

# VX-1700

## HF Multi Mode Mobile Radio



- Frequency Coverage :
  - RX: 30 kHz ~ 30.0000 MHz in 10 Hz Steps
  - TX: 1.600 ~ 30.0000 MHz
- A1A (CW), J3E (LSB/USB), A3E (AM), J2B (USB/LSB),
- 200 Memory Channels (arranged in five banks)
- Alpha-Numeric Labeling of Memory Channels
- Power Output:
  - 125 Watts (A1A, J2B, J3E @1.6000 ~ 3.9999 MHz)
  - 100 Watts (A1A, J2B, J3E @4.0000 ~ 30.0000 MHz)
  - 31 Watts AM Carrier (A3E @1.6000 ~ 3.9999 MHz)
  - 25 Watts AM Carrier (A3E @4.0000 ~ 30.0000 MHz)
- Mobile Antenna (Optional)
- Selcall / Telcall Built-in
  - Selcall
  - Telcall
  - Message Call
  - Position Request Call
  - Position Send Call
  - (with GPS receiver connected)
  - Beacon Request Call
- ALE Operation (requires optional ALE-1 unit)
- Dual Watch Operation
- External Automatic Antenna Tuner, FC-30 (Coax) and FC-40 (Wire) Available
- VOX
- Noise Blanker
- Dimmer Function
- CW Side Tone Function
- CW Semi-break-in
- Transcript® SSB Encryption Unit SC20-455 Available (Optional)
- PC Programmable
- MIL-STD 810D / E / F



## VX-1700 HF Multi Mode Mobile Radio

The Vertex Standard VX-1700 is a low-cost, integrated HF communications transceiver designed for the Land Mobile market.

The VX-1700 includes 200 memory channels (arranged in five banks) with Alpha-Numeric labeling of Memory channels. And the Selcall feature allows paging of a single transceiver or groups of transceivers by a dispatch center.

Available options include the VL-1000/VP-1000 1 kW Linear Amplifier/Power Supply, FP-1030A AC Power Supply, FC-30 Automatic External Antenna Tuner (for 50 Ohm unbalanced antenna feedlines), FC-40 Automatic External Antenna Tuner (for an end-fed random-length wire or long whip antenna), YA-30 Broadband Dipole Antenna, YA-007FG Mobile Antenna, MD-200A8X Desktop Microphone, MLS-100 External Speaker, and the ALE-1 Automatic Link Establishment Unit which automatically selects the channel with the best LQA (Link Quality Analysis) score from the programmed channels.

### Rear Panel



### Accessories & Options

 <p><b>VL-1000</b> Linear Amplifier <b>VP-1000</b> AC Power Supply for the VL-1000</p>	 <p><b>FP-1030A</b> AC Power Supply</p>
 <p><b>MD-200A8X</b> Desktop Microphone</p>	 <p><b>FC-40</b> External Antenna Tuner (Wire/Whip Antennas)</p>
 <p><b>FC-30</b> External Antenna Tuner (Coaxial Lines)</p>	 <p><b>MLS-100</b> External Speaker</p>

Various accessories listed may not be available in some countries.

### Specifications

General Specifications			
Receiver Frequency Range	30 kHz ~ 30.0000 MHz		
Transmitter Frequency	1.600 ~ 30.0000 MHz		
Emission Modes	A1A (CW), J3E (LSB/USB), A3E (AM), J2B (USB/LSB)		
Frequency Synthesizer Steps	10 Hz, 100 Hz, 1 kHz		
Frequency Stability	±1 ppm (14° F ~ 131° F / -10° C ~ +55° C) TYP		
Operating Temperature Range	14° F ~ 131° F (-10° C ~ +55° C)		
Antenna Impedance	50 Ohms		
Supply Voltage	13.8 Volts DC ±15%, negative ground		
Power Consumption	Standby	25 mA	
	Receive, no signal	1.0 A	
	Receive	1.5 A	
	Transmit	22 A (125 Watts output)	
Dimensions (WxHxD)	9.5" x 3.9" x 11.2" (241 x 99 x 285 mm)		
Weight (approx.)	9.5 lbs (4.3 kg)		
Receiver Specifications			
Intermediate Frequencies	1st: 45.274 MHz, 2nd: 24 kHz		
Sensitivity (A1A/J2B/J3E/A3E: S/N 10 dB)	A1A/J2B/J3E		A3E
	0.5 ~ 1.6 MHz:	1.41 µV	8 µV
	1.6 ~ 30 MHz:	0.16 µV	1 µV
Squelch Sensitivity (A1A/J2B/J3E)	0.5 ~ 1.6 MHz: 2.5 µV		
	1.6 ~ 30 MHz: 2 µV		
IF Rejection	Better than 80 dB		
Image Rejection	Better than 80 dB		
Selectivity	-6 dB		-60 dB
	A1A(W), J2B(W), J3E	> 2.2 kHz	< 4.5 kHz
	A1A(N), J2B(N)	> 500 Hz	< 2.0 kHz
	A3E	> 6 kHz	< 20 kHz
Audio Output	2.2 Watts into 8 Ohms @ 10% THD		
Audio Output Impedance	4 ~ 16 Ohms (8 Ohms Nominal)		
Conducted Radiation	Less than 4000 µµW		
Transmitter Specifications			
Power Output*1	125 Watts (A1A, J2B, J3E @ 1.6000 ~ 3.9999 MHz)*2		
	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)		
Modulation Types	J3E: PSN type modulator		
	A3E: Low-level (early stage)		
Spurious Radiation	-56 dB (Harmonics)		
J3E Carrier Suppression	Better than 50 dB below peak output		
Undesired Sideband Suppression	Better than 60 dB below peak output		
J3E Audio Response	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)		

Specifications are subject to change without notice or obligation.

\*1 Duty Cycle RX : TX = 4 min : 1 min

\*2 100 Watts 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

**ALE-1** Automatic Link Establishment Unit  
**SC20-455** Encryption Unit  
**YA-30** Broadband HF Antenna  
**YA-007FG** HF Multi-Band Mobile Antenna for FC-40  
**MMB-89** One-Touch Mobile Bracket  
**MHG-1** Carrying Handle  
**CT-118** Linear Amplifier Control Cable  
**CE77** Programming Software  
**CT-62** Programming Cable

ISO9001:2000



YAESU MUSEN CO., LTD  
ISO9001:2000 certification

ISO14001:1996



YAESU MUSEN CO., LTD  
ISO14001:1996 certification



**Vertex Standard**  
US Headquarters

10900 Walker Street, Cypress, CA 90630, U.S.A.  
Phone 714/827-7600; Fax 714/827-8100  
<http://www.vertexstandard.com>