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# Control Functionality Specification

The AV Technology Partner You Need.

## Overview

This document will serve to define the control functionality of the Farmers Insurance Mercer Island VTC Room audiovisual control system.

## Input/Output Assignments

### Extron DTP Crosspoint 84 – 8x4 Matrix Switcher

Inputs		Outputs	
1	Polycom Codec (HDMI 1 Out)	1	Polycom Codec (HDMI In)
7	Laptop 1 (HDMI Out)	3	Epson Projector (HDMI In)
8	Laptop 2 (HDMI Out)	Audio 1	Biamp Tesira (In 11)

### Epson PowerLite Pro G7500U - Projector

Inputs		Outputs	
HDMI	Extron Switcher (Out 3)		

### Polycom RealPresence Group 310 - Codec

Inputs		Outputs	
HDMI	Extron Switcher (Out 1)	HDMI 1	Extron Switcher (In 1)
Camera	Polycom EagleEye IV	Audio	Biamp Tesira (In 12)
Mic	Biamp Tesira (Out 3)		

### Biamp TesiraFORTE – Audio DSP

Inputs		Outputs	
1 – 10	Microphones	1 – 2	Room Speakers
11	Extron Switcher (Audio Out 1) – Program	3	Polycom Codec (Mic In)
12	Polycom Codec (Audio Out)		
POTS	Dialer		

## Control System Port Assignments

### AMX NX-2200 – Master Controller

Port	Device
RS-232 1	Epson Projector
RS-232 1	Extron Switcher
RS-232 1	Polycom Codec
Relay 1/2	Camera Lift
Relay 3/4	Projection Screen

### LAN via Network Switch

Port	Device
LAN	Biamp DSP
LAN	AMX Controller
LAN -232 1	AMX Touchpanel

## AMX Device Assignment

The integrator is responsible for setting the device ID's on all AMX equipment. CCI will use the following device ID's (unless notified otherwise prior to start of control programming):

ID	Device
10001	AMX MST-1001 Touchpanel

## DSP Programming

The integrator is responsible for programming the DSP system. CCI will use the following presets and tags (unless notified otherwise prior to start of control programming):

### Presets

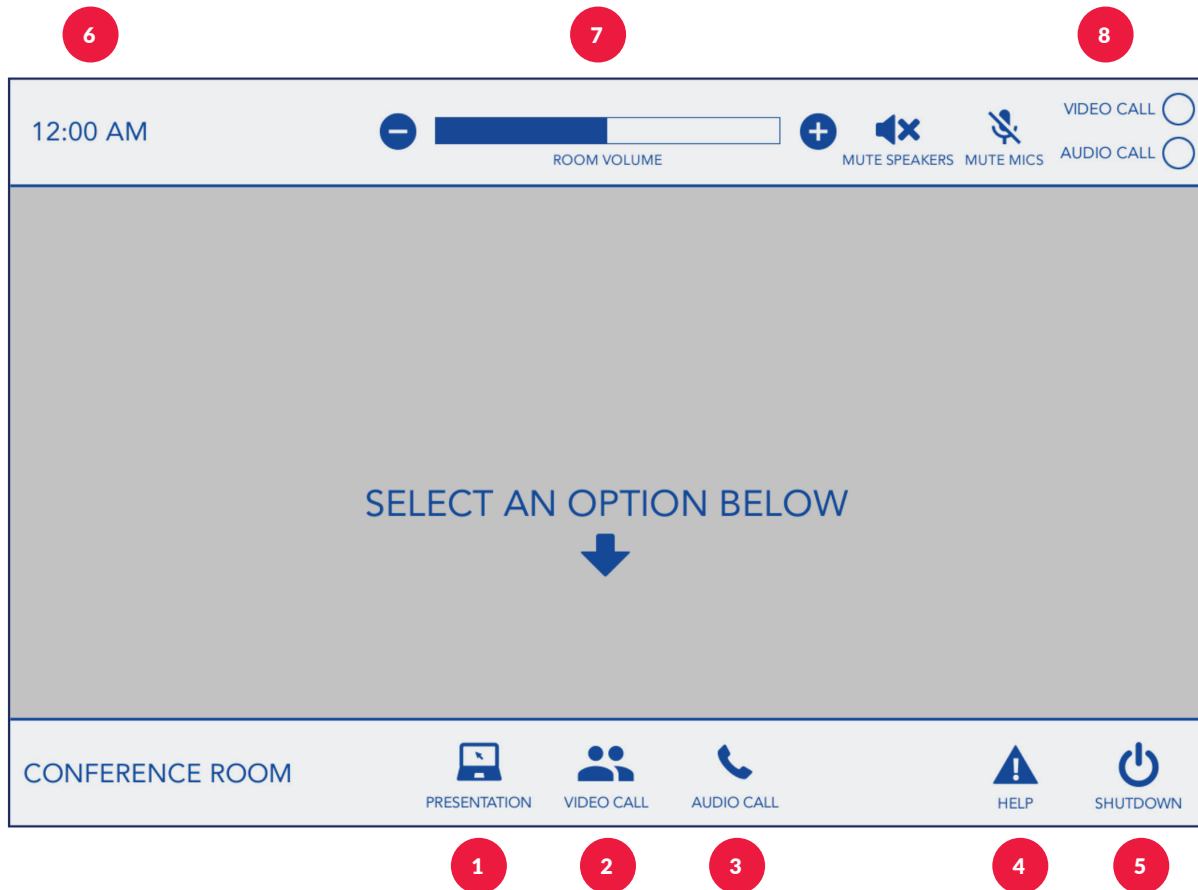
Preset	Description
1001	Recall default levels set for volume controls in the DSP program.

## Tags

Volume	Tag	Description
Room	masterVol	Overall Room Volume
Program	programVol	Source Volume (from Switcher Out)
Mic	micVol	Microphone Volume
ATC RX	atcRxVol	Dialer Incoming Audio Volume
ATC TX	atcTxVol	Dialer Outgoing Audio Volume
VTC RX	vtcRxVol	Codec Incoming Audio Volume
VTC TX	vtcTxVol	Codec Outgoing Audio Volume
Privacy	Privacy	Privacy State for ATC and VTC Calls
Dialer	Dialer	Analog Dialer

## Main Screen

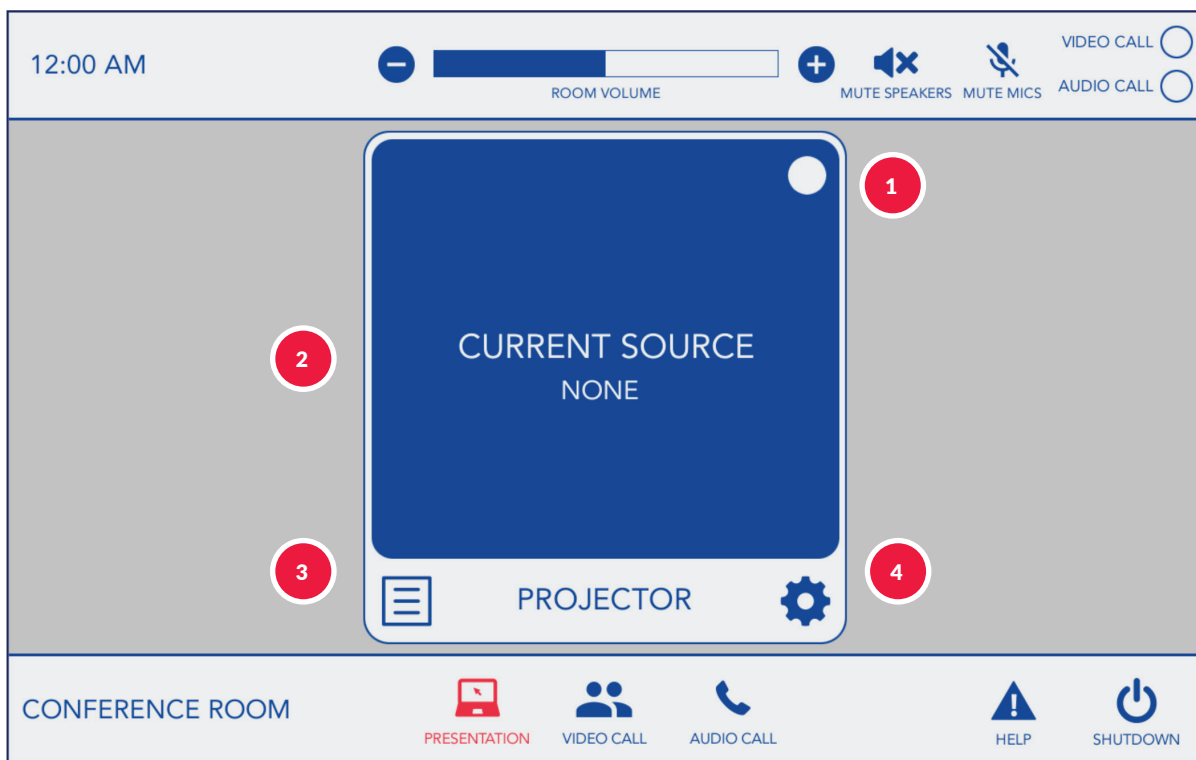
The Conference Room system allows for the following operations: room presentations, video calling and audio calling. The sample screenshot below shows the main interface (before any options are selected).



- |   |   |
|---|---|
| <p><b>1</b> Select this option if you would like to make a presentation in the room.</p> <p><b>2</b> Select this option if you would like to make a video call.</p> <p><b>3</b> Select this option if you would like to make an audio call.</p> <p><b>4</b> Select this option if you require assistance from the support desk.</p> | <p><b>5</b> Select this option when you are finished using the room and would like to shut down the system.</p> <p><b>6</b> Press and hold the time for 2 seconds to enter "tech mode" for advanced functionality.</p> <p><b>7</b> Controls allowing for the adjustment/muting of the primary room level as well as muting the room microphones (privacy).</p> <p><b>8</b> Call indicators will be lit if there is an active video or audio call in progress.</p> |
|---|---|

## Making a Presentation

Upon selecting the “Presentation” option on the bottom bar, the center area will be populated with a “widget” that represents the state and functionality available for the room projector in Presentation Mode. Additional details on the features available are provided below.



- 1 Feedback indicator will be lit if the projector is powered on. While the projector is warming or cooling, text will also be shown in this area, indicating how much time remains until the projector has finished warming or cooling. Note that control of the projector will not be available while warming or cooling.
- 2 The text in this area will reflect the name of the source that is currently being routed to the projector.
- 3 Select this option to bring up a list of sources available to route to the projector.
- 4 Select this option to bring up a settings page to allow for manual control of certain projector functions.

## Selecting a Source

Upon selecting the “Sources” option on the bottom left of the projector widget, the center area will be populated with a list of sources that are available to route to the projector. Additional details on the features available are provided below.

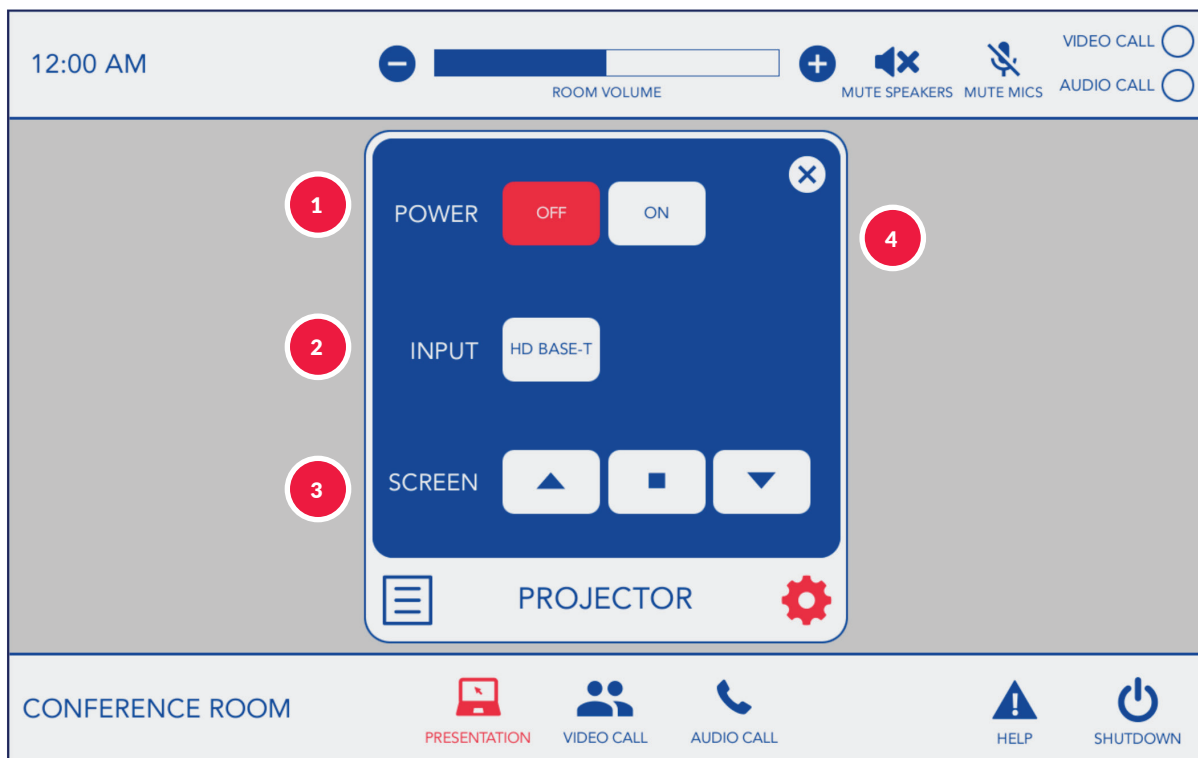


**1** Selecting any source from the list will close the source list page, route the source to the projector and turn on the projector (if it is not currently on already). Selecting “None” will close the source list page and clear the current source going to the projector. Selecting “None” will not turn the dis projector play on or off. *Note the sources shown above are examples and may differ from room to room.*

**2** Press to close the source list page.

## Controlling the Projector

Upon selecting the “Settings” option on the bottom right of the projector widget, the center area will be populated with options allowing for manual control of certain projector functions. Additional details on the features available are provided below.

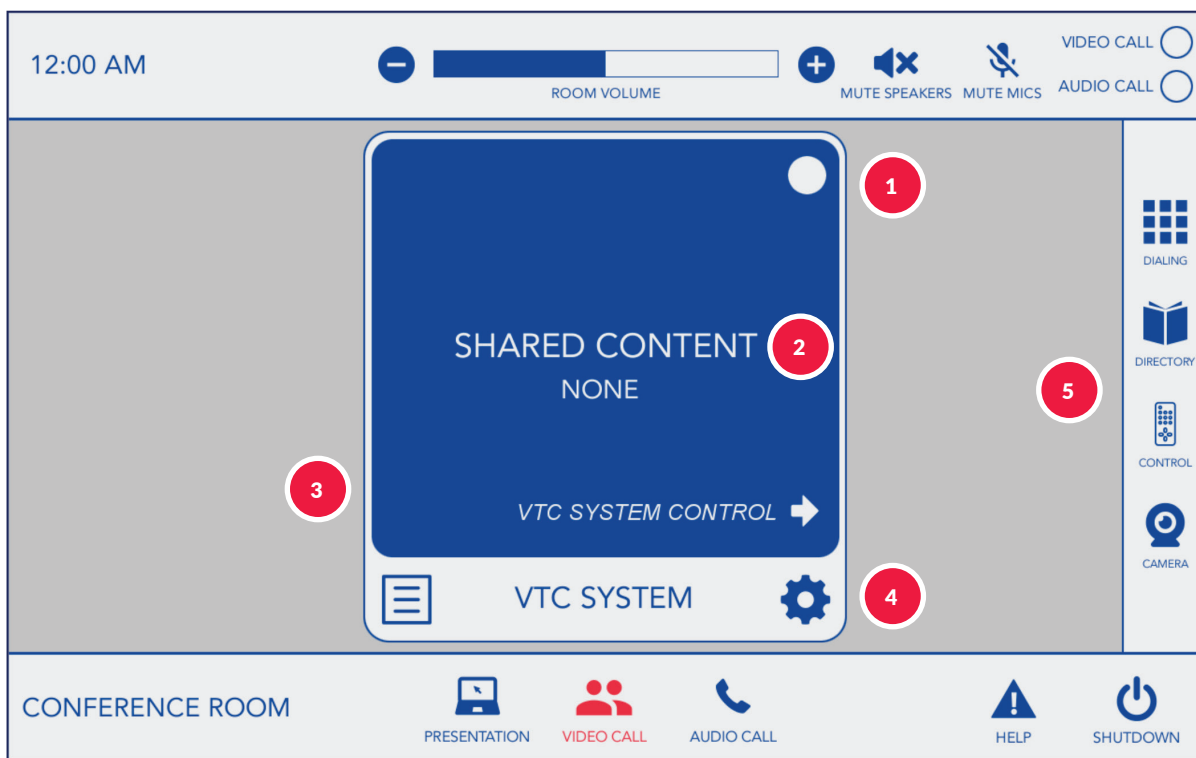


- 1 Controls allowing for manually turning the projector on or off.
- 2 Controls allowing for manually selecting the current projector input. *Note the inputs shown above are examples and may differ from room to room.*
- 3 Controls allowing for manually raising or lowering the projection screen.
- 4 Press to close the settings page.



## Making a Video Call

Upon selecting the “Video Call” option on the bottom bar, the center area will be populated with a “widget” that represents the state and functionality available for the VTC system in Video Call mode. The far right of the panel will display a list of options to select from in Video Call mode. Additional details on the features available are provided below.



- 1 Projector power feedback indicator, as described earlier.
- 2 The text in this area will reflect the name of the source that is currently being routed to the codec and currently being presented to the far end.
- 3 Select this option to bring up a list of sources available to route to the codec.
- 4 Select this option to bring up a settings page to allow for manual control of certain projector functions, as described earlier.
- 5 This area contains a list of additional options available in Video Call mode.

## Dialing and Managing Video Calls

Upon selecting the “Dialing” option on the right side of the panel, the center area will be populated with options allowing for manually dialing and managing calls from the codec. Additional details on the features available are provided below.



- 1 The codec is capable of maintaining four simultaneous calls. Each call listed in the call manager has a text area and a “hang up” button. The text area will be populated with information and status about the line. If a call is active on a particular line, the “Hang Up” button will be illuminated. Pressing the “Hang Up” button on an active call will disconnect the call.
- 2 Dialing controls allowing for entering a custom number as well as performing actions such as dialing a call and placing the codec into auto answer mode (which will automatically answer all incoming calls). The keypad on this page contains only standard numerical digits. The “Keyboard” button will bring up a full QWERTY keyboard should you need to enter additional characters not included on the standard keypad.
- 3 Press to close the Dialing page.

## Video Call Directory Dialing

Upon selecting the “Directory” option on the right side of the panel, the center area will be populated with options allowing for navigating and placing calls using the video call directories available. Additional details on the features available are provided below.



- 1 Select an option to display results from either the local address book saved on the codec itself or the global corporate directory.
- 2 This area will contain name and number fields for the entries found for the selected phonebook.
- 3 Select this option to bring up a keyboard allowing for entry of text to use for searching the selected phonebook for matches.
- 4 Select this option to bring up a keyboard allowing for entry of text to use for searching the currently selected folder for matches.
- 5 Select this option to clear the current search results and refresh the listings with all entries in the currently selected phonebook.
- 6 Once an entry has been chosen, select this option to dial the number associated with the selected entry.
- 7 Press the up/down buttons to page through the list of entries.
- 8 Press to close the Directory page.

## Controlling the Codec

Upon selecting the “Codec Control” option on the right side of the panel, the center area will be populated with options allowing for manual control of the codec for use while navigating through the codec’s on-screen display menus. Additional details on the features available are provided below.



**1** Controls allowing for manual control of the codec for use while navigating through the codec’s on-screen display menus.

**2** Press to close the codec controls page.

## Controlling the Camera

Upon selecting the “Camera Controls” option on the right side of the panel, the center area will be populated with options allowing for manual control of certain camera functions. Additional details on the features available are provided below.



- 1 Select to control either the near end or far end camera.
- 2 Controls allowing for manually adjusting the camera pan, tilt, zoom and focus.
- 3 Select a preset to recall stored pan, tilt, zoom and focus settings. Press and hold a preset for 3 seconds to store the current pan, tilt, zoom and focus settings to a preset slot. The touchpanel will beep twice to indicate that the preset has been saved.
- 4 Controls allowing for manually raising and lowering the camera lift.
- 5 Press to close the camera controls page.

## Making an Audio Call

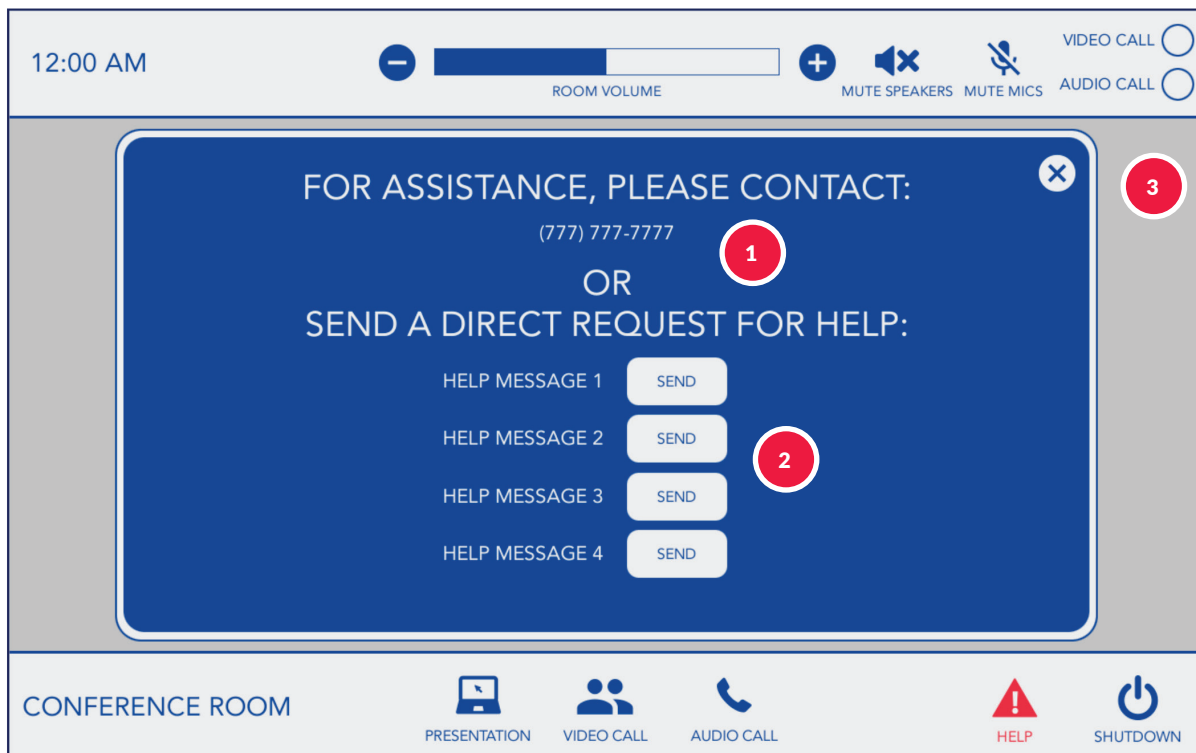
Upon selecting the “Audio Call” option on the bottom bar, the center area will be populated with options allowing for dialing an audio call. Note that an audio call is not considered a separate mode (as are Presentation and Video Call). This means that an audio call can be placed while already in Presentation or Video Call mode. Additional details on the features available are provided below.



- 1 The system has been configured to allow for 5 speed dial contacts (set up by the room administrator). Selecting a speed dial will recall the number stored for that contact and display it in the dialing text area on the top right. Once recalled, you may choose to dial the call or perform some other action, as required. *Note the speed dial names shown above are examples and may differ from room to room.*
- 2 Dialing controls allowing for entering a custom number as well as performing actions such as dialing a call, ending a call, and more.
- 3 Press to close the audio call page.

## Requesting Help

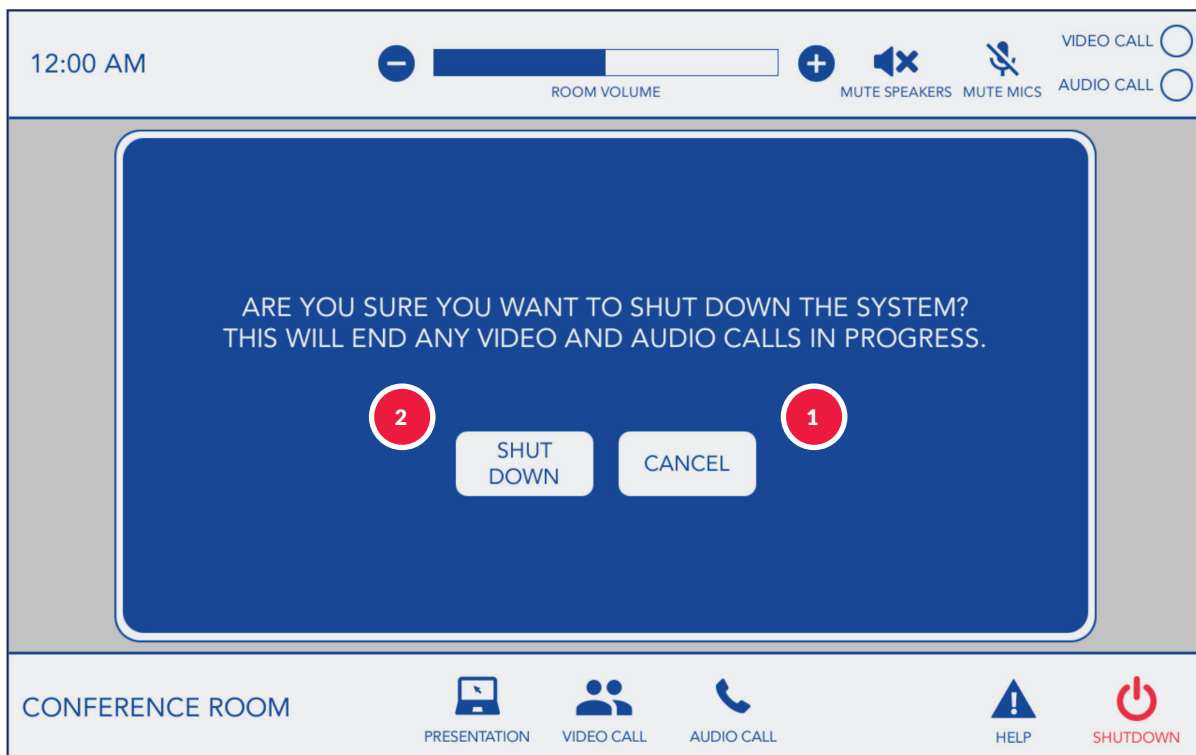
Upon selecting the “Help” option on the bottom bar, the center area will be populated with information and options for requesting support desk assistance. Additional details on the features available are provided below.



- 1 The top area shows the information available for directly contacting the support desk. *Note the speed dial names shown above are examples and may differ from room to room.*
- 2 Buttons are also provided to directly send a request for help through the control system to the enterprise room management software used by the organization. If the issue you are having corresponds to one of the pre-established help request messages, pressing the corresponding button will send the request to the support desk. *Note the help messages shown above are examples and may differ from room to room.*
- 3 Press to close the help page.

## Shutting Down the System

Upon selecting the “Shutdown” option on the bottom bar, a popup will be shown requesting confirmation prior to shutting down the system. Additional details on the features available are provided below.



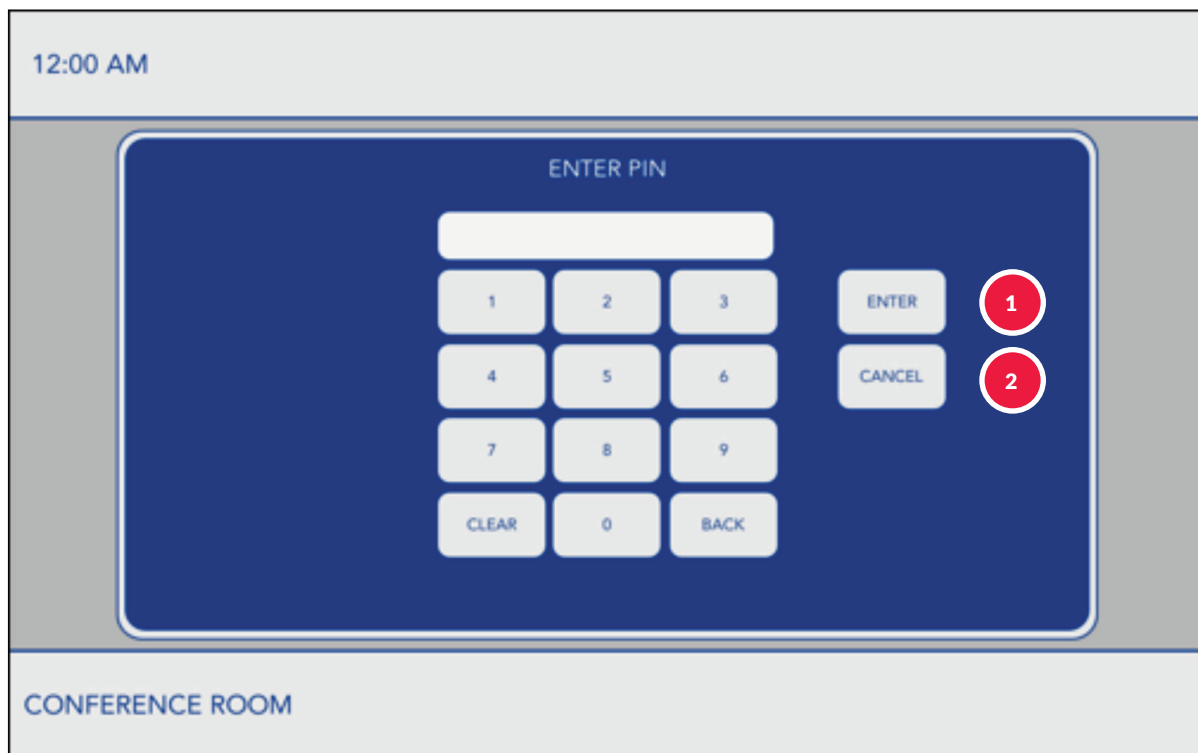
- 1 Selecting “Cancel” will close the popup with no changes to the system.
- 2 Selecting “Shutdown” will turn off the room projector, clear the current source going to the projector, hang up all video and audio calls, mute the room speaker and microphones, close all popups return the touchpanel to the start state shown on the first page of this guide.



## Advanced Features

### PIN entry

Advanced functionality is provided for within a PIN-protected “tech” page. Upon pressing and holding the clock on the upper left side of the panel, you will be presented with a page containing PIN-entry functionality. Additional details on the features available are provided below.

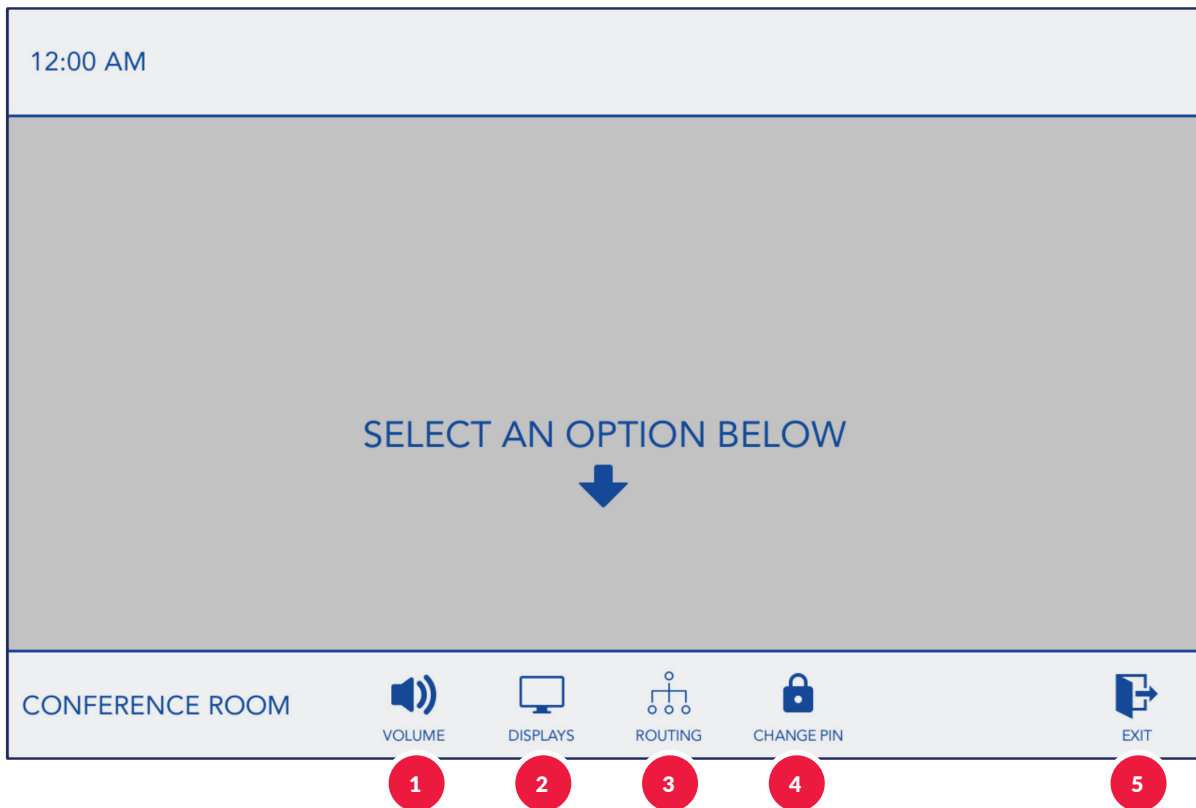


**1** Upon entering the correct PIN and selecting “Enter”, you will be taken to the main “tech” page. Should you enter an incorrect PIN, a message will be shown instead and you will have to re-enter the PIN.

**2** Selecting “Cancel” will close the PIN entry page and return to the previous page.

## Technician's Page

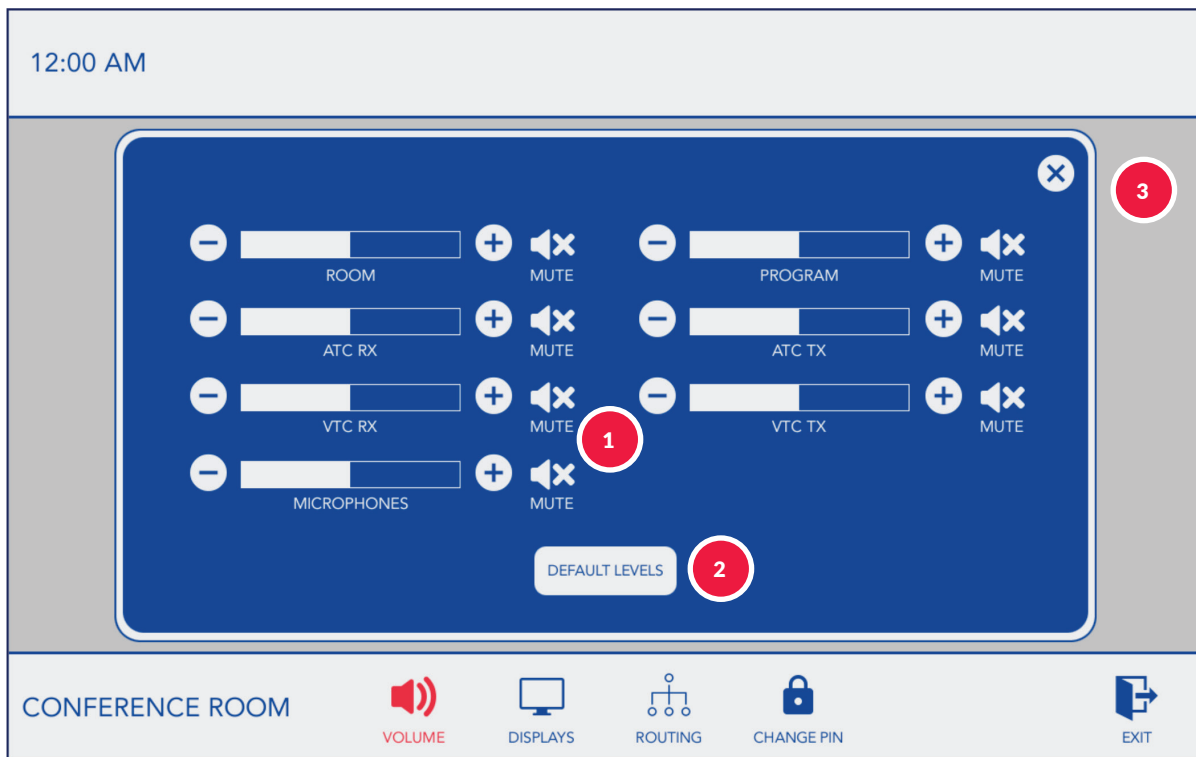
Once the correct PIN has been entered on the PIN entry page, you will be shown the main "tech" page which contains additional options for advanced system functionality. Additional details on the features available are provided below.



- 1 Select this option to show the "Advanced Volume" popup, allowing for manual control of the various room volume levels.
- 2 Select this option to show the "Advanced Displays" popup, allowing for manual control of the room projector.
- 3 Select this option to show the "Advanced Routing" popup, allowing for manual switcher routing.
- 4 Select this option to show the "Change PIN" popup, allowing you to change the saved Pin needed for entry to the "tech" page.
- 5 Select this option to close the "tech" page and return to the main page.

## Advanced Volume

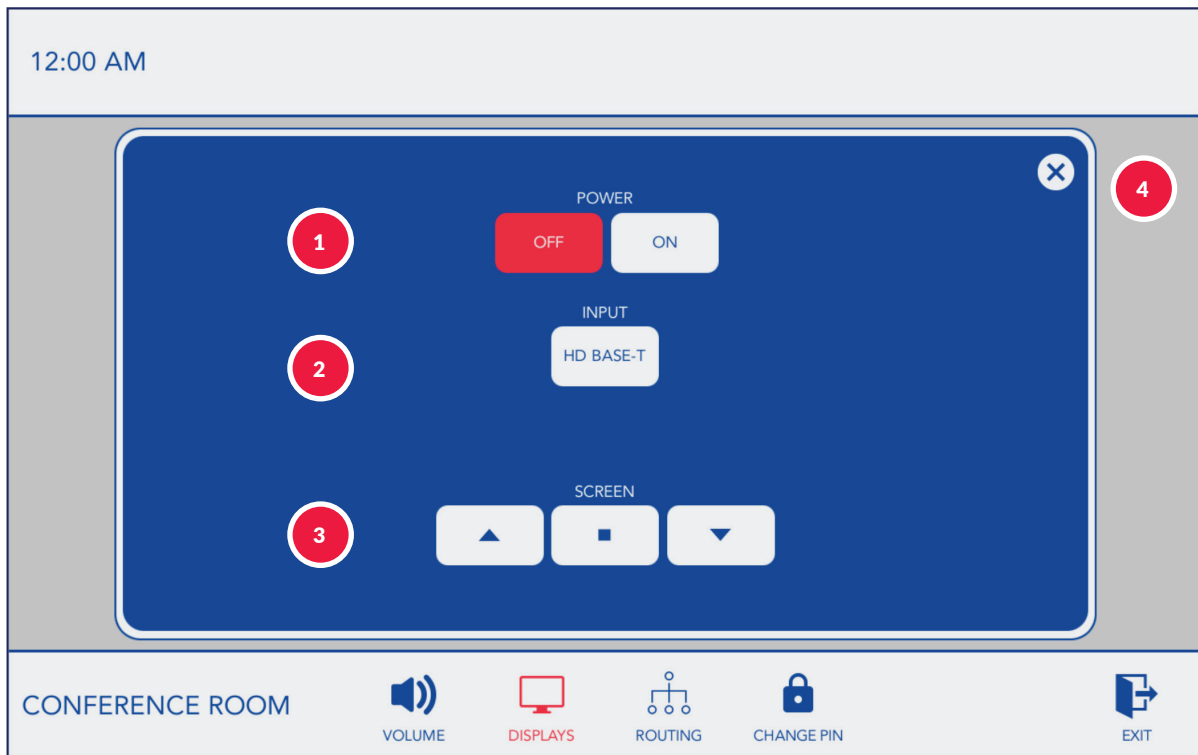
Upon selecting the "Volume" option on the bottom bar, the center area will be populated with controls allowing for adjusting and muting the volume levels for multiple volume elements used in the system. Additional details on the features available are provided below.



- 1 Controls allowing for level adjustment and muting of individual volume elements.
- 2 Select "Default Levels" to automatically recall the default levels and mute states for all volume elements in the system.
- 3 Press to close the "Advanced Volume" page.

## Advanced Displays

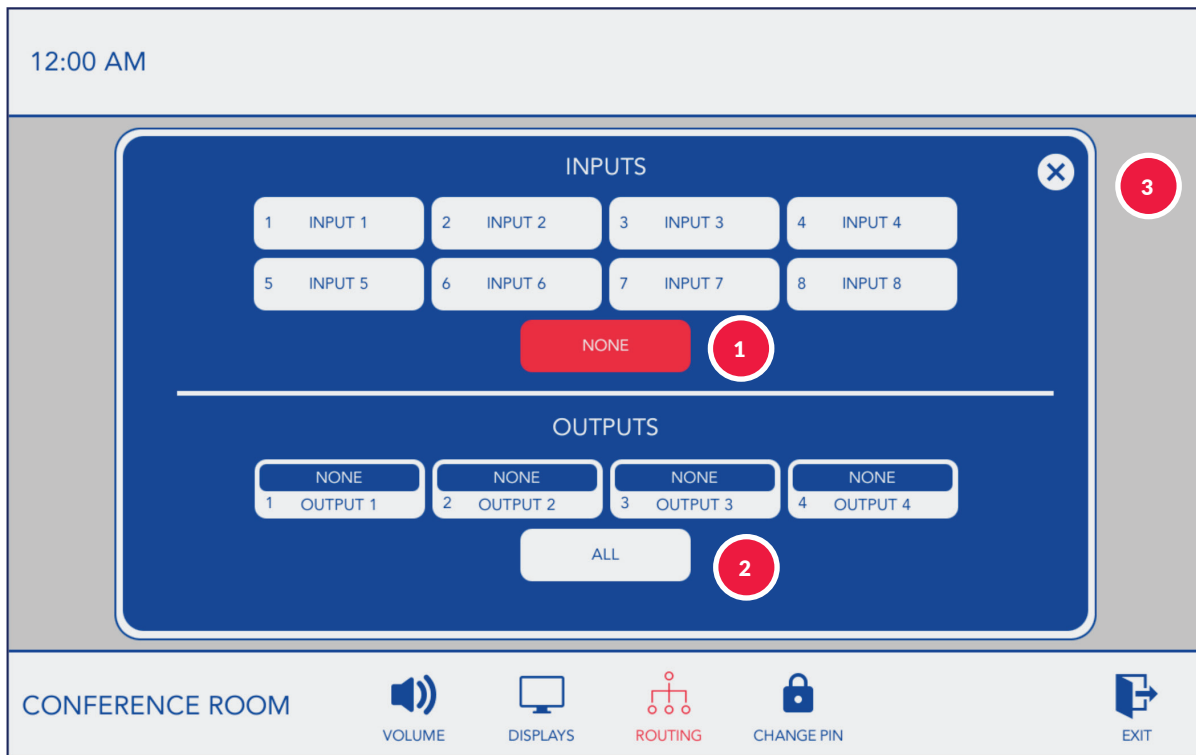
Upon selecting the “Displays” option on the bottom bar, the center area will be populated with options allowing for manual control of certain display functions. Additional details on the features available are provided below.



- 1 Controls allowing for manually turning the projector on or off.
- 2 Controls allowing for manually selecting the current projector input. *Note the inputs shown above are examples and may differ from room to room.*
- 3 Controls allowing for manually raising and lowering the projection screen.
- 4 Press to close the “Advanced Displays” page.

## Advanced Routing

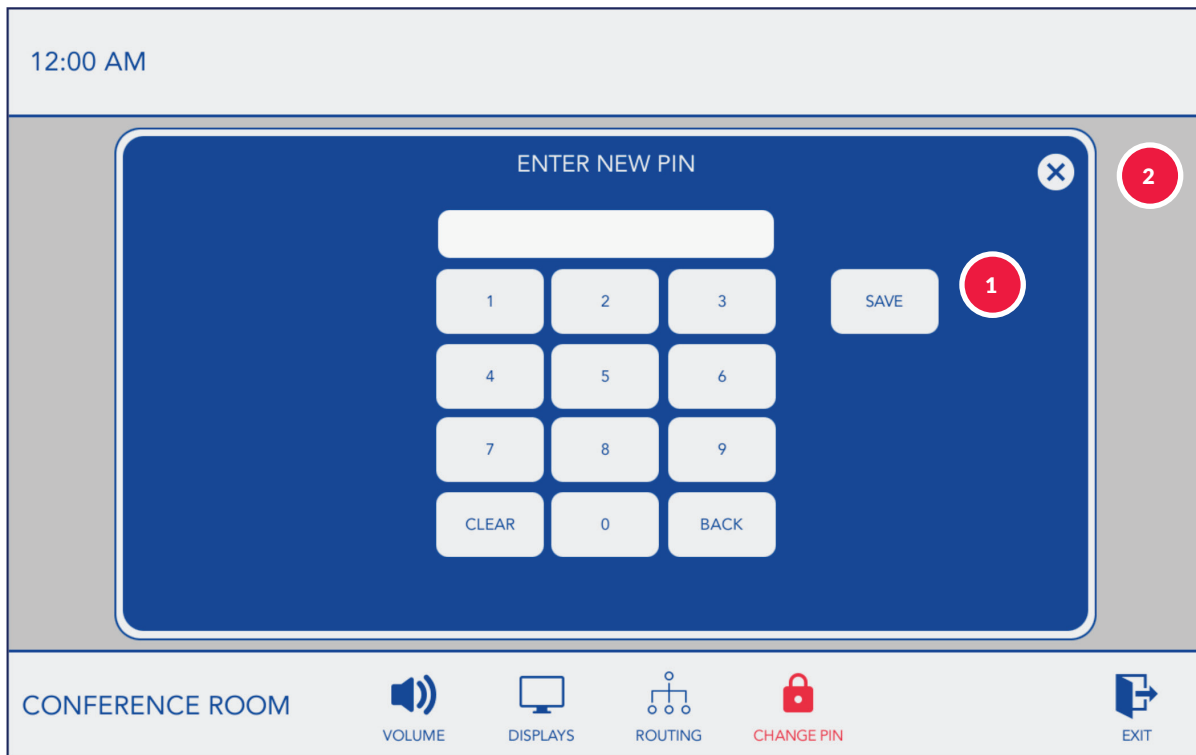
Upon selecting the “Routing” option on the bottom bar, the center area will be populated with options allowing for manual switcher routing. Additional details on the features available are provided below.



- 1 Select an input to set as the current selection. *Note the inputs names shown above are examples and may differ from room to room.*
- 2 Select an output to manually route the selected input to the selected output. *Note the output names shown above are examples and may differ from room to room.*
- 3 Press to close the “Advanced Routing” page.

## Change PIN

Upon selecting the “Change PIN” option on the bottom bar, the center area will be populated with options allowing you to change the PIN required to gain entry to the “tech” page. Additional details on the features available are provided below.



- 1 Upon entering a new PIN and selecting “Save”, the entered PIN will be stored for future access to the “tech” page. *Note, a “backdoor” PIN is also saved which cannot be changed. The “backdoor” PIN exists in case the primary PIN is changed and forgotten. Either PIN can be used to gain entry to the “tech” page.*
- 2 Press to close the “Change PIN” page.



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