

GIRA



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1 Introduction

1.1 System description

Gira One is a powerful Smart Home system that features device communication on the basis of encrypted bus communication. The two wires of a shielded, twisted pair are used for communication. The new, free of charge Gira Project Assistant (GPA) is used for device start-up. GPA ensures that start-up is straightforward and time saving. Since Gira One is based on the globally proven Smart Home standard KNX Secure, it is future-proof.



Highlights, facts and benefits

Time-saving, straightforward start-up that can be prepared at a desk.

Intuitive operation of functions used to control the lighting, as well as shading and heating, in the Smart Home.

Straightforward operation using buttons and the Gira Smart Home App, which offers wide-ranging customisation options for customers.

Secure and free of charge remote access for you and your customers using the Gira One Server.

One button per room not only controls the lighting and shading, but also measures the temperature for climate control.

Based on the globally established Smart Home standard KNX Secure and secure from manipulation by third parties.

1.2 System principle

The Gira One system can be used with a maximum of 200 devices and 250 electrical loads, such as lights, the heating or blinds.

You will require the Gira One server, a power supply, actuators, sensors and operating devices to set up a system.

The system can be operated using buttons integrated into the wall, the Gira Smart Home App, or Gira G1. Gira G1 is a room operating device that allows multiple functions to be controlled from one device.

Actuators are used to implement the switching commands. Switching or dimming actuators are required for switching and dimming the lights.

You'll need blind actuators to operate shutters, blinds, awnings or skylights, while the heating is activated using heating actuators.

The Gira One System draws its power from the power supply. The power supply must be dimensioned for the number of devices integrated.

1.3 System limitations

The Gira One system can be used with a maximum of 200 devices and 250 electrical loads. The following limitations apply within these specifications:

- Max. 1 Gira One server
- Max. 2 power supplies
- Max. 50 Gira G1
- Max. 50 scenes
- Max. 8 Sonos rooms
- Max. 30 Philips Hue devices
or max. 5 Hue bridges respectively
- Max. 20 IP cameras
- Max. 100 eNet users

1.4 Project planning

A complete Gira One project is planned in the free of charge Gira Project Assistant (GPA), with no other start-up software required. The required functions and devices are dragged into the building structure created in GPA. The choices are yours to make, and you create the building, storeys and rooms to suit your needs. The advantage is that a visualisation is created for the Gira Smart Home App at the same time, without any additional work. Detailed information about project planning and start-up using GPA can be found from page 58 on.

1.5 Lines used

A twisted and shielded twisted pair is required as the bus line for Gira One.

All bus nodes are connected to each other by the bus line. The bus line is a cost-efficient solution, and installation is easy to carry out.

The bus line supplies the bus nodes with the voltage they need, and allow information to be exchanged and therefore telegrams to be sent between the bus nodes.

+ **Note**

Power lines may not be used as bus lines, as there is a risk of mixing them up and failing to comply with the communication requirements specified.

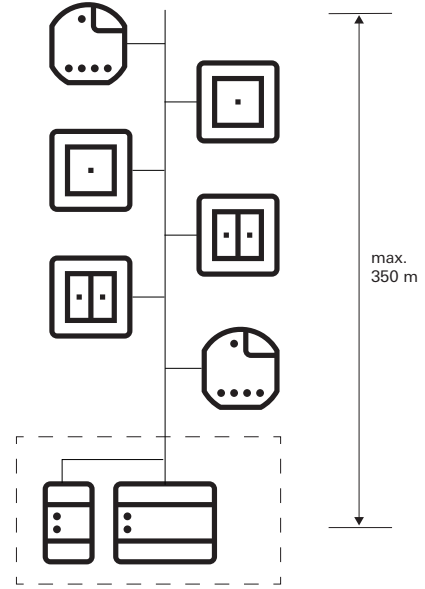
1.5.1 Recommended bus lines

Lines standard in Germany	Condition of installation
YCYM 2 × 2 × 0.8 Test voltage: 4 kV	Installation in the building
J-Y(St)Y 2 × 2 × 0.8 Test voltage: 2.5 kV	Installation the same as YCYM When adjacent to the 230 V mains observe lower test voltage
JH (St)H 2 × 2 × 0.8	Halogen-free line Install leaving a distance to the 230 V installation
A-2Y (L)2Y or A-2YF (L)2Y	For installation outdoors (Connection between buildings)

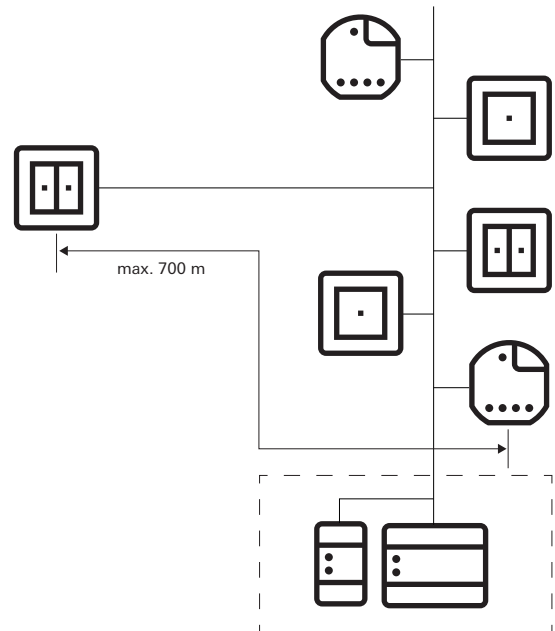
1.5.2 Cable lengths

The cables are limited to the following lengths for reasons of signal formation and the maximum propagation delays permitted:

- Distance power supply – node: max. 350 m
- Distance between any two nodes: max. 700 m
- Maximum overall cable length: max. 1000 m

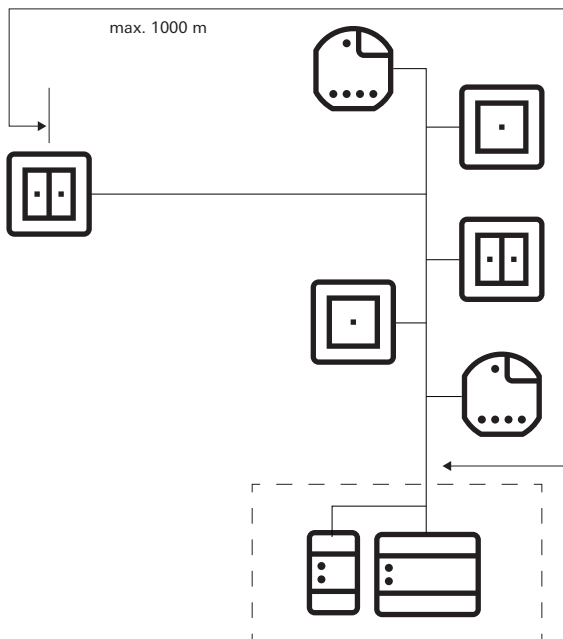


Distance power supply – node: max. 350 m



Distance between any two nodes: max. 700 m

1.5.3 Cable routing



Maximum overall cable length: max. 1000 m

When possible, the bus line should be routed together with the power lines, and therefore be installed within the usual installation zones. There are several ways to install bus lines. They can be installed in a star configuration from a central distributor, or as a ring configuration (open ring) leading through all rooms. Both types of installation can be combined.

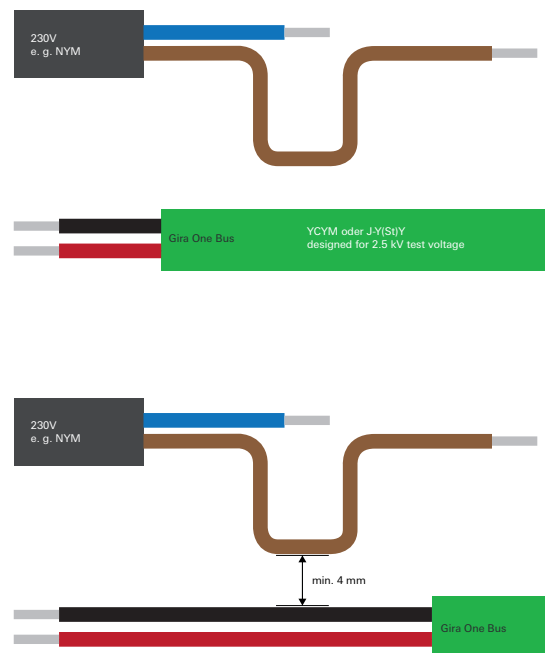
Because the bus voltage of Gira One is a safety extra-low voltage (SELV), no particular precautions need to be taken when it comes to contact safety when installing the bus lines.

The shielding on the twisted and shielded two-wire line may not be connected or earthed on any side. It acts a metal cage only.

The installation will require more careful consideration wherever bus lines are in contact with power lines, such as

- in control cabinets and distribution boards
- in junction boxes
- in switch boxes.

In general, there must be double insulation with a test voltage of 4 kV between the bus voltage and the 230 V mains. Observe minimum distances in accordance with the type of installation.



Distance between bus line and mains line

If control cabinets are used in which the power system is completely isolated from the installation bus (meaning no 230 V actuators, for example, may be installed), then no special regulations apply.

If distribution boxes from which the bus line and the 230 V line are stripped are used, then boxes with partitioning must be used which feature two separate chambers. Alternatively, separate boxes can be used for branching.

Special regulations apply to what are referred to as combinations, these being when one bus component and one power component share a cover. This is the case for a flush-mounted actuator, for example, in combination with a socket outlet (a socket outlet connected by the bus). When the shared cover is removed, the power side must remain covered. This is the case in socket outlets protected from direct contact.

Use of the second pair of wires

Most bus lines in use feature a second, free pair of wires. The following guidelines apply for use of these free wires:

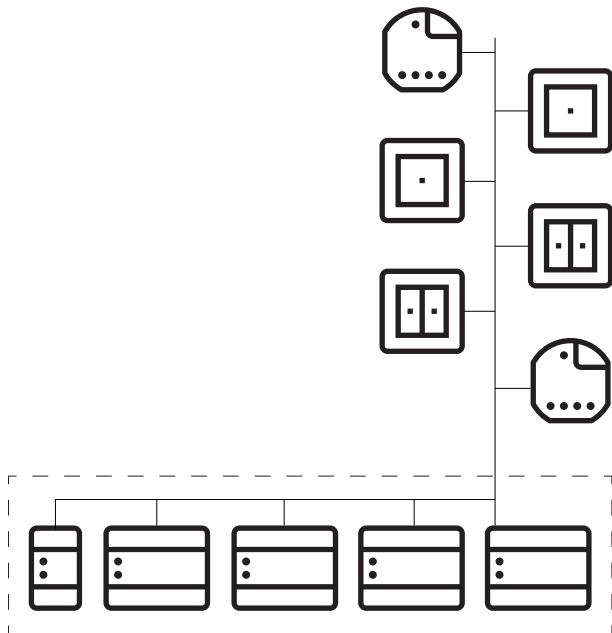
- Only low voltages are allowed (SELV/PELV).
- Max. 2.5 A continuous current, and an overcurrent protection function must be installed.
- Use as a telecommunication line for the public telecommunication network is not permitted.
- The second pair of wires can be used for the power supply for the Gira One server.

1.6 Topologies

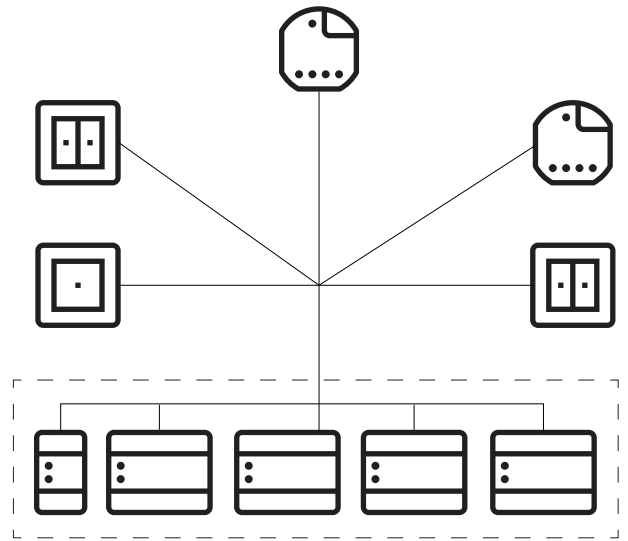
The bus line for Gira One can be installed to suit requirements and a branch can be made at any point. This results in a bus structure that is a free tree structure and makes configuration highly flexible. The following wiring topologies are supported, whereby combined forms are also possible.

The following wiring topologies are supported:

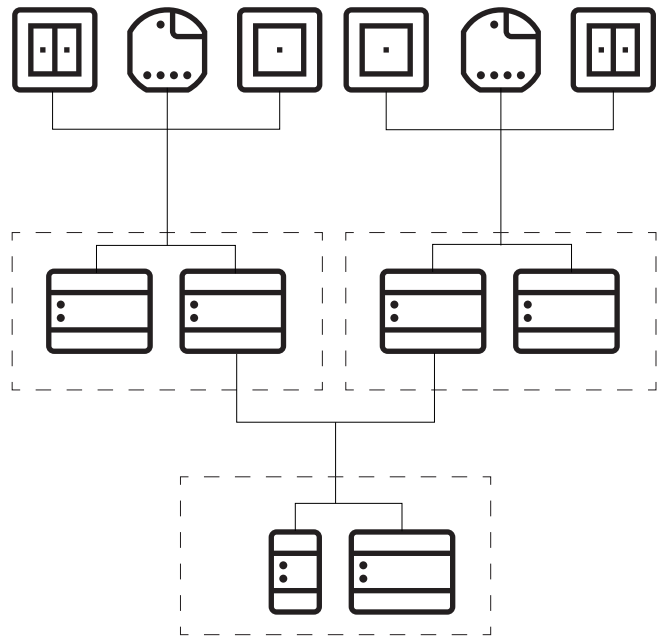
- Linear wiring
- Star wiring
- Tree wiring



Linear wiring



Star wiring



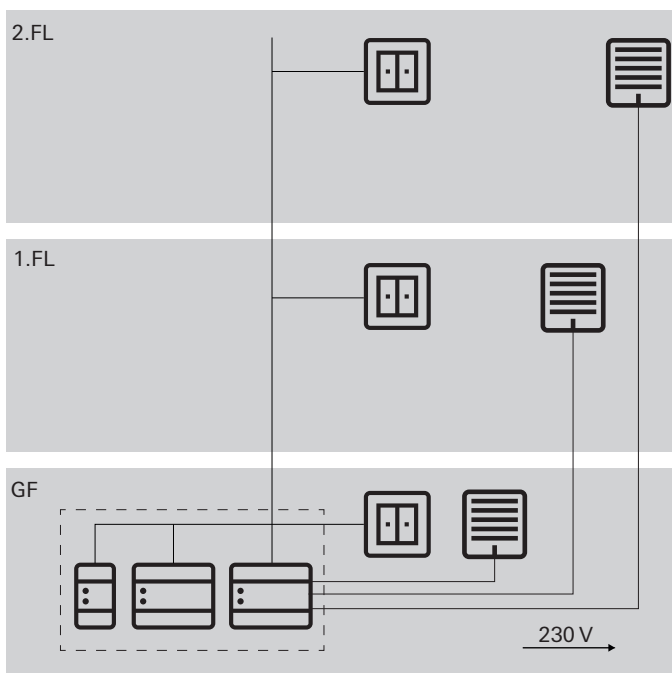
Tree wiring

1.7 Centralised or decentralised actuator installation

Actuators for series installation (DRA) for central installation in a control cabinet and actuators for decentralised flush-mounted installation can be used in the Gira One system. Of course, you can also combine both types of installation within one system.

Advantages of central installation (in a control cabinet):

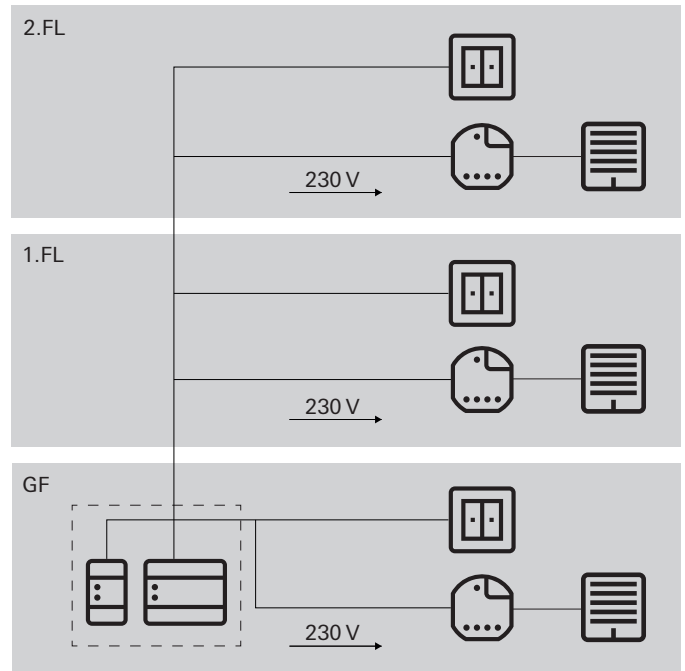
- Clearly organised configuration of all actuators in the control cabinet
- Channel buffer due to multi-actuators in the event of subsequent changes to requirements during project implementation
- Installation, maintenance and troubleshooting in one place
- Lower channel costs due to multi-actuators



Central actuator installation

Advantages of decentralised installation:

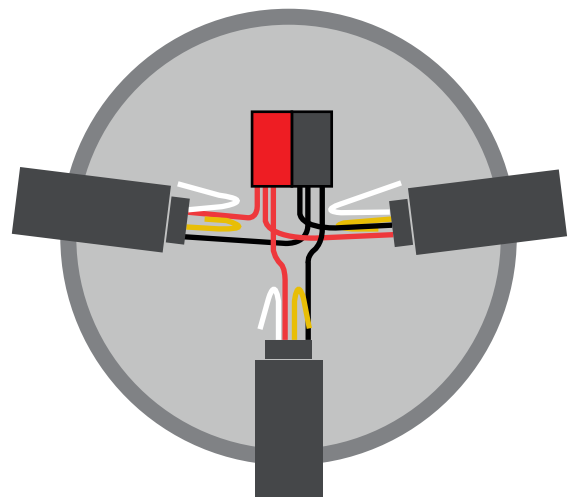
- Less space required in the distributor
- Usual wiring of the 230 V installation
- Easier retrofitting or upgrading of existing installations during renovations



Centralised actuator installation

1.8 Bus node connection

All bus nodes are connected to the data line by bus terminals. Bus terminals are plug terminals which can connect up to four bus lines. The use of bus terminals allows individual nodes to be disconnected from the bus without disconnecting the bus line itself. This is a key advantage: The removal of a bus node does not result in disruptions to communication by the remaining nodes.



Bus node connection

2 — Device overview

2.1 System devices

2.1.1 Gira One server



Order No. 2039 00

Features

- Start-up server for up to 200 Gira One devices.
 - Visualisation server for mobile end devices (iOS and Android).
 - Gira Smart Home App available for PC (Windows).
 - Functions and devices that can be visualised in the Gira Smart Home App:
 - Switching, dimming, garage door, door openers, blinds, awning, skylights, roof domes (with and without positioning), floor heating (electric), floor heating (hydronic), radiators (electric), radiators (hydronic), floor heating/cooling (hydronic), heating/cooling requirement notifications, status indicator for a binary state (on, off), status indicator for decimal states (actual temperature)
 - Group control (switching, dimming, blinds, shutters, awning, skylight, roof dome), scenes, IP camera, Sonos audio control, Philips Hue, eNet SMART HOME.
 - Automatic project documentation.
 - Automatic end customer documentation.
 - Integrated diagnostic function:
 - bus monitor to control devices and electrical loads.
 - Telegram monitor with ring memory for storing up to 500,000 telegrams.
 - Up to 250 devices can be controlled per project using the Gira Smart Home App.
 - Up to 250 timers, each with 10 switching times, can be set by the user in the app.
 - Up to 62 users can be created in user management.
 - Presence simulation with the simulation starting according to the day.
 - Connection to Sonos with a maximum of 8 Sonos rooms incl. assignment and selection of favourites.
 - Connection to Philips Hue with a maximum of 30 Hue devices or a maximum of 5 Hue bridges.
 - Connection of up to 20 IP cameras.
 - Connection of an eNet SMART HOME server with a maximum of 100 eNet switching, dimming and shading devices.
 - Simultaneous access to the Gira One server from 100 mobile end devices.
- Intuitive app user interface that can be adapted by the user:
 - Individual favourites area.
 - Easy configuration of timers and scenes.
 - Easy adaptation of functions and rooms (sorting, inscriptions, symbols, parameters, room and trade assignment).
 - More than 400 symbols for customisation of the visualisation.
 - Indoor and outdoor temperature display in the header.
 - Automatic location assignment by GPS for Astro function.
 - Activate and enable remote access for other users.
 - Enable remote maintenance for electricians.
 - User administration incl. administration of access rights for individual users.
 - The device password for the Gira One server can be changed via the Gira Smart Home App by the administrator.
 - Up to 50 scenes, each with 64 scene variants.
 - Time-saving start-up:
 - Gira Project Assistant (GPA version 5 and higher) is used for project planning and start-up.
 - Step-by-step project planning guided by a wizard makes start-up of the Gira One system very easy.
 - Offline start-up: Prepared at a desk even if you don't even own the devices yet. Loaded on-site at the customer once the devices have been installed.
 - Quick project changes and updates during operation without the need to restart the device.
 - Readout of current project via GPA.
 - Project backup: Automatic backup of a copy of the project on the Gira One server.
 - Regular functional upgrades and updates available with free of charge firmware and software updates.
 - Two RJ45 jacks with switch functionality help make looping the patch cord straightforward.

High security

- Integrated, secure remote access function for Gira Smart Home App.
- Integrated, secure remote maintenance function with Gira Project Assistant.
- The device password protects the Gira One Server against unauthorised access.
- Encrypted TLS data transfer between the Gira Smart Home App and the Gira One server, as well as between GPA and the Gira One server prevents interception by third parties.
- Encrypted bus communication (KNX Data Secure) between Gira One devices and the Gira One Server protects against unwanted access and manipulation of the Smart Home by third parties.

Technical data	
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Rated voltage:	DC 24 to 30 V
Power consumption:	2 W
IP communication:	Ethernet 10/100 BaseT (10/100 Mbit/s)
Supported protocols:	DHCP, AutoIP, TCP/IP, UDP/IP
IP connections:	2 × RJ45 jacks
Ambient temperature:	0°C to +45°C
Dimensions:	2 modular widths (MW)

2.1.2 Power supply



Order No. 21220, 2130 00, 2138 00

Features

Power supply for the bus voltage for the Gira One devices.

Power supply 320 mA

Technical data	
Output current:	320 mA
Short-circuit current:	max. 1 A
Dimensions:	4 modular widths (MW)

Power supply 640 mA

Technical data	
Output current:	640 mA
Short-circuit current:	max. 1.5 A
Dimensions:	4 modular widths (MW)

Power supply 1280 mA

Technical data	
Output current:	1280 mA
Short-circuit current:	max. 3 A
Dimensions:	6 modular widths (MW)



Connecting a parallel power supply

In the event of a system upgrade, the power supply that was originally chosen may prove insufficient. In this case, 2 × 320 mA power supplies or 2 × 640 mA power supplies with a parallel connection may be used. This does not require connection of a 200 m bus line between the power supplies. Operating 2 × 1280 mA power supplies within one system is not allowed.

Choosing a suitable power supply

The following table provides a brief overview to help with choosing the right power supply for your project. In general, you should factor in a little more capacity when planning the power supply so ensure that the power supply does not have to be replaced in the event of any upgrades.

Number of devices	External power supply for the Gira One server	Power supply
Up to 30	No	320 mA
Up to 75	No	640 mA
Up to 150	No	1280 mA
More than 150	Yes	1280 mA

2.2 Operating devices

2.2.1 Button 1-gang/2-gang



Order No. 5171 xx, 5173 xx

Features

- Button for operating Gira One devices.
- Integrated temperature sensor for measuring the room temperature.

Operating functions

- Switching devices, such as lights, socket outlets or a pump.
- Dimming the light.
- Operating shading and ventilation devices (blinds, shutters, skylights, roof domes and awnings).
- Convenient group control of switching, dimming, shading and ventilation devices.
- Opening scene variants.
- Use as a staircase button for activation of the staircase function for switching and dimming devices.
- Functions as a floor-call button together with Gira G1
- Controlling Sonos audio devices.
- Controlling Hue devices and eNet devices
- Function as a door or garage door opener.
- Boost function.

Room temperature

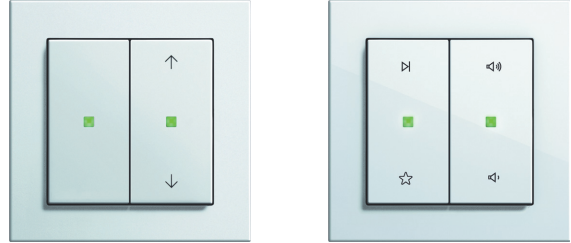
- Calibration of the temperature for the integrated temperature sensor.

LED display

- Brightness value of the status LED can be set to 5 different levels, as well as off.
- Colour of the status LED (red, green, blue) can be set.
- Status LED function can be set depending on the rocker function: always OFF, always ON, actuation display or status display.

Technical data	
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Current consumption:	8 to 12 mA
Connection:	Connection and junction terminal
Protection class:	III
Installation depth:	15 mm
Ambient temperature:	-5°C to +50°C

Replaceable rockers



Alternative rockers

The replaceable rockers allow you to configure the Gira One button to cater to the functions you are using.

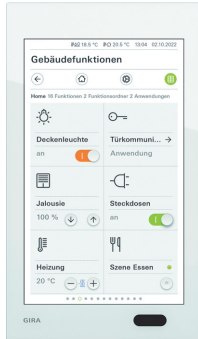
System 55 design diversity

Gira System 55 allows you to configure the Gira One button to harmonise with your interior design. Seven design lines with more than 90 frame designs offer infinite potential.



System 55

2.2.2 Gira G1



Order No. 2069 xx, 2067 xx, 2077 xx

The Gira G1 is a multi-functional room operating device for visualising and operating a variety of building functions. For use in the Gira One system and in the Gira door communication system. The respective range of functions depends on the firmware used. The exact range of functions are described in the Gira online catalogue and the technical documentation for the device.

Features

- A gesture-controlled multi-touch display is used for operation.
- LAN or WLAN is used for connection and communication according to version.
- Integrated speaker.
- Integrated microphone with echo compensation.

Potential applications and combinations

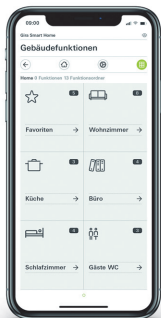
- As a multi-functional room operating device, the Gira G1 provides the following functions and combination of functions:
 - Gira One Client.
 - Home station video.

Functions as a Gira One Client

- Depending on the configuration, the Gira G1 can also be used as a client in systems with a Gira One server.
- Once activated, the Gira G1 displays the Gira interface of the Gira Smart Home App. Up to 250 Gira One devices can be displayed in this manner.
- A maximum of 50 Gira G1 units can be used within one and the same Gira One project.
- In addition to the building control devices, the following functions are available in the Gira G1 when used as a client on the Gira One server:
 - Direct function.
 - Gira door communication.
 - Online weather service.

Technical data	
Power consumption	
- Maximum:	7 W
- Typical:	4 W
- Minimum:	2 W
Power supply	
- PoE performance class 0:	DC 48 V PoE
LAN standard:	IEEE 802.3af
Connection cable	
- Ethernet specification:	Cat.5e, Cat.6, Cat.6a, Cat.7
Display	
- Type:	TFT
- Size:	15.3 cm (6")
- Number of colours:	16.7 M
- Resolution:	480 × 800 px (WVGA), 155 ppi
- Brightness:	350 cd/m ²
- Contrast ratio:	1:500
- Viewing angle:	> 80° all round
Proximity sensor	
- Range:	Max. 50 cm
- Detection range:	30° horizontal, 30° vertical
Protection type:	IP21
Installation depth:	32 mm
Ambient temperature:	0°C to +45°C
Dimensions in mm	
- Gira G1 (incl. flush-mounted power supply unit):	W 97 H 168 D 47
- Gira G1 (without flush-mounted power supply unit):	W 97 H 168 D 15
Installation height:	1.5 m

2.2.3 Gira Smart Home App



Gira Smart Home App

The user-friendly interface of the Gira Smart Home App visualises the entire installation for a single-family home, and is a convenient way to provide the functions it features: Dimming, switching, shutters, blinds, heating control, scene, timer, video stream from IP cameras, presence simulation and much more.

The interface of the Gira Smart Home App has been designed to operate the installation for a single-family home straightforwardly and intuitively using mobile devices. Added to this are customisation options: functions can, for example, be hidden from children, or a range of functions be assigned to specific users.

The Gira Smart Home App is available free of charge in the Apple and Android stores.

Gira Smart Home Windows Client

The Gira Smart Home Windows Client makes it easy to control your Smart Home using a PC or laptop (Windows operating system).

You can download the Gira Smart Home Windows Client free of charge from the Gira download area.

2.3 Actuators

2.3.1 Switching actuator/blind actuator REG



Order No. 5023 00 (switching actuator 6-gang, 16 A/blind actuator 3-gang)

Order No. 5028 00 (switching actuator 16-gang, 16 A/blind actuator 8-gang)

Order No. 5030 00 (switching actuator 24-gang, 16 A/blind actuator 12-gang)

Depending on the parameters set, the actuators can be used as a switch actuator or blind actuator. Combinations of switching and blind actuator are also possible. Two adjacent relay outputs are combined to form one blind output for the blind actuator function.

Features

- Actuator for switching electrical loads or for controlling blind, shutter, awning or skylight devices.
- The adjacent outputs (A1/A2, A3/A4, etc.) are combined to form one blind output respectively when used for operating blinds.
- Mixed operation at one actuator (e.g. A1 and A2 blind, A3 and A4 blind, A5 switching, A6 switching, etc.) is possible.
- Manual operation of the outputs.

Shading and ventilation function

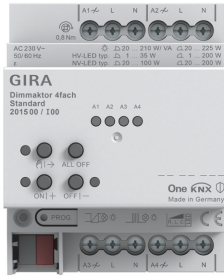
- Control of slat blinds, shutters, awnings, skylights or roof domes.
- Movement times optionally adjustable.
- Sun protection function with curtain or slat positions at the beginning or end of the function that can be set for each output.
- Setting of the delay time at the beginning or end of the sunshine.
- Fabric stretching for awnings.
- In the event of a wind alarm, such as one issued by a conventional weather station with zero-voltage relay outputs for the wind alarm, the blinds are raised and are automatically disabled. The status of the binary input is monitored on a cyclical basis.
- In the event of an active rain alarm, such as one issued by a conventional weather station with zero-voltage relay outputs for the rain alarm, the skylights or roof domes are closed immediately and are automatically disabled. The status of the binary input is monitored on a cyclical basis.
- In the event of an active frost alarm, such as one issued by a conventional weather station with zero-voltage relay outputs for the frost alarm, the active shutter movements are stopped and disabled to protect the shutter motor. The status of the binary input is monitored on a cyclical basis.
- Door contact query and visualisation in the Smart Home App: An open door results in the raising and locking of the blind or shutter.

Switching functions

- NO contact or NC contact operation.
- Setting of a switch-on or switch-off delay.
- Staircase function with an advance warning that can be set.
- Input of parameters as a switching function for the light or socket outlets, for example, or as a garage door function or door opener function.
- Garage door function: Parameters can be entered for the relay switching time.
- Door opener function: Parameters can be entered for the relay switching time.

Technical data	
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Rated voltage:	DC 21 to 32 V SELV
Current consumption:	4 to 18 mA (5023 00) 4 to 18 mA (5028 00) 4 to 24 mA (5030 00)
Switching capacity:	AC 250 V, 16 A / AC1
Maximum switch-on current:	800 A (200 μs) 165 A (20 ms)
Current load rating of adjacent outputs:	Total 20 A
Connected load	
- Ohmic load:	3000 W
- Capacitive load:	16 A, max. 140 μF
- Motors (blind or fan):	1380 W
- Light bulbs:	2300 W
- HV halogen lamps:	2500 W
- HV LED lamps:	typically 400 W
- Wound electronic transformer:	1200 VA
- Tronic electronic transformer:	1500 W
- Fluorescent lamps, uncompensated:	1000 VA
Duo-circuit:	2300 VA
Parallel compensated:	1160 VA
- Mercury-vapour lamps, uncompensated:	1000 W
parallel compensated:	1160 W
Connections	
- Gira One Bus:	Connection and junction terminal
- Load:	Screw terminals (max. 4 mm ² or 2 × 2.5 mm ²)
Dimensions in modular widths (WM):	4 MW (5023 00) 8 MW (5028 00) 12 (MW) (5030 00)

2.3.2 Dimming actuator, 4-gang



Order No. 2015 00

Features

- Actuator for switching and dimming of light bulbs, HV halogen lamps, dimmable HV LED lamps, dimmable compact fluorescent lamps, dimmable inductive transformers with LV halogen or LV LED lamps, dimmable electronic transformers with LV halogen or LV LED lamps.
- Automatic or manual selection of dimming principle according to load.
- Idle-state, short-circuit, and excess temperature-proof.
- Power extension using power boosters.
- Manual operation of the outputs.

Dimming outputs

- Minimum and maximum brightness can be set.
- Switch on to the last brightness value or permanently set switch-on brightness.
- Setting of a switch-on or switch-off delay.
- Staircase function; a pre-warning time and pre-warning brightness can also be set.

Technical data	
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Rated voltage:	AC 110 to 230 V, 50/60 Hz
Current consumption:	6 to 15 mA
Max. connected load Max. connected load (AC 230 V) per channel	
- Light bulbs:	20 to 225 W
- HV halogen lamps:	20 to 225 W
- Wound electronic transformer:	20 to 210 VA
- Tronic electronic transformer:	20 to 225 W
- Wound electronic transformer with LV-LED:	20 to 100 VA
- Electronic transformer with LV-LED:	typically 20 to 200 W
- HV LED lamps:	typically 1 to 200 W
- Compact fluorescent lamp:	typically 20 to 150 W
Connections	
- Gira One Bus:	Connection and junction terminal
- Load:	Screw terminals
Connection cross section:	Max. 4 mm ²
Dimensions:	4 modular widths (MW)

2.3.3 Heating actuator, 6-gang with controller



Order No. 2139 00

Features

- Single-room control possible through fixed controller and valve output pairing.
- Actuator for switching thermal servos in heating and cooling systems.
- The outputs are short-circuit-proof and overload-protected.
- Servos with 24 V or 230 V rated voltage can be actuated.
- Manual operation of the outputs.
- Heating requirement notification, e.g. on a heat pump in combination with a switching actuator, 1-gang 16 A with binary input, 3-gang (5061 00) or switch actuator 2-gang/blind actuator 1-gang 16 A with binary input 3-gang (5062 00).

Room temperature controller

- 6 independent controllers for heating and cooling mode, optimised for the respective heating and cooling system: floor heating (electric or hydronic), radiators (electric or hydronic), floor cooling
- Heating control type can be set. Continuous PI control or switching 2-point control.
- Operating modes: Comfort, standby, night-time reduction, and frost/heat protection.
- Automatic heating/cooling requirement notification: for this, the actuator continuously evaluates the corrected variables of the assigned outputs and informs the Gira One system if there is a heating/cooling requirement at an output or in a heating/cooling circuit. The connected switching actuator closes or opens its relay depending on the heating/cooling requirement notification. This enables burner and boiler controllers, which possess appropriate control inputs, to be controlled in an energy-efficient manner (e.g. switching between the reduction and comfort setpoint in a central condensing boiler or heat pump according to requirement).
- Limit value specification for floor temperature.
- Automatic window-up detection in the event of a drop in temperature or by window contact, including specification of the duration of frost protection.
- Window contact query and visualisation in the Smart Home App: An opened window will result in the activation of the frost protection heating mode after a 5 minutes has elapsed.
- Query in relation to a heating/cooling switchover, e.g. by means of the binary input that evaluates the switch contact of a heat pump to allow the current operating mode (heating or cooling) to be forwarded to the heating controller.
- Room temperature measurement using button 1-gang or 2-gang: Automatic averaging when multiple room temperature measurement buttons are assigned to the output.

Valve outputs

- 6 independent electronic valve outputs.
- Valve control with the characteristic “de-energised open” or “de-energised closed” can be parameterised for each output.
- Prevention of jammed valves by means of smart flushing with a duration of 5 minutes and a cycle of 1 week.
- Boost function for rapid heating of radiators – devices (electric or hydronic).

Technical data	
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Current consumption:	4.5 to 10 mA
Outputs:	6
Controller:	6
Contact type:	Triac
Switching voltage:	AC 24/230 V, 50/60 Hz
Switching current:	5 to 160 mA
Switch-on current:	1.5 A (2 s) max
Number of drives per output	
- AC 230 V drives:	4
- AC 24 V drives:	2
Connection cross section:	Max. 4 mm ²
Ambient temperature:	-5°C to +45°C
Dimensions:	4 modular widths (MW)

2.3.4 Switching actuator 1-gang 16 A with binary input 3-gang



Order No. 5061 00

Features

- Actuator for switching devices.
- 3 binary inputs for connecting conventional switches, buttons, contacts
- The inputs either act directly on the actuator, or are used to control Gira One actuators or to register status information.
- Connection of an external temperature sensor at input 3.

Switching functions

- NO contact or NC contact operation.
- Setting of a switch-on or switch-off delay.
- Staircase function with an advance warning that can be set.
- Input of parameters for use as a switching function for lights or socket outlets, a garage door function or a door opener function, for example, as well as a zero-voltage contact for transmitting the heating requirement to a heat pump.
- Garage door function: Parameters can be entered for the relay switching time.
- Door opener function: Parameters can be entered for the relay switching time.

Binary inputs

- Single and double-surface operation can be configured for rocker buttons.
- Connection of rocker buttons for which parameters were entered for switching, dimming, shading and ventilation, or scene call-up, staircase (motion detector), floor call with Gira G1, garage door and door opener functions.
- Connection of motion and presence detectors with zero-voltage relay outputs.
- Convenient group control of switching, dimming, shading and ventilation devices.
- Switching contact evaluation of wind, frost, brightness or rain sensors possible with zero-voltage contacts, in order to protect shading and ventilation devices from environmental influences.
- Window contact query and visualisation in the Smart Home App: An opened window will result in the activation of the frost protection heating mode after a 5 minutes has elapsed.
- Door contact query and visualisation in the Smart Home App: An open door results in the raising and locking of the blind or shutter.
- Query in relation to a heating/cooling switchover on a heat pump, to allow the current operating mode (heating or cooling) to be forwarded to the heating controller.
- Switching contact display to show contact status in the Smart Home App.
- Switching inputs that can be configured and for which parameters can be entered separately.

Technical data	
Rated voltage:	DC 21 to 32 V SELV
Current consumption:	5 to 18 mA
Switching capacity:	AC 250 V, Σ 16 AX
Maximum switch-on current:	800 A (200 μ s), 165 A (20 ms)
Gira One Medium:	Twisted pair (TP) YCYM 2 x 2 x 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Connections	
- Gira One Bus:	Bus terminals at the control line
- Inputs:	Connection terminals to control line
- Load:	Screw terminals
Connection cross section:	Max. 4 mm ²
Number of inputs:	3
Type of input:	Zero-voltage
Sampling voltage of auxiliary inputs:	approx. 5 V
Total length of auxiliary input cable:	Max. 10 m
Max. connected load	
- Ohmic load:	2500 W
- Capacitive load:	16 A, max. 140 μ F
- Motors (blind or fan):	1380 W
- Light bulbs:	2300 W
- HV halogen lamps:	2300 W
- HV LED lamps:	typically 400 W
- Wound electronic transformer:	1200 VA
- Tronic electronic transformer:	1500 W
- Fluorescent lamps uncompensated:	1000 VA
- Duo-circuit:	2300 VA
- Parallel compensated:	1160 VA

2.3.5 Switching actuator 2-gang/blind actuator 1-gang 16 A with binary input, 3-gang



Order No. 5062 00

Features

- Actuator for switching devices or for controlling blinds, shutters, awnings, skylight drives.
- In blind operation, the adjacent outputs (A1/A2) are combined into one blind output.
- 3 binary inputs for connecting conventional switches, buttons, contacts.
- Connection of an external temperature sensor at input 3.
- The inputs either act directly on the actuator, or are used to control Gira One actuators or to register status information.

Shading and ventilation functions

- Control of slat blinds, shutters, awnings, skylights or roof domes.
- Movement times optionally adjustable.
- Sun protection function with curtain or slat positions at the beginning or end of the function that can be set for each output.
- Setting of the delay time at the beginning or end of the sunshine.
- Fabric stretching for awnings.
- In the event of a wind alarm, such as one issued by a conventional weather station with zero-voltage outputs for the wind alarm, the blinds are raised and are automatically disabled. The status of the binary input is monitored on a cyclical basis.
- In the event of an active rain alarm, such as one issued by a conventional weather station with zero-voltage outputs for the rain alarm, the skylights or roof domes are closed immediately and are automatically disabled. The status of the binary input is monitored on a cyclical basis.
- In the event of an active frost alarm, such as one issued by a conventional weather station with zero-voltage relay outputs for the frost alarm, the active shutter movements are stopped and disabled to protect the shutter motor. The status of the binary input is monitored on a cyclical basis.
- Door contact query and visualisation in the Smart Home App: An open door results in the raising and locking of the blind or shutter.

Switching functions

- NO contact or NC contact operation.
- Setting of a switch-on or switch-off delay.
- Staircase function, with an advance warning that can be set.
- Input of parameters for use as a switching function for lights or socket outlets, a garage door function or a door opener function, for example, as well as a switching contact for transmitting the heating requirement to a heat pump.
- Garage door function: Parameters can be entered for the relay switching time.
- Door opener function: Parameters can be entered for the relay switching time.

Binary inputs

- Single and double-surface operation can be configured for rocker buttons.
- Connection of rocker buttons for which parameters were entered for switching, dimming, shading and ventilation, or scene call-up, staircase (motion detector), floor call with Gira G1, garage door and door opener functions.
- Connection of motion and presence detectors with zero-voltage relay outputs.
- Convenient group control of devices.
- Evaluation of wind, frost, brightness or rain sensors possible with zero-voltage contacts, in order to protect shading and ventilation devices from environmental influences.
- Window contact query and visualisation in the Smart Home App: An opened window will result in the activation of the frost protection heating mode after a 5 minutes has elapsed.
- Door contact query and visualisation in the Smart Home App: An opened door results in the shutter being raised and disabled.
- Query in relation to a heating/cooling switchover on a heat pump, to allow the current operating mode (heating or cooling) to be forwarded to the heating controller.
- Switching contact display to show contact status in the Smart Home App.
- Switching inputs that can be configured for which parameters can be entered separately

Technical data	
Rated voltage:	DC 21 to 32 V SELV
Current consumption:	5 to 18 mA
Switching capacity:	AC 250 V, Σ 16 AX
Maximum switch-on current:	800 A (200 μ s), 165 A (20 ms)
Gira One Medium:	Twisted pair (TP) YCYM 2 x 2 x 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Connections	
- Gira One Bus:	Bus terminals at the control line
- Inputs:	Connection terminals to control line
- Load:	Screw terminals
Connection cross section:	Max. 4 mm ²
Number of inputs:	3
Type of input:	Zero-voltage
Sampling voltage auxiliary inputs:	approx. 5 V
Total length auxiliary input cable:	Max. 10 m
Max. connected load	
- Ohmic load:	2500 W
- Capacitive load:	16 A, max. 140 μ F
- Motors (blind or fan):	1380 W
- Light bulbs:	2300 W
- HV halogen lamps:	2300 W
- HV LED lamps:	typically 1 to 200 W
- Wound electronic transformer:	1200 VA
- Tronic electronic transformer:	1500 W
- Fluorescent lamps, uncompensated:	1000 VA
- Duo-circuit:	2300 VA
- Parallel compensated:	1160 VA

2.3.6 Dimming actuator 1-gang 200 W with binary input 3-gang



Order No. 5065 00

Features

- Actuator for switching and dimming of light bulbs, HV halogen lamps, dimmable HV LED lamps, dimmable compact fluorescent lamps, dimmable inductive transformers with LV halogen or LV LED lamps, dimmable electronic transformers with LV halogen or LV LED lamps.
- 3 binary inputs for connection to conventional switches, buttons and motion detectors with zero-voltage contacts.
- The inputs are used to control Gira One actuators or to record status information.
- Automatic or manual selection of dimming principle according to load.
- Idle-state, short-circuit, and excess temperature-proof.
- Power extension using power boosters.
- Connection of an external temperature sensor possible at input 3.

Dimming outputs










- Minimum and maximum brightness can be set.
- Switch on to the last brightness value or permanently set switch-on brightness.
- Setting of a switch-on or switch-off delay.
- Staircase function; a pre-warning time and pre-warning brightness can also be set.









Binary inputs












- Single and double-surface operation can be configured for rocker buttons.
- Connection of rocker buttons parameterised with switching, dimming, shading and ventilation, or scene call-up, staircase (motion detector), floor call, garage door and door opener functions.
- Connection of motion and presence detectors with zero-voltage relay outputs.
- Convenient group control of switching, dimming, shading and ventilation devices.
- Switching contact evaluation of wind, frost, brightness or rain sensors possible with zero-voltage contacts, in order to protect shading and ventilation devices from environmental influences.
- Window contact query and visualisation in the Smart Home App: An opened window will result in the activation of the frost protection heating mode after a 5 minutes has elapsed.
- Door contact query and visualisation in the Smart Home App: An open door results in the raising and locking of the blind or shutter.
- Query in relation to a heating/cooling switchover on a heat pump, to allow the current operating mode (heating or cooling) to be forwarded to the heating controller.
- Switching contact display to show contact status in the Smart Home App.
- Switching inputs that can be configured and for which parameters can be entered separately.
- Registration and calibration of temperature values using remote sensors at input 3.

Technical data	
Rated voltage:	DC 21 to 32 V SELV
Current consumption:	5 to 18 mA
Gira One Medium:	Twisted pair (TP) YCYM 2 × 2 × 0.8
Test voltage:	4 kV (KNX/EIB bus line)
Connections	
- Gira One Bus:	Bus terminals at the control line
- Inputs:	Connection terminals to control line
- Load:	Screw terminals
Connection cross section:	Max. 4 mm ²
Number of inputs:	3
Type of input:	Zero-voltage
Sampling voltage auxiliary inputs:	approx. 5 V
Total length auxiliary unit cable:	Max. 10 m
Max. connected load	
- Light bulbs:	20 to 230 W
- HV halogen lamps:	20 to 230 W
- Wound electronic transformer:	20 to 210 VA
- Tronic electronic transformer:	20 to 230 W
- Wound electronic transformer with LV-LED:	20 to 100 VA
- Electronic transformer LV-LED:	typically 20 to 200 W
- HV LED lamps:	typically 1 to 200 W

3 ___ Electrical loads

Electrical loads	Function	Parameters	Devices
Dimming – light 	Switching lights Dimming lights Staircase function	<ul style="list-style-type: none"> - Load type - Minimum brightness - Switch-on brightness - Switch-on brightness value - Maximum brightness value - Switch-on delay - Switch-off delay - Staircase switch switch-off delay - Advance warning - Dim to brightness value 	Button, dimming actuator
Philips Hue 	Switching and dimming Philips Hue lights using the Gira Smart Home App or Gira button		Button Philips Hue bridge Philips Hue devices
Switching – light 	Switching lights Staircase function	<ul style="list-style-type: none"> - Function of the switching output - Switch-on delay - Switch-off delay - Staircase switch switch-off delay - Advance warning 	Button, switching actuator
Switching – garage door 	Activation of a garage door drive	<ul style="list-style-type: none"> - Function of the switching output - Switching time 	Button, switching actuator
Switching – pump 	Switching a pump	<ul style="list-style-type: none"> - Function of the switching output - Switch-on delay - Switch-off delay - Staircase switch switch-off delay - Advance warning 	Button, switching actuator
Switching – socket outlet 	Switching a socket outlet	<ul style="list-style-type: none"> - Function of the switching output - Switch-on delay - Switch-off delay - Staircase switch switch-off delay - Advance warning 	Button, switching actuator
Switching – Door opener 	Activation of a door opener	<ul style="list-style-type: none"> - Function of the switching output - Switching time 	Button, switching actuator
Shading – blind 	Raising and lowering blinds Slat adjustment Blind controller according to the position of the sun	<ul style="list-style-type: none"> - Movement time/no movement time - Downward movement time - Upward movement time - Slat movement time - Delay when sunshine begins - Blind position when sunshine begins - Slat position when sunshine begins - Delay when sunshine ends - When sunshine ends 	Button, blind actuator
Shading – awning 	Retracting and extending an awning Automatic retraction when there is wind Control according to the position of the sun	<ul style="list-style-type: none"> - Movement time/no movement time - Downward movement time - Upward movement time - Time to tension fabric - Delay when sunshine begins - Blind position when sunshine begins - Delay when sunshine ends - When sunshine ends 	Button, blind actuator

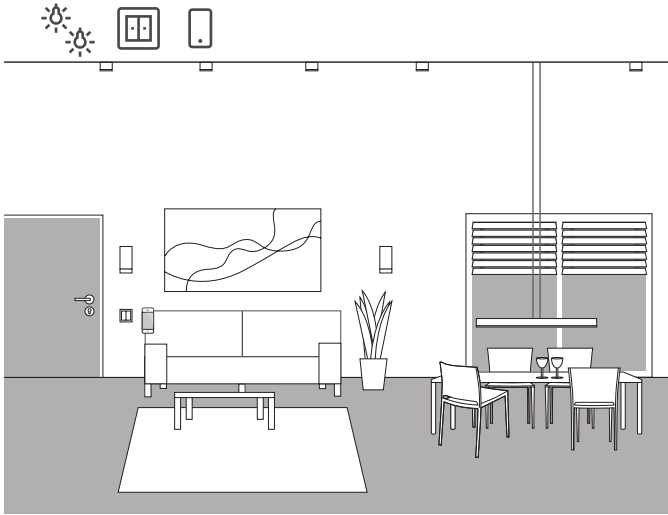
Electrical loads	Function	Parameters	Devices
Shading – shutters 	Raising and lowering shutters Control according to the position of the sun	<ul style="list-style-type: none"> - Movement time/no movement time - Downward movement time - Upward movement time - Delay when sunshine begins - Blind position when sunshine begins - Delay when sunshine ends - When sunshine ends 	Button, blind actuator
Ventilation – skylight 	Opening and closing skylights	<ul style="list-style-type: none"> - Movement time/no movement time - Downward movement time - Upward movement time - Delay when sunshine begins - Blind position when sunshine begins - Delay when sunshine ends - When sunshine ends 	Button, blind actuator
Ventilation – roof dome 	Opening and closing roof domes	<ul style="list-style-type: none"> - Movement time/no movement time - Downward movement time - Upward movement time - Delay when sunshine begins - Blind position when sunshine begins - Delay when sunshine ends - When sunshine ends 	Button, blind actuator
Heating – floor heating (electric) 	Regulating electric floor heating systems	<ul style="list-style-type: none"> - Valve with no voltage (direction of action) - Type of heating regulation - Window-up detection when the temperature falls - Duration of frost protection mode - Maximum floor temperature 	App, heating actuator
Heating – floor heating (hydraulic) 	Regulating hydronic floor heating systems	<ul style="list-style-type: none"> - Valve with no voltage (direction of action) - Type of heating regulation - Window-up detection when the temperature falls - Duration of frost protection mode - Maximum floor temperature 	App, heating actuator
Heating – radiators (electric) 	Regulating electric radiators	<ul style="list-style-type: none"> - Valve with no voltage (direction of action) - Type of heating regulation - Window-up detection when the temperature falls - Duration of frost protection mode - Duration of boost 	App, heating actuator
Heating & cooling – floor heating (hydraulic) 	Regulating hydronic floor heating systems	<ul style="list-style-type: none"> - Valve with no voltage (direction of action) - Type of heating regulation - Window-up detection when the temperature falls - Duration of frost protection mode - Maximum floor temperature - Minimum floor temperature 	App, heating actuator
Heating & cooling – heating/cooling requirement detector 	<p>The actuator evaluates the variables of assigned outputs on an ongoing basis and informs the Gira One system if there is a heating/cooling requirement in a heating/cooling circuit. The connected switching actuator closes or opens its relay depending on the heating/cooling requirement notification. This enables burner and boiler controllers, which possess appropriate control inputs, to be controlled in an energy-efficient manner (e.g. switching between the reduction and comfort setpoint in a central condensing boiler or heat pump according to requirement).</p>		Flush-mounted switching actuator 1-gang or 2-gang, heating actuator

Electrical loads	Function	Parameters	Devices
Scene template 	Creates a tile in the Gira Smart Home App, which can be used for configuration of a scene.	<ul style="list-style-type: none"> - No preference set: Configure scene in the Gira Smart Home App - Central off: All lights in the entire project off - Panic: All lights in the entire project on - Fire alarm: All lights in the entire project on and raise all blinds/shutters - All lights in the room on/off - All blinds/shutters in the room up/down - All lights in the room on/off and all blinds/shutters up/down 	Button, dimming actuator, switching actuator, blind actuator
IP camera 	Creates a tile in the Gira Smart Home App, which can be used for configuration of an IP camera.		IP camera
Sonos audio control 	Creates a tile in the Gira Smart Home App, which can be used for configuration of a Sonos speaker.		Button, Sonos speaker
eNet dimming – light 	Switching and dimming lights from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet dimming actuator
eNet switching – light 	Switching lights from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet switching actuator
eNet switching – socket outlet 	Switching socket outlets from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet switching actuator
eNet shading – blind 	Raising and lowering blinds from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet blind actuator
eNet shading – awning 	Retracting and extending an awning from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet blind actuator
eNet shading – shutter 	Raising and lowering shutters from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet blind actuator
eNet ventilation – skylight 	Opening and closing skylights from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet blind actuator
eNet ventilation – roof dome 	Opening and closing roof domes from the eNet SMART HOME system	Defined using the eNet SMART HOME system	Button, eNet server, eNet blind actuator

4 — Usage scenarios

4.1 Lighting control

4.1.1 Switching and dimming by button and app

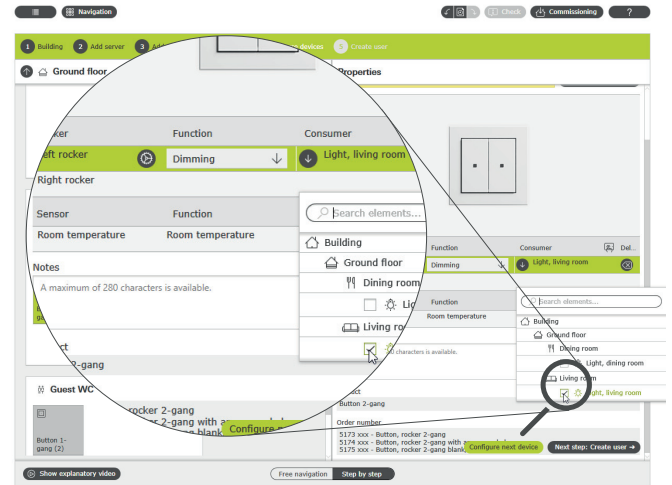


Example of use

There are several lights that can be switched and dimmed in a living space. All lights can be operated by both buttons and the Gira Smart Home App.

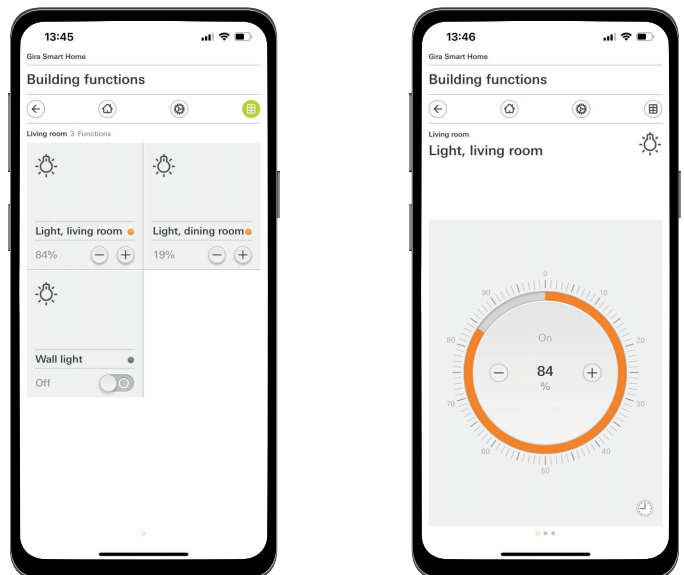
Project planning in GPA

1. Drag the “Dimming – light” device into the building structure for lights that should be able to be dimmed, and the “Switching – light” device into the building structure for lights that should be able to be switched.
2. Drag at least one button into the building structure.
3. Drag the corresponding actuators into the building. One dimming actuator for dimmed lights, one switching actuator for switched lights.
4. Choose an output at the dimming actuator and assign the “Dimming” function to it, and a corresponding lamp as the device.
5. Choose the “Dimming” function on a button and assign a corresponding light as the device.
6. Choose an output on the switching actuator and assign the “Switching” function to it, and a corresponding light as a device.
7. Choose the “Switching” function on a button and assign a corresponding light as a device.
8. Start operation of the project.



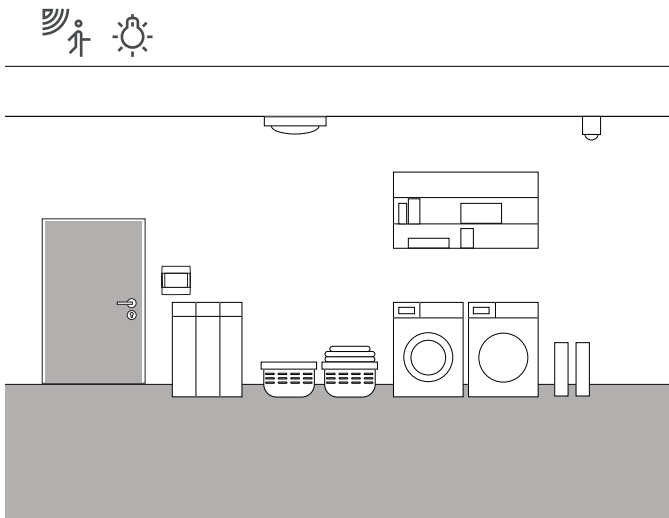
Assigning devices in GPA

A corresponding tile is automatically created in the Gira Smart Home App for each device during start-up. When you tap a small tile, the detailed view of the function opens. This is where you can, for example, set timers for the function.



Light functions in the Smart Home App

4.1.2 Motion-dependent light



Example of use

The lighting should be switched on automatically in a storage room in the basement whenever someone enters the room. The lighting should switch off again automatically after a certain time.

Devices required

For this usage case, you will require a System 3000 motion detector top unit 1.10 m Standard (5373 xx), a System 3000 relay switching insert (5403 00), a switching actuator with binary inputs (5061 00) and a coupling relay.

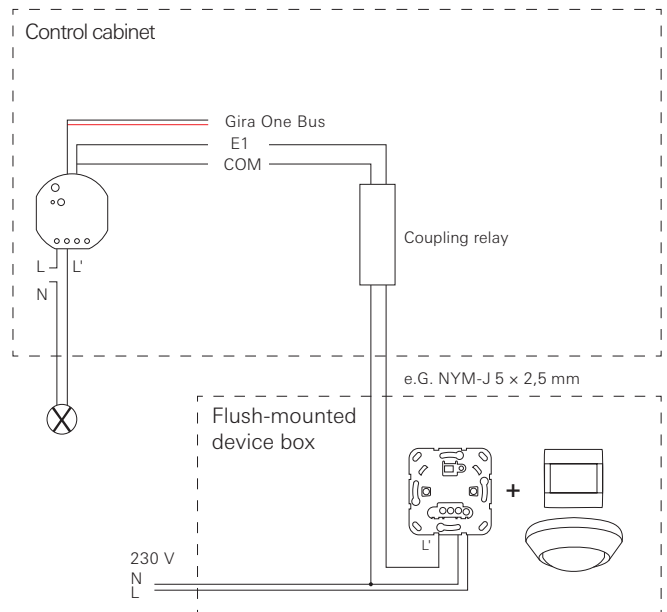
⊕ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Implementation

1. Use a coupling relay to connect a binary input of the switching actuator to the switching contact of the System 3000 relay switching insert.
2. Connect the lights that should be switched to the output of the switching actuator.
3. Choose the "Staircase" function for the input of the switching actuator in GPA.
4. Choose the "Staircase" function at the output of the switching actuator and assign the lights that should be switched using the motion detector as the device.
5. You can define the time for which the light should be switched on after detecting motion in the settings for the Staircase light function in the advance parameter settings for the switching actuator.



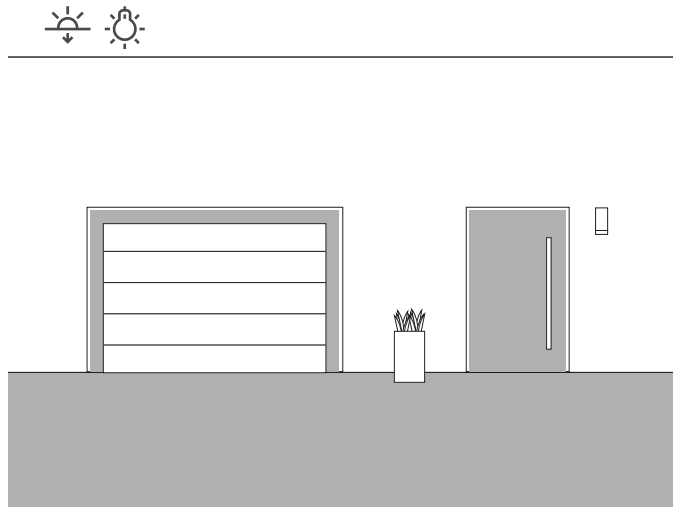
Example of connection

⊕ Notes

The neutral wires must be chosen for the correct circuits and RCD.

Please use an installation adapter (5429 00) for installation of a flush-mounted switching actuator in a sub-distribution unit.

4.1.3 Light switching according to the position of the sun

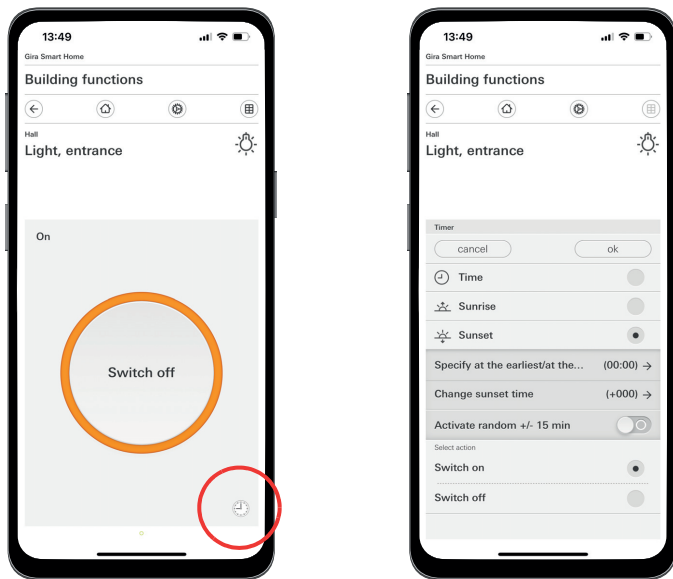


Example of use

The lighting in the entrance to a single-family house should be switched on according to the position of the sun. Whenever the sun goes down and no longer provides sufficient light, the lighting is switched on automatically.

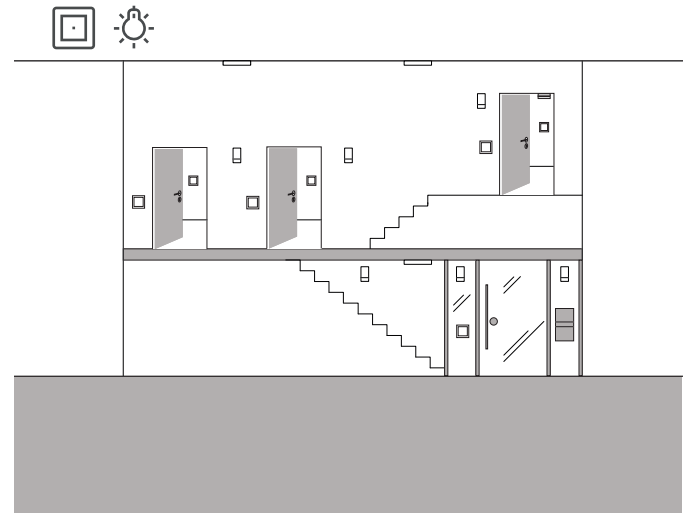
Solution

No complicated project planning is required for this usage. You can define actuation times for each function in the Gira Smart Home App. In this example, you would define that the lighting is switched on 15 minutes before the sun goes down. Because you can save your location in the Gira Smart Home App, the times at which the sun sets at your place of residence are, of course, used.



Opening the timer in the Smart Home App

4.1.4 Automatic staircase light

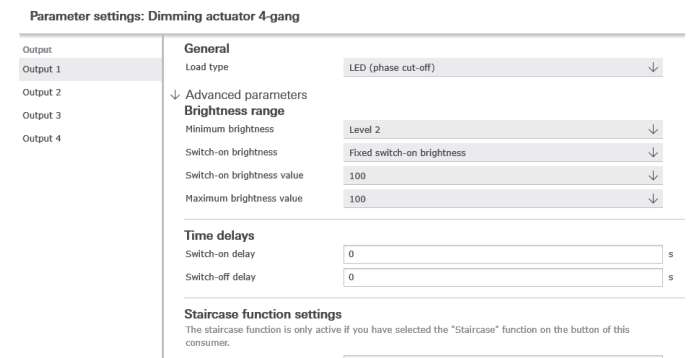


Example of use

The lighting in the staircase of a three-family house should be able to be switched on using multiple buttons. The light should switch off automatically after three minutes. To draw visitors' attention to the fact that the light is about to switch off, the light should be dimmed by 50% over the course of an advance warning.

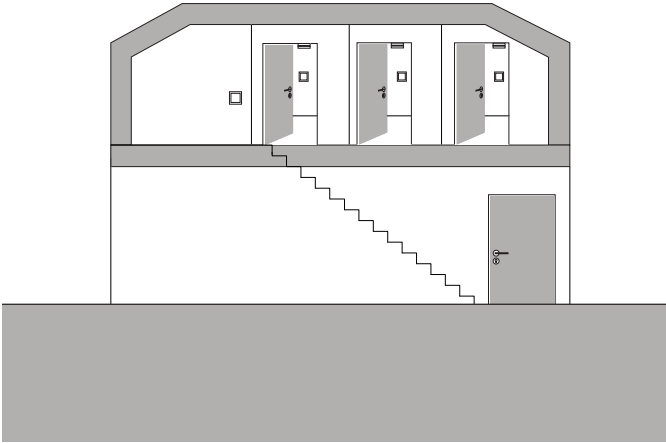
Project planning

1. Drag a "Dimming – light" device into the building structure.
2. Drag the required number of buttons into the building structure.
3. Drag a dimming actuator into the building structure.
4. Choose the "Staircase" function on all buttons, and assign "Dimming – light" to the devices.
5. Choose the "Dimming" function on the dimming actuator and assign "Dimming – light" to the devices.
6. Open the parameter settings for the dimming actuator.
7. Enter the settings for the staircase light function in the advanced parameters.



Advanced parameter settings for the dimming actuator

4.1.5 Group control



Example of use


There are three rooms in the attic of a single-family house in which one light is switched respectively using a button.

As it is easy to forget to switch off the light in one of the rooms in the attic, the light remains switched on for several days at a time without anyone noticing.

The aim is to prevent this by installing a button at the entrance to the attic with an LED that indicates when at least one light is still switched on. This button can also be used to switch all lights centrally.

Project planning

Assign the lighting for the three rooms to the button at the entrance to the attic in GPA.

When you activate the  visualisation function, a new tile is automatically created in the project for the group control. You can use this tile to switch the three lights centrally as well using the Gira Smart Home App or Gira G1.

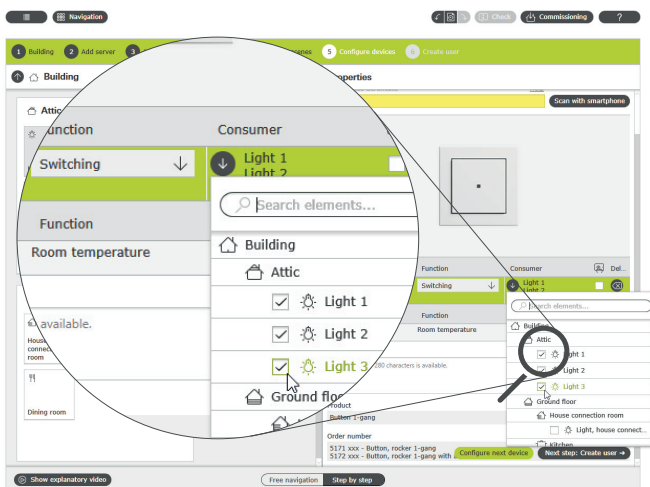
To ensure the LED in the button indicates whether a light is still switched on in the attic, you must enter a setting in the advanced parameter settings for this button.

To do so, choose the “Status display” option and the preferred LED colour for the corresponding rocker in the LED settings.

Parameter settings: Button Hall

General		LED settings	
Status LED		Colour	Red
Rocker		Function	actuation indicator
Rocker			
Sensor			
Room temperature			

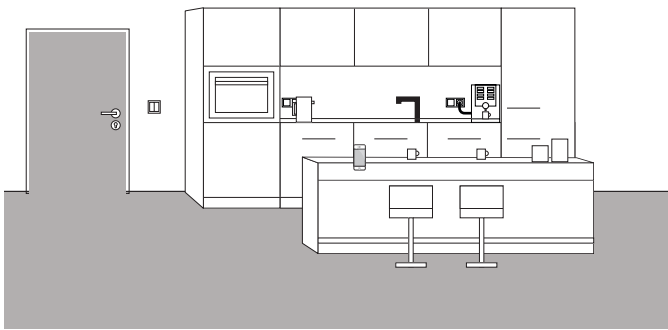
Advanced parameter settings for the button



Assigning multiple devices to a button

4.2 Switching functions

4.2.1 Retrofitting socket outlet switching using a flush-mounted actuator



Example of use

At times, it is only once you are living in a residential property that you notice important details were neglected during project planning. In this example, a coffee maker that takes a long time to heat up should be switched on in the morning using a switchable socket outlet. Fortunately, a button is installed above the counter next to the socket outlet from which the bus line can be pulled into the socket outlet. This allows a flush-mounted actuator to be retrofitted and integrated into the Gira One system. This also allows the socket outlet to be switched and a function timer to be created using the Gira Smart Home App. This allows the coffee maker to be switched on and off in the morning using a timer.

Implementation

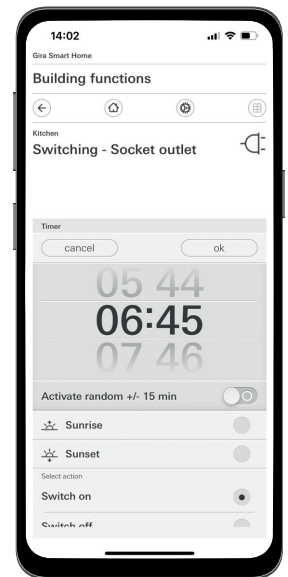
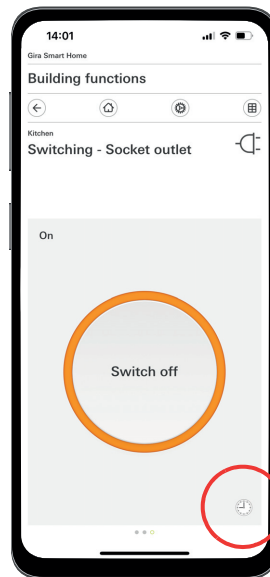
The flush-mounted switching actuator, e.g., the switching actuator 1-gang 16 A with a binary input 3-gang (5061 00), is installed behind the socket outlet. The bus is connected using the button next to the socket outlet.

Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

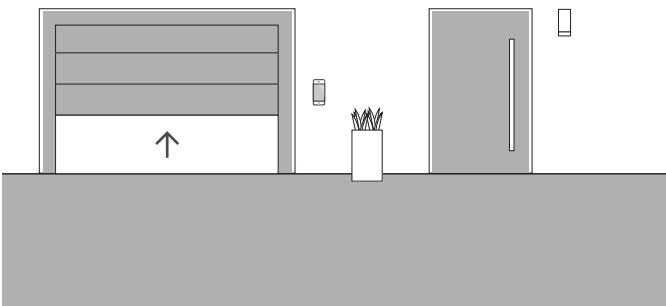
More detailed information can be found on page 78.

The “Switching – socket outlet” device and the flush-mounted switching actuator are dragged into the property and configured accordingly in GPA. Following start-up, the “Switching – socket outlet” device now appears in the Gira Smart Home App. The timer can now be configured to cater to the respective requirements in the detailed view.



Opening the timer in the Smart Home App

4.2.2 Operating the garage door using a button and the app

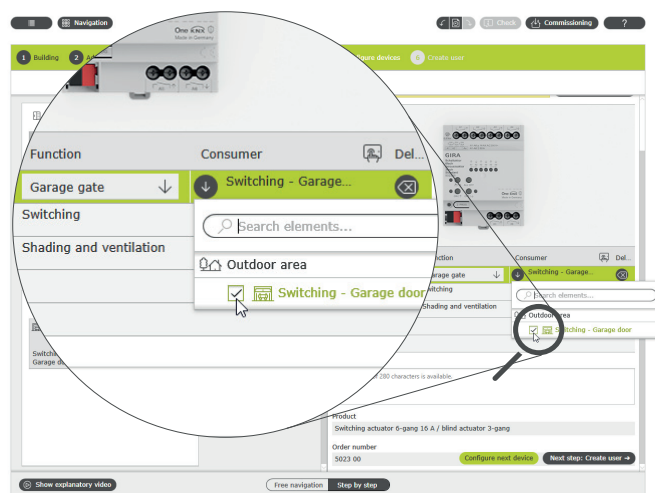


Example of use

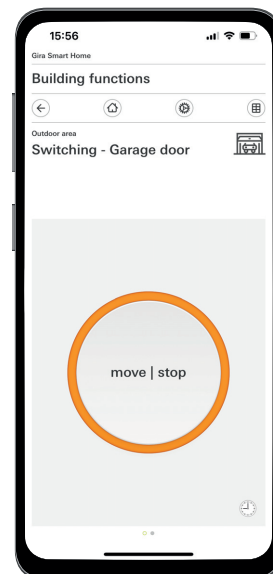
The garage door in a single-family house should be able to be opened and closed using a button in the entrance to the house, and by using the Gira Smart Home App. This makes it convenient to open the garage by pressing a button when leaving the house. The garage door can be opened from the car using the Gira Smart Home App when coming home again.

Project planning

1. Drag the “Switching – garage door” device into the building.
2. Drag a button into the building.
3. Drag a switching actuator into the building.
4. Choose the “Switching – garage door” function on the switching actuator and assign the “Switching – garage door” device.
5. Choose the “Garage door” function on the button, and assign the “Switching – garage door” device.



Assigning devices in GPA



Detailed view in the Gira Smart Home App

⊕ Note

This usage is only suitable for garage door motors that react to a switch impulse or a rising edge.

Status: Garage door open

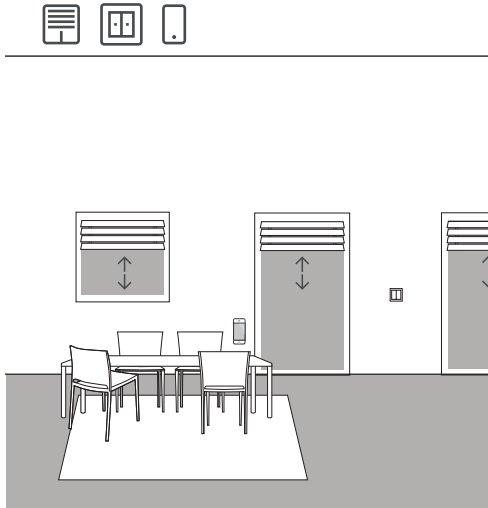
Operation: Button/rising edge: Garage door closes

Operation: Button/rising edge: Garage door stops

Operation: Button/rising edge: Garage door opens

4.3 Blind and shutter control

4.3.1 Moving blinds using a button and the app



Example of use

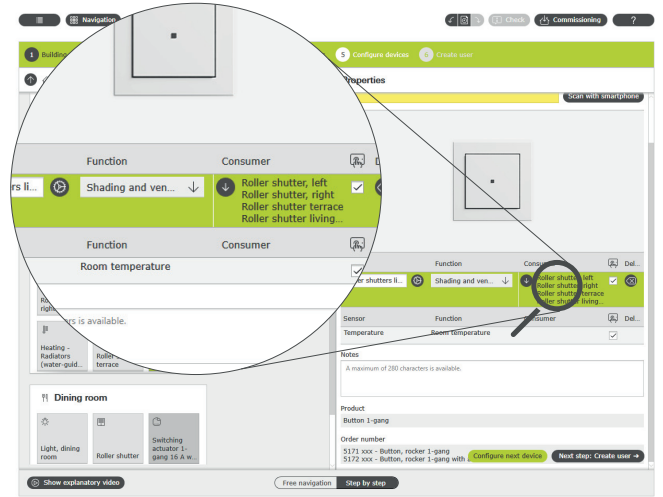
Several shutters are installed in a living space, which should be able to be operated both by button and the Gira Smart Home App.

Project planning in GPA

1. Drag the “Shading – shutter” device into the building structure for every shutter.
2. Drag at least one button and one blind actuator into the building structure.
3. Choose an output on the blind actuator and assign the “Shading and ventilation” function to it. As soon as the “Shading and ventilation” function has been chosen, 2 outputs are automatically merged.
4. Assign a corresponding shutter to this merged output as the device.
5. Choose the “Shading and ventilation” function on the button and assign the shutters that should be able to be controlled using this button as the device.
6. Start operation of the project.

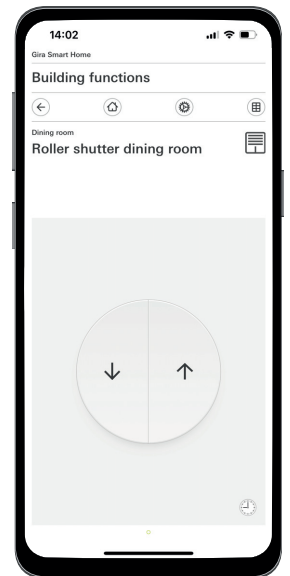
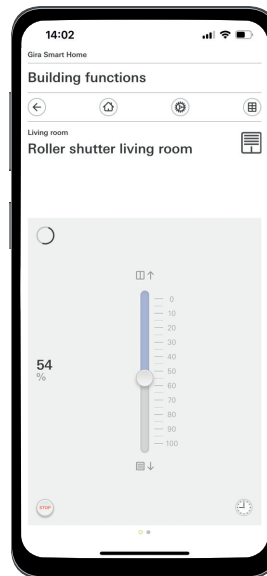
Difference with/without movement time

You can define whether you wish to calculate the explicit movement times of the devices activated or whether you wish to use the preset movement times (2 minutes) in the parameters for the blind actuators. If you measure the movement times yourself with a stopwatch and enter the corresponding values in the parameters, you can move the shutters or blinds to a specific position using the app.



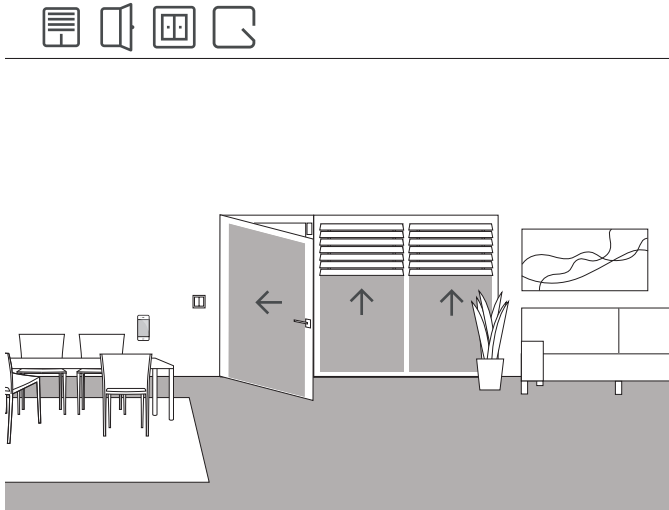
Assigning devices in GPA

A corresponding tile is automatically created in the Gira Smart Home App for each device during start-up.



Shutter with calculated movement times/preset movement times

4.3.2 Raising shutters when opening the patio door



Example of use

The shutter on a patio door should be raised automatically when the patio door is opened. The curtain should also be disabled to prevent automatic or manual lowering for as long as the door handle of the patio door is in the “Open” position.

In addition, the status of the door contact lock should be indicated in the Smart Home App by a separate tile.

Devices required

The door handle of the patio door must be equipped with a reed contact for this example. In addition, you will require an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00) for this usage case.


⊕ Note

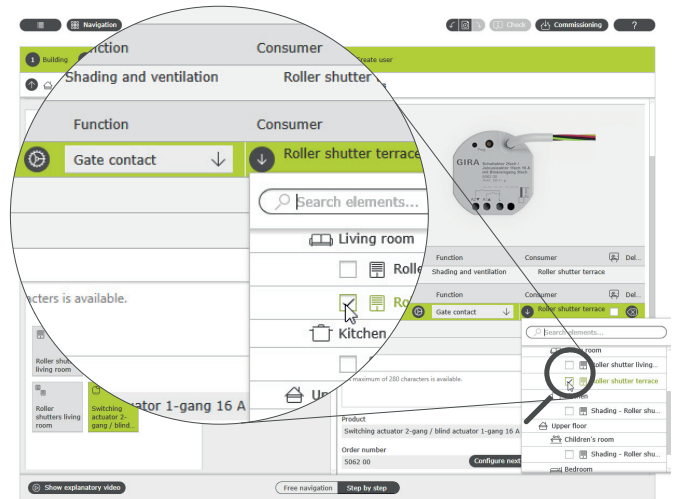
When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Implementation

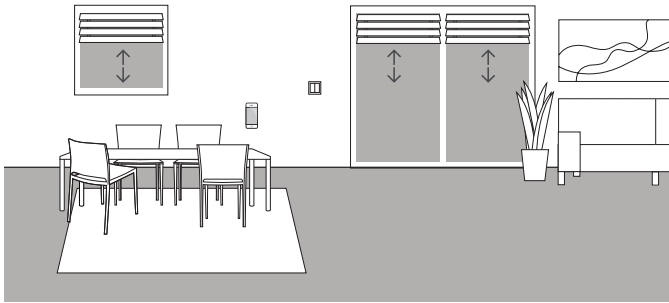
1. Connect the reed contact in the door handle to the binary input of the blind actuator.
2. Assign the “Door contact” function to the input in GPA.
3. Assign the device to the input which should be raised and locked when the patio door is opened.

If you activate the  visualisation function for this input, the status of the door contact lock is indicated in the Smart Home App by a separate tile.



Assigning devices for the “Door contact” function

4.3.3 Shutter – group control

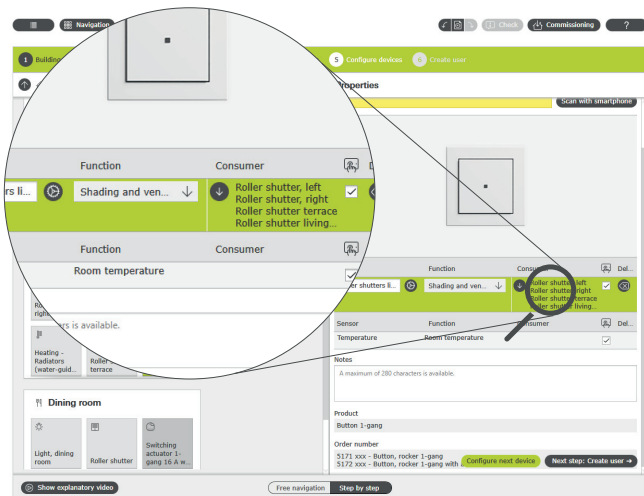


Example of use

There are several shutters installed in the living room of a single-family house. The customer does not wish to control all shutters individually, and instead wants a button that allows all shutters to be operated from one place. In addition, the customer would like to have the same means of operation in the Gira Smart Home App, so that all shutters in the living room can be controlled using a group function in the Gira Smart Home App.


Configuration

1. Drag a “Shading shutter” device into the living room for every shutter.
2. Drag a button into the living room.
3. Drag a blind actuator into the building.
4. Choose the “Shading and ventilation” function on the blind actuator for every shutter, and assign a shutter as the device.
5. Choose the “Shading and ventilation” function on the button and assign all devices of the “Shading” type which should be able to be moved using this button.

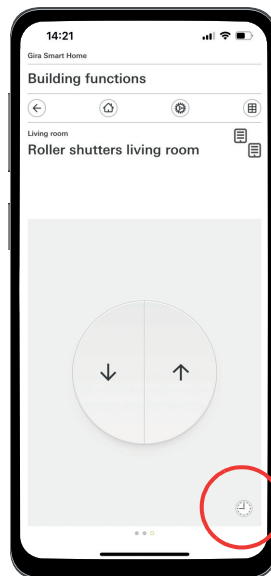


Assigning multiple devices to a button

Gira Smart Home App

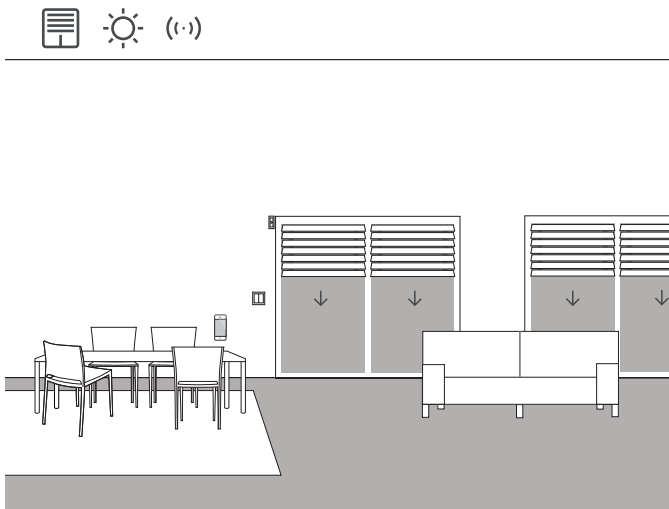
If you select the  “Visualisation” option, a function tile for operating the four shutters is created in the Gira Smart Home App during start-up. You can also give this function tile a name of its own. In this case, “Living room shutters”, for example.

Time-switch functions are easy to set up for the shutter group using this function tile. To do so, click on the clock symbol in the function tile and enter the preferred settings.



Opening the timer in the Smart Home App

4.3.4 Sun protection



Example of use

Rooms with window fronts facing south often heat up a lot in summer due to sunlight shining in. To prevent this, you can automate shading in these rooms by using brightness sensors.

The brightness sensor monitors the windows facing south and west. If a specific brightness value is exceeded, the blinds are lowered to 60% to protect the rooms from overheating and high levels of UV radiation.

Devices required

For this example, you will require a brightness sensor with a zero-voltage output, an switching threshold that can be set, and a measuring range from 0 to 100000 lux.

In addition, you will require an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00).

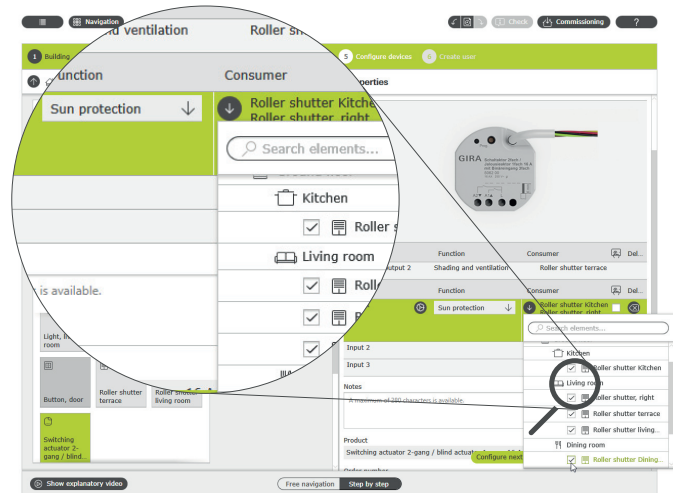
Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Configuration

1. Connect the brightness sensor to the binary input of the actuator.
2. Choose the “Sun protection” function for the corresponding input in GPA.
3. Choose all devices that should be activated when the defined brightness level is exceeded as the device.



Assigning several devices to the “Sun protection” function

4. Calculate the movement times of the blind, and enter the values calculated into the parameter settings for the blind actuator. Only when the movement times have been calculated correctly is the blind able to move to the preferred position.
5. Enter the delay times that should prevent activation of the devices when the brightness value is briefly exceeded or not reached (e.g. due to clouds) in the advanced parameters for the blind actuator.
6. Enter the position that the device should assume when the brightness value is exceeded.
7. Enter the position that the device should assume when there is no more sunshine.

Parameter settings: Switching actuator 2-gang / blind actuator 1-gang 16 A with binary input 3-gang

Output	General
Output 1 + output 2	<input type="checkbox"/> Do not record movement times (relative manual actuation)
Input	If travel times are entered, position values (e.g. 35%) can be selected.
Input 1	Movement time downwards: <input type="text" value="60"/> s
	Movement time upwards: <input type="text" value="61"/> s
	↓ Advanced parameters
	Sun protection
	Delay at the beginning of sunshine: <input type="text" value="30"/> s
	blind position at the beginning of sunshine: <input type="text" value="50"/> %
	Delay at the end of sunshine: <input type="text" value="30"/> s
	At the end of sunshine: <input type="text" value="last position before sunshine"/>

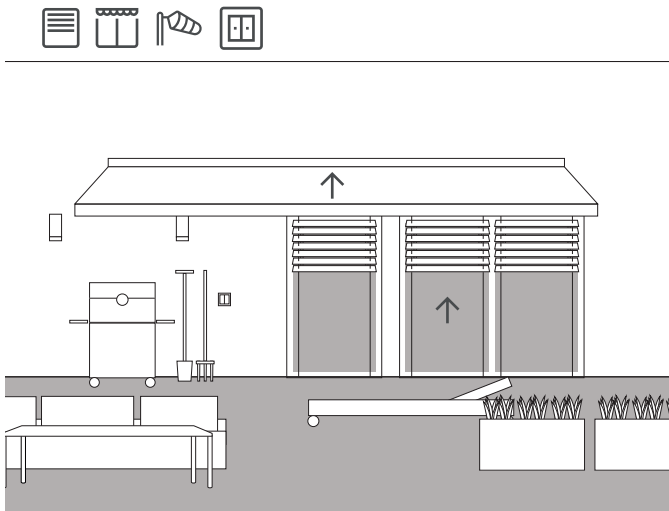
Advanced switching actuator parameter settings

Reaction of the installation

The devices connected react individually according to the parameters in the event of a signal from the brightness sensor at the binary input.

When there is no more sunshine, the devices that are connected are moved to the position that was chosen in the advanced parameters for the blind actuator.

4.3.5 Wind alarm



Example of use

To prevent blinds being damaged by strong winds, they can be raised automatically when the wind becomes too strong.

The blind is raised without delay in the event of a wind alarm, and is locked in this position. It cannot be lowered manually, for example by pressing a button, either. Movement commands from a timer are not executed when there is a wind alarm.

As Gira One regularly checks whether the interface (flush-mounted actuator) responds to queries, this ensures that the blinds will not be damaged even if the sensor is defective. If there is no response from the wind sensor, the system raises the blinds and thereby ensures that they are not damaged.

Devices required

For this example, you will require a wind sensor (e.g. Gira wind sensor Standard 0913 00) and an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00).

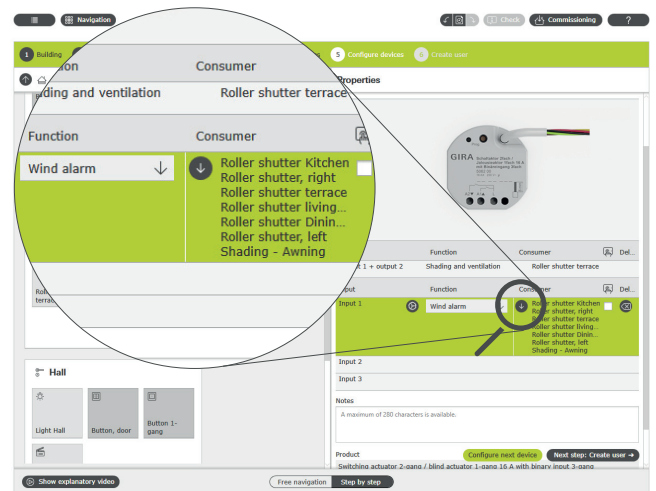
+ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Implementation

1. Connect the wind sensor to the binary input of the actuator.
2. Choose the “Wind alarm” function for the corresponding input in GPA.
3. Choose all devices that should be activated when a wind alarm is triggered as the device.



Assigning several devices to the “Wind alarm” function

Reaction of the installation

When a signal is sent from the wind sensor to the binary input, devices react as follows:

- Blinds are raised to protect the blind from damage.
- Shutters are lowered to protect the windows they cover from any debris flying around.
- Awnings are retracted to protect the awning from damage.
- Skylights and roof domes are closed to protect both the skylight and roof dome and the interior of the room.

As long as there is an active wind alarm, the devices connected are disabled and cannot be moved using the Gira Smart Home App or a button.

When the wind alarm is no longer active, the devices connected are moved back to the position that was activated prior to the wind alarm. If a different position was set in the interim, for example using the Gira Smart Home App or a function controlled by a timer, then movement to this changed position occurs.

+ Visualisation function

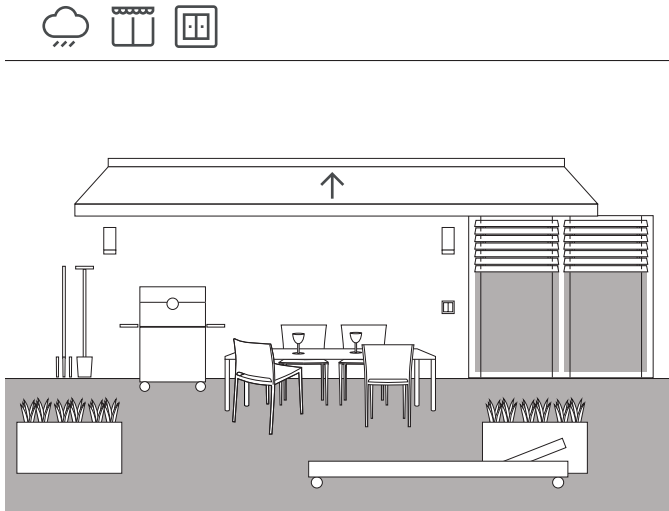
An active wind alarm can be shown as a separate tile using the visualisation function for the sensor channel in the Smart Home App.

To do so, activate the  visualisation function on the binary input.

+ Tip

When several wind sensors are used, different wind directions with different facade directions can be detected, for example. This means that in the event of a strong easterly wind, for example, only the blinds on the east-facing facade of a building are activated.

4.3.6 Rain alarm



Example of use

To ensure an awning is closed automatically in the event of rain, use of a rain sensor is recommended. As soon as it starts to rain, the awning is retracted and also disabled against extension, for example using a button or the Gira Smart Home App. This prevents damage due to moisture.

If skylights are still open in the house, then the signal from the rain sensor can, of course, also be used to close them and protect the interior from moisture.

Devices required

For this example, you will require a rain sensor with a zero-voltage output and an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00).

Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Configuration

1. Connect the rain sensor to the binary input of the actuator.
2. Choose the "Rain alarm" function for the corresponding input in GPA.
3. Choose all devices that should be activated in the event of rain as the device.



Assigning several devices to the "Rain alarm" function

Reaction of the installation

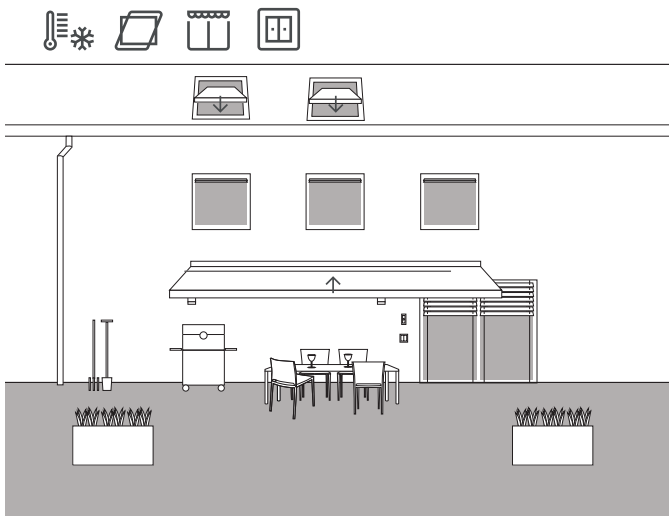
When a signal is sent from the rain sensor to the binary input, devices react as follows:

- Blinds are raised
- Shutters are lowered
- Awnings are retracted
- Skylights and roof domes are closed

As long as it continues to rain, the devices connected are disabled and cannot be moved using the Gira Smart Home App or a button.

When it stops raining, the devices connected are moved into the position that was activated prior to the rain. If a different position was set in the interim, for example using the Gira Smart Home App or a function controlled by a timer, then movement to this changed position occurs.

4.3.7 Frost alarm



Example of use

The blinds in a single-family house should be able to be stopped and disabled, the awning retracted and skylights automatically closed and disable when there is a risk of frost in order to prevent damage.

Devices required

For this example, you will require a temperature sensor with a zero-voltage output and an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00).

⊕ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

Configuration

1. Connect the temperature sensor to the binary input of the actuator.
2. Choose the "Frost alarm" function for the corresponding input in GPA.
3. Choose all devices that should be activated in the event of frost as the device.



Assigning several devices to the "Frost alarm" function

Reaction of the installation

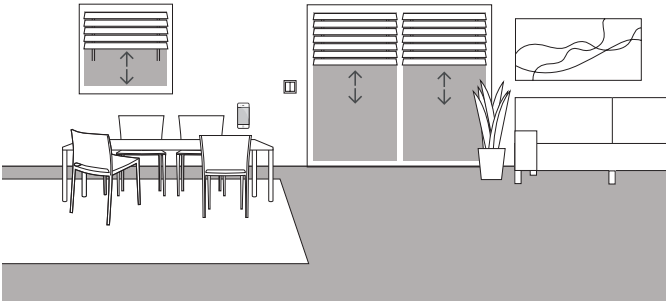
When a signal is sent from the temperature sensor to the binary input, devices react as follows:

- Blinds and shutters stop
- Awnings are retracted
- Skylights and roof domes are closed

As long as there is an active frost alarm, the devices connected are disabled and cannot be moved using the Gira Smart Home App or a button.

When temperatures rise above freezing, the devices connected are moved back to the position that was activated prior to the frost alarm. If a different position was set in the interim, for example using the Gira Smart Home App or a function controlled by a timer, then movement to this changed position occurs.

4.3.8 Shutters – operation based on time/sun position



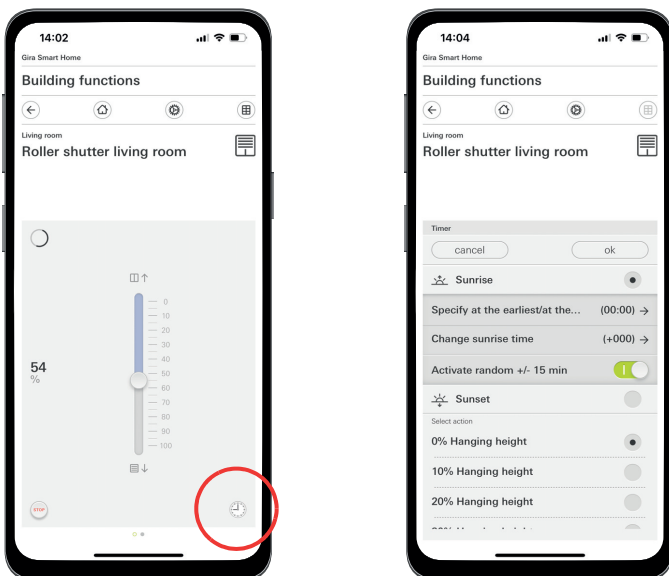
Example of use

If blinds or shutters are raised and lowered according to the time of day, parameters for these times can be entered in the Gira Smart Home App.

A combination of operation based on time and sun position is also possible.

Project planning

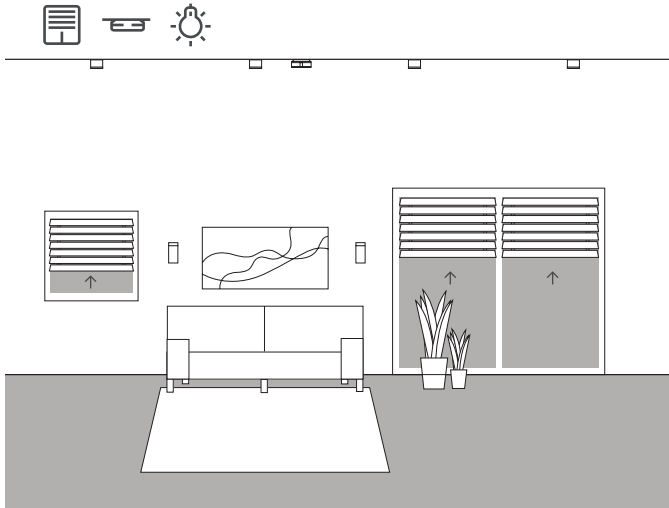
Tap the tile for the shutters for which you wish to activate operation based on time or the sun position in the Gira Smart Home App. Tap the “Timer” button in the detailed view. GPA created timers during start-up. They feature predefined switching times and are deactivated by default. You can either edit and activate these switching times or create new timers of your own. Multiple switching times can be created that are activated either at defined times of day, or following sunrise or sunset.



Opening the timer in the Smart Home App

4.4 Safety

4.4.1 Smoke alarm device



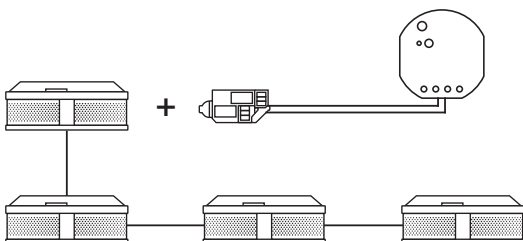
Example of use

Smoke alarm devices must be installed in every new building! When you connect your smoke alarm devices to the Gira One system, you can increase safety by means of an additional acoustic signal. In the event of a fire, blinds, for example, are automatically raised and all lights switched on. This ensures that in the event of a fire alarm, all occupants can escape.

Devices required

You can connect up to 40 devices in a network using a two-wire line when the Gira smoke alarm device Dual Q (2336 02) is used. A smoke alarm device in the network must be equipped with a relay module (2340 00).

In addition, you will required an actuator with a binary input (e.g. Gira switching actuator with binary inputs 5061 00) that is connected to the relay module.



Creating networks of Gira smoke alarm devices

Configuration

1. Connect all smoke alarm devices using a 2-wire line.
2. Plug the relay module for smoke alarm devices into a smoke alarm device.
3. Connect the alarm relay contacts on the relay module to the binary input of the switching actuator.
4. Drag a scene template into your project in GPA
5. Assign the "Fire alarm" type to the scene template.
6. Choose the "Scene" function in the binary input of the switching actuator.
7. Choose the scene template with the "Fire alarm" type as the device.



Assigning the "Fire" scene to the binary input

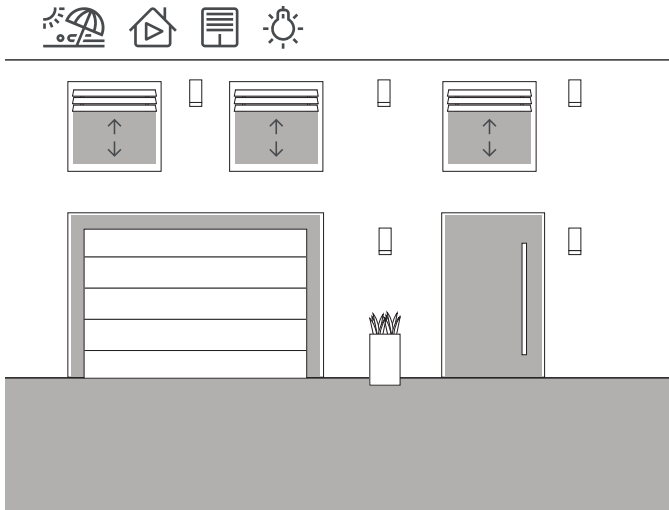
Reaction of the installation

When a signal is sent from the smoke alarm device to the binary input, devices react as follows:

- Blinds and shutters are raised
- All lights are switched on

If the scene turns out to be suboptimal in subsequent operation, it can be changed using the Gira Smart Home App. This allows the Gira Smart Home App to be used to remove, for example, individual lights, blinds or shutters from the scene.

4.4.2 Presence simulation



Example of use

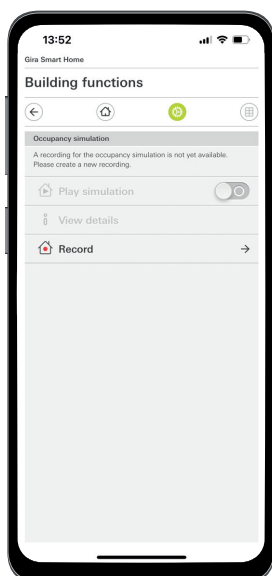
The Gira One system ensures home and apartment owners can go on holidays with absolute peace of mind. The presence simulation allows you to record selected building functions before having them performed again automatically. This perfectly simulates real use, making your building look like it is occupied when occupants are on holidays, for example.

The Gira Smart Home App can be used to choose the devices for which operation should be simulated during an absence. You can then replay this recording during a holiday.

The switching operations for the next seven days are recorded in recording mode.

In replay mode, the switching operations that were recorded are replayed when the occupants are absent.

Recording presence



Starting presence recording in the app

To record switching operations for the simulation:

1. Open the [Presence simulation] page in the system menu in the Gira Smart Home App.
2. Tap [Create new recording] and choose the functions that should be recorded and replayed in the subsequent simulation. For logical reasons, these should be functions that are visible from outdoors, for example light functions or the movement of blinds or shutters.
3. Confirm the functions chosen using [ok].
4. Once all functions have been chosen, activate the recording by swiping the [Record] slider to the right. The recording starts and automatically ends seven days later.

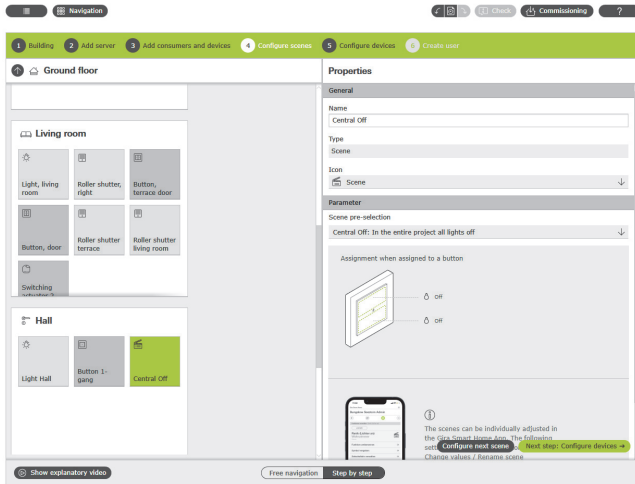
Simulating presence

To start the presence simulation, swipe the “Replay simulation” slider to the right.

Please note that the presence simulation can only be started if prior activity was recorded for seven days.

4.5 Scenes

4.5.1 Creating scenes in GPA



Creating a scene in GPA

A scene is used to group activities that should be carried out together each and every time. This allows specific preferences for the electrical installation can be saved for every situation in a room, for example, and be open again by pressing a button. You could create a “Watching television” scene, for example and assign it to the button on a button. If this button is pressed, the blinds, for example, move to a specific position, the lighting is dimmed to a defined value, and the television is switched on.

You can easily create scenes for your project using the “Scenes” device in GPA. The following preferences are available:

- No preference set: Configure scene in the Gira Smart Home App
Button at top: Scene variant 1
Button at bottom: Scene variant 2
- Central off: All lights in the entire project off
Button at top: Light off
Button at bottom: Light off
- Panic: All lights in the entire project on
Button at top: Light on
Button at bottom: Light on
- Fire alarm: All lights in the entire project on and raise all blinds/shutters
Button at top: Blinds/shutters up, light on
Button at bottom: Blinds/shutters up, light on
- All lights in the room on/off
Button at top: Light on/50% on
Button at bottom: Light off
- All blinds/shutters in the room up/down
Button at top: Blinds/shutters up
Button at bottom: Blinds/shutters down
- All lights in the room on/off and all blinds/shutters up/down
Button at top: Blinds/shutters up, light on/50% on
Button at bottom: Blinds/shutters down, light off

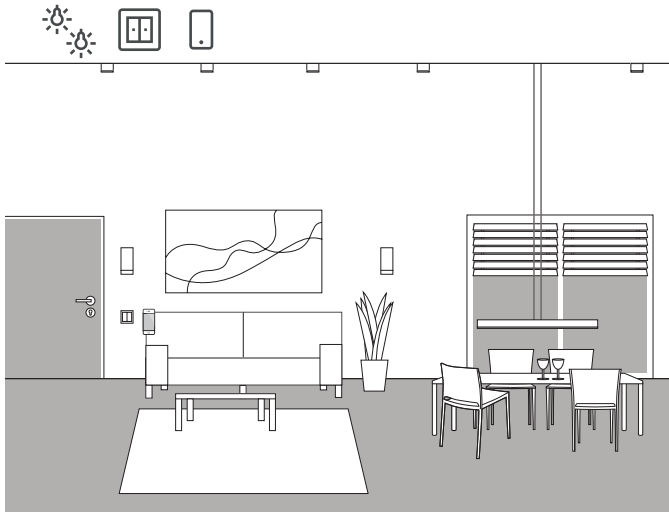
The following example explains how to project a scene that should be used to switch off all lights in the living room.

Project planning

1. Drag the devices required for all lights into the living room. In this example, these are a ceiling light, two wall lights and a reading lamp.
2. Assign corresponding buttons and switch or dimming actuators to the lights.
3. Drag a scene template into the living room.
4. Assign the “All lights in the room on/off” type to the scene template.
5. Drag a button into the living room.
6. Choose the “Scene” function for the button and assign the “All lights in the room on/off” scene.
7. Begin start-up.

If the scene turns out to be suboptimal in subsequent operation, it can be changed using the Gira Smart Home App.

4.5.2 Creating/changing scenes in the app



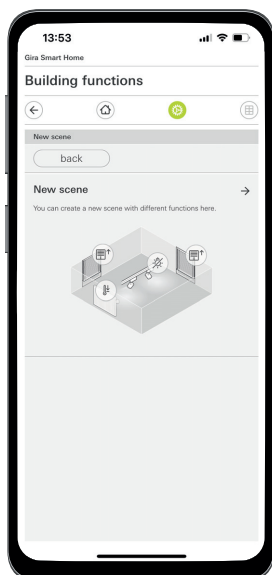
Example of use

There are several lights that can be switched and dimmed in a living space. All lights can be operated using a button of their own. In addition, light scenes can be activated using a button. This allows several light sources to be switched on by pressing a button and to operate using individual settings (e.g. 50% brightness).

If the scene created in GPA turns out to be suboptimal in subsequent operation, it can be changed using the Gira Smart Home App. The Gira Smart Home App can therefore be used to change, for example, the present brightness values or to remove individual lights from the scene. In addition, new scenes can be created and configured in the Gira Smart Home App. Please note that new scenes that are created in the Gira Smart Home App can only be activated using the app or Gira G1. Scene that are activated using buttons must be created using GPA.

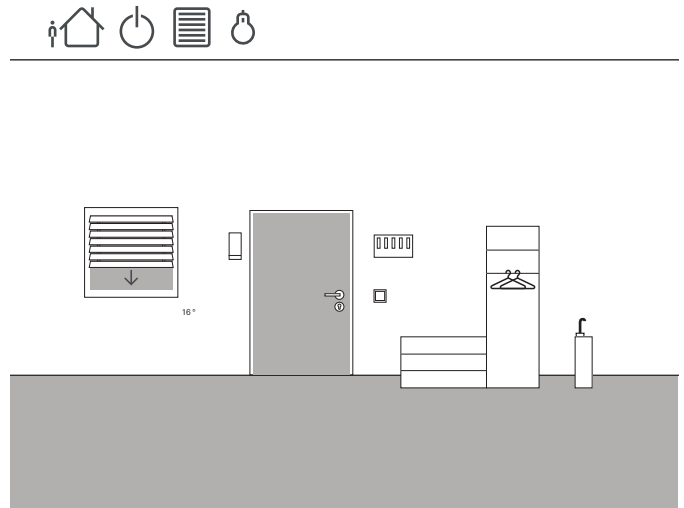
Implementation in the Gira Smart Home App

Scenes can be created, changed and supplemented in the Gira Smart Home App:



Creating a scene in the Smart Home App

4.5.3 Scene – central off



Example of use

A button that can be used to switch off all lights when leaving the house is supposed to be installed in the entrance to a house. In addition, the blinds on the patio doors should be lowered to protect the house from a burglary.

Project planning

1. Drag a scene template into the building structure.
2. Assign the "Central off" type to the scene template.
3. Drag a button into the building structure. In this case, a button in the entrance would, for example, be suitable.
4. Choose the "Scene" function for the button and assign the "Central off" scene.
All lights in the house are switched off using this scene template.
5. Begin start-up.
6. After successful start-up, open the Gira Smart Home App and add the patio door blinds to the scene.

If the scene turns out to be suboptimal in subsequent operation, it can be changed using the Gira Smart Home App. This allows the Gira Smart Home App to be used to remove individual lights from the scene, for example, to ensure that remain switched on during an absence.

4.5.4 Scene – panic button



Example of use

Another safety function is what is called a panic button. If alarming noises are audible in the house at night, pressing the panic button switches on all lights in the house, for example. This is a clear signal for any intruders that might be present to take to their heels.

Project planning

You can use existing, predefined scenes in GPA for project planning for this function. After all, there is a prepared panic scene there which automatically switches on all light devices in the GPA project when the panic button is pressed.

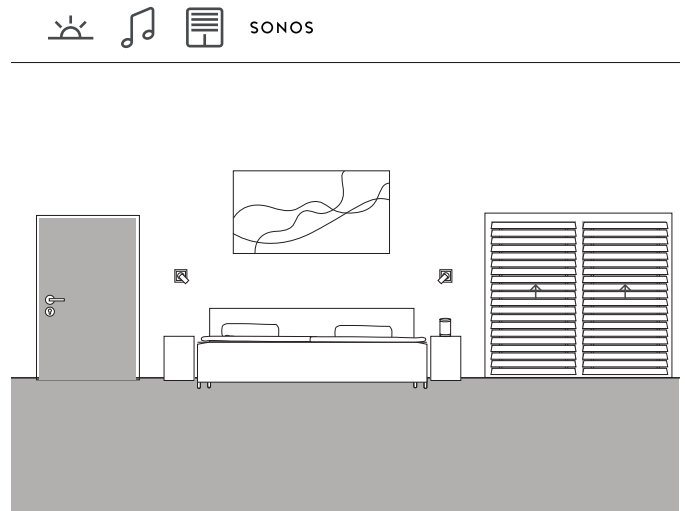
Proceed as follows for project planning:

1. Drag a scene template into the preferred room.
2. Assign the "Panic" type to the scene template.
3. Drag a button into the room.
4. Choose the "Scene" function for the button and assign the "Panic" scene.
5. Begin start-up.

When the button is pressed, all the lights in the house are switched on.

If the scene turns out to be suboptimal in subsequent operation, it can be changed using the Gira Smart Home App. This allows individual lights, for example, to be removed from the scene using the Gira Smart Home App. Or you can also make all shutters move when the panic button is pressed.

4.5.5 Scene – morning routine



Example of use

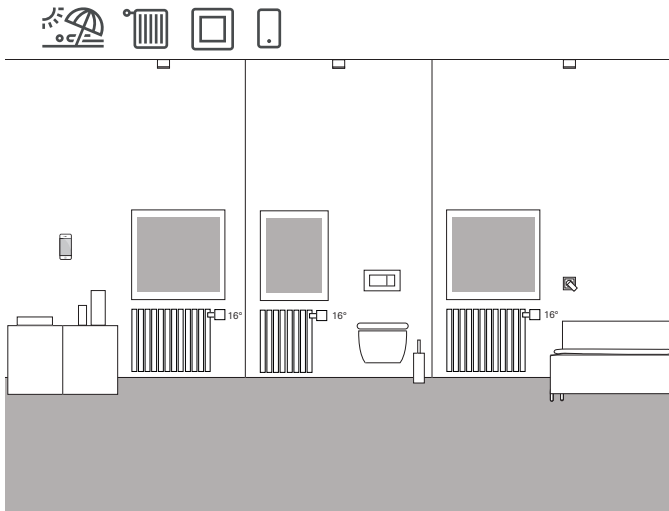
If you'd like to be woken by the sun and by music in summer, this is easy to implement in the Gira One system.

To do this, you can configure a scene that opens the slats of the blinds at the time you get up, and play music through the Sonos speaker. After a brief snooze phase, the blind is raised a little further. The coffee maker has already been switched on in the kitchen and is heating up the portafilter. This ensures a good start to the day.

Project planning

1. Drag a scene template into the room.
2. Assign the "No preference" type to the scene template.
3. Begin start-up.
4. After successful start-up, open the Gira Smart Home App and add the preferred devices to the scene, for example the Sonos speaker, the blinds and the socket outlet for the coffee maker.
5. Define the preferred time to start the scene in the timer.

4.5.6 Scene – holiday



Example of use

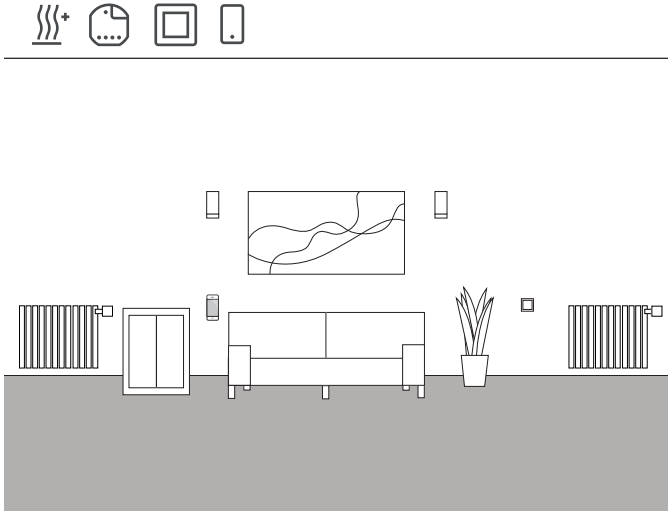
If you'll be leaving your house for an extended period of time, you'll often want to turn down the heating throughout the house. Gira One allows you to activate this using one single button. When you press this button, selected devices are switched off and the temperature is lowered in all rooms. As soon as you return from holiday, for example, you can switch on the heating again while still travelling by using the Gira Smart Home App. This ensures it is pleasantly warm when you arrive home.

Project planning

1. Drag a scene template into the project.
2. Assign the "No preference" type to the scene template.
3. Drag a button into the building structure. In this case, a button in the entrance would, for example, be suitable.
4. Choose the "Scene" function for the button and assign the "No preference" scene.
5. Begin start-up.
6. After successful start-up, open the Gira Smart Home App and add the preferred heating devices to the scene.

4.6 Heating and ventilation

4.6.1 Controlling the heating by app



Example of use

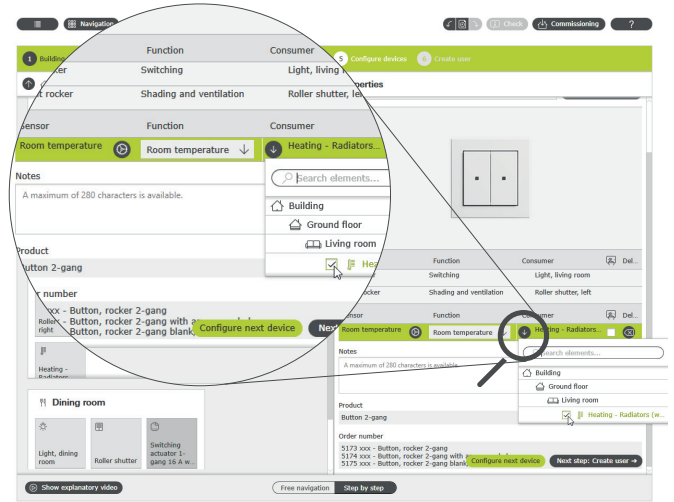
There are several heating devices installed in a living space that should be able to be controlled using Gira One.

Project planning in GPA

1. For every radiator, drag the corresponding device, for example “Heating – radiator (hydronic)” into the building structure.
2. Drag a heating actuator into the building.
3. Choose an output on the heating actuation and assign the “Heating” function to it, and the corresponding heating as the device.
4. A button is used to register the room temperature, which is installed in the same room as the heating device. Choose the “Room temperature” function on the sensor of the button, and assign the corresponding heating as the device.
5. Start operation of the project.



Choosing the “Heating” function and assigning devices



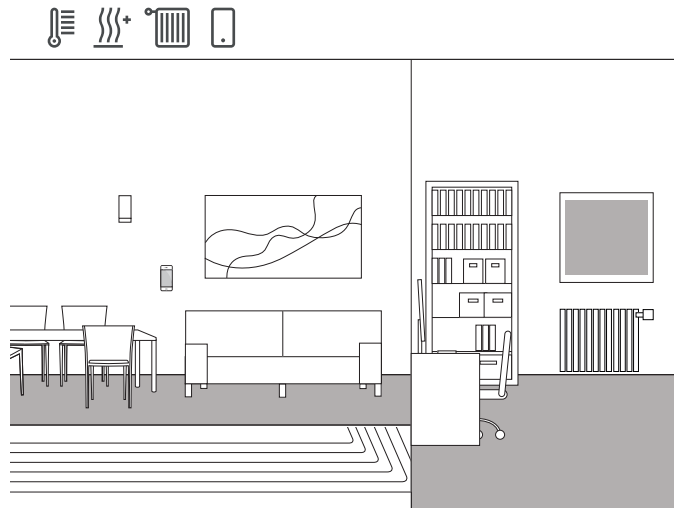
Registering the room temperature using a button

A corresponding tile for every heating device is created automatically in the Gira Smart Home App upon start-up. The preferred temperatures can be set here.



Heating function in the Gira Smart Home App

4.6.2 Controlling heating by time



Example of use

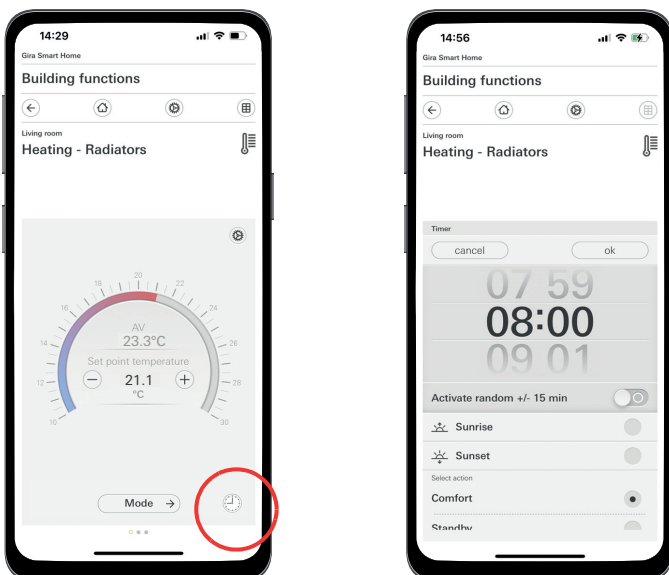
There is a combination of radiators and floor heating installed in a single-family house. Floor heating is installed in the living and dining areas, while normal radiators are installed in the children's bedrooms and the bedrooms.

Because the floor heating is slow to react, the temperature defined for it is rarely changed.

Things are different in the rooms with radiators, such as the children's bedrooms. Because the children arrive home from school at different times, the temperature in the rooms should be able to be set for a specific time. Timers for the heating profiles are very easy and convenient to create and change in the Gira Smart Home App.

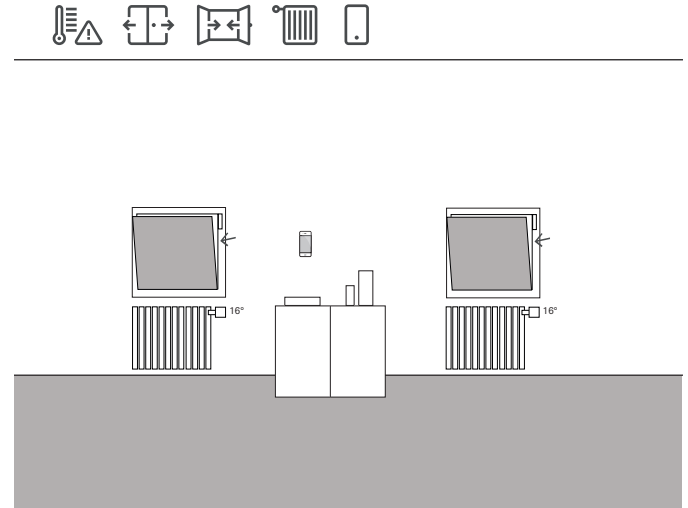
Setting a timer

Tap the tile for the heating function in the Gira Smart Home App for which you wish to activate time-based operation. Tap the "Timer" button in the detailed view. You can create multiple switching times here, which regulate specific temperatures at defined times of day.



Opening the timer in the Smart Home App

4.6.3 Frost protection during ventilation




Example of use

If window contacts are installed on a window, they can be used for a range of functions in the Gira One system. They allow, for example, the window status to be monitored. You can then use the Gira Smart Home App to see whether the windows in the house are open or closed. At the same time, you can use the window contacts to switch off the heating in the respective rooms if you forgot to close the window in winter. The heating, for example, then switches to frost protection in a window is open for more than 5 minutes.

Devices required

The window must be equipped with a window contact (e.g. Gira door or window contact 0953 02) for this example. In addition, you will require an actuator with a binary input (e.g. Gira blind actuator with binary inputs 5062 00) for this usage case.

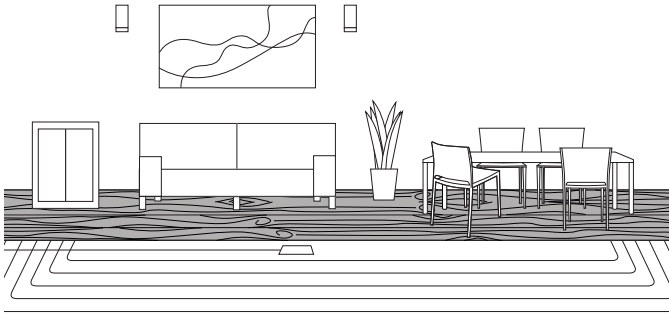
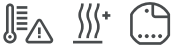
Project planning

1. Connect the window contact to a binary input.
2. Choose the "Window contact" function for the binary input and assign the corresponding heating as the device.
3. Activate the  visualisation function for the binary input and assign a name to the tile in the Gira Smart Home App (e.g. "Window – children's bedroom")

Automatic window-open detection

Even if there are no window contacts installed on your windows, you can automatically turn down the heating when ventilating. To do so, activate the "Automatic window-open detection" function on the heating actuator in the advanced parameters.

4.6.4 Limiting the floor temperature



Example of use

The floor temperature of electric floor heating systems installed under parquet floors may not exceed 27 °C, as otherwise the parquet floor will be damaged.

Gira One allows you to connect a Gira remote sensor (Item 1493 00) on binary input 3 of the flush-mounted actuator to implement a limit to the floor temperature. This guarantees that when the temperature is exceeded, the heating circuit is switched off to prevent damage to the parquet floor.

Project planning

1. Connect the remote sensor to binary input 3.
2. Choose the “Floor temperature” function for binary input 3 and assign the corresponding floor heating system as the device.
3. If you activate the visualisation function, the floor temperature is shown in a tile of its own in the Gira Smart Home App.
4. Choose the “Heating” function on the heating actuator and assign the corresponding floor heating system as the device.
5. The maximum floor temperature is defined on the heating actuator. Open the advanced settings on the heating actuator for the corresponding output, and define the limit for the floor temperature.

Parameter settings: Heating actuator 6-gang with controller

Output	Type of heating control	Continuous PI control
Output 1		
Output 2		
Message		
Heat demand		
System default values Setpoint temperatures heating		
The system defaults for the setpoint temperatures can be changed in the Gira Smart Home App. The system defaults are:		
Comfort		21
Standby		19
Night		17
Frost protection		7
Automatic window open detection		
If an open window is detected, the heating switches to frost protection mode. The automatic window open detection is only active if no window contact or gate contact is connected.		
Window open detection for temperature reduction		Off
Limit values for the floor temperature		
Maximum temperature		35

Advanced parameter settings for the heating actuator

4.6.5 Activating the boost function using a button



Example of use

The radiator in the bathroom of a residential building should be able to be heated to the highest setting for a certain time using a button. Once this time elapses, the temperature should be set back to the “normal” operating mode. This function can, for example, be used to briefly increase the temperature of the room for the duration of a bath. Gira One ensures that you don’t have to worry about resetting the temperature after the bath – it does this for you. This saves valuable energy while enjoying the warmth while in the bath.

Project planning

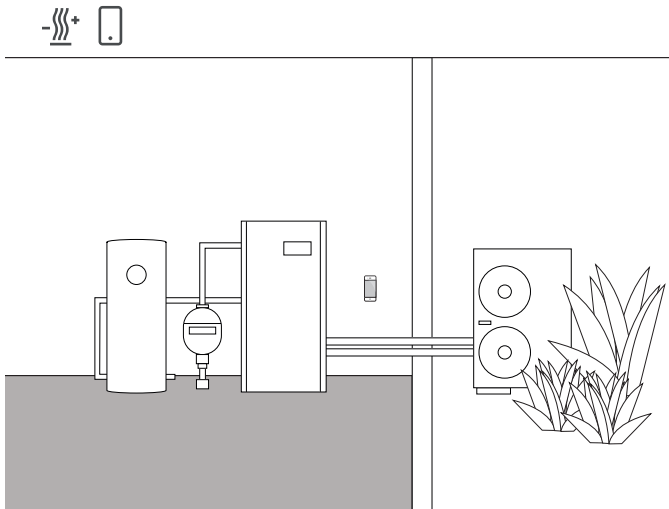
1. Drag a button into the bathroom.
2. Drag a heating device into the bathroom.
Please note that only the two devices “Radiator electric” and “Radiator hydronic” can be activated using a boost function.
3. Drag a heating actuator into the project.
4. Choose the “Boost” function on the button and assign the corresponding heating device.
5. Choose the “Heating” function on the heating actuator and assign the corresponding heating device.
6. The duration of the boost function is defined on the heating actuator. Open the advanced settings for the corresponding output on the heating actuator and define the duration of the boost function in minutes.

Parameter settings: Heating actuator 6-gang with controller

Output	system defaults are:	
Output 1	Comfort	21
Output 2	Standby	19
Message	Night	17
Heat demand	Frost protection	7
Automatic window open detection		
If an open window is detected, the heating switches to frost protection mode. The automatic window open detection is only active if no window contact or gate contact is connected.		
Window open detection for temperature reduction		0.2K / 4min
Duration of frost protection operation		20
Boost		
The boost function enables fast heating operation independent of the set operating mode for a predefined duration (boost duration). The boost function is only active if you have selected “Boost” on the button of this consumer.		
Boost duration		10

Advanced parameter settings for the heating actuator

4.6.6 Switching between heating and cooling



Example of use

Heat pumps are often installed in combination with hydronic floor heating systems. During the warm summer months, the floor heating systems can also be used for cooling. Here, the heat pump switches between heating and cooling.

The information that the heat pump is in cooling mode must be sent to the heating actuator so that it can also switch over to cooling mode. This is triggered via the binary input of a flush-mounted switching actuator, for example.

Required devices and consumers

For this example, you will require a heating actuator connected to the servos of the respective heating/cooling circuits (floor heating).

You will also require a switching actuator with binary input, connected to a zero-voltage heat pump output, which signals via switching contact whether the heat pump is in heating or cooling mode. In the GPA project, you will need the “heating and cooling – floor heating (hydronic)” consumer.

Project planning

1. Drag a heating actuator and a switching actuator with binary input into your project.
2. Select the “heating and cooling/switching” functions on the binary input and assign the “heating and cooling – floor heating (hydronic)” consumer.
3. Select the “heating and cooling” function on the heating actuator output and assign the “heating and cooling – floor heating (hydronic)” consumer.

⊕ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

System behaviour

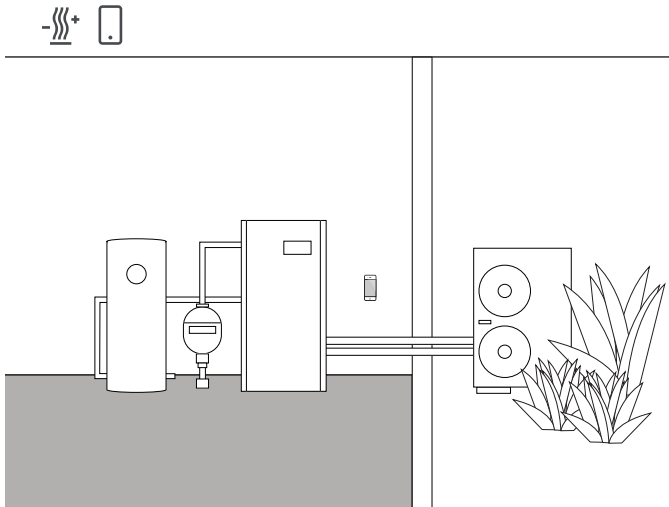
In winter:

The heat pump is in heating mode. If the temperature sensor transmits the signal that it is too cold in the room (actual temperature < set temperature), the heating actuator opens the control valve. This causes hot water to flow through the pipes in the floor and heat up the room.

In summer:

The heat pump is in cooling mode. If the temperature sensor transmits the signal that it is too warm in the room (actual temperature > set temperature), the heating actuator opens the control valve. This causes cold water to flow through the pipes in the floor and cool the room.

4.6.7 Heating/cooling requirement



Example of use

Systems with a heat pump use a circulation pump to transport the hot (or cold) water between the heat pump and the floor heating system. Some manufacturers offer the possibility of switching off the circulation pump via an input contact when there is no need for hot (or cold) water in the system. In this way, the circulation pump only runs if there is a need for heating or cooling, saving valuable electricity.

The Gira One heating actuators check the respective heating/cooling circuits to ascertain whether there is a need for heating or cooling. If there is a need for heating or cooling, a switching actuator channel automatically sends a signal to the heat pump input contact.

Required devices and consumers

For this example, you will require a heating actuator connected to the servos of the respective heating/cooling circuits (floor heating) and a switching actuator with binary input connected to the input contact of the circulation pump.

In the GPA project, you will require the "heating and cooling – floor heating (hydronic)" and "heating and cooling – heating/cooling requirement detector" consumers.

Project planning

1. Drag the heating actuator and, for example, a switching actuator with binary input and the aforementioned consumers into the project.
2. Select the "heating requirement" function for the switching actuator output and assign the "heating and cooling – heating/cooling requirement detector" consumer.
3. Select the "heating requirement" function on the heating actuator and assign the "heating and cooling – heating/cooling requirement detector" consumer.
This function can be found under "sensors", located under the outputs.

System behaviour

In winter: The heat pump is in heating mode.

If the temperature sensor transmits the signal that it is too cold in the room (actual temperature < set temperature), the heating actuator opens the control valve and sends the "heating requirement" signal to the system. The switching actuator assesses the "heating requirement" signal and switches on the circulation pump. This causes hot water to flow through the pipes in the floor and heat up the room.

If the temperature sensor transmits the signal that it is too warm in the room (actual temperature > set temperature), the heating actuator closes the control valve and sends the "no heating requirement" signal to the system. The switching actuator assesses the "no heating requirement" signal and switches off the circulation pump to save energy.

In summer: The heat pump is in cooling mode.

If the temperature sensor transmits the signal that the room is too warm (actual temperature > set temperature), the heating actuator opens the control valve and sends the "cooling requirement" signal to the system. The switching actuator assesses the "cooling requirement" signal and switches on the circulation pump. This causes cold water to flow through the pipes in the floor and cool the room.

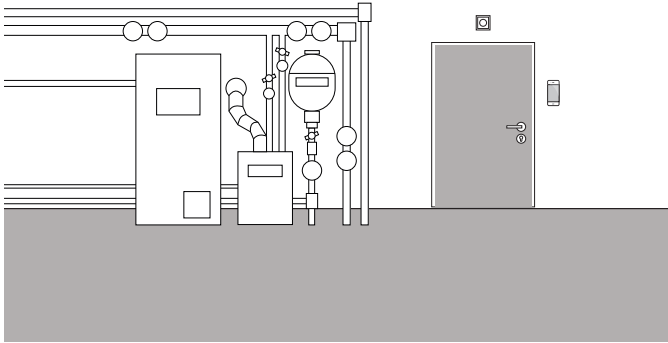
If the temperature sensor transmits the signal that it is too cold in the room (actual temperature < set temperature), the heating actuator closes the control valve and sends the "no cooling requirement" signal to the system. The switching actuator assesses the "no cooling requirement" signal and switches off the circulation pump to save energy.

⊕ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

More detailed information can be found on page 78.

4.6.8 Switching contact indicator



Example of use

Heating systems or heat pumps often have a switching contact that can transmit a fault signal. You can use this signal to receive information about a fault directly in the Gira Smart Home app, for example. In addition, a small signal light could be activated on the basement door on the ground floor as soon as the fault contact reports a fault.

Devices required


For this use case, you will require an actuator with binary input (e.g. Gira switching actuator with binary inputs 5061 00).

+ Note

When connecting devices with a binary input, please note that the bus and mains voltage terminals may not be placed in a shared connection space.

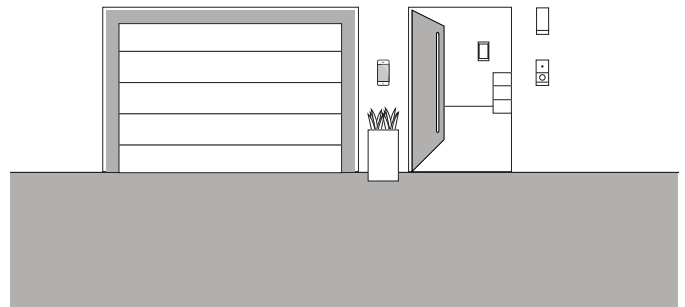
More detailed information can be found on page 78.

Project planning

1. Place the heating system fault contact parallel to binary inputs 1 and 2.
2. For binary input 1, select the “switching contact display” function.
3. Activate the  visualisation function for binary input 1 and assign a name to the tile in the Gira Smart Home App (e.g. “heating fault”).
4. For binary input 2, select the “switching” function and assign the corresponding light as the consumer.

4.7 Integration of further systems

4.7.1 Door communication system



Example of use

If you decide to integrate the Gira door communication system into a project in addition to Gira One, you can operate both systems from one device. In this case, the Gira G1 can be used as both a home station for a door communication system and as an operating point for my Smart Home.

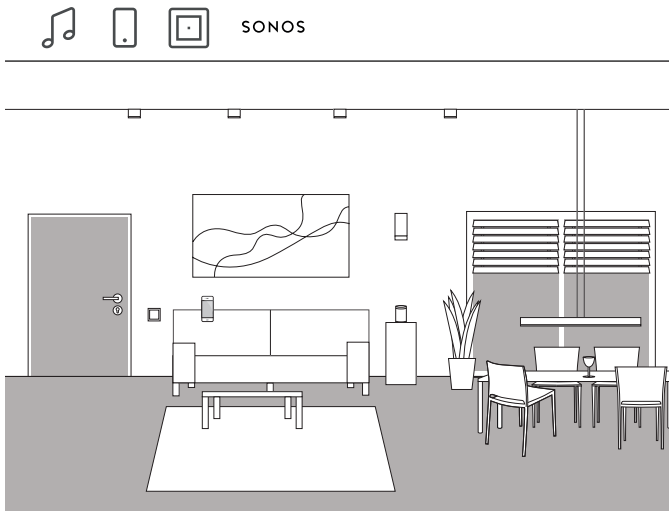
The Gira G1 floor call can also be triggered via a Gira One button. For this, select the “floor call (G1)” function on the corresponding button. Select the Gira G1(s) on which the floor call should be triggered as the consumer(s).

Door communication on your smartphone

If you want to use your smartphone to see who is at your door, you will need the “Gira DCS mobile” app in addition to the DCS IP gateway.

You can download the app free of charge from the respective app stores.

4.7.2 Sonos



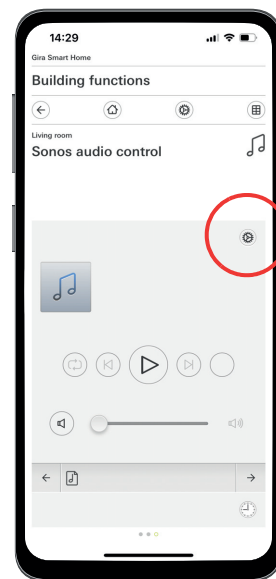
Example of use

If you use Sonos speakers in your house or apartment, you can connect these to your Gira One system to expand your Smart Home.

Thanks to the compatibility between Gira One and Sonos, the Sonos speakers can also be configured in the Gira Project Assistant. Once integrated, you can control your Sonos speakers using the Gira Smart Home app or a button. For example, you can start and stop your music using the upper rocker of a button. The lower rocker can then be used to call up a favourite playlist. It is also possible to connect other consumers in a scene using Gira One.

Project planning

1. Drag the “Sonos audio control” into the project in GPA.
2. If you also want to control the Sonos speaker via a button, drag a button into the project.
3. Assign the “Sonos audio control” function to the button. Select the Sonos consumer that you want to control using this button as the consumer.
4. Proceed with the start-up.
5. The connection to the Sonos system is established in the Gira Smart Home app:
Open the Sonos audio tile and tap the cog. You can then establish the connection to the Sonos speaker here.

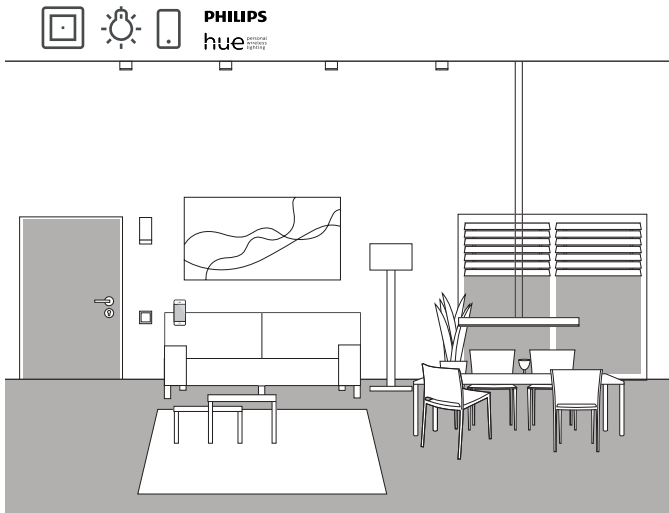


Setting up the Sonos speaker in the app

+ Notes

If you want to add a Sonos speaker at a later date, a user with administrator rights can set this up in the Gira Smart Home app. To do this, click on “Manage functions” in the system menu and then add a “Sonos audio control” using the + symbol.
If you want to operate a subsequently added Sonos speaker via a button, this will need to be set up via the GPA.

4.7.3 Philips Hue



Example of use

If you use Philips Hue lights in your house or apartment, you can connect these to your Gira One system to expand your Smart Home.

Thanks to the compatibility between Gira One and Philips Hue, the Philips Hue lights can also be configured in the Gira Project Assistant. This allows you to control your Philips Hue lights using Gira One devices or use them in Gira One scenes.

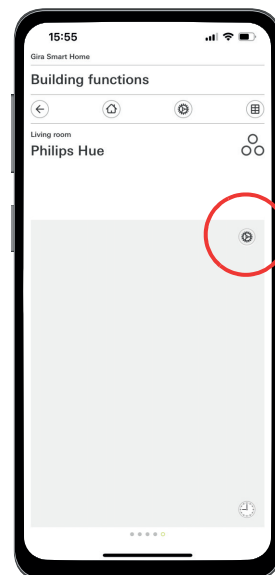
Project planning

+ Notes

A functional Philips Hue system is required for successful project planning.

Please note that it is not technically possible to control Gira One consumers via Philips Hue devices.

1. Drag the required Philips Hue consumers into the building structure.
2. Begin the start-up process.
During the start-up process, a tile is created in the Gira Smart Home app for each Philips Hue consumer.
3. Open the Gira Smart Home app and configure the corresponding Philips Hue consumers there.



Setting up Philips Hue in the app

+ Notes

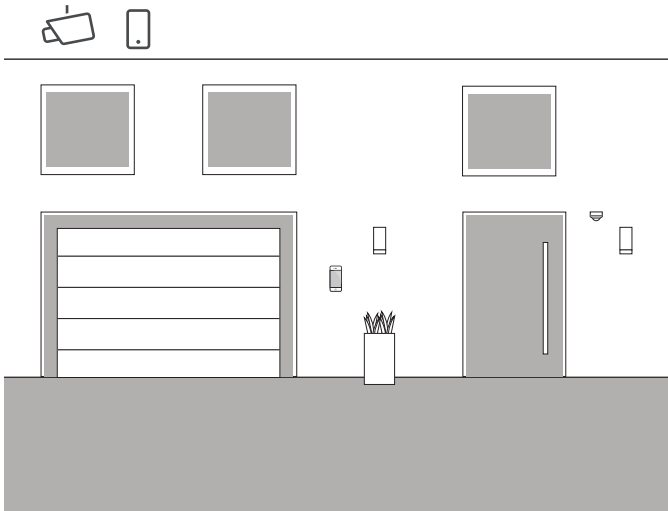
If you want to add a Philips Hue light at a later date, a user with administrator rights can set this up in the Gira Smart Home app. To do this, click on "Manage functions" in the system menu and then add a Philips Hue function using the + symbol.

If you want to operate a subsequently added Philips Hue light via a button, this will need to be set up via the GPA.

The Gira One system automatically selects the correct user interface for the Philips Hue consumer. This can be adjusted manually.

Please also note that the following Gira One functions cannot be used with Philips Hue consumers: staircase, wind/rain/frost alarm, sun protection, door contact

4.7.4 IP camera



Example of use

Do you ever wonder what's going on in your house when you're not at home?

If you plan to use indoor and/or outdoor cameras in your house, you can include these in your Gira One project. In this way, you can conveniently access your IP cameras in the Gira Smart Home app to check that everything is okay.

Note

The Gira One system uses ONVIF technology to set up the IP camera. As the use of ONVIF technology is implemented differently by different camera manufacturers, the settings and functions are highly dependent on the camera model used. For this reason, only the basic IP camera setup is shown here. If you encounter any problems, please contact the camera manufacturer.

For further information and a selection of preview URLs for various manufacturers, please see the FAQs from page 79 onwards.

Project planning in the Smart Home app

Requirement: Open the Smart Home app as an administrator or installer.

1. Open the Gira Smart Home app and tap the cog to open the system menu.
2. Tap "Manage functions".
3. Tap "+" to add a new function.
4. Select "IP Camera" as the new function.
5. Tap "Search for IP camera".
6. Select the IP camera you have found.
(If there is no camera listed, please read "Why is no IP camera displayed?").
7. Enter your credentials for the IP camera.
8. Then assign a symbol to the camera and give the camera function a name.

Why is no IP camera displayed?

If no IP camera is listed after step 5, check the following settings for your IP camera depending on manufacturer:

- Is the ONVIF function enabled?
- Have you created a user for the IP camera?
- Have you created a user for ONVIF?
(If multiple users need to be created, we recommend using the same credentials for all users)
- Which authentication was selected?
(We recommend using basic authentication in the Gira Smart Home app)
- Is the pan/tilt/zoom (PTZ) function enabled?
- Have you enabled a substream in the video stream settings and set "Motion-JPEG" as the video encoding there?
- Have you selected the lowest possible resolution and frame rate?
- Are CGI/API control commands enabled?

Once you have checked the settings above and adjusted them if necessary, tap on "Search for IP camera" again in the Smart Home app.

Why is no camera image displayed?

If you have found and successfully set up the IP camera and then a wait signal is displayed instead of the camera image, there is probably an error with the preview URL. Please check the following settings:

- Does your IP camera provide a preview URL?
If yes, enter this into the camera function settings (if multiple users need to be created, we recommend using the same credentials for all users).
- Have a username and password been entered for the preview URL?

Manual IP camera setup

If the IP camera setup was unsuccessful even after following the instructions above, it is possible to set up the IP camera manually:

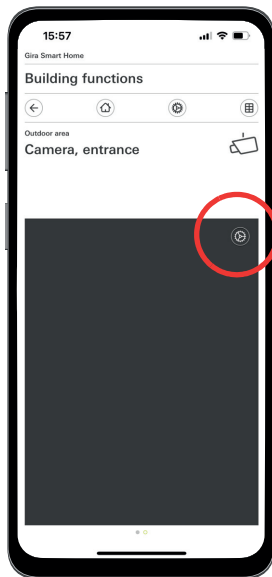
1. First, enable a substream in the videostream camera settings. Here, set "Motion-JPEG" as the video encoding.
1. Open the Gira Smart Home app and tap the cog to open the system menu.
2. Tap "Manage functions".
3. Tap "+" to add a new function.
4. Select "IP Camera" as the new function.
5. Tap "Manual input".
6. Enter the preview URL, for example, for:
 - Mobotix**
`http://benutzername:passwort@ipadresse/control/fast-stream.jpg?stream=full&preview&size=640x360&fps=20`
 - Hikvision**
`http://benutzer:passwort@ipadresse/ISAPI/Streaming/channels/102/httppreview`
 - Axis**
`http://Benutzer:Passwort@IP-Adresse/axis-cgi/mjpg/video.cgi`
 - Dahua**
`http://benutzername:passwort@ipadresse/cgi-bin/mjpg/video.cgi?channel=1&subtype=1`
7. Then assign a symbol to the camera and give the camera function a name.

4.7.5 eNet

Create the “IP camera” function template in the GPA

If you drag the “IP camera” function template into the building in the GPA, a tile will be created for the camera function in the Gira Smart Home App on start-up.

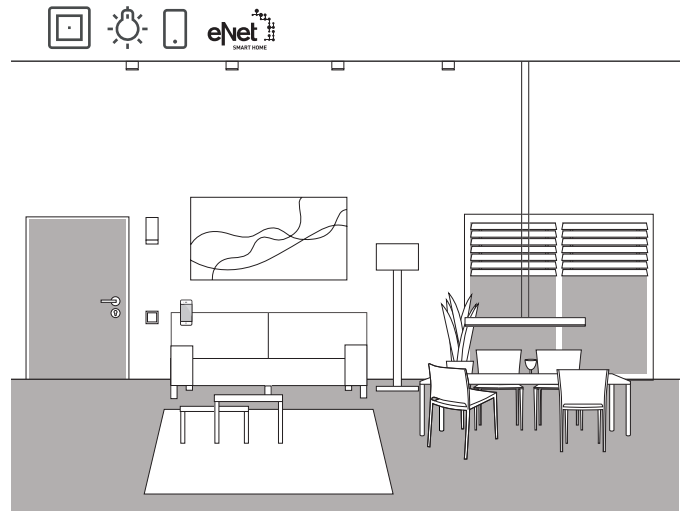
To establish the connection to the IP camera, call up the corresponding tile in the Gira Smart Home app and tap the cog. You can then continue with the IP camera setup as described in “Project planning in the Smart Home app”.



Setting up the IP camera in the app

+ Note

To complete the setup, please carry out a test of the camera function via remote control.
To do this, connect to the Smart Home via the mobile network (LTE/4G) and call up the camera function.



Example of use

If you are already using eNet SMART HOME in your house or apartment, you can connect the system to the Gira One functions to expand your Smart Home.

Thanks to the compatibility between Gira One and eNet SMART HOME, the eNET functions can also be configured in the Gira Project Assistant. In this way, the eNet SMART HOME system functions can be controlled via Gira One devices, the Gira Smart Home app or the Gira G1.

+ Notes

Successful project planning requires a functioning eNet SMART HOME system with an eNet server.

Please note that it is not technically possible to control Gira One consumers via eNet devices.

Please also note that the following Gira One functions cannot be used with eNet consumers: staircase, wind/rain/frost alarm, sun protection, door contact

If eNet consumers are controlled via the Gira One system, all eNet consumers are reliably switched within a few ms.

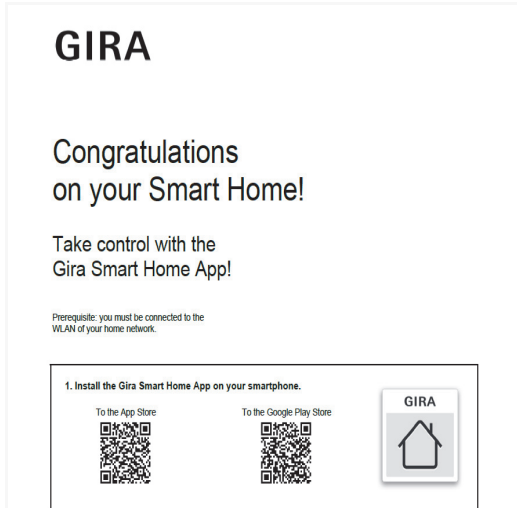
However, it may take a few seconds for the eNet consumer status to be reported back (e.g. in the Gira Smart Home app or on the Status LED of a Gira One button).

Project planning

1. Drag the required eNet consumers into the building structure.
2. Begin the start-up process.
During the start-up process, a tile is created in the Gira Smart Home app for each eNet consumer.
3. Open the Gira Smart Home app and configure the corresponding eNet consumers by adjusting the individual functions using the settings function.
To do this, you will need the administration access details for your eNet server.

5 — Benefits for installers

5.1 Instructions for end customers



Instructions for end customers

At the end of a project, you should hand over complete documentation for your Smart Home functions to your customers.

In the past, this required you to laboriously collect and print out all the process-relevant documents in order to then provide the customer with a bundle consisting of many different individual documents.

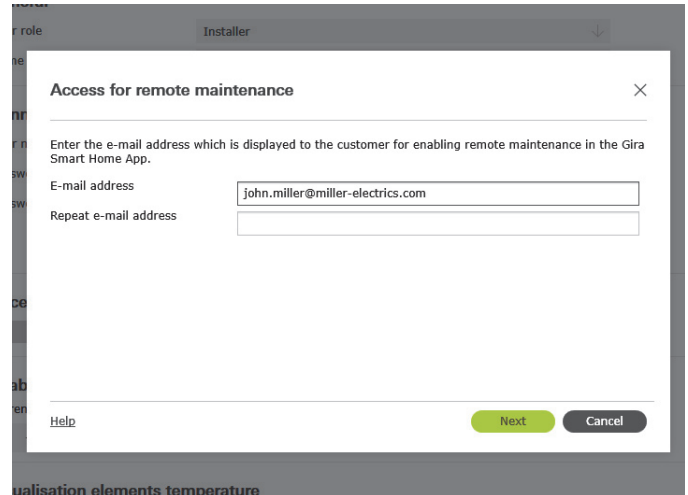
Now, the Gira Project Assistant takes care of the project documentation:

At the push of a button, the GPA automatically creates instructions for end customers that contain all the relevant information. This documentation is designed to be handed over to the customer in electronic (PDF file) or printed form.

Note

The "Project documentation" function is also available as a supplement to the end customer documentation. The project documentation includes a clear list of all the devices and functions used in the project together with the set parameters.

5.2 Remote maintenance



Setting up remote maintenance in the GPA

If customers have change requests for existing projects, this can become bothersome with many other systems. For minor changes to the project, the customer also has to be on site, appointments must be organised, travel costs are incurred, etc.

With Gira One, you can use the remote maintenance function to make changes to the project, correct any errors or perform system updates from the office. Ask your customers to allow you to perform remote maintenance before starting any work. Your customer can do this easily and conveniently via the Gira Smart Home app. Once you have completed all the project activities, call your customer again and inform them that they can deactivate remote maintenance again.

Setting up remote maintenance during project planning

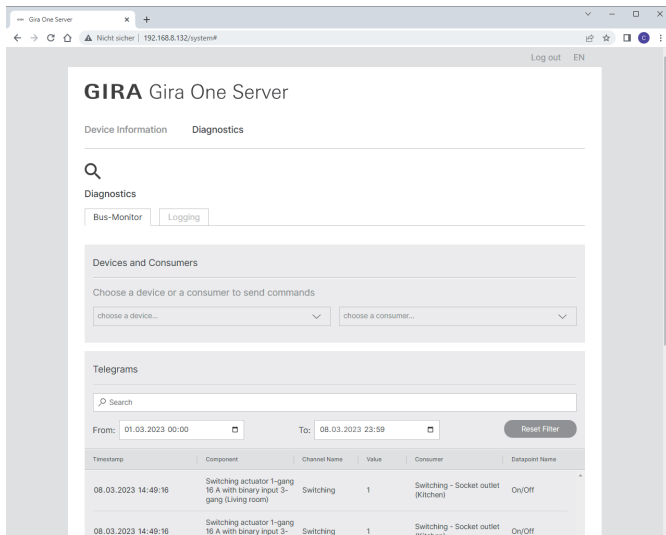
Remote maintenance is set up in the "User administration" view of the GPA. To set up remote maintenance, your PC must be connected to the GPA and the Gira One server must be connected to the internet.

1. Switch to the "User administration" view.
2. Select the "Installer" user.
3. Click the "Set up access" button in the "Access for future remote maintenance" area.
4. Confirm the terms of use and enter the installer's e-mail address. This address will be displayed to the customer in the Gira Smart Home app at a later date.
5. Begin start-up.

Note

During initial start-up, remote maintenance is automatically activated for the installer. If the customer does not want this, they need to deactivate the remote maintenance function in the Smart Home app.

5.3 Diagnostic monitor



Diagnostic monitor

Things sometimes happen during a project that cannot be explained at first glance. For example, the Sonos box could play for five minutes every night or the light in the hallway could switch on and off constantly.

The Gira Project Assistant diagnostic function can help you to find the cause of such an error.

In the Gira One system, there is a continuous recording of all telegrams logged on the server. As this stores the last 500,000 telegrams on the server, there is no need to activate this logging and then wait for the error to occur again, as is the case with other systems.

After starting the diagnostic function in the GPA, the Gira One server device website opens in your browser. Once you have logged in using the installer's access data, you can search back several days and quickly find the relevant telegram. This is very helpful and saves an enormous amount of time.

And best of all, you do not even have to travel to customer sites for the diagnostic function. Simply ask your customer to activate remote maintenance. You can then perform the troubleshooting from the comfort of your office.

6 — Project planning with the Gira Project Assistant (GPA)

Gira One system project planning takes place using the Gira Project Assistant (GPA). You can first create a project using the GPA user interface. You can then map building structures and adjust settings for the devices and components.

Using drag-and-drop, you can create building parts and rooms, as well as individual devices and components of the system using the library and device catalogue. You do not have to have the actual devices to hand to do this.

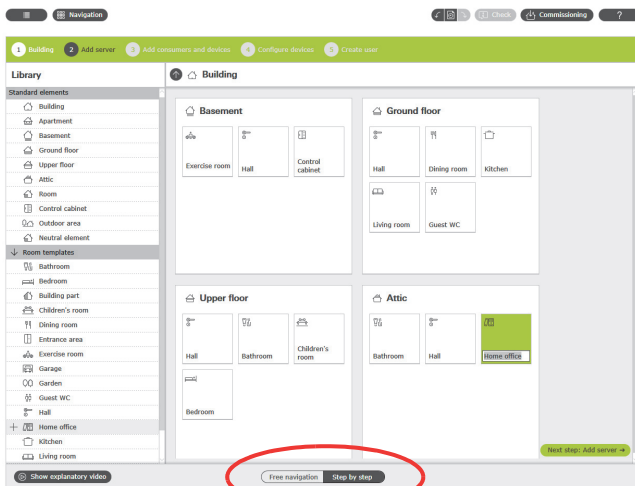
Finally, the GPA provides complete documentation at the touch of a button. The summarised project data can be provided to the customer as a printout or PDF.

6.1 Download and installation

You can always find the latest Gira Project Assistant software version on the Gira homepage, under Downloads. You can find the system requirements and the download link at the following address:

- <https://partner.gira.com/en/service/download/index.html>

6.2 Step by step/Free navigation



Selection: Free navigation/Step by step

In the GPA, you can freely choose how you want to edit a project. Using the switch in the bottom part of the screen, you can switch between “Free navigation” or “Step-by-step” mode at any time.

Step by step

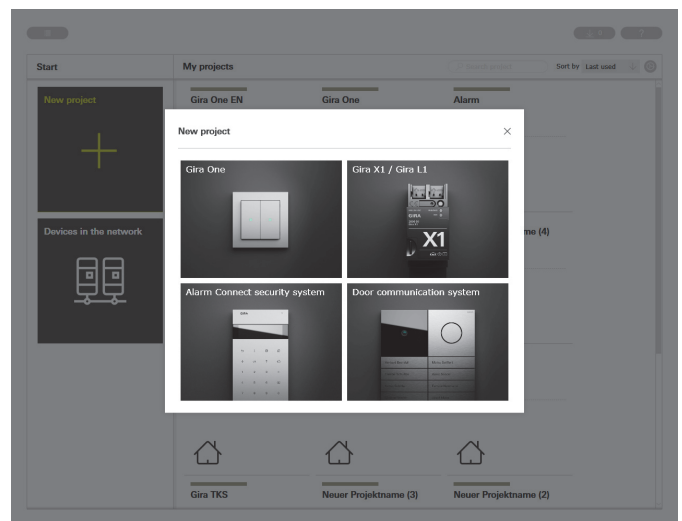
This mode guides you through the project step by step. After each project section, click the button at the bottom right to move to the next step. Here, the GPA checks whether your project planning is complete and provides appropriate hints if necessary.

Free navigation

This mode is suitable for experienced GPA users or for subsequent, quick changes to a project. You can move around freely in the GPA, select any views you want, and edit your project there.

6.3 Create new project

To create a new project in the GPA, click on the “New project” tile. In the dialogue that opens, select the “Gira One” system. Then enter a name for the project and a project password.

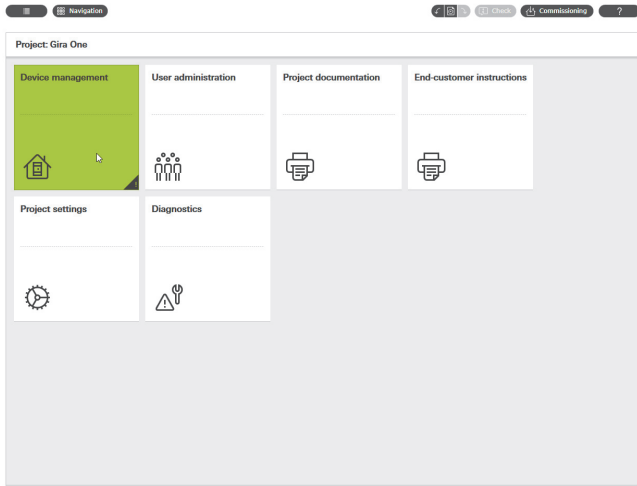


Create new project

6.4 Opening the buildings and devices view

If you have created a new project, the project view opens first. To start with the project, you first need to create the building structure for your project.

To do this, click on the “Buildings and devices” tile.



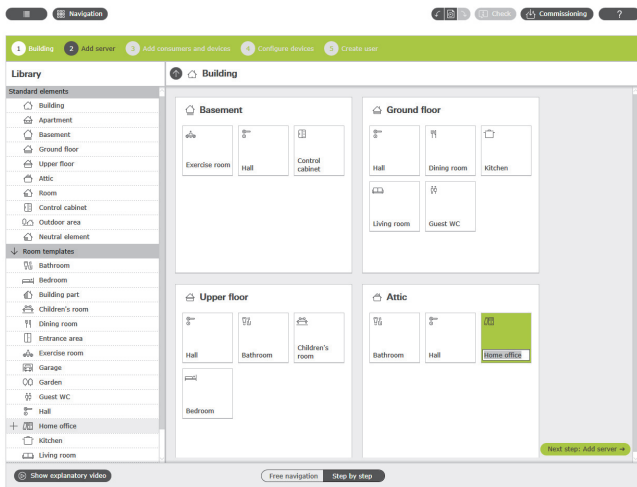
Project view

6.5 Create building structure

In the left-hand column, you will find the library with the building elements, such as floors or rooms. You can easily drag these elements from the library into the workspace to map your project.

All building elements can, of course, be renamed as desired and given other symbols.

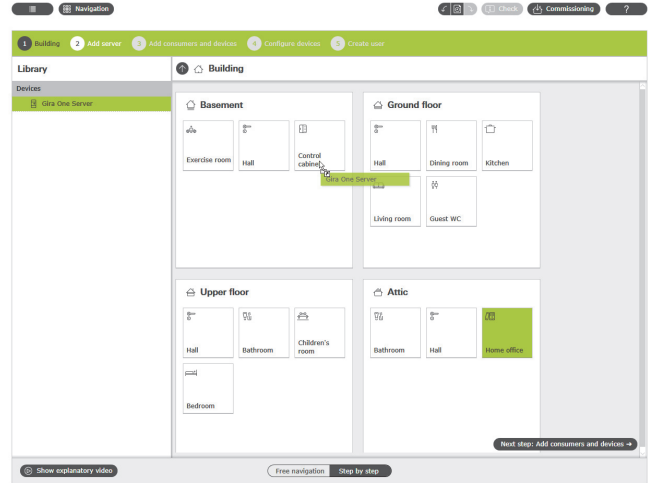
The building structure that you create here in the GPA will also be used for visualisation in the Gira Smart Home app once start-up is complete.



Create building structure

6.6 Inserting the Gira One server

Drag the Gira One server from the left-hand column into your project, e.g. into a “control cabinet”.



Dragging the Gira One server into the project

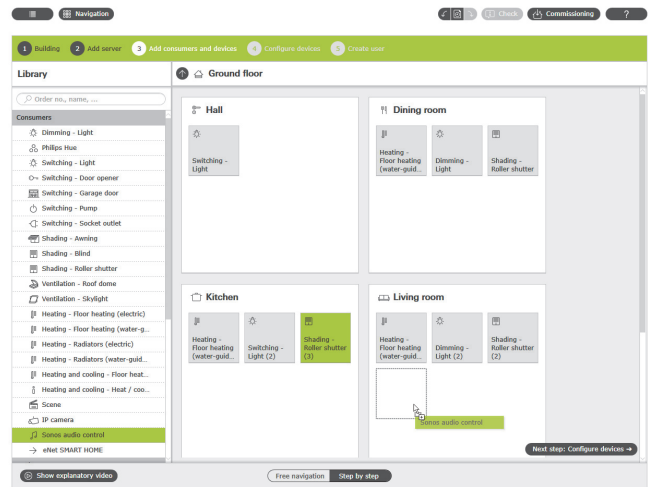
6.7 Adding consumers and devices

Now add the consumers and devices into your project.

Consumers include switched or dimmed lights, blinds or heating systems. The consumers are dragged into the corresponding rooms.

Operating elements, such as buttons or the Gira G1, are also located in the respective rooms.

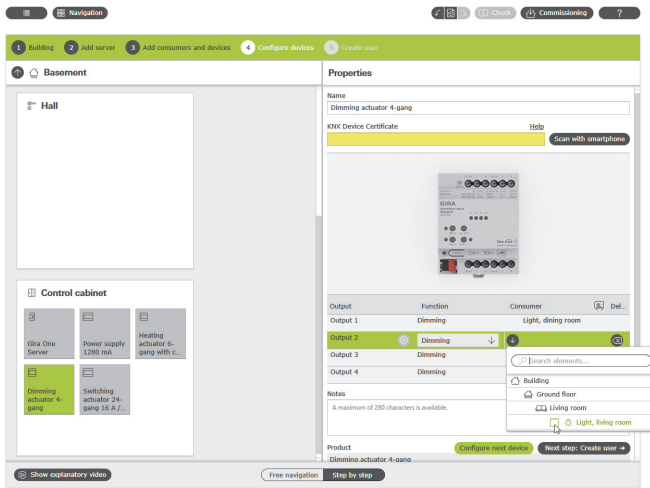
For DRA devices, such as switching and heating actuators, it is a good idea to create a “control cabinet” in the GPA project into which all DRA devices can be dragged.



Adding consumers and devices

6.8 Configuring devices

The devices are now configured. Select a device by clicking on the corresponding tile and adjust the corresponding settings. If you are working in step-by-step mode, click on “Configure next device” at the bottom to configure all the devices in sequence. The GPA checks that no device is forgotten.



Configuring devices

The following settings are required for successful start-up of all devices and functions:

- Device certificates for all installed devices.
- Assign functions and consumers.

6.8.1 Enter device certificate

The connection between the devices planned in the GPA and the devices actually installed in the project is established via the device certificates. Each Gira One device has a device certificate through which it can be uniquely identified. You must enter this device certificate in the GPA. You can find the device certificate on a label on the device or on the Secure Card that is included with every device.

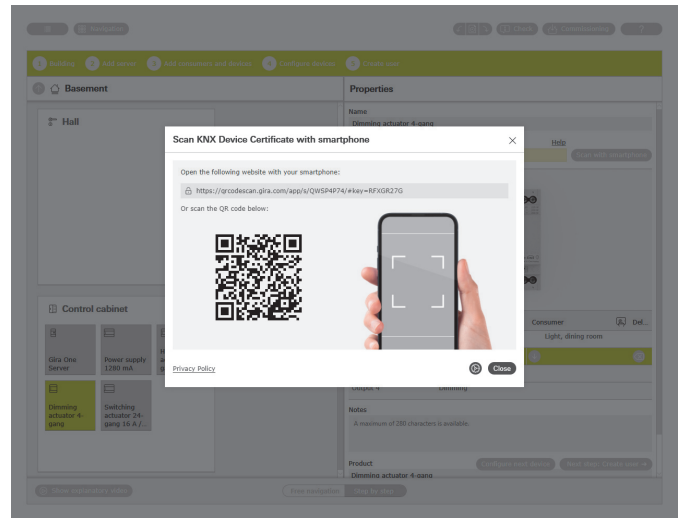
+ Note

The device certificate can be found on a label on the device or on the Secure Card under the following names:
 Gira One server: Gira Device Key
 Gira G1: Initial device password
 Actuators, buttons: KNX device certificate

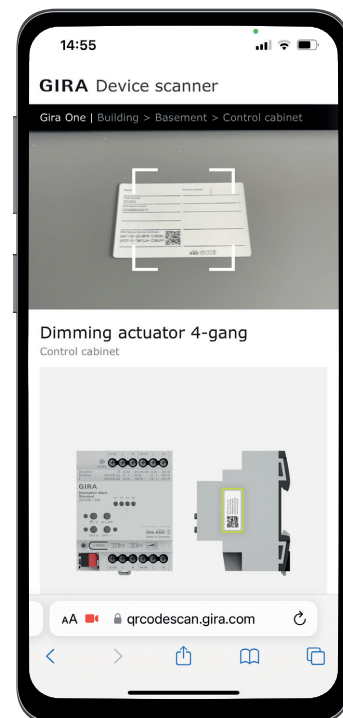
Scanning device certificates using a smartphone

To avoid having to enter the device certificates manually, you can easily scan the devices using your smartphone. This requires your PC to be connected to the GPA and your smartphone to be connected to the internet.

1. Click on the “Scan with smartphone” button in the GPA.
2. Scan the QR code displayed on the monitor using your smartphone.
The GPA then establishes an encrypted connection with your smartphone.
3. You can then enter the device certificate QR codes from the Secure Card into the GPA by scanning them using your smartphone camera.



Scanning connection codes using a smartphone



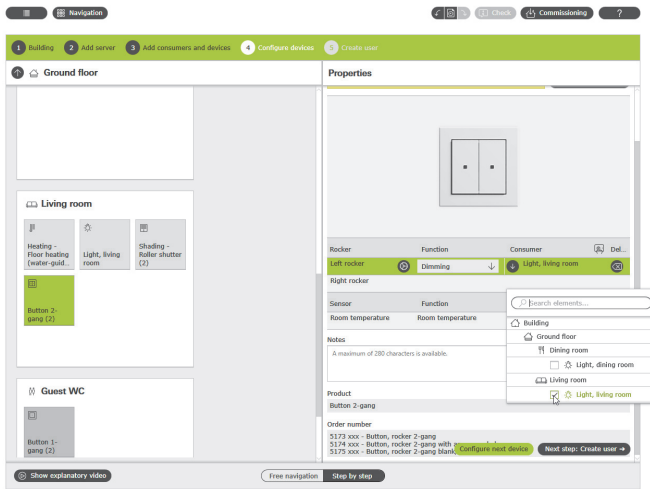
Scanning a device certificate from the Secure Card using a smartphone

6.8.2 Assigning functions and consumers

To connect the devices to the consumers, first select the corresponding function. You can then assign the desired consumer.

Example:

If you want to assign the “Dimming – light” consumer to a button, select the button, select the “Dimming” function for the rocker and then assign the “Dimming – light” consumer.



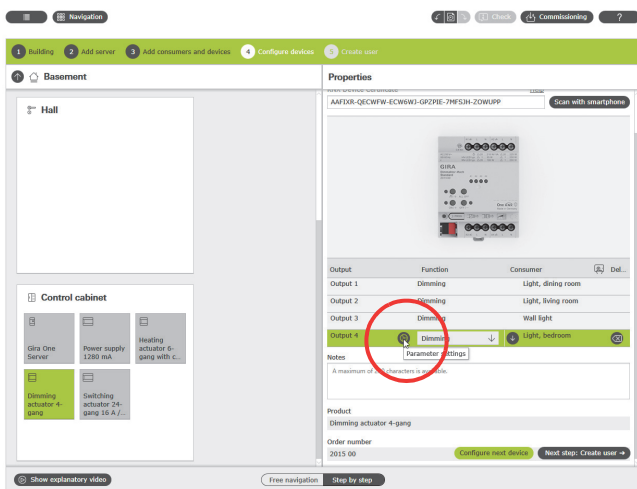
Assigning functions and consumers

6.8.3 Setdevice parameters

If you do not want to use the preset device parameters, you can adjust the parameters for each device function to your needs in the “Parameter settings” dialogue.

You can open the “Parameter settings” dialogue by clicking on the cog next to the corresponding function.

A list of all adjustable parameters can be found from page 63 onwards.

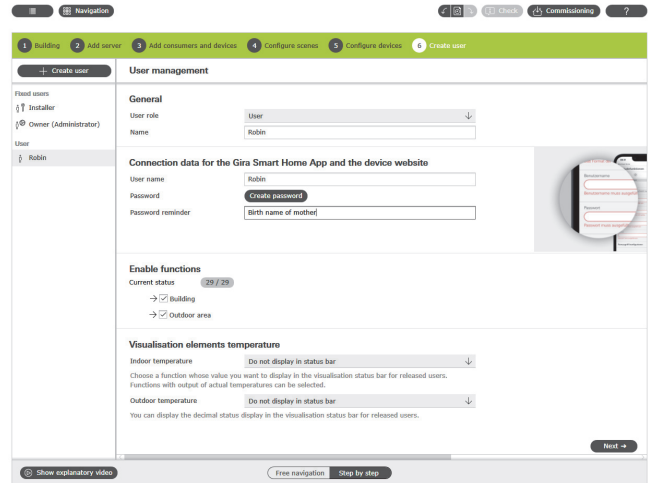


Accessing advanced parameters

6.9 Create user

For each new project, two users are automatically created with “Installer” and “Owner”. You can establish the connected data for these two users here. You can also create additional users (additional residents or Smart Home app users).

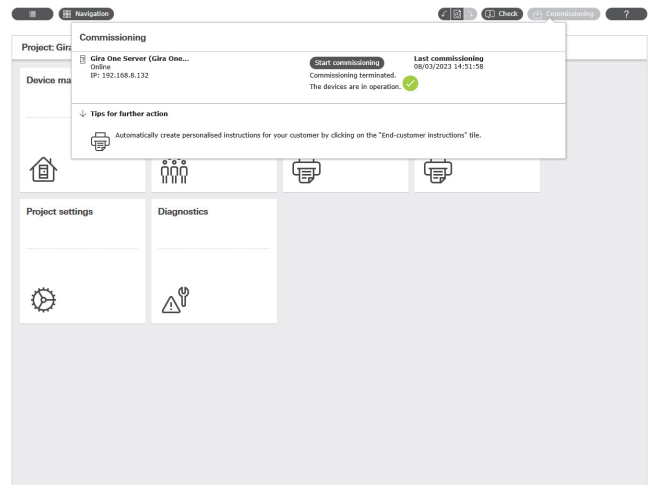
You can use the connection data defined here at a later date to establish the connection to the Gira Smart Home app.



Create user

6.10 Start-up project

Once everything is complete, the project is transferred to the Gira One server. To do this, click on the button at the top right to initiate start-up.



Start-up

6.11 Printing out project documentation and instructions for end customers

After successful start-up, you can transfer the project to the customer. Here, the GPA supports you with the automatically generated project documentation and instructions for end customers, which are created individually for each of your projects and therefore correspond to the individual Smart Home project.

Project documentation

The project documentation clearly lists all the devices and functions with the set parameters. This documentation can then be printed out or provided to your customer as a file together with the project file.

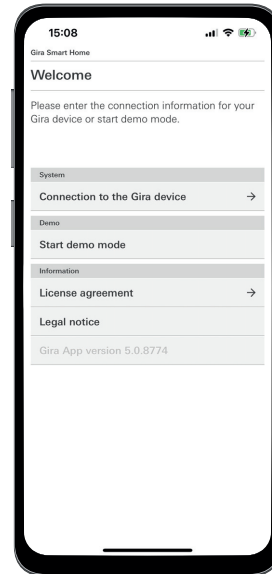


Project documentation

Instructions for end customers

All the functions are listed by room in the instructions for end customers. Furthermore, the instructions contain all users with the possibility of sorting and listing the connection data. And last but not least, the document gives initial tips about the Smart Home app possibilities, to allow the customer to start operating their Smart Home immediately.

6.12 Connecting the system to the Gira Smart Home app



Establishing the connection to the Gira One server

1. Open the Gira Smart Home app.
2. Tap the cog to open the settings menu.
3. Tap on "System".
4. Select "Connecting the Gira device".
5. If the Gira One server is not displayed, enter the IP address manually. You can find the IP address in the GPA in the "Devices in network" view.
6. Enter the username and password of the created user.
7. Tap the [ok] button.

The data is saved and the connection to the Gira One system is established.



Instructions for end customers

7 Parameters

7.1 1-/2-gang rocker button

Status LED brightness	Off Strongly dimmed Dimmed Normal Bright Very bright
<p>The brightness of the status LED can be set here.</p> <p>In the case of a 2-gang rocker button, this setting applies to both LEDs.</p>	
Colour	Red Green Blue
<p>The colour of the status LED can be set here</p> <p>In the case of a 2-gang rocker button, the status LED colour can be set separately for each rocker.</p>	
Function	always OFF always ON Actuation display Status display
<p>The function of the status LED can be set here.</p> <p>In the case of a 2-gang rocker button, the status LED function can be set separately for each rocker.</p> <p>The settings have the following functions:</p> <ul style="list-style-type: none"> - always OFF The status LED is always off - always ON The status LED is always on. - Actuation display The status LED lights up when the rocker is actuated. - Status display The status LED displays the status of the function triggered by the rocker. If feedback from several switching consumers is displayed, the status LED is switched on as soon as at least one consumer from the group is switched on. 	
Temperature calibration	-12.8 – 12.7 K
<p>The value for the temperature calibration can be entered here if the temperature measured in the button by the temperature sensor deviates from the actual room temperature.</p> <p>To establish the temperature deviation, the actual room temperature should be determined by means of a reference measurement using a calibrated temperature gauge.</p> <p>The measured value must be raised if the value measured by the sensor is below the actual temperature.</p> <p>The measured value must be lowered if the value measured by the sensor is above the actual temperature.</p>	

7.1.1 Operating concept of the buttons

The operating concepts for the buttons are fixed and cannot be changed. Depending on the function used, the following operating concepts are preset.

Function	Operating concept
Switching – light	Top: Toggle Bottom: Toggle
Dimming – light	Top: Short actuation: Toggle Long actuation: Brighter Bottom: Short actuation: Toggle Long actuation: Dimmer
Stairway	Top: Switch on Bottom: Switch on
Shading	Top: UP Bottom: DOWN
Scene	Top: Scene variant 1 Bottom: Scene variant 2
Heating functions	The heating functions are operated exclusively via the Gira Smart Home app. Operation and setting of set-points via buttons is not possible. Boost function: Top: Switch on Bottom: Switch on
Switching – garage door	Top: Impulse/rising edge Bottom: Impulse/rising edge
Switch – door opener	Top: Impulse/rising edge Bottom: Impulse/rising edge
Sonos audio control	Top: Play/Pause toggle Bottom: Play Favourite 1
Floor call (Gira G1)	Top: Trigger call Bottom: Trigger call

7.2 Dimming actuator 1-gang 200 W with binary input 3-gang

7.2.1 Output

Load type	universal (with calibration procedure) electronic transformer (capacitive/trailing edge) conventional transformer (inductive/leading edge) LED (trailing edge) LED (leading edge)
<p>The dimming principle of the dimming channel is specified here.</p> <ul style="list-style-type: none"> - universal (with calibration procedure): The dimming channel automatically sets the connected load type. After a programming procedure, after bus voltage recovery (without mains voltage) or after switching on the mains voltage supply of a load output, the actuator automatically calibrates itself to the connected load. In the case of ohmic loads, the calibration procedure is accompanied by brief flickering and lasts up to 10 seconds, depending on the conditions of the mains. - electronic transformer (capacitive/trailing edge): The dimming channel is set to the trailing edge principle. Ohmic loads or electronic transformers can be connected to the output. - conventional transformer (inductive/leading edge): The dimming channel is set to the leading edge principle. Conventional transformers can be connected to the output. - LED (trailing edge): The dimming channel is set to an optimised trailing edge principle. HV LEDs or compact fluorescent lamps that are optimised for this dimming principle can be connected to the output. - LED (leading edge): The dimming channel is set to an optimised leading edge principle. HV LEDs or compact fluorescent lamps that are optimised for this dimming principle can be connected to the output. 	
Minimum brightness	Level 1 (darker) Level 2 ... Level 7 Level 8 (brighter)
<p>The level set here is a measurement of the smallest adjustable residual phase angle of the truncated output signal. The value set here cannot be dropped below in any switched-on operating state of the dimming channel, i.e. the light cannot be made darker than set here in any case.</p>	

Switch-on brightness	Fixed switch-on brightness Last brightness value
<p>Here you can specify the brightness value at which the light should be switched on when the button is pressed briefly:</p> <ul style="list-style-type: none"> - Fixed switch-on brightness In this case, you can select a fixed value (1 - 100%) in the "Switch-on brightness value" field that opens. - Last brightness value The light is switched on with the brightness value that was active and stored internally before the last switch-off. 	
Switch-on brightness value	1 5 ... 100
<p>Here you can set the switch-on brightness. This parameter is only available if the "Fixed switch-on brightness" setting has been selected for the "Switch-on brightness" parameter.</p>	
Maximum brightness value	1 5 ... 100
<p>The value set here cannot be exceeded in any switched-on operating state of the dimming channel, i.e. the light cannot be made lighter than set here in any case.</p>	
Switch-on delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-on delay is parameterised here. After receiving an ON telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched on. An OFF telegram during the switch-on delay cancels the delay and sets the switching state to "OFF".</p>	
Switch-off delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-off delay is parameterised here. After receiving an OFF telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched off. An ON telegram during the switch-off delay cancels the delay and sets the switching state to "ON".</p>	

7.2.2 Input

Staircase switch switch-off delay	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration of the switch-on time of the staircase function is parameterised here.</p> <p>After the time set here has elapsed, the lighting is switched off or (if parameterised) the advance warning is started.</p> <p>A further ON telegram during the switch-off delay time retriggers the time, i.e. the time set here is restarted.</p> <p>The staircase function is only active if the "Staircase" function has been selected for the button of this dimming channel.</p>	
Advance warning	0 ... 3599 s (0 ... 59:59 min)
<p>According to DIN 18015-2, the advance warning is intended to warn people who are still on the staircase that the light will soon be switched off automatically.</p> <p>The advance warning set here follows the time set in the "Staircase switch switch-off delay" parameter.</p> <p>As an advance warning, the "Dim to brightness value" parameter can be used to set an advance warning brightness which is to apply before the channel switches off permanently. As a rule, the advance warning brightness has a reduced brightness value compared to the switch-on brightness.</p>	
Dim to brightness value	1 5 ... 100
<p>Here you set the brightness value that is to apply during the advance warning. During the advance warning, the dimming channel is set to the parameterised brightness value.</p> <p>This parameter is only available if a time has been entered for the "Advance warning" parameter.</p>	

Debounce time	10 ...255 ms
<p>This parameter defines the debouncing time individually for the input.</p> <p>The input signal at the input is evaluated after a delay in accordance with the time set here.</p>	
Contact type	NO contact NC contact
<p>Specify the contact type of the connected contact here.</p>	
When closing the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is closed.</p>	
When opening the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is opened.</p>	
Temperature calibration	-12.8 – 12.7 K
<p>The value for the temperature calibration can be entered here if the temperature measured by the connected sensor deviates from the actual room temperature.</p> <p>To establish the temperature deviation, the actual room temperature should be determined by means of a reference measurement using a calibrated temperature gauge.</p> <p>The measured value must be raised if the value measured by the sensor is below the actual temperature.</p> <p>The measured value must be lowered if the value measured by the sensor is above the actual temperature.</p>	

7.3 Dimming actuator, 4-gang

Load type	universal (with calibration procedure) electronic transformer (capacitive/trailing edge) conventional transformer (inductive/leading edge) LED (trailing edge) LED (leading edge)
<p>The dimming principle of the dimming channel is specified here.</p> <ul style="list-style-type: none"> - universal (with calibration procedure): The dimming channel automatically sets the connected load type. After a programming procedure, after bus voltage recovery (without mains voltage) or after switching on the mains voltage supply of a load output, the actuator automatically calibrates itself to the connected load. In the case of ohmic loads, the calibration procedure is accompanied by brief flickering and lasts up to 10 seconds, depending on the conditions of the mains. - electronic transformer (capacitive/trailing edge): The dimming channel is set to the trailing edge principle. Ohmic loads or electronic transformers can be connected to the output. - conventional transformer (inductive/leading edge): The dimming channel is set to the leading edge principle. Conventional transformers can be connected to the output. - LED (trailing edge): The dimming channel is set to an optimised trailing edge principle. HV LEDs or compact fluorescent lamps that are optimised for this dimming principle can be connected to the output. - LED (leading edge): The dimming channel is set to an optimised leading edge principle. HV LEDs or compact fluorescent lamps that are optimised for this dimming principle can be connected to the output. 	
Minimum brightness	Level 1 (darker) Level 2 ... Level 7 Level 8 (brighter)
<p>The level set here is a measurement of the smallest adjustable residual phase angle of the truncated output signal. The value set here cannot be dropped below in any switched-on operating state of the dimming channel, i.e. the light cannot be made darker than set here in any case.</p>	

Switch-on brightness	Fixed switch-on brightness Last brightness value
<p>Here you can specify the brightness value at which the light should be switched on when the button is pressed briefly:</p> <ul style="list-style-type: none"> - Fixed switch-on brightness In this case, you can select a fixed value (1 - 100%) in the "Switch-on brightness value" field that opens. - Last brightness value The light is switched on with the brightness value that was active and stored internally before the last switch-off. 	
Switch-on brightness value	1 5 ... 100
<p>Here you can set the switch-on brightness. This parameter is only available if the "Fixed switch-on brightness" setting has been selected for the "Switch-on brightness" parameter.</p>	
Maximum brightness value	1 5 ... 100
<p>The value set here cannot be exceeded in any switched-on operating state of the dimming channel, i.e. the light cannot be made lighter than set here in any case.</p>	
Switch-on delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-on delay is parameterised here. After receiving an ON telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched on. An OFF telegram during the switch-on delay cancels the delay and sets the switching state to "OFF".</p>	

Switch-off delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-off delay is parameterised here.</p> <p>After receiving an OFF telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched off.</p> <p>An ON telegram during the switch-off delay cancels the delay and sets the switching state to "ON".</p>	
Staircase switch switch-off delay	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration of the switch-on time of the staircase function is parameterised here.</p> <p>After the time set here has elapsed, the lighting is switched off or (if parameterised) the advance warning is started.</p> <p>A further ON telegram during the switch-off delay time retriggers the time, i.e. the time set here is restarted.</p> <p>The staircase function is only active if the "Staircase" function has been selected for the button of this dimming channel.</p>	
Advance warning	0 ... 3599 s (0 ... 59:59 min)
<p>According to DIN 18015-2, the advance warning is intended to warn people who are still on the staircase that the light will soon be switched off automatically.</p> <p>The advance warning set here follows the time set in the "Staircase switch switch-off delay" parameter.</p> <p>As an advance warning, the "Dim to brightness value" parameter can be used to set an advance warning brightness which is to apply before the channel switches off permanently. As a rule, the advance warning brightness has a reduced brightness value compared to the switch-on brightness.</p>	
Dim to brightness value	1 5 ... 100
<p>Here you set the brightness value that is to apply during the advance warning. During the advance warning, the dimming channel is set to the parameterised brightness value.</p> <p>This parameter is only available if a time has been entered for the "Advance warning" parameter.</p>	

7.4 Heating actuator, 6-gang with controller

7.4.1 Output

Valve with no voltage (direction of action)	open closed
<p>Both de-energised closed and de-energised open valve drives can be connected to the outputs of the heating actuator. You can use this parameter to set how the connected servo behaves in the de-energised state.</p> <p>Only servos with the same characteristic (de-energised closed/open) may be connected to each valve output.</p>	
Type of heating regulation	Continuous PI control Switching 2-point control
<p>The control principle should be set depending on the heating system and the insert used.</p> <p>Continuous PI control The continuous PI control is a control principle with a constantly changing variable. The value for the variable is always adapted to the existing temperature difference between the setpoint and actual temperature. Continuous PI control should be used if the variable is continuously monitored and can assume several states, such as several valve states (25% open, 50% open, etc.). In addition, more accurate control results can be realised with continuous PI control.</p> <p>Switching 2-point control: The controller switches the connected consumer on when the temperature falls below the setpoint temperature and switches it off again when the temperature exceeds the setpoint temperature. Since most heating systems are very sluggish, temperature overshoots can occur with this type of control. Two-point control should be used if the consumer can only assume two states.</p>	
Window-up detection when the temperature falls	Off 0.2 K/4 min ... 1 K/4 min
<p>Here you can set the drop in temperature at which the window-open detection should be activated.</p> <p>If the room temperature changes by at least the amount set here within four minutes, frost protection is activated.</p> <p>The duration of frost protection mode can be set between 4 and 255 minutes.</p>	

Duration of frost protection mode	4 ... 255 min
<p>Here you can set how long the frost protection mode should be active after an open window is detected.</p> <p>(This parameter is only visible if the window-open detection has been switched on.)</p>	
Duration of boost	1 ... 59 min
<p>The boost function can be used to temporarily heat up a room to a high temperature by pressing a button.</p> <p>The duration of the boost function is set here.</p>	
Maximum temperature (for floor heating)	10 ...45°C
<p>Here you can specify the maximum temperature that can be set for the floor heating so that the floor covering is not damaged.</p>	
Minimum temperature (for floor heating)	10 ...45°C
<p>Here you can specify the minimum temperature that can be set for the floor heating.</p>	

Note

The system default values of the setpoint temperatures displayed in the parameter settings are for information only and cannot be changed via the GPA.

7.5 Switching actuator 1-gang 16 A with binary input 3-gang

7.5.1 Output

Function of the switching output	NO contact NC contact
<p>NO contact The relay operates as a normally open contact. The logical switching state of the switching output is not forwarded to the relay in inverted form. Switching state = OFF ("0") -> relay contact open, Switching state = ON ("1") -> relay contact closed.</p> <p>NC contact The relay operates as a normally closed contact. The logical switching state of the switching output is forwarded to the relay in inverted form. Switching state = ON ("0") -> relay contact open, Switching state = ON ("1") -> relay contact open.</p>	
Switch-on delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-on delay is parameterised here. After receiving an ON telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched on. An OFF telegram during the switch-on delay cancels the delay and sets the switching state to "OFF".</p>	
Switch-off delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-off delay is parameterised here. After receiving an OFF telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched off. An ON telegram during the switch-off delay cancels the delay and sets the switching state to "ON".</p>	
Staircase switch switch-off delay	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration of the switch-on time of the staircase function is parameterised here. After the time set here has elapsed, the lighting is switched off or (if parameterised) the advance warning is started. A further ON telegram during the switch-off delay time retriggers the time, i.e. the time set here is restarted. The staircase function is only active if the "Staircase" function has been selected for the button of this dimming channel.</p>	

Advance warning	0 ... 3599 s (0 ... 59:59 min)
<p>According to DIN 18015-2, the advance warning is intended to warn people who are still on the staircase that the light will soon be switched off automatically. The advance warning set here follows the time set in the "Staircase switch switch-off delay" parameter.</p>	
Switching time	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration for which the switching contact is to be opened/closed is specified here. The parameter is only visible for the door opener and garage door functions.</p>	

7.5.2 Input

Debounce time	10 ... 255 ms
<p>This parameter defines the debouncing time individually for the input. The input signal at the input is evaluated after a delay in accordance with the time set here.</p>	
Contact type	NO contact NC contact
<p>Specify the contact type of the connected contact here.</p>	
When closing the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is closed. The parameter can only be configured for the "Switching" function.</p>	
When opening the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is opened.</p>	
Temperature calibration	-12.8 – 12.7 K
<p>The value for the temperature calibration can be entered here if the temperature measured by the connected sensor deviates from the actual room temperature.</p> <p>To establish the temperature deviation, the actual room temperature should be determined by means of a reference measurement using a calibrated temperature gauge.</p> <p>The measured value must be raised if the value measured by the sensor is below the actual temperature. The measured value must be lowered if the value measured by the sensor is above the actual temperature.</p>	

7.6 Switching actuator 2-gang/blind actuator 1-gang 16 A with binary input, 3-gang

7.6.1 Output – switching functions

Function of the switching output	NO contact NC contact
<p>NO contact The relay operates as a normally open contact. The logical switching state of the switching output is not forwarded to the relay in inverted form. Switching state = OFF ("0") -> relay contact open, Switching state = ON ("1") -> relay contact closed.</p> <p>NC contact The relay operates as a normally closed contact. The logical switching state of the switching output is forwarded to the relay in inverted form. Switching state = ON ("0") -> relay contact open, Switching state = ON ("1") -> relay contact open.</p>	
Switch-on delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-on delay is parameterised here. After receiving an ON telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched on. An OFF telegram during the switch-on delay cancels the delay and sets the switching state to "OFF".</p>	
Switch-off delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-off delay is parameterised here. After receiving an OFF telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched off. An ON telegram during the switch-off delay cancels the delay and sets the switching state to "ON".</p>	
Staircase switch switch-off delay	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration of the switch-on time of the staircase function is parameterised here. After the time set here has elapsed, the lighting is switched off or (if parameterised) the advance warning is started. A further ON telegram during the switch-off delay time retriggers the time, i.e. the time set here is restarted. The staircase function is only active if the "Staircase" function has been selected for the button of this dimming channel.</p>	

Advance warning	0 ... 3599 s (0 ... 59:59 min)
<p>According to DIN 18015-2, the advance warning is intended to warn people who are still on the staircase that the light will soon be switched off automatically. The advance warning set here follows the time set in the "Staircase switch switch-off delay" parameter.</p>	
Switching time	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration for which the switching contact is to be opened/closed is specified here. The parameter is only visible for the door opener and garage door functions.</p>	

7.6.2 Output – blind functions

No movement time	
<p>If this option is activated, no explicit movement times can be set for the window covering. Instead, the preset movement times are used: Moving down: 120 s Moving up: 122 s</p> <p>If this option is activated, no defined positions (e.g. 60%) can be moved to for this window covering.</p>	
Downward movement time	0 ... 1199 s (0 ... 19:59 min)
<p>The movement time for closing the window covering is set here. For this, you need to determine the time taken to complete the movement from the upper end position to the lower end position.</p>	
Upward movement time	0 ... 1199 s (0 ... 19:59 min)
<p>The movement time for opening the window covering is set here. For this, you need to determine the time taken to complete the movement from the lower end position to the upper end position.</p>	
Slat movement time (only for blinds)	0 ... 1199.9 s (0 ... 19:59 min)
<p>The movement time of the slats is set here. For this, you need to determine the time taken to complete the movement from the fully opened slat position to the fully closed slat position (movement DOWN). This parameter is only visible in the blind operating mode.</p>	
Time to tension fabric (only for awnings)	0...59.9 s
<p>Here you can specify the time to tension the awning fabric. After the awning has been completely extended, it moves in the opposite direction after the switchover time has elapsed for the duration of the time to tension fabric parameterised here. This parameter is only visible in the awning operating mode.</p>	
Delay when sunshine begins	0 ... 3599 s (0 ... 59:59 min)
<p>The telegram received via the "Sunshine" object to activate the sun protection can be evaluated with a time delay.</p>	

Blind position when sunshine begins	0 ... 100%
<p>The position of the window covering to which the window covering should move when the sun protection function has been activated can be defined here.</p>	
Slat position when sunshine begins (only for blinds)	0 ... 100%
<p>The position of the slats to which the slats should move when the sun protection function has been activated can be defined here. This parameter is only visible in the blind operating mode.</p>	
Delay when sunshine ends	0 ... 3599 s (0 ... 59:59 min)
<p>The telegram received via the "Sunshine" object to deactivate the sun protection can be evaluated with a time delay.</p>	
When sunshine ends	No reaction Raise Lower Stop Last position before sunshine
<p>The behaviour of the output at the end of sun shading – if necessary after the delay time has elapsed – is set here.</p> <p>No reaction At the end of sun shading, the output leaves the sun protection and the relays of the output show no reaction. Any movements running at this time are completed.</p> <p>Raise At the end of sun shading, the actuator moves the window covering up or opens the ventilation flap/roof window.</p> <p>Lower At the end of sun shading, the actuator moves the window covering down or closes the ventilation flap/roof window.</p> <p>Stop At the end of sun shading, the actuator moves the relays of the output to the "stop" position. This interrupts any drive movements that may be running.</p> <p>Last position before sunshine At the end of sun shading, the window covering is moved back to the position that was active at the beginning of the sunshine.</p>	

7.6.3 Input

Debounce time	10 ...255 ms
<p>This parameter defines the debouncing time individually for the input. The input signal at the input is evaluated after a delay in accordance with the time set here.</p>	
Contact type	NO contact NC contact
<p>Specify the contact type of the connected contact here.</p>	
When closing the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is closed.</p>	
When opening the contact	No reaction Switch on Switch off Toggle
<p>This parameter determines the reaction when the contact connected to the input is opened.</p>	
Temperature calibration	-12.8 – 12.7 K
<p>The value for the temperature calibration can be entered here if the temperature measured by the connected sensor deviates from the actual room temperature.</p> <p>To establish the temperature deviation, the actual room temperature should be determined by means of a reference measurement using a calibrated temperature gauge.</p> <p>The measured value must be raised if the value measured by the sensor is below the actual temperature.</p> <p>The measured value must be lowered if the value measured by the sensor is above the actual temperature.</p>	

7.7 Switching actuator 6/16/24-gang, 16 A/ blind actuator 3/8/12-gang

7.7.1 Switching functions

Function of the switching output	NO contact NC contact
<p>NO contact The relay operates as a normally open contact. The logical switching state of the switching output is not forwarded to the relay in inverted form. Switching state = OFF ("0") -> relay contact open, Switching state = ON ("1") -> relay contact closed.</p> <p>NC contact The relay operates as a normally closed contact. The logical switching state of the switching output is forwarded to the relay in inverted form. Switching state = ON ("0") -> relay contact open, Switching state = ON ("1") -> relay contact open.</p>	
Switch-on delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-on delay is parameterised here. After receiving an ON telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched on. An OFF telegram during the switch-on delay cancels the delay and sets the switching state to "OFF".</p>	
Switch-off delay	0 ... 3599 s (0 ... 59:59 min)
<p>The duration of the switch-off delay is parameterised here. After receiving an OFF telegram, the time that can be parameterised here is started. After the set time has elapsed, the light is switched off. An ON telegram during the switch-off delay cancels the delay and sets the switching state to "ON".</p>	
Staircase switch switch-off delay	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration of the switch-on time of the staircase function is parameterised here. After the time set here has elapsed, the lighting is switched off or (if parameterised) the advance warning is started. A further ON telegram during the switch-off delay time retriggers the time, i.e. the time set here is restarted. The staircase function is only active if the "Staircase" function has been selected for the button of this dimming channel.</p>	

Advance warning	0 ... 3599 s (0 ... 59:59 min)
<p>According to DIN 18015-2, the advance warning is intended to warn people who are still on the staircase that the light will soon be switched off automatically. The advance warning set here follows the time set in the "Staircase switch switch-off delay" parameter.</p>	
Switching time	0 ... 65535 s (0 ... 18:12:15 h)
<p>The duration for which the switching contact is to be opened/closed is specified here. The parameter is only visible for the door opener and garage door functions.</p>	

7.7.2 Blind functions

No movement time	
<p>If this option is activated, no explicit movement times can be set for the window covering. Instead, the preset movement times are used: Moving down: 120 s Moving up: 122 s</p> <p>If this option is activated, no defined positions (e.g. 60%) can be moved to for this window covering.</p>	
Downward movement time	0 ... 1199 s (0 ... 19:59 min)
<p>The movement time for closing the window covering is set here. The time to complete the movement from the upper end position to the lower end position must be determined.</p>	
Upward movement time	0 ... 1199 s (0 ... 19:59 min)
<p>The movement time for opening the window covering is set here. The time to complete the movement from the lower end position to the upper end position must be determined.</p>	
Slat movement time (only for blinds)	0 ... 1199.9 s (0 ... 19:59 min)
<p>The movement time of the slats is set here. The time taken to complete the movement from the fully opened slat position to the fully closed slat position must be determined (movement DOWN). This parameter is only visible in the blind operating mode.</p>	
Time to tension fabric (only for awnings)	0...59.9 s
<p>Here you can specify the time to tension the awning fabric. After completion of a downward movement, the awning stops and moves in the opposite direction after the switchover time has elapsed for the duration of the time to tension fabric parameterised here. This parameter is only visible in the awning operating mode.</p>	
Delay when sunshine begins	0 ... 3599 s (0 ... 59:59 min)
<p>The telegram received via the "Sunshine" object to activate the sun protection can be evaluated with a time delay.</p>	
Blind position when sunshine begins	0 ... 100%
<p>The position of the window covering to which the window covering should move when the sun protection function has been activated can be defined here.</p>	

Slat position when sunshine begins (only for blinds)	0 ... 100%
<p>The position of the slats to which the slats should move when the sun protection function has been activated can be defined here. This parameter is only visible in the blind operating mode.</p>	
Delay when sunshine ends	0 ... 3599 s (0 ... 59:59 min)
<p>The telegram received via the "Sunshine" object to deactivate the sun protection can be evaluated with a time delay.</p>	
When sunshine ends	No reaction Raise Lower Stop Last position before sunshine
<p>The behaviour of the output at the end of sun shading – if necessary after the delay time has elapsed – is set here.</p> <p>No reaction At the end of sun shading, the output leaves the sun protection and the relays of the output show no reaction. Any movements running at this time are completed.</p> <p>Raise At the end of sun shading, the actuator moves the window covering up or opens the ventilation flap/roof window.</p> <p>Lower At the end of sun shading, the actuator moves the window covering down or closes the ventilation flap/roof window.</p> <p>Stop At the end of sun shading, the actuator moves the relays of the output to the "stop" position. This interrupts any drive movements that may be running.</p> <p>Last position before sunshine At the end of sun shading, the window covering is moved back to the position that was active at the beginning of the sunshine.</p>	

8 — FAQs

8.1 Information about Gira One

What is the difference between the Gira One server and the Gira X1?

The Gira One server is the central device for the Gira One system and is started up using the Gira Project Assistant (GPA) from version 5.0 onwards.

It not only functions as a visualisation and start-up server for the Gira One system, but also offers a diagnostic, remote access and remote maintenance function as well as other functionalities. The Gira One server cannot be started up in the Engineering Tool Software (ETS).

The Gira X1 one is a visualisation server with integrated logic module as well as remote access functions (e.g. OpenVPN) for a KNX system. The Gira X1 is started up using the ETS. The visualisation for the KNX system is parameterised and started up in the Gira Project Assistant. In combination with the Gira S1, additional functions for a KNX system can be implemented, such as a remote access and remote maintenance function and notification functions for installers and customers.

The Gira One server complements the Gira server portfolio. All servers (Gira One server, Gira X1 and Gira HomeServer) undergo continuous development.

Which communication protocol does the Gira One system use?

Gira One devices are connected to each other via a 2-wire bus, which they use to communicate. To communicate, the devices use the KNX secure protocol, based on the worldwide KNX standard in which transmissions are completely encrypted. This prevents tampering by third parties.

How many devices can I install in a Gira One project?

A maximum of 200 devices can be installed, meaning all installed system devices, sensors and actuators.

How many scenes can be used?

Up to 50 scenes with 64 scene variants each can be used.

How many users can access the system simultaneously via the app?

Up to 100 mobile end devices can access the Gira One server simultaneously.

How are the individual functions operated on site or remotely?

Operation is via buttons, the Gira Smart Home App or Gira G1. It is also possible to integrate zero-voltage motion detectors or conventional buttons into the system to enable operation.

At the same time, it is possible to access the Gira One project remotely via the Gira Smart Home App. Remote access is encrypted, which prevents tampering by third parties.

Can I still switch on my light if the Gira One server fails?

Of course. The Gira One system is based on the global and established KNX standard. All sensors and actuators communicate with each other in a decentralised manner and function independently of the Gira One server. All basic functions in your Smart Home, such as operating the light, the shading, or even your heating, will function as usual if the Gira One server is ever unavailable. However, additional functions such as time and scene controls as well as operation via the Gira Smart Home App depend on the availability of the Gira One server.

8.2 Configuration/start-up

How are the individual products configured and started up?

From version 5.0 onwards, start-up is carried out via the new Gira Project Assistant (GPA), free of charge. Very easy and time saving. With the help of the new GPA, you can prepare the customer project in the office without any products at all, and then simply transfer it to the Gira One devices later at the construction site. Video tutorials integrated in the GPA and a step-by-step mode guide you through the entire start-up process. They enable the system to be configured successfully – without time-consuming training courses.

How do I find my Gira One server in the network?

The Gira Project Assistant (GPA) must be in the same network as the Gira One server so that it can be found automatically by the GPA. For this purpose, it is best if the Windows PC on which the GPA is installed is connected to the router to which the Gira One server is also connected via Ethernet/network connection.

In rare cases, the GPA might not immediately find the Gira One server within a project. In these cases, it helps if you open the “Devices in network” area in the GPA on the “My projects” project overview page and manually initiate the search for Gira devices. The GPA should then automatically find the Gira One server.

Is start-up also possible without an Internet router?

Start-up via the new Gira Project Assistant can be carried out without a router by connecting the Windows PC/laptop directly to the Gira One server. In this way, it is also possible to test the visualisation on the Gira Smart Home App. This can be done by installing the Gira Smart Home Windows Client on your Windows PC/laptop and connecting to the Gira One server.

How much time should I set aside for start-up?

The Gira Project Assistant requires up to 30 minutes for the start-up (transfer of the configuration data) of a relatively large single-family home equipped with approx. 60 devices.

I have forgotten the GPA project password. How can I access to the project?

To regain access to the project in the GPA, you must proceed as follows:

1. There must be a connected Gira Smart Home App with administrator rights (smartphone, tablet, Windows PC, Gira G1).
2. The administrator can then use this Smart Home App to reset the device password of the Gira One server to the GPA initial device password.
3. Open the system menu in the Gira Smart Home App.
4. Open “System”.
5. Open “Connection to device”.
6. Select “Reset device password”.
7. Follow the instructions in the Gira Smart Home App.

You can then read out the project from the Gira One server and access it again.

Are changes to function or room names applied to the Gira Project Assistant if you change them in the Gira Smart Home App?

Yes, all changes made in the Gira Smart Home App (e.g. room names, consumer designations, etc.) are applied to the GPA when the GPA is used to perform a project update or new start-up in the Gira One project.

How do I add new devices to an existing project?

New devices can be added to any Gira One project very easily using the Gira Project Assistant. It is also very easy to replace existing devices with new ones. The devices will need to have a functioning bus connection and be able to communicate with the Gira One system.

Adding new devices

New devices can simply be pulled from the device catalogue in the GPA and located in the building structure. The device must then be configured and linked to relevant consumers, for example, and the KNX device certificate entered. This change then needs to be transferred to the Gira One server by performing a start-up in the GPA.

Replacing existing devices

It is very quick and easy to replace existing devices with new ones. To do this, the existing KNX device certificate for the corresponding device must be replaced with the new KNX device certificate in the GPA project. All other settings can be retained. This change then needs to be transferred to the Gira One server by performing a start-up in the GPA.

What should I do if a device is defective?

It is very quick and easy to replace existing devices with new ones. To do this, the existing KNX device certificate for the corresponding device must be replaced with the new KNX device certificate in the GPA project. All other settings can be retained. This change then needs to be transferred to the Gira One server by performing a start-up in the GPA.

How do I reset devices to factory settings?

If you want to reset Gira One devices to factory settings, proceed as follows:

1. Switch off the bus voltage or disconnect the KNX connection terminal.
2. Wait for around 15 seconds.
3. Press and hold the programming button.
4. Switch on the bus voltage or plug in the KNX connection terminal.
5. Press and hold the programming button until the programming LED flashes slowly.
6. Briefly release the programming button and then press and hold it again until the programming LED flashes quickly.
7. Release the programming button.
8. The device performs a master reset, restarts, and is ready for operation again after approx. 5 seconds.

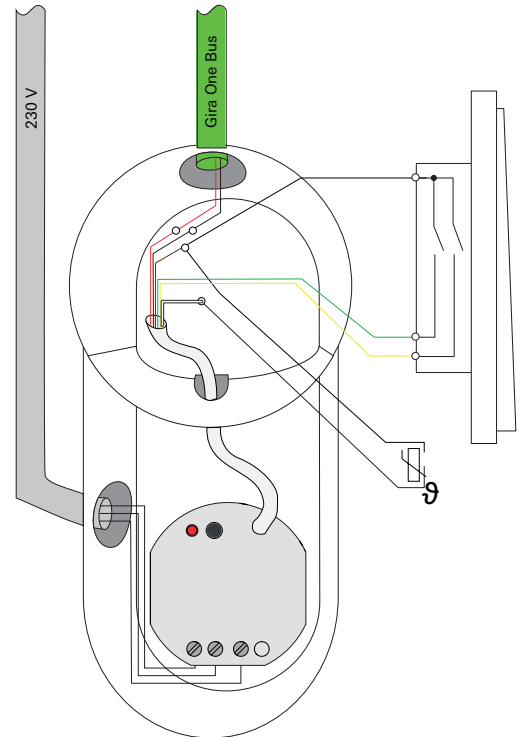
With the Gira One server, a factory reset can also be performed via the GPA or the device website.

Factory reset via the GPA

1. Open the GPA.
2. Select the "Devices in network" menu.
3. Select the Gira One server.
4. Click the gearwheel icon, then select "Factory reset".

Factory reset via the device website

1. Open the device website of the Gira One server.
2. Open the "Diagnostics" view.
3. In the "Logging" tab, select the "Factory settings" item.



Electronics device box with fixed separating plate

Why are the consumer designations in the diagnostics of the Gira One server different from the ones I see in my Gira Smart Home App?

Users of the Gira Smart Home App can make many adjustments, such as changing the consumer designation, directly in the Gira Smart Home App. However, these are not automatically applied to the Gira Project Assistant or diagnostics.

With each new start-up, the GPA checks whether there have been any changes in the Smart Home App and transfers them to the GPA project. You will then see the same consumer designations in the GPA project and diagnostics as in the Gira Smart Home App.

What should I bear in mind when connecting and mounting flush-mounted devices with binary input?

When connecting flush-mounted devices with a binary input, please note that the bus terminals and mains voltage terminals may not be placed in a shared connection space. In this case, please use two separate device boxes or an electronics device box with a fixed separating plate.

Please note that the maximum total length of the auxiliary line is 10 m.

8.3 Gira Smart Home App

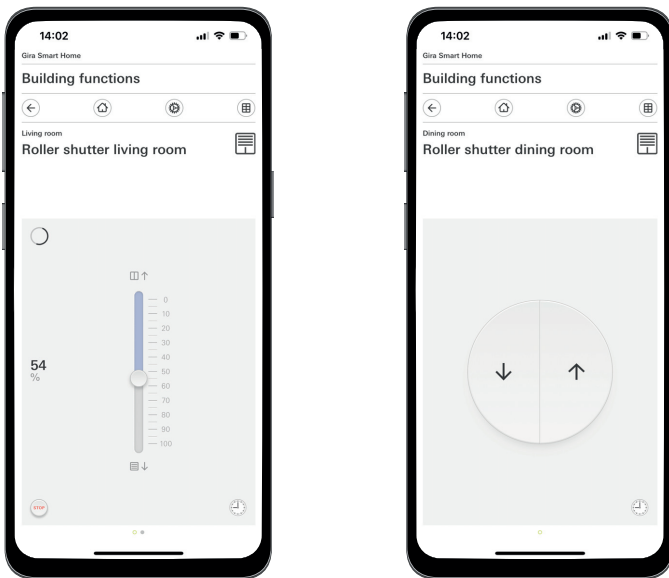
Can special characters be used as consumer designations in the Smart Home App?

Special characters such as emojis can be used to customise the designations. However, some special characters cannot be displayed in the Smart Home App, so you should check each new name individually.

Why is the blind function displayed without a slider in the Smart Home App?

In the extended parameters for the blind actuators in the GPA, you can define whether you wish to calculate the explicit movement times of the devices activated or whether you wish to use the preset movement times (2 minutes).

If you measure the movement times yourself with a stopwatch and enter the corresponding values in the parameters, you can move the shutters or blinds to a specific position using the app.



Shutter with calculated movement times/preset movement times

Are changes in the Gira Smart Home App retained after a power reset of the Gira One server?

Yes, all changes in the Gira Smart Home App are retained after a power reset of the Gira One server.

It should be noted that the Gira One server saves an image of the current project every 15 minutes, so that the changes are available again after a power reset.

Therefore, wait at least 15 minutes after you have made the changes in the Smart Home App before resetting the power on the Gira One server.

8.4 IP camera

Which video encoding formats can be displayed?

The following video encoding formats are supported:

- MJPEG
- 264
- RTSP (not for Gira Smart Home Windows Client or Gira G1)

What requirements must my IP camera meet for it to be displayed in the Smart Home App?

For an IP camera to be used in the Gira One system, it should support ONVIF technology. More information on whether cameras support ONVIF technology can be found here:

<https://www.onvif.org/conformant-products/>

Which camera manufacturers would Gira recommend?

IP cameras from the following manufacturers have all been involved in successful start-ups:

- Mobotix
- Hikvision
- Axis
- Dahua
- Reolink

Why is the camera image not displayed when I view the camera function via remote access?

It is only possible to display the camera image remotely with Basic authentication. In the "Authentication" section of the IP camera settings, change the setting from "Digest" to "Basic".

Which preview URLs can I use?

Mobotix

`http://benutzername:password@ipadresse/control/fast-stream.jpg?stream=full&preview&size=640x360&fps=20`

Hikvision

`http://benutzer:password@ipadresse/ISAPI/Streaming/channels/102/httppreview`

Axis:

`http://Benutzer:Passwort@IP-Adresse/axis-cgi/mjpg/video.cgi`

Dahua

`http://benutzername:password@ipadresse/cgi-bin/mjpg/video.cgi?channel=1&subtype=1`

Reolink

Reolink does not offer a preview URL. Video streams from Reolink cameras can only be viewed in the app via the alternative video stream (RTSP). Please note that the alternative RTSP video stream cannot be viewed using the Gira Smart Home Windows Client or the Gira G1.

Why does the camera function only display a play button?

The IP camera you are using probably does not support preview. Press the play button to view the alternative RTSP video stream.

Why is the video stream from my IP camera not displayed on all apps?

Make sure that all Gira Smart Home Apps for the respective operating systems (iOS, Android and Windows) are up to date.

If necessary, restart the Gira Smart Home App if the video stream is not displayed for a camera function.

Why can't I see the RTSP stream on my Gira G1 or Gira Smart Home Windows Client?

The Gira G1 and Gira Smart Home Windows Client can display video streams from IP cameras that are retrieved via a preview URL. There is an alternative way to view the video stream if the IP camera has a separate RTSP stream. The alternative way of viewing the video stream using a separate RTSP stream is only supported for the Gira Smart Home App on the iOS and Android operating systems. The Gira G1 and the Gira Smart Home Windows Client do not support this alternative way of viewing the video stream.

How can I view and edit the camera presets?

You can view and edit the camera presets via the IP camera function. This is supported on iOS, Android and Windows operating systems using the relevant Smart Home Apps/Clients. You can also display the video stream using the alternative way of viewing via a separate RTSP stream. It is not possible to view or edit the presets when using this alternative way of viewing the video stream. The alternative way of viewing the video stream using a separate RTSP stream is only supported for the Gira Smart Home App on the iOS and Android operating systems. The Gira G1 and the Gira Smart Home Windows Client do not support this alternative way of viewing the video stream.

How can I use the alternative video stream via RTSP to display the video stream?

The camera must support the RTSP streams application and the RTSP stream must be transmitted via the ONVIF standard.

One thing to note:

Ubiquiti cameras cannot be displayed via RTSP stream because they do not support the ONVIF standard, so their RTSP streams are not transmitted via the ONVIF standard.

How do I replace an existing IP camera with a new one?

We recommend that you use the same integration procedure described for new IP cameras when replacing defective IP cameras. When replacing defective IP cameras, we do not recommend editing the existing settings so that they correspond to the settings of the new IP camera.

8.5 Applications

Can I use a Gira One button to control several blinds or lights as a group?

It is possible to control several consumers via one button or via a visualization tile in the Gira Smart Home App.

For this, you will need to use the GPA to connect a rocker of the Gira One button to several shading consumers, e.g. shutters, which allows you to control all shutters centrally via one rocker. You can also operate this shading group via your Gira Smart Home App by activating the "Display/operate in the Gira Smart Home App" checkbox to the right of the consumer selection for the Gira One button.

Can I control eNet blinds using a timer?

You can store timers for eNet consumers such as blinds, shutters, awnings, or lights in the Gira Smart Home App.

Currently, the slat position can be configured for eNet blind actuators, but this does not result in the set slat position in the Gira Smart Home App.

How is heating/cooling controlled in the Gira One system?

All Gira One buttons have an integrated temperature sensor that can detect the room temperature at any installation location. Each button can transmit the respective temperature at the installation location to a heating actuator with controller in order to control the temperature. The respective heating or cooling circuit is controlled centrally in the heating actuator separately for each output.

In the Gira Smart Home App, you can use the following functions for each heating/cooling consumer:

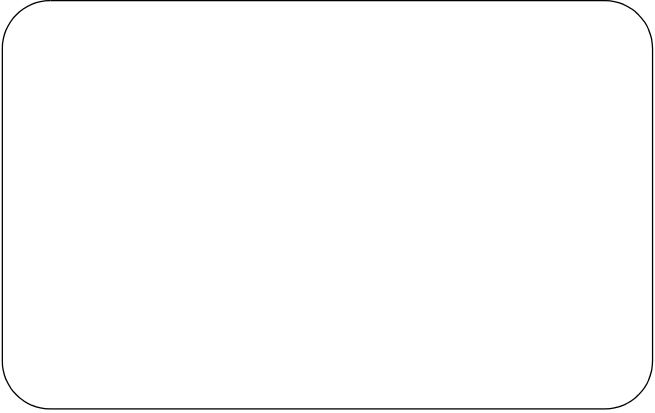
- Displaying the actual temperature at the installation location
- Setting the setpoint temperature at the installation location
- Selecting the operating mode (Komfort, standby, night-time reduction, frost/heat protection)
- Setting and editing timers

Can several heating circuits/actuator channels be supplied using one temperature sensor?

Several servos (230 V = 4; 24 V = 2) can be connected directly to each Gira One heating actuator.

Each output of the heating actuator can be connected to several temperature sensors, e.g. of the Gira One button, in order to ensure functional room temperature control. If there are several temperature sensors, the average of all the incoming temperature values is used.

9 ___ Device diagram

Device certificate	Device	Installation site	Function
			

Device certificate	Device	Installation site	Function