EUROSTER 2006/2006TX

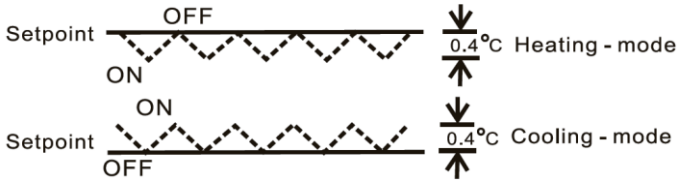
Installation and operation manual

MANUFACTURER: P.H.P.U. AS, ul. Polanka 8a/3, 61-131 Poznań, Poland

Manual version: 11.05.2017

SPECIFICATION

- EEPROM memory backup
- for Heating or Cooling,by factory preset
- temperature display range: 0 ~ 50°C
- temperature control range: 5 ~ 35°C for Room mode, 5 ~ 45°C for Floor-heating mode
- temperature sampling rate: 1 minute
- switching differential(Hysteresis): 0.4°C or 1°C selectable to users



- temperature sensing calibration: ± 2°C
- temperature adjusting scale: 0.2°C (fast forward adjusting function, pressing + or - for 3 seconds)
- temperature display scale: 0.1°C
- all 7-Day independently programmed
- 24-Hour- format, spread into 48 time adjusting zone
- thermostat operate Power: 2 X AA 1.5 Vdc LR 6 Alkaline Battery-low indication (when power goes below 2.4 Vdc)
- thermostat output: 16(3.5) AMP / 250 Vac, Voltage-free, SPDT.
- dimension: 138 L x 86 W x 29 H mm

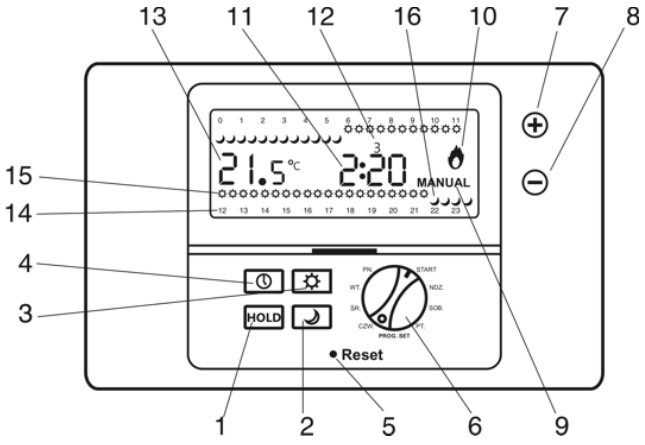
CHOOSING INSTALLATION LOCATION

For obtaining thermostat's best performance upon using, recommend user to follow up with precaution listed below.

1. Place thermostat on wall inside the room approximate 1.5 meter above floor.
2. Avoid position where temperature sensing easily interfered by ambience, such as, directly exposed to Sun-Light, too near to any Heat-Generate devices /refrigerator, right next to entrance/ exit/window, etc.

3. Prevent thermostat from installed at position that furniture may interfere air-flow, stagnant air-flow location is not suitable for installing thermostat.
4. Keep thermostat away from high humid ambience, high humidity is hazardous to thermostat's operational duration.
5. It's crucial, before installing thermostat, make sure house renovation is finished, no tacky painting/plaster is right on thermostat's installing position.
6. To level thermostat prior to installation is not necessary.
7. Push excess cable wires back into the wall while positioning thermostat. If there is a draft, pack the opening with non-combustible material.
8. Place batteries in thermostat requiring batteries, observing " +" and "-" positions.

OUTSIDE VIEW OF THE CONTROLLER



BODY

1. HOLD – use the button to switch the thermostat into the manual mode. The thermostat maintains the set temperature regardless of programmed settings. Press the HOLD button again to restore operation with programmed settings.
2. economical temperature — Press to display the current economical temperature.
3. comfort temperature — Press to display the current comfort temperature.
4. Setting the clock.
5. Restarting the thermostat.
6. A knob used to select weekdays when programming a thermostat.

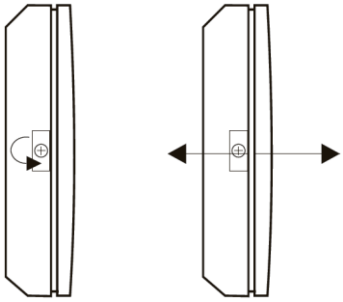
7-8. Multi-purpose setting buttons: ⊕ increase , ⊖ decrease.

DISPLAY

9. Temporary temperature change — MANUAL sign is displayed to indicate that the temperature has been changed manually by means of setting buttons.
10. An icon indicating activation and operation of the controlled device.
11. Indication of current time.
12. Current weekday, with 1 for Monday and 7 for Sunday, here: Wednesday.
13. Indication of current temperature.
14. Indication of time in 24-hour mode.
15. The ⚙ icon over or under the indication of time determines the period of thermostat operation with comfort temperature setting.
16. The ☾ icon over or under the indication of time determines the period of thermostat operation with economical temperature setting.

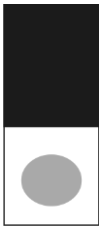
TO OPEN TOP HOUSING

Using the Philips screwdriver, release the screw that keeps front and back parts of the housing together. Beginning from the left side, open the thermostat. Take care of two hooks located on the right side of thermostat.



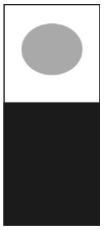
CHOOSING THERMOSTAT OPERATION MODE & TO REPLACE BATTERIES

J4 - COOL

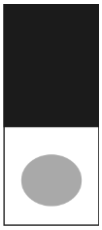


J4 - Selection of Cool or Heat mode

J4 - HEAT

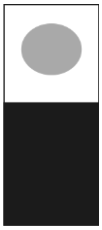


J1 - FLOOR



Floor - sensor signal commands Thermostat

J1 - ROOM



Room - sensor signal commands Thermostat

J1 - Selection of Floor - sensor or Room - sensor mode

BAT. LO RELAY OFF

Battery low protection disabled. Normal operation.

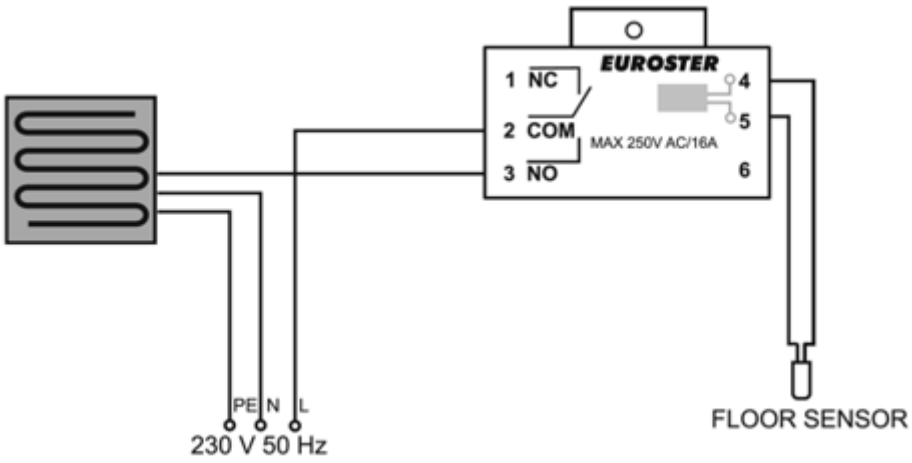
BAT. LO RELAY OFF

Battery low protection enabled.

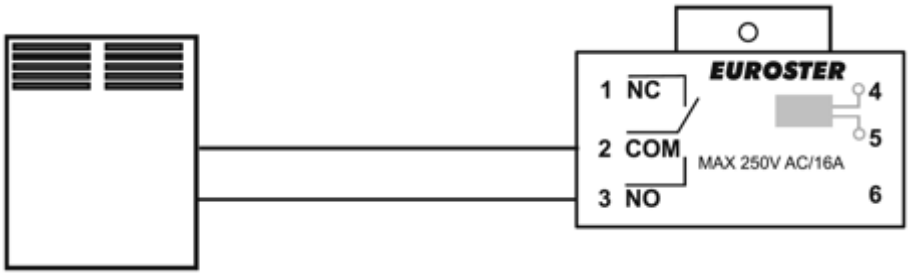
Switches the heating off when battery is empty.
Note: Option is not available in wireless versions.
Battery 2xAA. Follow „+" and „-" instruction.

WIRING GUIDE

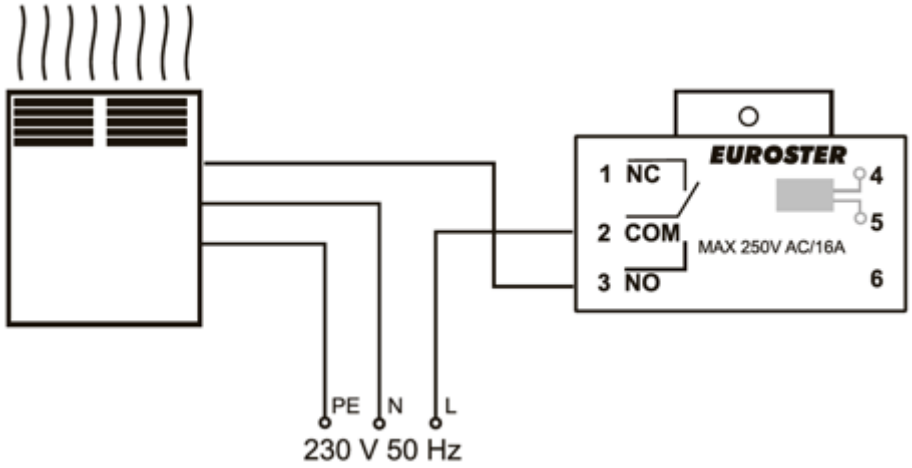
Floor - Heating System



Gas - Fired boiler

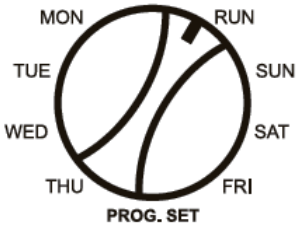


Heating / Cooling System



TO ADJUST HYSTERESIS (SWITCHING-DIFFERENTIAL)

1. Point Rotary switch to "RUN".



2. Press and hold both ⊕ and ⊖ for 3 seconds.
3. Shown as on LCD, to press either ⊕ or ⊖ to select required Hysteresis.
4. Wait for 5 seconds,after adjustment, thermostat shall automatically memorize adjustment and begin operating.

TO ADJUST TEMPERATURE CALIBRATION

1. Point Rotary switch to MON.
2. Press and hold both HOLD and 🕒 for 3 seconds.
3. Shown as on LCD, to press either ⊕ or ⊖ to set temperature calibration.
4. Wait for 5 seconds after calibration was done, Thermostat shall automatically memorize

TO ADJUST CLOCK

1. Rotary switch pointed to "RUN".
2. Press 🕒 to enter clock adjusting.

3. Press ⊕ or ⊖ to select the day of week.
4. Press [⏲] again to enter adjusting hour of day.
5. Press ⊕ or ⊖ to adjust.
6. Repeat procedure of pressing [⏲] and ⊕/⊖ to finish adjusting minute of hour.
7. LCD display shall automatically return to main page 5 seconds after clock adjusting completed.

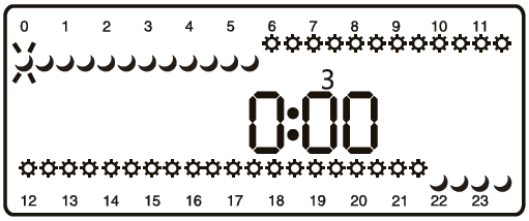
TO ADJUST ☼ AND ☾ TEMPERATURE SETTING

1. Rotary switch pointed to RUN.
2. Press [☼] to enter ☼ temperature setpoint. Press [☾] to enter ☾ temperature setpoint.
3. Press [☼]/[☾] again, LCD display begins flashing.
4. Press ⊕ or ⊖ to adjust temperature.
5. Wait 5 seconds after temperature adjustment finished, thermostat shall memorize setting and return to main page.

With two temperatures setting only, each of 7-day is spread into 48 independent time-scale, users can select length of time by own preference, to coordinate with ☼ and ☾ temperature setting, for coziest room temperature.

TO SET PROGRAM-PERIOD FOR EACH DAY AND START SETTING

1. Rotary switch pointed to the desired day of week.
2. LCD display shall show

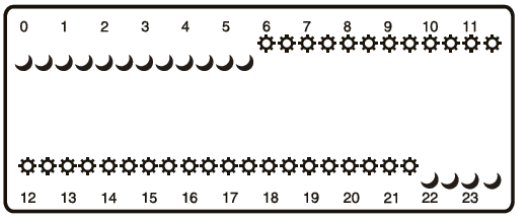


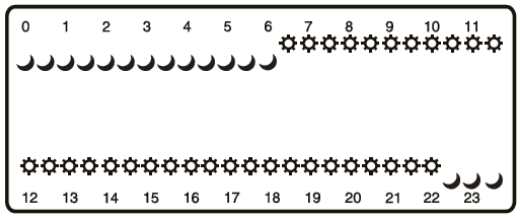
3. Press ⊕ or ⊖ to alter setting between b and a on LCD display.
4. Press [☼] or [☾] to select each individual time-scale, LCD display shall also indicate each time-scale by digital number and flashing, to guide users.
5. After finished setting all 7-day of week, spin rotary switch back to "RUN". Thermostat starts to operate its program.

ACTORY PRESET PROGRAM-PERIOD

Heating mode ☼ 20.4°C ☾ 16,2°C

Cooling mode ☼ 22.2°C ☾ 25°C





Pre-programmed time intervals:

Monday to Friday ☼ from 6:00 am to 10:00 pm ☾ from 10:00 pm to 6:00 am
Saturday and Sunday ☼ from 6:30 am to 10:30 pm ☾ from 10:30 pm to 6:30 am

TO SET HOLD (PERMANENT OVERRIDE)

1. Rotary switch pointed to RUN.
2. Press HOLD to enter this permanent override mode, LCD shall display "Temp Set" "Hold".
3. Press ⊕ or ⊖ to adjust temperature setting.
4. LCD display shall be flashing for approximate 8 second after temperature setting finished, and skip to indicate ambient temperature after flashing stopped. Thermostat starts to execute Permanent-Override function.
5. Press again HOLD, shall deactivate this "HOLD" command, thermostat shall resume its scheduled programs executing.

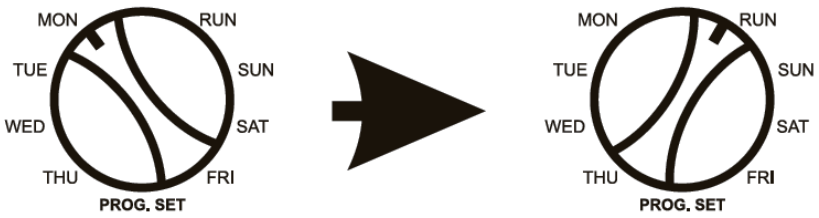
TO SET 5°C ANTI-FREEZE PROTECTION

1. Rotary switch pointed to RUN.
2. To enter this mode, press and hold HOLD button for 5 seconds, until A - F is shown on LCD.
3. Release HOLD button - Anti-Freeze protection is being started.
4. Press again HOLD to deactivate Anti-Freeze Protection, thermostat shall resume its scheduled programs executing.

IMPORTANT! Regardless of the activation moment, Anti-Freeze Protection is active until Monday, 0:00.

TO SET MANUAL (TEMPORARY OVERRIDE)

1. Rotary switch pointed to RUN.
2. Press ⊕ or ⊖ LCD display shall indicate current ☼ or ☾ temperature setting.
3. Press again ⊕ or ⊖ to change setting.
4. LCD display shall be flashing for approximate 8 second after temperature setting finished, and skip to main page of LCD-display after flashing stopped. Thermostat starts to execute "MANUAL" function.
5. Thermostat shall maintain executing "MANUAL" until ☼ program runs to the section of ☾. Vice versus. On LCD-display main page, when MANUAL in executing ☼ or ☾ shall disappear from display at the section of time that **MANUAL** function is executing.
6. Spin switch away from "RUN" and spin it back to "RUN" can terminate this "MANUAL" function.



RESTORING PRE-PROGRAMMED SETTINGS

1. Press simultaneously HOLD and ⊕ buttons and hold them while pressing RESET button.
2. Release all buttons.
3. Press HOLD button twice and RESET button again.

SIMPLIFIED DECLARATION OF EU CONFORMITY

P.H.P.U. AS AGNIESZKA SZYMAŃSKA-KACZYŃSKA hereby declares that the type of **Euroster 2006** equipment conforms to the following directives: 2014/30/EU (EMC), 2014/35/EU (LVD) and 2011/65/EU (RoHS).

The complete text of the Declaration of EU conformity is available at the following Internet address: www.euroster.pl

SET CONTENTS

1. EUROSTER 2006
2. user manual
3. alkaline batteries
4. 2 x screws

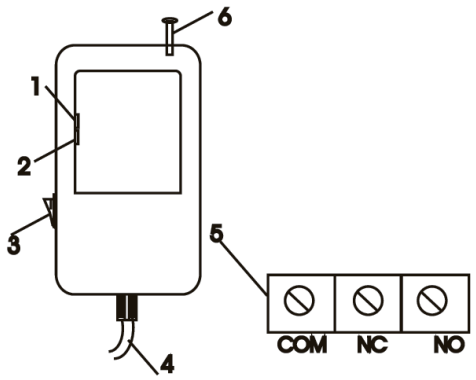
EUROSTER TXRX WIRELESS VERSION

GENERAL DESCRIPTION

The programmable temperature controller EUROSTER in the TXRX wireless version is, in terms of programming, the equivalent of EUROSTER wired version. In the packaging there is a user guide for the appropriate wired model. The difference is in how the on / off signal is transmitted.
With the EUROSTER TXRX controller the signal is transmitted wirelessly by radio, eliminating the need for wiring between the controller EUROSTER TX, and the device controlled by the receiver EUROSTER RX.
The effective range of operation depends to a large extent on the materials of which the building is made. EUROSTER TX, in conjunction with the receiver RX, provides coverage of about 100 m in open area. In buildings this distance reaches 30 meters which means the signal is able to cross several storeys. The signal is strongly attenuated by reinforced concrete structures which results in significantly reduced coverage.

Low battery indicator will be visible when the battery voltage drops to a minimum acceptable level. It is recommended to replace the batteries with new alkaline ones, every season. If needed, the controller must be re-programmed.

OUTSIDE VIEW



1. Receiving the signal from the transmitter indication- green LED.
2. Receiving device (e.g. heating) activated indication - red LED.
3. Switch for continuous operation of the heating appliance (can be turned on in the event of damage to the system). In an automatic mode the switch should remain in position 0.
4. Output cable.
5. Output connector - volt-free
   - contacts COM - NO normally open (most commonly used)
   - contacts COM - NC normally closed
6. Antenna - should be pulled out totally during the operation.

FIRST LAUNCH OF THE WIRELESS CON-TROLLER EUROSTER TXRX

The receiver voltage is life-threatening, therefore electricity supply should be absolutely detached during the installation and the assemblage be entrusted to a qualified installer. Do not install the controller showing signs of mechanical damage.

1. Insert new alkaline batteries.
2. Pull the telescopic antenna on the receiver RX out to its maximum.
3. After a few seconds the green LED should blink - the receiver is within the range of the transmitter. In order to verify coverage, after connecting the TXRX kit, the transmitter sends a signal every 3 seconds during the first minute (green LED blinking). Afterwards, the process is repeated every 1 minute and lasts about 1 second. No indication means insufficient coverage.
4. Active red LED means the heating (or cooling) device is turned on.

PROTECTION

1. If the receiver module EUROSTER RX does not receive a confirmation of activation or deactivation during 7 consecutive cycles (due to disruption of transmission by e.g. a strong electromagnetic pulse or due to battery voltage drop in EUROSTER TX), the heating appliance is turned off. This prevents the device from overheating. After the disruption is eliminated the system automatically returns to work, with the exception of battery replacement, which requires re-programming of the TX controller.
2. In addition, the receiver RX is equipped with an Anti-freeze system. This function is active only in case of loss of communication with the transmitter (discharged battery, interference). Such a state is indicated by fast flashing of the green LED, and follows 7 consecutive missed pulses from the transmitter. If this condition persists for a longer time, the receiver is automatically turned on for twenty minutes every three hours, so as not to lead to cooling of the rooms. As soon as the communication is re-established (disruption disappearance, batteries replaced) the receiver automatically turns off and the system returns to operate with the transmitter TX.
3. The signal sent to EUROSTER RX has a nature of coded digital transmission. This allows for an operation of multiple EUROSTER TX controllers on a small area without fear of cross-interference. When using two receivers RX always keep them

at least 0.5 m from each other. Controllers are always paired with receivers of the same code and there is no possibility of exchange of a single module. The code is printed on the receiver RX (sticker at the plug side) and the controller TX (transmitter) on the left side of the battery compartment or on the back of the housing.

However, if doubts in this respect arise, please contact the dealer or the manufacturer.

OPERATION

Because of the one-way signal transmission and safety of the user of heating (or cooling) equipment, EUROSTER TX sends every minute a short coded message confirming the status of the relay of the EUROSTER RX receiver. It is indicated by lighting of the green LED for about 1 second. For this reason, the indicator of the controller can light up earlier than the control device is turned on. Time difference should not be greater than 1 min. Similar situation may occur when turning the heating appliance off. Given the heat capacity of the buildings, this is not significant to the economy of regulation and has no effect on the cost of heating.

An electrical, oil or gas appliance, consuming more power than the maximum load of contacts, can be connected only through an external relay with appropriate characteristics. If in doubt, please consult the distributor or manufacturer.

Large inductive and capacitive loads should be avoided as they cause burnout of the relay's contacts.

Green light on the receiver RX indicates:

- receiving a signal from the transmitter - lights up every 1 minute for about 1s
- lack of communication - indicated by rapid flashing (caused by 7 consecutive missed connections)

Fast pulsing of the green LED means also

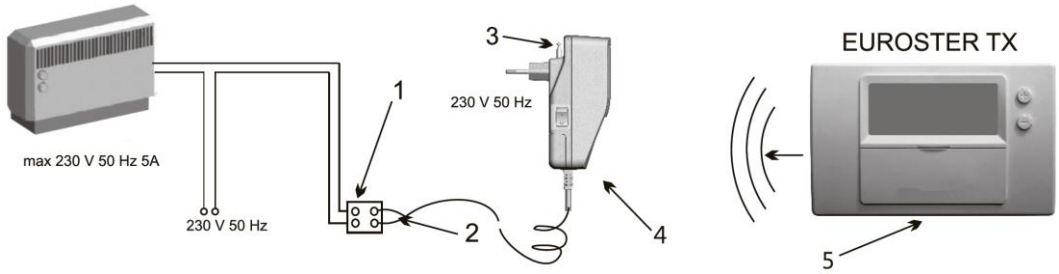
- distance of the receiver from the transmitter too long (reduce the distance)
- discharged batteries (replace with new alkaline ones). Partially discharged batteries can cause a decrease of the signal range - battery replacement is advised

Red LED indicates that the heating function of the boiler (or other device) is switched on.

WIRING DIAGRAM EXAMPLE EUROSTER TXRX

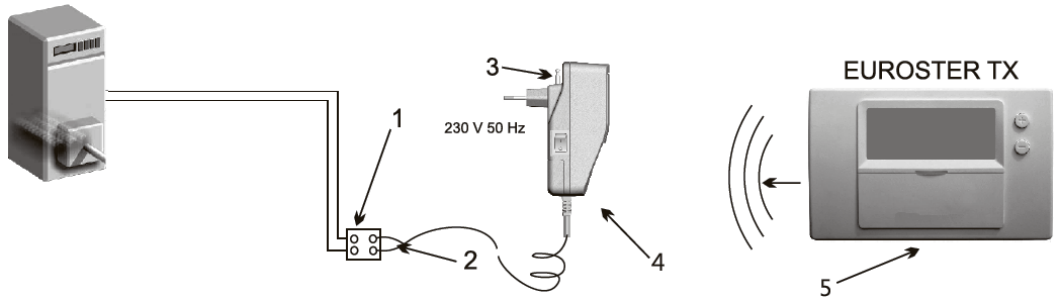
Presented diagrams are simplified and do not contain all the elements needed for the correct operation of the system.

With a 230 V AC powered device



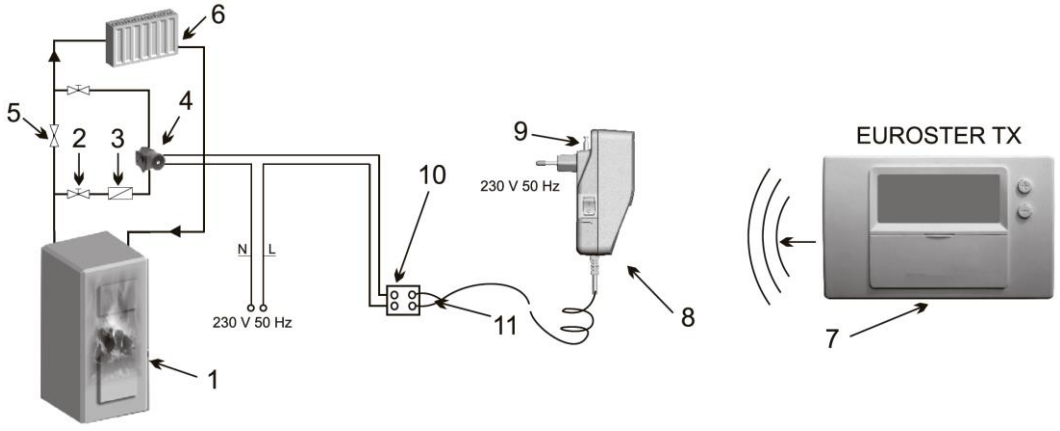
1. Electrical connector cube
2. Output wire, contacts used COM - NO - (normally open)
3. Antenna
4. Euroster RX (receiver)
5. Euroster TX, placed in any room

With a gas boiler



1. Electrical connector cube
2. Output wire, contacts used COM - NO - (normally open)
3. Antenna
4. Euroster RX (receiver)
5. Euroster TX placed in any room

With a CH pump



1. Central heating boiler
2. Shut-off valve

3. Strainer
4. CH pump
5. Return valve
6. Heat receiver – heater
7. EUROSTER TX (transmitter)
8. EUROSTER RX (receiver)
9. Antenna
10. Electrical connector cube
11. Output wire, contacts used COM - NO (normally open)

TROUBLESHOOTING LIST

The controller does not switch on the heating appliance

- replace the batteries - use only new alkaline batteries
- reset and program the controller
- move the controller to another place
- verify the operation of LEDs on the receiver unit (green and red)
- verify connection between the receiver and the controlled appliance
- disconnect the receiver unit from the controlled appliance and check the operation of the latter;
- check if the code given on the transmitter is the same as on the receiver
- fully extend the antenna

Blinking LCD display on the controller

- replace the batteries - use only new alkaline batteries
- reset and program the controller

Blinking battery charge indicator on the LCD display:

- replace the batteries - use only new alkaline batteries
- make sure the battery contacts are clean

Lack of windmill icon on the LCD display, which indicates that the appliance is switched off:

- verify the setting of DIP switches on the controller
- verify the settings of operating parameters: day, hour, temperature

RECEIVER RX TECHNICAL DATA

Supply Voltage: 230 V 50 Hz
Maximum load: 5 A 230 V 50 Hz
Protection class: II
Radio frequency: 433.92 MHz
Output cable length: 2 m
Dimensions: 112 x 64 x 68 mm

In case of a complaint the complete EUROSTER TXRX must be supplied to the point of sale with the warranty card.

SET CONTENTS

5. EUROSTER TX
6. EUROSTER RX
7. controller holder
8. user manual
9. alkaline batteries

SIMPLIFIED DECLARATION OF EU CONFORMITY

P.H.P.U. AS AGNIESZKA SZYMAŃSKA-KACZYŃSKA hereby declares that the type of **Euroster 2006TXRX** equipment conforms to the following directives: 2014/30/EU (EMC), 2014/35/EU (LVD), 2014/53/EU (RED) and 2011/65/EU (RoHS).

The complete text of the Declaration of EU conformity is available at the following Internet address: www.euroster.pl

ELECTRONIC WASTE MANAGEMENT INFORMATION

This product is designed and manufactured of high quality materials and components suitable for reuse.
The crossed out wheelie bin symbol located at the product means that the product is subject to selective collection in accordance with the provisions of the Directive 2012/19/EU of the European Parliament and of the Council.
The product contains an internal battery subject to the selective collection in accordance with the provisions of the Directive 2006/66/EC of the European Parliament and of the Council.
Such marking informs that the electrical and electronic equipment and batteries may not be disposed of together with other household waste after their service life. The user is obliged to take the used devices and batteries to a point of collection of waste electrical and electronic equipment and batteries. The entities collecting such equipment, including the collection points, shops, and municipal entities, set up an appropriate system enabling handover of such equipment and batteries.
The proper disposal of waste equipment and batteries contributes to prevention of consequences hazardous to the health of persons and nature, resulting from the possible presence of hazardous components in the equipment and batteries and from inaccurate storage and processing of such equipment and batteries. The guidelines regarding disposal of the batteries are included in the user manual.
A household plays an important role in contributing to reuse and recovery including recycling, of the waste equipment. The attitudes influencing protection of the common good of clean environment are shaped at this level. Households are also one of the larger users of small equipment and its rational management at this stage impacts the recovery of recyclables. Inaccurate disposal of this product may be penalised in accordance with national legislation.

WARRANTY CERTIFICATE
EUROSTER 2006/2006TXRX

Warranty terms:

1. The warranty is valid for 24 months from the device sale date.
2. Claimed thermostat together with this warranty certificate must be supplied to the seller.
3. Warranty claims shall be processed within 14 business days from the date the manufacturer has received the claimed device.
4. The device may be repaired exclusively by the manufacturer or by other party clearly authorized by the manufacturer.
5. Warranty becomes invalidated in case of any mechanical damage, incorrect operation and/or making any repairs by unauthorized persons.
6. This consumer warranty does not exclude, restrict nor suspend any right of the Buyer ensuing if the product would not meet any of the sale contract terms.

.....

sale date serial number/date of manufacture signature/stamp

Business entity that issued this warranty certificate is:
P.H.P.U. AS Agnieszka Szymańska-Kaczyńska, Chumiętki 4, 63-840 Krobia, Poland