

# VXR-9000 Series

## VHF/UHF Rack Mount Repeater/Base Station

### SPECIFICATION SHEET – NORTH AMERICA

### High Power Output for Exceptional Reach and Performance

Available in 50 W or 100 W options the VXR-9000 delivers the reliable performance and extended range needed. The slim-line design is crafted for easy installation and integration into most repeater sites.

### Large Channel Capacity with Priority Scan

The VXR-9000 may be programmed with up to 32 channels and can perform in repeater or base station mode. Includes Priority Channel scanning for efficient communications monitoring.

### Power Supply Backup with Alert

If DC power fails at the repeater site, the VXR-9000 will automatically revert to a backup DC power source, if connected. Under backup DC power, the repeater will transmit an alert message to notify the operator that immediate attention is required at the repeater site.

### Automatic Command Sequence Configuration

The VXR-9000 may be programmed to perform a five-step sequence of commands for certain operating events. For example, during a DC power failure and the repeater switches to a backup power supply, the repeater can be programmed to switch to low power and send a CW ID advising of the situation, etc.

### Designed for High Reliability

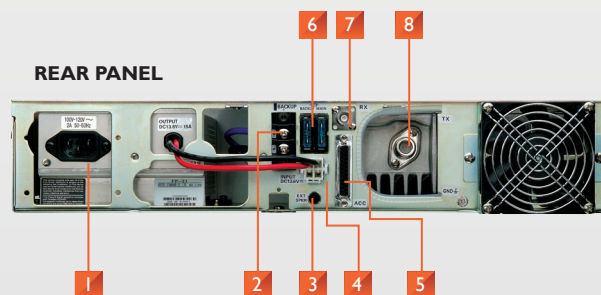
The cooling fan diameter is over 3 inches and thermostatically controlled to ensure a stable temperature environment. Fan operation may be programmed for three options: off, continuous or temperature-controlled, depending on the application. A malfunction alarm is also included.

### Simplex / Duplex Capability

The 50 Watt VXR-9000 is designed for simplex mode with single-antenna operation or full-duplex mode with the optional VXD-60 duplexer when optimal communications is necessary at all times.



VXR-9000



- |                                  |                                     |
|----------------------------------|-------------------------------------|
| 1. Power Supply FP-31 (Optional) | 5. D-SUB 25-pin Accessory Connector |
| 2. Backup Power Source Terminals | 6. Circuit Protection Fuse          |
| 3. External Speaker Jack         | 7. RX Antenna Jack                  |
| 4. Main Power Source Connector   | 8. TX Antenna Jack                  |



### 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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### Additional Features

- ✦ 6 Dual-function programmable keys
- ✦ 47 CTCSS / 108 DCS Encode / Decode
- ✦ Multi-tone decode
- ✦ CW ID Transmitter
- ✦ CW Message
- ✦ Audio compander per channel
- ✦ D-sub 25 pin accessory connector
- ✦ Automatic DC backup switching with alert
- ✦ EIA rack mount size

### Accessories

- ✦ MH-67A8J: Standard microphone
- ✦ MD-12A8J: Desktop microphone
- ✦ FP-31: Internal power supply unit (for 50 W)
- ✦ VPA-9000: 100 W Internal power amplifier unit
- ✦ FIF-9: 4-Wire line interface

### Option Boards

- ✦ FVP-25: Voice inversion encryption and DTMF paging
- ✦ FVP-35: Rolling code encryption

### Duplexer Options

- ✦ VXD-60VC: Duplexer VHF 148 – 160 MHz<sup>†</sup>
- ✦ VXD-60UD: Duplexer UHF 440 – 470 MHz<sup>†</sup>

### VXR-9000 Series Specifications

	VHF	UHF
<b>General Specification</b>		
Frequency Range	134 – 160 MHz 148 – 174 MHz	400 – 430 MHz 450 – 490 MHz
Number of Channels	32	
Power Supply Voltage	13.6 V DC ± 10%	
Channel Spacing	12.5 / 25* kHz	
Operating Temperature Range	-22°F to +140°F (-30°C to +60°C)	
Frequency Stability	1.5 ppm, 1.0 ppm (30 min. after wake up)	
RF Input-Output Impedance	50 Ohms	
Dimension (H x W x D)	3.5 x 19 x 13.5 inches (88 x 483 x 343 mm)	
Weight (Approx.)	21.4 lbs (9.7 kg) 50 W model	
<b>Receiver Specification: measured by TIA/EIA-603</b>		
Sensitivity 12dB SINAD	0.25 µV	0.3 µV
Adjacent Channel Selectivity	85 dB / 75 dB	80 dB / 75 dB
Intermodulation	82 dB / 78 dB	
Spurious and Image Rejection	90 dB	
Audio Output	4 W @ 4 Ohms	
<b>Transmitter Specification: measured by TIA/EIA-603</b>		
Output Power	50 / 25 / 10 W (100 W optional)	
Duty Cycle	100 % (25 W)	
Modulation	16K0F3E, 11K0F3E	
Maximum Deviation	± 5.0 kHz / ± 2.5 kHz	
Audio Distortion	< 2.5 % @ 1 kHz	
Conducted Spurious Emission	Better than 70 dB below carrier	

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.  
<sup>†</sup>50 Watt only \*25 kHz will not be available on new equipment in the U.S.A. after 1/1/2013. © 2013 Vertex Standard LMR, Inc. All rights reserved. NSS9000\_12/2013