

**Universal push-button module with BCU, 1-gang**

4091 TSM

**Universal push-button module with BCU, 2-gang**

4092 TSM

**Universal push-button module with BCU, 3-gang**

4093 TSM

**Universal push-button module with BCU, 4-gang**

4094 TSM

## Operationsmanual

# 1 Safety instructions

**Electrical equipment must be installed and fitted by qualified electricians.**

**Failure to observe the instructions may cause damage to the device and result in fire and other hazards.**

**Electrostatic discharges can cause defects in the device. Use only the supplied plastic screws.**

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

# 2 Function

## System information

This device is a product of the KNX/EIB 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.

Planning, installation and commissioning of the device are carried out with the aid of KNX-certified software. Full functionality with KNX commissioning software version ETS3.0d onwards.

An updated version of the product database, technical descriptions and conversion programs and other auxiliary programs are available on our Internet website.

## Intended purpose

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light moods, etc.
- Installation in appliance box to DIN 49073

## Product characteristics

- The push-button functions switching, dimming, controlling blinds, valuator, calling up moods, etc.
- Completion with keyset
- Two red status LEDs for each control surface
- A blue operation LED as an orientation light and to indicate the programming status
- Integrated bus coupling unit
- One or two functions per control surface
- Push-button function or rockers function, vertical or horizontal
- Connection of push-button expansion module to expand the universal push-button sensor module to include four additional buttons

# 3 Operation

## Operating a function or load

Depending on the programming, a control surface can have up to three functions assigned to it – upper/left, lower/right, entire surface. Operation depends on the specific function.

- Switching: Short press on the corresponding control surface.

- Dimming: Long press on the corresponding control surface. The dimming process ends when the control surface is released.
- Move blinds: Long press on the corresponding control surface.
- Stop or adjust blinds: Short press on the corresponding control surface.
- Call up light mood: Short press on the corresponding control surface.
- Save light mood: Long press on the corresponding control surface.
- Set value, e.g. brightness or temperature setpoint: Short press on the corresponding control surface.

## 4 Information for qualified electricians

### 4.1 Fitting and electrical connection



#### **DANGER!**

**Electrical shock on contact with live parts in the fitting environment.**

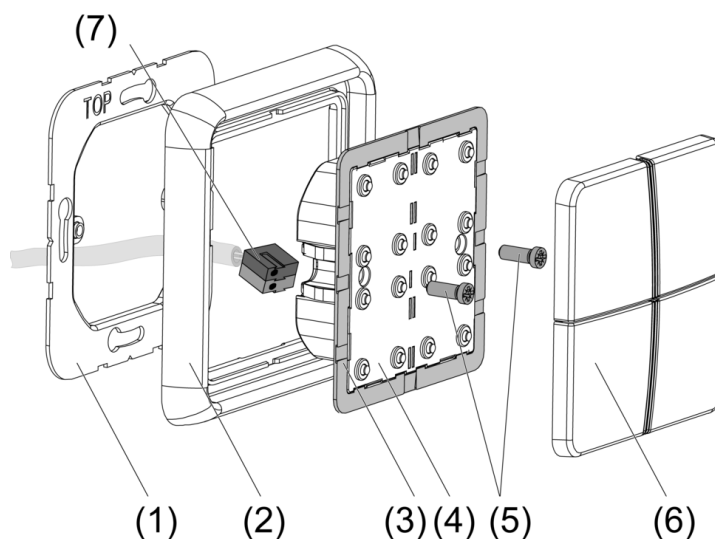
**Electrical shocks can be fatal.**

**Before working on the device, disconnect the supply voltage and cover up live parts in the working environment.**

#### Snapping on the adapter frame

- With the adapter frame (3) in the right orientation, snap it from the front onto the push-button module (4) (see picture 1). Note marking **TOP**.

#### Mounting and connecting the device



picture 1: Mounting the push-button module

- (1) Supporting ring
- (2) Design frame
- (3) Adapter frame
- (4) Push-button module
- (5) Fixing screws
- (6) Design control surfaces
- (7) KNX connecting terminal

Supporting ring side **A** for switch design range FD-Design, frame height 6 mm. Supporting ring side **B** for A design range and CD design range, frame height 11 mm.

When the push-button expansion module is used : Preferably mounted vertically. Use large supporting ring (13). When mounting on only one flush-mounted box, countersink the lower screws into the wall, e.g. with  $\varnothing 6 \times 10$  mm hole. Use supporting ring as template.



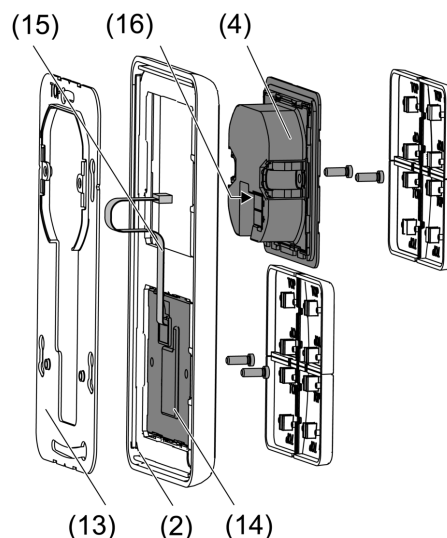
### DANGER!

**Danger of electrical 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 supplied plastic screws for fixing to the supporting ring.**

- Mount supporting ring (1) or (13) in the right orientation on an appliance box. Note marking **TOP**; marking **A** or **B** in front. Use the supplied box screws.
- Push frame (2) onto supporting ring.
- Mount push-button expansion module (14) preferably below. Route connecting cable (15) between supporting ring and intermediate web.
- Push-button expansion module: Insert connecting cable (15) in the right orientation into slot (16) in the push-button module. Do not crimp the connecting cable .
- Connect push-button module (4) to the KNX using KNX connecting terminal (7) and push onto the supporting ring.
- Fix push-button module(s) to supporting ring using the supplied plastic screws (5). Tighten the plastic screws only lightly.
- Before mounting the control surfaces (6), load the physical address into the device (see chapter 4.2. Commissioning).



picture 2: Mounting with push-button expansion module

## 4.2 Commissioning

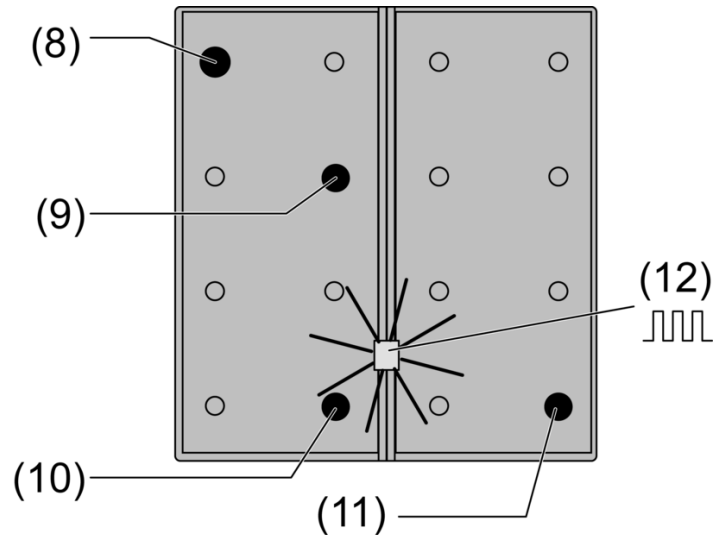
### Loading the physical address and application software

Configuration and commissioning with ETS3.0d Patch A.

The device is connected and ready for operation.

The control surfaces are not mounted yet.

- i If the device does not receive any application software, or the wrong application software, then the blue operation LED flashes slowly.



picture 3: Activating programming mode

- Activate programming mode: Press and hold push-button at the upper left (8). Then press push-button at the lower right (9, 10 or 11):

Push-button module	Prog. push-button
– 4gang, 3gang	(8) + (9)
– 2gang	(8) + (10)
– 1gang	(8) + (11)

The operation LED (12) flashes quickly.

- Load physical address into the device.  
The operation LED (12) returns to its previous state – off, on, or flashing slowly.
- Write the physical address on the device label.
- Load application software into the device.

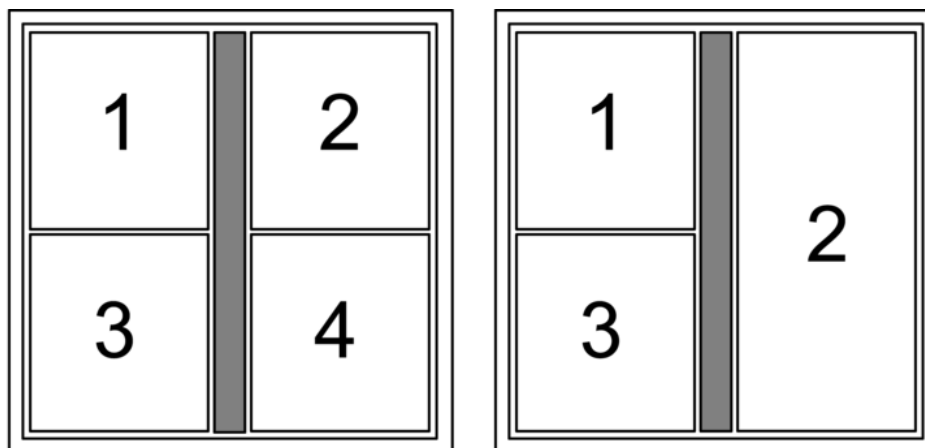
### Fitting the control surfaces

The control surfaces are available as a complete set of buttons. Individual buttons or the complete set of buttons can be replaced using buttons with symbols.

**i** The mounting spider is not required to mount the buttons.

The physical address is loaded into the device.

- Place control surfaces on the device in the right orientation and snap in with a short push. Note marking **TOP**.



picture 4: Button assignment

## 5 Appendix

### 5.1 Technical data

KNX medium  
 Commissioning mode  
 Rated voltage KNX  
 Power consumption KNX  
 Connection mode KNX  
 Protection class  
 Safety class  
 Ambient temperature  
 Storage/transport temperature

TP1  
 S mode  
 DC 21 V ... 32 V SELV  
 typ. 150 mW  
 Terminal  
 IP 20  
 III  
 -5 ... +45 °C  
 -25 ... +70 °C

### 5.2 Accessories

Extension for push-button modules  
 Cover kit, 1-gang  
 Cover kit, 2-gang  
 Cover kit, 3-gang  
 Cover kit, 4-gang  
 Cover with symbol, 1-gang  
 Cover with symbol, 2-gang  
 Cover with symbol, 4-gang for button 1 or 4  
 Cover with symbol, 4-gang for button 2 or 3  
 Adapter frame for CD ranges

Art.-No.: 4094 TSEM  
 Art.-No.: ..401 TSA..  
 Art.-No.: ..402 TSA..  
 Art.-No.: ..403 TSA..  
 Art.-No.: ..404 TSA..  
 Art.-No.: ..401 TSAP..  
 Art.-No.: ..402 TSAP..  
 Art.-No.: ..404 TSAP..14  
 Art.-No.: ..404 TSAP..23  
 Art.-No.: CD 4 AR



### 5.3 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:

#### **ALBRECHT JUNG GMBH & CO. KG**

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Kupferstr. 17-19  
D-44532 Lünen  
Service-Line: +49 (0) 23 55 . 80 65 51  
Telefax: +49 (0) 23 55 . 80 61 89  
mail.vka@jung.de

#### **General equipment**

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Telefax: +49 (0) 23 55 . 80 62 55  
mail.vkm@jung.de

#### **KNX equipment**

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