

### 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.
- Mini-USB connection.
- Magnetic fit.
- Complete data saving in case of power failure.
- CE directives compliant.

1. Mini-USB connector	2. External power supply connector	3. Temperature probe	4. KNX connector
5. A/D inputs	6. Battery	7. Programming button	8. Programming LED
		9. Magnet	

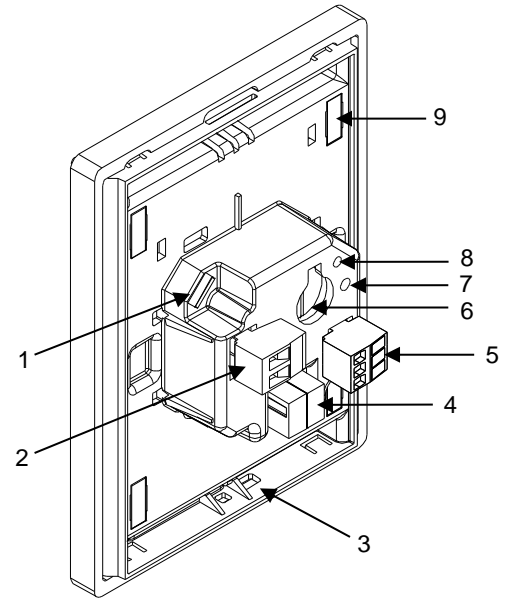


Figure 1. InZennio Z41 Lite

**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 safe mode.  
**Programming LED:** programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second.

### GENERAL SYSTEM SPECIFICATIONS

CONCEPT		DESCRIPTION		
Type of device		Electric Operation Control device		
KNX Supply	Voltage (typical)	29V DC SELV		
	Voltage range	21...31V DC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	6	174
24VDC	7	168		
Bus connection		Typical bus connector TP1, 0,50 mm <sup>2</sup> section		
External Power Supply		12- 29 VDC. Maximum consumption: 150mA (12VDC), 76mA (24VDC), 63mA (29VDC). <b>Do not connect 29VDC KNX bus as external power supply</b>		
Operating Temperature		0° C to +45° C		
Storage Temperature		-20° C to +60° 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		
N° of Automatic cycles per auto action		100.000		
Type of Protection		IP20, clean environment		
Assembly		Vertical position, with the temperature sensor to the bottom. Magnetic fit. See <i>Installation and Connection Diagram</i> section		
Minimum clearances		Keep away from heat and cold air flows to get better temperature sensor measurements.		
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		Mini USB A-B cable Ref. ZN1AC-UPUSB (not included)		
Weight		184 gr. Without metallic piece / 224 gr. With metallic piece		
PCB CTI Index		175 V		
Enclosure material		PC+ABS FR V0 halogen free		

### POWER SUPPLY AND PORT SPECIFICATIONS

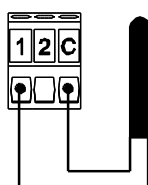
CONCEPT	DESCRIPTION
External power supply connection	Cable screw terminal and matching socket
USB Connector	Mini USB Type A connector. Version 2.0. Use this port only for firmware updates. Consult the <i>Manual for Firmware Update</i> at <a href="http://www.zennio.com">www.zennio.com</a> . Do not connect to PC, hard drives or other devices with consumption higher than 150 mA.

INTERNAL TEMPERATURE SENSOR AND CLOCK SPECIFICATIONS	
CONCEPT	DESCRIPTION
<b>INTERNAL TEMPERATURE SENSOR</b>	
Measuring range	-10 to 50°C
Resolution	0.1°C
Sensor precision @25°C	1 %
Calibration	The temperature sensor should be calibrated through the application program according to the external power supply connected and the frequency of usage
<b>INTERNAL CLOCK</b>	
Resolution	1 minute in display/ 1 second in KNX bus
Precision	30 ppm
Power supply	CR1225 3V battery
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

## INPUT SPECIFICATIONS AND CONNECTIONS

Any combination of the next **accessories** is allowed in the inputs:

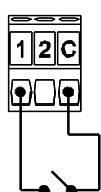
### Temperature Probe



#### Temperature probe references:

ZN1AC-NTC68E  
ZN1AC-NTC68F  
ZN1AC-NTC68S

### Switch/Sensor/ Push button



### Motion Sensor



Up to two motion sensors can be plugged into the same Z41 Lite input (parallel wiring)

Motion sensor cable screw terminal.

**Motion sensor references:**  
ZN1IO-DETEC-P<sup>(1)</sup>  
ZN1IO-DETEC-X

CONCEPT	DESCRIPTION
Number of inputs per common	2
Input voltage	+3.3V DC for the common
Input current	1.0mA @ 3.3V DC (each input)
Input impedance	Aprox. 3.3kΩ
Switching type	Dry voltage contacts between input and common
Connection method	Cable screw terminal
Max. cable length	30 m.
NTC probe length	1.5 m.
NTC accuracy (@ 25°C)	0.5°C
Temperature measure precision	0.1°C
Cable cross-section	0.15 mm <sup>2</sup> to 2.5 mm <sup>2</sup> (26-12 AWG)
Response time	Max 10ms.

(1) The micro switch number 2 in the ZN1IO-DETEC-P **must be in Type B position** to work properly.

## INSTALLATION AND CONNECTION DIAGRAMS

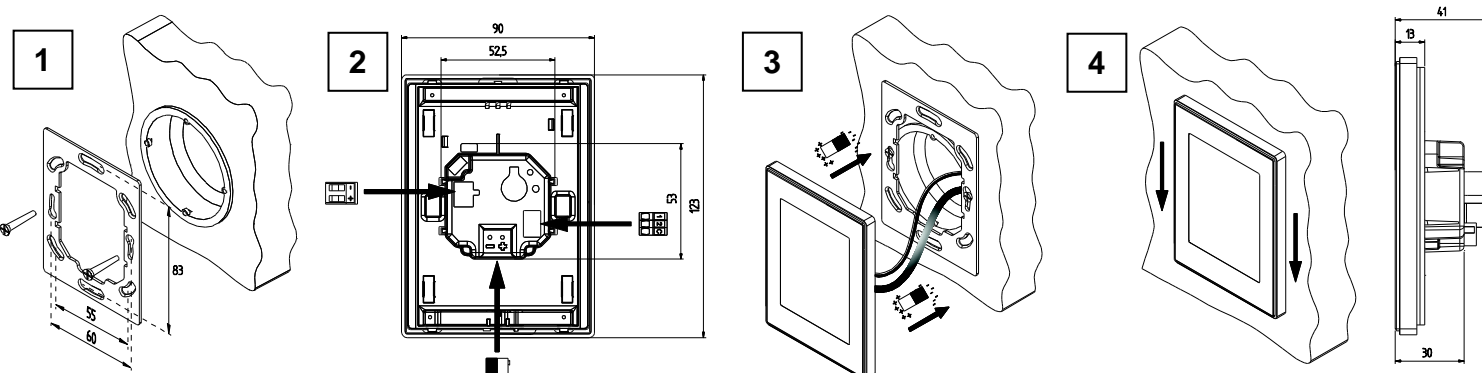
**Step 1:** Place the metallic piece into a squared or rounded standard mounting box with the own screws from the box.

**Step 2:** Connect the KNX bus at the rear of Z41 Lite, as well as the external power supply and the A/D input terminals.

**Step 3:** Once the power supply and bus KNX are connected, fit Z41 Lite in the metal platform. The device is fixed thanks to the magnets.

**Step 4:** Slid Z41 Lite downwards to fix it with the security anchorage system. Check, from the side, that nothing unless Z41 Lite outline can be seen (the metal platform should be completely hidden by Z41 Lite).

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.