Release Notes
Polycom® RPX™ HD 400 and 200 Series
Software Version 3.0.3/Hardware Revision I

Polycom announces the general availability release of its Polycom RealPresence Experience™ (RPX) HD, software version 3.0.3/hardware revision I. This document provides the latest information about this release.

Topics

Copyright Information

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Trademark Information

Introducing the Polycom RPX HD Software Version 3.0.3/Hardware Revision I Release

Polycom is pleased to announce the release of the Polycom RPX HD 400 and 200 Series, software version 3.0.3/hardware revision ?.

The Polycom RealPresence Experience High Definition offers unprecedented high-definition video in a cinematic view, extraordinary StereoSurround™ audio, and high resolution content. This truly immersive meeting environment provides the ultimate meeting experience for executives in any organization, linking sites across the globe.

What's New in RPX HD Software Version 3.0.3/Hardware Revision I

RPX HD Software Version 3.03/Hardware Revision I provides the following new functionality:

- New Axis M31 security camera
- New 21.5" widescreen 1080p tabletop content monitors to allow display of high profile and HD video
- New microphone placement to support for Telepresence Interoperability Protocol (TIP)
- Support for the Session Initiation Protocol (SIP) in network environments with or without a Microsoft Lync Server.

What's New in RPX HD Software Version 3.0.2/Hardware Revision H

RPX HD Software Version 3.0.2/Hardware Revision H provides the following functionality:

- The Telepresence Interoperability Protocol (TIP) is a proprietary protocol created by Cisco for deployment with Cisco TelePresence systems (CTS). The RPX supports TIP in order to provide the best possible telepresence experience when interoperating with CTS equipment. TIP is offered on Polycom RPX systems in addition to the currently supported H.323 protocols, thereby ensuring interoperability with standards-based systems from multiple vendors. For more information about Polycom ITP and Cisco interoperability, refer to the *Polycom Unified Communications for Cisco Environments* document.

  RPX software with TIP enabled also provides support for segment switching in Cisco Telepresence Multipoint Switch (CTMS) environments. The Polycom Ceiling Microphone Arrays use an innovative algorithm to detect the direction of sound from each seat. Based on this accurate detection, the CTMS chooses the appropriate camera from which to display video.
- Placement of the Polycom Ceiling Microphone Arrays in RPX rooms has been changed slightly to provide improved audio quality. The new placement offers up to 3dB improvement in overall sound, especially for participants seated in the outermost seats at the table. In some suites, additional microphones have been added to increase audio quality and coverage.
- Polycom recommends disabling Dynamic Bandwidth Allocation (DBA) for ITP systems. For information about how to disable DBA, refer to the *Polycom Immersive Telepresence (ITP) Administrator's Guide*.
- In addition to the VGA cable for content sharing, RPX includes a digital (DVI/HDMI) content sharing cable.

Software and Firmware Used in Version 3.0.3

RPX HD version 3.0.3 uses the following software and firmware:

- Polycom Telepresence Tool version: 3.0.3.5 (TelepresenceTool_3.0.3.5.msi)
- HDX software version: 3.0.3-14451 (polycom-hdx-release-3.0.3-14451.pup)
- HDX software version without encryption: polycom-hdx-release-3.0.3_ne-14451.pup
- Polycom Touch Control Operating System version: 1.3.0-17
- Polycom Touch Control Applications version: 1.3.0-103
- Crestron software version: 3.0.3-4 (RPX_3.0.3-4.zip)
- Crestron AV2/PRO2 firmware version: 4.001.1012 (Feb 17 2009) (pro2_av2_cp2_cp2e_rack2_pac2_4.001.1012.zip)
- Crestron Touch Panel firmware version: 3.001.0015 (tps-3000_tps-3000l_tps-3100_tps-4000_tps- 4000l_3.001.0015.zip)
- Delta projector firmware version for VW7008 projectors: FD34+SD33. The full file names are FD34-VW7008-20110308 and SD33-VW7008-20110307.
- Delta projector firmware version for VW7028 projectors: FP05+SP05. The full file names are FP05-VW7028BBCP-20110309 and SP05-VW7028BBCP-20110308.

For information on versions of other Polycom products that are compatible with this release, such as the Polycom RMX® conferencing platform and the Polycom Converged Management Application™ (CMA®) system, refer to the *Polycom Immersive Telepresence (ITP) Deployment Guide*.

Upgrading the Software to Version 3.0.3

Before upgrading the software, note the following:

- Your RPX system may have been shipped with the correct version of HDX and Polycom Touch Control software loaded. Check your system's software versions against the versions listed above. If you already have the correct versions loaded, you do not have to upgrade the software; however, you must still enter the option key as described in the following bullet.
- In order to upgrade the ITP software to version 3.0.3 from an earlier version, you must obtain an HDX software upgrade key and a new option key from Polycom Support at http://support.polycom.com. If you are using the Polycom Touch Control, you must also obtain a new option key. The option key enables the options that are required for Immersive Telepresence. Note that you must have an active maintenance contract to obtain the keys.
- For all ITP systems, if you are not planning to deploy TIP, you must go to the **Admin Settings > Network > Call Preference** screen in the HDX web UI. If the **SIP** and **TIP** check boxes are selected, clear the checkmarks from the check boxes.
- When you upgrade to HDX software version 3.0.1 or later, the directory entries are converted to a new format. If you ever have to revert to an HDX software version earlier than version 3.0, you must use the Polycom Telepresence Tool HDX Directory Downgrade tool to revert the entries to the format that existed prior to version 3.0. This will enable the directory entries to work correctly. For more information about the HDX Directory Downgrade tool, refer to the *Polycom Immersive Telepresence (ITP) Administrator's Guide.*

To upgrade the software to version 3.0.3 from an earlier version, the installer must follow these configuration procedures:

1. Download the appropriate software and firmware.
2. Upgrade the Delta projector firmware if necessary.

NOTE	**If you are upgrading the software to version 3.0.2 and your system has Delta projectors, you must ensure that the Delta projector firmware is at the correct version listed in the previous section. This may require you to upgrade the projector firmware. The firmware upgrade must be performed onsite by a trained installer.**

3. Upgrade the HDX software and configure the System Controller.
4. Upgrade either the Polycom Touch Control (for RPX sites with a Polycom Touch Control) or the Crestron Touch Panel software (for RPX sites with a Crestron Touch Panel).
5. Enable optional features in the System_Config.ini file as needed.
6. Run the Telepresence Tool.
7. Pair the Polycom Touch Control device with the HDX and the System Controller (for RPX sites with a Polycom Touch Control).
8. Configure the H.323 gatekeeper, the SIP server, and the Global Directory as needed.
9. Manage Favorites (for sites with a Polycom Touch Control) or the local directory (for sites with a Crestron Touch Panel) as needed.
10. Enable TIP, manage user-initiated multipoint conferences, and disable DBA as needed. Note that if you are performing a software upgrade and are deploying TIP, you also need to upgrade your suite to the Hardware Revision I Ceiling Microphone Array placement scheme.
11. Align and calibrate the projectors (if you upgraded the projector firmware).
12. Configure, align, and match the cameras (if you upgraded the projector firmware).
13. Verify the microphone audio.
14. If you are deploying TIP, calibrate the Ceiling Microphone Arrays.

NOTE	**The Delta VW7028 and VW7008 projectors must not be installed within the same suite, as this is unsupported.**

For complete information about how to perform these steps, refer to the *Polycom RealPresence Experience (RPX) HD 400 Series Installation Guide, Version 3.0.3* or the *Polycom RealPresence Experience (RPX) HD 200 Series Installation Guide, Version 3.0.3* as well as the *Polycom Immersive Telepresence (ITP) Administrator's Guide*.

Updating Passwords on Your RPX System

The procedure for updating passwords on your RPX system has changed since the last release. Follow the steps below to update the passwords on your RPX system.

1. Log into the Polycom HDX web UI and enter the new password for the Primary codec.
2. Repeat the previous step for the remaining codecs.

3. On the Telepresence Tool main screen, enter the IP addresses and passwords for all the codecs, and then click **Connect All**.
4. After the codecs are connected, click the down arrow on the Configure All HDXs field to access the drop-down menu.
5. Select **Update Passwords**.

   The Primary codec will restart when the update is done.
6. Go to **Admin Settings > General Settings > Security > Security Settings**.
7. If the **Enable Sessions List** check box appears on the screen, clear the check mark from the check box.
8. Click **Update**.
9. Repeat steps 6 through 8 for the remaining codecs.

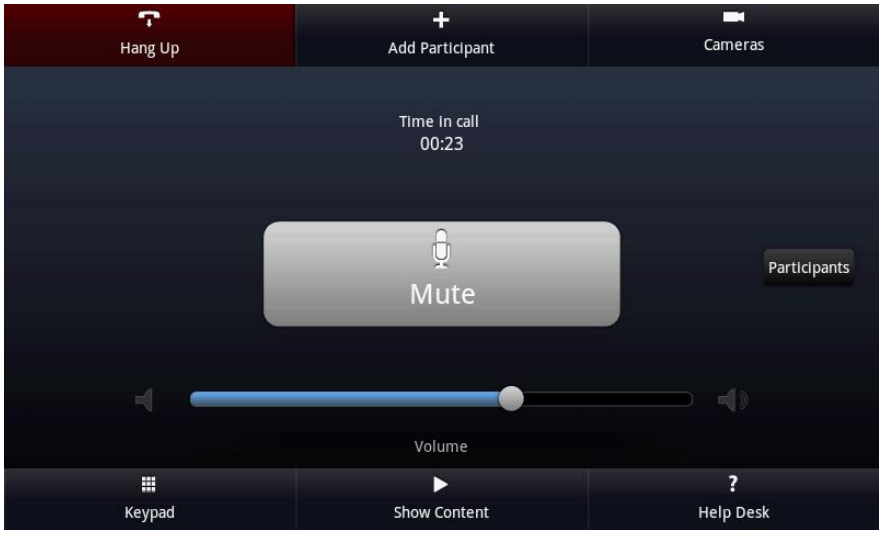
Note: For password-protected codecs, verify that the HDXPassword field in the System_Config.ini file contains the correct password for the Primary codec. For more information, refer to the *Polycom Immersive Telepresence (ITP) Administrator's Guide*.

Viewing the List of Conference Participants

When you join a conference using Polycom Meeting Composer™ on the Polycom Touch Control, you must perform the following steps to view the list of participants in the conference:

1. Ensure that the sites listed in the Conference List include all the sites you want to call.
2. Touch Join **Join** to join the conference.

   The Call screen appears.

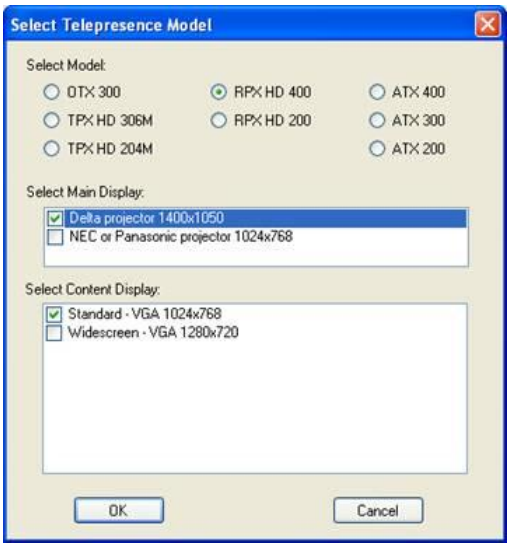


3. Touch **Participants** to view a list of the participants in the call.

Configuring the Content Monitors in Your RPX Suite

1. On the laptop, start the Polycom Telepresence Tool.
2. The first time you use the Polycom Telepresence Tool with the RPX, the Select Telepresence Model dialog box will appear and you must do the following:
   a. In the Select Model field, select the RPX system model.
   b. In the Select Main Display field, select the video format for the main displays installed in the room.
   c. In the Select Content Display field, select **Standard – VGA 1024x768**.

      You must select **Standard – VGA 1024x768** whether you have standard or widescreen content monitors.
   d. Click **OK**.



3. Press the **Enter** button on the content monitor to display the Configuration screen.

4. Press the **Right Arrow** button on the screen to select **Image Properties**.

5. Click **OK**.
6. Press the **Right Arrow** button on the screen to select **Scaling**.

7. Click **OK**.
8. Select **Full Screen**.

9. Click **OK**.
10. If needed, press the Auto Sync button to make the content fill the screen.

11. Repeat steps 3 through 10 for the remaining content monitors.

Issue Fixed in This Release

The following table describes the issue fixed in RPX 200 Version 3.0.3.

Feature	Description
Audio/Video Calls	When connecting an RPX 200 system to a Cisco telepresence system that has fewer screens, such as a CTS 300 or CTS 1300, the RPX 200 system sends video only from the primary HDX codec. The RPX 200 system is not currently capable of sending alternate video streams based on the active speaker to a system with fewer screens.

Known Issues and Limitations

For Users

The following table lists the known issues relevant to RPX end users. All issues apply to RPX systems with the Polycom Touch Control as well as to RPX systems with the Crestron Touch Panel unless otherwise noted.

Feature	Description	Workaround
Audio/Video Calls	When both SIP and H.323 are enabled on an ITP endpoint, it does not support automatic rollover from one protocol to the other when dialing multi-screen calls.	Configure directory and favorite entries to include only one address type, not both H.323 and SIP. Also, configure the HDX preferred dialing method to “auto” and set the video dialing order to use the most common protocol (either SIP or H.323) first. If a particular call does not connect with the first protocol, the ITP system will attempt using the other protocol, but only the center screen will connect. If you are using Polycom Calendaring for Outlook, and you need to have both H.323 and SIP enabled, set the video dialing order to first use the protocol that is configured for your calendared meetings. Otherwise, only the center screen of the ITP endpoint will connect to the calendared meeting.
	The RPX will not accept any incoming audio calls when it is already in a video call.	Place outgoing audio calls instead of receiving incoming audio calls when you are already in a video call.
	On rare occasions, pressing the audio Speed Dial button once (or the Dial button for manually placed calls) does not dial the call.	If needed, press the audio Speed Dial button or the Dial button twice in order to complete the call.
	When DTMF tones are heard during the process of dialing an audio call, the near-end and far-end audio is muted for a brief moment.	None

Feature	Description	Workaround
Audio/Video Calls (continued)	If the projectors are in sleep mode when an incoming video call is automatically accepted by the RPX, it may take up to 70 seconds for the projectors to automatically power up. During the 70 seconds that it takes for the projectors to warm up and show far-end video, the RPX meeting participants may not notice that the call has been established.	Verify that the projectors are powered up before placing or receiving any video calls.
	If the projectors are in sleep mode when a video call comes in, any codecs that are not being used will briefly show near-end video. This only occurs when the number of near-end codecs is more than the number of far-end codecs, such as when a RPX 400 on the near end receives an incoming call from an RPX 200 on the far end, or when either an RPX 400 or 200 receives an incoming call from a single endpoint (VSX or HDX).	None
	If you hang up an incoming audio call and then immediately place an outgoing audio call, the RPX may not hang up the initial incoming audio call.	Wait five seconds between consecutive audio calls.
	If the RPX is in a single endpoint video call (such as with a VSX or HDX video conferencing system) and the Do Not Disturb feature on the RPX is disabled, an incoming call from a two-codec or three-codec system will cause the center camera on the RPX to momentarily move to the side before returning to its correct position.	None
	If you place a point-to-point call to an RMX™ Virtual Meeting Room (VMR) and then add a site to the call from the Conference List on the Meeting Composer screen (with the Enhanced UI only), the point-to-point call will be dropped and a multipoint call will be created with the VMR as a participant in that multipoint call.	Hang up the VMR call and then make a new call with the participants that you want in that call.
	When you place a call to an RMX VMR using the following syntax, the call will not go through: IP##MeetingRoomID.	Place the call using this syntax: MeetingRoomID@IP (for example, `255000@172.25.130.21`).
	If you use Meeting Composer™ to add two audio sites to a call and then press **Join**, only one of the sites may connect. Additionally, if you are already in a call that includes an audio site and you attempt to add another audio site to the call, the new audio site may not connect.	Connect to the video sites first using the RMX, and then individually add the audio sites.
TIP	When an OTX 300 system is in a CTMS call with an RPX, CTS, or another OTX system, the OTX 300 system may not receive audio from the CTS system.	Hang up and dial again.
Content	If you hang up a call, content being shown locally disappears.	This is a security feature. You will need to resend your content after you hang up a call.
	If you share content using a laptop, for best results, set its input resolution to 1024x768 and its refresh rate to 75 Hz. This will ensure that the content image renders correctly.	None

Feature	Description	Workaround
Content (continued)	For VGA content, a shift of 2-3 pixels may be seen locally and a shift of up to 5 pixels on the far end.	None
Document Cameras	The Eye-10 document camera used in some custom solutions does not support the Freeze function that is available for other document camera models.	None
User Interface: Both Polycom Touch Control and Crestron Touch Panel	In an audio call from an RPX to a cellular phone or analog phone, if the remote user disconnects the call first, the Touch Panel continues to show the audio call as in progress.	Manually press the **Hang Up** button after each audio call is completed. The RPX will not accept incoming audio or video calls when the **Hang Up** button is off hook.
User Interface: Crestron Touch Panel Only	If you manually dial a call using the main dial pad and then open Meeting Composer to add an address, the initial point-to-point call stays connected, preventing going from a point-to-point call to a multipoint call.	Use the Meeting Composer dial pad instead of the main dial pad to create the first point-to-point call.
	If you press the **Content** button on the Touch Panel when no content source (such as a laptop) is connected to the RPX with the VGA cable, the Primary HDX codec will generate a hidden message on the Primary wall screen. The message states "PC input resolution and/or refresh rate not supported." This message will not be visible onscreen because the RPX is programmed to picture mute all wall screens when the system is not in a call. If you establish a video call while the message is activated, the call will take longer than usual to connect.	Wait three seconds (during which time the message will time out) before placing a video call from the Touch Panel.
	When searching for a site in the global directory with the Enhanced UI, up to nine characters can typically be displayed on the screen. However, depending on the width of the letters in the name, more or less of the site name may be truncated.	None
	With Meeting Composer, when dialing a phone number with more than 10 digits, or dialing any other long string such as extension@IP_address (ex: 123456@172.25.130.201), the string will likely be truncated when displayed in the right-hand pane of the Touch Panel.	None
	If you place a point-to-point call to an RMX Virtual Meeting Room (VMR) and then add an audio-only site to the call, the two columns on the left side of the Meeting Composer screen in the Enhanced UI will go blank and the icons at the top of the columns will become grayed-out.	None
	When Polycom Conferencing for Microsoft Outlook (PCO) is used to schedule multiple meetings and you select one of the meetings on the Touch Panel, the details for that meeting display on the left side of the Touch Panel screen. If that meeting is cancelled, it is removed from the meeting list; however, the details of the cancelled meeting are still displayed on the left side of the Touch Panel screen.	Select a different meeting from the meeting list.

Feature	Description	Workaround
User Interface: Crestron Touch Panel Only (continued)	The Touch Panel may indicate that a password is not required for meetings that actually are password-protected. If you try to join the meeting, the Touch Panel will prompt you for the password and you must enter it to join the meeting.	None
	If you use the DTMF dial pad in the Touch Panel Enhanced UI to manually enter a site to call, and then you try to escalate the call from point-to-point to multipoint, the calls will not connect correctly.	Use the Meeting Composer dial pad to manually enter a site to call. The DTMF dial pad in the Enhanced UI was not intended to be used to manually dial calls and should never be used for this purpose.
User Interface: Polycom Touch Control Only	If your system administrator has configured your system to use the calendar feature and you have two or more meetings scheduled at the same time, the Polycom Touch Control will display a meeting reminder for only one of the meetings.	None
	If you are already in a call, you cannot join a meeting using the Polycom Touch Control.	Hang up the current call before joining a meeting.
	When using the Polycom Touch Control, searching within a group in the global directory may not work properly.	None
	If you are in a multipoint call and you place an outgoing audio call while the **Video/Audio Only** toggle button is set to **Video**, that toggle button will disappear from the Polycom Touch Control screen.	When placing an audio call when you are already in a multipoint call, make sure that the **Video/Audio Only** toggle button is set to **Audio Only**.

For Administrators

The following table lists the known issues relevant to RPX HD administrators. All issues apply to RPX systems with the Polycom Touch Control as well as to RPX systems with the Crestron Touch Panel unless otherwise noted.

Feature	Description	Workaround
Audio/Video Calls	If you use the web UI to place a call that is not at the default call speed, the codecs will not automatically adjust to the same call speed. The Primary codec will connect at the call speed specified in the HDX web UI Call Quality field, but the remaining codecs will connect at the default call speed.	Specify multiple addresses in the IP address field (e.g., `76223;76224;76225`). Alternatively, use the web UI to connect to each codec individually at the desired call speed.
	When the primary codec answers an incoming video call, any HDX codecs that are not being used will automatically accept any other incoming video calls if the following conditions exist: 1. The RPX 200 Series or RPX 400 Series is in a single endpoint video call with a VSX or HDX video conferencing system (video ad-hoc dialing). 2. The RPX 400 is in a video call with an RPX 200 Series, a TPX™ 306M, or a TPX 204M.	To prevent unused codecs from accepting any incoming calls, use the Do Not Disturb timer. To change the amount of time before Do Not Disturb is activated, access the DoNotDisturbTimer field in the `System_Config.ini` file. In this field, you can enter a value between 10 and 300, or leave the value at 0 if you want to keep the feature disabled: `DoNotDisturbTimer=x` where `x` is the value (in seconds) of the desired timeout period. For example, `DoNotDisturbTimer=120` sets the parameter to 120 seconds.
	When the RPX is in a call, sending Telnet commands to change the video format may not work properly.	Do not use Telnet commands to change the video format when the RPX is in a call.
	When an RPX calls another RPX in a point-to-point call, the codecs begin to connect one at a time. If network resources become limited, not all of the codecs may connect, which may make it appear that one of the projectors is not working properly.	If a projector does not work correctly in a call, you should check if the codec connected. If it did not connect, reducing the call bandwidth may solve the issue.
	If your ITP environment is configured to use both the LDAP directory and H.323 Gatekeeper functions, and your speed dial entries are not IP addresses, video calls may take longer to connect due to the additional communication involved between the various components in the solution.	None
	For ITP systems configured for H.323 and registered with CMA version 6.0, the SIP/TIP options are disabled. After the ITP system reboots, the SIP/TIP options becomes enabled, and as a result, your call from the Global address book/LDAP does not go through.	Downgrade CMA to version 5.4 instead of version 6.0 or, after rebooting, manually disable the SIP/TIP options from the HDX web UI before you place or receive calls.
Control System	When you connect to the codecs through Telnet or through the Crestron Toolbox and use the command prompt, you may see “overflow buffer” and other error messages when you use the Touch Panel. These errors also appear on the Crestron log. This issue does not affect system performance or functionality.	None

Feature	Description	Workaround
Microphones	If you disconnect the Polycom Ceiling Microphone Arrays and then connect any microphones other than Ceiling Microphone Arrays, the proper stereo settings may be lost.	Launch the Polycom Telepresence Tool, make sure that all the HDX codecs are connected, and then click **Configure HDXs** to set the microphones to their correct settings.
Software Installation and Upgrades	When installing the Polycom Touch Control operating system and software using the USB drive, the software may fail to load or you may see a message listing an incorrect software version.	Manually reboot the Polycom Touch Control while the USB device is in the drive.
	When attempting to unpair the Polycom Touch Control from the System Controller during an upgrade, the Polycom Touch Control may remain paired.	Manually reboot the Polycom Touch Control to unpair it.
	When upgrading the HDX systems, you normally see a screen that displays an hourglass and a red progress bar. This screen may not appear for HDX PAL systems; however, the upgrade is still occurring and can be monitored through the web UI. The Home screen will appear on the displays when the upgrade is complete.	None
Telepresence Tool	When using the Telepresence Tool to remotely monitor a site, you may notice stuttering video.	Polycom recommends that you do not use the Telepresence Tool for remote monitoring while the system is in a video call.
User Interface: Both Polycom Touch Control and Crestron Touch Panel	If any of the HDX codecs are rebooted without rebooting the AV2 System Controller as well, the HDX UI remains onscreen.	Reboot the AV2 System Controller whenever any of the HDX codecs are rebooted. The VNOC, Service, and Site Administration teams are advised to reboot (power up) the AV2 System Controller after the HDX reboots (powers up) as part of the reset process or when recovering from a power failure. Placing a call without rebooting the AV2 System Controller will cause the Touch Panel to freeze.
User Interface: Crestron Touch Panel Only	If you add a site from the CMA directory to the speed dial list and then later change the name of that site in the CMA, the speed dial entry name that is displayed on the Touch Panel may not be updated.	Reboot the codecs and the AV2 System Controller. Alternatively, from the HDX web UI, delete and re-add the renamed CMA site to the Speed Dial list.
	If you reboot the Primary HDX codec while the RPX is in an audio call (with the Help Desk, for example), the **Hang Up** button on the Touch Panel will freeze.	Reboot the AV2 System Controller when the **Hang Up** button enters that frozen state.
	When initially loading the Crestron Touch Panel and then loading the AV2 System Controller, a Toolbox Results dialog box may appear at the end of the installation process. Although this dialog box displays an error message, the installation completed successfully.	None
	Users report that the Touch Panel seems to take an unusually long time to return directory information.	Check if there are LDAP entries in the directory that are no longer valid. If there are such entries, correct them.

Feature	Description	Workaround
User Interface: Crestron Touch Panel Only (continued)	With the Crestron Touch Panel, using the suffixes ‘1’, ‘2’, ‘3’, or ‘4’ for your audio speed dial name entries may cause the system to incorrectly interpret them as an ITP system, instead of distinct audio speed dial entries.	Do not use the suffixes ‘1’, ‘2’, ‘3’, or ‘4’ for your audio speed dial name entries.
User Interface: Polycom Touch Control Only	If you enter a site name that ends in the number ‘1’, ‘2’, ‘3’, or ‘4’, and then you make a call using the RMX, the RMX will interpret the site as part of an ITP system and will not display the site name on the Polycom Touch Control.	Do not use site names that end in the numbers ‘1’, ‘2’, ‘3’, or ‘4’.
	When you view the Directory list or the Favorites list on the Polycom Touch Control, the entries do not appear on the screen, although the rest of the screen appears as normal.	Reboot the Polycom Touch Control.
	If you reboot the Polycom Touch Control and then immediately attempt to use it, the Touch Control may not work properly.	Wait 30 seconds after the reboot completes before using the Polycom Touch Control.

Where to Get the Latest Product Information

To view the latest Polycom product documentation, visit the Support section of the Polycom website at http://support.polycom.com.