



Thank You For Your TurboStart Purchase!

The TurboStart STDN50A Voltage Step-Down Module is designed to work with automotive 16V, DC electrical systems with or without alternators. Many electrical components benefit from higher voltage, but some more sensitive components cannot tolerate the higher than normal voltage found in 16V systems. These components should be connected to the STDN50A module.

If you are not sure if an electrical component will tolerate higher voltage, contact that component's manufacturer.

The STDN50A module is rated at 25 amps continuous with 50 amps surge capacity. Loads should not exceed 25 amps for more than one minute and should never exceed 50 amps. The module is fused at 50 amps.

WARNING: This module gets very hot. <u>Temperatures can exceed 200 degrees Fahrenheit!</u> Mount the unit where it can get good ventilation and keep heat sensitive objects and body parts from contacting the red heat sink during and after use.

Mounting:

Mount the unit in a position that offers good ventilation. Optimal cooling is obtained with the heat sink mounted vertically. The module should be securely mounted to a flat rigid surface.

Wiring:

INPUT(Red Wire)-

Route an 8-gauge wire from the positive(+) terminal on the 16V battery to the **red** input wire on the module.

OUTPUT(Blue & Orange Wires)-

- <u>When not using an alternator</u>- Connect sensitive components to the **blue** wire. This will drop the voltage 2.4 volts and will yield around 14.5 volts on a typical application with a fully charged battery.
- <u>When using an alternator-</u> Connect sensitive components to the **orange** wire. This will drop voltage 3.6 volts and will yield around 14.9 volts on a typical application.

Both output wires can be used simultaneously for advanced applications, but the total load should not exceed the rated limits.

The module heat sink is electrically isolated and does not require grounding.

General Precautions

- Make sure all wires are of adequate size
- Route wires away from hot or sharp objects
- Make sure all connections are clean and secure