

# VX-5500 Series

## Low Band/VHF/UHF Mobile Radios

### SPECIFICATION SHEET

### Flexible Configuration And Durability For Demanding Applications

The VX-5500 delivers reliability and easy expandability for your networked, dual-band operation. Get tailored communications and a maximum return for your investment. Standard and dual control head packages available.

### Large Channel Capacity For Greater Reach

The VX-5500 provides convenient communications planning with its 250 channel capacity and the ability to program up to 250 memory groups with no limit on the number of channels in each group.

### Built For Durability

The one-piece die-cast enclosure for the VX-5500 doubles as its chassis, yielding extreme strength for resistance against shock and vibration and avoids over-heating.

### Multi-Configuration For Dual-Band Capability

One VX-5500 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 Series comes standard with built-in Emergency alert for enhanced driver safety. A panic button can be triggered by the front panel button to alert the dispatcher when problems arise. The VX-5500 also has an internal emergency microphone that can transmit should the regular microphone become damaged or unusable.

### Loud, Full-Sounding Audio

Audio companding ensures full-sounding audio for narrow band channel applications. The VX-5500 also has 5W high-powered audio output for crisp audio that helps you hear in noisy environments. Plus use the optional 10W rear external speaker for enhanced clarity.

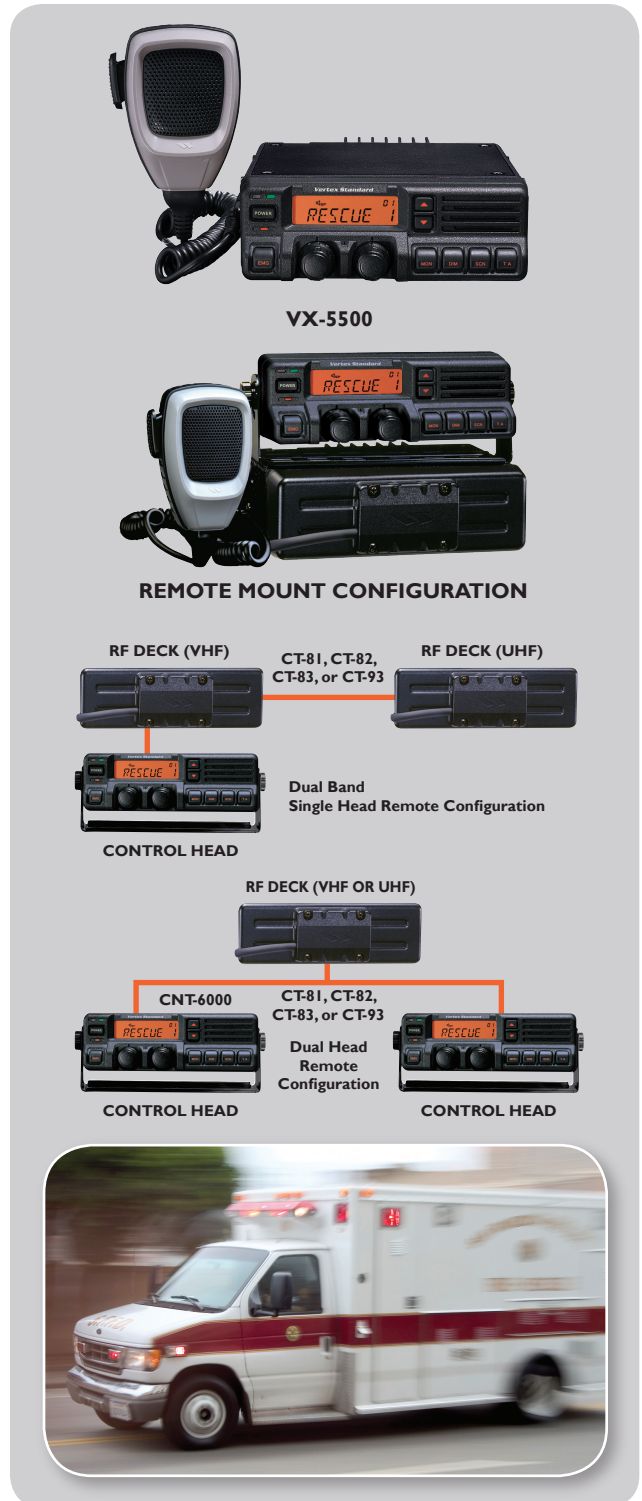
### Exclusive Auto-Range Transpond System – ARTS™

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 coordinated.



### 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 – another great reason to choose Vertex Standard. Ask your Dealer for more details.



## 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
- Compaander
- 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-53B7: Noise cancelling keypad mic. (12 keys)
- MLS-100: External speaker, 12W
- MLS-200: External speaker, 12W (indoor/outdoor use)
- FP-1023A: External Power Supply
- MMB-75: Mobile mounting bracket
- MMB-76: Locking mobile mounting bracket
- LF-1: DC Line filter
- CNT-6000: Control head
- RFDECK: RF Deck for dual-band configuration
- RMK-4000H: Cover for CNT-6000
- RMK-4000B: Cover for RF deck
- CNT-5000: Motorcycle control head
- VCS-5000: Channel selector
- BSC-5000: Base station console

## Option Boards

- FVP-25: Voice inversion encryption & DTMF paging
- FVP-35: Rolling code encryption
- FVP-36: Voice inversion encryption only
- FIF-7A: Interface for optional boards
- F2D-8: 2-Tone decode (requires FIF-7A)
- F5D-14: 5-Tone encode/decode (requires FIF-7A)
- VME-100: MDC1200® / GE Star® ANI Encode
- CN-6: Interface for accessories

## VX-5500 Series Specifications

	Low Band	VHF	UHF
<b>General Specification</b>			
Frequency Range	29.7 – 37 MHz (A) 37 – 50 (B)	134 – 160 MHz (A) 148 – 174 MHz (C)	400 – 430 MHz (A) 450 – 490 MHz (D) 480 – 512 MHz (F)
Number of Channels and Groups	250 and 250 Groups		
Power Supply Voltage	13.6V DC ± 15%		
Channel Spacing	20 kHz	12.5 / 30 kHz	
PLL Steps	5 / 6.25 kHz	2.5 / 5 / 6.25 kHz	
Current Consumption: TX	14A	12A	13A
Current Consumption:	2.1A		
RX	600 mA		
STBY			
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 (W x H x D)	7 x 2.4 x 7.7 inches (178 x 60 x 195mm)		
Weight (Approx.)	4.9 lbs (2.2 kg)		
<b>Receiver Specification: measured by TIA/EIA-603</b>			
Sensitivity 12dB SINAD	0.25 µV		
Adjacent Channel Selectivity	85 dB	85 / 77 dB	85 / 77 dB
Intermodulation	80 dB	80 / 75 dB	80 / 75 dB
Spurious and Image Rejection	90 dB		
Audio Output	Internal: 5W @ 4 Ohms, 3% THD; External: 10W @ 4 Ohms, 3% THD		
<b>Transmitter Specification: measured by TIA/EIA-603</b>			
Output Power	70W adjustable to 30W	50W adjustable to 5W	45W adjustable to 5W
Modulation	16K0F3E	16K0F3E, 11K0F3E	
Maximum Deviation	5 kHz	5.0 / 2.5 kHz	
Conducted Spurious Emissions	80 dB below carrier		
Audio Distortion	<2% @ 1 kHz		

## Applicable MIL-STD

Standard	MIL 810C Methods/ Procedures	MIL 810D Methods/ Procedures	MIL 810E Methods/ Procedures
Low Pressure	-	500.2/Procedure II	500.3/Procedure II
High Temperature	501.1/Procedure II	501.2/Procedure I, II	501.3/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I
Solar Radiation	505.1/Procedure I	505.2/Procedure I	503.3/Procedure I
Rain (control head only)	-	506.2/Procedure I, II	506.3/Procedure I, II
Humidity	507.1/Procedure II	507.2/Procedure II	507.3/Procedure II
Salt Fog	-	509.2/Procedure I	509.3/Procedure I
Dust	-	510.2/Procedure I	510.3/Procedure I
Vibration	514.2/Procedure VIII, X	514.3/Procedure I Cat 10	514.4/Procedure I Cat. 10
Shock	516.2/Procedure I, V	516.3/Procedure I, IV	516.4/Procedure I, IV

Specifications are subject to change without notice or obligation.

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