



## 1 SMART BATTERY COMBINER

### Operation:

- The two batteries will be connected together when either battery voltage is above 13.1v for 90 seconds (e.g. during charging). Electrical demand is spread across both batteries.
- The two batteries will be isolated when both batteries are below 12.7v for 30 seconds. All aftermarket accessories connected to the bus bars continue to run from the Aux battery, preventing further drain on the cranking battery. The factory fuse box runs from the cranking battery at all times.
- The optional Engine-On Sensor Cable (part # 226-EOS) allows the batteries to remain connected together with the engine running until the batteries drop below 11.6v. This option is recommended for vehicles with 'smart' alternators that may drop their output below 12.7v even with the engine on.

### Specifications:

- Requires 9-16v for operation
- 300A Continuous, 1500A for 10 seconds
- Sealed to IP67
- Accuracy +/- 0.1v

## SUPPORT

Visit [youtube.com/genesisoffroad](https://youtube.com/genesisoffroad) for product overview, detailed installation instructions, and helpful tips & tricks videos

## 2 CRANKING BATTERY POSITIVE

To factory positive post clamp

## 3 G SCREEN PORT

Connect the optional G Screen monitoring system here

## 4 AUX BATTERY NEGATIVE

To factory negative post clamp

## 5 GROUND BUS BAR

All aftermarket accessory ground wires connect here

## 6 POWER BUS BAR

All aftermarket accessory positive wires connect here

## 7 AUX BATTERY POSITIVE

Feeds the power bus bar

## 8 BOOST SWITCH

On - Manually connects the batteries for jump starting  
Auto - The Combiner will automatically connect/disconnect the batteries based on their voltage levels  
Off - Manually isolates the batteries

## 9 CRANKING BATTERY NEGATIVE

Links 2 battery negative posts together



# GEN 3 DUAL BATTERY SYSTEM FAQ

- **How do I connect a trickle charger to keep both batteries charged?**  
You can connect a charger to your factory positive wire on the cranking battery and the factory negative wire on the aux battery. This way the trickle charger works just like your alternator - it will charge the cranking battery first for a couple minutes, then the smart isolator links the batteries together to charge the aux battery as well.
- **I left my headlights/radio/dome lights turned on, and now the engine won't crank. I thought the system would protect the cranking battery from getting too low?**  
The factory positive wire harness feeds power directly to your fuse box, which means all of the factory circuits are powered from your cranking battery. The isolator does not turn off power to the fuse box. It 'isolates' the 2 batteries from each other, to protect your cranking battery from being drained by your aftermarket accessories that you have wired up to the bus bars. If you accidentally drain your cranking battery, that's when you'd set the boost switch to 'On' to jump start yourself from the second battery.
- **My factory post clamps won't get tight enough on the battery post.**  
Some factory battery post clamps are made of light duty stamped sheetmetal, and are easy to damage. First, make sure the post clamp is fully seated all the way to the bottom of the battery post. Try loosening up the post clamp nut so it is very loose, then use a large socket and gently tap the clamp down onto the post. Now tighten the clamp nut and see if it is secure. You can also try using a battery post shim, available from your local auto parts store, to fill the gap between the clamp and the post, allowing the clamp to tighten down more securely.
- **Do I need an sPOD, or is it unnecessary since the kit has the power and ground bus bars for accessories?**  
The sPOD system from [www.4x4spod.com](http://www.4x4spod.com) is a great compliment to our dual battery system. It allows you to easily add electrical accessories that need a fuse, relay, and a switch. It does have limitations, however, with the amount of current that can be used through any one switch. For example, you can't control a winch with it due to the very high amp draw for the winch. Our bus bars are perfect for connecting accessories that need direct battery power, or for those that come with a wire harness that includes a fuse, relay, and switch.
- **How do I connect an sPOD/winch/lights/air compressor/etc to the dual battery kit?**  
All aftermarket accessories should be connected directly to our power and ground bus bars, so that those devices will not drain down your cranking battery.
- **What size are the bus bar connection points?**  
There are 4 different sizes of connection points on the accessory bus bars to accommodate different size accessory wire lugs. The small screws between the tall studs use #10 ring terminals. The tall studs are 1/4", 3/8", and 5/16" diameter. Connect your accessory wires to the point that most closely matches your wire lugs.
- **How do I connect jumper cables to jump start myself or someone else?**  
Connect to the factory positive wire (on the cranking battery) and the factory negative wire (on the aux battery). This will give you the most direct path to your starter and alternator for the best performance.
- **I have more questions, how can I get help?**  
Check the Tech Help section of our website for lots of helpful information. [genesisoffroad.com/techhelp](http://genesisoffroad.com/techhelp)  
Subscribe to our YouTube channel for our tech tips videos. [youtube.com/genesisoffroad](http://youtube.com/genesisoffroad)  
Check out the 'Questions and Answers' and the 'FAQ' section on each product detail page on our website  
Contact us! [info@genesisoffroad.com](mailto:info@genesisoffroad.com) 901-214-5337

## Be Social!

Show off your installed dual battery system on social media  
for a chance to be featured on our page!