

MSD INSTALLATION INSTRUCTIONS

Single, Two, & Four Channel Relays PN 7566-1, PN 7566-2, PN 7566-4

ONLINE PRODUCT REGISTRATION: Register your MSD product online. Registering your product will help if there is ever a warranty issue with your product and helps the MSD R&D team create new products that you ask for! Go to www.msdpower.com/registration.

Parts Included:

- 1 - MSD Relay Module
- 1 - 40 Amp Fuse per Channel (Installed)

WARNING: During installation, disconnect the vehicle battery cables. When disconnecting, always remove the Negative cable first and install it last.

FEATURES

- 7V to 20V supply
- One to four independent 40A outputs
- Configurable single-wire activation with Ground (-) input or 12V (+) input, with removal of Tie-Bar
- Removable cover for easy accessibility
- LED status indicators

OPERATION

The main power supply to the unit should connect directly to the positive battery post.

WARNING: LIVE BATTERY POWER

Failure to follow these warnings may cause fire, injury, property damage, or even death. All connections must be properly secured.

Use only automotive grade wire with adequate heat and chemical resistance.

All wire gauges must be adequate for the current in the application.

MOUNTING

The Relay Module must be mounted in a dry location and away from extreme heat. The unit should not be immersed or subjected to direct spray from a power washer.



Figure 1 PN 7566-1 - Single Channel Relay



Figure 2 PN 7566-2 - Two Channel Relay



Figure 3 PN 7566-4 - Four Channel Relay

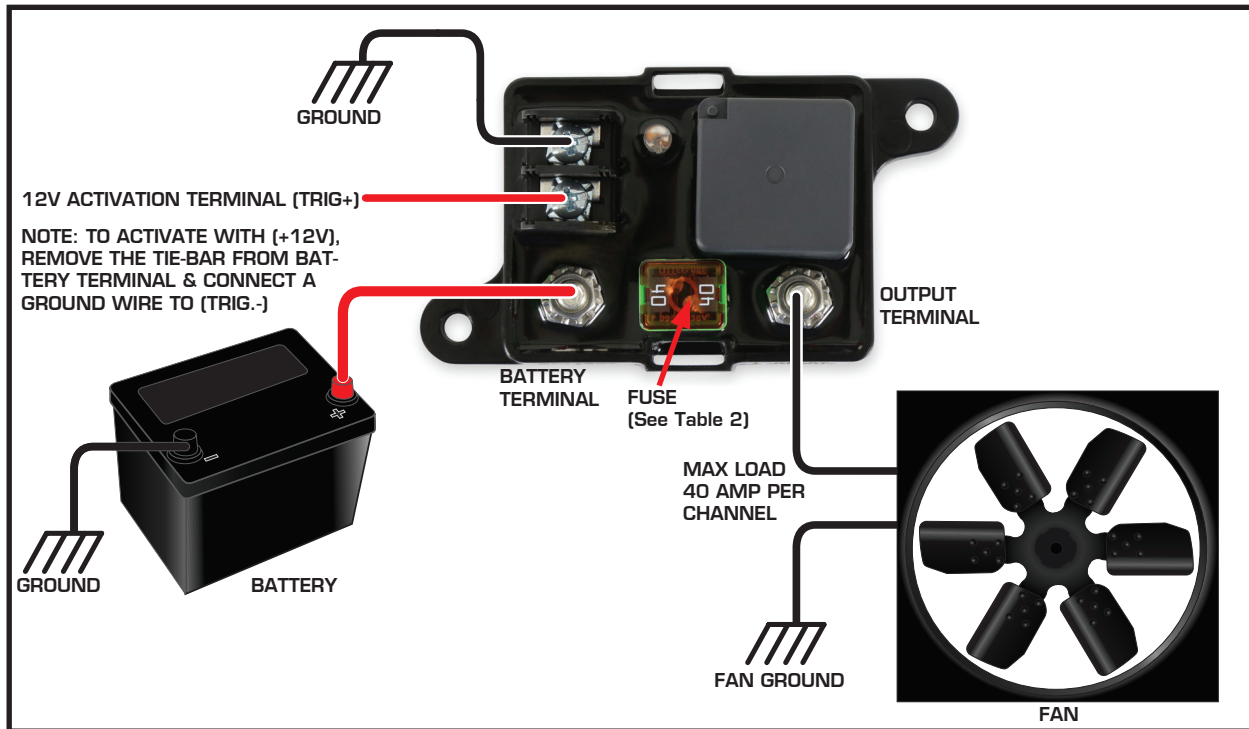


Figure 4 Single Channel Relay - 12V Activation

WIRING

The 'Battery' and 'Output' wires connected to the large terminals, must be sized according to the **Wire Size Selection Guide (Table 1)**.

WARNING:

Attach the power wire to the BATTERY+ terminal on the relay **before** connecting it to the battery post.

1. Main Power

Single Channel (PN 7566-1): Use #10 ring terminals on the wire that supplies the relay with +12V. Install the star-washer and 10-32 nut, torque to 20 in-lbs.

Two & Four Channel (PN 7566-2, PN 7566-4): Use 1/4" ring terminals on the wire that supplies the relay with +12V. Install the star-washer and 1/4-20 nut, torque to 30 in-lbs.

Securely connect the BATTERY+ terminal wire to the positive battery post. Use the 'Wire Size Selection Guide' to choose the appropriate wire (**Table 1**).

2. Outputs

Use #10 ring terminals and appropriately sized wire to connect the Channel (CH_) OUTPUT to desired accessory (pump, fan, ect.). Install star-washer and 10-32 nut, torque to 20 in-lbs.

Wire Size Selection Guide

Current Rating AMP	Minimum Wire Size AWG
140	2
100	2
80	4
60	6
35	8

Table 1 Wire Selection Guide

3. Trigger/Activation

Each output channel can be activated by one of two configurations, Ground (-) trigger or 12 volts (+). The relays come pre-configured for a ground input trigger. Use a Fork or #8 Ring Terminal appropriately sized for input wire (18-22AWG).

3a. Ground Activation - using a switch or other control device, apply ground to the appropriate TRIG.- terminal. (Figure 7)

3b. 12V Activation - the Tie-Bar connecting the BATTERY+ to TRIG.+ must first be removed (Figure 5). A ground wire will need to be run from a good chassis ground source to the TRIG.- terminal. The +12V input trigger can then be connected to the appropriate channel TRIG.+ terminal. (Example Fig. 4)

LED INDICATORS

Each relay branch has an activation LED visible through the relay cover which corresponds to the output terminal. The LEDs status can assist with diagnosing wiring problems and open circuits. The LED will be on whenever the corresponding output terminal is active.

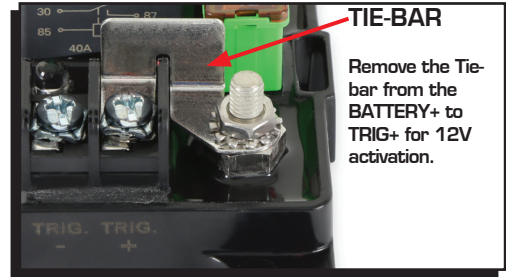


Figure 5 1 Channel Tie-bar removal for Ground activation

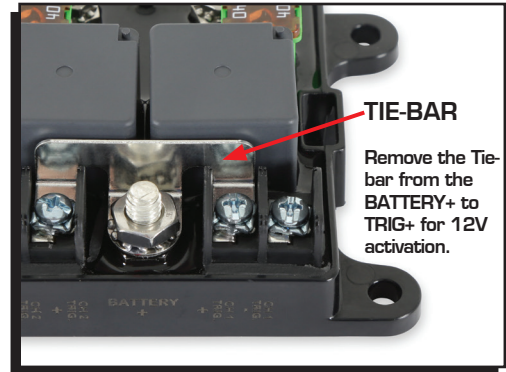


Figure 6 2 Channel Tie-bar removal for Ground activation

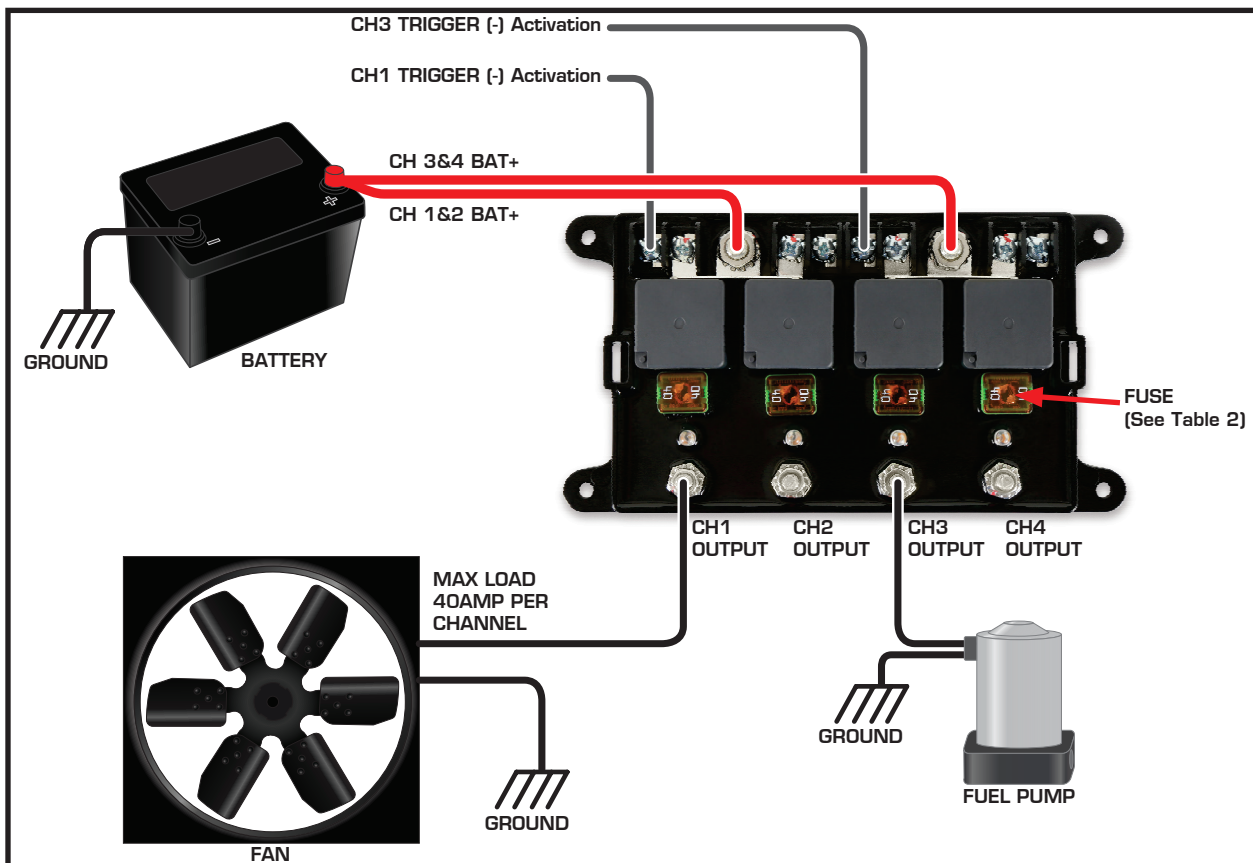


Figure 7 Four Channel Relay - Ground Activation



INSTALLATION INSTRUCTIONS

RELAY FUSES

Each relay is equipped with fused protection on every channel output. The fuse can be changed to match the accessory required Amp rating. Table 2 lists available fuses.

Low Profile JCASE Fuse Selection Guide

Current Rating AMP	Littlefuse Part Number	Housing Color
20	LJCA020	Blue
25	LJCA025	White
30	LJCA030	Pink
40	LJCA040	Green

Table 2 Replacement Fuse Selection Guide

TECH NOTES

Service

In case of malfunction, this MSD component will be repaired free of charge according to the terms of the warranty. When returning MSD components for warranty service, **Proof of Purchase** must be supplied for verification. After the warranty period has expired, repair service is based on a minimum and maximum fee.

All returns must have a Return Material Authorization (RMA) number issued to them before being returned. To obtain an RMA number please contact MSD Customer Service at 1 (888) MSD-7859 or visit our website at www.msdpower.com/rma to automatically obtain a number and shipping information.

When returning the unit for repair, leave all wires at the length in which you have them installed. Be sure to include a detailed account of any problems experienced, and what components and accessories are installed on the vehicle. The repaired unit will be returned as soon as possible using Ground shipping methods (ground shipping is covered by warranty). For more information, call MSD at (915) 855-7123. MSD technicians are available from 7:00 a.m. to 5:00 p.m. Monday - Friday (mountain time).

Limited Warranty

MSD warrants this product to be free from defects in material and workmanship under its intended normal use*, when properly installed and purchased from an authorized MSD dealer, for a period of one year from the date of the original purchase. This warranty is void for any products purchased through auction websites. If found to be defective as mentioned above, it will be repaired or replaced at the option of MSD. Any item that is covered under this warranty will be returned free of charge using Ground shipping methods.

This shall constitute the sole remedy of the purchaser and the sole liability of MSD. To the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representation whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall MSD or its suppliers be liable for special or consequential damages.

*Intended normal use means that this item is being used as was originally intended and for the original application as sold by MSD. Any modifications to this item or if it is used on an application other than what MSD markets the product, the warranty will be void. It is the sole responsibility of the customer to determine that this item will work for the application they are intending. MSD will accept no liability for custom applications.