

# SWITCH MODE DC-DC POWER CONVERTER

## USER'S MANUAL

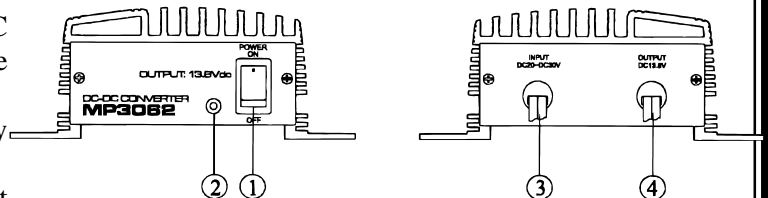
The Switch Mode DC-DC Power Converter is high quality 24V-13.8V DC-DC Power Converter primarily designed for 13.8V DC powering of automotive and marine electronic equipment. Switch Mode Power Supply technology enables it to generate less heat and thus convert the power at higher efficiency. Advanced design, quality production control and sturdy construction assure continued 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. **Over Voltage Protection:** When the output terminal appears over the voltage-output limit, the over voltage protection is activated and the output voltage is shut down 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.
  1. **DO NOT** use the unit if the equipment requires current input that higher than the designed value otherwise it might damage the unit.
  2. **DO NOT** use the unit for charging a 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** replaces the fuse before ceasing the problem. The value of the replaced fuse must match the assigned value.
  5. **DO NOT** feed the voltage other than 22-30V DC otherwise it may damage the unit. The input voltage range specified is the range of the operating voltage.
  6. **DO NOT** switch ON when it is fully loaded as it may damage the unit.
  7. **DO** place the unit at a place of good air ventilation. Heat is generated during operation.
  8. **NEVER** touch the heat sink panel when 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. **BESURE** the wiring connections are correct 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 (-).
- 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 Red Cable to positive terminal (+) and the Input Black Cable to negative terminal (-) of the 24V DC Battery 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 (-) output cable 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 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 works properly, check the equipment that is causing the problem. If the unit does not work properly, send it back to your dealer for checking and repairing.



### 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

### SPECIFICATIONS

Output Voltage:	13.8V±0.5V DC
Output Current:	8A
Ripple & Noise (RMS):	25mV
Line Regulation:	20mV
Load Regulation:	500mV
Efficiency:	≥86%
Output Connection:	Output Cables '
Operating Voltage:	22-30V DC
Dimensions (WxHxD):	125x47x120 (mm)
Weight:	0.65Kg



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