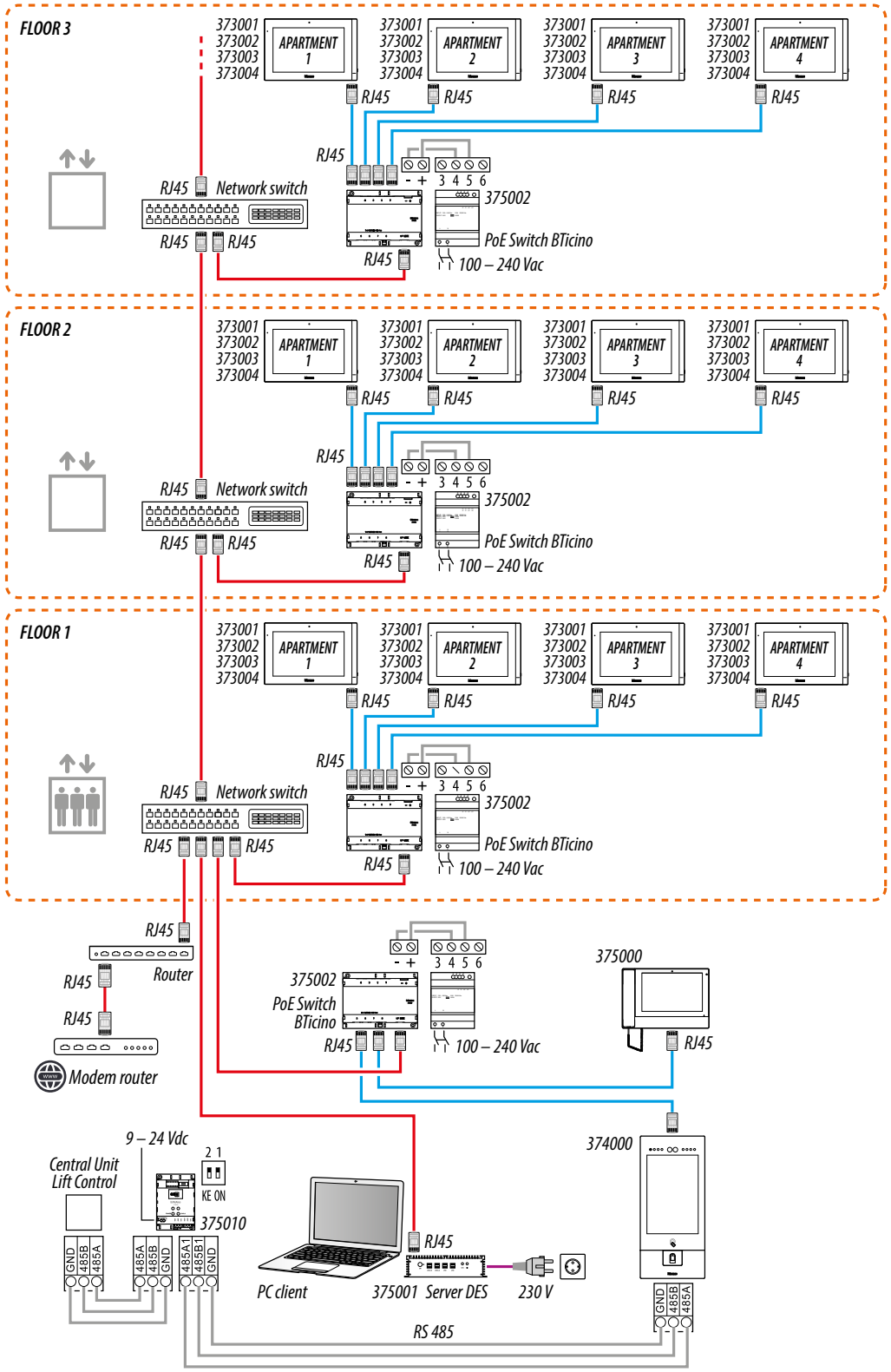


***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Lift control 1 - Lift control, 1 riser, 1 entrance panel

CABLES LEGEND	LAN PoE BTicino	LAN Ethernet	Copper cables	2 x Copper cables

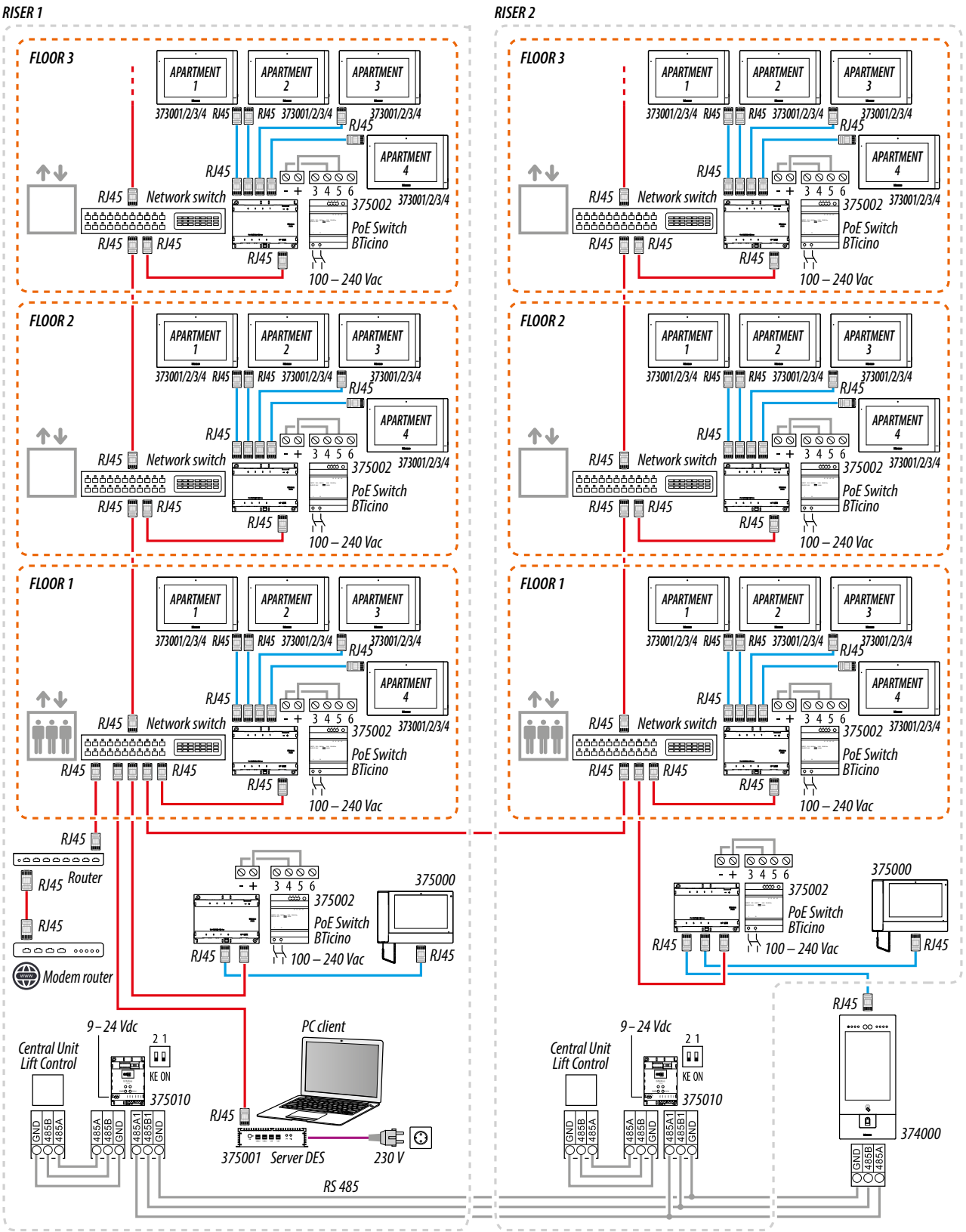


***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Lift control 2 - Lift control, multi riser, 1 entrance panel

CABLES LEGEND	LAN PoE BTicino	LAN Ethernet	Copper cables	2 x Copper cables

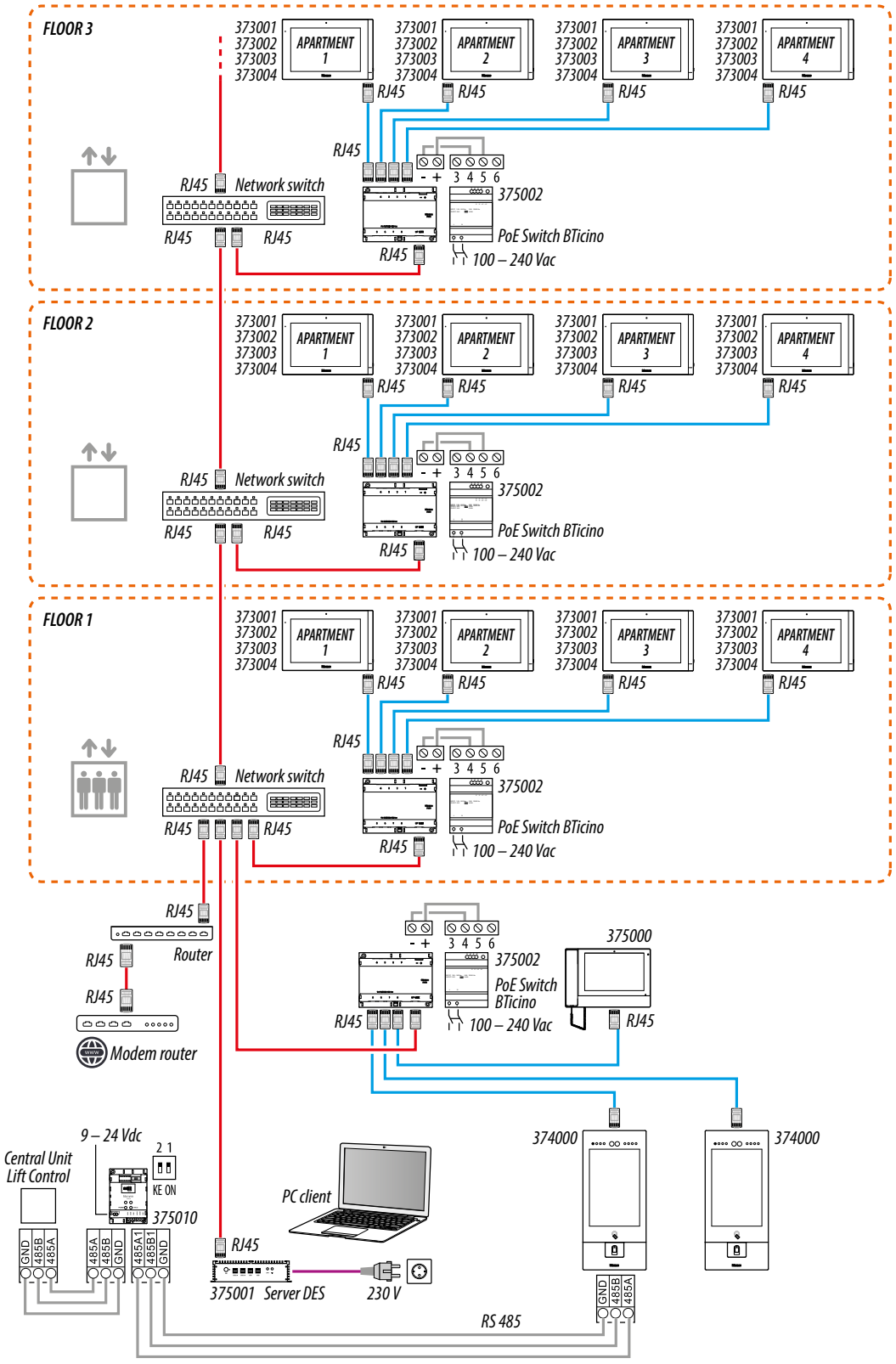


***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Lift control 3 - Lift control, 1 riser, multi entrance panel

CABLES LEGEND	LAN PoE BTicino	LAN Ethernet	Copper cables	2 x Copper cables

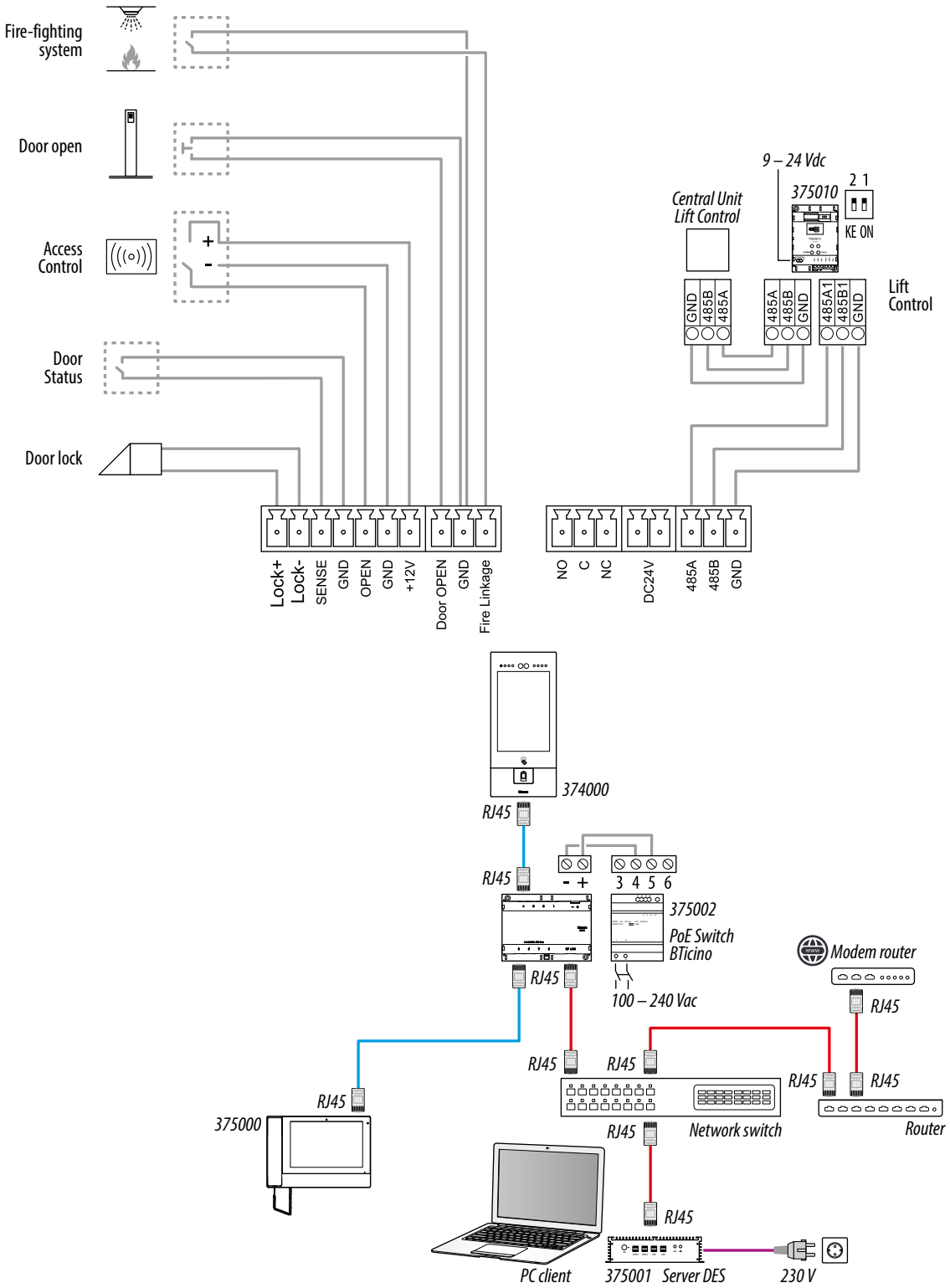


***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Available functions

CABLES LEGEND	LAN PoE BTicino	LAN Ethernet	Copper cables	2 x Copper cables



***Attention**: do not directly connect PoE ports to an unsuitable network interface, such as a device powered by a different voltage. Connect the UP LINK port to a suitable port, never to a PoE port.*

***Note**: to connect the devices it is possible to use both types of wiring (diagram A or diagram B) or even mixed ones.*

Use of the device

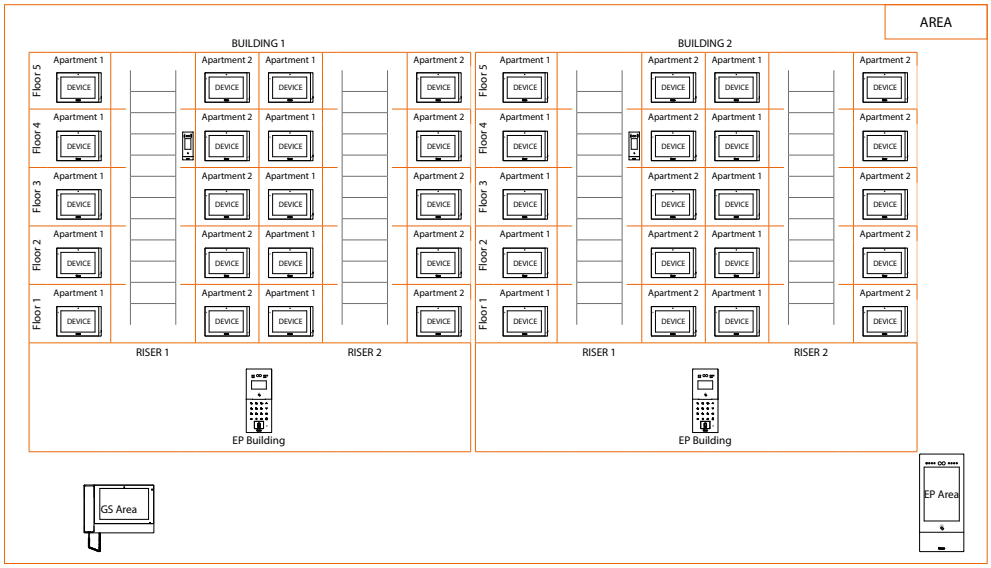
After installing the EP it is possible to:

- Call a IU
- Call a GS
- Access using Access Code;
- Access using badge or card;
- Access using Face recognition;
- Access using Finger print
- Set the advanced parameters

Introduction

After the installation and connection of the device, it is necessary to configure it and create the Community structure. For details see Server DES Software manual.

- Step 01 Community VLAN network creation
- Step 02 Community structure definition
- Step 03 Community structure creation
- Step 04 Device MAC address registration
- Step 05 Community customisation
- Step 06 Saving of passwords
- Step 07 Registration of the Community on the installer's Cloud
- Step 08 Forwarding of the address book to the DES Server
- Step 09 Installation of the devices
- Step 10 Activation of the devices
- Step 11 System test



Home page

This page may show different content according to the configuration and systems connected to the device.
The Home Page, with all the functions enabled, is shown below.

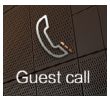
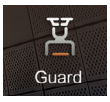
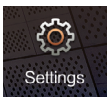
A *Current date*

B *Current time*

C *Status icons:*

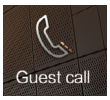
⚠ *Network problem*

D *Function keys*

	Call a IU
	Call a GS
	Access using Face recognition
	Access using Code
	Settings

1. Scroll to display the complete menu bar

Functions

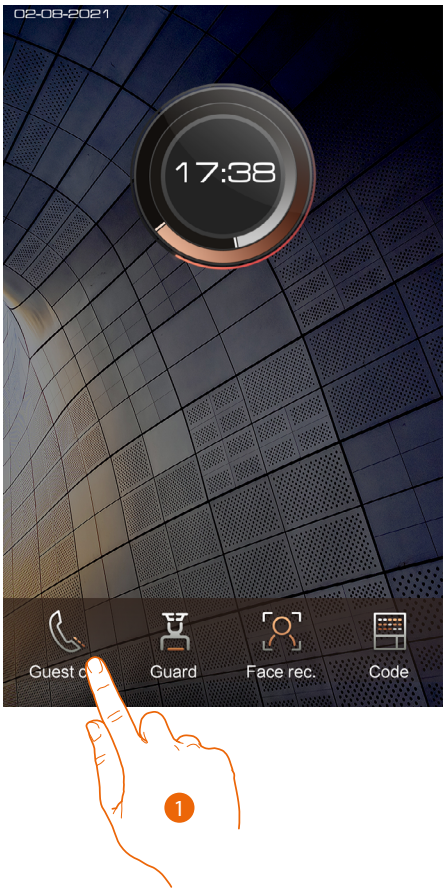


Call a IU

It is possible to call an IU in different ways:

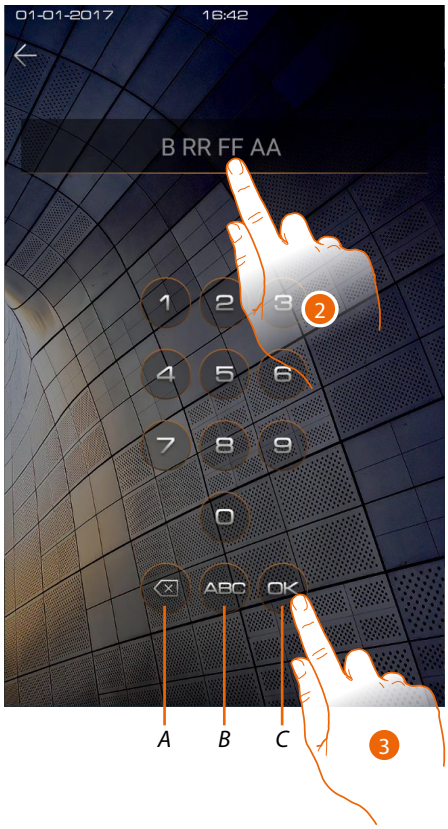
- Call using the address in the Community;
- Call using the Alias (alphanumeric code);
- Call using the Phonebook

The call mode depends on how the community has been configured using the SW. For details see Fundamental concepts

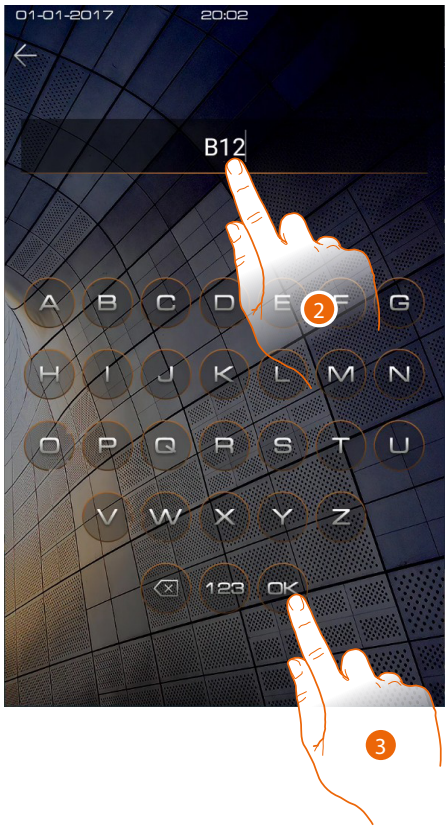


1. Touch to select the function

Call using the address in the Community



Call using the Alias (alphanumeric code)



A Delete typing

B Change the type of keypad (numbers/letters)

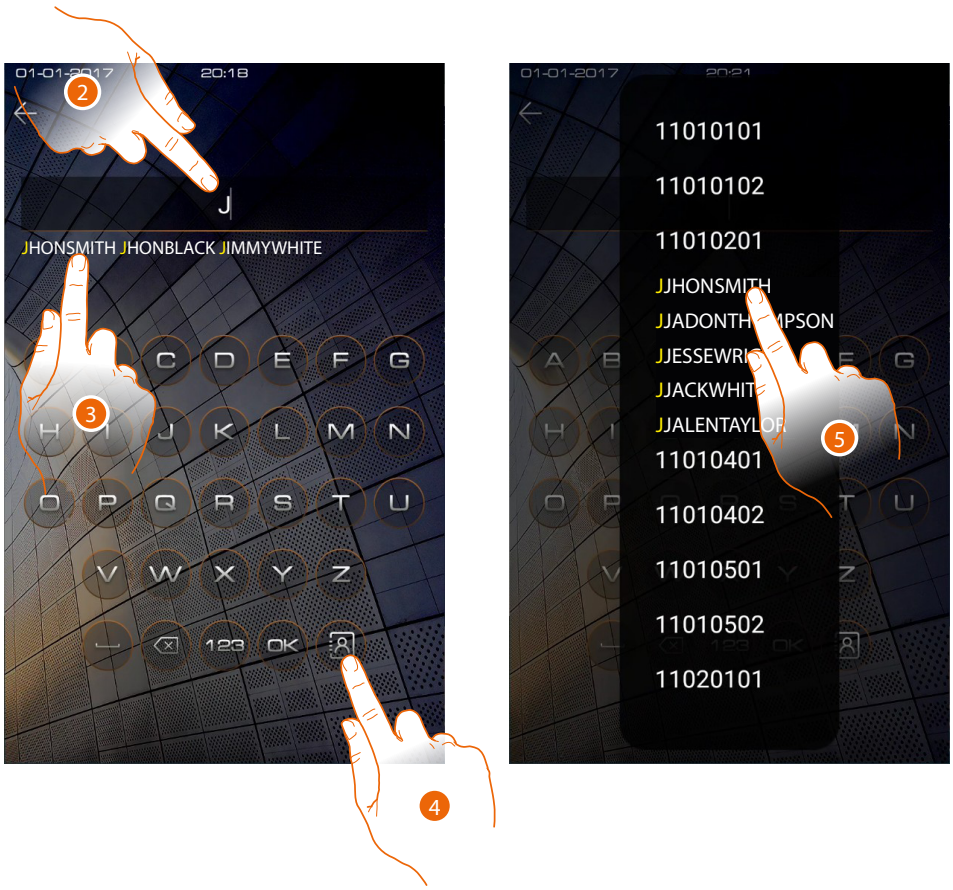
C Send a call

2. Enter the address in the IU Community, the device helps you by showing the fields to be entered (e.g. 1 01 04 02)
3. Touch to send the call

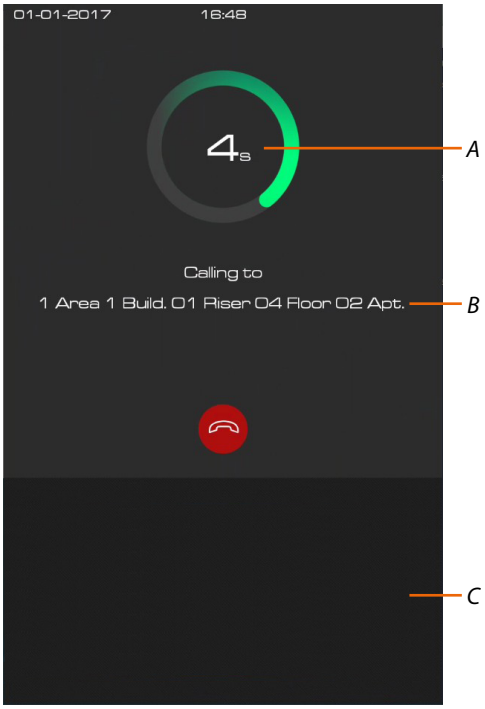
2. Enter the alphanumeric code created using the SW (e.g. B12)
3. Touch to send the call

***Note**: in the alphanumeric mode, the default code corresponds to the address in the Community as long as the SW has not altered it in the AB*

Call using the Phonebook



2. Enter the Alias saved in the AB (e.g. JOHNSMITH) directly. In this mode autocompletion is active
3. Touch the suggested contact to send the call
4. Touch to open the phonebook containing the contacts you can call.
   E.g. a Building EP will display only its building contacts.
5. Touch the code to send the call



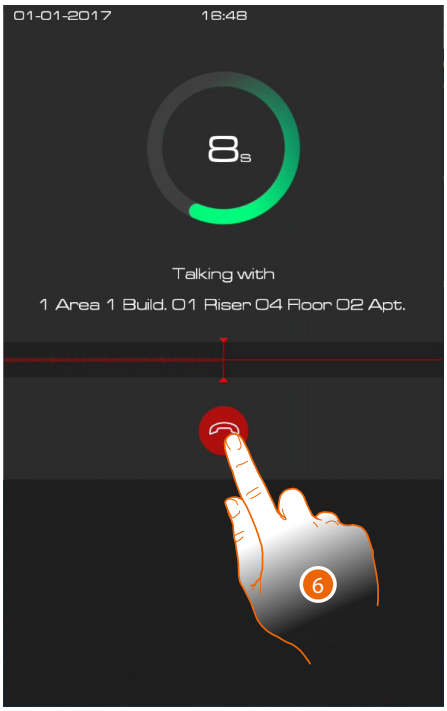
A Call duration

*B Address in the IU Community**

C Display messages and advertising zone (the home page display is software enabled)

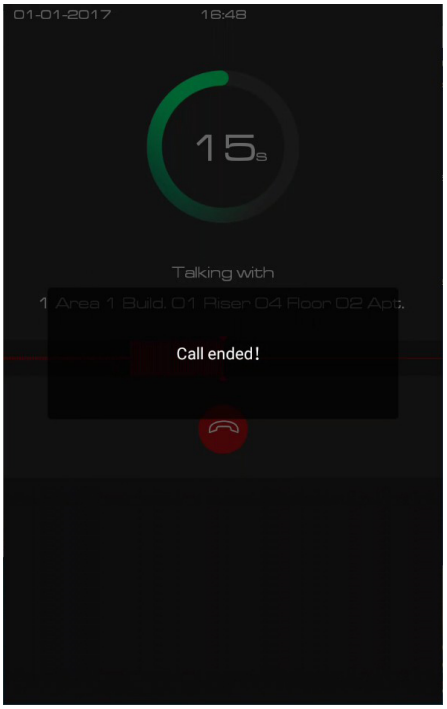
***Note**: the caller display depends on how the community has been configured using the software. For details see Fundamental concepts*

When the IU answers, the audio signal bar appears



6. Touch to end the call

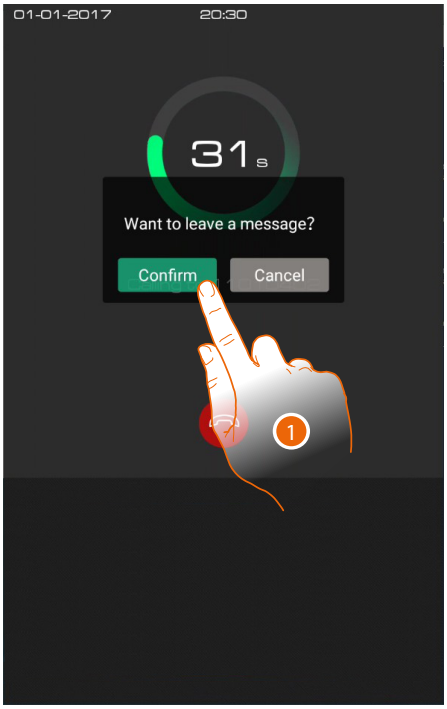
When the IU does not answer a message can be recorded (see **Answering machine**)



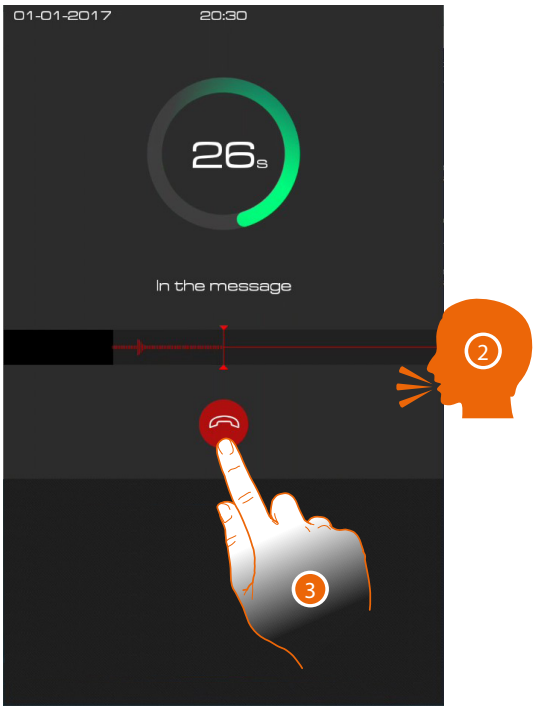
A message indicates that the call is ended

Answering machine

If the IU does not answer within 30 seconds, it is possible to leave a photo with a voicemail.



1. Touch to record a photo message

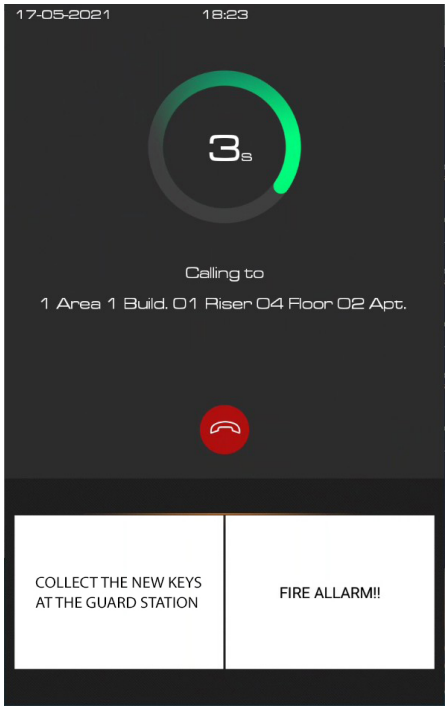


2. You have 30 seconds to leave a message.
   The IU will receive your image and the voice messages
3. Touch to end

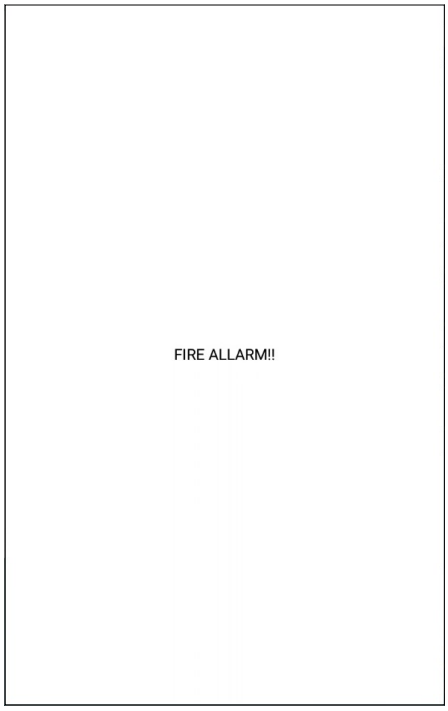
Messages and advertising

When messages are sent to the community via SW, the device displays them when the screen saver is activated.

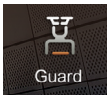
Community message	messages coming from the Facility manager about the Community
Advertisement message	messages coming from the Facility manager showing advertising content
Emergency notification	emergency messages, coming from the Facility manager



Messages displayed during a call

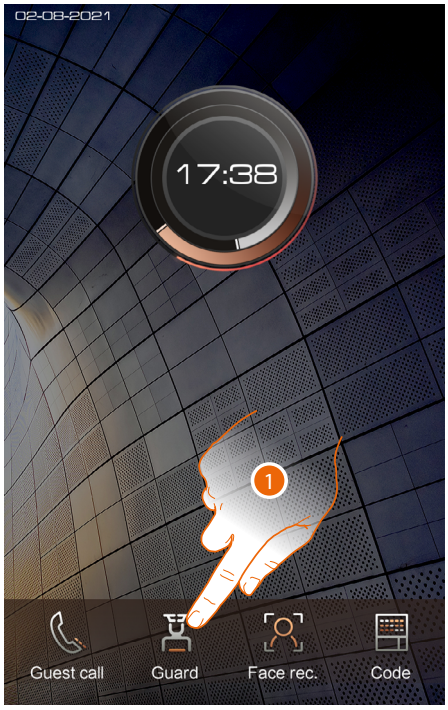


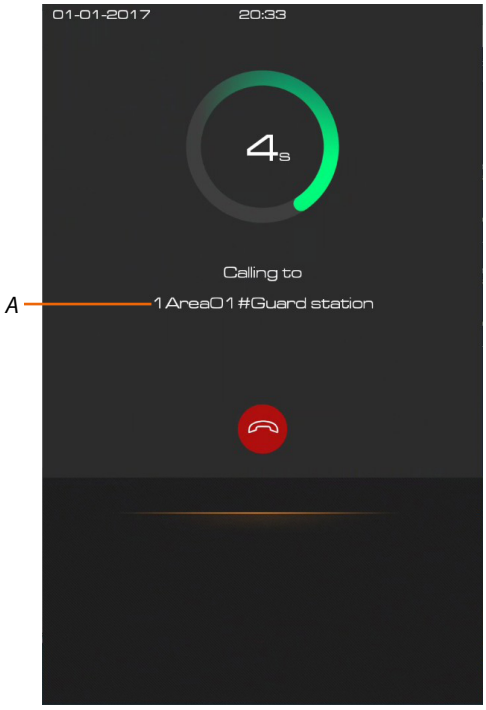
Messages displayed as screen saver



Call a GS

This function allows to call the reference GS set in the Settings/Guard station section



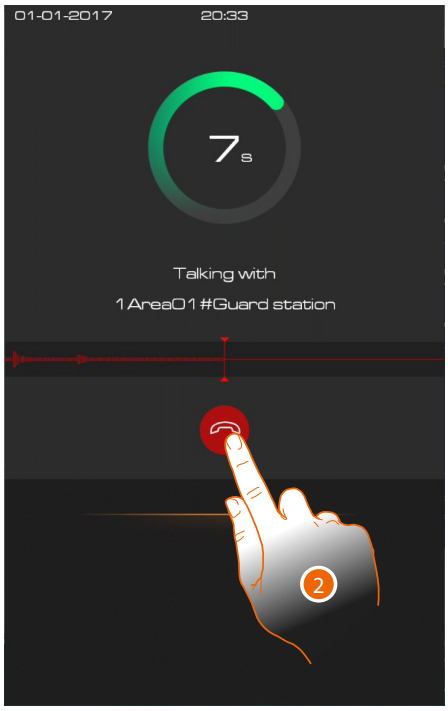


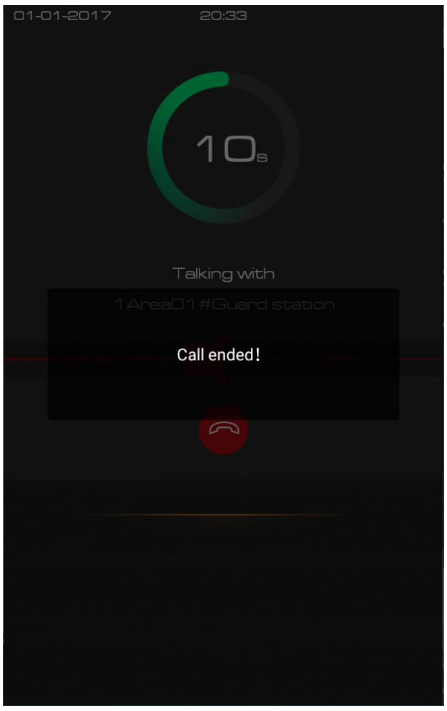
1. Touch to select the function

*A GS address**

***Note**: the caller display depends on how the community has been configured using the software. For details see Fundamental concepts*

When the GS answers, the audio signal bar appears



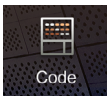


2. Touch to end the call

A message indicates that the call is ended

Accesses

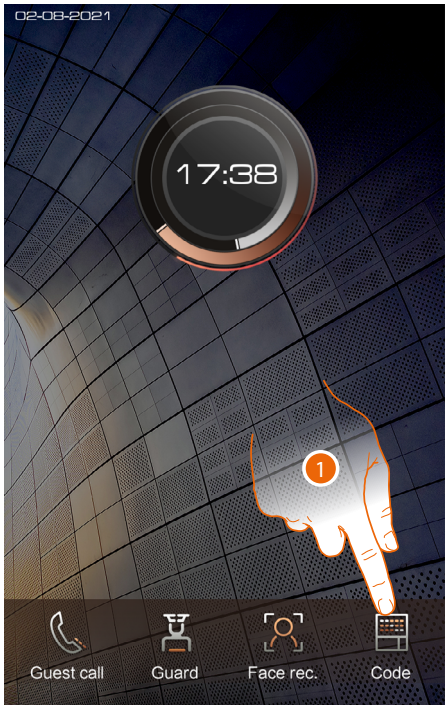
It is possible to access the building in different ways:

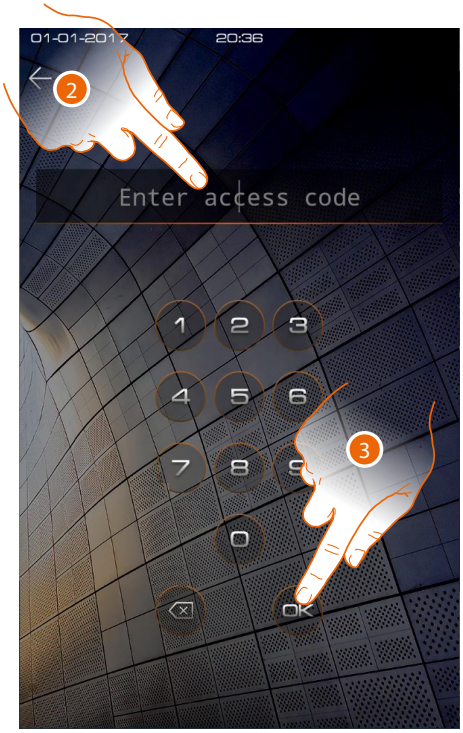
	Access code	Access by entering a local code, an apartment personal code* or a panic code
	Badge	Access using a badge or card configured with SW
	Face recognition	Access by face recognition. Need to record the face using SW (only for item 374000)
	Finger print	Access by fingerprint recognition. Need to record the fingerprint using SW (only for item 374000)

**Correct operation requires the configuration of the code from the IU and a resident associated with the apartment in the SW (see SW Community/Person profile management)*

Access using Access Code

Using this function it is possible to access the building by typing an Access code.
The Access Code is set in the Installation\Access code\local section





1. Touch to select the function
2. Enter the local access code (ask the plant manager for your code, available in the device parameters section of the SW) or the personal access code or panic code.
3. Touch to confirm

Personal access code opens the last EP of my community, i.e. the EP closest to the apartment, chosen from those to which I have access.
Example: if they are enabled to all the accesses (complete Area/Building/Riser/Floor/Apartment structure) I open the Apartment EP.
This code does not work on community/area/building EPs
Panic access code: opens the door and at the same time sends an alarm message to the guard station.
Example: if a criminal forces me to forcibly open the door
The local access code opens community EPs, with the exception of apartment SEPs and EPs

***Note**: for safety reasons, modify the code.*

***Note**: to activate the code, there must be a resident associated with the apartment in the SW (see SW manual).*

Beeps and visual warnings will confirm that the code has been recognised and the door lock will open.

Access using badge or card

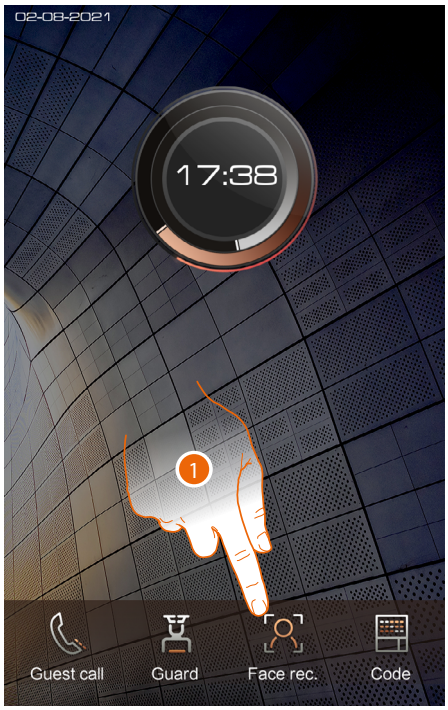
Using this function you can access the building using a badge or a card.
To use this function, the badge or card must be saved in the system via SW.

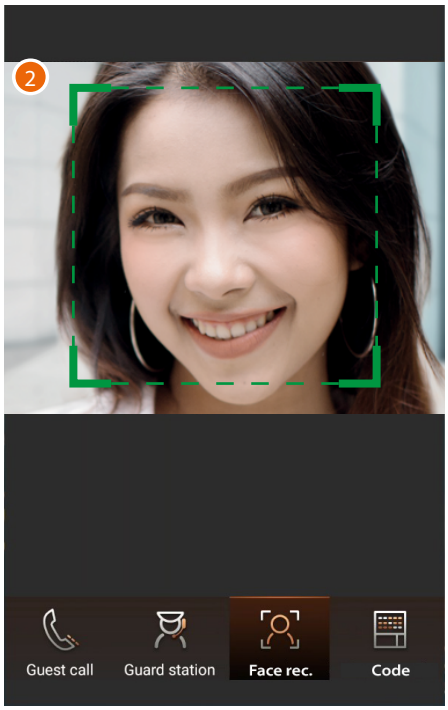
1. Move the badge or card on the reader

Beeps will confirm that the badge/card has been recognised and the door lock will open.

Access using Face recognition

Using this function, the EP camera will recognise your face and you can enter the building automatically without entering a code.
To use this function, your face must be saved in the system via SW.





If the proximity sensor is active the function will activate automatically, otherwise:

1. Touch to select the function
2. Position yourself so that the camera can frame your face and the system activates the recognition process.

Beeps will confirm that the face has been recognised and the door lock will open.

Access using Finger print

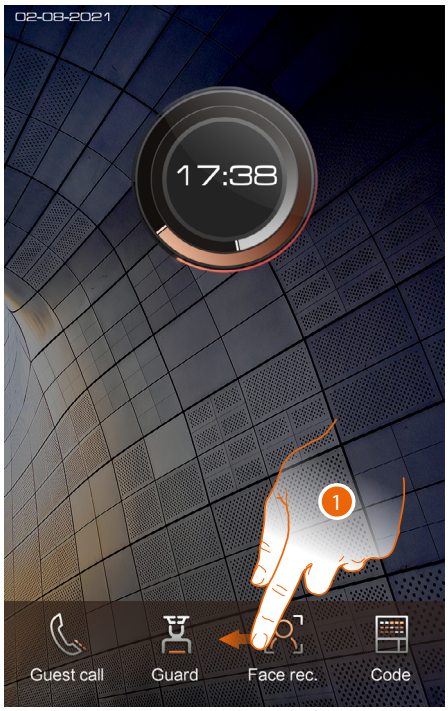
Using this function, the fingerprint reader will recognise your fingerprint and you can enter the building automatically without entering a code.
To use this function, your fingerprint must be saved in the system via SW.

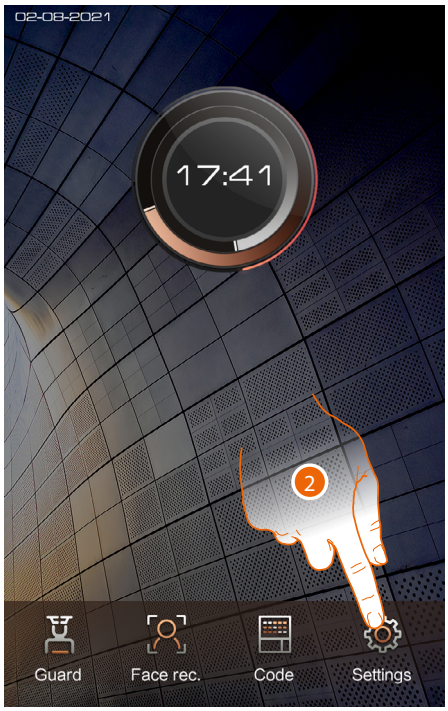
1. Position your finger in contact with the fingerprint reader

A beep will confirm the correct recognition of the fingerprint and the door lock will open.

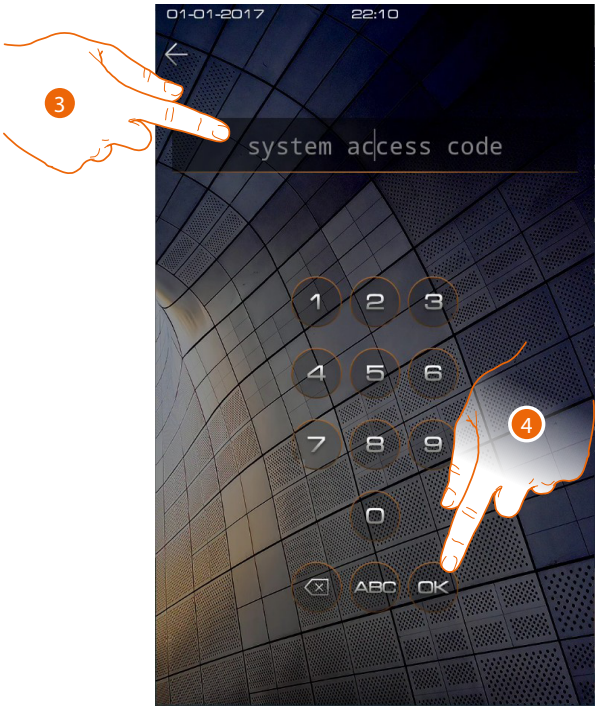
Configurations using the device (Settings)

In this section, it is possible to perform a wide range of configurations that will enable you to make the most of your EP. Access to this section is protected by an installer password which can be set by the software





1. Scroll to display the complete menu bar
2. Touch to access the Settings section

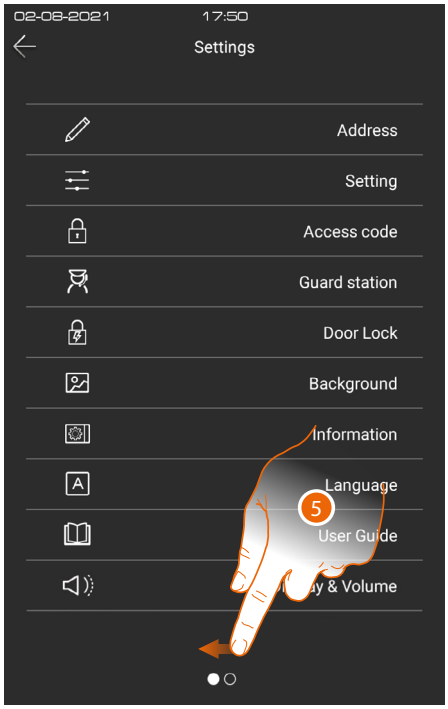


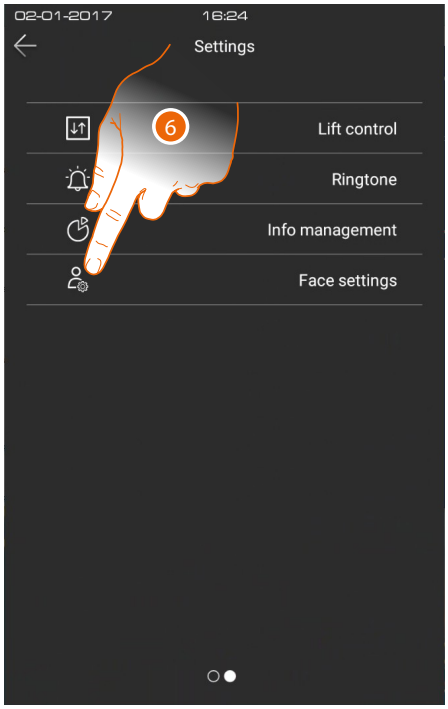
3. Enter the installer password to access the configuration section (ask the plant manager for your password, available in the device parameters section of the SW)

***Caution**: Save passwords in a safe place that is always accessible. (Cloud backup activation recommended) If both the SD and the backup are unavailable, it will not be possible to retrieve the passwords.*

***Note**: The passwords of the devices incorrectly activated in DEMO mode are: 2000 (EP) and 1111 (IU and GS)*

4. Touch to confirm





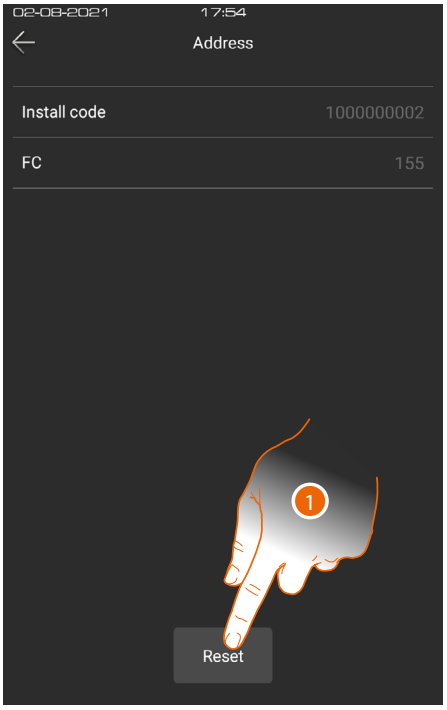
5. Scroll to display all the functions
6. Touch the icon for the desired configuration, choosing among:

	Address	It displays various device parameters and performs the reset command
	Setting	It enables different functions
	Access code	It sets the menu access installer password Settings and local access Code to open the gate
	Guard station	It sets the EP reference GS
	Door lock	It sets different parameters of the EP door lock
	Background	It sets the interface background
	Information	It displays different information on the device
	Language	It sets the interface language
	User guide	It displays the QR code to download the manual
	Display & Volume	It sets some display parameters and the ringtone volume

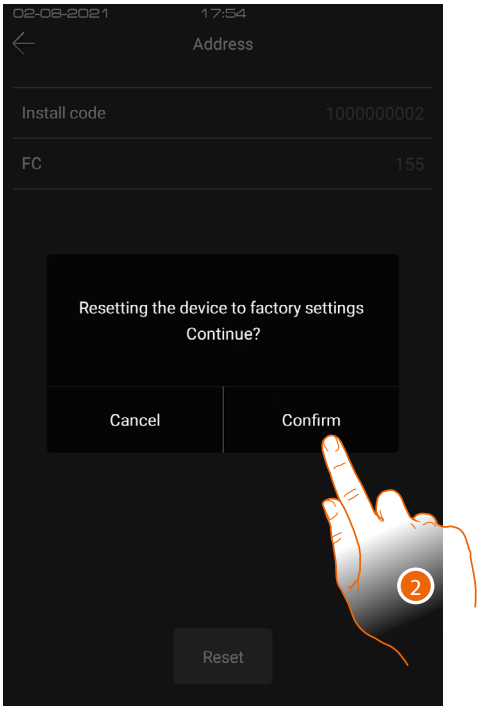
	Lift control	It sets the Lift control system parameters
	Ringtone	It displays the ringtones
	Info management	It displays information about messages in progress
	Face settings	It sets the parameters for the Face Recognition

Address

In this section, it is possible to display the different device parameters.
It is also possible to restore the factory settings of the device.



1. Touch to reset the device

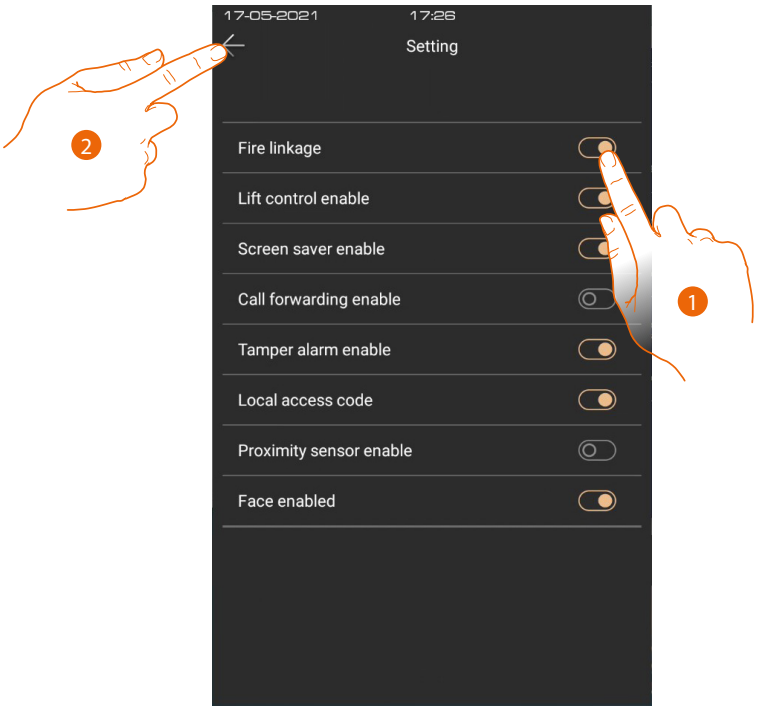


2. Touch to confirm

***Warning**: after confirmation, all customisations will be deleted and the parameters will be restored to factory values*

Setting

In this section it is possible to enable different types of functions.



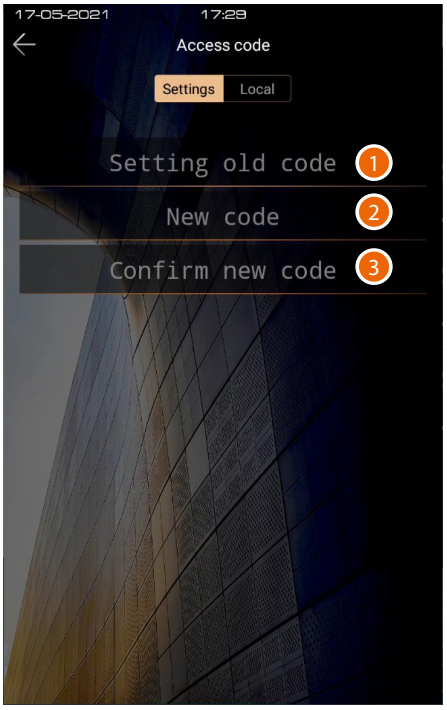
1. Touch to enable the function
2. Touch to save the setting

Fire linkage	It enables the Fire-fighting function
Lift control enable	It enables the Lift control
Screen saver enable	It enables the screen saver
Call forwarding enable	It enables the call forwarding to the GS
Tamper alarm enable	It enables the EP tamper alarm, to protect the EP from removal by intruders
Local access code	It enables the customised local code to access the building
Proximity sensing enable	It enables the proximity sensor to activate automatically the display and its functions
Face enable	It enables the Face Recognition

Access code

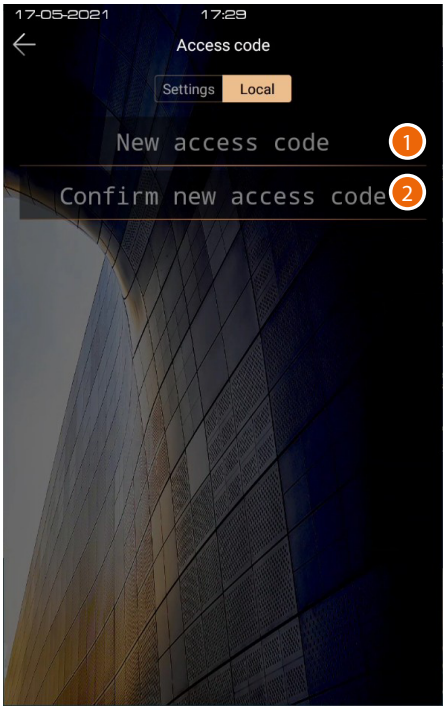
In this section it is possible to set the installer password to access the Settings menu and the access Code to enter the building

Settings



1. Enter the old installer password
2. Enter the new installer password
3. Enter again to confirm

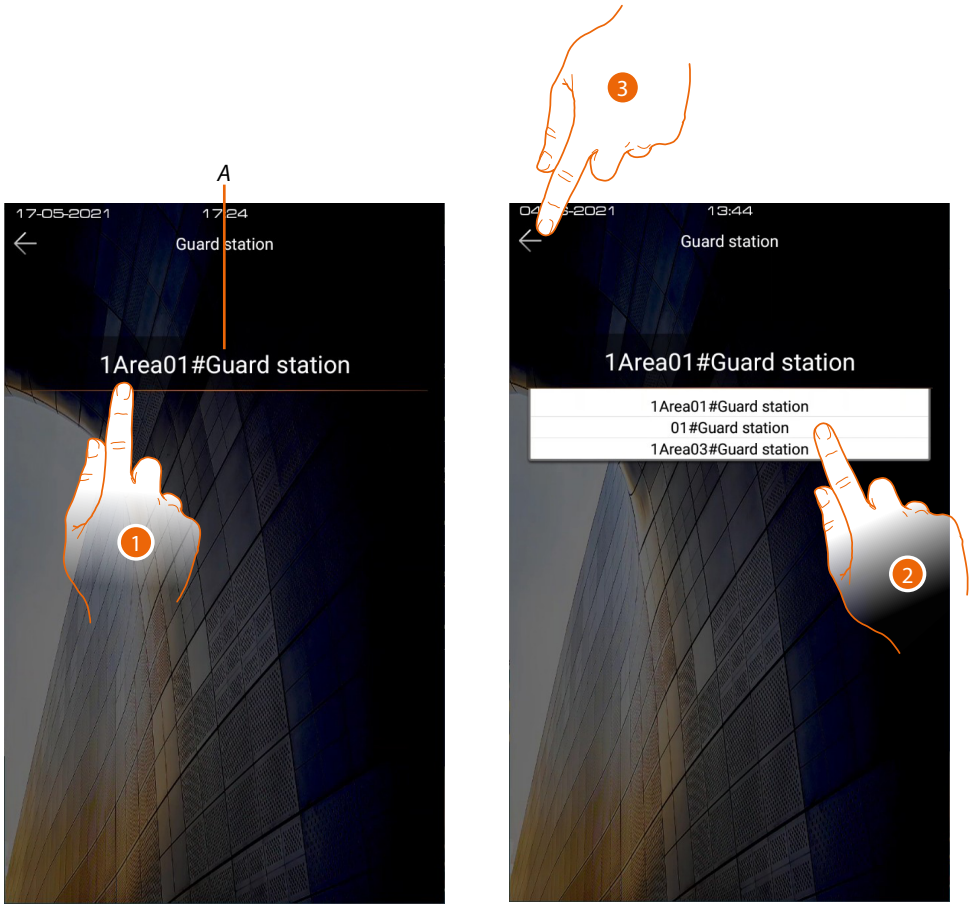
Local



1. Enter the new code (6 digits)
2. Enter again to confirm

Guard station

In this section it is possible to set the EP reference GS.
The reference GS intercepts and manages the calls to the IU or anyone called directly by pressing the pushbutton on the Home page (see the Call a GS section)



A *Address of the current reference GS*

1. Touch to modify the reference GS
2. Select the new GS
3. Touch to save the setting

Door lock

In this section it is possible to set different parameters of the EP door lock

A *A It restores the factory settings*

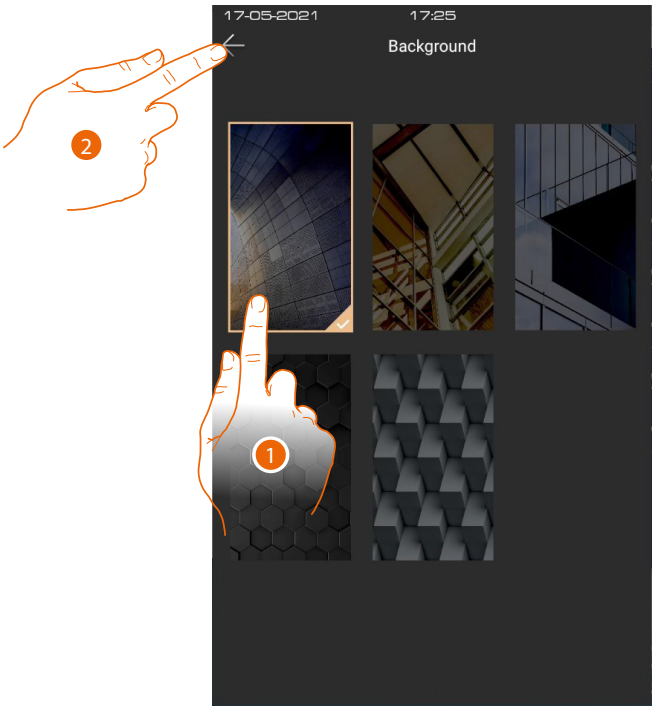
1. Door Status
   The Door Status function allows to receive door status notifications, and therefore a warning when the door is left open.
   To use this function, a clean contact in the GND SENSE input clamp is required.
   Touch to set a door status alarm:
   NO = sends an alarm when the contact remains open for more than 2 minutes
   NC = sends an alarm when the contact remains closed for more than 2 minutes
   Not used = never sends alarm
   The alarm is displayed on both the SSDES and GS
2. Lock
   The lock connected to the Lock+ / Lock- clamps can be controlled using pulse commands

Or

3. The lock connected to the Lock+ / Lock- clamps can be controlled using timed commands
4. Enter the contact activation time in seconds
5. Touch to save the setting

Background

In this section it is possible to set the interface background

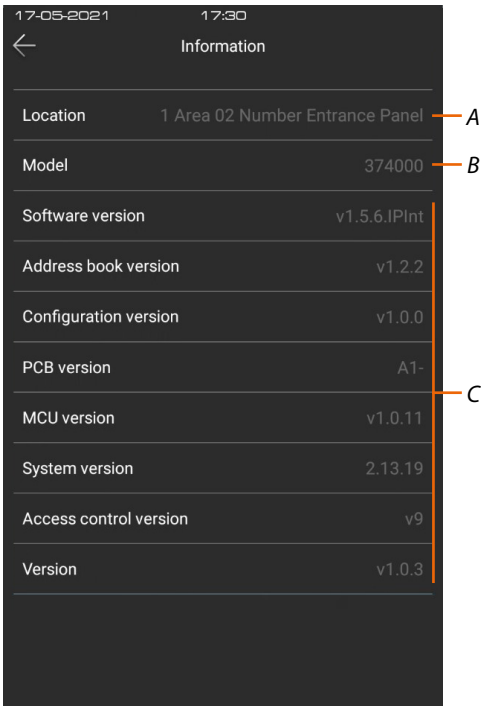


1. Select the background
2. Touch to save the setting

***Note**: it is possible to select other backgrounds or create new ones using the SW*

Information

In this section it is possible to display different information on the device



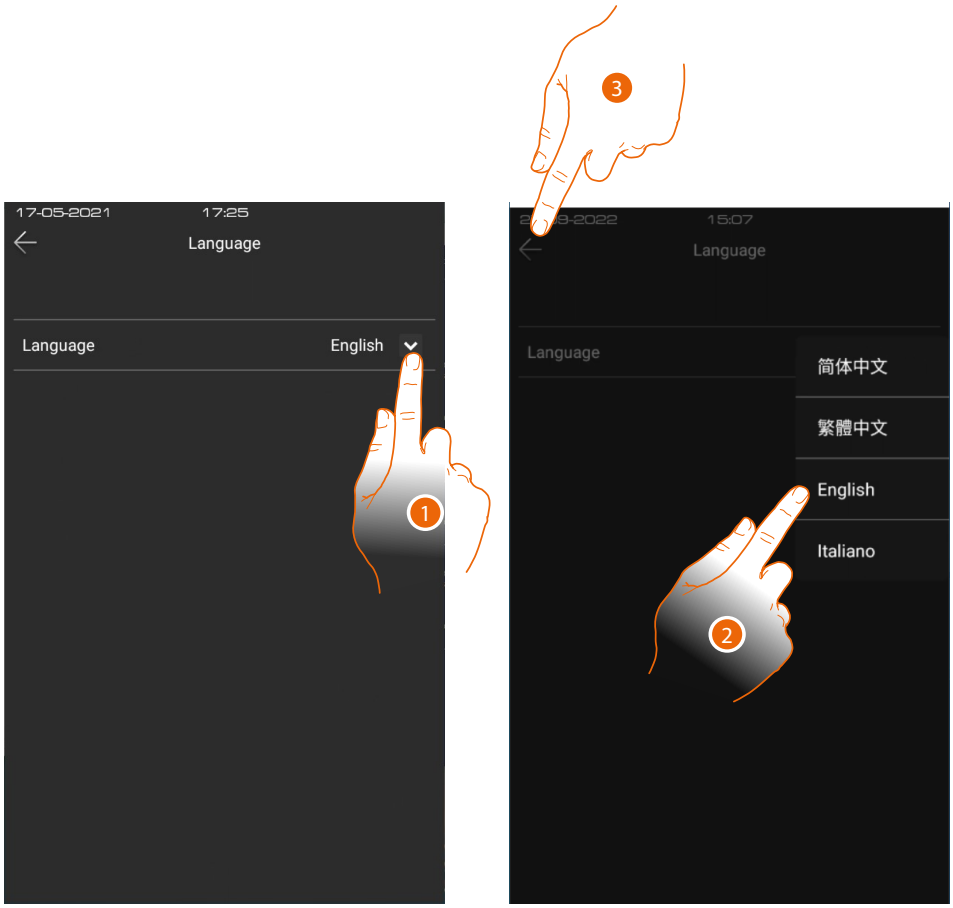
A Device address

B Item code

C Versions of the different device components

Language

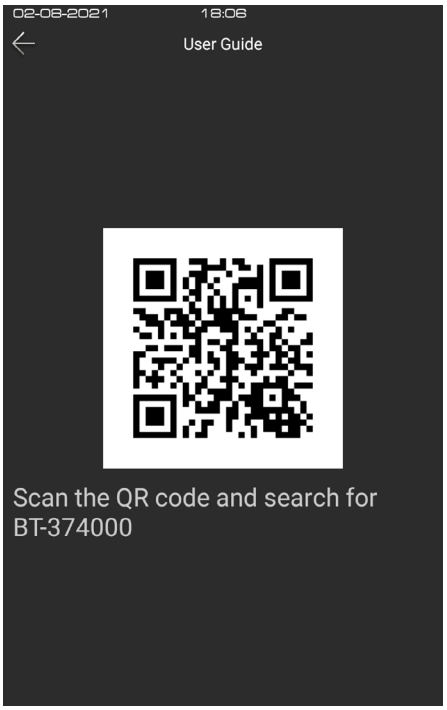
In this section it is possible to set the interface language



1. Touch to open the language selection panel
2. Select the language
3. Touch to save the setting

User guide

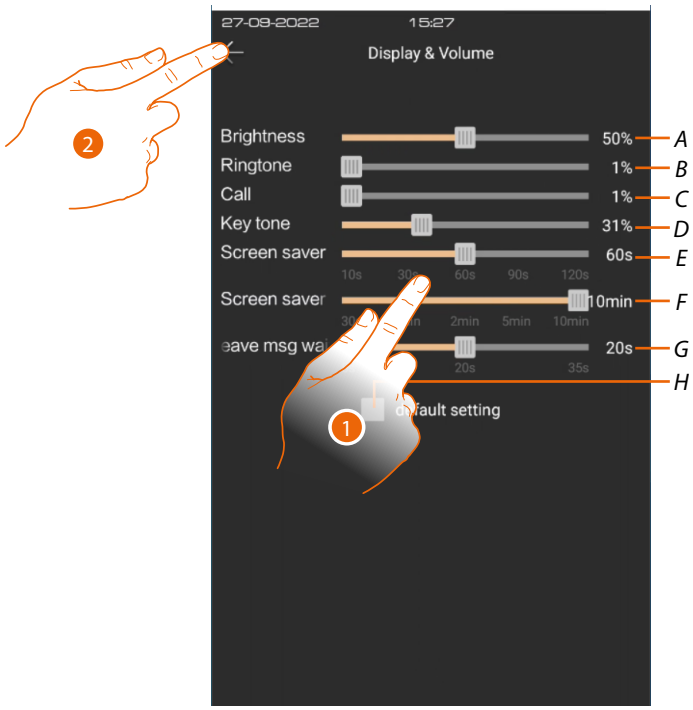
In this section it is possible to download this manual using the QR code



1. Using a smartphone, scan the QR Code
2. Search for the 374000 374002 code
3. Download the manual

Display & Volume

In this section it is possible to set some display parameters and adjust the ringtone volume



A *It adjusts the brightness (backlighting)*

B *It adjusts the ringtone volume*

C *It adjusts the call volume*

D *It adjusts the tone volume when a key is pressed*

E *It adjusts the screen saver activation time*

F *It adjusts the activation time of the display switch off*

G *Set the time within which it will be possible to leave a message in the answering machine. This time is connected with the ringing time (default 35 seconds). E.G.: if the time is set to 5 seconds, the ringing time will be 30 seconds.*

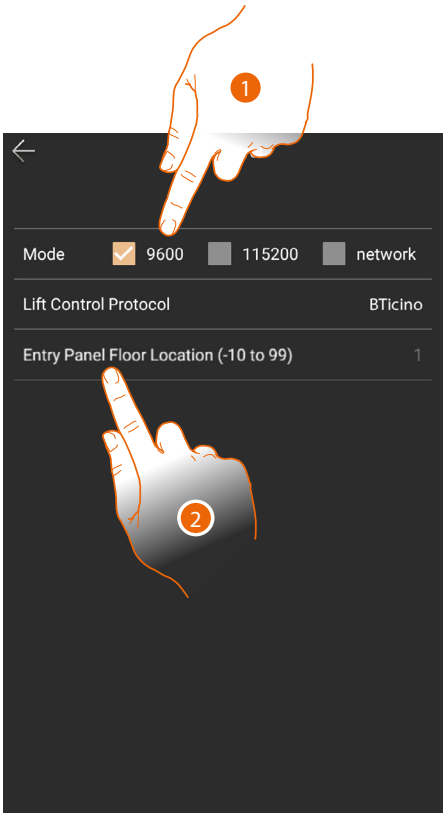
H *It restores the factory settings*

1. Touch to adjust the parameters
2. Touch to save the setting

Lift control

In this section it is possible to set some Lift Control system parameters

Master mode

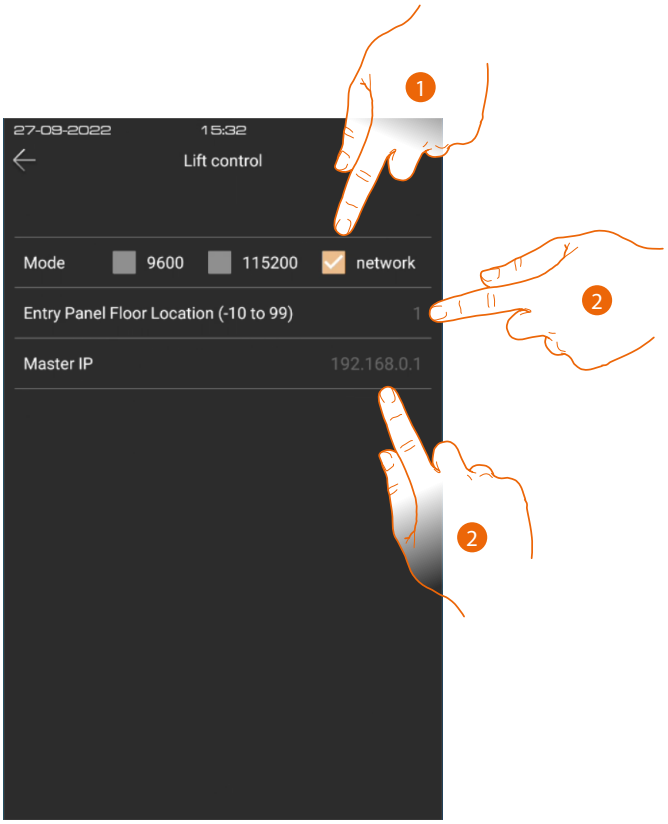


1. Select if the EP is Master (9600 or 115200), i.e. directly connected with the lift interface via RS485 (for interface 375010 select 9600)
2. Select the floor where the EP is located

It is possible to display some wiring diagram examples in the Example diagrams/lift control section

For more information, see the «Lift Control Interface item 375010 software manual»

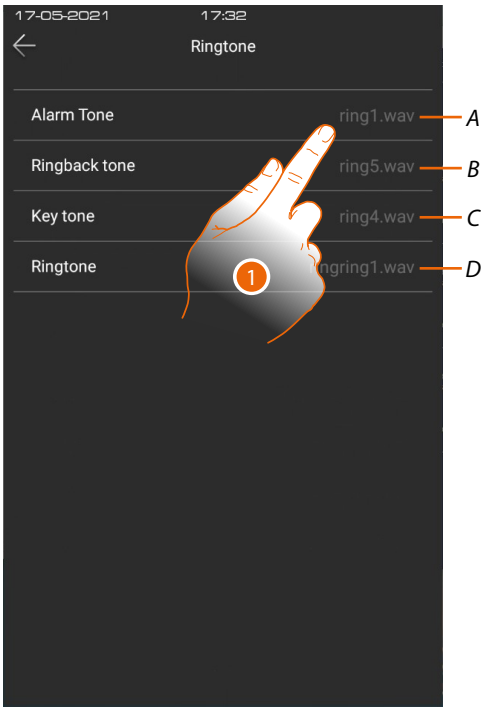
Slave mode



1. Select if the EP is Slave, i.e. not directly connected with the lift interface via RS485 but uses another EP as gateway.
2. Select the floor where the EP is located
3. Enter the IP address of the Master EP (only if EP is slave)

Ringtone

In this section it is possible to listen to the tones associated to the different types of ringtones or other.



A *Alarm tone*

B *Call in progress tone (ringback)*

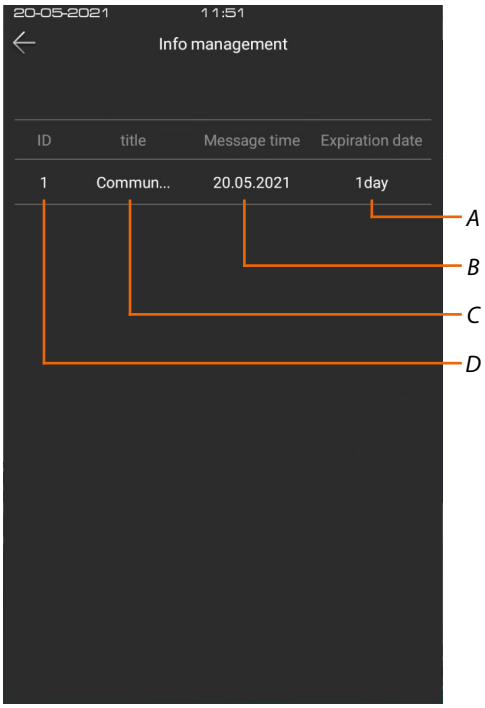
C *Confirmation key tone*

D *Ringtone not used (future use)*

1. Touch to listen to the tone

Info management

In this section it is possible to display the information about messages in progress



A *Message availability time (expiration date)*

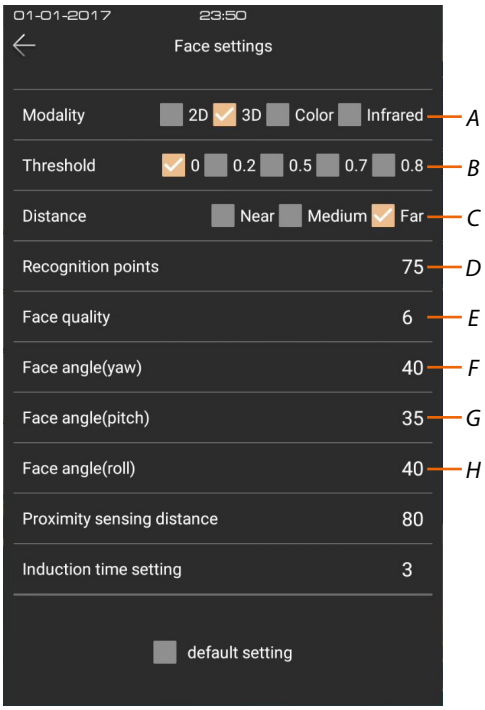
B *Time of message appearance*

C *Type of message (title)*

D *Number of the message (ID)*

Face settings

In this section it is possible to set some Face Recognition parameters



A *Camera operating modes:*
***2D** - in this mode, the depth of the image is not checked, and so showing a photograph opens the EP lock*
***3D** - in this mode, the depth of the image is checked, so recognition is only confirmed if someone is in front of the EP (DEFAULT)*
***Colour** - in this mode, the face is only checked by the colour camera (DAY)*
***Infrared** - in this mode, the face is only checked by the infrared camera (NIGHT)*

B **Sets the level of face recognition accuracy and therefore the degree of security.*
0= lower level of accuracy and security
0.8= higher level of accuracy and security (higher possibility of failed recognitions)

C *Set the distance for the face recognition*

D *Enter the number of recognition points to accept the face*

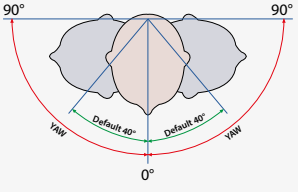
E *Enter the minimum image quality to accept the recognition*

F **Maximum angle of face rotation (left/right in relation to the frontal position), for which facial recognition is performed.*
If the rotation is greater, the face is not recognised.

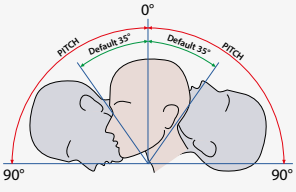
G **Maximum angle of face inclination (left/right in relation to the frontal position), for which facial recognition is performed.*
If the inclination is greater, the face is not recognised.

H **Maximum angle of face inclination (up/down in relation to the frontal position), for which the facial recognition is performed.*
If the inclination is greater, the face is not recognised.

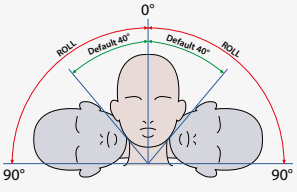
YAW (*F*)

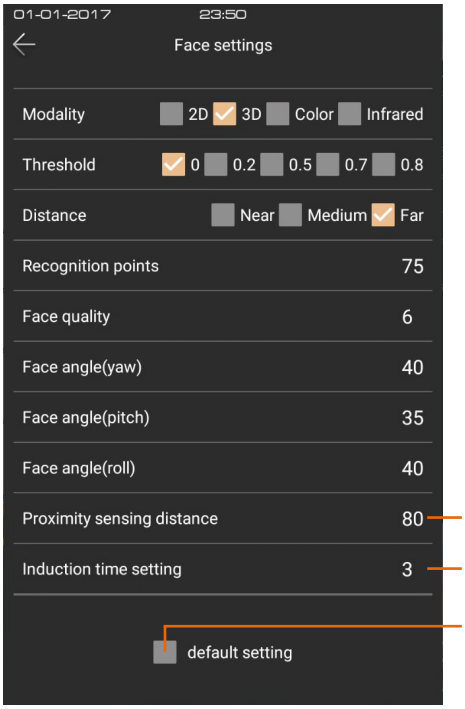


PITCH (*G*)



ROLL (*H*)





I *Enter the distance from the proximity to activate the recognition function*

J *Enter the time from when the Home Page appears to when the Face recognition function starts*
During the face recognition, any other operation is inhibited, even the call.
This time is important if the Face recognition is unsuccessful. You must thus set a time which is long enough for you to be able to call the IU before the Face recognition function reactivates.

K *Restore the factory settings*

**__Note__: Only change these parameters if absolutely necessary*

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BTicino SpA reserves the right to change at any time the content of this manual, and to communicate the changes made in any form, and in any way, deemed appropriate.