TO TURN ON THE SYSTEM, PRESS ANY BUTTON ON THE CONTROL PANEL

When a Projection Source button is blinking, the system is warming up.*

When it stops blinking, that source is ready to use.

*It may take up to three minutes for the system to warm up. Please be patient.

Touch Screen

VOLUME:
Use these buttons to adjust the volume up or down.

VIDEO and AUDIO MUTES:
Press VIDEO MUTE to black-out the image and mute the sound. Press AUDIO MUTE to mute only the sound.

To un-mute the image or sound, simply press the respective button again.

Please remember to turn off the system when you are done using it.

✓ Once the system is turned off, it will take approximately 3 minutes for the cool-down cycle to complete.
✓ Since it is not possible to restart the system until this cycle is complete, use VIDEO MUTE if you plan to use the system again during your class period.
✓ To ensure that the auto-shutdown feature does not interrupt your class, press any source button at the start of your class. The auto-shutdown feature shuts the system off after 4 hours without a system selection.

To switch between sources:
Press the Source button of the item you wish to display.

When the button stops blinking, the source is ready to use.

For additional assistance or to set up an equipment training session, please call the Classroom Support Hotline at 612-625-1086.

The University of Minnesota is an equal opportunity educator and employer. This publication is available in alternative formats upon request. Direct requests to ocmhelp@umn.edu. Printed on recycled and recyclable paper with at least 10 percent postconsumer material.
CONNECTING A LAPTOP

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

1. Connect the VGA cable 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 adapter, you can purchase one at the U of M Bookstore. OCM does not supply adapters in the classrooms.

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

3. Press the “LAPTOP” source button on the control panel.

4. When the button stops blinking, start the laptop.

✓ 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.

<table>
<thead>
<tr>
<th>Type of PC Laptop</th>
<th>Keys to Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer or Aspire</td>
<td>Fn+F5</td>
</tr>
<tr>
<td>Asus eee mini</td>
<td>Fn+F8</td>
</tr>
<tr>
<td>Dell</td>
<td>Fn+F8</td>
</tr>
<tr>
<td>Gateway</td>
<td>Fn+F3</td>
</tr>
<tr>
<td>HP or Compaq</td>
<td>Fn+F4</td>
</tr>
<tr>
<td>HP Mini</td>
<td>Fn+F2</td>
</tr>
<tr>
<td>Lenovo (IBM)</td>
<td>Fn+F7</td>
</tr>
<tr>
<td>Sony Vaio</td>
<td>Fn+F7</td>
</tr>
<tr>
<td>Toshiba</td>
<td>Fn+F5</td>
</tr>
</tbody>
</table>

LAPTOP TIPS

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.

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 Player” or “VHS Player” 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 activate the closed captioning, press the Closed Captioning button on either the DVD or VHS transport controls page.
6. To return to the main menu, press “Escape.”

---

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

To connect an external video playback device, you will need to provide the appropriate AV cable (with yellow, white, and red connectors). Connect the AV cables to the output jacks on the device and to either the input jacks on the front of the VHS player or the jacks on the equipment rack.

- If using the jacks on the VHS Player:
  Use the channel up/down buttons on the front to set it to “Line Input.” The VHS player display should read "F-1" or "L-1.” Select the “DVD/VHS Player” source.
- If using the jacks on the equipment rack: Select the “Auxiliary Video” source.

---

**Using Projector Aspect Ratio Controls**

The aspect ratio controls offer several different options to display content on the classroom’s widescreen projector. If you do not select any aspect ratio options:
- When displaying a computer screen, the projector will attempt to match the computer display settings.
- When displaying a video, VCR: the projector will display standard 4:3; DVD: projector will attempt to match settings encoded on the DVD.

---

**If the Display is Distorted, Employing Aspect Ratio Controls May Help Correct the Distortion:**

- Press the button marked “Projector Aspect Ratio Controls” on the main touch screen (located on the instructor station).
- Follow the guidelines describing the type of signal to be displayed and choose a setting at the top or the auto set up at the bottom.
- Press the Escape button to return to the main screen.
- More information is available in the Widescreen Aspect Ratio guide at: [http://www.classroom.umn.edu/support/AspectRatio.html](http://www.classroom.umn.edu/support/AspectRatio.html)
**Molecular and Cellular Biology Building, Room 3-120**

**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.*

**Return the rechargeable microphone to the charging base after use.**

**Wireless Rechargeable Microphone Tips**

<table>
<thead>
<tr>
<th>If the microphone is not working: First try using the second microphone.</th>
</tr>
</thead>
<tbody>
<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>
</tr>
</tbody>
</table>

**Microphone Indicators and Alerts:**

✓ 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.

✓ The LED indicator light on the top of the microphone will indicate its status:
  ✓ If it is **blinking red**, press the side button to unmute it.
  ✓ If it is **green**, the microphone is charged and on.
  ✓ If it is **blinking yellow/green**, the battery is low.
  ✓ If it is **solid red**, the microphone is usable but not fully charged.
  ✓ If it is **blinking with any other combination of colors**, there is a problem with the microphone.

**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, the source 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.

✓ **Auto-White Balance:** Place a white piece of paper in the viewing area and press the “Auto-White Balance” button. Colors will adjust based on the color of the white paper.

✓ You can also use the buttons on the front of the document camera to adjust the image display.
**MOLECULAR AND CELLULAR BIOLOGY BUILDING, ROOM 3-120**

**Using the Annotation Display**
1. Locate the laptop connection cables (in the pocket of the instructor station). The metal cover may need to be flipped up to access the cables. Please note: The projection system allows for a laptop computer to be connected either directly to the projector or to the annotation display. To use the annotation display, you will need to connect your laptop to the cable labeled “ANNOTATION DISPLAY.”

2. Connect the VGA cable 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.

3. Connect the USB cable to an available USB port on your laptop. Press the power button to turn on the annotation display.

4. Press the “Annotation Display” source button on the touch screen control panel. When the button stops blinking, the source is ready for use.

5. Start your laptop. The image will appear on both the annotation display and the projector. If the image doesn’t appear on your laptop after starting up, activate the external display (see Connecting a Laptop).

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

**To use the Annotation Display with your laptop computer, you will need:**
- **Driver software.** This software must be installed on your laptop computer. It is available for both the Windows and Mac OS X operating systems. There is no charge for the software.
- **A Wacom-brand annotation pen.** The display will not respond to anything but this pen. OCM does not supply these pens.

For more information on using the annotation display: Please contact John Knowles at 612-626-8650 or knowl014@umn.edu.

**Using the Hearing Assistance Equipment**
1. Remove a headset from the charging cradle located in the drawer at the instruction station.

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 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.

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

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/

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.

For additional assistance, call or email the Classroom Support Hotline:
612-625-1086 or ocmhelp@umn.edu