Audio

Active: Powered. An active crossover is electrically powered and divides the line-level signal prior to amplification. An active speaker includes an active crossover and built-in amplifier.

Actuality: Audio from an announcer speaking.

Amplifier: A component that increases the gain or level of an audio signal.

Balanced Input: A connection with three conductors: two identical signal conductors that are 180 degrees out of phase with each other, and one ground. This type of connection is very resistant to line noise.

Bandpass: A two-part filter that cuts both higher and lower frequencies around a center band. A bandpass enclosure cuts high frequencies by acoustic cancellation and low frequencies by natural physical limitations on bass response.

Bandwidth: In audio, the range of frequencies a device operates within. In video, the range of frequencies passed from the input to the output. Bandwidth can also refer to the transmission capacity of an electronic communications device or system; the speed of data transfer...very important when planning a meeting for the attendees to stay connected. (See PSAV’s bandwidth estimator for assistance: http://www.psav.com/bandwidth_estimator/)

Bass: Low frequencies; those below approximately 200 Hz.

Bi-Wiring: A method of connecting an amplifier or receiver to a speaker in which separate wires are run between the amp and the woofer and the amp and the tweeter.

Boost: To increase, make louder or brighter; opposite of attenuate.

Bridging: Combining two channels of an amplifier to make one channel that's more powerful. One channel amplifies the positive portion of an audio
signal and the other channel amplifies the negative portion, which are then combined at the output.

**CD**: Compact Disc. Ubiquitous digital audio format. Uses 16-bit/44.1-kHz sampling rate PCM digital signal to encode roughly 74 or 80 minutes of two-channel, full-range audio onto a 5-inch disc.

**CD-R**: Recordable Compact Disc.

**CD-RW**: Rewritable Compact Disc.

**Channel**: In components and systems, a channel is a separate signal path. A four-channel amplifier has at least four separate inputs and four separate outputs.

**Coloration**: Any change in the character of sound (such as an overemphasis on certain tones) that reduces naturalness.

**Crossover**: A component that divides an audio signal into two or more ranges by frequency, sending, for example, low frequencies to one output and high frequencies to another. An active crossover is powered and divides the line-level audio signal prior to amplification. A passive crossover uses no external power supply and may be used either at line level or, more commonly, at speaker level to divide the signal after amplification and send the low frequencies to the woofer and the high frequencies to the tweeter.

**Crossover Frequency**: The frequency at which an audio signal is divided. 80 Hz is a typical subwoofer crossover point and is the recommended crossover point in theatrical and home THX systems. Frequencies below 80 Hz are sent to the subwoofer; signals above 80 Hz are sent to the main speakers.

**Cut**: To reduce, lower; opposite of boost.

**Decibel (dB)**: A logarithmic measurement unit that describes a sound's relative loudness, though it can also be used to describe the relative difference between two power levels. A decibel is one tenth of a Bel. In sound, decibels generally measure a scale from 0 (the threshold of hearing) to 120-140 dB (the threshold of pain). A 3dB difference equates to a doubling of power. A 10dB difference is required to double the subjective volume. A 1dB difference over a broad frequency range is noticeable to most people, while a 0.2dB difference can affect the subjective impression of a sound.
**Delay:** The time difference between a sonic event and its perception at the listening position (sound traveling through space is delayed according to the distance it travels). People perceive spaciousness by the delay between the arrival of direct and reflected sound (larger spaces cause longer delays).

**Diaphragm:** The part of a dynamic loudspeaker attached to the voice coil that produces sound. It usually has the shape of a cone or dome.

**Diffusion:** In audio, the scattering of sound waves, reducing the sense of localization. In video, the scattering of light waves, reducing hot spotting, as in a diffusion screen.

**Digital Audio Server:** Essentially a hard drive, a digital audio server stores compressed audio files (like MP3 or WMA). Most include the processing to make the files, and all have the ability to play them back.

**Direct-Stream Digital:** A format for encoding high-resolution audio signals. It uses a 1-bit encoder with a sampling rate of 2,822,400 samples per second (versus 44,100 for CD). Used to encode six high-resolution channels on SACD.

**Dispersion:** The spread of sound over a wide area.

**Distortion:** Any undesired change in an audio signal between input and the output.

**DNR:** Dynamic Noise Reduction. A signal-processing circuit that attempts to reduce the level of high-frequency noise. Unlike Dolby NR, DNR doesn’t require preprocessing during recording.

**Dolby B:** A noise-reduction system that increases the level of high frequencies during recording and decreases them during playback.

**Dolby C:** An improvement on Dolby B that provides about twice as much noise reduction.

**Dolby Digital:** An encoding system that digitally compresses up to 5.1 discrete channels of audio (left front, center, right front, left surround, right surround, and LFE) into a single bitstream, which can be recorded onto a DVD, HDTV broadcast, or other form of digital media. When RF-modulated, it was included on some laser discs, which requires an RF-demodulator before the signal can be decoded. Five channels are full-range; the .1 channel is a band-limited LFE track. A Dolby Digital processor (found in most new receivers, preamps, and some DVD players) can decode this signal back into
the 5.1 separate channels. Most films since 1992's Batman Returns have been recorded in a 5.1 digital format, though a number of films before that had 6-channel analog tracks that have been remastered into 5.1.

**Dolby EX**: An enhancement to Dolby Digital that adds a surround back channel to 5.1 soundtracks. The sixth channel is matrixed from the left and right surround channels. Often referred to as 6.1. Sometimes referred to as 7.1 if the system uses two surround back speakers, even though both speakers reproduce the same signal. Software is backwards-compatible with 5.1 systems, but requires an EX or 6.1 processor to obtain additional benefit.

**Dolby Pro Logic**: An enhancement of the Dolby Surround decoding process. Pro Logic decoders derive left, center, right, and a mono surround channel from two-channel Dolby Surround encoded material via matrix techniques.

**Dolby Pro Logic II**: An enhanced version of Pro Logic. Adds improved decoding for two-channel, non-encoded soundtracks and music.

**Driver**: A speaker without an enclosure; also refers to the active element of a speaker system that creates compressions and rarefactions in the air.

**DSP**: Digital Signal Processing. Manipulating an audio signal digitally to create various possible effects at the output. Often refers to artificially generated surround effects derived from and applied to two-channel sources.

**DTS**: Digital Theater Systems. A digital sound recording format, originally developed for theatrical film soundtracks, starting with Jurassic Park. Records 5.1 discrete channels of audio onto a handful of laser discs, CDs, and DVDs. Requires a player with DTS output connected to a DTS processor.

**DTS ES**: An enhanced version of the 5.1 DTS system. Like Dolby's Surround EX, a sixth channel is added. In some cases (DTS ES Discrete), the sixth channel is discrete. Software is backwards-compatible with 5.1 systems, but requires an ES or 6.1 processor to obtain additional benefit. Neo: 6 is a subset of DTS ES that creates 6.1 from material with fewer original channels.

**Dynamic Range**: The difference between the lowest and the highest levels; in audio, it's often expressed in decibels. In video, it's listed as the contrast ratio.

**Efficiency Rating**: Level of sound output measured at a prescribed distance with a standard input power. Efficiency rating standard is 1 watt (2.83V at 8
ohms) at 1 meter over a specified frequency range and is measured in
decibels.

**Equalization**: Loosely, any type of relative frequency adjustment. Specifically, the process of changing the frequency balance of an electrical signal to alter the acoustical output.

**Equalizer**: A component designed to alter the frequency balance of an audio signal. Equalizers may be graphic, parametric, or a combination of both.

**Fade**: A gradual increase in audio, i.e. a fade-up, or a gradual decrease in audio, i.e. a fade-down.

**Feedback**: The transmission of current or voltage from the output of a device back to the input, where it interacts with the input signal to modify operation of the device. Feedback is positive when it's in phase with the input and negative when it's out of phase.

**FM**: Frequency Modulated.

**Frequency**: The number of cycles (vibrations) per second. In audio, audible frequencies commonly range from 20 to 20,000 cycles per second (Hz). In video, frequency is used to define the image resolution. Low-frequency video images depict large objects or images. Higher frequencies depict smaller objects (finer details).

**Frequency Response**: A measure of what frequencies can be reproduced and how accurately they are reproduced. A measurement of 20 to 20,000 Hz, 3dB means those frequencies between 20 and 20,000 Hz can be reproduced no more than 3 dB above or below a reference frequency level.

**Full-Range**: A speaker designed to reproduce the full range (20 Hz to 20 kHz) of audio frequencies.

**Gain**: Increase in level or amplitude.

**Gooseneck**: This refers to a microphone with a flexible neck that is most frequently attached to a podium or lectern. It is designed to allow the speaker to raise or lower the microphone to a suitable height.

**Graphic Equalizer**: A type of equalizer with sliding controls that creates a pattern representing a graph of the frequency-response changes. Raising sliders boosts the affected frequencies; lowering sliders cuts (attenuates) the affected frequencies.
**HDCP:** High-Bandwidth Digital Content Protection. Created by Intel, HDCP is used with HDTV signals over DVI and HDMI connections and on D-Theater D-VHS recordings to prevent unauthorized duplication of copyright material.

**HDR:** Hard-Drive Recorder. Device that uses a computer hard drive to store compressed digital audio and video signals.

**High Pass:** A filter that passes high frequencies, and attenuates low frequencies. Same as low cut.

**Hz:** Hertz or cycles per second. Something that repeats a cycle once each second moves at a rate of 1 Hz.

**Incue/Inq/In-Point:** These words all refer to the initial few seconds of audio signifying the beginning of the production.

**Integrated Amplifier:** A combination preamp and amplifier.

**Impedance:** A measure of the impediment to the flow of alternating current, measured in ohms at a given frequency. Larger numbers mean higher resistance to current flow.

**KHz:** Kilohertz or one thousand Hz.

**Lavaliere:** A small microphone that attaches to clothing, allowing the speaker to have a hands-free presentation.

**Line Array:** A group of speakers that have been arrayed or “built up” in the vertical or horizontal plane, which allow for a highly consistent sound field. A Line Array is perfect for medium to large audiences.

**Line-Level (Low-Level):** A level of electrical signals too low to make the average speaker move sufficiently. Amplifiers receive line-level signals and amplify them to speaker level.

**Lockout:** The final words of a segment used to signify the production’s conclusion.

**Low Pass:** A filter that lets low frequencies go through but doesn’t let high frequencies go through. Same as high cut.

**MHz:** Megahertz, or 1 million Hz.

**Midbass:** The middle of the bass part of the frequency range, from approximately 50 to 100 Hz (upper bass would be from 100 to 200 Hz). Also
used as a term for loudspeaker drivers designed to reproduce both bass and midrange frequencies.

**Midrange:** The middle of the audio frequency range. Also used as a term for loudspeaker drivers designed to reproduce this range.

**Mixer:** This is the unit in which audio signals are directed from. A mixer provides for both mic and line input combinations while allowing you to control one or more outputs.

**MLP:** Meridian Lossless Packing. Encoding format that is able to completely reconstruct the original signal at the receiving end. No information is lost or discarded, regardless of how trivial it might be. Used to encode six channels of high-resolution audio on DVD-A.

**Mono:** Monophonic sound. One channel.

**MP3:** MPEG-1 Audio Layer-3. Compression scheme used to transfer audio files via the Internet and store in portable players and digital audio servers.

**Natural Sound (NATS):** The nonverbal audio that occurs in a non-studio setting. NATS can be used to help characterize the setting.

**Noise:** An unwanted portion of a signal such as hiss, hum, whine, static, or buzzing.

**Nonlinear Editing:** Digital audio systems that allow for clips to be extracted without affecting the master recording.

**Octave:** The difference between two frequencies where one is twice the other. For example, 200 Hz is an octave higher than 100 Hz. 400 Hz is one octave higher than 200 Hz.

**Optical Digital Cable:** Fiber optic cable that transfers digital audio signals as light pulses.

**Outcue/Outq/Out-Point:** These words all refer to the final few seconds of audio signifying the conclusion of the production.

**Package:** A completed and fully edited audio piece.

**Passive:** Not active. A passive crossover uses no external power and results in insertion loss. A passive speaker is one without internal amplification.

**Phase:** Time relationship between signals; it's all relative.
**Power Output**: A measure, usually in watts, of how much energy is modulated by a component.

**Preamplifier**: A control and switching component that may include equalization functions. The preamp comes in the signal chain before the amplifiers.

**Pre Outs**: Connectors that provide a line-level output of the internal preamp or surround processor.

**Pre Outs/Main Ins**: Connectors on a receiver that provide an interruptible signal loop between the output of the internal preamp or surround processor portion of the receiver and the input of the amplifier portion of the receiver.

**Pre/Pro**: A combination preamp and surround processor.

**Processors**: Anything that processes an incoming signal in some way. Surround processors, for example, can decode a Dolby Digital signal to send to an amp so you can hear it.

**Pulse Code Modulation**: (PCM) a way to convert sound or analog information to binary information (0s and 1s) by taking samples of the sound and record the resulting number as binary information. Used on all CDs, DVD-Audio, and just about every other digital audio format. It can sometimes be found on DVD-Video.

**Q-and-A**: Question and answer session.

**Receiver**: Any component that receives, or tunes, broadcast signals, be it NTSC, HDTV, DBS, or AM/FM radio. Typically refers to the single component that includes a preamp, surround processor, multichannel amplifier, and AM/FM tuner.

**Reverberation**: The reflections of sound within a closed space.

**RF**: Radio Frequency. Television signals are modulated onto RF signals and are then demodulated by your television's tuner. VCRs and DBS receivers often include channel 3 or 4 modulators, allowing the output signal to be tuned by the television on those channels. Also, laser discs used an RF signal for modulating Dolby Digital 5.1 soundtracks on some movies. This requires an RF demodulator (usually referred to as an AC3-RF demodulator) before or in the surround processor to decode the signal.
**RMS**: Root Mean Square or the square root of the arithmetic mean (average) of the square's set of values. A reasonably accurate method of describing an amplifier's power output.

**SACD**: Super Audio CD. Enhanced audio format with up to six channels of high-resolution audio encoded using DSD. Requires an SACD player. Multichannel also requires a controller with six-channel analog or proprietary digital inputs for full playback.

**Sampling Frequency**: How often a digital sample is taken of an analog wave. The more samples taken, the more accurate the recording will be. You need to sample at a minimum of twice the highest frequency you want to capture. For example, the 44.1-kilohertz sampling rate of a CD cannot record sounds higher than 22.05 kilohertz.

**Scener**: A radio report in which the announcer is recorded at the same time and place as the background sound of an event.

**Sensitivity**: A measurement (in dB) of the sound-pressure level over a specified frequency range created by a speaker driven by 1 watt (2.83V at 8 ohms) of power with a microphone placed 1 meter away.

**Signal-to-Noise Ratio**: A comparison of the signal level relative to the noise level. Larger numbers are better.

**Simultaneous Interpretation**: This system allows attendees to hear the meeting in their own language.

**Sound Bite**: A portion of audio of someone speaking.

**Sound field**: The total acoustical characteristics of a space, such as ambience; number, timing, and relative level of reflections; ratio of direct to reflected sound; RT-60 time; etc.

**Soundstage**: The area between two speakers that appears to the listener to be occupied by sonic images. Like a real stage, a soundstage should have width, depth, and height.

**Speaker**: A component that converts electrical energy into acoustical energy.

**SPL**: Sound-Pressure Level. Measured in dB.

**Subwoofer**: A speaker designed to reproduce very low bass frequencies, usually those below about 80 Hz.
**THX**: Certification program for home theater equipment. Uses some proprietary features, but mostly assures a base quality level for a given room size. (See THX Select or Ultra.) Is compatible with any and all soundtrack formats. Stands for either Tom Holman's eXperiment, after the engineer who drafted the original standard, or is named after the company's founder George Lucas' first movie, THX 1138. Nobody agrees on which.

**THX Select**: Certification program for speakers and receivers that assures a base level of quality and performance when played in a room that's between 2,000 and 3,000 cubic feet.

**User-Generated Content (UGC)**: Text, photos, video or audio supplied by the customers of a company.

**Voicer**: A radio report without background audio taken from a scene or otherwise.

**Wrap**: A radio report containing both the reporter and an actuality.

**Lighting**

**AC Voltage**: Short for Alternating Current Voltage.

**Accent Light**: Used to draw extra attention to one section of the subject and add interest and sparkle.

**Alternating Current Voltage**: A voltage that undergoes cyclical changes in value and polarity, often represented as waves.

**Ambient Light**: (Available Light) The surrounding light exclusive of that being directed on a specific subject, usually non-directional.

**American National Standards Institute (ANSI)**: An independent industry-wide association that establishes standards to promote consistency and interchange ability among manufacturers.

**Amp**: Short for Ampere.

**Amperage (A)**: The measure of electrical current in amperes.

**Ampere (A)**: A unit of measurement for Electrical Current.
**Angle of Light:** The angle formed between the light-subject axis and camera-subject axis. Both horizontal (H) and vertical (V) should be specified. Examples: Camera-top light about 0° H, 5° V; rim Light 180° H & V; key light commonly 15° to 45° H and V.

**Anode:** An electrode that is positively charged, i.e. the electrode toward which electrical current moves.

**ANSI:** Abbreviation for American National Standards Institute.

**ANSI Code:** A three-letter system that has been devised to describe lamps of different manufacture but the same application. The letters have no relationship to lamp description, but the same letters always designate the same type of lamp. Some of the application parameters they define are wattage, base type, envelope size and light center length.

**Aperture:** The planar opening within the optical system of a light source that defines the total amount of usable light created by the optical system. A circular ring that attaches to the front of a snoot used in the film and video Industries to alter the size and light center strength.

**Arc:** The light caused by an electrical discharge between two electrodes in a gas such as xenon, argon or air. The first usable arc as a practical light source was developed in 1809 by Sir Humphrey Davy.

**Backdrop:** A vertical surface with painted designs, which is used to form the background for a theatrical setting, usually made of heavy cloth, sometimes drawn tight to achieve a smooth, flat surface, sometimes textured. It may also be used as a cyclorama.

**Back Light:** Used behind the subject and pointing toward the camera for visual separation of subject and background.

**Background Light:** Aimed at the background to create separation between subject and background.

**Balance:** Short for Color Balance.

**Ballast:** An electrical apparatus that limits the electrical current in a particular circuit, usually a circuit containing an arc source.

**Barn Doors:** An apparatus with adjustable flaps, usually 2, 4 or 8, that attaches to the front of a light source. It is used to block or shape the beam.
**Beam**: In Photometry, the circular area of the base of a cone shaped beam where the intensity is at least 50% of the maximum intensity. The maximum intensity is ideally located at the center of the base. It should be noted that some light sources, such as ellipsoidal spotlights and follow spots, can be adjusted or designed so that the light emanating from them does not include the entire beam, i.e. the edge of the beam is greater than 50% of its center.

**Beam Angle**: The angle of the vertex of a cone-shaped beam, where the perimeter of the base is defined by where the intensity is 50% of the maximum intensity.

**Beam Diameter**: The diameter of the base of a cone-shaped beam where the perimeter of the base is defined by where the intensity is 50% of the maximum intensity.

**Boom**: In the film and video industries, an adjustable arm mounted at an angle from a vertical pipe or stand, often counter-balanced, used to hold cameras, lighting or sound equipment.

**Borosilicate Glass**: A type of glass commonly used for lenses and mirrors.

**Breakup**: See Cucalorus.

**Broad Light**: A light unit with a wide beam spread.

**Bulb**: Quite often this term is used interchangeably with Lamp.

**Butterfly**: A large fabric scrim, diffuser, reflector or opaque fabric panel used for dimming, softening, bounce lighting and shading, respectively. A butterfly is usually 4' to 8' square and mounted on a yoke-supported frame.

**Cable**: The insulated wire cords used to interconnect devices. A strong, flexible wire rope made of steel, used to support pipes, battens, trusses, etc., from an overhead structure.

**Cam-lok™**: A commonly used type of insulated, locking, single conductor cable connector manufactured by Crouse-Hinds Inc. The name Cam-lok™ is trademarked.

**Capacitor**: A component designed to have a specific amount of capacitance in an electrical circuit.

**Casters**: Wheels placed on stands, trunnions, road cases or anything that requires easy mobility.
**C-Clamp:** In the film and video industries, a C-shaped device that can be affixed securely to a pipe and locks with the aid of a bolt, which when tightened, presses the clamp like a vise onto the pipe. It also has a stud or studs for the attachment of light sources, grip equipment, etc.

**Celo:** A plastic coated, wire-mesh cucalorus.

**Century Stand (C-Stand):** A grip stand manufactured by Matthews Studio Equipment Corp. The name Century Stand is trademarked.

**China Silk:** A fabric used for linear diffusion material; it spreads the light linearly.

**Chroma:** In the video industry, a measure of color intensity; it describes the saturation of a hue.

**Cine:** Of or relating to the film and video industries.

**Circuit Breaker:** An automatically operated electrical OFF switch designed to protect an electrical circuit from damage caused by overload or short circuit. A circuit breaker can be reset once it switches off and stops electrical flow.

**Color Balance:** An arrangement of hue, chroma and value within a design that produces a sense of equilibrium, i.e., no single colored area commands attention to the detriment of the entire arrangement.

**Color Correction:** Adjusting the color temperatures of various light sources so that they are all the same, or to make them match existing light sources, e.g., sunlight or fluorescent light. This is usually accomplished by utilizing color media (filters), but adjusting the input voltage levels is a method sometimes used for certain light sources.

**Color Frame:** An apparatus used to hold color media or other types of filters. It can be of various shapes and sizes and may be composed of one or more pieces.

**Color Temperature:** A linear scale for measuring the color of ambient light with warm (yellow) light measured in lower numbers and cool (blue) light measured in higher numbers. Measured in terms of “degrees Kelvin,”* daylight is approximately 5600-degrees Kelvin, a candle is approximately 800 degrees, an incandescent lamp is approximately 2800 degrees, a photoflood lamp is 3200 to 3400 degrees, and a midday blue sky approaches
10,000-degrees Kelvin. *Named for engineer and physicist Lord Kelvin (William Thomson), who conceived of the thermodynamic temperature scale, in 1848.

**Color Wheel**: An apparatus holding several different gels that can be rotated by hand or motor such that any one gel can be placed in front of a light source with relative ease.

**Conductor**: Generally, anything that will carry electrical current, but usually refers to an insulated wire.

**Connector**: Specifically, the name for a family of electrical wiring devices, such as plugs and receptacles, composed of one or more contacts; a means for electrically attaching a conductor to each contact; a means for electrically insulating each contact from the other; an overall insulating material around the complete assembly, such that only the contacts are exposed when the connector is properly installed to the item containing the conductors. Any item used to make an electrical connection between two or more separate conductors.

**Contrast Ratio**: Compare two reflected-light readings: The lightest significant area of the subject or scene, versus the darkest. Each medium or method of reproduction has different brightness ratio limits. Projected films about 125:1 (seven stops); Video about 32:1 (five stops). See Lighting Ratio.

**Convection Cooling**: A cooling process whereby air circulation is maintained in order to transfer heat from an object to the atmosphere around it by supplying adequate ventilation or heat sinks without the use of electrical or mechanical items such as fans, blowers, etc.

**Convex**: A term used to describe a lens side that is outwardly and usually spherically curved.

**Cookie (Cooky)**: Short for Cucalorus.

**Cool Light**: Light having a color temperature of approximately 3600°K to 4900°K, i.e., bright-white to blue-white.

**Crank-Up Stand**: A stand that is raised and lowered with the aid of a rotating handle and gear mechanism.

**Crown Glass**: A type of glass that has excellent optical quality, used for lenses and mirrors.
C-Stand: Short for Century Stand.

Cucalorus: An opaque or translucent material having one or more cut outs that will allow light to pass through in order to project a dappled form or pattern, such as the suggestion of the shadows of tree branches, on the subject and background.

Cuke (Cukes): Short for Cucalorus.

Current: Short for Electrical Current.

Cutter: A narrow, rectangular flag, ranging from 18" to 72" in length, and 6" to 24" in width, generally used to block only a portion of the light beam.

Cyc: Short for Cyclorama.

Cyc Light: Short for Cyclorama Light.

Cyclorama (Cyc): A vertical surface, which is used to form the background for a theatrical set that, is usually made of heavy cloth drawn tight to achieve a smooth, flat surface, or left loose and textured. It is meant to suggest limitless visual space. Traditionally, cycloramas were dome shaped or horizontally curved, but may now also be flat or vertically curved, as well.

Cyclorama Light (Cyc Light): A light source mounted at the top or bottom of a cyclorama in order to light it in a smooth, uniform manner.

Daisy Chain: A control signal wiring system employed in the interconnection of a plurality of some electronic items, such that the first item’s output connector is connected to a second item’s input connector via a control cable. A third item is connected to the second in the same manner, and so on until all items have been connected. The control console is connected to the input connector of the first item only, but sends data to all items via the interconnecting control cables. Some items that can sometimes be daisy chained are color scrollers, automated light sources and dimmer racks or packs. See Feed Through.

Daylight: Light that has a color temperature of approximately 5500-5600°K, which has been approximated to be the color temperature of ordinary sunlight at midday under normal atmospheric conditions.

Daylight Filter: A filter used to balance light from a warmer source, so that the spectral distribution will approximate daylight, i.e., 5500-5600°K.
**DC**: Abbreviation for Direct Current.

**DC Voltage**: Short for Direct Current Voltage.

**Dichroic**: A type of metallic coating applied to glass and some other materials that allow certain wavelengths of light, or other electromagnetic radiation, to pass, while reflecting all others.

**Diffuse**: To scatter light using diffusion material. A term used to describe a somewhat dull or stippled surface that is moderately reflective.

**Diffuse Light**: Soft, generally even illumination.

**Diffuser**: Generally, something made of diffusion material that softens the quality of the light passing through it to produce a more flattering light with less noticeable shadows. In the film and video industries, a fabric panel, used for diffusing, with the light source being a light source or sunlight. They are available in a variety of sizes, shapes and materials of varying textures and opacities.

**Diffusion**: Short for Diffusion Material or Diffusion Media.

**Diffusion Frame**: An apparatus used to hold diffusion material. It can be configured of various shapes and sizes, and may be composed of one or more pieces.

**Diffusion Material**: Any reflecting or transmitting media, for which the reflected or transmitted light is distributed uniformly, i.e., scattered over a wide range.

**Diffusion Media**: See Diffusion Material.

**Digital**: A term used to describe the use of binary code to record information that has been reduced to numerical form; usually instructional information in regard to control consoles.

**Digital Multiplex (DMX)**: A system that simultaneously transmits more than one digital signal.

**Dim**: To change the intensity of a light source.

**Dimmer**: An apparatus used to control the intensity of a light source.
**Dimmer Pack**: A portable housing that contains a group of electronic dimmers, usually not less than four nor more than 24. Some dimmer packs are designed for permanent installation.

**Dimmer Panel**: An apparatus, usually 19" long, that contains a group of electronic dimmers that are installed into a dimmer rack.

**Diode**: A solid-state rectifier.

**Direct Current (DC)**: An electrical current that maintains constant direction. Batteries provide DC current.

**Direct Current Voltage**: A voltage that maintains constant polarity.

**Direct Lighting**: Illumination on a subject or area that goes directly from the front of the light source in a straight line to the subject or area.

**Distribution**: Short for Light Distribution.

**DMX**: Abbreviation for Digital Multiplex.

**DMX 512**: A somewhat unique digital multiplex signal with specific characteristics that is commonly used in the stage and studio lighting industries. Control consoles designed to generate this signal were originally designed to control a maximum of 512 apparatuses, usually dimmers, but now can control many more.

**Donut**: A flat metal apparatus with a circular hole in the center used to reduce halation and sharpen the image when using patterns.

**Dot**: A small, round scrim, diffuser, reflector, or gobo, placed close to a light source, used for dimming, softening, bounce lighting or casting shadows, respectively. They are usually 3" to 10" in diameter.

**Double-Ended Lamp**: A somewhat elongated lamp that has a base and contact on each end.

**Duvetyn (Duvatyne, Duvetine, Duvetyne, Duvyteen)**: A smooth, lustrous, velvety opaque fabric used for butterflies, cutters, flags, gobos and overheads in the film and video industries.

**Ears**: The three individual slots that function as the color frame holder found on the front of some light sources. They are often used to retain other items, such as color wheels, barn doors, etc.
**Edison Connector:** The standard household male, parallel-blade plug that may or may not have a ground pin.

**Edison Lamp Holder:** The standard household screw-in lamp socket that accepts medium screw type lamp bases.

**Egg Crate:** A square or rectangular grid that, when installed on large open face light sources, alters the shape and intensity of the light and reduces glare.

**Electrical Current:** The flow of electrons from one point to another, measured in Amperes.

**Electrical Frequency:** The cycles per second of alternating current, measured in Hertz. In North America, and parts of South America and Southeast Asia, the frequency is 60Hz. The rest of the world operates on a frequency of 50Hz.

**Electrical Noise:** A general term for an unwanted electronic disturbance in conductors or electrical or electronic equipment. This equipment can also be the cause of electrical noise.

**Electrical Power:** The rate at which electricity is delivered to a circuit, in watts, or in reference to magnetic transformers, in Volt-Amperes.

**Electronic Ballast:** A ballast uses electronic components to limit electrical current. This type of ballast is often referred to as a flicker-free ballast.

**Ellipsoidal:** Short for Ellipsoidal Spotlight.

**Ellipsoidal Spotlight:** A spotlight that is encased in an ellipse-shaped reflector and framing shutters, and sometimes an iris and pattern slot.

**Eye Light:** A small, intense light source used to front light a subject, usually a person’s face, with hard light.

**Fahrenheit:** A graduated scale used to measure temperature. In the Fahrenheit scale, the freezing point is 32°F and the boiling point is 212°F.

**Falloff:** A term used to describe the illuminated area just outside of the field. (This term may also refer to the illumination in this area.) Light from a point source falls off inversely to the square of the distance. Move the light from 10' away to 20' away, and you have 1/4 of the intensity; 40', 1/16th.
Diffused lights fall off even faster than point sources. See Inverse Square Law.

**fc**: Abbreviation for foot-candle.

**Feed Through**: A wiring system employed in some electrical equipment and light sources in which the line-side leads or flush-mount connector(s) for a first item branch into two circuits internally. One circuit provides the electrical supply to the item itself, and the second circuit exits the unit by means of a set of load-side leads or another flush-mount connector(s). This allows for a second item to be electrically connected to the first. A plurality of items may be connected in this way, usually light sources such as strip lights. See Daisy Chain.

**Female**: A term applied to a connector that contains the holes or slots for receiving the pins, prongs, blades or tabs of a male connector. The female connector should always be attached to the line side of a circuit.

**Field Angle**: The angle of the vertex of a cone-shaped beam where the perimeter of the base is defined by where the intensity is 10% of the maximum intensity.

**Field Diameter**: The diameter of the base of a cone-shaped beam where the perimeter of the base is defined by where the intensity is 10% of the maximum intensity.

**Filament**: The wire inside an incandescent lamp envelope that glows and emits light when heated, i.e., when electricity passes through it.

**Fill**: To create the illumination needed to reduce shadows in an area or on a subject.

**Fill Light**: Angled from the side opposite the key light, this light softens the shadows created by the key and evens out the lighting ratio.

**Filter**: A term that refers to color media, diffusion material, light blocking or neutral density.

**Filter Frame**: See Color Frame.

**Finger**: A small, narrow, rectangular scrim, diffuser, reflector, or gobo, placed close to a light source, used for dimming, softening, bounce lighting, and casting shadows, respectively. Fingers are usually 2" to 6" in length, and 12" to 14" in width.
**FL**: A lamp designation that means “flood.”

**Flag**: (Filter, Gobo) An opaque panel, usually made of fabric, placed in the beam of a light source to block a portion of the beam or the whole beam. It can also hide lights in the dark recesses of a scene. They are usually square or slightly rectangular in shape, ranging from 10" to 48" in length, and 12" to 48" in width. Which term you use depends upon the device’s size and what part of the country you are in.

**Flash**: A tube filled with xenon gas through which an electrical charge of high voltage is passed to create an electrical arc that emits a short, bright flash of light. Flash light is daylight balanced, usually measuring 5500° Kelvin. See Strobe.

**Flat Light**: See Diffuse Light. All light is characterless, texture less and shallow shadowed when the source is close to the camera. Soft light is, by its nature, flatter than hard light, but even a soft source, above or to the subject’s side, is not flat.

**Flicker**: The flashing of some light sources that cannot be visually detected because of the frequency of its output voltage, but can adversely affect the way motion picture film records light.

**Flicker-Free**: A term used to describe electronic ballasts that electronically alter the electrical frequency that causes flicker.

**Flood**: The position of a moveable lamp, lens or pair of lenses on a spotlight that produces the widest field angle. To direct a large amount of light on a relatively large area.

**Flood Light**: A light source consisting of a rectangular lamp and sometimes a single lens, used to direct a large amount of light on a relatively large area.

**Floppy Flag**: A large flag that is designed to fold in half and function as a cutter or smaller flag.

**Fluorescence**: The property of certain materials to absorb radiation of certain wavelengths, usually ultraviolet, and re-emit the radiation as light.

**Fluorescent Lights**: Cool and daylight balanced, fluorescent lights have become very popular for photographic and video capture. Fluorescent
lighting can be used in the form of screw-in bulbs and reflectors, or rectangular banks of lights.

**Foamcore**: A polystyrene, Styrofoam material used as a substrate for some reflector boards, effective because of its light weight and ease of mounting via reflector forks.

**Focus**: To aim and adjust a light source to give the beam its desired size (spot or flood), edge (soft or hard), field (even or peak) and shape (round, patterned or cut).

**Focus Lens**: A movable lens in a multi-lens optical system that adjusts the focus of a light source.

**Follow Spot**: A narrow-beam focusing instrument that is manually operated and is usually composed of a powerful light source, an iris, shutters, a color changer and other features. It is usually operated from an adjustable stand and is used to follow performer(s) on a stage with its beam, surrounding the performer(s) in a large pool of light.

**Foot-candle (fc)**: A non-metric unit of measurement for Illumination, i.e., 1 lumen per square foot.

**Framing Projector**: A spotlight that has framing shutters or barn doors.

**Framing Shutters**: Thin, movable, heat-resistant metal plates that are introduced into a beam such that a portion(s) of the beam is blocked off, i.e., framed; affecting the beam pattern, usually forming a sharp edge in the beam. They are used in various types of light sources, but extensively in ellipsoidal spotlights, usually four (top, bottom, right and left); follow spots, usually two (top and bottom), always situated internally, and usually at the aperture. Framing shutters generally can be independently adjusted, but those used in follow spots usually move simultaneously with a single control mechanism.

**French Flag**: A small metal flag, usually used for shading.

**Fresnel**: Short for Fresnel Spotlight.

**Fresnel Lens**: Named for its inventor, French physicist Augustin J. Fresnel, and developed around 1800 for lighthouses, this is a flat lens consisting of concentric rings on one side that are segments of the spherical portion of a Plano-convex lens. The other side is flat, i.e., Plano. It controls light in the same manner as a Plano-convex lens, which converges light into a beam.
Many light sources employing this type of lens have a stippled pattern on the flat side of the lens to diffuse to smooth out the beam.

**Fresnel Spotlight**: A spotlight employing a single Fresnel lens that produces a soft-edged beam, usually provided with a spherical reflector and a means to adjust the focus from spot to flood.

**F/Stop**: A rating often applied to scrims used in the film and video industries on their ability to dim light. This rating is directly related to a camera’s ability to allow for the admittance of light.

**Full Scrim**: A metal scrim whose screen occupies the complete frame.

**Fuse**: An electrical device designed to stop the flow of electricity automatically when a predetermined over current tries to pass through it. This is meant to prevent further damage or fire from overheating.

**Fused Quartz**: A relatively pure, high-temperature glass used to manufacture lamp envelopes. It has a melting point of approximately 1650° C.

**Gaffer**: The lighting technician who is in charge of the electrical aspects of a set or production.

**Gaffer Grip**: A large, spring-loaded clamp with serrated or rubber-cushioned jaws. It usually has a stud or studs for the attachment of luminaries and grip equipment.

**Gaffer’s Pole**: See Operating Pole.

**Gag**: An apparatus composed of two grip heads attached to each other via a common bolt.

**Gel (Gelatin, Media)**: As used with photographic lights, a strong, flexible, fade-resistant material, used to change the color, amount or quality of light. A colored filter placed in front of a lighting fixture. Color is an important element in adult learning, which can be learned about here: http://inspiration.psav.com/sites/default/files/resources/14/2012_av-tech-adult-learning.pdf

**Gobo**: A logo or image etched out of metal that allows it to be projected onto a screen, wall, banner or other solid surface. Often used for brand reinforcement during events. Video mapping can be used to produce a similar by higher-end effect.
Guide Number: Guide numbers are used as a rating system to gauge the power or range of flash. The guide number equals the distance x f/stop. For example, say your flash has a guide number of 80’. At ISO 100, to determine the proper exposure for a subject 20 feet away, multiply 20 by X number (in this case 4) to get 80 (the guide number). Setting the aperture to f/4 (80 = 20 × 4) will render a proper exposure (at ISO 100).

Hair Light: Light source aimed at a subject’s hair to create separation from the background and add sparkle and highlights.

Halation: The distortion that appears around the edge of a sharply focused beam pattern. This effect can be reduced with the aid of a donut.

Half Scrim: A metal scrim whose screen occupies one half of its frame so that the straight edge of the screen is located across the diameter of the frame. It is used to cut light output.

Halogen: The name for a family of gases, used in lamps, to maintain proper color temperature.

Hard Edge: A beam pattern edge that is very clear and distinguishable, i.e., one without a fuzzy or blurry perimeter.

Hard Light: Illumination that has a hard edge and produces sharply defined shadows. Often this light is very intense, but generally less flattering than soft light. A light source that provides such illumination.

Head: A general term for a Fresnel spotlight. The part of a follow spot that contains the light source, i.e., not the stand, ballast or interconnect cable. The part of a metal halide light source that contains the lamp, i.e., not the ballast or interconnect cable. The part of an ellipsoidal spotlight that contains the reflector, i.e., not the lens barrel or the cap. Short for Grip Head or Ball Head.

Hertz: A unit of measurement for the Frequency of alternating current, i.e., one cycle per second.

Highboy (Hiboy): A heavy-duty stand designed to hold light sources or heavy grip equipment. The stand is equipped with wheels and tall risers, and usually a 1 and 1/8" receiver and a grip head.
**High Key:** A lighting style in which the majority of the scene is highly illuminated, usually enhanced by bright costumes and sets. A low ratio of key plus fill light lowers the contrast, helping to obtain this effect.

**Hollywood Box:** A piece of power distribution equipment used in the film and video industries, composed of a metal housing, a means for connecting an electrical supply and female flush-mount connectors or bus bars that can be electrically connected with bus bar lugs, for the purpose of supplying electricity to light sources. Some are also provided with over current protection.

**Hot Lights:** Common term for continuous light sources, especially tungsten or halogen lights that run hot.

**Hot Restrike:** A term applied to an igniter that can hot-start an arc lamp.

**Hot Spot:** The spot of light with the highest intensity, ideally located at or near the center of a beam that has been focused for a peak field.

**Hot Start:** A term used to describe the ignition of a heated arc lamp, i.e. a lamp that has just been electrified.

**HMI:** Abbreviation for Hydrargyrum (Greek for Mercury) Medium-Arc Lodides. This is a commonly used type of metal halide lamp manufactured by Osram-Sylvania Corp. The term Osram HMI is trademarked.

**Hz:** Abbreviation for Hertz.

**Illumination:** Generally, a term for light or lighting. In photometry, the amount of light, i.e., luminous flux per unit area incident on a surface, in foot-candles or lux.

**Incandescent:** A term used to describe a lamp, or a light source that utilizes such a lamp, that employs the incandescence of a filament as its light source. The filament is housed in a vacuum; enough electricity is passed through the filament that it glows. Such a lamp was first developed by Thomas Edison (United States) and Joseph Swan (Great Britain), independently, in 1879.

**Indirect Lighting:** Illumination that falls on an area or subject by reflection, e.g. bounce lighting.
Infrared (IR): A reference to anything that uses or emits infrared radiation. Electromagnetic radiation having a wavelength longer than visible red light but shorter than microwaves, i.e., approximately 750nm to 1mm.

Inky: A small Fresnel spotlight with a 1.5" to 3" lens diameter, usually 100-250 watts.

Inky Dink: See Inky.

Instant Restart: See Hot Restrike.

Instant Restrike: See Hot Restrike.

Intensity (Light Output): The “strength” of the incident light source, independent of the subject’s reflectivity.

Inverse Square Law: The quantity of light is inversely proportional to the square of its distance, i.e., illumination (fc) = Intensity (cd) / Distance2 (ft2). Say a light is placed 1 foot away from the subject. If the distance is doubled to two feet, the square of its distance is (22) or 2 x 2 = 4. The inverse of 4 is ¼. Therefore, the quantity of light falling on the subject from 2 feet will be ¼ the amount of light falling on the subject from the original 1 foot. If the light is moved to a distance of 8 feet, the square of its distance is (82) or 8 x 8 = 64. The inverse of 64 is 1/64. The quantity of light on the subject from 8 feet will be 1/64 the amount of light that falls on the subject from 1 foot away. Each time you roughly increase the distance incrementally, you open up your aperture two, three, four stops, etc., to compensate for the light falloff.

Iodide: A halogen gas used in lamps to maintain proper color temperature.

IR: Abbreviation for Infrared.

Iris: Short for Iris Diaphragm.

Iris Diaphragm: An arrangement of thin movable heat-resistant metal plates, i.e. leaves, that form an adjustable circular opening. They are usually placed within an ellipsoidal spotlight or follow spot in order to adjust the diameter of the beam, or in some cases, to mechanically dim the beam.

K: Abbreviation for Kelvin. Short for Kilowatt in the theatre, film and video industries.
**Kelvin (K):** In the metric system, a graduated scale used to measure temperature with 0° (−273° C) being the total absence of heat (absolute zero). Each degree is the same magnitude as a degree in the centigrade scale. The Kelvin scale is used to gauge color temperature.

**Key Light (Main Light):** The principle source of light, which establishes the character of the lighting, including atmosphere and mood. It may suggest a source, like the sun, or a window.

**Key Grip:** The supervising grip on a production; the person ultimately responsible for all other grips and grip equipment.

**Kicker:** A sideline, low angle back light that adds a slight edge light to the side of the subject.

**Kilowatt (kW):** 1000 watts.

**Lamp:** Any light source in a self-contained package composed of an envelope (containing gas, filaments, etc.), filament or electrodes, base, contacts, gas and any support structures. The source can be of the incandescent, fluorescent, quartz halogen, LED or arc type. Quite often this term is used interchangeably with light source.

**Lamp Base:** The part of a lamp to which the electrical connections are made; the part with the contacts. It is often the mechanical support or heat sink for the lamp.

**Lavender:** A type of material used for fabric scrims.

**Leads:** The electric cable(s) or sleeved, insulated wires, attached to a light source or piece of power distribution equipment, that terminate in a connector for the purpose of providing an electrical connection to the electrical supply or to another light source.

**LED:** Otherwise known as “Light Emitting Diode.” LED lights give off light and little-to-no heat (making them safer fixtures as well) and are more environmentally friendly than standard lighting fixtures.

**Leko:** A commonly used term for an ellipsoidal spotlight. Named after its inventors Joseph Levy and Edward Kook, the names Leko and Lekolite are trademarked by Strand Lighting Corporation.

**Lens:** A transparent material, usually glass, shaped to bend light rays as they pass through it. Colored lenses can also be used as color media.
Light: Illumination; the aspect of radiant energy of which a human observer is aware through a visual sense. Its electromagnetic radiation has a wavelength longer than ultraviolet radiation but shorter than infrared radiation, i.e., approximately 380mm (violet) to 750mm (red). A term that is often used interchangeably with light source.

Light Distribution: The way in which illumination of any color or quantity is spread over a particular background.

Lighting Ratio: The percentage of key light to fill light. Optimum and maximum lighting ratios depend upon subject matter, mood, media and type of reproduction, as well as personal tastes. In television a timid ratio is 2:1 (twice as much key as fill), a dramatic one, 8:1 (eight times as much key as fill, popular for film-noir look); a maximum one, about 16:1. Also called Brightness Ratio.

Light Meter: An apparatus used to measure various quantities of light such as color temperature, foot-candles, lux, flash, etc.

Light Source: Anything that emits light, such as an arc or a filament, a lamp or light head, bulb or flash.

Light Spill: A general term used to describe any stray light, including light leaks.

Location Fresnel: A Fresnel spotlight used primarily in non-standard production settings such as locations other than stages or studios. Because portability is generally a concern, they tend to be smaller in size when compared to studio Fresnel’s of the same wattage.

Long Throw: A term used to describe a light source that has an effective intensity at a relatively long distance. This term is very subjective and dependent on the type of light source used.

Louver: An opening provided with one or more slanted fixed or movable fins to control the angle of light, like venetian blinds for lighting.

Lowboy (Loboy): A heavy-duty stand designed to hold light sources or heavy grip equipment. The stand is equipped with wheels and short risers, and a 1 and 1/8" receiver and a grip head.

Low Key: A lighting style in which the majority of the scene is scarcely illuminated, usually enhanced by shadows and dark costumes and sets.
high ratio of key light to fill light increases the contrast, helping to obtain this effect.

**Lumen(s):** A unit of measurement for Luminous Flux, a measure of the total "amount" of visible light emitted by a source. A measure of brightness most commonly used when referring to video projectors. Brighter projectors are required for larger screens or in rooms with natural light.

**Luminous Flux:** The rate of flow of light energy evaluated, in Lumens, with reference to visual sensation; the part of the total energy radiated per unit time from a luminous source that is capable of producing the sensation of sight.

**Lux:** A metric unit of measurement for Illumination, e.g. 1 lumen per square meter.

**M:** Main Light. See Key Light.

**Magnetic:** A term used to describe an apparatus that utilizes a magnetic field to function.

**Magnetic Ballast:** A ballast that uses a magnetic field to limit electrical current. These types of ballasts generally do not prevent flicker.

**Magnetic Transformer:** A transformer that uses a magnetic field to convert voltage from one value to another. Simple common magnetic transformers consist of two wire coils wrapped around an iron core, each winding having its own pair of leads, one pair for the application of an input voltage, and the other pair for the output voltage.

**Male:** A term applied to a connector that contains the pins, prongs, blades, or tabs for insertion into the holes or slots of a female connector. The male connector should never be attached to the line side of a circuit.

**Mercury Vapour Lamp:** An arc lamp whose gas is primarily mercury vapour.

**Metal Halide Lamp:** An arc lamp that uses mercury vapour combined with metal halides, that when heated, radiates light with a color temperature of approximately 5500°K.

**MFL:** A lamp designation that means medium flood.
**Modeling Light**: A continuous burning light in the center of a flash unit used to preview the location of the illumination and shadows from the flash burst.

**Mogul Base**: A lamp base that falls in the larger range of sizes for the type of base in question, i.e., approximately 1 and 1/2" diameter for screw and pre-focus type bases, approximately 1 and 1/2" post-to-post distance for bi-post bases and approximately 1 and 1/6" prong-to-prong distance for end prong and extended end prong bases.

**Muslin**: A material used for fabric scrims used in the theatre, film and video industries. Also used in the manufacturing of backgrounds.

**MR Lamp**: Originally, this designation meant a lamp with a small, integral, multi-faceted reflector, but has since come to designate a lamp with a small, integral, mirrored reflector. The reflector could be parabolic or ellipsoidal.

**Mylar**: A type of plastic that can withstand fairly high temperatures and is used in the manufacture color media.

**N**: Nanometer (nm). A unit of measurement commonly used for wavelengths of light, equal to 1/1,000,000,000 meters.

**Neutral Density Filter**: A filter that reduces the intensity of light without affecting its color.

**NFL**: A lamp designation that means narrow flood.

**Noise**: Short for Electrical Noise.

**Non-Dim**: A term used to describe a circuit that does not pass through a dimmer. A term used to describe a load that is not intended to be connected to a dimmer.

**NSP**: A lamp designation that means narrow spot.

**O**: Open Face. A term used to describe the light sources that use no lenses.

**Operating Pole**: A long, lightweight rod with a handle on one end and an attachment on the other for the purpose of adjusting or switching on pole-operated yokes, light sources, pantographs, etc.

**Overhead**: A large scrim, diffuser, reflector, or opaque fabric panel, used for dimming, softening, bounce lighting and shading, respectively, with the
light source being a lamp or sunlight. They are usually 12' to 40' square and mounted on stand-supported frames.

**PAR**: An abridged version of Par Lamp, Par Can or Par Light.

**Parabolic Reflector**: A reflector designed to align light rays generally parallel to the axis formed by the point source and the center of the reflector, eventually resulting in a cylindrical-to-wide beam. The reflector has the shape of a parabola.

**PAR Can**: A generally lightweight light source that uses a PAR lamp, or in some cases, ray light reflector kit. The light beam characteristics depend on the type of lamp used.

**PAR Lamp**: A designation for a lamp with a parabolic aluminized reflector.

**PAR Light**: A generally lightweight light source that utilizes a PAR lamp. The beam characteristics depend on the type of PAR lamp used.

**Pattern**: A very thin, heat-resistant metal plate with a pattern cut out of its surface. When placed into the aperture of an ellipsoidal spotlight or follow spot via the pattern slot, an illuminated representation of the design is projected as the light shines through the cutouts.

**Pattern Holder**: A metal frame with a knob used to place patterns into the pattern slot of a light source.

**Pattern Rotator**: A motorized pattern holder that spins the pattern.

**Photometric**: A term used to describe anything that involves the measurement of light.

**Photometric Data**: Measurements of light and its properties.

**Photo-metrics**: Short for Photometric Data.

**Photometry**: The science of measuring light and its properties.

**Pigeon**: A small metal plate with nail holes and a 5/8” stud attached.

**Pigtail**: The relatively short electric cable, power cord, or leads on a light source or piece of power distribution equipment that may or may not have a connector installed.
**Pigtail Connector:** A connector that is installed on a pigtail.

**Pin Spot:** A spotlight that has an extremely narrow beam.

**Pipe Clamp:** A “C” shaped clamp with jaws that attaches onto a pipe and locks with the aid of a bolt, that when tightened, bites into the pipe and locks the clamp in place. It also has a secondary bolt for the attachment of light sources, distribution equipment, etc.

**Plano:** A term used to describe a lens side that is perfectly flat.

**Plano-Convex Lens:** A lens that is flat on one side and convex on the other. These lenses focus light rays passing through them into a beam.

**Polarizing Filters:** Polarizing camera filters can be set to reduce most glare, as well as darken blue skies. Best camera angle: 90° to the source light. Light loss: approximately two stops.

**Pole Cat:** In the film and video industries, a spring loaded, adjustable cross bar that when placed between a pair of walls or structures, allows for the attachment of lightweight light sources or grip equipment.

**Pole-Op:** Short for Pole-Operated.

**Pole-Operated:** A term used to describe a light source, yoke, pantograph, or other apparatus that can be controlled via an operating pole.

**Pot:** Short for Potentiometer.

**Potentiometer (Pot):** An electrical component that has the ability to vary the resistance in an electrical circuit. It always has a means for adjustment, such as a knob or handle, to make your light source brighter or dimmer.

**Pyrex™:** A type of borosilicate glass that can withstand very high temperatures, used for lenses and mirrors. Manufactured by Corning Glass Co., the name Pyrex™ is trademarked.

**Quartz:** Short for Fused Quartz.

**Quartz-Halogen:** See Tungsten-Halogen.

**Quartz-Iodine:** A term used to describe a family of tungsten-halogen lamps that use the halogen gas iodine and an envelope made of quartz in their manufacture.
**Reflector:** Generally, anything that causes reflection. A metal or glass apparatus, usually curved in some manner, used in most light sources for the purpose of directing light rays from a light source. In the film and video industries, a metallic or reflective fabric panel, used for bounce lighting, or simply to redirect light, with the light source being a light source or sunlight. They are available in a variety of sizes and shapes and materials of varying reflectance.

**Reflector Board:** A reflector for the film and video industries made out of a solid, lightweight, metallic coated material. One side is usually mirror-like for hard light reflection, and the other side is diffused for bounce lighting.

**Refraction:** The bending of electromagnetic radiation, such as light or heat, as it passes obliquely from one medium to another of different density.

**Reporter Light:** A compact, lightweight, handheld floodlight often used in conjunction with video cameras and often powered by batteries for portability.

**Rim Light:** Back light that usually refers to illuminating objects. A light source that provides such illumination.

**Rocky Mountain Leg:** A height adjustable leg on a stand, usually a grip stand.

**Safety Cable:** A steel cable that has a clip on one end and a loop on the other. It is intended to be threaded through a piece of hanging equipment and around a support structure, such as a batten or truss, and then clipped to its loop. It then acts as a safety support should the primary support, such as a pipe clamp or hanging arm, fail.

**Safety Screen:** A metal wire screen, placed at the front of an open-face light source, designed to retain large pieces of broken glass should the lamp break.

**Sail:** The total surface area of an overhead, butterfly, scrim, flag or cutter.

**Saturation:** The aspect of color that determines the difference from white at a constant hue, i.e., the property of any color that distinguishes it from a gray of the same brightness. High saturation is one with little or no white light added to the color, like deep red. Low saturation is one with a large amount of white light added to the color, such as light pink.
**Scoop**: Named for its scoop-like shape, an open face flood light with a large, diffuse reflector that is essentially the body of the light source. The reflector is parabolic, spherical, or ellipsoidal and is generally made from unpainted aluminum.

**Screw Base**: A threaded, cylindrical shaped lamp base with a single contact on the bottom. The threaded part of the base holds the lamp into its socket and acts as the second contact.

**Scrim**: In the theatre industry, a thin, gauze-like curtain. When illuminated from the front, it appears opaque, and when illumination is present behind it but not on it, the scrim becomes almost transparent. It can also appear translucent when there is some illumination directly on it, and some illumination present behind it, in the proper proportions. In the film and video industries, a fabric panel, used for dimming, with the light source being a lamp head or sunlight. They are available in variety of sizes and shapes and materials of varying density. In the film and video industries, a round, framed metal screen, available in various densities, placed on the front of a light source to act as a dimmer. They are also available so that only half of the frame is screened, therefore allowing for only a portion of the light to be dimmed. For us, a metal screen used in front of a light to reduce intensity without diffusion.

**Scrim Set**: A set of metal scrims comprising a full double density, half double density, full single density and half single density.

**Sealed Beam Lamp**: A lamp with an integral light source, reflector and lens, all of which are either sealed within, or are a part of the envelope.

**Shutter Blade**: A single framing shutter.

**Shutters**: Short for Framing Shutters. A rectangular, metal apparatus that resembles a Venetian blind in form and function, generally used as a mechanical dimmer or blackout mechanism on large spotlights.

**Side Light**: Illumination of a subject from the side to place the subject in depth. A light source that provides such illumination.

**Silk**: Specifically, a fabric used for linear diffusion material; it spreads the light linearly. It can be made from natural China silk or nylon. Generally, a scrim used in the film and video industries that is made from silk.

**Single Ended Lamp**: A lamp that has only one base and all of its contacts on the base.
**Snoot**: A cone-shaped accessory that mounts on the light to confine the beam to a very small spot.

**Soft Edge**: A beam pattern edge that is not very clear and distinguishable, i.e. one with a fuzzy or blurry perimeter.

**Soft Light**: Illumination that produces shadows with a soft edge. A light source that provides such illumination.

**Solid**: An opaque panel, usually made of fabric, placed into the beam of a light source to block a portion or the entire beam.

**SP**: A lamp designation that means spot.

**Specular**: A term used to describe a surface that is highly reflective or mirror-like; the kind of hard light from a small, pinpoint light source.

**Specular Light**: See Hard Light, definition #1.

**Spot**: Short for Spot Light. The position of a focusable lamp, lens or pair of lenses on a spotlight that produces the most narrow field angle. To mark a location on which a light source will be focused. A term used to describe a round light pattern.

**Spot Light**: Generally, any of several types of light sources capable of emitting a beam pattern that is round, or in some instances, oval in shape, but more specifically this term refers to Fresnel spotlights, ellipsoidal spotlights and follow spots.

**Spun Glass**: A diffusion material made from glass fibers. Stand Adapter An apparatus used for mounting any one of a number of devices to a stand.

**Strip Light**: A multi-lamp light source with its lamps mounted in a straight row.

**Strobe**: Short for strobe light. See Flash.

**Strobe Light**: (Flash) A tube filled with xenon gas through which an electrical charge of high voltage is passed to create an electrical arc that emits a short, bright flash of light. Flash light is daylight balanced, usually measuring 5500° Kelvin. See Flash.
**Stud**: A metal protrusion, generally 3/8", 1/2", 5/8" or 1 1/8" in diameter. It is used to mount light sources and assorted grip equipment to a receiver such as a light stand. Studs also have wide, circular grooves designed to captivate the tip of the tee-handle or bolt provided with the receiver. This prevents the receiver-stud combination from unintentionally uncoupling, and can also prevent the stud from rotating once it’s seated. Any threaded metal protrusion used to mount light sources and assorted grip equipment via a nut or threaded socket.

**Studio Fresnel**: A Fresnel spotlight used primarily in studios for the film and video industries. Because portability is generally not a concern, these tend to be larger than location Fresnel’s of the same wattage.

**Three-Point Lighting**: The standard lighting system of key, fill and back lighting from which all other lighting setups evolve.

**Transformer (Xformer)**: An item that converts voltage from one value to another. There are two basic types, electronic and magnetic, and both come in many configurations.

**Translucent**: A term used to describe something that transmits light, but scatters light rays so that a clear image cannot be seen through the material.

**Transparent**: A term used to describe something that transmits light without scattering light rays, so that a clear image can be seen through the material.

**Tungsten**: An element used to manufacture lamp filaments. It has a melting point of approximately 3400°.

**Tungsten-Halogen**: A term used to describe a family of lamps that use the halogen gas iodine, an envelope made of quartz, and a filament made of tungsten, in their manufacture.

**Tweenie**: A 300-650 watt Fresnel spotlight.

**Twofer**: A special power cord that has one male connector electrically connected to two female connectors via two separate cables or sets of sleeved wires.

**Two-Pin Base**: A lamp base with two narrow, parallel pin shaped contacts protruding from the bottom.
**Ultraviolet (UV):** A reference to anything that uses or emits ultraviolet radiation. Electromagnetic radiation having a wavelength longer than x-rays but shorter than violet light, approximately 40nm to 380nm.

**Ultraviolet Light (UV Light):** Although not actually light, this is a commonly used term for Ultraviolet Radiation.

**Ultraviolet Radiation (UV Radiation):** Invisible electromagnetic energy, of which the longer wavelengths are used to excite fluorescent materials. The wavelengths below 320nm are potentially harmful to human tissue.

**Umbrella:** An umbrella made from reflective fabric used for bounce lighting. Some translucent umbrellas with removable black covers are able to pass light through and diffuse it.

**Unit:** A term that is often used interchangeably with light source.

**UV:** Short for Ultraviolet.

**Volt (V):** A unit of measurement for voltage.

**Voltage (V):** The measure of voltage potential, in volts.

**Warm Color:** Generally, a color that is in the yellow-orange-red range.

**Warm Light:** Light having a color temperature of approximately 2600°K-3400°K, or yellow-white to red-white.

**Wash:** An even overall illumination covering a large area.

**Wash Light:** A light source used to produce a wash.

**Watt (W):** A unit of measurement for heat or electrical power.

**Wavelength:** The distance, measured in the direction of propagation, of a repetitive electromagnetic wave between two successive points.

**Xenon:** A gas used in some arc lamps that allows for a point source with extremely high luminous intensity and a color temperature of approximately 5500-6200°K.

**Y Cable:** See Twofer.
**Zoom**: Short for zoom focus. Some ellipsoidal spotlights and many follow spots have a zoom-focus system.

**Zoom Focus**: A term used to describe an optical system whereby the lenses in a light source adjust so that a beam pattern with a hard edge can be attained at various sizes at various distances without sacrificing beam lumens.

**Video**

**Anamorphic**: Process that horizontally condenses (squeezes) a 16:9 image into a 4:3 space, preserving 25 percent more vertical resolution than letterboxing into the 4:3 space. For the signal to appear with correct geometry, the display must either horizontally expand or vertically squish the image. Used on about two or three promotional laser discs and many DVDs. Also called Enhanced for Widescreen or Enhanced for 16:9.

**Aspect Ratio**: The ratio of image width to image height. Common motion-picture ratios are 1.85:1 and 2.35:1. Television screens are usually 1.33:1 (also known as 4:3), which is similar to the Academy standard for films in the '50s. HDTV is 1.78:1, or 16:9. When widescreen movies (films with aspect ratios wider than 1.33:1) are displayed on 1.33:1 televisions, the image must be letterboxed, anamorphically squeezed, or panned-and-scanned to fit the screen.

**ATSC**: Advanced Television Systems Committee. Government-directed committee that developed our digital television transmission system.

**Attenuate**: To turn down, reduce, decrease the level of; the opposite of boost

**Black Level**: Light level of the darker portions of a video image. A black level control sets the light level of the darkest portion of the video signal to match that of the display's black level capability. Black is, of course, the absence of light. Many displays, however, have as much difficulty shutting off the light in the black portions of an image as they do creating light in the brighter portions. CRT-based displays usually have better black levels than DLP, plasma, and LCD, which rank, generally, in that order.

**Brightness**: For video, the overall light level of the entire image. A brightness control makes an image brighter; however, when it is combined with a contrast, or white level control, the brightness control is best used to define the black level of the image (see Black Level). For audio, something referred to as bright has too much treble or high frequency sound.
B-roll: Supplementary video of scenes and interviews used to complement the primary video.

Cathode Ray Tube: (CRT) Analog display device that generates an image on a layer of phosphors that are driven by an electron gun.

Chrominance: (C) The color portion of a video signal.

Coaxial: 1) A speaker typically with one driver in the middle of, and on the same axis as, another driver. 2) An audio or video cable with a single center pin that acts as the hot lead and an outer shield that acts as a ground.

Codec: Mathematical algorithms used to compress large data signals into small spaces with minimal perceived loss of information

Component Video: A signal that's recorded or transmitted in its separate components. Typically refers to Y/Pb/Pr, which consists of three 75-ohm channels: one for luminance information, and two for color. Compared with an S-video signal, a Y/Pb/Pr signal carries more color detail. HDTV, DVD, and DBS are component video sources, though most DBS material is transcoded to component from composite signals.

Composite Video: A signal that contains both chrominance and luminance on the same 75-ohm cable. Used in nearly all consumer video devices. Chrominance is carried in a 3.58-mHz sideband and filtered out by the TV's notch or comb filter. Poor filtering can result in dot crawl, hanging dots, or other image artifacts.

Contrast: Relative difference between the brightest and darkeST parts of an image. A contrast control adjusts the peak white level of a display device

DBS: Direct Broadcast Satellite. Term that replaced DSS to describe small-dish, digital satellite systems such as DirecTV and Network

Digital Theater Systems: See DTS

D-ILA: Direct Drive Image Light Amplifier. This Hughes/JVC technology uses a reflective LCD to create an image. A light source is then reflected off the reflective LCD and is directed through a lens to a screen

Direct-View Television: Display whose image is created on the surface from which it is viewed.
**DLP**: Digital Light Processing. A Texas Instruments process of projecting video images using a light source reflecting off of an array of tens of thousands of microscopic mirrors. Each mirror represents a pixel and reflects light toward the lens for white and away from it for black, modulating in between for various shades of gray. Three-chip versions use separate arrays for the red, green, and blue colors. Single-chip arrays use a color-filter wheel that alternates each filter color in front of the mirror array at appropriate intervals.

**DMD**: Digital Micromirror Device. Texas Instruments engine that powers DLP projectors. Uses an array with tens of thousands of microscopic mirrors that reflect a light source toward or away from the lens, creating an image. Each mirror represents a pixel.

**Dot Crawl**: An artifact of composite video signals that appears as a moving, zipper-like, vertical border between colors.

**DTV**: Digital Television. Umbrella term used for the ATSC system that will eventually replace our NTSC system in 2006. HDTV is a subset of the DTV system. While the FCC does not recognize specific scan rates in the adopted DTV system, typically accepted rates include 480i, 480p, 720p, and 1080i.

**D-VHS**: Digital VHS. Digital signals recorded onto magnetic tape. Greater capacity than typical VHS; can record compressed HDTV signals. See D-Theater.

**DVD**: Officially known as the Digital Video Disc, though marketers unofficially refer to it as the Digital Versatile Disc. DVD uses a 5-inch disc with anywhere from 4.5 Gb (single layer, single-sided) to 17 Gb storage capacity (double-layer, double sided). It uses MPEG2 compression to encode 720:480p resolution, full-motion video and Dolby Digital to encode 5.1 channels of discrete audio. The disc can also contain PCM, DTS, and MPEG audio soundtracks and numerous other features. An audio-only version, DVD-A uses MLP to encode six channels of 24-bit/96-kHz audio.

**DVD-A**: Digital Versatile Disc-Audio. Enhanced audio format with up to six channels of high-resolution, 24-bit/96-kHz audio encoded onto a DVD, usually using MLP lossless encoding. Requires a DVD-A player and a controller with 6-channel inputs (or a proprietary digital link) for full compatibility.

**DVD-R**: A recordable DVD format similar to CD-R in that it is a write-once medium. Backed by Pioneer, Panasonic, Toshiba, and others.
**DVD-RW**: A recordable DVD format similar to CD-RW in that it is re-recordable medium. Backed by Pioneer, Panasonic, Toshiba, and others.

**DVD+R**: A recordable DVD format similar to CD-R in that it is a write-once medium. Backed by Sony, Philips, Yamaha, HP, and others.

**DVD+RW**: A recordable DVD format similar to CD-RW in that it is re-recordable medium. Backed by Sony, Philips, Yamaha, HP, and others.

**DVD-RAM**: A recordable DVD format similar to DVD-RW in that it is a re-writeable format. Unlike DVD-RW it is capable of being written to and erased over 100,000 times. Backed by Hitachi, Panasonic, Toshiba, and others.

**DVI**: Digital Visual Interface. Connection standard developed by Intel for connecting computers to digital monitors such as flat panels and DLP projectors. A consumer electronics version, not necessarily compatible with the PC version, is used as a connection standard for HDTV tuners and displays. Transmits an uncompressed digital signal to the display. The latter version uses HDCP copy protection to prevent unauthorized copying. See also HDMI.

**Dynamic Range**: The difference between the lowest and the highest levels; in audio, it's often expressed in decibels. In video, it's listed as the contrast ratio.

**Fade**: A gradual increase in video, i.e. a fade-in, or a gradual decrease in video, i.e. a fadeout.

**Fast File**: A video segment with entry and exit points but that is not interrupted by edited-in video clips.

**Fiber Optic Cable**: Glass, plastic, or hybrid fiber cable that transmits digital signals as light pulses.

**First Person**: A video told from the primary subject’s perspective. First-person videos most often include the word “I.”

**Front Screen Projection**: This option allows an image to be projected onto a screen or sail from the front of the room. The unit itself is placed within or behind the audience.

**Gray Scale**: The ability for a video display to reproduce a neutral image color with a given input at various levels of intensity.
**Hanging Dots:** An artifact of composite video signals that appears as a stationary, zipper-like, horizontal border between colors.

**(HD, High-Def) High-Definition:** An image that has a higher resolution and is clearer than other formats. It is widely accepted that 720p is the “bottom-end” on HD.

**HDCP:** High-Bandwidth Digital Content Protection. Created by Intel, HDCP is used with HDTV signals over DVI and HDMI connections and on D-Theater D-VHS recordings to prevent unauthorized duplication of copyright material.

**HDR:** Hard-Drive Recorder. Device that uses a computer hard drive to store compressed digital audio and video signals.

**HDMI:** HDTV connection format using a DVI interface that transfers uncompressed digital video with HDCP copy protection and multichannel audio.

**HDTV:** High-Definition Television. The high-resolution subset of our DTV system. The FCC has no official definition for HDTV. The ATSC defines HDTV as a 16:9 image with twice the horizontal and vertical resolution of our existing system, accompanied by 5.1 channels of Dolby Digital audio. The CEA defines HDTV as an image with 720 progressive or 1080 interlaced active (top to bottom) scan lines. 1280:720p and 1920:1080i are typically accepted as high-definition scan rates.

**High Gain Screen:** Material that reflects more light than a reference material. Increases a projector's light output at the expense of uniformity.

**IEEE 1394:** Networking standard for PCs. Combined with 5C copy protection, is used as a two-way connection to transfer the MPEG-compressed digital bitstreams between consumer electronics items, including HDTV tuners and displays, D-VHS recorders, DVD players, and DBS receivers. Also called FireWire, iLink.

**In Sync:** When the picture and sound are synchronized perfectly.

**Incue/Inq/In-Point:** These words all refer to the initial few seconds of audio signifying the beginning of the production.

**Interlace:** Process of alternating scan lines to create a complete image. In CRT displays, every second field/frame is scanned between the first field/frame. The first field represents the odd lines; the second field represents the even lines. The fields are aligned and timed so that, with a still image, the human eye blurs the two fields together and sees them as
one. Interlace scanning allows only half the lines to be transmitted and presented at any given moment. A 1080i HD signal transmits and displays only 540 lines per 60th of a second. 480i NTSC transmits and displays only 240 lines per 60th of a second. Motion in the image can make the fields noticeable. Interlaced images have motion artifacts when two fields don't match to create the complete frame, often most noticeable in film-based material.

**Keystone:** A form of video image distortion in which the top of the picture is wider than the bottom, or the left is taller than the right, or vice versa. The image is shaped like a trapezoid rather than a rectangle.

**Laser Disc:** Now-defunct 12-inch disc format with excellent analog, FM-recorded video image, and either analog or CD-quality PCM-encoded audio. Later discs used one of the analog channels to record an RF-modulated Dolby Digital/AC3 soundtrack and/or used the PCM tracks to encoded a DTS soundtrack.

**LCD:** Liquid Crystal Display. A display that consists of two polarizing transparent panels and a liquid crystal surface sandwiched in between. Voltage is applied to certain areas, causing the crystal to turn dark. A light source behind the panel transmits through transparent crystals and is mostly blocked by dark crystals.

**LCOS:** Liquid Crystal on Silicon.

**Letterbox:** Format used widely on laser disc and many DVDs to fit wide-aspect-ratio movies (1.85:1 and 2.35:1, for example) into a smaller frame, such as the 1.78:1 area of an anamorphic DVD or the 1.33:1 area of a laser disc or video tape. The image is shrunk to fit the screen, leaving blank space on the top and bottom. This process sacrifices some vertical detail that must be used to record the black bars.

**Live Shot:** Video broadcasted in real-time.

**Live Special Report (LSR):** A news story broadcast in real-time covering breaking news or a special event.

**Luminance:** The black and white (Y) portion of a composite, Y/C, or Y/Pb/Pr video signal. The luminance channel carries the detail of a video signal. The color channel is laid on top of the luminance signal when creating a picture. Having a separate luminance channel ensures compatibility with black-and-white televisions.

**Man on the Street (MOS):** Clips of randomly selected people speaking.
The name originates from the practice of news crews interviewing people on street sidewalks.

**Matte White:** Projection vinyl with a smooth white surface.

**Negative Gain Screen:** Material that reflects less light than a reference material. Often used for DLP and LCD projection systems.

**Nonlinear Editing:** Digital video systems that allow for clips to be extracted without affecting the master recording.

**NTSC:** National Television Standards Committee. Government-directed committee that established the U.S. color TV standard in 1953. Also known, sarcastically, as Never Twice the Same Color or Never The Same Color due to the inherent difficulty in achieving proper color calibration.

**Outcue/Outq/Out-Point:** These words all refer to the final few seconds of audio signifying the conclusion of the production.

**Package:** A completed and fully edited video piece.

**Phase:** Time relationship between signals; it's all relative.

**PIP:** Picture-in-picture.

**Pixel:** Contraction of picture element. The smallest element of data in a video image.

**Plasma:** Flat-panel display technology that ignites small pockets of gas to light phosphors.

**Progressive Scanning:** Each frame of a video image is scanned complete, from top to bottom, not interlaced. For example, 480p means that each image frame is made of 480 horizontal lines drawn vertically. Computer images are all progressively scanned. Requires more bandwidth (twice as much vertical information) and a faster horizontal scan frequency than interlaced images of the same resolution.

**Projection System:** Display that projects image onto a screen.

**Raw Edit/Rough Cut:** Video edited together without a voiceover, on-camera announcer or text so that separate narration or audio can be added.

**Rear Screen Projection:** A process of projection where an image is projected on the back surface of a screen placed between the audience and
the projector. This allows for a very clean front-of-the-house look in your meeting room because all production equipment is in the back-of-the-house, behind the screen.

**RGB:** Red, Green, Blue. Can refer to an unprocessed video signal or the color points of a display device. Together these three colors make up every color seen on a display device.

**RPTV:** Rear-Projection Television.

**Scan Lines:** The lines drawn by an electron gun in a CRT system to make up the picture. Drawn horizontally, from left to right, starting at the top left and working to the bottom right.

**SDTV:** Standard Definition Television. Lower-resolution subset of the ATSC's DTV system. 480i is typically accepted as an SD signal. Digital broadcasters can offer multiple sub-programs at SDTV quality, as opposed to one or two HD programs. Digital satellite and digital cable often refer to the majority of their programs as SDTV, somewhat erroneously, as neither system has anything to do with DTV, though both, technically, consist of a digital 480i signal.

**Sigout:** The final words of a segment used to signify the production’s conclusion.

**Source:** A component from which the system's signals originate. DVD player, AM/FM tuners, and VCRs are sources: 2 Pull-down Recognition or 3:2 Inverse Telecine: Film is usually recorded at 24 frames per second. NTSC video (North America) is 30 frames (60 fields) per second. In order to get smooth motion, the film frames are broken into video fields in a 3-2-3 sequence. 3 fields for the first film frame, 2 fields for the second film frame, and so on. If a line doubler doesn't compensate for the extra field during playback on a progressive-scan display, the image will have noticeable motion artifacts. A line doubler with 3:2 pull-down recognition or 3:2 inverse telecine can see this sequence in the signal and correct for it by making sure the last field in the first frame isn't mixed with the first field of the second frame.

**Standup:** The portion of video in which the reporter directly speaks into the camera. If a standup concludes a package, it contains a sigout. If other video precedes and follows a standup, the segment is referred to as a bridge.

**Uniformity:** Even distribution across a given space. In video, uniformity can refer to the distribution of light (hot spotting) or color.
**Unity Gain**: Output that equals the input. Unity gain screen material reflects as much light as the reference material. Has an even dispersion of light.

**User-Generated Content (UGC)**: Text, photos, video or audio supplied by the customers of a company.

**Video Mapping**: A technology to “paint” multiple video sources onto a stage or building where the image can be tightly trimmed around stage or building elements without necessarily needing multiple video projectors. Used to animate a stage set, change the entire mood of an event in real-time and provide an added wow factor.

**Voice-over (VO)**: Verbal audio played over video.

**Wall-to-Wall Coverage**: A continuous broadcast report of a single story with few to no interruptions, usually reserved for particularly significant stories.

**Y/C**: Abbreviation for luminance/ chrominance, aka S-video signal. Color and detail signals are kept separate, thus preventing composite video artifacts. Cable uses four-pin connector. Used with S-VHS VCRs, DVD players, Hi-8, and DBS receivers.

**Stage Design**

**Lectern**: A stand with a slanted top, used to hold a book, speech, manuscript, etc… at the proper height for a reader or speaker. Sometimes referred to as a podium.

**Masking**: The draping around a screen to create a specific projected image; therefore providing a very pleasing/clean look to your stage design.

**Rigging**: This term is utilized to describe any foundation or system that is used for support, move or fly scenery, lighting fixtures, drapery and other masking devices.

**Riser**: These are utilized namely for staging and creating platforms. They have a number of heights and can be stacked to elevate things further. You may hear risers referred to when a head table is needed or a speaker is giving an address to a large crowd so they can see and be seen in the entire room.

**Turnaround/Turnover**: When a crew has to reset or teardown a room for another event.

**Valance**: A drape that is hung above a screen, doorway or soffit.
Wide Screen: Basically what the name describes ... a large display screen that can be made up of either one large image or several smaller images.

Wings: The draping on either side of the screen.

**Event Theming**

Fogger: A device that creates a “fog” effect on stage or throughout a room. This electronic unit will create clouds of artificial non-toxic fog. Some fog can offer a variety of different colors or smells.

Pre-Con: Otherwise known as a pre-convention meeting. This is a gathering of all parties involved in the successful planning of the event and includes meeting planners, different vendors and venue representatives.

**Production Equipment**

Audience Response System: A tool that allows the audience to interact with the discussion and gives feedback instantly to the speaker and participants.

CAT-5: A cable used in connecting Ethernet networks. It is otherwise known as a “patch cable” in the audiovisual community.

Ethernet: A networking system. You may hear reference to a network connection as an Ethernet connection.

Flash Drive: A USB-driven storage device that can be easily removed and carried with an individual. They are sometimes referred to as a thumb drive, memory stick, jump drive, etc.

Hard Drive: A computer device that allows for the storage of data inside your computer. It is usually described by size, such as 60 GB.

Hardware: Another computer term. This one references any physical piece of computer. In other words, memory, monitor, printer, video card, etc. — basically anything computer-related that isn’t software.

House Board: A panel that all electrical fixtures are operated or switched.

Hub: When connecting multiple computers with NIC cards, this device allows them to be networked together using one connection.
**IP Address:** An **Internet Protocol address (IP address)** is a numerical label assigned to each device (e.g., computer, printer, etc.) participating in a computer network that uses the Internet Protocol for communication. An IP address serves two principal functions: host or network interface identification and location addressing.

**ISP:** Abbreviation of Internet Service Provider. An ISP is a company that provides Internet access. Service can be either nationwide or through an internal convention center communications specialist.

**Memory (RAM):** This is the area of your computer that all of your programs run from. If you have more RAM, you can obviously run more programs at the same time.

**Modem:** An internal or external modem transfers digital information from the computer to analog signals so that they can be transmitted over phone lines. In addition, it converts the analog signals back into digital information to your computer.

**Patch:** A connection which is plugged in between two lines.

**Server:** A CPU utilized to store and supply data to many users at the same time. Normally, these computers have a fast processor with a large amount of memory.

**Software:** The programs that run on a computer. A few examples are Microsoft Word and PowerPoint.

**Webcasting:** When you are looking to stream live or archived video, graphics and PowerPoint presentations over the Internet, a Webcast is requested.

**Workstation:** This term is usually utilized in reference to where a computer is connected to a network. At the same time, it can also be used to describe a standalone computer.

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**Digital Services**

**Internet bandwidth:** The measurement of the amount of concurrent activity that can happen on a property’s Internet connection. More bandwidth allows more people to be doing more things online at once.

**Native (vs. web) mobile app:** A native mobile app is installed on a mobile device usually via an app store and buffers content so is useful when the device is online and offline. Contrast to a web mobile app, which is a mobile
optimized website that requires Internet connectivity at all times to function.

**Hybrid (vs. virtual) event:** A hybrid event has both a live local audience and a remote audience. Presentation of content should be a compromise between what looks great in the room and what works for the remote viewer. Contrast to a virtual event that has no live local audience where content can be completely optimized for the remote audience.

**Live Polling (vs. Surveys):** Live polling is asking the audience a question they respond to with a device where the answer is usually displayed in the room in real time. They gauge the reactive answer of an audience. Contrast with surveys where the audience is given time to complete their answer and the results are often compiled later. They gauge the reflective answer of an audience.

**Rigging and Power**

**Safe working load:** In rigging the maximum amount of weight that can be hung from a point in the ceiling. The amount can vary significantly from venue to venue depending the ceiling engineering and if the load is static or dynamic.