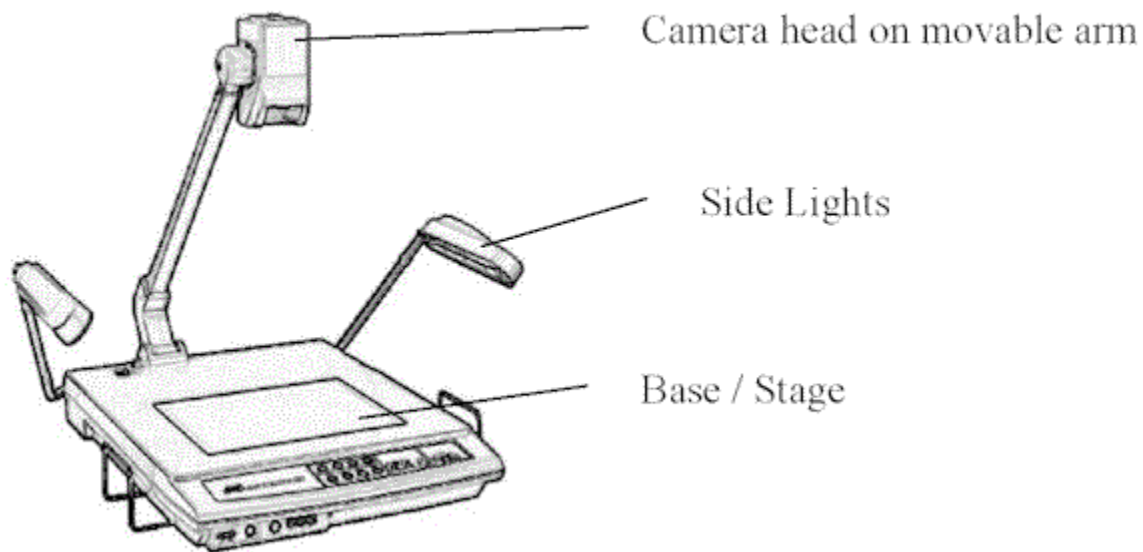


Choosing a Visual Presenter

A visual presenter is a color video camera mounted on a movable arm that is positioned over a large base on which objects can be placed. The base, called the stage, usually has side and bottom lights to illuminate the objects such as books, solid objects, or transparencies.

The camera has a lens that lets the user obtain an image of the entire object or it can zoom in for close up views to see very small areas. For objects such as an insect like a fly, the detailed body down to its individual hairs can be seen. Or when viewing a printed picture from a magazine the individual ink dots can be seen at a high zoom magnification.



The image produced by some visual presenters is identical in electronic form to that of a VCR or DVD player and thus can be seen using a TV, plasma panel, or a data/video projector. The images can be used to study an object or can be shared with a class or general audience.

Years ago, the only option available for this type of viewing was a device called an opaque projector. The projector was big and bulky, plus the image was not very bright. It used many lamps with a large lens arrangement to allow teachers to project images of solid objects or documents such as text from a book. The advent of bright and affordable data/video projectors (which allow a camera, VCR, DVD, or computer screen image to be projected to a group) marked the death knell of the opaque projector.

Since a company called "Elmo" marketed one of the early visual presenters (also called document cameras), this name is often associated with the product, just as Frigidaire is with refrigerator, or Kleenex is with facial tissues. However, it is important to know that Elmo is a brand name. There are dozens of manufacturers of visual presenters.

Visual presenters are now found in two different general types: analog and digital. An analog visual presenter uses a small video camera that produces NTSC video image format, the same video signal that comes out of the back of a standard VCR. This means that the images coming from an analog visual presenter can be input into a VCR, a function few people are aware of,

and thus few people take advantage of this ability to record the visual presenter images on inexpensive VHS tape.

Analog visual presenters, up until recently, have been much more affordable than digital ones. With the price of the CCD camera chips that capture images digitally plummeting in price, along with inexpensive computer memory and other microchip-based products, digital visual presenters are now priced on an almost even level with analog visual presenter. Digital visual presenters use the same technology as a hand held digital camera, and produce a computer compatible signal.

Many digital visual presenters can plug directly into a data/video projector using the data signal port. In most cases the resolution of the image is 2 to 4 times better than that of the normal TV image produced by an analog presenter. Such a resolution increase is a major advantage since with an XGA resolution of 1024 x 768, it is nearly possible to image a full 8-1/2 by 11 inch sheet and read all the text. This is also important when it is necessary to resolve the detail on certain objects.

Some digital visual presenters can be connected to a computer. Here the image obtained by the presenter is sent to the computer, processed, and appears on the computer's monitor or a laptop's LCD. This same image can also be transmitted to a projector for display on a large screen.

Another advantage of the digital visual presenter is that it will permit the capture of images in a computer based digital format. A connected computer can then save a file of the subject or item placed in the viewing area. The digital visual presenter is, in a sense, a scanner, since it can capture live images at high resolution to a computer file.

Some digital visual presenters can even capture and store many images internally without a computer. These images can be later recalled and used to compare with live images or for describing a process.

When combined with a computer, a rapid series of images forming a short movie can also be recorded.

Visual presenters come in versions that have lights, typically fluorescent lights located on folding arms that allow the users to provide more light on the object being viewed. Some may not have any lights and depend on the ambient room illumination, which vary greatly.

Finally, another option is the need to show transparent media such as viewgraphs or 35 mm slides. Many visual presenters have lights below the stage. This allows transparencies that may have originally been created for an overhead projector to be easily viewed. Some have special holders for 35 mm slides and permit them to be viewed as a full screen image.

In finding the best source to obtain your visual presenter, you need to consider the same factors that apply to other product categories. How does the warranty compare to that offered by other manufacturers? How easy is it to contact the tech support department? You also want to ascertain whether you can contact tech support after the warranty period has elapsed. Some companies are now charging for tech support on out of warranty items.

Visual presenters offer an easy way to show existing classroom materials. The resulting images can be easily sent to a data/video projector and thus appear on a large screen for all to see. Consequently, visual presenters extend the usefulness of the investment you have made in a data video presenter.

What are some ways a visual presenter can be used in a Classroom?

- To show a picture or chart from a textbook
- To share examples of student writing
- To show artifacts such as buttons, fossils, seashells, plants
- To show live science experiments in Biology or Physics classes
- An analog presenter can be set to view an ant farm, then attach the presenter to a VCR, record over time, and play back the construction of the ant tunnels
- A digital presenter can capture pictures from a textbook that can then be imported into PowerPoint.

These are just a few examples. The only limit is your creativity.