Raven Electronics Corporation

Specialized Communication Solutions Since 1968

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

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

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
  - Pilot/status tone generator

Specifications

4-WIRE AUDIO PORTS	
Isolation	>60 dB
Idle Noise	<20 dbrnC0
476-150 module:	
Input & Output Gain	-20 to +7 dBm @ 600Ω adjustable in 0.1dB steps
Frequency Response	300 to 3400Hz +/- 0.5dBm ref. to 1 KHz
476-151 module:	
Input & Output Gain	-20 to +7 dBm adjustable in 0.1dB steps
Input Impedance	600Ω or high impedance, user selectable
Output Impedance	600Ω
Frequency Response	5 to 3400Hz +/- 0.5dBm ref. to 1 KHz

ENVIRONMENTAL	
Operating Temperature	0 to 50 °C
Storage Temperature	-40 to 80 °C
Relative Humidity	0 to 95% non-condensing
Maximum Altitude	15,000 ft. (4572 meters)
PHYSICAL	
PC Board Dimensions	1.95" W X 4.5" L X 0.8" H (4.95 cm X 11.4 cm X 2.03 cm)
Weight	3 oz. (85g)
M-LEAD RELAY	
Maximum contact	voltage 60 VDC, 20 VAC
Maximum current	100 mA
POWER REQUIREMENTS	+5VDC @ 300 mA max. +12VDC @ 60 mA max. -12VDC @ 60 mA max.

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