General Purpose Classroom Equipment Instructions
Keller Hall, Room 3-125

To turn on the system:
Touch anywhere on the touch screen control panel.

Touch Screen Control Panel

Laptop Connection Pocket
Document Camera
Capture Space (Unit installed in ceiling)

Annotation Display
DVD/VHS Player

Video & 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.

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

Control Panel Tips

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.

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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.

Connecting a Laptop

The standard cables are located in the pocket of the instructor station.

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 classroom.

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 touch screen control panel.

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

5. 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>
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<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>
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<tr>
<td>HP or Compaq</td>
<td>Fn+F4</td>
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<tr>
<td>HP Mini</td>
<td>Fn+F2</td>
</tr>
<tr>
<td>Lenovo (IBM)</td>
<td>Fn+F7</td>
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<tr>
<td>Sony Vaio</td>
<td>Fn+F7</td>
</tr>
<tr>
<td>Toshiba</td>
<td>Fn+F5</td>
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The computer and annotation tablet in the instructor’s station is provided and supported by UNITE. For access to the computer and assistance with the annotation display, please contact UNITE Master Control at 612-625-6008.

This classroom is also capable of projecting items from a user-provided laptop. Instructions for connecting your laptop to the projection system are included below.
**Using the DVD/VHS Combination Unit**

1. Press the button marked “DVD/VHS Player” on the main touch screen (located on the instructor’s table).

2. When the “DVD/VHS Player” button stops blinking, the source is ready for use.

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

4. Press the “DVD/VHS Controls” button (on the main touch screen) to access the standard controls (play, stop, fast forward, scan, etc.).

5. From the “DVD/VHS Controls” screen, press the appropriate source button (“Select VHS” or “Select DVD”), based on the type of media you are presenting.

6. 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).

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

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**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.

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**DVD/VHS Combination Unit Tips**

<table>
<thead>
<tr>
<th>TO USE CLOSED CAPTIONING:</th>
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<tbody>
<tr>
<td>To activate the closed captioning, press the “Closed Captioning” button at the bottom of the touch screen.</td>
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</table>

**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).

<table>
<thead>
<tr>
<th>IF THE DVD IMAGE IS FREEZING OR DISTORTED:</th>
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<tbody>
<tr>
<td>✓ Remove the disc from the player.</td>
</tr>
<tr>
<td>✓ Check the disc for damage.</td>
</tr>
<tr>
<td>✓ Clean the disc (to remove smudges or fingerprints).</td>
</tr>
</tbody>
</table>

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**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 Ceiling-mounted Document Camera**

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

2. Press the “Document Camera Controls” button to access the standard camera controls.

3. Place the object you wish to display on the top of the table, directly in front of the video display screen.

4. 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.
- **Detail**: Use to control image sharpness. Text usually benefits from a detail setting of “High.” Pictures/images may appear distorted when using the “High” setting.
- **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.
- **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.
- **Detail**: Use to control image sharpness. Text usually benefits from a detail setting of “High.” Pictures/images may appear distorted when using the “High” setting.
- **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.

**Using the Annotation Display With Your Laptop**

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.

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 “Laptop” 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, p.2). Note: the Annotation Display can also be used with the installed computer. Select the “Computer with Annotation” source button to display.

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

**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 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.

**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.**

**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/)

**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)*

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