InZennio Z41. Capacitive color touch panel
ZN1VI-TP41C

CHARACTERISTICS

- 4.1'' capacitive color touch panel.
- LCD display of 16 million colors.
- Up to 6 configurable pages.
- 48 configurable direct control and/or indicator functions.
- 2 independent thermostats.
- Additional screens to control:
    - Configuration.
    - Tools.
- Built-in temperature sensor.
- Real Time Clock (RTC) with watch battery.
- External power supply 12-29VDC needed.
- KNX BCU integrated.
- Connections: Ethernet RJ45 4 poles/USB.
- Magnetic fit.
- Complete data saving in case of power failure.
- CE directives compliance.

1. KNX Connector	**2**. Programming Button	**3**. Programming LED	**4**. External power supply connector
5. Mini-USB connector	**6**. Ethernet connector	**7**. Battery	**8**. Temperature sensor	**9**. Magnet

Programming button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.
Programming LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second.
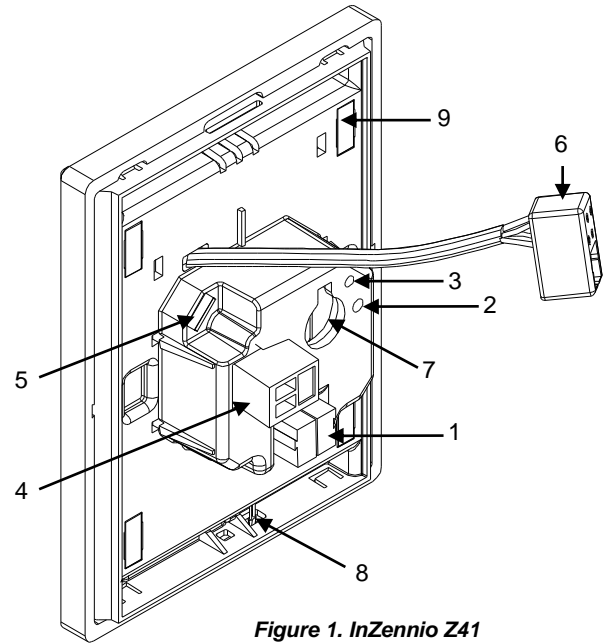

Figure 1. InZennio Z41

GENERAL SYSTEM SPECIFICATIONS

CONCEPT			DESCRIPTION	
Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29VDC SELV	
	Voltage range		21…31VDC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	6	174
		24VDC	10	240
	Bus connection		Typical bus connector TP1; 0,80 mm² section	
External power supply			12- 29 VDC. Maximum consumption: 150mA (12VDC), 76mA (24VDC), 63mA (29VDC). For minimum consumption use 12VDC.**Do not connect 29VDC KNX bus as external power supply**	
Operating temperature			0º C to +45º C	
Storage temperature			-20º C to +60º C	
Ambient humidity (relative)			5 to 95% RH (no condensation)	
Storage humidity (relative)			5 to 95% RH (no condensation)	
Complementary characteristics			Class B	
Safety class			III	
Operation type			Continuous operation	
Device action type			Type 1	
Electrical solicitations period			Long	
Nº of Automatic cycles per auto action			100.000	
Type of protection			IP20, clean environment	
Assembly			Independent Control Assembly device. Vertical position, with the temperature sensor to the bottom. Magnetic fit. See *Installation and Connection Diagram*	
Minimum clearances			Keep away from heat and cold air flows to get better temperature sensor measures	
Response to bus voltage failure			Complete data saving. Initialization screen.	
Response to bus failure recovery			Before failure data recovery	
Response to external power supply failure			Complete data saving. Display is switched off	
Response to external power supply failure recovery			Current data recovery	
Function indicator			Several on display as programmed	
Accessories			RJ45 Connector cable (included). Mini USB A-B cable Ref. ZN1AC-UPUSB (not included)	
Weight			235g (Aluminium frame version) / 227g (Polycarbonate frame version)	
PCB CTI Index			175V	
Enclosure material			PC+ABS FR V0 halogen free	

POWER SUPPLY, CONNECTION AND PORT SPECIFICATIONS

CONCEPT	DESCRIPTION
External power supply connection	Cable screw terminal and matching socket
Ethernet connector	RJ45 connector with 4 poles: Rx(+), Rx(-), Tx(+) and Tx(-). To use this port, consult the *Manual for Firmware Update* at www.zennio.com.
USB connector	Mini USB type A connector. Version 2.0. Do not connect to PC, hard drives or other devices with consumption higher than 150mA.

|	Please refer to the user manuals at www.zennio.com for details on how to upgrade the firmware through this port. The information about the underlying software licenses can be downloaded through the USB port by connecting a flash memory drive containing an empty folder named Z41_LICENSE (please ensure that the firmware version is 3.4.3 or greater).

TEMPERATURE SENSOR AND INTERNAL CLOCK SPECIFICATIONS

CONCEPT	DESCRIPTION
INTERNAL TEMPERATURE SENSOR	
Measuring range	-10 to 50ºC
Resolution	0.1ºC
Sensor precision @25ºC	1 %
Calibration	The temperature sensor should be calibrated through the application program according to the external power supply connected and the frequency of usage
INTERNAL CLOCK	
Resolution	1 minute in display/ 1 second in KNX bus
Precision	30 ppm
Power supply	SR44 1.5V battery (batch numbers before 13X04XXXX) CR1225 3V battery (batch number 13X04XXXX and following)
Data/Time set	Manual (set from screen) or auto (through KNX clock telegrams in bus)
Response to power failure (bus or external power supply)	It does not affect to internal clock
Response to power recovery	The internal error shows current time

INSTALLATION AND CONNECTION DIAGRAMS

Step 1: Place the metallic piece into a squared or rounded standard mounting box with the own screws from the box.
Step 2: Connect the KNX bus at the rear of Z41, as well as the external power supply terminal.
Step 3: Once the power supply and bus KNX are connected, fit Z41 in the metal platform. The device is fixed thanks to the magnets.
Step 4: Slid Z41 downwards to fix it with the security anchorage system. Check, from the side, that nothing unless Z41 outline can be seen (the metal platform should be completely hidden by Z41).

To uninstall proceed in the reverse way.
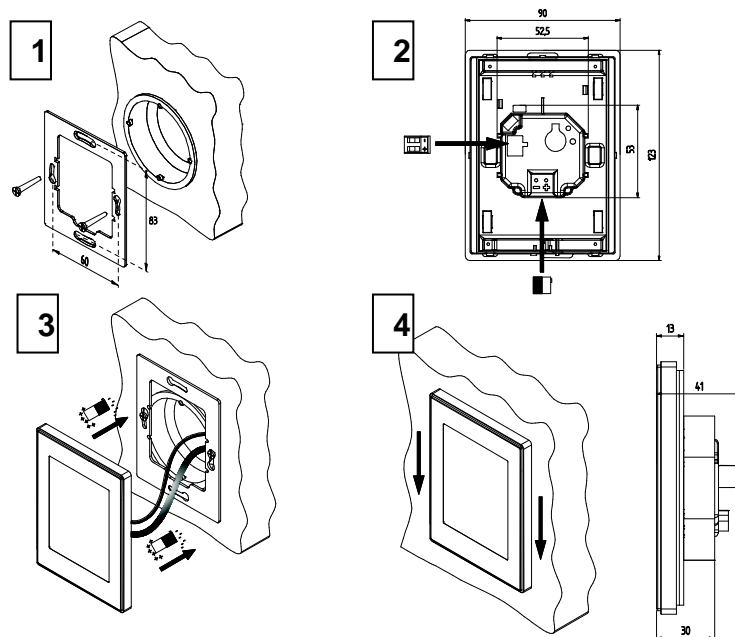
GENERAL CARE

- Do not use aerosol sprays, solvents, or abrasives that might damage the device.
- Clean the product with a clean, soft, damp cloth.

⚠ SAFETY INSTRUCTIONS

- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law.
- Do not connect the main voltage (230V) or any other external voltages to any point of the KNX bus or the device. Connecting an external voltage might put the KNX system into risk.
- Ensure that there is enough insulation between the AC Voltage cables and the KNX bus.
- Do not expose this device to rain or high humidity.
- The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of http://zennio.com/weee-regulation.