



GENERAL

Number of Semiconductors:

Transistors	112 (Australian version: 111)
FET	14
IC (Includes CPU)	51 (European version: 52) (Australian version: 50)
Diodes	180 (European version: 182)

Frequency Coverage:

U.S.A. version	143.8 ~ 148.2MHz
European version	144.0 ~ 146.0MHz
Australian version	144.0 ~ 148.0MHz

Frequency Control:

- CPU based 10Hz step PLL synthesizer.
- Independent Transmit-Receive Frequency Capability
- 32 Memory Channels provided
- Programmed Scan, Memory Channel Scan and Mode-Selective Scan Capability

Frequency Resolution:

- SSB 10Hz steps (Automatic 100Hz steps shift)
- FM 5KHz steps
- 1KHz steps with TUNING RATE switch depressed

Frequency Readout:

- 7 digit Luminescent display 100Hz readout

Frequency Stability:

- Within $\pm 1.5\text{KHz}$ in the range of $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$

RIT Frequency Coverage:

- $\pm 9.9\text{KHz}$ from displayed receive frequency

Power Supply Requirements:

- DC 13.8V $\pm 15\%$ Negative ground Current drain 20A max.
- AC power supply is available for AC operation.

Current Drain (at 13.8V DC):

Transmitting	100 watts output	Approx. 18.0A
	10 watt output	Approx. 7.0A
Receiving	At max. audio output	1.4A
	Squelched	1.2A

Antenna Impedance:

- 50 ohms Unbalanced

Weight:

- 6.9 Kg

Dimensions:

- 110(125)mm(H) x 285(300)mm(W) x 275(324)mm(D)
- (): Shows the dimensions including projections

TRANSMITTER

RF Output Power:

- SSB (A₃J) 100 Watts PEP
- CW (A₁), FM (F₃) 100 Watts
- Continuously Adjustable Output power 10 watts ~ Max.

Emission Mode:

- SSB (A₃J USB/LSB), CW (A₁), FM (F₃)

Modulation System:

- SSB: Balanced modulation
- FM: Variable reactance frequency modulation

Max. Frequency Deviation:

- $\pm 5\text{KHz}$

Harmonic Output:

- More than 60dB below peak power output

Spurious Output:

- More than 60dB below peak power output

Carrier Suppression:

- More than 40dB below peak power output

Unwanted Sideband:

- More than 40dB down at 1000Hz AF input

Microphone:

- 600 ohm electret condenser microphone with push-to-talk switch and scanning buttons.

Operating Mode:

- Simplex, Duplex (Any in-band 10KHz steps frequency separation programmable)

RECEIVER

Receiving System:

- SSB, CW Single conversion superheterodyne
- FM Double conversion superheterodyne

Receiving Mode:

- A₁, A₃J (USB, LSB), F₃

IF Frequencies:

- SSB, CW 10.75MHz
- FM 10.75MHz, 455KHz

Sensitivity:

- SSB, CW Less than 0.3 microvolts for 10dB S+N/N
- FM Less than 0.3 microvolts for 12dB SINAD
- Less than 0.6 microvolts for 20dB noise quieting

Squelch Sensitivity:

- SSB, CW Less than 1 microvolt
- FM Less than 0.3 microvolts

Spurious response rejection ratio:

- More than 60dB

Selectivity:

- SSB, CW More than 2.4KHz at -6dB point
- Less than 4.8KHz at -60dB point
- FM More than 15KHz at -6dB point
- Less than 30KHz at -60dB point

Audio Output Power:

- More than 2.0 watts (at 8 ohm 10% distortion)

Audio Output Impedance:

- 8 ohms