

VX-4100E/4200E Series

VHF/UHF Mobile Radios

SPECIFICATION SHEET

High Capacity, Enhanced Mobile Communications

The durable VX-4100E/4200E 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-4200E Series. In addition to 501 channels, the VX-4200E keeps operations easy with Direct Channel Access. For smaller operations, consider the 8-channel VX-4100E Series option.

Prevent Unauthorised Use

If lost or stolen, the VX-4100E/4200E 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-4100E/4200E 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.

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.



VX-4200E



VX-4100E



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.

Additional Features

- Five programmable keys (VX-4200E)
- Three programmable keys (VX-4100E)
- 12-Character alphanumeric display (VX-4200E)
- 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-4200E)
- D-sub 15 pin accessory connector
- Public address / horn alert
- User-selectable tones (VX-4200E)
- 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-1030A: 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.

VX-4100E/4200E Series Specifications



	VHF	UHF
General Specification		
Frequency Range	134 – 174 MHz	400 – 470 MHz
Number of Channels and Groups	501 and 32 Groups (VX-4200E) 8 and 1 Groups (VX-4100E)	
Power Supply Voltage	13.2V DC ± 15%	
Channel Spacing	12.5 / 20 / 25 kHz	
PLL Steps	2.5 / 5 / 6.25 kHz	5 / 6.25 kHz
Current Consumption	TX: 6A (25W), RX: 2.5 A, Standby: 0.3 A	
Operating Temperature Range	-30° C to +60° C	
Frequency Stability	±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	
Receiver Specification: measured by EN 300 086		
Sensitivity 20 dB SINAD	- 4 dB µV emf / -2 dB µV emf	
Adjacent Channel Selectivity	85 / 70	75 / 65 dB
Intermodulation	70 dB	
Spurious and Image Rejection	80 dB	
Audio Output	Internal: 2W @ 32 Ohms, 5% THD External: 12W @ 4 Ohms, 5% THD	
Transmitter Specification: measured by EN 300 086		
Output Power	25 / 12.5 / 5	
Modulation	16K0F3E, 11K0F3E	
Modulation limiting	±2.5 / ±4.0 / ±5.0 kHz	
Audio Distortion	< 3% @ 1kHz	
Spurious Emission	75 dB below carrier -36 dBm @ ≤1 GHz, -30 dBm @ > 1 GHz	

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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