# **INSTALLATION MANUAL**

#### **Level of Difficulty**

#### Easy

Installation difficulty levels are based on time and effort involved and may vary depending on the installer level of expertise, condition of the vehicle and proper tools and equipment.

## **Electrical Ratings**

Signal circuits	6.0-amps per side
Tail / Running Circuits	3.0-amps total

Check vehicle owner's manual or contact the vehicle manufacturer for more information.

#### Wiring Location(s)

S1 and S2

## Wiring Location Guide\* for SUVs and Vans (S)

S1	Behind driver side taillight housing
S2	Behind passenger side taillight housing
S3	Behind driver side rear access panel
S4	Behind passenger side rear access panel
S5	Behind driver side rear bumper
S6	Behind center of rear bumper
S7	Behind passenger side rear bumper
S8	Under rear floor panel
S9	Behind driver side rear access panel
S10	Behind passenger side rear access panel



\* Representative vehicle shown

Tools Required		
Ratchet	Trim panel removal tool	
Socket, 10mm	Cutting tool	
Socket extension	Wire crimper	
Electrical tape	Wire stripper	

#### **⚠ WARNING**

Do not exceed product rating or tow vehicle lamp load rating, whichever is lower.

The battery connection must be fuse-protected, 10-amp max. Exceeding the product rating can cause loss of warranty, overheating and potential fire.

#### NOTICE

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

All steps must be followed to ensure the product will function properly. Once installed, test for proper function by using a test light or connecting a properly wired trailer.

#### Maintenance

Periodic inspection of all wires and connections should be performed to ensure there is no visible damage or loose connections.

## Step 1

Locate the vehicle's battery in the engine compartment on the driver side and disconnect the negative battery terminal. Be sure to fasten this wire down and away from the battery while completing the installation process.



### Step 2

Starting on the driver side, open the vehicle hatch. Locate and remove the two 10mm taillight fasteners. Remove the taillights by pulling straight rearward. Set it aside.

Locate the vehicle taillight wiring connectors. The connectors will be similar to those on your new custom wiring product. Separate the connectors from the taillight housing taking care not to damage the locking tabs.

Repeat steps 2 and 3 on the other side of the vehicle.







#### Step 3

On the driver side, route the fishwire down between the body and the bumper cover. From under the vehicle you may need to remove the push fastener in the mud flap to locate and attach the fishwire to the housing with the yellow wire. Pull the wire back up and attach to the factory harness. Make sure the connectors are fully inserted with locking tabs in place.

#### **How to Fishwire**

A) Fish wire is a way to push or pull an electrical wire through a blind hole. Make sure the wire is long enough to stick out on the other side.

Insert the fish wire through the blind hole and locate it on the other side.

**B)** Use tape to secure the harness to the fish wire and pull back up.

The fish wire or harness may get hung up on something, if this happens you may have to push back down, wiggle it around or twist the wire to loosen it from what it's hung up on.

Fish wire could be anything from a cut-up wire hanger, stiff wire, rope or string depending on what is needed for the installation.













#### Step 4

Locate a suitable grounding point near the connector such as an existing screw with nut in the vehicle frame or drill a 3/32" pilot hole for the provided screw. The area should be free of rust, dirt and paint. Secure the white ground wire using the ring terminal and provided screw.

#### **MARNING**

Check for miscellaneous items that may be hidden behind or under any surface before drilling to avoid damage and / or personal injury.

#### Step 5

Locate a flat clean surface that is out of the path of spray and debris from the rear wheels and road. Adhere the black converter box using the provided double-sided tape. Failure to mount the box in a protected area can cause loss of warranty, product failure, overheating and potential fire.

#### Step 6

Route the custom wiring harness end with the green wire to the passenger side along the rear bumper. Repeat step 3 on the passenger side using the custom wiring harness end with the green wire. Secure any loose wire with cable ties as needed.







#### Step 7

Route the black power wire from the vehicle battery as shown on the provided 'Powered Converter Lead Instruction Sheet'.

#### NOTICE

Once 12 volt power wire is connected to the harness verify that the harness is functioning by attaching the battery and testing with a test light, 4-flat tester or a functioning trailer.

#### Step 8

Route the 4-flat to the trailer hitch and mount in an easy-to-access location. Secure any loose wires with the provided cable ties.

Reinstall all items removed during install. If it was disconnected at the beginning of the installation, reconnect the negative battery terminal. Install the provided 4-flat dust cover to help prevent corrosion.

#### POWERED CONVERTER LEAD INSTRUCTION SHEET



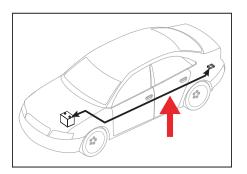
#### **NOTICE**

Illustrations are for reference only. Battery location may differ depending on the vehicle.



#### WARNING

To avoid personal injury or property damage, check for miscellaneous i tems that may be behind or under any surface before drilling.



## NOTICE

- 1. This converter system is to be used only on 12 volt negative ground systems.
- 2. Secure power wire to vehicle chassis using cable ties provided.
- 3. When passing the power wire through sheet metal, use an existing grommet, add a grommet or use silicone to protect the power wire from sharp edges.
- Overall T-connector design may differ from illustration. The illustration should be used for power lead instruction only. Illustration is not to scale.



#### **WARNING**

Route 12 GA wire to vehicle battery location, taking care to avoid any pinch points and hot or rotating components.

