Suo 1

Yi Suo

Professor Suver

CSE300

22 Sep 2015

How to set up a classroom projector with a laptop

Stony Brook University offers a fully integrated multimedia projector system in its classrooms. The infrastructure is a little more sophisticated than a classic projector. While the hardware configurations for the DVD player is already set up and a simple plug and play operation and choosing the source like it’s your TV remote will work just fine, the laptop configurations are not uniform across the campus and this issue is not brought up in the technical manual. Until the updated user manual comes out, this instruction should provide with enough information so you can set up your laptop for classes, meetings, or social gatherings on any projector system with a wall mounted box inside this campus.

Equipment and Supplies:

|  |  |
| --- | --- |
| A male to male 15 pin VGA cable | A display cable with two square connectors. Each connector comes a threaded screw on each side. You want the ones with 15 pins inside both ends of the connectors. |
| An audio cable | A thin cable with round pin connectors that have two ring slots engraved on the pins. The cable that connects your computer to a speaker is an audio cable. |
| A laptop computer with at least a VGA and audio port, or an HDMI port. | A VGA port is usually a blue or gray trapezoid connector with 15 pin holes.  An HDMI port is a trapezoid shaped opening with a thin, connector strip in the middle of the opening. If HDMI cable is going to be used, make sure the classroom has an HDMI port on the wall. |
|  |  |
| USB to VGA adapter(optional) | A USB to VGA adapter is a device with a USB port(shaped like a rectangle with two square holes on top of the connector) and a VGA port for video transfer.  Note: Using a USB port as a video output can use a large amount of system resources and can cause systems to get a bit sluggish/choppy, especially with older equipment. When available, it is recommended to use a dedicated video output. |
| USB to HDMI adapter(optional) | A USB to HDMI adapter is a device with a USB port and an HDMI port for both video and audio transfer.  Note: Using a USB port as a video and audio output can use a large amount of system resources and can cause systems to get a bit sluggish/choppy, especially with older equipment. When available, it is recommended to use a dedicated video output. |
| Lightning Port to VGA adapter(Mac users only) | Suo 2  An adapter with a small square connector for Mac computers to connect to a VGA cable. |

Starting up:

1. Locate the projector screen on the front wall.

2. Grab the string on the bottom of the screen with your hand and pull the screen down all the way, hesitate, then retract slowly until the screen comes to a stop.

Caution: Excessive pulling force may damage the projector screen.

3. Locate walk-up media station. Flip down front panel to access equipment.

4. Touch the 4 inch display screen with your finger to activate media system.

5. Touch red “status” button(denoted by a line go through the top of a circle) to turn on projector. A progress bar will appear on the 4 inch display while the projector warms up. “Status” indicator will turn yellow when the warming cycle is complete.

Warning: Light beams shooting out of the projector lens can have blinding effect. Do not look straight into the projector lens while the system is warming up.

6. Verify the indicator light on right side of the projector facing you is green. If it is flashing red, press “status” button on 4 inch display screen again and then repeat step 5.

7. Place the laptop on top of the metal frame labeled “PLACE LAPTOP HERE FOR PRESENTATIONS”.

8. Check the connectors panel underneath the 4 inch display screen and locate a VGA port(with 15 pin holes and two screw holes), an audio port(a round hole labeled “Audio” next to it), and an HDMI port(a slotted hole with “HDMI” labeled next to it). If you are connecting using a male to male 15 pin VGA cable, go to 8A. If you are connecting using an HDMI cable, go to 8B.

Note: Some classrooms may not have the HDMI port, then the VGA connection is required.

8A. Connecting via VGA

* With the computer off, connect VGA cable to the port labeled “VGA” under the 4 inch display screen. Connect the other end to laptop’s VGA port.

Caution: Connecting to the laptop with its power on may cause electrical damage to both the laptop and the projector system in case of power shortage.

* Plug in the audio cable to the audio port under the 4 inch display screen and to the laptop’s “audio out” port, usually denoted by a headphone label next to it.
* Note: Some new laptops may not have the VGA display port. Refer to the vendor accessories and purchase the USB to VGA adapter. Plug in the adapter into a USB port, then connect the VGA cable to the adapter.

Suo 3

OR 8B. Connecting via HDMI

* With the computer off, connect the HDMI cable to the port labeled “HDMI” under the 4 inch display screen. Connect the other end to laptop’s HDMI port.

Caution: Connecting to the laptop with its power on may cause electrical damage to both the laptop and the projector system in case of power shortage.

* Note: HDMI interface handles both audio and video inputs. No audio cable is needed in this configuration.
* Note: Older laptops may not have the HDMI port. Perform step 8A. Connecting via VGA or use a USB to HDMI adapter. Plug in the adapter into a USB port, then connect the HDMI cable to the adapter.

OR 8C. Connecting via Lightning Port to VGA adapter (Mac OS only)

* With the computer off, connect the adapter to the square opening located on top right hand corner of your laptop.
* Connect one male end of the VGA cable to the female end of the VGA adapter, and the other male end to the wall mount.

9. Press “sources” button at top of system page, then choose “computer”.

10. Turn on the computer. Ensure a projected desktop image is displayed on the screen after logging in. If no image is displaying, go to 10A.

10A. Ensure the laptop is outputting a signal by holding down the function key located on lower left corner of your keyboard and tapping the appropriate Function Key(F1-F12) depending on the laptop. Refer to your vendor’s manual for details. For Macs, make sure the “Mirror Displays” checkbox is checked on the bottom of the VGA Display window.

Shutting down:

1. At session’s end, shut down your laptop and disconnect all cables.

2. Touch the 4 inch display screen to wake up the user interface.

3. Press “status” button on the 4 inch display screen, then choose “yes” on the dialog to exit the system. A progress bar will appear on the display as the projector cools down.

4. Remove the laptop and all connection cables from the metal frame, close equipment access door.

5. Pull down on the metal hook on the bottom of the projector screen and let go to retract the screen.

Note: The screen may come to a stop in the middle of rolling up. If this happens, repeat step 5 until the screen is all the way up.