

# **COMMS Series**

2-Wire to 4-Wire, Party Line Converter

### **FEATURES**

- Portable, Rack Mount and openGear® Versions

- > Auto Null
- Supplies Party-Line Power Up to 6 Belt Packs

## **APPLICATIONS**

- Outside Broadcast
- > Stadiums / Arenas

## Intercom Units Provide An Interface Between Two Channels of 2-Wire Party-Line Intercom Audio And Two Channels of 4-Wire Analog Line-Level Signals



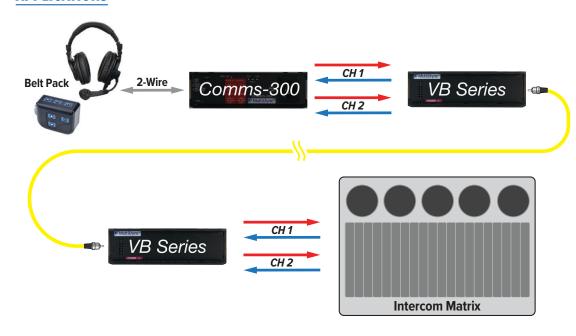
The COMMS Series Intercom Units provide a means to interface between two channels of 2-Wire party-line intercom audio and two channels of 4-Wire analog line-level signals. The unit is capable of performing auto nulling for each channel with the push of a button. In addition, each of the 4-Wire input and output channel levels are monitored and displayed on easy to understand front panel VU meters. With the flip of a switch, the unit can be a +28VDC party-line voltage power source while providing the 200 ohm intercom audio termination on both channels. If so desired, the party-line source and termination can be removed by just flipping the switch back. The unit can also be configured to work with either RTS party-line or ClearCom party-line equipment with the flip of a front

panel control switch. This switch adjusts the output gain between the party-line circuitry and the 4-Wire line level circuitry depending on which type of units one is interfacing with.

Auto nulling is done to achieve maximum return loss between the 4-Wire input and the 4-Wire output channels.

The COMMS Series is fully openGear® compatible with an industry standard card frame and is fully SNMP controllable and monitored through DashBoard. The openGear® frame also offers redundant power supplies. By adding a MultiDyne OG-3600 audio fiber transport, a party-line can be extended over fiber.

## **APPLICATIONS**

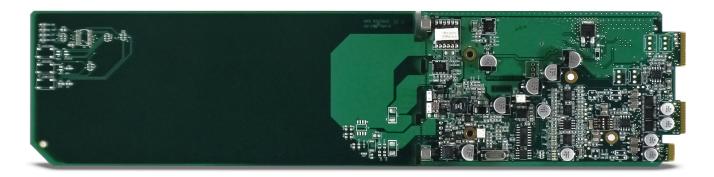






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## **TECHNICAL SPECIFICATIONS**

#### **General Audio**

	Frequency Response	±2.5 dB, 100 Hz to 8 kHz
	Distortion (THD+N)	>0.25% measured at 1 kHz, 4-wire input to 2-wire interface
	Signal-to-Noise Ratio	55dB, measured at 1 kHz, 4-wire input to 2-wire interface

### 2-Wire Pary-Line Intercom Interface:

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Туре	2-channel party-line, unbalanced (pin 1 common; pin 2 DC with channel 1 audio; pin 3 channel 2 audio)
Compatibility	single- and dual-channel intercom systems such as from RTS® and Clear-Com®
Impedance-Normal	>20 k ohms
Impedance–2-Wire (PL) Power Source Mode	200 ohms
Nominal Level	–10 dBu RTS, -14dbu Clear Com
"Mic Kill" Signal	24 kHz, ±1%
2-Wire Power Source	28 Vdc nominal, 750 mA maximum

## Impedance: 20k ohms

Nominal Level	+4 dBu
Maximum Level	+22 dBu
4-Wire Outputs	2
Туре	capacitor-coupled
Impedance	<50 ohms nominal
Nominal Level	+4 dBu
Maximum Level	+20 dBu into 2 k ohms

## Hybrids: 2

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Topology	3-section analog circuitry compensates for resistive, inductive, and capacitive 2-wire party-line loads
Nulling Method	automatic upon user initiation, processor implements digital control of analog circuitry; settings stored in non-volatile memory
Nulling Line Impedance Range:	120 to 350 ohms
Nulling Cable Length Range:	0 to 3200 feet
Trans-Hybrid Loss	>35 dB, typical at 1000 Hz

## 4-Wire Inputs: 2

Type	capacitor-coupled
Турс	capacitor coupled

## **Power Requirements**

Connector Type	Coaxial, negative sleeve, Switchcraft 712 compatible
Power	9 to 24VDC, < 25W depending of number of belt-packs connected

## **ORDERING INFORMATION**

FRAME OPTIONS	
COMMS-300	2 Channel Party-line to analog line level (4-wire) audio interface; For portable/throw down applications or can be rack mounted
COMMS-350	2 Channel Party-line to analog line level (4-wire) audio interface; For LightBox, LightCube & HalfCube systems only
OG-COMMS	2 Channel Party-line to analog line level (4-wire) audio interface; Card for the openGear OG3-FR-x frame