

Elementary Portable Projectors

Cables needed (all cables located and labeled in bottom of cart):

- **VGA Connection (blue male adapter at both ends of cord):** common computer monitor cable, usually plugged into the VGA port out on a computer and the same port on a monitor.



- **DVI to VGA Adapter (White with blue female VGA port on one end and metal DVI port on the other end):** commonly used for connecting a VGA cable to a computer with DVI port.



- **Ethernet Connection (network cable with an adapter which looks like a large phone plug):** common networking cable used to connect computers to a local network or the internet.



- **Computer Speakers (sound producing boxes with an adapter similar to the adapter for headphones)**



- **Composite Video and Audio (Yellow, Red, and White):** commonly used for connecting video equipment such as a dvd player or vcr to a display such as a tv or projector.



Connecting DVD or VCR to Projector

1. Connect the projector to the DVD/VCR using the composite video cables
 - a. Match the color coded ends to the output on the back of the vcr or dvd player. *Note: if there is more than one set of plugs located on the back, one is usually input and one is output. You want the plugs which are labeled as input (indicated next to the plugs).



2. Plug the other end of the cords into the same types of jacks on the back of the projector and note the number of the input (again indicated beside the jacks on the projector).
3. Plug in the projector and then press the power key. Each projector is a little different so the power key may be located in different areas.
4. After a brief warm-up an image should appear on the projection screen.
5. Adjust focus and height of the projector as desired.
6. If a setup screen appears follow the onscreen instructions to exit the setup function (sometimes pressing the menu or enter key will exit this function)
7. Connect the power to the DVD/VCR and turn it on.
8. If a picture appears indicating that the dvd is loading, you are finished. If not you will need to change the input on the projector proceed to step 8).
9. Toggle through the projector input by pressing the key labeled "input" on the projector. Some projectors will only show inputs for connected, powered devices while others will show all inputs. Cycle through until you find the correct input. An image should appear and sound should be played through the projector.

Connecting a Laptop to Projector With VGA or DVI

1. Connect the projector to the Computer using the VGA cable. The VGA ports should be on the back of the laptop and the back of the projector. They should both look similar to this, although coloring of the jacks may vary from manufacturer to manufacturer.
 - a. If your Laptop has a connection that looks like this you will need to connect the DVI/VGA adapter to the computer and then attach the VGA cord to the adapter.
2. Plug in the projector and then press the power key. Each projector is a little different so the power key may be located in different areas.
3. After a brief warm-up an image should appear on the projection screen.

4. Adjust focus and height of the projector as desired.
5. If a setup screen appears follow the onscreen instructions to exit the setup function (sometimes pressing the menu or enter key will exit this function)
6. Connect external speakers to the laptop if desired
 - a. Connect the speaker cord to the “headphone” jack on the computer.
 - b. Connect power to the speakers and turn them on.
7. Connect a network cable (Ethernet cable) to allow for an internet connection if desired (if you are using the laptop carts and one of its laptops you will be able to connect to the cart wirelessly....just make sure the laptop cart is plugged in correctly)
 - a. Connect one end of the network cable (Ethernet cable) to the Ethernet jack (looks like a big phone jack) on the back of the laptop.
 - b. Connect the second end to either an open port on your switch (located around your desk or student computers) or temporarily connect at the wall by unplugging your desktop computer’s connection.
8. Connect the power to the Laptop and turn it on.
9. Toggle through the projector input by pressing the key labeled “input” on the projector. Some projectors will only show inputs for connected, powered devices while others will show all inputs. Cycle through until you find the correct input as indicated by the VGA port on the back of the projector.
10. The final step before the image will appear is to tell the computer to send a video signal through the external VGA port. This is done a number of different ways depending on the manufacturer of the laptop, however in this case we use mostly Dell laptops at school so the procedure should be as follows (If you are using a laptop other than a dell the keys may vary but the same basic procedure works, you will simply have to decipher the pictures on the keys of the keyboard):
 - a. Find the “Fn” (function key) on the dell laptop keyboard. The “Fn” key will have a blue Fn on it. Then locate the CRT/LCD key (usually the “F8” key on dell laptops) denoted in blue as well.
 - b. Press both keys simultaneously (your laptop screen may go blank or flicker depending upon its settings)
 - c. Wait a moment and check to see if the projector is displaying your image.
 - d. If you would prefer to still see the screen on the laptop and on the projected screen press the above key combination again (to return to laptop only you can press the combination another time)

Connecting a Desktop to Projector With VGA or DVI

11. Connect the projector to the Computer using the VGA cable. The VGA ports should be on the back of the laptop and the back of the projector. They should both look similar to this, although coloring of the jacks may vary from manufacturer to manufacturer (*Note you will have to unplug your monitor from the desktop to attach the cord).



- a. If your Desktop has a connection that looks like this you will need to connect the DVI/VGA adapter to the computer and then attach the VGA cord to the



adapter.

12. Plug in the projector and then press the power key. Each projector is a little different so the power key may be located in different areas.
13. After a brief warm-up an image should appear on the projection screen.
14. Adjust focus and height of the projector as desired.
15. If a setup screen appears follow the onscreen instructions to exit the setup function (sometimes pressing the menu or enter key will exit this function)
16. Toggle through the projector input by pressing the key labeled "input" on the projector. Some projectors will only show inputs for connected, powered devices while others will show all inputs. Cycle through until you find the correct input as indicated by the VGA port on the back of the projector. Your computer screen should now appear on the projector screen.

Disconnecting the Projector from the Laptop

1. Power down the computer (shut it down and turn it all the way off).
2. When the computer is off, turn off the projector.
3. When the fan has stopped running you may unplug the projector and disconnect any other cords.