



UCD Estate Services
Seirbhísí Eastáit UCD

AV Support

For Lecture Theatres and
Classrooms



**I'm here to help...
For AV Support
Please phone 01 716 7300**

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1.0 AV Support

UCD Estate Services are responsible for the installation and upkeep of audio-visual equipment within shared teaching spaces on the Belfield and Blackrock Campuses. There are over 200 rooms available within this ever growing portfolio ranging from lecture theatres, alternative learning environment rooms, classrooms, seminar rooms to other bespoke rooms. Estate Services have strived to provide the highest standard of audio-visual equipment as well as standardising the equipment within each style of room in order to provide a familiar user experience, for both lecturers and students, no matter the room.

Audio visual equipment plays a pivotal role in the delivery of teaching, both on campus and online. This is crucial to enhance the teaching and learning experience within UCD and enable flexible and creative ways of using shared teaching spaces. Through high quality and innovative AV installations students can be engaged with teaching, whether in the classroom or online. Estate Services have strived to ensure that all AV equipment within shared teaching spaces is of a high standard and usability. Shared teaching spaces are constantly evaluated in order to assess the condition and quality of the equipment provided which determines where upgrades are required.

Throughout the year Estate Service provide AV support in many different forms which all increase the end user experience. These forms of support include the following:

1.1 Planned Preventative Maintenance

Our team of AV technicians are on site throughout the year conducting routine servicing of all AV equipment. These constant inspections and maintenance ensures that equipment is in peak performance for the end user. During this routine service any faulty or unreliable equipment is identified and replaced as required.

1.2 Reactive Maintenance

As with any electronic equipment, AV equipment can experience faults or cease working from time to time. Once reported, our AV technicians will begin working to resolve the issue and try to minimise any such disruption to classes. Estate Service's team of AV technicians are very familiar with all equipment within the shared teaching spaces and have many years of experience working within UCD, resolving these sorts of technical issues.

1.3 Ongoing Support

Estate Services are committed to assisting shared teaching space users and providing a positive experience while using AV equipment. If you require AV support you can contact us via email or by using the AV Support phone within the rooms. A member of the AV Support team can respond to any issues you are experiencing and are more than willing to give assistance and guidance on how to use any of the equipment within the classroom.

1.4 Pre-Term Checks

In order to ensure the beginning of term commences without an issue Estate Services conduct pre-term checks of all shared teaching spaces before the Autumn and Spring terms. Our AV technicians will ensure that all of the equipment within the room is in full working order and in place. Any issues that are highlighted during these checks are rectified before the commencement of term to avoid disruptions to teaching.

1.5 Teaching Support Requests

Estate Services aim to ensure that teaching staff are confident while using shared teaching spaces and are familiar with the AV equipment within them. In order to improve and facilitate use of the AV equipment Estate Services have introduced additional supports in the form of teaching support requests. This is a one-to-one session with one of our AV technicians who will demonstrate the use of the AV equipment in a given room. By booking a teaching support request this allows you to select a time and date that suits you in a specific building or room which you will be using during the term. These sessions are normally 50 minutes in duration and can be booked from Monday to Friday, 8am-4pm

1.6 Contact Us

Estate Services try to engage with teaching staff with regard to the AV equipment in shared teaching spaces. If you have any feedback or comments on your experience within shared teaching space please let us know. Likewise, if you have any questions or would like to learn more about AV equipment within UCD's Shared Teaching Spaces you can contact us via phone or email.

Email: estates@ucd.ie

Phone: 01 716 7300

Opening Hours

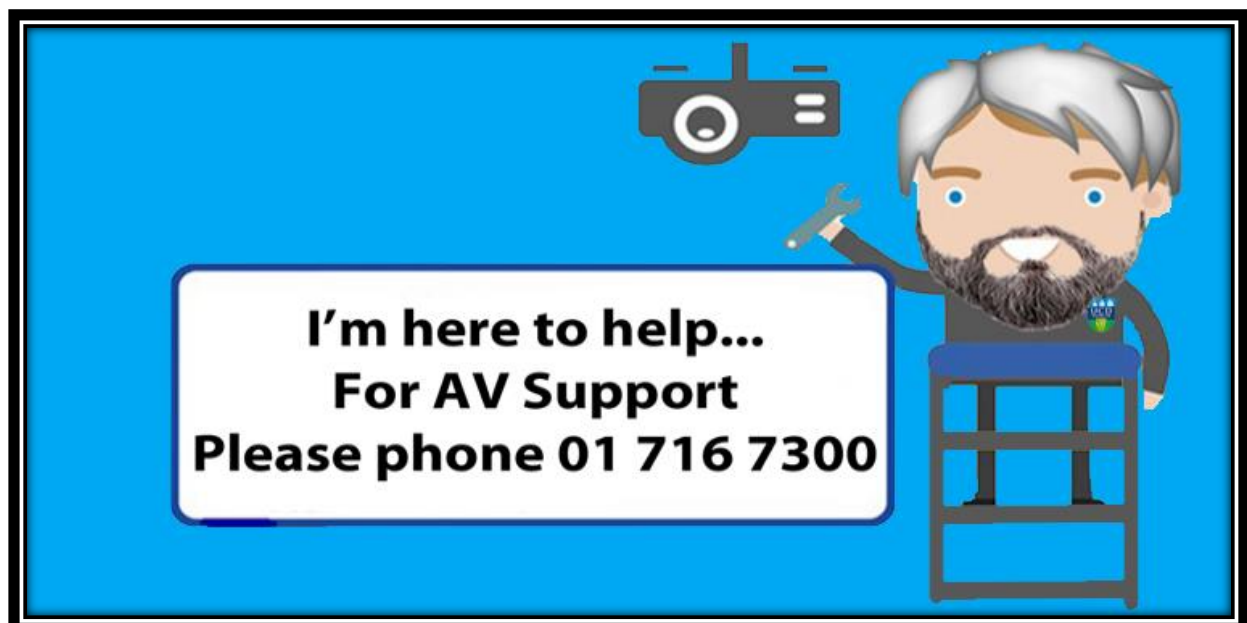
Monday – Thursday, 08:00-17:30

Friday, 08:00-16:30

Saturday – Sunday, closed



UCD Estate Services
Seirbhísí Eastáit UCD



2.0 Touch Button Control Panels

Touch button control panels are a simple to use control for the AV equipment within a shared teaching spaces. They are more commonly found in classrooms rather than lecture theatres. Despite the different appearance between these and touchscreen panels they share most of the same functionality. Touch button panels allow you to turn on and off the projector, select an input (this could include HDMI, VGA, USB-C or document camera) as well as adjust the volume of the speakers within the room. All touch button panels are clearly labelled and easy to understand. It is important when using the touch button panel to ensure that you:

- Firstly, ensure that the projector has been turned on.
- Ensure your device is powered on (if you are connecting a laptop or other portable device).
- Ensure that you have selected the appropriate input cable. Please refer to the [input cable section](#) of this document for further guidance.
- Ensure that you have selected the appropriate input setting on the touch button panel.
- Some touch button panels may list inputs as 'PC1' or 'PC2'. If you select one of these inputs then you should be able to view the input type on the projector screen as it will display the input type when connecting.

Below are the most common touch button panels used within shared teaching spaces:



MPC- M5 Panel:

- Most common touch button panel.
- Power on/ off to turn on projector display.
- Volume up/ down.
- Select correct input to display laptop or other device on the in room display.



MLC 104 Panel:

- Display on/ off to turn on projector display.
- Volume up/ down, turn the dial in the desired direction.
- Select correct input to display laptop or other device on the in room display.

**MPC-3 Panel:**

- Display on/ off button to turn on projector display.
- Volume up/ down, turn the dial in the desired direction.
- Optional mute button.
- Select correct input to display laptop or other device on the in room display.

3.0 Touchscreen Panels

Touch screen panels are present in many shared teaching spaces most commonly in lecture theatres. Touch screen panels act as the controls for all of the AV equipment within the space and will allow you to turn on the system, select your desired input and in some instances control cameras (lecture capture rooms).

There are different touchscreen panels used within shared teaching spaces, some which may have different programming so the screens may appear different, however their basic functionality is standardized across all of the teaching spaces.



3.1 Getting Started

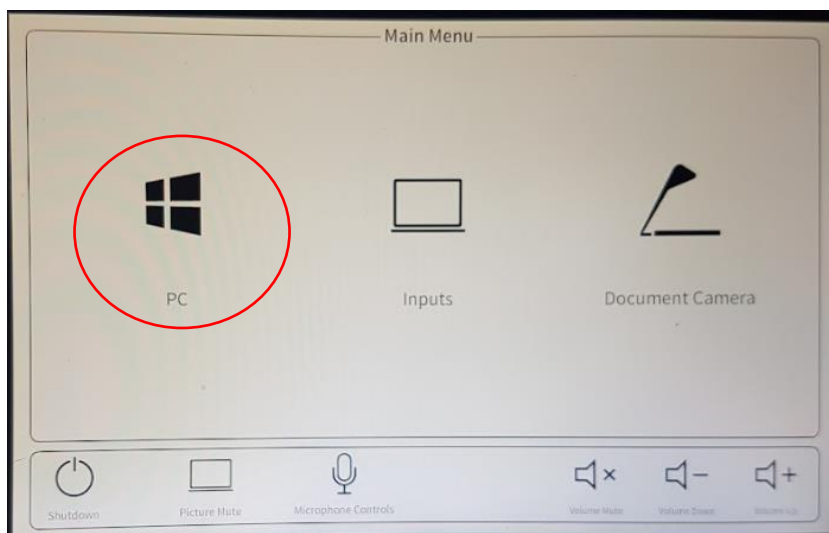
When you are getting started within a shared teaching space you will see the home screen on the touchscreen (as seen in the picture above). To get to the main menu just touch the screen once.



Once in the main menu you will see a number of options which can be selected to display on the projector screen. The main display options will be PC, Inputs and Document camera. To select your desired input just tap the icon on the touchscreen.

3.2 Using the Podium PC

To use the Podium PC, firstly ensure that the PC is turned on. You should be able to identify this via the PC monitor attached to the podium. Once this is completed you can tap the PC Icon on the touchscreen, after which the projectors will duplicate the display, in other words it will display the same image which can be seen on the PC monitor.

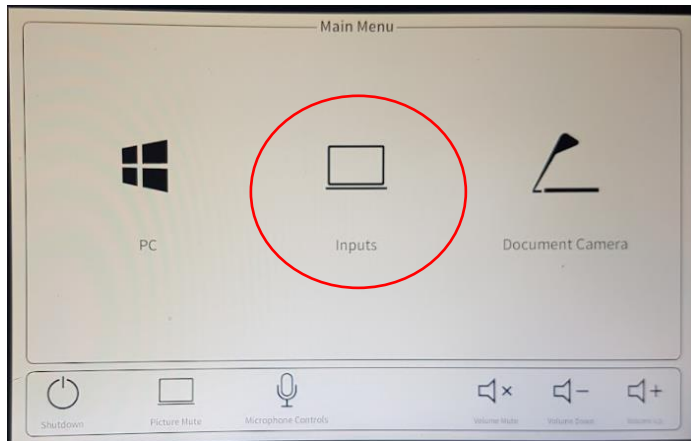


3.3 Using a Laptop or portable device

To use a laptop or another portable device you must firstly determine the connection type required. You may refer to the ports on the side of your device to determine this or else refer to the user manual on your device. The main inputs you will find in shared teaching spaces are HDMI, VGA and USB-C. It is important to note that VGA is gradually being phased out and may not be available in all

rooms. Likewise, USB-C is a newer technology which is currently being phased in as part of any AV upgrades and will become more widely available throughout campus in time.

Once you have determined the type of input you require, ensure that your device is turned on and insert the chosen cable (available on the teaching desk) into the correct port on your device.

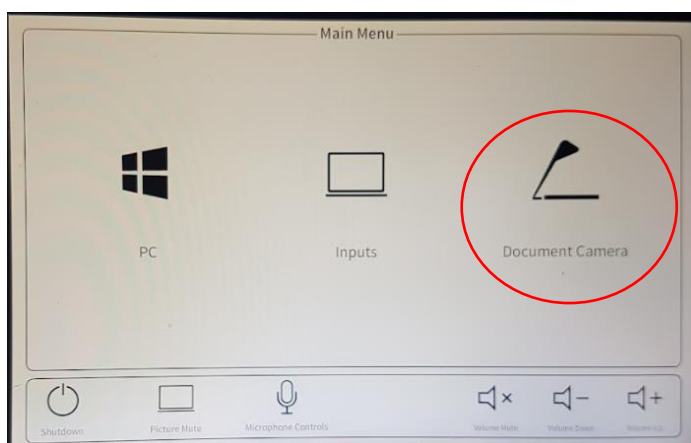


Following this you should tap 'Inputs' on the touchscreen which will bring you to the next menu where you can select the type of input, either HDMI, VGA or USB-C. Ensure that you tap the icon of the correct input, following which your device will be displayed on the projectors.

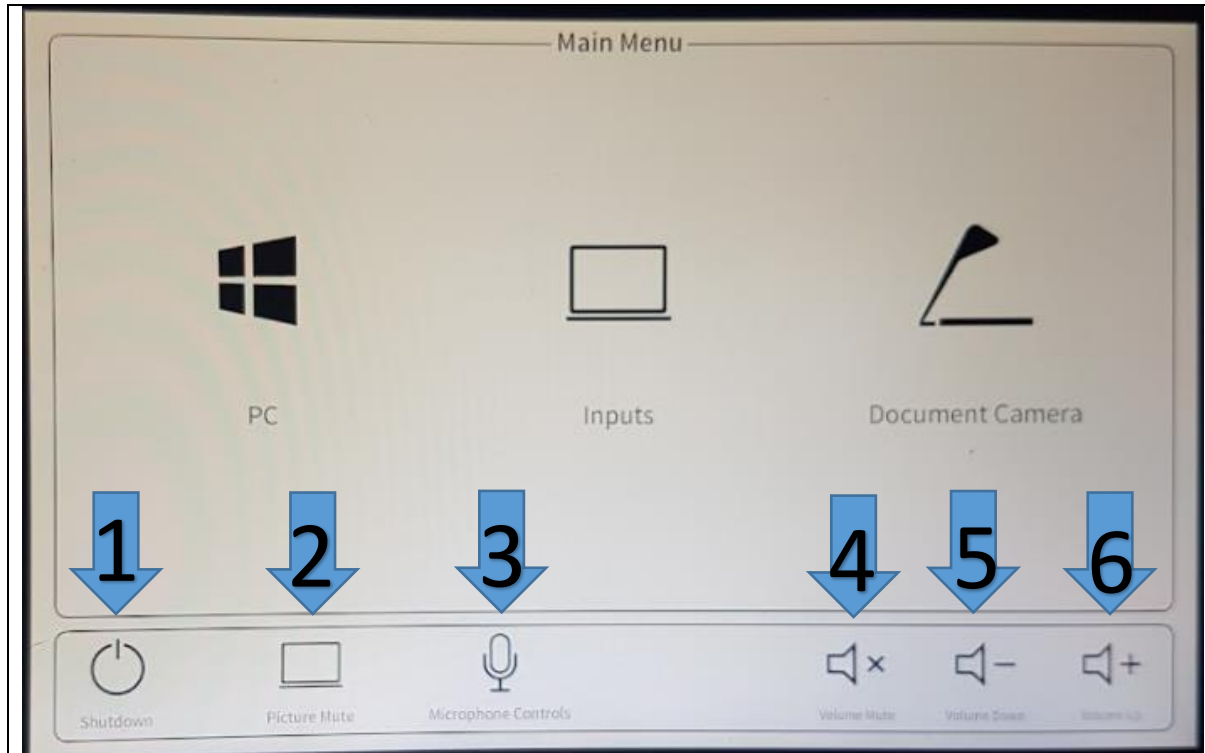
Important troubleshooting tip: If you are encountering difficulties connecting your device to the display, make sure to check your device's display settings. Make sure that they are set to duplicate or extend displays.

3.4 Using a Document Camera

To use a document camera you should ensure that you tap the document camera icon on the main menu. Depending on the type of document camera, this will either turn the camera on automatically or else you may be required to turn it on manually. You can refer to the [document camera section](#) for specific information on this. Once the document camera icon has been selected and it has been turned on then the image should display on the projector screen.

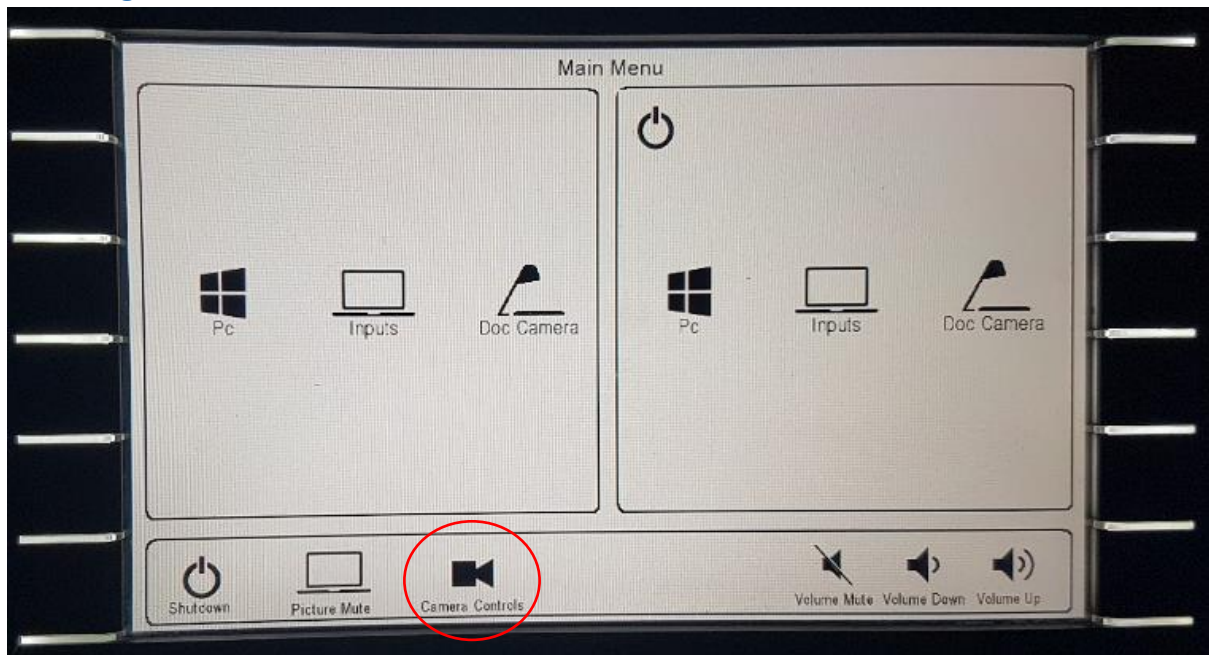


3.5 Other Controls Available on the touchscreen

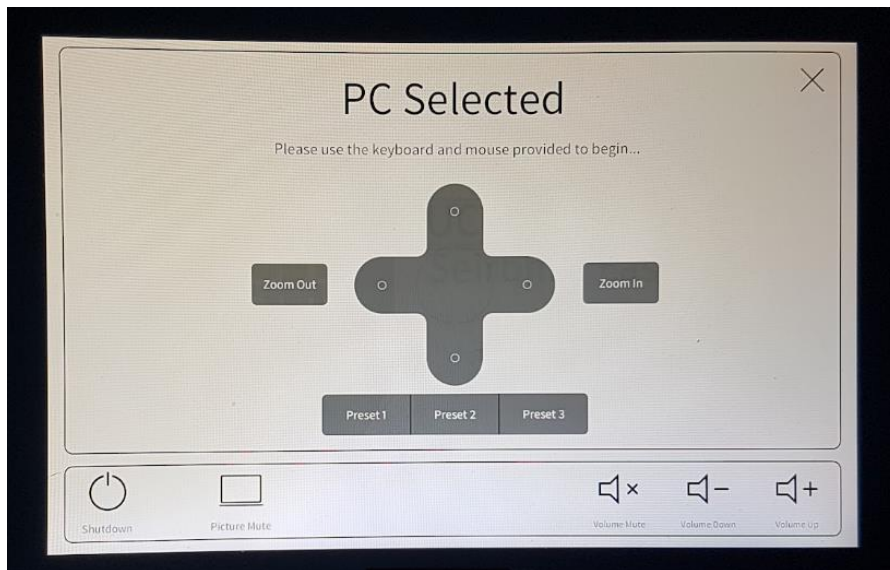


1. Shutdown: This button will turn off the display and set the projectors to sleep mode. The touchscreen will revert back to the welcome screen.
2. Picture Mute: This button will allow you to stop the display on the projector screens but will keep the system and projectors powered on.
3. Microphone Controls: This button will allow you to control the volume controls for a lapel microphone (if available for the given room). For more information on the use of lapel microphones please refer to the [microphone section](#) of this document.
4. Volume Mute: This button will allow you to turn off the audio output within the teaching space.
5. Volume Down: This button will allow you to turn down the volume of the audio output within the teaching space.
6. Volume Up: This button will allow you to turn up the volume of the audio output within the teaching space.

3.6 Using a PTZ Camera for Lecture



Lecture theatres are now equipped and setup for lecture capture. In most theatres the cameras are PTZ cameras, which means they can be moved (pan and tilt) as well as having the ability to zoom. By touching the camera controls icon, this will bring up the camera control window.



Once in this window the controls will allow you to pan and tilt the camera to your desired position as well as allow for zooming in or out as required. This window will also have the option to use preset options. These will be preprogrammed camera positions that can be selected by touching the desired preset button on the touchscreen. For further guidance on lecture capture please refer to the [lecture capture section](#) of this document.

4.0 Inputs

4.1 VGA



VGA Cable



Mini-Jack Cable

A VGA input cable can be found in many of the shared teaching spaces. This is an older technology which allows for transfer of visual data only. This solution will not support audio unless it is paired with an audio cable (mini-jack). It is important to note that this is an old technology and will be gradually phased out of use throughout shared teaching spaces. All modern portable devices will not support VGA and thus the demand for its availability in shared teaching spaces is decreasing.

To connect your laptop to the projector using VGA, insert the cable into the designated VGA port in your device. You should ensure that the system is turned on and the appropriate input has been selected (You can review this in the [Control panel settings](#)). Ensure that the cable is inserted correctly. Your laptop may detect the input automatically, in which case it will begin sending a signal to the display. If this does not occur automatically then you must go to your laptop's display settings and select the appropriate setting, normally this will be either to 'duplicate' or 'extend' display.

4.2 HDMI



HDMI Cable

A HDMI input cable can be found in all of the shared teaching spaces. This is a widely supported technology which allows for the transfer of visual and audio data through the same connection. This solution can be used with the vast majority of laptops and will continue to be included in all shared teaching spaces for a number of years.

To connect your laptop to the projector using HDMI, insert the cable into the designated HDMI port in your device. You should ensure that the system is turned on and the appropriate input has been selected (You can review this in the [Control panel settings](#)). Ensure that the cable is inserted correctly. Your laptop may detect the input automatically, in which case it will begin sending a signal to the display. If this does not occur automatically then you must go to your laptop's display settings and select the appropriate setting, normally this will be either to 'duplicate' or 'extend' display.

4.3 USB Type C



USB C Cable

USB C is a newly emerging technology that is being widely adopted and implemented into new systems and AV equipment. Many new laptops are being produced with USB C capabilities. Although it is not widely available throughout campus currently, it is being introduced as part of any upgrade work conducted in shared teaching spaces. Any USB C within the shared teaching spaces will allow for transfer of visual and audio data and will also provide charging to the device/ laptop.

To connect your laptop to the projector using USB C, insert the cable into the designated USB C port in your device. You should ensure that the system is turned on and the appropriate input has been selected (You can review this in the [Control panel settings](#)). Ensure that the cable is inserted correctly. Your laptop may detect the input automatically, in which case it will begin sending a signal to the display. If this does not occur automatically then you must go to your laptop's display settings and select the appropriate setting, normally this will be either to 'duplicate' or 'extend' display.

5.0 Microphones

Microphones are a useful addition to larger teaching spaces and can be used to amplify voice throughout a room, reducing the need to raise your voice. There are two main types of microphones which are used throughout the shared teaching spaces.

5.1 Gooseneck Microphones



Gooseneck microphones are fixed position microphones located on the teaching podium. They are fixed onto the teaching desk and will amplify speech from the teaching position to the rest of the room through the speakers, and will also act as an input for lecture capture where applicable

In the majority of lecture theatres the microphones will need to be turned on by pressing the button at the bottom of the stem of the microphone. You then should be able to hear the sound through the speakers. In a few lecture theatres the microphones are automatically powered on with the rest of the system and will require no further action.

5.2 Roving Microphones



Getting Started

Roving microphones are a wireless microphone that allows a user the freedom to move beyond the pickup of a fixed gooseneck microphone. The roving microphone bodypack can be attached to a belt, placed in a pocket, or held in a hand. The bodypack works in conjunction with a lapel wire that is fixed to a collar or a headset that is placed on the head. Both methods ensure that the microphone picks up the user's voice.

To begin turn the microphone on via the power button and ensure that the microphone lapel or headset attachment is connected via the 3.5mm jack connection. The microphone will be automatically tuned into the room speakers.

6.0 Document Cameras

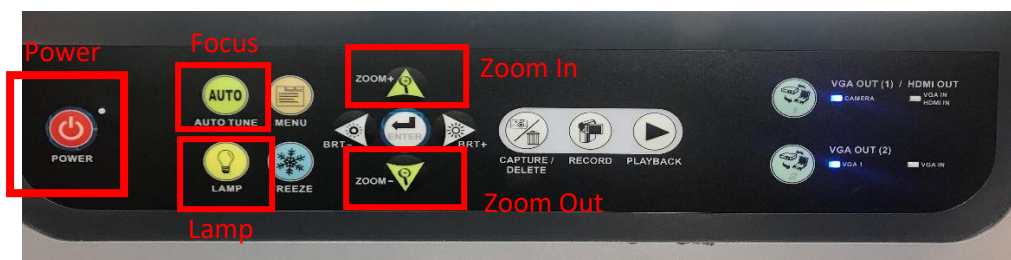
A document camera allows for magnification and projection of documents or objects which can be viewed from the classroom projector. They are simple to use and can act as a very useful visual aid when teaching.

6.1 Lumens Document Camera



6.1.1 Getting Started

To begin using your document camera you will need to tilt the arm into its upright position and press the power button located at the bottom left-hand side of the unit. Once this has been completed you can connect to the projector in the room. You should ensure that the projector is turned on and the appropriate input has been selected (You can review this in the [Control panel settings](#)). Once this has been completed the document camera will project onto the projector screen(s) within the shared teaching space.



6.1.2 Additional Controls

From the document camera control panel, you can zoom in and out, auto focus and turn on the lamps to allow for a brighter image to be presented.

6.2 WolfVision Document Cameras



6.2.1 Getting Started

To begin using your document camera you will need to tilt it to its upright position. This will both ensure that the camera is in the appropriate position but also power up the unit. Once this has been completed you can connect to the projector in the room. You should ensure that the projector is turned on and the appropriate input has been selected (You can review this in the [Control panel settings](#)). Once this has been completed the document camera will project onto the projector screen(s) within the shared teaching space. The Wolfvision document camera comes equipped with an inbuilt light which does not need to be adjusted and provides constant auto focus capabilities.

6.2.2 Additional Controls



For additional functions you can use the controls on the document camera. These functions will allow you to zoom in and out, adjust the focus and turn the lamp on and off.

7.0 Lecture Capture

Many lecture theatres and classrooms are now equipped with lecture capture capabilities in order to allow lectures to be recorded if required. This will allow for content to be available to students who may be unable to attend campus as well as for the content to be uploaded to Brightspace if required.

7.1 Lecture Theatres



Fixed/ PTZ Camera



Fixed position gooseneck microphone

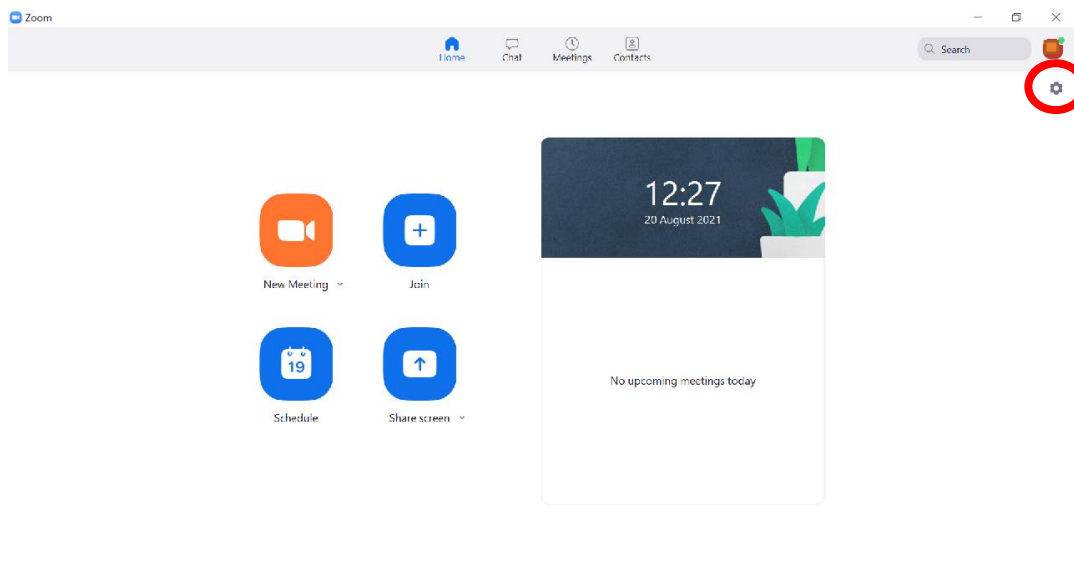
The lecture theatres are fitted with cameras which are ceiling mounted at the back of the room. The rooms are also equipped with microphones which will capture the audio required. In order to get the best lecture capture experience, the Podium PC must be used as all of the lecture equipment is linked to this device. If you have content such as slides they can be transferred to the Podium PC via USB key, downloaded from Google Drive after logging into UCD Connect or can be shared via a laptop input, for further info on the latter please refer to the [Logitech Screen share section](#).

7.1.1 Getting Started

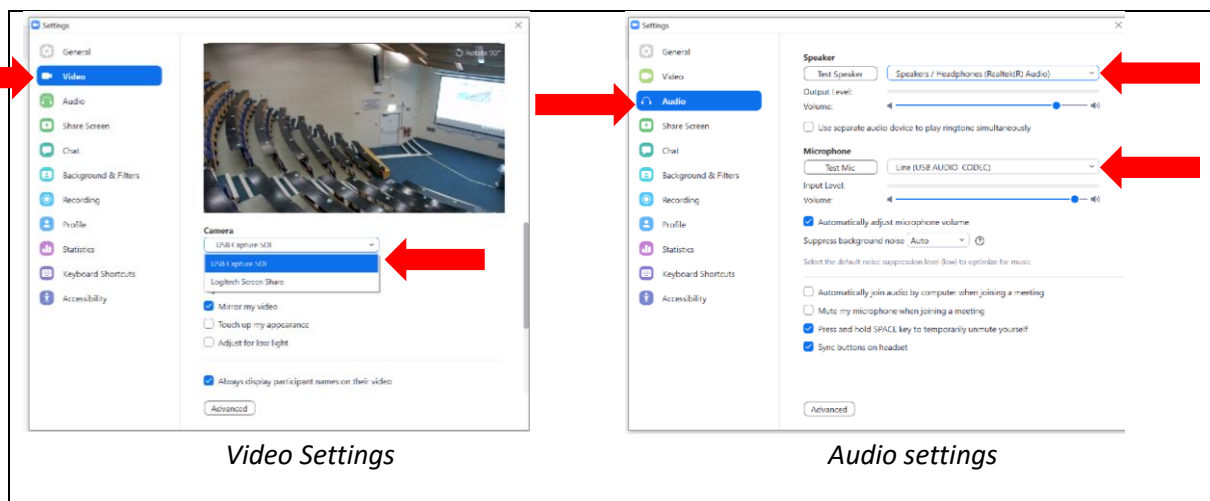
To begin ensure that the projector and Podium PC are turned on and fully loaded, with the PC input selected on the touchscreen control panel (by following the same steps outlined in the [touchscreen controls section](#)).



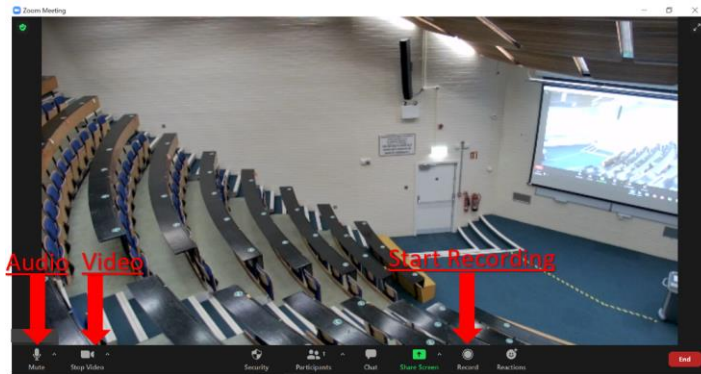
Next you should log into Zoom, you will find a shortcut to the Zoom Client on the PC's Desktop. It is important that you use the desktop Zoom application as this will allow for the best experience. Once you have been logged in you can then ensure that the appropriate settings are selected. Select the 'settings' Menu at the top right of the Zoom Client.



Once the settings menu is open you can then ensure that the appropriate camera, microphone and speakers are selected. In most instances these should be the default option.

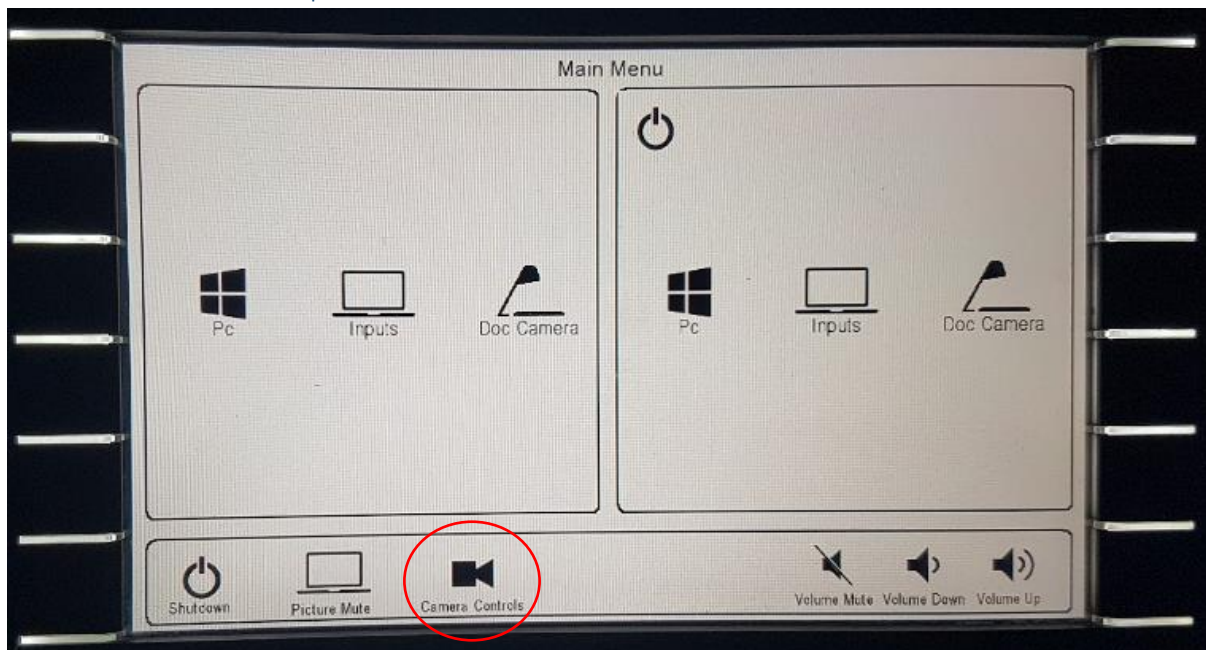


Once the appropriate settings have been selected then you can begin your session. Before you begin the lecture you should ensure that the microphone is unmuted and that the video is enabled. Once you are ready you can then press the 'Record' button to begin recording.

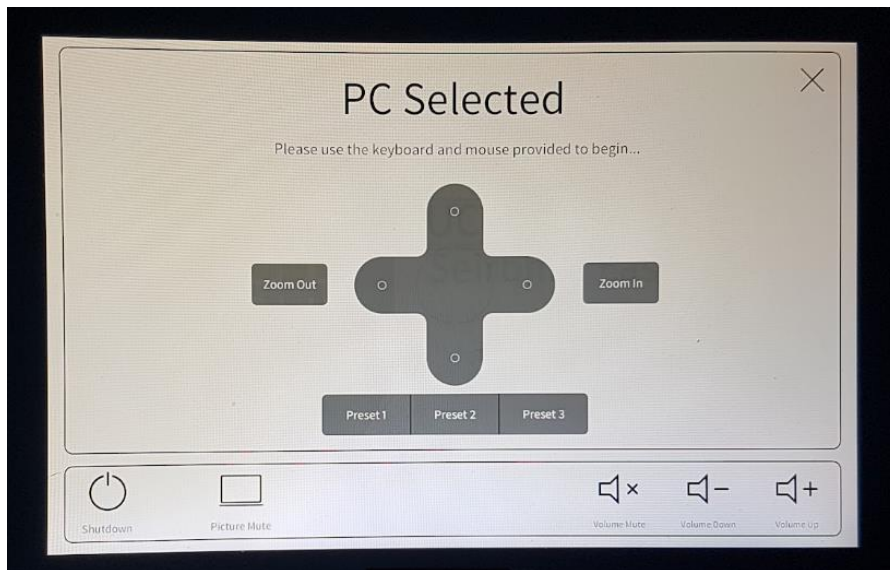


When you have finished the lecture you can select 'end meeting' followed by 'end meeting for all'. Once this has been completed a recording will be sent to your email which you can subsequently upload to Brightspace. Please ensure to log out of the Zoom Client on the Podium PC once you are finished.

7.1.2 Camera Control Options



In most theatres the cameras are PTZ cameras, which means they can be moved (pan and tilt) as well as having the ability to zoom. These cameras can be controlled by using the touchscreen control panel on the Podium. By touching the camera controls icon, this will bring up the camera control window.



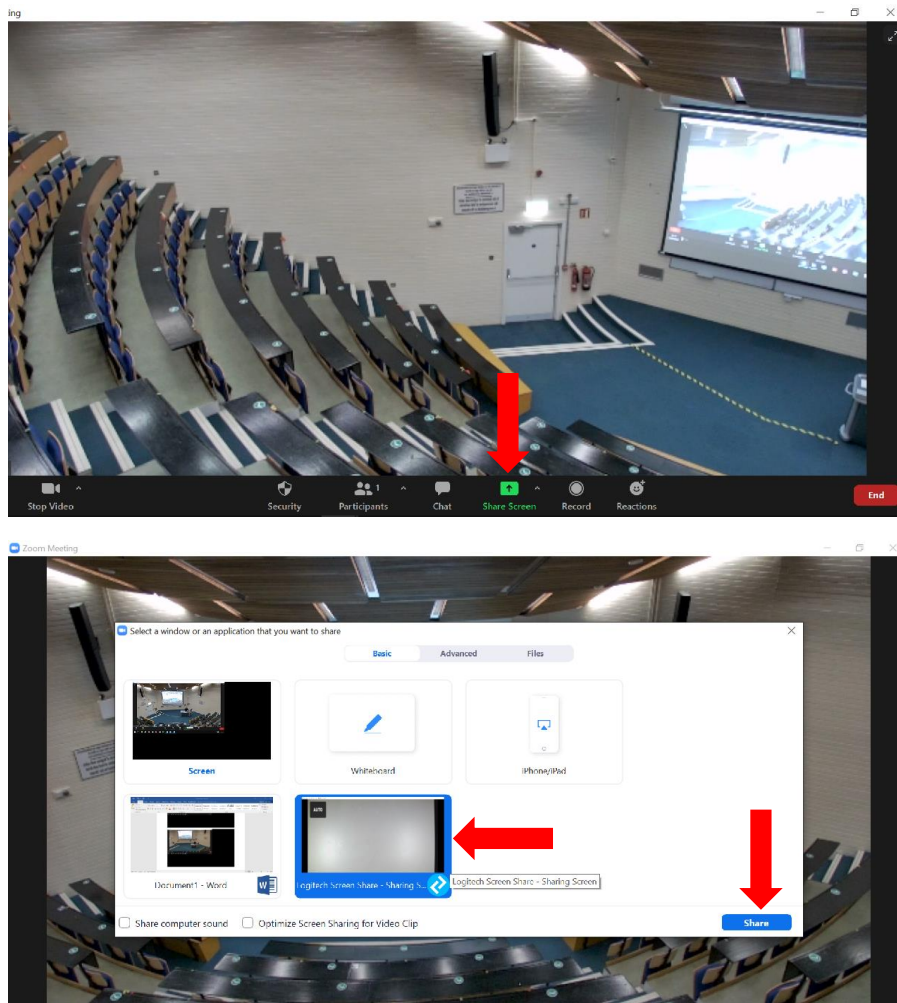
Once in this window the controls will allow you to pan and tilt the camera to your desired position as well as allow for zooming in or out as required. This window will also have the option to use preset options. These will be preprogrammed camera positions that can be selected by touching the desired preset button on the touchscreen.

7.1.3 Using another input on Share Screen

In certain instances you may want to use another input and be able to share this within the classroom and over Zoom. For instance if you wanted to use a document camera or else a laptop. This is possible through the use of another Application called Logitech Screen Share. Firstly you will need to open Logitech, you can find this application on the Podium PC's desktop.



Once you have selected the application you can minimize the window. You can then select your desired input by using the touchscreen control panel. Please refer to the [touchscreen control panel section](#) for further detail on how to do this. Once you have selected your desired input then, while in your zoom meeting select the 'share screen' option.



This will bring up a number of screen share options. Click to select the Logitech Screen Share option. Once this is selected then press the 'share' at the bottom right hand corner of this window. Once this has been completed your selected input will be viewable on the projector screens and on zoom for all participants. If you would like to stop sharing your screen, just select 'stop sharing'.

7.2 Classrooms



PTZ Camera with Auto Tracking



Sound-bar with inbuilt microphone

Some classrooms are fitted with cameras which are ceiling mounted at the back of the room. The rooms are also equipped with sound-bars with inbuilt microphones which will capture the audio required. In order to utilize the lecture capture capabilities you will require a laptop. The laptop can be connected to the projector in the normal way, please refer to the [‘inputs’ section of this document](#) for further information on this. Following this you will need to insert the USB cable into your laptop, this will be clearly marked to indicate it’s use for lecture capture. This USB cable will connect the camera and the microphone directly to your laptop.



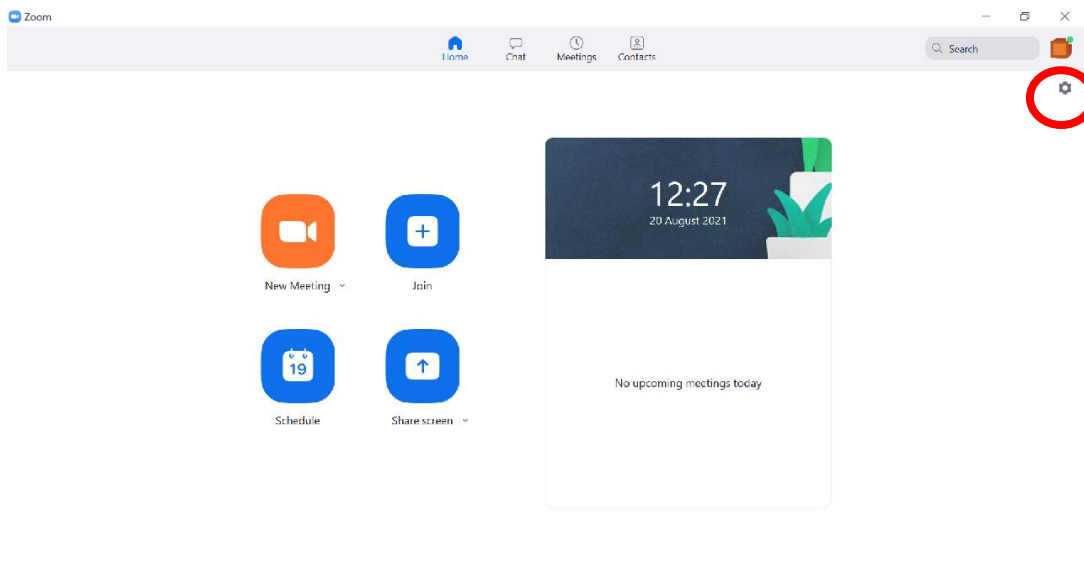
This style of lecture capture equipment allows for movement while teaching as the camera automatically tracks the lecturer throughout the room. The sound-bar is also capable of picking up audio from around the room, meaning that you will not be confined to the laptop for the duration of the class.

7.2.1 Getting Started

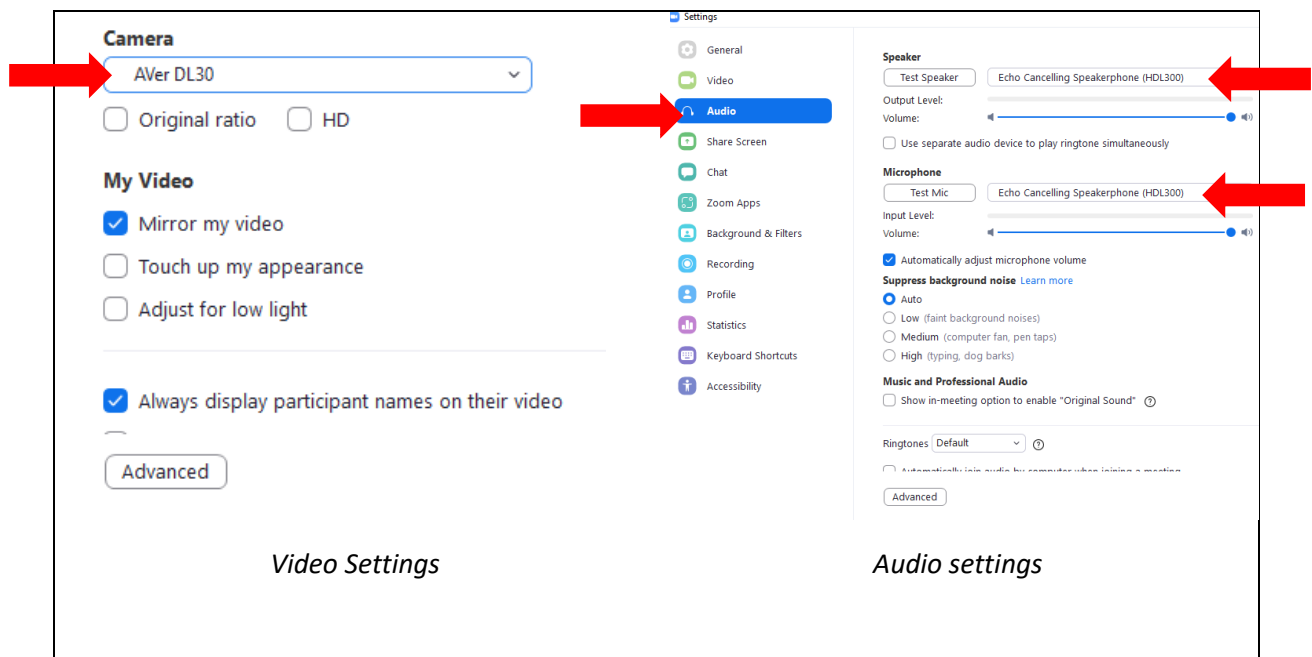
To begin ensure that the projector and your laptop are turned on and fully loaded, with the appropriate input selected on the control panel (by following the same steps outlined in [the control panel section](#)).



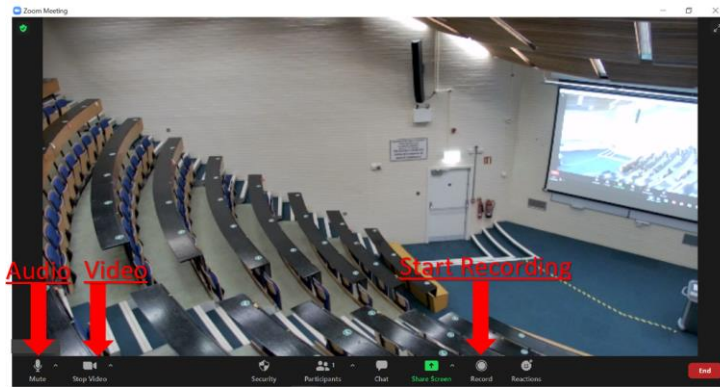
Next you should log into Zoom. It is important that you use the Zoom application as this will allow for the best experience. Once you have been logged in you can then ensure that the appropriate settings are selected. Select the 'settings' Menu at the top right of the Zoom Client.



Once the settings menu is open you can then ensure that the appropriate camera, microphone and speakers are selected. In most instances these should be the default option.



You should ensure that under video settings you have selected 'Aver DL 30' as your camera. For audio settings you should ensure that 'Echo Cancelling Speakerphone (HDL300)' is selected for Speaker and microphone options. Once the appropriate settings have been selected then you can begin your session. Before you begin the lecture you should ensure that the microphone is unmuted and that the video is enabled. Once you are ready you can then press the 'Record' button to begin recording.



When you have finished the lecture you can select 'end meeting' followed by 'end meeting for all'. Once this has been completed a recording will be sent to your email which you can subsequently upload to Brightspace.