Document cameras can be used to display three-dimensional objects, opaque items, transparencies, and slides. Document cameras have been installed in several classrooms. To locate a classroom with a document camera installed, click here: http://z.umn.edu/doccams.

In the classroom, document cameras are located on top of the instructor station, inside a drawer on the side of the instructor station, or in the ceiling above the instructor station.

How to Use a Document Camera

- If the lens and lamps are folded, unfold using the release catch at the base of the arm. While holding the catch open, unfold the camera head and lamps. Be sure the top of the camera head is aimed directly down.

- Press the “Document Camera” button on the system controls.

- Wait for the button to stop blinking. If the camera does not turn on, you can turn it on using the power button on the unit’s front panel.

- Control the camera using the “Document Camera Controls” button on the touch screen or the buttons on the camera unit itself.

- Place the object you wish to display directly below the document camera lens.

- If using touch screen controls, press “Escape” to return to the main controls.
Tips

There are various models of document cameras in classrooms. Some of these tips may not apply to the device in your room.

- Depending on which type of item you plan to display, use the "LAMP" button to adjust the light source accordingly. Each time you press the button, it cycles through these settings: upper lamps on, lightbox on, and all lightings off.
- When using transparencies or slides, change the light source to "lightbox on" (this will backlight the object from the white box in the center of the document camera).
- When using three-dimensional or opaque objects, change the light source to "upper lamps on." Be sure to adjust the lamps so the light is directed at the object.
- If the image color or brightness is imbalanced, automatically adjust the color by placing a white piece of paper under the lens and pressing the Auto White Correction (AWC) or Auto White Balance (AWB) button.
- Use the Iris buttons on the document camera to adjust brightness.
- Use the Detail button to control image sharpness. Text usually benefits from a detail setting of "High." Images may appear distorted when using the "High" setting.
- If the image is blurry:
  - Use the "APERTURE" button to control image sharpness. For images with mostly text, turn the aperture ON. For images with many pictures or colors, turn aperture OFF.
  - Use the "AF" or "Auto-Focus" button to automatically focus the image.
- Use the Zoom, Wide, or Tele buttons to enlarge or reduce image size.
- If the image is rotated on the Samsung SDP-860 models, you can correct the rotation by trying the following:
  - A. Rotate or flip the camera arm or head to turn in the opposite direction of the current position. It may reverse the image. OR
  - B. Use the settings by pressing the buttons on the document camera base to adjust the image by 180°. Use the following procedure for this option:
    1. Press the center button inside the large circular button. After pressing, a set of options will appear on the projection screen (make sure document camera source is selected). In the first set of options, select Image Adjustment. Move to this option, by pressing the button by the down arrow, then the middle button to select.
    2. In the second set of options, select Rotation. Change 0 to 180 (or 180 to 0) by selecting one of the buttons by the side arrows.
    3. When finished, select Return. Then, Save and Exit.
To use the document camera as a web cam:

1. Connect one end of the USB cord to the USB input at the instructor station and the other end to a laptop. Both ends of the cable will be the same, which is a USB A Male to A Male Cable, as shown in the picture.

2. Turn on the document camera using the power button at the base of the camera. Select the “Laptop” source on the touch screen control panel.

3. Using the options in your laptop application/software, find the document camera within the camera list and use it as a webcam. This step varies by laptop application. The document camera may be listed as Samsung Digital Presenter or Samsung SDP860.

4. Use the buttons on the base of the document camera to adjust the display settings and quality. Move the camera head and arm to vary image display.

Only Samsung SDP-860 model document cameras have this feature available. If you are unsure which model of document camera is installed in your classroom, please contact OCM: classroom@umn.edu

Here is an example, using the Skype application:

Windows:
After launching Skype, select "Options" from the "Tools" menu. Within the Options window, click "Video Settings." Choose "Samsung Digital Presenter" from the "Select Webcam" drop-down menu.

Mac OS X:
Select "Preferences" from the "Skype" menu. Within the separate window titled "General" that appears, click the "Audio/Video" button at the top. Choose "Samsung Digital Presenter" from the "Camera" drop-down menu.

If you have additional questions about these features or any general purpose classroom, please contact the Classroom Support Hotline at classroom@umn.edu or