### 8DP0L2EFA

8 BUTTON CONTROL UNIT WITH EXTENDED RANGE ANTENNA (UP TO 500') BUTTONS 1 AND 2 ARE ON OFF LATCHING (press button once to turn a function on press same button again to turn off) BUTTONS 3-8 ARE SINGLE MOMENTARY FUNCTIONS (hold the button down to activate a function release the button to deactivate) Works with 12 volt DC power supplies.

No more than 10 amps total at any given time can run through the receiver. We recommend the use of 6-10 amp diodes on the control wires to prevent any unexpected power feedback into the receiver. For higher amp uses you must use relays... with the unit. SEE DIRECTIONS IN THIS DOCUMENT. It is recommended to wire in a on off switch on the power or ground of the receiver to prevent battery drainage when the unit is not in use. . USE THEN ENCLOSED 10 AMP IN-LINE FUSE ON THE RED POWER WIRE. THERE ARE NO REFUNDS FOR BURNT OUT UNITS

See wiring instructions to connect the receiver to the desired function using the color-coded wires.

#### Kit includes

- 1-Receiver base unit
- 1-8 button transmitter with rubber boot and lanyard
- 1-10amp in line fuse link

# **Set-up and Operation**

All units come factory programmed unless stated otherwise. This gives a matched (1 of 16 million combinations @ 418MHz) interface between the keyfob and base unit. See **Figure 1** for keyfob button assignments. (8 buttons transmitter is numbered)



#### Fig. 1 Keyfob Button Assignments

Yellow wire is activated by button # 1 latching White wire is activated by button # 2 latching Green wire is activated by button # 3 momentary Blue wire is activated by button # 4 momentary Brown wire is activated by button # 5 momentary Orange wire is activated by button # 6 momentary Purple wire is activated by button # 7 momentary Striped wire is activated by Button # 8 momentary Red wire is DC power Supply (12 volt DC hot) Black wire is DC ground (12 volt negative)

# MAKE SURE YOU HAVE SECURE AND CLEAN CONNECTIONS EVERYWHERE

**Fig. 2** is the receiver or base unit. This picture shows the terminal designations and other functions.

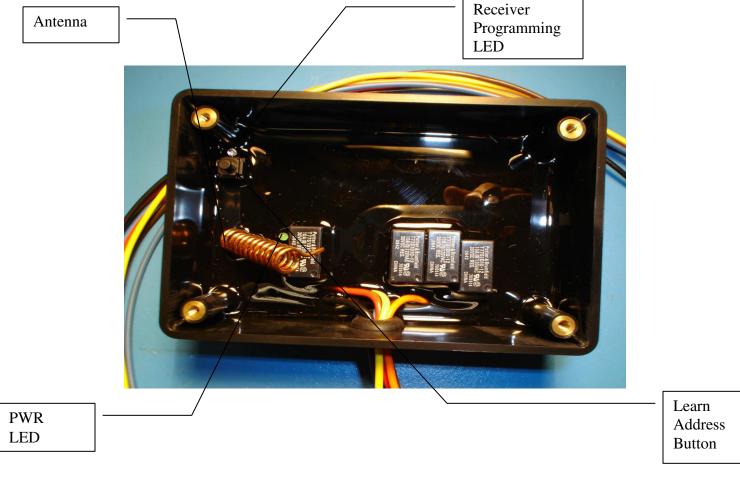


Fig. 2 Receiver Connection diagram and layout

Programming the transmitter to the base unit.

Please follow these steps: Video link

- Power-up the base unit.
- On the backside of the keyfob/8 Button depress the "ADD" button using a paperclip (a blue light in the window will blink).
- Flip keyfob over and push each button individually to send address to the receiver. The blue light will automatically turn off after 15 seconds from the time you first push the buttons. Now the keyfob has acquired its unique address.
- WAIT UNTIL THE BLUE LIGHT STOPS BLINKING AND PROCEED.
- Go to the receiver box and push the black (learn) button. The red LED will begin to flash.
- Again, push button #1 on the keyfob/8 Button to save that unique address to the receiver. Push the black button once again on the receiver box and the address programming is complete. Your unit is now ready to use.



# **Battery Replacement**

To test the battery, insert paper clip into add hole and depress lightly if the blue light begins to blink the battery and transmitter are ok. The key fob/8 Button uses a standard CR2032 lithium button cell battery. In normal use, it will provide 1 to 10 years of operation depending on use. To replace the battery (key fob), gently remove the battery cover. Carefully remove the battery by sliding off the battery cover and then gently tap the transmitter on the edge of a bench to loosen the battery and remove by han out from underneath the retainer. Observe the battery polarity when replacing. Replacing the 8 Button battery requires gently prying the battery cover open.

#### **Other Considerations**

Only one transmitter at a time can be activated within a reception area. Only one carrier of a particular frequency may occupy the same airspace at a given time. This means that if two transmitters are activated in the same area at the same time the signals will interfere and the decoder on the receiver will not see a valid transmission and the 500 will not function. If the range of the transmitter needs to be increased, contact your supplier and ask about antenna options of up to 500ft.

Also CAW/ DMB Inc has no control over the intended usage of this product. Because of that CAW offers no written or expressed liability as to how this product is used. CAW/DMB Inc. recommends that these units are intended for **OFF ROAD USE ONLY** 

## **TROUBLE SHOOTING**

Follow these steps: REMEMBER ONLY UP TO 10 TOTAL AMPS AT ANY GIVEN TIME, 10 AMPS PER FUNCTION DRAW. IF YOU EXCEED THIS YOU HAVE TO USE RELAYS...BETWEEN THE RECEIVER AND YOUR ACCESSORIES. See below

- Make sure the green LED is lit when the receiver power is turns on. If the LED is not on, check your power supply to the receiver.
- With the receiver powered up, make sure the red LED comes on when the buttons
  are depressed on the keyfob. If the red LED does not come on the receiver is not
  getting a signal from the transmitter. If the blue light on the transmitter does not
  flash when you depress the add button the battery needs replacement. CR2032
  battery.
- After completing the above steps and the unit still will not function, follow the procedure, **Set-up of Keyfob to Receiver Address**.
- If the unit still will not operate. Check connections to the component that the unit is trying to actuate using a voltmeter.
- (Problems Common for units with latching) The unit loses its programming between the transmitter and the receiver. (solution) The current draw it to high (use an automotive relay see instructions attached. The unit has received unprotected power (back feed) up one of the wires that is connected to one of the accessories you are trying to control. This can be intermittent. This can also cause one or both of the latching functions will not hold the latch. Check your accessories for current draw and Diode or fuse protect all control wires.
- Protect the transmitter from subzero temperatures as it may fail to operate in these conditions and or the battery may freeze..

Relay to be used with higher amp latching circuits. Use a typical sealed 40/60 automotive relay available at Control All Wireless and most auto parts stores.

A relay is basically a switching device. The difference is that it can handle more amperage that a typical switch allowing a typical switching device to power high amperage devices.

- 1. 12 volt power from battery connects to pin 30
- 2. Battery ground connects to pin 85
- 3. Power in from from activation switch or remote connects to pin 86
- 4. Pin 87 connects to device that needs to be operated. Example valve, motor, lights....

Note wire that connects to pin 30 must be as large or larger that the device you need to operate that's connected to pin 87

You should fuse or diode protect pin 85 and 87 to prevent back feed.

87a will have power when the unit is idle. This pin is not typically used in applications.

