



I. General information

Rival 431 radio receiver is an additional device from the series of DTM433MHz remote control system. It's a simplified, one-channel device devoted to gates, rollers and other devices where triggering pulse is needed. Rival 431 allows to broaden functioning of simple gate systems with a remote control in a inexpensive and easy way. The receiver cooperates with DTM433MHz series remotes. Radio signal transmission is based on KeeLoq® standard by Microchip® (dynamically variable code) which gives the best security. KeeLoq® system is considered to be one of the safest coding systems.

II. Receiver characteristics

- dynamically variable code KeeLoq®,
- superheterodyne receiver, frequency 433.92 MHz,
- simple and easy, one-button interface with a built-in LED indicator,
- receiver's memory containing 15 DTM433MHz remote controls,
- one separated relay NO-type output with max 1A/24V AC or DC,
- operating mode: monostable, turn on time 1 second,
- possibility of simple registering remotes, without the necessity of using a receiver's button,
- screw terminal block with the outside access, for connecting cables and outdoor aerial,
- supply voltage: from 12 V to 24V AC/DC,
- maximal current consumption: about 40mA (with relay on),
- tightness level: IP-53, the device devoted to surface mounting,
- working temperature: from -20°C to +55°C,
- dimensions [mm]: in case, height 118, width 55, depth 27,5

III. Rival 431 receiver's instalation

Electric connection must be done according to **fig.1**, which shows receiver with outputs description. Connector has plugged-in wire-antenna. Also additional antenna can be used. Antenna should be switched into connectors -(Y) middle cable conductor, (L) cable screen by concentric wire of 50 Ω impedance.

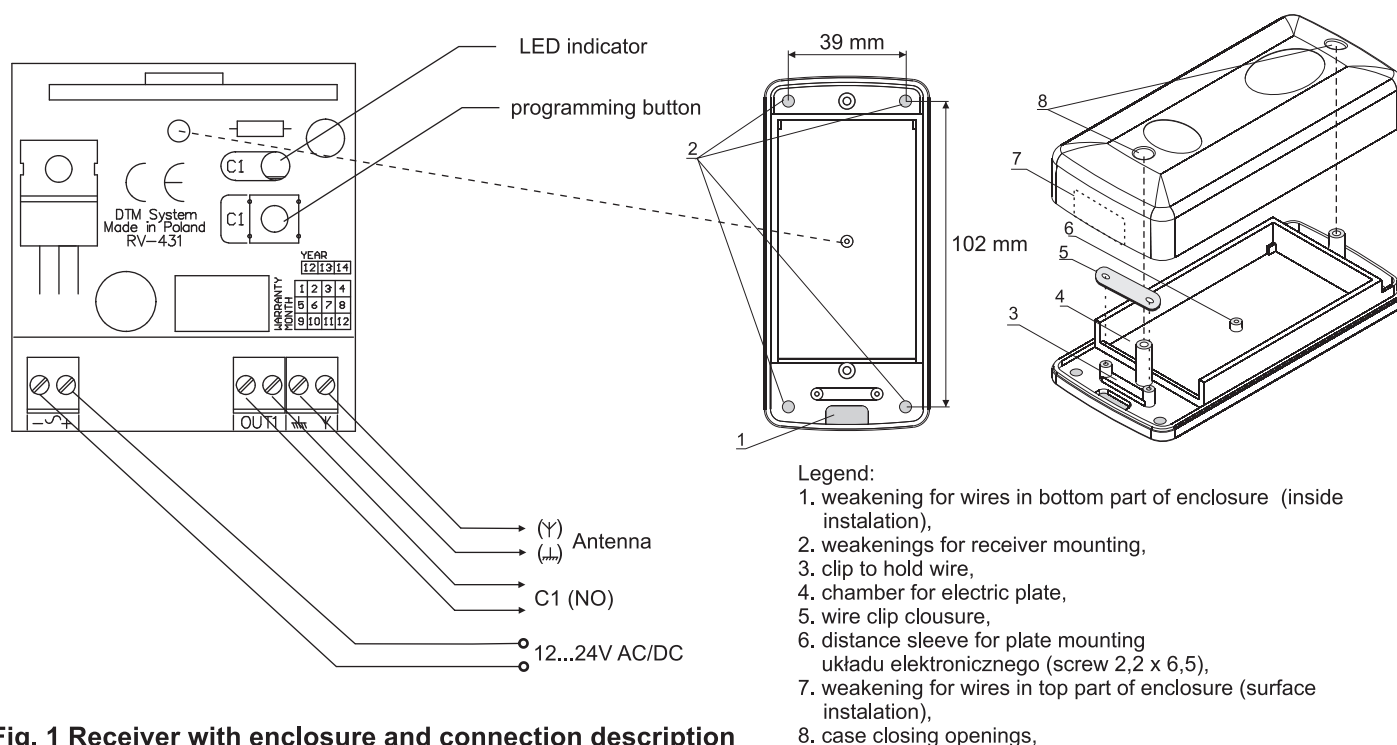


Fig. 1 Receiver with enclosure and connection description

IV. Receiver's programming

1) Registering a new remote

While holding the receiver's button, press a button in the remote which you want to register. The light will blink. While registering the remote in the receiver's memory, the button controlling the output channel must be used. Only one button of the remote can be registered. Registering another button of the same remote will result in removing the previous one.

Remarks:

- If you hold the receiver's button for too long, all remotes will be removed from the receiver's memory,
- You can't register more than 15 remotes.

2) Registering a new remote without using receiver's button

This useful function allows adding a new remote to the receiver's memory without using the receiver's button. The feature is useful only if some registered remote is available and it is within the receiver's radio range.

- press and hold button in previously registered remote for 15 seconds,
- press and hold button in a remote which you want to register for 15 seconds, within 3 seconds after releasing the previous button,
- the new remote is now registered with the same active button as in the previously registered remote.

Remarks:

- failure in registering may be caused by low batteries, radio interferences or full memory of the receiver.

3) Removing a remote

Press the active button in the remote while holding the receiver button. The light will fade then.

Remarks:

- if you hold the receiver's button for too long, all remotes will be removed from the receiver's memory.

4) Removing all remotes

Press and hold the receiver's button for 10 seconds. Release the button when the light fades.

V. Specification of DTM433MHz remotes

- KeeLoq® system,
- 2 buttons (4 buttons in NEO4P),
- Working frequency: 433.92 MHz,
- Battery L1028 23A 12V,
- TIP remote range: up to 50m, NEO remote range up to 150m,
- ERP: 1mW (TIP), 3mW (NEO),
- working temperature: from 0°C to +55°C.



VI. 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



The intention of the WEEE Directive (Directive 2002/96/EC on waste electrical and electronic equipment) is to reduce the amount of hazardous substances in waste. The underlying purpose is to promote the avoidance, recovery and risk-free disposal of waste.