



SERVICE MANUAL

Model TS-770E V-UHF ALL MODE DUO BANDER

SPECIFICATIONS

<GENERAL>

Frequency Range	144.0 ~ 146.0 MHz 430.0 ~ 440.0 MHz
Mode	SSB (USB, LSB), CW, FM
Voltage Requirements	220V (W), 240V (T) AC 50/60 Hz 12.0 ~ 16.0V DC (13.8V DC nominal)
Power Consumption	Receive (no signal): 45 watts [220V (W), 240V (T) AC], 1.5A (13.8V DC) Transmit: 130 watts [220V (W), 240V (T) AC], 6A (13.8V DC)
Semiconductor Complement	Transistors: 163 FETs: 31 ICs: 75 Diodes: 224 (W), 225 (T)
Dimensions	290 (W) x 124 (H) x 320 (D) mm (11"-7/16) x (4"-7/8) x (12"-5/8)
Weight	11 kg (24.2 lbs)

<TRANSMITTER SECTION>

RF Power Output	SSB, CW, FM: 10 watts FM (LOW): Approx. 1 watt
Modulation	SSB: Balanced modulation FM: Variable reactance frequency shift
Maximum frequency deviation (FM)	±5 kHz
Carrier Suppression	Better than 40 dB
Unwanted Sideband Suppression	Better than 40 dB
Spurious Radiation	Better than -60 dB
Microphone Impedance	500 ~ 600Ω
Antenna Impedance	50Ω
AF Response of Transmitter (SSB)	400 ~ 2,600 Hz (-9 dB)
Repeater Frequency Shift	-600 kHz (144.0 ~ 146.0 MHz) +1.6 MHz or -7.6 MHz (430.0 ~ 440.0 MHz)
RPT Tone Frequency	1750 Hz

<RECEIVER SECTION>

Receiver Sensitivity	SSB, CW: 0.25 μV for 10 dB (S + N)/N FM: 1 μV for 30 dB (S + N)/N 0.2 μV (144 ~ 146 MHz), 0.3 μV (430 ~ 440 MHz) for 12 dB SINAD
Intermediate Frequency	1st: 21.6 MHz 2nd: 8.83 MHz (144 MHz FM 455 kHz)
Image Rejection	1st IF: Better than 60 dB 2nd IF: Better than 50 dB
IF Rejection	Better than 70 dB
Squelch Sensitivity	0.25 μV
Audio Output	2.5 watts (with less than 10% distortion) into an 4 ohm load
Receiver Selectivity	SSB, CW: 2.4 kHz (-6 dB) 4.8 kHz (-60 dB) FM: 12 kHz (-6 dB) 24 kHz (-60 dB)
Frequency Stability	Within ±1 kHz during the first hour after 1 minute of warmup Within 150 Hz during any 30 minute period after warmup.

Circuit and ratings are subject to change without notice for improvement.

A product of
TRIO-KENWOOD CORPORATION
6-17, 3-chome, Aobada, Meguro-Ku, Tokyo 153, Japan

TRIO-KENWOOD COMMUNICATIONS, INC.
1111 West Walnut Street, Compton, California, 90220 U.S.A.
TRIO-KENWOOD COMMUNICATIONS, GmbH
D-6374 Steinbach TS, Industriestrasse 8A, West Germany
TRIO-KENWOOD (AUSTRALIA) PTY. LTD.
30 Whiting Street, Artarmon, Sydney N.S.W. Australia 2064



INFORMATION ONLY

PC BOARD VIEW

DIGITAL Unit (X54-1490-61) (View from component side)



