

ETB 234 SEPT CAD Lab Instructor Desk AV Instructions

- 1) The ETB 234 AV Control Panel is a wall mounted touchscreen located on the north wall on the left side of the instructor desk. It controls what inputs goes to each of the two ceiling mounted projectors. For inputs there are the two instructor desktop screens which are set up as a dual monitor to the main instructor CAD workstation and various cable connections for a laptop or another AV input.

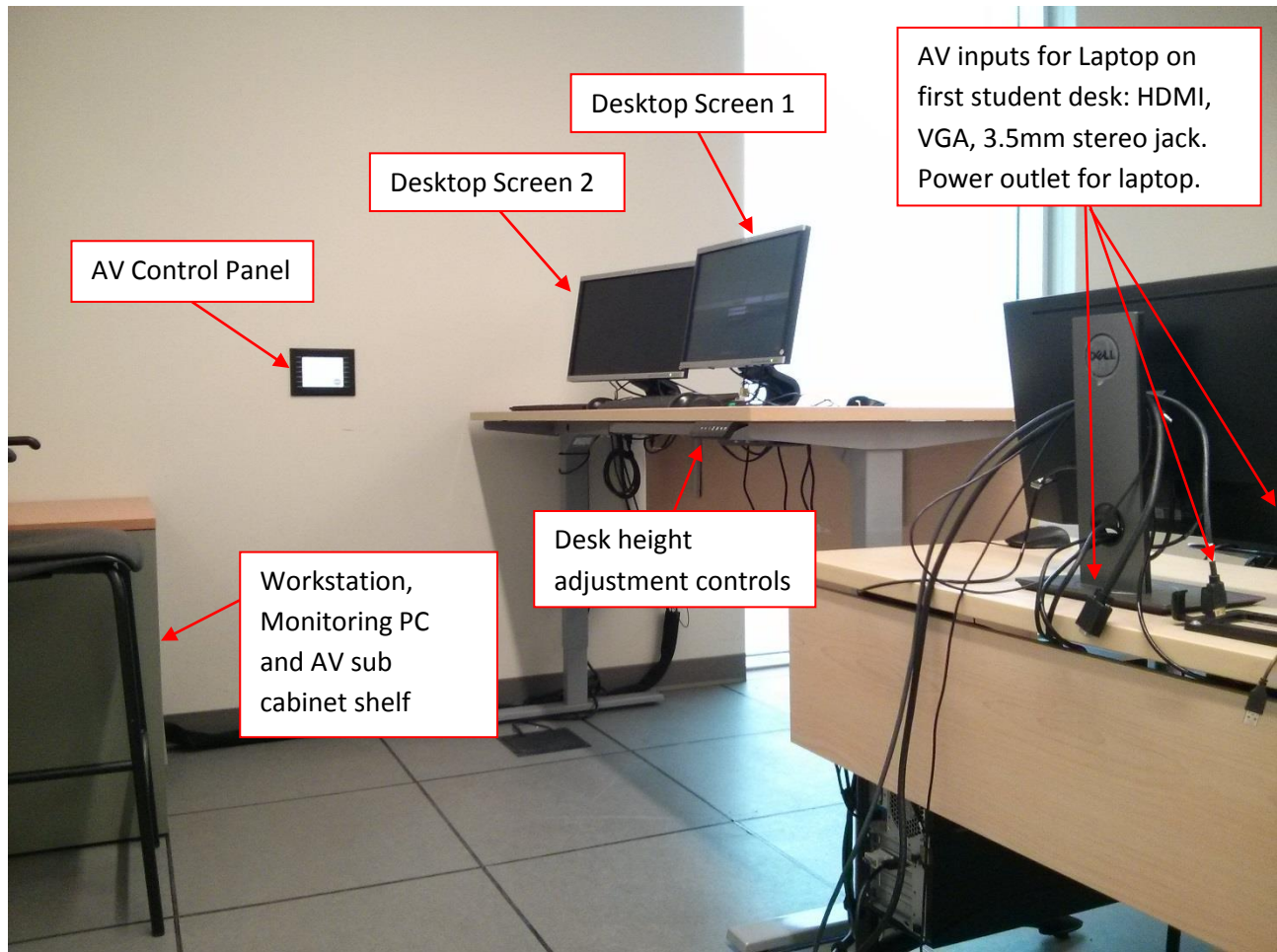


Figure 1: ETB 234 Instructor Desk and AV locations

- 2) The Workstation and normal desktop computers on the shelf perform different functions. The Workstation is the main instructor computer that has the same software as the student workstations. This would be the computer that you plug in your USB or run a DVD from. The second desktop computer has the Insight student monitoring software where one can see real time thumbnail screen shots of the student computers. The two computers cannot be interchanged as the projectors are not connected in any way to the second computer.

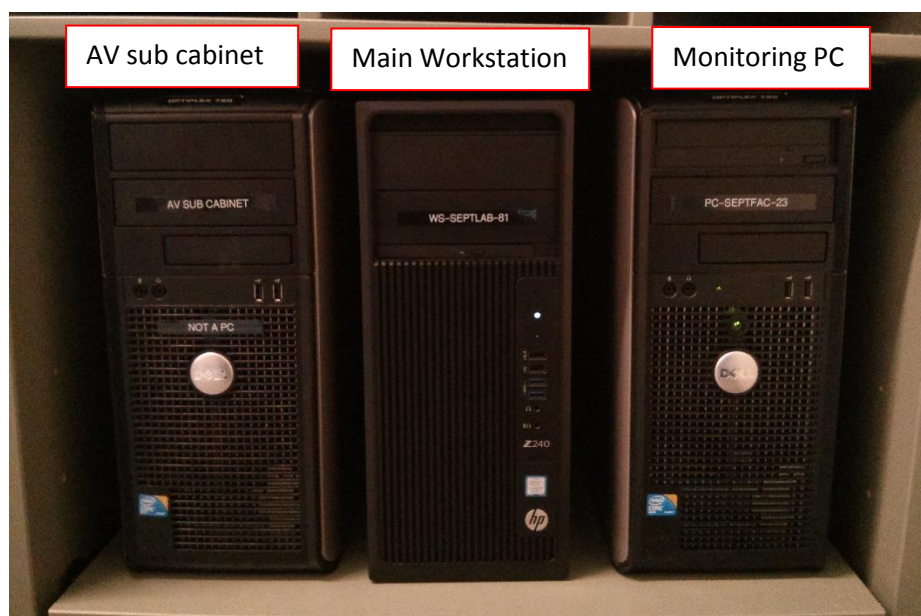


Figure 2: Computers and AV sub cabinet on the shelf unit

3) Desktop Screen 1 is the main screen for the Workstation. Desktop Screen 2 is the second monitor of the Workstation in a dual screen setup when that monitor's input is set to DVI. Both are set to a resolution that matches the Projectors native resolution so the items may appear larger than normal on the screens but the students will be able to see the content on the projector screens from the back. The outputs of Desktop Screen 1 and Desktop Screen 2 can be selected for display on the AV Control Panel. Desktop Screen 2 also acts as the main screen of the second desktop computer when that monitor's input is set to VGA. The desk height can be adjusted to suit your needs using the adjustment controls.

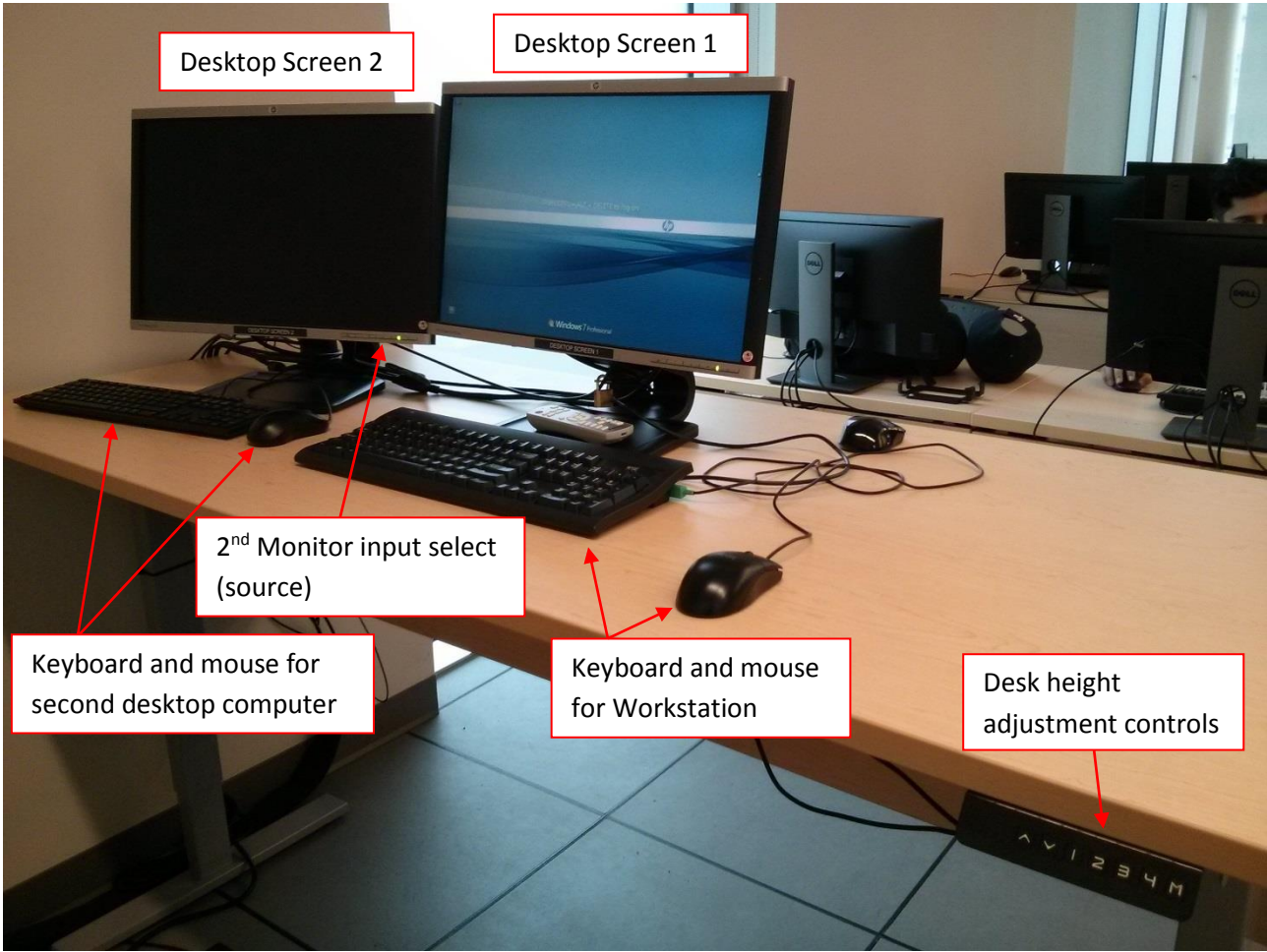


Figure 3: Instructor desk and monitor/keyboard/mouse layout

- 4) To change the input (source) on the second monitor you will need to click on the “+/source” button on the bottom right of the screen which will cause a “source control” menu to appear on the screen. From there use the “+” and “-” keys on the monitor to select “DVI” if you want the Workstation to have a dual monitor setup or “VGA” if you want to use the second desktop computer for monitoring the students screens. Then click on the “OK/auto” button and “OK” again if required. Note that the “dual monitor” option will still be active on the projector screens even if you select the second monitor for use with the second desktop computer.

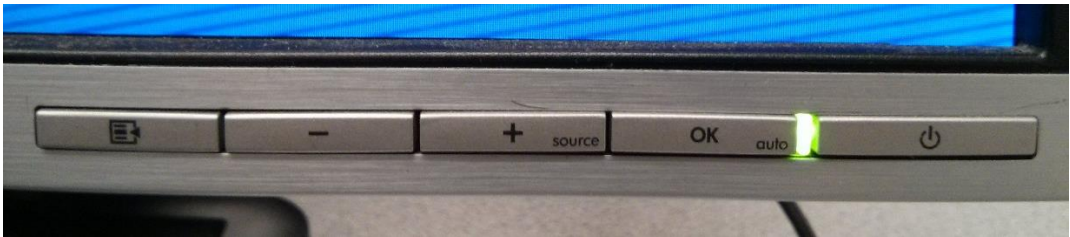


Figure 4: Monitor button controls

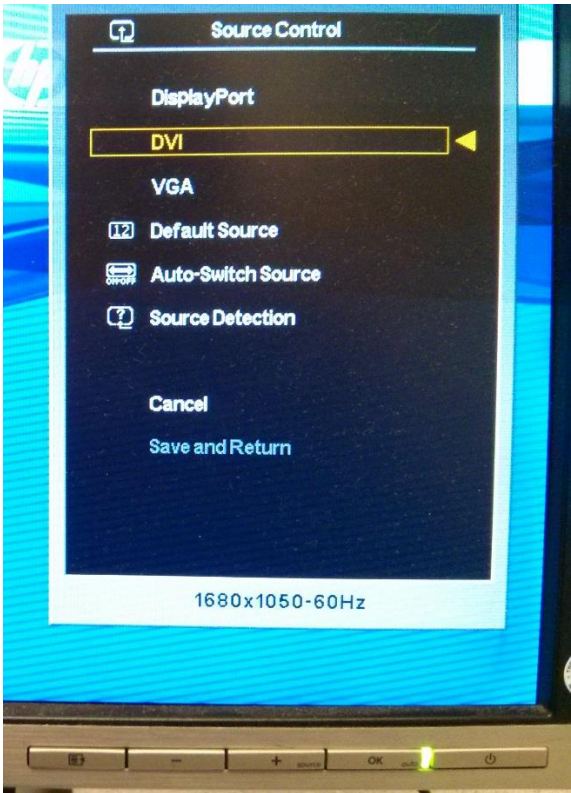


Figure 5: Monitor on screen source control menu

- 5) The CAD lab workstations and the second desktop computer are on the McMaster ADS domain so you and your students will need to use your Mac ID to login. All user accounts are stored on the workstation locally so the student’s saved work will remain on the computer that they used and will not transfer to another computer that they may log into. It is advised that the students save their work to a USB or cloud drive as the computers could be reformatted any time if an issue or software install occurs.

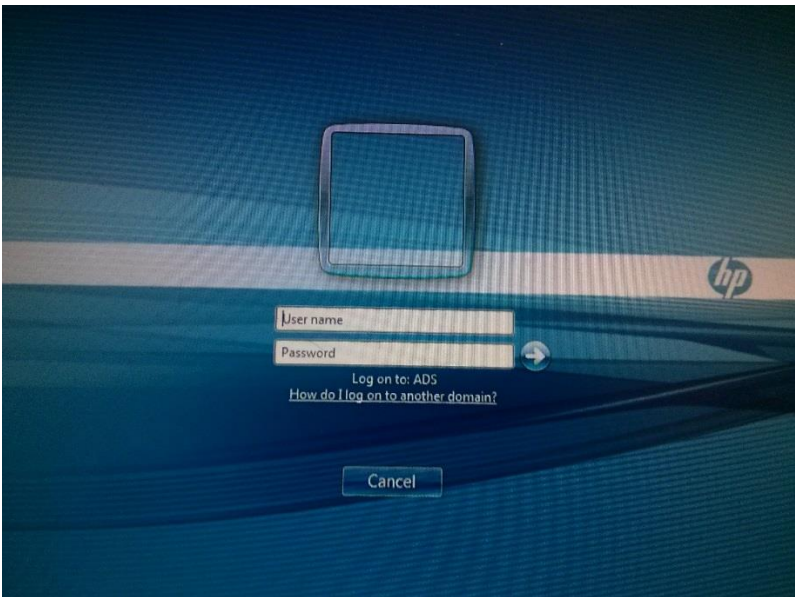


Figure 6: Workstation login screen (Windows 7)

AV Startup

- 6) If the AV Control Panel touch screen is blank then touch it. It should power on and display the gray standby screen or the AV control display if the previous user forgot to log out in which case you can skip to Step 8. On the standby screen touch the “Enter” button.

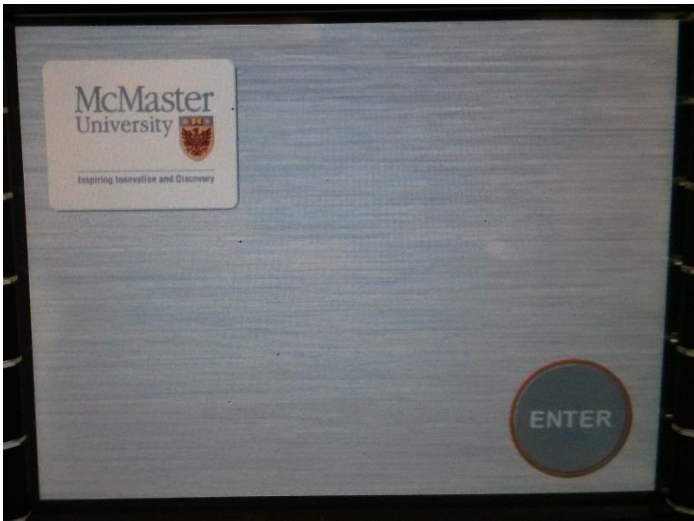


Figure 7: AV Control Panel standby screen

- 7) Enter the code and press “Submit”. A green loading bar will appear as the system and projectors power on. If you make a mistake you can use the “Clear Password” button to delete the entered password and retype it. You will need to obtain the ETB 234 AV Code from the SEPT person that you booked the lab with to login.

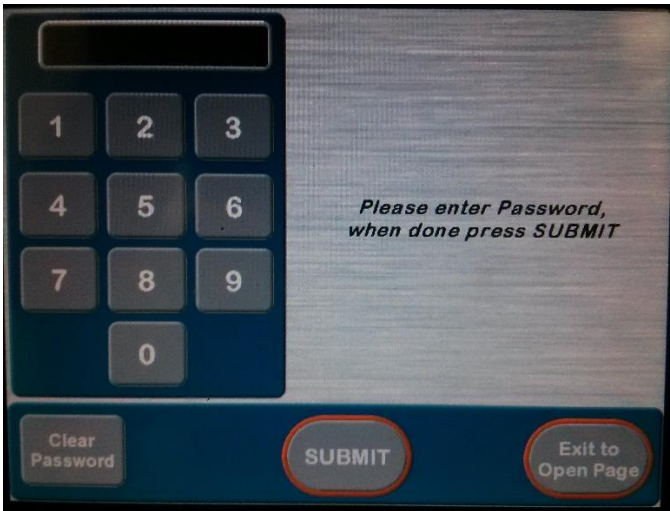


Figure 8: AV Control Panel password screen

Projector

- 8) The AV control screen will appear once fully powered on. From here you can select the desired input source for the Left and Right projectors. Note that the projectors are labelled Left and Right on the front of the unit. The active video selected will be indicated by the button “highlighted” a brighter colour than its normal gray. As well you can display nothing on the projectors by selecting the “HIDE” button within the projector menu. To display again on the projectors select “SHOW”.

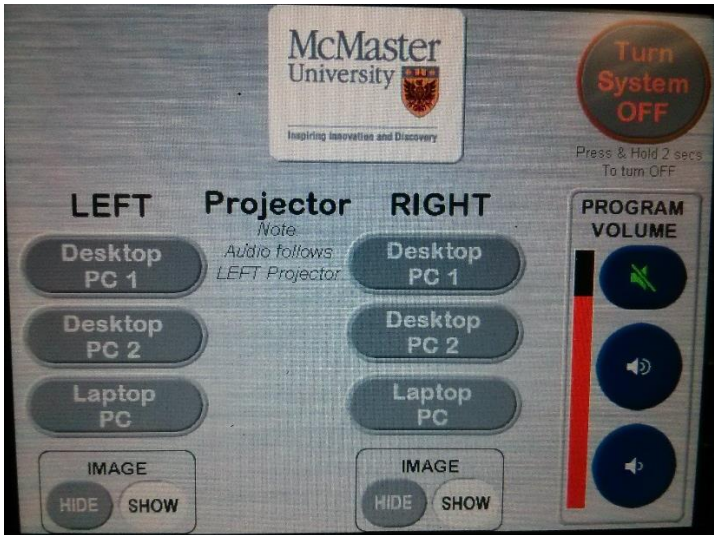


Figure 9: AV Control screen

- 9) For the instructor workstation selecting the “Desktop PC 1” under the Left or Right projector on the AV control screen will display Desktop Screen 1 by the selected project on the respective projector screen. The same will be if “Desktop PC 2” is selected it will display Desktop Screen 2. If you wish to match the dual screen layout of the instructor monitors then “Desktop PC 2” would need to be selected for the Left projector and “Desktop PC 1” for the Right Projector.

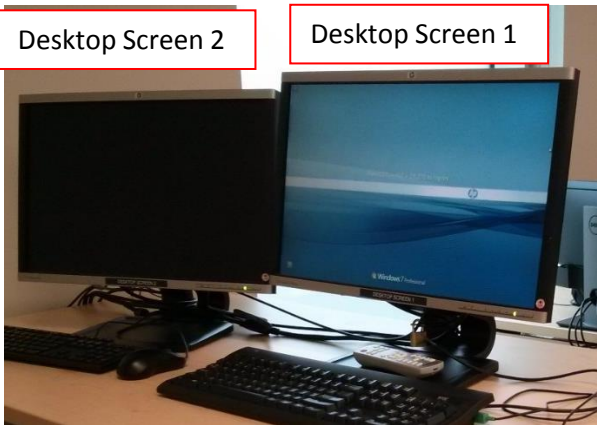


Figure 10: Instructor monitors



Figure 11: Projector input selection area of screen

Laptop

- 10) Your laptop can be connected to one of the available video input cables at the first student desk besides the instructor desk. As well there is an available power outlet on the second student desk to plug your laptop to. Plug only one of the video cables into the corresponding jack on your laptop. In some cases you may need to provide your own video cable converter if none of the two options will plug into your laptop. Then select the “Laptop PC” input on the AV control screen within the Active Video menu.



Figure 12: Laptop video inputs cables available

Audio

- 11) Audio is synced with the input source that is selected for the Left projector. You can set the volume level for the selected Left input by using the “Increase” and “Decrease” sound icon button in the “Program Volume” section of the AV Control screen. You will see the volume level indicated on the vertical volume bar on the side. You can also mute the audio with the “Mute” icon button. The Mute button will light up red when it is active and the volume bar level will vanish. Volume levels can also be adjusted further on the Workstation and on your laptop.

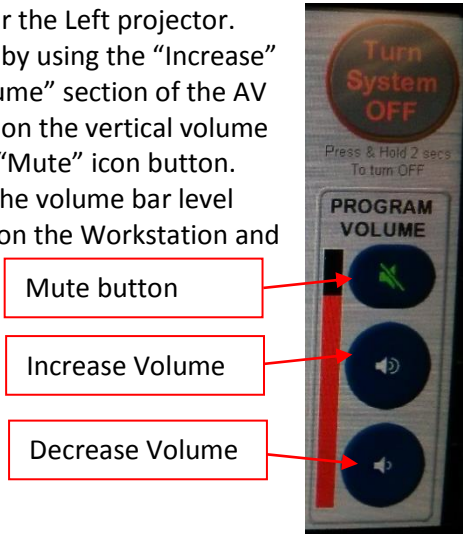


Figure 13: Volume menu area

- 12) To get sound from your laptop will depend on what video connection was made by you to the laptop. If you used the HDMI connection then the sound will also be available along with video through that single cable. If you used the VGA connection then you will need to also connect the single 3.5 mm stereo cable to the headphone jack on your laptop.



Figure 14: 3.5mm stereo cable

Shutdown: AV

- 13) To shut down the AV system press and hold the red “Turn System Off” button in the top righthand corner of the AV Control screen. The button must be held for a number of seconds until the projectors turns off. Once you see a load bar appear you may stop touching the screen. The system will power off the projectors.

Projector Remote

- 14) If the AV Control system does not start up or shut down the projectors then the remote is provide on the instructor desk for manually performing those operations. Instructions for this item are be included in a later revision.



Figure 15: Projector remote

Height Adjustable Desk Controls

- 15) The instructor desk and the double student desk in the last row by the north wall windows have electric height adjustment for either the instructor’s preferred instruction method of standing or sitting and for accessibility needs. The height adjustable student double desk in the last row should be surrendered to those students that may need the desk such as those using wheelchairs. The controls have labels above each of the buttons indicating what it does. Instructions for operating the controls will be included in a later revision.



Figure 16: Desk height adjustment controls