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

CONVERGE Pro 2 is optimized to work with the new Beamforming Mic Array 2 and DIALOG® 20 2-Channel Wireless Microphone System through its native connection.

VENUES

Boardrooms

Conference Rooms

Huddle Rooms

Training Rooms

Lecture Halls

Courtrooms

Auditoriums

Telemedicine Facilities

Powerful Architecture

+ 12 Mic/Line inputs with AEC
+ Built-in VoIP – 2 lines +3 lines (license)
+ Built-in Telco with ClearEffect™ processing
+ Built-in USB for PC-based conferencing
+ Built-in Dante for networked audio
+ Reduced footprint and power consumption

Audio Signal Processing

+ Next-gen Acoustic Echo Cancellation processing
+ Distributed Echo Cancellation® on every mic input
+ Noise Cancellation with Adaptive-Ambience
+ Acoustic Intelligence with faster convergence
+ DARE™ feedback elimination
+ Advanced microphone gating

Scalable Connectivity

+ Standalone and daisy-chained system
+ Stack up units up to 144 Mic/Line inputs (or 12 units)
+ Expansion bus "C-Link" with 64 channels
+ "P-Link" bus to connect 6 peripherals

Any Application

+ VoIP/POTS conferencing
+ PC-based conferencing & Unified Communications
+ Sound Reinforcement applications
+ Dante™ for audio networking

Configuration & Management

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

Flexible Control Options

+ Dialer app for Windows, Mac, iOS, Android
+ Tabletop controller with touch panel
+ Wall controller with buttons
+ Web based controller
+ 3rd party control modules

CONVERGE Pro 2 128T Front Panel

CONVERGE Pro 2 128T Back Panel

CONVERGE Pro 2	Conferencing								Sound Reinforcement	
	128	128D	128T	128TD	128V	128VD	120	48T	128SR	128SRD
System										
Mic/Line inputs	12	12	12	12	12	12	12	4	12	12
Mic/Line outputs	8	8	8	8	8	8	—	8	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	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗
Sound Reinforcement applications	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓
Built-in Dante for audio networking	✗	✓	✗	✓	✗	✓	✗	✗	✗	✓
Peripheral Devices										
Beamforming Mic Array 2	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
DIALOG® 20 - Wireless Mic System	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Configuration, Management & Control										
New CONSOLE® software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dialer app - Win, Mac, iOS, Android	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tabletop controller (available soon)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wall controller (available soon)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Third-party control modules (available soon)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Functional Specifications

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

Specifications are applicable based on the SKU types.

MIC/LINE INPUTS & OUTPUTS
Inputs: Balanced audio inputs, 3.81mm Orange color Phoenix/Euroblock type male header, Push-on mini-terminal block
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
EIN (Equivalent Input Noise):
20kHz BW, max gain, Rs = 150Ω, -126dBu
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
Input Impedance:
Balanced (line to ground), 2.2kΩ, 1%
Nominal Input Level:
Adjustable -56dB to 0dB, 7dB step coarse gain
Maximum Input Level: -65dBu to 20dBu
Phantom Power: 48V, Impedance 6.81kΩ
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

TELEPHONE
Port Type: RJ11
Frequency Response:
1. Mic/Line Input to Telephone Out:
250Hz – 3.4kHz , +/- 2dB, 4dBu
2. Telephone In to Mic/Line Out:
250Hz – 3.4kHz, +/- 2dB, -15dBu
THD + N:
1. Mic/Line Input to Telephone Out: <0.1% @ 4dBu
2. Telephone In to Mic/Line Out: <0.3% @ -15dBu
Dynamic Range:
1. Mic/Line Input to Telephone Out: >67dBu
2. Telephone In to Mic/Line Out: >87dBu
REN: Ringer Equivalent Number 0.2
Transhybrid Balance: 30dB (1kHz, all AC terminations)

VOIP
Port Type:
RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation
Audio:
5 Lines (2 default + 3 lines through License),
each line supporting 1+5 calls
Sample Rate: 24kHz
Sample Bit Depth: 24-Bit
Codec:
G.711 uLaw
G.711 ALaw
G.722

ETHERNET
Port Type:
RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation
IP address: IPv4 (IPv6 upgradeable)

DANTE™ AUDIO
Port Type: RJ-45 Gigabit Ethernet connectors for Primary and Secondary Ports
Audio: Digital Audio, 16 x 16 bidirectional channels
Sample Rate: 48kHz / 96kHz
Sample Bit Depth: 24-Bit

AMPLIFIER OUTPUT (applicable to 48T SKU)
Speaker Output Port: Dual binding posts
Audio: 2 Channels
Output Power: 10W Max, 8Ω load
Frequency Response:
20Hz – 22kHz @ +10dBu, +/- 0.5dBu
THD + N: 20Hz – 22kHz @ +10dBu, 1W, <0.3%
Dynamic Range:
20Hz – 22kHz @ 20dB, >102dB,
with 20kHz digital low pass filter
Crosstalk:
Channel to Channel, stimulus at 20dBu,
10W output to receptor 8Ω load, 20Hz – 22kHz, < -70dB

C-LINK EXPANSION BUS
Ports Type: RJ-45 (Cat5e or Cat6)
C-Link In & Out: Proprietary Expansion Bus
Audio: 64 Expansion channels
Cable: Solid core, factory terminated Cat 5e or 6 cable
Distance: Up to 150 Ft (45M)

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 IEEE802.3AF
Audio: Up to 3 Beamforming Microphone Array 2 units + up to 3 DIALOG 20 Wireless Receiver units
Cable: Solid core, factory terminated Cat 5e or 6 cable
Distance: Up to 200 Ft (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 x 10.73 x 1.72in or 43.2 x 27.3 x 4.4cm
2. With rack-ears:
19 x 10.73 x 1.72" or 48.3 x 27.3 x 4.4cm
Unit Weight: 9.3 lbs (Approximately)
Shipping Weight: 13.8 lbs (Approximately)

PACKAGE (as applicable based on SKUs)
Power Cord: 6 Ft (1.8M), Grounded, Qty 1
Input Connectors:
Terminal Block Connector, 3 Position (Orange), Qty 12
Output Connectors:
Terminal Block Connector, 3 Position (Black), Qty 8
GPIO Connector:
Terminal Block Connector, 6 Position (Green), Qty 1
C-Link Cable:
RJ-45 To RJ-45 Cable, 18 Inches (0.45M), Qty 1
Telephone cable: 12 Ft (3.6M), Qty 1
VoIP Cable: RJ-45 To RJ-45, 7 Ft (2M), Qty 1
USB Cable: USB Type A to Type B, 6 Ft (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
910-3200-004	CONVERGE Pro 2 120
910-3200-101	CONVERGE Pro 2 128SR
910-3200-101-D	CONVERGE Pro 2 128SRD