

DC – DC CONVERTER

DD105

DD107

OPERATING INSTRUCTION

■ SAFETY PRECAUTIONS

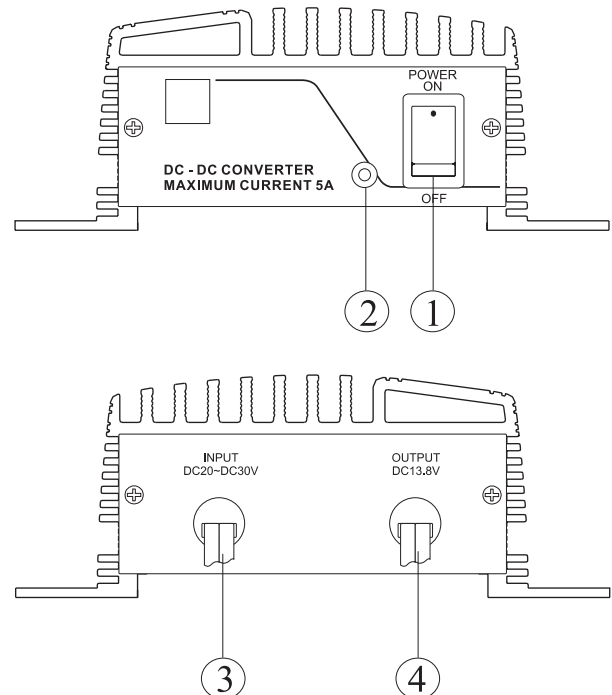
GENERAL

- 1) Please read through this operating instruction carefully and follow the instruction to prevent from abuse or misuse. This instruction must be kept to refer anytime in need.
- 2) The DD-105 and the DD107 are specially designed DC-DC converter to use DC13.8V operated radio equipment sourcing from DC24V outlet providing 5A continuous operation (DD105) or 7A continuous operation (DD107).
Note : Continuous operation to be 8(eight) hours under 24V input at 25°C.
NO RESPONSIBILITY is extended to other than above applications and/or use.
- 3) Over Voltage Protection
When DC16V $\pm 0.5V$ is appeared at the output terminal, the input voltage will be automatically shut down to protect the unit.
- 4) Over Current Protection
When the output current comes over the limitation, the output voltage and current will be automatically reduced to protect the unit.

■ CAUTION

- 1) **DO NOT** use for equipments require higher current input than the designed value otherwise it may damage the unit.
- 2) **DO NOT** use this unit for charging battery.
- 3) **DO NOT** use for lamps or motorized equipment which require high current input at starting as it may damage the unit.
- 4) **DO NOT** replace the fuse before ceasing problems and the assigned value of fuse must be taken in place.
- 5) **DO NOT** feed input voltage other than DC20V – DC30V as it may damage the unit. The input voltages specified here are for the purpose of operationable application only.
- 6) **DO NOT** start unit while the radio is being transmitted as it may damage the unit.
- 7) **NEVER** touch the heatsink panel during the unit is powered. Touching it may burn your hands or part of your body by high temperature.
- 8) **NO DC24V** output can come out from the input when feeding DC12V to the output.
- 9) **BE SURE** wiring connections otherwise it may damage the unit. While cable is for INPUT(+) and Black cable is for INPUT(-). Red cable is for OUTPUT(+) and Black cable is for OUTPUT(-).

■ CONTROLS AND FUNCTIONS



(1) POWER SWITCH

Turning ON, the indicator lights up.

(2) OPERATE LED

Light-up when unit is operate.

(3) INPUT CABLES

White is for (+) positive and Black is for (-) negative directly from the battery.

(4) OUTPUT CABLES

Red is for (+) positive and Black is for (-) negative.

■ CONNECTION AND OPERATION

- 1) Turn OFF the unit.
- 2) Connect the input white cable to (+) and the input Black cable to (-) of 24V battery firmly.
- 3) Turn OFF the equipments and connect Red (+) output cable of the unit to the positive polarity input of the equipment to be powered.
- 4) Connect Black (-) output cable of the unit to the negative polarity input of the equipment to be powered.
- 5) Turning ON the unit, LED lights up yellow, then turn ON the equipment to be powered.
- 6) When an operation is over, turn OFF the equipment being powered first. Then turn OFF the unit.

■ FEATURES

- 1) Overload Protection
Over Voltage Protection and Over Current Protection circuitry are adopted to prevent from overload.
Note : When the protection circuit works, disconnect the equipment. Keeping the may damage the unit or even may hurt you.
- 2) High RFI Stability
Designed for high protection circuitry against RFI (Radio Frequency Interference) provided you a stable operation. These units comply CE EMC Directive 89/336/EEC.

■ SPECIFICATIONS

	DD105	DD107
INPUT VOLTAGE	DC 20V - DC30V	
OUTPUT VOLTAGE	DC13.8V \pm 0.5V	
O.V.P. SETTING	DC16V \pm 0.5V	
OUTPUT CURRENT (CONTINUOUS)	5A FOR 8 HOURS UNDER DC24V INPUT AT 25°C	7A FOR 8 HOURS UNDER DC24V INPUT AT 25°C
CURRENT LIMITING	6 \pm 0.5A	9 \pm 0.5A
STANDBY CURRENT	70mA at no loading	
FUSE	7A	10A
COOLING SYSTEM	Air Convection	
DIMENSIONS	125(W) x 45(H) x 100(D)	125(W) x 45(H) x 120(D)
WEIGHT	0.55kg	0.62kg

* Specifications are subject to change with prior notice.