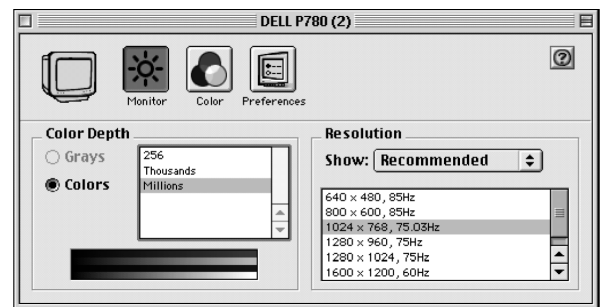
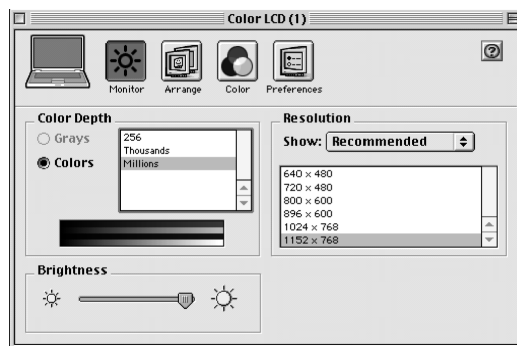
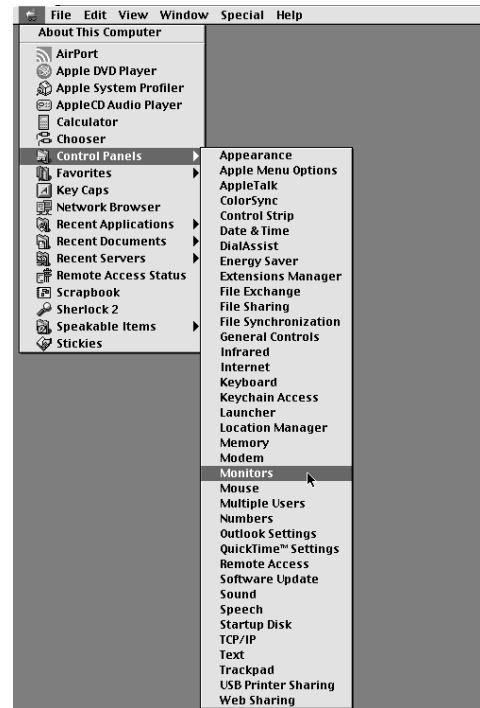


# Configuring a Macintosh Laptop to Use Multiple Displays

These instructions may be useful if you are connecting a Mac laptop to a secondary monitor or to a projector within the Ideal Learning Environment (ILE). Configurations for OS 9 and OS X are covered in these instructions.

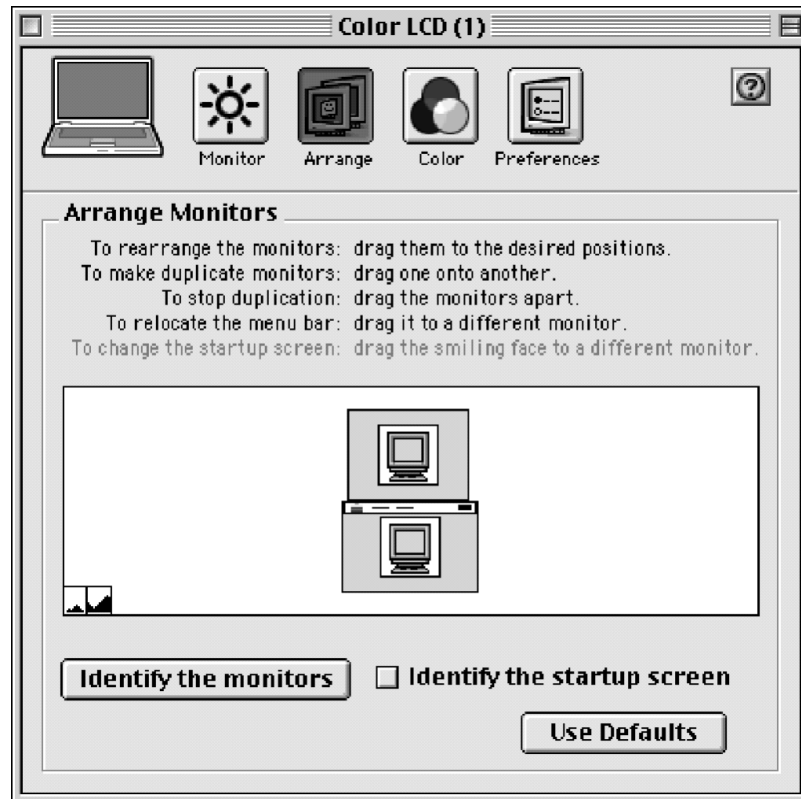
## OS 9

1. Make sure the Macintosh is either **Off** or in **Sleep Mode**.
2. Connect the secondary monitor or projector to the VGA port on the laptop.
3. Turn on or wake up the laptop. If the VGA connection you made is secure and the external display equipment is on, the laptop should send video both to its own flat screen and to the secondary source at this time. The two displays will either be identical or they will be different, depending on whether **video mirroring** is currently enabled.
4. Using the Apple Menu, open the Monitors control panel. If mirroring is disabled, each display will show its own control panel, as shown below. *If mirroring is already enabled, skip to step 8.*



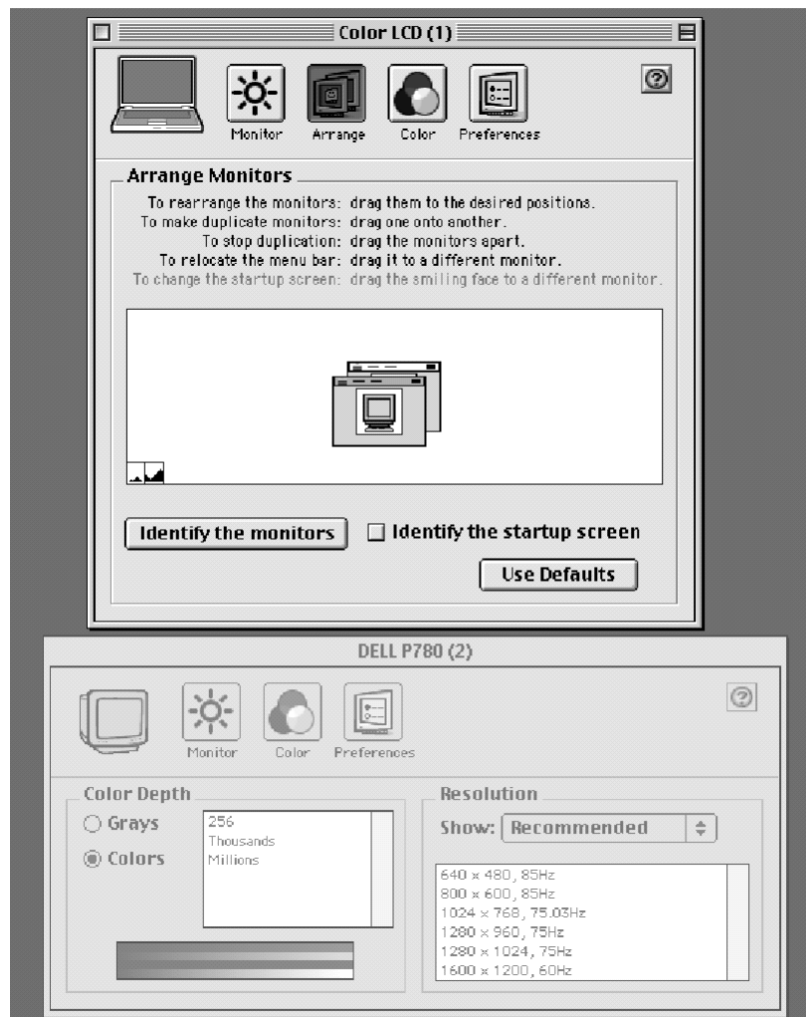
5. Use each control panel to set the desired resolution for each display. **NOTE:** Adjusting the resolution on one display may affect both displays, and usually setting both to the same or similar resolutions is advisable.

6. The control panel for the primary display device (the laptop's built-in screen) includes a button at the top labeled "Arrange". Click this to arrange the relative positions of the two displays and to enable video mirroring if you wish. (Drag the display icons to their desired position to arrange their relative locations. Drag one display on top of the other to enable video mirroring).



7. When your adjustments are complete, closing the control panel on the laptop's primary display will also close the secondary Monitor control panel. *See Step 11.*

8. If video mirroring was already enabled when you opened the Monitors control panel, you will notice that two control panel windows appear, one for each display device.



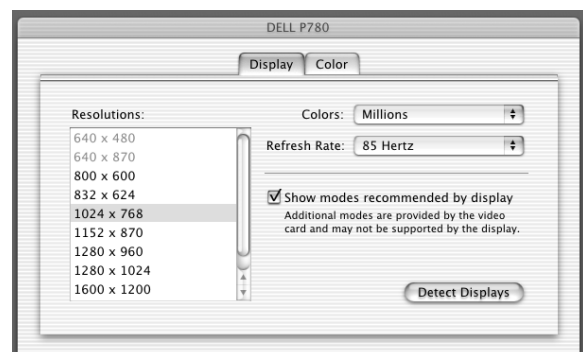
9. Use each control panel to set the desired resolution for each display. **NOTE:** Adjusting the resolution on one display may affect both displays, and usually setting both to the same or similar resolutions is advisable.
10. You can disable mirroring by clicking the Arrange button at the top of the primary display's control panel (for laptops it's called "Color LCD"). Then drag the display icons apart and position them as you wish. Closing the primary control panel closes them both.
11. When you are ready to disconnect the secondary display device, first power down the laptop or close its screen to place it in **Sleep Mode**. Then disconnect the cable from the laptop's VGA port.

## OS X

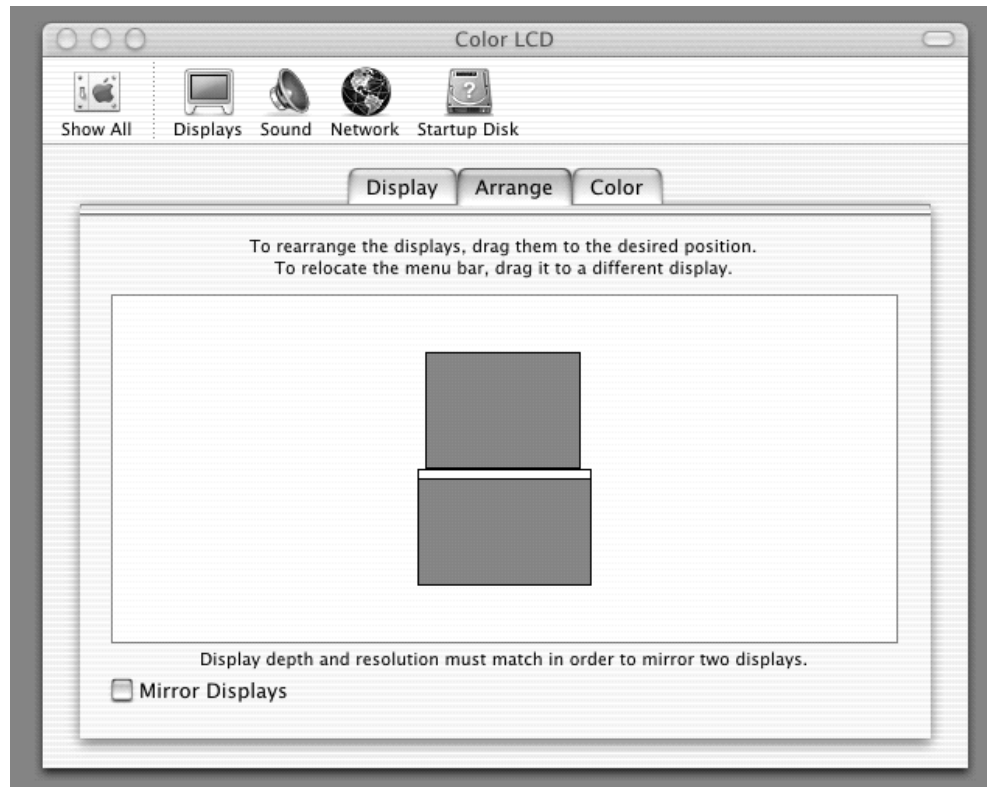
1. Make sure the Macintosh is either **Off** or in **Sleep Mode**.
2. Connect the secondary monitor or projector to the VGA port on the laptop.
3. Turn on or wake up the laptop. If the VGA connection you made is secure and the external display equipment is on, the laptop should send video both to its own flat screen and to the secondary source at this time. The two displays will either be identical or they will be different, depending on whether **video mirroring** is currently enabled.



4. Using the Apple Menu, open the **System Preferences** window and select the **Displays** control panel. If mirroring is disabled, each display will show its own control panel, as shown below. *If mirroring is already enabled, skip to step 8.*

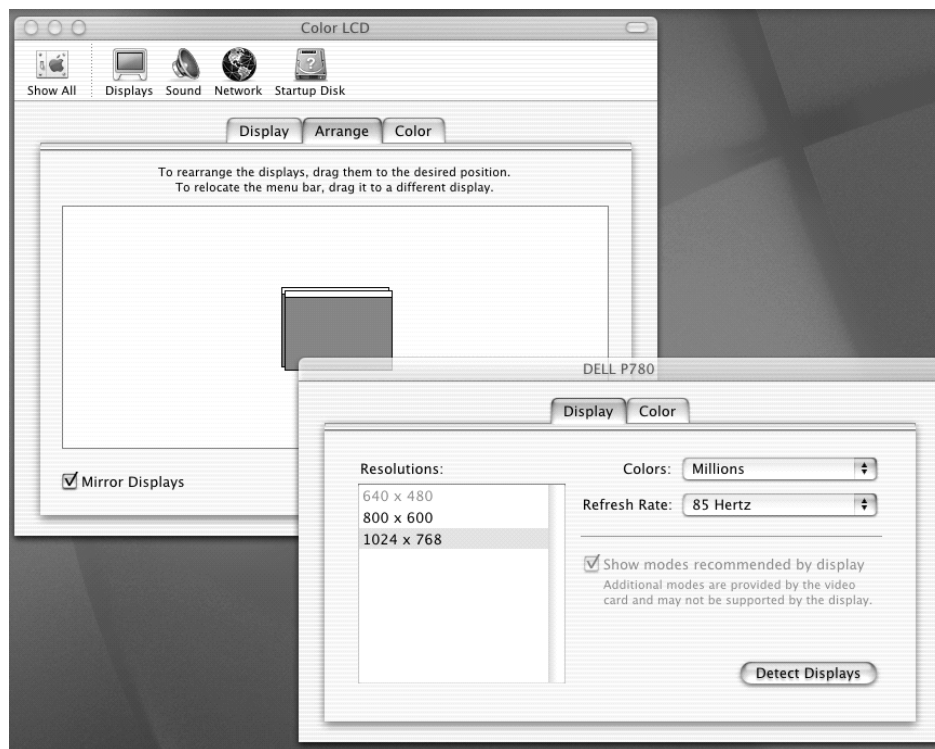


5. Use each control panel to set the desired resolution for each display. **NOTE:** Adjusting the resolution on one display may affect both displays, and usually setting both to the same or similar resolutions is advisable.
6. The control panel for the primary display device (the laptop's built-in screen) includes a tab at the top labeled "Arrange". Click this to arrange the relative positions of the two displays and to enable video mirroring if you wish. (Drag the display icons to their desired position to arrange their relative locations. Check the box next to "Mirror Displays" if you wish to enable video mirroring.)



7. When your adjustments are complete, closing the control panel on the laptop's primary display will also close the secondary Monitor control panel. *See Step 11.*

8. If video mirroring was already enabled when you opened the Display control panel, you will notice that two control panel windows appear, one for each display device.



9. Use each control panel to set the desired resolution for each display. **NOTE:** Adjusting the resolution on one display may affect both displays, and usually setting both to the same or similar resolutions is advisable.
10. You can disable mirroring by clicking the **Arrange** tab at the top of the primary display's control panel (for laptops it's called "Color LCD"). Then uncheck the box next to "**Mirror Displays**" at the bottom of the primary display window. Closing the primary control panel closes them both.
11. When you are ready to disconnect the secondary display device, first power down the laptop or close its screen to place it in **Sleep Mode**. Then disconnect the cable from the laptop's VGA port.