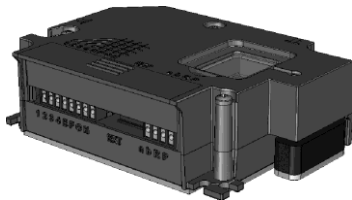


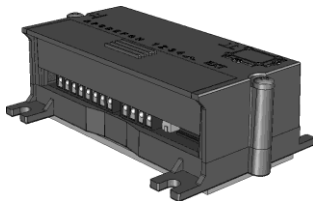


## Product information

Built-in  
door loudspeaker  
ASI11000-0000



Built-in  
bell button extension  
ASI21000-0000





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## Scope of delivery

### **ASI11000**

- 1 x built-in door loudspeaker ASI11000-0000
  - 1 x screw driver with round handle
  - 1 x screw (3 x 25), e.g. for Renz-Adapter "Antivandalism"
  - 3 x screw (3 x 10), e.g. for Renz-Adapter "Standard" / "Antivandalism"
- product information

### **ASI21000**

- 1 x built-in bell button extension ASI21000-0000 (with cable)
  - 1 x screw driver with round handle
  - 1 x screw (3 x 25)
  - 3 x screw (3 x 10)
- product information

## Safety instructions

**!** Mounting, installation, commissioning and repair of electronic devices have to be carried out only by qualified electricians!

For working on systems with main connection of 230 V alternating voltage, the safety requirements according to DIN VDE 0100 must be observed. When installing TCS:BUS systems, the general safety regulations for telecommunication systems according to VDE 0800 must be observed.

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





With suitable measures to protect against lightning, it has to be ensured that a voltage of each 32 V DC is not to be exceeded at the TCS:BUS wires.

### **General information on the conduit in TCS audio systems**

The conduit is determined by structural conditions and is limited only by its length.

- Observe when selecting the cable length: the loop resistance must not exceed  $20\ \Omega$  (table).
- To keep the max. permitted loop resistance, the cross-section of the wire can be doubled, that means, for one wire two lines are used (illustration). The lines must be twisted.
- When using shielded lines: connect the shields with each other and earth one side (b-wire) at the power supply.
- Optional strand or star formed wiring.

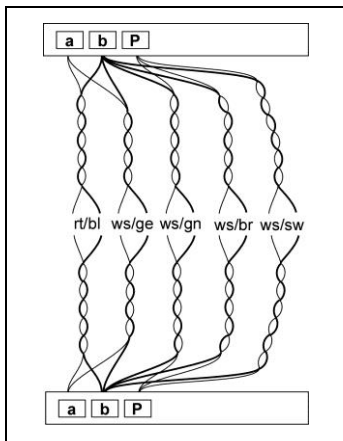
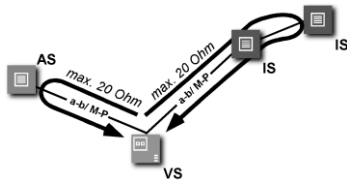


Table: loop resistances

cable length in m	cable diameter	
	0.6 mm	0.8 mm
	loop resistance in $\Omega$	
10	1.28	0.71
20	2.55	1.43
30	3.83	2.14
40	5.10	2.86
50	6.38	3.57
60	7.65	4.29
70	8.93	5.00
80	10.20	5.71
90	11.48	6.43
100	12.76	7.14
150	19.13	10.71
200	25.51	14.29
250		17.86
300		21.43

## Principle loop resistance

None of the devices (AS, IS or FE) should be further than 20 Ohm away from the power supply and control unit (VS).



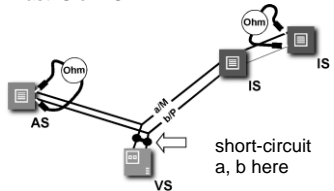
20 Ohm:

max. 160 m distance AS/IS-VS at  
0.6 mm diameter

max. 300 m distance AS/IS-VS at  
0.8 mm diameter

## Measure loop resistance

- Switch off the 230 V / 50 Hz of the VS
- Install a-b short-circuit at the VS.
- Other devices are not disturbing the measurement & can stay connected
- Measure the resistance at a/b at the last IS or AS



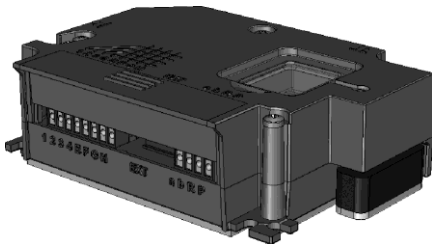
*AS front-door station*

*VS power supply and control unit*

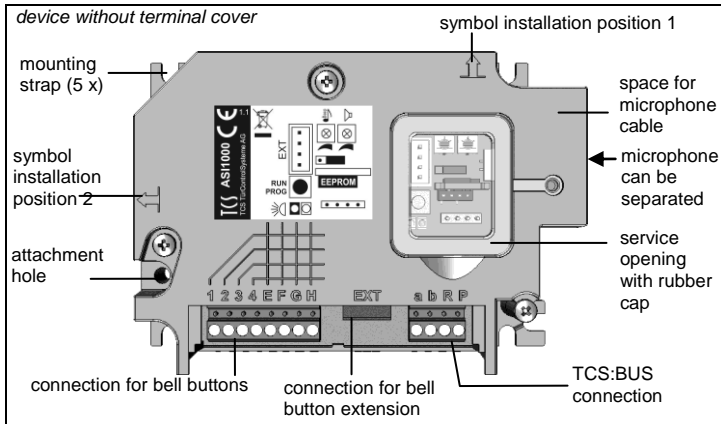
*IS indoor station*

*FE extended function*

## Built-in door loudspeaker ASI11000-0000



## Device overview



## Technical data

supply voltage:	+24 V $\pm$ 8 % (TCS:BUS power supply and control unit)
housing:	plastics black
dimensions (in mm):	H 79 x W 112 x D 34
weight	141 g
acceptable operating temp.:	-25... 55 °C (according to DIN EN 50486) installation in the protected outdoor area (behind front panels provided by customer)
input current:	I(a) = 0.1 mA, I(P) = 4.4 mA
max. input current:	I(Pmax) = 140 mA
length microphone cable (mm):	250

3-wire technique necessary!\*

*\*) In 2-wire technique, one ASI11000, one BVS20 and a suitable number of indoor stations (max. 16) are permitted. The number of possible indoor stations depends on the type and is stated in the product information of the indoor station!  
The connection of an FAA1100 is not permitted!*

## Intended use

The ASI11000 is a built-in door loudspeaker for the installation into letter box systems or behind individual front panels. The ASI11000 is suitable for indoor use and can also be used in the protected outdoor area.



The combination of ASI11000 and TCKE as well as the combination of TCU2 and ASI21000 is not possible.



The operation of the built-in door loudspeaker ASI11000 is only permitted with

- closed service opening (transparent rubber cap)
- closed terminal cover (engaged)
- and in correct installation position (see *Device overview*: symbol installation position 1; if not possible, use alternatively the installation position 2).



## Short description

### ***Basic functions***

ringing	<p>Pressing the connected bell buttons, provided by customer</p> <ul style="list-style-type: none"><li>• triggers the ringing at the indoor station, a tone sounds at the ASI11000,</li><li>• triggers the light switch function in the power supply and control unit, an acknowledgement tone sounds.</li></ul>
voice connection to the indoor station	<ul style="list-style-type: none"><li>• voice-controlled hands-free talking (standard), manually controlled simplex communication can be activated</li><li>• full duplex hands-free talking for indoor stations with handset can be realised</li></ul>
number of bell buttons	max. 16 can be directly connected (4 x 4 button matrix)
serial number per bell button	max. 2 possible

---

storage of the bell  
button  
assignment

- Ex works, the serial number of each indoor station is allocated to a bell button and stored in the front-door station in the EEPROM. The stored allocations do not get lost in case of a voltage breakdown.
- 

### ***Additional functions***

---

connection for

- bell button extension ASI21000, pluggable via a connector, (max. 6 ASI21000 can be connected, that corresponds to 192 further bell buttons, please observe: Installation, page 26)
  - Service Device
  - extended function door release (via R-terminal to FAA1100). Not possible in 2-wire technique.
-

indications via LED	<ul style="list-style-type: none"><li>• status indication for operating modes and errors</li><li>• status indication programming</li></ul>
error indication	acoustic and optical (LED)
volume	manually, can be adjusted separately for loudspeaker and acknowledgement tones
2nd slot	<ul style="list-style-type: none"><li>• to read-in TCU2 memories</li><li>• to read-in TCKE memories</li></ul>
configurable functions for bell buttons provided by customer	<ul style="list-style-type: none"><li>• send any control function when pressing a bell button (serial number of the control function = serial number of the ASI11000)</li><li>• send a door release command</li></ul>

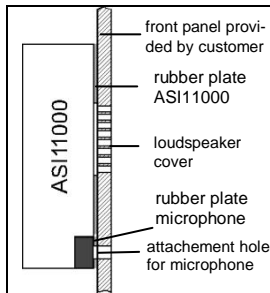
## Assembly

### **Installation position**

Horizontal installation preferred (installation position 1, terminals downwards), alternatively vertical (installation position 2, microphone downwards). See *Device overview*.

### **Fixing the housing**

- The rubber plate of the ASI11000 housing should rest flush on the front panel provided by customer. Thus, the sound from the loudspeaker is lead directly to the microphone and not through an air gap between housing and installation site (otherwise the sound quality is restricted)!
- Beside the correct installation, there is the possibility displace the microphone from the ASI11000 housing (see page 22).



## **Fixing with screws**

- To fix the ASI11000, 1 attachment hole and 5 mounting straps are available.
- With the enclosed screws, the installation on standard loudspeaker covers can be realised.

## **Fixing by glue**

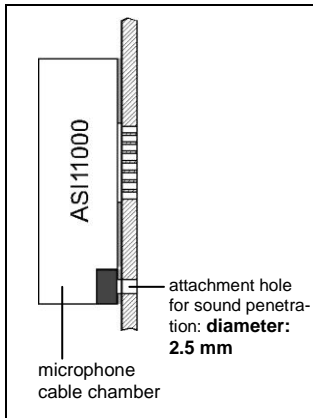
- The area on which the door loudspeaker is to be glued, has to be smooth and free from dust and grease.
- Pull the protective foil off the rubber plate and stick the device to the backside of the front panel.

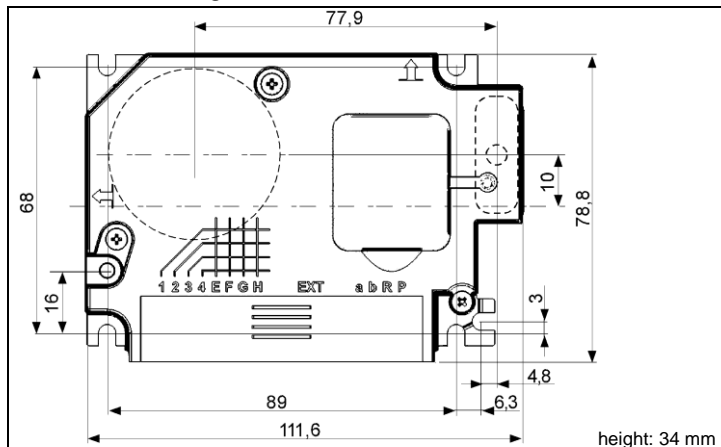
## **Fixing at door stations and letterbox systems**

For information on fixing the ASI11000 at standard door stations and letterbox systems see the *assembly instruction ASI11000, installation proposals*.

### ***Detaching the microphone***

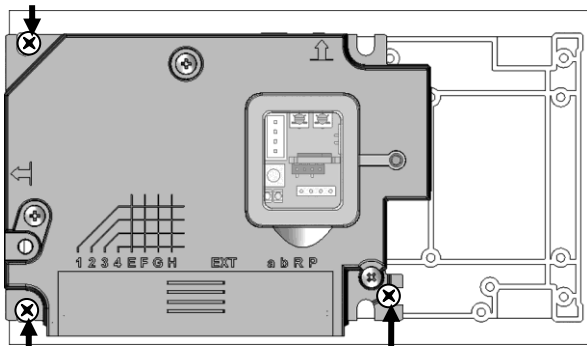
- The microphone is plugged in a form-locking connection and can be removed carefully from the housing.
- Remove the connection cable from the microphone cable chamber. Ensure that the cable is not pulled off at the microphone.
- For the installation behind a loudspeaker cover: the attachment hole for the sound penetration through the front cover must have a diameter of 2.5 mm.



***Dimensional drawing***

### Installation with Renz adapter “Standard”

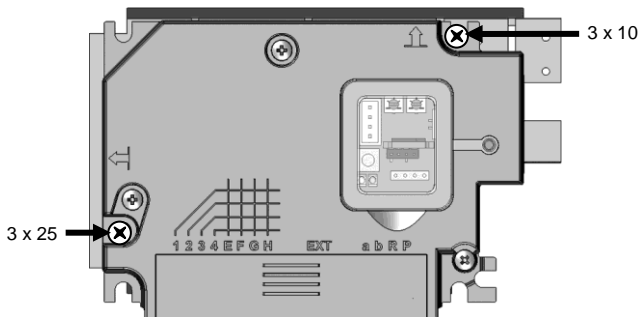
To install the ASI11000 via Renz adapter (*adapter for loudspeaker cover with connection port, article no. 97982195*) the 3 attachment holes have to be used as shown in the illustration. 3 screws enclosed: 3 x 10.





### ***Installation with Renz adapter “Antivandalism”***

to install the ASI11000 via Renz adapter (*adapter for loudspeaker cover RSA loose, article no. 97982164*) the 2 attachment holes have to be used as shown in the illustration. 2 screws enclosed: 3 x 10, 3 x 25.



## Installation

### ***Connect the bell buttons provided by customer***

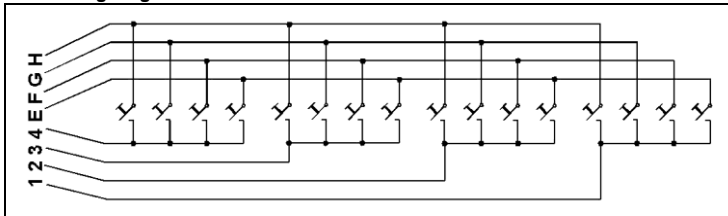


For the installation in the protected outdoor area: avoid water from entering the device with suitable measures!



Only use the enclosed small screwdriver to connect the lines and to avoid damaging the device.

### **Connecting diagram**



## Notes

- 3-wire technique necessary!
- In 2-wire technique one ASI11000, one BVS20 and a suitable number of indoor stations are permitted (max. 16). The number of indoor stations that can be realised depends on the type of the indoor station. For detailed information see the product information of the indoor station!
- In 2-wire technique, the connection of a FAA1100 is not permitted!
- When removing a TCU2-GH: Mind the corresponding terminals!

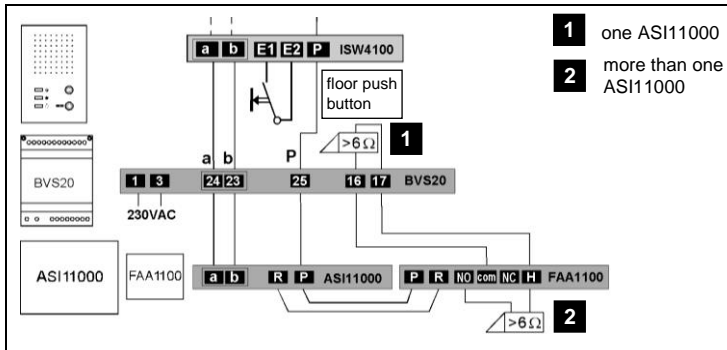
TCU2-GH:	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
ASI11000:	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>

- Connect buttons from a different systems (e.g. elevator):  
the buttons have to be potential-free. To establish potential-free buttons, eventually a relay for decoupling must be interconnected.
- Connect other consumers:



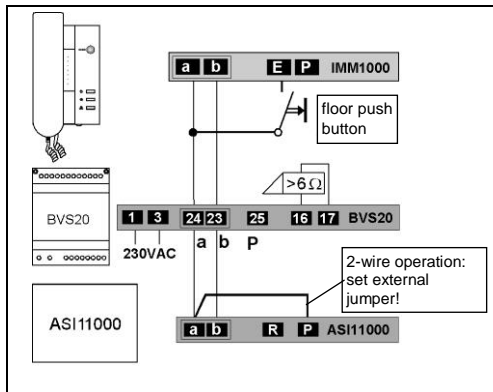
At the ASI11000 **no** further consumer such as spots, incandescent lamps or anything similar can be connected!  
In this case, a separated transformer is necessary.

### Wiring diagram 3-wire operation



- Max. number of indoor stations depends on the type (see product information of the indoor station).
- Attention: when using a FAA1100, the door release time of the power supply and control unit must be set to maximum!

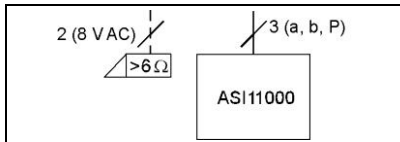
## Wiring diagram 2-wire operation



One ASI11000, one BVS20 and a suitable number of indoor stations is permitted (max. 16). The number of indoor stations that can be realised depends on the type of indoor stations. For detailed information see the product information of the indoor station! Connecting a FAA1100 is not permitted! Max. one ASI11000 at the BVS20.

- The max. number of indoor stations depends on the type (see product information of the indoor station).

### Connection diagram



### Connection lines

permitted cross-section (diameter): 0.08 ... 0.82 mm<sup>2</sup> (0.32 ... 1.0 mm)

#### **Max. number of wires per terminal contact:**

connection bell buttons: each 2 x 0.8 mm,

connection TCS:BUS: 3 x 0.6 mm or 2 x 0.8 mm



Further wires must be connected via auxiliary terminals!



Only use connection lines with an identical diameter within one terminal contact.

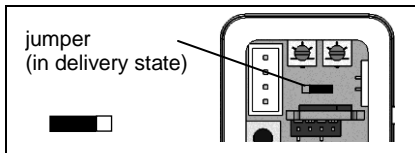
## Commissioning

- Install the devices of the system completely in voltage-free state.
- Check the a-, b- and P-wire against each other for short-circuits.
- Switch on the mains voltage.

### *Customising for long lines*

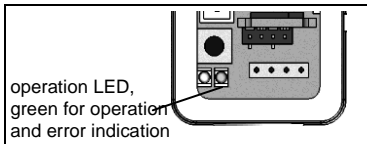
The front-door station ASI11000 can be configured for long lines with a loop resistance  $\leq 60$  Ohm.







- For this, plug the jumper on both left contacts.



## Error detection and indication

- Errors are signaled optically and acoustically by a single error tone and a permanent blinking of the green LED when pressing a bell button.



Error causes	Indication	Error tone	Solution
EEPROM is missing or plugged wrong	 operation LED, flashes green (1:7, 1 Hz)		Insert the EEPROM, switch on the mains voltage again
a- and P-wire are interchanged or short-circuited			Exchange the a- and P-wire or eliminate the short-circuit device is in stand-by mode again
a-wire is not connected			Connect the a-wire, device is in stand-by mode again
buttons stuck (pressed longer than 15s)			Loosen the button, device is in stand-by mode again
interface error: ASI21000 defect			Exchange the ASI21000, transfer the EEPROM



## Settings

### ***Factory settings***

communication time	56 s
door stand-by time	56 s
door release time	3 s

The times can be adjusted with the Service Device and the configurator configo<sup>TM</sup>.

### ***Removing and adding an ASI21000 in one system***

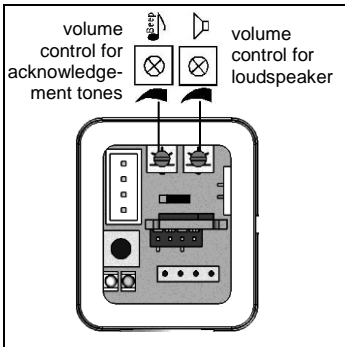


Only the last bell button extension ASI21000 at the end of a strand can be removed or added!  
Otherwise datasets will be moved.

## ***Set the volume for language and acknowledgement tones***

**!** Use the enclosed small screwdriver for the setting!

- Open the rubber cover of the service opening.
- The volume for language (loudspeaker) and acknowledgement tones can be set via two separate controllers.
- The controllers are set to an average value ex works.



## Reprogramming bell buttons

### ***Basic principle***












- All devices at the TCS:BUS have a unique serial number.
- When programming a bell button, the serial number is allocated to the indoor station and stored in the EEPROM of the front-door station. Per bell button, 1 or 2 indoor stations (serial numbers) can be allocated and called.
- When no serial number is allocated to a button (delivery state or deleted): by pressing this button the lights can be switched via the power supply and control unit.


### ***Programming a bell button***

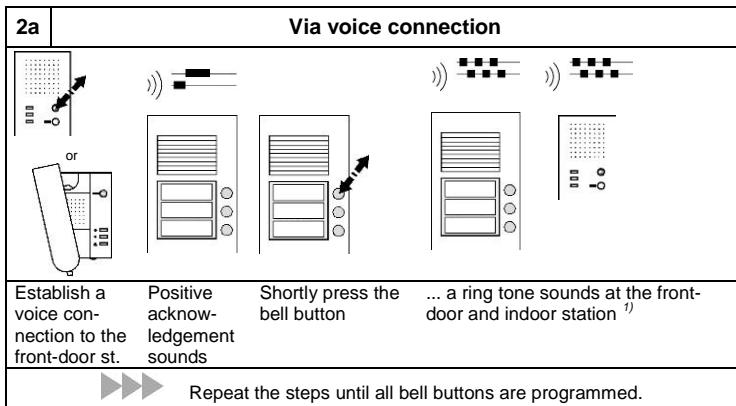
- Ensure that the indoor station is connected to the TCS:BUS and the mains voltage is switched on (the LED lights up at the power supply and control unit).

- The programming mode of the system has to be activated when starting the reprogramming of the bell buttons.

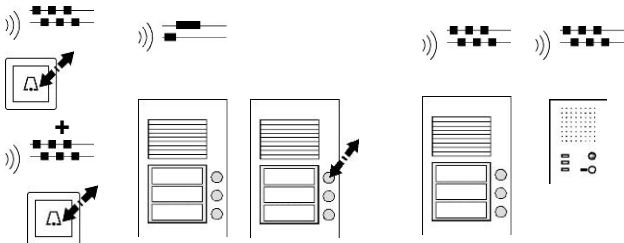
## Legend

Shortly press the button		LED blinks slowly (1:1, 1 Hz)	
Shortly press the button until...		LED blinks fast (1:1, 4 Hz)	
Release the button		LED shines	
Ring tone		NoProg tone	
Positive acknowledgement		Prog2 tone	
Deletion tone sequence			

1	<b>Initiate</b> Switch on the programming mode <u>of the system</u>
<p>Power supply and control unit:                      ASI11000</p> 	
<p>RUN/PROG button: shortly press                      LED blinks</p>	<p>Green operation LED blinks Programming mode <u>of the system</u> is switched on</p>



1) If there sounds a Progsper tone instead, the programming lock at the front-door station is activated. The programming lock can only be deactivated with the Service Device and configo<sup>TM</sup>.

**2b**alternatively: **Via floor push button** (if indoor station is not available)

Shortly press  
the floor push  
button two  
times, each  
time a ring  
tone sounds

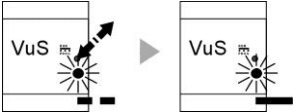

Positive  
acknow-  
ledgement  
sounds

Press a bell  
button

... a ring tone sounds at  
the front-door and  
indoor station<sup>1)</sup>



Repeat the steps until all bell buttons are programmed

3	End	
Power supply and control unit:		ASI11000
		
RUN/PROG button:	Shortly press	LED lights up Green operation LED is on Programming mode <u>of the system</u> is switched off

1) If there sounds a Progsper tone instead, the programming lock is activated at the front-door station. The programming lock can only be deactivated with the Service Device or the configurator config<sup>TM</sup>.



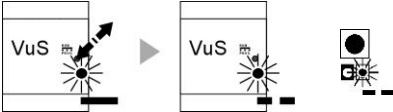
***Allocating a second indoor station to a bell button***

If two indoor stations are to be called by pressing one bell button, the serial number of the second indoor station can be allocated additionally to this bell button.

*If more than two indoor stations are to be called with one bell button or e.g. bell button and floor push button should have the same functionality, only the function parallel allocation can be used. Thus, only one serial number is allocated to the bell button, the allocation of further indoor stations is realised with the parallel allocation to the first indoor station.*

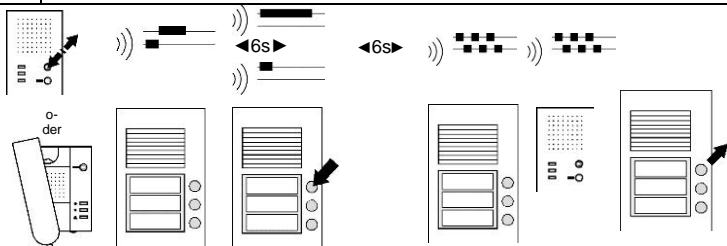
*The parallel allocation must be set with the Service Device (see manual, configure comfort telephones) or the configurator config<sup>TM</sup>.*

**Note:** Repeated programming of an already programmed bell button changes only the second serial number.

1	<b>Initiate</b> Switch on the programming mode <u>of the system</u>
<p>Power supply and control unit:                      ASI11000</p> 	
<p>RUN/PROG button:                      Green operation LED blinks</p> <p>Shortly press                      LED blinks                      Programming mode <u>of the system</u> is switched on</p>	

2a

## Via voice connection



Establish a  
voice  
connection  
to the  
front-door  
station

Positive  
acknow-  
ledgement  
tone  
sounds

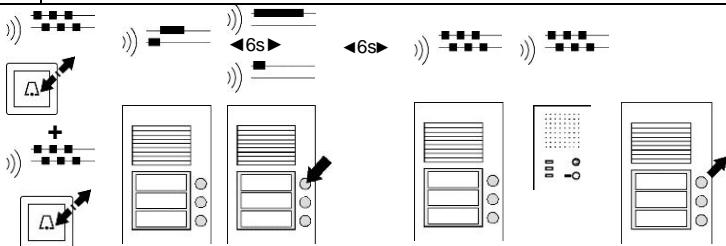
Press the bell button  
until Prog2 tone and  
a NoProg tone and...

... a ring tone at the  
front-door station  
and a ring tone at  
the indoor station  
sounds <sup>1)</sup>

Release



Repeat the steps until all bell buttons are programmed

**2b** alternatively: **Via floor push button** (if indoor station is not available)


Shortly press the floor push button 2 times, each time a ring tones sounds

Positive acknowledgment tone sounds

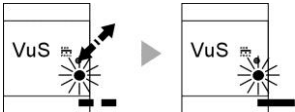

Press the bell button until Prog2 tone and a NoProg tone and ...

... a ring tone at the front-door station and a ring tone at the indoor station sounds<sup>1)</sup>

Release



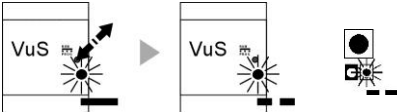
Repeat the steps until all bell buttons are programmed

3	End	
Power supply and control unit:		ASI11000
		
RUN/PROG button: shortly press      LED lights up		Green operation LED lights up Programming mode <u>of the system</u> is switched off

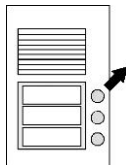
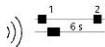
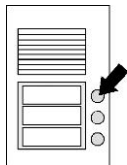
*1) If there sounds a Progsper tone instead, the programming at the front-door station is activated. The programming lock can only be deactivated with the Service Device and configo<sup>TM</sup>.*

### **Delete the programming**

Before an already programmed bell button can be programmed anew, the programming must be deleted.

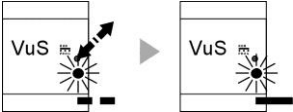

1	<b>Initiate</b> Switch on the programming mode <u>of the system</u>
Power supply and control unit: ASI11000  	
RUN/PROG button: shortly press      LED blinks	Green operation LED blinks The programming mode <u>of the system is</u> switched on

2

**Delete a button**

Press the button until as the deletion tone sequence sounds <sup>1)</sup>

Release

3	End	
	Power supply and control unit:  	ASI11000  
RUN/PROG button: Shortly press	LED lights up	Green operation LED lights up The programming mode <u>of the system</u> is switched off

1) If there sounds a Progsper tone instead, the programming lock at the front-door station is activated. The programming lock can only be deactivated with the Service Device and config<sup>TM</sup>.



## Setting functions

### ***Switching lights with bell button provided by customer***

A button which is not allocated to a resident can be used to switch the staircase lights.

Connect the bell button provided by customer, but do not program the button resp. delete the programming.

### ***Open the door or send control function with bell button provided by customer***

A button which is not allocated to a resident can be used to open a door or to send a control function.

Connect the bell button provided by customer and set the function with configurator config<sup>TM</sup>.

### ***Change-over the voice connection on full duplex operation***

Voice connections to the indoor station are realised basically according to the principle *Voice-controlled hands-free talking*. Alternatively for voice

connections with indoor stations with handset, the principle full duplex hands-free talking can be set with the configurator configo<sup>TM</sup>. Thus, the conversation participants can speak simultaneously without reducing the volume of one participant, such as in case of voice-controlled hands-free talking.

**Please observe:**

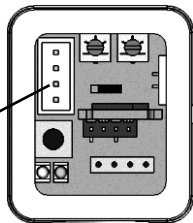
In full duplex operation feedback effects are possible. To avoid these effects, pull off the microphone and install it with distance to the housing (see page 22). Eventually reduce the volume of the ASI11000 (see page 34)

***Programming with the Service Device TCSK-01***

The following parameter can be set with the Service Device:

- AS address
- communication time
- programming lock
- type of acknowledgement tone
- speaking only in case of active door stand-by
- light switch function via door release button

connection  
for Service  
Device  
TCSK-01



### ***Programming with the device configurator configo™***

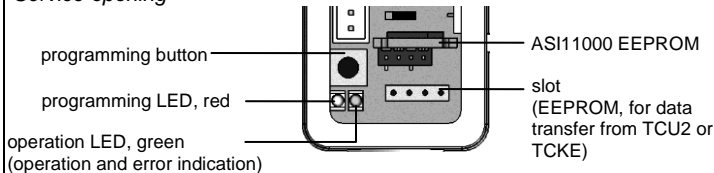
With the configurator configo™ the following allocations can be realised:

- sending any control function when pressing a bell button (serial number of the control function = serial number of the ASI11000)
- all functions of the TCSK-01
- bell button programming
- set the door stand-by time
- sending a 16 bit door release command

## **Repairs**

### ***Notes***

- For maintenance, the device is equipped with connections, LEDs and buttons which are accessible without having to remove screws. Open the **rubber cover**.

*Service opening*

The exchange programming mode cannot be switched on, if:

- the green LED for operation indication blinks slowly (the programming mode of the system at the power supply and control unit is switched on) or
- the green LED flashes (error indication).

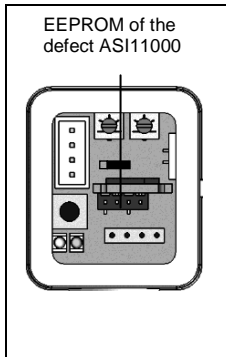


**ATTENTION!** Remove and plug on an EEPROM always in voltage-free condition!

### ***Data transfer from another ASI11000***

If a defect ASI11000 needs to be exchanged, the EEPROM of the programmed device can be removed and inserted into the new, identical constructed front-door station.

- Switch off the mains voltage of the system.
- Uninstall the defect ASI11000, install the new ASI11000 and connect it.
- Remove the EEPROM from the defect ASI11000.
- Plug the EEPROM in the new ASI11000 on the ASI11000\_EEPROM slot.
- Switch on the mains voltage and eventually evaluate the error indication.
- ASI1100 ready for data transfer? LED green: ON, LED red: OFF or error indication? Eliminate error.



- All programmings are available again.

Intended operation only with all covers!

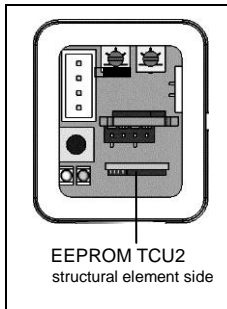
***TIP:*** Label the removed EEPROM immediately after the removal.  
Thus the allocation of the data to the correct exchange device.

### ***Transfer data from a TCU2-EEPROM storage***

If a TCU2 needs to be exchanged for an ASI11000, the data can be transferred from the TCU2-EEPROM.

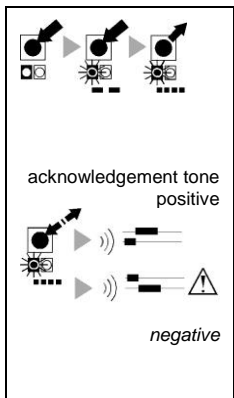
**!** The combination of ASI11000 and TCKE and the combination of TCU2 and ASI21000 is not possible.

- Switch off the mains voltage of the system.
- Uninstall the defect TCU2, install the ASI11000 and connect it.
- Remove the EEPROM from the defect TCU2.
- Plug the EEPROM in the ASI11000 on the provided slot (structural element side is facing away from the ASI11000-EEPROM).
- Switch on the mains voltage and eventually evaluate the error indication.
- ASI1100 ready for transfer? LED green: ON, LED red: OFF or  
Error indication? Eliminate the error.





- Press the programming button longer than 12 s. The red programming LED blinks: first slowly, then faster.
- Shortly press the programming button again.
- **Positive acknowledgement tone:** TCU2-EEPROM found, read-in was successful.
- Switch off the mains voltage of the system.
- Remove the EEPROM of the defect TCU2 from its slot.
- Switch on the mains voltage and eventually evaluate the error indication.  
Error indication? Eliminate the error.
- **Negative acknowledgement tone:** TCU2-EEPROM not found. Is the position of the EEPROM correct? EEPROM defect?



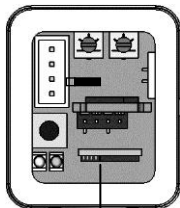
Intended operation only with all covers!

### ***Transfer data from a TCKE-EEPROM storage***

If a TCKE needs to be exchanged against an ASI21000, the data can be transferred from the TCKE-EEPROM.

**!** The combination of ASI11000 and TCKE and the combination of TCU2 and ASI21000 is not possible.

- Switch off the mains voltage of the system.
- Remove the defect TCKE and the TCU2, install the ASI11000 and ASI21000 and connect them.
- Remove the EEPROM from the defect TCKE.
- Plug the EEPROM on the provided slot in the ASI11000 (structural element side is facing away from the ASI11000-EEPROM).
- Switch on the mains voltage and eventually evaluate the error indication.



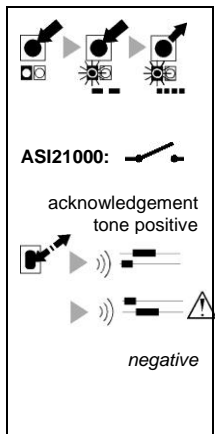
EEPROM TCKE  
structural element side

- ASI1100 ready for transfer?  
LED green: ON, LED red: OFF or  
error indication? Eliminate the error.

*Note:*

*To transfer the EEPROM content of the TCU2 which needs to be exchanged too, see data transfer from a TCU2-EEPROM storage.*

- Press the programming button longer than 12 s. The red programming LED blinks: first slowly, then fast.
  - Press the programming button of the ASI21000, where the data of the replaced TCKE are to be transferred.
  - **Positive acknowledgement tone:** TCKE-EEPROM found, read-in was successful.
  - Switch off the mains voltage of the system.
  - Remove the EEPROM of the defect TCKE from its slot.
  - Switch on the mains voltage and eventually evaluate the error indication.  
Error indication? Eliminate the error.
  - **Negative acknowledgement tone:** *TCKE-EEPROM not found. Is the position of the EEPROM correct? Is the EEPROM defect?*
- Intended operation only with all covers!



***Replace the indoor station: change the stored serial number***

When exchanging only one indoor station, the programming mode of the system must not be activated at the power supply and control unit. Only switch on the exchange mode by pressing the internal programming button of the device. The red LED blinks.

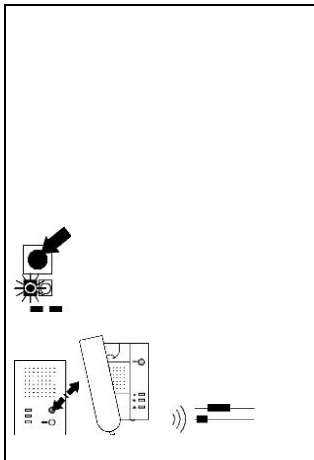
***TIP***

*Always exchange only one indoor station and allocate this station to the bell button. Thus, the programming can be executed safely, even if the programming status of the bell button is unknown.*

- Switch off the mains voltage of the system. Replace the indoor station.

*Note: Deleting a prior programming is not necessary.*

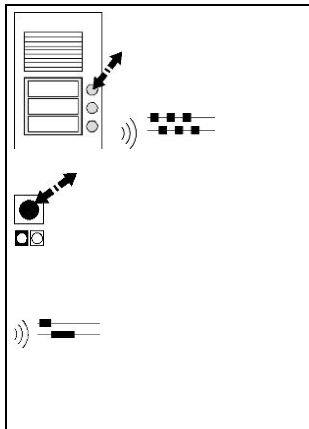
- Switch on the mains voltage and eventually evaluate the error indication.
- ASI1100 ready for the transfer? LED, green: ON, LED red: OFF or error indication? Eliminate the error.
- Switch on the exchange mode:  
Press the programming button for around 6 s (but less than 12 s). The red programming LED blinks slowly.
- Establish a voice connection from the indoor station to the ASI11000 (with the help of a second person).



- A positive acknowledgement tone sounds, if the new indoor station is found.
- Press the bell button which should be allocated to the replaced indoor station. A ring tone sounds.
- Switch off the exchange mode: Shortly press the programming button. The programming LED expires.
- Negative acknowledgement tone: new indoor station not found. Connection correct? Device defect?

Proceed identically when programming the 2. serial number.

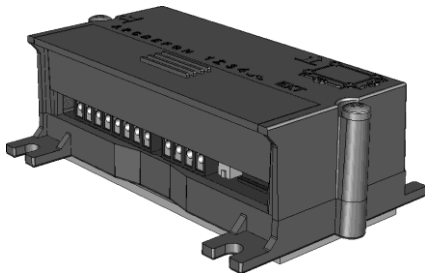
Intended operation only with all covers!





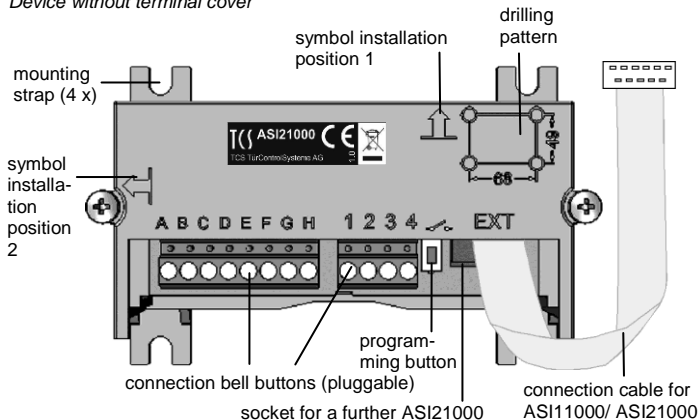


## Built-in bell button extension ASI21000-0000



## Device overview

*Device without terminal cover*



## Technical data

housing:	plastics, black
dimensions (in mm):	H 56 x W 88 x D 30
weight	55 g
acceptable operation temp.:	-25 °C ... + 55 °C (according to DIN EN 50486) installation in the protected outdoor area (e.g. behind loudspeaker cover provided by customer)

## Intended use

- The ASI21000 is a built-in bell button extension for up to 32 flats for the installation in letterbox systems or behind individual loudspeaker covers.
- The extension corresponds to the built-in door loudspeaker ASI11000.
- The ASI21000 can be used indoors as well as in the protected outdoor area.

**!** The combination of ASI11000 and TCKE and the combination of TCU2 and ASI21000 is not possible.

## Short description

### ***Basic functions***

ringing	<p>Pressing the connected bell button, provided by customer</p> <ul style="list-style-type: none"><li>• triggers ringing at the indoor station, a tone at the ASI11000 sounds,</li><li>• triggers the light switch function in the power supply and control unit, an acknowledgement tone sounds.</li></ul>
number of bell buttons	32 bell buttons can be connected directly (8 x 4 button matrix)
serial number per bell button	max. 2 possible
storage of the bell button assignment	The assignment is stored only in the EEPROM <u>of the connected ASI11000</u> .

***Additional functions***

connection for	<ul style="list-style-type: none"><li>• built-in door loudspeaker ASI11000 or further ASI21000, pluggable via connector,</li><li>• connection of max. 6 ASI21000 at the ASI11000 possible, corresponds to 192 further bell buttons</li></ul>
functions that can be configured for bell buttons provided by customer	<ul style="list-style-type: none"><li>• sending any control function when pressing a bell button (serial number of the control function = serial number of the ASI11000)</li><li>• sending a door release command</li></ul> <p>Settings are only stored in the EEPROM of the connected ASI11000.</p>

## Installation

### ***Installation position***

Horizontal installation preferred (installation position 1, terminals downwards), alternatively vertical (installation position 2, microphone downwards). See *Device overview*.

### ***Fixing the housing***

- The rubber plate of the ASI21000 housing should be flush with the loudspeaker cover provided by customer.

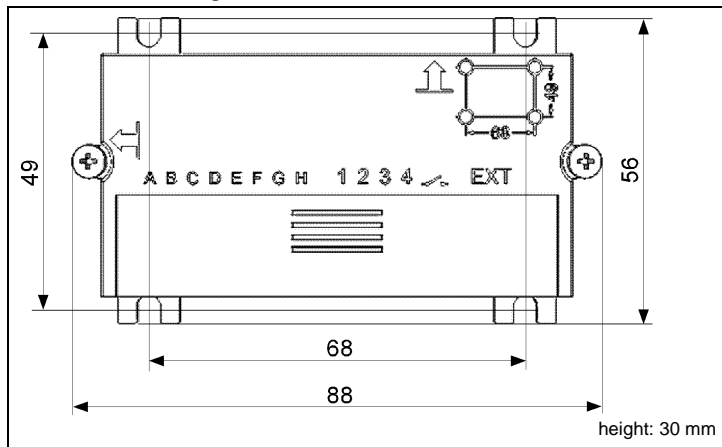
### **Fixing with screws**

- To fix the ASI21000, 4 mounting straps are available.
- With the enclosed screws, the installation on standard loudspeaker covers can be realised.

## **Fixing by glue**

- The surface on which the bell button extension is to be glued must be free from dust and grease.
- Remove the protective foil from the rubber plate and glue the device on the backside of the front panel.



***Dimensional drawing***

## Installation

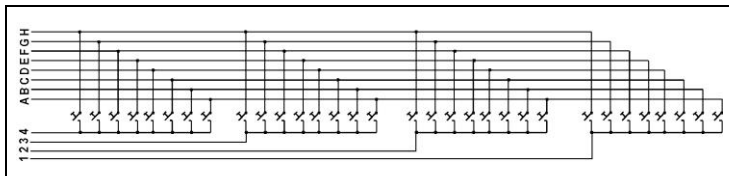
### ***Connect the bell buttons provided by customer***

■ When installing in the protected outdoor area: avoid water from entering the device with suitable measures!

■ Only use the enclosed small screwdriver to connect the lines and to avoid damaging the device.

The connection terminals are pluggable (for a fast module exchange).

### **Connecting diagram**



## Notes

- When replacing a TCU2 + TCKE: observe the corresponding terminals!  
TCKE:           5   6   7   8   9   10 11 12  
ASI21000:    A   B   C   D   E   F   G   H
- Connect buttons from a foreign system (e.g. elevator):  
The buttons must be **potential-free**. Eventually, a relay for decoupling must be interconnected to establish the potential-free buttons.

## *Coupling of ASI11000 and ASI21000*

The coupling of the ASI21000 with the built-in door loudspeaker ASI11000 is realised via the connection cable.

- Plug the connector of the cable on the connection of the built-in door loudspeaker ASI11000.

### ***Coupling of ASI21000 and ASI21000***

The coupling of the ASI21000 among themselves is realised via the connection cable.

- Plug the connector of the cable on the connection of the prior ASI21000.

## **Commissioning**

- Install the devices of the system in voltage-free state.
- Switch on the mains voltage of the system.

<b>Bell button reprogramming:</b>	<b>see page 35</b>
<b>Setting additional functions:</b>	<b>see page 49</b>
<b>Repairs:</b>	<b>see page 52</b>

## Conformity



The devices ASI11000 and ASI21000 meet the requirements of the EU standard 2004/108/EG by fulfilling the standards: EN 61000-6-3, EN 61000-6-1.

Declarations of conformity for download under [www.tcsag.de](http://www.tcsag.de), Downloads, trade information.

## Information on disposal



The adjoining symbol shows that the device has to be disposed separately from domestic waste. The materials used are recyclable. Please do help protecting our environment and dispose the device via a collection point for electronic scrap.



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 electricians.

- Please note our **conditions of sale and delivery**, available under [www.tcsag.de](http://www.tcsag.de), Downloads, trade information and included in our current product catalogue.
- Please contact the **TCS HOTLINE**.



## Service

Please send your questions and inquiries to  
**hotline@tcsag.de**

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09/2013

Subject to technical changes.

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