

## Product Data Sheet

# Seven Channel Remote Control



### Standard Features:

- The Versa 7 is designed to control up to seven devices or functions.
- 12 VDC (nominal)
- 5 Amp fuse for use with the controller
- 35 Amp fuse for use with the two internal relays
- Control unit (nominal dimensions):
  - Length: 3.8" (4.2" with mounting tabs)
  - Width: 3.6" (3.8" including connectors and switches)
  - Height: 1.2"
  - Mount holes: 0.09 x 0.47" slot
- 4 button remote transmitters (2)
- Receiver can be paired with up to 4 remote transmitters
- Remote transmitter battery: LR23A
- No IP rating (not waterproof)

### Each Kit Contains the Following Components:

- (1) Control Unit
- (2) 4-button Remote (pre-paired with the receiver)
- (2) Wire Harness

### **Explanation / Overview:**

The Versa 7 is designed to remotely control up to seven devices or functions. All seven functions can be controlled with the supplied four button remote control.

Channels 1 and 2 are tied to onboard 30 Amp relays and may be used to control two functions up to 30 Amps directly. Channels 3 – 7 are electronic outputs with a 500-milliamp current limitation. Typically, these outputs are connected to optional external relays for control functions. These optional external relays are not part of this kit.

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

### **Mounting Considerations:**

Choose your mounting location carefully. The Versa 7 should be securely mounted in an area that will remain dry and not subject to excessive shock and vibration. The Versa 7 should not be mounted inside a metal enclosure. If possible, it should be located away from metal objects. For maximum operating distance, the antenna wire should be extended in a straight line and oriented away from any adjacent metal.

The Versa 7 receiver unit and transmitters are not waterproof. Warranty will not be applicable to units that have been exposed to water.

### **Warranty Statement:**

Visit Concentric International's website for complete warranty information:  
<http://www.concentricintl.com/warranty>

### **Technical Resources:**

Visit Concentric International's Technical Resources website for complete product information: <http://www.concentricintl.com/tech>

**Electrical Configuration:**

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

Channel 1	Onboard 30 Amp relay	<ul style="list-style-type: none"> <li>• May be used together to control one linear actuator, i.e. CH1 retracts, CH2 extends.</li> <li>• May also be used independently to control other devices.</li> </ul>
Channel 2	Onboard 30 Amp relay	
Channel 3	<ul style="list-style-type: none"> <li>• Outputs at 500mA maximum each.</li> <li>• Channels 3-7 are negative (sinking) outputs. When activated, they supply the ground connection for the device they are controlling.</li> <li>• They may be used to control external relays (not included) if alternate switching configurations or loads greater than 500mA are required.</li> </ul>	
Channel 4		
Channel 5		
Channel 6		
Channel 7		

**Remote Control Operation:**

To Operate:	Press:
Channel 1	Button 1
Channel 2	Button 2
Channel 3	Button 3
Channel 4	Button 4
Channel 5	Button 1 + Button 2
Channel 6	Button 1 + Button 3
Channel 7	Button 1 + Button 4

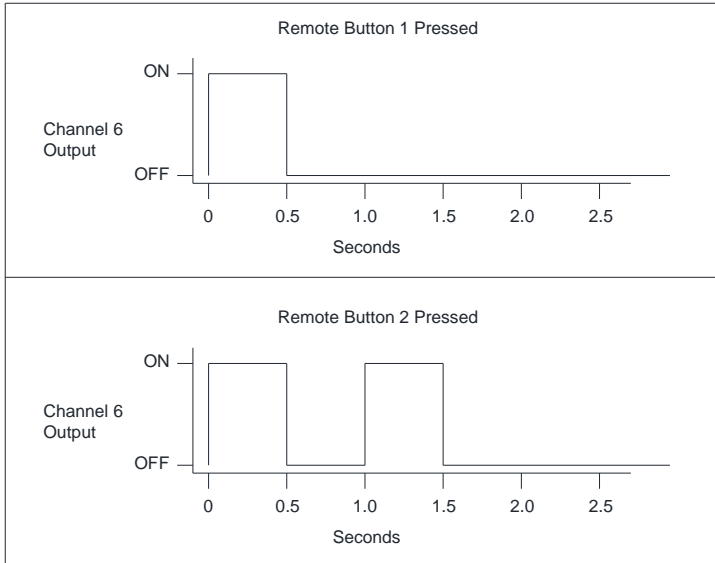
**DIP Switch Settings:**

Refer to the table below for DIP switch settings and special functions. The default position for all DIP switches is OFF.

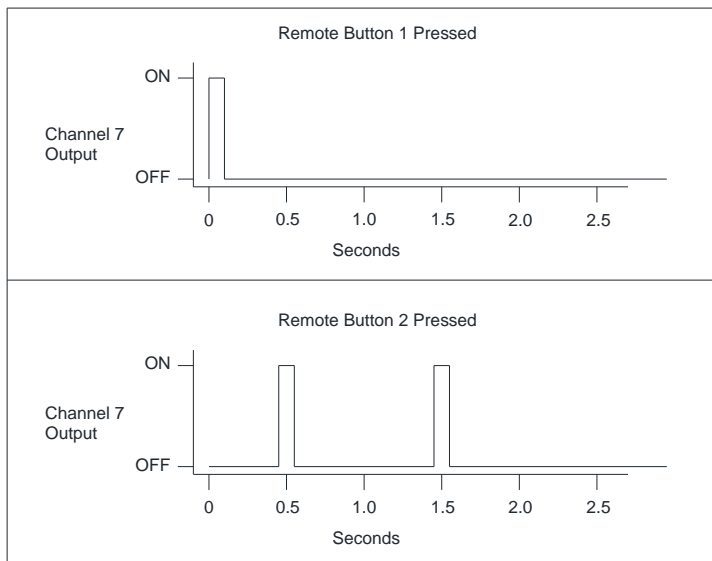
DIP Switch	OFF (up)	ON (down)
1	Channel 1 – Relay for CH-1 is ON as long as button 1 is held down.	Channel 1 – Pressing button 1 will turn ON CH-1 relay for 0.5 seconds then relay will go back to its normal state.
2	Channel 2 – Relay for CH-2 is ON as long as button 2 is held down.	Channel 2 – Pressing button 2 will turn ON CH-2 relay for 0.5 seconds then relay will go back to its normal state.
3	Not used	If CH-1 or CH-2 receives a signal 8 or more times within 20 seconds, CH-1 and CH-2 will be deactivated for 30 seconds then reset to normal.
4	Not used	Not used
5	Not used	Not used
6	Channel 6 – Provides (-) 500mA output as long as transmitter buttons 1 & 3 are pressed.	Channel – 6 Ties CH-6 control with CH-1 & CH-2 buttons. Button 1 pressed: <ul style="list-style-type: none"> <li>• CH-1 ON for 0.5 seconds (or longer if button 1 is held down).</li> <li>• CH-6 – output pulse – ON for 0.5 seconds – then OFF (only one pulse)</li> </ul> Button 2 pressed: <ul style="list-style-type: none"> <li>• CH-2 ON for 1.5 seconds (or longer if button 2 is held down).</li> <li>• CH-6 – output pulse – ON for 0.5 seconds – OFF for 0.5 seconds – ON for 0.5 seconds – then OFF.</li> <li>• See CH-6 output graphs on next page</li> </ul>
7	Channel 7 – Provides (-) 500mA output for 0.1 seconds when transmitter buttons 1 & 4 are pressed.	Channel – 7 Ties CH-7 control with CH-1 & CH-2 buttons. Button 1 pressed: <ul style="list-style-type: none"> <li>• CH-1 ON for 0.1 seconds (or longer if button 1 is held down).</li> <li>• CH-7 – output pulse – ON for 0.1 seconds – then OFF (only one pulse).</li> </ul> Button 2 pressed: <ul style="list-style-type: none"> <li>• CH-2 ON for 2 seconds (or longer if button 2 is held down).</li> <li>• CH-7 – output pulse – OFF for about 0.5 seconds – ON for 0.1 seconds – OFF for about 1 second – ON for 0.1 seconds – then OFF (2 pulses).</li> <li>• See CH-7 output graphs on next page</li> </ul>
8	Not used	Not used

## DIP Switch Settings (cont.): Channel 6 and Channel 7 Output Graphs

DIP Switch 6 --- ON (down)



DIP Switch 7 --- ON (down)



## Remote Control Programming:

The two remote transmitters that come with the Versa 7 kit are shipped pre-programmed for the receiver included with the kit. If a remote transmitter loses the programming code or if you wish to add more remote transmitters (maximum of 4 transmitters per receiver), follow these steps:

- If the Yellow ignition wire is connected, make sure the ignition is turned OFF.
- Locate the programming button on the side of the receiver next to the red LED.
- Press the programming button 3 times quickly. The red LED next to the button will light when the receiver enters the programming mode. Once in the transmitter programming mode, you will have approximately 10 seconds to program any transmitters you wish to use with that receiver.
- To program a transmitter to that receiver (one transmitter at a time), press any button on the transmitter. The receiver LED will turn OFF briefly then back ON indicating that it received the signal from that transmitter.
- Wait for the LED to turn OFF (at the end of the 10 second programming window) then test each transmitter for proper function.

## Operation Notes:

- When any channel is activated, either by remote or by switch control, the red LED on the receiver flashes a number of times equal to the channel number activated.
  - Press button 1 = 1 blink on receiver LED
  - Press button 4 = 4 blinks on receiver LED
  - Press buttons 1 & 4 = 7 blinks on receiver LED
- When using switch control for Channel 1 or Channel 2 (Gray and Green wires) none of the relays or outputs will ever operate at the same time. Channel 1 relay has the highest priority. Channel 2 relay has the second highest priority.
- The LED on the transmitter will turn ON while a button is pressed.
- Connecting the Yellow wire in the 10-pin harness to the ignition circuit will disable channels 1 – 4 when the ignition circuit is ON.
- When the Yellow ignition wire is set to disable channels 1-4 (when ignition is ON), it will disable control by the remote as well as by the external switches (Gray and Green wires for channels 1 & 2).

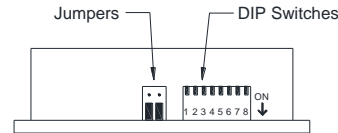
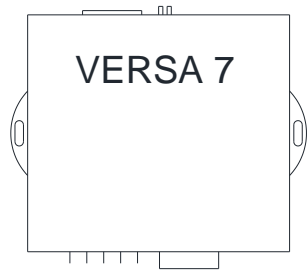
## Jumpers:

There are 2 jumpers on one side of the controller next to the 8 DIP switches (see VERSA 7 diagram below showing "Side A").

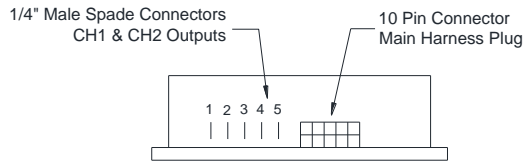
- Jumpers in the lower position (default position)
  - Gray and Green wires for channel 1 and channel 2 short to ground to activate.
- Jumpers in the upper position
  - Gray and Green wires for channel 1 and channel 2 short to +12 volts to activate.
- The jumper next to the 8 DIP switches is for channel 1. The other jumper is for channel 2.

## VERSA 7 Diagram:

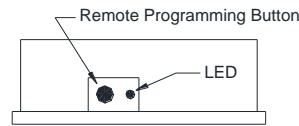
- VERSA 7



Side A

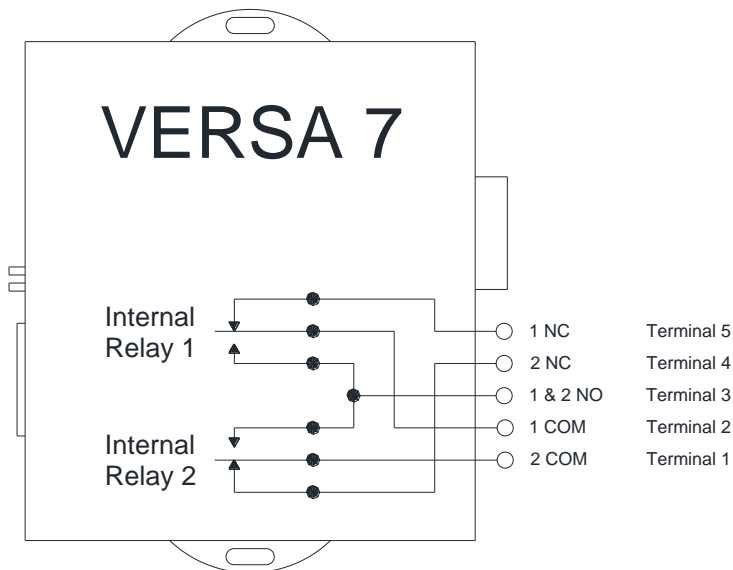


Side B



Side C

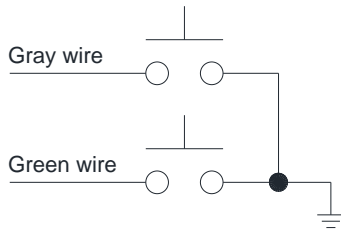
- Internal 30 Amp Relays



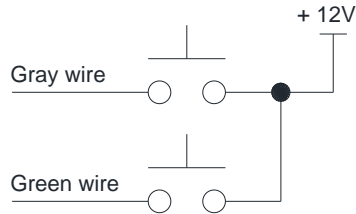
## Wiring Diagrams:

- Connecting the Gray and Green wires to external switches for channel 1 & 2 control.

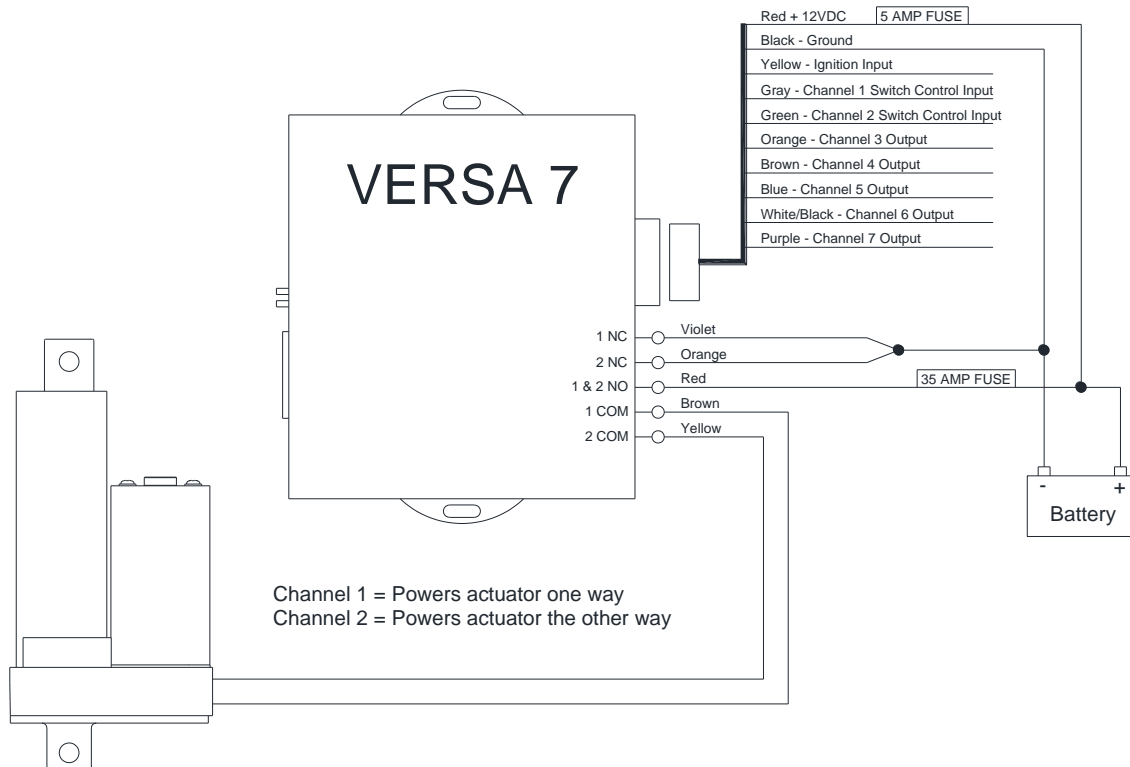
Jumpers in lower position



Jumpers in upper position

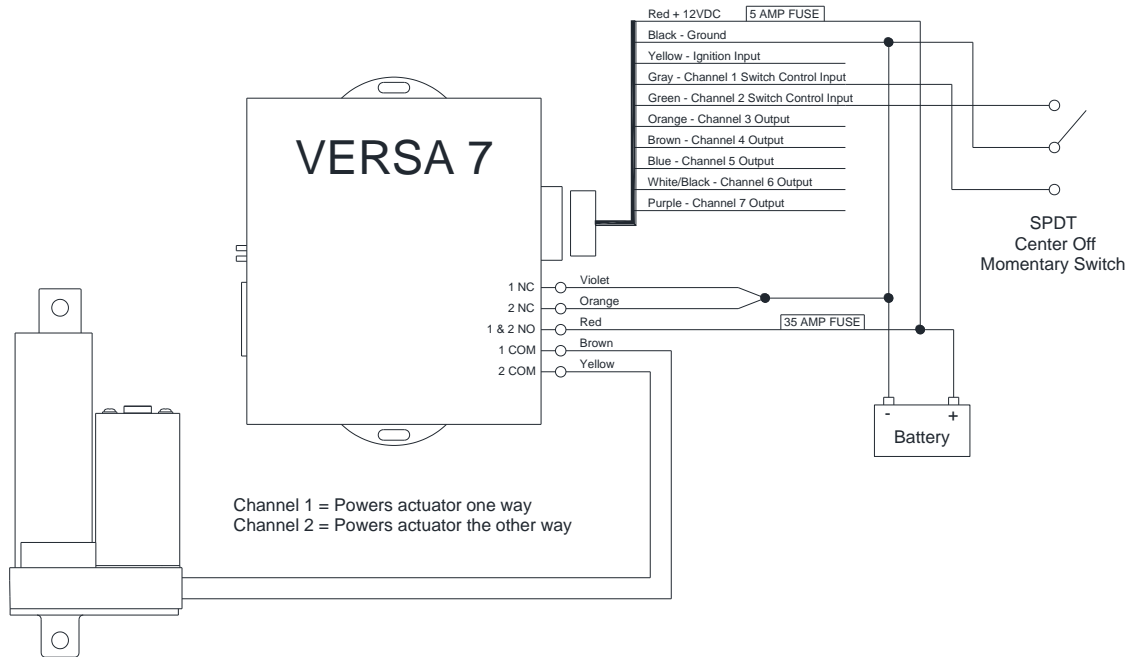


- Single Actuator Wireless Reversing Controller

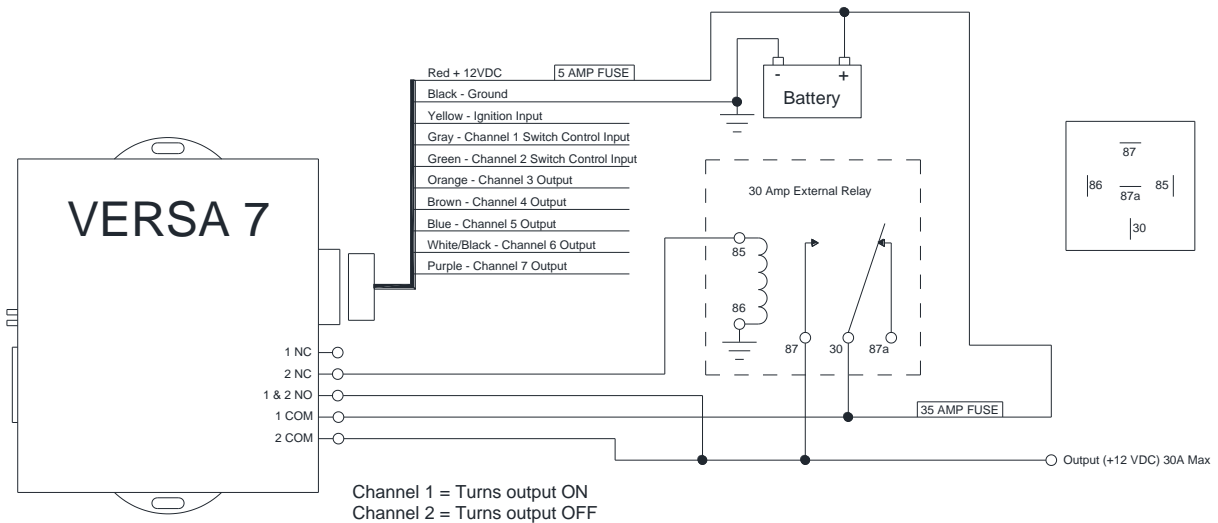




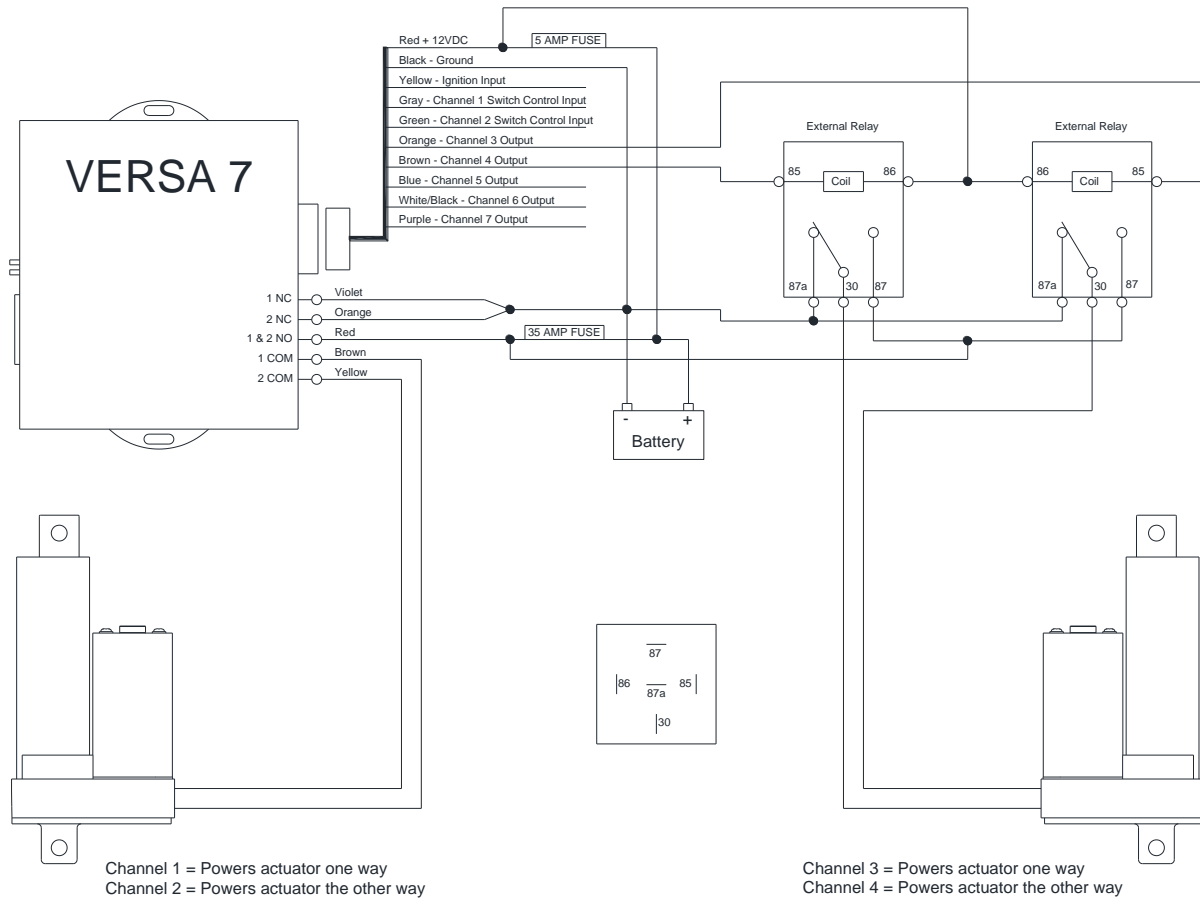
- Single Actuator Wireless Reversing Controller with Additional Manual Momentary Control Switches



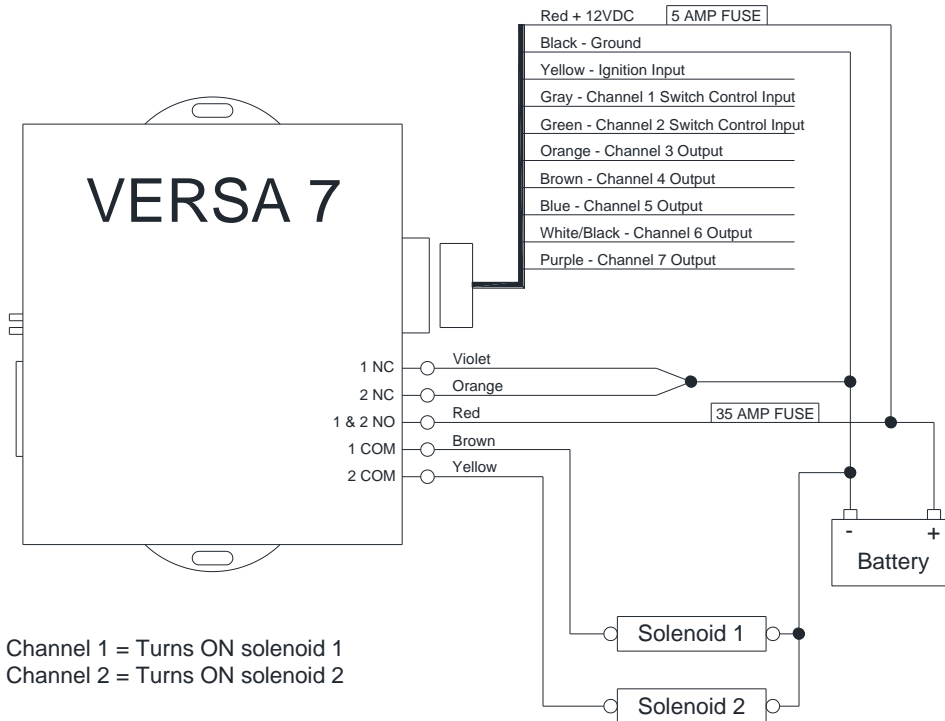
- Single Circuit Latching Controller (latch ON / latch OFF)



- Dual Actuator Wireless Reversing Controller



- Momentary Control of 2 Solenoids



### Ordering Key:

Part Number	Description
VERSA7	7-channel wireless controller with 2 remotes
VERSA7-TRANS	4-button transmitter (1)

### Terms of Use

The user is responsible for determining the suitability of Concentric International products for specific applications. Due to continuous development in order to improve its products, Concentric International products are subject to change without prior notice. Concentric International reserves the right to discontinue the sale of any products at any time.