

SSS SIEDLE

**Planning Manual
Siedle In-Home bus**

Issue 2012

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Please note:

For complex systems or special requirements, the technical consultants in our centers will be pleased to advise you.

Technical additions or printing errors do not constitute grounds for compensation claims.

Siedle In-Home bus

The Siedle In-Home bus is a high-performance communication system with a wide range of performance features which is simple to set up.

The basic functions calling, speech, door release and light switching are supplemented by video and control functions. Interfaces to the telephone network are available with the DoorCom family for analogue and ISDN connection.

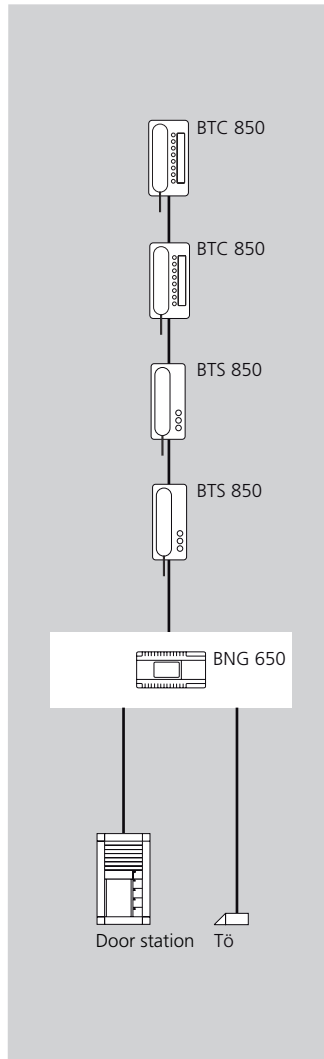
From small-scale systems in the sophisticated single family home through multiple family homes to large residential complexes, the Siedle In-Home bus is in popular use as a communication and control system.

The entire range of functional features is available if just 2 adjacent YR wires are available throughout the system.

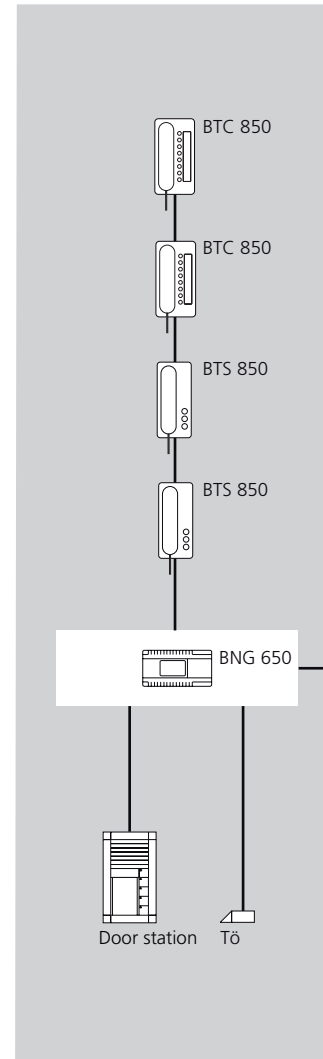
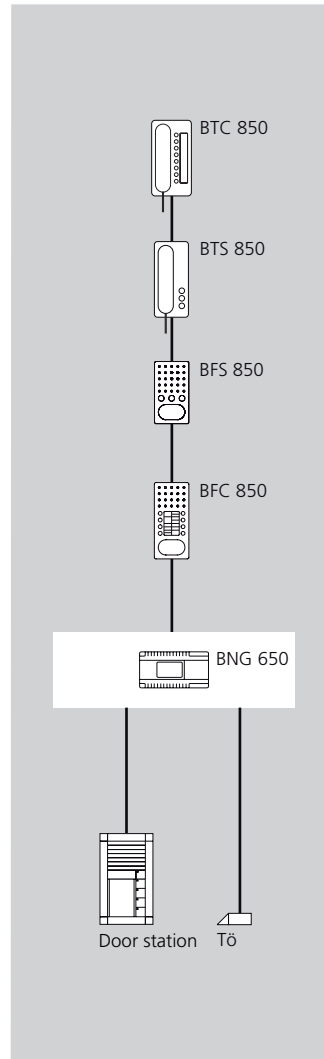
For newly installed systems, we recommend using standard commercially available conductor material J-Y(ST)Y.

Every user connected to the In-Home bus is able to fulfil its intended function independently of where it is installed.

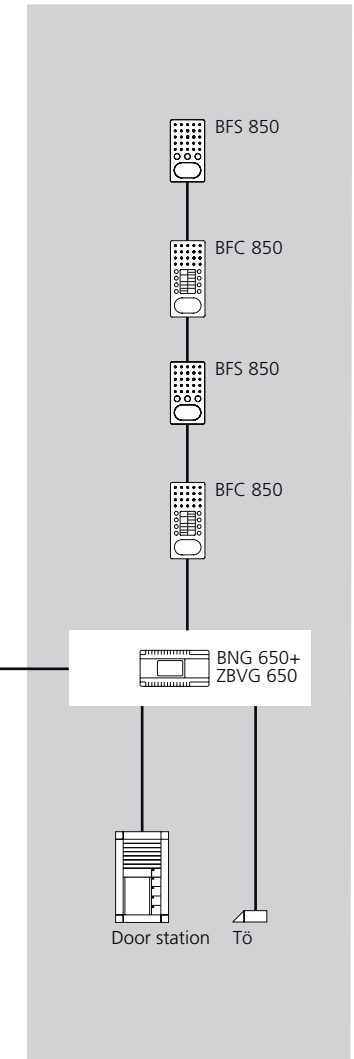
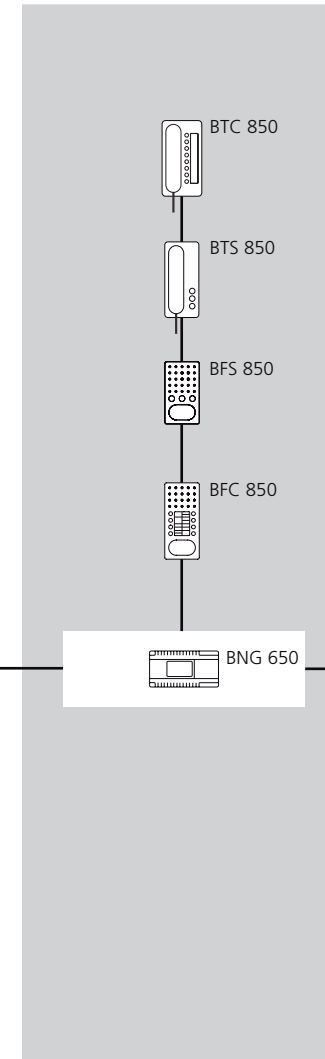
The functions can be modified and adjusted by programming.



In-Home bus: Audio as a single-line system



In-Home bus: Audio as a multiple-line system



Siedle In-Home bus Fields of application

The only requirement for use of the Siedle In-Home bus are 2 continuous YR or J-Y(St) Y cores, via which the entire range of functions including audio and video communication can be performed.

The Siedle In-Home bus is used

- in sophisticated one and two-family homes which seek a greater level of operating convenience using the increasingly accessible technical possibilities available
- in multiple family homes and larger residential complexes offering an enhanced level of security
- and in private and commercial properties in which additional control and switching functions are required

Performance features

Performance features	Siedle In-Home bus with BTS/BFS/BTC/BFC/BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
Calling/speech/door release/audio privacy function storey call with call differentiation	•
Light control	without additional installation
Secondary signal unit	via BNS 750-... or standard commercially available signal unit via BSM/BSE 650-... or ZAR/ZARF 850-..., additional installation required
Door release time	fixed at 3 secs
No. of door stations	within the system limits optional number
Number of lines	max. 15
Number of users per line	max. 31
Total number of users	max. 465
Speech circuits	1 per line
Call silencing with LED display	•
Call volume control in 5 steps	•
Video link	via BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
Storey door loudspeaker with call differentiation	•
Internal communication including call progress tones	•
Switching/control function	•
Display LEDs under the buttons	• BTC/BFC/BTCV/BFCV 850-..., S 850-...
Direct selective door dialling including video actuation	• BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
11 call signals, including chime	•

Performance features	Siedle In-Home bus with BTS/BFS/BTC/BFC/BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
Digital call input possible (COM/DRM)	• BIM 650-... required
Parallel door call	• Up to 4 users
extendable to 8 devices with additional power supply	BTC/BFC/BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
Doormatic function	BTC/BFC/BTCV/BFCV 850-..., S 850-...
Call forwarding	BTC/BFC/BTCV/BFCV 850-..., S 850-...
Send internal group call	BTC/BTCV/BFC/BFCV 850-..., S 850-...
Receive collective paging announcement	BFC/BFCV 850-...
Automatic call pickup of internal calls	BFC/BFCV 850-...
Programming	manual, Plug+Play* or via PC

(* ZPS/ZPSF 850-... required)

Plug+Play programming
exclusively using the devices of series:

- BTS/BFS/BTC/BFC/BTSV/BFSV/BTCV/BFCV 850-..., S 850-...
- BNG/BVNG 650-... and
- BTLM 650-03 with
- BTM 650-01 to BTM 650-04 or
- BTLE 050-03 with
- BRMA 050-01
- Siedle Classic CL xx B-...
- Select door station audio/video STA/STV 850-1 -2 or -4
- Siedle Steel with
- SBTLM 650-03

When using in a mixed installation with predecessor models, Plug+Play programming is not possible.

Applies for the assignment of call stations to call buttons. Extensions to the basic functions, for example parallel call or switching and control functions, are additionally programmed manually or by PC.

Components and users

Area	Components	Users	
Door area	BTLM/SBTLM 650-...	Bus door loudspeaker module	2
	BCMC 650-...	Bus colour CCD camera module	-
	BTLE 050-...	Bus-custom-fit door loudspeaker	2
	CL 01 B-01	Classic door station bus	2
	STA/SBA 850-...	Select door station audio	2
	STV/SBV 850-...	Select door station video	2
	BTM 650-...	Bus call button module	-
	BRMA 050-...	Bus call button matrix	-
	BVA 650-...	Bus video interfacing module	2
	BVS 650-...	Bus video transmitter	-
Living area	BTS 850-...	Standard bus telephone	1
	BFS 850-...	Standard handsfree bus telephone	1
	BTC 850-...	Deluxe bus telephone	1
	BFC 850-...	Deluxe handsfree bus telephone	1
	BNS 750-...	Bus secondary signal unit	1
	BTSV 850-...	Standard bus telephone with color monitor	1
	BFSV 850-...	Standard handsfree bus telephone with color monitor	1
	BTCV 850-...	Deluxe bus telephone with color monitor	1
	BFCV 850-...	Deluxe handsfree bus telephone with color monitor	1
	S 850-...	Siedle Scope mobile video call station and cordless landline telephone	1

Interface to the telephone network

Area	Components	Users	
	DCA 650-...	DoorCom Analog	1–31 (address dependent)

Interface to the IP network

	DCIP 650-...	DoorCom IP	1–31 (address dependent)
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Area	Components	User	
Distribution	BNG 650-...	Bus line rectifier (for audio)	-
	ZBVG 650-...	Bus supply unit accessory	-
	BVNG 650-...	Bus video line rectifier	-
	ZBVNG 650-...	Bus video line rectifier accessory	-
	BAA 650-...	Bus audio decoupler	-
	BVVU 650-...	Bus video distributor asymmetrical	-
	BVVS 650-...	Bus video distributor symmetrical	-
	BSM 650-...	Bus switching module	1
	BIM 650-...	Bus interface module	-
	BSE 650-...	Bus switching unit	1
	BEM 650-...	Bus input module	1

The components can be linked to form a system both over a single-line system and a multiple-line system. The difference between the systems lies in the upgrade capability and the performance scope of the lines:

- Single line systems are restricted to 31 users.
- Multiple line systems can accommodate up to 15 lines with 31 users each, i.e. up to 465 users. In addition, if programmed accordingly internal calls are also possible within one line.

For more information, see the following page.

The terms „user“ and „component“ or „device“ do not mean the same thing. Depending on its function, a component uses a certain bandwidth within the bus system can therefore count as 0, 1 or 2 users. The upgrade capability of the lines always refers to the number of users and not to the number of connected components or devices.

Siedle In-Home bus General

Structure of the conductor network

The Siedle In-Home bus can be structured as a single line or a multiple line system. The installation can be looped through from device to device or structured via a side circuit with bus distributor. Mixed structures are also possible.

Single line system

Systems with up to 31 users with one speech channel. The basic functions calling, speech, door release and light switching to the front door are performed as a matter of course, with several doors. In addition, there are a many different performance features available. Several speech channels or a higher number of users call for a multiple line system.

Parallel call

A call button can be assigned to several bus telephones in parallel. If the call button is pressed, these ring at the same time. The bus telephone which is picked up first or at which the speech button is pressed first is connected to the caller.

Internal speech operation

The users can intercommunicate internally provided the devices have been programmed accordingly.

The storey door loudspeaker

can be installed instead of a storey call button. All that is required in addition is a 12 V AC supply for the door release.

Interface to the telephone network

Instead of a user, an analogue interface can be connected to link up to the telephone network. The DoorCom Analog DCA 650-... can be used to create this link.

Interface to IP technology

The DoorCom IP links the Siedle door station to a TCP/IP network/Intranet. As a functional unit, the DCIP 650-... consists of the devices system interface In-Home bus SII 650-..., system interface video server SIVS 610-... and IP video server IPVS 600-...

Switching and control elements for greater convenience

In the central subdistributor or at any optional location in the line, bus switching modules BSE 650-..., BEM 650-... and BSM 650-... can be installed and actuated by the authorized users, e.g. for staircase lighting in addition to the external lighting or all-round lighting. At any optional position of the In-Home bus, switching and control elements BSM/BSE/BEM 650-... can be installed for selective actuation of individual or several users. (e.g. for roller blind actuation)

Status display for important information

At the deluxe devices BTC/BFC/BTCV/BFCV 850-..., status messages can be displayed which are transmitted by a bus input module BEM 650-... or by a switching module BSE 650-... (e.g. garage door open, terrace door open or fault in the air conditioning unit)

Programming is described in the system manual enclosed with the BNG/BVNG 650-... , and can be performed manually, using Plug+Play or via a PC.

Plug+Play programming refers exclusively to the assignment of bus telephones to call buttons. For programming with the PC, the interface PRI 602-... USB with software BPS 650-... from V 2.00 is required.

When programming using the PC, access rights to status displays or control functions are defined for the individual users.

Multiple line system

In contrast to the single line system, in multiple line systems installations can be formed encompassing up to 465 users. At first glance, the only difference in the performance features available appears to be the maximum number of users. However, a significant difference exists in terms of the number of speech channels. One speech channel is available per line.

In multiple line systems, it is possible for a bus telephone to communicate e.g. with the door station and at the same time bus telephones on a different line to communicate internally via another speech circuit.

In single line systems, only one speech channel is ever possible.

Several speech channels

Internal units connected to one line can speak internally. If the system is configured with several lines, in each line a call can be held without mutual interference.

No internal calls are possible across different lines.

There is only ever one speech channel available to the shared entrance door, even if several doors are completely or partially shared.

An example of a multiple line system:

A project accommodates several independent bureaus or practices.

The entrances are jointly used and internal communication is also required.

Procedure during planning

Even extensive and complex Siedle In-Home bus systems are simple to plan. In drawing up the planning documentation, we have used a systematic approach which applies throughout the entire planning process.

We consider the most logical **procedure** is to start with planning the **door area** then to work on the **living area** and to finish with the **distribution**. Distribution encompasses not only the power supply to the devices but also any switching and control functions.

In each area, i.e. door, living area and distribution, first the audio and then the video components are described.

In the Siedle In-Home bus, the audio, video and control signals are transmitted via two cores routed side by side.

General

The design of the door area can differ considerably. For standard applications, the door area design is simple to put together using the Siedle purchase order catalogue.

The planning documents refer exclusively to the electrical components required to ensure that the system functions reliably.

Additional functions and design elements have to be taken into consideration during planning and subsequently at the installation stage.

When planning the door station, pay attention to the mounting height, in particular when a video camera is being used.

Recommended mounting height appr. 1.60 m to centre camera

Door area

The door area offers wide scope for creative design. The door station can be equipped, for instance, with:

- Siedle Vario,
- Siedle Classic,
- Siedle Select door station,
- Siedle Steel or
- Siedle custom-fit door loudspeaker for mounting in an existing intercom compartment.

Siedle In-Home bus: Audio Ranges and system limits

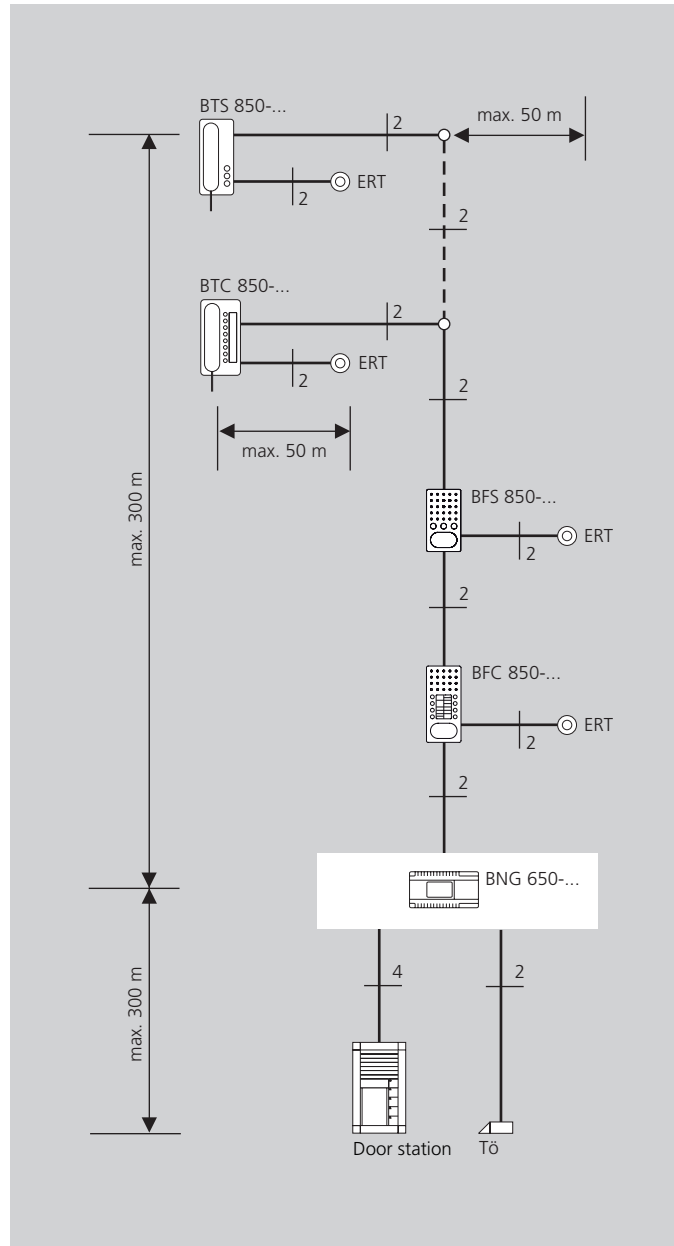
All specifications relating to ranges and functional characteristics refer to the above mentioned conductor material with 0.8 mm core diameter. With a core diameter of 0.6 mm, the range is halved. The system limits in the conductor network are also halved. When converting old bell systems (1+n installation): If two continuous cores are not available, all n cores must be connected to each other and used as one bus core. This reduces the possible length of the total laid conductor network to max. 400 m per line.

Single line system

- Max. 50 m between the bus telephone and storey call button ERT
- Max. 300 m from the bus line rectifier to the most distant door station
- Max. 300 m from the bus line rectifier to the most distant bus telephone
- Total laid conductor network length max. 1500 m

In single line systems

- The range
- Max. 31 users
- 1 speech channel

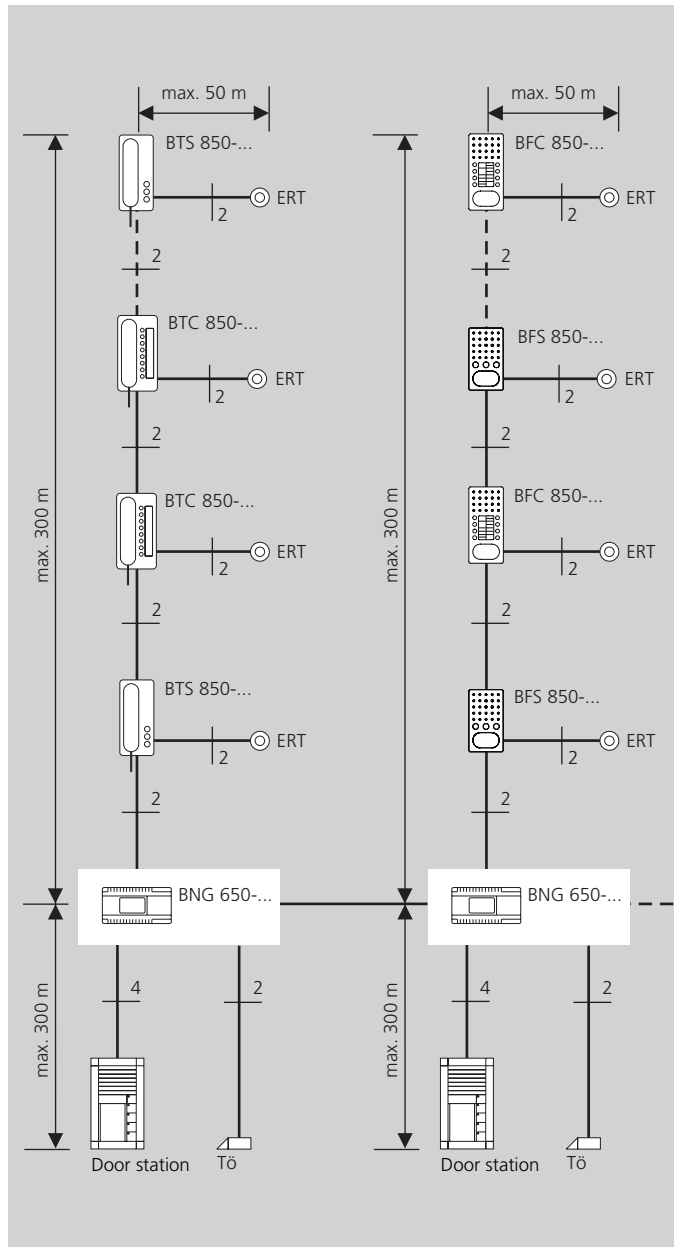


Multiple line system

- In multiple line systems, several single line systems are linked from BNG 650-... to BNG 650-...
- Up to 15 lines possible
- A maximum of 300 m between the most distant bus line rectifiers
- Distance from the BNG 650-... to the most distant user max. 300 m
- Max. 50 m between the bus telephone BTS/BFS/BTC/BFC and storey call button ERT
- Total laid conductor material length within one line max. 1500 m
- Maximum configuration 465 users at max. 15 lines.

In multiple line systems

- The range
- Max. 15 lines
- Max. 15 speech channels
- Max. 31 users per line
- Max. 465 users at max. 15 lines.



Siedle In-Home bus: Audio

Single line system up to max. 31 users

Cable size diagram

ÜV-THa-1/1

Speech connection to the door station via the BTS/BFS/BTC/BFC 850-... in a **single or multiple family home**.

In conjunction with the BTS/BFS/BTC/BFC 850-... also for internal telephony and/or for control functions in sophisticated single or multiple family homes where an advanced level of convenience is required. Independently of the device, whether bus telephone BTS/BTC 850-... with receiver or BFS/BFC 850-... as handsfree bus telephone, each system can be individually planned and constructed.

The BTS/BFS/BTC/BFC can be installed and operated in combination in a single system.

Where the execution of other control functions is required alongside door release and light using the BTC/BFC 850-... , the bus switching module BSM 650-... or bus switching unit BSE 650-... is required in addition.

See switching/control functions page 22 and 34.

Functional characteristics

Call, speech, door release and light operation between the door station and the connected BTS/BFS/BTC/BFC 850-... units. Internal speech communication from bus telephone to bus telephone is possible within one line.

Third party audio privacy function.

11 different electronic call signals freely selectable including chime.

Call differentiation between door calls, storey calls and internal calls is freely selectable.

Call silencing with status display and optical call display integrated.

Door release actuation at the door station which placed the last call and light actuation are possible at any time.

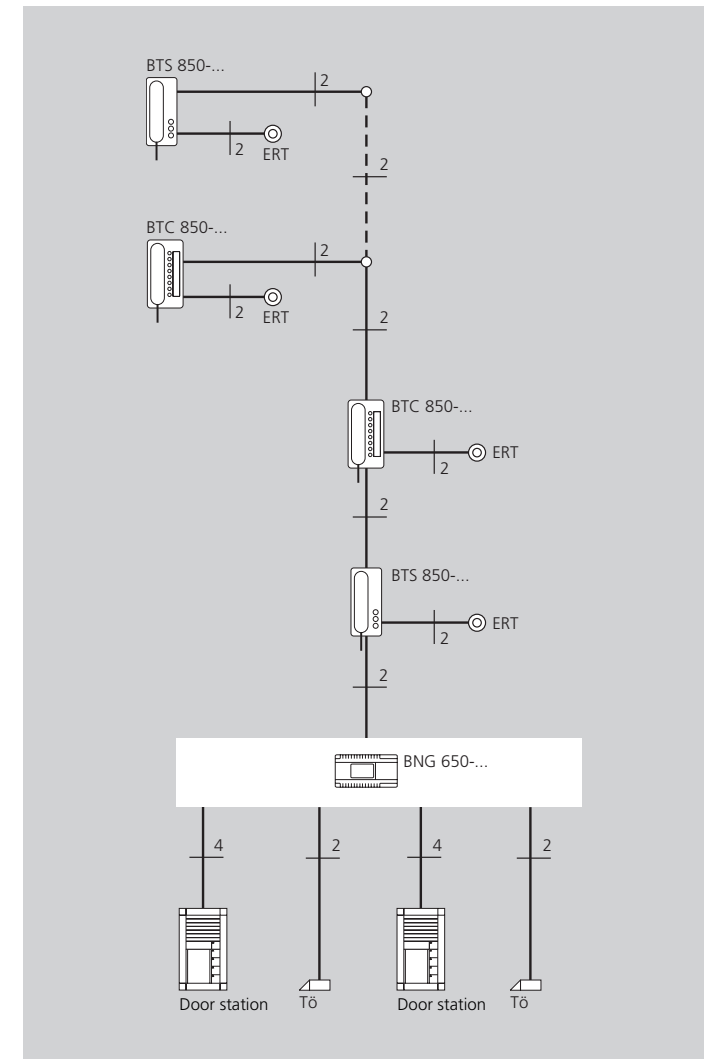
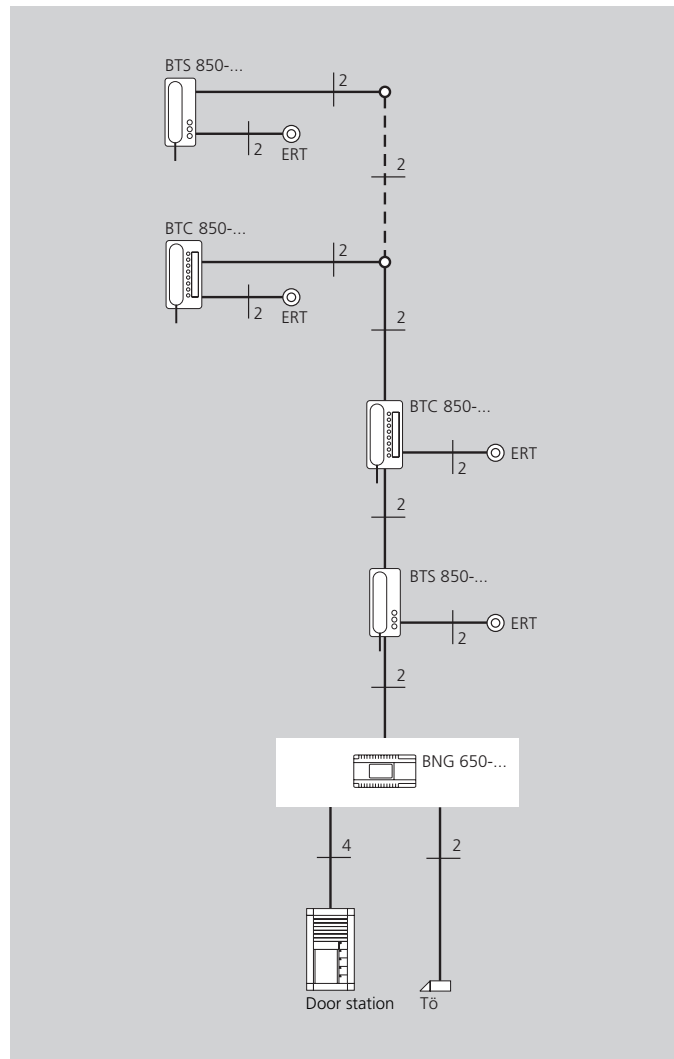
Door release actuation time:

Fixed at 3 secs.

Light contact actuation time:

0.4 secs with BPS 650-... , can be changed from V 2.00
ERT: Storey call button

Installation can be performed from one device to the next or via storey distributors. Mixed installation is also possible.



Key

ERT = Storey call button

Tö = Door release

(12 V AC min. 20 Ohm)

Siedle In-Home bus: Audio

Multiple line system up to max. 465 users

Cable size diagram ÜV-THa-n/n

Speech connection to the door station via the BTS/BFS/BTC/BFC 850-... in residential complexes.

In conjunction with the BTS/BFS/BTC/BFC 850-... additional control functions and also internal telephony within one and the same line are possible. Independently of the device, whether bus telephone BTS/BTC 850-... with receiver or BFS/BFC 850-... as handsfree bus telephone, each system can be individually planned and constructed.

The BTS/BTC/BFS/BFC 850-... can be installed and operated in combination in a single system.

Where the execution of other control functions is required alongside door release and light using the BTC/BFC 850-... , the bus switching module BSM 650-... or bus switching unit BSE 650-... is required in addition.

See switching/control functions page 22 and 34.

Functional characteristics

Call, speech, door release and light operation between the door station and the connected BTS/BFS/BTC/BFC 850-... units. Internal speech communication from bus telephone to bus telephone is possible within one line.

Third party audio privacy function.

11 different electronic call signals freely selectable including chime.

Call differentiation between door calls, storey calls and internal calls is freely selectable. Call silencing with status display and optical call display integrated.

Door release actuation at the door station which placed the last call and light actuation are possible at any time.

Door release actuation time:

Fixed at 3 secs.

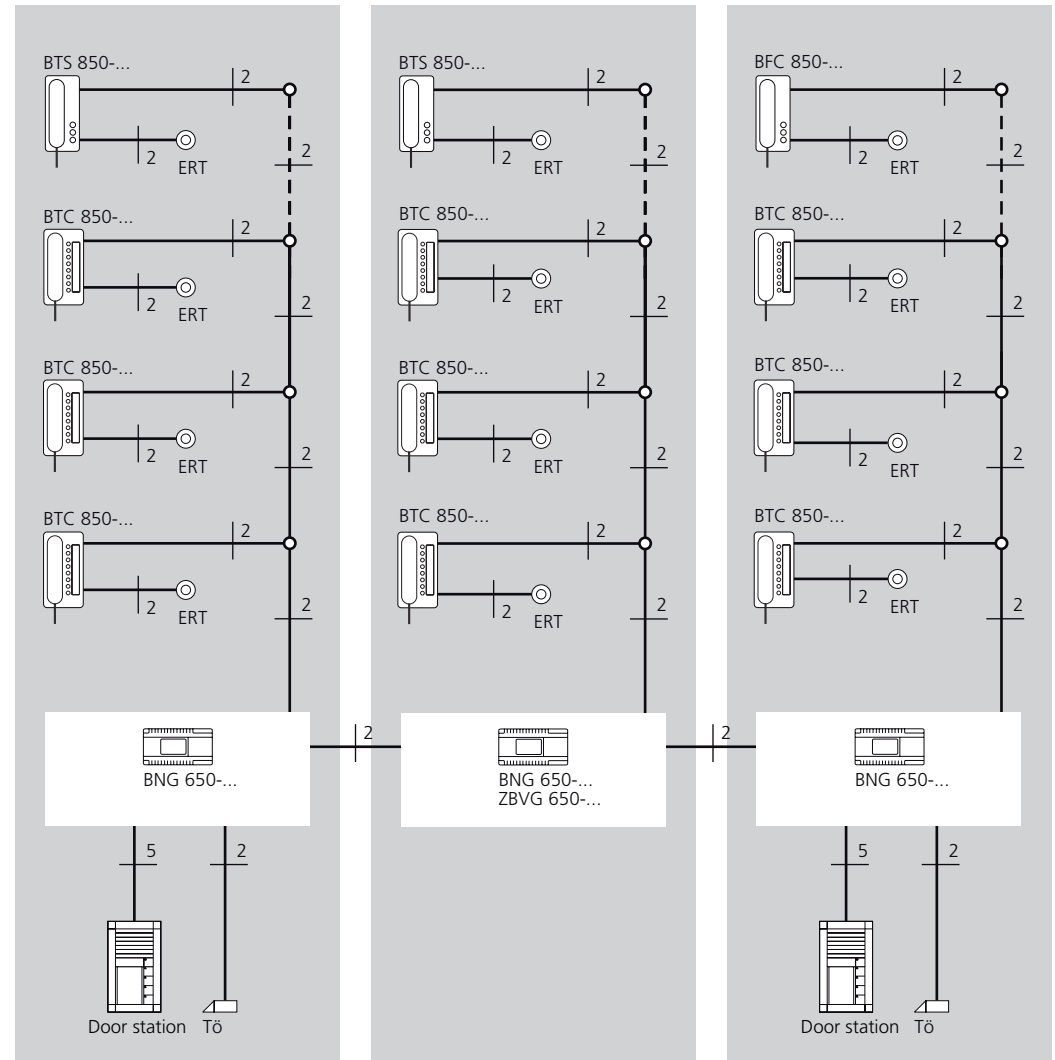
Light contact actuation time:

0.4 secs with BPS 650-... , can be changed from V 2.00
ERT: Storey call button

Installation can be performed from one device to the next or via storey distributors. Mixed installation is also possible.

Multiple line system

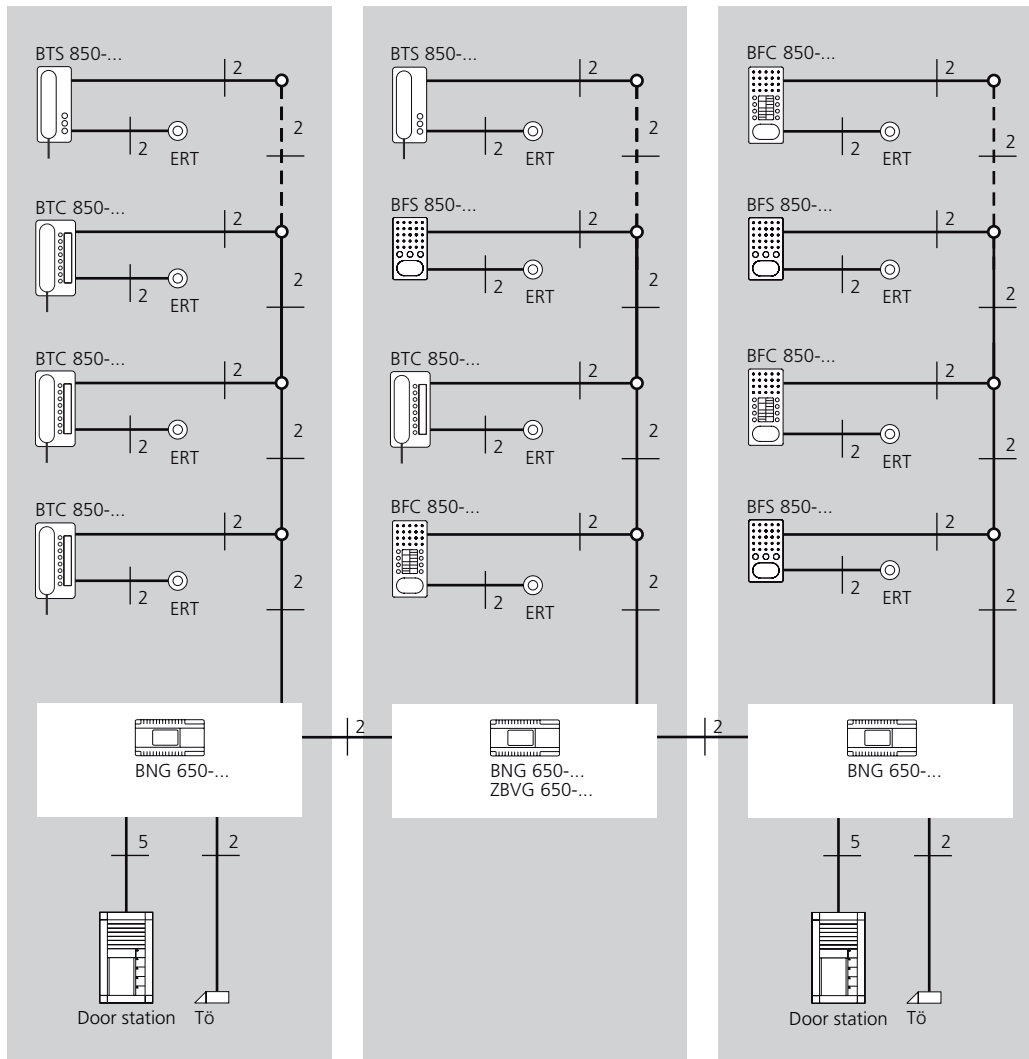
- A BNG 650-... is required for every line
- In multiple line systems, **1 x** bus supply unit accessory ZBVG 650-... is always required.
- One speech channel is available per line.



Key

ERT = Storey call button
Tö = Door release
(12 V AC min. 20 Ohm)

Installation notes



The devices BTS/BTC 850-... can be operated in combination in any optional form with BFS/BFC 850-... in a single system.

Conductor routing

In order to comply with the general safety regulations for telecommunication systems in accordance with VDE 0100 and VDE 0800, and to prevent electrical interference, ensure separate routing of heavy and light current conductors. A distance of 10 cm must be adhered to.

Conductor material

YR	Light current cable
J-Y(ST)Y	Twisted pair conductors, shielded
A2Y(ST)2Y	Buried telecommunication cable

For new installations, we recommend using standard available conductor material J-Y(ST)Y with 0.8 mm core diameter.

The Siedle In-Home-bus must be installed on two YR cores positioned side by side, and when using J-Y(ST)Y on one pair of cores. Using J-Y(ST)Y conductors reduces the likelihood of interference.

Siedle In-Home bus: Video Ranges and system limits

The Siedle In-Home bus: Video is a high-performance communication system with a wide range of performance features which is simple to set up. The basic functions calling, speech, door release, light, switching and control functions are supplemented by video. Installation in the building can be performed from bus telephone to bus telephone or via the side circuit with bus distributor. Mixed structures are also possible. In systems with several indoor units, the S 850-... units are always connected via a bus distributor BVVU 650-... . In the case of systems which are looped through and which have fewer than three entrances with camera, an attenuation calculation in the single line system up to 100 m is not necessary. The specification 100 m refers to the distance from the bus video line rectifier to the most distant user.

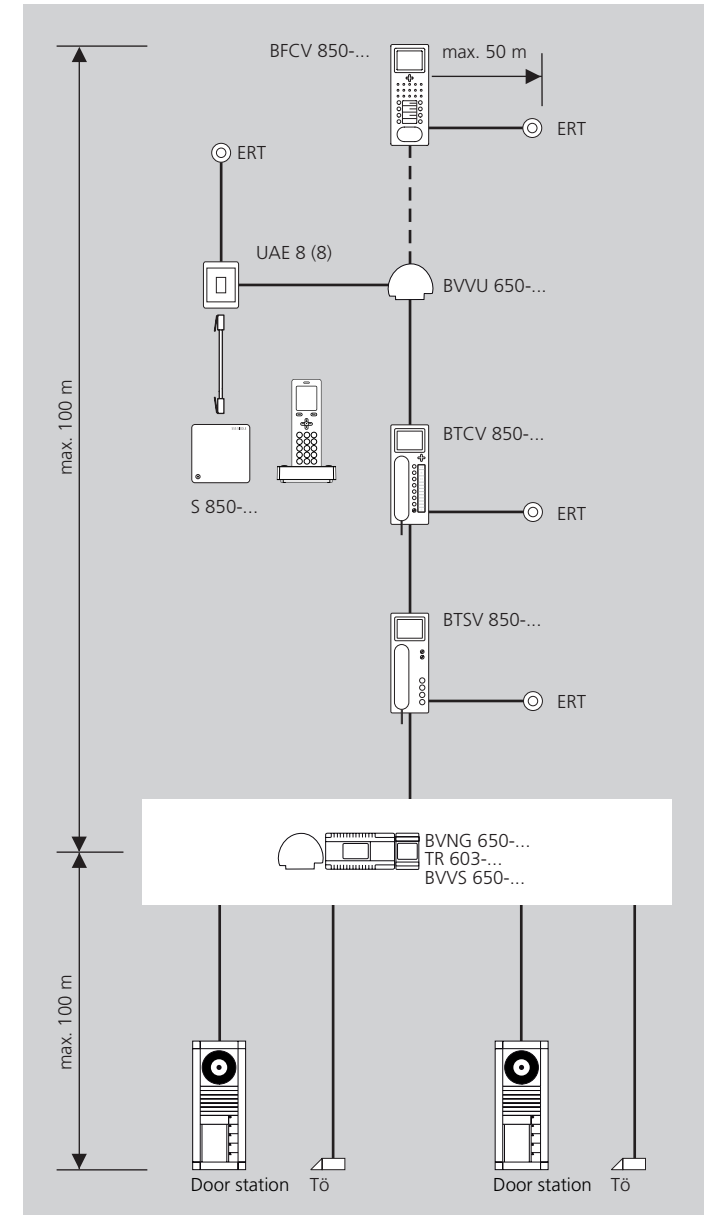
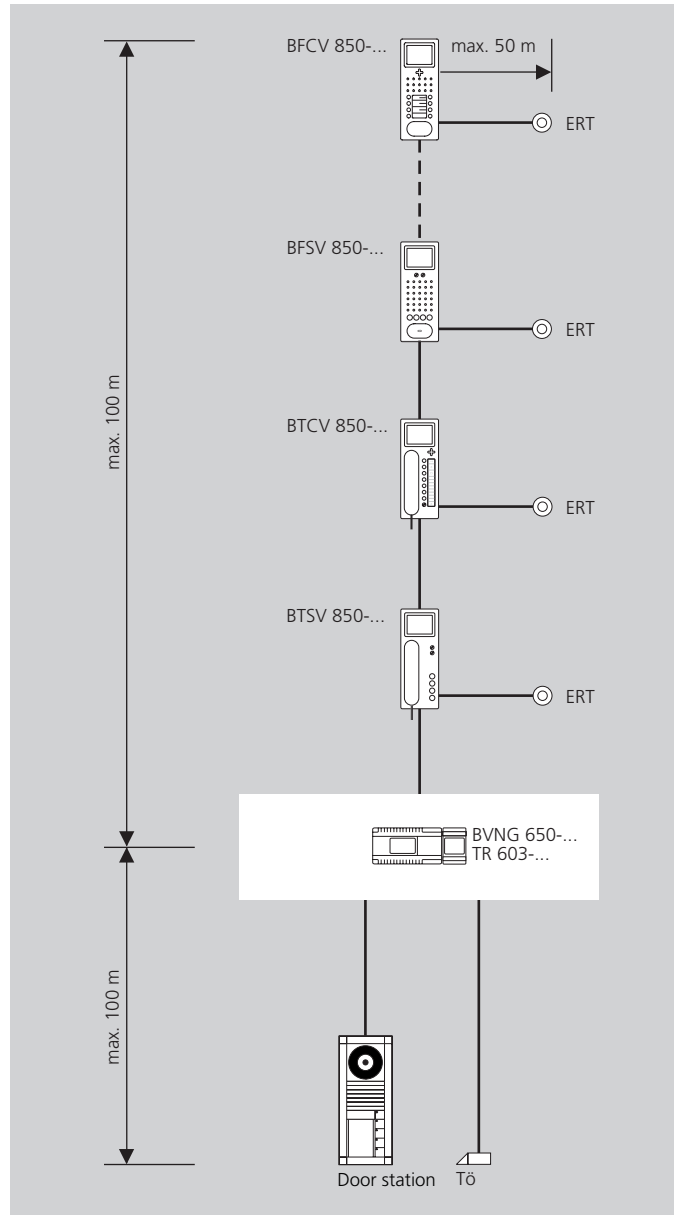
In systems with side circuit installation and bus distributor, a conductor length exceeding 100 metres, more than 2 entrances with camera and more than 10 video indoor units, an attenuation or range calculation must be performed.

In-Home bus components without video

In systems with audio/video devices, the range for all users is determined by the specifications for In-Home bus: Video. The audio users have no influence over the attenuation values. Connection to In-Home bus: Video via bus audio decoupler BAA 650-... The attenuation/range calculation is described from page 16. Our training and exhibition centres will be pleased to advise you.

Key

ERT = Storey call button
Tö = Door release
(12 V AC min. 20 Ohm)



Siedle In-Home bus: Video Single line system up to max. 31 users

Cable size diagram

ÜV-THa-1/1

Speech and video link to the video door station via bus telephones BTSV/BFSV/BTCV/BFCV 850-..., S 850-...

In conjunction with the video indoor units also for internal telephony for one and two-family homes and/or for control functions where an advanced level of convenience is required.

Where the execution of other control functions is required alongside door release and control functions using the BTSV/BFSV/BTCV/BFCV 850-..., the bus switching module/unit BSM/BSE 650-... is required in addition.

See switching/control functions page 22 and 34

Functional characteristics

Call, speech and video link via the Video door station. Door release and light control from the connected BTSV/BFSV/BTCV/BFCV 850-..., S 850-... are possible at any time.

Internal speech communication from bus telephone to bus telephone is possible within one line.

Third party audio privacy function.

11 different electronic call tones to chose from. Call differentiation between door calls and storey calls is freely

selectable.

Call silencing with status display and optical call display integrated.

Door release actuation at the door loudspeaker which placed the last call and light actuation are possible at any time.

Door release actuation time:

Fixed at 3 secs.

Light contact actuation time:

0.4 secs with BPS 650-..., can be changed from V 2.00

ERT: Storey call button

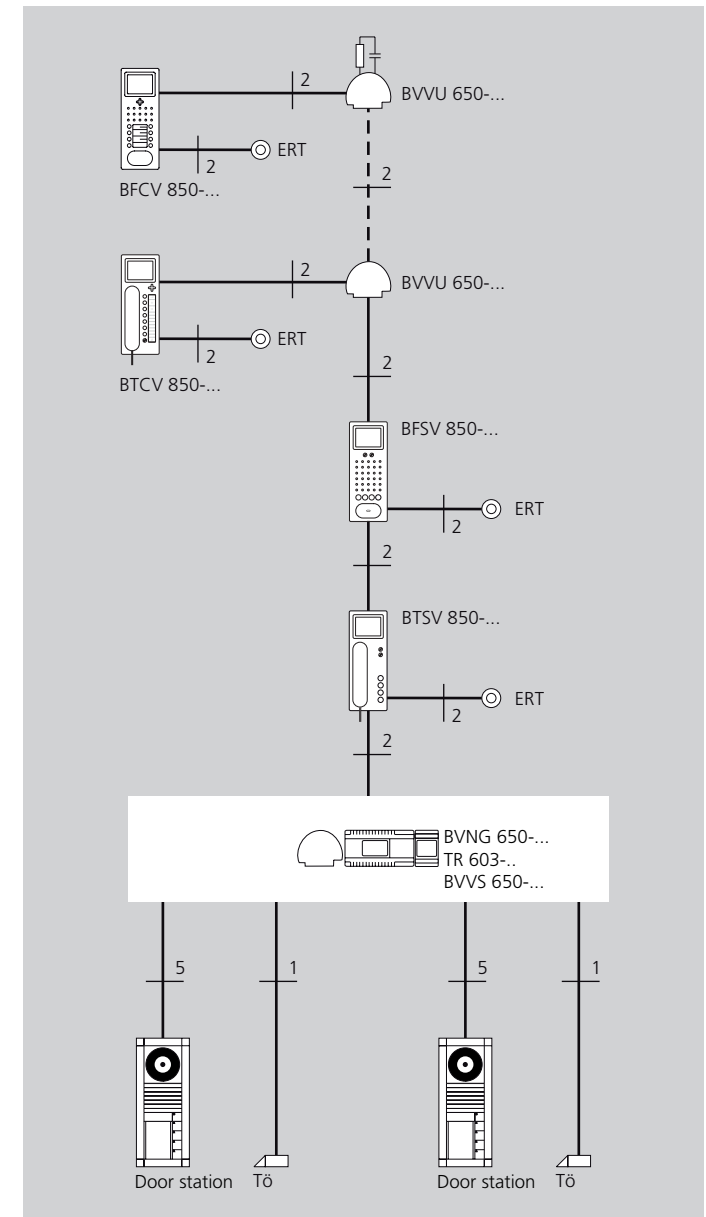
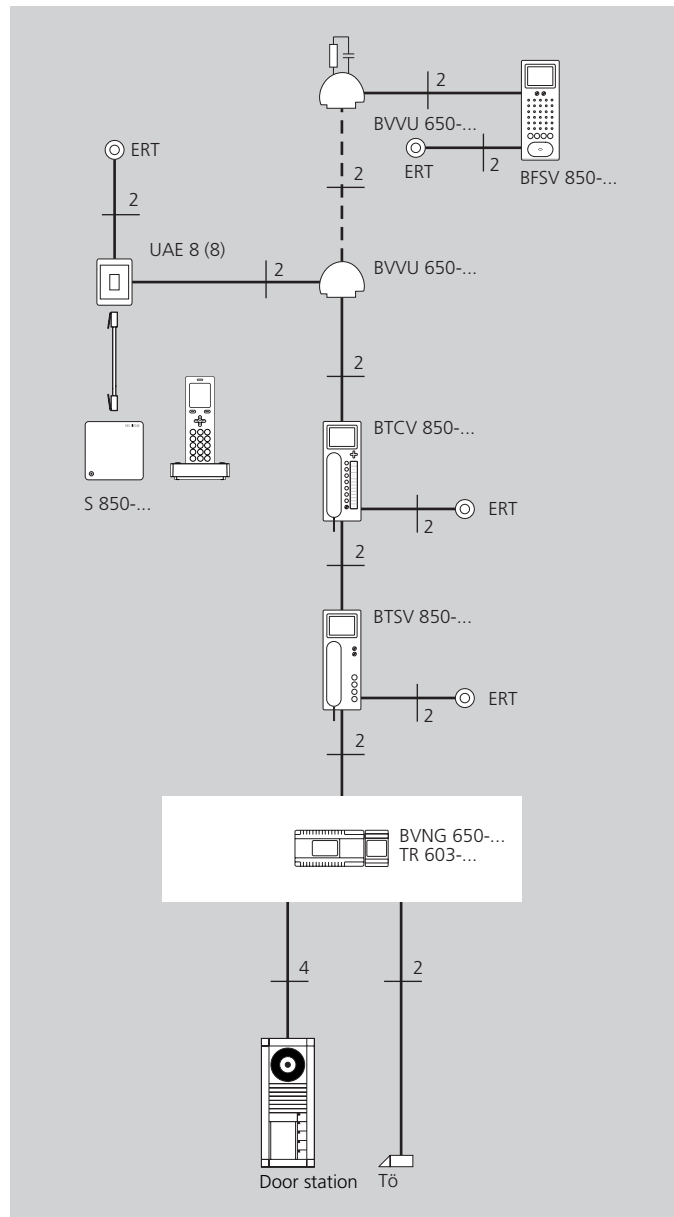
Installation can be performed from one device to the next or via storey distributors. Mixed installation is also possible.

Key

ERT = Storey call button

Tö = Door release

(12 V AC min. 20 Ohm)



Siedle In-Home bus: Video Multiple line system up to max. 465 users

Cable size diagram ÜV-TVHa-n/n

Speech and video link to the video door station via bus telephones BTSV/BFSV/BTCV/BFCV 850-..., S 850-...

In conjunction with the video indoor units additional control functions and also internal telephony within one and the same line are possible.

Multiple line system

- Max. 15 lines possible
- Max. 15 speech channels possible
- Max. 31 users per line
- Each line requires its own BVNG 650-... with ZBVNG 650-...
- One bus supply unit accessory ZBVG 650-... is required per system

Where the execution of other control functions is required alongside door release and control functions using the BTSV/BFSV/BTCV/BFCV 850-..., the bus switching module/unit BSM/BSE 650-... is required in addition.

See switching/control functions page 22 and 34

Functional characteristics

Call, speech and video link via the Video door station. Door release and light control from the connected BTSV/BFSV/BTCV/BFCV 850-..., S 850-... are possible at any time.

Internal speech communication from bus telephone to bus telephone is possible within one line.

Third party audio privacy function.

11 different electronic call tones to choose from. Call differentiation between door calls and storey calls is freely selectable.

Call silencing with status display and optical call display integrated.

Door release actuation at the door loudspeaker which placed the last call and light actuation are possible at any time.

Door release actuation time:

Fixed at 3 secs.

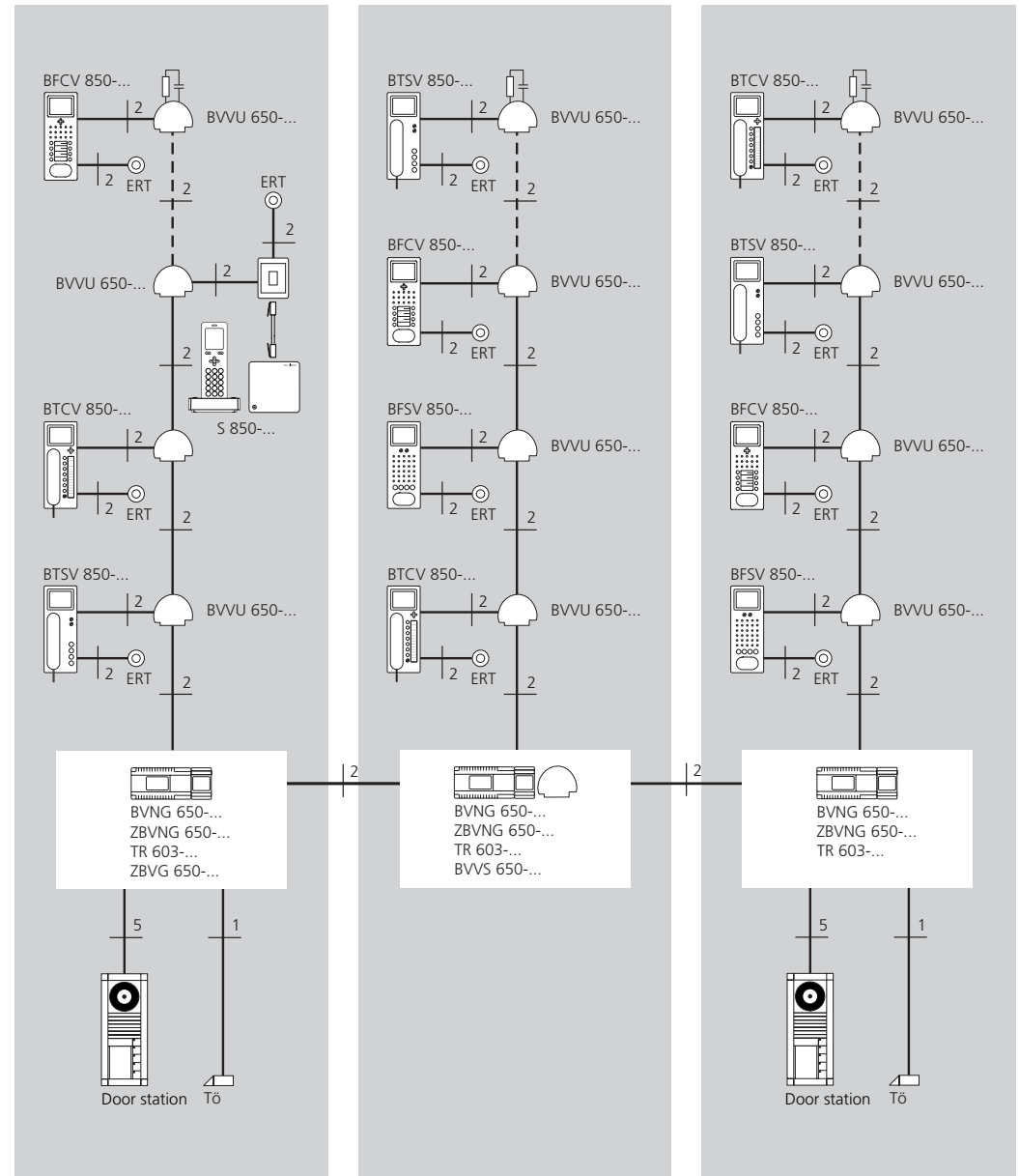
Light contact actuation time:

0.4 secs with BPS 650-..., can be changed from V 2.00
ERT: Storey call button

Installation can be performed from one device to the next or via storey distributors. Mixed installation is also possible.

Key

ERT = Storey call button
Tö = Door release
(12 V AC min. 20 Ohm)



Installation notes

Conductor routing

In order to comply with the general safety regulations for telecommunication systems in accordance with VDE 0100 and VDE 0800, and to prevent electrical interference, ensure separate routing of heavy and light current conductors. A distance of 10 cm must be adhered to. The conductor from the door loudspeaker must be laid directly without branching from the main junction box, or where applicable can also be looped via other door loudspeakers.

Conductor material

YR	Light current cable
J-Y(ST)Y	Twisted pair conductors, shielded
A2Y(ST)2Y	Buried telecommunication cable

For new installations, we recommend using standard available conductor material J-Y(ST)Y with 0.8 mm core diameter.

The Siedle In-Home-bus must be installed on two YR cores positioned side by side, and when using J-Y(ST)Y on one pair of cores. Using J-Y(ST)Y conductors reduces the likelihood of interference.

Range Siedle In-Home bus: Video

All specifications relating to ranges and functional characteristics refer to the above mentioned conductor material with 0.8 mm core diameter. With a core diameter of 0.6 mm, the range is halved. The ranges in the conductor network are halved.

Single line system

- Max. 50 m between BTSV/BFSV/BTCV/BFCV 850-..., S 850-... and storey call button ERT
- Distance from the BVNG 650-... to the most distant user max. 100 m with YR 0.8 mm, max. 150 m with J-Y(ST)Y 0.8 mm core diameter
- Total laid conductor network length max. 1500 m

Multiple line system

- Max. 50 m between the bus telephone and storey call button ERT
- Distance from the BVNG 650-... to the most distant user max. 100 m with YR 0.8 mm, max. 150 m with J-Y(ST)Y 0.8 mm core diameter
- Total laid conductor material length within one line max. 1500 m
- Maximum of 100 m between the most distant bus video line rectifiers, YR cable with 0,8 mm diameter, max. 150 m with J-Y(ST)Y 0.8 mm core diameter
- Total laid conductor network admissible connecting all BVNG 650-... units max. 750 m with YR 0.8 mm, max. 1125 m with J-Y(ST)Y 0.8 mm core diameter.

Attenuation values Siedle In-Home bus: Video

The damping value in dB is only significant for those areas or lines in which video components are mounted.

In the case of systems which are looped through and which have fewer than three entrances with camera, an attenuation calculation in the single line system up to 100 m is not necessary.

In systems with side circuit installation via bus distributor, a conductor length exceeding 100 metres, more than 2 entrances with camera and more than 10 bus telephones with colour monitor, an attenuation or range calculation must be performed.

For complex systems and large ranges/attenuation, the attenuation /range calculation is described over the next pages. Our training and exhibition centres will be pleased to advise you. See page 39

System limits

In single line systems

- The range
- Max. 31 users
- 1 speech channel

In multiple line systems

- The range
- Max. 15 lines
- Max. 15 speech channels
- Max. 31 users per line
- Max. 465 users at max. 15 lines.

Siedle In-Home bus: Video Range

With In-Home bus: Video, a distinction is made between a **camera branch** (in which the door stations with video are grouped) and a **monitor branch** (in which the bus telephones with colour monitor are grouped).

Attenuation must not exceed 45 dB at any point of the overall system, i.e. a maximum of 45 dB is admissible from the camera branch to the most distant user. If this value is exceeded in a branch/line, the ZBVNG 650-... is available to compensate for the loss. This is plugged into the BVNG 650-... .

In the monitor branch, attenuation of max. 55 dB is then admissible.

In the camera branch, attenuation of max. 45 dB is then admissible.

Operating mode switch

The operating mode switch at the BVNG 650-... is used to define how the system is operated.

Range calculation	
L Line	Total laid conductor material within a line 1500 m
camera branch	Maximum distance between BVNG 650-... and the most distant user in the
	camera branch conductor material 150 m = 30 dB with J-Y(St)Y 100 m = 20 dB with YR
monitor branch	Maximum distance between BVNG 650-... and the most distant user in the
	monitor branch conductor material 150 m = 30 dB with J-Y(St)Y 100 m = 20 dB with YR
L BVNG	Maximum distance from a BVNG 650-... to the most distant BVNG 650-...
	150 m = 30 dB with J-Y(St)Y 100 m = 20 dB with YR
Operating mode switch 1-standard-2	
1	Operation in existing systems with BTS/BTC 750-..., replaces BVSG 650-... max. 100m
NORM	Normal operation in a new system with the devices BTSV/BFSV/BTCV/BFCV 850-...
	max. 150 m with J-Y(St)Y max. 100 m with YR
2	Increased range in new systems with the devices BTSV/BFSV/BTCV/BFCV 850-... max. 200m only with J-Y(ST)Y (with supplementary installation)

Attenuation values	
A total 1	Total attenuation between the most distant camera door loudspeaker and the most distant apartment station of a line 45 dB
A total 2	Total attenuation between the most distant camera door loudspeaker and the most distant apartment station of a line, if the relevant BVNG 650-... encompasses a ZBVNG 650-... 45 dB + 55 dB
Attenuation camera branch	max. 45 dB
Attenuation monitor branch	max. 55 dB (with ZBVNG 650-...)

Attenuation of 2 dB is assumed for every 10 m of conductor length.

Siedle In-Home bus: Video Range

Camera branch

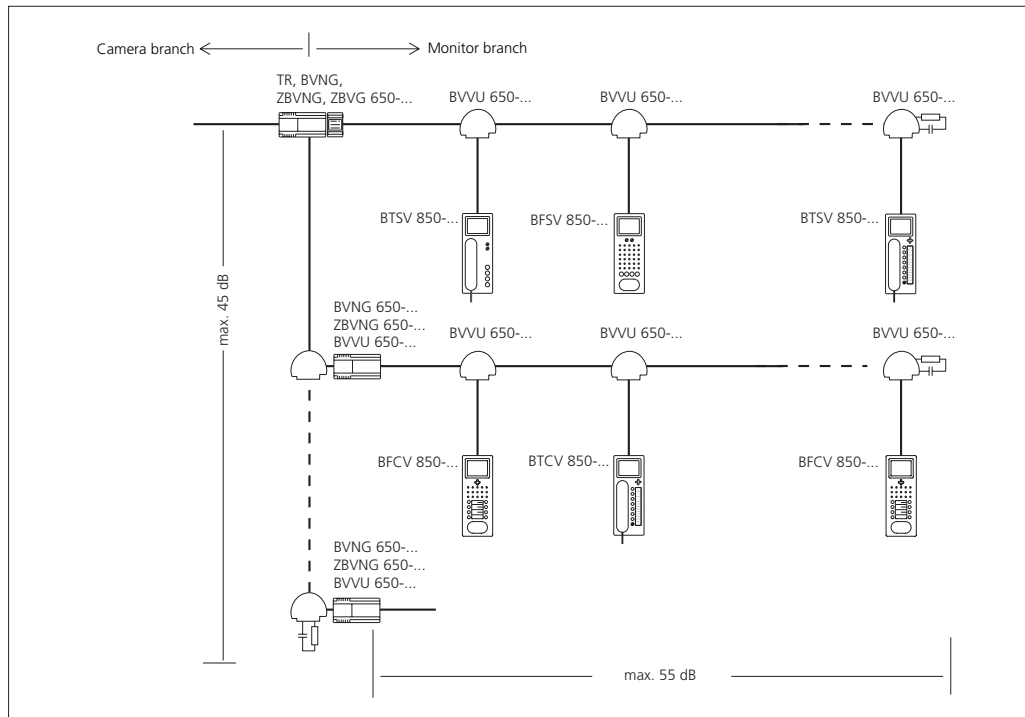
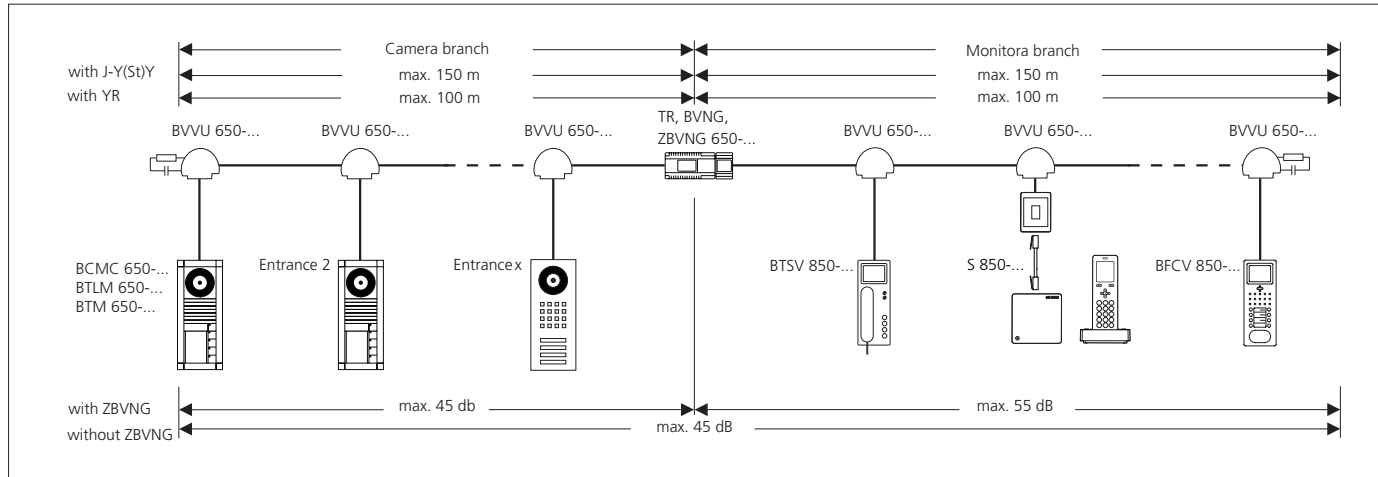
The camera branch is defined as the area in which the door stations with video are connected. Door stations without video can be connected via the BAA 650-... .

Monitor branch

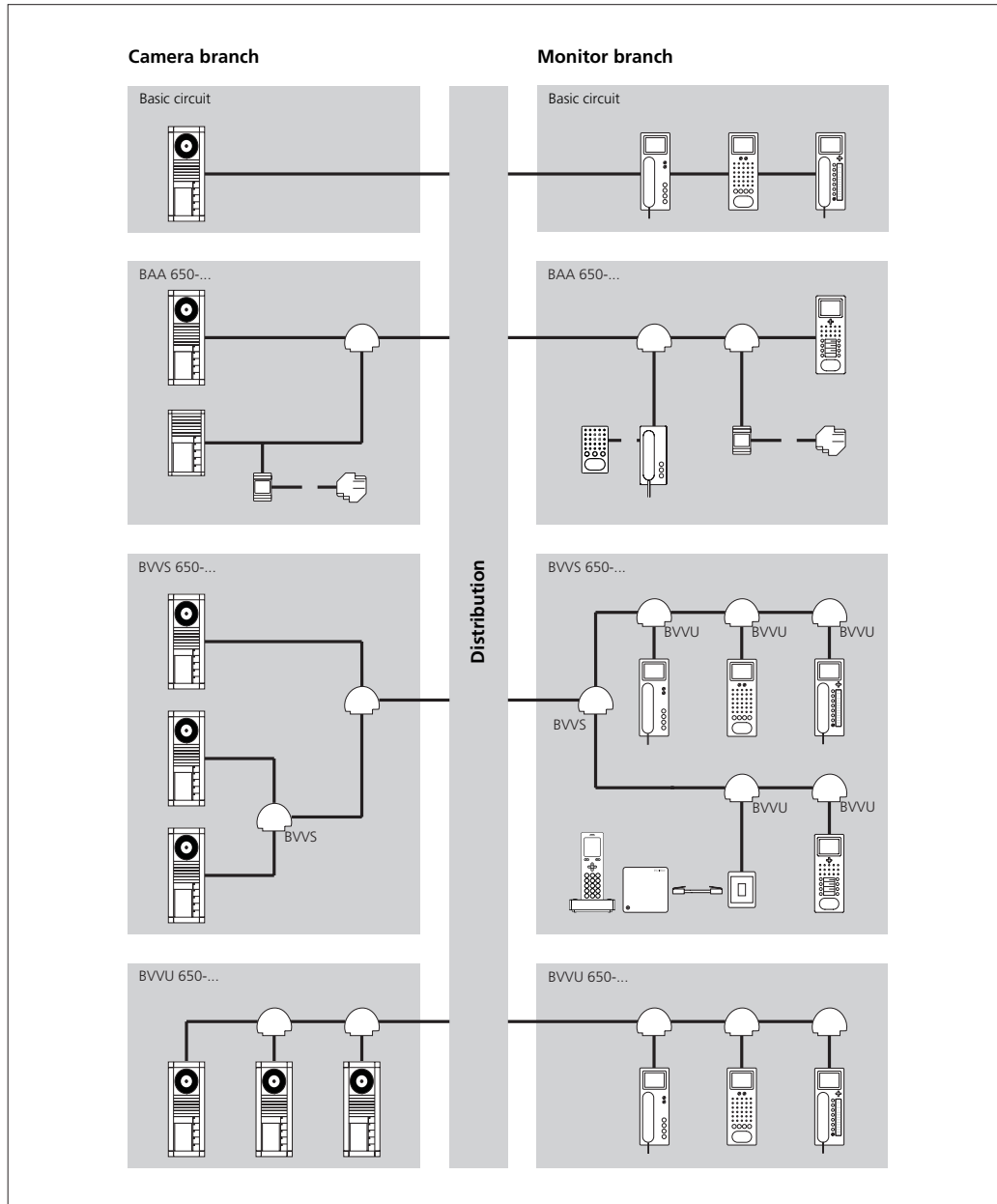
The monitor branch is defined as the area in which no door stations with video are connected.

Loop-through connection

In the monitor branch, looping through is possible from bus telephone to bus telephone. If you wish users without video to be connected, a bus audio decoupler BAA 650-... is required. Other audio or control components are then also subsequently looped through in the same way.



Attenuation values



- When looping through from bus telephone to bus telephone in the monitor branch, only the conductor attenuation is taken into consideration in the attenuation calculation.
- When calculating the conductor networks with side circuit installation and bus distributor, the distributor components BVVU/BVVS 650-... must not be left out of consideration.
- Unconnected looping terminals in the components BVVU 650-... and BAA 650-... must always be terminated with an RC element in order to prevent disturbance to the bus. Use the required RC element from already installed devices BTSV/BFSV/BTCV/BFCV 850-... or BVVU 650-... !

Camera branch

No bus distributor is required with a video door station.

with BAA 650-...

Connection of audio users (e.g. BTLM 650-... or BTLE 050-...) or users for switching and control functions.

Attenuation = 0 dB

with BVVS 650-...

More than one video door station in the camera branch with "star shaped" conductor routing.

Attenuation = 3 dB

with BVVU 650-...

More than one video door station in the camera branch with "looped through" conductor routing.

Throughput attenuation = 1 dB
Input attenuation = 12 dB

Monitor branch

No bus distributor is required if it is possible to loop through from BTSV/BFSV/BTCV/BFCV to BTSV/BFSV/BTCV/BFCV. The integrated distributor in the bus telephone with monitor uses attenuation = 0 dB.

with BAA 650-...

Connection of audio users (BTS/BFS/BTC/BFC 850-..., DCA 650-...) or users for switching and control functions.

with BVVS 650-...

Within the In-Home bus: Video more than one side circuit is required. Attenuation = 3 dB

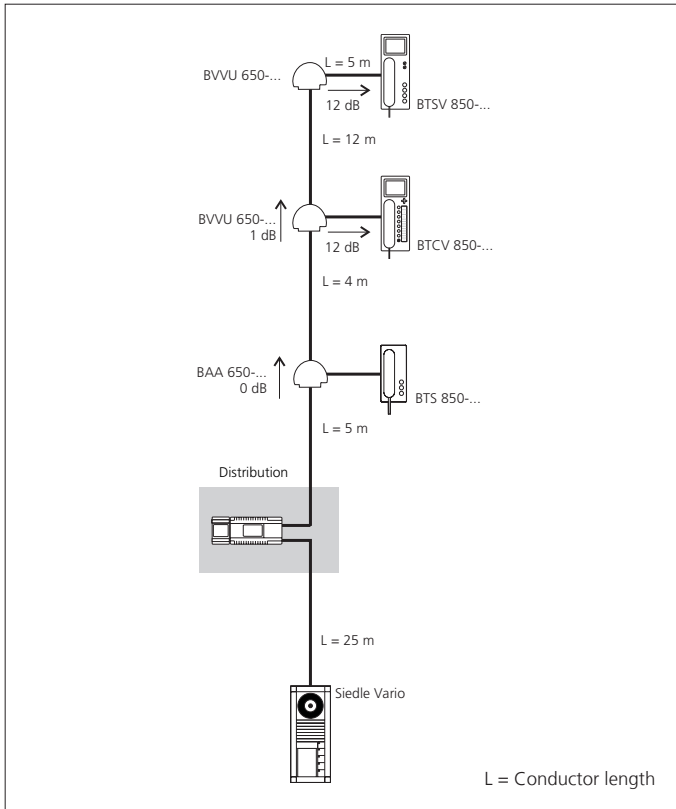
* At the outputs of a BVVS 650-..., additional distribution is required via BVVU 650-... . Audio users are connected via BAA 650-... .

with BVVU 650-...

Connection of a bus telephone with monitor to a side circuit with "looped through" conductor routing.

Throughput attenuation = 1 dB
Output attenuation = 12 dB

Example for calculating attenuation



Example:

In the camera branch

Conductor length 25 m = 5 dB

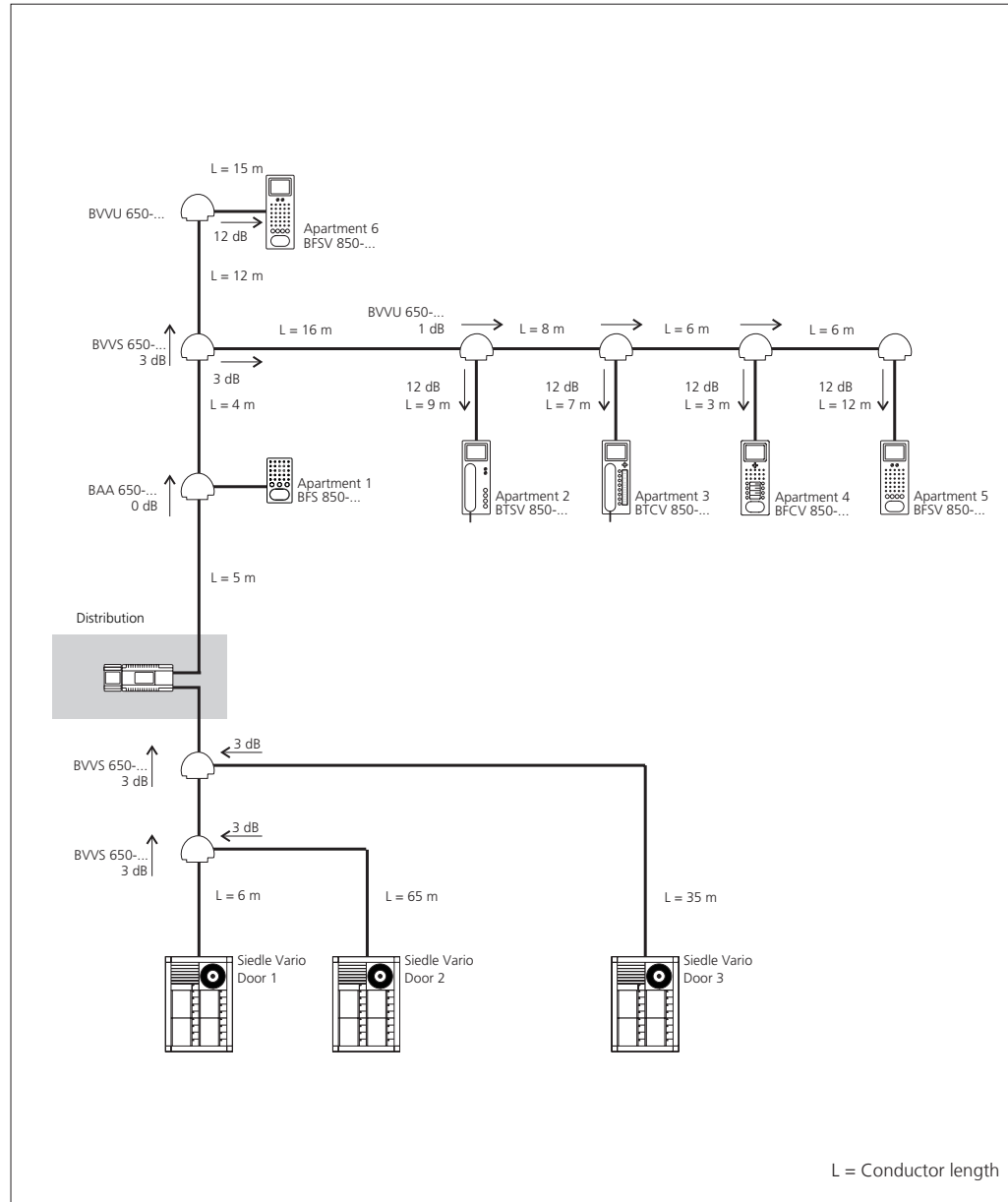
In the monitor branch

Conductor length 26 m

= 5.2 dB

The throughput attenuation (BVVU) 1 dB and the output attenuation (BVVU) 12 dB must be added to this.

5 dB + 5.2 dB + 1 dB + 12 dB = 23.2 dB



Example:

The BVVUs in the camera branch are assigned directly to the subdistributor.

Camera branch

The most distant user (door 2) in the camera branch

$L = 65 \text{ m} = 13 \text{ dB}$ plus the attenuation of the two following symmetrical bus video distributor

$2 \times \text{BVVS} = 6 \text{ dB}$

Attenuation in the camera branch = **19 dB**

Monitor branch

UV to the most distant residential unit apartment 5

$L = 57 \text{ m} = 11.4 \text{ dB}$ plus the output attenuation of

1 x (BVVS) 3 dB

plus 3 x throughput attenuation (BVVU) = 3 dB

plus 1 x output attenuation (BVVU) 12 dB

Attenuation in the monitor branch =

$11.4 \text{ dB} + 3 \text{ dB} + 3 \text{ dB} + 12 \text{ dB} = \mathbf{29.4 \text{ dB}}$

Total attenuation = Camera branch + monitor branch

$19 \text{ dB} + 29.4 \text{ dB} = 48.4 \text{ dB}$

In the BVNG 650-... a ZBVNG is required as the attenuation between the door loudspeaker and most distant residential unit amounts **to more than 45 dB.**

Storey door station at the In-Home bus: Audio

Independently of whether a single or multiple line installation system is used, a storey door station with video can be connected instead of a storey call button.

Additional information and supply components are required.

Storey door station at the In-Home bus: Video

Independently of whether a single or multiple line installation system is used, a storey door station with video can be connected instead of a storey call button. If there is a ZBVNG 650-... integrated in the BVNG 650-..., the

installation must be performed using a central distributor at the camera branch.

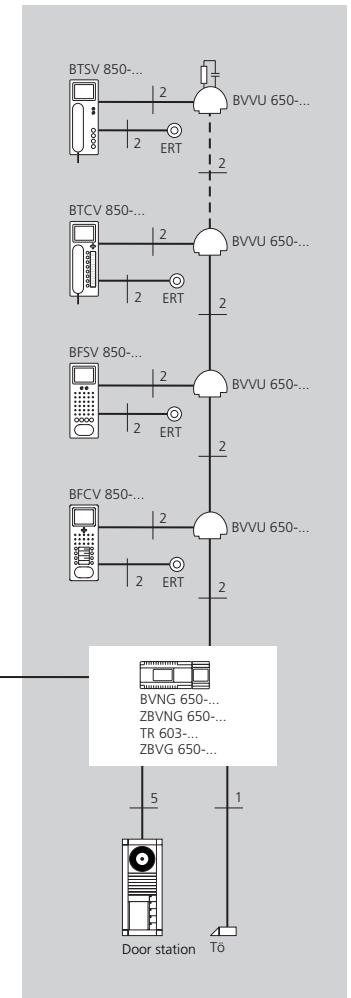
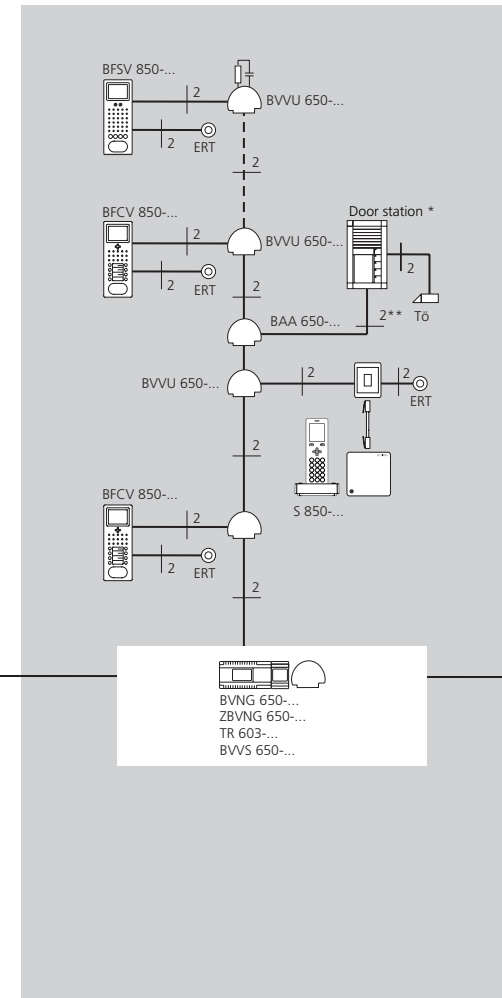
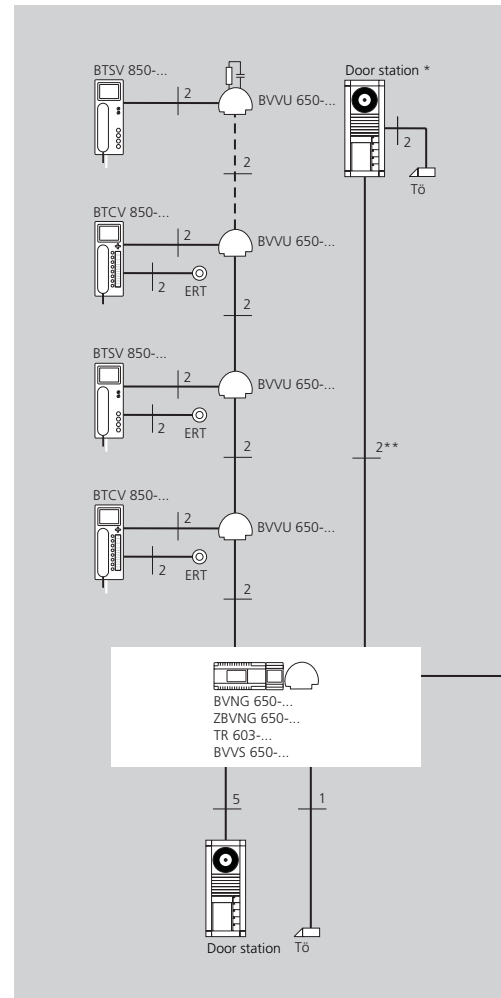
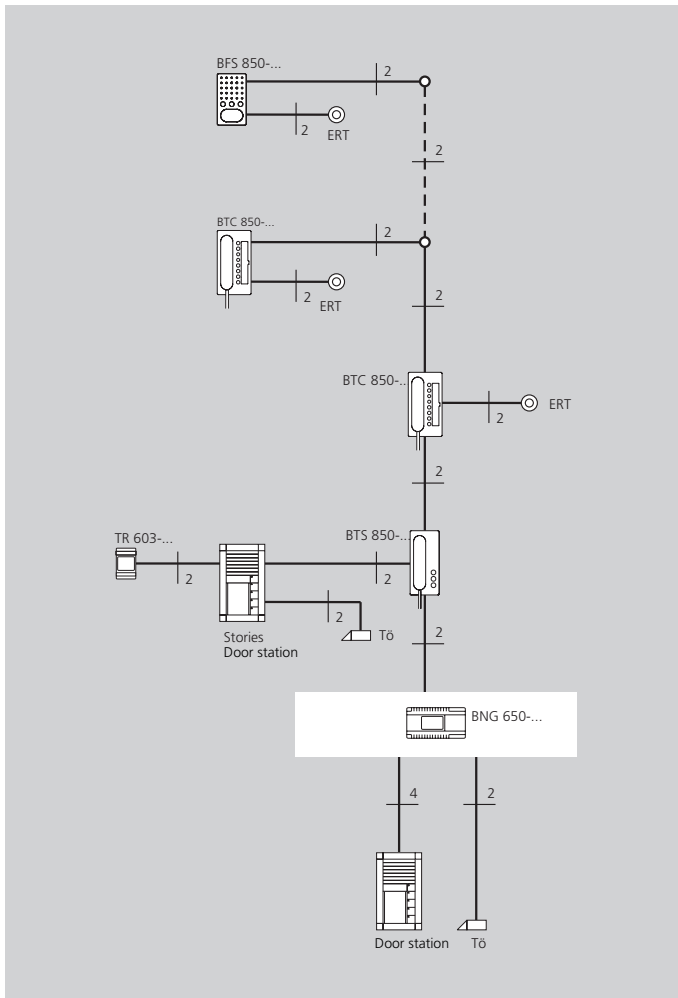
Installation from the storey door station to the central distributor must be performed using a separate conductor.

* The power supply is provided by additional installation and supply components.

** When using a central supply, additional cores are required.

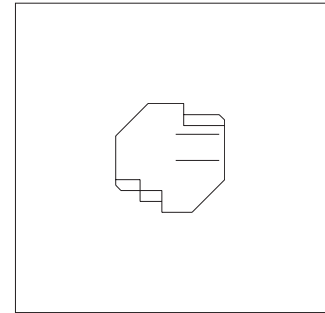
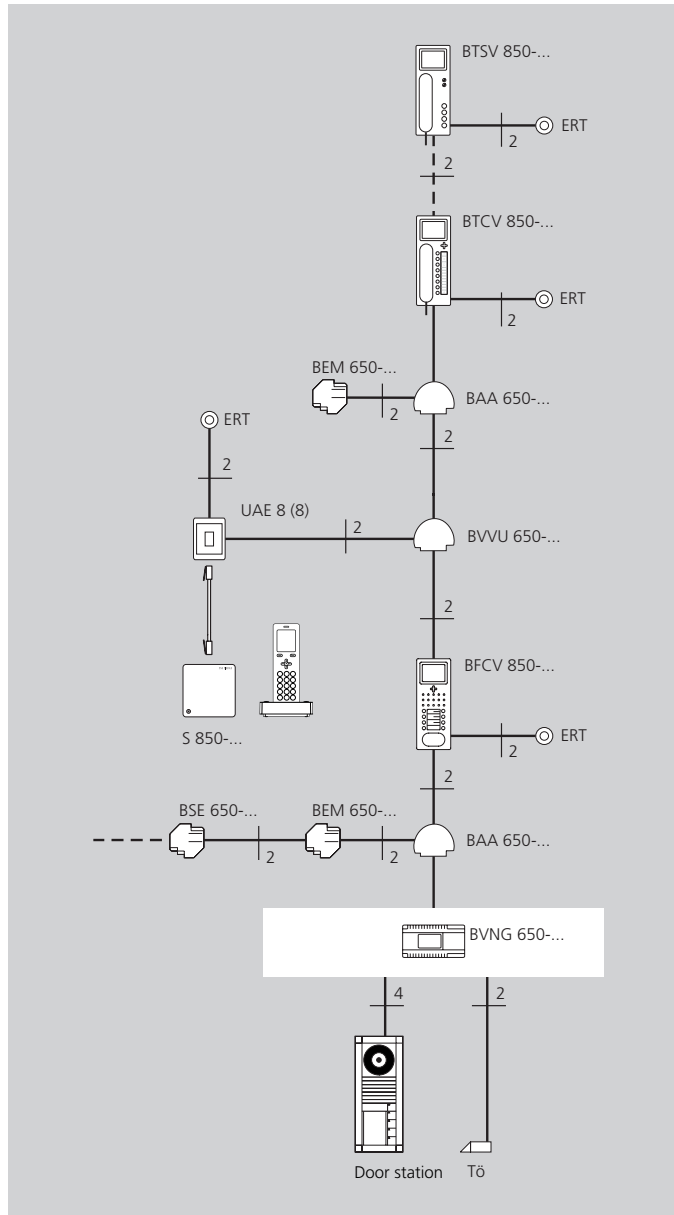
Key

ERT = Storey call button
Tò = Door release
(12 V AC min. 20 Ohm)



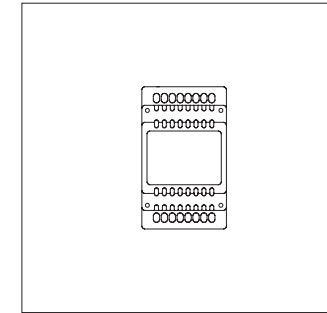
Switching and control functions at the Siedle In-Home bus

Using the switching and control components, functions can be performed or messages received at any optional point in the Siedle In-Home bus. Messages via the bus input module BEM 650-... can also initiate functions on the In-Home bus. For example a BTC/BFC 850-... can actuate a BSE 650-... and simultaneously receives a status feedback. At the In-Home bus: Video the switching and control components and devices without video must be decoupled. Other devices are then looped through.



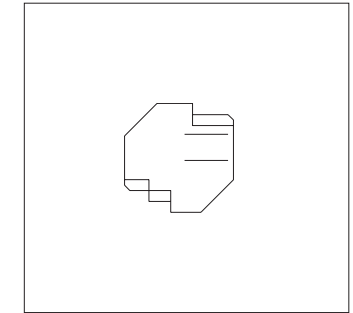
BSE 650-0

Bus switching unit with bistable relay, suitable for mounting in a 55 junction box. Actuation possible via BEM, using the programmable buttons of the system users or in parallel to a door call button. Power supply via the In-Home bus
 Contact type: Changeover switch max. 250 V AC, 6 A
 Switching time: adjustable from 0.4 secs. to 19 mins. 59 secs. / switching on and off
 Protection system: IP 20
 Ambient temperature: 0°C to +40°C
 Dimensions (mm) dia. x H: 51 x 23



BSM 650-02

Bus switching module in switch panel housing with 4 integrated relays, each with one potential-free work contact. Programmed functions can be actuated using the programmable buttons of the system users or in parallel to a door call button to actuate an external signalling device.
 Operating voltage: 12 V AC
 Operating current: max. 240 mA
 Contact type: 4 n.o. contacts, max. 24 V, 2 A
 Switching time: Adjustable from 1 to 10 sec.
 Horizontal pitch (HP): 3
 Dimensions (mm) W x H x D: 53.5 x 89 x 60



BEM 650-0

Bus input module for mounting in a 55 junction box with an input for tripping switching functions/transmitting messages at the In-Home bus. Activation possible via potential-free contact or 4–30 V DC, 10 mA.
 Power supply via the In-Home bus
 Protection system: IP 20
 Ambient temperature: 0°C to +40°C
 Dimensions (mm) dia. x H: 51 x 23

Siedle In-Home bus combined with Vario bus

The modules COM/ELM or FPM 611-... are used to actuate control functions which are evaluated and implemented the evaluating unit EC 602-... . The control functions are then executed via the In-Home bus. Control functions directly from the In-Home bus and from the Vario bus can be combined.

In order to utilize Vario bus control functions, an additional conductor with 4 cores is required from the input module to the EC 602-... .

Ranges in the Vario bus

The range depends on the type of installation, the core diameter and the connected load values „AW“ of the connected devices.

Range between the transformer and input modules with star-shaped installation

Max. **250 m** using 0.8 mm core diameter and with connected load value „AW“ 1.

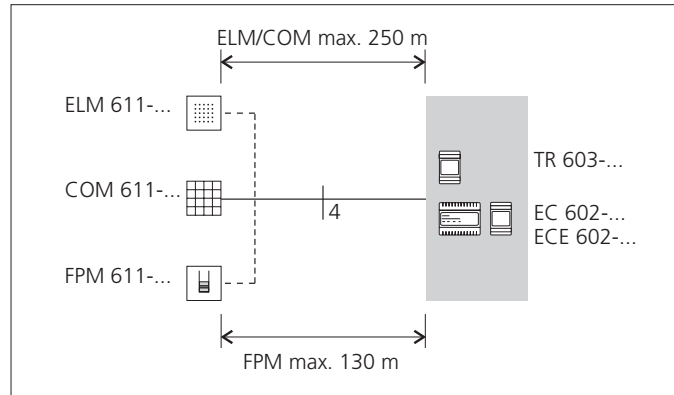
A second connected load value in the same line **halves** the range.

Connected load values AW

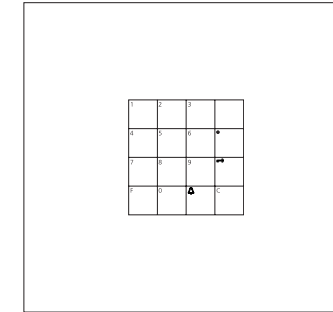
COM 611-..., DRM 611-..., ELM 611-..., EC 602-... = **AW 1**
 FPM 611-..., EC 602-... with ECE 602-... or RC with RCE 602-... = **AW 2**

One TR 603-... supplies 2 AWs

The conductor network laid throughout the entire Vario bus must not exceed 2000 m.

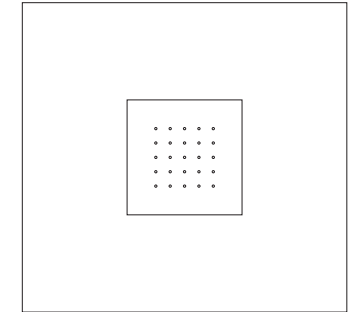


Input module at the Vario bus



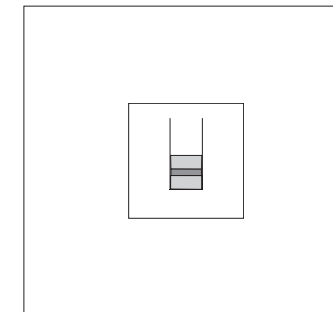
COM 611-01

Code lock module as an input unit for the placement of codes for control functions in conjunction with the Siedle Vario bus.



ELM 611-01

Electronic key read module as a no-contact control system in conjunction with the Siedle Easikey controller EC 602-... Reading unit for electronic keys or cards for actuation of functions at the Vario bus.

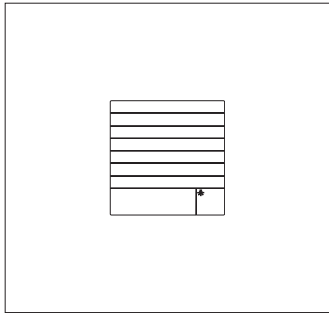


FPM 611-01

Fingerprint module as a monitoring system with function LEDs. For actuation of functions in conjunction with Easikey controller EC 602-... at the Vario bus.

Device description Vario door station

COM/DRM 611-... as call module

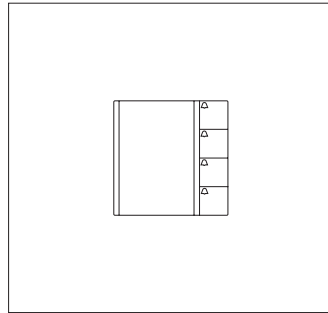


BTLM 650-04

Bus door loudspeaker module in 611 Vario design in conjunction with the Siedle In-Home bus.

With front louvre made of weather- and UV-proof polycarbonate, tropicalized loudspeaker, long-life electret microphone and volume controller for loudspeaker. Illuminated low current light button. Integrated video control and working contact for the door release. DR contact can be controlled via the bus line without supplementary wiring. Acoustic feedback when pressing one of the call buttons at the BTM 650-01 to -04.

Up to max. 40 call button modules can be connected in any optional combination, allowing up to max. 160 users. 1 BTLM 650-04 corresponds to 2 system users.

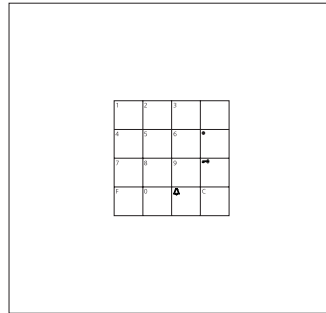


BTM 650-...

Bus call button modules BTM 650-... with 1, 2, 3 or 4 call buttons. The BTM 650-... is connected to the BTLM 650-... via ribbon cable.

Door release

Siedle door release units are high-resistance > 20 Ohm and provide operating reliability even over long ranges. Standard commercially available door release units 8 – 12 V AC, 20 Ohm can be connected.

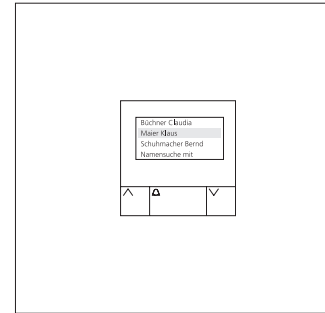


COM 611-02

Code lock module as an input unit for the placement of door calls and control functions in conjunction with the Siedle Vario bus.

- With keyboard, for calling in conjunction with the bus interface module BIM 650-...,
- For controlling in conjunction with the Easikey controller EC 602-...
- C button for cancelling incorrect inputs
- TÖ button for direct door release via the EC 602-....

In order to use the control functions or the door call facility, 4 additional cores are required from the input module to the EC 602-... or BIM 650-... .



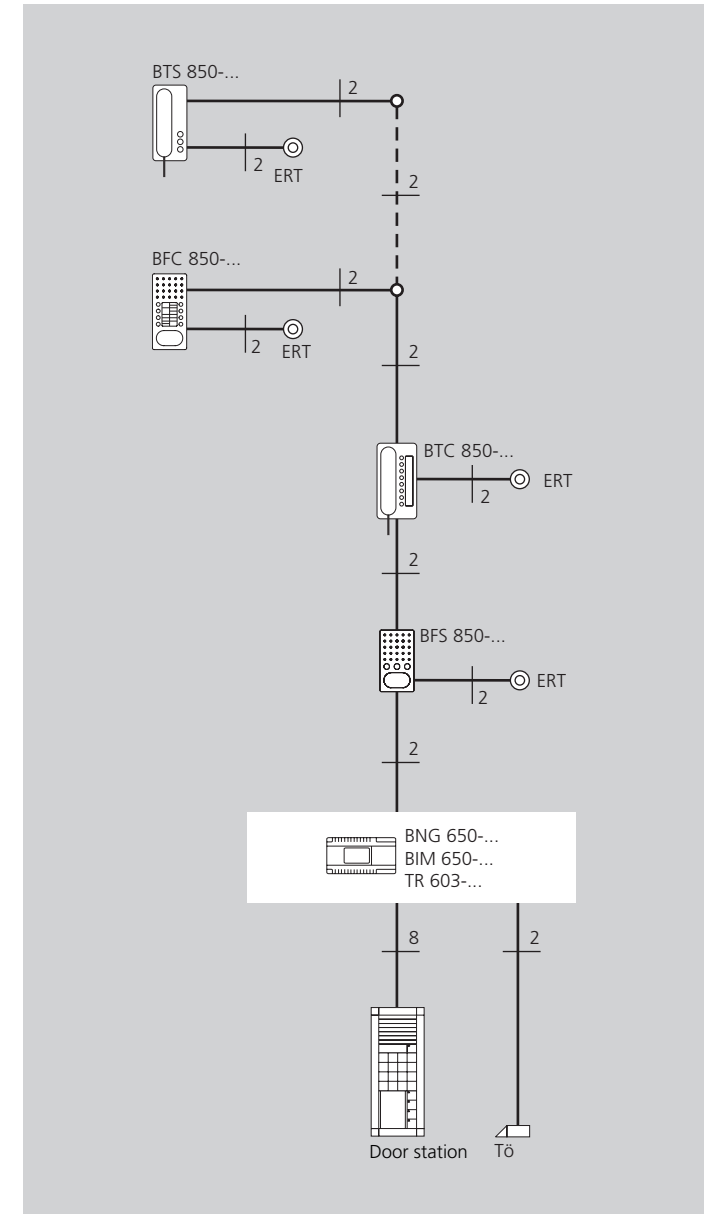
DRM 611-01

Display call module as an input unit with display for placement of door calls in conjunction with BIM 650-... .

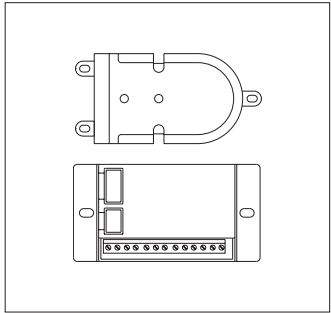
The names are indicated in alphabetical sequence in the display. The DRM 611-... can also be used in combination with the COM 611-... in order to display the input via the COM 611-... .

In order to use the control functions or the door call facility, 4 additional cores are required from the input module to the EC 602-... or BIM 650-... .

In the case of door stations with more than 160 call buttons, the COM 611-... or DRM 611-... is required per door station.



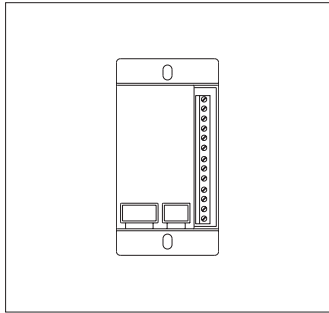
Door area
Bus custom-fit door loudspeaker



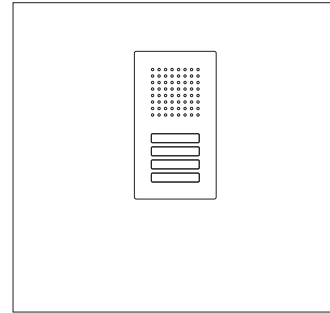
BTLE 051-03
 Bus custom-fit door loudspeaker incl. Bus call button matrix for In-Home bus. Integrated door release contact (DR). Max. load 15 V AC / 30 V DC / 2 A. Connection of existing call buttons (self-cleaning) via bus call button matrix BRMA 050-..., switching time DR fixed at 3 seconds. For optimum mounting in an existing on-site communication compartment, universal mounting adapter ZTL 051-0 can be used.

Max. 160 call buttons can be connected. However, a bus call button matrix BRMA 050-... is required for each started group of 12 call buttons.

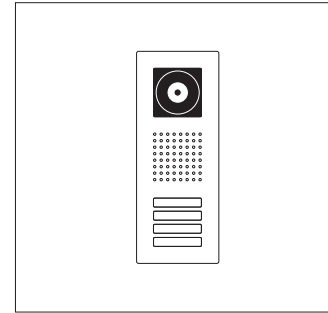
Door area
Siedle Classic



BRMA 050-01
 Bus call button matrix for the connection of existing call buttons to the custom-fit door loudspeaker BTLE 050-.../ ATLE 670-...
 Max. 14 BRMA 050-... can be connected to 1 BTLE 050-...
 Max. 16 BRMA 050-... can be connected to 1 ATLE 670-...

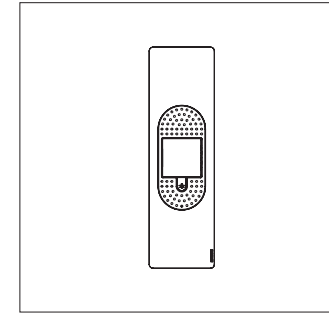


CL A xx B-02
 Classic door station with different front surfaces for the Siedle In-Home bus for flush mounting with flush mount housing. With one or more call button(s), backlit name plate, exchangeable from the front.

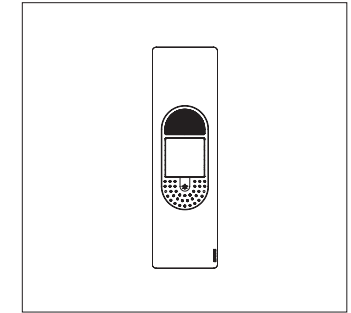


CL V xx B-02
 Classic door station with stainless steel front, V4A brushed, with flush-mount housing. Door loudspeaker, 1 to 4 call buttons with backlit nameplates, exchangeable from the front, colour CCD camera with integrated infrared lighting.

Door area
Select door station



STA/SBA 850-xx
 Select audio door station made of high-grade plastic with aluminium front, for surface mounting. With one, two or four call button(s), backlit nameplate, exchangeable from the front. The Select audio door station with letterbox is equipped with a call button.



STV/SBV 850-...
 Select video door station made of high-grade plastic with aluminium front, for surface mounting. With colour camera, one, two or four call button(s), backlit nameplate, exchangeable from the front. The Select video door station with letterbox is equipped with a call button.

Device description

Cameras

Application/General

Video cameras operating with the Vario door loudspeaker or externally in the background provide an unobtrusive method of surveillance in the entrance area. Call, speech and door release operation of the door station. The visitor appears on screen at one or more of the video call stations.

Possible applications include single and multiple family homes, private/commercial premises, practices and surgeries, administrative buildings etc. Other video components for special applications can be combined with our devices on request.

Our training and exhibition centres will be pleased to advise you. See page 39

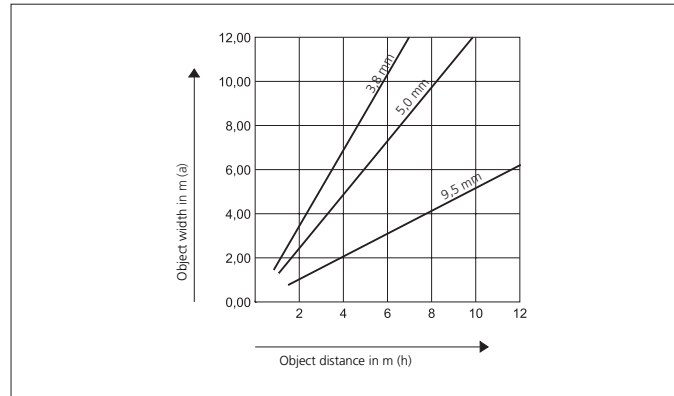
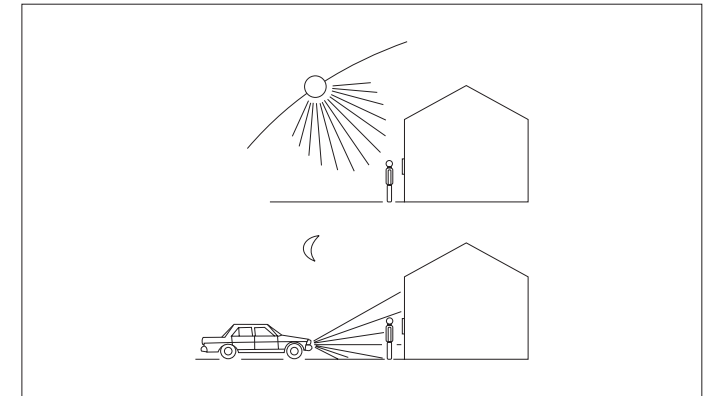


Diagram showing the pick-up range of external camera CEC 612 with image pick-up chip 1/3".

Connection to Siedle In-Home: Video with bus video transmitter BVS 650-... or bus video interfacing module BVA 650-...



Location of the video camera

Selection of the most suitable camera and its location is decisive to ensure good picture quality. The camera must not be directed towards:

- Direct backlight
- Direct sunlight
- Picture backgrounds with a high degree of brightness
- Highly reflective walls
- Lamps or light sources etc.

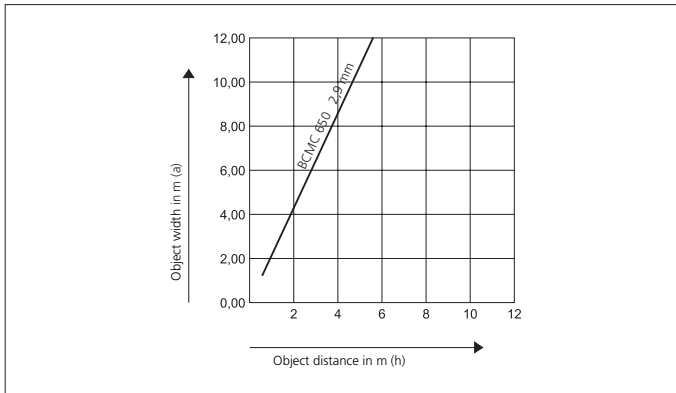


Diagram showing the pick-up range of bus camera BCMC 650-... with image pick-up chip 1/3".

If the range of the camera module is not sufficient, external cameras such as the CEC 612-... or KAWG 950-... can be used.

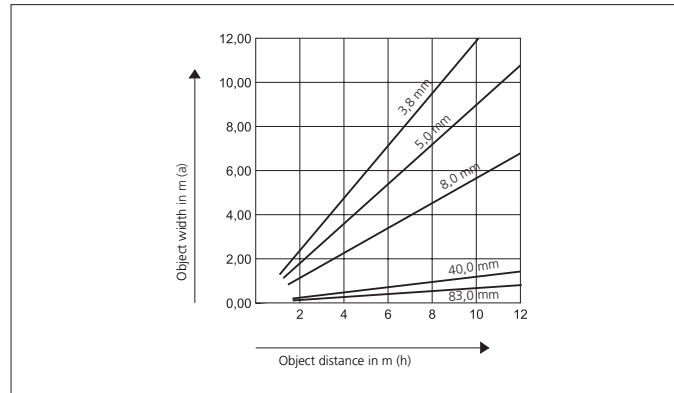
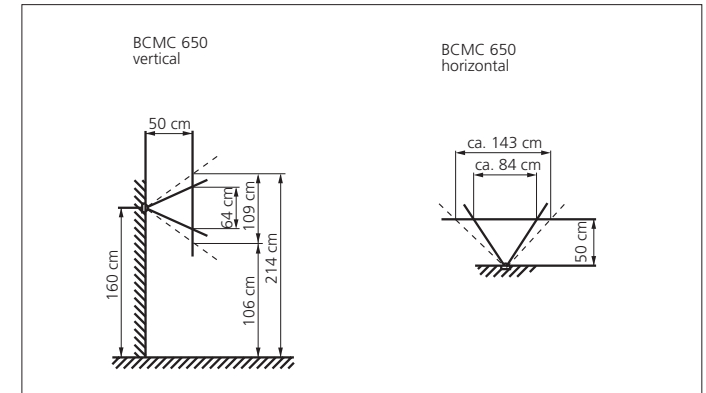


Diagram showing the pick-up range of the KAWG 950-... with image pick-up chip 1/4".

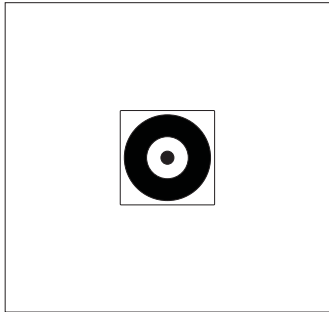
Connection to Siedle In-Home: Video with bus video transmitter BVS 650-... or bus video interfacing module BVA 650-...



Pick-up range of the camera module BCMC 650-...

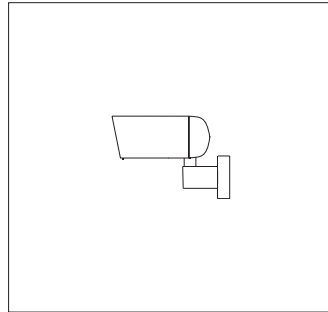
The shaded area indicates the adjustment range of the BCMC 650-...

Cameras



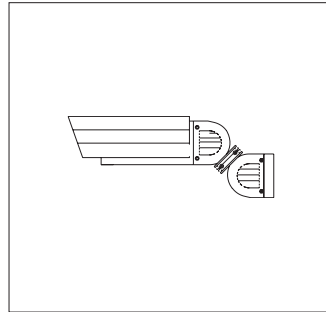
BCMC 650-0

Bus colour camera module for Siedle In-Home bus: Video. Integrated 2-step heating, day/night switching, infrared lighting and video signal converter. Supply via Siedle In-Home bus: Video, heating supply 12 V AC, 100 mA.



CEC 612-0

External colour camera day/night CCD video camera for external mounting in weather proof housing, wall arm with ball head and internal wiring. Connection to In-Home bus: Video via bus video interfacing module BVA 650-... or bus video transmitter BVS 650-... supply via additional line rectifier, 10,5 - 30 V DC, current consumption max. 250 mA.

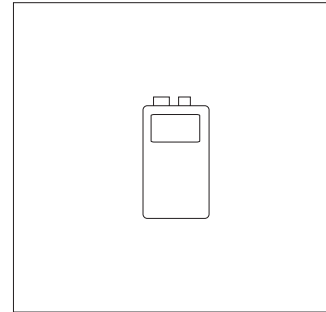


KA/WG 950-0 C

External colour CCD video camera for external mounting with weather proof housing and sun shade, wall arm with ball head and internal wiring. Connection to In-Home bus: Video via bus video interfacing module BVA 650-... or bus video transmitter BVS 650-... supply via additional line rectifier, 20 - 30 V DC, current consumption max. 250 mA. Using the line rectifier foot accessory ZNF 950-0 it is possible to provide a 230 V AC power supply.

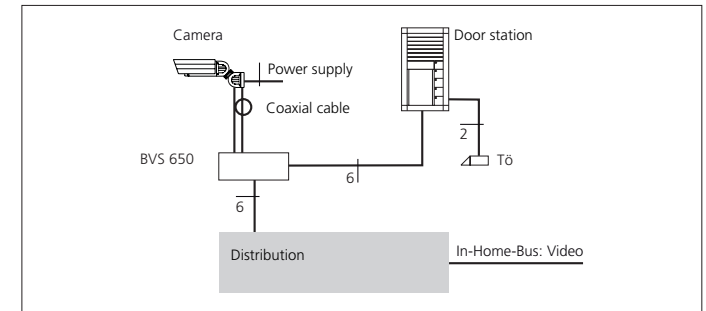
ZNF 950-0

Line rectifier foot accessory for the camera KA/WG 950-..., for supplying from the 230 V network.

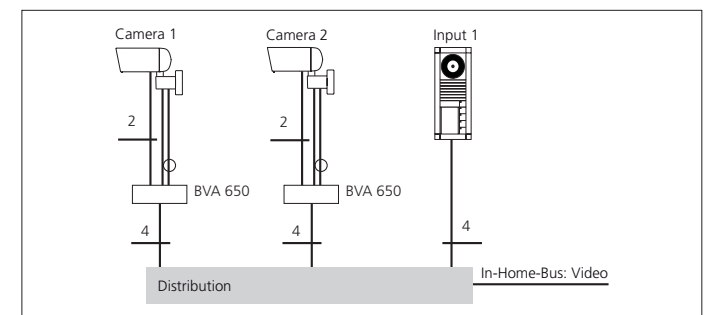


BVS 650-01

Bus video transmitter in a surface-mount housing with cable glands for connection of an external video camera and a bus door loudspeaker to the Siedle In-Home bus.



External camera in conjunction with BVS 650-... at the BTLM 650-...



BVA 650-0

Bus video interfacing module BVA 650 ... for actuation of external video cameras without door station to the Siedle In-Home bus: Video

- **BVA 650 AP-0**

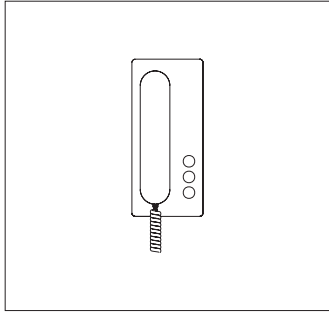
as surface mounted version, integrated in a housing, protection system IP 54.

- **BVA 650 UP-0**

as flush mounted version, for integration in 100 mm square flush-mounting junction box for use in dry indoor environments.

Device description

Bus telephones Audio

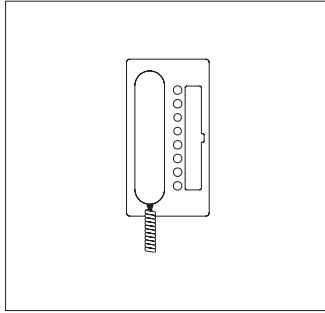


BTS 850-02

Standard bus telephone.
Connection at bus cores
Ta and Tb.

Calling, speech, door release
and storey call

- Door release and light button
- Internal speech communication
- 11 ring tones
- Call and speech volume can be changed in 5 steps
- Silencing button for the ring tone
- Double assignment of the light button and silencing button possible.
- Integration of ZAR 850-... accessory possible

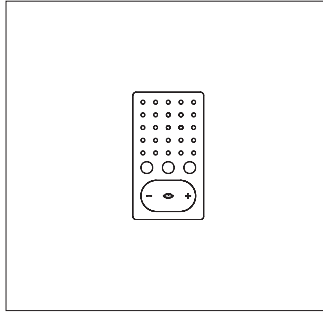


BTC 850-02

Deluxe bus telephone.
Connection at bus cores
TaM and TbM.

Calling, speech, door release
and storey call

- Door release and light button
- Internal speech communication
- 11 ring tones including chime
- Call and speech volume can be changed in 5 steps
- Silencing button for the ring tone
- 7 keys for switching and control functions with double assignment facility
- 7 LEDs under the buttons for display of switching statuses
- Integration of ZAR 850-... and ZPS 850-... accessory possible

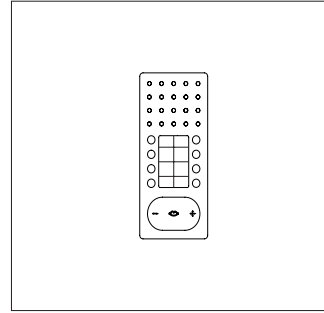


BFS 850-02

Standard bus handsfree telephone. Connection at bus
cores Ta and Tb.

Calling, handsfree/push to talk,
door release and storey calls

- Speech/control button
- Door release and light button
- Internal speech communication
- 11 ring tones
- Call and speech volume can be changed in 5 steps
- Silencing button for the ring tone
- Double assignment of the light button and silencing button possible.
- Integration of ZAR 850-... accessory



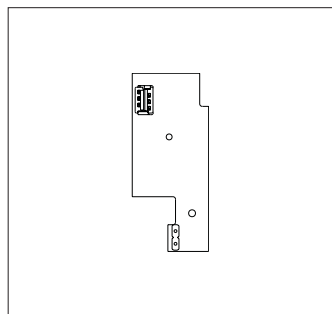
BFC 850-0

Deluxe handsfree bus telephone intercom. Connection
at bus cores Ta and Tb.

Calling, handsfree/simplex
communication, door release
and storey calls

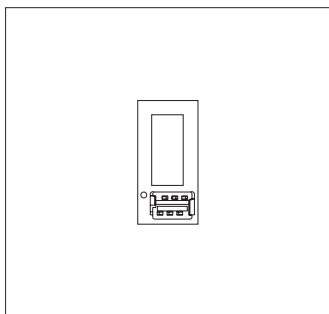
- Speech/control button
- Door release and light button
- Internal speech communication
- 11 ring tones
- Call and speech volume can be modified in 5 stages
- Muting button for the ring tone
- 7 keys for switching and control functions with double assignment facility
- Additional intercomfunctions possible
- Integration of ZARF/ZPSF 850-... accessory

Accessories



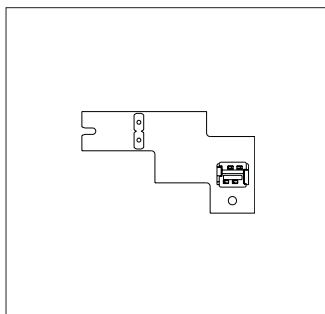
ZPS 850-0

Parallel switching accessory for integration into deluxe bus telephone BTC 850-... Circuit board for connection of an additional power supply. Required in case of manual programming from the third BTC 850-... , with PC programming from the fifth BTC 850-... . Supply 20 - 30 V DC from NG 602-... or VNG 602-..., current consumption max. 100 mA



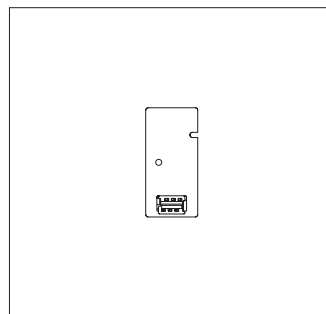
ZPSF 850-0

Parallel switching accessory for integration into deluxe handsfree bus telephone BFC 850-... Circuit board for connection of an additional power supply. When programming manually, required from the third BFC 850-... , when programming by PC from the fifth BFC 850-... . Supply 20 - 30 V DC from NG 602-... or VNG 602-..., current consumption max. 100 mA. Required for the function parallel door call, collective paging announcement / internal group call to more than 2 bus telephones. When programming with BPS 650-... 4 bus telephones.



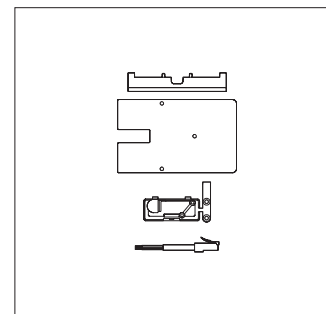
ZAR 850-0

Interfacing relay accessory for integration into bus telephones BTS 850-... or BTC 850-... Universal switching relay for secondary signal unit, video interfacing or switching relay. Potential-free switching contact max. 15 V AC / 30 V DC, 1 A, switching time 0.4 secs. – 19 mins. Supply via the In-Home bus.



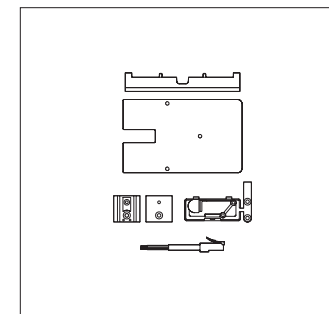
ZARF 850-0

Handsfree interfacing relay accessory for integration into the bus handsfree telephone BFS 850-... Universal switching relay for secondary signal unit, video actuation or switching relay, potential-free switching contact. Potential-free contact max. 15 V AC / 30 V DC, 1 A, switching time 0.4 secs. – 19 mins. Supply via the In-Home bus.



ZTS 800-01

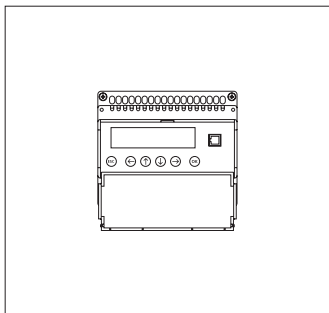
Table-top accessory for telephones BTS/BFS/BFC 850-... and HTS 811-... for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without UAE 8 junction box.



ZTC 800-0

Table-top accessory for the telephone BTC 850-... and HTC 811-... for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without UAE 8 junction box.

DoorCom-Analog DCA 650-02

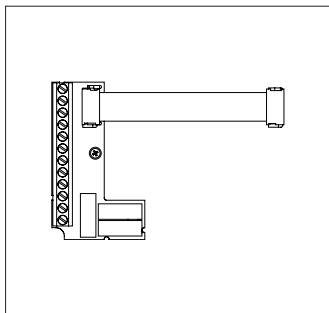


DCA 650-02

DoorCom-Analog for connection of one or more door stations to an analog PBX extension of a telephone system. Up to 31 call numbers can be stored. The call can be made using bell buttons or the display call module from the door station. Power supply with 12 V AC to terminals b and c, connection to the In-Home: Audio via terminals Ta/Tb.

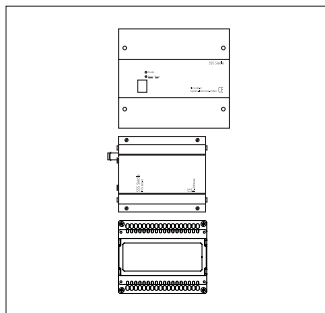
The facility to utilize individual performance features may differ depending on the TC system used. Please enquire with the manufacturer of your TC system.

DoorCom IP In-Home DCIP 650-0



DCSF 600-0

DoorCom switching and remote control interface, for use in DCA 612-... and DCA 650-...
DoorCom switching and remote control interface, for use in DCA 612-... and DCA 650-...



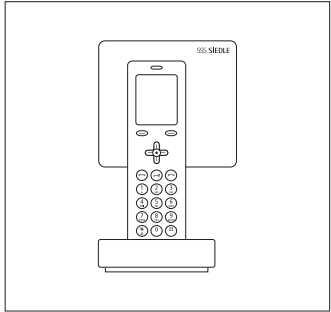
DCIP 650-0

The DoorCom IP links the Siedle door station to a TCP/IP network/Intranet. As a functional unit, the DCIP 650-... consists of the devices system interface In-Home bus SII 650-..., system interface video server SIVS 610-... and IP video server IPVS 600-...
The DCIP 650-... behaves in the same way as an In-Home bus system user

- One DCIP 650-... can be connected per line
- 4 software licences included in the scope of supply
- Other licences DCIP SC 600-... possible

Device description

Bus telephones Video



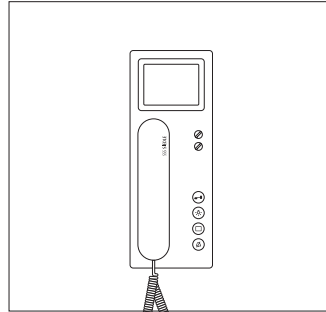
S 850-0

Siedle Scope mobile video call station and cordless landline telephone for the In-Home bus. Comprising a base station, cordless handset and charging tray. Scope unites the worlds of door communication and public network telephony, it is a comfort video in-house telephone and DECT telephone in one.

Performance features

- Individual design concept with six design variants
- Large 5.5 cm colour display, 240 x 320 pixel, illuminated
- Handsfree function
- Charging tray with illuminated control keys (call acceptance and door release)
- 8 ring tones
- Telephone directory for 50 entries
- Caller list with 20 entries including date and time
- Last number redial
- Optional menu language setting
- Li polymer battery

- Battery life on standby up to 100 h
- Range outdoors up to 300 m, indoors up to 50 m
- Doormatic
- Upgradable: Up to 8 cordless handsets in parallel
- Operation possible with and without Telephone system

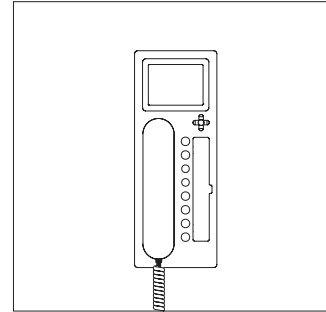


BTSV 850-03

Standard bus telephone with colour monitor for Siedle in-home bus

Functions:

- Calling, speech, vision, door release and storey call
- Colour monitor 8.8 cm
- Door opener and light button
- Mute button for call tone
- 11 call tone melodies
- Monitor button for current picture
- Brightness and colour regulation

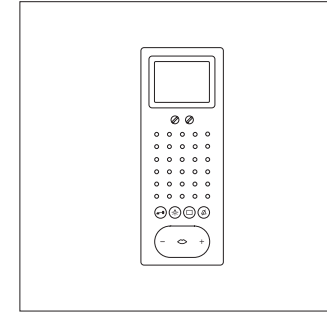


BTCV 850-03

Comfort bus telephone with colour monitor for door and internal telephony.

Functions:

- Calling, speech, vision, door release and storey calls
- Colour monitor 8.8 cm
- Integrated video memory for 28 pictures, upgradable with SD card
- Door release and light button
- Keys for switching and control functions
- Internal speech communication
- display of switching statuses
- Silencing button for the ring tone
- 11 ring tones
- Call and speech volume can be modified in 5 stages
- Monitor button for current picture
- 5-way button for video memory and zoom function
- Video memory function (only with additional installation)

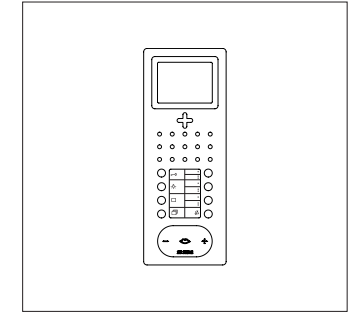


BFSV 850-03

Standard handsfree bus telephone with colour monitor

Functions:

- Calling, hands-free/simplex communication, video, door release and storey call
- Speech/control button
- Door opener and light button
- Internal speech communication
- Muting button for call tone
- 11 call tone melodies
- Call and speech volume adjustable in 5 steps
- Potential-free contact for additional signal device
- Colour monitor 8,8 cm
- Monitor button for current picture
- Brightness and colour regulation
- Direct door dialling (video and sound)



BFCV 850-02

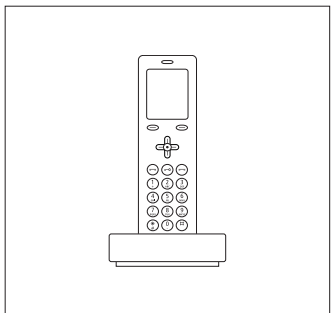
Deluxe handsfree bus telephone intercom with colour monitor for Siedle In-Home bus

Functions:

- Calling, speech, vision, door release and storey call
- Speech/control button
- Colour monitor 8.8 cm
- Integrated video memory for 28 pictures, memory upgrade possible using an SD card
- Door release and light button
- Buttons for switching and control functions
- Internal speech communication
- Display of switching statuses
- Muting button for call tone
- 11 ring tones
- Call volume adjustable in 5 steps
- Speech volume adjustable 5 steps
- Monitor button for current picture
- 5-way button for video memory and zoom function
- Video memory function (only with additional installation)

Accessories

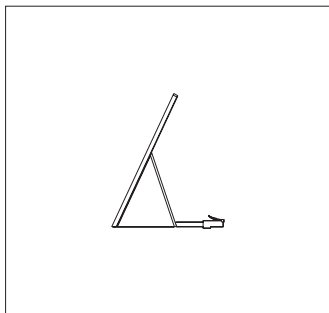
Bus secondary signal unit



SZM 850-0

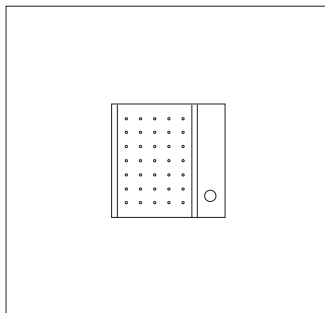
Siedle Scope supplementary cordless handset with charging tray and plug-in line rectifier. The SZM 850-... is a comfort video in-house telephone and DECT telephone in one, as an add-on for basic package S 850-...

Up to 8 cordless handsets can be logged into one base station.



ZTCV 850-0

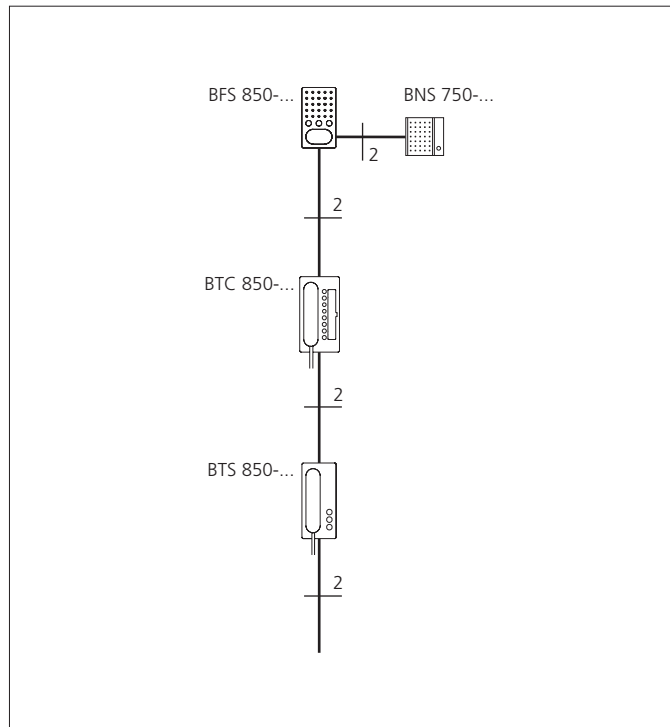
Table-top accessory for bus telephones with colour monitor BTCV/BFCV 850-0 as well as BTSV/BFSV 850-03 for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without telecom socket UAE 8/8.



BNS 750-02

Bus secondary signal unit in low-profile surface-mounted design with loudspeaker, volume control adjustable from the outside and electronic call generator, programmable in parallel to the BTS/BFS/BTC/BFC/BTSV/BFSV/BTCV/BFCV 850-...

Counts as a user within the limit of 465 units (users). Call differentiation for storey and door calls.

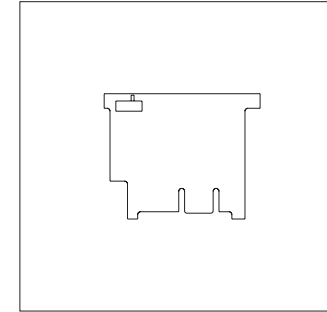
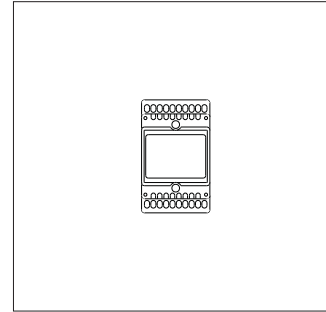
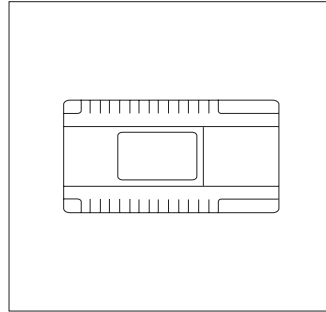
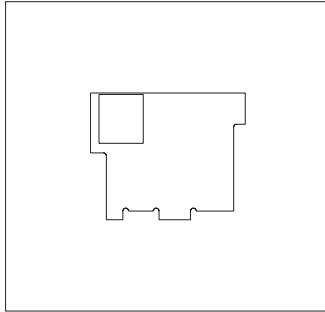
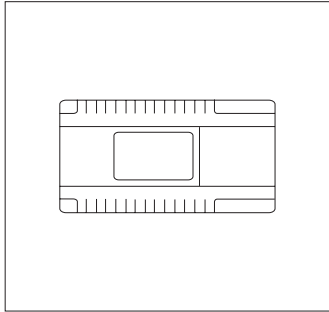


Cable size diagram with secondary signal unit

Device description
Power supply Audio

Power supply Video

Space requirement in the distributor



BNG 650-0
 Bus line rectifier für Siedle In-Home bus audio in switch panel housing for power supply to the bus users.
 Optional plug-in facility for the bus supply unit accessory ZBVG 650-...
 Relay contact for door release and light.

ZBVG 650-0
 Bus supply unit accessory as a plug-in card for integration in bus line rectifier BNG 650-... or bus video line rectifier BVNG 650-... with 8-pin Western socket for connection of the programming interface PRI 602-... USB.
 Is required in systems with more than one line or for programming the in-home bus via a Windows PC and PRI 602-... USB. Only one unit may be installed within the Siedle In-Home bus.

BVNG 650-0
 Bus video line rectifier for Siedle In-Home bus video in switch panel housing for power supply to the bus users.
 Optional plug-in facility for the bus supply unit accessory ZBVG 650-... and bus video line rectifier accessory ZBVNG 650-... as a video amplifier.

TR 603-0
 Transformer in switch panel housing, to supply supplementary components.
 For every connected video door station, a separate power supply to the door release or call button module lighting is required.

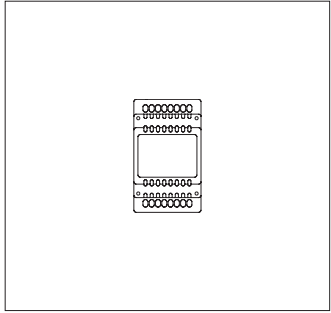
ZBVNG 650-0
 Bus video line rectifier accessory as a plug-in card for installation in bus video line rectifier BVNG 650-... Required where attenuation within a line is > 45 dB or for the creation of a multiple-line system with more than one BVNG 650-...
 In the case of multiple line systems, the ZBVNG 650-... must be installed in each BVNG 650-...

Devices	Unit width
BNG 650-...	9
BVNG 650-...	9
TR 603-...	3
NG 602-...	6
BSM 650-...	3
BIM 650-...	3
DCA 650-...	6
DCIP 650-...	6+8+5
EC 602-...	6
ECE 602-...	3
PRI 602-... USB	3

Switching and control devices

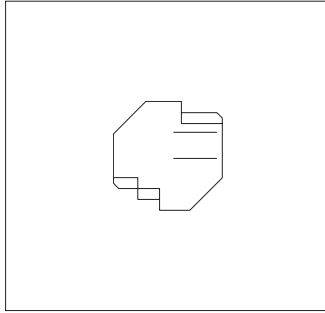
Bus distributor audio

Bus distributor video



BSM 650-02

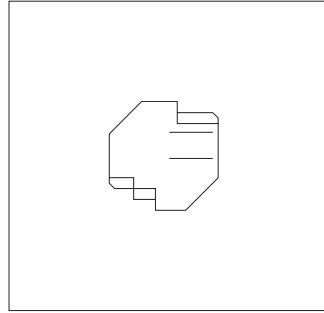
Bus switching module in switch panel housing with 4 integrated relays, each with one potential-free work contact. Programmed functions can be actuated using the programmable buttons of the system users or in parallel to a door call button to actuate an external signalling device.



BSE 650-0

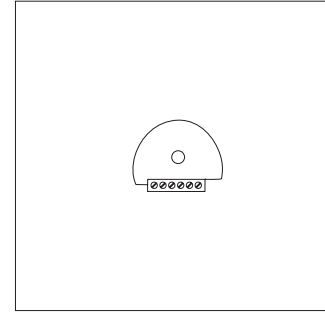
Bus switching unit with bistable relay, suitable for mounting in a 55 junction box. Actuation possible via BEM, using the programmable buttons of the system users or in parallel to a door call button. Power supply via the In-Home bus
Admissible switching output:

- Light bulbs max. 1300 W
- Fluorescent lamps max. 800 W
- Twin fluorescent lamps max. 1200 W
- Parallel compensated fluorescent lamps max. 400 W



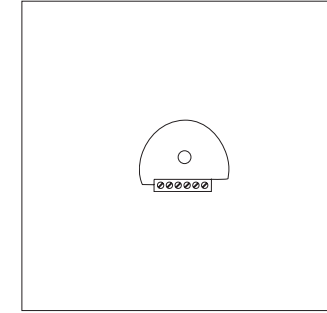
BEM 650-0

Bus input module for mounting in a 55 junction box with an input for tripping switching functions/transmitting messages at the In-Home bus. Activation possible via potential-free contact or 4–30 V DC, 10 mA. Power supply via the In-Home bus



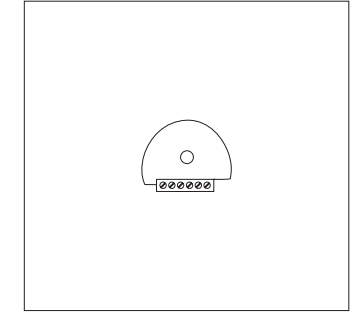
BAA 650-0

Bus audio decoupler, suitable for mounting in 55 junction box, for connection of pure audio components to the In-Home Video bus, e.g. BTS, BFS, BTC, BFC, BTLM/BTLE without video, BNS, BSM, BIM etc.



BVVS 650-0

Symmetrical bus video distributor with 2 outputs, suitable for mounting in a 55 junction box, for creation of a tree structure or in the case of several risers.

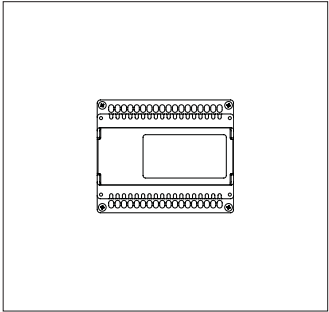


BVVU 650-0

Asymmetrical bus video distributor, suitable for mounting in 55 junction box, for coupling one bus video transmitter BVS 650-.../BCMC 650-... each

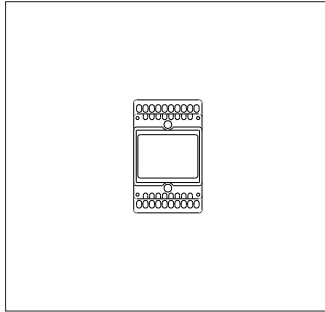
Vario bus Switching and control devices

Information on programming



EC 602-03

Entrance controller in switch panel housing for code lock module COM 611-..., electronic key reading module ELM 611-... or fingerprint module FPM 611-...
Display-supported programming of integrated buttons, or by means of PC software via additional programming interface PRI 602-... Electronic evaluating circuit with 2 switching outputs, extendable to 8 with ECE 602-..., 2 control inputs for time-controlled access rights.

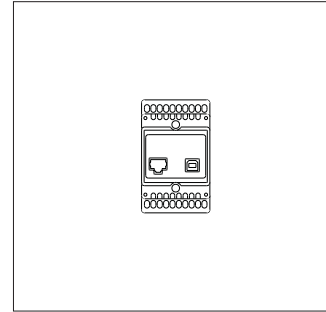


ECE 602-0

Entry controller extension in switch panel housing. Upgrades the EC 602-... by a further 6 working contacts.

General

Programming for the In-Home bus is described in the System Manual provided with the BNG/BVNG 650-... and can be performed manually, using **Plug+Play** or with PC. For programming with the PC, the interface PRI 602-... USB with software BPS 650-... from V 2.00 is required.



PRI 602-01 USB

The programming interface PRI 602-... USB in a switch panel housing connects a Windows PC via the USB port to the Siedle In-Home bus. Connection to the line rectifiers BNG 650-... and BVNG 650-... via ZBVG 650-...
The bus programming software BPS 650-... is included in the scope of delivery. Interface to the Siedle In-Home bus via 8-pin Western socket or via screw terminals.
Only one PRI 602-... USB can be connected to a PC.

PRS 602-01

Programming software suitable for programming the Vario bus components. The CD contains the following software, drivers and documents:

- Call controller and call controller extension RC/RCE 602-...
- Entrance controller and entrance controller extension EC/ECE 602-...
- FPM 611-... firmware update
- All necessary drivers, documentation of the display call module DRM 611-... and fingerprint module FPM 611-...

System requirements: Windows PC, Win 2000, Win XP, Win Vista Home/Ultimate, Win 7 Home Premium/Professional (32 Bit)

VBPS 602-01

Vario bus logging software for monitoring control functions executed via an EC/ECE 602-..., e.g. access control. The programming interface PRI 602-.../PRI 602-... USB is required.
Systemvoraussetzungen: Windows-PC, Win NT 4.0, Win 2000, Win XP (32 Bit)

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