3- and 4-Channel RF Receivers

Installation Manual

The ENFORCER 3- and 4-Channel RF receivers meet the growing demand for multi-channel receivers with multiple independently controlled output modes and can be used to remotely control a variety of devices including garage doors, lights, motorized gates, lifts, or others. Now also dual frequency, they are even more flexible and compatible with all ENFORCER transmitters of the same frequencies, including both fixed and code-hopping CODEBUMP™ variants.

- Flexible 10~24 VAC/VDC operating voltage
- Simultaneously receive 315 and 433.92MHz signals with optional Extended Range Antenna
- Range up to 500ft (150m) or up to 1,000ft (300m) with optional Extended Range Antenna§
- Independently programmable channels and up to 60 transmitter button codes per channel
- Pushbutton programming, no jumpers to cut or switches to set
- 5 Output modes per channel—timed pulse (0.5~99 sec), timed pulse (1~99 min), toggle, latch, and follow (validity)

§Operating range varies greatly depending on the installation and operating environment

Specifications

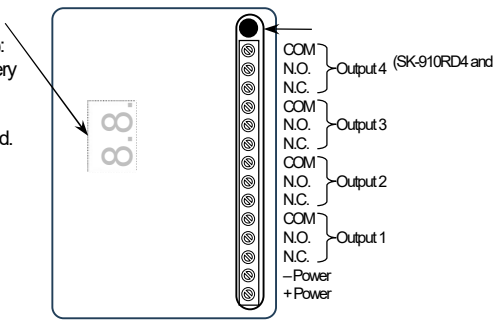
Model					
Operating frequency		315MHz*			
Memory capacity		60 per channel			
Operating voltage		10~24 VAC/VDC			
Operating current	Standby	16mA@12 VDC, 12mA@24 VDC			
	Active	60mA@12 VDC, 50mA@24VDC (both per channel)			
Relay output modes		0.5~99 sec momentary(default, 1s), 1~99 min momentary, toggle, latch, follow (validity)			
Relay contacts	Number		4		
	Rating	Form C 10A@14VDC			
Connectors		Screw terminals, +, -, with NO/NC/COM per relay			
Digital display		2-Digit, 7-segment LED			
Operating humidity		5~95%, non-condensing			
Operating temperature		32°~167° F (0°~75° C)			
Dimensions		$4^{3}/_{16}$"X$^{7}/_{8}$"X$2^{3}/_{8}$" (107x23x60 mm)			

Overview

LED

Shows (see LED Display below for details):

- General status –left dot flashes every 3~5s when operating.
- RF signal received –right dot lights when an RF signal is being received.
- Programming and code learning/deleting messages
- Number of codes programmed



Parts List

1x Manual

LED Display

8.8.	Flashing every 3~5 seconds – indicates the receiver is powered on and in operation.
8.8.	Shows the currently activated output channel when the transmitter button is pressed.
L.1.	Flashing – number shows the current channel to be programmed.
=.=.	Flash twice – indicates a new code has been learned or that all codes for the channel have been deleted.
-.-.	Slow flashing – in programing mode, shows that the attempted code has previously been learned. Flash twice – indicates exiting programming mode.
0.0.	Flashing – in programming mode, shows the number of codes (0~60) already learned for the selected channel.
0.0.	The number shows all the channels being output.
P1.	In output programming mode, indicates the current mode.
0.1.	In output programming mode when either P1 or P5 is selected, number indicates the output time in seconds or minutes, respectively.

Selector Button Operation

Enter programming mode	Press and hold for three seconds or more to enter programming mode.
Select channel for programming	Programming mode defaults to channel 1 on entering. Press again to switch through channels in sequence.
Memory display	After entering programming mode and the desired channel, within 2 seconds the LED will flash x number of times (where "x" is the number of codes learned for that channel).
Delete all codes from a channel	After entering programming mode and the desired channel, when the LED stops flashing, press and hold the selector button at least 3 seconds or until the LED flashes three times.
Program the output mode	In programming mode select the desired channel. Press the button again to display the current mode (P1~P5). To change, press to cycle through the modes in sequence.
Program the timed pulse duration	After programming the output mode and in P1 or P5 mode, press and hold the selector button to change the number of seconds or minutes, respectively.

Installation Notes

- Mount the receiver out of sight in a location not exposed to weather or moisture and not surrounded by metal. Metal will block the signal resulting in reduced range.

Programming

Entering Programming Mode

1. Press and hold the selector button for at least 3 seconds. The LED display will flash L1, indicating channel 1. Press the selector to switch to another channel, in sequence, if desired.
2. After 2 seconds, the display slowly flashes the number of codes stored and enters programming mode.

NOTE: If the selector button or no transmitter button is pressed within 15 seconds, the receiver exits programming mode.

Learning a New Transmitter Button Code

In programming mode with the desired channel selected and the LED indicator still flashing, press the desired transmitter button once. The 3 horizontal bars on the display will flash twice and the receiver will exit programming mode. Repeat the entire process to learn other codes.

NOTES

- After entering programming mode, do not press the selector button again as it will then go to output mode programming.
- The indicator LED will flash a maximum of 15 seconds. If no transmitter button is pressed during this time, the receiver will exit code programming mode, and the LED will turn off.
- If a code has already been learned, the indicator LED slowly flashes two dashes. The code will not be learned twice.
- One channel can learn the codes of up to 60 transmitter buttons. If you try to learn an additional transmitter code, the earliest code learned will be deleted and the new code will be learned.

Clearing a Channel's Memory

In programming mode, select the desired channel. While the display is flashing the correct channel, press and hold the selector button 3 seconds or until the LED flashes twice. All codes for the channel will be cleared.

*Operating range may vary greatly depending on the installation and operating environment.

Programming (Continued)

Displaying a Channel's Number of Codes Learned

In programming mode, select the channel. The LED will flash the channel's number of codes stored (15sec).

Programming a Channel's Relay Output Mode

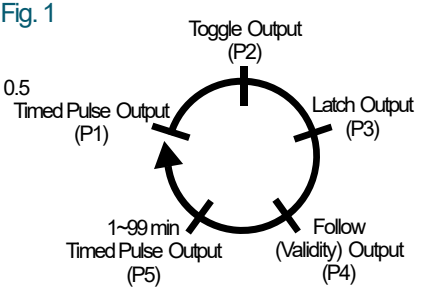
Each channel relay can be independently programmed to one of five output modes for any transmitter button.

- P1 – 0.5~99 Second Timed Pulse (default, 1 second) – The transmitter button turns the relay ON for the programmed number of seconds.
- P2 – Toggle – Works like a toggle to alternately turn a device ON & OFF. Press the transmitter button once, and the relay turns ON. Press the transmitter button again, and the relay turns OFF.
- P3 – Latch – The transmitter button turns the relay ON. It stays ON even if a compatible transmitter button is pressed again. To turn OFF, press the selector switch on the receiver once to reset.
- P4 – Follow (Validity) – The relay status follows the transmitter button status and will remain active for as long as the transmitter button is pressed.
- P5 – 1~99 Minute Timed Pulse – The transmitter button turns the relay ON for the preset number of minutes.

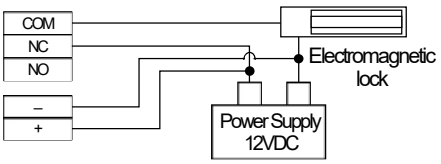
In programming mode, and with the desired channel selected, follow the steps below to set the output mode:

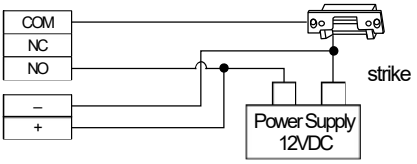
1. While the LED is flashing, press the selector button. The LED displays the current output mode (default P1).
2. To change, press the selector button to scroll sequentially through the 5 output modes as shown in Fig. 1 until the desired mode appears.
3. In mode P1 or P5, press and hold the selector button to change the seconds or minutes, respectively.
4. When complete, wait 15 seconds for the receiver to automatically exit programming mode.

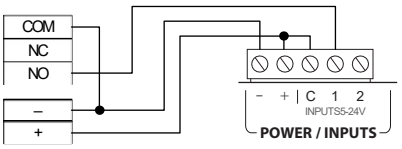
Fig. 1



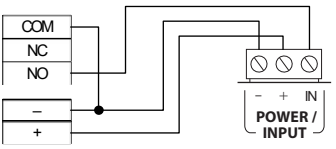
Sample Applications







Controller with "C" Input Terminal
Flex, FlexMax, BooTunes, PicoBoo MP3



Controller without "C" Input Terminal
PicoBoo, PicoFX, PicoVolt