

SMART Room System™ for Microsoft® Lync®

ADMINISTRATOR'S GUIDE

FOR MODELS SRS-LYNC-XS, SRS-LYNC-S, SRS-LYNC-M, SRS-LYNC-M-DUAL, SRS-LYNC-L AND SRS-LYNC-XL
FEATURING SMART BOARD® 8055i-G5, 8070i-G4 AND 8084i-G4 INTERACTIVE FLAT PANELS

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.

FCC warning

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

Trademark notice

SMART Room System, SMART Board, SMART Meeting Pro, SMART Ink, DViT, smarttech, the SMART logo and all SMART taglines are trade-marks or registered trade-marks of SMART Technologies ULC in the US and/or other countries. Microsoft, Windows, Lync, Outlook, PowerPoint and Office 365 are either registered trade-marks or trade-marks of Microsoft Corporation in the US and/or other countries. Intel and vPro are trade-marks or registered trade-marks of Intel Corporation or its subsidiaries in the US and other countries. DameWare is a registered trade-mark of SolarWinds Worldwide, LLC. VNC is a registered trade-mark of RealVNC Ltd. in the US and in other countries. "HDMI" and all associated logos are trade-marks of HDMI Licensing, LLC. All other third-party product and company names may be trade-marks of their respective owners.

Copyright notice

© 2015 SMART Technologies ULC. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without the prior written consent of SMART Technologies ULC. Information in this manual is subject to change without notice and does not represent a commitment on the part of SMART.

This product and/or use thereof covered by one or more of the following US patents.

www.smarttech.com/patents

01/2015

Important information



WARNING

- Failure to follow the installation instructions dispatched with your SMART product could result in personal injury and product damage which may not be covered by your warranty.
- Ensure that your installation complies with local building and electrical regulations.
- Do not open or disassemble the SMART product. You risk electrical shock from the high voltage inside the casing. Opening the casing also voids your warranty.
- Do not stand (or allow children to stand) on a chair to touch the surface of your SMART product. Instead, mount the product at the appropriate height.
- To reduce the risk of fire or electric shock, do not expose your SMART product to rain or moisture.
- If your SMART product requires replacement parts, make sure that the service technician uses replacement parts specified by SMART Technologies or parts with the same characteristics as the original.
- Ensure that any cables extending across the floor to your SMART product 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 your 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 your warranty.
- Use only extension cords and sockets into which this product's polarised plug can be fully inserted.
- Use the power cable provided with this product. If a power cable is not supplied with this product, please contact your supplier. Use only power cables that match the AC voltage of the power socket 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 panel by connecting rope or wire to its handles. Because the interactive flat panel is heavy, rope, wire or handle failure could lead to personal injury.
- Use SMART supplied mounting hardware or hardware that is designed to properly support the weight of your product.

IMPORTANT INFORMATION

- Disconnect all power cables for your interactive flat panel from the wall socket and seek assistance from qualified service personnel when any of the following occurs:
 - The power cable or plug is damaged
 - Liquid is spilled into the interactive flat panel
 - Objects fall into the interactive flat panel
 - The interactive flat panel is dropped
 - Structural damage such as cracking occurs
 - The interactive flat panel behaves unexpectedly when you follow operating instructions

Contents

Important information	i
Chapter 1: Welcome	1
About this guide	2
About your room system	2
Resources for administrators	8
Resources for others	8
Chapter 2: Maintaining your room system	11
Recommended tools	12
Turning off your room system	13
Maintaining the interactive flat panels	13
Maintaining the console	19
Maintaining the camera	19
Maintaining the microphones	20
Maintaining the speakers	20
Checking your room system cable connections	20
Checking your room system installation	20
Removing and transporting your room system	21
Chapter 3: Maintaining software and firmware	23
Updating software and firmware	23
Enabling the Room PC View feature	24
Chapter 4: Remotely monitoring your room system	25
Installing the Lync Room System Administrative Web Portal	25
Using the Lync Room System Administrative Web Portal	25
Chapter 5: Remotely managing your room system	29
Configuring your room system	30
Remotely managing your room system	31
Security	33
Ports	34
Intel MEBx controls	35
References	38
Chapter 6: Troubleshooting	39
Resolving hardware issues	40
Resolving software issues	49
Testing your room system	51
Appendix A: Using the Lync Admin Console and SMART Settings	53
Accessing the Lync Admin Console and SMART Settings	53
Lync Admin Console controls	54

CONTENTS

SMART Settings controls	58
Appendix B: Using the interactive flat panel on-screen display menus	61
Using the SMART Board 8055i-G5 interactive flat panel on-screen display menu	61
Using the SMART Board 8070i-G4 interactive flat panel on-screen display menu	66
Using the SMART Board 8084i-G4 interactive flat panel on-screen display menu	72
Appendix C: Resetting the room system to factory defaults	81
Appendix D: Hardware environmental compliance	83
Waste Electrical and Electronic Equipment and Battery regulations (WEEE and Battery Directives)	83
Batteries	83
More information	83
Index	85

Chapter 1

Welcome

About this guide	2
About your room system	2
Features	2
Integration with Lync	2
Simple startup	2
Automatic sharing of video and audio	3
Collaboration	3
Presence detection	3
Components	3
SMART Board interactive flat panels	4
Lync appliance	4
Console	4
Camera	5
Table microphones and audio processor	5
Speakers	5
Video connection harness	5
SMART Room System USB Bridge	5
Accessories	6
Additional table microphones	6
Wall stand kit	6
Comparing room sizes	6
Resources for administrators	8
Setup guide	8
Support centre and knowledge base	8
Resources for others	8
Resources for decision makers	8
Resources for installers	9
Resources for users	9

This chapter introduces you to this guide and your SMART Room System™ for Microsoft® Lync®.

About this guide

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

- How to maintain your room system's hardware for years of use
- How to remotely monitor and manage your room system
- How to troubleshoot issues with your room system

This guide is intended for individuals who are responsible for administering room systems in their organisations. Other documentation and resources are available for individuals who are responsible for installing room systems and individuals who use room systems.

About your room system

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

Using the installed Lync Room System software, users can start a meeting and connect with other individuals 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, connect an optional computer to share its screen and share files with connected individuals and meeting rooms in real time.

Features

Your room system includes the following features.

Integration with Lync

The SMART Room System integrates with your organisation's existing Lync infrastructure, enabling users to schedule meetings, remotely join meetings, and share Microsoft PowerPoint® files using the Lync client software already installed on their computers.

Simple startup

Once 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. Lync Room System software enables users to connect to remote participants and shares video and audio.

Alternatively, users can 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's high definition camera, microphones and speakers facilitate communication during the meeting.

Collaboration

Using Lync 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 their laptops or a room computer to share and interact with the computers' displays.

Presence detection

The interactive flat panels have presence detection sensors that can detect people up to 5m (16') away. If the sensors detect people in the meeting room, the room system turns on. If the sensors don't detect people in the meeting room for a specified period of time, the room system enters Standby mode.

Components

Your room system consists of 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 8070i-G4	SMART Board 8070i-G4 interactive flat panel	Small Large (×2)
SBID 8084i-G4	SMART Board 8084i-G4 interactive flat panel	Medium Extra large (×2)
AM70-L	Lync 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 with SMART Board 8055i-G5, 8070i-G4 and 8084i-G4 interactive flat panels. For information on room systems with SMART Board

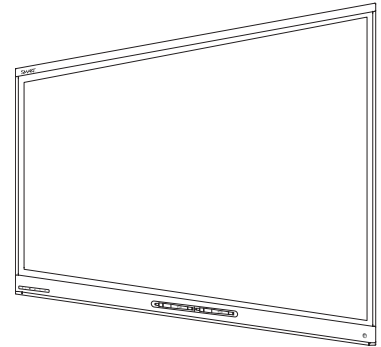
8055i interactive flat panels, see the *SMART Room System for Lync setup and maintenance guide* (smarttech.com/kb/170450).

- 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 notes and share them with others.

For information on which interactive flat panel model is included with your room system and the differences between these models, see *Comparing room sizes* on page 6.

Lync appliance

The Lync appliance includes Lync Room System software as well as SMART Product Drivers. Lync Room System software enables users to start, join and facilitate meetings and connect with others through your organisation's Lync infrastructure. SMART Product Drivers enables the touch features of the interactive flat panels and the operation of the all components in the room system.

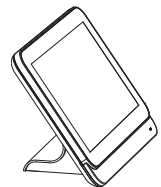
In room systems with SMART Board 8055i-G5 interactive flat panels, the Lync appliance is installed in an enclosure mounted to the wall behind the left interactive flat panel.

In room systems with SMART Board 8070i-G4 and 8084i-G4 interactive flat panels, the Lync appliance is installed in a slot on the bottom of the left interactive flat panel.

Console

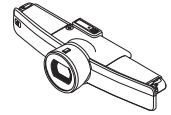
The console is the room system's primary display. It enables users to access and control the features of Lync Room System software during meetings.

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, enabling users to 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 purposes.

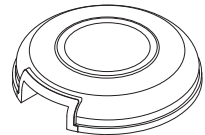


In most meeting rooms, digital pan, tilt and zoom (DPTZ) and the camera's 109° field of view ensure that all meeting participants are captured regardless of where they are in the meeting room.

The camera is installed on the top of the interactive flat panel in rooms with one interactive flat panel or between the interactive flat panels in rooms with two interactive flat panels.

Table microphones and audio processor

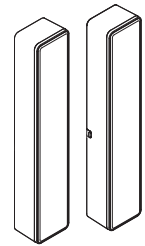
The table microphones automatically capture audio during meetings. Users can temporarily mute the microphones for privacy purposes.



Your room system comes with two table microphones. Your organisation 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 in-room 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 video connection harness's connectors 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 their 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.

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:

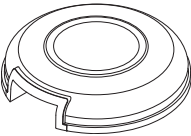
- Additional table microphones
- Wall stand kit

 **NOTE**

For accessory part numbers and ordering information, refer to the specifications (see *Resources for decision makers* on page 8).

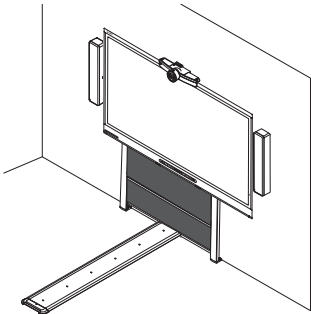
Additional table microphones

Your room system comes with two table microphones. Your organisation 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.



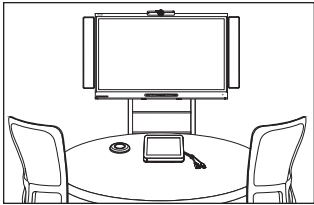
Wall stand kit

The wall stand kit includes a wall stand for each interactive flat panel in your room system and the cable tracking. 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 tracking covers cables running across the floor from the interactive flat panels to the meeting room table.



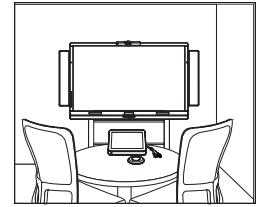
Comparing room sizes

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

Extra small room (SRS-LYNC-XS)		
Intended use:	Extra small meeting rooms (approximately four people) 7m ² (75 sq ft)	
Display type:	One SMART Board 8055i-G5 interactive flat panel	
Display size (diagonal):	138.4cm (54 1/2")	
Optional wall stand kit:	WSK-SINGLE	

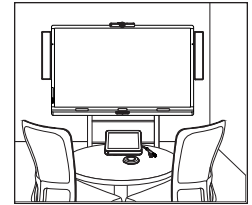
Small room (SRS-LYNC-S)

Intended use:	Small meeting rooms (approximately six people) 9m ² (100 sq ft)
Display type:	One SMART Board 8070i-G4 interactive flat panel
Display size (diagonal):	178cm (70")
Optional wall stand kit:	WSK-SINGLE



Medium room (SRS-LYNC-M)

Intended use:	Medium meeting rooms (approximately 12 people) 17m ² (180sq ft)
Display type:	One SMART Board 8084i-G4 interactive flat panel
Display size (diagonal):	213.4cm (84")
Optional wall stand kit:	WSK-SINGLE



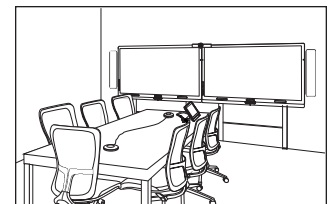
Medium room with dual panels (SRS-LYNC-M-DUAL)

Intended use:	Medium meeting rooms (approximately 12 people) 17m ² (180sq ft)
Display type:	Two SMART Board 8055i-G5 interactive flat panels
Display size (diagonal):	2 x 138.4cm (2 x 54 1/2")
Optional wall stand kit:	WSK-DUAL



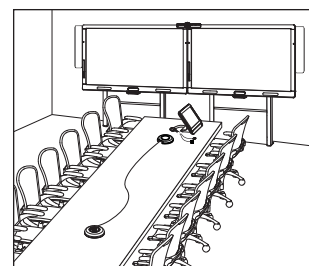
Large room (SRS-LYNC-L)

Intended use:	Large meeting rooms (approximately 16 people) 28m ² (300 sq ft)
Display type:	Two SMART Board 8070i-G4 interactive flat panels
Display size (diagonal):	2 x 178cm (2 x 70")
Optional wall stand kit:	WSK-DUAL



Extra large room (SRS-LYNC-XL)

Intended use:	Extra large meeting rooms (approximately 18 people) 37m ² (400 sq ft)
Display type:	Two SMART Board 8084i-G4 interactive flat panels
Display size (diagonal):	2 × 213.4cm (2 × 84")
Optional wall stand kit:	WSK-DUAL



NOTE

Other, minor differences are noted throughout this guide.

Resources for administrators

In addition to this guide, there are other resources for SMART Room System administrators.

Setup guide

Refer to the *SMART Room System for Lync setup guide* included with your room system to prepare for the room system prior to installation and then set it up after installation. If you misplaced this guide, you can download a PDF version from smarttech.com/kb/170820.

Support centre and knowledge base

The Support centre (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 for Lync for extra small rooms	smarttech.com/kb/170821

Product	Specifications
SMART Room System for Lync for small rooms	smarttech.com/kb/170449
SMART Room System for Lync for medium rooms	smarttech.com/kb/170448
SMART Room System for Lync for medium rooms with dual panels	smarttech.com/kb/170823
SMART Room System for Lync for large rooms	smarttech.com/kb/170447
SMART Room System for Lync 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 your room system when installing the product. If installers have misplaced these instructions, they can download PDF versions.

Product	Installation instructions
SMART Room System for Lync for extra small rooms	smarttech.com/kb/170857
SMART Room System for Lync for small rooms	smarttech.com/kb/170470
SMART Room System for Lync for medium rooms	smarttech.com/kb/170467
SMART Room System for Lync for medium rooms with dual panels	smarttech.com/kb/170858
SMART Room System for Lync for large rooms	smarttech.com/kb/170468
SMART Room System for Lync for extra large rooms	smarttech.com/kb/170658
SMART wall stand for SMART Board interactive flat panels	smarttech.com/kb/170466
SMART cable tracking for SMART Room Systems	smarttech.com/kb/170465
SMART Room System for Lync table microphone upgrade kit	smarttech.com/kb/170560

Resources for users

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

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

Chapter 2

Maintaining your room system

Recommended tools	12
Turning off your room system	13
Maintaining the interactive flat panels	13
Calibrating the interactive flat panels	13
Orientating the interactive flat panels	15
Cleaning the screens	16
Cleaning the presence detection sensors	17
Cleaning the camera windows and reflective tape	17
Maintaining ventilation	18
Preventing condensation	18
Maintaining pens	18
Maintaining the console	19
Maintaining the camera	19
Maintaining the microphones	20
Maintaining the speakers	20
Checking your room system cable connections	20
Checking your room system installation	20
Removing and transporting your room system	21

Your room system is designed to require no, or only minimal, cleaning and other maintenance.

If your room system requires cleaning or other maintenance or if your organisation mandates periodic cleaning or other maintenance of its IT infrastructure, follow the instructions in this chapter.

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	<ul style="list-style-type: none">• Paper and pencil• Ladder• Tape measure• Set of screwdrivers, including flat blade, Phillips No. 1 and Phillips No. 2• Torch• Nylon cable ties• Cable tie cutter
Hardware isolation testing	<ul style="list-style-type: none">• 5m (16' 5") USB cable• 5m (16' 5") USB cable with mini-B connector• 5m (16' 5") active USB extension cable• 6.3m (20' 8") HDMI cable• Functional spare Lync 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 interactive flat panels
IT access	<ul style="list-style-type: none">• IT administrator with knowledge of your organisation's Lync infrastructure• SMART Board interactive flat panel remote control• USB keyboard and mouse• Laptop that has Outlook and Lync client software and that is connected to your organisation's Lync infrastructure• Internet access for documentation and other resources• Alternative audio source, such as a portable music player

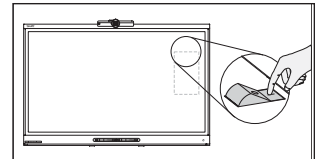
Turning off your room system

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

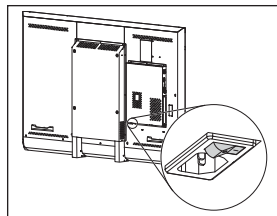
To turn off your room system

1. On the console, press **Options** and then press **Restart**.
2. When the screens are blank or when the SMART logo appears, do the following:

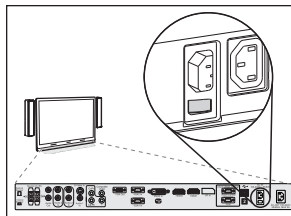
- a. If the room system includes SMART Board 8055i-G5 interactive flat panels, press the power button on the Lync appliance enclosure.



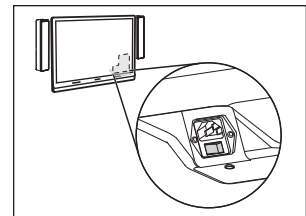
- b. Flick the power switch on the bottom of each interactive flat panel.



SBID8055i-G5



SBID8070i-G4



SBID8084i-G4

Maintaining the interactive flat panels

Complete the following tasks on a regular basis to maintain your room system's interactive flat panels:

- Calibrate and orientate 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 mouse clicks, digital ink or ink removal 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, you need to calibrate the interactive flat panels during initial configuration only. However, you might need to calibrate the interactive flat panels after initial configuration 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 your room system includes SMART Board 8055i-G5 interactive flat panels, ensure version 15.12.02 or later of Lync Room System software is installed before attempting to calibrate the interactive flat panels (see *Updating software and firmware* on page 23).
- If an error message appears while you are calibrating 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 Lync 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 that you want to calibrate.



TIP

When you press an interactive flat panel's screen, the circle beside the icon associated with that interactive flat panel 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. Orientate the interactive flat panel (see *Orientating 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.

Orientating the interactive flat panels

Typically, you need to orientate the interactive flat panels during initial configuration only. However, you might need to orientate 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

- To orientate the interactive flat panels, you need the room system administrator account's user name and password. You're unable to orientate the interactive flat panels in meeting mode.
- If your room system includes SMART Board 8055i-G5 interactive flat panels, ensure version 15.12.02 or later of Lync Room System software is installed before attempting to orientate the interactive flat panels (see *Updating software and firmware* on page 23).

To orientate 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 Lync 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 that you want to orientate.



TIP

When you press an interactive flat panel's screen, the circle beside the icon associated with that interactive flat panel turns blue.

7. Press **Orientate**.
The orientation screen appears.
8. Follow the on-screen instructions to orientate 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 13).

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-wipe markers on the screens. If dry-wipe 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 discolour the screens.
- Avoid touching the reflective tape between the screens and the bezel and ensure that this strip stays dry. Damage to this strip affects touch interactivity.

To clean the screens

1. Turn off your room system (see *Turning off your 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 interactive flat panel has one presence detection sensor, and each SMART Board 8070i-G4 and 8084i-G4 interactive flat panel has two presence detection sensors. The sensors should be inspected regularly for dust and should be cleaned if any obvious 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 your room system (see *Turning off your 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 DViT technology in the interactive flat panels uses four cameras in the corners of the frames and the reflective material between the screens and the bezels. Excessive dust buildup on the camera windows or reflective tape can impair touch performance.

These areas should be inspected regularly for dust and should be cleaned 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 your 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 ventilation to function. 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 your room system (see *Turning off your 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 your 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 8070i-G4 or 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 removing a worn nib with a replacement 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 discolour the screen.



To clean the screen

1. Turn off your room system (see *Turning off your 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 build-up.

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.

You need to 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 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 your room system (see *Turning off your 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 your room system (see *Turning off your room system* on page 13).
2. Wipe the speakers with a lint-free, non-abrasive cloth.

Checking your room system cable connections

Inspect your room system's cables on a regular basis to ensure that they are securely connected. Using cable strain relief ensures that cables remain securely connected and prevents technical issues associated with disconnected cables.

Checking your room system installation

Inspect your 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, refer to a professional installer.

Inspect your room system's software installation by making a test call (see *Testing your room system* on page 51).

Removing and transporting your room system



WARNING

Only professional, trained installers should remove your room system.



CAUTION

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

Chapter 3

Maintaining software and firmware

Updating software and firmware	23
Enabling the Room PC View feature	24

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

Updating software and firmware

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

You can also manually check for updates.



TIP

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

To manually check for updates

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 Lync Admin Console appears.

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

Lync Room System software checks for and installs any updates.

6. Press **Apply & Restart**.

Enabling the Room PC View feature

If you want to connect a room computer to your 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 Lync Room System software. You can download and install the latest version of Lync Room System software or configure your room system to download and install updates automatically in the Lync Admin Console (see *Updating software and firmware* on the previous page).
- Ensure that your organisation'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 Lync Admin Console appears.

4. Press **System Settings**.
5. Turn on **Room PC View**.
6. Press **Apply & Restart**.

Chapter 4

Remotely monitoring your room system

Installing the Lync Room System Administrative Web Portal	25
Using the Lync Room System Administrative Web Portal	25

Using the Lync Room System Administrative Web Portal, you can remotely collect diagnostic information to monitor the health of your SMART Room System.

Installing the Lync Room System Administrative Web Portal

To install the Lync 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 Lync Room System Administrative Web Portal and then install the Lync Room System Administrative Web Portal.

Using the Lync Room System Administrative Web Portal

Once you have installed the Lync 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 Lync 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 that you installed the Lync Room System Administrative Web Portal on.

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 organisation's network.

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

1. Log on to the Lync Room System Administrative Web Portal (see *To log on to the Lync 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 tickbox to show the password.
Room Tag HTML	
• 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 move the slider 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 move the slider 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 move the slider to the left to decrease the default ringer volume and then click Set Default Volumes .

5. Click **Sign out** when finished.

To view a room system's information and health status

1. Log on to the Lync Room System Administrative Web Portal (see *To log on to the Lync Room System Administrative Web Portal* on the previous page).
2. Click the room system's **Room Name** link.
3. Click **Details**.

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

4. Click **Health**.

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

5. Click **Sign out** when finished.

To save a room system's diagnostic logs

1. Log on to the Lync Room System Administrative Web Portal (see *To log on to the Lync Room System Administrative Web Portal* on the previous page).
2. Click the room system's **Room Name** link.
3. Click **Logging**.
4. Type the path where you want to save the diagnostics logs in the *Save to* box and then click **Save Logs**.
5. Click **Sign out** when finished.

To restart a room system

1. Log on to the Lync Room System Administrative Web Portal (see *To log on to the Lync Room System Administrative Web Portal* on the previous page).
2. Click the room system's **Room Name** link.
3. Click **Logging**.
4. Press **Restart Console** to restart the console.

OR

Press **Restart PC** to restart the Lync appliance.

5. Click **Sign out** when finished.

Chapter 5

Remotely managing your room system

Configuring your room system	30
Remotely managing your room system	31
Using the embedded web management interface	31
Using management software	32
Using remote access software	32
Security	33
Ports	34
Intel MEBx controls	35
References	38

Intel® AMT is part of Intel vPro® technology, which is used in your SMART Room System's Lync appliance.

You can use Intel AMT to remotely manage your room system. Before you can use Intel AMT, you must first enable and configure it on the Lync appliance. You can then connect to the room system and manage it 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 your room system for Intel AMT and how to use Intel AMT to remotely manage the room system.



IMPORTANT

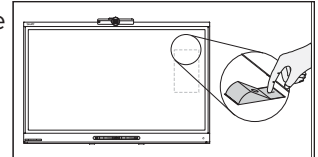
- Set an administrator password for the BIOS (under **Security > Administrator Password**) and change the Intel Management Engine BIOS Extension (MEBx) password from the default to prevent users from making configuration changes to Intel AMT.
- Store the BIOS and Intel MEBx passwords in a safe place because these passwords cannot be easily reset if lost.

Configuring your room system

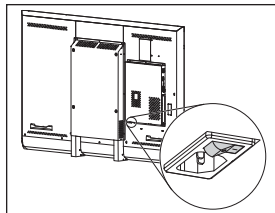
Before you can remotely manage your room system using Intel AMT, you need to enable Intel AMT and then configure it.

To enable Intel AMT

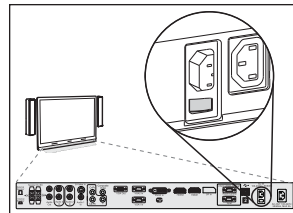
1. Turn off your room system (see *Turning off your room system* on page 13).
2. Connect a USB keyboard to the Lync appliance.
3. If the room system includes SMART Board 8055i-G5 interactive flat panels, press the power button on the Lync appliance enclosure.



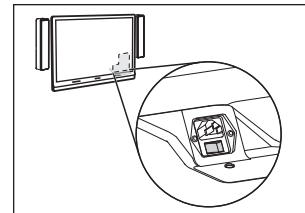
4. Flick the power switch on the bottom of each interactive flat panel.



SBID8055i-G5



SBID8070i-G4



SBID8084i-G4

5. Press the DELETE key.
The Lync 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 change the Intel AMT password following the on-screen instructions.



IMPORTANT

- 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
- Record this password in a safe place because you are unable to recover it afterwards.

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 35.

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

The room system restarts.

Remotely managing your room system

Once you have configured your room system for Intel AMT, you can connect to it and manage it remotely.

Using the embedded web management interface

Your room system's Lync appliance includes an embedded webpage for the administration of Intel AMT:

`http://[Your room system's IP address or fully qualified domain name (FQDN)]:16992`

The room system must be connected to a power source and the network to manage it remotely. However, it doesn't need to be running. Using the webpage, 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 your 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 launch VNC Viewer Plus (see *Using remote access software* below).

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

Using remote access software

The following procedures show how to connect to your room system using DameWare and VNC Viewer Plus. However, you can connect to your room system using any remote access software that supports Intel AMT Keyboard Video Mouse (KVM) connections.

Once you have connected to your 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 Lync 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-hand 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. Type the Intel AMT password that you specified in *To configure Intel AMT* on page 31 in the *Password* box.
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. Type the Intel AMT user name (**admin**) and password that you specified in *To configure Intel AMT* on page 31 when prompted.
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 38.

Ports

Ensure that 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
<div> 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.</div>		
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
<div> NOTE Enabling the redirection listener enables this port.</div>		
16995	Intel AMT redirection/TLS	Redirection traffic—SOL, IDER and Intel KVM using Intel AMT authentication—when TLS is enabled
<div> NOTE Enabling the redirection listener enables this port.</div>		
623	ASF Remote Management and Control Protocol (ASF-RMCP)	RMCP pings
<div> NOTE This port is a standard DMTF port and accepts WS-Management traffic. It's always enabled.</div>		
664	DMTF out-of-band secure web services management protocol Secure ASF-RMCP	Secure RMCP pings
<div> NOTE This port is a standard DMTF port and accepts WS-Management traffic. It's always enabled.</div>		
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		
<ul style="list-style-type: none"> Change ME Password 	Type a new Intel AMT password.	<p>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:</p> <ul style="list-style-type: none"> Uppercase letters (A–Z) Lowercase letters (a–z) Digits (0–9) Non-alphanumeric characters
<ul style="list-style-type: none"> Local FW Update 	<p>Select Enabled to enable local firmware updates.</p> <p>OR</p> <p>Select Disabled to disable local firmware updates.</p> <p>OR</p> <p>Select Password Protected to protect local firmware updates using the Intel AMT password.</p>	SMART recommends not changing this control from its default setting.
▶ Power Control		
<ul style="list-style-type: none"> Intel® ME ON in Host Sleep Status 	Select a power package.	SMART recommends not changing this control from its default setting.
<ul style="list-style-type: none"> Idle Timeout 	Type the idle timeout (in minutes).	SMART recommends not changing this control from its default setting.
Intel® AMT Configuration		
<ul style="list-style-type: none"> Manageability Feature Selection 	Select Enabled .	You must enable manageability feature selection to remotely manage your room system using Intel AMT.
▶ SOL/IDER/KVM		
<ul style="list-style-type: none"> User Name and Password 	Select Enabled to require user authentication for Serial Over LAN/IDE Redirection (SOL/IDER) sessions.	
<ul style="list-style-type: none"> SOL 	Select Enabled to allow the room system's input/output to be redirected to a management server console.	
<ul style="list-style-type: none"> IDER 	Select Enabled to allow the room system to be booted by a management console from a remote disk image.	
<ul style="list-style-type: none"> KVM Feature Selection 	Select Enabled to enable Intel KVM.	
<ul style="list-style-type: none"> Legacy Redirection Mode 	Select Enabled to leave the port open at all times when redirection is enabled in Intel MEBx.	

Control	Procedure	Notes (If any)
▶ User Consent		
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> Opt-in Configurable from Remote IT 	Select Enabled to allow remote users to change the user opt-in policy.	
<ul style="list-style-type: none"> 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		
<ul style="list-style-type: none"> Host Name 	Type the host name for Intel AMT.	If you configure a set host name, ensure that it mirrors the Windows operating system's host name to ensure stability.
<ul style="list-style-type: none"> Domain Name 	Type the domain name for Intel AMT.	
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.

CHAPTER 5
REMOTELY MANAGING YOUR ROOM SYSTEM

Control	Procedure	Notes (If any)
▶ 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.	
▶ RCFG		
• Start Configuration	Select Y to activate remote configuration. OR Select N to not activate remote configuration.	

Control	Procedure	Notes (If any)
▶ 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

Chapter 6

Troubleshooting

Resolving hardware issues	40
Locating serial numbers	40
Locating power and status lights	41
Resolving issues with SMART Board 8055i-G5 interactive flat panels	42
Resolving issues with SMART Board 8070i-G4 and 8084i-G4 interactive flat panels	44
Resolving issues with the console	47
Resolving issues with the camera	47
Resolving issues with the microphones	48
Resolving issues with the speakers	48
Resolving software issues	49
Resolving issues with the calendar	49
Improving the restart time	49
Adding trusted domains to your room system	50
Testing your room system	51

This chapter provides you with the information necessary to solve simple issues that can occur with your room system's hardware and software.



NOTES


- If you come across an issue not in this chapter, refer to the *SMART Room System for Lync troubleshooting decision tree* and other troubleshooting information in the SMART knowledge base (see *Support centre and knowledge base* on page 8).
- 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 your room system's hardware.

Locating serial numbers

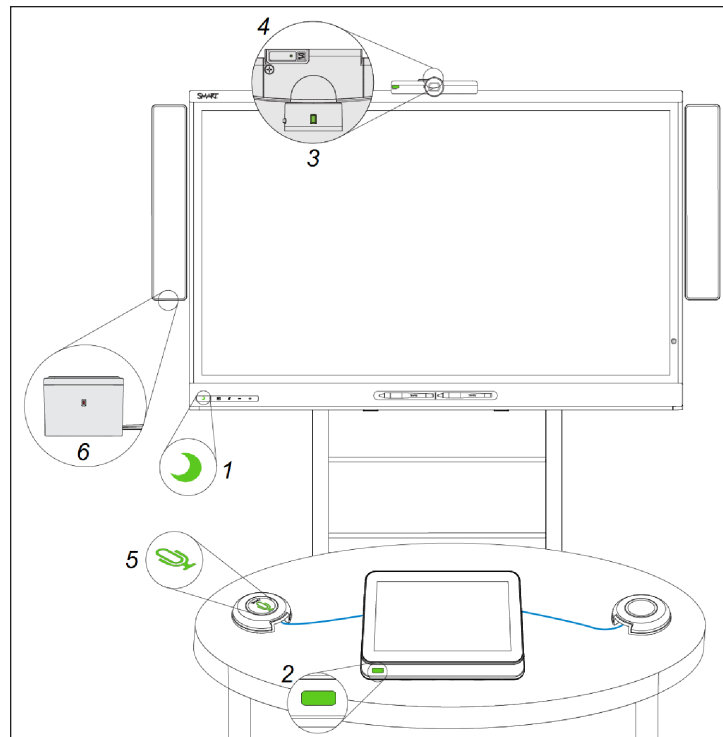
Each of the major components of your room system has a serial number.

Component	Serial number location
Interactive flat panel	On-screen display menu (see page 65 for SMART Board 8055i-G5 interactive flat panels, page 70 for SMART Board 8070i-G4 interactive flat panels or page 80 for SMART Board 8084i-G4 interactive flat panels)
<div> NOTE When requesting technical support, provide SMART Support with the left interactive flat panel's serial number.</div>	
Lync appliance	Wide side of the Lync 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 for Lync setup guide* provided with your room system for this purpose (see *Setup guide* on page 8).

Locating power and status lights

Your 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 interactive flat panels) OR Power/Standby (SMART Board 8070i-G4 and 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 8070i-G4 and 8084i-G4 interactive flat panels only)
- Power, hard drive activity and network connection lights on the Lync appliance
- Power light on the Lync appliance enclosure (room systems with SMART Board 8055i-G5 interactive flat panels only)

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

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

Standby light	Interactive flat panel status	Issues	Solutions
Test Area	Not receiving power	The interactive flat panels should be receiving power but aren't.	Ensure that the interactive flat panels are connected to the mains power supply and that the power switches are turned on.
	Test Area	The interactive flat panels are off.	Press the Standby buttons  on the front control panels to turn the interactive flat panels on.
Solid amber	Standby mode	The interactive flat panels don't turn on when participants enter the room.	<ul style="list-style-type: none"> • Enable presence detection (see page 59). • 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.	<ul style="list-style-type: none"> • Increase the re-enable time, which is the time between when you exit the room and when 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.	<ul style="list-style-type: none"> • 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.	<ul style="list-style-type: none"> Use SMART Board Diagnostics, which is available from SMART Settings (see page 53) to troubleshoot the issue. Ensure that the USB cables are connected as shown in the installation instructions (see page 9).
	On with touch control	The displays are blank.	<ul style="list-style-type: none"> 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 9).
		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 62).
		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.	<ul style="list-style-type: none"> Ensure that participants are touching the screens at right angles (see kb.smarttech.com/?q=13976). Orientate 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.	<ul style="list-style-type: none"> Ensure that nothing is taped to the screens. Remove obstructions from the reflective tape channels. Ensure that participants use consistent pressure whilst drawing digital ink. Close blinds or shades or dim light sources. Calibrate the interactive flat panels (see page 13).
		Participants try to erase digital ink with the erasers, but draw more digital ink instead.	Ensure that participants increase the initial contact area of the erasers.
		Participants try to draw digital ink with their fingers, but erase digital ink instead.	<ul style="list-style-type: none"> Ensure that participants lift their fingers and the palm of their hand from the interactive flat panels whilst they write because the interactive flat panels are interpreting the additional contacts as an eraser. Use a smaller pointer, such as the pen.

Standby light	Interactive flat panel status	Issues	Solutions
		Your room system isn't turning off when people have left the room.	<ul style="list-style-type: none"> Enable presence detection (see page 59).
		Your room system is turning off when participants are present.	<ul style="list-style-type: none"> Increase the time before the room system automatically turns off.


Resolving issues with SMART Board 8070i-G4 and 8084i-G4 interactive flat panels

Use the following table to resolve issues with your room system's SMART Board 8070i-G4 and 8084i-G4 interactive flat panels.

Lights	Interactive flat panel status	Issues	Solutions
Power: Off Touch system: Off	Not receiving power	The interactive flat panels should be receiving power but aren't.	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	Test Area	The interactive flat panels are off.	Press the Power/Standby buttons  on the front control panels to turn the interactive flat panels on.
Power: Solid amber Touch system: Off	Standby mode	The interactive flat panels don't turn on when participants enter the room.	<ul style="list-style-type: none"> Enable presence detection (see page 59). 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.	<ul style="list-style-type: none"> Increase the re-enable time, which is the time between when you exit the room and when 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.	<ul style="list-style-type: none"> 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.

CHAPTER 6
TROUBLESHOOTING

Lights	Interactive flat panel status	Issues	Solutions
Power: Solid green Touch system: Flashing amber (quickly)	Turning on	The status lights continue flashing amber (quickly) for more than one minute.	Turn off the interactive flat panels (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 off the interactive flat panels (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.	<ul style="list-style-type: none">• Use SMART Board Diagnostics, which is available from SMART Settings (see page 53) to troubleshoot the issue.• Ensure that the USB cable is connected as shown in the installation instructions (see page 9).

Lights	Interactive flat panel status	Issues	Solutions
Power: Solid green Touch system: Solid green	On with touch control	The displays are blank.	<ul style="list-style-type: none"> 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 9).
		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 74).
		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.	<ul style="list-style-type: none"> Ensure that participants are touching the screens at right angles (see kb.smarttech.com/?q=13976). Orientate 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.	<ul style="list-style-type: none"> Ensure that nothing is taped to the screens. Remove obstructions from the reflective tape channels. Ensure that participants use consistent pressure whilst drawing digital ink. Close blinds or shades or dim light sources. Calibrate the interactive flat panels (see page 13).
		Participants try to erase digital ink with the erasers, but draw more digital ink instead.	Ensure that participants increase the initial contact area of the erasers.
		Participants try to draw digital ink with their fingers, but erase digital ink instead.	<ul style="list-style-type: none"> Ensure that participants lift their fingers and the palm of their hand from the interactive flat panels whilst they write because the interactive flat panels are interpreting the additional contacts as an eraser. Use a smaller pointer, such as the pen.
		Your room system isn't turning off when people have left the room.	<ul style="list-style-type: none"> Enable presence detection (see page 59).
		Your room system is turning off when participants are present.	<ul style="list-style-type: none"> Increase the time before the room system automatically turns off.

Resolving issues with the console

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

Power light	Console status	Issues	Solutions
Test Area	Not receiving power	The console should be receiving power but isn't.	Ensure that the console is connected to the power supply as shown in the installation instructions (see page 9).
Solid amber	Receiving power but not connected to the Lync appliance	There's an issue with the Lync appliance or the interactive flat panels.	Refer to the troubleshooting table on page 42 (SMART Board 8055i-G5 interactive flat panels) or page 44 (SMART Board 8070i-G4 and 8084i-G4 interactive flat panels).
Solid green	Receiving power and connected to the Lync appliance	The screen is blank.	Ensure that the HDMI cable is connected as shown in the installation instructions (see page 9).
		The console screen appears on the interactive flat panel rather than on the console.	<ul style="list-style-type: none"> Follow the instructions in the <i>SMART Room System for Lync setup guide</i> (see page 8). Ensure that the cable from the HDMI1 port on the Lync appliance is connected to the console.
		There's no touch control.	<ul style="list-style-type: none"> Use SMART Board Diagnostics, which is available from SMART Settings (see page 53) to troubleshoot the issue. Ensure that the USB cable is connected as shown in the installation instructions (see page 9).

Resolving issues with the camera

Use the following table to resolve issues with your 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 9) 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.
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.

Lights	Camera status	Issues	Solutions
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 that the USB cable from the camera is connected to the Lync appliance.
Video capture: Red Service light: Green	On but not capturing video	The camera's video output doesn't appear even though it should.	Perform a room system test (see page 51).
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 51).

Resolving issues with the microphones

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

Microphone light	Microphone status	Issues	Solutions
Test Area	Not receiving power	The microphones should be receiving power but aren't.	Ensure that the microphones are connected as shown in the installation instructions (see page 9) and that the room system is turned on.
Red	On but muted	Remote participants are unable to hear room participants.	Unmute the microphones in Lync 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 51).

Resolving issues with the speakers

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

Power light	Speaker status	Issues	Solutions
Test Area	Not receiving power	The speakers should be receiving power but aren't.	Ensure that the speakers are connected as shown in the installation instructions (see page 9) and that the room system is turned on.

Power light	Speaker status	Issues	Solutions
On	On	Room participants are unable to hear remote participants.	<ul style="list-style-type: none">• Unmute the audio in Lync Room System software.• Turn up the volume in Lync Room System software.• For SMART Board 8084i-G4 interactive flat panels, ensure that the AUDIO2 input is <i>HDMI3/PC</i> (see page 77).• Ensure that the audio processor is receiving power and is connected as shown in the installation instructions (see page 9).
		Room participants can hear remote participants, but the sound is quiet.	Using the console, turn up the volume in Lync 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 your room system's software.

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

Resolving issues with the calendar

If the Lync 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 it has been booked for meetings, there is an issue with the connection between the room system and your organisation's Microsoft Exchange server. For assistance with these and other network issues, contact your organisation's network administrator.

Improving the restart time

If you find that 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 for Microsoft Lync* (kb.smarttech.com/?q=14391).

Adding trusted domains to your room system

If the domain name used in the Lync account's SIP URI is different from the domain name on the Lync Web Service certificate, your room system might not connect to the Lync Server. When this occurs, a dialogue box might appear asking if you want to trust the certificate, but this dialogue 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 Web Service certificate to the room system.



CAUTION

Use caution when you open the Windows registry editor. If you incorrectly modify the Windows registry, you can damage the Lync 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 Lync Admin Console appears.

4. Connect a mouse and keyboard to the Lync 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 that you created in steps 8 and 9 and then select **Modify**.

The *Edit String* dialogue box appears.

11. Type the domain name specified in the *Subject Name* and *Common Name* fields of the Lync 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 your room system

You can test your 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 Lync Admin Console appears.

4. Press **Lync 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 organisation uses an on-premises Lync 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.

Appendix A

Using the Lync Admin Console and SMART Settings

Accessing the Lync Admin Console and SMART Settings	53
Lync Admin Console controls	54
SMART Settings controls	58

You can access the Lync Admin Console and SMART Settings using the console.



NOTE

To access the Lync Admin Console and SMART Settings, you need the room system administrator account's user name and password.

Accessing the Lync Admin Console and SMART Settings

To access the Lync 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 Lync Admin Console appears.
4. Make changes (see *Lync Admin Console controls* on the next page).
5. If you want to make changes to SMART Settings, press **OEM Settings**, press **SMART Settings**, make changes (see *SMART Settings controls* on page 58) and then press **OK**.

6. If you want to apply your changes, press **Apply & Restart**.

OR

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

The Lync appliance restarts in meeting mode.

Lync Admin Console controls

Control	Procedure	Notes (if any)
Lync Settings		
► Credentials		
<ul style="list-style-type: none">• User Name	Type the Lync account's full domain name in one of two formats depending on how your organisation's servers are configured (for example, yourdomain\room1 or room1@yourdomain.com).	You can record this information in the <i>SMART Room System for Lync setup guide</i> (see <i>Setup guide</i> on page 8).
<ul style="list-style-type: none">• SIP URI	Type the Lync account's SIP URI (for example, room1@yourdomain.com).	You can record this information in the <i>SMART Room System for Lync setup guide</i> (see <i>Setup guide</i> on page 8). If the domain name used in the Lync account's SIP URI is different from the domain name on the Lync Web Service certificate, see <i>Adding trusted domains to your room system</i> on page 50.
<ul style="list-style-type: none">• Password	Type the Lync account's password.	You can record this information in the <i>SMART Room System for Lync setup guide</i> (see <i>Setup guide</i> on page 8).
► Proxy Credentials		
<ul style="list-style-type: none">• None	Select to not specify credentials for proxy authentication.	SMART recommends that you use the Lync account credentials for proxy authentication.
<ul style="list-style-type: none">• User Lync Account credentials	Select to use the Lync account credentials you provided in the <i>Credentials</i> section for proxy authentication.	
<ul style="list-style-type: none">• Other credentials	Select to use other credentials for proxy authentication. Type the user name in the <i>User name</i> box and the password in the <i>Password</i> box.	
► Configuration Modes		
<ul style="list-style-type: none">• Automatic	Select if your organisation's autodiscover DNS records are set to automatically link to the Lync 2013 server pool.	
<ul style="list-style-type: none">• Manual	Select if your organisation's autodiscover DNS records aren't set to automatically link to the Lync 2013 server pool, such as when your organisation maintains a mixed environment of Lync 2010 and Lync 2013 server pools. Type the address of the Lync 2013 server pool in the <i>Internal Server Name</i> box.	

APPENDIX A
USING THE LYNC ADMIN CONSOLE AND SMART SETTINGS

Control	Procedure	Notes (If any)
▶ Audio		
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> Make a Test Call 	Press to test the room system's call functions.	You can make a test call only if your organisation uses an on-premises Lync Server. See <i>Testing your room system</i> on page 51.
<ul style="list-style-type: none"> Test Meet Now 	Press to test the room system's server connections and video functions.	See <i>Testing your room system</i> on page 51.
▶ Quality Control		
<ul style="list-style-type: none"> Sign up for the Customer Experience Programme 	Turn On to allow Microsoft to collect information about configuration, commonly used features and issues to improve future releases of Lync Room System software. OR Turn Off to not allow Microsoft to collect this information.	SMART recommends that you allow Microsoft to collect information.
▶ Logging		
<ul style="list-style-type: none"> Help our support team to 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 Lync before changing this setting.
<ul style="list-style-type: none"> 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 Lync before changing this setting.
Exchange Settings		
<ul style="list-style-type: none"> Use Lync Account credentials 	Select to use the credentials that you specified in <i>Lync Settings</i> (see page 54) for Microsoft Exchange.	This control is available only for version 15.11 or later of Lync Room System software.

APPENDIX A
USING THE LYNC ADMIN CONSOLE AND SMART SETTINGS

Control	Procedure	Notes (If any)
<ul style="list-style-type: none"> 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 Lync Room System software.
System Settings		
▶ Monitor Layout		
<ul style="list-style-type: none"> Display content on the left screen 	Turn On to display content users share with others on the left interactive flat panel. OR Turn Off to not display content users share with others on the left interactive flat panel.	This control is available only for room systems with two interactive flat panels.
<ul style="list-style-type: none"> 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.	
<ul style="list-style-type: none"> 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 <i>Enabling the Room PC View feature</i> on page 24.
▶ Control Panel		
<ul style="list-style-type: none"> System Properties 	Press to open the <i>System Properties</i> dialogue box.	In the <i>System Properties</i> dialogue box, you can view and manage the Lync appliance's system properties, including the computer name and network ID.
<ul style="list-style-type: none"> User Settings 	Press to open the <i>User Accounts</i> dialogue box.	In the <i>User Accounts</i> dialogue box, you can view and manage the user and administrator accounts you created during the initial configuration of your room system's software.
<ul style="list-style-type: none"> Certificate Manager 	Press to open the <i>Certificates</i> window.	In the <i>Certificates</i> window, you can view and manage certificates, which the Lync appliance uses to verify the identity of a person or device, authenticate a service, or encrypt files.
<ul style="list-style-type: none"> Event Viewer 	Press to open the <i>Event Viewer</i> window.	In the <i>Event Viewer</i> window, you can view and manage the Lync appliance's event logs.
<ul style="list-style-type: none"> Operations Manager Agent 	Press to open the <i>Operations Manager Window</i> window.	This control is available only for version 15.06 or later of Lync Room System software.
<ul style="list-style-type: none"> Import SCOM Cert 	Press to open the <i>Import SCOM Cert</i> window.	This control is available only for version 15.12 or later of Lync Room System software.
<ul style="list-style-type: none"> Internet Settings 	Press to open the <i>Internet Properties</i> dialogue box.	In the <i>Internet Properties</i> dialogue box, you can set Internet-related options, including Internet security zones and privacy preferences.

APPENDIX A
USING THE LYNC ADMIN CONSOLE AND SMART SETTINGS

Control	Procedure	Notes (If any)
<ul style="list-style-type: none">• Network Connections	Press to open the <i>Network Connections</i> window.	In the <i>Network Connections</i> window, you can view the status of the Lync appliance's network connection and set network options, including the DNS server address.
<ul style="list-style-type: none">• Windows Firewall	Press to open the <i>Windows Firewall</i> window.	In the <i>Windows Firewall</i> window, you can view the status of and configure Windows Firewall on the Lync appliance.
<ul style="list-style-type: none">• Date and Time	Press to open the <i>Date and Time</i> dialogue box.	In the <i>Date and Time</i> dialogue box, you can set the date, time and time zone.
<ul style="list-style-type: none">• Region and Languages	Press to open the <i>Region and Language</i> dialogue box.	In the <i>Region and Language</i> dialogue box, you can set region and language options, including date and time formats, keyboard layouts and display languages.
Web Updates		
<ul style="list-style-type: none">• Lync Room System Version	Indicates the current version of Lync Room System software installed on the room system.	
► Microsoft Updates		
<ul style="list-style-type: none">• Download from Microsoft Update server	Select to download Microsoft updates from the Microsoft Update server.	
<ul style="list-style-type: none">• Download from WSUS server	Select to download Microsoft updates from your organisation's Windows Server Update Services (WSUS) server. Type the URL of the WSUS server in the text box.	
► OEM Updates		
<ul style="list-style-type: none">• Download from OEM server	Select to download SMART updates from the SMART server.	SMART recommends that you download updates from its server.
<ul style="list-style-type: none">• 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		
<ul style="list-style-type: none">• Automatic updates	Select to download and install updates automatically as they become available. OR Clear to download and install updates manually.	
<ul style="list-style-type: none">• Check Updates and Install	Press to manually check for and install any updates.	See <i>Updating software and firmware</i> on page 23.
<ul style="list-style-type: none">• 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		
<ul style="list-style-type: none"> Reset the Device to Factory Image 	Press to reset the room system to factory defaults.	See <i>Resetting the room system to factory defaults</i> on page 81.
Password Renewal		
<ul style="list-style-type: none"> Auto-Renew Password 	Turn On to enable automatic renewing of the Lync account password, and then type the number of days between renewals in the <i>Renewal Frequency in Days</i> box. OR Turn Off to disable automatic renewing of the Lync account password.	SMART recommends that you disable automatic renewing of the Lync account password.
► Account Type		
<ul style="list-style-type: none"> On-Premise 	Select if your organisation uses an on-premise Lync Server.	
<ul style="list-style-type: none"> Office 365 	Select if your organisation uses an Office 365™-hosted Lync Server and then type the connection point in the <i>Office 365 Connection Point</i> box.	
OEM Settings		
<ul style="list-style-type: none"> SMART Settings 	Press to open SMART Settings.	See <i>SMART Settings controls</i> below.
<ul style="list-style-type: none"> SRS Licensing Tool 	Press to check the status of your room system's product key and provide a MAK key if your Lync infrastructure doesn't include a KMS server.	This control is available only for version 15.05 or earlier of Lync Room System software.
Lync Licence		
<ul style="list-style-type: none"> Key Management Service (KMS) 	Press if your Lync infrastructure includes a KMS server.	This control is available only for version 15.06 or later of Lync Room System software.
<ul style="list-style-type: none"> Multiple Activation Key (MAK) 	Press if your Lync infrastructure 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 Room System software.

SMART Settings controls

Control	Procedure	Notes (If any)
SMART Room System Settings		
► Business Hours		
<ul style="list-style-type: none"> 12-Hour Setting 	Select if your organisation's business day is 12 hours and then select the appropriate time frame in the drop-down list.	Your room system enters power saving mode outside of the business hours that you define on this page.
<ul style="list-style-type: none"> Custom Setting 	Select if your organisation's business day isn't 12 hours and then select the start and end times for your organisation's business day.	
<ul style="list-style-type: none"> Business Days 	Select the days of the week that your organisation operates.	

APPENDIX A
USING THE LYNC ADMIN CONSOLE AND SMART SETTINGS

Control	Procedure	Notes (If any)
SMART Hardware Settings		
▶ SMART Board		In room systems with two interactive flat panels, there are two <i>SMART Board</i> pages under <i>SMART Hardware Settings</i> (one for each interactive flat panel).
• Orientate	Press to orientate the interactive flat panel.	See <i>Orientating the interactive flat panels</i> 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-orientate 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 <i>Calibrating the interactive flat panels</i> on page 13.
▶ 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 64 for SMART Board 8055i-G5 interactive flat panels, page 71 for SMART Board 8070i-G4 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.	

APPENDIX A
USING THE LYNC ADMIN CONSOLE AND SMART SETTINGS

Control	Procedure	Notes (If any)
▶ SMART Room System USB Bridge		This page only appears if you have connected the SMART Room System USB Bridge (see page 5).
• 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.	
• About This Software	Press to view version and legal information for the SMART software installed on the Lync appliance.	
▶ Tools		
• Diagnostics	Press to run SMART Board Diagnostics.	You should only run SMART Board Diagnostics in consultation with SMART Support.
Tasks		
• Orientate/Align the SMART Product	Press to orientate the interactive flat panels.	See <i>Orientating the interactive flat panels</i> on page 15.
• Connection Wizard	Press to run the connection wizard to connect, calibrate and orientate the interactive flat panels.	

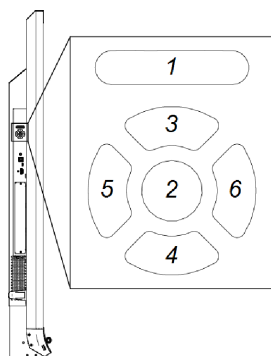
Appendix B

Using the interactive flat panel on-screen display menus

Using the SMART Board 8055i-G5 interactive flat panel on-screen display menu	61
Changing settings in the on-screen display menu	62
On-screen display menu options	62
Using the SMART Board 8070i-G4 interactive flat panel on-screen display menu	66
Using the menu control panel	66
Using the remote control	66
Changing settings in the on-screen display menu	67
On-screen display menu options	67
Using the SMART Board 8084i-G4 interactive flat panel on-screen display menu	72
Using the menu control panel	73
Using the remote control	73
Changing settings in the on-screen display menu	74
On-screen display menu options	74

Using the SMART Board 8055i-G5 interactive flat panel on-screen display menu

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



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 customise brightness, contrast, sharpness and other <i>Picture</i> options. Select one of this option's other values to set brightness, contrast, sharpness and other <i>Picture</i> 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 <i>Picture Mode</i> .
• Contrast	0–100	Sets the brightness of the image in relation to the background	You can modify this option only if you select User in <i>Picture Mode</i> .
• 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 <i>Picture Mode</i> .
• Colour	0–100	Sets the image colour depth	You can modify this option only if you select User in <i>Picture Mode</i> .
• Sharpness	0–100	Sets the image sharpness	You can modify this option only if you select User in <i>Picture Mode</i> .

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
► Colour temperature	Normal Warm User Cool	Sets the colour temperature	Select User to customise the amount of red, green and blue in the image. Select one of this option's 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 <i>Colour Temperature</i> .
• Green	0–100	Sets the amount of green in the image	You can modify this option only if you select User in <i>Colour Temperature</i> .
• Blue	0–100	Sets the amount of blue in the image	You can modify this option only if you select User in <i>Colour Temperature</i> .
• Movie Mode	Test Area Low Middle High	Sets the brightness, contrast, black level, colour and sharpness for movie watching	
• Picture Reset	[N/A]	Resets all options in the <i>Picture</i> 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 equalisation 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 equalisation 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 equalisation at 1.5 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 equalisation at 5 kHz	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• 12 kHz	0–100	Sets the sound equalisation at 10 kHz	This option isn't applicable to the SMART Room System. Don't change it from its default value.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• 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 <i>Sound</i> 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	Test Area 5 seconds 10 seconds 15 seconds	Sets the time of inactivity before the on-screen display menu turns off (in seconds)	
• OSD Reset	[N/A]	Resets all options in the <i>OSD</i> menu to their default values	
Setup			
• Power Save	On Test Area	Enables or disables Power Save mode	When Power Save mode is enabled and there isn't video input, the interactive flat panel displays <i>No Signal</i> 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 Test Area	Enables or disables the front control panel	Don't change this option from its default value.
▸ Proximity	On Test Area	Enables or disables presence detection	If you change this option in SMART Settings (see page 58), 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 Min–10 Min	Sets how long the interactive flat panel waits before detecting motion again	If you change this option in SMART Settings (see page 58), 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 Min–240 Min	Sets when the interactive flat panel automatically turns off	

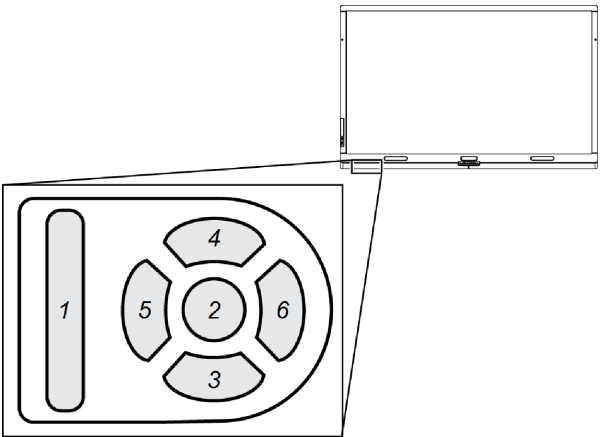
APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• Video input detect	On Test Area	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	This option only provides information. You're unable to modify it.
• Serial Number	[N/A]	Displays the interactive flat panel's serial number	This option only provides information. You're unable to modify it.
• Scalar firmware version	[N/A]	Displays the interactive flat panel's scalar firmware version	This option only provides information. You're unable to modify it.
• Touch firmware version	[N/A]	Displays the interactive flat panel's touch firmware version	This option only provides information. You're unable to modify it.
• OPS Information	[N/A]	Displays whether the OPS is installed	This option only provides information. You're unable to modify it.

Using the SMART Board 8070i-G4 interactive flat panel on-screen display menu

Using the menu control panel


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



No.	Name
1	MENU
2	SET
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
- orientate 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 **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 CINEMA/sRGB SPORT GAME USER AMBIENT DYNAMIC	Sets the picture mode	Select USER to customise brightness, contrast, sharpness and other <i>PICTURE</i> options. Select AMBIENT to set brightness based on the illuminance level of the room and to customise all other <i>PICTURE</i> options. Select one of this option's other values to set brightness, contrast, sharpness and other <i>PICTURE</i> options to default values. Alternatively, you can press the PICTURE MODE button on the remote control.
• BRIGHTNESS	0–100	Sets the overall brightness of the image and background	You can modify this option only if you select USER in <i>PICTURE MODE</i> .
• CONTRAST	0–100	Sets the brightness of the image in relation to the background	You can modify this option only if you select USER or AMBIENT in <i>PICTURE MODE</i> .
• SHARPNESS	0–100	Sets the image sharpness	You can modify this option only if you select USER or AMBIENT in <i>PICTURE MODE</i> .

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• 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 or AMBIENT in <i>PICTURE MODE</i> .
• TINT	0–100	Sets the image tint	You can modify this option only if you select USER or AMBIENT in <i>PICTURE MODE</i> .
• COLOUR	0–100	Sets the image colour depth	You can modify this option only if you select USER or AMBIENT in <i>PICTURE MODE</i> .
► COLOUR TEMPERATURE			
• COLOUR TEMPERATURE	NORMAL WARM USER COOL	Sets the colour temperature	Select USER to customise the amount of red, green and blue in the image. Select one of this option's 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 <i>COLOUR TEMPERATURE</i> .
• GREEN	0–100	Sets the amount of green in the image	You can modify this option only if you select USER in <i>COLOUR TEMPERATURE</i> .
• BLUE	0–100	Sets the amount of blue in the image	You can modify this option only if you select USER in <i>COLOUR TEMPERATURE</i> .
► AMBIENT			
• IN BRIGHT	1–100	Sets the image brightness for brightly lit rooms	You can modify this option only if you select AMBIENT in <i>PICTURE MODE</i> . The value of this menu option can't be less than the value of <i>IN DARK</i> .
• IN DARK	0–99	Sets the image brightness for dimly lit rooms	You can modify this option only if you select AMBIENT in <i>PICTURE MODE</i> . The value of this menu option can't be more than the value of <i>IN BRIGHT</i> .
• IN BRIGHT LUX	100–1000	Sets the illuminance level for brightly lit rooms (in lux)	You can modify this option only if you select AMBIENT in <i>PICTURE MODE</i> . The value of this menu option can't be less than the value of <i>IN DARK LUX</i> .
• IN DARK LUX	50–950	Shows the illuminance level for dimly lit rooms (in lux)	You can modify this option only if you select AMBIENT in <i>PICTURE MODE</i> . The value of this menu option can't be more than the value of <i>IN BRIGHT LUX</i> .

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (if any)
<ul style="list-style-type: none">SENSING LUX	[N/A]	Displays the current illuminance level of the room (in lux)	This option only provides information. You're unable to modify it.
<ul style="list-style-type: none">NOISE REDUCTION	ON OFF	Enables or disables image noise reduction	You can modify this option only if the currently selected video input is S-Video or component video.
<ul style="list-style-type: none">PICTURE RESET	[N/A]	Resets all options in the <i>PICTURE</i> menu to their default values	
ADJUST	The options in this menu aren't applicable to the SMART Room System.		
AUDIO			
<ul style="list-style-type: none">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.
<ul style="list-style-type: none">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.
<ul style="list-style-type: none">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.
<ul style="list-style-type: none">LINE OUT	FIXED VARIABLE	Sets the audio line out	Don't change this option from its default value.
<ul style="list-style-type: none">HDMI3/PC LINE OUT	FIXED VARIABLE	Sets the audio line out for the room computer (HDMI3/PC)	Don't change this option from its default value.
<ul style="list-style-type: none">AUDIO INPUT	DPORT USB IN1 IN2 IN3 HDMI3/PC ANALOGUE HDMI3/PC DIGITAL	Sets the audio input source	Alternatively, you can press the AUDIO INPUT button on the remote control. This option should be set to IN2 for the SMART Room System.
<ul style="list-style-type: none">LEFT SPEAKER	ON OFF	Enables or disables the left speaker	Don't change this option from its default value.
<ul style="list-style-type: none">RIGHT SPEAKER	ON OFF	Enables or disables the right speaker	Don't change this option from its default value.
<ul style="list-style-type: none">AUDIO RESET	[N/A]	Resets all options in the <i>AUDIO</i> menu to their default values	This option isn't applicable to the SMART Room System. Don't change it from its default value.
OSD			
<ul style="list-style-type: none">LANGUAGE	[Languages]	Sets the on-screen display menu's language	
<ul style="list-style-type: none">OSD TURN OFF	5–240	Sets the time of inactivity before the on-screen display menu turns off (in seconds)	

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• OSD H-POSITION	0–100	Sets the horizontal position of the on-screen display menu	
• OSD V-POSITION	0–100	Sets the vertical position of the on-screen display menu	
• INFORMATION OSD	3–10 OFF	Specifies how long the information menu displays when a user changes the video input or presses the DISPLAY button on the remote control	
▶ MONITOR INFO			
• MODEL NAME	[N/A]	Shows the interactive flat panel's model number	This option only provides information. You're unable to modify it.
• SERIAL NUMBER	[N/A]	Shows the interactive flat panel's serial number	This option only provides information. You're unable to modify it.
• OSD TRANSPARENCY	TYPE1 TYPE2 OFF	Sets the on-screen display menu transparency	
• OSD RESET	[N/A]	Resets all options in the <i>OSD</i> menu to their default values	
SETUP			
• POWER SAVE	ON OFF	Enables or disables Power Save mode	Don't change this option from its default value.
• STANDBY MODE	STANDBY ECO STANDBY	Sets the Standby mode to reduce power consumption	Don't change this option from its default value.
• DDC CI	ENABLE DISABLE	Enables or disables two-way communication and control of the interactive flat panel	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• SCAN MODE	UNDER SCAN OVER SCAN	Sets the scanning mode	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• FBC CONTROL	ENABLE DISABLE	Enables or disables the front control panel	Don't change this option from its default value.
• MONITOR ID	1–100	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.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
► PROXIMITY CONTROL			
• PROXIMITY	ENABLE DISABLE	Enables or disables presence detection	You can modify this option only if you select STANDBY in <i>STANDBY MODE</i> . If you change this option in SMART Settings (see page 58), 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)	You can modify this option only if you select ENABLE in <i>PROXIMITY</i> . If you change this option in SMART Settings (see page 58), 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 when the interactive flat panel automatically turns off (in minutes)	You can modify this option only if you select ENABLE in <i>PROXIMITY</i> .
• 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.
• CEC	ENABLE 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.
► HEAT STATUS			
• FAN1	[N/A]	Shows the status of the first fan	This option only provides information. You're unable to modify it.
• FAN2	[N/A]	Shows the status of the second fan	This option only provides information. You're unable to modify it.
• SENSOR1	[N/A]	Shows the temperature reading from the first sensor	This option only provides information. You're unable to modify it.
• SENSOR2	[N/A]	Shows the temperature reading from the second sensor	This option only provides information. You're unable to modify it.
► FAN CONTROL			
• COOLING FAN	ON AUTO	Sets the fan to run continuously (ON) or only when the sensor temperature is greater than optimal sensor temperature (AUTO)	

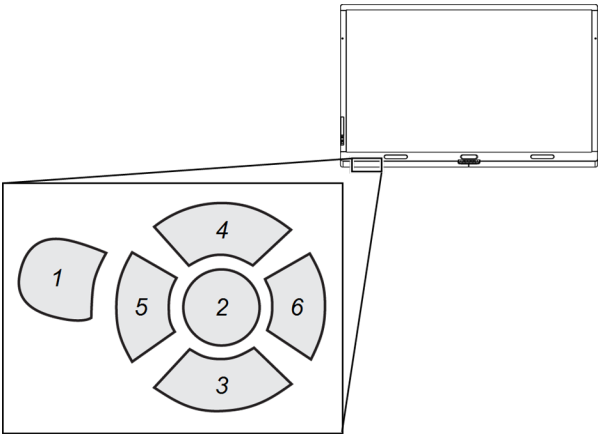
Option	Values	Function	Notes (If any)
• FAN SPEED	LOW HIGH	Sets the speed of the fan	
• SENSOR1	35–55	Sets the optimal temperatures for the first sensor (in degrees Celsius)	
• SENSOR2	35–55	Sets the optimal temperatures for the second sensor (in degrees Celsius)	
▶ USB SETTING			
• USB1	VGA1 VGA2 DVI HDMI1 HDMI2 HDMI3/PC DISABLE	Sets the video input for the USB1 port or disables the port	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• USB2	VGA1 VGA2 DVI HDMI1 HDMI2 HDMI3/PC DISABLE	Sets the video input for the USB2 port or disables the port	This option isn't applicable to the SMART Room System. Don't change it from its default value.
• SETUP RESET	[N/A]	Resets all options in the <i>SETUP</i> menu to their default values	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 SMART Room Systems)	You use this option when you first configure the SMART Room System.
• 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.

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
- orientate 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 <i>Picture Mode</i> menu change depending on which value you select for this option. The options documented in this table are those that appear when you select Vivid , Standard or Ambient in this option. Alternatively, you can press the PSM button on the remote control to access this option.
• In Bright	1–100	Sets the image brightness for brightly lit rooms	You can modify this option only if you select Ambient in <i>Picture Mode</i> . The value of this menu option can't be less than the value of <i>In Dark</i> .
• In Dark	0–99	Sets the image brightness for dimly lit rooms	You can modify this option only if you select Ambient in <i>Picture Mode</i> . The value of this menu option can't be more than the value of <i>In Bright</i> .
• Light Threshold	[Number]	Sets the light threshold	You can modify this option only if you select Ambient in <i>Picture Mode</i> .

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• Sensing Lux	[N/A]	Shows the current illuminance level of the room (in lux)	This option only provides information. You're unable to modify it.
• Backlight	0–100	Sets the backlight level of the image	SMART recommends that this option be set to 100 .
• Contrast	0–100	Sets the brightness of the image in relation to the background	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 .
• Colour Temp.	W50–C50	Sets the image colour temperature	SMART recommends that this option be set to 0 .
▶ Advanced Control			
• Dynamic Contrast	Low Medium High Test Area	Sets the dynamic contrast	SMART recommends that this option be disabled.
• Dynamic Colour	Low High Test Area	Sets the dynamic colour	SMART recommends that this option be disabled
• Clear White	Low High Test Area	Sets the clear white colour	SMART recommends that this option be disabled.
▶ Preferred Colour			
• Skin Colour	-5–5	Sets the preferred colour value for skin in the image	
• Grass Colour	-5–5	Sets the preferred colour value for grass in the image	
• Sky Colour	-5–5	Sets the preferred colour value for sky in the image	
• Super Resolution	On Test Area	Enables or disables super resolution	
• Gamma	Low Medium High	Sets the gamma	SMART recommends that this option be set to Low .

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
► Picture Option			
• Noise Reduction	Low Medium High Test Area	Sets image noise reduction	SMART recommends that this option be disabled.
• MPEG Noise Reduction	Low Medium High Test Area	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 Test Area	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 <i>TruMotion</i> .
• De-Blur	0–10	Reduces image blurring	You can modify this option only if you select User in <i>TruMotion</i> .
• Picture Reset	Yes No	Resets all options in the <i>Picture Mode</i> 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	This option only provides information. You're unable to modify it.
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 Test Area	Enables or disables virtual surround sound	This option isn't applicable to the SMART Room System. Don't change it from its default value.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
▶ Clear Voice II			
• Clear Voice II	On Test Area	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 Test Area	Enables or disables audio-visual synchronisation	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 synchronisation	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 Test Area	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.
• 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.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> HDMI3/PC 	Analogue Digital	Specifies whether the HDMI3/PC audio input is analogue or digital	This option should be set to Analogue for the SMART Room System.
TIME			
▶ Clock			
<ul style="list-style-type: none"> Date 	1–31	Specifies the current date	
<ul style="list-style-type: none"> Month 	Jan–Dec	Specifies the current month	
<ul style="list-style-type: none"> Year 	2010–2040	Specifies the current year	
<ul style="list-style-type: none"> Hour 	00–23	Specifies the current hour	
<ul style="list-style-type: none"> Minute 	00–59	Specifies the current minute	
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> Sleep Timer 	10–240 Test Area	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			
<ul style="list-style-type: none"> Language 	[Languages]	Sets the on-screen display menu's language	
<ul style="list-style-type: none"> ISM Method 	Normal Colour Wash	Sets the method for image stickiness minimisation (ISM)	ISM prevents static images that appear in the same location for long periods of time from causing screen burn-in.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
• Key Lock	On Test Area	Enables or disables key lock	
► Fail Over			
• Mode	Test Area 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 Test Area	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.
• 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 Test Area	Enables or disables presence detection	If you change this option in SMART Settings (see page 58), 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 58), 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 when the interactive flat panel automatically turns off (in minutes)	
• 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.

APPENDIX B
USING THE INTERACTIVE FLAT PANEL ON-SCREEN DISPLAY MENUS

Option	Values	Function	Notes (If any)
► USB Setting			
• USB 1	HDMI1 HDMI2 HDMI3/PC DVI-D DPORT VGA Disable	Sets the video input for the USB1 port, or disables the port	Don't change this option from its default value.
• USB 2	HDMI1 HDMI2 HDMI3/PC DVI-D DPORT VGA Disable	Sets the video input for the USB2 port, or disables the port	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 port, or disables the port	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 Test Area	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	This option only provides information. You're unable to modify it.
• Software Version	[N/A]	Shows the interactive flat panel's firmware version number	This option only provides information. You're unable to modify it.
• Serial Number	[N/A]	Shows the interactive flat panel's serial number	This option only provides information. You're unable to modify it.
• Customer Service Centre	[N/A]	Provides information on how to contact SMART Support	This option only provides information. You're unable to modify it.

Appendix C

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 Lync Admin Console appears.

4. Press **Web Updates**.

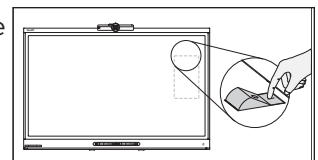
5. Press **Reset the Device to Factory Image**.

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

6. Complete the procedure in the *SMART Room System for Lync setup guide* (see *Setup guide* on page 8).

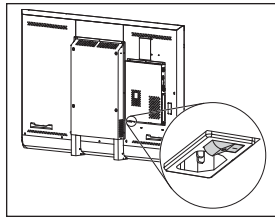
To reset the room system from the BIOS

1. Turn off your room system (see *Turning off your room system* on page 13).
2. Connect a USB keyboard to the Lync appliance.
3. If the room system includes SMART Board 8055i-G5 interactive flat panels, press the power button on the Lync appliance enclosure.

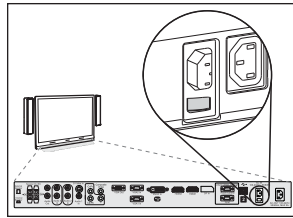


APPENDIX C
RESETTING THE ROOM SYSTEM TO FACTORY DEFAULTS

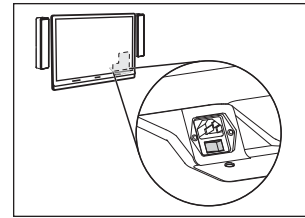
4. Flick the power switch on the bottom of each interactive flat panel.



SBID8055i-G5



SBID8070i-G4



SBID8084i-G4

5. Press the DELETE key.

The Lync 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 for Lync setup guide* (see *Setup guide* on page 8).

Appendix D

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 8070i-G4 and 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.

Index

A

- accessories 6
- Administrative Web Portal See Lync Room
 - System Administrative Web Portal
- air conditioning 18
- ambient lighting 68
- AMT See Intel AMT
- audio
 - configuring 60, 63, 69, 76
 - maintaining 20
 - sharing 3
 - troubleshooting 48
- audio processor 5

B

- backlight 75
- balance, audio 64
- bass 63
- batteries 66, 73, 83
- black level 62, 68, 76
- brightness 62, 67, 75
- business hours 58

C

- cable ties 12
- cable tracking 6
- cables
 - using cable strain relief with 20
 - using to isolate hardware issues 12
- calendar 49
- calibration 13, 59, See also orientation
- calls See test calls
- cameras
 - about 5
 - cleaning 19
 - optimising 60

- troubleshooting 47
- certificates 56
- chemicals 17
- cleaning
 - cameras 19
 - interactive flat panel cameras and reflective tape channels 17
 - interactive flat panel screens 16
 - microphones 20
 - presence detection sensors 17
 - speakers 20
- collaboration 3
- colour temperature 68, 75
- computers See laptops
- condensation 18
- consoles
 - about 4
 - cleaning 19
 - troubleshooting 47
 - viewing information and settings 60
- contrast 62, 67, 75
- countries 57
- credentials See passwords
- Customer Experience Programme 55

D

- DameWare 32
- date and time 57
- diagnostic logs 27
- digital pan, tilt and zoom 5
- displays
 - consoles See consoles
 - interactive flat panels See interactive flat panels
- documentation 8
- domains 50
- dry-wipe markers 16
- dust 17-19
- DViT technology 4

E

event logs 56
extra large rooms 8
extra small rooms 6

F

factory defaults 58, 81
factory reset 65
field of view 5
firewall 57
firmware updates 23
flashlights 12

G

glass cleaner 16, 19
guest laptops See laptops

H

hardware installation 20
hardware isolation testing 12
hardware removal 21
HDMI 5
health status 27
humidity 18

I

installation instructions 20
Intel AMT
 about 29
 configuring 31
 enabling 30
 managing your room system with 31
 security 33
Intel MEBx 31
interactive flat panels
 about 4
 configuring 59
 maintaining 13
 troubleshooting 42, 44
 using the on-screen display menu 61

Internet settings 56

K

knowledge base 8

L

ladders 12
languages 57, 64, 69
laptops 5, See also room computers
large rooms 7
lights 41
logging 27, 55
Lync 2010 54
Lync appliances 4
Lync infrastructure 2
Lync Room System Administrative Web
 Portal 25
Lync Room System software
 about 2
 troubleshooting 49
Lync Web Service certificate 50

M

markers 16
MEBx See Intel MEBx
medium rooms 7
menu control panel 66, 73
microphones
 about 5
 cleaning 20
 connecting additional 6
 setting default volume for 26, 55
 troubleshooting 48
Microsoft Exchange 55
Microsoft Lync appliances See Lync
 appliances
Microsoft Lync infrastructure See Lync
 infrastructure
Microsoft Lync Room System
 software See Lync Room System
 software
Microsoft Office 365 58
Microsoft Outlook 12

Microsoft PowerPoint 3
Microsoft updates 57

N

nylon cable ties 12

O

Office 365 See Microsoft Office 365
on-screen display menu 61
Open MDTK 32
orientation 15, 59, See also calibration
Outlook See Microsoft Outlook

P

packaging 21
passwords 26, 31, 54, 58
pens 18
permanent markers 16
ports, Intel AMT 34
power lights 41
presence detection sensors 59
 about 3
 cleaning 17
 configuring 71
 troubleshooting 42, 44
privacy 5
proxy authentication 54

Q

quality control 55

R

recovery 81
regions 57
remote control 66, 73
remote monitoring and management 25, 29
ringer 26, 55
room computers 5, 24, 56, See
 also laptops
room systems
 about 2

 accessories for 6
 comparing 6
 components of 3
 features of 2
 installing hardware 20
 maintaining 11
 resetting 81
 restarting remotely 27
 testing 51
 troubleshooting 39
 turning off 13
 updating software and firmware for 23
 viewing information and health status of 27
room tags See tags

S

screens
 consoles See consoles
 interactive flat panels See interactive
 flat panels
screwdrivers 12
serial numbers 40, 59, 65
sharpness 62, 67, 75
shutters, camera 5
SIP URIs 50
small rooms 7
SMART Board interactive flat
 panels See interactive flat panels
SMART Room System USB Bridge 5
SMART Room Systems See room systems
SMART Settings 58
SMART updates 57
smoke 18
software updates 23
speakers
 about 5
 cleaning 20
 setting default volume for 26, 55
 troubleshooting 48
Standby mode 64
startup 2
status lights 41
strain relief, cable 20
sunlight 18
support
 Microsoft 49

SMART 8

Windows Firewall 57

Windows Server Update Services server 57

T

tags 26

tape measures 12

test calls 51, 55

time See date and time

tint 68, 75

TLS 33

tools, recommended 12

touch panels See interactive flat panels

transportation 21

treble 63

troubleshooting 39

trusted domains 50

tutorial 56

U

updates 57

USB Bridge See SMART Room System

USB Bridge

user names 54

V

vacuum cleaners 18

ventilation 18

VGA 5

vibration 21

video connection harness 5

videos 3, See also cameras

VNC Viewer Plus 33

volume 48, 55

W

wall stand kits 6

water 17

Web Portal See Lync Room System

Administrative Web Portal

Web Service certificate 50

web updates 57

WEEE and Battery Directives 83

whiteboard feature 3

SMART TECHNOLOGIES

smarttech.com/support

smarttech.com/support/entsupport