# Table of Contents

INTRODUCTION ................................................................................................................................................................. 2

INTRODUCTION TO THE PRESENTATION SYSTEM ....................................................................................................... 2

SYSTEM COMPONENTS ....................................................................................................................................................... 3

MULTIMEDIA PRESENTATION SYSTEM OPERATION ........................................................................................................ 4

THREE OF OPERATION ..................................................................................................................................................... 4

Video Flow ....................................................................................................................................................................................... 4

Video Sources ................................................................................................................................................................................... 5

Audio Flow ....................................................................................................................................................................................... 5

Control Flow ..................................................................................................................................................................................... 6

PRESENTATION SYSTEM Operation ........................................................................................................................................... 7

Start Up Checklist ....................................................................................................................................................................... 7

Shut Down Checklist ...................................................................................................................................................................... 9

Using the Button-Based Control System .................................................................................................................................. 10

Using the VCR / DVD ............................................................................................................................................................... 10

Using the Audio System .............................................................................................................................................................. 11

Using the Screen Control ........................................................................................................................................................... 12

Using the Document Camera ................................................................................................................................................... 12

Using the Input Output Panel (I/O Panel) .................................................................................................................................. 13

TROUBLESHOOTING ..................................................................................................................................................... 14

DETERMINING THE PROBLEM ........................................................................................................................................ 14

APPENDIX A – SYSTEM DRAWINGS .................................................................................................................................. 16

## List of Figures

- FIGURE 1. PRESENTATION SYSTEM ......................................................... ERROR! BOOKMARK NOT DEFINED.
- FIGURE 2. VIDEO FLOW ................................................................................ 5
- FIGURE 3. AUDIO FLOW ............................................................................. 6
- FIGURE 4. Control Flow ............................................................................... 7
- A-1: AUDIO SCHEMATIC ........................................................................ 17
- A-2: VIDEO SCHEMATIC ......................................................................... 18
- A-3: CONTROL SCHEMATIC ................................................................. 19
Introduction

This chapter introduces you to the Classroom Control System located in rooms 211, 212, 419 at the Smathers Library Building.

This manual explains the configuration and use of the Room Control SYSTEM and its components. It includes instructions for the start-up, use, and shut down of all system components. In the event that changes to the delivered configuration are made, amendments to this manual can be found posted to the back of this document.

INTRODUCTION TO THE PRESENTATION SYSTEM

Congratulations on your new Presentation System. The system installed in the Smathers Library contains state-of-the-art electronic presentation components. This system has been designed to provide you with capabilities to present an audio/visual presentation using the latest in electronic presentation technology. The presenter is given a host of display and audio options, including the playing of VHS, DVD, and CD-ROM media, and the use of a computer for PowerPoint or other lecture presentations.

The room contains all commercial off-the-shelf products, assembled to create an interactive presentation system. The PRESENTATION SYSTEM is equipped with a Presentation laptop PC, a DVD/VCR unit, and miscellaneous switching, audio and processing equipment. A Button controller provides the ability to control the projector, screen and media sources. The room is configured with one ceiling-mounted LCD projector for presenting lecture media.

This user manual assumes the following:

- The user is familiar with the Button Control user interface, including proper startup and shutdown techniques
- The user is at least mildly familiar with the use of consumer level audio/visual products such as VCRs and CD/DVD players

This manual covers all aspects of the operation of the systems at the Smathers Library. However, it does not describe in detail the operation of each individual component. For detailed instruction on each component, it is suggested that the user refer to the delivered manufacturer’s documentation.
The components contained in the room includes:

- Wharton lectern
- Dell multimedia PC with Windows XP OS
- Samsung DVD/ VCR player
- Audio/Video Switcher
- Dell MP-5100 Projector
- Motorized projection screen
- FSR Button-based control system
Multimedia Presentation System Operation

This chapter focuses on the operation of the PRESENTATION SYSTEM. Included in this Chapter are instructions for start up, use, and shut down for the installed configuration.

It is important that the room configuration instructions be followed closely to ensure proper operation of all systems in the room. In preparing the room for electronic presentation, and assuming the room was shut down properly after its last use, the only device that will require manual power up is the Presentation Computer. All other devices should already have power applied. Since the room may have not been shut down correctly during previous use, it may be necessary to check all components to ensure power is being applied as needed prior to beginning a presentation.

Theory of Operation

Video Flow

Inputs from the presentation PC, DVD/VCR, Document Camera and I/O panel input are sent to the projector through the Video Switcher (see Figure 2.) The appropriate video source (as selected by the Switcher) is then passed to the desired output (projector).
Video Sources

The Switcher routes all input signals to the appropriate display (projector) inputs. The DVD/VCR, Document Camera and PC output are sent to the Switcher, where the DVD/VCR signals are routed to a composite/S-VHS video output to the projector, while the Document Camera, Laptop or PC provide an XGA signal.

The selection of any video source is controlled through the Button Controller located on the wall above the companion cart.

Audio Flow

Audio input signals from the PC, DVD/VCR, and Laptop are sent to the Video Switcher and then to the audio mixer/amplifier input. From the mixer/amp, audio is sent to the ceiling speakers in the room. Adjustment of volume is accomplished through the volume control buttons located on the Button controller.
Control Flow

The control of devices in the room is provided primarily through a Button-based controller mounted in the wall above the equipment cart. A controller is also available in the equipment cart. In the event of a system failure, hand held remotes may also be used. Selection of the projected source is accomplished by pressing the desired source button on the Button controller.
PRESENTATION SYSTEM Operation

The PRESENTATION SYSTEM is designed to provide an easy to use, flexible system for complete presentation. Please follow the instructions below for proper system operation. In the event that a problem occurs during the start up procedure, shut the system down and start over.

Start Up Checklist

Power up sequence:

1. Power up the companion cart using the ON/OFF Master power switch

2. Power up the laptop by pressing the ON/OFF button if needed.
3. At the Login screen, use a login ID assigned to you and press [Return].

4. Power up the system (screen, DVD/VCR and projector) by pressing the System On/Off button on the Button Controller. This will cause the projector to power up and the screen to lower. **NOTE:** The system components can also be turned on independently if needed through the separate component power buttons.

![System Power Up Button](image)

Figure 7. System Power Up Button

5. Select the desired display source for the LCD projector via the Button Control System. (see Figure 8).

![Source Selection](image)

Figure 8. Source Selection

6. Power on the DVD/VCR if needed.


8. Select the appropriate presentation media.

9. Present material as desired.
**Shut Down Checklist**

1. Power down the System with the System On/Off button. This will mute the audio, power off the projector and raise the screen. Or…

2. Power off the LCD projector via the Button Control System. **NOTE:** Once a projector has been powered down, it must go through a cool-down period. During this cool-down time, the projector will not respond to additional control inputs until the cool-down period is complete.

3. Shut down the presentation computer in the lectern by selecting the Windows **START** icon, followed by the **Shut Down...** option.

4. Raise the projection screen using the Button controllers.
Using the Button-Based Control System

The Button Control System is used to select and control media (DVD/VCR/PC/LAPTOP) and media display devices (projector/screen).

NOTE: See Button Control System documentation for full operation description.

1. Using the Button Control System, select the desired source to be displayed (VCR, DVD, Laptop, Doc Cam or PC).

2. Using the Button Control System, control functions of device selected using function control buttons.

Using the VCR / DVD

The Samsung VCR / DVD combination player is used for playback of VHS and DVD media.

NOTE: See Samsung documentation for full operation description.
1. Using the Button Control Panel, first select DVD/VCR as the desired input.
2. The selected button (DVD or VCR) will glow green for the active controls. To change selection, press the desired source on the SOURCE CONTROL panel.
3. If the player is not powered on, select the POWER button on the Button Controller or, the power button on the player.
4. Using the Control Panel, use the appropriate button to PLAY, PAUSE, STOP, FF, or RW the player for the desired function.
5. After using the player, eject the media and select a new input to the displays.

Using the Audio System

The Button controller provides audio playback volume control. Press the UP or DOWN arrow buttons to control room volume levels.

1. Using the Button Panel, first select media as the desired input.
2. Using the VOLUME control buttons, adjust volume to desired level.

**NOTE:** Lectern and wireless microphones are unaffected by this control and must be manually adjusted at the audio mixer/amp. The lectern mic is adjusted by turning the input #3 knob. The wireless mic *(room 419 only)* is controlled with the input #4 knob. *The master volume on the amplifier should not require adjustment.*
Using the Screen Control

NOTE: See Da-Light documentation for full operation description.

1. Push either UP or DOWN function on the Button Panel for the desired screen function.
2. After using the screen, raise the screen to store it out of the way.

Using the Document Camera

The Document Camera is used to project images of overhead transparencies, paper, or 3-dimensional products. To operate the Document Camera:

1. Select Doc Cam input on the Button Panel.

2. Use the remote or front panel controls on the Document Camera to adjust the Doc Cam image.

NOTE: Simultaneous display of Instructor’s Windows desktop and Doc Cam is not possible.
Using the Input Output Panel (I/O Panel)

The I/O panel is used to connect external devices such as Laptop PCs and other devices.

1. Connect Laptop VGA, Audio, or Doc Cam VGA to I/O plate as desired.
2. Select Laptop input button on the Button panel.

**NOTE:** Most laptops use [Fn][F8] to send the laptop video to the video switching system. However, some laptops may be different. Check laptop documentation to be sure.
Troubleshooting

This chapter discusses the steps necessary to troubleshoot problems associated with the Multimedia Presentation System.

The computer used in the system is a standard PC computer with easily acquired parts and accessories, and as such, are highly reliable and therefore should provide years of flawless service. However, should a failure of the system occur, or should the data on the computer be corrupted, the following are the procedures that should be followed to troubleshoot the system.

**Determining the Problem**

In the event of a failure, it may not necessarily impact the ability to present information. Use the following flowcharts to determine the impact and severity of the problem:

1. Source video (PC, DVD/VCR, LAPTOP, etc.) will not display on projector screen.

![Flowchart](image-url)
2. Source audio is not audible.

- Ensure amplifier power is ON.
- Is the source heard? No → Toggle the Audio Mute Button on the Button controller. Yes → Is the source heard? No → Contact Mediatech. Yes → End.