

Description • Installation • Starting Up • Operation

Ausgabe 04/2006 / Id.-Nr. 400232502



Note:

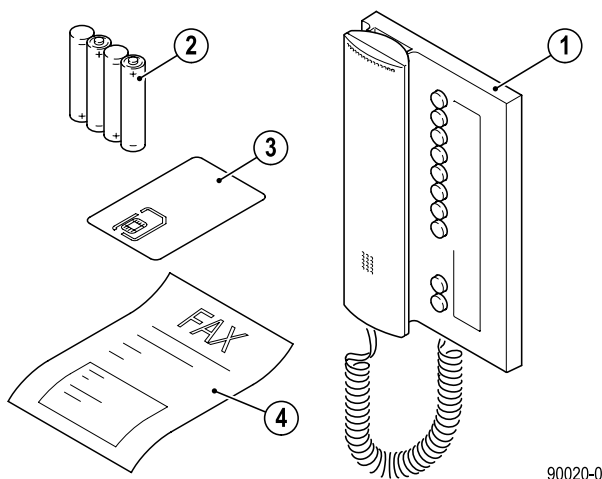
Please read the general notes in the current edition of the TwinBus system manual before starting the installation and the start-up.

TwinBus indoor telephone HANDYLINK 1 7670

Device description

The indoor telephone HANDYLINK 1 7670 can transfer door calls to a mobile phone (GSM) or to the telephone network. It is designed for voice communication with the door station and for opening the main door and/or floor access door as well as for internal communication (in-house telephone function) with subscribers on the same bus line. Depending on the system, the staircase lighting, for example, can be switched via the indoor telephone.

The indoor telephone HANDYLINK can be remotely controlled by external residential telephones or mobile phones.



90020-0

Scope of Delivery

1. Indoor telephone HANDYLINK
2. Storage batteries "Micro" (Ni-MH-Zellen, 800 mAh), 4 pcs.

The indoor telephone HANDYLINK is supplied with a connection terminal for TwinBus.

Instructions for Handling Storage Batteries



Danger!

Explosion hazard!

The storage battery may explode when exposed to open fire.

- Do not expose the storage battery to open flames.
- Please also observe the other instructions for handling storage batteries.

- Heating the storage battery or damaging it mechanically may release the alkali solution or other electrolytic substances.
- Prevent short circuits. Never touch the contacts with metal. This may cause injuries or fire.

- Do not use the storage battery any longer if it builds up excessive heat during use or charging, if it smells abnormal, if it changes its colour or if it deforms.
- Always use a protective plastic cover when transporting the storage battery.
- Charge the storage battery at a temperature between 5 and 35 °C. Beyond this range, the storage battery may be damaged.
- Never expose the storage battery to the sun and never immerse it in liquids.
- Keep out of the reach of children.
- Do not drop the storage battery.

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Features

Features		Comments
Internal Communication (In-House Telephone Function)		with up to 3 other, in-house subscribers
Call Memory		signals internal calls not answered optically
Switching Functions	10	using the 1 4981 switching devices
Automatic Door Opener (Portamat)		Main bell opens the door without a door call signal
Door opener button		illuminated
Call display		
Muting function		Door ringing visually signally
Volume control		4-setting
Privacy button		
Night design		Illuminated door opener button
Call differentiation		
Call tones from the doors	8	adjustable for main bell
Call tone for internal calls	1	fixed
Voice volume control		Setting when starting up in service mode
Programmable bell buttons	10	

GSM Functions

Features		Comments
Call forwarding to mobile telephone system (GSM) or to the telephone network		with up to 4 storable external subscribers
Call setup to stored external subscribers		Call duration max. 4 minutes
Remote control through external residential telephone or mobile phone		
Enabling / disabling call forwarding		
Voice connection to the door		Call duration max. 4 minutes
Door opener		after dialing from mobile phone or residential telephone with pass code input, otherwise without pass code input
Performing switching functions	10	Switching functions of the indoor telephone HANDYLINK in the TwinBus (one light switching command, 9 other switching commands)

Features	Comments
SMS message	per SMS to the active call forwarding number (refer to Service Mode)
Service settings	Service mode
Storage battery flat message	The storage batteries are charged via the TwinBus. Charging time approx. 24 hours.

Technical Data

Dimensions (H x W x D) in mm	220 x 132 x 18/42
Operating voltage	Supply via TwinBus line
Power consumption	
idling	15 mA
charging	65 mA
Storage battery for GSM modem	Micro (Ni-MH cells) 800 mAh
Ambient temperature	0 to 40 °C
Max. relative humidity	60%

Accessories

Accessories	Partno.	Function
Desktop module	1 7311	Console for use as a desktop unit
Flush-mounting frames	1 7321	Flush mounting and sockets for concealed and cavity wall installation

Conditions for installation

Type of installation	Accessories required
Surface mounted or on switch box	
Flush mounting	1 7321 flush-mounting frame
Desktop unit	1 7311 desktop console and a standard retail IAE/ UAE connection socket

Installation

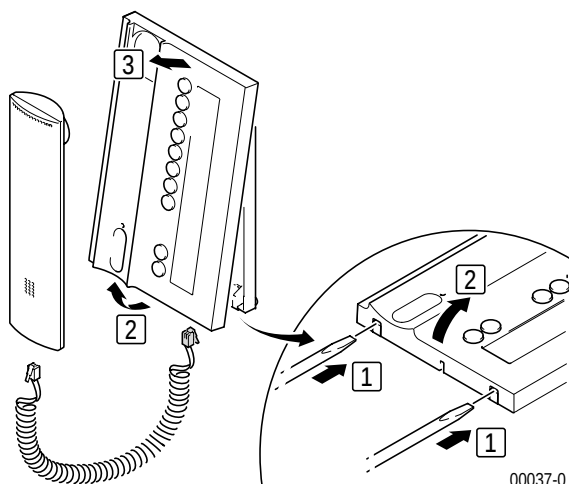
- Remove the TwinBus device and the supplied components from the packaging.



Note:

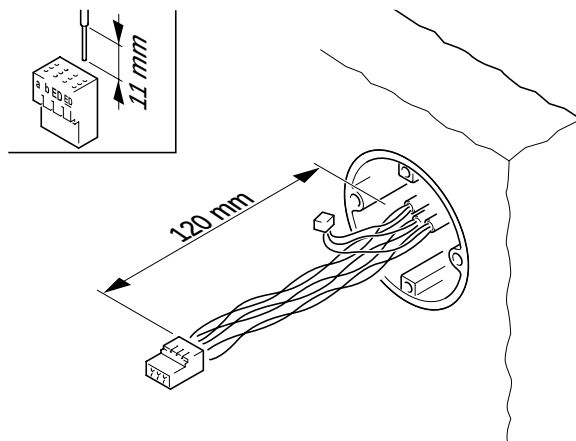
It takes the service provider several hours to clear the SIM card.

- Please provide your customers with a copy of the operating instructions for the TwinBus device. The operating instructions are printed on the packaging or are enclosed with the unit.

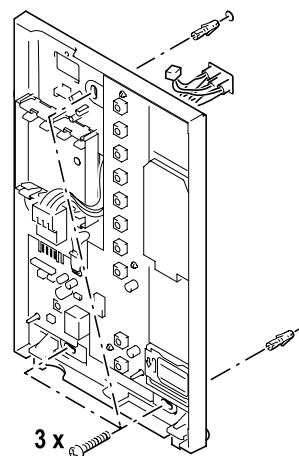


Surface-mounting

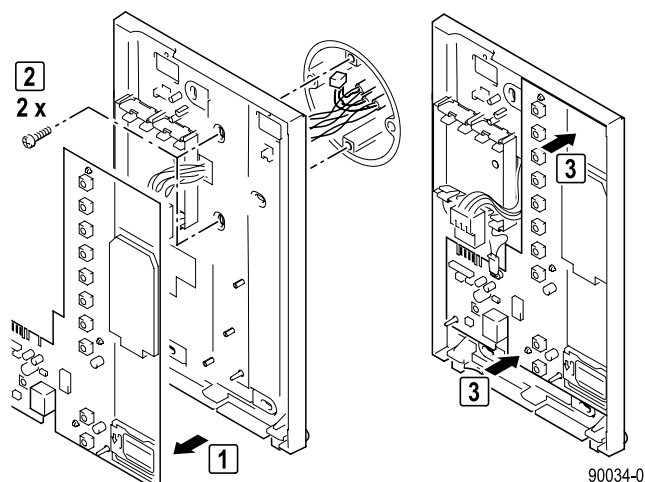
- Please remove the clamp from the packaging.



A Wall mounting

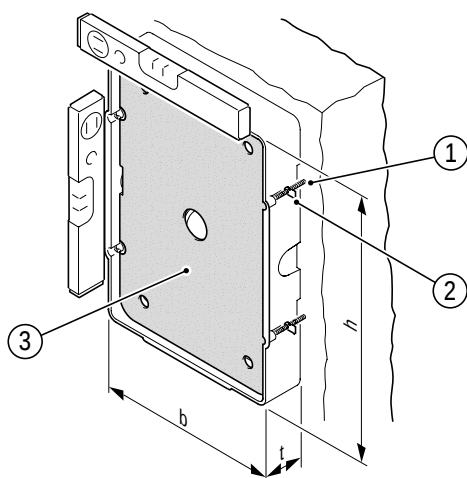


B Switch box mounting



Flush mounting and cavity wall installation

A flush mounting frame 1 7321 is required for installation. The flush mounting frame is plastered in or attached using the provided cavity wall clamps.

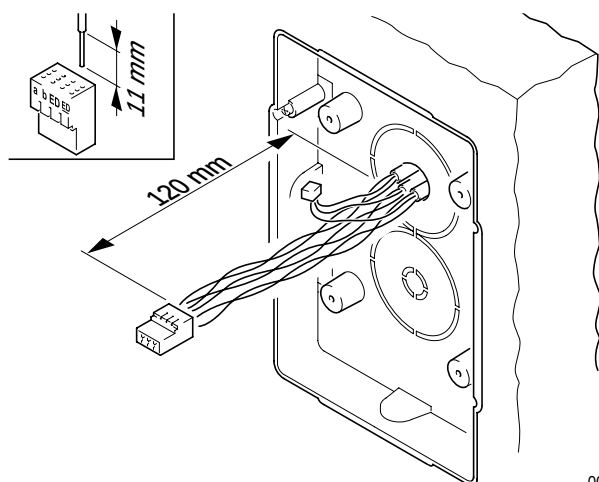


1. Cavity wall clamps
 2. Fastening screws for cavity wall clamps
 3. Plastering protection
- h: 242 mm
b: 169.5 mm
t: 35 mm



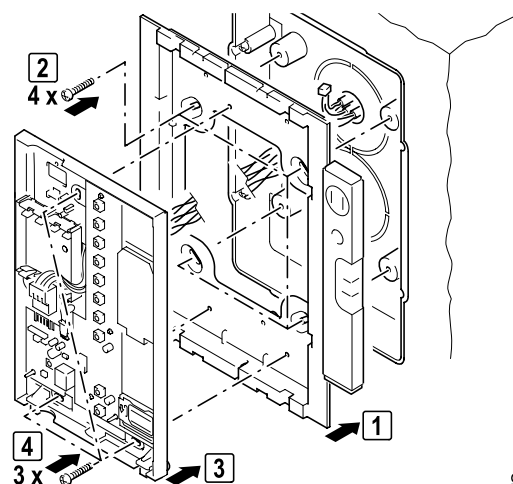
Note:

- The plaster protection (3) provides protection from soiling. It should only be removed just before the telephone is installed.
- If the walls are not plastered, the thickness of the plaster to be applied must be taken into consideration during installation.



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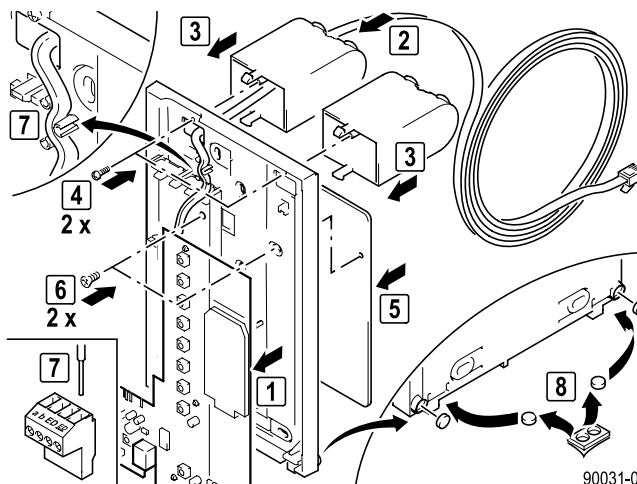
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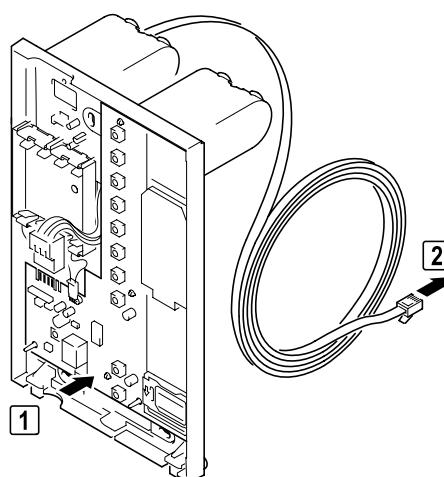
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Installation as a Desktop Unit

You require a 1 7310 desktop console and IAE/UAE8 or IAE/UAE4 junction box for installation.



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90033-0

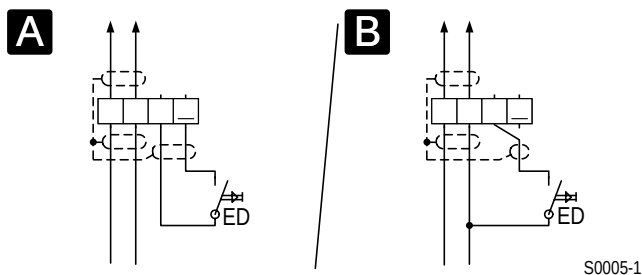


Caution!

Damage to device.

The western connector of the handset must not be inserted into sockets from other manufacturers or systems.

Connection



A Standard connection

B Apartment button connecting option using 3 wires

Connections

a, b Bus terminal
ED, ED Apartment button

- Connect screening on incoming and outgoing lines. Connect all unused wires as screening for YR lines.
- With connecting option B, leave connection ED free and heed the polarity of bus terminals a and b.
- Button adapter 1 4645 must be used when multiple indoor telephones operated in parallel are to react to one apartment button (ED).
- A maximum of 4 GSM indoor telephones may be connected to one TwinBus power supply unit. Per bus line, 1 indoor telephone HANDYLINK and 8 indoor telephones 1 7630 can be connected. If, for example, 4 indoor telephones are to signal the same door call, a maximum of 2 telephones can be connected to one bus line.

Function: SMS message

To be able to use the SMS message function:

- the SMS signal must close the ED (apartment button) circuit
- the SMS message must be enabled (with SMS message enabled, calls will not be signalled in the indoor telephones) – refer to Service Mode
- call forwarding must be enabled – refer to Operation, Remote Control of the Indoor Telephone HANDYLINK



Caution!

Damage to device!

The SMS signal must close the ED (apartment button) with zero potential:

- Do not connect power.
- Use only potential-free normally open contacts for SMS signalling.

Starting Up – SIM Card

Input Signal Strength of the Network

For proper functioning, sufficient reception of the mobile network must be ensured. Prior to installation, check the intensity at the installation site using a mobile phone.

- For testing purposes, insert the SIM card provided into a mobile phone (refer to the documentation of the mobile phone manufacturer).

Disabling the PIN Prompt

- Use a mobile phone to disable the PIN prompt on the SIM card (refer to the documentation of the mobile phone manufacturer).

Storing Call Numbers on the SIM Card

There are two ways of storing the numbers of the residential telephone or mobile phone to which the door intercom conversation is to be forwarded on the SIM card:

1. Set up the SIM card using a mobile phone.
 - Insert the SIM card provided into a mobile phone (refer to the documentation of the mobile phone manufacturer).
 - Create a new entry in the telephone directory:
 - Enter the number of the mobile phone (residential telephone, to which the door call is to be forwarded).
 - For the first call forwarding, enter "Ritto1" as the "Name", for the second one, enter "Ritto2", for the third one "Ritto3" and for the fourth one "Ritto4".
 - Store the entries on the SIM card.



Note:

Deleting call numbers and other functions – siehe "Service Mode" auf Seite 11.

2. Service mode – connection via an external residential telephone or mobile phone (with costs):
 - Refer to "Service Mode" auf Seite 11.

Inserting the SIM Card / Booting the GSM Modem



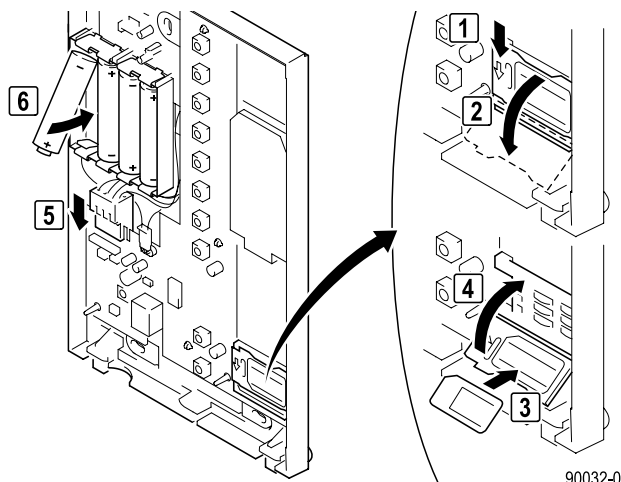
Caution!

Damage to device!

Before inserting or removing the SIM card, the indoor telephone HANDYLINK must be disconnected from the voltage supply:

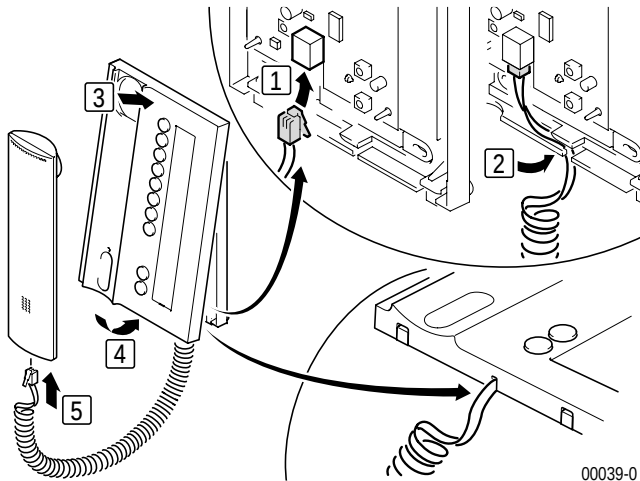
- Remove the storage batteries.
- Disconnect the TwinBus plug.

Insert the SIM card



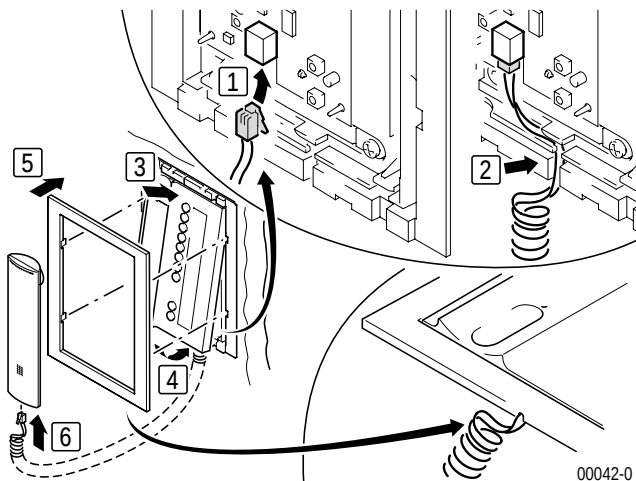
- ✓ The booting of the GSM modem is completed when the upper 4 LEDs flash once.
- ⊗ If only the upper two LEDs flash, the storage batteries are flat. Charge the storage batteries using an external battery charger or wait, until the storage batteries have been charged by the TwinBus – , also refer to Storage Battery Flat Message.

Surface-Mounting



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Flush mountig and Cavity Wall Installation



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Starting Up – TwinBus

Starting up can be performed using the indoor telephone or the apartment button. Starting up using the apartment button is useful if you do not have access to the residential unit.

To permit the operator to change the call tone of the main bell, the main bell must be programmed as the primary doorbell when making initial settings. The procedure must be repeated for other bell buttons.

The intercom can be used when two persons are performing the start-up procedure.

An internal call number must be assigned to each indoor telephone for internal communication. After programming the internal call number, the indoor telephone is known to all subscribers connected to the bus line. For example, subscriber 1 is dialled by all the other subscribers via the button that has been assigned to subscriber 1 as the internal call number. Please print the labelling field of all the indoor telephones accordingly – siehe "Operation" auf Seite 8.

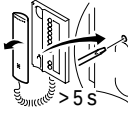
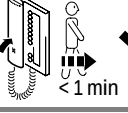
Adjustment Protection

Via the TwinBus power supply unit, the connected intercom units can be protected against inadvertent changes to the TwinBus settings.

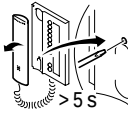
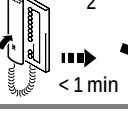
A negative acknowledge tone when the setting button is pressed indicates that the adjustment protection facility has been enabled.

Starting Up Using the Indoor Telephone

One-man start-up

Activity	Result
	
	

Two-man start-up

Activity	Result
	
	
	



- ✓ short tone: Device is ready for operation.
- ⊗ no tone: Time limit exceeded.
- ⊗ long tone: Programming procedure failed.

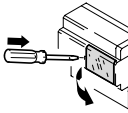
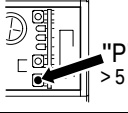
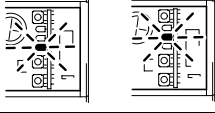
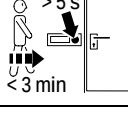
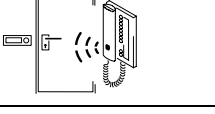
If the time limit has been exceeded:

- Repeat the procedure.

If the programming procedure failed:

- Check at the TwinBus power supply unit whether the adjustment protection has been enabled.
- If 10 bell buttons have already been programmed, the telephone memory is full. If necessary, delete all settings and reprogram the doorbells required.

Starting Up Using the Apartment Button

Activity	Result
	
	
	



- ✓ short tone: Device is ready for operation.
- ⊗ no tone: Time limit exceeded.
- ⊗ long tone: Programming procedure failed.

If the time limit has been exceeded:

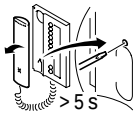
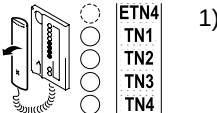
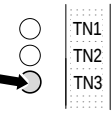
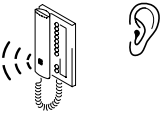
- Repeat the procedure.

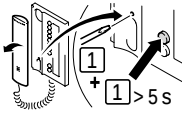
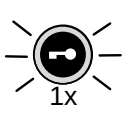
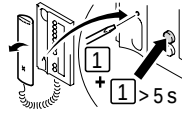
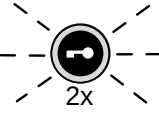
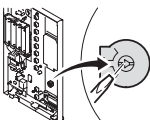
If the programming procedure failed:

- Check at the TwinBus power supply unit whether the adjustment protection has been enabled.
- If 10 bell buttons have already been programmed, the telephone memory is full. If necessary, delete all the settings and reprogram the doorbell required (only possible if you have access to the apartment).

Settings – TwinBus

For internal voice communication the indoor telephone must be assigned its own internal call number. Shown with the example of subscriber 3 (TN 3).

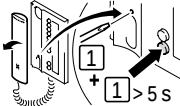
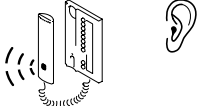
Activity	Result
Internal call number	
	
	Note: The four lower buttons are available for internal voice communication. The four upper buttons are reserved for GSM functions.
	

Activity	Result
Automatic door opening rights (Portamat)	
	 ON
	 OFF
Voice quality	
	Note: Depending on the system, an echo effect may influence the voice quality between the door and the mobile phone. The voice quality can be tuned at the potentiometer.

- 1) TN = Subscriber
ETN = External subscriber

Deleting Settings – TwinBus

This function deletes all the settings and programmed doorbells. If necessary, please note down any existing customer settings before deleting the settings.

Activity	Result
	



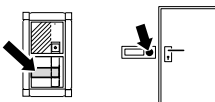
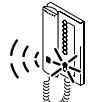
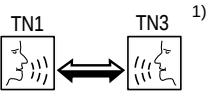
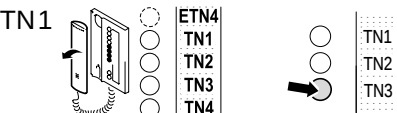
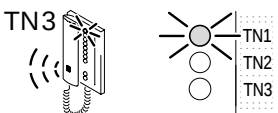
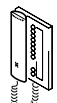
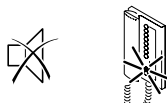
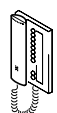
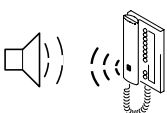
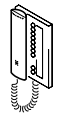
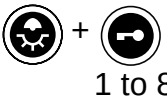
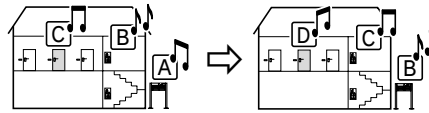
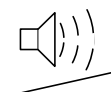
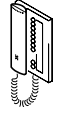
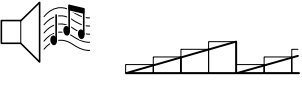
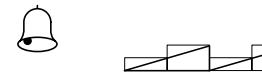
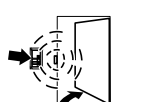
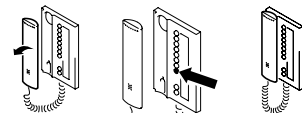
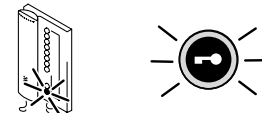
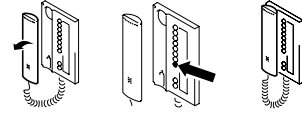
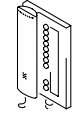
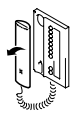
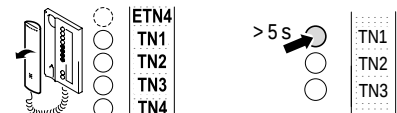
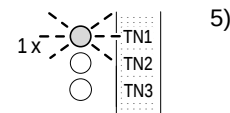
- ✓ short tone: Settings have been deleted.
- ⊗ long tone: Settings have not been deleted.

If the settings have not been deleted:

- Check at the TwinBus power supply unit whether the adjustment protection has been enabled.

Repeat the procedure.

Operation

Function	Activity	Result
TwinBus Functions		
Ringing 		
Opening the door 		
Internal call  ¹⁾	 ⁵⁾	 ⁵⁾
Muting 	1.  	
	2.  	
Selecting a call tune  A B C D E F G H	 	
Adjusting the ringing volume 	  > 1 s	
		
		 ON
		 OFF
Switching-function  ³⁾	 	
Enabling call memory ⁴⁾	 > 5 s ⁵⁾	 ⁵⁾

1) If the door opener button of the internal call number flashes (e.g. button TN 1 for subscriber 1), an internal call is already being made on the system. The system is busy.

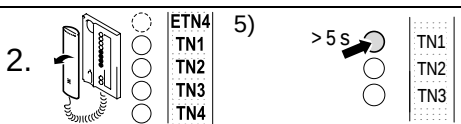
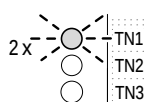
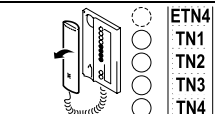
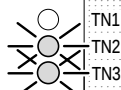
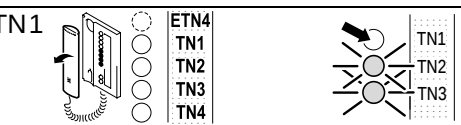
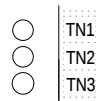
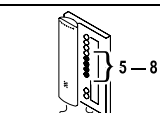
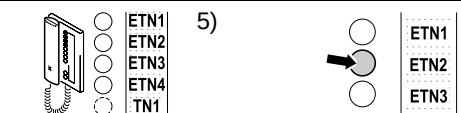
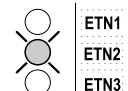
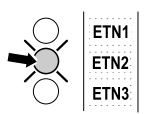
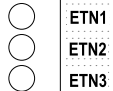
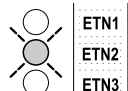
2) The lowest internal call button will then be blocked for internal calls. Only 2 other internal subscribers can be dialed.

3) Optionally with switching device 1 4981, e.g. switch light.

4) Shown with the example of subscriber 1 (TN 1).

5) TN = Subscriber

ETN = External subscriber

Function	Activity	Result
Disabling the call memory ¹⁾	2. 	
Viewing the call memory ¹⁾		
Deleting the call memory ¹⁾	TN1 	
Labelling		
Special functions ²⁾		2)
GSM Functions		
Enabling call forwarding to an external residential telephone or mobile network subscriber ³⁾		 ON
		 OFF
Selecting an external residential telephone or mobile network subscriber ⁴⁾		 4) 

1) Shown with the example of subscriber 1 (TN 1)

2) Further switching functions optionally with switching device 1 4981, e.g. switch garage door.

3) The indoor telephone HANDYLINK automatically enables calling line identification. To display the clear text on the mobile phone or indoor telephone (e.g. "Ritto door unit") in addition to the number for an incoming call from the indoor telephone HANDYLINK, the number of the indoor telephone HANDYLINK should be stored in the mobile phone or indoor telephone together with the name (refer to the instructions of the manufacturer).

4) If the called subscriber does not answer the call within the call timeout (refer to "Service Mode" on page 11), the connection is terminated again (LED goes out).

If the called subscriber answers the call, a conversation can be made for the defined call duration (refer to "Service Mode" on page 11).

An incoming door call on the TwinBus will abort the conversation.

5) TN = Subscriber

ETN = External subscriber

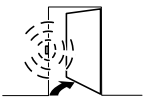
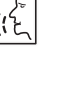
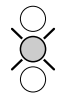
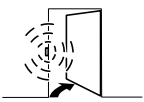


✓ short tone: The entry has been accepted.

⊗ long tone: The entry was faulty and was rejected.

**Note:**

To make full use of all the functions, the residential telephone or mobile phone must operate in DTMF mode (dual-tone multifrequency, refer to the instructions of the manufacturer).

Function	Activity	Result
Remote Control of the Indoor Telephone HANDYLINK		
Ringing 		
Engage in door intercom conversation after ringing	 	   
Opening the door 	  * 9	
Engage in door intercom conversation without ringing	  yy ¹⁾ 0	   
Special functions ²⁾	  yy ¹⁾ # 0...9 	
Enabling / disabling call forwarding	  yy ¹⁾ * 2 (* 1... * 4)	 ETN1 ETN2 ETN3  ⁴⁾ ON
	  yy ¹⁾ * 0  ETN1 ETN2 ETN3	 ETN1 ETN2 ETN3  OFF
Opening the door without ringing	  yy ¹⁾	
	** xxx ³⁾	
	* 9	

1) Telephone number for the indoor telephone HANDYLINK.

2) Optionally with switching device 1 4981, e.g. switch light,
"# 0" corresponds to the light button;

"# 5...# 8" corresponds to the 4 lower internal buttons 5...8 – refer to TwinBus Special Functions.

3) Four-digit pass code. Set to "0000" ex works.

4) TN = Subscriber

ETN = External subscriber

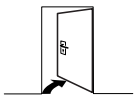


✓ short tone: The entry has been accepted.

⊗ long tone: The entry was faulty and was rejected.

**Note:**

To make full use of all the functions, the residential telephone or mobile phone must operate in DTMF mode (dual-tone multifrequency, refer to the instructions of the manufacturer).

Function	Activity	Result
Service Mode		
Enabling service mode	 ** yy¹⁾ xxxx²⁾	
Storing/deleting an external subscriber on/from the SIM card	 10	
	01...04	
	Storing nn *³⁾ Deleting *³⁾	
Changing the pass code	 90	
	xxxx²⁾	
Opening the door 	* 9	
Setting the call timeout	 95	
	xx (10...99 s)⁴⁾	

1) Telephone number for the indoor telephone HANDYLINK.

2) Four-digit pass code. Set to "0000" ex works.

3) "nn*" is the telephone number of the external subscriber.

4) Factory setting: 30 s.

**Note:**

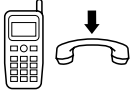
If a number is not entered (only "*"), the memory location is deleted.

The telephone numbers in storage locations 01 ... 04 are automatically assigned the names Ritto1 to Ritto 4.



✓ short tone: The entry has been accepted.

⊖ long tone: The entry was faulty and was rejected.

Function	Activity	Result
Setting the call duration	 96	
	xxx (030...240 s) ¹⁾	
Set up SMS message ²⁾	 98	
	1	 ON
	0	 OFF
Exit service mode	 # / 	

1) Factory setting: 120 s

2) If SMS message is enabled, an SMS is sent to the external residential telephone or mobile phone selected for call forwarding. The external residential network or mobile network subscriber will receive an SMS with the text: "Message from indoor telephone". The SMS message will be triggered via the ED connection on the indoor telephone HANDYLINK – refer to Connection.



✓ short tone: The entry has been accepted.

⊖ long tone: The entry was faulty and was rejected.

Storage battery flat message

Once the storage battery is flat, GSM communication is no longer possible. To indicate this condition, the two upper LEDs will flash alternately. Standard TwinBus telephone communication is not impaired. The GSM telephone automatically charges the storage battery within 24 hours via the TwinBus.



Note:

The storage batteries permanently supply the GSM modem with power. They are charged via the TwinBus. If voltage is not applied to the TwinBus (e.g. power failure or tripped fuse), the storage batteries will be drained.