

*Carus*

**Product information**

**CARUS IRIS**

**Front-door station for surface-mount**

**CAE100x-015x**





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## Scope of delivery

- 1 x IRIS front-door station
- 1 x slot screwdriver
- 1 x hexagon ballpoint screwdriver with 2.5 mm wrench size
- 1 x installation kit (universal dowel 6 x 35 mm and chipboard screw PZ 3.5 x 40 mm)
- 2 x laser film foil matt, format DIN A4 for name plates
- 1 x product information

## initiation

### Notes on this product information



This product information refers exclusively to qualified electricians.

The product information contains important notes on intended use, installation and initial operation. Please, keep the product information in a suitable place, where it is easily accessible for maintenance and repair reasons. You will find all product information in the download area at [www.carus-concepts.com](http://www.carus-concepts.com).

### Used symbols and warning notices

Symbol	signal word	Explanation
	<b>DANGER!</b>	The signal word describes an endangering with a high level of risk. Failure to observe this warning will result in death or very serious injury.
	<b>WARNING!</b>	The signal word describes an endangering with a medium level of risk. Failure to observe this warning could result in death or very serious injury.
	<b>CAUTION!</b>	The signal word describes an endangering with a low level of risk. Failure to observe this warning could result in a minor or moderate injury.
	<b>ATTENTION!</b>	The signal word indicates, that damages on equipment, environment and property can occur.

### Further used symbols



important note or important information



Step



cross reference For further information on this topic, see source



list, list entry 1 level



list, list entry 2 level



Explanation

# Safety instructions

## General safety regulations



Assembly, installation, commissioning and repair of electronic devices must be carried out by qualified electricians.  
Observe the latest regulations and standards for system installations.



### **WARNING! Danger of life due to electric shock**

Observe the safety regulations according to DIN VDE 0100, when working on main power connections of 230 V.



When installing TCS:BUS systems the general safety regulations for telecommunication systems according to VDE 0800 must be observed. Inter alia:

- separated cable routing of high and low voltage lines,
- minimum distance of 10 cm in case of a common cable routing,
- use of separators between high and low voltage lines within shared cable ducts,
- use of standard telecommunication lines, e.g. J-Y (St) Y with 0.8 mm diameter,
- already existing lines (modernisation) with deviating cross-sections can be used in compliance with the loop resistance.

## requirements to protect against lightning



### **ATTENTION! Device damage due to overvoltage.**

By suitable lightning protection measures it has to be ensured that the electric voltage of 32 V DC at each connection is not to be exceeded.

# Product description

## Intended use

The CAE100x-015x audio front-door stations are suitable for outdoor use.  
They are suitable for surface-mount.

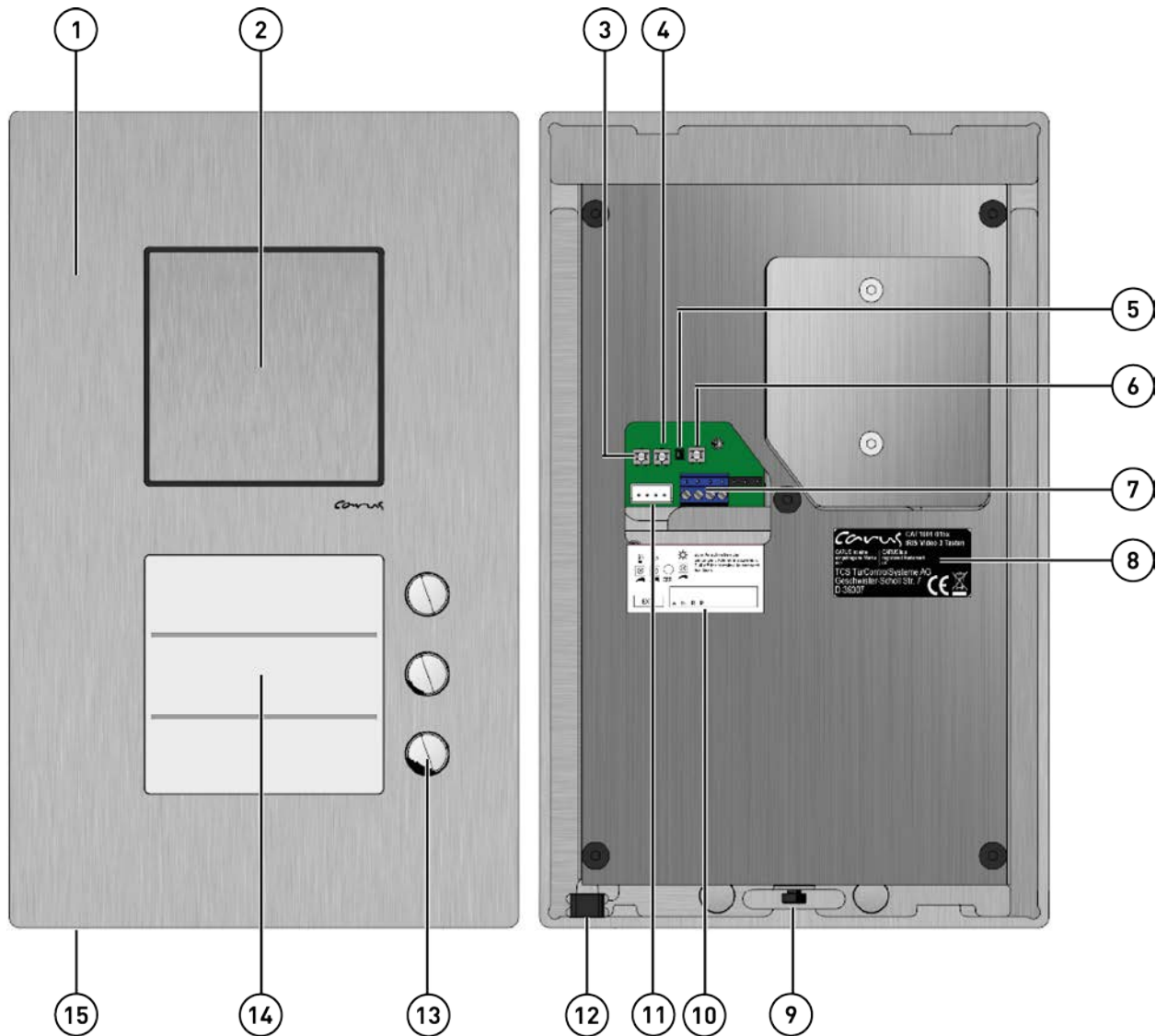


For applications, which differ from the intended use or goes beyond it, the manufacturer accepts no liability.

## Short description

- Front-door station for surface-mount
- for up to 3 flats
- housing made of solid aluminium
- surface with hand-made grinding and elaborate finishing (colour: black or silver)
- illuminated and chrome-plated bell buttons made of metal with maintenance-free contacts
- per bell button 2 indoor stations can be allocated
- durable and energy-saving name plate illumination
- name plate illumination is controlled by twilight switch
- threshold of the twilight switch can be adjusted manually
- acknowledgement tone when pressing the bell button
- volume system tones can be adjusted manually
- conversation time ex works: 56 seconds / can be adjusted with service device TCSK
- any bell button can be used to switch lights
- volume loudspeaker can be adjusted manually
- R-terminal for connection of an extended function *door release*
- door release time at R-terminal ex works: 3 seconds / can be adjusted with configuration software configo™
- door call standby time (to control the short-term memory in indoor stations) ex works: 56 seconds / can be adjusted with configuration software configo™
- voice connection in door call standby time / can be adjusted with service device and configuration software configo™

## Device overview



### front

- 1 top shell
- 2 loudspeaker
- 13 bell button
- 14 nameplate
- 15 release screw for name plate holder

### back

- 3 volume control system tone
- 4 volume control loudspeaker
- 5 LED error indication
- 6 controller light sensor (twilight switch)
- 7 connection terminal (a, b, R and P)
- 8 type label
- 9 lock screw for top shell
- 10 sticker connections and operation
- 11 connection for service device
- 12 microphone

## Technical data

supply voltage	+24 V $\pm$ 8 % (power supply and control unit)
input current in resting position	3-wire operation: I(a) = 0.1 mA, I(P) = 49 mA
max. input current:	I(a <sub>max</sub> ) = 14.8 mA, I(P <sub>max</sub> ) = 55 mA
housing	aluminium, anodised natural / silver or black
nameplate glass	acrylic glass
dimensions (in mm)	H 240 x W 150 x D 27
weight	1600 g
acceptable ambient temperature	-20 °C ... + 50 °C
degree of protection	IP44
3-wire technique necessary!	



# Mounting and installation

## Installation

For installing the bottom shell use the installation kit (enclosed in the delivery).



- Condensed water must be able to escape and evaporate. Avoid closing the opening for condensed water.
- Do not seal the device with silicone rubber under any circumstances.

### Installation site

For an optimal operation we recommend a mounting height of 130 cm to 150 cm (top edge of the device over ground, ill. 1).



For changing the nameplate pull the nameplate holder (1) downwards. Observe a free space of **at least. 13 cm.**



To achieve a high quality of the video image, the camera must not be oriented towards direct sunlight.

- solar radiation
- strong sources of light
- light or strongly reflecting walls.

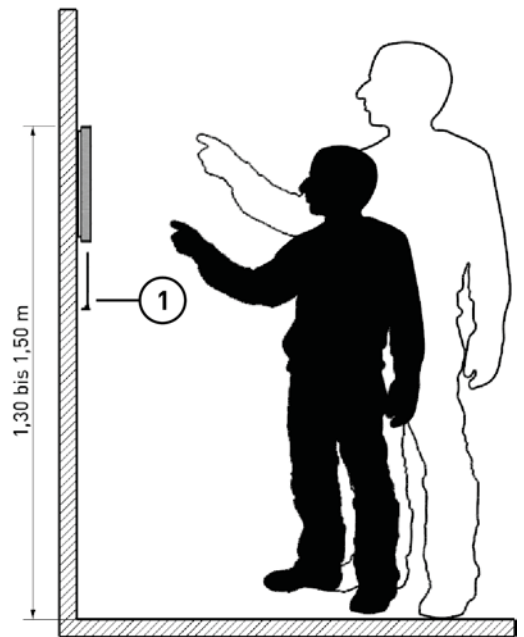


Fig. 1: mounting height

### Opening the device

The nameplate holder (2) is screwed to the housing (1) with an hexagon socket screw (3) .

- ▶ Remove the hexagon socket screw (3) by using the allen key (4) (ill. 2).



The nameplate holder is secured from falling down by two magnets.

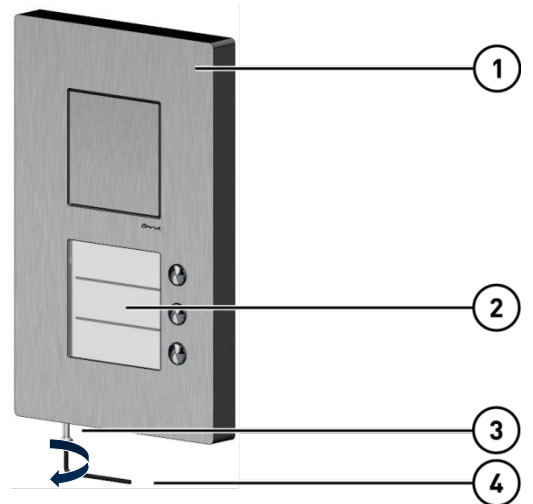
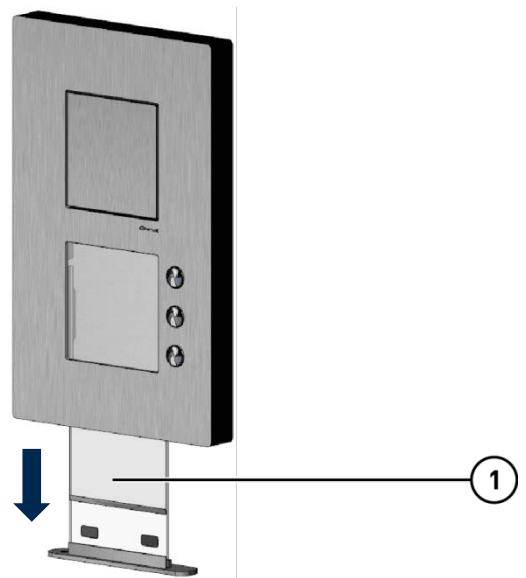


Fig. 2: Opening the front-door station

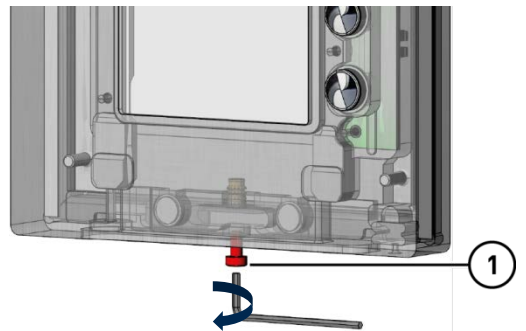
- ▶ Pull out the nameplate holder **(1)** (ill. 3).
- ▶ Place the nameplate holder on a clean and dry surface.



*Fig. 3: Removing nameplate holders*

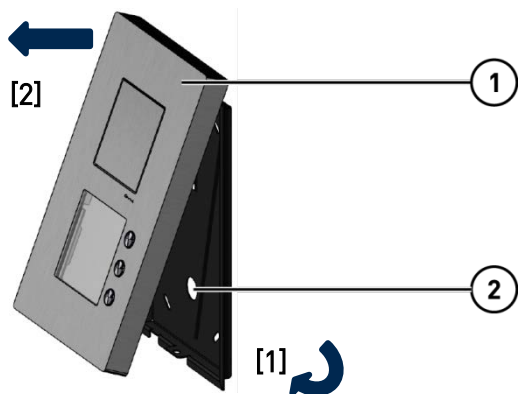
The top shell is connected to the bottom shell with another hexagon socket screw.

- ▶ Loosen the hexagon socket screw **(1)** by using the allen key (ill. 4).



*Fig. 4: Loosen the top shell*

- ▶ Remove the top shell **(1)** from the bottom shell **(2)** (ill. 5).
- ▶ Place the top shell on a clean and dry surface.



*Fig. 5: Removing the top shell*

### Installing the bottom shell

- ▶ Puncture the cellular rubber seal with a pointed object at the position of the cable gland.
- ▶ Guide the connection cable (3) through the cable gland (2) of the bottom shell (ill. 6).
- ▶ Install the bottom shell with 4 screws (1) (enclosed in the delivery) to the wall.



Observe the installation position of the bottom shell. The installation position of the bottom shell is marked by two arrows as well as the designation *Oben Top*.

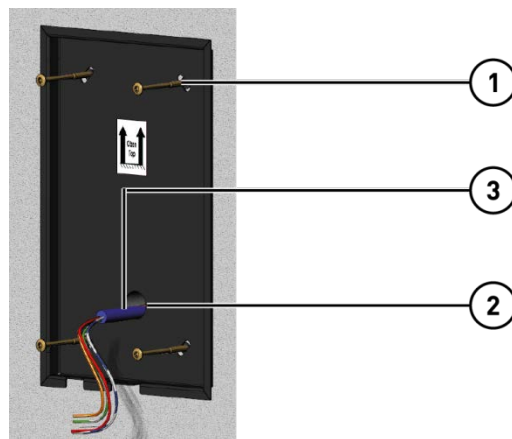


Fig. 6: Fixing the bottom shell on the wall

### Connect the lines

- ▶ Draw off the connection terminal (2) from the circuit board.
- ▶ Strip the lines.
- ▶ Connect the lines (a, b, R and P) according to the labelling (1) (ill. 7).
- ▶ Fix the lines by using the screwdriver (3) (enclosed in the delivery).



Observe the example circuit on page 14.

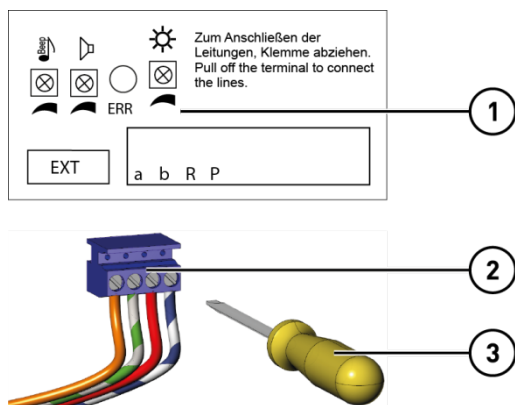


Fig. 7: Connect the lines

- ▶ Pin the connecting terminal (1) on the circuit board again (ill. 8).

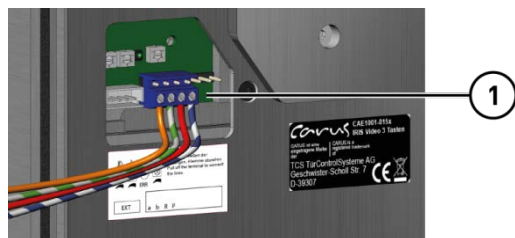
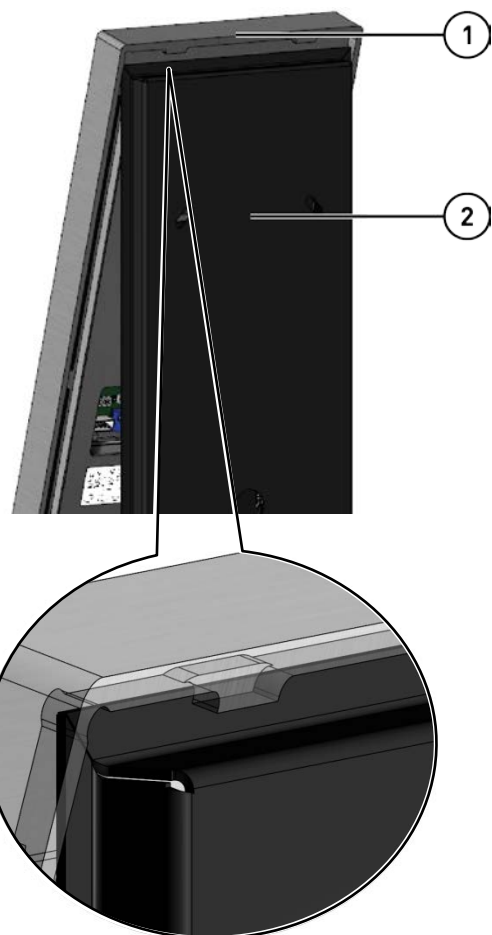


Fig. 8: Pin the connecting terminal

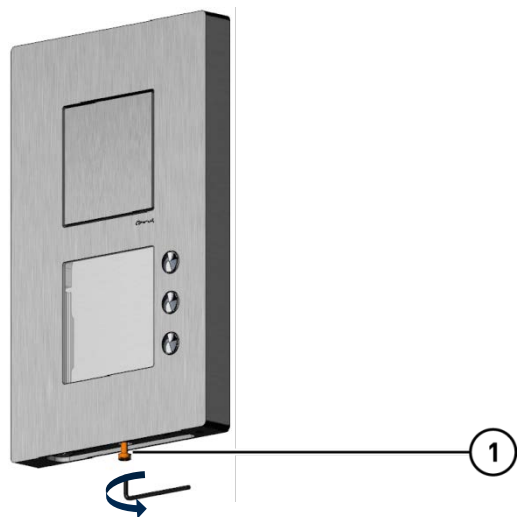
**Fixing the top shell**

- ▶ Put on the top shell (1) on the bottom shell (2) (ill. 9). The fixing brackets have to latch over the upper edge of the bottom shell.
- ▶ Turn down the top shell on the bottom shell.



*Fig. 9: Fixing the top shell*

- ▶ Fix the top shell with the hexagon socket screw (1) at the bottom shell (ill. 10).



*Fig. 10: Secure the top shell*

## Labelling the nameplate



Labelling templates as WORD files are available for download at [www.carus-concepts.com](http://www.carus-concepts.com).

- ▶ Enter the required names into the labelling template.
- ▶ Print the nameplates on the special foil (enclosed in the delivery) by using a laser printer.
- ▶ Alternatively: Label the special foil with a waterproof marker.
- ▶ Cut out the foil along the marking (W x H 72 x 77 mm).
- ▶ Push the nameplate from the side into the gab in the nameplate glass (ill. 11).



we recommend to print the nameplates onto a durable special foil.  
You can order replacement foils directly under [info@carus-concepts.com](mailto:info@carus-concepts.com).

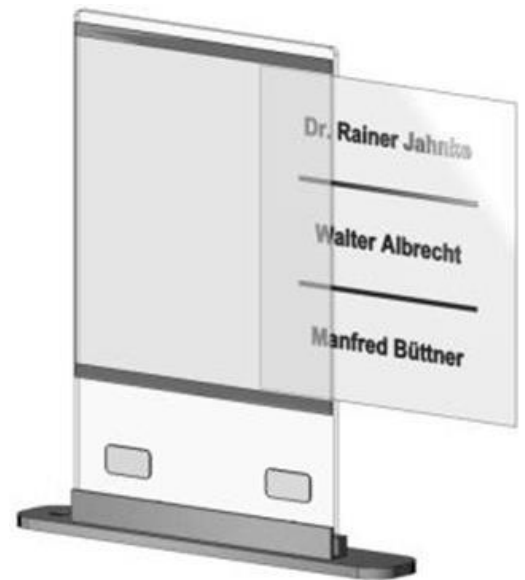


Fig. 11: Replacing nameplates

## Closing the device

- ▶ Push the nameplate holder into the front-door station (see p. 10, ill. 3).
- ▶ Fix the nameplate holder with the hexagon socket screw M3x10 (ill. 12).



Fig. 12: Closing the device

## Connecting the lines

### General information



- Use the small slot screwdriver (enclosed in the delivery) to connect lines. Avoid damaging the device.
- Ensure that no lines are clamped on the backside of the front-door station or between top and bottom shell.

### Example circuit

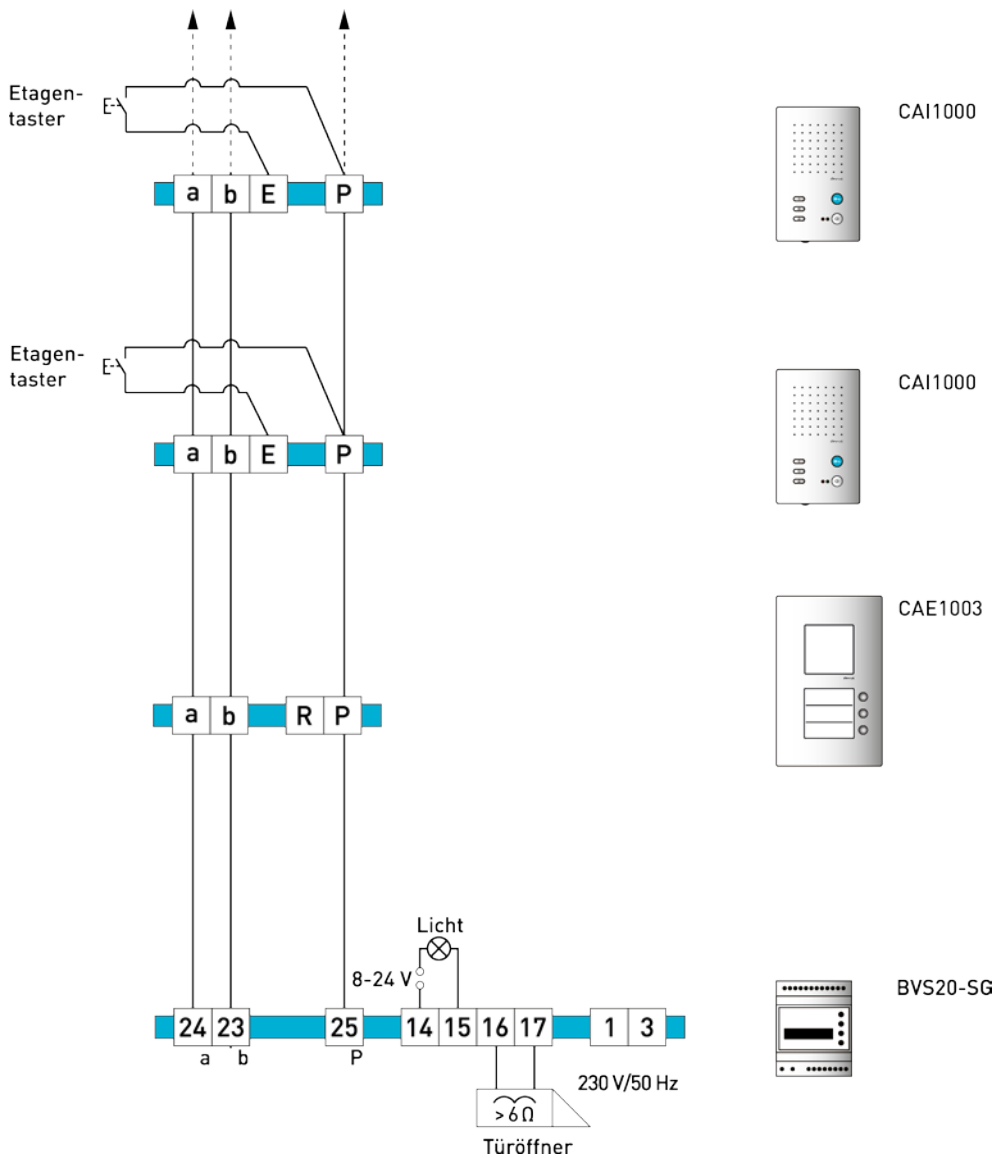


Fig. 13: Example circuit

For further information see TCS system manual. The TCS system manual can be downloaded at [www.tcsag.de](http://www.tcsag.de).

## Initial operation

- ▶ Install the devices of the system completely.
- ▶ Proof the a-, b- and P-wire against each other on short-circuit.
- ▶ Switch on the mains voltage.

## Settings



- For setting the volume use the enclosed slot screwdriver.
- The volumes are set on an average value ex works. A change is not always required.

### Setting the volume of the system tone

- ▶ Turn the control **(1)** right to increase the volume.
- ▶ Turn the control **(1)** left to reduce the volume.

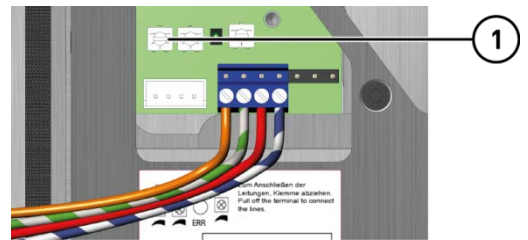


Fig. 14: Setting the volume of the system tone

### Setting the volume of the loudspeaker

- ▶ Turn the control **(2)** right to increase the volume.
- ▶ Turn the control **(2)** left to reduce the volume.

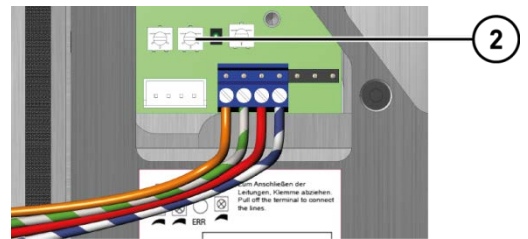


Fig. 15: Setting the volume of the loudspeaker

### Setting the illumination

By using the twilight switch you can control the illumination of the front-door station. The threshold is set to middle twilight ex works.

- ▶ Turn the control **(3)** right to increase the threshold.
- ▶ Turn the control **(3)** left to reduce the threshold.

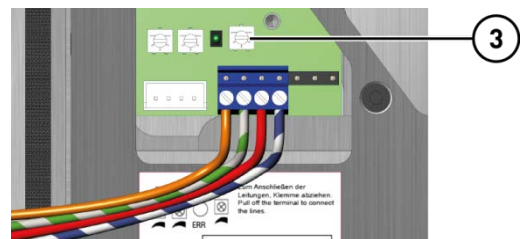


Fig. 16: Setting the illumination



If the front-door station should be illuminated permanently, turn the control to the left until the stop.

# Programming the bell buttons

## Basic principle

All devices at the TCS:BUS have an unique serial number.

The serial number of the indoor station is allocated to the bell button of the front-door station. The allocation is stored in the EEPROM of the front-door station.

Requirements for the programming:

- ▶ Ensure that the access to the indoor station in the flat is granted.
- ▶ Check if the indoor station is connected to the TCS:BUS.
- ▶ Switch on the mains voltage. The operating LED at the power supply and control unit is on.
- ▶ Check if a programming lock is set.

 Manual TCSK.



If a programming lock is set, you cannot program any bell button. To deactivate the programming lock you need a Service Device TCSK or the configuration software configo™.

### 1 power supply and control unit Switch on the programming mode of the system



Shortly press <sup>a/</sup>the RUN/PROG button.

The LED blinks.

The programming mode of the system is switched ON.

### 2 Deleting bell buttons <sup>b/</sup>



Press the button which should be deleted for 6 seconds until an acknowledgement tone sounds. <sup>c/</sup>

Release the bell button. Repeat step 2 to delete further bell buttons.

### 3 Programming via voice communication



Establish a voice communication to the front-door station. <sup>d/</sup> Press the bell button which should be programmed. A ring tone sounds at the front-door and indoor station. <sup>d/</sup>

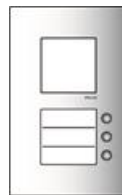
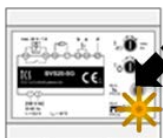
Terminate the voice communication.



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#### 4 power supply and control unit Switch off the programming mode of the system

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Shortly press the RUN/PROG button.

The LED is on.

The programming mode of the system is switched OFF. <sup>e)</sup>

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- a) Do not press the RUN/PROG button longer than 5 seconds. Otherwise you will activate the light switch function of the front-door station. The bell button cannot be programmed. The LED blinks. Shortly press the RUN/PROG button to switch off the programming mode. Shortly press the RUN/PROG button to switch on the programming mode. Program the bell button.
- b) If the light switch function is activated, you can switch the lights by pressing the door release button of the indoor station, if no voice communication is established. Switch on the programming mode. Press the RUN/PROG button longer than 5 seconds until the LED lights up. The light switch function is deactivated.
- c) Not necessary, if the bell buttons have not been programmed, see product information of the front-door station.
- d) If there sounds a Progsper tone (long high tone followed by long low tone) instead, the front-door station is equipped with a programming lock. You can deactivate the programming lock only with the service device TCSK or the configuration software configo™.
- e) An acknowledgement tone sounds at front-door stations (as of 2009) if the serial number of the indoor station was received (see product information of the front-door station).
- f) device specific indication modes of the front-door station see product information of the front-door station

## Cleaning



### ATTENTION!

#### Loss of function due to short-circuit and corrosion.

Water and cleaning agents can enter the device. Electronic elements can get damaged due to short-circuit or corrosion.

Avoid water and detergents from entering the device! Clean the device with a dry or slightly wet cloth.



### ATTENTION!

#### Damages on the surface of the device

Abrasive or scratching detergents damage the surface of the device.

Do not use any abrasive detergents!

Remove stronger stains with a pH neutral household cleaner.

## Conformity



Declarations of conformity are available for download under [www.tcsag.de](http://www.tcsag.de).

## Information on disposal



Dispose the device separately from domestic waste via a collection point for electronic scrap. Ask your county administration for the responsible collection point.



Dispose the parts of the packaging in collecting tanks for cardboard and paper resp. plastics.

## Warranty

We offer a **simplified processing** in case of warranty for qualified electricians.

- Please contact the **TCS HOTLINE** under [hotline@tcsag.de](mailto:hotline@tcsag.de).
- Our **standard terms and conditions of sale** you'll find under [www.tcsag.de](http://www.tcsag.de).

## **Service**

Please send your questions and inquiries to

**hotline@tcsag.de**

### **Headquarters**

TCS TürControlSysteme AG, Geschwister-Scholl-Str. 7, 39307 Genthin | Germany  
FON: Fax +49(0)3933 8799/-10 +49(0)3933 8799-11 [www.tcsag.de](http://www.tcsag.de)

### **TCS Hotline Germany**

FON: +49(0)4194 9881-188 FAX: +49 4194 9881-29,  
E-Mail: [hotline@tcsag.de](mailto:hotline@tcsag.de)

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