

iSwitch+

KNX Room Controller



DESCRIPTION

Interra iSwitch+ is a wall-mounting room controller device with an integrated temperature and humidity sensor. The iSwitch+ can control heating and cooling operating modes with 2-points, Continuous and PWM thermostat functions. Each push-button is equipped with an RGB LED to show feedback or visualization and LCD models are equipped with VA-Display technology which provides low energy cost and good view angle. Moreover, there is blue navigation LED for orientation nightlight. The device provides an adjustable LCD backlight and LEDs intensity for user comfort. The product range has 16 different models with AQI, without AQI, with LCD and without LCD. All models can be programmable with the same ETS database, which provides efficient commissioning.

MODELS AND VARIATIONS

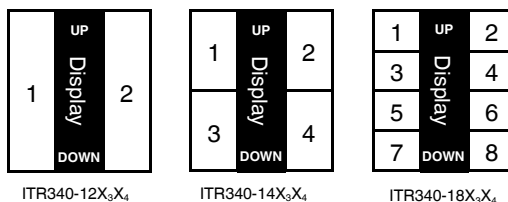
ITR 340 - X₁ X₂ X₃ X₄

X₁: LCD/AQI Status X₃: Material

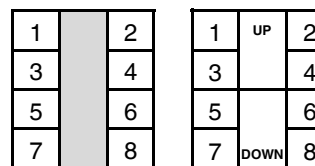
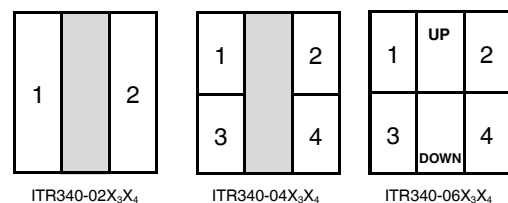
X₂: Button count X₄: Colour

X ₁	0	1	2	3
LCD	x	✓	x	✓
AQI	x	x	✓	✓

Models with LCD:



Models without LCD:



ITR340-08X₃X₄

ITR340-00X₃X₄

Material and Colour Options:

X ₃ : Material	0 Plastic	1 Aluminium	2 Stainless Steel	3 Glass
X ₄ : Colours	1 - Black	0 - Natural	0 - Natural	1 - Black
	2 - Glossy White	1 - Black	1 - Copper	2 - White
	3 - Matt White	2 - Bronze	2 - Bronze	
	4 - Anthracite Matt	3 - Gold		
	5 - Metallic Gray			

MAIN FUNCTIONAL CHARACTERISTICS

- All 16 models can be programmable with the same database.
- Push-button has Switching, toggle, dimming, shutter/blinds, thermostat controls, scenes, value, 2 channels, step switching mode features.
- Locking feature available for each button and complete device
- On/Off (2-points) and Proportional (Continuous or PWM) thermostat functions.
- Comfort, standby, economy and building protection operating modes.
- Manual or Automatic switching between Heat and Cool modes.
- Temperature measuring through integrated sensor with possibility of sending the value on change and periodically to the bus.
- Temperature (measured, external, setpoint, outdoor values as °C or °F), CO₂ concentration (from bus), humidity operating modes, fan levels, on/off indicator, warnings and locking status are displayed on LCDs.
- Fan controller available with up to 5-speeds.
- Relative humidity measuring through the integrated sensor with the possibility of sending the value on the bus.
- Threshold alarm defined for temperature and humidity levels.

LCD DISPLAY

The LCD is located between the gangs. The symbols on the LCD are explained below. LCD backlight can be automatically switched down while not using the device or changeable from the bus. Temperature values, humidity and CO₂ values can be switched between them with defined time to see all different values in LCD. Also, there are 2 buttons located up and down of the frame of the LCD.

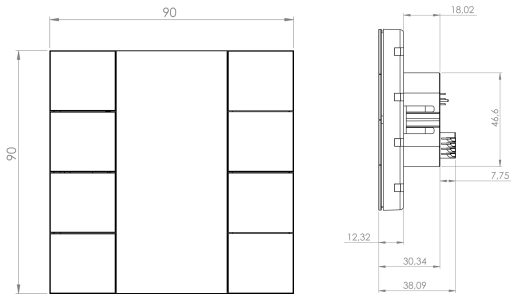
Each button has 2 different push-button functions, which are under short press and long press events. Functions are On, Off, Toggle, Step Value Switching, Setpoint Control and Operating Mode Switcher. All thermostat functions can be controllable over LCD buttons. So, push buttons can be arranged for other controls.



Symbol	Meaning	Symbol	Meaning
	Temperature (in °C or °F), relative humidity (in %), CO ₂ concentration		Heating (Symbol is flashing on heat active)
	Fan Control (5 Steps and Auto)		Cooling (Symbol is flashing on cool active)
	Internal temperature		Economy mode
	External temperature		Building protection
	Setpoint temperature		Comfort mode
	Alarm indicator		Standby mode
	Lock indicator		On/Off indicator

Product Code	ITR340-XXXX
Power Supply	KNX Power supply
Current Consumption	ITR340-0XXX / ITR340-2XXX: 10 mA ITR340-1XXX / ITR340-3XXX: 20 mA
Push Buttons	Depends on model (1 to 10 button) 1 x KNX Programming button
LED Indicators	RGB LEDs for each button 1 x Blue Navigation LED 1 x Red Programming LED
Sensors	Temperature sensor (±0.2°C sens.) Humidity sensor (±2 %RH sens.)
Interfaces	VA-type low power LCD
Commissioning Mode	S-Mode
Type of Protection	IP 20
Temperature Range	Operation (-5°C...45°C) Storage (-20°C...60°C)
Maximum Air Humidity	< 90 RH
Colour	Buttons: Depends on models Back cover: Matte black
Dimensions	90 x 90 x 12 mm (W x H x D)
Configuration	Configuration with ETS

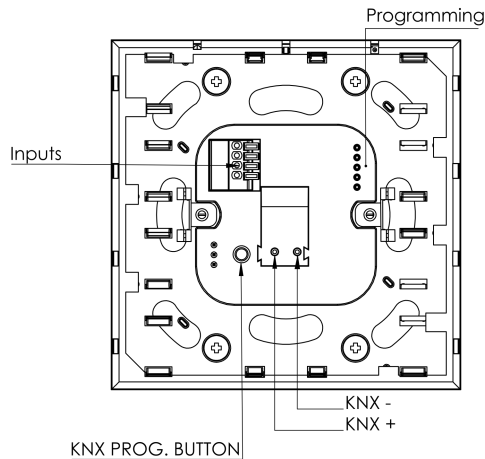
DIMENSIONS (mm)



All of the iSwitch+ models, with or without LCD, have got the same dimensions.

CONNECTION TO KNX BUS AND PROGRAMMING

The connection of the KNX bus line is made with the terminal block (black/red) included in delivery and inserted into the slot of housing.



After pressing the buttons on the top left and bottom left corner of the device simultaneously, the programming LED is activated by pressing the button in the bottom right corner and the LED's red light is on. Also, this can be done by pressing the programming button as another method.

In these circumstances, the device is ready for programming.

SAFETY INSTRUCTIONS

- All Installations should only be performed by qualified personnel following applicable regulations on preventing accidents, as required by law.
- Do not connect the main voltage (230 V AC) or any other external voltages to any point of the KNX bus.
- Connecting an external voltage might put the KNX system at risk.
- Ensure that there is enough insulation between the 230 V AC voltage cables and the KNX bus.
- Do not expose this device to direct sunlight, rain or high humidity.
- Clean the product with a clean, soft, damp cloth.
- Do not use aerosol sprays, solvents or abrasives that might damage the device.

MARKS

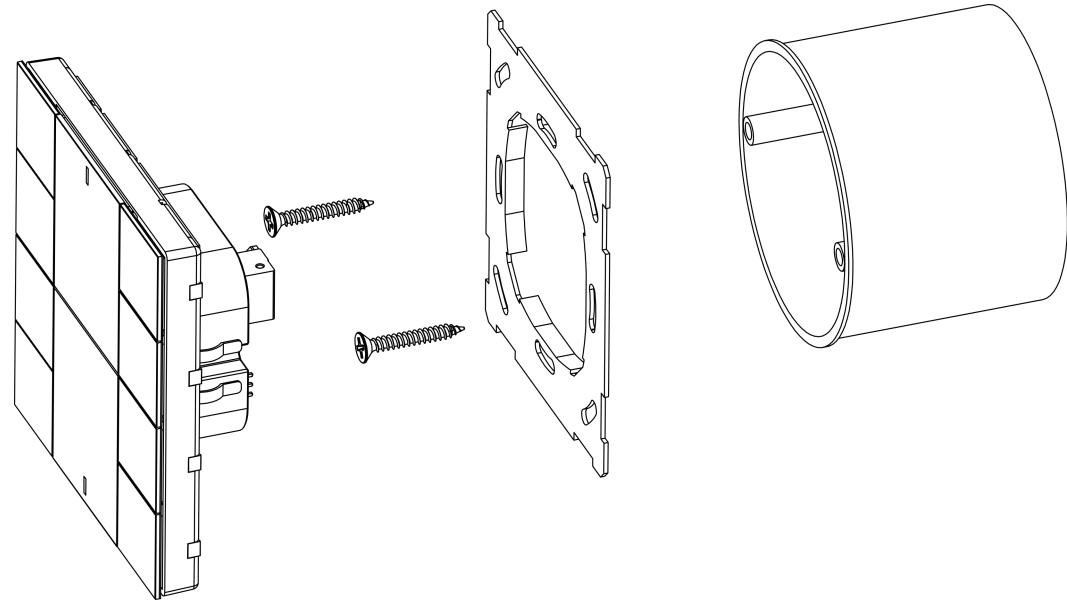
CE: The device complies with Electromagnetic Compatibility Directive (2014/30/EU), Low Voltage Directive (2014/35/EU) and Restricting the Use of Hazardous Substances Directive (2011/65/EU).

Tests carried out according to ,

EN 55024, EN 55032, EN 60950-1, EN63044-5-2 and EN61000-4-3 standards.

MOUNTING

iSwitch+'s mounting steps are described below.



Mounting

The device is suitable for use in dry interior rooms and can only mount on a standard-sized round or square wall flush mounting box. The BCU should be mounted after the wall painting process is finished. Otherwise, the product's cosmetics may be damaged. The mounting steps are shown below.

- First, the wall flush mounting box installation whether is done properly should be checked.
- Second, iSwitch+'s BCU part is placed to wall flush mounting box considering the "TOP" writing which is located on the upper side of the BCU must be demonstrated up direction.
- Third, the screws are guided through number "1" and number "2" holes that are shown above.
- Finally, The BCU should be aligned by scales that is positioned decently, then tighten the guided screws.