

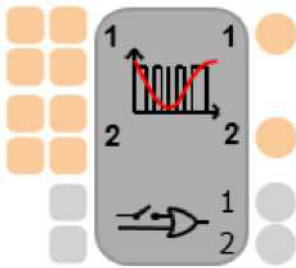
DATA SHEET



rH-PWM3

Three-channel low-voltage PWM controller
of the F&Home RADIO system.

The rH-PWM3 is designed for controlling three low voltage receivers powered from an external power supply. Power control is performed by pulse width modulation (PWM) that switches the receiver. The pulse frequency is set in the range of 100 Hz to 1 kHz. Communication with the server is done by radio. The rH-PWM3 module is particularly suitable for controlling LEDs, switching electromagnetic locks and other low-voltage electromagnetic actuators.



The rH-PWM3 module is represented by an object, which consists of three LIGHT-type channels that read information about power and activation time from four identical inputs. The algorithm determines the maximum power read from all inputs and, along with the switch-on time, controls the connected lamp or other receiver. Feedback about the actual level of load control is applied on the “Confirmed PWM status channel 1, 2 3” output, separately for each channel.

Inputs		
Figure	Name	Type
	PWM control Channel 1, 2, 3	Lightning input

Outputs		
Figure	Name	Type
	Confirmed PWM status Channel 1, 2, 3	Lightning output

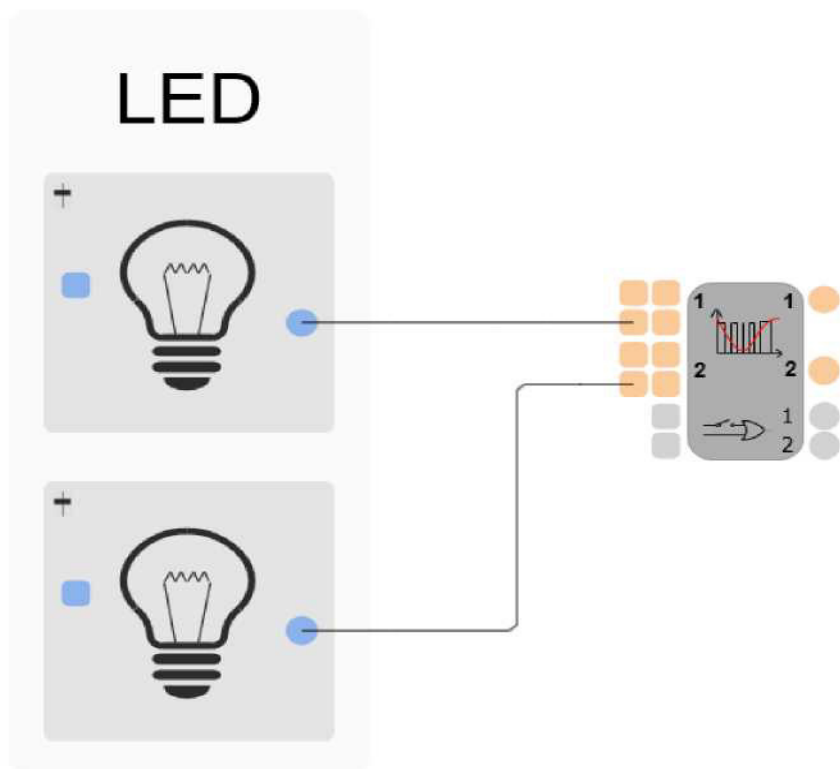


Installer settings in the configuration program

Feature name	Description	Range	Unit / Description
Connection monitoring	Sets action in case of loss of connection to the server (information about the modules out of reach).	Standard module	Information on the standard output SX 752
		Alarm module	Information on the alarm output SX 752
		Unmonitored module	No connection correctness control
The delay in signaling a lack of coverage	Sets the delay after which the module is reported that it is beyond the coverage range of the server	1 - 5	
PWM signal frequency	Sets the frequency of the PWM signal	100 - 1000 with a step of 100	Hz
Offline: enable for [minutes] after switching the power on	Sets the operation time of the module when there is no connection to the server	0-240	minute

- Disconnect the power supply circuit; make sure using the appropriate device if there is no voltage on the supply lines.
- Connect the wires according to the diagram above.
- If there are uninsulated wires in the installation box, perform adequate insulation.
- Place the module in the installation box.
- Place the antenna of the module parallel to one of the antennas of the server and move it away as far as possible from other wires.
- Switch on the power supply and register the module in the system.
- Close the installation box or install a button.

The simplest application of this object is a control using a mobile panel - icons with a slider. The brightness of the connected lighting will be proportional to the position of the icon slider.



Technical specifications table

Rated supply voltage	12 V DC
Supply voltage tolerance	-20%, +10%
Rated power consumption	0.4W
Radio link (operating frequency)	868 MHz
Signal strength	9 mW
Transmission type	two-way
Coding	yes
Range in open space	100 m
Period of logging in the system	30 seconds
Output load	3 x 4 A/12 V DC
Switching time from 0 to 100%	0.2-30 seconds
PWM frequency	100 - 1000 Hz adjusted with step of 100 Hz
Storing temperature	-20°C to +50°C
Working temperature	0°C, +45°C
Humidity	<=85% (without condensation and aggressive gases)
Dimensions	48 x 48 x 22 mm
Ingress protection	IP20
Operating position	any
Enclosure type	in-wall
Built-in security	against overheating against the surge on the load lines
Autonomous mode	no

Module operation indication (green LED)	
Mode	Description
Online (registered)	LED lights, dims during radio transmission
Registration	LED pulsating quickly
Offline	LED flashes every half a second - a module has lost the radio connection to the server or is not registered
Not programmed	LED flashes: lights, dims for 100 ms every 1 second - the module should be returned to the

Registration in the system

1. Select the registration method in the configurator.
2. Press and hold button on the housing.
3. After 5 seconds the module will register itself in the system or the program will report an error in case of failure.

WARNING

The connection method is specified in this manual. Any activities related to installation, connection and regulation should be carried out by persons with electrical qualifications who are familiar with this manual and features of the module. Manner of transport, storing and using the module affects its proper operation. Installation of the module is not recommended in the following cases: missing components, damage to the module or its deformation. In case of malfunction the module should be returned to the manufacturer.