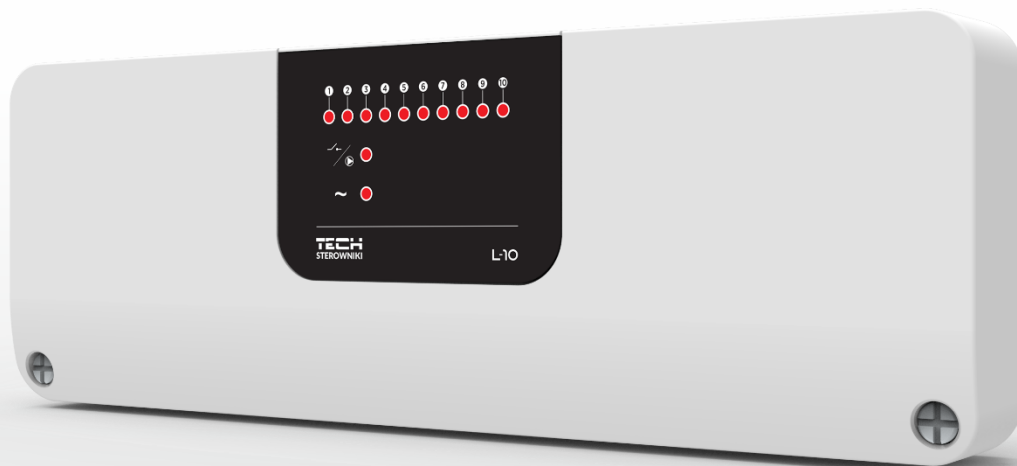


# TECH TECH CONTROLLERS

## USER MANUAL EU-L-10

EN



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*The pictures and diagrams are for illustration purposes only.  
The manufacturer reserves the right to introduce some changes.*

## I. SAFETY

Before using the device for the first 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 different 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

- High voltage! Make sure the regulator is disconnected from the mains before performing any activities involving the power supply (plugging cables, installing the device etc.).
- The device should be installed by a qualified electrician.
- Before starting the controller, the user should measure earthing resistance of the electric motors as well as the insulation resistance of the cables.
- The regulator should not be operated by children.



### NOTE

- The device may be damaged if struck by a lightning. Make sure the plug is disconnected from the power supply during storm.
- Any use other than specified by the manufacturer is forbidden.
- Before and during the heating season, the controller should be checked for condition of its cables. The user should also check if the controller is properly mounted and clean it if dusty or dirty.

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Changes in the merchandise described in the manual may have been introduced subsequent to its completion on September 10th 2018. The manufacturer retains the right to introduce changes to the structure. The illustrations may include additional equipment. Print technology may result in differences in colours shown.

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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 will be recycled.



## II. DEVICE DESCRIPTION

EU-L-10 controller is intended for controlling thermostatic actuators. It cooperates with room regulators, which send current temperature readings from a given zone. Based on the data, the external controller manages the thermostatic actuators (opening them when the temperature is too low and closing them when the pre-set temperature has been reached).

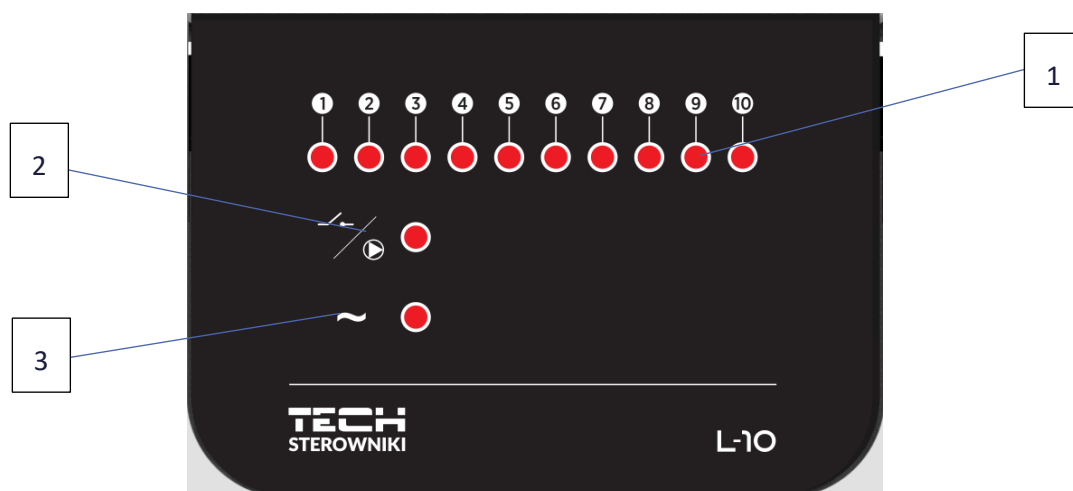
### Controller assets:

- Possibility of controlling the thermostatic actuators with the use of 18 outputs:
  - 8 zones / 2 outputs each (in case of a higher number of actuators, the maximum output load is 0,3 A).
  - 2 zones / 1 output each (in case of a higher number of actuators, the maximum output load is 0,3 A).
- Possibility of connecting to each zone one dedicated room regulator (EU-R-10b, EU-R-10z, EU-R-10s) or standard two-state regulators (EU-294v1, EU-292v3, EU-295v3).
- One 230 V output for a pump.
- Voltage-free contact (e.g. for controlling the heating device).
- Voltage contact for controlling the floor pump.
- Contact activation delay (for voltage-free and pump output). When the zone temperature is too low, the pump will enable the contact after 2 minutes.



### NOTE

The regulator has a WT 6,3A tube fuse-link protecting the network. Higher amperage fuse should not be used as it may damage the controller.



1. Zone icons 1-10
2. Icon indicating voltage-free contact and pump operation
3. Icon indicating that the controller has been connected to the power supply

### WARNING

If pump manufacturer requires an external main switch, power supply fuse or additional residual current device selective for distorted currents it is recommended not to connect pumps directly to pump control outputs.

To avoid damaging to the device, an additional safety circuit must be used between the regulator and the pump. The manufacturer recommends the ZP-01 pump adapter, which must be purchased separately.

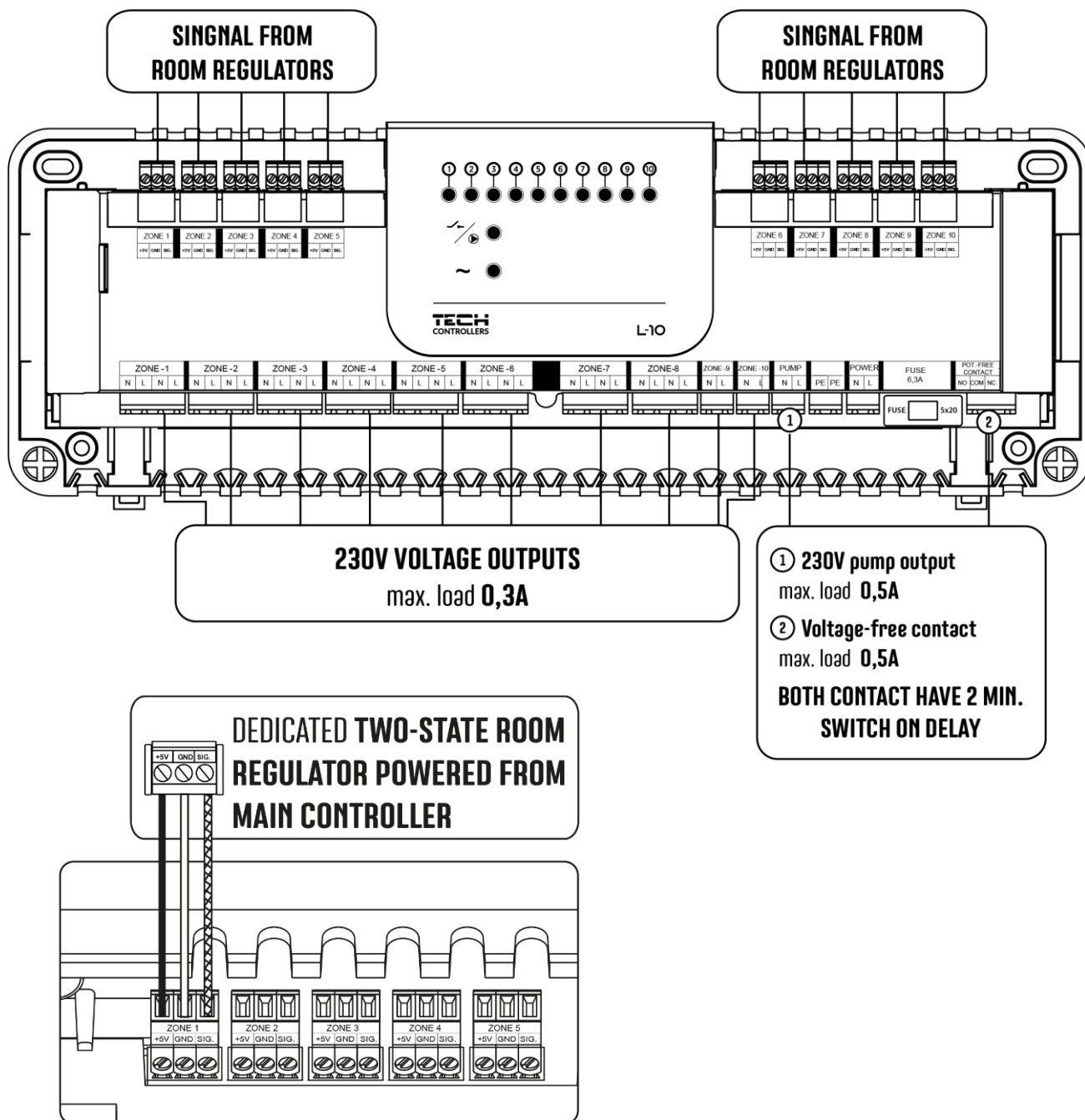
### III. HOW TO INSTALL THE CONTROLLER

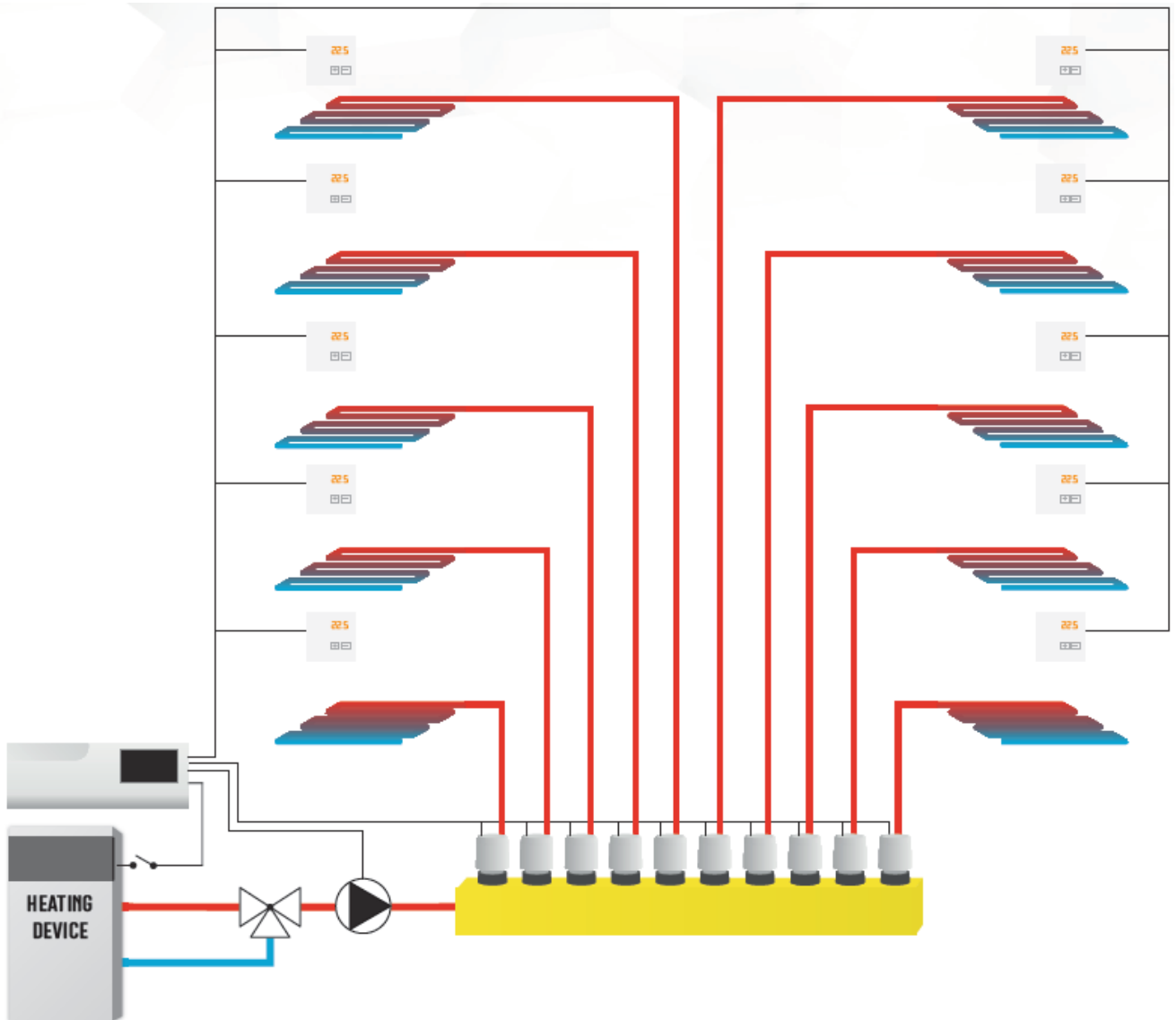
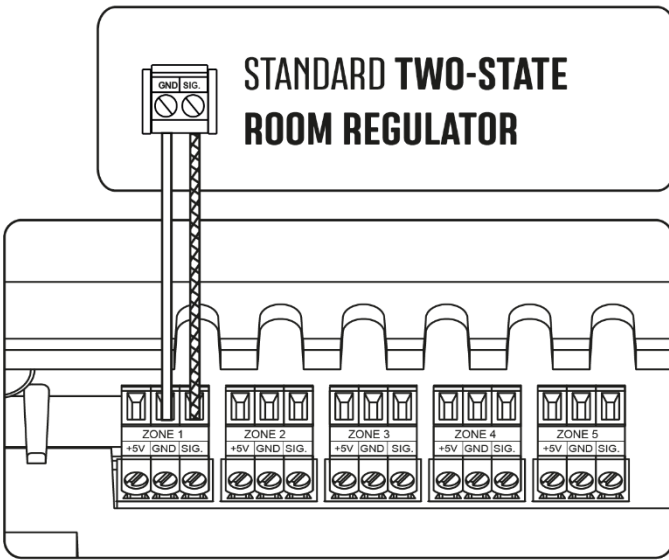
EU-L-10 should be installed by a qualified person.



#### WARNING

- Risk of fatal electric shock from touching live connections. Before working on the controller switch off the power supply and prevent it from being accidentally switched on.
- Incorrect connection of cables may lead to controller damage.





## IV. MAINTENANCE, TECHNICAL DATA

Before and during the heating season, the controller should be checked for condition of its cables. The user should also check if the controller is properly mounted and clean it if dusty or dirty.

Specification	Value
Power supply	230V +/- 10% / 50Hz
Max. power consumption	4W
Ambient working temperature	5÷50°C
Potential contacts 1-10 max. output load	0,3 A
Pump max. output load	0,5 A
Potential-free cont. nom. out. load	230V AC / 0,5A (AC1) * 24V DC / 0,5A (DC1) **
Fuse	6,3 A

\* AC1 load category: single-phase, resistive or slightly inductive AC load.

\*\* DC1 load category: direct current, resistive or slightly inductive load.



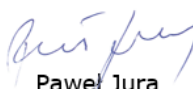
## EU Declaration of conformity


Hereby, we declare under our sole responsibility that **EU-L-10** manufactured by TECH STEROWNIKI II Sp. z o.o., head-quartered in Wieprz Biała Droga 31, 34-122 Wieprz, is compliant with Directive **2014/35/EU** of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to **the making available on the market of electrical equipment designed for use within certain voltage limits** (EU OJ L 96, of 29.03.2014, p. 357), **Directive 2014/30/EU** of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to **electromagnetic compatibility** (EU OJ L 96 of 29.03.2014, p.79), 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, PN-EN 60730-1:2016-10, PN EN IEC 63000:2019-01 RoHS .**

Wieprz, 10.09.2018

  
Paweł Jura

  
Janusz Master

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