

TECH TECH CONTROLLERS

USER MANUAL EU-MW-1

EN



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.
- 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.

Changes in the merchandise described in the manual may have been introduced subsequent to its completion on November 27th 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.

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.



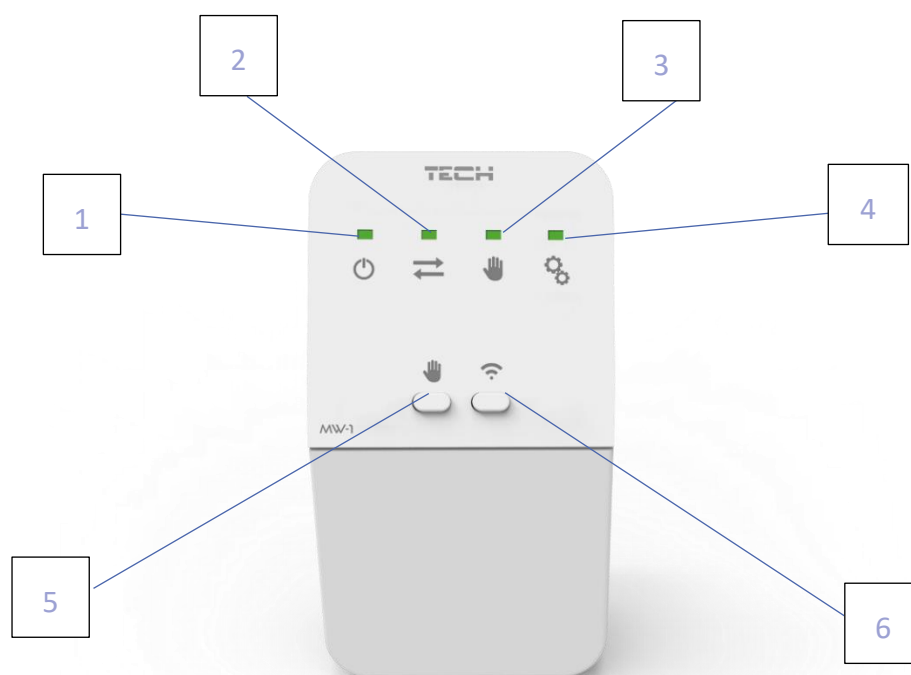
II. DEVICE DESCRIPTION

EU-MW-1 is a wireless device the task of which is to switch on/off the potential-free contact when receives the message from the main controller. Depending on the main controller, the EU-MW-1 module can e.g., switch on the boiler, pump or valve actuators.

Controller features:

- Wireless communication
- Possibility of activating manual mode
- Wireless communication with 4 devices at the same time

III. HOW TO USE THE DEVICE



1. Control light informing that the device is ON
2. Wireless communication
3. Manual mode ON
4. Contact switch status
5. Manual mode or cancel current operation
6. Pairing button

7. MANUAL MODE

- In order to activate manual mode, press *Manual mode* button (no. 5) - the control light will go on (no. 3).
- In order to enable/disable the radiator or other device connected to EU-MW-1, press the *Pairing button* once (no. 6).

- In order to deactivate manual mode, press *Manual mode* (no. 5)



NOTE

In the event of no interaction, after 15 minutes the controller switches from manual mode to automatic mode.

8. REGISTRATION

In order to register the first device, you should:

- press *Pairing* button on EU-MW-1
- go to the main controller menu and select *Pairing (Registration)* option



NOTE

Once you have selected *pairing* on EU-MW-1, it is necessary to activate *pairing* option in the main controller within 2 minutes. When this time is over, any pairing attempt will fail.

If:

- all control lights are flashing simultaneously = the registration has been successful.
- the control lights are flashing one after another from one side to the other = EU-MW-1 module has not received the signal from the main controller.
- all control lights light up continuously = the registration attempt failed.



NOTE

The registration process may be cancelled at any time by pressing and holding *Manual mode* button for 5 seconds.

9. ADVANCED REGISTRATION

EU-MW-1 module may cooperate with 4 devices at the same time. In order for the contact to be activated, at least one device must send a signal to MW-1 module.

In order to register devices 2,3 and 4, you should:

- enter device selection mode by pressing and holding *Pairing* button for 10 seconds - one control light is flashing.
- use *Manual mode* button to select the device which is to be registered (press twice to select device no. 2, three times to select device no. 3, four times to select device no. 4).
- once the device has been selected, press *Pairing* button.

If:

- all control lights are flashing simultaneously = the registration has been successful.
- the control lights are flashing one after another from one side to the other = EU-MW-1 module has not received the signal from the main controller.
- all control lights light up continuously = the registration attempt failed.

10. RESTORE FACTORY SETTINGS

In order to enter factory settings mode, you should:

- Press and hold *Manual mode* for 10 seconds - the two outermost control lights start flashing.
- Press *Pairing* button - all control lights are flashing.



NOTE

In order to cancel restoring the factory settings, press *Manual mode* button.

IV. ALARMS

In EU-MW-1, interval communication is carried out every 4 minutes. In the event of no communication with the main controller (e.g. due to power failure or limited range), the receiver will automatically disable the heating device contact after 15 minutes.

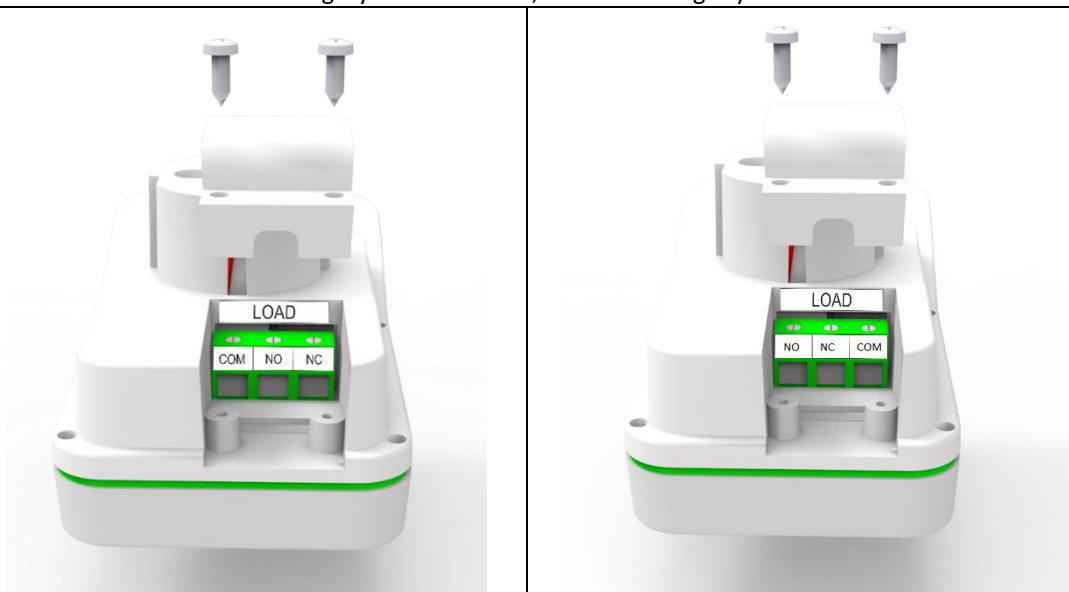
V. INSTALLATION, TECHNICAL DATA

Before connecting the cables, check the nameplate located on the back of the EU-MW-1 device and connect the wires according to the table below.

	EU-MW-1	EU-MW-1a
Power supply	100-240V/50-60Hz	230V ± 10% / 50Hz
Operation temperature	5°C ÷ 50°C	5°C ÷ 50°C
Potential-free cont. nom. out. load	230V AC / 0,5A (AC1) * 24V DC / 0,5A (DC1) **	230V AC / 0,5A (AC1) * 24V DC / 0,5A (DC1) **
Max. power consumption	<1W	<2W
Operation frequency	868MHz	868MHz
Max. transmission power	<25mW	<25mW

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

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



The controller 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.



WARNING

Incorrect connection of wires may lead to the module damage!

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.



EU DECLARATION OF CONFORMITY

Hereby, we declare under our sole responsibility that **EU-MW-1** manufactured by TECH STEROWNIKI II Sp. z o.o., 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 art. 3.1a Safety of use

PN-EN 62479:2011 art. 3.1 a Safety of use

ETSI EN 301 489-1 V2.2.3 (2019-11) art.3.1b Electromagnetic compatibility

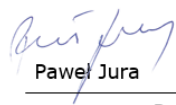
ETSI EN 301 489-3 V2.1.1:2019-03 art.3.1 b Electromagnetic compatibility

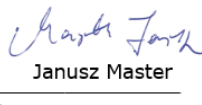
ETSI EN 300 220-2 V3.2.1 (2018-06) art.3.2 Effective and coherent use of radio spectrum

ETSI EN 300 220-1 V3.1.1 (2017-02) art.3.2 Effective and coherent use of radio spectrum

EN IEC 63000:2018 RoHS.

Wieprz, 27.11.2018


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