

Polycom[®] CX5000 and CX5000 HD Systems Setup Guide



Trademark Information

POLYCOM[®], the Polycom "Triangles" logo and the names and marks associated with Polycom's products are trademarks and/or service marks of Polycom, Inc. and are registered and/or common law marks in the United States and various other countries. All other trademarks are property of their respective owners. No portion hereof may be reproduced or transmitted in any form or by any means, for any purpose other than the recipient's personal use, without the express written permission of Polycom.

Patent Information

The accompanying product may be protected by one or more U.S. and foreign patents and/or pending patent applications held by Polycom, Inc.

© 2012 Polycom, Inc. All rights reserved.

Polycom, Inc. 4750 Willow Road Pleasanton, CA 94588-2708 USA

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Polycom, Inc. Under the law, reproducing includes translating into another language or format.

As between the parties, Polycom, Inc. retains title to and ownership of all proprietary rights with respect to the software contained within its products. The software is protected by United States copyright laws and international treaty provision. Therefore, you must treat the software like any other copyrighted material (e.g., a book or sound recording).

Every effort has been made to ensure that the information in this manual is accurate. Polycom, Inc. is not responsible for printing or clerical errors. Information in this document is subject to change without notice.

3

Contents

Warnings	4
Regulatory Information	5
System Requirements	6
The Polycom CX5000 HD System	7
What's in the Box	8
The Polycom CX5000 Device	9
Power Data Box components	10
Polycom CX5000 device rear section	11
Polycom CX5000 device base bottom section	12
Polycom CX5000 external dial pad and satellite microphones	12
Setting Up the Polycom CX5000 System	13
Positioning the Polycom CX5000 device	14
Setting up the Power Data Box and connections	14
Connecting the external dial pad and satellite microphones	17
Cleaning instructions	19
Appendix A: International Phone Adapters	20
Appendix B: Software EULA	23

Warnings

- ⚠ This symbol identifies safety and health messages in this guide and in guides to Polycom CX5000 accessories.
- ▲ Failure to properly set up, use, and care for the Polycom CX5000 device can increase the risk of damage to the Polycom CX5000 device, or even serious injury or death.

▲ DO NOT ATTEMPT REPAIRS

Do not attempt to take apart, open, service, or modify the Polycom CX5000 device, power data box, or any peripherals. Doing so increases the risk of electric shock, fire, or damage to the device. Any evidence of an attempt to open or modify any component of the Polycom CX5000 system, including any peeling, puncturing, or removal of any of the labels, is a violation of your license and warranty, and renders the Polycom CX5000 device ineligible for authorized repair.

If any part is damaged, malfunctioning, or if any internal parts become visible, contact Polycom Support.

- ▲ Do not attempt to open up the unit and do not attempt to replace the lithium battery. There is a risk of explosion if the lithium battery is replaced by an incorrect type.
- ⚠ This equipment is inoperable when main power fails and is unable to place emergency calls.
- ▲ To reduce the risk of fire, use only No. 26 AWG or larger (e.g. 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord.

- To avoid damage to the power data box and components, observe the following guidelines:
 - Protect cords from being walked on.
 - Protect cords from being pinched or sharply bent, particularly where they connect to the power outlet, the power data box, and the Polycom CX5000 device.
 - Do not jerk, knot, sharply bend, or otherwise abuse the power cords.
 - Do not expose the power cords to heat.
 - When disconnecting the power cords, pull on the plug—do not pull on the cord.
 - If the power cord or power data box becomes damaged in any way, stop using the device immediately, and contact Polycom Support for a replacement.
 - Unplug the Polycom CX5000 device during lightning storms or when the device is unused for long periods of time.
 - Use only the power supply unit and AC power cord that came with your device or that you received from an authorized repair center.
 - Do not use non-standard power sources, such as generators or inverters, even if the voltage and frequency appear acceptable. Only use AC power provided by a standard wall outlet.
 - Do not overload your wall outlet, extension cord, power strip, or other electrical receptacle. Confirm that they are rated to handle the total current (in amps [A]) drawn by the device (indicated on the power supply unit) and any other devices that are on the same circuit.
 - For devices with an AC power cord that connects to the power supply, always connect the power cord according to the following instructions:
 - Plug the AC power cord into the power supply until it stops.
 - Plug the other end of the AC power cord into the wall outlet.

Regulatory Information

Regulatory information for the countries in which the Polycom CX5000 system is approved for use can be found in the Polycom® CX5000 Regulatory Notices, which is shipped with the Polycom CX5000 product and is also available online at http://support.polycom.com/PolycomService/support/us/support/voice/index.html.

System Requirements

The following are the minimum system requirements for the Polycom CX5000 system hardware and software.

- Computer running one of the following operating systems:
 - Windows XP[™] operating system (SP2 or later, 32-bit only)
 - Windows Vista[™] operating system (32-bit and 64-bit)
 - o Windows 7 (32-bit and 64-bit)
- Computer running one of the following client applications:
 - Microsoft Lync[™] 2010
 - Microsoft Office Communicator 2007
 - o Microsoft Office Live Meeting 2007, client version 8.0.6362.128 or later
- Computer with 2.0 gigahertz or higher processor.
- Recommended 2.0 gigabyte (GB) of RAM or higher.
- 1.5 gigabytes (GB) of available hard disk space.
- Video card with 128 MB of RAM or higher.
- Super VGA (1280 x 1024) or higher-resolution video adapter and monitor.
- Keyboard and mouse, or compatible pointing device.
- Graphics hardware running in full hardware acceleration mode.
- For conference phone use, an analog PSTN phone line.
- For remote management, an Ethernet network adapter appropriate for the type of local-area or wide-area network to which you will connect.
- For the Polycom CX5000 HD system, the computer to which a CX5000 HD device is connected must have a quad-core processor to transmit HD video to the far end. A quad core processor is not required to display HD video received from the far end.

The Polycom CX5000 HD System

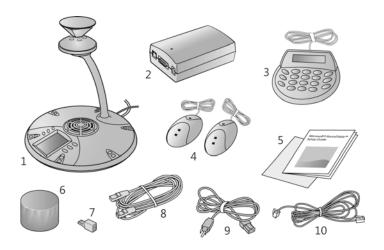
Polycom CX5000 HD systems support HD (720 x 1280) active speaker video when connected to a quad-core computer running a Microsoft Lync client. The HD video stream is supported only for point-to-point calls. Video in Online Meetings or other collaborative calls that use the Microsoft Lync AVMCU, such as for whiteboard presentations and PowerPoint® slide shows, is limited in Lync Server 2010 to VGA resolution.

CX5000 HD systems also offer the active speaker modes supported by non-HD CX5000 systems on earlier releases. Except for HD active speaker video, CX5000 HD devices are functionally identical to non-HD Polycom CX5000 devices.

Polycom CX5000 HD systems can be identified by the HD marking on the product label that is located on the bottom of the tabletop console.

What's in the Box

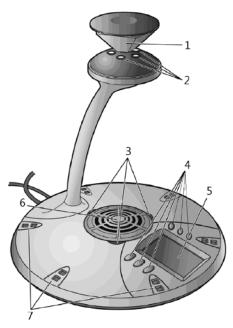
The Polycom CX5000 product package contains the following items.



- 1. Polycom CX5000 device.
- 2. Power data box.
- 3. External dial pad.
- 4. Satellite microphones.
- 5. Polycom CX5000 system documentation.
- 6. Privacy cover.
- 7. Phone adapter for specific locale.
- 8. RJ45 network cable.
- 9. Power cord.
- 10. RJ11 telephone cable.
- To determine the correct phone line adapter for your location, refer to Appendix A: International Phone Adapters. Always plug the RJ11 telephone cable into the power data box first and attach the phone adapter to the opposite end of the RJ11 telephone cord prior to plugging into your phone jack.

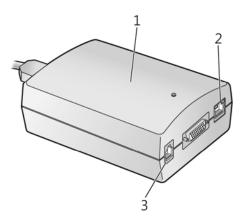
The Polycom CX5000 Device

Inspect the Polycom CX5000 device to become familiar with its components.



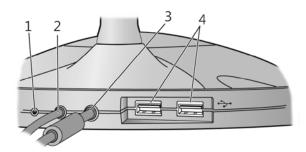
- 1. **Mirrors**. Five mirrors reflect the light into the cameras.
- 2. **Cameras**. Five small cameras capture the images from around the room.
- 3. **Light-emitting diode (LED) status lights**. Three status lights indicate phone connection, audio/video activity, mute, and incoming calls.
- 4. **Control buttons**. Six buttons control speaker volume, mute, phone on/off hook, flash, and information.
- 5. **Liquid crystal display (LCD) touch screen**. The LCD dial pad works just like your phone pad for ease of dialing and quick view of call status.
- 6. **Loudspeaker**. A centrally located loudspeaker provides the audio received from the remote conference.
- 7. **Microphones**. Six microphones located every 60° around the device pick up the audio in the room.

Power Data Box components



- Power data box. Provides the data and physical interfaces for connecting to an Ethernet network, a PSTN, and the Polycom CX5000 device, as well as providing the power source for the Polycom CX5000 device.
- 2. **RJ45 jack**. The location where the RJ45 cable connects your network to the power data box. Use the network connection when you want to manage the Polycom CX5000 device externally.
- 3. RJ11 jack. The location where the RJ11 cable connects your PSTN phone system to the power data box. Make certain that you have the correct phone adapter for your location. Always plug the RJ11 telephone cable into the power data box first and attach the correct phone adapter to the opposite end of the RJ11 telephone cord prior to connecting to your on-site phone jack. For information on choosing the correct phone adapter for your locale, refer to Appendix A: International Phone Adapters.

Polycom CX5000 device rear section

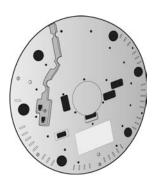


- 1. Reset button. Restarts the Polycom CX5000 device.
- 2. **USB Cable**. The cable that connects the Polycom CX5000 device to a USB port on your computer.
- 3. **System Cable**. The 26-pin cable that connects the Polycom CX5000 device to the power data box.
- 4. **USB Ports**. Two type A USB ports for the external dial pad.

A security slot for securing the device using a compatible computer security lock is located near the rear of the device.



Polycom CX5000 device base bottom section



The bottom section of the device has two RJ11 jacks and a cable conduit for connecting the satellite microphones to the Polycom CX5000 device.

Polycom CX5000 external dial pad and satellite microphones

The Polycom CX5000 product package includes an external dial pad and satellite microphones for extended accessibility and convenience. For setup information, refer to Connecting the external dial pad and satellite microphones.





Setting Up the Polycom CX5000 System

Complete the following procedures for getting your Polycom CX5000 device up and running:

- Positioning the Polycom CX5000 device.
- Setting up the power data box and connections.
- Connecting the external dial pad and satellite microphones.

For information on using the Polycom CX5000 device and getting the most from your meetings, see the *Polycom® CX5000 System User's Guide* located at http://support.polycom.com/PolycomService/support/us/support/voice/index.html.

▲ BE CAREFUL. The camera head is fragile and can be damaged by impact. Do not knock it over or bump it with notebooks or other objects. The Limited Warranty does not cover damage to the camera head or misalignment from abuse, accident or impact.

Positioning the Polycom CX5000 device

Proper positioning of your Polycom CX5000 device is essential for getting the best results during conferences and meetings. Select a location for the Polycom CX5000 device using the following guidelines:

- Select a well-ventilated, flat, level, clean, and dry location on which to place the Polycom CX5000 device.
- For maximized results, choose a location near the center of a conference table that is no longer than 15 feet (4.57 m) in length.
- Select a well-ventilated, clean, and dry location out of the typical walking path in which to place the power data box.

Setting up the Power Data Box and connections

- ▲ Failure to take the following precautions can result in serious injury or death from electric shock or fire, or cause damage to the Polycom CX5000 device and power data box.
 - Use only the power data box and alternating current (AC) power cord that came with the Polycom CX5000 device.
 - Do not use nonstandard power sources, such as generators or inverters, even if the voltage and frequency appear acceptable. Use only AC power provided by a standard wall outlet.
 - Use a properly grounded electrical outlet that accommodates the three-prong grounding plug. Do not remove the grounding prong. If the plug does not fit into your outlet, have an electrician replace the obsolete outlet.
 - Do not use the Polycom CX5000 device in a moist or wet environment.
 - Do not spill any liquid on the Polycom CX5000 device, power data box, or any cords.

After you have positioned the Polycom CX5000 device on the table as described above, you can begin to connect the cords and cables to the power data box. Select an appropriate power source for the Polycom CX5000 device, using the following guidelines:

To set up the power data box and system connections:

Locate the power data box, the RJ45 network cable, the RJ11 telephone cable, and power cord. The following procedure describes how to connect the cables and cord to the power data box, the Polycom CX5000 device, and your computer.

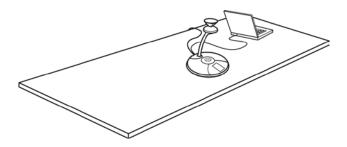
- 1. Fully insert the 26-pin system cable from the Polycom CX5000 device into the power data box. Ensure that the connection is tight and secured.
- 2. Connect one end of the RJ11 phone cable (26 AWG minimum) to the RJ11 jack on the power data box and the other end to an active PSTN RJ11 phone jack. For international locales, always plug the RJ11 telephone cable into the power data box first and attach the correct phone adapter to the opposite end of the RJ11 telephone cord prior to connecting to your on-site phone jack. The RJ11 connection is for use in the United States and Canada.
- 3. Connect one end of the RJ45 network cable to the RJ45 jack on the power data box and the other end to an active Ethernet RJ45 network jack.
- 4. Plug the AC power cord into the power data box. The system cable, power cord, RJ11 cable, and the RJ45 cable should be connected.
- Always plug the RJ11 telephone cable into the power data box first and attach the correct phone adapter to the opposite end of the RJ11 telephone cord prior to connecting to your on-site phone jack.



5. Connect the USB cable from your Polycom CX5000 device to your computer.



6. Plug the other end of the AC power cord into an electrical wall outlet. Your setup should resemble the following illustration.



• Consider taping the system cable to the table surface and floor so that it remains secure.

Your Polycom CX5000 device is now set up and ready to use. Before you begin using the Polycom CX5000 device, remove the privacy cover on top of the device.

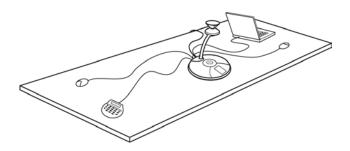


To avoid any disturbance to the acoustic quality, place the cap at least six feet away from the device.

Connecting the external dial pad and satellite microphones

An external dial pad and satellite microphones are provided for accommodating the needs of a larger meeting room where people may be further from the Polycom CX5000 device than in a conventional meeting environment.

The following illustration shows how the external dial pad and microphones can be positioned to enhance the Polycom CX5000 device in larger conference rooms.



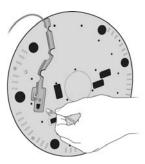
To set up the external dial pad:

» Plug the USB connector from the external dial pad into one of the USB ports located at the rear of the Polycom CX5000 device.

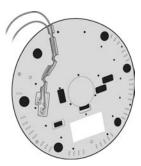


To set up the satellite microphones:

- 1. Carefully turn the Polycom CX5000 device so that you can access the two RJ11 jacks at the base bottom of the device.
- 2. Plug both RJ11 connectors attached to the satellite microphones into the RJ11 jacks at the bottom of the device.



3. Run the RJ11 cables through the conduit so that the cords are securely lodged and sit below the surface of the Polycom CX5000 base bottom.



4. Place the Polycom CX5000 device upright on the table and check to see that the RJ11 cords do not disrupt the stability of the device. If so, return to the previous step and make certain the RJ11 cables are lodged securely into the conduit.

Cleaning instructions

Always clean the base of the Polycom CX5000 device and the power data box with a dry cloth. For the camera head (mirrors and lens), use a microfiber lens cleaning cloth (available at camera and telescope retailers) and follow these instructions.

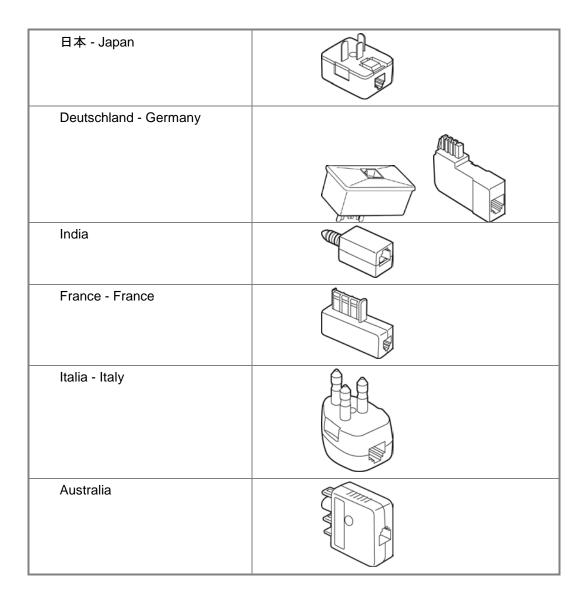
To clean your Polycom CX5000 device lenses and mirrors:

- Avoid touching the lens elements and reflective surfaces of the mirror. Finger
 prints on the reflective surface of the mirror should be cleaned promptly. Always
 use a light touch.
- 2. Before attempting to clean the lenses, use a soft lens brush or "canned air" to carefully remove all grit, dirt, dust, or other substances that may scratch the surfaces of the optics. Then use soft lens cleaning tissues, a lint-free cotton cloth, or a clean cotton swab to gently polish the lens surface.
- 3. For materials that still remain on the lenses, use a lens cleaning solution (such as a commercial optical lens cleaner or household window cleaner) to remove grease. Do not apply the cleaner directly onto a lens, since this may result in the liquid seeping into the barrel of the lens. Instead, apply the solution onto a cloth or swab. Then apply light pressure with soft circular motions of the cloth or swab to remove the foreign substance. Excessive pressure (for example, rubbing gritty dirt into the lens surfaces) may damage coatings.
- 4. Follow similar procedures to clean the mirrors. Excessive pressure may damage coatings and may misalign the mirrors.

Use care when cleaning the lenses and mirrors. The camera head is fragile. The Limited Warranty does not cover camera head damage or misalignment from abuse, accident, or impact.

Appendix A: International Phone Adapters

The following table can help you determine the phone adapter required for your geographical location.



Nederland - Netherlands	A A
Belgique - Belgium	
België - Belgium	
Sweden	
Denmark	
Portugal	
Norway	Ah
Finland	
Finland	
Svizzera - Switzerland	_
Suisse - Switzerland	
Schweiz - Switzerland	
México - Mexico	
United States	7/5
新加坡 - Singapore	
(RJ11)	aggagg)
South Africa	
Brasil - Brazil	

한국 - South Korea	
香港 - Hong Kong	
United Kingdom	
Ireland	
New Zealand	

Appendix B: Software EULA

MICROSOFT SOFTWARE LICENSE TERMS

LICENSED DEVICE SOFTWARE

These license terms are an agreement between Microsoft Licensing, GP and you. Please read them. They apply to the software included in the licensed device. The terms also apply to any Microsoft updates and supplements for this software, unless other terms accompany those items. If so, those terms apply.

By using the licensed device, you accept these terms. If you do not accept them, do not use the licensed device. Instead, return it to the retailer for a refund or credit.

If you comply with these license terms, you have the rights below for each license you acquire.

- 1. OVERVIEW. The software is licensed on per copy per licensed device basis. The licensed device is the device on which you use the software.
- 2. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not (a) work around any technical limitations in the software; (b) reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation; (c) make copies of the software; (d) publish the software for others to copy; or (e) rent, lease or lend the software.
- 3. GOVERNMENT CLAUSES INCORPORATED BY REFERENCE. If you are the US Government the following Federal Acquisition Regulation (FAR) clauses are incorporated by reference into this Agreement. The version of each clause shall be that version incorporated into your government contract:
 - 52.222-26, Equal Opportunity
 - 52.222-35, Affirmative Action for Special Disabled and Vietnam Era Veterans
 - 52.222-36, Affirmative Action for Workers with Disabilities
- 4. DISPUTES WITH CUSTOMER. In the event we, in our sole discretion, decide to prosecute a claim against a U.S. Government customer relating to this agreement or a government contract applicable to the use of the licensed device you agree to cooperate fully in the prosecution of such claim, including but not limited to the filing of the claim in your name on our behalf and filing of any appeals in a Board of Contract Appeals or federal court. We agree to be responsible for your reasonable and documented out of pocket expenses, and for the actual prosecution and settlement of all such claims, including the payment of any and all

- costs incurred by us in connection with such claim. Any recoveries awarded to you as a result of the claim in excess of those owed shall be paid to us.
- 5. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see www.microsoft.com/exporting.
- 6. APPLICABLE LAW. Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles.
- 7. LIMITATION ON AND EXCLUSION OF DAMAGES. You can recover from Microsoft and its reseller only direct damages up to the amount you paid for the software or \$100, whichever is less. You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.

This limitation applies to (a) anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and (b) claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law. It also applies even if (x) repair, replacement or a refund for the software does not fully compensate you for any losses; or (y) Microsoft knew or should have known about the possibility of the damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. They also may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.