



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!

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

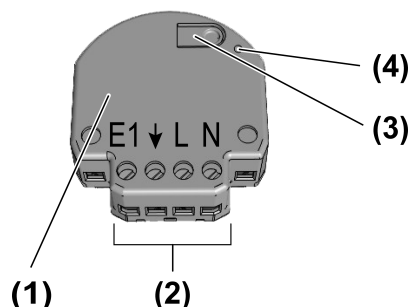


Figure 1

- (1) Switch actuator mini
- (2) Terminals
- (3) Button **Prog.**
- (4) LED

3 Intended use

- Zigbee actuator for switching loads
- Zigbee transmitter to operate Zigbee-compliant lamps, luminaires and switch actuators
- Operation of Zigbee-compliant transmitters or connected switches or push-buttons (normally open contact)
- Control via sensors with relay contact 230 V
- Use in conjunction with Zigbee gateways from different manufacturers
- Mounting in appliance box according to DIN 49073 with a suitable cover

4 Product characteristics

- Zigbee-certified product
- Display of the set operating mode by means LED
- Input to connect a switch, push-button or relay contact 230 V of a sensor
- NO or NC contact operation, setting via app
- Assigning the input to other Zigbee devices via app
- Parameterising via app
- Updating via app

5 Operation

Operating actuator with connected switch or push-button

- Pressing switch or push-button: Actuator switches on or off.

Transmitter function

Additional Zigbee lamps or devices for controlling lighting can be connected to the actuator. This function is set with the NEXENTRO Config App. The devices are then operated in the same way as the actuator when a switch or button is pressed.

Radio operation

The operation is done with Zigbee transmitters or Zigbee gateways that comply with Zigbee Standard 3.0. The scope of functions and the type of operation depends on the transmitter or gateway used.

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!

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

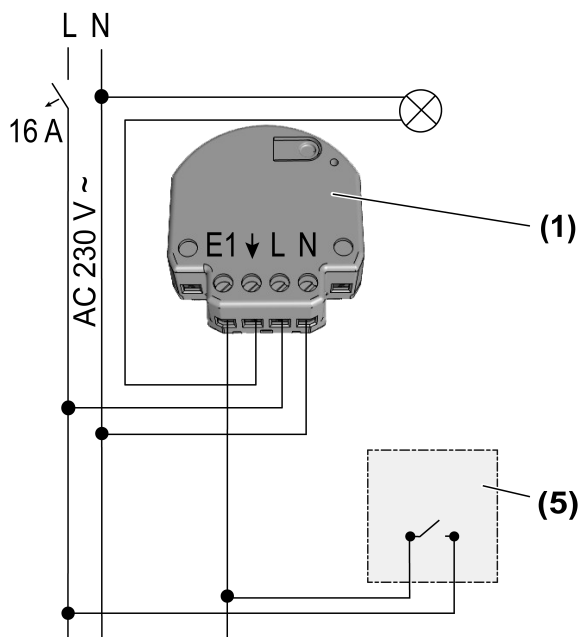


Figure 2: Connection diagram

- (1) Switch actuator mini
- (5) Switch, push-button (normally open contact), sensor with relay contact 230 V

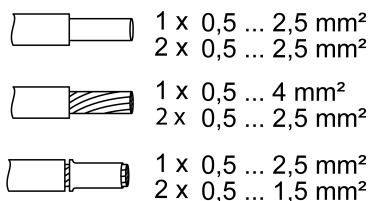


Figure 3: Clampable conductor cross-section

Lit switches or push-buttons must have a separate N terminal.

- Make the connection according to the connection diagram. In doing so, note the clampable conductor cross-section (Figure 3).
- Insert the actuator in the appliance box in such a way that the **Prog.** button and status LED are visible.
- **i** The light can be switched by briefly pressing the **Prog.** button.
- Mount a suitable cover or switch or push-button.
- Perform commissioning.

7 Commissioning with app

The requirement for commissioning via app is a mobile end device (smartphone, tablet) with Bluetooth interface, running the Android or iOS operating system. The app guides you step by step through the commissioning process.

- Download and install the NEXENTRO Config App from the App Store (iOS) or Google Play Store (Android).

App functions

- Joining an existing network
- Setting up your own network
- Assigning device names

- Setting device parameters: Operating mode (Operation with switch, push-button or sensor), normally open or normally closed contact operation
- Connecting the actuator with Zigbee transmitters, actuators or gateways
- Displaying the switching status: On, Off
- Displaying device information: Device type, software version, hardware version
- Performing a software update
- Resetting to the default setting
- Operating the actuator for test purposes

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).

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

Adding the NEXENTRO actuator to a Zigbee network with gateway

To connect the NEXENTRO actuator to other Zigbee devices, the NEXENTRO actuator must be added to the network.

i 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".
- Select function **Join Network** in the NEXENTRO Config App.
The actuator joins the Zigbee network and is displayed in the app of the gateway.
The NEXENTRO Config App shows all available devices that can be controlled via the sensor function of the actuator.
- Select the devices.

Create a Zigbee network with the NEXENTRO actuator (without gateway)

A Zigbee network can be created with a NEXENTRO actuator and other 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.

- Select function **Create Network** in the NEXENTRO Config App.
The NEXENTRO actuator 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 shown.
- Select the devices.

Adding the NEXENTRO actuator to a Zigbee network of NEXENTRO devices

The NEXENTRO actuator 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 NEXENTRO actuator to be added to the Zigbee network.
- Select the **Join Network** function.
The actuator joins the Zigbee network.

All available devices that can be controlled via the sensor function of the actuator are shown.

- Select the devices.

Joining a Zigbee network with a NEXENTRO actuator via Touchlink


Requirement: The distance between the Zigbee transmitter and the NEXENTRO actuator is 10 to 20 cm.

- Select function **Touchlink** in the NEXENTRO Config App.
The NEXENTRO actuator is ready to join the Zigbee network.
- Trigger Touchlink on the Zigbee transmitter.
The actuator joins the Zigbee network and is connected to the transmitter.
The NEXENTRO Config App shows all available devices that can be controlled via the sensor function of the actuator.
- Select the devices.

8 Commissioning without app

A simplified commissioning can also be carried out without the app.

Prerequisite: The actuator is in the default setting or the assignment to a Zigbee network has been deleted.

- Open the network of the gateway, see gateway app.
 - Switch on mains voltage.
The actuator searches for the gateway's Zigbee network for 1 minute.
The switching state of the actuator changes four times, the actuator has found the network and joined it. The actuator is displayed in the app of the gateway.
 - If the actuator is operated without a gateway, connect the actuator to a transmitter via Touchlink within 5 minutes after switching on the mains voltage.
-  A more detailed configuration can only be carried out with the NEXENTRO Config App.

Setting the operating mode using the Prog. button



DANGER!

Mortal danger of electric shock.

The following work must be carried out under mains voltage and therefore may only be carried out by an electrician!

Only use insulated tools for the work! Cover up live parts in the working environment.

- "Switching with switch" operating mode: Connection of switches. When the switch is operated, the load is switched over, e.g. lights that are switched on are switched off and vice versa.
- "Switching with push-button" operating mode: Connection of push-buttons. When the push-button is operated, the load is switched over, e.g. lights that are switched on are switched off and vice versa.
- "Sensor" operating mode: For operating with 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.

LED	Mode
GN (grün, green)	Schalter, switch
RD (rot, red)	Taster, push button
BL (Blau, blue)	Sensor, sensor

Figure 4: Assigning LED colour to the operating mode

- Press the button **Prog.** (3) until LED (4) lights up.
The current operating mode is displayed.
- Keep briefly pressing button **Prog.** (3) until the necessary operating mode is selected.
The LED (4) lights up in the colour of the selected operating mode (Figure 4).
- Save the settings: Press the button **Prog.** (3) for less than 4 seconds or do not press for 30 seconds. The LED (4) goes out.

9 Reset device

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 actuator acknowledges the deletion of the network assignment and the Bluetooth coupling to mobile end devices by changing the switching state four times.

Restoring the device to factory settings

The device deletes the assignment to a network and all connections to Zigbee lamps and devices. The "Switching with switches" operating mode is set. Alternatively, the device can also be reset with the NEXENTRO Config App.



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
Precondition: Load is switched off.

- Press the **Prog.** button (3) for longer than 20 seconds.
After approx. 20 seconds, the LED flashes rapidly alternately red and green.
- Within 10 seconds, release the button and actuate it briefly once again.
The LED flashes more slowly alternately red and green, the device is reset to the default settings and is restarted.

- i** After resetting the device to the default settings or deleting the Bluetooth coupling, the device must 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.

10 Technical data

Rated voltage	AC 230 / 240 V ~
Mains frequency	50 / 60 Hz
Standby power	max. 0.2 W
Power loss	max. 4 W
Ambient temperature	-5 ... +45 °C

Storage/transport temperature	-25 ... +70 °C
Dimensions (LxWxH)	approx. 48 x 51 x 20 mm
Switching current at 35 °C	
Ohmic	16 A (AC1)
 For a switching current greater than 10 A, use a conductor cross-section of 2.5 mm ² .	
Connected load at 35 °C	
Incandescent lamps	2300 W
HV halogen lamps	2000 W
Electronic transformers	1500 W
Inductive transformers	1000 VA
HV-LED lamps	typ. 400 W
Capacitive load	920 VA (115 µF)
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%
Total line length	
pwr cable	max. 100 m
Extension	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

11 Declaration of conformity

Insta GmbH hereby declares that the radio system type art. no. 57005000 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

12 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:

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 Service Center
 Hohe Steinert 10
 58509 Lüdenscheid
 Germany

Insta GmbH

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