

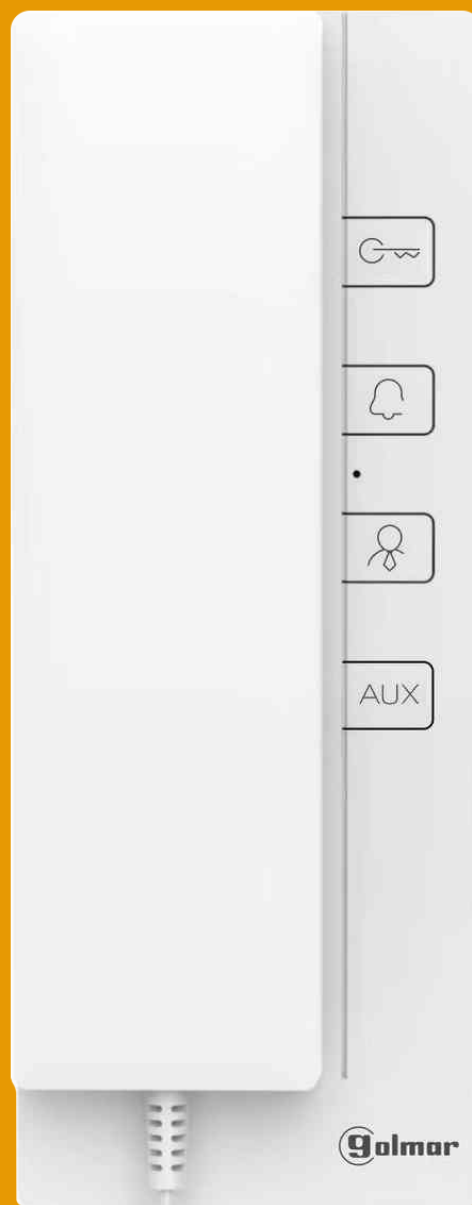


TECHNOLOGY



# T-520/G2+ TELEPHONE

## INSTALLER'S MANUAL



## INTRODUCTION

First of all, we thank and congratulate you for purchasing this product.

Our commitment to achieving the satisfaction of customers like you is manifested through our ISO-9001 certification and the manufacture of products like the one you have just purchased.

Its advanced technology and strict quality control will ensure that customers and users enjoy the numerous features that this device offers. To get the most out of them and ensure proper operation from day one, we recommend that you read this instruction manual.

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## SAFETY PRECAUTIONS

- **Always disconnect the power supply** before making modifications to the device.
- The fitting and handling of these devices must be carried out by **authorised personnel**.
- The wiring must run at least **40cm away from any other wiring**.
- Do not overtighten the screws on the connector.
- Install the T-520/G2+ telephone in a dry protected location free from the risk of dripping or splashing water.
- Do not place in humid, dusty or smoky locations, or near sources of heat.
- Before connecting the device to the mains, check the connections between the door panel, power supply & T-520/G2+ telephones.
- Use Golmar cable **RAP-GTWIN/HF** (2x1mm<sup>2</sup>)
- Always follow the instructions contained in this manual.

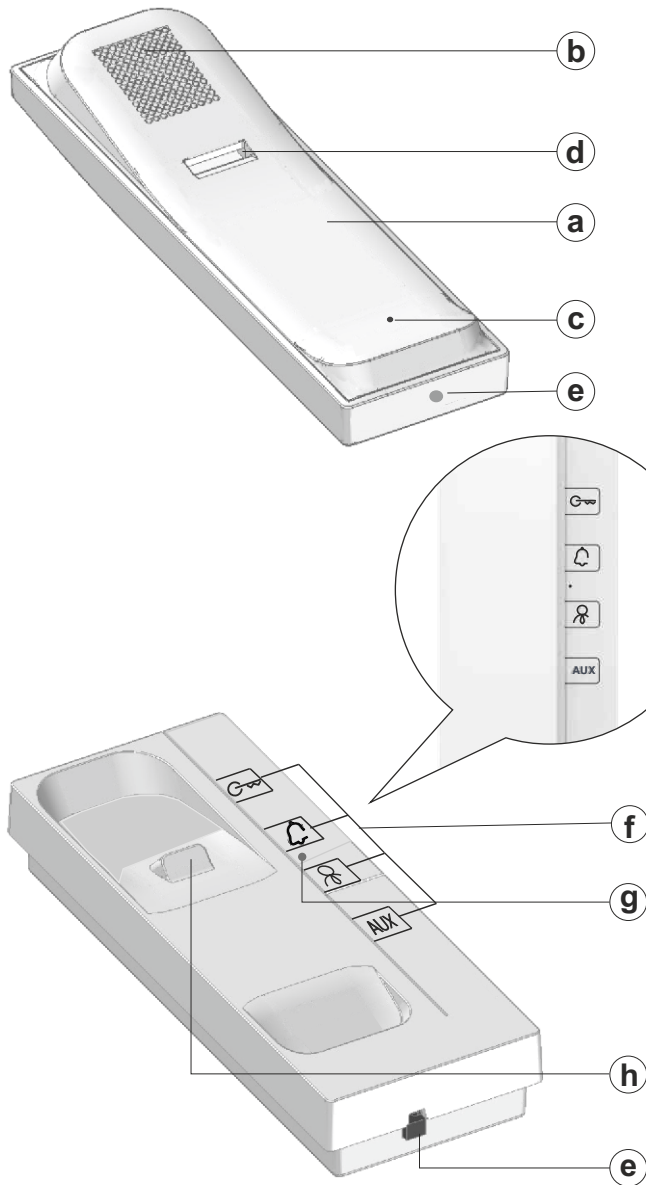
## CHARACTERISTICS

- T-520/G2+ telephone with simplified installation (non-polarised 2 wire bus).
- Up to 4 T-520/G2+ telephones/monitors per apartment (master, slave 1, slave 2 and slave 3).
- Up to 32 apartments/T-520/G2+ telephones in mixed installations with monitors (**EL632 G2+ SE module**).
- Up to 128 apartments/T-520/G2+ telephones per installation (**EL642 G2+ sound module required**).
- Completely private conversation.
- Call reception volume control: min, med, max and off (do not disturb).
- Audio volume control during communication process (4 different levels).
- "HZ" input for calls from apartment front door.
- Output to auxiliary call repeater (maximum 50mA/12Vdc).
- Up to 5 different ringtones to identify the origin of the call (door panel 1, door panel with different address from 1, intercom, guard monitor or front door of the apartment "HZ").
- Button  for lock release activation 1 / activate- deactivate "Doctor mode"/ auto switch-on function.
- Button  volume adjustment, "do not disturb" mode for tone call volume control, / communication call volume control (T-520/G2+ speaker) / ends the call on the phone that was pressed.
- Button  for call to guard monitor (if exist). / "intercom" (within the same apartment).
- Button **AUX** or lock release 2 activation/ staircase light activation (SAR-G2+ & SAR-12/24 modules required).
- DIP switches for setting the telephone's address (call code), master/slave and end of line.

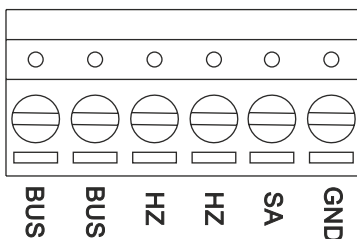
## SYSTEM OPERATION

- To make a call, the visitor needs to press the button for the apartment, an audible tone indicates that the call is being made and LED  on the door panel illuminates. If vocal synthesis is enabled, a 'Call is in progress' message appears indicating that a call is being made. At this moment, the apartment's telephone(s) receives the call. If another apartment is called by mistake, press the button for the correct apartment and the first call will be cancelled.
- Upon receiving the call, tones will be heard on the telephone(s) in the apartment. If the call is not answered within 45 seconds, the door panel's LED  will turn off, and the channel will be freed.
- To establish communication, lift the handset on any telephone in the apartment. Door panel's LED  will turn off, the led  will turn on.
- Communication will last for one and a half minutes or until the handset is replaced. When communication has finished, door panel's LED  will turn off and the channel will be freed. If vocal synthesis is enabled, a 'Communication is finished' message will indicate that the call is over.
- To open the door, **short press button**  (if it exists and you wish to open the second door, press button **AUX** ) during the call or communication processes: activates the lock release for 3 seconds and LED  on the door panel will also illuminate for 3 seconds. If vocal synthesis is enabled, a 'Door is open' message will be indicated on the door panel.
- Description of the function buttons can be found on pages 5 & 10.

## TELEPHONE DESCRIPTION:

Description:

- a. Telephone handset.
- b. Speaker grille.
- c. Microphone hole.
- d. Subjection hole.
- e. Telephone cord connectors.
- f. Function buttons.
- g. Telephone status LED:
  - “Do not disturb” mode.: led will flash slow (red).
  - Call: If Do Not Disturb mode is enabled, the LED flash fast (red).
- h. Hook switch.

Product label:Description connection terminals:

BUS, BUS: Communication BUS (non-polarised).

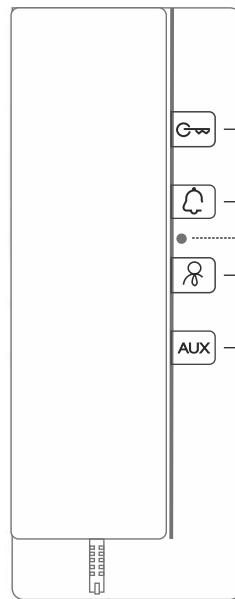
SA, GND: Auxiliary call repeater output (max 50mA/12Vdc), relay SAR-12/24.

HZ, HZ: Apartment front door button input:

Connect only on the master monitor. The signal received is then transmitted to the slave telephones in the same apartment through the BUS.

**Note:** HZ push button function mode: When HZ push button is pressed will be call tone and activate the output of auxiliary call repeater with standby telephone, call process, communication process (HZ tone with lower audio level), intercom process and "Do not disturb" mode. **Important:** Up to 8 telephones/ apartments with push button "HZ" activated at the same time (with system and telephones in standby).

## TELEPHONE DESCRIPTION:

**Function push buttons:**

Function push buttons (x4)

**Status led:**

- "Do not disturb" mode: led will flash slow (red).

- Call: If Do Not Disturb mode is enabled, the LED flash fast (red).

 during the call or communication processes: **a short press activates door release 1**, and a long press also immediately activates door release 1 (1 beep will be heard). In standby: Handset on hook, an 8 second press activates 'automatic door release' mode (3 beeps will be heard) or deactivates 'automatic door release' mode (1 beep will be heard). In standby: Handset off hook, Press the button for 3 seconds establishes audio communication with the main door panel 1 (auto-switch On) (1 beep will be heard). Further information (see page 10).



In standby: Handset on hook, a 5 second press (**note:** release the button when the status LED lights up) activates the "do not disturb mode" (2 beeps will be heard), the status led will flash slow (red), and will flash fast (red) when a call is in progress. In standby: Handset on hook, a short press ends 'do not disturb mode' (2 beeps will be heard), the status LED will turn off. In standby: Handset on hook, a short press allows you to listen to the current call tone volume or to end the 'do not disturb mode', each short press switches to the next volume level (min/med/max). During a call: A short press silences the call on the pressed phone and deactivates the 'SA' output. In communication: Each short press adjusts (between 4 levels) the volume of the telephone loudspeaker. Further information (see page 10).



In standby: Handset off hook, short press to calls 'Guard' monitor (if exist). In standby: handset off hook, 2 short consecutive presses initiate the intercom call (within the same apartment).



During the call or communication processes: **a short press activates door release 2**, and a long press also immediately activates door release 2 (1 beep will be heard). In standby: Handset on the hook/ off hook, one press will activated the staircase light (1 beep will be heard) (the SAR-G2+ & SAR-12/24 modules required).

## TELEPHONE DESCRIPTION:

**Description of the DIP switch and configuration of the T-520/G2+ telephone address (code):****Building / Villa (Nexa door panel)**

**Dip1-Dip7:** Sets the telephones address (addresses 1 to 128). **Note:** Mixed installations with monitors (addresses 1 to 32). The switches set to OFF have a zero value. The values of the switches set to ON are shown in the table below. The telephone code is the sum of the values of the switches set to ON.

**Important:**

Apartment 1 (Dip1 to ON & Dip2-Dip7 to OFF)  
Apartment 128 (Dip1-Dip7 to OFF)

**Table of values**

Switch number: 1 2 3 4 5 6 7  
Value when ON: 1 2 4 8 16 32 64



Example:  $0+0+4+0+16+0+0=20$

**Dip8-Dip9:** These define whether the telephone is master or slave. Each apartment must have only one master telephone.

**Master****Slave 1****Slave 2****Slave 3**

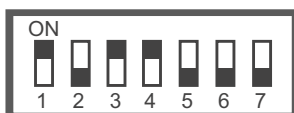
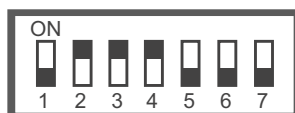
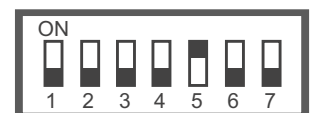
**Dip10:** Configures the end of line. In installations with telephones only, it must always be in the OFF position. In mixed installations of monitors with T-520/G2+ telephones in the same apartment, set to ON for the telephones in which the BUS cable ends and leave in the OFF position for intermediate telephones.

**IMPORTANT:** T-520/G2+ telephone in **Villa installation with SOUL door panel**, see corresponding Kit Soul user manual for Kit features as maximum number of apartments and monitors/ T-520/G2+ telephone.

**Configuration of T-520/G2+ telephone address codes (up to 128 addresses):****Important:**

- Up to 32 apartments/T-520/G2+ telephones in mixed installations with monitors (**EL632 G2+ SE module**).
- Up to 128 apartments/T-520/G2+ telephones per installation (**EL642 G2+ sound module required**).

**Dip1 a Dip7:** To configure the T-520/G2+ telephone/apartment address (up to 128 addresses).

**Apartment code 1****Apartment code 2****Apartment code 3****Apartment code 4****Apartment code 5****Apartment code 6****Apartment code 7****Apartment code 8****Apartment code 9****Apartment code 10****Apartment code 11****Apartment code 12****Apartment code 13****Apartment code 14****Apartment code 15****Apartment code 16**

## TELEPHONE DESCRIPTION:

Continued from previous page.

Apartment code 17



Apartment code 18



Apartment code 19



Apartment code 20



Apartment code 21



Apartment code 22



Apartment code 23



Apartment code 24



Apartment code 25



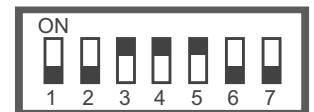
Apartment code 26



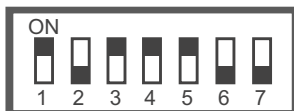
Apartment code 27



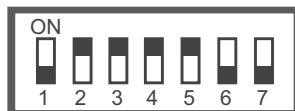
Apartment code 28



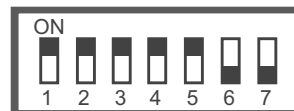
Apartment code 29



Apartment code 30



Apartment code 31



Apartment code 32



Apartment code 33



Apartment code 34



Apartment code 35



Apartment code 36



Apartment code 37



Apartment code 38



Apartment code 39



Apartment code 40



Apartment code 41



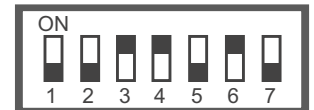
Apartment code 42



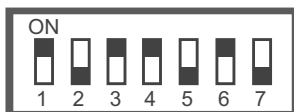
Apartment code 43



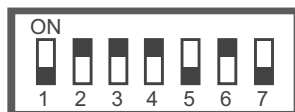
Apartment code 44



Apartment code 45



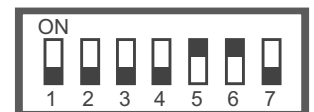
Apartment code 46



Apartment code 47



Apartment code 48



Apartment code 49



Apartment code 50



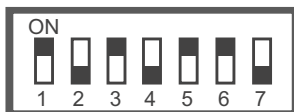
Apartment code 51



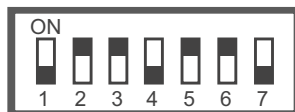
Apartment code 52



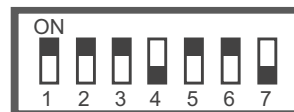
Apartment code 53



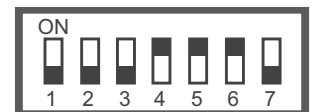
Apartment code 54



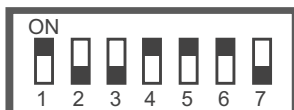
Apartment code 55



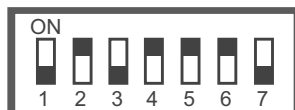
Apartment code 56



Apartment code 57



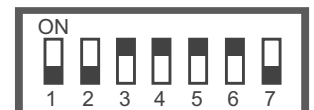
Apartment code 58



Apartment code 59



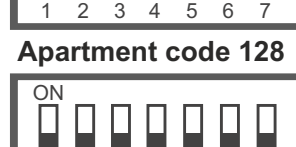
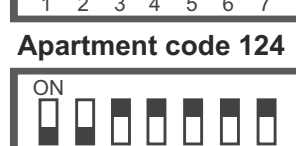
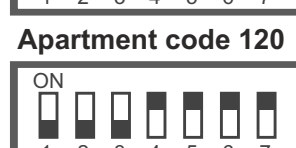
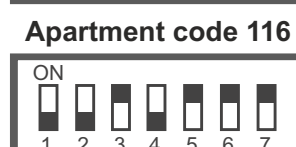
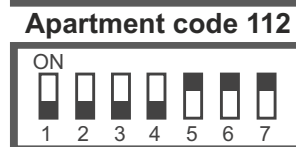
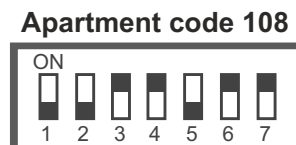
Apartment code 60



Continued overleaf



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**TELEPHONE DESCRIPTION:****Autoswitch-on function:**

With the T-520/G2+ telephone in standby mode and the handset off the hook, you can establish an audio communication with the master door panel. It is only operative if there is no communication in progress.

With the telephone in standby mode and handset off the hook, press the button  for 3 seconds, a confirmation tone will sound on the telephone, indicating that audio communication has been established with the master door panel.

The communication will last for one and a half minutes or until the handset is replaced.

**"Automatic door opening" mode:**

The T-520/G2+ telephone allows you to activate/deactivate the "automatic door opening" mode.

Activate "automatic door opening" mode:

With the telephone in standby mode (handset on hook), press the button  for 8 sec., 3 confirmation beeps will be heard, indicating that the "automatic door opening" mode has been activated, (within 3 seconds of a call from the door panel).

Deactivate "automatic door opening" mode

With the telephone in standby mode (handset on hook), press the push button  for 8 seconds, 1 confirmation beep will be heard, indicating that the 'automatic door opening' mode has been deactivated.

**Setting audio volume in the telephone:**

The telephone allows you to change the volume of the audio in the speaker of the communicating telephone (between 4 levels from minimum to maximum in carousel mode) through the function button .

The telephone must be in communication, a short press on the button , allows to change the audio volume on the telephone speaker, each short press reproduces the selected volume (between 4 levels from minimum to maximum and in carousel mode), stop pressing once the desired volume level is selected on the telephone. When communication has finished, the selected volume will be saved in the telephone.

**Activate / deactivate "do not disturb" mode function:**

-Activate 'do not disturb' mode: With the telephone in standby and the handset on hook, a 5 second press on the push button  (**note:** release the button when the status LED lights up) activates the 'do not disturb' mode, 2 beep will be heard and the status LED will flash slow (red) indicating that the telephone is in 'do not disturb' mode, and will flash fast (red) when a call is in progress. The phone will not ring when receiving an incoming call (see note 'HZ' on page 4).

-Deactivate 'do not disturb' mode: With the telephone in standby mode and the handset on hook, a short press on the push button  deactivates the 'do not disturb' mode, 2 beep will be heard and the status LED will turn off.

**Setting call tone volume:**

The phone must be in standby mode and the handset must be on hook to adjust the volume of the call tone. A short press on the push button  allows you to listen to the current call tone volume (or to end if the 'do not disturb' mode was activated), each short press changes to the next volume level (minimum/medium/maximum).

**"Call tone volume", "communication volume", "doctor mode" & "do not disturb", default value :**

The T-520/G2+ telephone allows you to restore the "volume of the call tones", the "volume of communication", the "automatic door opening" (Doctor mode) and the "do not disturb mode" to the 'default value'.

With the telephone in standby mode and the handset on hook, press the push button  for 10 seconds, 4 confirmation beeps will be heard, indicating that the "volume of the call tones" level 2, the "volume of communication" level 2, the "automatic door opening" (Doctor mode) deactivated and the "do not disturb mode" deactivated on the telephone have been restored to the default value.

**Cancel the 'call forwarding' process or 'communication' with door panel from G2Call+ App:**

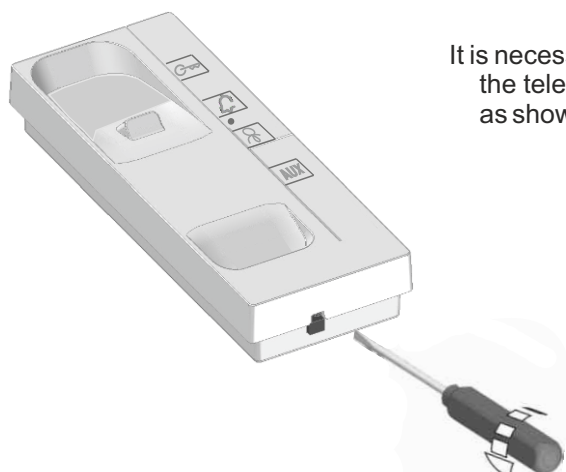
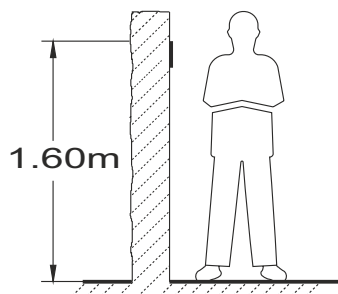
-If a call is made from the door panel to an apartment of a mixed video door entry system (ART 7W/G2+ V11 monitors and T-520/G2+ telephones in the same apartment) and the ART 7W/G2+ V11 monitor has "call forwarding" configured and activated; from an T-520/G2+ telephone in the same apartment settings as (S1, S2 or S3), you can cancel the process of "call forwarding" to an smartphone by picking up the telephone handset (information about this function, see the TART 7W G2+ V11 manual).

-If smartphone is in communication with door panel from G2Call+ App, you can cancel the communication process to an smartphone by pressing the button  on the telephone for more than 3 seconds (information about this function, see the TART 7W G2+ manual).

## INSTALLING THE TELEPHONES

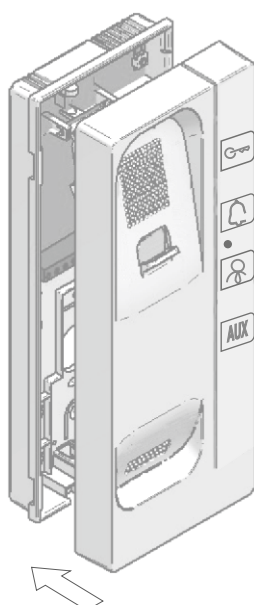
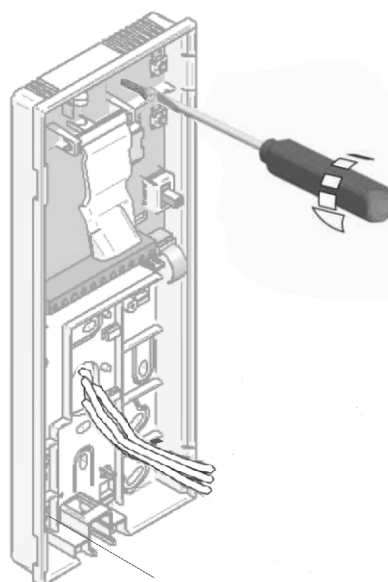
### Fixing the telephone to the wall:

The top of the wall mounting connector should be located at a height of 1.60m from the ground. The minimum distance between the wall mounting connector and the closest object must be 5 cm.



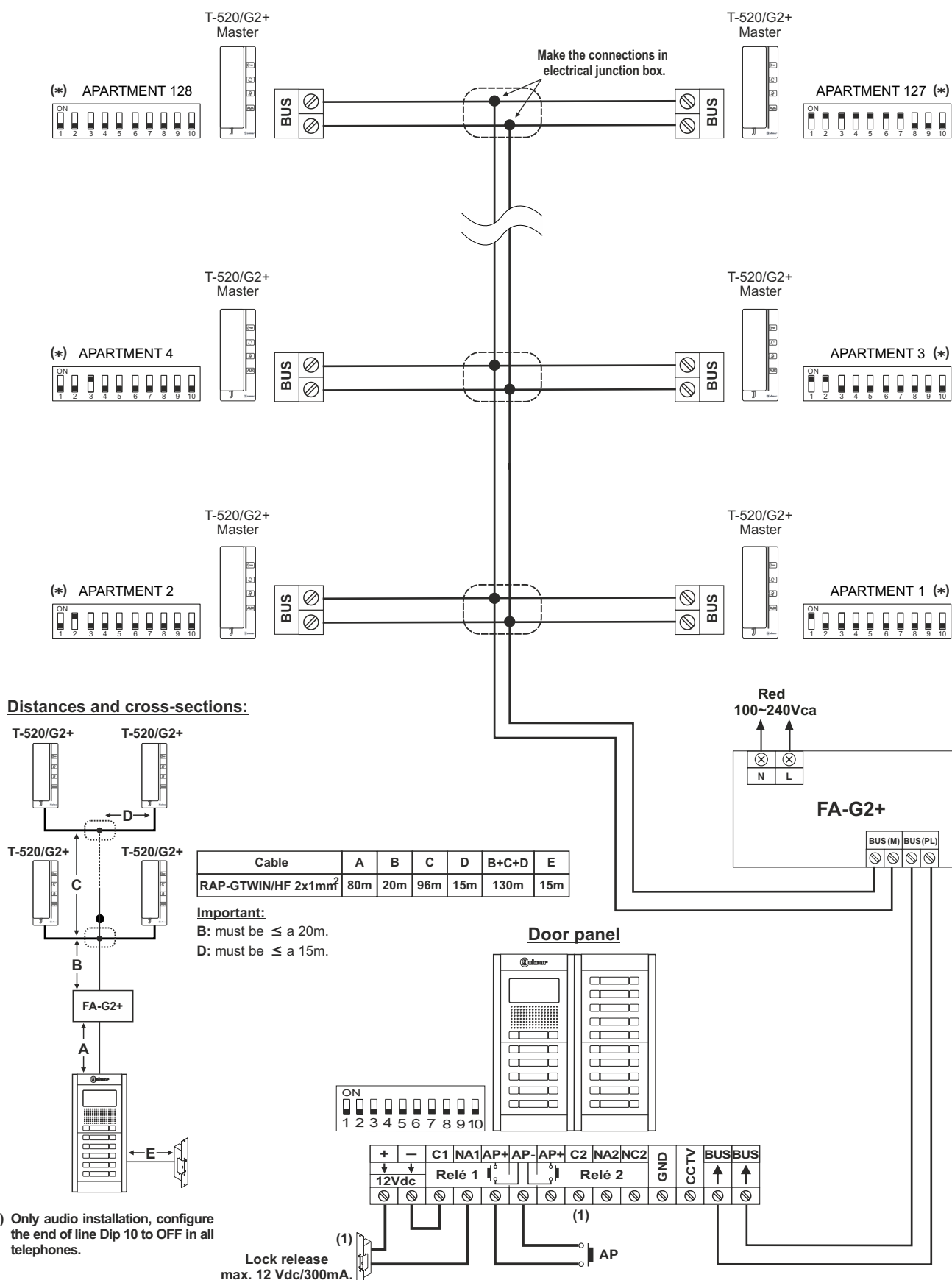
It is necessary to open the telephone for wiring and fixing purposes. To open the telephone, insert a flat screwdriver into the slots and gently pry open as shown in the drawing.

Avoid dusty or smoky environments or locations near sources of heat. The telephone can be fixed to an electrical embedding box or directly to the wall. To secure directly to the wall, drill two 6mm holes at the specified positions using 6mm wall plugs and Ø3.5 x 25mm screws.



Pass the cables through the cable holes and connect them to the connector as per the wiring diagrams. Close the telephone as shown in the drawing. Once the telephone is closed, connect the handset using the telephone cord and place it on the hook.

## WIRING DIAGRAMS:

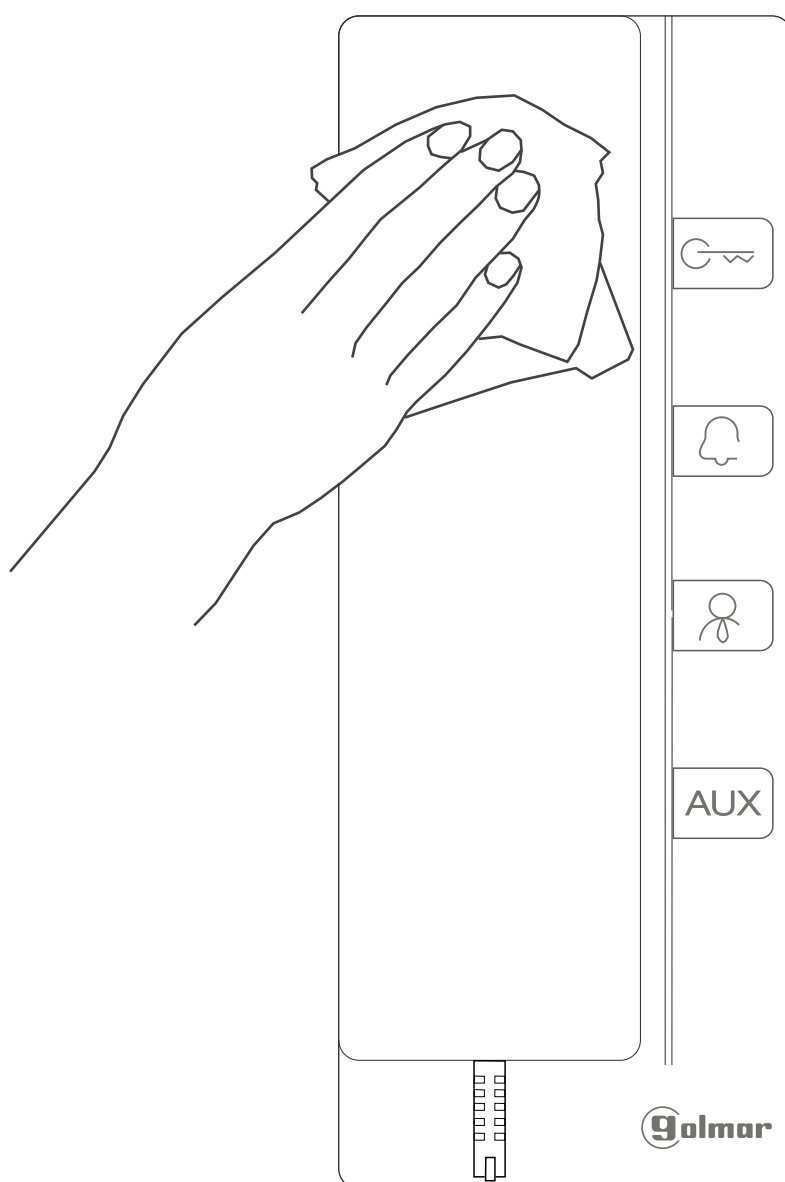
***Audio door entry system with 128 apartments / T-520/G2+ telephones and Golmar d.c lock release.***

(1) For more information about the door panel, installation, configuration, connection of an AC lock release, mixed installation with monitors and T-520/G2+ telephones and other wiring diagrams, (see the corresponding door panel manual).

**CLEANING THE TELEPHONE:**

---

- Do not use solvents, detergents or cleaning products that contain acids, vinegar or abrasive components.
- Use a soft damp lint-free cloth with water.
- Always wipe the telephone in the same direction, from top to bottom.
- After cleaning the telephone, remove any moisture with a soft dry lint-free cloth.



**COMPLIANCE:**

Este producto es conforme con las disposiciones de las Directivas Europeas aplicables respecto a la Compatibilidad Electromagnética **2014/30/CEE**.

*This product meets the essentials requirements of applicable European Directives regarding Electromagnetic Compatibility **2014/30/ECC**.*



**NOTA:** El funcionamiento de este equipo está sujeto a las siguientes condiciones:

(1) Este dispositivo no puede provocar interferencias dañinas, y (2) debe aceptar cualquier interferencia recibida, incluyendo las que pueden provocar un funcionamiento no deseado.

**NOTE:** Operation is subject to the following conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any received interference, including the ones that may cause undesired operation.



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