

The new switching freedom. WaveLINE RF solutions.



<u>sonControlever</u>

room

ything om every

Greater flexibility and more comfort while controlling light and other functions. The WaveLINE grants you the freedom of choice where you can place your control elements. This grants you a comfortable freedom.

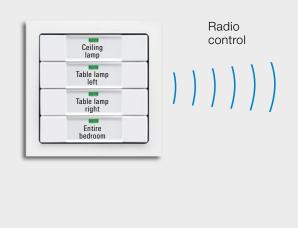
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Upgrade, renovation or a new building: Radio control comfort for all situations.





Multi-talent: The 4gang WaveLINE control elements

Various functions under control via radio signal

WaveLINE is a new wireless control system using the radio frequency technology. With our new wall mounted control elements "transmitters" you will be able to control Light, blinds and other functions in your house, along with movement detectors or window contacts which can create a perfect integration for a reliable safety and functionality.

New possibilities for older buildings.

When renovating an existing house, or simply rearranging the furniture, the switches are often no longer where they are. Or you may be missing a few additional switching options for greater comfort. Often this means: making new holes in the wall, laying cables, re-plastering, painting or wallpapering. This involves additional expenditure and generates unavoidable dirt and rubbish.

With the WaveLINE you save on the associated expenditure, but not on the comfort. The radio signal bridges the distances for you. The associated switches are simply glued on and control the actuator via radio. For safety, for example, the sensors signal whether a window is open or closed. And they can be retrofitted quickly and easily. With radio control instead of cables.



Easy...Right from the beginning – with radio control in new buildings.

Also in new buildings it does not always have to be cables! Use the WaveLINE radio control system right from the start, for example, to switch lights from several positions in the room, or even from a different room, in addition to the main switch. The same applies to blinds and entire light scenes. The wireless operating comfort equally applies to outdoor areas; for switching lights in the garden and the pool from the house, for example. Also automatic or preprogrammed functions can be integrated via the WaveLINE radio control system. Movement detectors switch lights via radio signal, actuators lower the heating when an open window is signaled – the possibilities of the WaveLINE are as numerous as the desires for comfort and safety. And, if a desired function has been forgotten: no problem – the WaveLINE is ideally suited for easy retrofitting.

Switchover to the comfort of radio control. Actuator or transmitter both are ready.

WaveLINE actuators

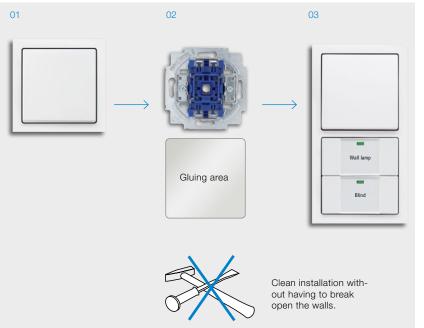
It's this simple: position the switch actuator in close proximity to your consumer. This could be a lamp or a blind. Then exchange the existing switch for one or several wall-mounted transmitters.



Why functionality over comfort while you can get both! Operating blinds, dimming lights, switching devices – with the WaveLINE from the position that is the most practical for you. Apart from the special actuator you only need the radio wall-mounted transmitters which are simply glued at the desired position. No cable connections, no flush-mounted wall box, no construction headaches. Elegant right from the time of installation.

The WaveLINE actuators take over the control and switching function – e.g. for one lamp or entire light scenes. They are equipped with a radio receiver, which means that they can be activated via wall-mounted transmitters that can be installed almost anywhere and remotely operated. They are easy to install and their reception is outstanding. Depending on the model, they are multi-functional with operating mode selector switch, programmable or specially designed for certain tasks, such as timer functions. It is the wall-mounted transmitters in the WaveLINE system that make the difference in comfort. You have always wanted to control the blinds remotely without having to get up from your armchair, yet the switch is located next to the window at the other end of the room. The WaveLINE is the solution to the problem. An appropriate WaveLINE actuator is installed in the blind box and a wall-mounted transmitter is installed at the desired location without any structural alterations and you are ready to control the blind remotely via radio.



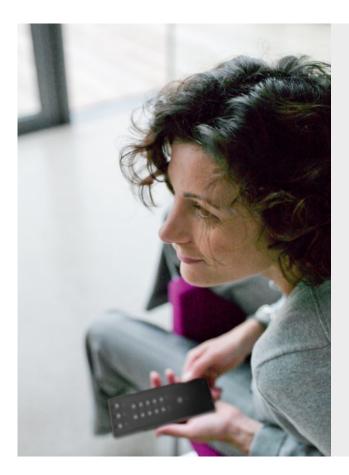


Radio control comfort for retrofitting. Small cause – large effect: with the WaveLINE the comfort of remote control is easily retrofitted. Clean and without a separate cable. The old switch is replaced with a switch combination that is glued on and a separately mounted actuator is ready to be remote controlled.

01 Conventional switch / push-button

- 02 Remove the rocker and 1gang cover frame and glue the mounting plate to the wall
- 03 Install the new 2gang cover frame and control elements

Unlimited possibilities. Greater living comfort.





Remote control

The WaveLINE manual transmitter: mains-independent, versatile, elegant.

Living requires freedom.

WaveLINE is not only surprisingly easy to install. The system is also extremely versatile. Switching, controlling blinds and calling up entire light scenes and main functions with a press of a button: the WaveLINE makes your living space a little more comfortable. You will quickly get used to the everyday advantages of comfort that practical remote radio control provides and will not want to miss it. You may even get additional ideas about other functions that you would like to easily and without great effort convert to radio control.

Greater comfort: remote control with the manual transmitter.

A special feature of the WaveLINE system is that the switching flexibility is increased with radio wall-mounted transmitters and that one has a radio switch where it is regularly needed. Of course, also the classical manual transmitter has its place in the WaveLINE system – with group selection keys for all the important applications. For switching, dimming, raising and lowering of blinds or calling up scenes. With the elegant transmitter you have everything under control right where you are.



01 Switching

Even loads that are not permanently mounted can be switched via radio control and a radio-controllable socket outlet. This allows you, for example, to switch off the bedside table lamp or the radio with the wallmounted transmitter next to the door when you leave the room.



02 Dimming

Create the right atmosphere with light with the continuously variable dimming function. With the appropriate dimming actuator of the WaveLINE system and the matching wall-mounted transmitter you fix precisely from where you would like to dim the lighting.



03 Blind

Why get up to adjust the blind when you can do it comfortably from the couch! The WaveLINE makes it possible. Via manual transmitter or wall-mounted switch. And to operate the screen, the beamer lifter, the garage door or the exterior lighting is just as easy.



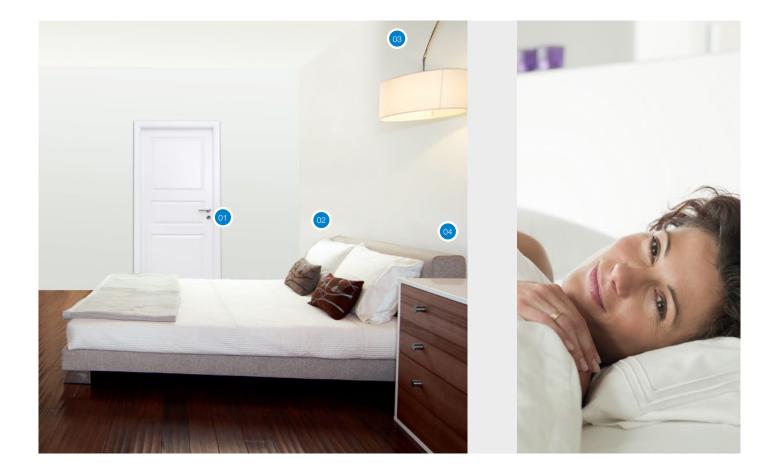
04 Central functions

Are all the lights off when you leave the house? With the WaveLINE and the central function a press of a button suffices to switch off the lights in the entire house. Comfortable – and extremely useful for daily life.

05 Light scenes

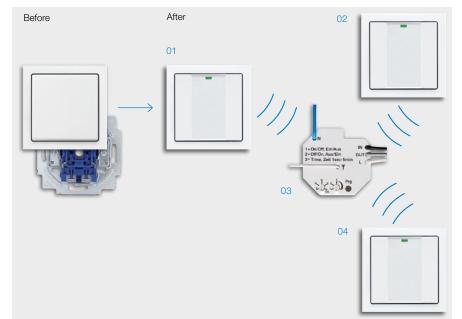
With WaveLINE you can operate individual light sources or store entire lighting scenes, which can then be recalled at the press of a button. Create the individual atmosphere with light for the evening meal, for watching television, for reading – with just one radio signal from the WaveLINE.

Controlling the main light. Without getting up.

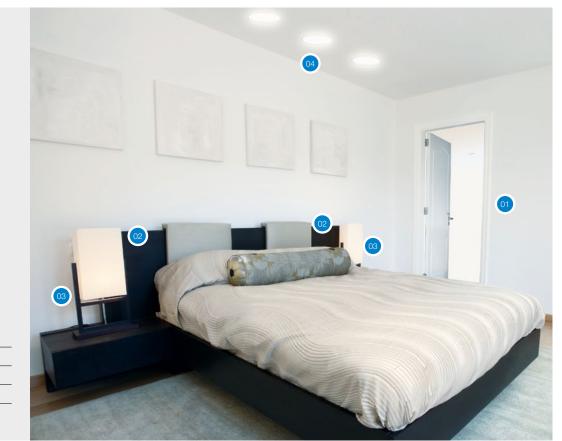


Retrofitting a cross connection: the clever way, so that the ceiling light in the bedroom can be operated from both sides of the bed. For this the existing switch, mostly located at the door, is replaced by a wall-mounted transmitter. Two wall-mounted transmitters, that are linked via radio signal instead of cables, are also glued to the wall next to the bed. The light can now be remotely controlled via the separately mounted actuator.

- 01 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84
- 02 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84
- 03 WaveLINE switch actuator, article no. 6702
- 04 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84



Complete and flexible. Radio control comfort in the bedroom.

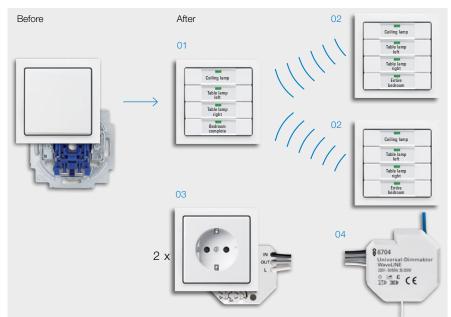


Rocker assignment of 4-channel wall-mounted transmitter:

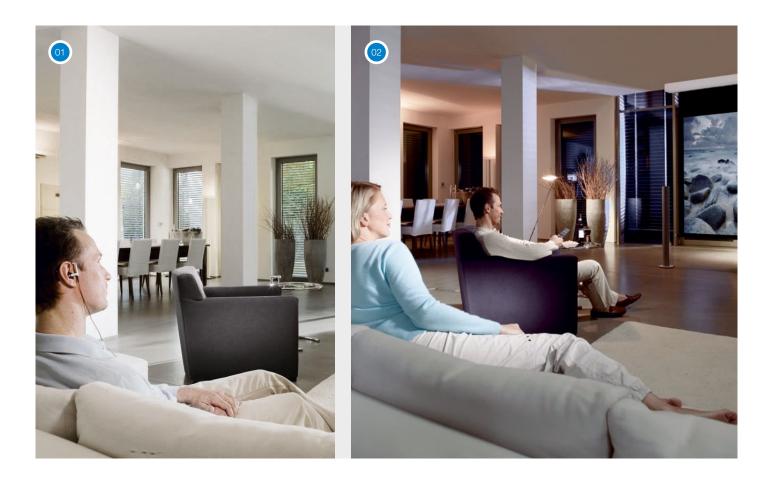
~~	ceiling lamp
~~	Table lamp left
~~	Table lamp right
~~~	Bedroom complete

For even greater comfort in the bedroom, additional functions can be retrofitted together with a cross connection: switching and dimming the main light additionally from both sides of the bed and switching of two bedside table lamps from all positions. Added to this is the integration of a central function with which all lamps can be switched off with the press of a button when leaving the room. Essential here are the WaveLINE 4-channel wall-mounted transmitters that are installed in place of the light switch and simply glued at the side of the beds.

- 01 WaveLINE wall-mounted transmitter, 4 channel, article no. 6733-84
- 02 2 x WaveLINE wall-mounted transmitters, 4 channel, article no. 6733-84
- 03 2 x WaveLINE switch actuators, article no. 6702 2 x SCHUKO[®] socket outlet inserts, article no. 20 EUC-84
- 04 WaveLINE universal dimming actuator, article no. 6704



## Leaning back and enjoying living comfort. Multitude of functions well combined.



#### Everything comfortably under control.

Discover the numerous possibilities to integrate and enjoy radio control comfort in your living room. Indoor and outdoor illumination, blinds and additional equipment such as the screen for the television viewing event at home: the WaveLINE makes their operation easy. From the position that is most comfortable for you. Either with the manual transmitter or with the wallmounted transmitters of the WaveLINE radio control system. The touch rockers can be assigned individually, which makes available numerous functions as a single control combination for you. These are advantages which make the living room even more cosy.

Garde illumina	
Ceiling indo	light or
Wall la	imp
Ceilir floodli	ng ght
D.U.	P
Roller b	olind
Roller b	_
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01 Also complete light scenes – for reading, for example – can be called up centrally.

02 Television viewing comfort with all the functions and the right light atmosphere is available at the press of a button.

2 x	WaveLINE switch actuators,
	article no. 6702, wall lamp, switchable
	socket outlet with ceiling floodlight

- 2 x WaveLINE universal dimming actuators, article no. 6704, 2 light circuits in the ceiling
- 2 x WaveLINE blind actuators, article no. 6705, screen and roller blind
- 6 x WaveLINE wall-mounted transmitters, 4 channel, article no. 6733-84
- 1 x WaveLINE manual transmitter, article no. 6780

## Switching lights and ventilation. Perfect for a bathroom or a kitchen.



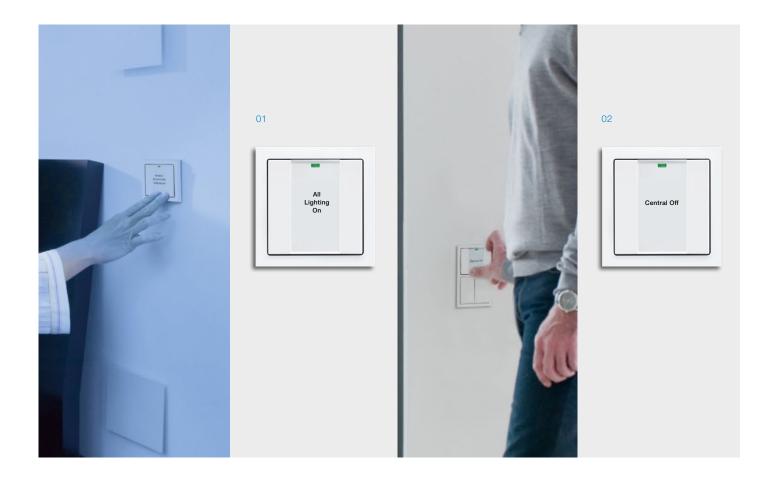
#### Practical and energy-saving.

The WaveLINE wall-mounted transmitter switches the light on or off in the bathroom or the WC for guests via a series actuator – and also the fan/ventilation via its second output. The actuator also has an automatic switch-on and switch-off delay. If the light is switched on for briefly washing the hands, the fan remains off. If you remain longer than 2 minutes the fan switches on automatically. After the light is switched off, the fan remains on for a further 5 minutes.

01 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84 switches on the lighting and the fan

02 WaveLINE series switch actuator, article no. 6703, channel 1: lighting, channel 2: fan

## Central ON and OFF. A good feeling.



#### Everything is bright. Everythings is OK.

With the WaveLINE you have a central switch directly next to your bed to switch on the entire lighting at once via radio signal, and that without extensive installation work. In security technology this function is known as a panic button. If you have an uneasy feeling during the night that something is wrong, just a press of the button and everything is bright and clear. The sudden light will drive away any unwelcome guests.

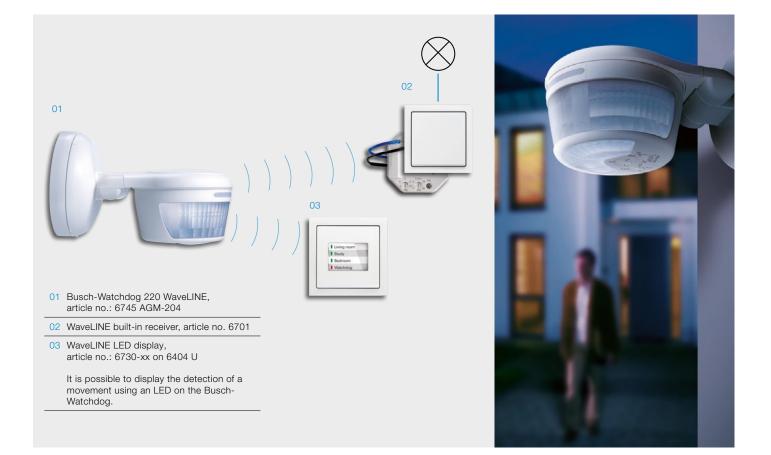
## One wall-mounted transmitter for the light in the entire house.

Perhaps this has happened to you: you have left the house in a hurry and are then not sure whether you have turned off all the lights. Or you simply don't want to turn off or check each single light. The WaveLINE handles this task with the central Off function. A wall-mounted transmitter is installed at the front door without any great effort, which controls the corresponding actuators via radio. For you this means: one press of the button and everything is off.

01 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84

02 WaveLINE wall-mounted transmitter, 1 channel, article no. 6731-84

## Movement equals light. For safety and quality of living.

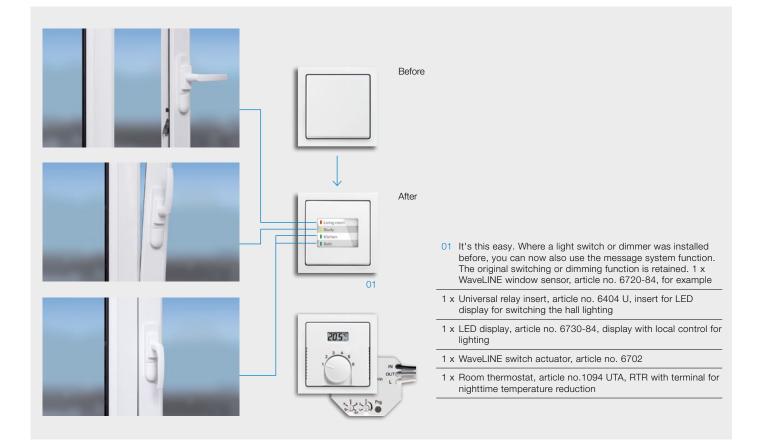


#### Easy to install - powerful effect

The distribution of the sensor and actuator function to 2 devices opens up totally new possibilities for application with this Busch-Watchdog. The sensor can be freely placed wherever it can optimally monitor the entire detection range. It is extremely energy-saving so that the high-performance batteries (iron (II) disulphide) last for up to 10 years. If it detects a movement, it then transfers the switch-on signal to the built-in actuator, which can even be installed in a deep flush-mounted socket outlet underneath a push-switch near the lamp. In addition, it is possible to assign several sensors to a single actuator and thus reliably monitor even angled

areas. The installation of the WaveLINE Watchdog could not be easier. Battery operation eliminates all need for wiring. The wall connection socket is quickly attached to the wall with only a single fastening screw.A rubber absorber provides perfect equalisation in case of an uneven foundation. Adapters for mounting to house corners or downpipes are also available. The sensor itself is then connected to the wall connection socket via a bayonet joint and can be turned by 30°, for example, for the equalisation of slopes. The batteries can be tested directly on the device.

## Checking all windows. At a glance.



#### Open, closed or locked: unmistakable information.

Where conventional systems only check whether the window is in contact with the frame, WaveLINE goes a decisive step further. It signals the position of the window handle and thus provides information as to whether the window is locked.

Window sensors monitor and transmit the position of the window handle – this is indicated by means of a coloured LED on the easy-to-view display, which can be individually labelled.

In addition, the nighttime temperature reduction of the room thermostat can be activated via a switch actuator when the window is open. This prevents the heating from being switched on immediately, especially when the temperature outside is low. The associated window sensors mounted between the handle and the frame are available in black, white, and stainless steel optics and thus well-suited for all conventional window frames and window handles. To save costs, the existing handles can continue to be used.



- 02 WaveLINE window sensor, white matt 6720-64
- 03 WaveLINE window sensor, stainless steel 6720-66
- 04 WaveLINE window sensor, basalt black 6720-65

## The confidence that everything is closed. Even the cellar door.



#### Instead of a tour of inspection: an inspection glance.

Where window sensors cannot be installed, the WaveLINE universal detectors are used. Often it is good to know that the cellar door is closed – when small children are in the house or as protection against uninvited guests, for example. The signalling channels of the universal detectors operate independent from each other. The first channel is triggered by the reed channel, while the second channel is firmly wired to a floating contact. This is practical for later installation: If the LED display is combined with the universal relay insert, which replaces the existing switch, the switching function can, for example, be retained for the hall light.



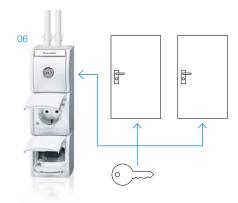
## Controlling garden functions. From the house.



### Fountain and garden illumination under control with radio control.

The garden can also be enjoyed from the house. Especially when functions such as the fountain, garden illumination or the swimming pool cover can be easily operated from indoors with the WaveLINE wall-mounted transmitter.

One possible outdoor combination of the ocean® range consists of three single elements: switch, socket outlet and empty cover box for the actuator. With the switch the radio control can be blocked when necessary, such as in the winter. Tip: The consumers can also be connected directly by the electrician, instead of the socket outlet.

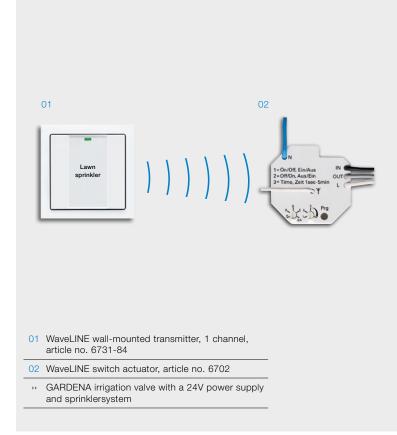


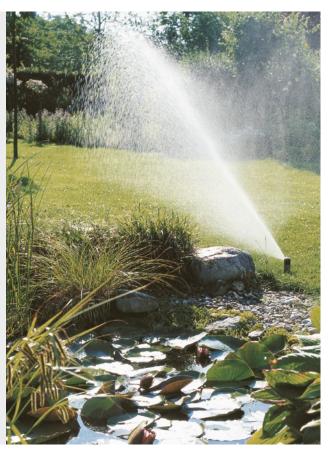
The key switch prevents unauthorized operation. The profile half cylinders of an existing locking system can be used. This makes additional keys unnecessary.

06 Key switch, article no. 2733 SLW-54

» 3gang combination as above, only the switch needs to be replaced with the key switch.

## Watering the garden with GARDENA. Its fun with the comfort of radio control.





#### Watering the easy way.

Permanently installed irrigation systems make watering the garden with a watering can or hose obsolete. The WaveLINE provides even more comfort. The irrigation system can be switched on or off from the kitchen or any other room in the house. For this, a irrigation valve, from GARDENA, for example, which can be connected to each switch combination, needs to be integrated. It is also possible to automatically switch the garden irrigation system on briefly with the Busch-Watchdog movement detector, to chase away small animals from your property. All you need to water your garden via radio signal is a wall-mounted transmitter, switch actuator, valve and system from GARDENA!



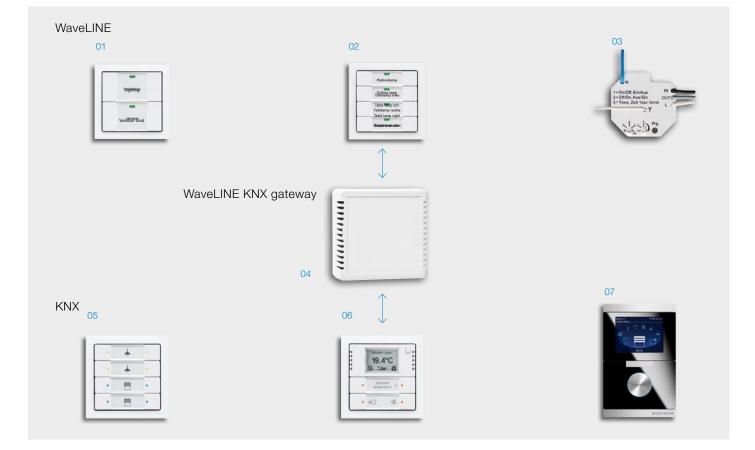
## ABB i-bus[®] KNX. Easy extension of networked home technology.



#### KNX radio control intelligently linked.

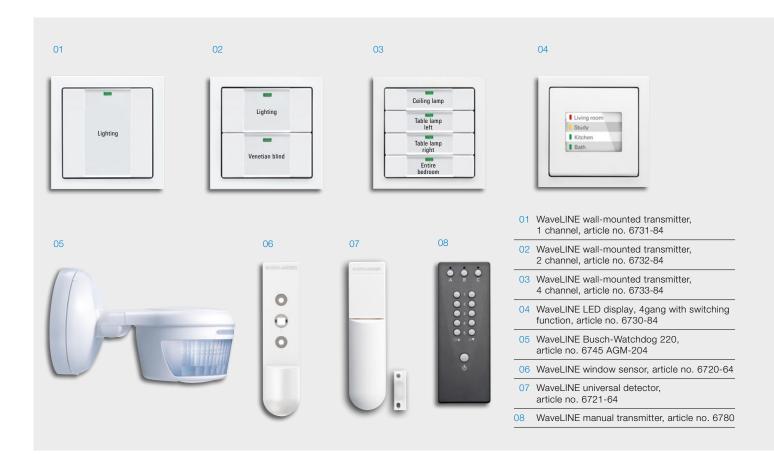
The light in the house is perfect for every situation, the living room is comfortably heated at just the right time and the movement of the blinds adjusts to the weather or the time of day – with networked home technology via the ABB i-bus® KNX the house adapts itself to your wishes. Aside from the power lines, also a KNX network is installed with which actuators and sensors comprehensively interact. Even though a KNX installation is carefully planned, it could be that individual functions may have to be added later.

The WaveLINE makes this possible without having to structurally extend the KNX network. Signals between the two systems can be exchanged via the WaveLINE TP-RF media converter. Here an example: the temperature sensor in the KNX network measures a specific temperature in the living room, the corresponding command is signaled via the media converter and triggers the radio signal in the WaveLINE system for lowering the blind.



- 01 WaveLINE wall-mounted transmitter, 2 channel, article no. 6732-84(-500)
- 02 WaveLINE wall-mounted transmitter, 4 channel, article no. 6733-84(-500)
- 03 WaveLINE switch actuator, article no. 6702(-500)
- 04 WaveLINE KNX gateway, article no. 6770(-500)
- 05 Control element, 4/8gang, article no. 6127/02-884
- 06 Room thermostat, article no. 6124/01-84
- 07 Busch-priOn[®] 8.89 cm-(3.5"-) TFT colour display with rotary control element, article no. 6344-825-101

## The complete range. At a glance.



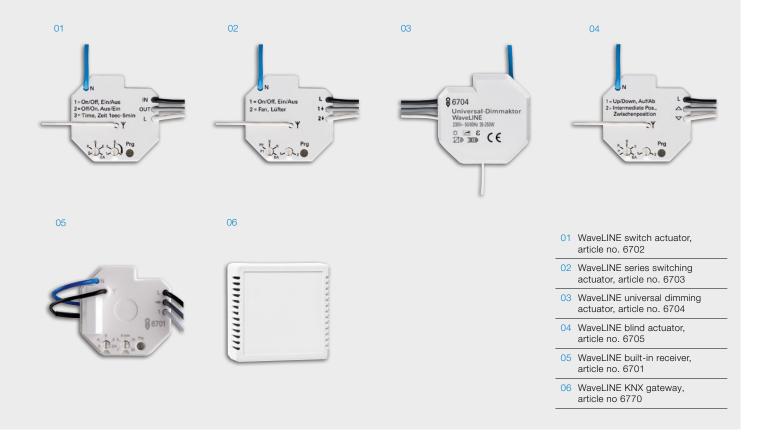
## Including a variety of designs.

The wall-mounted transmitters of the WaveLINE system are available in the switch ranges carat[®], pure stainless steel, solo[®], Busch-axcent[®] and future[®] linear. Wall-mounted transmitters with a 1 and 2 channel function are available in programs Busch-Duro 2000[®] SI and Reflex S. All for radio comfort in individual design.









## Easy to install. Also behind the socket outlet.

The WaveLINE actuators fit into the flush-mounted wall box. For the option of remotely controlling consumers connected to socket outlets, such as floor lamps, the corresponding actuator is simply installed behind the socket outlet.

## Interfaces for smooth integration.

The WaveLINE stands for flexibility due to the simple extension of operating options in and around the house. The smooth embedment into overall systems via made-tomeasure interfaces, ABB i-bus[®] KNX or SmartEnergy systems, for example, is a decisive advantage.

#### Contact us

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