GIRA

Operating instructions

Pushbutton sensor 4 Komfort, 1-gang
Order no. 5001 ..

Pushbutton sensor 4 Komfort, 2-gang
Order no. 5002 ..

Pushbutton sensor 4 Komfort, 4-gang
Order no. 5004 ..

Product image non-binding

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GIRA

1 Safety instructions

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

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

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

This manual is an integral part of the product, and must remain with the customer.

GIRA

2   Device components

Front view
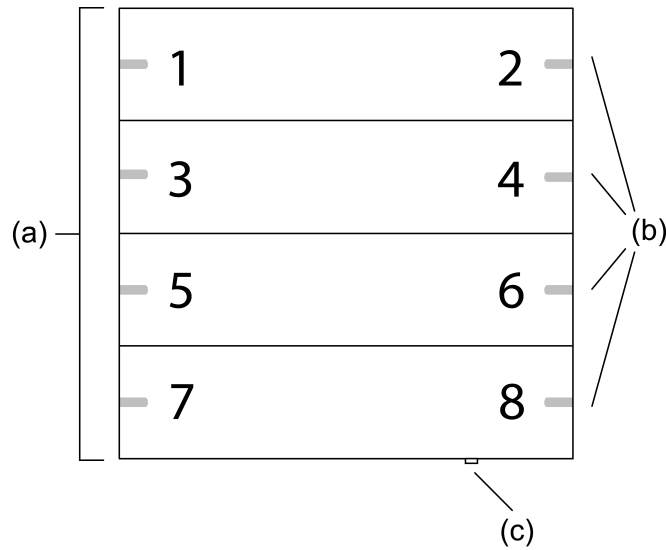
Figure 1: Device components 4-gang

(a)   Operating rockers

(b)   Status LED

(c)   Additional button

1...8   Buttons assignment and status LED

ℹ️   The additional button (c) is functional from hardware version I01 onwards.

Rear view

Figure 2: Device components - rear side

(d)   Connection for remote sensor

(e)   Locking screws

(f)   Opening for removing the KNX device connection terminal with screwdriver

(g)   Device connection terminal KNX

3 System information

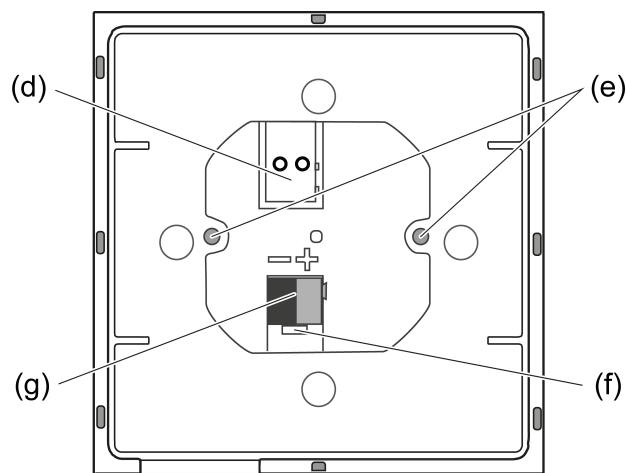This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite to proper understanding.

The function of this device depends upon the software. Detailed information on load-able 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 technical knowledge is required. A device certificate, which is attached to the device, is required for safe commissioning. During mounting, the device 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 5.7.7 and above.

4 Intended use

- Operation of loads, e.g. light on/off, dimming and colour temperature control, colour control and brightness, shading up/down, 1-byte values, 2-byte values, 3-byte values and 6-byte values, brightness values, temperatures, colour temperature values, calling up and saving light scenes as scene extension
- Calling up and saving device-internal light scenes
- Measurement of room temperature
- Measurement of room humidity
- Indication of an alarm
- For use as orientation lighting
- Mounting in appliance box with dimensions according to DIN 49073

5   Product characteristics

– Push-button sensor functions switching, dimming, shading, value transmitter, scene extension, 2-channel operation and controller extension adjustable

– Controller extension with operating mode selection, forced operating mode switch over, presence function and setpoint shift

– Status LED - optionally red, green, blue, yellow, cyan, orange, violet, white - adjustable per button

– LED functions orientation lighting, alarm signalling 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

– Scene control of up to 8 scenes with 8 scene outputs each

– Temperature measurements optionally with device internal sensor, wired sensor to the device connection terminal and external sensor connected via communication object

– Room humidity measurement with internal device humidity sensor

– Integrated bus coupling unit

6 Operation

Depending on the programming, a rocker can have up to two functions assigned to it. Operation is carried out by a short or long press on the buttons and depends on the specific function configured.

6.1 Examples for operating various standard applications

- Switch: Short press on button.
- Dim: Long press on button. The dimming process ends when the button is released.
- Move shading: Long press on button.
- Stop or adjust shading: 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.

7 Information for electrically skilled persons

7.1 Mounting and electrical connection

⚠ DANGER!

Electric shock when live parts are touched.

Electric shocks can be fatal.

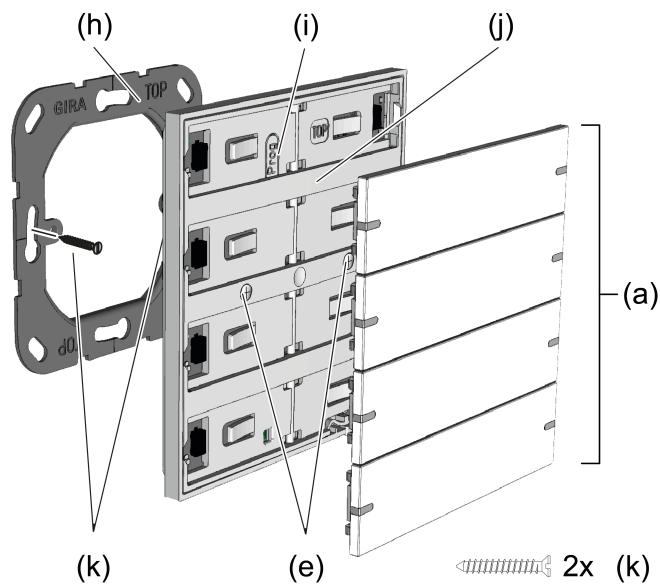Cover up live parts in the installation environment.

Figure 3: Mount device

(a)   Operating rockers
(e)   Locking screws
(h)   Supporting frame
(i)   Programming button
(j)   Push-button sensor
(k)   Box screws

Mounting and connecting the device (see figure 3)

ℹ The device should be used in an air-tight appliance box. Otherwise temperature and humidity reading 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 (h) in the right orientation on an appliance box.

⚇ Note the **TOP** marking.

⚇ Use the enclosed box screws (k).

■ Pull off commissioning rockers from push-button sensor.

⚇ The push-button sensor is delivered with commissioning rockers. The operating rockers suitable for the push-button sensor must be ordered separately (see accessories).

■ Connect push-button sensor (j) to the KNX (g) using KNX device connection terminal (red = +, black = -).

■ Optional: Connect remote sensor (see accessories) to connection (d). The relevant device connection terminal is included with the remote sensor.

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

■ Attach push-button sensor (j) onto the supporting frame (h).

■ Screw push-button sensor (j) with the integrated locking screws (e) onto supporting frame. Connection torque max. 0.8 Nm.

■ Optional: Cover up the locking screws (e) with the labels supplied with the rocker set (only for the 2-gang and 4-gang device variants).

Push-button sensor can be put into operation.

⚇ Programming the physical address before operating rockers mounting.

■ Snap on operating rockers (a).

Device is ready for operation.

7.2   Commissioning

Programming the physical address and application program

> |i| Project design and commissioning with ETS from version 5.7.7 and above.

The programming button (i) is located under the topmost operating rocker.

Precondition: The device is connected and ready for operation.
The topmost operating rocker is dismantled.

- ▪ Activating Programming mode: push the programming button (i).

  The status LED 1 and 2 flash red. Programming mode is activated.

- ▪ Programming the physical address.

  The status LED 1 and 2 return to their previous state. Physical address is programmed.

- ▪ Programming the application program.

> |i| All status LEDs are switched off while the application program is programmed. As soon as the programming is successfully completed, the status LEDs carry out their parameterised function.

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

7.2.1 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 device remains passive in safe-state mode, since the application program is not being executed (state of execution: terminated).

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

Activating safe-state mode

- Switch off the voltage.
- Press and hold down the programming button.
- Switch on voltage.

  The safe-state mode is activated. The programming LED flashes slowly (approx. 1 Hz).

$\boxed{\mathbf{i}}$ Release the programming button only after the programming LED starts flashing.

Deactivating safe-state mode

- Switch off the voltage or carry out ETS programming.

7.2.2 Master reset

The master reset restores the basic device settings (physical address 15.15.255, firmware remains in place). The device must then be recommissioned with the ETS.

| i | In 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 (delivered state). Restoring the factory settings causes the devices to lose their physical address and configuration.

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 performing 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 programming button for > 5 seconds until the programming LED starts flashing quickly.

- Release the programming button.

  The device performs a master reset. The programming LED is switched on.

  The device restarts and is in delivery state.

7.3   Mounting the rockers

- Attach the rocker centrally.
- Press on the rocker with both thumbs (see figure 4).

  The rocker snaps into place.
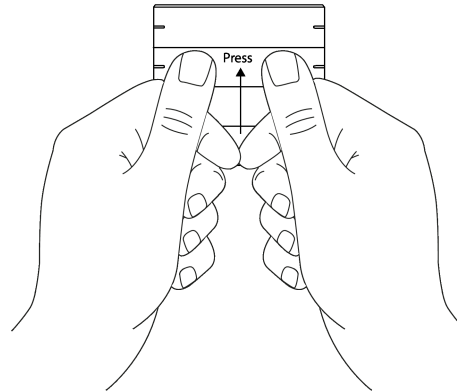
  Device is ready for operation.

Figure 4: Press lightly in the middle of the rocker

7.4   Removing commissioning rockers

■ Pull the commissioning rocker on both sides to release it from the push-button sensor (see figure 5).
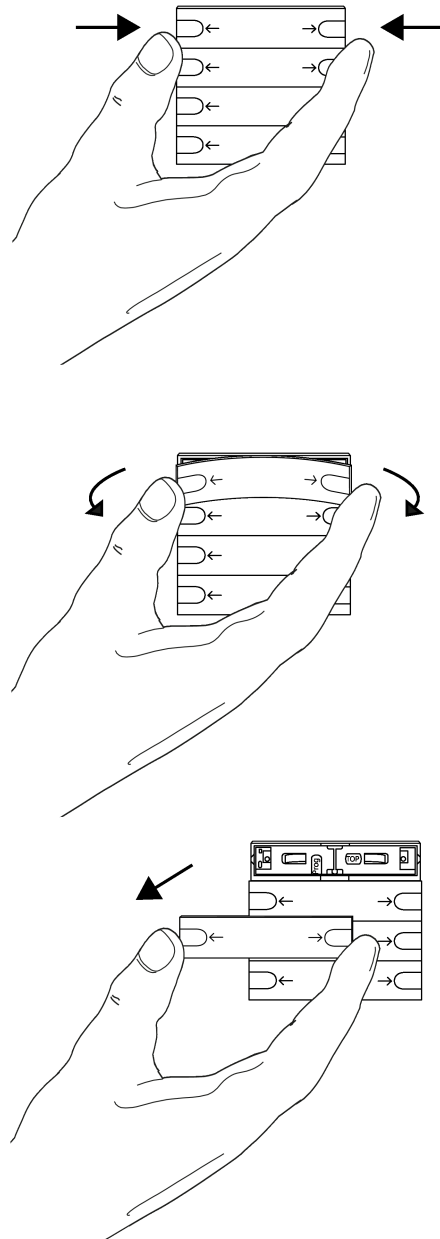
Figure 5: Removing the commissioning rocker

7.5 Removing rockers

■ Pull the rocker on one side to release it from the push-button sensor (see figure 6).
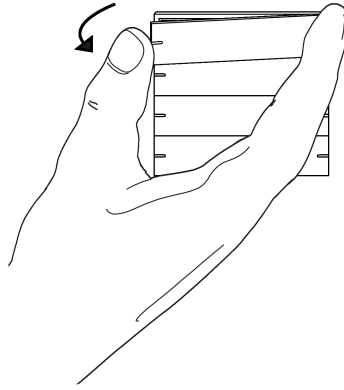
Figure 6: Removing the rocker

8   Technical data

KNX

KNX medium	TP256
Commissioning mode	S mode
Rated voltage	DC 21 ... 32 V SELV
Current consumption KNX	8 ... 18 mA
Connection mode KNX	Standard device connection terminal
Connecting cable KNX	EIB-Y (St)Y 2x2x0.8
Protection class	III

Installation dimensions (see figure 7)

Construction height	12.5 µm
Installation depth	15.5 µm

Mechanism

Loosening torque locking screws	max. 0.8 Nm

Connection cable remote sensor (see accessories)

Cable type extension	NYM-J 3×1.5 or J-Y(St)Y 2×2×0.8
Total length remote sensor line	Max. 50 m

Ambient conditions

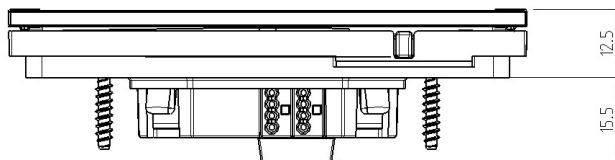|	
Ambient temperature	-5 ... +45°C
Storage/transport temperature	-20 ... +70°C

Figure 7: Installation dimensions

9 Accessories

[i] Individually labelled rocker sets are available from the Gira inscription service www.beschriftung.gira.de.

Rocker set, 1-gang for pushbutton sensor 4	Order no. 5021 ..
Rocker set, 1-gang, inscribable, for pushbutton sensor 4	Order no. 5031 ..
Rocker set, 2-gang for pushbutton sensor 4	Order no. 5022 ..
Rocker set, 2-gang, inscribable, for pushbutton sensor 4	Order no. 5032 ..
Rocker set, 4-gang for pushbutton sensor 4	Order no. 5024 ..
Rocker set, 4-gang, inscribable, for pushbutton sensor 4	Order no. 5034 ..
Remote sensor	Order no. 1493 00

10 Warranty

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