**InZennio Z41. Capacitive color touch panel**
**ZN1VI-TP41C**

**Technical Documentation**

## 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.

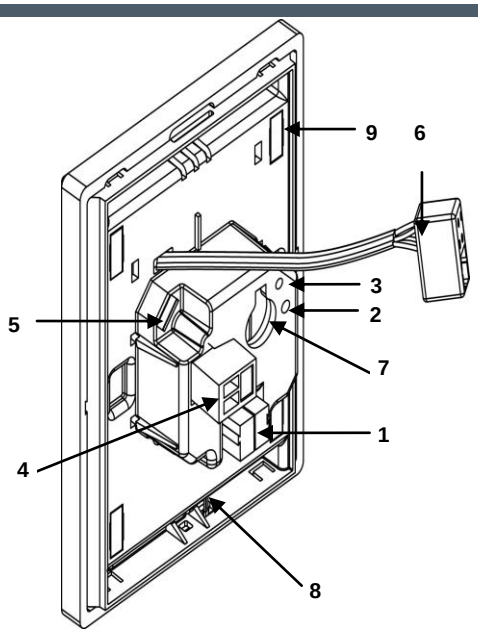



***Figure 1. InZennio Z41***

| | | | | |
|---|---|---|---|---|
| **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:** a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into secure mode.
**Programming LED:** programming mode indicator (red). When the device goes into secure mode, it blinks (red) every half second.

## GENERAL SYSTEM SPECIFICATIONS

| CONCEPT | | DESCRIPTION |
|---|---|---|
| Type of device | | Electric Operation Control device |
| KNX Supply | 29V DC SELV | 29V DC SELV |
| | 21…31V DC | 21…31V DC |
| | Power consumption | 10 mA |
| | Bus connection | Typical BUS connector TP1, 0,50 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) | | 30 to 85% RH (no condensation) |
| Storage humidity (relative) | | 30 to 85% RH (no condensation) |
| Complementary characteristics | | Class B |
| Safety class | | II |
| 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 | | 190 gr. Without metallic piece / 230 gr. With metallic piece |
| PCB CTI Index | | 175 V |
| Enclosure material | | PC+ABS FR V0 halogen free |

## POWER SUPPLY AND PORTS SPECIFICATIONS AND CONNECTIONS

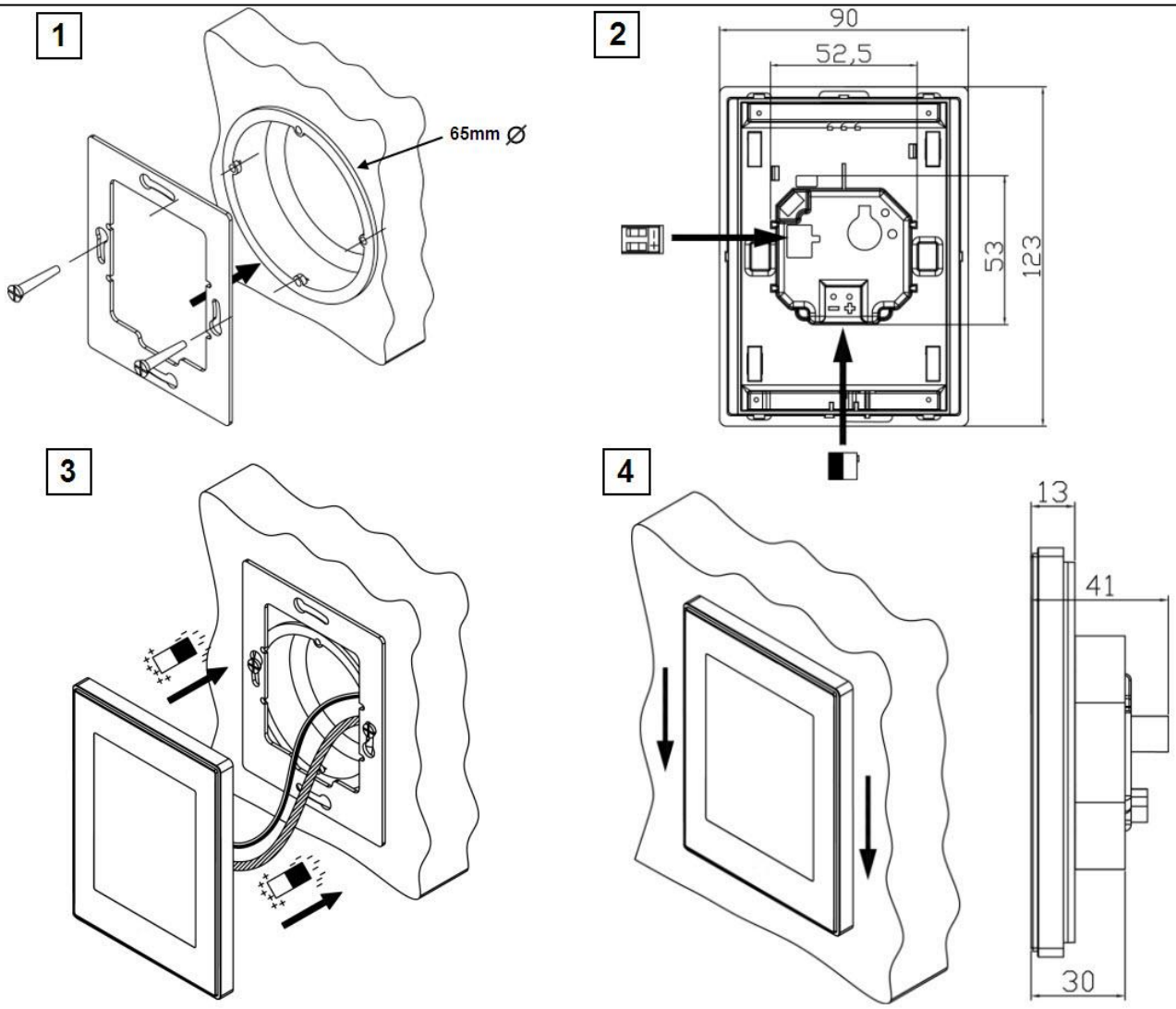
| CONCEPT | DESCRIPTION |
|---|---|
| External power supply connection | Cable screw terminal and matching socket |
| Ethernet Connector | RJ45 connector with 4 poles: Rx(+), Rx(-), Tx(+) and Tx(-).<br>To use this port, consult the *Manual for Firmware Update* at www.zennio.com. |
| USB Connector | Mini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

| 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 | Watch battery type SR44 1.5V |
| 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 (60 X 60 mm) or rounded (65 mm interior diameter) 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

- 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.