Overview, Required Tools, Preinstallation Checks, and List of Hardware Fasteners

Important Updates for the Cisco TelePresence Experience and Order Assurance Program

While immersive TelePresence orders are processed in the same way as other Cisco collaboration endpoints, the Cisco Advanced Technology Partner (ATP) performs additional network and room readiness before the system is installed into the customer’s premises. It is the partner’s responsibility to make sure that all network and room readiness is performed prior to the system being powered on and connected to the customer’s network. This preparation ensures the best immersive experience.

The partner will design and implement your network for your immersive system using the latest requirements and guidelines for bandwidth, Quality of Service (QoS), latency, packet loss, and packet jitter. In addition, the partner will make sure that the room in which the system is installed follows all room requirements that are provided in Chapter 2, “Room Requirements for the TX9000 and TX9200 Systems.”.

This room readiness information was previously performed by partners using the Room Readiness Assessment (RRA) and Network Path Assessment (NPA) tools. For more information about the RRA and NPA, refer to the Experience and Order Assurance page at http://tools.cisco.com/tsbu/oa/index.html.

For more partner-specific room and network information, refer to the Cisco TelePresence partner community, located at the following URL (partner-level login required): https://communities.cisco.com/community/partner/collaboration/bizvideo/tp
Differences Between the CTS-3010 and CTS-3210 Installation and the TX9000 and TX9200 Systems

If you have installed Cisco TelePresence System 3000 series systems, be aware that you cannot use the same procedures for building the Cisco TelePresence System TX9000 (TX9000) or Cisco TelePresence System TX9200 (TX9200).

Be sure to follow all leveling procedures in this manual. In particular, note any variances in the floor level and adjust the system to accommodate the variances.

An important difference is the installation of the spools to the displays. Be sure that you install the spool tightly to the display and do not use them as a leveling device; failure to do so can cause the displays to be out of level with the rest of the system.

Tools and Equipment List

To assemble the CTS-TX9000 and CTS-TX9200, you need the following tools and equipment:

Uncrating and Unpacking:
- Claw hammer or small pry bar
- Large Phillips screwdriver
- Long Phillips screwdriver or extension for Phillips bit
- Pallet jack or hand cart (for moving component boxes to installation site)
- Safety gloves
- Cloth gloves (for installing the reflector panels)
- Safety glasses

Cisco TelePresence System TX9000 Structure Assembly:
- Cordless Driver
- Phillips #0, #1, #2, #3 bits and hand tools
- Extension for the Phillips bits, or a long handled screwdriver
- Ratchet box wrench set with Metric sizes, or power tool Metric wrench set
- (For optional seismic anchors only) 3/4” box end wrench
- M6, M7, and M8 sockets and combination wrenches
- Size 14 Wrench for Structure leveling feet
- Size M5.5 nut driver for M3 nut (used for the power/Ethernet outlet assemblies in the table legs)
- Metric Allen (hex) wrench set
- Laser level with tripod (flexible type recommended)
- Bubble Levels (1’ and 3’)
- Stud Finder
- Box cutter or tin snips (for removing the tabs on the center rear panel—systems with free-standing reflector walls only)
• Wall-mounted reflector wall systems only:
  – Appropriate fasteners depending on your type of wall (concrete, concrete block, brick, or drywall). All types of walls require an anchor. If your wall is drywall, it is recommended that at least 2 screws per L bracket go through the stud.
  – Jigsaw and drill bit (for cutting outlet holes in the reflector, if required).
• (Optional) furniture sliders
  You can use furniture sliders (flat plastic pieces) to place under items you need to move. For example, you can place the sliders under the table legs if you need to move the second row table for TX9200 systems.

Pre-Installation Checks

Before you install the system, you must perform the following pre-installation checks:

• Checking the Physical Condition of System Packaging, page 1-3
• Checking the Function of the 65-Inch Display Prior to Installation, page 1-3

Checking the Physical Condition of System Packaging

Items should be received at the installation site with the packaging in good condition. In particular, display packaging should be undamaged, and the tilt indicators on the displays should show that the displays have remained upright during transit.

If you see any damage to the system packaging prior to installation, document the damage by taking pictures and contact the Cisco Technical Assistance Center (TAC) before you begin installation.

Checking the Function of the 65-Inch Display Prior to Installation

Reports from installers in the field have indicated that some displays are not functional after they are shipped to the installation site. To avoid installing a non-functional display, perform a pre-installation check on the displays after you remove the cardboard overpack, but before you completely remove the display from its packaging.

To perform the display integrity check, complete the following steps:

---

**Step 1**

Remove the outer box from the display packaging.

**Note**

You can leave the display in the rest of its packaging for this check, as long as you can access the power cord outlet and the DVI connectors on the lower part of the display.
Step 2  Look at the rear of the display. Plug the power cord into the display and a power outlet, then turn on the display.

*Figure 1-1  Plugging the Power Cord Into the Display*
Step 3  Check the LED on the front of the display.

- If the LED is orange, proceed to Step 4.
- If the LED is unlit, recheck the power cable. If this problem persists, report the problem to Cisco technical support.

Figure 1-2  Checking the LED
Step 4  Plug a display source into the DVI input of the display.

*Figure 1-3  Attaching a DVI Cable to the Display*
Step 5  Check that the LED on the front of the screen is green and that the signal from the DVI source video is being displayed on the screen.

- If the LED is green and the signal from the DVI source video displays on the screen, this procedure is complete, and this display is ready to be installed.
- If the LED is not green, or is the signal from the DVI source video is not displayed, proceed to Step 6.

Figure 1-4  Checking for the Green DVI on the Screen
Step 6  Access factory mode on the system by completing the following steps:

a. Remove the two screws that attach the metal switch cover next to the power outlet.

Note  If required, detach the power cord, then reattach it after you remove the cover.

b. Remove the metal switch cover.

Figure 1-5  Removing the Metal Switch Cover
c. Press the button underneath the cover to enter factory mode.

*Figure 1-6  Pressing the Factory Mode Button Under the Factory Mode Cover*
Step 7  Check the LED on the front of the screen and the display screen and perform one of the following actions:

- If the LED on the front of the display is green, the display shows a multicolored pattern, and the Checksum data shows “15FC” on the upper left side of the screen, press the Factory Mode button again and reattach the factory mode cover. You are finished with this procedure, and this display is ready to be installed.

![Checksum Value](image)

- If the LED is orange, or the display remains blank, double-check the signal cable coming in to the DVI connection. If the LED remains orange, report the problem to Cisco technical support.

Note  If the LED is flashing, make a note of the flashing pattern and report the pattern to Cisco technical support.

---

**Installation Overview**

The order of steps differ depending on your type of system:

- To install a system that uses a wall-mounted reflector wall, see the “Instructions for Systems That Use a Wall-Mounted Reflector Wall” section on page 1-10 for the order of steps.
- To install a system that uses a free-standing reflector wall, see the “Instructions for Systems That Use a Free-Standing Reflector Wall” section on page 1-11 for the order of steps.

**Instructions for Systems That Use a Wall-Mounted Reflector Wall**

To install a system that uses a wall-mounted reflector wall, follow this order:

**Step 1**  Install the reflector wall to the wall of the room by going to Chapter 3, “Installing the Wall-Mounted Reflector Wall Structure,” and complete the steps in that chapter.
Step 2  After you install the reflector wall, continue the installation of the system by completing the steps in Chapter 4, “Installing And Performing Initial Leveling of the Main Display Structure.”

Step 3  Continue the installation steps in sequential order, skipping Chapter 6, “Installing the Free-Standing Reflector Wall Structure.”

**Instructions for Systems That Use a Free-Standing Reflector Wall**

To install a system that uses a free-standing reflector wall, start at Chapter 4, “Installing And Performing Initial Leveling of the Main Display Structure,”, and continue the installation steps from that place in the book sequential order.