Description

The EU-R-8b Plus room regulator is designed to cooperate with TECH external controllers.
It should be installed in heating zones. The regulator sends current room temperature and humidity readings to the external controller, which uses the data to control thermostatic valves (opening them when the temperature is too low and closing them when the room temperature has been reached).

Current temperature is displayed on the screen. The middle button ● enables the user to change the displayed parameter from current temperature to current humidity. The regulator enables the user to change the pre-set zone temperature permanently or for a period of time.

Controller equipment:

- built-in temperature sensor
- air humidity sensor
- wall-mountable casing

Low battery

If the regulator battery is low, the following message will flash on the screen: **Lo.**
In order for the regulator to operate properly, replace the batteries (2xAAA 1,5V).

How to use the regulator

1. Display - current zone temperature
2. Button <
3. Button ●
4. Button >

How to register a room regulator in a given zone

Each room regulator should be registered in a zone. In order to register, go to the external controller menu and select Sensor in the submenu of a given zone (Zone / Registration / Sensor). After selecting Registration icon, press the button on the back of the room regulator.

If the registration process has been completed successfully, the external controller screen will display a message to confirm whereas the room sensor screen will display **Scs**. If the room sensor displays **Err**, an error has occurred during the registration process.

⚠️ **NOTE**
Only one room regulator may be assigned to each zone.

⚠️ **NOTE**
In zone controllers, a regulator may serve as a floor sensor. In order to register the device as a sensor, press the communication button on the regulator twice.

Bear in mind the following rules:

- Once registered, the sensor cannot be unregistered, but only disabled by selecting OFF in the submenu of a given zone in the external controller.

- If the user attempts to assign a sensor to the zone to which other sensor has already been assigned, the first sensor becomes unregistered and it is replaced by the other one.

- If the user attempts to assign a sensor which has already been assigned to a different zone, the sensor is unregistered from the first zone and registered in the new one.

It is possible to set individual pre-set temperature value and weekly schedule for each room regulator assigned to a given zone. The settings may be configured both in the external controller menu (Main menu/ Sensors) and via www.emodul.eu (using ST-507 or WiFi RS). The pre-set temperature may also be adjusted directly from the room sensor using the buttons < >.

How to change the pre-set temperature

The pre-set zone temperature may be adjusted directly from the EU-R-8b Plus room regulator using the buttons < >.

During controller inactivity, the main screen displays current zone temperature. After pressing one of the buttons < >, the current temperature is replaced with the pre-set temperature (the digits are flashing). Using the buttons < > the user may adjust the pre-set temperature value. After setting the desired value wait for 3 seconds – after this time the display shows a panel to define how long the new setting should apply.
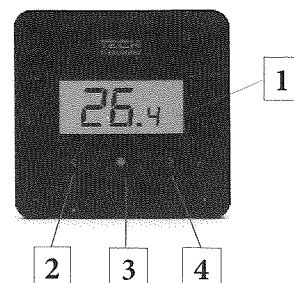
Time settings may be adjusted with the use of buttons:
- permanently – press > button until **Con** appears on the screen (the pre-set value will apply all the time regardless of schedule settings);
- for a specified number of hours – press one of the buttons < > until the desired number of hours appears on the screen e.g. 01h (the pre-set value will apply for a specified period of time; after that the weekly schedule will apply);
- if the temperature value defined in the weekly schedule settings should apply, press < until the screen displays **OFF**.

Description of the functions available in the menu

In order to enter the menu, press and hold the buttons < > at the same time. Next, use the buttons < > to switch between functions.

1. **Bat** - this function enables the user to monitor the battery level (%). After selecting this option, the screen flashes for 3 seconds. Next, it displays the battery level given in percent.

2. **Cal** - this function enables the user to check the sensor calibration value. After selecting this option, the screen flashes for 3 seconds. Next, it displays calibration setting.

3. **Loc** - this function enables the user to activate the key lock. After selecting this function, the screen flashes for 3 seconds. Next, the user is asked if they want to activate the key lock (yes/no). Select the answer using one of the buttons < >. Wait 3 seconds to confirm.
When the lock is active, the keys are locked automatically after 10 seconds of inactivity. To unlock, press and hold the buttons < >. **Ulc** message informs that the keys have been unlocked.
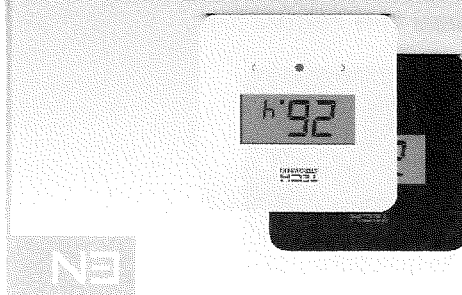
4. **Def** - this function enables the user to restore factory settings. After selecting this function, the screen flashes for 3 seconds. Next, the user is asked if they want to restore factory settings (yes/no). Select the answer using one of the buttons < >. Wait 3 seconds to confirm.

5. **Ret** - after selecting this' option, the screen flashes for 3 seconds and exits the menu.

Technical data

Temperature adjustment range	5ºC÷35ºC
Power supply	batteries 2xAAA 1,5V
Measurement error	±0,5ºC
Humidity Measurement range	10-95%RH
Operation frequency	868MHz

EU Declaration of conformity

Hereby, we declare under our sole responsibility that **EU-R-8b Plus** manufactured by TECH, head-quartered in Wieprz Biała Droga 31, 34-122 Wieprz, is compliant with Directive 2014/53/EU of the European parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment, Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products as well as the regulation by the MINISTRY OF ENTREPRENEURSHIP AND TECHNOLOGY of 24 June 2019 amending the regulation concerning the essential requirements as regards the restriction of the use of certain hazardous substances in electrical and electronic equipment, implementing provisions of Directive (EU) 2017/2102 of the European Parliament and of the Council of 15 November 2017 amending Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 305, 21.11.2017, p. 8).

For compliance assessment, harmonized standards were used:
PN-EN IEC 60730-2-9 :2019-06 par.3.1a Safety of use
ETSI EN 301 489-1 V2.1.1 (2017-02) par.3.1 b Electromagnetic compatibility
ETSI EN 301 489-3 V2.1.1 (2017-03) par.3.1 b Electromagnetic compatibility
ETSI EN 300 220-2 V3.1.1 (2017-02) par.3.2 Effective and coherent use of radio spectrum
ETSI EN 300 220-1 V3.1.1 (2017-02) par.3.2 Effective and coherent use of radio spectrum

TECH CONTROLLERS

USER'S MANUAL
EU-R-8B PLUS

WARRANTY CARD

TECH company ensures to the Buyer proper operation of the device for the period of 24 months from the date of sale. The Guarantor undertakes to repair the device free of charge if the defects occurred through the manufacturer's fault. The device should be delivered to its manufacturer. Principles of conduct in the case of a complaint are determined by the Act on specifi c terms and conditions of consumer sale and amendments of the Civil Code (Journal of Laws of 5 September 2002).

CAUTION! THE TEMPERATURE SENSOR CANNOT BE IMMERSED IN ANY LIQUID (OIL ETC). THIS MAY RESULT IN DAMAGING THE CONTROLLER AND LOSS OF WARRANTY! THE ACCEPTABLE RELATIVE HUMIDITY OF THE CONTROLLER'S ENVIRONMENT IS 5÷85% REL.H. WITHOUT THE STEAM CONDENSATION EFFECT.
THE DEVICE IS NOT INTENDED TO BE OPERATED BY CHILDREN.

Activities related to setting and regulation of the controller parameters described in the Instruction Manual and parts wearing out during normal operation, such as fuses, are not covered by warranty repairs. The warranty does not cover damages arising as a result of improper operation or through the user's fault, mechanical damage or damage created as a result of fi re, fl ood, atmospheric discharges, overvoltage or short-circuit. The interference of an unauthorized service, wilful repairs, modifi cations and construction changes cause the loss of Warranty. TECH controllers have protective seals. Removing a seal results in the loss of Warranty.

The costs of unjustifi able service call to a defect will be borne exclusively by the buyer. The unjustifi able service call is defi ned as a call to remove damages not resulting from the Guarantor's fault as well as a call considered unjustifi able by the service after diagnosing the device (e.g. damage of the equipment through the fault of the client or not subject to Warranty), or if the device defect occurred for reasons lying beyond the device.

In order to execute the rights arising from this Warranty, the user is obliged, at his own cost and risk, deliver the device to the Guarantor along with a correctly fi lled-in warranty card (containing in particular the sale date, the seller's signature and a description of the defect) and sales proof (receipt, VAT invoice, etc.). The Warranty Card is the only basis for repair free of charge. The complaint repair time is 14 days.

When the Warranty Card is lost or damaged, the manufacturer does not issue a duplicate.

....
seller's stamp

....
date of sale

Safety

Before using the device for the fi rst time the user should read the following regulations carefully. Not obeying the rules included in this manual may lead to personal injuries or controller damage. The user's manual should be stored in a safe place for further reference. In order to avoid accidents and errors it should be ensured that every person using the device has familiarized themselves with the principle of operation as well as security functions of the controller. If the device is to be sold or put in a diff erent place, make sure that the user's manual is there with the device so that any potential user has access to essential information about the device.
The manufacturer does not accept responsibility for any injuries or damage resulting from negligence; therefore, users are obliged to take the necessary safety measures listed in this manual to protect their lives and property.

WARNING
• The regulator is not intended to be used by children.
• Any use other than specified by the manufacturer is forbidden.
• The device should be installed by a qualified person.

We are committed to protecting the environment. Manufacturing electronic devices imposes an obligation of providing for environmentally safe disposal of used electronic components and devices. Hence, we have been entered into a register kept by the Inspection For Environmental Protection. The crossed-out bin symbol on a product means that the product may not be disposed of to household waste containers. Recycling of wastes helps to protect the environment. The user is obliged to transfer their used equipment to a collection point where all electric and electronic components.