

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 \pm 15%, negative ground |
| Frequency Synthesizer Steps | 10 Hz, 100 Hz, 1 kHz |
| Frequency Stability | \pm 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 μ V (A1A/J2B/J3E); 8 μ V (A3E) 1.6 – 30 MHz: 0.16 μ V (A1A/J2B/J3E); 1 μ V (A3E) |
| Squelch Sensitivity (A1A/J2B/J3E) | 0.5 – 1.6 MHz: 2.5 μ V 1.6 – 30 MHz: 2 μ V |
| 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 μ W |

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 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 | – | – | 516.5/Procedure I |

Specifications are subject to change without notice or obligation.

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