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Wireless system F&Wave

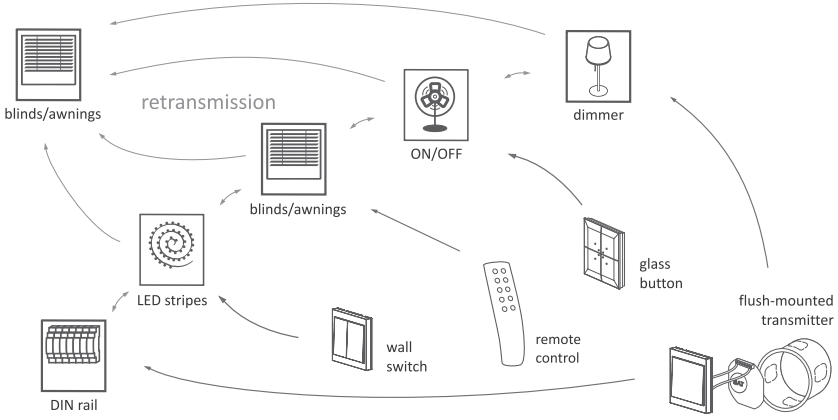
FW-TO1S1

1-channel controller for gates and wickets

5 902431 675367

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 remote 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.

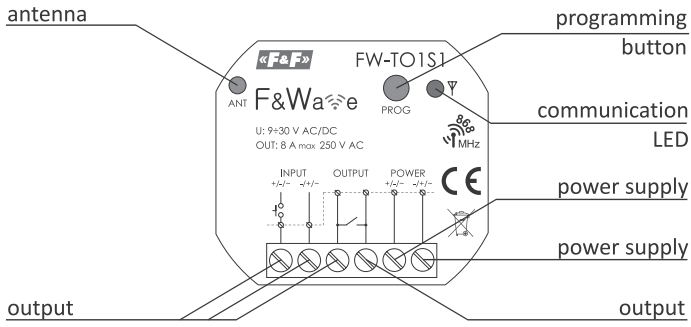
Installation of this device should be carried out by a qualified installer after reading this manual. Dismantling the casing of the device will automatically void the warranty. Before starting the assembly, make sure that the connecting wires are not live. Conditions of storage, transport and use affect the proper operation of the device.

Features of the module

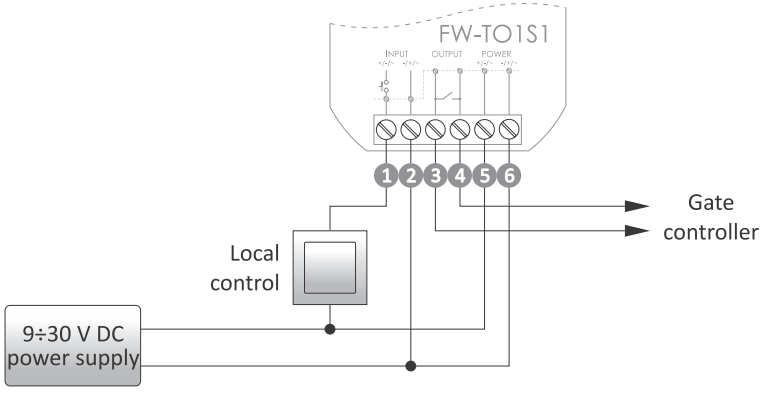
- Cooperation with remote control transmitters of the F&Wave system;
- Single monostable relay - relay contact remains closed as long as a button on the remote control or local control is pressed*;
- Dedicated to integrati on with gate automati on or direct control of electric door openers;
- The ability to control from up to 32 transmitters;
- Local control – the ability to directly control the relay using any momentary (bell) button;
- Group programming of transmitters - multiple transmitters can be linked to the receiver in a single programming cycle;
- Separated NO output contact with load capacity of 8 A (AC-1);
- Retransmission of transmitter signals - possibility to increase the range of remote control;
- Low power consumption - low operating cost.

* Due to the nature of the transmission, the relay contact may remain closed for approx. 0.1÷0.3 seconds after the button is released.

Device description



Wiring diagram



1 2	Input	Local control input, triggered by applying voltage to terminals 1-2. Triggering the input causes the relay contact to close for the time the button is pressed. **Attention!** The control input does not work with illuminated buttons.
3 4	Output	Relay output - separated normally open contact (the contact closes when the local button or the button on the transmitter associated with the controller is pressed). **Attention!** In the case of integration with a gate automatics system, terminals 3-4 must be connected in the place provided on the gate control unit for the connection of the local control "open/close".
5 6	Supply	Controller power supply Polarity of the power supply (order of connecting the wires from the power supply to terminals 5-6) - arbitrary.

Load capacity

8 A/250 V AC (AC-1)

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

Programming description

The receiver can be associated with 32 remote buttons.

If the same transmitter button is programmed more than once, it will only be stored once in the controller's memory.

Adding the 33rd (and subsequent) remote buttons will erase the first of the programmed transmitters from memory.

If no action is performed by the user in programming mode for 30 seconds (e.g. pressing the PROG button or linking a transmitter button to the receiver), the programming mode will be terminated.

Programming controller

① Press and hold the PROG button for approximately 2 seconds until the LED on the controller starts blinking slowly (cycle 0.5 s ON - 0.5 s OFF).

② Release the button – the controller will now enter pairing mode with the remote transmitters. This mode is also indicated by the LED light blinking in a cycle of 0.5 s ON – 0.5 s OFF. The controller will now listen for commands from the F&Wave transmitters - any transmitter detected here will be paired with the controller.

③ Binding of a transmitter button to the receiver is signalled by a 1-second LED switch on.

④ You can link the controller to multiple transmitters in one programming step.

⑤ To complete programming, briefly press the PROG button.

Reset settings

① Press and hold down the PROG button.

② Keep the button pressed for at least 10 seconds. After the first two seconds the LED will start to blink slowly, after a few more it will go out and after a few more it will start to blink rapidly. The fast blinking indicates entry into the setting reset mode.

③ Release the button. The LED should blink rapidly all the time.

④ Press and hold the PROG button until the LED lights up permanently, then release the button.

⑤ When this sequence is completed, all programmed transmitters will be deleted from the controller's memory.

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	9÷30 V AC/DC
control input	9÷30 V AC/DC
contact	separated 1×NO
power consumption	
operating mode (relay on)	0.60 W
standby	0.25 W
output load capacity (AC-1)	8 A/250 V AC
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	43×48×20 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