Laptops and Projectors: How to, Tips and Hints

This page will help you learn how to make your laptop work with a projector. Because there are literally thousands of laptop configurations, models, screen sizes and screen resolutions out there, we cannot know how each laptop works but this is some basic information for users.

Please understand that the information presented here is no substitute for testing beforehand. Spending 10-15 minutes testing the equipment BEFORE the class starts or the semester starts can save you lost teaching time.

Attaching your computer to a projector:

Whether you use the console in a classroom or use a portable projector, the hookup is the same:
You attach a VGA cable FROM the laptop TO the projector or console.
The cable attaches to your laptop via the EXTERNAL MONITOR port on the back of your laptop:

Important note: Some laptops like the Sony Vaio, the Apple iBook, Powerbook and MacBookPro do not have standard VGA monitor connectors. Make sure you have any adapters or docking ports with you for presentations.

This is a VGA port found on most Windows laptops.

This is a VGA cable connector.

In general, the **order in which you do things** with computers and projectors is very important:

1. Connect the VGA cable from the laptop to the projector or console.
2. Turn on the PROJECTOR, let it warm up and select the proper COMPUTER input using the MODE or INPUT button on the remote control.
3. Turn on your computer LAST.

This is important because when you turn on your computer, it looks to all the ports and connectors to see what's hooked up to it. So theoretically, the computer will know there is a projector connected and send the image that you see on the screen out to the projector.

What do you do when it doesn't send the image to the projector?

ALWAYS CHECK THIS FIRST: Is the **projector's input** set to **the correct COMPUTER input**? If it is, try the following:

For Windows users: If you get an image on the laptop screen but not on the projector, check the following:

1. On your laptop's keyboard, find the key marked "FUNCTION" (lower left corner of the keyboard).
2. Then, search for a key that has either the letters "LCD/CRT" or a little monitor icon. Most often, it will be in the top row of keys marked F1 through F12.
3. When you have both keys located, press and hold the FUNCTION key and then press the LCD/CRT key that you located before. It might take a couple of seconds for the computer to react.
   This should toggle the screen image through a cycle like this: Image on Laptop Screen **|** Image on Projector | Image on Both

So if you press the "Function F" key sequence once, you'll get an image on the projector, but your laptop screen will go black. Press the key sequence again and you'll see the image through the projector and on your laptop.

For MAC users:

All Apple laptops made since 2008: Hold down the Command Key (to the left of the spacebar) and press F1. This will toggle the mirroring on and off.

First time setup: System Preferences>Displays>Display Tab. Two windows will appear. **Check that the resolution on both is 1024x768**. Also check the "Show displays in Menu Bar" checkbox to put a display shortcut at the top of your screen (near the clock).

If possible test everything before you need it. Get into your classroom and try it before your first class.

POWER & SLEEP:

Your laptop will shut off the display or go to sleep very quickly when it is using the battery. When it does, you will lose your image on the projector.
When that happens, tap the space bar on your keyboard. Wait a moment. When the laptop wakes up, the image will return on the projector.

You can adjust the power settings (Windows: Control Panels>Power Settings/Mac: System Preferences>Energy Saver) to prevent this behavior.

INTERNET ACCESS:

For the most reliable connection use the blue Ethernet cables in the conference room. If no hard wire is available connect to the UofM Wireless connection via x500 or guest account. Computers connecting via the Ethernet cable will need to have the MAC/Hardware Address registered to obtain an IP address. Devices can be registered by going to:

https://wired.netaccess.umn.edu/cgi-bin/register.pl

Back-up Plans for all computer presentations:

Nothing is 100% reliable. If your class depends on a PowerPoint or Word presentation, get your presentation off your laptop and on to a flash drive. Always carry it with you. Do not rely on "the cloud" for storage.