



# Polycom<sup>®</sup> RealPresence<sup>®</sup> Immersive Telepresence (ITP), Version 5.1.2

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**Note: Camera calibration**

**Polycom<sup>®</sup> RealPresence Immersive Studio<sup>™</sup>:** After upgrading to version 5.0.2, you must perform the camera calibration process as described in the *Polycom RealPresence Immersive Studio Camera Calibration Process Rev 3.5*.

**Polycom<sup>®</sup> RealPresence<sup>®</sup> OTX<sup>®</sup> Studio:** After upgrading to version 5.0.1 or later, you must perform the camera calibration process as described in the *Polycom RealPresence OTX Studio Camera Calibration Addendum*.

## Overview

Polycom announces a new release of Polycom RealPresence Immersive Studio and Polycom RealPresence OTX Studio system software. This document provides the latest information about the following Polycom software:

- Version 5.1.2 of the Polycom RealPresence Immersive Studio system software
- Version 5.1.2 of the Polycom RealPresence OTX Studio system software
- Version 5.1.2 of the Polycom<sup>®</sup> RealPresence Touch<sup>™</sup> Panel software
- Version 1.2.0 of the Polycom RealPresence Touch Operating System software

## Polycom RealPresence Immersive Studio

The Polycom RealPresence Immersive Studio system is a high-end immersive telepresence solution that provides the best user experience in high-quality video and sound.

The Polycom RealPresence Immersive Studio experience offers exceptional clarity and realism, including:

- High-quality, 1080p60 video performance with exceptional sharpness and brightness across greater than 100° on ultra-high-definition displays.
- Polycom® 3D Voice™ that delivers extremely clear pinpoint audio which comes directly from the person speaking.
- 1080p60 resolution for any type of content, including video and live animation.

Administrators configure the system through the system's web interface. Users access calling functions through familiar operations on the RealPresence Touch and user-friendly onscreen guides.

For more information about setting up and using the RealPresence Immersive Studio systems, refer to the documents on the product pages at [Polycom Support](#).

## Polycom RealPresence OTX Studio

The Polycom RealPresence OTX Studio system is a high-end immersive telepresence solution that provides the best user experience in high-quality video and sound.

The Polycom RealPresence OTX Studio experience offers exceptional clarity and realism, including:

- 1080p60 HD video and content with exceptional sharpness and brightness.
- Polycom 3D Voice that delivers extremely clear pinpoint audio which comes directly from the person speaking.

Administrators configure the system through the system's web interface. Users access calling functions through familiar operations on the RealPresence Touch and user-friendly onscreen guides.

For more information about setting up and using the RealPresence OTX Studio systems, refer to the documents on the product pages at [Polycom Support](#).



### Note: System startup

Every time you power on a RealPresence Immersive Studio system, a splash screen appears on the monitor with a note to wait as the system starts. The monitor then goes black for a period of time. Do not attempt to turn off or restart the system during this time.

## Software Version History

### Polycom RealPresence Immersive Studio Software

Software Version	Release Date	Description
5.1.2	June 2016	Includes minor updates and corrected issues.
5.1.1	April 2016	Includes minor updates and corrected issues.
5.1.0	February 2016	Includes minor updates and corrected issues.

Software Version	Release Date	Description
5.0.2	January 2016	Includes minor updates and corrected issues.
5.0.1	November 2015	Includes minor updates and corrected issues.
5.0.0	September 2015	Includes support for Microsoft® Office 365™ calendaring, incorporates first release of the Polycom® RealPresence® Touch™ device, adds support for viewing content from Microsoft Lync desktop clients, includes enhancements to security for SIP applications, adds native support for RealConnect feature, adds support for 3.5mm audio input with HDMI content, and OpenSSL.
4.3.2	August 2015	Includes minor updates and corrected issues.
4.3.1	June 2015	Includes minor updates and corrected issues.
4.3.0	March 2015	Includes minor updates and corrected issues.
4.2.0	December 2014	Includes support for Polycom 70" Touch Digital Display optimized for use with VisualBoard™ applications, call hold and resume, remote manageability enhancements, RealPresence® Mobile SmartPairing™, RealPresence® Access Director™ interoperability.
4.1.3.2	April 2014	Correction for the Heartbleed OpenSSL Security Vulnerability in third-party software.
4.1.3	February 2014	Adds support for Polycom® SmartPairing™. Provides minor fixed issues and software optimization.
4.1.2	December 2013	Initial release.

## Polycom RealPresence OTX Studio Software

Software Version	Release Date	Description
5.1.2	June 2016	Includes minor updates and corrected issues.
5.1.1	April 2016	Includes minor updates and corrected issues.
5.1.0	February 2016	Includes minor updates and corrected issues.
5.0.2	January 2016	Includes minor updates and corrected issues.
5.0.1	November 2015	Includes minor updates and corrected issues.
5.0.0	September 2015	Initial release.

## Security Updates

For information about known and resolved security vulnerabilities, refer to the [Polycom Security Center](#).

## RealPresence Touch Configuration

Perform the RealPresence Touch configuration according to the instructions in the *Polycom RealPresence ITP Administrator Guide* and the *Polycom RealPresence Immersive Studio Installation Guide* or the *Polycom RealPresence OTX Studio Installation Guide*. Settings not listed in the Administrator Guide and Installation Guide should be left at the factory default. Otherwise, a factory reset may be required.

## Polycom Solution Support

Polycom Implementation and Maintenance services provide support for Polycom solution components only. Additional services for supported third-party Unified Communications (UC) environments integrated with Polycom solutions are available from Polycom Global Services, and its certified Partners, to help customers successfully design, deploy, optimize, and manage Polycom visual communication within their third-party UC environments. UC Professional Services for Microsoft Integration is mandatory for Polycom Conferencing for Microsoft Outlook and Microsoft Office Communications Server or Microsoft Lync Server integrations.

For additional information and details, refer to [Polycom Professional Services](#) or contact your local Polycom representative.

## Resolved Issues

The following issues are resolved in the version 5.1.2 release.

Category	Issue ID	Description
Audio	GS-29533	When a RealPresence Immersive Studio system is called from a VMR, the audio was mono. This issue has been corrected.
Audio	GS-30318	When RealPresence Immersive Studio rooms are connected to VMR calls with recording activated center channel, audio is lost. This issue has been corrected.
Audio	GS-30331	When an Immersive Telepresence room was dialed out from a VMR, the audio was mono instead of stereo. This issue has been corrected.
Camera	GS-30319	The Immersive Telepresence center camera white balance (blue gain) color settings might not have been stored after a codec reboot. This issue has been corrected.
Content	GS-30317	RealPresence Immersive Studio systems with VisualBoard might have had unresponsive switching of content video. The content displayed on the Primary display. This issue has been corrected.
Interop RP Touch	GS-30316	A provisioned RealPresence OTX Studio system might have incorrectly displayed recent calls on the RealPresence Touch device. This issue has been corrected.
Video	GS-30369	The White Balance and Exposure Compensation options were repeated on the Video Inputs page. This issue has been corrected.

## Known Issues

Polycom recommends that you use a bridge when connecting the following systems:

- Four-screen Polycom RealPresence Experience (RPX™) Series system to the RealPresence Immersive Studio and RealPresence OTX Studio systems. Using a bridge delivers the best immersive continuous room layout. If you connect a four-screen RPX system to a RealPresence Immersive Studio or RealPresence OTX Studio system without using a bridge, the connection adjusts for the different aspect ratios by dropping the video from the fourth RPX system codec and displaying black bars around the 4:3 aspect ratio RPX system video feeds.
- Two-screen Polycom RealPresence Experience (RPX™) Series system or standalone endpoint to the RealPresence Immersive Studio system. Using a bridge delivers the best immersive continuous room layout. If you connect an RPX two-screen system to a RealPresence Immersive Studio system without using a bridge, the Immersive Studio system sends only the center and left sections video (for two-screen RPX systems) or center section video (for standalone systems), not the whole room.

The following table lists known issues for the version 5.1.2 release.

Category	Issue ID	Description	Workaround
Audio	GS-19769	Calls between RealPresence Immersive Studio and Cisco CTS room systems may experience issues with spatial audio on the CTS side where the left and right speakers are slightly louder than the center speaker.	
Calling	GS-21507	When Immersive Studio systems, registered to CUCM, are in a point-to-point SIP call, call statistics show the call connecting at lower than set preferred speeds and do not match between the two systems.	Register to DMA trunked to CUCM.
Camera	GS-13182	Before attaching, disconnecting, or otherwise modifying the cabling to a camera system, you must physically disconnect the DC power supply for the right and left codecs. It is not sufficient to simply "turn off" the systems because power to the camera system is maintained due to other system requirements.	Polycom recommends that you disconnect the AC supply cable to turn off the primary codec power instead of using the front switch. You might experience improper camera operation if you ignore these instructions.
Contacts	GS-26569	On the RealPresence Touch, deleting contacts using the virtual keyboard sometimes did not function as expected.	Press and hold the contact you want to delete or use the <b>Delete</b> button in the Input field.
Content	GS-23968	In an RMX call, if you switched content from PPCIP to Visual Board, content may not have launched in the first try.	Relaunch VisualBoard to show content.

Category	Issue ID	Description	Workaround
Hardware	GS-15698	If you are out of a call and <b>Self View</b> is enabled, the system goes to sleep according to the sleep timer setting. The default setting is 3 minutes.	Change the sleep timer settings. Polycom recommends that you do not turn off the sleep timer.
Interoperability Microsoft	GS-12982	When a Polycom® RealPresence® Group system is in a multipoint call hosted by a Microsoft Lync AV MCU, the RealPresence Group system participant name, number, and system values on the <b>Settings &gt; System Information &gt; Call Statistics</b> screen might be incorrect.	
Interoperability Microsoft	GS-18630	RealPresence Group systems currently do not support Lync mobility clients.	
Monitors	GS-25845	After a softupdate, displays might remain on if the sleep timer is set to less than three minutes.	Do not set the codec sleep timer to less than three minutes.
Provisioning	GS-19239	While in a TIP call, the bandwidth reported by the Primary codec is an aggregate of all three codecs and not only the Primary codec.	
User Interface	GS-16887	On Immersive Telepresence systems, closed caption text is only displayed on the main monitor and the text may be partially blocked by the camera.	
User Interface	GS-22702	On a Lync client, you might see incorrect presence information.	
User Interface	GS-22730	After terminating a call that used video mute, you might continue to see the video mute icon on the secondary monitors.	
Video	GS-22113	When people move around in the room, you may experience stuttering video	On the web interface, go to <b>Admin Settings &gt; Network &gt; IP Network &gt; Network Quality</b> . Uncheck <b>Automatically Adjust People/Content Bandwidth</b> and set the Quality Preference to <b>Both</b> .

Category	Issue ID	Description	Workaround
Video	GS-24574	If you terminated a just initiated call and promptly dialed another call, the far end system might not see the secondary and tertiary video from the near end system.	
Video	GS-25874	When placing a SIP blast dialing call from an OTX Studio system to two endpoints, the video will not display correctly on each endpoint.	Do one of the following: <ul style="list-style-type: none"> <li>• Dial each individual SIP address separately.</li> <li>• Use H323 blast dial.</li> <li>• Have each participant dial into the conference.</li> </ul>

## Interoperability



### Note: Software upgrades recommended

Polycom recommends that you upgrade all of your Polycom systems with the latest software versions. Any compatibility issues may already have been addressed by software updates. Go to [PolycomService/support/us/support/service\\_policies.html](https://polycomservice.com/support/us/support/service_policies.html) to see the Current Interoperability Matrix.

Video conferencing systems use a variety of algorithms to compress audio and video. In a call between two systems, each end transmits audio and video using algorithms supported by the other end. In some cases, a system might transmit a different algorithm than it receives. This process occurs because each system independently selects the optimum algorithms for a particular call, and different products might make different selections. This process should not affect the quality of the call.

## Video

Video	Description
H.264 High Profile, RTV	Video system: Baseline, High Profile (HiP)
H.263 & H.264	Video Error Concealment
H.239	Polycom People + Content
Binary Floor Control Protocol (BFCP)	Content sharing via Session Initiation Protocol (SIP)
AES Media Encryption	For secure video/audio and content

## Audio

Audio	Description
G.719	3-channel audio for point-to-point calls between RealPresence Immersive Studio and RealPresence OTX Studio systems.
Siren™ 22	22kHz bandwidth with StereoSurround™
Siren™ LPR (Lost Packet Recovery)	Siren LPR preserves audio quality during high packet loss.
G722.1 Annex C	14kHz bandwidth with Polycom Siren 14
G.722, G.722.1	7kHz bandwidth
G.711	3.4kHz bandwidth



**Note: 3-channel audio**

3-channel audio is currently supported only for point-to-point calls.  
 3-channel audio does not support LPR (Lost Packet Recovery) in high loss networks.

## Products Tested in This Release

Polycom RealPresence Immersive Studio and RealPresence OTX Studio systems are tested extensively with a wide range of products. The following list is not a complete inventory of compatible equipment. It simply indicates the products that have been tested for compatibility with this release.

Polycom strives to support any system that is standards-compliant, and investigates reports of Polycom systems that are not interoperable with other vendor systems.



**Note: Update your system**

Polycom recommends that you upgrade all of your Polycom systems with the latest software versions. Any compatibility issues may already have been addressed by software updates. Go to [PolycomService/support/us/support/service\\_policies.html](https://polycomservice.com/support/us/support/service_policies.html) to see the current Polycom Interoperability Matrix.

Product	Interoperable Versions
<b>Management Systems and Recorders</b>	
Polycom® RealPresence® Distributed Media Application™ 7000	6.3.1
Polycom® RealPresence® Resource Manager	9.0.1
Polycom® RealPresence® Access Director™	4.2.2
<b>Gatekeeper, Gateways, External MCU, Bridges, Call Managers</b>	
Polycom® RealPresence® Collaboration Server 2000/4000	8.6.3.6



Product	Interoperable Versions
Polycom® Multipoint Layout Application	3.1.6
<b>Endpoints</b>	
Polycom RealPresence OTX Studio	5.1.2
Polycom RealPresence Immersive Studio	5.1.2
Polycom® HDX® Systems	3.1.11
Polycom® Immersive Telepresence (ITP) Series	3.1.4
Polycom RealPresence Group Series	5.1.2
Polycom® RealPresence® Mobile	3.5.1
Polycom® RealPresence® Desktop for Mac®	3.5.1
Polycom® RealPresence® Desktop for Windows®	3.5.1
Polycom® SoundPoint® IP 650	4.0.7
Polycom® SoundStation® IP 7000	4.0.9
<b>Peripherals</b>	
Polycom® People+Content™ IP	1.3.1
Polycom® RealPresence Touch™	5.1.2 Panel software 1.2.0 Operating System software

## Microsoft Interoperability

The RealPresence ITP systems support interoperability with the following Microsoft software versions.

Product	Versions
Microsoft Skype for Business Server 2015	6.0.9319.235
Microsoft Lync Server 2013	5.0.8308.941
Microsoft Exchange Server 2013	15.00.1130.007

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