

Vídeo Producción Handbook



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Video Production

Equipment

The pieces of equipment necessary for video production will depend on the types of programs you wish to produce. The items below may be used in different combinations depending on your needs:

...Camcorder With Tripod	...VCR(s)	...External Microphone(s)
...Video Mixer or Switcher	...Video Monitor(s)	...Scanner
...Audio Mixer	...CD Player	...Studio Lights
...Video Editor (such as a Casablanca, Avio, Kron or Prestige) or PC with an Editing Software Package and Video Card		

Remember: It is important that you read the manual for each piece of equipment you choose. Get to know the features and functions before you begin production. Knowing what each machine will do and how to switch from one function to another will prevent wasting time and making mistakes.

Cables

Cabling can be confusing because different brands and models of audio and video equipment will have different input and output connectors. Below are some examples of different types of cabling.



S-Video



BNC



RCA



RF-Coaxial



USB

S-Video – This cable is used with an S-VHS VCR, TV monitor, editor VCR, a/v digital mixer and S-VHS camcorder. An S-Video cable carries the TV picture only. This cable hooks up a VCR to a TV monitor, an a/v digital mixer to an editor VCR, a VCR to a digital editor, an S-VHS camcorder to a TV monitor and a computer to a TV monitor.

BNC – This cable is used with a VCR, TV monitor and editor VCR. A BNC cable carries TV picture only. The cable hooks up a VCR to an Editor VCR, A VCR to a TV monitor and one editor VCR to another.

RCA – This cable is used with a VCR, microphone or audio mixer, TV monitor, camcorder, a/v digital mixer, digital video editor and computer used in digital editing. It can carry either sound or a TV picture. When duplicating a videotape with two VCRs, one phono (RCA) cable is used to carry the video signal and another phono (RCA) cable is used to carry the audio signal. A phono (RCA) cable is used to hook up an a/v digital mixer to an editor VCR, a camcorder to a VCR and a microphone or audio mixer to an editor VCR.

RF-Coaxial – This cable is used with a TV receiver, VCR, cable drop and head end of cable system. An RF cable carries sound and picture. An RF cable is used to carry the sound and TV picture from the head end of the in school cable TV system to the cable drop in a classroom and then to a TV receiver. An RF cable carries the sound and TV picture from a VCR to a TV receiver.

USB – This cable is used to attach a variety of components such as a scanners and keyboards.

The Production Process

There are three phases involved in production: Pre-Production, Production and Post-Production.

Pre-Production

Program Concept: Ask these questions:

What is the purpose of the program?

What kind of program do I want to produce?

Report, Interview, Documentary, Public Service Announcement, How To Video, Mini-drama, Commercial, etc.

Program Design: Ask this question:

What is going to happen in the program? (Beginning, Middle and End)

Research: Do your homework!

Be sure of the facts. Research using the library, the Internet or interviews.

Writing and Rewriting: Don't overwrite!

Remember that video stories rely on pictures to help tell the story. Choose visuals carefully and keep the narration simple and not overburdened with detail.

Marking Scripts for Reading

Double or triple space between lines. This makes it less likely that the reader will get lost while reading the script.

Type the script so that each line of text goes only halfway across the page. Shorter lines are easier to read.

Highlight, underline, capitalize, or use a different font when typing scripts in order to mark areas that may need emphasis or may be difficult to read.

Storyboarding: A series of individual visual "sketches" of the program

Do this before shooting begins to help understand what shots will be required in the program.

Individual storyboard frames can be as simple as stick figures or as complex as frames from a comic book.

Planning for the Shoot

Make a list of equipment, props, personnel and locations that will be needed.

Make a production schedule (timeline) and be sure that the crew and locations will be available at the time of the shoots.

Assign jobs ahead of time so that everyone involved will know exactly what they are responsible for throughout the process.

Production

The Production Crew

Producer/Director: This is the main person in charge of the production. The producer/director oversees the development of the program and the production of the scenes.

Writer: The writer is responsible for writing a script outline and creating a storyboard containing audio and video cues.

Prop Person: This person is responsible for being sure that all necessary costumes, scenery and set decorations are available for the shoot.

Production Assistant: The PA (who may also do double duty as the Prop Person) is responsible for getting the necessary equipment to the shoot, setting it up and helping with anything else the Producer/Director requests.

Videographer: This person operates the camera and makes sure the shots are well composed. The camera operator is also responsible for making sure that the talent is miked and that good quality audio is acquired. The camera operator should always use headphones to monitor the audio quality.

Talent: The performer(s) in front of the cameras.

Editor: This person is responsible for putting the finished production together. This includes editing according to the script and storyboard, adding music, narration or other audio, titles and transitions.

Shooting Scenes and Takes

Scenes: Recording a number of shorter scenes is usually preferable to shooting one long one.

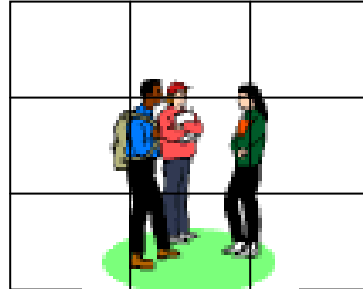
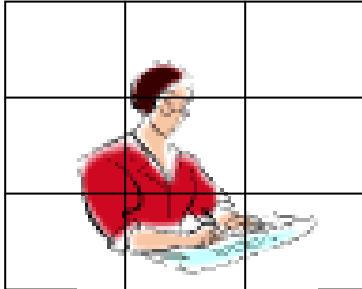
Takes: If a mistake is made during recording, do other takes of the same scene.

Note: Be sure to decide on some way to identify the various scenes and takes. The preferred way is to identify each by saying Scene 1, Take 2, etc. This will help identify the good takes when you get to the point of editing.

Note: When the camera person begins recording, the director should wait for 5 seconds while the camera gets “up to speed”. The director should then call the scene and take, wait for 5 more seconds and either call “action” or point to the talent to begin.

Basic Camera Shots: Video composition can be defined as the arrangement of visual elements in the video space. Like still photography, video involves a two-dimensional representation of a three-dimensional scene. Attention must be directed not only at a main subject, but at the background and foreground elements as well.

The “**Rule-of Thirds**” provides another useful guideline for video composition. To follow the rule-of-thirds divide the video space into thirds, both horizontally and vertically. The top horizontal line serves as an “eyeline” for most people shots, particularly one-person shots. Both the top and bottom horizontal lines provide placement points for the horizon on outdoor scenes. Subjects placed along any of the four lines are more dynamic: the four intersections provide the strongest subject placement points.



Tripod Operation: For the most stable shooting, your camera should be on a tripod whenever possible. The tripod should be set at a proper level so that the videographer will be able to stand comfortably while taping. Levers for tilting and adjusting the tripod should be loose enough for moving up and down and right and left smoothly but not so loosely that the weight of the camera might cause the levers to tilt. Experiment to get the feel of the tripod before you begin filming. It is recommended that you purchase a rolling dolly along with your tripod. This allows you to move the tripod smoothly from one area to another.

If a tripod is impractical, zoom the camera out all the way and get close to the subject. This will minimize camera shake.

Audio Basics

Poor audio can ruin a great video clip. Choose well when choosing a microphone and always be sure to test the quality and level of your audio before you begin filming. There are many different types of microphones available; however, it is recommended that an external microphone be used whenever possible.

Camcorder Microphones are built into most camcorders. Although the camera can zoom in on an object 20 feet from the camera, you must keep in mind that the built in mike cannot zoom in. It will only pick up the sounds that are closest to the camera. The sound from 20 feet away will probably be very faint to non-existent from that distance.

External Microphones are plugged into the camcorder (in some cases a plug adapter may be necessary). There are numerous types of external microphones available:

General-Purpose Microphones are mikes ideal for placing on mike stands in front of speakers or singers or as hand held devices.

Lavaliere Microphones are small ‘clip-on’ type mikes which can be easily attached to the clothing of a speaker or singer. The movement of the speaker is restricted by a wire.

Wireless Microphones provide greater freedom of movement. These mikes are excellent for situations where a wire attached to the speaker would be restrictive. Wireless microphones use radio frequencies to transmit and receive sound. VHF (Very High Frequency) microphones are the least expensive but are prone to interference such as picking up radio frequencies. UHF (Ultrahigh Frequency) microphones are more expensive, but are much less susceptible to picking up radio frequencies.

Omnidirectional Mikes (Surround Sound) have a 360-degree pickup radius. They capture sounds from all directions equally, and all sounds are given equal importance. They are the most dynamic of the microphones.

TIP: Headphones are a necessity for good audio production. The camera operator, as well as an audio operator, can hear the audio quality that is actually recorded on tape. Inexpensive “Walkman” style headphones will work although “cup” headsets are more effective at shutting out the sound around the camera operator and make it easier to concentrate on the audio.

Lighting

Television is a two-dimensional medium. The image projected on a TV screen has height and width, but not depth. Lighting techniques; therefore, are often used to create the illusion of three dimensions by combining placement with intensity of light sources.

Base lighting is flat or frontal lighting that gives overall brightness, but doesn't help to create depth. A certain amount of base light is necessary.

Key lighting is the main light on the talent (usually a spotlight). Lighting from a key is hard and highly directional. Used alone, it creates deep shadows on the opposite side of the talent's face.

Fill lighting helps fill the shadows created by key light. This helps create a three-dimensional look.

Back lighting creates a 'halo' around the talent's head and shoulders, helping the subject stand out from the background and increase three dimensionality.

Bounce lighting uses reflective 'flats' or light-colored ceilings and walls to reflect light on a subject. Bounce lighting can provide base light and is sometimes preferable to lighting the subject directly.

Diffusers soften the lighting effect to tone down hot lights and eliminate shadows. Photo umbrellas and specially manufactured diffuser paper are often used.

Gels are colored plastic materials that can be used to change light color. Gels are often used to create colored 'spills' on backgrounds to add visual interest by producing a multitude of effects.

Bounce boards are white or reflective surfaces (foil) that bounce overhead light into shadowy areas under the eyes, nose or chin of a subject. Bounce boards are very useful when shooting outside on sunny days.

TIP: Avoid combining natural and artificial light sources because differences in color temperatures will result in tones, usually with an overly red or bluish tint.

TIP: Many public buildings, schools and offices use fluorescent lighting that can either be daylight in color temperature (with a blue-white radiance) or incandescent (with a softer, yellowish radiance). Fluorescent lighting may flicker. If test footage indicates flickering light, turn off the fluorescents and light the scene with standard incandescents only or move to another location with a different type of lighting.

Post-Production

Choosing the best of Scenes and Takes

Once back in the studio, the footage must be reviewed so that the best of the takes can be identified. This process is called 'Shot Logging'. Each shot should be evaluated for performance, camera work and audio quality.

Editing

The Editor along with input from the Producer/Director will assemble the program adding narration, sound effects, background music, titles and graphics as needed.

Tips On Evaluating A Video Shot

Is this shot good enough?

Video

- Does the background of the shot distract from the main subject?
- (i.e. too busy, too dark, too light, not appropriate to subject)
- Are all lettering and graphics clear and appropriate for the shot?
- Is the background appropriate for the talent's skin tone? Does the talent fade into the background?
- Is the talent wearing an appropriate color for the background and lighting? (i.e. too bright, too dark, busy prints or plaids, hats showing shadows, etc.)
- Are all objects in the shot well lit with no shadows?
- Are the main subjects of the shot in focus?
- Is the composition of the shot pleasing and focused on the main subjects (or talent)? (i.e. appropriate headroom, talent or objects not 'cut off', feet not showing if sitting, off center, edge of background showing, etc.)
- Is the shot steady? (i.e. zooms, pans, tilts, trucks are smooth)

Audio

- Is the sound clear?
- Are the microphones placed properly for the space?
- Are all sounds consistent? (i.e. All voices, music, sound effects, etc. are of equal or enhancing volume)
- Are there distracting background noises or microphone feedback?

If the answer to any of these question is NO, you may not want to use the shot. Even a single shot with a distraction can ruin your entire production.