

Trouble Shooting Reverse Polarity Wiring Problems

Switch doesn't work properly but the shaved kit transmitters do work

- Step 1** Did you purchase a switch kit designed for three switches and only use two switches?
YES - Connect third switch
NO - Check wiring

Switch works properly but shaved kit transmitters do not work

- Step 1** Does the LED on the remote light up when you press the transmitter button?
YES - Transmitter works properly continue to step 2
NO - Replace transmitter battery
- Step 2** Can you hear the receiver make a clicking sound when you press channel 1 or 2 on the transmitter?
YES - Receiver and relay work properly. Go to step 4
NO - Go to step 3
- Step 3** Does the LED on the receiver light up when the transmitter button is pressed?
YES - Transmitter is properly learned and OK, go to Step 4
NO - Check power and ground to the receiver and then reprogram the transmitters
- Step 4** Use a test light to check for voltage at pin 87 of the relay. Did the test show greater than 10 volts?
YES - The relay checked works properly. The other side of the motor is not properly grounded.
NO - Connect pin 87 to a proper voltage source.

Limited Warranty Statement

SPAL USA WARRANTY STATEMENT

SPAL USA warrants this product to be free from defects in material and workmanship for a period of one (1) year from the date of sale to the original purchaser, and not more than two (2) years from the date of manufacture. SPAL USA will repair this product free of charge if, in the judgment of SPAL USA, it has been proven defective within the warranty period. The product should be returned, at the customer expense, to the location of original purchase. This warranty does not cover any expenses incurred in the removal and/or reinstallation of the product. This warranty does not apply to any product damaged by improper installation, accidental misuse, abuse, improper line voltage, fire, flood, lightning, or other acts of God, or a product altered or repaired by anyone other than SPAL USA. This warranty is in lieu of other warranties, expressed or implied, including any implied warranty of merchantability. No person is authorized to assume for SPAL USA any other liability concerning the sale of this product.

IMPORTANT-KEEP YOUR INVOICE WITH THIS WARRANTY STATEMENT!

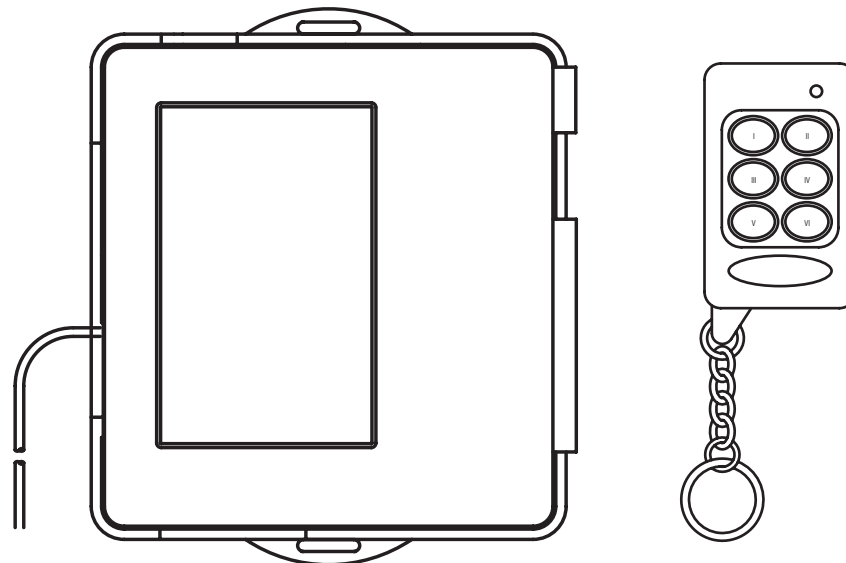


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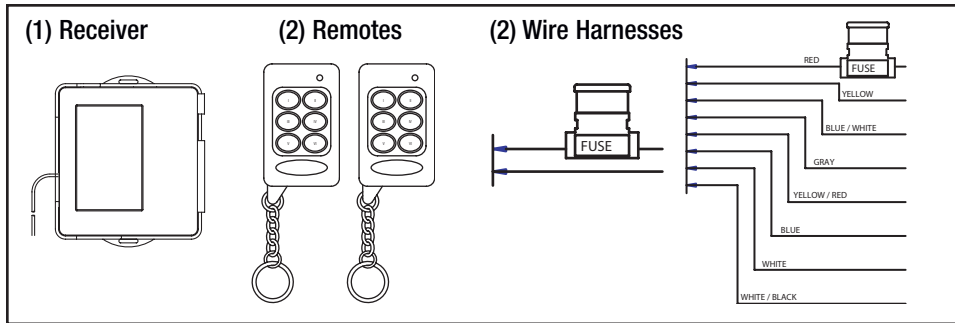
Tech Support Line: 800-454-7725



RCU6

Installation Manual & Operation Instructions

Each Kit Contains The Following Components



FCC ID INFORMATION

FCC ID#: KNF6TX

"This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation."

Industry Canada

IC ID#: XXXXXX-6TX (XXXXXX will be replaced with the company number issued by Canada)

"The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met."

Disclaimer Statement

Caution: changes or modifications not expressly approved by SPAL USA will void the user's authority to operate the equipment.

Installation Instructions for RCU6

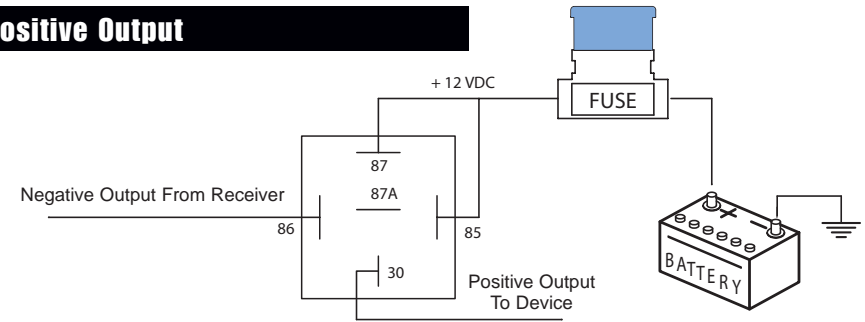
This kit is designed to operate six functions via the 6-button remote controls. These channels can be used to operate power door locks, power door releases, trunk releases, control linear actuators, or roll up or down power windows.

All channels can be Positive or Negative outputs depending on how the input wire is connected. Please refer to the diagrams on page __?_ of this instruction manual for positive, and negative, wiring diagrams and other recommendations, such as reverse polarity for power windows.

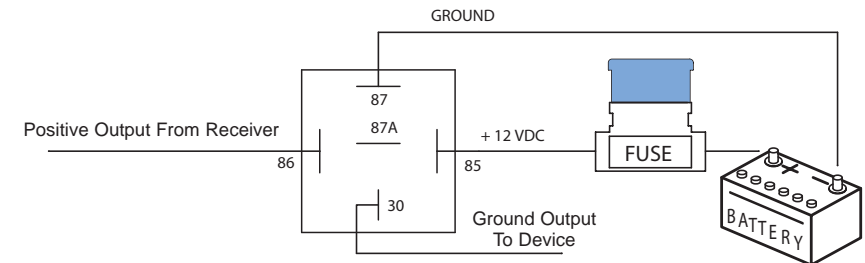
****Proper wiring is critical to the correct operation of this product. Make sure all wires are properly connected, properly grounded, free of potential damage, and are correctly fused****

Optional Wiring Diagrams

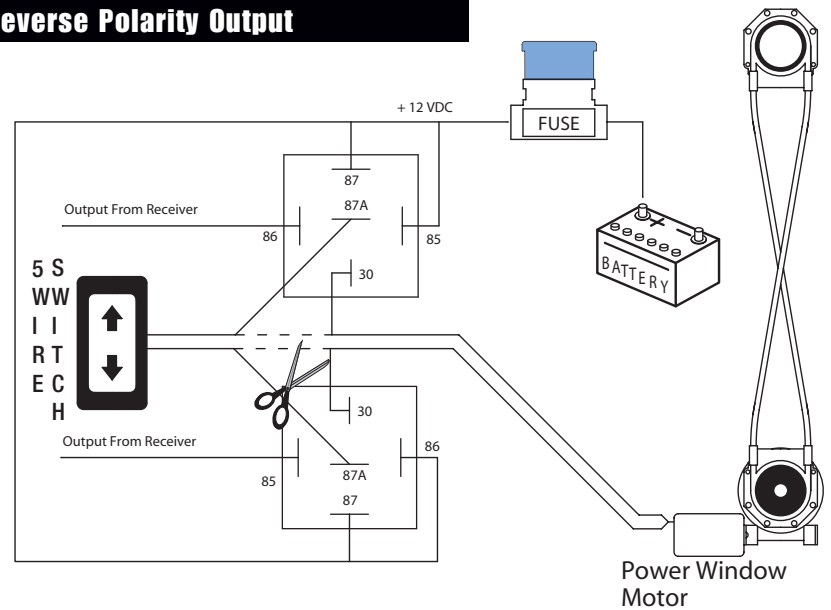
Positive Output



Negative Output



Reverse Polarity Output



****In a reverse polarity system, a switch that rests at ground must be used.****



FOR POWER WINDOWS TWO RELAYS MUST BE PLACED BETWEEN THE SWITCH AND THE WINDOW MOTOR. THE DASHED LINES INDICATE WHERE THE WIRES MUST BE CUT.

Mounting / Wiring Section

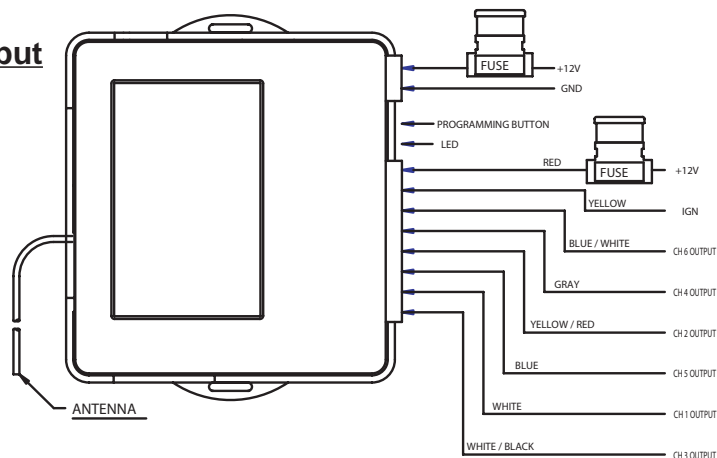
Receiver Mounting and Wiring:

****The receiver must be mounted inside the vehicle to avoid moisture****

****Do not plug in the receiver module until all the wiring is complete****

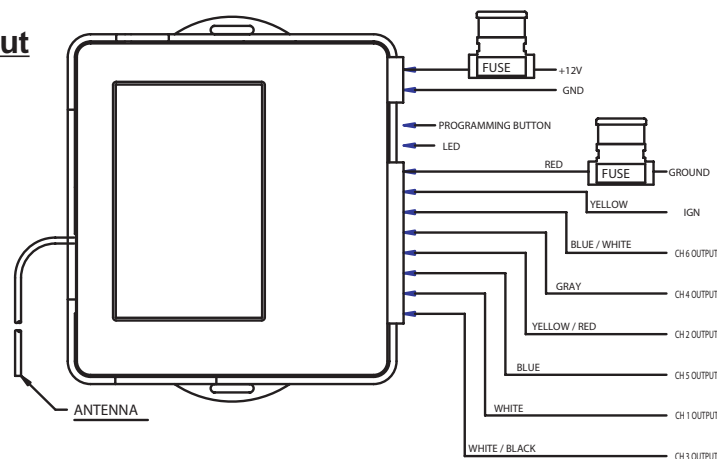
****Do Not Ground the Antenna****

Positive Output



Connector 1			Connector 2	
Pin #	Wire Color	Circuit	Wire Color	Circuit
1	Red	Input	Red	Positive 12 VDC
2	Yellow	Ignition	Black	Ground
3	Blue/White	Channel 6		
4	Gray	Channel 4		
5	Yellow/Red	Channel 2		
6	Blue	Channel 5		
7	White	Ignition 1		
8	White/Black	Channel 3		

Negative Output



Operation Section

Basic Function of the SPAL Shaved Door Kit

The remote control supplied with your kit has four buttons, but is capable of controlling 6 channels.

Channel 1:

Channel 2:

Channel 3:

Channel 4:

Channel 5:

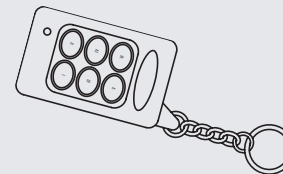
Channel 6:

Positive outputs are +12VDC

Negative outputs are ground

Both outputs are capable of handling 10Amps

Basic Functions Of The Remote Control



To Operate:

Channel 1

Channel 2

Channel 3

Channel 4

Channel 5

Channel 6

Press:

Button I

Button II

Button III

Button IV

Button V

Button VI

Programming Section

Reprogramming the Remote Transmitters:

****This RCU6 can accept up to 4 SPAL remote transmitters (Part # RCU6TX)****

The remote transmitters are shipped Pre-Programmed. In the event that a remote transmitter loses the programmed code, or if you wish to add more remote transmitters, follow these instructions:

- Make sure ignition is OFF.
- Locate the programming button located on the side of the receiver, next to the LED.
- Press the programming button 3 times (The LED will light).
- Press Button 1 on each remote you wish to program (The LED will turn off for a moment, then back on with each remote transmitter it recognizes)
- The LED will remain lit for approx. 10 seconds after the last remote transmitter has been recognized.
- Wait for the LED to go out. Then test each remote transmitter for proper function.

Optional Wiring Section

Wiring Options

Item to be Activated	Description of Function	Relay Type	# of Relays Required	Diagram
1 Power window motor	Move window up & down	SPDT	2	Reverse
1 Power window motor	Move window one direction	SPDT	1	Reverse
Linear actuator	Move in & out	SPDT	2	Reverse
Solenoid	Activate Solenoid	SPST	1	Positive or Negative
Trunk Release	Open the Trunk	SPST	1	Positive or Negative
Door lock actuator	Lock & unlock	SPDT	2	Reverse

SPST = Single pole single throw relay, 30 or 40 amp

SPDT = Single pole double throw relay 30 or 40 amp

Relays can either be purchased from SPAL USA or from your local auto parts store.