SSS SIEDLE

Planning Manual
Siedle In-Home bus

Issue 2020

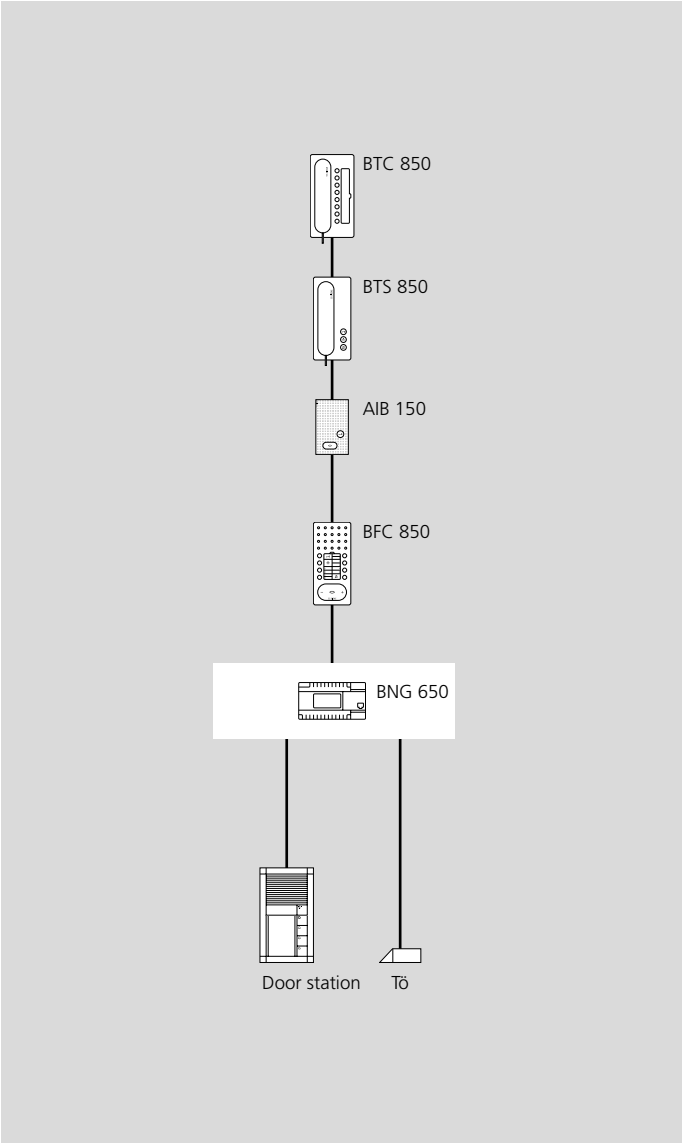
Contents

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

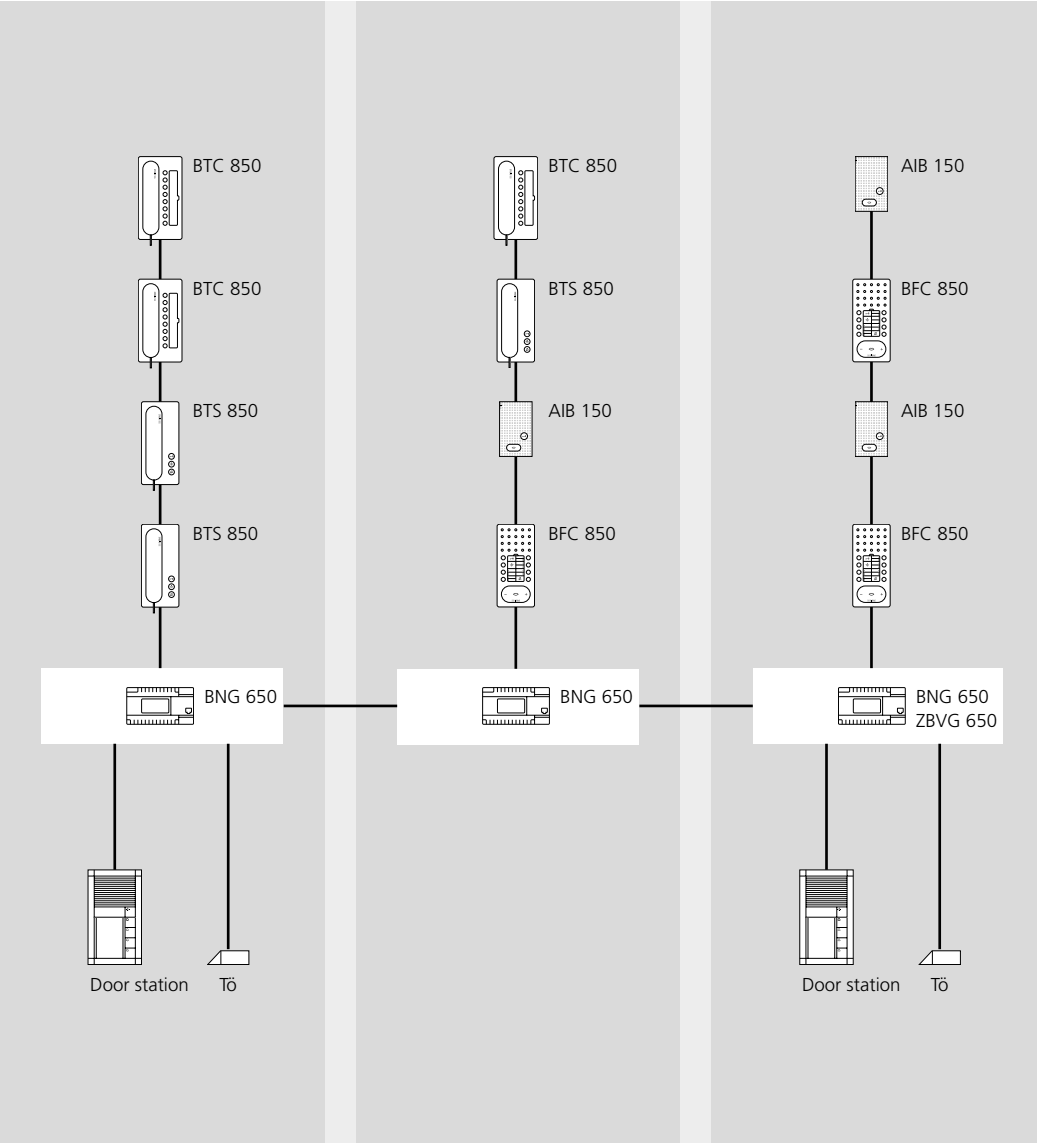
Technical additions or printing errors do not constitute grounds for compensation claims.

Overview
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. DoorCom Analog provides an interface to the telephone network.
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.
For newly installed systems, we recommend using standard commercially available conductor material J-Y(St)Y. However, the entire range of functional features is available if just 2 adjacent YR wires are installed throughout the system. The range is lower when using YR wires in video systems.
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

Overview
Fields of application

The only requirement for deployment of the Siedle In-Home bus is the availability of 2 cores throughout.
We recommend using J-Y(St)Y as conductor material, although YR is also possible (observe range). This is used to perform the whole functional scope including audio and video communication.

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
• Buildings with flexible functional scope with the possibility of extended functionality.

Performance features

Performance features	Indoor devices/Components
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 65x-… or ZAR/ZARF 850-…, additional installation required
Door release time	Fixed at 3 seconds
No. of door stations	Within the system limits
Number of lines	Max. 15
Number of users per line	Max. 31
Total number of users	Max. 465
Speech channels	1 per line
Call silencing	•
Call volume control in 5 steps	•
Video link	•
Storey door loudspeaker with call differentiation	•
Internal communication including call progress tones	•
Switching/control function	•
Display LEDs under the buttons	BTC/BFC/BTCV 850-…
Direct selective door dialling including video actuation	•
11 call signals, including chime	•
Digital call input possible (COM/DRM)	BIM 650-… required
Parallel door call	Max. 4 Deluxe devices
Doormatic	Deluxe devices

Performance features	Indoor devices/Components
Call forwarding (across lines without video)	Deluxe devices
Send internal group call	Deluxe devices
Automatic call pickup of internal calls	Deluxe handsfree devices
Receive collective paging announcement	Deluxe devices
Programming	Manual, Plug+Play or via PC

Plug+Play programming
exclusively using the devices of series:

• Indoor devices 850-…
• Indoor devices AIB/VIB 150-…
• Siedle Vario from BTLM 650-03
• Door loudspeaker module Plus BTLM 651-…
• Custom-fit door loudspeaker from BTLE 050-03 with BRMA 050-01
• Siedle Compact
• Siedle Classic
• Siedle Steel
• BNG/BVNG 650-…

Extensions of the basic function, such as parallel call or switching and control functions, are also programmed manually or by PC.

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

Overview
Components and users

Area	Components		Users
Door area	BTLM 650-…	Bus door loudspeaker module	2
	BTLM 651-…	Bus door loudspeaker module Plus	2
	CA 850-…	Siedle Compact audio door station	2
	CAU 850-…	Siedle Compact audio door station flush mounting	2
	BCV 850-…	Siedle Compact video door station	2
	BCVU 850-…	Siedle Compact video door station flush mounting	2
	F CL A 0x B-…	Classic door station Audio	2
	F CL V130 0x B-…	Classic door station Video	2
	STL …	Steel door station	2
	BTLE 050-…	Bus custom-fit door loudspeaker	2
Indoor devices	AIB 150-…	Audio indoor station Siedle Basic	1
	VIB 150-…	Video indoor station Siedle Basic	1
	BTS 850-…	Standard bus telephone	1
	BTC 850-…	Comfort bus telephone	1
	BFC 850-…	Comfort handsfree bus telephone intercom	1
	BNS 750-…	Bus secondary signal unit	1
	BTSV 850-…	Standard bus telephone with colour monitor	1
	BTCV 850-…	Comfort bus telephone with colour monitor	1
	BVPC 850-…	Bus video panel	1
Distribution	BNG 650-…	Bus line rectifier	–
	ZBVG 650-…	Bus supply accessory	–
	BVNG 650-…	Bus video line rectifier	–
	ZBVNG 650-…	Bus video line rectifier accessory	–
	VNG 602-…	Video line rectifier	–
	LNG 600-…	Power line rectifier	–
	NG 602-…	Line rectifier	–
	ANG 600 -…	Access line rectifier	–
	TR 603-…	Transformer	–
	TR 602-…	Transformer	–

Area	Components		Users
Distribution	BAVU 652-…	Bus audio/video distributor asymmetrical top hat rail	–
	BVVU 652-…	Bus video distributor asymmetrical top hat rail	–
	BVVS 652-…	Bus video distributor symmetrical top hat rail	–
	BAA 650-…	Bus audio decoupler	–
	BVVU 650-…	Asymmetrical bus video distributor	–
	BVVS 650-…	Symmetrical bus video distributor	–
	BIM 650-…	Bus interface module	–
	BCMC 650-…	Bus camera 80 for Siedle Vario	–
	BCM 653-…	Bus camera 130 for Siedle Vario	–
	BCM 658-…	Bus camera 180 for Siedle Vario	–
	BRMA 050-…	Bus call button matrix	–
	PRI 602-… USB	Programming interface USB	–
	BVM 650 -…	Bus video modulator	– / 2 depending on operating mode
	EC 602-…	Entrance controller	–
	ECE 602-…	Entrance controller extension	–
	TCIP 603-…	Door controller IP	–
	FSM 740-…	Remote switching and control module	–
	SCE 640-…	Switching controller extension	–
	TCIP SRV 603-…	Door controller IP server	–
	BSE 651-…	Bus switching unit top hat rail	1
	BEM 651-…	Bus input module top hat rail	1
	BSE 650-…	Bus switching unit	1
	BSM 650-…	Bus switching module	1
	BEM 650-…	Bus input module	1
Interface to the telephone network	DCA 650-…	DoorCom Analog	1–31 address dependent
Interface to the IP network	SG 650-…	Smart Gateway Professional	1–31 address dependent
	SG 150-…	Smart Gateway	1–31 address dependent

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 additional, 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.

Functional

	In-Home bus: Audio	**In-Home bus: Video**
Call, speech, door release and light operation between the door station and the connected bus indoor devices units	X	X
Video connection to the video door station	–	X (via the bus indoor devices with colour display)
Internal speech communication from Deluxe indoor devices to indoor devices is possible within one line	X	X
Third party audio privacy function	X	X
11 different electronic call signals freely selectable including chime	X	X
Call differentiation between door calls, storey calls and internal calls is freely selectable	X	X
Call silencing with status display and optical call display integrated	X	X
Door release actuation at the door station which placed the last call and light actuation are possible at any time	X	X
Bus indoor devices can be operated in combination in any optional form with in a single system	X (only audio indoor devices)	X (Bus indoor devices without video and switching control components are always uncoupled at the In-Home bus: Video using a BAA 650-…)
Door release actuation time	Fixed at 3 seconds	Fixed at 3 seconds
Light contact actuation time	0.4 seconds, change possible with BPS 650-…	0.4 seconds, change possible with BPS 650-…

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 indoor devices in parallel. If the call button is pressed, these ring at the same time. The bus indoor devices 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.

Storey door loudspeaker
It can be installed in place of a storey call button. Only an additional 12 V AC is required to supply 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 Smart Gateway SG 150-… or the Smart Gateway Professional SG 650-… links the In-Home bus to IP networks, permitting the integration of IP devices into the door communication.

Switching and control elements for greater convenience
In the central subdistributor or at any optional location in the line, bus switching modules BSE 65x-…, BEM 65x-… 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 BSE/BEM 65x-…/BSM 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 indoor devices and bus video panels, status messages can be displayed which are transmitted by a bus input module BEM 65x-… or by a switching unit BSE 65x-… (e.g. garage door open, terrace door open or fault in the air conditioning unit).

Programming
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 indoor devices to call buttons.
For programming with the PC, the interface PRI 602-… USB with software BPS 650-… (latest version) 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 indoor device to communicate e.g. with the door station and at the same time bus indoor device 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.

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. In the living area, we call these indoor devices. 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.

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

The basic installation of In-Home-Bus: Audio takes place as a single-line system. Within this line, the users are installed on the bus cores. A maximum of 31 users may be connected to one line. Users are classified as devices occupying an address within the bus. If more than 31 users are required, additional lines must be configured. Apart from a few exceptions, all the devices have an assigned address. Up to 15 lines each with 31 users can be configured (in theory a maximum of 465 users).

Power supply
The nerve centre of any line is the bus line rectifier, which controls the entire function of the system. The bus cores are connected to the bus line rectifier.

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.

In audio systems, installation is optionally carried out from one device to another or through distributors. Installation takes place through connecting terminals.

Conductor material	
YR	Light current cable
J-Y(St)Y	Twisted pair conductors, shielded
A-2Y(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.

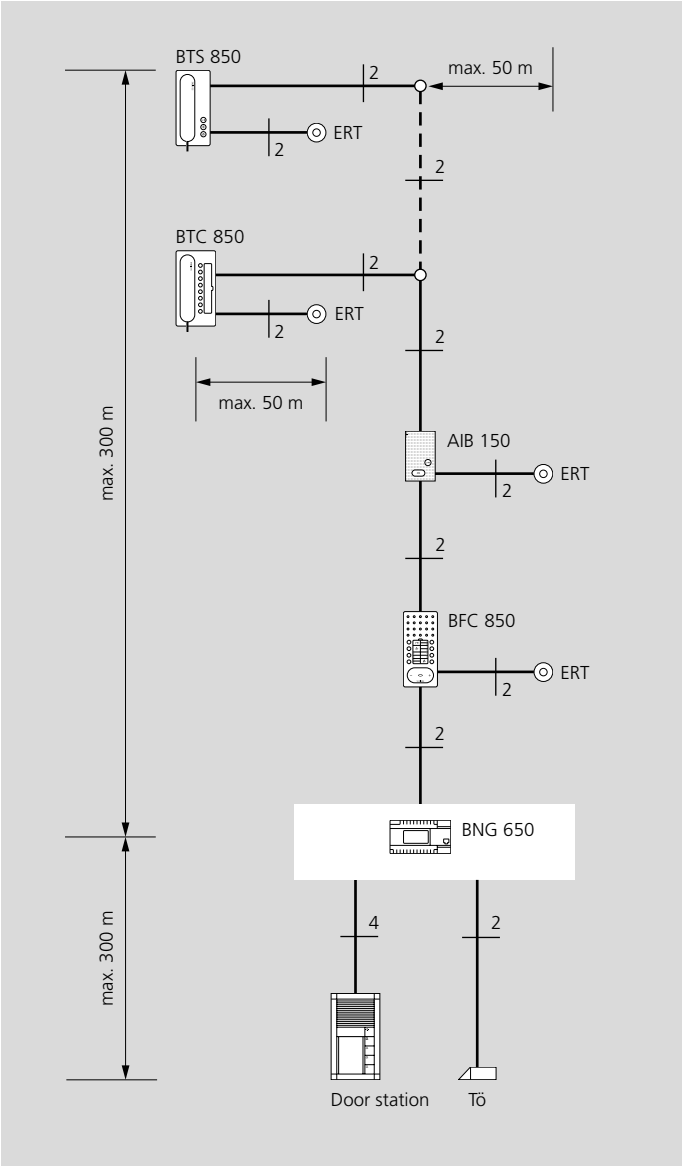
The Siedle In-Home bus installation must take place with J-Y(St)Y to a core pair or with YR to two adjacent wires. Using J-Y(St)Y conductors reduces the likelihood of interference.

Ranges and system limits

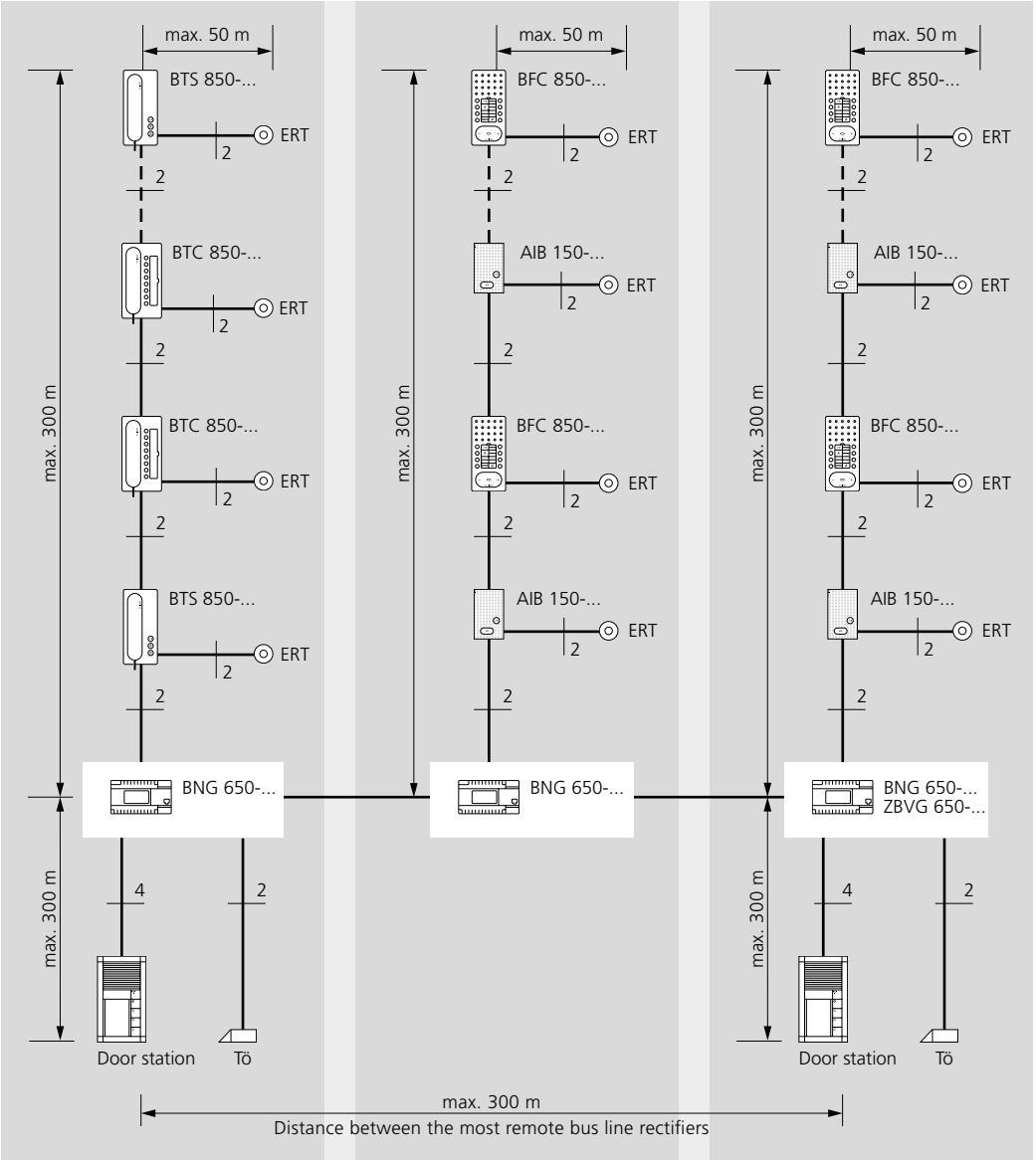
	Single line system	**Multiple line system**
Number of users	Max. 31	Max. 31 users per line Max. 465 users at max. 15 lines
Number of speech channels	1	Max. 15 One speech channel is available per line. A BNG 650-… is required for every line. In multiple line systems, 1x bus supply unit accessory ZBVG 650-… is always required.
Max. distance bus indoor device and ERT storey call button	Max. 50 m	Max. 50 m
Max. distance bus line rectifier to the most remote bus indoor device	Max. 300 m	Max. 300 m
Max. distance bus line rectifier to the most remote door station	Max. 300 m	Max. 300 m
Max. distance between the most remote bus line rectifiers	–	Max. 300 m
Total laid conductor network length	Max. 1500 m	Max. 1500 m per line

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.

In-Home bus: Audio
Ranges and system limits



In-Home bus: Audio
Ranges and system limits in single line system



In-Home bus: Audio
Ranges and system limits in multiple line system

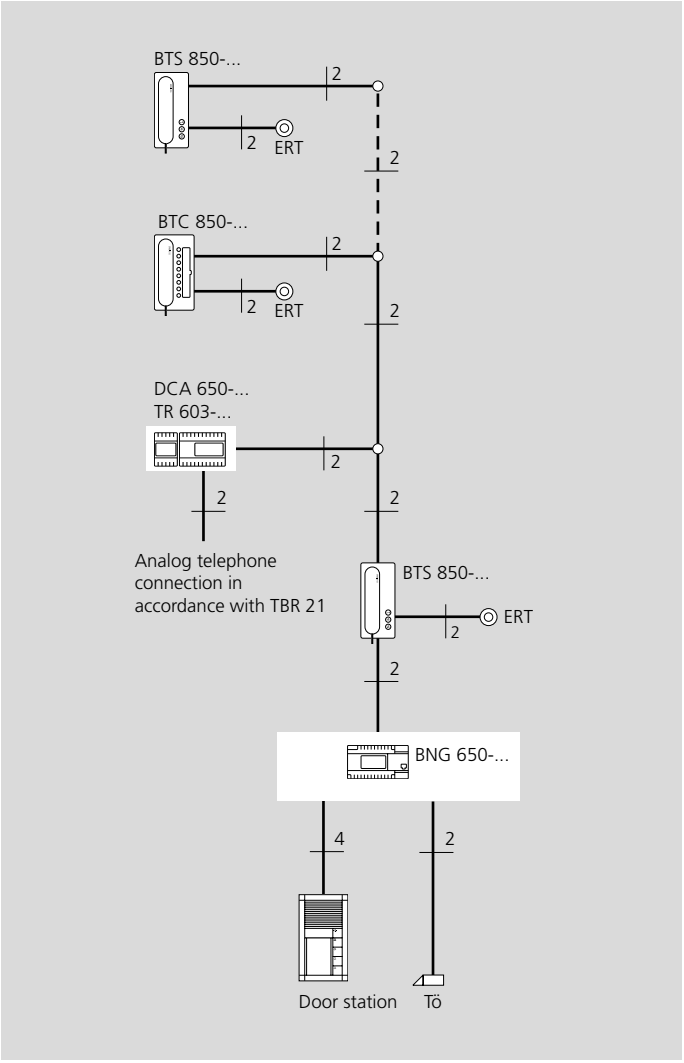
A maximum of 1500 m of installation cable may be laid within the line.
All specifications relating to ranges refer to the above mentioned conductor material with 0.8 mm core diameter.
With a core diameter of 0.6 mm, the range is halved.

Key
ERT = Storey call button
Tö = Door release 12 V AC, use at least 20 Ohm (e.g. TÖ 615-…).

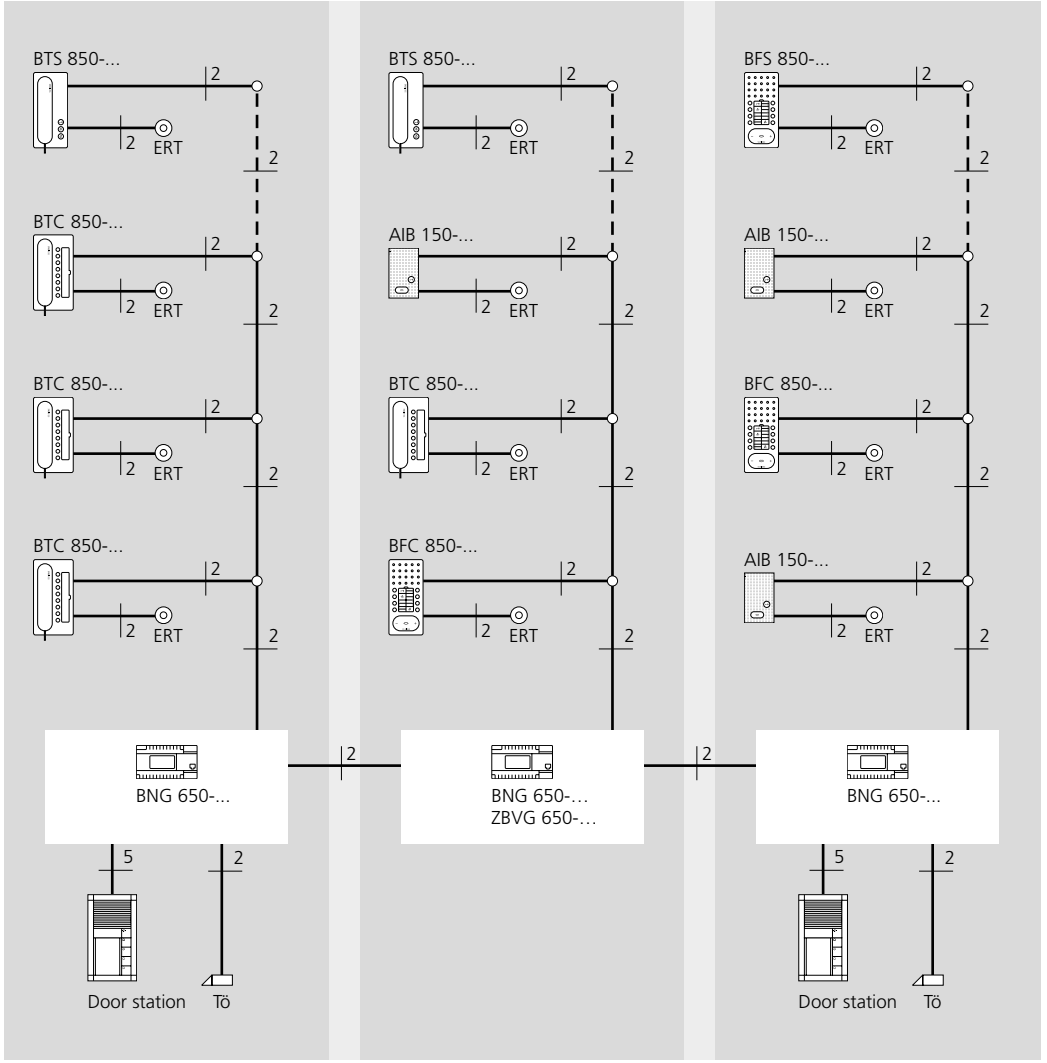
In-Home bus: Audio
Cable size diagram

Speech connection to the door station via the bus indoor device in a single or multiple family home. Also for internal telephony and/or with elevated operating convenience for control functions. Independently of the design of the bus indoor devices and interfaces, they can all be planned and operated in combination in a system.

Where the execution of other control functions is required alongside door release and light using the bus indoor device, the bus switching module BSM 65x-… or bus switching unit BSE 65x-… is required in addition.



In-Home bus: Audio
Cable size diagram, single line system



In-Home bus: Audio
Cable size diagram, multiple line system

Key
ERT = Storey call button
Tö = Door release 12 V AC,
use at least 20 Ohm (e.g. TÖ 615-…).

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 indoor device to bus indoor device or via the side circuit with bus distributor. Mixed structures are also possible.
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 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-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-…

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.
- In In-Home bus systems with video, installation is optionally carried out from one device to another or through distributors.
- If installation is not carried out from one device to another, then bus video distributor BVVU/BVVS 65x-… is always required.
- Switching/control components and audio devices are always connected using an bus audio decoupler BAA 650-… in a system with video.

Conductor material	
YR	Light current cable
J-Y(St)Y	Twisted pair conductors, shielded
A-2Y(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 installation must take place with J-Y(St)Y to a core pair or with YR to two adjacent wires. Using J-Y(St)Y conductors reduces the likelihood of interference.

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 indoor devices with colour display 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.

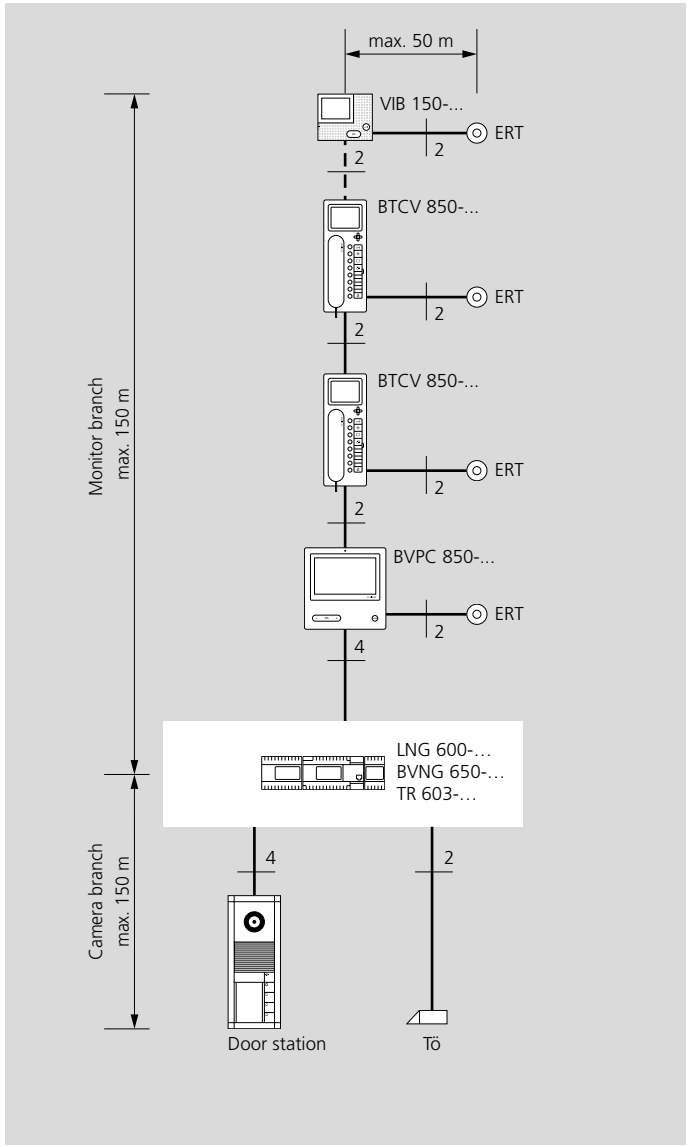
Operating mode switch
The operating mode switch at the BVNG 650-… is used to define how the system is operated.

Range calculation	
Line	Total laid conductor material within a line 1500 m Total laid conductor network connecting all BVNG 650-… units **Max. 1125 m** **Conductor material with J-Y(St)Y** **Max. 750 m** **with YR**
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**
BVNG	Maximum distance from a BVNG 650-… to the most distant BVNG 650-… **150 m = 30 db** **Conductor material with J-Y(St)Y** **100 m = 20 db** **with YR** **300 m** **using a network cable (such as CAT5)**
Operating mode switch 1-standard-2	
1	Operation in existing systems with BTS/BTC 750-…, replaces BVSG 650-… max. 100 m
NORM	Normal operation in a new system with the current bus indoor devices
	150 m = 30 db **Conductor material with J-Y(St)Y** **100 m = 20 db** **with YR**
2	Increased range in new systems with the current bus indoor devices max. 200 m only with J-Y(ST)Y (with supplementary installation)

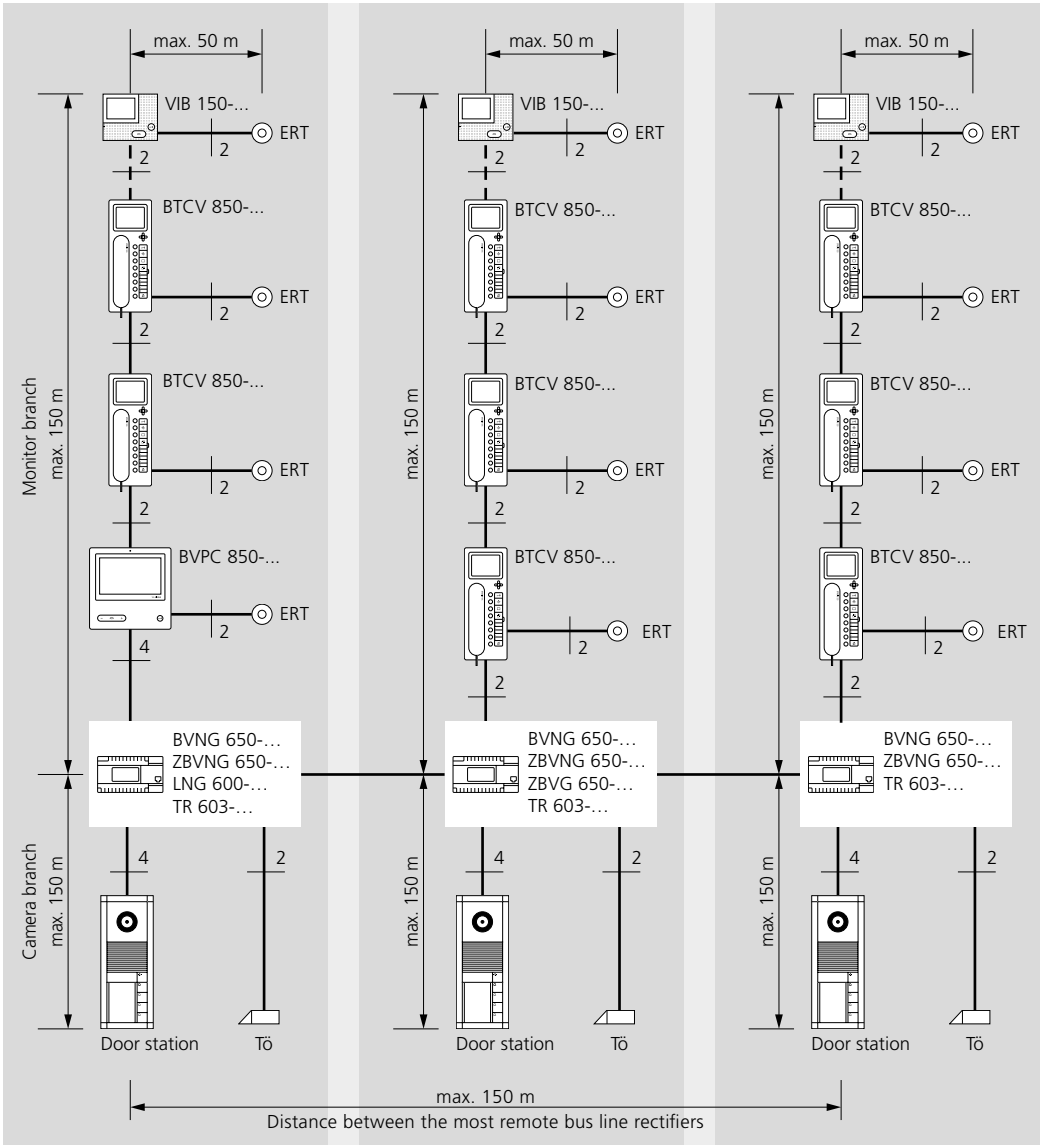
Attenuation values	
A total 1	Total attenuation between the most distant camera door loudspeaker and the most distant bus indoor device of a line 45 dB
A total 2	Total attenuation between the most distant camera door loudspeaker and the most distant apartment station of a line, **if the relevant BVNG 650-… encompasses a ZBVNG 650-…** **45 dB + 55 dB**
Attenuation camera branch	Max. 45 db
Attenuation monitor branch	Max. 55 db (with ZBVNG 650-…)
System limits	
Single line system	Max. 31 users Max. 1 speech channel
Multiple line system	Max. 31 users per line Max. 465 users at max. 15 lines Max. 15 speech channels One speech channel is available per line. Each line requires its own BVNG 650-… with ZBVNG 650-… In multiple line systems, 1x bus supply unit accessory ZBVG 650-… is always required.

The total laid conductor network connecting all BVNG 650-… units must not exceed 1125 m with J-Y(St)Y 0.8 mm core diameter / 750 m with YR 0.8 mm core diameter.

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



In-Home bus: Video
Ranges and system limits in single line system



In-Home bus: Video
Ranges and system limits in multiple line system

All information regarding range and function refers to the J-Y(ST)Y conductor material with core diameter of 0.8 mm.

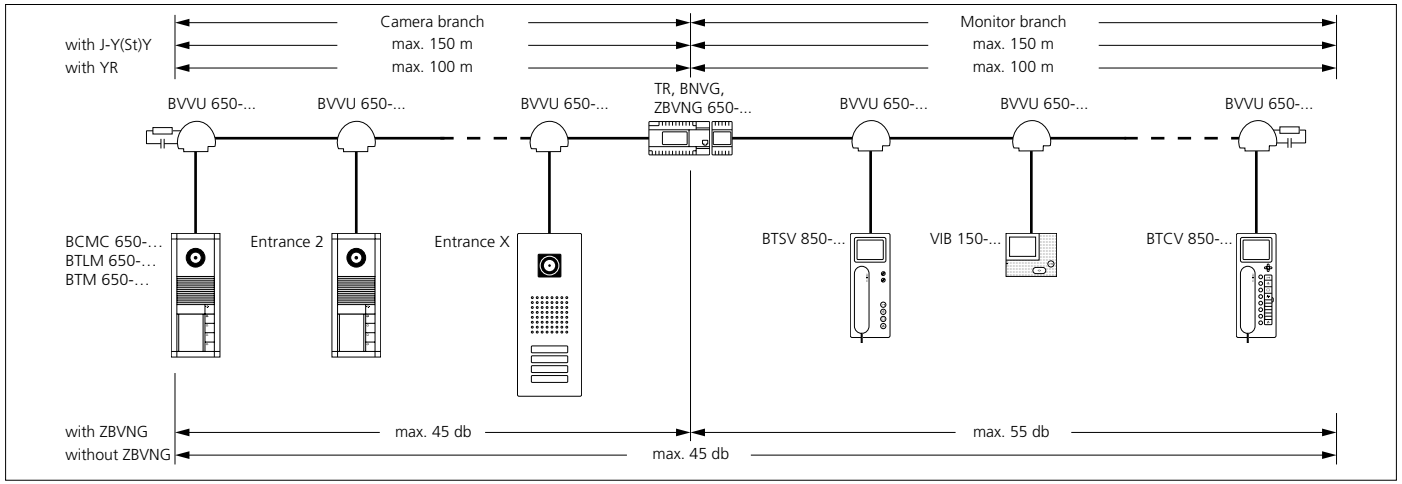
Key
ERT = Storey call button
Tö = Door release 12 V AC, use at least 20 Ohm (e.g. TÖ 615-…).

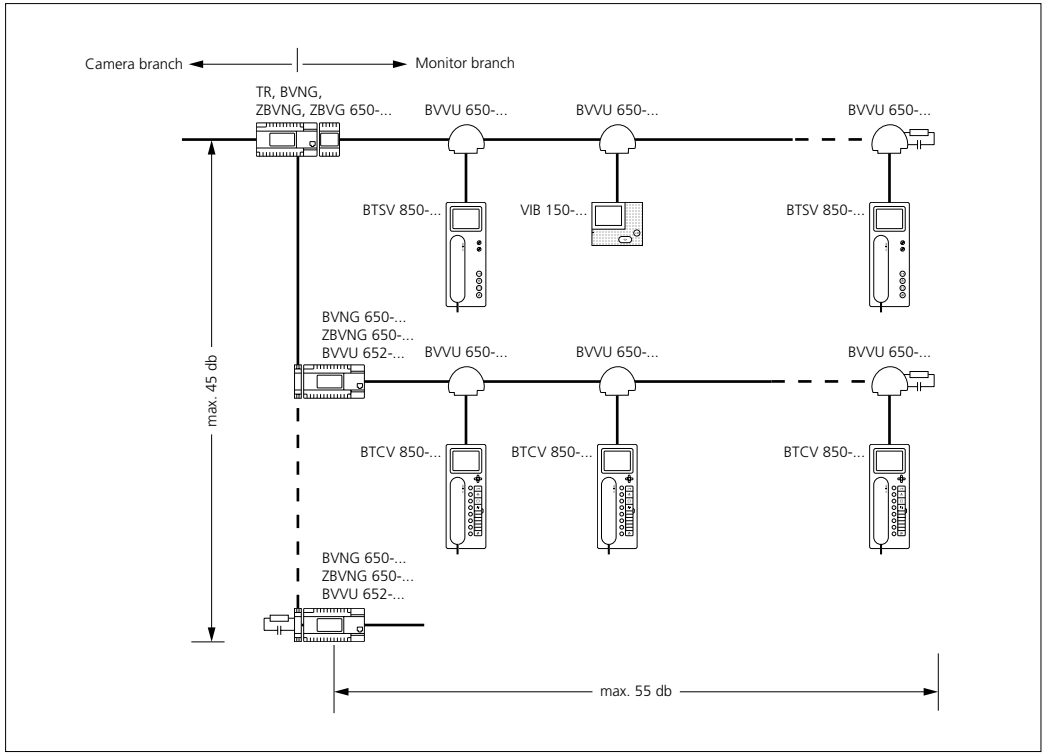
In-Home bus: Video
Range

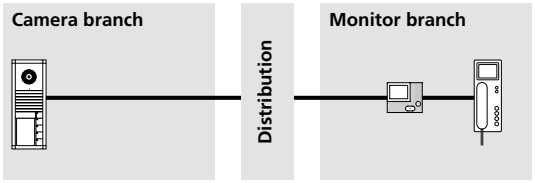
Camera branch
The camera branch is defined as the area in which the door stations with video are connected. Door stations without video must be connected via the BAA 650-…

Monitor branch
The monitor branch is defined as the area in which the indoor devices with colour display are connected.

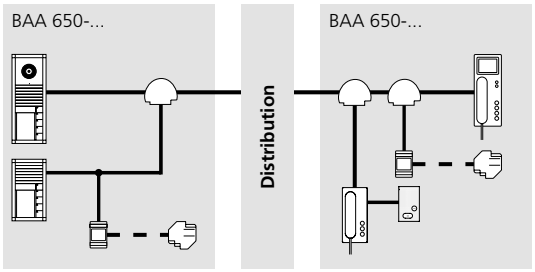
Loop-through connection
In the monitor branch, it is possible to loop through from one bus indoor device with colour display to the next. If you wish users without video to be connected, a bus audio decoupler BAA 650-… is required. Other audio or control components are then also subsequently looped through in the same way.



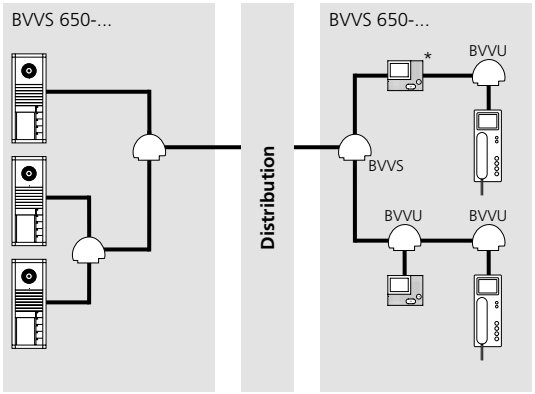




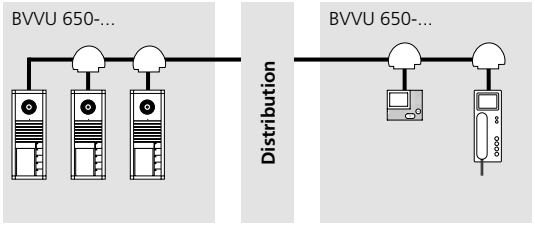
Camera branch:
No bus distributor required with a door station.
Monitor branch:
No bus distributor required when looping through from bus telephone to bus telephone. The integrated bus distributor in the bus telephones is used.
Attenuation:
No attenuation to be considered.



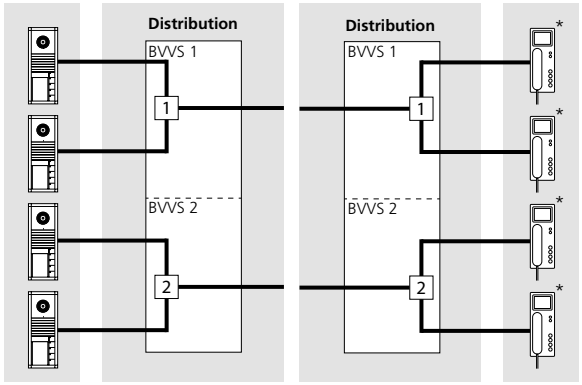
BAA 650-... in the camera branch:
Connection of audio users (e.g. BTLM 650-… or BTLE 050-…) or users for switching and control functions.
BAA 650-... in the monitor branch:
Connection of audio users (AIB 150-…, BTS/BTC/ BFC 850-…, DCA 650-…) or users for switching and control functions.
Attenuation:
No attenuation to be taken into consideration if decoupled.



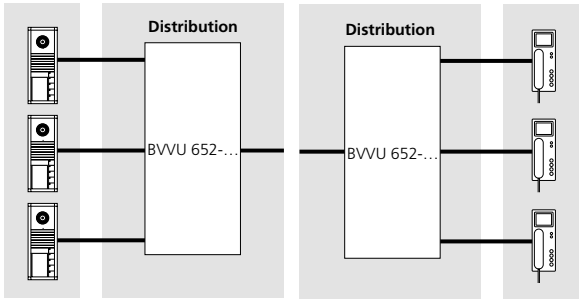
BVVS 650-... in the camera branch:
More than one video door station in the camera branch with "star shaped" conductor routing.
BVVS 650-... in the monitor branch:
Within the In-Home bus: Video more than one side circuit is required.
Attenuation:
The attenuation from BVVS 650-…, BVVU 650-… and the conductor length must be taken into consideration.



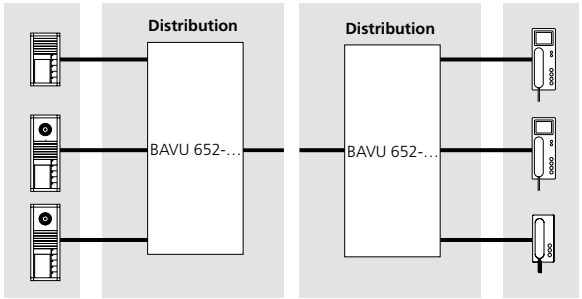
BVVU 650-... in the camera branch:
More than one video door station in the camera branch with "loop through" conductor routing.
BVVU 650-... in the monitor branch:
Connection of a bus telephone with monitor to a side circuit with "looped through" conductor routing.
Attenuation:
The attenuation from BVVU 650-… and the conductor length must be taken into consideration.



BVVS 652-... in the camera branch:
More than one video door station in the camera branch with "star shaped" conductor routing.
BVVS 652-... in the monitor branch:
Within the In-Home bus: Video more than one side circuit is required.
Attenuation:
The attenuation from BVVS 652-… and the conductor length must be taken into consideration.

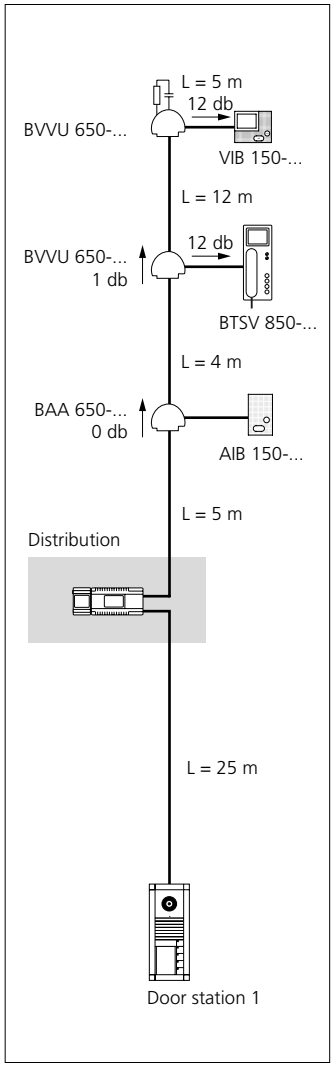


BVVU 652-... in the camera branch:
More than one video door station in the camera branch with "star shaped" conductor routing.
BVVU 652-... in the monitor branch:
Connection of a bus telephone with monitor to a side circuit with "star shaped" conductor routing.
Attenuation:
The attenuation from BVVU 652-… and the conductor length must be taken into consideration.

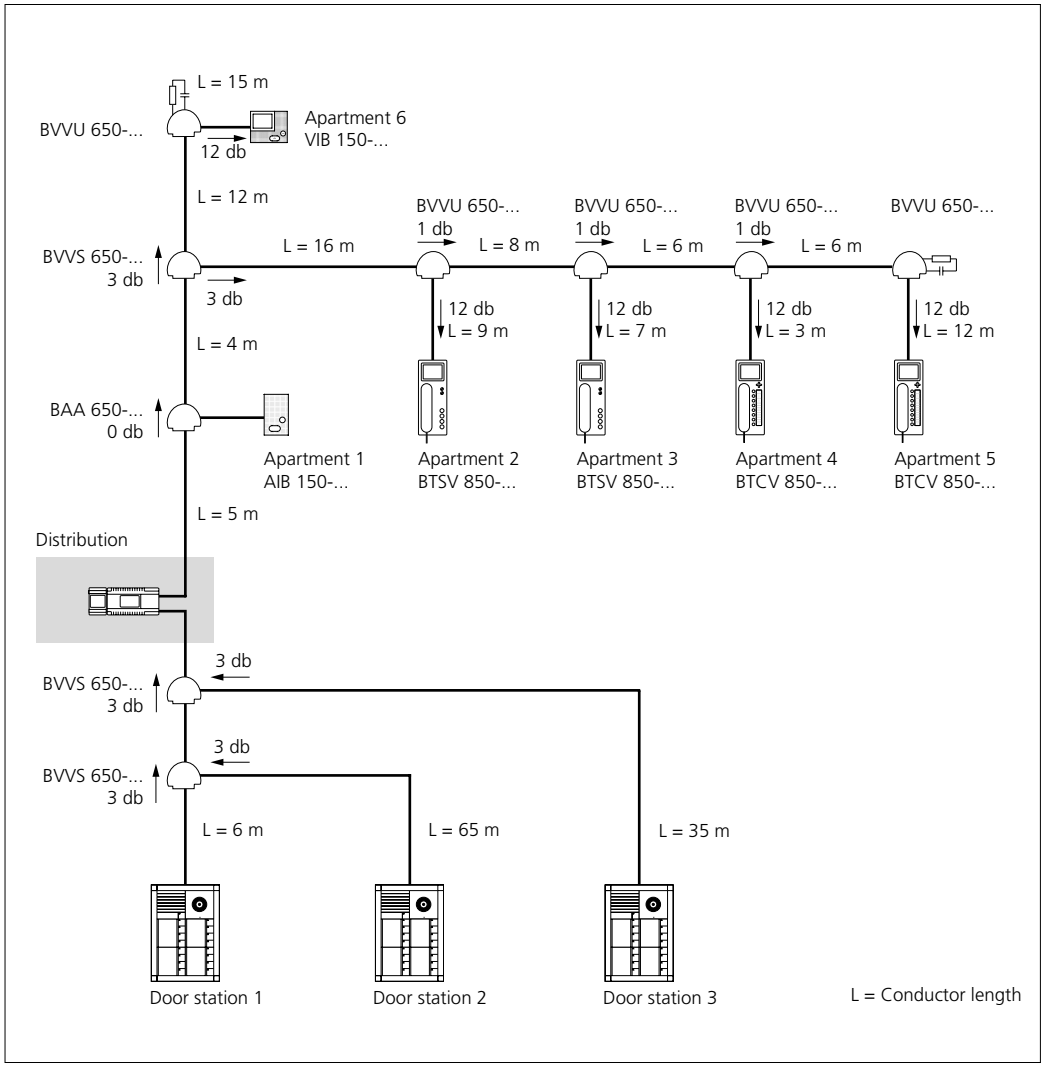


BAVU 652-... in the camera branch:
More than one video door station in the camera branch with "star shaped" conductor routing.
Connection of audio users (e.g. BTLM 650-… or BTLE 050-…) or users for switching and control functions.
BAVU 652-... in the monitor branch:
Connection of a bus telephone with monitor to a side circuit with "star shaped" conductor routing.
Connection of audio users (AIB 150-…, BTS/BTC/ BFC 850-…, DCA 650-…) or users for switching and control functions.
Attenuation:
The attenuation from BAVU 652-… and the conductor length must be taken into consideration.

In-Home bus: Video
Example for calculating attenuation



Camera branch	
Conductor length 25 m	5 db
Monitor branch	
Conductor length 26 m	5,2 db
Throughput attenuation BVVU 650-…	1 db
Output attenuation BVVU 650-…	12 db
Sum	**23,2 db**



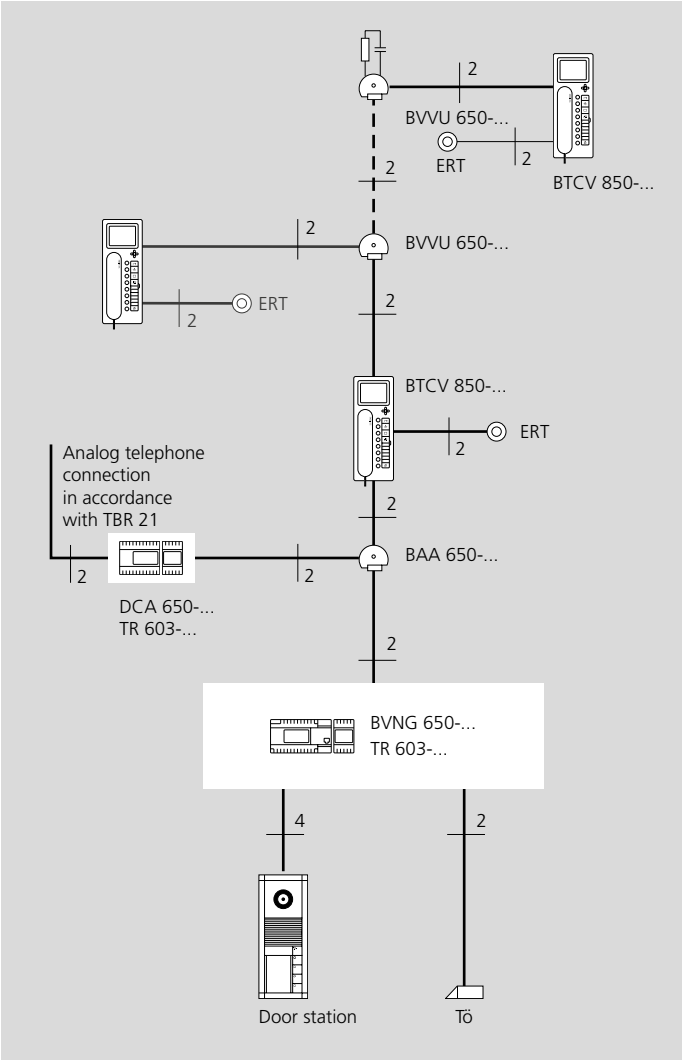
Camera branch	
The most distant user (door 2) Conductor length 65 m	13 db
Input attenuation BVVS 650-…	3 db
Throughput attenuation BVVS 650-…	3 db
Monitor branch	
Most remote residential unit Conductor length 57 m	11,4 db
Output attenuation BVVS 650-…	3 db
Throughput attenuation BVVS 650-… (3x)	3 db
Output attenuation BVVU 650-…	12 db
Sum	**48,4 db**

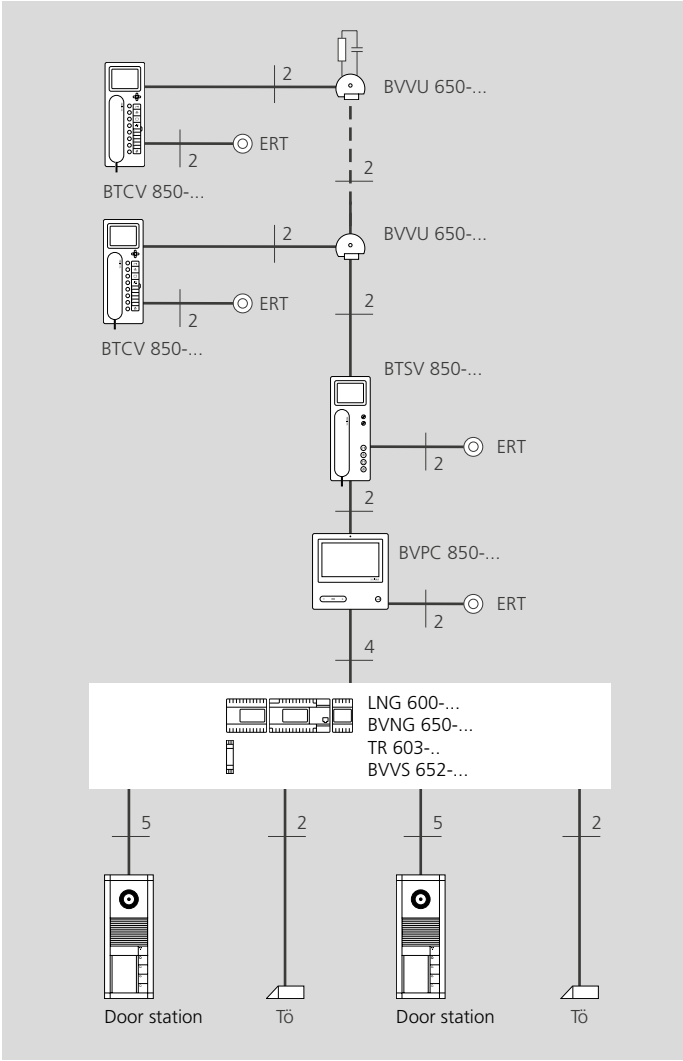
In the BVNG 650-… a ZBVNG is required as the attenuation between the door loudspeaker and most distant residential unit amounts to more than 45 db.

Cable size diagram
Speech and video connection to the video door station via the bus indoor devices with colour display.
In conjunction with the video indoor devices, additional control functions and also internal speech communication (e.g. internal telephony for one and two-family home) within one and the same line are possible.

Where the execution of other control functions is required alongside door release and control functions using the bus indoor devices with colour display, the bus switching module BSM 650-…/the bus switching unit BSE 65x-… is required in addition.

Bus indoor devices without video and switching control components are always uncoupled at the In-Home bus: Video using a BAA 650-…

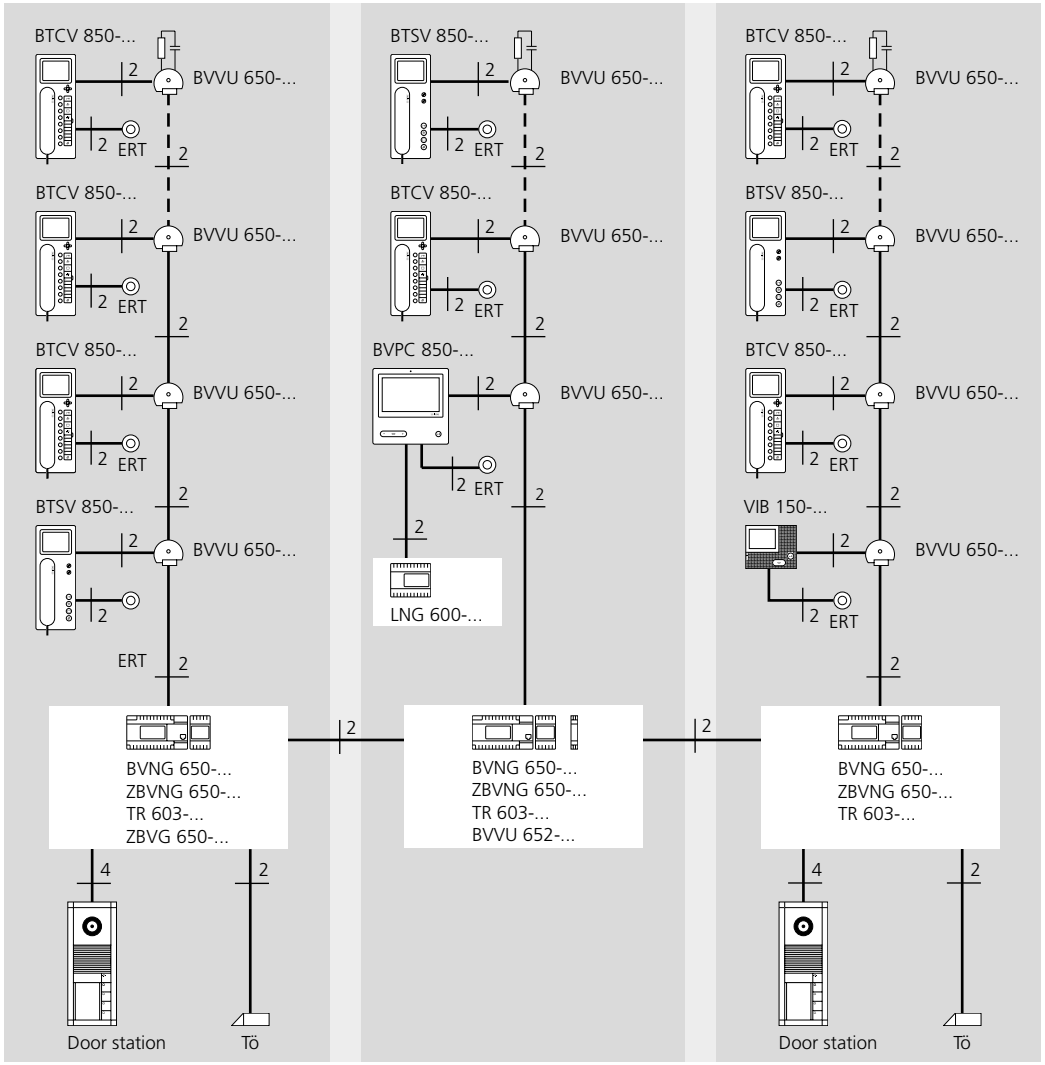




In-Home bus: Video
Cable size diagram, single line system

Key
ERT = Storey call button
Tö = Door release 12 V AC,
use at least 20 Ohm (e.g. TÖ 615-…).

In-Home bus: Video
Cable size diagram



In-Home bus: Video
Cable size diagram, multiple line system

Key
ERT = Storey call button
Tö = Door release 12 V AC, use at least 20 Ohm (e.g. TÖ 615-...).

In-Home bus: Video

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.

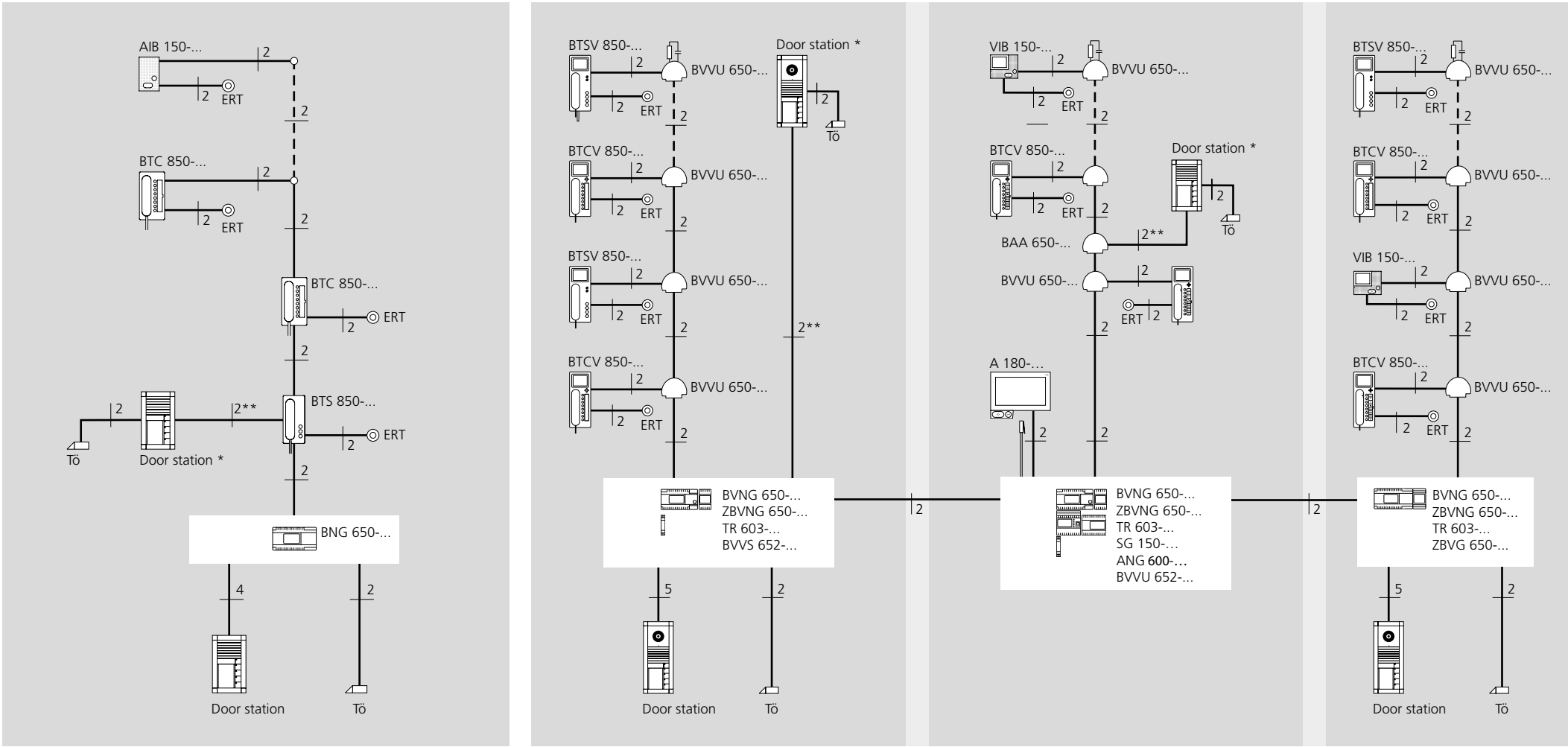
Storey door station at the In-Home bus: Video

Regardless of the type of installation, single line or multiple line, a storey door station with video can also be connected in place of a storey call button.
If a ZBVNG 650-… is installed in BVNG 650-…, then the installation must take place via the central distribution on 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.

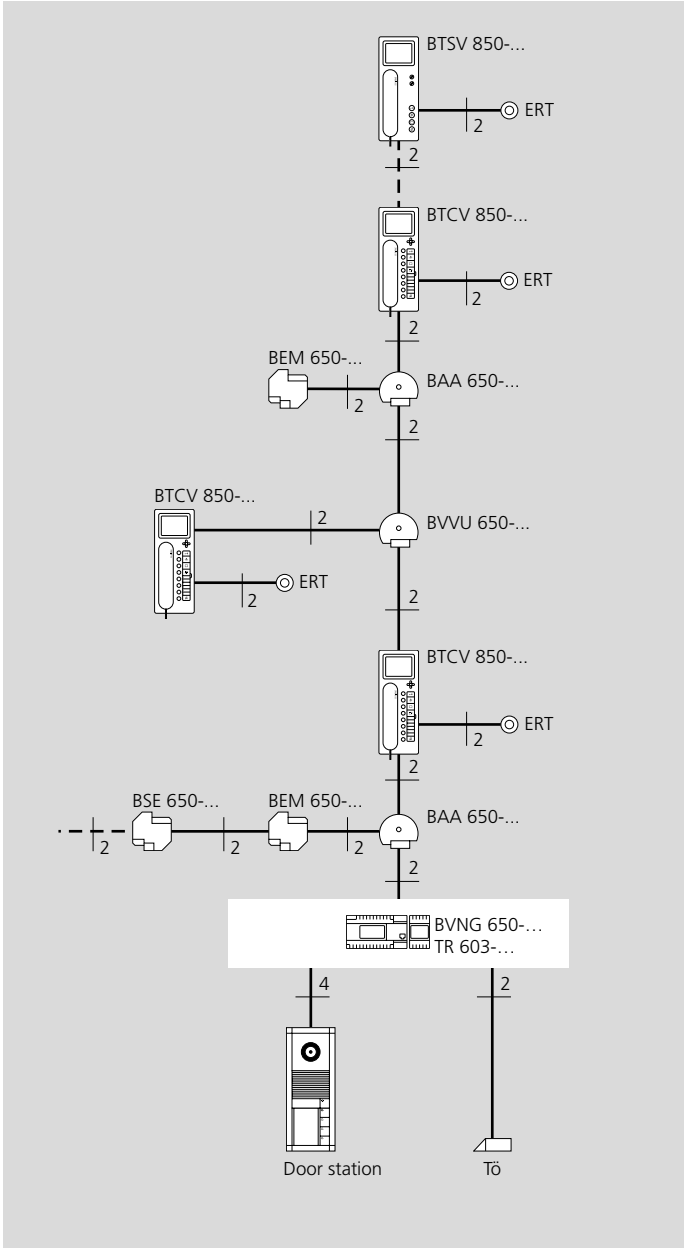
Key
ERT = Storey call button
Tö = Door release 12 V AC, use at least 20 Ohm (e.g. TÖ 615-…).



In-Home bus: Video

Switching and control functions at the In-Home bus

Using the switching and control components, functions can be performed or messages received at any optional point in the 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.



Key
ERT = Storey call button
Tö = Door release 12 V AC,
use at least 20 Ohm (e.g. TÖ 615-…).

Vario bus
Digital call input

The Vario bus is the bus system for Siedle access control and connects its system components to one another.
In addition, "digital calls" can be added to a door communication system with the Vario bus.

The basic installation of the Vario bus is carried out using a four-core Vario bus line (two core pairs).
One core pair (bv, cv) forms the supply line and supplies the power to the devices. Another core pair (Da, Db) forms the data line and enables data transfer and transfer of switching and control signals.
Nodes and branches are permitted at any point on the Vario bus line, taking into account the permissible ranges.

Digital call input
In the case of "digital calls", the door call is made via an input device such as the COM 611-… code lock module, the DRM 612-… display call module, a panel PC with Siedle SKI 700-… communication interface or an ST 10-… Siedle Touch, instead of the call buttons.
Connected telephones are called via a call number which is either entered directly (COM 611-…) or selected from an electronic list of names (DRM 612-…, ST 10-… or panel PC).
In order for the calls to be made from the Vario bus to the in-Home bus, the BIM 650-… bus interface module is required.

Installation notes

Telecommunication cables must be used for installation.

J-Y(St)Y	Twisted-pair conductors, shielded, 0.8 mm core diameter
A-2Y(St)2Y	Telecommunication cable 0.8 mm core diameter

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.

Power supply

The Vario bus system components can be supplied with the following power supply:

Models / Power supply	**TR 602-… (12 V AC) ***	**TR 603-… (12 V AC) ***	**ANG 600-… (48 V DC)**
Input/read units			
COM 611-…	X	X	
DRM 612-…	X	X	
SKI 700-…	X	X	
ST 10-…			X
Interfaces			
BIM 650-…	X	X	

* Steps must be taken to ensure that the supply voltage never falls below 9 V AC at any time at maximum current input to each device.

The maximum range of the Vario bus varies between the supply line and data line.

Supply line range

The supply line's loop resistance (go and return line between input/read unit and power supply) must not exceed 20 Ohm.
In the case of communication lines with a core diameter of 0.8 mm, this results in a maximum technically-determined range of approx. 260 m.
The range that can be achieved depends on the current consumption of the devices to be supplied and the type of installation (star/bus installation).

To facilitate calculation, the current consumption for the modules is given in "AW" connected load values.

Connected load values	AW
COM 611-…	1
DRM 612-…	1
SKI 700-…	1
ST 10-…	1

One TR 603-… supplies 2 AWs
One TR 602-… supplies 5 AWs

If the same power supply supplies both the BIM 650-… bus interface module and the input modules, the BIM has no effect on the range calculation for the input modules, provided it is located directly by the power supply.

Star-shaped installation

In the case of the star-shaped installation, each input/read unit is supplied by a separate line.
The range between the transformer and input/read units in the case of a star-shaped installation is max. 260 m with a core diameter of 0.8 mm and a connected load value "1 AW". An additional input/read unit in the same line with a connected load value of 1 AW reduces the range for 2 AW (1 AW + 1 AW = 2 AW) to 130 m.

Bus installation

In the case of bus installation, several input/read units are supplied via a common supply line.
Up to 5 AW can be operated with a core diameter of 0.8 mm via one supply line and power supply.
Additional devices will need their own, completely separate supply line and power supply.

AW	Range
1	260 m
2	130 m
3	75 m
4	50 m
5	40 m

Steps must be taken to ensure that the supply voltage never falls below 9 V AC at any time at maximum current input to each device.

Data line range

Each BIM 650-… bus interface module provides the connection for the data line of the associated input modules in the Vario bus and must be operated alone as an independent Vario bus line.
The entire length of the data line within a Vario bus line between input modules and the associated BIM 650-… is max. 2000 m.
Nodes and branches are permitted at any point on the Vario bus line, taking into account the permissible ranges.

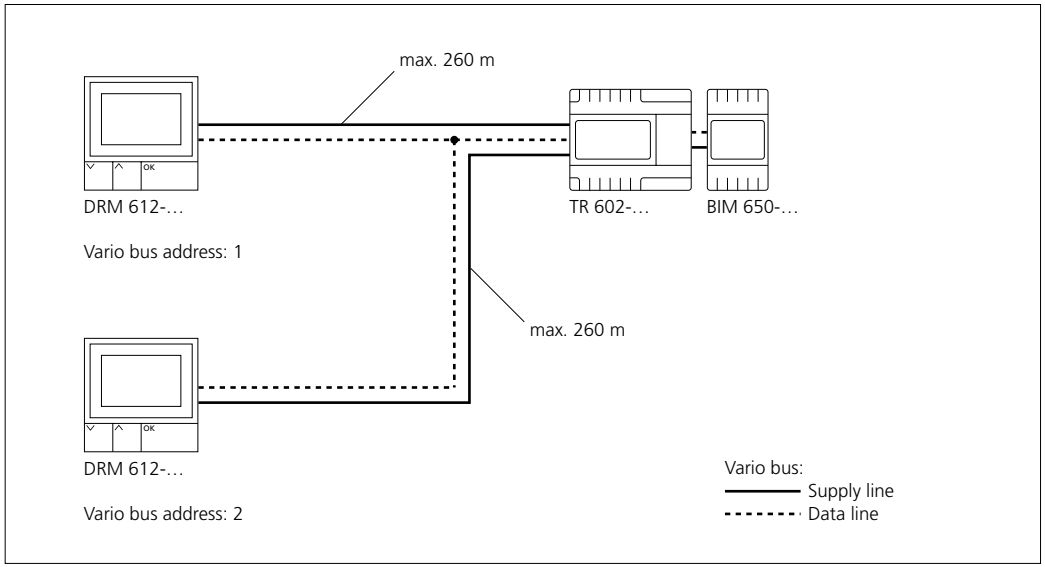
Up to 8 Vario bus addresses are available per device.
Each Vario bus address may be assigned once per device type (COM 611-… / DRM 612-…).
This means that up to 8 devices of the same device type can be operated per Vario bus line.

Note

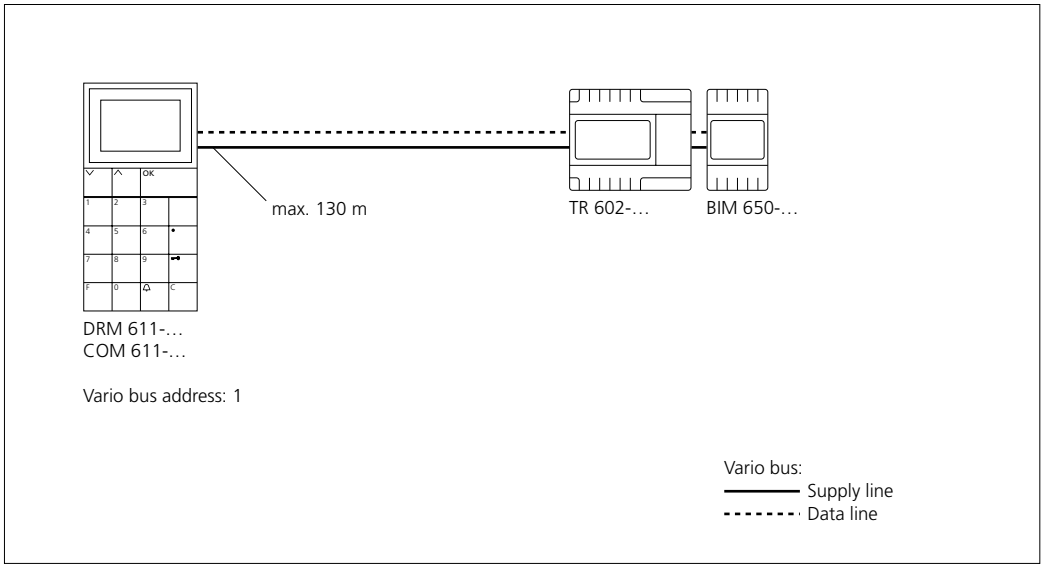
The ST 10-… replaces the call buttons and can be used for entering call numbers or as a code lock for access control.
Depending on its use, the ST 10-… is identified by the Vario bus as DRM 612-… and/or COM 611-…
In this case, a connected DRM or COM must not be given the same address as a ST 10-…!
Alternatively, instead of a ST 10-…, a panel PC with SKI 700-… can also be used.

In total, up to 16 input modules can be operated for digital calls per Vario bus line.
If a COM is to be used for access control, an EC 602-… easikey controller or an door controller IP TCIP 603-… is required.

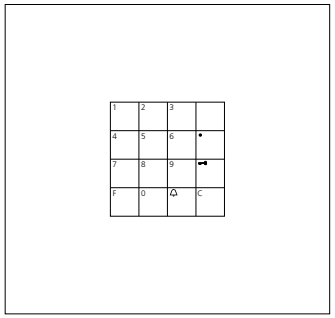
Vario bus
Ranges in the Vario bus



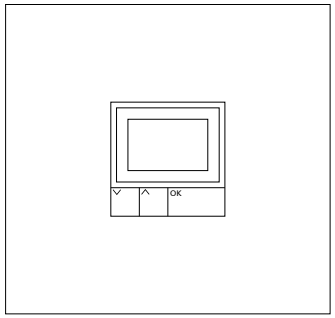
Range of the supply line for star-shaped installation of the supply line (example)



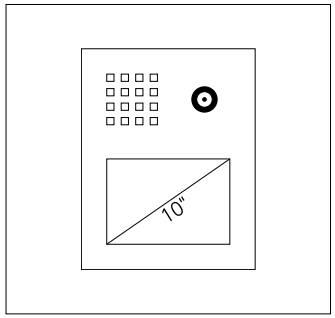
Range of the supply line for bus installation of the supply line with 2 AW (example)



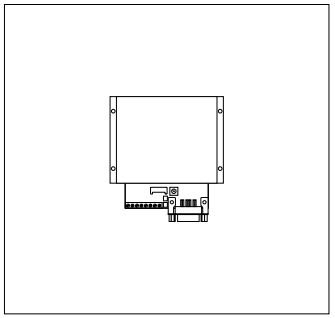
COM 611-02
Code lock module as an input unit for entering codes for door calls and control functions in conjunction with the Siedle Vario bus.
Operating voltage: 12 V AC
Operating current:
max. 140 mA
Protection system: IP 54
Ambient temperature:
–20 °C to +55 °C
Dimensions (mm) W x H x D:
99 x 99 x 27



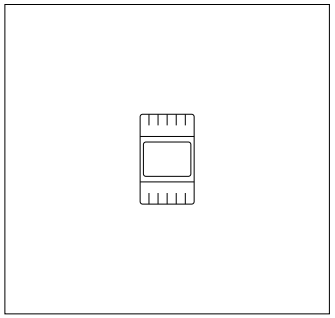
DRM 612-01
Display call module as an input device with 4-line display for placing door calls.
Indication of names in the display in alphabetical order.
The DRM 612-… can also be used in combination with the COM 611-… in order to display the input via the DRM 612-…
Operating voltage: 12 V AC
Operating current:
max. 200 mA
Protection system: IP 54
Ambient temperature:
–20 °C to +55 °C
Dimensions (mm) W x H x D:
99 x 99 x 27



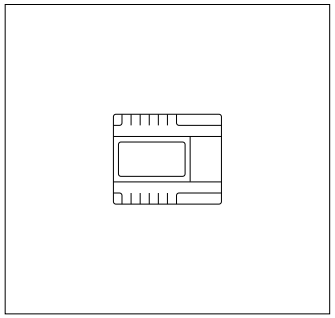
ST 10-0
Siedle Touch:
25.7 cm (10.1") control panel for door communication and access control in conjunction with the Siedle Vario bus.
For making door calls via digital call buttons or call numbers as well as for setting codes for control functions / access control.
Fitted in the Siedle Steel design line or as a rear-mounting solution in the façade integrated into the architecture.
Screen diagonal: 257 mm / 10.1"
Resolution: 1280 x 800 pixels
Installation type: Horizontal or vertical
Operating voltage: 48 V DC
Operating current:
max. 500 mA
Current consumption in idle status: 350 mA
Protection system: IP 65 from the front
Ambient temperature:
–20 °C to +55 °C



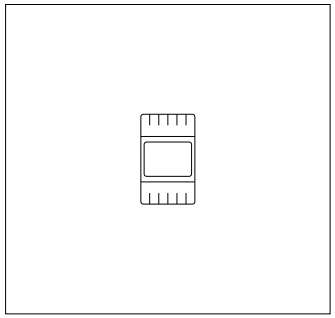
SKI 700-0
For connecting a panel PC to the Siedle door communication system. Together with the panel PC, the SKI 700-… replaces the call buttons and can be used for entering call numbers or as a code lock for access control.
In conjunction with the In-Home bus, can only be used with the BIM 650-… bus interface module as well as the BTLM 651-… bus door loudspeaker module Plus or the BTLE 051-… ES7007 bus custom-fit door loudspeaker.
Operating voltage:
12 V AC / 15 V DC
Operating current: 150 mA
Ambient temperature:
–20 °C to +70 °C
Dimensions (mm) W x H x D:
100 x 36 x 98



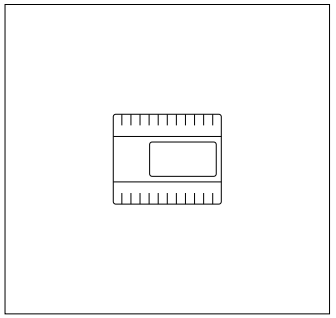
BIM 650-02
Bus interface module in switch panel housing, used for connection between Siedle Vario bus and Siedle In-Home bus.
It is always required when a bus door loudspeaker has to be equipped with a COM or DRM in addition to or instead of direct call buttons.
Operating voltage:
12 V AC from TR 602-…
Operating current: 50 mA
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Dimensions (mm) W x H x D:
53.5 x 89 x 60



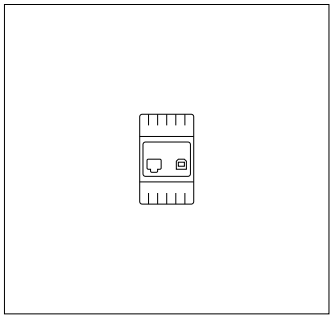
TR 602-01
Transformer in switch panel housing, to supply supplementary components.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 170 mA
Output voltage: 12 V AC
Output current: max. 2.5 A
Fusing: primary Si1 T 200 mA L, secondary side with thermal fuse
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60



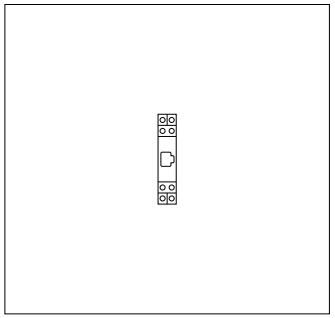
TR 603-0
Transformer in switch panel housing for supplying system and additional components.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 100 mA
Output voltage: 12 V AC
Output current: max. 1.3 A
Fusing: primary thermal fuse, secondary short circuit proof
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 3
Dimensions (mm) W x H x D:
53.5 x 89 x 60



ANG 600-0
Access line rectifier in switch panel housing with 230 V AC switching contact.
Operating voltage:
100–240 V AC, +/-10 %, 50/60 Hz
Operating current: 0.5–1 A
Output voltage: 48 V DC
Output current: 800 mA
Fusing: primary thermal fuse, secondary short circuit proof
Contact type: changeover switch max. 250 V AC, 6 A
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60



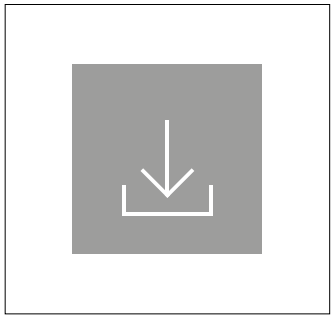
PRI 602-01 USB
The programming interface PRI 602-… USB in a switch panel housing connects a Windows PC via the USB port to the Siedle In-Home bus and the Siedle Vario bus.
Connection to the line rectifiers BNG 650-… and BVNG 650-… via ZBVG 650-…
Interface to the Siedle In-Home bus via 8-pin Western socket or via screw terminals.
Only one PRI 602-… USB can be connected to a PC.



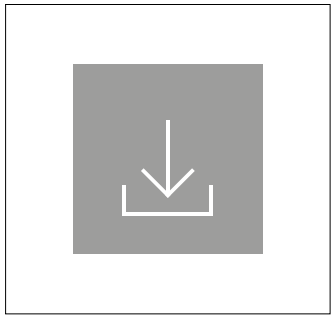
ZWA 640-0
Western socket accessory for switch panel mounting.
Integrated socket for 4/6/8-pin western plug.

Vario bus

Programming – with PC



BPS 650-0
Bus programming software for programming In-Home bus systems. For this, the programming interface PRI 602-… USB is also required.



PRS 602-02
Programming software suitable for programming the Vario bus components.
System requirements:
Windows PC, operating system Microsoft® Windows 8/10

Space requirement in the distributor

Models	Unit width
BIM 650-…	3
ANG 600-…	6
TR 603-…	3
TR 602-…	6
PRI 602-… USB	3
ZWA 640-…	1

General
Programming can be performed manually or with PC. Manual programming is described in the Siedle In-Home bus system manual, which is supplied with the BNG/ BVNG 650-… bus line rectifiers. The PRI 602-… USB programming interface with BPS 650-… software (latest version) is required for programming with a PC.
The PRS 602-… programming software (latest version) is also required for a DRM 612-… Detailed information regarding programming with a PC can be found in the online help for the software in question.

Important remarks prior to programming
• The entire installation must have been completed.
• All supply units must be connected to mains voltage 230 V AC.
• If several input modules of the same type (e.g. several COM 611-…) are used on a Vario bus line, a different address must be set on each of the input/read modules. Addresses "0" and "9" are not permitted!
• Different input/read units which are combined on a door station (e.g. COM… and ELM…) each receive the same address.
• An ST 10-… or an SKI 700-… cannot be combined with a COM 611-… or DRM 612-… on a door.
• All system components must be ready for operation.

Programming – with PC
For programming using a PC, the PC is connected to the Vario bus via the PRI 602-… USB programming interface.
The call numbers for digital calls are configured via the BPS 602-… bus programming software.
For the DRM 612-…, the call numbers and names are assigned using the PRS 602-… programming software, for the ST 10-…, they are assigned via a web interface.

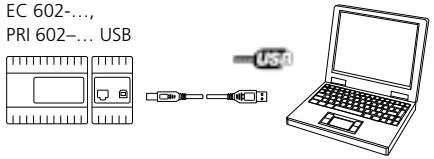
Connection via programming interface PRI 602-… USB

The PRI 602-… USB is connected to the PC using the USB connecting cable, which is supplied with the PRI 602-… USB. The PRI 602-… USB can either be permanently installed in a system or plugged in using an 8-pin Western socket (mobile operation).

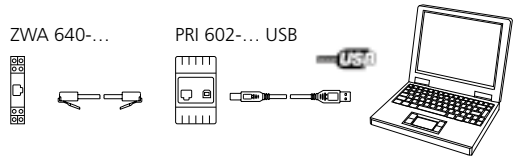
Note!

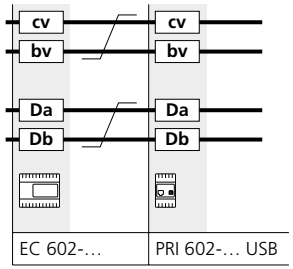
The PRI 602-… USB may be connected either solely using the cables and sockets or using the terminals on the Siedle Vario bus.
There is a risk of short circuit if connected simultaneously via terminals and sockets – if the cores are mixed-up.

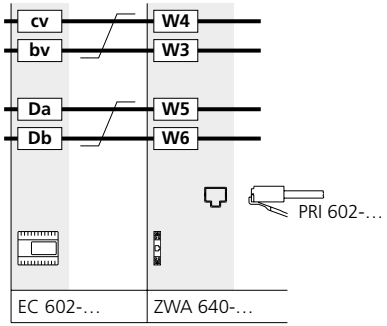
Connection via programming interface PRI 602-… USB
Permanent installation

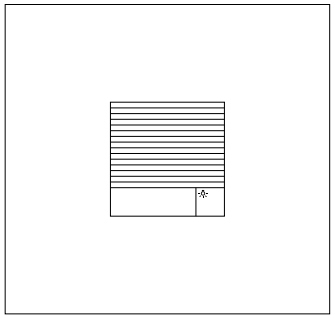


Connection via programming interface PRI 602-… USB
Mobile operation

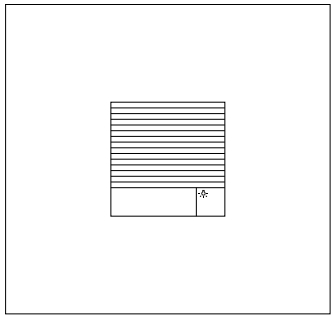




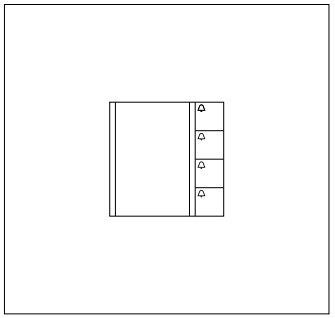




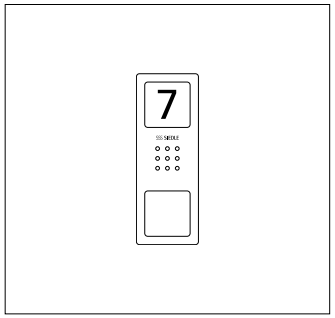
BTLM 650-04
Bus door loudspeaker module for Siedle Vario with integrated loudspeaker and microphone.
Performance features:
• Front grille made of weather and UV-resistant polycarbonate
• Loudspeaker, voice volume can be adjusted
• Durable electret microphone
• Light button with LED-lit light symbol
• Work contact for door release, can be controlled without additional wiring via existing bus line
• Integrated camera actuation
• Connection of a COM 611-… code lock module and/or DRM 612-… display call module for digital call input
• Acoustic feedback when pressing a call button can be activated
Up to max. 40 call button modules can be connected in any combination, allowing up to max. 160 call buttons to be connected. 1 BTLM 650-04 corresponds to 2 system users.



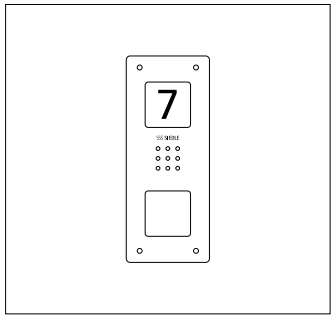
BTLM 651-0
Bus door loudspeaker module Plus for Siedle Vario with integrated loudspeaker and microphone, as well as additional audio amplifier, noise filter and control electronics for the status display.
Performance features:
• Front grille made of weather and UV-resistant polycarbonate
• Loudspeaker, voice volume can be adjusted
• Voice volume can be doubled via the audio amplifier (with additional supply)
• Durable electret microphone
• Light button with LED-lit light symbol
• Potential-free work contact for door release, can be controlled without additional wiring via existing bus line
• Integrated camera actuation
• Connection of a ZAM 600-… status display module for optical and acoustic signalling of the operating state is possible
• Connection of a COM 611-… code lock module and/or DRM 612-… display call module for digital call input is possible
• Acoustic feedback when pressing a call button can be activated
Up to max. 40 call button modules can be connected in any optional combination, allowing up to max. 160 call buttons.
1 BTLM 651-0 corresponds to 2 system users.



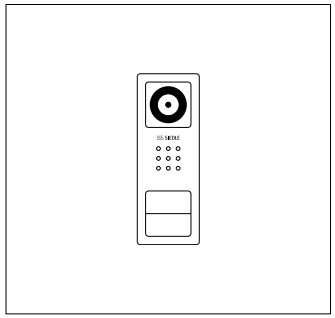
BTM 650-01 to -04
Bus call button modules for In-Home bus 1–4 call buttons, integrated LED lighting. Connection by means of ribbon cable to the bus door loudspeaker. Supply to the LED lighting via terminal b and c with 12 V AC, current consumption 20 mA per bus call button module BTM 650-…



CA 850-1 E to -4 E
Siedle Compact audio door station, for installation in the In-Home bus or as a replacement device in the Siedle Basic audio set. With the functions calling, speech and door release.
Performance features:
• Integrated door loudspeaker
• Adjustable voice volume
• Number of integrated call buttons: 1, 2, 4
• Acoustic button acknowledgement can be activated
• Backlit nameplates exchangeable from the front
• Backlit info sign for house number, logos, opening times, etc.
• for surface mounting with brushed stainless steel panel

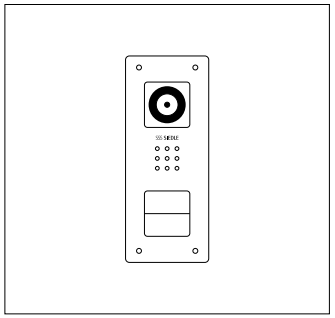


CAU 850-1-0 E to -4 E
Siedle Compact audio door station flush mounting, for installation in the In-Home bus. With the functions calling, speech and door release.
Performance features:
• Integrated door loudspeaker
• Adjustable voice volume
• Number of integrated call buttons: 1, 2, 4
• Acoustic button acknowledgement can be activated
• Backlit nameplates exchangeable from the front
• Backlit info sign for house number, logos, opening times, etc.
• For flush mounting with brushed stainless steel panel



BCV 850-1-01 E /
BCV 850-2-01 E
Siedle Compact video door station in bus technology, for installation in the In-Home bus. With the functions calling, speech, vision and door release.
Performance features:
• Integrated camera with automatic day/night switchover, LED lighting and 2-stage heating
• Integrated door loudspeaker
• Adjustable voice volume
• Number of integrated call buttons: 1, 2
• Acoustic button acknowledgement can be activated
• Backlit nameplates exchangeable from the front
• for surface mounting with brushed stainless steel panel

Colour system: PAL
Image pick-up: CMOS sensor 1/3" 756 x 504 Pixel
Resolution: 550 TV lines
Lens: 3,7 mm
Pick-up angle: horizontal appr. 65°, vertical appr. 50°
Mechanical adjustment range: 30° horizontal/vertical
2-step heating: 12 V AC, max. 110 mA
Operating voltage: via In-Home bus

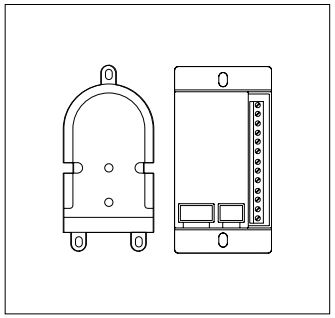


BCVU 850-1-0 E /
BCVU 850-2-0 E
Siedle Compact video door station flush mounting in bus technology, for installation in the In-Home bus. With the functions calling, speech, vision and door release.
Performance features:
• Integrated camera with automatic day/night switchover, LED lighting and 2-stage heating
• Integrated door loudspeaker
• Adjustable voice volume
• Number of integrated call buttons: 1, 2
• Acoustic button acknowledgement can be activated
• Backlit nameplates exchangeable from the front
• For flush mounting with brushed stainless steel panel

Colour system: PAL
Image pick-up: CMOS sensor 1/3" 756 x 504 Pixel
Resolution: 550 TV lines
Lens: 3,7 mm
Pick-up angle: horizontal appr. 65°, vertical appr. 50°
Mechanical adjustment range: 30° horizontal/vertical
2-step heating: 12 V AC, max. 110 mA
Operating voltage: via In-Home bus

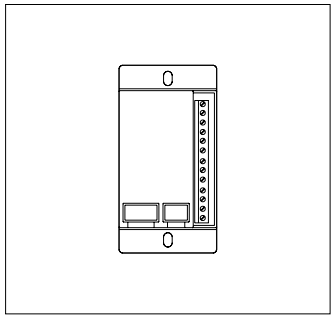
Device description

Bus custom-fit door loudspeaker



BTLE 051-04

Bus custom-fit door loudspeaker with bus call button matrix for installation in the customer's intercom compartments, door constructions, letterboxes, etc.
Up to 12 of the customer's call buttons can be directly connected to the BRMA 050-… bus call button matrix.
Performance features:
• Loudspeaker, voice volume can be adjusted
• Durable electret microphone
• Potential-free work contact for door release, can be controlled without additional wiring via existing bus line
• Integrated camera actuation
• Universal fastening options, when used with the ZJ 051-… grille, it can be screwed onto this directly
1 BTLE 050-… corresponds to 2 system users.

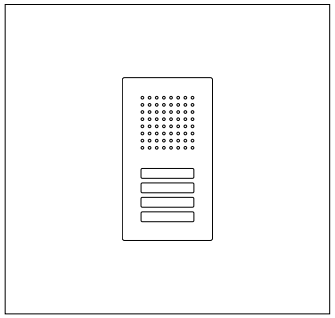


BRMA 050-01

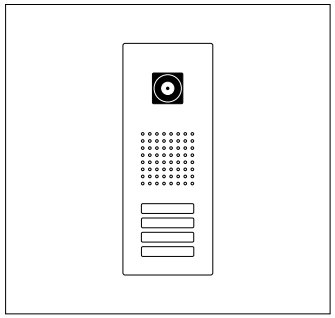
Bus call button matrix for connecting 12 on-site call buttons to the BTLE 050-…/ ATLE 670-… custom-fit door loudspeaker.
Max. 160 call buttons can be connected. However, a bus call button matrix BRMA 050-… is required for each started group of 12 call buttons.
Max. 14 BRMA 050-… can be connected to 1 BTLE 050-…
Max. 16 BRMA 050-… can be connected to 1 ATLE 670-…

Device description

Siedle Classic

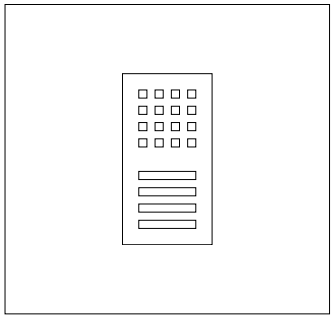


Classic audio
Door station with stainless steel front. Door loudspeaker and illuminated call buttons. Integrated door release contact (TÖ), contact load max. 15 V AC, 30 V DC, 2A, switching time TÖ fixed at 3 seconds. Current consumption for LED lighting of bell buttons, per button 5 mA, 12 V AC.
Acoustic feedback when the call button is pressed.

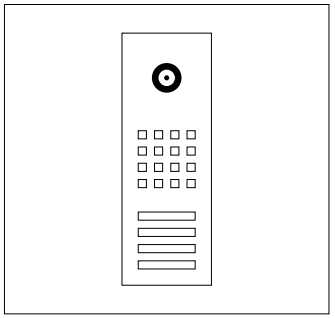


Classic video
Door station in the Classic design line, with stainless steel front, door loudspeaker, call buttons and Bus camera. LED-illuminated bell buttons, 5 mA, 12 V AC each per button.
Acoustic feedback when the call button is pressed.

Siedle Steel

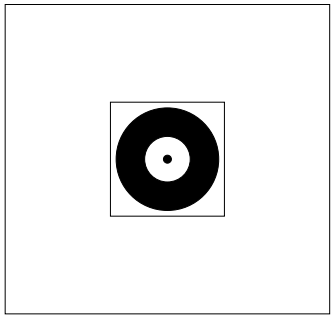


Steel Audio
Door station with stainless steel front, door loudspeaker and call buttons. Integrated door release contact (TÖ), contact load max. 15 V AC, 30 V DC, 2 A, switching time TÖ fixed at 3 seconds. Current consumption for LED lighting of bell buttons, per button 3 mA, 12 V AC.
Acoustic feedback when the call button is pressed.

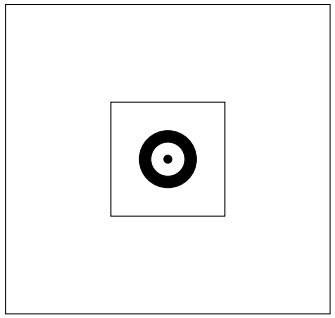


Steel Video
Door station in the Steel design line, with stainless steel front, door loudspeaker, call buttons and Bus camera. LED-illuminated bell buttons, 3 mA, 12 V AC each per button.
Acoustic feedback when the call button is pressed.

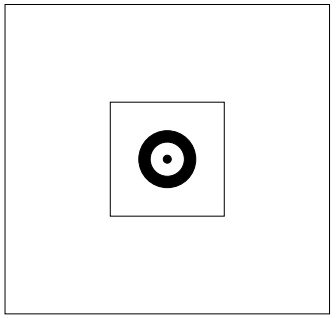
External cameras



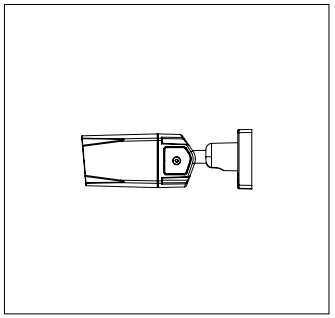
BCMC 650-03
Bus camera 80 for Siedle Vario with automatic day/night switchover (True Day/Night) and integrated infrared lighting. Horizontal/vertical pick-up angle: appr. 80°/60°
Colour system: PAL
Image pick-up:
CMOS sensor 1/3"
756 x 504 Pixel
Resolution: 550 TV lines
Lens: 2.9 mm
Mechanical adjustment range: 30° horizontal/vertical
2-step heating: 12 V AC
max. 130 mA
Protection system: IP 54, IK 10
Ambient temperature:
–20 °C to +55 °C
Height of structure (mm): 32
Dimensions (mm) W x H x D:
99 x 99 x 58



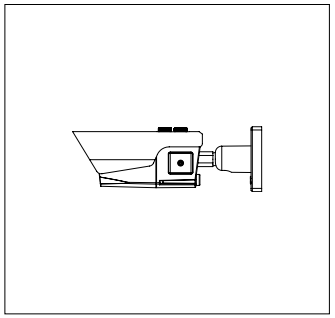
BCM 653-02
Bus camera 130 for Siedle Vario with automatic day/night switchover (True Day/Night) and integrated infrared lighting. Horizontal/vertical pick-up angle: appr. 130°/100°
Colour system: PAL
Image pick-up:
CMOS sensor 1/3"
756 x 504 Pixel
Resolution: 550 TV lines
Lens: 2.1 mm
2-step heating: 12 V AC
max. 130 mA
Protection system: IP 54, IK 10
Ambient temperature:
–20 °C to +55 °C
Height of structure (mm): 15
Dimensions (mm) W x H x D:
99 x 99 x 41



BCM 658-02
Bus camera 180 for Siedle Vario with automatic day/night switchover (True Day/Night) and integrated infrared lighting. Horizontal/vertical pick-up angle: appr. 175°/120°
Full screen or 9 picture excerpts can be selected
Electronic image rectification in full screen
Extended pick-up angle in edge area for selected picture excerpt
Backlight compensation (BLC)
Colour system: PAL
Image pick-up: CMOS sensor 1/2.7" 1920 x 1080 pixels
Resolution: 600 TV lines
Lens: 1.55 mm
2-step heating: 12 V AC
max. 130 mA
Protection system: IP 54, IK 10
Ambient temperature:
–20 °C to +55 °C
Height of structure (mm): 15
Dimensions (mm) W x H x D:
99 x 99 x 41



CE 600-01
Colour CCD video camera external mounting with automatic day/night switchover (True Day/Night) and integrated infrared lighting. Horizontal pick-up angle: appr. 81.2°–22.5°
Colour system: PAL
Image pick-up:
CCD sensor 1/3"
976 x 582 Pixel
Resolution: 750 TV lines
Lens: 2.8–12 mm
Mechanical adjustment range: 160° horizontal/180° vertical
Continuous operation: suitable
Video output: 1 Vss at 75 Ohm
Operating voltage: 20–50 V DC
Operating current:
max. 250 mA
Protection system: IP 67
Ambient temperature:
–20 °C to +50 °C
Dimensions (mm) W x H x D:
75.3 x 76 x 218.5



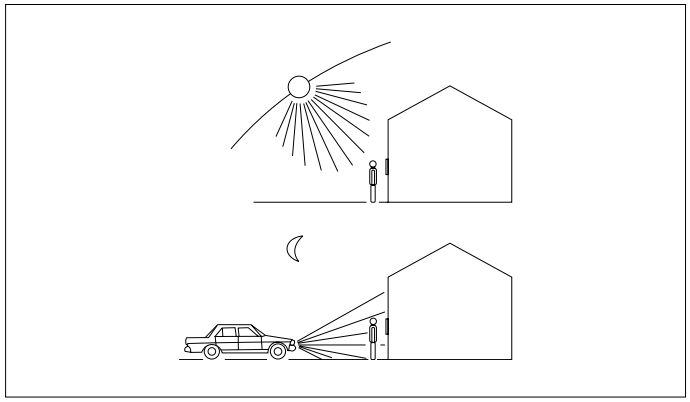
CE 950-01
Colour CCD video camera external mounting with automatic day/night switchover (True Day/Night) and integrated infrared lighting. Horizontal pick-up angle: ca. 45.6°–4.0°
Colour system: PAL
Image pick-up:
CCD sensor 1/4"
976 x 582 Pixel
Resolution: 700 TV lines
Lens: 3.8–45.6 mm
Mechanical adjustment range: 180° horizontal/vertical
Continuous operation: suitable
Video output: 1 Vss at 75 Ohm
Operating voltage: 20–50 V DC
Operating current:
max. 500 mA
Protection system: IP 67
Ambient temperature:
–20 °C to +50 °C
Dimensions (mm) W x H x D:
100 x 108 x 267

Location of the video camera

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.



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
- very bright image backgrounds
- highly reflective walls opposite the camera
- lamps or direct light sources

Pick-up range of the camera

If the range of a camera module is not sufficient, external cameras such as the CE 600-… or CE 950-… can be used.

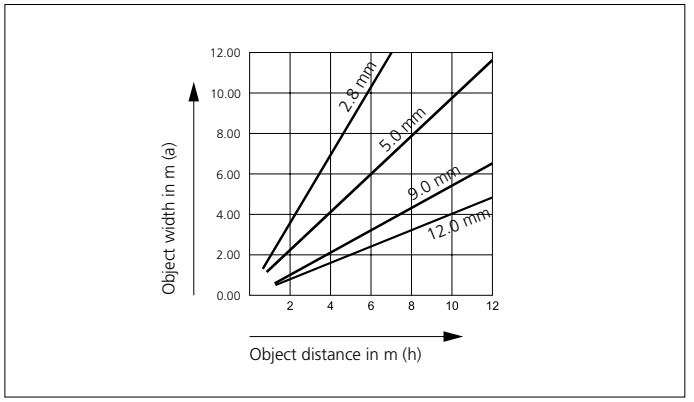


Diagram showing the pick-up range of external camera CE 600-… with image pick-up chip 1/3".

Connection to Siedle In-Home: Video with bus video Modulator BVM 650-…

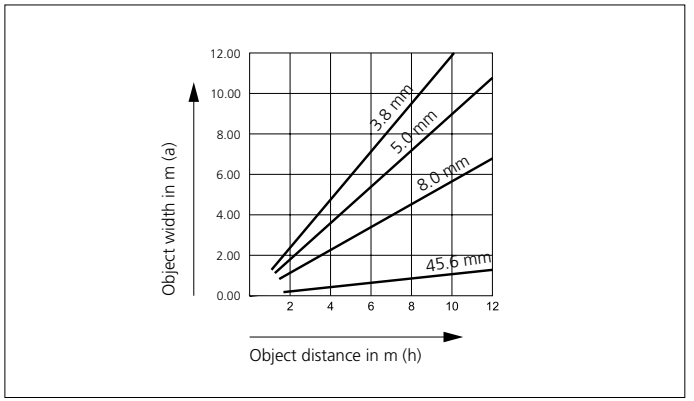


Diagram showing the pick-up range of external camera CE 950-… with image pick-up chip 1/4".

Connection to Siedle In-Home: Video with bus video Modulator BVM 650-…

BCMC 650-03

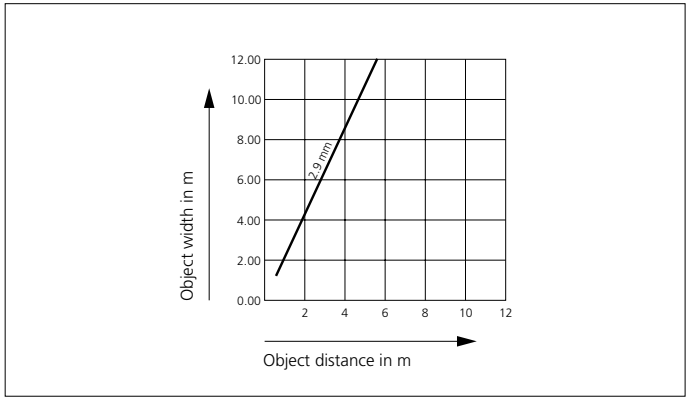
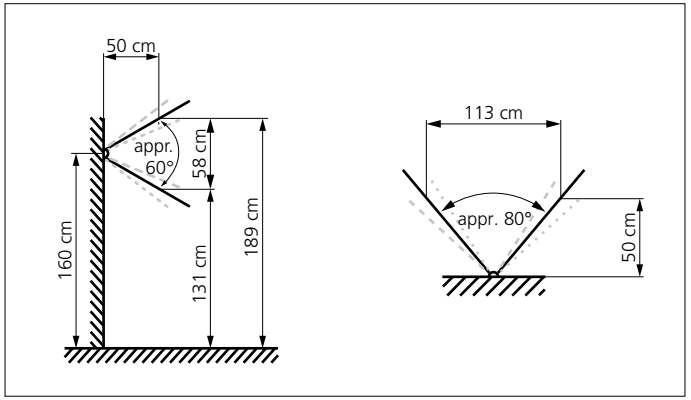
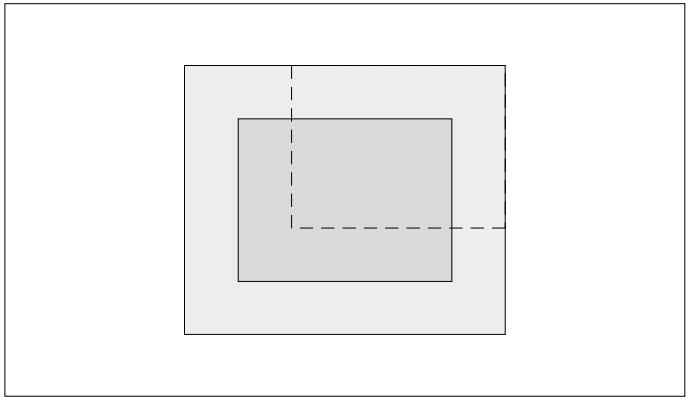


Diagram showing the pick-up range of bus camera BCMC 650-… with image pick-up chip 1/3".



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

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



The picture excerpt visible at the display is mechanically set at the camera BCMC 650-… by max. 30°.

BCM 653-02

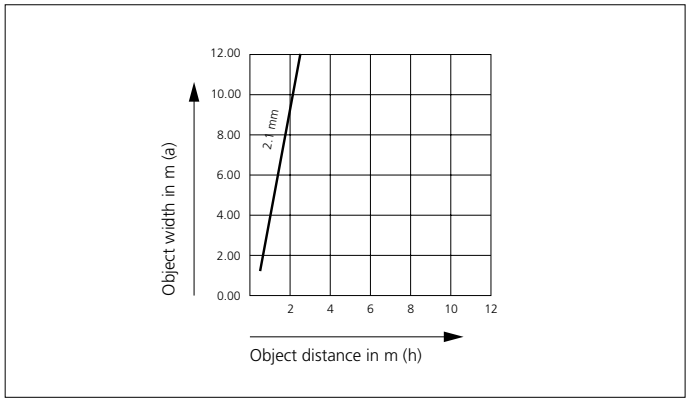
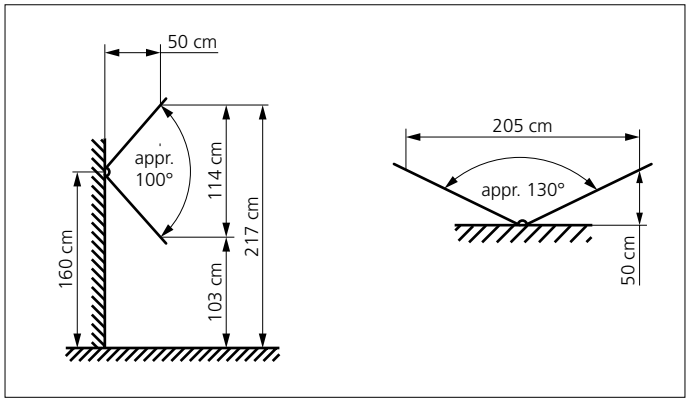
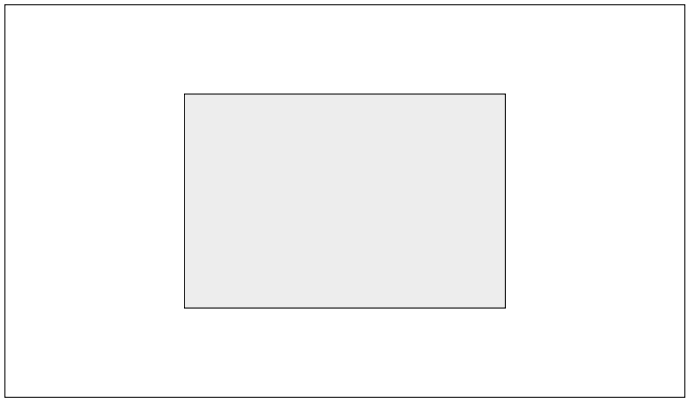


Diagram showing the pick-up range of bus camera BCM 653-… with image pick-up chip 1/3".



Pick-up range of the camera module BCM 653-… vertical

Pick-up range of the camera module BCM 653-… horizontal



The picture excerpt of the camera BCM 653-… cannot be adjusted. No zoom function is possible.

BCM 658-02

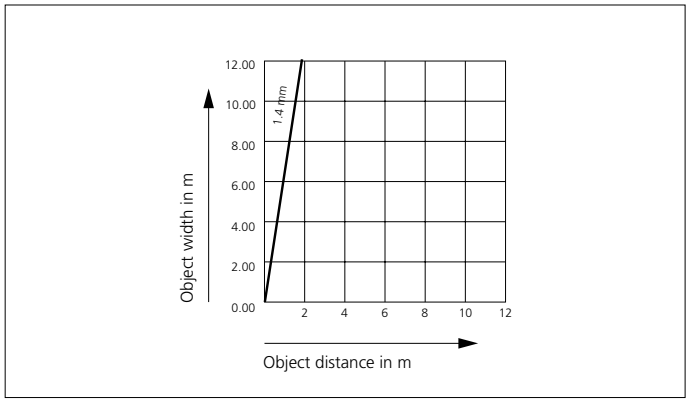
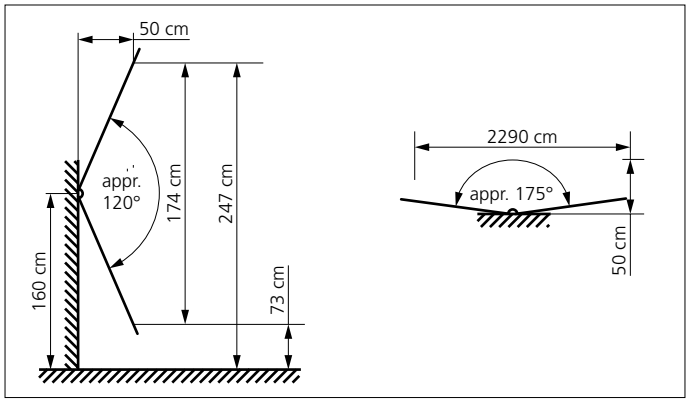
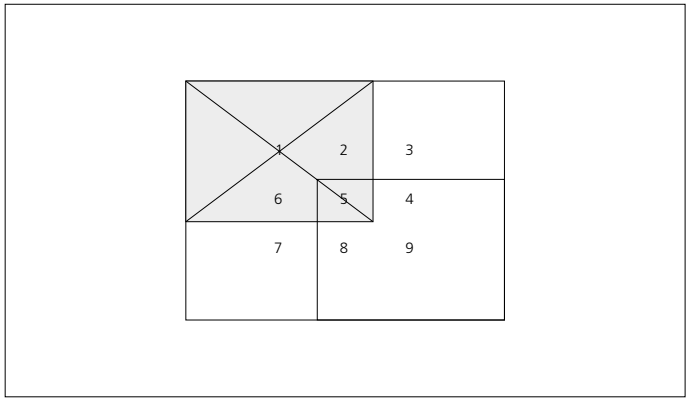


Diagram showing the pick-up range of bus camera BCM 658-… with image pick-up chip 1/3".

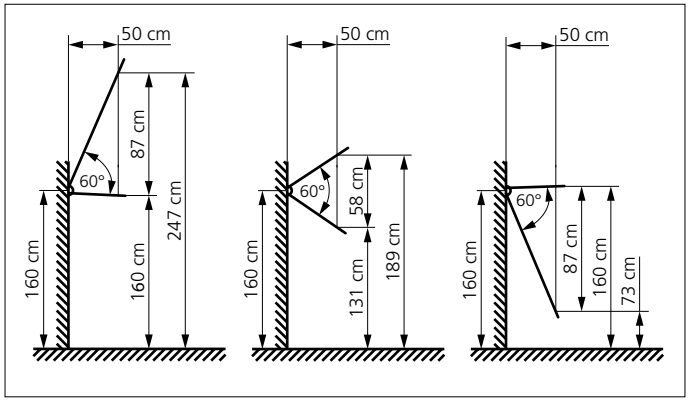


Pick-up range of the camera module BCM 658-… vertical

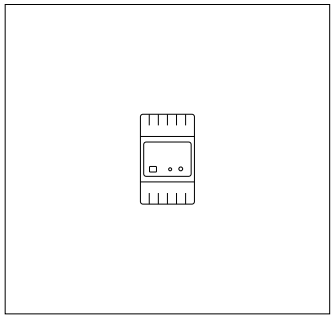
Pick-up range of the camera module BCM 658-… horizontal



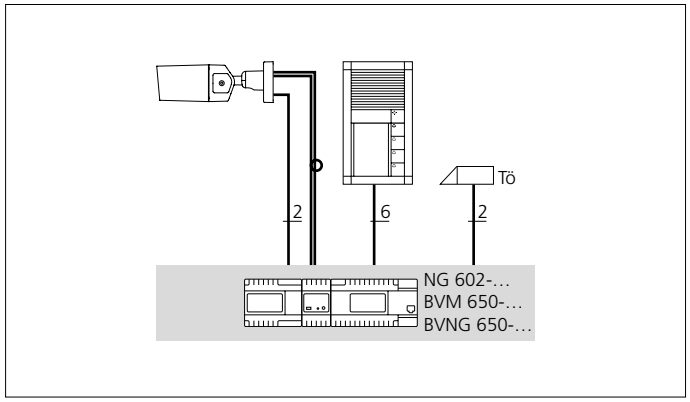
The pick-up angle of camera module BCM 658-… can be adjusted depending on the mounting situation.
Required picture excerpt from the camera view (1 to 9) or full screen (0).



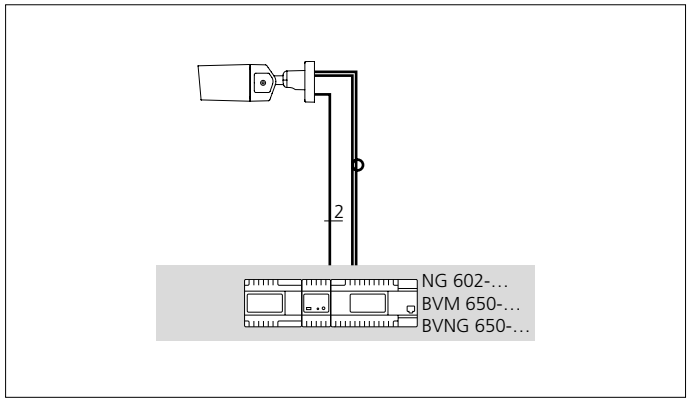
Select the picture excerpt based on the existing mounting situation.
- Picture excerpt (1–3) top camera alignment
- Picture excerpt (4–6) central camera alignment
- Picture excerpt (7–9) bottom camera alignment



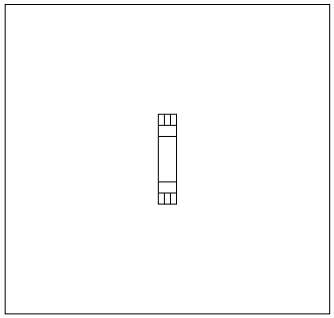
BVM 650-0
The bus video modulator in switch panel housing connects an analogue camera with the In-Home bus.
There are two operating modes to choose from, the analogue camera can be operated with or without a door station.
A distance of up to 100 m between the camera and the BVM 650-… is permitted.
Supply via the In-Home bus.
A potential-free switching contact, e.g. for camera or light actuation, is available.
Contact type: potential-free
max. 30 V AC/DC, 1 A
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 3
Dimensions (mm) W x H x D:
53.5 x 89 x 60



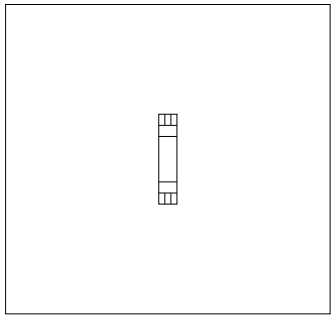
External camera in conjunction with BVM 650-… at the BTLM 650-…



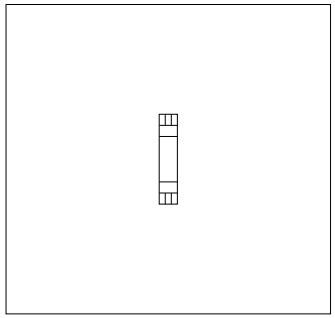
External cameras without assigned door station, actuation takes place via BVM 650-…



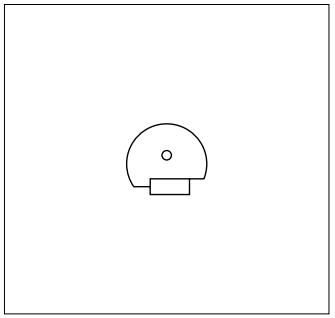
BAVU 652-0
Asymmetrical bus audio/video distributor for top hat rail mounting for connection of pure audio components and for decoupling/coupling the In-Home bus: Video users in one device.



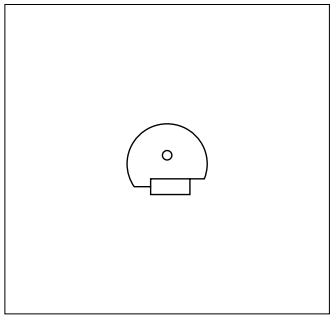
BVVU 652-0
Asymmetrical bus video distributor for top hat rail mounting comprising 2 internally linked distributors for decoupling/coupling the In-Home bus: Video users.



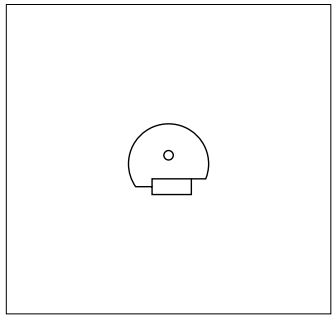
BVVS 652-0
Symmetrical bus video distributor for top hat rail mounting comprising 2 completely separate distributors with 2 outputs each for creation of a tree structure or in the case of several risers.



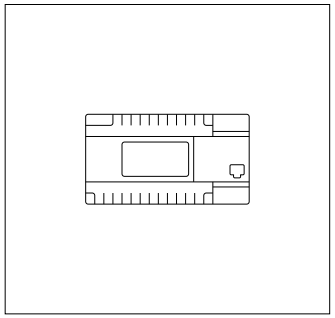
BAA 650-0
Bus audio decoupler, suitable for mounting 55 junction box, for connection of pure audio components to the In-Home Video bus, e.g. BTS, AIB, BTC, BFC, BTLM/BTLE without video, BNS, BSM, BIM etc.



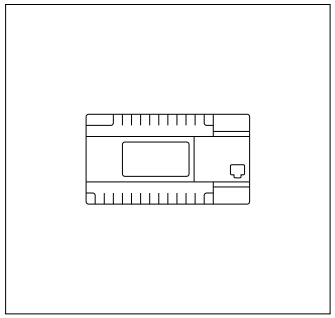
BVVU 650-0
Asymmetrical bus video distributor for coupling/decoupling In-Home: Video users. Screw terminals for bus input, looped bus throughput and bus output.



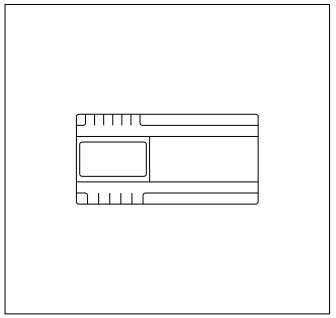
BVVS 650-0
Symmetrical bus video distributor with 2 outputs, suitable for mounting in a 55 junction box, for creation of a tree structure or in the case of several risers.



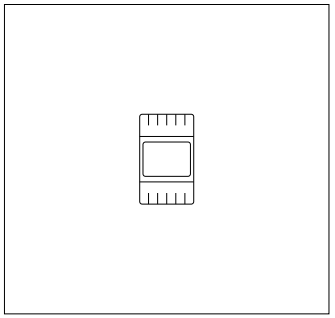
BNG 650-0
Bus line rectifier for Siedle In-Home bus: audio in switch panel housing for power supply to the bus users.
Optional plug-in facility for the bus supply unit accessory ZBVG 650-…
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 200 mA
Output voltage:
27.5 V DC, 12 V AC
Output current:
0.5 A DC, 1 A AC
Fusing: primary fuse
1 T 250 mA L, secondary short circuit proof
Contact type: 2 n.o. contacts
24 V, 2 A
Protection system: IP 30
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 9
Dimensions (mm) W x H x D:
162 x 89 x 60



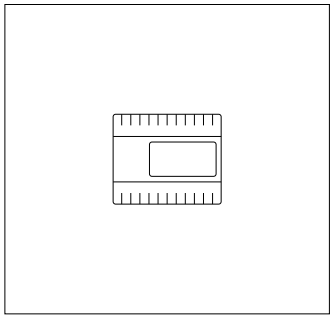
BVNG 650-0
Bus video line rectifier for Siedle In-Home bus: video in switch panel housing for power supply to the bus users.
Optional plug-in facility for the bus supply unit accessory ZBVG 650-… and bus video line rectifier accessory ZBVNG 650-… as a video amplifier.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 300 mA
Output voltage: 29 V DC stabilized +/-5 %
Output current: 1.2 A
Fusing: primary thermal fuse, secondary short circuit proof
Contact type: 2 n.o. contacts
24 V, 2 A
Protection system: IP 30
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 9
Dimensions (mm) W x H x D:
162 x 89 x 60



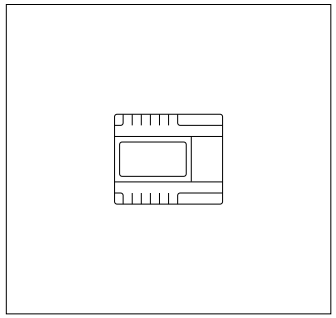
VNG 602-02
Video line rectifier in a switch panel housing for central supply of video door intercom systems.
It can additionally be used as a universal voltage supply.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 250 mA
Output voltage: 30 V DC
Output current: 1.1 A
Fusing: Si 1 T 315 mA, secondary side thermal fuse
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 10
Dimensions (mm) W x H x D:
180 x 89 x 60



TR 603-0
Transformer in switch panel housing for supplying system and additional components.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 100 mA
Output voltage: 12 V AC
Output current: max. 1.3 A
Fusing: primary thermal fuse, secondary short circuit proof
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 3
Dimensions (mm) W x H x D:
53.5 x 89 x 60



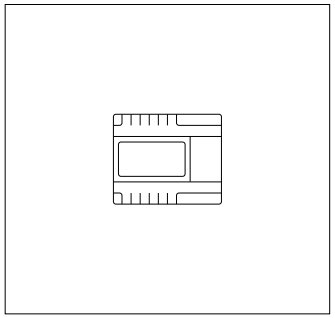
LNG 600-0
Power line rectifier in the switch panel housing for the central supply of LED modules and bus video panels.
One LNG 600-… supplies max. 3 BVPC 850-… devices
Operating voltage:
100–240 V AC, +/-10 %, 50/60 Hz
Operating current:
0.3 A to 0.7 A
Output voltage: 30 V DC
Output current: 1.1 A DC
Ambient temperature:
0 °C to +40 °C
Protection system: IP 20
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60



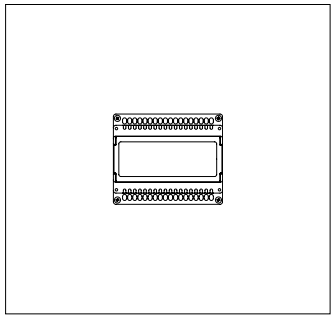
NG 602-01
Line rectifier in switch panel housing for 1+n technology, and for power supply to supplementary components.
Inclusive of function LEDs.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 200 mA
Output voltage:
23.3 V DC, 12 V AC
Output current:
0.3 A DC, 1.6 A AC
Fusing: primary Si1 T 200 mA L, secondary side with thermal fuse
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60

Device description

Power supply



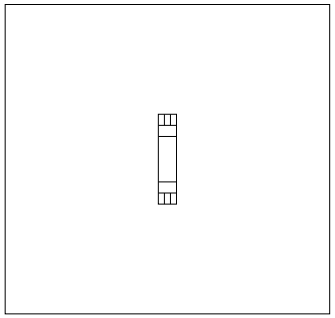
TR 602-01
Transformer in switch panel housing, to supply supplementary components.
Operating voltage:
230 V AC, +/-10 %, 50/60 Hz
Operating current: 170 mA
Output voltage: 12 V AC
Output current: max. 2.5 A
Fusing: primary Si1 T 200 mA L, secondary side with thermal fuse
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60



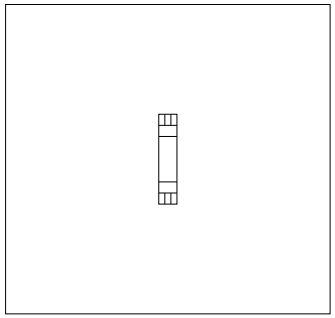
ANG 600-0
Access line rectifier in switch panel housing with 230 V AC switching contact.
Admissible switching output:
• Light bulbs max. 1300 W
• Fluorescent lamps max. 800 W
• Twin fluorescent lamps max. 1200 W
• Parallel compensated fluorescent lamps max. 400 W
Operating voltage:
100–240 V AC, +/-10 %, 50/60 Hz
Operating current: 0.5–1 A
Output voltage: 48 V DC
Output current: 800 mA
Fusing: primary thermal fuse, secondary short circuit proof
Contact type: changeover switch max. 250 V AC, 6 A
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 6
Dimensions (mm) W x H x D:
107 x 89 x 60

Space requirement in the distributor

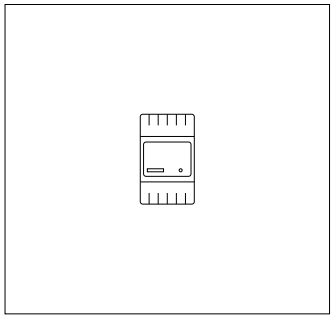
Models	Unit width
BNG 650-…	9
BVNG 650-…	9
VNG 602-…	10
TR 603-…	3
LNG 600-…	6
NG 602-…	6
TR 602-…	6
ANG 600-…	6
DCA 650-…	6
SG 650-…	6
SG 150-…	6
BAVU 652-…	1
BVVU 652-…	1
BVVS 652-…	1
BSM 650-…	3
BSE 651-…	1
BEM 651-…	1
PRI 602-… USB	3
BIM 650-…	3
ZWA 640-…	1
EC 602-…	6
ECE 602-…	3



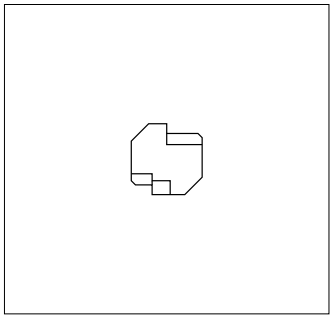
BEM 651-0
Bus input module for the top hat rail. With one input for triggering switching functions or leaving messages on the In-Home bus.
Activation possible via potential-free contact or 4–30 V DC, 10 mA.
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 1
Dimensions (mm) W x H x D:
18 x 90 x 60



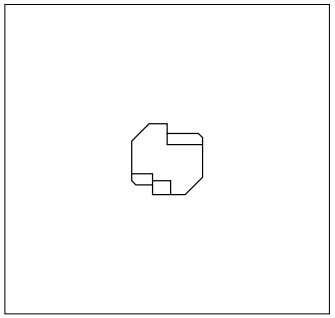
BSE 651-0
Bus switching unit for the top hat rail, with bi-stable relay.
For implementing various switching scenarios.
Actuation possible via BEM bus input module, the function buttons of the bus telephones (incl. door release button) or the light or call button of a door station.
Contact type: Changeover switch max. 30 V DC, 5 A
Switching time: adjustable / switch on and off
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Horizontal pitch (HP): 1
Dimensions (mm) W x H x D:
18 x 90 x 60



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
Protection system: IP 20
Ambient temperature: 0 °C to +40 °C
Horizontal pitch (HP): 3
Dimensions (mm) W x H x D:
53.5 x 89 x 60



BSE 650-02
Bus switching unit with bistable relay, suitable for mounting in a 70 junction box.
For implementing various switching scenarios.
Actuation possible via BEM bus input module, the function buttons of the bus telephones (incl. door release button) or the light or call button of a door station.
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
Contact type: changeover switch max. 250 V AC, 6 A
Switching time: adjustable / switch on and off
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Dimensions (mm) dia. x H:
51 x 23



BEM 650-02
Bus input module for mounting in a 70 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.
Protection system: IP 20
Ambient temperature:
0 °C to +40 °C
Dimensions (mm) dia. x H:
51 x 23

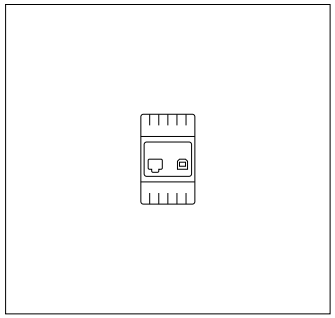
Device description

Information on programming

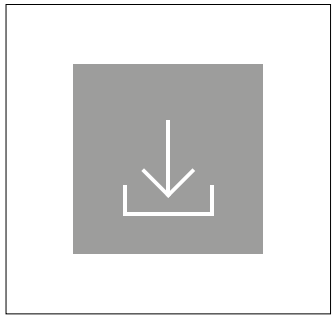
General

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-… (latest version) is required.

Programming – with PC

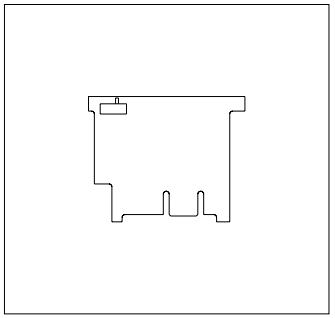


PRI 602-01 USB
The programming interface PRI 602-… USB in a switch panel housing connects a Windows PC via the USB port to the Siedle In-Home bus and the Siedle Vario bus.
Connection to the line rectifiers BNG 650-… and BVNG 650-… via ZBVG 650-…
Interface to the Siedle In-Home bus via 8-pin Western socket or via screw terminals.
Only one PRI 602-… USB can be connected to a PC.

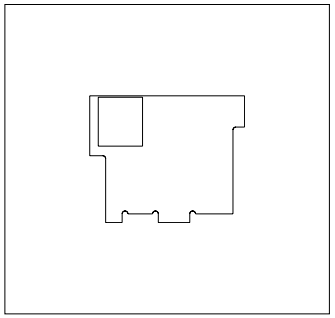


BPS 650-0
Bus programming software for programming In-Home bus systems. For this, the programming interface PRI 602-… USB is also required.

Accessories



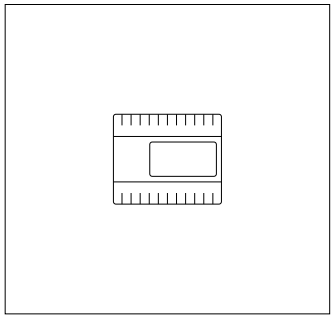
ZBVNG 650-0
Bus video line rectifier accessory as a plug-in card for installation in bus video line rectifier BVNG 650-… Required where attenuation within a line is > 45 dB or for the creation of a multiple-line system with more than one BVNG 650-…
In the case of multiple line systems, the ZBVNG 650-…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



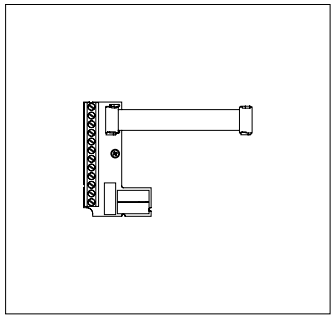
ZBVG 650-0
Bus supply unit accessory as a plug-in card for integration in bus line rectifier BNG 650-… or bus video line rectifier BVNG 650-… with 8-pin Western socket for connection of the programming interface PRI 602-… USB.
Is required in systems with more than one line or for programming the in-home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

Device description

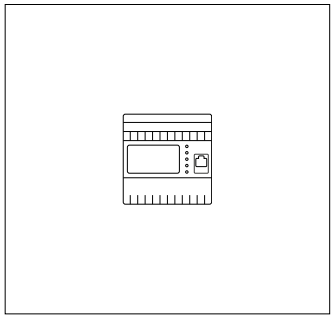
Interface to public network telephony



DCA 650-02
DoorCom Analog, in switch panel housing as an interface for the Siedle In-Home bus, connects the door intercom system to telephone systems via the system's analogue connection.



DCSF 600-0
DoorCom switching and remote control interface, for use in DCA 612-… and DCA 650-…



SG 650-0
Smart Gateway Professional: top hat rail device for private or professional use.

Interface between In-Home bus, IP networks, the internet and mobile phone network: Call, speech and video signals from the door are transmitted to the IP network.

Functions
Interface for local or mobile forwarding of In-Home door communication in IP networks.

Highlights
• Mobile door call using smartphone app via the Siedle server (cloud service)
• Flexible expansion options for In-Home system with IP clients
• Siedle Axiom and JUNG TCM client can be used without user licence

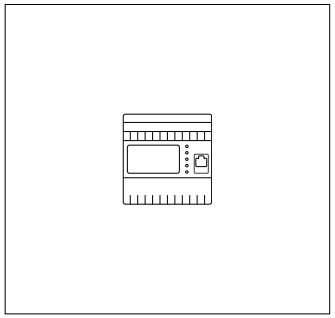
Other performance features
• Support for the Siedle app for iPhone or Android smartphone
• Up to 50 IP users (subject to licence, 2 licences included)
• Group call of up to 6 IP users
• Parallel call to IP and In-Home bus end devices possible
• Direct door dialling from list
• Central video memory with automatic time controlled deletion of images (data protection compliant)
• Local extension of a door intercom system through the 7" Smart Control Panel from Albrecht Jung GmbH & Co. KG (www.jung.de)
• Connection of VoIP telephones (with and without video)
• CTI door call: Audio transmission via the telephone network in parallel with video signal over an IP network possible, ensuring an audio link in optimum TC quality
• Connection of TC systems (up to 3 simultaneous call connections) (subject to licence)

System conditions:
• In-Home bus intercom system
• Each SG 150-… / SG 650-… must be supplied via a separate ANG 600-… / VNG 602-…
• Alternatively, power can also be supplied via PoE according to IEEE 802.3af.
• For using the Siedle app via the Siedle server (cloud service):
• Smart Gateway:
- Latest software version: 2.0.1
- Active internet connection (Upload): The frame rate (number of frames per second) of the transmitted video stream from the Smart Gateway to the Siedle Server depends on the data transmission rate that is available for this connection at the time of the door call. The Smart Gateway dynamically adapts the frame rate to the available bandwidth:
- Minimum bandwidth: 2 MBit/s (approx. 5 frames/second)
- Recommended bandwidth: 4 MBit/s (approx. 10 frames/second)

• Smartphone:
- Operating system: iOS 11.4 / Android 7 or higher
- iOS: The Siedle App is optimized for use on the iPhone and iPad.
- Android: The Siedle App is optimized for use on the smartphone. The Siedle App can be used on tablets but is not optimized for this.
- Stable Wi-Fi or mobile network connection (3G/4G/5G): The frame rate (number of frames per second) of the transmitted video stream from the Siedle Server to the Siedle App depends on the data transmission rate that is available for the mobile network connection at the time of the door call:
- Bandwidth 2 MBit/s: approx. 5 frames/second are shown
- Bandwidth 4 MBit/s: approx. 10 frames/second are shown

The Siedle app is the mobile complement to a door intercom system. To achieve optimum operating and failure safety, Siedle recommends planning for at least one wired system indoor station in addition to the app.
The Siedle app is available from the App Store or Play Store.

Performance features of the Siedle app:
• Audio and video door communication
• Door release function with security prompt
• Handsfree/discreet
• In-call volume adjustment possible
• Microphone muting
• Switching command for central light contact in In-Home bus
• Access to video memory in the Smart Gateway (show, copy or delete images)
• Siedle ringtones
• Direct door dialling from list



SG 150-0
Smart Gateway: top hat rail device for private or professional use.

Interface between In-Home bus and IP networks in housing for mounting on DIN top hat rails: Call, speech and video signals from the In-Home bus are transferred to the IP network.

Highlights
• Mobile door call using smartphone app via the Siedle server (cloud service)
• Flexible expansion options for In-Home system with IP clients
• Siedle Axiom and JUNG TCM client can be used without user licence

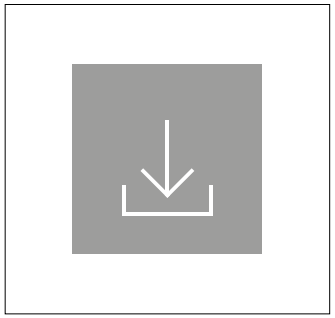
Other performance features
• Support for the Siedle app for iPhone or Android smartphone
• Up to 10 IP users (subject to licence, 5 licences included)
• Group call of up to 6 IP users
• Parallel call to IP and In-Home bus end devices possible
• Direct door dialling from list
• Central video memory with automatic time controlled deletion of images (data protection compliant)
• Local extension of a door intercom system through the 7" Smart Control Panel from Albrecht Jung GmbH & Co. KG (www.jung.de)
• Connection of VoIP telephones (with and without video) (subject to licence)
• CTI door call: Audio transmission via the telephone network in parallel with video signal over an IP network possible, ensuring an audio link in optimum TC quality (subject to licence)
• Connection of TC systems (up to 3 simultaneous call connections) (subject to licence)

With the two licences BLSHT and BLF, the Smart Gateway SG 150-0 gets the functionality of the Smart Gateway Professional SG 650-0. The limitation to 10 IP users remains with the SG 150-0.

System conditions:
• In-Home bus intercom system
• Each SG 150-… / SG 650-… must be supplied via a separate ANG 600-… / VNG 602-…
• Alternatively, power can also be supplied via PoE according to IEEE 802.3af.
• For using the Siedle app via the Siedle server (cloud service):
• Smart Gateway:
- Latest software version: 2.0.1
- Active internet connection (Upload): The frame rate (number of frames per second) of the transmitted video stream from the Smart Gateway to the Siedle Server depends on the data transmission rate that is available for this connection at the time of the door call. The Smart Gateway dynamically adapts the frame rate to the available bandwidth:
- Minimum bandwidth: 2 MBit/s (approx. 5 frames/second)
- Recommended bandwidth: 4 MBit/s (approx. 10 frames/second)
• Smartphone:
- Operating system: iOS 11.4 / Android 7 or higher
- iOS: The Siedle App is optimized for use on the iPhone and iPad.
- Android: The Siedle App is optimized for use on the smartphone. The Siedle App can be used on tablets but is not optimized for this.
- Stable Wi-Fi or mobile network connection (3G/4G/5G): The frame rate (number of frames per second) of the transmitted video stream from the Siedle Server to the Siedle App depends on the data transmission rate that is available for the mobile network connection at the time of the door call:
- Bandwidth 2 MBit/s: approx. 5 frames/second are shown
- Bandwidth 4 MBit/s: approx. 10 frames/second are shown

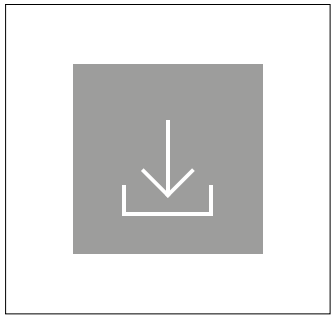
The Siedle app is the mobile complement to a door intercom system. To achieve optimum operating and failure safety, Siedle recommends planning for at least one wired system indoor station in addition to the app.
The Siedle app is available from the App Store or Play Store.

Performance features of the Siedle app:
• Audio and video door communication
• Door release function with security prompt
• Handsfree/discreet
• In-call volume adjustment possible
• Microphone muting
• Switching command for central light contact in In-Home bus
• Access to video memory in the Smart Gateway (show, copy or delete images)
• Siedle ringtones
• Direct door dialling from list



Siedle app for Smart Gateway
The Siedle app is the mobile complement to a door intercom system. To achieve optimum operating and failure safety, Siedle recommends planning for at least one wired system indoor station in addition to the app.
The Siedle app is available from the App Store or Play Store.

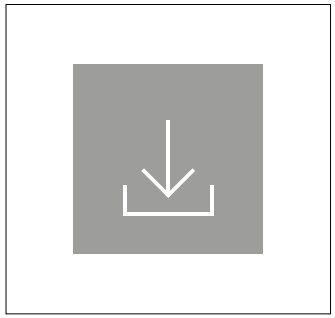
Performance features of the Siedle app:
• Audio and video door communication
• Door release function with security prompt
• Handsfree/discreet
• In-call volume adjustment possible
• Microphone muting
• Switching command for central light contact in In-Home bus
• Access to video memory in the Smart Gateway (show, copy or delete images)
• Siedle ringtones
• Direct door dialling from list



BLC 250-0
Licence for an additional IP user on the Smart Gateway or Smart Gateway Professional.

5 licences included with Smart Gateway (SG 150-…),
2 licences included with Smart Gateway Professional (SG 650-…).

Orders can be placed via the "My Siedle" service portal: www.siedle.com/mysiedle



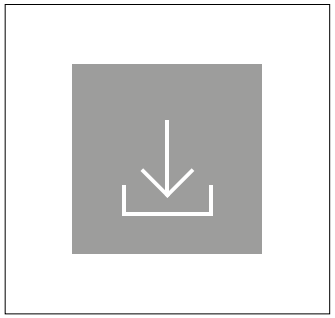
BLT 250-0
Application licence for enabling an external connecting channel for VoIP telephony between an VoIP telephone system (SIP client/SIP trunk) and the Smart Gateway. One application licence BLT 250-0 can be imported per Smart Gateway.
A free BLC 250-… user licence is required for each TC PBX extension that is to be accessible via the Smart Gateway (Professional).

The following conditions apply to the use of an application licence BLT 250-0:
• Ready-to-use Smart Gateway SG 150-… with firmware from V 2.0
• Application licence BLF 250-0 third-party device bus licence for connecting VoIP telephones
• Pre-configured, ready-to-use VoIP telephony connection (SIP client/SIP trunk)

or
• Ready-to-use Smart Gateway Professional SG 650-… with firmware from V 1.3.0
• Pre-configured, ready-to-use VoIP telephony connection (SIP client/SIP trunk)

Third-party devices are subject to authorization by Siedle.

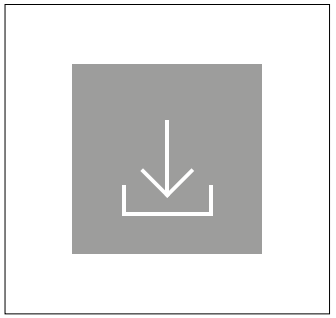
Orders can be placed via the "My Siedle" service portal: www.siedle.com/mysiedle



BSHT 650-0
The virtual in-house telephone assumes the function of a video indoor station as the client software on a Windows PC or a Windows-based operating panel.
Performance features:
• Control directly at the monitor by mouse click or fingertip pressure
• Two view modes: Window and widget view
• Audio and video door communication
• Camera surveillance
• Video memory
• Direct door dialling from list
• Receiving group calls
• Switching and control functions (e.g. for door opening and light switching)
• Available for the Smart Gateway range
• Subject to licence
• CTI door call: Audio transmission via the telephone network in parallel with the video signal possible over Ethernet, ensuring an audio link in optimum TC quality

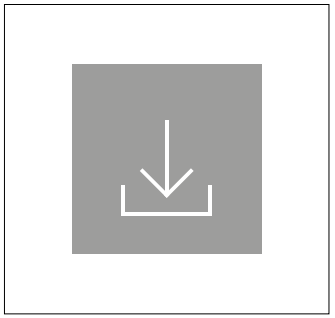
The following conditions apply to the use of a BSHT 650-0 virtual in-house telephone:
• Ready-to-use Smart Gateway SG 150-… with firmware from V 2.0
• Application licence BLSHT 250-0 in-house telephone software bus licence for enabling the virtual in-house telephone
• Free user licence (BLC 250-0 bus licence client) for one IP user

or
• Ready-to-use Smart Gateway Professional SG 650-… with firmware from V 1.3.0
• Free user licence (BLC 250-0 bus licence client) for one IP user



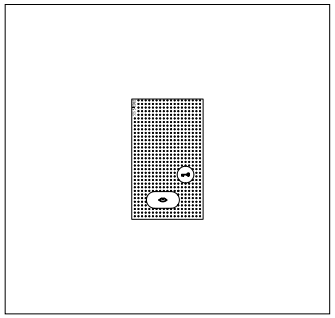
BLF 250-0
Application licence for enabling VoIP telephones on the SG 150-… Smart Gateway. One BLF 250-… application licence can be imported per Smart Gateway. One free BLC 250-0 user licence is additionally required for the integration of a VoIP telephone.

The following conditions apply to the use of an application licence BLF 250-0:
• Ready-to-use Smart Gateway SG 150-… with firmware from V 2.0
• Free user licence (BLC 250-0 bus licence client) for one IP user

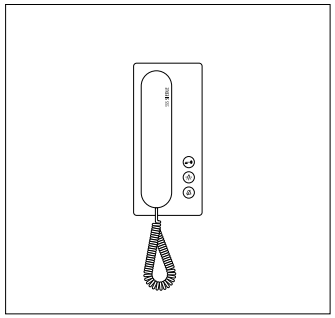


BLSHT 250-0
Application licence for enabling the BSHT 650-… virtual in-house telephone on a SG 150-… Smart Gateway. One BLSHT 250-… application licence can be imported per Smart Gateway. One free BLC 250-0 user licence is additionally required for the integration of the virtual in-house telephone. The BSHT 650-… software is available to download free of charge for your laptop/PC in Siedle's download area.

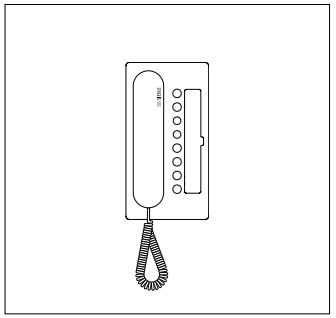
The following conditions apply to the use of an application licence BLSHT 250-0:
• Ready-to-use Smart Gateway SG 150-… with firmware from V 2.0
• Free user licence (BLC 250-0 bus licence client) for one IP user



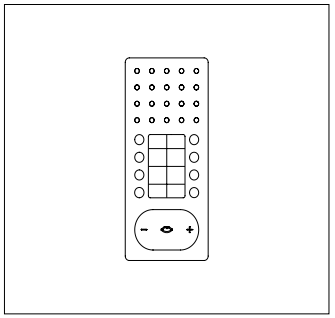
AIB 150-01
Audio indoor station Siedle Basic: Handsfree station for surface mounting.
Entry-level device with all essential functions in the accustomed standard of Siedle quality. Minimized ergonomically optimized design with simple operation, clear symbolism and excellent acoustics.



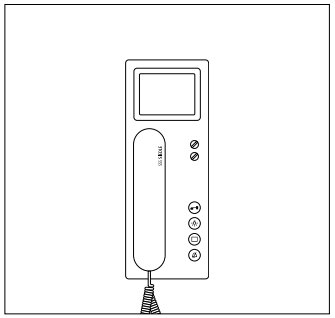
BTS 850-02
Standard bus telephone. Connection at bus cores Ta and Tb.
Functions:
• Calling, speech, door release and storey call
• Door release and light button
• Internal speech communication
• 11 ringtones
• Call and voice volume adjustable in 5 steps
• Muting button for ringtone
• Double assignment of the light button and silencing button possible.
• Integration of ZAR 850-… accessory possible



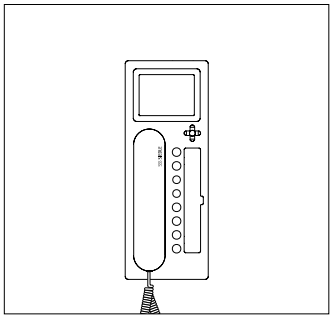
BTC 850-02
Deluxe bus telephone. Connection at bus cores Ta and Tb.
Functions:
• Calling, speech, door release and storey call
• Door release and light button
• Internal speech communication
• 11 ringtones
• Call and speech volume can be changed in 5 steps
• Silencing button for the ringtone
• 7 keys for switching and control functions with double assignment facility
• 7 LEDs under the buttons for display of switching statuses
• Integration of ZAR/ ZPS 850-… accessory possible



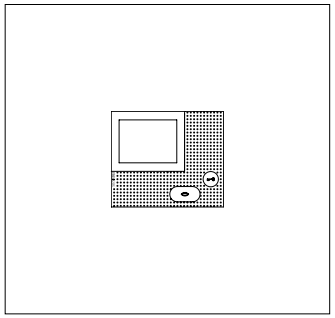
BFC 850-0
Deluxe handsfree bus telephone intercom. Connection at bus cores Ta and Tb.
Functions:
• Calling, handsfree/simplex communication, door release and storey calls
• Speech/control button
• Door release and light button
• Internal speech communication
• 11 ringtones
• Call and speech volume can be modified in 5 stages
• Muting button for the ringtone
• 7 keys for switching and control functions with double assignment facility
• Additional intercomfunctions possible
• Integration of ZARF/ ZPSF 850-… accessory possible



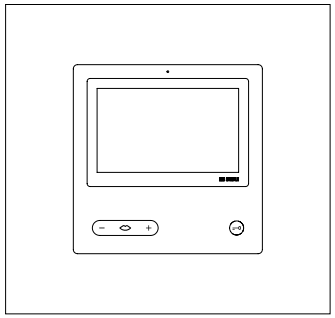
BTSV 850-03
Standard bus telephone with 8.8 cm colour monitor for the Siedle In-Home bus.
Functions:
• Calling, speech, vision, door release and storey call
• Colour monitor 8.8 cm
• Door opener and light button
• Mute button for call tone
• 11 call tone melodies
• Monitor button for current picture
• Brightness and colour regulation



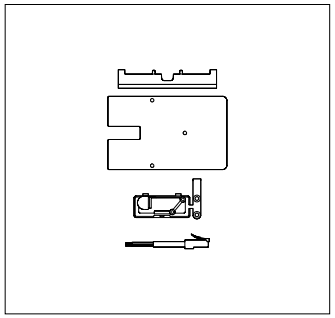
BTCV 850-03
Comfort bus telephone with colour monitor 8.8 cm for door and internal telephony.
Functions:
• Calling, speech, vision, door release and storey calls
• Colour monitor 8.8 cm
• Integrated video memory for 28 pictures, upgradable with SD card
• Door release and light button
• Keys for switching and control functions
• Internal speech communication
• display of switching statuses
• Silencing button for the ringtone
• 11 ringtones
• 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)



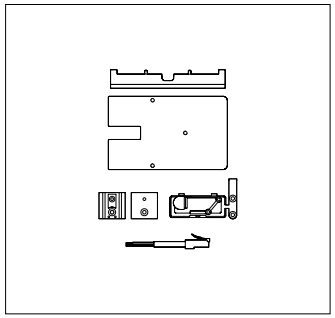
VIB 150-0
Video indoor station Siedle Basic: Video handsfree station for surface mounting.
Entry-level device with all essential functions in the accustomed standard of Siedle quality. Minimized ergonomically optimized design with simple operation and clear symbolism, excellent acoustics and image reproduction.



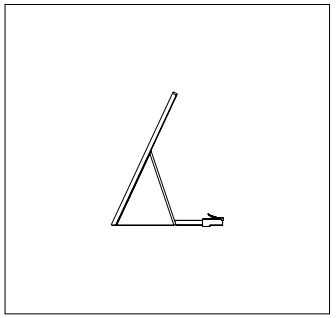
BVPC 850-0
Deluxe bus video panel with touchscreen 17.8 cm for the Siedle In-Home bus.
Functions:
• Calling, speech, vision, door release, light, storey call/switching/control functions, signal displays and internal communication
• Integrated video memory, capacity for over 2000 images with the supplied SD card (4 GB)
• 15 switching/control functions in conjunction with the bus switching module BSM/ BSE 650-…
• 15 signal displays
• Optimized depiction of switching/control functions and messages
• Voice volume adjustable in 5 stages
• 11 different electronic call tones to chose from
• Optical call display by flashing of the speech button
• Selective dialling of max. 15 door loudspeakers/ cameras
• Call silencing and status display
• Call volume adjustable in 5 stages up to max. 83 dB(A)
• Door release/light function at any time using bus cores
• Door/video connection possible at any time
• Feedback for switching/control functions and messages in conjunction with bus input module BEM 650-…
• Internal telephony with max. 15 indoor stations
• Call forwarding
• Collective announcement
• Automatic call pick-up of internal calls



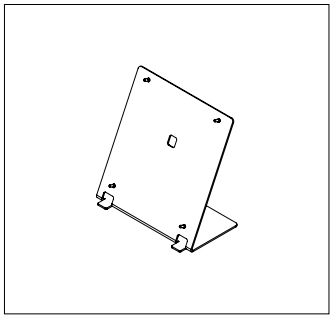
ZTS 800-01
Table-top accessory for telephones BTS/BFC 850-… and HTS 811-… for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without UAE 8(8) junction box.



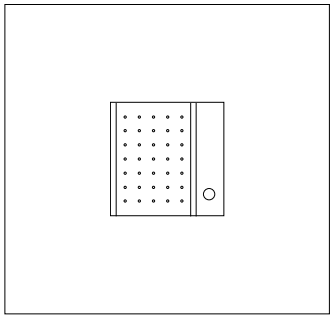
ZTC 800-0
Table-top accessory for the telephone BTC 850-… and HTC 811-… for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without UAE 8/8(8) junction box.



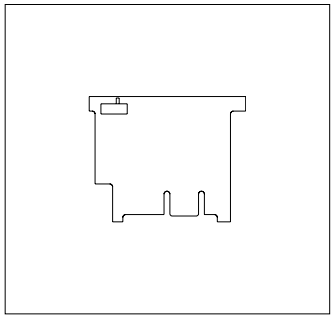
ZTCV 850-0
Table-top accessory for bus telephones with colour monitor BTCV 850-… as well as BTSV 850-03 for conversion from a wall to a table-top unit. Slip-proof console with 2 rubber feet but without telecom socket UAE 8(8).



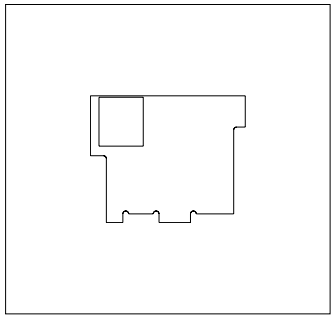
ZTVP 850-0
Table-top accessory for the BVPC 850-… bus video panel for conversion from a wall to a table-top device. Slip-proof table foot, connecting cable with RJ45 plug, but without telecom socket UAE 8(8).



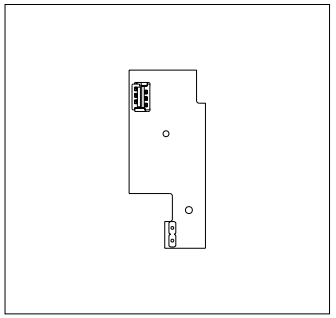
BNS 750-02
Bus secondary signal unit in a low-profile surface-mounted design with loudspeakers, externally adjustable volume control and electronic call generator, programmable in parallel with a bus indoor device. Connection to the In-Home: Video only via BAA 650-…



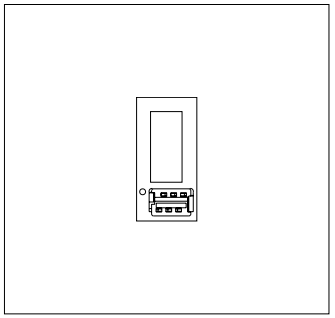
ZBVNG 650-0
Bus video line rectifier accessory as a plug-in card for installation in bus video line rectifier BVNG 650-… Required where attenuation within a line is > 45 dB or for the creation of a multiple-line system with more than one BVNG 650-…
In the case of multiple line systems, the ZBVNG 650-…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



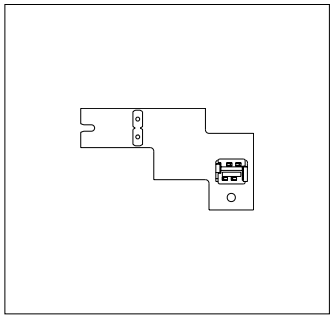
ZBVG 650-0
Bus supply unit accessory as a plug-in card for integration in bus line rectifier BNG 650-… or bus video line rectifier BVNG 650-… with 8-pin Western socket for connection of the programming interface PRI 602-… USB.
Is required in systems with more than one line or for programming the in-home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



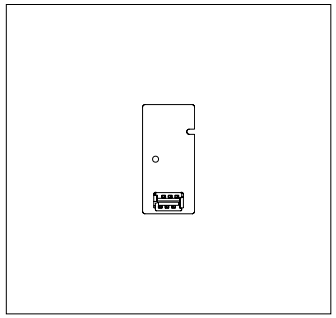
ZPS 850-0
Parallel switching accessory for integration into comfort bus telephone BTC 850-… To supply the telephone where more than 4 telephones are required to ring simultaneously.
Max. 8 BTC 850-… units can ring simultaneously.
An NG 602-… or VNG 602-… is required in addition for supply purposes.



ZPSF 850-0
Handsfree parallel switching accessory for mounting in the comfort handsfree bus telephone intercom BFC 850-… Circuit board for connection of an additional supply.
Required if more than 4 handsfree bus telephones BFC 850-… are called simultaneously or for each BFC 850-… which is required to receive a collective paging announcement.
A maximum of 8 handsfree bus telephones can ring at the same time. (Telephones 1–4 without ZPSF 850-…, telephones 5–8 with ZPSF 850-…)
An NG 602-… or VNG 602-… is required in addition for supply purposes.



ZAR 850-0
Interfacing relay accessory for mounting in bus telephones BTS 850-… or BTC 850-… Universal switching relay with a potential-free contact for secondary signal unit, video interfacing or switching relay, one potential-free switching contact.



ZARF 850-0
Handsfree interfacing relay accessory for integration in the handsfree bus telephone BFC 850-… Universal switching relay e.g. for secondary signal unit, video actuation or switching relay.

Servicing
After-sales service

Furtwangen factory

Service hours:
Monday through Thursday
from 7.30 a.m. to 5.00 p.m.
Friday up to 4.00 p.m.

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Technical hotline	Tel. +49 7723 63-434 Fax +49 7723 63-441 support@siedle.de
Services and information	Siedle website www.siedle.com

SSS **SIEDLE**

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