

This transmitter is designed for mobile or base CW operation. Powered by the 12 volt vehicle battery or 12 volt regulated power supply, its maximum power output is less than 5 watts RMS. Frequency of operation is within the 10 meter band, determined by the installation of a crystal into the oscillator board. This transmitter contains a transmit/receive relay and an output connector for the receiver to share the antenna and permit break-in operation. The DX 800V also has an internal fan that will turn on anytime the heat sink gets to 115°F. Keep the top of the unit (fan inlet) and the rear of unit clear so air flow can be at a maximum. If the unit overheats, a 230°F thermal switch will turn the unit off. The DX 800V has two subcircuit fuses: a 3 amp ATC fuse on the control board, and a 0.8 amp 5X20MM fuse on the "Radio" connector to protect against accidental excessive RF.

Operation:

- **<u>Red "POWER" Button</u>** turns the unit on or off.
- White "REC AMP" Button turns the receive amplifier on to provide 6dB of gain for your receiver. This will work independently of the power button – that is, the white button may be pressed "on" even when the red button is "off." The oscillator may be operated without any output to the antenna. You will be able to hear the signal in your receiver. This may be useful to adjust your electronic keyer or to practice your Morse code "off the air."
- <u>Green "DIAL-A-WATT" Button</u> turns the variable power on.
- **<u>RF Output Knob</u>** controls RF output level only when the green button is on.
- <u>Class AB/C</u> is selected by the toggle switch above the "RF Output" knob. This switch selects Class AB or Class C for the RF power transistors.
- <u>Meter</u> is an RF Relative Output and Battery Voltage indicator. The toggle switch above the meter selects RF or BV (battery voltage). When reading battery voltage, multiply the reading by 2 – for example, if the meter is reading "7" while switched to BV, multiply 7 by 2, which equals 14 volts. Voltage readings that drop more than a few tenths of a volt during key downs may indicate the power wires or the power source are underrated.
- A <u>Crystal</u> made for series operation must be installed into the holes labeled "X-1" near the top of the oscillator board. The frequency should fall between 28.0MHz and 29.7 MHz.
- <u>Key Jack</u> for 1/8" miniature phone plug is located on the rear of the unit for connection of the telegraph key.

- <u>Fan Jack/Remote</u> for ¹/4" phone plug is for additional fans and remote operation. To use the optional remote control head, the rocker switch on the internal control board has to be set to the "OFF" position.
- <u>Power Cables</u> are located at the rear. The red lead connects to the positive side of the power supply, and the black connects to the negative side. See CAUTION on back of sheet.
- <u>Antenna Connector</u> (SO239) for 50 ohm antenna is located on the rear panel.
- <u>Radio Connector</u> (SO239) for 50 ohm output to the receiver is also located on the rear panel.
- <u>Delay Rocker Switch</u> adds delay to the transmit/receive relay to accommodate different transmission rates for break-in keying operation.
- **Fan Rocker Switch** turns on the fan or sets the auto for thermal switch control.

Frequency Range	28.0 MHz to 29.7 MHz
Stability	50 parts per million, 0-50 degrees Celsius with typical quartz crystal
Power Output	< 5 watts
Voltage	13.6 volts DC
Amps	< 8
Impedance	50 ohms
Duty Cycle	100% at full output
Harmonics	> 30dB down
Dimensions	4-5/8"(H) x 7-¾" x 13-5/8"
Weight	10.88 pounds