



SPACE AND AV USER GUIDE

LEARNING AND TEACHING BUILDING



MONASH
University

LEARNING
SPACES

GETTING
STARTED

PRESENTING
CONTENT

OUR
STUDENTS

AUDIO AND
LIGHTING

SUPPORT



LEARNING SPACES

Interactive spaces	4
Collaborative spaces.....	5
Tiered collaborative spaces.....	6
Room configurations and furniture.....	7
Informal learning spaces	8



Consult with an Education Designer for more ideas and support in developing active learning.

INTERACTIVE SPACES

30, 60 & 90 CAPACITY ROOMS

The Interactive spaces encourage student movement, exploration and participation in a variety of activities.

Designed for multiple scaffolded activities, for example:

- Think pair share
- Small model making
- Group mind-mapping
- Debates
- Role-play
- Peer presentations
- Inquiry learning
- Hands-on technology
- Various group size activity
- Formative feedback discussions
- Self-evaluation and reflective learning



Consult with an Education Designer for more ideas and support in developing active learning.

COLLABORATIVE SPACES

30, 60, 90 & 120 CAPACITY ROOMS

The Collaborative spaces encourage group work and sharing of ideas with a central teaching point for explicit instructions.

This includes:

- Case study exploration
- Compare and contrast activities
- Group problem solving
- Team-based projects
- Team google doc report formulation
- Jigsaw discussions
- Group based formative feedback



TIERED COLLABORATIVE SPACES

There are 3 tiered spaces that enable a variety of 'at scale' collaborative learning pursuits. All spaces feature split lecterns (see page 18) and map tables (see page 17).

COLLABORATIVE TIERED SPACE G.81

- 240 students
- Turn and learn style tiered seating enables peer assisted learning and sharing knowledge for a variety of group sizes

COLLABORATIVE TIERED SPACE G.31

- 174 students
- Writable tables for up to 6 students

LEARNING IN THE ROUND G.54

- 154 students
- Providing the broadest capabilities to support active learning at scale; 360 degree writable walls, writable tables and unique AV facilitates team sharing

Consult with an Education Designer for more ideas and support in developing active learning.

ROOM CONFIGURATIONS AND FURNITURE

Each room supports flexibility in your lesson by inviting students to move throughout the space, interact with peers and actively use all surfaces.

All furniture and MoCows must be returned to the original set up at the completion of a session, ready for the next class.

Please log a Monash BEIMS request for any concerns regarding extra, missing or broken furniture:

ehelpdesk.fsd.monash.edu.au/BEIMSSRS/

Powered tables, couches and MoCows throughout LTB cannot be moved during classes but may be reconfigured between semesters where the room suitability is changing for future use.





INFORMAL LEARNING SPACES

Informal learning spaces are located throughout the LTB offering students a range of places to engage in learning activity.

- Smaller bookable spaces for up to 6 students/academics to collaborate. These can be booked outside the room on the room booking touch panel or via Google calendar.
- Social study space catering for a range of group sizes are located throughout the building, ideal for group work and to meet with friends and colleagues.
- Quiet study spaces support individual activity and small groups in areas that are less busy.
- Outside of class use, formal learning spaces are available and students are welcome to use them for informal study.





GETTING STARTED

Recommended equipment	11
Classroom AV layout	12
■ Teacher's touch down point	13
DataWall spaces layout	14
Tiered spaces layout	16
■ Map tables.....	17
■ Split lectern.....	18

RECOMMENDED EQUIPMENT



LAPTOP HDMI DONGLE/ADAPTOR

Many phones, tablets and apple devices require an HDMI dongle to connect to the AV equipment. All Monash provided SOE devices are supplied with a suitable HDMI adaptor where it is required.



MICROPHONE POUCH

When wearing an item of clothing without pockets, staff can bring their own arm or belt pouch. Microphone belt pouches can be ordered via an eSolutions service request*.



PRESENTATION CLICKER

To enable you to walk around the room and engage with the students while presenting, consider ordering a USB presentation clicker via an eSolutions service request*.



WHITEBOARD MARKERS

Whilst initial supplies of whiteboard markers and erasers will be provided, we recommend staff carry supplies to be adequately resourced for learning and teaching activities.

*Equipment requests via monash.edu/esolutions/contact

CLASSROOM AV LAYOUT

Flat floor classrooms are equipped with a teacher's touch down point which is used to setup and control the audiovisual system in the room. Also located in the room are 2-8 MoCows (Mobile Computers on Wheels) which can be used for student collaboration on their own laptops or to display the main presentation from the teacher's touch down point. Whiteboard cameras have also been installed to provide viewing and recording of whiteboard content for students.





TEACHER'S TOUCH DOWN POINT

1. Preview Monitor
2. AV Touch Panel
3. Laptop Cable
4. Lectern PC Mouse and Keyboard
5. Lectern PC with USB Ports
6. Window Blind Control
7. AV Support Phone

NOTE: Headset and Hand-held Microphones are only available in DataWall, 60, 90 and 120 capacity spaces (see page 39 for details).

DATAWALL SPACES LAYOUT

DataWall enabled rooms (G.03, G.21, G.60, G.61 and 2.82) have a main display in the room which is capable of several additional features over and above the regular learning spaces:

- The ability to display the Extend Desktop PC over multiple screens creating a wide computer display where you can maximise a single program (e.g. Microsoft Excel) over the entire datawall or drag/drop multiple programs/windows onto different individual datawall screens.
- The ability to divide each screen into 4 subscreens and display 4, 8, 12 or 16 student groups work utilising either the MoCows in the room or student wireless presentation capability.





Extend desktop PC over multiple screens



Displaying multiple student groups work

TIERED SPACES LAYOUT

Tiered spaces have multiple locations which enable use of the audiovisual system: the split lectern and the map table(s). The split lectern contains a document camera, lectern computer, laptop connectivity with wireless presentation capability, and preview monitor. The map tables(s) contain overhead cameras which can capture writing and objects on each map table(s), the room microphones (headset and handheld), additional laptop connectivity and a wireless AV touch panel.





MAP TABLES

1. Wireless AV Touch Panel
2. Laptop Cable
3. Headset and Hand-held Microphone
4. Map Table Camera Buttons
5. AV Support Phone
6. Lectern PC Mouse and Keyboard
7. USB port to Lectern PC



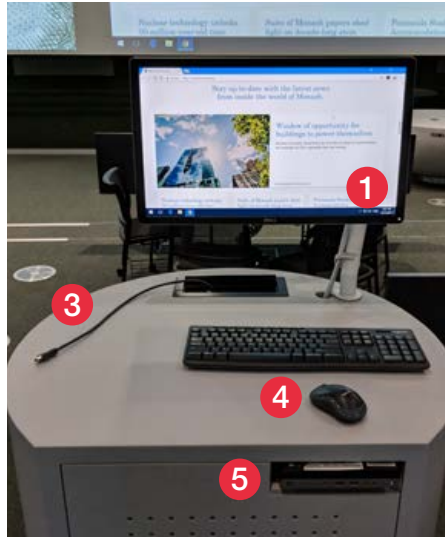
Map Table laptop cable and power



Map Table Camera Buttons

CAMERA BUTTONS

1. Big area preset
2. Small area preset
3. Zoom-in / Zoom Out toggle



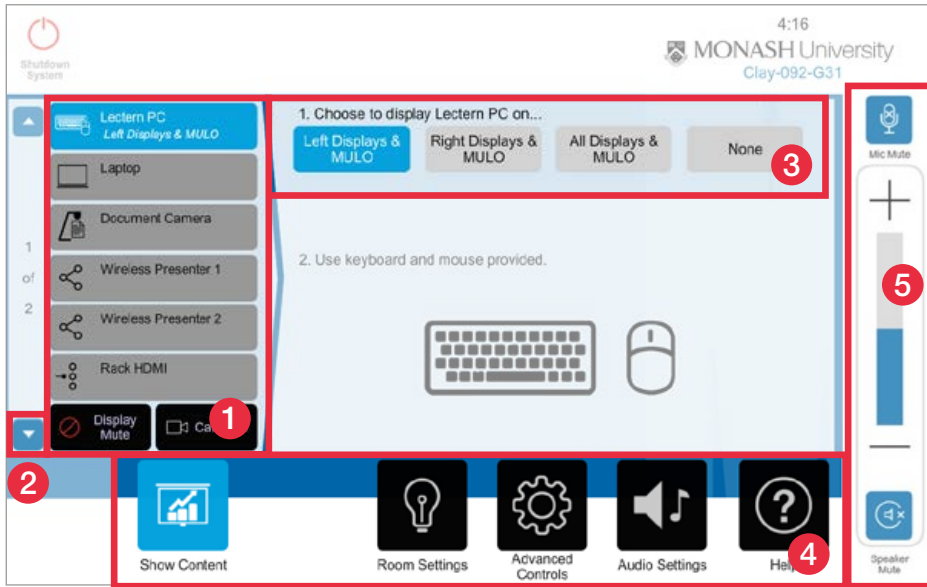
SPLIT LECTERN

1. Preview Monitor
2. AV Touch Panel
3. Laptop Cable
4. Lectern PC Mouse and Keyboard
5. Lectern PC with USB ports
6. Document Camera
7. Headset and Hand-held Microphone (see page 17)
8. AV Support Phone (see page 17)



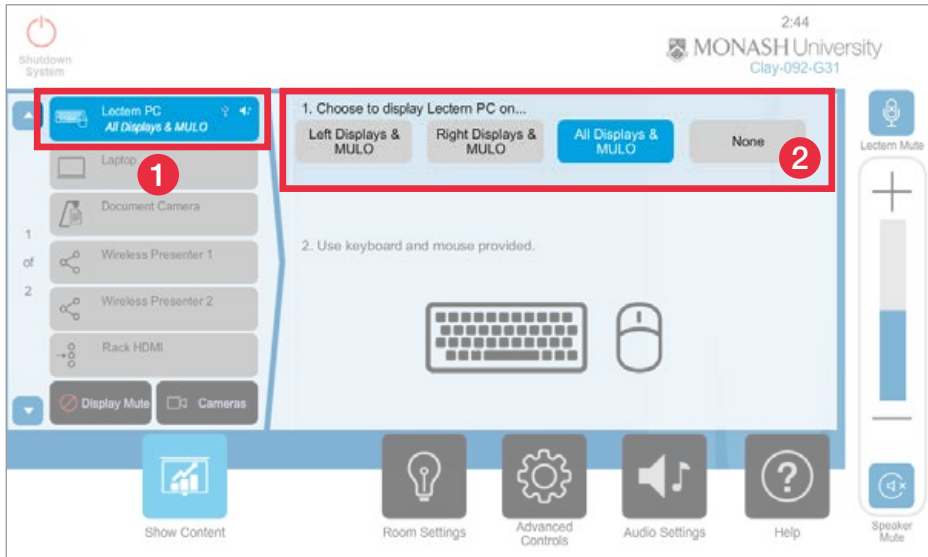
PRESENTING CONTENT

AV touch panel.....	20
Lectern PC.....	21
Using a laptop.....	22
Document camera.....	23
Whiteboard camera.....	24
Hiding content.....	25
Wireless presenter (MirrorOp).....	26



AV TOUCH PANEL

1. Available Sources
2. Page down button to second page of sources
3. Display Options
4. Function Pane
5. Audio Pane



LECTERN PC

1. Select *Lectern PC* on the source pane.
2. Select where to display the content:

- Main Displays / Left Display / Right Display / None

And where installed:

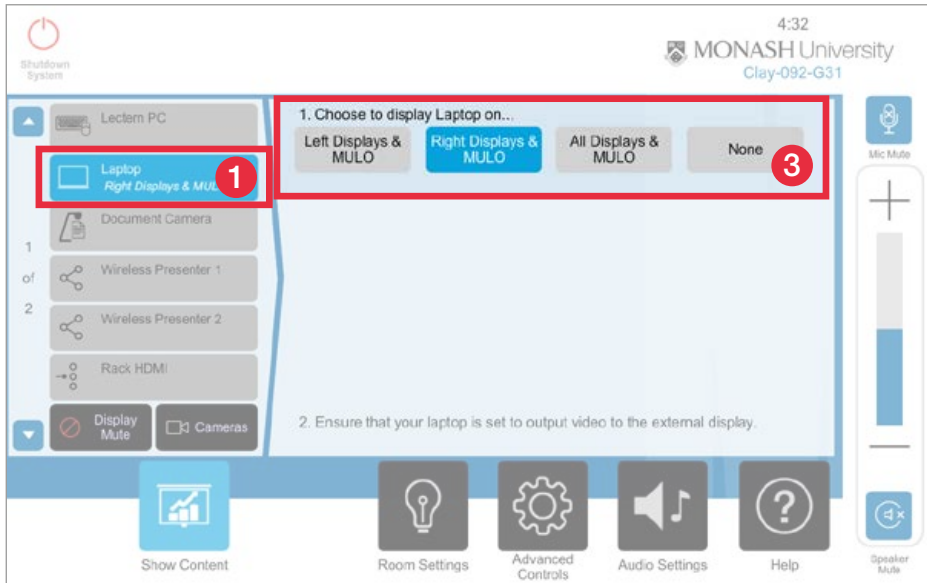
- MoCows
- DataWall Left / Middle / Right Displays
- Odd / Even Displays
- East / West Displays

NOTE: The active button in the Source pane will be highlighted along with the USB and audio icons when a USB device is connected and the speakers are active.



PC KEY

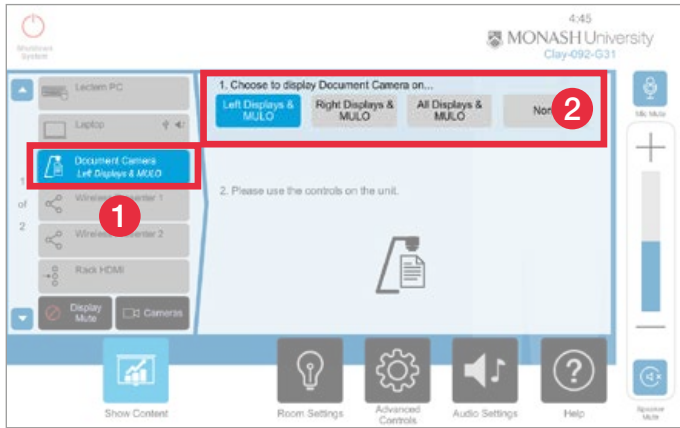
1. USB ports
2. Power button



USING A LAPTOP

1. Select *Laptop* on the source pane.
2. Connect your laptop using the HDMI cable. (To use the lectern PC mouse and keyboard with your laptop, connect the USB cable as well.)
3. Select where to display the content:
 - Main Displays
 - MoCows
 - All Displays
 - None (to stop displaying laptop)





DOCUMENT CAMERA

AV CONTROL PANEL

1. Choose *Document Camera* on the source pane.
2. Select where to display the content.
3. Zoom in / out to frame the document / object (see camera operation below).

CAMERA OPERATION

1. Move the camera arm up or down
2. On / off switch
3. Zoom wheel
4. Auto focus

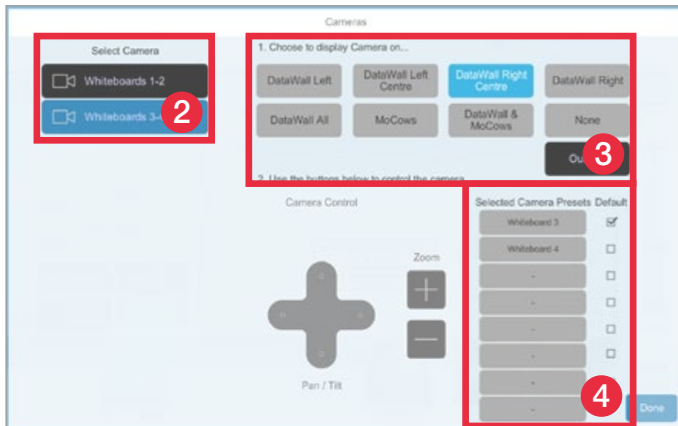




WHITEBOARD CAMERA

DIRECT DISPLAY

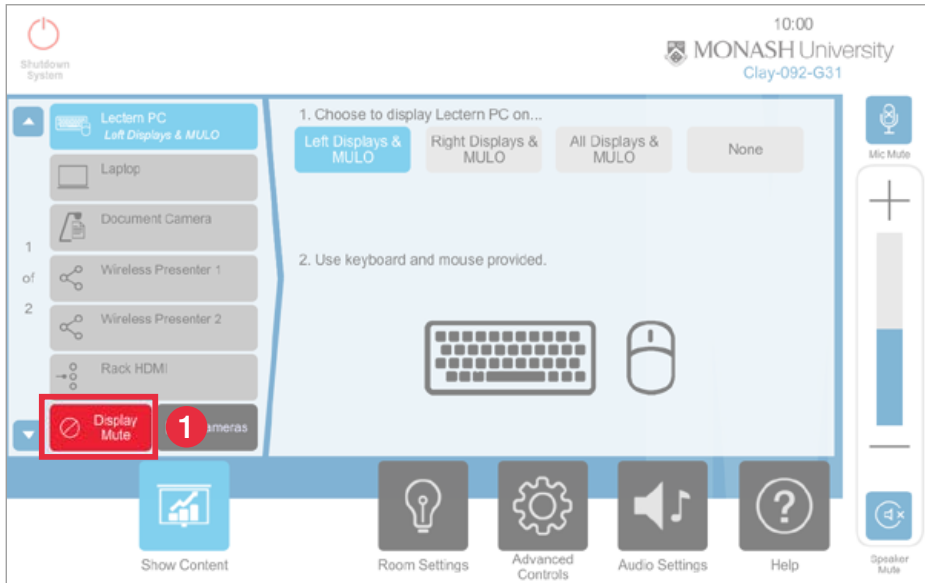
1. Press the button below a whiteboard to project to the main display (the button will illuminate red when active).
2. Use whiteboard markers to illustrate your point keeping within the black corners defining the border of the camera area.
3. Press the corresponding whiteboard button to switch between whiteboards.
4. To return to your previous presentation (e.g. laptop powerpoint) press any red illuminated whiteboard button.



DISPLAY USING AV TOUCH PANEL

1. Press **Cameras** on the AV touch panel.
2. Select whiteboard camera range (if applicable).
3. Select the relevant screen group to project whiteboards to (e.g. MoCows).
4. Select whiteboard preset that corresponds to the whiteboard number you wish to display.

NOTE: Whiteboard numbers are located in the top right hand corner of the black marked area.



HIDING CONTENT

1. Press *Display Mute* on the source pane to hide the content on the projected screen.
2. To resume projection, select the 'flashing red' *Display Mute* button.

NOTE: If you do not wish to display content on either projection screens or lectern monitor, select None.



Display mute button – projection enabled



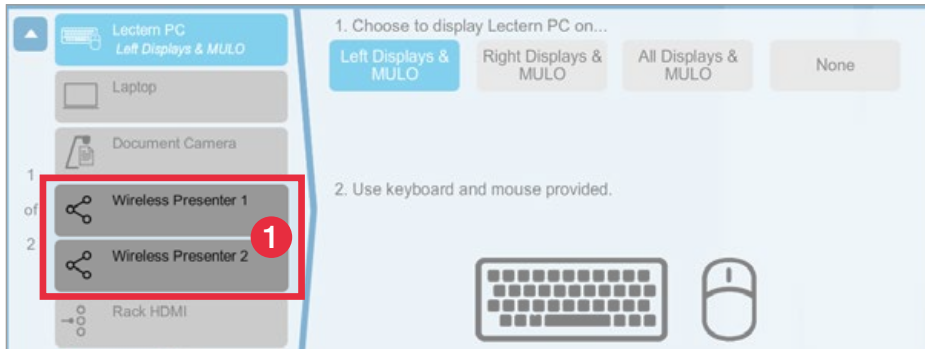
Display mute button – projection disabled

WIRELESS PRESENTER (MIRROROP)

Lecture theatres have a Wireless Presentation System that enables up to four laptops or mobile devices to concurrently connect and present wirelessly on the audiovisual system.

- You can now free yourself from the lectern with the MirrorOp software.
- Anything normally done on a computer can also be done while wirelessly presenting.
- Each system has its own Server IP address. There is also a Login Code that changes with each session.
- To use MirrorOp, you will first need to download the software via MySoftware or the website.
Visit: monash.edu/esolutions/learning-meeting-spaces/using-wireless-presentations

NOTE: For Android, iPhone or iPad, MirrorOp Presenter will need to be downloaded.



ACCESSING MIRROROP

1. Select *Wireless Presenter* on the source pane.
2. From your laptop Start Menu select *MirrorOp*.
3. Enter the IP address displayed on the screen display.
4. Enter the Login Code.
5. Press *OK*.

The screenshot shows the 'Wireless video presentation system' PC/Mac instructions page. It includes the following steps:

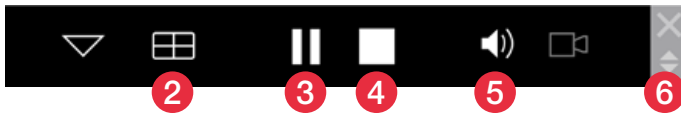
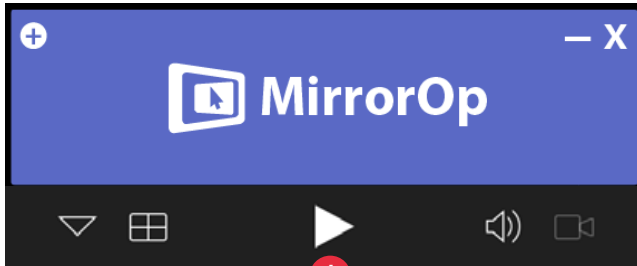
1. Connect to the **Eduroam** wireless network
2. Start **MirrorOp Sender** - available from the website below: <http://intranet.monash.edu.au/evolutions/wireless-presentation/>
3. Enter the IP (far right)
4. Enter the Login Code (far right) ie Passcode (far right)
5. Use [F11] to collapse the MirrorOp window down. Select the play icon [▶] to begin presenting

 A note at the bottom states: 'Note: If you do not want to present wirelessly, please connect your laptop to the provided cabling'. The MONASH University logo is also present.

The screenshot shows the Windows Start menu with the 'MirrorOp' application icon highlighted by a red circle containing the number '2'. Other visible icons include Mail, Maps, Messaging, Microsoft Edge, Microsoft Office 2016 Tools, Microsoft Skitchlight, Microsoft Solitaire Collection, Microsoft Store, Microsoft System Center, Mirror Op, Auto Log, Mixed Reality Portal, and Mixed Reality Viewer.

The screenshot shows the MirrorOp mobile app interface. It displays an error message: 'No compatible receiver found. Please check your network connection and try again.' Below the message, there is a red box containing the text 'Input hostname or IP' with a red circle containing the number '3' next to it.

The screenshot shows the MirrorOp mobile app interface. It displays a 'Passcode' entry screen with the text 'Enter the code displayed on WiD'. There are four input fields for the passcode, with a red box around them and a red circle containing the number '4' next to it. 'Cancel' and 'Ok' buttons are visible at the bottom.



NOTE: When opening MirrorOp the sound on your device will automatically mute. Sound will be projected to the AV system speakers.

WIRELESS PRESENTER

USING MIRROROP

1. After entering your log in code, wait 5 seconds for the play button to appear. Press **Play** to display content. This will display a pop up screen and will change to the MirrorOp controls.
2. For multiple devices, select the **quadrant button** and choose the position of each device. You can have up to four devices to one Wireless Presenter.
3. Pressing pause will freeze the projection screen, but will continue playing video and audio on the laptop. Press **Pause** to resume projection.
4. Press **Stop** to end the wireless session. A warning message appears to make sure you want to stop and exit.
5. Press **Volume** to mute audio.
6. The X will log out completely from the wireless presentation session and the application will return the user to the instruction screen.



OUR STUDENTS

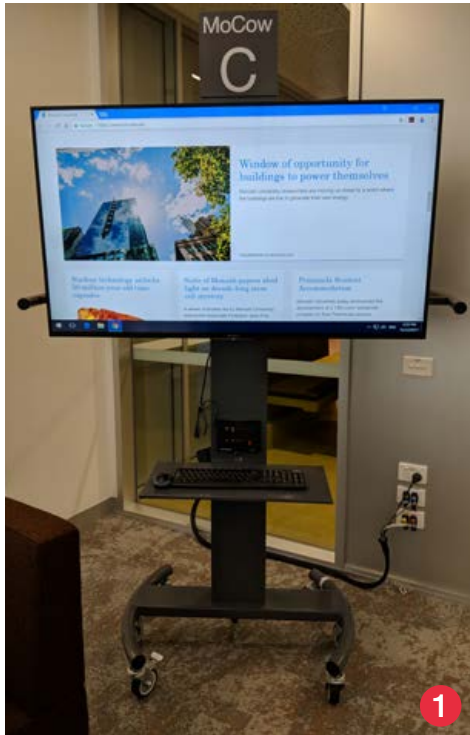
Collaboration tools	30
MoCows	31
Presenting on the main displays	32
DataWall enabled rooms	33



COLLABORATION TOOLS

Students can collaborate using a number of technologies within the room:

- Students can **develop** content in groups from a MoCow using:
 - A MoCow PC
 - Their laptop plugged into the MoCow
- Student group work can be **presented** on the Main display from:
 - A whiteboard camera
 - A MoCow
 - Wirelessly via MirrorOp on their laptop / phone
- **Compare** student group work side by side with other student groups on the wide DataWall display in enabled rooms.



MoCow – Mobile Computer on Wheels



MoCow wall point



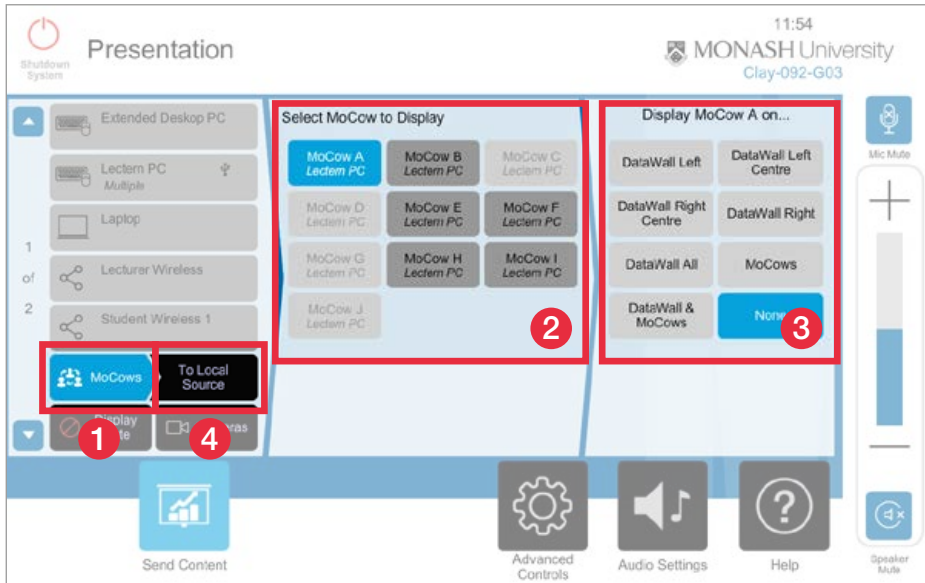
Control panel



Keyboard and mouse

MOCOWS

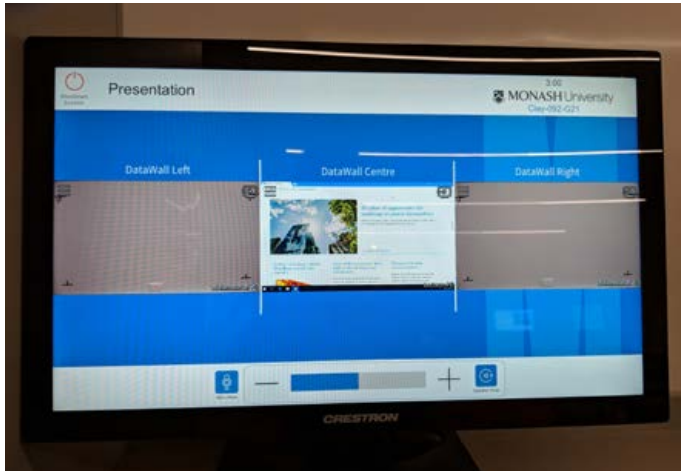
1. Move MoCow into a suitable location for student group activity.
2. Ensure the letter tile on the MoCow trolley matches up with the label on the wall point.
3. Switch the MoCow AV control panel to *PC/Laptop*:
 - MoCow PC will display by default (ensure PC is turned on).
 - Optionally connect a laptop to the HDMI cable; laptop will automatically switch over.
4. Use the MoCow wireless keyboard and mouse to control the MoCow PC (when displaying a laptop use the laptop's keyboard and mouse).
5. Begin student group activity.



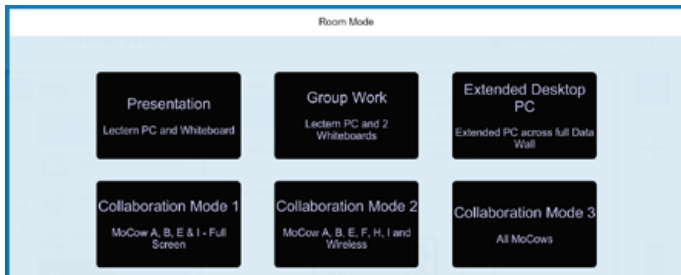
PRESENTING ON THE MAIN DISPLAYS

1. Select *MoCow* sources button.
2. Select which student group work to display.
3. Select where to display the work:
 - All Displays
 - DataWall Left
 - Etc.
4. Press *To Local Source* to split the MoCows back to their individual local PC or connected student laptop.

NOTE: This feature is only available in DataWall/60/90/120 spaces.



Touch Monitor found only in DataWall rooms. Can be used to customise each DataWall quadrant.



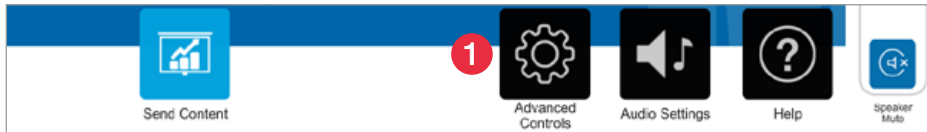
DATAWALL ENABLED ROOMS

ROOM MODES

When activities transition from teacher presentations to student group or other lesson modes it is often beneficial to use room mode presets to speed up the process of configuring the AV.

Room Modes available:

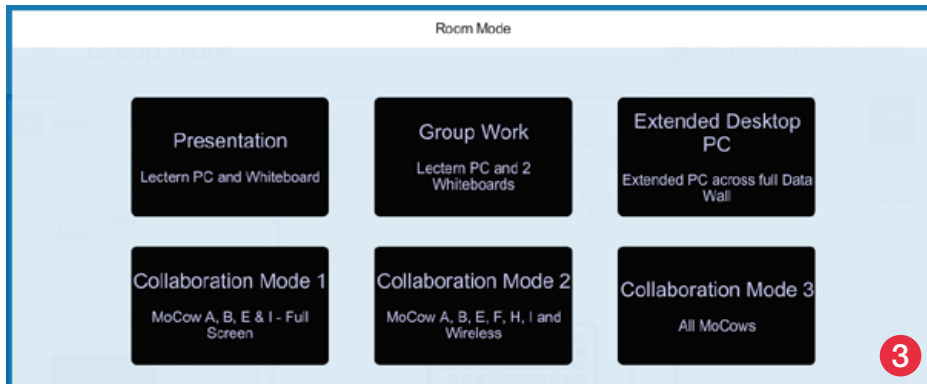
- **Presentation** – displays a single powerpoint or other presentation to the room.
- **Group Work** – displays a single powerpoint or other presentation to the room along with 2 whiteboards.
- **Extended Desktop PC** – displays a single wide screen canvas across the DataWall. This can be used to visualise highly detailed graphics or data rich content.
- **Collaboration Mode 1** – displays 1 MoCow per datawall screen to enable the juxtaposition of student work.
- **Collaboration Mode 2** – divide each DataWall screen into 4 subscreens. Top row of subscreens displays MoCows around the room. Bottom row of subscreens displays student content from their own device presented wirelessly.
- **Collaboration Mode 3** – divide each DataWall screen into 4 subscreens showing all MoCow outlets within the room.



Crestron Control Panel



Advanced settings screen



Available room modes

DATAWALL ENABLED ROOMS

SWITCH TO A DATAWALL ROOM MODE

1. Select *Advanced Controls*.
2. Press *Select Room Mode* button.
3. Choose a preset which most closely matches your lesson activity.
4. Fine tune further by selecting any additional sources and displays.

NOTE: Please contact MU-OLT mu-olt@monash.edu to discuss additional presets you would like to see in the future.



Source button



Play button



FINE TUNE A DATAWALL PRESET

Once a DataWall preset (Room Mode) has been selected, displays can be further customised to suit your needs using the Touch Monitor.

1. Current active preset (Room Mode)
2. DataWall screens preview
3. Source selection button per screen or quadrant
4. Play button to make quadrant full screen

CHANGE TO A DIFFERENT GROUPS WORK

1. Select the **Source** button.
2. Choose a source:
 - Student group
 - MoCows
 - Wireless



AUDIO AND LIGHTING

Microphones	38
■ Hand-held	39
■ Headset	39
Room settings	40
Audio settings	41



MICROPHONES

LTB spaces are equipped with the following microphones:

Tiered Collaborative spaces

- 2 x headset
- 2 x hand-held
- Found in Map Tables (see page 17)

Collaborative Spaces (30 capacity)

- No microphones

DataWall (30 capacity)

- 1 x headset
- 1 x hand-held

Collaborative Spaces (DataWall, 60, 90 and 120 capacity)

- 2 x headset
- 2 x hand-held
- Found at the teacher's touch down point (see page 13)



NOTE: When finished using either microphone, turn it off and replace the device firmly back into the charging dock to ensure the next user has a charged microphone.

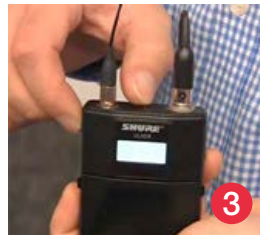
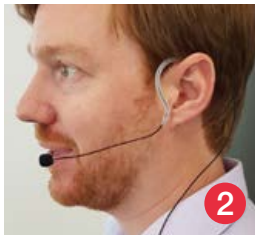
HAND-HELD MICROPHONE

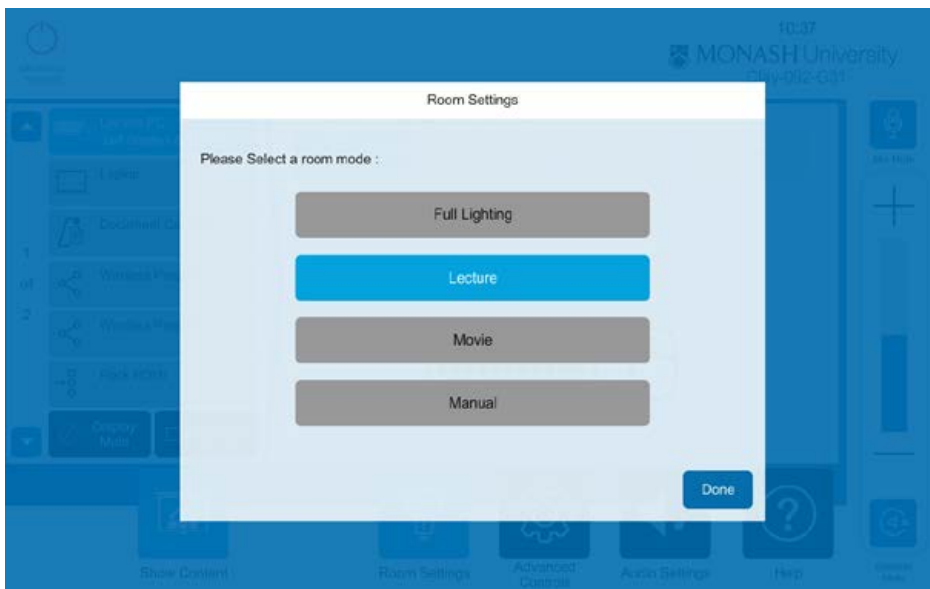
1. Retrieve the microphone from the charging dock.
2. Turn the microphone on and commence speaking.

HEADSET MICROPHONE

1. Retrieve the microphone from the charging dock.
2. Place the headset over your ear and ensure the microphone capsule is close to your mouth.
3. Turn the microphone on and commence speaking.
4. Ensure that the Mic Mute button is blue. If it is flashing red, it has been muted. Tap to unmute.

NOTE: If recording to MULO (Monash University Lectures Online), you need to use the microphones.





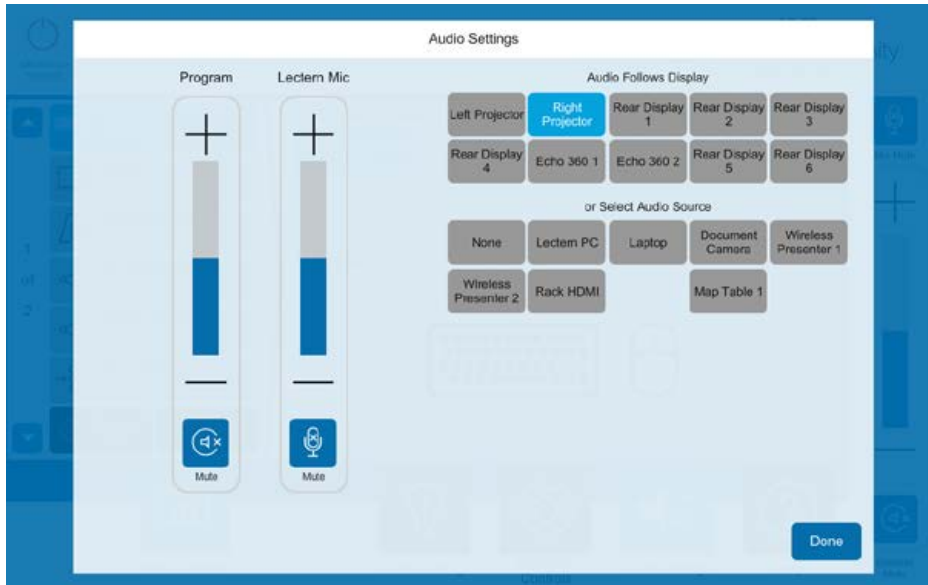
NOTE: In G.31 and G.81 the 'Full Lighting' setting will automatically open the blinds. Switching to 'Lecture' or 'Movie' setting will automatically close the blinds.

ROOM SETTINGS

Room settings allows you to control the lighting within the learning space.

To adjust the lighting using the controls:

1. Choose **Room Settings** on the AV touch panel.
2. Select the lighting control to be adjusted:
 - **Full Lighting** – turns all lights on full in the learning space.
 - **Lecture** – lighting will be dimmed slightly.
 - **Movie** – lighting will be dimmed as if in a cinema.
 - **Manual** – adjust the available lighting options manually. Blind control will be found here for Tiered Collaborative Spaces.
3. Press **Done**.



AUDIO SETTINGS

Audio settings allows you to control the room and microphone volumes within the learning space.

To adjust the audio using the controls:

1. Choose **Audio Settings** on the AV touch panel.
2. Adjust the volume of the audio:
 - Program – the source currently being used (PC, laptop, etc.).
 - Lectern Mic – includes the headset and hand-held microphones.
3. Select the required audio display or source. Right Projector is selected by default.
 - Audio Follows Display – Sounds will be heard from any chosen source on selected display.
 - Select Audio Source – Ability to have one source continually heard. Audio will override screen display to selected audio source.
4. Press **Done**.



SUPPORT

Key contacts 45



KEY CONTACTS

AUDIO VISUAL ASSISTANCE

T: 55155

ESOLUTIONS ASSISTANCE

T: 51777 (option 5)

E: servicedesk@monash.edu

Or log a job using Service Desk Online:

servicedeskonline.monash.edu

STAFF DEVELOPMENT TRAINING SUPPORT

T: 29888

E: staff.development@monash.edu

