u::Lux Switch KNX TP

Manual

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u::Lux Switch KNX TP - Manual

Contents

Mounting

The *u::Lux Switch KNX TP* consists of the *u::Lux NetLink KNX TP* and the *u::Lux Display*.

The *u::Lux NetLink KNX TP* is delivered in a pre-installed metal assembly frame.
The device fits into a 50mm flush-mounting where it has to be fixed (screwed tightly) with the metal assembly frame. To comfortably store the KNX TP cable/s which is/are connected to the *u::Lux Switch KNX TP* (EIB-bus line) we advise however to use a deep flush-mounting (65mm) or even better a so called electronic flush-mounting box (see illustration below).

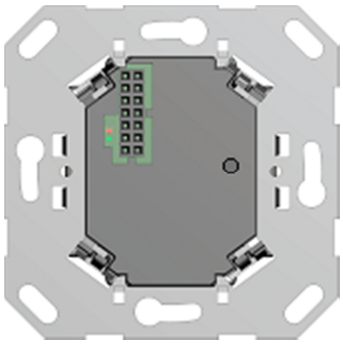
Electronic-flush-mounting box

Before mounting, please ensure that the used flush-mountings are vertical and flat (plane) to the wall.

Flush-mounting installed correctly

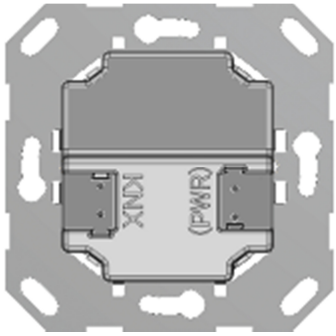
Flush-mounting incorrectly installed

Please note the correct mounting position according to the sketch.



u::Lux NetLink KNX TP – front view (mounting position)

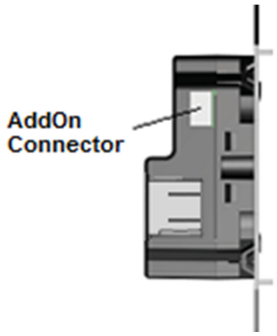
The KNX-cables incl. connection sockets have to be connected to the intended KNX-connectors at the back of the device.



u::Lux NetLink KNX TP – rear view

The wiring of the system works with normal KNX-cables (EIB-bus line). Please note that the connectors have to be mounted carefully to the cable.
Information about the correct mounting of a KNX TP connector can be found on our homepage under „Downloads“ in the document „official KNX-TP Installation Manual (PDF)“.

Optionally there are extensions (e.g. temperature sensor) available. For this reason there is a plug connector provided laterally on the *u::Lux KNX TP*. Please inform yourself on our website about the possibilities with our *u::Lux AddOn* modules.



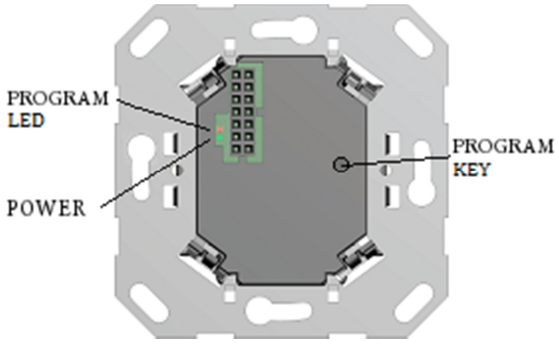
u::Lux-Net Link KNX TP – side view

Mounting order

1. Draw in the KNX-cable and cut to length.
2. Attach the KNX plug connector.
3. *Connect the u::Lux NetLink KNX TP* to the KNX-cable/connector.
4. Connect extensions (optionally).
5. *Fix the u::Lux NetLink KNX TP* with bolts to the flush-mounting.

Startup

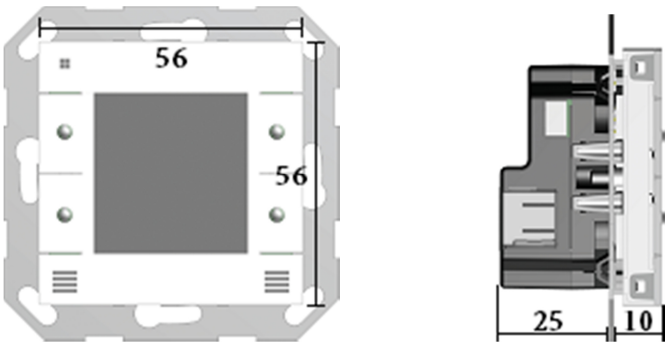
On the *u::Lux NetLink KNX-TP* there are two LEDs visible (for diagnostic purposes) in the installed status The lower LED (green) illuminates as soon as the *u::Lux NetLink KNX-TP* gets provided with energy. Therefore a connection to a KNX power supply is required.



u::Lux NetLink KNX TP – front view

To activate the KNX programming mode there is a key (PROGRAM KEY) and a red LED (PROGRAM LED).

The *u::Lux Display* has to be placed in an appropriate frame cover before it gets attached to the *u::Lux NetLink KNX-TP*. The frame cover is not included in the scope of delivery from the *u::Lux Switch*. Matching frame systems are frame covers in the so-called frame system 55 (opening approx. 56mm). On our homepage you will find a preliminary list of individual manufacturers and model designations. Then the *u::Lux Display* combined with the frame cover has to be attached to the *u::Lux NetLink KNX-TP*. In case of very heavy aperture systems or if an anti-theft device is desired you have the possibility to screw the *u::Lux Display* directly to the assembly frame.



u::Lux Switch KNX TP – front view, side view and measurements (without aperture system)

Startup order

1. Connect the *u::Lux NetLink KNX TP* through the KNX-cable (EIB-bus line), with a *KNX* power supply *(KNX Bus)*.
2. *Mount the u::Lux NetLink KNX TP* in a flush-mounting.
3. *Provide the KNX power supply (KNX Bus)* with voltage.
4. Check the green LED at the *u::Lux NetLink KNX TP.*
5. If necessary assign an address with the ETS (programming mode).
6. *Place the u::Lux Display* in an appropriate frame cover and attach both to the *u::Lux NetLink KNX TP*.

Energy supply

The energy supply of the *u::Lux Switch KNX TP* is provided through the **"BUS"** connection at the *u::Lux NetLink KNX TP.* The black/red wire pair of the KNX bus cable has to be connected to this connection.

There is an additional connector available for special functions (increased energy consumption). This one carries the designation "**PWR"**. Normally here is no connection available or necessary. If indicated connect here the yellow/grey wire pair of the KNX bus cable.

Internal components

The *u::Lux Display* contains the following functional groups:

Display

High-resolution graphic display with a visible resolution of 176x184 pixels and 262.144 colours, currently 65.536 colours are used.

Keys

All 4 keys have a mechanical pressure point. Basically they serve to transmit the switching commands (e.g. light on, light off), and the setting of parameters (e.g. temperature specifications for heating regulation) or they also serve to select a submenu.

RGB LED

One LED is assigned to each push button. By using the RGB LED there can be created mixed colours like yellow, magenta, cyan and white, additionally to the 3 basic colours red, green and blue.

Infrared receiver / infrared sensor

The *u::Lux Switch* includes an infrared transmitter (emitter) and an infrared receiver (detector).
The infrared transmitter is basically needed as a source of infrared for the proximity sensor. The infrared receiver detects signals of an infrared remote control and is used as detector for the proximity sensor.

Brightness sensor

The brightness sensor detects light intensity of more than 500 lux in the wavelength range from approx. 450nm until approx. 850nm (visible light).

Loud speaker

The loud speaker or amplifier of the loud speaker is designed for a short period maximum power output of 0,5W.

Technical data

The data refer to the *u::Lux Switch KNX TP* which consists of the *u::Lux NetLink KNX TP* & *u::Lux Display*.

Supply:	through KNX bus cable (EIB-bus line)
Power consumption:	min. approx. 0,35 W (display switched off), max. approx.. 0,6 W (display switched on).
Bus-current consumption:	approx. 24mA with 21,5V bus voltage, approx. 16mA with 29,5V bus voltage, in each case with display switched on At standby mode: < 15mA with 21,5, < 11mA with 29,5V
Connection (NetLink KNX TP):	1 KNX TP connector, 1 KNX TP optional expansion connector
Notification (NetLink KNX TP):	1 x LED (green) for energy supply 1 x LED (red) for programming
Network:	KNX- TP (Twisted Pair)
Display:	TFT, 184x176 pixels, 262.144 colours, therefrom used 65.536
Ambient temperature:	-10 °C bis +40°C
Storage temperature:	-30 °C bis +80°C
Protection type:	IP20
Protection class:	III
Installation depth:	suitable for 50mm flush-mounting
Installation dimensions:	suitable for 56mm x 56mm aperture systems

Hazard warnings

Attention! Assembly and installation of electrical devices may only be performed by a qualified electrician. Strictly observe the prevailing accident prevention measures. Failure to observe the installation instructions may result in damage to the device, fire or other dangers.

CE – marking

The CE marking is exclusively addressed to the governmental supervising authorities of the Member States and facilitates the free movement of goods. The CE marking does not represent any guarantee of specific features.

Guarantee

The guarantee complies with the statutory requirements. Technical changes and error reserved.

Ordering information

u::Lux Switch KNX TP	order number
u::Lux Switch KNX TP incl. u::Lux AddOn Temp	order number
u::Lux NetLink KNX TP	order number
u::Lux Display	order number

Version Management

Version	Date	Name	Note
1.00	02.02.2016	KH	Creation of the document
1.01	01.11.2016	KH	corrections