



## Description

This unit when used between two batteries it is an isolator. It isolates the main battery from the second battery and does not allow the second battery to power car electronics or feed into the starting the car unless emergency manual Over-Ride Connection is activated.

It only allows charging the second battery only when the starting battery is full. It also diverts excess power from the alternator to run equipment that feeds from the second battery. It prevents excessively large charging current dumping into the depleted second battery from the starting battery.

When used with one battery and a load, it acts as a low voltage cutout to keep the battery from over discharge according to you selected settings. It is then termed as a Battery Protector.

There are 10 pairs of cut-in and cut-out voltages covering most common applications and various types of battery.

A Micro-Processor monitors the terminal voltages at all times and controls the on-off function according to the selected pairs of on and off voltages with tight tolerance. Additional intelligent self recoverable protections have been added to this new model to ensure long service life even in harsh operating conditions.

## Features

- MCU controls with FET, no moving parts, all solid state, extremely low standby current and voltage drop.
- 10 pairs of disconnect and re-connect voltages to select covering most types of lead acid battery and the Lithium Fe Phosphate battery.
- Intelligent self recoverable protections in Over temperature, Over voltage and Over current .
- Wide operating temperature range from -40°C to +60°C
- Emergency manual Over-ride to connect two batteries to supply extra power to boost the starting of your car.
- Charge the second battery only when starting battery is full
- When used with a single battery, it acts as a low voltage cut-out to keep the battery from being overdrawn.

## Specifications

MODELS	SSB-2112	SSB-2212		
BATTERY VOLTAGE SYSTEM	12VDC	24VDC		
ISOLATOR SETTING	Tolerance: $\pm 0.1Vdc$ for 12Vdc sys.	Tolerance: $\pm 0.2Vdc$ for 24Vdc sys.		
LVD = Cut Out    LVR = Cut In	LVD	LVR		
Mode 0	10.5V	12.9V	21.0V	25.8V
Mode 1	10.9V	13.0V	21.8V	26.0V
Mode 2	11.2V	13.1V	22.4V	26.2V
Mode 3	11.5V	13.2V	23.0V	26.4V
Mode 4	11.9V	13.3V	23.8V	26.6V
Mode 5	12.1V	13.4V	24.2V	26.8V
Mode 6	12.4V	13.5V	24.8V	27.0V
Mode 7	12.6V	13.6V	25.2V	27.2V
Mode 8	12.8V	13.7V	25.6V	27.4V
Mode 9	13.0V	13.8V	26.0V	27.6V
ON/OFF Delay Time for Isolator Mode	15 seconds			
PROTECTION				
Low Voltage Protection (No Delay)	8.5VDC $\pm 0.5VDC$		17VDC $\pm 1.0VDC$	
Over Voltage Protection	18.5VDC $\pm 0.5VDC$		34.5VDC $\pm 1.0VDC$	
Over Temperature Protection	Yes			
Protection Current (Start Point)	140A			
CONTINUOUS OUTPUT CURRENT	100A			
MAXIMUM OUTPUT CURRENT (delay 10-60 seconds)	120A			
OPERATION CURRENT CONSUMPTION (LED ON)	10mA			
IDLE CURRENT CONSUMPTION (LED OFF)	7mA			
VOLTAGE DROP WITH 100A (MAIN BATT. to AUX. BATT.)	250mV			
OPERATION TEMPERATURE RANGE	-40°C to +60°C			
OVER-RIDE FEATURE	YES			
INDICATION BY LED (TWO COLOR RED AND GREEN)	YES			
APPROVAL	CE EN 61000			
DIMENSION (L x W x H)	222x75x50 mm    8.7x3.0x2.0 inch			
WEIGHT	650g    23oz.			

■ All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

■ SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE