

**KNX push-button universal 1-gang**

Art. no.: ..10911ST

**KNX push-button universal 2-gang**

Art. no.: ..10921ST

**KNX push-button standard 1-gang**

Art. no.: ..10711ST

**KNX push-button standard 2-gang**

Art. no.: ..10721ST

**KNX push-button extension 1-gang**

Art. no.: ..10911TE

**KNX push-button extension 2-gang**

Art. no.: ..10921TE

**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.

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

## 2 Device components

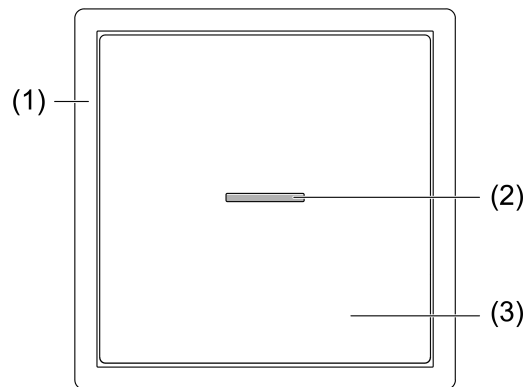


Figure 1: Device components 1-channel

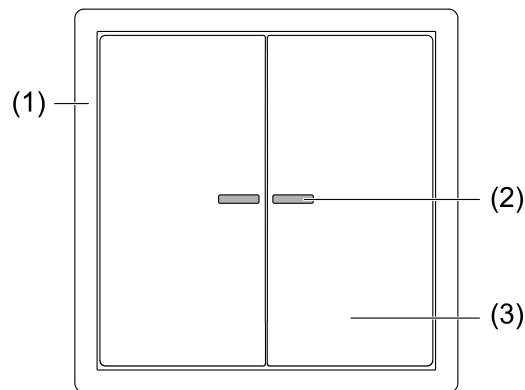


Figure 2: Device components 2-channel

- (1) Design frame (accessories)
- (2) Status LED
- (3) Operating rockers (accessory)

### 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 Jung 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, brightness values, temperatures, colour values, calling up and saving scenes, etc.
- Mounting in appliance box according to DIN 49073

#### Product characteristics

- Operating concept (rocker or button) adjustable for every operating area
- Button assessment (single-area operation or dual-area operation) adjustable
- One or two functions per operating area
- Integrated bus coupling unit

Depending on the version:

- Completion with 1-gang or 2-gang rocker

Universal:

- Alarm message, optionally with confirmation by pressing any button
- Disable or function switch-over of all or of individual button functions possible
- Brightness of Status LEDs adjustable
- Measurement of the room temperature
- One status LED per operating area – red, green or blue adjustable
- Connection of possible
- Connection of external switching contacts possible

Standard:

- One status LED for each operating area - red

Extension:

- Connection to Push-button universal possible
- Version with single and dual rocker without status LED

## 4 Energy saving mode

The device optionally switches to the energy saving mode after a preset time or by an external telegram. In energy saving mode all LED functions are switched off.

The device leaves the energy saving mode – depending on programming – on operation or by an external telegram.

**i** Button or rocker operations with activated energy saving mode are executed immediately.

## 5 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.

**i** Universal: For the rocker functions Dimming, Venetian blind and 2-channel operation, full-surface operation can be programmed, which can trigger another function.

### Operating a function or load

- Switching: Short press on button / rocker.
- Dimming: Long press on the button / rocker.
- Moving Venetian blind: Long press on button / rocker.
- Stopping or adjusting Venetian blind: Short press on button / rocker.
- Setting value: Short press on button / rocker.
- Adjusting value: Long press on button / rocker
- Opening scene: Short press on button / rocker
- Saving scene: Long press on button / rocker
- Operating channel 1: Short press on button / rocker
- Operating channel 2: Long press on button / rocker
- Operating controller extension: Short press on button / rocker

## 6 Information for electrically skilled persons



### DANGER!

Mortal danger of electric shock.

Cover up live parts in the installation environment.

### 6.1 Fitting and electrical connection

Mounting and connecting the device (Figure 3)

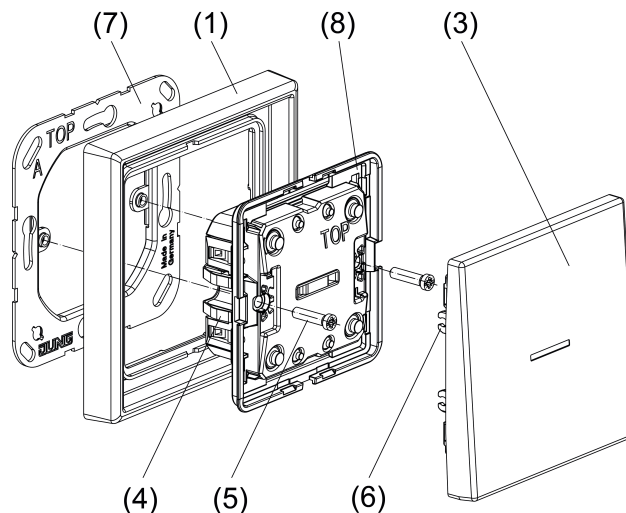


Figure 3: Fitting the device

- (1) Design frame
- (3) Operating rocker (top = narrow side)
- (4) Retaining spring
- (5) Screw
- (6) Retaining clamp
- (7) Supporting frame
- (8) Device module



### DANGER!

Danger of electric shock

When mounting with 230 V socket outlets under a common cover, there is a danger of electrical shocks in the event of a fault.

Use only the enclosed plastic screws for fastening to the supporting frame!

- Mount supporting frame in the right orientation on an appliance box.
- i** Note marking **TOP** and marking **A** (= in front).
- i** Use the supplied box screws.
- Connect device to the KNX using KNX connecting terminal (red= +, black = -).
- Optional: Connect (see accessories) to connection terminal (Figure 4).
- Optional: Connect external switching contacts (e.g. push-button or reed contacts) to the connection terminal (Figure 5).
- In secure operation: It is advisable to remove the secure certificate from the device.

- Attach device onto the supporting frame.
- Optional: Screw the device to the supporting frame. Tighten the plastic screws only lightly.
- Snap on rockers.
- i** The rockers suitable for the device must be ordered separately (see accessories).
- i** The device should be used in an air-tight appliance box. Drafts cause incorrect temperature values to be measured.

#### connecting (Figure 4)

- i** Only possible with Push-button universal.
- Connect to Push-button universal with a separate line (e.g. J-Y(St)Y 2×2×0.8). Note colour coding: black = SW, red = RT, white = WS, yellow = GE  
The connection terminal blocks are included with the .
- i** Do not exceed the cable length (max. 30 m).
- i** One Push-button universal can be connected per .
- i** Do not connect any external voltage.

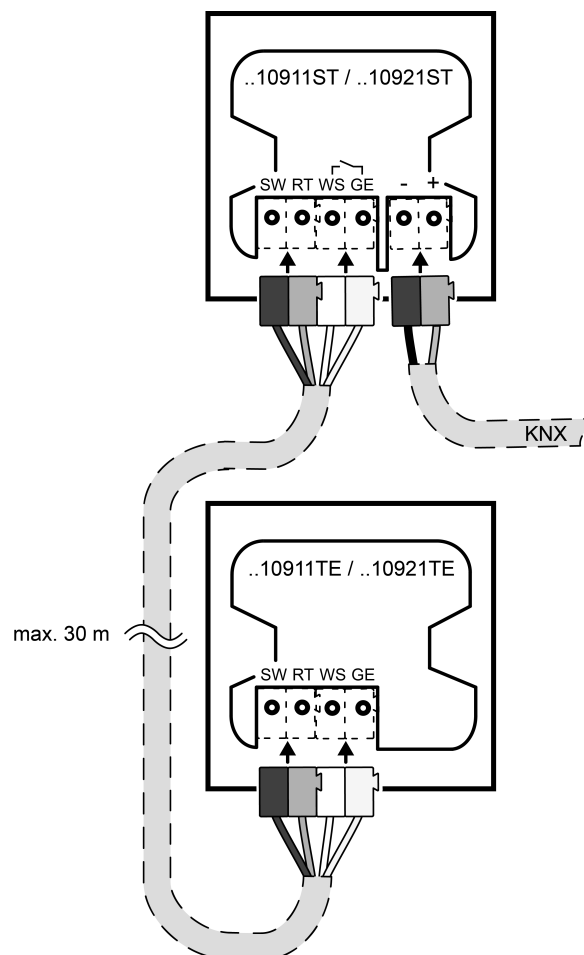



Figure 4: Connecting push-button extension

#### Connecting external switching contacts (Figure 5)

- i** Only possible with Push-button universal.
- Connect external switching contacts (e.g. push-button or reed contacts) with a separate line (e.g. J-Y(St)Y 2×2×0.8) to Push-button universal (connection terminal  / WS GE). A suitable device connection terminal is available as an accessory (2050GEWS).
- i** Do not exceed the cable length (max. 30 m).
- i** A maximum of 20 external switching contacts can be connected in parallel or in series.

**i** Do not connect any external voltage.

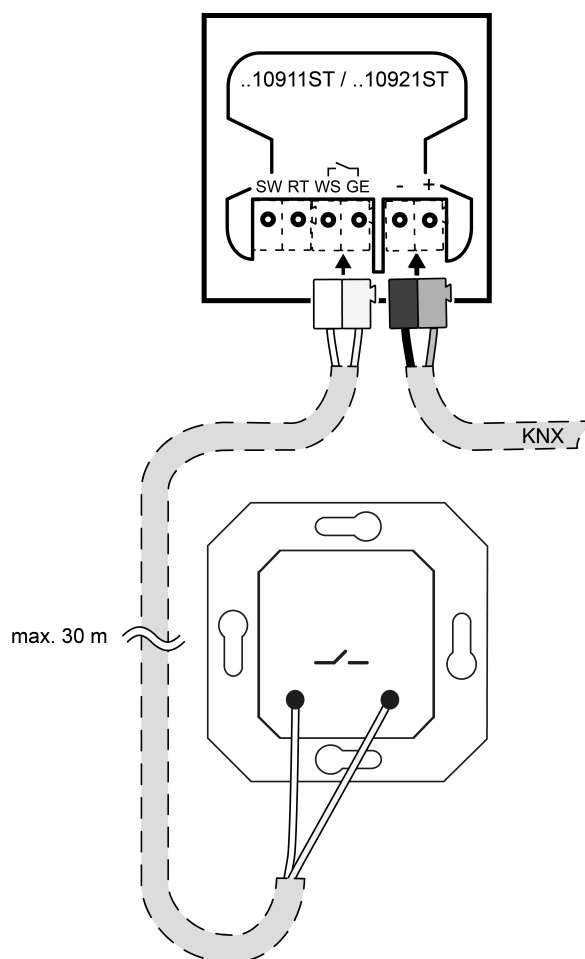


Figure 5: Connecting installation push-button

## 6.2 Commissioning

### Preconditions in secure operation

- A dedicated application program is required.
- 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.

### Programming the physical address and application program

- i** Project design and commissioning with ETS from version 5.7.3 and above.

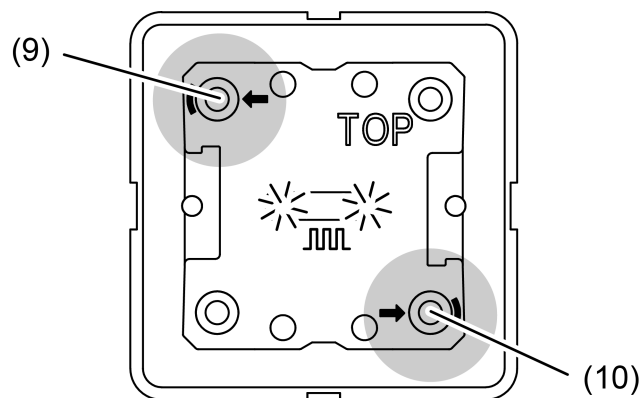


Figure 6: Buttons for activating Programming mode

- i** Activation of the programming mode without attached rockers.

Precondition: The device is connected and ready for operation.

- Activate programming mode: Press and hold push-button at the upper left (9). Then press push-button at the lower right (10) (Figure 6).  
The status LEDs flash rapidly (approx. 8 Hz). Programming mode is activated.
- Load the physical address into the device.  
The status LEDs return to their previous state – off, on, or flashing. Physical address is programmed.
- Write the physical address on the device label.
- Load the application program into the device.
- i** The status LEDs flash slowly while the application program is programmed (approx. 0.75 Hz). As soon as the programming is successfully completed, the status LEDs carry out their parameterised function.
- i** If the device contains no – or an incorrect – application program, both status LEDs flash slowly (approx. 0.75 Hz).

### Safe-state mode

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

- 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 left button and bottom right button (Figure 6).
- Switch on the bus voltage.  
The safe-state mode is activated. The status LEDs flash slowly (approx. 1 Hz).
- i** Only release the the top left and bottom right buttons when the LEDs flash.



## Deactivating safe-state mode

- Switch off bus voltage or carry out ETS programming.


## Master reset

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

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

## Performing a master reset

Precondition: The safe-state mode is activated.

- Press the top left button and bottom right button (Figure 6) and hold for more than 5 seconds.  
The device performs a master reset. The status LEDs flash rapidly (approx. 4 Hz).  
The device restarts. The status LEDs flash slowly (approx. 0.75 Hz).
-  Only release the the top left and bottom right buttons when the LEDs flash.

## Restoring the device to factory settings

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 configuration.

## Flashing sequence of the status LEDs

Status LED status	Flash frequency
Application discharged / stopped	approx. 0.75 Hz
Safe-state mode	approx. 1 Hz
Status display flashes	approx. 2 Hz
Alarm signal	approx. 2 Hz
Master reset	approx. 4 Hz
Programming mode	approx. 8 Hz
Full-surface operation	approx. 8 Hz

## 6.3 Dismantling

### Dismantling the operating rockers (Figure 7)

The operating rockers can be dismantled using a dismantling wedge or a screwdriver (Figure 8).

**i** The recesses are intended for a blade width of up to 4 mm.

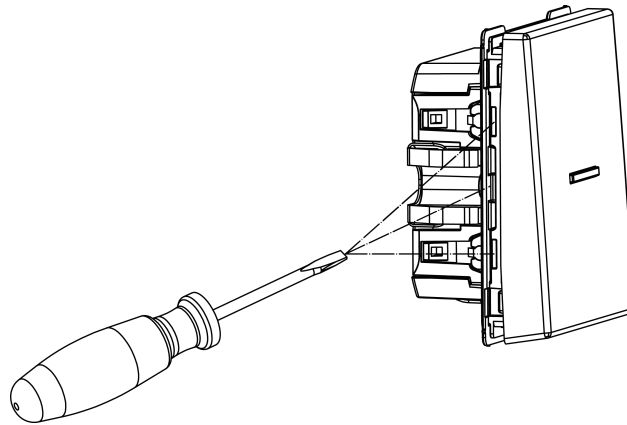


Figure 7: Dismantling rocker from the side

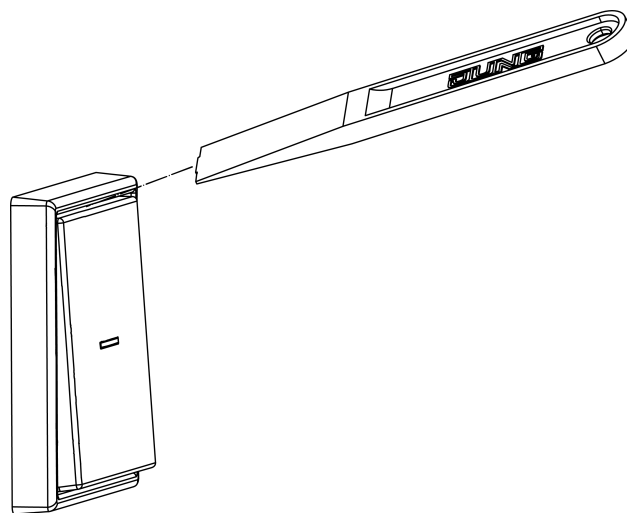


Figure 8: Dismantling rocker from above

## 7 Technical data

### KNX

KNX medium	TP256
Safety	X-mode
Commissioning mode	S-mode
Rated voltage	DC 21 ... 32 V SELV

### Current consumption KNX

without push-button extension or external switching contacts	4.9 ... 8.2 mA
with push-button extension	6.6 ... 9.4 mA
with external switching contacts	7.7 ... 11.0 mA

Connection mode KNX	Standard device connection terminal
Connecting cable KNX	EIB-Y (St)Y 2x2x0.8
Protection class	III

### Push-button extension connection (see accessories)

Number	1
Cable type	J-Y(St)Y 2x2x0.8
Cable length	max. 30 m

### External switching contact connection

Number	max. 20
Cable type	J-Y(St)Y 2x2x0.8
Cable length	max. 30 m

### Ambient conditions

Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C

## 8 Accessories

KNX push-button extension 1-gang	Art. no. ...10911TE
KNX push-button extension 2-gang	Art. no. ...10921TE
Rocker for KNX push-button 1-gang	Art. no. ...101..
Rocker for KNX push-button 2-gang	Art. no. ...102..



## 9 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

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