



RRD-1020 Series

Narrow Band Capable Radio Kit for US&S ETD/HTD
model 6696 and Repeater Model 6680

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.

Drop in replacements for US&S UNMODIFIED models 6696 and 6680

Features & Benefits

- Direct replacement, plug and play units.
- 7.5-12Vdc input power.
- Software programmable: 12.5kHz narrow or 25kHz wide band.
- Both low & high power are programmable; 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 EnvelopeSM TX keying.

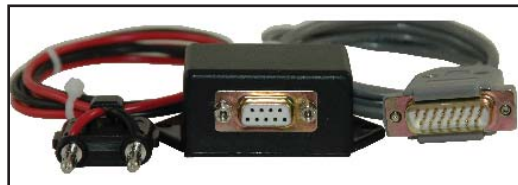
- Electronic settings and adjustments are software programmable.
- No on-board or hardware adjustments are required.
- Programmable high/low output power.
- SMD component design.
- Designed and manufactured in the USA.
- Meets FCC and IC Canada standards.

Other models are available to fit all US&S and Wabtec
NextGen enclosures and parameters.

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-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).

RRD-1021 (No Photo)
Mount kit for RRD-1020, 1025 Series radios.

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: 7.5 - 10 Vdc (10 watt version)
Operating Temp: -30°C / +65°C

TRANSMITTER SPECIFICATIONS

Operating Bandwidth: 20 MHz
RF Output Power: 1-6 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
Transmit Attack Time:
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

PRIMUS

Tel: 888-303-7245

**RAILROAD
PRODUCTS**



RRD-1020M Series

Narrow Band Capable Radio Kit for US&S ETD/HTD
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Drop in replacements for US&S MODIFIED models 6696 and 6680

Features & Benefits

- Direct replacement, plug and play units.
- One programming kit can be used for all RRD radios; cost effective and also simplifies the maintenance and upgrade process.
- Dedicated In-Service-Adjustment (ISA) port minimizes the risk of programming wipes and radio damage. Competitors utilize a programming pin in the HTD harness exposing the radio to the risk of dangerous voltage levels during programming.
- Software programmable for 12.5kHz narrow or 25kHz wide band.
- Both low & high power are programmable; factory delivered at 2 and 8 Watts respectively.
- 450-470 MHz frequency range.

- Frequency stability standard @ 1.5 ppm for fixed applications.
- Ultra fast TX/RX attack times.
- Controlled Envelope
- Meets FCC and IC Canada standards.
- All electronic settings are software programmable.
- No on-board or hardware adjustments are required.
- SMD component design.
- Designed and manufactured in the USA.

Other models are available to fit all US&S and Wabtec NextGen enclosures and parameters.

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

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Mount kit for RRD-1020(M), 1025 Series radios.

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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)
Transmit Attack Time: 15 ms
Spurious / Harmonics: -20dBm
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