External radio receivers series

1. Description

The radio receivers are intended for remote control of the doors automation. The receivers can control one (single-channel), two (two-channel), three (three-channel) or four(four-channel) devices. The presented external radio receivers series are compatible with remote-control boards of the radio control system AN-Motors. When receiving the command from the board the output of the receiver is activated (is closed) for 2 seconds.

2. Technical characteristics

	1^{st} 2^{nd} 3^{rd} 4^{th}
Quantity of control channels	
Operating supply voltage	9B ...35B DC / 8B ... 26B AC
Current consumption (not more than).....	30мА – standby mode / 70мА – output activation
Operating frequency	433.92MHz
Quantity of receivable control boards	up to 255 pieces
Relay output	NO (normally-open)
Load of relay output contact	1A max., 24B DC / 0,5A max., 125B AC
Case protection rating	IP40
Environment temperature	-20°C ... +50°C
Overall dimensions (not more than).....	78mm × 44mm × 25mm
Length of connection cables (not less than)	450mm
Weight (not more than)	80g

The company reserves the right to make changes in the given manual and in the product technical characteristics
The content of this manual cannot be the basis for legal claims.

3. Operation

The product is designed for operation in dry places and is not intended for the use in acid, salt orexplosive environment .

3.1. Installation

The receiver can be installed in two ways: with the help of the mounting self-stick pad (is included into the delivery set); or with the help of case lugs (Figure 1). The connection of the receiver should be performed according to Figure 2 and according to the made choice of control channels (in case of multichannel receiver). The two-core cable is intended for power connection, the five-core cable – for channels connection.

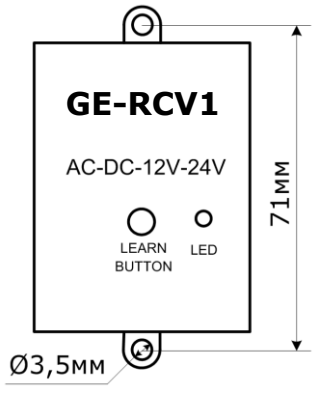

Figure 1

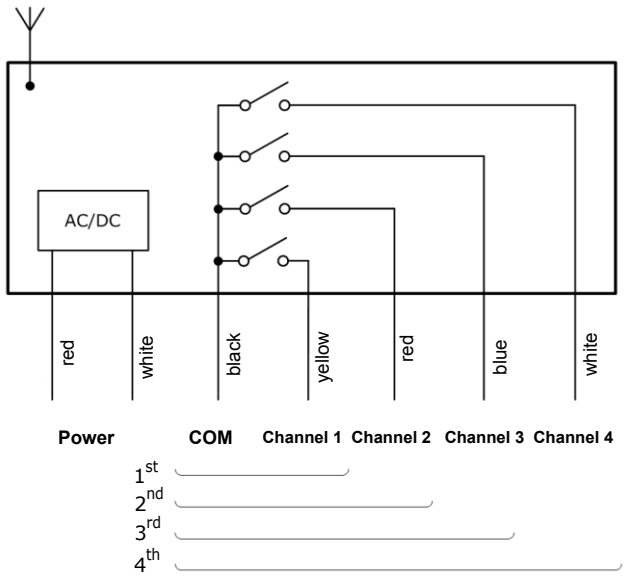

Figure 2

The place of installation should have radio reception of high quality (there are no shielding and reflecting surfaces, other radio-frequency radiation sources).

Before the beginning of connection work, make sure that the wiring is de-energized.

3.2. Programming of control boards

The button of radio control board, which is pressed when recording the board, controls the first channel of the receiver (Channel 1, Figure 2). The rest buttons of the receiver are saved automatically, herewith the next clockwise button of the board will correspond to the second (Channel 2), to the third (Channel 3) and to the fourth (Channel 4) channel of the receiver. When recording the board earlier entered into the memory, the board will be rerecorded, and if during boards recording the other button was pressed, the buttons of the board will be reassigned. The deletion procedure leads to deleting of all earlier recorded radio control boards from the memory.

Recording	**Indication «LED»**
1) quickly press the button **«LEARN BUTTON»** of the receiver	is green with a short blinking (*if it is red with a short blinking, maximal quantity of boards is recorded – the receiver's memory is full*)
2) press and release the selected button of the board	is (~2sec) red, then it is green with a short double blinking
3) press and release the same button of the board	is (~2sec) red, then a rare blinking green (standby mode)
If during boards recording the following action will not be performed within 6 seconds, the receiver will go into standby working mode (a rare blinking green of the indicator «LED»). The board will not be recorded and it is necessary to perform the recording procedure again.	
Deleting	**Indication «LED»**
1) press and hold (~9sec) the button **«LEARN BUTTON»** of the receiver	is blinking (~9sec) green several times and red several times, then it is red
2) release the button **«LEARN BUTTON»** of the receiver	is (~2sec) green, then a frequent blinking (~3sec) red, after that a rare blinking green (standby mode)

3.3. Functional check (test) and maintenance

Before the beginning of the receiver's operation in doors automation check if automation performs the required commands from the recorded remote-control board (for example, opening, closing, partial opening, stop of the doors movement etc.). During testing and using watch the state of the receiver's indicator «LED».

Description	**Indication «LED»**
Power is connected to the receiver. The receiver works in standby of the control command or programming procedures.	a rare blinking green
The command from the recorded board is performed (one can hear relay actuation)	is (~2sec) green
When pressing the button of the unrecorded board	is (~2sec) red
When pressing the button of the board with the lost synchronization (requires boards rerecording)	is (~2sec) orange
The receiver is faulty	is red with a short blinking

The receiver doesn't require special maintenance. It is recommended to check (test) the work of the receiver every time when the service maintenance (support manning) of the doors automation is performed.