

# VX-4100/4200 Series

## VHF/UHF Mobile Radios

### SPECIFICATION SHEET

## High Capacity, Enhanced Mobile Communications

The durable VX-4100/4200 Series gives you extensive signaling and expanded customisation to help you maximise your communications investment.

### Memory for Enhanced Group Communications

For group communications, get the radio that best serves your needs with 501 programmable channels in the VX-4200 Series. In addition to 501 channels, the VX-4200 keeps operations easy with Direct Channel Access. For smaller operations, consider the 8-channel VX-4100 Series option.

### Prevent Unauthorised Use

If lost or stolen, the VX-4100/4200 Series has built-in 5/6-tone features that allow for over-the-air kill and revive to prevent misuse of missing radios.

### When Safety Counts

As with all Vertex Standard mobile radios, the VX-4100/4200 Series comes standard with built-in Emergency alert for enhanced driver safety. A panic button can be triggered by the front panel button or remotely to alert the dispatcher when problems arise.

### Dual-Band Receive For Interoperability

When full situational awareness is needed, add the receiver option to get single VHF or UHF transmit combined with dual-band receive to better coordinate communication.

### Exclusive Auto-Range Transpond System – ARTS™

Only Vertex Standard radios are designed to inform you when you and another ARTS™-equipped station are within communication range. If out of range for more than 2 minutes, your radio senses no signal has been received and beeps to alert you. The base station can then alert the field unit to move back in range. A great solution to keep your workers co-ordinated.

### The Vertex Standard Difference

Our number one goal is achieving superior customer satisfaction by delivering products and services that exceed your expectations. Count on Vertex Standard for radios that are built to last and designed to provide more features for a better return on your investment. Ask your Dealer for more details.



VX-4200



VX-4100



## Additional Features

- Five programmable keys (VX-4200)
- Three programmable keys (VX-4100)
- 12-Character alphanumeric display (VX-4200)
- RSSI signal strength indicator
- DTMF ANI
- CTCSS / DCS Encode and Decode
- BCLO / BTLO and TOT Functions
- MDC 1200® ANI encode
- Compander
- Internal emergency microphone (front panel)
- Priority scan
- Dual Watch scan
- Follow-me scan
- Follow-me Dual Watch scan
- Talk Around scan
- Group scan (VX-4200)
- D-sub 15 pin accessory connector
- Public address / horn alert
- User-selectable tones (VX-4200)
- Radio-to-radio cloning

## Accessories

- MH-67A8J: Standard microphone
- MH-53A8J: Noise cancelling microphone
- MH-75A8J: Keypad microphone (16 keys)
- MD-12A8J: Desktop microphone
- MLS-100: External speaker, square, 12W
- MLS-200: External speaker, 12W (indoor/outdoor use)
- FP-1023A: External power supply
- MMB-85: Mobile mounting bracket
- LF-1: DC Line filter

## Option Boards

- FVP-25: Voice inversion encryption & DTMF paging
- FVP-35: Rolling code encryption
- FVP-36: Voice inversion encryption only
- DVS-5: Digital voice storage unit
- VME-100: MDC-1200® / GE-STAR® ANI Encode
- VMDE-200: MDC-1200® / GE-STAR® ANI Enc./Dec.
- SRX-1: Dual-band Rx unit (adds UHF Rx)
- SRX-2: Dual-band Rx unit (adds VHF Rx)

## VX-4100/4200 Series Specifications

	VHF	UHF
<b>General Specification</b>		
Frequency Range	134 – 174 MHz	400 - 470 MHz, 450 - 520 MHz
Number of Channels and Groups	501 and 32 Groups (VX-4200) 8 and 1 Groups (VX-4100)	
Power Supply Voltage	10.8 - 15.6V DC	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL Steps	5 / 6.25 kHz	
Current Consumption	TX: 1.1 A, RX: 2.5 A, Standby: 0.3 A	
Operating Temperature Range	-30° C to +60° C	
Frequency Stability	Better than ±2.5 ppm	
RF Input-Output Impedance	50 Ohms	
Dimension (W x H x D)	165 x 43 x 155mm	
Weight (Approx.)	1.4 kg	
<b>Receiver Specification: measured by TIA/EIA-603</b>		
Sensitivity 12 dB SINAD	0.25 µV	0.35 µV
Adjacent Channel Selectivity	85 / 75	78 / 70 dB
Intermodulation	80 / 75 dB	
Spurious and Image Rejection	90 dB	80 dB
Audio Output	Internal: 2 W @ 32 Ohms, 5% THD External: 12 W @ 4 Ohms, 5% THD	
Spurious Rejections	-57 dBm	
<b>Transmitter Specification: measured by TIA/EIA-603</b>		
Output Power	50 / 25 / 10 W	45 / 25 / 10 W
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	±5.0 kHz/ ±2.5 kHz	
Audio Distortion	< 3% @ 1kHz	
FM noise (W/N)	50/44 dB	48/42 dB
Conducted Spurious Emissions	75 dB below carrier	

## 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	514.3/Procedure I Cat. 10, 8	514.3/ Procedure I Cat. 10	514.4/ Procedure I Cat. 10	514.5/ Procedure I Cat. 20, 24
Shock	516.2/Procedure I	516.3/Procedure I, IV	516.4/Procedure I	516.5/Procedure I, IV, VI

Specifications are subject to change without notice or obligation.

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