

RAV™ | 600/900

Premium Conferencing Systems

A higher-quality alternative to conference phones. RAV delivers significantly improved sound quality for standalone audio conferencing, and connects to popular rich-media devices such as video and web conferencing systems for enhanced audio performance.

ClearOne®



A REVOLUTIONARY AUDIO CONFERRING SYSTEM

RAV APPLICATIONS

Board Rooms

Conference Rooms

Executive Offices

Use with Rich-Media Systems

- + Video conferencing
- + Web conferencing
- + IP telephony
- + Personal computer

In-Room Sound Amplification

RAV ADVANTAGES

Superior Audio Performance

- + Sound quality exceeds any conference phone
- + 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
- + Full-duplex sound enables participants to speak and listen at the same time without cutting in and out
- + 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
- + Three microphones per pod provide 360° audio pickup

Rich Media Ready

- + Interfaces with any video or web conferencing system, providing a superior alternative to the existing audio setup

Ease of Use and Installation

- + Dial pad resembles a standard phone
- + Built-in web server enables remote access
- + RAV-Ware™ software provides simple user interface for system configuration
- + Plug and play setup – conference in minutes

Flexibility

- + Place mixer on tabletop, credenza, or in rack
- + Multiple speaker options: wall-mount, ceiling-mount, or custom
- + Position microphone pods, speakers, and controller in optimal locations
- + Wireless or wired controller option

Remote System Management

- + Configure, monitor, and control single or multiple RAV systems via LAN or WAN

Investment Protection

- + Remote firmware upgrade capabilities for future product enhancements
- + For evolving conference room needs - use audio now, add video or web later

HDConference

> 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
- + AV control system compatibility: Easily integrates with AMX or Crestron control systems
- + 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.



MICROPHONE PODS

RAV 600 – two pods. RAV 900 – three pods. Each pod features three voice-activated mic elements for 360-degree audio pickup.



BOSE® LOUDSPEAKERS

Ceiling or wall-mount options provide premium sound. Also available without speakers for custom speaker options.



RAV-WARE 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
- + System Check: Verify RAV components
- + Event Logging: Track system events
- + Network Find: Connect to other RAV units
- + Firmware Upgrades: Update RAV 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 Pod

Coverage: 360 degrees
Connection: RJ-45 with Cat. 5, Link In/Out Ports
Maximum Distance from Base Mixer: 50' (RAV 900), 75' (RAV 600)
Frequency Response: 60 Hz – 14 kHz (+/- 1 dB)
THD+N: < 0.08% (-45 dBu input @ 1 kHz)
Sensitivity: -45 dBu
Input Level: -6 dBu for 1 kHz 94 dB SPL microphone input
Dynamic Range: > 65 dB

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)

Loudspeaker

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)
RF Controller: 10.5" x 4.5" x 2.75"
(26.7 cm x 11.4 cm x 6.9 cm)
Mic Pod Diameter: 7" (17.8 cm),
Height: 1.5" (3.8 cm)

Weight

Mixer: 4.5 lb (2 kg)
RF Controller: 2.0 lb (.9 kg)
Mic Pod: 1.1 lb (.5 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:
Wired Controller
Remote Antenna
Roll-About Carts

RAV with Wireless Controller Part Numbers

910-153-100 RAV 600 No Speakers
910-153-101 RAV 600 Ceiling Speakers
910-153-102 RAV 600 Wall-Mount Speakers
910-153-300 RAV 900 No Speakers
910-153-301 RAV 900 Ceiling Speakers
910-153-302 RAV 900 Wall-Mount Speakers

RAV with Wired Controller Part Numbers

910-153-112 RAV 600 No Speakers
910-153-113 RAV 600 Ceiling Speakers
910-153-114 RAV 600 Wall-Mount Speakers
910-153-313 RAV 900 No Speakers
910-153-314 RAV 900 Ceiling Speakers
910-153-315 RAV 900 Wall-Mount Speakers

RAV Accessory Part Numbers

910-153-025 RAV Wired Controller
910-153-050 RAV Remote Antennae Accessory Kit

Call 1-801-974-3641 for international part numbers.

> CLEARONE LOCATIONS

Headquarters:
Salt Lake City, UT USA
5225 Wiley Post Way
Salt Lake City, UT 84116
Tel: 801-975-7200
800-945-7730
Fax: 801-977-0087
sales@clearone.com

Latin America
Tel: 763-486-1765
global@clearone.com

EMEA
Tel: 44 (0) 1189 036 053
global@clearone.com

APAC
Tel: 801-303-3388
global@clearone.com