



Product information

Door telephone ISH3030

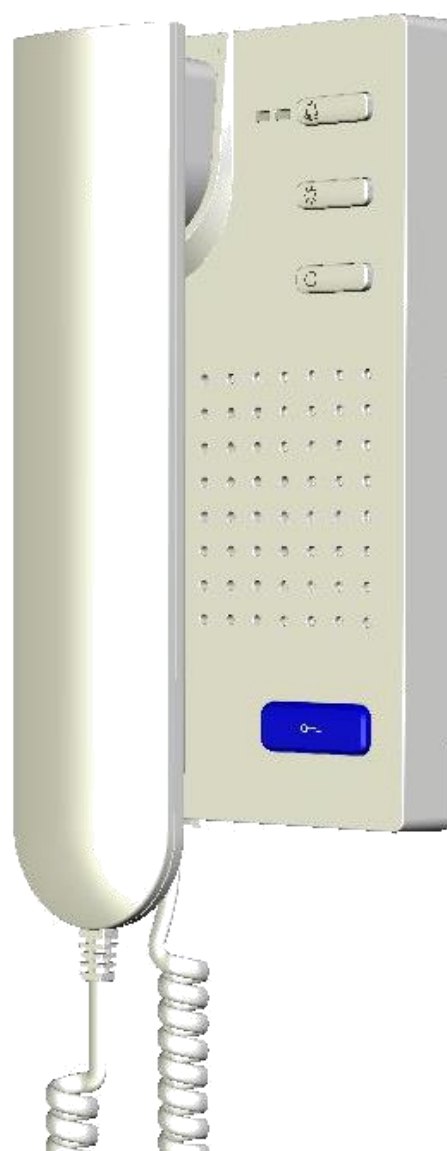


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Scope of delivery

1 x indoor station ISH3030: upper cover, lower cover, handset with connecting line
product information
instruction manual

Safety instructions



Notice! Mounting, installation, commissioning and repair of electrical devices have to be carried out only by qualified electricians! Thus the standards and rules for the installation of systems must be observed!

When installing TCS:BUS systems the general safety regulations for telecommunication systems after VDE 0800 have to 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 in 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 diameters can be used in compliance of the loop resistance.



With suitable requirements to protect against lightning it is imperative that the electric tension of each 32 V DC is not exceeded at the connections a,b,P,E.

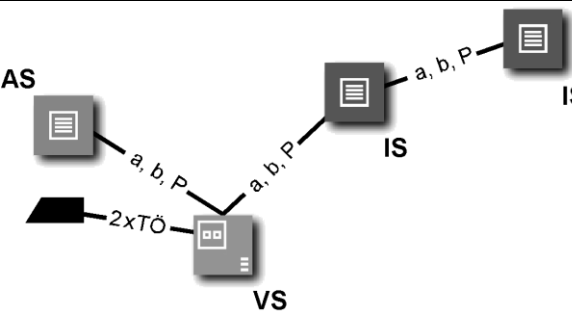
Intended use

- The ISH3030 are door telephones for the object area.
- They are suitable for the operation in TCS audio systems and combined audio / video systems.
- They are suitable for surface-mount.








max. number ISH3030 in 2-wire operation

In case of using power supply and control unit	max. number ISH3030	
BVS20 or NBV1000, 1 line	20	
BVS100, distributed on 3 lines	80	
PSG02, 1 line	30	

max. number ISH3030 in 3-wire operation

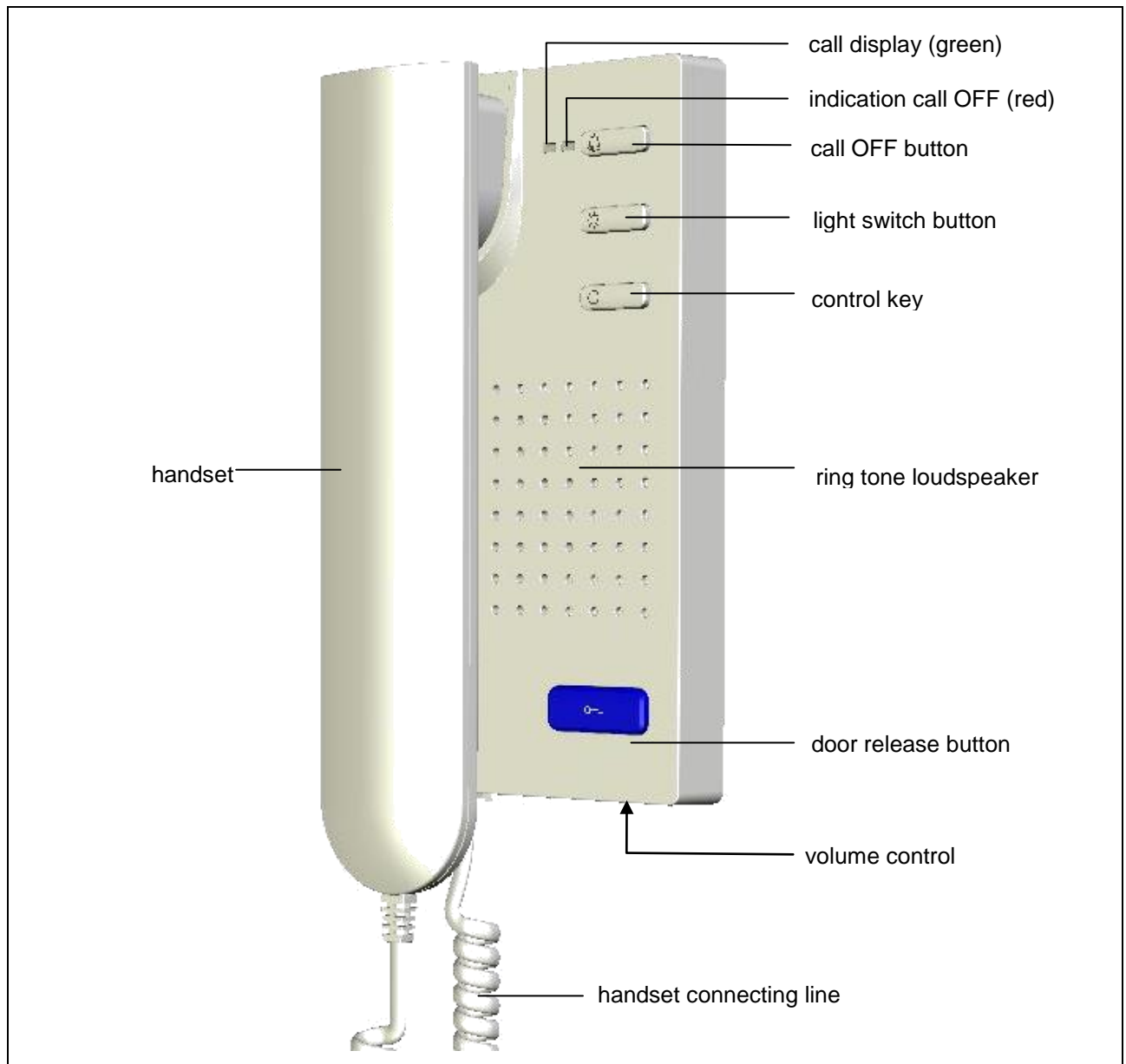
in case of using power supply and control unit	max. number ISH3030	 <p>AS front-door station VS power supply and control unit IS indoor station Note: The number of the max. connectable AS is limited and is described in their product information!</p>
BVS20 or NBV1000, 1 line	20	
BVS100, distributed on 3 lines	80	
PSG02, 1 Strang	90	
BVS20 + NGV1011, 1 line	90	
BVS100 + NGV1011, 3 lines	270	

Indication and operating elements

	handset	<ul style="list-style-type: none"> communicating to the door end communication
	call OFF button	<ul style="list-style-type: none"> press short: ring tone stopper press for 8 s: initiate ring tone selection
	indication call OFF (red)	<ul style="list-style-type: none"> ON: call OFF activated error indication total error: both LEDs flashing ring tone selection: both LEDs are ON
	control key	<ul style="list-style-type: none"> control function 8 ring tone selection internal call
	call display (green)	<ul style="list-style-type: none"> ON: call, communication activated Blinking 3 x: busy speech channel error indication: both LEDs flashing ring tone selection: both LEDs are ON
	light switch button	<ul style="list-style-type: none"> switching lights ring tone selection floor call (from the flat door)
	door release button	<ul style="list-style-type: none"> open the door trigger light switch function* ring tone selection door call from front-door station
	volume control for <ul style="list-style-type: none"> voice output ring tone 	adjustable in 8 steps: <ul style="list-style-type: none"> in case of an existing communication in case of off-hook handset (no communication)

* if the light switch function in the front-door station is activated

Device overview



Technical data

Supply voltage:	+24 V \pm 8 % (power supply and control unit)
Housing:	plastic (colors like shown in the price list)
Dimension (in mm):	H 180 x W 100 x D 50
Weight	340 g
Acceptable ambient temperature:	-5 ...+ 40 °C
Degree of protection:	IP30
Input current, standby	2-wire operation: I(a) = 1 mA 3-wire operation: I(a) = 0.2 mA, I(P) = 0.8 mA
Max. input current:	I(Pmax) = 70 mA

Short description

- large, detatched, blue door release button
- light switch button
- control button with control function 8
- call OFF button for ring tone mute with optical display
- optical indication of door calls via LED (green)
- optical indication of a busy line when voice communication is established via LED (green)
- ring tone can be adjusted by the resident, selection out of 13 in improved quality
- voice volume and ring tone volume manually adjustable
- acoustic call distinction between 2 front-door stations (via configurations software configo™), flat door (floor door) and internal call
- one parallel call can be activated (via Service Device TCSK-01 or configo™)
- audio privacy function and automatic call cut-off (after 2 min)
- magnetic handset cradle
- pluggable handset cord
- lower cover with plugged screw terminal can be pre-installed and used alternative for sister product for hands-free talking
- optical and acoustic error indication
- can be functional extended by mounting places for call relays, controlling the radio signal device and EnOcean radio interface
- energy efficient by a lower stand-by consumption of only 0.025 W

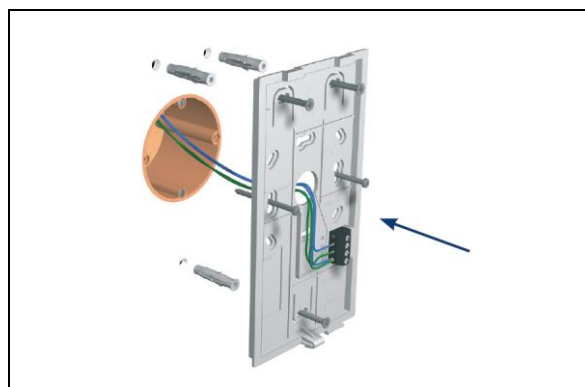
Installation

Install the lower cover

- For placing the connection cables without any problems, a flush-mounted socket must be installed behind the device.
Position the flush-mounted socket below the cable conduit.
- Install the lower cover with three screws.

TIPP: Avoid tearing of the straps:

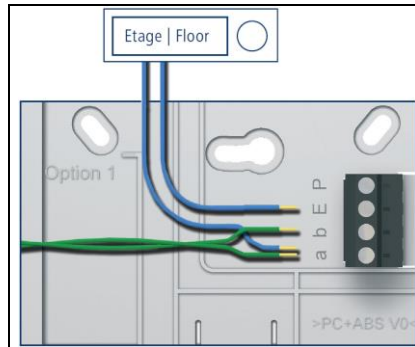
For fixing the straps do not use counter-head screws or flat washers!



Connecting the lines (2-wire technique)

- Minimize the length of the lines above the lower cover to place the lines without any problems and without clamping the lines when snapping-on the upper cover.
- Connect the lines according to the labeling at: a b E P (from the bottom to the top), floor push-button at a – E.

See wiring example on page 9.



Snapping-on the upper cover

- Set on the upper cover at both adjustment increments of the lower cover (1).
- Snap-in the upper cover below with slight pressure (2)



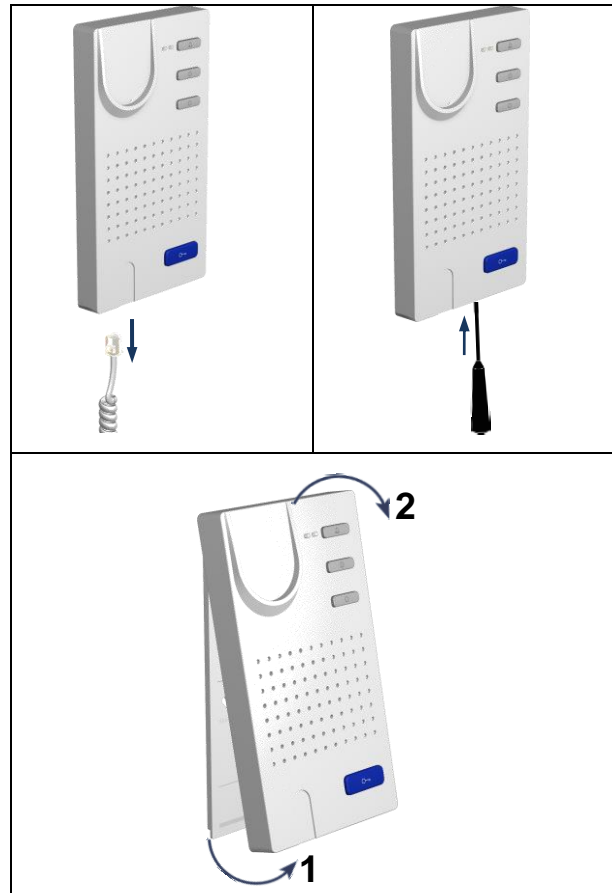
Connect the handset

- Put the western plug of the handset cord into the socket at the underside of the telephone.

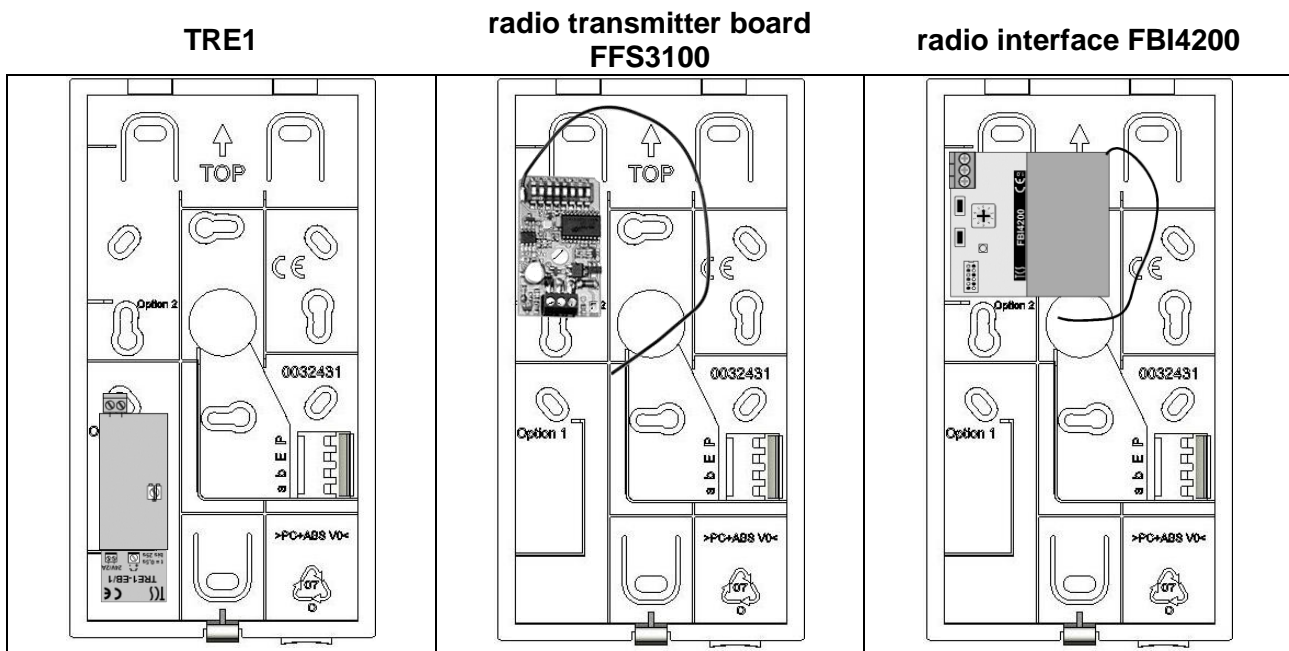


Open the device

- Remove the handset cord.
- There is a rectangular release opening at the underside of the device. Insert a small screwdriver straight and with slight pressure into this opening.
- The upper cover can be removed at the underside (1).
- Lift the upper cover out of the two upper adjustment increments (2).



Installation of extended functions



- The extended functions (and the antenna) have to be fixed with adhesive pads in the indoor station (see also product information of the corresponding extended function).

Connecting the lines

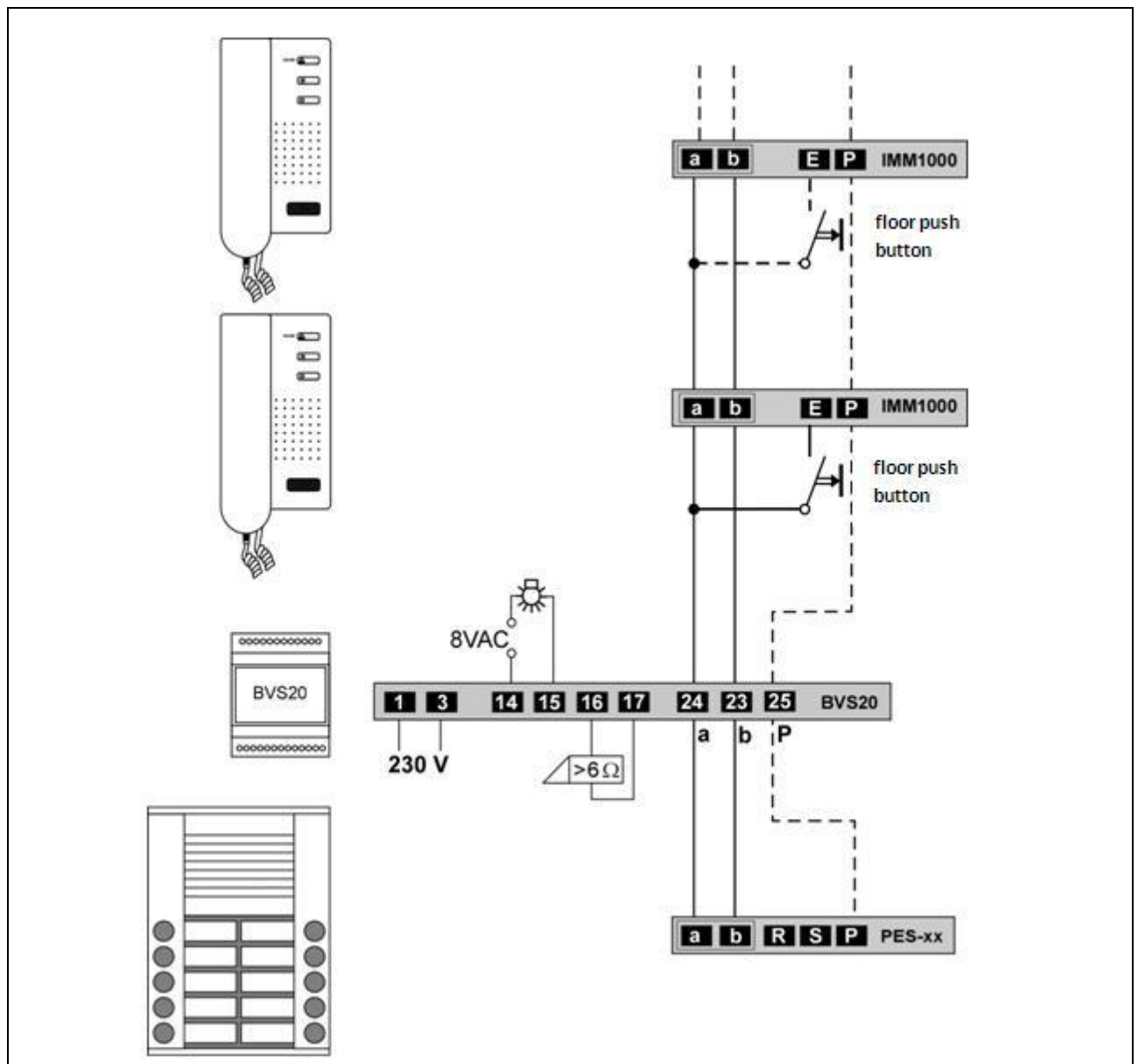
Connecting lines

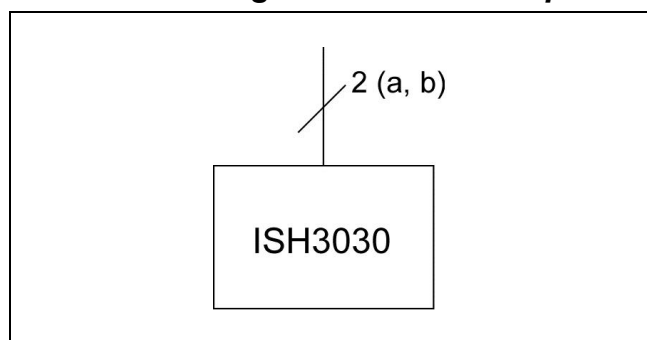
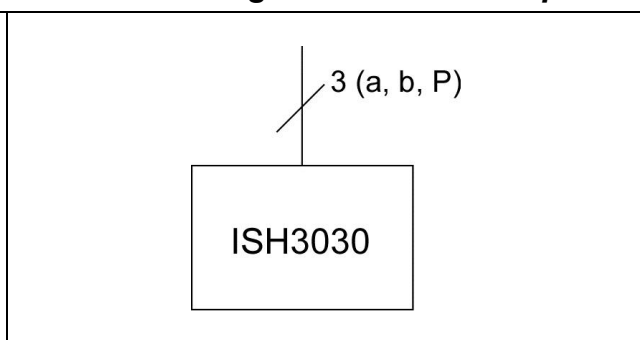
permitted cross-section (diameter)	0.08 ... 0.82 mm ² (Ø 0.32 ... 1.0 mm)
max. number of wires per terminal contact	each 2 x 0.8 mm, 3 x 0.6 mm

! Further wires have to be connected via auxiliar terminals!

! Use only connecting lines with the same diameter in one terminal contact.

Wiring diagram



Connection diagram 2-wire technique**Connection diagram 3-wire technique****Replacing an ISH1030 or TTS1 by an ISH3030**

- The floor push-button have to be connected always to the a-wire.
- In case of a parallel circuit both telephones have to be replaced by the ISH3030.

Commissioning

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

Note:

If the floor push-button is not working, proof, if it is connected to the a-wire of the power supply and control unit.

Settings

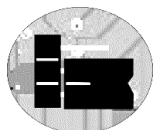
Pre-adjusted times

communication time	max. 2 min	
flashing period of the green LED, if the voice channel is busy after lifting the handset	2 sec	3 x flashing
internal standby time, if the device is calling or is called	around 30 sec	

2-wire/3-wire operation

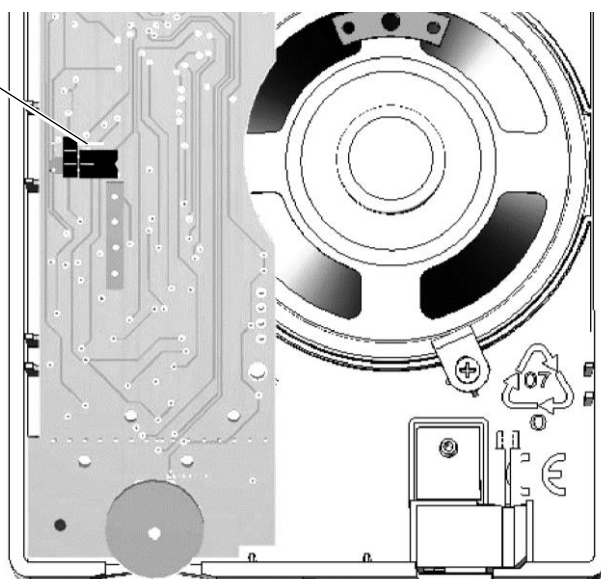
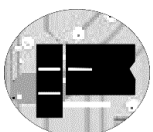
The jumper J1 is adjusted for 2-wire operation in delivery condition. **J1**

2-wire operation (scope of delivery)



- Put the jumper J1 on the two upper contacts for the 3-wire operation.

3-wire operation



Ring tone selection

For 4 different incoming calls (door calls of 2 different front-door stations, floor call, internal call) different ring tones can be selected.

1	End communication. Press call OFF button for ca. 8 s. Both LEDs are on and an acknowledgement tone sounds, the ring tone selection is activated.	
	By pressing the following buttons a ring tone can be selected. You can chose between 13 tones.	
2a	select door ring tone from the front-door station*	Press the <i>door release button</i> as often as the required ring tone sounds. The ring tone selected last, will be stored.
2b	select door ring tone of floor door	Press the <i>light switch button</i> as often as the required ring tone sounds. The ring tone selected last, will be stored.
2c	select internal ring tone	Press the <i>control key</i> as often as the required ring tone sounds. The ring tone selected last, will be stored.
3	Press call OFF button short. In case that no button is pressed for ca. 8 s, the device ends the ring tone selection automatically. Both LEDs go out and an acknowledgement tone sounds, the ring tone selection is deactivated.	

* The ring tone is identical for all front-door stations and can be selected only identically for all.
For selecting a second door ring tone it is necessary to activate the call distinction by changing the audio AS limit.
Changing the audio AS limit is only possible with the configuration software configo™.

Adjust the volume

Each adjustable in 8 steps

volume voice	Turn the volume control of the ring tone when a voice communication is established (adjustment ex works: volume step 6 from 8)
volume ring tone	Turn the volume control for ring tone when the handset is hooked on (no voice communication) (adjustment ex works: volume step 7 from 8)

- A signal tone is reflecting the adjusted volume when turning the volume control of the ring tone.
- If the setting is finished, the adjusted ring tone will be reflected in the adjusted volume.

Configuration options

function	manual	TCSK-01	configo™ from version 1.3.3
ring tone volume	x	–	x
voice volume	x	–	x
selecting ring tones for door calls, internal calls and floor calls	x	–	x
ring tone for door call 2	–	–	x
parallel allocation	–	x	x
change audio AS limit	–	–	x
block ring tone output	x	–	–
block ring tone selection	–	–	x
reset to factory settings	–	–	x

Programming with the Service Device TCSK-01

- The indoor station is acting like a telephone.
- Use the commands „8“ for configuration (see *product information Service Device TCSK-01*).

search telephones	(*) (51) (#)
activate parallel call	(*) (89) (#) ser. no. (#) ParSNo (#)
deactivate parallel call	(*) (89) (#) ser. no. (#) 0 (#)

Ser. No. = the serial number of the new indoor station, that should be configured

ParSNo. = the serial number of the indoor station, to which the new configured indoor station is allocated

General information on the conduit in TCS audio systems

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

- Note when selecting the cables: the loop resistance can amount max. 20 Ω (table)
- In compliance to the max. permitted loop resistance the wire cross-section can be doubled, that means, that for one wire two lines can be used. The lines have to be twisted.
- In case of using shielded cables: connect the shielding with each other and put it one-sided on mass (b-wire) in the power supply
- Optional strand or star formed wiring

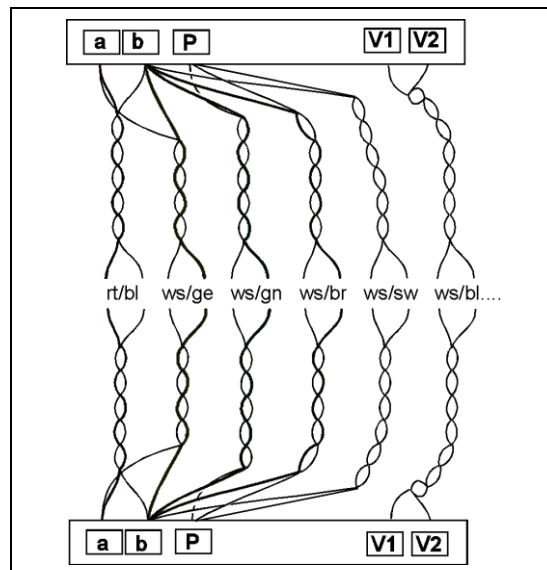


table: loop resistances

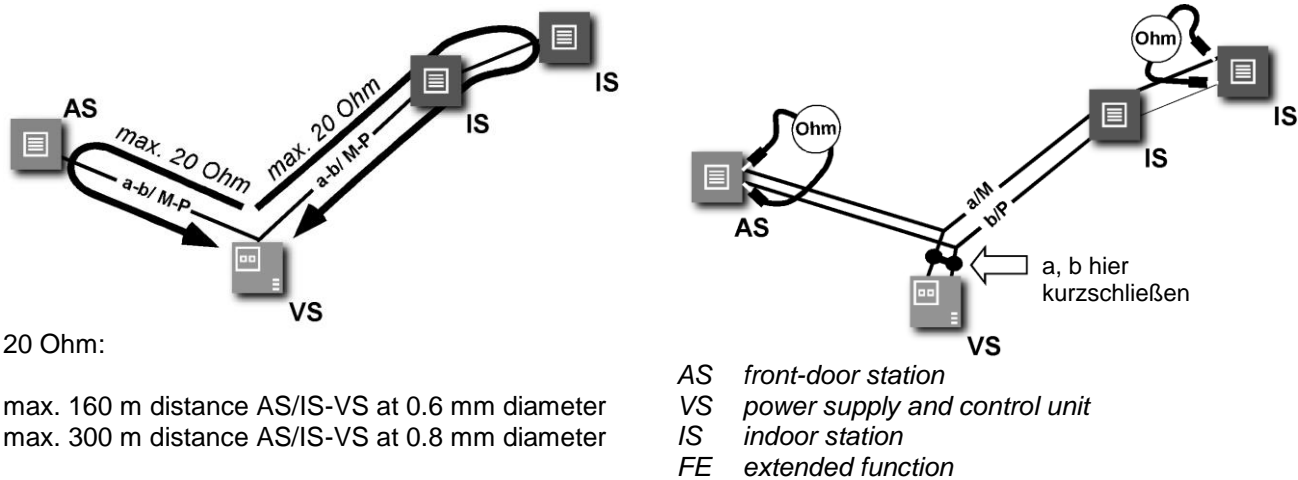
cable length in m	line diameter	
	0.6 mm	0.8 mm
	loop resistance in Ω	
10	1.28	0.71
20	2.55	1.43
30	3.83	2.14
40	5.10	2.86
50	6.38	3.57
60	7.65	4.29
70	8.93	5.00
80	10.20	5.71
90	11.48	6.43
100	12.76	7.14
150	19.13	10.71
200	25.51	14.29
250	31.89	17.86
300	38.27	21.43

Principle loop resistance

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

Resistance measurement

- Switch off 230 V / 50 Hz of the VS.
- Install a-b short-circuit at VS.
- Other devices don't disturb the measurement, they can be connected.
- Measure the resistance at a/b of the last IS or AS.



Repair

Error detection and indication

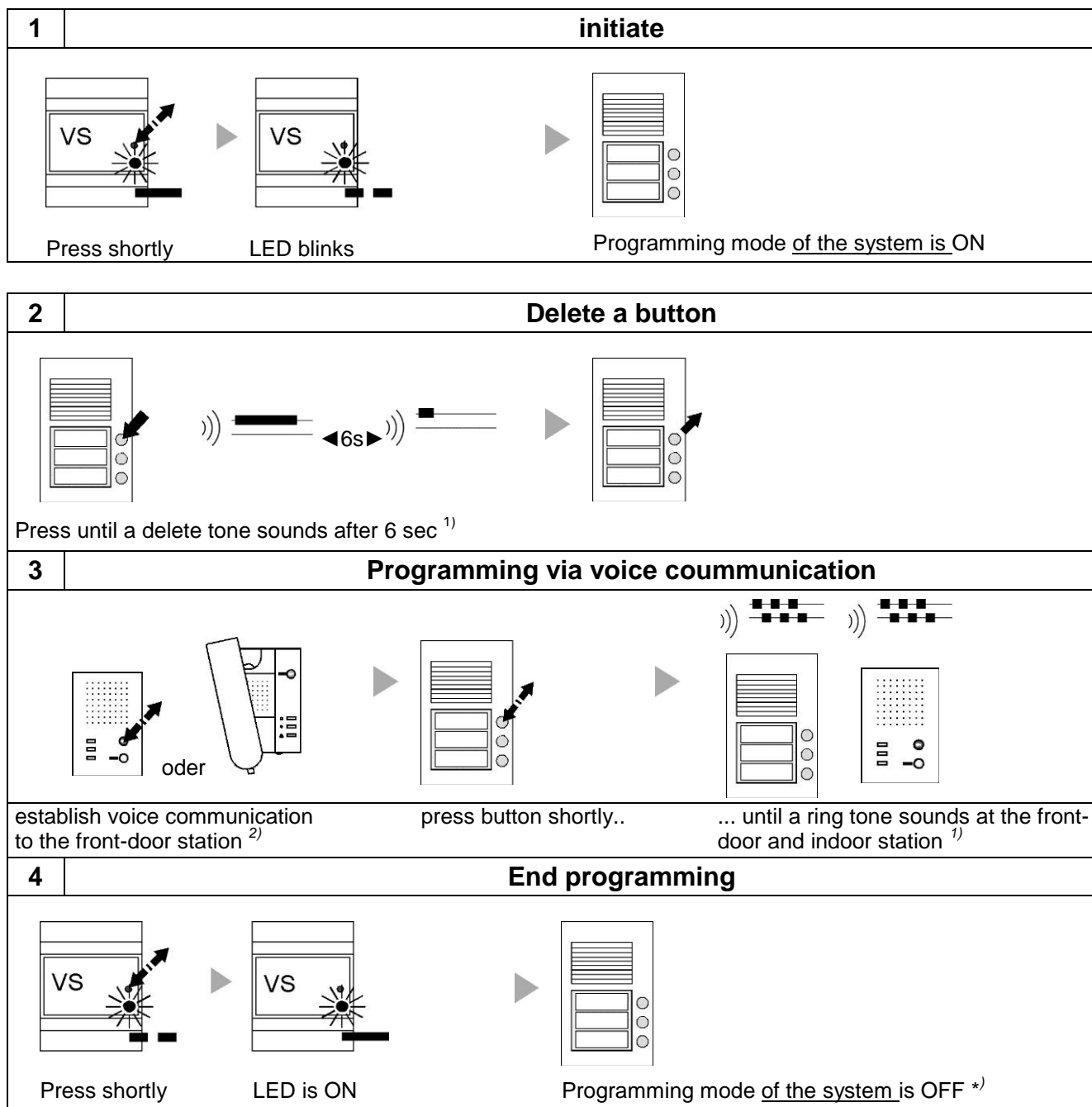
Errors will be indicated optical and acoustic: error tone for one time and constant flashing of the operation indication. When pressing any button, the error tone sounds again. The optical error indication stays active as long as the error is resolved.

error causes	display error mode	error tone	elimination
a- and P-wire interchanged or short-circuited	 both LEDs are flashing)))	change a- and P-wire or eliminate short-circuit, device is going into sleep mode again
a-wire: not connected or not supplied)))	Connect the a-wire or proof power supply, device is going into sleep mode again
button sticks (pressed longer than 15 s))))	Remove button at the device or floor push button, device is going into sleep mode again

Substitution of an indoor station – programming bell buttons

Basic principle

- All devices at the TCS:BUS got an unique serial number.
- Programming a bell button means that the serial number of an indoor station is allocated to the bell button of a front-door station and is stored within the EEPROM of the front-door station.
- Ensure that the new indoor station is connected to the TCS:BUS and the mains voltage is switched on (the operation LED at the power supply and control unit is ON) and further, that the access to the flat is guaranteed during the programming.
- This instruction describes the case, when a serial number is allocated to a bell button and no programming lock is set. To unlock a programming lock you need a Service Device TCSK-01 or the configuration software configo™.



¹⁾ If there sounds a Progsper tone instead, the front-door station got a promgramming lock.

The programming lock can be unlocked only with the Service Device TCSK-01 or the configuration software configo™

²⁾ New developed front-door stations (from 2009 on) respond to that with a positive acknowledgement, if the serial number of the indoor station was received (see product information of the front-door station).


^{*)} device-specific indication modes of the front-door stations see product information of the front-door station

Cleaning

! Avoid water from entering the device!
Do not use any abrasive detergents!

Clean the device with a dry or slightly wet cloth.
Remove stronger stains with a standard plastic cleaner.

Conformity

 Download declarations of conformity for the device from 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 electrician.

- Note our **conditions of sale and delivery**, download from www.tcsag.de, downloads, trade information and included in our actually price list.
- Please contact us: **hotline@tcsag.de**.

Service

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

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