

# VXD-7200

## Digital Mobile Radio

SPECIFICATION SHEET

DMR TIER 2 STANDARD

### Clear, Quality Mobile Communications

The VXD-7200 conventional mobile radio makes converting from analog to digital easy. The VXD digital radio series operates on the most widely-used Digital Mobile Radio (DMR) protocol, making it compatible to work with other DMR models and brands. The VXD Series can also be used with any existing analog two-way radios for an easy transition to new equipment and maximum return on investment.

### Invest Today In Digital – Convert From Analog As Needed

The VXD-7200 can operate in both analog and digital mode providing an easy path to digital when ready. This flexibility enables conversion to digital one radio at a time, one channel at a time or the entire system based on functional or fiscal needs. Includes dual-mode analog and/or digital scan and mixed mode priority scan to easily operate in digital and still scan and communicate with analog radio users of any brand.

### Digital Doubles Call Capacity With One License

All Vertex Standard VXD radios use Time-Division Multiple-Access (TDMA) 6.25 kHz efficient digital technology that doubles the capacity for the price of one frequency license. The radios support twice as many talk groups or calls without adding more licensing costs.

### Digital Delivers Consistent, Clear Audio Quality

Experience enhanced voice clarity and reduced noise over a greater range versus analog technology for consistently crisp, clear communications

### Digital Delivers Integrated Voice and Text for Efficiency

Includes text messaging in digital mode for flexible communications. Radio display features 40 characters of text. Receive messages or send up to 10 different pre-set messages using 1-touch button system.

### FCC Narrowbanding Compliant

Meets the FCC Part 90 requirement for using 12.5 kHz channels by January 1, 2013. VXD radios enable users to keep existing 12.5 kHz channels and double the call capacity with the two-slot TDMA technology. Using digital meets the FCC recommendation to convert directly to 6.25 kHz efficient equipment for greater spectrum efficiency.



VXD-7200

BACK



#### 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

- 512 Channel capacity
- Four programmable front panel keys
- 40 Character alphanumeric display
- Multi-color LED custom call alert
- 26-Pin accessory connector
- Basic privacy (digital mode only)
- MDC-1200<sup>®</sup> analog encode/decode: call alert, emergency and PTT ID
- Digital encode/decode: call alert, private call, emergency, selective radio inhibit, radio check and remote monitor
- 2-Tone Analog paging: call alert, call alert with voice, select call

## Accessories

- MH-67A8J: Standard microphone
- MD-12A8J: Desktop microphone
- DTT-1: Desktop tray
- CT-149: Rear accessory connector universal cable
- CT-148: Ignition sense cable
- MMB-93: Low profile mounting kit
- MMB-94: High profile mounting kit
- MMB-95: Key lock mounting kit
- MMB-96: In dash mounting kit
- E-DC-27: Power cable 15 Amp, 10 ft.
- E-DC-28: Power cable 20 Amp, 20 ft.

## VXD-7200 Specifications

	VHF	UHF
<b>General Specification</b>		
Frequency Range	136 – 174 MHz	403 – 470 MHz   450 – 512 MHz
Number of Channels and Groups	512 Channels and 512 Groups	
Power Supply Voltage	13.6 V DC ± 20%	
Channel Spacing	12.5 / 25 kHz	
Current Consumption	TX @ 1-25 W: 11.0 A max TX @ 25-40 W: 14.5 A max RX: 2 A max, Standby: 0.81 A max	
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability	±0.5 ppm	
Dimension (H x W x D)	2.01 x 6.89 x 8.11 inches (51 x 175 x 206 mm)	
Weight (Approx.)	4.0 lbs (1.8 kg)	
<b>Receiver Specification: measured by TIA/EIA-603C</b>		
Sensitivity:	0.3 µV 0.22 µV typical	
Analog 12dB SINAD	0.3 µV 0.22 µV typical	
Digital	5% BER: 0.3 µV	
Adjacent Channel Selectivity:		
TIA603	65 dB @ 12.5 kHz, 80 dB @ 25 kHz	65 dB @ 12.5 kHz, 75 dB @ 25 kHz
TIA603C	50 dB @ 12.5 kHz, 80 dB @ 25 kHz	50 dB @ 12.5 kHz, 75 dB @ 25 kHz
Intermodulation	78 dB	75 dB
Spurious Rejection	80 dB	75 dB
Audio Output	3 W (Internal) 7.5 W (External @ 8 Ohms) 13 W (External @ 4 Ohms)	
Audio Distortion	3% Typical	
Hum and Noise	-40 dB @ 12.5 kHz -45 dB @ 25 kHz	
Conducted Spurious Emission	-57 dBm	
<b>Transmitter Specification: measured by TIA/EIA-603C</b>		
Output Power	1 – 25 W 25 – 45 W	1 – 25 W 25 – 40 W   – 1 – 40 W
Modulation Limiting	± 2.5 kHz @ 12.5 kHz, ± 5.0 kHz @ 25 kHz	
Conducted/Radiated Emission	-36 dBm < 1 GHz, -30 dBm > 1 GHz	
FM Hum & Noise	-40 dB @ 12.5 kHz, -45 dB @ 25 kHz	
Adjacent Channel Power	60 dB @ 12.5 kHz, 70 dB @ 25 kHz	
Audio Distortion	3%	
FM Modulation	11K0F3E, 16K0F3E	
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE	
Digital Protocol	ETSI TS 102 361-1, -2, -3	

## Applicable MIL-STD

	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.3 / II	500.4 / II
High Temperature	501.3 / IA, III/A1	501.4 / I/HOT, II/HOT
Low Temperature	502.3 / I/C3, II/C1	502.4 / I/C3, II/C1
Temperature Shock	503.3 / I/AIC3	503.4 / I
Solar Radiation	505.3 / I	505.4 / I
Rain	506.3 / I, II	506.4 / I, III
Humidity	507.3 / II	-
Salt Fog	509.3 / I	509.4 / I
Dust	510.3 / I	510.4 / I
Vibration	514.4 / I Cat. 10, II/3	514.5 / I Cat. 24
Shock	516.4 / I, IV	516.5 / I, IV