

VXD-R70

Digital Repeater

SPECIFICATION SHEET

DMR TIER 2 STANDARD

Clear, Quality Communications

Easily convert from analogue to digital two-way radio communications with the VXD-R70 repeater, providing the essential voice communications needed. The VXD digital radio series operates on the most widely-used digital protocol – DMR (Digital Mobile Radio), making it compatible to work with other DMR models and brands. The VXD Series can also be used with existing analogue two-way radios for an easy transition to new equipment and maximum return on investment.

Get 100% continuous duty at 45 Watt VHF and 40 Watt UHF for easy integration into most repeater sites.

Easy Digital Conversion: Operate in Analogue or Digital Mode

The VXD-R70 can operate in both analogue and digital modes providing an easy path to switch to digital when ready. This flexibility enables conversion to digital one radio at a time, one channel at a time or the entire system at once based on functional or fiscal needs. Any brand of analogue two-way radios can be supported by the VXD-R70 repeater in addition to using DMR portable or mobile radios.

Digital Doubles Call Capacity With One Licence

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 licence. The radios support twice as many talk groups or calls without adding more licensing costs.

Continuous Performance with Power Supply Backup

Includes integrated power supply with connector for optional external DC battery backup.

Multicoloured LED Status Indicator

LED indicator enables easy monitoring of repeater status. Status indicators include: power, digital/analogue mode, repeater disabled, transmit analogue/digital mode by slot, and receive analogue/digital mode by slot.



VXD-R70



REAR PANEL

482.6MM (W) X 132.6MM (H) X 296.5MM (D)

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 a comprehensive 1-year warranty – another great reason to choose Vertex Standard. Ask your Dealer for more details.

Additional Features

- 16 Channel capacity
- EIA Rack mount size
- AMBE+2™ Digital vocoder
- 26-Pin accessory connector

VX-R70 Specifications

	VHF	UHF	
General Specification			
Frequency Range	136 – 174 MHz	403 – 470 MHz	450 – 512 MHz
Number of Channels	16		
Power Supply Voltage	100 – 240 V AC (13.6 V DC)		
Channel Spacing	12.5 / 20 / 25 kHz		
Current Consumption	Standby: 1 A (1 A DC typical) TX Low Power: 3 A (7.5 A DC typical) TX High Power: 4 A (12 A DC typical)		
Operating Temperature Range	–30° C to +60° C (–22° F to +140° F)		
Frequency Stability	±0.5 ppm		
Duty Cycle	100%		
Dimension (H x W x D)	132.6 x 482.6 x 296.5 mm (5.22 x 19 x 11.67 inches)		
Weight (Approx.)	14 kg (31 lbs.)		
Receiver Specification: measured by EN 300 086			
Sensitivity :			
Analogue 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 Distortion	3% (typical)		
Hum and Noise	–40 dB @ 12.5 kHz –45 dB @ 25 kHz		
Conducted Spurious Emission	–57 dBm		
Transmitter Specification: measured by EN 300 086			
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		
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		