Science and Education Center
Multimedia Workstation
Operating Instructions

Overview
The multimedia workstations in the Science and Education Center are designed in two basic types which operate nearly identically. For ease of reference in this document, we’ll differentiate the two types of units by calling one type a Sympodium workstation and the other a SmartBoard workstation.

Both types of workstations include a computer, document camera, VCR, DVD player, and stereo amplifier/tuner. The amplifier/tuner also serves as a video switcher allowing you to choose whether to show a DVD or videotape through the ceiling-mounted LCD projector. The LCD also projects images from the document camera, the computer in the workstation, or a laptop computer you bring to the classroom.

The Sympodium workstations also include a specialized computer monitor mounted to the top of the desk. This monitor has a digitized pen attached by a tether which can be used to control the computer’s operating system and programs or to “write” on the computer screen. Details of how to operate the Sympodium are presented later.

The SmartBoard workstations have a normal computer monitor in the multimedia desk but still allow for special interaction with the computer’s operating system and programs through the use of a wall-mounted SmartBoard. The touch-sensitive SmartBoard works in conjunction with the LCD projector to provide similar functionality to the Sympodium. SmartBoard operating instructions are listed below.

To begin, let’s explore basic functionality shared by all the workstations.

To Display the Desk Computer:
Using the Sharp remote control, light the lamp on the ceiling-mounted projector by aiming the remote at the front of the projector and pressing the Power On button. The lamp will take a moment to warm up, but you can confirm that the projector has responded to the remote control by watching for a green indicator light on the control surface of the projector just behind the lens.

Power up the computer by pressing the power button on the front of the computer tower inside the workstation. You may also need to power on the computer monitor inside the desk or the Sympodium monitor on the top of the desk. Once the computer is booted, log in as normal.

Again, using the Sharp remote control pointed at the LCD projector, press the Input 1 button and the computer display will be projected.
To get audio from the fixed computer to the classroom sound system, open the cabinet on the right side of the workstation and locate the Sony amplifier/tuner in the equipment rack. The Sony unit is at the bottom of the equipment stack and controls the audio volume in the room as well as the video device (DVD or VCR) that will be projected through the ceiling-mounted LCD. Identify the Power button on the amplifier/tuner and press it to turn the unit on.

On the Sony amplifier, you'll see a large knob that serves as a volume control. You may use it to adjust the volume of the playback in the room. As a start, turn the volume control until the display on the Sony unit reads 40.

Just beneath the volume control knob, you'll find a similarly shaped knob which is considerably smaller. This control (Input Selector) allows you to select a source from the equipment stack (VCR or DVD player) or from the computer. Turn this small control knob until the Sony display indicates that MD/TAPE is selected. This is the proper setting for hearing computer audio.

**To Display a Laptop Computer:**
You may connect a laptop computer to the fixed projection system in the room by connecting the laptop's external monitor port to the 15-pin cable available on the workstation desktop. For best results, connect the laptop to the 15-pin cable before powering up the laptop computer.

Using the Sharp remote control, light the LCD projector lamp by aiming the remote control toward the front of the ceiling-mounted projector and pressing the Power On button. The lamp will take a moment to warm up, but you can confirm that the projector has responded to the remote control by watching for a green indicator light on the control surface of the projector just behind the lens. Again, using the Sharp remote control pointed at the LCD projector, press the Input 1 button and the computer display will be projected.

The workstation will automatically detect a connected laptop and override the signal from the computer fixed inside the desk. To display the computer in the desk, the laptop must be disconnected from the workstation.
To Play a Videotape:
Using the Sharp remote control, light the lamp on the ceiling-mounted projector by aiming the remote at the front of the projector and pressing the Power On button. The lamp will take a moment to warm up, but you can confirm that the projector has responded to the remote control by watching for a green indicator light on the control surface of the projector just behind the lens.

Open the cabinet on the right side of the workstation and locate the Sony amplifier/tuner in the equipment rack. The Sony unit is at the bottom of the equipment stack and controls the audio volume in the room as well as the video device (DVD or VCR) that will be projected through the ceiling-mounted LCD. Identify the Power button on the amplifier/tuner and press it turn the unit on.

On the Sony amplifier, you’ll see a large knob that serves as a volume control. You may use it to adjust the volume of the playback in the room. As a start, turn the volume control until the display on the Sony unit reads 40.

Just beneath the volume control knob, you’ll find a similarly shaped knob which is considerably smaller. This control allows you to select a source from the equipment stack (VCR or DVD player). Turn this small control knob until the Sony display indicates that Video 1 is selected. This is the proper setting for displaying a videotape.

The VCR is located just above the Sony amplifier and can now be powered on. The VCR draws power from the Sony amplifier and will not operate if the Sony unit is not activated first. You may insert a tape in the VCR.

Again, using the Sharp remote control pointed at the LCD projector, press the Input 4 button and the image from the VCR will be projected. No sound comes from the projector and the volume control on the Sharp remote control has no effect on the loudness in the room. Adjust volume by using the large control knob on the Sony amplifier.

You may control playback of the videotape by using the controls located on the front of the VCR.

To Play a DVD:
Using the Sharp remote control, light the lamp on the ceiling-mounted projector by aiming the remote at the front of the projector and pressing the Power On button. The lamp will take a moment to warm up, but you can confirm that the projector has responded to the remote control by watching for a green indicator light on the control surface of the projector just behind the lens.

Open the cabinet on the right side of the workstation and locate the Sony amplifier/tuner in the equipment rack. The Sony unit is at the bottom of the equipment stack and controls...
the audio volume in the room as well as the video device (DVD or VCR) that will be projected through the ceiling-mounted LCD. Identify the Power button on the amplifier/tuner and press it turn the unit on.

On the Sony amplifier, you’ll see a large knob that serves as a volume control. You may use it to adjust the volume of the playback in the room. As a start, turn the volume control until the display on the Sony unit reads 40.

Just beneath the volume control knob, you’ll find a similarly shaped knob which is considerably smaller. This control allows you to select a source from the equipment stack (VCR or DVD player). Turn this small control knob until the Sony display indicates that DVD is selected. This is the proper setting for displaying a DVD.

The DVD player is located at the top of the equipment stack just above the VCR and can now be powered on. The DVD player draws power from the Sony amplifier and will not operate if the Sony unit is not activated first. You may insert a disc in the DVD player. The DVD player supports playback of DVD media as well as Video CDs, Audio CDs, and CD media which contain MP3 audio files.

Again, using the Sharp remote control pointed at the LCD projector, press the Input 4 button and the image from the DVD will be projected. No sound comes from the projector and the volume control on the Sharp remote control has no effect on the loudness in the room. Adjust volume by using the large control knob on the Sony amplifier.

You may control playback of the DVD by using the controls located on the front of the DVD player.

**To Display the Document Camera:**

Using the Sharp remote control, light the lamp on the ceiling-mounted projector by aiming the remote at the front of the projector and pressing the Power On button. The lamp will take a moment to warm up, but you can confirm that the projector has responded to the remote control by watching for a green indicator light on the control surface of the projector just behind the lens.

Power on the document camera by locating the Power button on the left-hand side of the front control surface of the document camera. Once the Power button is pressed, the document camera confirms it is operating by illuminating a green indicator lamp just to the right of the Power button. You may place items (documents, objects, books, photos, or transparencies) on the document camera base. The base can be illuminated from lamps positioned above the document surface or
from lamps built into the document base itself. You may toggle through the lighting options by pressing the Lamp button on the front control surface of the document camera. The document camera may also have a lens cap covering the camera lens. Simply remove the cap at this time.

Again, using the Sharp remote control pointed at the LCD projector, press the Input 2 button and the image from the document camera will be projected. You may adjust the zoom of the document camera lens by pressing the zoom control on the front of the document camera control surface. Focus should be automatic for the document camera, but may need to be activated manually from time to time. Simply press the AutoFocus button and wait for the camera to sharpen the image.

**To Use the Sympodium:**

Follow the steps outlined above for projecting an image from the computer fixed inside the desk. There is currently no provision for allowing laptop computers to interface with the Sympodium device. Once the computer has been properly booted, locate the special digitized pen (stylus) that is tethered to the Sympodium monitor. Holding the stylus like a pen, bring it to light contact with the surface of the Sympodium monitor.

The mouse cursor should follow the stylus around the page. You may tap the pen on the screen to activate features of the computer operating system or other programs. Double-tapping with the stylus has the same effect as a double-click with a computer mouse.

Find the row of buttons along the top of the Sympodium device. Icons next to each button indicate how the stylus will interact with the computer and computer image. To draw or write on the surface of the operating system or within programs such as PowerPoint, press the button on the Sympodium which has a pen icon associated with it (you may quickly select one of four pen colors: blue, black, green, and red). Now, simply press down on the Sympodium screen with the stylus. Use the stylus as you would a regular pen. An eraser, as well as a right and left mouse click function may also be assigned to the stylus behavior as easily as pressing the appropriate button on the Sympodium control surface.
You will also note a button on the unit which may be used to bring up an on-screen keyboard. Short sections of text may be entered by calling up this keyboard and using the stylus to press down the virtual keys.

For more information about the Smart Sympodium, check out the documents at the following Internet links:

http://instructech.usi.edu/sympodium.pdf
http://instructech.usi.edu/smartboardguide.pdf

**To Use the SmartBoard:**
Follow the steps outlined above for projecting an image from the computer fixed inside the desk. There is currently no provision for allowing laptop computers to interface with the SmartBoard device. Once the computer has been properly booted, approach the SmartBoard in the room and begin controlling the mouse cursor in the operating system and within applications by lightly pressing a finger to the SmartBoard surface and dragging your finger across the surface of the SmartBoard.

You may activate icons on the computer system through the SmartBoard by clicking or double-clicking. The click and double-click function may be accomplished by using a finger to tap or double-tap the surface of the SmartBoard.

You can pick up and use the special “pens” that are located in the SmartBoard tray and use them to “write” on the computer screen. These pens do not actually contain ink and real markers should not be used on the SmartBoard surface. It will damage the SmartBoard. The pens do allow your drawings or notes to appear on the computer screen and through the projection system in the room. An “eraser” in the SmartBoard tray does what you’d expect with these virtual scribbles.

For more information about the SmartBoard, check out the documents at the following Internet link:

http://instructech.usi.edu/smartboardguide.pdf