



KNX Touch One

Technical specifications and installation instructions

Item number 70195



Elsner Elektronik GmbH Control and Automation Engineering

Sohlengrund 16
75395 Ostelsheim
Germany

Phone +49 (0) 70 33 / 30 945-0 info@elsner-elektronik.de
Fax +49 (0) 70 33 / 30 945-20 www.elsner-elektronik.de

Technical support: +49 (0) 70 33 / 30 945-250

1. Field of application

The **Room Controller KNX Touch One** enables control of the KNX building technology for one room by means of a touch-sensitive display screen. The unit provides integrated control functions which can also be directly set on the display (automatic). Basic settings are made by the installer in the ETS.

The **KNX Touch One** with integrated indoor sensor (temperature, air humidity) includes an internal automated operation function for shades (sun/privacy shades) and room climate control (heating, cooling, ventilation), internal light control as well as bus functions for time and scene control. 4 binary inputs enable the connection of conventional buttons, switches and window contacts.

Eight universal pages with up to eight functions per page can be created to ensure the orderly operation and display of the function and object assignments.

For remote control of the drives, one Remo 8 eight-channel wireless remote control can be used with the **KNX Touch One**.

Functions

- Internal automatic shade controls (protection from the sun/privacy)
- Room climate control (heating, cooling, ventilation)
- Internal lighting control
- Integrated interior sensors (temperature, air humidity)
- Bus functions for time and scene control
- Universal menu to display and operate the function and object assignments
- Bus functions: Actuating variable comparators, multi-function modules (computers), AND/OR logic

Configuration is made using the KNX software ETS. The **product file** can be downloaded from the Elsner Elektronik website on www.elsner-elektronik.de in the "Service" menu.

1.1. Scope of delivery

- Central control and operation unit with colour touch-display screen, 5.7 inch
Integrated interior sensors (temperature, air humidity) and
4 binary inputs (e.g. for buttons)
- Data sheet

Accessories (not included in the scope of delivery):

- Radio remote control Remo 8

1.2. Technical Data

Housing	Plastic
Colour	Gloss white (similar to RAL 9003 Signal White) /Light grey (similar to RAL 7035 Light Grey)
Assembly	Surface mount

Protection Class	IP 20	
Dimensions	approx. 164 x 121 x 38 (B x H x D, mm)	
Weight	Approx. 380 g	
Ambient temperature	Operational 0 to +50°C, Storage -30 to +70°C, Avoid condensation	
Auxiliary supply	12...40 V DC / 14...28 V AC Residual ripple 10 %	
Auxiliary current at 100% display lighting	300 mA at 12 V DC 130 mA at 24 V DC 80 mA at 40 V DC	230 mA at 14 V AC 110 mA at 28 V AC
Auxiliary current at 0% display lighting	120 mA at 12 V DC 55 mA at 24 V DC 35 mA at 40 V DC	85 mA at 14 V AC 45 mA at 28 V AC
Power consumption	For 100 % display lighting: max. 3.6 Watt For 0 % display lighting: max. 1.5 Watt	
Bus current	max. 10 mA	
Data output	KNX +/- Bus connector terminal	
BCU type	TP UART	
PEI type	0	
Group addresses	max. 1024	
Assignments	max. 1024	
Communications objects	447 (Number 1 ... 532)	
Temperature measurement range	0...+50°C	
Resolution (temperature)	0.1°C	
Humidity measurement range	0...100% RH	
Resolution (humidity)	0,1% RH	
Accuracy (humidity)	± 7.5% RH at 0... 10% RH ± 4.5% RH at 10... 90% RH ± 7.5% RH at 90...100% RH	

* Please not chapter *Measuring accuracy*.

The product conforms with the provisions of EU directives.

1.2.1. Measuring accuracy

Deviations in measured values due to interfering sources must be corrected in the ETS (offset).

 Installation location

During the **Temperature measurement**, the self-heating of the device is taken into consideration by the electronics. The software compensates the self-heating by reducing the measured temperature. After commissioning, it may take up to 1.5 hours for the correct indoor temperature value to be displayed.

2. Installation

2.1. Installation notes



Installation, testing, operational start-up and troubleshooting should only be performed by an electrician.



CAUTION! **Live voltage!**

There are unprotected live components inside the device.

- National legal regulations are to be followed.
 - Ensure that all lines to be assembled are free of voltage and take precautions against accidental switching on.
 - Do not use the device if it is damaged.
 - Take the device or system out of service and secure it against unintentional use, if it can be assumed, that risk-free operation is no longer guaranteed.
-

The device is only to be used for its intended purpose. Any improper modification or failure to follow the operating instructions voids any and all warranty and guarantee claims.

After unpacking the device, check it immediately for possible mechanical damage. If it has been damaged in transport, inform the supplier immediately.

The device may only be used as a fixed-site installation; that means only when assembled and after conclusion of all installation and operational start-up tasks and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

2.2. Installation location

The device must be installed in a frost-free room which must wherever possible be heatable in order to prevent dew on the display.

When selecting an installation location, please ensure as far as possible that the temperature and humidity measurements of the integrated sensor are affected as little as possible by external influences. Possible sources of interference include:

- Direct sunlight
- Drafts from windows and doors
- Warming or cooling of the building structure on which the sensor is mounted, e.g. due to sunlight, heating or cold water pipes
- Connection lines which lead from warmer or colder areas to the sensor

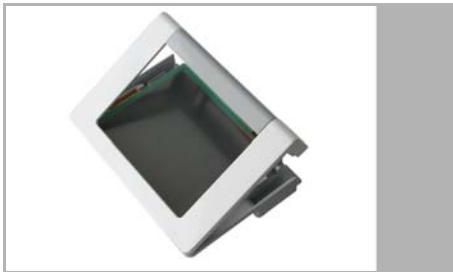
You can correct temperature and humidity variations from such sources of interference on the ETS and/or directly on to the touch display.

2.3. Installing the device

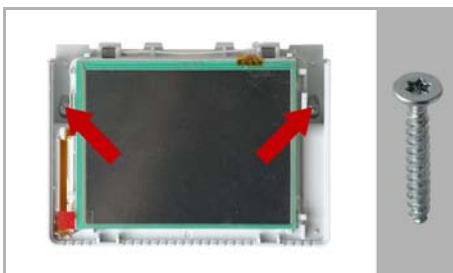
The **KNX Touch One** refers to a surface-mounted unit. Ducting and connections should be via a plaster, hollow wall box or concrete box (see drilling plan).



Loosen the frame on the upper corners by pulling it forward. You can apply pressure on the screen with your thumbs while doing this.

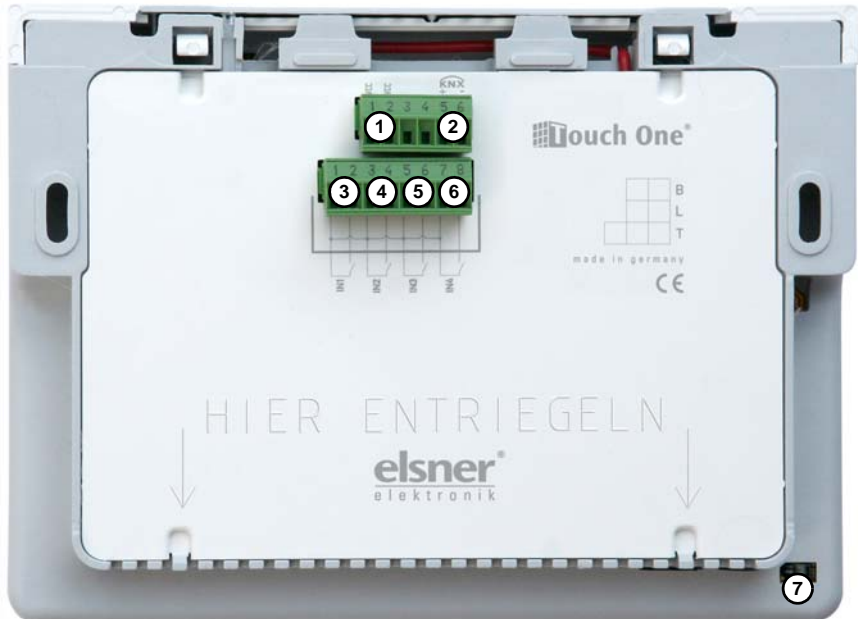


Remove the frame at the top first, then at the bottom.



Secure the underside of the housing to the wall using 2 screws. Use screws which are appropriate for the wall material. Ensure a sufficient distance from wall trim, door frames, etc.

2.4. Assigning connector terminals



- ① Terminals 1, 2: VCC (Auxiliary voltage AC/DC)
- ② Terminal 5: KNX + | Terminal 6: KNX -
- ③ Terminals 1, 2: Button interface 1
- ④ Terminals 3, 4: Button interface 2
- ⑤ Terminals 5, 6: Button interface 3
- ⑥ Terminals 7, 8: Button interface 4
- ⑦ Opening sensor (temperature/humidity)

2.5. Addressing the unit

The physical address is assigned using the display screen menu **Settings > Phys. Address**. Press the buttons:



The **Physical Address** menu displays the current address and the status of the programming LED (the address is 15.15.250 on delivery).



Press the Programming button, in order to address the device to the bus.

3. Maintenance and care

Finger marks on the touch screen are best removed with a damp cloth or a microfiber cloth. You can wipe the buttons without activating them.

Do not use abrasives / detergents or aggressive cleaners for cleaning.

If there is a power outage, the data you have entered will be saved for around 10 years. No battery is required for this.