

KNX Touch One

Technical specifications and installation instructions



1. Description

The **KNX Touch One** enables centralised control of your home automation 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.

The Remo 8 eight-channel wireless remote control can be learned by means of the **KNX Touch One** for remote control of the drives.

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

Configuration is carried out with the KNX software ETS. The **software files** (VD format), data sheet and user's manual is available for download from Elsner Elektronik at www.elsner-elektronik.de in the "Service" menu area.

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	<ul style="list-style-type: none"> Gloss white (similar to RAL 9003 Signal White)/Light grey (similar to RAL 7035 Light Grey) Aluminium (similar to RAL 9006 White Aluminium)/ Graphite (similar to RAL 7024 Graphite 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 to 40 V DC / 14 to 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	362 (Number 1 ... 433)
Temperature measurement range	-40...+100°C
Resolution (temperature)	0.1°C
Accuracy (temperature)	± 1.0°C from +5°C to +45°C
Humidity measurement range	0 ... 100 %
Resolution (humidity)	0,1 % 0 % to 20 % = ± 5 % rH 20 % to 80 % = ± 3 % rH 80 % to 100 % = ± 5 % rH
Drift (humidity)	± 0.5 % rH per year in normal atmosphere

The following norms were consulted during the evaluation of this product with respect to electromagnetic compatibility:

Electromagnetic emission:

- EN 60730-1:2000 EMC Section (23, 26, H23, H26) (Threshold class: B)
- EN 50090-2-2:1996-11 + A1:2002-01 (Threshold class: B)
- EN 61000-6-3:2001 (Threshold class: B)

Immunity to interference:

- EN 60730-1:2000 EMC Section (23, 26, H23, H26)
- EN 50090-2-2:1996-11 + A1:2002-01
- EN 61000-6-1:2004

The product was tested by an accredited EMC-lab in compliance with the above-named norms.

2. Installation

2.1. Installation Instructions



Installation, testing, operational start-up and troubleshooting should only be performed by an electrician (acc. to VDE 0100).

Disconnect power from all lines that are to be connected and take all safety precautions against accidental re-activation.

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



A damaged device may not be put into operation.

If it may be assumed that safe operation is no longer possible, the device or plant is to be taken out of operation and secured against unintentional activation.

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 provided for it.

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

2.2. Installation location

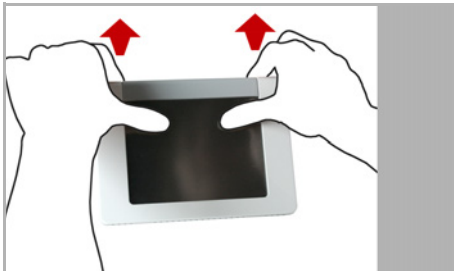
The device must be installed in a frost-free room which must wherever possible be heatable in order to prevent dew on the display.

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 in order to obtain the specified sensor accuracy.

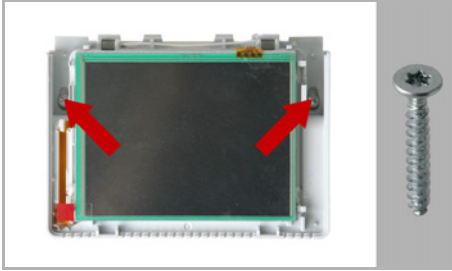
2.3. Installing the device



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

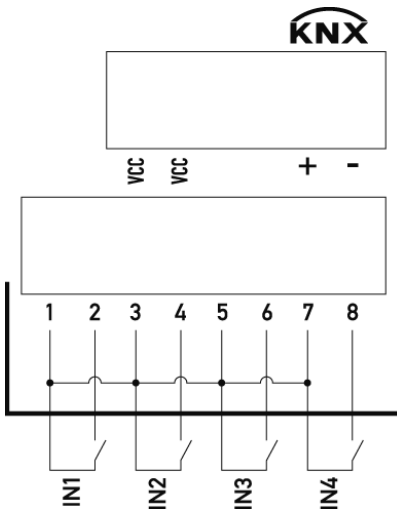


Remove the frame at the top first, then at the bottom.



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



VCC / Auxiliary voltage

1, 3, 5, 7 / \approx VCC DC

2, 4, 6, 8 / button interface 1, 2, 3, 4

3. Maintenance and care

Finger marks on the touch screen are best removed with a damp cloth. In the event of a power failure, the data you entered will be stored for approx. 10 years. No batteries are required.