

If adding to an existing installation, please contact [Technical Support](#) to ensure the feature is enabled.

Additional tools you may need include a multi-meter, insulated wire crimper, wire stripper, 12 VDC or 24 VDC weatherproof relay and relay harness, 20ga or larger wire, star washer, self-tapping screw, heat shrinking terminal, in-line fuse holder, diode, heat gun, cable ties, and heat shrink butt connectors.

Installation Overview

The following steps provide an overview of the installation process:

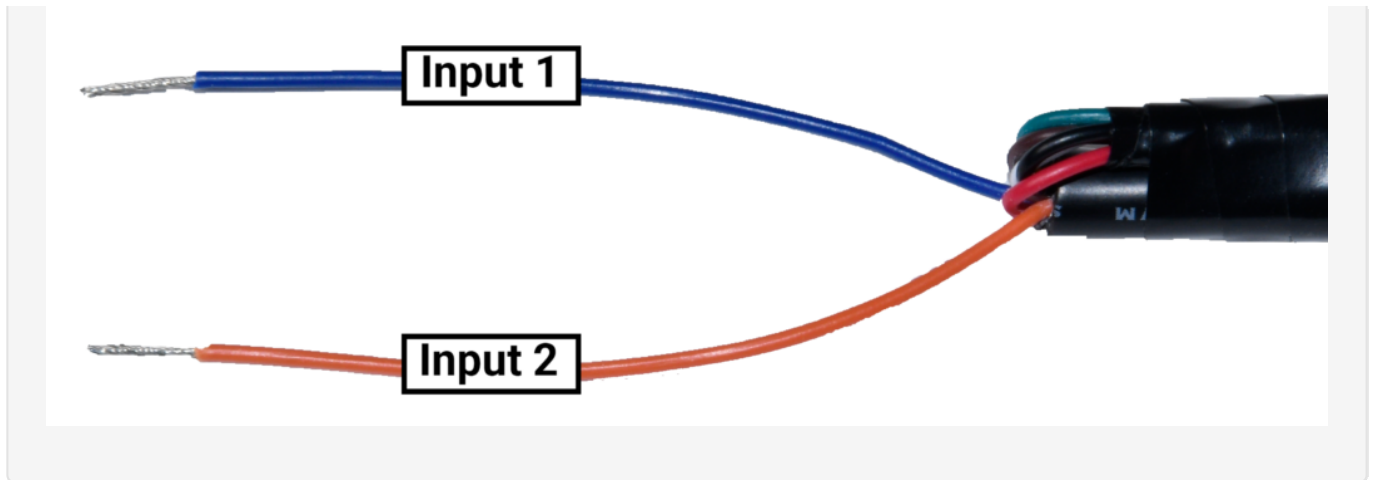
1. Install preparation.
2. In-line fuse installation.
3. Wire connection.

1. Install preparation.

1. At the switch you are looking to monitor, use a digital multi-meter to identify a wire that has a change in voltage/polarity when in the ON and OFF position.
2. Determine which input you will utilize:
 - A. Input 1 Blue Wire = Positive (+) 12 VDC Input
 - B. Input 2 Orange Wire = Negative (-) 12 VDC Input



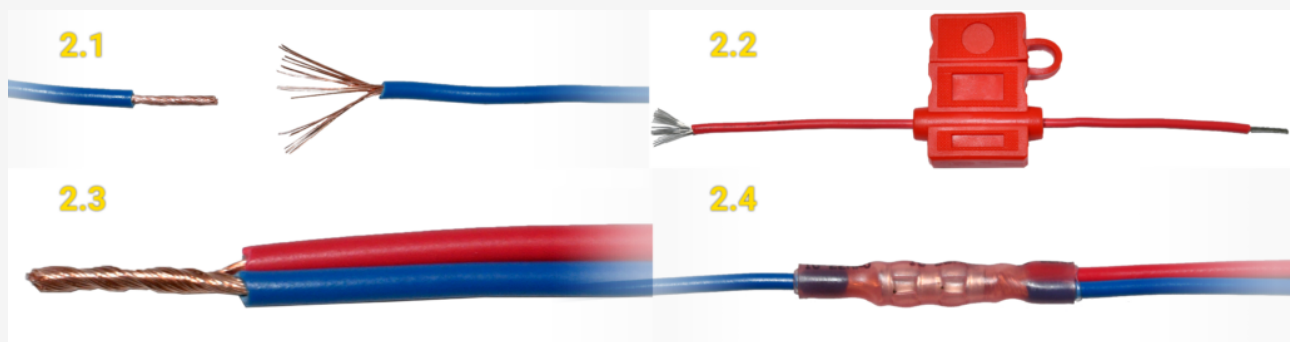
Note. If your asset is a 24 VDC system **OR** the asset has a Power Take Off (PTO), you must use Input 2. In the event you need to change the polarity of your output, refer to **Wire Connection - With Relay Step #1-#3**.



2. In-line fuse installation.

Locate wire strippers, in-line fuse holder, insulated wire crimper, heat gun, and heat shrink butt connector.

1. With the switch in the OFF position and key removed, find a loose section of the switch wire identified, cut the wire, fray one end, and twist the wire strands of the other end.
2. Strip 1/2 in. (12 mm) of insulation from both sides of the in-line fuse holder, fray one end, and twist the wire strands of the other end.
3. Twist the frayed end of the in-line fuse holder and frayed end of the switch wire together.
4. Insert each wire in to the butt connector, crimp, and apply heat.



Note. Every heat shrink butt connector must be heated to make a watertight seal; glue will seep from the butt connector when heated. Use extra care when applying heat as to not damage the wire or any surrounding wires.

3. Wire connection.

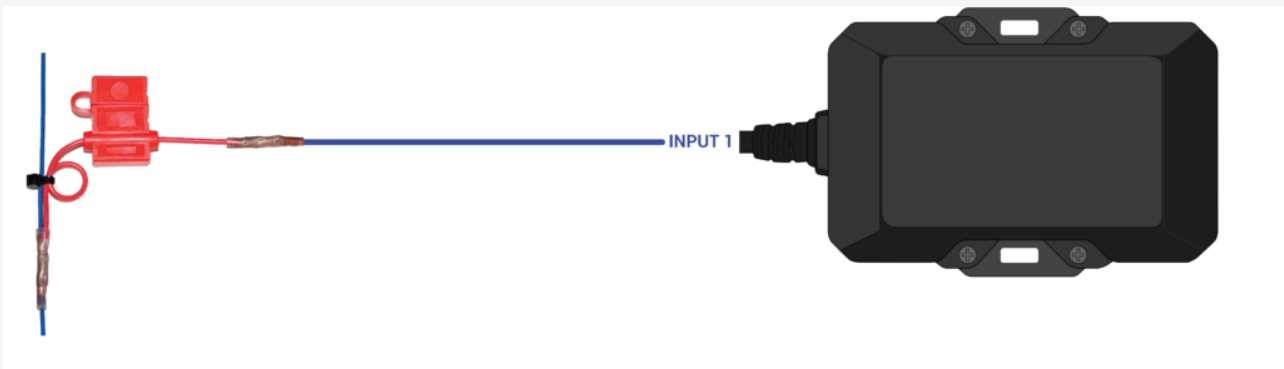
- **Without Relay**



Note. (+)12 VDC Asset Trigger to (+)12 VDC Device Input.

Locate a heat shrink butt connector, insulated crimping tool, and heat gun.

1. Connect in-line fuse wire to the device input by stripping 1/2 in. (12 mm) of insulation from the input wire, twist the wire strands, insert and crimp each wire into the butt connector before applying heat.



- **With Relay**




Note. (+) 24 VDC Asset Trigger to (-) 24 VDC Device Input.

Locate weatherproof relay, relay harness, wire stripper, insulated crimper, heat shrink ring terminal, star washer and three butt connectors.

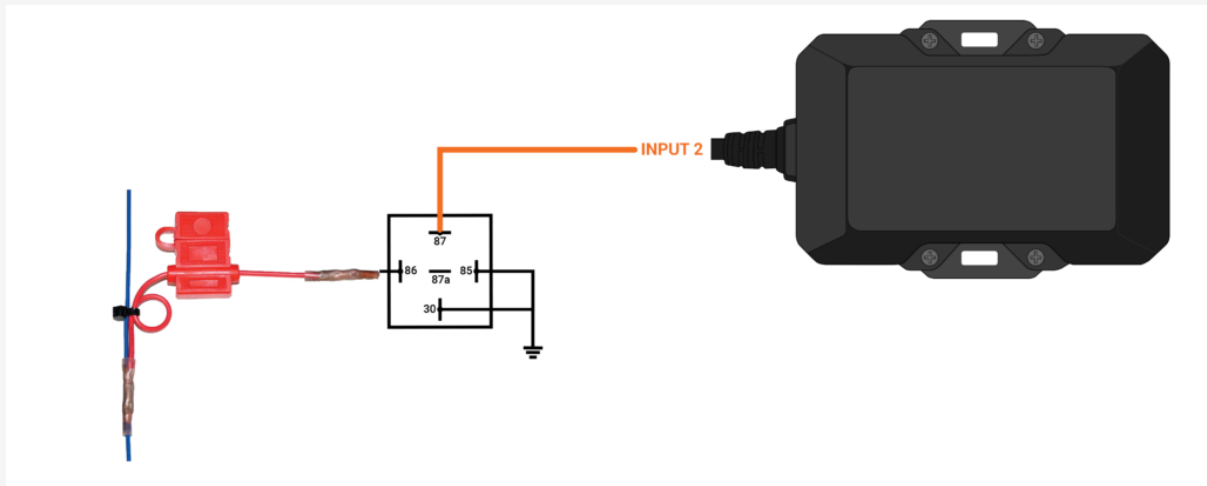
1. Strip 1/2 inch (12 mm) of insulation from each relay harness wire (except 87a), twist the wire strands of 87 and 86, and fray the ends of 85 and 30 before twisting them together.
 - A. For wires **85** and **30**: Locate a heat shrink ring terminal, star washer, and insulated crimping tool; insert wire into ring terminal, crimp, and apply heat before securing the star washer and ring terminal to chassis ground.



Note. If you have to extend this wire OR the connection is spliced into the device ground wire, use 20ga wire or larger along with a heat shrink butt

 connector.

- B. For wire **87**: Locate a heat shrink butt connector and insulated crimping tool; crimp wire 87 to the device Orange input wire (Input 2).
- C. For wire **86**: Locate a heat shrink butt connector and insulated crimping tool; crimp wire 86 to the in-line fuse wire.



- 2. Locate a heat gun, tape and cable ties; apply heat to all butt connectors listed above, connect relay to relay harness, tape off all unused wires, mount relay, apply loom to protect harness and secure wires with cable ties.