

SPECIFICATIONS

GENERAL

Frequency Coverage:
(With DR-7 Digital
Readout/General
Coverage Board)

Receive:

Without AUX-7: 1.5 to 30 MHz, continuous.

With AUX-7:* Same, plus 0 to 1.5 MHz at reduced performance.

Transmit:

(0 to 1.5 MHz Receive only)

Without AUX-7: 1.5-2.0, 3.5-4.0, 7.0-7.5, 14.0-14.5, 21.0-21.5, 28.0-30.0 MHz.

With AUX-7:* Above ranges, plus any eight 500 kHz segments between 1.5 and 30 MHz.

(Without DR-7
Digital Readout/
General Coverage
Board)

1.5-2.0, 2.5-3.0
(Receive only),
3.5-4.0, 5.0-5.5
(Receive only),
7.0-7.5, 14.0-14.5, 21.0-
21.5, 28.5-29.0 MHz
plus 8 additional 500
kHz ranges with
AUX-7.*

Frequency Stability: Less than 1 kHz first hour.
Less than 150 Hz per hour
after 1 hour warm up. Less
than 100 Hz \pm 10 % line vol-
tage change.

Frequency Readout
Accuracy:

Analog: Better than \pm 1 kHz
when calibrated at the
nearest marker point.

Digital: 15 ppm \pm 100 Hz.

External Counter Mode:

Maximum Input
Frequency: 150 MHz.

Input Level Range: 50 mV to 2V, rms.

Power Supply
Requirements:

11-16 VDC (13.6 VDC
nominal), 3A receive,
25A transmit.

NOTE

Proof of license or other F.C.C. authori-
zation must be submitted in order to ob-
tain range modules which allow trans-
ceive operation outside an amateur band.

*AUX-7 requires use of
appropriate Range
Modules.

Modes of Operation: USB, LSB, CW, RTTY,
AME (A-3H).

Dimensions:

Depth: 12.5 in. (31.75 cm),
excluding knobs and
connectors.

Width: 13.6 in. (34.6 cm).

Height: 4.6 in. (11.6 cm), ex-
cluding feet.

Weight: 17.1 lb. (7.75 kg.).

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RECEIVER

Sensitivity (1.8-30 MHz):

SSB, CW: (Typically .25 μ V on 15m & 10m bands)	Less than 0.5 uV for 10 dB S + N N
AM (30% Mod.):	Less than 2.0 uV for 10 dB S + N N

AGC: Less than 4 dB output variation for 100 dB input signal change, referenced to AGC threshold.

Selectivity: 2.3 kHz at -6 dB and 4.1 kHz at -60 dB. (1.8:1 shape factor).

Ultimate Selectivity: Greater than 100 dB.

**60 dB 1st. IF rejection from 22-30 MHz.*

Intermodulation:

(100 kHz or greater spacing)
Intercept Point: +20 dBm.

Two-tone Dynamic Range: 99 dB.

IF Frequency:

First IF: 48.05 MHz.

Second IF: 5.645 MHz.

Image and IF

Rejection: Greater than 80 dB.*

Spurious Response: Greater than 60 dB down.

Internally Generated

Spurious: Less than 1 uV equivalent, except 3 uV equivalent from 5 to 6 MHz.

Audio Output: 2.0 watts @ less than 10% THD (4 ohm load).

TRANSMITTER

Power Input (Nominal):

SSB:	250 watts PEP.
CW:	250 watts.
AME (A-3H)	80 watts (carrier), plus upper sideband.

Duty Cycle:

SSB, CW, AM:	100%.
Tune, SSTV, RTTY: w/o FA-7	
Fan:	33%, 5 minutes transmit, maximum.

Load Impedance: 50 ohms, nominal.

with FA-7
Fan: 100%.

Spurious Output: Greater than 50 dB down.

Microphone Input: High impedance.

Harmonic Output: Greater than 45 dB down.

Wattmeter Accuracy: $\pm 5\%$ @ 100 watts (50 ohm load).

Intermodulation Distortion: 30 dB below PEP. (24 dB below one of two tones.)

VSWR Turndown (Nominal):

@ 1:1 :	0%
@ 2:1 :	10%
@ 3:1 :	25%
@ 4:1 :	50%
@ 5:1 and Above:	90%

Carrier Suppression: Greater than 60 dB.

Undesired Sideband Suppression: Greater than 60 dB @ 1 kHz.