TEN - TEC

OPERATOR'S MANUAL

JUPITER

MODEL 538
HF Transceiver

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Photo 1 Jupiter Front View

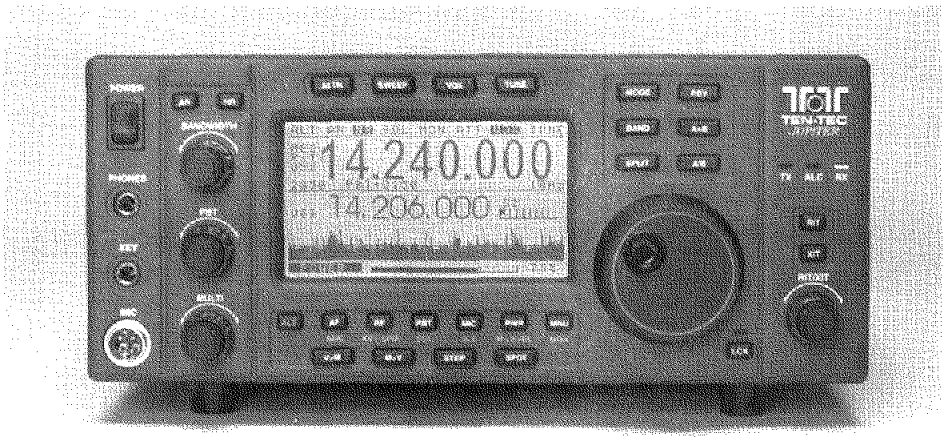


Photo 2 Jupiter Rear View

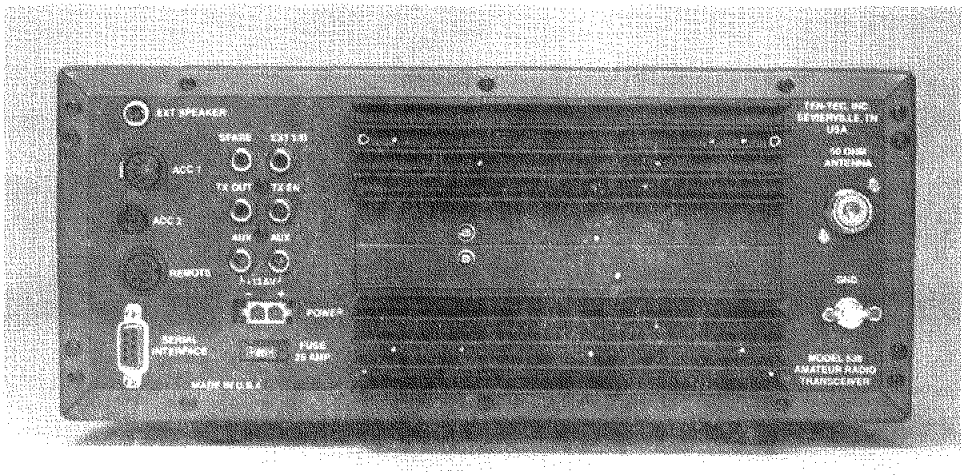


Photo 3 Jupiter Top View

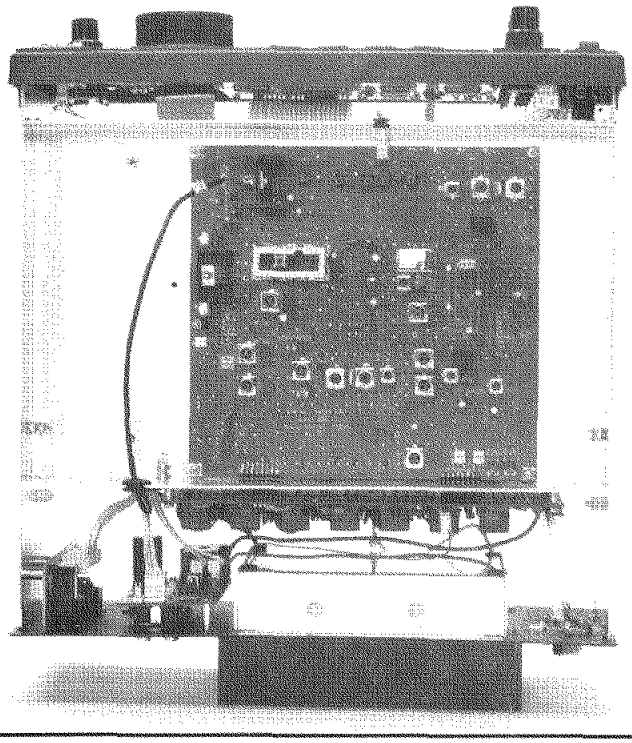
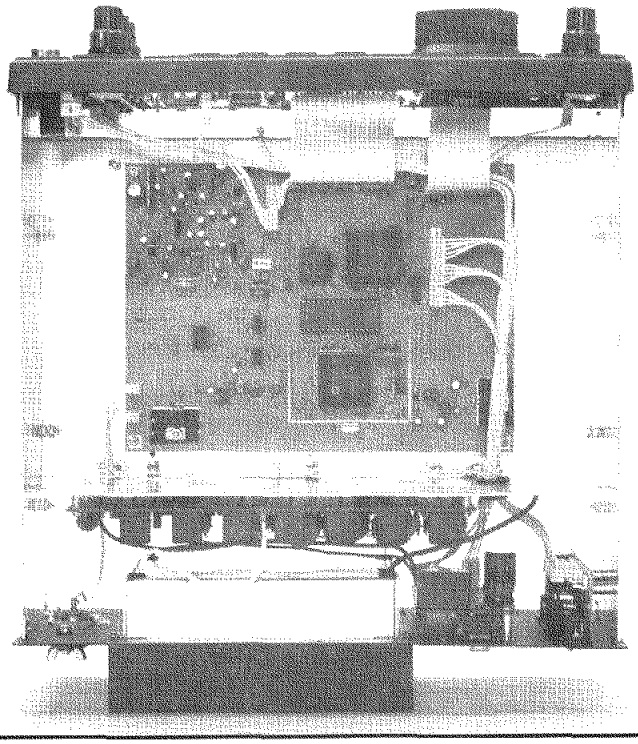


Photo 4 Jupiter Bottom View



SPECIFICATIONS

GENERAL

MODULATION	LSB, USB, CW, AFSK, FM, AM.
FREQUENCY RANGE	Receive: 100 kHz – 30 MHz. Transmit: All amateur radio frequencies: 160 through 10 m.
DISPLAY	Multi-line text and graphic Liquid Crystal Display.
VFO	Dual VFOs with SPLIT transceive option.
OFFSET TUNING	+/- 10 kHz on receive and transmit.
MEMORIES	128 internal to Jupiter. - Virtually any PC will store thousands of memories in Pegasus Emulation Mode.
FREQUENCY ACCURACY	+/- 90 Hz at 25°C at 30 MHz for 1 year.
ANTENNA IMPEDANCE	50 ohms, SWR <2:1, unbalanced .
POWER REQUIRED	12-14 VDC @1.5 A receive, 20A transmit.
CONSTRUCTION	9 epoxy glass PC boards, molded front panel, aluminum chassis, textured painted steel cover.
DIMENSIONS	HWD = 5" x 12.125" x 13" (12.7 x 30.8 x 33 cm.) Depth includes heat sink on rear panel.
WEIGHT	12 lbs. (5.45 kg.)

TRANSMITTER

RF OUTPUT	5 – 100 watts, ALC stabilized.
DC INPUT	Maximum 250 watts @ 14 VDC. 100% duty cycle for up to 10 minutes. Continuous duty with user-supplied air cooling of rear panel heat sink.
MICROPHONE	4-pin front panel connector accepts 200 ohm to 50K ohm impedance microphones with 5 mV (-67 dB) output and provides DC polarizing voltage (+9 V) for electret microphones.
LINE INPUT	1 mV p-p into 47k Ohms.
T/R SWITCHING	PTT or VOX on SSB, Adjustable QSK on CW.
CW OFFSET	DSP generated: programmable 0 to 1270 Hz. Sidetone automatically matches offset.
FM DEVIATION	5 kHz peak.
METERING	Selectable: Forward power or SWR.
SSB GENERATION	DSP implementation of Weaver method SSB.