CLASSROOM TECHNOLOGY GUIDE



Media Services Contact Information

Bill Williams, Multimedia Coordinator
Columbia Campus – Waymon L. Hickman Building, Room 131
wwilliams13@columbiastate.edu
Phone: 931.540.2888

Lili Eubank, Coordinator/Theater & Event Services
Columbia Campus – Waymon L. Hickman Building, Room 131
leubank1@columbiastate.edu
Phone: 931.540.2885

Williamson Campus, Administration Building, Suite 220
mediaservices@columbiastate.edu
Phone: 615.465.5721

Audiovisual technology is provided in classrooms and labs to engage students. Operation of this equipment is standardized as best as possible to ensure easy use.

Please keep the following in mind:

- Each instructor station has a “black box” (control panel or touch screen) to operate the equipment. The manufacturer’s name, Extron, is usually imprinted on the box.

- Display ON or System ON turns on the projector or TV. It will lower the projector screen at the same time.

- Display OFF or System OFF turns off the projector or TV. It will raise the projector screen at the same time.

- While the “black box” may differ in size or look in some classrooms, the above applies. Don’t worry about breaking anything. . .press the button or tap the icon on the screen that best represents the above.

- On the rare occasions that the audiovisual equipment doesn’t turn ON or OFF, wait one minute and try pressing the button or icon again.

- Oh, don’t forget to make sure the computer power is turned on. The computer is located inside one of the compartments of the instructor station. You will not believe the number of times we get called for a problem and find the computer is off.

The instructions on the following pages will guide you on the basic operation of the equipment. This guide is not intended to provide full instructions found in equipment manuals. There may be some slight variances within this guide of equipment pictured but the application of the instructions provided can be applied.

Please contact the Media Services team at mediaservices@columbiastate.edu if you have any questions.

Table of Contents

Control Panel found in most Classrooms (How to Turn ON/OFF the Projector and Other Functions) 4

Next Generation Touch Screen found in Some Classrooms 6

Next Generation Cable Cubby 8

Lawrence County Campus Control Panel 10

WAYMON L. HICKMAN BUILDING, ROOM 121 14

FRANKLIN ADMINISTRATION 221 BASIC PRESENTATION EQUIPMENT INSTRUCTIONS 17

BASIC PRESENTATION EQUIPMENT INSTRUCTIONS FOR FRANKLIN ADMINISTRATION 223 COMMUNITY ROOM 18

MICROPHONE INSTRUCTIONS FOR FADM 223 COMMUNITY ROOM 20

LIVESTREAMING/WEB CONFERENCE INSTRUCTIONS FOR FADM 223 COMMUNITY ROOM 21

WARF 105 CLASSROOM - LOCAL CLASSROOM PRESENTATION 22

WARF 105 - DESKTOP VIDEO CONFERENCE (DVC) 24

Elmo Document Camera 26

Cable Cubby with External USB ports, and Laptop Connections 28

Having difficulties with equipment in the classroom? 29

Control Panel found in most Classrooms
How to Turn ON/OFF the Projector and Other Functions



Buttons and Volume Knob

DISPLAY ON: Press Display On to turn on the projector and lower the screen. (Warning: 90 second warm up time; wait for button to stop blinking)

DISPLAY OFF: Press Display Off and then confirm action on touch screen by tapping Power Down icon to turn off the projector and raise the screen. Failure to confirm will cancel the action.

MUTE: Press the MUTE button to silence audio. Press again to return to normal.

VOLUME (Black knob under Mute button)**:** Turn the knob to the right to increase volume. Turn it to the left to decrease volume.

SELECTING A DEVICE FOR PROJECTION: Press one of the following buttons to project that device.

1 – PC

2 - LAPTOP: After pressing button, tap one of the icons on the touch screen to select proper cable.

3 - DOC Camera (Elmo document camera).

(See next page for explanation of touch screen.)

Touch Screen found in most Classrooms Continued

Home Screen: The home screen displays the classroom location and Columbia State logo. Tapping the home screen has the same effect as pressing the Display On button. It will lower the screen and turn on the projector.



Laptop Screen: After pressing the

Laptop button, the touch screen will change to give two input cable options. Tap the icon of the cable connected to the laptop.

Note that any mobile device that accepts an HDMI type cable, or has an HDMI female adapter, may be plugged in to the projection system. Tap the appropriate icon to project on the screen.

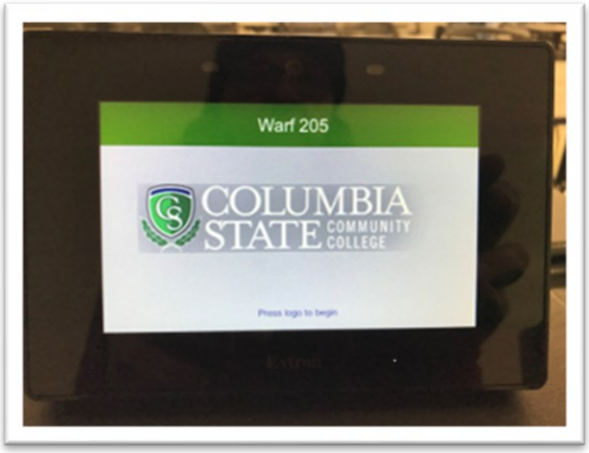


PIC MUTE: Tap the *Pic Mute* icon to temporarily dim the projector bulb and raise the screen (the projector does not turn off). Tap the icon again to return to normal. This icon appears on every screen of the device selected for projection.



Next Generation Touch Screen found in Some Classrooms

Home Screen: The home screen displays the classroom location and Columbia State logo. Press the logo to begin which turns on the projection system.



Projecting a Device: Press one of the following icons to project the device on the projection screen or TV.

1 - PC

2 - LAPTOP

3 - DOCUMENT CAMERA
(Elmo document camera)

4 - AUX INPUT (*Not in use*)



PICTURE MUTE: Tap the *Pic Mute* icon to temporarily dim the projector bulb and raise the screen (the projector does not turn off). Tap the icon again to return to normal.

CEILING MIC MUTE

Tap the icon to mute the ceiling microphone. Tap again to unmute.

SOUND VOLUME CONTROL

Move the slider above the Mute icon to adjust the sound volume up or down. Tap the Mute icon to mute the audio. Tap again to unmute.



(Continued on next page.)

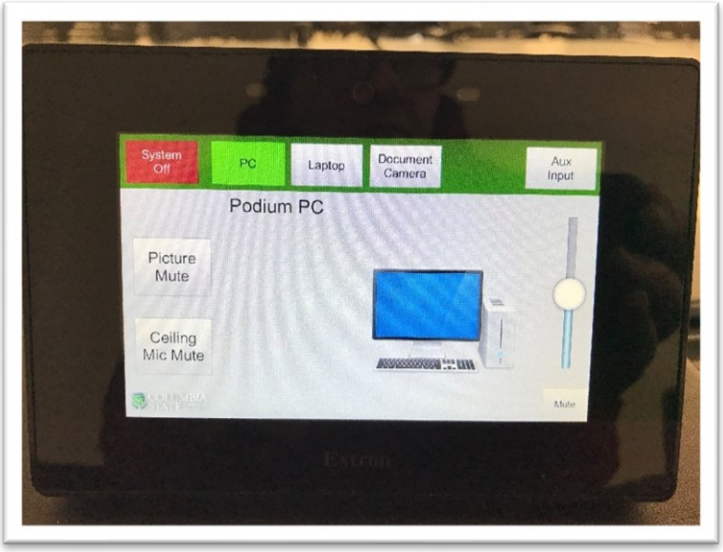
Next Generation Touch Screen (Continued)

Touch Screen Functions

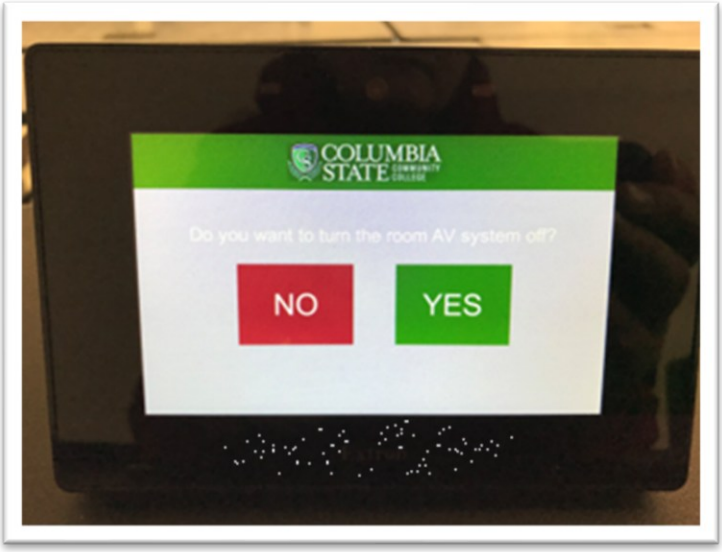
SYSTEM OFF:

STEP 1 - Tap the System Off icon to begin the process of turning off the projection system.

Note: This does not log off the computer and logging off the computer does not turn off the projection system. They are two separate actions.



STEP 2 - Tap the YES icon to confirm the action of turning off the projection system. Tap the NO icon to continue using the projection system in the ON state.



Next Generation Cable Cubby

Laptop connection, wired Internet connection, power outlet, and USB port

Lift the black metal cover to reveal the HDMI cable for laptop connection, wired Internet connection, power outlet, and the instructor station's computer extended USB port.



Laptop or Mobile Device Connection

Pull the HDMI cable up and out.

Connect it to the HDMI port on the device. Note that any mobile device that accepts an HDMI type cable may be plugged in to the projection system using the cubby's HDMI cable.



Push the button labeled **PRESS** above the cable to retract the cable to its home position.

Wired Internet Connection

Pull the Internet cable up and out.

Connect it to the Internet port on the device.

Push the button labeled **PRESS** above the cable to retract the cable to its home position.

(Continued on the next page.)

Next Generation Cable Cubby (Continued)

USB Port

The cubby's USB port is connected to the teacher station's computer. You may plug a USB thumb drive or clicker receiver into this port. **This port is not a phone charger.**



AC Electrical Outlet

This outlet may be used for electronic devices.

Lawrence County Campus Control Panel

Follow prompt on Extron Control Panel to turn on projection or TV system.



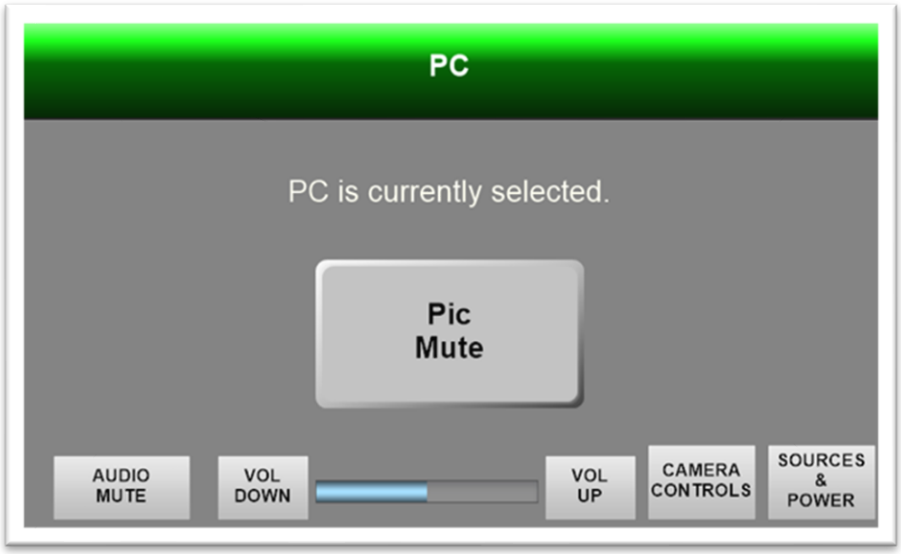
Tap the icon of the device you want to project on the screen or TV. Note that the control panel screen display different options based on the device you select.



(Continued on the next page.)

Lawrence County Campus Control Panel Continued

Each device page on the control panel will have common controls.



Button Descriptions

Tap **Pic Mute** to blank the projection and raise the screen to use the whiteboard

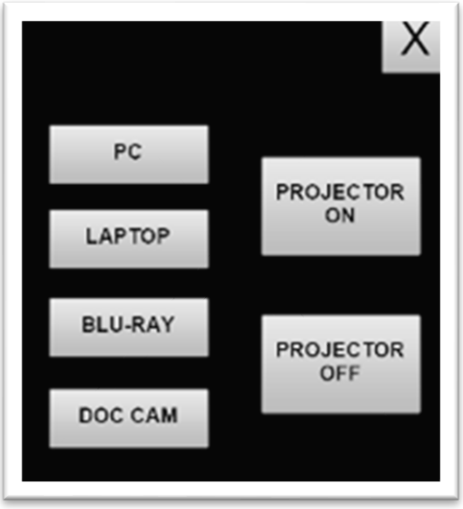
Tap **AUDIO MUTE** to silence the room speakers

Tap **VOL DOWN** to decrease audio level on the room speakers

Tap **VOL UP** to increase audio level on the room speakers

Tap **CAMERA CONTROLS** to bring up a menu to control the live streaming camera

Tap **SOURCES & POWER** to switch to bring up a menu to select a different device to project or to power off the projector.



Note:

You have to use a USB cable to connect the DOC CAM to the computer to use in Zoom meeting.

The BLU-RAY will play DVD discs in the classroom but not on Zoom.

(Continued on the next page.)

Lawrence County Campus Control Panel Continued

The following page will appear when you select **LAPTOP**.



Connect the appropriate cable from the cable cubby located on the teacher station to the laptop or device you want to project. Then tap the icon for that cable to project the laptop on the screen or TV.



(Continued on the next page.)

Lawrence County Campus Control Panel Continued

The following page will appear when you select **Blu-Ray**.



The symbols on the icons are the universal symbols for DVD/BLU-RAY player control. Tap the appropriate icon for the action you want.

The **More…** icon will reveal an additional menu that will allow you to scroll through a disc's menu (i.e. scene selection) and function select. Tap the appropriate arrow to move through the Blu-Ray or DVD menu and land on the selection you want to make. Press OK to select the menu item.



Note that the Blu-Ray player does not play videos in Zoom or Microsoft Teams. You must use the PC disc drive to stream a DVD in those applications. The PC cannot play a Blu-Ray disc.

WAYMON L. HICKMAN BUILDING, ROOM 121

The following instructions explain the functions of the Crestron control panel in Hickman 12. Presentation mode is used when lecturing in the room only, and the instructions are on this page. The next page explains Video Conference mode - used for Desktop Video Conference (DVC).

PRESENTATION MODE

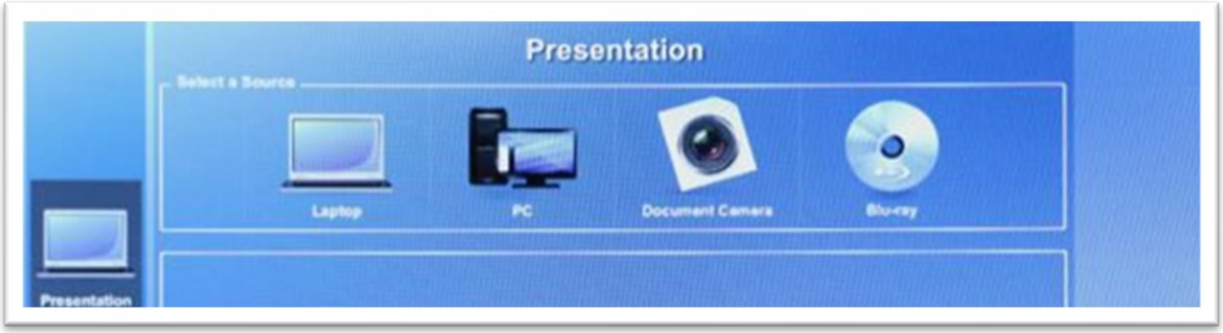
1. Tap the Crestron screen to wake it up and follow the instructions to begin.

2. Select Presentation mode.

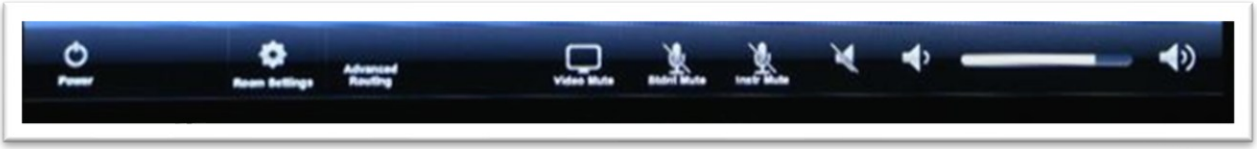
3. The screen will change to the Presentation control page.



4. Select a source to display by tapping the corresponding icon



5. Power off the system by tapping the power icon and answering the question. You can mute the video by tapping the Video Mute icon. Volume is controlled by tapping the speaker icons.



(Continued on the next page)

WAYMON L. HICKMAN BUILDING, ROOM 121 CONTINUED

The following instructions explain the Video Conference mode - used for Desktop Video Conference (DVC). This is used when using video conference software like Zoom or Teams.

VIDEO CONFERENCE MODE

1. Tap the Crestron screen to wake it up and follow instructions to begin.
2. Select Video Conference mode.
3. The screen will change to the Video Conference Control page.



NOTE: This is an Extended Desktop Display system. When using the PC, programs other than PowerPoint (i.e., Internet Explorer or Online Campus—you can't play a video when in DVC mode) will need to be "dragged" from monitor 1 to monitor 2 to display on the room's TV screens. Place the cursor on the bar at the top of the program. Using the left click on the mouse, hold down the left click key and drag the program to the second monitor.

The touch screen is used to control the system as follows.

- VC Displays: tap the PC icon to display the computer. Tap the Document Camera icon to display the document camera. (NOTE: Please stop sharing your screen so that the far site can see the doc cam full screen.)

- In/Out: tap In to zoom the camera in and tap Out to zoom the camera out

- Instructor/Student: tap Instructor icon to broadcast the instructor camera. Tap the Student icon to broadcast the student camera. Icons P1, P2, P3, P4, & P5 are preset views for each camera.

(continued on the next page)

WAYMON L. HICKMAN BUILDING, ROOM 121 CONTINUED

- Black Circle with Dots: tap one of the dots to move the selected camera (up, down, left, or right)
- Power Icon: tap the Power icon to turn off the system. Tap Shutdown to power off. Tap Cancel to return to previous page.
- Video Mute: you can mute the video by tapping the Video Mute icon. Nothing will display. Tap again to display video.
- Stdnt Mute: tap the icon to silence the student microphones in Hickman 121. Tap again to un-silence.
- Instr Mute: tap the icon to silence the instructor microphone in Hickman 121. Tap again to un-silence.
- Speaker Icons: Mute, Decrease Speaker Volume , and Increase Speaker Volume. Tap the appropriate icon to control Hickman 121 speaker volume.

FRANKLIN ADMINISTRATION 221
BASIC PRESENTATION EQUIPMENT INSTRUCTIONS

A presentation in Room 221 is possible if the room divider is closed. There is no control system like there is in Room 223. However, a presentation may be projected on the screen by doing the following.

STEP 1: Lower the projector and screen using the Down button on the corresponding button panel on back wall.



STEP 2: Locate the connection plate on the back wall. Connect laptop computer using an HDMI cable.

Note: The press feed connections can be used to supply audio to a camera or production equipment if the larger space is in use (divider open). There are also wired Network/Internet connections on this plate.



STEP 3: Use an NEC projector remote control to power on the projector and select the HDMI 2 source to project the laptop.



When the presentation is finished:

- Power off the projector.
- Wait 1 minute, then put the projector back in the ceiling pressing the up button on Projector Panel.
- Raise the screen by pressing the up button on the Screen Panel.

BASIC PRESENTATION EQUIPMENT INSTRUCTIONS FOR FRANKLIN ADMINISTRATION 223 COMMUNITY ROOM

Move your hand in front of control panel to wake it up. Then tap the Touch here to begin icon.



Choose Combined Mode if you are presenting to the larger space. The room partition will be open.

Choose Individual Mode if room partition is closed, splitting the community room in half.



The home control screen will appear when the AV system is ready for operation.



(Continued on the next page.)

BASIC PRESENTATION EQUIPMENT INSTRUCTIONS FOR FRANKLIN ADMINISTRATION 223 COMMUNITY ROOM CONTINUED

Tap one of the icons or press one of the buttons to project that device on the screen.





The Digital Laptop HDMI cable and Analog Laptop VGA cable is in a cubby to the left of the control panel.

Use the volume control knob to adjust room volume.



Tap the System Off icon to shut down the system.



Tap the Power Down icon to turn the system off or Cancel to continue using the system.



MICROPHONE INSTRUCTIONS FOR FADM 223 COMMUNITY ROOM

Microphones are stored in soft cases inside the presentation station or the Workforce Work Room. There are handheld microphones and lapel (lavaliere) microphones for the Community Room. A combination of up to six microphones can be used at one time.

Each microphone has a switch. Move the switch up to turn it ON. Move the switch down to turn it OFF. The lapel microphone has a Right to Left switch; move the switch to the ON position to turn it on.

The presentation system must be turned on in the Combined mode for the microphones to be heard in the entire room. The microphones will only be heard in the front half of the room if operating the presentation system in the Individual mode.

The volume of each microphone can be adjusted by doing the following:



1. Press the Mic Control button.
2. The Microphone Control page opens.

   - The arrows next to the corresponding microphone number control the volume.

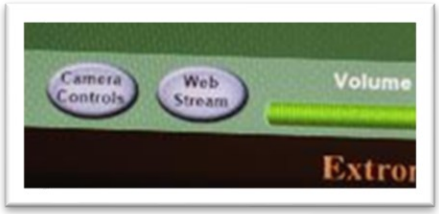
   - Tap the UP arrow icon to increase volume or the DOWN arrow icon to decrease volume. Tap Mute icon to mute the microphone.

   -Tap the Close icon to exit the page.

LIVESTREAMING/WEB CONFERENCE INSTRUCTIONS FOR FADM 223 COMMUNITY ROOM

Meeting platforms like Zoom and Microsoft Teams can be used in the Community Room if the host of the meeting has a meeting platform account. The following instructions guide the operation of the streaming system. Note that the camera and microphones are connected to the computer through an audiovisual bridge.

1. Tap the Web Stream icon.



2. The Streaming System page opens.



-Tap Stream to begin broadcasting the room cameras and microphones. Tap Stop to stop broadcasting the camera and microphone. Color Bars will appear in the stream.

-Tap Stdnt Cam icon to broadcast a view of the audience.

-Tap Instr Cam icon to broadcast a view of the presenter.

-Tap the Camera Controls icon for camera control.

-Tap the Vid Mute icon to turn off the camera. Tap again to turn it back on.

-Tap the Audio Mute icon to turn off the microphones. Tap again to turn it back on.

-Tap the UP or Down arrows to adjust the microphone volume.

-Tap the Close icon to exit the page.

WARF 105 CLASSROOM - LOCAL CLASSROOM PRESENTATION

The following instructions are for presenting to the local classroom only. Livestreaming DVC (Desktop Video Conference) operation instructions follow.

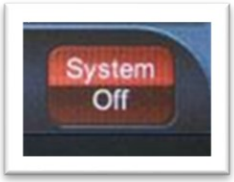
1. Wave your hand in front of the Extron panel to wake it up.
2. Touch the screen to begin.



3. Tap Local Presentation.



NOTE: If you find it in the Video Conference mode, tap System Off and then tap ***Swap Modes*** to select the Local Presentation mode.

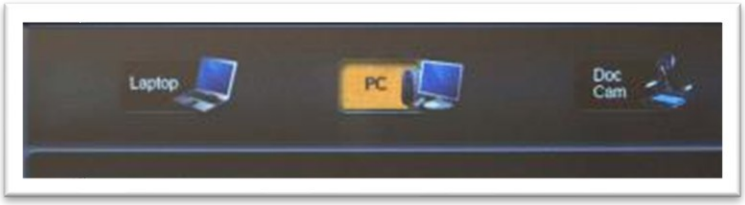




(Continued on the next page.)

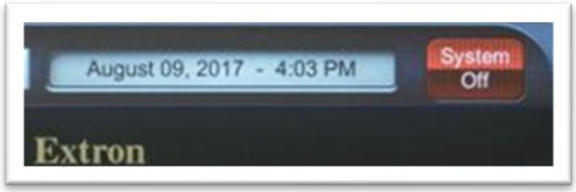
WARF 105 CLASSROOM - LOCAL CLASSROOM PRESENTATION CONTINUED

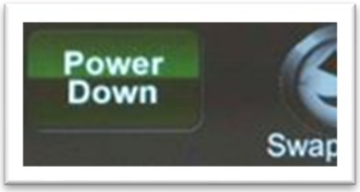
4. There are three icons at the top of the screen. Tap the icon of the device you want displayed on the TV screens.



NOTE: Selecting Laptop or Doc Cam will give you additional controls. Follow the instructions on the screen. Program Volume controls sound levels in the room.

5. Tap System Off, then tap Power Down on the next screen to turn off system.





WARF 105 - DESKTOP VIDEO CONFERENCE (DVC)

The following instructions are for DVC (Desktop Video Conference). Local presentation operation instructions are on the previous pages.

1. Wave your hand in front of the Extron panel to wake it up and touch the screen to begin.



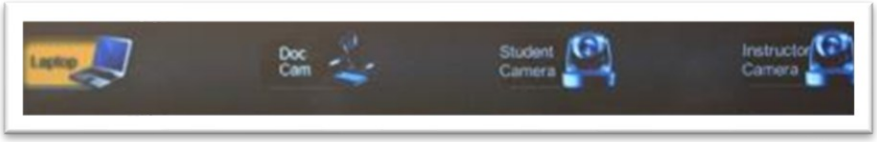
2. Tap Video Conference.
   NOTE: If you find it in the Local Presentation mode, tap System Off and then tap Swap Modes to select the Video Conference mode.







3. There are four icons at the top of the screen. Tap the icon of the device you want to broadcast. NOTE: The PC is automatically broadcast in Video Conference mode.

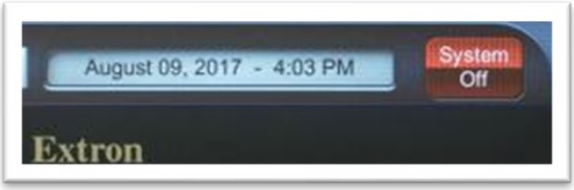


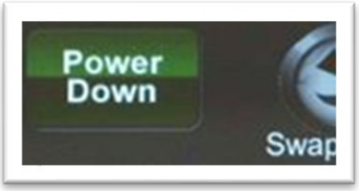
(Continued on the next page.)

WARF 105 - DESKTOP VIDEO CONFERENCE (DVC) CONTINUED

NOTE: Selecting Laptop, Doc Cam, or one of the Cameras will give you additional controls. PC Volume controls sound levels in the room. The microphones can be silenced by tapping Mute under the appropriate microphone label (Podium Mic and/or Ceiling Mic). Camera angles can be adjusted by tapping one of the Preset icons, or one of the Arrows. The Zoom control, + (plus) and – (minus) can be used to widen or shorten the field of view.

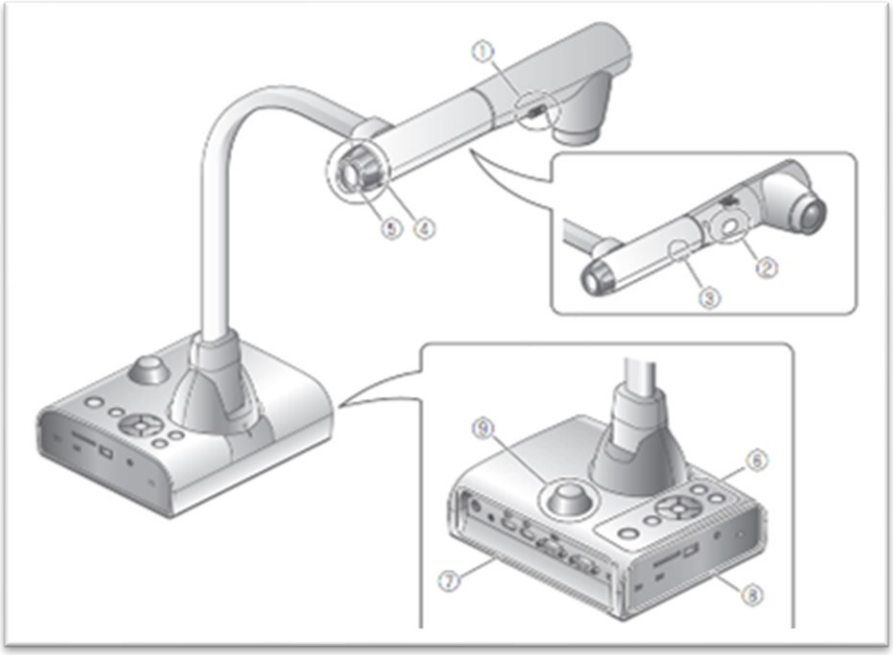
4. Tap System Off, then tap Power Down on the next screen to turn off system.





Elmo Document Camera

These are the most common functions for the model of Elmo document used in most classrooms.



1 - ILLUMINATION SWITCH
Move the switch to the right to turn on the light (#2 in drawing). Move it to the left to turn it off.

4 - ZOOM DIAL
Rotate the dial toward you to zoom in. Rotate the dial away from you to zoom out.

5 - AF (Automatic Focus)

6 - OPERATING PANEL

(Continued on the next page.)

Elmo Document Camera Continued

Operating Panel

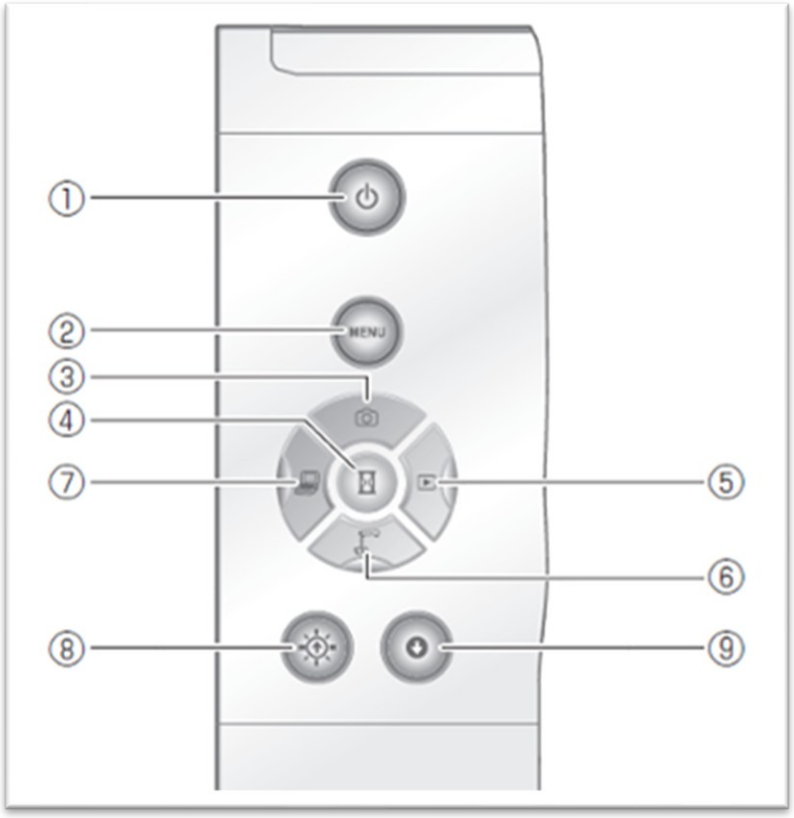
These are the most common functions for the model of Elmo document used in most classrooms.

1 - POWER BUTTON
Press the power button once to turn on the document camera. The light around the button will turn blue.

Press and hold the power button for 2 seconds to turn the power off. The light around the button will turn red.

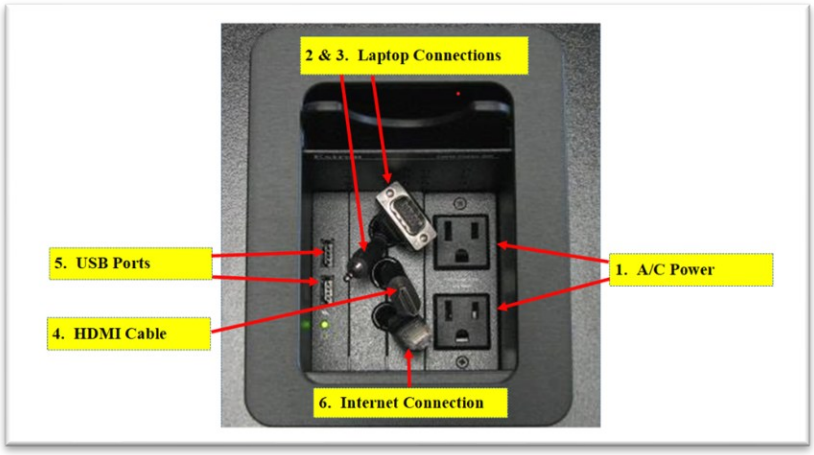
8 - BRIGHTNESS ADJUST
Press the button in increments to brighten the image.

9 - DARKNESS ADJUST
Press the button in increments to darken the image.



Cable Cubby with External USB ports, and Laptop Connections

The Extron Cubby provides external connections for the PC's USB ports, laptop connection, and other mobile devices. Some cubbies may look different but have the same ports and connections.



1. **A/C Power** for Laptop and other mobile devices provides110V power.

2. **Laptop Computer Video Port.** Connect the VGA Cable into a similar looking port on your laptop. Press *DISPLAY ON* to lower screen and power on projector. Select *Laptop* on the control panel and tap the icon of the cable on the touch screen to see the device's video on projection screen.

3. **Laptop Computer Audio Port.** Plug the mini audio jack into headphone port on your laptop. You can also plug an I-Pod or MP3 player into this port. Select *Laptop* on the control panel and tap the VGA cabke icon on the touch screen to hear the audio.

4. **HDMI Cable for Laptop Connection and other mobile devices.** HDMI (High-Definition Multimedia Interface) is a digital replacement for existing analog audio/video standards. Many newer computer, audiovisual, and mobile devices use this type of interface to transmit audio and video data to displays such as projectors and televisions. Plug the HDMI cable into the device, select *Laptop* on the control panel, and tap the icon of the HDMI cable on the touch screen to project and/or hear the device.

5. **USB Port for Flash Drives, USB Drive, etcetera.** Connect your USB device here for the teacher station's PC.

Wired Internet Connection for Laptop Computer. Connect the internet cable to the similar looking port on your laptop computer.

Having difficulties with equipment in the classroom?

The following troubleshooting guide may help to solve the problem. Further assistance, including a personal tutorial
session, may be arranged by sending an e-mail to Media Services at mediaservices.columbiastate.edu.

Cabinet doors locked?

· The keys should be next to the computer keyboard or in the drawer.

None of the equipment is working!

· Is the master power switch, located inside the cabinet, on?

· Are all the components inside the cabinet turned on?

Projector Problems

· Have you turned on the projector using the control panel or touch screen? It is a black box mounted on the
countertop. Look for the "ON" or “DISPLAY ON” button .

· Have you selected the correct input source? Press the button on the control panel that corresponds with the device you are using.

Screen Problems

· The screen will automatically lower when you press the "ON" or “DISPLAY ON” button on the countertop control panel.

· Try pressing the “ON” or “DISPLAY ON” button again after the projector is on and the button stops blinking.

(Continued on the next page.)

Having difficulties with equipment in the classroom? (Continued)

Computer Problems

· Have you turned the computer power on?

· Have you turned on the power to the monitor?

· Have you "logged on" to the network?

· Is the computer not projecting? Check to see if the projector is turned on and the correct input source (PC) is
selected on the control panel.

· Volume problem? Use the control panel's volume knob to adjust the sound.

· Double-click the speaker icon on the computer's taskbar to adjust the output volume.

Document Camera/Visual Presenter (Elmo)

· Is the power turned on? On some models, the power switch is located in the rear of the document camera near the power cord.

· Is the document camera not projecting? Check to see if the projector is turned on and the correct input source (DOC CAM) is selected on the control panel.

· Is the document dark? Check to see if the lamp is turned on. Also, you may need to adjust the iris.

· Is the document bright? Try turning off the lamp and/or adjusting the iris.

· Is the document out of focus? Try pressing auto-focus or manually adjusting the focus.

· Is the remote control's batteries dead? Contact Media Services at mediaservices@columbiastate.edu for new batteries.

DVD Player (Where equipped)

· Is the power turned on?

· Is there a DVD or CD in the machine?

· The machine will not play the disc. Have you tried another disc?

· Did you press DVD on the remote control or front of the machine?

· Is the DVD machine not projecting? Check to see if the projector is turned on and the correct input source (VIDEO or DVD/VCR) is selected on the control panel.

Having difficulties with equipment in the classroom? (Continued)

· Is the remote control's batteries dead? Contact Media Services at mediaservices@columbiastate.edu for new batteries.

· Volume problem? Use the control panel's volume knob to adjust the sound.

ZOOM (Livestream/DVC Issues)

· **Can't hear the participants?** In the Zoom application, click on the arrow next to the microphone icon. Select test Speaker and Microphone. Rotate through the speaker, headphone, or other audio selections until you hear the participants. Also make sure that the participant's microphone is unmuted.

· **Participants can't hear you?** In the Zoom application, click on the arrow next to the microphone icon. In the Zoom application, click on the arrow next to the microphone icon. Select test Speaker and Microphone. Test the speaker and then move on to testing the microphone. Speak a few words and then pause. Zoom will play back what you said. Keep selecting other microphone choices until you are heard.

· **Can't see the participants?** Check the view settings. The view setting menu is found in the upper right hand corner of the Zoom application when in a meeting

· **The participants can't see you?** Ask them to check their view settings. The view setting menu is found in the upper right hand corner of the Zoom application when in a meeting. You should also check to see if you have the correct camera selected. In the Zoom application, click on the arrow next to the camera icon and select a camera in the list. If using an external USB camera, try unplugging the camera and plugging it back in.

· **If all else fails**, close the Zoom application, restart the computer, reopen the Zoom application, and restart/rejoin the meeting.

· There is more helpful information on Zoom's website at (click on the link): **https://support.zoom.us/hc/en-us**