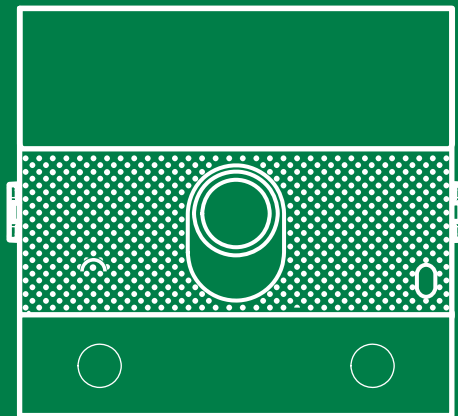


EN

TECHNICAL  
MANUAL



Ultra audio/video module, IP (ViP) system  
Art. UT8020

 **Comelit**<sup>®</sup>  
Passion. Technology. Design.

# Warning

## Intended use

This Comelit product has been designed and manufactured for use in the creation of audio and video communication systems in residential, commercial, industrial and public buildings.

## Installation

All activities connected to the installation of Comelit products must be carried out by qualified technical personnel, with careful observation of the indications provided in the Manuals / Instruction sheets supplied with those products.

## Wires

Disconnect the power supply before carrying out any operations on the wiring.

Use wires with a cross-section suited to the distances involved, observing the instructions provided in the system manual.

We advise against running the system wires through the same duct as power cables (230V or higher).

## Safe usage

To ensure Comelit products are used safely:

- carefully observe the indications provided in the Manuals / Instruction sheets,
- make sure the system created using Comelit products has not been tampered with / damaged.

## Service

Comelit products do not require maintenance aside from routine cleaning, which should be carried out in accordance with the indications provided in the Manuals / Instruction sheets.

Any repairs must be carried out:

- for the products themselves, exclusively by **Comelit Group S.p.A.**,
- for the systems, by qualified technical personnel.

## Disclaimer

**Comelit Group S.p.A.** does not assume any responsibility for

- any purpose other than the intended use,
- failure to observe the indications and warnings contained in this Manual / Instruction sheet.

**Comelit Group S.p.A.** reserves the right to change the information provided in this Manual / Instruction Sheet at any time and without prior notice.

# Table of contents

|  |           |
|--|-----------|
| <b>Warning .....</b>   | <b>2</b>  |
| <b>Description.....</b>  | <b>4</b>  |
| UT8020 .....   | 4         |
| <b>Notes for the installer.....</b>  | <b>6</b>  |
| <b>Technical specifications .....</b>  | <b>7</b>  |
| <b>Installation.....</b>   | <b>8</b>  |
| Flush-mounted installation composition table.....                                    | 8         |
| Surface-mounted installation composition table.....                                  | 9         |
| <b>Flush-mounted installation.....</b>   | <b>10</b> |
| Removing nameplates (2A) / module (2B).....  | 11        |
| Installation with side-by-side boxes.....  | 12        |
| <b>Wall-mounted installation.....</b>  | <b>13</b> |
| <b>Optional.....</b>   | <b>13</b> |
| Removing nameplates (2A) / module (2B).....  | 14        |
| Installation with side-by-side boxes.....  | 15        |
| <b>Connections.....</b>  | <b>16</b> |
| Connection with power supply from floor distribution unit 1440 .....                 | 16        |
| Connection with power supply from standard POE switch .....                          | 16        |
| Connection with separate power supply .....  | 17        |
| Connection with separate power supply and non-POE switch .....                       | 17        |
| Variant for using the external entrance panel relay .....                            | 18        |
| Variant with safety door lock .....  | 18        |
| <b>Module connection.....</b>  | <b>19</b> |
| <b>Outdoor entrance panel module consumption table .....</b>                         | <b>19</b> |
| power supply from floor distribution unit Art. 1440 or from standard PoE.....        | 19        |
| power supply with additional power supply unit Art. 1595 or Art. 1596B.....          | 19        |
| Connection of button modules Art. UT9200.....  | 20        |
| Connection of Touchscreen module Art. UT9270.....                                    | 20        |
| Connection of Touchscreen module Art. UT9270 with additional power supply unit ..... | 21        |
| Connection of number keypad module Art. UT9279M.....                                 | 21        |
| <b>Programming .....</b>   | <b>22</b> |
| <b>Address button modules .....</b>  | <b>22</b> |
| <b>First startup or restarting .....</b>   | <b>22</b> |
| <b>Adjusting the brightness of the button LEDs .....</b>                             | <b>23</b> |
| <b>Reset to factory values.....</b>  | <b>24</b> |
| <b>Connection distances .....</b>  | <b>24</b> |
| <b>Programming via ViP Manager.....</b>  | <b>25</b> |
| Connections available for programming via ViP Manager.....                           | 25        |

# Description



## UT8020

*Audio/video module for Ultra entrance panel, IP (ViP) system.*

*Twilight sensor for automatic nameplate backlighting power-off during daytime hours. Omnidirectional digital microphone and double loudspeaker for high-fidelity audio.*

*Wide-angle 2 Megapixel colour video camera (field of vision: 160° horizontal, 90° vertical).*

*Audio-visual indications for disabled individuals assistance request can be activated via programming.*

*Facility for 2 call buttons. To be finished with cap, single button or dual button made using aluminium or professional grade plastic treated to prevent yellowing and dulling.*

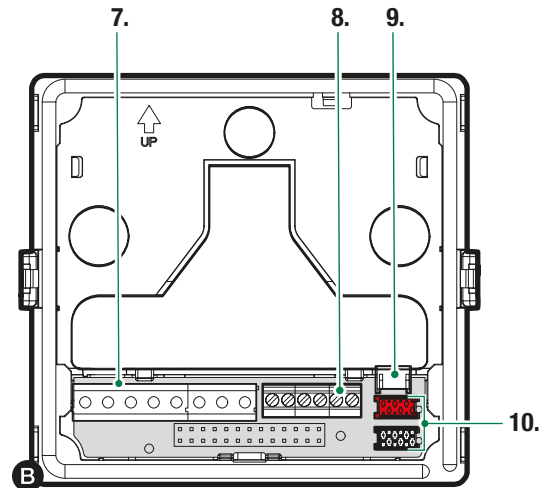
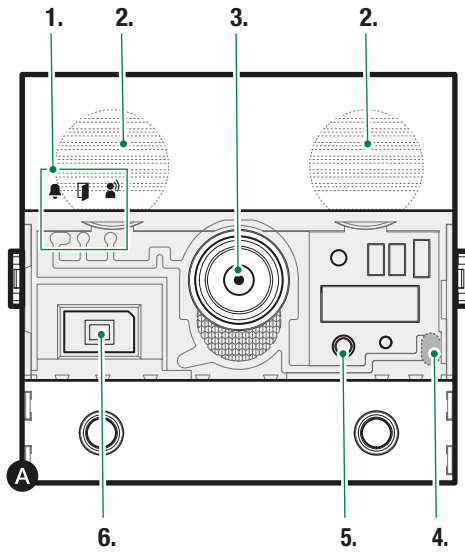
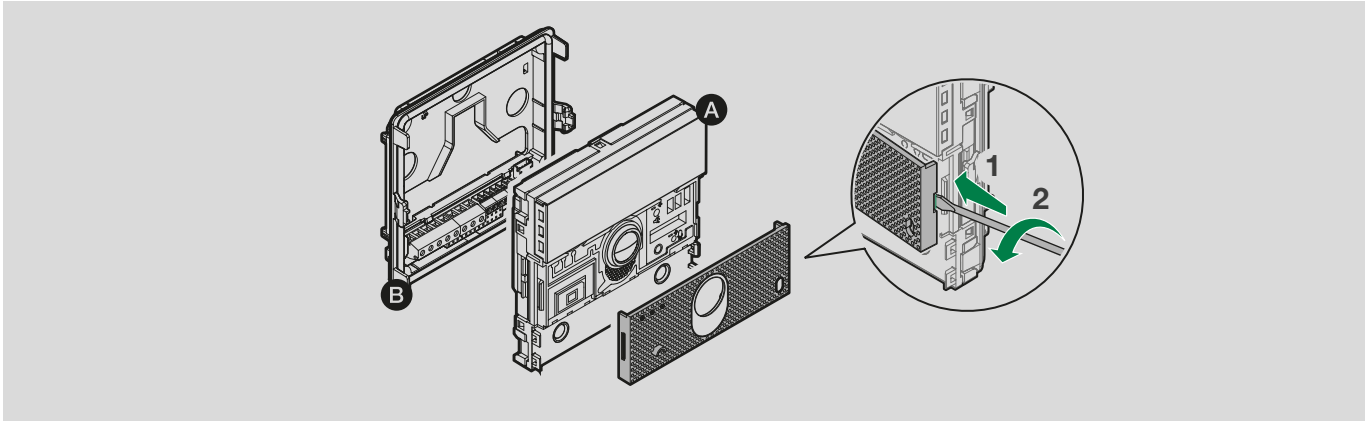
*Adjustment and programming can take place without removing the module.*

*Dimensions: 1 Ultra module.*






***ULTRA: the new and most technologically advanced entrance panel offering maximum ease of installation.***

*Available in flush-mounted (10 mm protrusion from the wall) or surface-mounted (just 35 mm protrusion from the wall) variants.*





**1. Indicator LEDs**

-  calling (green)
-  system busy (red)
-  first startup or restart (flashing red)
-  lock-release enabled
-  communication enabled

**2. Loudspeakers**

**3. Colour video camera**

**4. Twilight sensor**

**5. Button for starting the reset procedure and adjusting the backlighting**

**6. Digital microphone**

**7. Terminal block for connection:**

- RTE** programmable input: RTE (local lock-release input), DO (door open indication), Activate output, Priority call or Call user
- GND SE-** RTE and door lock input reference negative
- SE+** electric door lock connection
- NO NC COM** relay contacts
- V- V+** 33 VDC power supply (Art. 1595, Art. 1596B)

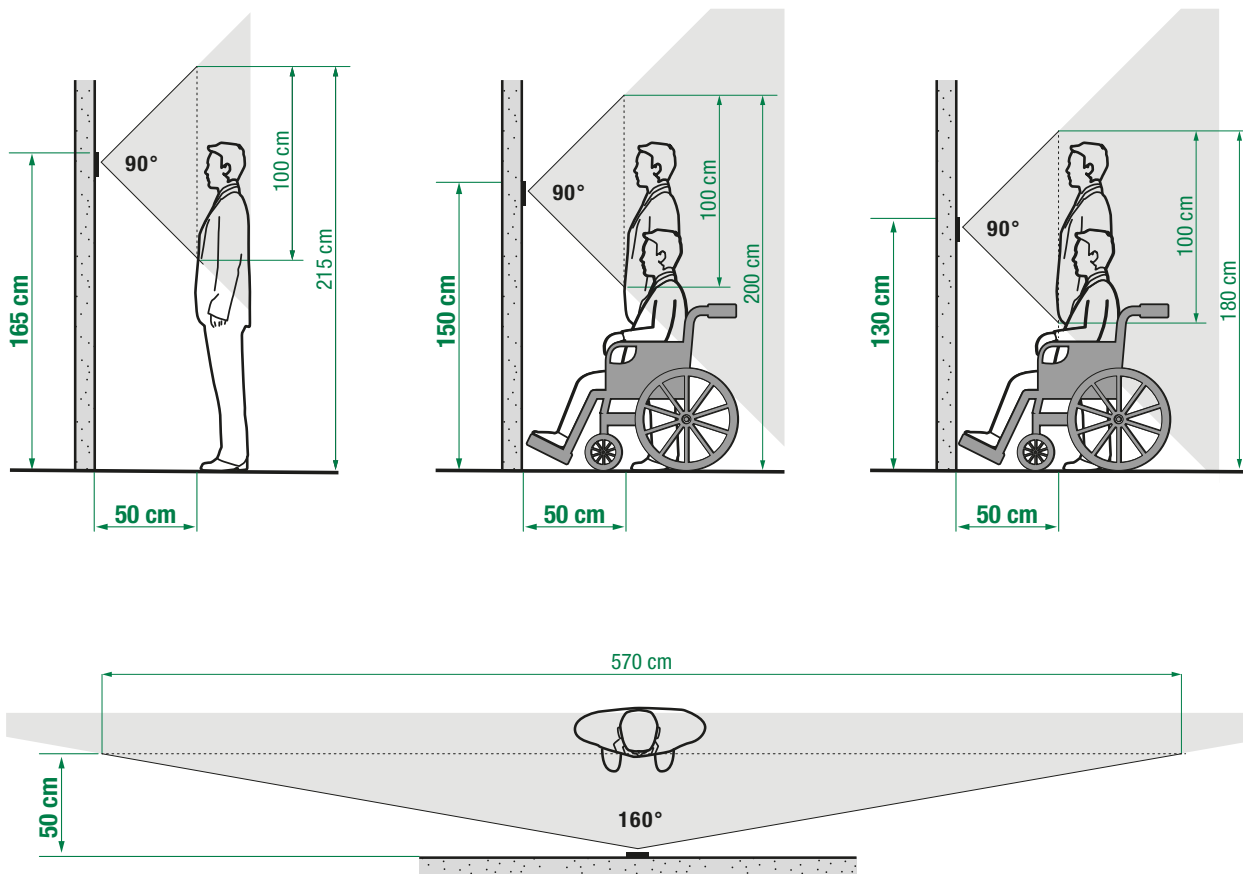
**8. Ethernet terminal block**

- + 36-57 VDC power supply, standard PoE
- TX- TX+** Ethernet transmission line terminals
- RX- RX+** Ethernet receipt line terminals

**9. Connector for additional modules with LAN**

**10. Connector for additional module connection**

# Notes for the installer



The camera must not be installed in front of light sources, or in places where the filmed subject is against the light. In dim environments, we recommend additional lighting is provided.

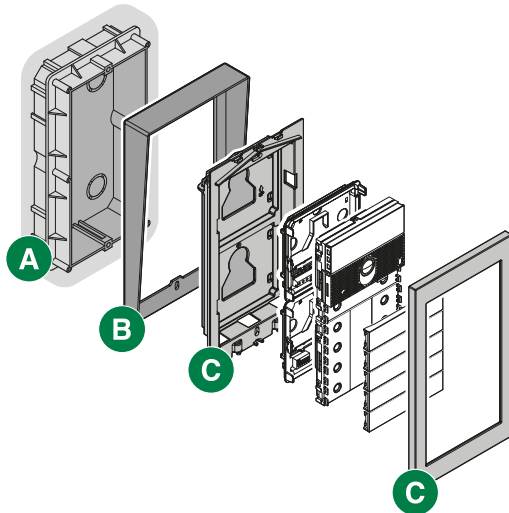
# Technical specifications

| <b>GENERAL DATA</b>                                |  |
|--|--|
| Type   | Modular                                    |
| Product height (mm)                                | 90   |
| Product width (mm)                                 | 100  |
| Product depth (mm)                                 | 35   |
| Product colour                                     | Black RAL9005, Transparent, Aluminium      |
| Material   | Polycarbonate, Aluminium alloy             |
| Flush mounting                                     | Yes, with specific accessory               |
| Surface mounting                                   | Yes, with specific accessory               |
| <b>COMPATIBLE SYSTEMS</b>                          |  |
| ViP  | Yes  |
| <b>AUDIO SPECIFICATIONS</b>                        |  |
| Microphone   | MEMS digital audio sensor, omnidirectional |
| Loudspeaker  | 28 mm (Ø), 8 Ohm, 1W (2)                   |
| Technologies implemented                           | Echo cancelling                            |
| <b>CAMERA FEATURES</b>                             |  |
| Camera   | Colour                                     |
| Sensor type  | 1/3" CMOS                                  |
| Viewing angle (H x V - °)                          | 160 x 90                                   |
| <b>ELECTRICAL SPECIFICATIONS</b>                   |  |
| Type of power supply                               | PoE, external power supply                 |
| PoE power supply                                   | 36-57 VDC, standard PoE                    |
| PoE Class  | Class 0                                    |
| <b>HARDWARE CHARACTERISTICS</b>                    |  |
| Call type  | Buttons                                    |
| Type of buttons                                    | Mechanical                                 |
| Number of buttons (no.)                            | 2  |
| Backlighting colour                                | White, Off                                 |
| Terminals  | TX- TX+RX- RX+V- V+RTE GND SE COM NC NO    |
| Removable terminals                                | Yes  |
| Number of inputs (no.)                             | 1  |
| Number of outputs (no.)                            | 2  |
| Communication port                                 | Ethernet                                   |
| Twilight sensor                                    | Yes  |
| <b>SETTINGS</b>                                    |  |
| Loudspeaker volume                                 | Yes  |
| Mic volume   | Yes  |
| Backlighting brightness                            | Yes  |
| Viewing area                                       | Yes  |
| <b>NETWORK AND COMMUNICATION PROTOCOL</b>          |  |
| LAN type   | Ethernet 10 Mbit/s                         |
| IP address assignment                              | Auto IP, DHCP, Static                      |
| <b>PROGRAMMING MODE</b>                            |  |
| ViP Manager software                               | Yes  |
| <b>ENVIRONMENTAL AND CONFORMITY SPECIFICATIONS</b> |  |
| Operating temperature (°C)                         | -25 to 55                                  |
| Operating humidity (max RH - %)                    | 25 to 95                                   |
| <b>MAIN FUNCTIONS</b>                              |  |
| Lock-release                                       | Yes  |
| Number of auxiliary relays (no.)                   | 2  |
| Input for local key button                         | Yes  |
| Input for door open signal                         | Yes  |
| System status visual indications                   | Yes  |
| System status audio indications                    | Yes  |
| System status voice synthesis                      | Yes  |

# Installation

The entrance panel is available in flush-mounted or surface-mounted variants:

















## Flush-mounted installation composition table



A = Flush-mounted box

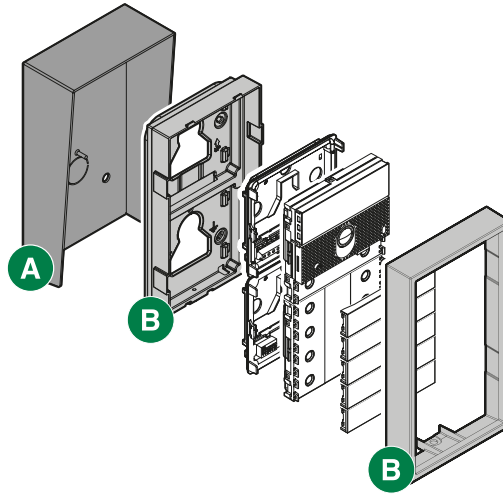
B = Rain shield #

C = Flush-mounted module holder with finishing frame

|                                   |  |  |  |   |  |   |   |   |
|-----------------------------------|--|--|--|---|--|---|---|---|
| Flush-mounted box                 | <br>3110/1<br>3110/1A | <br>3110/2<br>3110/2A | <br>3110/3<br>3110/3A |   | <br>3110/4<br>3110/4A |   |   |   |
| Rain shield                       | <br>UT9181            | <br>UT9182            | <br>UT9184H           | <br>UT9183 | <br>UT9186              | <br>UT9189  | <br>UT9184 | <br>UT9188 |
| Module holder/<br>finishing frame | <br>UT9161            | <br>UT9162            | <br>UT9163            |   |  | <br>UT9164 |   |   |



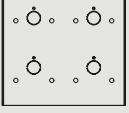
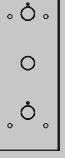
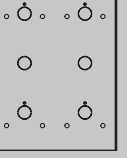
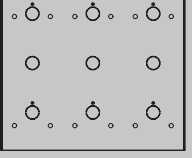
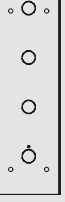
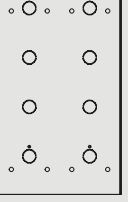

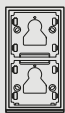
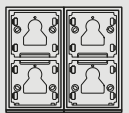
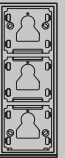
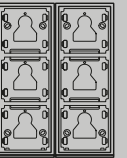
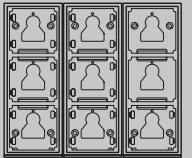
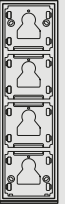
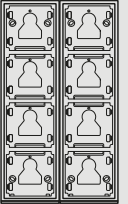
# Optional

Surface-mounted installation composition table



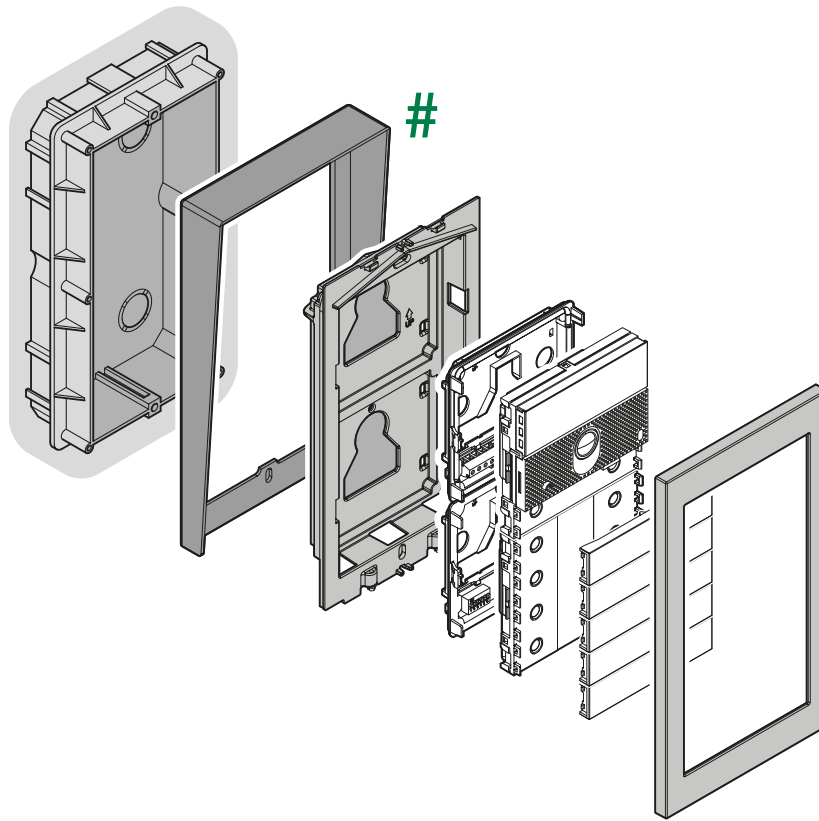
A = Rain shield #

B = Surface-mounted housing with frame

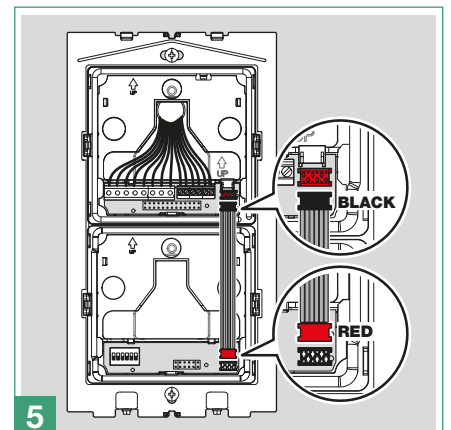
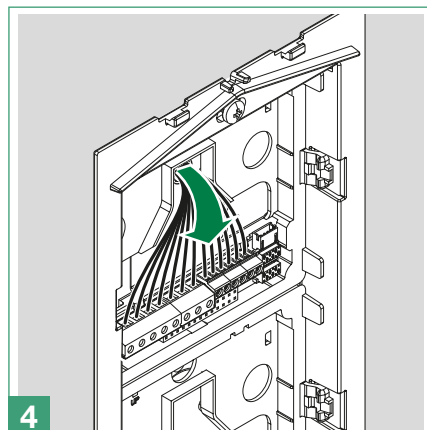
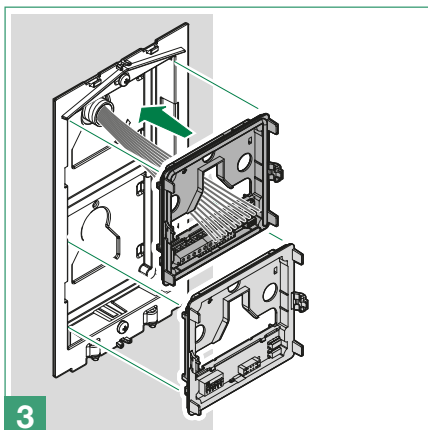
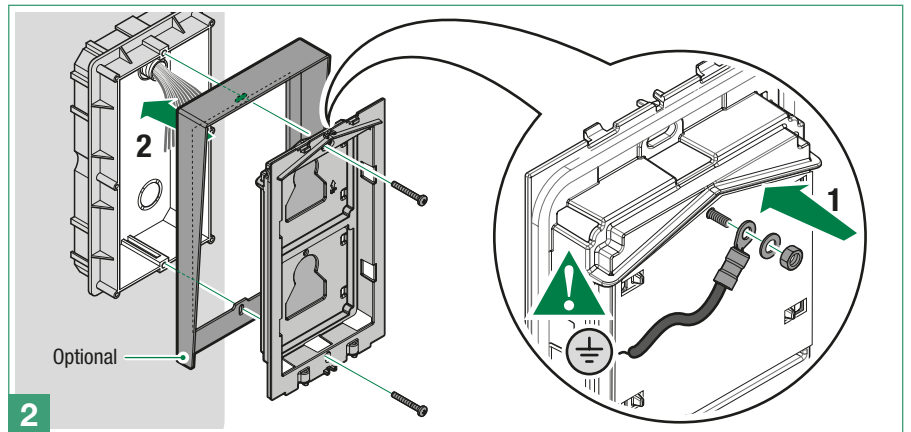
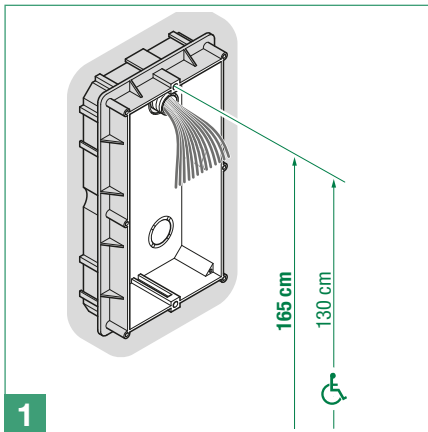
|               |   |   |  |   |   |  |   |   |
|---------------|---|---|--|---|---|--|---|---|
| Rain shield   | <br>UT9191 | <br>UT9192 | <br>UT9194H | <br>UT9193 | <br>UT9196 | <br>UT9199 | <br>UT9194 | <br>UT9198 |
| Housing/frame | <br>UT9171 | <br>UT9172 | <br>UT9174H | <br>UT9173 | <br>UT9176 | <br>UT9179 | <br>UT9174 | <br>UT9178 |

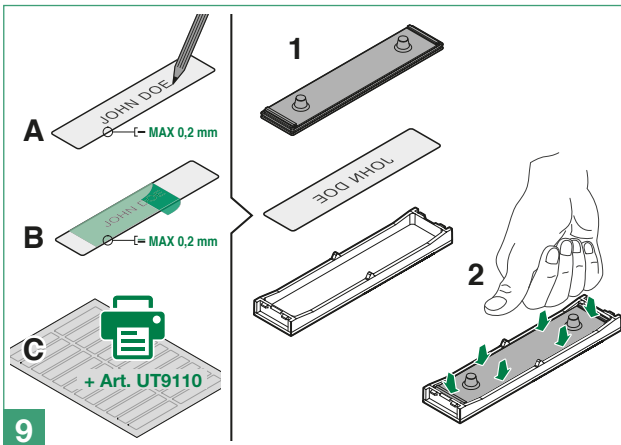
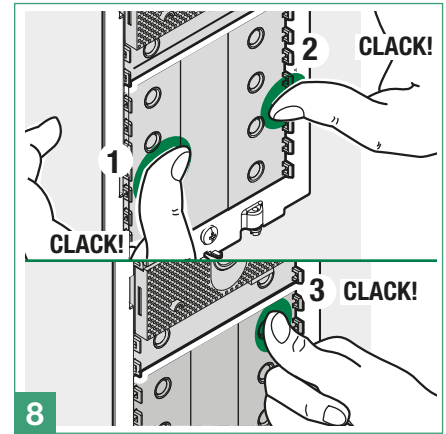
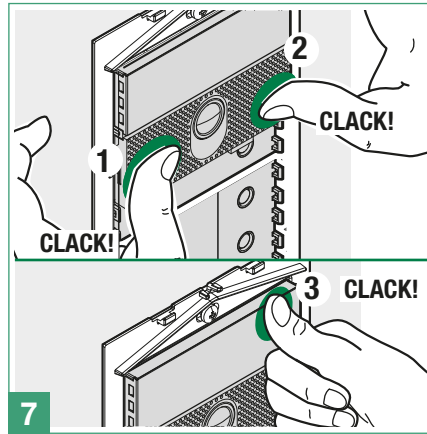
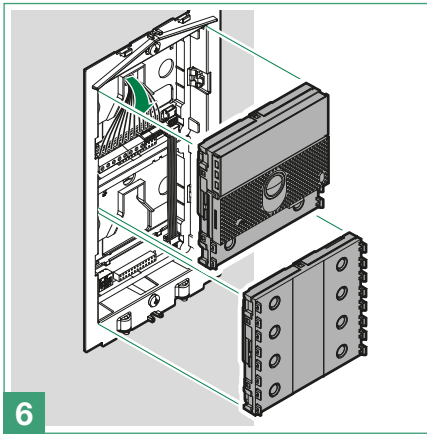
# Optional

# Flush-mounted installation



# Optional





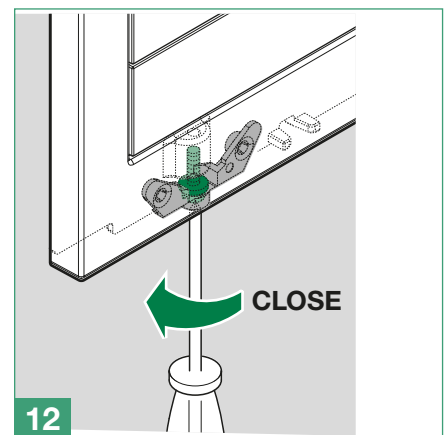
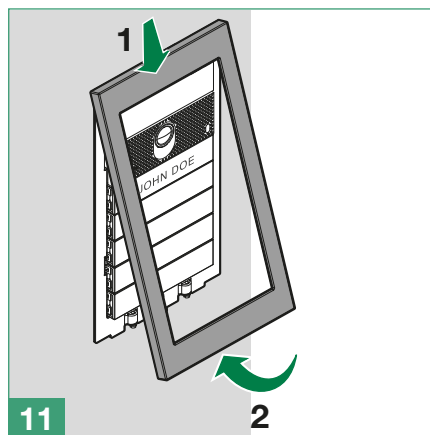
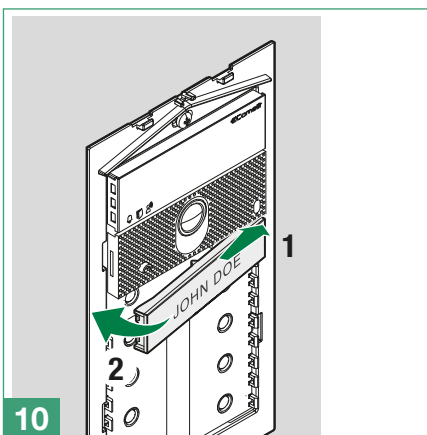
The button has a nameplate which can be written on (A); alternatively, an adhesive label can be applied (B).

**The total thickness of the nameplate + adhesive label must not exceed 0.2 mm.**

You can visit the website [pro.comelitgroup.com](http://pro.comelitgroup.com) to download the PDF to print the entrance panel name cards, using the pre-cut sheets (C) available in our catalogue (Art. UT9110 \*).

Custom engraved **Full Metal Ultra** nameplates are available on request. Find out how:

<https://pro.comelitgroup.com/en-gb/customised-nameplates-for-ultra-entrance-panel>

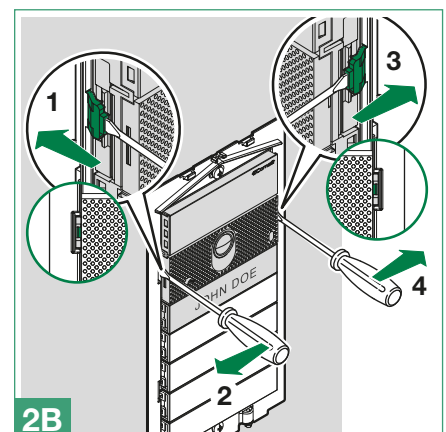
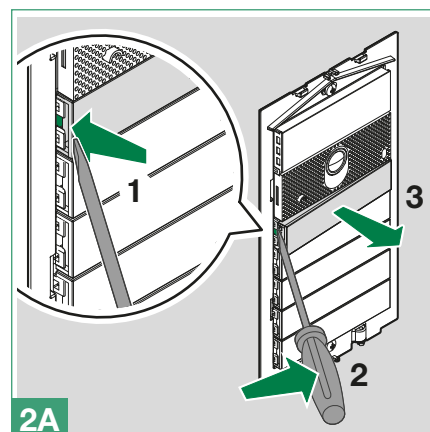
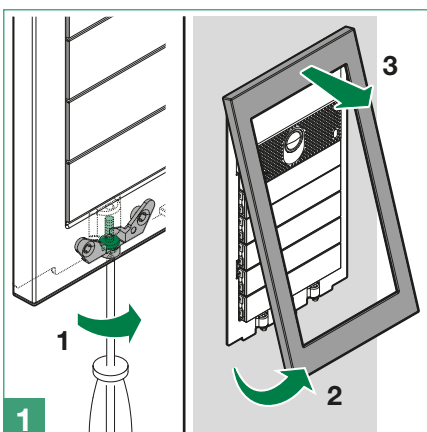


\* Kit Art. **UT9110** contains 5 sheets of pre-cut labels for nameplates and 1 sheet for the information module.

The sheets are made using Yupo paper which offers the ultimate transparency and resistance to atmospheric agents over time.

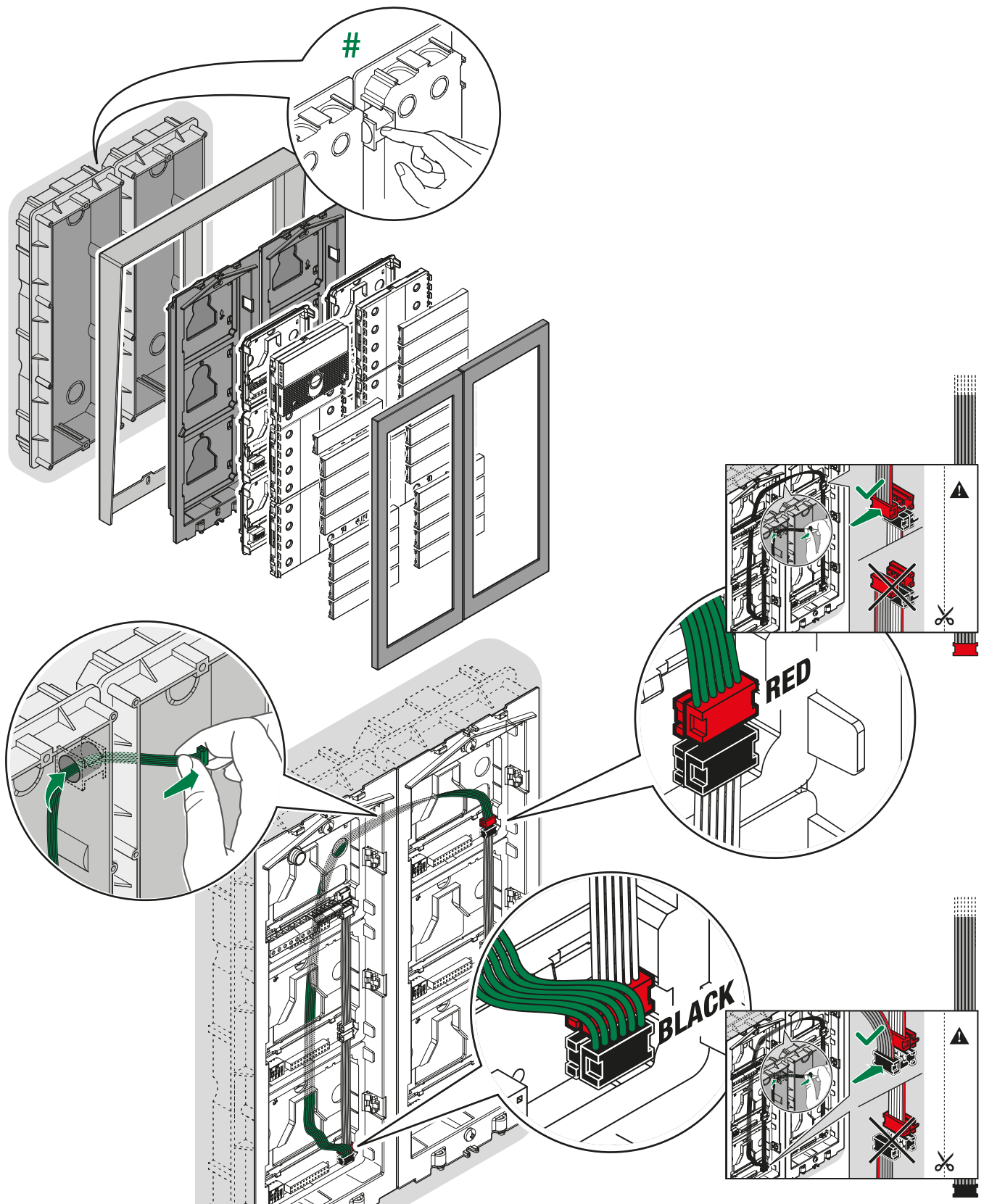
To print the labels, use the editable .pdf file which is available to download free of charge from the website [pro.comelitgroup.com](http://pro.comelitgroup.com)

### Removing nameplates (2A) / module (2B)





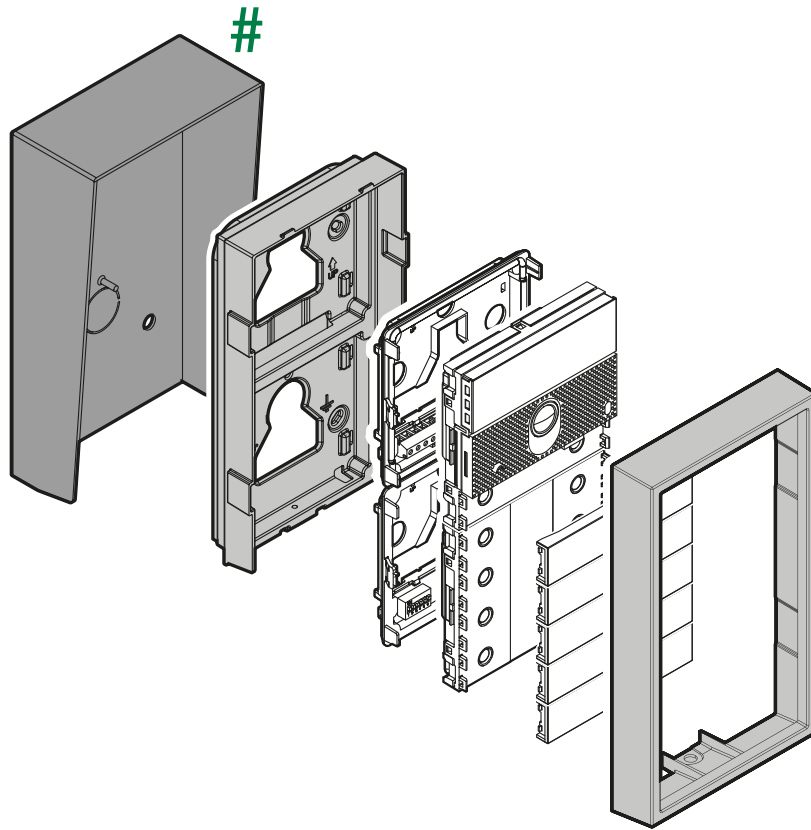
## Installation with side-by-side boxes



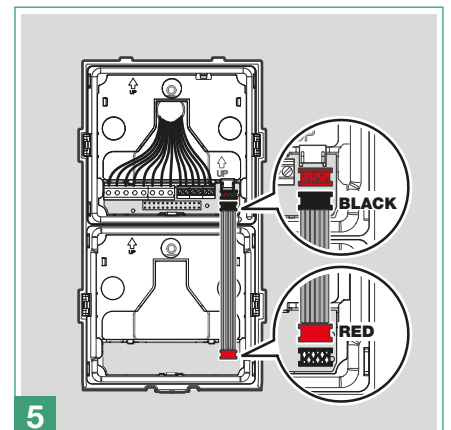
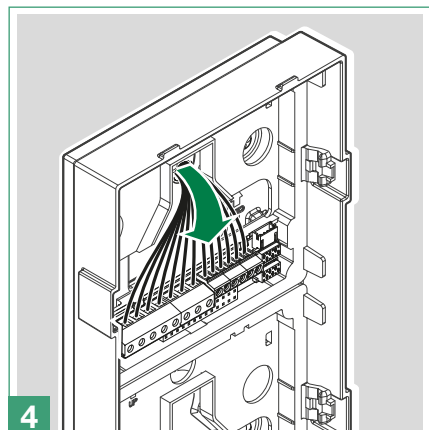
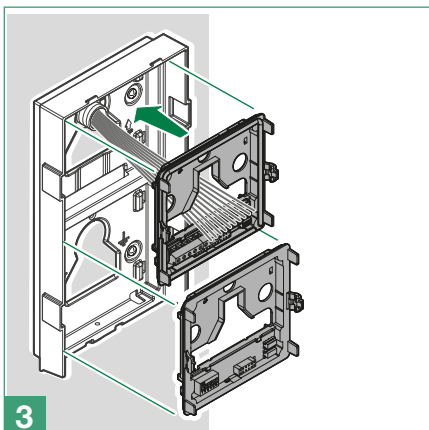
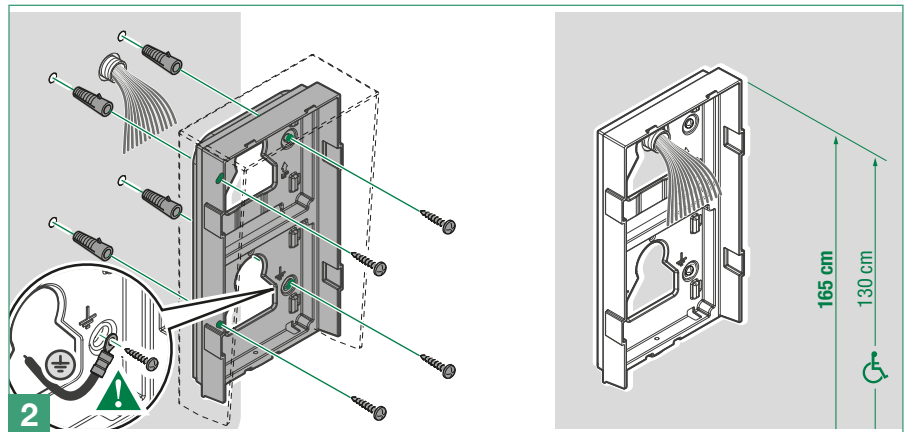
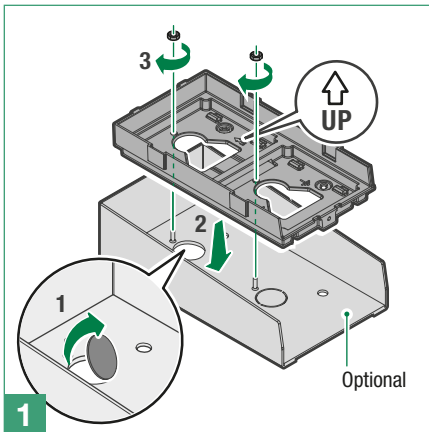
# Before installing the boxes in the wall, fit the spacers.

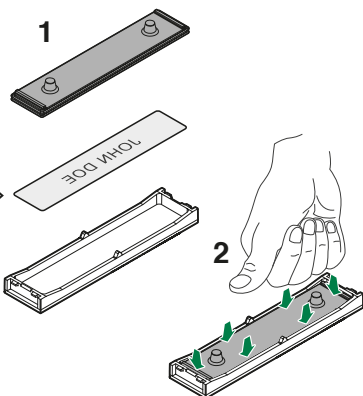
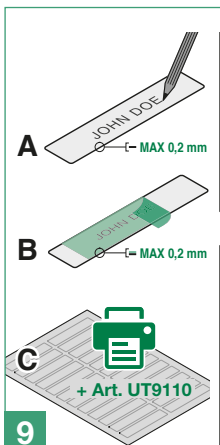
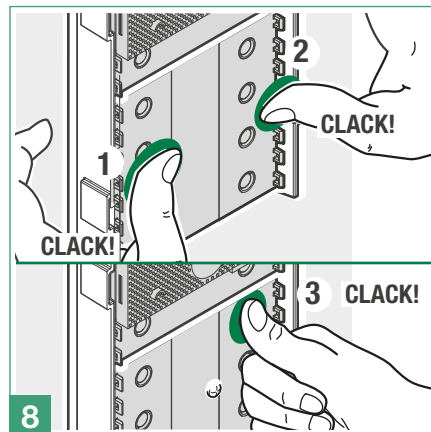
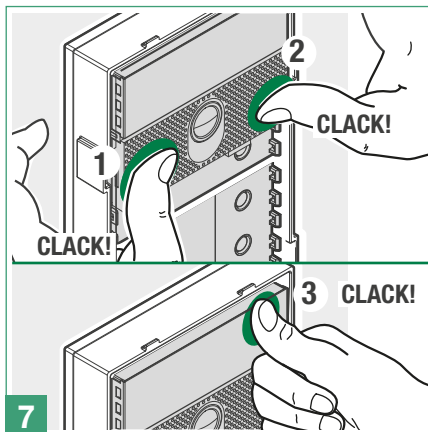
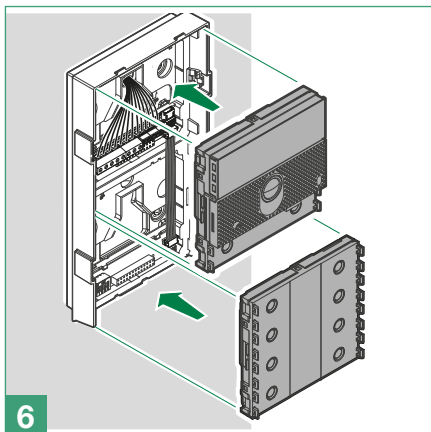


# Wall-mounted installation



# Optional





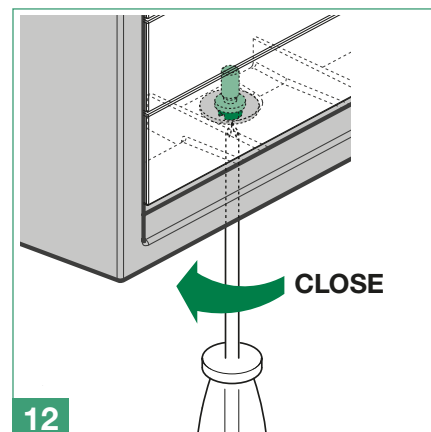
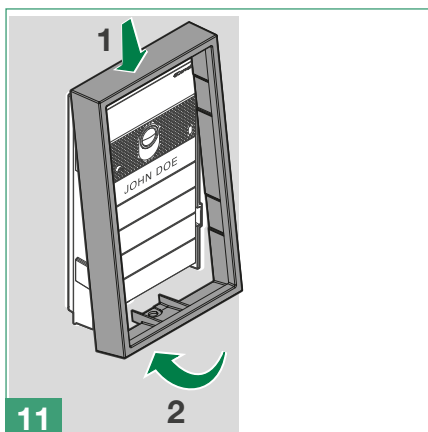
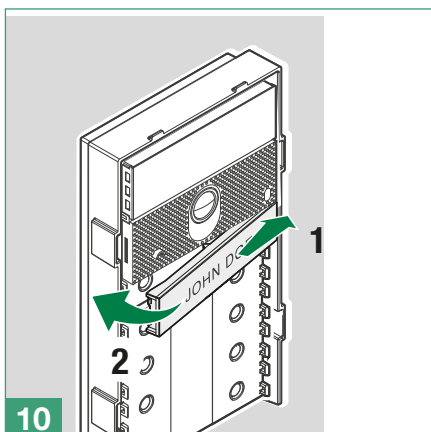
The button has a nameplate which can be written on (A); alternatively, an adhesive label can be applied (B).

**The total thickness of the nameplate + adhesive label must not exceed 0.2 mm.**

You can visit the website [pro.comelitgroup.com](https://pro.comelitgroup.com) to download the PDF to print the entrance panel name cards, using the pre-cut sheets (C) available in our catalogue (Art. UT9110 \*).

Custom engraved **Full Metal Ultra** nameplates are available on request. Find out how:

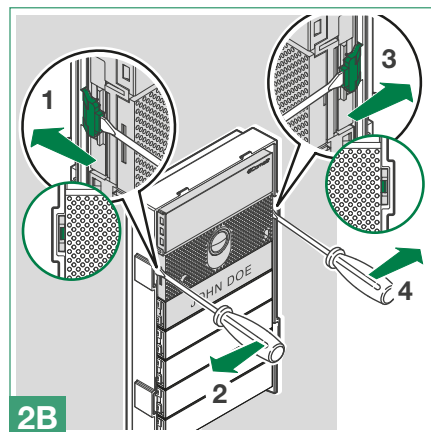
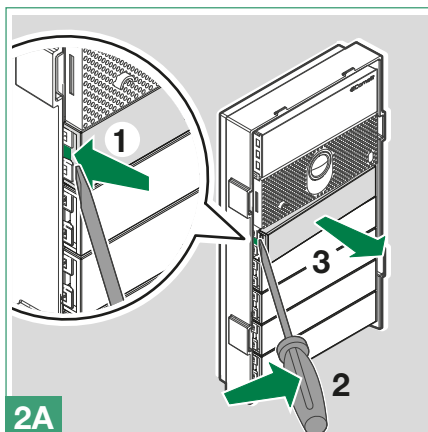
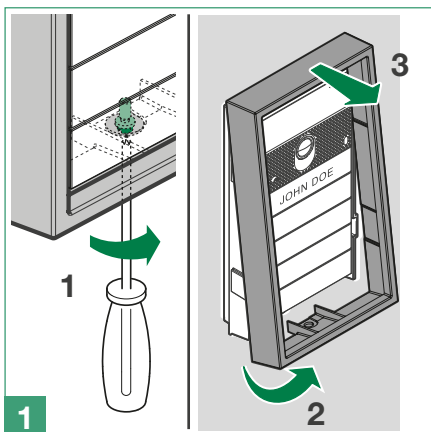
<https://pro.comelitgroup.com/en-gb/customised-nameplates-for-ultra-entrance-panel>



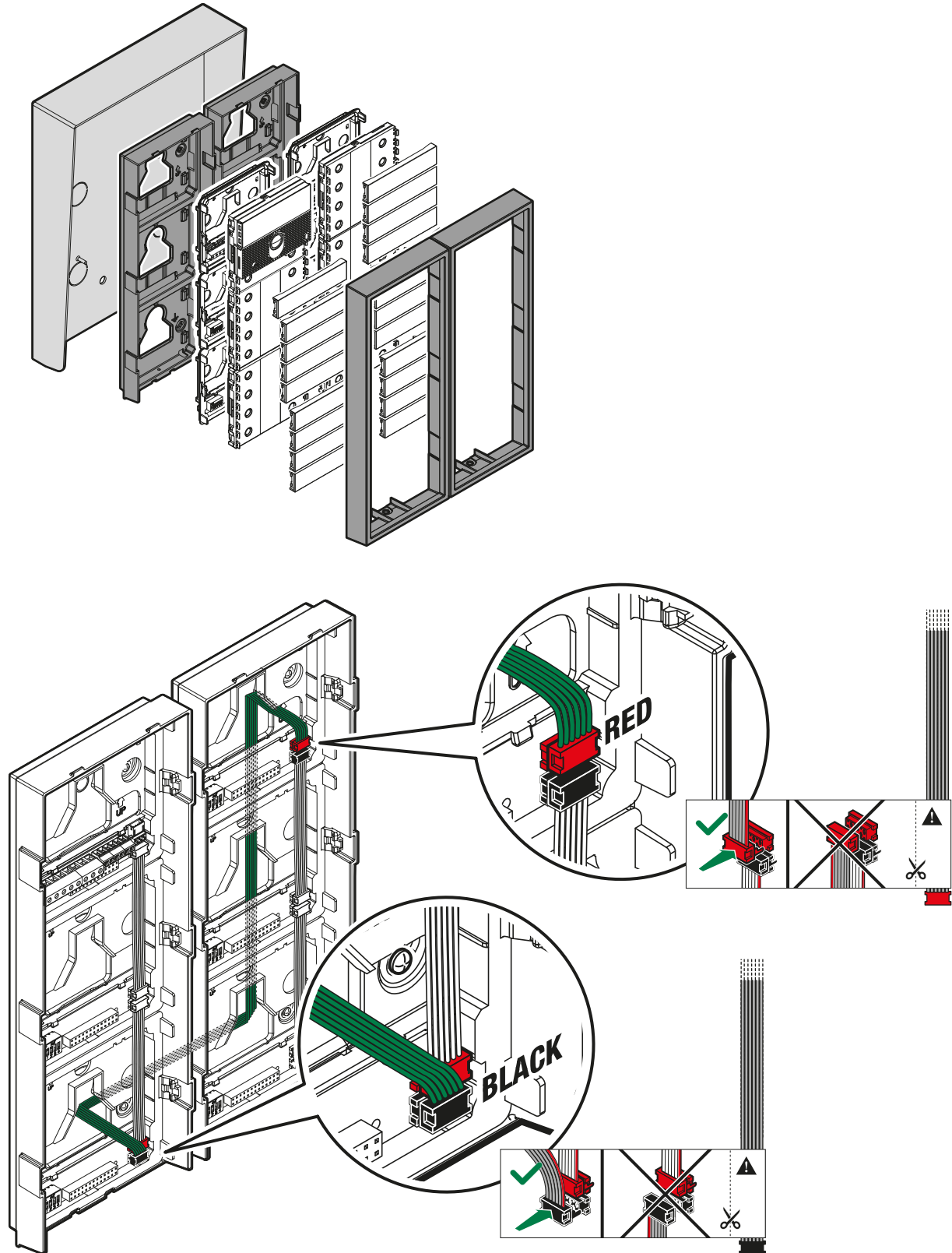
\* Kit Art. **UT9110** contains 5 sheets of pre-cut labels for nameplates and 1 sheet for the information module.

The sheets are made using Yupo paper which offers the ultimate transparency and resistance to atmospheric agents over time. To print the labels, use the editable .pdf file which is available to download free of charge from the website [pro.comelitgroup.com](https://pro.comelitgroup.com)

### Removing nameplates (2A) / module (2B)

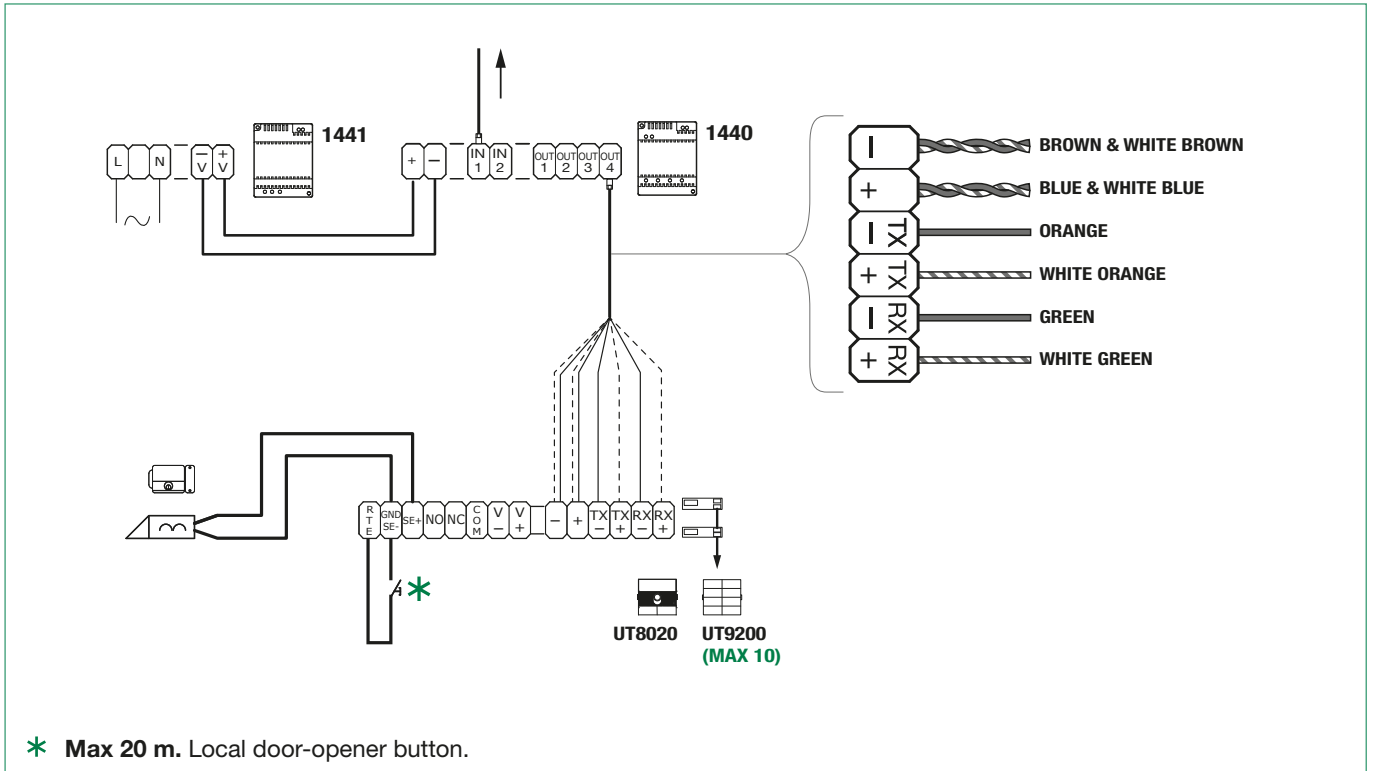


# Installation with side-by-side boxes

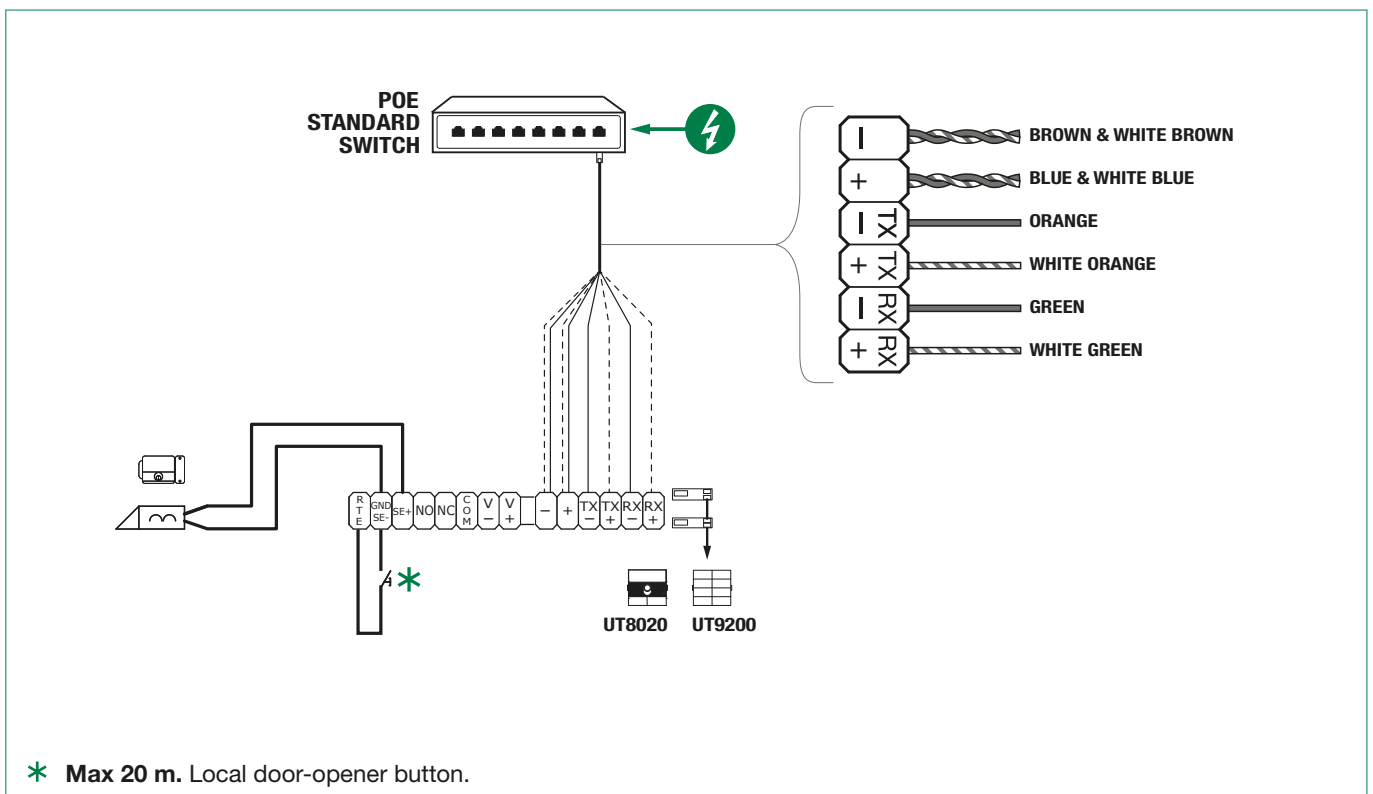


# Connections

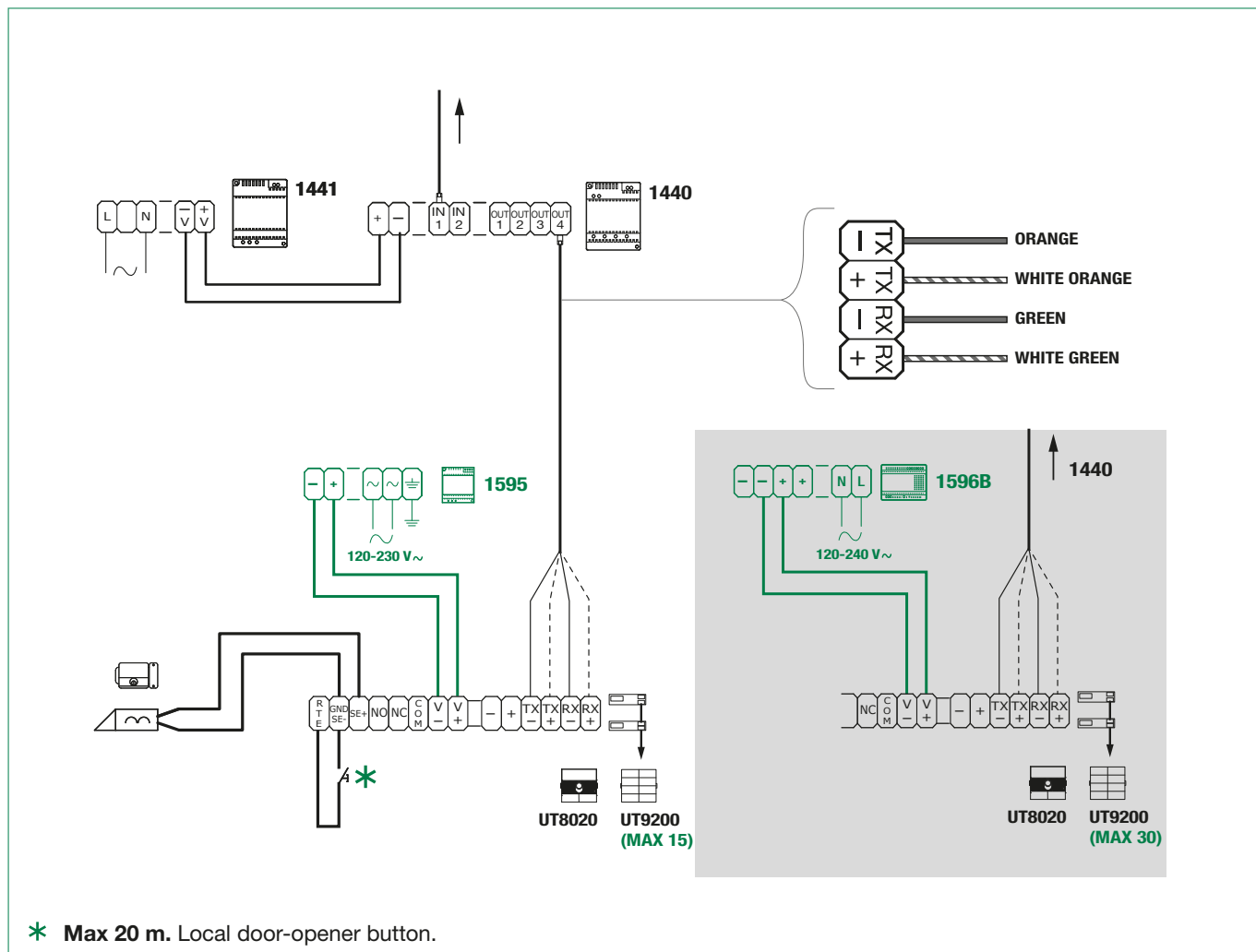
## Connection with power supply from floor distribution unit 1440



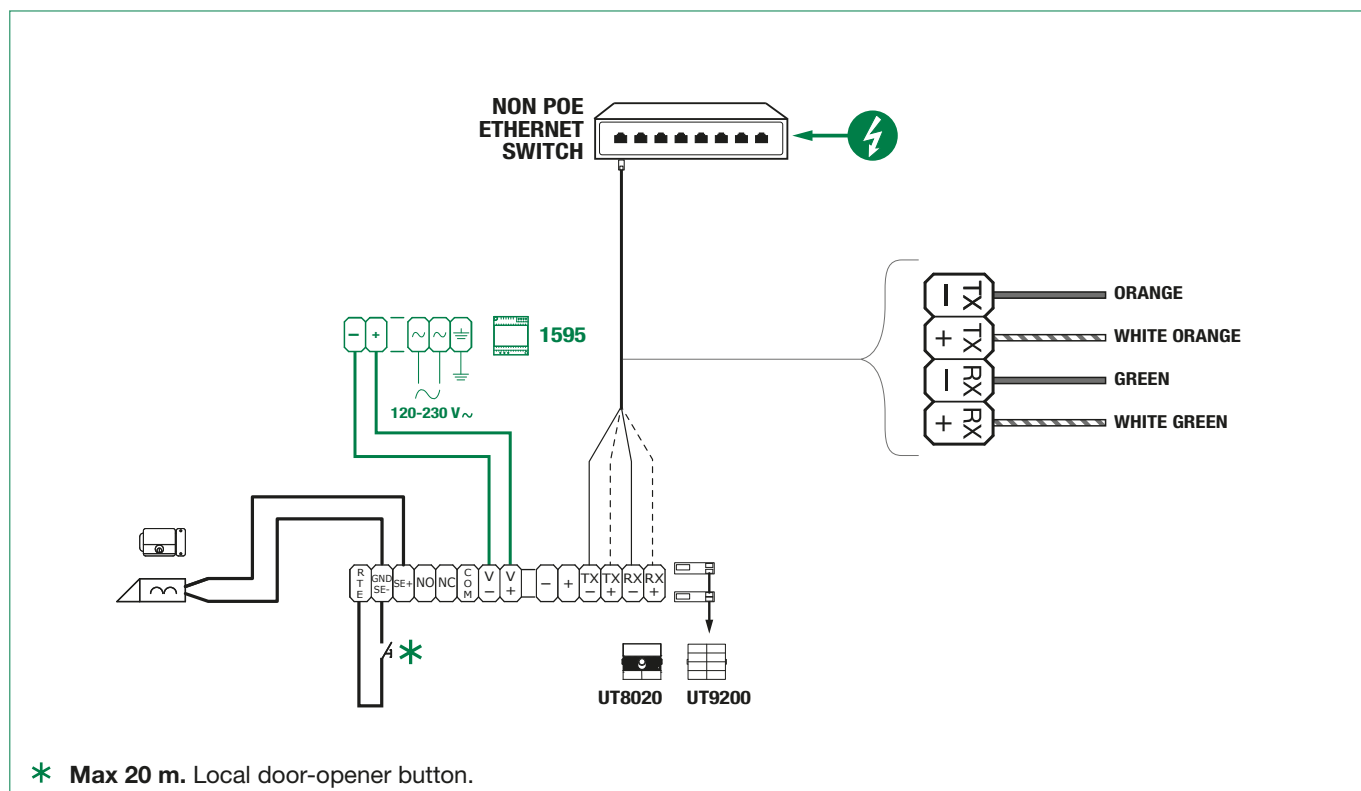
## Connection with power supply from standard POE switch



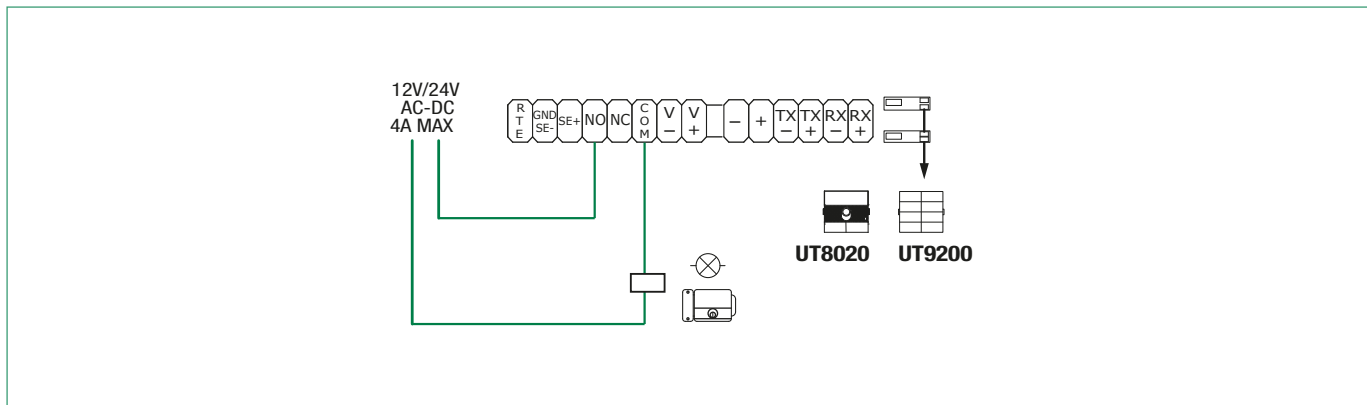
### Connection with separate power supply



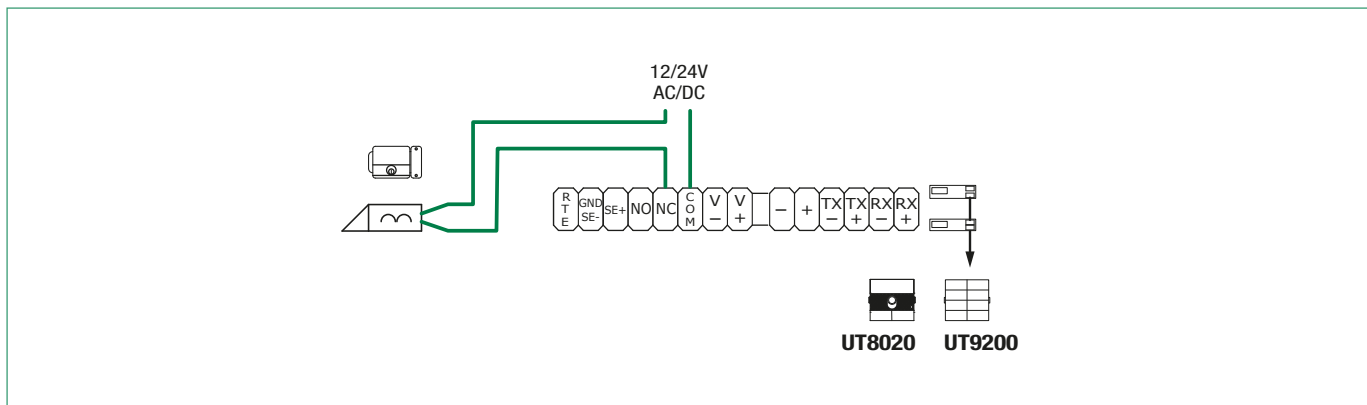
### Connection with separate power supply and non-POE switch



### Variant for using the external entrance panel relay



### Variant with safety door lock



# Module connection

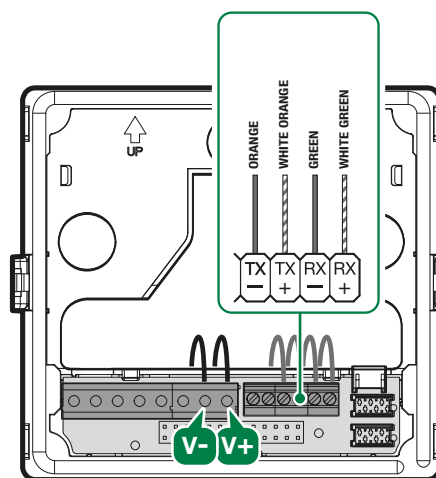
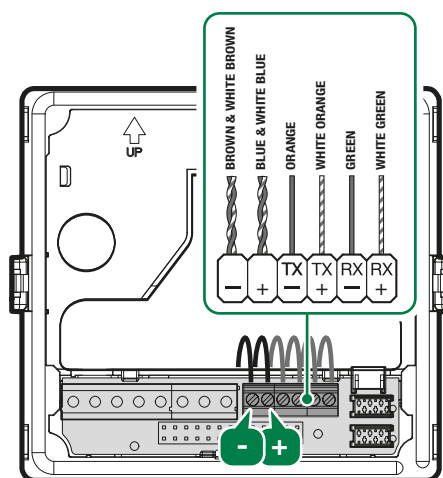
Maximum power available for the modules depending on the type of power supply.



| Power supply  | Maximum power available [W] |
|---------------|-----------------------------|
| Standard PoE  | 5,5                         |
| PoE from 1440 | 5,5                         |
| 1595          | 7.5                         |
| 1596B         | 15                          |

**A** power supply from floor distribution unit Art. 1440 or from standard PoE

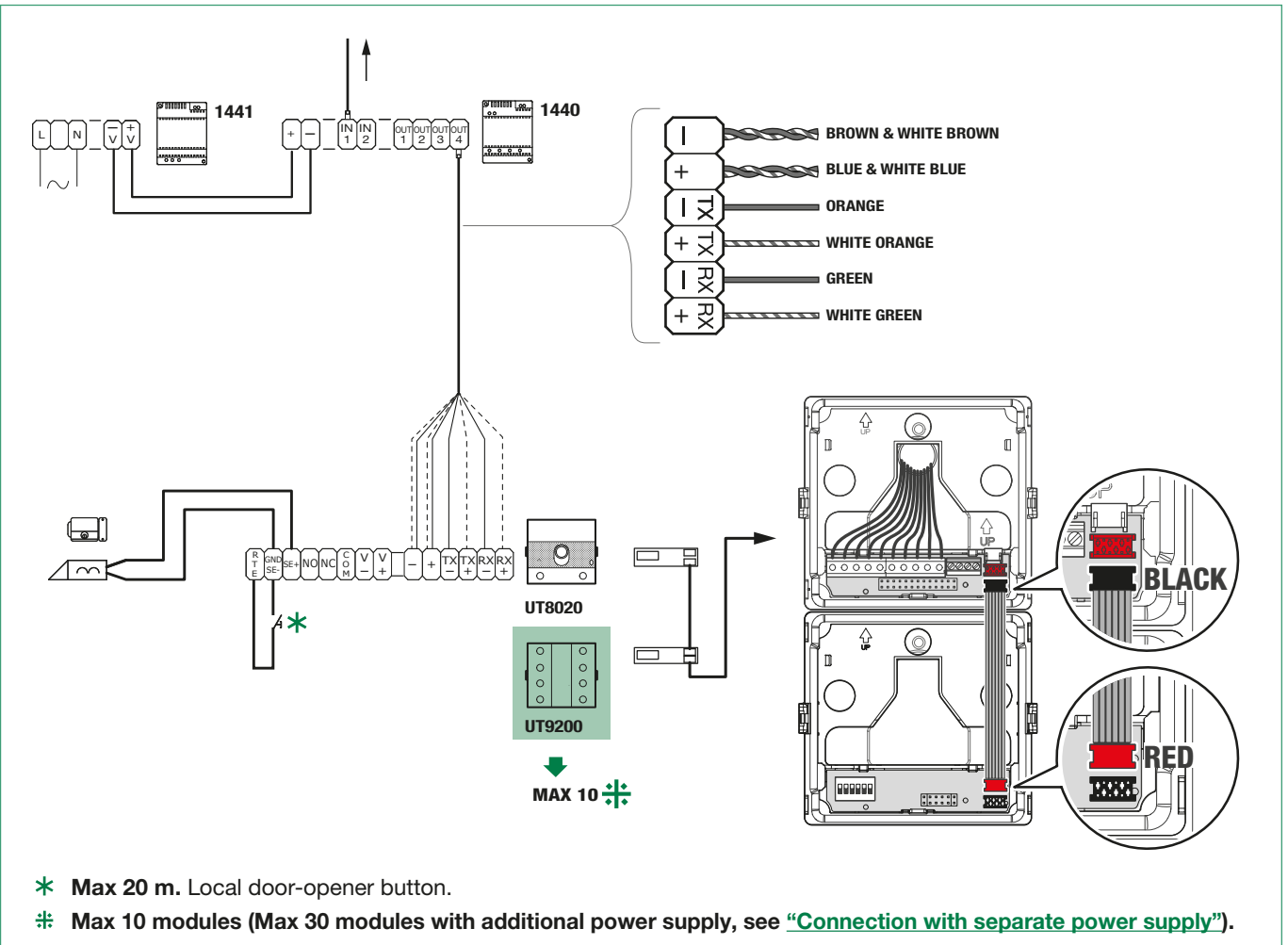
**B** power supply with additional power supply unit Art. 1595 or Art. 1596B



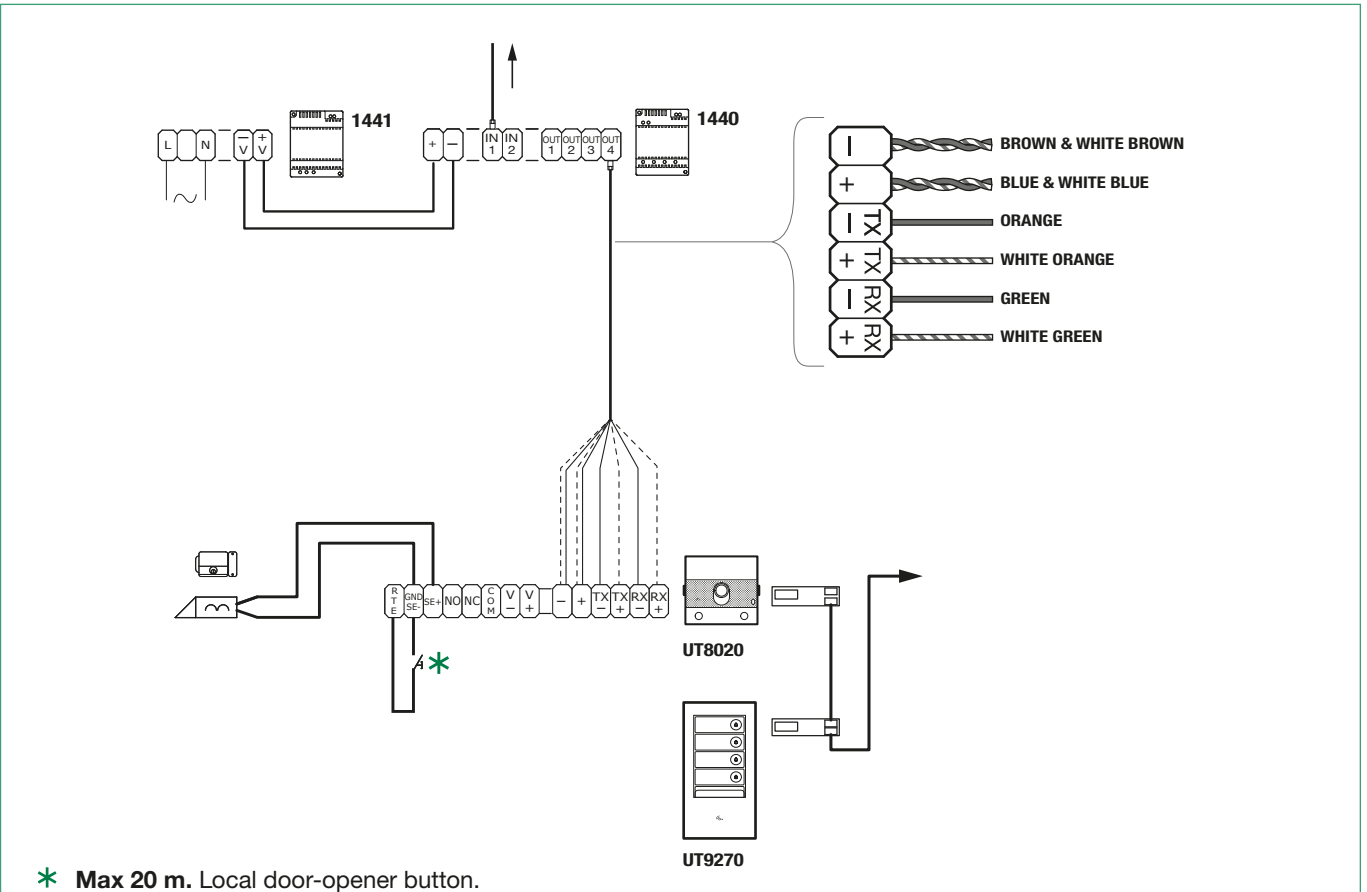
## Outdoor entrance panel module consumption table

| Code    |   | Absorption W   |  |
|---------|---|--|--|
| UT9200  | Call button modules                         | 0.5  |  |
| UT9240  | Information module                          | 0.5  |  |
| UT9240M | Metal information module                    | 0.5  |  |
| UT9279M | Number keypad module                        | 4.5  | With 2 bistable relays active at the same time |
| UT9310M | Magnetic induction module                   | 9.4  | Always requires additional power supply unit   |
| UT9270  | Touchscreen module                          | 5.5  |  |
| UT9260M | Digital directory module with Ultra display | PoE power supply with 1441: 2,6W<br>Power supply with 1595: 2,3W |  |

## Connection of button modules Art. UT9200

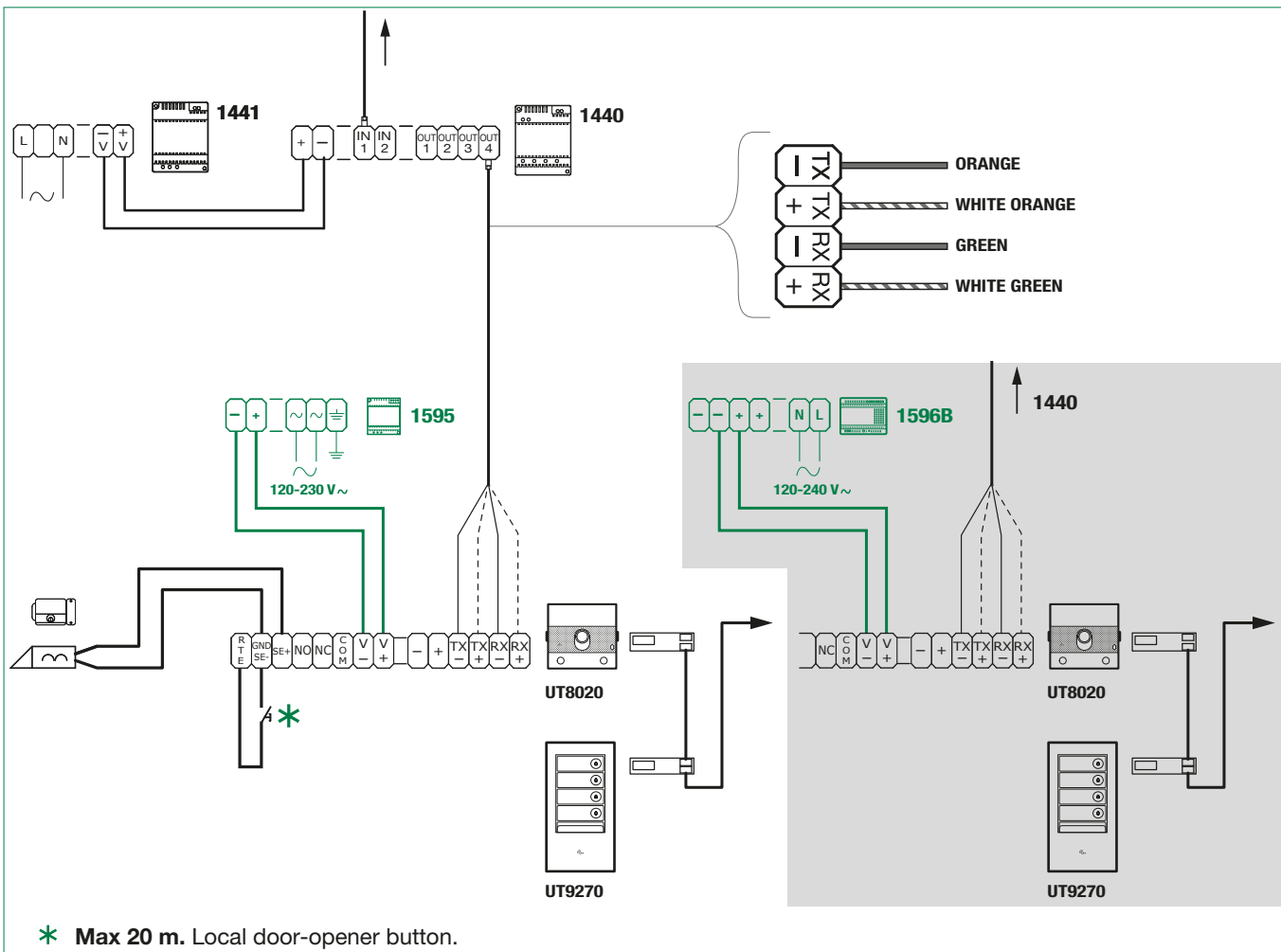


## Connection of Touchscreen module Art. UT9270

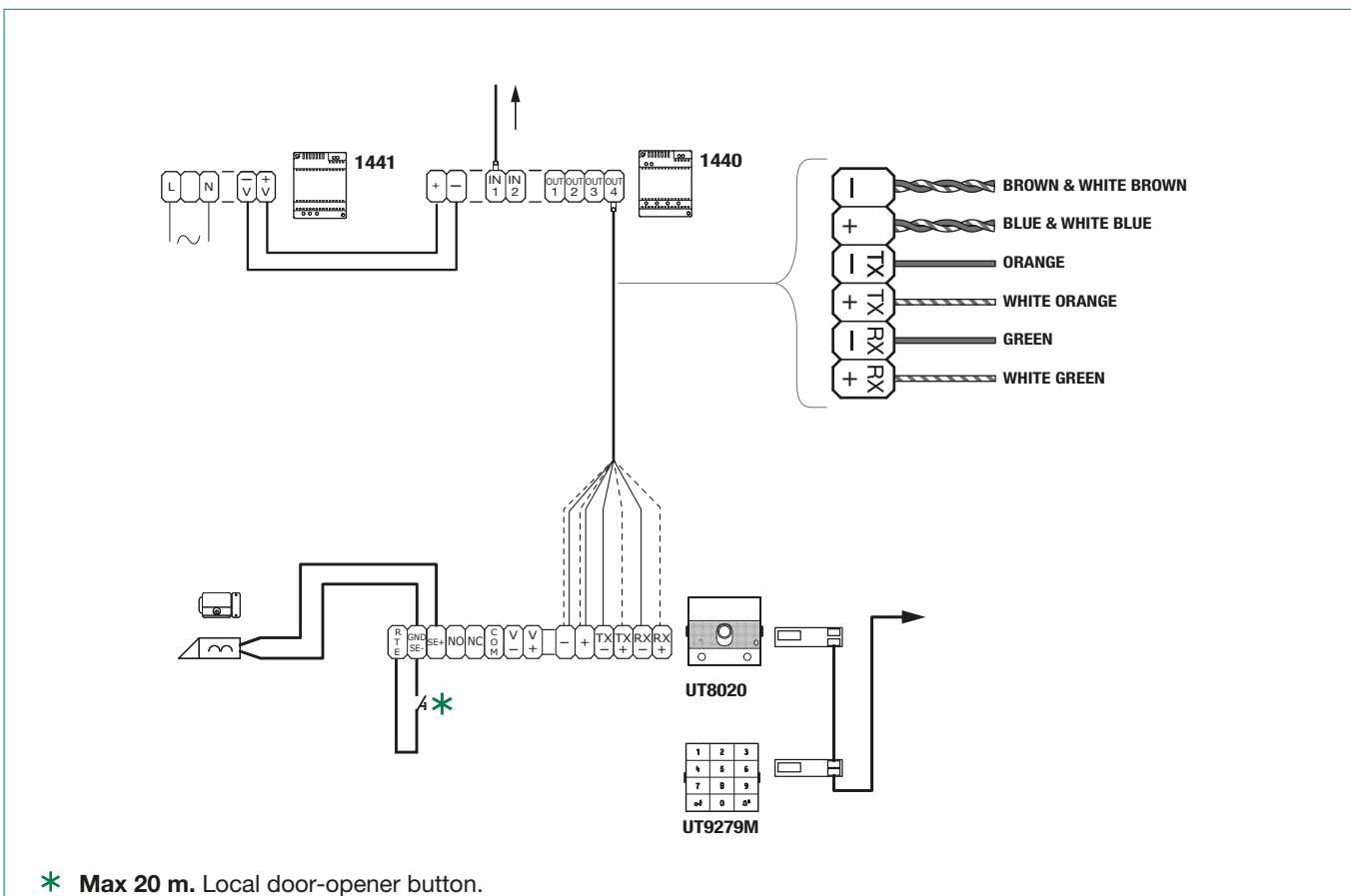




Connection of Touchscreen module Art. UT9270 with additional power supply unit



Connection of number keypad module Art. UT9279M



# Programming

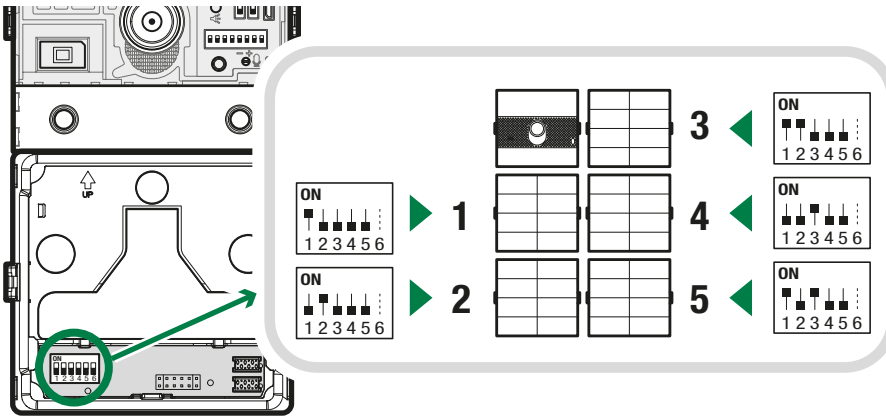
To perform programming correctly, proceed as follows:

- I. Address the button modules (see [“Address button modules”](#))
- II. Configure the ViP address for the UT8020 module via ViP Manager (see [“Programming via ViP Manager”](#))
- III. Program the ViP call addresses via ViP Manager (see [“Programming via ViP Manager”](#))

## Address button modules

DIP 1-5: addressing call button module (see TAB. A)

Addressing call button modules means that, in the event they are replaced, it is not necessary to reprogram the button addresses. All you need to do is assign the same address as before to the new module.



TAB. A

| code | DIP ON |                     |
|------|--------|---------------------|
| 1    | 1      | 12 3,4 23 1,2,3,5   |
| 2    | 2      | 13 1,3,4 24 4,5     |
| 3    | 1,2    | 14 2,3,4 25 1,4,5   |
| 4    | 3      | 15 1,2,3,4 26 2,4,5 |
| 5    | 1,3    | 16 5 27 1,2,4,5     |
| 6    | 2,3    | 17 1,5 28 3,4,5     |
| 7    | 1,2,3  | 18 2,5 29 1,3,4,5   |
| 8    | 4      | 19 1,2,5 30 2,3,4,5 |
| 9    | 1,4    | 20 3,5 31 1,2,3,4,5 |
| 10   | 2,4    | 21 1,3,5            |
| 11   | 1,2,4  | 22 2,3,5            |

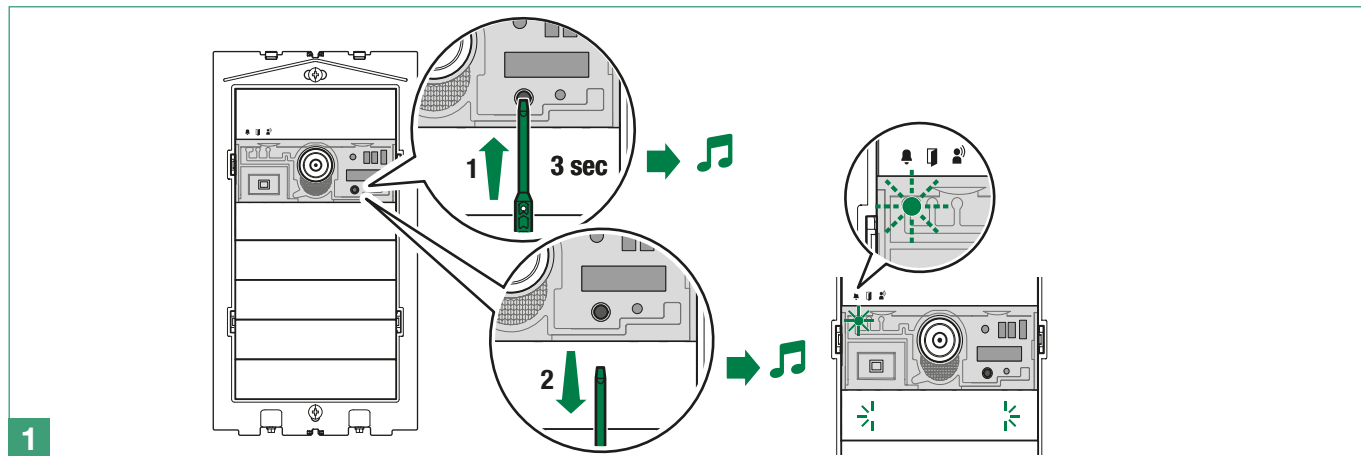
## First startup or restarting

When starting up the module (30 sec. approx.):

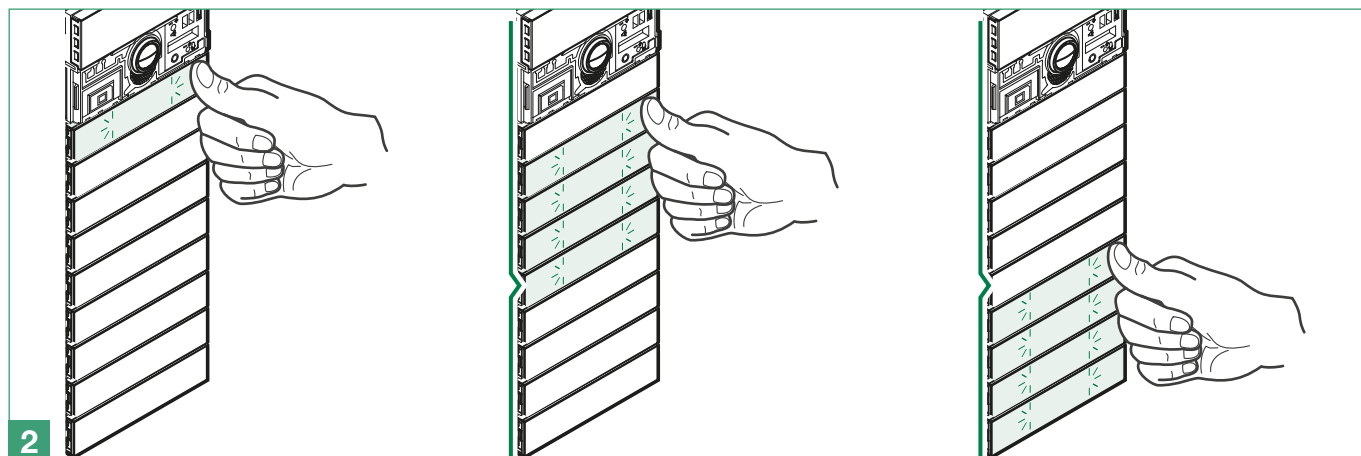
- ▶ the button backlighting comes on
- ▶ the red LED flashes
- » At the end of the startup process the red LED switches off and the backlighting behaves according to its configuration.

## Adjusting the brightness of the button LEDs

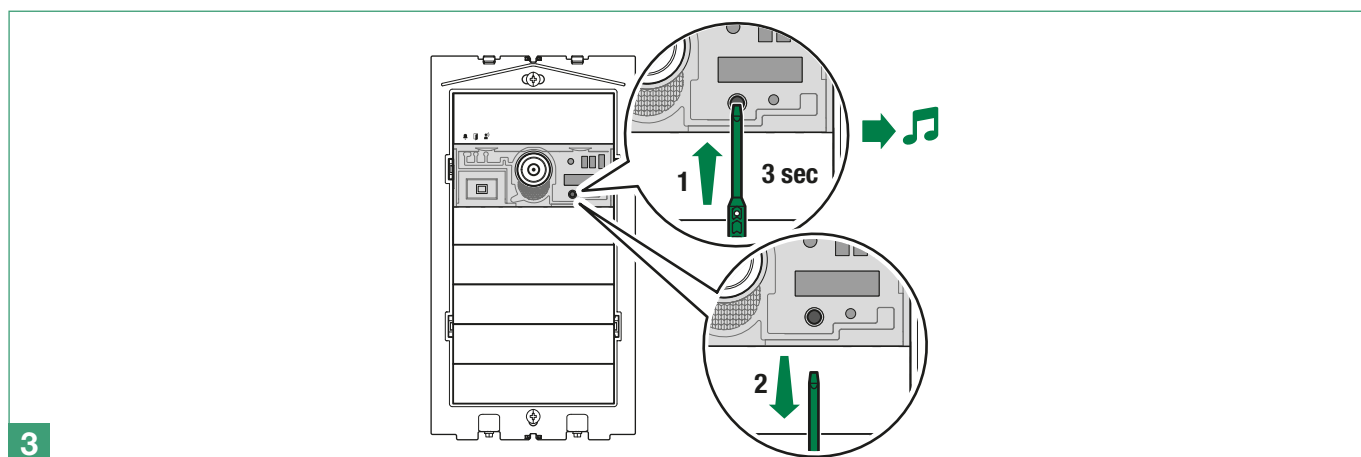
1. Press the button for 3 sec., until you hear a beep. Release the button.
  - » if the procedure was completed successfully, you will hear a confirmation tone; the red LED flashes and the button backlighting comes on.
  - » if there is a device error you will hear an error tone.



2. Press a button repeatedly for each module to adjust the brightness of the buttons individually.

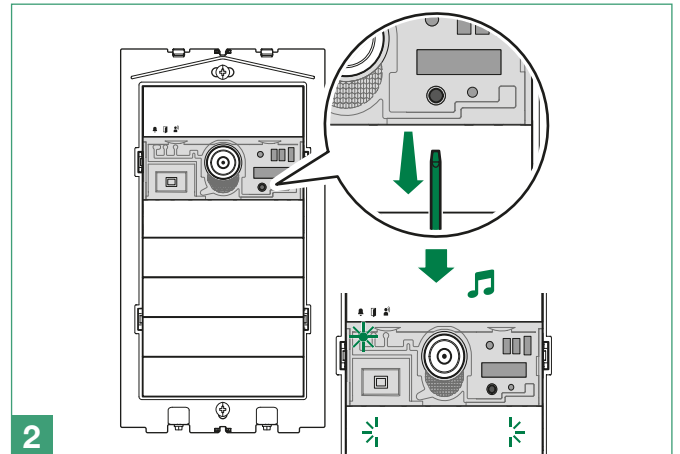
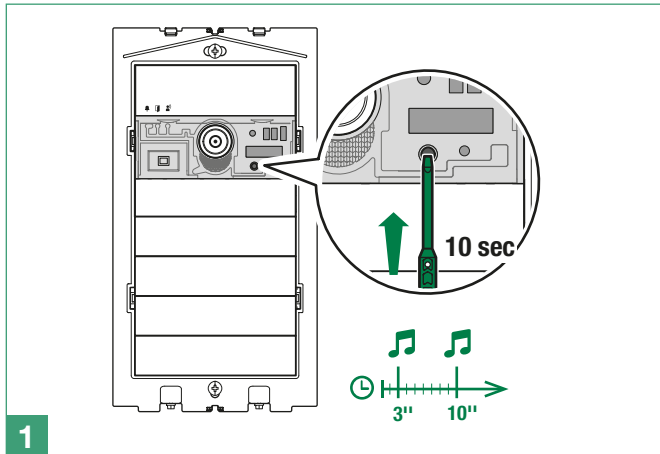


3. To exit programming mode, press the button for 3 sec., until you hear a beep. Release the button.



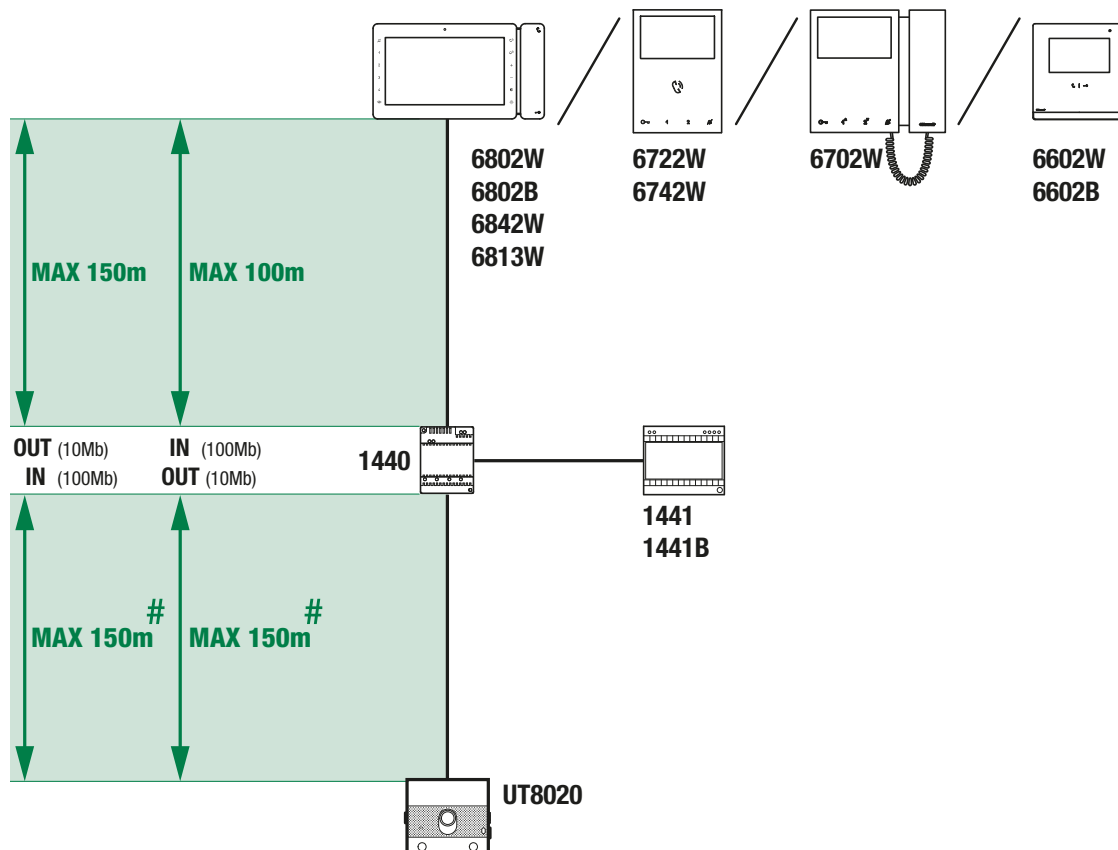
## Reset to factory values

1. Press the reset button for approximately 10 sec.:
  - » after 3 seconds you will hear a beep
  - » after 10 seconds you will hear a second beep
2. Release the reset button
  - » if the procedure was completed successfully, you will hear a confirmation tone; the red LED flashes and the button backlighting comes on for the duration of the device restart procedure.
  - » if there is a device error you will hear an error tone.



## Connection distances

# If Art. UT8020 is powered directly from third-party standard POE switches, the maximum distance is reduced to 100 m.



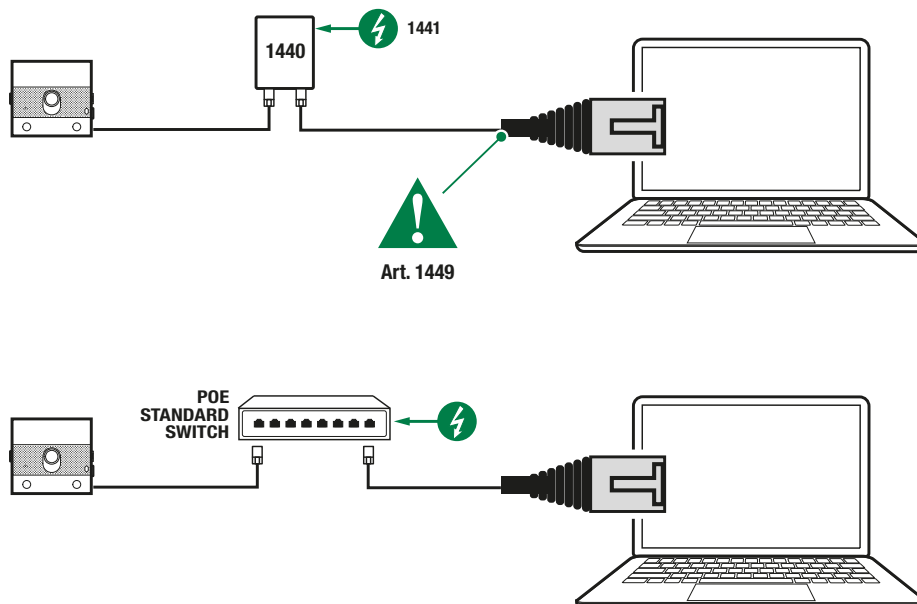
# Programming via ViP Manager

All device configurations (with the exception of button module addressing) can be carried out via PC and ViP Manager software, which is available to download free of charge from the website [pro.comelitgroup.com](http://pro.comelitgroup.com).

## For example:

- programming call addresses for the buttons
- activating audiovisual indications
- adjusting the backlighting and twilight sensor threshold
- adjusting volumes (speaker, microphone, voice messages, etc.)
- configuring video (zoom, horizontal and vertical shifting of the viewing area, colour, brightness, contrast, resolution)
- enabling and configuring the RTSP stream
- setting the functions that can be assigned to the RTE input (lock-release, priority call, actuator control, etc.)
- setting activations that can be assigned to the module SE outputs and relay

## Connections available for programming via ViP Manager





[www.comelitgroup.com](http://www.comelitgroup.com)

Via Don Arrigoni, 5 - 24020 Rovetta (BG) - Italy

