

miniUVR868

ONE-CHANNEL RADIO RECEIVER

installation manual

v. 1.2

GENERAL INFORMATION

MiniUVR868 receiver is a compact, one-channel device designed for use with electrical devices powered by 230V. MiniUVR868 receiver is a simple and inexpensive way to extend the functionality of home automation installation, gate automation and others with a remote control. Various possible modes of output channel provide tremendous flexibility and allow adaptation to the majority of installations. Small housing gives complete freedom to choose the place of installation, eg. in the flush-mounted installation boxes.

TECHNICAL AND FUNCTIONAL DATA

- Power supply: 230VAC
- Receiver memory: 200 remotes DTM868MHz series
- Operating temperature: from -20°C to +55°C
- Housing external dimensions: 44x37x22mm, IP-20
- Weight: 42g
- Frequency: 868MHz FSK modulation
- Receiver relay output: NO/NC 3A/230VAC-1* category (<700VA)
or 3A/30V DC-1* category (<90VA)
- Working mode: monostable, bistable, momentary
- Turn on time in monostable mode: 0,5s/od 1to 127s every 1s/ from 1 to 127 min. every 1 min.
- Manual control input: NO type, 230VAC
- Clear and simple user interface, based on five LEDs and two buttons;
- Easy remote registering, without need to use the receiver button;
- Ability to register remotes programmed outside the installation - Galactic function;
- Ability to delete all memory and single remote (deleted remote presence necessary);
- Ability to verify the number of registered remotes.

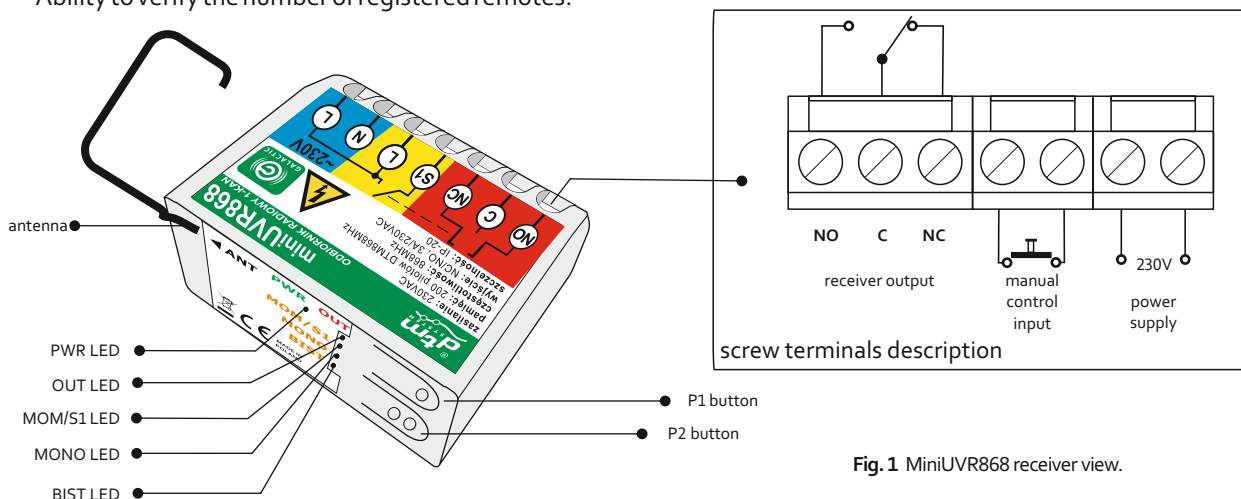


Fig. 1 MiniUVR868 receiver view.

* The receiver output load value refers to resistive devices such as incandescent lamp, traditional halogen lamp, heater. You cannot directly connect LED bulbs, motors, switching power supplies to the receiver output.

1. INSTALLATION

Receiver is designed for indoor, installation box, or inside the housing of other automation devices. Ensure appropriate working conditions, consistent with parameters of the device. Do not install the receiver in locations exposed to high humidity and frequent and sudden changes of temperature. Due to the externally accessible screw connectors, provide galvanic isolation from the other devices and cords. Example of electrical connection is presented in Fig.2.

Controlled device must be connected to a potential-free output of the receiver C, NO or NC. If the device requires normally open (NO) connect it to the terminals NO and C. If the device requires normally closed (NC) connect it to the terminals NC and C. 230V power supply is indicated by the green PWR LED. During operation, each output turn on is signaled by a OUT LED. Usage of manual control button is indicated by the yellow S1 LED. Wire antenna is factory connected to ANT terminal.

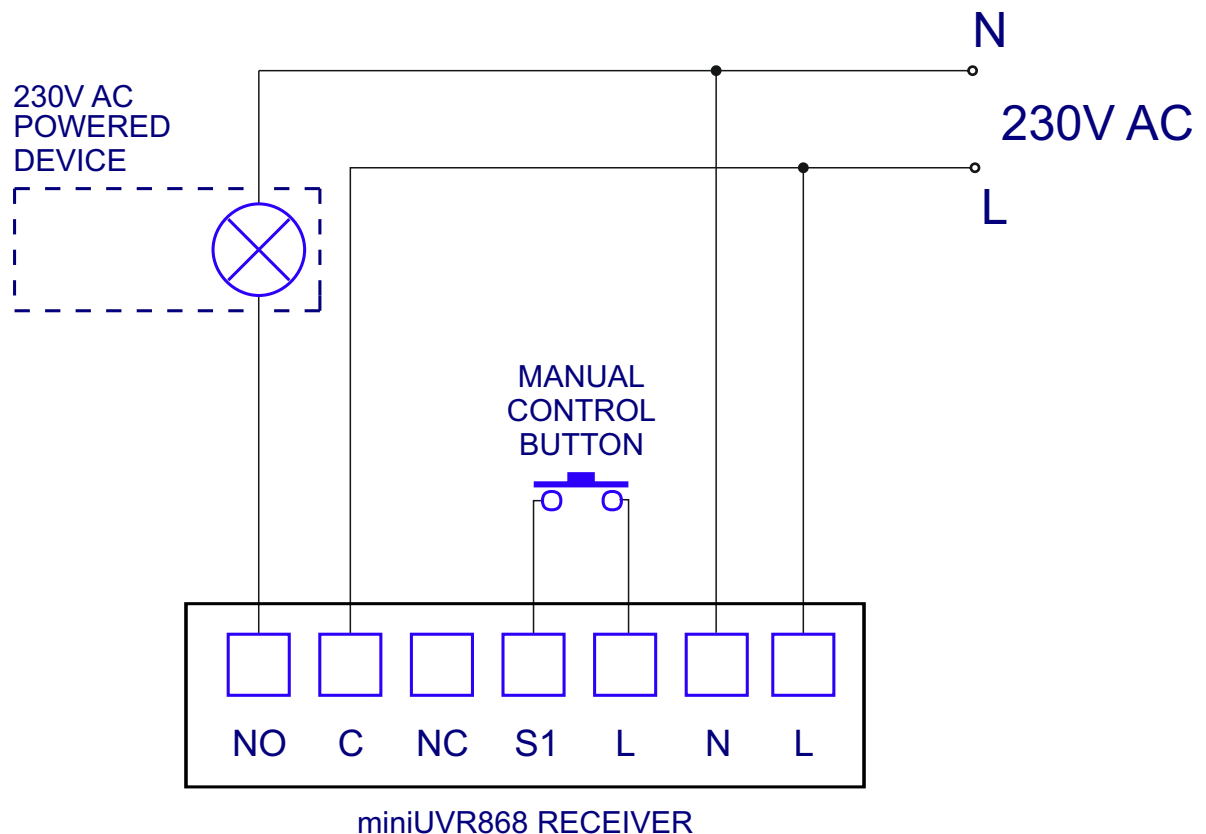
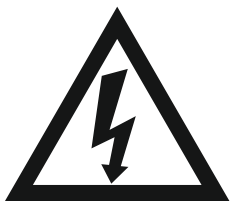


Fig.2 Exemplary schem of electrical connection of miniUVR868 receiver.

IMPORTANT REMINDER !!!



Electrical installation must be performed by qualified and experienced personnel in accordance with applicable laws. The unit uses dangerous voltage 230V 50Hz, all connections must be made with power supply disconnected. The installer must mount the system in a safe manner to avoid the risk associated with its use. The person performing the installation of the device without complying all applicable laws is responsible for any damages that the device may cause.

2. PROGRAMMING

Receiver has the ability to program its working parameters. Before programming refer to Fig.1. showing the view of the receiver to locate the P1 and P2 programming buttons and LEDs signaling receiver working mode.

2.1 Registering the remote to receiver memory

Press and hold the P1 button, red OUT LED lights-on, then press the selected button on the remote. Successful registering is indicated by OUT LED blinking.

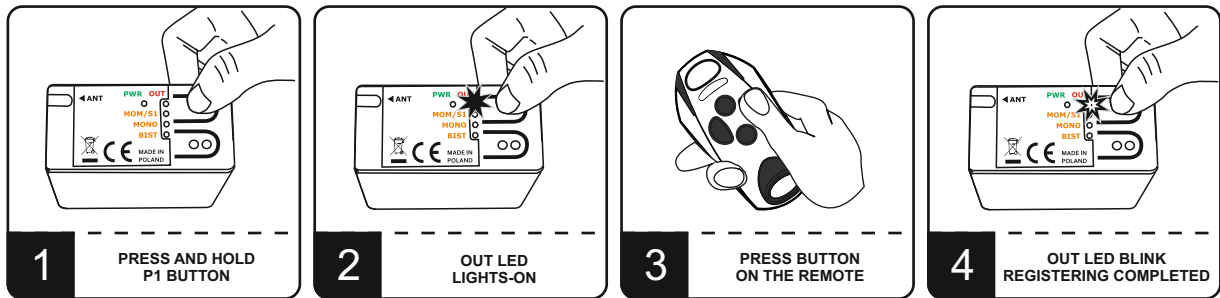


Fig. 3. Registering the remote.

2.2. Deleting a single remote from receiver's memory

To delete the remote, simultaneously press and hold down P1 and P2 buttons on the receiver. All LEDs will flash, then press the remote button. Successful deleting is indicated by OUT LED flashing.



Pressing P1 and P2 buttons too long, lead to receiver memory format (see point 2.10.).

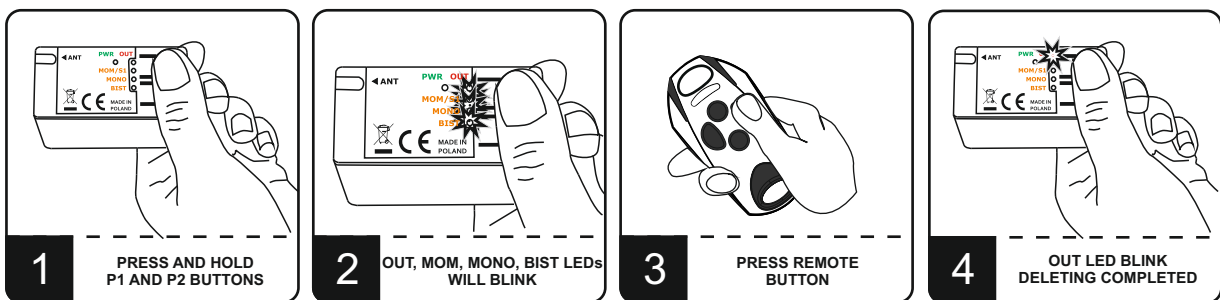


Fig. 4. Deleting the remote.

2.3. Easy remote registering function

Easy remote registering function allows to register remote without the need of physical access to the receiver. The condition for successful easy registering, is the need to be in receiver radio range and to have previously registered remote. For easy remote registering, within the receiver radio range, press and hold for 15 seconds button of already registered remote. Within no more than 3 seconds, press and hold for 15 seconds the button of remote you want to register.

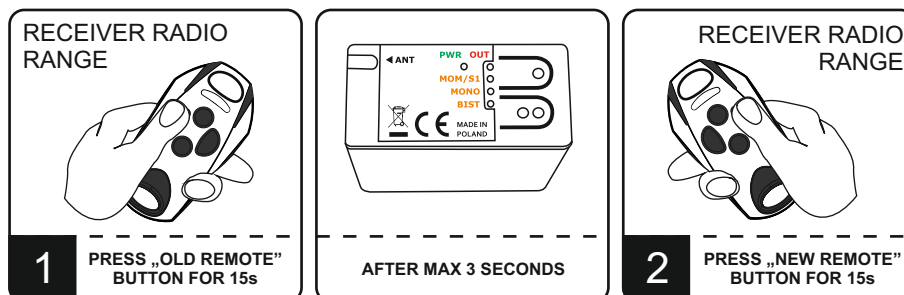


Fig. 5. Easy remote registering.

Easy remote registering function is not available for:

- a channel configured to operate in a momentary mode,
- easy remote registering function locked.

Easy remote registering failed can be caused by:

- low battery of one of the remotes,
- radio interference that may occur during the procedure,
- the receiver memory is full.

2.4. Easy remote registering function lock/unlock

To protect the device against unauthorized attempts of registering remotes, lock the easy registering function. In order to lock/unlock the easy remote registering function, press P1 and P2 buttons, then release the P2 button. After five seconds OUT LED starts to light on and off cyclically every 5 seconds. Releasing the P1 button when:

- OUT LED lights - easy remote registering locked,
- OUT LED off - easy remote registering unlocked.



Releasing the P1 button, within 5 seconds after releasing the P2 button will exit the procedure without saving changes.

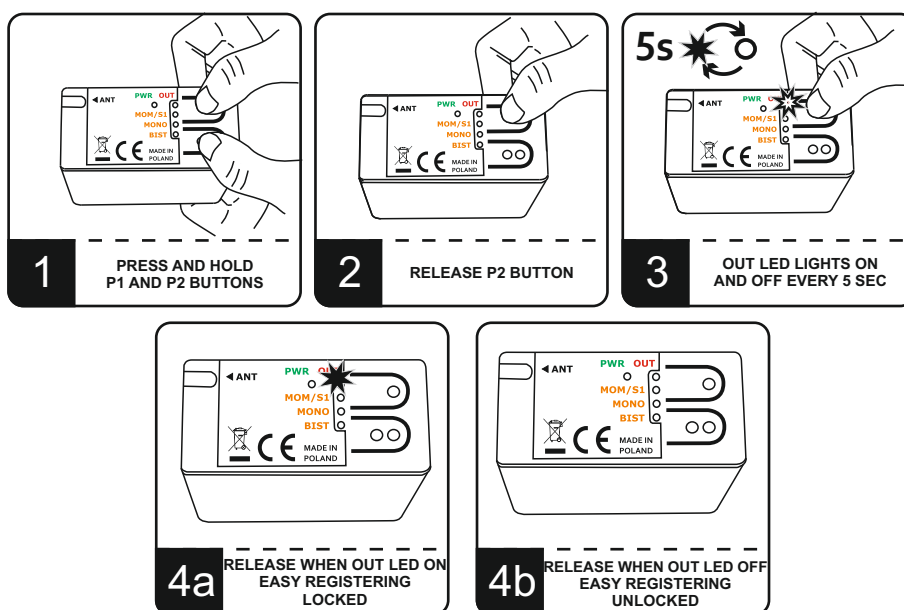


Fig.6. Easy remote registering function lock/unlock.

2.5. Entering the authentication code of Galactic function

GALACTIC function allows registering remotes programmed and configured outside the installation, without use of the receiver button.



To enter the authentication code to the receiver, it is necessary to have a remote with GALACTIC function. Remote has to have set the authentication code, entered by GPROG programmer.

To enter an authentication code to the receiver, press twice P2 button. OUT LED starts blinking for 8 seconds. During this time, press and hold for 5 seconds two buttons of the remote with galactic function.



The frequency of OUT LED flashing after double-pressing the P2 button, indicates whether the authentication code is set or not.

Very fast blinking (10 blink per second) indicates that there is no code entered in the receiver.

Slow blinking (1 blink per second) indicates the authentication code of Galactic function is set in the receiver.

2.6. Deleting the authentication code of GALACTIC function from the receiver.

To delete the authentication code, you must have the remote with GALACTIC function, with use of which the code has been entered.

To delete the code, press the P2 button twice. The OUT LED will blink slowly for 8 seconds. During this time, press for 5 seconds, any two buttons on the remote, with use of which the code has been entered. OUT LED will flash, confirming the removal of the code.



The authentication code of GALACTIC function is being removed after formatting the memory (see point 2.10.).

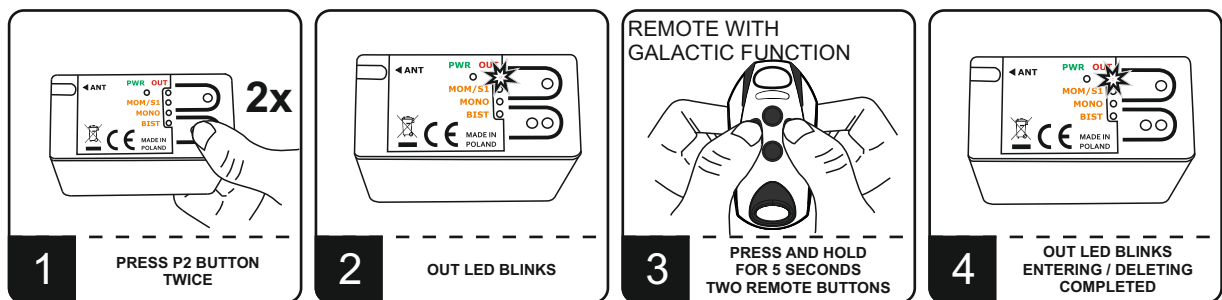


Fig.7. Entering/deleting the authentication code in the receiver.

2.7. Registering the remote with Galactic function.

The condition for the success of registering the remote with Galactic function, is the compatibility of authentication codes set in the receiver and the remote.

In order to register the remote, press and hold for 5 seconds, two buttons on the remote, in the receiver radio range.

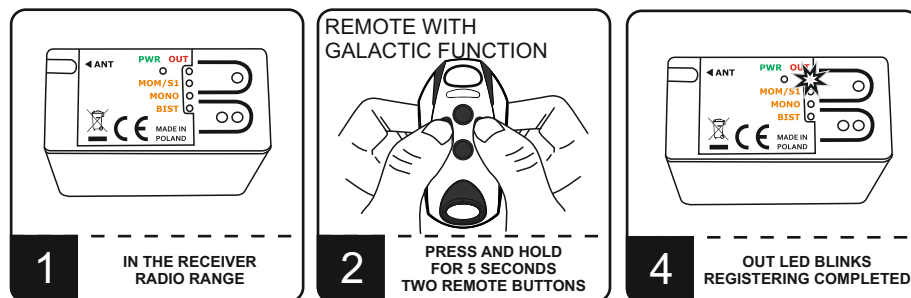


Fig.8. Registering the remote with Galactic function.

Fail in registering the remote can be caused by:

- incompatibility of the authentication codes in the receiver and the remote,
- low battery of the remote,
- radio interference that may occur during the procedure,
- the receiver memory is full.

2.8. Setting the operating mode of the output channel to bistable or momentary.

To set the channel mode, press and release the P1 button. Red OUT LED and yellow LED indicating the currently set channel, light up. Repeatedly press P1 button to set desired mode of operation. The yellow LED with description MOM to set momentary mode. The LED with BIST description to set bistable mode. To confirm the selected operating mode, press and hold the P1 button on the receiver. OUT LED flash, then the OUT LED and LED indicating the selected mode will go out

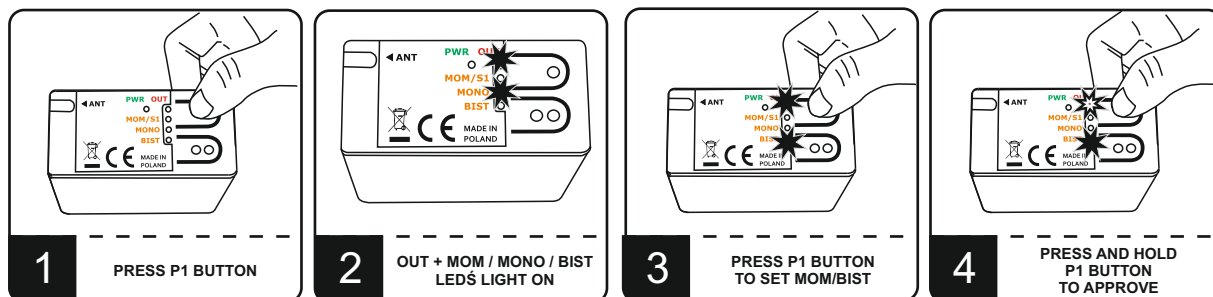


Fig.9. Setting output channel mode to bistable/momentary.



Pressing P2 button will exit the output mode programming without approving changes.

2.9. Setting the operating mode on the output channel to monostable.

To set channel output mode to monostable, press and release the P1 button. Red OUT LED and yellow LED indicates the currently set mode light on. Repeatedly press P1 button to set monostable mode, indicated by yellow LED with description MONO. To approve, press and hold P1 button. MONO LED goes out and starts flashing. While holding down the P1 button deduct the required number of blink, then release the P1 button. The number of deducted blinks of MONO LED sets the channel activation time in seconds, or minutes if after the button is released P1 button is quickly pressed for a moment. To set the activation time for 0,5s release the P1 button before the first blink of yellow MONO LED.

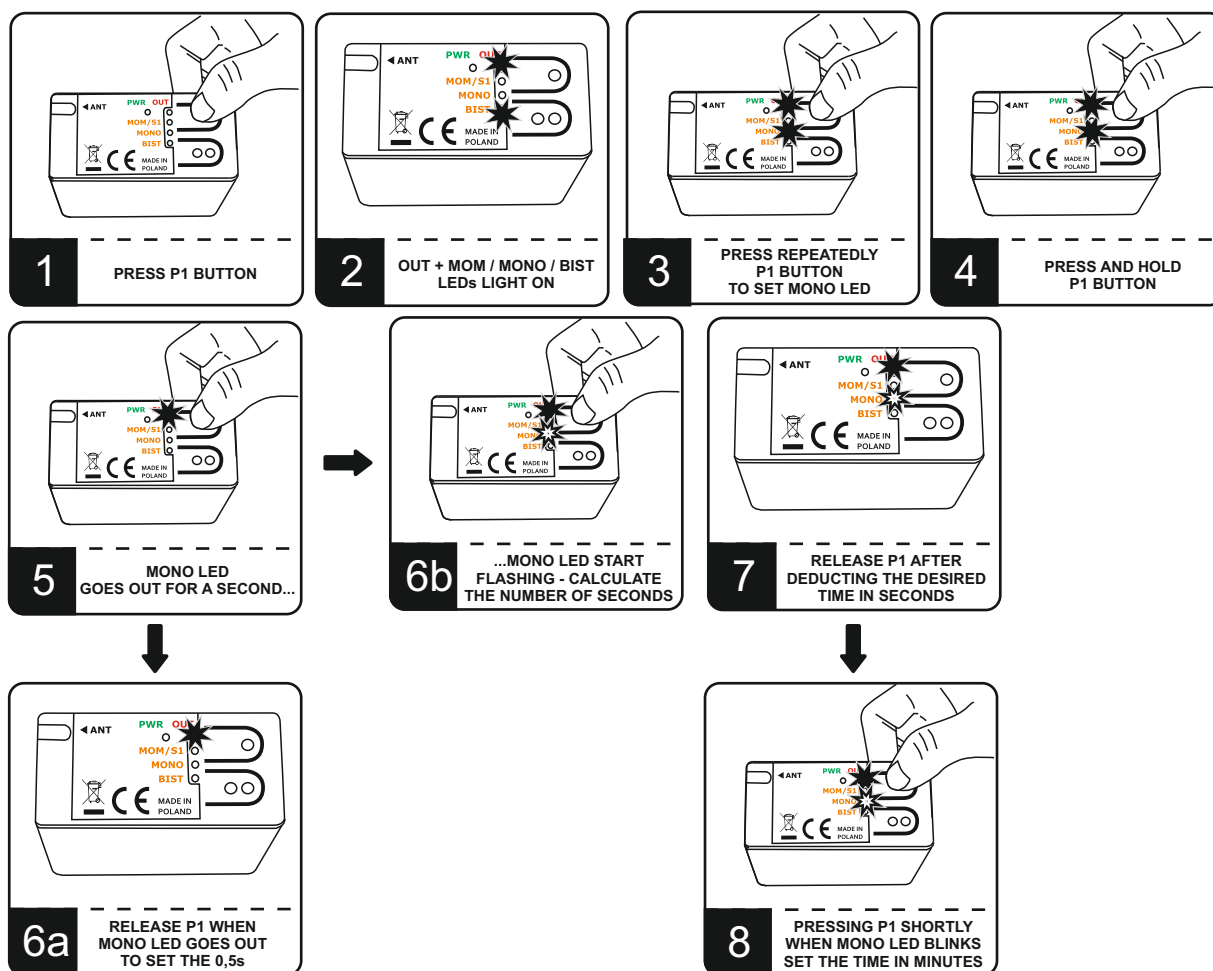


Fig.10. Setting monostable mode.

2.10. Memory format.

To format memory of the receiver, press and hold P1 and P2 buttons for 15 seconds. Release buttons when the LEDs go out.

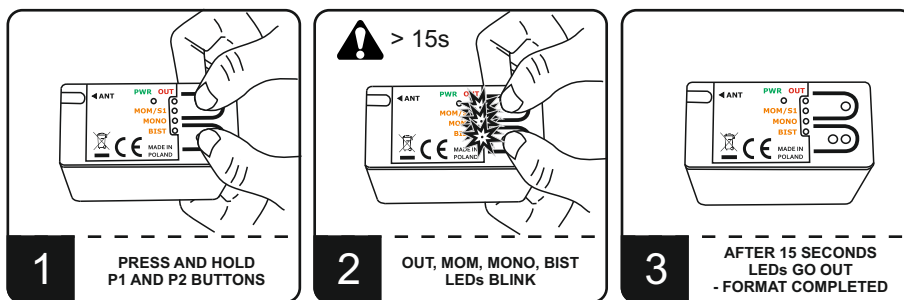


Fig.11. Memory format.

Memory format:

- removes all remotes from the receiver,
- sets easy remote registering function unlocked,
- sets the output channel mode to monostable with time of 0,5s,
- removes the authentication code of Galactic function.

2.11. Verifying the number of registered remotes

To verify the number of registered remotes, prior registering or deleting the remote is required.

After registering or deleting the remote, hold receiver button for 5 more seconds. LED will blink showing number of registered remotes. First number of tens (from 0 to 20 long pulses), then number of units (from 0 to 9 short pulses). Example showing the number of pulses is shown in Fig. 12.

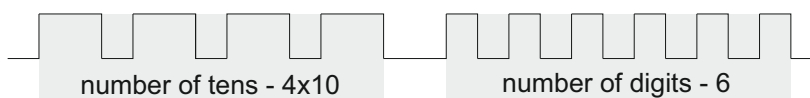


Fig. 12. Example showing pulses of 46 registered remotes.

UTILIZATION

Electrical devices cannot be thrown with municipal waste. Proper utilization of the devices gives the possibility of saving the Earth's natural resources for longer and prevents the degradation of the Environment.



WARRANTY

DTM System provides operational and ready to use devices. The producer gives 24 months warranty from the selling date to the end customer. This time is counted according to the producer warranty labels or serial numbers placed on every product. Producer obliges himself to repair the device for free if during the warranty period there are problems which come because of his fault. Broken device should be supplied on customer's expense to the place of purchase and enclose clear and brief description of the breakage. The cost of mount/dismount is covered by the user. The warranty does not cover: batteries in the remote controls, faults caused by improper usage, user self repairs and adaptations, lightning strikes, voltages or short circuits in the electrical grid. Appropriate legal acts regulate details of the warranty.



DTM System hereby declares that the radio receiver complies with Directive 2014/53/ EU. The full text of the EU Declaration of Conformity is available at the Internet address.

www.dtm.pl