

REDCOM Radio Interface

Connecting REDCOM switching systems and military & commercial radios

- ▶ Easy message-based setup
- ▶ Allows back-to-back radio patches with VOX, COR & PTT
- ▶ Security check for encrypted military radios
- ▶ Suppresses repeater squelch tail noise burst
- ▶ Three monitor speaker outputs
- ▶ Supports multi-user dial-in monitoring via analog, digital & IP

RADIO USERS GAIN ACCESS TO REDCOM SYSTEM FEATURES

REDCOM's Radio Interface provides a simple and reliable connection between REDCOM switching systems and two-way radio systems. Radio users gain all the same benefits of a REDCOM system normally available to station users. The feature allows any phone in the REDCOM system to dial out to a remote radio, or allows a radio to dial directly into the system and ring a phone, make an outside call, or call another remote radio system.

SUPPORTS VOX, COR & PTT CALLING

The Interface contains two circuits and supports full two-way calling with Push To Talk (PTT), Voice Operated Transmission (VOX) or Carrier Operated Relay (COR). Each circuit can interface with an HF (pulse) or UHF/VHF (DTMF) radio for simplex or duplex operation. The Interface allows direct, back-to-back radio patches with both VOX and COR.

EFFECTIVELY SUPPRESSES REPEATER SQUELCH

REDCOM technology removes the annoyance of repeater squelch tail noise found in analog radios commonly in use with police, fire, municipal and commercial/industrial communication networks.

SECURITY CHECK FOR ENCRYPTED RADIOS

Interoperable with encrypted military radios, REDCOM's Radio Interface verifies that the radio is secure before the voice transmission is enabled.

ADJUSTABLE GAIN

REDCOM's Radio Interface provides adjustable gain to accommodate radio audio and long cable lengths, enabling geographic distribution between the radio base unit and the REDCOM switch.

MULTI-USER DIAL-IN MONITORING

Several users can monitor radio traffic by dialing in via analog telephone systems, digital (ISDN) phones, or IP phones. This feature can also be password controlled for enhanced security.

ADDITIONAL FEATURES:

- Transmission in each direction is VOX controlled, with built-in timing to facilitate transmit/receive transitions.
- Operating parameters can be changed in the field to accommodate specific radio system characteristics.
- Parameters are stored in non-volatile RAM for protection if the board is removed or interrupted.
- Transmits a ring sound over the radio to the remote user to notify of an incoming call (call will not be billed until it is answered).
- On-board microprocessor controls the 2-way VOX, call progress monitoring, and timing operations without the use of specially equipped phones.
- Auto answer is available on a port-by-port basis and can answer on ring number 1-255. This is set by using the "ans_mode" command on the Radio Interface screen.
- PTT activation from REDCOM LCS or ISDN CommandSet™ phones.

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Talk to the communications experts at REDCOM

For more information about how REDCOM can create a reliable solution for you, call us today at +1.585.924.6500, or e-mail sales@redcom.com

One Redcom Center, Victor, NY 14564-0995, U.S.A. www.redcom.com

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COMPATIBLE

SPECIFICATIONS:

Description

- Front panel LED indications
- Standard interface compatible with normal balanced/unbalanced remote radio electrical characteristics
- Remote Supervision Release allows the switch software to release the radio circuit on detection of on-hook from the phone network
- Variable audio delay to accommodate scanners and secure preamble

Output Gain

- The output can be adjusted to any level between 0.1 and 8 mV rms into a 150 Ω load, or -16 to +9 dBm0 into 600 Ω load.

Input Gain

- The Radio Interface may be adjusted to provide a 0 dBm level (PCM) to the backplane when the input is any level between 100 mV rms and 2 V rms (+8.5 to -17 dBm0 at 600 Ω).

Radio Requirements

- Microphone Input: low impedance 150 Ω (nominal 0.1-8 mV rms), or 600 Ω (100 mV to 2 V).
- Speaker Output: 50 mV to 3 V rms into the Radio Interface's 600 Ω input.

REDCOM SWITCH COMPATIBILITY:

- REDCOM HDX V3.0 R3P0 or higher

COMPATIBLE RADIOS:

Below is a list of radios that have been tested by REDCOM for compatibility with the Radio Interface:

- SINCGARS (RT-15xx and RT-17xx series, various manufacturers)
- Cobra MicroTalk
- Rockwell Collins AN/VRC-100
- Harris AN/PRC-150
- Harris AN/PRC-117F
- Harris RF5000
- Motorola MaxTrac 300
- Kenwood TK-805D



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