Thank you for purchasing the

SwapHelper.com Seat Helper

Please solder all wire connections and cover in the included shrink wrap for best performance. Wire nuts, butt connectors and other similar connection methods can lead to intermittent signal issues. These methods are only suitable in temporary testing situations.

Warnings:

1. *Disconnect battery prior to installation! Failing to disconnect the battery could result in damage to your truck and/or Seat Helper!*

2. *Do NOT start your swap under a tight timeline, e.g. starting Sunday afternoon and you need your truck for work on Monday morning. You need to plan to take your time, including double checking your work and diagnosing any issues after installation.*

3. *Do NOT plug the USB into a computer that is also connected to a 120v inverter in the vehicle! Doing so could cause damage to the Seat Helper!*

Opening the box:

Depending on the seat model/year selected at checkout, you will receive a different plug and play harness for your seats.

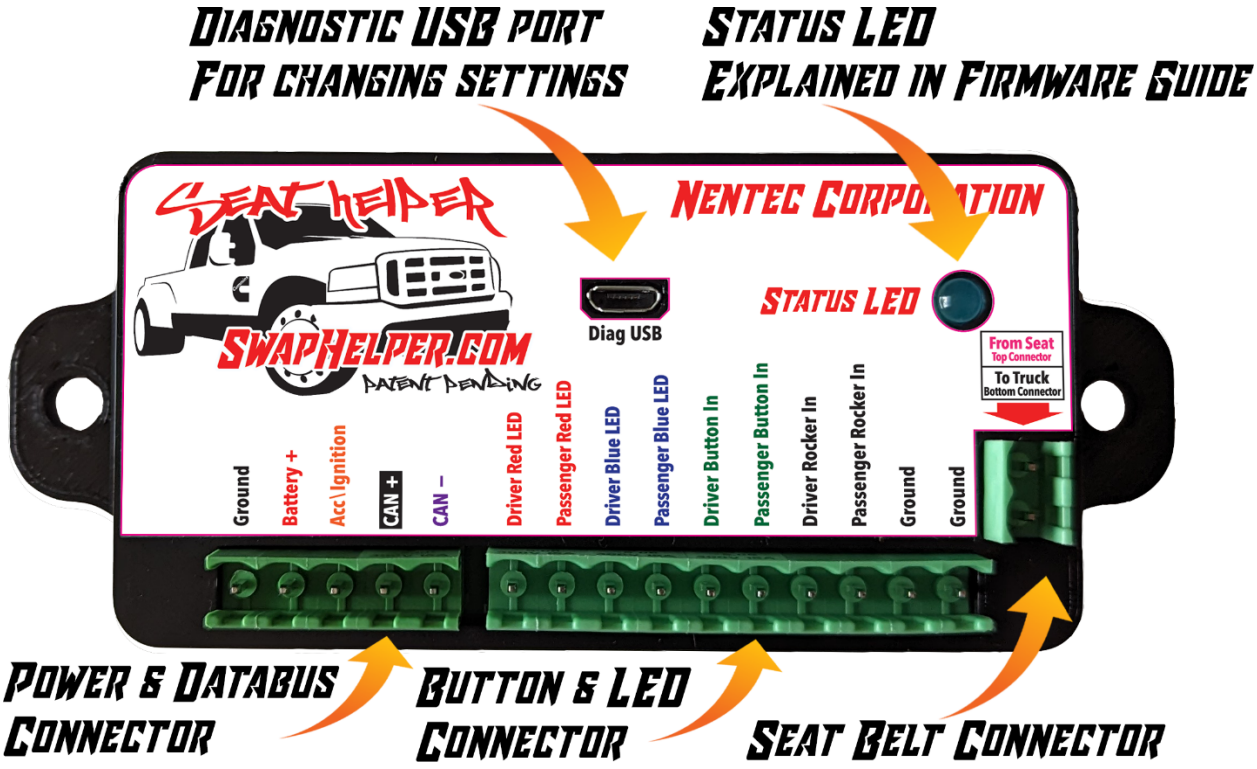
The following items are included with your Seat Helper:

1. Main seat harness
2. Seat Helper Control Module
3. Pre-wired Switch Harness w/ 2x Momentary buttons (built in LEDs)
4. Micro USB cable
5. Add-A-Fuse for ignition tap
6. 2x 30 Amp Fuse Holder (12AWG)
7. 6x Large shrink wraps, 2x Small shrink wraps
8. 6x Large non-insulated 12AWG crimps, 2x small non-insulated 20AWG crimps
9. 2x Mounting zip ties

Review the included items prior to installation and become familiar with them. If any items are missing, please contact us and we will assist you.

Getting to know your Seat Helper:

Your Seat Helper is a sophisticated device that allows you to easily install late model Super Duty seats into just about any car or truck:



Installation:

Disconnect battery prior to starting installation!

It is HIGHLY recommended you watch our unboxing and installation video(s) and read these instructions in their entirety prior to starting your installation! The installation and unboxing video(s) are available here:

Or

https://www.SwapHelper.com/SeatHelper

Main wiring for the Seat Helper:

The wiring of the Seat Helper is very straight forward but must be installed properly to guarantee proper functionality and best performance. Most of the Seat Helper comes pre-wired from the factory, but there are four main blunt cut wires that must be connected by the customer for it to function properly. These four wires consist of:

Ground (Black, connects to ground), 60 Amps

Climate+ (Red, connects to constant 12 volts), 30 Amps

Movement+ (Red, connects to constant 12 volts), 30 Amps

Acc/Ignition (Orange, connects to switched 12 volts), less than 1 Amp

These wires have been stubbed out with 12 AWG (gauge) wire for Ground and Climate+, while Movement+ is 16 AWG wire and Acc/Ignition is 20 AWG wire.

Connecting the wiring for the Seat Helper:

The aforementioned four circuits, except for Ground, must be connected with inline fuses. For Climate+ and Movement+, you have two options based on the vehicle you are installing the Seat Helper in: if your vehicle was originally equipped with power and/or heated seats, you can use the existing 30 amp circuits to power the Seat Helper (diagrams provide in these instructions for some vehicles), or you can run new wiring directly to the battery and fuse the circuits with the included 30 Amp Fuse Holders (12AWG). For Acc/Ignition, you can use the stock "hot in run" from your existing power and/or heated seat wiring, or if not equipped, we include an Add-A-Fuse tap with instructions below for where to connect it.

Connecting the Ground circuit to a high-quality grounding point is imperative and is sometimes overlooked during installations in favor of the positive connections. A poor ground connection will result in poor seat performance. Same as the Climate+ and Movement+, you can connect your ground to the existing seat wiring or you can run your own ground, either to a high-quality termination point or directly to the battery ground.

We have included six 12 AWG non-insulated barrel crimps to connect Ground, Climate+ and Movement+, and two 20 AWG non-insulated barrel crimps to connect Acc/Ignition. To properly use these crimps, you will need a high-quality set of crimping pliers, such as Milwaukee Crimping Pliers SKU# 48-22-6103 or Klein Tools Crimping and Cutting Tool 1005 Crimpers. You may also solder the crimps after crimping the wires together. The final step after crimping and/or soldering is to use the included shrink wraps with a heat gun to cover the joint.

Pre-wired connections:

The Seat Helper comes with three pre-wired connectors: the power & data bus connector, the button & LED connector, and the seat belt connector. All the wiring is color coded and should not need to be changed or modified unless changing the button & LED connector to accommodate different switches and/or LEDs.

The seat belt connector allows you to run the newer seat belt in your older truck. The output, labeled "To Truck", is active low, meaning it pulls to ground when the seat belt is unlatched and is open when the seat belt is latched. If you plan to use

this, for the 99 to 07 Super Duty trucks and Excursions, this (“To Truck”) will connect to circuit 85 Brown/L Blue.

The button & LED connector come pre-wired with momentary buttons that have both a red and blue LED internally.

You can also use momentary or static (latching) rocker switches with the Seat Helper by making use of the Driver/Passenger Rocker input (for the “down” press of the rocker switch) in conjunction with Driver/Passenger Button inputs (for the “up” press of the rocker switch).

Here is a pinout/explanation of the button & LED connector:

Driver Red LED – This is an output and displays three levels brightness to indicate heat for the driver’s side. This is a current limited battery positive output with internal fusing. Only use with LED lighting, and limit current to 50mA or less.

Passenger Red LED – This is an output and displays three levels brightness to indicate heat for the passenger’s side. This is a current limited battery positive output with internal fusing. Only use with LED lighting, and limit current to 50mA or less.

Driver Blue LED – This is an output and displays three levels brightness to indicate heat for the driver’s side. This is a current limited battery positive output with internal fusing. Only use with LED lighting, and limit current to 50mA or less.

Passenger Blue LED – This is an output and displays three levels brightness to indicate heat for the passenger’s side. This is a current limited battery positive output with internal fusing. Only use with LED lighting, and limit current to 50mA or less.

Driver Button In – This is an input for either a momentary switch, a momentary rocker switch or static (latching) rocker switch for the driver’s side. If using a rocker switch, this will be the input for “up” action on the rocker switch. This input is active low, meaning it triggers when pulled to ground.

Passenger Button In – This is an input for either a momentary switch, a momentary rocker switch or static (latching) rocker switch for the passenger’s side. If using a

rocker switch, this will be the input for “up” action on the rocker switch. This input is active low, meaning it triggers when pulled to ground.

Driver Rocker In – This is an input for a momentary rocker switch or static (latching) rocker switch for the driver’s side. This will be the input for “down” action on the rocker switch. This input is active low, meaning it triggers when pulled to ground.

Passenger Rocker In – This is an input for a momentary rocker switch or static (latching) rocker switch for the passenger’s side. This will be the input for “down” action on the rocker switch. This input is active low, meaning it triggers when pulled to ground.

Ground (2x)– These two grounds are the return for the buttons/rockers and LEDs. They are tied together, so it doesn’t matter which one you use.

How to physically route the Seat Helper harness:

The harness should be run under the carpet and come out under each seat as shown here:

Please note, a pre-production harness is shown here with different wire colors

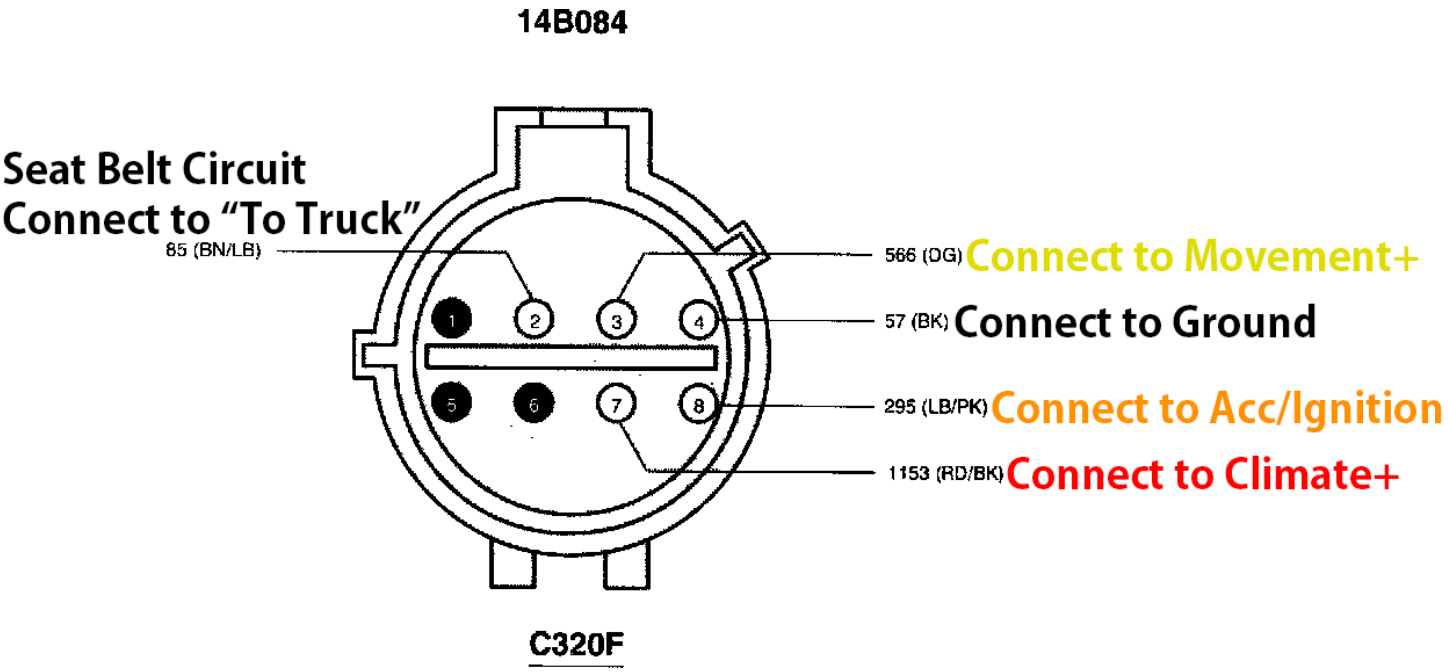
It is recommended the carpet be lifted to allow you to install the harness more easily. There is enough length in the harness to comfortably route it around obstacles and to plug the harness into each seat with some length to spare.

For the Seat Helper module itself, two zip ties are included to mount it under the driver's seat. Mount it on a stationary, non-moving area under the seat and where the seat will not make contact with the module when moving. The power & data bus connector was shipped from the factory with extra length to accommodate different mounting points and can be shortened, if needed. This can be done by unscrewing each terminal, removing the wire, cutting it to the correct length, stripping the end and reinstalling it in the terminal. Make sure the terminals are tight.

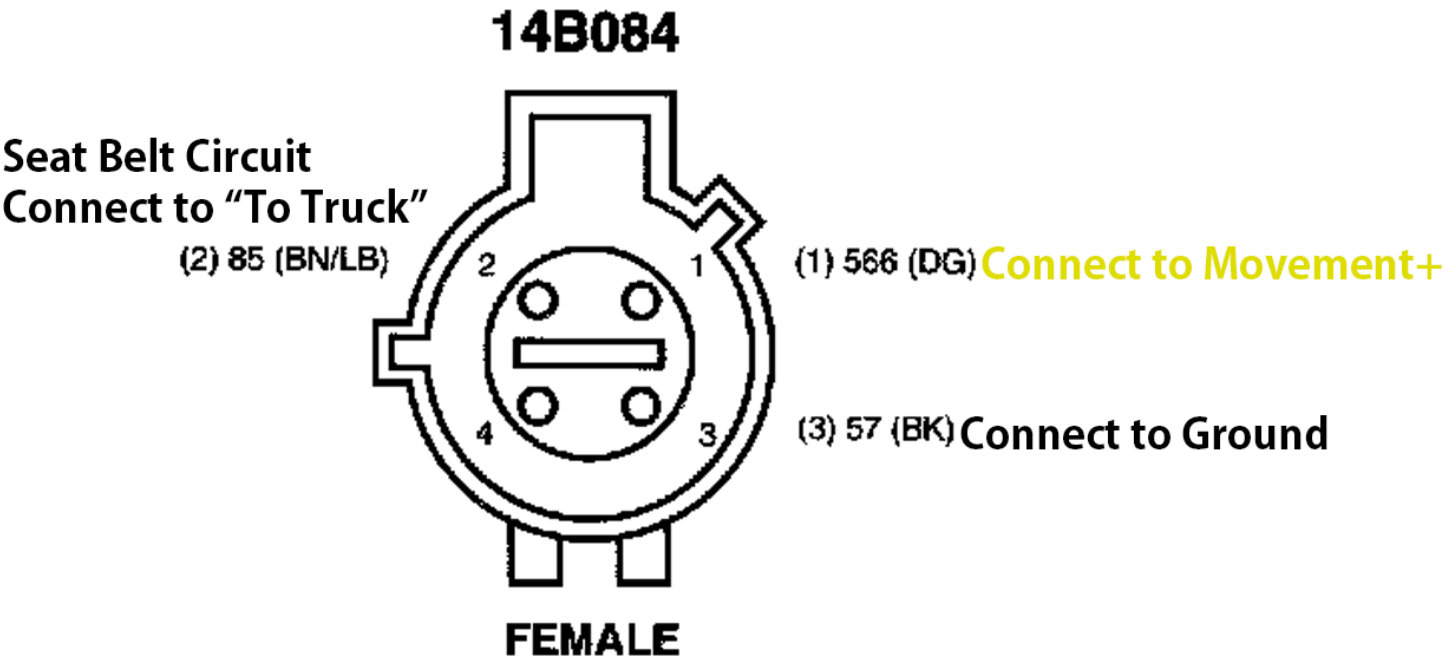
Wiring pinouts:

For trucks originally equipped with heated seats, you can use the existing wiring in the truck. While not required, you can also run larger gauge wire directly to the battery, as discussed earlier.

Wiring for 99-07 Super Duty and Excursions with Heated seats:



Wiring for 99-07 Super Duty and Excursions with Power seats:



For trucks that only had power seat(s), you will need to tap into the ignition circuit as shown below and run Climate+ directly to the battery with the included 30 amp fuse, as discussed earlier. Also, please make sure circuit 57 (pin 3) is of sufficient size.

Wiring for other trucks or trucks without power seats:

In this case, you will need to run each circuit individually using the instructions above in the "*Connecting the wiring for the Seat Helper*" section.

Notes about seat operation:

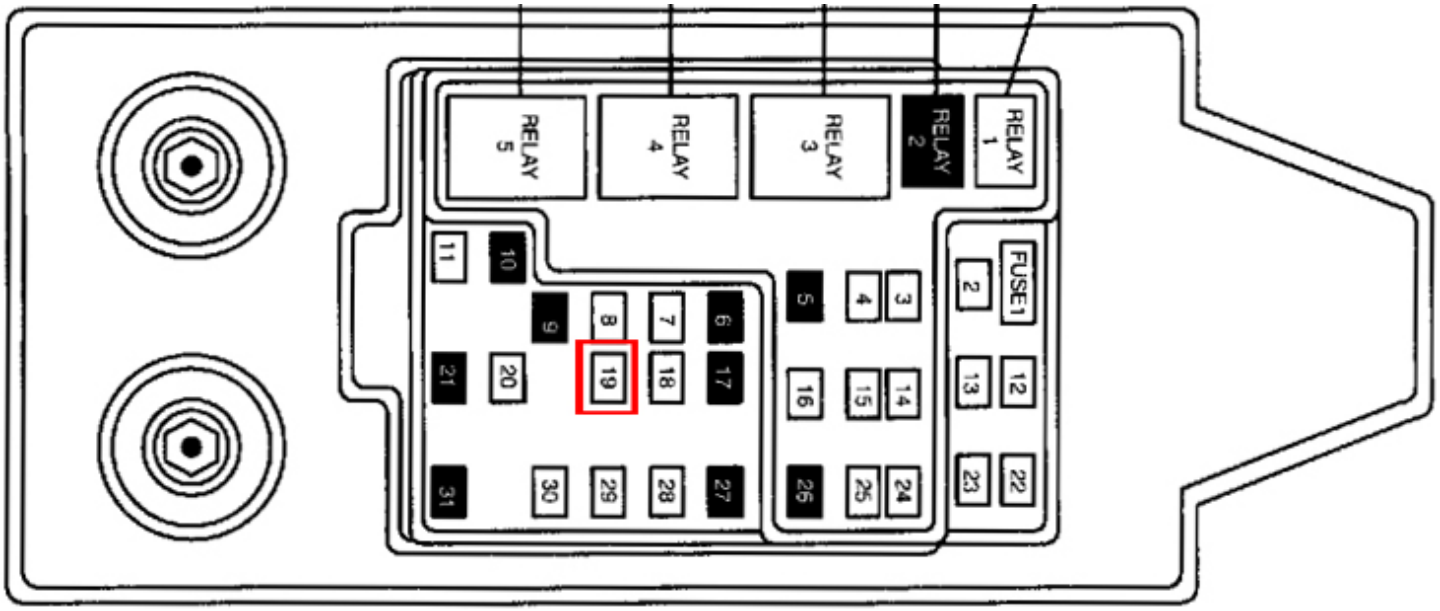
Both seats must be connected for heating and cooling to function. Failure to connect both seats will cause the Seat Helper to show an error.

If the Movement+ is connected but the Climate+ is not, only the passenger seat will move. Both must be connected for the driver seat to have movement.

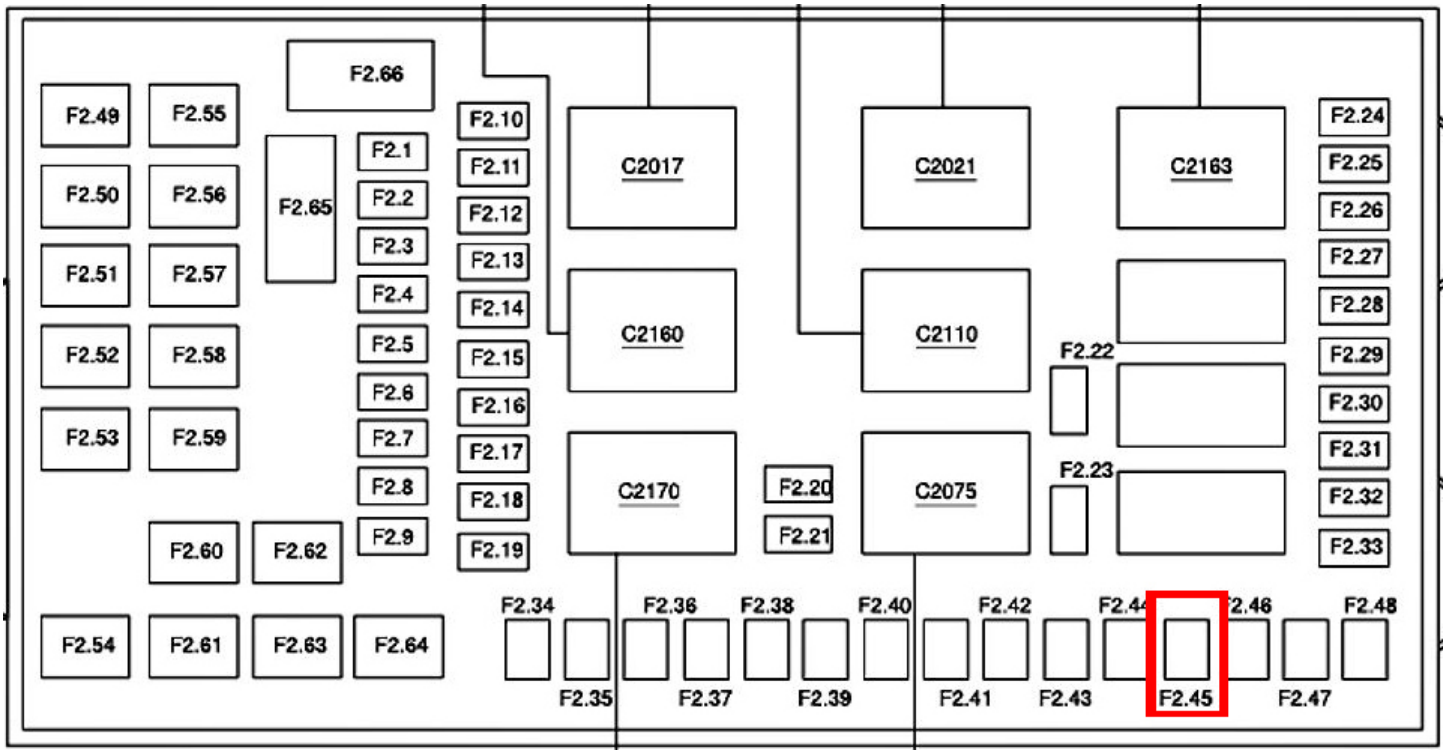
When heat modes are engaged, the seat fans do not run all the time – they tend to run very little so the seats can warm up. This is controlled thermostatically by the Ford modules in the seat. When the seats are in cool mode, the fans will run at all times.

For Super Duty trucks/Excursions not originally equipped with power and/or heated seats, use the included Add-A-Fuse to tap into the ignition circuit on 99 to 07 Super Duty Trucks and Excursions (Circuit 640) for Acc/Ignition:

Tap into Circuit 640 in a 1999 to 2001 Super Duty or Excursion at Fuse 19:



Tap into Circuit 640 in a 2002 to 2007 Super Duty or Excursion at Fuse F2.45:



If you are installing the Seat Helper into a different vehicle than the two listed above, you will need to find an accessory/ignition source to tap into.

Functionality:

Given the advanced functionality of the Seat Helper and the ability to update the functionality remotely, we have included a separate set of instructions regarding functionality. These are included and may be updated from time to time, the latest copy of which, along with the latest firmware, are available from our website at https://www.SwapHelper.com/Seathelper

Troubleshooting:

As mentioned above, it is recommended you visit our website and watch videos regarding the Seat Helper installation and use. The information can be found at:

https://www.SwapHelper.com/Seathelper

Still can't figure out your issue? Shoot us an e-mail for additional support:

Contact@SwapHelper.com

Technical specs:

Operating temperature range	**: -40*C to 85*C (-40*F to 185*F)**
Quiescent Current Consumption	**: 60 uA (.00006 amps) Maximum**
Operating voltage range	**: 6v to 18v, DC only**
Reverse Polarity Protection	**: Yes**
Load dump protection	**: Yes**
Water Resistance	**: IP20**

Return Policy:

Unopened, unused product(s) may be returned within 30 days of purchase date by original purchaser for a refund, minus original shipping charges and a 25% restocking fee. Customer is responsible for return shipping. Used products(s) are not eligible for return but may be repaired or replaced under Warranty policy. Return requests must be made by submitting a request to Contact@SwapHelper.com.

Warranty:

Nentec Corporation (SwapHelper.com) warranties this product to be free of defects in material and workmanship for one (1) year from date of purchase. This warranty is limited to the correction of any such defect, or the replacement of any such defective item, provided that: (a) item(s) was/were purchased from SwapHelper.com or an authorized Nentec Corporation distributor; (b) we are properly notified and consent to the return of the item(s) in question; (c) the item(s) is/are returned with proof of purchase date; and (d) it is found upon inspection by us that the item(s) is/are defective as noted above; (e) the return request is made by original purchaser. This warranty does not cover labor costs, consequential damages, nor does it apply to any item(s) that have been improperly installed, overloaded, altered, or otherwise abused by the customer, its agent(s) or employee(s). Other than the described obligation, we assume no further liability with respect to the sale or use of our products. We make no warranty, expressed or implied, and disclaim any warranty of merchantability or fitness for a particular purpose. Warranty requests must be made by requesting a Return Merchandise Authorization from Contact@SwapHelper.com.