

# VX-5500/6000 Series

## Low Band/VHF/UHF Mobile Radios

### SPECIFICATION SHEET – NORTH AMERICA

#### Flexible Configuration And Durability For Demanding Applications

Easily support networked, dual-band operations with reliable performance. With the VX-6000 Series, get high output power for greater coverage from 100 W to 120 W adjustable power output. Standard and dual control head packages available.

#### Large Channel Capacity For Greater Reach

Features 250 channel capacity and the ability to program up to 20 memory groups with no limit on the number of channels in each group.

#### Built For Durability

The one-piece die-cast enclosure doubles as its chassis, yielding extreme strength for resistance against shock and vibration and avoids over-heating.

#### Multi-Configuration For Dual-Band Capability

One Control Head and two RF Decks on different bands may be networked for dual-band operation. Low Band, VHF or UHF radios may be combined to meet complex communications requirements involving federal, state and local government operations.

#### When Safety Counts

As with all Vertex Standard mobile radios, the VX-5500/6000 Series includes Emergency alert for enhanced driver safety. A panic button can be triggered by the front panel button to alert the dispatcher when problems arise. There is also an internal emergency microphone that can transmit should the regular microphone become damaged or unusable.

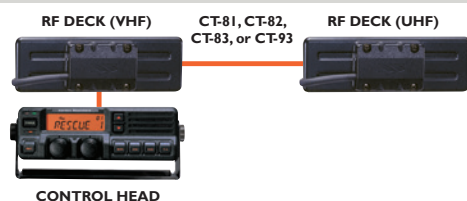
#### Loud, Full-Sounding Audio

Audio companding ensures full sound for narrow band channel applications. Use the optional 12W rear external speaker for enhanced clarity.

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

Always know your connection status. Only Vertex Standard radios are designed to inform you when you and another ARTS™-equipped radio are within communication range. If out of range, your radio senses no signal has been received and beeps to alert you. A great solution to keep workers coordinated.

#### Dual Band Single Head Remote Configuration



#### Dual Head Remote Configuration



VX-5500



VX-6000



REMOTE MOUNT CONFIGURATION



#### 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 industry-leading 3 year warranty.

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www.vertexstandard.com/lmr

### Additional Features

- ▶ Seven programmable backlit keys
- ▶ 8-Character alphanumeric display
- ▶ DTMF ANI
- ▶ CTCSS / DCS Encode and Decode
- ▶ BCLO / BTLO and TOT Functions
- ▶ Status quick check
- ▶ Compander
- ▶ Internal emergency microphone (front panel)
- ▶ Priority scan
- ▶ Dual Watch scan
- ▶ Group scan
- ▶ D-sub 25 pin accessory connector
- ▶ Water shield microphone connector
- ▶ Public address / horn alert
- ▶ User-selectable tones
- ▶ Radio-to-radio cloning

### Accessories

- ▶ MH-53C7A: Standard microphone
- ▶ MH-53A7A: Noise cancelling microphone
- ▶ MH-53B7A: Noise cancelling microphone – DTMF keypad
- ▶ MD-12A7A: Desktop microphone
- ▶ MLS-100: External speaker, 12 W
- ▶ MLS-200: Waterproof external speaker, 12 W
- ▶ SEC-1223: External Power Supply (VX-5500)
- ▶ FP-1030A: External Power Supply (VX-6000)
- ▶ MMB-75: Mobile mounting bracket (VX-5500)
- ▶ MMB-76: Locking mobile mounting bracket (VX-5500)
- ▶ MMB-77: Mobile mounting bracket (VX-6000)
- ▶ MMB-79: Locking mobile mounting bracket (VX-6000)
- ▶ LF-1: DC Line filter (VX-5500)
- ▶ RMK-4000H: Cover for CNT-6000
- ▶ RMK-4000B: Cover for RF deck
- ▶ CT-93 Remote Cable for RMK-4000 33 ft (10 m)
- ▶ CT-81 Remote Cable for RMK-4000 20 ft (6 m)
- ▶ CT-82 Remote Cable for RMK-4000 8 ft (2.5 m)
- ▶ CT-83 Remote Cable for RMK-4000 2 ft (0.6 m)
- ▶ CNT-5000: Motorcycle control head (VX-5500)
- ▶ CNT-6000: Control head
- ▶ BSC-5000: Base station console

### Option Boards

- ▶ FVP-25: Voice inversion encryption and DTMF paging
- ▶ FVP-35: Rolling code encryption
- ▶ FVP-36: Voice inversion encryption only
- ▶ VME-100: MDC-1200® / GE Star® ANI Encode
- ▶ FIF-7A: Interface for optional boards
- ▶ CN-6: Interface for third-party accessory boards

### VX-5500/6000 Series Specifications

	Low Band	VHF	UHF
<b>General Specification</b>			
Frequency Range	29.7 – 37 MHz (VX-5500) 37 – 50 MHz	148 – 174 MHz	450 – 490 MHz
Number of Channels and Groups	250 with 20 Groups		
Power Supply Voltage	13.6 V DC ± 15% (VX-5500) 13.4 V DC ± 15% (VX-6000)		
Channel Spacing	20* kHz	12.5 / 25* kHz	
PLL Steps	5 / 6.25 kHz	2.5 / 5 / 6.25 kHz	
Current Consumption (VX-5500/6000): TX	15 A / 22 A	12 A / 25 A	13 A / 28 A
Current Consumption (VX-5500/6000): RX STBY	2.1 A / 2.2 A 600 mA		
Operating Temperature Range	-22°F to +140°F (-30°C to +60°C)		
Frequency Stability	Better than ±5 ppm	Better than ±2 ppm	
RF Input-Output Impedance	50 Ohms		
Dimension (H x W x D)	2.4 x 7 x 7.7 inches (60 x 178 x 195 mm) VX-5500 2.4 x 7 x 11.9 inches (60 x 178 x 301 mm) VX-6000		
Weight (Approx.)	4.9 lbs (2.2 kg) VX-5500 15.4 lbs (6.9 kg) VX-6000		
<b>Receiver Specification: measured by TIA/EIA-603</b>			
Sensitivity 12dB SINAD	0.25 µV		
Adjacent Channel Selectivity	85 dB	85 dB / 80 dB	85 dB / 77 dB
Intermodulation	80 dB	80 dB / 75 dB	
Spurious and Image Rejection	90 dB		
Audio Output	Internal: 5 W @ 4 Ohms, 3% THD External: 10 W @ 4 Ohms, 3% THD		
<b>Transmitter Specification: measured by TIA/EIA-603</b>			
Output Power: VX-5500 VX-6000	70 W adjustable to 30 W 120 W adjustable to 50 W	50 W adjustable to 5 W 110 W adjustable to 50 W	45 W adjustable to 5 W 100 W adjustable to 50 W
Modulation	16K0F3E, 11K0F3E		
Maximum Deviation	5 kHz	5.0 kHz / 2.5 kHz	
Conducted Spurious Emissions	80 dB below carrier		
Audio Distortion	< 2% @ 1 kHz		

### Applicable MIL-STD

Standard	Methods/Procedures		
	MIL 810C	MIL 810D	MIL 810E
Low Pressure	–	500.2 / II	500.3 / II
High Temperature	501.1 / II	501.2 / I, II	501.3 / I, II
Low Temperature	502.1 / I	502.2 / I, II	502.3 / I, II
Temperature Shock	503.1 / I	503.2 / I	501.3 / I
Solar Radiation	505.1 / I	505.2 / I	505.3 / I
Rain (control head only)	–	506.2 / I, II	506.3 / I, II
Humidity	507.1 / II	507.2 / II	507.3 / II
Salt Fog	–	509.2 / I	509.3 / I
Dust	–	510.2 / I	510.3 / I
Vibration	514.2 / VIII, X	514.3 / I Cat. 10	514.4 / I Cat. 10
Shock	516.2 / I, V	516.3 / I, IV	516.4 / I, IV

Specifications are subject to change without notice or obligation. Vertex Standard is a trademark of Vertex Standard LMR, Inc. All other trademarks are the property of their respective owners.  
\*25 kHz will not be available on new equipment in the U.S.A. after 1/1/2013. © 2014 Vertex Standard LMR, Inc. All rights reserved. NSS\_5500/6000\_01/2014