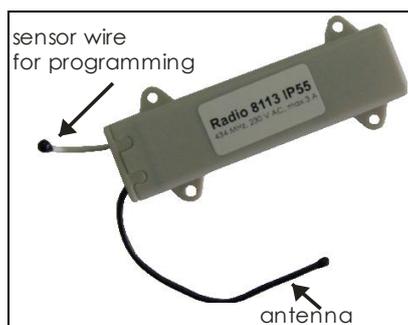# SINGLE-CHANNEL RECEIVER **RADIO 8113 IP55**
Manual

1. Description
1.1 Usage
The radio receiver Radio 8113 IP55 is designed to operate motors of roller shutters and roller shades.

The Radio 8113 IP55 can be applied on a 24-hour basis outdoors or indoors in humid premises, with operating temperature rates from -30°C to +50°C, and relative humidity up to 100% at temperature of 25°C and moisture condensation.

1.2 Features

- 2 ways to enter the programming mode: either using a sensory wire or a preprogrammed remote control of the Radio product line (the remote mode is activated automatically after the roller shutters installation has been completed and power is switched on);
- possibility to connect a one-button switch of any design by any producer;
- possibility to install the receiver into a roller-shutter box due to its shape, size and water-proof case.

1.3 Technical characteristics

Working range, MHz	434,05 – 434,79
Supply voltage, V/Hz	230~(+10%, -15%)/50
Rated current, mA	50
Max switched current, A	3
Number of operated motors	1
Memory (number of transmitters)	500
Duration of commands "UP", "DOWN", sec.	100
Duration of command "COMFORT", sec.	7
Dimensions, mm	27,2x98,5x22,5
Body protection class	IP55
IP protection class	II

1.4 Delivery set
single-channel radio receiver **Radio 8113 IP55**, pcs.　　1
manual, pcs.　1
package, pcs.　1

2. Application
2.1 Operating limitations
It is required to apply double-insulated cables with lead section of min. 0.75mm^2 to connect **Radio 8113 IP55** to a power source or a motor/ electric drive.

2.2 Installation and programming

2.2.1 Security measures

Only professional electricians or other specialists with the similar qualification are allowed to install the electrical appliance.

"Consumers' Electrical Equipment Engineering Rules" (PTE) and "Safety Regulations While Using Consumers' Electrical Equipment" (PTB) up to 1000V are to be strictly followed while installing and using the appliance.

2.2.2 Installation of Radio 8113 IP55

Unpack the **Radio 8113 IP55.**
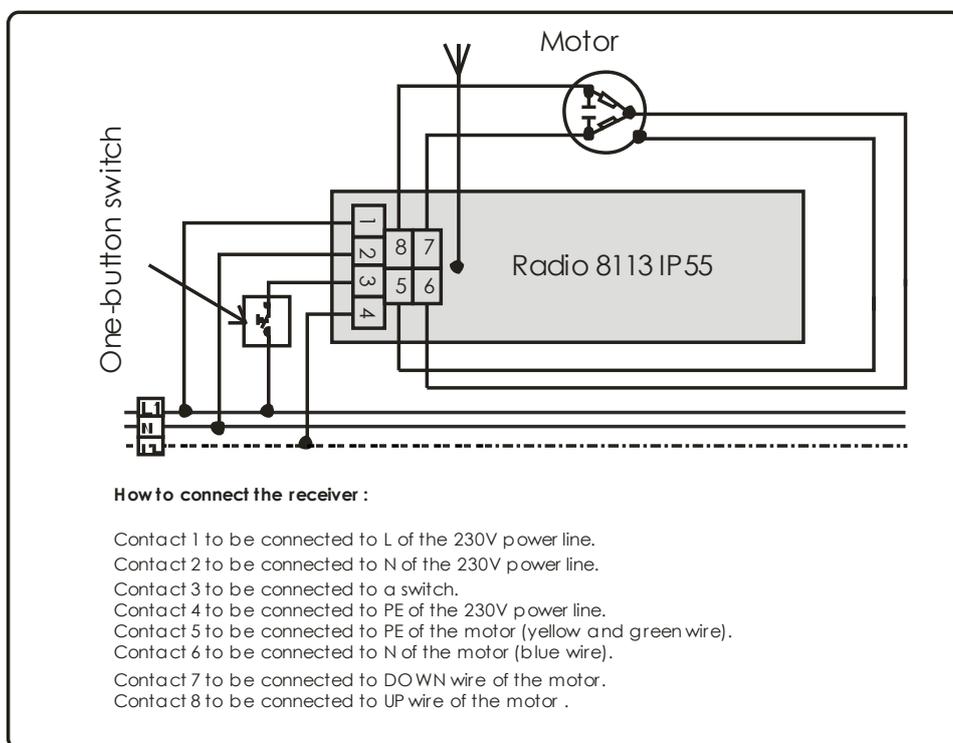**Switch the power off.**
Follow the connection scheme below to install the receiver:
Connect the wires to the contacts of the device as shown on the scheme in figure 1;
Use self-driving screws to fix the device inside the roller-shutter box or screw it to the wall;
Switch the power on.
Caution! After switching the power it is necessary to wait for 5 seconds before starting programming with the sensory wire.

How to connect the receiver :

Contact 1 to be connected to L of the 230V power line.
Contact 2 to be connected to N of the 230V power line.
Contact 3 to be connected to a switch.
Contact 4 to be connected to PE of the 230V power line.
Contact 5 to be connected to PE of the motor (yellow and green wire).
Contact 6 to be connected to N of the motor (blue wire).
Contact 7 to be connected to DOWN wire of the motor.
Contact 8 to be connected to UP wire of the motor .

2.3 Operating the appliance
2.3.1 Programming
2.3.1.1 Complete memory cleaning of the device Radio 8113 IP55

To provide the correct work of Radio 8113 IP55, it is strongly recommended to erase previous test codes from the memory of the receiver before programming.
To clean the memory completely you should:
enter the programming mode (PM): take the sensory wire inbetween two fingers and hold it for › 4 sec. until the motor stops (if it has been working) and then rolls briefly up and down;
clean the device memory: once moretake the wire inbetween two fingers and hold it for › 4 sec. until the motor rolls continuously up and down twice;
leave the programming mode: touch the sensory wire with two fingers and release it quickly. For confirmation , the motor will briefly roll up and down twice.
2.3.1.2 Entering buttons codes / remote controls groups into the memory of the receiver Radio 8113 IP55

Caution! If the receiver's memory is clean (there are no programmed button codes or remote control codes), the Radio 8113 IP55 will enter the programming mode automatically when it is powered. In this case, please, follow the instructions starting from Step 2 on page 2.

Step 1: Activate the programming mode, choosing either way a) or way b)* as described below:

    a) entering the programming mode via the sensory wire: squeeze inbetween two fingers and hold the sensory wire for › 4 sec. until the motor stops (if it has been working) and rolls briefly up and down.

Note 1
If one doesn't perform any actions within 32 sec., the device Radio 8113 IP55 leaves the programming mode automatically which is confirmed by a double brief up-and-down movement of the motor.

* Activating the programming mode of the Radio 8113 IP55 via the sensory wire or a preprogrammed remote control can be performed within 3 hours after the receiver has been powered. If the time is over and you want to use the sensory wire to activate the programming mode, please, switch the power off and then switch it on, wait for 5 sec. and start programming. To activate the programming mode with a preprogrammed remote control, you should switch the power off for the receiver Radio 8113 IP 55 and then switch it on again.

b) activating the programming modewith a remote control:

    ✓ press and hold the preprogrammed button on the remote control for › 4 sec. until the motor stops (if it has been working) and makes a brief up-and-down movement;
    ✓ within 5 sec. after the motor has stopped working briefly press the button of the remote control twice. In 5 sec. after stopping, the motor will make an up-and-down movement. Then go on to Step 2 at once.

Step 2: Programme remote control(s) into the memory of the Radio 8113 IP55 (only a remote control of the Radio product line can be programmed):

- Radio 8101-5: choose the channel and briefly press the STOP button;
- Radio 8101-1, Radio 8101-2(M), Radio 8101-4(M): briefly press the button you want to programme;
- Radio 8152-50: briefly press the PROGRAMMING button.

To confirm that the remote control has been programmed, the motor makes a continuous DOWN movement, then a brief UP-and-DOWN movement, then a continuous UP movement (as the result the roller shutter will return to its initial position).

Note 2

- If a remote control has been already programmed into the memory of the device, the motor will make a brief DOWN-and-UP movement.
- If the memory of the device is full, the motor will make a brief DOWN-and-UP movement three times.

Step 3: Leave the programming mode of the Radio 8113 IP55 in one of the following ways:
if you entered the PM following either way a) or way b) discribed in Step 1, you should squeeze the sensory wire inbetween two fingers and then quickly release it;
if you entered the PM with a remote control as described in way b) of Step 1, you should briefly press the button of the preprogrammed remote control which was previously used to enter the PM.
Confirmation: a double brief DOWN-and-UP motor movement.

2.3.1.3 Deleting remote controls from the memory of the receiver Radio 8113 IP55

    ✓ Perform Step 1 in item 2.3.1.2 to enter the programming mode.

✓ To delete a code of a remote control group, you should <u>press and hold the button, which was programmed for this group, for › 1 sec.</u> until the motor makes a continuous UP-and-DOWN movement.

Caution: don't hold the button of the remote control more than 4 sec.!

Note 3
To clean the memory of the Radio 8113 IP55 completely, you should <u>take the sensory wire inbetween two fingers and hold it for › 4 sec</u>. until the motor makes a double continuous DOWN-and-UP movement.

✓ Perform Step 3 in item 2.3.1.2 OR wait for 32 sec. until the device leaves the programming mode automatically.

2.3.2 Operation by means of the receiver Radio 8113 IP55
The receiver can perform the following commands:
"UP", "DOWN", "STOP", "COMFORT" if the transmitter Radio 8101-5 is used;
"UP", "DOWN", "STOP" if the timer function of the transmitter Radio 8152-50 and/or the mini-transmitters Radio 8101-2M, Radio 8101-4M are used;
"STEP-by-STEP" if the mini-transmitters Radio 8101-1, Radio 8101-2(M), Radio 8101-4(M) and / or an additionally connected one-button switch is used.

3 Servicing
If you notice any defects or / and malfunction while using the device, you should unplug it at once and call the service. In case of any defects or / and malfunction of the receiver within the warranty period, the service is provided by the producer's dealer in charge of installation of the device.

4 Storage
Store the receiver packaged indoors, in dry, heated, aerated premises at temperature of 5-40°C and relative humidity up to 80 % without any moisture condensation. The air is not to contain any aggressive substances, conducting dust, acid and alkali vapor, or any gases, causing corrosion and destroying insulation.

5. Transportation
The receiver is to be packaged and transported in containers, goods vans, heated and hermetically sealed partitions of airplanes and holds as well as by vehicles that provide dust and precipitation protection. The transportation temperature rates are from -50°C to +50°C.

Transportation conditions in regard to mechanical agents exposure are medium (S), according to GOST 23216. Canting of the products is not acceptable.

6. Utilization
At the end of the operation life the device is due to be utilized. The product is safe and harmless for human's life and health as well as it is environmentally friendly. The receiver doesn't contain any non-ferrous or precious metals.

7. Operation life terms and producer's warranty
The prefailure life of the receiver, at the average, is min. 5000 running hours, the average operation life is min. 5 years.

The producer guarantees high quality standards of the product provided that all the transportation, storage, installation and operating conditions are met / fulfilled. The warranted operation life is 24 months since putting the receiver into operation. The warranted storage period before putting the receiver into operation is 6 months since its production date.

The present manual is a warranty certificate. The defective receiver won't be accepted without this manual.

Warranty doesn't apply to mechanically damaged products.

8. Acceptance record

The single-channel radio receiver **Radio 8113 IP55** (see serial number and production date on page 1) is produced IAW (in accordance with) required state standards and operating TU RB/BY 100376351.002-2003. The product was approved by Quality Control Department) and declared as valid for operation.