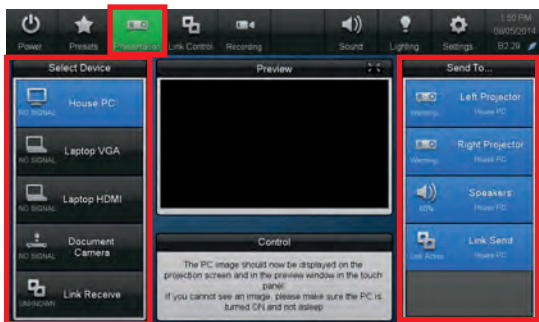


Graphical User Interface-(GUI)

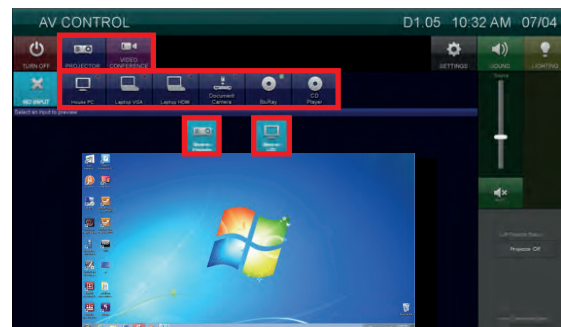
Southern Cross University's AV rooms have a variety of user interfaces, so gaining the understanding of AV control system concepts will assist when moving from room to room, that have very different graphical user interface design.

Different GUI's (Graphical User Interface) provide the same AV mode functions.

On this very different looking interface, the AV mode is called 'Presentation' however the same principle applies, there are a selection of presentation devices available on the left, and the choice of which projector to send it to on the right.



This design looks different to the first, however provides the same functionality (as most GUI design does).



Along with different GUI's, there are some differences based on the capability of the room, as some rooms do not have all presentation devices installed.

AV Control Systems

AMX

The Audio Visual equipment is controlled much like a home entertainment system's is controlled with a remote control. In Southern Cross University rooms, the equipment is controlled by AMX via a Touch panel system. AMX is a vendor brand that essentially acts as a glorified remote control, serially controlling all of the room's devices, such as projectors, audio and presentation devices, in macro sequences so that when a user touches a button on the touch panel to send the presentation to the screen, a sequence is initiated that starts the projectors, sets the input to the projectors for the House PC, and changes the audio routing to come from the House PC. In every mode, a pre-programmed sequence is initiated with a touch of a button on the touch panel.

A touch panel with a GUI, controls the AMX systems. At Southern Cross University, there are several different user interface designs on the touch panels, which all essentially do the same types of operations, however due to the complexity with the different looking interfaces, we will demonstrate these differences, and the similarities with a focus on the concepts of using the AMX touch panels.

Some of the earlier designs have a separate interface for mode selection, which is presented after starting the system, a separate 'Mode Selection' page will appear. Most multi-use systems have a type of mode selection, which will provide access to the different modes available to the room.

Room Size

Small Room AV-In the smaller teaching spaces, the AV equipment is usually basic, with only one presentation screen. In these spaces the AV control systems are very basic, with the touch panel interface providing a simple design that does not have preview. There are simple commands to send the House PC, laptop or visualiser to the screen.

Large Room AV-Large room AV control is designed to incorporate videoconferencing and lecture recording. These systems are more complex with options for 'Modes' on the touch panel interface.

Audio Visual Room Concepts

Modes

A function of the AMX control systems, is to include different modes to change the rooms configuration, Most notably to change the system from a stand alone presentation room, to a fully functional collaborative videoconference room.

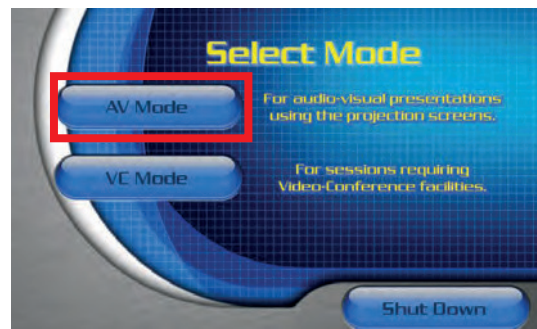
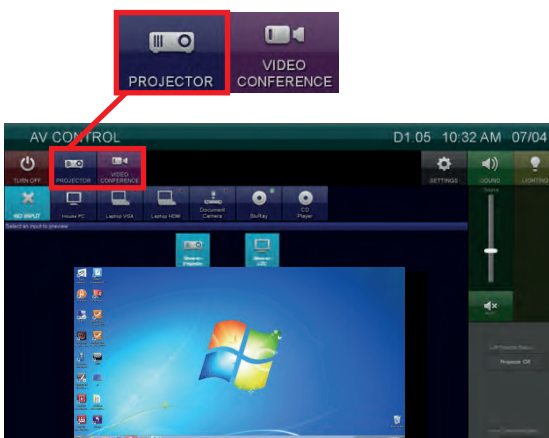
In the newer designs, the modes are selected by choosing a 'Tab' at the top of the page. This looks similar to using a web page tab. In these systems the nomenclature has been changed to 'Projector' and 'Videoconferencing'. This simply reflects that in 'Projector' only mode, you are using just the projectors and in 'Videoconferencing', you are adding videoconferencing to the session.

AV/Projector Mode

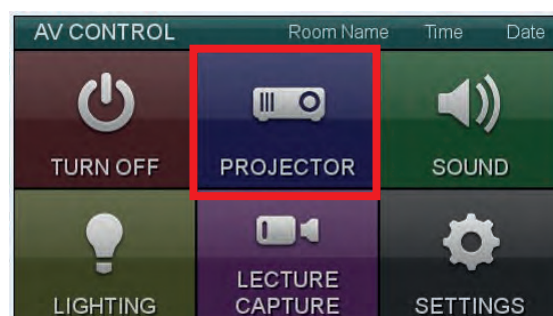
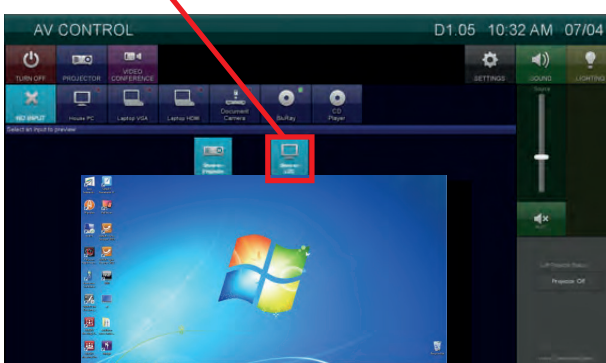
All of the larger teaching spaces and some meeting rooms are equipped with two screens providing the ability to show two separate presentation devices at once, e.g. the House PC with a Power Point presentation on one screen, and the visualiser (or document camera) on the other. In some of the touch panel GUI designs, this is called 'AV mode', others it is called 'Projector'.

There is no real difference between 'Project Mode' and 'AV Mode'. This is just the nomenclature that has been used when programming the system, and refers to the use of the system to only show presentations locally (not via videoconference). AV/Projector mode, can also be used to record lectures, however currently, it is only possible to record one presentation source.

Examples of AV/Projector Mode.



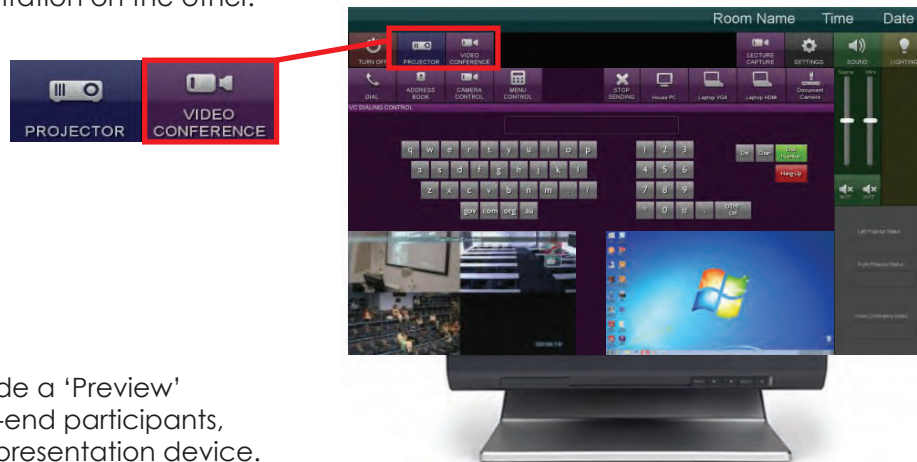
Some systems may include an LCD screen instead of a second projector.



Audio Visual Room Concepts

Videoconferencing Mode

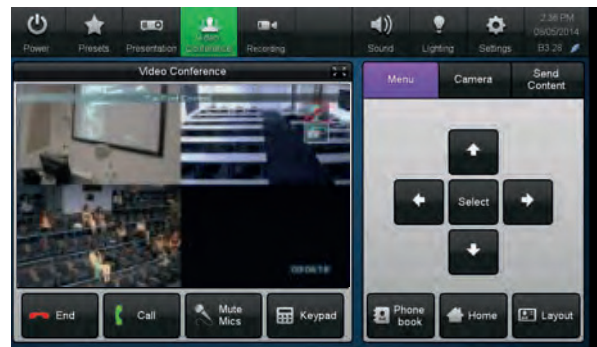
Other than the obvious ability to use videoconferencing, the main difference between this mode and the AV/Projector mode, is the limitation of only being able to show one presentation at a time. The other screen is used to display the videoconference participants, and is set up that way so that the class at the far side (other end of the videoconference) will see the image of the lecturer on one screen, and the presentation on the other.



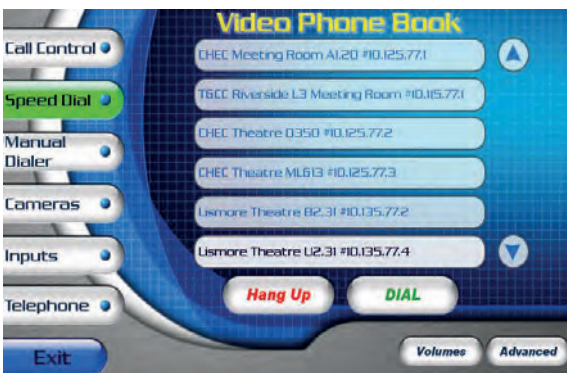
Some interfaces provide a 'Preview' of the video of the far-end participants, and a preview of the presentation device. This reflects what is seen on the screens.



Others provide independent preview, Preview of the videoconference, and a preview of the presentation, on different pages of the touch panel interface.



While some, provide no preview at all.



However all will have the videoconference video image (participants) on one screen, and the display of the presentation (eg. House PC Power Point) on the other screen.

Audio Visual Room Concepts

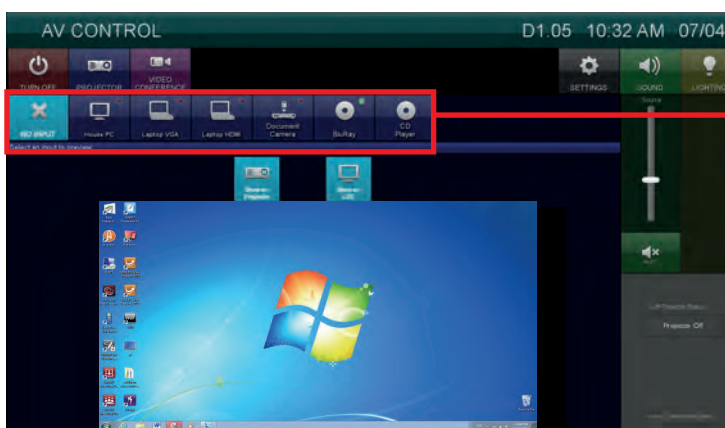
Preview

Preview is a function of the AMX systems, and allows some special functionality on the touch panel interfaces. This allows the user to preview the presentation on the touch panel, as well as acting as a monitor for the computer, visualiser or other presentation devices.

For the most part the preview acts as a computer screen, allowing the user to be able to see what they are presenting without having to turn around and look at the projector or LCD screens. This function also useful for users needing to edit the presentation on the fly, or set up a presentation before sending it to the screens,

Most touch panel interface design in larger spaces have this functionality, however is accessed slightly different on each.

Presentation preview buttons

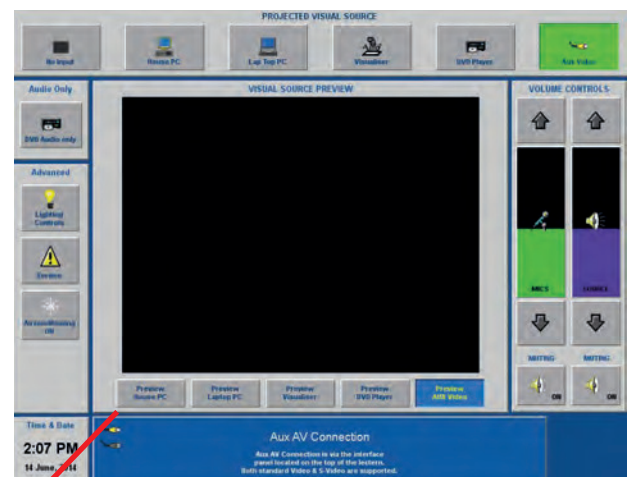
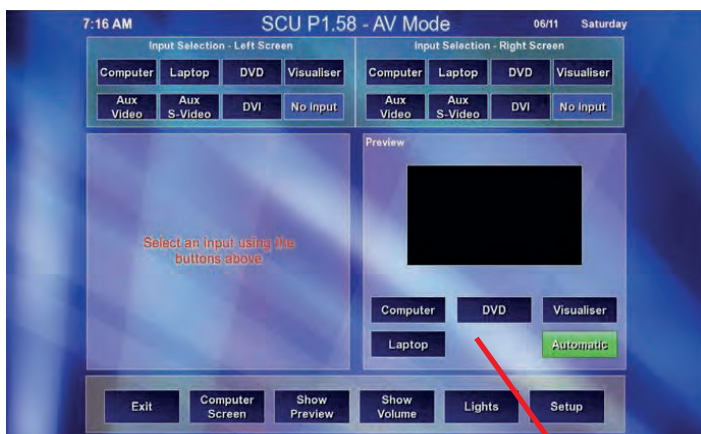
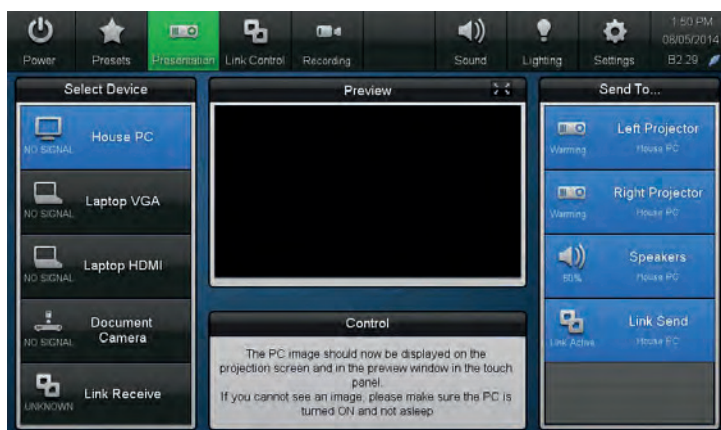


In newer systems, selecting a presentation device button will preview the presentation before it is shown on the projector screens. Selecting 'Left Projector' or 'Right Projector' (or LCD in some rooms) will send the presentation to the screens.

The purpose of this is to preview the presentation to ensure the presentation is ready to be viewed by the students, or if there is a correction to be made, it can be edited before being sent to the screen.

If a presentation is already being sent to the screens, it can be removed by selecting the 'No Input' button, then selecting the projector or LCD that the presentation is on.

As already mentioned, some systems may have a different GUI, however provide the same type of functionality. The image on the left looks very different however will provide the same preview capability.



Other examples of preview on older style interfaces.

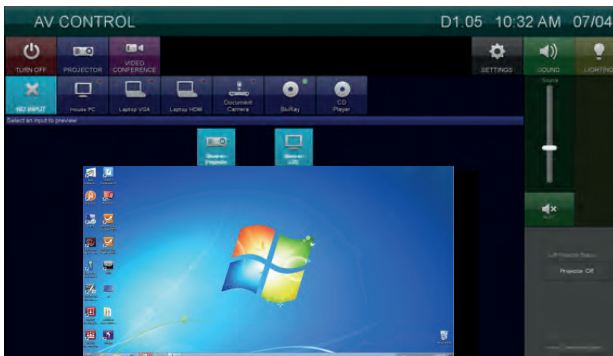
Audio Visual Room Concepts

Preview cont

The other function of the preview window, is in order for the lecturer to see and expanded image of the preview of the presentation.

Touching the image of the computer screen will expand the image of the desktop with the soft pad of the finger, will expand the image to a larger version, and touching it again will shrink it back.

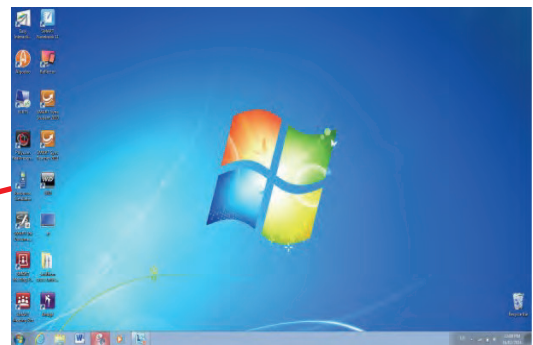
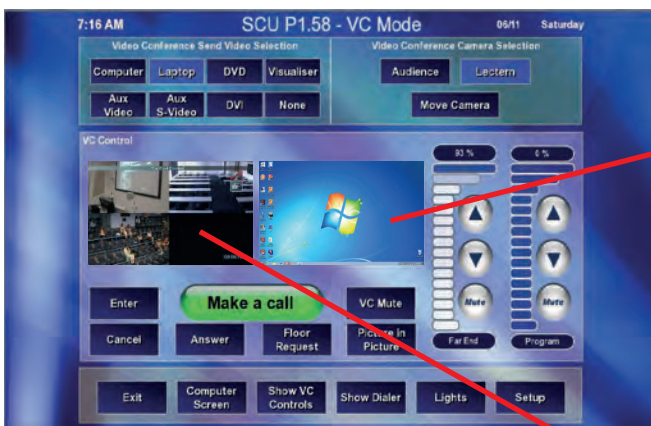
Touching the preview window with the pad of your finger will expand the preview of the presentation device.



Expanded preview. Touching again will contract the window.



In videoconference mode, there are two options to expand, one is the presentation, the other is the video of the attendees in the conference.



Some systems will expand to full screen, as others will only expand part of the screen, however they all behave the same, touching to expand, and again to contract it back into place.

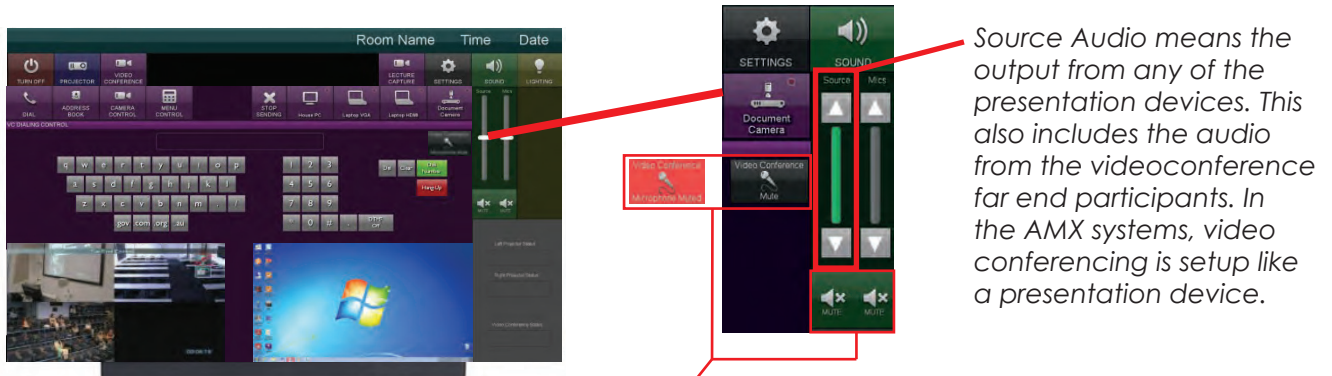
Note: The touch panel is not a touch controlled PC screen, and still requires a keyboard and mouse to use the computer.

Audio Visual Room Concepts

Audio

Audio in the systems works fairly intuitively, however with some limitations.

The microphone is used for room reinforcement as well as videoconferencing in most cases, however the level controls for the room volume are separate in most rooms.



Source Audio means the output from any of the presentation devices. This also includes the audio from the videoconference far end participants. In the AMX systems, video conferencing is setup like a presentation device.

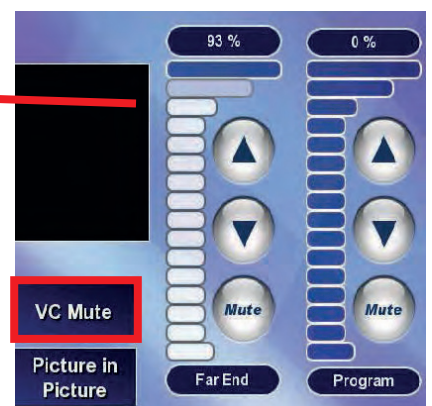
There are two types of muting. The green buttons at the buttons mute the microphone in the room i.e. room reinforcement through the speakers and the source audio.

The 'Video Conference' mute is a separate mute control that stops the microphone going to the far side. This is useful for when the lecture is being delivered from the far side, muting the mic can assist in keeping the noise down in the lecturers room. When muted, it turns red, when un-muted it is grey.

All interface design has similar audio control, however there are some differences in the nomenclature.



'VC Mute' on this system works the same as the one above.



On this system, the source audio is called 'Program', and is the audio levels of all the in-room audio including the room mic. 'FarEnd' refers to the audio levels from the videoconference.

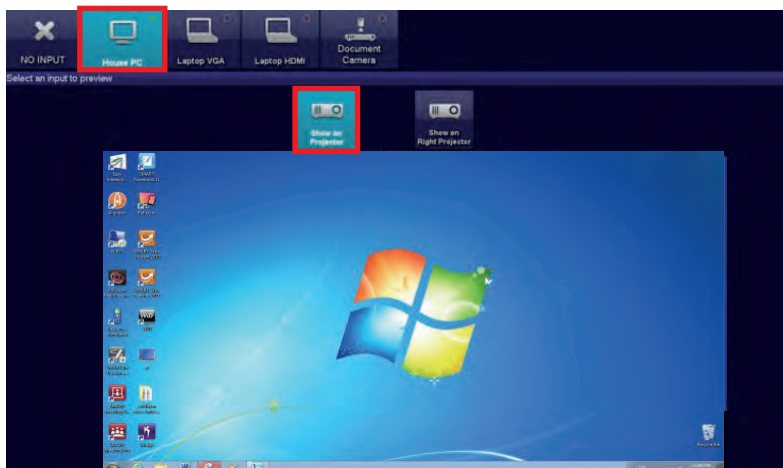
Audio Routing

Audio follows the devices sent to the projectors or LCD. This simply means when selecting a presentation device such as the 'House PC' and then selecting a Projector (or LCD in rooms equipped), the audio from the house PC will be available to send out the speakers, until another sound capable device i.e. 'Laptop HDMI', is sent to a projector. At that point, the 'Laptop HDMI' will take over the audio.

With this in mind, if you require to audition some music or video clip, it must be sent to a projector first to be heard. Also, if you are using the 'House PC' and switch to the Laptop, and you require the sound from the House PC, you must go back to the 'House PC' button, and re-select the projector, so that it is the last device sent to the projector.

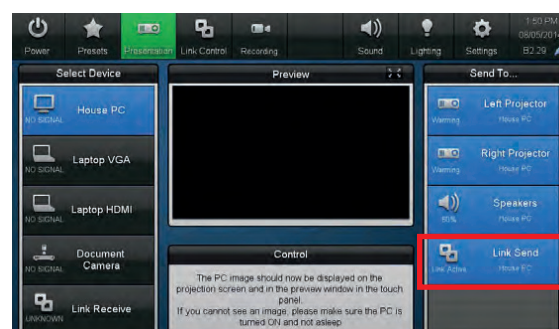
Changing the 'Preview View' will not effect change the last device sent to a projector, or LCD, so you can have the audio coming from the House PC, while viewing the Document Camera in the preview window.

Where this can be use full, is if you have some audio on your phone, iPod, or another digital player, plugging it into the Laptop VGA audio lead, and selecting a projector or LCD last, can provide the audio while showing the presentation on screen, or playing a Youtube video on the house PC that has been sent to the projector last, while showing a document on the visualiser or document camera.



In a videoconference, this is similar, however as there is only one device available at one time, it is the audio of that device that can be shared over the videoconference. When the control of the videoconference presentation device has been taken over by the far side, the audio automatically changes to the that side.

selecting 'Laptop' on this system, will send the audio from the laptop to the room speakers and the far end room.



Some systems have a separate control controls for the audio on the 'Send to' tab. This gives the user the ability to see this audio routing concept a bit easier.