

Application and care of Digital camera & LCD Projector

Objectives: At the end of this lesson you shall be able to

- define LCD Projector
- state the applications of LCD Projector
- define digital camera and its uses.
- brief the care and maintenance of LCD projector and digital camera.

LCD Projector

LCD projector is a type of video projector for displaying video, images or computer data on a screen or other flat surface.

It is an advanced teaching aid used for effective presentation comparing to Slide Projector and Overhead Projector.

To display images, LCD (liquid- crystal display) projectors typically send light from a lamp through a prism that separates light to three poly-silicon panels- one each for the red, green and blue components of the video signal and projects on the screen.

LCD projector was invented in 1984 by American inventor Gene Dolgoff.



Application

An LCD projector connects to a computer, laptop or desktop, allowing the computer's screen to be viewed by the entire class.

LCD projector brings the world to the class. Show multimedia presentations, or downloaded videos. Anything that can appear on your computer screen can be projected with an LCD projector.

Audio Visual Aids are used for communication purpose. In teaching- learning process AVA plays very important role. It is important to select aids which are appropriate to the method of teaching.

Audio aids communicate ideas through the ears to the mind. They may take the form of audio, music or tape recordings.

Visual aids communicate facts and ideas through the eyes to the mind and emotions. Visual aids include films, slides, videos, overhead projection, books, photographs, models and charts.

Digital Camera:

Is a camera which produces digital images that can be stored in a computer and displayed on screen.

A digital camera or digicam is a camera that encodes digital images and videos digitally and stores them for later reproduction.



LCD Projector Care & Maintenance

- Become familiar with the unit before your first presentation or event.
- To prolong lamp life, always allow your projector to cool completely before turning off or unplugging.
- Remember that excessive heat can greatly shorten your lamp life.
- Do not operate your projector in direct sunlight or near a heat source.
- Change filter, if applicable, as specified in your user manual.
- Never operate the unit without the air filter, if applicable. Doing so can draw dust into the optics of the projector, which can be projected onto your image.
- Avoid using your projector in a smoky environment. This can cause damage to the optics of the unit and can void your warranty.
- Store your projector in a cool, dry area. Save the shipping box for safe secure storage when not in use. If the need arises for you to ship your projector in the future, the original box and packing material is the safest way to pack your unit.
- If the projector is mounted to the ceiling, be sure that the area near the intake fan is kept clean and not in direct line of air or heat vents.
- For optimal image quality, always keep your lens clean. The safest way to clean your lens is with a lens cloth, which can be purchased at a camera store.

Care & Maintenance of Digital camera

- Avoid dirt and sand. Use care when cleaning dirt particles and sand from your digital camera. Do not use canned or pressurized air to clean the sand, as you might just drive the particles into the camera case. Budget priced camera cases, might not be sealed perfectly, making it easier for grit and sand to penetrate the case and cause damage. Gently blow out the grit and sand to avoid this problem. Use care when shooting photos on a windy day at the beach, too, where sand can blow with excessive force. Avoid opening the battery compartment on such days.
- Avoid liquids. Try to keep all liquids away from the camera, unless you have a model with a waterproof case. Cameras are like any piece of electronics, and they can be damaged by excessive water.

- Avoid touching the lens and LCD. Oils from your skin can smudge the lens and LCD, eventually causing permanent damage. Clean the lens and LCD with a microfiber cloth as soon as possible, anytime you see a smudge from your fingertips.
- The lens and sun don't mix. Do not point your camera's lens directly at the sun for any length of time, especially with a DSLR camera. Sunlight focused through the lens of the camera could damage the image sensor or even start a fire inside the camera.
- Use cleaning liquids with care. Avoid using an excessive amount of cleaning liquid with your camera. In fact, other than stubborn smudges, you should be able to clean the camera with a dry microfiber cloth. If a liquid is needed, place a few drops of the liquid on the cloth, rather than directly on the camera. Water can be used in place of cleaning liquid as well.
- Vacuum clean the bag. Dirt and sand inside your camera bag could damage your camera, so be sure to vacuum the bag regularly to keep it clean and protect your camera.
- Watch the temperature. Although some cameras are designed to survive harsh temperatures, most cameras are not. Do not leave your camera in a sunny vehicle, where temperatures quickly can exceed 100 degrees Fahrenheit. Avoid leaving the camera in direct sunlight, which can damage the plastic. Finally, avoid extreme cold, too, which could damage the LCD.
- Use neck straps and wrist loops. Admittedly, this is more of a "preventative" maintenance tip, but be sure to use neck straps and wrist loops with your camera whenever possible as you're shooting photos outside. If you slip while hiking, or if you lose the grip on your camera near the pool, the straps can save your camera from a potentially disastrous fall. Better be safe than feeling sorry. (If you do drop the camera, click on the link to try some troubleshooting tips.)
- Store camera properly. If you're not going to use your camera for a couple of months, you'll want to store it in a low humidity area and out of direct sunlight. Additionally, try storing the camera without the battery inserted, as this will reduce the possibility of suffering corrosion.