Wireless system
F&Wa෮e

FW-LED2P
2-channel LED controller
12 V DC

5 908312 599319

CE

Description of the system

F&Wave is a family of wireless devices controlled by radio with a range of up to 100
meters*. The receivers are available in either a DIN-rail mounting version (housing
1S) or a ø60 flush-mounted version. The transmitters are available as handheld remo-
te controllers or as a flush-mounted version. The receivers relay control signals. The
device that receives a control signal from the transmitter will automatically send it
forward, which allows to increase the range of the remote control.
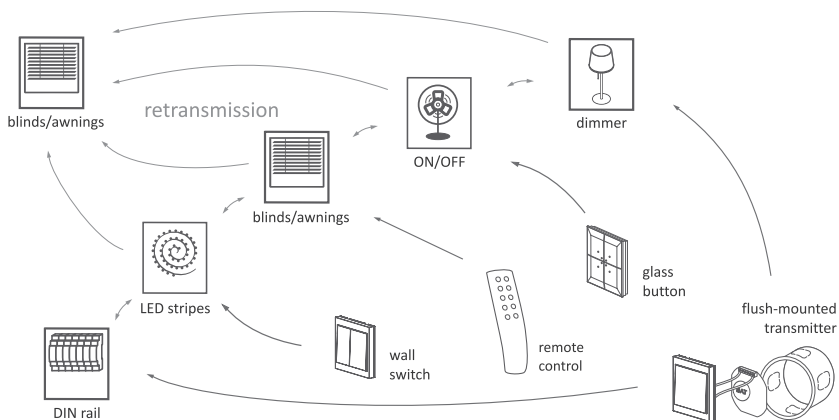
* Range of up to 100 meters in open space without any interfering factors. In building conditions and in the presence of
interference sources (power lines, transmitters, etc.) the actual range may be smaller.
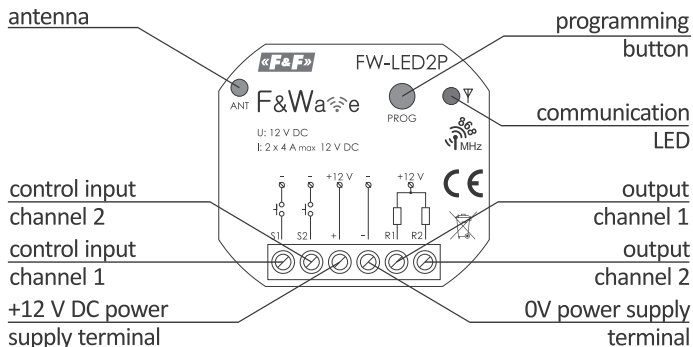
Installation of this device should be carried out by a qualified installer after reading this manual. Dismantling the casing of the device will automatically void the warranty. Before starting the assembly, make sure that the connecting wires are not live. Conditions of storage, transport and use affect the proper operation of the device.
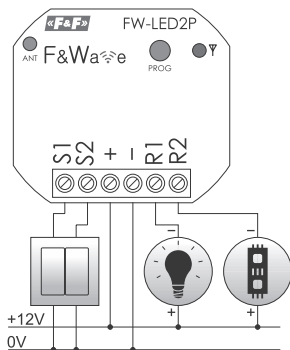
Features of the module

- 2-channel LED controller 12 V DC;
- Cooperation with remote control transmitters of the F&Wave system;
- The ability to control from up to 8 transmitters;
- 2 local control inputs - the ability to directly control the lighting using any monostable buttons (for example: bell buttons);
- Ability to control 12 V LED strips, 12 V dimmable LED bulbs;
- Soft start - smooth lighting switching (on/off);
- Small enclosure size;
- Screw terminals for easy installation in a ø60 flush-mounted box;
- Retransmission of commands from the transmitter - the ability to increase the range of the remote control;
- Low power consumption - low operating cost;
- Built-in electronic thermal protection to prevent damage in case of excessive load of the controller.

Description of the device

antenna

programming button

communication LED

control input channel 2

output channel 1

control input channel 1

output channel 2

+12 V DC power supply terminal

0V power supply terminal

Wiring diagram

S1 - control input - channel 1
S2 - control input - channel 2
+12 V DC - +12 V DC power supply
0 V - 0 V power supply
R1 - output - lighting - channel 1
R2 - output - lighting - channel 2

(!) Control inputs do not cooperate with backlighted buttons.

Load capacity

2× 4 A/12 V DC

The actual maximum load depends on the nature and design of the receiver.
For more information visit: www.fif.com.pl.

(!) Light bulb or the packaging of the light bulb must be clearly marked with a symbol or description explicitly indicating that the bulb is designed to work with dimmers
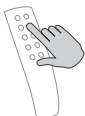
Pairing

(!) Each channel of the receiver is independently paired.

① After proper connection, press and hold the PROG button until the circuit of the first channel will switch on and the communication LED will go off.
To select a second channel for pairing, hold the programming button again until the circuit of the second channel switches on.

② Press the selected button on a remote control or in a flush-mounted transmitter.

③ Correct pairing will be confirmed by temporary switching off of the output circuit and the LED will turn on again.

(!) Each channel of the receiver can be paired with 8 different transmitters (remote buttons). Pairing with more buttons will remove the first entries made

Unpairing

To clear the list of transmitters cooperating with the receiver, press the PROG button and hold it down for at least 10 seconds. Fast flashing of communication LED will indicate that the memory of the controller has been cleared.

Local buttons

Short press of a button switches on/off the lighting on the last set brightness level. Long press of a button (longer than 1 second) increases the brightness level (in a jump of 10%). Another long press of a button decreases the brightness level.

Remote buttons

The FW-RC4, FW-RC10 transmitters operate on the principle of a bistable switch: one press of a button activates the relay; the second press of button deactivates the relay. Long press of a button (longer than 1 second) increases the brightness level (in a jump of 10%). Another long press of a button decreases the brightness level.

The FW-RC5 transmitter also has separate inputs ON (always ON) and OFF (always OFF).

> (!) Due to the nature of transmission and retransmission do not use the same button in transmitter more often than every 2 seconds. Switching of the receiver may be carried out with a short delay.

> (!) We do not recommend the use of remote bistable transmitters to control a group of receivers due to the possibility of desynchronization of the activation state (especially when operating on larger distances and/or simultaneous use of local buttons on the receivers).

> (!) Activation of the thermal protection is indicated by a steady pulsing of communication LED, switching off of the output circuit and the lack of its reactivation possibility. After lowering the temperature to a safe value the output circuit will remain switched off until restarted.

Devices of the F&Wave system

Battery transmitters	
Type	**Product**
Flood sensor	FW-FS1
Remote control	FW-KEY, FW-RC4, FW-RC10
Wall button	FW-WS1, FW-WS2, FW-WS3
	FW-WSO1, FW-WSO2, FW-WSO4
Flush-mounted box ø60	FW-RC5

AC transmitters	
Type	**Product**
Flush-mounted box ø60	FW-GS1, FW-GS2, FW-GS4
	FW-RC4-AC

Receivers		
Function	**Flush-mounted box ø60**	**DIN rail**
Correct operation of LED light bulbs with devices of the FW-...-NN series	FW-BYPASS-NN	---
Universal dimmer	FW-D1P	FW-D1D
2-channel LED controller	FW-LED2P	FW-LED2D
Single relay	FW-R1P	FW-R1D
Single multifunction relay	FW-R1P-P, FW-R1-P-NN	FW-R1D-P
Double relay	FW-R2P	FW-R2D
Double multifunction relay	FW-R2P-P, FW-R2P-NN	FW-R2D-P
Roller blind controller	FW-STR1P	FW-STR1D
Roller blind multifunction controller	FW-STR1P-P	FW-STR1D-P

Technical data

power supply	10÷16 V DC
control input	10÷16 V DC; <3 mA
power consumption	
operating mode	0.40 W
standby	0.25 W
output load capacity (AC-1)	2× 4 A/12 V DC
radio frequency	868 MHz
maximum emitted frequency power	10 mW
working temperature	-25÷65°C
terminal	2.5 mm² screw terminals
tightening torque (max)	0.4 Nm
mounting	ø60 flush-mounted box
dimensions	48×43×20 mm
ingress protection	IP20

Warranty

F&F products are covered by a 24 month warranty from the date of purchase.
The warranty is effective only with a proof of purchase.
Contact your dealer or directly with us.

CE declaration

F&F Filipowski L.P. declares that the device is in conformity with the essential requirements of Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC. The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at www.fif.com.pl on the product page.

Compliance with the standards

PN-EN 55024:2011; PN-EN 60669-1:2006;
PN-EN 60669-2-2:2008; PN-EN 62368-1:2015-03;
PN-ETSI EN 300 220-1 V3.1.1:2017-08
PN-ETSI EN 300 220-2 V3.1.1:2017-08
PN-ETSI EN 301 489-1 V2.1.1:2017-08
PN-ETSI EN 301 489-3 V1.6.1:2014-03