

Raven Electronics Corporation

Specialized Communication Solutions Since 1968

Dual 4-Wire Interface Modules 476-150 & 476-151 M4x Communication Technology

The Raven **476-150 & 476-151 Dual 4-Wire Interface Modules** are modules that plug into a Raven 47692 or 47698 Line Interface Board. These modules provide two 4-wire audio ports with transformer coupled inputs and outputs (476-150) or differential inputs and outputs (476-151). The two ports can be configured for E & M Lead (or COR and PTT) operation when required. The 476-151 has a lower frequency response to pass PL tones and the input can be configured for high impedance.

The Dual 4-Wire Interface can be software provisioned to perform the following functions:

- Signal-to-noise analysis
- 2175Hz notch filtering
- Audio level control
- PTT generation
- Audio Delay:
 Receive & transmit audio delay up to 1 second
- Tone Detection:
 - Function tones
 - Status tone (1950Hz/2175Hz) • DTMF
 - Keying Options: • VOX threshold
 - COR
 Combination of VOX/COR
 - Custom, via software

- Tone Generation:
 - EIA keying tones for tone remote control • Voting status tone (1950/2175Hz)
 - DTMF
 - Test tones
 - Call progress tones
 - o Pilot/status tone generator

Specifications

4-WIRE AUDIO PORTS Isolation Idle Noise 476-150 module: Input & Output Gain

Frequency Response

476-151 module: Input & Output Gain

Input Impedance

Output Impedance Frequency Response >60 dB <20 dbrnC0

-20 to +7 dBm @ 600Ω adjustable in 0.1dB steps 300 to 3400Hz +/- 0.5dBm ref. to 1 KHz

-20 to +7 dBm adjustable in 0.1dB steps

600Ω or high impedance, user selectable 600Ω 5 to 3400Hz +/- 0.5dBm ref. to 1 KHz

ENVIRONMENTAL

Operating Temperature Storage Temperature Relative Humidity Maximum Altitude

PHYSICAL

PC Board Dimensions

Weight

M-LEAD RELAY Maximum contact Maximum current

POWER REQUIREMENTS

0 to 50 °C -40 to 80 °C 0 to 95% non-condensing 15,000 ft. (4572 meters)

1.95" W X 4.5" L X 0.8" H (4.95 cm X 11.4 cm X 2.03 cm) 3 oz. (85g)

voltage 60 VDC, 20 VAC 100 mA

+5VDC @ 300 mA max. +12VDC @ 60 mA max. -12VDC @ 60 mA max.

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APPLICATIONS

- 800 MHz Rebanding
- Conventional Radio Simulcast
- Repeater Intertie
- Incident Response
- Radio Interoperability
- Multi-user Crosspatch (network enabled)
- DTMF Crosspatch
- Communications System Troubleshooting
- SNR Voting
- 4-Wire Bridge
- Dispatch