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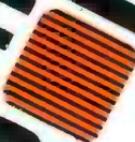
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**glossary
of video
terms**
JVC
PR  **DUCTS**

Teleproduction shortcuts by Bob Westmoreland. 1974
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INTRODUCTION

US JVC Corp. is proud to provide this glossary of video terms for your convenience. Every attempt has been made to make this glossary as complete as possible. Terms have been drawn from theatrical, lighting, film, electronics, technical video and other sources.

Because Video is the exciting, changing field that it is, no glossary can hope to be totally complete for more than a few months. New words are constantly being coined. Combinations of video and non-video words often occur to describe special situations or to identify new products. So the only way to keep up with it all is to pay careful attention to the many trade publications and read manufacturers' specification sheets as they appear.

Attending meetings of professional organizations such as the SMPTE (Society of Motion Picture and Television Engineers), N.A.V.A. (National Audio-Visual Association) or the I.T.A. (International Tape Association) to name just a few, is also an excellent way to stay abreast of new developments and new terms.

We hope you will find this glossary helpful in your everyday use of the video medium in whatever way you are using it. It's just another way that JVC works with you!

US JVC CORP.

A

AC—Alternating current; also called line voltage; common in most of the world. Used by electronic circuitry as a point of reference: the voltage of an alternating current rises to its maximum strength and then falls (through zero) to a negative strength that is equal in amplitude to the maximum—this alternation takes place sixty times per second.

ACCESS TIME—Time during tape playback between the moment information is called for and the moment it is delivered.

AC TO DC CONVERTER—An electronic unit, which rectifies the flow of an alternating current to a direct current.

AD-LIB—From the Latin 'ad libitum' meaning 'at pleasure', or 'without restriction'. In broadcast terminology, without script, extemporizing.

AGC—Set automatic gain control.

AIR CHECK—Off-the-air tape copy of commercial or program for verification or competitive use.

ALC—Automatic level control or automatic light control.

AMPERAGE RATING—The number of amps needed by electronic unit to function.

AMPERE—A unit of measurement of the electrical current used by a particular circuit; is equal to watts divided by volts.

AMPHENOL CONNECTOR—A brand of microphone cable connector.

AMPLIFIER—An electronic circuit that strengthens electronic signals sent through it within a certain amplitude/frequency range.

AMPLITUDE—The strength of an electronic signal as measured by the height of its waveform as displayed on an oscilloscope.

ANALOG—Direct (usually physical) transfer of measurement of readout signal: see digital.

ANCHORMAN—News program MC.

ANGLE OF VIEW—That portion of a scene visible through a particular lens; usually expressed as the horizontal width of a scene as viewed by a lens; determined by focal length of the lens.

APERTURE—The opening at the camera-end of the lens through which the light image collected by the lens is allowed to pass to hit the vidicon target area. The size of the aperture determines the amount of light that will get to the vidicon.

APERTURE GRILLE—A metal screen located just behind the inside of a TV display tube's screen surface; used to limit the points at which the electrons hit the phosphor coating of the screen; necessary for color TV to ensure the reproduction of a true color picture.

ASPECT RATIO—The proportions of the TV picture area; the aspect ratio of television is four units of width to every three units of height; this is expressed as a 3 x 4 or 3:4 aspect ratio.

ASSEMBLY EDITING—A method of electronic editing; various taped segments are retaped in a determined sequence to produce a coherent whole.

ASSOCIATE PRODUCER—General assistant to the producer.

ATTENUATE—To turn down or reduce the level of a signal.

AUDIO CUE—The identification of an event by the use of sound; a word, noise, or other sound which alerts those producing either an audio or video tape that something is about to happen. In video productions, certain words in the script are used as "cues" to denote shifts in action, camera position, microphones, or other technical events; in electronic editing, audio cues are often used to signal edit points.

AUDIO DUB—To re-record the audio portion of a video tape without disturbing the video portion of the signal; also, to make a copy of an audio tape.

AUDIO HEAD—The recording and/or playback unit on an audio or video tape recorder; it receives the audio signal, induces that signal onto the magnetic tape moving past it, and/or induces the signal from the tape for reproduction.

AUDIO-IN—Input jack which delivers an audio signal to a particular piece of equipment; an input receptacle which receives an audio signal.

AUDIO MIXER—An electronic circuit capable of accepting a number of audio signals from various sources (microphones, tape decks, turntables) and combining them at relative signal levels to form one composite signal; a unit which "mixes" together various sounds into one total sound and enables the operator to control the level of each sound and the overall level of the total sound. Used when two or more sound sources are combined to be recorded on a single audio track.

AUDIO-OUT—Output jack which carries an audio signal from a particular piece of equipment; an output receptacle which delivers an audio signal.

AUDIO TRACK—That portion of the video tape on which audio information is recorded.

AUTOMATIC GAIN CONTROL—AGC: an electronic circuit that adjusts the incoming signal to a predetermined level; an automatic volume control usually denotes an audio function while ALC (automatic level control) denotes the parallel video function.

AUTOMATIC LEVEL CONTROL—ALC; see also automatic light control. When used to describe an audio signal control, means the same as AGC.

AUTOMATIC LIGHT CONTROL—ALC; vidicon camera control which automatically adjusts the target voltage to compensate for variations in light levels.

A/V—Industrial term for audio/visual; also audio/video.

AVAILABLE LIGHT—Source of lighting (both natural and artificial) present in the scene to be taped.

B

B&W—Black-and-white; monochrome.

BABY—750 watt spotlight.

BABY LEGS—Low camera tripod.

BACKGROUND—Setting behind performers.

BACKING—The plastic ribbon, usually mylar, of both audio and video tape on which the oxide is coated.

BACK LIGHT—Light placed behind objects in a scene and pointing toward the camera to provide a rim of light, which outlines the object and creates a sense of depth by setting off that object from the rest of the scene.

BACK PORCH—5 microsecond portion of composite video signal lying between the trailing edge of horizontal sync pulse and the trailing edge of corresponding blanking pulse.

BACKSPACING—Reverse cueing technique.

BACKTIMING—Reverse cueing technique for editing backspace, used in electronic editing.

BALOPTICON—(Balop). Any of various types of opaque projectors or the slides and art work prepared for them. (The image is picked up by the film chain.)

BANDWIDTH—Number of frequencies contained in a designated channel.

BARN DOORS—Metal flaps which attach to the sides of a lamp housing and which control the light being cast onto an area.

BARREL DISTORTION—Distortion of a scene by a wide angle lens; everything looks rounded and out of proportion around the edges of the scene when objects are very close to the lens.

BEAM—A semi-coherent flow of electrons.

BEAM ADJUSTMENT—A control on vidicon cameras which regulates the amount of current flowing in the beam.

BEAM SPLITTING SYSTEM—Method of dividing up the color components of the image so that it can be cast on more than one vidicon target area. Beam splitting systems are used in two, three, and four-tube color cameras.

BI-CONCAVE—A lens configuration in which the lens element has an inward curve on both sides.

BI-CONVEX—A lens configuration in which the lens element has an outward curve on both sides. A magnifying glass is the most common example of a bi-convex lens.

BICYCLING—Exchange of video tape programs between non-connected stations.

BI-DIRECTIONAL—A directional microphone (as opposed to omni-directional) which accepts sound waves from two different directions, while attenuating sound waves from any other direction. Also as in bi-directional editing search.

BINDER—Chemical adhesive used to bind the iron oxide particles to the video tape backing material.

BLACK—Going to black or fade to black figuratively means bring down the curtain for a scene or an act. Literally, the screen is dark for an instant.

BLACK CLIPPING—A video control circuit found in cameras and in VTRs—which regulates and contains the black level of the video signal so that it does not disturb or appear in the sync portion of the signal.

BLACK LEVEL—Minimal television voltage signal establishing blackness of transmitted image. The bottom level of the picture signal, below which are the sync, blanking, and other control signals that do not appear as picture information.

BLANKING—Suppression; the process—and the period of time that process takes—during the scanning of the raster area when the beam is shut off. Line blanking takes place when the beam is returning from the end of one line to begin another; similarly, the process and the period of time in which the beam finishes scanning one field and retraces its path to the top of the raster area to begin scanning the next field, called field blanking.

BLANKING SIGNAL—The pulses added to the video signal to indicate that the signal from the beam to the target area should be cut off, since the beam is in fly-back.

BLOCK—To work out camera & cost positions in advance of production as in to block out.

BLOCK OUT—To draw a sketch, write down, or run through the action that a scene or series of scenes will contain.

BLOOM—Undesirable TV picture caused by excessive light saturation.

BODY BRACE—A metal frame worn over the upper torso to which a camera is attached and which supports that camera.

BOOB TUBE—Negative reference to television receiver.

BOOM—Can be a mike boom, light boom, or camera boom; a mike or light boom is a long piece of metal piping at the end of which a light or mike is attached to allow either mike or light to be positioned over the heads of subjects in a scene, while remaining outside the camera angle of view; a camera boom is a complex piece of heavy-duty equipment which allows the camera and operator to be raised to various heights.

BOOST—To turn up; to increase in volume; to make a signal stronger.

BOUNCE—Sudden variations in the brightness caused by the video equipment.

BRIGHTNESS RATIO—An indication, expressed as a ratio, of the difference between the whitest and the blackest object in a scene; the range from brightest white to darkest black as it occurs in the scene being recorded. Too wide a brightness ratio can lead to an unacceptable contrast ratio when the scene is displayed on a TV screen.

BRIGHTNESS VALUE—Luminance; the relative brightness of a particular object in a scene; the point on the gray scale at which the object is between absolute black and absolute white, either of which can be used as a point of reference to determine the brightness value of the object; essentially a relative determination made by the observer.

BROADBAND—Ability of a circuit to operate over a relatively wide range of frequencies. Cable TV is often referred to as broadband communication.

BURN, BURN IN—Overbright images are retained on the surface of television camera tube (removed by photographing a brightly lit white card).

BURST FLAG—A pulse produced by a color sync generator; when present, it causes the signaling color camera to produce a burst signal.

BURST SIGNAL—Color burst; a set of high-frequency (3.5 MHz) pulses at the beginning of each line which determines the phase of the color signal.

BUS—One complete channel of an audio or video mixing system, including inputs, gain controls, and an output; two or more buses are required for video signal switching.

BUSINESS—Incidental stage action, such as walking, picking up a book or reading a newspaper.

BUSY—A scene or picture with too many props, details, or tonalities which act to detract from the main object.

C

CABLE—A grouping of wires in a protective sheath used for the transmission of electrical power and/or signals; also, CATV.

CABLE RUN—Conduit used to run cables through the studio or building.

CALL LETTERS—FCC assigned station designations.

CALL SHEET—Production timetable for talent (actors).

CAMEO—The effect of a person or object suspended in space. This is achieved by using a black background and spotlighting the subject.

CAMERA—The eye of the video system; capable of absorbing the light values of a scene and converting them to a corresponding series of electrical impulses, through the use of a cathode ray pickup tube such as the vidicon; a light-sensitive cathode ray tube (and its associated electronic circuitry and lens optics) which translates the light values of any scene it views into a set of voltage variations which can be used to re-create those light values on another cathode ray tube such as that used for TV display.

CAMERA CHAIN—The camera and its associated electronics; used to describe the camera, camera control unit, and power supply of large studio camera systems.

CAMERAMAN—The operator of a manually controlled television camera. Also camera person, camera operator.

CAMERA REHEARSAL—To block out camera movements.

CANNON CONNECTOR—A particular brand of audio jack which features three leads—two for the signal, and one for the overall system grounding; a very secure type of connecting jack often found on high quality microphones, video monitors, and VTRs.

CANS—Earphones.

CAPACITOR—A component used in audio and video circuits to store and release voltages within the circuit.

CAPPING UP—Covering the lens with its cap to protect the camera's vidicon from burns.

CAPSTAN—A rotating shaft on the VTR which is turned by a motor and which, in turn, governs the speed of the tape as it proceeds from the supply to the take-up reel.

CAPSTAN SERVO EDITING—Head over-ride editing; a method of electronic editing in which a new video signal replaces an already existing signal without disrupting the picture (except for a switch from signal 1 to signal 2 at the point of addition). The motor speed of the capstan—which controls the speed of the video tape—on VTR B is controlled by the vertical sync pulses on the video tape on VTR A during the "editing" of the signal on Tape A onto the tape on VTR B, so that no disruption of the flow of signal information occurs during the switch of signals.

CARDIOID—One of many possible pickup patterns of a microphone. As the cardioid or heart-shaped pattern suggests, sound waves coming to the microphone's rear and sides are rejected, those directly in front of it are received.

CARRIER FREQUENCY—The particular wavelength of a certain frequency on which a signal is impressed for transmission in a coherent fashion to a receiver, where it is stripped of its carrier frequency, amplified, and reproduced; can apply to either audio or video.

CATHODE RAY TUBE—CRT—a vacuum tube with a cathode and heater element at one end capable of producing electron beams. The beams flow down the length of the tube where they either hit a phosphor coating on the face of the tube and make it glow, or hit an oxide coating and produce a voltage—depending on the purpose of the cathode ray tube. Both a vidicon and a TV picture tube are cathode ray tubes.

CATV—Community antenna television; a system whereby TV signals are received from off-the-air broadcasts or are otherwise generated and are then sent along a coaxial cable to TV receivers; originally developed in the 1940's as a method of providing TV reception in rural, mountainous areas; presently being developed as a commercial property. Using present technology, more than eighty channels can be sent by cable to any TV set.

CCTV—Closed circuit television; any form of television that is locally originated and displayed; non-network, non-cable TV.

CERAMIC MIKE—A piezoelectric microphone.

CHANNEL—The space on the frequency waveband assigned to a particular television broadcast; width varies from country to country; in the U.S. spectrum space is about 6 MHz wide for each channel.

CHARACTER GENERATOR—A device which electronically displays letters or numerals on a TV screen.

CHEAT—To show more of one side of an actor or object into camera.

CHERRY PICKER—Motorized high angle camera crane position with operator bucket.

CHIP CHART—Standard B/W gray scale test chart for TV camera alignment.

CHROMA KEYING—The electronic introduction of a color background into a scene: unlike b&w keying, color is present and color values can be adjusted by the operator of the keying unit.

CHROMATICITY—A subjective evaluation of the hue and saturation of an object.

CHROMINANCE—Chroma: the hue and saturation of an object as differentiated from the brightness value (luminance) of that object.

CHROMINANCE SIGNAL—That portion of the total video signal which contains the color information. Without the chrominance signal, the received TV picture would be in b&w.

CHROMINANCE TUBE—See color dissector tube.

CLAMPER—An electronic circuit which sets the video level of a picture signal before the scanning of each line begins, to ensure that no spurious electronic noise is introduced into the picture signal from the electronics of the video equipment.

CLAMPING—The action of the electronic clamper circuit.

CLEAN EDIT—An electronic edit of a video picture which has no noise, distortion, or other disruption when the signal changes from

picture 1 to picture 2. In a clean edit the picture is instantly replaced by a subsequent picture.

CLEARANCE—Permission to use copyrighted material.

CLIP—To cut-off sharply.

CLIPPING—A circuit which removes the positive and negative overmodulations of a composite video signal so that they do not interfere with the picture or sync information.

CLOSED CIRCUIT—In television, a distribution system using wires or microwaves to connect receiving sets to transmission equipment. The classroom unit of camera and monitor and sometimes VTR is considered a closed circuit system. See also CCTV.

CLOSE-UP—A relative determination of a camera angle of view; usually, a shot which shows the subject of a picture in great detail.

C-MOUNT—A mounting plate for vidicon video cameras and 16mm movie cameras which accepts a certain type of lens. Both the lens and mounting plate have matching nut-and-bolt threads, the mounting plate hole is of a standard diameter and the lens has a threaded collar on it that can be screwed into the hole. A type of lens standard for personal video cameras such as a portable camera.

COAX—See coaxial cable.

COAXIAL CABLE—A one-ground, one-conductor cable which can carry a wide range of frequencies as far as 1,000 feet with little or no signal loss.

COAXIAL CONNECTOR—A specially designed cable connector used in cable TV and other 75-ohm cable applications.

COLD—Without introduction, e.g., beginning a program with a statement.

COLOR BACKGROUND GENERATOR—An electronic circuit used in chroma keying to produce a solid color background of any desired hue and saturation.

COLOR BARS—SMPTE standard test bars, electronically generated bar-shaped video tape leader color pattern to match playback to original recording levels and phasing. Usually occupied by a 1000 Hz audio reference tone.

COLOR BURST—See burst signal.

COLOR CAMERA—A video camera capable of changing both the brightness values (luminance) and the color values (hue and saturation, expressed as chrominance) of a scene into a series of electronic pulses.

COLOR DISSECTOR TUBE—Color tube; chrominance tube. A cathode ray tube designed to separate a scene's hue and saturation values into their R-B-G components for electronic encoding as part of the color video signal.

COLORIZER—Electronic circuitry used to generate a chrominance signal in relation to the gray values of a b&w video signal. Each graduation of gray from black-to-white is assigned a color value. The result is an artificially colored picture, which does not truly represent the scene.

COLOR KILLER CIRCUIT—An electronic circuit used in a VTR to suppress the 3.58 MHz color carrier frequency when a b & w tape is being shown; the same circuit in a b & w VTR used to suppress the color carrier frequency when a color tape is being played back in b & w. Without a color killer, the color signal would appear in the displayed b & w picture as random noise.

COLOR PHASE—The proper timing relationship within a color signal. Color is considered to be in-phase when the hue is reproduced correctly on the screen.

COLOR PICTURE TUBE—A cathode ray tube, the screen-end of which is capable of glowing, with the three primary television colors—red, blue and green. Its cathodes produce three electronic beams (each corresponding to one of the three colors) and its raster area is coated with three different types of phosphor (each one again corresponding to one of the three colors).

COLORPLEXER—Encoder; electronic circuitry which processes three separate color signals—red, blue and green—coming from the pickup tubes into one composite encoded color video signal.

COLOR SUBCARRIER—The carrier wave on which the color signal information is impressed; contains the burst signal and alternating phase color information. In the U.S. the color subcarrier is 3.5794 MHz, usually abbreviated to 3.58 MHz.

COLOR SYNC—A control signal necessary for the operation of color cameras, SEGs, and monitors; consists of a 3.58 MHz burst (which sets the color phase and placement before each line is scanned) and a 3.58 MHz color subcarrier.

COMPATIBLE COLOR—A TV broadcast system which produces a color signal that can be received by either a b & w or color set. The luminance values (the basis of b & w reception) and the chrominance values (the basis of color reception) are broadcast as different portions of the total signal so that the luminance values are not dependent on the chrominance values for reproduction.

COMPONENT—Any portion of a total electronic system; a component can be the transistor on a circuit board or the circuit board in a TV camera or the TV camera in a studio system.

COMPOSITE MASTER—An original program produced by editing various portions of other recordings onto a new reel of tape; in electronic editing the resulting tape is one generation away from the master materials from which it was recorded.

COMPOSITE SYNC—The total sync system, containing both horizontal and vertical scan controls.

COMPOSITE VIDEO SIGNAL—Video signal containing both picture and sync information.

COMPRESSION—An audio term similar to video clipping; the automatic adjustment of volume variations to produce a nearly consistent sound level. Elimination of audio overmodulations produces a sound lacking in dynamics—it is never soft or loud but always at the same level.

CONCAVE—A lens configuration in which the lens element has an inward curve.

CONDENSER MIKE—Describes the type of element used to convert sound waves to voltage variations; in this case, two condenser plates.

CONDUCTOR—A strand of wire(s) capable of carrying an electronic signal along its length; a length of cable which conducts a signal from one point to another.

CONTRAST RANGE—The range of gray between the darkest and the lightest (brightest) value in a scene; expressed as a ratio of light to dark such as 20:1, and used to evaluate the picture on a TV screen. See also brightness ratio.

CONTROL TRACK—The lower portion along the length of a video tape on which sync control information is placed and used to control the recording or playing back of the video signal on a VTR.

CONTROL TRACK HEAD—An audio head which records the control track information onto the tape during record and induces it off during playback.

CONVERGING MENISCUS—A lens configuration in which the lens element has an outward curve on one side and an inward curve on the other.

CONVEX—A lens configuration in which the lens element has an outward curve.

COOKIE—A cut-out screen placed before light source to cast random wall shadows.

CORNER INSERT—A second video picture signal inserted into an area of the first video picture signal. Corner inserts are achieved by halting the horizontal and vertical scanning of the first picture in a

predetermined area and inserting the second picture scanning portions into that area.

CPS—The current term is Hertz (Hz); cycles per second; the number of times per second an electronic event is repeated.

CRASH EDIT—A brute force electronic assemble edit which may leave a slight glitch or distortion at the edit point on playback. See also glitch.

CREEPIE-PEEPIE—Hand-held TV camera.

CRIMPING—A mechanical method of attaching a jack to the end of a cable. The sleeve of the jack is squeezed around the cable so that it will stay on; most often used in coaxial cable installations.

CRIMPING TOOL—A pliers-like tool used to crimp video or audio cables to their respective connectors without soldering them.

CROP—The camera framing of a picture which excludes part of the subject.

CROSSFADE—To fade out one video signal and fade in another as a simultaneous movement; see also "dissolve." Can be written as "X" on taping scripts.

CROSS TALK—A spillover of sound from a line to an adjacent line; a spillover of sound on a reel of recorded tape, from one layer to an adjacent layer.

CUEING—Pre-setting a record, transcription, or a tape on the first playback machine, for immediate starting.

CUT—To instantly replace one picture with a second picture.

CUT AWAY—Videotape shot of interviewer which may be interspersed during editing process to avoid jump-cut editing of interviewer.

CUTOFF, TV cutoff—Section of transmitted image which is hidden from home viewers by the receivers mask.

CUTTING ON THE ACTION—A production or editing technique in which two events are set in contrast to each other; as event A is taking place on the screen, the camera switches to event B before event A has ended; often used to develop plot, create tension, or produce contrast.

CUTTING ON THE REACTION—A production or editing technique in which one event is followed by a scene which displays the results of that event; after event A has taken place, the camera cuts to event B to show the impact of event A on the plot or characters.

CUTTING TO TIGHTEN—An editing procedure used to shorten a series of shots. Used to eliminate excess footage and to produce a coherent whole.

CYC-CYCLORAMA—Large "J" profiled background scenery usually white, eliminating any visual frame of reference, a limbo environment.

D

dBm—dB rating which indicates the number of decibels a signal is above or below one milliwatt.

DC—Direct current; electrical current which, unlike ac, maintains a steady flow, does not reverse directions, and, therefore, cannot be measured in cycles per second (Hz).

DC TO AC INVERTER—An electronic unit which converts direct current to alternating current; used with an ac to dc converter to change one ac standard to another; for instance, 220 volt 50 Hz is changed to 12 volt dc is then changed to 120 volt 60 Hz through the inverter.

DEAD—Highly sound-absorbent, referring to studios.

DECIBEL—dB; a subjective evaluation of the volume of any particular sound in relation to other sounds; an evaluation of the strength of a signal in relation to a predetermined reference level.

DEFEAT—Turn off.

DEFINITION—The sharpness of a picture subjectively evaluated in terms of its resolution.

DEFLECTION CIRCUIT—A complete set of deflection coils consisting of one coil to control vertical scanning and another to control horizontal scanning; also, electronics used to power a deflection system.

DEFLECTION COIL—An electromagnetic coil wound around the cathode end of the cathode ray tube to produce a magnetic field which controls the movement of the electron beam.

DEGAUSS—To demagnetize. (As in degaussing a CRT).

DEMODULATED—Description of a signal stripped of the carrier frequency onto which it was modulated; a signal is demodulated after it has been broadcast and prior to its display.

DEPTH OF FIELD—The distance between the first object in focus and the last object in focus within a scene as viewed by a particular lens; can vary with the quality and focal length (mm) of the lens or with its f-stop setting.

DEPTH OF FOCUS—Distance between the lens and the vidicon in which sharp focus is maintained. The allowable latitude of lens image plane to vidicon target area which ensures that a given picture remains in focus. Depth of focus is adjusted by moving the vidicon closer to or farther away from the end of the lens (setting of backfocus when installing a new tube).

DEPTH PERCEPTION—A subjective evaluation of the distance between objects viewed with regard to their size and the planes which they describe.

DEW CONTROL—A warning system that indicates the presence of too much moisture for the safe operation of a video recorder.

DIALOGUE—In drama, the conversation between characters.

DIAPHRAGM—The element in a microphone which is vibrated by sound waves entering the mike. The vibrations of the diaphragm are converted into voltage variations to produce the audio signal. See also iris.

DICHROIC DAYLIGHT CONVERSION FILTER—A lens filter which balances the color values of objects in direct sunlight so that they will match the values of scenes taped in artificial light.

DICHROIC MIRRORS—Special mirrors which reflect certain wavelengths of the light spectrum, while allowing others to pass through their semitransparent surfaces; used in color TV cameras to divide light into the three primary colors for pickup tubes.

DIELECTRIC—Describes an insulator placed between conductors to prevent them from touching and thus shorting out the signal being carried.

DIGITAL—Translation of information providing easy signal regeneration with minimal noise, drift or distortion—see Analog.

DIN—Deutsche Industrie-Norm; German standard for electronic connections. DIN plugs can be three, four, five, or six-pin plugs, depending on their use, although they all have the same outer diameters and appearance.

DIORAMA—Miniature set used for landscapes, towns, etc. Used to create the illusion of a large set.

DIRECTOR—The person who rehearses and puts a show on the air. In most stations except the largest, the functions of the producer and the director are usually combined. He is the *one person* assigned the responsibility and given the authority for the entire production.

DISSOLVE—A slow crossfade; one picture gradually fades out, the next picture gradually fades in; can be written using the symbol "X."

DIVERGING MENISCUS—A thicker version of the converging meniscus lens configuration. One side curves inward and the other side curves outward but the edges of the curves do not meet at the rim as they do in a converging meniscus lens.

DOLLY—Wheels on the feet of a tripod; also the action of moving a camera toward or away from a scene.

DROP-OUT—Loss of a portion of the video picture signal caused by lack of iron oxide on that portion of the video tape, or by dirt or grease covering that portion of the tape.

DROP-OUT COMPENSATOR—Circuitry which senses signal loss produced by drop-out and substitutes missing information with signal from the preceding line—if one line drops out of a picture, it is filled in with the preceding line, resulting in no drop-out on the screen.

DUBBING—Duplicating an audio and/or video signal such as a composite master tape to make additional tape copies. Dubbing puts the resulting copy or dub one generation away from the tape from which it was recorded. Can also refer to erasing an audio track and recording a new track in its place. See audio dub.

DYNAMIC MIKE—A type of very sound-sensitive uni- or omnidirectional mike which can stand rough handling.

E

EBR—Electron beam recording video tape to film, transfer system, utilizing step printing of 3 B/W negatives.

ECU—Extreme close-up.

EDIT—To creatively alter original recorded filmed videotape material (and/or length of).

EDIT CODE—Time code—video tape retrieval code added to original recording, utilizing a time structure, hours, minutes, second and/or 1/30's (frames) with visual readouts—see also SMPTE time code.

EDITING DECK—A specially constructed video tape recorder which has, in addition to play and record circuitry, circuitry and controls to accomplish assembly and/or insert editing; an editing deck is used in conjunction with a second video tape recorder to record a master program tape (on the editing deck) from various tape recorded segments being played back on the second VTR.

EFFECTS BUTTONS—The push-button controls on a special effects generator which indicate the special effects (inserts, wipes,

keying, etc.) available on that SEG and which are engaged when that effect is desired.

EFFECTS CHANNEL—That bus in a three-bus switcher set aside to produce special effects.

EIA—Electronic Industries Association; the people who determine recommended audio and video standards in the U.S.

EIAJ—Electronics Industries Association of Japan.

EIAJ TYPE #1 RECOMMENDED COLOR STANDARD—

The compatible color standard established by the Electronic Industries Association of Japan; compatible with the EIAJ Type #1 Standard in that color tapes can be played back in b & w on EIAJ Type #1 b & w VTRs, and b & w tapes can be played back in b & w on EIAJ Type #1 color VTRs.

EIAJ TYPE #1 STANDARD—That standard established by the Electronic Industries Association of Japan for half-inch helical scan video tape recorders.

EIA SYNC—Also called EIA RS-170 sync; the standard waveform for broadcast equipment in the United States as established by the EIA.

EIDOPHOR—Trade name of an oil-film type of video projection system.

EIGHT-PIN CONNECTOR—A type of jack commonly used for the VTR-to-monitor connection; provides a full set of audio and video connections—one ground and one lead each for audio-in, audio-out, video-in and video-out.

ELECTRET CONDENSER MIKE—A very sensitive microphone requiring a dc power supply (usually a battery built into the mike).

ELECTRON GUN—The assembly at the end of the cathode ray tube which produces the electron beam for scanning; consists of cathode, heater, and grids.

ELECTRONIC EDITING—Repositioning video signal segments on a reel of video tape without physically cutting the tape; a re-recording of the video signal segments in different order. Electronic editing implies that the edited version of the program will be one generation removed from the recordings from which it was assembled.

ELECTRONIC VIEWFINDER—Viewfinder; viewfinder monitor. A small TV screen attached to the video camera which allows the operator to view a given scene exactly as it is being viewed by the camera.

ELECTROSTATIC FOCUS—Method of focusing the electron beam in a cathode ray tube without using electromagnetic coils around the diameter of the tube; its advantage over coils is that it improves the quality of the picture while requiring less power to operate.

E.J.—Electronic journalism, the use of electronic means to produce news and the resulting programs thereof.

ENCODER—Device altering character of an electronic signal or superimposing other information on it. Also see colorplexer.

E.N.G.—Electronic News Gathering; the use of video cameras, record and other ancillary electronic gear to collect news stories for TV airing.

EQUALIZATION—eq; the normalization of an electronic signal, either audio or video; adding eq in audio means reshaping the frequency response to emphasize certain frequency ranges and eliminate others.

EQUALIZER—An audio or video circuit which provides equalization either automatically (usually in the case of video) or manually (often available in higher-priced audio mixers).

EQUALIZING AMP—A video circuit which is preset to provide a certain equalization to the video signal.

ERASE HEAD—Either an audio or video head which erases the signal on a video tape prior to the recording of a new signal on that tape; simply, an electromagnet which disturbs the signal previously recorded on the tape.

ESTABLISHING SHOT—A long shot used to establish the environment in which the action to follow takes place; for example, a long shot of a burning house preceding a medium shot of firemen with hoses.

E-TO-E—Electronics to electronics; monitoring the output signal of a VTR while it is recording is an E-to-E process; the signal monitored has not yet been recorded on tape; rather, a sample of the signal is being fed from the VTR directly to the monitor; with E-to-E it isn't possible to be certain that the signal is being recorded on the tape.

ETV—Educational television.

EXECUTIVE PRODUCER—Generally the producer with top responsibility and/or financial responsibility for the production.

EXPOSITION—Explanation of details essential to the progression of a program, usually accomplished through dialogue or motion.

EXTENDERS—A lens accessory which lengthens the barrel and in so doing reduces the minimum focusing distance of the lens and increases the effective f-stop.

EXTERNAL KEYING—A keying effect accomplished when a particular camera is assigned to supply the key signal through an SEG; as opposed to internal keying, in which any of the cameras can supply the key signal.

EXTRA—A player who appears in a program but has no lines, except for mob scenes, etc., where many voices in unison may be called for.

EYE-LIGHT—A small pencil-beam spotlight which, when directed at subject's eyes, produces a glitter which appears natural on the screen.

F

FADE—Fade-in being an image slowly, coming out of black to fill image.

FADE—To vary the strength of a signal, as in fading in or fading out; can be used with reference to both audio and video.

FADER—A sliding pot control with which an audio or video signal is faded.

FCC—FEDERAL COMMUNICATIONS COMMISSION—the federal agency responsible for making policy and exercising control over all use of the air waves for broadcast purposes.

FIELD—The electronic signal corresponding to one passage over the raster area by the scanning spot; 262.5 lines (1/60 second) in the American TV system; half a frame. Two fields interlace to make one frame.

FIELD BLANKING—Field retrace period; that period of time during which the field scanning spot returns from the bottom to the top of the raster area; used to add control pulses to the video signal; occupies about 15-20 lines of the 525 line system.

FIELD FREQUENCY—The number of fields scanned per second; sixty fields are scanned per second in the American TV system, which is also used in certain other countries including Canada, Mexico, and Japan.

FIELD TIME BASE—The pattern of and points at which a field changes; 60 Hz is the field time base of the American TV system; the field time base must be kept as steady and regular as possible to ensure the best possible picture.

FILL—A segment at the end of a program that can be eliminated if necessary.

FILL-LIGHT—The illumination of shadowy areas in a scene to establish the proper brightness ratio or contrast ratio within the scene.

FILL SIGNAL—That signal or portion of a signal which is used in keying, wiping, or inserting to replace portions of the primary signal; any video signal which is used to replace another video signal in a special effects application.

FILM CHAIN—A special motion picture projector combined with a video camera to turn movies into video.

FILM LOOP—A length of film with the ends spliced together so that it can be projected continuously; frequently used for special effects, such as rain, snow, or smoke which may be added to studio pictures by superimposition.

FILM TRANSFER—High quality motion picture film made from an original tape; kinescope recording.

FILTER—A glass element whose ability to transmit light varies with its design; used to exclude certain wavelengths or types of light; sometimes needed for color and b & w recording.

FIRST GENERATION—The original recording of a tape segment. The first time the signal is recorded on tape, that tape is called first generation. Every subsequent recording of the already recorded segment will be a generation removed.

FLAG—("French" flag) Black cloth hung at front of a light to protect the camera against stray light entering lens.

FLAGGING—Picture distortion caused by improper operation of VTR or VCR playback/monitor timing coordination.

FLASHBACK—A device for recreating a scene from the past.

FLAT—A unit of scenery, essentially the same as that used in stage setting.

FLAT LIGHT—Lighting a scene or setting with over-all brightness without noticeable modeling or highlights.

FLIP FLOOD—A floodlight, a light projecting a broad beam of illumination.

FLOOR MANAGER—The production assistant in charge of all floor operations not involving engineering. He supervises the erection of sets, the placement of props, live sound effects, talent, cueing, and the like. He is the director's representative in the studio or on the floor.

FLOOR PLAN—A scale diagram indicating the position of stage settings in the studio.

FLUFF—An error.

FLUID HEAD TRIPOD—A tripod whose camera-mount consists of two metal plates. The upper, rotating plate rests on a bed of fluid and the movement provided is very smooth.

FLYBACK—Retrace; the movement of a scanning spot from the end of a line or a field to the beginning of the next line or field.

FLYING SPOT SCANNER—Film to video tape transfer system utilizing an electronic shutter.

FM—Frequency modulated; frequency modulated RF; descriptive of a signal which has been impressed on a radio carrier wave in such a manner that the carrier frequency changes in proportion to the original signal.

FOCAL LENGTH—Distance between the optical center of a lens and the image plane (which, in the case of the video camera, is the pickup tube's target area). The distance is measured in millimeters (mm) and determines the angle of view of the lens. (25 mm = about 1 inch).

FOCUS—The greatest possible resolution of an object, when the object seems to be sharp and well defined; the act of moving lens to make the image sharp and defined; to bring an electron beam or a light ray to its minimum size.

FOCUS COIL—An electromagnetic coil surrounding the cathode ray tube and producing a magnetic field which controls the flow of the electron beam from cathode to target area so that it strikes target area as the smallest possible spot; works on the same principle as the deflection coil.

FOCUS CONTROL—Focus ring; a calibrated lens control which focuses light rays going through that lens by moving the internal elements of the lens; the control which governs the focus coil in a video camera; the setting of the distance between vidicon and end of lens. See also depth of focus.

FOG FILTER—A lens filter which lends the effect of a fog to a scene.

FOLLOW FOCUS—The continual adjustment of the lens to keep an object in focus as either object, camera, or both are moving.

FOOT CANDLE—Amount of illumination received by a surface one foot from a lighted candle—metric equiv. is lux.

FOOT CANDLES—Ft-c; lumens per square foot; the measurement of the intensity of light on an area; the amount of light cast on a particular area, varying with distance of that area from light source.

FOOT LAMBERT—One lumen or one foot candle of light covering a one square foot surface.

FORMAT—As in recording format, $\frac{3}{4}$ inch U, $\frac{1}{2}$ inch EIAJ are two record formats commonly used.

FRAME—A complete TV picture composed of two fields; a total scanning of all 525 lines of the raster area; occurs every $\frac{1}{30}$ of a second. (625 lines, $\frac{1}{25}$ sec in Europe and many other countries).

FRAME FREQUENCY—The number of frames occurring in a given period of time; usually 30 fps (frames per second) or one-half the field frequency of 60 Hz.

FRAMESTORE—A device which records and stores video information which it can retrieve in the form of a still frame picture; information is stored on a videodisc or disc-cassette.

FREQUENCY—The number of times a signal vibrates each second; expressed as cycles per second (cps) or, more usually, as Hertz (Hz).

FREQUENCY MODULATION—See FM.

FREQUENCY MODULATOR—An electronic circuit which produces a carrier wave signal on which the audio or video signal is impressed.

FREQUENCY RANGE—Frequency response; the width of frequencies from the highest to the lowest frequency which a piece of equipment is capable of handling without distortion. Most circuits have limits to their frequency ranges beginning at a certain number of cycles per second and ending at a certain number of cycles per second; for instance, the frequency range of audible signals that the human being can hear is described as being between 20 and 20,000 Hz.

FRESNEL LENS—Fresnel spot; a specially constructed lens which produces a soft-edged concentration of light; used as a lens in a spotlight lamp housing.

FRICTION HEAD TRIPOD—A tripod whose camera-mount consists of two metal plates, the lower stationary, the upper rotating; generally does not provide smooth camera movement though more expensive models utilize ball bearings to offset this problem.

F-STOP—A calibrated control (f1, f2, f3.5, f4, etc.) which indicates the amount of light passing through a lens to the target area; a control which can be adjusted to vary the size of the lens iris. Higher number indicates smaller iris opening.

FX—Extraneous effects.

G

GAFFER—Chief set electrician.

GAIN—Amount of signal amplification; turning up the gain means increasing the strength of the signal, turning down the gain, decreasing the strength; used in both audio and video to denote the relative strength of the signal in question.

GAMMA—In video, an exponent. The exponent of the power law used to approximate the curve between the output magnitude and the input magnitude of the signal actually used.

GAP—The small space in an audio or video head across which the magnetic field is produced when recording and induced on playback; the audio and video heads are small, horseshoe-shaped electromagnets and the gap is the space which this tape must contact for good recording/playback.

GEL—GELATIN—Translucent celluloid-life light filter altering characteristics of the light source.

GENERAL LIGHTING—The overall lighting of a scene produced by available light and base lighting units.

GENERATING ELEMENTS—The component which enables the sound waves entering the head of a microphone to be used to produce an electronic signal composed of voltage variations corresponding to the sound wave; some of the most common are ribbon, condenser, crystal, and dynamic elements.

GENERATION—Each time a signal is recorded from a camera or other source (such as off-the-air broadcast) and then re-recorded from that original recording; first recording is said to be first generation, first re-recording is said to be second generation, and so on. The more generations, the more time-base error and the more noise on the video and audio tracks.

GENLOCK—Device synchronizing television signal sources. Circuitry which locks the sync generator that is used to control cameras and the SEG to the sync signal from a prerecorded tape on a VTR so that the signal from that tape can be mixed through the SEG with live camera signals.

GEOMETRIC DISTORTION—Any defect which causes the geometry or perspective of the reproduced image to differ from the original.

GLITCH—Random television picture noise appearing as an ascending horizontal bar.

GOBO—A decorative frame through which the camera may shoot for special scenic effects; a non-transparent black screen.

GOPHER—Production assistant who “goes for” coffee, etc.

GRAY SCALE—The number of steps from black to white that a camera can resolve; how faithfully the light values of a scene (changes of brightness from black to white) can be rendered by any piece of electronic equipment such as camera or monitor; may be used as equivalent to the contrast ratio; that set of gray tones—from black to white—on a test pattern—sometimes five steps, sometimes ten, depending on the pattern.

GRID—A cross hatch of metal pipes for hanging lights in a video studio.

H

HALO—The black area around a very intense source of light, as seen by the camera and monitor. When a match is struck and held in front of the camera, a halo is visible around the flame; a halo visible through the viewfinder of a vidicon camera may mean that the light source is bright enough to burn the target area.

HAND HELD—Without tripod or dolly.

HARD WIRED—Wires permanently soldered into place.

HEAD—Audio or video; a small electromagnet which pulses magnetic signals onto a video tape moving past it or induces those signals off a recorded tape; audio heads are usually stationary, video heads move in reverse of the tape's direction in most VTRs.

HEAD ALIGNMENT—The positioning of the audio or video heads so that they describe the correct path at the correct angle across the video tape; heads that are out of alignment won't record or play back properly.

HEAD CLOGGING—Occurs when the gap of an audio or video head gets filled with dirt, grease, or oxide so that it can no longer record or play back a signal; cured by cleaning the heads.

HEAD DRUM ASSEMBLY—That portion of the VTR in which the video heads and their related mechanical and electronic controls are located. In helical scan the head drum assembly is the large circular unit around which the tape wraps as it passes the video heads.

HEAD DRUM SERVO—One method of controlling the video tape during playback so that the video heads contact the tape with the proper timing (sync) to retrieve the information on the tape. The control track pulses are used to control the rotation of the video heads.

HEAD DRUM SERVO EDITING—An inferior variation of editing. Instead of the tape being slowed or speeded up to maintain sync, the video heads are slowed or speeded up by the use of the head drum servo controls.

HEAD END—Antenna/equipment origination point for cable television transmission.

HEADLIFE—Normal lifespan of a video head.

HEADSET—A device consisting of one or two telephone-type receivers connected to a headband for individual listening to audio sources, such as intercommunication circuits. Some headsets are equipped with a small microphone to permit two-way communication.

HEAD SHOT—A close-up view of a subject, encompassing the subject from top of head to top of shoulders.

HEADS OUT—A reel of tape wound so that the beginning of the program is at the beginning of the tape; a rewind tape; a tape that is played but *not* rewind onto its original reel is said to be tails out.

HELICAL SCAN VIDEO TAPE RECORDING—A type of video recording in which the video heads and the tape meet at such an angle that the resulting pattern on the tape is a long, diagonal series of tracks from the video heads, each diagonal stripe containing the full information for one field of video picture; named after the helical path the tape describes between supply and take-up reels.

HELICAL WIND—The screw-like configuration of the tape across the video heads, from the plane of the supply reel, through the plane on which the heads are rotating, to the plane of the take-up reel.

HERTZ—The international electronic term for cycles per second, most usually written Hz.

HIGH END—The highest frequency information of a video or audio signal; in audible audio signals, the high end is the treble portion of the signal.

HIGH END NOISE—Any spurious noise occurring in the high frequencies of a signal.

HIGHLIGHT—An area of great brightness on a TV display; a very bright portion of a picture.

HIGH RESOLUTION—Descriptive of a camera or monitor capable of displaying a great number of scanning lines (1,000—2,000) which produce a picture that is very detailed, defined, and sharp.

HITCH-HIKE—Two brief commercials, running concurrently, advertising 2 different products of the same sponsor; piggy-back spots.

HORIZONTAL BLANKING—Line blanking. See blanks.

HORIZONTAL FREQUENCY—See line frequency.

HORIZONTAL RESOLUTION—A subjective evaluation of the number of vertical lines (usually from a test pattern) that can be seen in a horizontal direction; the better the horizontal resolution the sharper and less blurry the picture. See also resolution.

HORIZONTAL SYNC—The sync pulses which control the horizontal line-by-line scanning of the target area by the electron beam. See also line frequency, line scanning.

HOT—Live wire; a conductor carrying a signal is said to be a hot conductor; the wire carrying the signal, as opposed to the ground wire.

HOUSING—An enclosure, waterproof, theftproof, etc. which in one or more ways protects a video camera.

HOWL—Positive feedback; in video, the wild, swirling effect which results when a camera is pointed into a monitor displaying the picture which that camera is producing; in audio, any high frequency feedback caused by a microphone being too near the speaker reproducing the sound being picked up by the mike.

HUE—A term used to describe the dominant wavelength of a color in a range that runs from red to yellow, to green, to blue, to violet, and back to red, all colors have a hue.

I

IATSE—International Alliance of Theatrical State Employees—Set workers (many cameramen and other operators belong to this union known also as IA).

IC—Integrated circuit; a very small electronic component, containing a photoetched, miniature circuit.

ICONOSCOPE—An early (1923) type of camera pickup tube, no longer used.

IEEE SCALE—A waveform monitor scale in keeping with the IEEE standards and the recommendations of the TV Broadcasters and Manufacturers for coordination of Video Levels.

IMAGE—The picture on the TV screen; whether color or b & w, the image is usually measured by its luminance values.

IMAGE BUFFER—Electronic circuitry which is capable of modifying a 625 line 50 Hz video signal to the 525 line 60 Hz standard (or the reverse).

IMAGE DISSECTOR TUBE—Early camera pickup tube, no longer used, invented by Philo Farnsworth in 1927.

IMAGE ENHANCER—TV engineering accessory to improve apparent video resolution.

IMAGE ORTHICON—A camera pickup tube developed prior to the vidicon; the first really reliable and sensitive camera pickup tube; larger and bulkier than a vidicon.

IMAGE PLANE—The point behind the lens at which the image collected by the lens is cast; in video, the image plane is at the surface of the vidicon target area.

IMAGE RETENTION—Lag; the vidicon pickup tube's tendency to retain an image on its target area after it has stopped scanning that image. Extreme image retention results in the image being burned into the target area.

IMAGE TRANSFORM—Proprietary computerized high quality video tape to film transfer system.

IMPEDANCE—The AC resistance of a component to the flow of a signal; expressed as high or low impedance, hi-Z or low-Z.

INGENUUE—A young woman lead in a drama or musical.

INLAY—Keyed insert; static matte insert. An insertion effect in which the fill signal is static and of a predetermined shape.

IN-LINE COLOR—A color TV tube system in which the three electron guns producing the primary colors of the color signal are next to each other in a straight line rather than in a triad, as has traditionally been the case in color TV manufacture.

INSERT—A general effects term meaning the introduction of a secondary signal into an already existing picture; accomplished by keying, wiping, or crossfeeding.

INSERT EDIT—The insertion of a segment into an already recorded series of segments on a video tape; the inserted segment replaces one which must be of the exact length. Insert edits demand that the segment be edited in (as in assembly editing) and then edited out at the end of the segment, since already recorded video information exists following the edited-in segment on the original tape.

INSERTION LOSS—The loss of signal strength that occurs when a piece of video or audio equipment is added to the path of the signal flow from origin to display; can be corrected by using an amplifier to build up the signal strength again.

INSERT STAGE—Small studio for minor tabletop or close up video taping or photography.

INSTANT REPLAY—Immediate playback of recorded material either full speed or slow motion usually of a live program.

INSTRUMENT—An individual quartz light.

INTERCOM LINE—Usually the audio connection between the television director and the members of the crew. In some closed-circuit applications talk-back audio lines have been installed to permit verbal interchange between students and teachers in remote classrooms and the TV center.

INTERCUTTING—A production technique in which a cut is made from a scene (long shot) to a detail of that scene (close-up) to clarify or emphasize a point.

INTERFACE—To connect two or more components to each other so that the signal from one is supplied to the other(s). Feeding a signal between units that run on different standards is the most frequent form of interfacing, as in connecting a half-inch helical span VTR to a two-inch quadruplex machine.

INTERFERENCE—Unwanted signals entering the signal path.

INTERLACE—A scanning method in which the lines of two fields are combined into a frame in such a way that all the lines of each field are visible as part of the frame' the positioning of 262.5 lines from one field with 262.5 lines from the next field to form a full 525-line frame.

INTERMITTANT SHUTTER—Rotating prismatic lens arrangement replacing normal camera shutter (for film chain application, a five bladed intermittant shutter is generally used).

INTERNAL KEYING—A method of keying in which the key signal can be sent through the SEG from any one of the cameras already in use. See also external keying.

IN THE CAN—Pre-recorded programs being stored for airing or closed circuit playback.

IN THE CLEAR—Without background accompaniment, such as narration without underscoring music or sound.

INVERTER—DC to AC current converter similar to a rectifier.

INVERTER—Circuitry to convert dc to ac; see DC to AC inverter.

IPS—Inches per second; the customary way of measuring tape speed on an audio or video tape recorder.

IRIS—Iris diaphragm; an adjustable set of metal leaves over the aperture of a lens, used to control the amount of light passing through the lens. Iris openings are measured in f-stops.

J

JACK—Plug in electronic connection or connector.

JACK BAY—Patch panel.

JACKET—The protective and insulating housing of a cable.

JEEP—To convert a TV receiver into a TV monitor or monitor/receiver by requiring the internal circuitry and adding input and output jacks for video and audio.

JINGLE—Music used to TV commercial, sometimes sung or read as poetry.

JITTER—A tendency toward lack of synchronization of the picture. It may refer to individual lines in the picture or to the entire field of view.

JOYSTICK—Band control stick for operation of electronic equipment such as editing controllers and video switchers—SEG's.

JUMP CUT—Bad or jagged edit of tape or film.

JUMPER—A short length of wire used to make a temporary electric hookup, of ac power, video or audio.

JUNCTION BOX—Portable terminal box for AC power, also portable terminal for cable interfacing.

K

K—Kelvin temperature—used for measurement of light source color temperature 0°K is -273°C.

KELVIN—Also expressed as Kelvins or K; the unit of measurement of the temperature of light. In color recording, light temperature affects the color values of the lights and the scene that they illuminate.

KEYING—Keyed insert; inlay insert. One video signal being controlled by the waveform of a second video signal when they are combined to form a composite picture. The signal from source 1 fills in the scanning lines of the total picture of source 2 at the points where the picture goes above a certain preset gray level.

KEYLIGHT—The spotlight or main light on a scene which emphasizes the important objects in that scene.

KEYSTONE—Distortion caused by incorrect projector to screen angle alignment. Also keystoneing.

KILL—To remove used props, set units, and the like. Also, to extinguish lights.

KILOHERTZ—A unit of frequency equal to 1,000 hertz.

KINESCOPE—An early and imperfect video storage and reproduction technique in which a film of a television program is made by placing a movie camera in front of a TV screen displaying that program.

L

LAG—"Ghost" image retained when past action occurs in the presence of insufficient illumination. Also camera lag.

LAP—Lap Dissolve—a cross-dissolve into new material while dissolving out of old material.

LAVALIER MIKE—A microphone worn around the neck and resting on the chest cavity. Lavaliers are small and unobtrusive.

LEAD—Principal actor, performer, also wired connection or jumper cable.

LEADER—Audio and/or video countdown introduction at head of tape for identification purposes. Also used as a cue. Leader is often used at both the head end and tail end of a tape or between sections of raw unedited material.

LED—Light emitting diode, a brightly lighted semi-conductor component.

LENS—A series of optical elements, contained within a barrel or tube, which collect and focus light.

LENS CLEANING BRUSH—A very fine brush specially made for cleaning a lens.

LENS HOOD—Tunnel shaped cover to keep ambient light off the face of the lens.

LENS MOUNT—The assembly on the front of the camera to which the lens is attached.

LENS PAPER—A paper specially made for cleaning lenses.

LENS SPEED—Measurement of the ability of a particular lens to collect light; the ability of that lens to work at different light levels; usually expressed by its lowest f-stop number.

LENS TURRET—A rotating disc on the front of a camera which permits several lenses to be mounted on the camera at one time to facilitate rapid interchanging.

LEVEL—Audio or video amplitude or intensity also as in-give me a level, a test of same.

LIGHTING RATIO—The brightness level of the fill-light compared to the brightness level of the key-light, or the shadowy areas compared to the brightly lit areas; measured as a ratio determined by the f-stop of the lens; a 1:2 ratio means that key is one f-stop brighter than fill; 1:3, a stop and a half; and 1:4, two stops.

LIGHT LEVEL—The intensity of light available measured in foot candles or lux. (10.75 lux=1 ft. candle).

LIMITER—A circuit which shapes a signal sent through it to conform to certain preset tolerance; used in both audio and video to regulate signal flow and prevent overamplification, distortion, and the introduction of spurious noise.

LIMITING—Controlling the strength of a signal to a predetermined level.

LINE COUNT—The number of scanning lines actually used to carry the video picture signal; always less than 525 lines in the U.S. TV system.

LINE DRIVE PULSE—The signal generated to control the horizontal blanking circuits.

LINE FREQUENCY—The number of lines scanned in one second; in the U.S. system it is 525 x 60, or a line frequency of 15.7 kHz.

LINE LEVEL IMPEDANCE—An impedance of 600 ohms, considered a low impedance signal.

LINE MATCHING TRANSFORMER—An audio device used to match the impedance of a microphone to the input impedance of a mixer, tape recorder, or amplifier; a device which changes the output impedance of a mike from low-Z to hi-Z or vice versa.

LINE OF SIGHT—High band transmission (TV or FM) to TV radio receivers between antenna and the horizon line.

LINE OUT—See video out.

LINE PERIOD—The length of time it takes for a line to be scanned and then retraced to the point where scanning of the next line will begin.

LINE SCANNING—The path over the target area of the electron beam, as it moves from the left edge across the area.

LINE TIME BASE—The control of the horizontal deflection of the scanning spot so that it starts to scan each new line at exactly the right moment.

LINE VOLTAGE—See AC.

LIP SYNC—Abbreviated form of "lip synchronization," recording of actors dialogue at the same time that the program is being filmed.

LIVE ACTION—Action taking place in studio or on remote, as opposed to film action.

LIVE TITLES—Titles on cards for studio pickup, as opposed to slide or film titles.

LOAD—To place a termination across a video or audio line.

LOG—A listing of various items comprising a broadcast, as required by the F.C.C.

LONG LENS—A high focal length lens with a long barrel; performs similar function to the telephoto lens with the advantage of that lens' shorter barrel.

LONG SHOT—A camera angle of view taken at a distance and including a great deal of the scene area.

LOWELL LIGHT—A small, lightweight, portable lighting unit made by the Lowell Company.

LOW LEVEL LIGHTING—A scene illuminated with under 50 ft-c of light; often results in a poor signal-to-noise ratio and/or poor contrast ratio in the recorded picture.

LOW LIGHT LAG—A blurring, image-retention effect which occurs when a vidicon tube is operating in insufficient light.

LOW PASS FILTER—A filter, often used on two-way cable systems, which inhibits the flow of high-frequency information along a cable while it allows low-frequency information to pass.

LS—Long shot, shows tiny actors against large or wide background scenes.

LUMEN—A measurement of light quantity, taken at the source of light against a predetermined constant. Lumens per square foot equals footcandles.

LUMINANCE—See brightness value.

LUMINANCE SIGNAL—The black-to-white brightness values of a scene which produce a b&w display picture.

LUX—The metric measurement of light quantity; taken at the surface which that light source is illuminating. One footcandle equals 10.76 lux.

M

MACHINE TO MACHINE EDIT—Transferring video and audio material from one recorder to player to another recorder, in which the edit is made by a simple assemble edit button and a glitch or distortion may appear at the edit point. See also crash edit.

MACRO LENS—A magnifying lens capable of focusing down to a few inches.

MAGICAM—Proprietary matting system for using small scale model sets and matting in actors electronically to save on set construction costs.

MAGNETIC TAPE DEVELOPER—A special chemical solution applied to the control track edge of video tape which makes control pulses visible to the eye and allows precise cutting of the tape between pulses; necessary for physical tape editing.

MAIN TITLE—Major explanation of the program theme—as opposed to subtitle.

MAKEGOOD—Free broadcast re-run of poorly transmitted or disjointed commercial that was mistakenly not aired at all.

MARK—Gaffing tape indication of studio floor to indicate camera or performer positions.

MASTER—Original completed videotape (or disc, audio tape).

MASTER MONITOR—High quality monitor equipped with such facilities as picture focus, internal and external sync, and horizontal and vertical scanning controls.

MASTER VOLUME CONTROL—An audio term, most often used with mixers and amplifiers to denote the final overall volume control of signal level.

MASTER VTR—When duplicating tapes, that deck which plays the original tape is called the master VTR; that which records the original signal on blank tape to produce the copy is called the slave VTR.

MATCH CUT—Editing in another camera's view of an identical moment in the recorded action.

MATCH DISSOLVE—Fading to/or dissolving to an identical camera position.

MATCHING TRANSFORMER—A circuit which changes the impedance of a TV signal, often from 75 ohms to 300 ohms, for audio, see line matching transformer.

MATTE—A film term sometimes used in video production work to denote a keyed effect, an insert of video signal information keyed from one source into a second video signal.

MC—Master of ceremonies.

MEDIUM—Means of communicating a message.

MEDIUM SHOT—Camera angle of view between close-up and long-shot; a view of the head and shoulders of a subject; as opposed to head only (close-up) or full body (long-shot).

MEMORY—Magnetic information storage which is retrievable.

METER—Unit consisting of a calibrated dial and swinging needle which give a visual indication of the operation of the particular circuitry it is connected to.

MICKEY MOUSE—Using obvious primary colors or standard gray scale shades to do titles or backgrounds for TV use. "Mickey Mousing It" or "Making it cartoon simple."

MICROSECOND—One millionth of a second.

MICROWAVE—A line-of-sight type, cable-free transmission system for relaying broadcast signals with a wavelength of less than one meter for between 8-16 km (5-10 miles) generally.

MINICAM—Describes lightweight often self-contained portable E.N.G. type cameras. Also Microcam.

MINI PLUG—A female receptacle which accepts a mini jack; similar to a phone plug in design but much smaller; a plug introduced by Japanese electronic firms for use on miniaturized pieces of equipment.

MISTRACKING—Improper tape path and tape-to-head contact, resulting in bursts of noise appearing in the picture during display.

MIX—Session in recording studio, generally refers to an audio mix.

MOBILE UNIT—A location vehicle used for collecting or transmitting TV signals.

MODE—Electronic setting activating specific circuits in a system i.e. record mode, playback mode.

MODULATION—The process of adding audio or video signals to a pre-determined carrier signal. See also demodulated.

MOIRE—Optical disturbance caused by interference of similar frequencies.

MONAURAL—Single sound source to both ears.

MONITOR—TV set without receiving circuitry used to directly display the composite video signal from a camera, video tape recorder, or special effects generator.

MONITOR/RECEIVER—A combination of monitor and TV receiver capable of accepting composite video signals directly from source or those video signals broadcast as RF; also capable of producing a composite video signal output from a broadcast input signal, allowing user to record "off-the-air."

MONOCHROME SIGNAL—A black-to-white video signal containing only luminance information and capable of being received either by a b & w or color TV receiver and displayed as a b & w picture.

MONTAGE—Visual blending of several scenes.

MOUNT—Refers to lens mounting on camera, as in "C" mount.

MULTI-BOX—Generally a four way electrical junction box used on location or in studio.

MULTIPLEX—Signal conductor transmitting several different picture sources.

MULTIPLEXER—An optical system allowing a number of film and slide projectors to feed video information into the same video camera.

N

NAB—National Association of Broadcasters, standard setting and fraternal organization of the broadcasting industry.

NABET—National Association of Broadcast Employees & Technicians, a broadcast technicians union.

NAEB—National Association of Educational Broadcasters.

NARRATOR—An on or off camera neutral performer commenting on the program's story or meaning.

NCTA—National Cable TV Association, the operators' membership association.

NEEDLE DROP—Single usage of a licensed or copyrighted piece of music.

NEMO—A remote pickup.

NET—National Educational Television.

NETWORK—A group of affiliated broadcast stations such as ABC, CBS, NBC in the U.S.

NEUTRAL DENSITY FILTER—A filter placed over a lens to reduce the brightness of a scene without altering its colors.

NOISE—Any unwanted signal present in the total signal; both an audio and video term to describe one signal interfering with another; usually created by some malfunction of either a component or circuitry which is part of the signal path; a signal inherent in certain audio or video components.

NON-COMPOSITE VIDEO SIGNAL—A video signal containing picture and blanking information but no sync signals.

NORMAL LENS—A subjective evaluation of the angle of view of a lens; a normal lens is one which is neither wide angle nor telephoto.

NO-SEAM—Seamless background paper which comes in rolls and sheets in a variety of colors and sizes.

NTSC—National Television Standards Committee—a broadcast engineering advisory group established in the 1940's which recommends standards to the FCC, for the 525 line 60 field system; see also PAL and SECAM.

NTSC COLOR—The color standard used in the U.S. and set by the National Television System Committee; compatible color which can be received in b & w.

O

O and O's—Broadcast stations owned and operated by a network, usually in major markets; see affiliate and independent.

OCTOPUS CABLE—Any cable with a number of different jacks at one or both ends; a cable which allows two pieces of video equipment with dissimilar jacks to be interfaced.

OFF—Off-stage or off-screen.

OFF-MIKE—Not within the pickup pattern of the microphone.

OMNI-DIRECTIONAL—Mike which has a pickup pattern essentially uniform in all directions.

ONE INCH (25 mm) VIDICON—A vidicon tube with a target area one inch (25 mm) in diameter.

ONE TUBE COLOR CAMERA—A color-capable video camera which produces a color signal through the use of only one pickup tube.

ON LINE—Video tape editing with Quad 2" (51 mm) VTRs.

ON THE LINE—A term used in video production with a special effects generator to identify the signal which is leaving the SEG for broadcast or recording.

OPEN MIKE—Live mike.

OPERATIONS—Schedule operation of a production facility or broadcast station.

OPTICAL CENTER—The point in a lens at which the image is collected to be focused on the image plane. The distance between the optical center of a lens and the image plane is described as the focal point.

OSCILLOSCOPE—The oscilloscope is similar to the television except that it shows waveforms instead of pictures.

OUTPUT—The terminal point of a unit of electronic equipment, from which the signal is taken.

OUTTAKE—Taped segment not used in final edited version of a program.

OVER FRAME—A voice heard off screen.

OVERLAY INSERTION—Self keyed insertions moving matte insertion. An insertion effect in which the fill signal is a moving object which determines its own parameters as it moves.

OVERSCAN—TV picture beyond area of normal screen size.

P

PACKAGE—A complete program available for sale, also a "packager," someone who syndicates TV programming.

PAD—Potentiometer; in programming, segments at the end of a program that can be eliminated if necessary. Syn: cushion, fill.

PAINT POTS—Controls on a colorizer for mixing colors electronically—reostals.

PAL—Phase alternate line 625 line 50 field system used in the U.K., Western Europe, Scandinavia, Australia and South Africa.

PAN—To follow action by swinging camera left or right.

PASSIVE MIXER—An audio mixer containing no active electronic components or circuitry; usually an inexpensive audio mixer capable of combining and regulating the level of various signals but producing a loss in the strength of those signals since they are not amplified within the mixer.

PATCH CORD—Any cable with a jack at each end used to connect audio or video components to each other; in audio, from which the term originates, the traditional patch cord is a cable with a phone plug at each end.

PATCH CORD—Short cable with male connectors at both ends.

PATCHING—The act of connecting two components to each other with a patch cord and/or patch panel.

PATCH PANEL—A plate on which a number of female receptacles are mounted, each the termination of a different audio or video signal; used with patch cords to make secure but temporary connections between components.

PATCH PANEL—Also jackfield; a rack mounted panel for connecting patch cords.

PATCH PLUG—Console-mounted female cable connection.

PEAK-TO-PEAK VOLTAGE— V_{pp} . The total voltage produced by a signal, determined by adding together the positive and negative extremes to which the voltage modulates.

PEAK WHITE—The brightest, whitest portion of the picture signal corresponding to the highest level the signal attains.

PEDESTAL—Black level. The minimum level which the blackest portions of the displayed signal are allowed to reach.

PEDESTAL TRIPOD—A professional tripod, often with a hydraulic shaft.

PERSISTENCE OF VISION—A phenomenon of the brain working in conjunction with the eyes which makes the present system of television possible; the retention by the eye's retina of any image it sees for a short period of time (about 0.05 s). If the image is replaced by a slightly different image before the first image fades, the distinction between the two separate images is lost and motion is perceived.

PERSPECTIVE—The angle at which we see things; our viewpoint. A lens produces a certain perspective of the scene it is viewing, which may not agree with our sense of perspective.

PHASE—The relative timing of a signal in relation to another signal; if both signals occur at the same instant, they are in phase; if they occur at different instants, they are out of phase.

PHONE PLUG—Variety of jack often used as a microphone connector.

PHONO PLUG—Variety of jack most often used with audio amplifiers. Also known as RCA plug.

PHOSPHOR—A chemical coating used on the inside face of a cathode ray display tube. When hit by electrons, the phosphor glows according to the strength of the electrons.

PHOTOCONDUCTOR—Any unit which permits the flow of an electrical current corresponding to varying light input.

PHOTOFLOOD—A self-contained light bulb which gives a very bright intense light without the use of external lenses or lamp housings.

PICKUP PATTERN—A determination of the directions from which a microphone is sensitive to sound waves; varies with the mike element and mike design. The two most common pickup patterns are omni- and uni-directional.

PICKUP RESPONSE—The tendency of a microphone to be sensitive to or to reject sound coming from different directions; the sensitivity of the mike to various frequencies.

PICKUP TUBE—A camera tube for pickup of images.

PICTURE AREA—The area of a TV screen containing the video picture.

PICTURE LOCKING—Synchronizing the picture signal; sync controls on a picture.

PICTURE SIGNAL—The picture information part of the composite video signal; the portion of the video signal above the pedestal.

PICTURE TUBE—A cathode ray tube designed to display the video picture signal.

PIEZOELECTRIC—A microphone element usually used in inexpensive, limited frequency response mikes; often called ceramic or crystal mikes.

PINCH ROLLER—A rubber roller which "pinches" or presses the video tape to the capstan. Together with the capstan the pinch roller pulls the tape through the tape path on the video tape recorder.

PLAYBACK—Function which induces the magnetic patterns on a video tape from that tape into the circuitry of a video tape recorder, in order to reconstruct the composite video signal for display.

PLAYBACK AMPLIFIER—In audio, a circuit which amplifies the audio signal prior to its being reproduced through a speaker; in video, a circuit which amplifies the video signal in the VTR prior to its being supplied to a monitor.

PLAYBACK HEAD—Audio or video head used to obtain a signal from the video tape. Some heads are capable of playback and record, others of playback only; the video heads of most helical scan VTRs serve as both record and playback heads.

PLUMBICON—The trade name of N.V. 'Philips' special lead oxide tube which is more sensitive than a vidicon; used in some color cameras.

PLUS DIOPTR—A special lens accessory which fits over a camera lens to make that lens capable of extreme close-ups.

POLARITY—The positive or negative orientation of a signal; in video, the polarity of the picture is black/negative, white/positive; reversed polarity would result in a negative picture.

POLARIZING FILTER—A special filter with polarizing properties; a filter which, when placed over the lens, can be rotated so that it cuts down the amount of reflected light coming into the lens.

POLECAT—Telescoping light support pole running from floor to ceiling.

POP FILTER—A sponge rubber or plastic foam cap placed over the end of a microphone to reduce sibilance, breathy sounds, popping p's and b's, and other unwanted vocal effects.

PORTS—Air ducts built into microphones to control the pickup pattern and frequency response characteristics.

POT—Potentiometer—variable resistor used to control levels/volumes. Also see paint pot.

POWER PACK—Rechargeable battery power supply or belt.

PRACTICAL SCENERY—Scenery that works, such as a door that can be opened or closed.

PREAMPLIFIER—An electronic circuit which maintains or establishes an audio or video signal at a predetermined signal strength, prior to that signal being amplified for reproduction through a monitor or speaker.

PRE-PRODUCTION—Covers all activity prior to actual taped production.

PRESENCE—The quality of being on mike, at the proper individual distance from the microphone.

PREVIEW—The monitoring of a video signal prior to its being processed through an SEG.

PRIMARY COLORS—The three colors used in color TV, no two of which can be combined to produce the third: red, green and blue.

PROCESSING AMPLIFIER—Proc-amp, signal processor, video processor, helical scan processor. A unit inserted on the line between any two components through which a composite video signal travels; serves to stabilize the composite signal, regenerate the control pulses, and, in certain models, change the gain and pedestal to improve contrast.

PRODUCER—The person who assembles and coordinates the elements that make up a show.

PRODUCTION FACILITIES—All the physical and material requirements of a television program including scenic supplies and construction areas in addition to the usual complement of cameras, lights, microphones, film chain, etc.

PROJECTION TELEVISION—A combination of lenses and mirrors which projects an enlarged television picture on a screen to attain a larger display area than a cathode ray tube is capable of giving.

PROP—Theatrically derived abbreviation for property; any portable article on the set other than scenery and costumes.

PROXIMITY EFFECT—Associated with certain types of microphones; the closer the sound is to the mike, the more the base frequencies are exaggerated.

PSA—Public service announcement.

PULSE—The variation of a constant signal for a certain period of time.

PULSE DISTRIBUTION AMPLIFIER—An amplifier designed to boost the strength of the sync as well as other control signals to the proper level for distribution to a number of cameras, special effects generators, and the like.

PUNCH UP—To engage a function button, as in punching up an effect on a special effects generator.

PULL BACK—A dollying back from a subject with the camera as opposed to zooming back.

PULL FOCUS—To intentionally go from soft focus to sharp focus or vice versa.

PUP—Baby 500 Watt Quartz spotlight.

PUSH ROD—Rod with handle which permits control of focus and zoom from back of video camera—see also rear focus.

Q

QUAD—Quadruplex—a four head recording system, such as 2" (51 mm) Quad, which writes video information on successive vertical stripes (1, 2, 3, 4, 1, 2, 3, 4, etc.)

QUADRUPLEX—A system of video tape recording using two-inch tape and four rotating video heads. The heads pass the tape at an angle perpendicular to its path.

QUARTZ BULB—A small lighting element which produces a great deal of light for a long period of time.

QUICK CUTS—A series of quick edits with dissolves.

R

RABBIT EARS—Home indoor-type TV antennas.

RACK—To pivot a camera lens turret, also rack focus.

RACK MOUNTING—A method of mounting equipment, standardized by the EIA so that the sides of the rack are just over 19" (48 cm) apart, and all equipment 19" wide or less can be mounted in the rack. Equipment designed to be rack mounted has screw mounting holes at the edges.

RADIO FREQUENCY—RF; the range of frequencies used to transmit electric waves; a broadcast of that frequency range assigned to a certain bandwidth of that frequency.

RANDOM ACCESS—Simple retrieving of stored magnetic information regardless of where it is located on the tape.

RANDOM INTERLACE—Industrial sync. A method of scanning in which the horizontal and vertical scan controls run independently of each other in a random relationship; there is no fixed phase between the two and the result is an unreliable time base, especially if two or more cameras are being used.

RASTER—The pattern described by the scanning spot of the electron beam as it scans the target area of a cathode ray tube; the pattern of scanning in both the pickup and display tubes.

RAW STOCK—Unrecorded videotape.

RBG SIGNAL—The chrominance information; red, blue and green.

REACTION SHOT—An edit, cut to the facial reaction of an interview or theatrical situation.

READING—An actor's first time through a script.

READOUT—A visual display of stored information.

REAL TIME—Original time span, without compression or selective grouping.

REAR SCREEN—A projected image film or slide from behind a translucent screen.

RECEIVER—An electronic component capable of collecting radio frequency broadcasts and reproducing them in their original audio and/or video form.

RECORDING AMPLIFIER—Amplifier used in a video tape recorder to set the level of the video signal prior to its being supplied to the video heads.

RECORDIST—Engineer in charge of VTRs during production, also operating engineer or VTR engineer.

REGISTRATION—An adjustment associated with color TVs to ensure that the electron beams the three primary colors of the phosphor screen are hitting the proper color dots/stripes; also, a similar adjustment of the tubes in color cameras.

REMOTE—Broadcasting originating outside the studio.

REMOTE PICKUPS—Events televised away from the studio by a mobile unit or by permanently installed equipment at the remote location. See also: remote broadcast.

RESIDUAL—A talent re-use payment.

RESOLUTION—A subjective evaluation of the amount of detail in a picture; see also horizontal resolution, vertical resolution.

RE-TAKE—To re-shoot rejected material.

REVERBERATION—The repetition of a sound after it has been originally produced; Hello-hello-hello-el-lo-el-lo; caused by sound waves bouncing off objects and surfaces and thus reaching the ear or microphone later than the original sound; different from echo; not to be confused with echo.

RF—See radio frequency.

RF ADAPTOR—RF amplifier; RF modulator/converter. A unit which accepts the composite video signal to modulate a carrier frequency and produce a broadcast signal on a standard TV channel.

RF AMPLIFIER—See RF adaptor.

RF MODULATOR—See RF adaptor.

RGB—Primary colors; red, green and blue.

RIBBON MIKE—A microphone with a metal coil element, old-fashioned and not very durable since the "ribbon" tends to fray at the edges.

RIGHTS—Creative or performance equities (royalty).

ROLL—Loss of vertical sync causing the picture to move up or down the screen.

ROLL-OFF—The preset attenuation of a predetermined range of bass frequencies—used by some microphone manufacturers on their mikes to reduce the proximity effect.

ROOM TONE—Recorded ambient noise used in opening or spreading open sound tracks, UKA buzz tone.

ROTARY ERASE HEAD—A set of heads on the rotating video head assembly which erases the video signal during recording and editing; usually positioned one scan line in front of the video heads; produces cleaner edits than a stationary erase head.

ROTARY IDLER—Stationary guide along the tape path.

ROUGH EDIT—A rapid assembly of various segments in the order they will appear in the final program; not a finished master tape, not a clean edit.

S

SAFE AREA—Ninety percent of the TV screen, from the center of the screen; that area of the display screen (and therefore of the camera scanning area) which will reproduce on every TV screen, no matter how it is adjusted.

SAFE TITLE AREA—Eighty percent of the TV screen, from the center of the screen; that area of the display screen (and therefore of the camera scanning area) which will reproduce legible title credits no matter how it is adjusted.

SAFETY—Extra copy of a video tape, in case something happens to the original copy; usually a second generation copy, although on special effects generators with two program outputs it's possible to record two master tapes, one being the safety tape.

SAG—Screen Actors Guild—film performers union—AFTRA.

SANDBAG—Sand filled heavy canvas bag to weigh down light stands or props.

SATURATION—One of the determinations of the color of an object or light; how vivid a color is: related to the strength of the chrominance signal.

SCANNING—The action of the electron beam as it traces a pattern over the target area of the camera pickup tube in order to convert the light values of each spot on the area to a corresponding electrical signal.

SCANNING SPOT—The point at which the electron beam strikes the target area.

SCHMIDT OPTICAL SYSTEM—An arrangement of lenses and mirrors in combination with a very bright cathode ray tube; used in video projection systems.

SCOOP—500 watt circular floodlight.

SCOOP—A large bowl-shaped unit—often made of aluminum—into which a lighting unit is placed so that it will reflect light over a wide area.

SCOPE—Cathode ray tube device for testing electronic signals.

SCRIM—Thin gauze light diffusion device.

SCRIPT—Material written for actors and technicians to follow in creating a production.

SCRIPT—Written material prepared for rehearsal and production, with cues, camera direction, and so on.

SECAM—Sequential Couleur a Memoire: sequential color and memory. A color TV system developed by the French which differs greatly from both the NTSC and PAL color systems. Used in France, USSR, and Eastern Europe. 625 lines 50 fields.—See also NTSC and PAL.

SECOND GENERATION—See generation.

SEG—See special effects generator for video effects.

SELECTIVE FOCUS—Adjusting the lens so that a particular object in a scene is in perfect focus. When a telephoto lens is used, all but that object will be out of focus, creating the familiar effect of object surrounded by blur.

SEPARATE MESH—A mesh screen located in certain pickup tubes, which helps control the path of the electron beam from cathode to target area, thus improving the scanning process and the resulting picture.

SFX—Sound effects, music or sounds used as background for a production.

SHADING—Video contrast characteristic.

SHADOW MASK COLOR TUBE—RCA developed dot matrix color picture tube; a color tube equipped with a metal sheet with half a million small holes in it. The metal sheet (which is the shadow mask) is placed between the electron guns, which beam the picture signal, and the phosphor-coated screen.

SHOOT—To videotape or film a production.

SHOOTING RATIO—The amount of tape recorded as opposed to the amount of tape actually used in the final, edited program.

SHOT—An individual scene.

SHOT-BOX—A pre-set unit for controlling a camera's zoom lens.

SIDEBAND FM—See FM.

SIGNAL PATH—The movement of the signal from point of origin to point of display; the course a signal takes through a component or series of components.

SIGNAL PROCESSOR—See processing amplifier.

SIGNAL-TO-NOISE RATIO—The amount of electrical signal inherently produced by a unit in operation, compared to the level of the signal that unit is processing. The higher the signal-to-noise ratio (the more signal, the less noise), the better the quality of the resulting sound or picture.

SIMPLE EDITING—A term used by some manufacturers to indicate that the VTRs do not have capstan servo or head drum servo editing; an imprecise method of electronic editing which does not guarantee clean edits.

SINGLE-D—A type of ported microphone with reduced proximity effect.

SKEW—The tape tension between supply reel and first rotary idler of tape path around head assembly of a VTR; skew must be maintained properly or picture instability will result.

SLANT TRACK—Slang term for helical scan.

SLATE—A clapboard with scene information written on it in chalk, or a hinged clapboard, also electronic slate. To slate is to identify a scene.

SLAVE VTR—A video tape recorder used to record a copy of a video tape from another (master) video tape recorder.

SLOW-MO—To slow down or vary speed below normal tape speed, also name for a videodisc system.

SMEAR—A video picture in which objects are blurred at the edges and seem to be running or bleeding beyond the edges.

SNOW—Random noise on the display screen, often resulting from dirty heads.

SNOW—TV signal breakup caused by weak video reception.

SOLENOID—An electromagnetic circuit control.

SOLID STATE—Circuitry not containing vacuum tubes. Integrated circuits and transistorized equipment are often referred to as being solid state.

SOUND WAVE—Air set in motion by any physical force or entity. This motion is a vibration of a certain rate and strength which makes it unique unto itself. The rate of vibration is measured in Hertz (Hz) or cycles per second; the force of the vibration is measured in decibels.

SPECIAL EFFECTS GENERATOR—SEG—A unit used in video production to mix, switch, and otherwise process various video signals to create a final signal known as the program signal.

SPECIFIC LIGHTING—Lighting used to illuminate an object in order to create a desired effect on the display screen; any lighting units that are set up especially for recording an event.

SPEED—Called when VTR and camera have reached full recording speed. (Called before action is called.)

SPEED (LENS)—Sometimes used to indicate the aperture ratio of a camera lens. It is the ratio of the focal length to the physical diameter of the lens and indicates the light admitting properties of the lens.

SPILL—Undesired illumination.

SPILLOVER—A loud sound volume causing the VU meter needle to go above the 100 mark on the scale; the leakage of one signal from one line to an adjacent line; the leakage of signal from one layer of recorded tape to an adjacent layer.

SPINDLE—Rotating shaft in tape transport system.

SPLICE—A physical joint between two pieces of film on tape.

SPLICING—The physical cutting and rejoining of recording tape; the joint of the two ends of the video or audio tape is secured by tape coated with an adhesive substance on one side.

SPLIT SCREEN—A special effect utilizing two or more cameras so that two or more scenes are visible simultaneously on each part of the screen.

SPOT—A TV commercial, a small light with a variable, focusable beam.

SPOTLIGHT—A lighting unit whose light can be focused into a beam and directed at a particular object or part of a scene.

SPYDER—Small camera dolly.

STANDARD FOCUSING—Optical nomenclature used to describe a lens which can be focused by moving a section of the outer barrel of the lens backward or forward until the image passing through the lens is in sharp detail on the image plane.

STANDARD (MINIMUM) SIGNAL—The peak-to-peak voltage of a signal whose amplitude is sufficient for its use within a system; for non-composite video signals, it is 0.7 Vpp; for composite video signals, 1.0 Vpp.

“STAND BY”—Cue that the program is about to go on the air or to be taped.

STAR FILTER—Special filter to produce cross hatch or star effect by picking up light on objects being shot.

START MARK—Sync indication in either audio or video track or at the head of a film or audio track still.

STATIC MATTE INSERTION—See inlay insert.

STEP-DOWN TRANSFORMER—An electronic circuit which can change electric current from one voltage to another; the most common transformer of this type is 220 V-to-120 V. A step-down transformer does not change the Hertz of the current; thus 220 V 50 Hz can only be changed to 120 V 50 Hz (to get 60 Hz at 120 V you'd need an AC to DC converter and a DC to AC inverter).

STEPS—Term used to describe the number of controls on a colorizer; the control for each color is called a step.

STET—To let stand; a notation to retain a previously deleted line or passage in a script.

STILL FRAME—An individual frame of tape being held as a continuous shot.

STING—A brief musical chord, generally used to punctuate an important line of dialogue or a powerful visual action.

STOCK SHOT—A piece of film or still photograph or stock tape from an archive, library or collection licensed for re-use.

STORYBOARD—A representation generally in small boxes of visual dialogue and camera instructions for a scripted production, frame by frame.

STREAKING—Similar to smearing; occurs when objects in a scene bleed beyond their edge.

STRETCH—Slow down the action or add program material to fill in the allotted time.

STRIPE FILTER—A chrominance tube system in which the target area of the tube is divided into sequential stripes for R, B, G, and Y, and can therefore derive a color signal by using only one pickup tube.

SUBCARRIER FREQUENCY—The frequency on which color information is modulated in the color TV system; in the U.S. it's 3.58 MHz.

SUBCARRIER PHASE SHIFTER—Special circuitry designed to control the phase relationships of the two portions of the encoded color signal so that they maintain their correct relationship during recording, transmission and reproduction. A phase shifter allows the user to change the timing of the signals involved so that they are occurring at the correct time and are thus said to be in phase.

SUN SHADE—A metal cylinder attached to the end of a lens to keep light from entering the lens from the periphery of the angle of view.

SUPER—The superimposition of one video signal on another using the fader controls of the special effects generator.

SUPER CARDIOID—Variable-D—A microphone with a very directional pickup pattern, allowing sound to affect the element only if it's coming toward the front of the mike; see also pickup pattern.

SUPPLY REEL—The reel on the VTR which contains blank tape or a recorded program prior to it being run through the VTR.

SUPPRESSION—See blanking.

SURROUND SHOT—An angle of view peculiar to highly portable recording equipment such as the portapak; the camera can enter into the action and wander through it, giving the viewer the impression that the camera is part of the event.

SWARF—Filament thrown up by a disc cutting stylus.

SWITCH—To cut from one camera to another. Syn: cut, take, intercut.

SWITCHER—Term often used to describe a special effects generator; a unit which allows the operator to switch between video camera signals. Switchers are often used in industrial applications to switch between video cameras monitoring certain areas for display on one monitor; these kinds of switchers do not have sync generators.

SWITCHER-FADER—A switcher with an added device used to fade out or in an image; fade from one camera image to another, or super-impose two images.

SYNC—Synchronize; various drive pulses, both horizontal and vertical, which maintain the horizontal and vertical scanning procedures of the video picture signal from camera to display; see also horizontal sync, vertical sync.

SYNC GENERATOR—A pulse generator which produces the sync signals necessary to integrate the functioning of various pieces of video equipment in relation to each other and the video signal.

SYNC MARK—Editor's reference mark.

T

TAG LINE—Performer's final line.

T-CONNECTION—A T-shaped 3-way cable connector for distributing an incoming signal 2 outgoing ways.

TAILS OUT—A tape that has been played but not rewound; a tape whose end is nearest the outside of the reel; the opposite of heads out.

TAKES—Consecutive attempts at taping a scene or performance.

TAKE-UP REEL—The reel onto which the tape is collected during recording or playback. See feed reel.

TAKE-UP REEL—The right reel on the VTR which accepts the video tape after it has been run off the supply reel through the VTR's tape path.

TALLY—A system of audio intercommunication among various members of the video production crew. A tally light is set on top of each camera and glows when that camera is the one on the line as the program signal camera.

TAPE—A medium capable of storing an electronic signal and consisting of backing, binder, and iron oxide coating. The orientation of the iron oxide determines whether the tape can be used for helical scan video recording.

TAPE PATH—The circuit the tape runs from supply to take-up reel past the erase head, video heads, audio/control track head, and between capstan and pinch roller; standardized on half-inch (12.7 mm) machines by the EIAJ.

TAPE PRODUCTION CIRCUIT—A circuit which detects a spill or tear in videotape during playback or record and shuts down the recorder or player to prevent tape or machine damage. Available in some VTRs and VCRs.

TAPE TENSION GUIDE—The first guide off the supply reel, adjusted to maintain proper skew.

TAPE TRANSPORT—Those mechanical components of the video tape recorder which move the tape from supply reel to take-up reel and back.

TARGET AREA—The face of the vidicon tube or other camera cathode ray pickup tube. This area (opposite the cathode heater) is where the image formed by the lens is transformed into an electronic signal. On the outside face of the tube the image from the lens is focused, and on the inside, this image is "read" by the electronic scanning beam. A circuit is completed at each point the beam strikes the

target, and because a voltage is being applied to the target area, a certain resistance results which gives a voltage variation or video signal.

TEARING—Occurs when horizontal sync is lost or distorted in a picture, resulting in some of the horizontal lines getting out of place or phase with the rest of the picture.

TELECINE—See film chain.

TELEPHOTO LENS—A lens with a large focal length (number of millimeters) which has a very narrow angle of view.

TELEPROMPTER—The trade name of a mechanical prompting device used on TV.

TELEVISION RECEIVER—TV set; capable of sensing and receiving broadcast video signals, stripping them from their carrier frequencies, and producing them as a light image picture on the face of a cathode ray display tube. See also receiver.

TELOP—A projector for opaque shades.

TENSION—The pull of the capstan assembly on the video tape to keep it against the video head drum assembly; used in conjunction with the skew control to keep tape properly in path.

TERMINATION—The insertion of a load at the end of a line carrying a signal; a video terminator is a 75-ohm resistor placed at the end of a line to keep the signal from bouncing back along the line; 600 ohms is commonly used to terminate an audio line.

TEST BARS—See color bars.

TEST COMMERCIAL—A commercial primarily produced to gauge a limited audience reaction, also a pre-production test for in-house viewing by creative staff.

TEST PATTERN—Optical guide for TV camera reference alignment.

THEME—Music that identifies a program and is played at the beginning and end.

THREE TUBE COLOR CAMERA—A color-capable camera which produces a color signal through the use of three pickup tubes, each assigned to one of the primary colors. An early stage in the development of the color video camera, introduced by RCA in 1940. Standard of the Broadcast Industry today.

THROUGH THE LENS VTR—The use of a small b/w video camera cabled to a monitor and/or recorder during filming with a motion picture camera. A split beam reflex type viewing system specially modified is used to allow such recording. This allows instant replay of filmed scenes on videotape.

THROW—Distance from projector lens to screen surface.;

TIGHT—Framing close to the edges of the picture.

TIGHT CLOSE UP—Extreme close-up. Abbr: TCU.

TIGHT SHOT—See close up.

TILT—To move the camera up toward the ceiling (tilt up) or down toward the floor (tilt down).

TIME-BASE STABILITY—What helical scan hasn't got; the maintenance of the scanning process to very close tolerances.

TIN—To coat the end of a cable wire with solder before making a solder connection, thus ensuring a more sound connection.

TITLE CRAWL—A roller like device used to "roll" credits or titles across TV screen, either mechanical or electronic crawls are available.

TONGUE—Dolly mounted camera boom.

TRACKING—The angle and speed at which the tape passes the video heads.

TRANSCRIPTION—A record which is manufactured solely for broadcast purposes.

TRANSDUCER—The element of the microphone that changes the sound vibrations into electronic pulses.

TRANSLATOR—An electronic device used to extend the service from a broadcast TV station. The translator accomplishes this by receiving, amplifying, and retransmitting the signal.

TRANSMISSION ABILITY—An evaluation, usually expressed as a percentage, of the amount of light a filter will admit. A ninety percent transmission filter will allow ninety percent of available light to pass through it, eliminating ten percent.

TRANSMISSION LINE—A wire conductor designed to carry electronic impulses from one place to another with a minimum pick-up of outside interference.

TRAPEZE—Device for suspending an overhead light.

TRIPOD—A three-legged stand on top of which a camera is mounted.

TRIPOD DOLLY—Base of tripod with wheels.

TRIPOD HEAD—The top portion of a tripod where its legs meet and the camera is mounted; friction or fluid-head tripod designs are available.

TRUCKING—Moving the camera left (truck left) or right (truck right) on a tripod with a dolly, or moving your body while holding a portapack camera.

T-STOP—A rating of a lens in terms of its ability to transmit light; the transmission ability, or transmission stop, of a lens; more exact, in terms of a lens' transmission ability than an f-stop rating, but no more helpful than the f-stop when working with a video camera; used on some lenses in film and still photography in place of f-stop.

TV STORYBOARD—Sheets of paper with blank TV screens on them; used for roughing out the action of a program.

TWEAK—To exactly align electronic equipment.

TWO SHOT—Television picture showing two performers or two objects of major interest.

TWO-THIRDS-INCH (17 mm) VIDICON—A vidicon with a target area two-thirds of an inch (17 mm) in diameter; the most commonly used vidicon in portable video cameras.

2:1 INTERLACE—A scanning system in which the horizontal and vertical control pulses are locked together so that they occur at the correct time in relation to each other.

U

U-FORMAT—Refers to $\frac{3}{4}$ " U format videocassette recorders and players, also U-VCR, VCR's, U-MATIC, $\frac{3}{4}$ ".

UHF—Ultra high frequency—470-890 megahertz channels 14-83. More limited area of coverage than VHF, with the same power.

UHF CONNECTOR—Standard type of video-in/video out jack; commonly found on professional monitors; used to carry either composite or non-composite video signal.

UMBRELLA—A light reflective bounce apparatus in an umbrella shape.

UNDER—A direction, usually referring to music or sound, meaning to bring the volume down and keep behind dialogue.

UNI-DIRECTIONAL—Microphone pickup pattern which accepts only sound coming in front of it.

V

VARIABLE FOCAL LENGTH LENS—See zoom lens.

VARIABLE MIKE—A microphone with a number of ports in its casing; designed to correct the proximity effect and to produce a super-cardioid pickup pattern.

VCR—A videocassette recorder (or player) generally a 3/4" U-format videocassette recorder.

VECTORSCOPE—Round (green) oscilloscope to align amplitude and phase of the 3 TV color signals (RGB).

VERTICAL BLANKING—Field blanking; the blanking of a signal during scanning, when the scanning spot is flying back from scanning one field to begin scanning the next field, and at which time blanking and sync pulses are introduced to the signal.

VERTICAL FREQUENCY—See field frequency.

VERTICAL INTERVAL—Moment measured in microseconds during which the electron scanning beam returns to the top of the TV tube.

VERTICAL INTERVAL SWITCHING—A method of switching video signals in a special effects generator; this replacement of one signal with another takes place during the vertical retrace period.

VERTICAL RESOLUTION—The number of horizontal lines on a test pattern that can be reproduced by a camera or monitor so that they are distinctly visible; the number of horizontal lines a piece of video equipment is capable of processing per field as picture information. See also resolution.

VERTICAL RETRACE—The return of a scanning spot to the top of the target area to begin scanning a new field after completing its scan of the previous field; the time it takes for this to occur. See also flyback.

VERTICAL SCANNING—The field-by-field scanning of a picture, at the rate of sixty fields per second. (In U.S., Canada, Mexico, and Japan). See also scanning.

VERTICAL SYNC—The sync pulses which control the vertical field-by-field scanning of the target area by the electron beam. See also sync, field, field blanking, field frequency.

VIDEO—Television and the technical equipment and events involved in creating television; the visual portion of a signal containing both sight and sound information; an alternative to broadcast television. The picture portion of a television broadcast (Latin: I see) also CCTV.

VIDEO AMPLIFIER—A circuit which can increase the strength of a video signal sent through it.

VIDEO ART—See videograph.

VIDEO CARTRIDGE—A self-contained video module played on a specially designed video tape recorder. The cartridge contains one reel of video tape which is fed out of the cartridge into the internals of the VTR and then rewound onto the cartridge after play.

VIDEOCASSETTE—A self-contained video module played on a specially designed video tape recorder; similar in design to an audio cassette; houses two reels—supply and take-up with the tape running between them but connected to both.

VIDEO DISTRIBUTION AMPLIFIER—A special amplifier for strengthening the video signal so that it can be supplied to a number of video monitors at the same time.

VIDEO FREAK—A videophile, person entirely dedicated to use or study of video technology.

VIDEO FREQUENCY—VF; a composite video signal unmodulated by radio carrier frequency.

VIDEO GAIN—The amplitude of the video signal; the control on a VTR which determines the "volume" level of the video signal.

VIDEOGRAPH—A photographic print, photographed off a TV screen with a still photographic camera, especially when used in documentation of a piece of video art. See art.

VIDEOGRAPHY—Term used to describe videotaping in a photographic sense, that is taking motion pictures with video equipment, also refers to the whole range of video applications.

VIDEO HEAD—See head for video signal recording.

VIDEO-IN—Line-in; a jack through which video signal is fed into a given component.

VIDEO-OUT—Line-out; a jack from which a video signal is fed out of given component.

VIDEO PROCESSOR—See processing amplifier.

VIDEO SWITCHER—See special effects generator and switcher.

VIDEO TAPE RECORDER—VTR; an electro-mechanical device capable of recording, storing, and reproducing an electronic signal which contains audio, video, and control information.

VIDEO WAVEFORM—The pictorial display on a special oscilloscope of the various components of the video signal, used to check the integrity of the signal and signal components.

VIDICON—A vacuum tube capable of changing light images into electrical voltage variations corresponding to the brightness of those images; a particular type of cathode ray pickup tube used in

some video cameras, containing a cathode assembly and a target area coated with antimony trisulfide; the least expensive and most generally reliable pickup tube presently available.

VIEWFINDER—An electronic or manual viewfinder on a video camera.

VIGNETTES—Camera shots through specially shaped masks such as windows, keyholes, diamonds.

VOICE COIL—The element in a dynamic microphone which vibrates when sound waves strike it; the coil of wire in a loudspeaker through which audio frequency current is sent to produce vibration of the cone and reproduction of sound.

VOICE-OVER—A voice speaking over other sounds: the addition of a narration to the original sound track during post-production.

VOLTAGE PEAK-TO-PEAK—Vpp; Ppv; see peak-to-peak voltage.

VOLUME—The amount or fullness of sound.

VOLUME UNIT METER—VU meter; a meter generally associated with the monitoring of the amplitude of a video or audio signal. See also meter.

VTR—See video tape recorder.

W

WALKTHROUGH—A rough rehearsal without cameras.

WALL CURRENT—117 volts. U.S.

WATT—A unit of electrical power; that amount of power required to maintain a current of one amp under the pressure of one volt.

WAVEFORM MONITOR—Special oscilloscope used to display the video waveform.

WHIP PAN—A purposely image burning whiz pan shot.

WHITE LEVEL SET—White set; a camera control which establishes the luminance level for a color camera.

WIDE ANGLE LENS—A lens with a very short focal length; a lens that has a very wide angle of view.

WIDE OPEN—Descriptive of a lens set at its lowest f-stop rating so that the iris is opened as wide as possible.

WILD FOOTAGE—Audio tape recorded out of sync with any particular video picture for use in post-production as an audio track; video tape recorded without audio for use as visual material in post-production, to which narration will be added.

WILD TRACK—Unsynchronized video or audio track wrap—'a wrap'—'that's a wrap' to finish an entire shoot and pack up the equipment.

"WIND IT UP"—An expression meaning to increase the speed or conclude the program.

WIND SCREEN—Similar to a pop filter; a heavy foam rubber microphone cover, used outdoors to cut down on audible noise created by wind blowing across the top of the mike.

WING IT—To do a program without rehearsal.

WIPE—Term used to describe the SEG effect of replacing a portion of video signal A with video signal B; also to erase a tape.

X

XENON—Quartz lamp using Xenon gas giving constant color temperature.

Z

ZOOM LENS—A lens with a variable focal length; a lens whose angle of view can be changed without moving the camera.

ZOOM RATIO—A mathematical expression of the two extremes of focal length available on a particular zoom lens.

ZOOM SHOT—A camera movement which involves zooming in while camera is live, or recording a scene, by operating the camera's zoom lens, as in zoom in, zoom out.

