Zigbee Pushbutton Interface 2-gang 230 V

Art. no.: 57004000

Operating instructions

1 Safety instructions

To avoid possible damage, read and follow the following instructions:

Installation only by persons with appropriate knowledge and experience in the following areas:

– 5 safety regulations and standards for the installation of electrical systems
– Selection of suitable tools, measuring devices, installation materials and, if necessary, personal protective equipment
– Installation of the installation material
– Connection of devices to the building installation under consideration of local connection conditions

Improper installation endangers your own life and the lives of users of the electrical system and there is a risk of serious damage to property, e.g. through fire. You are at risk of personal liability for personal injury and damage to property.
Contact an electrical contractor!

Even a lamp that is visibly switched off is permanently supplied with mains voltage. Therefore, switch off the circuit breaker before replacing the lamp. Otherwise there is a risk of electric shock when touching live parts.

The device must not be used in connection with consumers that could lead to danger to life or limb or damage to property, e.g. heaters or electrical machines.

Read the instructions in full, observe them and keep them for future reference.
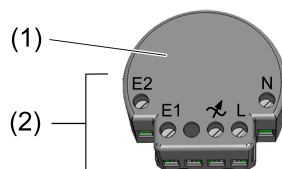
2 Device components

Figure 1: Device components

(1) Push-button interface 2-gang 230 V
(2) Terminals

3 Intended use

– Zigbee transmitter for operating Zigbee-compliant devices, e.g. lamps, lights, plug adaptors, dimmers, venetian blind actuators
– Operation with connected switches or push-buttons (normally open contact) and venetian blind push-buttons
– Control via sensors with relay contact 230 V
– Integration into networks with Zigbee gateways from different manufacturers
– Mounting in appliance box according to DIN 49073 with a suitable cover

4 Product characteristics

– Zigbee Certified Product
– 2 inputs for switches, push-buttons or relay contacts 230 V from sensors

– Switching, dimming, colour temperature control, venetian blind and shutter control, saving and opening scenes
– Electronic short circuit protection
– Electronic over-temperature protection
– Operation without neutral conductor possible when supplied via a lamp wire
– Parameterising via app
– Updating via app

5 Operation

If the lamps in a group are in different switching states, they are synchronised when they are first operated. Depending on the desired switching state, further operation is required.

| i | For an unused input of the push-button interface the operating mode "off" should be set.

Switching or dimming the light using the push-button

Operating mode "Control" is set in the app.

■ Switching: Press the push-button briefly. The light switches on or off.
■ Dimming: Long press on the push-button. The dimming process ends when the push-button is released.
■ Colour temperature: Press the push-button twice briefly (double-click) in the switched-on state to switch to the "Colour temperature" mode.
    Long press on the push-button to change the colour temperature. With each new long press, the direction of the color temperature change changes.

| i | After a further double click, the device switches back to normal operation. After one minute without operation, the device also returns to normal operation.

Switching the light using the switch

Operating mode "Switch" is set in the app.

■ Switching: Switch using the switch. Light switches off or on to the last brightness value.
■ Switching the light to 50% brightness: Switch twice using the switch.
■ Switching the light to 100% brightness: Switch three times using the switch.

Saving and opening scenes using the push-button

The Zigbee devices to be saved in a scene must first be assigned to the inputs of the push-button interface in the app.

Operating mode "Scene" is set in the app.

■ Saving the scene: Set the device to the required values. Long press on the push-button to save the scene. For confirmation, the devices switch briefly off and on again.
■ Opening the scene: Press the push-button briefly.

| i | To reset the scene, the "All Off" scene must be saved to an input.

| i | Saving the scenes using the push-button can be deactivated via the app (default: activated).

Operating the curtain using the push-button

Operating mode "Blinds" is set in the app.

| i | Push-button at input 1 raises the curtain, push-button at input 2 lowers the curtain. This can be switched over in the app.

■ Moving the curtain: Press the push-button for longer than 1 second.
■ Stopping the curtain: Press the push-button briefly.
■ Adjusting the slats (venetian blind only): Press the push-button for less than 1 second.

6   Fitting and electrical connection

To ensure good transmission quality, keep a sufficient distance from any possible sources of interference, e.g. metallic surfaces, baby monitors, microwave ovens, WiFi routers and wireless headphones.

⚠ **DANGER!**

Electrical shock when live parts are touched.

Electrical shocks can be fatal.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers, secure against being switched on again and check that there is no voltage!

ⓘ   Recommendation: Use an appliance box with an installation depth of 60 mm.

Operation of the push-button interface, in combination with a switch or push-button, is possible with and without neutral conductor.
If there is a neutral conductor, the push-button interface should be connected to it in any case (Figure 2).
When operating without a neutral conductor, the lamp wire must be connected to the load terminal ⚡. This is used for the power supply of the push-button interface, the load is not switched over it. With some HV LED Zigbee lamps it may also be necessary to connect a compensation module (4) to ensure the power supply of the push-button interface or a trouble-free operation of the lamp (Figure 3).
To connect the push-button interface to a venetian blind push-button for operating curtains, the connection to a neutral conductor is necessary (Figure 4).

ⓘ   Only HV LED Zigbee lamps may be connected to the load terminal ⚡.

- ■   Make the electrical connection according to the connection diagram (Figure 2), (Figure 3) or (Figure 4). In doing so, note the clampable conductor cross-section (Figure 5).
- ■   When connecting without neutral conductor, connect a compensation module (4) if necessary (Figure 3).
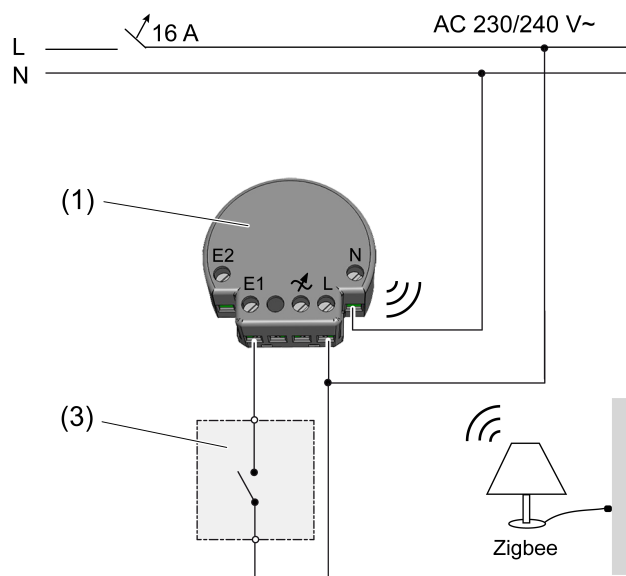

Figure 2: Connection diagram switch or sensors (with neutral conductor)

(1)   Push-button interface
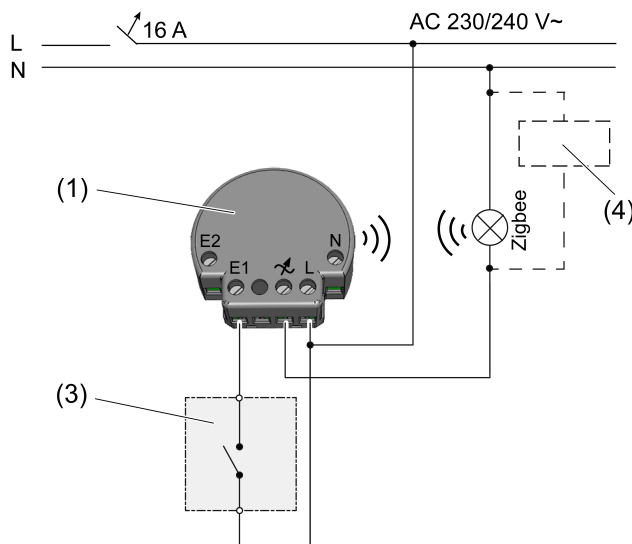(3)   Switch, push-button or relay contact of a sensor

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Figure 3: Switch connection diagram (without neutral conductor)

(1) Push-button interface
(3) Switch, push-button or relay contact of a sensor
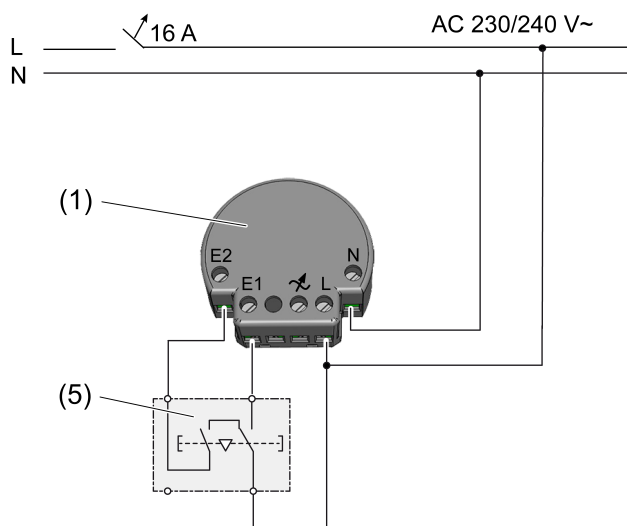(4) Compensation module (optional, see accessories)

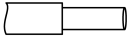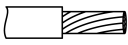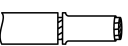Figure 4: Venetian blind push-button connection diagram (5)

1 x 0,5 ... 2,5 mm²
2 x 0,5 ... 2,5 mm²

1 x 0,5 ... 4 mm²
2 x 0,5 ... 2,5 mm²

1 x 0,5 ... 2,5 mm²
2 x 0,5 ... 1,5 mm²

Figure 5: Clampable conductor cross-section

Reset the overheating protection / short-circuit protection

If the electronic overheating or short-circuit protection has been triggered, disconnect the device from the mains. After cooling the device is ready for use again.

7   Commissioning

Commissioning is carried out via the NEXENTRO Config App, which step by step guides you through the commissioning. This requires a mobile end device (smartphone or tablet) with a Bluetooth interface and the Android or iOS operating systems.

> ℹ️   The NEXENTRO Config App for the operating systems Android or iOS must be downloaded from the App Store (iOS) or Google Play Store (Android) and then installed.

App functions

– Joining an existing network
– Setting up your own network
– Assigning a device name
– Setting device parameters: Operating mode, venetian blind movement direction, scenes, switch-on behaviour (dimming level, colour temperature)
– Connect the push-button interface to Zigbee actuators and Zigbee lamps
– Displaying the switching status of the connected switches or push-buttons
– Displaying device information: Device type, software version, hardware version
– Performing a software update
– Resetting to the default setting

The following operating modes can be set via the app:

– **Control**: For operating two separate lighting units via one push-button each for switching on and off, dimming and setting the colour temperature (default setting). When the push-button is operated, the load is switched over, e.g. lights that are switched on are switched off and vice versa.
– **Switch**: For operating two separate lighting units via one switch each for switching loads on and off. When the switch is operated, the load is switched over, e.g. lights that are switched on are switched off and vice versa.
– **Sensor**: For operating sensors with relay contact 230 V, e.g. motion detectors. The load is always switched on when the relay contact is closed and always switched off when it is opened.
– **Scene**: For operation with two push-buttons for opening individual scenes.
– **OFF**: Input unused.
– **Control 1ch**: For operating a lighting unit via two push-buttons. Input E1: Switch on, dim brighter or change colour temperature to cold white. Input E2: Switch off, dim darker or change colour temperature to warm white.
– **Blinds**: For operation with two push-buttons for operating a venetian blind or a shutter.

Registering new devices in the NEXENTRO Config app

NEXENTRO devices must be registered for commissioning in the NEXENTRO Config App. To do this, the new unit must be put into pairing mode, which is active for approx. 1 minute after mains voltage recovery.

■ Re-energise the NEXENTRO device and start the search in the NEXENTRO Config App.
■ Add the new device to the list of registered devices.
■ Assigning device names (optional).

> ℹ️   With a registered device, connecting to a terminal is possible at any time.

Adding a push-button interface to a Zigbee network with gateway

To be able to control devices of a Zigbee network, the push-button interface must be added to the network.

> ℹ️   With certain gateways, adding to a network is done via the **Touchlink** function, see http://www.nexentro.de/help.

■ Start the search mode for new devices in the app of the gateway to open the network for further Zigbee devices. The function call depends on the gateway, e.g. "Search devices".

- In the NEXENTRO Config App, set the operating mode for both inputs of the push-button interface.
- Select the **Join Network** function.

  The push-button interface joins the Zigbee network.

  In the NEXENTRO Config App, all available Zigbee devices are displayed according to the current operating mode of the push-button interface.
- Select the devices to be controlled with the respective input of the push-button interface.

ⓘ The push-button interface is not displayed in the app for some gateways, but can be connected to available Zigbee devices from the network via the NEXENTRO Config App.

Creating a Zigbee network with the push-button interface (without gateway)

A Zigbee network can be created with the push-button interface and further NEXENTRO devices can be added to the network. Adding additional Zigbee devices is always done via the NEXENTRO device with which the Zigbee network was created.

- In the NEXENTRO Config App, set the operating mode for both inputs of the push-button interface.
- Select the **Create Network** function.

  The push-button interface has created a Zigbee network. The device search starts and searches for devices to join the network.
- Re-energise Zigbee lamps that are to join the network. For NEXENTRO devices, select **Join Network**.

  All available Zigbee devices are displayed according to the current operating mode of the push-button interface.
- Select the devices to be controlled with the respective input of the push-button interface.

Adding a push-button interface to a Zigbee network of NEXENTRO devices

The push-button interface can be added to a network created with another NEXENTRO device via the function **Create Network**.

- Carry out the device search in the NEXENTRO Config App for the NEXENTRO device with which the Zigbee network was created.
- Switch to the push-button interface to be added to the Zigbee network.
- Set the operating mode for the two inputs of the push-button interface.
- Select the **Join Network** function.

  The push-button interface joins the Zigbee network.

  All available Zigbee devices from the Zigbee network are displayed according to the current operating mode of the push-button interface.
- Select the devices to be controlled with the respective input of the push-button interface.

Joining a Zigbee network with a push-button interface via Touchlink

Requirement: The distance between the Zigbee transmitter and the push-button interface is 10 to 20 cm.

- Select function **Touchlink** in the NEXENTRO Config App.

  The push-button interface is ready to join the Zigbee network.
- Trigger Touchlink on the Zigbee transmitter.

  The push-button interface joins the Zigbee network.

  In the NEXENTRO Config App, all available Zigbee devices are displayed according to the current operating mode of the push-button interface.
- Select the devices to be controlled with the respective input of the push-button interface.

Restoring the device to factory settings

Resetting the device to default settings is done via the app. The device deletes the assignments to a network and all connections to Zigbee devices. The operating mode is set to "Control".

[i]   After resetting the device to the default setting, it has to be removed from the NEXENTRO Config App. On iOS equipment, the device also has to be removed from the list of paired Bluetooth devices (Settings/Bluetooth). Otherwise, re-pairing will not be possible.

Deleting assignment to the Zigbee network and Bluetooth coupling

■   Switch off the supply voltage to the device four times in quick succession and switch it on again. The pause between switching operations must be less than two seconds.
      The network assignment and the Bluetooth coupling to mobile end devices are deleted.

8   Technical data

Rated voltage	AC 230 / 240 V ~
Mains frequency	50 / 60 Hz
Connected load at 35 °C	
HV-LED lamps	max. 100 W

[i]   When operating with a neutral conductor, the connection power at the load terminal increases to a maximum of 150 W.

Power reduction	
per 5 °C in excess of 35 °C	-5%
when installed in wooden or dry construction walls	-15%
when installed in multiple combinations	-20%

Standby power	max. 0.2 W
Power loss	max. 1.2 W
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C
Dimensions (LxWxH)	approx. 48 x 45 x 20 mm

Total line length	
pwr cable	max. 100 m
Input cable	max. 50 m

Zigbee	
Communication protocol	Zigbee 3.0 (router)
Radio frequency	2.400 ... 2,483 GHz
Transmission capacity	1 mW

Bluetooth	
Radio frequency	2.402 ... 2.480 GHz
Transmission capacity	max. 2.5 mW, Class 2
Transmitting range	typ. 10 m

9   Accessories

Compensation module LED	Order no. 51681000

10 Declaration of conformity

Insta GmbH hereby declares that the radio system type art. no. 57004000 meets the directive 2014/53/EU. You can find the full article number on the device. The complete text of the EU Declaration of Conformity is available under the Internet address: www.insta.de/instastorefront/services/downloads

11 Warranty

We reserve the right to make technical and formal changes to the product in the interest of technical progress.

We provide a warranty as provided for by law.

Please send the unit postage-free with a description of the defect to our central customer service office:

Insta GmbH
Service Center
Hohe Steinert 10
58509 Lüdenscheid
Germany

Insta GmbH

Postfach 1830

58468 Lüdenscheid

Germany

Telefon +49 (0) 2351 936-0

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