KNOWLEDGE BASE ARTICLES

PrecisionHD USB Camera



JUNE 2013

Thank you for choosing Cisco!

Your Cisco product has been designed to give you many years of safe, reliable operation.

The articles in his Knowledge Base give advice on installation, interoperability, configuration, firewalls, and many other frequently asked questions.

Our main objective is to address your goals and needs. Please let us know how well we succeeded!

We recommend that you visit the Cisco web site regularly for updated versions of this guide.

The user documentation can be found on

http://www.cisco.com/go/telepresence/docs.

How to use this guide

The top menu bar, the entries in the Table of Contents, and the entries in the question lists are all hyperlinks. You can click on them to go to the topic.

The numbering of the questions is for reference only.

Table of Contents

| lr | About this guide |
|----|---|
| | User documentation |
| | Software |
| q | 490: How do I know that the PrecisionHD USB camera is successfully connected to my PC? 7 |
| | 491: Why is the PrecisionHD USB camera not connecting with the PC?7 |
| | 492: Which frame rate is supported by the PrecisionHD USB camera? |
| | 493: Do I need to install specific drivers for my PrecisionHD USB camera?7 |
| | 494: Which applications can I use with the PrecisionHD USB camera?7 |
| | 495: Why is the video on my computer screen not smooth when I am using the PrecisionHD USB Camera? |
| | 496: Do I need to use an external microphone with the PrecisionHD USB camera?7 |
| | 497: I cannot see the PrecisionHD USB camera in Windows Explorer, why? |
| | 498: Can I use the PrecisionHD USB camera with Skype? |
| | 499: How do I select the PrecisionHD USB camera in Microsoft Office Communicator 2007 R2 / Live Messenger? |
| | 500: How do I select the PrecisionHD USB camera in Skype? |
| | 501: Can I use the PrecisionHD USB camera with a USB hub? |
| | 503: How do I use the privacy cover on the PrecisionHD USB Camera?9 |
| | 504: What do the PrecisionHD USB camera LEDs mean? |
| | 505: What happens if I plug the PrecisionHD USB camera into a USB 1.0 port? |
| | 506: What are the salient features of the PrecisionHD USB camera? |
| | 507: How do I check that my system has recognized the PrecisionHD USB camera? |
| | |

| 509: Why do I only get the video image from my PrecisionHD USB camera when viewing it in Windows Explorer?9 |
|--|
| 510: Which approvals apply to the PrecisionHD USB camera?9 |
| 511: What are the minimum system requirements needed to use the PrecisionHD USB camera? |
| 516: Can I use the PrecisionHD USB camera with Windows 7? 10 |
| 517: How do I upgrade my PrecisionHD USB Camera? |
| 519: Which resolutions does the PrecisionHD USB Camera support?11 |
| 522: Why cannot I undock my laptop from my docking station while the PrecisionHD USB Camera is connected to the docking station? |
| 537: How do I manually control focus, brightness and white balance on the PrecisionHD USB Camera? |
| 542: Why is the sound low and/or distorted when I am using a PrecisionHD USB Camera on Windows 7? |
| 561: How should the video room layout and lighting be?11 |
| 576: What are the limitations to using ConferenceMe with a PrecisionHD USB Camera? 12 |
| 653: Can I use the PrecisionHD USB with OS X? |
| 654: Can I use the PrecisionHD USB with Linux? |
| 663: Why do I get a warning that the Precision HD USB camera is busy when I try to upgrade it? |



Chapter 1 Introduction

About this guide

Several small articles related to the Cisco TelePresence PrecisionHD USB Camera are gathered in this Knowledge Base document. Most of the articles are in question-answer form and cover installation, interoperability, configuration, firewalls, and many other frequently asked questions.

For complete user guides for the products, please visit the web pages as described to the right.

Cisco TelePresence products covered in this guide

Cisco TelePresence PrecisionHD USB Camera

User documentation

For all our products we have several guides suitable for various user groups.

You can download all the user guides for the Cisco TelePresence products from the Cisco web site, ▶ http://www.cisco.com/go/telepresence/docs

Select the following path in the right pane:

PrecisionHD USB Camera:

```
TelePresence Peripherals
> Cisco TelePresence PrecisionHD USB Cameras
```

Document categories

End-user guide: Maintain and Operate | End-User Guides

CC software release notes: Release and General Information | Release Notes

CC software licensing information: Release and General Information | Licensing Information

Software

You can download the software for your product from the Cisco web site, http://www.cisco.com/cisco/software/navigator.html



Chapter 2 Questions and answers

490: How do I know that the PrecisionHD USB camera is successfully connected to my PC?

When you connect the PrecisionHD USB camera to your computer, the camera LED turns orange immediately and then turns green when the camera has been successfully connected. The camera LED is located on top of the camera housing.

Related questions:

504: What do the PrecisionHD USB camera LEDs mean?

491: Why is the PrecisionHD USB camera not connecting with the PC?

Make sure that your operating system has the latest updates. Recommended operating systems are:

- 32 bit OS Windows 7, Windows XP SP2/SP3, Windows Vista SP1/SP2
- 64 bit OS Windows 7, Windows XP SP1/SP2, Windows Vista SP1
- Apple Mac OS X 10.6.5 *
- Linux Ubuntu 10.04 (Lucid Lynx)*
- Linux Fedora 12 (Constantine) *
- Linux Debian 5.04 *
- * Firmware upgrade is not available on these operating systems.

Related questions:

493: Do I need to install specific drivers for my PrecisionHD USB camera?

492: Which frame rate is supported by the PrecisionHD USB camera?

The PrecisionHD USB camera supports 30 frames per second up to HD resolution (720p30).

493: Do I need to install specific drivers for my PrecisionHD USB camera?

No, for a PC running one of the recommended operating system versions, the PrecisionHD USB camera works without installing a driver.

Related questions:

491: Why is the PrecisionHD USB camera not connecting with the PC?

494: Which applications can I use with the PrecisionHD USB camera?

The PrecisionHD USB camera works with a wide range of relevant applications and has been tested with the following applications:

- Cisco TelePresence Movi
- Cisco TelePresence Jabber Video
- Cisco TelePresence ConferenceMe
- Microsoft Office Communicator
- Microsoft Office Live Meeting
- Skype
- VLC

495: Why is the video on my computer screen not smooth when I am using the PrecisionHD USB Camera?

Make sure that:

- Your computer meets the requirements for using the camera
- · There is enough bandwidth for your call
- There are enough CPU and memory resources available

496: Do I need to use an external microphone with the PrecisionHD USB camera?

No, the PrecisionHD USB camera has a built-in microphone.

497: I cannot see the PrecisionHD USB camera in Windows Explorer, why?

This feature is only supported on 32 bit Windows XP.

498: Can I use the PrecisionHD USB camera with Skype?

Yes, you can use the PrecisionHD USB camera with Skype.

Related questions:

494: Which applications can I use with the PrecisionHD USB camera? 500: How do I select the PrecisionHD USB camera in Skype?

499: How do I select the PrecisionHD USB camera in Microsoft Office Communicator 2007 R2 / Live Messenger?

Follow these steps:

- 1. Select Tools > Set up Audio and video.
- 2. Select *Custom* in the first screen and select *USB Audio Device*. If you have several cameras connected, select the PrecisionHD USB camera.
- 3. Click Next.
- 4. Select your speakers and Next.
- 5. Select the PrecisionHD USB camera (USB Video Device).

500: How do I select the PrecisionHD USB camera in Skype?

Some laptop computers have a built-in camera. You can configure Skype to use the PrecisionHD USB camera as follows on your PC:

- 1. Login to Skype
- 2. Go to Tools > Options
- 3. In the General section set audio and video devices as follows:
 - a. Audio
 - Select *Audio Settings* and then for Microphone device, select TANDBERG Audio from the drop-down list.
- b. Video
 - Select *Video Settings* and then for the webcam select TANDBERG Video from the drop-down list.
 - Click *Save* if you are asked to save the webcam settings.
 - Verify that your PrecisionHD USB camera is working through the small self-view image; for example, by pointing to the camera.
- 4. Click Save.

If you have two or more cameras connected to your computer, you need to disable these in Windows to use the PrecisionHD USB camera.

Related questions:

498: Can I use the PrecisionHD USB camera with Skype?

501: Can I use the PrecisionHD USB camera with a USB hub?

We do not recommend using the PrecisionHD USB camera with a USB hub.

A bus-powered hub draws all its power from the host interface: many devices, including the PrecisionHD USB camera, require more power than this method provides and the device will not work.

503: How do I use the privacy cover on the PrecisionHD USB Camera?

Turn the privacy cover:

- Right to open it
- Left to shut it

504: What do the PrecisionHD USB camera LEDs mean?

The LED colors are:

- Yellow indicates that the camera is enumerating or connecting.
- Green indicates that the camera is connected and ready for use.
- Orange indicates that the camera is streaming video.

Related questions:

490: How do I know that the PrecisionHD USB camera is successfully connected to my PC?

505: What happens if I plug the PrecisionHD USB camera into a USB 1.0 port?

When the PrecisionHD USB camera is connected to a USB 1.0 port, Windows displays the message; "The device can perform faster. This USB device can perform faster if you connect it to a Hi-Speed USB 2.0 port ..."

The PrecisionHD USB Camera is enumerated and connects, but fails to stream video and audio. (Enumeration is the technical term for the camera device to be discovered by the PC with proper USB communication established.)

506: What are the salient features of the PrecisionHD USB camera?

The PrecisionHD camera is a USB 2.0, High speed device whose main features are:

- Compatible with USB Video Class (UVC) 1.0
- Compatible with USB Audio Class (UAC) 1.1
- Supports a maximum bandwidth of 65 Mbps over USB.
- Maximum supported resolution: 1280x720.
- Default resolution: VGA (640x480).
- Video output formats: Mjpeg and YUV 422.
- Audio output: 48 KHz sampling-16 bit Mono.
- Supports Auto Focus, Auto Exposure and Auto White Balance.

507: How do I check that my system has recognized the PrecisionHD USB camera?

On a Windows system follow these steps:

- 1. Click on Start-button and select Devices and Printers.
- 2. Under *Devices* you should see TANDBERG HD. This is your PrecisionHD USB camera.

On a Mac system follow these steps:

- 1. Open *Photobooth* (click on magnifying glass in upper right corner and type " photobooth" followed by enter).
- 2. If you can see a picture from the camera it is installed and working. If you have more than one camera attached you can switch from one to the other using the CAMERA menu tab.

Related questions:

491: Why is the PrecisionHD USB camera not connecting with the PC?

509: Why do I only get the video image from my PrecisionHD USB camera when viewing it in Windows Explorer?

Windows Explorer only shows the USB Video Device, therefore there is no audio from the PrecisionHD camera when using Windows Explorer.

Related questions:

- 494: Which applications can I use with the PrecisionHD USB camera?
- 497: I cannot see the PrecisionHD USB camera in Windows Explorer, why?

510: Which approvals apply to the PrecisionHD USB camera?

This product is tested and approved for use in indoor office and residential environments according to North American and European standards. For other markets, contact your local distributor for more information.

For a USB extension cable, the following applies: The connecting cable can be extended by using a standard USB extension cable. The maximum recommended extension cable length is 2 meters / 9 feet.

511: What are the minimum system requirements needed to use the PrecisionHD USB camera?

To use the PrecisionHD USB camera with Cisco TelePresence Movi or Jabber Video:

| Movi | HD (1280x720) | VGA (640x480) | CIF (352x288) |
|---------------|--|--|--|
| Windows XP | Core 2 Duo 2GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 512MB RAM Good Internet Connection |
| Windows Vista | Core 2 Duo 2GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 1GB RAM Good Internet Connection |

To use the PrecisionHD USB camera with Microsoft Communicator:

| мос | HD (1280x720) | VGA (640x480) | CIF (352x288) |
|---------------|---|--|--|
| Windows XP | Core 2 Quad 2GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 512MB RAM Good Internet Connection |
| Windows Vista | Core 2 Quad 2GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 1GB RAM Good Internet Connection |

To use the PrecisionHD USB camera with Skype/VLC:

| Skype/VLC | HD (1280x720) | VGA (640x480) | CIF (352x288) |
|---------------|--|--|--|
| Windows XP | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 512MB RAM Good Internet Connection |
| Windows Vista | Core 2 Duo 2GB RAM Dedicated Graphics Card Good Internet Connection | Core 2 Duo 1GB RAM Dedicated Graphics Card Good Internet Connection | Intel Atom 1GB RAM Good Internet Connection |

Related questions:

491: Why is the PrecisionHD USB camera not connecting with the PC?

516: Can I use the PrecisionHD USB camera with Windows 7?

Yes, the Cisco TelePresence PrecisionHD USB Camera works with Windows 7.

Related questions:

491: Why is the PrecisionHD USB camera not connecting with the PC?

517: How do I upgrade my PrecisionHD USB Camera?

- 1. Download the latest software from the Cisco web site.
- 2. Connect your PrecisionHD USB camera to your computer.
- 3. Make sure the LED is green before you start the upgrade.
- 4. Run the upgrade software.

519: Which resolutions does the PrecisionHD USB Camera support?

| 1 | 6:9 | formats |
|---|-----|---------|
|---|-----|---------|

| | width | height | 30 fps | 25 fps | 15 fps |
|-------|-------|--------|--------|-----------|-----------|
| 720p | 1280 | 720 | MJPEG | MJPEG | MJPEG |
| w4cif | 1024 | 576 | MJPEG | MJPEG | MJPEG |
| w448p | 768 | 448 | MJPEG | MJPEG | MJPEG |
| wcif | 512 | 288 | MJPEG | MJPEG/RAW | MJPEG/RAW |
| w180p | 320 | 180 | RAW | RAW | RAW |
| wqcif | 256 | 144 | RAW | RAW | RAW |

4:3 formats

| | width | height | 30 fps | 25 fps | 15 fps |
|---------|-------|--------|--------|--------|-----------|
| VGA | 640 | 480 | MJPEG | MJPEG | MJPEG/RAW |
| QVGA | 320 | 240 | RAW | RAW | RAW |
| CIF | 352 | 288 | RAW | RAW | RAW |
| 160x120 | 160 | 120 | RAW | RAW | RAW |

Related questions:

492: Which frame rate is supported by the PrecisionHD USB camera?

522: Why cannot I undock my laptop from my docking station while the PrecisionHD USB Camera is connected to the docking station?

You should be able to undock your laptop from your docking station as long as no programs are running and accessing the PrecisionHD USB Camera. Please check that all programs accessing the PrecisionHD USB Camera, e.g. Cisco JabberVideo, are properly closed and exited.

Related questions:

663: Why do I get a warning that the PrecisionHD USB camera is busy when I try to upgrade it?

537: How do I manually control focus, brightness and white balance on the PrecisionHD USB Camera?

From CC1.1 release the PrecisionHD USB Camera allows you to manually change the focus, brightness and white balance.

Skype:

- 1. Connect your PrecisionHD USB camera to your computer.
- 2. Open Skype and log in
- 3. Select Tools > Options.
- 4. Select Video Settings.
- 5. Select Webcam Settings .
- 6. Click OK when you're done

Microsoft Office Communicator:

- 1. Connect your PrecisionHD USB camera to your computer.
- 2. Open Microsoft Office Communicator and log in
- 3. Select Tools > Set Up Audio and Video.
- 4. Adjust the Microphone and speaker settings.
- 5. Click Next.
- 6. Select TANDBERG Video from the Webcam list.
- 7. Select Webcam Settings.
- 8. Click OK when you're done

542: Why is the sound low and/or distorted when I am using a PrecisionHD USB Camera on Windows 7?

If you are using the PrecisionHD USB Camera versions 1.0 or 1.1 with Windows 7, a very high input gain is set for your microphone, which can cause sound to be distorted or unnaturally low. You can resolve this issue by either upgrading the camera software to version 1.2 or later, or lowering the recording volume for your microphone in the Windows settings.

561: How should the video room layout and lighting be?

Here are some tips for making the room better suited for video calls. Make sure that the background is not too cluttered. Avoid curtains, windows or doors, or distracting artwork in the background. Take into consideration that the participants are facing the screen as well as each other. The lighting should be even and bright. Avoid strong backlighting. The participants should not be placed in front of a window or other lighting sources. You should also avoid placing light sources directly oover the participants, as this leads to distracting shadows on the participants face. You can improve lighting by having light colored, but not bright, walls, covering any windows with curtains, and ensuring that the source of lighting is out of the picture shot.

576: What are the limitations to using ConferenceMe with a PrecisionHD USB Camera?

The following are known limitations to using the PrecisionHD USB Camera with Cisco TelePresence ConferenceMe.

• ConferenceMe may not automatically select the PrecisionHD camera as the audio device. To rectify this problem:

a. Go to *Start Menu > TANDBERG > Configure ConferenceMe*.
b. For Audio inpu, select TANDBERG Audio.

• If your computer has more than one webcam connected, ConferenceMe cannot select the PrecisionHD USB Camera in any circumstance, therefore the above steps do not work. This issue is present in software versions up to and including CC1.1.0 and ConferenceMe 1.0(1.2).

Related questions:

494: Which applications can I use with the PrecisionHD USB camera?

653: Can I use the PrecisionHD USB with OS X?

Yes, the PrecisionHD USB have been tested successfully with OS X 10.6.4 (Snow Leopard) and OS X 10.7. (Lion).

654: Can I use the PrecisionHD USB with Linux?

Yes, the PrecisionHD USB have been tested successfully with Ubuntu 10.04, Debian 5.04 and Fedora 12.

663: Why do I get a warning that the PrecisionHD USB camera is busy when I try to upgrade it?

Please make sure you have closed all programs accessing the PrecisionHD USB Camera. Programs like WebEx Connect, Messenger, Skype, Jabber Video, Movi etc. need to be closed in order to upgrade the software on the camera.

Related questions:

522: Why cannot I undock my laptop from my docking station while the PrecisionHD USB Camera is connected to the docking station?

• 1 | 1 • 1 | 1 • CISCO ...

Cisco contacts

On our web site you will find an overview of the worldwide Cisco contacts.

Go to: http://www.cisco.com/web/siteassets/contacts

Corporate Headquarters Cisco Systems, Inc.

170 West Tasman Dr.

San Jose, CA 95134 USA

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

TANDBERG is now a part of Cisco. TANDBERG® is a registered trademark belonging to Tandberg ASA.