

Installer's manual

IT



Thermostat remote control **SMART** RADIO

KN-SMART-S / KB-SMART-S

SMART
≡



Customer support:

Technical assistance and commercial consultancy: +39 02.45482147

For more information:

www.aircontrolclima.it

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Security and guarantee

ATTENTION:Read the safety instructions before proceeding with the installation and use of the system. Keep this manual for future reference. Incorrect installation or placement of system elements can cause electrocution, short circuit, fire and other damage to the system. Be sure to use only accessories manufactured and/or supplied by KOOLNOVA, designed specifically for use in this system, and leave installation to a professional.

- This system is designed to be used by installers with an equivalent product at no cost to the customer.
- Only a qualified technician can carry out installation and maintenance activities.
- It is recommended to use only elements or spare parts supplied by KOOLNOVA.
- When placing the system elements in bathrooms, be especially careful not to place the elements inside showers or near humid places.

This product is covered by a legal guarantee and for any information regarding it, contact your retailer.

KOOLNOVA guarantees the conformity of the products to their technical specifications for a period of 2 years, parts and labor, from the date indicated in the certification of the product purchase document. The user can make the warranty effective at the distributor or point of sale or by calling the customer service telephone number. The non-compliant part or product will be repaired or replaced with an equivalent product at no cost to the customer. Any replaced part or product becomes the property of KOOLNOVA. The repaired product is guaranteed for a period of 6 months from the date of repair.

However, this guarantee does not apply in the following cases:

- Installation or use not in accordance with the instructions provided in this manual.
- Incorrect connection or incorrect use of the product, in particular with accessories not intended for this purpose.
- Abnormal wear.
- Failure to comply with the technical and safety regulations in force in the geographical area of use.
- Products that have suffered impacts or falls.
- Products damaged by lightning, power surges, heat or radiation sources, water damage, exposure to excessively humid conditions, or any other cause external to the Product.
- Improper use or negligence.
- Intervention, modification or repair carried out by a person not approved by the manufacturer or distributor subject to legal provisions. All warranties other than those described in this paragraph are expressly disclaimed.

DRUMS:The rechargeable battery of p. lithium ion batteries in the SMART remote control must be replaced and recycled or disposed of, separated from household waste, by the AIR CONTROL technical service.



General recommendations and requirements

- The installation must be carried out in total absence of electricity.
- Identify and connect the elements according to current electronic legislation.
- To connect the system elements via the KOOLNOVA bus, use a cable made up of two wires with a section of 0.5mm² (2x0.5mm²). No polarity.
- Pay particular attention to the polarity of the elements, if present. It may damage your electronic device.
- To connect the motors to the motor output, use a 2-wire cable with a section of 0.5mm². With polarity
- For the Modbus connection, use a 3 or 4 wire twisted and shielded cable with a 0.5mm² (AWG22) section, which is highly recommended for RS485 connections.
- Only use specified cables and connect cables to items securely. Make sure that the cables do not exert external stress on the elements. Keep the wires tidy and clean.
- Do not connect wires of different gauges to the same element.
- Respect the color code used on the system elements.
- The use of a corrugated tube with an external diameter of 16 mm is recommended to route the wiring.
- For correct system operation, separate the bus from any other power cable.

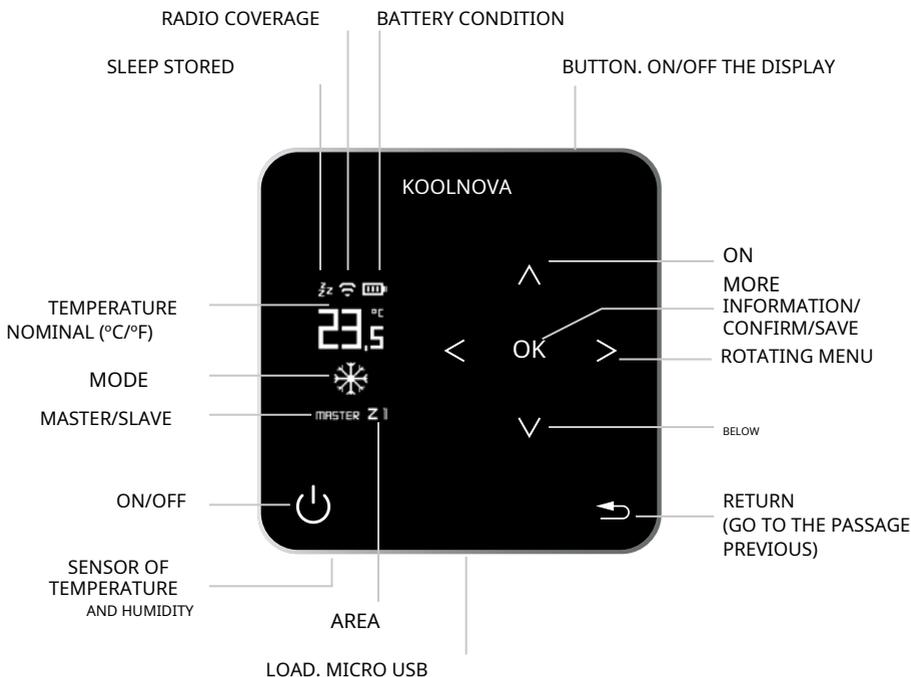
ATTENTION: A main switch or other means of disconnection must be incorporated into the external power cable of the system which has constant separation in all poles, in accordance with relevant local and national regulations.

The system automatically restarts if the main power is turned off and on again.

General

1. General

1.1. Home screen



OFF

- OFF/ON zone.

- Press the button to turn the zone on/off.

NOTE: Frost protection function active (see page 12).



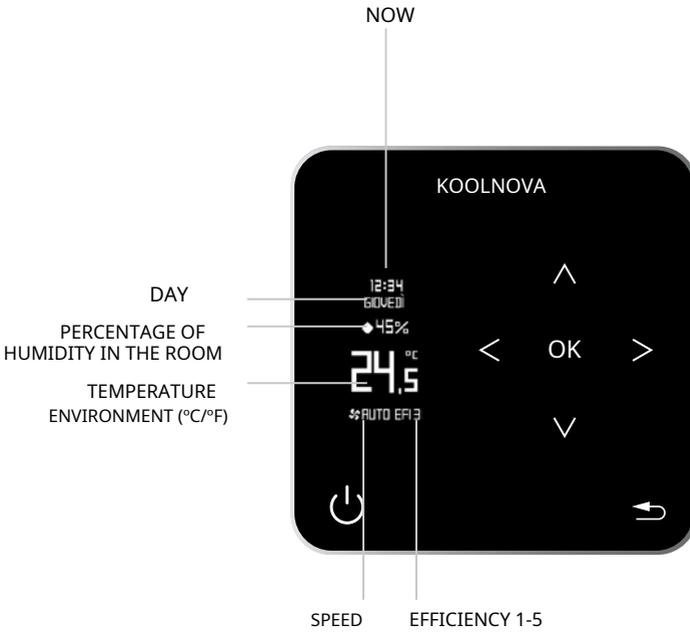
STOP

- System shutdown. The display does not show the mode.

- Press the button for 2 seconds.

NOTE: Frost protection function deactivated (see page 12).

1.2. Further information



1.3. Alarms

HUMIDITY ALARM:
HIGH HUMIDITY, RELAY ACTIVATED

NO RADIO COVERAGE

ENTRANCE OF
ALARM DETECTED



ALARM INPUT DETECTED

- System in STOP. The display shows the icon .

NOTE: While the alarm is active the system remains in STOP.



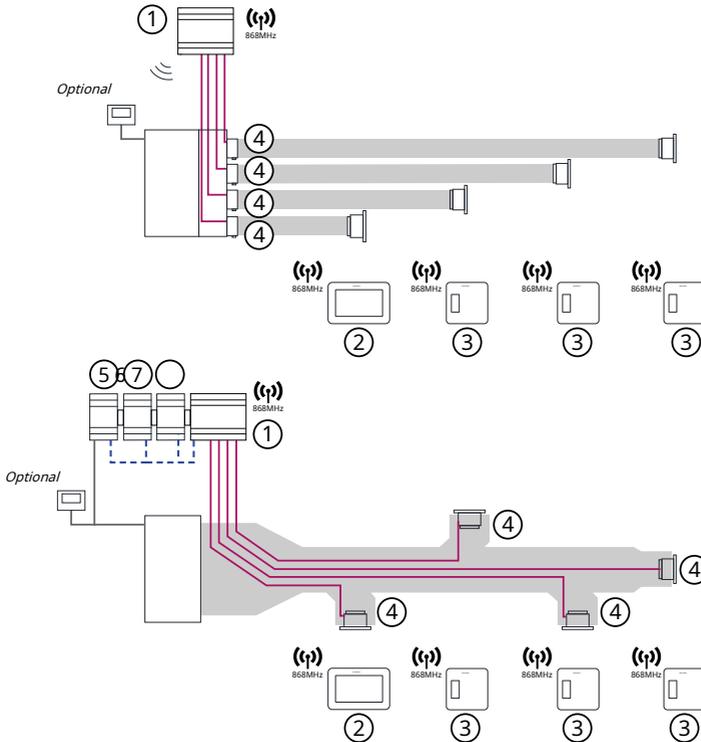
HUMIDITY ALARM

- High humidity, relay activated

- The cooling floor heating turns off automatically and the cold air continues to work

1.4. Scheme

Control up to 8 zones independently (no additional modules are needed).



--- KOOLNOVA BUS: Two wires without polarity. Section (2 x 0.5mm²).

— ENGINE: Two threads with polarity. Section (2 x 0.5mm²).

— INDOOR UNIT: The width depends on the brand.

For correct operation of the system, separate the BUS from any electrical line.

No	CODE	DESCRIPTION
1.	KN-UNI-WIFI	Three Radio ntraline (up to 8 zones).With ica series WiFi module on the (umarket)
2.	KN-ETERNAL-M	T&mdustedETERNAL RADIO. Full Color [metal grey zed]
3.	KN-SMART-S	ThermostatSMART RADIO. Capacitive buttons [metallic grey].
4.	NH-ES-NH-CO	Motorized nozzle [width]X[height] [white / aluminium/special]. Motorized damper[diameter]
5.	NH-CFI-CDZ	FILO interface.Communication with AC machine/[select brand]
6.	NH-SR-UNI	Moradiant double.Underfloor heating / Underfloor cooling / Radiators
7.	NH-GTP-UNI	Ga teway production control. ON/OFF. Cold hot. Speed / 0-10V 3

1.5. Functions

1.3" OLED screen, backlit capacitive keys and metallic color finishes.

Functions:

- Zone On-Off.
- System stop (MASTER).
- System operating mode and efficiency (MASTER).
- Control of the temperature and speed of the machine.
- Reading of the ambient temperature and relative humidity of the area.
- SLEEP function.
- 6 languages (Spanish, Italian, English, French, Portuguese, German).
- Adjustable brightness of the backlit capacitive buttons.
- Frost protection function.

The KOOLNOVA system has a freeze protection function, which activates the system when the temperature measurement in any of its zones is below 10°C, to prevent the heating/cooling system from freezing.

Please note that the frost protection function is active by default. However, if the system is in STOP mode, the frost protection function will no longer be active. To protect the treated rooms from various cold and damp diseases, we recommend leaving this function active.

Installer menu

2. Installer menu

Installer menu

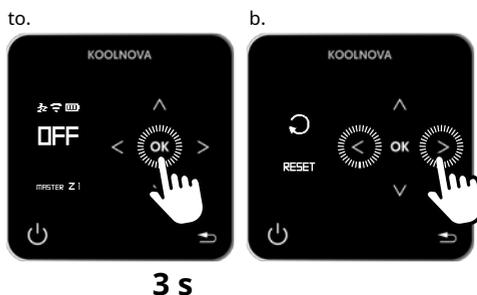
	MASTER'S DEGREE	SLAVE
1.	RESET	
2.	INT(INTERFACE 0-63)	INT(INTERFACE 0-63)
3.	MASTER/SLAVE	SLAVE/MASTER
4.	MACHINE AC(MACHINE AC) (1-4)	MACHINE AC(MACHINE AC) (1-4)
5.	EFI(EFFICIENCY 1-5)	
6.	VOL(VOLUME 01-16)	VOL(VOLUME 01-16)
7.	RADIANT FLOOR(RADIANT FLOOR ACTIVATING MODES)	RADIANT FLOOR(RADIANT FLOOR ACTIVATING MODES)
8.	CALIBRATE. (TEMPERATURE CALIBRATION)	CALIBRATE. (TEMPERATURE CALIBRATION)
9.	RADIO	RADIO
10.	ADVANC.(ADVANCED)	ADVANC.(ADVANCED)



Access to the installer menu

to. With the thermostat set to **OFF** for **STOP**, press the button **OK** for 3 seconds.

b. Use the buttons **<** and **>** to navigate the installer menu, to select an option press **OK**.



Exit the installer menu

- Press the button to return to the main screen.



2.1. RESET

- Press the button **OK**.

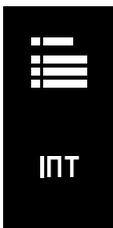


ATTENTION: Please note that the zones previously activated in the system will be deleted.

- Use the buttons \wedge And \blacktriangleright to select **YES**.
- Press the button **OK**.

NOTE: Make sure all thermostats are reset before starting pairing.

To perform a RESET on a SLAVE control, you must first convert it to a MASTER control. Once the RESET has been carried out, convert it back to SLAVE.



2.2. INT (INTERFACE 0-63)

- Press the button **OK**.



- Communication with the AC machine- [select the model-brand] (see the document *A51004 Model Table INT*).

- Use the keys \wedge And \blacktriangleright to select the INT code.

- Press the button **OK**.

- The data is saved, the next time you access this screen the last assigned code will be displayed. Example: 1-->MITSUBISHI HEAVY.



2.3. MASTER/SLAVE

Select the MASTER/SLAVE control type (by default SLAVE).

- Press the button **OK**.



- Use the buttons **^** and **And** to select the type of control.
- Press the button **OK**.



- The saved option appears on the home screen. Example: MASTER.



2.4. MACHINE AC (MACHINE AC 1-4)

The screen shows the saved option. Example: AC 3.

- Press the button **OK**.

NOTE: The control unit can control up to four machines.

Select the machine (AC 1 - AC 2 - AC 3 - AC 4, **by default AC 3**).



- Use the buttons **^** and **And** to select the AC.
- Press the button **OK**.

- The data is saved the next time you access this screen it will display the last assigned AC. Example: AC 3.

NOTE: If your system has more than one machine, set the AC on each thermostat before performing PAIRING.



2.5. EFI (EFFICIENCY 1-5)

Select energy efficiency (1-5, default 3). Use the and buttons to select the efficiency level. ^

- Press the button **OK**.

- The data is saved the next time you access this screen it will display the last assigned efficiency level. Example: EFI 3.



LEVEL	COMFORT	EFFICIENCY
EFI 1	Maximum	Normal
EFI 2	High	Average
EFI 3	Optimal	Optimal
EFI 4	Medium	High
EFI 5	Normal	Maximum



The more information screen shows the selected efficiency level. Example: EFI 3.



2.6. VOL (VOLUME 01-16). Flow regulation

Select the volume (01-16).

- Press the button **OK**.



Select the volume (01-16, default 01). Use the buttons to select the ^ And v For volume.

- The data is saved the next time you access this screen will display the last assigned volume. Example: VOL 01.



2.7. RADIANT FLOOR (How to activate the RADIANT FLOOR mode)

- Press the button **OK**.



To activate the radiant floor modes (default NO):

- Use the buttons \wedge And \vee

- To select **NO** or **YES** and press **OK**.

NO: (2 ways).



YES: (5 ways).



- The data is saved the next time you access this screen it will display the last assigned mode. Example: NO.



2.8. CALIBRATE. (Temperature CALIBRATION)

- Press the button **OK**.



To adjust the temperature measurement. Use the increase or decrease \wedge And \vee For buttons in 0.5°C steps.

- Press the button **OK**.



2.9. RADIO

- Press the button **OK**.



View radio parameters.

For correct association the radio signal must be greater than 20%.



2.10. ADVANC. (ADVANCED)

- Press the button **OK**.



View advanced settings:

- AC ENABLEMENT.

To activate or deactivate AC (default YES).

- To select **YES** or **NO** and press **OK**.

ATTENTION: If the area does not have an air duct connected to the indoor unit (floor only), select **NO**.

User menu

3. User menu

User menu(rotating menu)

MASTER'S DEGREE		SLAVE
1.	MODE(MODE)	
2.	SLEEP	SLEEP
3.	SPEED(SPEED)	SPEED(SPEED)
5.	DEGREES(DEGREES) (Celsius °C /Fahrenheit °F)	DEGREES(DEGREES) (Celsius °C /Fahrenheit °F)
6.	BRIGHT(BRIGHTNESS)	BRIGHT(BRIGHTNESS)
7.	CLOCK(CLOCK)	CLOCK(CLOCK)
8.	LANGU.(TONGUE) (6 different languages)	LANGU.(TONGUE) (6 different languages)



Access the more information screen

With the remote control showing the home screen.

- Press the button **OK**.

Exit the more information screen

- Press the button  or **OK** to return to the main screen.



Access to the user menu

- Press the buttons **<And>**.

Exit the user menu

- Press the button  to return to the main screen, or will automatically return to the home screen after 10 seconds.

3.1. MODE

View the saved option. Example:





- Press the buttons \wedge And ∇ to select the mode.
- Press the button **OK**.

ICON	MODE
	Cold air
	Hot air
	Underfloor heating
	Cold air + Underfloor heating (refreshing)
	Warm air + Underfloor heating (heat)



3.2. SLEEP

- Press the button **OK**.



4 Options available: 30 / 60 / 90 / 120 minutes.

- Use the buttons \wedge And ∇ to select the time interval.
Example: 90 minutes.

- Press the button **OK**.

The main screen shows the time is over icon $\overset{Z}{Z}$ until the interval of and **the area is turned off**.



3.2.1. Delete stored SLEEP

Access the SLEEP screen.

- Use the buttons \wedge and \blacktriangledown to select the icon



- Press the button **OK**.

The home screen will not show the icon



3.3. SPEED

- Press the button **OK**.



SPEED:4 options available (default AUTO). **Minimum / Average / Maximum / AUTO.**



- Use the buttons \wedge and \blacktriangledown to select the speed.

- Press the button **OK**.



3.4. DEGREES(Celsius °C /Fahrenheit °F)

- Press the button **OK**.



- Use the buttons \wedge and \blacktriangledown to select the type of degree °C or °F (default °C)

- Press the button **OK**.



3.5. BRIGHT (BRIGHTNESS)

Adjustable brightness of the backlit capacitive buttons.

- Press the button **OK**.



Five different brightness levels.

- Use the buttons **^** and **v** to adjust the brightness.
- Press the button **OK**.



3.6. CLOCK (CLOCK)

- Press the button **OK**.



During configuration this parameter **flashes**.

Clock

The hours flash.

- Use the buttons **^** and **v** to set the time.

- Press the button **>**, the minutes flash.

- Use the and buttons **^** and **v** to set the minutes.

Days of the week

To set the days of the week, press the button **>**, it **flashes**.

- Use the buttons **^** and **v** to select the day. Example: THURSDAY.

- Press the button **OK**.



3.7. LANGU. (LANGUAGE - 6 different languages)

- Press the button **OK**.



- Use the FR / ES [^] **And** to select the language: EN / IT / PT / GE/ buttons.

- Press the button **OK**.

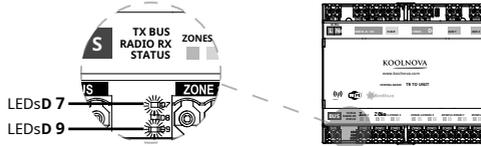
The language is saved, the next time you access this screen you will see the last language assigned. Example: Italian.

**Activation of zones
- Association of thermostats -**

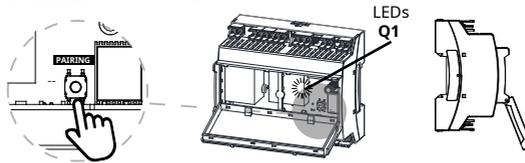
4. Activation of zones - Association of thermostats -(Up to 8 zones)

Step by step

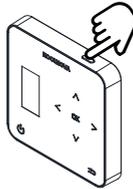
1. Power the KOOLNOVA system radio control unit for the first time. The LEDTX BUS(D7) flashes quickly and the LEDSTATUS(Q9) flashes slowly.



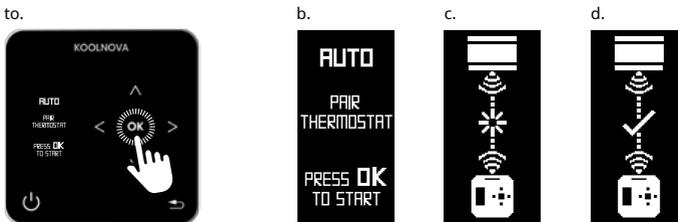
2. Open the lid of the centralina Radio and press the pairing buttonPAIRING(S1). The Red LED (Q1) flashes for 5 minutes. the



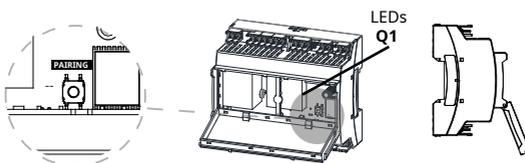
3. Press the top button to turn on the SMART thermostat.



4. Perform "Pairing" on all ETERNAL RADIO thermostats in the system to pair. Press the buttonOK.



5. Press the pairing buttonPAIRING(S1) to complete the installation. The red LED (Q1) stops flashing.

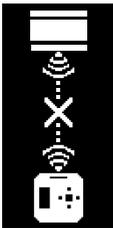




4.1. Successful association

The thermostat has been successfully paired.The area was successfully registered

- View the home screen.



4.2. Association error

The thermostat has not been associated.

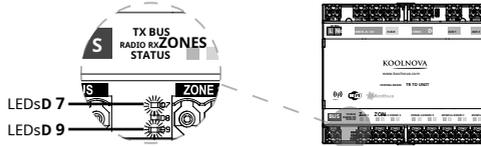
- Try again, repeat the process:
4. Activation of zones - Association of thermostats -

4.3 Reassociation of thermostats

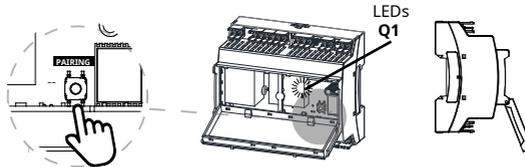
Re-pair a thermostat that was previously paired with another installation.

Step by step

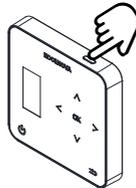
1. With the KOOLNOVA system radio control unit powered. The LEDSTATUS(Q9) flashes slowly or it is steady on.



2. Open the cover of the radio control unit and press the pairing button PAIRING(S1). The red LED (Q1) flashes during 5 seconds.



3. Press the top button to turn on the SMART thermostat.



4. Perform "Pairing" on the SMART RADIO thermostat to re-pair.

to. Without radio coverage

Example: Z3 (antigua installation)

3 s

b.

c.

d.

And.

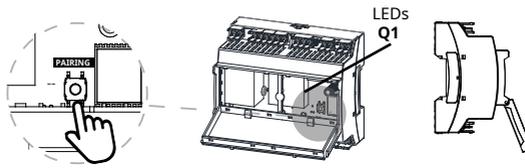
f.

g.

h. With radio coverage

Example: Z6 (new installation)

5. Press the pairing button **PAIRING(S1)** to complete the installation. The red LED (**Q1**) stops flashing.





ITALY

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