

CONVERGE™ | 560/590

Professional Conferencing Systems

ClearOne

An easy-to-use conferencing system with flexible microphone and speaker options. Converge 560 and 590 deliver exceptional audio conferencing quality and value at a price point far superior to the competition. Customizable microphone and speaker options, plus the ability to connect to rich-media systems, allow great flexibility in a wide variety of medium-sized room applications.



PROFESSIONAL
CONFERRING
AT AN
AFFORDABLE
PRICE

APPLICATIONS

- Semi-customized Board Rooms
- Multimedia Conference Rooms
 - + Video conferencing
 - + Web conferencing
- Distance Learning Rooms
- Classrooms with Video Conferencing
- Deposition & Hearing Rooms

ADVANTAGES

Superior Audio Performance

- + Full-duplex sound enables participants to speak and listen at the same time without cutting in and out
- + ClearEffect™ provides natural, full-sounding audio without requiring wideband on both ends
- + Distributed Echo Cancellation® effectively eliminates echo
- + Noise cancellation removes background noises from fans or HVAC systems
- + Automatic level controls keep participants' audio balanced and consistent
- + First-mic priority eliminates hollow "tunnel" sound by activating only the microphone closest to the person speaking
- + Ability to add 3rd-party microphones allows flexibility in designing optimal room coverage
- + Local sound distribution (single speaker zone) allows amplification of presenter's voice in near-end room

Rich Media Ready

- + Interfaces with any video or web conferencing system, providing superior audio pickup
- + Camera voice tracking capability allows six or nine camera presets for pan/tilt/zoom in video conferencing applications
- + Recording option allows crystal-clear capture of both sides of conversation, useful particularly in courtroom environments

Ease of Use and Installation

- + Dial pad resembles a standard phone
- + Built-in web server enables remote access
- + Configuration & device management software provides simple user interface for system configuration and operation
- + Microphone distribution boxes contain three industry-standard XLR microphone connectors for flexibility in using 3rd-party microphone solutions
- + Internal 10-watt amplifier drives speaker configuration of choice; external amplifier and speakers can also be added

Flexibility

- + Place mixer on tabletop, credenza, or in rack
- + Mic distribution boxes can be rack mounted or strategically positioned throughout the room to minimize microphone cable runs
- + Wireless or wired controller option

HDCConference™

> **components**



AUDIO MIXER

Provides advanced audio processing for superior sound quality. Can be placed on a tabletop, credenza, or in a standard equipment rack.

- + ClearOne audio technologies: Distributed Echo Cancellation®, Noise Cancellation, First Mic Priority, Look-Ahead Gating, ClearEffect™, Adaptive Modeling, Chairman Override Mode
- + Single speaker zone sound distribution allows amplification of presenter's voice in near-end room
- + Camera control: Camera presets triggered by microphone activation with video conferencing



TABLETOP CONTROLLER

Wireless or wired controller provides intuitive interface that emulates a telephone keypad. Converge 560/590 also available without controller included, so system can be used with 3rd party control systems such as AMX or Crestron.



RACK KIT

Allows microphone distribution boxes to be mounted in a standard equipment rack.



MICROPHONE DISTRIBUTION BOX

Converge 560 - two boxes. Converge 590 - three boxes. Each box contains three industry-standard XLR microphone connectors. Boxes are daisy-chained from mixer using standard RJ-45 cables. Boxes can be rack-mounted with mixer or strategically positioned throughout room to minimize microphone cable runs.



CONFIGURATION & DEVICE MANAGEMENT SOFTWARE

Customize the audio settings and configure system via the built-in USB or Ethernet connection with drag-and-drop user interface.

- + Device Toolbox: Pre-configured audio settings for common auxiliary devices, such as video codecs and microphones
- + System Check: Verify Converge 560/590 components
- + Event Logging: Track system events
- + Network Find: Connect to other Converge 560/590 units
- + Firmware Upgrades: Update system remotely

> **SPECIFICATIONS**

AUDIO PERFORMANCE

Conditions: Unless otherwise specified, all measurements are performed with a 22 Hz to 15 kHz BW limit (no weighting)

Audio Mixer

AEC tail time: 128 ms
Adaptive noise cancellation: (6 – 18 dB)
Gating: Adaptive ambient, 1st mic priority, look-ahead gating, NOM attenuation
Audio bandwidth: 16 kHz with videoconferencing or other full-band networks

Microphone Distribution Box

Connection: Female XLR
Maximum Distance from Audio Mixer to Last Mic Box: 60 ft.
Maximum Level: +17 dBu
Frequency Response: 20 Hz to 14 kHz
THD+N: <0.01% (+14 dBu input @1 kHz)
Phantom Power: 24 V selectable
Impedance: 5 kOhm

Line Input

Connection: Unbalanced RCA
Gain: -10 dBu nominal, adjustable from -14 dB to +18 dB
Nominal Level: -10 dBu
Maximum Level: +9 dBu
Impedance: > 10 kOhm

Line Output

Connection: Unbalanced RCA
Nominal Level: -10 dBu, adjustable from -14 dB to +18 dB
Maximum Level: +9 dBu
Frequency Response: 40 Hz – 15 kHz (+/- 1 dB)
Dynamic Range: > 80 dB
THD+N: < 0.02% (+6 dBu input @ 1 kHz)

Playback/Record Input

Connection: Unbalanced RCA
Gain: -10 dBu nominal, adjustable from -14 dB to +18 dB
Nominal Level: -10 dBu
Maximum Level: +9 dBu
Impedance: > 10 kOhm

Playback/Record Output

Connection: Unbalanced RCA
Nominal Level: -10 dBu, adjustable from -14 dB to +18 dB
Maximum Level: +9 dBu
Frequency Response: 40 Hz – 15 kHz (+/- 1 dB)
Dynamic Range: > 80 dB
THD+N: < 0.02% (+6 dBu input @1 kHz)

Amplifier Output

Connection: Left and right push terminals
Power: 10 Watts into 8 Ohm load
Impedance: 8 Ohm
Frequency Response: 60 Hz – 15 kHz (+/- 1 dB)
Dynamic Range: > 80 dB
THD+N: < 0.5% (+5 dBu line input @ 1 kHz)
Output Level: 90 dB SPL output @ 1 meter

TELEPHONE INTERFACE

Conditions: All measurements taken with ALC disabled.

Connection: RJ-11 (Set and Line jacks)
Tail Time: 30 ms
Frequency Response: 250 Hz to 3.3 kHz (+/- 1 dB)
THD+N: < 0.2% (+7 dBu line input @1 kHz)
Dynamic Range: > 60 dB

RS-232 Control Port

DB9 female
9,600/19,200/38,400/57,600 (default)/115,200
Baud rate: 8 bits, 1 stop, no parity
Hardware flow control on (default)/off

Communication I/O

10/100 Ethernet Control Port:
RJ-45 with LED indicators for link, duplex and activity status.

USB 1.1 Configuration Port

Slave port

Power Supply

Primary Voltage: 100 to 240 VAC
Auto-Sensing, 50-60 Hz

VISCA Camera Port

DIN, 9600 baud, no Flow Control

Dimensions (W x D x H)

Mixer: 17" x 7.5" x 2"
(43.2 cm x 19.1 cm x 5.1 cm)
Controller: 10.5" x 4.5" x 2.75"
(26.7 cm x 11.4 cm x 6.9 cm)
Mic Box: 4.7" x 5.6" x 1.7"
(11.9 cm x 14.3 cm x 4.4 cm)

Weight

Mixer: 4.5 lb (2 kg)
Controller: 2.0 lb (.9 kg)
Mic Box: 1.5 lb (.7 kg)

Environmental

Operating Temp: 32-122° F (0-50° C)

Optional Accessories

Go to www.clearone.com to find out more regarding other conferencing products:
Remote Antenna
Microphones
Roll-About Carts

Part Numbers

- 910-153-566 Converge 560 with no controller
- 910-153-560 Converge 560 with wireless controller
- 910-153-565 Converge 560 with wired controller
- 910-153-596 Converge 590 with no controller
- 910-153-590 Converge 590 with wireless controller
- 910-153-595 Converge 590 with wired controller
- 910-153-050 Converge Remote Antenna Accessory Kit

Call 1-801-974-3641 or visit www.clearone.com for international part numbers.



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