RADVISION®
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Scopia XT Telepresence

Deployment Guide

Version 3.2

For Solution 8.2

3.2

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Chapter 1 | About Scopia XT Telepresence

Scopia XT Telepresence is a videoconferencing system which is used to create video meetings with a telepresence effect. A telepresence system consists of two or more endpoints which work together to create a wider image, creating a simulated experience of participants being present in the same room.

Figure 1: The Scopia XT Telepresence

You can use the Scopia XT Telepresence both in Scopia Solution deployments and in third party video deployments. In both cases Scopia Management and Scopia Desktop Server must be deployed in the network. These components provide connectivity between your Scopia XT Telepresence and any other telepresence system, including third party systems.

To support videoconferences between your Scopia XT Telepresence and other H.323 endpoints, you need to add a Scopia Elite MCU to the deployment (Figure 2: Scopia XT Telepresence topology on page 6).

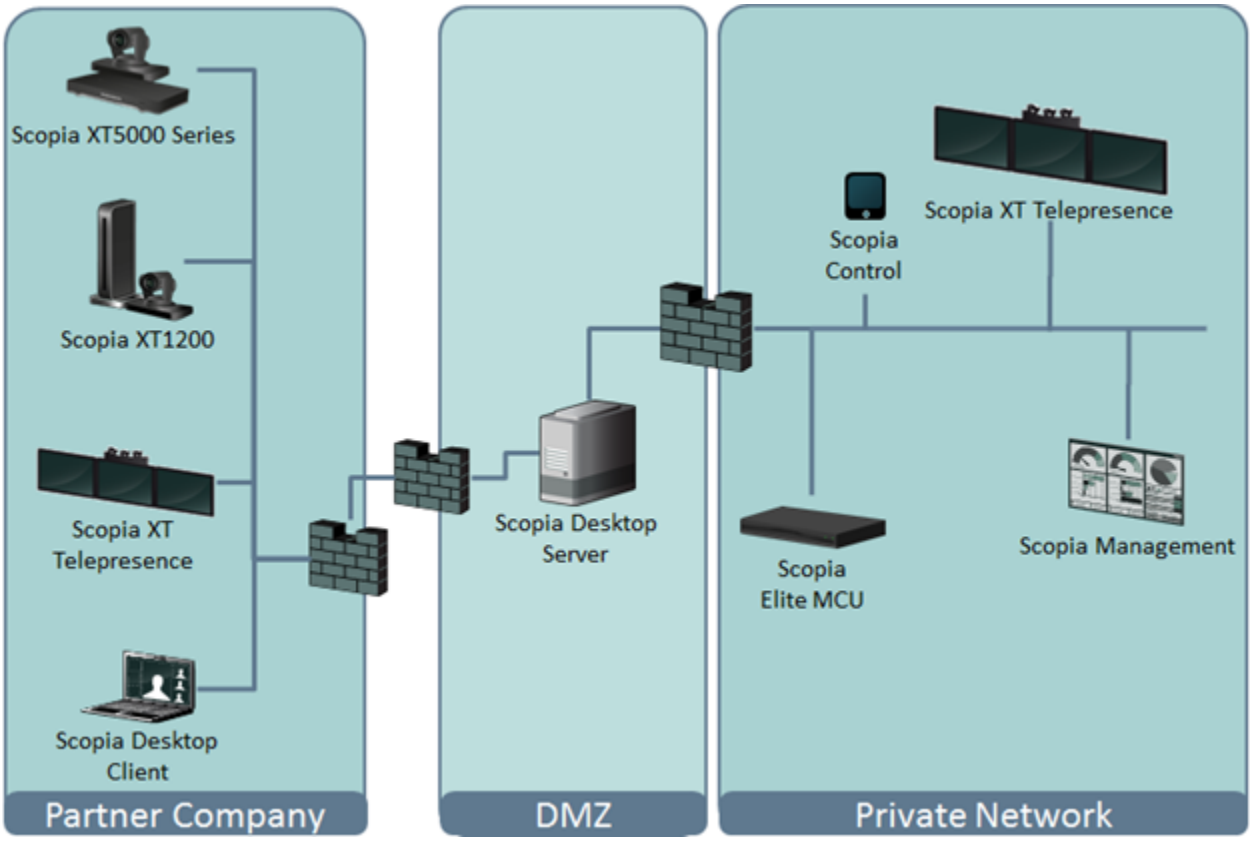

Figure 2: Scopia XT Telepresence topology

In deployments with the Scopia Elite MCU, you can moderate your meetings by inviting participants, muting other participants and terminating the meeting.

The Scopia XT Telepresence platform relies on three Scopia XT Series systems (sold separately), which are installed and calibrated specifically for telepresence. When you register the Scopia XT Series systems, you are given a telepresence license which enables the telepresence feature as well as support for Scopia Control, which transforms an Apple® iPad™ device into a remote control for the Scopia XT Telepresence platform.

Before purchasing the Scopia XT Telepresence platform, the following components are required:

- Three XT Series systems, where each one includes a XT Codec Unit, a Sony Camera, Microphone Pods, and a XT Remote Control Unit.
- Scopia Management with build-in Scopia Gatekeeper installed on a server.

  Scopia Management with a 10-port license is provided at no extra cost.
- Three 50”-65” monitors to display the participants, and an extra monitor or projector for displaying presentations.
- Audio amplifier and speakers
- An Apple iPad with Scopia Control installed.

The Scopia XT Telepresence package includes the following components:

- A bracket for mounting cameras
- A product CD-ROM containing:
  - Scopia XT Telepresence calibration application for versions older than 3.2
  - Deployment Guide for the Scopia XT Telepresence

- Three XT Series customer letters containing product keys for each of the Scopia XT Series systems
- Scopia Desktop Server license for 10 ports.

You can use Scopia XT Telepresence in standard size telepresence rooms hosting up to 6 participants (see Figure 1: The Scopia XT Telepresence on page 5) as well as in dual row telepresence rooms for up to 18 participants (see Figure 3: The Scopia XT Telepresence deployed in a dual row telepresence room on page 7).

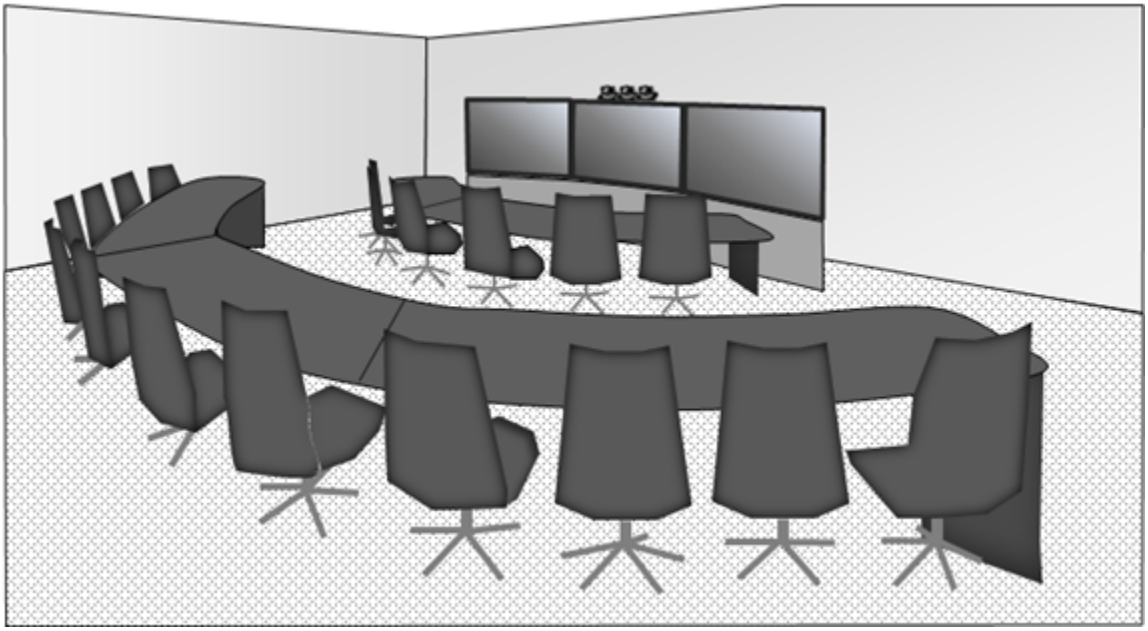

Figure 3: The Scopia XT Telepresence deployed in a dual row telepresence room

This publication describes the latest version of the Scopia XT Telepresence product which uses XT5000 Series XT Codec Units. For information about Scopia XT Telepresence using Scopia XT1200 XT Codec Units, refer to the following documents:

- *Deployment Guide for Scopia XT Telepresence version 1.0*
- *Deployment Guide for Scopia XT1200*
- *User Guide for Scopia XT1200*

Chapter 2 | Setting up the Telepresence Room

Creating the telepresence effect requires carefully choosing the telepresence room. This section contains guidelines to help you choose the optimal room and convert it into the ideal telepresence room.

You can deploy Scopia XT Telepresence in a standard size telepresence room hosting up to 6 participants or, for special cases, in a dual-row telepresence room for up to 18 participants.

Deploying Scopia XT Telepresence in a dual row telepresence room differs from deploying it in a standard telepresence room. Be sure to perform only procedures relevant for your deployment.

Navigation

- Choosing a Telepresence Room on page 8
- Creating the Ideal Telepresence Room on page 10
- Choosing Monitors for Your Scopia XT Telepresence on page 13

Choosing a Telepresence Room

The quality of the telepresence experience depends on your choice of the room for telepresence.

Ensure that the room you choose meets these requirements:

- Physical dimensions

Table 1: Recommended physical dimensions for telepresence rooms

Dimensions	Standard telepresence room	Dual-row telepresence room
Width	4 - 4.6m	9.5m
Depth	6m - 9.2m	8m
Height	3-5m	3-5m

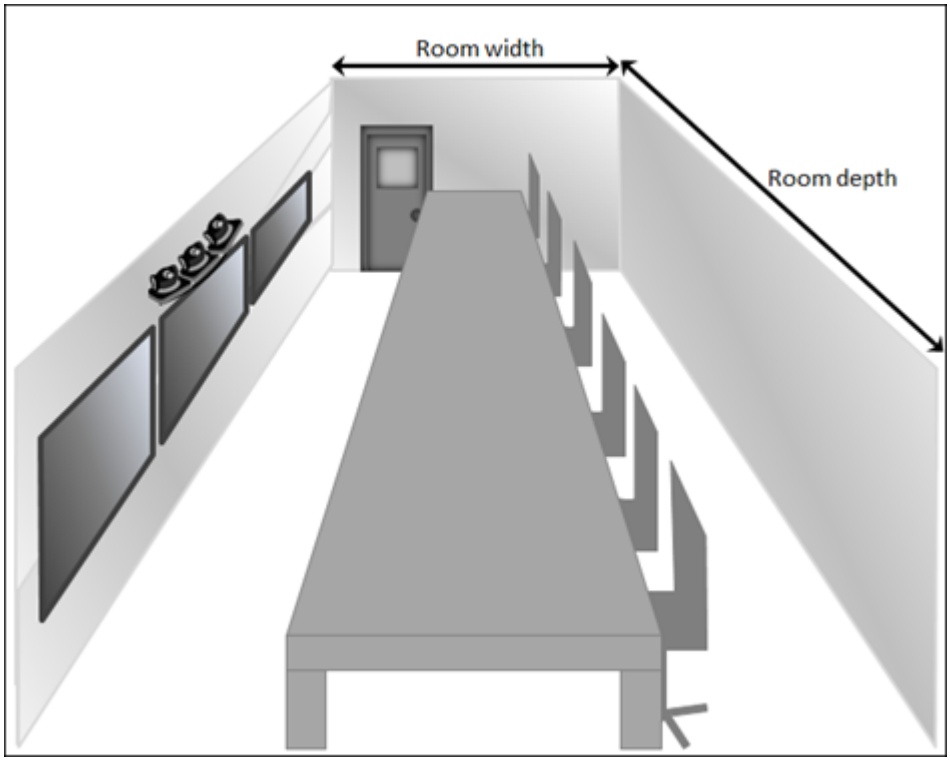

Figure 4: Recommended structure and dimensions for a standard telepresence room

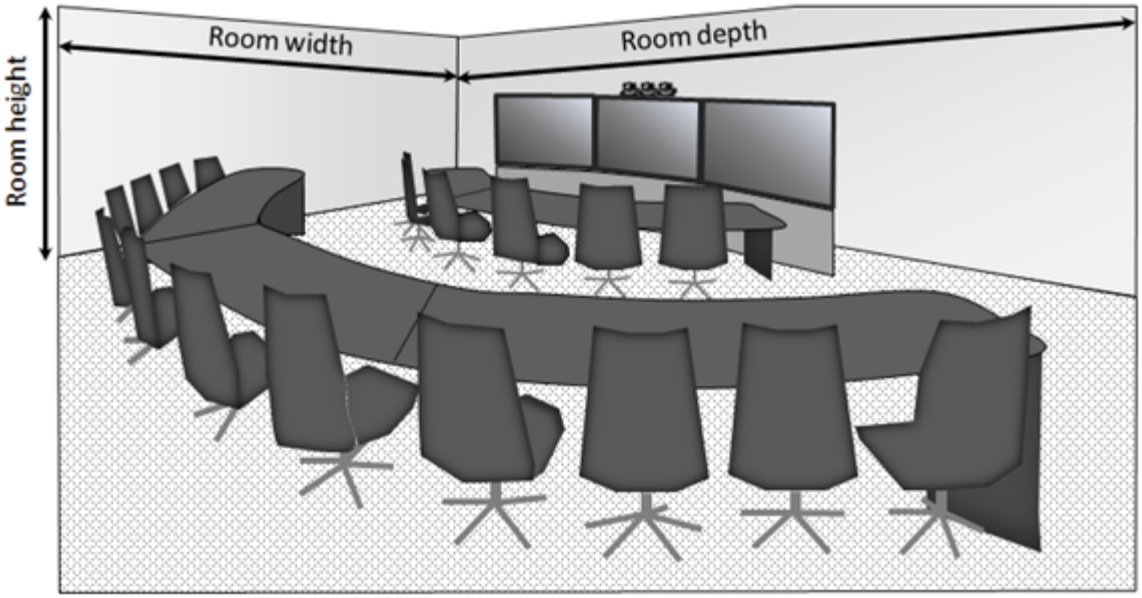

Figure 5: Recommended dimensions for a dual row telepresence room

Important:

Choosing a different sized room can cause image and sound distortions that can detract from the telepresence effect.

- Room structure

  Ideally, the telepresence room should have no windows. If a room without windows is not available, ensure the windows are covered with blinds or thick curtains.

The door should be out of the camera view when the Scopia XT Telepresence is installed (Figure 4: Recommended structure and dimensions for a standard telepresence room on page 9).

Ensure that the air conditioning system is not louder than 45 dBA in the area where you plan to place the table with Microphone Pods on it.

To avoid noise coming from outside choose a quiet room that is not adjacent to other rooms.

- Room contents

  If there is furniture or equipment in the room, ensure it can be moved to the side, out of the camera's range.

- Materials

  Avoid using hard or polished materials which exaggerate light and sound reflections in the Telepresence room. For example:

  - Glass surfaces (room partitions or furniture elements)
  - Polished wood or marble floor
  - Plasterboard false ceiling
  - Wooden furniture

  If your room has floors and walls made of the materials listed above, you can modify your room as described in Creating the Ideal Telepresence Room on page 10.

- Power supply
  - A stable circuit supporting minimum 2640 W
  - Nine power sockets on the wall where you plan to place monitors (100-240V AC2,5A).
  - Six power sockets under the table
- Network connections
  - Three wired Gigabit Ethernet (RJ-45 UTP) connections on the wall where the Scopia XT Telepresence will be placed.
  - A wireless connection for the Scopia Control running on an iPad.
  - Additional LAN connections allow participants to use their portable computers during the telepresence meeting.

In addition, make sure the room can be modified to adjust its lighting, color, and use of materials to the needs of telepresence. For more information, see Creating the Ideal Telepresence Room on page 10.

Creating the Ideal Telepresence Room

This section contains guidelines and recommendations to help you to create a telepresence room.

You can deploy Scopia XT Telepresence in a standard size telepresence room hosting up to 6 participants or, for special cases, in a dual-row telepresence room for up to 18 participants.

Deploying Scopia XT Telepresence in a dual row telepresence room differs from deploying it in a standard telepresence room. Be sure to perform only procedures relevant for your deployment.

Important:

The guidelines in this section must be very closely observed to guarantee the best telepresence experience in your telepresence room.

- Carefully choose the colors and room surfaces:

  If the room has a floor or walls made of hard, polished or laminated material, cover them with material that does not produce sound and light reflection:

  - Use a fitted carpet on the floor.
  - Upholster the walls with fabric, except for the wall which serves as the background for meeting participants.
  - Color the background wall with a neutral gray color. For best results we strongly recommend the PANTONE 422U shade as background.

    If you are creating a dual-row telepresence room, you can use a panel 1.4m x 8m of a neutral color to cover the background wall. The panel can be straight (parallel to the wall) or semicircular (following the angle of the tables). Place the panel at 30cm height from the floor, as shown in Figure 6: Placing the panel on the background wall for a dual-row telepresence room on page 11.

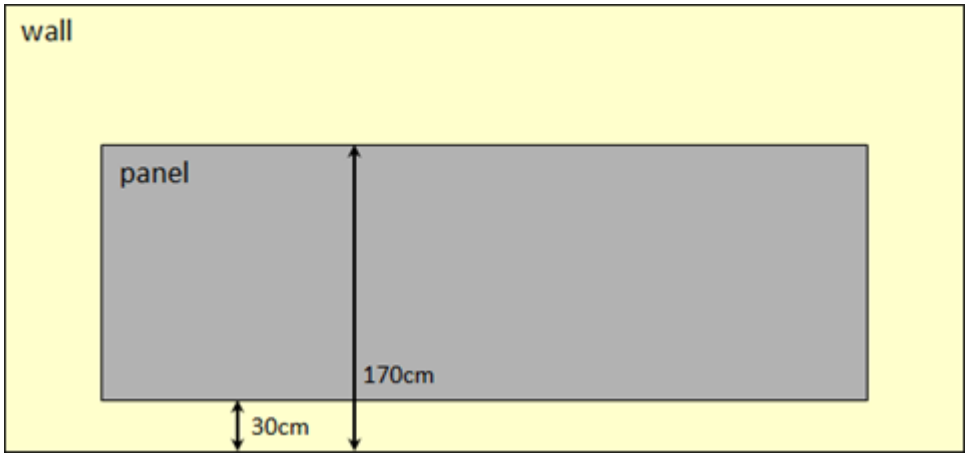

Figure 6: Placing the panel on the background wall for a dual-row telepresence room

  - Choose a matte or flat wall paint to avoid light reflection.

- Choose the lighting to create a uniform indirect ambient light:
  - Cover any windows with gray or light blue blinds or thick curtains. There should be no outdoor light in the telepresence room.
  - Use fluorescent bulbs with electronic ballast that provide a color temperature of 3500K-4100K. The recommended color temperature is 4000K-4100K.
  - The brightness reflected off a participant's face must be 300 lux minimum.
  - Install light fixtures for indirect light (Figure 7: Suggested lamp locations on page 12) to ensure soft lighting.
  - Install the lamps so that they are not located directly above the areas where you plan to place monitors and the table. This allows you to provide an evenly distributed ambient lighting in the room. See Figure 7: Suggested lamp locations on page 12 for suggested lamp locations.

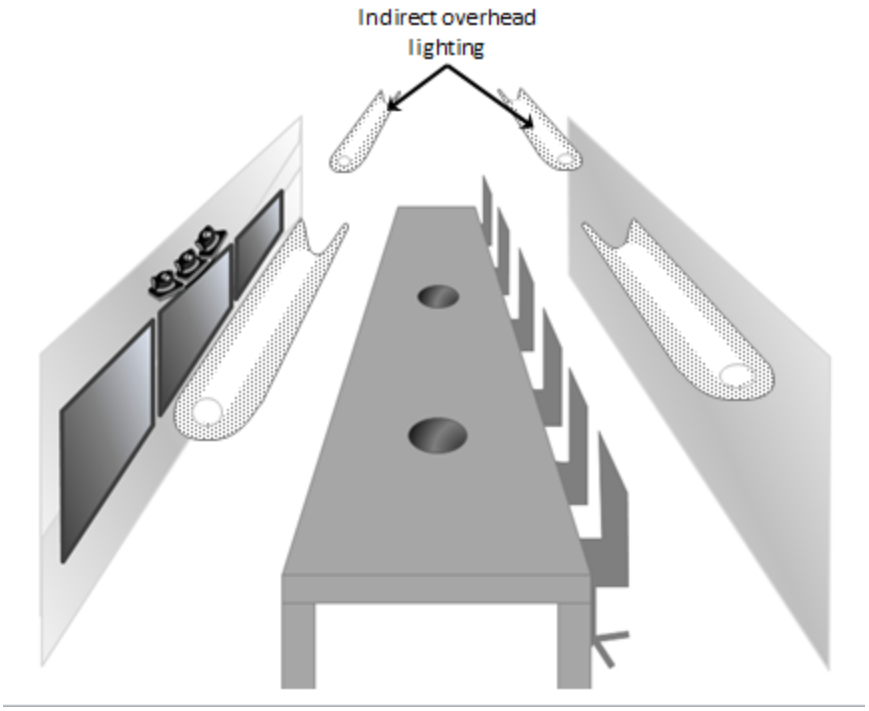

Figure 7: Suggested lamp locations

- Carefully choose and position the furniture:

  Carefully place the monitors at the appropriate height, so that the bottom of each screen (not frame) is aligned with the height of the table. Mount the monitors' brackets or stands to ensure the height of the monitors are correct.

  Do not fix the furniture position before the monitors are placed.

  - The table (or tables for a dual-row room) should not be made of hard, polished or laminated material like wood or metal. We strongly recommend using a matte or plastic table surface. The height of the table should be standard: 71-75cm; ideally 72cm.
  - For a dual-row telepresence room choose three tables of the front row for six participants and three tables of the back row for 12 participants. Ensure that the back row tables are built so that they do not expose participants' legs. The tables must be of these dimensions (Figure 8: Table dimensions on page 13):
    - Front row tables: 70 x 290cm
    - Back row tables: 70 x 290cm

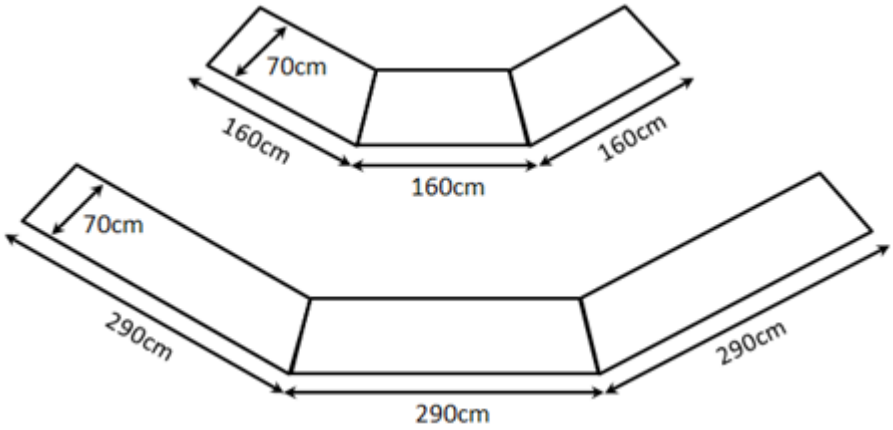

Figure 8: Table dimensions

Important:

Deploying Scopia XT Telepresence in a dual row telepresence room differs from deploying it in a standard telepresence room. Be sure to perform only procedures relevant for your deployment.

- The chairs should be plastic or with fabric upholstery, height adjustable.

- Provide power and network infrastructure:
  - Make necessary changes to provide the sufficient power supply and network connections as described in Choosing a Telepresence Room on page 8.
  - Install a network switch in the room
  - Install a wi-fi router in the room
- Isolate noise

  If the room is adjacent to other meeting rooms or offices, make sure you perform necessary changes to isolate noise coming from outside.
- Put up notices warning meeting participants that they should not use cellular phones during a telepresence meeting to avoid electromagnetic interference.

Choosing Monitors for Your Scopia XT Telepresence

Monitors are not included in the Scopia XT Telepresence kit so you can choose the monitors that match your telepresence room dimensions and provide the image quality that you need.

This section explains how to choose monitors for the Scopia XT Telepresence.

There are two types of monitors deployed in the Scopia XT Telepresence: monitors that are used to show meeting participants (referred to as “TP monitors”) and a single monitor that is used for displaying presentations (the “presentation monitor”).

The recommended size of the presentation monitor is 42 inches.

The TP monitor size depends on the telepresence room dimensions, therefore we strongly recommend choosing monitors only after you chose the room. For guidelines on choosing the telepresence room, see Choosing a Telepresence Room on page 8.

All TP monitors in your telepresence room must be the same size and model to provide image consistency.

The remote telepresence system can have different sized monitors. However, if the height to width ratios of monitors are significantly different, meeting participants will appear slightly shorter or taller than in real life; which may ruin the telepresence effect. For example, the image transmitted from a telepresence system using 65” monitors to a telepresence system using smaller, 50” monitors will appear smaller, causing people to look shorter than they really are. Therefore, we recommend, whenever possible, to create telepresence meetings between systems using TP monitors of the same height to width ratio.

If you are deploying Scopia XT Telepresence in a dual row telepresence room, always use 65” TP monitors.

Important:

Deploying Scopia XT Telepresence in a dual row telepresence room differs from deploying it in a standard telepresence room. Be sure to perform only procedures relevant for your deployment.

If you are deploying Scopia XT Telepresence in a standard telepresence room, follow the guidelines in Table 2: Choosing TP monitors depending on the Telepresence room dimensions on page 14 to choose the TP monitors for your telepresence room.

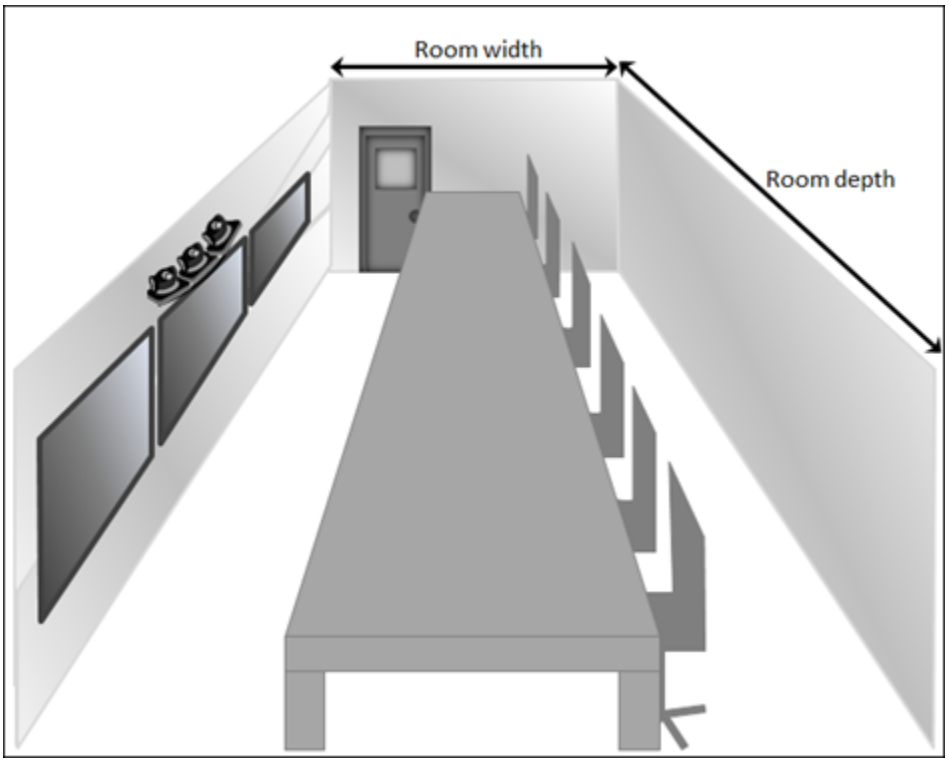

Figure 9: Standard telepresence room dimensions

Table 2: Choosing TP monitors depending on the Telepresence room dimensions

Minimum room width (meters)	Minimum room depth (meters)	Monitor size (inches)
4	5.26	50”
4.10	5.51	55”

Minimum room width (meters)	Minimum room depth (meters)	Monitor size (inches)
4.30	5.92	60”
4.40	6.26	65”

Use the minimal room dimension to choose TP monitors. For example, if you have a 4x6m room, you choose monitors that match 4m width, not 6m depth.

Chapter 3 | Setting up Your Scopia XT Telepresence

This section guides you through the Scopia XT Telepresence setup and provides this information:

Navigation

- Placing Components of Your Scopia XT Telepresence on page 16
- Placing Furniture in your Standard Telepresence Room Setup on page 30
- Placing Furniture in your Dual-Row Telepresence Room on page 31

Placing Components of Your Scopia XT Telepresence

The room housing the Scopia XT Telepresence also requires the correct placement of the various components of the system, including its Microphone Pods, cameras, speakers and monitors.

The following names are given to the various components of the Scopia XT Telepresence deployment (Figure 10: Scopia XT Telepresence components on page 17):

- Auxiliary-L refers to the camera and the monitor positioned on the left and XT Series connected to them.
- Primary refers to the camera and the monitor positioned on the center and XT Series connected to them.
- Auxiliary-R refers to the camera and the monitor positioned on the right and XT Series connected to them.

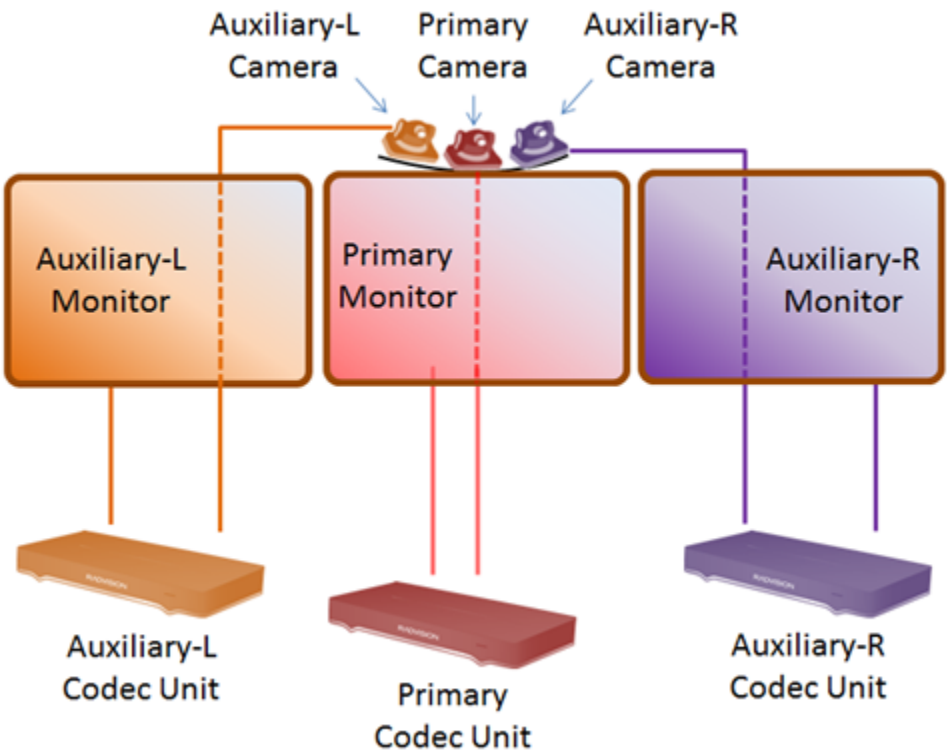

Figure 10: Scopia XT Telepresence components

The camera and monitor positions are described as they appear to a meeting participant.

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- Placing the Monitors on page 17
- Mounting the XT Codec Unit on page 18
- Placing the Cameras on page 19
- Placing the Microphone Pods on page 27
- Placing the Speakers on page 29

Placing the Monitors

About this task

The Scopia XT Telepresence comprises three monitors for displaying the participant image (TP monitors) and one monitor for displaying presentations (a presentation monitor).

This section contains a generic procedure for placing the monitors in your telepresence room.

Before you begin

Measure the table in your telepresence room.

We recommend you write down the measurement as you will use it as your point of reference during this procedure.

Ensure that you have brackets or stands for supporting the monitors. The monitor brackets are not included in the Scopia XT Telepresence kit.

Ensure that the height of the brackets or stands is correct: the monitors must be placed so that the bottom of their screens (not the frames) are at the same level as the table surface.

We strongly suggest labeling cables during the system setup to avoid confusion. Prepare these sticky labels for components and component cables:

- “Primary monitor”, “Auxiliary-L monitor”, and “Auxiliary-R monitor”
- “Primary monitor cable”, “Auxiliary-L monitor cable”, and “Auxiliary-R monitor cable”

Procedure

1. Place the brackets or stands against a long wall so that you provide enough space between the brackets and the table. Refer to Table 3: Table position on page 18.

   Table 3: Table position

	50” monitor	55” monitor	60” monitor	65” monitor
Distance from the monitor to the table	2.50 m	2.60 m	2.70	2.80
Distance from the table to the background wall	1.30 m	1.30 m	1.40 m	1.40 m

   Important:

   Place the TP monitors at approximate distance. After all components are in place, make sure the distance is exact by moving the table. For more information, see Placing Furniture in your Standard Telepresence Room Setup on page 30.

2. Mount the TP monitors onto the brackets or stands.
3. Make sure that the TP monitors are aligned vertically and that there is no slope.
4. Bring TP monitors as close together as possible.

   There should not be any distance between the TP monitors.
5. Ensure that the TP monitors are still aligned vertically.
6. Place the bracket for the presentation monitor under the TP monitors in the center.
7. Mount the presentation monitor onto the bracket.
8. Plug in the power cable for all monitors.

Mounting the XT Codec Unit

About this task

Follow the guidelines in this section to correctly place the XT Codec Unit.

Procedure

Place the XT Codec Unit following these guidelines:

- Place the XT Codec Unit on a horizontal surface which stands firmly on its base.
- The surface must be dry and free of dust, oil and other residues.
- Leave enough space for air circulation and for connecting cables easily.
- Place the XT Codec Unit anywhere within 5 meter reach of the camera cables.

⚠ Caution:

Do not place the camera on top of the XT Codec Unit. It can cause the system to overheat.

Placing the Cameras

About this task

Follow this procedure to place the cameras of your Scopia XT Telepresence correctly. The cameras are mounted on top of the primary monitor with the help of a special mounting bracket.

Before you begin

Ensure that you have the mounting brackets. The bracket is part of the Scopia XT Telepresence package.

We strongly suggest labeling cables during the system setup to avoid confusion.

Prepare these sticky labels for components and component cables:

- “Primary camera”, “Auxiliary-L camera”, and “Auxiliary-R camera”
- “Primary camera cable”, “Auxiliary-L camera cable”, and “Auxiliary-R camera cable”

Depending on the position of the monitors in your telepresence room, you can attach the bracket to the wall behind the monitors or to the Primary monitor.

Procedure

1. If you need to attach the bracket to the wall, perform these steps:
   a. Hold the wall-mount plate (Figure 11: Wall mount plate on page 20) against the wall and above the Primary monitor so that it is aligned with the Primary monitor horizontally. The bottom of the mount plate must be as close to the top of the monitor as possible. See Figure 12: Positioning the wall mount plate on page 20 for reference.

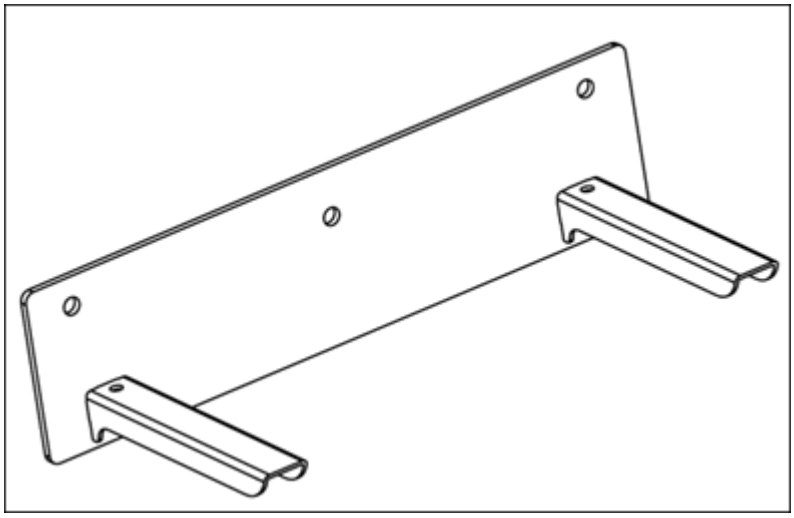


Figure 11: Wall mount plate

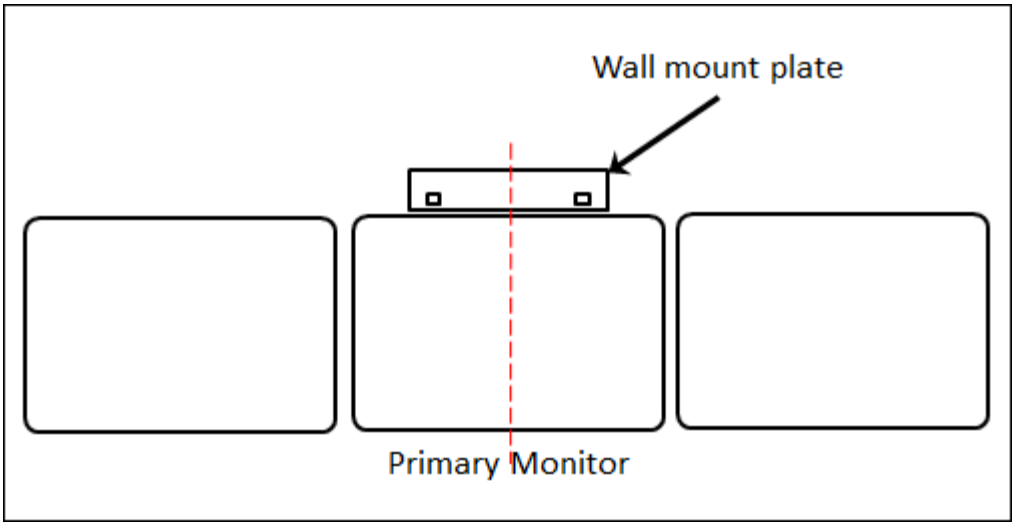


Figure 12: Positioning the wall mount plate

b. Using a pencil mark the hole positions on the wall. Three screws are used to attach the plate to the wall.

c. Make holes in the wall.

d. Attach the plate to the wall.

e. Slide the support plate onto the rails of the wall mount plate as shown Figure 13: Sliding the supporting plate onto the wall mount plate on page 21.

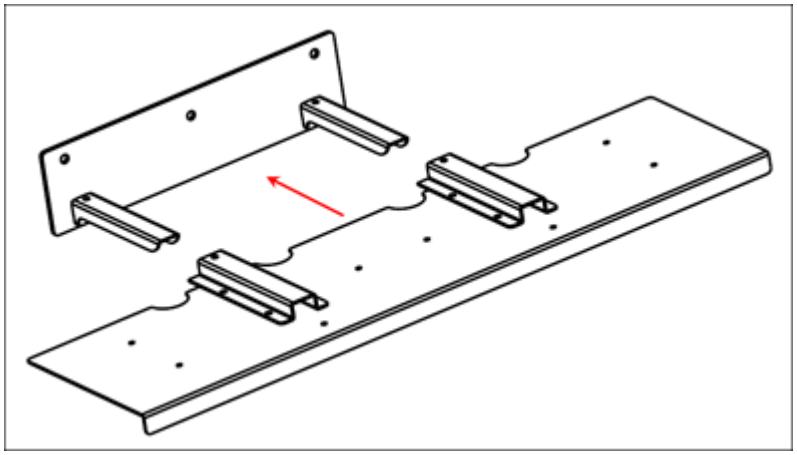


Figure 13: Sliding the supporting plate onto the wall mount plate

f. Secure the two plates together with screws.

Or

2. If you need to mount the bracket onto the Primary monitor, perform these steps:

   a. Insert two bolts in each clamp mount as shown in Figure 14: Inserting bolts and screws into the clamp mount on page 22 and Figure 15: Clamp mount bolts on page 22.

   Use the holes that allow you to place the bracket at the correct height.

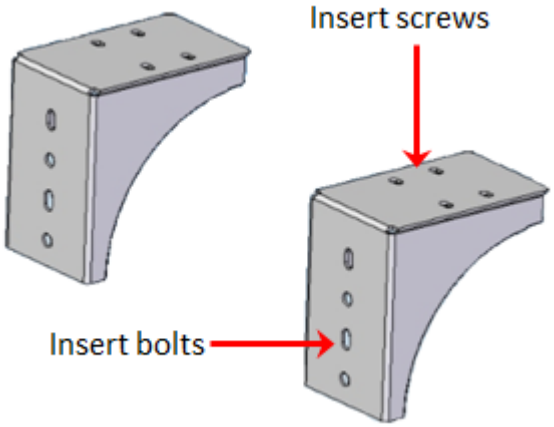


Figure 14: Inserting bolts and screws into the clamp mount

Figure 15: Clamp mount bolts

b. Attach the camera bracket to the clamp mounts using two screws for each clamp mount.

c. Place the bracket on top of the Primary monitor so that it is aligned with the monitor horizontally as in Figure 12: Positioning the wall mount plate on page 20.

d. Adjust the bracket position so that it is parallel to the floor by rotating the bolts using the 4mm Allen wrench.

e. When the bracket is positioned correctly, block the bolts by turning the bolt nuts counterclockwise.

3. Using a 3mm Allen key, release and remove the fixing screws on all three bracket plates.

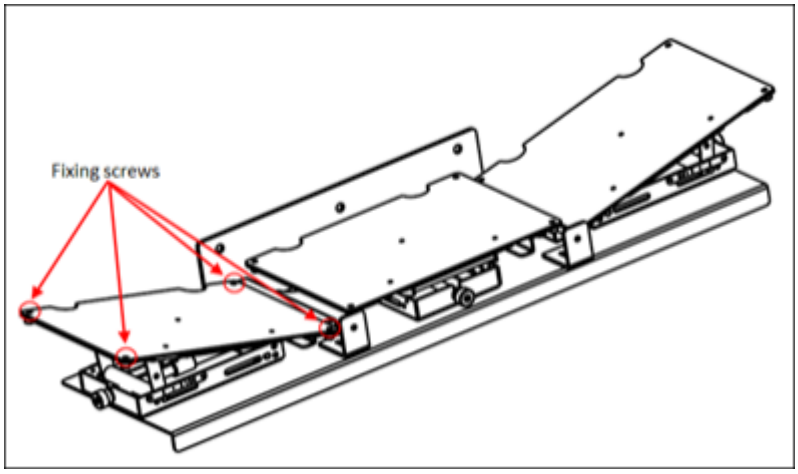


Figure 16: Fixing screws on bracket plates

4. Remove all three bracket plates.

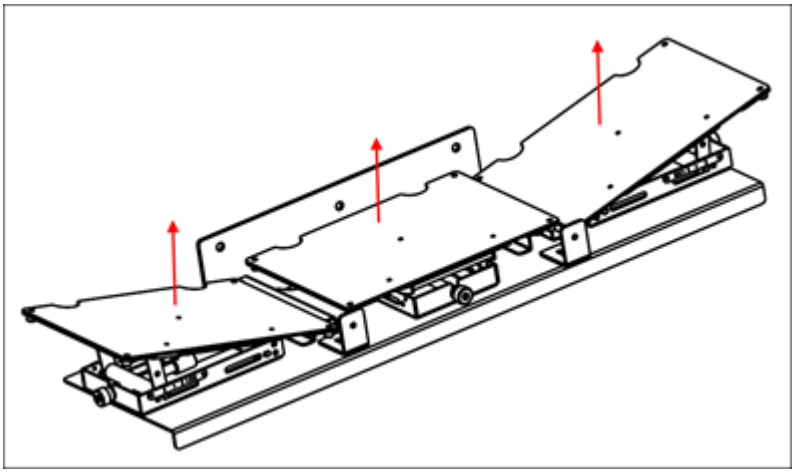


Figure 17: Removing bracket plates

5. One by one attach cameras to their bracket plates using three 3mm screws for each camera.

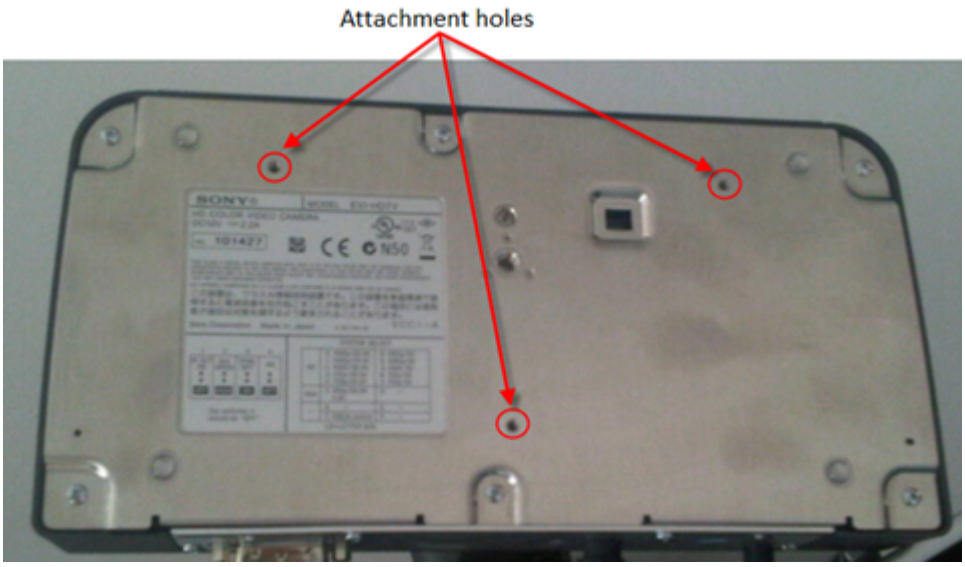


Figure 18: Attachment holes at the bottom of the camera

6. Replace the bracket plates.
7. Fix the bracket plates in their positions using four Allen screws (Figure 16: Fixing screws on bracket plates on page 23).
8. Mark cameras using sticky labels you prepared.
9. Connect cameras to their respective XT Codec Units. For example, connect Auxiliary-L camera to Auxiliary-L XT Codec Unit:
   a. Connect the camera cables as shown in Figure 19: Connecting a camera to a XT Codec Unit for Scopia XT5000 Series on page 25.

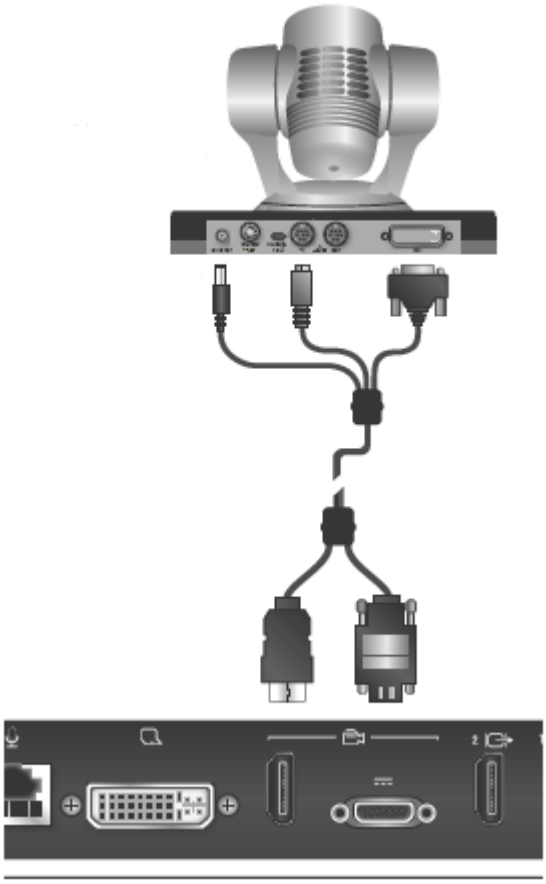


Figure 19: Connecting a camera to a XT Codec Unit for Scopia XT5000 Series

Important:

Make sure to connect the VISCA IN cable to the RS-232C IN connector as shown in Figure 20: RS-232C IN connector on the rear of the camera on page 25

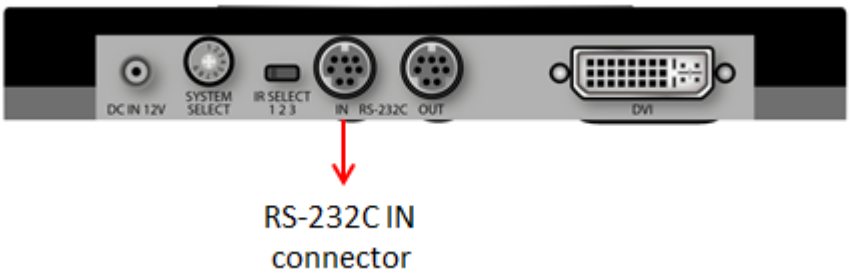


Figure 20: RS-232C IN connector on the rear of the camera

b. Set the **System Select** on the rear of the camera to **7**.

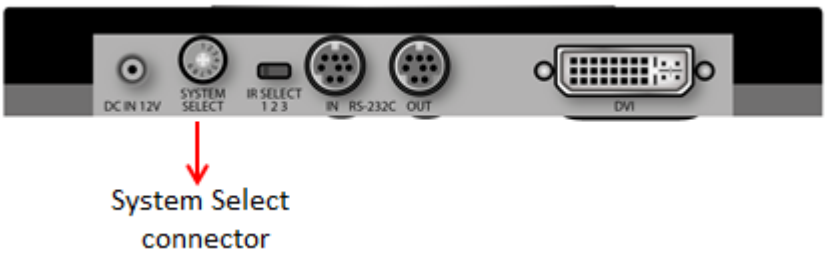


Figure 21: System Select connector on the rear of the camera

At this stage the Scopia XT Telepresence monitors display the image transmitted by the cameras.

10. Mark camera cables using the sticky labels.

11. Use the screws on left and right of the bracket to create a slope on the sides.

    If you are deploying Scopia XT Telepresence in a standard telepresence room, the recommended slope is 2.5 cm for 50” and 55” monitors and 3 cm for 60” and 65” monitors.

    If you are deploying Scopia XT Telepresence in a dual-row telepresence room, the slope must be 0 cm.

    Important:

    Deploying Scopia XT Telepresence in a dual row telepresence room differs from deploying it in a standard telepresence room. Be sure to perform only procedures relevant for your deployment.

    Use the measurement scale next to the screw for precision: each marking indicates 5mm.

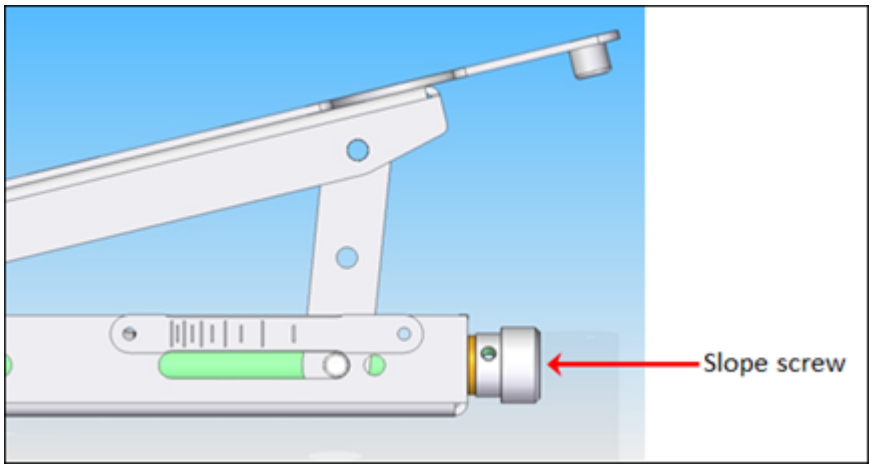


Figure 22: Slope screw

12. Adjust the front panel and fix it with two screws.

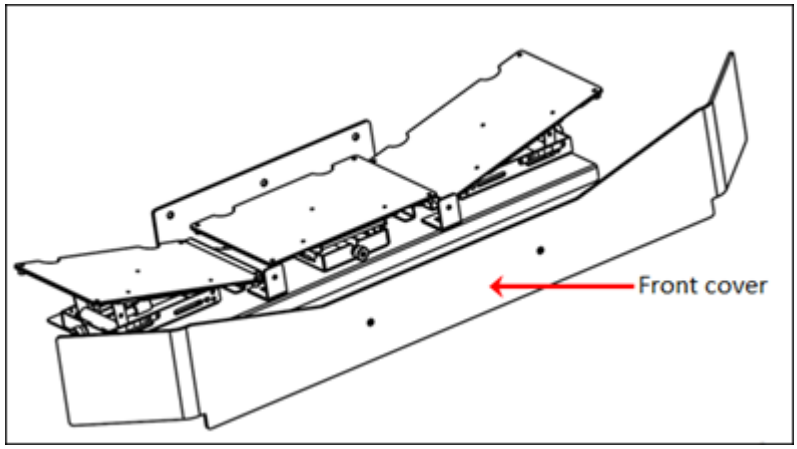


Figure 23: Front cover of the camera bracket

13. Press C on the XT Remote Control Units to display the menu.

Placing the Microphone Pods

About this task

The Scopia XT Telepresence comes with two Microphone Pods. The Microphone Pods are connected in the cascaded mode: the first pod is connected to the second, and the second pod is connected to the Master XT Codec Unit (Figure 26: Connecting the Microphone Pods to the XT Codec Unit for Scopia XT5000 Series on page 29).

Place Microphone Pods carefully to cover the entire room in case of a standard telepresence room or to cover the first row in a dual-row telepresence room.

If you want to cover the second table row in a dual-row telepresence room, you need to deploy third-party audio-in accessories described in *Scopia XT Series Third-Party Accessories for version 2.0.*

Procedure

1. Place the Microphone Pods on the table in the telepresence room according to these specific guidelines (Figure 24: Placing Microphone Pods on the table on page 28):
   - Rotate the Microphone Pods so the cord extends in the direction of the monitors.
   - Place the first Microphone Pod in front of the second chair (participant).
   - Place the second Microphone Pod in front of the fifth chair (participant).
   - Ensure there is a distance of two meters (approximately) between the Microphone Pods.
   - Both Microphone Pods should be 10cm from the edge of the table (Figure 24: Placing Microphone Pods on the table on page 28).

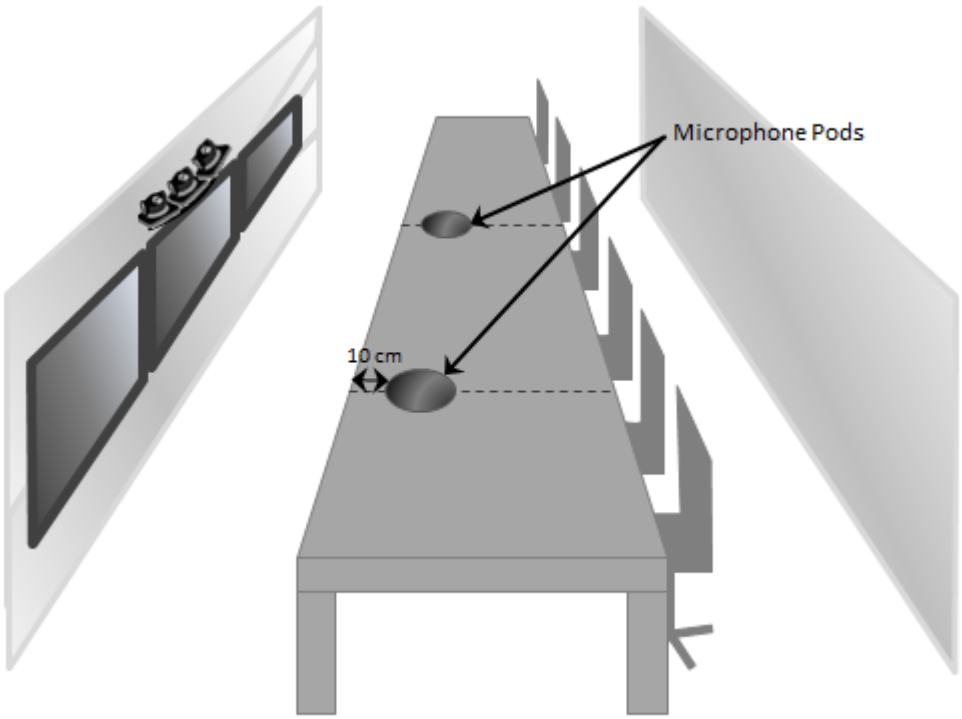


Figure 24: Placing Microphone Pods on the table

2. Connect the Microphone Pod output to the rear panel of the XT Codec Unit as shown in Figure 25: Microphone Pod on page 29.

Figure 25: Microphone Pod

Figure 26: Connecting the Microphone Pods to the XT Codec Unit for Scopia XT5000 Series

3. Connect the second Microphone Pod output to the first Microphone Pod input.

Placing the Speakers

About this task

The speakers are not part of the Scopia XT Telepresence package.

Follow the guidelines in this procedure to place speakers correctly so that the telepresence effect is created during a meeting.

Before you begin

Ensure you have all the necessary equipment:

- An analog high quality amplifier with 2 speakers

  or

- Two high quality amplified speakers

Procedure

1. Place the amplified speakers as close to the Auxiliary-L and Auxiliary-R monitors as possible.
2. Connect the amplified speakers:
   a. Connect the amplified speakers to ANALOG (green) connector on the XT Codec Unit shown in Figure 27: Connecting the analog speaker for Scopia XT5000 Series on page 30.

Figure 27: Connecting the analog speaker for Scopia XT5000 Series

3. Adjust the speaker volume so that it is higher than the background noise.

   We recommend that the speaker volume is at least 20 dBA higher than the background noise.

Placing Furniture in your Standard Telepresence Room Setup

About this task

After all Scopia XT Telepresence components are properly placed in the Telepresence room, you need to finalize the room setup. This section describes the procedure for a standard telepresence room. For a dual-row telepresence room, refer to Placing Furniture in your Dual-Row Telepresence Room on page 31.

Procedure

1. Place the table at the correct distance from the monitors.

   This distance depends on the size of monitors. Refer to Table 4: Table position on page 31 and Figure 28: Placing the table in a telepresence room on page 31 for details.

Table 4: Table position

	50” monitor	55” monitor	60” monitor	65” monitor
Distance from the monitor to the table	2.50 m	2.60 m	2.70	2.80
Distance from the table to the background wall	1.30 m	1.30 m	1.40 m	1.40 m

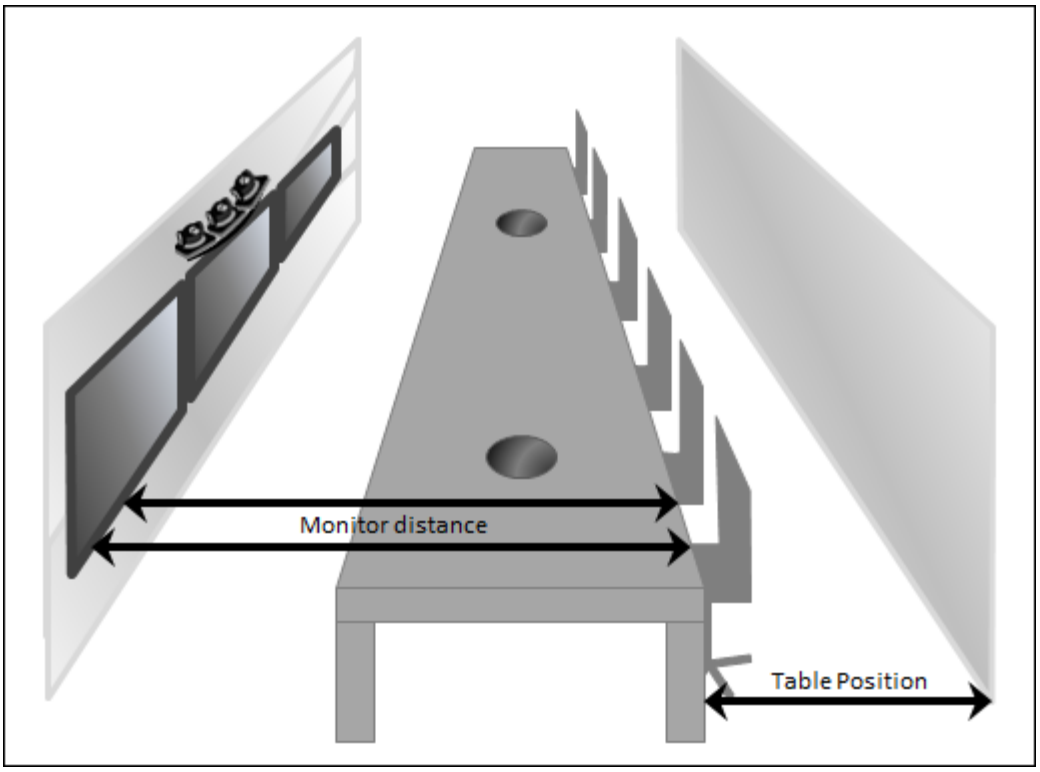


Figure 28: Placing the table in a telepresence room

2. Place the chairs by the table and at the correct distance from each other.

   The distance between the chairs depends on the monitor size:

   - 50 inch monitors — 60 cm
   - 55 inch monitors — 65 cm
   - 60 inch monitors — 70 cm
   - 65 inch monitors — 75 cm

Placing Furniture in your Dual-Row Telepresence Room

About this task

After Scopia XT Telepresence components are properly placed in the telepresence room, you need to carefully measure the precise locations of the tables from the cameras.

For a standard telepresence room, refer to Placing Furniture in your Standard Telepresence Room Setup on page 30.

Procedure

1. Align the middle of the central table in the front and back rows with the primary (central) camera.

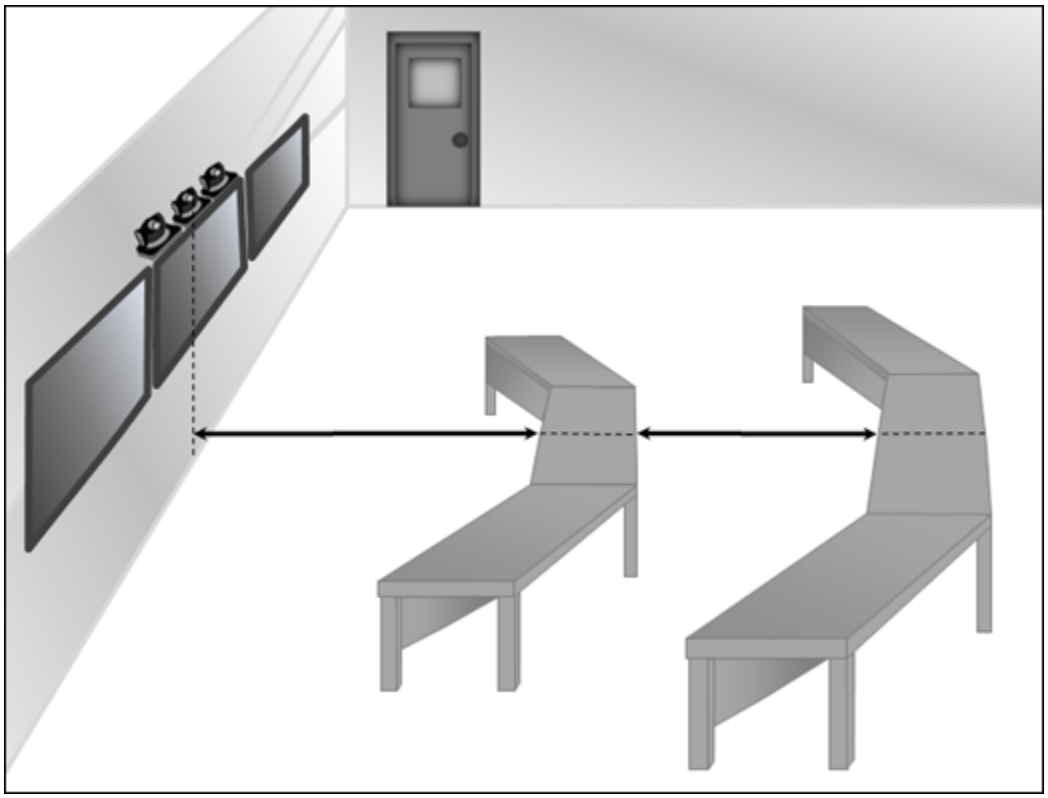


Figure 29: Aligning central tables

2. Place the tables so that the distances between cameras and middle of the tables are as shown in Figure 30: Measuring distance between the cameras and front tables on page 33.

   For each of the three front tables, use a tape-measure to calculate the distance between each table and the wall. The tape-measure should run along the middle of the table, continuing in a straight line at the same height as the table, all the way to the wall, ending directly under the wall-mounted camera.

   For the left table, the tape measure ends under the left camera. For the middle table, it ends under the middle camera. For the right table, it ends under the right camera.

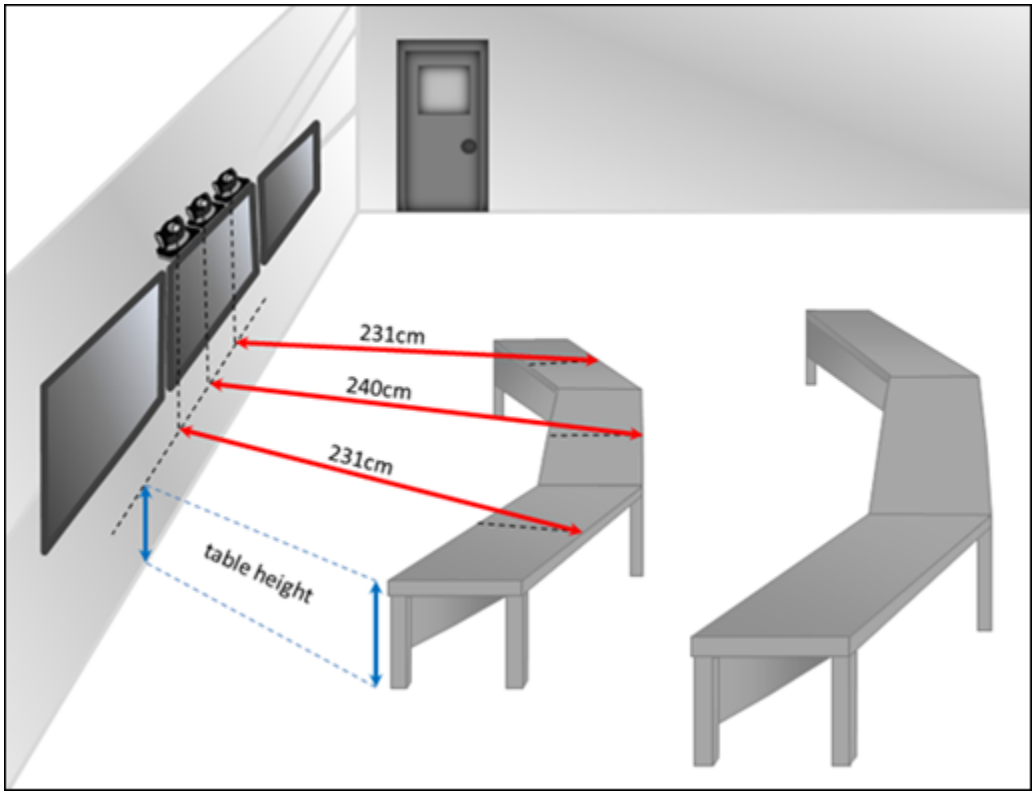


Figure 30: Measuring distance between the cameras and front tables

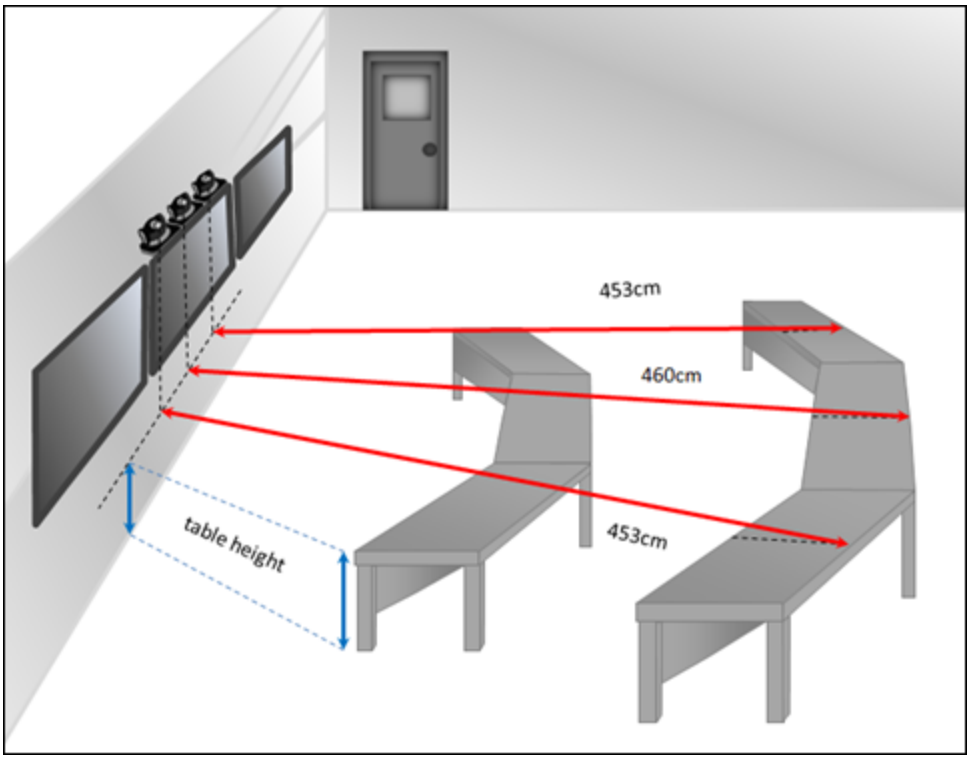


Figure 31: Measuring distance between the cameras and back tables

3. Ensure that the distance from the edges of a table to its respective camera is the same. See Figure 32: Distance between cameras and front row tables on page 34 and Figure 33: Distance between cameras and back row tables on page 34.

Measure these distances along the imaginary horizontal line from the edge of the tables to the wall below the respective camera.

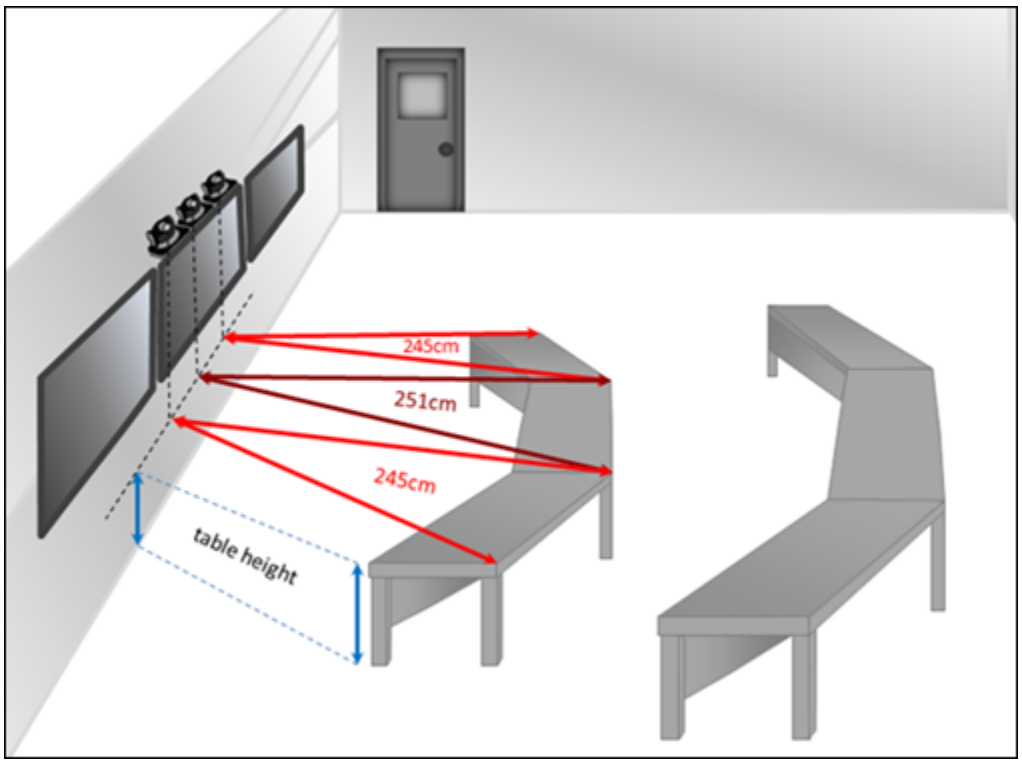


Figure 32: Distance between cameras and front row tables

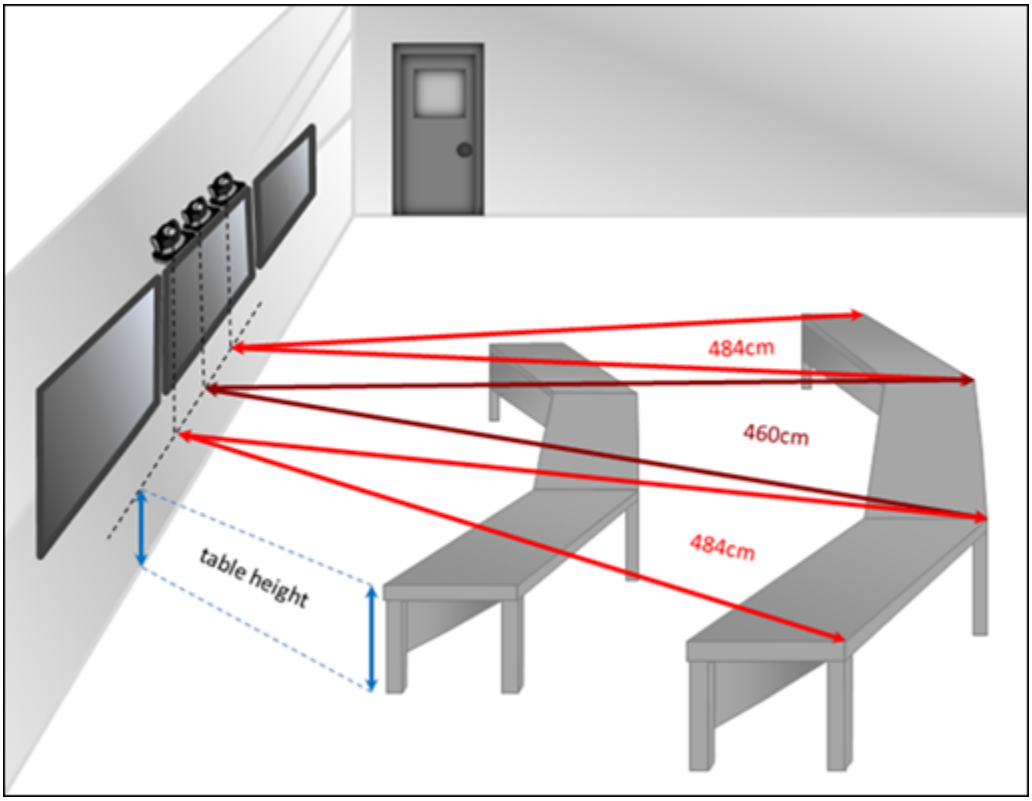


Figure 33: Distance between cameras and back row tables

4. Ensure that the distance between the front and back rows of the tables is 151cm. Measure this distance between the middle of the opposite tables, as shown in Figure 34: Measuring distance between the table rows on page 35.

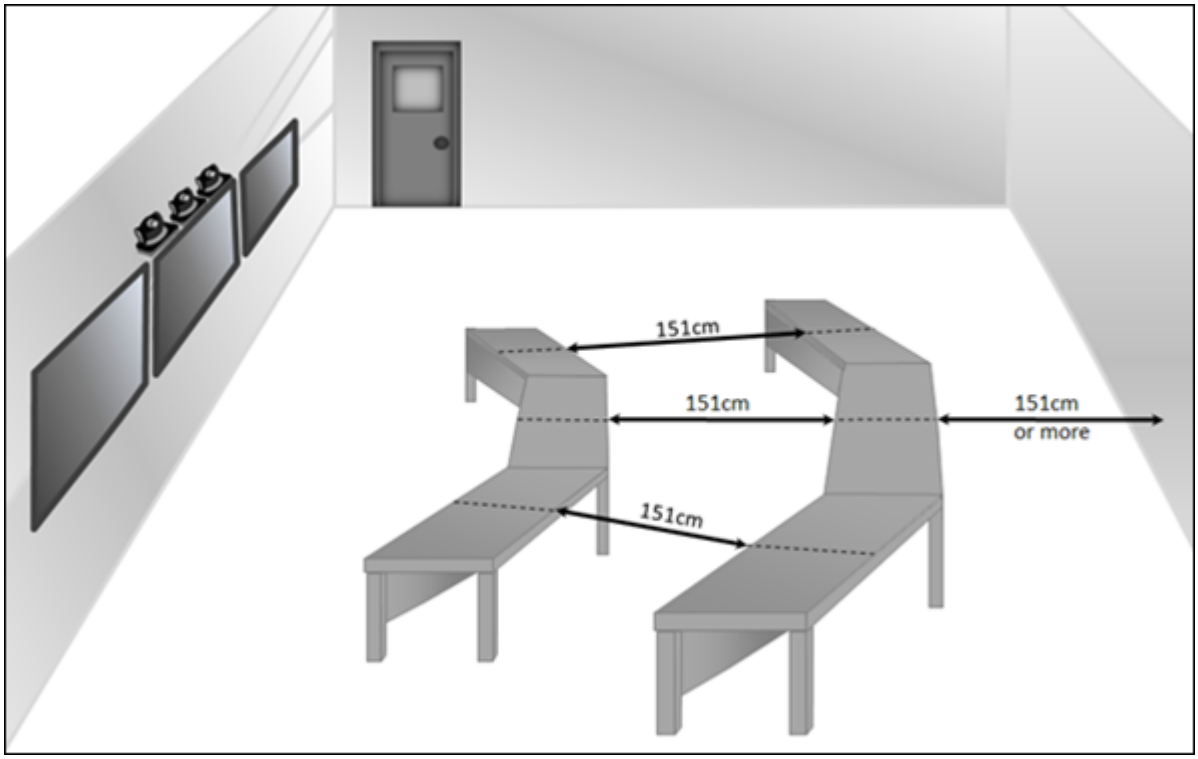


Figure 34: Measuring distance between the table rows

5. Ensure that the distance between the central table of the back row and the background wall or the background panel is at least 151cm as shown in Figure 34: Measuring distance between the table rows on page 35.

6. Place the chairs by the table 70cm from each other.

7. Ensure that the chairs are not located too close to blind spots (edges of the tables not covered by cameras). See Figure 35: Blind spots in dual-row telepresence rooms on page 36.

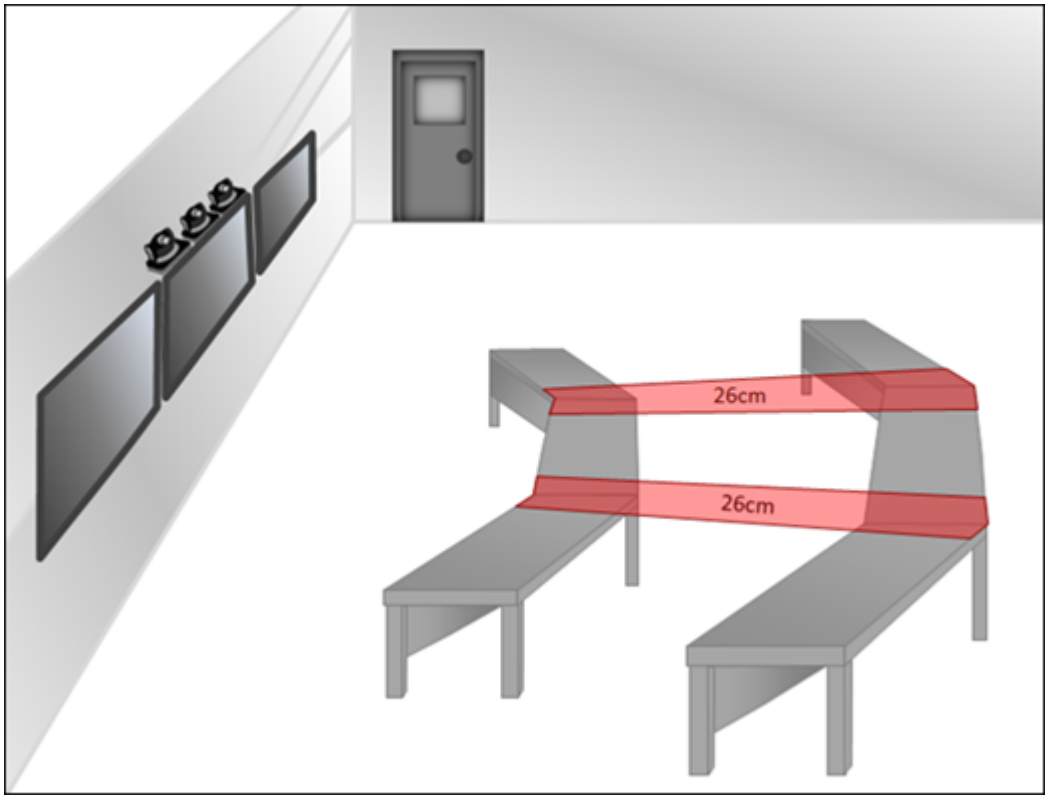


Figure 35: Blind spots in dual-row telepresence rooms

Chapter 4 | Configuring the Scopia XT Telepresence

This chapter guides you through the Scopia XT Telepresence configuration and covers these topics:

Navigation

- Installing Your Scopia XT Telepresence License on page 37
- Performing Basic Configuration on page 42
- Setting Basic System Information on page 51
- Pairing an XT Remote Control Unit with an XT Codec Unit on page 55
- Pairing Your Scopia XT Telepresence with the Scopia Control on page 57
- Downloading and Installing the Scopia XT Telepresence Calibration Application on page 60
- Calibrating your Scopia XT Telepresence on page 61
- Adding Scopia XT Telepresence in Scopia Management on page 71

Installing Your Scopia XT Telepresence License

There is a telepresence license that provides access to the product's telepresence functionality.

Having a telepresence license installed on your Scopia XT Telepresence system automatically activates the Scopia Control license. Scopia Control is an application installed on an iPad that is used for controlling the Scopia XT Telepresence.

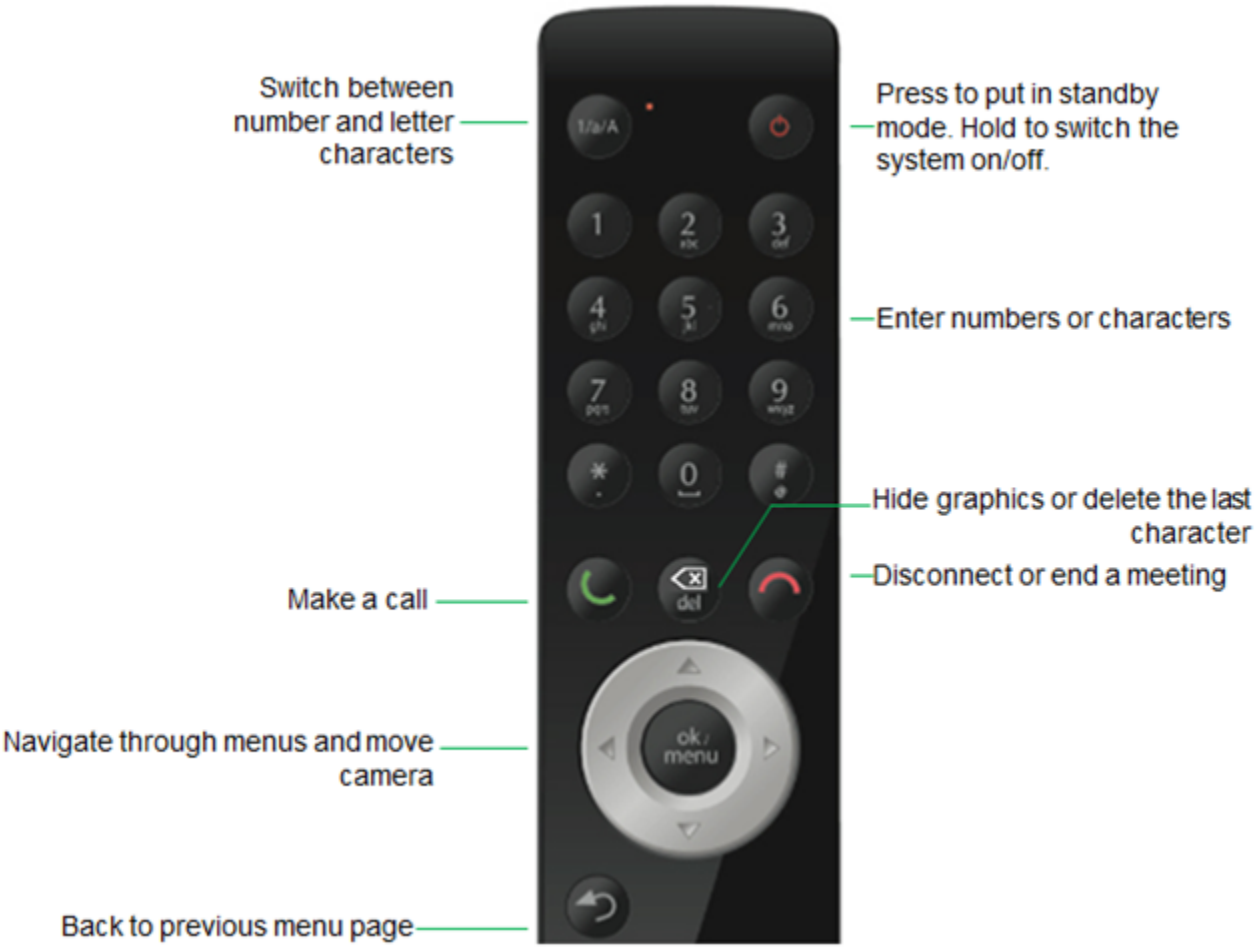
Navigation

- Using the XT Remote Control Unit on page 37
- Registering the Scopia XT Series to Obtain a License Key on page 40
- Enabling the License from the Scopia XT Series on page 40

Using the XT Remote Control Unit

This section explains how to use the XT Remote Control Unit to navigate through the system menus, and lists the function of each key.

The XT Remote Control Unit has an improved design and increases usability to give you a smoother and more efficient videoconferencing experience. Figure 36: The new XT Remote Control Unit on page 38 describes the functions of the XT Remote Control Unit.


Switch between number and letter characters
Press to put in standby mode. Hold to switch the system on/off.
Enter numbers or characters
Hide graphics or delete the last character
Disconnect or end a meeting
Make a call
Navigate through menus and move camera
Back to previous menu page

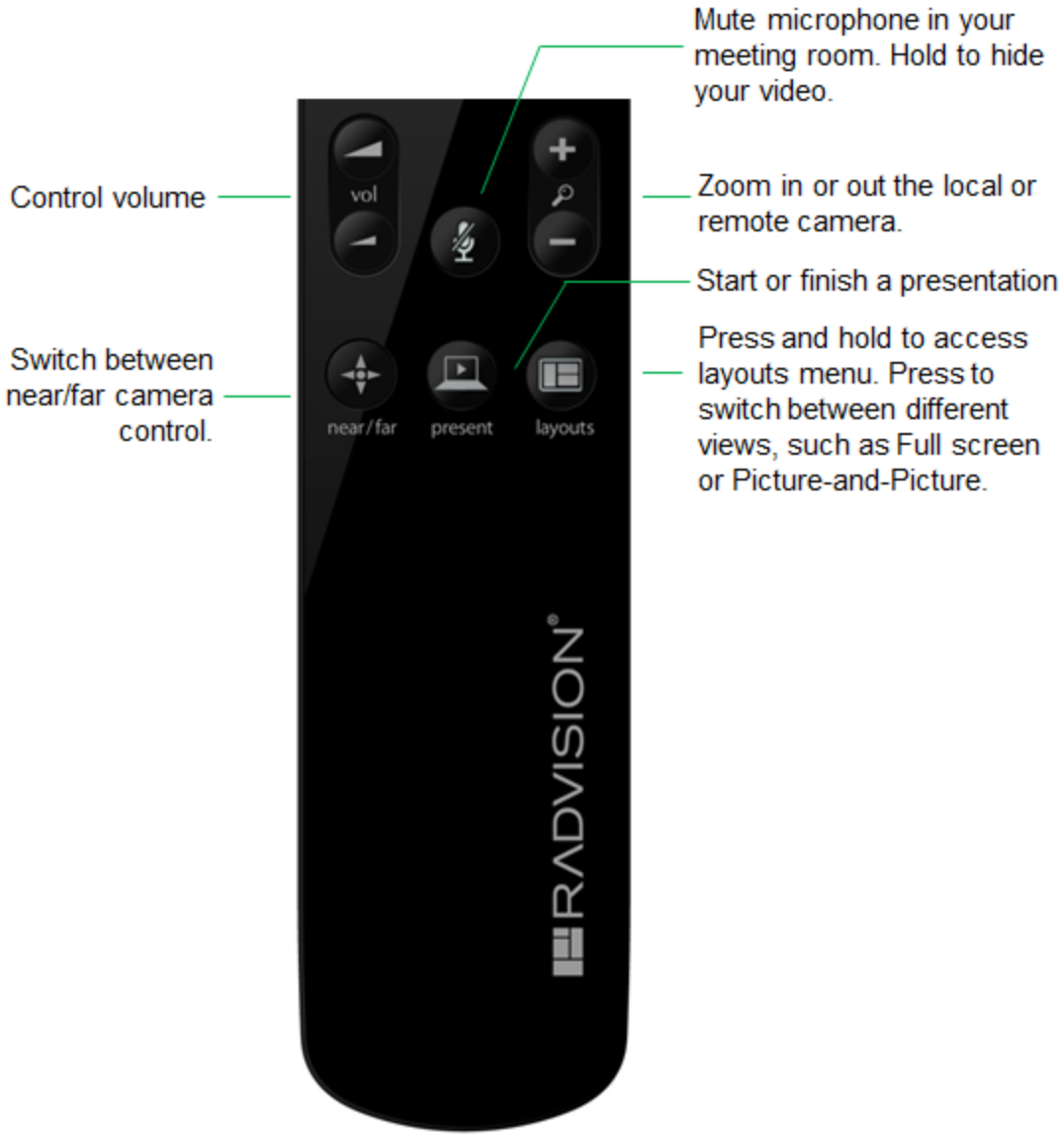


Figure 36: The new XT Remote Control Unit

Use the XT Remote Control Unit to navigate through system menus, as follows:

- Scroll through menus and options using the arrow keys and pressing the **ok/menu** key.

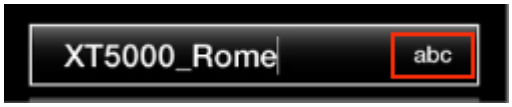
  Important:

  Use the **ok/menu** key to select an item or a specific option, such as when choosing the interface language. If there are less than 5 options in a list, press **ok/menu** repeatedly to scroll through the options.

- Use the XT Remote Control Unit keypad to enter letters and digits.

  The default input method is **abc1**: you must press the required character key on the XT Remote Control Unit repeatedly before entering a digit. To enter text in the XT Series interface, scroll to the input field and enter the required characters.

  The current input method is displayed in the field you are in:



You can also switch between **ABC**, **abc**, and **123** input methods by pressing **1/a/A** repeatedly while the cursor is in the input field.

Registering the Scopia XT Series to Obtain a License Key

About this task

Register your XT Series to obtain your license key to activate the features of the XT Codec Unit, and receive a number of additional benefits:

- Notification of software updates and new features availability.
- Be the first to know about product support alerts.
- Access to Radvision's user-community.

You can obtain other license keys in the same way, when you need them to enable optional features in the XT Codec Unit, such as increased bandwidth or the embedded MCU, depending on the model. For details, see *Administrator Guide for Scopia XT5000 Series Version 3.2*.

Procedure

1. Open the envelope that came with the XT Series.
2. Locate the serial number and the product key in the letter inside the envelope. The serial number is printed on a label affixed at the back of the XT Codec Unit.

   You can find the user code (and the serial number) by selecting **Configure > About** from the Main menu.
3. From your computer's Internet browser, navigate to http://licensing.radvision.com/.
4. Complete the online registration form and enter the serial number (or the user code) AND the product key.

   The web registration form returns an active license key.
5. Write down the license key and keep it in a safe place for future use.
6. Use the license key to enable the software:
   - If deploying Scopia XT Telepresence or a single Scopia XT Series, refer to Enabling the License from the Scopia XT Series on page 40.
   - If deploying a single Scopia XT Series, you can also enable the software remotely as described in *Installation Guide for Scopia XT5000 Version 3.2*.

Enabling the License from the Scopia XT Series

About this task

This procedure describes how to enable the software license of an XT Codec Unit via the endpoint's interface.

You can also enable the license from the web interface, as described in *Installation Guide for Scopia XT5000 Series Version 3.2*.

If you do not yet have your license key, you can set up the system in demo mode for a period of 24 hours. After this time, you must enable your license key to use the system.

Before you begin

- Obtain a license key for the Scopia XT Series as described in Registering the Scopia XT Series to Obtain a License Key on page 40 or, if you are enabling a license option to extend Scopia XT Series functionality, see *Administrator Guide for Scopia XT5000 Series Version 3.2*. You activate licenses individually on three XT Codec Units by entering the license key in the Enable License page.
- If configuring from the endpoint, you must first enable advanced configuration, as described in *Deployment Guide for Scopia XT Series*.

Procedure

1. Access the Scopia XT Series's **Main** menu.
2. Select **Configure** > **Advanced** > **Utilities** > **Licenses**.

   The **Licenses** screen appears, displaying the serial number (10-digit string) and user code. The user code corresponds to the system MAC address. These fields are not editable.

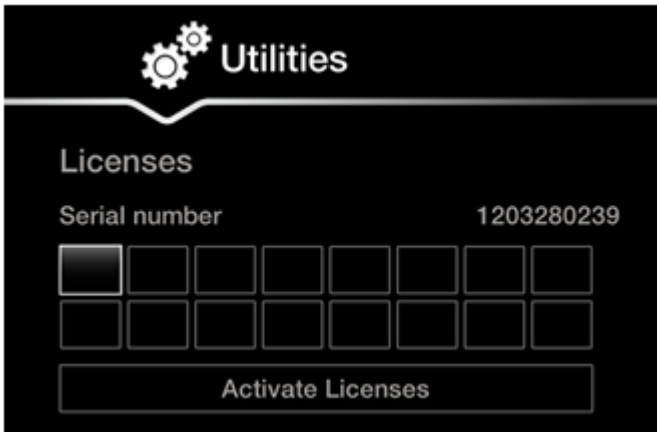


Figure 37: Activating a license

Important:

The serial number is also printed on a label affixed at the back of the XT Codec Unit.

3. Enter the license key you received when registering the product. You can also enter license keys for optional features.

4. Select **Activate Licenses**.

   The license is automatically enabled.

   Important:

   If you are enabling a second GLAN license option, the XT Codec Unit is restarted (see *Administrator Guide for Scopia XT5000 Series Version 3.2* for details).

Performing Basic Configuration

During this configuration you define some basic settings for your Scopia XT Telepresence like user interface language, the system name, and network settings.

Important:

Your system administrator might already have set these parameters for you. If your administrator set up PIN protection, you need the PIN number before continuing with the configuration.

In addition to fresh installations, you need to use the quick setup wizard after restoring default settings and re-installing software.

You need to configure all three XT Series systems separately, performing procedures described in this section three times: once on each of the XT Codec Units.

The Quick Setup wizard automatically appears when you turn the XT Codec Unit on for the first time.

Navigation

- Accessing the Quick Setup Procedure on page 42
- Accessing XT Series Web Interface on page 44
- Setting the System Name and Language on page 45
- Adjusting the Image Position on page 46
- Configuring Network Settings on page 48
- Configuring Gatekeeper Settings on page 50

The tasks appear in this section in the order they are presented in the quick setup wizard.

Accessing the Quick Setup Procedure

About this task

Access the quick setup procedure to define basic settings for your Scopia XT Series, such as the system's name, language, and network settings. Follow the tasks of the quick setup procedure in the order they are presented.

This is relevant for both new installations, and also after restoring default settings and re-installing software.

You can do this procedure from the endpoint itself or from the XT Series web interface.

Before you begin

Your system administrator might already have set these parameters for you and customized certain features described in this guide to suit the environment of your company. If your administrator set up PIN protection, you need the PIN number before continuing with the configuration.

Procedure

1. The quick setup wizard automatically appears the first time you access the Scopia XT Series, either by turning on the XT Codec Unit or logging in to the web interface.

   If the quick setup wizard is not displayed automatically when you first turn on the XT Codec Unit, select **Configure** > **Quick Setup** from the Main Menu.

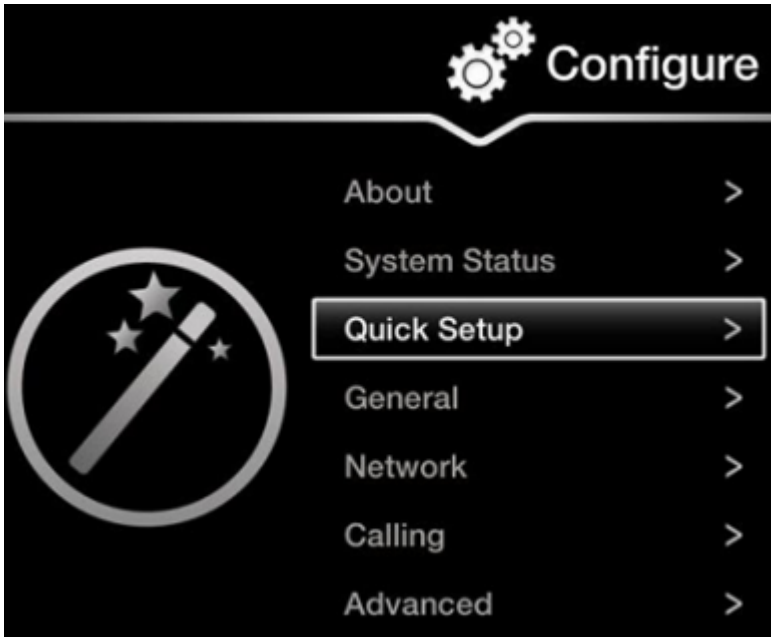


Figure 38: Accessing the Quick Setup

2. The quick setup wizard guides you through these basic configuration tasks:
   - Setting the System Name and Language on page 45: Define your system's name, your country, and preferred language for the interface.
   - Adjusting the Image Position on page 46: Adjust your monitor's image if necessary.

     Important:

     This task is not available from the web interface. If you are configuring from the web interface, perform this procedure from the endpoint.
   - Configuring Network Settings on page 48: Define your system's network settings to allow you to place and receive calls.

- Configuring Gatekeeper Settings on page 50: If your Scopia XT Series works in conjunction with a gatekeeper, configure gatekeeper-related settings.

Accessing XT Series Web Interface

About this task

This procedure describes how to access the XT Series web interface. The XT Series supports the following internet browsers:

- Internet Explorer version 8 or later
- Google Chrome version 11 or later
- Mozilla Firefox version 3.6 or later
- Apple Safari version 5 or later
- Opera version 11 or later

Procedure

1. Open any of the supported internet browsers and enter the system's IP address.

   For example, *http://1.2.3.4/*.

   The XT Series login page opens.

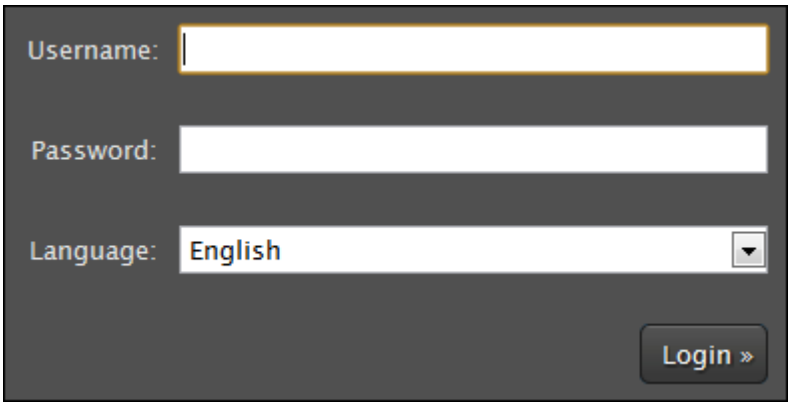


Figure 39: Logging into the XT Series web interface

2. Enter the username and password.

   The default username for the web interface is **Admin** and the default password is **1234**.

   Important:

   We recommend changing the default credentials after logging in for the first time, as described in the *Deployment Guide for Scopia XT Series*.

3. (Optional) Select the web interface language from the **Language** list.

4. Select **Login**.

Setting the System Name and Language

About this task

You can select the name of your XT Codec Unit, to be displayed on the monitors participating in the videoconference call (for example: **Hong-Kong**, or **9th-Floor-Room**, or **NY-Office**), and on the system's titlebar.

There is also a unicode version of the system name for users who want the name displayed on the titlebar to contain non-English characters. For more information, see *Deployment Guide for Scopia XT Series*.

You can also select the country in which the system is located and the language in which the system menus are displayed.

After initial setup, you can modify these settings by selecting **Configure > General** from the **Main** menu, or from the web interface as described in *Installation Guide for Scopia XT5000 Series Version 3.2*.

Before you begin

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 42.

Procedure

1. Enter the name of the XT Series in the **System Name** field. This name is also used for the SIP username and the H.323 name, which can be manually changed.

   If you perform this task from the endpoint interface, use the alphanumeric keys of the XT Remote Control Unit (for more information, see Using the XT Remote Control Unit on page 37).

Figure 40: Setting Country and Language

2. Select the required country from the **Country** list. If performing this task from the endpoint interface, use the arrow keys and press **ok/menu**.

The system menu and the **Language** field automatically change to the language used in the selected country.

3. If you want to change the language of the system menus, select **Language**.

   If performing this task from the endpoint interface, press **ok/menu** to display the list of languages. Scroll to the preferred language and press **ok/menu**.

4. To adjust the image on your monitor, select **Next** and continue with Adjusting the Image Position on page 46.

   If performing the quick setup from the web interface, access the quick setup from the endpoint to adjust the image. This can be done at any time.

Adjusting the Image Position

About this task

If your monitor does not center the image correctly, perform this procedure. This can be done from the endpoint itself only.

Before you begin

This procedure is performed as part of the Quick Setup Wizard, after Setting the System Name and Language on page 45.

Access the quick setup wizard from the endpoint, as described in Accessing the Quick Setup Procedure on page 42.

Procedure

1. Examine the image on the monitor to decide if you need to adjust the image position.

   The triangles in the top left corner and bottom right corner must be fully visible so that the white border of the triangle is fully visible on all sides.

   If the image is centered correctly, skip this procedure and select **Next**.

Figure 41: Examining the image position

2. Press **1** to align the top left corner.

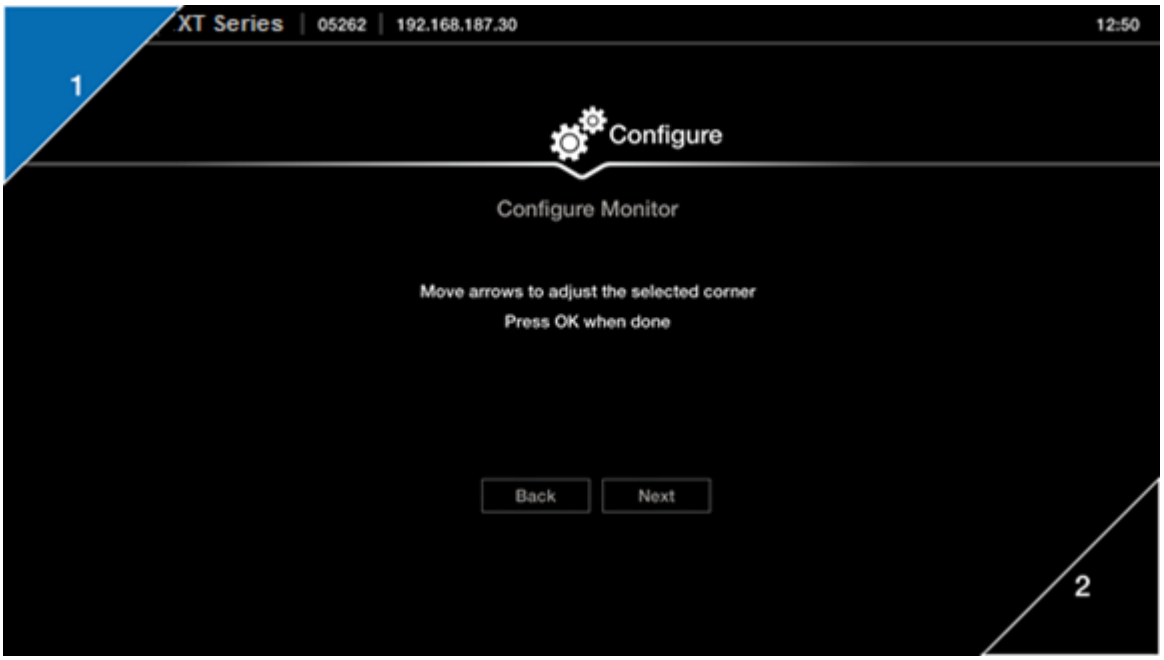


Figure 42: Adjusting the image position

3. Use the arrow keys on the XT Remote Control Unit to position the image, and then press **ok/menu**.

4. Press **2** to align the bottom right corner.

5. Use the arrow keys on the XT Remote Control Unit to position the image, and then press **ok/menu**.

6. To configure network settings, select **Next** and continue with Configuring Network Settings on page 48.

Configuring Network Settings

About this task

This procedure describes how to set up the network settings and the IP address the system uses for placing a call.

If you are modifying the network settings after initial setup, navigate to **Configure** > **Network** > **GLAN 1** from the **Main** menu. For more information, see *Deployment Guide for Scopia XT Series*.

Before you begin

This procedure is performed as part of the Quick Setup Wizard, after Adjusting the Image Position on page 46. Consult with your network administrator to configure these fields.

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 42.

Procedure

1. Press **ok/menu** and select one of the following from the **IP Address Mode** list:
   - **Automatic**: (Default) Select this option if the system gets its IP address automatically (using DCHP).

     The **IP address**, **Subnet mask**, **Gateway**, and **DNS** fields appear as read-only. See Table 5: Configuring IP addresses on page 49 for a description of these fields.
   - **Manual**: Select this option if you require a static IP address. This is required, for example, if the XT Series is connected directly to the Internet, without any address translation, or when other external endpoints need to dial to this endpoint as an MCU. Enter the fields as described in Table 5: Configuring IP addresses on page 49.

     To secure SIP connections using TLS certificates, your system must have a static IP address, since the system generates the certificate request using its IP address as the Common Name (CN). For more information, see *Deployment Guide for Scopia XT Series*.

Figure 43: Defining IP Settings

2. If you selected **Manual**, configure the following, as instructed by the system administrator:

Table 5: Configuring IP addresses

Field Name	Description
IP address	Enter the system static IP address here, used for accessing and managing the system. If the system retrieves its IP address automatically, this field displays the IP address assigned to the system.
Subnet mask	Enter the subnet mask associated with the IP address. If the system retrieves its IP address automatically, this field displays the subnet mask that has been assigned.
Gateway	Enter the default gateway static IP address. The gateway is used to route information between two subnets, for example, between the headquarters and a partner site. If the system gets its IP address automatically, this field displays the gateway IP address assigned to the system.
DNS	Enter the DNS server IP address. The DNS server in your network resolves domain names in your network and translates them into IP addresses. If the system gets its IP address automatically, this field displays the assigned DNS server IP address.

3. To configure your gatekeeper's settings, select **Next** and continue with Configuring Gatekeeper Settings on page 50.

Configuring Gatekeeper Settings

About this task

A gatekeeper routes audio and video H.323 calls by resolving dial strings (H.323 alias or URI) into the IP address of an endpoint, and handles the initial connection of calls. If your Scopia XT Series works in conjunction with a gatekeeper, configure gatekeeper-related settings as described in this procedure.

This procedure completes the basic system configuration.

If you are modifying these settings after initial setup, navigate to **Configure > Network > H.323** from the **Main** menu. For more information, see *Deployment Guide for Scopia XT Series*.

Before you begin

This procedure is performed as part of the basic configuration after Configuring Network Settings on page 48. Consult with your network administrator to configure these fields.

Access the quick setup wizard from the endpoint or web interface, as described in Accessing the Quick Setup Procedure on page 42.

Procedure

1. Set the **Use Gatekeeper** list to **Yes**.

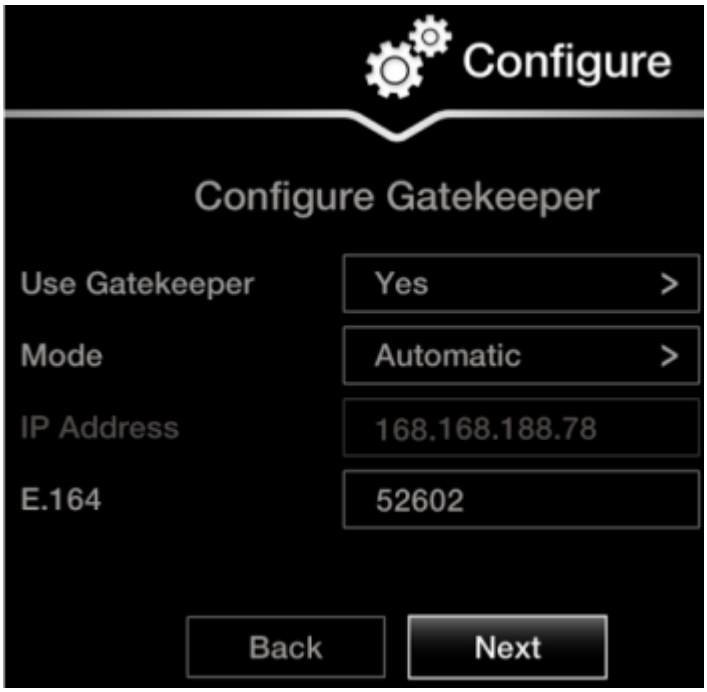


Figure 44: Gatekeeper settings

2. Set the **Mode** list to **Manual**.

Important:

If the gatekeeper is configured to be automatically detected by endpoints, select **Automatic** (depends on the type of gatekeeper). Consult the network administrator.

3. Enter the IP address of the gatekeeper in the **Gatekeeper IP address** field.
4. Enter the H.323 number required to dial the XT Codec Unit in the **E.164** field.
5. Select **Done**.

   The basic configuration of your Scopia XT Series is complete.

Setting Basic System Information

Set the system's basic information, such as the correct local time and date. We recommend modifying the default administrator PIN to prevent users from modifying advanced settings. For more information, see the following topics:

Navigation

- Setting Date and Time on page 51
- Setting the Time Zone on page 52
- Remotely Setting Regional Information on page 53
- Configuring the Screen Saver to Start Automatically on page 55

Setting Date and Time

About this task

You can set the date and time from either the endpoint or the web interface.

Before you begin

If configuring from the endpoint, you must first enable advanced configuration, as described in *Deployment Guide for Scopia XT Series*.

Procedure

1. Access the date and time settings as follows:
   - From the XT Series web interface, select **Administrator Settings > System > Date & Time > General**.
   - From the endpoint's main menu, select **Configure > Advanced > System > Date & Time > General**.

You need to enter the PIN required to access the **Advanced** settings. The default PIN is 1234.

2. Set the date and time, as described in Table 6: Configuring date and time settings on page 52.

Important:

If you configure set **Internet time** to **Yes** , you cannot modify the date and time fields.

Table 6: Configuring date and time settings

Field Name	Description
Day	Enter the date.
Month	Enter the month.
Year	Enter the year.
Hour	Enter the hour.
Minutes	Enter the minutes.
Internet time	Select **Yes** to synchronize the system clock with the network clock, thus allowing you to align devices connected to the Internet using NTP.
Use Default NTP Server	If your organization uses an external Network Time Protocol (NTP) server for synchronizing the system clock, select **Yes**. If your organization uses one or two internal NTP servers for that purpose, select **No** and enter the server IP address in fields **Server 1** and/or **Server 2**.
Refresh time	Indicates the period of time after which the system contacts the NTP server to refresh the clock.

3. From the web interface only, select **Save**.

Setting the Time Zone

About this task

You can set the time zone from your endpoint or the XT Series web interface.

Before you begin

If configuring from the endpoint, you must first enable advanced configuration, as described in *Deployment Guide for Scopia XT Series*.

Procedure

1. Access the time zone settings as follows:
   - From the XT Series web interface, select **Administrator Settings > System > Date & Time > Time Zone**.

- From the endpoint's main menu, select **Configure > Advanced > System > Date & Time > Time Zone**.

  You need to enter the PIN required to access the **Advanced** settings. The default PIN is 1234.

2. Configure settings as described in Table 7: Configuring time zone related settings on page 53.

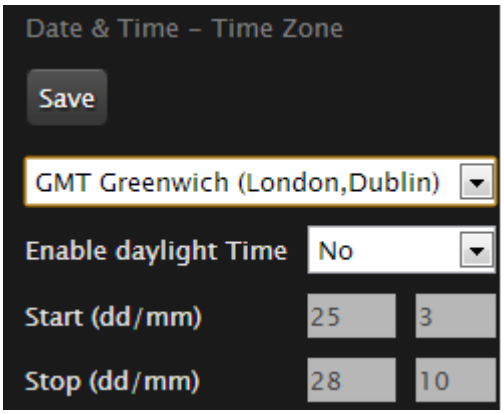


Figure 45: Setting the time zone

Table 7: Configuring time zone related settings

Field Name	Description
Time zone list	Select the time zone to which the system belongs.
Enable daylight time	Set the daylight or summer time field to **Yes** or **No** according to the current daylight-saving status of your time zone.
Start (dd/mm)	Set the day and month to indicate when daylight saving times start.
Stop (dd/mm)	Set the day and month to indicate when daylight saving times end.

3. From the web interface only, select **Save**.

Remotely Setting Regional Information

About this task

You must configure the region-related settings: the country and language. You also need to configure audio coding and video frequency, because your video network depends on the local infrastructure. The system suggests the optimal values for audio coding and video frequency when you enter the country value.

You may have set some of these fields in the Quick Setup procedure, since this is part of the basic required settings (for details, see Accessing the Quick Setup Procedure on page 42). You can modify these settings at any time from the endpoint or the web interface.

Procedure

1. Access the XT Series web interface, as described in Accessing XT Series Web Interface on page 44.

2. Select **Administrator Settings > System > Location**.

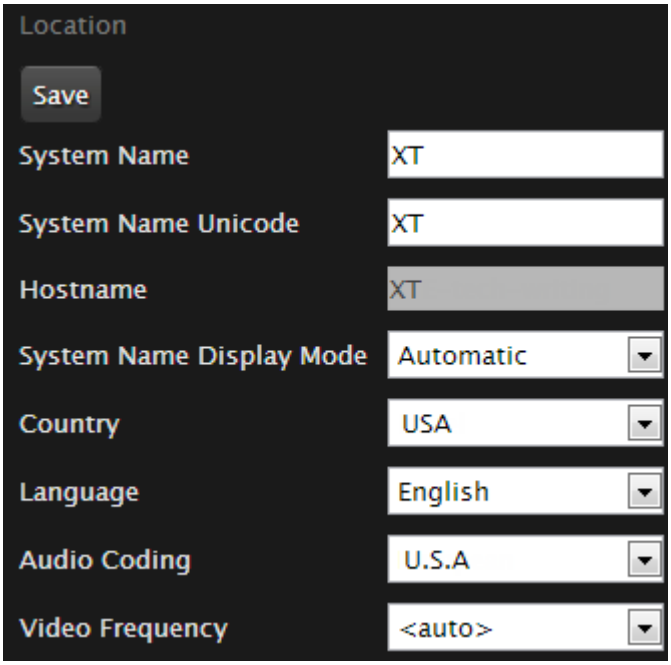


Figure 46: Setting regional information

3. Define regional settings as described in Table 8: Configuring regional information on page 54.

Table 8: Configuring regional information

Field Name	Description
System name	Enter the name that will appear in the local endpoint interface and in the remote endpoint interface (if connected).
Country	Select the country in which the local system is located. Once the country is selected, the other fields are populated automatically.
Language	Select the language used in the XT Series endpoint's interface.
Audio coding	Select the **European** or **US** coding.
Video frequency	The video refresh frequency depends on the country, and may assume the values of **50Hz** or **60Hz**. You can select the video frequency automatically or manually. If set to automatic, the system assigns the value depending upon the selected country. In Japan, the frequency depends on the country area (east or west); thus in Japan the system administrator must select manually the correct value related to the geographic location.

4. Select **Save**.

Configuring the Screen Saver to Start Automatically

About this task

The screen saver helps to protect your monitor from burn-in without switching it off. This can be useful in situations when you stop using your Scopia XT Series for a relatively short period of time. You can do this procedure from the endpoint itself or from the XT Series web interface.

Procedure

1. Access the screen saver settings as follows:
   - From the endpoint's main menu, select **Configure > General**.
   - From the XT Series web interface, select the **Basic Settings** tab.

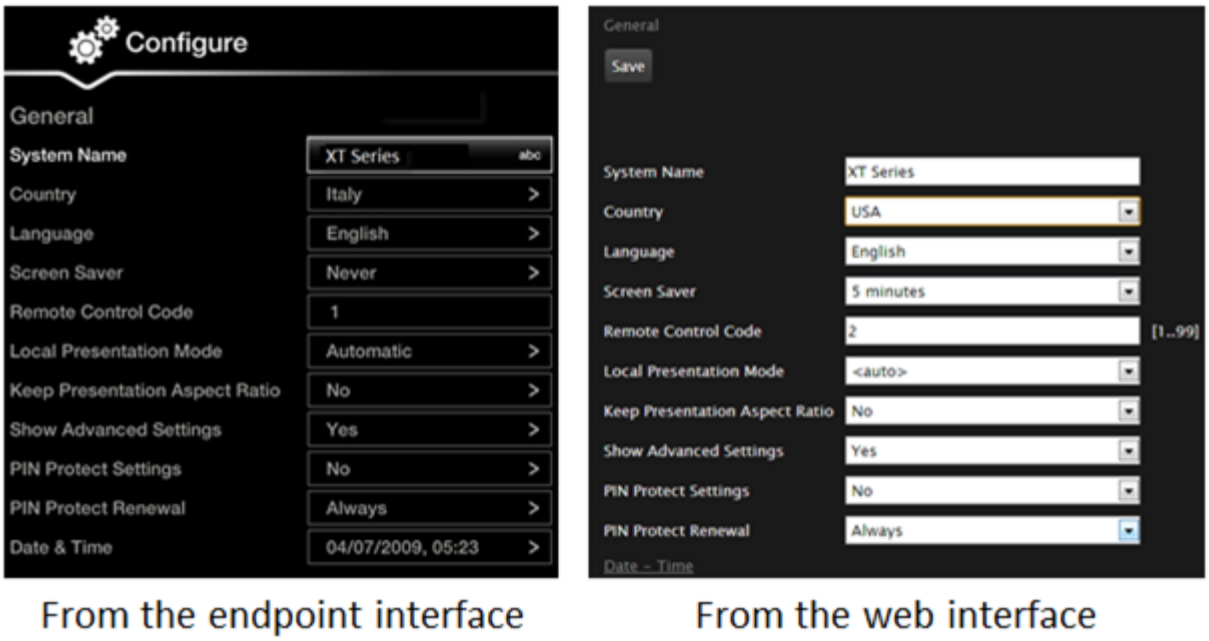


Figure 47: Configuring screen saver settings

2. Select **Yes** from the **Screen Saver** list.
3. Set the time after which the screen saver automatically starts on the display in the **Minutes** field.
4. From the web interface only, select **Save**.

Pairing an XT Remote Control Unit with an XT Codec Unit

About this task

Multiple XT Codec Units can be set up in the conference room and controlled with different XT Remote Control Units.

Each XT Remote Control Unit is dedicated to one XT Codec Unit by pairing them. This is done by configuring the same numeric code in your XT Remote Control Unit and the system software.

An XT Remote Control Unit is configured with code 01 by default.

Before you begin

Decide what numeric code you want to use for your monitor and the XT Codec Unit. You can choose any value between 1-99.

Procedure

1. Access the general settings, as follows:
   - From the web interface, select **Basic Settings > General**.
   - From the endpoint's Main menu, select **Configure > General**.

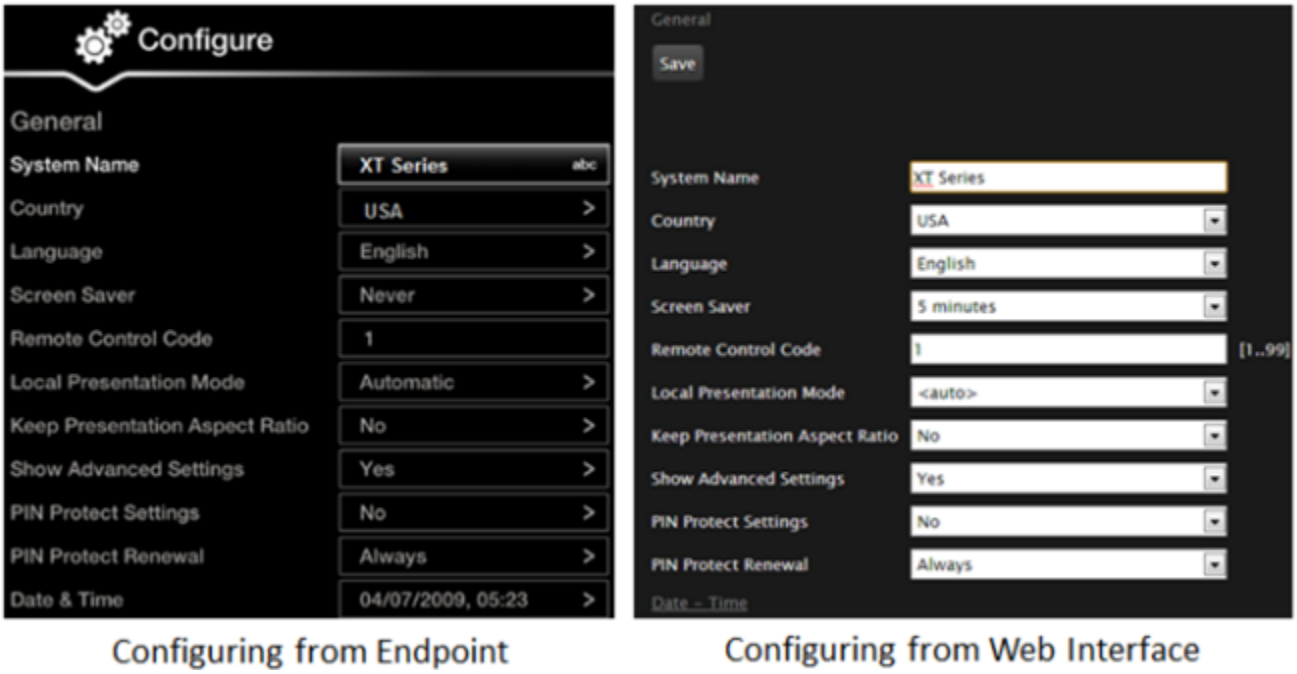


Figure 48: Setting the XT Remote Control Unit Code

2. Enter the numeric code in the **Remote control code** field. You can choose any value between 1-99.

3. From the web interface only, select **Save**.

4. On the XT Remote Control Unit, press the ***** and # keys simultaneously until the red led blinks twice.

Figure 49: Setting the code on the XT Remote Control Unit

5. Using the keypad, type the number you just entered in the **Remote control code** field.

   Important:

   You must always use two digits for a code. For example, to set the code to “1”, enter “01”.

   The code of the XT Remote Control Unit is changed and the Remote Control icon with the new Remote Control code appear at the top-right corner of the screen:

   Important:

   The code and icon do not appear when the default code, **01**, is used.

6. Set the code and exit by doing one of the following:
   - In the web interface, select **Finish**.
   - In the endpoint, press **OK**.

Pairing Your Scopia XT Telepresence with the Scopia Control

About this task

The Scopia Control is an application which enables you to manage and control the visual layout and camera settings of a Scopia XT Telepresence videoconference using the intuitive touch interface of an Apple® iPad®. For more information about Scopia Control, refer to the *Scopia Control Online Help*.

After this procedure your Scopia XT Telepresence is fully integrated and ready for use.

Before you begin

Ensure you have this information:

- The IP address of the primary XT Series in your Scopia XT Telepresence.
- The IP address of the Scopia Desktop Server deployed in your video network.

Procedure

1. Download the Scopia Control application from the App Store.
   a. Open the **App Store**.

      Important:

      If you have already downloaded the Scopia Control app to your iPad, select **Updates** to verify you have the latest version.

   b. Enter Scopia Control in the **Search** field.
   c. Tap the **Free** button.
   d. Tap the **Download** button.
   e. Enter your credentials and tap **OK**.
2. Open the iPad settings by tapping the **iPad Settings** icon.
3. Select **Scopia Control** in the **Apps** section.

Figure 50: Scopia Control under the Apps section

4. Enter the IP address of the primary XT Series.

Figure 51: Configuring SCOPIA Control settings

5. Enter the Scopia Control password.
6. Verify that the **Multiple XT5000** is disabled.
7. Enter the IP address of the Scopia Desktop Server.
8. Enter credentials of the Scopia Management meeting organizer.
9. Tap **Save**.
10. Verify that the Scopia Control is configured correctly by opening it.

    When configured correctly, the Scopia Control pairs to the Scopia XT Telepresence.

Figure 52: The Scopia Control is paired with the name of the system at the top of the page

Downloading and Installing the Scopia XT Telepresence Calibration Application

About this task

Before using the Scopia XT Telepresence, you need to calibrate the cameras and monitors using the Scopia Telepresence Calibration application.

You can download and install the calibration application to a laptop (PC or Mac) by remotely accessing the web interface of one of the Scopia XT5000 Series endpoints in the telepresence system.

The calibration application runs on the computer of your choice. It does not run natively on the endpoints themselves.

Perform this procedure before starting calibration.

Procedure

1. Access the web interface of one of the Scopia XT5000 Series endpoints comprising your Scopia XT Telepresence as described in Accessing XT Series Web Interface on page 44.

2. In the **Telepresence Calibration** area at the bottom of the Home page, select **Create package**.

3. Select the link to the package when it appears as shown in Figure 53: Locating the link to the calibration application package on page 60.

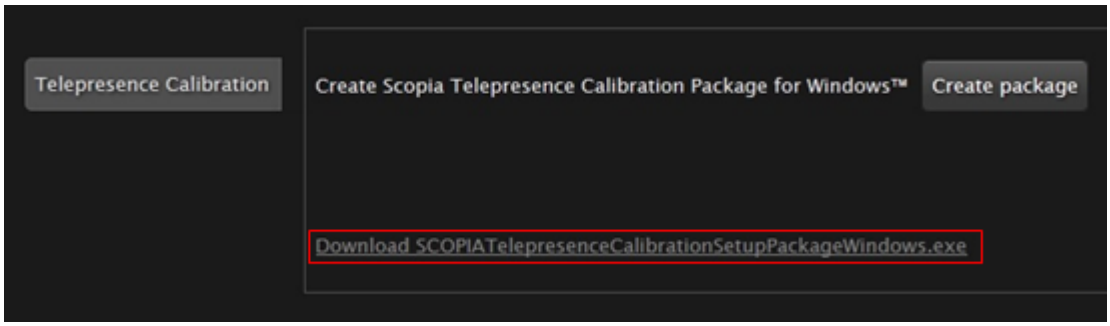


Figure 53: Locating the link to the calibration application package

The system automatically generates the link relevant for your operating system: Mac or PC.

4. Open the package.

5. Select the **Scopia XT Telepresence Calibration application** and select **Next**. See Figure 54: Selecting the Scopia XT Telepresence Calibration application in the Setup screen on page 61.

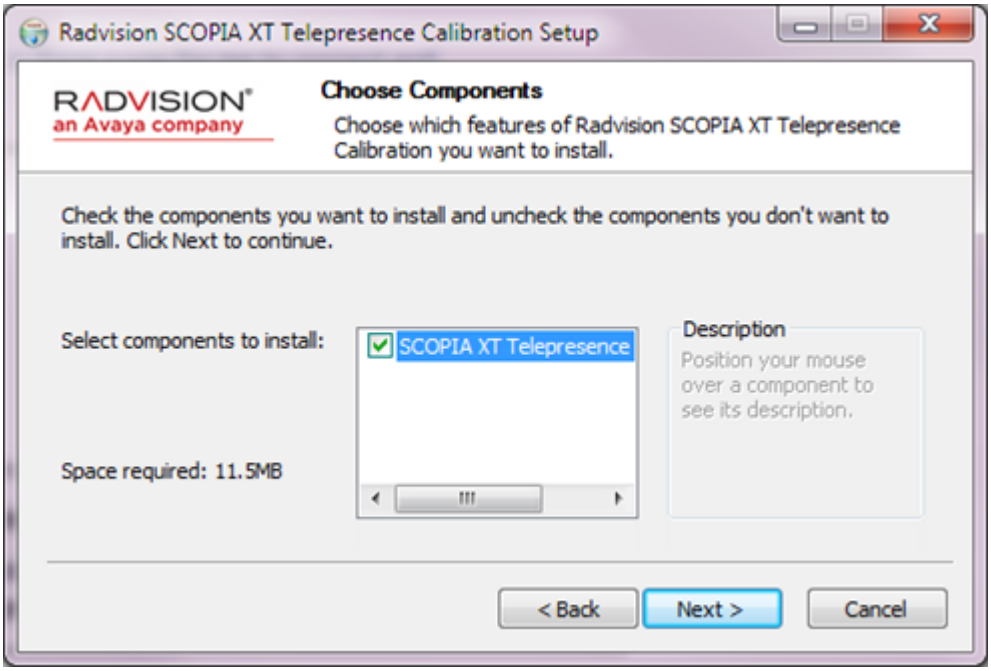


Figure 54: Selecting the Scopia XT Telepresence Calibration application in the Setup screen

You can either install this application on a laptop to use it later during calibration or install it on a USB drive to use a different computer during calibration.

6. Select the destination folder and select **Next**.
7. Select **Install**.
   The calibration application for your Scopia XT Telepresence is installed.

Calibrating your Scopia XT Telepresence

About this task

During this procedure you use the Scopia XT Telepresence Calibration application to calibrate the cameras and monitors of the Scopia XT Telepresence so that the images are aligned and can be stitched together to create the full telepresence effect. The Calibration application is protected with the password used for the Scopia Control paired with your Scopia XT Telepresence.

This procedure is performed simultaneously on all three XT Codec Units.

The Scopia XT Telepresence saves the position of cameras during this calibration as the default position of cameras, which is restored when you restart the XT Codec Units in your Scopia XT Telepresence.

Before you begin

1. Ensure you have a portable computer.
2. Ensure that you have completed all procedures in Configuring the Scopia XT Telepresence on page 37 up until this section.
3. Ensure you have the password for the Scopia Control paired with your Scopia XT Telepresence. The default password is **1234**.
4. Check the naming conventions for components comprising your Scopia XT Telepresence in Placing Components of Your Scopia XT Telepresence on page 16.
5. Make sure you have downloaded the Scopia XT Telepresence Calibration application as described in Downloading and Installing the Scopia XT Telepresence Calibration Application on page 60.
6. Ensure you have the Advanced XT Remote Control Unit.

Procedure

1. Bring a laptop with the Scopia XT Telepresence Calibration application into your telepresence room.
2. Connect the laptop to the same network to which the Scopia XT Telepresence is connected.
3. Turn the Scopia XT Telepresence on or press any button on the remote to wake the system, if it is in the screensaver mode.
4. If you downloaded the calibration application to a USB drive, insert it into the USB port of your laptop.
5. Start the Calibration application.
6. Enter the IP address of primary XT Codec Unit.

   If you do not remember the IP address of the XT Codec Unit, you may press the **Help** button on the Advanced XT Remote Control Unit to display this IP address on the primary monitor.

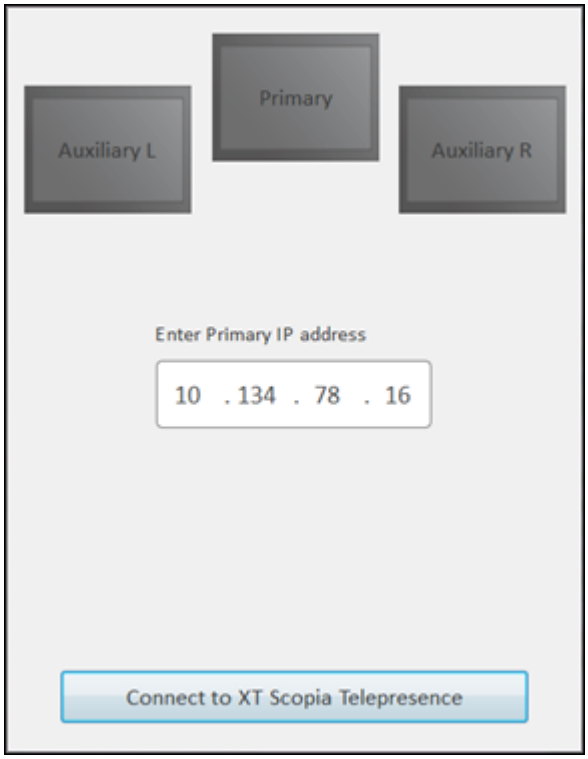


Figure 55: Entering the IP address for the primary XT Codec Unit

7. Select **Connect to the Scopia XT Telepresence**.
8. Enter the Scopia Control password and select **OK**.
   The default password is **1234**.
9. Configure settings as described in Table 9: Configuring basic Scopia XT Telepresence settings on page 64.

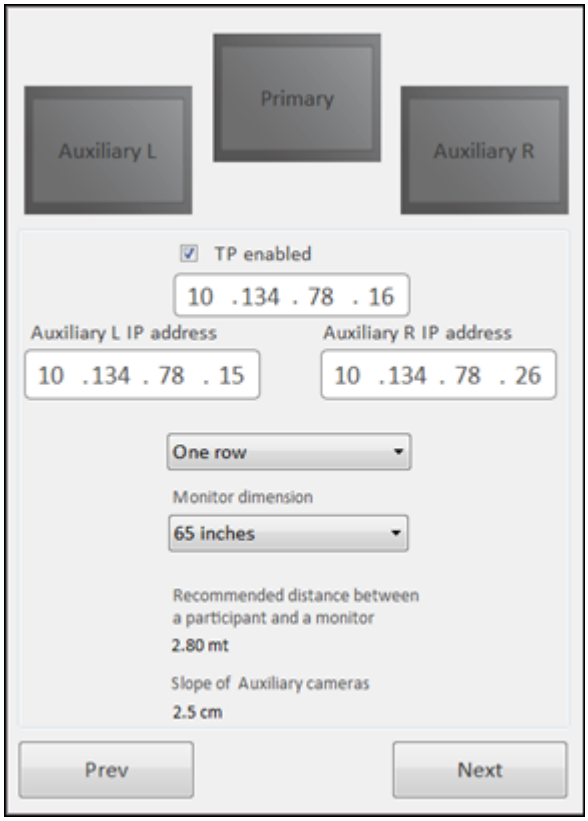


Figure 56: Entering the IP address for the auxiliary XT Codec Units

Table 9: Configuring basic Scopia XT Telepresence settings

Field	Description
TP enabled	Ensure the **TP Enabled** check box is selected.
Auxiliary L IP address	Enter IP addresses for the auxiliary left XT Codec Unit.
Auxiliary R IP address	Enter IP addresses for the auxiliary right XT Codec Unit.
One row	Select **One row** for a standard telepresence room. Select **Two rows** for a dual-row telepresence room.
Monitor dimension	Select the size of TP monitors you chose in accordance with recommendations in Choosing Monitors for Your Scopia XT Telepresence on page 13. This setting is relevant only for a standard telepresence room. The application shows the recommended distance from a monitor to a meeting participant, as well as the recommended slope of the auxiliary cameras. This information is relevant only for standard telepresence room deployments.

10. Select **Next**.

    The screen shows cable connection instructions.

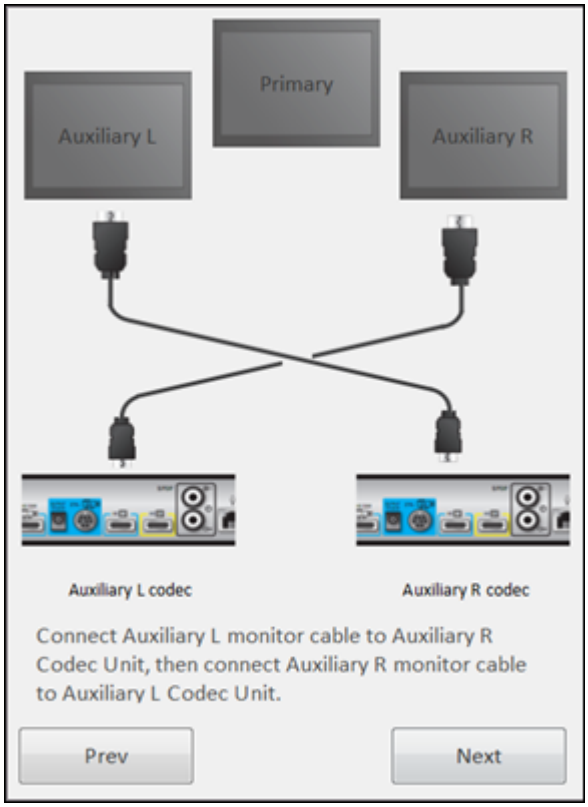


Figure 57: Instructions for monitor cable connection

11. Connect the monitor cable of the Auxiliary-L monitor to the Auxiliary-R XT Codec Unit.
12. Connect the monitor cable of the Auxiliary-R monitor to the Auxiliary-L XT Codec Unit.
13. Select **Next**.

    The pattern for monitor calibration is displayed on all three screens.

    Important:

    From this step onwards you can use the Advanced XT Remote Control Unit only to shut down the XT Codec Unit and display basic settings by pressing **Help**.

14. Use remote controls of the monitors to calibrate monitors so that the colors in the pattern looks identical on all of them.

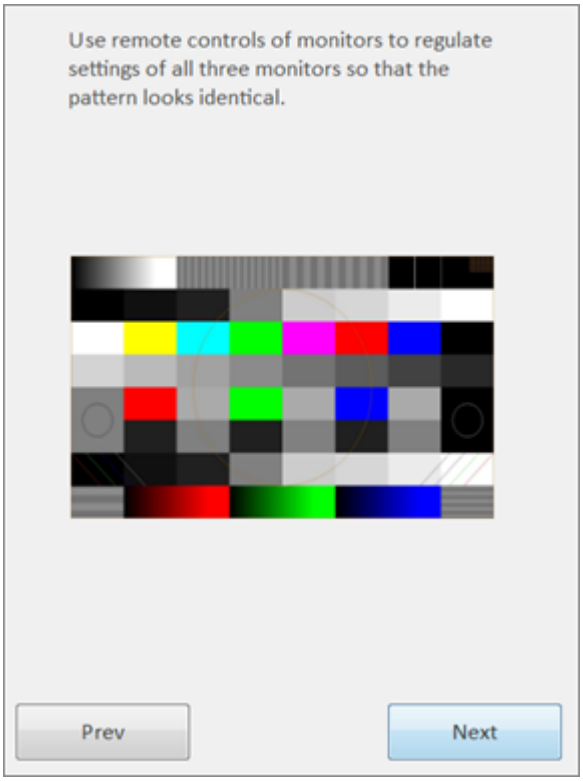


Figure 58: Calibrating the monitors

15. Select **Next**.

16. To position the cameras correctly:

    a. Select **Calibrate cameras automatically**.

Figure 59: Calibrating camera positions

The position of the cameras is calibrated automatically.

b. Check that the cameras are vertically aligned, by checking that the table surface line is continuous and not fractured on the image.

c. To fine tune the cameras manually, select **Calibrate cameras manually**.

Important:

In a typical installation you perform manual calibration of the auxiliary cameras using the primary camera image for reference. We strongly recommend that you do not calibrate the primary camera manually.

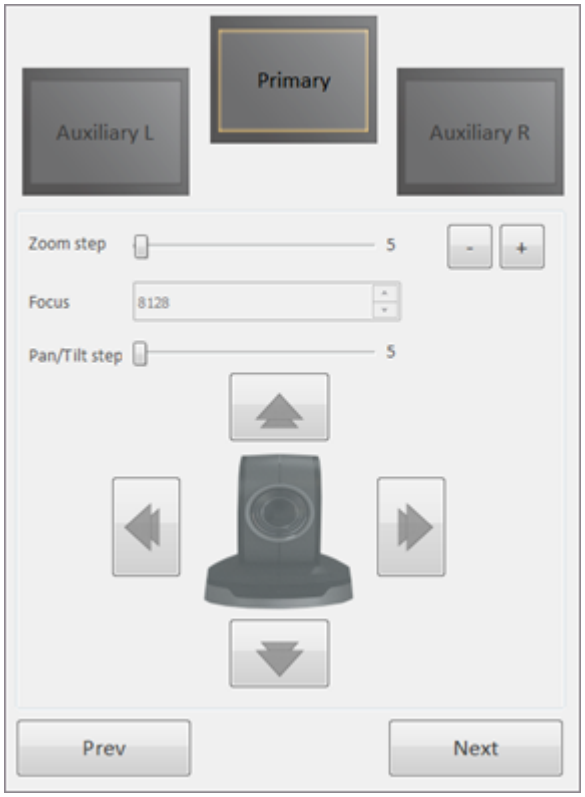


Figure 60: Calibrating camera position manually

d. Select the right-hand image to calibrate the camera providing the right image.

e. Select the **Pan/Tilt step** by dragging the slider. The sensitivity of the slider depends on the current zoom.

   We recommend that you set the **Pan/Tilt step** value to 1 or 2 at the beginning of the manual calibration to change the camera position.

f. Select the **Up** and **Down** buttons to position the camera vertically.

g. Check that this camera's vertical position is correct by using the table's surface as a reference.

h. Place an object on the table so that its image appears on the images in the center and on the left.

i. Verify that there are no image areas that appear on both monitors as shown in Figure 61: Example of incorrect pan calibration on page 69.

Figure 61: Example of incorrect pan calibration

If there are image areas that appear on two screens, set the **Pan/Tilt step** to 1 or 2, and then select the **Left** or **Right** buttons to position the camera horizontally.

j. Repeat the manual calibration for the camera providing the left image.

k. Select **Next**, and then select **Yes** to apply these settings. The camera position is saved by the XT Codec Unit.

l. If it is still necessary to adjust the camera position, you can also slightly change the slope of the camera bracket. Typically, it is not necessary.

17. Calibrate the color of the camera image to the lighting conditions of your telepresence room.

    a. Select **Calibrate cameras automatically**.

    The automatic colorimetric calibration is performed.

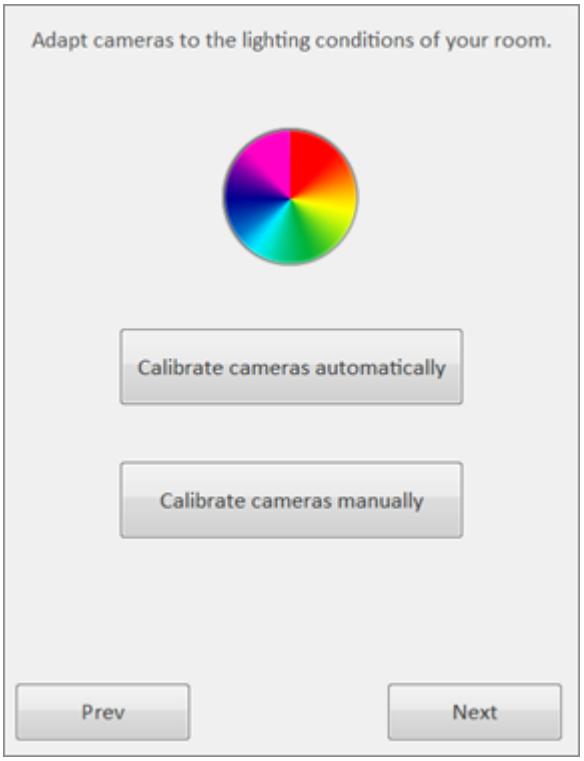


Figure 62: Calibrating camera image

Typically you do not need to perform a manual image calibration. In case you do, adjust the colors and brightness of the cameras so that the image on the monitors reflects reality.

b. Select **Next**.

18. Reconnect the Auxiliary-L monitor cable to the Auxiliary-L XT Codec Unit.

19. Reconnect the Auxiliary-R monitor cable to the Auxiliary-R XT Codec Unit.

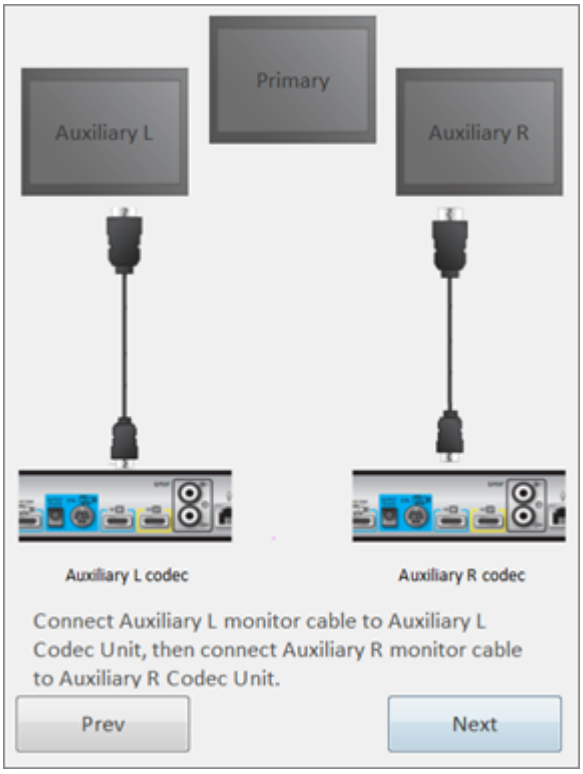


Figure 63: Reconnecting the monitor cables.

20. Select **Next**.
21. Select **Done**.

    Your Scopia XT Telepresence is configured and calibrated. The Calibration application closes and the standard screensaver image is displayed .

Adding Scopia XT Telepresence in Scopia Management

About this task

If you use regular endpoints to create Scopia XT Telepresence, define them in Scopia Management as components of the telepresence system, not as single endpoints. You cannot directly change an existing single endpoint in Scopia Management into a telepresence endpoint, and vice versa.

If your organization uses an LDAP directory, only the primary endpoint should be defined in the LDAP directory.

Before you begin

- Ensure the gatekeeper to which you registered your telepresence system is defined and configured in Scopia Management. Refer to Configuring Gatekeeper Settings on page 50.
- If the endpoints you want to define as part of your telepresence system already exist in Scopia Management as separate single endpoints, you must delete them. You will redefine these endpoints as part of your telepresence system as described in the procedure below.
- If your organization uses the LDAP directory and the endpoints forming the telepresence system are defined in the LDAP directory, we strongly recommend that you define only the primary endpoint in your LDAP directory and remove non-primary endpoints from it.

Procedure

1. Access the Scopia Management administrator portal.
2. Select the **Endpoints** tab.
3. Select **Add** > **Add manually**.

   The **Add Endpoint** window appears. The Add Endpoint window looks different, depending on the model of the telepresence system you are adding. See Figure 64: Add Endpoint window on page 72.

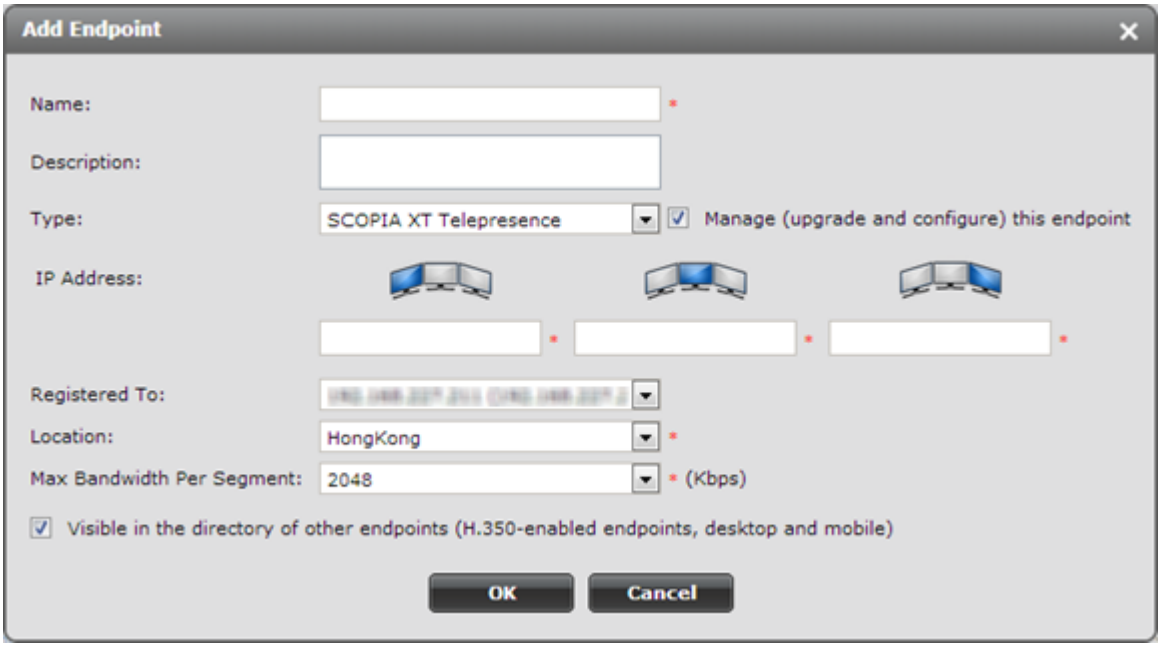


Figure 64: Add Endpoint window

4. Configure your telepresence endpoint as described in Table 10: Configuring telepresence endpoints on page 73.

Table 10: Configuring telepresence endpoints

Field Name	Description
Name	Enter a name used to identify the telepresence system as a whole. This is the name displayed in the list of endpoints.
Description	Enter any description text that you may have for this endpoint.
Type	Select **Scopia XT Telepresence**.
Required Gatekeeper	Select the gatekeeper to which the telepresence system is registered. You register the Scopia XT Telepresence to a gatekeeper as part of the basic configuration described in Configuring Gatekeeper Settings on page 50.
Location	A location is a physical space (building) or a network (subnet) where video devices can share a single set of addresses. A distributed deployment places these components in different locations, often connected via a VPN. This is only relevant for deployments with multiple locations. Select the location of the telepresence system from the list of locations you defined earlier in Scopia Management .
Max Bandwidth per Segment	Scopia Management uses the bandwidth value to reserve resources for this endpoint. Enter the default maximum bandwidth for a single codec in the telepresence system. For example, for the telepresence system to use 6144 Kbps, define 2048 Kbps for one codec. When there is enough bandwidth available, video is displayed in the highest possible resolution. This value is also subject to the bandwidth settings of the meeting type (MCU service) used in a meeting.

Field Name	Description
Visible in the directory of other endpoints	Select to display the telepresence system in the corporate address book. The telepresence endpoint is represented in the address book as a single endpoint. The number which the system displays is the number assigned to the primary monitor. The following solution components can access the telepresence system via this single entry: • Scopia Management • Scopia Desktop • XT Series • Scopia Add-in for IBM Lotus Notes • Scopia Add-in for Microsoft Outlook • Room systems via H.350 • Cisco telepresence devices
IP Address	Enter the IP address for all component in these cases: • If this telepresence system is not registered to a gatekeeper Or • If you want Scopia Management to manage this telepresence system

5. Select **OK**.

   The Scopia XT Telepresence appears on the **Endpoints** tab. The telepresence icon indicates that the type of the endpoint is telepresence. The **Dialing Info** field shows the E.164, the URI or the IP address of the primary component of the telepresence system.

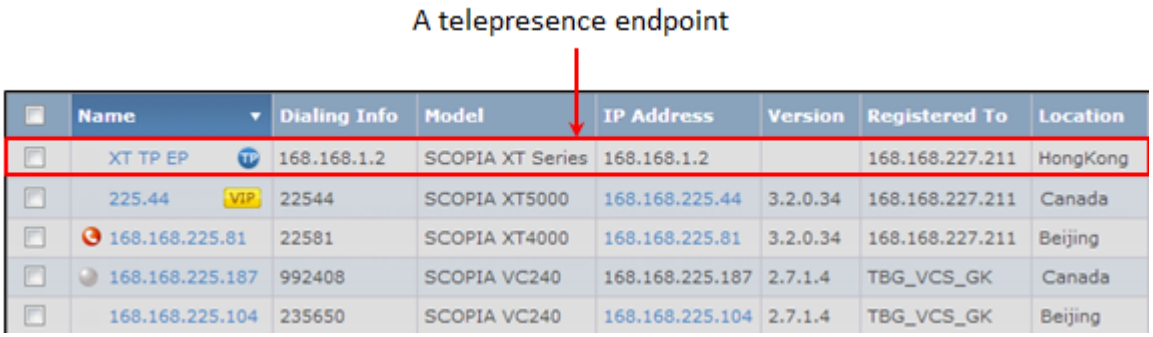


Figure 65: Example of a telepresence endpoint on the Endpoints tab

6. To show the presence information for the telepresence system on Microsoft Lync clients, re-import its primary endpoint from the LDAP directory as described in *Administrator Guide for Scopia Management*.

   When the primary endpoint is re-imported, Scopia Management lists the telepresence system and also reflects its presence information in Lync clients (if applicable).

Chapter 5 | Participating in a Telepresence Meeting

Scopia XT Telepresence offers an immersive experience for videoconferences, and has a number of customization options including muting your own system, disabling your own video, or muting other participants in the meeting. You can also invite other participants to the meeting, and integrate a presentation as part of the conference.

Navigation

- Preparing for your Telepresence Meeting on page 75
- Telepresence between Two Scopia XT Telepresence Systems on page 76
- Starting a Telepresence Meeting between Multiple Locations on page 78
- Controlling a Telepresence Meeting on page 80
- Starting a Presentation on page 84

Preparing for your Telepresence Meeting

You can prepare for your telepresence meeting by following a number of guidelines to optimize your telepresence experience:

- If you are using a laptop during a telepresence meeting, do not place it too close to the microphone pods. Noise produced by the laptop cooling system may be increased by the microphones and aggravate the quality of audio in the meeting.
- Avoid using your cellular phones during your telepresence meeting to avoid EMI (electromagnetic interference).
- If you are in a dual-row telepresence room, ensure you are not in the blind spot. See Figure 66: Blind spots in dual-row telepresence rooms on page 76.

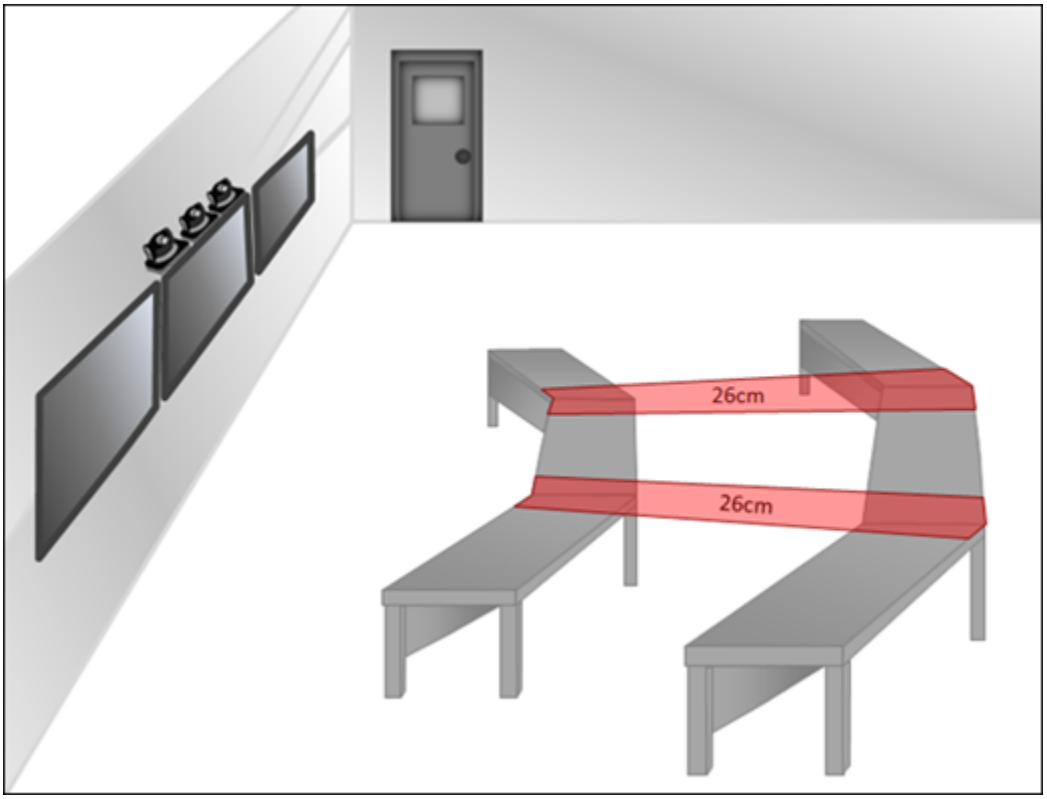


Figure 66: Blind spots in dual-row telepresence rooms

Telepresence between Two Scopia XT Telepresence Systems

About this task

You can create a telepresence meeting between two Scopia XT Telepresence systems, creating the experience of two groups in the same room. To connect to the other telepresence system, it must appear in the corporate directory of accessible endpoints from the Scopia Control app.

If the other Scopia XT Telepresence does not appear in the list of accessible endpoints, contact your video network administrator for help.

Procedure

1. Open the **Scopia Control** application on your iPad.

   It automatically connects to your Scopia XT Telepresence. For example, in Figure 67: Scopia Control is connected to the Scopia XT Telepresence system on page 77 Scopia Control connects to a telepresence system called London TP.

Figure 67: Scopia Control is connected to the Scopia XT Telepresence system

2. Tap **Directory**.

   Scopia Control connects to the Scopia Management directory. A list of accessible video endpoints is displayed (Figure 68: The Scopia Control displays the Directory of endpoints on page 77).

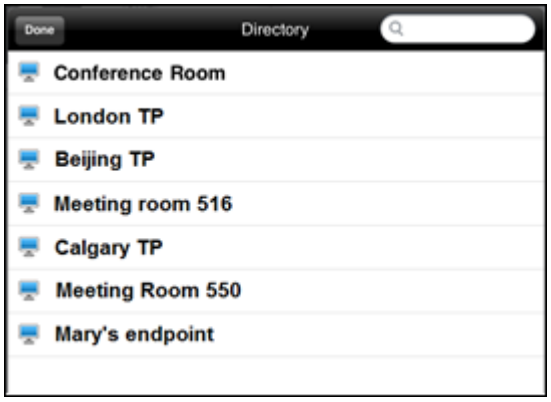


Figure 68: The Scopia Control displays the Directory of endpoints

3. Select another Scopia XT Telepresence from the list.

   The Scopia XT Telepresence connects to the other Scopia XT Telepresence (Figure 69: Telepresence meeting in progress on page 78).

Figure 69: Telepresence meeting in progress

Starting a Telepresence Meeting between Multiple Locations

About this task

You can use your Scopia XT Telepresence to create meetings between several endpoints of different types: personal endpoints, room systems, and telepresence systems.

This feature may not be available depending on your video network settings. For more information refer to your video network administrator.

Before you begin

Refer to your video network administrator to check the service number of the MCU.

Procedure

1. Open the **Scopia Control** application on your iPad.

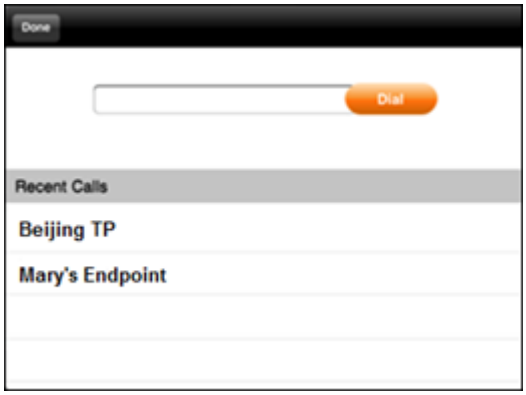
It automatically connects to your Scopia XT Telepresence. For example, in Figure 70: Scopia Control is connected to the Scopia XT Telepresence system on page 79 Scopia Control connects to a telepresence system called London TP.

Figure 70: Scopia Control is connected to the Scopia XT Telepresence system

2. Tap **Place call**.

3. In the **Dial** field, enter the MCU service number and the meeting number.

   The meeting number can be the last four digits of your phone extension or any other unique four-digit number.



4. Tap **Dial**.

The virtual conference room is created.

Invite participants as described in Inviting Participants to your Telepresence Meeting on page 82.

Controlling a Telepresence Meeting

You can control your telepresence meeting using the Scopia Control. The XT Remote Control Unit is disabled when the Scopia Control is paired with the Scopia XT Telepresence.

You control your telepresence meeting by performing these actions:

Navigation

- Muting Your Microphone in Scopia XT Telepresence on page 80
- Controlling Volume of Speakers on page 80
- Disabling Your Video on page 81
- Muting Participants in a Telepresence Meeting on page 81
- Inviting Participants to your Telepresence Meeting on page 82
- Terminating the Telepresence Meeting on page 83

Muting Your Microphone in Scopia XT Telepresence

About this task

You can mute your microphone so others cannot hear you talk by tapping the **Mic** button. See Figure 71: Mic button on the Scopia Control screen on page 80.

Figure 71: Mic button on the Scopia Control screen

Controlling Volume of Speakers

About this task

You can control the volume of speakers by dragging the volume slider.

Figure 72: The volume slider

Disabling Your Video

About this task

If necessary, you can disable your video by tapping the **Privacy** button. See Figure 73: Privacy button in the Scopia Control screen on page 81.

Figure 73: Privacy button in the Scopia Control screen

Muting Participants in a Telepresence Meeting

About this task

You can mute any of the participants in a meeting through Scopia Control's list of participants. If your meeting is with another telepresence system, muting that system mutes all the microphone pods on that system.

This feature may not be available depending on your video network settings. For more information refer to your video network administrator.

Procedure

1. Tap the **Participants** button .

   The Participants pane is displayed. See Figure 74: The Participants pane on page 82.

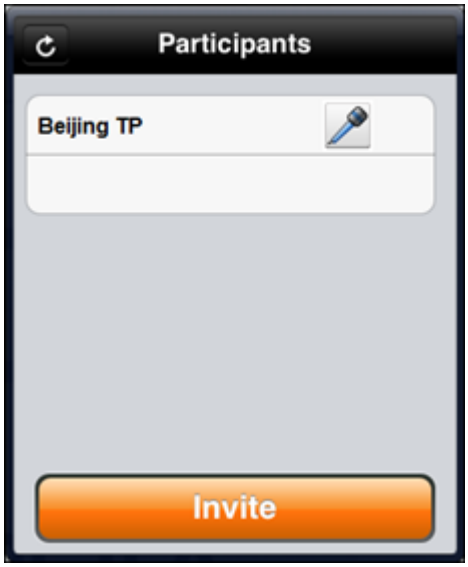


Figure 74: The Participants pane

2. Tap the **Microphone** button next to the participant's name to mute their microphone.

Inviting Participants to your Telepresence Meeting

About this task

You can invite participants by sending an invitation to other telepresence systems, room systems or personal H.323 endpoints. Usually you invite participants by selecting the name of their endpoint in the directory. You can also invite participants by directly dialing the H.323 number of the endpoint they are using.

This feature may not be available depending on your video network settings. For more information refer to your video network administrator.

Procedure

1. To invite a participant from directory:
   a. Tap the **Participants** button .

      The Participants pane opens.

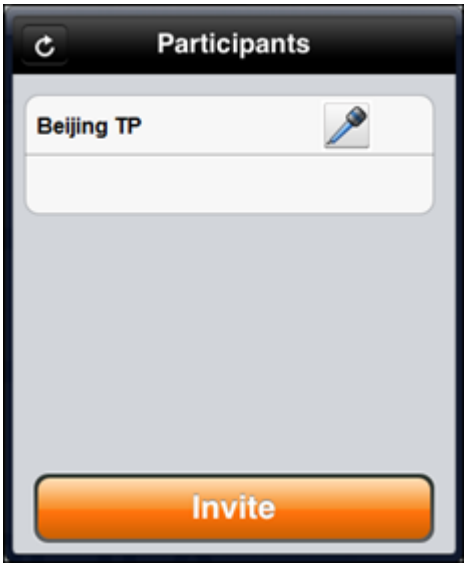


Figure 75: The Participants pane

b. Tap **Invite**

c. Tap a name in the list.

d. If necessary, search the directory and select a contact from the search results.

2. To invite a participant by H.323 number:

a. Tap **Invite**.

b. Tap **By Address**.

Figure 76: Invite Participants screen

c. Enter the H.323 number.

d. Tap **Call**.

Terminating the Telepresence Meeting

About this task

This feature may not be available depending on your video network settings. For more information refer to your video network administrator.

Procedure

1. Tap the Control button .
2. Tap the **Terminate Meeting** button.

   This screen is displayed.

Figure 77: The paired screen of the Scopia Control

Starting a Presentation

About this task

Scopia XT Telepresence also integrates presentations seamlessly into the telepresence experience. Starting a presentation is simple and intuitive.

Procedure

1. Ensure the computer holding the presentation is connected to the DVI port of the primary XT Series XT Codec Unit.
2. On the portable computer, start your presentation.
3. In Scopia Control, tap the **Present** button.

Figure 78: The Present button

The presentation is displayed on presentation monitor of all telepresence systems participating in the meeting.

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Radvision, an Avaya company, is a leading provider of videoconferencing and telepresence technologies over IP and wireless networks. We offer end-to-end visual communications that help businesses collaborate more efficiently. Together, Radvision and Avaya are propelling the unified communications evolution forward with unique technologies that harness the power of video, voice, and data over any network.

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