SDC-210 SWITCHING MODE DC-DC POWER CONVERTER

USER'S MANUAL

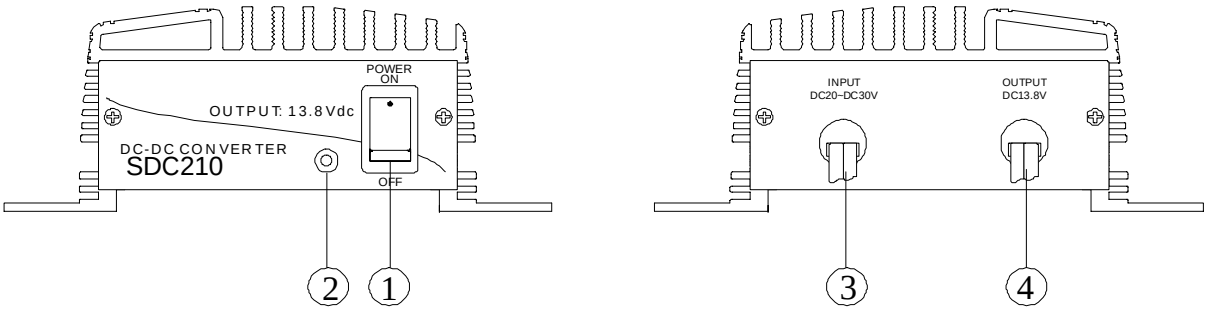
INTRODUCTION

SDC-210 is high quality 24V-13.8V 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 over the limitation, the overload circuitry will be triggered. The output voltage and current are reduced to protect the unit.
2. Over Voltage Protection: When the output terminal appears over the voltage output limit, the over voltage protection will be triggered and the output voltage will be cutoff to protect the unit and your equipment.
3. High RFI Stability: The unit is designed for high protection circuitry against RFI (Radio Frequency Interference) provides a stable operation without affected by RFI.

FRONT PANEL AND REAR PANEL



1. POWER SWITCH: Switch ON/OFF the unit.
2. POWER INDICATOR: Lights up when the unit is activated.
3. INPUT CABLE.
4. OUTPUT 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 type of the fuse taken in place must be the same as the original one.
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. DO NOT switch ON the unit when it is full loaded as it may damage the unit.
7. MUST place the unit at a place of well air ventilation, heat is generated during operation.
8. NEVER touch the heat sink panel during the unit is operating. The heat sink may be heated up and burn your hand.
9. DO NOT feed a voltage source into the output cable, it may damage the unit.
10. BE SURE wiring connections otherwise it may damage the unit. White cable is for INPUT (+) and the attached Black cable is for INPUT (–). Red cable is for OUTPUT (+) and the attached Black cable is for OUTPUT (–).

Note : The ground (negative polarity, input and output negative polarities are common.) of the unit is connected to the case.

CONNECTION AND OPERATION

1. Switch OFF the unit.
2. Connect the Input White 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.
3. 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 Black (–) output cable of the unit to the negative (–) polarity input of the equipment.
4. Switch ON the unit, POWER INDICATOR lights up, then switch ON the equipment.
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. 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
OUTPUT CURRENT:	8A
RIPPLE & NOISE (R.M.S):	18mV
LINE REGULATION:	20mV
LOAD REGULATION:	500mV
EFFICIENCY:	≥86%
OUTPUT CONNECTION:	Output Cables
OPERATION VOLTAGE:	22-30V DC
DIMENSION (W×H×D):	125×47×120 (mm)
WEIGHT:	0.65Kg