

# VX-1700

## HF Mobile Radio

### SPECIFICATION SHEET

### Multi-Mode Mobile HF Radio

The multi-purpose 125-Watt VX-1700 is designed to operate as a mobile radio or as a base station for long-haul land mobile communications. Operating modes include LSB/USB (J3E and J2B), AM (A3E) and CW (A1A), making the VX-1700 ideal for a wide variety of applications.

#### Large Channel Capacity

The VX-1700 can store 200 channels arranged in five groups with the flexibility to have any number of channels per group. Each channel can be programmed with a 6-character alphanumeric description for quick and easy call management.

#### Automatic Link Establishment (ALE) Option

With the ALE-I option installed, the VX-1700 Automatic Link Establishment feature selects the channel with the best LQA (Link Quality Analysis) score from the programmed channels automatically.

#### Flexible Calling Options

The VX-1700 provides six different built-in calling modes to support various communications requirements including SELCALL, TELCALL, Message Call (for text messages), Position Request Call, Position Send Call and Beacon Request Call to check signal quality.

#### Dual Watch Operation

Operate the VX-1700 radio on one channel while periodically monitoring the designated memory channel to ensure a call is not missed. Ideal for emergency management situations when it is important that a call gets through to dispatch.



VX-1700

9.5 (W) X 3.9 (H) X 11.2 (D) inches



#### The Vertex Standard Difference

Our number one goal is achieving superior customer satisfaction by delivering products and services that exceed your expectations. Vertex Standard radios are built to last and are backed by an industry-leading 3 year warranty – another great reason to choose Vertex Standard. Ask your Dealer for more details.

### Additional Features

- Four programmable keys
- Noise blanker
- CW Semi break-in
- CW Side tone function
- VOX

### Accessories

- MD-12A8J: Desktop microphone
- MD-100A8X: Channel control desktop microphone
- FP-1030A: External power supply
- MLS-100: External speaker
- ALE-1: Automatic link establishment unit
- FC-30: Antenna tuner (coaxial lines)
- FC-40: Antenna tuner (wire/whip antennas)
- YA-30: Broadband HF antenna 77 ft.
- YA-31: Broadband HF antenna 49 ft.
- YA-007FG: HF Multi-band mobile antenna (7 MHz to 30 MHz requires FC-40)
- MMB-89: One-touch mobile bracket
- MHG-1: Carrying handle

### Option Board

- FVP-39: Variable split-band voice scrambler (FVP-24 compatible)

## VX-1700 Specifications

### General Specification

Frequency Range	RX: 30 kHz – 30.0000 MHz; TX: 1.600 – 30.0000 MHz
Number of Channels	200
Emission Type	A1A(CW); J3E(LSB/USB); A3E(AM); J2B (USB/LSB)
Power Requirements	DC 13.8V ±15%, negative ground
Frequency Synthesizer Steps	10 Hz, 100 Hz, 1 kHz
Frequency Stability	± 1 ppm (+14° F to +131° F / -10° C to +55° C) TYP
Current Consumption	Standby: 25 mA; RX, no signal: 1.0 A; RX: 1.5 A TX: 24 A (125 W output)
Operating Temperature Range	+14° F to +131° F (-10° C to +55° C)
Antenna Impedance	50 Ohms
Dimension (W x H x D)	9.5 x 3.9 x 11.2 inches (241 x 99 x 285 mm)
Weight (Approx.)	9.5 lbs (4.3 kg)

### Receiver Specification

Intermediate Frequency	1st: 45.274 MHz, 2nd: 24 kHz
Sensitivity (A1A/J2B/J3E/A3E: S/N 10 dB)	0.5 – 1.6 MHz: 1.41 µV (A1A/J2B/J3E); 8 µV (A3E) 1.6 – 30 MHz: 0.16 µV (A1A/J2B/J3E); 1 µV (A3E)
Squelch Sensitivity (A1A/J2B/J3E)	0.5 – 1.6 MHz: 2.5 µV 1.6 – 30 MHz: 2 µV
IF and Image Rejection	Better than 80 dB
Selectivity	A1A(W), J2B(W), J3E: > 2.2 kHz @ -6 dB; < 4.5 kHz @ -60 dB A1A(N), J2B(N): > 500 Hz @ -6 dB; < 2.0 kHz @ -60 dB A3E: > 6 kHz @ -6 dB; < 20 kHz @ -60 dB
Audio Output	2.2 Watts into 8 Ohms @ 10% THD
Audio Impedance	4 – 16 Ohms (8 Ohms Nominal)
Conducted Radiation	Less than 4000 µW

### Transmitter Specification

Output Power	125 Watts (A1A, J2B, J3E @ 1.6000 – 3.9999 MHz)* 100 Watts (A1A, J2B, J3E @ 4.0000 – 30.000 MHz) 31 Watts AM Carrier (A3E @ 1.6000 – 3.9999 MHz) 25 Watts AM Carrier (A3E @ 4.0000 – 30.000 MHz)
Duty Cycle	RX:TX = 4 min.: 1 min.
Modulation	J3E: PSN type modulator A3E: Low-level (early stage)
Spurious Radiation	-50 dB (Harmonics)
J3E Carrier Suppression	Better than 50 dB below peak output
Undesired Sideband Suppression	Better than 60 dB below peak output
Audio Response (J3E)	Not more than -6 dB from 400 Hz – 2500 Hz
Occupied Bandwidth	A1A: less than 0.5 kHz; J3E: less than 3.0 kHz; A3E: less than 6.0 kHz
Microphone Impedance	200 – 10 k Ohms, (600 Ohms Nominal)

\*100 W when using FC-30

## Applicable MIL-STD

Standard	MIL 810C Methods/ Procedures	MIL 810D Methods/ Procedures	MIL 810E Methods/ Procedures	MIL 810F Methods/ Procedures
Vibration	–	514.3 / Procedure I Cat. 10	514.4 / Procedure I Cat. 10	514.5/Procedure I Cat. 20/24 Figure 514.5C-1
Shock	514.2 / Procedure I Cat. 10	–	–	516.5/Procedure I

Specifications are subject to change without notice or obligation.

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