

Tech Spec

ConferenceSHOT AV

Enterprise-Class Conferencing System

Silver/black: 999-9995-x00 (North America), 999-9995-x01 (Europe and UK), 999-9995-x09 (Australia and New Zealand)

White: 999-9995-x00W (North America), 999-9995-x01W (Europe and UK), 999-9995-x09W (Australia and New Zealand)

Camera and speaker may be ordered individually or in ConferenceSHOT AV bundles



Features

- Integrated HD camera and audio system ideal for huddle rooms and small to medium conference rooms
- Audio inputs for two Vaddio MicPOD table or ceiling microphones
- Audio output for optional matching speaker – or integrate into existing audio infrastructure
- 2.14 Megapixel effective, native 1080p/60 HD image sensor
- 10x optical zoom, horizontal field of view of 74° in super-wide mode
- Simultaneous uncompressed USB 3.0 and IP (H.264) video + full-duplex audio streaming
- Precise pan and tilt movements at up to 90° per second with smooth, silent direct-drive motors
- Universal Video Class (UVC) and Universal Audio Class (UAC) drivers supported in Windows®, Mac® OS, and Linux operating systems, compatible with most UC conferencing applications
- Presenter-friendly IR remote control
- Integration-ready Telnet control
- Enterprise-class IT support with full web controls for remote management

Back of the Camera



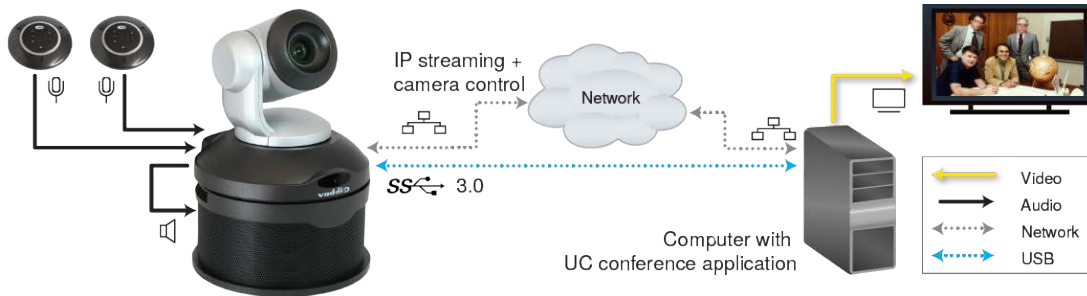
- **Network PoE+** – 10/100/1000 Ethernet port; IP streaming and control via web interface
- **USB 3.0** – Type B media device connector; streams uncompressed UVC standard video and UAC standard audio
- **EasyMIC ports** – Connect up to two Vaddio EasyMIC microphones
- **Audio output** – Line level differential audio and 12 VDC power output to the optional amplified speaker or other audio infrastructure

What's Included

ConferenceSHOT AV systems may include these items, depending on the bundle ordered:

- ConferenceSHOT AV camera
- ConferenceSHOT AV speaker with cable
- Mounting shelf kit (black or white according to camera color)
- UCC cable kit – Ethernet, USB 3.0, and HDMI cables, 1.8m/6 ft (8m/26 ft and 20m/65 ft cable kits available)
- PoE+ power injector with AC cord set(s)
- Microphone(s) with cables

Basic Connection Diagram



Specifications

Camera and Image

Image device	1/2.8-type Exmor CMOS sensor	Pixels	2.14 million (effective)
IP (H.264) RTSP Video Resolutions	1080p down to 180p 1080p at 30/25/15; others 60/30/25/15	USB 3.0 (UVC) Video Resolutions	1080p down to 180p at 60/30/15
<i>IP and USB streams are simultaneous and can be at differing resolutions.</i>			
Pan angle and speed	± 165°, up to 90°/sec	Tilt angle and speed	+90° -30°, up to 90°/sec
Lens and horizontal FOV	10X optical zoom, 67.0° wide to 7.6° tele, f=3.8mm to 38mm, F1.8 to F3.4 Super-wide: 11X optical zoom, 74° wide to 7.6° tele, f=3.8mm to 41.8mm, F1.8 to F3.4		
Min. working distance	10mm (wide), 1.0m (tele)	Min. illumination	100+ lux recommended
Aperture/detail	16 steps	Gain	Auto or manual
Backlight compensation	On or off	White balance	Auto, manual, One-Push
Focusing system	Auto or manual	Noise reduction	On or off
Sync system	Internal	S/N ratio	Over 50 dB
Remote management	Web interface, Telnet	Power	PoE+ (25 watts)

Audio

EasyMIC Inputs (2 channels available)	RJ-45 12V, bidirectional, balanced	Line Out	4-pin Phoenix type terminal block Impedance: 50 ohms Frequency response 20Hz - 20KHz THD + noise < 0.02% Maximum output level +12 dBu differential audio Power to speaker: 12V, 0.84A max (10 watt speaker)
IP Streaming	1 Channel (PCM), 16-bit resolution, 48 KHz sample rate		
USB streaming (record, playback)	2 Channel (UAC), 16-bit resolution, 48 KHz sample rate		

Physical and Environmental

Height	Camera: 6.3" (163 mm) Speaker: 3.63" (92 mm)	Operating temperature	0°C to +40°C (32°F to 104°F)
Width	Camera: 6.1" (155 mm) Speaker: 7.25" (184 mm)	Operating humidity (relative)	20% to 80% non-condensing
Depth	Camera: 5.5" (145 mm) Speaker: 6.75" (171 mm)	Storage temperature	-5°C to +60° C (23°F to 140°F)
Weight	Camera: 3.0 lbs.(1.36 kg) Speaker: 1.6 lbs. (0.72 kg)	Storage humidity (relative)	20% to 80% non-condensing

Specifications are subject to change without notice.

A & E Specification

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Description

The system shall be designed for UC conferencing use in small to medium conference rooms in corporate, healthcare, government, and education environments, and other applications.

The camera shall provide simultaneous IP (H.264) and uncompressed USB 3.0 streaming outputs. IP streaming video resolution shall be configurable. USB output shall use Universal Video Class (UVC) and Universal Audio Class (UAC) drivers supported in Windows®, Mac® OS, and Linux operating systems for compatibility with most UC conferencing applications. USB streaming resolution shall be auto-negotiated between the camera and the UC conferencing application. USB and IP streams may be at differing resolutions.

The camera shall be designed to connect to a speaker and Vaddio EasyMIC microphones. A 10-watt powered speaker designed for use with the camera shall be available. A camera mount designed to accommodate the camera and speaker shall be available.

The system shall be compatible with Vaddio camera controllers, mixers, and other equipment.

The camera optics shall feature an optical zoom lens (11X in Super-Wide mode and 10X in normal mode) and 2.14 Megapixel, full HD (native 1080p/60) image sensor.

The camera body shall incorporate an indicator to show camera status.

The camera shall have IR sensors built into the front, to receive IR signals from a handheld remote control. The remote shall be included with the camera.

The camera shall use a single control arm anchored with brushless DC direct drive motors for accurate and fast camera positioning and slow crawls suitable for on-air use.

Configuration and Control

It shall be possible to control the camera using a handheld IR remote control, a browser-based graphical user interface, or via Telnet command line.

It shall be possible to use the remote to control up to three cameras.

The web-based graphical user interface shall provide full operational and administrative control of the camera. It shall be accessed through commonly used web browsers including the current and next most recent versions of Chrome®, Firefox®, Safari®, Internet Explorer®, and Microsoft® Edge.

The camera shall provide a command line API that can be accessed via Telnet session.

Installation Requirements

The camera and speaker shall be designed to attach to a wall mount in an indoor environment. The camera shall be usable with or without the speaker.

The camera shall support inverted operation with image flip and inversion of pan and tilt controls.

The system shall use standard Cat-5e/Cat-6/Cat-7 cables made to the EIA/TIA 568B standard for network and microphone connections. Maximum cable length for Cat-5e cables shall be 328 ft (100m).

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CeilingMIC

Conference Room Microphones

ORDERING INFORMATION

CeilingMIC Microphone

White 999-85100-000 (Worldwide)

Black 999-85150-000 (Worldwide)

OVERVIEW

CeilingMIC™ microphones deliver professional audio quality into your PC system for a superior conferencing experience. These overhead microphones are a more economical alternative to a custom installation. Ceiling-mounted microphones offer a clutter-free alternative to tabletop microphones, creating a clean look in your conference room or meeting space.

- Works with Vaddio products designed with an EasyMIC port (AV Bridge MATRIX PRO, ConferenceSHOT AV Cameras, EasyUSB MicPOD I/O, EasyUSB Mixer/Amp)
- Three-element array head with LED mute status indicator
- Full 360-degree pickup coverage
- Supports both referenced and non-referenced AEC
- Ideal for drop tile ceilings and open-ceiling environments

Each CeilingMIC unit delivers the performance of three microphone elements built into a single pendant body. Each unidirectional cardioid microphone element is equipped with integrated echo cancellation and Digital Signal Processing (DSP), including equalization, filtering and automatic gain control (AGC). The DSP in the interface box provides AEC reference from far end and applies it to individual mic elements, so conference calls are crystal clear on both ends of the conversation.

The lightweight, simplified ceiling box means faster, easier installations. With its plug-and-play design, installation is as simple as connecting a Cat-5 cable between the host device's EasyMIC port and the CeilingMIC microphone interface box. Power, control and audio are all carried over a single cable. The CeilingMIC supports lengths of up to 100 ft. (30 m) of Cat-5 cable between its interface box and EasyMIC ports.

The CeilingMIC pendant includes a 3 ft. (0.9 m) adjustable drop cable. A Cat-5 cable of up to 15 ft. (4.6 m) can be used instead for longer drop lengths.

WHAT'S IN THE BOX

- CeilingMIC microphone (black or white)
- Silicone split strain relief boot (black or white)
- 3' (0.9m) Cat-5 cable (black or white)
- CeilingMIC interface box
- Cable clamp grommet
- 2 qty ceiling trim ring plates (black or white) with mounting screws
- Ceiling tile brace
- Installation Guide



FEATURES

Interface box

- New design emphasizes simplicity and ease of connection
- Up to 100 ft. (30 m) cable distance from the interface box to the connected device

Trim plates

- White or black, to match the microphone body
- Two-piece design can be installed after the rest of the installation is complete

Drop-down cable

- Matches the trim ring and microphone body
- Up to 15 ft. (4.6 m) drop-down cable length supported

Microphone body

- New cloth-wrapped design with improved geometry for better audio pickup
- Split strain-relief boot with easy access to the cable connector in the microphone body for quick installation and easy substitution of custom drop-down cable

TECHNICAL SPECIFICATIONS

Frequency Response	100 Hz to 16 KHz
THD + Noise	< 0.02%
Dynamic Range	>90 dB
Operating/Storage Temperature	32°F to 104°F (0°C to 40°C)
Operating/Storage Humidity	10% to 80% (non-condensing)
Maximum Cabling Distance	Drop cable: 15 ft (4.6 m) Interface box to host device: 100 ft (30 m)
Interface Box Dimensions	Length including flange: 10.25 in (26 cm) Width: 4.6 in (11.7 cm) Height: 2 in. (5.1 cm)
Microphone body dimensions	2.5 in. (6.3 cm) diameter
Installed Weight	2 lbs (0.9 kg)

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