

# VX-2100/2200 SERIES

VHF/UHF Mobile Radios



- 128 CHANNEL CAPACITY / VX-2200
- 8 CHANNEL CAPACITY / VX-2100
- POWER OUTPUT : 50 W (VHF) / 45 W (UHF)
- WIDE BAND COVERAGE
  - VHF 134-174 MHz
  - UHF 400-470 MHz / 450-512 MHz
- LOUD FRONT SPEAKER AUDIO
- CTCSS / DCS ENCODE/DECODE
- DTMF ANI
- 2-TONE ENCODE/DECODE
- 5-TONE SIGNALING BUILT-IN
- REMOTE RADIO STUN/KILL/REVIVE (5-TONE)
- EMERGENCY FEATURE
- D-SUB-15 PIN ACCESSORY CONNECTOR
- ARTS™ (AUTO-RANGE TRANSPOND SYSTEM)
- DTMF PAGING
- ENCRYPTION ( OPTION )
  - VOICE INVERSION/ROLLING CODE
    - MDC1200® / GE-STAR®
    - ANI ENCODE ( OPTION )
    - MIL-STD 810 C/D/E/F



VX-2100 Series  
8 ch Version

VX-2200 Series  
128 ch Version with LCD

## VX-2100/2200 Series VHF/UHF Mobile Radios

The VX-2100 (8-channel) and VX-2200 (128-channel) series mobiles are full featured FM transceivers designed for flexible mobile business communications in the VHF or UHF Land Mobile Radio bands. These transceivers are designed for reliable business communications in a wide variety of applications with a wide range of operating capability provided by their leading-edge design with high output power (50 Watts VHF/45 Watts UHF). The VX-2200 mobiles have an eight character alpha-numeric display to manage the 128 channel capacity.

### 128 Channel Capacity VX-2200 / 8 Channel Capacity VX-2100

For easy of operation the 8-channel VX-2100 is your workhorse radio. For larger systems, the VX-2200 gives you 128 channels to get the job done.

### Power Output: 50 watts (VHF) / 45 watts UHF

With 50 watts output on VHF and 45 Watts output on UHF, the new VX-2100 and VX-2200 have the power to get your message through.

### Wide Band Coverage (VHF 134-174 MHz / UHF 450-512 MHz)

The new VX-2100 and VX-2200 continue with our efforts to give you the maximum flexibility possible with ultra-wide band coverage.

### Loud Front Speaker Audio

The front facing speaker and 4 Watts of audio power gives you plenty of receiver audio even in noisy environments.

### Signaling Features

The VX-2100 and VX-2200 mobiles have plenty of built-in signaling to offer. Besides the standard CTCSS and DCS sub-audible signaling, these mobiles also include 2-tone encode and decode, DTMF ANI/Paging and 5-tone encode and decode.

### Emergency Feature

Excellent for school bus drivers, delivery vans, or any other application where you do not want the driver to be "on their own". With the built-in Emergency feature, a silent alarm can be sent and transmit live audio to the dispatcher.

### D-SUB 15 pin Accessory Connector

Connecting outboard devices is easy using the rear mounted 15 pin accessory connector.

### Optional Features

The FVP-25 /FVP-36 includes a simple inversion scrambler. The FVP-35 offers rolling code type encryption. The VME-100 board gives you MDC1200® (and GE-Star®) encode feature to operate in existing systems.

### Rugged, Die-cast Construction

The VX-2100/2200's circuitry is housed within a die-cast aluminum enclosure, which doubles as a heat sink. This extraordinarily durable construction ensures many years of reliable operation, even in high-vibration installations.



### MIL-Spec Rated (MIL 810 C/D/E/F)

The ultra-rugged design of the VX-2100/2200 enables it to be fully compliant with the exacting specifications of MIL 810 C/D/E/F, pursuant to the test procedures documented below.

#### APPLICABLE MIL-STD

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
High Temperature	501.1/Procedure II			
Low Temperature	502.1/Procedure I			
Blowing Sand & Dust			510.3/Procedure I	
Vibration	514.2/Procedure VIII, X	514.3/Procedure I, Cat.10	514.4/Procedure I, Cat.10	514.5/Procedure I, Cat.20,24
Shock	516.2/Procedure I, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV, VI



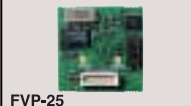







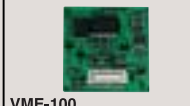

#### Specifications

	VX-2100/2200 VHF	VX-2100/2200 UHF
<b>General Specifications</b>		
Frequency Range	134-174 MHz	400-470 MHz 450-512 MHz
Number of Groups	1/8	
Number of Channels	8/128	
Power Supply Voltage	13.6 V DC ±15 %	
Channel Spacing	12.5/20/25 kHz	
Current Consumption (Approx.)	TX: 11 A, RX: 2.5 A, Standby: 250 mA	
Operating Temperature Range	-22° F - 140° F	
Frequency Stability	Better than ±2.5 ppm	
RF Input-Output Impedance	50 Ohm	
Dimension (W x H x D)	6.5" x 1.8" x 6.1"	
Weight (Approx.)	2.87 lbs.	

	VX-2100/2200 VHF	VX-2100/2200 UHF
<b>Receiver Specifications</b> Measured by TIA/EIA-603		
Sensitivity (12 dB SINAD)	0.25 µV	0.25 µV
Adjacent Channel Selectivity	75 / 65 dB	73 / 65 dB
Intermodulation	73 / 70 dB	
Spurious and Image Rejection	90 dB	80 dB
Audio Output	Internal: 4 W @ 18 Ω, 5 % THD External: 12 W @ 4 Ω, 5 % THD	
<b>Transmitter Specifications</b> Measured by TIA/EIA-603		
Output Power	50 / 25 / 10 W	45 / 25 / 10 W
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	±5.0 kHz / ±2.5 kHz	
Audio Distortion	< 3 % @ 1 kHz	
Conducted Spurious Emission	70 dB below carrier	

Specifications are subject to change without notice or obligation.

#### Accessories & Options

 MH-67A8J Standard Microphone	 MH-64A8J 16 Keypad Microphone	 FVP-25 DTMF Paging/Voice Inversion Type Encryption Unit	 FVP-35 Rolling Code Encryption Unit	 FP-1023A External Power Supply (13.8 VDC 23 A)	 MLS-200 External Speaker (12 W Peak Power)	 LF-1 Line Filter							
 MH-25A8J Standard Microphone	 MD-12A8J Desktop Microphone	 FVP-36 Voice Inversion Type Encryption Unit	 VME-100 MDC1200®/GE-STAR® ANI Encoder Unit	 MLS-100 External Speaker (12 W Peak Power)									
				<table border="1"> <tbody> <tr> <td rowspan="2">Programming Cable</td> <td>USB</td> <td>FIF-10A + CT-104A</td> </tr> <tr> <td>RS-232C</td> <td>CT-29 + CT-126</td> </tr> <tr> <td>Programming Software</td> <td colspan="2">CE82</td> </tr> </tbody> </table>		Programming Cable	USB	FIF-10A + CT-104A	RS-232C	CT-29 + CT-126	Programming Software	CE82	
Programming Cable	USB	FIF-10A + CT-104A											
	RS-232C	CT-29 + CT-126											
Programming Software	CE82												



## 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>