

VPS-T91 6/12 VDC POWER SUPPLY

Harvey-Wells Electronics, Inc.
Southbridge, Mass.

GENERAL:

The VPS-T91 is a vibrator power supply designed for use with the Harvey-Wells Model T-90 or TS-90 transmitter in mobile or portable installations. This unit can be operated from a 6 or 12 volt d.c. source, providing the unit is fused properly and the vibrators are positioned correctly within their respective sockets. The arrow on the vibrator should point to the power voltage symbol stenciled on the vibrator power supply chassis.

Two silicon diode full-wave "voltage doubling" circuits provide the high voltage for transmitter operation. A relay, mounted within the VPS-T91, connects the individual circuits in series, making their voltages additive, thus supplying the voltages required for the power amplifier, modulator, speech and exciter stages.

A shielded 10 foot length of multiconductor cable, supplied with the VPS-T91, is partially wired to the Jones connector in order that it may be adapted to either a 6 or 12 volt system. Instructions for wiring accompany the equipment. The octal plug on the opposite end is completely wired and requires no modification, under either condition.

Since the VPS-T91 is draws considerable current, it is advisable to use heavy battery type cable for connections to the 6 or 12 volt source. This cable is not supplied but can be purchased in any automotive or electrical supply outlet.

MOUNTING:

The VPS-T91 should be mounted as close to the battery as possible. four 1/4 holes on the bottom of the power supply provide a means for mounting the unit. Mount the supply so access may be had to the input terminals and fuses.

VPS-T91 6/12 VDC POWER SUPPLY

-2-

CONNECTIONS:

After the supply and transmitter have been properly mounted, connect the octal plug into the socket on the power supply and the Jones connector, S-312 CCT, to the transmitter power receptacle.

The single wire fused line at the transmitter end of the cable should then be connected to the ammeter block or terminal. This line supplies the filament voltage to the transmitter.

OPERATION:

With all cable connections complete, operation of the VPS-T91 is controlled at the transmitter end. Turning the transmitter Power Switch ON will provide the filament voltage to the transmitter, only. Placing the XMIT/STBY switch in the "XMIT" position or depressing the Push-to-Talk microphone button will then energize the vibrator starting relay and provide the high voltage necessary for power output.

Refer to the Instruction Book for complete information on transmitter operation.