Our Services

Media Technology Services (MediaTech), a group within Computing Services, provides the following in support of teaching and learning.

- **Classroom Technologies**
  Standard classroom technologies for over 100 lecture halls, classrooms and seminar rooms around campus with a centrally supported infrastructure. These include: projection, DVD/CD player, document camera, Clickers (classroom response system), videoconferencing and an auxiliary panel with inputs for a second laptop, VCR, camera, iPod, etc.

- **Classroom Technology Support**
  Classroom equipment demonstrations and equipment lending. MediaTech's most popular items for lending include: wireless clip-on microphones and instructor Clickers kits.

- **Media Production**
  Fee-based lecture recordings, analog to digital media conversions and video web streaming.

- **Videoconferencing**
  Video collaboration of two geographic locations for classroom content, presentations and lectures. MediaTech centrally maintains the supporting technical infrastructure for the videoconferencing service.

- **AV & Media Consultation**
  Onsite consultations for integrating personal technologies, such as iPods, video recorders and laptops, into a classroom setting. Consultants are available to assist with planning unique or complex presentations, such as a panel of speakers in a large auditorium, as well.

- **Facility Design and Consultations**
  Design and implementation consultations for departments creating distance education facilities, developing technology rich collaboration spaces, or upgrading departmental classrooms with classroom technology standards.

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1 These technology rich spaces are centrally managed by the University Registrar or Computing Services (18 computer labs or "clusters").
This manual provides comprehensive step-by-step instructions for the equipment found in University Registrar controlled classrooms and auditoriums. The aim of this guide is to help you successfully utilize this equipment for classes and presentations.

**Microphones**

Wireless microphones are available from the MediaTech office in Cyert Hall A74 and may be borrowed by faculty for a term. Contact MediaTech at 412-268-8855 or via email (mediatech@cmu.edu) to reserve one.

**Equipment Cables and Adapters**

Laptop VGA and audio cables are provided. If you are using the equipment below, please bring the appropriate cable or adapter to the classroom:

- VCR and video camera - RCA cable
- iPod video player - RCA to Mini cable
- Second laptop - VGA cable
- Musical device - Mini-to-mini cable
- Mac computer - Mac adapter

**Support**

This documentation, device descriptions, manufacturer information and video demonstrations are available online at www.cmu.edu/computing/mediatech/. If immediate assistance is needed, contact MediaTech at 412-268-8855.

**Feedback**

For classroom equipment improvements, suggestions or questions, send email to MediaTech at mediatech@cmu.edu.
The Lectern

The image below identifies the equipment found in a large classroom lectern. For more information on using the lectern equipment (e.g., DVD player, Document Camera, etc.), see the appropriate section following *Getting Started*.

Tip! The lectern can be moved. Make sure that the wheel brakes are unlocked before moving.

Turning On the Projector

Touch the **touch panel** to wake the system and then, touch one of the following options on the start screen:

- Left Projector On
- Both Projectors On
- Right Projector On
- Audio Only
- Expand computer desktop to full screen

*Continued on reverse.*
Raise/Lower the Projector Screen

If the projector screen isn't positioned correctly, touch the arrow keys under Screen to move the screen up and down. The screen will stop automatically at the bottom or top, or you can press Stop to stop it at any other position.

Choose a Different Projector

Once you choose your projection (e.g., left projector on, both projectors on, etc.), touch the projector tabs to change the projection selection. For example, to turn the left projector off, touch the Left Projector tab and touch Turn Projector Off.

Changing the Classroom Lighting

The buttons for lighting control are in the lower right corner of the touch panel. You can have all the lights on, off or select one of the lighting areas such as: rear, front or note taking.

Changing Devices

Touch the button for the device you would like to use (e.g., DVD, Laptop, Desktop). For more information on using these devices (e.g., Laptop, DVD, Document Camera, etc.), see the appropriate section following Getting Started.

Getting Help

For troubleshooting help, touch the question mark (upper right corner) on the touch panel and follow the prompts. If immediate assistance is needed, contact MediaTech at 412-268-8855.
Using a DVD or MP3 Disc

1. Touch **DVD** on the touch panel and place the DVD into the DVD player.
2. Touch **Sound from DVD**.
3. Control the volume and operate the DVD player from the touch panel.

   The buttons on the touch panel are like those on most standard DVD players. Chapter rewind, rewind, stop, play, pause, fast-forward, and chapter advance. To navigate through the menus, use the buttons to the lower right of the screen.

   ![DVD Controls Diagram]

   If you prefer, operate the DVD player from the DVD player controls instead.

   **Note:** In classrooms and auditoriums with a desktop computer a small video window appears on the bottom of the touch panel. The window allows you to monitor what is displayed. If you would like a larger view of the monitor window, touch the **Show Desktop Full Screen** button.

   ![Desktop Full Screen Diagram]

   Continued on reverse.
Using a CD

1. Touch **CD** on the touch panel and place the CD into the DVD player.
2. Touch **Sound from CD**.
3. Control the volume and operate the CD player from the touch panel.

   The buttons on the touch panel are like those on most standard CD players (chapter rewind, rewind, stop, play, pause, fast forward, and chapter advance).

   ![CD Player Buttons](image)

   If you prefer, operate the CD from the DVD player controls instead.
Connecting a Laptop

1. A laptop VGA cable and audio cable are provided.

2. Connect the VGA cable to the port on your computer.

3. Touch Laptop on the touch panel and then Sound from Laptop.

4. Make sure the laptop sound setting is not too low to be heard or muted. If the laptop image does not display, do one of the following:
   - Reboot your laptop.
   - Select the “mirroring”/LCD/CRT button on your laptop. The location of this button varies between laptop manufacturers and can be any of the function keys. It may be F3, F5, F7 or F8. Look for a small square on top of, or next to, a small monitor icon. The images below are examples of this icon.

5. Operate the laptop.

Accessing the Internet

If you need Internet access, but do not have a wireless card, plug your Ethernet cable into the Campus Network port on the auxiliary panel.

Note: For your convenience, power outlets are available on the far right side of the auxiliary input panel (see the image below).

Note: If you are using a Mac computer, please bring the appropriate Mac adapter for your model.
Connecting a Second Laptop

1. Bring a laptop VGA cable and audio cable to the classroom.

2. Connect one end of the VGA cable to the port on your computer.

3. Connect the other end of cable to the Aux VGA jack on the auxiliary inputs panel. If sound is needed, connect the audio cable.

4. Touch Aux (Video) Inputs and then VGA - Sound from VGA.

5. Make sure the laptop sound setting is not too low to be heard or muted.

6. Operate the laptop.

Note: If you are using a Mac computer, please bring the appropriate Mac adapter for your model.
Connecting a Musical Device

**Note:** If you would like to show a video from an iPod video player, see *Connecting an iPod Video Player.*

1. Bring a mini-to-mini cable to the classroom.

2. Connect one end of the cable to the headphone jack on the music player.

3. Connect the other end of cable to the **AUX VGA AUDIO** jack on the auxiliary input panel and then turn on the music device.

Continued on reverse.
4. Touch **Aux (Video) Inputs** and then **VGA - Sound from VGA**.

5. Operate the music device. Control the volume using the touch panel.
Connecting an iPod Video Player

Follow the steps below to display a video from your iPod video player. To play music follow the steps for Musical Devices.

1. Bring an RCA to mini cable to the classroom for your iPod.

2. Connect the yellow cable to the COMPONENT VIDEO Pb jack, the white cable to the AUDIO LEFT, and the red cable to the AUDIO RIGHT jack on the auxiliary inputs panel.

3. Connect the single-end of the cable to headphone jack on the iPod player.
4. On the iPod, select Videos, then Video Settings. The TV Out option should be set to ask.
5. Select your video from the iPod’s Video Playlists section.
6. When prompted for TV On or TV Off, select TV On. This will project your image on the screen, however it will not be displayed on your iPod. You will see a running counter instead.

Continued on reverse.
7. Touch **Aux (Video) Inputs** and then **COMPOSITE VIDEO (VCR)** - Sound from Composite.

8. Operate the iPod. Volume can be controlled from the touch panel.
**Connecting a VCR**

1. Bring the VCR and RCA cable to the room.

2. Connect the cable to the back of the VCR.
   - **RCA cable** (yellow, white and red) - connect the yellow cable to the yellow VIDEO OUT jack, and the white and red cables into the AUDIO L and R jacks, respectively.
   - **Component Video cable** (blue, green, red, plus audio cables) - connect the green cable to the Y jack, the blue to Pb and red to Pr. Attach the audio cables into the audio out jacks. The VCR back panel may vary between models.

3. Connect the cables to the auxiliary input panel.
   - **RCA cable** - connect the yellow cable to the Pb jack (below COMPONENT VIDEO). connect the white to the AUDIO LEFT jack (white), and the red into AUDIO RIGHT (red).

*Continued on reverse.*
• **Component Video cable** - connect green to Y, blue to Pb and red to Pr and then, the audio cables into the red and white AUDIO jacks.

4. Plug the VCR power cord into a power outlet and turn on the VCR. For your convenience, two power outlets are located on the far right side of the auxiliary input panel.

5. Touch **Aux (Video) Inputs** and then **COMPOSITE VIDEO (VCR) - Sound from Composite**. If using the component cables (green, blue and red), select Component Video.

6. Operate the VCR using the remote or the buttons on the VCR. A small video window appears allowing you to monitor what is displayed. If you would like a larger view of the monitor window, touch **Show Desktop Full Screen** on the touch panel.
Connecting a Video Camera

1. Bring the video camera and appropriate the RCA cable for your camera model.

2. Connect the cable to the AV IN/OUT jack on the video camera. The location and names will vary due to different camera models.

3. Connect the cables to the auxiliary input panel.
   - **RCA cable** - connect the yellow cable to the Pb jack (below COMPONENT VIDEO). Connect the white and red cables to the AUDIO LEFT (white) and AUDIO RIGHT (red) jacks respectively.

   - **S-Video cable** - connect the cable to the S-VIDEO jack.

4. Turn on the camera.

*Continued on reverse.*
5. Touch **Aux (Video) Inputs** and then **COMPOSITE VIDEO (VCR)** - **Sound from Composite**. If using the s-video cable, select **S-Video**.

6. Operate the video camera directly from the device.

**Note:** In classrooms and auditoriums with a desktop computer a small video window appears on the bottom of the touch panel. The window allows you to monitor what is displayed. If you would like a larger view of the monitor window, touch the **Show Desktop Full Screen** button.
Setting up the Document Camera

1. Raise the camera arm and pivot the camera. If the camera arm is laying down, raise it into position by pressing the button on the base of the arm in the direction indicated by the arrows, while simultaneously lifting the arm up. Turn the camera until the lens is pointed down.

2. Move the lamp arms into position. If you will be using the arm lamps (for paper documents and objects), raise the lamp into position by lifting the arms toward the back of the unit, and rotating the lamps so the light is shining on the base. (The arm lamps are not needed for transparencies, slides or negatives.)

3. Touch **Doc Camera** on the touch panel. This will turn the device on. If it doesn’t, press the power button on the document camera itself.

   **Note:** The document camera has a slight delay when turned on. The power button will be green if on or red if off.

4. From the **touch panel**, select your lamp option.
   - **Arm** - turns on the side arm lamps.
   - **Base** - turns on the lower base lamp.
   - **Lamp** - cycles through the lighting options from side arm lamps on (for paper documents and objects), base light on (for transparencies, slides or negatives), or all off. The upper lamps will turn on by default.

5. Operate the Document Camera, using the touch panel.

   **Tip!** You can also use the buttons on the document camera panel itself. See “Using the Document Camera Panel” on the reverse for the function of each.

   *Continued on reverse.*
Using the Document Camera Panel

**Power** - turns the device off or on. The light will be red if off or green if on.

**Freeze** - takes a snap shot image. Press once to take the image and display it. The image will remain on the screen until the freeze button is pressed again.

**AWC** - automatically adjusts the color to the lighting in the room. 
*Tip: Only activate AWC with a white surface (printed text is okay), for best results.*

**Zoom** (- and +) - controls the image size. Press “-” for farther away or “+” for a closer view.

**TXT/IMG** - changes the mode from viewing text, to viewing images or objects. 
*Tip: Books and documents display best in text mode. Charts, graphs, photos, slides and objects, display best in image mode. When in doubt, please try both options to determine the mode that works best for you.*

**Rotate** - changes the visual orientation. The image will rotate 90 degrees clockwise each time “rotate” is pressed.

**AF** - automatically focuses the camera. 
*Tip: Keep the object stable during auto-focus. If blurry, press AF to refocus.*

**Lights for EXT1 and EXT2** - No image will project on the screen, unless both of these lights are off. If either is on, press the INT/EXT button until they cycle off.

**INT/EXT** - NOT AVAILABLE for classrooms. If either of the EXT1 or EXT2 lights are on, press this button until both cycle off. No image will be displayed until they are off.

**Lamp** - cycles through the lighting options. For transparencies or slides, turn the lower light on. For any object, book or paper with text on it, the upper lights need to be on. The upper lamps will turn on by default. 
*Tip: If you are experiencing glare, turn the lamps off.*

**IRIS** (- and +) - adjusts the brightness. 
*Tip: If there is a "hot spot", or a portion of your display with a bright glare, use the “-” button until the glare is reduced.*

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**Using the Software**

Software installed on large classroom and auditorium computers, gives you the option to save, freeze, and rotate document camera images. For more information, visit [www.cmu.edu/computing/mediatech/help/](http://www.cmu.edu/computing/mediatech/help/).

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**Playing Audio**

If you would like audio to play while using the document camera do the following:

1. Touch the **audio source device** on the touch panel. In the example (left), DVD is selected.
2. Touch **Sound From Device**. The example (left) uses Sound From DVD.
3. Touch **Doc Camera** and adjust the volume as needed.
Display Two Different Document Camera Images

Software installed on large classroom and auditorium computers, gives you the option to save, freeze, and rotate document camera images.

1. Using the touch panel, turn on the projectors. See the *Getting Started* for steps.

2. Touch the **Right Projector** tab and then **Doc Camera** (Figure 1).
3. Touch the **Left Projector** tab and then **Desktop** (Figure 2).

4. Log on to the desktop computer with your Andrew userID and password.

**Tip!** To expand the desktop computer view from preview to full screen, touch **Show Desktop Full Screen**.

*Continued on reverse.*
5. Launch the Document Camera software, select **Start > All Programs > SDP USB Viewer.**

6. The SDP View window displays in half screen mode. For full screen, select **Screen Full.**

7. Place your document on the document camera base. Make sure you can see the entire image on the desktop computer.

8. From the **Mini Control** window (upper right corner), select **Capture Image.** The document image is now frozen to the computer.

   ![Mini Control Window]

   **Note:** The computer image will display on the left projector screen.

9. Select one of the following:
   - **Save** - to save the image. Save the image to the location you prefer (e.g., Desktop, MyDocuments).
   - **Release** - to remove or “uncapture” the image.

   ![Image Capture/Save/Print]

10. Remove the document from the document camera panel.

11. Place the second document on the document camera panel.

   **Note:** The document camera image will display on the right projector screen and the captured image on the left projector screen.
Using the Desktop Computer

Desktop computers are available in large classrooms and auditoriums.

1. Touch Desktop on the touch panel.
2. If sound is needed, touch Sound from Desktop. Control the volume using the touch panel. Check to make sure the computer sound setting isn't on “mute”.
3. Touch Show Desktop Full Screen.

The keyboard and track pad are located in the drawer just under the surface of the lectern.

4. Login using your Andrew UserID and password.
5. Operate the computer. The machine is connected to the internet, and the same Windows software suite found on Computing Services public cluster computers has been installed.

Continued on reverse.
Playing DVDs, CDs, and MP3 Discs

1. Insert the media into the computer DVD drive.
2. Touch Desktop on the touch panel and then Sound from Desktop.
3. Media players, such as QuickTime, have been installed on the computer. Use the player controls to navigate the media. Sound is controlled from the touch panel.

Note: If you are using a jump drive/USB key or wireless mouse, the USB port is located on the computer. Simply insert your jump drive/USB key to use it.

6. Log off when finished.
Using Clickers in the Classroom

The i>clicker classroom response technology is available in large classrooms, auditoriums and some small classrooms. For a list of classrooms, visit www.cmu.edu/computing/mediatech/clickers/.

Using the Classroom Computer

To use the i>clicker software installed on the desktop computer:

1. Copy the iclicker - Copy me first folder to your AFS space.
2. Rename the folder for your class or session (e.g., Physics123).
3. Open the copied folder to begin your session.

Using a Jump Drive

To use a jump drive/USB key with the classroom desktop computer:

1. Connect the jump drive to the USB port located on the computer.
2. The Actions screen will display.
3. Choose Open the Folder to begin your session.

For detailed instructions on using Clickers visit www.cmu.edu/teaching/clickers/

Using a Laptop

Important: The i>clicker software MUST be loaded on your laptop prior to class.

1. Connect your laptop. See the Laptop section for steps.
2. Connect the purple CLICKER cable to your laptop’s USB port.
3. Launch the i>clicker software from your laptop to begin your session.

For detailed instructions on using Clickers visit www.cmu.edu/teaching/clickers/.