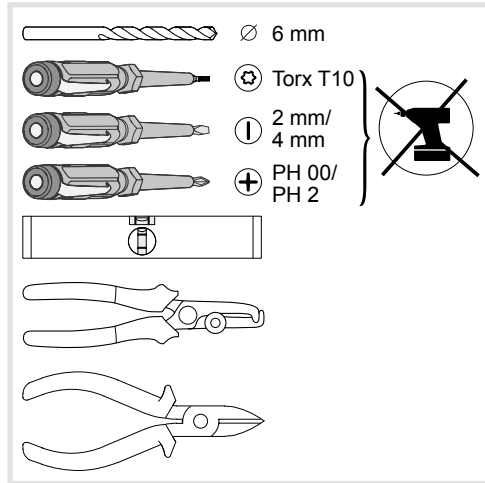


RER1..X, RER2..X
**Door stations for
ELCOM.HOME Audio assembly,
surface-mounted:**
- 1 call button RER1..Y
- 2 call buttons RER2..Y

Tooling required



Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, guidelines, regulations, directives, safety and accident prevention regulations of the country.

When installing and laying cables, always comply with the applicable regulations and standards for SELV electrical circuits.

These instructions are an integral component of the product and must be retained by the end user.

Design and layout of the device

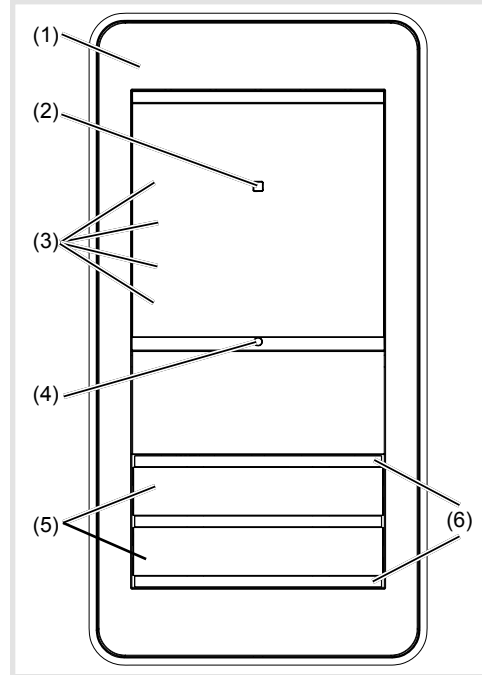


Figure 1: Front

- (1) Design front plate
- (2) Microphone
- (3) Door loudspeaker
- (4) Twilight sensor for call button
- (5) Button panel with call push-buttons
- (6) Cover strip for dismantling protection

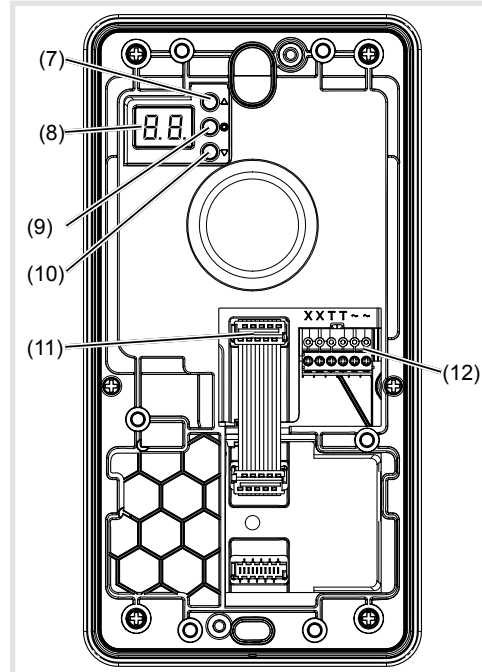


Figure 2: Inside view of product

- (7) Upward adjustment button ▲
- (8) 7-segment display
- (9) Selection button ○
- (10) Downward adjustment button ▼
- (11) Module connecting cable
- (12) Connection terminal block

Function

The audio door station operates with a 2-wire bus system and enables communication via sound.

Correct use

- surface mounting
- not compatible with intercom systems made by other manufacturers
- suitable for outdoor use

Product characteristics

- completely pre-assembled
- name plate can be changed from the front without any special tools
- one-man commissioning
- call buttons with acknowledge tone (programmable) and tactile feedback
- call button can also be configured for lighting or door opening, or no function at all
- uniform and durable white LED backlighting of call buttons
- twilight controlled call push-button backlighting with adjustable switch-on brightness level
- break-proof flush-mounted call buttons
- loudspeaker and microphone protected against sabotage
- volume and microphone sensitivity settable
- 1 to 10-second adjustable door release
- call-free door opening can be set for single door systems

Operation

Switch on lights

- Press the call push-button assigned to the desired subscriber.

If this function has been configured, an acknowledge tone confirms that the call push-button has been pressed. The indoor stations addressed will be called.

Switch-on lights

- Press the call push-button assigned to lighting.

If this function has been configured, an acknowledge tone confirms that the call push-button has been pressed. The light contact of a line power supply is closed for the set time.

Cleaning and care

Commercially available products should be used to clean and care for plastic parts.

- ⓘ To prevent the surface from being damaged, wire wool, wire brushes or similar tools should not be used to clean the product.

Information for electricians

Installation and electrical connection



DANGER!

Touching live parts in the installation environment can result in an electric shock!

An electric shock can be lethal!

Before working on the device or load, disconnect all associated circuit breakers. Cover all live parts in the area!

When installing door communication systems, comply with the general safety regulations for telecommunications systems according to VDE 0800:

- Separate routing of power and door communication cables with a minimum spacing of 10 cm
- Partitions between power and door communication cables in shared cable ducts
- Use of standard telecommunications cables, e.g. J-Y (St) Y with 0.8 mm diameter.

Bus cables

- J-Y(ST)Y or A-2Y(L)2Y
Use wrapped wire pair.
Recommendation: white/yellow
- CAT
Use a pair of twisted wires
Recommendation: orange/white
- YR
Use adjacent wires.

Mounting door station

The connecting cables and indoor stations are connected to the line power supply in compliance with maximum cable length and attenuation stipulations. (see operating instructions of the line power supply).

- Unclip the design front plate (1) using a flat-headed screwdriver (4 mm) (figure 3).

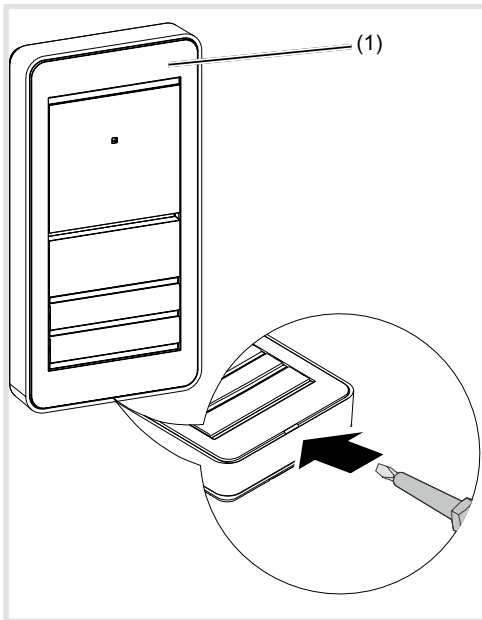


Figure 3: Unclipping the design front plate

- Use a Torx T10 screwdriver.
- Loosen the 2 screws (13) in the door station (figure 4).

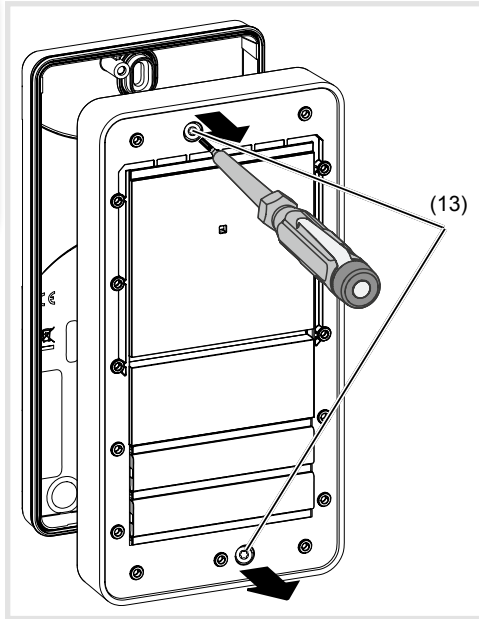


Figure 4: Opening for the first time 1

(13) Torx T10 screw

- Opening for the first time: insert 2 mm, a flat screwdriver (4 mm) between the front face and the fixing base and then lift it to unlock it (figure 5).

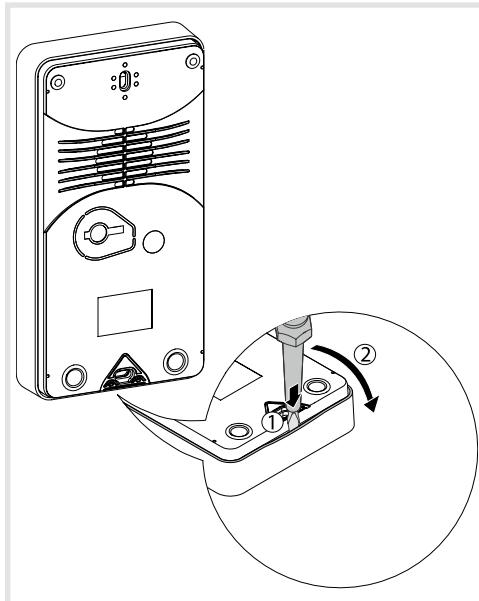


Figure 5: Opening for the first time 2

- Using a pointy object (tip, screw, rigid copper wire, etc.), make a hole in the membrane (14) big enough for the cable to go through (figure 6).
- Thread roughly 170 mm of the cable through.
- Position the fixing base on the wall in order to determine where the two fixing points should be (figure 6).

- - The fixing screws and washers are not supplied.
- Use Ø 4 mm max. screws with a non-counter-sunk Ø 8 mm max. head.



WARNING!

Do not use an electric screwdriver. Use a normal screwdriver without applying too much pressure.

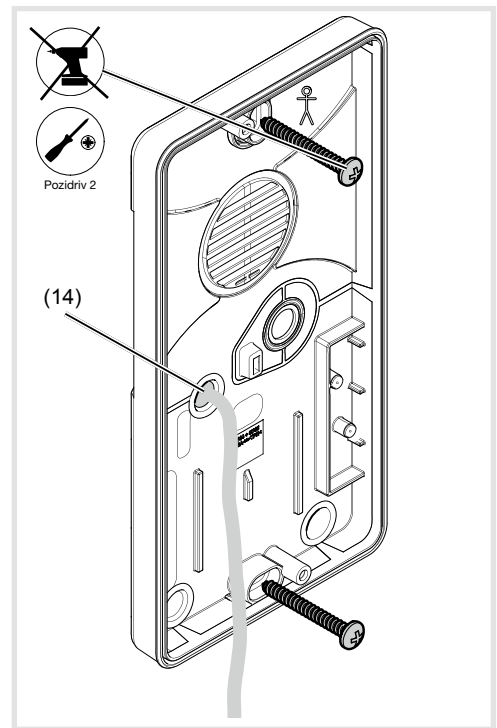


Figure 6: Base fixing

(14) Feeding the cable through

Connect door station

- Remove the connection terminal block (13) from the audio module (figure 7).
- Connect the 2-wire bus cable to the terminals **XX** of the connection terminal block (figure 7).
- Connect door release to the terminals **TT** of the connection terminal block (figure 7 and 8) if required.

or:

- FF for an installation with anti-tamper system, connect the door release to the contact **FF** of the line power supply (figure 9).
- To ensure protection against tampering, the door release power lead must not be threaded through the door station.
- For call push-button backlighting connect 12 V~ lead from the power transformer to the terminals **~** of the connection terminal block (figure 7, 8 and 9).

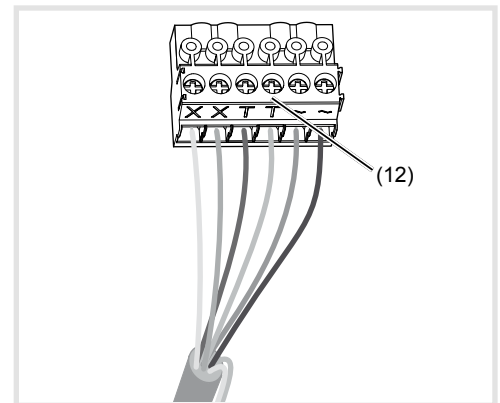
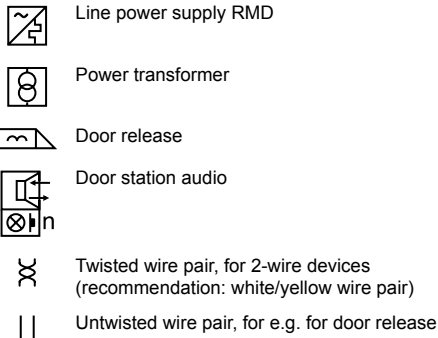


Figure 7: wired connection terminal block

- Information about how to connect the door station as a floor station can be found in the operating instructions of the line power supply.
- Attach connection terminal block to audio insert.

Switching and wiring diagram symbols



- i** - The earthing of the Bus line power supply (PE) increases interference resistance.
- The Bus line power supply must be installed far away from any sources of electromagnetic disturbance (Wireless telephony and radio, hi-fi equipment, video, computing, etc.).

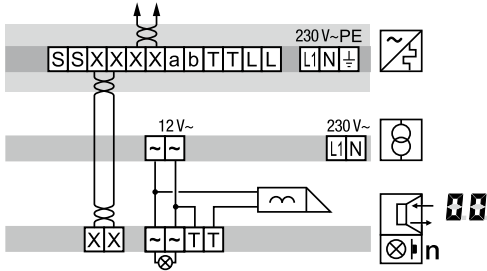


Figure 8: Door release connection on the door station

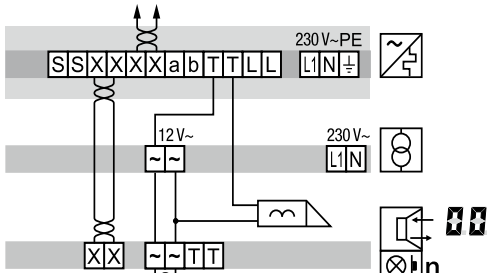


Figure 9: Connection of door station with manipulation-protected door release

Call up and change system settings

On the back of the audio module, there are 3 buttons and a 2-digit 7-segment display (figure 2) for the system (figure 11) settings.

- Press **▽ / ▲** button.
Device turns to setting mode. The first menu entry **Ab** is displayed.
- i** The reading direction of the 7-segment display varies by 180° depending on which button **▽ / ▲** you start with.
- Select the desired menu entry with **▽ / ▲**.
- Confirm the selection with **○**.
- i** The 7-segments display goes dark if there is no actuation for 5 seconds. Settings are applied. The device returns to normal operation.

Setting the values

The menu entry to be set is confirmed and flashes alternately with the value to be set.

- Press **▽ / ▲** button.
Press briefly: change the value by one step.
Press and hold: run through values. Scrolling stops when the button is released.
- Confirm set value with **○**
The device applies the setting and returns to the previous menu entry.

Automatic call push-button addressing AA

The call push-button and connector on the back are addressed by the automatic call push-button addressing as follows. Addressing is performed automatically from top to bottom (figure 10).

- i** Door stations are automatically pre-configured at the factory.

The menu entry **AA** is confirmed. **AA** flashes alternately with the entry **00** for cancel.

- With **▽ / ▲** select the entry **00** for automatic addressing.
- Confirm with **○**.
During the addressing, the display flickers. Afterwards the display returns to the previous menu entry **AA**.

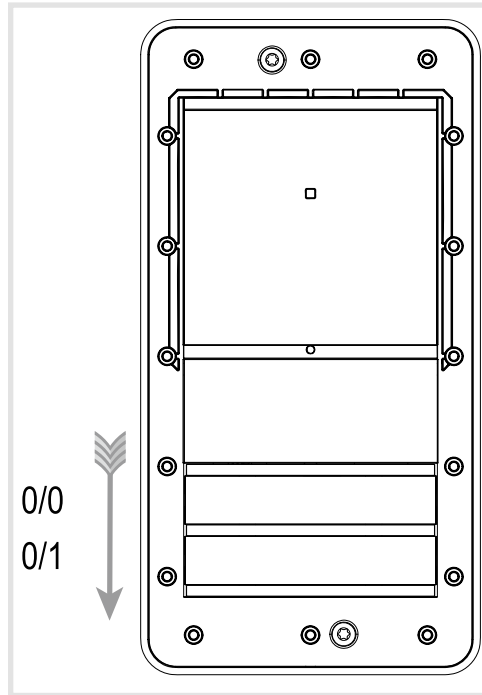


Figure 10: Module address and automatic call push-button addressing

Set individual call push-button address/function Ab

The menu entry **Ab** Set individual call push-button address/function is confirmed and flashes.

- Confirm the call push-button to be set.
The menu entry **Ab** flashes alternately with the current address/function.
- With **▽ / ▲** select the required address **00** ... **FF** or function **LL** for light push-button, **EE** for door release push-button or **--** for no function.

i Internal call ¹⁾:

In the door communication system, internal calls from indoor station to indoor station are possible. Unlike comfort indoor stations only the fixed addresses **FF** and **FE** are available as call destination for the internal call.

- 1) Requires the appropriate default setting by the installer (see: Indoor station/Expanded settings).
- Confirm set address/function with **○**.
The device applies the setting and returns to the previous menu entry. **Ab**.

Display of saved error codes EE

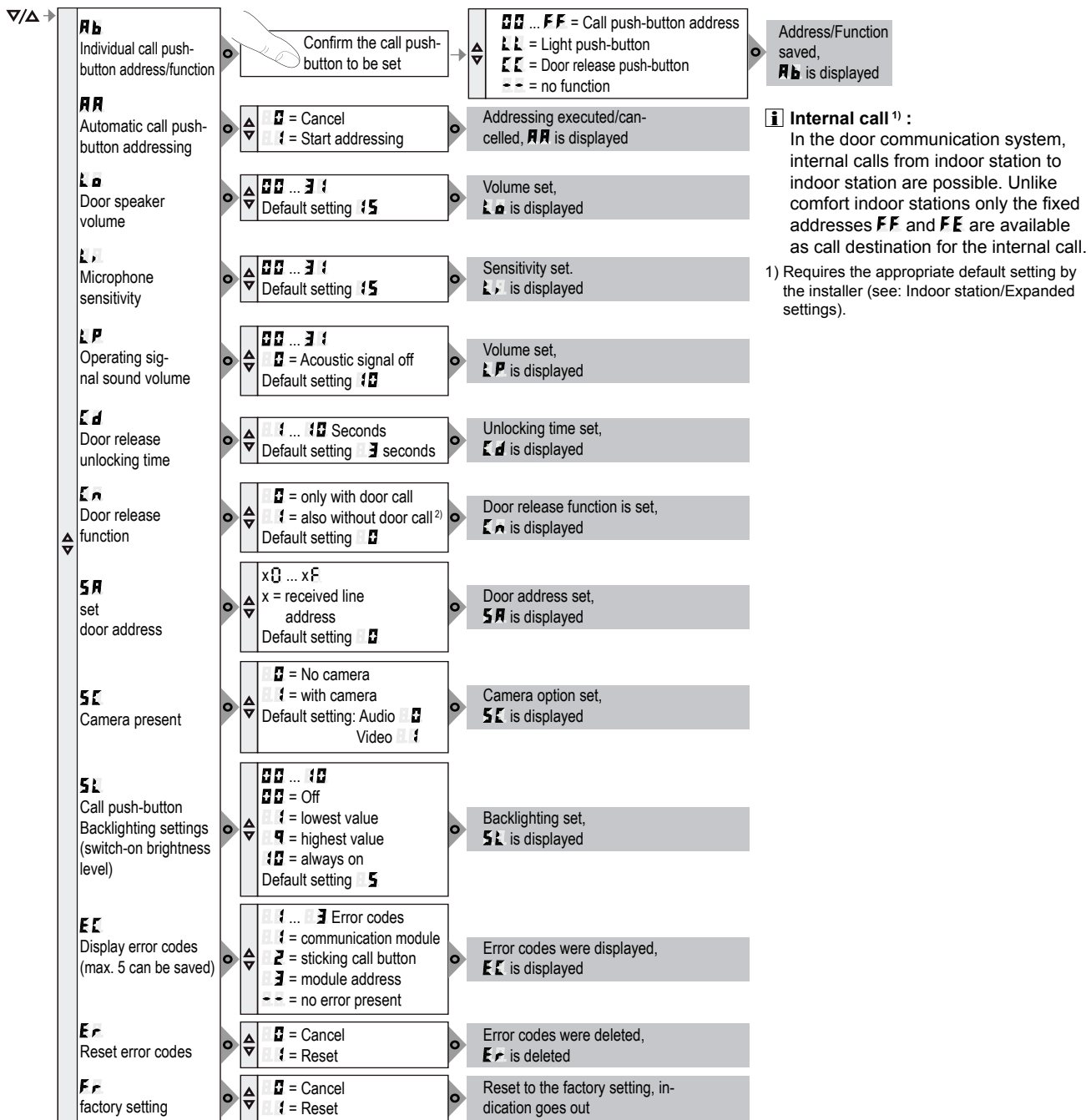
Audio insert and call push-button module errors that occur during operation are stored in the error memory of the audio insert for diagnosis.

- Select menu entry **EE** with button **▽ / ▲** and confirm with **○**
If no error code has been saved, **--** is displayed for 2 seconds followed by **EE** again.
If error codes have been saved, **EE** flashes and the module address and error code are displayed.
- Press button **▽ / ▲**, to call up further error code if necessary.
- Press button **○** to return to menu entry **EE**.

Error code	Error cause	Corrective actions
01	Communication error between audio insert and call push-button module. Once the error has occurred 3 times, the system is reset automatically and the error code is generated.	If the error continues, the call push-button module must be replaced and the addressing operation performed again.
02	Call button stuck.	Check call push-button module, and if there is a defect, replace and address.
03	Call push-button address failed to write in call push-button module.	If the error persists, the call push-button module must be replaced and addressed.

Table 1: Error codes and corrective actions

- i** The memory should only be deleted once 5 error codes have been stored, so that new error codes can be saved.
- i** Identical error codes are only saved once.



i Internal call¹⁾ :
 In the door communication system, internal calls from indoor station to indoor station are possible. Unlike comfort indoor stations only the fixed addresses **FF** and **FE** are available as call destination for the internal call.

1) Requires the appropriate default setting by the installer (see: Indoor station/Expanded settings).

2) Door station call-free door-opening function only possible in single door systems.

Figure 11: Overview of system settings

Install door station

The system settings are complete.

- Use a Torx T10 screwdriver.
- Position the door station on the base and tighten the two screws in the front plate (figure 12).

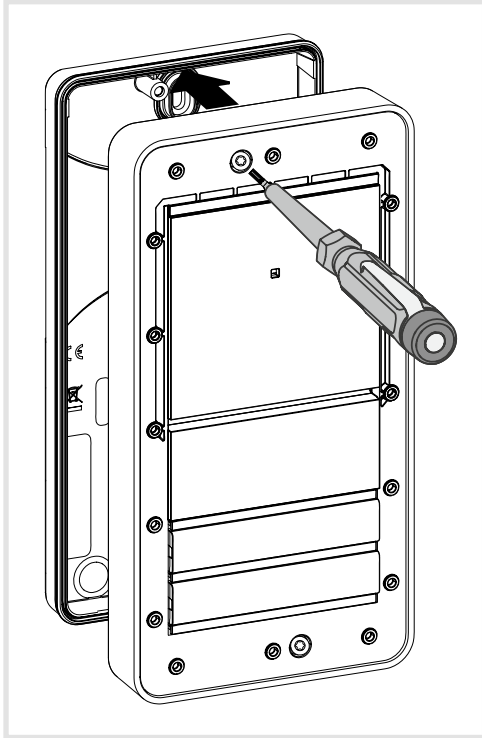


Figure 12: Installing door station

- Clip the design front plate (1) on to the door station making sure that the unclipping slot (15) is pointing downwards (figure 13).

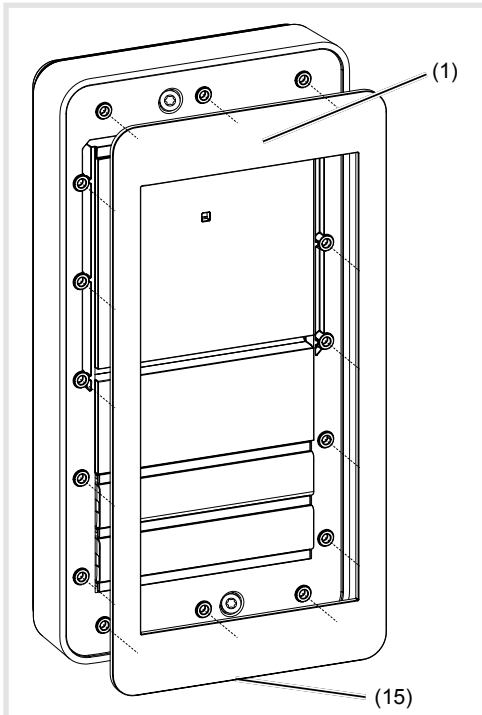


Figure 13: Clipping the design front plate on to the base.

(15) Unclipping slot

Label call push-button

- Press one side of the call push-button.
The other side can be levered open (16) using a screwdriver.
- Insert the screwdriver into the lever opening system (16) and unlock the button (figure 14).
- Remove cover with name plate insert.

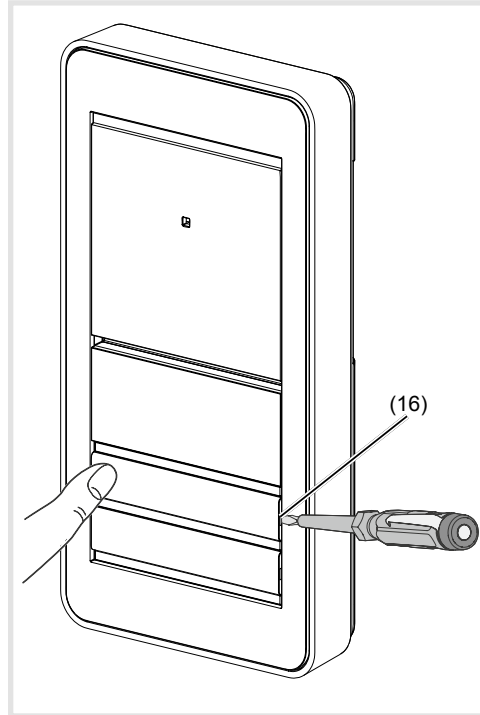


Figure 14: Removing name plate cover

(16) Lever opening system

- Label name plate insert if required.
- Place a name plate or label inside the cover and press down on the cover.
- ⓘ Do not use a paper name plate or label as it may be damaged by damp and UV light along with the writing on it.
- ⓘ Use UV-resistant media and laser printing or marking devices for the labelling:
 - small buttons - 12 mm
 - medium buttons - 30 mm

It is advisable to use white writing on a black background.

Dismantle call push-button module cover

During cleaning or replacement, the call push-button module cover can be dismantled from the front.

- Lever open the top and bottom of the cover strips (6) and remove them (figure 15).

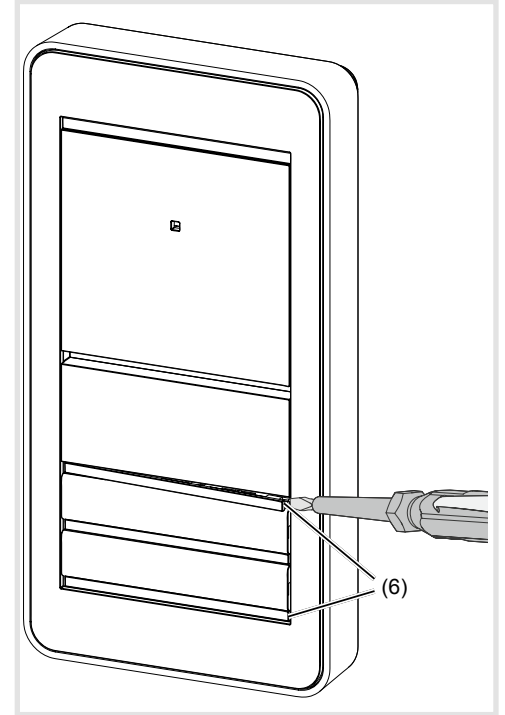


Figure 15: Removing cover strips

- Use a screwdriver to lever open the push-button module cover and remove it from the front (figure 16).

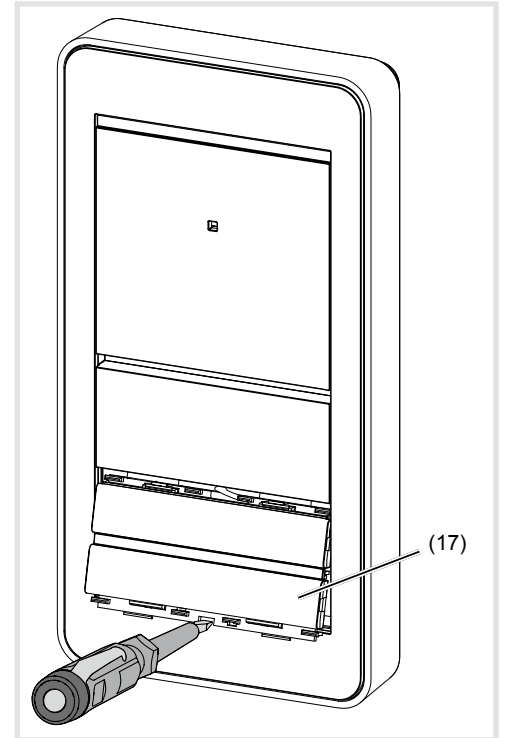


Figure 16: Dismantling the call push-button module cover

(17) Call push-button module cover

- ⓘ Defective covers can only be replaced by covers with the same number of push-buttons.
- Remove the module to be replaced and install the new module in reverse order.

Replace a module

Dismantle the door station (figure 3).

- Remove the connection terminal block (12) from the video insert.
- Loosen the screws (18) on the rear base of the modules (19) using a screwdriver and remove the base (figure 17).
- Remove the connecting cable connectors from the module (12) to be exchanged (figure 2).

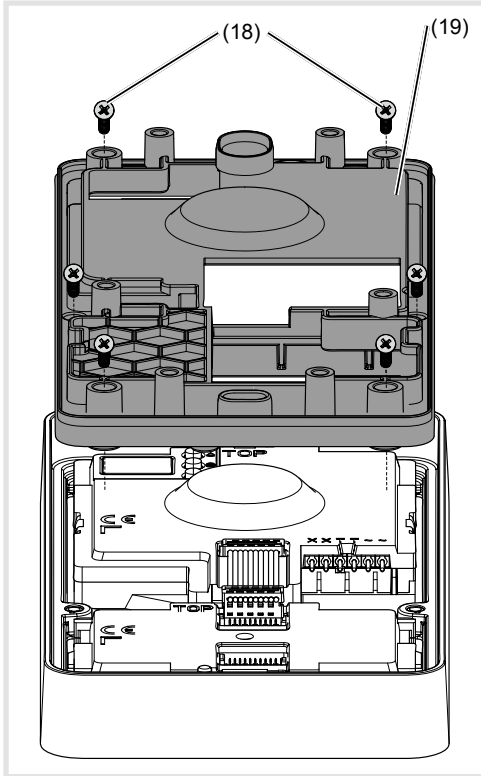


Figure 17: Module base dismantling

(18) Vis

(19) Module base

The audio module and the call push-button module can be removed.

- Remove the module to be replaced and install the new module in reverse order.
- Automatic or manual addressing of the module is required to operate the door station.

Appendix

Technical data

Operating voltage	22 ... 24 V=
Current consumption audio insert Stand-by	5 mA
Current consumption audio insert Operation	110 mA
Current name plate lighting per call push-button module	45 mA

Menu setting	Backlighting On	Backlighting Off
0	Permanent Off	
1	≈ 750 lx	≈ 1600 lx
2	.	.
3	.	.
4	.	.
5	.	.
6	.	.
7	.	.
8	.	.
9	≈ 60 lx	≈ 110 lx
10	Permanent On	

Table 2: Switch-on brightness level name plate-lighting

Door release contact T/T potential-free	max. 24 V/1 A
Door release unlocking time	1 ... 10 s
Degree of protection	IP 54
Degree of protection	IK07
Average degree of humidity	from 5% to 75% without condensation at 25°C, can vary between 85% and 95% for 30 days in the year

Operating temperature	-20°C ... +55°C
Storage/transport temperature	-30°C ... +80°C
Connecting terminals for conductor diameter	0.5 ... 0.8 mm
Dimensions:	
Small call push-button	75.8 x 14.5 mm
Small name plate insert	72.1 x 12 mm
Medium call push-button	75.8 x 32.6 mm
Medium name plate insert	72.1 x 30.1 mm
Width of name plate insert	max. 0.5 mm
Door station dimensions (W x H x D)	100 x 191 x 29.5 mm

