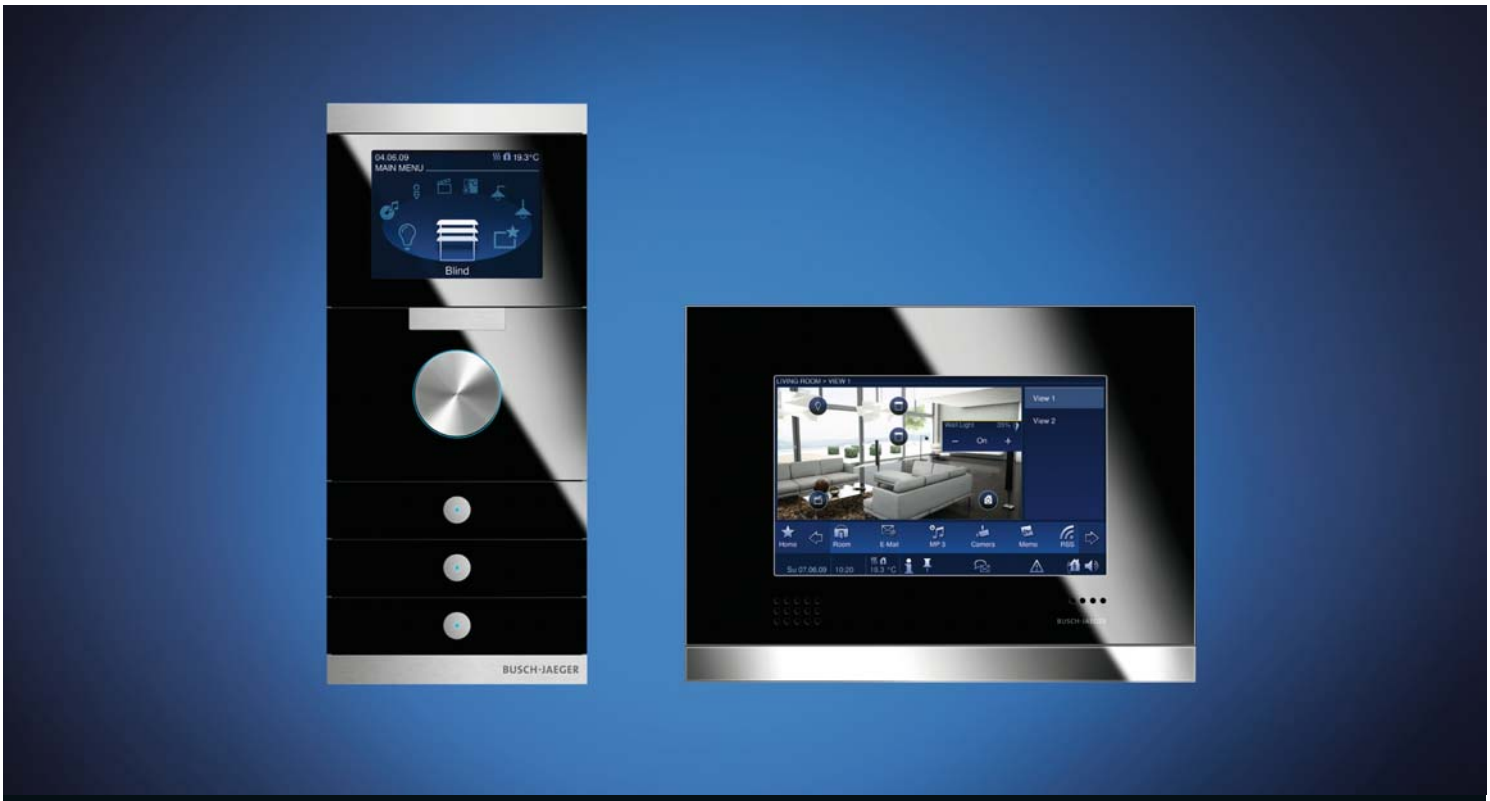


Busch-*priOn*® Busch-*ComfortTouch*®

The new generation of intelligent home control – Product and planning brochure.

Power and productivity
for a better world™

A whole new quality of life.

Networked structures in buildings are not new. Various systems such as lighting, heating and media technology are moving ever closer together. Today, interfaces between systems are virtually standard in modern buildings. The only difficulty thus far: how can users maintain an overview in these complex systems? New control concepts are required. Busch-Jaeger is now providing the answer with a new generation of intelligent home controls: intuitive to operate and offering a consistent colour concept, they help the user maintain an easy overview of all of the building technology at all times. Menus and buttons that are customized to customer requirements and include texts and icons ensure clarity. This high-performance technology works both reliably and unobtrusively in the background -- only high-quality control elements are visible whose functions are custom-tailored to the user. In this way, it is possible to create personalised Living Space® at the touch of a button.

The ABB i-bus® KNX is the basis which makes holistic control of building technology possible. All information, including switching and control commands, is transmitted via a data bus, which can be compared to a computer network. Here, the individual elements can be connected through a special bus line (twisted pair).

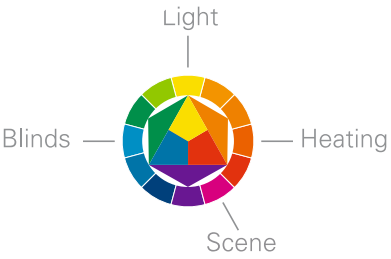
With a fingertip, it is possible to set whole scenes with lighting, music, heating and other functions. Subsequent changes can be made thanks to easy re-programming.

Busch-*priOn*®

Busch-*ComfortTouch*®

An operating concept that is fun.

Using the computer or the mobile phone, we get up-to-date information whenever we want it. The on-board computer in a car informs us at all times about current consumption or the outside temperature. Our navigation device receives current traffic information automatically and reacts accordingly for route planning. We appreciate all of this and we would not want to be without these things once we have them. Only in buildings do we often settle for a minimum of comfort and control. The cause of this is frequently the users' fear of not being able to cope with the operation of such technologies. Busch-Jaeger is now offering a completely new concept, thanks to which such concerns are finally a thing of the past. It is as easy as it is powerful and it maps all building technologies from heating to multimedia in a single user menu. Busch-*priOn*® and the new Busch-*ComfortTouch*® – the new generation of home controls make operation as easy as child's play.

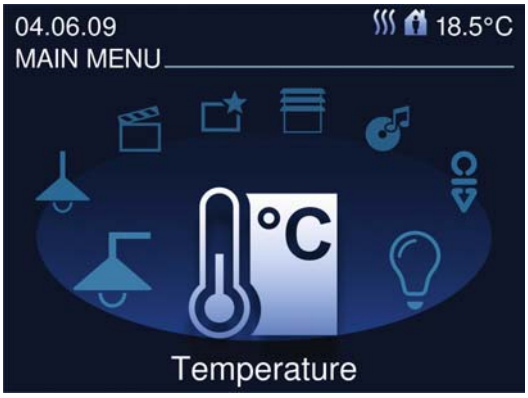


The new operating concept distinguishes itself through its clarity and user-friendliness. Operating fields follow a colour concept developed especially for this purpose; each comfort zone is assigned a special, logically-selected colour:

The colours of intuition

- Light control is yellow, like the sun
- Functions of the blinds are blue, like the sky
- Climate functions are orange, representing warmth
- Living scenes are magenta, representing an awareness of life

The Busch-*ComfortTouch*® unites the functions of a home control and an information and entertainment centre on a single screen. Using the colour display, it is possible to switch on or dim lights in the entire building, control the blinds or regulate the ambient temperature or scenes using a combination of the functions mentioned above -- even using a remote control. The user menu can be customized to suit individual user needs, and thanks to a floor plan or photos, designed so that it is especially clear.



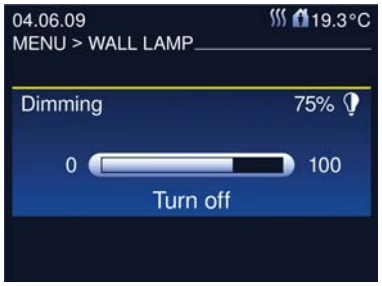
Busch-*priOn*® was designed to control a room and enables the control of a variety of functions, from temperature regulation on through to setting an alarm clock. Especially user-friendly: the display is switched on only at the touch of a button -- if it is inactive, Busch-*priOn*® acts like a standard switch and triggers a previously-programmed primary function when it is touched. This makes operation easy even for guests.

Busch-*priOn*® – innovative and intuitive.

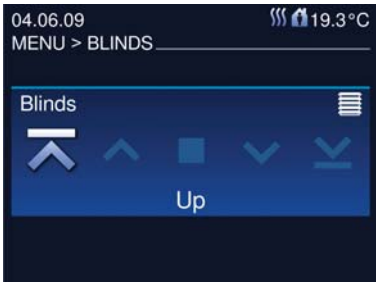
Control elements were never like this. The new 3.5" TFT display is as beautiful as it is powerful; it is an informative component of an in-wall combination. Its menu can be adapted individually to any building, and it provides an overview of the power consumption of electrical devices at all times. Here you can regulate the heat, dim the light or call up many scenes which trigger a multitude of previously-defined actions in a jiffy. Meaningful icons guide even inexpert users to their goal in just a few steps. Thanks to the division of the functions into individual areas such as lighting, heating and blinds, every user can find his way here intuitively. However, the possibilities of the Busch-*priOn*® are not exhausted with the functions of classic building technology.

The display can also be used for music control.

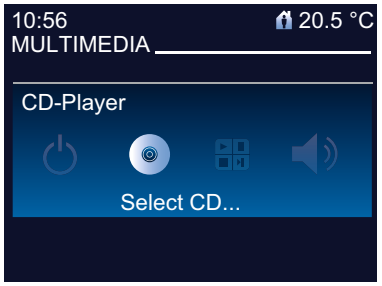
Lighting



Lighting

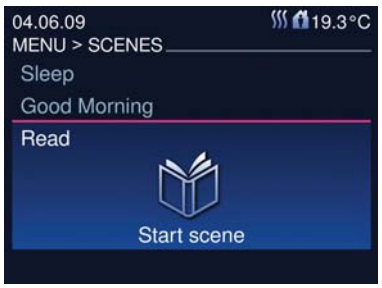


Blinds



Music control

Heating



Scenes

The combination of push button/rotary knob and display presents a universal operating concept. The definition of a primary function makes usage especially easy. The primary function is displayed when somebody approaches the display (there is a special proximity sensor for this) or if somebody touches the rotary knob. In principle, any switching, dimming, blind, scene or sequence function which is stored in the device can be specified as the primary function. Only if the menu button is pressed does the display change to the circuit menu. Here, up to 8 entries can be indicated by an icon. By turning the push-button/rotary knob, the user can bring the desired function into the foreground. A text corresponding to the icon currently displayed appears (e.g. system settings, room control: office, room control: living room), etc. By pressing the **push-button/rotary knob**, the display changes to reflect the respective list menu, which can contain up to 15 different functions. The user can scroll through these functions by pressing the **push-button/rotary knob**. The function in question is selected with a press of the button.

Note 1:
If the display is in screen-saver mode or in stand-by, the primary function is only called up if the user approaches the device (only possible thanks to an end strip with proximity sensor) or if the **push-button/rotary knob** is touched. The circuit menu appears only after the menu button has been pressed.

Note 2:
The display can display messages such as "Alarm." If the menu button is pressed or there are several messages in the queue, these messages are displayed before the circuit menu appears.

reddot design award
best of the best 2008

A special award: Busch-*priOn*® received the distinction "best of the best" from the "red dot award: communication design 2008" for its interface design.

Frame-free variety.

Furthermore, individuality characterises the Busch-*priOn*® not just when it comes to the programming of the individual buttons: the combination of Busch-*priOn*® control elements could hardly be more flexible. For Busch-*priOn*® is not bound to a frame -- instead, up to 3 individual elements are fixed on a carrier and, at the end, provided with end strips above and below. There are four choices of finish for the control elements: studio white, glass white, glass black and stainless steel. Most of the end strips are also available in these colour variants. For the display (style sheets), there are three choices: black, blue and silver.

Modular concept

End strips

These serve not just to look beautiful -- they optionally contain a temperature sensor for room control, an infrared interface for the remote control and a proximity sensor for activating the display or LED of the control elements when somebody approaches.

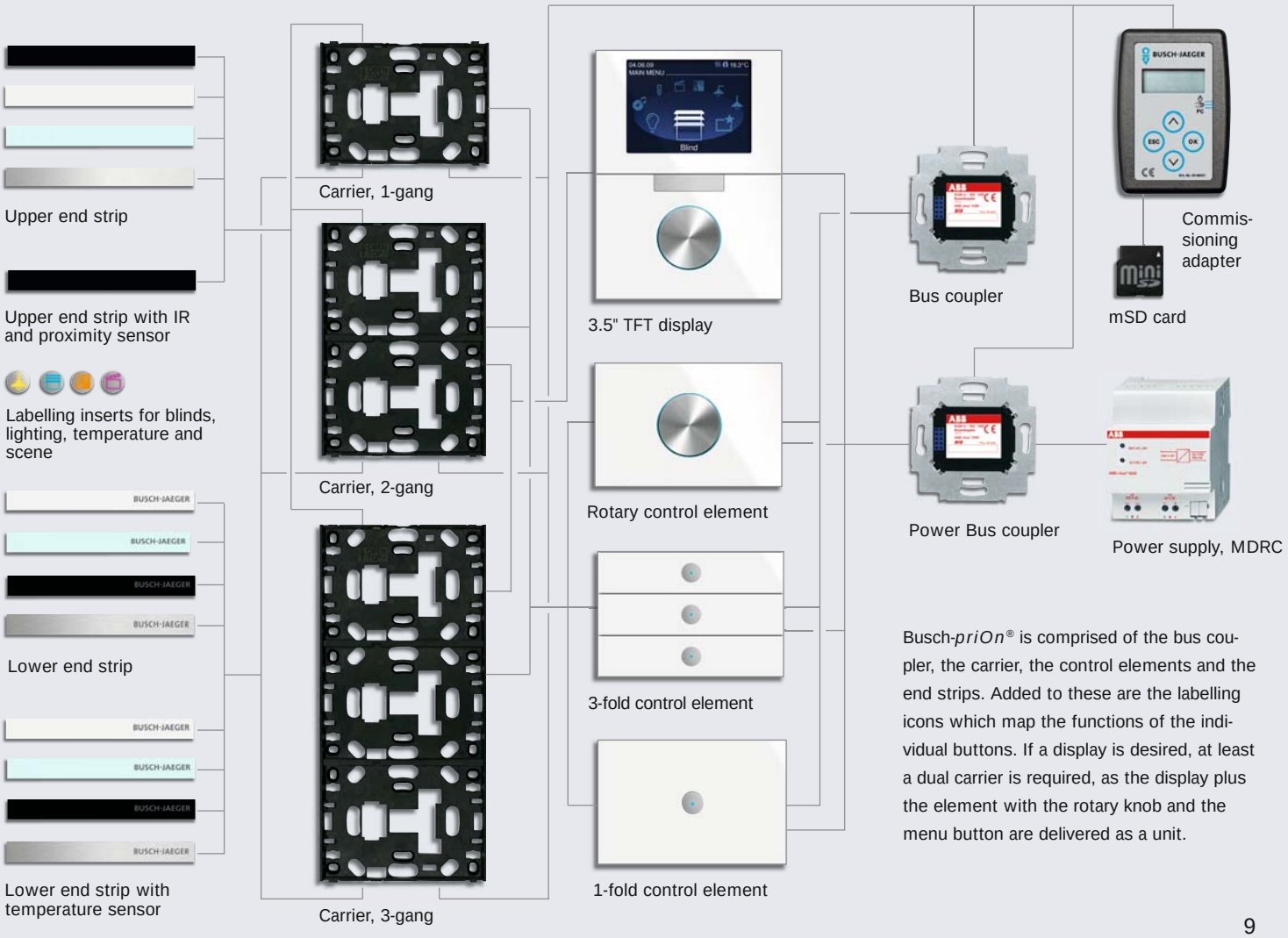
Combinations as desired.

The control elements and end strips can be combined at will in their colours and functions for Busch-*priOn*®. Up to 3-way combinations are possible, whereby a single bus coupler will suffice.

	Item number	Carrier 1-gang	2-gang	3-gang
Upper end strip with IR and proximity sensor	6350-825	•	•	•
Upper end strip	6348-...	•	•	•
Control element 1-fold	6340-...	•	•	•
Control element 3-fold	6342-...	•	•	•
Rotary control element	6341-...	•	•	•
3.5" display incl. control element	6344-...	-	•	•
Lower end strip with temperature sensor	6352-...	•	•	•
Lower end strip	6349-...	•	•	•
Bus coupler	6120/12	•	-	-
Power Bus coupler (needs additional power supply)	6120/13	•	•	•
Power supply, MDRC*	CP-D24/2.5	•	•	•

*product available via ABB STOTZ-KONTAKT

Many combinations are possible



Busch-*priOn*® is comprised of the bus coupler, the carrier, the control elements and the end strips. Added to these are the labelling icons which map the functions of the individual buttons. If a display is desired, at least a dual carrier is required, as the display plus the element with the rotary knob and the menu button are delivered as a unit.

Not just any KNX control element.

Each of the buttons of the Busch-*priOn*® can be programmed individually, as is usually the case with KNX. The applications range from switching, dimming and blinds on through to scenes. Logic functions are also possible. A display provides additional functions too. Weekly timers, messages and multimedia applications can be integrated here, for example. Furthermore, additional applications can be implemented by assigning internal group addresses. The user menu can be configured in 19 languages.

Application	Control element	Rotary control element	3.5” TFT display with rotary control element
Logic			
Delay	•	•	•
Staircase lighting	•	•	•
Light scene actuator	•	•	•
Sequence	•	•	•
Preset	•	•	•
Cyclical telegram	•	•	•
Flash functionality	•	•	•
Logic	•	•	•
Gate	•	•	•
Min/max value transducer	•	•	•
Threshold value/hysteresis	•	•	•
PWM inverter	•	•	•
Priority	•	•	•

Application	Control element	Rotary control element	3.5” TFT display with rotary control element
Rocker switch total	•	-	-
Rocker switch left/right	•	-	•
Dimming rocker switch total	•	-	-
Dimming rocker switch left/right	•	•	•
Blind rocker switch total	•	-	-
Blind rocker switch left/right	•	•	•
Value transmitter rocker switch total	•	-	-
Value transmitter rocker switch left/right	•	•	•
Value transmitter, 2 objects, rocker switch left/right	•	-	-
Value dimming sensor rocker switch total	•	-	•
Light scene extension unit with storage function	•	-	•
Step-type rocker switch total	•	-	
Step-type rocker switch left/right	•	-	
Multiple operation rocker switch left/right	•	-	-
Short-long operation rocker switch left/right	•	-	-
Set thermostat operating mode	•	-	•
Media box/CD/DVD/Radio	-	-	•
Short-time timer	-	-	•
Weekly timer	-	-	•
Alarm clock	-	-	•
Messages	-	-	•
Screen saver	-	-	•
Display text/value	-	-	•
Device lock	-	-	•
Thermostat settings	-	-	•
Sequence actuator settings	-	-	•
Scene actuator settings	-	-	•
Ambient temperature controller	-	-	•[1, 3]
Orientation	•	•	-
Status/stand-by/proximity	•[2]	•[2]	•[2]
Status	•	•	-
Function illumination	•	•	-
Alarm	•	•	-
Light scene storage	•	•	•

[1] Only in combination with end strip bottom "temperature sensor" or other external sensor
[2] Only in combination with end strip top "IR and proximity sensor"
[3] Busch-*priOn*® has 1 internal ambient temperature controller

The right coupler and additional power supply.

Maximum number of Busch-*priOn*® devices per TP line

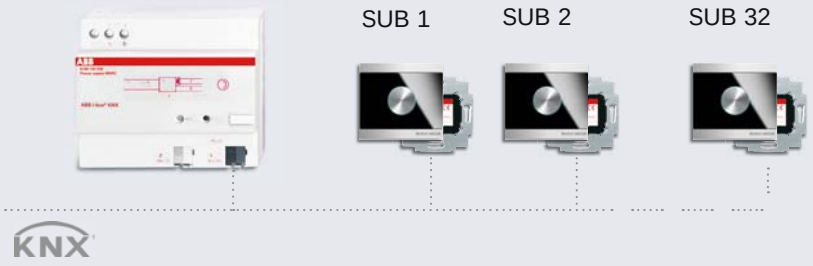
Number of display-combinations per line	Total number of combinations (display combinations plus 1- or 3-gang combinations with end strips)	Total number of Power Bus coupler 6120/13 per line
0	0 + 60	60
1	1 + 59	60
2	2 + 58	60
3	3 + 57	60
4	4 + 56	60
5	5 + 55	60
6	6 + 54	60
7	7 + 53	60
8	8 + 52	60
9	9 + 51	60
10	10 + 45	55
11	11 + 37	48
12	12 + 30	42
13	13 + 22	35
14	14 + 15	29
15	15 + 7	22
16	16 + 0	16

Behind every Busch-*priOn*® combination is needed one bus coupler only. For a 1-gang carrier, a Standard Bus coupler will suffice. In the case of the 2-gang carrier, the Power Bus coupler must be used, which requires an additional, external power supply for this purpose.

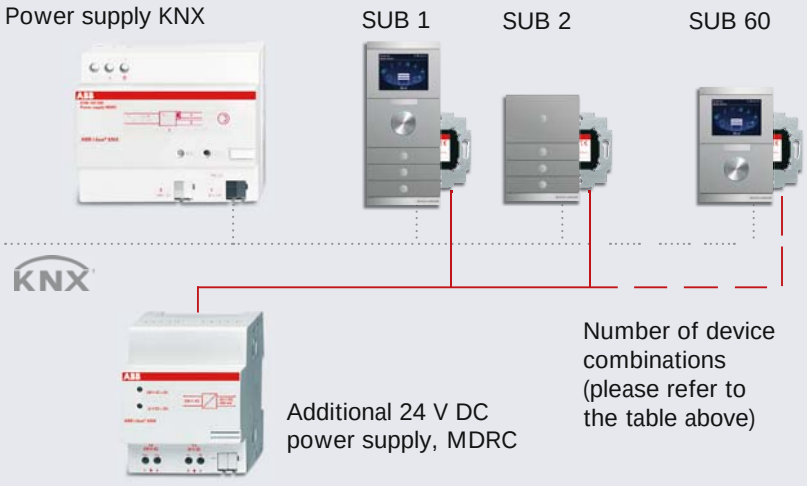
The table to the left describes the corresponding device combinations.

Please note: with new Standard Bus couplers and Power Bus couplers the normal KNX line-topology is existing no longer. Please calculate the number of BUS-SUBSCRIBERS (SUB) refer to the table.

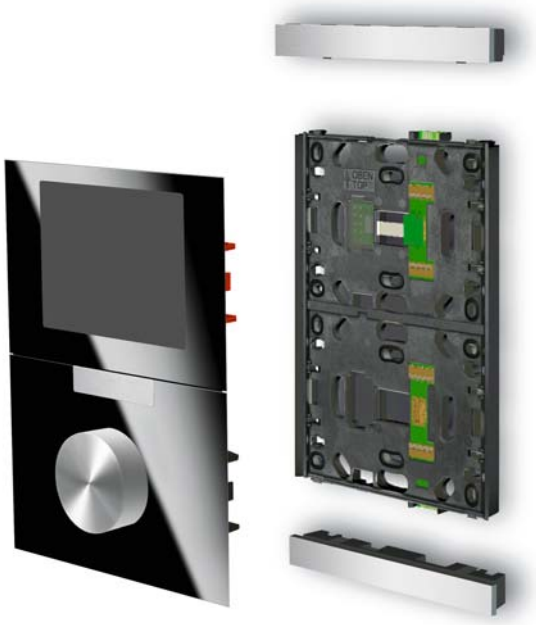
Standard Bus coupler



Power Bus coupler



Easy installation.



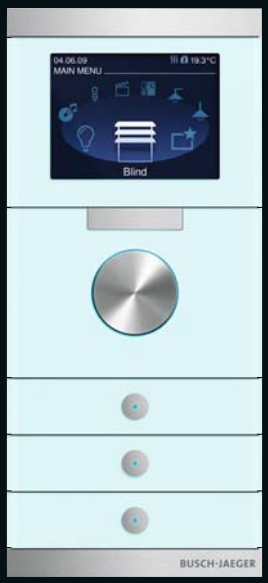
The carrier serves to hold and make contact with the individual control elements, the 3.5" TFT display, the end strips and the flush-mounted bus coupler. The positioning of the control elements can be selected freely for multiple combinations. A special bar must be mounted on top as well as below. Its material can be different than that of
the module. The carrier is mounted by screwing it to the flush-mounted bus coupler and, for multiple combinations, also to the wall.

Thanks to the anti-fingerprint surface, the stainless steel Busch-*priOn*® is easy to keep clean and maintains its sophisticated surface finish even when it is in use. Glass surfaces and end strips match the carat® series.

Busch-*priOn*®
Glass black

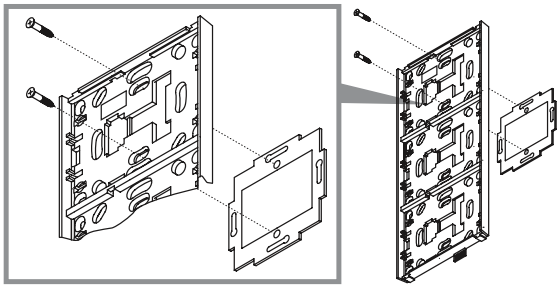
Busch-*priOn*®
Glossy Alabaster studiowhite

Busch-*priOn*®
Stainless steel

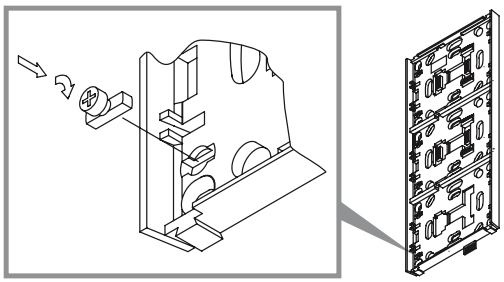


Busch-*priOn*®
Glass white

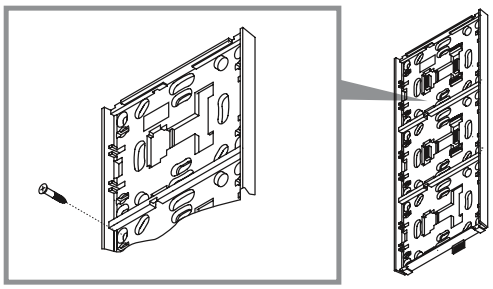
Busch-*priOn*® is installed in a flush-mounted wall box (German Standard) and by default, at a distance of 71 mm. After installation of the carrier frame on the wall (see right), the individual modules are fastened to the carrier frame by snapping them in. Special securing elements prevent removal of the modules.



The carrier plate is screwed onto the carrier ring of the bus coupler located beneath it.



So that the Busch-*priOn*® also lies flat on uneven walls, special balancing elements are included with the device. With the help of the included depth gauge, first the distance is measured, then the appropriate element is selected.



If needed, the carrier plate can be stabilised with additional screws in the locations provided.

Busch-*priOn*®
2-gang combination,
glass black

Busch-*priOn*®
Rotary control element,
glass black

Busch-*priOn*®
3-fold control element,
glass black

Busch-*priOn*®
1-fold control element,
glass black

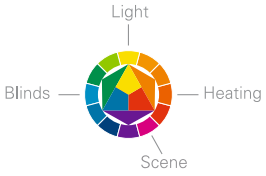
Busch-*priOn*® can be combined ideally with the carat® switch series. These switches distinguish themselves through their uniformly-designed surfaces.

Busch-*ComfortTouch*® – outer beauty and inner values.

reddot design award
best of the best 2008

A special award: the Busch-*ComfortTouch*® received the distinction "best of the best" from the "red dot award: communication design 2008" for its interface design.

The Busch-*ComfortTouch*® unites the functions of a home control and an information and entertainment centre with a beautiful masterpiece. Using the 9" colour display in 16 : 9 format, it is possible to switch on or dim lights, control the blinds or regulate the ambient temperature or scenes using a combination of the functions mentioned above -- even using a remote control. An audio player for replaying MP3 files is also integrated into the Busch-*ComfortTouch*®. All of this is of interest not just for homes -- the device is also used in medical practices, offices, restaurants and shops in order to create appropriate lighting, provide soft background music or keep the room climate comfortable and tailored to your needs. A presence simulation and the display of fault messages provide additional security. E-mails can be displayed without a separate computer. It is also easy to answer e-mails with graphics and voice messages. Incorporation into a network can be accomplished via LAN or WLAN without additional cabling.



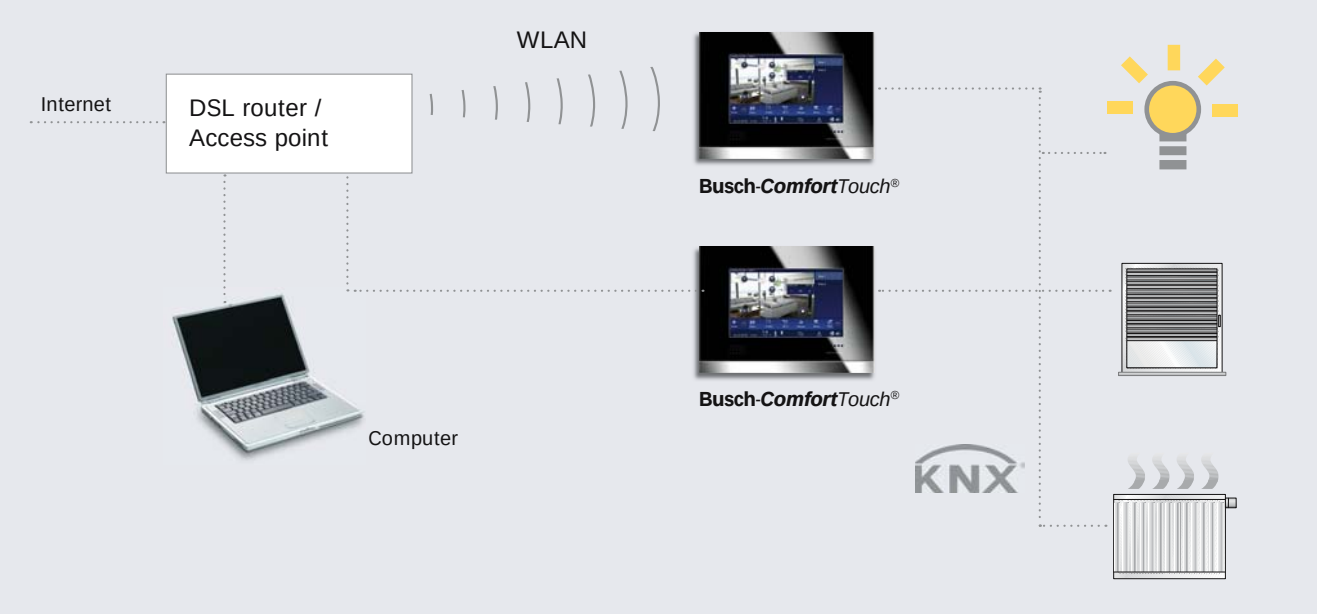
Video player:
If you provide video files via the network, you can also access these via the panel and play them back on the display.

MP3 player:
The MP3 player provides background music for activities such as cooking, reading the newspaper, and can create a mood, e.g. at a party or during a festive meal. MP3s can be played back via the built-in loudspeakers or in stereo via the line-out output on Busch-AudioWorld® or active speakers. The USB flash drive, SD card or an approved drive on the LAN can serve as the source for the music files.

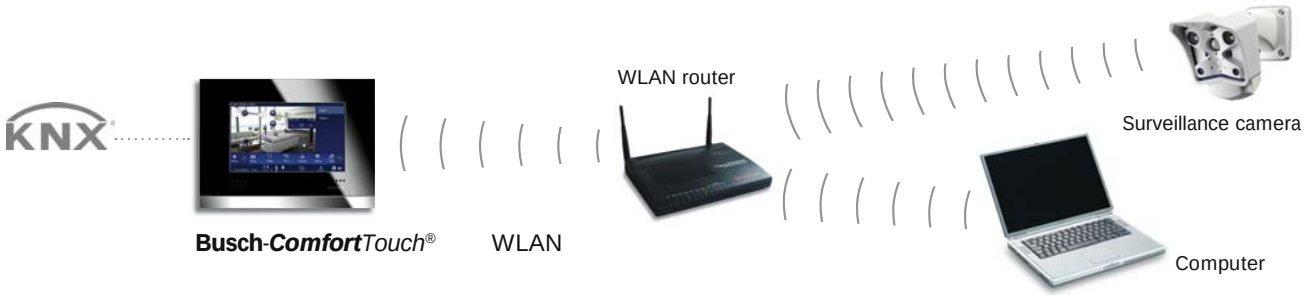
Feed reader:
The "feed reader" enables users to read news feeds from the Internet in a compact format, e.g. the current news, weather or traffic information. The "feed reader" can appear as a compact application on the start page.

Home control – including multimedia.

In addition to the control of classic building technology functions, the design of the Busch-*ComfortTouch*® enables the integration of networks via LAN or WLAN. Here, the device can be used as a gateway between IP networks and KNX networks. For incorporation into a LAN, the network settings can be set statically or the DHCP function can be used.



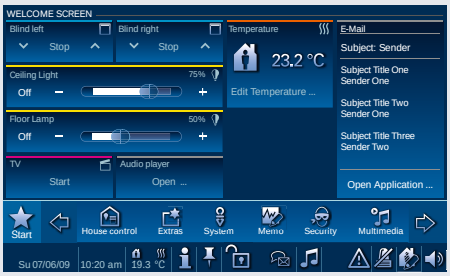
The bus is connected to the panel via a pluggable KNX coupler and screw terminals. The panel also has audio outputs, a USB interface and a slot for a SD card. Important: the panel must be able to receive the WLAN signals -- how far away it may be installed depends first and foremost on the capability of the WLAN network. The WLAN password can be read in via the SD card or the USB interface.



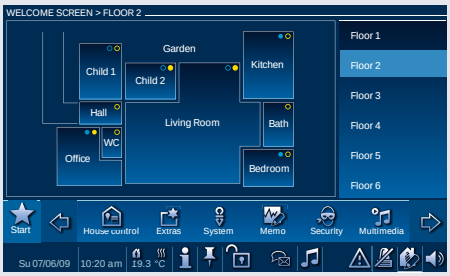
The Busch-*ComfortTouch*® can display and control WLAN-based applications. Surveillance cameras offer quick visual information about what is taking place within their detection range. They can be activated individually and the image recorded can be displayed on the panel. To do this, the surveillance cameras must be IP-capable. The wireless connection of a computer to the Busch-*ComfortTouch*® is also of benefit.

Various menu categories.

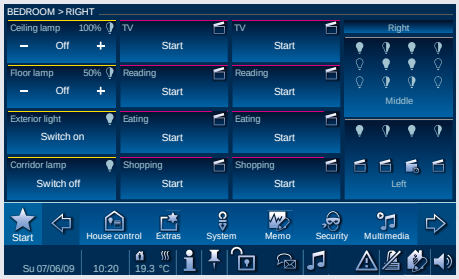
A menu customized individually for the user with meaningful buttons ensures intuitive, clear operation. Pictures of the individual rooms can also be imported and provided with buttons. This makes operation even easier and allows messages to be assigned immediately. For the display, there are three basic page types. The **start page** serves as an entry into the system with favourite functions on the first level. Using the jump functions on the navigation bar, it is easy to reach **operating pages** for individual rooms or building sectors with their respective functions. Concrete settings for applications such as the MP3 player can then be made via the **application pages**.



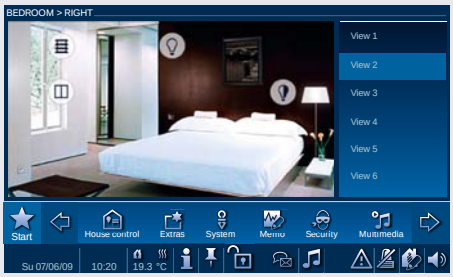
Functional start page
Operating functions and applications can be called up directly here. The various corresponding buttons can be arranged on a grid of maximum 4x4 elements. The same applies for the operating pages. Furthermore, the start page allows an application to be displayed in compact form; the RSS feed is shown here.



Start page with floor plan
Another possibility for designing the start page: with a floor plan, it is possible to navigate directly to the operating pages for individual rooms. Up to 6 floor plans are possible. Up to 2 consumers states per room depicted can be displayed. However, it is not possible to activate directly from the floor plan view.



Operating pages
With the buttons, you can control the room functions. Here too, various operating elements can be combined in a grid of maximum 4x4 elements. Furthermore, it is possible to store up to 2 sub-pages so that a total of 36 operating functions per room are available. These sub-pages are visualised using so-called swap elements and they indicate the current status. For better orientation, a miniature view (image/photo) of the room can also be inserted instead of a sub-page.



Operating pages with image of room
Thanks to the stored photo, the user can see which operating functions are available in the respective room as well as the status of each consumer. Another option is to trigger functions directly using operating elements. The positioning of the buttons on the image is not completely without restriction; they must be arranged in a grid of 3x4 elements. In order to provide different views of a room, it is possible to store up to 5 additional operating pages with images.

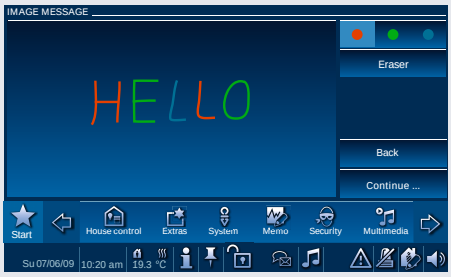
Application pages
These map the individual applications in full-page mode. All application-specific functions can be activated via these pages, e.g. ambient temperature control or MP3 player.

Many easy-to-operate functions.

The Busch-*ComfortTouch*® forms the switching centre for the whole house, thus replacing individual devices such as timers, logic modules and temperature controller. Functions have been integrated which not only make you more comfortable, but also mean greater security and more economical operation for the building. Presence simulations, the interface to LAN and WLAN and the storage of complex scenarios that also include multimedia functions are just a few advantages of this device. End customers can trigger individual actions with the touch of a button and set and change functions themselves as needed.

Ambient temperature control:
The Busch-*ComfortTouch*® contains a local temperature controller inside the unit. Various rooms can be controlled centrally using the unit. For this, the unit must only know the actual temperature of the other rooms – for example, as determined by an external temperature sensor. The controlling itself is handled on the panel. The control of external ambient temperature controllers is also possible.

Time/date display:
The navigation bar always displays the current time and date. The switching between summer and winter time occurs automatically.



Graphic messages:
Users can use the Busch-*ComfortTouch*® to leave graphic messages for other users.
A graphic message is a handwritten text message or drawing created with the pen or a finger on the display. If the graphic message application is called up, the screen shows an overview of all addressees known to the system. The user can then select an addressee. If there are graphic messages present which have not yet been read, then a corresponding symbol which indicates the new message appears on the status line.

Voice messages:
With this application, it is possible to leave voice messages and listen to them later on. The microphone for this is integrated into the Busch-*ComfortTouch*®. If the application is called up, the screen displays an overview of all addressees in the system. The user can then select a recipient for the voice message. There are 100 storage spaces with a 60-second recording capacity apiece available for voice messages. New messages which have not yet been played back are marked accordingly and indicated by a symbol on the status bar.

Scenes and sequences:
Scenes and sequences can be combined as required to then simultaneously call up, one after another, all functions provided by the panel. However, these scenes and sequences must first be created by the electrical installer with the commissioning tool. Later, users can combine them individually on the panel and make changes to them. In total, 64 scenes and sequences can be stored in the unit. In contrast to scenes the time-delayed processing of sequential actions is possible with sequences. Different pause times can be inserted between actions for sequences and sequences can also be interrupted or stopped.

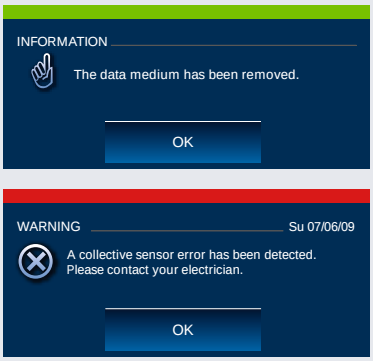
User languages:
In an international environment with various languages (hotel, ship), the complete labelling can be changed very easily. Up to 255 operating languages are possible via a translation table.

System languages:
The description and labelling of the system settings on the panel can be switched to different administrator languages. Up to 19 administrator languages are available.

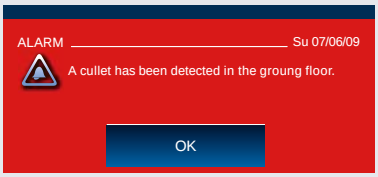
Weekly program:
Processes occurring on a weekly basis (scenes and sequences) can be set in a clearly arranged way and automated in any number of weekly programmes. These weekly programmes can only be set up initially by the electrical installer using the commissioning tool. Later, users can combine them on the panel and make their own changes to them. Weekly programmes can be assigned validity ranges (e.g. school holidays) outside of which they are not active. This way, weekly programmes can be activated and deactivated automatically for certain times. A maximum of 8 validity ranges can be defined.

Access control:
Various user groups are available; each of these can be assigned a password. This protects particular operating buttons, applications and pages (e.g. video surveillance or operating pages) against access. 8 such user groups can be created.

Presence simulation:
It scares away burglars because it makes the house look lived-in even if nobody is home. The processes and times for up to 20 objects are grouped according to day of the week and recorded to the minute and they can be called up automatically upon presence. This way, the light switches on and off, the blinds move, music plays, and this not exactly the same way every day, but individually on each day of the week according to the user's habits.



Malfunction and alarm display:
It offers protection and information about malfunctions and faults. Signal contacts, sensors and their proper function can be monitored as required. The user can choose how the message is actually output. The possibilities include a signal tone, e-mail and the running of a scene.



Message centre:
Message circuits/contacts can be monitored and their status displayed. This enables the panel to monitor the security of the building and transmit messages about unauthorised access. A maximum of 8 circuits can be monitored. The number of signal contacts is limited to 30.

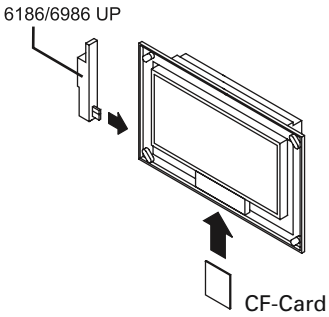
Entirely practical installation.

The Busch-*ComfortTouch*® also consists of several components. A special installation box for flush mounting or cavity-wall installation forms the basis. The touch display is screwed tight and then provided with a design frame. There are 2 variants in black or white glass from which you can choose. They correspond to the design of the carat® series, so that the panel can be combined with switches and sockets from this programme. To complete the look, a design bar can also be fastened on the bottom edge. It is available in aluminium or chrome and makes the connection to interior designs where metal elements dominate.

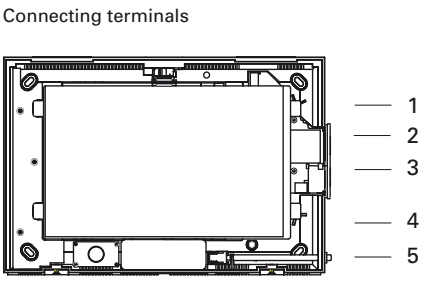
The high-performance 16:9 touch display with 9" screen offers a resolution of 800 x 480 pixels.

The design bar of aluminium or chrome is a pure design element which can be omitted

Graphic memo

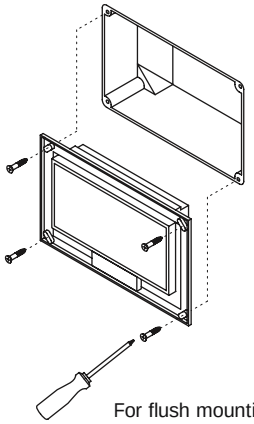


Before installation, the CF card and -- if desired -- the KNX interface are inserted in the slots provided. While the CF card is included in the scope of delivery, the KNX interface must be ordered separately.



Next, all required terminals can be connected.

1 LAN connection
2 SD card slot
3 USB slot
4 KNX/TP connection and audio out
5 Power supply, 230 V, 50 Hz



For flush mounting of the panel, Busch-Jaeger offers a special mounting box which is installed flush in the wall. The display is inserted and screwed in at the corners. Finally, the design frame is fastened by plugging it in.

RSS

Efficient energy handling

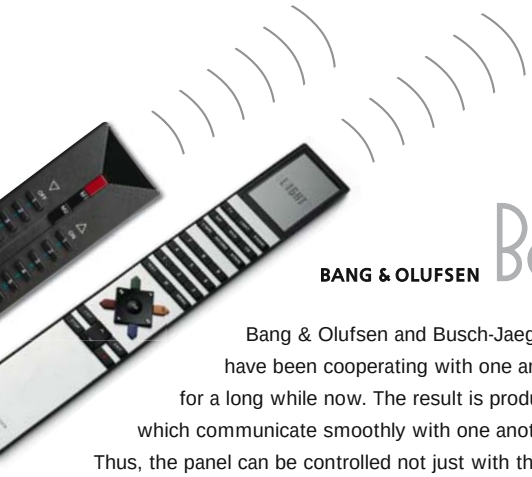
Open in all directions.

Busch-Jaeger's new operating solutions are not isolated islands -- they are based on KNX and thus can be combined with many devices. However the individual components have more to offer than just the bus connection. Via USB or a SD card, it is easy to read in data. Wireless interfaces such as WLAN and infrared minimise the cabling effort and ensure users maximum comfort.

Busch-*ComfortTouch*®

WLAN

Via WLAN, the building technology and the Internet can be connected to one another wirelessly. Whether RSS information or e-mails: the panel can display all of this without additional cabling.

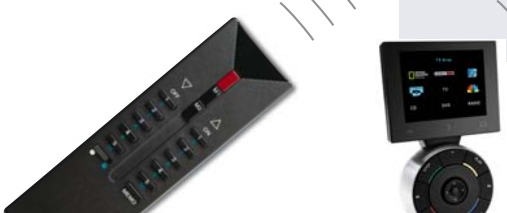


BANG & OLUFSEN

Bang & Olufsen and Busch-Jaeger have been cooperating with one another for a long while now. The result is products which communicate smoothly with one another. Thus, the panel can be controlled not just with the Busch-Jaeger remote control, but also with the B&O Beo4 and Beo5 remote controls; complete home cinema scenarios can be called up with the touch of a button.

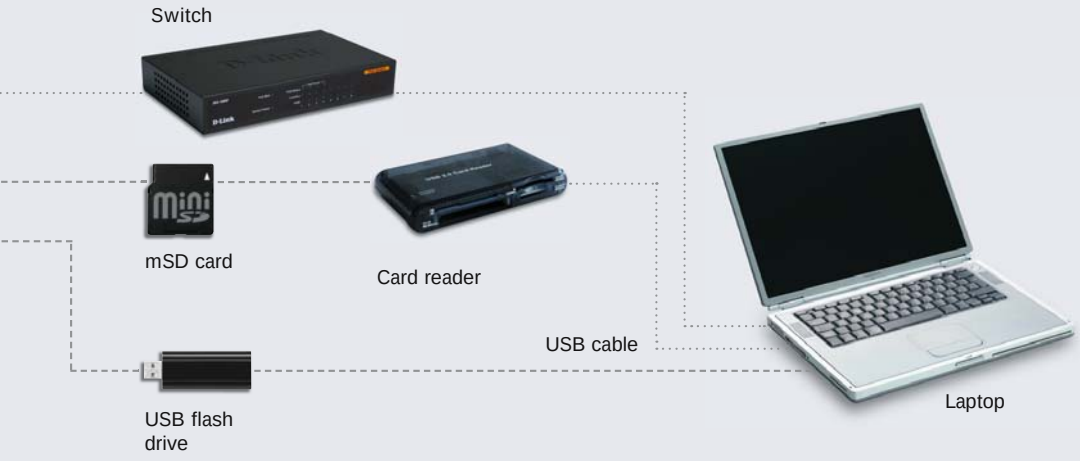
Busch-*priOn*®

Busch-*priOn*® can be controlled with the Busch-Jaeger IR remote control and the B&O Beo5 remote control -- infrared interfaces in the end strips make this possible. This way, scenarios which create the appropriate atmosphere in the room can be called up with the touch of a button.

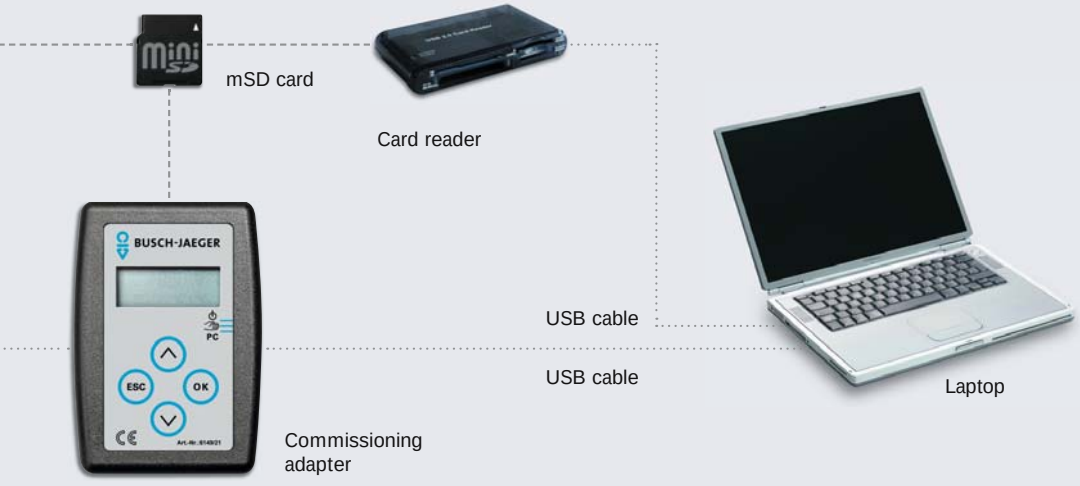


New paths to commissioning.

What is the point if the occupant can operate the system easily but the technician despairs during the installation? The new, simple approach for the user does not stop short of the people who install and start up the Busch-Jaeger solutions. Therefore, there are new paths available -- so that work proceeds quickly and easily.



The Busch-*ComfortTouch*® is started up using a special tool which imports KNX data from the ETS 3F. The assignment to the buttons is made with simple drag&drop functions. Floor plans and graphics can be stored.



The planning of Busch-*priOn*® occurs, as is generally the case with KNX, using the software solutions ETS 3F. In order to minimise the download times, a special commissioning adapter can be used, which will replace the RS232 and USB interfaces for the new generation of bus couplers. After transferring the data from the laptop to a micro SD card, the coupler can be programmed directly locally using the adapter.

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