System basics

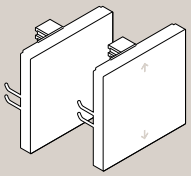
07

Gira System 3000

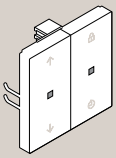
GIRA

Gira System 3000 // Device overview

Top units

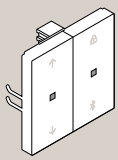


Gira System 3000
Operating top unit and operating top unit arrow symbols



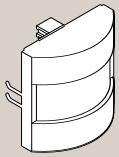
Gira System 3000
Operating top unit Memory

Gira System 3000
Blind timer and timer Display

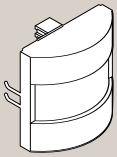


Gira System 3000
Blind timer and timer BT

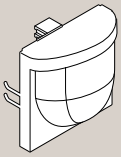
Gira System 3000
Brightness and temperature sensor BT



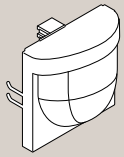
Gira System 3000
Motion detector top unit 1.10 m Standard



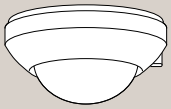
Gira System 3000
Motion detector top unit 1.10 m Komfort BT



Gira System 3000
Motion detector top unit 2.20 m Standard

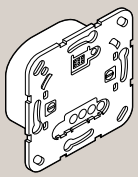


Gira System 3000
Motion detector top unit 2.20 m Komfort BT

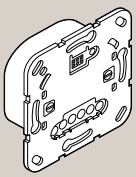


Gira System 3000
Presence and motion detector 360° top unit BT

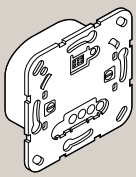
Inserts



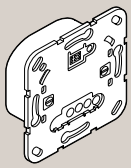
Gira System 3000
Relay switching insert



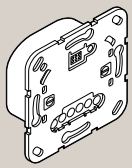
Gira System 3000
Electronic switching insert



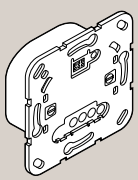
Gira System 3000
Universal LED Dimming insert Standard



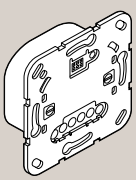
Gira System 3000
Universal LED Dimming insert Komfort



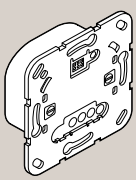
Gira System 3000
DALI power control unit, flush-mounted insert



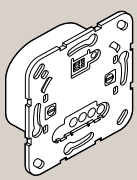
Gira System 3000
Auxiliary insert, 2-wire



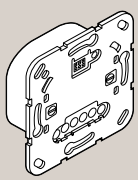
Gira System 3000
Auxiliary insert, 3-wire



Gira System 3000
Impulse insert



Gira System 3000
Blind control insert without auxiliary input



Gira System 3000
Blind control insert with auxiliary input

Gira System 3000

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1 // The Gira System 3000

With the new System 3000, daily control of lighting and shading is easier and more convenient than ever before. By combining different top units and inserts, the kit offers a solution for almost any desired function. The System 3000 can be controlled manually on the device, automatically via the sensor and/or timer, and using the Gira Bluetooth app. The craftsman-friendly inserts have a low installation depth – this facilitates installation and shortens installation times. All inserts from the System 3000 can be freely combined with the Gira top units from the following design lines: Standard 55, Gira E2, Gira E3, Event, Gira Esprit, Gira Studio, ClassiX Gira E22, Gira F100 and certain versions of Gira TX_44.

1.1 Easy installation

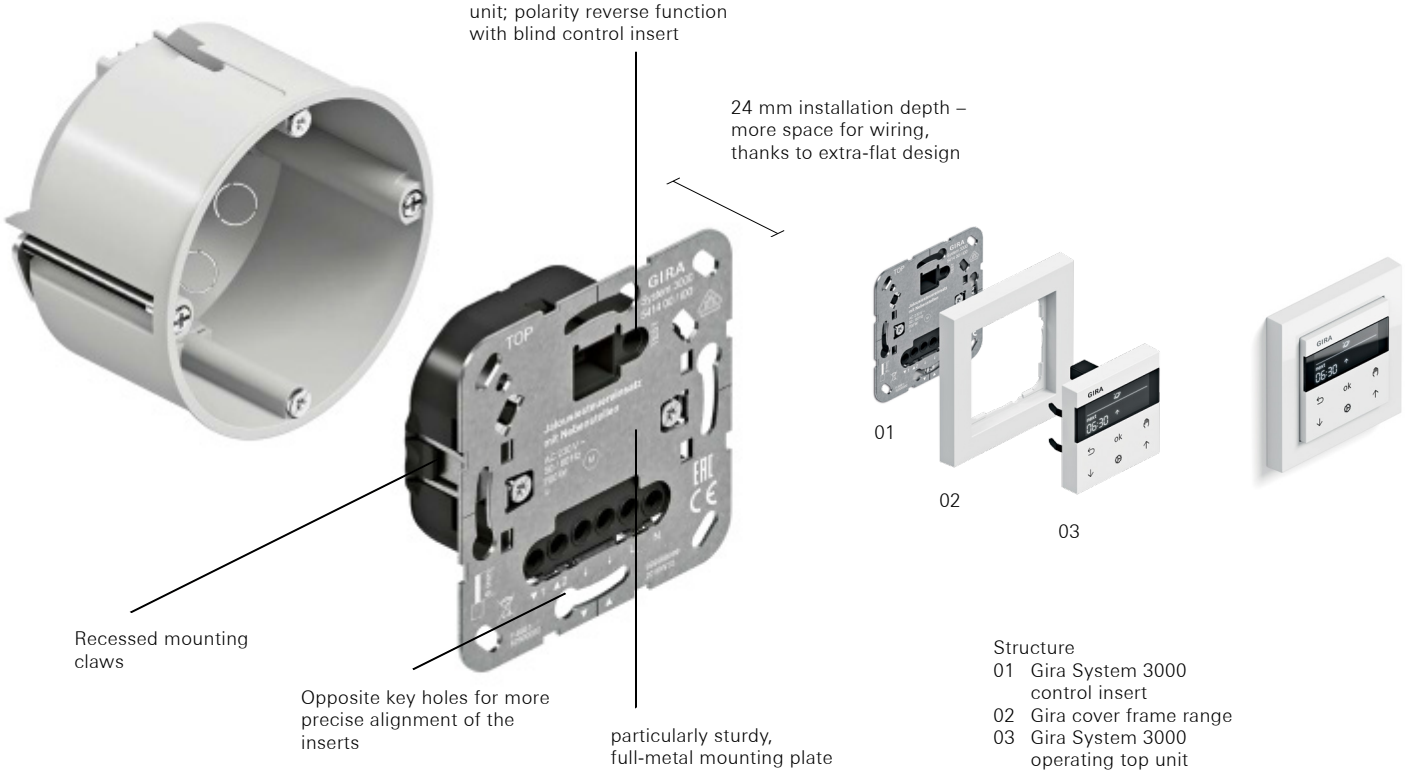
Installing the System 3000 components is now easier than ever. The low installation depth of the inserts offers more space for wiring. The galvanised steel mounting plate provides sufficient stability. The housed mounting claws allow for an easy and quick installation and ensure a secure hold in the flush-mounted device box.

The space-saving inserts can be effortlessly wired into any commercially-available flush-mounted device box and cavity box.

The new inserts make it possible to check the installation with a test button even without top units. You can also make additional settings using the test button. An LED gives feedback on the currently set function.
Start-up is particularly reliable thanks to the plug-in top units with particularly sturdy retaining springs. An exchange protection signals via LED or via the display if the attachment, for example, was plugged into the wrong insert after a renovation.

Mounting the cover frames and top units is particularly easy thanks to sturdy mounting plates and retaining springs. Exchange protection helps to find the right insert after a renovation.

After successful installation, the top unit with all its functions is available.



Structure
01 Gira System 3000 control insert
02 Gira cover frame range
03 Gira System 3000 operating top unit

1.2 Intuitive operation

In addition to manual actuation, the Bluetooth components of the new System 3000 are conveniently operated and configured via smartphone using the Gira Bluetooth app.

1.3 Clear advantages

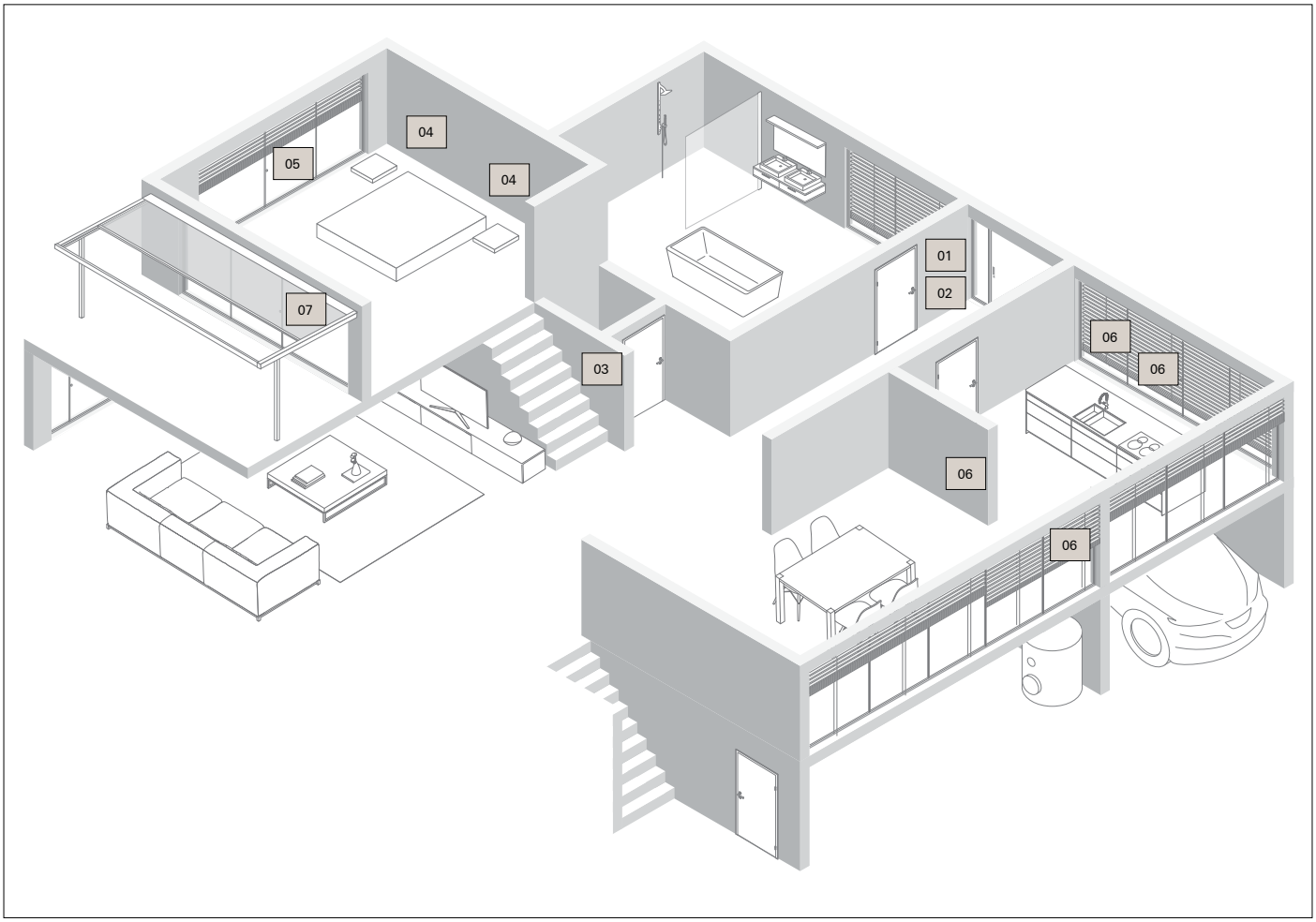
The System 3000 supports skilled craftsman as well as developers and renovators with the modular principle.

Specialised craftsmen
A forward-looking, future-proof system creates customer loyalty.
Easy and fast installation, e.g. reverse polarity function with blind control insert.
Backward compatible with the addition of existing systems.
Test button and operating mode selection button shorten the installation time.
Voltage measurement possible when installed.

Developers and renovators
Components for different applications (switching, dimming, shutters, blinds, etc.).
Easy and intuitive operation for all ages.
Optional control via Gira Bluetooth app possible.
Use of the Bluetooth technology, therefore a separate WLAN is not required.
The colour and material of the top units can be selected from the extensive Gira design line.
All inserts can be freely combined with the Gira top units from the following design lines: Standard 55, Gira E2, Gira E3, Event, Gira Esprit, Gira Studio, ClassiX, Gira E22, Gira F100 and certain versions of Gira TX_44.
Easier installation saves time and costs.
Depending on the operating top unit, the standby recording is only 0.2 to 0.5 W.
Backward compatibility with the addition of existing equipment, blind control and System 2000.

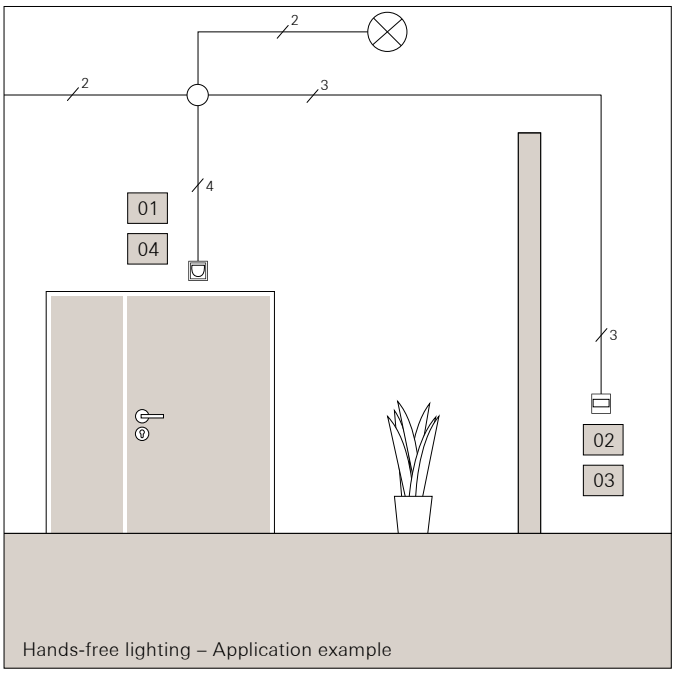
2 // Application scenarios

2.1 Single-family home



01	Hands-free lighting
02	Alarm function
03	Automatic lighting for the guest WC
04	Conveniently control lighting via the auxiliary unit
05	Shading control with lock-out protection
06	Shading of entire areas using group control
07	Automatic shading in bright sunlight

2.1.1 Hands-free lighting



Hands-free lighting – Application example

Automatically switch on the hall light when coming home in the dark. With a Gira motion detector or presence and motion detector you'll have this function set up in no time at all. For long or winding halls, simply extend the detection field with a 3-wire auxiliary insert and another motion detector. If there is no-one in the detection range, the lighting switches off automatically again. Of course, the Gira motion detectors also take into account ambient brightness. If there is enough daylight, the light stays off. It's as simple as that.

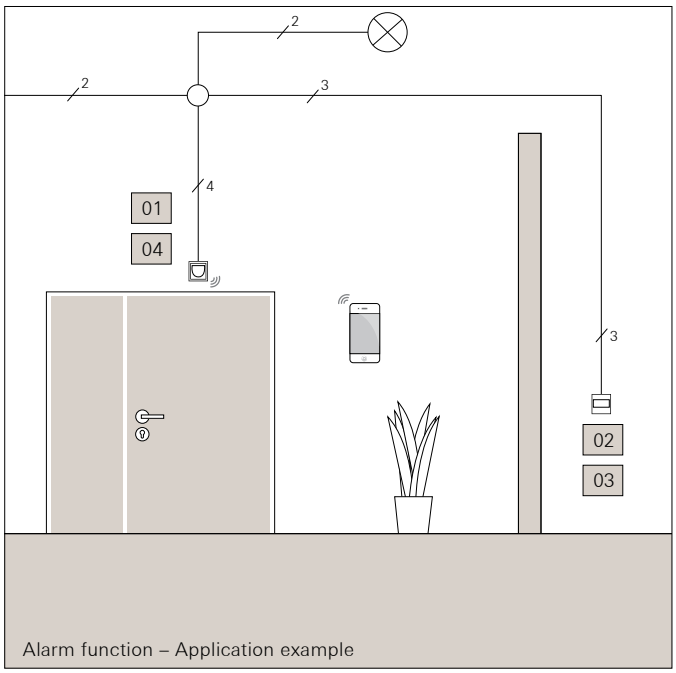
Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Auxiliary insert, 3-wire	1	5409 00
03	Motion detector top unit 1.10 m Standard	1	5373 ..
04	Motion detector top unit 2.20 m Standard	1	5375 ..

Note:

If a 3-wire auxiliary insert is used, no operating top unit may be used on the main unit.

Number of 3-wire auxiliary inserts: maximum of ten
Total cable length: maximum 100 metres.

2.1.2 Alarm function



Alarm function – Application example

With one click in the Gira Bluetooth app, the motion detector becomes your watchdog.

The activated alarm function detects movement of persons and causes the lighting to flash. Burglars are unsettled and deterred. The light signal may also alert neighbours. The alarm function is triggered independently of brightness and can be used along with other additional functions such as occupancy simulation. Of course, you can also extend the detection field with up to ten auxiliary units here.

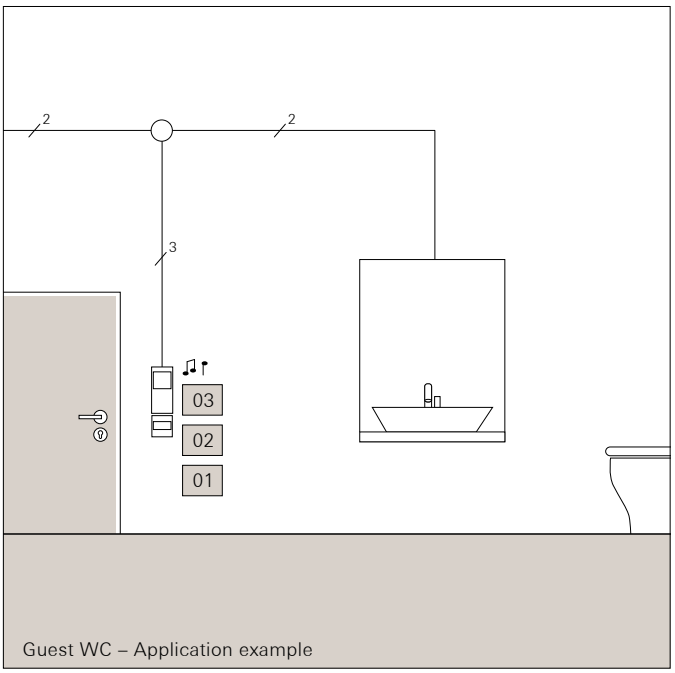
Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Auxiliary insert, 3-wire	1	5409 00
03	Motion detector top unit 1.10 m Standard	1	5373 ..
04	Motion detector top unit 2.20 m Komfort BT	1	5376 ..

Note:

If a 3-wire auxiliary insert is used, no operating top unit may be used on the main unit.

Number of 3-wire auxiliary inserts: maximum of ten
Total cable length: maximum 100 metres.

2.1.3 Automatic lighting for the guest WC

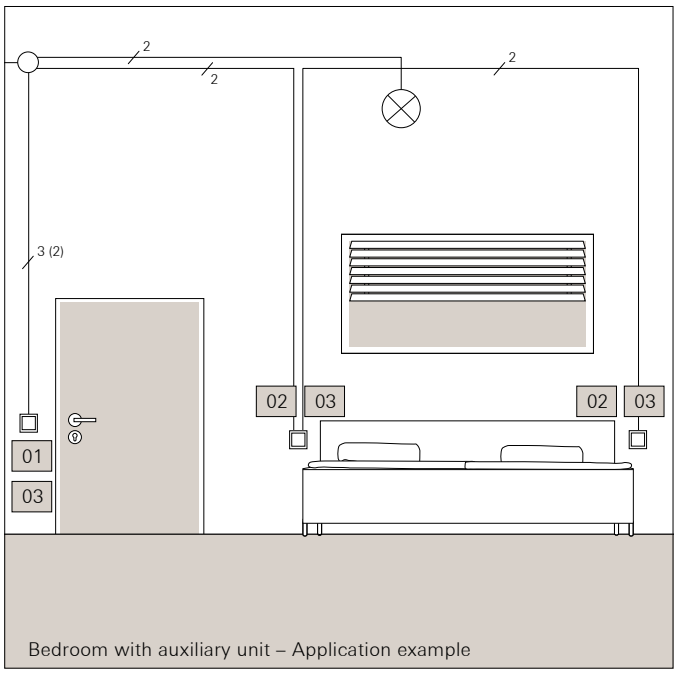


Guest WC – Application example

In windowless rooms, a motion detector provides a very good service, for example, in the basement, the attic or the garage. And automatic lighting in the windowless guest WC also saves guests from searching for the light switch. That's not enough? How about if the radio played music? No problem with the Gira RDS flush-mounted radio! When motion is no longer detected, the motion detector automatically turns off the lighting and the radio.

Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Motion detector top unit 1.10 m Standard	1	5373 ..
03	Gira RDS flush-mounted radio	1	2280 ..

2.1.4 Convenient lighting control with auxiliary unit

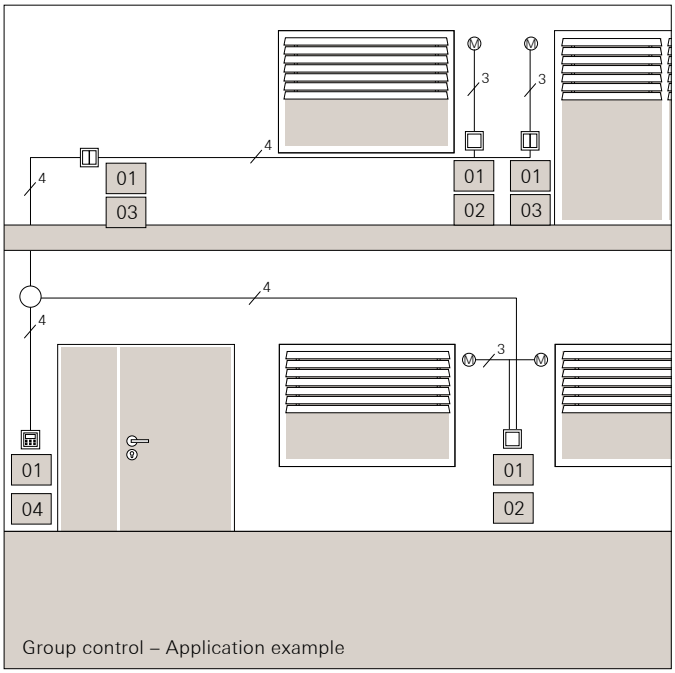


Bedroom with auxiliary unit – Application example

Getting up again to turn off the main bedroom lighting? With the 2-wire auxiliary insert, you can add additional operating points to the main unit.
The range of functions is specified by the main unit.
Looking for even more convenience? The bedroom lighting is dimmable with the universal LED dimming insert Komfort as the main unit. Even via auxiliary units.

Number	Components	Quantity	Order no.
01	Universal LED dimming insert Komfort	1	5401 00
02	Auxiliary insert, 2-wire	2	5408 00
03	Operating top unit	3	5360 ..

2.1.5 Shading of entire areas using group control



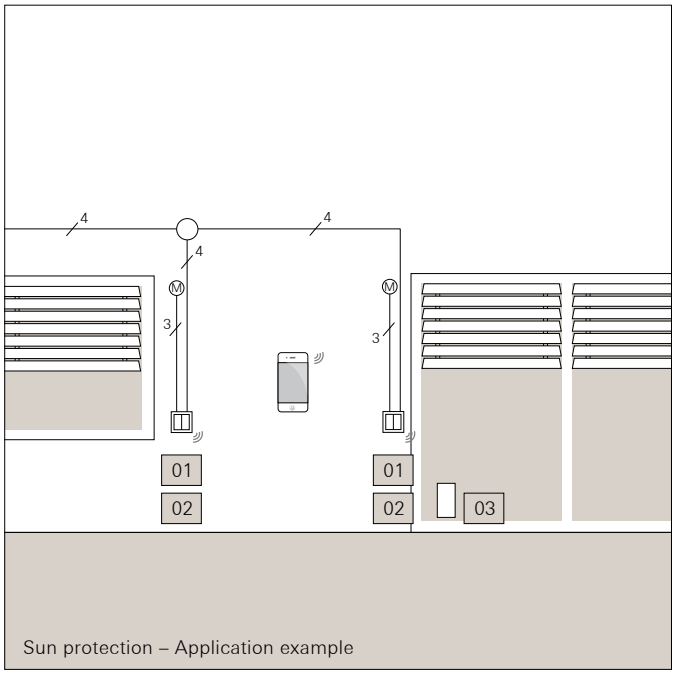
Group control – Application example

With the blind control insert with auxiliary input, you can cascade shading so that the blinds can be flexibly controlled, per room, per floor or per building – individually and conveniently. A blind control insert with auxiliary input controls one or more shading motors[1]; another blind control insert with auxiliary input in turn combines several blind control inserts into one group. With the blind timer and timer display as a group control, you can control the entire shading system automatically as you wish. Individually programmed or, thanks to the astro function, in sync with sunrise and sunset. Even when you're on holiday, the timer program takes over the raising and lowering of the blinds. Using an operating top unit Memory, you can disable the automatic lowering of the shutters. In addition, a Memory function allows two additional movement times for the connected motors.

Number	Components	Quantity	Order no.
01	Blind control insert with auxiliary input	5	5414 00
02	Operating top unit arrow symbols	2	5361 ..
03	Operating top unit Memory	2	5363 ..
04	Blind timer and timer Display	1	5366 ..

[1] Note the maximum connectible motor power of 700 W, even when controlling several motors via a blind insert. If you are connecting several motors at a time, the motors must be suitable for this. Alternatively, use cut-off relays.

2.1.6 Automatic shading in bright sunlight

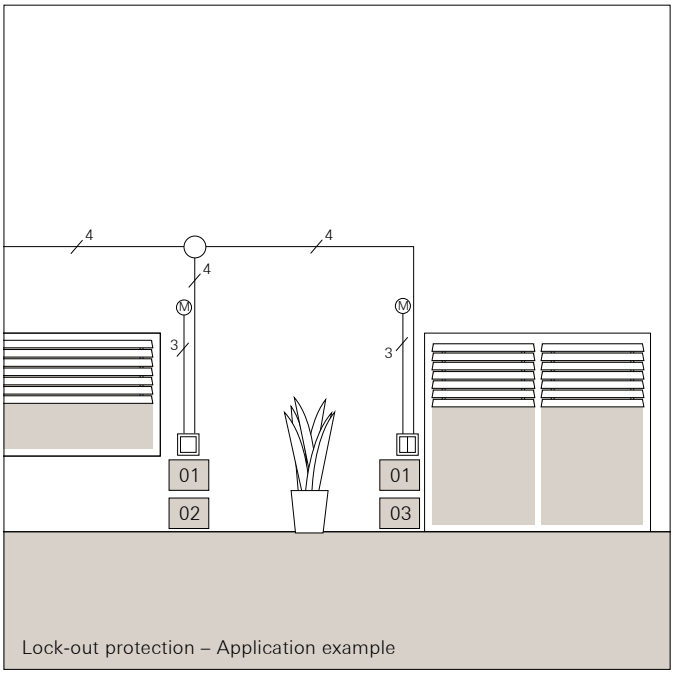


Sun protection – Application example

With the Gira blind timers and timers BT, you can conveniently shade your living area with time control. Thanks to the astro function no one has to worry about programming or making the switch to summer or winter time. If you also install a brightness and temperature sensor BT, your automated shading is complete. The brightness and temperature sensors BT monitor the south and west facing windows. If a certain brightness is exceeded, the shading goes down to protect the room from overheating and from strong UV radiation. The brightness threshold, the shading position and the time schedule can be set individually via the Gira Bluetooth app.

Number	Components	Quantity	Order no.
01	Blind control insert with auxiliary input	2	5414 00
02	Blind timer and timer BT	2	5367 ..
03	Brightness and temperature sensor BT	1	5466 02

2.1.7 Lock-out protection

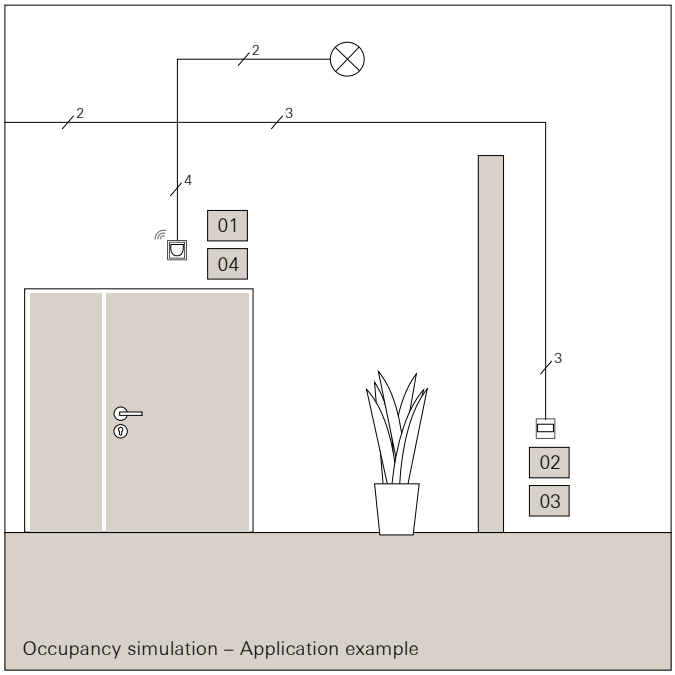


Lock-out protection – Application example

Have you thought of everything? The shading system can be individually controlled, automatically creates shadows in strong sunlight and follows the astro function daily? We think we can take it even one step further for you. With our practical lock-out protection feature, you prevent the shutters from closing automatically if someone else is still outdoors. You can activate the lock-out protection simply by pressing a button on the operating top unit Memory.

Number	Components	Quantity	Order no.
01	Blind control insert with auxiliary input	2	5414 00
02	Operating top unit arrow symbol	1	5361 ..
03	Operating top unit Memory	1	5363 ..

2.1.8 Occupancy simulation



Occupancy simulation – Application example

With the Gira occupancy simulation, your home is also inhabited even when you're not home.
In normal operation, the individual switching times of the last 24 hours are permanently stored in the motion detector top unit. If more than 60 circuits occur, the oldest ones are overwritten. If the occupancy simulation has been activated via the Gira Bluetooth app, the lighting will be switched on, depending on the brightness, at the times saved on the previous day. Switching off is as usual after expiry of the delay time. If motion is detected, the light is additionally switched on or the delay time is extended. The shading control can also be easily automated via the Gira Bluetooth app so that nobody has to check in on the home while on holiday.

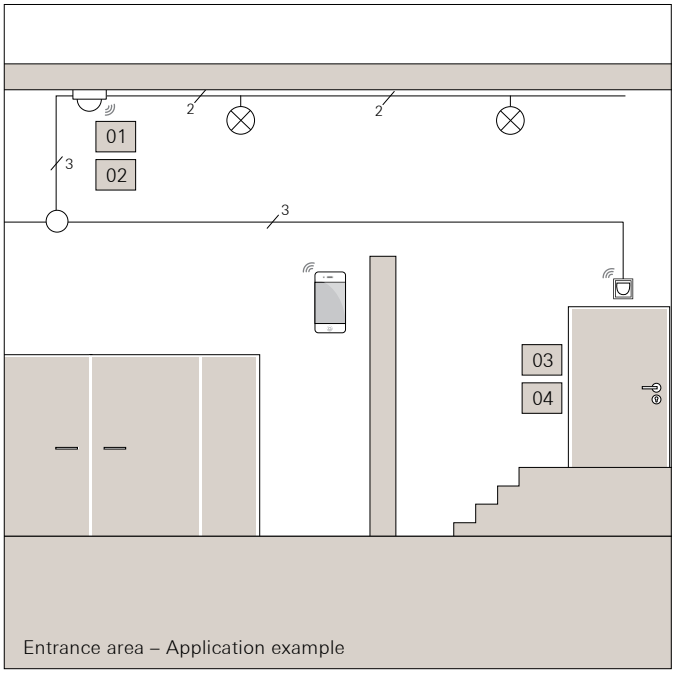
Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Auxiliary insert, 3-wire	1	5409 00
03	Motion detector top unit 1.10 m Standard	1	5373 ..
04	Motion detector top unit 2.20 m Komfort BT	1	5376 ..

Note:

If a 3-wire auxiliary insert is used, no operating top unit may be used on the main unit.

Number of 3-wire auxiliary inserts: maximum of ten
Total cable length: maximum 100 metres.

2.2.1 Daylight-dependent lighting control in the entrance area

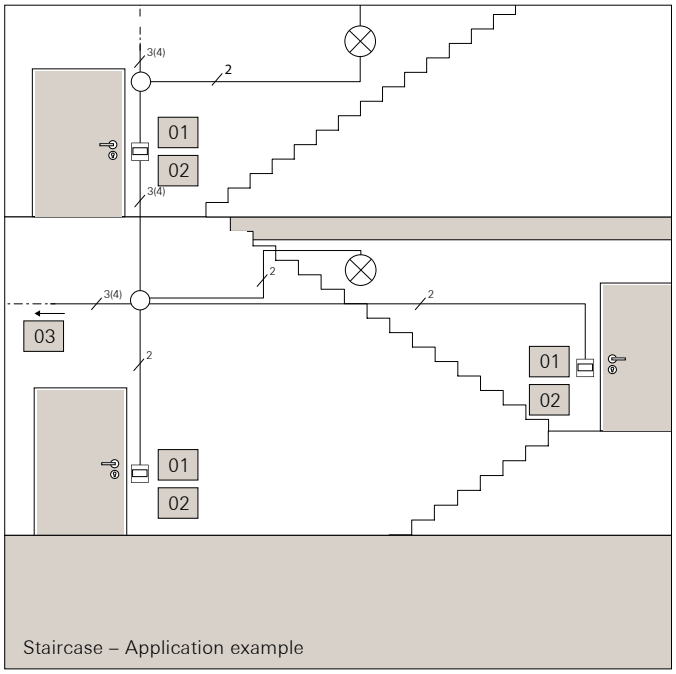


Entrance area – Application example

The entrance area of office buildings is usually heavily frequented before and after work. With the Gira System 3000 you can adjust the lighting control by combining different functions and time programs via the Gira Bluetooth app: At the start of the work day, the lighting switches permanently on between 8:00 am and 10:00 am with a brightness of 80 %. Between 10:00 am and 4:00 pm, the lighting provides a basic brightness of 20 % and increases to 80 % when motion is detected. From 4:00 pm to 6:00 pm, the lights will turn permanently on again with a brightness of 80 %. After 6:00 pm, the basic brightness is switched off and the lighting is switched on only when motion is detected. At the weekend, the basic brightness is also switched off, and the lighting reacts exclusively to motion.

Number	Components	Quantity	Order no.
01	Universal LED dimming insert Komfort	1	5401 00
02	Presence and motion detector 360° top unit BT	1	5377 02
03	Auxiliary insert, 3-wire	1	5409 00
04	Motion detector top unit 2.20 m Komfort BT	1	5376 ..

2.2.2 Automatic staircase lighting

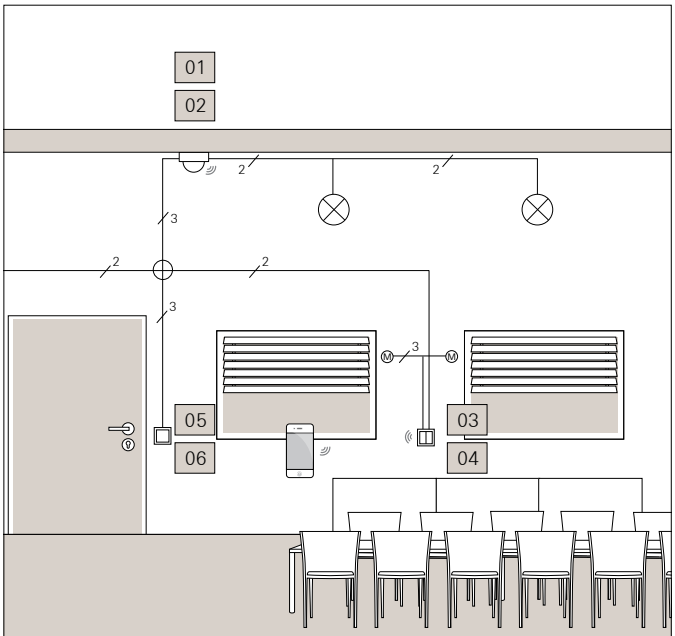


Staircase – Application example

With the Gira System 3000, you can make staircases safer and more convenient without having to lay new lines. With the combination of the impulse insert, the motion detector top unit and the automatic staircase mechanism, you simply rely on the existing line structure (3 or 4-conductor system). This saves installation costs during implementation and energy costs during operation. Illuminated or non-illuminated buttons can also be installed in combination with the motion detectors based on your preference.

Number	Components	Quantity	Order no.
01	Impulse insert	3	5410 00
02	Motion detector top unit 1.10 m Standard	3	5373 ..
03	Staircase light timer	1	0821 00

2.2.3 Light and shading on demand in the meeting room

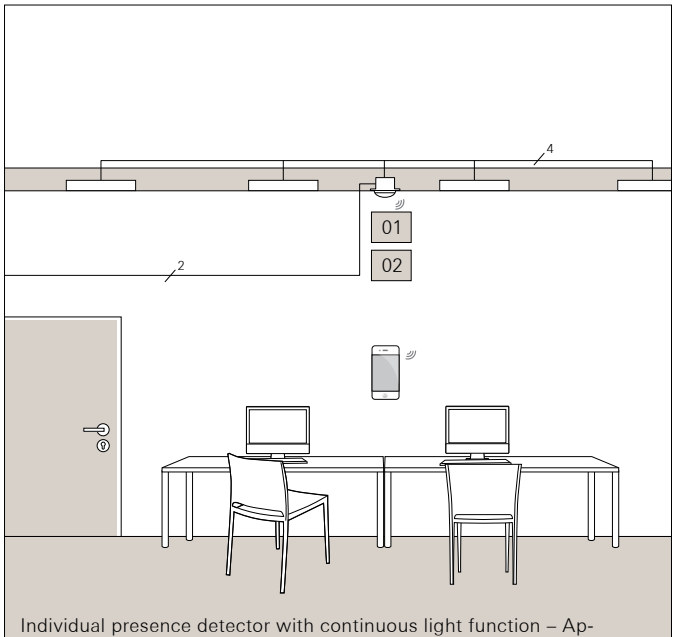


Meeting room – Application example

Never too bright during a presentation, never too dark at a meeting. With the combination of lighting and shading control, you can easily adjust the lighting conditions to your current needs with the push of a button. If lighting is not needed during a presentation, it will be switched off using an auxiliary unit or smartphone for the entire room. If there's too much daylight, the windows can be shaded using the same procedure. In terms of lighting during a meeting, the available daylight is measured. Based on this, the lighting intensity adapts to the actual light required. When the meeting is over, the lighting is switched off completely after a set delay time.

Number	Components	Quantity	Order no.
01	Universal LED dimming insert Komfort	1	5401 00
02	Presence and motion detector 360° top unit BT	1	5377 02
03	Blind control insert without auxiliary input	1	5415 00
04	Blind timer and timer BT	1	5367 ..
05	Auxiliary insert, 2-wire	1	5408 00
06	Operating top unit	1	5360 ..

2.2.4 Individual presence detector with continuous light function

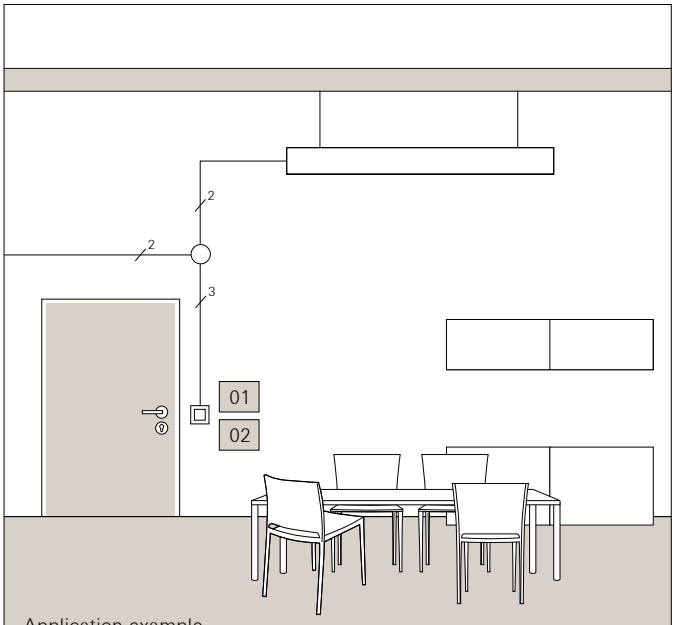


Individual presence detector with continuous light function – Application example

The combination of the Gira presence detector and the DALI Power control unit enables you to meet the different lighting requirements in open-plan offices. The occupancy detectors detect even the slightest movement, measure the current brightness in the area and, using the constant light control, add as much light as currently needed. If an office is not occupied, the lighting is switched off. The desired brightness and other settings can be set individually via the Gira Bluetooth app. Convenience made possible by Bluetooth, without having to put up a ladder. Can be added later. And with no need for a connection.

Number	Components	Quantity	Order no.
01	DALI Power control unit, flush-mounted insert	1	5406 00
02	Presence and motion detector 360° top unit BT	1	5377 02

2.2.5 Semi-automatic light with energy-saving function

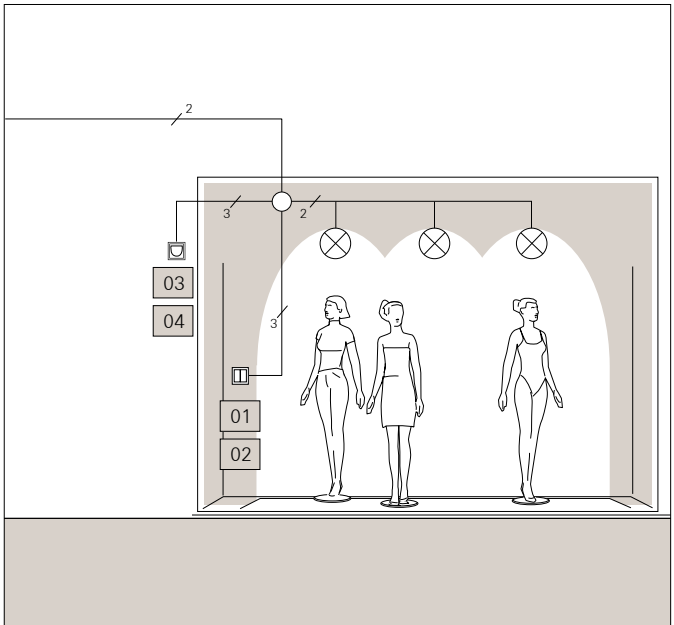


Application example
Semi-automatic light with energy-saving function

There are rooms in which the light is always on, although no-one is present. Solve this problem with the simplest switch insert from System 3000. The relay switching insert has an integrated and adjustable delay time, after which the light is automatically switched off based on preference. The function is particularly suitable for rooms where no-one usually stays for a long time, such as office kitchens, server rooms, the toilet or copy room. The lighting is switched on with using an operating top unit and switches off automatically after one, five, 30 or 60 minutes. The functions can be conveniently adjusted using a button. Of course, the light can also be turned off manually at any time.

Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Operating top unit	1	5360 ..

2.2.6 Shop window

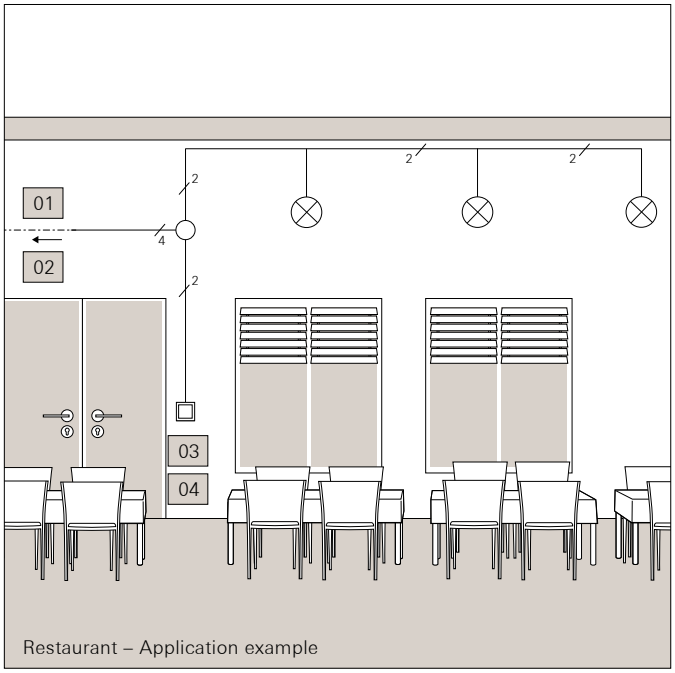


Shop window – Application example

Do you want to efficiently illuminate your windows in the dark with a time control? With the Memory function on the operating top unit Memory you can set the lighting in your shop window to stay on continuously between 5:00 pm and 12:00 am. As manual actuation always takes precedence over automatic operation, you can of course switch the lighting on or off manually at any time using the left rocker. Subsequently, the lighting is controlled depending on the movement detected by the motion detector. With the blocking function of the operating top unit Memory, you deactivate both the motion detector and the Memory function and can therefore completely manually control the lighting in the shop window.

Number	Components	Quantity	Order no.
01	Relay switching insert	1	5403 00
02	Operating top unit Memory	1	5363 ..
03	Auxiliary insert, 3-wire	1	5409 00
04	Motion detector top unit 2.20 m Standard	1	5375 ..

2.2.7 Central switching of restaurant lighting

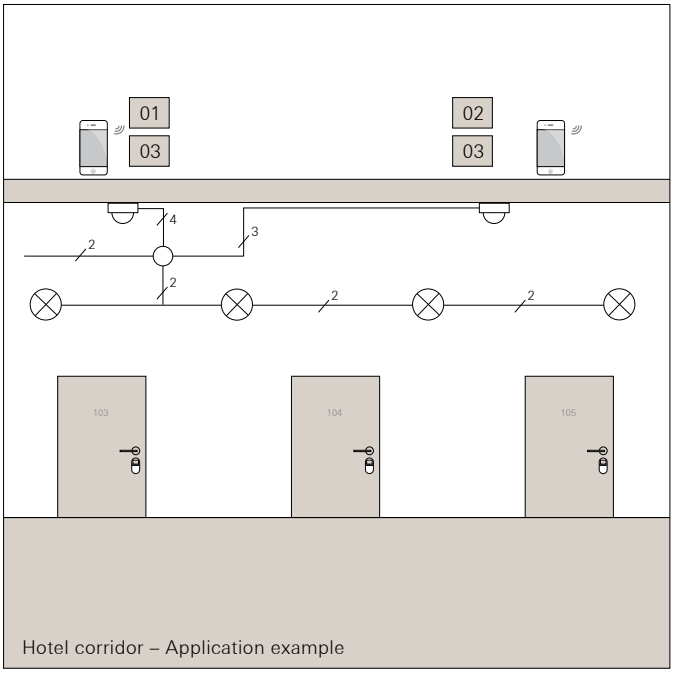


Restaurant – Application example

As operator of a restaurant or a pub, perhaps you want to be able to switch your light from one central spot without having to constantly operate several switches in different rooms? With the universal LED dimmer DRA, you can switch and dim the entire lighting system using the operating top unit on the 2-wire auxiliary insert. The universal LED power boosters allow the user to connect LED lighting up to 600 W. The uniform brightness of the entire lighting system ensures a harmonious feel-good atmosphere.

Number	Components	Quantity	Order no.
01	Universal LED dimmer DRA	1	2365 00
02	Universal LED power booster DRA	1	2383 00
03	Operating top unit	1	5360 ..
04	Auxiliary insert, 2-wire	1	5408 00

2.2.8 Hotel corridor – Check in and feel welcome



Hotel corridor – Application example

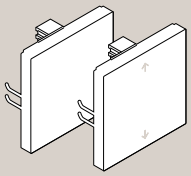
Basic lighting is required in hotel corridors.
The occupancy and motion detector with 360°top unit BT in combination with dimmers from the Gira System 3000 offers this function and more: when a guest enters the detection field, the lighting in the hotel corridor switches from the preselected basic brightness (40 %) to the switch-on brightness (100 %), and the guest has full light as he walks to his hotel room.
You can easily set the settings for the detection field on the occupancy and motion detector 360° top unit BT as well as the delay time and switch-on brightness via the Gira Bluetooth app. If you have optimally configured a device, you can copy the settings and transfer them to all other devices in the hotel.

Number	Components	Quantity	Order no.
01	Universal LED dimming insert Komfort	1	5401 00
02	Auxiliary insert, 3-wire	1	5409 00
03	Presence and motion detectors 360° top unit BT	2	5377 02

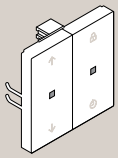
3 // Device overview

n line with the modular principle, the Gira System 3000 provides different combinable top units and inserts for the individual control of lighting and shading.

Top units

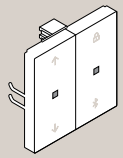


Operating top unit and operating top unit arrow symbols



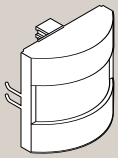
Operating top unit Memory

Blind timer and timer Display

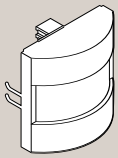


Blind timer and timer BT

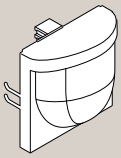
Brightness and temperature sensor BT



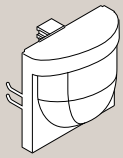
Motion detector top unit 1.10 m Standard



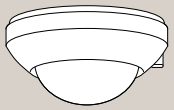
Motion detector top unit 1.10 m Komfort BT



Motion detector top unit 2.20 m Standard

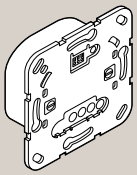


Motion detector top unit 2.20 m Komfort BT

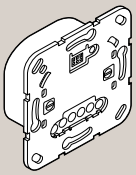


Presence and motion detector 360° top unit BT

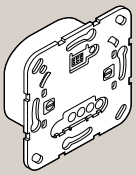
Inserts



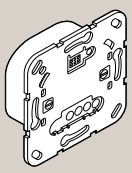
Relay switching insert



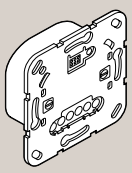
Electronic switching insert



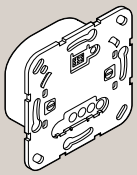
Universal LED dimming insert Standard



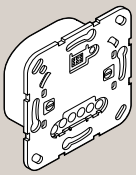
Universal LED dimming insert Komfort



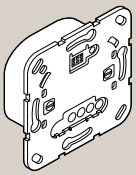
DALI Power control unit Flush-mounted insert



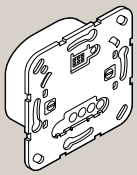
Auxiliary insert, 2-wire



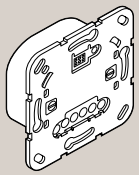
Auxiliary insert, 3-wire



Impulse insert



Blind control insert without auxiliary input



Blind control insert with auxiliary input

3.1 Top units and inserts

Top units	Light	Shading	Order no.
System 3000 operating top unit	✓	✓	5360 ..
System 3000 operating top unit arrow symbols	✓	✓	5361 ..
System 3000 operating top unit Memory	✓	✓	5363 ..
System 3000 blind timer and timer Display	✓	✓	5366 ..
System 3000 blind timer and timer BT	✓	✓	5367 ..
System 3000 brightness and temperature sensor BT	✓	✓	5466 02
System 3000 motion detector top unit 1.10 m Standard	✓		5373 ..
System 3000 motion detector top unit 1.10 m Komfort BT	✓		5374 ..
System 3000 motion detector top unit 2.20 m Standard	✓		5375 ..
System 3000 motion detector top unit 2.20 m Komfort BT	✓		5376 ..
System 3000 presence and motion detector 360° top unit BT	✓		5377 02

Inserts	Light	Shading	Order no.
System 3000 relay switching insert	✓		5403 00
System 3000 electronic switching insert	✓		5405 00
System 3000 universal LED dimming insert Standard	✓		5400 00
System 3000 universal LED dimming insert Komfort	✓		5401 00
System 3000 DALI Power control unit, flush-mounted insert	✓		5406 00
System 3000 auxiliary insert, 2-wire	✓		5408 00
System 3000 auxiliary insert, 3-wire	✓		5409 00
System 3000 impulse insert	✓		5410 00
System 3000 blind controller insert without auxiliary input		✓	5415 00
System 3000 blind controller insert with auxiliary input		✓	5414 00

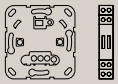
3.2 Combination options

The following table shows you which of the Gira System 3000 top units and inserts you can combine with each other.

	Lighting control			
	 Relay switching insert	 Electronic switching insert	 Universal LED dimming insert Standard	 Universal LED dimming insert Komfort
 Operating top unit and operating top unit arrow symbol	Switching	Switching	Switching Dimming	Switching Dimming
 Operating top unit Memory	Switching Memory	Switching Memory	Switching Dimming Memory	Switching Dimming Memory
 Blind timer and timer Display	Switching Memory Timer	Switching Memory Timer	Switching/dimming Memory Timer	Switching/dimming Memory Timer
 Blind timer and timer BT	Switching Timer App operation	Switching Timer App operation	Switching/dimming Timer App operation	Switching/dimming Timer App operation
 Motion detector top unit 1.10 m Standard	Switching	Switching	Switching	Switching
 Motion detector top unit 1.10 m Komfort BT	Switching App operation	Switching App operation	Switching Dimming App operation	Switching Dimming App operation
 Motion detector top unit 2.20 m Standard	Switching	Switching	Switching	Switching
 Motion detector top unit 2.20 m Komfort BT	Switching App operation	Switching App operation	Switching Dimming App operation	Switching Dimming App operation
 Presence and motion detector 360° top unit BT	Switching App operation	Switching App operation	Switching Constant lighting control App operation	Switching Constant lighting control App operation

For mounting heights of up to 1.10 m with a purely horizontally-aligned detection range, which means it doesn't have its own range limitation outdoors.

For mounting heights of up to 2.20 m with angled, vertically-aligned detection range

Lighting control				Blind control	
					
DALI Power control unit Flush-mounted insert	Auxiliary insert, 2-wire	Auxiliary insert, 3-wire	Impulse insert with staircase-light automatic control switch	Blind control insert with auxiliary input	Blind control insert without auxiliary input
Switching Dimming Tunable White	① Switching Dimming Tunable White	① Switching Dimming Tunable White	Switching on	Up/down Inscribable position	Up/down Inscribable position
Switching Dimming Memory	– – –	① Switching Dimming	– – –	Up/down Inscribable position Memory	Up/down Inscribable position Memory
Switching/dimming Memory Timer	– – –	① Switching Dimming	– – –	Up/down, position Memory Blind timer	Up/down, position Memory Blind timer
Switching/dimming Timer App operation	– – –	① Switching Dimming	– – –	Up/down, position Blind timer App operation	Up/down, position Blind timer App operation
Switching	– – –	Switching on	Switching on	– – –	– – –
Switching Dimming App operation	– – –	Switching on	Switching on	– – –	– – –
Switching	– – –	Switching on	Switching on	– – –	– – –
Switching Dimming App operation	– – –	Switching on	Switching on	– – –	– – –
Switching Constant lighting control App operation	– – –	Switching on	Switching on	– – –	– – –

Setting and operation via the Gira Bluetooth app.

① Depends on the main unit to be controlled.

3.3 Auxiliary units

Auxiliary units are an easy and cost-effective way to extend your control options and offer a variety of operations. For example, with an auxiliary unit you can extend the detection field of motion detectors or set up further operating points to control light or shading. You can also perform a group or central control of your entire shading system with an auxiliary unit.

The combination of different top units and inserts and the various operating variants result in numerous case distinctions that can not all be listed in this system manual. We've put together the basic rules for using auxiliary units:

- In all cases, auxiliary units only have as many functions as the main unit and the top unit that is placed there.
- 2-wire auxiliary inserts can only be combined with an operating top unit or operating top unit arrow symbols.
- Any number of 2-wire auxiliary units can be connected to one main unit.
- As an alternative to the 2-wire auxiliary insert with the operating top unit, non-illuminated buttons can be used. Depending on the main unit, the operation and setting options of the main unit and the auxiliary unit are different.
- A maximum of ten 3-wire auxiliary units can be connected to one or more main units.
- The maximum cable length is 100 metres.
- If the auxiliary units and load line are laid separately, the number of 3-wire auxiliary units increases to ten.

Comparison of System 3000 auxiliary inserts

Property	Auxiliary insert, 2-wire	Auxiliary insert, 3-wire	Auxiliary insert for universal LED rotary dimming insert
Neutral conductor	Only usable without neutral conductor (N)	Only usable with neutral conductor (N)	Only usable with neutral conductor (N)
Test button	No	No	No
Combinable with top unit	For operating top units with and without arrow symbols	all System 3000 top units (including operating top unit)	Cover with knob for dimmer
Number of auxiliary units on a main unit	any amount	max. 10	max. 10
Number of main units on an auxiliary unit	1	up to five main units (group control)	1
Motion detector on the auxiliary unit with brightness evaluation	No	Yes	No, only cover with knob for dimmer

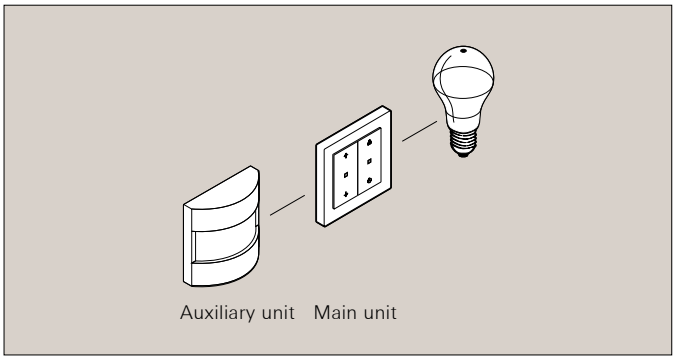
Compatibility of System 3000 with System 2000 auxiliary unit

Main unit	Auxiliary unit	Compatible
System 2000 switching or dimming insert	Rocker button	Yes
	System 3000 auxiliary insert, 2-wire	Yes
	System 3000 auxiliary insert, 3-wire	No
	System 3000 rotary auxiliary unit	No
System 3000 switching or dimming insert	Rocker button	Yes
	System 2000 auxiliary insert, 2-wire	Yes
	System 2000 auxiliary insert, 3-wire	No

3.3.1 Auxiliary insert, 3-wire with motion detector

As soon as a top unit with a microcontroller (all top units except the operating top unit with and without arrow symbols) is used on the main unit (MU), a motion detector can also be used on the 3-wire auxiliary insert (AI).

When the switch-on conditions (brightness, movement) are fulfilled, the lighting is switched on for two minutes of delay time.



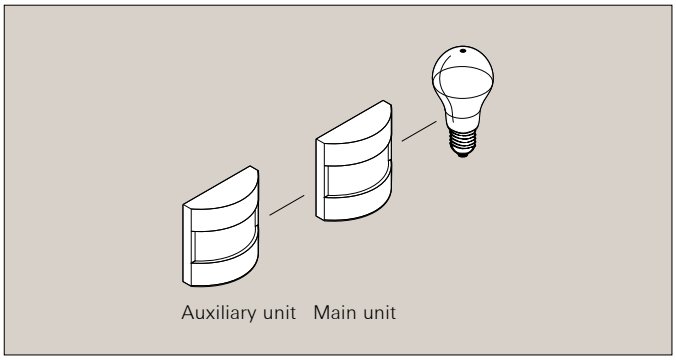
3.3.2 Auxiliary insert, 3-wire with brightness evaluation

There is a motion detector on the main and auxiliary units. The brightness is also evaluated on the auxiliary unit.

Each motion detector decides on the basis of its set brightness threshold whether the lighting should be switched on.

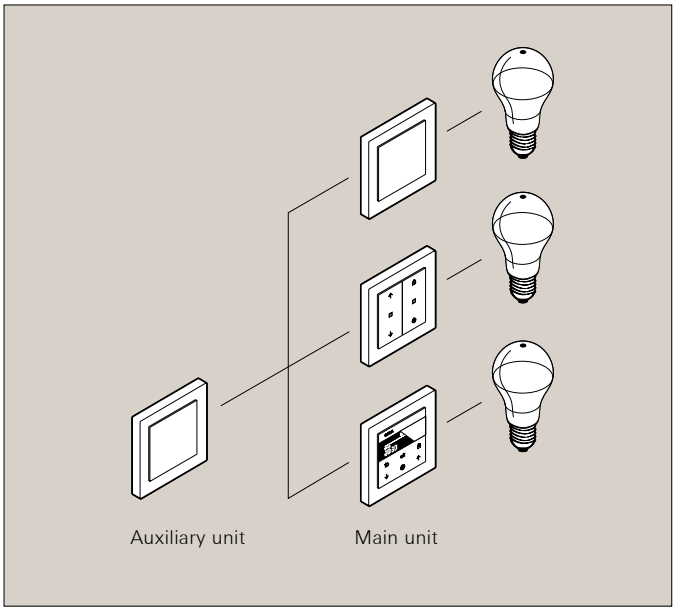
The light is switched off when:

- no more motion is detected in the detection range and the delay time expires or
- the ambient light is bright enough and the delay time has expired.



3.3.3 Central 3-wire auxiliary insert (group control)

- In the System 3000, it is possible to switch on and off or dim several main units centrally using a 3-wire auxiliary insert.
- Targeted switching on and off of the main units.
- A maximum of five main units, including System 3000 Rotary, Mini and DRA dimmers.
- Not possible with DALI Power control unit, flush-mounted insert.



3. Intelligent top units with Bluetooth connection (for example, motion detector top unit Komfort, blind timer and timer BT, presence and motion detector 360° top unit) detect whether the top unit has been placed again on the insert with which the top unit was put into operation. If the top unit is not placed on the same insert as before, an error message will be displayed. This ensures that different top units that are of the same type but differ in their configuration are placed back on their original insert. If the LED status of the motion detector top unit Komfort BT, blind timer and timer BT, presence detector and motion detector 360° top unit or operating top unit Memory flashes red three times, it means that the top unit was previously connected to another insert. The blind timer and timer Display signals the exchange protection by an indicator in the display.

4. Insert the top unit onto the corresponding insert or reset the top unit by simultaneously pressing the operating buttons for switching, raising/lowering or dimming for more than four seconds.

3.4 Exchange protection

The intelligent Gira System 3000 top units can detect whether they have been placed back on the right type of insert or even on the same insert, for example, after being removed from the inserts during a renovation and collected in a box.
To be able to assign the top units to the correct inserts, the following rules apply:

1. Operating top unit and motion detector Standard have no exchange protection. They always immediately work on any suitable insert.

2. Smart top units without Bluetooth connection (for example, the blind timer and timer Display) have an exchange protection that detects whether the top unit has been placed on a suitable type of insert (trades: light or shading). For example, if the blind timer and timer Display was installed on a blind insert and is now plugged into a light insert, “Err” appears on the display. Pressing the “Up” and “Down” buttons simultaneously for more than four seconds will remove the exchange protection and the combination of the insert and the top unit will work again.

3.5 Backward compatibility

If buildings are equipped with System 2000 and blind control and are now to be modernised with components from the new System 3000, the following principles apply:

- Rocker buttons as an auxiliary unit do not have to be changed.
- System 2000 2-wire auxiliary insert (top unit and insert) do not have to be changed.
- System 2000 auxiliary unit for presence detector and 3-wire automatic control switch can no longer be used and must be exchanged for inserts and top units from the new System 3000. The main units must then also be exchanged for System 3000 main units.
- In principle, the inserts and top units must always be from the same system.
- Existing device combinations (inserts and top units) can be exchanged for individual System 3000 combinations in an existing blind control installation.

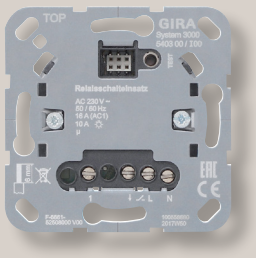
4 // System 3000 Lighting

4.1 Device overview

Top units	Order no.
System 3000 operating top unit	5360 ..
System 3000 operating top unit arrow symbols	5361 ..
System 3000 operating top unit Memory	5363 ..
System 3000 blind timer and timer Display	5366 ..
System 3000 blind timer and timer BT	5367 ..
System 3000 brightness and temperature sensor BT	5466 02
System 3000 motion detector top unit 1.10 m Standard	5373 ..
System 3000 motion detector top unit 1.10 m Komfort BT	5374 ..
System 3000 motion detector top unit 2.20 m Standard	5375 ..
System 3000 motion detector top unit 2.20 m Komfort BT	5376 ..
System 3000 presence and motion detector 360° top unit BT	5377 02

Inserts	Order no.
System 3000 universal LED dimming insert Standard	5400 00
System 3000 universal LED dimming insert Komfort	5401 00
System 3000 relay switching insert	5403 00
System 3000 electronic switching insert	5405 00
System 3000 DALI Power control unit, flush-mounted insert	5406 00
System 3000 impulse insert	5410 00
System 3000 auxiliary insert, 2-wire	5408 00
System 3000 auxiliary insert, 3-wire	5409 00
System 3000 universal LED rotary dimming insert Standard	2450 00
System 3000 universal LED rotary dimming insert Komfort	2455 00
System 3000 rotary auxiliary insert for LED dimmer	2389 00
System 3000 universal LED dimmer Mini	2440 00
System 3000 universal LED dimmer DRA	2365 00
System 3000 universal LED power booster DRA	2383 00

System 3000 relay switching insert



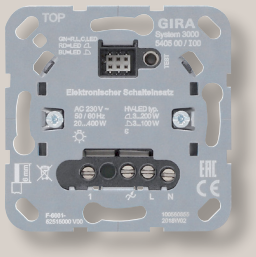
Order no. 5403 00

The relay switching insert switches different light sources, e.g. LED, halogen light bulbs or fluorescent lamps and motors. If desired, you can conveniently set the delay times using the TEST button with LED display. The switching insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Connecting auxiliary units is possible
- Delay times when using an operating top unit can be varied
- Auxiliary input for 2-wire or 3-wire auxiliary insert. Suitable for switching the following loads per channel:
  - HV LED lights: type 500 W
  - type 500 W, compact fluorescent lamp
  - 2,300 W light bulbs
  - 2,300 W HV halogen lamps
  - 1,200 VA fluorescent lamps, not compensated
  - 1,500 W Gira Tronic transformers
  - 1,000 VA wound transformer
  - 6 A switching current for motors
- Adjustable functions using the TEST button:
  - Switching on and off using short operation
  - None, 1 min, 5 min, 30 min, 60 min delay time (automatic Off after manual On)
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 electronic switching insert



Order no. 5405 00

The electronic switching insert can be operated with or without neutral conductor.

When operating with a neutral conductor, the electronic switching insert is supplied via the external conductor and neutral conductor, and therefore there is no leading or trailing edge. It is not necessary to set an operating mode. The electronic switching insert switches light bulbs, HV halogen lamps, electronic or inductive transformers with halogen or LED lights as well as switchable or dimmable HV LED or compact fluorescent lights.

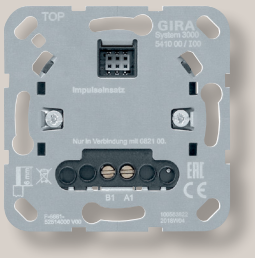
When operating without a neutral conductor, the electronic switching insert is supplied via the external conductor and the connected load, and therefore there is no leading or trailing edge. The corresponding operating mode is set automatically or manually to match the load. The set operating mode is indicated by an LED. The electronic switching insert switches light bulbs, HV halogen lamps, electronic or inductive transformers with halogen or LED lights as well as switchable or dimmable HV LED or compact fluorescent lamps.

The electronic switching insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Switching on via bulb-saving soft start
- Connecting auxiliary units is possible
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 100 W
  - type 3 up to 100 W, compact fluorescent lamp
  - 20 to 400 W light bulbs
  - 20 to 400 W HV halogen lights
  - 20 to 400 W Gira Tronic transformer
  - type 20 – 100 W electronic transformer with LV LED
  - 20 – 400 VA wound transformer
  - type 20 – 100 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 200 W, electronic transformers with LV LED type 20 to 200 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 impulse insert



Order no. 5410 00

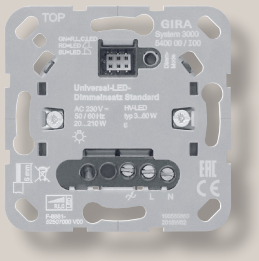
With the impulse insert you can set up staircase lighting controls. In combination with an operating top unit or motion detector, you can control the light manually or automatically for each floor.

In conjunction with the DRA staircase light timer, you can upgrade existing staircase installations to automatic lighting control without rewiring.
The impulse insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- For installation or retrofitting of motion detectors on the staircase
- Simple retrofitting of existing 3 or 4-wire installations
- Operation with the DRA staircase light timer, order no. 0821 00
- Can be combined with operating top units, motion detectors or presence and motion detectors from the System 3000
- Retriggering of the delay time by repeatedly pressing the operating top unit or by repeated Capture by the motion detector
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals
- Performance equipment: see operating instructions for the DRA staircase light timer, order no. 0821 00

System 3000 universal LED dimming insert Standard



Order no. 5400 00

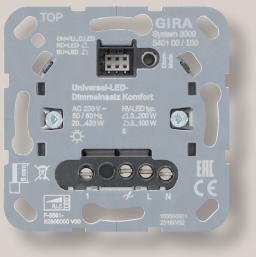
With the universal LED dimming insert Standard you can switch on/off and dim lighting. As a universal LED dimmer, the dimmer automatically adjusts to leading or trailing edge. Operation with or without a neutral conductor is possible.

You can easily set the dimmer using a dimming mode button with LED display. The universal LED dimming insert Standard can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Automatic or manual setting of the operating mode to match the load
- Switching on via bulb-saving soft start
- Minimum brightness can be set
- Switch-on brightness or last brightness level can be saved
- Connecting auxiliary units is not possible
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 60 W
  - type 3 up to 60 W, compact fluorescent lamp
  - 20 to 210 W light bulbs
  - 20 to 210 W HV halogen
  - 20 to 210 W Gira Tronic transformer
  - type 20 – 60 W electronic transformer with LV LED
  - 20 – 210 VA wound transformer
  - type 20 – 60 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 120 W, electronic transformers with LV LED type 20 to 120 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED dimming insert Komfort



Order no. 5401 00

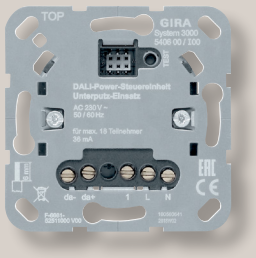
With the universal LED dimming insert Komfort you can switch on/off and dim lighting. As a universal LED dimmer you can set it specifically for leading or trailing edge. Operation is possible with and without neutral conductor. It has an auxiliary unit input for the 2-wire, 3-wire auxiliary unit insert and rocker switch.

You can easily set the dimmer using a dimming mode button with LED display. The universal LED dimming insert Komfort can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Automatic or manual setting of the operating mode to match the load
- Switching on via bulb-saving soft start
- Minimum brightness can be set
- Switch-on brightness or last brightness level can be saved
- It has an auxiliary input for the 2-wire, 3-wire auxiliary insert and rocker button
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 100 W
  - type 3 up to 100 W, compact fluorescent lamp
  - 20 to 420 W light bulbs
  - 20 to 420 W HV halogen
  - 20 to 420 W Gira Tronic transformer
  - type 20 – 100 W electronic transformer with LV LED
  - 20 – 420 VA wound transformer
  - type 20 – 100 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 200 W, electronic transformers with LV LED type 20 to 200 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 DALI Power control unit, flush-mounted insert



Order no. 5406 00

With the 1-channel DALI Power control unit, flush-mounted insert, you can control lights with the DALI interface as well as DALI ballasts with and without the Tunable White function.

Operation is carried out by the Gira operating top units or timer switches or by motion detectors and presence detectors.

The DALI Power control unit, flush-mounted insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Operation with mains voltage (active operation)
- Device delivers the necessary control current during active operation for 18 DALI devices
- Extension of the number of devices to 72 DALI devices by connecting up to four active DALI inserts at the same time
- Connection of buttons or 2-wire and 3-wire auxiliary inserts
- Adjustment of colour temperature for lights with DALI Device Type 8 for Tunable White according to IEC 62386-209
- Save the minimum brightness, the coolest and warmest colour temperature
- Switch on with the last brightness/colour temperature set, or a saved brightness/colour temperature.
- Colour temperature setting 2,000 to 10,000 K
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED dimmer Mini

Order no. 2440 00

With the universal LED dimming insert Mini you can switch on/off and dim lighting. As a universal LED dimmer, the dimmer automatically adjusts to leading or trailing edge. Operation with or without a neutral conductor is possible.

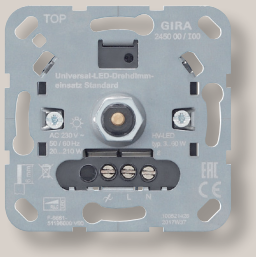
The universal LED dimmer Mini is operated via a 2-wire or 3-wire auxiliary insert with operating top unit, a rocker button or a rotary auxiliary insert for LED dimmers.

The universal LED dimmer Mini can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073 in combination with a suitable cover.

The functions at a glance:

- Operates according to the leading or trailing edge principle
- Automatic or manual setting of the operating mode to match the load
- The set operating mode is indicated by an LED
- Switching on via bulb-saving soft start
- Switch-on brightness or last brightness level can be saved
- Minimum brightness can be set
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 50 W
  - type 3 up to 50 W, compact fluorescent lamp
  - 20 to 210 W light bulbs
  - 20 to 210 W HV halogen
  - 20 to 210 W Gira Tronic transformer
  - type 20 – 50 W electronic transformer with LV LED
  - 20 – 210 VA wound transformer
  - type 20 – 50 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 100 W, electronic transformers with LV LED type 20 to 100 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED rotary dimming insert Standard



Order no. 2450 00

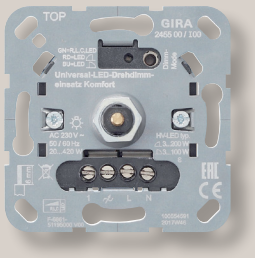
With the universal LED rotary dimming insert Standard you can switch on/off and dim lighting. As a universal LED dimmer, the dimmer automatically adjusts to leading or trailing edge. Operation with or without a neutral conductor is possible.

The universal LED rotary dimming insert Standard can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Automatic setting of the operating mode to match the load
- Switching on via bulb-saving soft start
- Minimum brightness can be set
- Switch-on brightness or last brightness level can be saved
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 60 W
  - type 3 up to 60 W, compact fluorescent lamp
  - 20 to 210 W light bulbs
  - 20 to 210 W HV halogen
  - 20 to 210 W Gira Tronic transformer
  - type 20 – 60 W electronic transformer with LV LED
  - 20 – 210 VA wound transformer
  - type 20 – 60 VA wound transformer with LV LED
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED rotary dimming insert Komfort



Order no. 2455 00

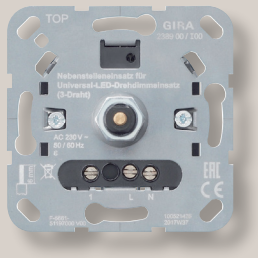
With the universal LED rotary dimming insert Komfort you can switch on/off and dim lighting. As a universal LED dimmer you can set it specifically for leading or trailing edge. Operation is possible with and without neutral conductor. It has an auxiliary input for the rotary auxiliary insert for LED dimmers, 2-wire auxiliary insert, 3-wire auxiliary insert and a rocker button.

You can easily set the dimmer using a dimming mode button with LED display. The universal LED rotary dimming insert Komfort can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Automatic or manual setting of the operating mode to match the load
- Switching on via bulb-saving soft start
- Minimum brightness can be set
- Switch-on brightness or last brightness level can be saved
- It has an auxiliary input for the rotary auxiliary insert for LED dimmers, 2-wire auxiliary insert, 3-wire auxiliary insert and a rocker button
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 100 W
  - type 3 up to 100 W, compact fluorescent lamp
  - 20 to 420 W light bulbs
  - 20 to 420 W HV halogen
  - 20 to 420 W Gira Tronic transformer
  - type 20 – 100 W electronic transformer with LV LED
  - 20 – 420 VA wound transformer
  - type 20 – 100 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 200 W, electronic transformers with LV LED type 20 to 200 W AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 rotary auxiliary insert for 3-wire



Order no. 2389 00

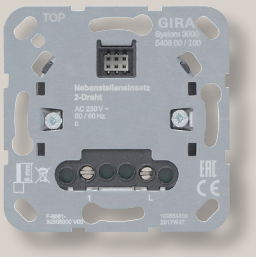
With the 3-wire rotary auxiliary insert you can control the universal LED rotary dimming insert Komfort, universal LED dimming insert Komfort, universal LED dimmer Mini and the universal LED dimmer DRA.

The 3-wire rotary auxiliary insert for LED dimmer can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Operation identical to the universal LED rotary dimming insert
- A maximum of five rotary auxiliary inserts on one or more main units can be connected
- Maximum total cable length 100 m
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 auxiliary insert, 2-wire



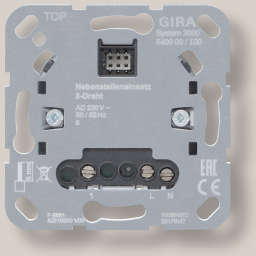
Order no. 5408 00

With the 2-wire auxiliary insert you can switch on/off and dim your lighting. Overall, the auxiliary unit always has just as many functions as the top unit placed on the main unit.
Operation is in combination with an operating top unit. The 2-wire rotary auxiliary insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Can only be combined with operating top units with and without arrow symbols
- Setup of additional operating units for the control of System 3000
- Any number of 2-wire auxiliary inserts can be connected to one main unit
- Maximum total cable length 100 metres
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 auxiliary insert, 3-wire



Order no. 5409 00

The 3-wire auxiliary insert offers a wide variety of functions depending on the top unit and insert used on the main unit. Overall, the auxiliary unit always has just as many functions as the top unit placed on the main unit. Operation is carried out with top units from the System 3000. The 3-wire auxiliary insert can be installed in a standard device box (e.g. Kaiser 1055-02) in accordance with DIN 49073.

The functions at a glance:

- Combinable with all top units
- Different applications are possible due to the various combination possibilities of the top units and inserts from the System 3000
- Extension of the detection field of motion detectors
- Setup of additional operating points for controlling the System 3000
- A maximum of ten 3-wire auxiliary inserts can be connected to one or several main units; where the auxiliary unit and load lines are laid separately, up to 3-wire ten auxiliary inserts can be connected
- Maximum total cable length 100 metres
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED dimmer DRA

Order no. 2365 00

With the universal LED dimming insert DRA you can switch on/off and dim lighting. As a universal LED dimmer, the dimmer automatically adjusts to leading or trailing edge.

One advantage: when renovating, you do not have to lay any new lines, but can simply install directly on the existing installation. The required components disappear centrally in a sub-distribution.

The universal LED dimmer DRA is operated via a 2-wire or 3-wire auxiliary insert with operating top unit, a rocker button or a rotary auxiliary insert for LED dimmers.
The DRA dimmer is mounted in the sub-distribution on top-hat rails according to DIN EN 60715.

The functions at a glance:

- Operates according to the leading or trailing edge principle
- Automatic or manual setting of the operating mode to match the load
- The set operating mode is indicated by an LED
- Switching on via bulb-saving soft start
- Switch-on brightness or last brightness level can be saved
- Minimum brightness can be set
- Electronic short circuit protection with permanent shutdown after seven seconds at the latest, reversible
- Electronic excess-temperature protection
- Suitable for switching the following loads:
  - HV LED lights: type 3 – 100 W
  - type 3 up to 100 W, compact fluorescent lamp
  - 20 to 420 W light bulbs
  - 20 to 420 W HV halogen
  - 20 to 420 W Gira Tronic transformer
  - type 20 – 100 W electronic transformer with LV LED
  - 20 – 420 VA wound transformer
  - type 20 – 100 VA wound transformer with LV LED
  - In operating mode Trailing Edge Connected Load for HV LED lights type 3 to 200 W, electronic transformers with LV LED type 20 to 200 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 universal LED power booster DRA

Order no. 2383 00

With the universal LED power booster DRA you can expand your dimmer in a modular fashion, depending on your power requirements. Depending on the dimmer, different numbers of power boosters can be connected. This allows you to conveniently switch on/off and dim large LED loads.
Operation of the power booster is via upstream dimmer.

The universal LED power booster DRA is mounted in the sub-distribution on top-hat rails according to DIN EN 60715.

The functions at a glance:

- Multiple universal LED power boosters DRA can be connected to a dimmer
- Total output of the connected loads is divided between dimmers and power boosters
- Connected loads are supplied via a common load line
- Electronic excess-temperature protection
- The maximum load and number of power boosters depends on the dimmer (see reference list in the universal LED power boosters DRA operating instructions).
  Suitable for the following loads:
  - 75 to 100 W HV LED lights leading edge
  - 200 W HV LED lights trailing edge
  - 200 to 420 W light bulbs
  - 200 to 420 W HV halogen
  - 200 to 420 W Gira Tronic transformer
  - 200 – 420 VA wound transformer
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 motion detector top unit 1.10 m Standard

Order no. 5373 ..

The motion detector top unit regulates the lighting depending on motion and brightness. It switches on if there is movement in the detection field and automatically switches on when it is dark enough.

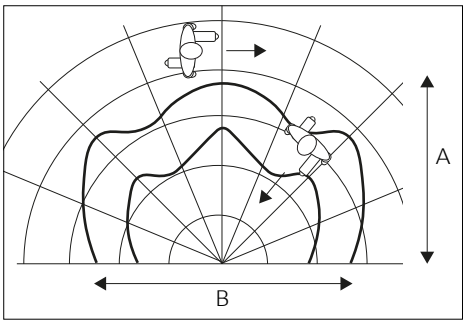
The lighting is switched off
- if no movement is detected and the two-minute delay time has expired
  or
- when it is light enough again and the two-minute delay time has expired.

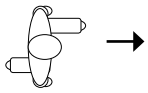
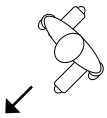
It's convenient and saves energy. Thanks to the special lens design, the motion detector top unit has a large detection field.

The functions at a glance:

- Automatically switches lighting on/off, depending on thermal motion and ambient brightness
- Detection range 180°
- Clip-on panel to limit the detection range
- Extended detection range via auxiliary units
- Switch-on brightness and sensitivity can be adjusted
- Mounting height 1.10 metres
- in Gira TX_44 also IP44 protection against splash water

- Detection field:



	A x B	
1.10 m Sensitivity		
25 %	≈ 8 x 11 m	≈ 2 x 4 m
50 %	≈ 13 x 20 m	≈ 5 x 6 m
75 %	≈ 26 x 30 m	≈ 6 x 9 m
100 %	≈ 32 x 38 m	≈ 11 x 14 m

System 3000 motion detector top unit 2.20 m Standard

Order no. 5375 ..

The motion detector top unit regulates the lighting depending on motion and brightness. It switches on if there is movement in the detection field and automatically switches on when it is dark enough.

The lighting is switched off
- if no movement is detected and the two-minute delay time has expired

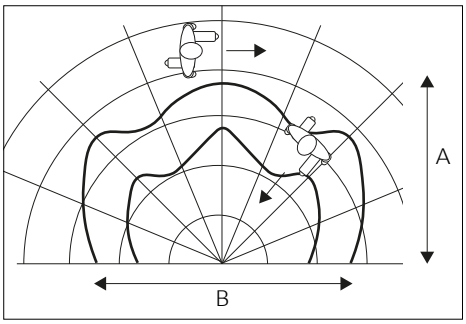
or
- when it is light enough again and the two-minute delay time has expired.

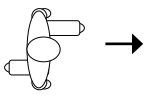
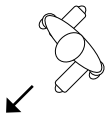
It's convenient and saves energy. Thanks to the special lens design, the motion detector top unit has a large detection field which also includes the area below the detector. In the intended mounting height of 2.20 metres, e.g. mounted over a door, the lighting is switched on upon when someone takes their first step through the door.

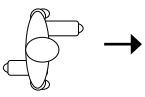
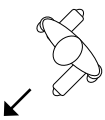
The functions at a glance:

- Automatically switches lighting on/off, depending on thermal motion and ambient brightness
- Detection range 180°
- Extended detection range via auxiliary units
- Switch-on brightness and sensitivity can be adjusted
- Mounting height 2.20 metres or 1.10 metres
- in Gira TX_44 also IP44 protection against splash water

- Detection field:



	A x B	
2.20 m Sensitivity		
25 %	≈ 7 x 12 m	≈ 3 x 2 m
50 %	≈ 11 x 13 m	≈ 4 x 4 m
75 %	≈ 13 x 15 m	≈ 6 x 5 m
100 %	≈ 15 x 20 m	≈ 9 x 9 m

	A x B	
1.10 m Sensitivity		
25 %	≈ 7 x 9 m	≈ 1 x 2 m
50 %	≈ 8 x 10 m	≈ 3 x 4 m
75 %	≈ 9 x 12 m	≈ 4 x 6 m
100 %	≈ 10 x 18 m	≈ 5 x 7 m

System 3000 motion detector top unit 1.10 m Komfort BT

Order no. 5374 ..

The motion detector top unit regulates the lighting depending on motion and brightness. It switches on if there is movement in the detection field and automatically switches on when it is dark enough.

The lighting is switched off
- if no movement is detected and the set delay time has expired or
- when it is light enough again and the set delay time has expired.

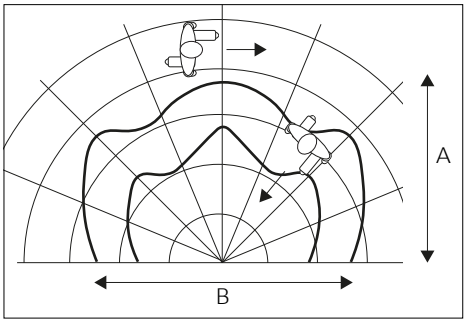
It's convenient and saves energy. Thanks to the special lens design, the motion detector top unit has a large detection field.

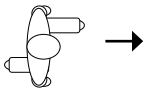
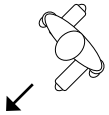
You can set this easily using your smartphone and the Gira Bluetooth app.

The functions at a glance:

- Automatically switches lighting on/off, depending on thermal motion and ambient brightness
- Detection range 180°
- Clip-on panel to limit the detection range
- Extended detection range via auxiliary units
- Switch-on brightness, delay time and sensitivity can be adjusted
- Staircase function with switch-off pre-warning
- Optimised burglary prevention through occupancy simulation
- Alarm function
- Basic brightness can be set
- Settings via smartphone and Gira Bluetooth app
- Sliding switch for permanent On/Off
- Activation of the pairing mode for teaching in within the Gira Bluetooth app
  - Slide the sliding switch to the ON/AUTO position for more than four seconds.
- Mounting height 1.10 metres
- in Gira TX_44 also IP44 protection against splash water

- Detection field:



	A x B	
1.10 m Sensitivity		
25 %	≈ 8 x 11 m	≈ 2 x 4 m
50 %	≈ 13 x 20 m	≈ 5 x 6 m
75 %	≈ 26 x 30 m	≈ 6 x 9 m
100 %	≈ 32 x 38 m	≈ 11 x 14 m

System 3000 motion detector top unit 2.20 m Komfort BT

Order no. 5376 ..

The motion detector top unit regulates the lighting depending on motion and brightness. It switches on if there is movement in the detection field and automatically switches on when it is dark enough.

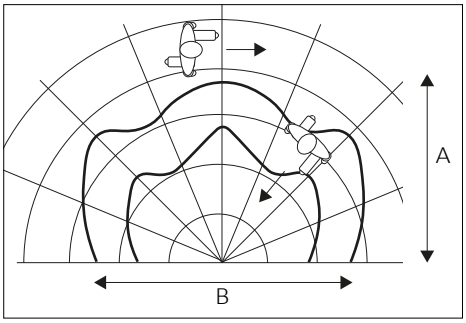
The lighting is switched off
- if no movement is detected and the set delay time has expired
or
- when it is light enough again and the set delay time has expired.

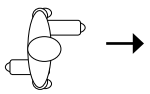
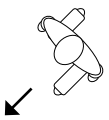
It's convenient and saves energy. Thanks to the special lens design, the motion detector top unit has a large detection field which also includes the area below the detector. In the intended mounting height of 2.20 metres, e.g. mounted over a door, the lighting is switched on upon when someone takes their first step through the door.
You can set this easily using your smartphone and the Gira Bluetooth app.

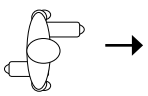
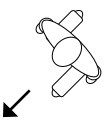
The functions at a glance:

- Automatically switches lighting on/off, depending on thermal motion and ambient brightness
- Detection range 180°
- Extended detection range via auxiliary units
- Switch-on brightness, delay time and sensitivity can be adjusted
- Staircase function with switch-off pre-warning
- Optimised burglary prevention through occupancy simulation
- Alarm function
- Basic brightness can be set
- Settings via smartphone and Gira Bluetooth app
- Push button for permanent on / off
- Activation of the pairing mode for teaching in within the Gira Bluetooth app
  - To do this, press the ON/AUTO button for more than four seconds
- Mounting height 2.20 metres or 1.10 metres
- in Gira TX_44 also IP44 protection against splash water

- Detection field:



	A x B	
2.20 m Sensitivity		
25 %	≈ 7 x 12 m	≈ 3 x 2 m
50 %	≈ 11 x 13 m	≈ 4 x 4 m
75 %	≈ 13 x 15 m	≈ 6 x 5 m
100 %	≈ 15 x 20 m	≈ 9 x 9 m

	A x B	
1.10 m Sensitivity		
25 %	≈ 7 x 9 m	≈ 1 x 2 m
50 %	≈ 8 x 10 m	≈ 3 x 4 m
75 %	≈ 9 x 12 m	≈ 4 x 6 m
100 %	≈ 10 x 18 m	≈ 5 x 7 m

System 3000 presence and motion detector 360° top unit BT

Order no. 5377 02

The presence and motion detector 360° top unit BT controls the lighting in indoor areas depending on motion and brightness. It switches on the lighting automatically if there is motion in the detection field or if it is dark enough.

The lighting is switched off
- if no movement is detected and the set delay time has expired or
- when it is light enough again and the set delay time has expired.

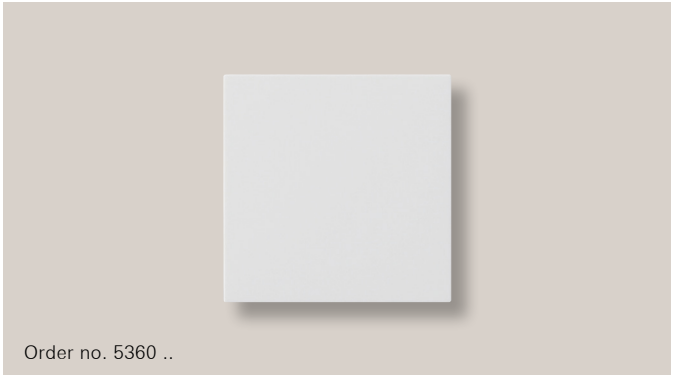
It's convenient and saves energy. Thanks to the special lens design, the presence and motion detector 360° top unit BT has a large detection field. Mounting heights of up to six metres allow for use in corridors or stairwells.

You can set this easily using your smartphone and the Gira Bluetooth app.

The functions at a glance:

- Automatically switches lighting on/off, depending on motion and ambient brightness
- 360° detection range for mounting heights up to six metres
- Three independent PIR sensors, individually adjustable
- Clip-on panel to limit the detection range
- Extension of the detection range by grouping up to ten devices
- Staircase function with switch-off pre-warning
- Optimised burglary prevention through occupancy simulation
- Continuous light control in combination with dimming inserts
- Can be used as a sentinel and as a presence detector
- Alarm function
- Night light function
- Basic brightness can be set
- Settings via smartphone and Gira Bluetooth app
- Mounting height three metres:
  - Detection field – tangential direction of movement: Ø 20 metres
  - Detection field – radial direction of movement: Ø 12 metres

System 3000 operating top unit



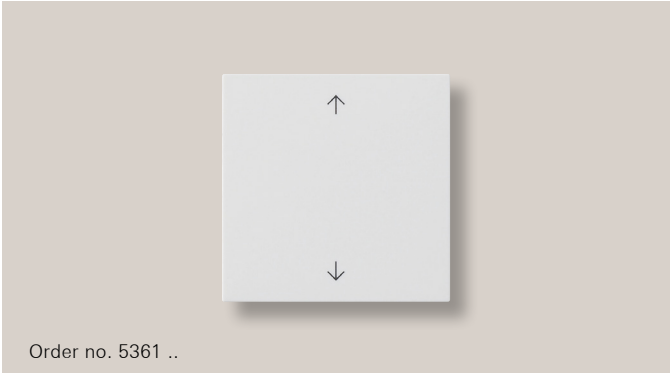
Order no. 5360 ..

The operating top unit is a 1-channel top unit for all System 3000 applications.
It can be operated as top, bottom or multi-surface.

The functions at a glance:

- Lighting control with appropriate inserts
- Lighting control with appropriate inserts
- Continuous operating concept
- Top unit for 2-wire or 3-wire auxiliary insert

System 3000 operating top unit arrow symbols



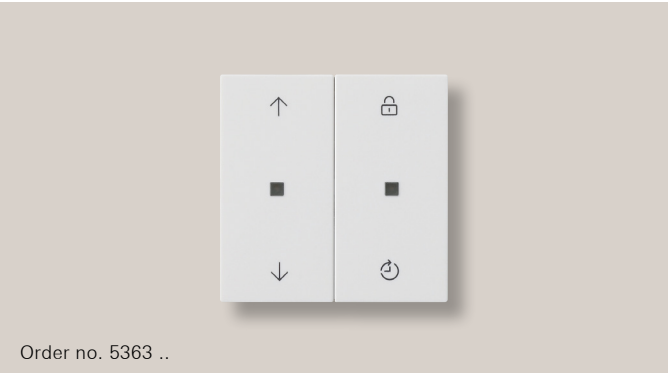
Order no. 5361 ..

The operating top unit is a 1-channel top unit for all System 3000 applications.
It can be operated as top, bottom or multi-surface.

The functions at a glance:

- Lighting control with appropriate inserts
- Lighting control with appropriate inserts
- Continuous operating concept
- Top unit for 2-wire or 3-wire auxiliary insert

System 3000 operating top unit Memory



Order no. 5363 ..

The operating top unit Memory is a 1-channel top unit for all System 3000 applications. The top unit consists of a split rocker, which looks like a 2-gang rocker. Each side of the rocker is assigned a coloured LED, which serves as a function display, status display and orientation light. The rocker can be operated as top, bottom or multi-surface.

The functions at a glance:

- Lighting control with appropriate inserts
- Lighting control with appropriate inserts
- Continuous operating concept
- Top unit for 3-wire auxiliary insert
- Operation is both manual and automatic
- Night mode, i.e. the function and status LED lights do not stay on
- Locking function to deactivate all automatic, auxiliary unit and Memory functions
- Includes a Memory function with two switching times, repeated every 24 hours

System 3000 blind timer and timer Display

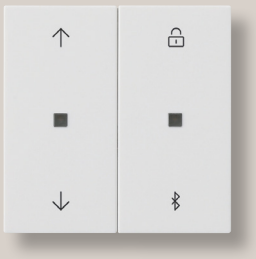
Order no. 5366 ..

The blind timer and timer Display is a 1-channel top unit for all System 3000 applications. It consists of a capacitive touch-sensitive surface in the typical Gira design with an illuminated display.

The functions at a glance:

- Lighting control with appropriate inserts
- Lighting control with appropriate inserts
- Top unit for 3-wire auxiliary insert
- Menu control, dialogue-led
- Two time blocks: Mon to Fri, Sat to Sun:
  - For switching and dimming operations, a time block consists of two on/off time combinations
  - For blind inserts, a time block consists of an up/down time combination
- Astro function:
  - 18 countries can be selected
  - Setting a time difference for morning and evening
- Quick save: Saving of the current time as a switching time
- Automatic setting of summer or winter time, which can be switched off by the user
- Illuminated segment display: Allows for easy reading in dark installation locations
- Touch-sensitive surface: operation through six operating surfaces with printed symbols
- Evaluation of auxiliary units
- Display turns off after two minutes or permanent display of the time
- Locking function to deactivate all automatic, auxiliary unit and time programme functions
- Power failure: In the event of a power failure, time and date are saved for four hours. All other values are stored in power outage safe mode
- Fast switching between automatic and manual actuation
- Display of the next switching time or raising/lowering time

System 3000 blind timer and timer BT



Order no. 5367 ..

The blind timer and timer BT is a 1-channel top unit for all System 3000 applications. The top unit consists of a split rocker, which looks like a 2-gang rocker. The rocker can be operated as top, bottom or multi-surface. The right-coloured LED shows the different functions, the left-coloured LED indicates the respective status. You can set and programme this easily using your smartphone and the Gira Bluetooth app.

The functions at a glance:

- Lighting control and configuration with appropriate inserts
- Lighting control and configuration with appropriate inserts
- Top unit for 3-wire auxiliary insert
- Connected sun protection and twilight function with System 3000 brightness and temperature sensor BT
- 40 switching times, at each switching time blind and slat positions or switching and dimming values can be stored
- Night mode, i.e. the function and status LED lights do not stay on
- Locking function to deactivate all automatic, auxiliary unit and time programme functions
- Operating the System 3000 inserts via Gira Bluetooth app with status feedback in values (0 to 100 percent, On/Off)
- Switch-on brightness can be saved with dimming insert
- Copying switching times via Gira Bluetooth app to other blind timers and timers BT
- Astro function using GPS data in the Gira Bluetooth app for every switching time
- Automatic adjustment of summer or winter time and automatic time synchronisation per Gira Bluetooth app
- Random function
- Additional parameters can be set depending on the System 3000 insert

4.2 Switches and buttons

The System 3000 provides switching and impulse inserts so that lighting can be switched on and off easily. All Gira inserts are functional without top units. Even setting an operational mode works without a top unit. The relay switching insert is approved for a temperature range of -25 °C to +45 °C. The inserts are not suitable for safety-relevant applications.

4.2.1 Components

Top units	Order no.
System 3000 operating top unit	5360 ..
System 3000 operating top unit arrow symbols	5361 ..
System 3000 operating top unit Memory	5363 ..
System 3000 blind timer and timer Display	5366 ..
System 3000 blind timer and timer BT	5367 ..
System 3000 motion detector top unit 1.10 m Standard	5373 ..
System 3000 motion detector top unit 1.10 m Komfort BT	5374 ..
System 3000 motion detector top unit 2.20 m Standard	5375 ..
System 3000 motion detector top unit 2.20 m Komfort BT	5376 ..
System 3000 presence and motion detector 360° top unit BT	5377 02

Inserts	Order no.
System 3000 relay switching insert	5403 00
System 3000 electronic switching insert	5405 00
System 3000 impulse insert	5410 00

4.2.2 Definitions

Switch

An electrical installation device with an operating element that is operated by pressing, turning or tilting. The electrical contact is closed by an actuation and remains closed until the operating element is actuated a second time.
An example of this is the operation of a light switch. If the switch is pressed, the living room light switches on and stays on. If the light switch is pressed a second time, the living room light switches off again.

Button

An electrical installation device with an operating element that is operated by pressing and then returns to its initial position. The electrical contact is closed only for the duration of the operation.
An example of this is the operation of a door bell button.
As long as the door bell button is pressed, the door bell will sound. As soon as the door bell button is released, the door bell will no longer sound.

Delay time

The relay switching insert and electronic switching insert work as switches. That is, they turn on the lights when first actuated and off when actuated again. Optionally, you can set an delay time for the relay switching insert. After expiry of the delay time, the relay switching insert automatically switches the lighting off again. Within this delay time, you can also manually switch off the load on the operating top unit.

You can set the delay times for the relay switching insert as follows:

- Switch (no delay time)
- 1 minute
- 5 minutes
- 30 minutes
- 60 minutes

The delay time function is first and foremost an energy-saving function: in particular in rooms where someone is not permanently present (e.g. office kitchens), the light is automatically switched off after a certain period of time. This function can also be used so that when leaving the house, for example, the light in the hallway stays on to give the impression that there is still someone at home.

An extension of the delay time by repeated pressing is not possible.

4.2.3 Switch as main and auxiliary unit

The relay switching insert and the electronic switching insert become a light switch with the operating top unit.
The impulse insert can be operated manually with the operating top unit. In combination with a motion detector top unit, this becomes an staircase light timer. When it is dark, it automatically switches the lighting on and off with each detected movement in conjunction with the staircase light timer.

System 3000 main units

The main unit consists of one device insert and one matching operating top unit.
Any number of 2-wire auxiliary inserts and non-illuminated buttons can be connected to one main unit via the auxiliary unit terminal.

System 3000 auxiliary units

The auxiliary unit consists of one auxiliary insert with a matching top unit or rocker button.

A System 3000 main unit can be controlled by a System 3000 auxiliary unit by placing a signal on Terminal 1 of the main insert when activated.

The functionality that results on the main unit depends on the choice of device. The following devices can be used as an auxiliary unit:

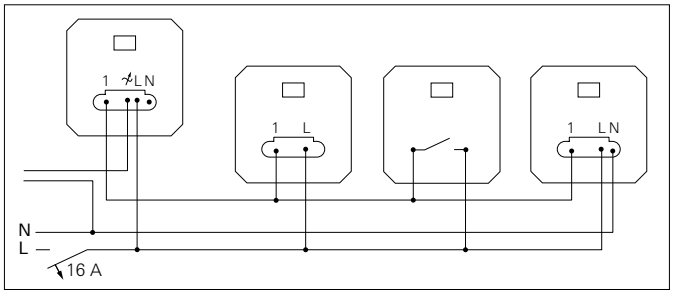
- A 230 V (rocker) button as NO contact
- One 2-wire auxiliary insert with operating top unit
- One 3-wire auxiliary insert with any System 3000 top unit

4.2.4 Mounting and settings

The Gira relay switching inserts and impulse inserts already offer functions to automate lighting. This section gives an overview of the installation steps and the adjustable operating modes and functions.

Relay switching insert

Connecting and installing the insert



Observe the following during installation:
- Illuminated buttons must have a separate N terminal.
- Do not plug in the top unit while powered on, and do not change it while powered on, as this may cause a malfunction.

To set the delay time, proceed as follows:

1. Press the TEST button for more than four seconds. After pressing the TEST button, the LED lights up in the colour of the set delay time.

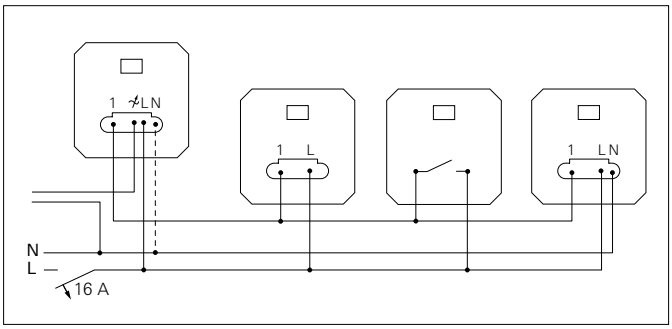
2. Briefly release the TEST button and then press the button repeatedly until it lights up in the colour of the desired delay time.

LED colour	Pre-defined delay time	
Green	Switching without delay time	
White	Delay time:	1 minute
Blue	Delay time:	5 minutes
Yellow	Delay time:	30 minutes
Red	Delay time:	60 minutes

3. The selected delay time is automatically stored after 30 seconds. If the LED turns off, the saving process was successful.

Electronic switching insert

Connecting and installing the insert



Observe the following during installation:

- If non-dimmable LED lights are used, the neutral conductor must be connected. If other light sources are used, operation without a neutral conductor is possible.
- A maximum of 600 W LED or compact fluorescent lamps can be connected per 16 A circuit breaker.

Set operating mode

When operating without a neutral conductor, the operating mode must match the load. The operating mode is usually set automatically. However, it may be necessary to set the operating mode manually.

When operating with a neutral conductor, the operating mode can not be set. The LED status has no function in this case.

You can set the following operating modes:

Universal, R, L, C, LED

- Factory preset
- Automatic measurement on the load, the trailing edge, leading edge or LED leading edge
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Dimmable HV LED lights or compact fluorescent lamps
  - Dimmable electronic or inductive transformers for halogen or LED lights

LED trailing edge

- Connection of inductive transformers not permitted
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Trailing edge dimmable HV LED lights or compact fluorescent lamps
  - Trailing edge dimmable electronic transformers for halogen or LED lights

LED leading edge

- Connection of inductive transformers not permitted
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Leading edge dimmable HV LED lights or compact fluorescent lamps
- Leading edge dimmable electronic transformers for halogen or LED lights

To set the type of operation, proceed as follows:

1. Make sure the load is off.
2. Press the TEST button for more than four seconds until the LED lights up.
3. Press the TEST button within one second until the required operating mode is selected.

LED colour	Operating mode
Green	R, L, C, LED
Red	LED trailing edge
Blue	LED leading edge

The LED lights up in the colour of the selected operating mode.

4. Within the next 30 seconds, press the TEST button for more than one second.

The LED turns off and the light turns on. The operating mode is stored. If the TEST button is not pressed within 30 seconds for longer than one second, the operating mode will not be saved and the LED goes out.

Impulse insert

The impulse insert is used exclusively for setting up staircase lighting controls. The impulse insert supplies control signals to a DRA staircase light timer, which centrally switches the staircase lighting.

You can install one or more impulse inserts on each floor of a staircase. Either operating top units or motion detector top units are mounted on the impulse inserts. A switch-on signal is sent to the staircase light timer either via the manual actuation of the operating top unit or by the detection of movement.
The staircase lighting is switched on for the set delay time.

Retriggering of the delay time by repeatedly pressing the operating top unit or by repeated Capture by the motion detector is made possible by the impulse insert. Retriggering resets the delay time to the start time and extends the lighting duration of the staircase lighting.

4.3 Dimming

Basically, a lighting system is initially designed for the maximum brightness required. In practice, however, many situations require a downgrade of the lighting to adapt to individual needs.

Dimmed light improves lighting and living quality, creates individual lighting conditions for the everyday workplace and makes a significant contribution to energy savings.

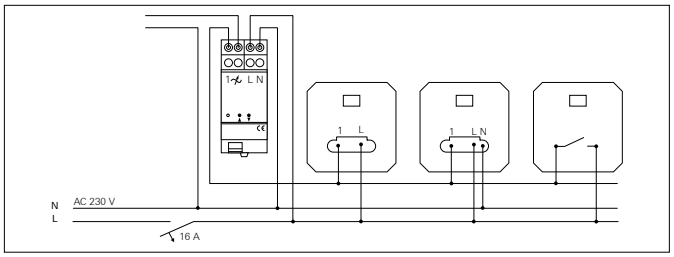
4.3.1 Components

Top units	Order no.
System 3000 operating top unit	5360 ..
System 3000 operating top unit arrow symbols	5361 ..
System 3000 operating top unit Memory	5363 ..
System 3000 blind timer and timer Display	5366 ..
System 3000 blind timer and timer BT	5367 ..
System 3000 brightness and temperature sensor BT	5466 02
System 3000 motion detector top unit 1.10 m Standard	5373 ..
System 3000 motion detector top unit 1.10 m Komfort BT	5374 ..
System 3000 motion detector top unit 2.20 m Standard	5375 ..
System 3000 motion detector top unit 2.20 m Komfort BT	5376 ..
System 3000 presence and motion detector 360° top unit BT	5377 02

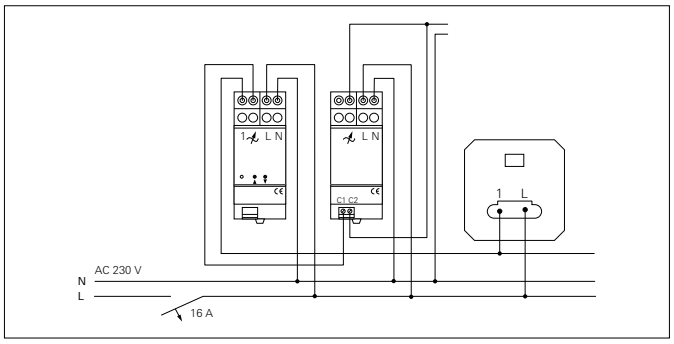
Inserts	Order no.
System 3000 universal LED dimming insert Standard	5400 00
System 3000 universal LED dimming insert Komfort	5401 00
System 3000 DALI Power control unit, flush-mounted insert	5406 00
System 3000 universal LED rotary dimming insert Standard	2450 00
System 3000 universal LED rotary dimming insert Komfort	2455 00
System 3000 universal LED dimmer Mini	2440 00
System 3000 universal LED dimmer DRA	2365 00
System 3000 universal LED power booster DRA	2383 00

4.3.2 Mounting and settings

Connecting and installing the DRA dimmer



DRA dimmer and universal LED power booster DRA – connecting and installing



Observe the following during installation:
- When operating multiple dimmers or power boosters in a sub-distribution between the DRA devices, a distance of 1 MW (about 18 mm) should be kept to avoid overheating.
- A maximum of 600 W LED or compact fluorescent lamps can be connected per 16 A circuit breaker.
- When connecting transformers, pay attention to the specifications of the Transformer manufacturer.
- Only connect illuminated buttons if they have a separate N terminal.

Set operating mode

The operating mode must match the load. The operating mode is usually set automatically. However, it may be necessary to set the operating mode manually.

You can set the following operating modes:

Universal, R, L, C, LED

- Factory preset
- Automatic measurement on the load, the trailing edge, leading edge
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Dimmable HV LED lights or compact fluorescent lamps
  - Dimmable electronic or inductive transformers for halogen or LED lights

LED trailing edge

- Connection of inductive transformers not permitted
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Trailing edge dimmable HV LED lights or compact fluorescent lamps
  - Trailing edge dimmable electronic transformers for halogen or LED lights

LED leading edge

- Connection of inductive transformers not permitted
- Load type:
  - Light bulbs
  - HV halogen lamps
  - Leading edge dimmable HV LED lights or compact fluorescent lamps
  - Leading edge dimmable electronic transformers for halogen or LED lights

To set the type of operation, proceed as follows:

1. Make sure the load is off.
2. Press the TEST button for more than four seconds until the LED lights up.
3. Press one of the two buttons for less than one second, as often as needed until the required operating mode is selected.

LED colour	Operating mode
Green	R, L, C, LED
Red	LED trailing edge
Blue	LED leading edge

The LED lights up in the colour of the selected operating mode.

4. Press and hold both buttons.
   The LED lights up in the colour of the selected operating mode. The light turns on at the lowest brightness and slowly brightens.
5. Once the desired minimum brightness has been reached, release both buttons.

The LED lights up in the colour of the selected operating mode and the light turns on. The operating mode is stored.
If neither of the buttons is pressed within 30 seconds, the operating mode is saved and the LED lights up green.

4.3.3 Dimmability of light sources

Light bulbs

The light bulb is a 'thermal radiator'. In the bulb, a current flows through a thin filament made of conductive material, the spiral-wound filament. The spiral-wound filament is heated until it lights up yellow or white.

Halogen bulbs

One special design of the light bulb is the halogen bulb. These are available in the following variants: high voltage (HV) for mains voltage and low voltage (LV) for low voltage.

High-voltage halogen bulbs are relatively easy to dim. Using an edge dimmer (leading edge or trailing edge), part of the sinusoidal mains voltage is cut off in each half-wave, thus supplying the bulb with less effective voltage. This creates gaps in the power supply of a few milliseconds, which, however, have no appreciable effect due to the hermetic inertia of the filament.

High-voltage halogen bulbs can theoretically be dimmed without any restrictions. When dimming, high-voltage halogen bulbs change their colour temperature to warmer (lower) values and the life of the bulb usually increases significantly. Even the low-voltage halogen bulbs are dimmable using the same principle. Here, however, it must be taken into account that the ballast (transformer), which generates the required low voltage, can also be dimmed. Details on compatibility can be found in the transformer manufacturer's product documentation.

LED lights

If nothing else, because of the EU-wide ban on incandescent light bulbs in the context of the German Energy Saving Ordinance, LED lights have gained popularity in recent years. The actual light sources in LED lights are light-emitting diodes that consist of semiconductor materials. LED lights require considerably less energy than the classic light bulb.

In addition, LED lights last significantly longer: If one assumes that light bulbs have about 1,000 operating hours, the manufacturers of LED lights typically indicate a service life of 20,000 to 50,000 operating hours.

Unlike light bulbs, LED lights are a very fast light source, and begin to glow immediately upon the onset of current flow and do not produce any subsequent glow when the power is turned off.

Even LED lights can be dimmed. While halogen lights and light bulbs are operated with alternating current, LED lights require direct current. LEDs are also operated with operating voltages below 1 V. Therefore, LED lights require a ballast – either as a separate device or integrated into the lamp.

The tasks of the ballast are, on the one hand, to lower the mains voltage to LED-compatible levels, and, on the other hand, to supply continuous power to the LED during supply gaps, which inevitably arise in leading and trailing edge phases. In addition, if necessary, the dimming process is controlled via the ballast (PWM, for dimmable LED lights) and the colour temperature is adjusted.

Dimmable LED lights must be expressly marked as "dimmable" in order to operate on leading or trailing edge.

4.3.4 Dimming principles

Leading edge

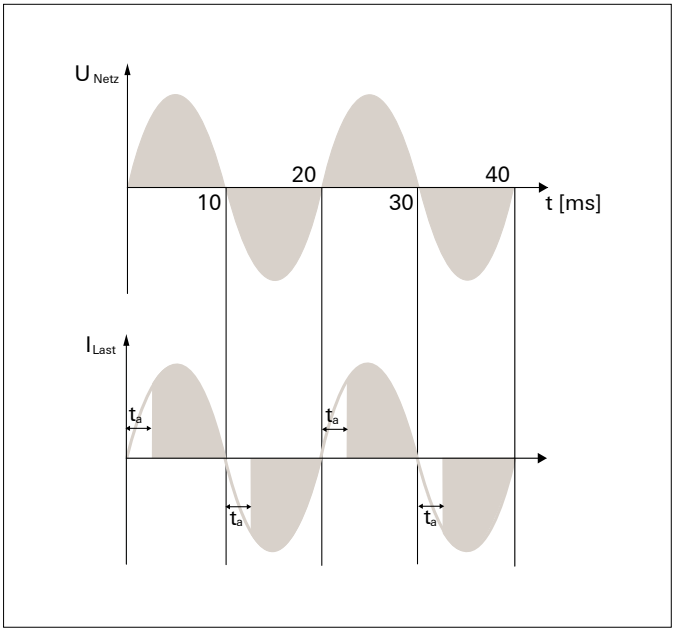
With the leading edge principle, the dimmer blocks the flow of current to the light at the beginning of each half sine wave. It is insulating. Only after expiry of an adjustable delay time is the electronic switch in the dimmer switched on and the connected lights receive power. With the next sine zero, the current flow is extinguished and the lamp is switched off. This process is repeated for every sine wave, i.e. 100 times per second. The brightness of the connected bulbs can be infinitely adjusted via the delay time.

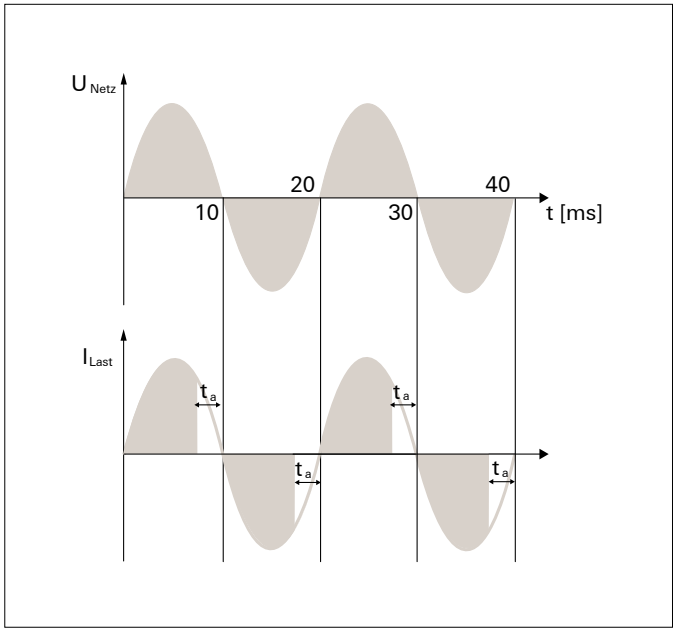
The leading edge principle is suitable for ohmic and inductive loads, light bulbs or low-voltage halogen bulbs with a conventional (wound) transformer. In addition, there are LED lights that are specially approved for dimming according to the approved, leading-edge principle.

Trailing edge

With the trailing edge principle, the lights are switched on in the sine half-wave zero crossing and are switched off again after an adjustable delay time. The advantage here is that no interference voltages occur when switching on, because the voltage at the time is equal to zero.

The trailing edge principle is suitable for all light bulbs and loads with a capacitive input behaviour, e.g. electronic transformers. There are also LED lights that are only suitable for the leading-edge principle. These are, for example, lamps that have a capacitor on the input side (for example, for radio interference suppression). When it is discharged, it acts as a short-circuit for a short time when it is turned on. This effect would produce high current peaks in the leading edge due to the steep switch-on edges.





4.3.5 Installation-related power reduction

In addition to the basic compatibility of the lights and possibly the ballasts, the planned installation position must be taken into account.

Since dimmers have a higher power loss than relays, special attention must be paid to the heat generated by the power loss. To avoid damage, the resulting heat must be safely diverted. The heat is usually diverted through the mounting plate into the wall. If this is not possible, for example because the dimmer is installed in a surface-mounted device box or in a cavity box in a plasterboard framework, the rated load must be reduced.

Rules and examples on how to reduce the rated load

In the event of higher ambient temperature
Reduction by 10 % per 5 °C Exceedance of the ambient temperature above 25 °C
Example: Installation of a dimmer with 500 W with an ambient temperature of 40 °C 40 °C – 25 °C = 15 °C 15 °C/5 °C = 3 3 x 10 % = 30 % Result: Reduction of the rated load by 30 %
The 500 W dimmer may only be charged with 70 % of the specified rated output, i.e. with 350 W.

For installation in cavity walls, plasterboard or wooden walls, for installation in furniture
Reduction by 15 %
Example: Installation of a dimmer with 500 W in a wall unit Result: Reduction of the rated load by 15 %
The 500 W dimmer may only be charged with 85 % of the specified rated output, i.e. with 425 W.

When installing multiple dimmers above or next to each other
Reduction for the external devices by 10 %, for the internal devices by 20 %
Example: Installation of three dimmers each with 500 W side by side in a multiple combination Result: Reduction of the rated load by 10 %/20 %
The two outer 500 W dimmers may only be charged with 90 % of the specified rated output, i.e. with 450 W. The inner 500 W dimmer may only be charged with 80 % of the specified rated output, i.e. with 400 W.

If several of these conditions are met in an installation, the rated output must be reduced accordingly even further.

4.3.6 Setting the operating mode and basic brightness

All Gira System 3000 dimmers automatically measure the characteristics of the connected load and then choose the most suitable dimming principle. For capacitive and ohmic loads, trailing edge is usually set; for inductive loads leading edge is set.

The dimming principle and the basic brightness can also be set manually during start-up using the operating mode selection button. An LED in use indicates the current selection.

LED lights up green

- Automatic load calibration
- Trailing edge for light bulbs, HV halogen bulbs, dimmable HV LED or compact fluorescent lamps as well as dimmable electronic transformers with LV halogen or LV LED lights
- Leading edge for dimmable inductive transformers with halogen or dimmable LED lights
- LED leading edge for dimmable HV LED lights or compact fluorescent lamps

LED lights up red

- Dimmer operates according to the trailing edge principle
- Setting for light bulbs, HV halogen lamps, dimmable HV LED or compact fluorescent lamps that are dimmable according to the trailing edge principle
- Dimmable electronic transformers for halogen or LED lights

LED lights up blue

- Dimmer operates according to the leading edge principle
- Setting for light bulbs, HV halogen lamps, dimmable HV LED or compact fluorescent lamps that are dimmable according to the leading edge principle
- Dimmable electronic transformers for halogen or LED lights

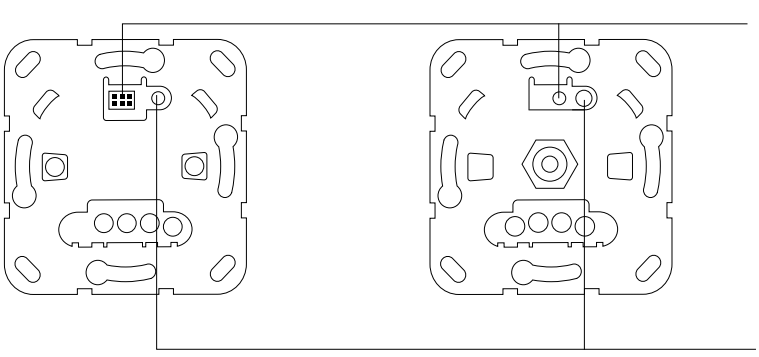
To set the type of operation and the basic brightness, proceed as follows:
First make sure the load is off.

Pushbutton dimmer

Order no. 5400 00
Order no. 5401 00

Rotary dimmer

Order no. 2455 00



Universal

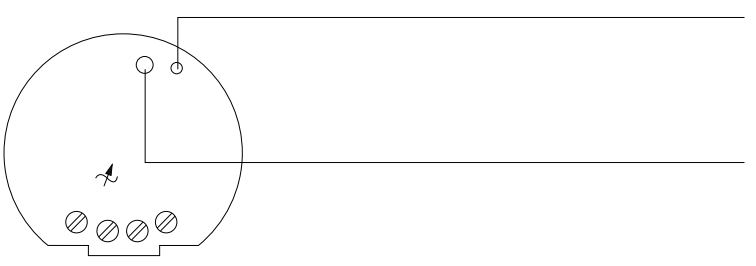
LED trailing edge

LED leading edge

Buttons for setting the operating mode and minimum brightness

Universal LED dimmer Mini

Order no. 2440 00
Order no. 2365 00



Universal

LED trailing edge

LED leading edge

Buttons for setting the operating mode and minimum brightness

Pushbutton dimmer

Order no. 5400 00
Order no. 5401 00

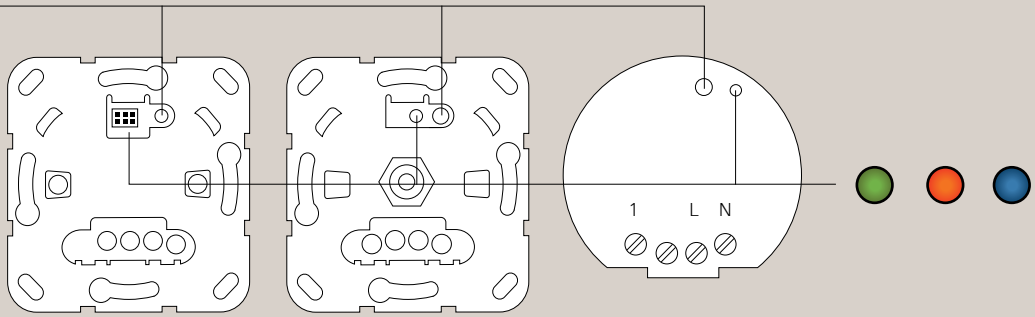
Rotary dimmer

Order no. 2455 00

Universal LED dimmer Mini

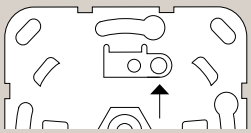
Order no. 2440 00
Order no. 2365 00

1. Buttons for setting the operating mode and minimum brightness



2. Select the operating mode

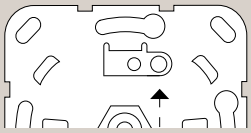
Press and hold the button, until the LED lights up



LED lights up.

> 4 s

3. Press the button briefly and repeatedly until the desired operating mode is selected



The LED lights up in the colour of the selected operating mode.

< 1 s

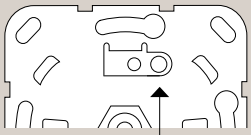
> 30 sec Timeout Abort/Reset

4. Set the minimum brightness

Press and hold down the button

When the Automatic operating mode is selected, the first step is to measure the load.

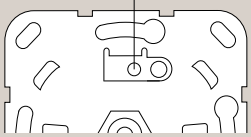
Keep the button pressed.
In the lowest dimming position, the light must light up.



The LED flashes.
The light turns on at the lowest brightness level and slowly brightens.

Once the desired minimum brightness has been reached, release the button

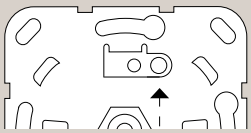
Change the minimum brightness level again:
The light switches back to the the lowest brightness level and slowly brightens.



The LED lights up.
Operating mode and minimum brightness are set.

> 30 s Timeout
The settings will be saved.

5. Save the setting:
Press the button briefly



LED goes out

4.3.7 DALI

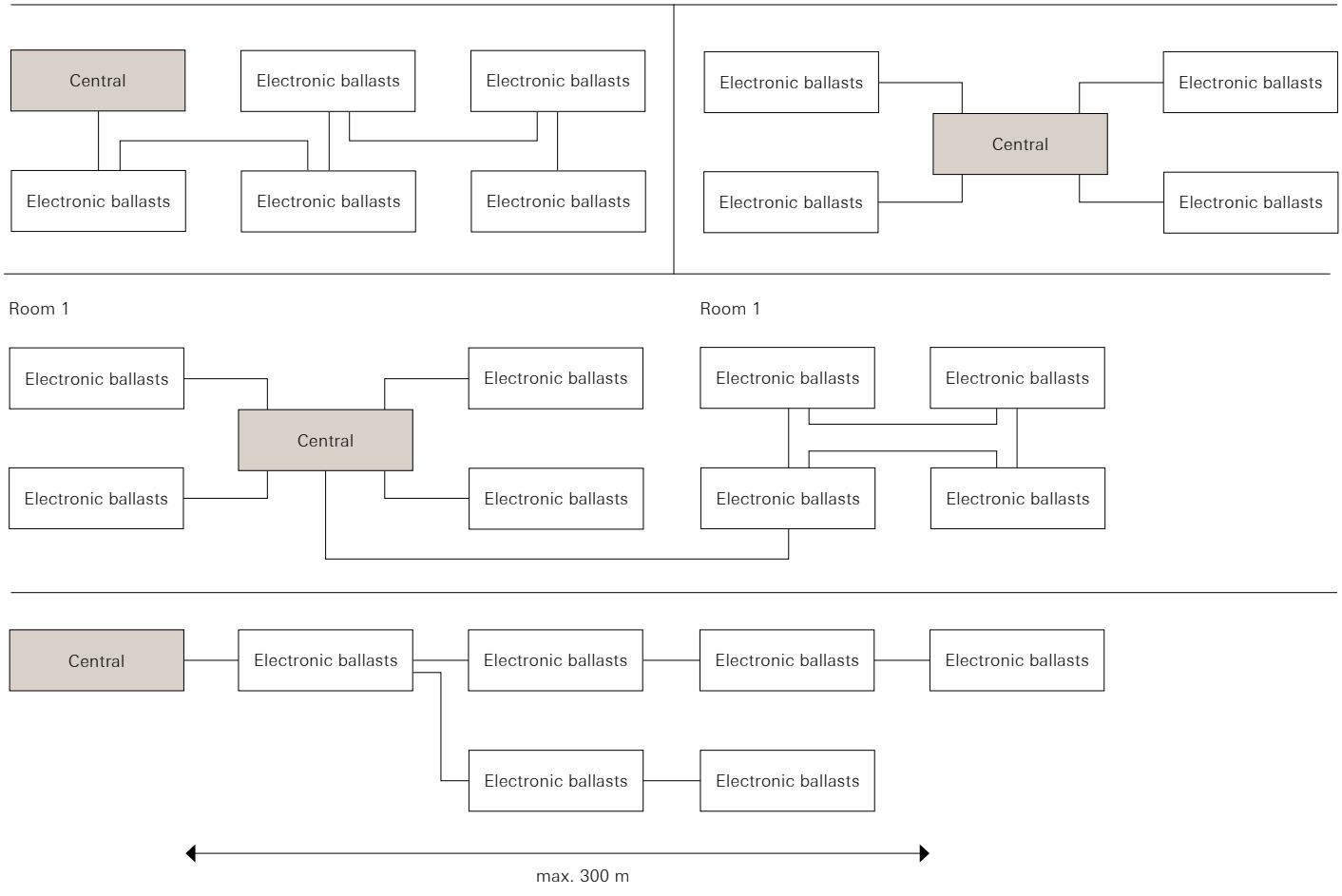
DALI stands for "Digital Addressable Lighting Interface" and is a standard for digital data transmission between components of a lighting system. DALI was developed in the early 21st century and has largely replaced 1 – 10 V technology in buildings. The goal was to create an easy-to-use interface in a system with low component costs.

DALI was originally included as Annex E4 of DIN EN 60929 in the international standardisation. As part of the further development and implementation of advanced functions, DALI is currently described in the DIN EN 62386 series of standards.

DALI offers the following functions and options:

- Switching and dimming from different points
- Operating units of different types and manufacturers have the same dimming behaviour
- Standardised dimming characteristics for adaptation to eye sensitivities
- Selection between linear and logarithmic dimming behaviour
- Switching operation is transferred in the electronic ballast (EVG) (no more wear in the relay, no dimensioning of switching currents necessary, no separate contactors)
- Scene control
- Targeted start up or brightening of levels
- Coordinated fading between scenes
- Individual, group or central control
- White point adjustable during operation (Tunable White, TW)
- Colour control

DALI is particularly suitable for multi-purpose rooms, office rooms or open-plan offices as well as training or lecture rooms and production halls.

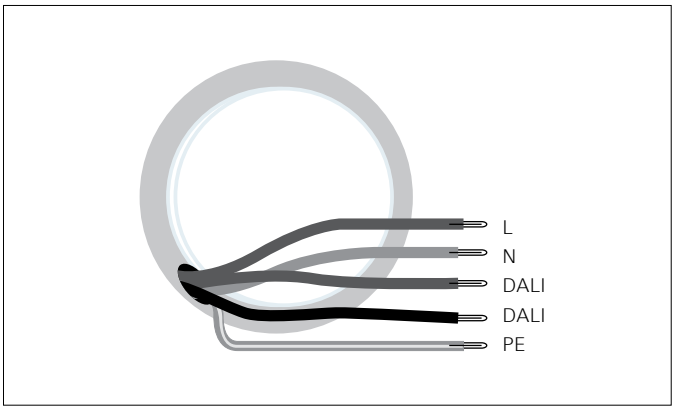


4.3.8 Tips for planning LED light dimmers

DALI Installation rules

When installing a DALI system, note the following:

1. DALI is FELV (functional(ly) extra low voltage).
2. No special data lines need to be used. An NYM line can be used for example.
3. The same installation rules apply to the cable routing of the DALI control lines as to mains power systems.
4. DALI control lines and mains voltage lines may be under the same protective sheath or pulled into the same tube.
5. For a five-wire cable, a protective conductor and a neutral conductor must be present.
6. The connected devices may be connected during any phase.
7. The wiring of the DALI devices can be done as serial or star wiring or as mixed connection. A terminating resistance is not required.
8. The cable length between the control device and the furthest device must not exceed 300 metres.



Select lights

Make sure the LED lights are dimmable.
If possible, only install lamps from the same manufacturer and from the same batch (same date of manufacture) into a system.

Consider the installation position

Plan to reduce the maximum rated power of the dimmers, depending on the intended installation position and the expected ambient temperature.

Set operating mode

First, set the operating mode to “Universal” and test the system.
If problems arise:
Set and check the LED trailing edge operating mode.
If more problems arise:
Set and check the LED leading edge operating mode.

For maximum connected load: Select LED trailing edge.
For the widest possible dimming range: Select LED leading edge.

For complex systems

You can dim larger (LED) loads using power boosts (DRA). Check whether a DALI system is a sensible alternative.

4.3.9 Troubleshooting

Problem	Cause	Remedy
Connected LED or compact fluorescent lamps switch off in the lowest dimming position or flicker.	The defined basic brightness is too low.	Increase the basic brightness level.
Connected lights do not switch on at the lowest dimming setting or are delayed.	The defined basic brightness is too low.	Increase the basic brightness level.
Connected LED or compact fluorescent lamps flicker or buzz; no correct dimming is possible, dimmer buzzes.	Lamps are not dimmable.	Check manufacturer information. Swap lamps out for another type.
	Operating mode (dimming principle) and lamps are not an optimal match.	Check operation in another operating mode; reduce any connected load. Set operating mode manually. Swap lamps out for another type. Use the LED compensation module.
	Dimmer is connected without a neutral conductor.	If possible, connect the neutral conductor, otherwise replace the bulb with another type.
Connected LED or compact fluorescent lamps are too bright in the lowest dimming position; Dimming range is too small.	The defined basic brightness is too high.	Reduce the basic brightness.
	Operating mode (dimming principle) is not an optimal match with the connected HV LED lights.	Check operation in another operating mode; reduce the connected load if necessary. Set operating mode manually. Swap HV LED lights out for another type.
Dimmer switches load off briefly and back on again.	Short-circuit protection has been triggered, in the meantime there is no longer an error.	Check the system.

Problem	Cause	Remedy
Dimmer has switched off and can not be switched on again.	Excess-temperature protection triggered.	Disconnect the dimmer and switch off circuit breakers. LED trailing edge: Reduce the connected load; Swap lamps out for another type. LED leading edge: Reduce the connected load; check operation in LED trailing edge setting; Swap lamps for another type. Leave the dimmer to cool for at least 15 minutes. Switch circuit breakers and dimmers on again.
	Overvoltage protection has been triggered.	LED trailing edge: Check operation in the LED leading edge setting; reduce the connected load if necessary. Swap lamps out for another type.
	Short-circuit protection triggered.	Disconnect the dimmer and switch off circuit breakers. Repair short circuit. Switch circuit breakers and dimmers on again. Note: The short-circuit protection is based on an electronic fuse; the load circuit is not galvanically isolated from the mains supply when switched off.
	Load failure	Check load. Replace light source. For inductive transformers: Check primary fuse.
	Dimmer is connected without a neutral conductor.	If possible, connect the neutral conductor, otherwise replace the bulb with another type.
LED light is dimly lit with the dimmer off (“ghosting effect”).	LED light is not suitable for this dimmer.	Use another type of LED light or one from another manufacturer. Connect the neutral conductor to the dimmer. Use the LED compensation module.

4.4 Automatic lighting

For more safety and greater convenience, the System 3000 offers components for automatic, motion-dependent lighting control. The motion detectors, sentinels and presence detectors from Gira automatically switch on the lighting if movement is detected in the detection field and switch off again after a set delay time has elapsed – all in a convenient and energy-saving manner.

Basically, the motion-dependent lighting control can be divided into two typical fields of application:

Motion detector

Motion detectors which are particularly suitable for transit areas such as stairs or corridors. The task of the motion detector is to switch on the light as a function of the ambient brightness when a person enters the detection range and to switch off the light when the person leaves the room again. The main focus here is on avoiding dangerous situations in the dark. In this application, it is not necessary to switch off the light manually. Here, the desired delay time always expires and the light switches off if the delay time is not reactivated by new motion.

Presence detector

Presence detectors are motion detectors that are typically placed in rooms where people are present longer. The presence detector has the primary objective of saving energy and switching off or dimming the room lighting if no one is present. For this, the presence detector must be able to detect even small and sporadic movements. In this application, the light must also be able to be switched off manually. Presence detectors can be switched off if necessary and movements ignored in the detection range.

In addition, all System 3000 motion detectors and presence detectors measure the ambient brightness and thus make the control of automatic lighting even more intelligent: You can set the lighting to only be switched on during movement if an additional brightness threshold is not reached. Or you can design more complex systems in which further motion detectors or presence detectors follow when a motion detector is triggered.

The Gira presence and motion detector 360° top unit BT can be used as a motion detector and as a presence detector.

4.4.1 Components

Top units	Order no.
System 3000 motion detector top unit 1.10 m Standard	5373 ..
System 3000 motion detector top unit 1.10 m Komfort BT	5374 ..
System 3000 motion detector top unit 2.20 m Standard	5375 ..
System 3000 motion detector top unit 2.20 m Komfort BT	5376 ..
System 3000 presence and motion detector 360° top unit BT	5377 02

Inserts	Order no.
System 3000 relay switching insert	5403 00
System 3000 electronic switching insert	5405 00
System 3000 universal LED dimming insert Standard	5400 00
System 3000 universal LED dimming insert Komfort	5401 00
System 3000 auxiliary insert, 3-wire	5409 00
System 3000 DALI Power control unit, flush-mounted insert	5406 00
System 3000 impulse insert	5410 00

4.4.2 Operation and functions

The motion detectors and presence detectors from Gira offer a wide range of functions to automate the lighting conveniently and on demand. This section gives an overview of the individual operating modes and functions.

Operating mode of the motion detector

In the motion detector mode, the automatic load switching takes place as a function of heat movement and ambient brightness. The lighting can not be switched off via an operating point (switch, button or wireless network).

Area of application

Entrance and transit areas (corridors and stairs), garages, cellars, bathrooms and guest WCs.

Operating mode of the presence detector

In the presence detector mode, the automatic load switching takes place as a function of heat movement and ambient brightness. In presence detector mode, the lighting can be switched off via an operating point (2-wire auxiliary unit, 3-wire auxiliary unit, button or wireless network). Restarting during an active motion detection during the delay time is deactivated.
In conjunction with the dimming inserts, you can adjust the lighting to an individually-set brightness depending on motion. In this combination, the presence detector continuously measures the amount of artificial light and daylight. If the determined switching threshold is not reached, the presence detector switches on the light when motion is detected and adjusts it so that the desired brightness value is reached. The brightness in the room thus remains constant, regardless of the amount of daylight entering the room. This is called “constant light control”.

Area of application

Offices, conference rooms, WCs, sports halls, warehouses.
In connection with dimming inserts, especially offices, conference rooms and production areas.

The presence mode is activated and set easily and conveniently via smartphone and the Gira Bluetooth app.

The following parameters can be programmed:

- Detection range
- Sensitivity of all sensors
- Brightness threshold
- Fixed or dynamic delay time
- Switch-off pre-warning
- Occupancy simulation
- Hotel/orientation light function
- Night light function
- Constant lighting control
- Alarm mode
- Walking test
- Occupancy simulation
- Day mode

Function: Continuous On

The load is switched manually on until the function is deactivated again. With the Gira Bluetooth app or a switch on the device, you can use this function to prevent the presence detector from detecting presence and from switching off the lighting during periods of low activity.
A typical application scenario is, for example, preventing the light from turning off when doing homework or reading in the bathtub, or in staircases when moving furniture.

Function: Continuous Off

The load is switched manually on until the function is deactivated again. Using the Gira Bluetooth app or a switch on the device, this function prevents the lighting from being switched on, even if the device detects the presence of a person.
A typical application scenario is the prevention of light switching on when motion is detected, e.g. during film screenings or projector presentations.

Function: 0.5 – 5 hours Continuous On

The load is permanently switched on for a period of 0.5 to 5 hours (or until manual deactivation).
In principle, this function behaves like the “Continuous On” function, except that it is automatically deactivated after a set time and switches to automatic mode (“AUTO” function). Manual deactivation is thus not really necessary.

Function: 0.5 – 5 hours Continuous Off

The load is permanently switched off for a period of 0.5 to 5 hours (or until manual deactivation).
In principle, this function behaves like the "Continuous Off" function, except that it is automatically deactivated after a set time and switches to automatic mode ("AUTO" function). Manual deactivation is thus not really necessary.

Function: Impulse operation

If impulse operation is activated, the load is only switched on for a short time (about 0.5 seconds) when presence is detected. A longer-lasting detection of motion leads at certain intervals to a repeat of the switch-on impulse. If the Day Mode setting is also selected, the motion evaluation is always independent of brightness. This function can be used in motion and presence detector mode to monitor other rooms, e.g. whether a customer is in the store, for example, in conjunction with a bell.

Function: Switch-off pre-warning

With the switch-off pre-warning, the lighting is not switched off immediately at the end of motion detection and after expiry of the delay time, but only after an advance warning with a light flashing three times every ten seconds (switching insert) or dimming down of the lighting (dimming insert). The switch-off pre-warning warns the person in the room that the lighting will be switched off shortly. He therefore has the option of activating the delay time (e.g. by moving) to prevent the lighting from switching off (according to DIN 18015-2).

Function: Occupancy simulation

In recording mode (inactive mode), the switching operations are recorded in automatic mode, which are triggered by the presence of people. In playback mode, the recorded operations are played back. In playback mode, the load is only executed when the brightness level is reached (brightness < switch-on threshold) per switching operation and switched off again after the set delay time has elapsed.
For example, if you are away for a long time (e.g. on holidays), you can simulate people in the building and deter potential intruders.

If movement is detected in playback mode, it is also evaluated and the lighting adjusted accordingly. In presence simulation, the alarm function can also be activated.

Function: Alarm mode

When the alarm mode is activated, the motion detector switches the load into flashing mode (about
one second on, one second off) for the set delay time. In addition, the LED status (red LED) signals the triggering of the alarm by flashing quickly (about 0.5 seconds on, 0.5 seconds off) until the alarm function is deactivated. In alarm mode, the motion evaluation is always independent of brightness.

The alarm mode is usually activated in a person's absence. If unauthorised persons gain access to the building, they will be unsettled by the sudden activation of the load. Neighbours can be alerted to an unauthorised entry.

Function: Hotel light or orientation light

With the hotel light/orientation light function, the light is switched between two brightness values when motion is detected.

The hotel light/orientation light function is considered to be a convenience function in hotels. The lighting is permanently turned on as an orientation light with low brightness.
When motion is detected, the motion detector switches the light to a higher, pre-set brightness value.
To use the hotel light/orientation light function, the device must be combined with a dimming insert.
For all switch-on commands, the light switches to the pre-set Memory dimming level. If no motion is detected, the lighting is dimmed again to the brightness of the orientation light after an delay time has elapsed.

The setpoint for the orientation light is 20 % of the factory setting.

When the motion detector is in presence detector mode, a power off command dims the lighting to the orientation light level and does not turn it off completely.

With the "Continuous Off" function the lighting can be turned off completely.

Function: Night light

With the night light function, the light is switched on during programmable periods of time with a low brightness level when motion is detected. A typical application is the night-time trip to the bathroom. The design of living spaces is in accordance with VDI/VDE 6008, Page 3 and VDE AR-E 2757-8.
To use the night light function, the device must be combined with a dimming insert. For all switch-on commands, the motion detector switches on the light to the night-time brightness level. The value is factory set to 20 % and can be adjusted using the Gira Bluetooth app.
A switched-on load can still be dimmed using the auxiliary units, and can be set to be lighter or darker than the night-time brightness level.

Function: Constant lighting control

The motion detector constantly measures the amount of artificial light and daylight. If the determined switching threshold is not reached, the motion detector switches on the light when motion is detected and adjusts it so that the desired brightness value is reached.

The brightness in the room thus remains constant, regardless of the amount of daylight entering the room. It should remain the same over a monitored area (e.g. a desk) even in the case of variable ambient light (e.g. sunlight/daylight).

This leads to more convenience, constantly-adapted lighting and energy savings. Typical applications: offices, conference rooms, production areas, etc.

To use the constant lighting control function, the device must be combined with a dimming insert. The setting of the desired constant lighting control brightness value is done in the Gira Bluetooth app. Constant lighting control always switches on with the stored switch-on level (Memory value) and then adjusts to the pre-defined brightness setpoint.

Temporarily changing the brightness value: The light can be dimmed by connecting a 2-wire auxiliary insert with operating button to the auxiliary unit terminal 1 of the dimming insert. The value set in this way is the new brightness value to which the constant lighting control should be set. This is maintained until the device switches off after expiry of the delay time. The next time the device is switched on, the constant lighting control will return to its original brightness value.

Time-switch functions

The hotel function, alarm mode, presence control, night light function, etc.can be activated for a certain period of the day.

This allows you to create a schedule for the different operating modes and functions for each individual day of the week. Switching points can be set. You can activate one function per switching point, e.g.:

- Mon – Fri: 10:30 pm Night light function ON
- Sat & Sun: 12:00 am Alarm function ON
- Mon – Sun: 6:00 am Automatic

The stored programmes and settings are saved even in the event of a power failure.

Lock time

If a motion detector has switched off the lighting, the motion detection is deactivated for a short locking time in order to prevent the motion detector from recognising the lamps that are cooling down in the detection field as heat movement and switching them back on immediately. The required locking time is automatically determined by all motion detectors and is 0.3 to max. three seconds.

4.4.3 Setting up detection fields

If a motion detector is supplied with mains voltage, it starts a process of calibrating the environment for a maximum of 60 seconds. During this time no movement is detected and no switching command is accepted. During the calibration, the lighting is switched off; this is indicated by a red LED behind the detection lens.

Motion detector top unit Standard and Komfort BT

At the motion detector's nominal mounting height of 1.10 metres or 2.20 metres, the following results from the mounting position:

- A detection field with a detection angle of 180°
- A frontal surveillance range of up to 30 metres
- A side surveillance range of up to 15 metres

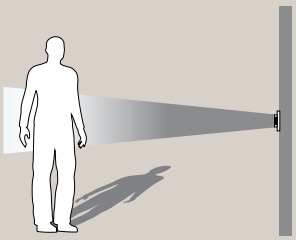
Options for restricting the detection field

If necessary, you can limit the detection field of the motion detectors. That gives you even more flexibility in your choice of the installation site.

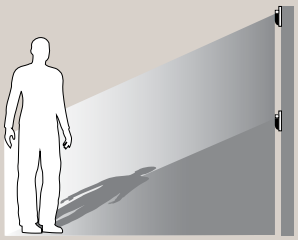
The scope of delivery of the 1.10 m motion detector top units includes a clip-on panel that limits the detection field to an angle of 90°. The clip-on panel can be mounted either on the right or on the left. With the motion detector top unit 2.20 m Komfort BT you can also activate/deactivate the individual sensors via app. This limits the detection range on the left and right by 60°. The detection field of the 1.10 m Komfort BT motion detector top unit can also be individually adjusted via the app.

Presence and motion detector 360° top unit BT

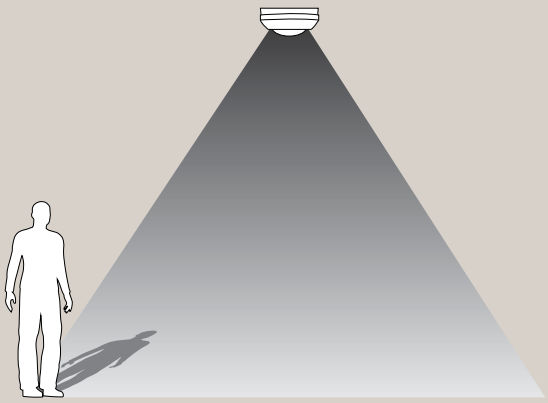
The presence and motion detector 360° top unit BT has a surveillance space of 20 metres in diameter on the ground with a mounting height of three metres. You set the detection field via the Gira Bluetooth app or with the covering panel to restrict the detection field.



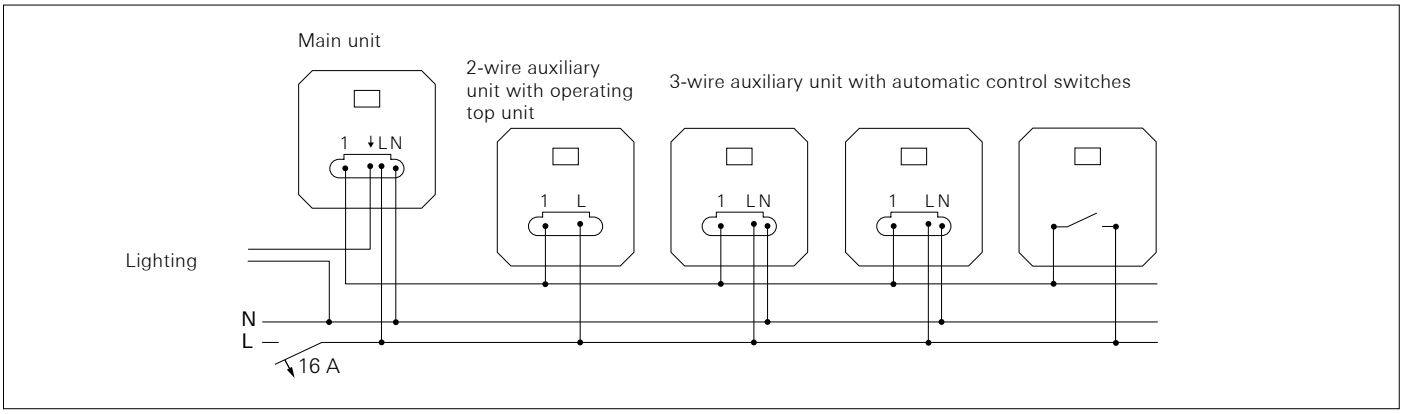
Motion detector top unit 1.10 m



Motion detector top unit 2.20 m



Presence and motion detector 360° top unit BT



The auxiliary inserts extend the detection range and trigger the lighting control via the main unit.

4.4.4 Settings

The motion detectors and presence detectors can be mounted for a wide range of applications and in different positions. To ensure that they are a perfect fit for the individual application and installation site, the adjustment parameters can be modified individually. Details can be found in the respective operating instructions.

Delay time

The delay time defines how long the lights remain on after all motion is detected.
The delay time of the motion detector top unit Standard is set to two minutes. You can set the delay time from ten seconds up to 60 minutes in the Gira Bluetooth app for the motion detector top unit Komfort.
The motion detector top unit Komfort BT also has a dynamic self-teaching delay time.
This function uses the movements detected in the past to determine an delay time within specified limits. If presence is detected for a longer period of time, the delay time is increased cyclically and cyclically reduced in the case of a longer absence. This optimises the energy efficiency and user convenience of the automatic switching.

Sensitivity

The sensitivity function allows you to set the range for the motion detectors and prevent faulty switching due to too sensitive monitoring.
With the motion detector top unit Komfort BT, the sensitivity of the individual infrared sensors can also be set individually using the Gira Bluetooth app.

Brightness threshold

By setting the brightness threshold, you can adjust the motion detectors to the switch-on brightness level required for the respective application. A lower brightness level is usually required in transit areas than in work areas (e.g. office or workshop).

Walking test

The walking test function allows you to check the detection range and the detection behaviour and, if necessary, adjust them using the corresponding settings (detection field and sensitivities).
The walking test is carried out independent of brightness. The lighting is switched on for one second for each incident of motion detected.

Save switch-on brightness (Memory value)

In conjunction with a dimming insert, you can save an individual switch-on brightness level. This lets you create your own standard. If required, you can adjust the brightness level using operating top units or conveniently via the Gira Bluetooth app on your smartphone.

Saving and retrieving user settings

The motion detector top unit Komfort BT offers the possibility of saving the current configuration on the device and in the Gira Bluetooth app.

Tip: Save the configuration after start-up.
If the end customer changes the settings later, he always has the opportunity to restore the installer's settings.

The following settings can be saved:

- Operating function
- Operating mode
- Detection field settings (PIRs)
- Sensitivity settings (PIRs)
- Switch-on brightness (Memory value)
- Brightness threshold
- Delay time
- Dynamic delay time
- Walking test
- Impulse operation
- Switch-off pre-warning
- Occupancy simulation
- Hotel/orientation light function
- Night light function
- Constant lighting control
- Function: Alarm mode

4.4.5 Connecting the motion detector top unit Komfort BT

The motion detector top unit Komfort BT can be connected with a smartphone via Bluetooth. The Gira Bluetooth app makes start-up and managing settings a breeze.

To connect the motion detector top unit Komfort Bluetooth to the smartphone, proceed as follows:	
1.	Motion detector top unit 1.10 m Komfort BT: Slide the sliding switch to the ON/AUTO position for more than four seconds. Motion detector top unit 2.20 m Komfort BT: Press the ON / AUTO button for more than four seconds. Presence and motion detector 360° top unit BT: Press the Bluetooth [Bluetooth symbol] button for more than four seconds.
2.	Search for available devices using the app and follow the instructions on the screen. Each Bluetooth device can manage up to eight smartphones.

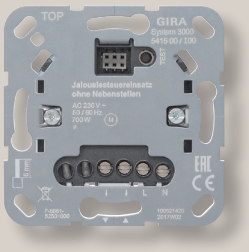
5 // System 3000 Shading

As a logical further development of the well-known blind control system, the System 3000 supplies all components for modern shading control in a modular and craftsman-friendly manner.

The two blind inserts with and without auxiliary input can each be combined with the different covers: operating top unit, operating top unit Memory, blind timer and timer Display, and blind timer and timer BT.

Available in the various Gira designs, they can be selected to match the rest of the electrical installation.

System 3000 blind controller insert without auxiliary input



Order no. 5415 00

5.1 Device overview

Top units	Order no.
System 3000 operating top unit	5360 ..
System 3000 operating top unit arrow symbols	5361 ..
System 3000 operating top unit Memory	5363 ..
System 3000 blind timer and timer Display	5366 ..
System 3000 blind timer and timer BT	5367 ..

Inserts	Order no.
System 3000 Blind control insert with auxiliary input	5414 00
System 3000 Blind control insert without auxiliary input	5415 00

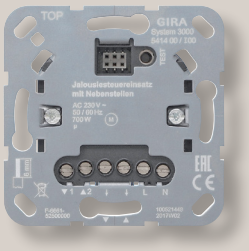
Sensor	Order no.
System 3000 brightness and temperature sensor BT	5466 02

With the blind control insert without auxiliary input, you can manually control hangings with mechanical control buttons, via Bluetooth or via a timer. With its low installation depth of only 24 millimetres, this insert offers optimum connection options. The stable mounting plate ensures fast and safe installation. The blind control insert without auxiliary input can control blinds, shutters and awnings.

The functions at a glance:

- Intelligent insert for operation with operating top unit and System 3000 blind timer and timer
- Data-based, bidirectional communication of top units and inserts
- Test operation is possible without top unit
- Reverse polarity function of the motor outputs (up/down) using the TEST button in the event of an incorrect connection This eliminates the need to rebuild the inserts
- Energy-saving power supply unit
- Motors: maximum 700 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals
- To control a hanging
- Not suited for group or central control

System 3000 blind controller insert with auxiliary input



Order no. 5414 00

With the blind control insert with auxiliary input, you can manually control hangings with mechanical control buttons, individually or centrally, via Bluetooth or via a timer.
With its low installation depth of only 24 millimetres, this insert offers optimum connection options and a stable mounting plate.

The blind control insert with auxiliary input can control blinds, shutters and awnings and can be expanded via the auxiliary input to group and central control.

The functions at a glance:

- Intelligent insert for operation with operating top unit and System 3000 blind timer and timer
- Data-based, bidirectional communication of top units and inserts
- Test operation is possible without top unit
- Reverse polarity function of the motor outputs (up/down) using the TEST button in the event of an incorrect connection. This eliminates the need to rebuild the inserts
- Energy-saving power supply unit
- The installation on different external circuits for local and central control is possible. The different fuse circuits do not need to be noted
- The installation can be carried out with different RCCBs
- Every blind control insert is unrestricted and can be used as a main or auxiliary unit
- Motors: maximum 700 W
- AC 230 V, 50/60 Hz
- VDE mark
- Screw terminals

System 3000 operating top unit, System 3000 operating top unit arrow symbols

Order no. 5360 .., 5361 ..

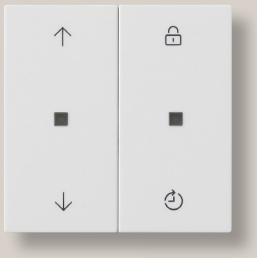
The operating top unit is a 1-channel top unit for all System 3000 applications.

It can be operated as top, bottom or multi-surface.

The functions at a glance:

- Shading control with appropriate inserts
- Lighting control with appropriate inserts
- Continuous operating concept
- Top unit for 2-wire or 3-wire auxiliary insert

System 3000 operating top unit Memory



Order no. 5363 ..

The operating top unit Memory is a 1-channel top unit for all System 3000 applications. The top unit consists of a split rocker, which looks like a 2-gang rocker. Each side of the rocker is assigned a coloured LED, which serves as a function display, status display and orientation light. The rocker can be operated as top, bottom or multi-surface.

The functions at a glance:

- Shading control with appropriate inserts
- Lighting control with appropriate inserts
- Continuous operating concept
- Top unit for 3-wire auxiliary insert
- Operation is both manual and automatic
- Night mode, i.e. the function and status LED lights do not stay on
- Locking function to deactivate all automatic, auxiliary unit and Memory functions
- Includes a Memory function with two switching times, repeated every 24 hours

System 3000 blind timer and timer Display

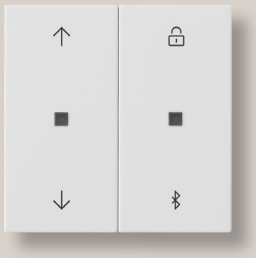
Order no. 5366 ..

The blind timer and timer Display is a 1-channel top unit for all System 3000 applications. It consists of a capacitive touch-sensitive surface in the typical Gira design with an illuminated display.

The functions at a glance:

- Shading control with appropriate inserts
- Lighting control with appropriate inserts
- Top unit for 3-wire auxiliary insert
- Menu control, dialogue-led
- Two time blocks: Mon to Fri, Sat to Sun:
  - For blind inserts, a time block consists of an up/down time combination
  - For switching and dimming operations, a time block consists of two on/off time combinations
- Astro function:
  - 18 countries can be selected
  - Setting a time difference for morning and evening
- Quick save: Saving of the current time as a switching time
- Automatic setting of summer or winter time, which can be switched off by the user
- Illuminated segment display: Allows for easy reading in dark installation locations
- Touch-sensitive surface: operation through six operating surfaces with printed symbols
- Evaluation of auxiliary units
- Display turns off after two minutes or permanent display of the time
- Locking function to deactivate all automatic, auxiliary unit and time programme functions
- Power failure: In the event of a power failure, time and date are saved for four hours. All other values are stored in power outage safe mode
- Fast switching between automatic and manual actuation
- Display of the next switching time or raising/lowering time

System 3000 blind timer and timer BT



Order no. 5367 ..

The blind timer and timer BT is a 1-channel top unit for all System 3000 applications. The top unit consists of a split rocker, which looks like a 2-gang rocker. The rocker can be operated as top, bottom or multi-surface. The right-coloured LED shows the different functions, the left-coloured LED indicates the respective status. You can set and programme this easily using your smartphone and the Gira Bluetooth app.

The functions at a glance:

- Shading control and configuration with appropriate inserts
- Lighting control and configuration with appropriate inserts
- Top unit for the 3-wire auxiliary unit
- Connected sun protection and twilight function with System 3000 brightness and temperature sensor BT
- 40 switching times, at each switching time blind and slat positions or switching and dimming values can be stored
- Night mode, i.e. the function and status LED lights do not stay on
- Locking function to deactivate all automatic, auxiliary unit and time programme functions
- Operating the System 3000 inserts via Gira Bluetooth app with status feedback in values (0 to 100 percent, On/Off)
- Switch-on brightness can be saved with dimming insert
- Copying switching times via Gira Bluetooth app to other blind timers and timers BT
- Astro function using GPS data in the Gira Bluetooth app for every switching time
- Automatic adjustment of summer or winter time and automatic time synchronisation per Gira Bluetooth app
- Random function
- Additional parameters can be set depending on the System 3000 insert

System 3000 brightness and temperature sensor BT

Order no. 5466 02

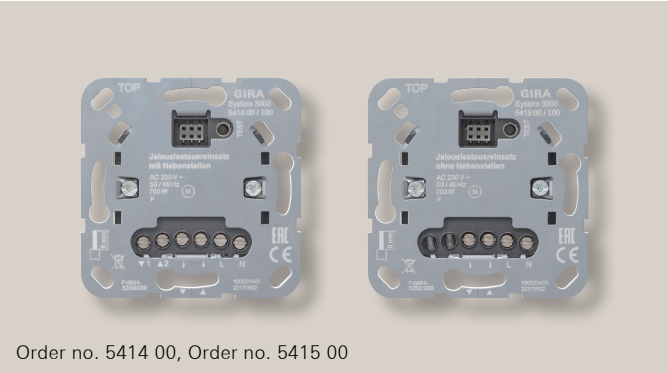
The Bluetooth brightness and temperature sensor is used to record brightness and temperature levels. It can be affixed to window panes without tools using an adhesive pad and is powered by a lithium battery. As a result, it is independent of the mains power supply and can be attached anywhere without disturbing lines.

The wireless range in a room is about ten metres.
With the Bluetooth brightness and temperature sensor, you can extend the blind timer and timer Bluetooth with different functions.

The functions at a glance:

- Measured brightness and temperature levels can be displayed on one or more blind timers and timers BT via Bluetooth. The blind timer and timer BT then triggers the sun protection or the twilight function and lets the hangings move to a fixed position or switches the lighting or dimming
- Sends the current brightness level (in the range of 5 to 80,000 lx) via Bluetooth to the blind timer and timer BT
- Sends the current temperature level (in the range of –5 °C to +55 °C) via Bluetooth to the blind timer and timer BT
- Sun protection function enables the automatic lowering of a hanging in the event of excessive sunlight:
  - The hanging moves to the sun protection position if the brightness threshold is exceeded for more than two minutes
  - Hanging is raised again when the brightness falls below the threshold for more than 15 minutes
- Brightness threshold can be linked to the temperature measurement. As a result, the shading is only triggered when the set temperature and the brightness threshold are exceeded
- Twilight function enables automatic lowering of the hanging or a switching or dimming of the lighting:
  - Hanging moves to the twilight position if the twilight threshold is not reached for longer than four minutes.
  - Hanging is raised again if the twilight threshold is exceeded for at least four minutes. Lighting switches on when the twilight threshold is exceeded for four minutes.

5.2 Electrical connection



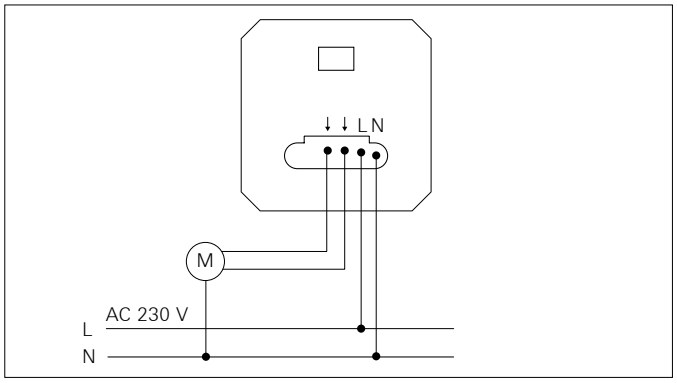
Order no. 5414 00, Order no. 5415 00

The blind control inserts have four terminals L, N, ↓ and ↓ for controlling a motor on the shading system. In addition, the blind control insert with auxiliary input provides two terminals 1 and 2 for connecting auxiliary units.

The external conductor is connected to L and the neutral conductor to N. Both terminals ↓ are available for connection of a structure motor on the shading system.

1.

5.2.1 Connect insert



1. Connect the blind control insert according to the connection diagram.

2. Mount the blind control insert in a device box. The connection terminals must be aligned downwards. Thanks to its small installation depth of only 24 mm, there is enough connection space.

3. Switch on the mains voltage.

4. You can also use the TEST button to control the connected motor without top unit, to test the wiring and to set the end position of the motor.

   - If you press TEST for less than one second, the hanging will move towards the lower end position.
   - If you press TEST for more than one second, the hanging will move towards the upper end position.
   - If the motor is moving in the wrong direction, press the TEST button for more than ten seconds. As a result, the motor outputs (up/down) are reversed and it is not necessary to remove the inserts again.

5. Depending on the type of hanging, set the upper and lower end position. Details can be found in the motor's operating instructions. You set the desired end position on the motor.

6. Finally, mount the cover frame and the top unit in a de-energised state.

Note:

When connecting a wind sensor:

As long as there is an Up command on the auxiliary input 2 because of a wind alarm, the blinds can neither be operated manually nor automatically. The locking of the manual actuation serves to protect the hangings.

5.2.2 Requirements for the shading motor

The motors used must be equipped with a limit switch (mechanical or electronic), which switches the de-energized motor into the end position. After switching on the relays, the mains voltage is available to be raised or lowered for shading.

The relays of the shading control switch motors up to 700 W. Also note this value when operating several motors.

Note the maximum power-on time (often referred to as “ED” in technical data). Frequent startup
and shutdown can cause the motors to overheat, turning them off via an integral thermal switch and limiting their function again until they have cooled down.

Depending on the design of the motor, the cooling process can take up to
30 minutes. If you want to switch motors at the same time, the motors must be suitable for this. Alternatively, use cut-off relays.

5.3 Tips for operation

In addition to the actual raising/lowering of hangings, you can also adjust slats, depending on the hanging, and temporarily deactivate automatic or programmed switching operations via the locking function. Moreover, you can set an individual ventilation position in which the hanging automatically stops.

5.3.1 Adjust hangings and slats

1. Press the upper or lower half of the button for more than one second to move the hanging up or down.
2. Press the button again to stop the hanging at a desired position. Otherwise, the hanging moves to the upper or lower end position.
3. Press the upper or lower half of the button for less than one second to adjust the slats.

If a ventilation position is already stored, the hanging stops being lowered from the upper position when the ventilation position is reached.

5.3.2 Blocking function

With the locking function, the user can set the hanging in the upper end position. All automatic functions as well as the operation via auxiliary units are deactivated until the locking function is switched off again. This will prevent the patio door shutters from being automatically lowered while residents are still in the garden, for example.

Activate and deactivate the locking function

The locking function disables auxiliary unit operation (wind alarm remains unaffected) and disables all automatic operations. Manual actuation is still possible via the buttons. If the locking function button is pressed for more than four seconds, the locking function activates. As long as the locking function is active, the LED function lights up red.

5.3.3 Ventilation position

The ventilation position is any position between the upper and lower end position where the hanging stops automatically when being lowered. This lets the room continue to be ventilated/not be completely darkened, for example. After the hanging has stopped in the ventilation position, it can also be lowered to the bottom end position through a subsequent command. In combination with the blind timer and timer BT top unit, the stored hanging positions can be controlled from any position via the Gira Bluetooth app.

Setting the ventilation position
To set the ventilation position, proceed as shown in the figure on the right.

If you save a new ventilation position, the stored value will be overwritten.

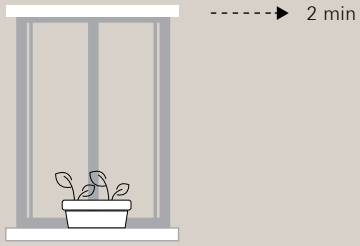
5.3.4 Reversal time

In order to prevent overloads from occurring when reversing the direction of rotation while raising/lowering, which could damage the insert and the motor, there is a reversal pause of approx. one second between switching the drive off and on again.

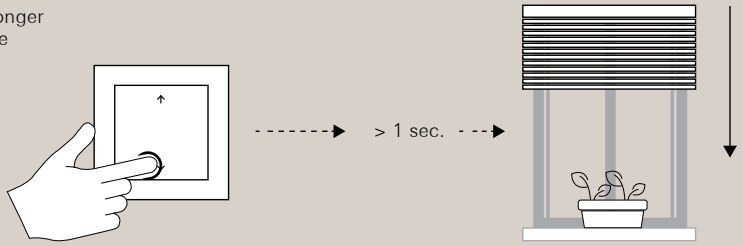
Raise the blinds

Raise the blinds

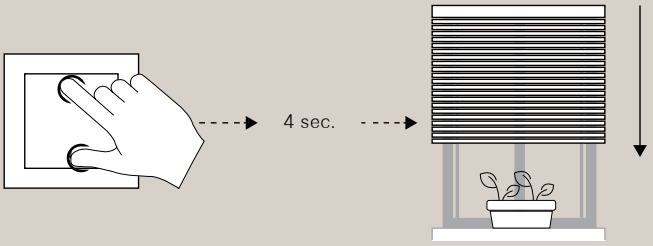
The blind control goes off automatically after about two min.



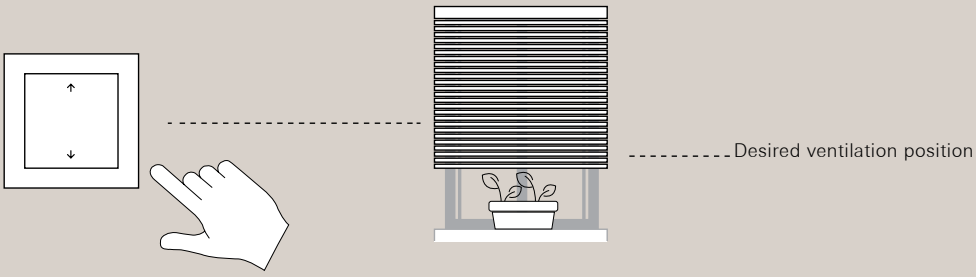
Press and hold the button (longer than one sec.). The blinds are lowered.



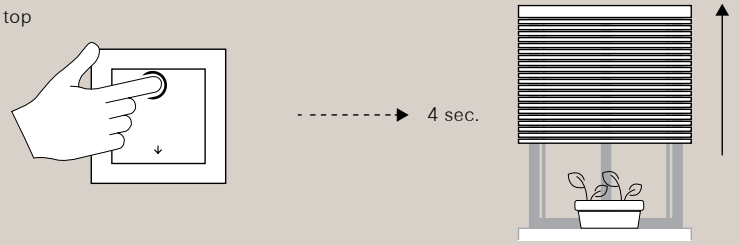
Press and hold the top and bottom buttons at the same time. The blinds stop for four sec. and then continue to be lowered.



When the desired ventilation position has been reached, release the buttons and..



... within four sec., press the top button.



The ventilation position is saved and the blinds are raised back to the upper position.

5.4 Control options

5.4.1 Individual control

The simplest variant of shading control is individual control. If only a few blinds are to be used, the individual control option offers a cost-effective variant.

The individual control option (blind control insert without auxiliary input with any top unit) switches a shading system into a self-contained system. If several motors are connected to a blind control insert, the maximum connectible power of 700 W must also be taken into account. The motors must be suitable for parallel operation. Alternatively, use cut-off relays.

By selecting the top unit, individual control can be realised as a manual, remote-controlled or sensor-controlled variant.

5.4.2 Group and central control

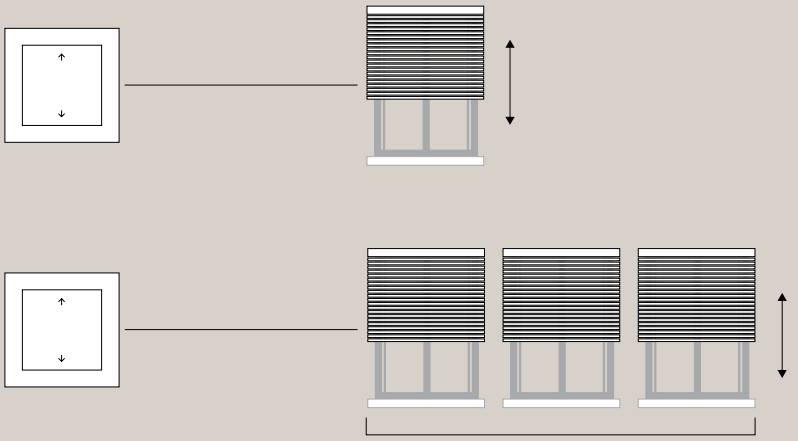
Group or central control refers to cases where individual blind control inserts are interconnected via the auxiliary inputs. Since an auxiliary input is required, group and central controls can only be implemented with the blind control insert with auxiliary input. An auxiliary unit can control multiple blind control inserts simultaneously and has the advantage that it can be cascaded in any way, so that the blinds can be flexibly controlled individually, per room, per floor or per building, even with more than three levels of hierarchy.

With group control, a blind control insert with any top unit acts as a master, which transmits the control commands to all connected blind control inserts to which the motors are connected. The blinds can be controlled individually on site via the downstream blind control inserts.

5.4.3 Central control

For very large systems, e.g. as in office buildings, all blinds can be centrally controlled. If a wind sensor is connected, the entire system can be protected from storms globally. A group control is installed on each floor and the respective masters are centrally grouped together with a higher-level master. The following control options result: centrally via the master, floor by floor via group control and individually on site.

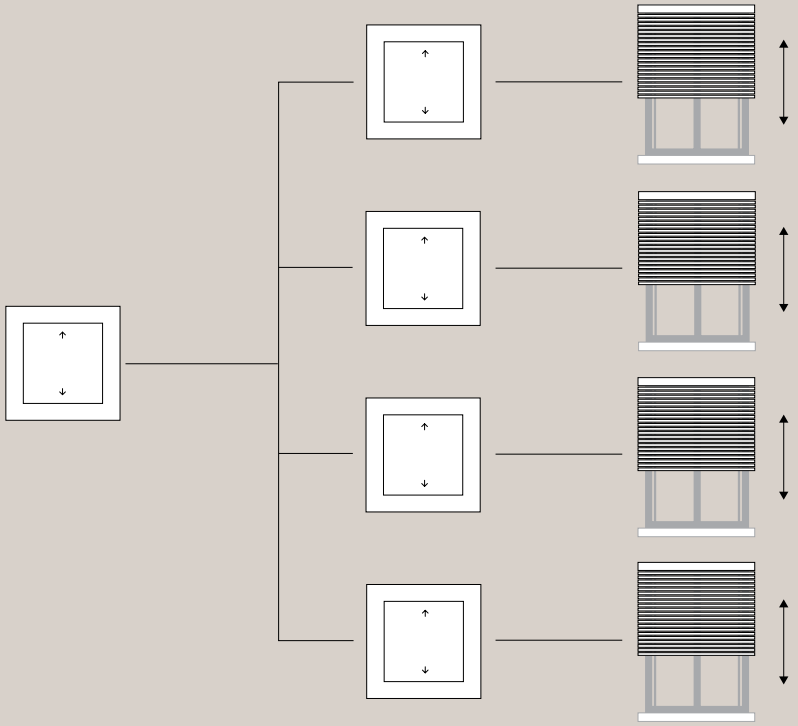
Individual control



Individual control

Max. 700 W

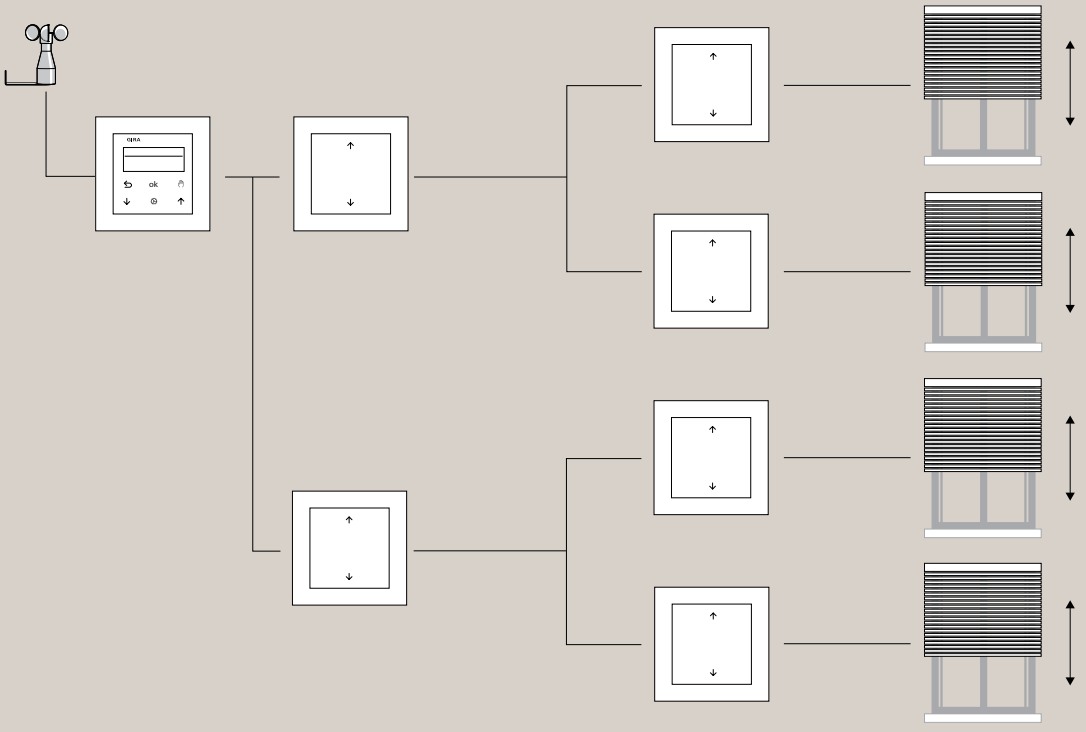
Group control



Group control

Individual control

Central control

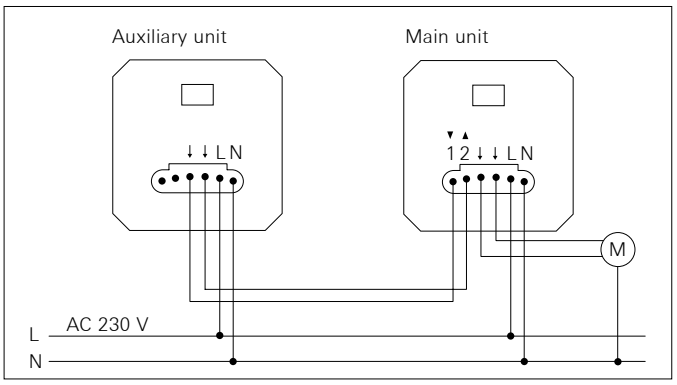


Central control

Group control

Individual control

5.4.4 Connect auxiliary units



In addition to the terminals L, N and the motor connection, the blind control insert with auxiliary input provides two terminals 1 and 2 for connecting auxiliary units. If the mains voltage 230 V is switched to one of these inputs, the corresponding direction of motor travel is triggered. This makes it possible to control the blinds with a second operating element or to raise/lower multiple blinds individually or as a group. The motor runs as long as a mains voltage is supplied to the auxiliary input. Since the auxiliary input "On" terminal 2 can also be used to connect a wind sensor, this has the highest priority, even with respect to local operating elements.

The 230 V auxiliary inputs are galvanically isolated from the electronics via optical couplers and routed by the interface to the operating top unit. This allows the use of different external conductors (e.g. Gira L1 + Gira L2).

Mechanical and electronic auxiliary units can be connected to an auxiliary input. Mechanical auxiliary units are blind buttons or switches. These are suitable for connection and provide protection against unauthorised actuation. Disadvantages of the mechanical auxiliary units are that the buttons can only be operated manually during the entire running time and switches must be reset.

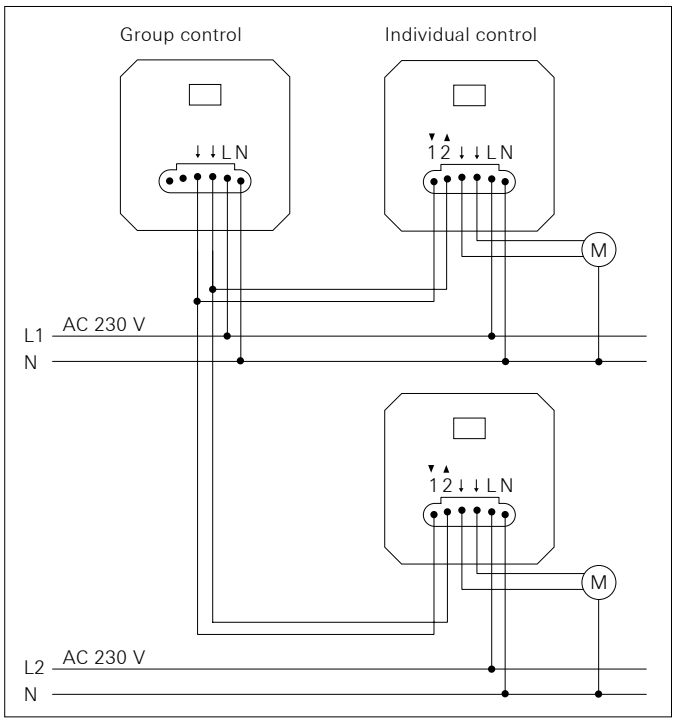
The System 3000 auxiliary unit uses the same concept at both operating points. In addition, various operating concepts can be combined with each other here, such as a blind timer and timer Display and an operating top unit Memory.

Caution!

Device damage due to improper connection!

Do not connect motors and auxiliary units at the same time, as the high AC voltages generated by the motors can damage the blind control insert.
Only connect the auxiliary units to the auxiliary inputs of the main unit. A blind control insert acts here either as a group or central control device or to control a motor.

5.4.5 Integrate device into group control

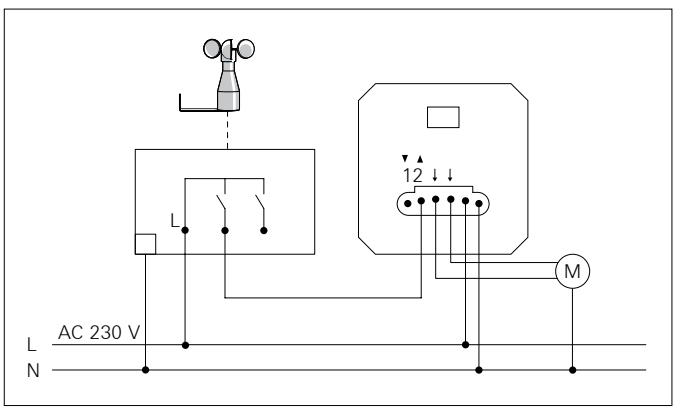


For a group control, connect the blind control inserts to each other as follows:

Note:

The blind control inserts can also rest against different external conductors.

5.4.6 Connect the wind sensor



Wind sensors protect the blinds from destruction due to excessive wind. If the wind sensor reports excessive wind, the blinds are raised to a safe upper end position and locked there until the set threshold falls again.

1. Connect the wind sensor to auxiliary input 2 according to the above wiring diagram.
2. If you want to use the wind alarm for all external blinds on a building, connect the wind sensor to auxiliary input 2 of the central control.

Note:

As long as there is an Up command on auxiliary input 2, the blinds can neither be operated manually nor automatically.

Further details can be found in section 5.7, “Wind alarm”, on page 79.

5.5 Functionality depending on the top unit

	Blind control insert with or without auxiliary input			
Function	Operating top unit	Operating top unit Memory	Blind timer and timer Display	Blind timer and timer BT
Operation: Up, Down, Stop	X	X	X	X
Ventilation position can be saved	X	X	X	X
Runtime	120 seconds	120 seconds	120 seconds	can be saved (1 to 600 seconds)
Blocking function		X	X	X
Slat adjustment time	X	X	X	can be saved (1 to 10 seconds)
Memory function		Two switching lines can be saved	Two switching lines Mon to Sun can be saved	
Timer			Two switching lines Mon – Fri and Sat – Sun can be saved	40 individual switching times can be saved *
Automatic summer/winter time change			deactivatable	
Astro function			for 18 countries	
Random function				X
Remote control				via the Gira Bluetooth app
Status/Feedback		LED	Display	LED and Gira Bluetooth app
Change to inverse operation				X
Sun protection function				with brightness and temperature sensor BT
Temperature-dependent sun protection				with brightness and temperature sensor BT
Twilight function				with brightness and temperature sensor BT
Exchange protection		X	X	X
Illuminated display			X	
Current time display			X	

*) Via the Gira Bluetooth app

5.6 Type of hanging

Blinds and shutters are summarised under the term “hangings” and are used both in the commercial and the private sector in a variety of variants.

The dangers of using blind control systems

Some applications can pose a danger to the user.
In the case of heavy rolling lattice shutters, for example, there is a risk of injury from pinching fingers or hands. These dangers must be excluded by applying additional suitable safety measures. Measures may include using light barriers or a collision protection system.

Potential applications

The various types of hangings are used as glare and sun protection in the home and office as well as in sun rooms and greenhouses:

- As shutters made of plastic, metal or wood for protecting the home interior
- As a strip curtain in the living room or in meeting rooms
- As an awning on a terrace or balcony
- As rolling lattice shutters on shop windows
- As roller shutters at the entrances of larger halls, such as storage or sales halls and garages

Shading system requirements

Shutters are usually hangings that are raised and lowered by means of a webbing or a crank drive. Alternatively, the systems are equipped with a motorised drive that raises and lowers them.

The Gira System 3000 is a modern and convenient system and meets the following requirements:

- It can be used universally for most motorised drives on the market
- The system has one or more operator or auxiliary units
- The blind control system can be extended to system controls with single, group and central control
- The system has a central wind alarm. It automatically moves to a safety position and locks
- It has an automatic sun protection and twilight function
- Operation is manual, time controlled or controlled wirelessly
- The blind control system has a well-balanced price-performance ratio
- Different insert-top unit combinations provide a variety of functionalities

5.6.1 Choice of top unit

Operating top unit	Operating top unit Memory	Blind timer and timer Display	Blind timer and timer BT
			

The selection of the top unit depends on the type of hanging and the desired range of functions. A total of four different types of top units are available.

Types of hangings with and without special requirements
There are different types of hangings with different requirements:

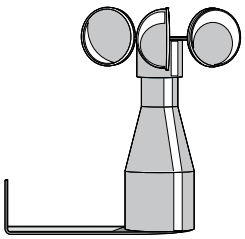
Controllable with all top units:

- Shutters and blinds that only approach the upper and lower end position and the ventilation position
- Awnings that require no fabric stretching function

Only controllable with the blind timer and timer BT:

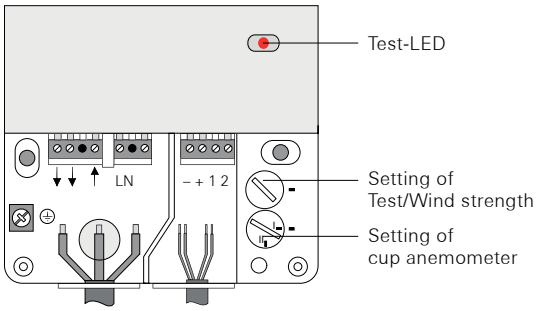
- Awnings that require no fabric stretching function
- Hangings that protect against excessive sunlight and for which a supplementary component, a brightness sensor, is absolutely mandatory
- Hangings with targeted positioning

5.7 Wind alarm



Cup anemometer

5.7.2 Wind sensor Standard



Order no. 0913 00

5.7.1 Wind sensor

The wind sensor automatically moves the hangings to a protective position if a predefined wind force threshold value is exceeded. The sensitive blind slats or awnings are thus protected from possible destruction by strong winds or storms.

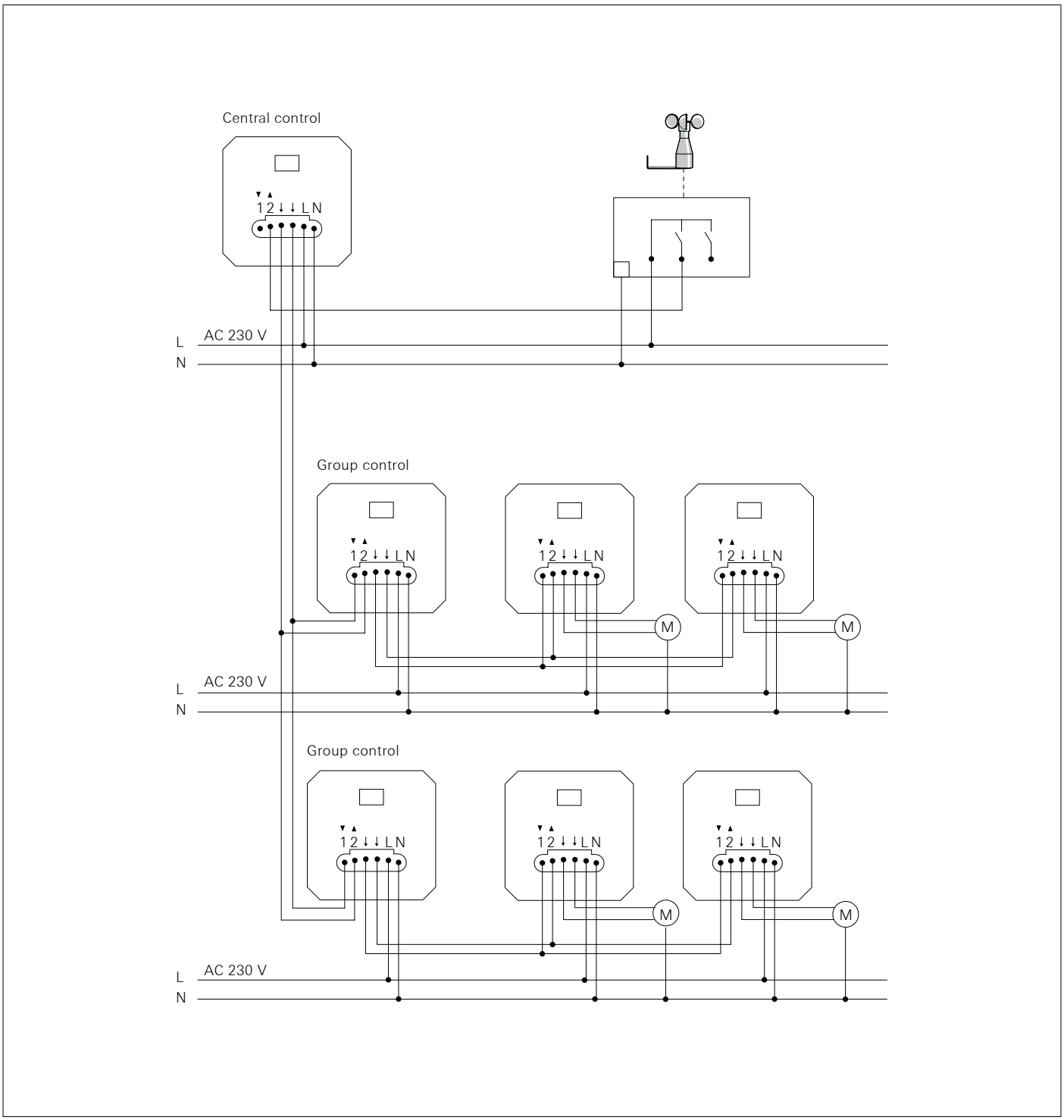
Cup anemometer

Generally, the cup anemometer consists of three to four arms on a joint axis with hemispherical cups at each end. The wind sensor for the blind control system consists of two components, the cup anemometer and the evaluation unit. The anemometer is mounted to the roof or the side of the building. Note that the anemometer is mounted in a position favourable for measuring the wind force and not in one that is sheltered from the wind.

The wind sensor is the operating device of the cup anemometer. Depending on the pre-selected wind speed level, a zero-voltage relay closes in the evaluation unit. A mains voltage of 230 V is connected to auxiliary input 2 of the blind control insert via this relay. If the wind sensor detects an excessively-high wind speed, the hangings are automatically raised.

With group or central control, all blinds whose auxiliary input has been connected to the evaluation unit are firmly locked in the upper end position and can not be operated, neither automatically nor manually. Only when the wind speed measured by the wind sensor has fallen below the preset threshold again is the wind alarm deactivated and the blinds can be operated again.

5.7.3 Central wind alarm



Thanks to the auxiliary unit principle of the System 3000, the anemometer can be used throughout different phases as a central wind alarm for all blinds in an installation.

5.8 Sun protection function

5.8.1 Blind timer and timer BT

You can individually extend your blind timer and timer BT using sensors. This turns your blind control insert into a complex, yet easy-to-use control centre for the building's shading system.

General details

You can extend your blind timer and timer BT using the brightness and temperature sensor BT. The sensor is assigned to the blind timer and timer BT via the Gira Bluetooth app and can be deactivated at any time.
You can assign a brightness and temperature sensor BT to the blind timer and timer BT.
After assigning this, you pull up the current temperature and brightness values with your Gira Bluetooth app. The brightness sensor transmits brightness values in the range of 5 to 80,000 lx, while the temperature sensor transmits temperatures in the range of - 5 °C to + 55 °C to the blind timer and timer BT.
If there are changes in brightness of more than 10 % from the current level, these changes are transmitted by the sensor to the blind timer and timer BT so that it triggers the shading or twilight function.

Sun protection

The blind timer and timer BT has a sun protection function, which you can activate or deactivate as needed. The sun protection function is deactivated by default.
Use the Gira Bluetooth app to set a sun brightness threshold. The adjustment range of the threshold value is 4,000 to 80,000 lx. If the specified threshold is exceeded, the blinds will be automatically lowered. However, this only happens after a time delay of two minutes to ensure that the level has not only been exceeded because of a temporary light disturbance. Similarly, the hangings are automatically raised if the threshold is not reached. In this case, the time delay is 15 minutes to ensure that the threshold is not affected by temporary cloud fields, for example, causing the hangings to be wrongly raised again.

Twilight

In addition to the sun protection function, the blind timer and timer BT also has a twilight function. This can be turned on or off at dawn and dusk as needed. The twilight function is deactivated for dawn and dusk by default.
Use the Gira Bluetooth app to set a twilight threshold. The adjustment range of the threshold value is 5 to 4,000 lx. If this level is not reached, the blind timer and timer BT switches off the twilight function with a time delay of four minutes.

When using the twilight function, keep in mind that the sun sensor can not detect when dawn occurs if the blinds are completely lowered.

Temperature

The evaluation of temperature and brightness values does not take place in the brightness and temperature sensor BT, but in the devices assigned via Bluetooth.

Use the Gira Bluetooth app to set a temperature threshold. The adjustment range of the threshold value is 5 to 50 °C and also has an Off position. If the brightness threshold and the adjustable temperature threshold defined in the sun protection function have now been exceeded, the brightness function will be activated. However, if only the brightness threshold is exceeded and the temperature threshold is still within the specified range, the function will not be activated. In this case, the temperature will now be carefully monitored so that the brightness function can be executed immediately as soon as the temperature is exceeded.

Note that the temperature measured on a window pane may differ from the actual room temperature.

5.8.2 Brightness and temperature sensor BT

The brightness and temperature sensor BT is a battery-powered device and is therefore free from annoying. lines. Using an adhesive pad, you can attach it easily without the use of tools to the inside of a window pane. Brightness and temperature sensor BT in closed
rooms has reached a wireless range of up to ten metres.
The sensor records the brightness and temperature levels and sends the currently-measured levels to the blind timer and timer BT. Depending on the actual recorded values and the set values, the blind timer and timer Bluetooth switches off the sun protection or twilight function in order to move the hangings to a fixed position or to switch on the lighting.

Temperature-dependent shading is activated by the blind timer and timer BT if the set brightness and temperature values are exceeded. For example, a sun room can be shaded automatically as soon as a pre-defined temperature is exceeded in order to prevent it from overheating.
In the Gira BT app, you can manage all of the settings for the blind timer and timer Bluetooth. In addition, you can read all current temperature and brightness values in the app, giving you an overview at any time about whether the levels are within the defined limits or whether a threshold level is about to be exceeded or not reached.

5.8.3 Connect sensors with blind timer and timer BT

Please note that the brightness and temperature sensor BT does not take over evaluation of the recorded values.
This is still done in the Bluetooth-assigned devices. The brightness and temperature sensor BT has a MAC address. The blind timer and timer BT and the brightness and temperature sensor BT are connected to each other via the Gira Bluetooth app by entering the MAC address. Each blind and blind timer BT can only work with one sensor. However, one sensor can supply several blind timer and timer BTs with sensor data.

6 // Gira Bluetooth app

With the Gira Bluetooth app, you can conveniently control the System 3000 Bluetooth devices with your mobile end device, such as a smartphone. The Bluetooth connection is established over a range of up to ten metres between the smartphone and the selected System 3000 device. The app allows for convenient

- operation of device functions;
- displaying of levels and states;
- creation of time controls and
- configuration of the device.

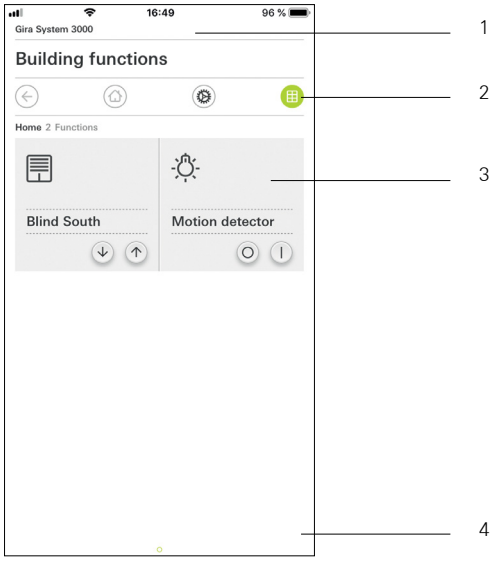
The app also makes start-up of the device much easier, as device configurations can be easily set, transferred from device to device, and imported from other installations.

If updates are available for the app, they are automatically offered for download from the iTunes App Store (iOS) or the Google Play Store (Android). The software of the Bluetooth devices (firmware) can also be updated through the app. So app and device remain up to date at all times.

6.1 Structure of the user interface

Different views

The figures in the tile or detailed views may differ from the views in your project. Different operating and control options are available according to the combination of insert and top unit. Accordingly, this document only refers to the basic functions.



The user interface is divided into four areas:

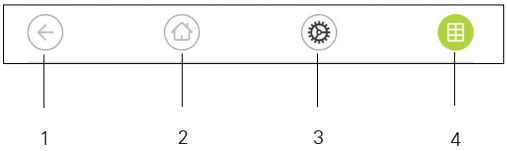
1 The status bar
2 The navigation bar
3 The action area
4 The orientation guide

At the lower edge of the screen you will see a circle for every available function or page. The circle marked shows the current position. By swiping horizontally, you can change the function or page. This also causes the marked circle to shift.

Google Play

Laden im App Store

6.2 Navigation bar



The buttons in the navigation bar have the following functions:

1	Back	Opens the previously-opened page
2	Home	opens the home page of the action area
3	System	opens the [Settings] view
4	Change view	switches between tile and detailed view

6.3 Action area

The action area is the central workspace through which you can operate and adjust the settings of the System 3000 Bluetooth devices. You can operate all devices here.

The action area has two view options:

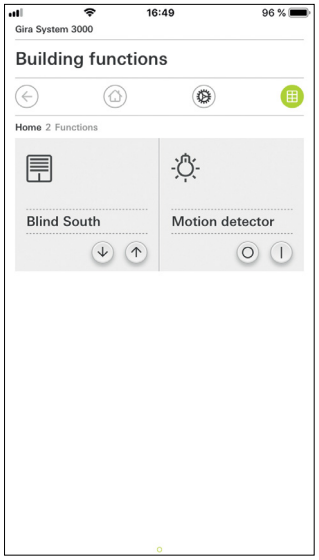
- Tile view
- Detailed view

The first page of the action area is the Home page.

6.3.1 Tile view

Tile view is one of the two view options of the action area, along with detailed view.

In tile view you can display up to six small tiles per page.



Operation in tile view

Central functions such as switching on and off, raising or lowering the blinds or dimming in fixed steps can be operated directly in tile view. To do so, tap the plus/minus or arrow buttons to dim the light or move the blinds/shutters.

When you tap a tile, the detailed view of the function opens. There (depending on the configuration) you can carry out additional operations in the function.

Note:

Bluetooth connection in tile view

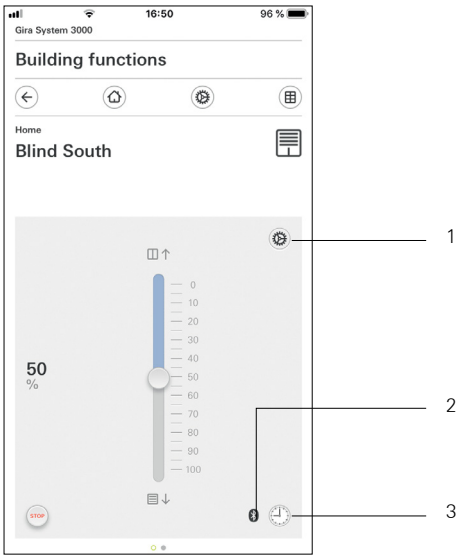
During operation in tile view, a Bluetooth connection must first be established to the device before an action is executed. You will recognise this by a delayed response to your operation.

6.3.2 Detailed view

Detailed view is one of the two view options of the action area, along with tile view. Detailed view is opened by tapping a tile in tile view.
All operating elements of the relevant function are then available on the entire display.

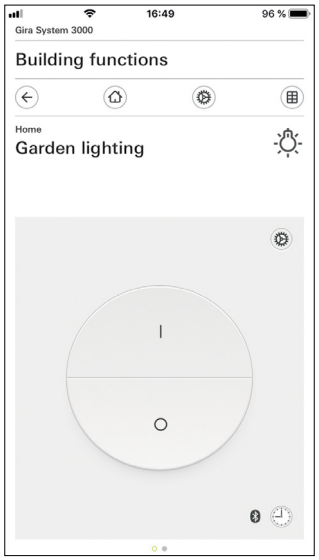
Operation for most functions is by tapping, with some functions, such as the blind control, distinguishing between a short and long press of the button. The following sections deal with some special features of operation.

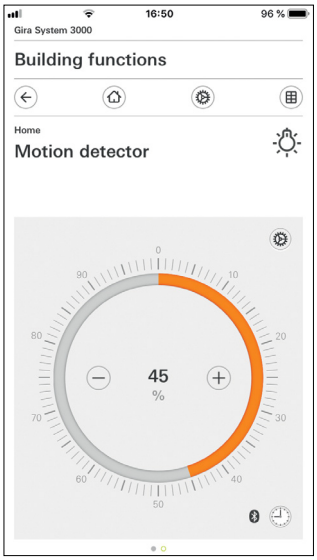
You can switch from one function to the next with a horizontal swiping movement of the finger.



Adjustable scale

The adjustable scale can be used in the Dimmer function. To adjust the brightness, tap directly on the desired value in the scale or move the adjustable scale to the desired position.





The symbols in the detailed view have the following meanings:

1 Set device parameters
2 Bluetooth connection active
3 Timer (System 3000 blind timer and timer BT)

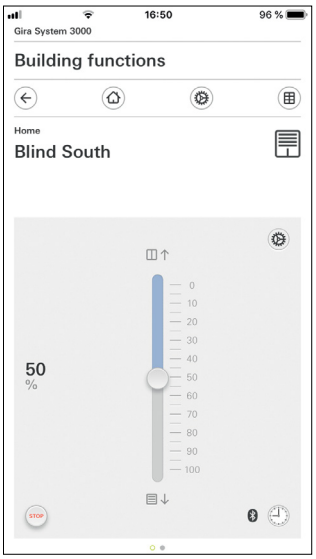
Note:

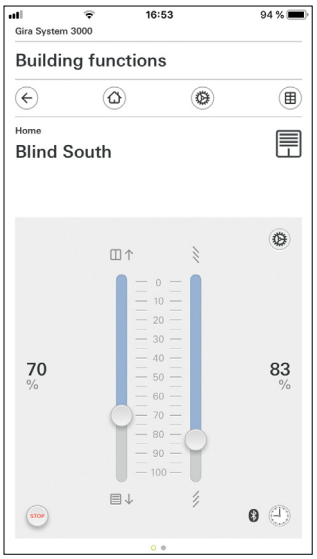
Bluetooth connection in detail view

If you switch to detailed view, a Bluetooth connection to the device is already established in the background.
This is indicated by the illuminated blue LED. The functions therefore run without any noticeable delay.

Blind/shutters
Operation using slide control

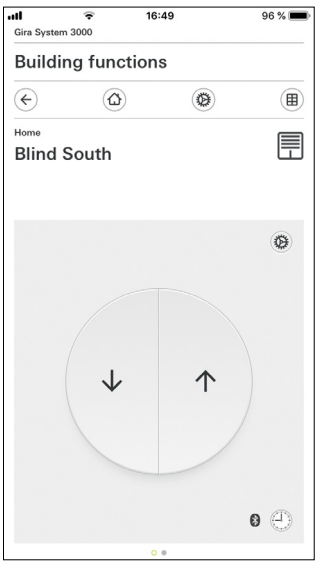
You can control blinds or shutters in the detailed view using the slider or rocker. To move blinds or
shutters up or down or to adjust the slats, slide the controller to the desired position.





Stop button

When you tap the STOP button, you can directly stop active movement of the hanging or a slat adjustment. The hanging then stops immediately at its current position.

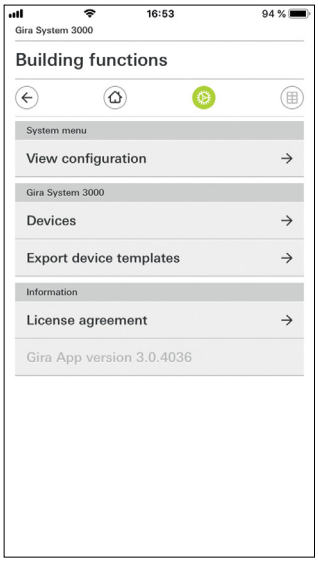


6.4 Settings in the system menu

Basic settings can be accessed in the system menu.
Open the system menu by tapping the gear symbol in the navigation bar.

The following functions are available in the system menu:

- View configuration (see Section 6.4.1)
- Devices (see Section 6.5)
- Licence agreement

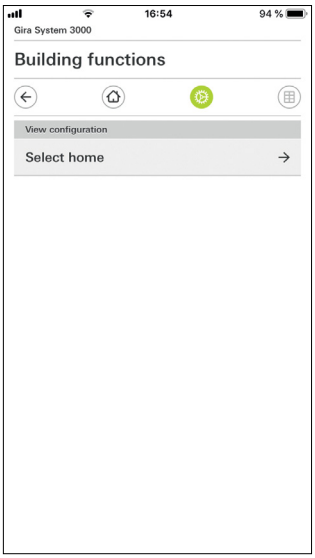


6.4.1 View configuration

In the view configuration, you define the functions displayed and the order of the functions for the action area.

Tap the View Configuration button.
The View Configuration page opens.

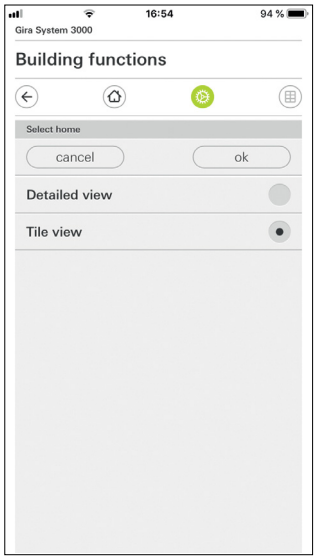
The following menu item is available:
Select Home (see Section 6.4.2)



6.4.2 Select Home

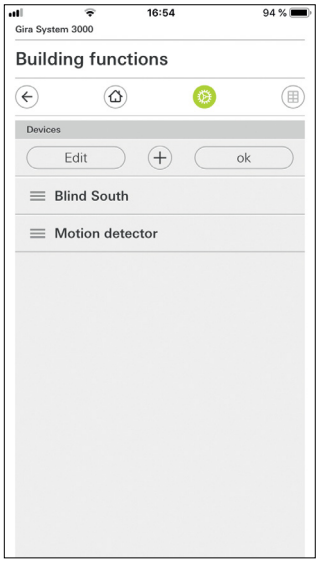
Here you can define whether the Home view is displayed in tile or detailed view when the Home button is tapped.

1. Select the desired view for the Home view.
2. Tap the OK button.



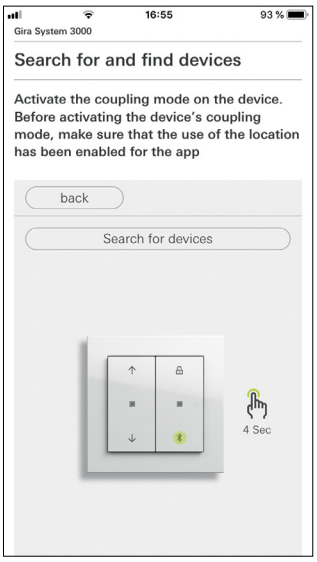
6.5 Devices

Pair new devices with your Gira Bluetooth app.
The following options are available:
- Pair devices (see 6.5.1)
- Pair devices (see 6.5.2)
- Change the device sequence



6.5.1 Pairing devices

You can pair new devices with your Gira Bluetooth app here.



1. Tap +.
2. Activate pairing mode on the device.
   The blue LED on the device flashes slowly. Pairing mode is active for one minute.
3. In the app, tap on Search for Devices.
   Pairing mode is exited automatically once pairing is successful.
4. The blue LED lights up to confirm that the connection is active.
5. Set the corresponding device parameters.

Note:

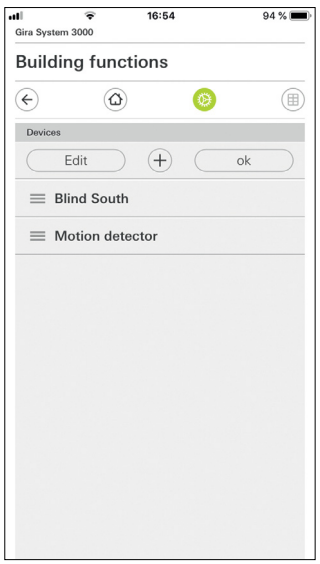
Pair mobile end device via Bluetooth

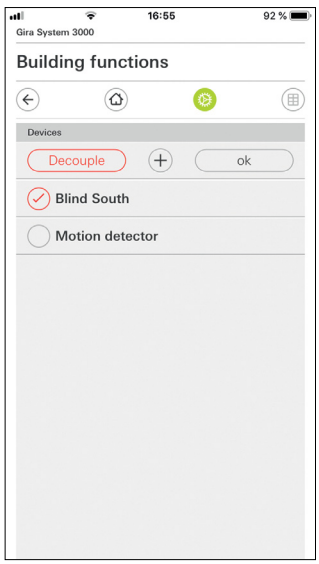
You can pair up to eight mobile end devices with a top unit. When pairing the ninth device, the device that has been inactive the longest is deleted.
In the case of blinds, shutters or awnings, a reference movement is carried out into the upper end position after programming. You should not stop this reference movement.

6.5.2 Unpairing devices

You can unpair devices from your Gira Bluetooth app here.

1. Tap the Edit button.
   A selection point appears in front of the devices.
2. Select the device you want to unpair.
   A red tick mark confirms your selection.
3. Tap Unpair.
   The device is now removed from the list.
4. You should also remove the device from the Bluetooth system menu on your smartphone or tablet.





7 // Operation

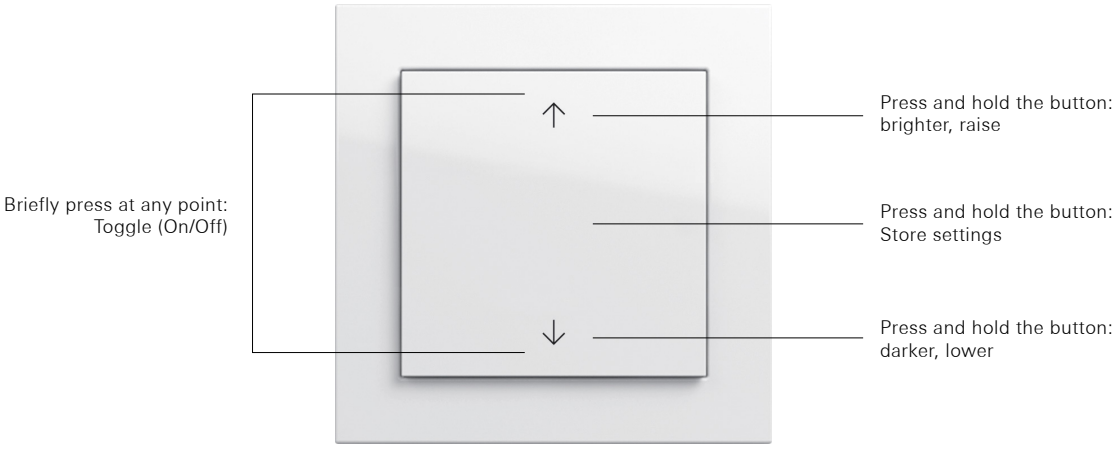
7.1 Manual control

Light and shading can be controlled simply and intuitively at the push of a button with the operating top unit and the operating top unit Memory. For programmed control, the blind timer and timer Display and the blind timer and timer Bluetooth are available.

7.1.1 Operating top unit

With the operating top unit, you can control light and shading manually at the push of a button. The button reacts over the entire surface and makes switching lights via toggle function particularly easy: the light is switched on at any point by pressing a button and then off again when the button is pressed again.

Thus, the operating top unit can also be operated with the elbow if you don't have your hands free. In combination with a dimming insert, the lighting can also be dimmed. Pressing and holding the upper half of the button makes the lighting brighter, and pressing and holding the lower half makes it darker. The shading is also controlled by pressing and holding the button: pressing and holding the upper half causes the blind to be raised, while pressing and holding the lower half lowers it again. Once you have defined a ventilation position, the hanging first stops at this position and then after pressing and holding the button, it lowers to the set lower end position.



Gira Operating top unit with arrow symbols

The operating top unit is also available without arrow symbols.

You would like to ...	Realisation	Further information
... switch on the light.	Press the control button briefly.	If the dimming insert is used, the light is set to the stored switch-on brightness when switching on.
... switch on the light with minimum brightness.	Press and hold the bottom control button.	
... make the light brighter.	Press and hold the top control button.	The light can be dimmed to maximum brightness.
... make the light darker.	Press and hold the bottom control button.	The light can be dimmed to the minimum brightness.
... adjust the brightness/raising or lowering position.	Press and hold the middle control button.	
... save the current brightness level as the switch-on brightness.	1. Adjust the light to the desired brightness. 2. Simultaneously press the top and bottom control buttons for more than four seconds.	The light switches off briefly and immediately back on again. The switch-on brightness is saved. If a stored brightness level is saved again, the dimmer turns on after each switch on with the level that it had before switching off.
... store a ventilation position from the upper end position.	1. Press and hold the bottom control button. 2. Simultaneously press the top and bottom control buttons for more than four seconds. 3. Release the buttons when the desired position is reached and briefly press the button again within four seconds.	Saving a new position overwrites the previous one (see page 73).
... set the colour temperature for DALI control devices.	Briefly press the top and bottom control buttons simultaneously, and twice.	After the level has been set, it is stored permanently.

7.1.2 Operating top unit Memory

The operating top unit Memory has the same functions as the operating top unit, but it can be extended with additional functions. Both the operating top unit and the operating top unit Memory offer the following functions:

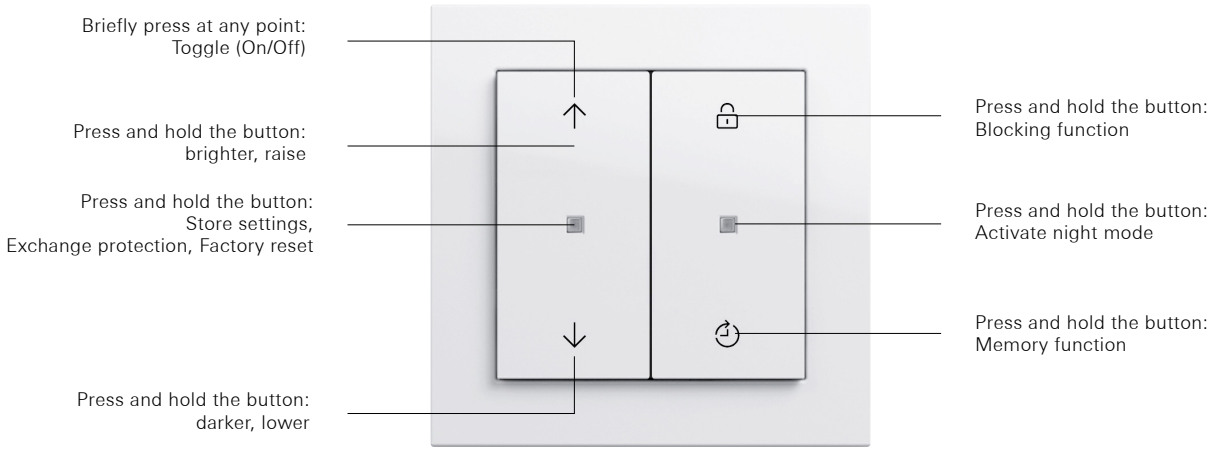
1. Toggle function (On/Off) by briefly pressing on any point
2. Making brighter/raising by pressing and holding the left upper half of the button
3. Making darker/lowering by pressing and holding the left lower half of the button
4. Save settings by pressing and holding the centre of the left button

The right-hand button of the operating top unit Memory expands the operating top unit by the disabling function (above) and the Memory function (below). By pressing and holding the blocking function for a long time you deactivate all automatic functions and Memory operation and block operation of the auxiliary unit. If the blocking function is activated, however, you can still manually press the left half of the button.

Press and hold down the Memory function to activate it. In the Memory function, previously-stored switching operations are repeated every 24 hours.

Press the upper right and lower buttons simultaneously, and activate the night mode, in which both LEDs do not light up permanently, but only for five seconds.

To save the Memory function, simultaneously press the Memory button and the desired function button (On / Off, Lighter / Darker, Up / Down). Successful storage is signalled by the LED.



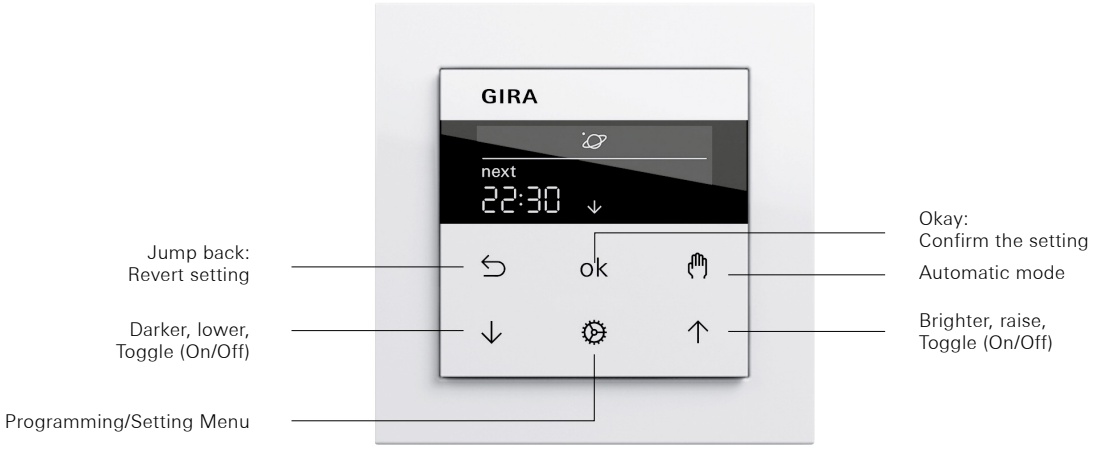
Gira operating top unit Memory

You would like to ...	Realisation	Further information
... switch on the light.	Press the control button briefly.	If the dimming insert is used, the light is set to the stored switch-on brightness when switching on.
... switch on the light with minimum brightness.	Press and hold the bottom left control button.	
... make the light brighter.	Press and hold the top left control button.	The light can be dimmed to maximum brightness.
... make the light darker.	Press and hold the bottom left control button.	The light can be dimmed to the minimum brightness.
... adjust the brightness/raising or lowering position.	Press and hold the middle left control button.	
... save the current brightness level as the switch-on brightness.	1. Adjust the light to the desired brightness. 2. Simultaneously press the top and bottom left control buttons for more than four seconds.	The light switches off briefly and immediately back on again. The switch-on brightness is saved. If a stored brightness level is saved again, the dimmer turns on after each switch on with the level that it had before switching off.
... store a ventilation position from the upper end position.	1. Press and hold the bottom control button. 2. Simultaneously press the top and bottom control buttons for more than four seconds. 3. Release the buttons when the desired position is reached and briefly press the button again within four seconds.	Saving a new position overwrites the previous one (see page 73).
... save the current switching time for the Memory mode.	Simultaneously press and hold down the Memory button and the desired function button (On / Off, Lighter / Darker, Up / Down).	When the LED lights up green, the current switching time is stored. Saving again overwrites the old switching time.
...delete the stored switching times.	Press the bottom right button for more than 20 seconds until the LED lights up green a second time.	
... activate/deactivate Memory mode.	Press the right bottom button for more than four seconds.	
... activate/deactivate the blocking function.	Press the right button for more than four seconds to activate.	Manual actuation via the left top and bottom buttons is still possible.
... activate/deactivate night mode.	Press the right top and bottom buttons for more than four seconds to activate.	In night mode, the status and function LEDs are not permanently lit, only for five seconds after the buttons are pressed.
... set the colour temperature for DALI control devices.	Briefly press the top and bottom control buttons simultaneously, and twice.	After the level has been set, it is permanently stored.
... operate the control button on another insert with the same function.	Put the control button on another insert.	Saved settings and switching times are retained.
... operate the control button on another insert with a different function.	Press the left and right arrow button for more than four seconds.	The top unit can be operated on another insert with a different function.

7.2 Automatic control

7.2.1 Blind timer and timer Display

The blind timer and timer Display is a System 3000 top unit with six operating surfaces. Use the arrow buttons to manage control the System 3000 functions depending on the insert.
Use the middle lower operating surface Menu Programming/Settings to access the menu where you can select and program various functions, such as the astro function or the blocking function. Use the OK operating surface to confirm the settings. Use the Return operating surface to undo settings and reset the changed functions to factory settings.
You can switch to the Automatic operating surface in Automatic mode. In Automatic mode, the load is automatically switched according to the stored switching times.



Gira blind timer and timer Display

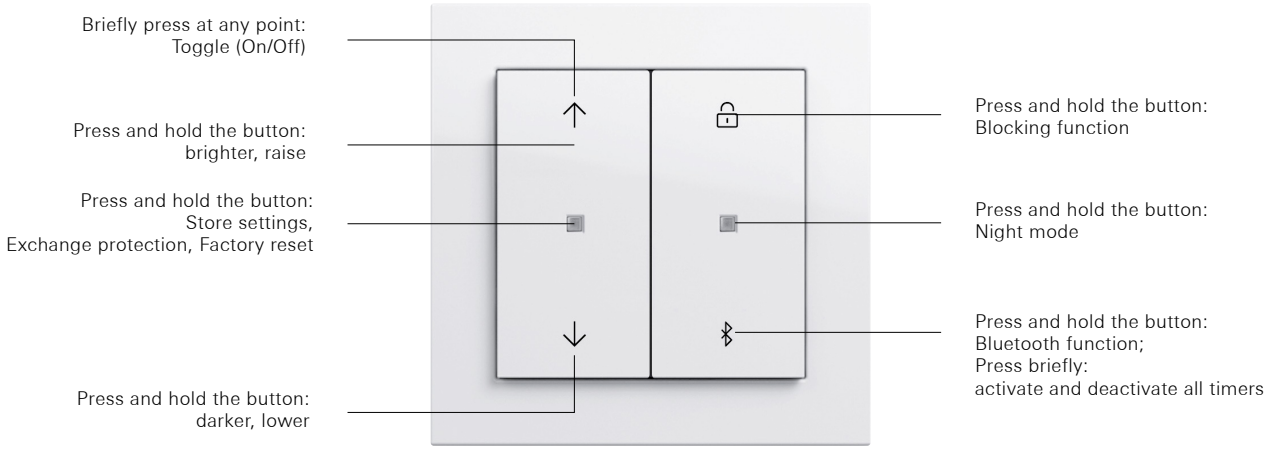
You would like to ...	Realisation	Further information
... switch on the lights/raise the blinds.	Press the right arrow button.	If the dimming insert is used, the light is set to the stored switch-on brightness when switching on.
... switch off the lights/lower the blinds.	Press the left arrow button.	
... activate/deactivate Automatic mode.	Press the Automatic button.	If no times are stored, the automatic mode can not be activated.
... reset device to factory settings.	Press the Jump Back button and the Automatic button simultaneously for more than ten seconds.	The display starts a countdown.
... permanently display the time.	Press OK and Jump Back simultaneously for ten seconds.	Press again to turn off the display two minutes after the operation.
... save the current time as raising/lowering time.	Press the desired arrow button and OK for more than a second.	The time is stored for Mon – Sun and the display shows SAVE.
... activate the blocking function.	Press the right arrow button for more than four seconds.	The display shows 🔒. Alternatively, activate the blocking function in the menu with the selection 🔒.
...deactivate the blocking function.	Press the right arrow button briefly.	
...change the programming.	1. Press the Programming/Setting Menu button. 2. Confirm the programming by pressing the OK button.	With blind inserts, two raising/lowering times can be programmed for each weekly block (Mon – Fri, Sat – Sun). With switching and dimming inserts, four switching times can be programmed for each weekly block (Mon – Fri; Sat – Sun).
...change the time.	1. Press the Programming button and then one of the arrow buttons until the display shows 📅 🕒. 2. Confirm by pressing the OK button and then define the settings. 3. Confirm the new time by pressing the OK button.	In the event of a power failure, the time is retained for at least four hours.
... operate the control button on another insert with the same function.	Put the control button on another insert.	Saved settings and switching times are retained.
... operate the control button on another insert with a different function.	Press the left and right arrow button for more than four seconds.	The top unit can be operated on another insert with a different function.

7.2.2 Blind timer and timer BT

The blind timer and timer BT has four buttons (On / Off / Blocking function / Bluetooth) that control a local operation. With the left rocker half, the System 3000 inserts are directly controlled. As with the operating top unit Memory, the toggle function (On / Off), is executed by briefly pressing the left button up or down.
Pressing and holding the padlock icon activates the blocking function. The blocking function overrides all automatic and time programs as well as operation via any connected auxiliary units.

Press and hold the lower right button to switch the Bluetooth function on or off. Using the Bluetooth connection, you can pair your smartphone or tablet with the blind timer and timer BT. The Gira Bluetooth app makes comprehensive operation possible. You can easily access the time programs and the configuration of the blind timer and timer BT. Both can be password protected. The values set on the device are automatically read via Bluetooth function as soon as a connection exists and are transferred to the Gira Bluetooth app.

By briefly pressing the lower right button, you can deactivate the Automatic mode without having to hold a smartphone in your hand. This is indicated by an orange LED on the right rocker side. Another press of the button activates the Automatic mode again.



Gira blind timer and timer BT

You would like to ...	Realisation	Further information
... switch on the light.	Press the control button briefly.	If the dimming insert is used, the light is set to the stored switch-on brightness when switching on.
... switch on the light with minimum brightness.	Press and hold the bottom left control button.	
... make the light brighter.	Press and hold the top left control button.	The light can be dimmed to maximum brightness.
... make the light darker.	Press and hold the bottom left control button.	The light can be dimmed to the minimum brightness.
... adjust the brightness / raising or lowering position.	Press and hold the middle left control button.	
... save the current brightness level as the switch-on brightness.	Adjust the light to the desired brightness. Simultaneously press the top and bottom left control buttons for more than four seconds.	The light switches off briefly and immediately back on again. The switch-on brightness is saved. If a stored brightness level is saved again, the dimmer turns on after each switch on with the level that it had before switching off.
... pair the smartphone with the top unit/Bluetooth function.	Press the right bottom button for more than four seconds.	If you have paired your smartphone with the blind timer and timer BT, you can use the Gira Bluetooth app to programme the settings for light brightness or the position of the blinds.
... activate/deactivate the blocking function.	Press the right top button for more than four seconds.	The blocking function blocks operation of the auxiliary unit and deactivates the Bluetooth function. Manual actuation via the left top and bottom buttons is still possible. When the blocking function is active, the LED lights up red.
... activate/deactivate night mode.	Simultaneously press the top and bottom right control buttons for more than four seconds.	In night mode, the LED lights up for a maximum of three seconds after one operation.
... operate the top unit on another insert with the same function.	Simultaneously press the top and bottom left control buttons for more than four seconds to release the top unit.	The top unit is locked and the left LED flashes red. It is released by pressing the buttons. The saved settings are retained.
... operate the top unit on another insert with a different function.	Simultaneously press the top and bottom left control buttons for more than four seconds to release the top unit.	The top unit is locked and the left LED flashes red. It is released by pressing the buttons. The saved settings are discarded.

7.2.3 Pair blind timer and timer BT with mobile end device

To connect the blind timer and timer BT to a mobile end device, proceed as follows:

1. Download the Gira Bluetooth app to the mobile end device and open the app.
2. Press the Bluetooth button on the blind timer and timer BT for more than four seconds. The pairing mode is activated.
3. Follow the instructions in the app.
4. You can set a password if you wish. You will always be prompted to enter it when you carry out further pairings. Overall, it is possible to pair eight Bluetooth devices with the app.

You can manually end the pairing mode by pressing the Bluetooth button for more than four seconds. Alternatively, the pairing mode will automatically end when a pairing has been successfully completed or no pairing takes place for more than one minute.

7.2.4 Reset device to factory settings

1. Press the left button up and down during the first two minutes after switching on the mains voltage, for more than 20 seconds, until the red status LED flashes rapidly.
2. Release both buttons and briefly press again within ten seconds. The red status LED will flash slowly for approx.five seconds.

The device has been reset to factory settings. The blue function LED indicates that the time is not set by flashing three times. On a blind insert, a reference movement into the upper end position takes place.

Note:

After resetting to factory settings, the device must be removed from the app. For iOS end devices, the device must also be removed from the list of paired Bluetooth devices (Settings/ Bluetooth). Otherwise, a new pairing is not possible.

7.3 Operation via auxiliary units

If you operate the lighting via auxiliary units, the following rules apply:

7.3.1 Rock button as auxiliary unit

The main unit is switched on by briefly pressing the button that acts as an auxiliary unit. This happens in toggle mode. If the main unit was switched off, it is switched on again by pressing the button and vice versa. If you press the button longer, the lighting is alternately made brighter and darker. If the minimum or maximum brightness level is reached, the dimmer stops. After each operation, the dimming direction is also changed.

7.3.2 Auxiliary unit with operating top unit

Auxiliary insert, 2-wire

Toggle the main unit by briefly pressing the operating top unit up, down or over the entire surface. This happens in toggle mode. If the main unit was switched off, it is switched on again by pressing the operating top unit again and vice versa.
If you press and hold the operating top unit, depending on where you press the it, you can make the lighting brighter or darker and save the setting.
If you press and hold the operating top unit, a dimming insert is switched on to the minimum brightness. If the main unit is already switched on, when the operating top unit is pressed down, the lighting is dimmed continuously to the minimum brightness. When you release the operating top unit, the achieved brightness value is retained.
Press the operating top unit over the entire surface while the load is switched on to save the current brightness value as the new switch-on brightness in the main unit.

Auxiliary insert, 3-wire

Toggle the main unit by pressing the operating top unit up. You can also make the light brighter by pressing the operating top unit up and darker by pressing it down.
Moreover, you can selectively turn off the main unit if you press the operating top unit down. The 3-wire auxiliary unit with operating top unit does not have the Toggle function.
By means of a selective switching (Up – Down; Down – Down), you can use the 3-wire auxiliary unit to selectively control several main units at the same time.

7.4 Time-switch function

With the time-switch function, light and shading can be controlled automatically according to a set schedule. Lighting can then be switched on or off at pre-set times or dimmed to a desired brightness level. Blinds are raised or lowered at certain times or into a set position. The time-switch function can be used with the blind timer and timer Display or the blind timer and timer BT.

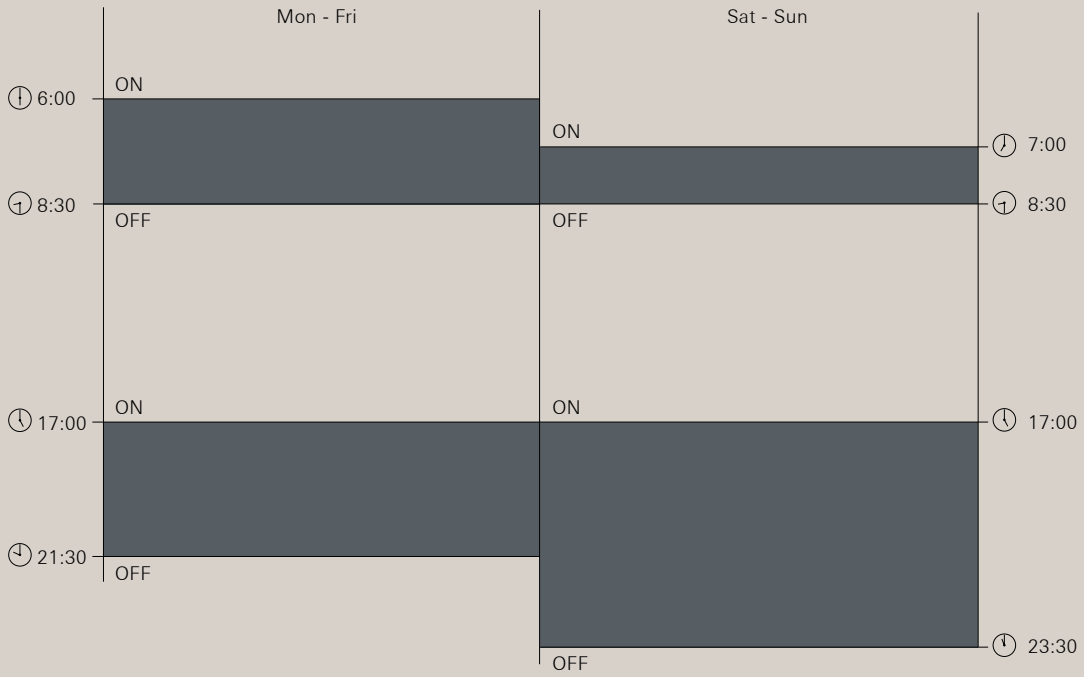
Both top units recognise immediately whether they are on a light or blind control insert and in turn, adjust to the respective timer or blind timer operation. This happens completely automatically. The changeover between summer and winter time is also automatic.

You can also set and save the switch-on brightness level of dimmers using the blind timer and timer. If you set certain time switching points, the dimmer switches on at the set time switching points with the desired switch-on brightness.
The settings of the blind timer and timer are are saved even in the event of a power failure so that none of the settings are lost.

7.4.1 Switching times

The blind timer and timer Display has two blocks of weeks.
The first block is Mon – Fri and the second is Sat – Sun
For both weekly blocks, you can program the switching point pairs On/Off for blind inserts and the switching point pairs On / Off for switching and dimming inserts.

With the blind timer and timer BT, you can set and manage up to 40 switching times via the Gira Bluetooth app. The switching times do not have to be set chronologically but can be arranged in any order. Depending on the day of the week, you can programme different times as you wish.



7.5 Astro function

Use the astro function to set lighting and shading in accordance with sunrise and sunset. During the year, you can adjust the times for raising or lowering the blinds or for switching the light on and off according to the changing sunrise and sunset times.

Note:

To ensure that the blind timer and timer Display can calculate the astro times, you must specify the current time, date and coordinates for which the times are to be calculated.
The blind timer and timer Bluetooth copies the geodata and times from your smartphone automatically.

7.5.1 Combination of astro function and time-switch function

The combination of astro time and a fixed blind movement time ensures that the blinds are raised in the morning at sunrise, but not before a pre-defined time. In the evening, the blinds are lowered at sunset, but not later than at a pre-set time.
Similarly, the combination of the astro time point and a fixed light switching time ensures that the lighting is switched off in the morning at sunrise, but at the latest at the switch-off time set in the time program. In the evening, the load is switched on at sunset, but at the earliest at the switch-on time point set in the time program.

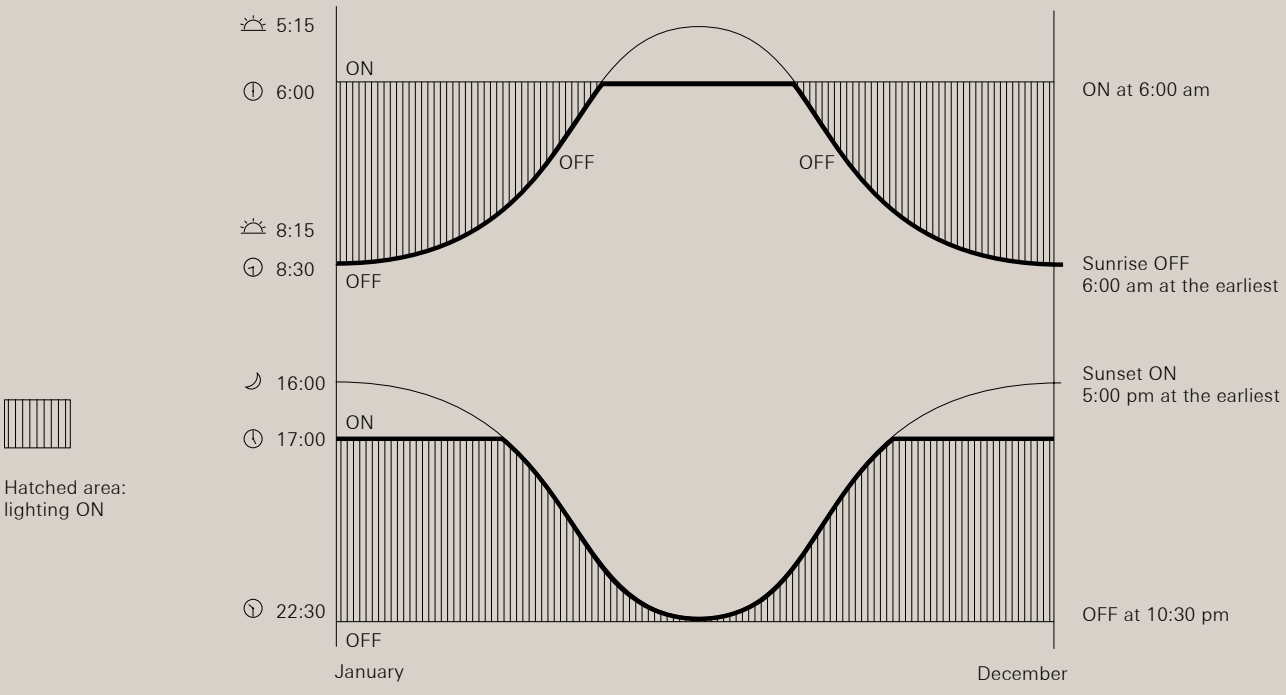
Example of time program and astro function for outdoor lighting

You want the outdoor lighting to come on in the mornings and evenings when the residents leave the house or return home.

The outdoor lighting is switched on Monday to Friday from 6:00 am to 8:30 am in the morning and from 5:00 pm to 11:30 pm in the evening via a time-switch function. The astro function ensures that the switching times are adapted according to sunrise and sunset.

In winter, the time program switches the lighting on at 06:00 in the morning and the astro function switches it off after sunrise (e.g.at 08:30). In winter, the sun sets before the switching time of 5:00 pm set in the time program, which means that the sunset is not weighted here and the lighting is not switched on until 5:00 pm.
The lighting is switched off at 10:30 pm. During the course of the year, sunrise and sunset times change, therefore the switching times also change:
In March, the sun still rises after the set switching time. The lighting is switched on at 6:00 am in the mornings. In the evenings, the sun does not set until after the switching point of the time program. The lighting therefore remains off and is only switched on around 7:00 pm in the evening.

In mid-summer, the sun rises before the programmed switching point. At 5:30 am, it is already sufficiently light for the outdoor lighting not to be switched on. The outdoor lighting therefore also remains switched off in the evenings.



7.6 Occupancy simulation

If you are away for an extended period of time (for example, on holidays), occupancy simulation give the impression that people are in the building and deter potential intruders. The occupancy simulation function records switching operations and automatically plays them when necessary. This way, the lighting is automatically switched on even during a long absence.

First, the switching operations are recorded in the recording mode for a specified period of time. In the playback mode of the occupancy simulation function, the recorded switching operations are reproduced. In the event that not enough switching operations have been stored during the recordings, random shifts will be performed.
If movement is detected in playback mode,
it is also evaluated and the lighting adjusted accordingly. In presence simulation, the alarm function can also be activated.

Note:

This function can only be activated after over
24 hours of activity were saved. In automatic mode, times during which the lighting was switched on are stored continuously. Over a period of 24 hours, a maximum of 60 switching operations are stored. If more than 60 operations occur, the oldest ones are overwritten. If the occupancy simulation has been activated, the lighting will be switched on depending on the brightness of the previous day. Switching off is after expiry of the delay time.

7.7 Alarm function

When the alarm mode is activated, the motion detector switches the load into flashing mode (approx. one second on, one second off). In addition, the LED status (red LED) signals the triggering of the alarm by flashing quickly (about 0.5 seconds on, 0.5 seconds off) until the alarm function is deactivated. In alarm mode, the motion evaluation is always independent of brightness.

The alarm function is activated when leaving the house or apartment. If an intruder tries to gain access during this time, he is unsettled and scared away by the sudden activation of the load. The neighbours might also be alerted through activation of the load that someone is in the house or apartment, and can call for help.

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