SMART Room Systems™ with Skype® for Business

ADMINISTRATOR'S GUIDE

FOR MODELS SRS-LYNC-XS, SRS-LYNC-S-G5, SRS-LYNC-M, SRS-LYNC-M-DUAL, SRS-LYNC-L-G5 AND SRS-LYNC-XL

FEATURING SMART BOARD® 8055i-G5, 8065i-G5 AND 8084i-G4 INTERACTIVE FLAT PANELS

> **NOTE**
>
> This documentation has been updated to support Microsoft's transition from Lync® to Skype® for Business software. Most references to Lync have been removed and replaced with Skype for Business, however the following information is still applicable to SMART room systems running Lync software.

SMART®

Product registration

If you register your SMART product, we'll notify you of new features and software upgrades.

Register online at smarttech.com/registration.

Important information

> ⚠️ **WARNING**
>
> - Failure to follow the installation instructions shipped with the room system could result in injury and product damage which may not be covered by the warranty.
>
> - Ensure your installation complies with local building and electrical codes.
>
> - Do not open or disassemble the room system. You risk electrical shock from the high voltage inside the casing. Opening the casing also voids the warranty.
>
> - Do not stand (or allow children to stand) on a chair to touch the surface of the room system. Rather, mount the product at the appropriate height.
>
> - To reduce the risk of fire or electric shock, do not expose the room system to rain or moisture.
>
> - If the room system requires replacement parts, make sure the service technician uses replacement parts specified by SMART Technologies or parts with the same characteristics as the original.
>
> - Ensure that any cables that cross the floor to the room system are properly bundled and marked to avoid a trip hazard.
>
> - Do not insert objects inside the cabinet ventilation holes, because they could touch dangerous voltage points and cause electric shock, fire or product damage which may not be covered by the warranty.
>
> - Do not place any heavy objects on the power cable. Damage to the cable could cause shock, fire or product damage which may not be covered by the warranty.
>
> - Use only extension cords and outlets that can fully accommodate the room system's polarized plugs.
>
> - Use the power cables provided with the room system. If a power cable is not supplied, please contact your supplier. Use only power cables that match the AC voltage of the power outlet and that comply with your country's safety standards.
>
> - If the glass is broken, do not touch the liquid crystal. To prevent injury, handle glass fragments with care when disposing of them.

- Do not move or mount the interactive flat panels by connecting rope or wire to their handles. The interactive flat panels are heavy, and failure of the rope, wire or handle could lead to injury.

- Use SMART supplied mounting hardware or hardware that is designed to properly support the weight of the room system.

- Disconnect all the room system's power cables from the wall outlet and seek assistance from qualified service personnel if any of the following occur:

  - The power cable or plug is damaged

  - Liquid is spilled into any of the room system's components

  - Objects fall into any of the room system's components

  - Any of the components are dropped

  - Structural damage such as cracking occurs

  - The room system behaves unexpectedly when you follow operating instructions

Contents

Welcome

This chapter introduces this guide and the SMART Room System™ with Skype® for Business.

About this guide

This guide explains how to administer the SMART Room System. It includes the following information:

- How to maintain the room system's hardware for years of use

- How to remotely monitor and manage the room system

- How to troubleshoot issues with the room system

This guide in intended for individuals who administer room systems in their organizations. Other documentation and resources are available for individuals who install room systems and individuals who use room systems.

About the room system

The SMART Room System features one or two SMART Board® interactive flat panels, a room system appliance, a tabletop console, a high-definition camera, microphones, speakers and cables for use with an optional computer.

Using the installed Skype for Business Room System software, users can start a meeting and connect with other participants or meeting rooms with a single tap on the console or the interactive flat panels. They can write or draw on the interactive flat panels using the whiteboard feature or connect an optional computer to share its screen and share files with other participants and meeting rooms in real time.

Features

The SMART Room System includes the following features.

Integration with Skype for Business
The room system integrates with your organization's existing Lync or Skype for Business infrastructure, enabling users to schedule meetings, remotely join meetings, and share Microsoft PowerPoint® files using the Skype for Business client software already installed on their computers.

Simple startup
After the room system turns on, the console and the interactive flat panels show the meeting room's schedule, including when the meeting room is booked and when it's available. Users can start a scheduled meeting by pressing the meeting's block in the schedule on either the console or the interactive flat panels.

Users can also start ad hoc meetings or whiteboard sessions with a single press of the console or interactive flat panels.

Automatic sharing of video and audio
When users start or join meetings, the room system shares video and audio automatically without requiring any manual setup on the users' part. The room system includes a high-definition camera, microphones and speakers, so users can see and hear remote participants.

Collaboration
Using Skype for Business Room System software's whiteboard feature, users can write or draw notes on the interactive flat panels, automatically sharing with remote participants. Users can also write or draw over PowerPoint files attached to the scheduled meeting as well as connect a laptop or a room computer to share and interact with the computers' displays.

Presence detection
The interactive flat panels feature presence detection sensors that can detect people up to 16' (5 m) away and turn the room system on automatically. If the room is unoccupied for a specified period of time, the room system enters Standby mode.

Components
The room system includes the following major components:

Part no.	Description	Room sizes
SBID 8055i-G5	SMART Board 8055i-G5 interactive flat panel	Extra small Medium with dual panels (×2)
SBID 8065i-G5	SMART Board 8065i-G5 interactive flat panel	Small Large (×2)
SBID 8084i-G4	SMART Board 8084i-G4 interactive flat panel	Medium Extra large (×2)
AM70-L	room system appliance	All
CP311	Console	All
CAM301	Camera	All
MIC500	Table microphones	All
MIX500	Audio processor	All
CSR500	Speakers	All
1019403	Video connection harness	All
SRS-USB Bridge	SMART Room System USB Bridge	All

> ### ✎ NOTES
>
> - This guide documents room systems that use SMART Board 8055i-G5, 8065i-G5 and 8084i-G4 interactive flat panels. For information about room systems that use SMART Board 8055i or 8070i-G4 interactive flat panels, see the *SMART Room System with Skype for Business setup and maintenance guide* (smarttech.com/kb/170450).
>
> - Other, minor components are documented elsewhere in this guide.

SMART Board interactive flat panels

SMART Board interactive flat panels feature SMART's proprietary DViT® (Digital Vision Touch) technology on a 16:9 LCD screen with e-LED backlight. DViT technology enables users to do the following:

- Interact with content by pressing it with their fingers

- Write digital ink using their fingers or one of the provided pens

- Erase digital ink using their fists, their palms or the provided eraser

During a meeting, the interactive flat panels show video, shared PowerPoint files, and video input from optionally connected computers. In addition, users can use the whiteboard feature to record and share notes.

For information about which interactive flat panel model is included with your room system and the differences between these models, see *Comparing room sizes* on page 7.

> ### ✎ NOTE
>
> The USB receptacle on the bottom-left corner of SMART Board 8055i-G5 and 8065i-G5 interactive flat panels is not functional in room systems.

room system appliance

The room system appliance includes Skype for Business Room System software as well as SMART Product Drivers. Users can use Skype for Business Room System software to start, join and facilitate meetings and connect with others through your organization's Lync or Skype for Business infrastructure. SMART Product Drivers enables the touch features of the interactive flat panels and the operation of the room system components.

In room systems that use SMART Board 8055i-G5 and 8065i-G5 interactive flat panels, the room system appliance is installed in an enclosure mounted to the wall behind the left interactive flat panel.

In room systems that use SMART Board 8084i-G4 interactive flat panels, the room system appliance is installed in a slot on the bottom of the left interactive flat panel.

Console

The console is the room system's primary display. Users can use it to access and control the features of Skype for Business Room System software during meetings.

The console is typically located on the meeting room table. Like the interactive flat panels, the console features a 16:9 LCD screen with touch technology, and users can interact with buttons and other controls by pressing them.

Camera

The high-definition camera automatically captures room video during meetings. Users can temporarily stop the video or shutter the camera for privacy.

In most meeting rooms, digital pan, tilt and zoom (DPTZ) and the camera's 109° field of view ensure all meeting participants are visible regardless of where they are in the meeting room.

In rooms with one interactive flat panel, the camera is installed on the top of the interactive flat panel. In rooms with two interactive flat panels, the camera is installed between the interactive flat panels.

Table microphones and audio processor

The table microphones automatically capture audio during meetings. Users can temporarily mute the microphones for privacy.
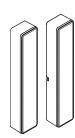
The room system comes with two table microphones. Your organization can purchase additional table microphones (see *Additional table microphones* on the next page).

Speakers

The speakers transmit audio from remote participants during a meeting. The room system's audio-processing features eliminate echos and audio feedback.

The speakers are installed on either side of the interactive flat panels.

Video connection harness
Users can connect the video connection harness's HDMI® cable or VGA cable to a computer to display the computer's video output on an interactive flat panel and share it with remote participants.

The connectors for the video connection harness are typically located on the meeting room table.

SMART Room System USB Bridge
When combined with the video connection harness, the SMART Room System USB Bridge enables users to connect laptops or a room computer to the room system. When users connect the SMART Room System USB Bridge to a computer, they can interact with the computer by touching the interactive flat panel's surface.

SMART recommends that all users install the latest versions of SMART Meeting Pro® PE software, SMART Ink™ and SMART Product Drivers on any computer or laptop that will be used to connect to the SMART Room System using the SMART Room System USB Bridge. Visit smarttech.com/downloads to download the latest SMART software versions and refer to the *SMART Room System with Skype for Business User's Guide* (smarttech.com/kb/170818) for full instructions on how to install all of the software for the SMART Room System USB Bridge.

The SMART Room System USB Bridge's connector is typically located on the meeting room table.

Accessories

Optional accessories for the SMART Room System include the following:

- Additional table microphones
- Wall stand kit

> **NOTE**
>
> For accessory part numbers and ordering information, refer to the specifications (see *Resources for decision makers* on page 9).

Additional table microphones
The room system includes two table microphones. Your organization can purchase and connect up to three additional table microphones for each room system if needed for a total of up to five table microphones.
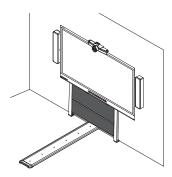
Wall stand kit

The wall stand kit includes a wall stand for each interactive flat panel in the room system and the cable raceway. The wall stand transfers some of the weight from the wall to the floor and is required for metal stud walls that can't support the full weight of the interactive flat panel. The cable raceway covers cables running across the floor from the interactive flat panels to the meeting room table.

Comparing room sizes

The SMART Room System comes in six sizes. This section presents the key differences among these sizes.

Extra small room (SRS-LYNC-XS)

Intended use:	Extra small meeting rooms (approximately four people) 100 sq. ft. (9 m^2)
Display type:	One SMART Board 8055i-G5 interactive flat panel
Display size (diagonal):	54 1/2" (138.4 cm)
Optional wall stand kit:	WSK-SINGLE
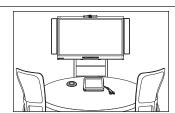
Small room (SRS-LYNC-S-G5)

Intended use:	Small meeting rooms (approximately six people) 150 sq. ft. (14 m^2)
Display type:	One SMART Board 8065i-G5 interactive flat panel
Display size (diagonal):	64 1/2" (163.9 cm)
Optional wall stand kit:	WSK-SINGLE

Medium room (SRS-LYNC-M)

Intended use:	Medium meeting rooms (approximately 12 people) 200 sq. ft. (19 m^2)
Display type:	One SMART Board 8084i-G4 interactive flat panel
Display size (diagonal):	84" (213.4 cm)
Optional wall stand kit:	WSK-SINGLE

Medium room with dual panels (SRS-LYNC-M-DUAL)

Intended use:	Medium meeting rooms (approximately 12 people) 200 sq. ft. (19 m^2)
Display type:	Two SMART Board 8055i-G5 interactive flat panels
Display size (diagonal):	2 × 54 1/2" (2 × 138.4 cm)
Optional wall stand kit:	WSK-DUAL

Large room (SRS-LYNC-L-G5)

Intended use:	Large meeting rooms (approximately 16 people) 300 sq. ft. (28 m^2)
Display type:	Two SMART Board 8065i-G5 interactive flat panels
Display size (diagonal):	2 × 64 1/2" (2 × 163.9 cm)
Optional wall stand kit:	WSK-DUAL

Extra large room (SRS-LYNC-XL)

Intended use:	Extra large meeting rooms (approximately 20 people) 400 sq. ft. (37 m^2)
Display type:	Two SMART Board 8084i-G4 interactive flat panels
Display size (diagonal):	2 × 84" (2 × 213.4 cm)
Optional wall stand kit:	WSK-DUAL

> **NOTE**
>
> Other, minor differences are noted throughout this guide.

Resources for administrators

In addition to this guide, SMART provides a variety of other resources for SMART Room System administrators.

Setup guide

Refer to the *SMART Room System with Skype for Business setup guide* included with the room system to prepare for the room system before installation and to set it up after installation. A PDF version of the guide is available for download from smarttech.com/kb/170820.

Support center and knowledge base

The Support center (smarttech.com/support) contains a library of documents, including this guide, and a knowledge base that you can search when troubleshooting issues with your room system.

Resources for others

SMART provides resources for SMART Room System decision makers, installers and users as well as administrators.

Resources for decision makers

Decision makers can refer to the SMART Room System website (smarttech.com/smartroom) for general information on room systems and to the specifications for detailed information on specific products.

Product	Specifications
SMART Room System with Skype for Business for extra small rooms	smarttech.com/kb/170821
SMART Room System with Skype for Business for small rooms	smarttech.com/kb/170822
SMART Room System with Skype for Business for medium rooms	smarttech.com/kb/170448
SMART Room System with Skype for Business for medium rooms with dual panels	smarttech.com/kb/170823
SMART Room System with Skype for Business for large rooms	smarttech.com/kb/170824
SMART Room System with Skype for Business for extra large rooms	smarttech.com/kb/170659
SMART wall stand kits for SMART Board interactive flat panels	smarttech.com/kb/170526

Resources for installers

Installers can refer to the installation instructions included with the room system when installing the product. PDF versions of the installation instructions are available for download.

Product	Installation instructions
SMART Room System with Skype for Business for extra small rooms	smarttech.com/kb/170857
SMART Room System with Skype for Business for small rooms	smarttech.com/kb/170860
SMART Room System with Skype for Business for medium rooms	smarttech.com/kb/170467
SMART Room System with Skype for Business for medium rooms with dual panels	smarttech.com/kb/170858
SMART Room System with Skype for Business for large rooms	smarttech.com/kb/170859
SMART Room System with Skype for Business for extra large rooms	smarttech.com/kb/170658
SMART wall stand for SMART Board interactive flat panels	smarttech.com/kb/170466
SMART cable raceway for SMART Room Systems	smarttech.com/kb/170465
SMART Room System with Skype for Business table microphone upgrade kit	smarttech.com/kb/170560

Resources for users

The room system comes with a table top guide, which you can place on your meeting room table for users to consult when using the room system. The table top guide includes basic information about using the room system.

In addition, users can refer to the *SMART Room System with Skype for Business user's guide* (smarttech.com/kb/170818) for more detailed information.

Chapter 2

Maintaining the room system

The room system is designed to require minimal or no cleaning or other maintenance.

Follow the instructions in this chapter if the room system requires cleaning or other maintenance or if your organization mandates periodic cleaning or other maintenance of its IT infrastructure.

Recommended tools

The following are recommended tools that professional, trained installers and IT specialists should have available for maintenance and troubleshooting purposes:

Activity	Recommended tools
Hardware service	- Paper and pencil - Ladder - Tape measure - Set of screwdrivers, including flat blade, Phillips No. 1 and Phillips No. 2 - Flashlight - Nylon cable ties - Cable tie cutter
Hardware isolation testing	16' 5" (5 m) USB cable 16' 5" (5 m) USB cable with mini-B connector 16' 5" (5 m) active USB extension cable 20' 8" (6.3 m) HDMI cable - Functional spare room system appliance - Functional spare console and power supply - Functional spare camera kit - Functional spare microphone and audio processor kit, including cables - Functional spare speaker kit, including cables - Functional spare power supplies for the camera, audio processor and speakers for room systems with SMART Board 8055i-G5 or 8065i-G5 interactive flat panels
IT access	- IT administrator with knowledge of your organization's Lync or Skype for Business infrastructure - SMART Board interactive flat panel remote control (8084i-G4 interactive flat panels only) - USB keyboard and mouse - Laptop that has Outlook and Skype for Business client software and that is connected to your organization's Lync or Skype for Business infrastructure - Internet access for documentation and other resources - Alternative audio source, such as a portable music player

Turning off the room system

For some maintenance procedures, you need to turn off the room system.

To turn off the room system
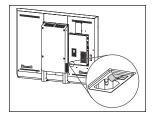
1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears..

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts and the Windows user log in page appears on the console.

3. Press the **Power** button to shut down the room system.

4. Flick the power switch on the bottom of each interactive flat panel:

SBID8055i-G5 and SBID8065i-G5

SBID8084i-G4

> 📝 **NOTE**
>
> When the system is turned back on, the administrator will need to log in and select **Apply & Restart** or **Undo & Restart**.

Maintaining the interactive flat panels

Complete the following tasks regularly to maintain the room system's interactive flat panels:

- Calibrate and orient the interactive flat panels as necessary

- Clean the screen

- Clean the presence detection sensors

- Clean the camera windows and reflective tape

- Maintain ventilation

- Prevent condensation

- Replace pen nibs as necessary

Calibrating the interactive flat panels

Digital cameras in the corners of the interactive flat panels track the position of the pens, eraser and your finger on the screens, and then send the information to SMART Product Drivers, which interprets this information as touch input, digital ink or an eraser in the appropriate location. Calibration determines the position and angles of the cameras to accurately identify the location of touches on the interactive flat panels.

Typically, the interactive flat panels require calibration during initial configuration only. However, you might need to calibrate the interactive flat panels again in the following situations:

- Digital ink disappears as users write or draw.

- The environment lighting changes.

> 👉 **IMPORTANT**
>
> - To calibrate the interactive flat panels, you need the room system administrator account's user name and password.
>
> - If the room system includes SMART Board 8055i-G5 or 8065i-G5 interactive flat panels, ensure version 15.12.02 or later of Skype for Business Room System software is installed before you attempt to calibrate the interactive flat panels (see *Updating software and firmware* on page 23).
>
> - If an error message appears while you calibrate the interactive flat panels, contact your SMART reseller or SMART Support (smarttech.com/support/entsupport).

**To calibrate an interactive flat panel**

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.
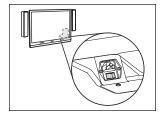
2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **OEM Settings**, and then press **SMART Settings**.

   SMART Settings appears.

5. Press **SMART Hardware Settings**.

6. Press the icon of the interactive flat panel you want to calibrate.

> 💡 **TIP**
>
> When you press an interactive flat panel's screen, the circle beside that interactive flat panel's icon turns blue.

7. Select **Advanced Settings** from the drop-down list.

8. Press **Calibrate**.

   The calibration screen appears. This can take a few moments.

> 📝 **NOTE**
>
> If the calibration screen doesn't appear on the selected interactive flat panel, move it to the selected interactive flat panel by pressing the spacebar on the keyboard.

9. Follow the on-screen instructions to calibrate the interactive flat panel.

   A message appears stating that the calibration was successful, and then the orientation screen appears.

10. Orient the interactive flat panel (see *Orienting the interactive flat panels* below).

11. On the console, press **OK**.

   SMART Settings closes.

12. On the console, press **Apply & Restart**.

   The room system restarts.

Orienting the interactive flat panels

Typically, the interactive flat panels require orientation during initial configuration only. However, you might need to orient the interactive flat panels again if the location of users' touch is misinterpreted (a pointer appears a distance from the actual contact or on a different display than the one being touched).

> 👉 **IMPORTANT**
>
> - The interactive flat panels must be oriented from the Skype for Business Admin Console. You will need the room system administrator account's user name and password.
>
> - If your room system includes SMART Board 8055i-G5 or 8065i-G5 interactive flat panels, ensure version 15.12.02 or later of Skype for Business Room System software is installed before you attempt to orient the interactive flat panels (see *Updating software and firmware* on page 23).

To orient an interactive flat panel

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **OEM Settings**, and then press **SMART Settings**.

   SMART Settings appears.

5. Press **SMART Hardware Settings**.

6. Press the icon of the interactive flat panel you want to orient.

   > 💡 **TIP**
   >
   > When you press an interactive flat panel's screen, the circle beside that interactive flat panel's icon turns blue.

7. Press **Orient**.

   The orientation screen appears.

8. Follow the on-screen instructions to orient the interactive flat panel.

   The orientation window closes.

9. On the console, press **Apply & Restart**.

   The room system restarts.

10. If this doesn't correct inaccurate touch control, calibrate the interactive flat panel (see *Calibrating the interactive flat panels* on page 14).

Cleaning the screens

Follow these instructions to clean the interactive flat panels' screens without damaging their anti-glare coating or other product components.

> ⚠️ **CAUTION**
> - Do not use permanent or dry-erase markers on the screens. If dry-erase markers are used on the screens, remove the ink as soon as possible with a lint-free, non-abrasive cloth.
>
> - Do not rub the screens with a dense or rough material.
>
> - Do not apply pressure to the screens.
>
> - Do not use cleaning solution or glass cleaner on the screens, because they can deteriorate or discolor the screens.
>
> - Avoid touching the reflective tape between the screens and the frame, and ensure that this strip stays dry. Damage to this strip affects touch interactivity.

To clean the screens

1. Turn off the room system (see *Turning off the room system* on page 13), and then disconnect the power sources for the interactive flat panels.

2. Wipe the screens with a lint-free, non-abrasive cloth.

Cleaning the presence detection sensors

Each SMART Board 8055i-G5 and 8065i-G5 interactive flat panel has one presence detection sensor, and each SMART Board 8084i-G4 interactive flat panel has two presence detection sensors. Inspect the sensors regularly for dust and clean them if dust buildup has occurred.

> ⚠️ **CAUTION**
> Do not use compressed air, water, chemical agents or cleaning agents to clean the sensors.

To clean the presence detection sensors

1. Turn off the room system (see *Turning off the room system* on page 13), and then disconnect the power sources for the interactive flat panels.

2. Gently wipe the sensors using a clean lint-free cloth.

Cleaning the camera windows and reflective tape

The interactive flat panels' DViT technology uses four cameras in the corners of the frames and the reflective material between the screens and the frames. Dust buildup on the camera windows or reflective tape can impair touch performance.

Inspect these areas regularly for dust and clean them if any obvious dust buildup has occurred.

> ⚠️ **CAUTION**
>
> - Do not use compressed air to clean the camera windows or borders.
>
> - Do not use water, chemicals or cleaning agents.
>
> - Applying too much pressure when cleaning the tape or cameras can damage the tape and cameras and cause performance issues or errors.

To clean the camera windows and reflective tape

1. Turn off your room system (see *Turning off the room system* on page 13), and then disconnect the power sources for the interactive flat panels.

2. Using a clean lint-free cloth, gently wipe the camera windows in the top corners and the reflective tape along the top of the interactive flat panel screens.

3. Gently wipe the reflective tape along the sides of the interactive flat panel screens.

4. Gently wipe the camera windows in the bottom corners and the reflective strip across the bottom of the interactive flat panel screens.

Maintaining ventilation

The interactive flat panels require proper ventilation. Dust buildup in the ventilation holes compromises cooling and can lead to product failure.

- Clean accessible ventilation holes monthly with a dry cloth.

- Use a vacuum cleaner with a narrow hose-end attachment to clear the back ventilation holes regularly.

> ⚠️ **CAUTION**
>
> Avoid setting up or using your room system in an area with excessive levels of dust, humidity or smoke.

Preventing condensation

The interactive flat panel screens contain layers of glass that can collect condensation, especially in the following conditions:

- Temperature extremes with high humidity

- Rapid changes in humidity, which can occur when you operate the room system near water (such as a pool, kettle or air conditioner ventilator)

- Direct exposure to sunlight

To evaporate condensation from the interactive flat panels

1. Remove the humidity source from the interactive flat panel, if possible.

2. Turn off the room system (see *Turning off the room system* on page 13), and then disconnect the power sources for the interactive flat panels.

3. Remove any moisture from the interactive flat panel with a smooth, dry cloth.

4. Leave the interactive flat panel turned off for 48 hours.

Maintaining pens

To prevent damage to the interactive flat panels' anti-glare coating, replace a pen if its nib becomes worn. You can purchase replacement pens from the Store for SMART Parts (see smarttech.com/Support/PartsStore).

> **NOTE**
>
> For room systems with SMART Board 8084i-G4 interactive flat panels, you can replace the pen nib instead of the entire pen. These room systems come with replacement nibs. For instructions on replacing a worn nib, see the *Pen nib replacement installation instructions* (smarttech.com/kb/156689).

Maintaining the console

Follow these instructions to clean the console's screen without damaging its anti-glare coating or other product components.

> ⚠️ **CAUTION**
>
> - Do not rub the screen with a dense or rough material.
>
> - Do not apply excessive pressure to the screen.
>
> - Do not use cleaning solution or glass cleaner on the screen, because they can deteriorate or discolor the screen.

To clean the screen

1. Turn off the room system (see *Turning off the room system* on page 13), and then disconnect the power source for the console.

2. Wipe the screen with a lint-free, non-abrasive cloth to remove finger prints and minor buildup.

   OR

   Apply a laptop screen cleaning solution to a lint-free, non-abrasive cloth, and then wipe the screen with the cloth to remove more significant buildup.

   > ⚠️ **CAUTION**
   >
   > Do not apply the laptop screen cleaning solution or other liquids directly to the screen.

Maintaining the camera

> ⚠️ **CAUTION**
>
> Do not directly contact the camera lens, even to clean it. Directly contacting the camera lens can scratch or otherwise damage it, negatively impacting the camera's performance.

Clean the camera lens only if there is visible accumulation of dust. Use a canister of inert gas or a blower bulb to blow the dust off of the lens. Don't blow off dust with your mouth because this can deposit droplets of saliva on the camera lens.

Maintaining the microphones

Follow these instructions to clean the microphones.

To clean the microphones

1. Turn off the room system (see *Turning off the room system* on page 13).

2. Wipe the microphones with a lint-free, non-abrasive cloth.

Maintaining the speakers

Follow these instructions to clean the speakers.

To clean the speakers

1. Turn off the room system (see *Turning off the room system* on page 13).

2. Wipe the speakers with a lint-free, non-abrasive cloth.

Checking the room system cable connections

Inspect the room system's cables regularly to ensure they are securely connected. Using cable strain relief ensures cables remain securely connected and prevents technical issues associated with disconnected cables.

Checking the room system's hardware installation

Inspect the room system's hardware installation frequently to ensure that it remains secure.

- Check the mounting location for signs of damage or weakness that can occur over time.

- Check for loose screws, gaps, distortions or other issues that could occur with the mounting apparatus.

If you find an issue, contact a professional installer.

Inspect your room system's software installation by making a test call (see *Testing the room system* on page 54).

Removing and transporting the room system

> ⚠️ **WARNING**
>
> Only professional, trained installers should remove the room system.

> ⚠️ **CAUTION**
>
> - Save the original packaging so that you can repack your room system with as much of the original packaging as possible. This packaging was designed to provide the best possible protection against shock and vibration. If the original packaging isn't available, you can purchase the same packaging directly from your authorized SMART reseller (smarttech.com/where).
>
> - Transporting the room system without correct packaging voids the warranty and could lead to product damage.

Chapter 3

Maintaining software and firmware

This chapter documents common procedures for maintaining the room system's software and firmware.

Updating software and firmware

At a scheduled time each night, the room system checks Windows Update for updates to its software and firmware. It then installs any updates and restarts.

You can also check for updates manually.

> 💡 **TIP**
>
> For alternative methods of updating Skype for Business Room System software, see *Summary of SMART Room System for Lync software updates* (kb.smarttech.com/?q=14458).

To check for updates manually

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **Web Updates**.

5. Press **Check Updates and Install**.

   Skype for Business Room System software checks for and installs any updates. If updates are found, the system will reset back to Meeting Mode once the updates are complete.

6. If no updates are found, press **Apply & Restart**.

Enabling the Room PC View feature

If you want to connect a room computer to the room system, you must enable the Room PC View feature. Users can then share the room computer's display by pressing the appropriate controls on the console.

> **NOTES**
>
> - The Room PC View feature is available only in versions 15.10 and later of the Lync or Skype for Business Room System software. You can download and install the latest version of Skype for Business Room System software or configure the room system to download and install updates automatically in the Skype for Business Admin Console (see *Updating software and firmware* on the previous page).
>
> - Ensure your organization's networking conferencing policies are compatible with Room PC View.

To enable the Room PC View feature

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **System Settings**.

5. Turn on **Room PC View**.

6. Press **Apply & Restart**.

Enabling the System Center Endpoint Protection feature

You can enable the System Center Endpoint Protection (SCEP) feature from Microsoft to complete daily antimalware scans and real-time download protection scans.

> **NOTE**
> - The SCEP feature is available only in versions 15.13.2 and later of the Lync or Skype for Business Room System software. You can download and install the latest version of Skype for Business Room System software or configure the room system to download and install updates automatically in the Skype for Business Admin Console (see *Updating software and firmware* on page 23).
> - For more information on SCEP, see technet.microsoft.com/library/hh508836.aspx.

To enable the SCEP feature

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **System Settings**.

5. Scroll to *System Center Endpoint Protection*, and then turn on **Antivirus protection**.

   > **NOTE**
   > You must accept the Microsoft end user license agreement to continue.

6. Set the **Daily Scan Time**.

   > **NOTE**
   > To ensure the scan completes before the maintenance schedule, set the daily scan time to two hours before the daily maintenance time specified in the *Web Updates* page.

7. Select **Download from WSUS server or Microsoft Update** to download updates from your organization's Windows Server Update Services (WSUS) server or the Microsoft Update server as defined in the Skype for Business Admin Console.

   OR

   Select **Download from UNC File Share** to download updates from a Universal Naming Convention (UNC) file share location.

8. Press **Apply & Restart**.

Chapter 4

Remotely monitoring the room system

Using the Skype for Business Room System Administrative Web Portal, you can remotely monitor the health of the SMART Room System.

Installing the Skype for Business Room System Administrative Web Portal

To install the Skype for Business Room System Administrative Web Portal

1. Download the installation file from microsoft.com/en-us/download/details.aspx?id=40329.

2. Follow the instructions in technet.microsoft.com/en-us/library/dn436324.aspx to configure your environment for the Skype for Business Room System Administrative Web Portal, and then install the Skype for Business Room System Administrative Web Portal.

> **NOTE**
> The above sources may still refer to Lync software or servers, however you can still use these resources for installing the Skype for Business Room System Administrative Web Portal.

Using the Skype for Business Room System Administrative Web Portal

After you have installed the Skype for Business Room System Administrative Web Portal, you can use it to do the following:

- Set a room system's password, room tag and audio volumes

- View a room system's information and health status

- Save a room system's diagnostic log

- Restart a room system

To log on to the Skype for Business Room System Administrative Web Portal

1. Open your Internet browser.

2. Go to the following address:

   https://[*Computer*]/lrs

   Where *[Computer]* is the address of the computer on which the Skype for Business Room System Administrative Web Portal is installed.

3. Type your user name and password in the appropriate boxes.

4. Click **Sign in**.

   The *Lync Room System Admin Portal* page appears. The table on this page contains important information for all room systems on your organization's network.

To set a room system's password, room tag and audio volumes

1. Log on to the Skype for Business Room System Administrative Web Portal (see *To log on to the Skype for Business Room System Administrative Web Portal* above).

2. Click the room system's **Room Name** link.

3. Click **Settings**.

4. Set the following controls:

Control	Procedure
Credentials	
• Password	Type the room system's password, and then click **Set**.
• Show password	Select the check box to show the password.
Room Tag	
• Tag	Type the room system's tag, and then click **Update**.
Audio	
• Default Speaker Volume	Move the slider to the right to increase the default speaker volume or to the left to decrease the default speaker volume, and then click **Set Default Volumes**.
• Default Microphone Volume	Move the slider to the right to increase the default microphone volume or to the left to decrease the default microphone volume, and then click **Set Default Volumes**.
• Default Ringer Volume	Move the slider to the right to increase the default ringer volume or to the left to decrease the default ringer volume, and then click **Set Default Volumes**.

5. Click **Sign out** when done.

To view a room system's information and health status

1. Log on to the Skype for Business Room System Administrative Web Portal (see *To log on to the Skype for Business Room System Administrative Web Portal* on the previous page).

2. Click the room system's **Room Name** link.

3. Click **Details**.

   A page appears that shows the room system's information, including its name, hardware components and software versions.

4. Click **Health**.

   A page appears that shows the room system's health status, including the status of its network connection and audio and video devices.

5. Click **Sign out** when done.

To save a room system's diagnostic logs

1. Log on to the Skype for Business Room System Administrative Web Portal (see *To log on to the Skype for Business Room System Administrative Web Portal* on page 28).

2. Click the room system's **Room Name** link.

3. Click **Logging**.

4. In the *Save to* box, type the path where you want to save the diagnostics logs, and then click **Save Logs**.

5. Click **Sign out** when done.

To restart a room system

1. Log on to the Skype for Business Room System Administrative Web Portal (see *To log on to the Skype for Business Room System Administrative Web Portal* on page 28).

2. Click the room system's **Room Name** link.

3. Click **Logging**.

4. Click **Restart Console** to restart the console.

   OR

   Click **Restart PC** to restart the room system appliance.

5. Click **Sign out** when done.

Chapter 5

Remotely managing the room system

The SMART Room System's room system appliance uses Intel® AMT, which is part of Intel vPro® technology. You can use Intel AMT to manage the room system remotely.

Before you can use Intel AMT, you must enable and configure it on the room system appliance. You can then manage the room system remotely by using one of the following:

- The embedded web management interface

- Management software, such as Open MDTK

- Remote access software, such as DameWare® or VNC® Viewer Plus

This chapter explains how to configure and use Intel AMT to remotely manage the room system.
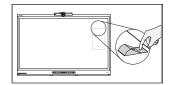
> ☞ **IMPORTANT**
>
> - Set an administrator password for the room system appliance's BIOS (under **Security > Administrator Password**) and change the Intel Management Engine BIOS Extension (MEBx) password from the default to prevent users from making configuration changes to Intel AMT.
>
> - Store the BIOS and Intel MEBx passwords in a safe place: these passwords cannot be easily reset if lost.
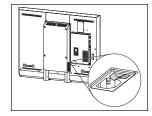
Configuring the room system

Before you can remotely manage the room system using Intel AMT, you need to enable and configure Intel AMT on the room system appliance.
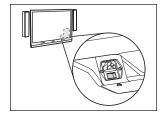
To enable Intel AMT

1. Turn off your room system (see *Turning off the room system* on page 13).

2. Connect a USB keyboard to the room system appliance.

3. If the room system includes SMART Board 8055i-G5 or 8065i-G5 interactive flat panels, press the power button on the room system appliance enclosure.

4. On the bottom of each interactive flat panel, flick the power switch on.

SBID8055i-G5 and SBID8065i-G5   *SBID8084i-G4*

5. Press the DELETE key.

   The room system appliance enters BIOS mode.

6. Browse to the **Advanced** tab.

7. Select **AMT Configuration**, and then press ENTER.

8. Set *Intel AMT* to **Enabled**.

9. Set *BIOS Hotkey Pressed* to **Enabled**.

   > **NOTE**
   >
   > By enabling this option, you can open Intel MEBx during a system restart by pressing CTRL+P before the Windows startup screen appears.

10. Press ESC.

11. Browse to the **Save & Exit** tab.

12. Select **Save Changes and Exit**, and then select **Yes**.

Intel MEBx opens.

13. Continue to the next procedure.

To configure Intel AMT

1. Enter the default Intel AMT password (**admin**) when prompted, and then follow the on-screen instructions to change the Intel AMT password.

   > 👉 **IMPORTANT**
   >
   > ○ New passwords must be between eight and 32 characters long and must contain at least one of each of the following character types:
   >
   >   ○ Uppercase letters (A–Z)
   >
   >   ○ Lowercase letters (a–z)
   >
   >   ○ Digits (0–9)
   >
   >   ○ Non-alphanumeric characters
   >
   > ○ Record this password in a safe place: the password cannot be recovered afterward.

2. Select **Intel® AMT Configuration**, and then press ENTER.

3. Select **Activate Network Access**, and then press ENTER.

4. Press Y.

   > 🗒 **NOTE**
   >
   > For information on other MEBx controls, see *Intel MEBx controls* on page 37.

5. Select **MEBX Exit**, and then select **Y**.

   The room system restarts.

Remotely managing the room system

After you configure the room system for Intel AMT, you can connect to it and manage it remotely.

Using the embedded web management interface

The room system appliance includes an embedded web page for the administration of Intel AMT:

http://[*The room system's IP address or fully qualified domain name*]:16992

Although the room system must be connected to a power source and the network before you can manage it remotely, it doesn't need to be running. Using the web page, you can do the following remotely:

- Restart the room system

- Turn off the room system

- Start the room system in BIOS mode

- Manage local system Intel AMT user accounts and rights (not operating system user accounts)

Using management software

Open MDTK (opentools.homeip.net/open-manageability) is open source management software that provides robust administration tools for the SMART Room System and other Intel AMT devices. Open MDTK enables you to view installed Intel AMT security certificates, assess the room system's Intel AMT capabilities, enable or disable the embedded web management interface, change Intel AMT IP addresses, enable advanced IP settings, edit Intel AMT user accounts, completely disable remote Intel AMT capabilities on a target system, and more. Open MDTK doesn't include remote access software, but you can use it to start VNC Viewer Plus (see *Using remote access software* below).

For additional management software that works with Intel vPro technology, see msp.intel.com/management-consoles.

Using remote access software

The following procedures show how to use DameWare and VNC Viewer Plus to connect to the room system. You can use any remote access software that supports Intel AMT Keyboard Video Mouse (KVM) connections.

After you connect to the room system, you can perform all of the administrative tasks described in this guide, including restarting the room system in administrator mode and making configuration changes in Skype for Business Admin Console and SMART Settings.

> **NOTE**
>
> When you connect to a room system using remote access software, an orange and yellow border appears around the room system's screens and an icon flashes in the top-right corner to indicate to anyone in the room that you're accessing the room system remotely.

To connect to your room system using DameWare

1. Start DameWare.

2. Click **Connect**.

   The *Remote Connect* window opens.

3. Type the IP address for the room system in the *Host* box.

4. Type admin in the *User ID* box.

5. In the *Password* box, type the Intel AMT password you specified in *To configure Intel AMT* on page 33.

6. Select **Use Intel AVT KVM**.

7. Click **Connect**.

8. Press F1, and then press ENTER to select the room system display you want to view.

   > ✎ **NOTE**
   >
   > If you want to view a different display, you must disconnect from the room system and then connect to it again.

To connect to your room system using VNC Viewer Plus

1. Start VNC Viewer Plus.

2. Select **None** in the *Encryption* drop-down list.

3. Select **Intel® AVT KVM** in the *Connection Mode* drop-down list.

4. Click **Connect**.

5. When prompted, type the Intel AMT user name (**admin**) and password you specified in *To configure Intel AMT* on page 33.

6. Press F1, and then press ENTER to select the room system display you want to view.

Security

Intel AMT remote communications are secured by TLS, which is a protocol that secures and authenticates communications across a public network. For more information, see *References* on page 40.

Ports

Ensure the following ports are open for use by Intel AMT:

Port	Description	Use
16992	Intel AMT HTTP	WS-Management messages to and from Intel AMT **▶ NOTE** This port is open over the network only when Intel AMT is configured or during the configuration process. Starting with version 6.0, the port is optionally open when TLS is enabled. The port is always open locally.
16993	Intel AMT HTTPS	WS-Management messages to and from Intel AMT when TLS is enabled
16994	Intel AMT redirection/TCP	Redirection traffic: Serial Over LAN (SOL), IDE Redirection (IDER) and Intel KVM using Intel AMT authentication **▶ NOTE** Enabling the redirection listener enables this port.
16995	Intel AMT redirection/TLS	Redirection traffic: SOL, IDER and Intel KVM using Intel AMT authentication when TLS is enabled **▶ NOTE** Enabling the redirection listener enables this port.
623	ASF Remote Management and Control Protocol (ASF-RMCP)	RMCP pings **▶ NOTE** This port is a standard DMTF port and accepts WS-Management traffic. It's always enabled.
664	DMTF out-of-band secure web services management protocol Secure ASF-RMCP	Secure RMCP pings **▶ NOTE** This port is a standard DMTF port and accepts WS-Management traffic. It's always enabled.
5900	Virtual Network Computing (VNC) remote control program	KVM viewers that don't use Intel AMT authentication but use the standard VNC port instead

Intel MEBx controls

The following are the controls in Intel MEBx:

Control	Procedure	Notes (if any)
Intel® ME General Settings		
• Change ME Password	Type a new Intel AMT password.	The default password is **admin**. When you first open Intel MEBx, you're prompted to change the password. New passwords must be between eight and 32 characters in length and must contain at least one of each of the following character types: • Uppercase letters (A–Z) • Lowercase letters (a–z) • Digits (0–9) • Non-alphanumeric characters
• Local FW Update	Select **Enabled** to enable local firmware updates. OR Select **Disabled** to disable local firmware updates. OR Select **Password Protected** to make local firmware updates require the Intel AMT password.	SMART recommends not changing the default setting.
▶ Power Control		
• Intel® ME ON in Host Sleep Status	Select a power package.	SMART recommends not changing the default setting.
• Idle Timeout	Type the idle timeout (in minutes).	SMART recommends not changing the default setting.
Intel® AMT Configuration		
• Manageability Feature Selection	Select **Enabled**.	You must enable this before you can remotely manage the room system using Intel AMT.
▶ SOL/IDER/KVM		
• User Name and Password	Select **Enabled** to require user authentication for Serial Over LAN/IDE Redirection (SOL/IDER) sessions.	
• SOL	Select **Enabled** to allow the room system's input/output to be redirected to a management server console.	
• IDER	Select **Enabled** to allow the room system to be booted by a management console from a remote disk image.	
• KVM Feature Selection	Select **Enabled** to enable Intel KVM.	

Control	Procedure	Notes (if any)
• Legacy Redirection Mode	Select **Enabled** to leave the port open at all times when redirection is enabled in Intel MEBx.	
▸ User Consent		
• User Opt-in	Select **KVM** to require local user consent for Intel KVM remote control. OR Select **None** to not require local user consent.	This control doesn't affect your room system. If you enable user opt-in for Intel KVM, users are prompted with a key code. The users must provide this key code to the administrator who is attempting to remotely connect to the room system.
• Opt-in Configurable from Remote IT	Select **Enabled** to allow remote users to change the user opt-in policy.	
• Password Policy	Select **Default Password Only** to allow changing the Intel AMT password from the network interface if the default password hasn't been changed yet. OR Select **During Setup and Configuration** to allow changing the Intel AMT password from the network interface during only setup and configuration. OR Select **Anytime** to allow changing the Intel AMT password from the network interface at any time.	
▸ Network Setup		
▸ Intel® ME Network Name Settings		
• Host Name	Type the host name for Intel AMT.	If you configure a set host name, ensure it mirrors the Windows operating system's host name to ensure stability.
• Domain Name	Type the domain name for Intel AMT.	
• Shared/Dedicated FQDN	Select **Shared** to use an FQDN that is shared with the host. OR Select **Dedicated** to use a dedicated FQDN for Intel MEBx.	
• Dynamic DNS Update	Select **Enabled** to enable the firmware to actively register its IP address and FQDN on the domain name system (DNS) using the Dynamic DNS (DDNS) Update protocol. OR Select **Disabled** to disable this feature.	
• Period Update Interval	Type the interval (in minutes) at which the firmware DDNS Update client sends period updates.	This control is only available if you enable Dynamic DNS Update.

Control	Procedure	Notes (if any)
• TTS	Type how long (in seconds) the record should not be scavenged in DNS server.	This control is only available if you enable Dynamic DNS Update.
▶ TCP/IP Settings		
▶ Wired LAN IPV4 Configuration		
• DHCP Mode	Select **Enabled** to configure TCP/IP settings by a Dynamic Host Configuration Protocol (DHCP) server. OR Select **Disabled** to configure TCP/IP settings manually.	
• IPV4 Address	Type the IPv4 address for the room system.	This control is only available if you disabled DHCP.
• Subnet Mask Address	Type the subnet mask address for the room system.	This control is only available if you disabled DHCP.
• Default Gateway Address	Type the default Gateway address for the room system.	This control is only available if you disabled DHCP.
• Preferred DNS Address	Type the preferred DNS address for the room system.	This control is only available if you disabled DHCP.
• Alternate DNS Address	Type the alternate DNS address for the room system.	This control is only available if you disabled DHCP.
• Activate Network Access	Select **Y** to transition Intel MEBx to the POST provisioning state if all network settings are configured. OR Select **N** to disable this feature.	You must activate network access to remotely manage your room system using Intel AMT.
• Unconfigure Network Access	Select **Full Unprovision** to fully reset the network configuration. OR Select **Partial Unprovision** to reset the network configuration except for Pre-Shared Key (PSK) settings, remote configuration settings and network settings.	
▶ Remote Setup And Configuration		
• Current Provisioning Mode	View the current provisioning TLS mode: Public Key Infrastructure (PKI), PSK or None.	
• Provisioning Record	View the room system's provision PSK/PKI data.	
• Provisioning Server IPV4/IPV6	Type the port number of the Intel AMT provisioning server.	The default port is 9971.
• Provisioning Server FQDN	Type the FQDN of the provisioning server mentioned in the certificate.	

Control	Procedure	Notes (if any)
▶ RCFG		
• Start Configuration	Select **Y** to activate remote configuration. OR Select **N** to not activate remote configuration.	
▶ TLS PSK		
• Set PID and PPS	Type the provisioning ID (PID) and provisioning pre-shared key (PPS) in the dash format.	
• Start Configuration	Select **Y** to delete the PID and PPS. OR Select **N** to not delete the PID and PPS.	
▶ TLS PKI		
• Remote Configuration	Select **Enabled** to enable remote configuration. OR Select **Disabled** to disable remote configuration.	
• PKI DNS Suffix	Type the PKI DNS suffix.	
• Manage Hashes	Select to manage hashes on the room system.	

References

- *Introducing the Intel vPro Platform Solution Manager*
  software.intel.com/en-us/blogs/2013/04/19/introducing-the-intel-vpro-platform-solution-manager

- *Intel AMT start here guide*
  software.intel.com/en-us/articles/intel-active-management-technology-start-here-guide-intel-amt-9

- *Intel AMT implementation and reference guide*
  software.intel.com/sites/manageability/AMT_Implementation_and_Reference_Guide

Troubleshooting

This chapter helps you solve simple issues that can occur with the room system's hardware and software.

> 🖼️ **NOTES**
>
> - If you come across an issue not addressed in this chapter, refer to the *SMART Room System with Skype for Business troubleshooting decision tree* and other troubleshooting information in the SMART knowledge base (see *Support center and knowledge base* on page 9).
>
> - If issues with the room system hardware persist, contact your SMART reseller or SMART Support (smarttech.com/support/entsupport).
>
> - If issues with the room system software persist, contact Microsoft.

Resolving hardware issues

This section explains how to resolve common issues with the room system hardware.

Locating serial numbers
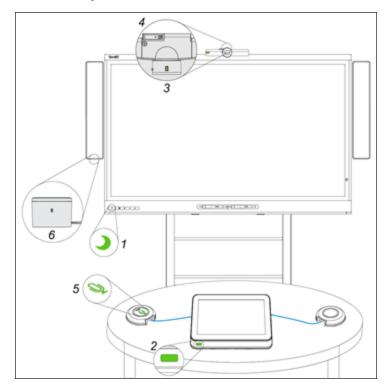
Each of the major components of the room system has a serial number.

Component	Serial number location
Interactive flat panel	On-screen display menu (see page 71 for SMART Board 8055i-G5 and 8065i-G5 interactive flat panels or page 80 for SMART Board 8084i-G4 interactive flat panels)
	NOTE
	When requesting technical support, provide SMART Support with the left interactive flat panel's serial number.
Room system appliance	Wide side of the room system appliance
Console	Bottom of the console
Camera	Top of the camera beside the service light
Table microphones	Bottom of each microphone
Audio processor	Narrow side of the audio processor
Speakers	Back of each speaker

It's good practice to record these serial numbers in a safe place. You can use the *SMART Room System with Skype for Business setup guide* provided with the room system for this purpose (see *Setup guide* on page 9).

Locating power and status lights

The room system's components have power and status lights, which you can use when resolving common issues with the room system.

No.	Component	Light
1	Interactive flat panel	Standby (SMART Board 8055i-G5 and 8065i-G5 interactive flat panels) OR Power/Standby (SMART Board 8084i-G4 interactive flat panels)
2	Console	Power and status
3	Camera	Video capture
4	Camera	Service
5	Microphones	Microphone
6	Speakers	Power

> **NOTE**
>
> The following power and status lights aren't shown in the above diagram:
>
> - Touch system light on the interactive flat panels (room systems with SMART Board 8084i-G4 interactive flat panels only)
>
> - Power, hard drive activity and network connection lights on the room system appliance
>
> - Power light on the room system appliance enclosure (room systems with SMART Board 8055i-G5 and 8065i-G5 interactive flat panels only)

Resolving issues with SMART Board 8055i-G5 and 8065i-G5 interactive flat panels

Use the following table to resolve issues with the room system's SMART Board 8055i-G5 and 8065i-G5 interactive flat panels.

Standby light	Interactive flat panel status	Issues	Solutions
Off	Not receiving power	The interactive flat panels aren't receiving power.	Ensure that the interactive flat panels are connected to the mains power supply and that the power switches are turned on.
	Off	The interactive flat panels are off.	Press the **Standby** buttons 🌙 on the front control panels to turn the interactive flat panels on.

Standby light	Interactive flat panel status	Issues	Solutions
Solid amber	Standby mode	The interactive flat panels don't turn on when participants enter the room.	- Enable presence detection (see page 65). - Reduce the room temperature to increase the difference between the ambient temperature and human body temperature. - Ask participants to move closer to the interactive flat panels or make bigger motions. - Remove any glass, acrylic or other material between participants and the presence detection sensors.
		The interactive flat panels are turning on after they've been turned off.	- Increase the re-enable time, which is the interval before the presence detection sensors start detecting motion again. - Close any blinds or shades to prevent sunlight from hitting the presence detection sensors.
		The interactive flat panels are turning on when participants aren't present.	- Remove sources of major temperature fluctuation (humidifier emission, air conditioning, heating system). - Close any blinds or shades to prevent sunlight from hitting the presence detection sensors.

Standby light	Interactive flat panel status	Issues	Solutions
Solid white	On with no touch control	There's no touch control.	• Use SMART Board Diagnostics, which is available from SMART Settings (see page 57), to troubleshoot the issue. • Ensure that the USB cables are connected as shown in the installation instructions (see page 10).
	On with touch control	The displays are blank.	• Press the **Input Select** buttons ⮕ on the front control panels until you select **HDMI**. • Ensure that the HDMI cables are connected as shown in the installation instructions (see page 10).
		The image is unstable or unfocused.	Secure the HDMI cables at both connection points.
		The image is too light, too dark or has poor quality issues.	Adjust the Picture options (see page 68).
		There is a persistent image on one of the screens.	Turn off the affected interactive flat panel and leave it turned off for as long as the image was on the screen.
		When participants touch the interactive flat panels, the touch point is in the wrong location.	• Ensure participants are touching the screens at right angles (see kb.smarttech.com/?q=13976). • Orient the interactive flat panels (see page 15).
		An area of one of the screens doesn't respond to participants' touch. OR When participants draw digital ink, the lines are broken.	• Ensure nothing is taped to the screens. • Remove obstructions from the reflective tape channels. • Ensure participants use consistent pressure while drawing digital ink. • Close blinds or shades or dim light sources. • Calibrate the interactive flat panels (see page 14).
		Participants try to erase digital ink with the erasers, but draw more digital ink instead.	Ensure participants increase the initial contact area of the erasers.

Standby light	Interactive flat panel status	Issues	Solutions
		Participants try to draw digital ink with their fingers, but erase digital ink instead.	• Ensure participants lift their fingers and the palm of their hand from the interactive flat panels while they write because the interactive flat panels are interpreting the additional contacts as an eraser. • Use a smaller pointer, such as the pen.
		The room system isn't turning off when people have left the room.	• Enable presence detection (see page 65).
		The room system is turning off when participants are present.	• Increase the time before the room system automatically turns off.

Resolving issues with SMART Board 8084i-G4 interactive flat panels

Use the following table to resolve issues with the room system's SMART Board 8084i-G4 interactive flat panels.

Lights	Interactive flat panel status	Issues	Solutions
Power: Off Touch system: Off	Not receiving power	The interactive flat panels aren't receiving power.	Ensure that the interactive flat panels are connected to the mains power supply and that the power switches are turned on.
Power: Solid red Touch system: Off	Off	The interactive flat panels are off.	Press the **Power/Standby** buttons ⏻ on the front control panels to turn the interactive flat panels on.

Lights	Interactive flat panel status	Issues	Solutions
Power: Solid amber Touch system: Off	Standby mode	The interactive flat panels don't turn on when participants enter the room.	• Enable presence detection (see page 65). • Reduce the room temperature to increase the difference between the ambient temperature and human body temperature. • Ask participants to move closer to the interactive flat panels or make bigger motions. • Remove any glass, acrylic or other material between participants and the presence detection sensors.
		The interactive flat panels are turning on after they've been turned off.	• Increase the re-enable time, which is the interval before the presence detection sensors start detecting motion again. • Close any blinds or shades to prevent sunlight from hitting the presence detection sensors.
		The interactive flat panels are turning on when participants aren't present.	• Remove sources of major temperature fluctuation (humidifier emission, air conditioning, heating system). • Close any blinds or shades to prevent sunlight from hitting the presence detection sensors.
Power: Solid green Touch system: Flashing amber (quickly)	Turning on	The status lights continue flashing amber (quickly) for more than one minute.	Turn the interactive flat panels off (see page 13), wait a few minutes and then turn the interactive flat panels back on.
Power: Solid green Touch system: Flashing amber (slowly)	Updating firmware	The status lights continue flashing amber (slowly) for more than five minutes.	Turn the interactive flat panels off (see page 13), wait a few minutes and then turn the interactive flat panels back on.
Power: Solid green Touch system: Flashing or solid green	On with no touch control	There's no touch control.	• Use SMART Board Diagnostics, which is available from SMART Settings (see page 57), to troubleshoot the issue. • Ensure that the USB cable is connected as shown in the installation instructions (see page 10).

Lights	Interactive flat panel status	Issues	Solutions
Power: Solid green Touch system: Solid green	On with touch control	The displays are blank.	• Press the **Input Select** buttons ➡ on the front control panels until you select **HDMI3/PC**. • Ensure that the HDMI cables are connected as shown in the installation instructions (see page 10).
		The image is unstable or unfocused.	Secure the HDMI cables at both connection points.
		The image is too light, too dark or has poor quality issues.	Adjust the PICTURE options (see page 73).
		There is a persistent image on one of the screens.	Turn off the affected interactive flat panel and leave it turned off for as long as the image was on the screen.
		When participants touch the interactive flat panels, the touch point is in the wrong location.	• Ensure participants are touching the screens at right angles (see kb.smarttech.com/?q=13976). • Orient the interactive flat panels (see page 15).
		An area of one of the screens doesn't respond to participants' touch. OR When participants draw digital ink, the lines are broken.	• Ensure nothing is taped to the screens. • Remove obstructions from the reflective tape channels. • Ensure participants use consistent pressure while drawing digital ink. • Close blinds or shades or dim light sources. • Calibrate the interactive flat panels (see page 14).
		Participants try to erase digital ink with the erasers, but draw more digital ink instead.	Ensure participants increase the initial contact area of the erasers.
		Participants try to draw digital ink with their fingers, but erase digital ink instead.	• Ensure participants lift their fingers and the palm of their hand from the interactive flat panels while they write because the interactive flat panels are interpreting the additional contacts as an eraser. • Use a smaller pointer, such as the pen.
		The room system isn't turning off when people have left the room.	• Enable presence detection (see page 65).
		The room system is turning off when participants are present.	• Increase the time before the room system automatically turns off.

Resolving issues with the console

Use the following table to resolve issues with the room system's console.

Power light	Console status	Issues	Solutions
Off	Not receiving power	The console isn't receiving power.	Ensure that the console is connected to the power supply as shown in the installation instructions (see page 10).
Solid amber	Receiving power but not connected to the room system appliance	There's an issue with the room system appliance or the interactive flat panels.	Refer to the troubleshooting table on page 44 (SMART Board 8055i-G5 and 8065i-G5 interactive flat panels) or page 47 (SMART Board 8084i-G4 interactive flat panels).
Solid green	Receiving power and connected to the room system appliance	The screen is blank.	Ensure that the HDMI cable is connected as shown in the installation instructions (see page 10).
		The console screen appears on the interactive flat panel rather than on the console.	- Follow the instructions in the *SMART Room System with Skype for Business setup guide* (see page 9). - Ensure that the cable from the HDMI1 receptacle on the room system appliance is connected to the console.
		There's no touch control.	- Use SMART Board Diagnostics, which is available from SMART Settings (see page 57), to troubleshoot the issue. - Ensure that the USB cable is connected as shown in the installation instructions (see page 10).

Resolving issues with the camera

Use the following table to resolve issues with the room system's camera.

Lights	Camera status	Issues	Solutions
Video capture: Off Service: Off	Not receiving power	The camera should be receiving power but isn't.	Ensure that the camera is connected as shown in the installation instructions (see page 10) and that the room system is turned on.
Video capture: Off Service light: Flashing amber	Updating firmware	The service light continues flashing amber for more than five minutes.	Temporarily disconnect the power cable from the camera and then connect it again after a few seconds.

Lights	Camera status	Issues	Solutions
Video capture: Off Service light: Flashing red	Hardware error	The camera's video output doesn't appear.	Temporarily disconnect the power cable from the camera and then connect it again after a few seconds.
Video capture: Off Service light: Solid red	Hardware error (the USB cable isn't properly connected)	The camera's video output doesn't appear.	Ensure the USB cable from the camera is connected to the room system appliance.
Video capture: Red Service light: Green	On but not capturing video	The camera's video output doesn't appear.	Perform a room system test (see page 54).
Video capture: Green Service light: Green	On and capturing video	The camera's video output doesn't appear.	Open the privacy shutter. (The privacy shutter is marked with a red spot to indicate when it's closed.)
		The video quality is poor.	Perform a room system test (see page 54).

Resolving issues with the microphones

Use the following table to resolve issues with the room system's microphones.

Microphone light	Microphone status	Issues	Solutions
Off	Not receiving power	The microphones aren't receiving power.	Ensure that the microphones are connected as shown in the installation instructions (see page 10) and that the room system is turned on.
Red	On but muted	Remote participants are unable to hear room participants.	Unmute the microphones in Skype for Business Room System software or press the microphone button on the table microphones.
Green	On and not muted	Remote participants are still unable to hear room participants.	Perform a room system test (see page 54).

Resolving issues with the speakers

Use the following table to resolve issues with the room system's speakers.

Power light	Speaker status	Issues	Solutions
Off	Not receiving power	The speakers aren't receiving power.	Ensure that the speakers are connected as shown in the installation instructions (see page 10) and that the room system is turned on.

Power light	Speaker status	Issues	Solutions
On	On	Room participants are unable to hear remote participants.	- Unmute the audio in Skype for Business Room System software. - Turn up the volume in Skype for Business Room System software. - For SMART Board 8084i-G4 interactive flat panels, ensure the AUDIO2 input is *HDMI3/PC* (see page 77). - Ensure the audio processor is receiving power and is connected as shown in the installation instructions (see page 10).
		Room participants can hear remote participants, but the sound is quiet.	Using the console, turn up the volume in Skype for Business Room System software settings.
		Room participants can hear remote participants, but the sound is distorted, or there's feedback.	One or more of the remote participants' audio systems is causing the distortion or feedback. Mute individual remote participants until you identify the remote participants with problematic audio systems. Ask those remote participants to troubleshoot their audio systems.

Resolving software issues

This section explains how to resolve common issues with the room system's software.

Before troubleshooting issues with your room system's software, ensure the latest versions of the software are installed (see *Updating software and firmware* on page 23).

Resolving issues with the calendar

If the Skype for Business Room System software calendar doesn't appear on the console and interactive flat panels, or if it indicates that the room is free for 24 hours when you know that is has been booked for meetings, there is an issue with the connection between the room system and your organization's Microsoft Exchange server. For assistance with these and other network issues, contact your organization's network administrator.

Improving the restart time

If you find the room system takes a long time to restart when you are modifying settings, you can remove unused Microsoft language packs to improve the restart time. For more information, see *Improving the start-up and restart time on a SMART Room System with Skype for Business* (kb.smarttech.com/?q=14391).

Adding trusted domains to the room system

If the domain name used in the Skype for Business account's SIP URI is different from the domain name on the Lync or Skype for Business Web Service certificate, the room system might not connect to the Lync or Skype for Business Server. If this occurs, a dialog box might appear asking if you want to trust the certificate, but this dialog box disappears quickly thereafter.

In this situation, you need to add the domain name specified in the *Subject Name* and *Common Name* fields of the Lync or Skype for Business Web Service certificate to the room system.

> ⚠️ **CAUTION**
>
> This procedure uses the Windows registry editor. Use caution when you use the Windows registry editor. If you incorrectly modify the Windows registry, you can damage the room system appliance's operating system.

To add a trusted domain to your room system

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Connect a USB mouse and keyboard to the room system appliance.

5. Press **System Settings**, and then press **Network Connections**.

   Control Panel appears.

6. Type **regedit** in the address bar.

   The *Registry Editor* window appears.

7. In the left pane, browse to and open **HKEY_LOCAL_MACHINE\SOFTWARE\ Policies\Microsoft\Office\15.0\Lync**.

8. In the right pane, right-click and select **New > String Value**.

   A new string appears.

9. Type **TrustModelData**, and then press ENTER.

10. Right-click the string you created in steps 8 and 9, and then select **Modify**.

    The *Edit String* dialog box appears.

11. Type the domain name specified in the *Subject Name* and *Common Name* fields of the Lync or Skype for Business Web Service certificate in the *Value data* box, and then press **OK**.

12. Close the *Registry Editor* window.

13. Disconnect the mouse and keyboard.

14. Click **Apply & Restart**.

    The room system restarts.

Testing the room system

You can test the room system from the console.

> **NOTE**
> To complete a room system test, you need the room system administrator account's user name and password.

To complete a room system test

1. On the console, press **Options**, and then press **Settings**.

    The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

    The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

    The Skype for Business Admin Console appears.

4. Press **Application Settings**.

5. Press **Make a Test Call**, and then follow the on-screen instructions to test call functions.

> 🖊 **NOTE**
>
> You can make a test call only if your organization uses an on-premises Skype for Business Server.

   OR

   Press **Test Meet Now**, and then follow the on-screen instructions to test server connections and video functions.

6. If you're unable to complete a test call or test meeting, wait one or two minutes and then try step 5 again.

7. Press **Apply & Restart**.

   The room system restarts.

Using the Skype for Business Admin Console and SMART Settings

You can access the Skype for Business Admin Console and SMART Settings using the console.

> **▨ NOTE**
>
> To access the Skype for Business Admin Console and SMART Settings, you need the room system administrator account's user name and password.

Accessing the Skype for Business Admin Console and SMART Settings

To access the Skype for Business Admin Console and SMART Settings

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Make changes (see *Skype for Business Admin Console controls* on the next page).

5. If you want to make changes to SMART Settings, press **OEM Settings**, and then press **SMART Settings**. After making the changes (see *SMART Settings controls* on page 64), press **OK**.

6. To apply the changes, press **Apply & Restart**.

    OR

    If you don't want to apply the changes, press **Undo & Restart**.

    The room system appliance restarts in meeting mode.

Skype for Business Admin Console controls

Control	Procedure	Notes (if any)
Application Settings		
▸ Credentials		
• User Name	Type the Skype for Business account's full domain name in one of two formats depending on how your organization's servers are configured (for example, **yourdomain\room1** or **room1@yourdomain.com**).	You can record this information in the *SMART Room System with Skype for Business setup guide* (see *Setup guide* on page 9).
• SIP URI	Type the Skype for Business account's SIP URI (for example, **room1@yourdomain.com**).	You can record this information in the *SMART Room System with Skype for Business setup guide* (see *Setup guide* on page 9). If the domain name used in the Skype for Business account's SIP URI is different from the domain name on the Lync or Skype for Business Web Service certificate, see *Adding trusted domains to the room system* on page 53.
• Password	Type the Skype for Business account's password.	You can record this information in the *SMART Room System with Skype for Business setup guide* (see *Setup guide* on page 9).
▸ Proxy Credentials		
• None	Select to use no credentials for proxy authentication.	SMART recommends that you use the Skype for Business account credentials for proxy authentication.
• Use Skype for Business Account credentials	Select to use the Skype for Business account credentials you provided in the *Credentials* section for proxy authentication.	
• Other credentials	Select to use other credentials for proxy authentication. Type the user name in the *User name* box and the password in the *Password* box.	

Control	Procedure	Notes (if any)
▶ Configuration Modes		
• Automatic	Select if your organization's autodiscover DNS records are set to automatically link to the Skype for Business 2015 server pool.	
• Manual	Select if your organization's autodiscover DNS records aren't set to automatically link to the Skype for Business 2015 server pool, such as when your organization maintains a mixed environment of Lync 2010, Lync 2013 and Skype for Business 2015 server pools. Type the address of the server pool in the *Internal Server Name* box.	
▶ Audio		
• Default Speaker Volume	Move the slider to the right to increase the default speaker volume. OR Move the slider to the left to decrease the default speaker volume.	
• Default Microphone Volume	Move the slider to the right to increase the default microphone volume. OR Move the slider to the left to decrease the default microphone volume.	
• Default Ringer Volume	Move the slider to the right to increase the default ringer volume. OR Move the slider to the left to decrease the default ringer volume.	
• Make a Test Call	Press to test the room system's call functions.	You can make a test call only if your organization uses an on-premises Skype for Business Server. See *Testing the room system* on page 54.
• Test Meet Now	Press to test the room system's server connections and video functions.	See *Testing the room system* on page 54.
▶ Quality Control		
• Sign up for the Customer Experience Program	Turn **On** to allow Microsoft to collect information about configuration, commonly used features and issues to improve future releases of Skype for Business Room System software. OR Turn **Off** to not allow Microsoft to collect this information.	SMART recommends that you allow Microsoft to collect information.

Control	Procedure	Notes (if any)
▶ Logging		
• Help our support team help you	Select **Off** to disable logging. OR Select **Light** to enable recording of summary information and gathering information about specific errors. OR Select **Full** to enable recording of detailed information.	SMART recommends that you enable full logging. Review the Privacy supplement for Microsoft Skype for Business before changing this setting.
• Also turn on Windows Event Logging...	Turn **On** to enable Windows Event Logging. OR Turn **Off** to disable Windows Event Logging.	SMART recommends that you enable Windows Event Logging. Review the Privacy supplement for Microsoft Skype for Business before changing this setting.
Exchange Settings		
• Use Skype for Business Account credentials	Select to use the credentials you specified in *Application Settings* (see page 58) for Microsoft Exchange.	This control is available only for version 15.11 or later of Skype for Business Room System software.
• Other credentials	Select to use different credentials for Microsoft Exchange, and then type the user name, email address and password for Microsoft Exchange in the appropriate boxes.	This control is available only for version 15.11 or later of Skype for Business Room System software.
System Settings		
▶ Monitor Layout		
• Display content on the left screen	Turn **On** to enable the display of content users share with others on the left interactive flat panel. OR Turn **Off** to disable this display.	This control is available only for room systems with two interactive flat panels.
• Tutorial Slide Show	Turn **On** to enable the tutorial. Users can view the tutorial on the interactive flat panels to learn how to use the room system. OR Turn **Off** to disable the tutorial.	
• Room PC View	Turn **On** to enable the Room PC View feature. Users can show or hide a connected room computer's screen from the console. OR Turn **Off** to disable the Room PC View feature.	See *Enabling the Room PC View feature* on page 24.
• Display Subject Line	Turn **On** to display the Skype meeting's subject line on the console. This will override any settings configured on the server policies.	

Control	Procedure	Notes (if any)
▶ Control Panel		
• System Properties	Press to open the *System Properties* dialog box.	In the *System Properties* dialog box, you can view and manage the room system appliance's system properties, including the computer name and network ID.
• User Settings	Press to open the *User Accounts* dialog box.	In the *User Accounts* dialog box, you can view and manage the user and administrator accounts created during the initial configuration of the room system's software.
• Certificate Manager	Press to open the *Certificates* window.	In the *Certificates* window, you can view and manage certificates, which the room system appliance uses to verify the identity of a person or device, authenticate a service, or encrypt files.
• Event Viewer	Press to open the *Event Viewer* window.	In the *Event Viewer* window, you can view and manage the room system appliance's event logs.
• Operations Manager Agent	Press to open the *Operations Manager Window* window.	This control is available only for version 15.06 or later of Skype for Business Room System software.
• Import SCOM Cert	Press to open the *Import SCOM Cert* window.	This control is available only for version 15.12 or later of Skype for Business Room System software.
• Internet Settings	Press to open the *Internet Properties* dialog box.	In the *Internet Properties* dialog box, you can set Internet-related options, including Internet security zones and privacy preferences.
• Network Connections	Press to open the *Network Connections* window.	In the *Network Connections* window, you can view the status of the room system appliance's network connection and set network options, including the DNS server address.
• Windows Firewall	Press to open the *Windows Firewall* window.	In the *Windows Firewall* window, you can view the status of and configure Windows Firewall on the room system appliance.
• Date and Time	Press to open the *Date and Time* dialog box.	In the *Date and Time* dialog box, you can set the date, time and time zone.
• Region and Languages	Press to open the *Region and Language* dialog box.	In the *Region and Language* dialog box, you can set region and language options, including date and time formats, keyboard layouts and display languages.

Control	Procedure	Notes (if any)
▶ System Center Endpoint Protection		
• Antivirus protection	Turn **On** to enable the SCEP feature. OR Turn **Off** to disable the SCEP feature.	See *Enabling the System Center Endpoint Protection feature* on page 25.
• Daily Scan Time	Select the time of day you want to run antimalware scans.	Select a time outside of regular business hours and at least two hours before the daily maintenance time (see *Daily Maintenance Time* below).
▶ Update Mode		
• Download from WSUS server or Microsoft Update	Select to download SCEP updates from your organization's Windows Server Update Services (WSUS) server or the Microsoft Update server.	
• Download from UNC File Share	Select to download SCEP updates from a Universal Naming Convention (UNC) file share location.	
Web Updates		
• Skype for Business Room System Version	Indicates the current version of Skype for Business Room System software installed on the room system.	
▶ Microsoft Updates		
• Download from Microsoft Update server	Select to download Microsoft updates from the Microsoft Update server.	
• Download from WSUS server	Select to download Microsoft updates from your organization's WSUS server. Type the URL of the WSUS server in the text box.	
▶ OEM Updates		
• Download from OEM server	Select to download SMART updates from the SMART server.	SMART recommends that you download updates from the SMART server.
• Download from internal server	Select to download SMART updates from an internal server. Type the URL of the internal server in the text box.	
▶ Update Frequency		
• Automatic updates	Select to download and install updates automatically as they become available. OR Clear to download and install updates manually.	
• Check Updates and Install	Press to manually check for and install any updates.	See *Updating software and firmware* on page 23.
• Daily Maintenance Time	Select the time of day you want to run maintenance checks.	Select a time outside of regular business hours.

Control	Procedure	Notes (if any)
▶ Factory Reset		
• Reset the Device to Factory Image	Press to reset the room system to factory defaults.	See *Appendix C: Resetting the room system to factory defaults* on page 81.
Password Renewal		
• Auto-Renew Password	Turn **On** to enable automatic renewing of the Skype for Business account password, and then type the number of days between renewals in the *Renewal Frequency in Days* box. OR Turn **Off** to disable automatic renewing of the Skype for Business account password.	SMART recommends that you disable automatic renewing of the Skype for Business account password.
▶ Account Type		
• On-Premise	Select if your organization uses an on-premise Lync or Skype for Business Server.	
• Office 365	Select if your organization uses an Office 365™-hosted Lync or Skype for Business Server, and then type the connection point in the *Office 365 Connection Point* box.	
OEM Settings		
• SMART Settings	Press to open SMART Settings.	See *SMART Settings controls* on the next page.
• SRS Licensing Tool	Press to check the status of the room system's product key and provide a MAK key if your Lync or Skype for Business infrastructure doesn't include a KMS server.	This control is available only for version 15.05 or earlier of Lync room systems software.
Skype for Business License		
• Key Management Service (KMS)	Press if your Lync or Skype for Business infrastructure includes a KMS server.	This control is available only for version 15.06 or later of Lync or Skype for Business Room System software.
• Multiple Activation Key (MAK)	Press if your Lync or Skype for Businessinfrastructure doesn't include a KMS server, and then provide a MAK key.	This control is available only for version 15.06 or later of Lync or Skype for Business Room System software.

SMART Settings controls

Control	Procedure	Notes (if any)
SMART Room System Settings		
▶ Business Hours		
• 12-Hour Setting	Select if your organization's business day is 12 hours, and then select the appropriate time frame in the drop-down list.	The room system enters power saving mode outside of the business hours you define on this page.
• Custom Setting	Select if your organization's business day isn't 12 hours, and then select the start and end times for your organization's business day.	
• Business Days	Select the days of the week your organization operates.	
SMART Hardware Settings		
▶ SMART Board		In room systems with two interactive flat panels, there are two *SMART Board* pages under *SMART Hardware Settings* (one for each interactive flat panel).
• Orient	Press to orient the interactive flat panel.	See *Orienting the interactive flat panels* on page 15.
▶ Orientation/Alignment Settings		
• Quick (4 Points)	Select to use four alignment points.	The Quick orientation is suitable for most purposes. You can perform a Quick orientation to re-orient the interactive flat panel with minimal interruption.
• Standard (9 Points)	Select to use nine alignment points.	The Standard orientation provides a slightly higher level of accuracy.
• Wide (12 Points)	Select to use 12 alignment points.	The Wide orientation is suitable for wide-screen interactive flat panels.
• Fine (20 Points)	Select to use 20 alignment points.	
• Defaults	Press to return orientation settings to their defaults.	
▶ Advanced Settings		
• Calibrate	Select to calibrate the interactive flat panel.	See *Calibrating the interactive flat panels* on page 14.

Control	Procedure	Notes (if any)
▶ Proximity Settings		
• Turn on the proximity feature	Select to enable presence detection.	If you change these options in SMART Settings, the changes appear in the interactive flat panel's on-screen display menu (see page 71 for SMART Board 8055i-G5 and 8065i-G5 interactive flat panels or page 79 for SMART Board 8084i-G4 interactive flat panels). However, if you change these options in the on-screen display menu, the changes don't appear in SMART Settings.
• Minimum sleep	Type how long the interactive flat panel waits before detecting motion again (in minutes).	
• Defaults	Press to return presence detection settings to their defaults.	
• Hardware Info & Settings	Select to view information about the interactive flat panel, including its serial number and firmware and software versions.	
▶ SMART Room System USB Bridge		This page only appears if you have connected the SMART Room System USB Bridge (see page 6).
• Hardware Info & Settings	Select to view information about the SMART Room System USB Bridge, including its serial number.	
▶ SMART Camera		
• Preview	Press to view a preview image from the camera, select the mains power line frequency for your country (50 Hz or 60 Hz) and set the pan, tilt, zoom, contrast and brightness as appropriate for the meeting room's size.	
▶ Hardware Info & Settings	Select to view information about the camera, including its serial number.	
• Additional Information	Press to view additional information about the camera.	
▶ Console for Room System		
• Calibrate	Press to calibrate the console.	
• Hardware Info & Settings	Select to view information about the console, including its serial number.	
▶ Audio Conferencing System		
▶ Hardware Info & Settings	Select to view information about the audio system, including its serial number.	
• Additional Information	Press to view additional information about the audio system.	
About Software and Product Support		
• Contact Support	Press to view contact information for SMART Support.	

Control	Procedure	Notes (if any)
• About This Software	Press to view version and legal information for the SMART software installed on the room system appliance.	
▶ Tools		
• Diagnostics	Press to run SMART Board Diagnostics.	You should run SMART Board Diagnostics only in consultation with SMART Support.
Tasks		
• Orient/Align the SMART Product	Press to orient the interactive flat panels.	See *Orienting the interactive flat panels* on page 15.
• Connection Wizard	Press to run the connection wizard to connect, calibrate and orient the interactive flat panels.	
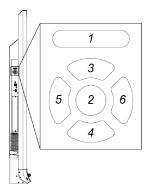
Appendix B

Using the interactive flat panel on-screen display menus

Using the SMART Board 8055i-G5 and 8065i-G5 interactive flat panels on-screen display menu

You can access the SMART Board 8055i-G5 and 8065i-G5 interactive flat panels on-screen display menu using the menu control panel located on the side of the interactive flat panels.

No.	Name
1	MENU
2	SET
3	[Up]
4	[Down]
5	[Left]
6	[Right]

👉 **IMPORTANT**
- For room systems with one interactive flat panel, temporarily remove the left speaker to access the menu control panel.

- For room systems with two interactive flat panels, temporarily remove both speakers and the camera, and then move the right interactive flat panel to access the menu control panels.

Changing settings in the on-screen display menu

To change settings in the on-screen display menu

1. Press the **MENU** button on the menu control panel.

   The on-screen display menu appears.

2. Press the up and down arrows to highlight a menu, and then press **SET**.

3. Press the up and down arrows to highlight a menu option.

4. Press the left and right arrows to change the menu option's setting.

   OR

   Press the right arrow to open the menu option's submenu. (Repeat steps 3 and 4 to change settings in the submenu.)

5. Press **MENU** until the on-screen menu closes.

On-screen display menu options

Option	Values	Function	Notes (if any)
Picture			
▸ Picture Mode	Standard User Dynamic	Sets the picture mode	Select **User** to customize brightness, contrast, sharpness and other *Picture* options. Select one of the other values to set brightness, contrast, sharpness and other *Picture* options to default values.
• Brightness	0–100	Sets the overall brightness of the image and background	You can modify this option only if you select **User** in *Picture Mode*.
• Contrast	0–100	Sets the difference in brightness between the lightest and darkest parts of the image.	You can modify this option only if you select **User** in *Picture Mode*.
• Black Level	0–100	Sets the level of brightness in the darkest parts of the image	You can modify this option only if you select **User** in *Picture Mode*.
• Color	0–100	Sets the image color depth	You can modify this option only if you select **User** in *Picture Mode*.

Option	Values	Function	Notes (if any)
• Sharpness	0–100	Sets the image sharpness	You can modify this option only if you select **User** in *Picture Mode*.
▶ Color temperature	Normal Warm User Cool	Sets the color temperature	Select **User** to customize the amount of red, green and blue in the image. Select one of the other values to set the amount of red, green and blue in the image to default values.
• Red	0–100	Sets the amount of red in the image	You can modify this option only if you select **User** in *Color Temperature*.
• Green	0–100	Sets the amount of green in the image	You can modify this option only if you select **User** in *Color Temperature*.
• Blue	0–100	Sets the amount of blue in the image	You can modify this option only if you select **User** in *Color Temperature*.
• Movie Mode	Off Low Middle High	Sets the brightness, contrast, black level, color and sharpness for movie watching	
• Picture Reset	[N/A]	Resets all options in the *Picture* menu to their default values	
Sound			
▶ Sound Mode			
• Treble	L50–R50	Sets the high frequency sound	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Bass	L50–R50	Sets the low frequency sound	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▶ EQ			
• 120 Hz	0–100	Sets the sound equalization at 120 Hz	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• 500 Hz	0–100	Sets the sound equalization at 500 Hz	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• 1.2 kHz	0–100	Sets the sound equalization at 1.2 kHz	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• 7.5 kHz	0–100	Sets the sound equalization at 7.5 kHz	This option isn't applicable to the SMART Room System. Don't change it from its default value.

Option	Values	Function	Notes (if any)
• 12 kHz	0–100	Sets the sound equalization at 12 kHz	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Balance	L50–R50	Balances the left and right volume	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Audio Input	HDMI USB	Sets the audio input source	Don't change this option from its default value.
• Sound Reset	[N/A]	Resets all options in the *Sound* menu to their default values	This option isn't applicable to the SMART Room System. Don't change it from its default value.
OSD			
• Language	[Languages]	Sets the on-screen display menu's language	
• OSD Turn Off	Off 5 seconds 10 seconds 15 seconds	Sets the time of inactivity before the on-screen display menu turns off	
• OSD Reset	[N/A]	Resets all options in the *OSD* menu to their default values	
Setup			
• Power Save	On Off	Enables or disables Power Save mode	When Power Save mode is enabled and there is no video input, the interactive flat panel displays *No Signal* for 25 seconds before turning off. Don't change this option from its default value.
• Monitor ID	1–100	Specifies a unique ID for the interactive flat panel	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• FBC Control	On Off	Enables or disables the front control panel	Don't change this option from its default value.
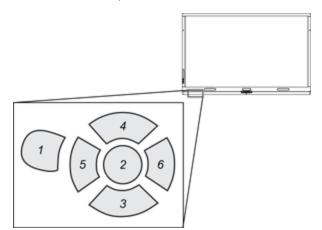
Option	Values	Function	Notes (if any)
▸ Proximity	On Off	Enables or disables presence detection	If you change this option in SMART Settings (see page 64), the change appears in the on-screen display menu. However, if you change this option in the on-screen display menu, the change doesn't appear in SMART Settings.
• Re-enable Time	1Min.–10Min.	Sets how long the interactive flat panel waits before detecting motion again	If you change this option in SMART Settings (see page 64), the change appears in the on-screen display menu. However, if you change this option in the on-screen display menu, the change doesn't appear in SMART Settings.
• Auto Power Off	15Min.–240Min.	Sets how long the interactive flat panel waits before turning off	
• Video input detect	On Off	Enables or disables video input detection.	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Lync® Room Reset	[N/A]	Resets options in all menus to their default values (for a SMART Room System)	You use this option when you first set up the room system.
• Setup Reset	[N/A]	Restores the setup settings to their default value	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Factory Reset	[N/A]	Resets options in all menus to their default values	This option isn't applicable to the SMART Room System. Don't change it from its default value.
About			
• Model Number	[N/A]	Displays the interactive flat panel's model number	
• Serial Number	[N/A]	Displays the interactive flat panel's serial number	
• Scalar firmware version	[N/A]	Displays the interactive flat panel's scalar firmware version	
• Touch firmware version	[N/A]	Displays the interactive flat panel's touch firmware version	
• OPS Information	[N/A]	Displays whether the I/O extension module is installed	

Using the SMART Board 8084i-G4 interactive flat panel on-screen display menu

You can access the SMART Board 8084i-G4 interactive flat panel on-screen display menu using the menu control panel or the remote control.

Using the menu control panel

The menu control panel is located on the bottom of the interactive flat panel.

No.	Name
1	MENU
2	OK
3	[Up]
4	[Down]
5	[Left]
6	[Right]

Using the remote control

The remote control requires two 1.5V AAA batteries.

> ⚠️ **WARNING**
>
> To reduce the risk associated with leaking batteries:
>
> - use only AAA type batteries
>
> - do not mix used and new batteries
>
> - orient the battery's plus (+) and minus (-) terminals according to the markings found on the remote control
>
> - do not leave the batteries in the remote control for an extended period
>
> - do not heat, disassemble, short or recharge the batteries, or expose them to fire or high temperature
>
> - avoid eye and skin contact if batteries have leaked
>
> - dispose of exhausted batteries and product components in accordance with applicable regulations

To replace batteries in the remote control

1. Press the tab on the underside of the remote control, and then open the cover.

2. Remove the existing batteries.

3. Insert two new 1.5V AAA batteries in the remote control.

4. Replace the cover.

Changing settings in the on-screen display menu

To change settings in the on-screen display menu

1. Press the **MENU** button on the remote control or the menu control panel.

   The on-screen display menu appears.

2. Press the up and down arrows to highlight a menu, and then press **OK**.

3. Press the up and down arrows to highlight a menu option.

4. Press the left and right arrows to change the menu option's setting.

   OR

   Press the right arrow to open the menu option's submenu. (Repeat steps 3 and 4 to change settings in the submenu.)

5. Press **MENU** until the on-screen menu closes.

On-screen display menu options

Option	Values	Function	Notes (if any)
PICTURE			
▸ Picture Mode			
▸ Picture Mode	Vivid Standard Ambient Expert1 Expert2	Sets the picture mode	SMART recommends that this option be set to **Standard**. The other options in the *Picture Mode* menu change depending on the value you select for this option. The options documented in this table are those that appear when you select **Vivid**, **Standard** or **Ambient**. Alternatively, you can press the **PSM** button on the remote control to access this option.

Option	Values	Function	Notes (if any)
• In Bright	1–100	Sets the image brightness for brightly lit rooms	You can modify this option only if you select **Ambient** in *Picture Mode*. The value of this menu option can't be less than the value of *In Dark*.
• In Dark	0–99	Sets the image brightness for dimly lit rooms	You can modify this option only if you select **Ambient** in *Picture Mode*. The value of this menu option can't be more than the value of *In Bright*.
• Light Threshold	[Number]	Sets the light threshold	You can modify this option only if you select **Ambient** in *Picture Mode*.
• Sensing Lux	[N/A]	Shows the current illuminance level of the room (in lux)	
• Backlight	0–100	Sets the backlight level of the image	SMART recommends that this option be set to **100**.
• Contrast	0–100	Sets the difference in brightness between the lightest and darkest parts of the image	SMART recommends that this option be set to **84**.
• Brightness	0–100	Sets the overall brightness of the image and background	SMART recommends that this option be set to **63**. Alternatively, you can press the **BRIGHTNESS** buttons on the remote control.
• Sharpness	0–50	Sets the image sharpness	SMART recommends that this option be set to **0**.
• Saturation	0–100	Sets the image saturation	SMART recommends that this option be set to **55**.
• Tint	R50–G50	Sets the image tint	SMART recommends that this option be set to **0**.
• Color Temp.	W50–C50	Sets the image color temperature	SMART recommends that this option be set to **0**.
▶ Advanced Control			
• Dynamic Contrast	Low Medium High Off	Sets the dynamic contrast	SMART recommends that this option be disabled.
• Dynamic Color	Low High Off	Sets the dynamic color	SMART recommends that this option be disabled

Option	Values	Function	Notes (if any)
• Clear White	Low High Off	Sets the clear white color	SMART recommends that this option be disabled.
▶ Preferred color			
• Skin Color	-5–5	Sets the preferred color value for skin in the image	
• Grass Color	-5–5	Sets the preferred color value for grass in the image	
• Sky Color	-5–5	Sets the preferred color value for sky in the image	
• Super Resolution	On Off	Enables or disables super resolution	
• Gamma	Low Medium Hight	Sets the gamma	SMART recommends that this option be set to **Low**.
▶ Picture Option			
• Noise Reduction	Low Medium High Off	Sets image noise reduction	SMART recommends that this option be disabled.
• MPEG Noise Reduction	Low Medium High Off	Sets MPEG image noise reduction	SMART recommends that this option be disabled.
• Black Level	High Low	Sets the level of brightness in the darkest parts of the image	SMART recommends that this option be set to **Low**.
• LED Local Dimming	Low Medium High	Sets the level of LED local dimming to reduce brightness in the darkest parts of the image	SMART recommends that this option be disabled.
▶ TruMotion			
• TruMotion	Smooth Clear Clear Plus User Off	Sets TruMotion	SMART recommends that this option be set to **Smooth**.
• De-Judder	0–10	Reduces image juddering	You can modify this option only if you select **User** in *TruMotion*.
• De-Blur	0–10	Reduces image blurring	You can modify this option only if you select **User** in *TruMotion*.

Option	Values	Function	Notes (if any)
• Picture Reset	Yes No	Resets all options in the *Picture Mode* menu to their default values	
• Aspect Ratio	16:9 Just Scan Set By Program 4:3 Zoom Cinema Zoom 1	Sets the aspect ratio	Don't change this option from its default value.
• Picture Wizard II	[N/A]	Starts Picture Wizard II, which you can use to adjust the picture quality of the original image	
• Screen	[N/A]	Shows the current input type	
SOUND			
• Sound Mode	Standard User Setting	Sets the sound mode	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Virtual Surround	On Off	Enables or disables virtual surround sound	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ Clear Voice II			
• Clear Voice II	On Off	Enables or disables the Clear Voice II feature	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ AV Sync.			
• AV Sync.	On Off	Enables or disables audio-visual synchronization	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Speaker	-5–15	Sets the speaker level for audio-visual synchronization	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Bypass	[N/A]	Enables or disables speaker bypass	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ Sound Setting			
• Balance	L50–R50	Balances the left and right volume	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Speaker	Internal External Off	Enables the internal speakers, enables the external speakers or disables audio altogether	This option isn't applicable to the SMART Room System. Don't change it from its default value.

Option	Values	Function	Notes (if any)
• Line Output	Fixed Variable	Sets the audio line out	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• HDMI3/PC Line Output	Fixed Variable	Sets the audio line out for the room computer (HDMI3/PC)	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ Audio Input			
• Audio In 1	HDMI3/PC HDMI1 HDMI2 DPORT DVI-D VGA Component Composite Disable	Specifies a video input to map to AUDIO1 or disables AUDIO1	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Audio In 2	HDMI3/PC HDMI1 HDMI2 DPORT DVI-D VGA Component Composite Disable	Specifies a video input to map to AUDIO2 or disables AUDIO2	This option should be set to **HDMI3/PC** for the SMART Room System.
• Audio In 3	HDMI3/PC HDMI1 HDMI2 DPORT DVI-D VGA Component Composite Disable	Specifies a video input to map to AUDIO3 or disables AUDIO3	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• USB Audio	HDMI3/PC HDMI1 HDMI2 DPORT DVI-D VGA Component Composite Disable	Specifies a video input to map to the USB audio input or disables the USB audio input	This option isn't applicable to the SMART Room System. Don't change it from its default value.

Option	Values	Function	Notes (if any)
• HDMI3/PC	Analog Digital	Specifies whether the HDMI3/PC audio input is analog or digital	This option should be set to **Analog** for the SMART Room System.
TIME			
▶ Clock			
• Date	1–31	Specifies the current date	
• Month	Jan.–Dec.	Specifies the current month	
• Year	2010–2040	Specifies the current year	
• Hour	00–23	Specifies the current hour	
• Minute	00–59	Specifies the current minute	
• Off Time	[N/A]	Enables you to schedule times when the interactive flat panel turns off automatically	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• On Time	[N/A]	Enables you to schedule times when the interactive flat panel turns on automatically	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Sleep Timer	10–240 Off	Specifies the amount of inactivity (in minutes) before the interactive flat panel turns off or disables the sleep timer feature	This option isn't applicable to the SMART Room System. Don't change it from its default value.
OPTION			
• Language	[Languages]	Sets the on-screen display menu's language	
• ISM Method	Normal Color Wash	Sets the method for image stickiness minimization (ISM)	ISM prevents static images that appear in the same location for long periods of time from causing screen burn-in.
• Key Lock	On Off	Enables or disables key lock	
▶ Fail Over			
• Mode	Off Auto Manual	Enables or disables fail over mode	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• DPM Select	On Off	Enables or disables DPM Select	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• DivX® VOD	Registration Deregistration	Registers DivX video-on-demand (VOD)	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Initial Setting	Yes No	Resets options in all menus to their default values	This option isn't applicable to the SMART Room System. Don't change it from its default value.

Option	Values	Function	Notes (if any)
• Set ID	1–255	Sets the interactive flat panel's ID	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Standby Mode	Standby	Sets the Standby mode to reduce power consumption	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ Proximity Control			
• Proximity Control	On Off	Enables or disables presence detection	If you change this option in SMART Settings (see page 64), the change appears in the on-screen display menu. However, if you change this option in the on-screen display menu, the change doesn't appear in SMART Settings.
• Re-enable Time	1–10	Sets how long the interactive flat panel waits before detecting motion again (in minutes)	If you change this option in SMART Settings (see page 64), the change appears in the on-screen display menu. However, if you change this option in the on-screen display menu, the change doesn't appear in SMART Settings.
• Auto Power Off	15–240	Sets how long the interactive flat panel waits before turning off	
• Welcome OSD	Enabled Disable	Enables or disables the welcome screen	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Welcome Timeout	5–30	Sets how long the welcome screen appears (in seconds)	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Ready State Brightness	0–100	Sets the brightness of the welcome screen	This option isn't applicable to the SMART Room System. Don't change it from its default value.
▸ USB Setting			
• USB 1	HDMI1 HDMI2 HDMI3/PC DVI-D DPORT VGA Disable	Sets the video input for the USB1 receptacle, or disables the receptacle	Don't change this option from its default value.

Option	Values	Function	Notes (if any)
• USB 2	HDMI1 HDMI2 HDMI3/PC DVI-D DPORT VGA Disable	Sets the video input for the USB2 receptacle, or disables the receptacle	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• USB 3	HDMI1 HDMI2 HDMI3/PC DVI-D DPORT VGA Disable	Sets the video input for the USB3 receptacle, or disables the receptacle	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• Lync® Room Reset	Reset Cancel	Resets options in all menus to their default values (for a SMART Room System)	You use this option when you first configure the SMART Room System.
• CEC	Enabled Disable	Enables or disables Consumer Electronics Control (CEC) support on HDMI inputs	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• FBC Control	On Off	Enables or disables the front control panel	This option isn't applicable to the SMART Room System. Don't change it from its default value.
SUPPORT			
• Model/Type	[N/A]	Shows the interactive flat panel's model number	
• Software Version	[N/A]	Shows the interactive flat panel's firmware version number	
• Serial Number	[N/A]	Shows the interactive flat panel's serial number	
• Customer Service Center	[N/A]	Provides contact information for SMART Support	

Resetting the room system to factory defaults

This appendix explains how to reset the room system to factory defaults.

In most situations, you should reset the room system from the *Settings* screen. However, if the room system is in an unrecoverable state or the *Settings* screen is otherwise not accessible, you can reset the room system from the BIOS.

To reset the room system from the Settings screen

1. On the console, press **Options**, and then press **Settings**.

   The *Enter your credentials* screen appears.

2. Type the room system administrator account's user name and password in the text boxes, and then press **Authenticate**.

   The room system restarts.

3. Type the room system administrator account's password, and then press ENTER.

   The Skype for Business Admin Console appears.

4. Press **Web Updates**.

5. Press **Reset the Device to Factory Image**.
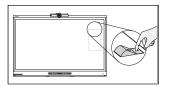
   The room system restarts, and the software is reset to factory defaults.

6. Complete the procedure in the *SMART Room System with Skype for Business setup guide* (see *Setup guide* on page 9).
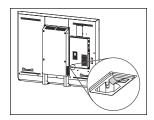
To reset the room system from the BIOS

1. Turn off the room system (see *Turning off the room system* on page 13).

2. Connect a USB keyboard to the room system appliance.

3. If the room system includes SMART Board 8055i-G5 or 8065i-G5 interactive flat panels, press the power button on the room system appliance enclosure.

4. On the bottom of each interactive flat panel, flick the power switch on.

SBID8055i-G5 and SBID8065i-G5   *SBID8084i-G4*

5. Press the DELETE key.

   The room system appliance enters BIOS mode.
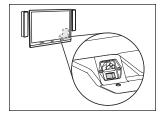
6. Browse to the **Advanced** tab.

7. Select **Recovery Function**, and then press ENTER.

8. Set *Image Recovery* to **Enabled**.

9. Press ESC.

10. Browse to the **Save & Exit** tab.

11. Select **Save Changes and Exit**, and then select **Yes**.

    The room system restarts, and the software is reset to factory defaults.

12. Complete the procedure in the *SMART Room System with Skype for Business setup guide* (see *Setup guide* on page 9).

Hardware environmental compliance

SMART Technologies supports global efforts to ensure that electronic equipment is manufactured, sold and disposed of in a safe and environmentally friendly manner.

Waste Electrical and Electronic Equipment and Battery regulations (WEEE and Battery Directives)

Electrical and electronic equipment and batteries contain substances that can be harmful to the environment and to human health. The crossed-out wheeled bin symbol indicates that products should be disposed of in the appropriate recycling stream and not as regular waste.

Batteries

The remote controls for SMART Board 8084i-G4 interactive flat panels contain 1.5V AAA batteries. Recycle or dispose of batteries properly.

More information

See smarttech.com/compliance for more information.

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