

# SMART Audio™ CAS-340 and CAS-360

### Classroom amplification systems

System administrator's and user's guide

Extraordinary made simple<sup>™</sup> SMART<sub>™</sub>



# **Product registration**

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

Register online at smarttech.com/registration.

Keep the following information available in case you need to contact SMART Support.

Serial number:

Date of purchase:

#### 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 own expense.

#### Trademark notice

SMART Audio, SMART Board, SMART Notebook, smarttech, the SMART logo and all SMART taglines are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. Blu-ray is a trademark of the Blu-ray Disc Association. All other third-party product and company names may be trademarks of their respective owners.

#### Copyright notice

© 2011 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.

Patents pending.

April 11, 2011

# Important information for your classroom amplification system

#### 🔺 WARNING

- Failure to follow the installation instructions shipped with your SMART product could result in personal injury and damage to the product which may not be covered by your warranty.
- To reduce the risk of fire or electric shock, do not expose the SMART product to rain or moisture.
- Ensure that any cables extending across the floor to your SMART product are properly bundled and marked to avoid a trip hazard.
- Don't open or disassemble the SMART product. You risk electrical shock from the high voltage inside the casing. Opening the casing also voids your warranty.
- If your SMART product requires replacement parts, make sure the service technician uses replacement parts specified by SMART Technologies or parts with the same characteristics as the original.
- To reduce the risk associated with leaking batteries:
  - do not leave the battery in the product for an extended period
  - o do not heat, disassemble, or short the battery, or expose it 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
- Do not charge the battery with any power adapter other than the one supplied. Do not charge other battery types in your SMART product with the supplied power adapter. Both of these actions can cause damage to the product and can cause a fire or personal injury.

If the SMART product becomes excessively warm or emits an unusual smell while the battery is recharging, immediately disconnect the power adapter from the power outlet and turn the product off.

- Do not use your SMART Audio<sup>™</sup> classroom amplification system in a facility control system or any other environment that requires extremely high reliability, or where the use of a wireless device can cause interference. The product can interfere with other electronic devices or cause them to malfunction, or other wireless devices may interfere with the product or cause it to malfunction. Where use is prohibited, turn off the product. SMART Technologies does not accept any liability for damages.
- Ensure your ceiling or ceiling tiles are strong enough to support the ceiling-mounted product components and use tethers if provided or required. Failure to securely install components might lead to components falling which can cause personal injury and product damage that may not be covered by your warranty. Refer to product documentation to find component weights.
- Ensure the installation of your SMART product meets local building codes and regulations.

#### CAUTION

- Avoid setting up and using the SMART product in an area with excessive levels of dust, humidity and smoke.
- If your SMART product requires replacement parts, make sure the service technician uses replacement parts specified by SMART Technologies or parts with the same characteristics as the original.
- To reduce the risk of fire or electric shock, do not expose the SMART product to rain or moisture.
- Make sure an electrical socket is near your SMART product and remains easily accessible during use.
- Do not drop the portable components of your SMART product. Dropping your microphone can damage it and void the warranty for that item.
- Do not place items other than your microphone in your microphone charging cradle. Items can create an electrical short leading to product damage, fire or personal injury.
- When connecting product components, ensure cables are connected to correct locations. Incorrectly connected components can result in product damage.

# Contents

Important information for your classroom amplification system	iii
Chapter 1: Getting started	1
About your SMART Audio system	1
Choosing audio inputs.	2
Controlling audio inputs.	3
Overview of the SMART Audio system	4
Physical components	
SMART software	7
Chapter 2: Using the control unit	9
Turning on and turning off your SMART Audio system	g
Auxiliary audio inputs for the control unit	10
System reset	10
Chapter 3: Using the SMART Audio system microphone	11
Parts of the microphone	12
Assembling the microphone	12
Charging the microphone	13
Turning on and turning off the microphone	15
Connecting the microphone to the room module	
Speaking into the microphone.	
Connecting auxiliary audio input devices to the microphone	
Controlling an auxiliary audio input device using the microphone.	
Using a second microphone	
Customizing a microphone	
Chapter 4: Using your SMART Audio system with SMART Notebook software	25
Installing SMART Audio software.	
Placing the SMART Audio system toolbar icon	
Opening SMART Audio software	
Using SMART Audio system teacher settings	27
Chapter 5: Troubleshooting for your SMART Audio system	31
Troubleshooting using the microphone status light	
Troubleshooting no voice transmission from the microphone issues	32
Troubleshooting issues with auxiliary audio input devices.	32
Appendix A: Customizing SMART Audio software with configuration software	33
Installing SMART Audio configuration software	34

	Using SMART Audio configuration files	35
	Setting base volumes with the volume tab	38
	Using the speaker control tab.	39
	Setting responses to incoming pages.	42
	Setting microphone features.	44
	Setting audio input names and trims.	47
	System settings	48
Ap	pendix B: Hardware environmental compliance	51
-	r · · · · · · · · · · · · · · · · · · ·	
•	Waste Electrical and Electronic Equipment regulations (WEEE directive)	
	· · ·	51
•	Waste Electrical and Electronic Equipment regulations (WEEE directive)	51 51
	Waste Electrical and Electronic Equipment regulations (WEEE directive)   Restriction of Certain Hazardous Substances (RoHS directive)	51 51 51
	Waste Electrical and Electronic Equipment regulations (WEEE directive). Restriction of Certain Hazardous Substances (RoHS directive). Batteries.	51 51 51 52
-	Waste Electrical and Electronic Equipment regulations (WEEE directive). Restriction of Certain Hazardous Substances (RoHS directive). Batteries. Packaging.	51 51 51 52 52
-	Waste Electrical and Electronic Equipment regulations (WEEE directive). Restriction of Certain Hazardous Substances (RoHS directive). Batteries. Packaging. Covered electronic devices.	51 51 52 52 52

## Chapter 1 Getting started

About your SMART Audio system	1
Choosing audio inputs	2
Speaking into your microphone	2
Connecting audio input devices to your microphone.	2
Playing sound files from your connected computer.	2
Connecting audio input devices to your control unit	2
Connecting audio input devices to the External Control Panel (ECP)	2
Paging over your SMART Audio system	2
Controlling audio inputs	3
Controlling your SMART Audio system with the microphone	3
Controlling your SMART Audio system from SMART Notebook software	3
Overview of the SMART Audio system	4
Physical components.	
Control unit	5
Room module	5
Ceiling speakers.	6
Wall speakers	6
Microphone	6
Microphone charging cradle	6
SMART software	7

### About your SMART Audio system

The SMART Audio system amplifies teacher and student voices, reducing teacher vocal strain and ensuring that everyone can clearly hear what is being said from anywhere in the room. The systems include a wireless microphone that either the teacher or students can use, a control unit that provides a USB interface to the computer and a room module that combines an amplifier and an infrared sensor.

The CAS-340 model features seamless integration with SMART Notebook <sup>™</sup> collaborative learning software. Pressing the SMART Audio icon in SMART Notebook software brings up an intuitive user interface that enables educators to control up to five audio inputs with the touch of a finger. Adjusting the volume is quick and simple, saving valuable class time while maintaining lesson flow.

With the CAS-360 model, educators control the system settings by using the control dial and the LCD screen on the wall-mounted control unit.

You can order either system with wall-mounted or ceiling-mounted speakers.

### Choosing audio inputs

You can connect audio inputs from a variety of sources to your SMART Audio system, which broadcasts them from your ceiling speakers or wall speakers.

#### Speaking into your microphone

When you speak into your SMART Audio system microphone, your voice transmits by infrared signal to the room module and is broadcast from the ceiling speakers or wall speakers. For more information on speaking into the microphone, see page 15.

#### Connecting audio input devices to your microphone

You can connect an audio input device, such as a portable audio player, directly to the 3.5 mm jack on your microphone. The audio input transmits by infrared signal to the room module and is then broadcast from the ceiling speakers or wall speakers. For more information on connecting an audio input device to the microphone, see page 16.

#### Playing sound files from your connected computer

You can play sound or video files on your computer, and the sound file broadcasts from the ceiling speakers or wall speakers.

#### Connecting audio input devices to your control unit

You can connect an audio input device, such as a CD player, DVD/Blu-ray<sup>™</sup> player or VCR to the wall-mounted control unit. The audio input then broadcasts from the ceiling speakers or wall speakers. For more information, see page 10.

#### Connecting audio input devices to the External Control Panel (ECP)

You can connect an audio input device, such as a CD player, DVD/Blu-ray player or VCR to the ECP of your SMART Board<sup>™</sup> interactive whiteboard. The audio input then broadcasts from the ceiling speakers or wall speakers. For more information, see page 10.

#### Paging over your SMART Audio system

You can connect your existing paging system to the room module. The pages then broadcast from your ceiling speakers or wall speakers. You can configure the system to reduce the volume of all

other audio input devices when pages are broadcast.

### **Controlling audio inputs**

You can control audio inputs broadcasting from your ceiling speakers or wall speakers from your microphone or from SMART Audio software.

#### Controlling your SMART Audio system with the microphone

You can control audio inputs broadcasting from your ceiling speakers or wall speakers using your microphone while you move around your classroom. For example, you can do the following:

- Mute or adjust the volume of your voice on the microphone.
- Mute or adjust the volume of an auxiliary audio input device connected to your microphone.
- Mute or adjust volume of auxiliary audio inputs connected to the control unit or the ECP of your interactive whiteboard.

#### Controlling your SMART Audio system from SMART Notebook software

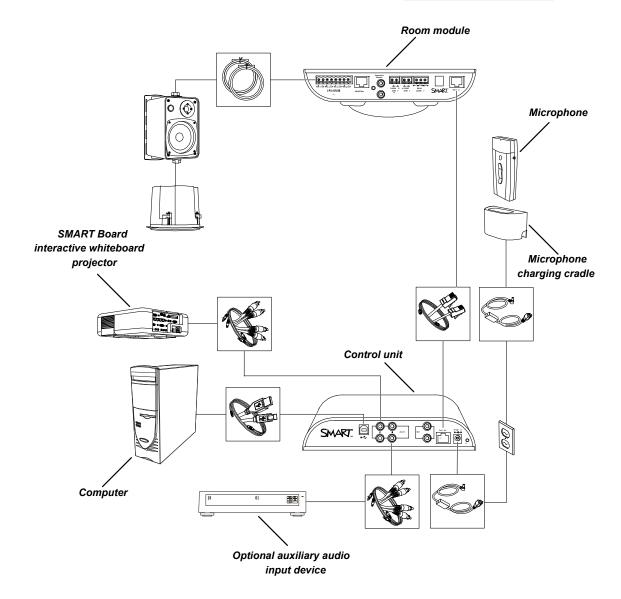
Your SMART Audio system is integrated with SMART Notebook software so that you can conveniently control the SMART Audio system from your interactive whiteboard.

Press the **SMART Audio** icon icon on the SMART Notebook software toolbar, and then you can do the following:

- Mute or adjust the volume of up to two microphones
- Mute or adjust the volume of audio files playing on your computer
- Mute or adjust the volume of audio files playing on connected auxiliary input devices
- Set the tone for your ceiling speakers or wall speakers

### Overview of the SMART Audio system

This is a basic cabling diagram showing the relationship between all of the components in the SMART Audio system. For more information on installing and cabling your SMART Audio system, see the *SMART Audio CAS-340 and CAS-360 installation guide* (smarttech.com/kb/155320).



### **Physical components**

Your SMART Audio system includes the following items:

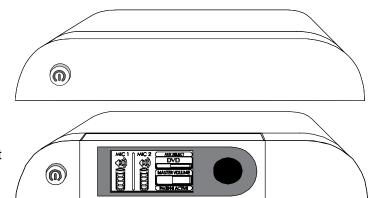
- Control unit and power supply
- Microphone, sleeve and lanyard
- Microphone charging cradle and its power supply
- · Ceiling-installed room module, infrared sensor and audio amplifier
- Either four ceiling speakers or four wall speakers

#### **Control unit**

The control unit is a wall-mounted panel that connects the SMART Audio system to your computer. For more information on using the control unit, see page 9.

#### CAS-340 top view

The top of the CAS-340 has a power button.



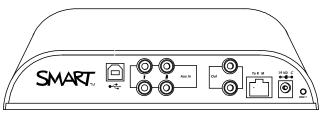
#### CAS-360 top view

The top of the CAS-360 includes a power button, an LCD control screen and adjustment dial. You can customize some of the audio functions from the screen.

#### CAS-340 and CAS-360 bottom view

The underside of the control unit has a removable panel. Under the panel are the following:

- USB connection to the computer
- RCA connections for auxiliary inputs such as DVD/Blu-ray players and VCRs
- Connectors for assistive listening devices
- RJ45 connection for the Cat 5e cable to the room module
- System power input
- System reset button



6

CHAPTER 1 Getting started

#### Room module

The room module contains the infrared sensor and the speaker amplifiers. The room module is ceiling-mounted and is connected to all of the speakers.

The room module connects to the control unit with a Cat 5e cable.

#### **Ceiling speakers**

SMART Audio system ceiling speakers receive both power and sound input through speaker wire from the room module. Speaker strength is 30 W.

#### Wall speakers

SMART Audio system ceiling speakers receive both power and sound input through speaker wire from the room module. Speaker strength is 30 W.

#### Microphone

Your SMART Audio system includes a microphone that transmits an infrared signal by line of sight up to 15' (4.6 m) to a receiver in the room module. The microphone has a built in voice receiver and you can also add external wired microphones to the 3.5 mm jack on the side of the microphone.

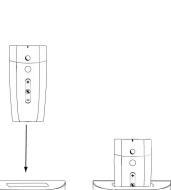
You can attach the included lanyard to the microphone and wear it around your neck. The microphone has power, volume and mute buttons.

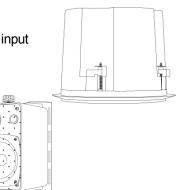
#### Microphone charging cradle

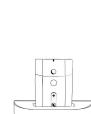
Charge the microphone in the wall-mounted microphone charging cradle provided with your SMART Audio system.

For more information on charging your microphone, see page 13.

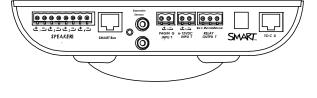
- WARNING A
  - Do not charge the battery with any charger other than the one supplied. Do not charge other battery types in your SMART product with the supplied power adapter. These actions can cause damage to the product and can cause a fire or personal injury.
  - If the SMART product becomes excessively warm or emits an unusual smell while the battery is recharging, immediately disconnect the power cable from the power outlet.











### SMART software

Your SMART Audio system operates without additional software. However, the following software will extend your usage of the SMART Audio system.

- SMART Notebook software and SMART Product Drivers enable you to access commonly used audio settings, such as volume control, while teaching.
- SMART Audio software enables you to control the SMART Audio system from SMART Notebook software.
- SMART Audio configuration software enables an installer or system administrator to customize the SMART Audio system.

You can install SMART software from the included CD or from smarttech.com/downloads.

## Chapter 2 Using the control unit

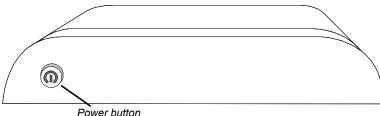
Turning on and turning off your SMART Audio system	9
Auxiliary audio inputs for the control unit	. 10
Connecting auxiliary audio input devices to the control unit	. 10
System reset	10

The control unit has the following roles in your SMART Audio system:

- Providing power to the room module and the speakers through the Cat 5e cable to the room module
- Connecting to your computer for audio system adjustments using the SMART Audio system software
- Providing customization through an LCD screen and adjustment dial (CAS-360 only)
- Providing volume control (CAS-360 only)

### Turning on and turning off your SMART Audio system

Your control unit has a power button that turns on your SMART Audio system, including your room module and ceiling speakers or wall speakers, and turns off your SMART Audio system.



#### To turn on or turn off your SMART Audio system

Press the power button on the control unit.

#### IMPORTANT

The microphone has its own power button. For more information, see page 15.

### Auxiliary audio inputs for the control unit

You can connect auxiliary audio inputs to the control unit, such as a CD player, VCR, DVD/Blu-ray player or other media device. You can transmit sound from these devices as an alternative to voice input from your microphone.

When your SMART Audio system is turned on, you can control the volume and mute features using the auxiliary input controls, with SMART Audio software (see page 27), or the system microphone (see page 17).

#### i note

For more information on connecting audio inputs directly to the microphone, see page 16.

#### Connecting auxiliary audio input devices to the control unit

#### To connect the auxiliary audio input device to the control unit

- 1. Ensure that the auxiliary audio input device is turned off.
- 2. Remove the bottom cover from the control unit.
- 3. Connect two RCA input plugs to the Aux 2 inputs.
- 4. Replace the cover on the control unit.

### System reset

If you encounter issues with your SMART Audio system, you can reset it.

#### To reset the system

- 1. Remove the control unit bottom cover.
- 2. Press the labeled system reset button for three seconds.

The system resets.

3. Replace the control unit bottom cover.

# Chapter 3 Using the SMART Audio system microphone

Parts of the microphone	. 12
Assembling the microphone	. 12
Placing a battery in the microphone	. 13
Using the microphone's protective sleeve	. 13
Connecting the lanyard to the microphone	. 13
Charging the microphone	
Charging time	. 14
Charge duration	. 14
Turning on and turning off the microphone.	. 15
Connecting the microphone to the room module	. 15
Speaking into the microphone	. 15
Adjusting microphone volume	. 16
Adding auxiliary microphones	16
Connecting auxiliary audio input devices to the microphone	. 16
Controlling an auxiliary audio input device using the microphone	. 17
Using a second microphone	. 18
Using microphone channels	. 18
Checking your microphone mode	. 18
Enabling Assigned Channel mode	. 19
Enabling Find Channel mode	. 19
Customizing a microphone	. 20
Enabling Button Disable mode	20
Enabling Automatic On and Automatic Off mode	. 21
Downloading global settings from the control unit	. 22

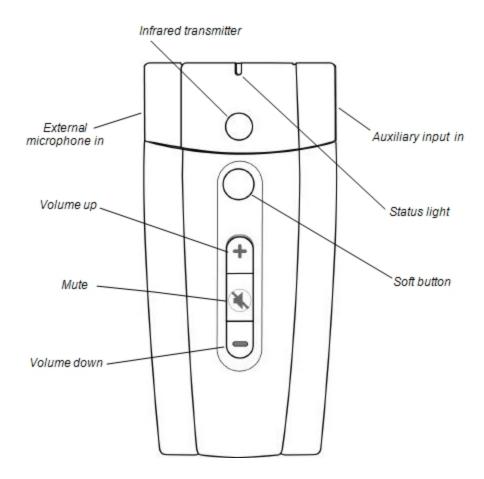
The SMART Audio system microphone is a voice input device that transmits a line-of-sight infrared signal up to 15' (4.6 m) to the room module. The room module receives the input, and then passes the audio input to the speakers through the speaker wires according to SMART Audio software settings.

You can use a second microphone with the SMART Audio system. For more information, see page 18.

The microphone is battery operated and chargeable with the included microphone charging cradle. For more information, see page 13.

### Parts of the microphone

The microphone has several controls and connections, as described below.



### Assembling the microphone

The microphone has a battery, a protective sleeve and a lanyard.

#### Placing a battery in the microphone

The microphone uses a replaceable, rechargeable 3.7V lithium ion battery.

To place a battery in the microphone

- 1. Remove the back panel of the microphone.
- 2. Remove the plastic film from the battery.
- 3. Insert the battery into the microphone with the label facing out and down.



4. Replace the back panel of the microphone.

#### Using the microphone's protective sleeve

The microphone has a protective sleeve. Slide the microphone into the sleeve to reduce sound transfer from tapping the microphone and to protect the microphone from damage.

#### Connecting the lanyard to the microphone

The microphone has a lanyard for hands-free use.

#### To connect the lanyard to the microphone

Slide the lanyard mounting plate into the back of the microphone.

### Charging the microphone

You can charge the microphone in the microphone charging cradle or by connecting the charging cable directly to the bottom of the microphone.

#### WARNING

- Do not charge the battery with any power adapter other than the one supplied.
- Do not charge other battery types in your SMART product with the supplied power adapter. Both of these actions can cause damage to the product and can cause a fire or personal injury.
- If the SMART product becomes excessively warm or emits an unusual smell while the battery is charging, immediately disconnect the power adapter from the power outlet and turn off the product.

#### **Charging time**

It takes approximately one hour to charge the microphone.

#### **Charge duration**

A full charge provides approximately seven hours' use. This time can vary depending on the frequency of transmission, battery age and room temperature.

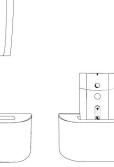
#### To charge the microphone in the microphone charging cradle

- 1. Connect AC power adaptor into the microphone charging cradle.
- 2. Place the microphone in the charger facing out.

#### 🚺 TIP

The microphone is more stable if it is in its protective sleeve. For more information, see page 13.

The red light will start to flash when the microphone is charging, and will turn solid red when the microphone is fully charged.



0

(+ 🛞 I)

#### To charge the microphone directly

Connect the AC power adapter jack directly to the connection on bottom of microphone.

### Turning on and turning off the microphone

#### TIP

You can set your microphone to turn off automatically when placed in the microphone charging cradle, and to turn on when removed from the microphone charging cradle. For more information, see page 20.

#### To turn on the microphone

Press any button on the microphone.

The microphone status light flashes red, and then turns solid green.

#### IMPORTANT

If you do not see a light or you see an amber light, see Troubleshooting using the microphone status light.

#### To turn off the microphone

Press the mute button for four seconds.

The microphone status light turns off.

### Connecting the microphone to the room module

When your microphone is connected to the room module, the status light will be solid green. If it's amber or flashing red, it isn't connected.

#### To connect the microphone to the room module

- 1. Stand within 15' (4.6 m) of the room module.
- 2. Point the microphone's infrared transmitter at the room module.
- 3. Turn off the microphone, and then turn it on again.

### Speaking into the microphone

Your microphone contains a voice receiver and transmits your voice input to the room module.

Your microphone uses a line of sight infrared signal to communicate with the room module. The maximum distance for this is 15' (4.6 m).

#### IMPORTANT

- · Hold your microphone so the infrared transmitter faces out.
- If you hear a sudden squelch, The microphone is either out of range or pointed against a nonreflective surface. Position your microphone so the infrared transmitter points toward the room module.

#### Adjusting microphone volume

You can increase or decrease the volume of transmission from the microphone, as well as mute and restore volume.

#### To increase or decrease the microphone volume

Press the volume up or volume down button.

#### To mute or restore the microphone volume

Press the mute button.

When you mute the microphone, the microphone status light flashes green. When you restore the microphone volume, the microphone status light turns solid green.

#### Adding auxiliary microphones

The microphone has a voice receiver and doesn't require an external, auxiliary microphone. If you prefer to use an auxiliary microphone, contact your authorized SMART reseller.

#### To add an auxiliary microphone

Connect the auxiliary microphone to the 3.5 mm jack.

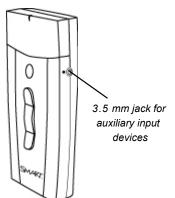


# Connecting auxiliary audio input devices to the microphone

The microphone has a 3.5 mm input jack enabling you to connect an external audio source such as a handheld audio player or other sound player. The input is mixed with voice input, enabling you to speak over the auxiliary audio input device.

#### To connect auxiliary audio input devices

- 1. Turn on the auxiliary audio input device, and then reduce the volume on the device.
- 2. Connect the auxiliary audio input device output jack to the microphone auxiliary input 3.5 mm jack.
- 3. Increase the volume control on the auxiliary audio input device until the auxiliary audio input device is clearly and comfortably heard over the SMART Audio system.



#### To mute or restore volume for an auxiliary audio input device

Press the mute button on the microphone.

# Controlling an auxiliary audio input device using the microphone

You can use the microphone to increase the volume, lower the volume or mute the most recently active auxiliary audio input device connected to the control unit without returning to your computer or the auxiliary input device.

This enables you to decrease or mute the volume, provide commentary and return to transmitting audio.

#### To adjust the volume of the device connected to the control unit using the microphone

1. Press the mute button on your microphone so that your voice doesn't transmit.

The microphone status light flashes green.

2. Use the volume control buttons to adjust the volume of the device connected to the control unit.

#### i NOTE

This volume control is very precise. You must press a volume button several times before you notice a difference.

To mute or restore volume to a device connected to the control unit using the microphone

Press the soft button on your microphone.

### Using a second microphone

You can purchase a second microphone as a back-up or to use as a second microphone while teaching.

A second microphone is typically used as a student microphone that can be passed around a group of students while the teacher is using the primary microphone.

#### 🖸 TIP

You can set the student microphone to Button Disable mode so students can't adjust the volume on their microphone or on any auxiliary audio input devices. For more information, see page 20.

#### Using microphone channels

The SMART Audio system microphone can transmit on two channels: channel 1 and channel 2. Set your microphone mode to determine the channel.

- In Find Channel mode (default), the microphone chooses an available channel.
- In Assigned Channel mode, the microphone transmits on the channel you assign it.

#### IMPORTANT

Two microphones can not be set to the same channel at the same time.

#### Checking your microphone mode

You can check to see whether a microphone is set to Find Channel mode or Assigned Channel mode.

#### To check the microphone mode

- 1. If the microphone is turned on, turn it off by holding the mute button for four seconds.
- 2. Turn on the microphone by pressing any button.

Using the SMART Audio system microphone

3. Observe the microphone status light.

If the microphone status light flashes red once, the microphone is set to Assigned Channel mode and channel 1.

OR

If the microphone status light flashes red twice, the microphone is set to Assigned Channel mode and channel 2.

OR

If you don't see a red flashing light, the microphone is set to Find Channel mode.

#### **Enabling Assigned Channel mode**

In Assigned Channel mode you can set a microphone to transmit on either channel 1 or channel 2.

#### IMPORTANT

Two microphones can not be set to the same channel at the same time.

#### To set a microphone to Assigned Channel mode

- 1. Turn off the microphone by holding the mute button for four seconds, and then wait 10 seconds.
- 2. Hold the soft button and the mute button for three seconds, and then release the buttons.

The microphone status light flashes red rapidly.

3. Press the soft button to set the microphone to channel 1.

OR

Press the volume up button to set the microphone to channel 2.

The microphone status light turns solid green.

#### **Enabling Find Channel mode**

In Find Channel mode, the microphone looks for an available channel.

#### IMPORTANT

Two microphones can not be set to the same channel at the same time.

#### To set a microphone to Find Channel mode

- 1. Turn off the microphone by holding the mute button for four seconds, and then wait 10 seconds.
- 2. Hold the soft button and the mute button for three seconds, and then release the buttons.

The microphone status light flashes red rapidly.

3. Wait 18 seconds. Don't push any buttons.

The microphone status light turns solid green.

### Customizing a microphone

You can customize a microphone to change some of its settings, including the following modes:

- In Button Disable mode, only the mute button works. For more information, see below.
- In Automatic On and Automatic Off mode, the microphone turns off when you place it in a charger and turns on when you remove it. For more information, see page 21.

#### i note

Your system administrator could have set either of these settings as global settings to be downloaded from the room module. Following the steps below overrides the global setting until the next time someone downloads the global settings. For more information, see page 22.

#### **Enabling Button Disable mode**

In Button Disable mode, only the mute button works, so students can't adjust the volume while you pass the microphone around.

#### To set a microphone to Button Disable mode

- 1. Turn on the microphone.
- 2. Press and hold the soft button and volume down button for five seconds.

The microphone status light flashes red, yellow and green alternately indicating that you're in Local Programming mode.

Using the SMART Audio system microphone

3. Press the mute button and hold it for one second to change the state of the Button Disable mode.

IMPORTANT

- Four quick green flashes of the microphone status light indicates that the feature is on and only the mute button works.
- Four quick red flashes of the microphone status light indicates that the feature is off and all buttons work.
- 4. Press the soft button and volume down button for three seconds to exit Local Programming mode.

OR

Wait 30 seconds and the microphone will automatically exit Local Programming mode.

#### Enabling Automatic On and Automatic Off mode

You can set the microphone to Automatic On and Automatic Off mode, which turns the microphone off when you place it in the microphone charging cradle and turns it on when you remove it from the microphone charging cradle.

#### To set a microphone to Automatic On and Automatic Off mode

- 1. Turn on the microphone.
- 2. Press and hold the soft button and volume down button for five seconds.

The microphone status light flashes red, yellow and green alternately indicating that you're now in Local Programming mode.

3. Press the volume down button to change the state for the microphone Automatic On and Automatic Off mode.

#### IMPORTANT

- Four quick green flashes of the microphone status light indicates that the feature is on and the microphone will turn off when in the charger and turn on when removed.
- Four quick red flashes of the light indicates that the feature is off and the microphone must be turned on or off manually.

Using the SMART Audio system microphone

4. Press the soft button and volume down button for three seconds to exit Local Programming mode.

OR

Wait 30 seconds and the microphone will automatically exit Local Programming mode.

#### Downloading global settings from the control unit

You system administrator could have designated certain default settings for your microphone. Downloading these global settings from the control unit ensures your microphone operates as expected.

#### IMPORTANT

Your microphone must be in Find Channel mode to download global settings. For more information on Find Channel mode, see page 19.

These global settings could include the following:

- Volume limits for microphones (see page 39)
- Low battery status light indication (see page 44)
- Automatic shut off when charging (see page 44)
- Button Disable mode (see page 45)
- Custom functions for the soft button (see page 46)

#### Ι ΝΟΤΕ

You can override two of these global settings by programming your microphone directly. These include Button Disable mode and Automatic On and Automatic Off mode (see page 20). These override settings are overwritten the next time you download global settings from the control unit.

#### To download global settings from the control unit

- 1. Turn on your SMART Audio system at the control unit.
- 2. Turn on your microphone, and wait until its status light is solid green.

#### IMPORTANT

If the microphone status light is amber, the microphone is not connected to the room module and you are unable to download global settings.

3. Press the volume up and volume down buttons for five seconds.

#### CHAPTER 3

Using the SMART Audio system microphone

The microphone status light flashes amber.

4. When the microphone status light is solid green, you can use the microphone.

## Chapter 4 Using your SMART Audio system with SMART Notebook software

Installing SMART Audio software	
Placing the SMART Audio system toolbar icon	
Opening SMART Audio software	
Using SMART Audio system teacher settings	
Changing SMART Audio system input volumes.	27
Muting SMART Audio system inputs	
Checking microphone battery level	
Setting speaker tone	

Your SMART Audio system is integrated with SMART Notebook software so that you can conveniently control the system when using your interactive whiteboard.

By pressing the **SMART Audio** icon icon icon SMART Notebook software toolbar, you can do the following:

- · Mute or adjust the volume of up to two microphones
- Mute or adjust the volume of audio files playing on your computer
- Mute or adjust the volume of audio files playing on connected auxiliary input devices
- · Set the tone for your ceiling speakers or wall speakers

### Installing SMART Audio software

If the SMART Audio icon is isn't on the SMART Notebook software toolbar, install SMART Audio software from the included CD or from the SMART website.

#### To install SMART Audio software for Windows

- 1. Disconnect the USB cable that connects your computer to your control unit.
- 2. Insert the included SMART Audio software CD in your computer, and then browse to the **SMARTAudioSetup.exe** file.

OR

Go to <u>smarttech.com/downloads</u>, select the SMART Audio software downloads, and then download **SMARTAudioSetup.exe** to your desktop.

3. Double-click **SMARTAudioSetup.exe**, and then follow the on-screen instructions to install SMART Audio software.

To install SMART Audio software for Mac

- 1. Disconnect the USB cable that connects your computer to your control unit.
- Insert the included SMART Audio software CD in your computer, and then browse to SMART Audio Install.dmg file.

OR

Go to <u>smarttech.com/downloads</u>, select the SMART Audio software downloads, and then download **SMART Audio Install.dmg** to your desktop.

3. Double-click **SMART Audio Install.dmg**, and then follow the on-screen instructions to install SMART Audio software.

### Placing the SMART Audio system toolbar icon

If you don't see the SMART Audio icon icon on your SMART Notebook software toolbar, you can add it from the *Customize Toolbar* window.

To place your SMART Audio system icon on your SMART Notebook software toolbar

- 1. Open SMART Notebook software.
- 2. Select View > Customize Toolbar.

The Customize Toolbar window appears.

- 3. Drag the SMART Audio icon ito your SMART Notebook software toolbar.
- 4. Press Done.

### Opening SMART Audio software

SMART Audio software enables you to control the SMART Audio system from your interactive whiteboard.

#### To open SMART Audio software from SMART Notebook software

- 1. Open SMART Notebook software.
- 2. Press the SMART Audio icon 🔤.

SMART Audio software appears.

3. Press Connect.

### Using SMART Audio system teacher settings

Your SMART Audio system teacher settings enable you to do the following:

- Connect your control unit to the room module.
- Increase or decrease the volume of the two microphone channels or any auxiliary audio inputs. For more information, see page 27.
- Mute the two microphone channels or any auxiliary audio inputs. For more information, see page 28.
- Check the microphone battery level by channel. For more information, see page 28.
- Set speaker tone. For more information, see page 29.

#### Changing SMART Audio system input volumes

Your SMART Audio system mixes audio inputs from the following sources:

- Mic 1, the default SMART Audio system microphone channel
- Mic 2, another SMART Audio system microphone channel
- USB Audio, audio or video files playing on the computer and transmitted to the control unit through the USB connection

Using your SMART Audio system with SMART Notebook software

• Aux 1, the connection from your SMART Board projector to your control unit, and streams any audio inputs connected directly to your SMART Board interactive whiteboard or ECP

#### 🚺 TIP

You can rename Aux 1 or Aux 2 to a term more descriptive of the audio input. For more information, see page 47.

 Aux 2, any auxiliary audio input device connected to the control unit. For more information, see page 10

You can adjust the volumes of these inputs to your preference.

#### Adjusting volume for SMART Audio system auxiliary audio input devices

All audio inputs into the SMART Audio system speakers are mixed. You can adjust the volume of any audio inputs.

#### 🚺 TIP

You can also adjust volume for inputs at the input source. To adjust the input from the SMART Audio system microphone, see page 16.

#### To adjust the volume for a SMART Audio system input

Slide the input's volume slider up or down for the input.

#### Muting SMART Audio system inputs

All audio inputs into the SMART Audio system speakers are mixed. You can mute any or all inputs, and restore their volume later.

#### To mute a SMART Audio system input

Press the un-muted speaker icon delow the input volume slider.

#### To restore a SMART Audio system input's volume

Press the muted speaker icon 🕼 below the input volume slider.

#### Checking microphone battery level

You can use SMART Audio software to check your microphone battery level.

#### I NOTE

If your microphone battery level is below 10%, the microphone status light flashes red. For more information, see Troubleshooting the infrared transmitting microphone status light.

#### To check microphone battery level

1. Press the **SMART Audio** icon icon icon icon icon icon the SMART Notebook software toolbar.

SMART Audio software appears.

2. Look at the *Microphone battery level* area.

#### IMPORTANT

If this area indicates *No mic found*, your microphone is either not turned on (see page 15) or not connected to the room module.

#### Setting speaker tone

SMART Audio system enables you to set speaker tone.

#### To set speaker tone

- Select the SMART Audio icon an on the SMART Notebook software toolbar. SMART Audio software appears.
- 2. Press High, Medium or Low.

# Chapter 5 Troubleshooting for your SMART Audio system

Troubleshooting using the microphone status light	31
Troubleshooting no voice transmission from the microphone issues	32
Troubleshooting issues with auxiliary audio input devices	32

# Troubleshooting using the microphone status light

The normal state for the microphone status light is solid green. Use the following table if the light isn't on or if it isn't solid green.

Status light	Cause	Solution
The microphone status light is off	Your microphone is turned off.	Press any button on your microphone.
	Your microphone battery isn't charged.	Charge your microphone battery in the microphone charging cradle.
Flashing red twice per second	Battery power is at 10% of its full charge.	Charge the battery.
Flashing red four times per second	Battery power is at 5% of its full charge.	Charge the battery.
Solid amber	Your room module isn't receiving power	Press the power button on the control unit.
	You're out of range of your room module.	Move within 15' (4.6 m) of the room module.
Flashing green	The microphone is muted.	Press the mute button to restore the microphone's volume.
Solid green	Normal operation	No action required

# Troubleshooting no voice transmission from the microphone issues

Use this table if your voice doesn't come through the speakers when you speak into the microphone.

## IMPORTANT

Use this table only if the status light on your microphone is solid green. If it is not on, or if it is a color other than solid green, see Troubleshooting the infrared transmitting microphone status light.

Cause	Solution
Your volume is too low on the microphone.	Increase the volume.
Your microphone volume is too low in SMART Audio software.	Open SMART Audio software, and increase the volume.
Your microphone isn't connected to the room module	Turn your microphone toward the room module, and then move to within 15' (4.6 m) of the room module.
The SMART Audio system is turned off.	Turn on the SMART Audio system.

# Troubleshooting issues with auxiliary audio input devices

Use the following table if you can't hear an auxiliary audio input device playing on your SMART Audio system.

Cause	Solution
The file isn't playing.	Play the file.
Your computer is muted.	Restore the volume for your computer.
The input device is muted at your control unit.	Open SMART Audio software and restore the volume.
The SMART Audio system is turned off.	Turn on the SMART Audio system.
There is no USB connection from your computer to your control unit.	Connect a USB cable from your computer to your control unit.

#### APPENDIX A

Customizing SMART Audio software with configuration software

Setting audio input names and trims	. 47
Input names	. 48
Input trim settings	
System settings	. 48
Setting Auto Select	
Relay settings	. 49

Your SMART Audio system is designed to operate once installed without any special settings. You can, however, customize your SMART Audio system to meet requirements or to improve your audio experience.

System administrators can customize settings using the SMART Audio system configuration software.

#### IMPORTANT

Do not install SMART Audio configuration software on teacher computers unless you want to give them access to the configuration settings. The SMART Audio software available through SMART Notebook software provides the controls that a teacher requires. For more information, see page 25.

# Installing SMART Audio configuration software

If you don't have SMART Audio configuration software installed on your computer, install it from the included CD or from the SMART website.

## IMPORTANT

You require a computer with a Windows operating system to install and run SMART Audio configuration software. After your SMART Audio system is configured, you can run SMART Audio software from SMART Notebook software on a computer with either a Windows operating system or Mac operating system software.

#### To install SMART Audio configuration software

- 1. Disconnect the USB cable that connects your computer to your control unit.
- 2. Insert the included SMART Audio software CD in your computer, and then browse to the *SMARTAudioConfigSetup.exe* file.

OR

Go to <u>smarttech.com/downloads</u>, select the SMART Audio software downloads, and then download **SMARTAudioConfigSetup.exe** to your desktop.

3. Double-click **SMARTAudioConfigSetup.exe**, and then follow the on-screen instructions to install SMART Audio configuration software.

# Using SMART Audio configuration files

SMART Audio configuration files include many settings that affect the operation of your SMART Audio system. These files are stored in the control unit, but you can also store them on a computer or USB drive as a backup.

The file extension for SMART Audio configuration files is LPT.

You can edit an LPT file using SMART Audio configuration software. Access a file in one of the following ways:

- Open SMART Audio configuration software to see the default settings in a file. For more information, see page 36.
- Open SMART Audio configuration software on a computer connected to a control unit, and then download the control unit's LPT file to the computer. For more information, see page 37.
- Open a LPT file on a computer or USB drive. For more information, see page 36.

You can then edit audio settings in the LPT file.

- To edit system volume, see page 38.
- To edit speaker controls, see page 39.
- To edit paging control and 6-12 VDC input settings, see page 42.
- To edit microphone settings, see page 44.
- To edit audio input names and trims, see page 48.
- To edit other system settings, see page 48.

After you edit the LPT file, you can do one of the following:

- Upload the settings to a connected control unit. For more information, see page 37.
- Save the settings as an LPT file to upload to a control unit at another time. For more information, see page 37.

## **Opening SMART Audio configuration software**

SMART Audio configuration software is designed to help system administrators configure SMART Audio system settings.

#### IMPORTANT

This software is not designed for end users. Teachers and other presenters should use SMART Audio system software accessed from SMART Notebook software.

#### To open SMART Audio configuration software

- 1. Select Start > All Programs > SMART Technologies > SMART Tools.
- 2. Click Audio Configuration Software.

The SMART Audio Configuration Software screen appears.

#### IMPORTANT

If a warning appears stating that Windows does not see the SMART device, connect your computer to a SMART Audio system control unit with a USB cable.

# Opening a SMART Audio configuration file

You can open a SMART Audio configuration file with SMART Audio configuration software, and then upload it to a connected control unit. This could be part of implementing settings or restoring a backup of settings.

#### To open a SMART Audio configuration file

- 1. Open SMART Audio configuration software (see page 36).
- 2. Select File > Open.
- 3. Browse to and select the LPT file.

SMART Audio configuration software settings are loaded from the file.

# Downloading a configuration file from the control unit

You can download the current configuration file from the control unit, typically to do one of the following:

- Configure specific settings.
- Store a backup of the control unit's settings.
- Copy the specific settings, and then upload them to another control unit in another room.

#### To download a configuration file from the control unit

- 1. Open SMART Audio configuration software (see page 36).
- 2. Select the Setup tab.
- 3. Click Download Configuration File from CU.

The file downloads from the control unit to your computer.

4. Edit the file, and then upload it to your control unit (For more information, see page 37).

OR

Select File > Save to save the configuration file to your desktop.

# Uploading a configuration file to the control unit

After you edit the settings, upload them to the control unit.

## To upload configurations to the control unit

- 1. Open SMART Audio configuration software (see page 36).
- 2. Select the Setup tab.
- 3. Click the Upload Configuration File to the CU button.

SMART Audio configuration software settings are uploaded to the control unit.

# Saving configuration files to a computer

After you edit settings, you can save the LPT file to your computer as a backup or to upload to another SMART Audio system control unit.

#### To save configuration files

- 1. Select the File > Save or File > Save as.
- 2. Type a file name, and then click **OK**.

SMART Audio configuration software settings are saved to the file.

# Setting base volumes with the volume tab

The SMART Audio configuration software *Volume* tab enables you to do the following:

- Set a master default volume for all audio input devices.
- Set specific default volumes for specific audio input devices.

Auxiliary input volume can be set in a range from -40 dB to 8 dB. Microphone volumes can be set in a range from -40 dB to +6 dB.

These form a base from which other volume controls can be applied.

## Setting master volume

The SMART Audio system master volume control sets a base volume that can further be adapted by other settings in the SMART Audio system.

#### To set master volume

- 1. Select the Volume tab.
- 2. Move the Master Volume slider up or down.

OR

Use the up or down arrows to change the volume.

# Setting other inputs' volume

You can set the base volumes for several auxiliary audio input devices.

#### To set input volume

- 1. Select the Volume tab.
- 2. Move the Aux 1, Aux 2 or USB Audio slider up or down.

OR

Use the up or down arrows to change the volume.

#### Ι ΝΟΤΕ

You can give these inputs a more descriptive name, such as "CD player," using SMART Audio configuration software. For more information, see page 47.

## Setting microphone volume

You can set the base volume for two microphone channels.

#### i NOTE

Mic 1 controls the volume for channel 1 and Mic 2 controls the volume for channel 2.

#### To set the input volume

- 1. Select the Volume tab.
- 2. Move the Mic 1 or Mic 2 slider up or down.

OR

Use the up or down arrows to change the volume.

#### IMPORTANT

You must have a microphone turned on, set to the channel and connected to the room module to set input volume. For more information, see page 18.

# Using the speaker control tab

The SMART Audio configuration software Speaker Control tab enables you to do the following:

- Select speaker and room equalization settings for the speakers connected to the room module and the audio characteristics of the room.
- Trim the amplifiers (speakers).
- Save room-specific equalizations.

# 🖸 TIP

All settings in this tab can be saved as an equalization group in the LPT file. This enables you to save different rooms' equalization settings in one LPT file. For more information, see page 41.

# Setting speaker and room equalization

Your SMART Audio system has two independent equalization circuits: speaker equalization and room equalization.

#### Speaker equalization

Speaker equalization is a defined set of equalization curves for industry standard speakers.



The SMART Audio Room Speaker library is part of the firmware and can be updated.

#### To set speaker equalization

- 1. Select the Speaker Control tab.
- 2. In the Speaker EQ drop-down list, select your speaker.

OR

Select Flat if your speaker type isn't listed.

#### Room equalization

The room equalization circuit is helpful when you have room-specific anomalies, such as bass buildup, ringing or areas of feedback. The room equalization circuit consists of seven bands of parametric equalization.

## IMPORTANT

To select the filter type or other parametric settings, use the Room Equalization Parameters menu.

#### To set room equalization

- 1. Select the Speaker Control tab.
- 2. In the Room Equalization area, raise or lower the slider for each band.

OR

On the Level box, use the up and down arrows to raise or lower the level.

#### Room equalization parameters

For bands 3 to 6 you can select the type of filter (Peak/dip, Notch, Shelving, and Band pass), the center frequency and the bandwidth of the equalization curve.

#### To set room equalization parameters

- 1. Select the Speaker Control tab.
- 2. For each band, set the Filter Type, Frequency and Bandwidth.

## Ι ΝΟΤΕ

You can set frequency only for band 1 (bass) and band 7 treble).

## Setting amplifier trim

If a speaker is too loud or quiet for a portion of the room, adjust the speaker trim down -12 dB or up +6dB in 1dB increments.

#### Ι ΝΟΤΕ

Adjusting the trim too high can cause feedback.

#### To set amplifier trim

- 1. Select the Speaker Control tab.
- 2. Use the up and down arrows in the Amplifier Trims area to adjust the trim from -12 dB to 6 dB.

#### i note

The default setting is 0 dB.

## Saving and recalling equalizations

You can save equalizations in the room module to enable you to respond to different situations in the same SMART Audio installation or to save several rooms' equalization settings in the same LPT file, and then later apply them to each individual room.

#### To save equalization settings

- 1. Create your equalization settings.
- 2. In the Save EQ drop-down list, select the name you prefer for the current equalization.
- 3. Click the Save Selected EQ button.

#### To recall equalization settings

- 1. Select the Speaker Control tab.
- 2. Select an Equalization from the Recall EQ drop-down list.

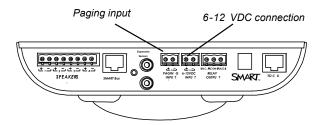
# Setting responses to incoming pages

The SMART Audio configuration software *Paging* tab enables you to do the following:

- Set paging input trim if you will connect the paging system to your room module.
- Set a duck on page.
- Set a duck on a 6-12 VDC input.

# SMART Audio and paging

When you install your SMART Audio system room module, you can connect it to your existing paging system with either the paging input or the 6-12 VDC connection.



Use the SMART Audio system configuration software to define how the SMART Audio system responds to an incoming page.

## WARNING

Paging systems often deliver important safety information. Use a professional installer to connect the room module to an existing paging system so that pages are heard reliably.

# Setting incoming page volume

If you connect your existing paging system to your SMART Audio system room module, you can trim the input when a page occurs. The following are common page volume scenarios:

• Trimming the incoming page to -19 dB so that pages don't play over SMART Audio system speakers, because the paging input already runs to other speakers in the room. Page ducking of other SMART Audio system inputs is still possible. For more information, see page 43.

 Trimming to increase the volume or decrease the volume of the paging input that plays over the SMART Audio speakers.

#### To increase or decrease the volume of the incoming page

- 1. Select the **Paging** tab.
- 2. Use the Paging Input Trim arrow buttons to adjust the page input trim from -19 dB to 6 dB.

# Setting SMART Audio system volume during a page

For an external page to duck the SMART Audio system, the room module requires either of the following:

- A signal at the paging input (even if the page plays on speakers that aren't part of the SMART Audio system)
- A signal at the 6–12V input. This is only a signal and doesn't result in the page playing over the SMART Audio system.

#### Duck on page

When a signal is present at the paging input, the other SMART Audio system inputs are ducked the designated amount.

#### To set Duck on Page

- 1. Select the **Paging** tab.
- 2. Select a ducking level in the Duck on Page drop-down list.

Ducking level	Volume change during a paging input
none	No change
low	-6 dB
medium	-12 dB
high	-18 dB

## Setting ducking on 6-12 VDC input

When a signal is present at the 6-12 VDC input, the other SMART Audio system inputs are ducked the designated amount.

#### To set Duck on 6-12 VDC Input

- 1. Select the Paging tab.
- 2. Select a ducking level in the **Duck on 6-12v** drop-down list.

#### APPENDIX A

Customizing SMART Audio software with configuration software

Ducking level	Volume change during a 6-12 VDC input
none	No change
low	-6 dB
medium	-12 dB
high	-18 dB

# Setting microphone features

The SMART Audio configuration software Microphones tab enables you to do the following:

- Set a low battery microphone status light indicator.
- Enable or disable automatic shut off when charging.
- Set Button Disable mode.
- Enable or disable auxiliary input volume control from the microphone.
- Set the action of the soft button when pressed quickly.
- Set the action of the soft button when pressed and held.

#### IMPORTANT

After you upload the microphone settings to a control unit, you must download them from the control unit to each microphone by holding the volume up and volume down buttons for four seconds. For more information, see page 22.

## Setting the low battery indication

You can program the microphone status light to flash when the battery is low.

- At 10% battery charge the light will flash red twice per second.
- At 5% battery charge the light will flash red four times per second.

#### To set the low battery indication

- 1. Select the Microphone tab.
- 2. Select the Low Battery LED checkbox.

## Setting Automatic On and Automatic Off mode

This setting turns off microphones when they're placed in the microphone charging cradle and turns them on when they're removed.

# i NOTE

This is a global setting for all microphones in the system. You can also program a specific microphone for a specific response. For more information, see page 21.

#### To set Automatic On and Automatic Off mode

- 1. Select the Microphone tab.
- 2. Select the Auto off when charging checkbox.

# Setting Button Disable mode

Button Disable mode disables the buttons of the microphone, preventing users from changing volume settings. The Mute button isn't disabled with this feature.

## I NOTE

This is a global setting for all microphones in the system. You can also program a specific microphone for a specific response. For more information, see page 20.

#### To set Button Disable mode

- 1. Select the Microphone tab.
- 2. Select the Disable buttons on microphone checkbox.

# Setting auxiliary volume control from the microphone

You can use the microphone to increase the volume, decrease the volume or mute the most recently active auxiliary audio input device at the control unit without returning to your computer or the input device. For more information, see page 17.

Press the mute button on the microphone to take control of the volume for the auxiliary audio input device.

## i note

Auxiliary audio input refers to external input sources at the control unit, not at the microphone.

#### To set auxiliary volume control

- 1. Select the Microphone tab.
- 2. In the **Aux Volume Control** drop-down list, select **on mute** to enable the user to control auxiliary audio input device volume when the microphone is muted.

OR

Select **disable** to prevent the user from controlling auxiliary audio input device volume using the microphone.

# Setting auxiliary ducking

The auxiliary ducking settings enables you to reduce the volume of the auxiliary input devices at the control unit when speaking into the microphone.

This is helpful if you want to talk over a DVD/Blu-ray or other auxiliary audio input device at the control unit.

#### To set auxiliary ducking

- 1. Select the Microphone tab.
- 2. Select a ducking level in the Aux Ducking drop-down list.

Ducking level	Volume change during microphone transmission
none	No change
low	-6 dB
medium	-12 dB
high	-18 dB

# Setting soft button short response

You can designate a response for when a user presses the soft button on a microphone for less than four seconds. Typically this will be to mute auxiliary inputs at the control unit, but it can trigger a relay or have no action.

#### To set soft button short response

- 1. Select the Microphone tab.
- 2. Select **Aux Mute** in the **Soft Button Short** drop-down list to mute auxiliary inputs at the control unit.

OR

Select Relay to trigger a relay at the relay input.

OR

Select No Action for no response to quickly pressing the soft button.

## Setting soft button long response

You can designate a response for when a user presses the soft button on a microphone for more than four seconds. Typically this mutes auxiliary audio input devices at the control unit, but it can also trigger a relay or have no action.

#### To set soft button long response

- 1. Select the Microphone tab.
- 2. Select **Aux Mute** in the **Soft Button Long** drop-down list to mute auxiliary inputs at the control unit.

OR

Select **Relay** to trigger a relay at the relay input.

OR

Select No Action for no response to pressing the soft button for longer than four seconds.

# Setting audio input names and trims

Your SMART Audio system enables you to customize the name or label for any auxiliary audio input at the control unit. Each input can be named from one of the preset input labels or can be user defined.

The SMART Audio configuration software Input Names/Trims tab enables you to do the following:

- Change the name an audio input so that it's more recognizable in SMART Audio software.
- Set trims for audio inputs.

# Input names

Each input has a name that appears in the SMART Audio software volume controls.

#### To change the name of an auxiliary audio input

- 1. Select the Input Names/Trims tab.
- 2. Identify the input you want to rename.
- 3. In the drop-down list, select the name you want for that input. If you select **User Defined**, type a name for the input.

# Input trim settings

You can trim the audio inputs that arrive at the control unit to reduce their volume.

#### To change the trim of an auxiliary audio input device

- 1. Select the Input Names/Trims tab.
- 2. Select the input you want to trim, and then set the trim.

# System settings

The SMART Audio Configuration System Settings tab enables you to do the following:

- Set Auto Select.
- Set a trigger for the room module relay.
- Set a response for the room module relay.

# **Setting Auto Select**

When your SMART Audio system is set to Auto Select, the control unit automatically detects the active audio input. This enables the user with a microphone to change the volume of the active auxiliary input device without changing the volume of the other auxiliary input device.

For more information on changing the volume of the auxiliary input with the microphone, see page 17.

#### To set Auto Select

- 1. Select the System Settings tab.
- 2. Select the **Auto Select** checkbox to enable the microphone to only change the volume of the active audio input.

OR

Clear the checkbox to enable the microphone to change the volume of all audio input devices.

## **Relay settings**

You can install a relay at the room module to trigger a relay response on command, such as dimming lights, turning on an auxiliary input or sending a signal to another location.

The command to the relay trigger can be one of the following:

- By the teacher pressing the soft button of the microphone.
- By an input at the 6-12 VDC input.
- By either the soft button or by an input at the 6-12 VDC input.

The relay can provide one of the following:

- Latching response
- 200 ms pulse
- 400 ms pulse
- 600 ms pulse

#### About the relay

This is an SPDT relay with Not Open (N.O.), Not Closed (N.C.) and COM settings.

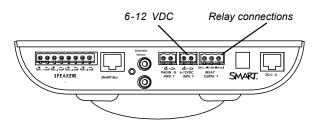
#### **Relay states**

A relay can be in an activated or deactivated state, as shown below.

State	Relay path
Activated	The N.O. contact is closed and the N.C. contact is open.
Deactivated	The N.O. contact is opened and the N.C. contact is closed.

#### **Room module connections**

There are relevant connections on the room module.



#### To set Relay Mode

- 1. Select the System Settings tab.
- 2. Select the preferred mode from the following table:

Setting	Result
Latching	Relay is active until the next pulse is received.
200 ms pulse	Relay is active for 200 milliseconds.
400 ms pulse	Relay is active for 400 milliseconds.
600 ms pulse	Relay is active for 600 milliseconds.

#### To set Relay Trigger

- 1. Select the System Settings tab.
- 2. For *Relay Trigger*, select **either** for both microphone soft button and 6-12 VDC input to trigger the relay.

OR

Select **mic** for microphone soft button only.

OR

Select 6-12v for 6-12 VDC input only.

## Ι ΝΟΤΕ

If you select 6-12v input as a relay trigger, the input can also duck audio volume on the same signal. For more information, see page 43.

# Appendix B 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 regulations (WEEE directive)

Waste Electrical and Electronic Equipment regulations apply to all electrical and electronic equipment sold within the European Union.

When you dispose of any electrical or electronic equipment, including SMART Technologies products, we strongly encourage you to properly recycle the electronic product when it has reached end of its life. If you require further information, please contact your reseller or SMART Technologies for information on which recycling agency to contact.

# Restriction of Certain Hazardous Substances (RoHS directive)

This product meets the requirements of the European Union's Restriction of Certain Hazardous Substances (RoHS) directive 2002/95/EC.

Consequently, this product also complies with other regulations that have arisen in various geographical areas, and that reference the European Union's RoHS directive.

# **Batteries**

Batteries are regulated in many countries. Check with your reseller to find out how to recycle used batteries.

There are special regulations that must be met when shipping a product that has a lithium ion battery packaged with the product or shipping a lithium ion battery. When returning a SMART Technologies

product which contains a lithium ion battery or returning a lithium ion battery, call SMART Technologies RMA for information on these special shipping regulations:

- 1.866.518.6791, Option 4 (U.S./Canada)
- 1.403.228.5940 (all other countries)

# Packaging

Many countries have regulations restricting the use of certain heavy metals in product packaging. The packaging used by SMART Technologies to ship products complies with applicable packaging laws.

# **Covered electronic devices**

Many U.S. states classify monitors as covered electronic devices and regulate their disposal. Applicable SMART Technologies products meet the requirements of the covered electronic devices regulations.

# China's Electronic Information Products regulations

China regulates products that are classified as EIP (Electronic Information Products). SMART Technologies products fall under this classification and meet the requirements for China's EIP regulations.

# U.S. Consumer Product Safety Improvement Act

The United States has enacted the *Consumer Product Safety Improvement Act* which limits the lead (Pb) content in products used by children. SMART Technologies is committed to complying with this initiative.

## **SMART** Technologies

smarttech.com/support smarttech.com/contactsupport