

Neutrino installation guide

Version 1.01

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Congratulations on your new Neutrino power distribution and control system. This guide is intended to quickly guide you through the steps required to install your new Neutrino module.

Step 1. Find a suitable location to mount the module. Since the module is waterproof you are free to locate it just about anywhere you like, but it can't be more than 2.5 feet from the battery. Please note that if you decide to install the module where it is exposed to water, cover the terminals with silicone grease. If you need to locate the distribution module more than 2.5 feet from the battery it's ok to splice in additional 8 AWG wire.

Step 2. Connect up the 10 AWG leads to the battery. Black to negative and red to positive. Make sure you don't reverse polarity as this will cause irreparable damage to the module.

Step 3. Run the ambient temperature probe out to a location that is both shielded from direct sunlight and away from sources of vehicle heat.

Step 4. Connect the yellow power sense wire to a convenient circuit that is energized when the vehicle ignition is switched on. Typically this will be a tail light wire. We recommend the use of something like this to make the connection. [Scotchlok 560, IDC Electrical Tap Connector](#)

Step 5. Connect up the various devices and battery charger connections to the 10 position terminal block. The terminals are clearly labeled on the top of the module. Please note that if you use the direct battery charger connection it's essential that you install a <5 amp fuse on the positive leg.

Here's a breakdown of what each terminal does, starting from left to right:

NOTE: It's really important to ensure correct polarity when hooking up devices. It is entirely possible to damage a 3rd party electrical accessory if polarity is reversed. Make sure to connect the -/ground wire to either the chassis or one of the 3 ground terminals on the module. Make sure to connect the +/positive wire to one of the 6 positive terminals on the module.

- a. Ground. One of three terminals that may be used to obtain the ground side of the circuit from the module rather than from the vehicle. This is really handy for simplifying installation and is almost essential when connecting audio devices in order to avoid "ground loop" noise. You can also use this ground or any of the others to connect up the ground leg of your battery charger.
- b. Battery. This is a special input for your battery charger than allows for a direct connection through the Neutrino module to the vehicle battery. It completely bypasses the internal

circuitry. It's important when using this input to remember to install a fuse to ensure safety in the event of a short circuit.

- c. Ground. See item a.
- d. Circuit 6. This is one of the six circuits you can control, and can handle a maximum sustained load of 15 amps.
- e. Circuit 5. This is one of the six circuits you can control, and and can handle a maximum sustained load of 12 amps.
- f. Circuit 4. This is one of the six circuits you can control, and can handle a maximum sustained load of 15 amps.
- g. Circuit 3. This is one of the six circuits you can control, and and can handle a maximum sustained load of 15 amps.
- h. Circuit 2. This is one of the six circuits you can control, and and can handle a maximum sustained load of 20 amps. This is the circuit to use for devices that require extreme amounts of power.
- i. Circuit 1. This is one of the six circuits you can control, and and can handle a maximum sustained load of 12 amps.
- j. Ground. See item a.

Step 6. Secure the module via double stick tape, a tie wrap, a metal band, or any other way that works for you.

Step 7. Download the appropriate smart phone application from the iTunes store or the Android Marketplace. <https://itunes.apple.com/us/artist/arboreal-systems/id889657381>

Step 8. Connect your phone to the module via a Bluetooth wireless connection.

To connect via Bluetooth, make sure Bluetooth is enabled on your phone and launch the Neutrino Controller application. Unlike traditional Bluetooth, Bluetooth 4 LE does not require pairing, and will automatically connect. It takes a few seconds, but once it's connected you will have full access to all Neutrino functionality. (note: there is no problem in using the Neutrino module to power a small USB power converter to power your phone)

Step 9. go to www.arborealsystems.com/support and read/download the Neutrino owner's manual, where complete system operation is explained in detail.

Congratulations. You are now ready to begin using Neutrino!