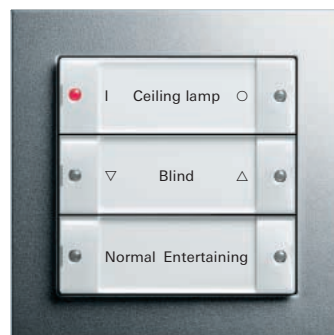


Simply via radio:
Light and light-scene management
Blinds control
Room temperature control
Security
Building management
Linking of numerous functions

Gira radio bus system

Intelligent functions for upgrading



Upgrade to intelligent building technology quickly and cleanly – simply via radio

More than 30 million existing buildings with no intelligent building technology offer the ideal opportunity for using the Gira radio bus system: With the Gira radio bus system, the modernisation of existing electrical installations in existing buildings can be performed quickly, cleanly and economically. Without any dirt, noise or great expenditure, a wide range of the most modern control options can be installed simply via radio – from the cellar up to the roof, from automatic lighting control to function-overlapping scenarios to central building management. This makes the Gira radio bus system the perfect solution for any renovation and modernisation.

Anything is possible – simply via radio:

- ▶ Convenient light and light-scene management
- ▶ Blind and awning control
- ▶ Power-saving room temperature control
- ▶ Comprehensive security functions
- ▶ Central building management
- ▶ Easy linking of numerous functions



The Gira radio bus system was developed especially for upgrading to modern bus technology in existing buildings, for single- and multi-family homes, freehold flats and other flats. It's also ideal for small commercial facilities, such as shops, restaurants, chambers and medical practices, however.

As no infrastructure is required, the Gira radio bus system is also of interest for smaller isolated solutions, e.g. light-scene management and panic switching. The system can be expanded at any time, so that the intelligent technology can grow in the building step by step. Naturally, the entire building technology can also be controlled and monitored via radio.

The transmission of signals between the components of the Gira radio bus system occurs via radio, i.e. no need for control lines here. The system is mounted quicker and cleaner than any cable-bound installation when installed subsequently and can even be taken along when you move.

Battery-powered sensors offer a high degree of flexibility, as they can be installed exactly where they are needed, even if a 230 V line is not available.

Stepping into the world of technology is easy. You need neither training nor software for installation of the Gira radio bus system.

Advantages:

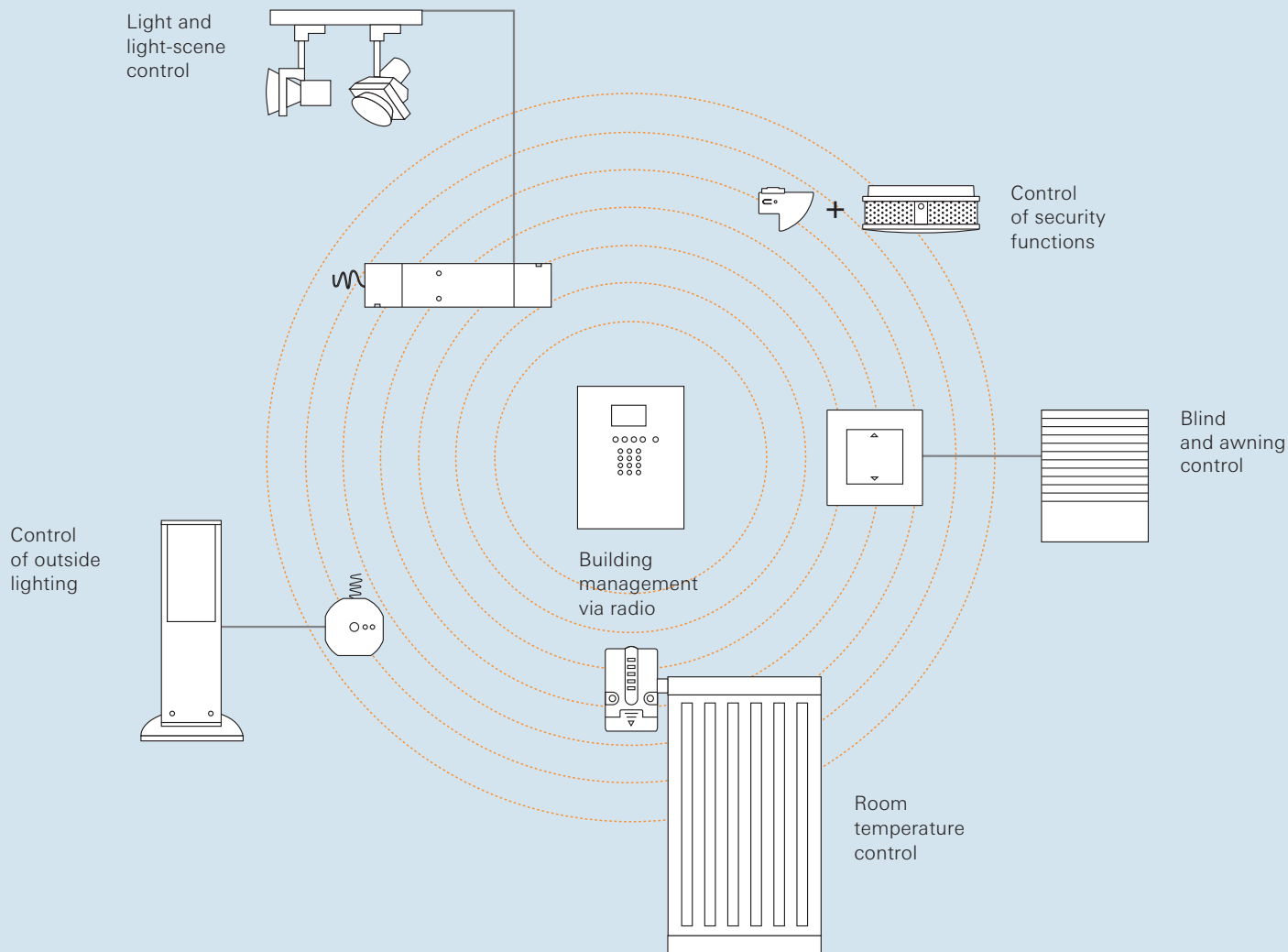
Ideal for upgrading existing buildings

Easy, quick, clean and quiet installation

Attractive price-to-performance ratio

High flexibility – can easily be modified later

Super-easy installation without software or training



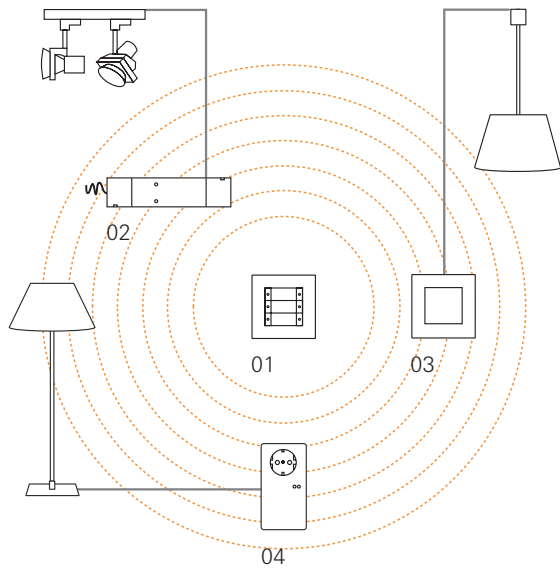
Lighting control – simply via radio

With the Gira radio bus system, existing buildings can be easily upgraded with individually adapted lighting control. In addition to the installation already in place, new operating points can be mounted with little expenditure, so that lights can be switched on and off and dimmed from a different spot, for example. Several lights can be controlled simultaneously or integrated into light scenes as well. The assignment of the operating point and lights can be changed easily at any time.

Simple upgrading via radio:

- ▶ Subsequent 2-way switching, e.g. at the bedside
- ▶ Light-scene control and management
- ▶ Garden lighting controlled from inside





Light and light-scene control via radio:
Switch and dim multiple lights at one time
and from a single location.

- Application example with:
- 01 Flat radio wall transmitter
 - 02 Radio switching actuator
 - 03 Radio top unit for switching and dimming
 - 04 Radio socket outlet adapter

The radio wall transmitters



Radio wall transmitter, flat design

The radio wall transmitter is characterised by an especially flat design. The device can also be adhered directly to smooth surfaces such as glass and wood without any additional housing.

Free of the need for a mains connection, it can be attached wherever operating points are needed. Previously installed switches and switch combinations can also be expanded quickly and cleanly with additional operating points using the radio wall transmitter.

The radio wall transmitter is available in 1- and 3-gang designs in transparent mint or transparent white in the design of the Gira switch ranges Standard 55, E2, Event and Esprit.

Note: The device cannot be used with the metal frames from Gira Esprit.

Radio wall transmitter insert for use with Gira push button sensors

The push button sensor (without controller) well known from the Gira Instabus KNX/EIB system can be easily attached to the radio wall transmitter insert. In addition to simple switching and dimming commands, lights or blinds can be controlled centrally and light scenes can be programmed. "All off" and "all on" commands are also possible.

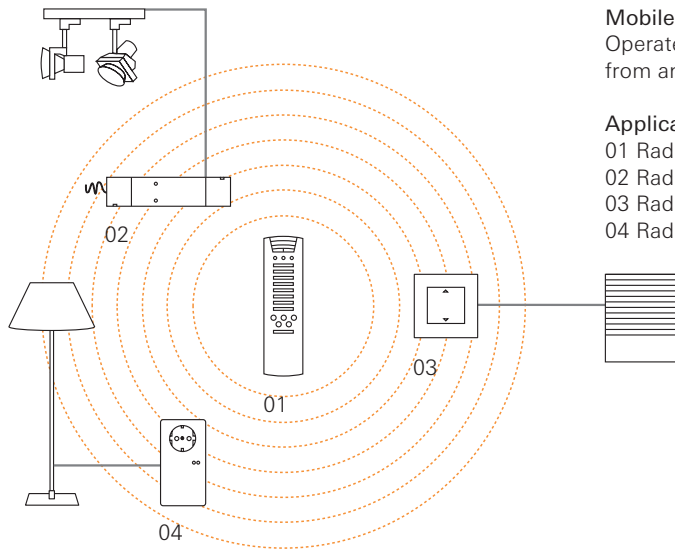
This radio wall transmitter is ideally suited toward installation in an existing flush-mounted box and can be combined with the covers and frames of all Gira switch ranges. It can also be operated trouble-free in the cover frames made of metal.

Radio universal transmitter 2 for use with conventional switches

The radio universal transmitter 2 detects the 230 V signals of conventional switches and push buttons and converts them to radio commands. Through the additional connection for the constant power supply, available at the installation site anyway, dimming telegrams are also possible.

The compact device is located behind the flush-mounted 230 V inserts in the flush-mounted box. In this way, existing sensors can also be integrated easily into the Gira radio bus system.

The radio universal transmitter 2 can be used with the covers and frames of all Gira switch ranges.



Mobile scene management via radio:
Operate scenarios for various lighting moods from any spot in the house.

Application example with:
01 Radio remote control
02 Radio universal dimmer 315 W
03 Radio control button top unit
04 Radio socket outlet adapter

The radio remote controls



Comfort radio remote control

The radio remote control offers maximum mobility. Up to 3 x 8 functions, e.g. switching and dimming of lights or controlling blinds, can be operated – even centrally. In addition, up to five light scenes can be saved and called up. All light scenes can be dimmed with the “master dimmer button”. For even more security, the radio remote control has separate central off and panic buttons (central on).

Mini radio remote control

In your pants pocket, the Mini radio remote control is always ready. As the little brother of the Comfort radio remote control, two receivers or receiver groups, some blinds or lights, can be controlled and switched with it.

The radio receivers and actuators



Radio top unit for switching and dimming

The device is attached onto the inserts from the Gira System 2000: It ensures that the switching and dimming commands of the radio transmitters are implemented, but can also be operated manually on site. Integration into light scenes is also possible.

Matching inserts from System 2000

Universal dimming insert for switching and dimming almost all lights. (Order No. 0305 00)

LV dimming insert for switching and dimming 230 V filament or halogen lamps in conjunction with conventional transformers. (Order No. 0331 00)

Relay insert for switching lights, fluorescent lamps or other electrical devices. (Order No. 0853 00)

Additional inserts can be found in the Gira catalogue.



Radio socket outlet adapter

Inserted between socket outlet and plug, the adapters make mobile devices switch-able via radio as well, e.g. standing and table lamps, radios and coffee machines.

Electrical devices can be switched on or off by radio via the radio socket outlet adapter. Lights can also be integrated in up to five light scenes.

The radio socket outlet adapter dimmer enables standing and table lamps with plugs for SCHUKO socket outlets to be dimmed. The dimmed brightness value of the lights can be saved in the adapter and called up as the switch-on brightness.



Radio universal cord dimmer

The radio universal cord dimmer is installed in the line of a standing or table lamp. Light can be switched on and off and dimmed via radio with it. It is possible to integrate the radio universal cord dimmer into light scenes as well.



Mini radio switching actuator
Mini radio momentary-contact actuator

The radio switching actuator Mini 1-channel enables switching of electrical loads via radio. The especially compact device can be used, for example, in the lamp canopy and thus offers an especially economical option of switching lights per radio. With sufficient contact security, the switching actuator can also be used behind socket outlets. The advantage: Mobile devices, standing lamps and all outside socket outlets can be switched off and on centrally via radio.

The Mini radio momentary-contact actuator switches on only for the duration of the actuation of the sensor (max. 12 sec.).

Mini radio switching actuator 2-channel

By using the Mini radio switching actuator 2-channel, it is possible to switch two electrical loads independently of one another.



Radio switching actuator
Radio momentary-contact actuator

With its slim design, the radio universal switching actuator can be installed in the tightest of spots, e.g. in intermediate ceilings.

The switching actuator can also be installed inconspicuously at cabinets. This makes it possible to switch the lighting of kitchen counters or display cabinets with the radio wall transmitter from the door or integrate it into light scenes.

This device is also available in a momentary-contact actuator version.



Radio universal dimmer
315 W

The radio universal dimmer enables the switching and dimming of lights.

Radio control unit
1–10 V

Using the radio control unit 1–10 V, fluorescent lamps with 1–10 V ballasts or electronic transformers with 1–10 V control input can be switched and dimmed.

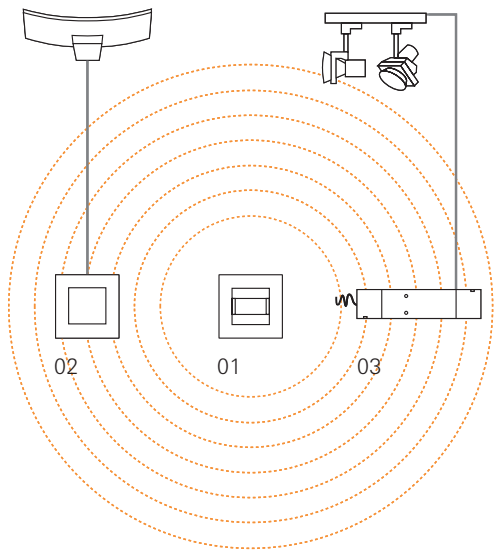
Automatic light – simply via radio

Automatic lighting control can also be implemented quickly and easily with the Gira radio bus system – not only in temporarily-used passageways and rooms, but also outside. The radio-capable sensors are battery-powered and can therefore be mounted anywhere. They signal the movement or presence of persons via radio to actuators, which then switch on the lights. Thus rooms are only illuminated when people are present in them. This reduces power consumption, lowers power costs and increases living comfort.

Simple upgrading via radio:

- ▶ Movement-dependent lighting control in passageways
- ▶ Presence-based illumination control indoors
- ▶ Automatic illumination control outdoors





Movement-dependent light control via radio:
Ideal for subsequent installation in passageways such as stairwells and foyers, for example.

- Application example with:**
- 01 Radio automatic control switch
 - 02 Radio top unit for switching and dimming
 - 03 Radio switching actuator

Radio sensors



Radio automatic control switch

The radio automatic control switch enables simple upgrading with convenient lighting control, as it can be adhered or screwed directly to a wall anywhere without a cable or flush-mounted box thanks to its compact, battery-powered nature.

When below the set brightness value, it activates radio actuators or power sections which switch on the connected lights. The light is switched off after movement has stopped for a while.

The brightness switching threshold, the daily operation and the sensitivity can be set for an optimum adjustment to the local conditions. The delay period can also be set when using the radio power section.

Radio presence detector

The radio presence detector is mounted on the ceiling and monitors an area with an 8 m diameter below it. If a certain brightness value is under-shot and the radio presence detector then senses a movement, it activates the radio actuator to switch on the light.

In conjunction with a dimmer, it can adjust the lighting to a constant value. If no movement can be recognized or if it is bright enough, the radio actuator is switched off, and thus also the light.

This functionality is convenient and saves energy, e.g. at the workplace or in the conference room.

Radio observer 180/16

The radio observer can do everything the conventional Gira observers can, but it doesn't need a mains connection thanks to its being supplied by battery. For this reason, radio observers can be attached anywhere they would have the best "overview", e.g. even in the garden or at the garden gate.

Radio power section



Radio power section

The radio power section is the partner of the radio observer. Upon receiving a signal, it switches connected lights on and then off again after the set delay time has expired. For optimum all-round protection, a radio power section can be combined with up to 30 additional radio observers.

This is especially practical, e.g. during a garden party: With the radio wall transmitter or radio remote control, the observer function can be disabled. During this time, the lighting stays switched on or off, your choice.

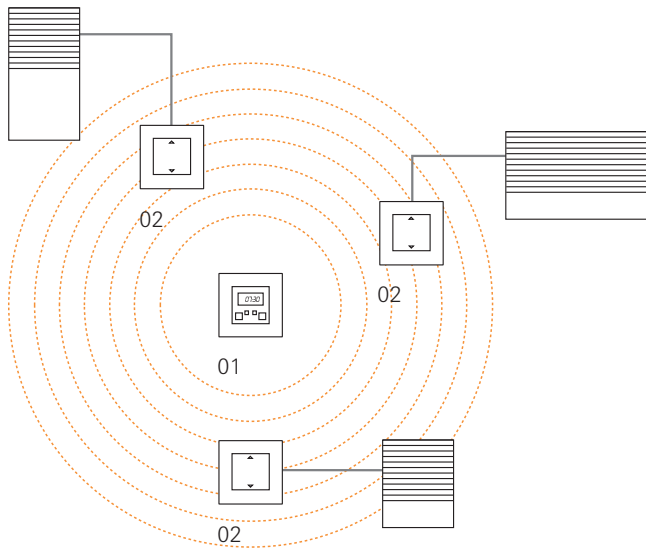
Control all the blinds – simply via radio

With the Gira radio bus system, central blind control can be upgraded easily without any caulking or plastering. Electronic blind control is integrated into the Gira radio bus system with the radio universal transmitter and the radio control button top unit. It then operates all of the taught-in blinds centrally, e.g. at the fixed times or depending on the sunrise and sunset. Naturally, the blinds can also be operated manually at the blind top units. If awnings or garage doors are to be controlled too, no problem. The radio bus components can be used here too.

Simple upgrading via radio:

- ▶ Central control of all blinds
- ▶ Time-dependent blind control
- ▶ Weather-dependent blind and awning control
- ▶ Garage door control





Blind control via radio:

Ideal for subsequent installation of central control of all blinds.

Application example with:

- 01 Electronic blind control in conjunction with the radio universal transmitter 2
- 02 Radio control button

Radio transmitter



Radio universal transmitter 2 for use with electronic blind control

The radio universal transmitter detects the 230 V signals of conventional switches and push buttons and converts them to radio commands. Through an additional connection for the constant power supply, available at the installation site anyway, slat adjustment and move is also possible.

The compact device is located behind the flush-mounted 230 V inserts in the flush-mounted box. A deep flush-mounted box is required for a combination with electronic devices, such as blind control or room temperature controller. If desired, the system then controls the blinds centrally in the morning and evening, for example.

Radio receiver and actuator



Radio control button top unit

The device is attached to the inserts of the blind control (e.g. Order No. 0398 00). It enables the (group) control of blinds via the following of central radio control commands, which could come from an electronic blind control in conjunction with the radio universal transmitter; manual operation at the device is possible.

Solar and glass-breakage sensors can also be integrated. Automatically lowering blinds then protect rooms and potted plants from bright sunshine and protect your property from unlawful access when glass breaks.



Mini radio blind actuator

If only a small amount of space is available, the Mini radio blind actuator is used. The especially compact design allows the actuator to be installed in a flush- or surface-mounted box next to a shutter box.

The device enables distant radio control of a blind or shutter motor and can adjust the slats and move the blind based on the actuation of a radio transmitter.

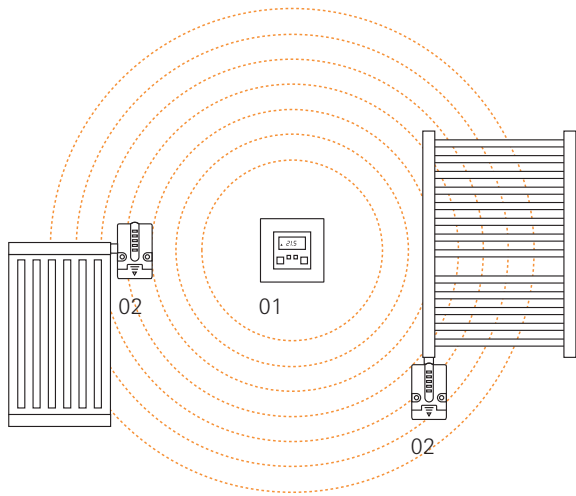
Control the room temperature – simply via radio

Only heating rooms when they are actually being used is not only convenient, but saves energy too. With the radio room temperature sensor with clock and the radio motor valve drive, such economical, single-room temperature control can be implemented very easily at a later date. The radio room temperature sensor transmits telegrams to one or more radio motor valve drives, which then actuate the heating valves. The times at which the heating is to be switched on and off can be programmed totally separately and day-dependent. Heating optimisation ensures that the desired temperature is also reached at the selected time.

Simple upgrading via radio:

- ▶ Central-off function when leaving the house
- ▶ Panic switching if you hear suspicious noises
- ▶ Alarm and control of light and blinds in case of fire





Room temperature control via radio:
Ideal for subsequent control of single or multiple radiators in a room.

Application example with:

- 01 Radio room temperature sensor with clock
- 02 Radio motor valve drive

Radio transmitter



Radio room temperature sensor

The radio room temperature sensor with integrated time clock and the radio motor valve drive enables quick and simple upgrading of convenient single-room control.

Up to 32 different switching times can be set with it. The times for the comfort or lowering temperature for each day can be programmed individually. It transmits current information on the room temperature, the setpoint temperature and the temperature level to the battery-operated radio motor valve drive which operates the heating valve. Self-taught heating

optimisation guarantees that the desired temperature is also reached at the selected time.

The radio room temperature sensor with clock is available in the style of the various Gira switch ranges.

Radio actuator



Radio motor valve drive

The radio motor valve drive together with a valve adapter is attached to the heating valve of a floor heater, radiator or convector heater. It actuates the radiator valve upon incoming radio commands from the radio room temperature sensor. The emitted heat is continually adapted to the current requirements here.

In connection with the Gira radio controller, the radio controlled room temperature control can be combined with additional radio bus functions to produce centrally accessible scenarios and time programs.

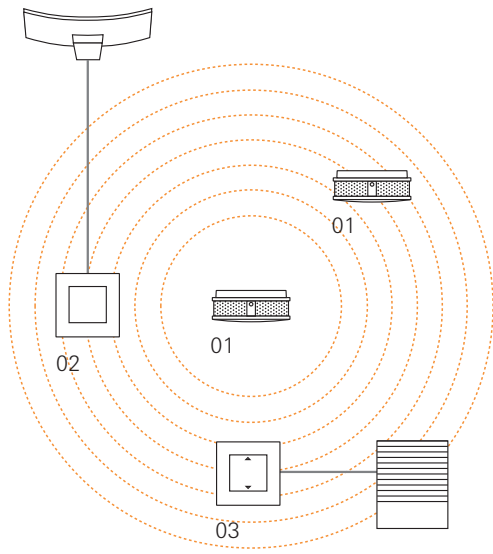
Install more security – simply via radio

Networking of the radio bus components enables comprehensive security functions which can only be implemented with a conventional installation with great expenditure. All dangerous devices can be switched off at once via radio with the push of a button. The radio panic button also offers you added security. You can use it to switch on all the lights in the house and garden if you hear suspicious noises at night. In case a fire alarm is triggered, the Gira radio bus system automatically switches the lights on, raises the blinds and thus secures the escape route.

Simple upgrading via radio:

- ▶ Central-off function when leaving the house
- ▶ Panic switching if you hear suspicious noises
- ▶ Alarm and control of light and blinds in case of fire





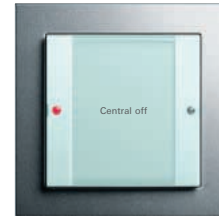
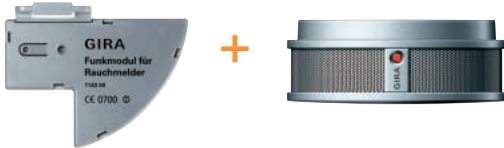
Security functions via radio:

If a radio smoke detector triggers an alarm, the light is switched on and the blinds are raised automatically, for example.

Application example with:

- 01 Radio modular smoke detector/VdS
- 02 Radio top unit for switching and dimming
- 03 Radio control button top unit

Radio sensor and transmitter



Modular smoke detector/VdS with radio module

Increased security is offered by the modular smoke detector/VdS with radio module. It can be easily integrated into the radio bus installation and networked with additional radio receivers.

This allows it to not only warn of danger, but also ensures secure escape options: The smoke detector switches the hall and stairwell lights on and raises the blinds in case of fire via the radio module, for example. It also triggers additional radio-capable smoke detectors, which then signal an alarm together. Even danger in remote rooms won't stay undetected here.

Up to 40 additional smoke detectors can also be networked by wire with the radio-capable smoke detector and integrated into the alarm chain.

Radio panic switch

Panic switching can be implemented very easily, e.g. next to the bed, with the Gira radio wall transmitter.

If you hear suspicious noises at night, all you have to do is give a touch and any number of radio receivers and actuators are switched on accordingly. Your house and garden will be bathed in frighteningly bright light. This will surely make questionable characters take flight.

Radio central circuit breakers

Touching the central circuit breaker next to the front door ensures that no important or dangerous devices remain switched on when leaving your home.

Not only individual devices can be integrated into this function, but also entire circuits; this lets you rest assured that the stove or clothes iron is definitely switched off when you're gone.

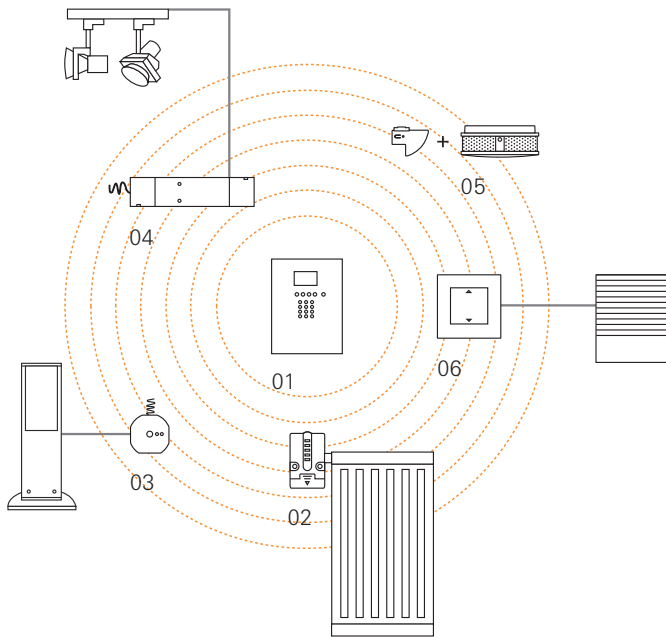
Manage all of the building technology – simply via radio

With the Gira radio controller, central building management can also be implemented, without complex wiring work. Thus not only individual devices, but also a variety of functions, such as lighting, blinds, heating, power supply and security technology, can be linked with one another and controlled and monitored via radio. In addition, all radio transmitters and receivers can be reprogrammed centrally and relinked with the Gira radio controller. This gives you access to all of the building technology at a central location.

Simple upgrading via radio:

- ▶ Central control and monitoring of all radio bus components
- ▶ Central creation, execution and modification of light scenes, scenarios and time programs
- ▶ Central networking of various functions





Building management via radio controller:
 Ideal for central control, monitoring and networking of the entire radio bus installation.

- Application example with:**
- 01 Radio controller
 - 02 Radio motor valve drive
 - 03 Mini radio switching actuator
 - 04 Radio switching actuator
 - 05 Smoke detector with radio module
 - 06 Radio control button top unit



Radio controller

The radio controller is the central control and operating unit for the entire Gira radio bus system.

All radio bus components can be addressed, programmed, linked and organised in freely-definable groups with it.

Devices integrated in the Gira radio bus system, such as lights, blinds and heating can be managed and controlled centrally – individually or in a group, manually, by time switch or integrated in scenarios. Quick execution of light scenes is possible via the number buttons and the favourites button is ideally suited toward especially frequently-used functions.

All settings programmed by the user can be saved to a chip card for backup purposes and loaded back into the radio controller if necessary. Function enhancements are possible via software updates.

Using special mounting frames, the radio controller can be installed either surface- or flush-mounted.

It can also be integrated with additional functions into the modular function profile. This forms a clean and uniform total solution.

Additional radio bus components

The Gira radio bus system offers solutions for the widest variety of installation environments, e.g. radio DRA components, with which existing conventional distributor installations can be upgraded to radio. If isolated solutions are to be implemented via radio within an Instabus KNX/EIB installation and integrated into the Instabus, this can be accomplished easily via the Gira radio Instabus converter. In large buildings, a repeater ensures that radio transmitters and receivers can also communicate over a greater distance.

Radio DRA receivers and actuators



Radio receiver module DRA

The radio receiver module is installed together with radio DRA actuators in a distributor and wired to them. It receives radio telegrams via an integrated antenna and forwards them via a separate data cable to the radio DRA actuators. Up to 30 actuators can be connected to a receiver module.

A radio additional antenna is required with installation in a metal distributor. It is installed outside the distributor and connected to the reception module.



Radio DRA actuators

With the DRA radio actuators, light and blind applications can be implemented in a building centrally, and an existing conventional distributor installation can be upgraded to radio, for example. They are installed in a distributor together with the radio receiver module without negatively affecting each other's reception quality.

The radio DRA actuators include a radio control unit 1–10 V, a radio universal dimming actuator, a radio blind actuator and a radio switching actuator.

Radio gateway



Radio Instabus converter

The converter links the radio bus system to the Gira Instabus KNX/EIB system. It receives radio signals, converts them and forwards them to the Instabus KNX/EIB system. By linking these two systems, it is possible to use the mutual advantage: Instabus KNX/EIB devices can be operated from any point, e.g. with the radio remote control, and sensors can also be installed where no bus cables are available or desired.



Repeater for greater ranges

If the range of the radio signals isn't sufficient, you can use the repeater: It receives weakened signals from assigned transmitters and transmits them again at a high signal level. This ensures that all commands reach the receiver.



You can “climb aboard” as an electrical installer right away with the Gira radio bus system, because you need neither training nor software. During commissioning, you need only assign the devices – you’re done in a snap of the fingers.



Demonstrate commissioning and operation: The Gira radio bus presentation case helps you advise customers interested in subsequent installation of modern electrical engineering. It contains three functional and plug-ready displays with original devices. Functioning and advantages of the wireless radio bus technology can be presented graphically with them.

Display 1:
Comfort radio remote control, radio presence detector, aluminium colour and clamping light with lighting element.

Display 2:
functional radio switching actuator and light signal, Gira E2, aluminium colour.

Display 3:
3-gang radio wall transmitter, flat design, radio dimmer and SCHUKO socket outlet, Gira Esprit glass mint/aluminium colour.

More information on individual components is available, as usual, on the Internet at www.gira.de/funkbus















To program the radio top unit for switching and dimming and the radio control button top unit:


1. Keep the button of the receiver pressed in the centre for approx. 4 seconds. A pulsing signal tone indicates readiness for programming.
2. Trigger a signal, e.g. by actuating a button on the remote control. It is read in and saved.
3. A continuous signal tone confirms successful assignment. The programmed receiver now only responds to signals of “its” transmitter.




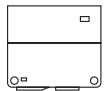







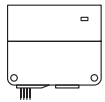



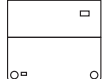
To program all remaining receivers:

1. Keep the “Prog” button pressed for approx. 4 seconds. The red LED flashes.
2. Press the desired button of the transmitter. Continuous illumination of the LED confirms successful assignment.
3. Press the “Prog” button briefly again. Programming is complete.





The system components and their combination options

Radio bus-system transmitter		
Bi-directional devices		
	Radio controller	0358 18
	Radio module for modular smoke detector/VdS	1143 00
Uni-directional devices		
	Radio remote control Comfort	0527 00
	Radio remote control Mini	0412 00
	Radio universal transmitter 2	0521 00
	Radio room temperature sensor with clock	1186 . .
	Radio observer 180/16	0826 02
	Radio automatic control switch	1306 . .
	Radio presence detector	0318 02 0318 04
	Radio multi-purpose transmitter, 4-gang	0441 00
	Radio wall transmitter, flat	1111 . .
		1113 . .
	Radio wall-transmitter insert, combinable with EIB push button sensors	0511 00
	Loewe television sets with "Media Plus Chassis" software or Loewe RC 1 remote control	

Combinable top units		
	Push button sensors, combinable with radio wall-transmitter insert	
Push button sensor 2		
	1-gang	1011 . .
	2-gang	1012 . .
	3-gang	1013 . .
Push button sensor with inscription space		
	1-gang	0881 . .
	2-gang	0882 . .
	4-gang	0884 . .



Radio bus-system receiver		
Bi-directional devices		
	Radio controller	0358 18
	Radio module for modular smoke detector/VdS	1143 00
	Radio motor valve drive	1187 00
Uni-directional devices		
	Radio power section surface-mounted	0843 02
	Radio switching actuator	0404 00
	Radio momentary-contact actuator	0567 00
	Mini radio switching actuator	0413 00
	Mini radio switching actuator, 2-channel	0424 00
	Mini radio momentary-contact actuator	0565 00
	Radio socket outlet adapter for switching	0401 02
	Radio socket outlet adapter for dimming	0401 10 1185 02 1185 10
	Radio control unit 1-10 V	0865 00
	Radio-universal cord dimmer 315 W	0335 01
	Radio universal dimmer 315 W	0809 00
	Radio top unit for switching and dimming (combinable with System 2000 inserts)	0543 . .
	Radio repeater for greater ranges	0867 00
	Radio receiver module DRA	1133 00
	Mini radio blind actuator (connectable to tube motor)	0425 00
	Radio control button top unit with sensor evaluation (mountable on blind controller inserts)	0545 . .
	Radio Instabus converter, surface-mounted (for transition to Gira Instabus KNX/EIB System)	0868 00







... combinable with:

System 2000 inserts	
	Universal dimming insert 0305 00 LV dimming insert 0331 00
	1-10 V control unit 0860 00
	Tronic switch insert 0866 00 Triac switch insert 0854 00
	Relay insert 0853 00 Heating/cooling relay insert 0303 00 Zero-voltage relay insert 1148 00

The inserts named above are also combinable with the top units listed at the right.









... combinable with:

DRA actuators	
	Radio switching actuator, 1-gang 1134 00 Radio blind actuator, 1-gang 1136 00
	Radio-universal dimming actuator, 1-gang 1135 00 Radio control unit 1-10 V, 1-gang 1137 00


System 2000	
	Auxiliary insert for presence detector and automatic control switch (3-wire) 0335 00
	Auxiliary insert (2-wire) 0333 00
All auxiliary inserts can be used to expand the inserts listed at the left.	
Top units	
	Comfort presence detector ¹⁾ 0317 02 0317 04
	Top unit for switching and dimming ²⁾ 0655 ..
	Automatic control switch Installation height 1.10 m ¹⁾ Standard 1300 .. Comfort 0661 ..
	Automatic control switch Installation height 2.20 m ¹⁾ Standard 1301 .. Comfort 0671 ..

¹⁾ for System 2000 inserts and auxiliary insert 0335 00
²⁾ for System 2000 inserts and auxiliary insert 0333 00

... combinable with:

Blinds control system	
	Tube motor with safety switch-off 10 Nm 0857 00 25 Nm 1149 00 35 Nm 0858 00 50 Nm 0859 00
The inserts listed in the following are combinable with the tube motors and the top units listed at the right.	
	Blind controller insert without auxiliary input 0399 00
	Blind controller insert with auxiliary input 0398 00
	Blind controller insert without neutral conductor 0395 00
	Blind controller insert DC 24 V 0388 00
Top units	
	Top unit for control button 0644 .. – with sensor evaluation 0820 .. – with sensor evaluation and memory function 0822 ..
	Top unit for easy electronic blind controller (no auxiliary unit evaluation possible) 0841 ..
	Top unit for electronic blind controller – with sensor evaluation 0646 .. 0823 ..
The top units are combinable with the inserts listed at the left.	

... combinable with:

Instabus KNX/EIB System	
	Instabus KNX/EIB System

General information on the Gira radio bus system.

General notes on the Gira radio bus system

Radio transmission occurs on a non-exclusive transmission path, and interference cannot be excluded for this reason. The radio transmission is thus not suitable for security purposes, e.g. emergency-stop, emergency call etc. If walls and ceilings are to be penetrated along the

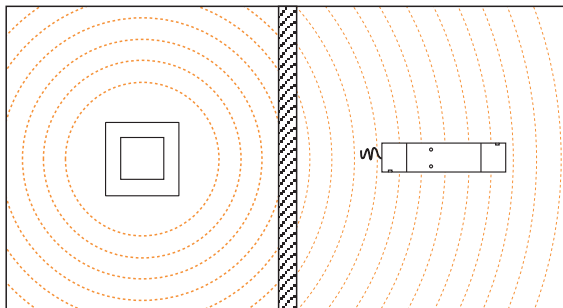


Abb. 1: Walls and ceilings reduce the strength of the radio signal

transmission path (Fig. 1), the radio range depends considerably on the type of construction materials to be penetrated and the effective wall thickness. The table shows the capability of radio signals to penetrate different materials.

Degree of penetration for dry material:

Wood, plaster, sheetrock:
approx. 90% penetration

Brick, pressboard:
approx. 70 % penetration

Reinforced concrete:
approx. 30 % penetration

Metal, metal screens,
aluminium cladding:
approx. 10 % penetration

Important: Moisture in the material reduces penetration.

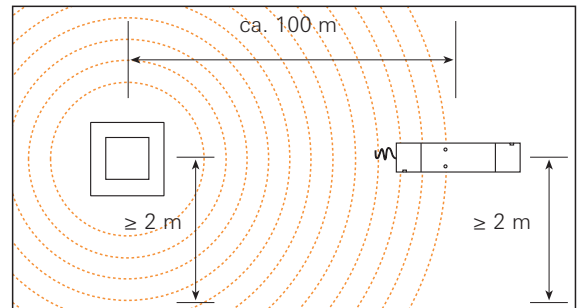


Abb. 2: Measurement of the free-field range

Due to the multitude of influences, the evaluation of the radio paths in buildings is very difficult. For this reason, the range specified in the free field (Fig. 2) refers to uninfluenced dissemination of the radio waves and optimally aligned arials. With the Gira radio bus system, this is usually 100 m.

Requirements for the measurement of field ranges:

Level area

Horizontal distance to interfering objects from each point of the line connecting the transmitter and receiver > 20 m

Height of the measured objects above the ground > 2 m

Alignment of the measured objects for optimum contact

Moist ground

Dependence of transmission range from the mounting height of the receiver:

100 m	at	≥ 2 m
56 m	at	1,5 m
34 m	at	1,0 m
28 m	at	0,8 m
23 m	at	0,6 m
18 m	at	0,4 m
13 m	at	0,2 m

Condition:

The mounting height of the sensor is 2 m with a moist ground.

How to ensure the best possible radio connection

Align all aerials of the transmitters and receivers vertically or all horizontally to the greatest extent possible.

The length of aerials may not be changed, as they are perfectly matched to the wavelength of the frequency.

Maintain the greatest possible distance (several decimetres) to larger metal surfaces, e.g. metal doors and frames, aluminium blinds or metal cabinets.

A minimum distance of 10 cm is to be maintained between two receivers.

A minimum distance of 30 cm is to be maintained between transmitter and receiver.

Maintain a minimum distance of 50 cm to electronic devices, e.g. motors, electronic ballasts or Tronic transformers.

Radio components of other function groups, e.g. radio headphones or cordless telephones, must be kept at least 3 m away.

How to select a suitable mounting site

Check the planned system in the building with the respective devices, e.g. from the radio presentation case, for a reliable radio connection before using radio components. Take the state of construction of the building into account here, e.g. the degree of drying out off plaster and screed or the existing doors and armour or hangings of the windows.

Do not mount the transmitters and receivers near the ground and observe a minimum installation height of 0.5 m.

Transmitters and receivers are not to be installed behind metal or conductive surfaces, such as anti-static floors, sounding with metal cladding, cable lines, metal louvered ceilings and hot-water and electrical floor heating.

To correct irregular reception, it is often sufficient to move the transmitter or receiver a few centimetres. This reception interference can often occur due to shadowing, obliteration, or reflections of the radio signal as sometimes occur with car radios and mobile telephones, for example.

How to ensure secure radio signal transmission

To avoid telegram overlapping, do not operate other radio transmitters with radio receivers.

To avoid telegram overlapping, repeat a radio telegram only via a repeater within a "radio zone". The repeater is to be installed in a sensible place, i.e. halfway between the transmitter and receiver.

No more than eight presence detectors may be used within a "radio zone". With constant presence in all detection areas of these signallers, the radio channel could be heavily burdened due to the high frequency of telegrams from the presence detectors.

Product-specific aspects for secure radio signal transmission

Radio presence detector:
Please use only alkaline batteries to operate the radio presence detector, as only these have sufficient pulse current capacity.

Multi-purpose transmitter:
Please extend push button cables only with paired cables for each input and with a cross section of approx. 0.2 mm² to max. 5 m. Insulate unused cables.

Repeater:
Please install the device as close as possible to the middle of the distance between the transmitters and receivers and not near other transmitters or receivers. Please maintain a minimum distance of 1 m to prevent overamplification.

GIRA

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