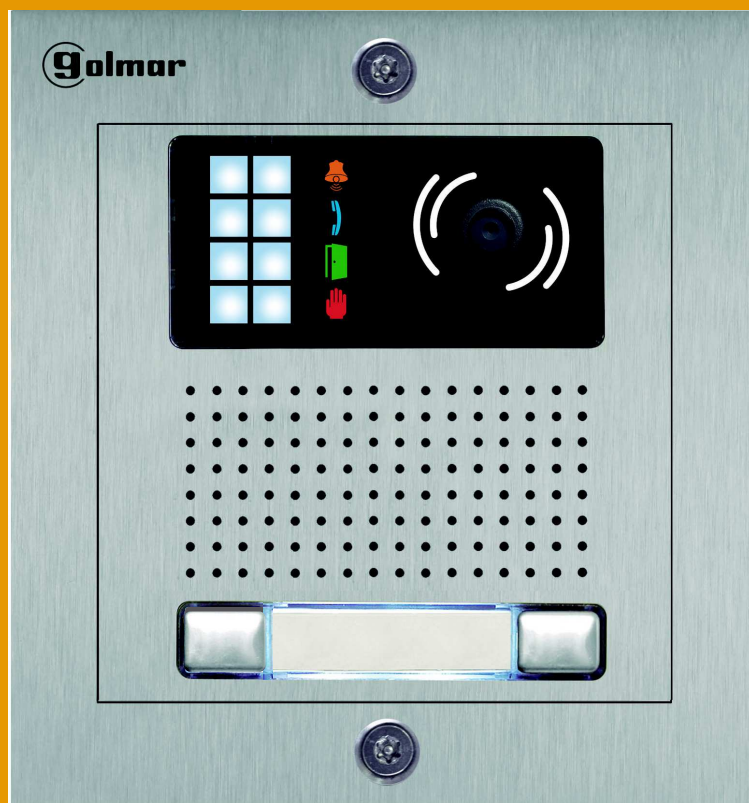


USER MANUAL



GB2 Video Door Entry System Kit 2-wire installation Stainless Steel Nexa Modular



INTRODUCTION

First and foremost we would like to thank you for purchasing this product.

Our commitment to satisfying our customers can be seen from our ISO-9001 certification and from the manufacturing of products like this one.

Its advanced technology and exacting quality control will ensure that customers and users enjoy the many features this system offers. To obtain the maximum benefit from these features and a properly wired installation, we kindly recommend that you spend a few minutes of your time reading this manual.

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SET-UP WARNINGS

- Do not use excessive force when tightening the power supply connection block screws.
- **Always disconnect the power supply** before installing or making modifications to the devices.
- The fitting and handling of these devices must be carried out by **authorised personnel**.
- The wiring must run at least **40 cm away from any other wiring installations**.
- Before connecting the device to the mains, check the connections between the door panel, power supply, distributors, camera unit, GSM interface, monitors and telephones.
- Use Golmar **RAP-2150** cable (2x1mm²).
- Always follow the instructions contained in this manual.











SAFETY PRECAUTIONS

- **Always disconnect the power supply** before installing or making modifications to the devices.
- The fitting and handling of these devices must be carried out by **authorised personnel**.
- The wiring must run at least **40 cm away from any other wiring**.
- In the power supply unit:
 - ⚠ Do not overtighten the screws on the connection block.
 - ⚠ Install the power supply in a dry and protected place free from the risk of water leaks or sprays.
 - ⚠ Avoid locations that are humid, dusty or near heat sources.
 - ⚠ Ensure that the air vents are free from obstruction so that air can circulate freely.
 - ⚠ To avoid damage, the power supply must be firmly secured in place.
 - ⚠ To prevent electric shock, do not remove the cover or handle the wiring connected to the terminals.

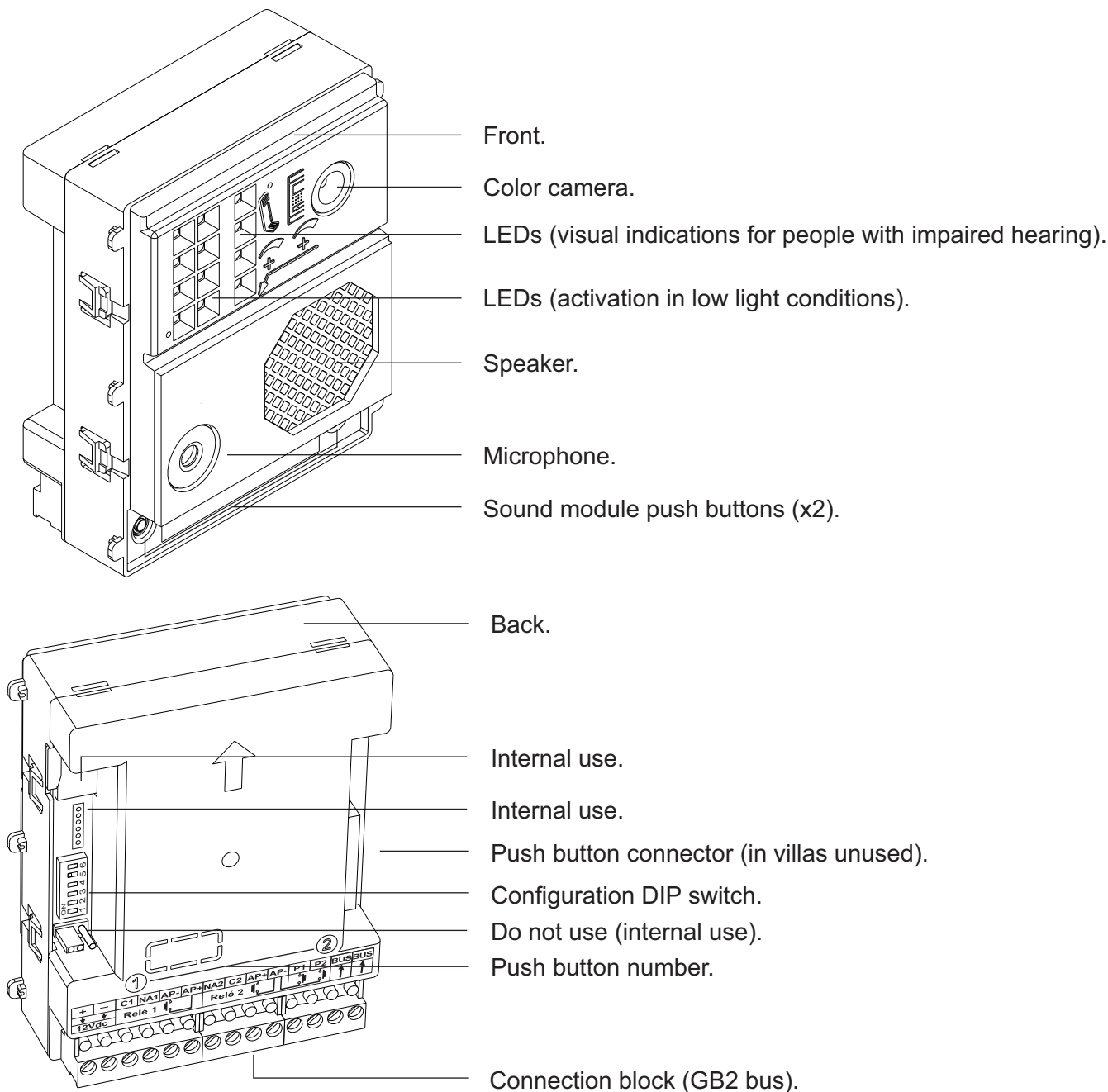
CHARACTERISTICS

- Video door entry system with simplified installation (non-polarised 2 wire bus).
- Up to 4 access panels (DP-GB2A distributor required for more than one access panel) per installation.
- Up to 2 apartments (NX5110 1-apartment kit and NX5220 2-apartment kit) per installation.
- Maximum 18 Thera monitors per installation.
- Maximum 16 Thera monitors in one apartment.
- Maximum 4 Thera monitors in parallel (without distributors) per installation.
- Installation with Thera monitors (FA-GB2/A power supply required).
- Call confirmation tone.
- Visual indications on the door panel for people with impaired hearing (indicating call process, communication, door open and channel busy).
- Audible indications on the door panel for people with impaired vision (indicating call in progress, missed call, door open, call finished and engaged).
- Door opening timeable at 1 or 5 seconds.
- 2 outputs for independently activated lock releases.
- Relay 1 output to activate the DC or AC lock releases actuated by relay.
- Relay 2 output to activate the DC or AC lock releases actuated by relay.
- Input for external door opening button (Relay 1 output).
- Input for external door opening button (Relay 2 output).
- Maximum distance between the power supply and the furthest door panel: 80m with a cross-section of 1mm².
- Maximum distance between the power supply and the last distributor: 80m with a cross-section of 1mm².
- Maximum distance between the distributor and monitor: 40m with a cross-section of 1mm².

SYSTEM OPERATION

- To make a call, the visitor must press the button of the apartment; an audible sound indicates that the call is being made and LED  will turn on. If vocal synthesis is enabled, a "Call is in progress" message appears to indicate a call is being made. At this moment the apartment's monitor(s) receives the call. During the call the visitor can correct his call by pressing a push button corresponding to a different apartment, in which case the original call is cancelled.
- In systems with several access doors, the other door panel(s) will be automatically disconnected. If another visitor tries to call, a telephone tones will be heard to indicate that the system is busy and LED  will illuminate. If vocal synthesis is activated, the message "System is busy, try later" will be indicated on the door panel.
- The call lasts for 40 seconds. The image appears on the monitor (with code 0 "apartment 1" or monitor 16 if the call is in "apartment 2") when receiving the call without the visitor knowing.
If the call is not answered within 40 seconds, LED  will turn off and the channel will be freed.
- To establish communication, press push button  on any monitor in the apartment. Door panel LED  will turn on. If the vocal synthesis is enabled the message "you can speak now" will be heard confirming the communication is activated.
- Communication will last for one and a half minutes or until push button  is pressed again. When communication has finished, LEDs  and  will turn off and the channel will be freed. If vocal synthesis is activated, a "Communication is finished" message will indicate that the call is over on the door panel.
- To open the door, press push button  during the call or communication processes: one press will activate the lock release for five seconds and LED  will also turn on for five seconds. If vocal synthesis is activated, a "Door is open" message will be indicated on the door panel.
- For a description of the functioning and setup of the monitor, see the monitor's user manual.

DESCRIPTION OF THE EL632/GB2 SOUND MODULE

Description of the EL632/GB2 sound module:

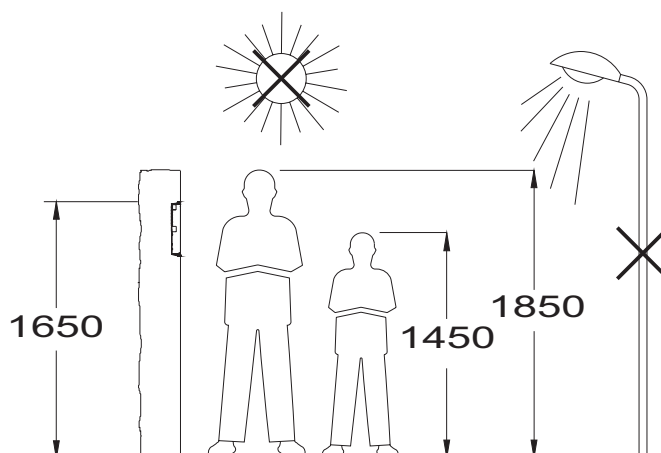
Connection terminals:

+, -	: Positive, negative (12Vdc output for Golmar DC lock release).
C1	: Contact "C" for lock release (Relay 1).
NA1	: Contact "NO" for lock release (Relay 1).
AP -, AP +	: Input for external door opening button (Relay 1).
NA2	: Contact "NO" for lock release (Relay 2).
C2	: Contact "C" for lock release (Relay 2).
AP +, AP -	: Input for external door opening button (Relay 2).
P1	: Input for external call button (push button 1).
P2	: Input for external call button (push button 2).
BUS	: Connection BUS (non-polarised).
BUS	: Connection BUS (non-polarised).

Note: See wiring diagrams for connections (pages 11-18).

DOOR PANEL INSTALLATION

Positioning the embedding box:



Make a hole in the wall to position the top of the door panel at a height of 1.65 m.

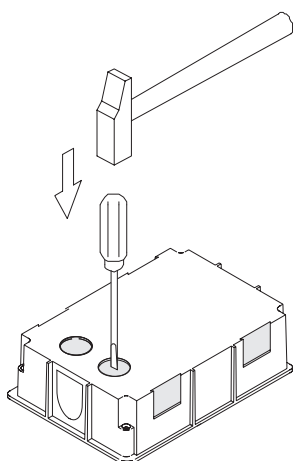
Hole dimensions:

CE-610 embedding box: 125(W) x 140(H) x 56(D) mm.

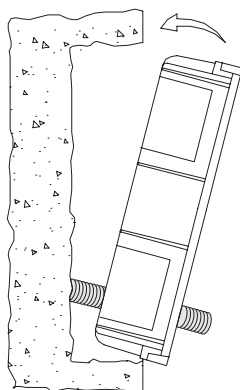
The door panel has been designed to be used under most environmental conditions. It is however advisable to take extra precautions to prolong its service life (shields, covered areas, etc.).

To obtain optimum video door entry system image quality, avoid direct contact from light sources (sunshine, street lights, etc.).

Preparing the cable entry:



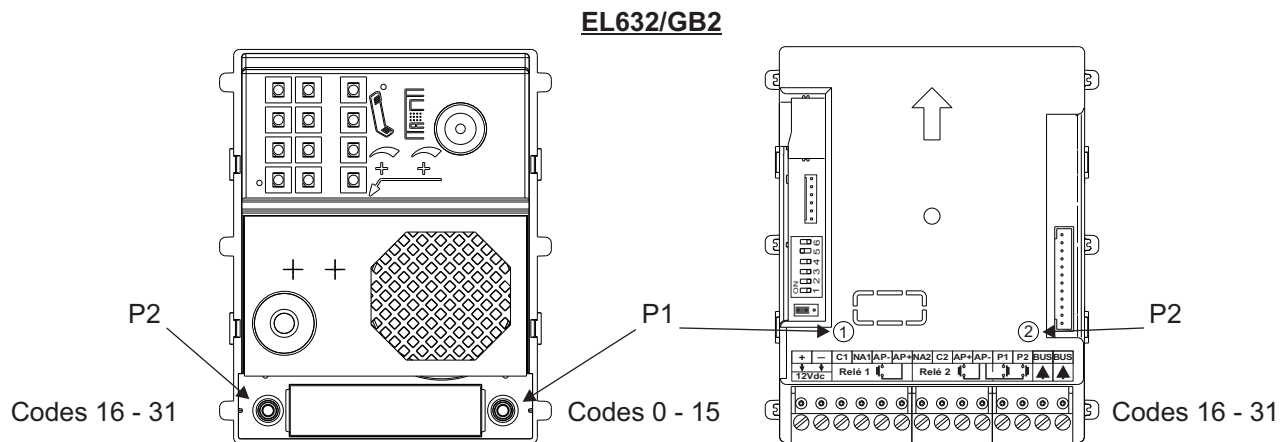
Break through the hole to allow the entry of the cable
into the bottom section of the embedding box.



Pass the cable through the hole made in the embedding box.
Embed the box and ensure that it is level and flush.
Once embedded, remove the protective stickers from the screw holes.

DOOR PANEL INSTALLATION

Codes assigned to the call buttons of the sound module:



The sound module's P1 and P2 push buttons are assigned with factory codes.

- Apartment 1, push button “P1”: Assigned with codes 0-15.

Monitors in this apartment must be set with codes in order of allocation of 0-15.

When push button “P1” on the door panel is pressed, all of the monitors in apartment 1 will receive the call and only the monitor assigned with code 0 will show the door panel image. If the call is answered from any other monitor in the apartment, the image on the monitor assigned with code 0 will disappear and audio and video communication will be established with the door panel.

- Apartment 2, push button “P2”: Assigned with codes 16-31 (only kits with 2 push buttons).

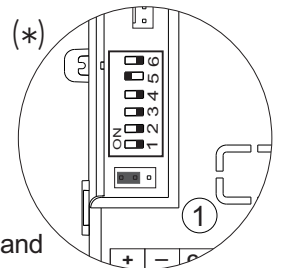
Monitors in this apartment must be set with codes in order of allocation of 16-31.

When push button “P2” on the door panel is pressed, all of the monitors in apartment 2 will receive the call and only the monitor assigned with code 16 will show the door panel image. If the call is answered from any other monitor in the apartment, the image on the monitor assigned with code 0 will disappear and audio and video communication will be established with the door panel.

Description of the configuration dip switch of the sound module:

The configuration dip switch is located on the left side of the rear part of the module.

- (*) Door Panel Address:
Dip switches: 1 and 2 OFF (address 1), 1 ON and 2 OFF (address 2), 1 OFF and 2 ON (address 3), 1 and 2 ON (address 4).
- (*) Leave OFF.
- (*) Set to OFF for use with door panels in villas and set to ON for use in apartment buildings.
- (*) Set to ON to configure the door release time to 5 seconds. Set to OFF to configure the door release time to 1 second.
- (*) Set to ON to configure: (see page 8-9)
The vocal synthesis language (using the sound module's P1 push button).
Relay 1 and Relay 2 of the lock release will be NO or NC (using the sound module's P2 push button). Set to OFF when configuring is complete.

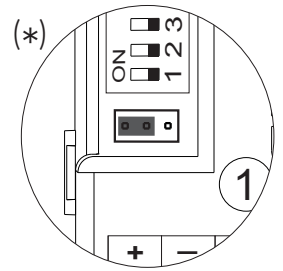


(*) **Factory default setting.**

DOOR PANEL INSTALLATION

Description of the configuration jumper:

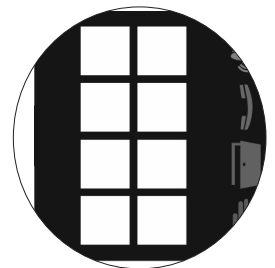
Important: Do not change the factory default position of the configuration jumper.



(*) Factory default setting.

Description of the door panel LED lights (for low light conditions):

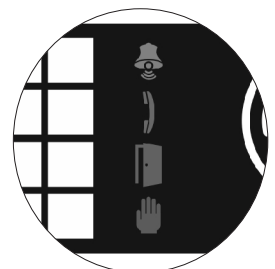
The door panel LED lights will turn on during a call if there is low light, allowing the person who called to be seen on the apartment's monitor.



Description of the visual indications on the door panel:

Visual indications on the door panel for people with impaired hearing:

- While calling: LED “🔔” will turn on during the call and while in communication.
- During communication: LED “📞” will turn on during the communication process.
- During door release: LED “🚪” will turn on during door release.
- End of communication: LEDs “🔔” and “📞” will turn off.
- Calling at one door panel while another door panel is communicating (if there is more than one door panel): LED “👋” will turn on for 3 seconds..
- While calling and the monitor is in “Do not disturb” mode: LED “🔔” will turn on for 4 seconds.
- While calling (apartment with no monitor or telephone): LED “🔔” will turn on for 4 seconds.



Description of the vocal synthesis (audible indications on the door panel):

Audible indications from the door panel for people with impaired vision.





If the vocal synthesis in the sound module is activated (see pages 6 and 8 for setup), a voice with the following messages can be heard from the door panel:

- While calling: “Call is in progress”
- During door release: “Door is open”.
- End of communication: “Communication is finished”.
- Calling at one door panel while another door panel is communicating (if there is more than one door panel): “System is busy, try later”.
- While calling and the monitor is in "Do not disturb" mode: “Resident Unavailable”.
- While calling (apartment with no monitor or telephone): “Resident Unavailable”.

DOOR PANEL INSTALLATION





Adjusting the door panel communication volume:

If after starting the system the door panel audio volume seems inadequate, follow these steps:

- Call an apartment.
- The call is received in the apartment. Establish communication by pressing the push button  on the monitor.
- Next, press the push button used to call the apartment for 3 seconds until a number of confirmation tones are heard and the door panel communication LED  starts to blink.
- Each press on the same call button will increase the door panel volume and LED blink speed.
There are 5 volume settings and the blink speed of LED  will increase for each. Slow to fast blink - low to high volume. After reaching "setting 5", that is, maximum blink speed and volume, the next setting is "setting 1", that is, minimum blink speed and volume (carousel mode).
- To save the volume setting keep the push button used to call the apartment pressed until a number of confirmation tones are heard and the door panel communication LED  turns off.

Adjusting the vocal synthesis volume:

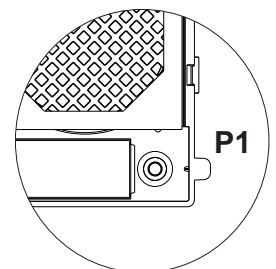
If after starting the system the vocal synthesis volume of the door panel seems inadequate, follow these steps:

- Within 10 seconds of connecting power to the door panel press any call push button on the door panel.
- Keep the call push button pressed until the vocal synthesis volume is heard and door panel LED  starts to blink.
- Each press on the same call push button will increase the vocal synthesis volume and the blink speed of LED .
There are 5 volume settings and the blink speed of LED  will increase for each. Slow to fast blink - low to high volume. After reaching "setting 5", that is, maximum blink speed and volume, the next setting is "setting 1", that is, minimum blink speed and synthesiser volume (carousel mode).
- To save the volume setting keep the push button used to call the apartment pressed until a number of confirmation tones are heard and the door panel communication LED  turns off.

Selecting the vocal synthesis language:

To activate the vocal synthesis of the door panel, follow these steps:

- Set dip 6 of the sound module's configuration dip switch to ON (see page 6), a confirmation tone will be heard.
- The desired language can be set using the sound module's P1 push button.
- Each press will change the language. Continue doing this until the desired language is heard.
- Once finished set dip 6 on the configuration dip switch to OFF.
A confirmation tone will be heard.

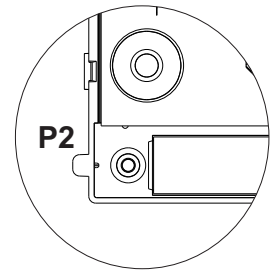


DOOR PANEL INSTALLATION

Configuring the contact type for Relay 1 and Relay 2 (lock release):

To change the contact type for lock release activation of Relay 1 and Relay 2 of the door panel, follow these steps:

- Set dip 6 of the sound module's configuration dip switch to ON (see page 6), a confirmation tone will be heard.
- Use the sound module's P2 push button to select the desired contact type (N.O factory default or N.C).
- Each press will change the contact type. A long confirmation tone will be heard if the selected contact is N.O or two short tones if the selected contact is N.C. Stop pressing P2 when the desired tone is heard.
- Once finished set dip 6 on the configuration dip switch to OFF. A confirmation tone will be heard.



Description:

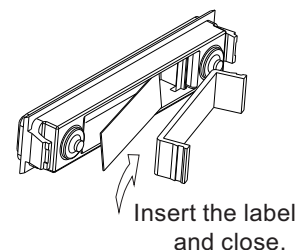
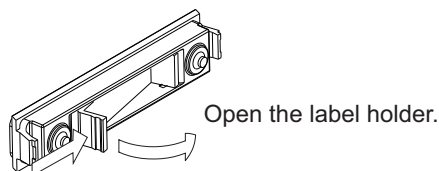
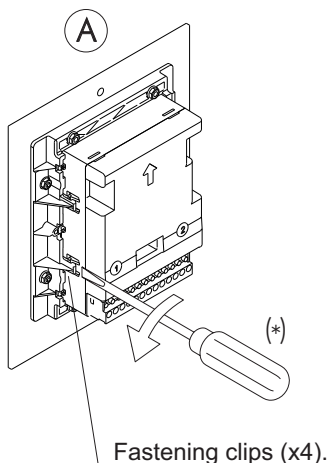
Normally open: N.O.

Normally closed: N.C.

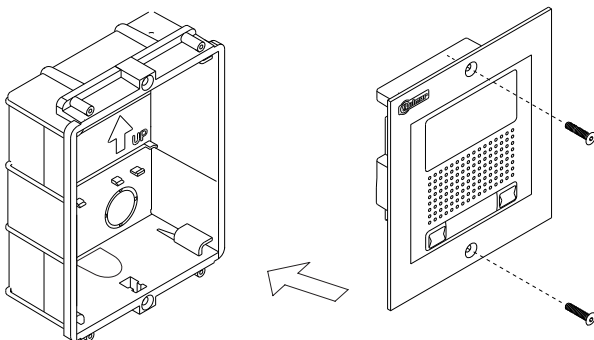
Important: The selected contact type will apply to both Relay 1 and Relay 2.

Inserting the push button identification labels:

To insert the push button identification labels, remove the sound module from the door panel to access the label holder and use a flat screwdriver to gently lever open the fastening clips, as shown in drawing (A). Once the identification labels have been inserted, reattach the sound module to the door panel. Line up the tabs on the sound module with their respective fastening clips and then press gently until correctly positioned.



Closing the door panel:



Once the door panel has been correctly wired, configured and adjusted, fix it to the embedding box using the tamper-proof screws and 1/4" tamper-proof screwdriver bit supplied.

Important:

- Before closing the door panel, make a test call to any apartment to ensure that everything works correctly.
- Keep the tamper-proof screwdriver bit in a safe place in case the door panel needs to be reopened.

POWER SUPPLY INSTALLATION

FA-GB2/A power supply installation instructions:

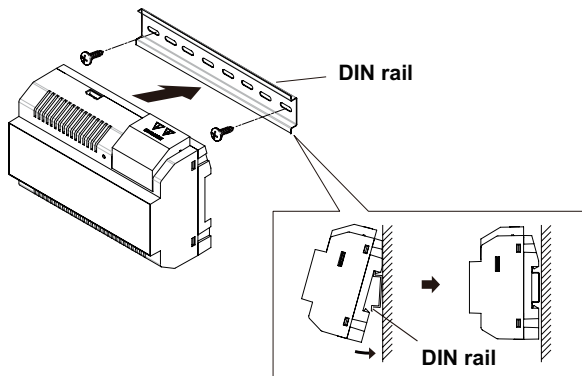
The FA-GB2/A power supply has been specially designed for the GB2 video door entry system with Golmar Thera monitors.

Install the power supply in a dry and protected place free from the risk of drip or water projections.

To prevent electric shock, do not remove the protective cover of the primary or handle the wiring.

The installation and handling of this device must be carried out by authorised personnel in the absence of electrical current.

To avoid damage, the power supply has to be firmly fixed.

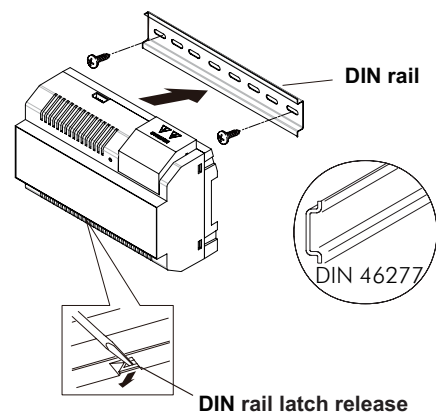


Please note that current regulations stipulate that the power supply must be protected by a thermo-magnetic circuit breaker.

Connect the FA-GB2/A power supply to the earth connection.

Mount the DIN rail to the wall with the plugs and screws supplied.

Then attach the power supply by applying slight pressure.



The power supply can be installed on a DIN 46277 rail.

To remove the power supply from the DIN rail, use a flat screwdriver to lever it off, as shown in the drawing.

The FA-GB2/A model requires 8 elements on the rail.

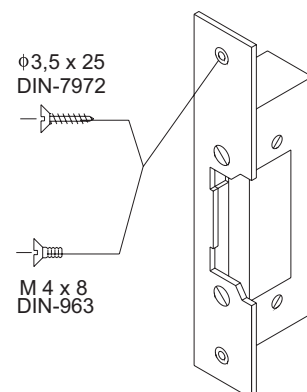
IMPORTANT: the maximum number of units that can be connected to an FA-GB2/A power supply is 18 THERA GB2 monitors.

Replace the protective cover once the input terminals have been wired.

LOCK RELEASE INSTALLATION

Lock release installation instructions:

If the lock release is to be fitted to a metal door, use a Ø3.5mm drill bit and thread the hole made. For wooden doors, use a Ø3mm drill bit.



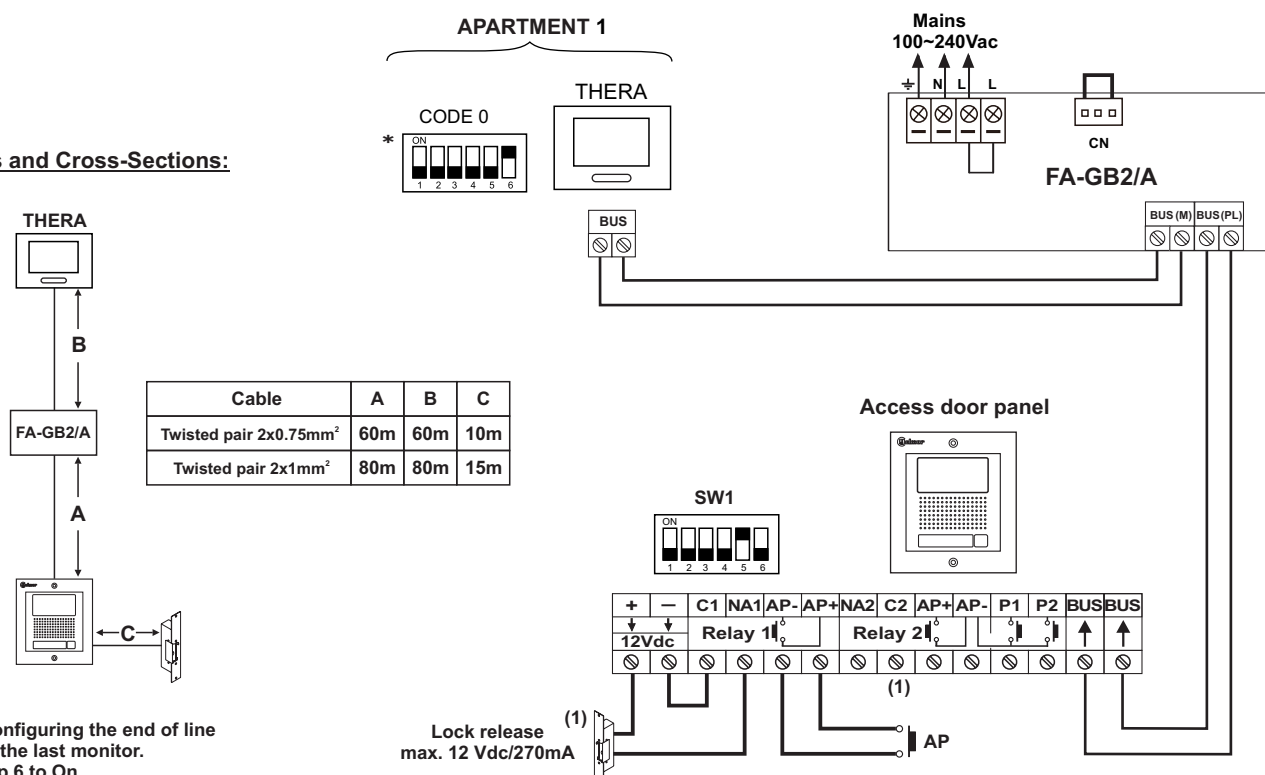
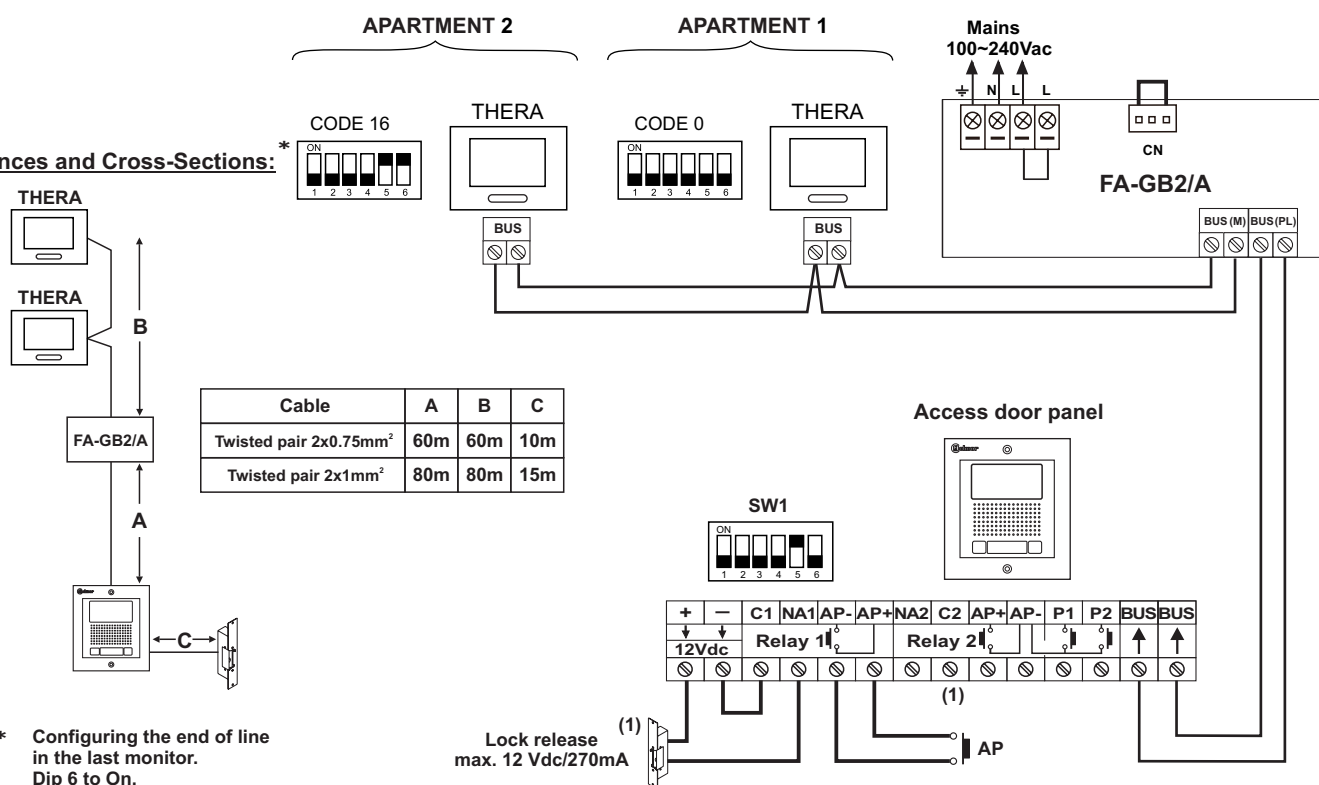
IMPORTANT:

- The lock release must be 12V AC or DC (Golmar).

(See page 18 for AC lock releases and pages 11-18 for DC lock releases).

- The kit is supplied with two varistors. If connecting an AC lock release to one of the outputs, fit the varistor supplied directly to the lock release terminals to ensure the device functions correctly.

WIRING DIAGRAMS:

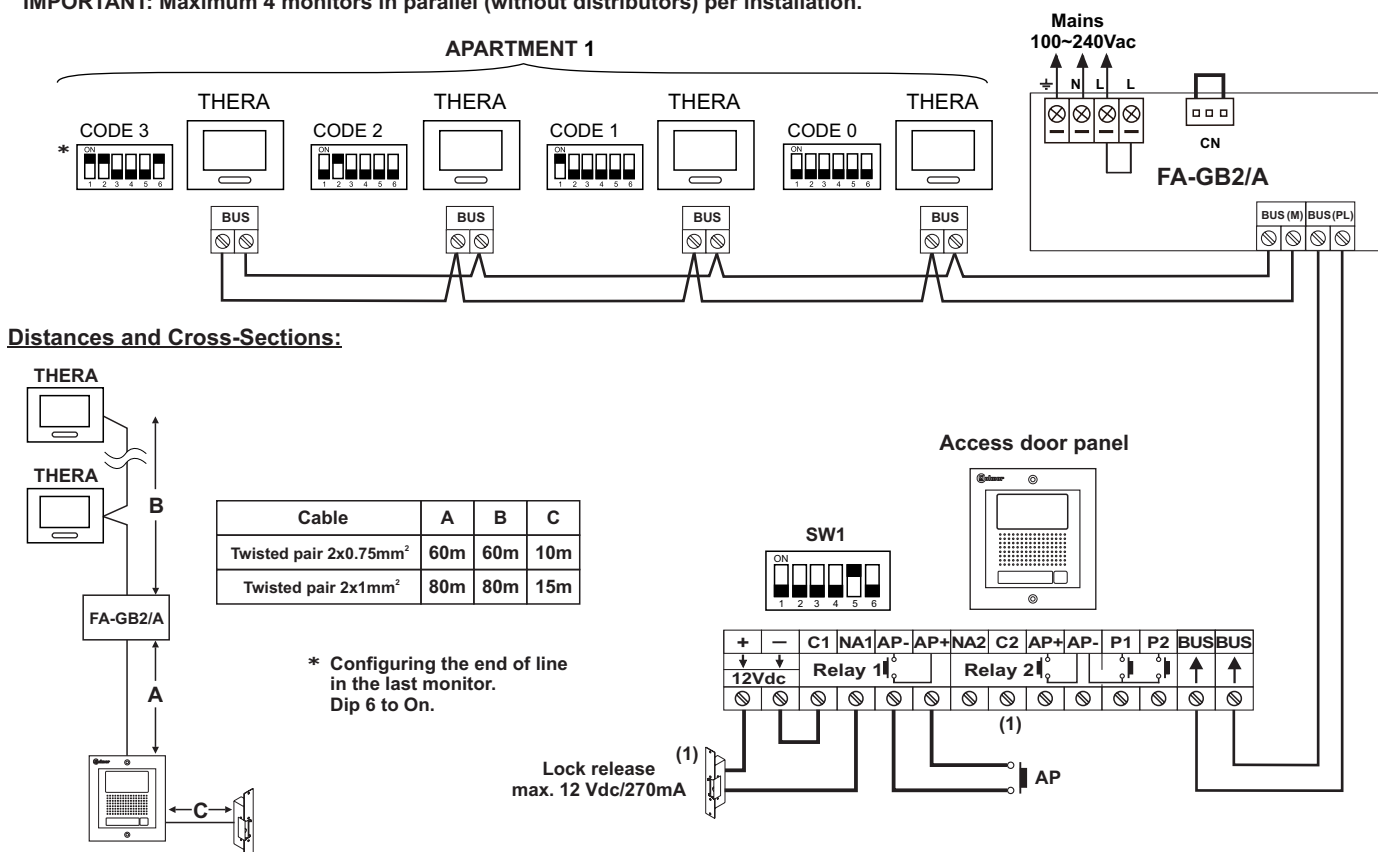
One apartment kit (NX5110 THERA kit) and Golmar DC lock release.Distances and Cross-Sections:Two apartment kit (NX5220 THERA kit) and Golmar DC lock release.Distances and Cross-Sections:

(1) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

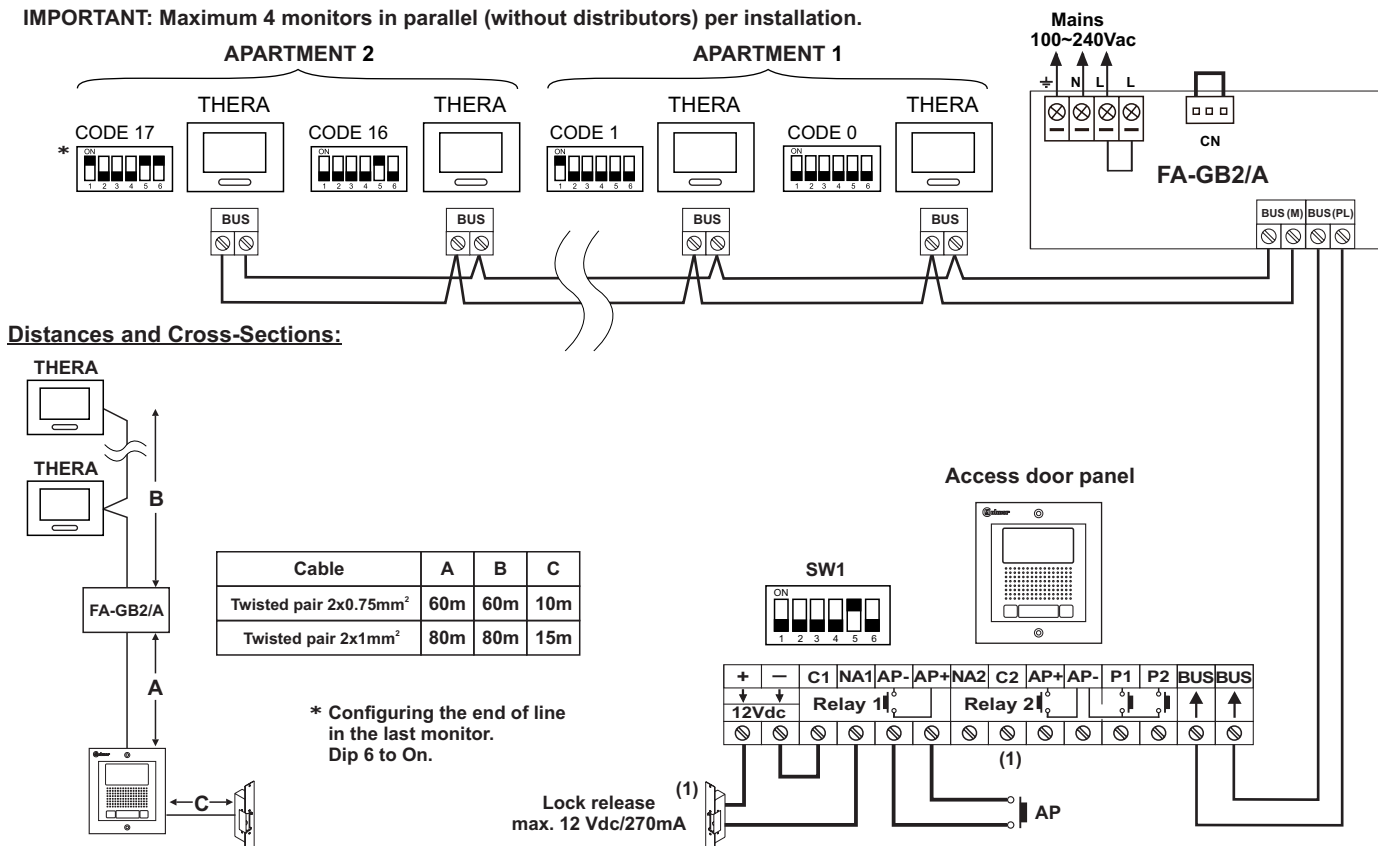
WIRING DIAGRAMS:

One apartment kit (NX5110 THERA kit) with monitors in parallel (In-Out) and Golmar DC lock release.

IMPORTANT: Maximum 4 monitors in parallel (without distributors) per installation.

**Two apartment kit (NX5220 THERA kit) with monitors in parallel (In-Out) and Golmar DC lock release.**

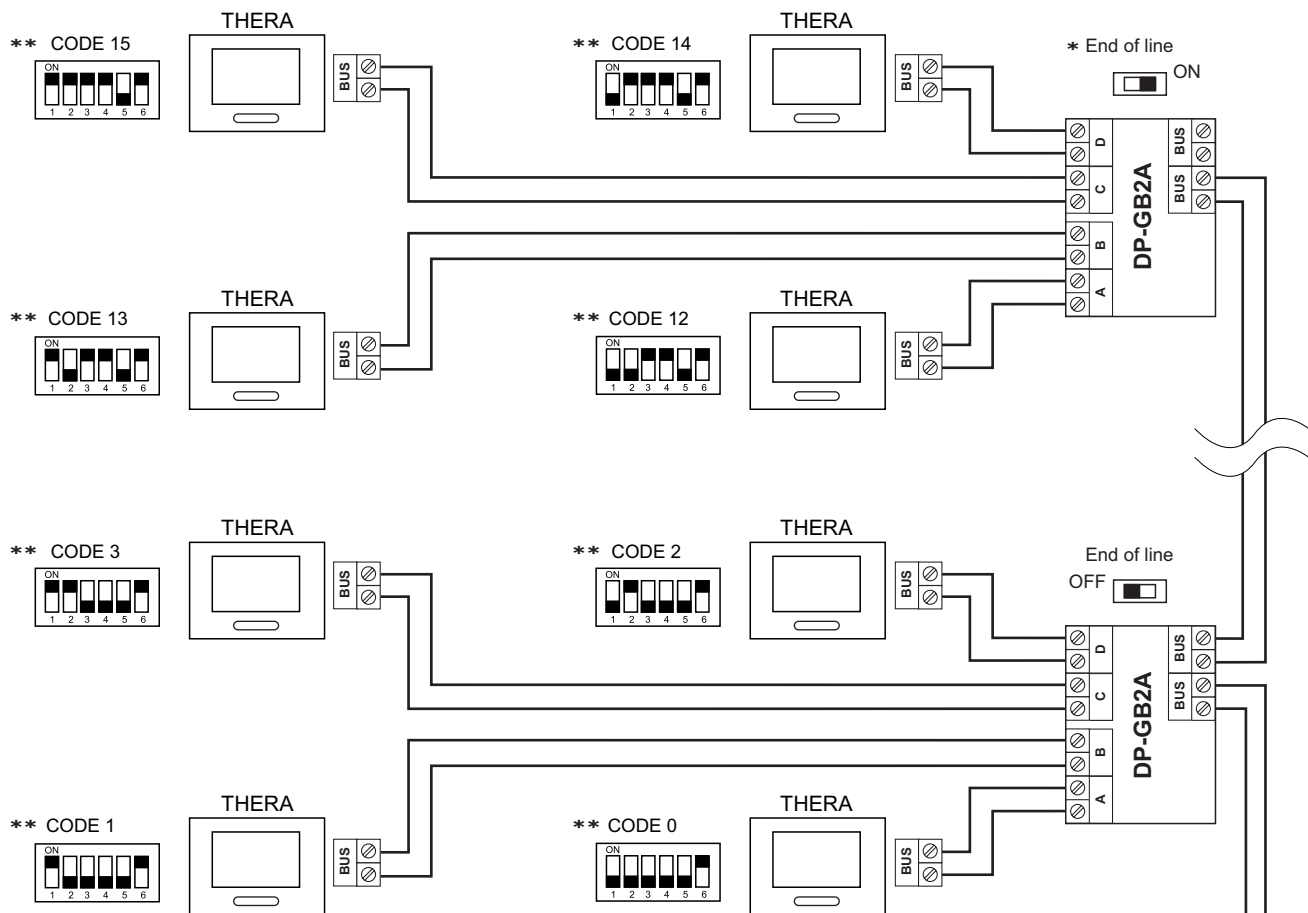
IMPORTANT: Maximum 4 monitors in parallel (without distributors) per installation.



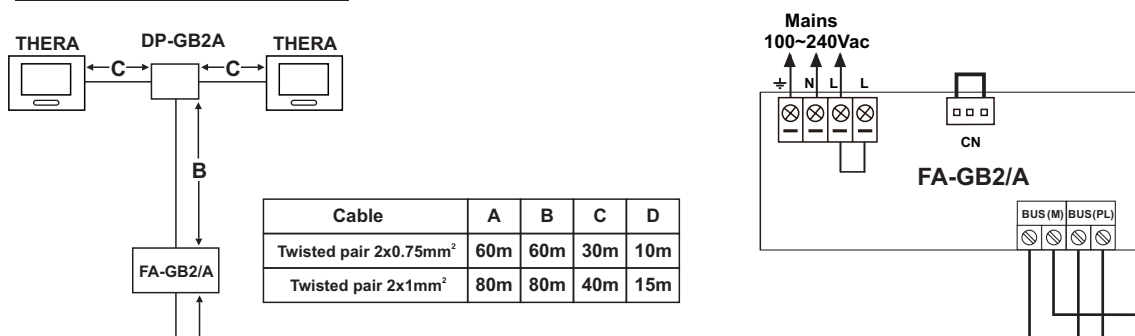
(1) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

WIRING DIAGRAMS:

One apartment with 16 THERA monitors, 4 DP-GB2A distributors and Golmar DC lock release.

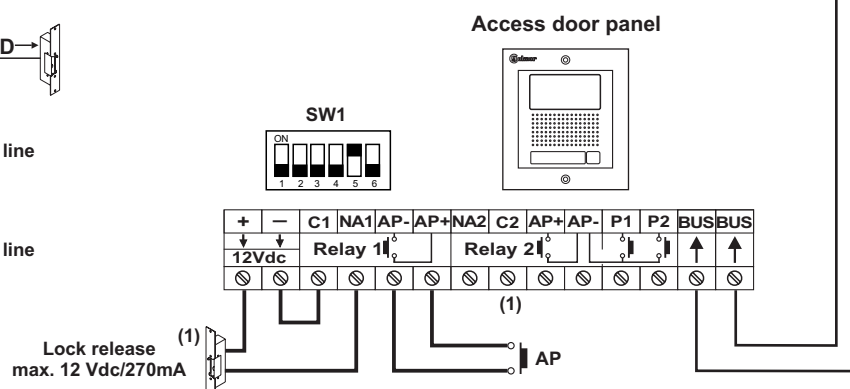


Distances and Cross-Sections:



* Configuring the end of line in the last distributor. Switch to On.

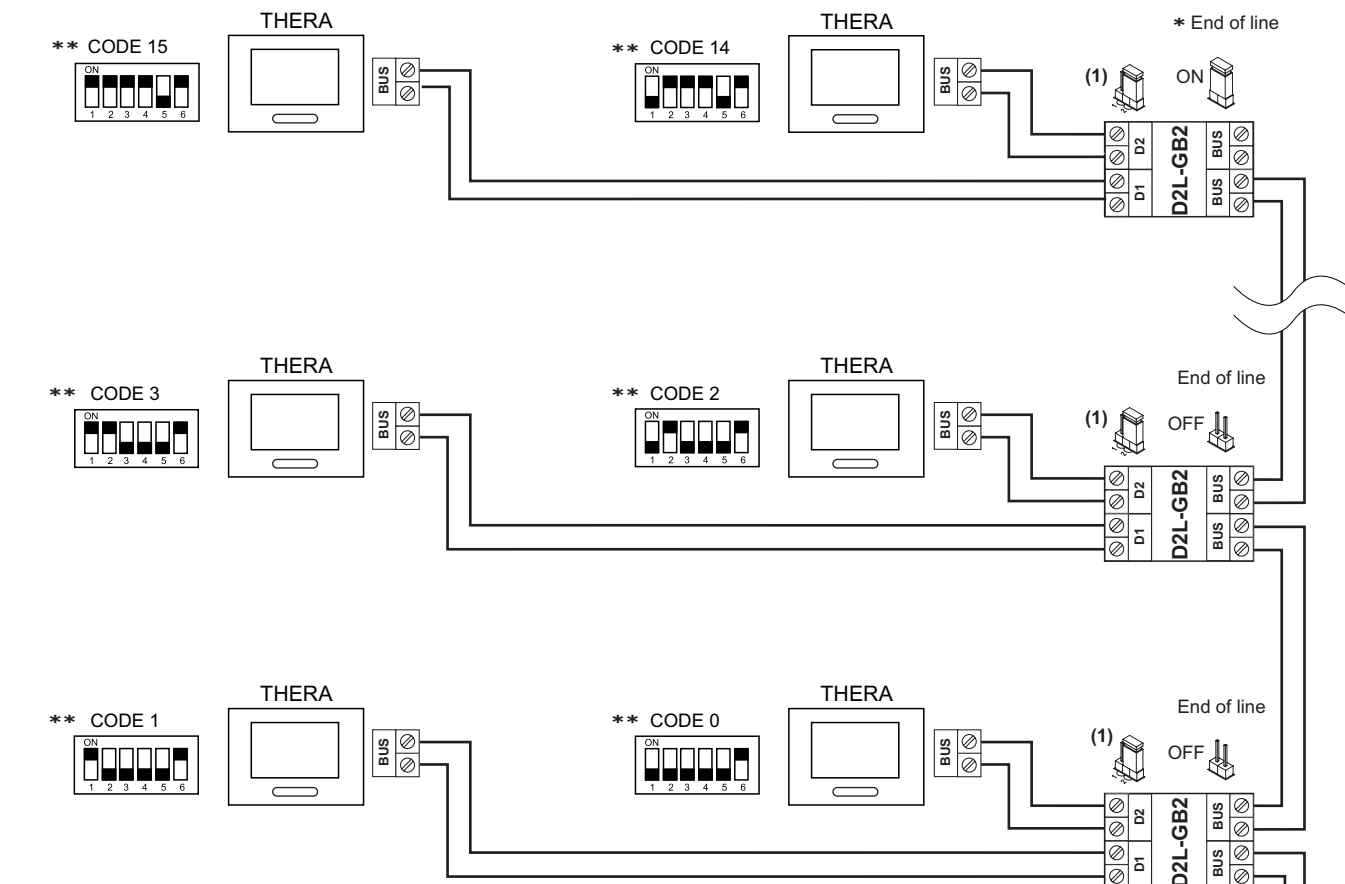
** Configuring the end of line in the last monitor. Dip 6 to On.



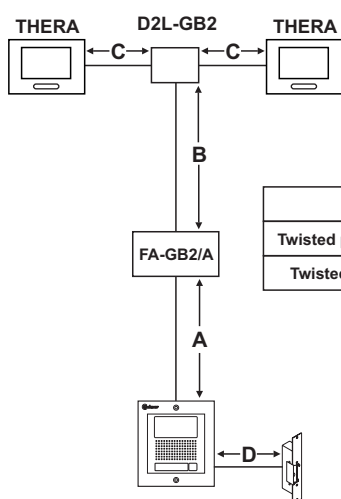
(1) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

WIRING DIAGRAMS:

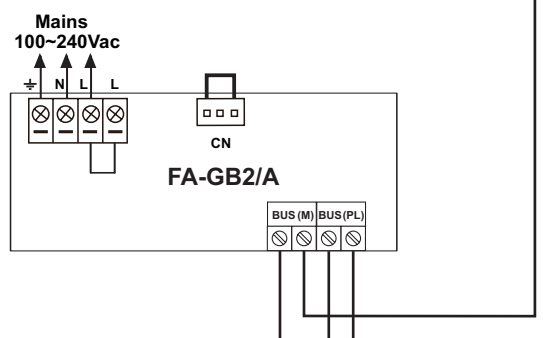
One apartment with 16 THERA monitors, 8 D2L-GB2 distributors and Golmar DC lock release.



Distances and Cross-Sections:



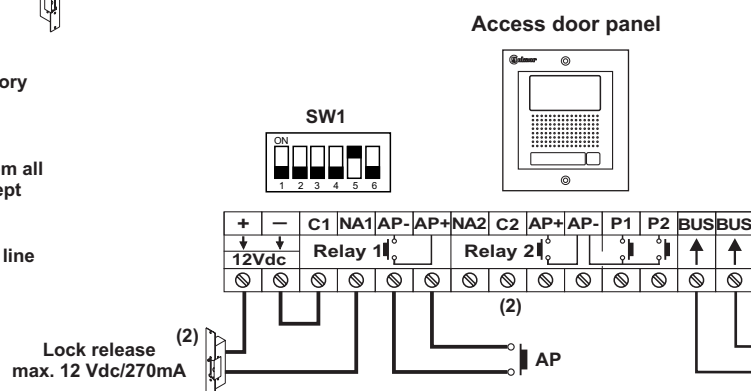
Cable	A	B	C	D
Twisted pair 2x0.75mm ²	60m	60m	30m	10m
Twisted pair 2x1mm ²	80m	80m	40m	15m



(1) Do not change the factory default position of the configuration jumper.

* Remove the jumper from all of the distributors except the last.

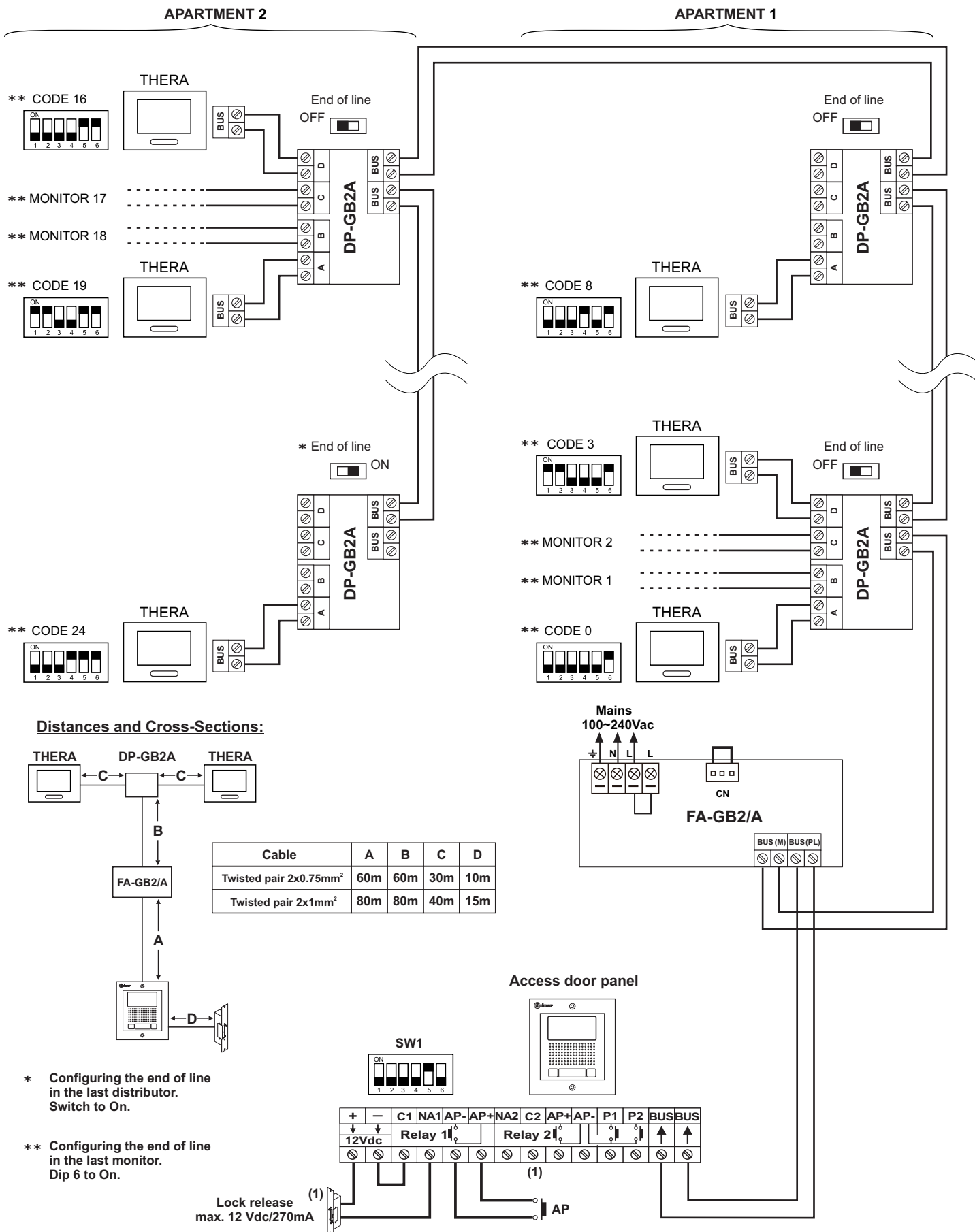
** Configuring the end of line in the last monitor. Dip 6 to On.



(2) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

WIRING DIAGRAMS:

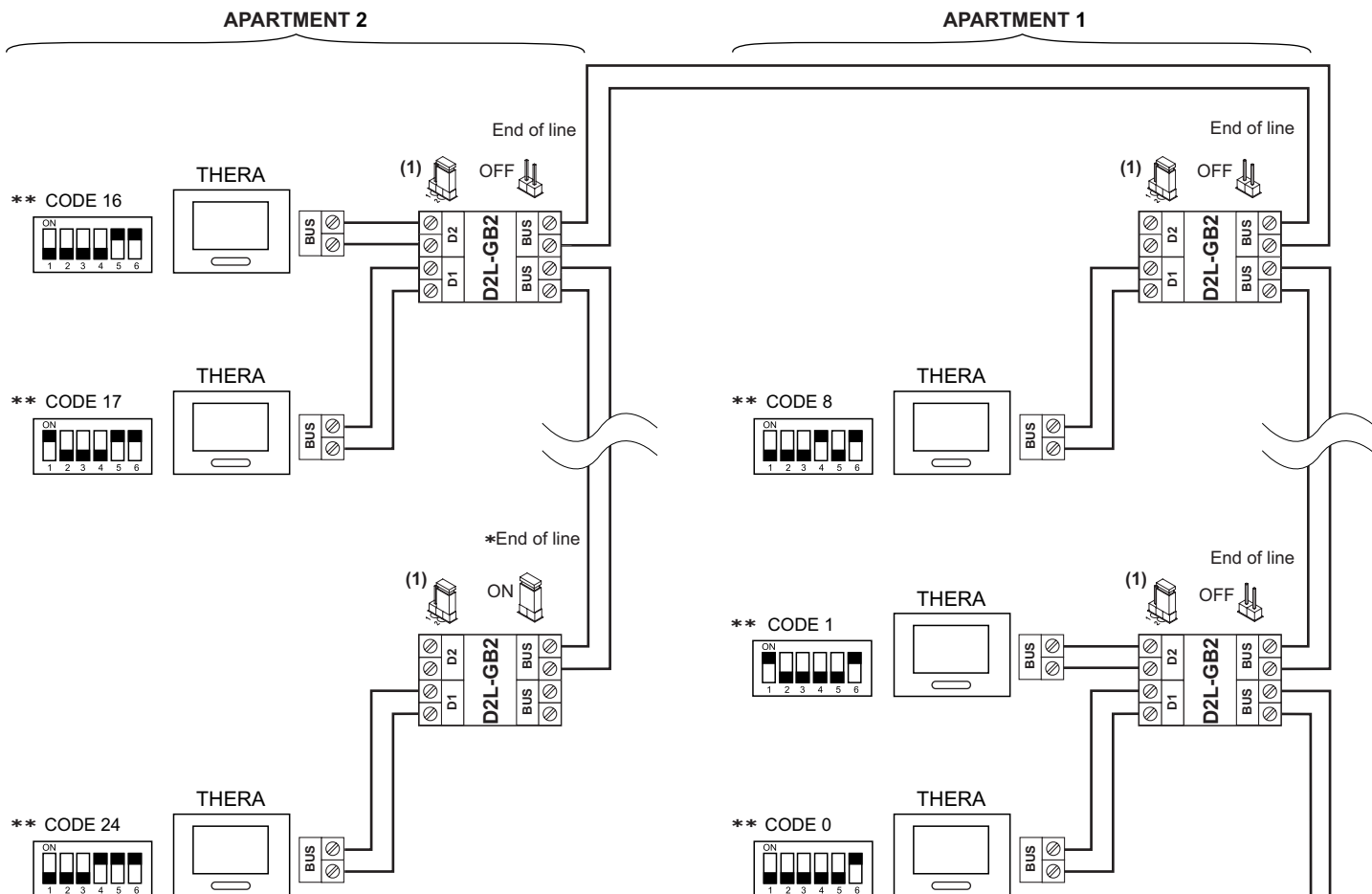
Two apartments with 18 THERA monitors, 5 DP-GB2A distributors and Golmar DC lock release.



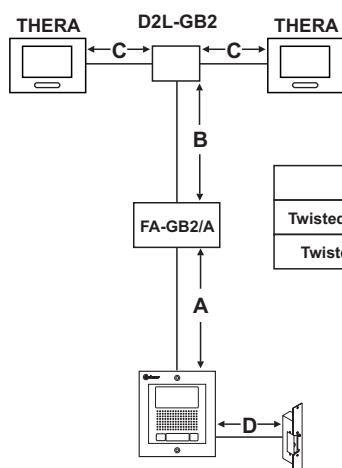
(1) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

WIRING DIAGRAMS:

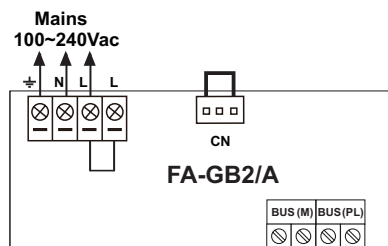
Two apartments with 18 THERA monitors, 9 D2L-GB2 distributors and Golmar DC lock release.



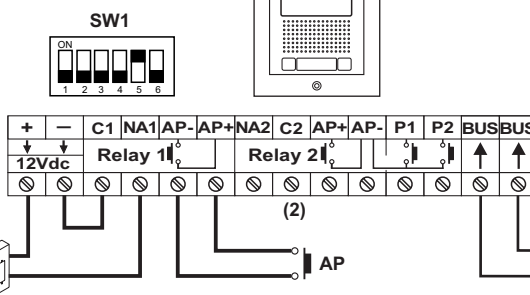
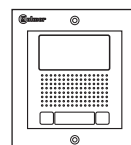
Distances and Cross-Sections:



Cable	A	B	C	D
Twisted pair 2x0.75mm ²	60m	60m	30m	10m
Twisted pair 2x1mm ²	80m	80m	40m	15m



Access door panel



(1) Do not change the factory default position of the configuration jumper.

* Remove the jumper from all of the distributors except the last.

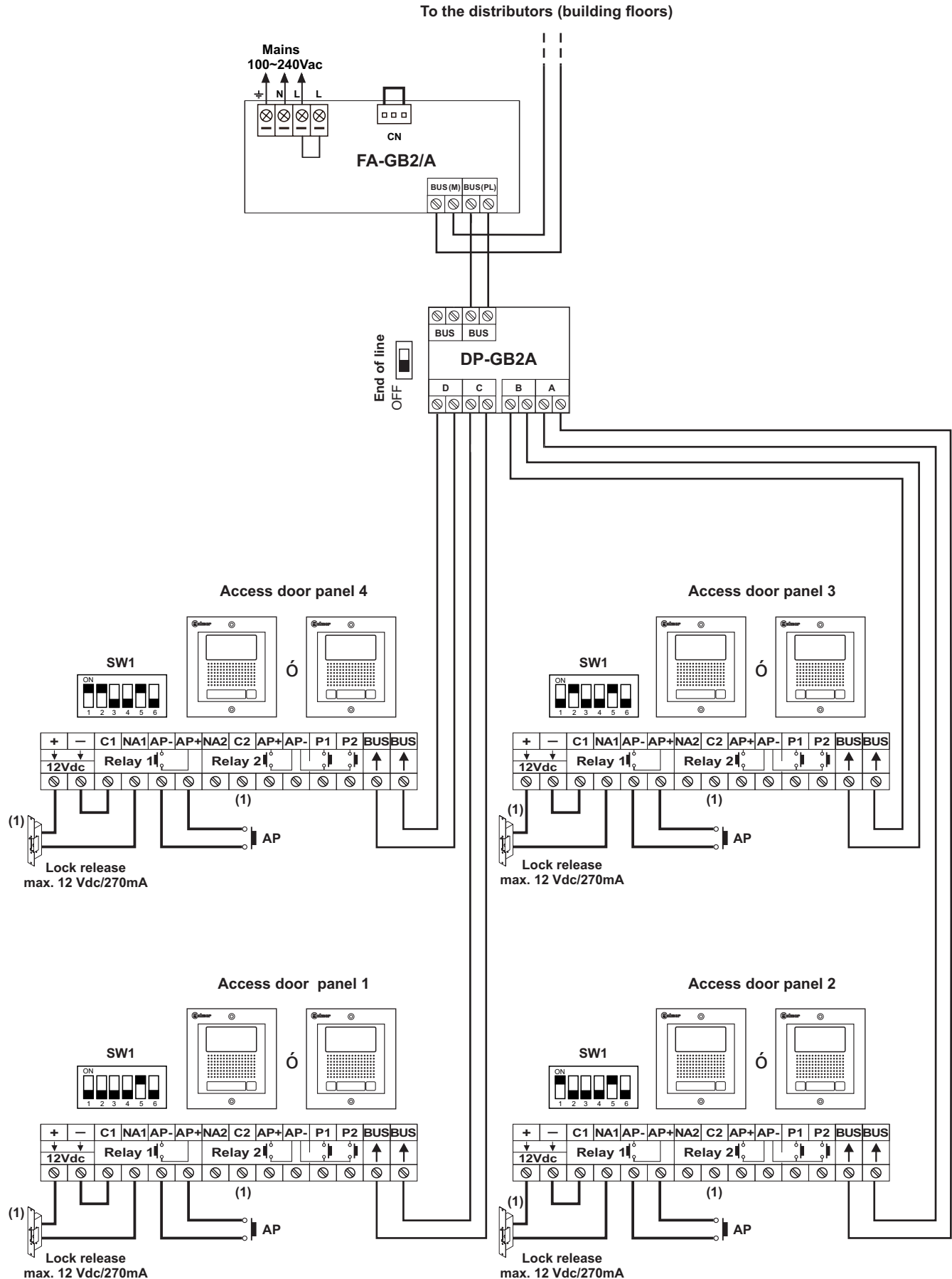
** Configuring the end of line in the last monitor. Dip 6 to On.

Lock release
max. 12 Vdc/270mA

(2) Important: For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

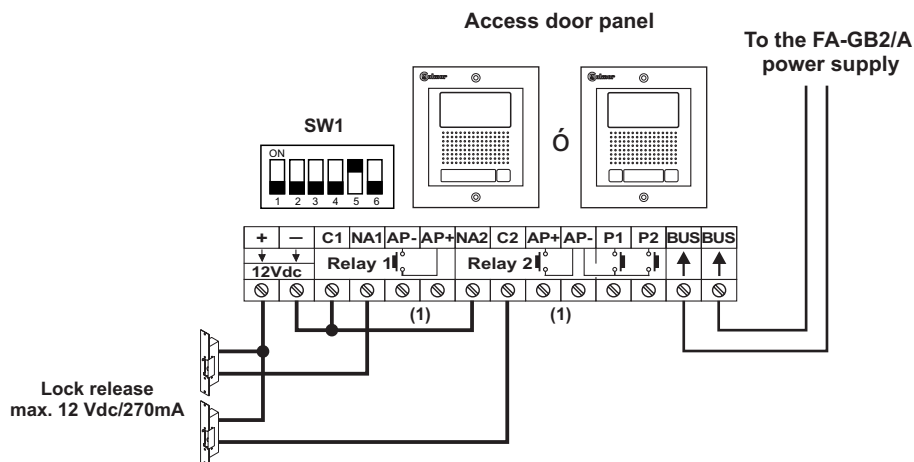
WIRING DIAGRAMS:

Video door entry system with 4 access panels, DP-GB2A distributor for door panels and Golmar DC lock release.

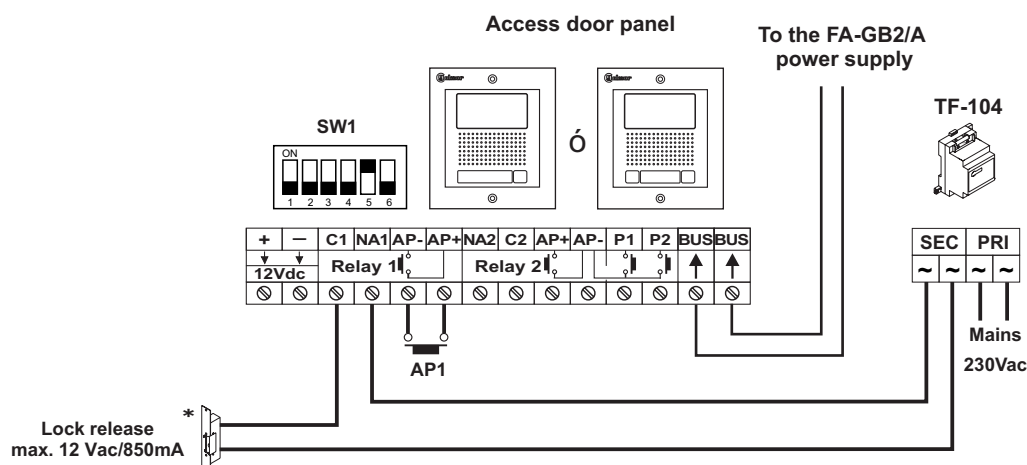


(1) **Important:** For AC lock releases or a second lock release, see diagram "Connection of Golmar AC and DC lock releases" on page 18.

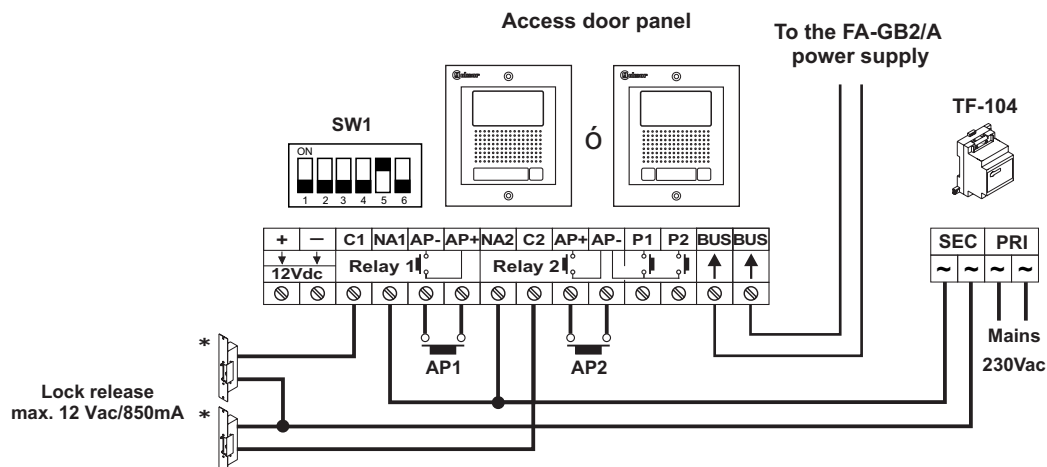
WIRING DIAGRAMS:

Connection of Golmar AC and DC lock releases.Connection of 2 DC lock releases without “AP”:

(1) Important: With 2 DC lock releases, it is not possible to use the “AP” door opening buttons.

Connection of 1 AC lock release with “AP”:

* Important: Fit the varistor supplied with the kit directly to the terminals of the lock release.

Connection of 2 AC lock release with “AP”:

* Important: Fit the varistor supplied with the kit directly to the terminals of each of the 2 lock releases.

NOTES:

This image shows a full page of a handwriting practice worksheet. It consists of multiple rows of horizontal dashed lines spaced evenly down the page, providing a guide for letter height and placement. The background is plain white, and there are no margins or additional markings.



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