

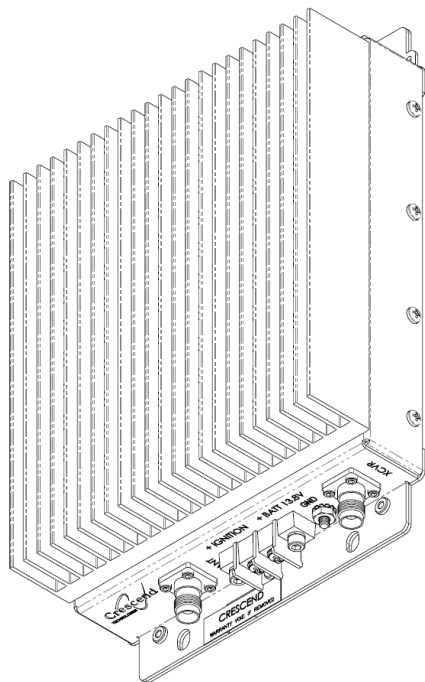
- Crescent Technologies -

Mobile Power Amplifier DSDTJK50-01T

User Manual.

1. Construction.

The unit is assembled in the chassis with heatsink, intended for conventional cooling.



Unit dimensions are 2.7" x 6.75" x 9.8".
All connectors are placed at one side of chassis.

Fig. 1

2. Installation Guide.

Install the unit in one of two positions: horizontal (fins up) or vertical (front panel up or down). The proper air access to the unit shall be provided: no obstacle for air is allowed closer than 3" from heatsink. The place of installation shall provide the ambient temperature between -30°C and $+60^{\circ}\text{C}$.

Do not destroy the sealing labels.

Screws from # 10 to # 1/4-20 are recommended for unit fastening. See the fastening hole's positions in Fig. 2.

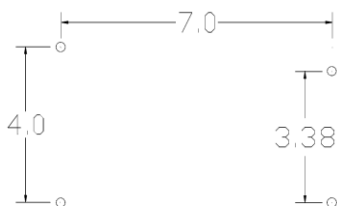


Fig. 2

It is recommended to connect the nut clamp “GND” to the nearest ground point at the place of installation.

Use copper wire # 10 or #12 AWG shall for connection to the car battery. Wires shall be crimped for making ring terminals.

Connect the clamp “- 13.8V” to the pole “-” of car battery.

Connect the clamp “+ 13.8V” to the pole “+” of car battery. Use 30 A fuse for protection.

Use 50 Ohm coax cables with TNC (M) connectors for connecting to “XCVR” and “ANT” .

Connect the port “XCVR” to RF output of radio.

Connect the port “ANT” to antenna.

3. Operation Guide

- The DC power supply voltage should provide 13.8 V nominal. The allowed DC voltage value is between 10.8 V and 17.8 V. Note: with DC voltage less than 13.8 V, the output power may be less than rated 50W;
- Do not apply RF signal out of rated frequency range 769 – 869 MHz;
- For transmitting the input RF power should be in the range 1..4 W;
- The continuous transmit time should not exceed 3 min, and the duty cycle should not be greater than 40% for avoiding the overheat;
- In the case of overheat (if the heatsink temperature reaches +85°C) the unit switches to RX mode;
- If the load VSWR exceeds 2-3, the output power reduces.

FCC RF Exposure:

This transmitter must be restricted to work related operations in a controlled RF exposure environment. All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration, and the exposure conditions and/or duration of their passengers, to comply with the General Population/Uncontrolled MPE limit and requirements. All users should maintain a safe distance of 115cm.

Part 90 Amplifier - FCC 90.219 CLASS B DEVICE

WARNING: This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. Unauthorized use may result in significant forfeiture penalties, including in excess of \$100,000 for each continuing violation.

FCC ID#: CWWDSDTJK50