

Application Note

Using RoboSHOT Series Cameras with Polycom Codecs

This note applies to the following products and kits:

- RoboSHOT 12E HDBT OneLINK Bridge system for Polycom codecs, part number 999-96450-500/500W/501/501W
- RoboSHOT 12E HDBT OneLINK HDMI system for Polycom codecs, part number 999-95450-500/500W/501/501W
- RoboSHOT 12E HDMI for Polycom codecs, part number 999-99400-500/500W/501/501W
- Polycom Codec Kit for OneLINK Bridge to RoboSHOT HDBT Cameras, part number 999-9645-000/001/009
- Polycom Codec Kit for OneLINK HDMI to RoboSHOT HDBT Cameras, part number 999-9545-000/001/009
- Polycom Codec Kit for OneLINK Bridge to RoboSHOT HDMI Cameras, part number 999-9640-000/001/009
- Polycom Codec Kit for OneLINK HDMI to RoboSHOT HDMI Cameras, part number 999-9540-000/001/009

It also applies to the following discontinued kits:

- RoboSHOT 12 HDBT OneLINK Bridge system for Polycom codecs, part number 999-9645-500/501
- RoboSHOT 12 HDBT OneLINK HDMI system for Polycom codecs, part number 999-9545-500/501
- RoboSHOT 12 HDMI for Polycom codecs, part number 999-9940-500/501

Application

For customers wishing to pair a RoboSHOT series camera with a Polycom codec, Vaddio offers several options including:

- The **RoboSHOT 12E HDMI for Polycom Codecs** camera bundle includes a RoboSHOT 12E HDMI camera and the appropriate cables to connect the camera directly to a Polycom codec.
- **RoboSHOT-OneLINK systems for Polycom Codecs** include a RoboSHOT 12E HDBT camera, the specified OneLINK device, and the appropriate cables to connect the camera to a Polycom codec via the OneLINK device, extending camera installation distance and introducing additional flexibility into the room design.
- **Polycom Codec Kits for OneLINK Bridge and for OneLINK HDMI** include the specified OneLINK device and appropriate cables to connect a *customer-provided* camera to a Polycom codec via the OneLINK device, offering the same advantages as camera-OneLINK systems. OneLINK HDMI and OneLINK Bridge kits are available for Vaddio HDBaseT cameras.

OneLINK kits for Vaddio HDBaseT cameras can be used with the following cameras and camera series:

- RoboSHOT HDBT
- RoboSHOT UHD
- DocCAM 20 HDBT
- RoboSHOT IW

They are also expected to support any HDBaseT cameras that Vaddio may introduce in the future.

What's in the Box

RoboSHOT 12E HDMI camera for Polycom codecs, part number 999-99400-500/500W/501/501W

Includes:

- RoboSHOT 12E HDMI camera, black or white
- PoE+ mid-span power injector, with AC cord set(s)
- Vaddio IR Remote Commander
- Thin Profile Wall Mount, black or white, with mounting hardware kit
- Polycom fan-out cable, 2 ft.
- Quick-Start Guide, RoboSHOT 12E HDMI and RoboSHOT 30E HDMI Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

RoboSHOT 12E HDBT OneLINK Bridge system for Polycom codecs, part number 999-96450-500/500W/501/501W

Includes:

- RoboSHOT 12E HDBT camera, black or white
- PoE+ mid-span power injector, with AC cord set(s)
- Vaddio IR Remote Commander
- Thin Profile Wall Mount, black or white, with mounting hardware kit
- OneLINK Bridge AV interface
- Power supply, 48VDC/1.36A, with AC cord set(s)
- USB 3.0 cable, type A to B 6 ft. (1.8 m)
- Polycom fan-out cable, 2 ft.
- 3-position Phoenix-style connectors, 3.5 mm, qty 4
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, RoboSHOT 12E HDBT and RoboSHOT 30E HDBT Cameras
- Quick-Start Guide, OneLINK Bridge for Vaddio HDBT Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

RoboSHOT 12E HDBT OneLINK HDMI system for Polycom codecs, part number 999-95450-500/501

Includes:

- RoboSHOT 12E HDBT camera, black or white
- PoE+ mid-span power injector, with AC cord set(s)
- Vaddio IR Remote Commander
- Thin Profile Wall Mount, black or white, with mounting hardware kit
- OneLINK HDMI receiver
- Power supply, 48VDC/1.36A, with AC cord set(s)
- Polycom fan-out cable, 2 ft
- 3-position connector, Euro-style, 5 mm
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, RoboSHOT 12E HDBT and RoboSHOT 30E HDBT Cameras
- Quick-Start Guide, OneLINK HDMI for Vaddio HDBaseT Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

Polycom codec kit for OneLINK Bridge to RoboSHOT HDBaseT Cameras, part number 999-9645-000/001/009

Includes:

- OneLINK Bridge AV interface
- Power supply, 48VDC/1.36A, with AC cord set(s)
- USB 3.0 cable, type A to B 6 ft. (1.8 m)
- Polycom fan-out cable, 2 ft.
- 3-position Phoenix-style connectors, 3.5 mm, qty 4
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, OneLINK Bridge for Vaddio HDBT Cameras

You will need to provide:

- A Vaddio HDBaseT camera such as RoboSHOT HDBT, RoboSHOT UHD, or an architectural camera
- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

Polycom codec kit for OneLINK HDMI toVaddio HDBaseT Cameras, part number 999-9545-000/001/009

Includes:

- OneLINK HDMI receiver
- Power supply, 48VDC/1.36A, with AC cord set(s)
- Polycom fan-out cable, 2 ft
- 3-position connector, Euro-style, 5 mm
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, OneLINK HDMI for Vaddio HDBT Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A Vaddio HDBaseT camera such as RoboSHOT HDBT, RoboSHOT UHD, or an architectural camera
- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

Polycom codec kit for OneLINK Bridge to RoboSHOT HDMI Cameras, part number 999-9640-000/001/009

Includes:

- OneLINK Bridge AV interface
- OneLINK HDMI EZIM (EZCamera Interface Module)
- Power supply, 48VDC/1.36A, with AC cord set(s)
- 3-position Phoenix-style connectors, 3.5 mm, qty 4
- USB 3.0 cable, type A to B 6 ft. (1.8 m)
- Polycom fan-out cable, 2 ft
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, OneLINK Bridge for RoboSHOT HDMI Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A RoboSHOT 12 HDMI or RoboSHOT 30 HDMI camera
- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

Polycom codec kit for OneLINK HDMI toRoboSHOT HDMI Cameras, part number 999-9540-000/001/009

Includes:

- OneLINK HDMI receiver
- OneLINK HDMI EZIM (EZCamera Interface Module)
- Power supply, 48VDC/1.36A, with AC cord set(s)
- Polycom fan-out cable, 2 ft
- 3-position connector, Euro-style, 5 mm
- EZCamera RS-232 control adapter 998-1001-232
- Quick-Start Guide, OneLINK HDMI for RoboSHOT HDMI Cameras
- App Note, Using RoboSHOT Cameras with Polycom Codecs

You will need to provide:

- A RoboSHOT 12 HDMI or RoboSHOT 30 HDMI camera
- A Polycom RealPresence Group 300, 500, or 700 codec
- Display(s)
- Audio peripherals and related cables to connect to the codec

Before You Install the Camera

This section covers items and information you need before you start the installation.

RS-232 Control Connections

Be sure the camera is set for the same baud rate as the codec. DIP switch 6 on the back of the camera sets the baud rate at 9600 (up) or 38400 (down).

Note

For most codecs, the default is 9600 baud. Check the documentation for your codec.

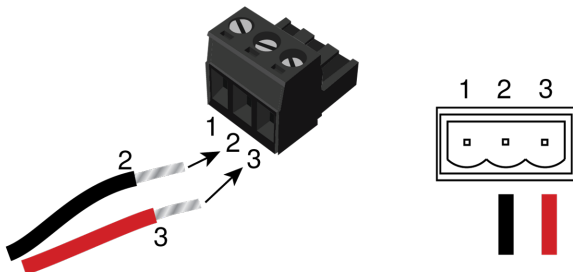
If the codec has additional RS-232 communication settings, be sure they match the camera's settings:

- 8 bits
- 1 stop bit
- No parity
- No flow control

These cannot be changed on the camera.

IR Forwarding with the OneLINK HDMI Camera Extension

The OneLINK HDMI camera extension provides IR forwarding; the OneLINK Bridge AV interface does not. For IR forwarding with the OneLINK HDMI, terminate the bare ends of the Polycom fan-out cable with the 3-position Euro-style connector.

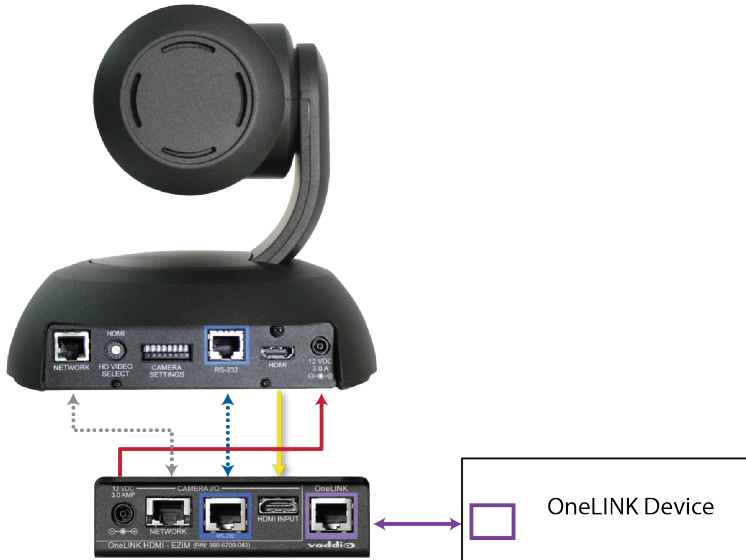


Using HDMI Cameras with OneLINK devices

If you use a OneLINK device between an HDMI camera and the codec, you must connect the camera using the OneLINK HDMI EZIM (EZCamera interface module), which is an HDBaseT converter. This diagram shows a legacy RoboSHOT HDMI camera connected to the EZIM.

Note

RoboSHOT 12E and 30E HDMI cameras are not compatible with OneLINK devices.

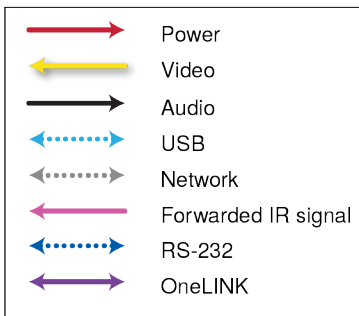


Basic Connections

The diagrams in this section provide guidance for these connection scenarios:

- Connecting a camera directly to a Polycom codec
- Connecting an HDBaseT camera to a Polycom codec using a OneLINK device
- Connecting an HDMI camera to a Polycom codec using a OneLINK device

Connection diagrams use the following conventions for line/signal type:



Note

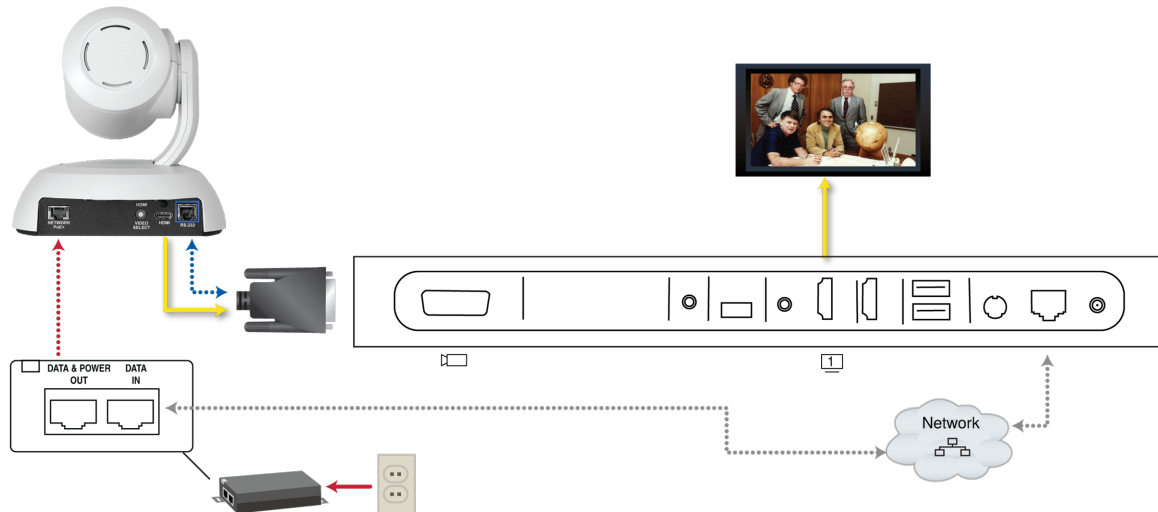
In cases where special cables are used, the connection diagram depicts the cable itself as well as the signal type(s) that it carries.

Connecting a Camera Directly to a Polycom Codec

In this scenario, the camera and codec are physically sited relatively close to the displays, audio peripherals, and other elements of the room system. The codec provides connectivity for the camera and all peripheral devices.

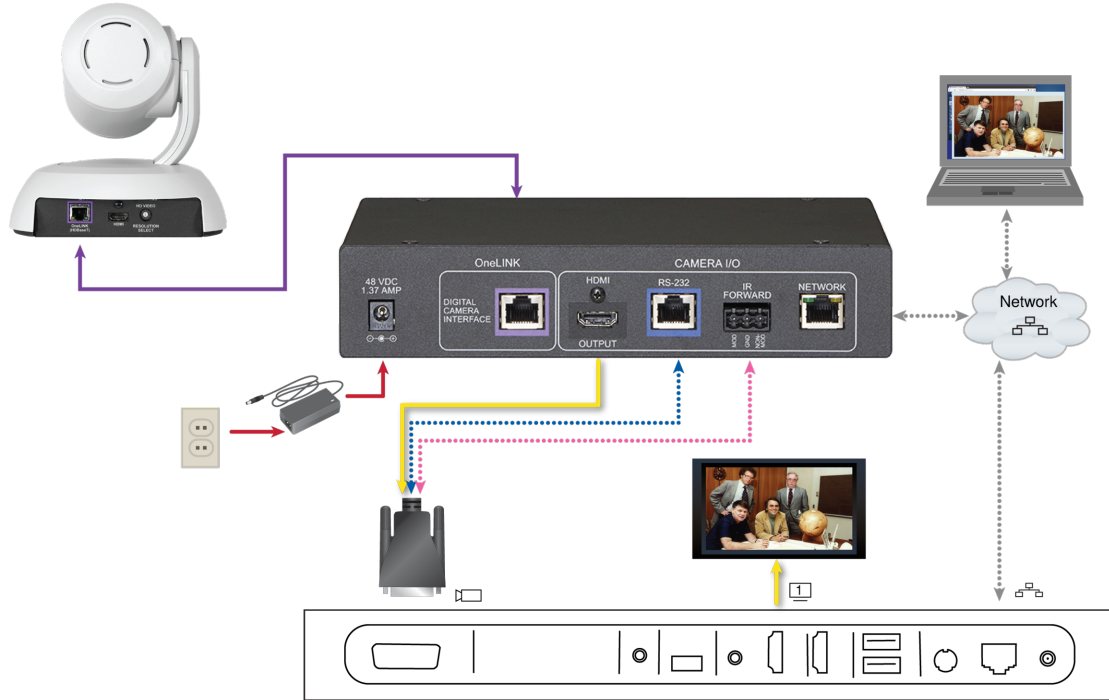
Kit for this scenario: 999-99400-500/501/509, RoboSHOT 12E HDMI for Polycom Codecs

This diagram refers to the special cable required, and shows the signal types it carries. The diagram shows details for connecting the camera and associated display. Refer to the codec documentation for information on completing the installation.



Legacy RoboSHOT HDMI cameras can also be connected in a similar way.

This diagram shows the camera and OneLINK HDMI extension connected to the codec and separately providing an IP video stream. It depicts the required Polycom fan-out cable and the signal types it carries. The OneLINK HDMI extension also provides IR forwarding. For additional connection diagrams and other information, refer to the Complete Manual for the OneLINK HDMI Camera Extension.



Connecting an HDMI Camera to a Polycom Codec Using a OneLINK Device

In this scenario, the camera may be sited up to 328 ft. (100 m) from the codec.

Both OneLINK devices provide additional video outputs; the OneLINK Bridge also provides audio and USB connectivity, and the OneLINK HDMI provides IR forwarding capability if supported by the camera.

Kits for this scenario:

- Polycom codec kit for OneLINK Bridge to RoboSHOT HDMI Cameras, 999-9640-000/001/009
- Polycom codec kit for OneLINK HDMI to RoboSHOT HDMI Cameras, 999-9540-000/001/009

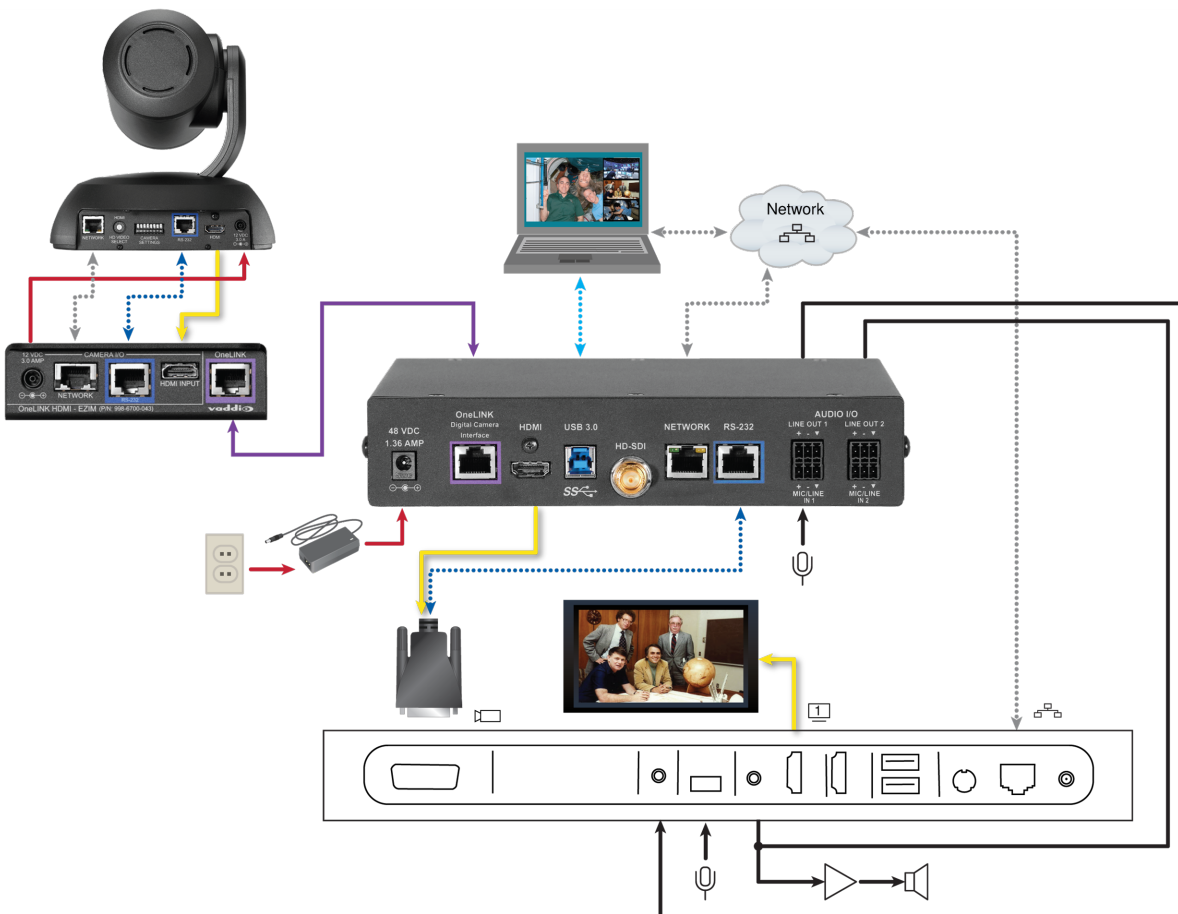
Note

These kits are compatible with legacy RoboSHOT HDMI cameras. They are not compatible with RoboSHOT 12E HDMI or RoboSHOT 30E HDMI cameras.

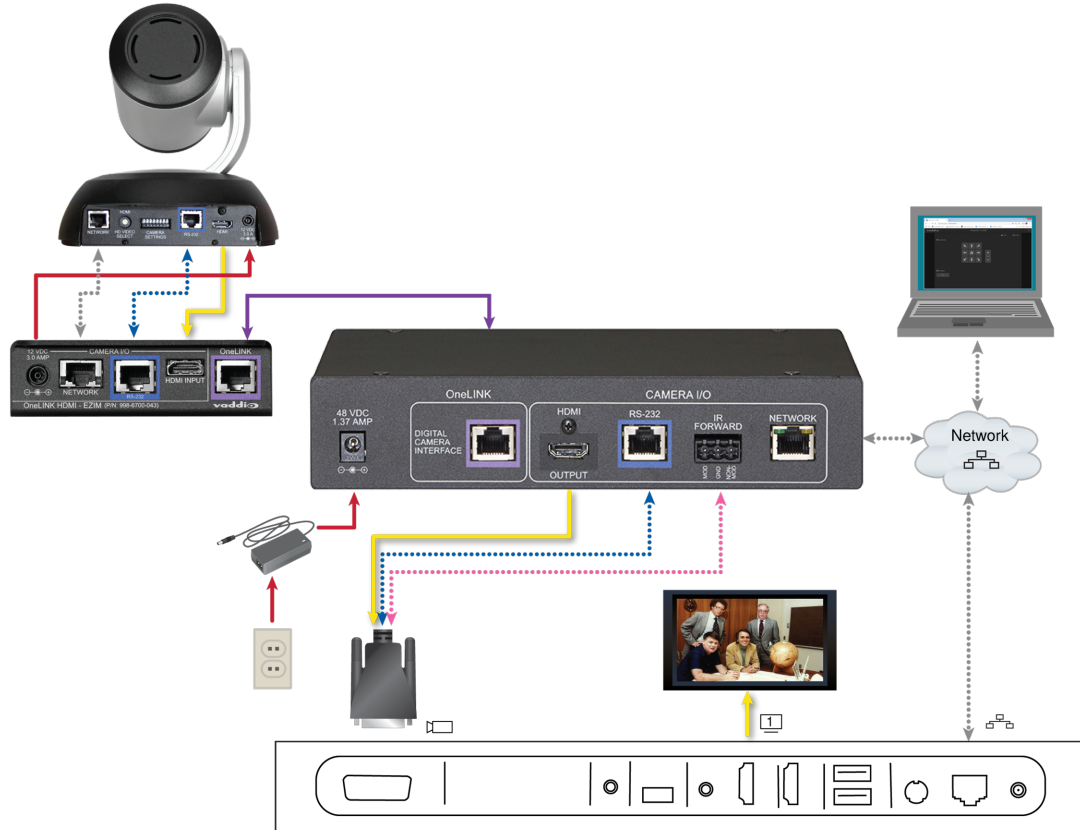
In these diagrams, an EZCamera Interface Module (EZIM) is installed with the camera for the required HDBaseT connectivity to the OneLINK device. They show detailed information for the camera and associated display. Refer to the codec documentation for information on completing the installation.

This diagram shows the camera and OneLINK Bridge AV interface in a conferencing set-up. It depicts the required Polycom fan-out cable and the signal types it carries.

For additional connection diagrams and other information, refer to the Complete Manual for the OneLINK Bridge AV Interface.



This diagram shows the camera and OneLINK HDMI extension connected to the codec and separately providing an IP video stream. It depicts the required Polycom fan-out cable and the signal types it carries. The OneLINK HDMI extension also provides IR forwarding. For additional connection diagrams and other information, refer to the Complete Manual for the OneLINK HDMI Camera Extension.



Configuring the Camera for Use with the Codec

When the camera is installed and powered on, you will need to configure it for use with the codec.

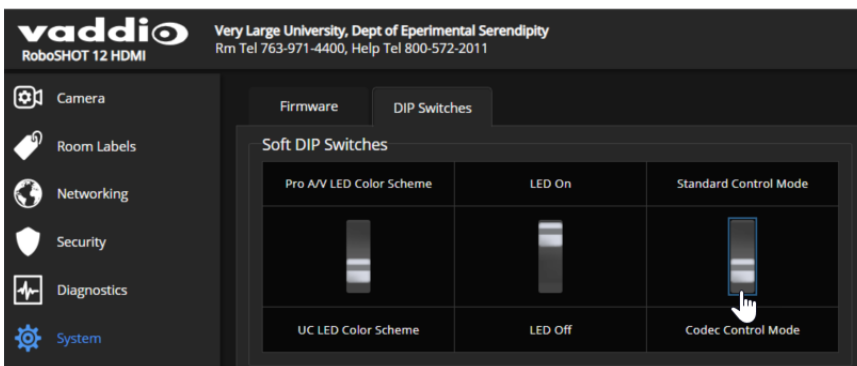
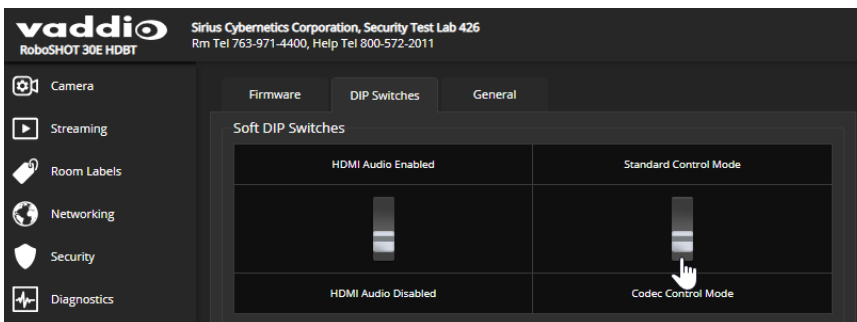
Note

If you are connecting a camera that you did not purchase as part of a kit for use with Polycom codecs, you may need to update the firmware.

RoboSHOT 12E HDBT and RoboSHOT 30E HDBT support these kits and do not require a firmware update. Legacy RoboSHOT HDMI cameras require version 2.3.0 firmware or later.

1. Access the camera's web interface and log in as **admin**. Refer to the camera's documentation for detailed instructions.
2. Update the camera's firmware if necessary. Refer to the camera's documentation for detailed instructions.
3. On the DIP Switches tab of the System page, select Codec Control Mode using the appropriate soft DIP switch.

The camera is now ready for operation.



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