SSDC-240 ISOLATED SWITCHING MODE DC-DC CONVERTER

USER'S MANUAL

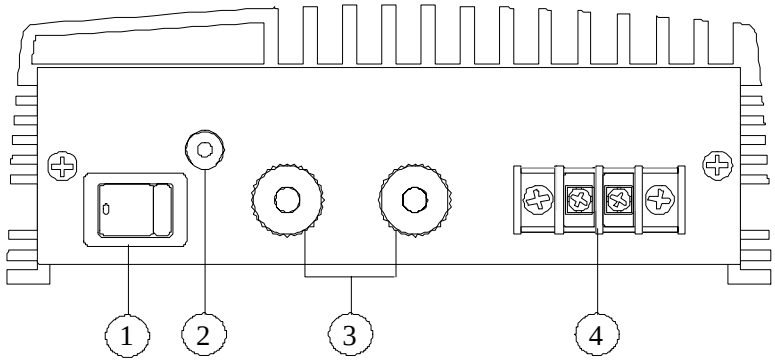
INTRODUCTION

SSDC-240 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.
4. Thermal control cooling fan speed.

FRONT PANEL



1. POWER SWITCH: Switch ON/OFF the unit.
2. POWER INDICATOR: Lights up when the unit is activated.
3. SCREW-ON OUTPUT TERMINAL: Full load output terminal.
4. 2–WAY TERMINAL BLOCK: Max. 15A output terminal.

Note: 1. The total output current of all terminals must not exceed the output current as listed on the specifications next page.
2. The INPUT CABLE and the COOLING FAN are located on the rear panel.

CAUTION

1. **DO NOT** use the unit for the equipment requires input current higher than the maximum output current of the unit otherwise 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 large input current at start-up 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 22-30 VDC otherwise damage the unit. The input voltage range specified is the range of the operating voltage.
6. 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 burn your hand when there is component failure.
8. **DO NOT** feed a voltage source into the output terminal, it may damage the unit.
9. **MAKE SURE** the wiring connections are correct, otherwise damage the unit or your equipment.

CONNECTION AND OPERATION

1. Switch OFF the unit.
2. Connect the Input Red Cable to positive terminal (+) and the Input Black Cable to negative terminal (–) of the 24V DC Battery firmly. (Make sure the battery is not empty.)
3. Turn OFF the equipment to be operated and connect the Red/(+) output terminal of the unit to the positive (+) polarity input of the equipment. Connect the Black/(–) output terminal of the unit to the negative (–) polarity input of the equipment.
4. Switch ON the unit, POWER INDICATOR lights up, then turn ON the equipment to be powered.
5. When the operation is finished, turn OFF the equipment first and then switch OFF the unit.
6. 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 and power is ON, the unit may be under the condition of overload or over voltage. 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 to the unit again. 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
CONTINUOUS OUTPUT CURRENT:	35A
MAXIMUM OUTPUT CURRENT:	40A
RIPPLE & NOISE (PEAK TO PEAK):	120mV
LINE REGULATION (22~30VDC):	50mV
LOAD REGULATION (0~100% LOAD):	250mV
EFFICIENCY:	≥84%
OUTPUT CONNECTION:	Screw-on Terminal and 2-Way Terminal Block
OPERATION VOLTAGE:	22-30V DC
DIMENSION (W×H×D):	156×57×240 (mm)
WEIGHT (APPROX.):	2.2Kg