

FW2-RLY4

TWO WAY WIRELESS OUTPUT RELAY MODULE



ELECTRONIC ENGINEERING LTD.

INSTALLATION INSTRUCTIONS

P/N 7102374 REV.A Y.N

LEARNING PROCESS

We suggest you to refer to the "Outputs Learning" section of your control panel installation manual.

Learning process in Serenity™ control panel:

- Insert one battery CR123 into the FW2-RLY4 and wait until the end of the power-up process during which LEDs Red and green are blinking alternately.
- Enter into installer mode from control panel, then go to Output Radio learn menu (P64E, E) and Select the Radio Output number to be learnt from #6 to #16*. You can reach this number directly with P64E "#Output" E. Enter manually the serial number (S/N) indicated on the device sticker and press Enter to save.
The S/N is the ID of the first relay; The S/N must be learned firstly. The FW2-RLY4 offers 4 different outputs which have to be learned separately.
- The next three outputs should be learned as follow:
Example: if the first relay is output #8 with ID 2151217. Then Output #9 ID will be 2151218, Output #10 ID will be 2151219 / Output#11 will be 2121220.

*Default Outputs on Serenity™ panel

Output 1 = Internal Siren
Output 2 = (-) Alarm
Output 3 = (-) Arm/Disarm
Output 4 & 5 = Wireless Siren

LED INDICATION

UNIT STATE	GREEN LED	RED LED
Power Up	Green and Red blinking alternately for 500ms during device initialization until device is ready for learning.	
Initialization Failure	OFF	Blinking 250ms during 10 sec after power up.
Registration Process	Blinking 250ms during learning process	OFF
Registration Success	Constant ON during 3 sec	OFF
Registration Failure	Blinking ON 250ms and OFF 750ms during 10 seconds	OFF
Cut Off	OFF	ON for 10 sec
Reset Process	Green and Red blinking alternately for 500ms during device initialization until the device is ready for learning.	

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INTRODUCTION

The FW2-RLY4 is an external two way wireless relay output module with 4 Relays. It is supported by Crow's Serenity™ control panels and RF-Tx/Rx UART Modules.

OPERATION MODES

The FW2-RLY4 operates in 2 different modes:

- Operated by 2xCR-123 batteries
- Optional external power (from 9V to 12V)

FEATURES

- 4 Relays control (ON/OFF state only)
- Push-In wire terminals for easy installation
- Bi-Color LED indication
- Fit in a Universal external plastic box
- Sending Alert/Restore events
- Sending Open/Close Tamper events
- Monitor battery level
- Indicates AC fail if module is connected to an external power supply unit.

TESTING THE FW2-RLY4

After learning the FW2-RLY4 into your control panel, proceed with manual testing to check functioning.

This test can be manually performed from the control panel by activating related Output(s). On Serenity™ control panel, you can use the digit key located on LCD display.

Activate / Deactivate outputs to check good functioning of the FW2-RLY4

SETTING TO DEFAULT

It is recommended to set the FW2-RLY4 to default state "OFF" (all relays normally closed) before using the device.

You can force "OFF" state as follow:

- Press and Hold tamper switch of the FW2-RLY4
- Insert one battery.
- LEDs start blinking alternately Red and Green several seconds and go off.
- Release tamper switch.

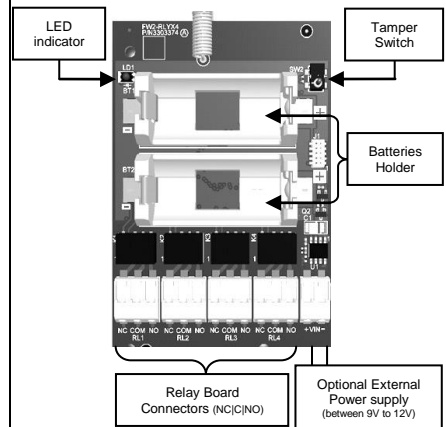
Note:

For this procedure, the FW2-RLY4 must be powered by battery only.

TECHNICAL SPECIFICATIONS

Data Protocol	FW2 Protocol
Modulation Type	GFSK (2 frequencies)
Frequency band	8F – 868.35MHz 9F – 916.5MHz
Identification	Unique ID serial number – 24 bit
Event Transmission	Output State, Tamper, Supervision, Low battery, Keep alive
Supervision Time	7 min (by default) Configurable between 1 to 30 min
Range (open space)	500m
Operation	2 CR 123A Lithium batteries 3V Battery life up to 5 years Optional External P.S 9V to 12V
Current Consumption	
Average	<50 µA
Transmission	~60 mA
Max Contact Capacity	1A / 24V
Operating temperature	-10°C to +50°C
Dimensions	98mm x 55mm x 12mm
Weight (inc. battery)	120 gr.

THE FW2-RLY4 BOARD



DELETE THE FW2-RLY4

If all 4 relays are learned into control panel, **deleting the first relay #1** (S/N of the first output – the serial number labelled on the device) **will automatically delete all 4 relays.**

If you want to delete a specific relay (besides the first relay), go to the control panel installer mode and select the output number you want to delete #2,#3 or4#.

To delete an Output on Serenity™ control panel, use the Programming command shortcut: P66E "#Output" E

To Delete ALL outputs:

- Go to "Radio Output" level in installer mode
- Select the Output where the Relay #1 is learned
- Delete the Radio Output device
- Exit and save the configuration

To Delete a SPECIFIC output:

- Go to "Radio Output" level in installer mode
- Select the Output you want to delete
- Delete the Radio Output device
- Exit and save the configuration

REGULATORY APPROVALS

The FW2-RLY4 conforms to essential requirements set out by:

- RTTE directive:1999/5/EC

Harmonized Standards applicable to this products are:

- EN300220-2
- EN301489-3
- EN301489-1
- EN50130-4:1995+A1(1998)+A2(2003)
- EN61000-6-3
- EN60950-1

Additional Standards & Directives applicable to this product are:

- Security Grade 2 Environmental Class II
- RoHS directive: 2002/95/EC
- EN50131-1
- EN50131-3
- EN50131-6
- EN50131-5-3
- EN50130-5



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These instructions supersede all previous issues in circulation prior to February 2017