



Installation Guide for

ConferenceSHOT AV

Enterprise-Class Conferencing System

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Overview

This guide covers the ConferenceSHOT™ AV system – a camera and detachable speaker available in silver/black or white, together or separately, with or without microphones and a variety of other accessories.

What's in this Guide

This guide covers:

- Unpacking the system
- Tips for a successful installation
- Instructions for installing the camera mount
- Information on connecting the system components
- Instructions for mounting the camera and speaker
- Camera power-on

Complete product information is available in the **Integrator's Complete Guide to ConferenceSHOT AV Enterprise-Class Conferencing System**.



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

Unpacking the Conferencing System

Make sure you received all the items you expected. Here are the packing lists for the ConferenceSHOT AV system.

Caution:

Use the power supply shipped with the camera. Using a different power supply may create an unsafe operating condition or damage the camera, and will void the warranty.

Caution

Always support the camera's body when picking it up. Lifting the camera by its head or mounting arm will damage it.



ConferenceSHOT AV camera kit

North America: 999-9995-000 (black/silver) or 999-9995-000W (white)

Europe and UK: 999-9995-001 (black/silver) or 999-9995-001W (white)

Australia and New Zealand: 999-9995-009 (black/silver) or 999-9995-009W (white)

- ConferenceSHOT AV camera
- Vaddio IR Remote Commander
- PoE+ power injector with AC cord set(s)
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

ConferenceSHOT AV speaker kit

All locales: 998-9995-003 (black) or 998-9995-003W (white)

- Speaker
- Wall mount kit
- Cable to camera, 6 in. (15 cm)

ConferenceSHOT AV system with single ceiling microphone

North America: 999-9995-100 (black/silver) or 999-9995-100W (white)

Europe and UK: 999-9995-101 (black/silver) or 999-9995-101W (white)

Australia and New Zealand: 999-9995-109 (black/silver) or 999-9995-109W (white)

- ConferenceSHOT AV camera
- ConferenceSHOT AV speaker with cable
- Vaddio IR Remote Commander
- Wall mount kit, black or white according to camera and speaker color
- One ceiling MicPOD
- PoE+ power injector with AC cord set(s)
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

ConferenceSHOT AV system with two ceiling microphones

North America: 999-9995-200 (black/silver) or 999-9995-200W (white)

Europe and UK: 999-9995-201 (black/silver) or 999-9995-201W (white)

Australia and New Zealand: 999-9995-209 (black/silver) or 999-9995-209W (white)

- ConferenceSHOT AV camera
- ConferenceSHOT AV speaker with cable
- Vaddio IR Remote Commander
- Wall mount kit, black or white according to camera and speaker color
- Two ceiling MicPODs
- PoE+ power injector with AC cord set(s)
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

ConferenceSHOT AV system with single tabletop microphone

North America: 999-9995-300 (black/silver) or 999-9995-300W (white)

Europe and UK: 999-9995-301 (black/silver) or 999-9995-301W (white)

Australia and New Zealand: 999-9995-309 (black/silver) or 999-9995-309W (white)

- ConferenceSHOT AV camera
- ConferenceSHOT AV speaker with cable
- Vaddio IR Remote Commander
- Wall mount kit, black or white according to camera and speaker color
- One tabletop MicPOD
- PoE+ power injector with AC cord set(s)
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

ConferenceSHOT AV system with two tabletop mics

North America: 999-9995-400 (black/silver) or 999-9995-400W (white)

Europe and UK: 999-9995-401 (black/silver) or 999-9995-401W (white)

Australia and New Zealand: 999-9995-409 (black/silver) or 999-9995-409W (white)

- ConferenceSHOT AV camera
- ConferenceSHOT AV speaker with cable
- Vaddio IR Remote Commander
- Wall mount kit, black or white according to camera and speaker color
- Two tabletop MicPODs
- PoE+ power injector with AC cord set(s)
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

ConferenceSHOT AV basic camera system

North America: 999-9995-500 (black/silver) or 999-9995-500W (white)

Europe and UK: 999-9995-501 (black/silver) or 999-9995-501W (white)

Australia and New Zealand: 999-9995-509 (black/silver) or 999-9995-509W (white)

- ConferenceSHOT AV camera
- Vaddio IR Remote Commander
- One tabletop MicPOD
- PoE+ power injector with AC cord set(s)
- HDMI audio embedder kit
- Ethernet cable, 10 ft (3 m)
- USB 3.0 cable, 6 ft (1.8 m)
- HDMI cable, 6 ft (1.8 m)
- Molex connector

Download manuals, dimensional drawings, and other information from www.vaddio.com/support.

A Quick Look at the System



- **Camera and zoom lens:** The ConferenceSHOT 10 camera features a 10X optical zoom lens (11X in Super-Wide mode).
- **IR sensors:** Sensors in the front of the camera base receive signals from the remote. Make sure there's nothing directly in front of the camera base, and point the remote at the camera.
- **Status light:** The multi-colored LED indicates the camera's current state.
- **Speaker:** Far-end audio for small conference rooms.

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

Back of the Speaker



Use the provided speaker cable to connect the speaker to the camera.

Installation

This section covers siting the camera, installing the mount, and installing the camera and speaker.

Before You Install the Camera

- Choose a camera mounting location that will optimize camera performance. Consider camera viewing angles, lighting conditions, line-of-sight obstructions, and in-wall obstructions where the camera is to be mounted.
- Ensure that the camera body can move freely and point away from the ceiling and lights. The camera will not perform well if it is pointed toward a light source such as a light fixture or window.
- Follow the installation instructions included with the camera mount.

Note

Inverted installation is not recommended when the ConferenceSHOT speaker is to be used.

Don't Void Your Warranty!

Caution

This product is for indoor use. Do not install it outdoors or in a humid environment without the appropriate protective enclosure. Do not allow it to come into contact with any liquid.

Use only the power supply included with this product. Using a different one will void the warranty, and could create unsafe operating conditions or damage the product.

Do not install or operate this product if it has been dropped, damaged, or exposed to liquids. If any of these things happen, return it to Vaddio for safety and functional testing.

Learn more at www.vaddio.com/products.

Cabling Notes

For RJ-45 connections, use Cat-5e or better cable and high-quality standard RJ-45 connectors.

Note

Use standard RJ-45 connectors and a good crimping tool. Do not use pass-through RJ-45 connectors. Poorly crimped connectors can damage the connectors on the product, cause intermittent connections, and degrade signal quality. Test cable pin-outs and continuity before connecting them.



Intact – Contact fingers will make reliable contact with the cable connector



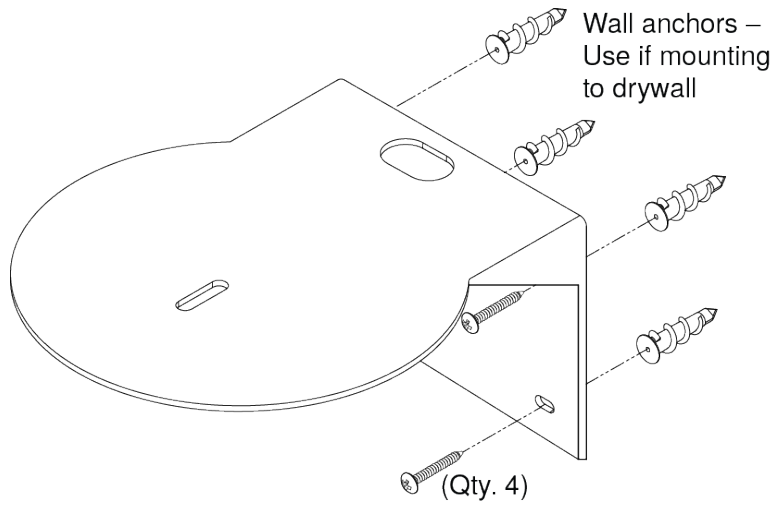
Damaged – Some contact fingers are bent and will NOT make reliable contact with the cable connector

Pro Tip

Label all cables at both ends.

Installing the Wall Mount

If you install the camera wall mount to drywall, use the wall anchors provided with the wall mount.



Note

Inverted installation is not recommended when the ConferenceSHOT speaker is to be used.

Installing the Camera

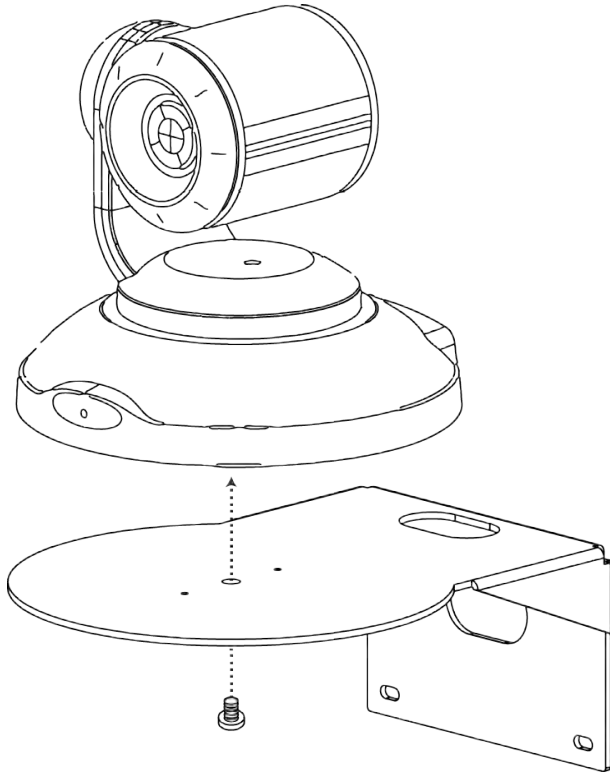
Caution

Before you start, be sure you can identify all cables correctly. Connecting a cable to the wrong port can result in equipment damage.

Caution:

Check Cat-5 cables for continuity before using them. Using the wrong pin-out may damage the camera system and void the warranty. Pro tip: Label your cables.

1. Route the cables through the opening in the mounting shelf.
2. Connect all required cables to the camera.
3. Secure the camera to the mounting shelf using the mounting screw ($\frac{1}{4}$ -20 x .375 in.) supplied with the camera.

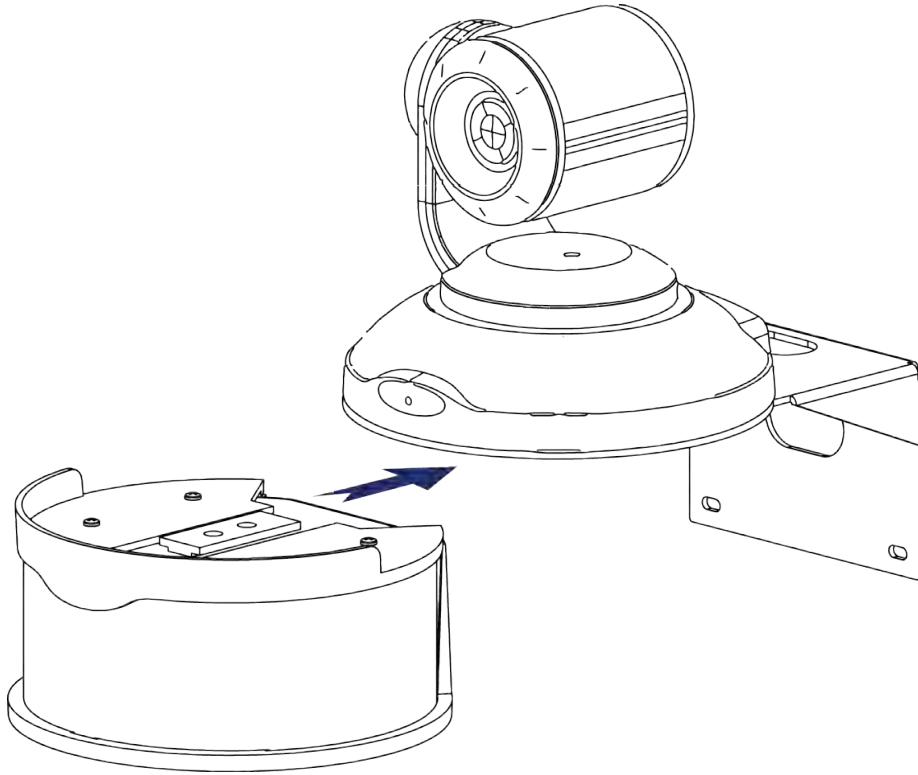


Note

If the camera is jostled or bumped, it may require a pan-tilt reset.

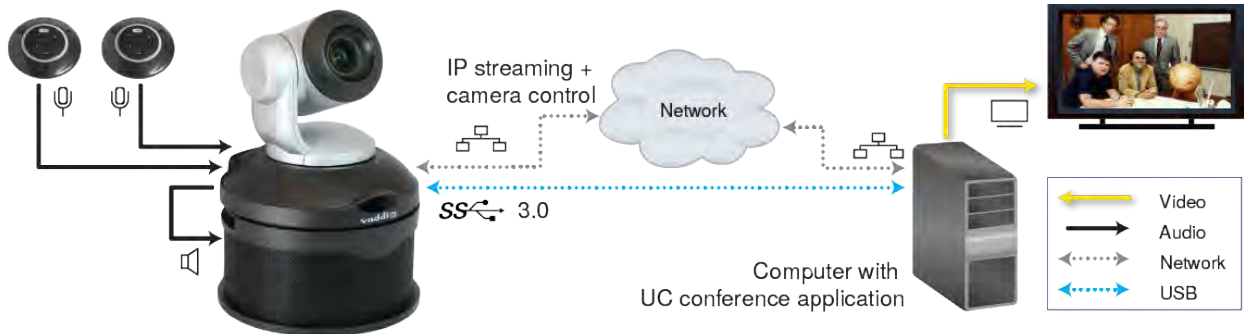
Installing the Speaker

1. If you are adding a speaker to a previously-installed ConferenceSHOT AV camera, you may need to remove the camera from the mounting shelf to connect the speaker cable.
2. Install the camera on the mounting shelf if you have not already done so .
3. Slide the speaker part of the way onto the mounting shelf.
4. Connect the speaker cable (power and line level signal) to the speaker.
5. Slide the speaker into place.



Basic Connections

Here is an example of how the camera might be set up in a medium-size conference room. In this setup, a PC uses a unified communications conferencing application to manage the camera and connected microphones and speaker.



Powering Up the System

Connect camera power.

The camera will initialize and move. This will take a few seconds. When an image is available, the camera is ready to accept control information.

Status Light

The light in the camera's base indicates its current state.

- Blue – Camera is active
- Purple – Standby mode or booting
- Yellow – Firmware update is in progress
- Blinking blue – Video mute is on (Pro A/V color scheme) or USB cable is disconnected (UC color scheme)
- Blinking yellow – Motor out of calibration
- Blinking purple – Error

Caution

Do not remove power or reset the camera while the indicator is yellow, showing a firmware update in progress. Interrupting a firmware update can make the camera unusable.

Operation, Storage, and Care

For smears or smudges on the product, wipe with a clean, soft cloth. Use a lens cleaner on the lens. Do not use any abrasive chemicals.

Keep this device away from food and liquids.

Do not operate or store the device under any of the following conditions:

- Temperatures above 40°C (104°F) or below 0°C (32°F)
- High humidity, condensing or wet environments
- Inclement weather
- Severe vibration
- Between converging tectonic plates
- Dry environments with an excess of static discharge

Do not attempt to take this product apart. There are no user-serviceable components inside.

Next Steps

The camera is now ready to configure and use. This information is available in the **Configuration and Administration Guide for ConferenceSHOT AV Enterprise-Class Conferencing System**. It is also included in the **Integrator's Complete Guide to ConferenceSHOT AV Enterprise-Class Conferencing System**.

Compliance Statements and Declarations of Conformity

Compliance testing was performed to the following regulations:

FCC Part 15 (15.107, 15.109), Subpart B	Class A
ICES-003, Issue 54: 2012	Class A
EMC Directive 2004/108/EC	Class A
EN 55022: December 2010	Class A
EN 55024: November 2010	Class A
KN22 2008 (CISPR 22: 2006)	Class A
KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002)	Class A
IEC 60950-1:2005 (2nd Edition); Am 1: 2009 + Am 2: 2013	Safety
EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013	Safety

FCC Part 15 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15, Subpart B, of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.



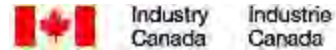
Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by Vaddio can affect emission compliance and could void the user's authority to operate this equipment.

ICES-003 Compliance

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.



European Compliance

This product has been evaluated for electromagnetic compatibility under the EMC Directive for Emissions and Immunity and meets the requirements for a Class A digital device. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Standard(s) To Which Conformity Is Declared:



EMC Directive 2004/108/EC

EN 55022: December 2010

EN 55024: November 2010

EN 61000-4-2: 1995 + Amendments A1: 1998 + A2: 2001

EN 61000-4-3: 2006 + A1: 2008

EN 61000-4-4: 2004 + Corrigendum 2006

EN 61000-4-5: 2006

EN 61000-4-6: 2009

EN 61000-4-8: 2010

EN 61000-4-11: 2004

KN22 2008 (CISPR 22: 2006)

KN24 2008 (CISPR 24: 1997 + A1: 2000 + A2: 2002)

EN 61000-4-2

EN 61000-4-3

EN 61000-4-4

EN 61000-4-5

EN 61000-4-6

EN 61000-4-8

EN 61000-4-11

IEC 60950-1: 2005 (2nd Edition); Am 1: 2009 + Am 2: 2013

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 + A2: 2013

Conducted and Radiated Emissions

Immunity

Electrostatic Discharge

Radiated Immunity

Electrical Fast Transients

Surge Immunity

Conducted Immunity

Power Frequency Magnetic Field

Voltage Dips, Interrupts and Fluctuations

Conducted and Radiated Emissions

IT Immunity Characteristics

Electrostatic Discharge

Radiated Immunity

Electrical Fast Transients

Surge Immunity

Conducted Immunity

Power Frequency Magnetic Field

Voltage Dips, Interrupts and Fluctuations

Safety

Safety

Warranty Information

See Vaddio Warranty, Service and Return Policies posted on support.vaddio.com for complete details.

Hardware* warranty: Two (2) year limited warranty on all parts and labor for Vaddio manufactured products. Vaddio warrants its manufactured products against defects in materials and workmanship for a period of two years from the day of purchase, to the original purchaser, if Vaddio receives notice of such defects during the warranty. Vaddio, at its option, will repair or replace products that prove to be defective. Vaddio manufactures its hardware products from parts and components that are new or equivalent to new in accordance with industry standard practices.

Exclusions: The above warranty shall not apply to defects resulting from improper or inadequate maintenance by the customer, customers applied software or interfacing, unauthorized modifications or misuse, mishandling, operation outside the normal environmental specifications for the product, use of the incorrect power supply, modified power supply or improper site operation and maintenance. OEM and special order products manufactured by other companies are excluded and are covered by the manufacturer's warranty.

Vaddio Customer Service: Vaddio will test, repair, or replace the product or products without charge if the unit is under warranty. If the product is out of warranty, Vaddio will test then repair the product or products. The cost of parts and labor charge will be estimated by a technician and confirmed by the customer prior to repair. All components must be returned for testing as a complete unit. Vaddio will not accept responsibility for shipment after it has left the premises.

Vaddio Technical Support: Vaddio technicians will determine and discuss with the customer the criteria for repair costs and/or replacement. Vaddio Technical Support can be contacted by email at support@vaddio.com or by phone at one of the phone numbers listed on support.vaddio.com.

Return Material Authorization (RMA) number: Before returning a product for repair or replacement request an RMA from Vaddio's technical support. Provide the technician with a return phone number, e-mail address, shipping address, product serial numbers and original purchase order number. Describe the reason for repairs or returns as well as the date of purchase. See the General RMA Terms and Procedures section for more information. RMAs are valid for 30 days and will be issued to Vaddio dealers only. End users must return products through Vaddio dealers. Include the assigned RMA number in all correspondence with Vaddio. Write the assigned RMA number clearly on the shipping label of the box when returning the product. All products returned for credit are subject to a restocking charge without exception. Special order product are not returnable.

Voided warranty: The warranty does not apply if the original serial number has been removed or if the product has been disassembled or damaged through misuse, accident, modifications, use of incorrect power supply, use of a modified power supply or unauthorized repair.

Shipping and handling: Vaddio will not pay for inbound shipping transportation or insurance charges or accept any responsibility for laws and ordinances from inbound transit. Vaddio will pay for outbound shipping, transportation, and insurance charges for all items under warranty but will not assume responsibility for loss and/or damage by the outbound freight carrier. If the return shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

Products not under warranty: Payment arrangements are required before outbound shipment for all out of warranty products.

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Visit us at support.vaddio.com for firmware updates, specifications, drawings, manuals, technical support information, and more.

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