

# VX-2000 SERIES

## VHF/UHF Mobile Radios



- **FREQUENCY RANGE:**
  - VHF : 134 MHz ~ 174 MHz, 25 Watt
  - UHF : 400 MHz ~ 512 MHz, 25 Watt
- **AVAILABLE IN TWO VERSION:**
  - 4 CHANNEL WITH LED DISPLAY
  - 40 CHANNEL WITH LED DISPLAY
- MIL-STD 810 C/D/E
- 2-TONE DECODE
- CTCSS ENCODE/DECODE
- DCS ENCODE/DECODE
- 12.5 / 25 kHz BANDWIDTH PROGRAMMABLE BY CHANNEL
- PC PROGRAMMABLE
- RADIO TO RADIO CLONING
- BUILT-IN DB-9 CONNECTOR FOR ACCESSORY/DATA APPLICATIONS
- LAUD EXTERNAL SPEAKER AUDIO: 5 Watts

## VX-2000 SERIES 4 / 40 Channel 25 W VHF/UHF Mobile Radios

The multi-purpose VX-2000 series mobiles, with rugged MIL-STD 810 C/D/E ratings, meet the demanding requirements of public safety and commercial communications for today and the future. Available in 25 W VHF and 25 W UHF, each model provides programming flexibility on a per channel basis for narrowband (12.5 kHz) and wideband (25 kHz) requirements.

Both the 4 and 40 channel versions include CTCSS and DCS Encode/ Decode and are easily programmed via PC. All models offer a built-in DB-9 connector for accessory/data application. State-of-the-art surface mount design and a rugged, die-cast aluminum chassis assure high reliability and unparalleled performance.

The VX-2000 mobiles are designed to permit maximum flexibility for today's installation requirements.

### SPECIFICATIONS

General Specification	VX-2000V (VHF Highband)	VX-2000U (UHF band)
Number of Channels	4/40	
Frequency Range	134 ~ 160 MHz (A) 148 ~ 174 MHz (C)	400 ~ 430 MHz (A) 450 ~ 480 MHz (D) 480 ~ 512 MHz (F)
Channels Spacing	12.5/25 kHz	
Power Supply Voltage	10.8 to 15.6 VDC	
Current Consumption		
Standby	250 mA	
Receive	500 mA	
Transmit	6.5 A	
Ambient Temperature Range	-30° C to + 60° C (-22 F to + 140 F)	
Frequency Stability	EIA: ±2.5 ppm	ETS: ±1.5 kHz
RF Input-Output Impedance	50 ohms	
Audio Output Impedance	4 ohms	
Dimensions(WxHxD)	160 x 40 x 105 mm (6.25" x 1.5" x 4.25")	
Weight	0.85 kg (1.9 lbs)	

Receiver Specification	Measurements made per EIA/ETS standard	
Circuit Type	Double Conversion Superhetroyne	
Sensitivity		
EIA 12 dB SINAD	0.20 µV	0.25 µV
20 dB Quieting	0.30 µV	0.35 µV
ETS(20 dB SINAD)	0.50 µV (emf)	0.50 µV (emf)
Adjacent Channel Selectivity	EIA: 70 dB (25 kHz), 60 dB (12.5 kHz)	ETS: 70 dB (25 kHz), 60 dB (12.5 kHz)
Intermodulation	EIA: 65 dB	ETS: 60 dB
Spurious and Image Rejection	EIA: 65 dB	ETS: 65 dB
Audio Output	5 W 4 ohms w/ < 10% THD	

Transmitter Specification	Measurements made per EIA/ETS standard	
Power Output	25/5 W	
Modulation	EIA:Dired FM 16K0F03, 11K0F3E	ETS: 16K0G3E, 8K50G3E
Maximum Deviation	±5 kHz (25 kHz), ±2.5 kHz (12.5 kHz)	
Conducted Spurious Emissions	EIA: 65 dBc	ETS: -36 dBm † 1 GHz, -30 dBm >1 GHz
FM Hum and Noise	45 dB (25 kHz), 40 dB (12.5 kHz)	
Audio Distortion (@1 kHz)	<5%	

Measurements per EIA / ETS standards unless noted above. Specification subject to change without notice or obligation.

### APPLICABLE MIL-STD

Military Standards 810 C/D/E		
Method 500.2, Procedure 1	Method 503.3, Procedure 1	Method 509.3, Procedure 1
Method 500.3, Procedure 1	Method 505.2, Procedure 1	Method 510.2, Procedure 1
Method 501.1, Procedure 1,2	Method 505.3, Procedure 1	Method 510.3, Procedure 1
Method 501.2, Procedure 1,2	Method 506.1, Procedure 2	Method 514.2, Procedure 1,8
Method 501.3, Procedure 1,2	Method 506.2, Procedure 2	Method 514.3, Procedure 1,8
Method 502.2, Procedure 1	Method 506.3, Procedure 2	Method 514.4, Procedure 1,8
Method 502.2, Procedure 2	Method 507.1, Procedure 2	Method 516.2, Procedure 1,4
Method 502.3, Procedure 1	Method 507.2, Procedure 2	Method 516.3, Procedure 1,4
Method 502.3, Procedure 2	Method 507.3, Procedure 2	Method 516.4, Procedure 1,4
Method 503.2, Procedure 1	Method 509.2, Procedure 1	

About this brochure: We have made this brochure as comprehensive and factual as possible. We reserve the right, however, to make changes at any time in equipment, optional accessories, specifications, model numbers, and availability. Precise frequency range may be different in some countries. Some accessories shown herein may not be available in some countries. Some information may have been updated since the time of printing; please check with your Authorized Vertex Standard Dealer for complete details.

### ACCESSORIES & OPTIONS

- F2D-4/4B** 2-Tone Decoder Unit
- FP-1023A** External Power Supply 23 A DC
- FTE-18** ANI Unit
- MLS-100** External Speaker (12 Watt)
- LF-1** Plug-in DC Line Filter
- MD-11A8J** Desktop Microphone
- MH-700D** DTMF Back-lit Microphone
- VTM-20** VX-Trunk II Trunking Mobile Logic Board
- VPL-1** Radio to Computer Programming Cable
- CE-20** Programming Software
- T9101411** Radio to Radio Cloning Cable



FP-1023A

MD-11A8J

MH-700D

MLS-100

FTE-18



**Vertex Standard**  
US Headquarters

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