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**What’s in this guide?**

For additional information about configuring and using your Cisco product, refer to the following URL:

http://www.cisco.com/go/telepresence/docs
Indications for Use

The Cisco TelePresence Clinical Presence System™ (CPS) enables secure and effective audio/video communication between multiple healthcare providers and between providers and patients. The system transmits real-time audio and video captured by a high-definition camera and integrated microphone. It also receives real-time audio and video from a corresponding functionally like system in a remote location. Finally, the CPS supports transmission of real-time audio and video from peripheral audio/visual medical devices, which may be connected to standard audio and video inputs provided on the system. The CPS is intended to facilitate remote provider/patient and provider/provider consultations. These consultations should always be conducted with a licensed medical professional physically in the room with the patient.

Contraindications

The CPS is not intended to substitute for the in-person physical examination of a patient or as a substitute for direct medical intervention. It is also not intended for real-time, active, or online patient monitoring, nor is it intended to provide time sensitive data or alarms. The CPS does not support transmission of numerical telemetric/serial data and is not intended for use with non-audio/visual medical devices.
Introduction

The Cisco TelePresence Clinical Presence System™ (CPS) is a uniquely designed apparatus that delivers safety, mobility, and storage.

The CPS has been researched and developed with direct input from clinical healthcare professionals to provide practical functionality and ease-of-use in medical environments while utilizing the latest in Telepresence technology, enabling practitioners to collaborate, consult, and learn with one another.

Key Features of the CPS:

- **High definition video quality**: A 1080p full high-definition system with PrecisionHD 12x optical zoom camera provide the clearest possible picture and position for maximum field of view

- **Optional power configurations**: Wireless and rechargeable battery versions of the Clinical Presence provide increased mobility and range

- **Height adjustable**: Full electronic worm drive provides accurate, variable height adjustment of platform, monitor and camera

- **Modular storage options**: Multiple optional storage configurations provide medical professionals with the ability to store and transport medical devices, laptops, PCs, keyboards and light sources

- **Ruggedized exterior**: Tactile membrane control on front panel and disposable splash guards ensure increased sterility and durability needed in telemedicine environments
Safety Precautions

Warning
This unit is heavy! Precaution should be taken during transportation of the system. If the unit needs to be wheeled over doorsteps and/or into elevators, it is recommended the unit be lifted over by at least two individuals to ensure their safety and prevent damage to the unit.

For Customers In North America
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at the user’s own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Environmental Issues
Thank you for buying a product, which contributes to a reduction in pollution, and thereby helps save the environment. Our products reduce the need for travel and transport and thereby reduce pollution. Our products have either none or few consumable parts (chemicals, toner, gas, paper). Our products are low energy consuming products.

Battery handling
Batteries for the Remote Control are Long Life and Alkaline batteries saving the environment; please follow guidelines on the packing material for handling and disposal of the batteries.

The system enclosed batteries (rechargeable batteries for lift use and for wireless use) in this product are non-user replaceable and should be removed by a service technician only.

Production of Products
Our factories employ the most efficient environmental methods for reducing waste and pollution and ensuring the products are recyclable.

Waste Handling
EU Battery and WEEE Directives
Your Cisco product may contain a user replaceable battery or a permanently affixed battery as indicated in the user manual. For product safety and data integrity reasons a permanently affixed battery should only be removed or replaced professionally by a repair technician or waste management professional. Please contact Cisco or an authorized service agent if the product fails to perform due to malfunction of the permanently affixed battery.

This symbol on a Cisco product, battery or packaging means that the product and/or battery should not be disposed of with your household waste.

It is your responsibility to dispose of your waste equipment and batteries separately from your household waste and in accordance with local laws and regulations. The correct disposal of your old equipment and batteries will help prevent potential negative consequences for the environment and human health.

Please use the nearest waste collection facility as directed by your municipality or your retailer.
Important Safeguards

Using System in a Medical Environment

No currently available technology can completely substitute for the in-person physical examination of an individual patient. Cisco TelePresence products have the ability to provide high quality audio/high resolution video over long distances; and when used properly, these products can provide a significant and valuable tool for physicians and other medical professionals who are unable to examine a patient in person. The use and value of the system will vary depending on the specific circumstances of the patient’s condition, transmission speed and the ability of audio/visual technology to be used for remote evaluations. Ultimately, judgments on how this tool should be used must be at the individual discretion of the physician or other medical personnel supervising the patient’s care.

All the equipment connected to this system shall be certified according to UL Standard UL60601-1 or other IEC/ISO/CSA Standards applicable to the equipment.

When this system is used together with other equipment in the patient area*, the equipment shall be either powered by an isolation transformer or connected to the power outlet that is at the rear of the cart, unless it is certified according to UL Standard UL60601-1.

NOTE: The power outlet provided in the system is powered from an isolation transformer. The maximum output rating of this outlet is 300 (AC) and 150 (battery powered) Watts.

The leakage current could increase when connected to other equipment.

The operator should take precautions to avoid touching the rear panel input and output circuitry and the patient at the same time.

To isolate the system from the mains supply remove the mains plug from the wall socket.

Warning on Power Connection

Use only with the supplied power cords or cords that meet local hospital-grade requirements. Users in the United States and Canada should use hospital-grade cords that meet the following requirements:

<table>
<thead>
<tr>
<th>Plug Type</th>
<th>United States</th>
<th>Canada</th>
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<tr>
<td>Cord Type</td>
<td>Hospital Grade</td>
<td>Hospital Grade</td>
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<tr>
<td>Minimum Cord Det Rating</td>
<td>10A/125V</td>
<td>10A/125V</td>
</tr>
<tr>
<td>Safety Approval</td>
<td>CSA NRTLus</td>
<td>CSA</td>
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NEVER USE AN EXTENSION CABLE TO POWER THE SYSTEM.

ElectroStatic Discharge (ESD)

With regard to testing against IEC 61000-4-2 (Edition 1.2 2001-04), the unit was observed to have its screen(s) “go black” when discharge of 4 kV or 6 kV was applied at the repetition rate of 1 pulse per second. The screen(s) self-recovered in seconds after the test. No other affects were observed.
Operator Safety Summary

For your protection, please read these safety instructions completely before operating the equipment and keep this manual for future reference. The information in this summary is intended for persons who operate the equipment as well as repair (servicing) personnel. Carefully observe all warnings, precautions and instructions on the apparatus, or the ones described in the operating instructions and adhere to them.

Also, adhere to safety guidelines found in manuals for any peripheral equipment. For your protection, the instruction manual for the LCD display is provided.

Equipment Markings

The “exclamation mark” within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions within literature accompanying the equipment.

Smash Hazard -- Please be aware of areas where there is a potential to smash or crush limbs and extremities or objects.

- Water and moisture – Do not operate the equipment under or near water – for example near a bathtub, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool or in areas with high humidity.
- Cleaning – Unplug the apparatus from the wall outlet before cleaning or polishing. Do not use liquid cleaners or aerosol cleaners. Use a lint-free cloth lightly moistened with water for cleaning the exterior of the apparatus.
- Ventilation – Do not block any of the ventilation openings of the apparatus. Install in accordance with the installation instructions. Never cover the slots and openings with a cloth or other material. Never install the apparatus near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Grounding – Do not defeat the safety purpose of the grounding-type plug. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician.
- Power-Cord Protection – Route the power cord so as to avoid it being walked on or pinched by items placed upon or against it, paying particular attention to the plugs, receptacles, and the point where the cord exits from the apparatus.
- Attachments – Only use attachments as recommended by the manufacturer.
- Lightning – Unplug this apparatus during lightning storms or when unused for long periods of time.
- Servicing – Do not attempt to service the apparatus yourself as opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty. Refer all servicing to qualified service personnel.
- Storage – If you need to store the system, ensure that it is stored in a controlled environment to avoid damage. Refer to the codec documentation for further guidelines.
- Repacking – Do not throw away the carton and packing materials. They make for an ideal container with which to transport the system.
- Mobility – Before moving the system unplug the power cord and securely wrap them around the cable wrap brackets. Unplug the table microphone and carry separately. To move the cart, hold the cart handle. You may use the camera tilt handle for local repositioning of the cart.
- Damaged Equipment – Unplug the apparatus from the outlet and refer servicing to qualified personnel under the following conditions:
  - When the power cord or plug is damaged or frayed
  - If liquid has been spilled or objects have fallen into the apparatus
  - If the apparatus has been exposed to rain or moisture
  - If the apparatus has been subjected to excessive shock by being dropped, or the cabinet has been damaged
  - If the apparatus fails to operate in accordance with the operating instructions.
Warnings

Not Intended For Dialing Emergency Medical Services
Cisco Telepresence Clinical Presence System is not intended to make emergency calls. In the event of an emergency, the user should use a telephone or device other than the Cisco Clinical Presence System to call local emergency services.

Loss of Connectivity
During the use of the Cisco TelePresence Clinical Presence System™, a healthcare professional may lose connectivity with the system, a medical device or the video conferencing system. Loss of connectivity can result from power outages, network outages, and failure in the CPS software/hardware, or other causes. Loss of connectivity can prevent a health care professional from completing the patient exam in a timely manner. In cases where performance of the examination is time critical, the user should not use the Cisco TelePresence Clinical Presence System and seek an in-person examination from a licensed healthcare professional.

Delay or Choppiness of Audio or Video Transmission
The Cisco TelePresence Clinical Presence System normally operates at a delay of no more than 20 milliseconds, meaning that the provider will experience the audio and video transmissions later than they are really occurring. In cases where the remote healthcare provider needs to make time sensitive assessments or give instructions this delay may result in misalignment of audio and visual transmissions to the real-time procedure and/or inappropriate treatment or diagnosis.

Proper Training Is Required

Camera May Not Focus
There may be times when the main CPS camera or a connected peripheral camera does not focus or loses focus. This problem can result from equipment malfunction, improper use of the camera, improper configuration, or other reasons. An improperly configured or poorly focused camera may reduce the quality of the image. The camera can be maximized on the inputs on frame rate and resolution. Please refer to the Cisco TelePresence System Codec C Series “Getting Started Guide” at http://www.cisco.com/en/US/products/ps11422/prod_installation_guides_list.html.

Audio Distortions
System Assembly

The Cisco TelePresence Clinical Presence System™ (CPS) is fully assembled with the exception of the Cisco PrecisionHD Camera, any optional accessories, and some cable connections.

- Cisco PrecisionHD Camera
- Scope Holder/Storage Bin Options
- Modular Storage Options
- Powering the Clinical Presence
  - AC Power
  - Battery Power Option
Installing the Cisco PrecisionHD Camera

1. Secure the PRECISIONHD CAMERA to the system's CAMERA SHELF using a 1/4-20 X 3/8” FLATHEAD PHILLIPS SCREW.

2. Connect the CAMERA CABLES -- bundled and loomed to the ARTICULATING ARM of the CAMERA SHELF -- to the back of the PRECISIONHD CAMERA:
   a. HDMI VIDEO OUT
   b. CAMERA CONTROL
   c. DAISY CHAIN
Installing Optional Scope Holders and/or Storage Bins

1. Determine the location(s) of where the optional HOLDER(S) or BIN(S) ought to be placed.

2. Raise the system (WORK SURFACE) about 3” so as to provide space to insert the BIN/HOLDER BRACE up the system’s column.

   **NOTE:** If the lift battery does not contain a charge, then you will need to provide power to the system in order to raise the WORK SURFACE, as well charge the lift battery.

3. Adjust the height/location for each option and use a 3/16” HEX KEY to secure the BIN/HOLDER to the BRACE with 2 HEX FLATHEAD SCREWS (5/16-18 x 1/2”).
Storage Options

The MODULAR STORAGE OPTIONS are designed to provide convenience and flexibility to the way you use the CPS.

**NOTE:** The total space available underneath the system’s WORK SURFACE / ELECTRONIC HOUSING is 18.5". The combination of the MODULAR STORAGE OPTIONS may not exceed 18.5".

It is recommended that there are two people available when installing each of these options.

- **SHELF**  
  (holds 20lbs max.)
- **KEYBOARD TRAY**  
  (holds 5lbs max.)
- **ANCILLARY SIDE TRAY**  
  (holds 15lbs max.)
- **LOCKING STORAGE DRAWER**  
  (holds 15lbs max.)
- **LOCKING STORAGE CABINET**  
  (PULL OUT TRAYS AND AREA FOR MINI PC  
  (holds 35lbs max.)
Installing a Single Modular Storage Option

1. Remove the 2 PHILLIPS SCREWS holding the WORK SURFACE in place.

2. Use the FRONT HANDLES on the WORK SURFACE to pull forward and lift to remove the WORK SURFACE.

3. Attach the EXTENDERS (2) to the front corners underneath the WORK SURFACE:
   - align the guide on each the EXTENDER to the guide holes at the bottom of the ELECTRONIC HOUSING
   - use the 5/16-18 x 1/2" PAN PHILLIPS SCREWS to secure the EXTENDERS to the CART

4. Raise the storage option to fit install underneath the work surface:
   - Align and lock the front posts to the extenders.
   - While supporting the storage option, use two 5/16-18 x 1/2" PAN PHILLIPS SCREWS to secure toward the rear of the ELECTRONIC HOUSING.

5. Screw in the CAPS to the bottom of the EXTENDERS.

6. Replace the WORK SURFACE and secure with the same PHILLIPS SCREWS.
Installing Additional Modular Storage Options

The procedure for installing any additional modular storage components is similar to the above instructions.

It is recommended that there are two people available when installing each of these options.

**NOTE:** The total space available underneath the system’s WORK SURFACE / ELECTRONIC HOUSING is 18.5". The combination of the MODULAR STORAGE OPTIONS may not exceed 18.5".

**NOTE:** If the lift battery does not contain a charge, then you will need to provide power to the system in order to raise the WORK SURFACE, as well charge the lift battery, in the event that you require more space to install any additional storage options.

1. Attach the EXTENDERS (2) to the front corners underneath the already installed module.
   - align the guide on each the EXTENDER to the guide holes at the bottom of the ELECTRONIC HOUSING
   - use the 5/16-18 x 1/2" PAN PHILLIPS SCREWS to secure the EXTENDERS to the CART

2. Raise the storage option to fit install underneath the work surface:
   - Align and lock the front posts to the extenders.
   - While supporting the storage option, use two 5/16-18 x 1/2" PAN PHILLIPS SCREWS to secure toward the rear of the ELECTRONIC HOUSING.

3. Screw in CAPS to the bottom of the EXTENDERS.
Powering the CPS

**AC Power**

1. Provide power to the system by plugging the system into a standard 120V or 230V outlet as applicable.
2. Flip the power switch to the ON position.
3. Make sure the display is ON if it has not turned on automatically.

The CPS is now ready to be configured and begin making calls.

**Battery Power Option**

1. In the same manner as removing the WORK SURFACE, remove the PHILLIPS SCREW (1) holding the BASE PLATE in place.
2. Remove the BASE PLATE by gently pulling the plate forward and then up.
3. Locate the YELLOW BATTERY CONNECTOR that extends from the battery and plug into the POWER SUPPLY UNIT.
4. Replace the BASE PLATE.
5. If the BATTERY has enough charge, then the CPS is now ready to be configured and begin making calls

Make sure the display is ON if it has not turned on automatically.

**NOTE:** If the BATTERY does not have enough charge, provide power by plugging the system into a standard 120V or 230V outlet as applicable -- this charges the BATTERY while powering the system with AC power.

**NOTE:** Providing power to the system via the AC power cord will automatically switch the system from battery power to AC power; the battery power will shut off and begin to charge from the AC power.
NOTE: The batteries in this product are non-user replaceable and should be removed by a service technician only.
Audio Schematic

NOTES:

⚠️ WHEN A HEADPHONE IS CONNECTED THE SPEAKERS ARE DISCONNECTED

Power Schematics (without Battery)

Power Schematics (with Battery)

Audio Schematics

Video Schematics

Control Schematics
Video Schematic

NOTES:

⚠️ WITH DUAL DISPLAY OPTION THE CONNECTOR ON THE I/P IS COVERED AND THIS CABLE IS CONNECTED TO THE 2ND DISPLAY
Control Schematic

NOTES:

- The wireless access point is optional.
- This port will either connect to the wireless access point or to the local LAN.
Using the System

The CPS features a simple and clean design as well as easy to use controls to efficiently and effectively operate.

- Turning the System On
- Electronic Lift
- Making a Call
- System Interface

Turning the System On

When connected to AC outlet, simply turn ON the unit with the power switch at the rear of the unit’s base.

When operating with the battery option, ensure that the power switch is ON, and also press and hold the power button for 1 second, on the battery power’s control panel. Both must be ON for the unit to function.

MOBILE OPERATION (UNPLUGGED / BATTERY DISCHARGING)

Unplug the Power Supply Module from the AC wall outlet. Ensure that the cord is safely stowed aboard the cart to reduce the risk of damage.

Use connected equipment between charges, depending on battery conditions, environmental conditions and equipment load. As the Battery Module’s charge is depleted, the Battery Charge LED Meter will indicate the approximate charge level (see chart).

To turn the Power Supply Module’s outlets (and any connected equipment) OFF and stop the battery from discharging, press the “Power” button for one second. The alarm will beep once briefly after one second has passed. Release the button. All LEDs will be OFF.

STATIONARY OPERATION (PLUGGED IN / BATTERY CHARGING)

Plug the Power Supply Module into a live AC wall outlet.* The Power Supply Module will deliver AC power to connected equipment while simultaneously charging the Battery Module.

Use connected equipment indefinitely as long as the Power Supply is connected to a live AC outlet. If the utility power fails, due to a blackout or severe brownout, the Power Supply will automatically support connected equipment with AC power from the Battery Module (if adequately charged). When power resumes after a blackout, the Power Supply will automatically resume supplying AC power and recharging the Battery Module.
Electronic Lift

The CPS has an ELECTRONIC LIFT that can be utilized by pressing the UP or DOWN indicators found at the side of the unit.

The UP/DOWN button will raise or lower unit from the MOTORIZED COLUMN.

Work Surface Heights: 38” min. / 48” max.

Please USE CAUTION when raising or lowering the unit. When the unit is in the raised position, ensure that the area below the work surface is clear to lower the unit.

**NOTE:** The lift motor is powered by a separate, rechargeable battery. When fully charged, the lift can be utilized approximately 30–40 times.

Charge the lift battery by providing AC power to the unit.

The lift battery will NOT charge with the optional system battery -- only when plugged into an AC source.

**Duty Cycle (2/18)s**

The duty cycle of this unit is 2 minutes continuous use followed by 18 minutes not in use.

Smash Hazard -- Please be aware of areas where there is a potential to smash or crush limbs and extremities or objects.
Making a Call

The CPS makes video calls and presentations using the Cisco Codec C40, housed within the system, and its accompanying Remote Control.

The system interfaces on the CPS provides simple call control options once you are connected to a video call.

Please refer to the C-Series codec documentation for instructions on placing calls and using the remote control.

You may access additional documentation online at:

http://www.Cisco.com/support/

Select DOCUMENTATION in the menu to search.
The CPS provides ease of use and sufficient input/output options. Once the system is in a call, the simple SOURCE CONTROL user interface enables efficiency with the ability to manage volume, camera controls, and quick access to any connected sources.

- Source Controls
- Side Interface
- Rear Interface
Source Controls

The SOURCE CONTROLS found at the front of the CPS are designed to provide simple use and quick access to sources when in a call.

HEADPHONE
Plug in a ¼" headphone to initiate a private audio session. All audio output from the system can be heard through the headphones -- audio will not be available from the integrated speakers and heard ONLY through the headphones.

VOLUME
+ increases system audio volume
- decreases system audio volume

CAM / ARROWS
Controls the system’s camera position.

ZOOM
+ increases system’s camera zoom
- decreases system’s camera zoom

DISPLAY LAYOUT
Toggles through various screen layouts from the Cisco Codec C40. Refer to the codec’s documentation to understand the various layouts when in a call and when not in call.

CAM
Presents the system’s camera.

AUX
Presents the source (a 2nd PHD Camera or other HDMI source) connected to the AUX input on the SIDE INTERFACE.

PC
Presents the computer connected to the PC IN / PC AUD IN input on the REAR INTERFACE.

VIDEO 1, 2, 3, 4
Displays the video sources connected to the corresponding video inputs on the SIDE INTERFACE.
Side Interface

The SIDE INTERFACE provides connectivity to video sources to be accessed using the SOURCE CONTROLS found at the front of the CPS -- designed to provide simple use and quick access to sources when in a call.

RS232 (CONTROL)
Currently not available – TBD.

CAM (CONTROL)
Used to integrate a second Cisco Precision HD Camera.

AUDIO IN 1
RCA Connector for a scope or other listening device. When a device is connected, audio will not be presented through the local integrated speakers. Audio will continue to be heard at the far end.

AUX (VIDEO INPUT)
HDMI connection may be used for a second Cisco Precision HD Camera or other HDMI source. This source is presented by pressing the AUX button on the front SOURCE CONTROLS.

VIDEO INPUTS 1, 2, 3, 4
Inputs 1, 2 and 3 are RCA connectors. Input 4 is S-Video. These sources are presented by pressing the corresponding video button on the front SOURCE CONTROLS.
Rear Interface

The REAR INTERFACE provides network, audio, and computer connectivity. The SOURCE CONTROLS found at the front of the CPS are designed to provide simple use and quick access to sources when in a call.

LAN (ETHERNET)
Connect the system to the network in order to place calls.

PC (ETHERNET)
Connect your PC to the system in order to gain network/Internet access. The CPS must be connected to the network for access.

VGA OUT
Connect a secondary display or projector to output the system’s video. May be used with LINE OUT to provide audio to a secondary speaker/audio amplifier.

LINE OUT
An RCA connector that provides line level audio to an external speaker/audio amplifier.

PC IN
A DVI-I connector to connect a computer source for presentation. This source is presented by pressing the corresponding PC button on the front SOURCE CONTROLS.

PC AUD IN
Connect a 3.5mm stereo mini plug from the computer to provide audio when presenting the PC.

MIC/LINE IN
Connect an additional microphone to the XLR input to provide additional coverage.
Cleaning the System

The surface materials of the CPS can be easily cleaned.

Please refer to the respective Materials Safety Data Sheets (MSDS) for detailed descriptions for each product from its manufacturer.

**ACTiVA Rubber Flooring™**
www.rubberfloors.com
201-804-5565

**Samsung Staron®**
www.staron.com
1-800-795-7177

**Wilsonart® Chemsurf®**
www.wilsonartlaminate.com
800-433-3222

---

**Wilsonart® Atlantis D525-60**
(blue inlaid laminate material)
Clean with warm water and mild soaps, such as those used for hands or dishes. Avoid cleansers containing abrasives, acids, or alkalis.

Stubborn stains may be removed with a 1.5 minute exposure to hypochlorite bleach followed by a clean water rinse.

**Samsung Staron®**
(white solid material)
General and everyday cleaning can be done by wiping the surface with a damp cloth or sponge, then dry with soft cloth or paper towels. An ammonia-based, non-abrasive cleaner may be used for stains.

Disinfect the surface with water-diluted liquid bleach -- approximately 4-parts water to 1-part bleach.

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**ACTIVA Rubber Flooring™**
(blue raised rubberized inlaid material)
General cleaning (avoid steel wool or abrasive pads):
1. Sweep and clean all surface dirt.
2. Use OPTI-BRITE Rubber Floor Cleaner (or equivalent product) diluted 3 oz. per gallon of warm water.
3. Wet vacuum or mop up the solution.
4. Rinse with cold water and vacuum or mop up all the rinse water.

Spot cleaning: use a mild spray solution (like Windex) on the area to be cleaned. Wipe clean with a soft, dry cloth.

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**GENERAL CLEANING:**

1. Before cleaning, ensure that the computer and monitor is turned off.
2. Direct the suction nozzle of vacuum cleaner across rows of keys on the keyboard to remove dirt/dust accumulated in between keys. Hand brush may be used to assist in removing settled dirt/dust.
3. Use cloth dampens with ethyl alcohol to wipe clean the keyboard and mouse. Do not use excessive alcohol as the disinfectant is flammable.
4. Wait until the residual alcohol has evaporated before returning the computer for normal usage.
5. Use 0.1% hypochlorite solution to wipe clean the surface of CPU and monitor casings. Wait for 5 minutes and use another piece of cloth dampened with water to clean off residual hypochlorite.
6. The glass surface of video display terminals with cathode ray tubes may be cleaned and disinfected using diluted hypochlorite solution.
7. The video display surface of LCD monitor should be wiped gently using a damp cloth.
Technical Specifications

UNIT DELIVERED COMPLETE WITH:
Base Cart with C40 codes, PrecisionHD camera, 24" widescreen LCD, integrated microphone and speakers.
AC powered and rechargeable battery versions available. AC powered unit is available in single or dual display version.

BANDWIDTH
- 1920 x 1080@30 fps (1080p30)
- 1920 x 1080@60 Hz (1080p60)
- 1920 x 1080@60 Hz (1080p)
- 1920 x 1080@50 Hz (1080p50)
- 1920 x 1080@25 Hz (1080p25)
- 1920 x 1080@29.97 Hz (1080p29.97)
- 1920 x 1080@50 Hz (1080p50)

STORAGE AND TRANSPORT TEMPERATURE
- -20°C to 60°C (-4°F to 140°F) at RH 10-90% (non-condensing) at 20-40°C, Atmo-spheric pressure: 700 to 1060 hPa

APPROVALS
- CAN/CSA-22.2 No. 601.1 UL Standard No. 60061-1
- CEC 60061-1-2

LIFT DUTY CYCLE (210)
The lift duty cycle of this unit is 2 minutes con-tinuous use followed by 18 minutes not in use.

DIMENSIONS (approximate)
- Width: 25’’x33.5’’
- Depth: 33’’x83.8’’
- Height: lift down: 67’’/170.2 cm
- Lift up: 77’’/195.6 cm
- Weight: AC powered/Single display: 270 lbs/122.5 kg
- Battery powered/Single display: 310 lbs/140.6 kg

All specifications subject to change without notice, system specifics may vary.
All images in these materials are for representa-tional purposes only, actual products may differ.
MTBF PRODUCT RELIABILITY/MTBF
- 250% to 90% Relative Humidity (RH)
- Atmospheric pressure: 700 to 1060 hPa
- Power On Hours (POH) > 69,000 hours
- Expected random Mean Time Between Failures (MTBF) for the electronic components based on the Power On Hours:
- All images in these materials are for representa-tional purposes only, actual products may differ.
- TANDBERG and Expressway are registered trademarks or trademarks of TANDBERG in the U.S. and other countries.
- All other trademarks are property of their respec-tive owners.

MTBF PRODUCT RELIABILITY/MTBF
- 270 lbs/122.5 kg
- Useful Life Cycle > 6 years
- ISO 9001 certificate for the code is available upon request

20% to 90% Relative Humidity (RH)

All images in these materials are for representa-tional purposes only, actual products may differ.
Troubleshooting & Frequently Asked Questions

Troubleshooting

POWER

No power to monitors
Verify power to the cart and the monitors are switched on. Once on, powering on/off the cart will automatically power the on monitors.

No power to camera
Verify power to the cart and connection to the rj-45 control port of the camera.

No power to cart
Verify the unit is plugged in, the rear input switch is on, and the circuit breaker is not tripped. If the unit is a DC powered version of the CPS, verify the power button on the front near the speakers is on.

AUDIO

No audio from the system.
Use volume controls to make sure the volume is at a reasonable level (approximately 75%). Make sure the headphone jack is clear and audio output 1 is “on” in the advanced audio setup. Audio alert tones and ringer settings may be sampled to verify audio from the codec.

Far side cannot hear me
Verify that the microphone is not muted (no on-screen mute icon ( )). Check the audio input levels screen in the advanced configuration for microphone 1.

Can't hear Audio Input Locally
Audio input 1 cannot be heard locally through the speakers, as it would cause feedback. Input 1 is reserved for devices such as stethoscopes where headphones would typically be used.

VIDEO

No video on the monitors
Make sure power is going to the monitors and the hdmi inputsource is selected on the monitor. Ensure the codec is not in a sleep state by pressing a button the remote control or front button panel.

PC not recognized by the codec, not shown on the monitor when selecting PC input.
Maximum resolution for the DVI and HDMI inputs is 1920 x 1080 @ 60 Hz (1920 x 1200 at 50 Hz). Resolutions above that will not be recognized by the codec.

Only selfview from the rear (second) video output (single monitor system only).
The second video output will only show the selfview unless the Dual Monitor option key is installed. The key may be entered within the web interface.

Presenter option issues/No Content sharing.
The Presenter Package option may not be installed. Check the system information screen to verify the Presenter Package is installed. The presenter package should be default on the CPS if the package is not installed, contact technical services.

Can't see the far end in a call, selfview only.
Verify that the selfview is not selected with the remote control. Pressing the selfview button ( ) on the remote control will toggle between far and near end video.

Far side video blocky/discolored/frozen Disruptions apparent in the datastream.
Percentages of lost packets can be viewed in the call status pages. Attempting calls at lower bandwidths may lessen or eliminate the disruptions.

How do I see my selfview?
Pressing the selfview button ( ) on the remote control will toggle between far and near end video.

CONTROL

No control of the camera
Verify power to the camera and no menus are on the screen for remote operation. Remote should be pointed at the camera. Verify remote control operation can be verified by directing the remote directly into the lens of the camera at a distance of 2-3 inches. Then when viewing the selfview, the IR transmitter should be blinking. If not change remote control batteries.

Not able to switch video inputs/buttons
Verify Dataport 1 baud rate is set to 38400 N,8,1 in the dataport advanced settings.

Lift not functioning
Lift battery may be drained. Plug unit into a power source to charge.

Cannot make multisite calls
Verify the Multisite Option key has been installed on the system by viewing the system information screen. Use the green “Connect” key to connect another participant.

Remote control not working
Remote should be pointed directly at the camera for operation. Correct remote control operation can be verified by pointing the remote directly into the lens of the camera. The IR transmitter should be blinking. If there is no indication of transmission, change remote control batteries.

Frequently Asked Questions

How do I get the CPS software version and IP address?
Press and hold the Main Cam video source selection on the touch button membrane. The CPS software version and IP address will be displayed on the screen.

Where can I find additional information, downloads, and manuals?
Additional information can be found at the Cisco website listed below:

United States:

International (select Support > Documentation):
http://www.cisco.com/web/siteassets/locator/index.html

How many devices may I connect to the AC outlets on the rear of the cart?
The AC only version of the CPS will allow a maximum of 400 Watts from the rear AC outlets. The maximum total output on a AC/DC powered cart allows for 150 Watts maximum.

Can I access the CPS remotely?
Call control and endpoint configuration is available through the codec’s web interface. Enter the username and password for permissions. The default username is “admin” without a password.

Who do I contact for system repairs?
For assistance regarding repairs to the CPS, contact Cisco Systems:

Electromagnetic Emissions Safety Summary

The Teleconferencing Unit is intended for use in the electromagnetic environment specified below. The customer or the user of the Teleconferencing Unit should assure that it is used in such an environment.

Guidance and manufacturer's declaration -- electromagnetic emissions -- for all ME equipment and ME systems (See clause 5.2.2.1 of IEC 60601-1-2:2007)

<table>
<thead>
<tr>
<th>Emissions test</th>
<th>Compliance</th>
<th>Electromagnetic environment -- guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF emissions CISPR 11</td>
<td>Group 1</td>
<td>The Teleconferencing Unit uses RF energy only for its internal function. Therefore, its RF emission are very low and are not likely to cause any interference in nearby electronic equipment.</td>
</tr>
<tr>
<td>RF emissions CISPR 11</td>
<td>Class A</td>
<td>The Teleconferencing Unit is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.</td>
</tr>
<tr>
<td>Harmonic emissions IEC 61000-3-2</td>
<td>N/A</td>
<td>The Teleconferencing Unit is intended for use in an electromagnetic environment -- guidance</td>
</tr>
<tr>
<td>Voltage fluctuation/flicker emissions IEC 61000-3-3</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

Recommended separation distances between portable and mobile RF communications equipment and the ME equipment or ME system (See clause 5.2.2.2) of IEC 60601-1-2:2007)

The Teleconferencing Unit is intended for the use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Teleconferencing Unit can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Teleconferencing Unit as recommended below, according to the maximum output power of the communications equipment.

**Recommended separation distances**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Separation Distance (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 KHz to 80 MHz</td>
<td>$d = \frac{1.5}{P_{out}}$</td>
</tr>
<tr>
<td>80 MHz to 800 MHz</td>
<td>$d = \frac{1.0}{P_{out}}$</td>
</tr>
<tr>
<td>800 MHz to 2.5 GHz</td>
<td>$d = \frac{1.2}{P_{out}}$</td>
</tr>
</tbody>
</table>

For transmitters rated at a maximum output power not listed above, the recommended separation distance in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where $P_{out}$ is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**NOTE 1:** At 800 MHz and 800 MHz, the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Guidance and manufacturer's declaration -- electromagnetic immunity -- for all ME equipment and ME systems (See clause 5.2.2.1.f) of IEC 60601-1-2:2007)

<table>
<thead>
<tr>
<th>Immunity test</th>
<th>IEC 60601 test level</th>
<th>Compliance level</th>
<th>Electromagnetic environment -- Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic discharge (ESD)</td>
<td>x6 kV contact</td>
<td>x6 kV contact</td>
<td>Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.</td>
</tr>
<tr>
<td>Harmonic emissions</td>
<td>≤2 kV</td>
<td>≤2 kV</td>
<td>Mains power quality should be that of a typical commercial or hospital environment.</td>
</tr>
<tr>
<td>Electrical fast transient/ burst</td>
<td>≤1 kV</td>
<td>≤1 kV</td>
<td>Mains power quality should be that of a typical commercial or hospital environment.</td>
</tr>
<tr>
<td>Surge</td>
<td>≤1 kV differential mode</td>
<td>≤1 kV differential mode</td>
<td>Mains power quality should be that of a typical commercial or hospital environment.</td>
</tr>
<tr>
<td>Voltage dips, short interruptions and voltage variations on power supply input lines</td>
<td>≤5 % UT (&gt;95 % dip in UT) for 0.5 cycle</td>
<td>≤5 % UT (&gt;95 % dip in UT) for 0.5 cycle</td>
<td>Mains power quality should be that of a typical commercial or hospital environment.</td>
</tr>
<tr>
<td>Power frequency (50/60 Hz) magnetic field</td>
<td>3 A/m</td>
<td>3 A/m</td>
<td>Power frequency magnetic fields should be at levels characteristic of a typical location is a typical commercial environment.</td>
</tr>
</tbody>
</table>

**NOTE:** UT is the a.c. mains voltage prior to application of the test level.

Recommended separation distance:

- Conducted RF: IEC 61000-4-6
  - 3 Vrms
  - 150 kHz to 80 MHz
- Radiated RF: IEC 61000-4-3
  - 3 V/m
  - 80 MHz to 2.5 GHz
  - 800 MHz to 2.5 GHz

**NOTE 1:** At 80 MHz and 800 MHz, the higher frequency range applies.

**NOTE 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radio, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Teleconferencing Unit is used exceeds the applicable RF compliance level above, the Teleconferencing Unit should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as relocation of the Teleconferencing Unit.

(b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than $\frac{6}{10}$ V/m.
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