

Single-channel radio receiver Radio 8113 IP with a possibility to connect an optocenter, photo cells and other safety sensors



Description

1.1 Usage

The radio receiver Radio 8113 IP is designed to operate motors of gates, garage doors, awnings, blinds, roller shutters as well as light and other electric devices.

1.2. Technical characteristics

Supply voltage, V/Hz	~230 (+10%, -15%) / 50
Max switched current, A	3
Switched voltage, V	~250 / =30
Number of operated motors	1
Working frequency, MHz	434,42 ± 0,37
Working distance in open space, m	100
Memory	36 remote controls
Dimensions, mm	80×80×55
Ambient temperature, °C	от -20 до +65
Working conditions	indoors, outdoors
IP protection class	IP65
Protection class under GOST 27570	II
Conformity	CE

(no ground connection required)

1.3. Working modes of Radio 8113 IP

1) **“Other automation units”**: the mode is used to connect a Radio 8113 IP to another automation device that operates roller shutters, gates, or garage doors. The signal is transmitted 1,5 seconds (i.e. voltage is supplied to the automation device for 1,5 sec).

2) **“Roller shutters”**: the mode is used to connect a Radio 8113 IP directly to a roller shutter motor. The signal can be programmed from 0,2 to 180 seconds. The factory preset is 60 seconds.

3) **“Outdoor blinds”**: the mode is used to connect a Radio 8113 IP directly to a blinds motor to open/close blinds and turn their lamellas horizontally. he signal can be programmed from 0,2 to 180 seconds. The factory preset is 120 seconds.

4) **“Light and other electric devices”**: the mode is used to connect a Radio 8113 IP directly to a lighting unit or any other electric device. The signal is transmitted until the “stop” signal has been activated with a remote control or a switch (needs to be connected to the Radio 8113 IP).

2. Programming

2.1. Programming modes:

- 1) programming remote controls;
- 2) programming scenario switches;
- 3) setting working modes of Radio 8113 IP.

2.1.1. Programming remote controls mode

a) Programming remote controls into the memory of Radio 8113 IP:

- Press and hold the programming button more until the LEDs flash red and green.
 - The LED will continue to blink red during the entire process of remote controls programming.
 - Press the button of the remote control you want to programme. The LED will flash green three times to signal that the button of the remote control has been programmed.
- Note: if the LED flashes green only one time, it signals that the button has been previously programmed into the memory of the receiver Radio 8113 IP. If the LED blinks red and green, it signals that the memory of Radio 8113 IP is full, and the button can not be programmed..*
- In case you need to programme several buttons, press the desired buttons one by one.
 - To finish programming, press the programming button one time. The LED signals the end of programming with two red and green flashes.

b) Deleting ALL remote control from the memory of Radio 8113 IP:

- Press and hold the programming button until the LEDs flash red and green.
- Again press and hold the programming button more than 4 seconds until LED 2 flashes red twice. Release the programming button.
- To come back to the standby mode, press the programming button one time.

c) Deleting the desired button(s)/remote control(s) from the memory of Radio 8113 IP:

- Press and hold the programming button until the LEDs flash red and green.
- The LED will continue to blink red during the entire process of remote controls deleting.
- Press and hold the button of the remote control you want to delete more than one second. When LED 2 flashes red, release the button.
- In case you need to delete several buttons, press and hold the desired buttons more than one seconds one by one.
- To finish deleting, press the programming button one time. The LED signals the end of programming with two red and green flashes.

2.1.2. Programming scenario switches mode

- Press and hold the programming button until the LEDs flash red and green.
- Press the button of the scenario switch you want to programme. The LED will flash green and red and then continue to blink red during the programming session.
- For further steps, please, see the corresponding manual on Radio 8105-50-4, Radio 8105-50-6, Radio 8105-50-8.

2.1.3. Setting working modes of Radio 8113 IP

- Press and hold the programming button until the LEDs flash red and green.
- Press the programming button. The LED flashes red and green to indicate that Radio 8113 IP has entered the mode, where you can set the necessary working regime (mode) of the receiver (see the modes description in point 1.3).
- Count how many times the LED blinks green to determine the current working mode. The number of green blinks indicates the chosen working mode (see the table below). The factory preset is roller shutters mode with the 60-second signal.

No.	Working mode	How to switch to the next mode	Indication	
			How LED signals switching to the next mode	How Led signals the chosen working mode
1	Other automation units	Press and hold the programming button more than 1 second	★/★/★	★ ★ ★ ★ ...
2	Roller shutters	Press and hold the programming button more than 1 second	★/★/★	★ ★ ★ ★ ★ ...
3	Outdoor blinds	Press and hold the programming button more than 1 second	★/★/★	★ ★ ★ ★ ★ ★ ...
4	Light and other electric devices	Press and hold the programming button more than 1 second	★/★/★	★ ★ ★ ★ ★ ★ ★ ★ ...

To finish setting the working mode of Radio 8113 IP, select one of the two options:
a) to remember the selected working mode and signal duration: press the programming button one time. The LED signals the end of programming with two red and green flashes.

b) to ignore the selected working mode and signal duration: wait for 32 seconds until Radio 8113 IP leaves the programming mode itself. The LED signals the return to the standby mode with two green and red flashes.

2.2. Setting signal duration for roller shutters mode or for outdoor blinds mode

- Switch off the Radio 8113 IP power.
- Connect a switch (see fig. 1).
- Switch on the power.
- Follow the first three steps of point 2.1.3.
- Select the desired working mode if necessary (see the table above).
- Close the roller shutter or blinds with the connected switch.
- Open the roller shutter or blinds with the connected switch.
- In five seconds after the roller shutter or blinds reach the upper position, stop the object by pressing shortly the DOWN button of the switch.
- Press the programming button one time. The LED signals the end of setting signal duration with two green and red flashes.

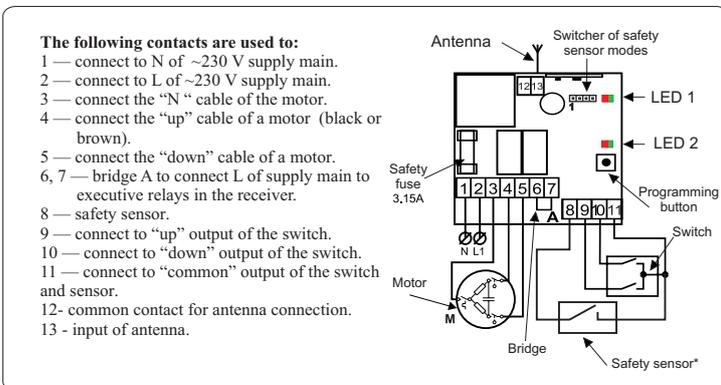


Fig. 1. Connection scheme for Radio 8113 IP

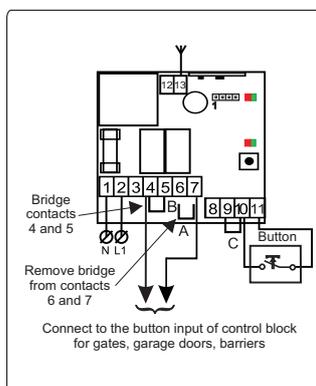


Fig. 2. Scheme that shows how to connect Radio 8113 IP to a step-by-step input (open-stop-close) of a control block for operation of gates, barrier arm gates or of a garage door motor.

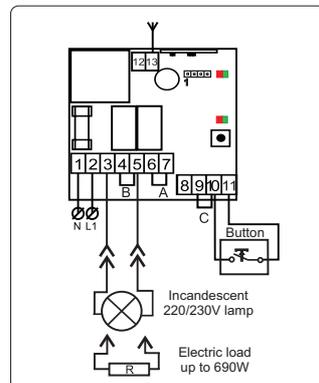
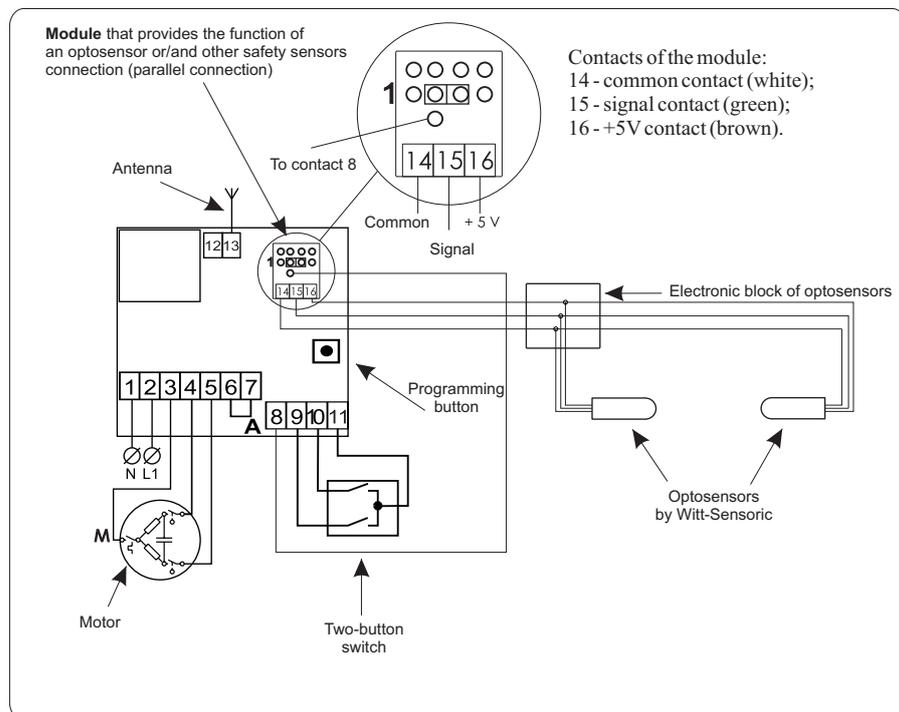


Fig. 3. Scheme that shows how to connect Radio 8113 IP to a lighting unit or other electric devices.

Connecting an optosensor by Witt-Sensoric to Radio 8113 IP



To connect an optosensor by Witt-Sensoric to Radio 8113 IP, please, follow the steps below:

- switch power off the Radio 8113 IP receiver;
- remove module 1 from the PCB of the receiver;
- connect the white common cable of the sensor to contact 14;
- connect the signal green cable of the sensor to contact 15;
- connect the power supply brown cable of the sensor to contact 16;
- place the module back on the PCB;
- bridge contacts 2 and 3 of the module to have a stop reaction for the sensor's command or contacts 3 and 4 to have a stop and up reaction for the sensor's command;
- connect the module's cable to contact 8 of the receiver;
- switch on the Radio 8113 IP receiver.

Note: when module 1 and sensors by Witt-Sensoric are used, contacts 8 and 11 of the Radio 8113 IP receiver are not active. To stop the motor of the roller shutter, it is necessary to touch the button of the opposite direction on the connected switch.