



## RRD-1140 Series

*Narrow Band Capable Radio Kit for Wabtec 2360 NextGen EOT*

All radios are delivered in narrow band mode that is compliant with the FCC refarming mandate. Superb radio sensitivity permits these radios in narrow band mode to be fully interoperational with existing legacy wide band equipment as delivered. A complete line of replacement parts, programming cables and software together with Operating and Maintenance Manuals are available. One year manufacturer's warranty is standard; 2 and 3 year extended warranties are available. Call for details.

**Features & Benefits**

- Direct replacement, plug and play units.
- Software programmable: 12.5kHz narrow or 25kHz wide band.
- Both low & high power are selectable; factory delivered at 2 and 5 Watts respectively.
- 450-470 MHz frequency range.
- Frequency stability standard @ 1.5 ppm for fixed applications.
- Ultra fast TX/RX attack times.
- Controlled Envelope<sup>SM</sup> TX keying.
- Meets FCC and IC Canada standards.
- Electronic configuration settings are selectable.
- Selectable high/low output power.
- SMD component design.
- Designed and manufactured in the USA.

**Key Accessories and Replacement Parts**



**RRD-1220**  
Complete Programming and testing interface; RRD-1000(M), 1015(M), 1020(M), 1025, 1100 and 1140 Series radios, Quantum ETD and HTD radios, plus JSLM and RNET 15 pin radios. Includes all coaxial cables and test harnesses. Individual programming harnesses and software sold separately.



**RRD-1210**  
Programming interface; RRD-1000(M), 1015(M), 1020(M), 1025, 1100 and 1140 Series radios, Quantum ETD and HTD radios, plus JSLM and RNET 15 pin radios. Individual programming harnesses and software sold separately.



**RRD-1145**  
Adapter harness; RRD-1140 Series radio. Length: 12 inches.

**RRD-1006 (No Photo)**  
Programming software for RRD-1000(M), 1015(M), 1020(M) and 1025 Series radios.

**RRD-1008 (No Photo)**  
Maintenance & Operating Manual; RRD-1000(M), 1015(M), 1020(M) and 1025 Series radios. (Ritron DTX-Plus Series).

**GENERAL SPECIFICATIONS**

Frequency Range: 450-470MHz  
 Number of Channels: 8  
 TX/RX Spacing: 20 MHz max (w/in frequency range):  
 Mode of Operation: Simplex or Half Duplex  
 Channel Increment: 5-6.25kHz (Synthesizer step size)  
 Emissions Bandwidth: 11kHz Narrow Mode; 16kHz Wide Mode  
 Frequency Stability: 1.5 ppm (-30°C / +65°C)  
 Supply Voltage: 11.5 - 15 Vdc (10 watt version)  
 Operating Temp: -30°C / +65°C

**TRANSMITTER SPECIFICATIONS**

Operating Bandwidth: 20 MHz  
 RF Output Power: 1-10 watts  
 RF Load Impedance: 50 ohms  
 Audio Distortion: 5% max  
 Modulation Freq Resp: +1/-3dB ref 1 kHz  
 At MIC IN; 50-2500Hz (ref pre-emphasis curve)  
 At AUX IN; 50-2700Hz (w/o pre-emphasis)  
 15 ms  
 Spurious / Harmonics: -20dBm  
 FM Hum and Noise: 40dB (12.5kHz channel); 45dB (25 kHz channel)  
 Current Drain: 1.0 A @1W; 2.4 A @ 6W; 2.4 A @10W (13.7Vdc supply)

**RECEIVER SPECIFICATIONS**

Operating Bandwidth: 20 MHz  
 Sensitivity: 0.28 uV (12 SINAD w de-emphasis)  
 RF Input Impedance: 50 ohms  
 Adj Channel Selectivity: 60 dB (+/-12.5kHz w/narrow IF)  
 70 dB (+/- 25kHz w/wide IF)  
 Spurious/Image Reject: 70 dB  
 Intermodulation Reject: 70 dB  
 FM Hum and Noise: 40dB (12.5kHz channel); 45dB (25kHz channel)  
 Conducted Spurious: -57 dBm  
 Receive Attack Time: 15ms  
 Noise/Squelch Attack: 13ms  
 RSSI Squelch Attack: 5ms  
 Audio Distortion: 5%  
 Audio Resp-AUX OUT: 100Hz-3.5kHz (12.5kHz channel)  
 100 Hz-5kHz (25kHz channel)  
 Receive Current Drain: 75 mA



**Tel: 888-303-7245**

