Peripheral Equipment Use

ELMO Document Camera

Contents

Learning Objectives

Upon completion of this chapter, you will be able to:
- Identify the Document Camera components
- Demonstrate how to switch from the main videocamera to the Document Camera view
- Demonstrate the proper use of the Document Camera
- and its functionality
- Identify basic troubleshooting issues and resolution and articulate how to contact the OTN Service Desk
- Demonstrate the ability to properly clean the Document Camera

Duration

This chapter should take approximately 30 minutes to complete.

Legend

Reminder

Key Tips

Reference to Other Materials

Web / E-mail Address

Phone / Fax Number

1.   ELMO Document Camera Components

The ELMO Document Camera is a device which allows images from x-ray film, paper, and transparencies to be transmitted to a telemedicine system. The following are the major components of the ELMO Document Camera. Note: Different versions of the Document Camera may have slightly different set-ups than indicated here.

Camera Head: The camera head captures the image of the document which is then transmitted to the screen of the telemedicine system

Lamp Arm: The lamp arm is the light source for the stage

Stage: The stage is used to hold the document to be viewed

Front Panel: The front panel is a dashboard and controls the functionality of the Document Camera. The following are some of the buttons and associated indicator lights. Please note that different versions of the Document Camera will have slightly different setups.

- Lamp: Upper (On/Off), Base (On/Off)
- Input: Internal, AV1, AV2
- POSI/NEGA: P,N
- Color/B&W: C, B&W
- Zoom: Tele, Wide
- Focus: Manual (N,F), Auto

2.   Preparing the Document Camera for an Event

The following steps will help prepare the Document Camera for use

Ensure that the Document Camera is connected: The Document Camera should already be connected to the videoconference system. Before using the camera, check to ensure that all of the cables are properly connected:

- **Polycom iDoc:** Connect the cable to the EXT. port located on the back of the iDoc system.
- **Polycom Room-Based System:** Connect the cable to the S- Video port on the back of a Polycom system.
- **Tandberg Intern II:** Connect the cable to the S-Video port located on the front panel of the Tandberg Intern II.

Connect to power: Connect the A/C power cable to the power outlet on the wall. Ensure that the power plug is firmly pushed into the power port at the back of the Document Camera.

For those using a Polycom iDoc or Tandberg Intern II system, remember to use an alternative power outlet located on the wall of the room – DO NOT use the power bar on the videoconference system itself.
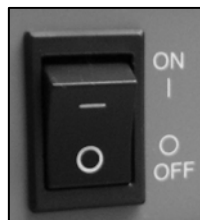
Turn on the Document Camera: Turn the Document Camera on by toggling the power switch located on the rear right hand corner of the Document Camera.

Position the Main Column and Lighting Unit Arms: The next step is to set up the camera for use. This involves setting up the main camera column and lighting unit arms.

- To release the camera column arm, press the lock button located at the rear left side of the Document Camera and raise the camera head. Next, unfold the lighting unit arms so that they are positioned as in the diagram on the previous page.
- To store the Document Camera, turn off the power switch and unplug the unit from the wall outlet. Turn the camera head so that it may be ready to be stored with the camera eye facing forward. Press the column lock release button and fold down the main column. Fold down the lighting unit arms – right side folds down first.

Adjusting the White Balance: The white balance refers to the correctness of color reproduction under various lighting conditions. To adjust the white balance of the camera:

- With the stage surface clear of material, press the WHITE BALANCE button on the front panel.
- The indicator lamp will blink and then light up indicating the white balance is fixed for the current color temperature.
- Pressing the white balance again will cause the indicator lamp to go out and the mode returns to the AUTO mode.

For some versions of the Document Camera, the iris adjustment and white balance buttons are located on the camera head.

Switching to the Document Camera view: Switch from the main videoconference camera to the Document Camera by selecting the input device using the videoconference system remote control. For single monitor systems, you will need to switch the PiP view.

- **iDoc Systems:** Push the Camera button to bring the three input icons onscreen. Use the arrow keys to select the #2 (Document Camera) icon and press Select to ready the monitor to receive input from the Document Camera. Make sure that the switchbox located at the side of the iDoc has been set to "Document Camera".
- **Tandberg Systems:** Select the "Document Camera" or "Aux" camera view, depending on which port your Document Camera is connected to.

3. Operating the Equipment

The following are some of the basic operating features of the Document Camera.

Viewing Documents: In order to properly view documents, position the document on the viewing surface (the stage) and move it to allow the image to be displayed.

- To turn on the lights, use the 'Lamp' button which is located on the front right hand corner of the panel. As you press this button (wait a few seconds between each press), the Document Camera lights will toggle from upper, base, and off settings.
    - o Use the overhead light to view non-transparent objects such as EKGs and printed objects.
    - o Use the base light setting to view transparencies and x-rays.
- Use the POSI/NEGA button to view negative films. This button is located to the left of the Lamp button on the front panel.
    - o Press the N button until the green light appears over the N.
    - o Press again to return to normal viewing mode P.
- Use the Contrast button to produce sharper contrasts between light and dark images.

Adjusting the Brightness: The iris is used to change the brightness of an image by adjusting the diaphragm of the lens in the camera.

- The auto iris (system default and recommended setting) will adjust the level of brightness automatically according to the object on the stage.
- The manual iris can be initialized by pressing on the auto/manual button on the front panel. Pressing this button will toggle between the manual (indicator light on) and auto (indicator light off) settings.
- When in manual mode, press the Iris 'open' button or 'close' button to increase or decrease respectively the amount of light in the image.
- You can return to auto iris mode by pressing on the auto- manual button again (the indicator light will go out).

Note: For some versions of the Document Camera, the iris adjustment and white balance buttons are located on the camera head.

Adjusting the Focus: The autofocus button (AF) located on the front panel to the

right of the zoom buttons can be used to bring an image into focus. Pressing on this button will cause an indicator light to blink until the object on stage is brought into focus.

- The manual focus mode can be engaged by pressing the Focus-Near or Focus-Far buttons on the ELMO's remote.
- You may need to use the manual focus if objects have: little or excessive contrast, fine repeated patterns, glitter, motion.

Using the Zoom Function: Use the 'TeleZoom Wide' buttons in the middle section of the front panel to adjust the image size on the screen.

- By continuously pressing the zoom button, the speed of zooming in/out becomes faster.

Rotating an Image: The Image Rotate button can be used to rotate the view of the image.

- Every time the image rotation button is pressed, the image rotates counter-clockwise by 90 degrees.

Freezing an Image: You may wish to capture an image on the screen

- To pause or freeze an image, press the pause button located on the front panel.
- To unfreeze an image, press Pause again and the pause is cancelled.

4.   Troubleshooting

The following troubleshooting tips could help to solve some of the more common issues that may arise when using the Document Camera

Eliminating Color Halos

If colored lines or halos present themselves on film, press on the Color / B&W button.
- Note: For some versions of the Document Camera, the remote control is required in order to adjust the Color / B&W settings. The remote control should be located in the front drawer of the Document Camera.

For any additional issues that cannot be addressed using these troubleshooting tips, please contact the OTN Service Desk at 1-866-454-OTN1 (6861).

5.   Cleaning the Equipment

The ELMO Document Camera should be cleaned periodically. When doing so, please keep the following guidelines in mind.

Cleaning the equipment: The following guidelines should be kept in mind when cleaning the ELMO Document Camera:
- Unplug the Document Camera and platform from the wall outlet before cleaning.
- Do not use liquid cleaners or aerosol cleaners.
- Use a damp cloth for cleaning.
- Never spill liquid of any kind on the Document Camera.