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Installation Guide for the

HuddleSHOT and HuddleSHOT FC

All-in-One Conferencing Cameras

Contents

Overview

This guide covers:

HuddleSHOT all-in-one conferencing camera:
- North America – 999-50707-000 (black); 999-50707-000G (gray)
- Europe and UK – 999-50707-001 (black); 999-50707-001G (gray)
- Australia and New Zealand – 999-50707-009 (black); 999-50707-009G (gray)

HuddleSHOT FC all-in-one conferencing camera:
- 998-50808-000 (black)
- 998-50808-000G (gray)

What's in this Guide

This guide covers:
- Unpacking the camera
- Tips for a successful installation
- Instructions for installing the camera mount
- Camera power-on

Complete product information is available in the **Complete Manual for the HuddleSHOT All-in-One Conferencing Camera**.

If you are responsible for configuring the equipment after installing it, please use the Complete Manual. It includes all the information in this guide, plus information on configuring, operating, and troubleshooting the camera.

Features

- Intuitive operation with simple remote control
- Simultaneous uncompressed USB 3.0 and IP (H.264) video at resolutions up to 1080p/60 with full-duplex audio streaming
- 110° HFOV at 1x with full dewarping; 125° HFOV with no dewarping
- Selectable 1x, 1.5x, or 2x zoom with dewarping option
- Easy configuration, system administration, and remote management via web interface
- Integrated stereo speakers and phased microphone array
- Advanced network security features
- Audio input for Vaddio TableMIC or other microphone with EasyMic connectivity
- 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

A Quick Look at the Camera

This section covers the physical features of the cameras. They are in the same locations in both cameras.

Front of the Camera

Camera and zoom lens – HuddleSHOT and HuddleSHOT FC cameras offers 1x, 1.5x, and 2x zoom levels.

Left and right speakers – Far-end audio, or content audio when using EasyMic Adapter Mode.

Integrated microphones – No external microphone needed in typical installations. Echo-canceling microphones pick up the voices of participants up to 10 ft. (3 m) away.

Status light – The illuminated ring around the lens bezel indicates the camera's current state. The status light can be turned off in the administrative web interface.

Note
By default, the camera's status indicator light is active during normal operation; however, it can be configured to remain off when the camera is powered up. The camera may be sending video even if the light is off.

Back of the Camera

Network/PoE+ – RJ-45 connector. Connect to the network and to power via the Power and Data Out port of the mid-span PoE+ power injector. Provides power and network access for IP streaming and camera control via web interface or Telnet.

USB 3.0 – USB type C connector. Connect to a computer for use with soft conferencing applications. Provides uncompressed USB 3.0 stream.

EasyMic – RJ-45 connector. Optional connection for a TableMIC or other microphone with Vaddio EasyMic connectivity.

Multifunction button – Momentary pushbutton; used to return from standby, display IP address, pair with a remote, and restore factory defaults.

Connections

This section covers:
- Selecting the location for the camera
- Cabling notes
- Connection diagrams

And a required safety note here:

Note
PoE type networks connected to this equipment are for intra-building use only and should not be connected to lines that run outside of the building in which this product is located.

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.

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.

Before You Install the Camera

Keep these things in mind when deciding where to place the camera.
- 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 will point away from light sources. The camera will not perform well if it is pointed toward a light fixture or window.

Prepare for a successful installation:
- Be sure you can identify all cables correctly.
- If you make cables for this installation, check them for continuity.
- Talk to the network administrator. If installing the camera in a non-DHCP network (one that does not automatically assign IP addresses), you will need to configure the camera with a static IP address as directed by the network administrator.
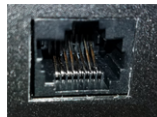
Cabling Notes

Caution
Do not use pass-through RJ-45 connectors when making cables for this product. Poorly crimped connectors of this type can cause intermittent connections and degraded signal quality. They can also damage the connectors on the product, which will void your warranty.

Intact – will make reliable contact with cable connector

Damaged – Bent contact fingers will NOT make reliable contact with cable connector

When making cables for this product, use Cat-5e or better cable. We recommend using high-quality connectors and a high-quality crimping tool.

We recommend shielded cabling if the cables will be coiled, run tightly with other cables, or routed near sources of electromagnetic interference such as power lines or fluorescent light fixtures.
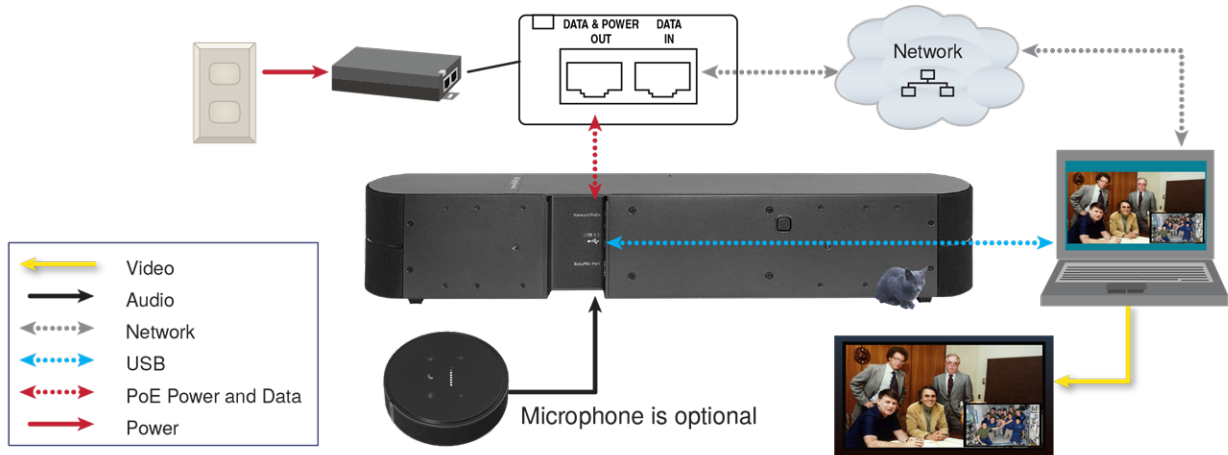
Caution
Check your cables. Connecting a cable to the wrong port or using the wrong pin-out can result in equipment damage and will void the warranty.

Pro Tip
Label all cables at both ends.
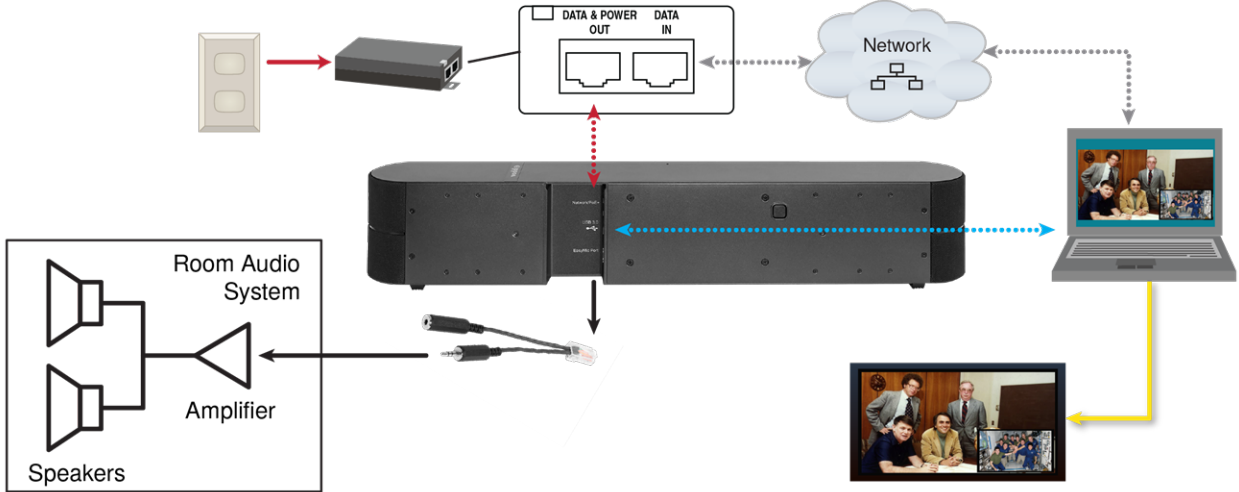
Basic Connections for Conferencing

This diagram shows a basic conferencing configuration. A laptop provides USB connectivity and the HDMI output to the display. Adding an optional TableMIC microphone allows more flexibility in the room layout.

This system provides acoustic echo cancellation, with or without the TableMIC microphone.

HuddleSHOT camera shown. The HuddleSHOT FC camera connects the same way.

Connections – Using the Camera with a Room Audio System

This diagram shows a setup for a room with an audio system. The camera's built-in microphones are used and far-end audio is routed to the room's speakers, using the EasyMic adapter.

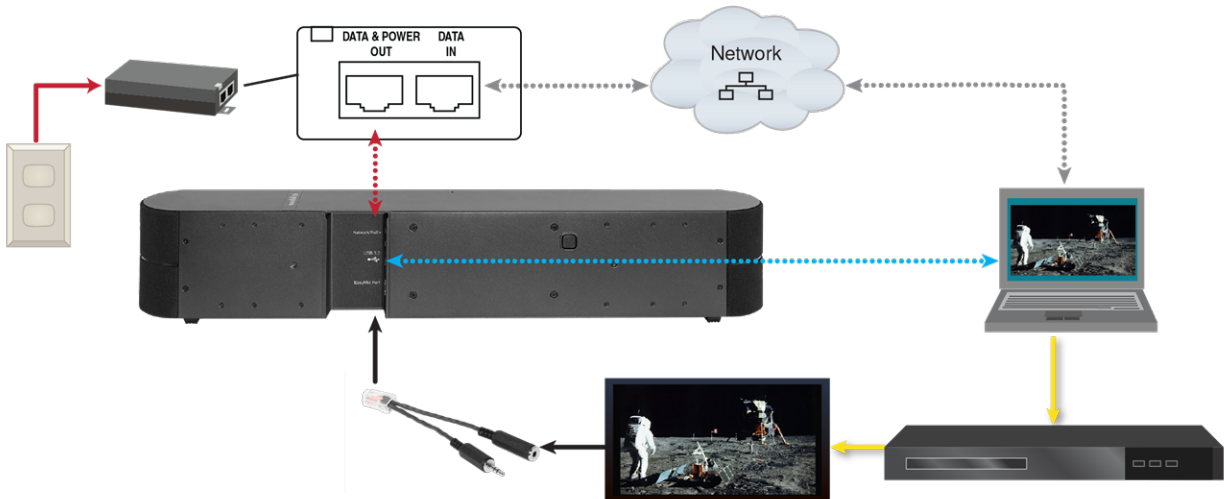HuddleSHOT camera shown. The HuddleSHOT FC camera connects the same way.

Connections – Using the Camera as a Sound Bar

This diagram shows the camera used as a sound bar for the display. Audio from the DVD or other external device is routed from the display to the camera's speakers using the EasyMic adapter. The display's built-in speakers are not used. Select EasyMic Adapter Mode on the Audio page of the web interface.

HuddleSHOT camera shown. The HuddleSHOT FC camera connects the same way.

Note
The computer in this connection diagram is not required in EasyMic adapter mode.

Mounting the HuddleSHOT Camera

For information about mounting the HuddleSHOT FC camera, refer to the documentation for the product in which it is housed.
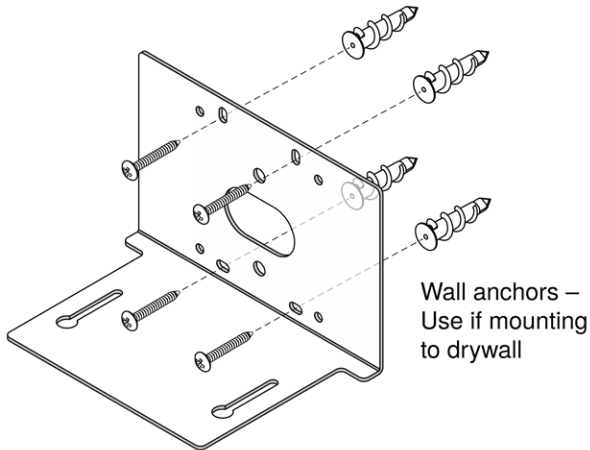
This section covers:
- Installing the wall mount for the HuddleSHOT camera
- Mounting the HuddleSHOT camera
- Other mounting options

Installing the HuddleSHOT Wall Mount

The HuddleSHOT camera is shipped with a wall mount. Other mounting options are available as well. Contact us if you don't have the camera mount you need.

You can install the camera wall mount to a 2-gang wall box or directly to the drywall.
- If you mount it to drywall, use the wall anchors provided with the wall mount.
- If you mount it to a wall box, use the cover plate screws supplied with the wall box.

Wall anchors –
Use if mounting
to drywall

Installing the HuddleSHOT Camera on the Wall Mount

Caution
If installing a TableMIC microphone with the camera, be sure you can identify the cables correctly. Connecting a cable to the wrong port can result in equipment damage and void the warranty.

1. Route the cables through the opening in the mounting shelf and connect them to the camera.
2. Place the camera on the mount.
3. Attach the camera to the mount using the mounting screws supplied with the camera, but do not fully tighten the screws.

Do not tighten the screws securing the camera to the wall mount until you are able to access the camera's web interface. You will need access to the button on the back of the camera to pair the remote and camera or to display the camera's IP address in the USB stream.

Optional Adjustable HuddleSHOT Mount

For additional flexibility in installation, a tilting wall mount (part number 535-2100-207) is available for the HuddleSHOT camera. It can be mounted above or below a display, or placed on the conference room table.

Tabletop Use

Use the adjustable mount on as a tabletop mount for a simple, quick installation.

1. Place the adhesive feet on the outer face of the mount base.
2. Use the two screws provided with the camera to secure it to the adjustable shelf .

Wall Mounting

The adjustable mount can be installed on drywall or secured to a wall box. Do not use the adhesive feet for this type of installation.

Installing on a Compatible Above/Below Mount

The adjustable mount can replace the original camera shelf on a Chief or Middle Atlantic above/below mount. Contact your sales representative for information on compatible products.

Do not use the adhesive feet for this type of installation.

1. Remove the original camera shelf from the shelf mounting bar.
2. Secure the base of the adjustable mount to the shelf mounting bar.
3. Ensure that the screws are properly tightened before placing the camera on the adjustable mount.

Powering Up the Camera

Connect camera power. The camera will initialize. This takes a minute or two. When an image is available, the camera is ready to accept control information.

Status Indicator Light

The light in the camera's base indicates its current state.
- Purple – Initializing
- White – Camera is active
- Red – Audio is muted
- Blinking red – Video is muted
- Yellow/green – Firmware update is in progress
- Blinking cyan – Remote pairing mode
- Blinking blue – Pairing error
- Different color on each blink – Disco mode! Everybody dance!
  (We have never actually observed this mode. If your camera does this, please contact us and describe how you induced this behavior.)

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

Note
By default, the camera's status indicator light is active during normal operation; however, it can be configured to remain off when the camera is powered up. The camera may be sending video even if the light is off.

Multifunction Button

Use the button on the back of the camera to do these things:
- **Display the camera's IP address in the video output:** Press momentarily. Press again to dismiss the IP address.
- **Pair the remote with the camera:** Press and hold until the light blinks cyan. Then press the pairing button on the remote.
- **Restore factory default settings:** Press and hold for about 10 seconds during power-up.
- **Return from standby mode:** When the camera is in standby (purple indicator light, or no light), press momentarily to return to the ready state.

Next Steps

The camera will need to be configured for your network before it can be used. This will require knowing the camera's IP address. To get this information, the remote will need to be paired with the camera. Refer to the Complete Manual for the HuddleSHOT All-in-One Conferencing Camera for these tasks.

Photo Credits

This guide may include some or all of these photos.

European Space Agency (ESA) astronaut Samantha Cristoforetti, a Flight Engineer with Expedition 42, photographs the Earth through a window in the Cupola on the International Space Station
By NASA - https://blogs.nasa.gov/ISS_Science_Blog/2015/03/06/women-in-space-part-two-whats-gender-got-to-do-with-it/, Public Domain, https://commons.wikimedia.org/w/index.php?curid=38834990

Carl Sagan, Bruce Murray, Louis Friedman (founders) and Harry Ashmore (advisor), on the occasion of signing the papers formally incorporating The Planetary Society
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Main Control Room / Mission Control Room of ESA at the European Space Operations Centre (ESOC) in Darmstadt, Germany
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Expedition 42 on orbit crew portrait, International Space Station, Mar. 7, 2015 – Barry Wilmore (Commander) Top, Upside down, to the right cosmonaut Elena Serova, & ESA European Space Agency Samantha Cristoforetti. Bottom center US astronaut Terry Virts, top left cosmonauts Alexander Samokutyaev and Anton Shkaplerov.
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European Space Agency astronaut Luca Parmitano, Expedition 36 flight engineer, outside the International Space Station
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Chris Cassidy, Luca Parmitano, and Karen Nyberg, ISS, 2013. Photo Credit: NASA

Nicolas Altobelli, Rosetta Scientist at ESA's European Space Astronomy Centre, Villanueva de la Cañada, Madrid, Spain
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Andrea Accomazzo, ESA Rosetta Spacecraft Operations Manager, providing a live update from the Main Control Room at ESA's European Space Operations Centre, Darmstadt, Germany during the Rosetta wake-up day.
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Sleeping goose
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Photo AS11-40-5948, Aldrin assembles seismic experiment, by National Aeronautics and Space Administration, courtesy of the NASA History Office and the NASA JSC Media Services Center

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