

# Instructions For Installation And Use Of Intelligent Battery Isolator

Two-way intelligent isolator -- mainly suitable for lead acid batteries (12V/24V).

Install a second battery on the car, and the original car generator can be used to charge the added battery. When the car is turned off, the battery will be automatically charged from the added battery to ensure that the starting battery is not discharged. Intelligent battery detection reduces unnecessary switching operations, avoids various faults caused by improper operation, and does not need to switch signal lines from ignition switches. In the actual application of intelligent battery isolator, the pull-in and disconnection are completely intelligently controlled, and the It embodies intelligence and avoids unnecessary battery connection and mutual charging and discharging when the conventional battery isolator is turned on without starting the original car's ignition. It can reach more than 80A. If the main and auxiliary batteries are connected at the same time, the charging capacity is even more than 100A. This is fatal to the generator, battery and wiring harness, and the service life of the auxiliary battery and the main battery Significantly shortened, the smart isolator avoids this kind of event well. The isolator will pull in after the main battery voltage reaches 13V/2 minutes or 13.8V/1 minute after the original vehicle voltage rises and the charging capacity drops. Stagger the highest peak of charging. It has a good protective effect on generators, batteries and wiring harnesses. Some brands of battery isolators will be disconnected under high current load for a short time, or cannot be connected to the exhausted large-capacity battery pack due to the rapid drop in voltage. 12/24V battery isolators are not simply based on battery voltage and fixed Delay, but will judge the trend (voltage rise or fall), only when the reverse trend exceeds a certain time, the reverse operation will be performed. The delay time is determined by the voltage change trend. In the case of high current discharge, the same applies to the battery isolator Will make intelligent judgments, and will not disconnect the auxiliary battery due to excessive load momentary current, such as electric winches, super speakers, inverters, etc.

No voltage loss (no voltage drop): Low working current, 30mA when pulled in. Electricity is extremely precious in Rvs and other equipment. In order to maximize energy saving, we choose High-tech products, the advantage lies in power saving, only needed when operating The tiny current does not consume energy at all when the relay is held.

The battery connector is an automatic parallel connection controlled by a microprocessor.

Bottle group relay (no need to open the switch and other human actions), when its When the voltage of a battery in one group reaches a predetermined value (the battery is charging), The isolator pulls in, the two sets of batteries are connected in parallel, when the voltage When the value is lower than the floating charge value (the battery is discharging), the battery pack is disconnected open. Here, the conventional isolator is used to give the auxiliary battery intelligently.

Disadvantages caused by charging. Conventional isolator, if you want to To charge the main battery, you must turn on the switch. At this time, the original car Electrical appliances will work, the generator will start to generate heat, and this When the generator does not rotate to dissipate heat, it wastes energy and takes a long time Work will damage the original car generator.

Battery isolator is the best substitute for diode separator, Its main feature is that there is no voltage loss, generator or battery charging The electrical voltage does not need to be increased.

Priority start battery:

In a typical setup, the generator is directly connected to the starter battery, and the auxiliary battery pack and other batteries are connected to the starter battery through the battery isolator connector. When the isolator learns that the starter battery has reached a predetermined voltage, they can be connected in parallel at the same time to connect other batteries. Group charging.

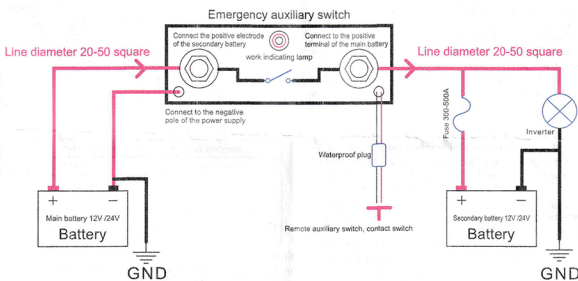
Two-way voltage sensing and dual power supply:

The isolator senses two sets of batteries at the same time. For example, when the charger is charging the auxiliary battery set, the battery isolator will also work. Charge the main battery. Both sets of batteries can supply power to the isolator; when the auxiliary battery is charged with solar energy, the isolator will be closed after the voltage of the auxiliary battery reaches 13V/2 minutes, and the main battery will be charged at the same time to achieve bidirectional function; Parallel connection: It can be connected by a switch in the manual state. This function is used in emergency situations such as the starting battery is discharged or damaged. Operation method: Press the red switch on the isolator for more than 3 seconds, and you can let go when you hear the sound and the light is on. At this time, the main and auxiliary batteries are connected. After a delay of 60 seconds, it will automatically switch to the automatic mode. Operation. It can also be connected to a spare auxiliary starter extension cord, and extend it to a suitable position to install a jog switch (only a normally open jog switch) to realize remote control (remote auxiliary switch is not provided, with interfaces and connectors, optional With switch).

Installation instructions:

1. The isolator can be used in a 12V or 24V system with a common negative electrode for dual batteries. Automatic adaptation: Automatically detect and adapt to the 12/24V battery voltage system. Both conventional two working voltage vehicles can be installed directly and mutually installed. No need to adjust and replace. The applicability is more powerful.
2. Install the isolator near the battery of smaller capacity (usually the starter battery), and fix the dry and dry position away from the heat source.
3. Preparation of the power line: According to the installation length, use a red power line of 20 square meters or more, cut 2 cables of appropriate length, and connect the cables to the terminals, and also connect the black power line to the terminal, and use the black power line to connect The negative electrode of the auxiliary battery is connected to the common ground (frame).
4. The isolator is equipped with a grounding wire. Connect the ground terminal of the isolator to the common ground (frame).
5. In the automatic mode, when the two battery voltages are lower than 10V, the isolator cannot work. When the voltage of one battery is 0V, the isolator cannot pull in, which effectively protects the charger and the line. It can be connected in auxiliary functions.
6. When the power is turned on for the first time, the indicator light flashes for 6 seconds to enter normal operation. When the isolator is closed, the indicator light is always on; when the isolator is isolated, it flashes once every five seconds; when it is ready to close, it lights up twice every five seconds; Dim twice every five seconds when preparing to disconnect;

The installation diagram of dual battery/battery isolator is as follows:



The working current of the smart isolator is 80-400A (please check the actual amperage marked on the isolator), and the maximum current is 160A-800A (double the value of the marked amperage) for 30 seconds. The charging current of all cars can be satisfied. However, the current difference in starting with the auxiliary battery power is greater. (The audio modification is about 30A, the starting current of normal small cars is about 160A, medium cars are above 200A, and the starting current of large cars can reach more than 300A), 150A-200A is most suitable for economical motorhomes, off-road enthusiasts, cross-country activities, etc. It can be used on products that require general and power saving and energy saving. It is wasted if the spare battery of the audio system is modified with an isolator above 100A. Don't choose the cheapest and the most expensive, just choose the right one, and choose the one that suits you is the best. The company develops a full range of products on its own, from 80A-400A isolators of different levels, suitable for automobiles, yachts, RVs, large off-road vehicles, special equipment, solar base stations, ships, and airplanes. Please choose them reasonably.