GIRA

Button, rocker 1-gang
Order no.: 5171 .., 5172 ..
Button, rocker 2-gang
Order no.: 5173 .., 5174 .., 5175 ..

Operating instructions

1   Safety instructions

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. During installation and cable routing, comply with the regulations and standards which apply for SELV circuits.

These instructions are an integral part of the product, and must remain with the end customer.

2   Device components

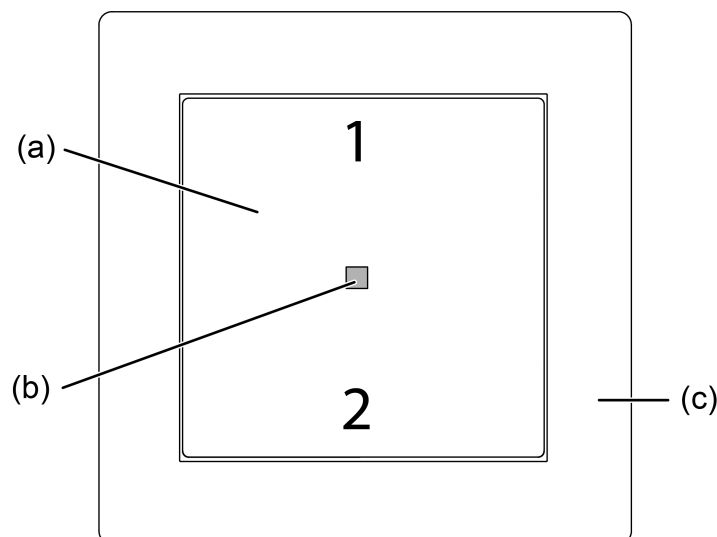Front view 1-channel (Figure 1) and 2-channel (Figure 2)

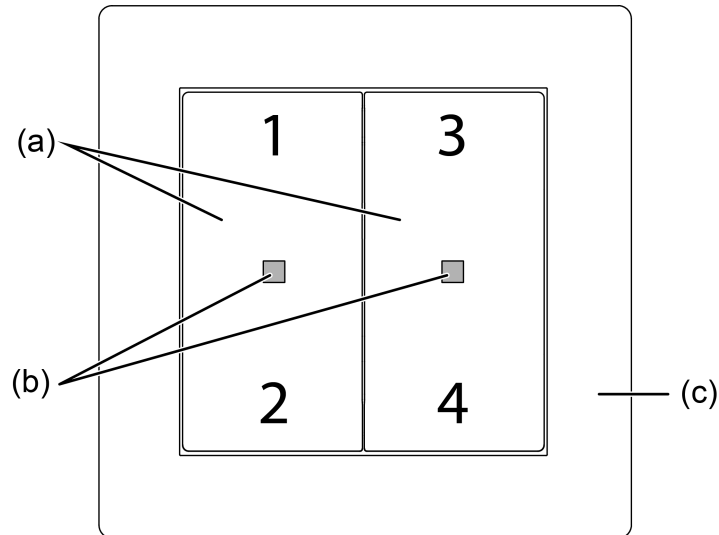Figure 1: Device components 1-channel

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Figure 2: Device components 2-channel

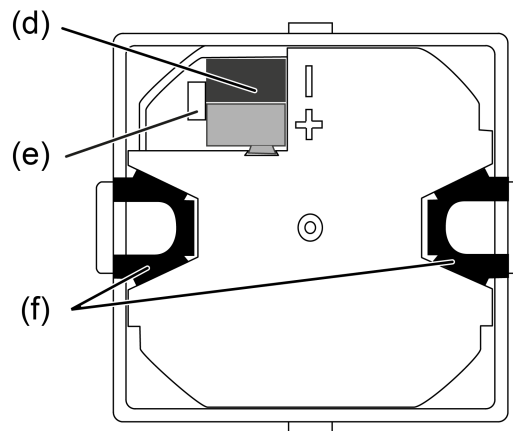|	
(a)	Operating rockers (accessory)
(b)	Status LED
(c)	Cover frame (accessory)
1...4	Push-buttons assignment and status LED

Rear view (Figure 3)

Figure 3: Device components

(d)	Device connection terminal KNX
(e)	Opening for removing the KNX connection terminal with screwdriver
(f)	Retaining spring for mounting in supporting frame

3 Function

System information

This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite to proper understanding.

The function of this device depends upon the software. Detailed information on loadable software and attainable functionality as well as the software itself can be obtained from the manufacturer´s product database.

The device can be updated. Firmware can be easily updated with the Gira ETS Service App (additional software).

The device is KNX Data Secure capable. KNX Data Secure offers protection against manipulation in building automation and can be configured in the ETS project. Detailed specialist knowledge is required. A device certificate, which is attached to the device, is required for safe commissioning. During mounting, the certificate must be removed from the device and stored securely.

Planning, installation and commissioning of the device are carried out with the aid of the ETS, version 5.7.3 and above.

Intended use

–   Operation of loads, e.g. light on/off, dimming, Venetian blinds up/down, 1 byte values, 2 byte values, brightness values, temperatures, calling up and saving light scenes
–   Mounting in appliance box according to DIN 49073

Product characteristics

–   Push-button sensor functions switching, dimming, Venetian blind, value transmitter, scene extension, 2-channel operation and controller extension adjustable
–   Controller extension with adjustable operating mode selection, forced operating mode switch over, presence function and setpoint shift
–   Status LED – optionally red, green, blue – adjustable per rocker
–   LED functions orientation lighting and night reduction can be set separately
–   Brightness of LED adjustable and switchable while in operation
–   Disable or function switch-over of all or of individual button functions possible with disabling function
–   Temperature measurements optionally with device internal sensor and external sensor connected via communication object
–   Integrated bus coupling unit

4 Operation

The operation of functions or electrical consumers can be set individual for each device:

Operation concept	single-area operation	dual-area operation
Rocker function	-	Each rocker can perform an individual function.
Button function	Two buttons above one another perform the same function.	Each button can perform an individual function.

4.1 Examples for operating various standard applications

- Switch: Short press on button.
- Dim: Long press on the button. The dimming process ends when the button is released.
- Move Venetian blind: Long press on button.
- Stop or adjust Venetian blind: Short press on button.
- Set value, e.g. brightness or temperature setpoint: Short press on button.
- Open scene: Short press on button.
- Save scene: Long press on button.
- Execute channel 1: Short press on button.
- Execute channel 2: Long press on button.
- Operate controller extension: Short press on button.

5   Information for electrically skilled persons

5.1 Fitting and electrical connection

⚠️ **DANGER!**

Mortal danger of electric shock.

Cover up live parts in the installation environment.
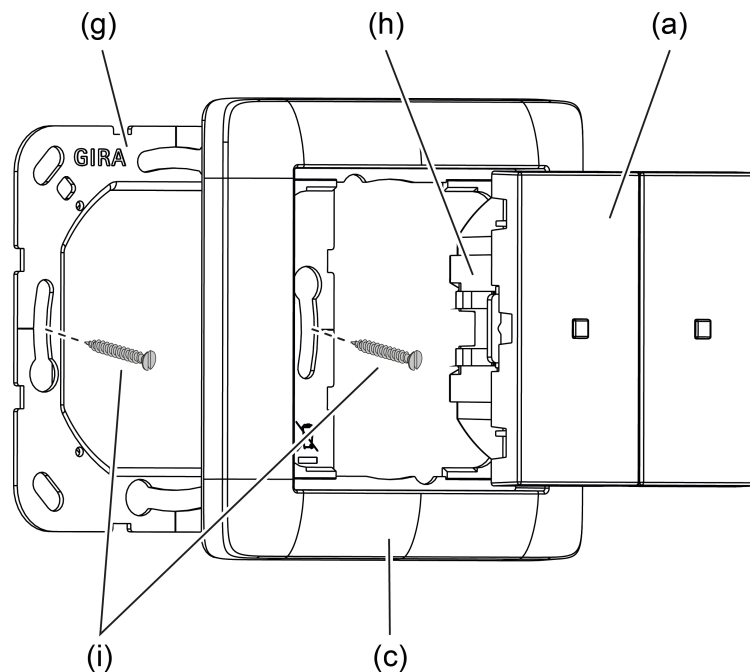
Mounting and connecting the device (Figure 4)

Figure 4: Fitting the device

(a)	Operating rockers
(c)	Cover frame
(g)	Supporting frame
(h)	Basic unit
(i)	Box screws

ℹ️ The device should be used in an air-tight appliance box. Otherwise temperature measurements can be negatively influenced by draughts.

In secure operation (preconditions):

– Secure commissioning is activated in the ETS.

– Device certificate entered/scanned or added to the ETS project. A high resolution camera should be used to scan the QR code.

– Document all passwords and keep them safe.

■ Mount supporting frame on an appliance box

ℹ️ Use the supplied box screws.

■ Position the cover frame on the supporting frame.

■ Connect device to the KNX using KNX connecting terminal (red= +, black = -).

■ In secure operation: The device certificate must be removed from the device and stored securely.

■   Attach device onto the supporting frame.
Cover frame is fixed.

The device can be commissioned and is ready for operation.

5.2 Commissioning

Programming the physical address and application program, 1-channel (Figure 5) and 2-channel (Figure 6)

[i] Project design and commissioning with ETS from version5.7.3and above.
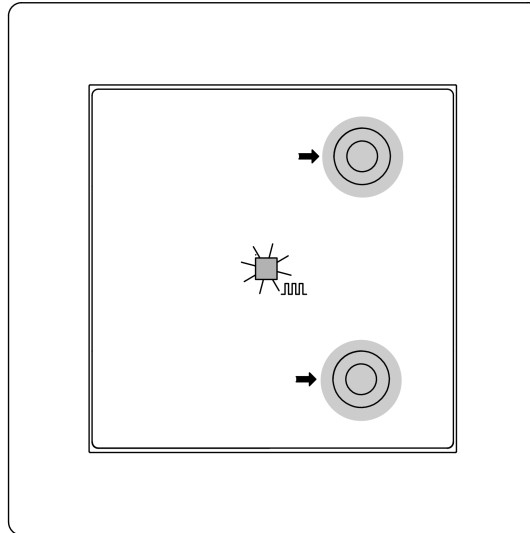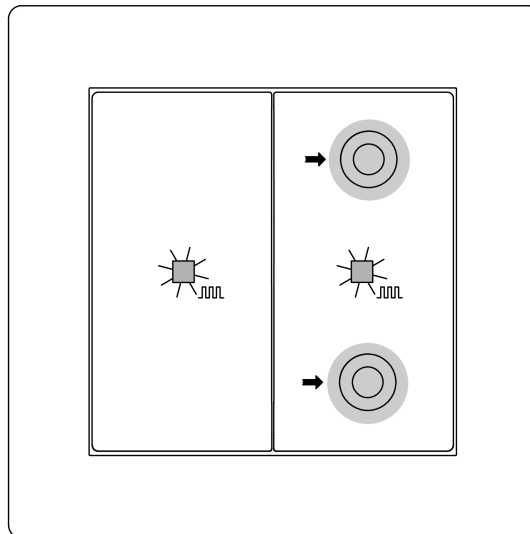
Figure 5: Activating programming mode (1-channel)

Figure 6: Activating programming mode (2-channel)

Precondition: The device is connected and ready for operation.

- Activate programming mode: Press the top right button and bottom right button simultaneously and hold for longer than 4 seconds (Figure 5).
  The Status LED flashes red. Programming mode is activated.

[i] When the programming mode is activated, telegrams can be sent to the bus.

- Programming the physical address.
  The status LED returns to its previous state. Physical address is programmed.

- Programming the application program.

[i] The status LED is switched off while the application program is programmed. As soon as the programming is successfully completed, the status LED carries out its parameterised function.

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| i | When the application program is discharged and the bus voltage is connected, all status LEDs initially light up green. Whenever a button is actuated, the respective illuminated status LED changes colour (green → red → blue → green → ...). |

5.2.1 Safe-state mode

The safe state mode stops the execution of the loaded application program.

If the device does not work properly - for instance as a result of errors in the project design or during commissioning - the execution of the loaded application program can be halted by activating the safe-state mode. The safe-state mode does not permit controlling the outputs via the bus and by hand. The push-button remains passive since the application program is not being executed (state-of-execution: terminated). Only the system software is still functional so that the ETS diagnosis functions and also programming of the device continue to be possible.

$\boxed{i}$ Only the system software of the device is still functional. ETS diagnosis functions and programming of the device are possible.

Activating the safe-state mode

- Switch off the bus voltage.
- Press and hold down the top right and bottom right button.
- Switch on the bus voltage.
  The safe-state mode is activated. The status LED flashes red slowly (approx. 1 Hz).

$\boxed{i}$ Only release the the top right and bottom right buttons when the LED flashes.

Deactivating safe-state mode

- Switch off bus voltage or carry out ETS programming.

5.2.2 Master reset

The master reset restores the basic device setting (physical address 15.15.255, firmware re-mains in place). The device must then be recommissioned with the ETS.

[i]   During secure operation: A master reset deactivates device security. The device can then be recommissioned with the device certificate.

[i]   Devices can be reset to factory settings with the ETS Service App. This function uses the firmware contained in the device that was active at the time of delivery (delivery state). Restoring the factory settings causes the devices to lose their physical address and con-figuration.

If the device - for instance as a result of errors in the project design or during commissioning - does not work properly, the loaded application program can be deleted from the device by per-forming a master reset. The master reset resets the device to delivery state. Afterwards, the device can be put into operation again by programming the physical address and application program.

Performing a master reset

Precondition: The safe-state mode is activated.

■   Press and hold down the top right and bottom right button for more than 5 seconds until the status LED flashes.

     The device performs a master reset. The status LED flashes quickly (approx. 4 Hz).

     The device restarts and is in delivery state.

6   Technical data

KNX

KNX medium	TP256
Safety	X-mode
Commissioning mode	S-mode
Rated voltage	DC 21 ... 32 V SELV
Current consumption KNX	8 ... 12 mA
Connection mode KNX	Standard device connection terminal
Connecting cable KNX	EIB-Y (St)Y 2x2x0.8
Protection class	III

Ambient conditions

Ambient temperature	-5 ... +50 °C
Storage/transport temperature	-25 ... +70 °C
Relative humidity	max. 93 % (no condensation)

7   Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.
Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

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