iSwitch+

KNX Room Controller

Product Code	ITR340-XXXX
Power Supply	KNX Power supply
Current Consumption	10 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.) Air Quality Sensor (0-500 VOC Index) Brightness Sensor (Up to 1800 Lux.)
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

CE KNX EIB

DESCRIPTION

Interra iSwitch+ is a wall-mounting room controller device with an integrated temperature, humidity sensor, air quality and brightness 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
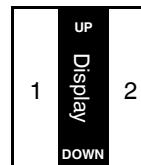
I T R 3 4 0 - X_1 X_2 X_3 X_4

X_1: LCD/AQI Status X_3: Material
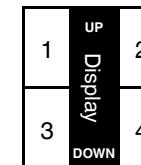
X_2: Button count X_4: Colour

X_1	0	1	2	3
LCD	✗	✓	✗	✓
AQI	✗	✗	✓	✓
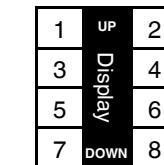
Models with LCD:
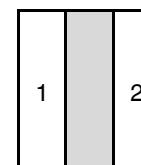
ITR340-12$X_3$$X_4$ ITR340-14$X_3$$X_4$ ITR340-18$X_3$$X_4$

Models without LCD:

ITR340-02$X_3$$X_4$ ITR340-04$X_3$$X_4$ ITR340-06$X_3$$X_4$
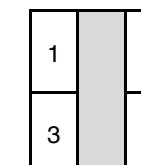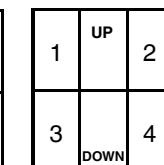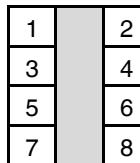
ITR340-08$X_3$$X_4$ ITR340-00$X_3$$X_4$

Material and Colour Options:

	0 Plastic	1 Aluminium	2 Stainless Steel	3 Glass
X_3: Material				
X_4: Colours	1 - Black	0 - Natural	0 - Natural	1 - Black
	2 - Glossy White	1 - Black	1 - Copper	2 - White
	3 - Matte White	2 - Bronze	2 - Bronze	
	4 - Matte Anthracite	3 - Gold		
	5 - Metallic Gray			

MAIN FUNCTIONAL CHARACTERISTICS

- Switching, toggle, dimming, shutter/blinds controls, predetermined scenes by users, value functions that can send presented values, 2 channels control functions, thermostat air conditioning functions, and step-switching mode features are available.
- It can measure with integrated temperature, humidity, brightness and air quality (depending on the model) sensors.
- Configurable and programmable External Inputs as analog or digital over ETS.
- Scenes from 1 to 64 can be specified and these scenes can be implemented by request.
- Room temperature regulation can be done with 2 – Points (Hysteresis), PWM or Continuous PI control options.
- Operating modes: comfort, standby, economy and protection.
- Automatic switching between operating modes via the weekly program.
- Each LED can be configured independently from buttons.
- External – internal temperature, (measured, setpoint, outdoor values as ºC and ºF), operating mode, settings, air quality index, fan control, humidity, and on/off features are displayed on LCDs.
- Enhanced and extended LCD Screen functions.

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		Protection Mode
	Setpoint temperature		Comfort mode
	Alarm indicator		Standby mode
	Locked indicator		ON / OFF indicator

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.

KNX PROG. BUTTON
KNX +
KNX -
Inputs
Upgrade port

To enter the programming mode, first press and hold the button in the upper left corner. While holding down the button in the upper left corner, press and release the button in the upper right corner 5 times. Then the button in the upper left corner is released and pressed again. So red programming LED turn on and 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
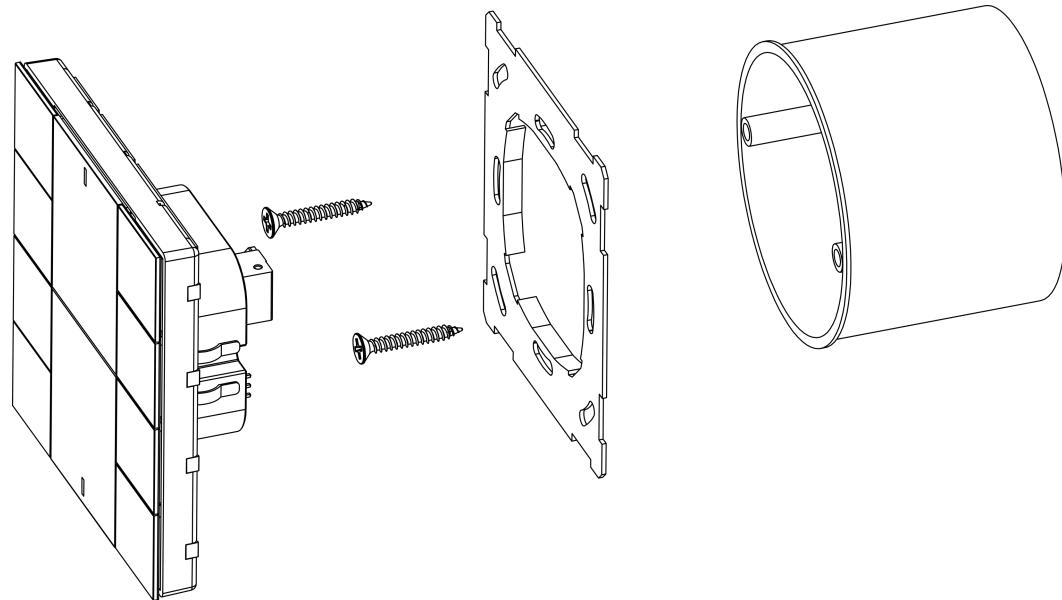
CE: The device complies with Electromagnetic Compatibility Directive (2014/30/EU), Low Voltage Directive (2014/35/EU) and Restricting the Use of Hazardous Substances Directive (2011/65/EU).

Tests carried out according to ,

EN 55032, EN 55035, EN 61000-4-3, EN IEC 62368-1, EN IEC 63044-3 and EN IEC 63044-5-2 standards.

MOUNTING

The iSwitch+'s mounting steps are described below.

Mounting

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

- Check the mounting box, and whether is done properly

- Insert the metal frame of the Switch+ into the wall flush mount.

- Connect the KNX cable and other cables (optional) to respective terminals.

- Finally, insert the iSwitch+ into the metal frame.