This classroom system can operate in two different projection modes:

**CLASSROOM (L&R):**
- ✔ Using the Classroom (Left & Right) mode allows dual projection from up to two different sources.

**CINEMA (CENTER):**
- ✔ Using the Cinema (Center) mode allows for single projection from one source.

**PLEASE NOTE:** THE SELECTION OF PROJECTION MODE (ROOM MODE) CAN ONLY BE DONE WHEN ALL PROJECTORS ARE OFF.

When you are done using the system, please remember to turn off each projector by pressing the “Power Off” button.

Since once you press “Power Off,” you will have to wait until the shut down sequence is complete to restart the system, use “Image Mute” if you plan to use the system again during your class period.

For additional assistance or to set up an equipment training session, please call the Classroom Support Hotline at 612-625-1086.
**TO SWITCH BETWEEN SOURCES:** Press the source button of the item you wish to display (Laptop 1 or 2, Document Camera, VHS, or DVD).

*Please note: The source button will blink while that source warms up. When the button stops blinking, the source is ready to use.*
**USING THE SYSTEM (CINEMA CENTER MODE)**

1. Select the mode in which you want to project: Classroom (Left & Right) or Cinema (Center).
2. Press any source button on the touch screen.
3. It may take up to three minutes for the system to warm up. Please be patient. From within any control menu, pressing Escape will return you to the main projection system menu.

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**IMAGE MUTE:**
Press IMAGE MUTE to black-out the image. To un-mute the image, press the button again.

**DOCUMENT CAMERA CONTROLS:**
Displays controls for the Document Camera.

**IMAGE ASPECT:**
Press this button to adjust the screen aspect ratio from 16x9 (widescreen) to 4x3 (normal). This control can only be used when the projector is in Cinema (Center) mode.

**PROGRAM VOLUME:**
Use the up/down buttons to adjust volume.

**AUDIO MUTE:**
Press AUDIO MUTE to mute only the sound. To un-mute the sound, press the button again.

**ROOM MODE:**
Displays controls for changing the room projection mode.

**ELECTRIC SCREEN CONTROLS:**
Displays controls for the electric screens.

**DVD/VHS CONTROLS:**
Displays controls for the DVD and VHS players.
**CONNECTING A LAPTOP**

1. The standard cables are located in the pocket of the instructor station. You may need to flip up the metal cover to access the cables.

   *Please note: The projection system allows for the connection of up to two laptop computers at the same time. The sets of cables, labeled “1” and “2,” correspond to the “LAPTOP 1” and “LAPTOP 2” buttons on the touch screen. Either laptop connection can be displayed on either or both projectors.*

2. Connect one of the VGA cables to the laptop before you turn on the laptop. Be sure to align the cable with the port and push it in straight, taking care to not bend the pins.

   *Please note:* Some Apple laptops have a DVI (or mini-DVI) port, rather than the standard VGA port. To use the projection system, you will need to use a VGA adapter to connect your computer to the laptop cable. If you do not have an, you can purchase one at the U of M Bookstore. OCM does not supply adapters in classrooms.

3. Connect the thin audio cord into the headphone jack of your laptop (not the microphone jack).

4. Press the “LAPTOP 1” or “LAPTOP 2” source button (depending on which laptop cable you used in step 2) on the touch panel of the desired video projector. The projector will take approximately 3 minutes to warm up.

5. When the “Laptop” source button stops blinking, start the laptop.

6. If the laptop image does not appear, activate the external display:

   **For PC (Windows-based) Laptops:** To activate the external display, you must press and hold the Function key (labeled “Fn”); while holding down the “Fn” key, press the appropriate secondary key (as noted in the chart at right). The image should appear on the screen.

   **For Mac (Apple) Laptops:** To activate the external display, open “System Preferences” on your laptop. Click on “Displays,” then “Detect Displays.” The image should appear on the projection screen.

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**IF YOU NEED TO ADJUST THE LAPTOP VOLUME:**

Increase the system volume by using the volume up/down buttons on the touch screen.

- If you cannot hear any audio, verify that the "Audio Mute" button on the system control panel is not on. *When this button is selected, the audio will not play.*

- You can also increase the volume by adjusting the volume on the laptop itself (using the laptop’s control panel). If that does not work, verify that the laptop’s mute button is not selected.

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**IF THE IMAGE IS DISTORTED, OR YOU SEE AN ERROR MESSAGE THAT INDICATES “FREQUENCY OUT OF RANGE”:**

You may need to adjust the monitor resolution.

- **For PC Laptops:** From the Start Menu, open the Control Panel and double-click on the “Display” icon. Select the “Settings” tab, and adjust the screen resolution to 1024 by 768 pixels.

- **For Mac Laptops:** Open “System Preferences” on your laptop. Click on “Displays,” and in the “VGA Display” window select “1024 x 768, 60.0 Hz” from the list.
**Using the DVD and VHS Players**

1. Press either the “DVD” or “VHS” buttons on the touch screen control panel (located on the instructor station). When the button stops blinking, the source is ready for use.

2. Insert your DVD, CD, or VHS tape.

3. Press either the “DVD Controls” or “VHS Controls” button to access the player controls (play, stop, fast forward, scan, menu, etc.).

4. Use the Transport Controls on the touch screen to control the player. For additional DVD navigation options, use the DVD Navigation controls (on the right side of the touch screen).

5. To return to the main menu, press “Escape.”

**DVD/VHS Tips**

**To Use Closed Captioning:**

To activate the closed captioning, locate the “Closed Captioning” switch near the DVD/VHS combination unit. Flip the switch to the “ON” position.

*Please note:* When playing a DVD, if the captions do not appear, you may need to activate the closed captioning on the DVD’s menu of options (using the DVD Navigation controls on the touch screen).

**If the DVD Image is Freezing or Distorted:**

- Remove the disc from the player.
- Check the disc for damage.
- Clean the disc (to remove smudges or fingerprints).

**Using the Auxiliary Video (for External Devices)**

The data/video projector is capable of displaying audio and video from a variety of user-provided external devices (including portable DVD players, iPods, and more) using the Auxiliary Video input jacks. To connect an external video playback device, you will need to provide the appropriate AV cable (with yellow, white, and red connectors).

1. Connect the AV cables to the output jacks on the device and to the input jacks on the front of the equipment rack (below the DVD/VHS combination unit).

2. Press the “Auxiliary Video” button on the touch screen (located on the instructor’s table). The image from the device should appear on the projector screen.
**Using the Wireless Rechargeable Microphone**

1. Remove the mic from the charging base and clip the microphone mouthpiece to your shirt, about 3 inches directly below your chin.

2. Unmute the microphone by pressing the side button. *The microphone is ready to use when the top light is green.*

**Wireless Rechargeable Microphone Tips**

<table>
<thead>
<tr>
<th>If the Microphone is Not Working:</th>
</tr>
</thead>
<tbody>
<tr>
<td>First try using the second microphone.</td>
</tr>
<tr>
<td>If the microphone is not charged, (indicated by a blinking yellow/green light) return it to the charging base and use the second microphone.</td>
</tr>
<tr>
<td>If the second microphone is not available, please call the Classroom Support Hotline at 612-625-1086 for assistance</td>
</tr>
<tr>
<td>Please note: the rechargeable microphones do not have volume adjustment.</td>
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<tr>
<th>Microphone Indicators and Alerts:</th>
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<tbody>
<tr>
<td>✓ If the microphone leaves the immediate vicinity of the classroom, the unit will turn off and emit an alarm beep to alert you to return the microphone to its charging base.</td>
</tr>
<tr>
<td>✓ The LED indicator light on the top of the microphone will indicate its status:</td>
</tr>
<tr>
<td>✓ If it is <strong>blinking red</strong>, press the side button to unmute it.</td>
</tr>
<tr>
<td>✓ If it is <strong>green</strong>, the microphone is charged and on.</td>
</tr>
<tr>
<td>✓ If it is <strong>blinking yellow/green</strong>, the battery is low.</td>
</tr>
<tr>
<td>✓ If it is <strong>solid red</strong>, the microphone is usable but not fully charged.</td>
</tr>
<tr>
<td>✓ If it is <strong>blinking with any other combination of colors</strong>, there is a problem with the microphone.</td>
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**Using the Hearing Assistance Equipment**

1. Remove the headset from the charging cradle located in the instructor station drawer.

2. Put on the headset. *Please note: For best reception, put the headset in front of your face with the earphones on top and the company logo on the bottom, facing outward.*

3. Adjust the volume to desired level using the volume knob.

4. Return the headset to the charging cradle when you are finished using it.

**Note: Do Not** place or store any liquid or metal objects near the hearing assist charging cradle. This will cause possible interference, electrical shorting, or shock.

**Hearing Assistance Equipment Tips**

 ✓ Any sound that is coming through the classroom system (such as audio from the DVD/VHS player, laptop, and instructor microphone) should be audible on the headsets.

 ✓ If you experience interference or static, try moving to a different location. Also, be sure that you are facing the front of the auditorium.

If you experience problems with the hearing assistance equipment or have any other questions, please call the Classroom Support Hotline at 612-625-1086.
**Using the Document Camera**

1. If the camera head (containing the lens) and lamps are folded, you will first need to unfold these items using the camera’s release catch, located at the base of the arm. **While holding the catch open, unfold the camera head and lamps.**

2. The arm should move freely once the catch has been released. Be sure that the top of the camera head is aimed directly down.

3. Press the “Document Camera” button on the touch screen. When the button stops blinking, it is ready for use.

4. Press the “Document Camera Controls” button (on the main touch screen) to access the standard document camera controls.

5. Place the object you wish to display on the document camera.

6. To return to the main touch screen menu, press “Escape.”

**Document Camera Tips**

- **Zoom:** Use “Wide” to reduce or “Tele” to enlarge the image size.
- **Focus:** Use the “Auto-Focus” button to automatically focus the image.
- **Iris:** Use to adjust the image brightness. Use the “Auto Iris” button to automatically adjust the brightness.

**Using the U of M Network**

**To connect to the wired network:**
Simply connect the Ethernet cord (in the pocket of the instructor station) to the Ethernet jack on your laptop.

*Please note: You will need to register and setup your computer for DHCP Service (Dynamic Host Configuration Protocol) prior to using the Ethernet connection.

**Wired Network Tips**

**Understanding DHCP:**
- Once registered and set up, DHCP allows you to automatically connect to the network on any campus classroom Ethernet jack.
- DHCP registration should be done in advance of the time you need to use the network, as the registration confirmation process may take several minutes.

DHCP registration can be done online at: [http://www.oit.umn.edu/network/setup-guides/](http://www.oit.umn.edu/network/setup-guides/)

**To connect to the wireless network:**
Simply open a web browser (e.g., Internet Explorer, Firefox, Safari). You will be prompted to log in with your U of M Internet ID (X.500) and password.

**Wireless Network Tips**

**If the connection is slow or does not work properly:**
Verify that you are connected to the “UofM Wireless” connection.
- There may be other wireless network connections within range of the classroom. Connecting to a non-U of M network may cause the connection to be slow or not work properly.

**If you do not have a U of M Internet ID:**
Guests to campus may use the "UofM Guest" network for free.

For more information about obtaining guest access to the U of M network, please visit the following website: [http://www.oit.umn.edu/wireless/guest-access/index.htm](http://www.oit.umn.edu/wireless/guest-access/index.htm)

Data network service and support is provided by the Office of Information Technology. For further assistance with the wireless or wired network connection, please call the 1-HELP Technology Helpline at 612-301-4357.