

Release Notes

Polycom® QDX™ 6000, Version 4.0.0



Polycom is pleased to announce the software release of Polycom QDX 6000. This document provides information about the Polycom QDX 6000 system and version 4.0.0 software.

For more information about using the features described in this document, refer to the product documentation available at www.polycom.com/videodocumentation.

Polycom® QDX™ 6000 Introduction

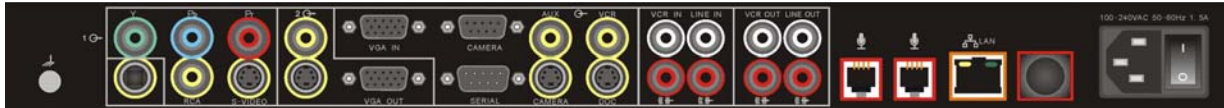
The Polycom QDX 6000 delivers high quality DVD resolution video and CD quality audio along with simple-to-use content sharing capabilities:

- Easy to deploy and simple-to-use and maintain without the need for IT support
- Affordability speeds your return on investment (ROI)
- Increased productivity in any environment thanks to expanded video and audio inputs



Inputs and Outputs

The Polycom QDX 6000 has the following interfaces:



Type	Description
5 video inputs	<ul style="list-style-type: none"> S-video with RS232 control, IR and power for EagleEye QDX 6000 VGA input S-video 2 x composite: VCR and another video source
6 video outputs	<p>Main Display:</p> <ul style="list-style-type: none"> Component S-Video Composite <p>2nd display:</p> <ul style="list-style-type: none"> VGA S-video composite
4 audio inputs	<ul style="list-style-type: none"> Stereo Line in– 2 x RCA Stereo VCR – 2 x RCA 2 x Polycom analog microphone – RJ9
2 audio outputs	<ul style="list-style-type: none"> Stereo main output – 2 x RCA Stereo VCR – 2 x RCA
Other	<p>LAN NIC – RJ45 10/100</p> <p>RS 232 serial port - Used for RS-232 devices</p> <p>Internal universal power supply – Power switch</p>

Polycom EagleEye QDX 6000 Camera



POLYCOM EagleEye QDX 6000 Camera supports 16:9 4CIF/4SIF formats.

Remote control

You can use the remote control to place calls, adjust the volume, navigate screens, and select options.



Microphones



Polycom QDX 6000 system provide 2 analog directional Microphones, QDX 6000 System support stereo surround with 2 microphones.

Software Features

The following sections highlight the major software features of Polycom QDX 6000. For more details, please refer to QDX 6000 datasheet, “Administrator’s Guide for Polycom QDX 6000 Systems”, and “User’s Guide for Polycom QDX 6000 Systems”.

High quality Standard –Definition Video

QDX 6000 system can deliver high resolution DVD-like resolution video at bandwidth from 256K to 4M.

Bandwidth	Resolution/Frame Rate	Video Protocol
256K – 2M	4CIF /25fps, 4SIF/30fps	H.264/H.263
2M-4M	4CIF /25fps, 4SIF/30fps	H.263
64K- 192K	CIF/25 fps, SIF/30 fps	H.264/H.263/H.261

High quality Audio






- CD quality audio
- Polycom Siren™22
- Stereo voice (When using 2 of Polycom microphones)
- AEC/AGC/ANS

Content sharing

- H.239 for content sharing
- 5 video inputs, any one of which can dynamically be sent as content input.
- Polycom PPCIP as the content input.
- People and content video can be displayed on single screen using Dual Monitor Emulation or 2 separate monitors.
- H.264 content

Customized Logo

You can customize the following logos shown on your Polycom QDX 6000 system in the on screen UI and the web interface. For more information about logo customization, please refer to *Administrator Guide for Polycom QDX 6000 Systems*.

Splash screen shown on system startup	
Logo on the top right corner of the home screen	
Logo on the top left corner of each page on web interface	
Image on the welcome screen on web interface	
Screen saver image on embedded UI	

Caption

QDX 6000 system supports meeting caption and rolling caption with adjustable color and position.

- Site name – To indicate who you are or where you are, especially for multipoint conference.

- Share message – To indicate purpose of this meeting or send meeting notice in a big conference. For example, you can send a notice in training “Our training will start at 8:30 am tomorrow morning, not 9:00 am, please join on time. Thanks!”
- Compatible with all standard H.323 endpoint and MCU , will not be filtered through MCU



LPR

QDX 6000 Supports Polycom LPR (Lost Packet Recovery) technology to ensure good video quality even in difficult network environment with packet lost.





What's new in V4.0.0

The version 4.0.0 software includes the features and functionality of version 4.0.0, with the additions described in the following sections. The 4.0.0 Release also includes stability improvements.

Serial port applications

Feature	Description
Data pass through using the RS-232	QDX is able to do data pass through on the RS-232 port, primarily for medical applications.
API support	A control system (i.e. Crestron / AMX) can be connected to a QDX system. For information about API commands in version 4.0.0, please refer to the <i>Integrator's Reference Manual for Polycom QDX 6000 Systems</i> .






Audio


Feature	Description
Audio association to video input	You can play the VCR/DVD player audio through Line Output while setting Auxiliary Audio Input Association to current video source. (Go to System > Admin Settings > Audio > Inputs/Outputs >  > )
Mute Speaker	Press and hold  for 4 seconds, then speaker volume will be zero. Press  to resume volume.

Network

Feature	Description
SIP support	Ability to make a SIP call by configuring SIP Settings. (Go to System > Admin Settings > Network > IP > SIP Settings .)
H.323 and SIP mixed calls	You can enable both IP H.323 and SIP at the same time. <ul style="list-style-type: none"> You can enable both IP H.323 and SIP at the same time on the Call Preference screen. You can register the Polycom QDX 6000 system with both a SIP server and H.323 gatekeeper at the same time and support features that are unique to both protocols at the same time. You can set H.323 and SIP separately in the Dialing Order. The call speed preference for "IP Calls" denotes preference for both H.323 and SIP calls.
LDAP / H.350 directories	QDX 6000 is able to use the CMA server to host the LDAP directories. Go to System > Admin Settings > Global Services > Directory Servers
IPv6 basic support	Configurable IPv6 settings: Site-Local, Global Address, and Default Gateway values can be set manually or automatically.
802.1X and 802.1p/Q Network Support	The 4.0.0 release adds support for 802.1X and 802.1p/Q. The IEEE 802.1X standard provides port-based access control on wired and wireless IEEE 802 LANs. IEEE 802.1p support enables link layer priority tagging of the link layer traffic. IEEE 802.1Q support enables VLAN (virtual LAN) tagging for bridged networks.
Quality of service value change	The Type of Service Value previously called Far End Camera Control is now called Control .


Directory and Home Screen

Feature	Description
Directory Screen	<p>The Directory interface has been modified for version 4.0.</p> <ul style="list-style-type: none"> The alphabet tabs have been removed. When the group is set to All, no global entries are displayed until you start entering a name in the search field. You can highlight a directory entry and press  on the remote or keypad to get information about the entry, add it to your Contacts list, edit it, or delete it. The “Global” group has been removed. The “Local” group has been renamed “Contacts”.
Directory Server Configuration	<p>In version 4.0, the navigation to directory server configuration is slightly different. You can access Polycom GDS, LDAP, and Microsoft OCS settings by going to System > Admin Settings > Global Services > Directory Servers.</p> <p>You can only register with one directory server at a time.</p>
Contacts Home Screen	<p>The Contacts home screen has been modified for version 4.0.</p> <ul style="list-style-type: none"> The Contacts home screen displays presence icons for each Contact. Global Contacts (from a directory server) show one of the following presence icons: <ul style="list-style-type: none">  Available  Busy  Offline Local Contacts are marked as . The Contacts home screen can include additional buttons: Recent Calls, Manual Call, Directory, Available, Add a Contact, and Alerts. <p>The Contacts group includes all directory entries that you have added to the Contacts list or created locally.</p>
Recent Calls Screen	<p>The Recent Calls screen has been redesigned with functionality similar to the Contacts home screen.</p> <p>From the Recent Calls screen you can navigate to the Contacts list screen, Place a Call screen, or the directory. You can also add recent calls to your Contacts list.</p>
Sites Display Changes	<p>In version 4.0 the choices for the Sites button name are Speed Dial and Sites, rather than Speed Dial and Contacts as in previous versions.</p>

Feature	Description
Do Not Disturb, Availability Control	The button on the Contacts list screen and Place a Call screen that allows youth set your system to Available or Busy is now called Availability Control instead of Do Not Disturb Icon in Home Screen Settings (System > Admin Settings > General Settings > Home Screen Settings > ).
Web Interface Changes	Version 4.0 offers an improved directory in the system's web interface. The new design makes the Directory page faster, easier to use, and more reliable. The directory and other status pages on the web no longer require Java.

Security

Feature	Description
Login and Logout	<p>In version 4.0, you can require users to log in for system access. Version 4.0 also adds a logout feature. If Require Login for System Access is enabled, the system automatically prompts users to log in when the system comes out of sleep mode. If a call comes in, the user must log in before answering the call, even if the system is configured to answer calls automatically.</p> <p>When you log in, the system displays the time and date of the last successful login to the account, along with the number of unsuccessful login attempts since that time.</p> <p>When Require Login for System Access is enabled, you can set up a user account by configuring a User ID, User Password, and password policies.</p>
Account Lockout	<p>With version 4.0 you can configure and enforce an account lockout if someone fails to log in correctly. After a configurable number of failed login attempts, the account is locked for an amount of time specified by the administrator.</p> <p>If the system locks an account, the owner of that account must wait the specified amount of time before trying to log in again. If the system locks the User account and the User password is forgotten, an administrator can log in and reset the user's password. If the system locks the Admin account and the Room password is forgotten, use factory restore to reset the system back to its initial factory default state so that the system can be initialized again.</p>
Sleep Mode Changes	<p>In version 4.0 the microphones are automatically muted in the following cases:</p> <ul style="list-style-type: none"> ▪ When Security Mode is enabled and the system goes to sleep. ▪ When Security Mode is enabled and the system is awake but no one is logged in.

Feature	Description
	Pressing the Mute button on the remote control or on the microphone will <i>not</i> unmute the microphone until someone logs in to the system.
AES Required Setting	In version 4.0 you can select Off, When Available, or Required for All Calls.
Password Security	Version 4.0 includes the following password security enhancements: <ul style="list-style-type: none"> For increased security, the Room, Remote Access, and User passwords are stored in encrypted format when Security Mode is enabled. Encrypted login is also supported for remote access passwords. All passwords appear as a series of asterisks as you type them in a configuration or login screen. To enter numbers in a password field, use the remote or keypad number buttons. To enter letters in a password field, press  Keyboard on the remote or keypad. Room, Remote Access, and User passwords can contain up to 40 characters.
Password Creation Policies	This version allows you to set up password policies, which are requirements that must be met when creating new passwords. These password settings can ensure that strong passwords are used. If you attempt to create or change a password to a value that does not satisfy the password policy, the system displays a message that lists the password criteria that need to be met.
Configurable Admin ID	You can now customize the administrator's account to have an ID other than the default "admin". The system prompts you to enter the Admin ID and Room password when you attempt to access Admin Settings in the local system interface. If you set a remote access password, you must enter both the Admin ID and the remote access password to access Admin Settings in the Polycom QDX 6000 web interface.
Ability to Disable Serial Ports	In version 4.0 you can disable the serial ports on the back of the system for increased security.
Reentering the Room Password	When Security Mode is enabled, you must reenter the room password when you try to change it.

Others

Feature	Description
Setting quality preference	You can set the maximum amount of bandwidth allocated to

Feature	Description
for People or Content	<p>People and Content.</p> <ul style="list-style-type: none"> ▪ People—10% Content, 90% People ▪ Both—50% Content, 50% People ▪ Content—90% Content, 10% People
Customizing your logos	<p>You can customize following logos from Polycom QDX 6000 Web UI: screen saver logo, web welcome logo, plash logo, Embedded UI logo, and web header logo.</p> <p>Login to Polycom QDX 6000 Web UI:</p> <ul style="list-style-type: none"> ▪ To customize the screen saver logo, click Utilities > Screen Saver, click Next. ▪ To customize other logos, click Utilities > Customise System Logo.
Changing names and icons of cameras	<p>You can choose camera icons from categories including Corporate, Education, Justice, Manufacturing, and Medical.</p> <p>Go to System > Admin Settings > Cameras.</p>
Software updates and factory restore	<p>Version 4.0 includes the following enhancements:</p> <ul style="list-style-type: none"> ▪ You can upgrade your system from Web UI between 4.0 builds. ▪ You can restore your system to 4.0 factory software or the last 4.0 software that was loaded to the system using 3.0 to 4.0 upgrade procedures.
CMA integration	<p>Polycom QDX 6000 can be managed and provisioned in the legacy mode by the next release of CMA.</p>

Known Limitations

The following table lists the known feature limitations for the version 4.0.0 release. If a workaround is available, it is noted in the table.

Feature	Limitation
Content	H.264 content couldn't be negotiated in H323 call above 1920kbps.
System	During system boot up, QDX will output ASCII stream to the RS232 port even when it is set to "pass through" mode. This may cause interference with external devices connected to QDX via the RS232 port.
Interoperability	There is no audio transmit when QDX interoperates with VSX in a SIP call at 64kbps.
	QDX is not negotiating stereo audio with VSX.

Feature	Limitation
	H239 is not working with QDX and the Tandberg C20 in SIP calls.
	QDX does not receive content from the Tandberg C20 if the QDX sends first.
	QDX does not transmit video to the Sony XG80 in SIP calls above 1920kbps.
	QDX cannot dial out to the Sony PCS-1, PCS-G50 and G70 over SIP.
	QDX does not receive video for 35 seconds into the SIP call with Sony systems.
	Content remains frozen on the Aethra X7 in SIP calls when the QDX stops sending.
	Aethra X7 can not send content to the QDX in SIP calls.
	H239 content does not work with LifeSize in SIP calls.
	SIP dial out calls with LifeSize systems/FECC does not work.
	QDX is unable to connect above 1920kbps with Tandberg MXP in SIP calls/Calls are down sped to 1920kbps.
	H239 content does not work with QDX and the Tandberg MXP in SIP calls.
	Tandberg MXP/Encryption check codes do not match.

Interoperability

Polycom QDX 6000 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 the V4.0.0 release.

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 may 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 may make different selections. This process should not affect the quality of the call.

Type	Product	Version
NAT/FW	Netgear WGR614V9	V1.2.6_18.0.0.17NA
Management Systems and	Polycom RSS4000	5.0.0.001

Type	Product	Version
Recorders	Polycom RSS2000	4.0.0.001
Gatekeepers, Gateways, and MCUs	Polycom CMA4000/5000	4.01.04
	Polycom SE200	3.00.07
	Polycom Pathnavigator	V 7.00.12
	Polycom RMX 1000	V2.1
	Polycom RMX 2000	4.1.0.37/5.0.0
	Polycom RMX 4000	5.0.0
	Polycom MGC	9.0.3.1
	Tandberg Codian 4505	3.1(2.1.3)
	Radvision ECS	5.6.2.10
	Tandberg GK	N6.1
	Cisco 3745 GK	12.4
	Tandberg Gateway	3.2
Endpoints	Polycom HDX Series	2.0.3.2/2.5.0.6/2.5.0.6.1/2.5.0.7
	Polycom VSX Series	9.0.5.1
	Polycom PVX	8.0.2
	Polycom CMAD	4.1.2
	Polycom FX/EX	6.0.5
	Polycom Viewstation 512MP/SP128	7.5.4
	Polycom VS4000	6.0.5
	Polycom iPower 9000	6.2.0.1208
	Polycom VVX1500	3.1.3.0439
	Polycom SoundStation IP4000 SIP	3.1.1.0137
	Polycom SoundStation IP3000	2.8
	Polycom Sound Point 601/650 SIP	3.1.3.0439
	Sony PCS –1	3.42
	Sony PCS –G70	3.42
	Sony PCS –TL50	2.42
	Sony PCS –G50	2.70

Type	Product	Version
	Sony PCS-XG80	2.0.4
	Tandberg MXP 6000	F8.1
	Tandberg MXP 1700	F8.1
	Tandberg MXP 1500	F8.1
	Tandberg MXP 880	F8.1
	Tandberg MXP 150	L5.1
	Tandberg Edge95 MXP	F8.1
	Tandberg C20	2.0.0.191232
	Tandberg 6000 B series	B10.3
	Tandberg 6000 E series	E5.3
	LifeSize Room System	4.2.7(8)
	Polycom DST B5	2.0.0
	Polycom DST K60	2.0.1
	Aethera X7	12.1.7
	Aethera X3	11.2.23
	Aethera VegaStar Gold	6.0.49

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