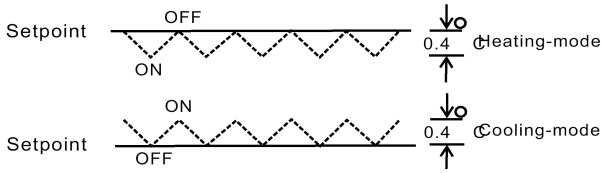
EUROSTER 2006/2006TX

SPECS

- 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: 132.5 L x 85 W x 27.6 H mm

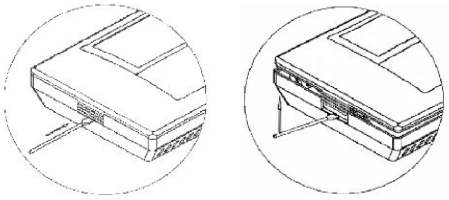
CHOOSING INSTALLATION LOCATION

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.

TO OPEN TOP HOUSING

Insert Flat-Head screw driver in positin as shown on right
Gently lift the side upward

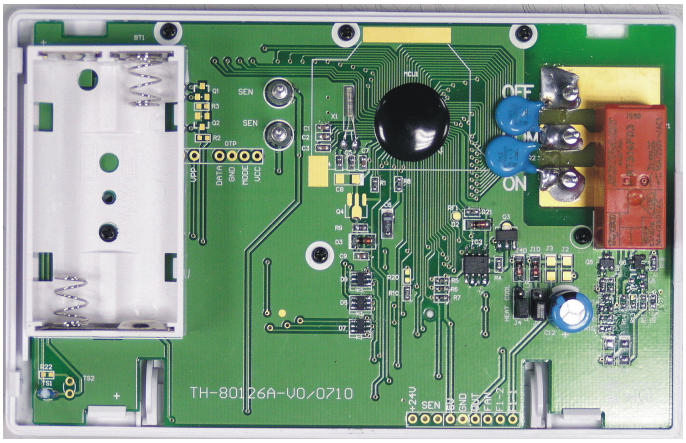


CHOOSING THERMOSTAT OPERATION MODE & TO REPLACE BATTERIES

J4.
COOL

J4
HEAT

J4. Selection of Cool or Heat mode



J1.
FLOOR

J1.
ROOM

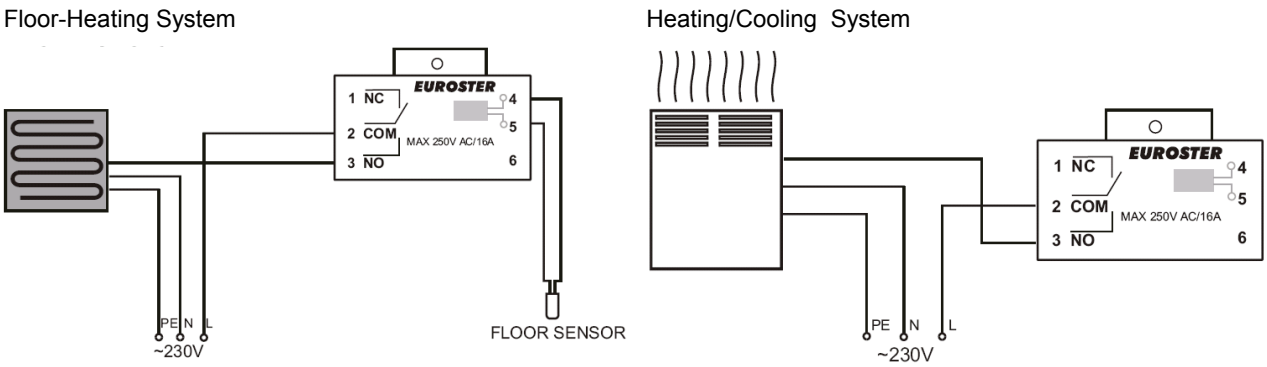
Battery 2 x AA. Follow "+ " and "-" instruction.

J 1 - Selection of Floor-sensor or Room-sensor mode

Floor-sensor signal commands Thermostat.

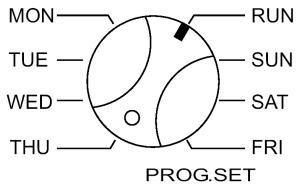
Room-Sensor signal commands Thermostat

Wiring Guide



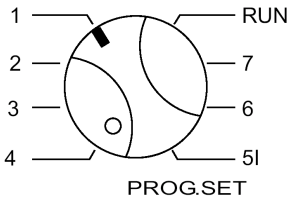
TO ADJUST HYSTERESIS (SWITCHING-DIFFERENTIAL)

1. Point Rotary switch to "RUN".
2. Press and hold both ⊕ & ⊖ 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.



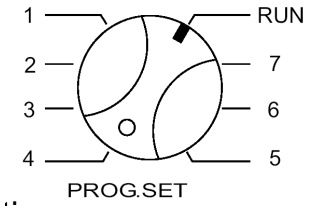
TO ADJUST TEMPERATURE CALIBRATION

1. Point Rotary switch to „1" (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 adjustment and begin operating.



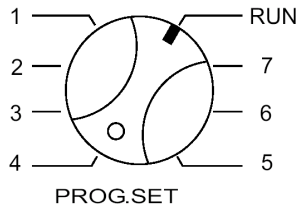
TO ADJUST CLOCK

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.

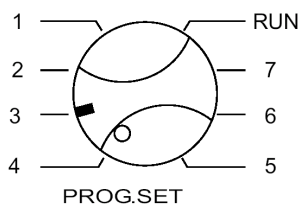


1. Rotary switch pointed to RUN.
2. Press ☼ to enter ☼ temperature setpoint. Press ☽ to enter ☽ temperature setpoint.
3. Press ☼/☽ again, LCD display begins flashing.
4. Press ⊕ or ⊖ to adjust temperature.
5. Wait 5 seconds after temperature adjustment finished, thermostat shall memorize setting and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

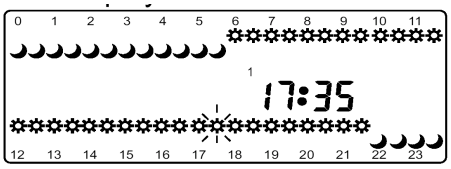
With two temperatures setting only, each of 7-day is spread into 48 independent time-scale, users can select length of time by own preference, to coordinate with ☼ and ☽ temperature setting, for coziest room temperature.

TO SET PROGRAM-PERIOD FOR EACH DAY AND START SETTING. (WEDNESDAY CHOSEN FOR GRAPHIC EXAMPLE)

1. Rotary switch pointed to the desired day of week.



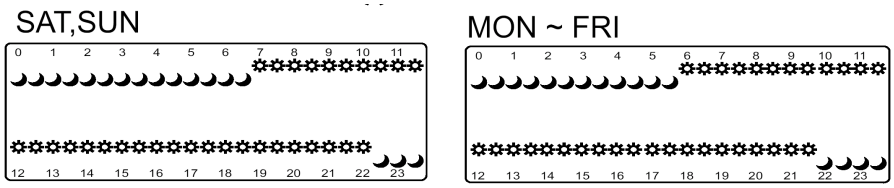
2. LCD display shall show



3. Press ⊕ or ⊖ to alter setting between ☼ and ☽ 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.

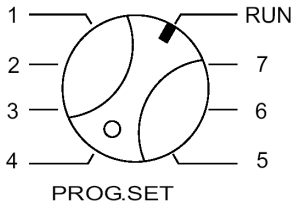
FACTORY PRESET PROGRAM-PERIOD

Heating mode ☼ 20.4°C ☽ 16,2°C
Cooling mode ☼ 22.2°C ☽ 25°C



TO SET HOLD (PERMANENT OVERRIDE)

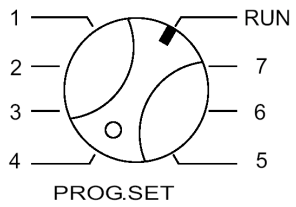
1. Rotary switch pointed to RUN.



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.

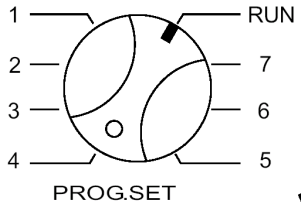


2. To enter this mode, press and hold „Hold" button for 5 seconds, until A - F is shown on LCD.
3. Release „Hold" button - Anti-Freeze protection is being started.
4. Press again „Hold" to deactivate Anti-Freeze Protection, thermostat shall resume its scheduled programs executing.

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

TO SET MANUAL (TEMPORARY OVERRIDE)

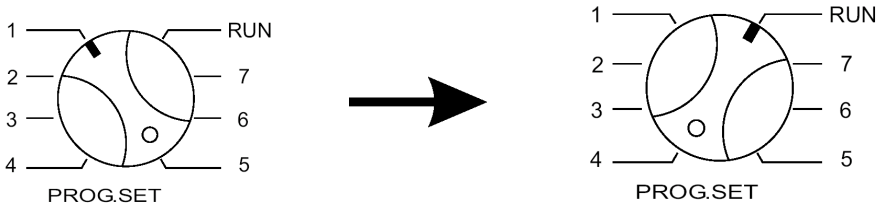
1. Rotary switch pointed to RUN



2. Press ⊕ or ⊖ LCD display shall indicate current or ☼ 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.

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.

5. Spin switch away from "RUN" and spin it back to "RUN" can terminate this "MANUAL" function.



WIRELESS TEMPERATURE CONTROLLERS

USER MANUAL

Important: Any guarantee claims will be processed only if both the transmitter and receiver have been delivered to the point of sale, accompanied with the guarantee certificate.
Euroster with wireless technology – TX RX

A. Overview

Programmable temperature controllers Euroster TX RX are a wireless version of the relevant wired models, with the same programming functions. **Therefore, the user manual of the relevant wired model is attached herewith.** The difference is in the method of transferring the switch on/ off signals.
EUROSTER TX RX utilises wireless technology, thus eliminating the need for routing of cables between the transmitter unit EUROSTER TX and the appliance, which is controlled by receiver unit EUROSTER RX.
The operating range of the transmitter/ receiver pair depends to a large extent on the materials used for construction of the building. In the open the operating range is ca. 100 m. With up to 30 m range inside buildings the signal will pass several storeys. In reinforced concrete enclosures signal attenuation is very high and consequently the operating range drops.
IMPORTANT! The low battery lamp LED will come on when the voltage has dropped below the minimum admissible level. Then the batteries must be replaced and EUROSTER TX must be programmed anew.

B. First start-up

1. Insert new alkali batteries
2. Fully extend the telescopic antenna of the RX unit
3. Green LED indicates that the receiver unit is in the range of the transmitter. For the first minute upon connection of the TX/ RX pair the green lamp comes on every 3 seconds to indicate communication between the units. After that time communication is tested every minute for ca. 1 second. When the green LED does not light up the receiver unit is beyond the range.
4. Red LED indicates that the heating/ cooling appliance has been switched on.

C. Protections

1. If due to external interference such as strong electromagnetic pulse or low battery in EUROSTER TX confirmation of switch on/ off signal has not been received by EUROSTER RX for seven subsequent cycles the heating appliance will be switched off to prevent potential overheating. When communication has been restored the system automatically returns to the current program. EUROSTER TX must be programmed anew after each replacement of batteries.
2. The RX receiver is additionally equipped with a protection system which is active only in case of loosing or lack of communication between the transmitter and the receiver (run down batteries, interference). Such state occurs after not receiving 7 signals from the transmitter and is signalized with fast flashing of green LED. If this state lasts longer the receiver is turned on automatically every three hours for 20 minutes in order to avoid cooling of the rooms. At the time of retrieving the communication (changing of batteries, disappearance of interference) the receiver turns off the system and automatically restarts working with the TX transmitter.
3. Coded digital transmission technology, as used in EUROSTER TX allows for operation of several units in a limited area without any disturbance. A minimum distance of 0.5 m should be kept between two RX units. Modules are not interchangeable as the transmitter and receiver form a pair with the same unique code. The code is given both on the RX unit (sticker at the plug side) and on the TX unit (on the left-hand side in the battery compartment).

For any doubts or queries, please do not hesitate to contact us or your local distributor.

D. Operation

As it is required due to one-way transmission of signal and as a protection of the controlled heating/ cooling appliance every minute a momentary coded signal is sent by EUROSTER TX to verify the status of the relay of EUROSTER RX, which is signalled by green LED. For this reason the on/ off lamp on the controller may come on before the appliance has been actually switched on. This difference should not exceed 1 minute. Similarly, this may happen during switching off the appliance. Taking into account the heat capacity of buildings this has no effect on the energy efficiency and, consequently, on the heating cost.

Note: The controller may be connected to an electrical, gas-fired or oil-fired appliance with rated power exceeding the contact rating only through an intermediate switch with load rating and performance appropriate for the controlled appliance parameters.

Note: High inductive and capacitative loads should be avoided as they shorten the life of relay contacts.

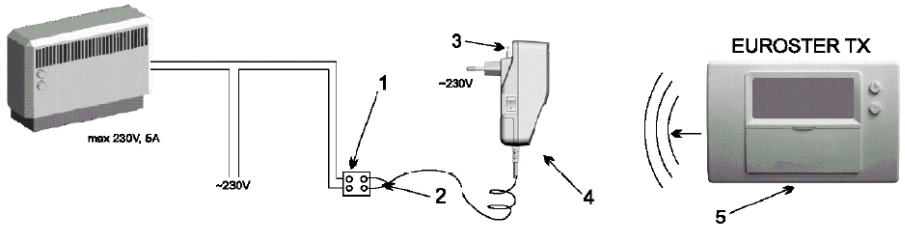
Note: Green LED on the receiver unit confirms receiving of signal from the transmitter. Normally it lights up at ca. 1 second intervals.
If it does not, do the following:

1. **Reduce the transmitter/ receiver distance**
2. **Check the battery charge status, and replace with new alkaline type ones, if required. With low batteries the operating range will be reduced and replacement is recommended.**

Red LED signals switching on of the heating or other controlled appliance.

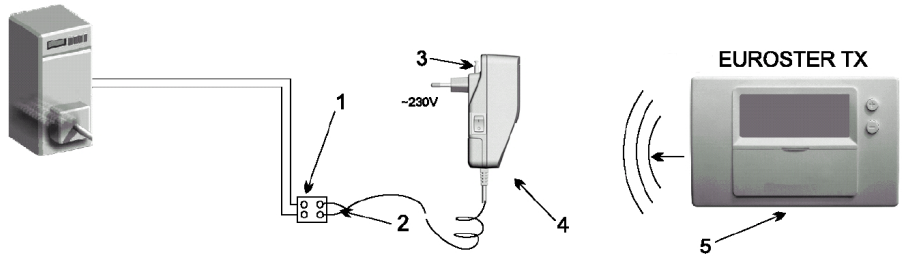
Danger! Hazardous voltage is present inside the enclosure. Any tampering with the unit may result in a life-threatening electrical injury!

S1. Wiring example: EUROSTER TX RX connected to a heating/cooling appliance



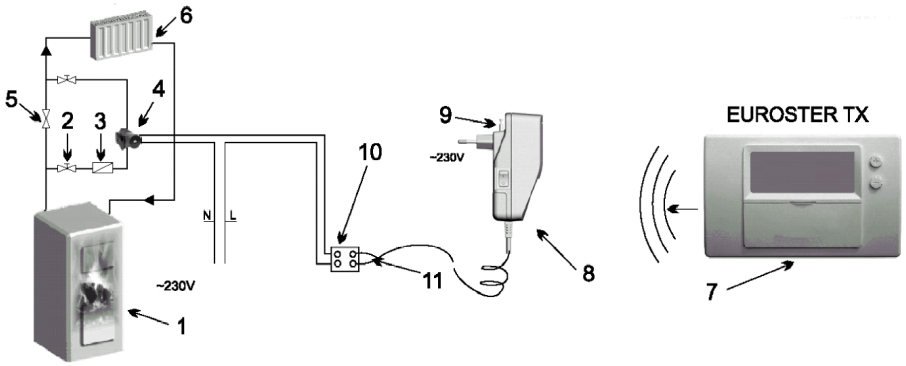
Legend:
1. Terminal block
2. Two-conductor cable, voltage-free relay output of EUROSTER RX, normally open, contact rating: 5A, 230 V AC
3. Antenna
4. EUROSTER RX (receiver)
5. Euroster TX installed at a preferred location

S2. Wiring example: EUROSTER TX RX connected to a gas-fired boiler



Legend:
1. Terminal block
2. Two-conductor cable, voltage-free relay output of EUROSTER RX, normally open, contact rating: 5A, 230 V AC
3. Antenna
4. EUROSTER RX (receiver)
5. Euroster TX installed at a preferred location

S3. Wiring example: EUROSTER TX RX connected to a heating water circulating pump



Legend:
1. Heating boiler
2. Shutoff valve
3. Strainer
4. Heating water circulating pump
5. Check valve
6. Heating unit – radiator
7. Euroster TX (transmitter unit)
8. Euroster RX (receiver unit)
9. Antenna
10. Terminal block
11. Two-conductor cable, voltage-free relay output of EUROSTER RX, normally open, contact rating: 5A, 230 V AC

E. Troubleshooting list

1. 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.
2. Blinking LCD display on the controller
   - replace the batteries - use only new alkaline batteries;
   - reset and program the controller.
3. Blinking battery charge indicator on the LCD display:
   - replace the batteries - use only new alkaline batteries;
   - make sure the battery contacts are clean.
4. 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.

GUARANTEE CERTIFICATE

Guarantee conditions for EUROSTER 2006/2006TX

1. The guarantee period is 24 months as of the date of sale
2. The faulty controller must be delivered to the point-of-sale or sent by mail directly to the manufacturer, accompanied with the guarantee certificate.
3. The guarantee claims will be processed within 14 days from the date of receiving the unit.
4. Only the manufacturer and the companies explicitly authorised by him may carry out the repairs.
5. Mechanical damage, misuse or unauthorised repairs make this guarantee invalid.
6. The present guarantee does not cancel, restrain or withhold the Buyer's right to claim on the basis of product non-compliance with the contractual conditions.

TO BE COMPLETED BY THE POINT-OF-SALE

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date of sale company seal and signature service phone no.