



CONVERGE Pro 2 is the industry's most advanced professional audio DSP platform for conferencing and sound reinforcement applications. It outperforms in any size room, audio environment, and application.

The 012 model mixer has 12 outputs, USB audio; GPIO, RS232, IP control interfaces; and P-Link and C-Link expansion buses.

This device is optimized to work with the DIALOG® 20 2-Channel Wireless Microphone System through its native connection.

Powerful Architecture

- + 12 Mic/Line outputs
- + Increased Mic/Line outputs for other CP2 units
- + Outputs-only DSP mixer
- + Built-in USB for PC-based conferencing
- + Reduced footprint and power consumption

Scalable Connectivity

- + Standalone and daisy-chained system
- + Expansion bus "C-Link" with 150 channels
- + "P-Link" bus to connect peripheral devices

Configuration & Management

- + New CONSOLE® software
- + Auto-discovery of devices
- + MatrixView™ for entire system
- + FlowView™ for visualized audio signal paths
- + System monitoring and troubleshooting

Audio Signal Processing

- + Acoustic Intelligence for better audio
- + DARE™ feedback elimination

Application

- + PC-based conferencing & Unified Communications
- + Video codec-based Video Conferencing
- + Sound Reinforcement applications

Flexible Control Options

- + Dialer app for Windows, Mac, iOS, Android
- + Touch Panel Controller with tabletop and wall mount options
- + 3rd-party control modules



APPLICATIONS

Large Meeting Rooms

Convention Centers

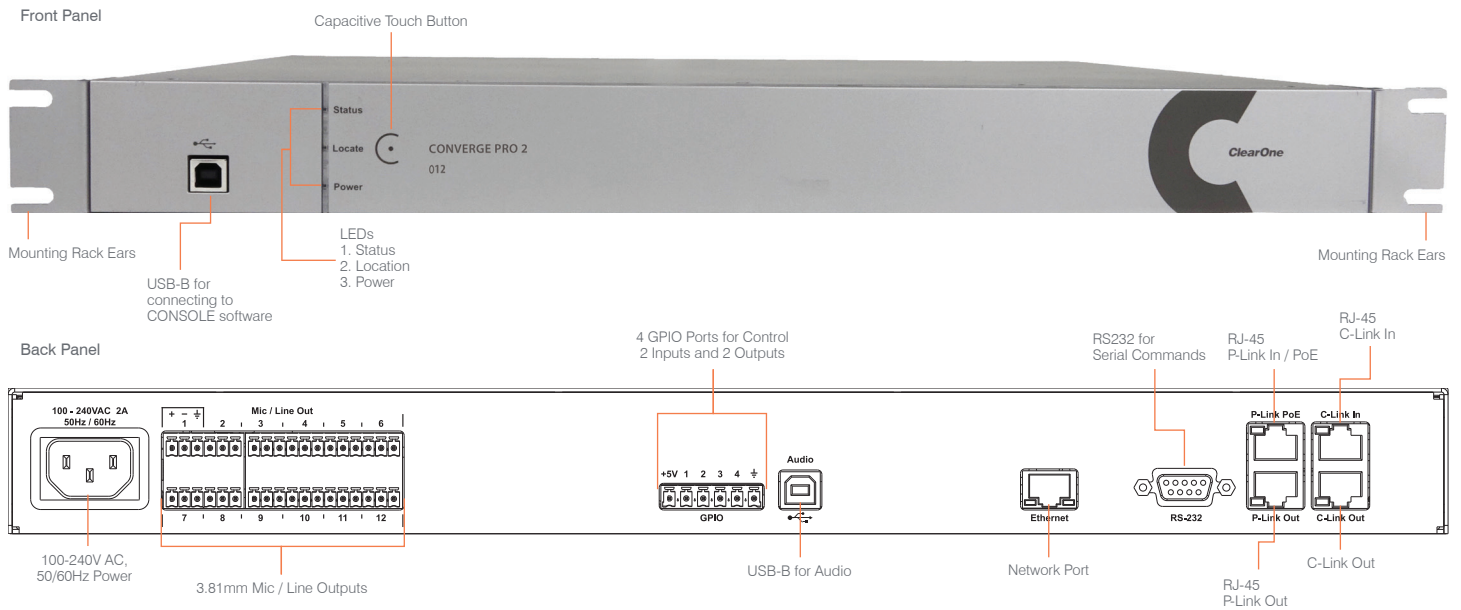
Transportation Hubs

Training Rooms

Lecture Halls

Houses of Worship

Auditoriums



CONVERGE Pro 2	Conferencing										Sound Reinforcement	
	128	128D	128T	128TD	128V	128VD	48T	48V	120	012	128SR	128SRD
System												
Mic/Line inputs	12	12	12	12	12	12	4	4	12	✗	12	12
Mic/Line outputs	8	8	8	8	8	8	8	8	✗	12	8	8
AEC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
C-link expansion bus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
P-link peripheral bus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
USB audio interface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ethernet, RS-232, GPIO interface	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Applications												
Built-in USB for PC-based conferencing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
Built-in Telco for teleconferencing	✗	✗	✓	✓	✗	✗	✓	✗	✗	✗	✗	✗
Built-in VoIP for VoIP conferencing	✗	✗	✗	✗	✓	✓	✗	✓	✗	✗	✗	✗
Microsoft Skype for Business audio conferencing	✗	✗	✗	✗	✓	✓	✗	✓	✗	✗	✗	✗
Sound Reinforcement applications	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Built-in Dante for audio networking	✗	✓	✗	✓	✗	✓	✗	✗	✗	✗	✗	✓
Peripheral Devices												
Beamforming Mic Array 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗
DIALOG® 20 - Wireless Mic System	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GPIO Expander	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
USB Expander	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Configuration, Management & Control												
New CONSOLE® software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dialer app - Win, Mac, iOS, Android	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Touch Panel Controller	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Third-party control modules	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

PRODUCT SPECIFICATIONS

Unless otherwise specified, all measurements are performed with a 20Hz to 22kHz BW (no-weighting).

Mic/Line Outputs

Outputs:

Balanced audio outputs, 3.81mm Black color Phoenix/Euroblock type male header, Push-on mini-terminal block

Frequency Response:

20Hz – 22kHz @ +4dBu, +/- 0.5dBu

THD + N (Total Harmonic Distortion + Noise):

- 20Hz – 22kHz @ +4dBu, line level, 0.006%
- 20Hz – 22kHz @ -56dBu, mic level, <0.04%

Dynamic Range:

20Hz – 20kHz @ 0dB, >105dB

Crosstalk (Mic/Line):

Channel to Channel, stimulus at 20dBu to receptor at -56dBu, 1kHz, < -98dB

Output Impedance:

Balanced (line to ground), 95Ω, 1%

Output Level:

0dBu (Nominal), 20dBu (Max), -40dBu (Selectable)

USB AUDIO

Port Type: USB-B connector

Audio: Digital Audio, 2 x 2 bidirectional channels

Sample Rate: 48kHz

Sample Bit Depth: 24-Bit

Compatible:

- USB 2.0
- USB 3.0

ETHERNET

Port Type:

RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation

IP address: IPv4 (IPv6 upgradeable through future s/w, f/w upgrade)

C-LINK EXPANSION BUS

Ports Type: RJ-45 (Cat5e or Cat6)

C-Link In & Out: Proprietary Expansion Bus

Audio: 150 Expansion channels

Cable: Solid core, factory terminated Cat 5e or 6

Distance: Up to 80' (24M)

P-LINK PERIPHERAL BUS

Ports Type: RJ-45 (Cat5e or Cat6)

P-Link In & Out: Proprietary Peripheral Bus

PoE In:

- P-Link In Port
- PoE 802.3af Mode B, Midspan
- Power on "spare pairs" 4,5 and 7,8
- Input voltage range: 48V to 56V

Audio:

Up to 3 DIALOG 20 Wireless Receiver units + Up to 3 USB Expander units + Up to 3 GPIO Expander units

Cable:

Solid core, factory terminated Cat 5e or 6 cable

Distance: Up to 200' (60M)

RS232

Port Type: DB9 Female

Settings:

9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control

Support: Serial commands

GPIO

Port Type:

5.08mm Green color Phoenix/Euroblock type male header

Support: Control, Status, Variable Voltage Control

Power Pin: 5V DC @ 350mA Power Source

Pin 1 to 4:

- Open Collector Outputs: 40VDC @ 250mA
- Active Outputs (Source/Sink): 5VDC @25mA
- Logic Inputs: 40.2kΩ pull up
- Variable Voltage Control Inputs: 5VDC max

Ground Pin: GND

USB CONTROL

Port Type: USB-B connector

Location: Front Panel

Compatible:

- USB 2.0
- USB 3.0

LEDs

Location: Front Panel

Status LED:

- Off: Unit still initializing
- Blue - Fast Blinking: Stack Syncing in progress
- Blue - Slow Blinking: Unit not configured
- Blue - Solid: Configured unit
- Red - Fast Blinking: Stack Sync error

Locate LED:

Blue - Blinking: Unit "Locate" command received

Power LED:

Blue - Solid: Unit is powered on

TOUCH SENSOR

Sensor Type: Capacitive Touch Button

Location: Front Panel

POWER & THERMAL

Port Type: AC Inlet

Mains Voltage: 100-240V AC, 50/60Hz

Power Consumption: 50 Watts Typical

Thermal: 170 BTU/Hr Typical

Operating Temperature:

14°F (-10°C) to 104°F (40°C) Ambient Temperature

DIMENSION & WEIGHT

RU size: 1 RU

Width x Depth x Height:

1. Without rack-ears:
17"W x 10.73"D x 1.72"H (43.2cmW x 27.3cmD x 4.4cmH)
2. With rack-ears:
19"W x 10.73"D x 1.72"H or (48.3cmW x 27.3cmD x 4.4cmH)

Unit Weight: 9.3 lbs (4.2 kg) (Approximately)

Shipping Weight: 13.8 lbs (6.3 kg) (Approximately)

PACKAGE

Power Cord: 6' (1.8M), Grounded, Qty 1

Output Connectors:

Terminal Block Connector, 3 Position (Black), Qty 12

GPIO Connector:

Terminal Block Connector, 6 Position (Green), Qty 1

C-Link Cable:

RJ-45 To RJ-45 Cable, 18" (45.7cm), Qty 1

USB Cable:

USB Type A to Type B, 6' (1.8M), Qty 1

Rack Ears: Pre-installed, Qty 2

Screw/Washer Kit: Rack Decor, Qty 4

PART NUMBERS

Part Number	Product
910-3200-001	CONVERGE Pro 2 128
910-3200-001-D	CONVERGE Pro 2 128D
910-3200-002	CONVERGE Pro 2 128T
910-3200-002-D	CONVERGE Pro 2 128TD
910-3200-003	CONVERGE Pro 2 128V
910-3200-003-D	CONVERGE Pro 2 128VD
910-3200-005	CONVERGE Pro 2 48T
910-3200-006	CONVERGE Pro 2 48V
910-3200-004	CONVERGE Pro 2 120
910-3200-007	CONVERGE Pro 2 012
910-3200-101	CONVERGE Pro 2 128SR
910-3200-101-D	CONVERGE Pro 2 128SRD

SALES AND INQUIRIES

Headquarters

5225 Wiley Post Way,
Suite 500
Salt Lake City, UT 84116

US & Canada

Tel: 801.975.7200
TollFree: 800.945.7730
Fax: 801.303.5711

International

Tel: +1.801.975.7200
global@clearone.com

Sales

Tel: 801.975.7200
sales@clearone.com

TechSupport

Tel: 801.974.3760
tech.support@clearone.com