



User Guide

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# Polycom® Pano



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# Before You Begin

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## Topics:

- [Audience, Purpose, and Required Skills](#)
- [Get Help](#)

This guide is for users who want to operate Polycom Pano systems.

Please read the Polycom Pano documentation before you operate the system. The following related documents are available from [Polycom Support](#):

- *Polycom Pano Administrator Guide*, which describes how to configure, customize, manage, and troubleshoot Polycom Pano systems
- Setup sheets for your hardware
- Release notes
- *Polycom Pano Safety and Regulatory Notices*, which describes safety and legal considerations for using Polycom Pano systems

Polycom recommends that you record the serial number and option key of your Polycom Pano system here for future reference. The serial number for the system is printed on the unit.

System Serial Number: \_\_\_\_\_

Option Key: \_\_\_\_\_

## Audience, Purpose, and Required Skills

The primary audience for this guide are users who want to perform basic to intermediate tasks using the Polycom Pano system.

## Get Help

For more information about installing, configuring, and administering Polycom products, refer to **Documents and Downloads** at [Polycom Support](#).

## The Polycom Community

The [Polycom Community](#) gives you access to the latest developer and support information. Participate in discussion forums to share ideas and solve problems with your colleagues. To register with the Polycom Community, simply create a Polycom online account. When logged in, you can access Polycom support personnel and participate in developer and support forums to find the latest information on hardware, software, and partner solutions topics.

# Getting Started with Polycom® Polycom Pano

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## Topics:

- [Polycom Pano Power](#)
- [Polycom Pano Home Screen](#)

This guide includes information about Polycom Pano systems. It includes information that helps you whether you're just starting to learn about video conferencing or if you just need a quick refresher. It also includes step-by-step instructions for everyday video conferencing tasks.

For detailed information on the most recent feature descriptions, refer to the *Polycom Pano Release Notes* available at [support.polycom.com](http://support.polycom.com).

## Polycom Pano Power

Powering your system on and off is a simple procedure. Make sure the system is powered off before you connect devices to it. After you have connected all of the related equipment that you intend to use, connect the power on the system.

It is important to note that Polycom Pano systems are designed to stay in a wake state and do not have a power button.

## Power On the Polycom Pano System

After setting up your system, you need to power on the Polycom Pano system.

### Procedure

- 1 Use the HDMI cable to connect the Polycom Pano system to the monitor.
- 2 Connect the touch monitor USB cable.
- 3 Connect the power cord to the Polycom Pano system or connect the LAN cable to power on the system by Power over Ethernet (PoE).
- 4 If it is not already connected, connect the LAN cable to the system for network connectivity.  
The Polycom splash screen displays within several seconds.

## Power On Self Test (POST)

After being powered on, Polycom Pano systems automatically perform system health checks before the systems are initialized. This process is known as a power on self test, or POST. The status of the POST sequence is displayed with the LED indicator light on the front of the device.

All test results are logged in the system memory. For more information about what the colors of the indicator lights mean, contact your administrator.

When the POST sequence completes with no severe errors, the Polycom Pano system starts normally.

## Power Off a Polycom Pano System

If you need to change out a monitor, you might need to power off the Polycom Pano system.

### Procedure

- » Disconnect the power cord from the Polycom Pano system or disconnect the LAN cable when the system is powered by PoE.

## Polycom Pano Home Screen

The Polycom Pano Home screen invites meeting participants to start collaborating, to share content, or to touch the screen and start writing. When you select Start Writing, a new session begins on a blackboard with a toolbar and content tray. When you exit the session, you return to the Home screen. Before collaborating, you can connect to the system using Polycom Pano app, Airplay, Miracast, or an HDMI connection. The following information appears on the home screen:

- [System Information](#)
- [Content Viewing Area](#)
- [Annotation Toolbar](#)
- [Content Tray](#)

### System Information

The following information about the system is available on the Home screen:

- IP Address - Location identifier for the Polycom Pano system used to connect Polycom Pano app. The IP address is also used by administrators to access the web interface to configure the system.
- Room System Name - The name assigned to the system and broadcast to nearby devices.
- Date and Time - Current date and time associated with the system's configured location.
- PIN - Code that is assigned to the system to limit access.

### Content Viewing Area

The content sharing sources display in the center of the Home screen. This area shows a single maximized content source or up to four minimized content sources. For more details about sharing content on the Polycom Pano, see [Share Content](#).

## Annotation Toolbar

The annotation toolbar enables you to create and annotate content in real-time on the Polycom Pano system. You can use the annotation toolbar to annotate content using your finger or a stylus. For more information, see [Annotation Toolbar](#).

## Content Tray

The Polycom Pano Home screen shows a maximum of four content sources at one time. When the maximum number of sessions are displayed and another source is added, the incoming source is added to the top-left of the content view area. The system moves one of the original sources to the content tray, the storage area for inactive content sources.


Keep the following in mind about the content tray:

- Content items are shown newest to oldest.
- The content tray expands to show up to three lines of sources. If there are more sources available, scroll vertically to see those items.

## Removing an Item from the Content Tray

You can move an item from the content tray to the content viewing area.

### Procedure

- 1 Tap  to open the content tray.
- 2 Tap the content item you want to move from the content tray to the content viewing area.



# Share Content

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## Topics:

- [Share Your Screen](#)
- [Stop Sharing Your Screen](#)
- [Share Content from a Device Connected to Polycom Pano](#)
- [Stop Sharing Content from a Connected Device](#)

You can share content on a Polycom Pano system wirelessly or using an HDMI connection. The following is supported:

- Casting information from a device that supports AirPlay® or Miracast wireless streaming.
- Sending content from Polycom Pano app, which is installed on a computer and wirelessly connected to the Polycom Pano system. For more details, see [Polycom Content Companion](#).
- Broadcasting information stored on a computer that is directly connected to a Polycom Pano system.

The Polycom Pano can show up to four content sources at a time from one participant at a time or multiple participants at the same time. The name associated with the device that is sharing content displays on the Polycom Pano system to identify the meeting participant who is sharing content.



**Note:** The Polycom Pano system does not support high-bandwidth digital content protection (HDCP). If you share HDCP-encrypted content, it is not shown.

## Share Your Screen

You can stream video and audio content onto a Polycom Pano system from a device that supports Miracast or AirPlay screen mirroring.

Keep the following in mind when sharing your screen:

- The device must be on the same Wi-Fi network as the Polycom Pano system.
- You control the audio by using the volume controls on the device.
- The Polycom Pano system uses the orientation and aspect ratio of your device.

## Share Your Screen Using Miracast

You can share the screen and audio of a Microsoft Windows® or Android™ device that supports the Miracast wireless display standard and is no more than 10 meters away from the Polycom Pano system.

Polycom has tested and supports the following devices:

- Microsoft Surface Book
- Microsoft Surface Pro 4
- Lumia 650 and above
- Dell XPS 13 950-80085LV Signature Edition laptop
- HP Spectre x360 13-4195nr Signature Edition 2 in 1 P
- NuVision TM800W560L Signature Edition Tablet

### Procedure

- 1 Make sure the device is connected to the same Wi-Fi network as the Polycom Pano system.
- 2 On the device, access the Miracast or compatible screen mirroring feature. Miracast is supported on a variety of devices that use different methods for accessing the feature. On most devices, the screen mirroring feature is accessed from the Settings menu. For details, check your device documentation.
- 3 On the device, select the name of the Polycom Pano system shown on the home screen.
- 4 When prompted, enter the PIN shown on the Polycom Pano home screen.

## Share Your Screen Using AirPlay

You can share the screen and audio of an iPhone®, iPad®, or Mac® computer that is AirPlay-enabled.


### Procedure

- 1 Make sure the AirPlay-enabled device is connected to the same Wi-Fi network as the Polycom Pano system.
- 2 Access AirPlay on the device. On most iOS devices, the AirPlay feature is located in the Control Center that you open by swiping up from the bottom of the device. For details, check your device documentation.
- 3 Select the name of the Polycom Pano system that is shown on the home screen.
- 4 When prompted, enter the PIN shown on the Polycom Pano home screen.

## Stop Sharing Your Screen

When you are done presenting content on your Windows, Android, or iOS device, make sure you end the sharing session.

### Procedure

- » Do one of the following:
  - End the AirPlay or Miracast screen share feature on the device.
  - Tap  on the content window. Confirm that you want to end the session.

## Share Content from a Device Connected to Polycom Pano

You can share content from a computer or other device that is directly connected to the Polycom Pano.

Keep the following in mind when sharing your computer system:

- You control the audio using the volume controls on the monitor.
- The computer video output must be configured to use one of the supported resolutions and refresh rates.

### Supported HDMI Input Resolutions and Frame Rates

Input	Resolution	Frame Rate(s)
UHD	3840 x 2160p	24,25,30
OHD	2560 x 1440p	50,60
FHD	2560 x 1440p	50,60
WSXGA+	1680 x 1050	60
UXGA	1600 x 1200	60
SXGA	1280 x 1024	60,70,75,85
HD	1280 x 1024	50,60
XGA	1280 x 1024	60,70,75,85



**Note:** The way you set the resolution and refresh rate differs, depending on the type of operating system you have. Check your computer's manual or help topics for the appropriate steps.

### Procedure

- 1 Connect one end of an HDMI cable to the HDMI Input port on the monitor. Connect the other end of the HDMI cable to the HDMI Output port on the Polycom Pano system.
- 2 If your monitor has only a DVI input port, use a DVI-HDMI adapter to connect it to the HDMI output port of the Polycom Pano system.




**Note:** If you use an HDMI-to-DVI adapter, you must connect an audio cable from the computer to the Polycom Pano system to receive audio.

## Stop Sharing Content from a Connected Device

You can stop sharing content from a connected device.

## Procedure

»Do one of the following:

- Disconnect the HDMI cable from the Polycom Pano system and computer.
- Tap  on the content window. Confirm that you want to end the session.

# Polycom Pano App

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## Topics:

- [Install Polycom Pano App](#)
- [Use Polycom Pano app in Standalone Mode](#)
- [Connect to a Room System](#)
- [Disconnect from a Room System](#)
- [Share Local Content](#)
- [Stop Sharing Local Content](#)

Polycom Pano app allows you to share local content, such as your desktop or a running application, from a computer that is not connected directly to the Polycom Pano system.

Keep the following points in mind about Polycom Pano app:

- The application provides video-only content. No audio is shared.
- Polycom Pano app supports any computer desktop resolution with color set to 32-bit.
- Your computer resolution can be set to anything, but Polycom Pano app scales the image to 1024x768 or 1280x720.
- If Bluetooth detection is turned on, Polycom Pano app can detect nearby room systems that are enabled with Bluetooth broadcasting to facilitate content sharing. Note, this feature is only available to Microsoft Windows 10 users with Bluetooth version 4.0 or higher.
- Content sent from the Polycom Pano app to the Polycom Pano is encrypted.

## Install Polycom Pano app

You must install the Polycom Pano app application on a computer before you can use it to show content.

### Procedure:

- 1 Download the installation package to your local drive.
- 2 Double-click the installation package.
- 3 Follow the on-screen instructions.

## Use Polycom Pano app in Standalone Mode

Standalone mode allows you to share local content.

## Procedure

- » Start Polycom Pano app and click or tap **Skip** on the **Sign In** screen.

# Share Content Using Polycom Pano App

After connecting to a room, you can share your local desktop or a running local application on the Polycom Pano room system.

## Check Application Information

The Polycom Pano app version and copyright information are located on the application title bar.

### Procedure:

- 1 Click or tap on the application title bar.
- 2 Click or tap **About**.

# Connect to a Room System

You must connect to a room system before you can share content.

## Automatically Detect Rooms

If your Bluetooth detection is turned on, Polycom Pano app can detect nearby Polycom Pano room systems that have enabled Bluetooth broadcasting to facilitate content sharing. Detected rooms are listed on the **Connect to** window.



**Note:** The auto discovery feature is available to Microsoft Windows 10 users with Bluetooth version 4.0 or higher.

## Connect to an Automatically Detected Room

After you enable Bluetooth on your device, Polycom Content Companion can automatically detect nearby rooms. You can then connect to a detected room.

### Procedure

- 1 Click or tap a room listed under **Connect to**.
- 2 Enter the room PIN code, if asked.

## Recent Devices

Up to five recently connected devices are listed under **Recent Devices**. You can connect to a recent device, or remove devices from the **Recent Devices** list.

## Remove a Device from Recent Devices List

If a recently connected device is no longer available, you can remove it from the Recent Devices list.

### Procedure

- 1 Click or tap **Recent Devices**.
- 2 Click or tap the icon located to the right of the desired device.

## Connect to a Recent Room

You can connect to a previously connected room.

### Procedure

- 1 Click or tap a room in the **Recent Used Room** list.
- 2 Enter the PIN, if required.

## Connect to a Room Manually

You can find a room by specifying its IP address.

### Procedure

- 1 Click or tap **Find Other Devices**.
- 2 Enter the IP address or name of the desired room, and click or tap **Connect**.
- 3 Enter the PIN, if required.

## Disconnect from a Room System

You can connect with one room system at a time. To connect with another room system, you must disconnect from the current one first.

### Procedure

- » Click or tap on the upper-right of the screen, then click or tap **Yes**.

## Share Local Content

After connecting to a room, you can present your local desktop or running local applications to the Polycom Pano room system.

### Procedure

- » Do one of the following:
  - To share you desktop, click or tap **Monitor**.

- To share a running application, click or tap an application name on the **Share** screen.  
You can refresh the running application list by clicking or tapping on the icon located to the right of the **Share** screen.

## Stop Sharing Local Content

You can stop sharing content without disconnecting from the room system.

### Procedure

- » On the **Content Sharing** toolbar, click or tap **Stop**.



# Annotation Toolbar

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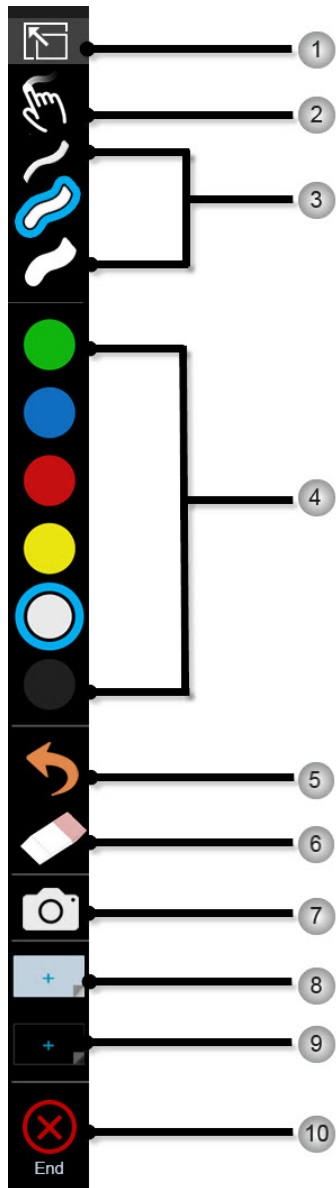
## Topics:

- [Annotation Toolbar Elements](#)
- [Annotate Content](#)
- [Erase an Annotation](#)
- [Undo an Annotation](#)
- [Use Snapshot to Annotate Content](#)
- [Stop Sharing Annotated Content](#)
- [Highlight Content](#)
- [Create a Whiteboard or Blackboard](#)
- [Exit the Annotation Toolbar](#)

You can highlight, draw, and erase annotations on a whiteboard, blackboard or shared content using elements on the Polycom Pano annotation toolbar.

## Annotation Toolbar Elements

Refer to the following figure and table for descriptions of the annotation toolbar elements.



**Annotation Toolbar Elements**

Reference Number	Description
1	Expands the view of the whiteboard, blackboard, or content to full screen.
2	Highlights briefly on content to note certain areas of interest.
3	Provides drawing line widths.
4	Provides color selections.

**Annotation Toolbar Elements**

Reference Number	Description
5	Undoes the last annotation.
6	Erases annotations made on whiteboard, blackboard, or content.
7	Captures a snapshot of live content.
8	Provides a blank whiteboard to create annotations.
9	Provides a blank blackboard to create annotations.
10	Exits the current content sharing interaction screen and returns to the Home screen

## Annotate Content

You can draw or write annotations on shared content.


**Procedure**

- 1 On the annotation toolbar, select the desired line width.
- 2 Select a color.
- 3 Use one finger or a stylus to draw or write.

## Erase an Annotation

You can use three or more fingers to erase annotations on shared content. When you erase an annotation, an indicator appears under your finger. Erased annotations cannot be undone.



**Procedure**

- » Do one of the following:
  - On the toolbar, tap . Use your finger to erase an annotation.
  - On the shared content screen, use three or more fingers to erase an annotation.

## Undo an Annotation

You can undo a previous annotation or undo all annotations at one time.

**Procedure**

- » Do one of the following:
  - Tap  to undo the last annotation you made.
  - Tap and hold  to undo all annotations you made.


## Use Snapshot to Annotate Content

Snapshot freezes live content by capturing the current screen so you can highlight or annotate it without changing the live content shared in a session. You can return to the live content at any time or switch between any content sources in the content tray. A limited number of snapshots are available. A prompt notifies you when you have reached the snapshot limit.

### Take a Snapshot

You can take a snapshot of all the sources of live content and annotate on them across the panels or take a snapshot of the live content without changing the original content source.


#### Procedure

- 1 Tap . A snapshot flash and sound indicates success. All existing sources move to the content tray and are replaced with a full screen snapshot.
- 2 Use the toolbar to annotate or highlight on the snapshot.
- 3 Tap anywhere on the snapshot to minimize, maximize or close the snapshot in the session

### Switch between Live Content and a Snapshot

If you take a snapshot of live content, you can view and switch between all the content sources in the content tray.


#### Procedure

- 1 Tap  to view all the sources in the content tray.
- 2 Tap on the source. The label **Snapshot** indicates the snapshot source.
- 3 Select minimize, maximize for full screen, or close on the source window.

## Stop Sharing Annotated Content

When you are finished sharing annotated content, you can stop the content sharing session.


#### Procedure

- » Tap  to end the sharing session.

## Highlight Content

You can highlight content temporarily instead of drawing on it.

#### Procedure



- 1 Locate the area on the content you want to highlight.
- 2 Tap .

- 3 Select a color from the toolbar.
- 4 Use one finger to circle around or slide across the content. A transparent highlight appears briefly. Repeat as often as you desire anywhere on the displayed content.

## Create a Whiteboard or Blackboard

The whiteboard and blackboard allow you to draw or write on content on a shared space. Create a new whiteboard or blackboard at any time.

### Procedure

- » From the toolbar, tap  or .

## Exit the Annotation Toolbar

When you are finished using the annotation toolbar, exit the feature.

### Procedure:

- » Tap .

# Troubleshooting

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Your administrator is available to assist you when you encounter difficulties.

## View System Information

Note that your administrator might ask you for the system serial number, software version, any active alert messages, and other information.

### Locate the System Serial Number

You can view the system serial number on the web interface of the Polycom Pano system, if your administrator has granted users access.

- » To locate the system serial number (14 digits), look on the back of the system.

### Locate the IP Address

You can view the system IP Address on the Home screen of the Polycom Pano system.

## View Polycom Pano App Log Files

Viewing the log file is helpful in determining the causes and solutions of problems. Before you open log files, you must exit Polycom Pano app. You can find the log files from the following location:

- Windows 7 and 8: C:\Users\yourAlias\Polycom Pano app\log
- Mac: /Users/UserName/Library/Application Support/Polycom/Content Companion

### Procedure

- 1 Click or tap on the application's title bar.
- 2 Click or tap **Log Collector**.
- 3 Enter the recipient's email address.
- 4 Click or tap **Send**.

## Regulatory Notices

Regulatory notices describe safety and legal considerations for using the following Polycom Pano systems:

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For more regulatory information, refer to *Polycom Pano Regulatory Notices* at [support.polycom.com](http://support.polycom.com).