# VX-4600 Series

## VHF/UHF Mobile Radios

#### SPECIFICATION SHEET

### **Optimized Mobile Communications**

The VX-4600 mobile radios are packed with enhanced features and signaling performance for increased communications flexibility and worker safety.

#### **Expanded Signaling and Security**

Both radios provide a full range of signaling capabilities including 2-tone, 5-tone and MDC 1200<sup>®</sup> encode/decode for selective calling.

Private communication is supported by built-in voice inversion encryption. And, if a radio is ever lost or stolen, 5-tone remote stun/kill/revive can be activated to ensure messages are only heard by those intended.

#### Enhanced Audio Performance

Features Channel Announcement which loudly speaks the current channel description to simplify changing channels when focused on other tasks simultaneously.

Includes voice activation (VOX) that enables users to transmit voice without pressing the Push to Talk button on the microphone. Enables hands-free operation for convenience.

In noisy environments, activate the Clear Voice function to enhance audio transmit to ensure your message is heard. And, to ensure a radio is not accidentally turned down too low, a minimum volume limit can be programmed by your Dealer.

Whisper capability is also included to augment audio transmit when talking quietly is necessary for discreet communications.

Record and store up to 120 seconds for keeping an audible record of important messages using the optional DVS-8 Voice Storage unit.

#### When Safety Counts

As with all Vertex Standard mobile radios, the VX-4600 Series includes Emergency alert for enhanced driver safety.

Operators can activate the Lone Worker function when leaving equipment or a vehicle temporarily. If a problem arises while away, the radio switches to Emergency mode to alert help.

When constant contact is required at all times, Vertex Standard's exclusive Auto-Range Transpond System (ARTS<sup>™</sup>) is also included to inform the user that another  $\ensuremath{\mathsf{ARTS}}^{\ensuremath{\mathsf{m}}}\xspace$  -equipped radios are within communication range.

#### Large Group Communications Made Easy to Manage

The VX-4600 has 512-channel capacity and 32 groups to easily manage a variety of calls at the most complex job site.

### ACMA Narrowband Compliant

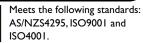
400MHz narrowband compliant.

The ACMA intends to ensure all radios are narrowband compliant by 31 December 2015 in urban areas and by 31 December 2018 in rural areas.



The Vertex Standard Difference Our number one goal is achieving superior customer satisfaction by delivering products and services that exceed your expectations. Vertex Standard radios are built to last and are backed by an industryleading 3 year warranty – another great reason to choose Vertex Standard. Ask your Dealer for more details.







VX-4600

165mm (W) X 45mm (H) X 155mm (D)



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#### **Additional Features**

- Six programmable keys
- 8-Character alphanumeric display (VX-4600)
- RSSI signal strength indicator (VX-4600)
- DTMF Paging
- DTMFANI
- Speed dial (VX-4600)
- CTCSS / DCS Encode and Decode
- BCLO / BTLO and TOT Functions
- Compander
- Direct channel entry (VX-4600)
- Minimum volume control
- Talk around
- Priority scan
- Dual priority scan
- Dual watch scan
- Follow-me scan
- Talk around scan
- Talk back scan
- Operator selectable scan
- Group scan
- Manual squelch control
- D-sub 15 pin accessory connector
- Public address / horn alert
- Radio-to-radio cloning

#### Accessories

- MH-67A8J: Standard microphone
- MH-75A8J: Keypad microphone (16 keys)
- MD-12A8J: Desktop microphone
- MLS-100: External speaker, square, 12W
- MLS-200: External speaker, I2W (indoor/outdoor use)
- FP-1023A: External power supply
- LF-6: DC Line filter

#### **Option Board**

DVS-8: Digital voice storage

### VX-4600 Series Specifications

	VHF	UHF				
General Specification						
Frequency Range	134 - 174MHz	400 - 470MHz 450 - 520MHz				
Number of Channels and Groups	512 with 32 groups (VX-4600)					
Power Supply Voltage	13.6 V DC ± 20%					
Channel Spacing	12.5 / 20 / 25kHz					
PLL Steps	1.25 / 2.5 / 5 / 6.25kHz	5 / 6.25kHz				
Current Consumption	TX: 11A, RX: 2.5A, Standby: 200mA					
Operating Temperature Range	-30°C to +60°C					
Frequency Stability	±2.5ppm					
RF Input-Output Impedance	50 Ohms					
Dimension ( $H \times W \times D$ )	165 x 45 x 155mm					
Weight (Approx.)	1.2	1.25kg				
Receiver Specification: measured	by TIA/EIA-603					
Sensitivity 12dB SINAD	0.25µV					
Adjacent Channel Selectivity	75dB / 70dB					
Hum and Noise	45dB / 40dB					
Intermodulation	75dB					
Spurious and Image Rejection	85dB / 80dB					
Audio Output	Internal: 4W @ 20 Ohms; External: 12W @ 4 Ohms, <5% THD					
Transmitter Specification: measured	red by TIA/EIA-603					
Output Power (Selectable)	25 / 12.5 / 5W	25 / 12.5 / 5W				
Modulation	I6K0F3E, I IK0F3E					
Maximum Deviation	±5.0kHz / ±2.5kHz					
Hum and Noise	45dB / 40dB					
Audio Distortion	< 3% @ 1kHz					
Conducted Spurious Emission	70dB below carrier					

# Applicable MIL-STD Standard MIL 810C Methods/Procedures MIL 810D Methods/Procedures

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures	MIL 810G Methods/Procedures
Low		500.2 /	500.3 /	500.4 /	500.5 /
Pressure		Procedure I	Procedure I	Procedure I	Procedure I
High	501.1 /	501.2 /	501.3 /	501.4 /	501.5 /
Temperature	Procedure I, II	Procedure I	Procedure I	Procedure I	Procedure I
Low	502.1 /	502.2 /	502.3 /	502.4 /	502.5 /
Temperature	Procedure I	Procedure I, II	Procedure I, II	Procedure I, II	Procedure I, II
Temperature	503.1 /	503.2 /	503.3 /	_	_
Shock	Procedure I	Procedure II	Procedure I		
Solar	_	_	505.3 /	505.4 /	_
Radiation			Procedure I	Procedure I	
Rain	506.1 /	506.2 /	506.3 /	506.4 /	506.5 /
	Procedure II	Procedure II	Procedure II	Procedure III	Procedure III
Humidity	507.1 /	507.2 /	507.3 /	-	-
	Procedure II	Procedure II	Procedure II		
Salt Fog		509.2 /	509.3 /	509.4 /	509.5 /
	-	Procedure I	Procedure I	Procedure I	Procedure I
Dust	-	-	510.3 / Procedure I	-	-
Vibration	514.2 / Procedure VIII, X	514.3 / Cat. 10	514.4 / Cat. 10	514.5 / Cat. 20, 24	514.6 / Cat. 20, 24
Shock	516.2 / Procedure I, III,V	516.3 / Procedure I, IV	516.4 / Procedure I, IV	516.5 / Procedure I, IV	516.6 / Procedure I, IV

Specifications are subject to change without notice or obligation.

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