Using Digital Cameras and Projectors

Most of the digital cameras and projectors in use in Extension are of the same basic type. This Quick Reference will attempt to give some basic guidelines for using these pieces of equipment. Some of the specific items will change with various models and brands of equipment.

Using Digital Cameras
In Extension, most of the cameras are Sony Digital Mavicas. These cameras utilize a 3 1/2” floppy disk for storing the pictures. This disk can be used in any computer with a floppy disk drive. Some of these cameras will record video as well as still pictures. Generally the amount of video is small, approximately 15 seconds.

Wait for the Green Light
Perhaps the most important point for improving pictures taken with the digital cameras is to wait for the green light. On the Sony Digital Mavica cameras, you should point the camera at the subject, frame the picture with the zoom lens, and press the shutter button halfway down until the green light appears in the display finder, then press the button the rest of the way down. If sound is turned on, you will also hear a beep when the camera is ready. The green light (and beep) means the camera is ready to take the picture. If you have been getting fuzzy pictures, it is probably because the camera was not ready when the picture was snapped.

A Common Misconception
Some people think you have to hold the camera steady after you snap the picture until it quits recording. You do NOT have to hold the camera steady until it quits recording. Once you snap the picture, the shutter closes and no more information is added to the picture. All the camera is doing when it says recording is writing the picture information to a file on the floppy disk. You DO have to wait until it quits recording to take another picture.

Camera Limits
Due to the relatively low resolution (number of dots per inch or pixels) of some of the early models of the Sony cameras, they are limited in the types of pictures they can take. For example, the early models of the cameras take portraits or groups of two or three quite well, but they do not take pictures of large groups very well. Learn the limits of your camera and stay within those limits to take good pictures.

In this respect, you need to learn to set the resolution of your camera to the optimum mode for the pictures you are taking. Some of the newer models have resolution capability of up to 1216x960 pixels. Learn the tradeoff between resolution and file size (i.e. the number of pictures you can store on one disk).
Standard or Fine?
Most of the Sony cameras have an option for either Standard or Fine quality. The camera should be set to Fine. There is no good reason for using standard mode. Set the camera to Fine mode and leave it there.

Programs
Another important factor in taking good pictures is the programs that are built into the computer. The camera has programs for action, low light, landscape, portrait, and other modes. These can be a significant help in taking good pictures. Learn to change these modes and then experiment with them to determine what makes a good picture.

Picture Effect
The cameras also have some built in special effects. These include: Black & White mode, Sepia, Pastel, Negative Art, and Solarize. These have a place in special circumstances, but they are typically not used very often. Black & White mode may be the most commonly used mode in Extension situations. Sometimes Black & White mode makes a better picture for the newspaper or a newsletter. Experiment with this mode to determine when it will work for you.

The Secret to Great Pictures
An excellent photographer once told me the secret to taking great pictures: Take lots of pictures! This does two things. One is that you simply have a better chance of getting a good picture (even by accident). The second is that you learn how to use your camera more effectively.

Using Digital Projectors
As with the digital cameras, most of the digital projectors in Extension are either BoxLight or In Focus brands. Hopefully these ideas will help you use the projector more successfully.

Hooking Up The Projector
In each case, there are two cables you need to hook up the projector. One is the power cable. It connects to the side of the projector and connects to the wall. The on/off switch is just above the point where the power cable connects to the projector.

The second cable has a small 15-pin connector on one end and a larger oblong connector with small ears on the other end. It also has a large almost round connector about one foot back from the computer connector.

The 15-pin end connects to the computer. The connection on the computer is almost always blue in color. On desktops, the projector connects to the same place the external monitor connects. There is only one connector on the computer where this cable will connect.
The other end connects to the projector on the back. There is only one place this connector will fit. There is no place on the computer where this connector will fit.

If you are using a desktop computer, you should disconnect the monitor and connector the projector cable to the monitor connector. The connect the monitor to the oblong box on the cable. This will allow you to use the projector and the monitor.

**Do I Have to Have the Projector On BEFORE I Turn On the Computer?**

No, but it is a good idea. I would suggest the following procedure:

1. Connect the projector to the power supply
2. Connect the projector to the computer.
3. Turn on the projector and wait until it displays the initial startup screen.
4. Turn on the computer.

Using this procedure will give the best chance of everything working properly.

If the computer is already on, use the following procedure:

1. Connect the computer to the power supply.
2. Connect the projector to the computer.
3. Turn on the projector and wait until it displays the blank screen. It may display the screen from the computer (probably not).
4. If the projector does not display the computer screen, you have to tell the computer to send the image to the computer. If you have a Compaq computer, you should hold the **FN key, press F4 key**, and let both keys go. You should see the projector display the message “Perfecting the image” and in a few seconds, the computer picture should appear.

**What if the projected picture is not right?**

There are two types of not right. In one, you cannot tell what kind of picture it is. The picture has wavy lines or is split into two sections with a blank spot in the middle, etc. In the second version of not right, the picture looks like the computer picture, but it seems to be missing lines.

**Case 1 - The projected image is not right, having wavy lines or is split into two parts.**

**Procedure 1**

1. The first thing to try is to turn off the projector, wait 20 seconds (if you do not wait long enough, it won’t come back on), and then turn the projector back on. Hopefully, this will allow the projector to sense the picture and correct the problems.
2. If this does not work, try the following:

**Procedure 2**

1. Press the Menu button on the projector
2. Press the right button until the Image item on the menu is selected
3. Press the down button and see if the AutoImage option is on (it probably will be off)
4. If it is off, press the Enter button to set it to On (the projector will probably reset, you will see the message “Perfecting the image”, and in a few seconds, the computer image will be displayed.
If this does not work,

Procedure 3
1. Turn off the projector
2. Shut down the computer
3. Wait 20 seconds and turn on the projector
4. After the projector displays the blue screen, turn on the computer.

Procedure 4
If this does not work, repeat Procedures 2 and 3 until it does

Case 2 - The computer screen is displayed, but it is missing lines.
In this case, the computer is probably set to display a higher resolution than the projector is capable of displaying. For example, many of the earlier projectors are only capable of displaying 800x600 resolution. Many of the newer laptop computers are capable of displaying 1024x768 resolution. If the computer is set to 1024x768 and the projector can only display 800x600 resolution, the projector will emulate the computer screen by dropping some of the lines. Use the following process to set the computer resolution to match the projector resolution.

If the Changrez icon is present on the front computer screen:
1. Click the **Changrez icon**
2. Click the 800x600x32 option
3. Click the **Switch button**
4. Close the Changrez window

If the Changrez icon is not present:
1. **Right-click** the computer screen
2. Select **Properties** from the drop-down menu
3. Click the **Settings tab** at the top of the Display Properties window
4. In the Screen Area (Resolution box), move the slider bar until it says 800x600
5. Click the **OK button** at the bottom of the Display Properties window
6. A message about resizing the desktop will appear, click the **OK button**
7. A message will appear asking if you want to keep this setting, click the **OK button**
The computer screen should reset and a “Perfecting the image” message should appear on the projector screen. In a few seconds, the image should appear properly.

How can I blank the display of the projector?
1. Press the Standby button (a “Standby active” message will appear)
How do I get the computer screen back on if it is in standby?

1. Press the Standby button again
   (Note: If the projector has been off a while, it may take several seconds for it to warm back up and the light to come back on. Be patient. If the screen has not come back on in 15 seconds (and this seems like a very long time), then press the Standby button again. If the screen does not come back on in another 15 seconds, turn the projector off, wait 20 seconds, and turn it back on.)

Do I have to wait for the projector to cool down before I turn it off and pack it up?
Technically, no. However, what I do is put the projector into standby mode, then I shut down my computer, pack up the computer, and pick up all my papers. When I have everything else put up, I then turn off the projector and pack it up. Putting the projector into standby mode shuts down the lamp and allows the projector to cool off. It takes about 5 minutes for it to cool off.