SSDC-210 ISOLATED SWITCHING MODE DC-DC CONVERTER

USER'S MANUAL

INTRODUCTION

SSDC-210 is a high quality 24V-13.8V Isolated DC-DC Power Converter primarily designed for 13.8V DC powering of automotive and marine electronic equipment. It is implemented by using Switching Mode Power Supply technology to make it generate less heat and hence higher efficiency. Advanced design, quality production control and sturdy construction assure continue stability and reliability.

FEATURES

- **1.** Overload Protection: When the output current is being over the limitation, the overload circuitry is activated and the output voltage and current are reduced to protect the unit.
- **2.** High RFI Stability: The unit is designed for high protection circuitry against RFI (Radio Frequency Interference) provides a stable operation without affected by RFI.
- **3.** Isolated input and output.

FRONT PANEL AND REAR PANEL



- **1.** OUTPUT CABLE.
- 2. POWER INDICATOR: Lights up when the unit is activated.
- 3. INPUT CABLE.

CAUTION

- **1.** DO NOT use the unit for the equipment requires current input that higher than the designed value otherwise it may damage the unit.
- 2. DO NOT use the unit for charging battery.
- **3.** DO NOT use the unit for lamps or motorized equipment that require high current input at starting as it may damage the unit.
- **4.** When the fuse is broken, DO NOT replace the fuse before ceasing the problem. The value of the fuse taken in place must match the assigned value.
- **5.** DO NOT feed the voltage other than 22-30V DC otherwise damage the unit. The input voltage range specified is the range of the operating voltage.
- 6. MUST place the unit at a place of well air ventilation, heat is generated during operation.
- **7.** NEVER touch the heat sink panel, as it may be burn your hand when there is component failure.
- 8. DO NOT feed a voltage source into the output cable, it may damage the unit.

9. BE SURE wiring connections otherwise it may damage the unit. Red cable is for INPUT (+) and Black cable is for INPUT (-). Red cable is for OUTPUT (+) and Black cable is for OUTPUT (-).

CONNECTION AND OPERATION

- 1. Connect the Input Red Cable to positive terminal (+) and the Input Black Cable to negative terminal (-) of the 24V DC Battery (make sure the battery is not empty) firmly, POWER INDICATOR lights up.
- **2.** Turn OFF the equipment to be operated and connect the Red (+) output cable of the unit to the positive (+) polarity input of the equipment. Connect the (-) output cable of the unit to the negative (-) polarity input of the equipment.
- **3.** Turn ON the equipment to be powered.
- 4. When the equipment will not be used again, turn OFF the equipment first and then remove the connection between the equipment and the unit.
- **5.** If the power indicator does not light up or becomes dimmer and the unit has no output voltage when the battery (not empty) is connected, the unit may be under the condition of overload. Disconnect the equipment and check the unit for working properly. If the unit work properly, check the equipment that causing the problem and DO NOT connect the equipment that causing the problem. If the unit does not work properly, send it back to your dealer for checking and repairing.

SPECIFICATIONS

OUTPUT VOLTAGE:	13.8V±0.5V DC
OPERATION VOLTAGE:	22-30V DC
OUTPUT CURRENT:	8A
MAX. OUTPUT CURRENT:	10A
RIPPLE & NOISE (P-P):	<35mV
LINE REGULATION (22-30Vdc):	0.2%
LOAD REGULATION (0~100% Load):	2.5%
NO LOAD CURRENT:	80mA
FUSE RATING:	10A
EFFICIENCY:	≥86%
CONNECTION METHOD:	Output Cables
DIMENSION (W×H×D):	125×47×120 (mm)
WEIGHT:	0.65Kg