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MULTIFUNCTION RELAY

WARRANTY. The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a complant can be found on the website: www.ff.com.ut/reklamacie 5

 RELAY
 FW-R1D-P

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F&F Filipowski sp. i

Do not dispose of this device in the trank along with other wastel According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to bere the occurion of the purchase of one equipment (1) accordiance trank or abandored in nature, pose a threat to the environment and human health.

### WARNING!

Installation of the device should be performed by a qualified installer, after reading this manual.

# Features of the module

- \* Cooperation with F&Wave remote control transmitters;
- \* A single multifunction relay operates in 5 modes:

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 a) Bistable relay – first pressing of the button activates the relay, second pressing switches it off;

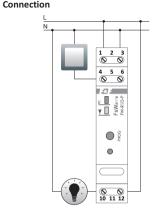
b) Time relay – pressing the button activates the relay for the preprogrammed time. It is possible to set the time from 1 second to 48 hours. Pressing the button while the relay is on starts the timing from the beginning:

- c) Monostable relay the relay remains switched on as long as the button on the remote control is pressed;
- d) Switch on pressing the button activates the relay;
- e) Switch off pressing the button deactivates the relay;
- \* The relay function is associated with the button of the transmitter. Each button can carry out a different function;
  \* Ability to control up to 32 transmitters;
  \* Local control – the possibility of directly con-
- trol the relay using any monostable button

(for example bell button). The local input can also have any relay function assigned to it;
\* Group programming of transmitters – if several buttons have the same function, they can be set in one programming cycle;

- \* Separated NO output contact with a load capacity of 16 A (AC-1);
- Retransmission of signals from the transmitter – the ability to increase the range of remote control:
- \* Low power consumption low operating cost:
- \* Built-in electronic thermal protection to prevent damage in case of excessive load of the

relay.



 L power supply
 N power supply
 - control input triggered by level L or N
 10/12 - output - contact NO

# WARNING! The control input does not work with backlit buttons.

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# WARNING!

If the same relay button is programmed more than once, it will only be written once in the memory of the controller.

## WARNING!

If the user does not perform any actions (for example pressing the PROG button or pairing the button with the receiver) in the programming mode for 30 seconds, the programming mode will be terminated.

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# Programming mode

## Bistable relay mode

1) Press and hold the PROG button.

- 2) Keep the button pressed for approximately 2 seconds until the relay switches on and the LED will slowly blink (0.5 s ON - 0.5 s OFF cycle).
- 3) Release the button. The controller will enter the configuration of the operating mode. The selected mode is indicated by short blinks of LED, repeated every 2 seconds:
  - -1 blink bistable relay;
  - -2 blinks-time relay;
  - 3 blinks monostable relay;
  - -4 blinks-switch on:
  - -5 blinks-switch off.
- 4) Changing the operating mode is done by briefly pressing the PROG button (in the case of bistable mode, you do not have to do it – it is set by default after entering the programming mode).
- 5) To confirm the selected operating mode

press and hold the PROG button until the LED starts to blink fast (0.1 s ON - 0.1 s OFF cycle) - this indicates the confirmation of the selected operating mode and entering to the next stage.

- 6) Release the button (if the button is not released within 60 seconds, system will automatically exit the programming mode). The controller will now proceed to pairing with transmitters, which is indicated by even blinking of the LED (0.5 s ON - 0.5 s OFF cycle). The controller will register all commands received from now from transmitters and will link them with the chosen operating mode. The linking of the button with the receiver is indicated by a 1-second switch off of the relay and a 1-second activation of the LED. You can pair the controller with many buttons in one programming step.
- 7) To end the programming, press the PROG button briefly.

#### Time relay mode

1) Press and hold the PROG button.

- 2) Keep the button pressed for approximately 2 seconds until the relay switches on and the LED will slowly blink (0.5 s ON - 0.5 s OFF cycle).
- 3) Release the button. The controller will enter the configuration of the operating mode. The selected mode is indicated by short blinks of LED, repeated every 2 seconds:
- -1 blink bistable relay;
- -2 blinks-time relay;
- -3 blinks monostable relay;
- -4 blinks-switch on:
- -5 blinks-switch off.
- 4) Changing the operating mode is done by briefly pressing the PROG button, so you need to press it once shortly to select the time relay mode.
- 5) To confirm the selected operating mode, press and hold the PROG button until the LED starts to blink fast (0.1 s ON - 0.1 s OFF cycle), and then release the button.

- 6) After confirming the operating mode, the controller goes to setting the switch-on time. In the first step the number of seconds is set (0:59). The second edition mode is indicated by one long and one short blink of the LED (the cycle is repeated every 2 seconds).
- 7) Set the set number of seconds by briefly pressing the PROG button (each press is 1 second). If the number of seconds is to be zero, then do not press briefly, but just go straight to confirming the value (step 8).

## WARNING!

The indication of the edited parameter occurs only until the first short press of a button. Then the LED indicates the fact of pressing the PROG button.

8) Confirm the selected operating mode by pressing and holding the PROG button until the LED starts to blink fast (0.1 s ON - 0.1 s OFF cycle), and then release the button.

- 9) In the next steps, the minutes (0÷59) and hours (0÷48) are set in the same way. Setting the minutes is indicated by one long and two short blinks of the LED, setting the hours one long and three short blinks.
- 10) After setting the time, the controller will go into pairing with transmitters, which is indicated by even blinking of the LED (0.5 s ON – 0.5 s OFF cycle). The controller will register all commands received from now from transmitters and will link them with the chosen operating mode. The linking of the button with the receiver is indicated by a 1-second switch off of the relay and a 1-second activation of the LED. You can pair the controller with many buttons in one programming step.
- 11) To end the programming, press the PROG button briefly.

# Monostable relay mode 1) Press and hold the PROG button. 2) Keep the button pressed for approximately 2

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seconds until the relay switches on and the LED will slowly blink (0.5 s ON - 0.5 s OFF cycle).

- Release the button. The controller will enter the configuration of the operating mode. The selected mode is indicated by short blinks of LED, repeated every 2 seconds:
  - 1 blink bistable relay;
  - -2 blinks-time relay;
  - -3 blinks monostable relay;
  - –4 blinks switch on;
  - 5 blinks switch off.

the next stage.

4) Changing the operating mode is done by briefly pressing the PROG button, so you need to press it twice shortly to select the monostable relay mode (this will be indicated by 3 short blinks of the LEDs).
5) To confirm the selected operating mode, press and hold the PROG button until the LED starts to blink fast (0.1 s ON – 0.1 s OFF cycle) – this indicates the confirmation of the selected operating mode and entering

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6) Release the button (if the button is not released within 10 seconds, system will automatically exit the programming mode). The controller will now proceed to pairing with transmitters, which is indicated by even blinking of the LED (0.5 s ON - 0.5 s OFF cycle). The controller will register all commands received from now from transmitters and will link them with the chosen operating mode. The linking of the button with the receiver is indicated by a 1second switch off of the relay and a 1second activation of the LED. You can pair the controller with many buttons in one programming step.

- 7) To end the programming, press the PROG button briefly.
- "Switch on" mode

1) Press and hold the PROG button.

 Keep the button pressed for approximately 2 seconds until the relay switches on and the LED will slowly blink (0.5 s ON - 0.5 s OFF cycle).

 Release the button. The controller will enter the configuration of the operating mode. The selected mode is indicated by short blinks of LED, repeated every 2 seconds:

- -1 blink bistable relay;
- 2 blinks time relay;
- 3 blinks monostable relay;
- -4 blinks-switch on;
- -5 blinks-switch off.

4) Changing the operating mode is done by briefly pressing the PROG button, so you need to press it three times shortly to select the "Switch on" feature (this will be indicated by 4 short blinks of the LEDs).

5) To confirm the selected operating mode, press and hold the PROG button until the LED starts to blink fast (0.1 s ON – 0.1 s OFF cycle) – this indicates the confirmation of the selected operating mode and entering the next stage.

6) Release the button (if the button is not released within 10 seconds, system will automatically exit the programming mode). The controller will now proceed to pairing with transmitters, which is indicated by even blinking of the LED (0.5 s ON - 0.5 s OFF cycle). The controller will register all commands received from now from transmitters and will link them with the chosen operating mode. The linking of the button with the receiver is indicated by a 1-second switch off of the relay and a 1-second activation of the LED. You can pair the controller with many buttons in one programming step.

- To end the programming, press the PROG button briefly.
- "Switch off" mode
- 1) Press and hold the PROG button.
- Keep the button pressed for approximately 2 seconds until the relay switches on and the LED will slowly blink (0.5 s ON - 0.5 s OFF cycle).
- 3) Release the button. The controller will enter the configuration of the operating mode.

The selected mode is indicated by short blinks of LED, repeated every 2 seconds:

- -1 blink bistable relay;
- -2 blinks-time relay;
- 3 blinks monostable relay;
- -4 blinks-switch on;
- -5 blinks-switch off.
- 4) Changing the operating mode is done by briefly pressing the PROG button, so you need to press it four times shortly to select the "Switch off" feature (this will be indicated by 5 short blinks of the LEDs).
- 5) To confirm the selected operating mode, press and hold the PROG button until the LED starts to blink fast (0.1 s ON – 0.1 s OFF cycle) – this indicates the confirmation of the selected operating mode and entering the next stage.
- 6) Release the button (if the button is not released within 10 seconds, system will automatically exit the programming mode). The controller will now proceed to pairing with transmitters, which is indicated by even -15-

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blinking of the LED (0.5 s ON - 0.5 s OFF cycle). The controller will register all commands received from now from transmitters and will link them with the chosen operating mode. The linking of the button with the receiver is indicated by a 1-second switch off of the relay and a 1-second activation of the LED. You can pair the controller with many buttons in one programming step.

7) To end the programming, press the PROG button briefly

### Settings reset

Press and hold the PROG button;
 Keep the button pressed for at least 10 seconds. After 2 seconds, the relay switches on and the LED will slowly blink (cycle 0.5 s ON - 0.5 s OFF). After a few more seconds the LED will stop blinking and after a few more it will start blinking rapidly. Fast blinking indicates entering the settings reset mode.

3) Release the button. The LED should blink rapidly all the time.  Press and hold the button until the LED is permanently on and then release the button.

5) After executing this sequence, all programmed buttons will be removed from the memory of the controller.

#### Technical data

85÷265 V AC/DC power supply control input 85÷265 V AC/DC; <1 mA power consumption 0.60 W on standby 0.25 W load capacity of the output (AC-1) 16 A/250 V radio frequency 868 MHz working temperature -25-65°C terminal 2.5 mm<sup>2</sup> screw terminals max. 0.4 Nm tightening torque on TH-35 rail mounting dimensions 1 module (18 mm) ingress protection IP20

#### Warranty

The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us. More information how to make a compliant can be found on the website: www.fif.com.pl/reklamacje

### **Compliance with norms**

PN-EN 60669, PN-EN 60950, PN-EN 55024, PN-EN 61000, PN-ETSI EN 300 220-1, PN-ETSI EN 300 220-2, PN-ETSI EN 301 489-1, PN-ETSI EN 301 489-3.

CE declaration can be found on the website: www.fif.com.pl.

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