

# Polycom<sup>®</sup> CX5000 Setup Guide



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## 2 Polycom CX5000 Setup Guide

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## Warnings

⚠ This symbol identifies safety and health messages in this guide and Polycom CX5000 accessories guides.

⚠ **WARNING**

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.

⚠ **WARNING**

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.

⚠ **WARNING**

To avoid damage to the power data box and components, use 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 sources of 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 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.

⚠ WARNING

Mains powered voice telephony without emergency dialing

⚠ WARNING

This equipment will be inoperable when main power fails.

⚠ WARNING

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.

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## Regulatory Information

Regulatory information for the countries in which the Polycom® CX5000 is approved for use can be found in the *Polycom® CX5000 Regulatory Manual*, which is shipped with the Polycom CX5000 product and is also available online at

[http://www.polycom.com/global/documents/support/user/products/voice/Polycom\\_CX5000\\_Regulatory\\_Manual\\_All\\_Languages.pdf](http://www.polycom.com/global/documents/support/user/products/voice/Polycom_CX5000_Regulatory_Manual_All_Languages.pdf) .

## Introduction

When you want to meet with people who are geographically separated, video conferencing gives you a greater sense of immediacy than a conventional telephone conference call. The Polycom<sup>®</sup> CX5000 Unified Conference Station is a next generation video conferencing system that provides a comprehensive conferencing experience through the use of 360 degree video and active speaker detection.

This guide will help you install the Polycom CX5000 device hardware and begin using it for your meetings.

## How the Polycom CX5000 Works

The Polycom CX5000, when used with Microsoft<sup>®</sup> Office Live Meeting 2007 or Microsoft<sup>®</sup> Office Communicator 2007, is a video conferencing device. Video conferencing is a set of interactive telecommunication technologies that allow two or more locations to interact using video and audio transmissions simultaneously. It has also been called visual collaboration.

With the Polycom CX5000, you can do any of the following:

- Place an outgoing phone call.
- Answer an incoming phone call.
- Conduct an audio-only session.
- Conduct an audio/video conference.

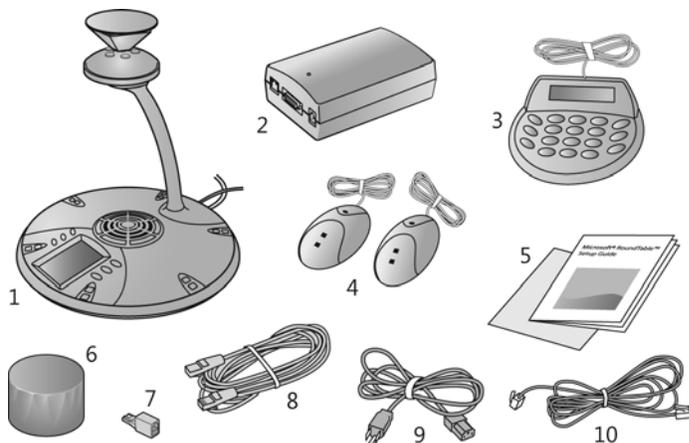
The Polycom CX5000 is placed in the center of your conference table and connected to a computer, computer network, public switched telephone network (PSTN) analog phone line, and power data box. The Polycom CX5000 cameras capture the entire panoramic view of your conference room, as well as the voices coming from any location around the table, as shown in Figure 1 below.



**Figure 1. A Polycom CX5000 conference in session**

## Unpacking

The Polycom CX5000 product package contains the following items, as shown in Figure 2 below.



**Figure 2. Unpacking the box**

1. Polycom CX5000 device.
2. Power data box.
3. External dial pad.
4. Satellite microphones.
5. Polycom CX5000 Setup Guide and Quick Reference Card.
6. Privacy cover.
7. Phone adapter for specific locale.
8. RJ45 network cable.
9. Power cord.
10. RJ11 telephone cable.

### Note

For determining the correct phone line adapter for your location, see *Appendix A: International Phone Adapters*, later in this document. 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.

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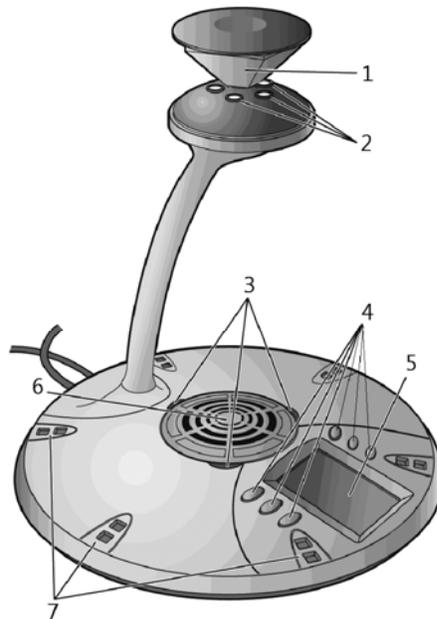
## System Requirements

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

- Computer running the Windows XP™ operating system (SP2 or later, 32-bit only) or Windows Vista™ operating system (32-bit and 64-bit).
- 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 × 1024) or higher-resolution video adapter and monitor.
- Keyboard and mouse, or compatible pointing device.
- Ethernet network adapter appropriate for the type of local-area or wide-area network to which you will connect. Your computer requires an active wired Ethernet connection for running Polycom CX5000.
- Graphics hardware running in full hardware acceleration mode.
- An analog PSTN phone line.
- Microsoft Office Live Meeting 2007 or Office Communicator 2007 or Office Communicator 2007 R2 (as an active speaker device).

## The Polycom CX5000 device

Inspect the Polycom CX5000 device and become familiar with its components, as shown below in Figure 3.

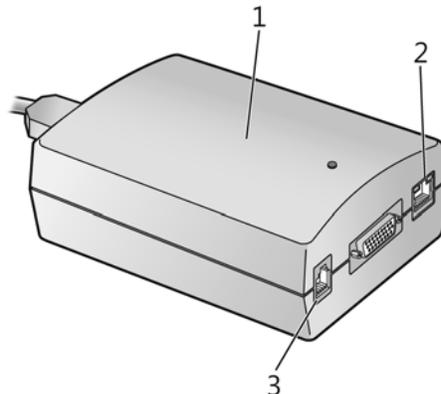


**Figure 3. Polycom CX5000 device**

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

Inspect the power data box and cables to become familiar with its components, as shown below in Figure 4.

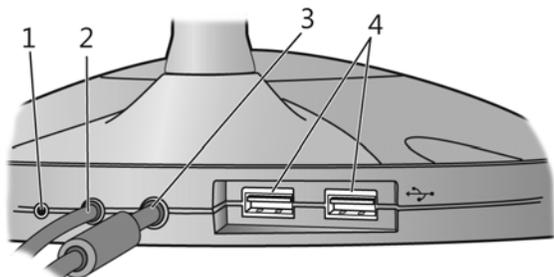


**Figure 4. Power data box connections**

1. **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, see *Appendix A: International Phone Adapters* later in this document.

## Polycom CX5000 device rear section

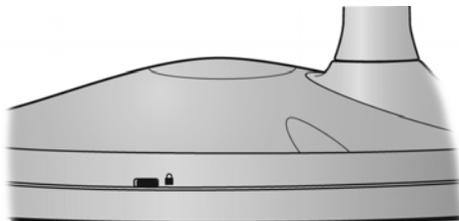
Inspect the rear section of the Polycom CX5000 device to determine the components, as shown in Figure 5 below.



**Figure 5. 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.

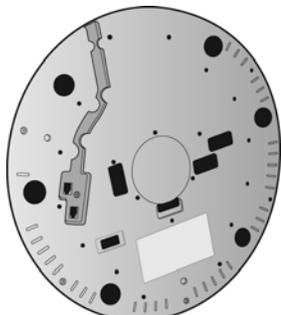
Additionally, located near the rear of the device is a security slot for securing the device using a compatible computer security lock, as shown in Figure 6 below.



**Figure 6. Security slot**

## Polycom CX5000 device base bottom section

Inspect the bottom section of the Polycom CX5000 device to view the components, as shown in Figure 7 below.



**Figure 7. 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.

For information on connecting the external dial pad and microphones, see “Connecting the external dial pad and satellite microphones,” later in this guide.

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## Polycom CX5000 external dial pad and satellite microphones

Polycom CX5000 provides an external dial pad and satellite microphones for extended accessibility and convenience. Below are the components, as shown in Figures 8 and 9.



**Figure 8. External dial pad**



**Figure 9. Satellite microphones**

## Setting up the Polycom CX5000

Setting up the Polycom CX5000 is easy. Just 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.

After you complete the Polycom CX5000 setup, you can begin using Polycom CX5000 for phone calls, conference calls, and remote meetings.

For information on using the Polycom CX5000 device and getting the most from your meetings, see the *Polycom CX5000 User's Guide* located at:

<http://www.polycom.com/support/voicedocumentation/>.

**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 camera head damage or misalignment from abuse, accident or impact.**

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## 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 in length.
- Select a well-ventilated, clean, and dry location out of the typical walking path in which to place the power data box.

### WARNING

Failure to take the following precautions can result in serious injury or death from electric shock or fire, or damage to the Polycom CX5000 device and power data box.

## Setting up the Power Data Box and connections

After you have positioned the Polycom CX5000 device on the table as described above, you can now 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:

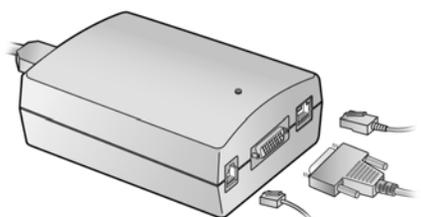
- Use only the power data box and alternating current (AC) power cord that came with the Polycom CX5000 device.
- Do not use nonstandard power sources, such as generators or inverters, even if the voltage and frequency appear acceptable. Use only AC power provided by a standard wall outlet.
- Use a properly 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.

### To set up the power data box and Polycom CX5000 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.

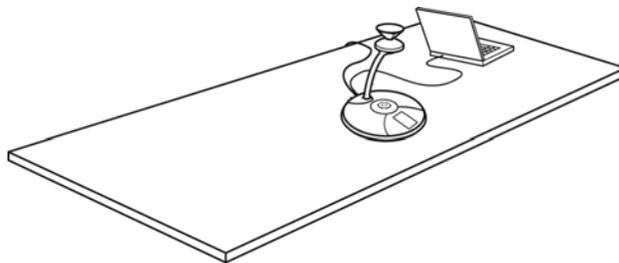
The system cable, power cord, RJ11 cable, and the RJ45 cable should be connected. Always plug the RJ11 telephone cable into the power data box first and attach the correct phone adapter to the opposite end of the RJ11 telephone cord prior to connecting to your on-site phone jack.



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.
7. Your setup should resemble Figure 10 below.



**Figure 10. Polycom CX5000 setup**

**Note**

If necessary, tape the system cable to the table surface and floor so that it remains secure. 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 connecting to your on-site phone jack.

Your Polycom CX5000 device is now set up and ready to use. Before you begin using the Polycom CX5000 device, be certain to remove the privacy cover on top of the device, as shown below in Figure 11.



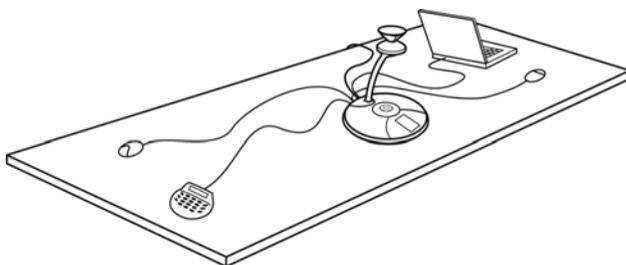
**Figure 11. Privacy cover removal**

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.

Figure 12 below shows how the external dial pad and microphones can be positioned to enhance the Polycom CX5000 device in a larger conference rooms.



**Figure 12. External dial pad and satellite microphones**

### To setup the external dial pad

To setup the external dial pad, do the following.

- Plug the USB connector from the external dial pad into one of the USB ports located at the rear of the Polycom CX5000 device as seen in Figure 13 below.



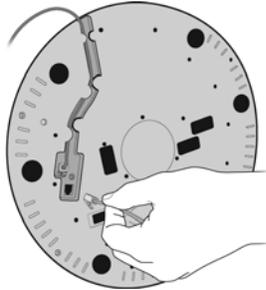
**Figure 13. Connecting external dial pad**

### To setup the satellite microphones

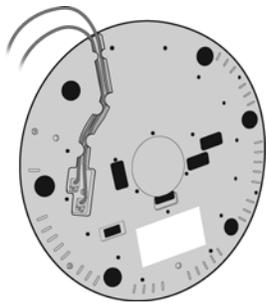
To setup the satellite microphones, do the following.

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 micro fiber lens cleaning cloth (available at camera and telescope retailers) and follow the instructions below.

### **To clean your Polycom CX5000 device lenses and mirrors**

1. 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 any of the lenses, carefully remove, with a soft lens brush or "canned air," 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.**

# Software EULA

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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:
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  - 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.
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