## Installation

## **Dual Battery Relay**



### Terminals:

30	+Battery Aux (12V)
87	+Battery Main (12V)

85 -Battery GND 86 Manual Link (to GND)

DBR open with control board

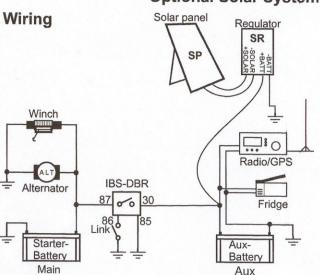


# **Terminal Configuration**



IBS-DBR

# **Optional Solar System**



## **Users Manual**

The IBS-DBR is an ultra compact microcomputer controlled high performance Dual Battery Relay offering 200Amp continuous and 500Amp inrush current capability. The DBR offers the latest inbuilt IBS-RBM (Relay Booster Module) feature to perform a link start from auxiliary battery (activated with an external switch to GND) if the starter battery has failed. Easy to understand LEDs indicate all possible functions. Due to its easy setup the DBR is simple to be installed. In combination with IBS or DBi-DBS very powerful multi battery systems can be configurated. The built in trailer battery recognition detects if a battery is present, otherwise it disengages the link function.

#### LED Status indication Green LED

Green LED

Flashing: DBR operational

On: Batteries linkedOff: Batteries not co

Batteries not connected

Red LED

Off: Everything OK

On: Batteries manually linked by external switch

1xFlashing: Battery Main or Aux is low

2xFlashing: Relay defective

3xFlashing: Main battery missing

4xFlashing: Aux battery missing

### Bi-directional Automatic Battery Link

While the engine is running the Main and Aux batteries are linked together for parallel charging from the alternator (green LED is on). If the engine is stopped, the two batteries will be disconnected automatically with some delay (depending battery status) and the green LED starts flashing. Appliances as fridges, lights, compressors, inverters are now safely fed from the Aux battery. Extra charge on Aux battery (Solar) is detected and batteries are linked (green LED is on).

## Manual Battery Link

In an emergency situation (defective or empty Main Battery) or in case of higher power consumption the two batteries (Main & Aux) may be linked together by activating the external link switch for 30 Min.(red LED is on). After the 30 Min. the system returns to the automatic mode. During this 30 Min a new activation of the external switch starts again the 30 Min. time delay. The Load Sharing Function with the manual battery link reduces the stress on alternator, wiring and the batteries in conjunction with the use of electrical winches.

## Winch application

Connect an electrical recovery winch to the main battery as shown in the wiring diagram.