

ALCHEMEA

M	Electronics	Mu, letter of Greek alphabet used as SI prefix where it is pronounced as Micro meaning 1/100,000th (10 ⁻⁶)
3:1 Rule	microphones	Practical rule to avoid comb-filter distortion; keep adjacent microphones > three times as far apart as the distance <u>between the sound source & the mic.</u>
3:2 Pull Down	Film	To transfer from 24fps (IE cinema Film) to 30fps each film frame is alternately scanned as 2, then 3 fields. The 30fps result comprises of 2 fields / Fm. Produces the correct running speed but often with motion artefacts
A/D	Digital	Analog to Digital converter
AAC	Digital	Advanced Audio Coding. Lossy data Reduction part of MPEG-2 & beyond.
Absorption		Loss or conversion of energy into a less useful form as it travels though a medium
Academy frame {ratio}	Film	1.33 aspect Ratio as used for presentation of all Silent & sound movies up to the 1950's. Also TV
Academy Roll off Curve	Film	Academy of Motion Picture Arts & Sciences Hiss/noise reducing HF filter, flat to 1kHz, 2K@-1, 5k@-4, 9k@-10, 10kHz@-12
ACM	computer	Audio Compression Manager, part of MS (r) Windows where Audio CODECS are stored Eg to be able to play MP3 files
ACPI	Computer	Advanced Configuration & Power Interface, Gives power saving & IRQ steering Can cause problems on Pc's used for Audio
active circuit	Analog	electronic circuit containing Valves or transistors IE can have gain
Active Lines	Video	with a 625 line video picture only 576 lines contain picture info
ADPCM	Digital	Adaptive Differential {or Delta} Pulse Code Modulation. A/D conversion where the difference rather than the actual value is stored. Often used as a lossy data reduction scheme
ADR	Film	Automatic {or Assisted} Dialogue replacement. Re voicing due to technical or artistic fault(s) in the location recording aka Looping
ADSL	Digital	Asymmetrical Digital Subscriber Line; data via standard phone line, Asymmetrical = different data rates Up & down stream, IE up to 640kb/s send/ 8Mb/s receive
ADSR		Attack Decay Sustain Release. Typical 4 stages in an amplitude envelope.
AES/EBU	Digital	Digital audio interface jointly conceived by the Audio Engineering Society and the European Broadcasting Union. Standard IEC-958. 2 Channels Max 24Bit, usually uses XLR (3 pin) See S/PDIF.
AES31-3	Digital	File format & Edl spec for interchange between DAW's
Aftertouch	MIDI	Midi message sending data about overall pressure applied to the keys of a keyboard whilst notes are sustained. Also known as Channel Aftertouch.
AGP	Computer	Accelerated {Advanced} Graphics Port. Much improved over PCI buss port for graphics cards. Post 1997
AIFF	Computer	Audio Interchange File Format. Digital Audio, native for Mac
aka		Also Known As

Allpass filter		Phase shifter; Circuit that phase shifts on a frequency selective basis (as any other Filter) but gives no frequency dependant attenuation or boost
Alpha	Graphics	As well as RGB or CMYK a amount of transparency or Alpha channel is supported Eg PSD & PNG formats
Alpha	Computer	a functional initial build of a program that probably has a number of bugs
Alpha numeric	Computer	The letters A-Z, numbers and generally other symbols on a typewriter style keyboard
AM	Electronics	Amplitude Modulation. A carrier wave is modulated in level
Ambience (Atmos)	Film	Low level sound effects that set a mood or suggest the character of a particular place.
ambisonics	Surround Sound	Method of recording (+ playback) a full perphonic soundfield as 4 components, W sound pressure and three pressure gradient (fig 8) signals XY&Z. see B format
Amp	Electronics	Ampere. Unit of electric current equals one coulomb per second. 1Amp will flow in a circuit with 1ohm resistance if 1Volt is applied
amp	Analog	Amplifier
amplifier	Electronics	An electronic circuit that increases signal level by increasing voltage or current. Amplifiers isolate one part of a circuit from another. Impedance matching amplifiers actually can decrease level. Preamplifiers are designed to handle small voltages, such as microphone signals. Power amplifiers are designed to drive loudspeakers.
amplitude		signal level. Often measured in dB above a reference point.
Analog		(in UK Eng traditionally spelt analogue) one continually varying quantity {Eg sound/air pressure} is represented by a 2nd analogous one {Eg Volts}
Analogue Synthesis		Or Subtractive Synthesis. Reproducing real organic sounds through the use and manipulation of simple electronic waveforms. Usually, the waveforms are harmonically rich and filters will remove unwanted content.
Anamorphic	Film	Lens or optical attachment that squeezes {on a camera} or unsqueezes {movie projector} the width of the image used in CinemaScope & Panavision formats
Anechoic	Acoustics	a room with no reverberation, or total absorption of sound
ANSI	Computer	American National Standards Institute. They have set the standard for Screen display of text under DOS
Answer Print	Film	First print from a cut negative containing picture density & colour corrections probable also a combined optical sound track
API	Computer	Application Program Interface; set of commands to program a device or software (Eg Windows Media)
Application	Computer	An executable piece of code or program. Is specific to a particular operating system. On a PC will have .EXT or .COM extension On an Atari .PRG
Arpeggiator	Synths	Pattern that regularly plays through the notes of a chord, making arpeggios. Usually found on Monophonic synthesizers.
ASCII	Computer	American Standard Code for Information Interchange. Standard for using a 7bit word for 128 defined letters & control characters found on a computer keyboard. A .TXT file uses only ASCII characters.

ASCII encoding	Computer	A way of sending Binary data via an E-mail. Eg BinHex, MIME and UUENCODE
ASIO	Computer	Audio Streaming Input Output; driver protocol
Aspect Ratio	Film	Ratio of screen width to height, the height being 1. Eg Panavision/CinemaScope has a Ratio of 2.35:1 For simplicity expressed as just 2.35.
Aspect Ratio	TV	Rather than use a sensible system as with Films TV picture shape tends to be expressed as a ratio of any 2 arbitrary numbers Eg Film 1.33 is 4:3, 1.77 is 16:9
ASPI	Computer	Advanced SCSI Programming Interface (r) Adaptec, unified drivers for SCSI cards
Assembly Language	Computer	Very low level programming language, that will be specific to the CPU used
ATA	Computer	AT Attachment; a hard disk for the IBM AT computer
ATAPI	Computer	AT Attachment Packet Interface; aka ATA 4 Disk interface
ATM	Digital	Asynchronous Transfer Mode; data transmitted in 53 Byte packets or cells. Suitable for TDM and packet switching.
Atmos	Film	Atmosphere. Low level sound effects that set a mood or suggest the character of a particular place.
ATR		Audio Tape Recorder
Attack	Fx Units	Time taken for parameter to rise from 0 to peak level
attenuator	Electronics	device for reducing signal level. Can contain active circuitry or just resistors.
atto	SI Units	prefix Symbol a Eg attogram (ag) = 0.000000000000000001grams Or 10^{-18}
auditory canal	The Ear	auditory meatus. Ear canal extending from the concha to the eardrum (tympanic membrane)
auditory system	The Ear	hearing system comprising of the outer ear (pinna, concha, auditory meatus, and tympanic membrane), the middle ear (ossicles: malleus, incus, stapes), the inner ear (cochlea), and the brain.
AutoConform	Video	Software that can read an EDL & control 2 or more Broadcast VTR's [or Audio tape recorders] to produce a high quality replica of an offline edit
AutoTune	Fx Units	Automatic pitch shifter introduced by Antares. Will pitch shift audio to the nearest note in the chosen scale, virtually in real-time.
Aux		Auxiliary sends Used to provide a feed to musicians or Fx units from each channel of a mixing console
AVI	Computer	Audio Video Interleave, MS (c) RIFF format, originally part of the Video for Windows standard
Avid	Film	Trade name of the most widely known Microprocessor based non linear editing system (NLE) for pictures & sound
axial modes	Acoustics	frequency dependant resonance between wall surfaces
B format	Surround Sound	4 channel system to capture a full perphonic soundfield as 4 components, W sound pressure and three pressure gradient (fig 8) signals XY&Z.
Baby Legs	Film	a short {approx 1 m max} camera tripod. Legs implies a separate Pan & tilt head will be added
BAFTA	Film	British Academy of Film and Television Arts.
Balance		To mix or control the relative level & Eq of a number of sound sources. If from a multitrack often called a mixdown

Balanced Line		A twisted pair of cables neither of which is at 0 volts; there is a 180° polarity difference between the 2. May have a 3rd screening wire at 0Vols / Earth or ground potential. Used for Analog parts of phone system & high quality Pro audio
bandpass filter		BP; Passes frequencies in specified band & attenuates all others
Bandwidth	Digital	Upper limit to the amount of data per second that can be handled. Eg kByte/sec See Baud
Bandwidth	Analog	Upper & lower frequency limit a system can pass with 3dB or less attenuation. Eg 20Hz-20kHz
BASIC	Computer	Beginner's All purpose Symbolic Instruction Code; a high level programming language
basilar membrane	The Ear	part of the human hearing system, a membrane in the cochlea of the ear has sensory cells.
Bass Trap	Acoustics	LF absorber
Baud	Computer	A measurement of data rate. For practical purposes can be regarded as the same as Bits/Sec but strictly the number of transitions / sec. Pronounced Bode
BBS	Computer	bulletin-board service.
BCC	Computer	Blind Carbon Copy; E-mail function to send without the people listed in the To or CC field knowing who else is to get the message
BCD	Computer	Binary Coded Decimal. 4bit word used to represent the decimal numerals 0-9 (as binary 0000 to 1001)
BeOs	Computer	Os {Operating System} from Be Inc designed for Audio & Video Data (unfortunately now obsolete)
Beta	Computer	Software that is not sufficiently de-bugged to be releasable, but is good enough for Beta Testing
Bias	Electronics	As applied to magnetic recording a RF signal mixed with audio to overcome the Reluctance of the tape to be magnetized Help to linearize & reduce distortion
bi-directional		Polar pattern, more commonly known as Fig 8 or unhelpfully as Cosine
Binary	Computer	Numbering system based on 2 values: 0 and 1. This system is the one used by Computer.
binary code	Computer	Binary code is string of data bits: code strings 7 bits long show the ASCII
binary file transfer	Computer	The transfer of a file containing 8-bit data, as opposed to 7-bit ASCII
Binary Files	Computer	Contains data other than ASCII text information
binaural		Having or involving the use of two ears.
BinHex	Computer	Mac standard method to encode Binary file as though text, so for Eg it can be sent via E-mail. Has extension .HQX
BIOS	Computer	Basic Input Output System. Software held in ROM or RAM that monitors hardware devices, Eg Disks, cards VDU
Bit	Computer	Binary Digit. Can have one of 2 values. Eg on/off 0/1 True/False Hi/Low
BITC	Film	Burnt In Timecode; Timecode display superimposed over a video image for human rather than machine reading {In USA aka Window Dub}
bitmap	Computer	Binary representation of a picture using a grid of small blocks called Pixels. A single pixel is used for each colour and can depending on the number of bits/pixel record different brightness levels. Eg 1bit/Pixel for black/white, 8bit/Pixel for 256 different brightness of Red/Green/Blue etc
Black & Burst	Video	A master House Sync generator. Like a Composite video signal but the picture part is blank IE just Sync & colour burst info

Blumlein pair	Microphones	stereo microphone arrangement consisting 2, Figure of 8 (bi-directional), coincident microphones at an angle of 90° to one another. Named after Alan Dower Blumlein it being one of many stereo recording methods he invented
BNC connector	Electronics	Bayonet Coaxial connector either 50 or 75ohm, widely used for pro video signals also digital audio & clocks
Board		{US Eng} same as UK Eng, Desk aka Mixing Console
Boolean Logic	Computer	In Boolean Algebra operators such as AND, OR, NOR, NOT used to test the truth of a comparison
Boolean operator	Computer	Eg AND, OR, NOT. Used to define search criteria, when using Internet and other database searches. Eg Cat NOT big
boot	Computer	to start a computer & load the Operating system
Bridge Rectifier	Electronics	Uses 4 diodes to provide full wave {positive & negative 1/2 cycles} conversion of AC to pulsating DC
buffer amp	Analog	a small signal amplifier typically with a high I/p impedance, low O/p Z and unity gain (or a slight attenuation)
Bug	computer	an error (human) in a program
Burst Error	Digital	Data error effecting a number of contiguous bits, eg tape dropouts.
Byte	Computer	BY eightE, a word of 8 Bits.
C/C	Film	Cutting Copy. The rushes edited to form the C/c or workprint.
Cache	Computer	Memory space on a computer, reserved for storing frequently used instructions, makes it go faster. This memory space is usually takes the form of dedicated circuitry (hardware cache), or part of RAM memory (software cache).
CAL	Computer	Computer Assisted Learning
Cannon connector	Electronics	a ITT(r) XLR or compatible latching low voltage connector. Can have 3-8 pins, 3 pin vers standard for balanced analog and stereo digital AES/EBU 4 pin for 12V DC power to portable pro equipment
Capacitor	Electronics	Component that can store an Electrostatic charge. Rather like a rechargeable battery but not so volumetrically efficient
cardioid	Microphones	heart-shaped polar pattern, -6db @90deg
CBR	Digital	Constant Bit Rate see VBR
CBT	Computer	Computer Based Training
CCD	Electronics	Charged Coupled Device; array of analog light sensitive areas on a chip used for image gathering. Eg digital camera /Scanner
CD-R	Computer	Compact Disc Recordable. Once only.
CD-ROM	Computer	Compact disk read-only memory. CD containing computer files
CD-ROM	Computer	12 cm disk, 1 sided/1 Layer) 0.635 gig
CD-ROM	Computer	8 cm disk, 1 sided/1 Layer) 0.180 gig
CD-RW	Computer	Compact Disc Re-Writable.
CDS	Film	Cinema Digital Sound; obsolete

CELP	Digital	Code Excited Linear Prediction; Audio lossy data reduction encoding very low bit rate & awful sound quality
centi	SI Units	prefix Symbol c Eg centigram (cg) = 0.01grams Or 10^{-2}
CGA	Computer	Obsolete graphics standard for PC's 320x200 pixels & 4 colours
CGI	Film	Computer Generated Images
character	Computer	Alpha numeric or other symbol such as Alt, Space & Tab encoded into 1Byte
chip	Computer	Silicon Chip. An Integrated Circuit containing a number of electronic devices such as transistors & capacitors.
Chorus	Fx Units	Slightly detuned copies of the main sound. Causes a fattening of the sound when combined with the original. Popular on bass sounds.
Chroma	Video	Colour aspect of a video signal {from greek khr ρ ma}
Chrominance	Video	Colour aspect of a video signal {from greek khr ρ ma}
CinemaScope	Film	Widescreen film format (c) Twentieth Century Fox Originally had 2.55 aspect ratio & 4 tr mag sound Uses Anamorphic lenses
client	Computer	Program that requests services from another computer called a server.
clipping	Electronics	distortion of a waveform passing through a system that cannot handle the peak voltage required. If viewed on an oscilloscope peaks are clipped
Clone	Digital	a clone is a copy but unlike an analog copy where extra noise & distortion is guaranteed, a clone is regarded as being identical to the original
Cluster	Computer	a number of Computer networked together and acting like 1 larger computer
CMYK		Cyan Magenta Yellow black, the 4 ink colours used for full colour printing on paper. Aka Subtractive colours + black
coaxial		on the same axis IE a centre point & concentric circle(s) round it Eg Coax cable as used for unbalanced signals
COBOL	Computer	Common Business Orientated Language
cochlea	The Ear	inner ear. Sound analysing part of the auditory system connected to the brain via auditory nerves.
Cocktail Party Effect	Acoustics	The ability of the humans to hear a desired sound by use of our binaural auditory abilities to locate the sound source direction
CODEC	Digital	COder/DECoder Software to encode/decode probably using data reduction. for Audio & Video
coercivity		resistance of a magnetic material to changes in magnetization. High Coercivity material needs a V large Magnetic field to demagnetise it.
coincident	Microphones	2 or more mic capsules in the same place.
colouration		Unwanted frequency response or Eq changes. Is an analogy to light which appears coloured if there are not equal amounts of Red/Green&Blue.
comb filter		Alteration of the frequency response of a system as a result of constructive and destructive summing of a signal and a delayed version of the signal. If plotted on a linear frequency scale, it look like the teeth of a comb.

command-line interface	Computer	Text based method of issuing commands, like open a file. Initiated by typing near English like words using a keyboard. eg DOS, UNIX & SSL.
CompactFlash		Flash memory card (r) SanDisk
Component video	Video	Unlike Composite systems Eg PAL & NTSC the chrominance and luminance information are kept separate
Composite print	Film	Type of film print shown in Cinemas that has both pictures & audio on the same piece of film aka Married print
Composite Video	Video	Analog signal combining video sync pulses + chrominance and luminance visual information. Eg PAL, SECAM & NTSC
Compressor		Unit that reduces dynamic range by attenuating loud signals. Helps to give more consistency (& apparent loudness) to a performance.
Computer	Computer	An electronic device that uses coded instructions to manage information.
Concert Pitch	Acoustics	ISO standard, middle A =440Hz
concha	The Ear	resonant cavity of the outer ear between the pinna and the ear canal.
Condenser	Electronics	Obsolete name for a Capacitor.
Condenser microphone	Microphone	Mic in which the diaphragm is one plate of a capacitor. Changes in capacitance caused by air vibrations are converted to a voltage. Requires a buffer amp very close to Capsule also a DC polarising voltage.
conductor	Electronics	material that allows the easy passage of electrons Eg wire
cps	Computer	Characters per second. And Obs name {now Hz} for Cycles per second
CPU	Computer	Central Processing Unit. A microprocessor.
CRC	Computer	Cyclic Redundancy Check; error checking test when transferring data. A check sum is added to data sent & then the receiver applies the same check. If they don't match, the data can be requested again
critical distance	Acoustics	Distance from a sound source where direct & reverberant sound are the same level
CrO2		Chromium Dioxide. A High coercivity tape formulation popular for Video tape use.
crosstalk		Leakage {usually unwanted} of Acoustic or Electrical signal into a signal path
cursor	Computer	An on screen bar which usually blinks, indicates where the next line of text etc will appear.
CV / gate		Control Voltage / gate. Old triggering method used with analogue synths before MIDI and digital equipment. A voltage is sent to trigger a note from the VCO, then gated to interrupt the note.
D/A	Digital	Digital to Analog converter aka DAC
D1	Video	Digital VTR format 1; Professional 19mm {3/4} cassette Component I/O
D2	Video	Digital VTR format 2; Professional 19mm {3/4} cassette Composite I/O
D3	Video	Digital VTR format 3; Professional 12.5mm {1/2} cassette Composite I/O
D5	Video	Digital VTR format 5; Professional 12.5mm {1/2} cassette Component I/O
DAB	Digital	Digital Audio Broadcasting, digital radio
Dailies	Film	{US Eng} same as Uk Rushes

Daisy Chain	MIDI	Serial connection of MIDI devices.
Damping	Electronics	ability of a device to stop oscillating when the source of the oscillation stops. Underdamped = ringing Overdamped = dead
DAO	Computer	Disk At Once; all data is written in one session. For a CD Audio disk to be a master to Red Book standards data must be written this way. See TAO
DAT	Digital	Digital Audio Tape (recorder). 0.15 wide tape in a cassette. 16Bit stereo. Was known as R DAT, R = rotating heads. There was an SDAT (stationary head) but it was never released.
Data	Digital	Digital Information stored and processed by a computer.
Data Byte	MIDI	Starts with a 0. Carries relevant Data for the type of message defined by Status Byte of 7 bits (128 possibilities).
Daughter Board	Computer	circuit board {probably small} that plugs into a larger circuit board. Eg sound cards can have a superior MIDI sound module or Dig I/o via a daughter board
DAW	Computer	Digital Audio Workstation. Usually a computer with dedicated hardware and software for editing and processing digital audio.
dBFS	Digital	Decibels below full scale. Sound level meters on Digital recorders are calibrated in dBFS, 0dBFS is the maximum level IE all bits have a value of 1.
DDS	Computer	Digital Data Storage. Aka Data Dat. Cassettes same size as DAT but is designed with better error correction 2g to 20gig capacity
dead	Acoustics	a room with little reverberation IE near anechoic
Decay		Time taken for a parameter to fall from peak level to sustain level once attack time is over.
Decca Tree	Microphone	3 spaced Omnidirectional Mics in a T layout. Invented by Decca UK, recording engineers
deci	SI Units	prefix Symbol d Eg decigram (dg) = 0.1grams Or 10^{-1}
decibel		Tenth of a Bel =dB. A Bel is the logarithmic ratio of two powers. Has been adapted to cover Voltage etc
decoding	Film	Electronic process of recovering surround information from a 2 channel encoded mix. Eg Dolby Pro Logic
deka	SI Units	prefix Symbol da Eg dekagram (dag) = 10grams Or 10^1
Delay		Time separation between two events. Eg the arrival of a direct sound & 1st & subsequent reflections.
Delay Line	Fx Units	Electronic device {usually digital} that can store then forward the signal with a time interval set by a user
Device Driver	Computer	piece of software that tells an operating system how to communicate with a device such as a Sound card, printer or MIDI interface
diaphragm		A membrane that is freely moved by sound vibrations. Eg a mic/ the eardrum. Or if moved by electrical energy, moves air. Eg Loudspeaker.
diffraction		scattering of sound. (See diffraction grating.)
diffraction grating	Optics	Grid or grating that splits light into its spectral/frequency/colour components Eg the pits pattern on a CD give a Rainbow effect


diffraction grating	Acoustics	Grid or grating that splits sound into its spectral/frequency components. This scatters the sound in all directions giving a diffused field. Eg Quadratic Diffuser
diffuse field	Acoustics	A sound field composed of sound arriving from all directions.
DigiBeta	Video	Digital Betacam; (r) Sony. Professional Component 10 bit Digital VTR using 2:1 compression
Digital	Digital	An analog waveform is represented as a series of binary numbers
DIMM	Computer	Dual In line Memory Module
Dipole Speaker	Film	Fig 8 {sometimes omnidirectional} radiating LS used to create a diffused surround soundfield
Directory	Computer	MS DOS name, post Win95 now called a folder
disk drive	Computer	A physical data storage device Eg hard disk and floppy disk.
Distortion		Non linearity between an input & output signal as it passes though a system.
Dither	Digital	Process that linearizes digital audio by adding a random noise signal at very low level. It allows one to resolve sounds quieter than the lowest quanzation level.
DLT	Computer	High capacity, speed & cost tape based data storage
DMA	Computer	Direct Memory Access (or Address)
DNS	Computer	Domain Name System. Internet service to convert a domain name eg alchemea.com into a numeric IP address
Dolby A	Analog	Dolby noise reduction. 4 band Compander system for professional use.
Dolby AC-3	Film	Multichannel Lossy data reduction coding. Used on Dolby Digital Film prints & DVD-V
Dolby Digital	Film	Multichannel digital format used for cinema prints, DVD-V & some HDTV. Uses Dolby's AC-3 lossy data reduction.
Dolby Pro Logic	Film	Surround sound decoder. Analog IC that recovers 4 channels of Dolby Matrix encoded information carried on a 2 channel recording.
Dolby SR	Analog	Spectral recording. Analogue Noise reduction. The best Dolby noise reduction system, used on SVA Film prints & 1/2 -2 analog tape.
Dolby SRD	Film	35 mm release prints containing both an Dolby Stereo SR encoded analog track & a Dolby Digital (D) optical soundtrack.
DOS	Computer	Disk Operating System from IBM and Microsoft. A command-line operating system & by implication its 16bit Disk format.
Double head	Film	Projector with 1 head & roll of film for the pictures & another for sound
DPI	Computer	dots per inch a measurement of how many picture elements, (pixels) per inch. Eg to specify the resolution of printers.
Driver	Computer	small file containing instructions to control hardware such as a sound card,
DSD		Direct Stream Digital Used by Sony for SACD. Delta modulation IE V High sample rate low bit rate {1 or 8 bits}
DSP	Digital	Digital Signal processor
DTS	Film	Digital Theater Systems; 5.1 or 6.1 Surround system, Audio is on CD-ROM, synched to picture by an optical timecode track
Dual Boot	Computer	Computer with the ability to boot from 1 of 2 operating systems installed
dummy head	Microphones	Binaural technique using 2 Omnidirectional Pressure mics placed where a humans eardrum would be, but on a mannequin head with pinna.

Duplex	Computer	Full duplex connection {via a NIC for example} allows data to be sent and received simultaneously whereas a half duplex link alternate between sending and receiving data.
DVD		Removable Optical digital storage medium. Officially the letters have no meaning, previously Digital Versatile Disk & prior to that Digital Video disk. Can store data on 1 or 2 layers and on both sides of disc, each layer gives about 4 gig
DVD-1		8 cm disk, 1 sided/1 Layer) 1.36 gig
DVD-10		12 cm disk, 2 sided/1 Layer) 8.74 gig
DVD-14		12 cm disk, 2 sided/Mixed Layer) 12.32 gig
DVD-18		12 cm disk, 2 sided/2 Layer) 15.90 gig
DVD-2		8 cm disk, 1 sided/2 Layer) 2.47 gig
DVD-3		8 cm disk, 2 sided/1 Layer) 2.72 gig
DVD-4		8 cm disk, 2 sided/2 Layer) 4.95 gig
DVD-5		12 cm disk, 1 sided/1 Layer) 4.37 gig
DVD-9		12 cm disk, 1 sided/2 Layer) 7.95 gig
DVD-A		DVD-Audio Proposed replacement for CD's. Has up to 8 channel surround, high bit & sample rates + graphics & movies
DVD-R 1.0		DVD-Recordable WORM 12 cm disk, 1 sided/1 Layer) 3.68 gig
DVD-R 2.0		DVD-Recordable 12 cm disk, 1 sided/1 Layer) 4.37 gig; 8.75 gig for rare 2 sided discs
DVD-RAM 1.0		12 cm disk, 1 sided/1 Layer) 2.4 gig; 4.8 gig for 2 sided
DVD-RAM 2.0		12 cm disk, 1 sided/1 Layer) 4.37 gig; 8.75 gig for 2 sided
DVD-RAM 2.0 3		8 cm disk, 1 sided/1 Layer) 1.36 gig; 2.47 gig for 2 sided
DVD-ROM	Computer	
DVD-RW 2.0		DVD-ReWritable 12 cm disk, 1 sided/1 Layer) 4.37 gig; 8.75 gig for rare 2 sided discs
DVD-V		DVD-Video Most common form of DVD, Better than VHS picture + surround sound
DVE	Video	Digital Video Effects
dynamic microphone	Microphones	Vibration of the diaphragm in a dynamic microphone causes an electrical conductor to move in a magnetic field, this creates an electrical signal by induction.
dynamic range	Analog	Ratio of the loudest sound a system can handle with acceptable distortion to either the quietest sound perceivable or the noise floor. Generally expressed in dB's.
dynamics unit	Fx Units	dynamic range controlling devices Eg Compressor, Expander & Gate
early reflections	acoustics	Discrete delayed versions of a sound arriving after the Direct sound but before the diffused reverberant ones. If delays are 50ms> an echo will be heard
EBCDIC	Computer	Extended Binary Coded Decimal Interchange Code, a standard 8-bit character code used in computing and data transmission. See BCD
echo	Computer	data sent from 1 device to another is returned to the source. Used for data integrity checking.
Edge numbers	Film	Alpha numeric code. Typically at 20 frame intervals on 16mm & 16 frame on 35mm Camera film. Placed at edge of film outside the picture area
EDL	Film	Edit Decision List A text file that is human & machine readable showing Timecode start & end points for each clip/segment used in an edited programme.
Eg		exempli gratia (Latin) for example

electret microphone	Microphones	Condenser or capacitor microphone with the capsule permanently charged so no external polarizing voltage is needed.
Electron	Electronics	negatively charged particle circling the nucleus of an atom
E-Mail	Computer	electronic mail. Messages delivered over a network, including the Internet.
Emphasis	Digital	to improve the signal-to-noise ratio of CDs or DAT a high frequency boost (called Emphasis) is applied on record & a corresponding high frequency rolloff (called De-emphasis) is applied on playback. A flag in the subcode section of the CD/DAT tells the player when to use de-emphasis.
emulation	Computer	Software used to translate instruction written for 1 type of CPU/operating system to run on another system. Eg SoftWindows allows Macs to run PC programs.
Encryption	Computer	altering data to make it unreadable unless you have the Key to decrypt it
ensemble		Group of musicians performing together
Entropy coding	Digital	A/D encoding in which short words are substituted for the most often used data values & long words substituted for infrequently used values. Used in Lossless data reduction Eg Huffman Coding
Envelope	Synthesis	Name given to the linear stages of one parameter varying over time. Can be applied to any parameter Eg: volume envelope. See ADSR.
EOX	MIDI	End Of SyseX - message indicating the end of manufacturer specific transmission.
EPROM	Computer	Erasable Programmable Read Only Memory; Read only memory chip that retains its information until it is exposed to ultraviolet light through a small clear window. Often used to upgrade firmware
equalization		(EQ) The use of filters to alter the frequency response of a system
error correction	Digital	The use of extra bits Eg parity bits to check the validity of the data being sent
Eustachian tube	The Ear	Tube between middle ear and the pharynx that serves to equalise air pressure on both sides of the eardrum
Even Harmonics	acoustics	Harmonic in a complex wave that has a 2:1 or other even ratio to the fundamental
exa	SI Units	prefix Symbol E Eg exagram (Eg) = 10000000000000000grams Or 10^{18}
Exciter	Fx Units	Fx Processor which creates & adds upper harmonics
Expander	Fx Units	Unit that increases dynamic range by attenuating quiet signals. Helps minimize background noise on a performance.
extended character set	Computer	Extension to the ASCII 128 character set. Unfortunately the extensions tend to be operating system specific unlike ASCII.
FAQ		Frequently asked questions.
FAT	Computer	File Allocation Table
femto	SI Units	prefix Symbol f Eg femtogram (fg) = 0.000000000000001grams Or 10^{-15}
field	Video	with the normal interlaced video method each picture frame comprises 2 fields, one with only the even No lines the other only odd number lines
file	Computer	A named collection of data, usually stored on a disk drive.
file compression	Computer	Eg WinZip. Software to make files smaller with no loss of data. The file will need to be re-expanded before it can be used.

file suffix	Computer	Typically 3 letters after the filename that indicate what type of file & therefore what application is needed to run the file. Eg xxx.DOC is a MS Word document, xxx.MID is a MIDI file
filename	Computer	8 to 255 {depending on the Disk operating system} alphanumeric characters used to name a file.
filter		Circuit that attenuates certain portions of the audio frequency spectrum
firewall	Computer	A secure gateway that protects a network from unauthorised access by making the machines behind the firewall invisible.
Firewire	Computer	Most popular name {(r) Apple Computer} for IEEE1394, a High speed 400 megabits per second Plug & play Serial connection {Sony call it i.LINK,(r)}
flame	Computer	Derogatory & often offensive comment re an E-mail. A flame war being an on line argument/row.
Flanging		Comb filtering effect originally achieved by mixing 2 tapes playing the same recording in sync and by touching the flanges of the tape spool so as to slow down one of them. The results causes predominantly a heavy phasing effect.
Fletcher Munsen Curves	acoustics	aka Equal loudness curves, statistical analysis of human subjective impression of loudness V frequency
floating point	Computer	radix or a decimal point that does not occupy a fixed position within a given word
floppy disk	Computer	Removable data storage. Generally < 2Mb. Older disks of 8 or 5 1/4 diameter were floppy the current 3.5 discs have a hard shell.
floptical drive	Computer	Derived from Floppy OPTICAL. A disc drive using a mixture of Laser & magnetic techniques. Up to 1.3g in size
FM Synthesis		Frequency Modulation Synthesis. When one waveform modulates another to create a new one. Repeated many times in order to reproduce real organic sounds.
folder	Computer	A collection of Document and program files can be stored in folders. In DOS & early Windows was called a directory.
Foley	Film	Post syncing Fx.Eg footsteps or rustling clothes, in sync with the picture. Named after Jack Foley one of its first practitioners.
FPGA	Computer	Field Programmable Gate Array; Chip with thousands of programmable logic gates, often used for prototypes & custom designs Eg DSP
fps	Film TV	Frames Per Second
Freemidi	MIDI	Similar system to OMS.
freeware	Computer	Software that the author/owner licences one to use without charge
Frequency		Number of cycles in a periodic wave per second; measured in Hertz {Hz}
FTP	Computer	File Transfer Protocol. Part of TCP/IP data transmission protocol designed for binary files rather than Text
Fundamental Frequency	acoustics	The perceived tone or pitch of a complex waveform (IE one consisting of multiple frequencies)
gain	Electronics	amount of amplification generally expressed in dB's
game port	Computer	Uses a 15pin D connector, for analog joystick control. On a PC also MIDI I/O
Gate	Fx Units	a dynamics unit that greatly reduces signal level output when the input signal falls below a set threshold level

Gateway	Computer	Link between two different kinds of network with the ability to modify IP addresses and route signals.
Gflop	Computer	Giga Flop = 100,000,000 Floating point mathematical operations per second
GIF	Computer	Graphical Interchange Format; Graphics format from CompuServe (r) 256 colours IE 8bits/ pixel. Popular on WWW
giga	SI Units	prefix Symbol G Eg gigagram (Gg) = 1,000,000,000grams Or 10^9
Gigabyte	Computer	1,073,741,824 Bytes $\{1024^3\}$ or 2^{30} {sometimes = 1,000,000,000}
Glass Master	Computer	Glass Mastering is the process of transferring the CD master (either on PCM-1630 tape, recordable CD, or Exabyte tape) to a physical image of the pits that are on the finished CD. The glass master is a glass plate, about 10 in diameter, coated with a light-sensitive material. During glass mastering, a laser etches very tiny pits on the material. When the master tape is played, its digital signals are converted to the EFM coding format for the CD, and that signal is fed to the special laser cutter. The glass master is very delicate, and cannot be played. Succeeding steps in the process, called Father, Mother, and Stamper, result in the metal forms which are capable of hot molding thousands of compact discs on the presses.
gobo		A baffle {US Eng but also used in UK}
Google	Computer	The best search engine I have found
Googol	Computer	10^{10} IE 1+ 100zeros
ground		{US Eng but widely used in UK} {UK Eng= Earth} aka Zero Volts A connection, Eg from the chassis to Terra Firma to remove mains voltage in a fault condition or RF interference
GUI	Computer	Graphical User Interface. Was know as WIMP; Windows, Icons, Mouse & Pointer. Eg Mac Os & MS Windows
Guide track	Film	G/T; sync recording of dialogue etc but where it assumed the track will not be of usable quality generally because of technical reasons
gun mic	Microphones	Highly directional though mostly at higher frequencies. Widely used for speech recording for Film/TV
Haas effect	Acoustics	If two sound waves identical apart from a delay to 1 of them are created only the earlier of the 2 will be heard. Unless delay is greater than about 30 ms then discrete echoes are heard.
HAL	Computer	Hardware Abstraction Layer; part of the operating system that lets programs communicate directly with hardware rather than through an API. hard work to program but can run much faster
handshaking	Computer	The use of bi-directional data flow to confirm the successful transmission of data
hard disk	Computer	hardware usually inside the computer to store data as magnetic patterns on rigid magnetic discs. Was know as a Winchester disk
hardware	Computer	physical or 3 dimensional components of a computer system Eg Disks, case, PSU etc
Harmonics	Acoustics	aka Overtones. Most waveforms consist of the fundamental note + a number of other frequencies or harmonics that define the timbral character of the sound
Harmonizer		Pitch Shifter (r) Eventide. Can sample and playback at a different pitch/speed any input sound virtually in real-time. Good for making artificial harmonies.

Hayes AT command set	Computer	Commands devised by modem manufacturer Hayes. Are de facto standard for software which controls modem communication.
hecto	SI Units	prefix Symbol h Eg hectogram (hg) = 100grams Or 10^2
Helmholtz resonator		reactive, tuned, sound absorber usually employing slats or perforations over a cavity.
Hertz		Unit for Frequency (Hz) same as Cycles per second (cps) named after Heinrich Hertz
Hexadecimal	Computer	Base 16 numbering system. Uses 0-9 then the letters A-F for the 16 characters.
HF		High Frequencies
High Resolution Controller	MIDI	Midi message combining 2 data bytes (MSB and LSB) to express one 14 bit value (16384 possibilities)
highpass filter		HP;=Bass cut
hole in the middle		bad central phantom image in stereo playback.
host	Computer	a computer acting as a server (to a client)
HRTF	Acoustics	Head Related Transfer Function; the Eq'ing effect caused principally by our outer ear that changes vis-  -vis the angle from which the sound originates
HTML	Computer	Hypertext Markup Language. A text document that contains embedded tags to control formatting Eg cause text after that point to be in bold.
HTTP	Computer	Hypertext Transport Protocol. Used on the WWW to make hypertext links.
hypercardioid		Polar pattern (Eg of a Mic), -9dB @90°
hypertext	Computer	A document containing links to other documents.
Hz	Analog	Hertz same as CPS
I/O	Computer	Input / Output
IE		Id Est (Latin) that is to say
IEC		International Electrotechnical Commission
impedance		Opposition to the flow energy in any system using oscillating energy. Eg Sound or AC signals.
incus	The Ear	One of 3 ossicles that convey eardrum vibrations to the cochlea
inductance	Electronics	Symbol L; ability of a conductor to store energy as a magnetic field
infrasound	acoustics	LF below audible range
inner ear	The Ear	cochlea
integer	maths	a whole number IE not including a fraction
intensity		Amplitude
intensity	Acoustics	intensity is the sound energy flux per unit area.
Intensity Probe	Acoustics	2 closely spaced pressure mics used, from which is calculated sound velocity = their difference (corrected for air density & mic spacing) X Averaged sound pressure of the 2 mics.
intensity stereo		Conveying the direction from which a sound originates purely by level differences Eg A coincident stereo Mic pair, a pan pot
interaural	acoustics	Difference in information received by a pair of ears
interference	Electronics	Unwanted crosstalk, generally by induction, into a system
interference	Acoustics	Constructive or destructive summing of 2 or more sound waves

Interlace	Video	To get a reasonably low bandwidth & a tolerable flicker rate it was decided to split each picture into 2 fields, using odd & then even lines
inverse square law	Acoustics	The intensity of sound diverging spherically from a point in free space decreases inversely as the square of the distance. Sound pressure, varies as the first power of the distance. Thus sound pressure decreases 6 dB with each doubling of the distance in free space.
Ion	Electronics	Electrically charged atom(s) with an unequal number of protons (positively charged particle in an atom's nucleus) and electrons (negatively charged particle circling the nucleus)
IRQ	Computer	Interrupt ReQuest; each of the many devices in a computer has to issue an Interrupt to have a turn at using the CPU
ISDN	telecom	Integrated Services Digital Network; 64kb/sec down same cable as POT
ISO		International Standards Organisation
Java	Computer	Programming language not tied to a specific operating system.
Java Script	Computer	Unrelated to Java but a programming language much used on the WEB
Jitter	Computer	Timing variations Eg in a digital audio clock.
JPEG	Computer	Joint Photographic Experts Group, Data reduced Graphics format popular on the WWW. Unlike GIF can suport photo quality images
kB	Computer	Kilobyte. 1024 Bytes 2^{10} Sometimes = 1,000 Bytes
Keykode	Film	Digital, machine readable alpha numeric code on original negative. Like the human readable edge numbers
kilo	SI Units	prefix Symbol k Eg kilogram (kg) = 1000grams Or 10^3
KVM switch	Computer	Keyboard Video Mouse; means of making 1 KVM control many Computer
LAN	Computer	Local Area Network. A collection of interconnected Computer within a few hundred metre area
LCD	Electronics	Liquid Crystal Display
LED	Electronics	Light Emitting Diode; semi-conductor that glows
LF		Low Frequencies. If audio this means Bass
LFO		Low Frequency Oscillator
Lightworks (r)	Film	Microprocessor based non linear editing system for pictures & sound
Linux	Computer	UNIX-like operating system originally developed by Linus Torvalds, It's open source IE freeware
live acoustic	Acoustics	Reverberant space or room
Local Control	MIDI	Internal message sent from a keyboard to its own in-built sound module.
log on	Computer	Connecting to a host computer. Generally with password protection
lowpass filter	Electronics	LP; = Top or high frequency Cut
LPCM	Digital	Linear Pulse Code Modulation. Common system of encoding an analog signal where the amplitude of the signal sampled at the Nyquist rate is directly converted to a binary number. Eg as on CD
LPF	Electronics	Low Pass Filter: will remove High Frequencies. Very popular in current dance music when swept.

LSB	Digital	Least Significant Byte or Bit depending on context.
LTC	Digital	Longitudinal Time Code; the most common physical form for SMPTE/EBU t/c to take. For recording on a normal analog soundtrack. See MTC, VITC
Luminance	Video	Black & White information of a video signal. Abbreviated as Y
LZW	Digital	Limple Ziv Welch, lossless data reduction algorithm
M&E	Film	Music & Effects (track) As the final mix of a film but minus dialogue Sometimes aka International version
Mac OS	Computer	Apple Macintosh (r) Operating System
MacBinary	Computer	File format that combines Macintosh Finder info with the data and resource forks
Macintosh (r)	Computer	Personal computer introduced in 1984 by Apple.
Macrovision (r)	Video	Video copy protection that rapidly modulates colourburst signals and pulses the vertical blanking signal in order to make videotape copies of protected material unwatchable
malleus	The Ear	1 of 3 ossicles that convey vibrations to the oval window of the cochlea
masking		Process by which the threshold of audibility of one sound is raised by the presence of another sound
MB	Computer	Megabyte 1,048,576Bytes (2 ²⁰) Sometimes = 1,000,000 Bytes & sometimes either number of bit/sec
Mb	Computer	Megabit 1,048,578 Bits Or 131,072.25 Bytes Not consistently written so may mean Bytes
MDM		Modular Digital Multitrack. Eg Adat, DTRS typically low cost 8Track ATR's that can be easily synced together to form say 128 track capability
meatus	The Ear	Ear Canal
median plane		Straight ahead. The vertical plane equidistant from the two ears bisecting the head
mega	SI Units	prefix Symbol M Eg megagram (Mg) = 1,000,000grams Or 10 ⁶
Metadata	Computer	data about data.
Metafile	Computer	An image file that can contain a mix of bitmapped or raster image data & vector info.
micro	SI Units	prefix Symbol μ Eg microgram (μ g) = 0.000001grams Or 10 ⁻⁶
micron		Commonly used {in theory obsolete} name for μ m Eg millionth of a metre = 0.000001m Or 10 ⁻⁶
microphone	microphones	Device that transduces air vibrations into corresponding electrical signals. Aka Mic
Microprocessor	Computer	A CPU, Central Processing Unit, the computational engine or brain.
microtone		a musical interval less than a semi-tone on the equal tempered scale
middle ear	The Ear	Portion of the ear between the eardrum and the cochlea.
MIDI	MIDI	Musical Instrument Digital Interface; sends performance data not actual sounds
MIDI channel	MIDI	16 available per MIDI port. Each channel can carry it's own independent information.
MIDI Clock	MIDI	A systems common message sent out on every beat. Used by software sequencers to control drum machines, arpeggiators and any other timing dependent devices.
MIDI Connector	MIDI	5 pin DIN plug, all 5 pins being in a 1800 Semi circle. Only 3 pins used
MIDI In	MIDI	Port receiving MIDI messages from the outside world.

MIDI Interface	MIDI	Hardware generally with multiple MIDI In and Out ports, each carrying 16 channels of information. Often connected to the computer via USB
MIDI Modes	MIDI	1: omni polyphonic 2: omni monophonic 3: responds to 1 channel polyphonically 4: responds to 1 channel monophonically
MIDI Out	MIDI	Port sending MIDI messages generated within the unit to the outside world.
MIDI Thru	MIDI	Port re-transmitting incoming MIDI messages to the outside world.
mid-side	microphones	See MS
milli	SI Units	prefix Symbol m Eg milligram (mg) = 0.001grams Or 10^{-3}
MIME	Computer	Multi-purpose Internet Mail Extensions. A standard for sending Binary files in ASCII form via the Internet.
mixdown		Process in which a multichannel recording is combined into 1, 2 or more channels for loudspeaker or headphone listening.
MLP	Digital	Meridian Lossless Packing, Lossless data reduction algorithm. Part of the DVD-A specification
MMC	MIDI	MIDI Machine Control - Systems Common messages carrying transport information via the MIDI protocol
modem	Computer	MOdulator/DEModulator. Hardware to allow digits to be sent via a Plain Old Telephone line.
modes	Acoustics	Low-frequency resonances (modes) prominent in small rooms
mono		Contraction of monophonic / monaural
mono compatibility		An acceptably low level of distortion (particularly Comb Filtering) where a stereo mix is heard as a mono sum of the L+R channels
Monophonic	MIDI	Not polyphonic. Can only play one note at a time.
Monophonic		Mono, sound recording carrying 1 channel of information.
Monotimbral	MIDI	Not multitimbral. Can only play one sound at a time. Responds according to one of the 4 MIDI Modes.
mouse	Computer	Mechanical device to control an on screen pointer. 1 or more buttons can select control options.
Mp3	Digital	MPEG-1 Audio Layer 3. Lossy data reduction scheme for mono or stereo
MPEG	Film	Moving Pictures Expert Group
MS	Microphones	Intensity Stereo technique where information is conveyed as a Sum (L+R, the Main channel) & Difference (L-R, the side channel). As a Mic technique the Main pickup will be via any Mic pointing at sound source & Side by a L/R facing Fig 8 Mic.
MS (r)	Computer	Microsoft. Software corporation responsible for DOS, Windows + applications such as Word/Excel
MSB	computer	Most Significant Byte or Bit depending on context is the one representing the greatest quantity
MSN	Computer	Multiple Subscriber Number; an ISDN line can have more than one number associated with it, useful for directing calls to specific bits of kit - phone, fax, PCs etc.
MTC	MIDI	MIDI Time Code - systems common message sending Hour Min Sec Frames information via MIDI protocol.

multiscan	Computer	A VDU or monitor that can handle a range of frame or refresh rates.
Multitimbral	MIDI	Electronic instrument capable of playing different sounds simultaneously, each sound responding to a particular MIDI channel
Mumetal		nickel alloy, 17%iron, 5% copper and 2% chromium by weight. Has high magnetic permeability and is used esp. in transformer cores and magnetic shields.
Nagra	Film	Highly regarded portable 1/4 professional audio recorder (r) Kudelski {means Record in Polish}
nano	SI Units	prefix Symbol n Eg nanogram (ng) = 0.00000001grams Or 10^{-9}
netiquette	Computer	NETwork etIQUETTE. the polite way to talk over the internet
network	Computer	Number of Computer linked together via a LAN, the Internet etc
newbie	Computer	Someone who is new to the Internet or a newsgroup
Nibble	Computer	Half a Byte, 4 Bit word {can be spelled Nybble}
NIC	Computer	Network Interface Card, allows data communication between Computer on a Network
NLE	Film	Non Linear Editor. Uses random access digitised images & sound on a CPU based system, to produce an EDL or if material digitised at sufficient quality, a finished programme
noise	acoustics	Sound without a perceived pitch
noise floor		The inherent noise of a circuit or system with no intentional signal passing though it
Noise shaping	Digital	type of Dither. The sound of the noise is filtered to make it less obtrusive whilst still linearizing the system.
Normalization	Digital	DSP operation where the gain of all program material is adjusted so the peak level will be 0 dBFS. {often a value other than 100% can be set}
NOS	Microphones	Stereo Mic technique. 2 Cardioids spaced 300mm @ 90° angle. Ex Dutch state broadcast Co of same name
NTSC	Video	National TV standards Committee. And their method of encoding Colour information with Luminence (B&W) Used in Americas, Japan. Jokingly = Never Twice the Same Colour
Null Modem	Computer	a RS232 [or other serial cable] connecting cable that has the Send & return (also possibly CTS & CTR) wires crossed over
Nybble	Computer	Half a Byte, 4 Bit word {can be spelled Nibble}
Nyquist Rate	Digital	Nyquist Theorem is a mathematical proof that a band limited analog signal can be accurately encoded if the sampling rate is at least twice the highest analog frequency
oblique modes	Acoustics	Modal resonances of a room that involve all six wall surfaces
Octal	Computer	Base 8 numbering system. Uses 0-7 for the 8 characters.
octave	acoustics	An interval between two frequencies having a ratio of 2:1
Odd Harmonic	Acoustics	Harmonic in a complex wave that has a 3:1 or other odd ratio to the fundamental
Off line Editing	Film	Use of random access digitized images & sound on a CPU based sytem (a NLE) or less common sub broadcast quality VTR's, to produce an EDL
offline	Computer	Not connected to a network, IE only using data on a local machine

offline	Video	Using a low resolution Work copy of a master recording to make edit decisions & produce an EDL
offline reader	Computer	Software to gather e-mail or Usenet news on connection to an on-line service, then disconnect from the service, allowing the user to read mail offline
OMF	computer	Open Media Framework; Data format from Avid/Digidesign used for exchange of edited image and sound data between NLE systems
Omni	MIDI	Not channel specific. Will execute any messages coming on any of the 16 channels
omnidirectional	Microphones	microphone with uniform sensitivity to sound arriving from all directions IE will have a circular polar pattern
OMS	MIDI	Open Music System. Macintosh based MIDI studio manager created by the defunct Opcode, Obs in Mac OS X and above.
online	Video	Video edit using full broadcast quality VTR's possibly driven from an EDL see AutoConform
onomatopoeia		a word that sounds like what it is describing Eg WOW, Tick, Purr, Swish
operating system	Computer	A set of special programs and routines a computer uses to perform basic tasks like starting up the computer and managing files. DOS, Mac OS, Windows XP and UNIX are operating systems.
ORTF	Microphones	Stereo Mic technique. 2 Cardioids spaced 170mm @ 110° angle. Ex French state broadcast Co of same name
OSS	Microphones	Optimum Stereo Signal; aka Jeklin Disk. Uses a pair of omnidirectional mics 165mm apart with dividing baffle
ossicles	The Ear	3 bones of the middle ear (malleus, incus, stapes) provide mechanical linkage between the eardrum and the oval window of the cochlea
outer ear	The ear	See pinna
oval window	The ear	Membranous window of the cochlea to which the stapes ossicle is attached
PAL	Video	Phase Alternate Line. Method of encoding Colour information with Luminance (B&W) Used in most of Europe, China, SA, & Australasia.
Panavision	Film	Manufacturer of lenses & cameras for a Widescreen film format compatible with CinemaScope. 2.35:1 aspect ratio
panpot	Electronics	Variable resistance level control, which can place a mono signal anywhere between the two channels of a stereo mix
Parallel	Computer	concurrent or simultaneous events Eg transmission of several data bits at the same time down a multicore cable
parametric equalizer		Eq having a variable bandwidth (or Q) and adjustable boost/cut at a selected centre frequency
Parity	Computer	Error checking Bit(s) added to a word to make it an odd or even number (OddParity/EvenParity)
Path	Computer	The location of a file on a storage device such as an FTP site, hard disk, or floppy disk.
PC	Computer	Personal Computer. Generally an IBM-compatible
PCM	Digital	Pulse Code Modulation. A/D encoding where the amplitude of the signal sampled at the Nyquist rate is directly converted to a binary number. Eg as on CD

PCMCIA	Computer	Personal Computer Memory Card International Association. The size of a credit card, these devices can be inserted into Computer & the M5000 Reverb to provide removable storage space, network or soundcard facilities etc aka PC Card
Pentium	Computer	Intel CPU originally called the 80586 {it came just after the 486}
Perceptual coding	Digital	Lossy data reduction scheme that remove information that it is assumed is masked by the remaining audio
periodic wave		Having a regularly repeating or cyclic pattern, Eg pedulum; if audible results in a pitched sound or tone.
periphonic	Surround Sound	all round surround. 360° on horizontal & vertical axis
permalloy		PERMEABLE ALLOY. A nickel-iron alloy which has very high magnetic permeability.
peta	SI Units	prefix Symbol P Eg petagram (Pg) = 1000000000000000grams Or 10^{15}
phantom image		Creating an apparent sound source/location between a pair of loudspeakers by feeding the same sound to both speakers. See Intensity Stereo
phantom power	microphones	Means of supplying DC power (usually 48V) to a mic down the same 3 core cable as sends audio to the desk. Audio being sent as the difference in voltage between the twisted pair & DC as 0V to the screen & the +48v being applied to both wires in the pair.
phase		The time relationship between two signals of the same frequency expressed as degrees of a circle. 180° out of phase means when 1 signal is at max positive amplitude the 2nd is at max negative level IE they cancel each other
Phaser	Fx Unit	Unit that sweeps through a range of frequencies at a set rate (LFO), emphasizing the center frequency.
phasiness		Audible comb filter distortion
Phono Connector		{UK Eng} Low cost coaxial connector for domestic audio & video {in US Eng known as RCA connector}
pico	SI Units	prefix Symbol p Eg picogram (pg) = 0.000000000001grams Or 10^{-12}
Pink Noise		Random noise having equal power energy per octave As lower Octaves have less Hz in them than higher ones, Pink noise has a 3db/Oct boost compared to White Noise. Called Pink because Red light = a low freq & Blue High.
pinna	The Ear	Outer ear. Directional cues result from the reflection of sound from the folds of the pinna.
pitch		Subjective perception of frequency
pixel	Computer	PICTure Element or single dot in a bitmap. May be square or rectangular requires 1 to 40bits to convey
platform	Computer	Eg Mac or PC, software for 1 type not usable on another. But a network often allows cross-platform use
polar pattern		Graphical representation of Level/amplitude against angle
polynomial	maths	a sum of one or more terms each consisting of a constant multiplied by one or more variables raised to a positive (or non-negative) integral power (e.g. $3 + 4xy^2$).
Polyphony	MIDI	Number of notes that can be played/sustained simultaneously
Poly-pressure	MIDI	Polyphonic Aftertouch. Pressure information for each key.

POP	Computer	Point of Presence. Multiple modems at a Internet Service Providers site giving access to the internet via a local phone call.
POP	Computer	Post Office Protocol. Used for storing & access to E-mail
Pop filter		a screen mounted in front of a microphone to stop blasts of air (eg from a vocalist) whilst being near acoustically transparent
Port	Computer	Socket on a PC where communications cables are connected. Eg Comms, printer, USB port
Portamento	Music	Pitch slide (over a certain length of time) between consecutive notes.
POST	Computer	Power On Self Test. Initial part of the boot process where the BIOS checks the system.
Post Production	Film	Work carried out after principal movie shoot is over IE picture & sound editing, digital Fx / CGI, ADR, Mix & printing
Post Sync	Film	recording an audio performance, in sync with picture, at a time after the original pictures were shot. IE ADR or Foley
POT	telecom	Plain Old Telephone, an analog phone line
Pot	Electronics	see potentiometer
potentiometer	Electronics	Potential Difference dividing network. Variable resistor arranged as a resistor with a 3rd connection that can tap into the resistance at any point.
POV	Film	Point Of View, IE a subjective shot as though the camera is a person
PowerPC	Computer	CPU developed by Apple, IBM & Motorola. Used in the latest Macs
PPP	Computer	Point to Point Protocol. Allows TCP/IP connection to the internet
PQ Coding	Computer	A CD contains subcode areas, named with a letter, from P to W. The key subcode areas are named P & Q, containing the location of each track on the CD, whether the track contains Emphasis and whether copying is permitted. P&Q coding is part of the mastering process.
precedence effect		See Haas effect
presence		Eq, typically a boost around 2-5kHz that has the effect of making speech/vocal sounds appear closer to the listener
pressure gradient	Microphones	Eg Fig 8 ribbon microphone. The force acting on the diaphragm is proportional to the differences between the pressures on both sides of the diaphragm. Also called a velocity microphone because its output depends on the air particle velocity at the diaphragm or ribbon
pressure microphone	Microphones	Responds to changes in air pressure & not particle movement. Will have an Omnidirectional polar pattern
Print though		transfer of magnetism from 1 layer of an analog tape recording to the next layers. Heard as a pre or post echo effect
Pro Tools		Digidesign(r) digital audio workstation. Uses plug-in software controlling inbuilt DSP chips
program	Computer	same as an application or Executable file {UK & US eng} in US sole spelling so also TV program etc
programme		{UK Eng} Eg TV, Radio, Concert but not Computer where US spelling used IE Program

protocol	Computer	An agreed set of software instructions that allow different devices to communicate with each other
Proton	Electronics	positively charged particle in an atom's nucleus
Proximity effect	Microphone	The bass or LF increase when sound source close to a directional mic. The particle velocity aspect increases with the reciprocal of the square of the distance from the source, whilst the pressure continues increasing with the reciprocal of the distance.
proxy	Computer	A server acting as a secure gateway between 2 networks.
psychoacoustics	Acoustics	Study of the interrelationships between the human hearing mechanisms & acoustics
PZM	Microphones	Pressure Zone Mic, (r) Crown {USA} for a boundry layer mic
Q	Analog	Quality Factor; In a filter or Eq circuit defines bandwidth therefore slope. High Q = narrow bandwidth
quadratic residue diffuser	Acoustics	sound diffuser panel. From research by Manfred Schroeder based on a Modulo number sequence
Quicktime	Computer	Movie and JPEG viewing system originally written for Apple Mac now on PC too.
RAM	Computer	Random access Memory. High speed Read/Write caplable memory. Electronic working space into which the current application & the operating system is loaded. Data disappears when power is removed.
rarefy	Analog	Make or become less dense or solid, esp. by expansion
raster image	Computer	Another name for a Bitmap picture
RDAT	Digital	obsolete name for DAT, short for Rotating head Digital Audio Taperecorder
refraction	Acoustics	Bending of a sound wave as it passes though media of different densities
refresh rate	Computer	Eg 72Hz = the number of times /sec the display on a VDU is updated. Less than 70Hz & the picture visibly flickers.
Reissner's Membrane	The ear	With basilar membrane, Reissner's Membrane divides the cochlea into three longitudinal chambers.
Release	Synthesis	Time taken for the parameter to fall from sustain level to 0 once key is released.
Release print	Film	Film played in a Cinema. Normally 35mm Consists of reels approximately 20 minutes long which are played consecutively without interruption either by alternating between two projectors, or by splicing the individual reels together into one large reel called a platter. Played at 24 fps, there being 16 frames per foot
Resonance	Acoustics	Increase in the acoustic pressure in an enclosed (or partially enclosed) space as a result of the dimension of the space interacting with the wavelength of the signal. Acoustical resonance in a room will occur at frequencies where the wavelength = the distance between two opposite, plane, parallel surfaces. (IE walls)
reverberation		time extension of acoustical events in a room generated by multiple sound reflections

RF	Electronics	Radio Frequencies Not solely the transmitted output of a Radio station but particularly regarding electromagnetic interference any high frequency noise
RGB		Red Green Blue the 3 Primary colours from which all colours can be formed
RIAA		Recording Industry Association of America; Re Vinyl disc playback = the standard replay Eq curve
ribbon microphone	Microphones	Type of Dynamic Mic the diaphragm being a ribbon of metal laying in a magnetic field. Normally has Fig 8 Polar pattern
ROM	Computer	Read Only Memory
room tone	film	aka Buzz track Low level (hopefully) background noise atmosphere
round window	the ear	Window in the cochlea opening into the middle ear that acts as a pressure release on the fluid of the inner ear.
RT60	Acoustics	Reverberation; time taken for a single sound to diminish by 60dB
Rushes	Film	{Uk Eng} a print of the previous days shoot. Traditionally will become the C/C {In US English called Dailies}
S/PDIF	Computer	Digital audio interface, shorthand for Sony-Philips Digital Interface to IEC-958 Standard. 2 Channels Max 24Bit, generally uses phono {RCA} (coaxial) connector.
SACD	Digital	Super Audio CD, Sony (r) system using a DVD disk & 1 bit Delta modulation Direct Stream Digital (DSD) Competitor to DVD-A
SASS	Microphones	Stereo Ambient Sampling System trade name of a stereo mic technique using 2, head spaced & angled PZM's with a centre baffle
Sawtooth wave	Synthesis	Cyclic ascending or descending linear transition between a high level and a low level. Return to original level occurs in no time. Contains an infinity of (odd and even) harmonics. Looks like a saw, hence the name.
SCMS	Digital	Serial Copy Management System; generally pronounced Scums. System to allow 1 digital copy only of a CD etc
SCSI	Computer	Small Computer System Interface. Parallel connection 8 or 16bit wide @ various speeds either Balanced {Know as Differential} or unbalanced Popular on Samplers, used with some Disc drives. Will probably be superseded by USB & Firewire.
SDDS	Film	Sony Dynamic Digital Sound; 7.1 channel Surround system for cinema, uses data reduction
SDS	MIDI	MIIDI Sample Dump Standard; protocol to allow Audio data & loop info to be sent (very slowly) over a MIDI cable
SECAM	Video	Sequentiel Couleur Avec Memoire; French system to encode colour information with luminence (B&W) 625 lines. 50Hz - 6MHz bandwidth
self noise	Electronics	Inherent noise floor of microphone or electrical circuit/component
Sequencer	MIDI	a program that can record, manipulate & play MIDI performance data
Serial		one after another. Daisy chain connection Eg for digital 1 bit at a time.
server	Computer	Host computer that supplies files & services like printers to client Computer

shareware	Computer	Software that the author/owner licences one to use without mandatory charge
Silicon Chip	Computer	An Integrated Circuit (IC) a collection of circuit elements such as transistors & capacitors fabricated on 1 piece of silicon
simple harmonic motion		Eg a pendulum. If plotted on a Time/Amplitude graph shows a Sine wave
sine wave		Result of simple harmonic motion and uniform linear motion. It is the only waveform that has no harmonics. Called a sine wave because the displacement is proportional to the sine of the angle.
SLIP	Computer	Serial Line Internet Protocol. Allows TCP/IP connection to the internet
SMTP	Computer	Simple Mail Transport Protocol. Used for sending & receiving E-mail
software	Computer	Binary coded instructions. Eg applications & operating systems
sonic		Pertaining to sound
sound pressure level		sound pressure referred to a standard level, the threshold of hearing; expressed in dB
SoundField microphone	Microphones	Mic with 4 capsules set in a regular tetrahedron. See ambisonic, B Format
spatial		Pertaining to space.
speed of sound		see velocity of sound
spot microphone	microphones	Mic placed close to a performer to augment a main stereo/ surround Mic
Square wave		Regular oscillation between 2 fixed levels. The transition theoretically occurs in no time. Thus contains an infinity of (odd) harmonics.
standing wave		When a wavelength = the distance between a pair of walls (or it fits X number of times) the wave will have no apparent velocity
stapes	The Ear	1 of the 3 bones in the middle ear
Star Network	MIDI	Parallel connection (Eg of MIDI devices using a Thru Box)
Status Byte	MIDI	Starts with a 1, indicates type of message on 3 bits (8 types possible) and channel on 4 bits (16 possibilities).
stereo		(from Greek) meaning solid, IE with depth, breadth and height implied
stereoscopic	Optics	Ability of eyes/brain to perceive depth / distance
stimulus		Something that causes a sensation
Subband	Digital	aka Critical Bands, approximately 1/3rd Octave frequency band used in Perceptual coding
Sustain		Level at which the parameter will stabilise for as long as the note is sustained once decay is over.
SVA	Film	Stereo Variable Area; Used in Dolby Stereo/Pro Logic, 2 soundtracks in the space previously used for 1, See Variable Area
SVGA	Computer	Super Video Graphics Array. VDU monitor standard for the PC etc gives a picture 800x600 Pixels in size
sweet spot		Optimum listening position for multi loudspeaker playback.
Sync Pip	Film	Exactly 1Fm of 1kHz tone is put at a point 2seconds (3ft of 35mm cinema film) before 1st frame of picture.

SYSEX	MIDI	System Exclusive, machine code transmitted within the MIDI protocol specific to each manufacturer.
sysop	Computer	SYSTEM OPERATOR. Person who runs a bulletin board or on-line service
Systems Common messages	MIDI	Messages which are not channel specific. Includes SYSEX.
TA	Computer	Terminal Adaptor; as a Modem allows digital communication over an analog line a TA interfaces a computer to an ISDN line
tangential mode	Acoustics	Room resonance that involves four of the six surfaces of a room.
TAO	Computer	Track At Once you can write 1 track do something else then another track aka Multisession
TCP	Computer	Transmission Control Protocol. See TCP/IP
TCP/IP	Computer	Transmission Control Protocol/Internet Protocol. Protocol system including TCP, IP, SMTP, FTP, Telnet and many other network protocols
Telecine	Film	Machine to convert Film images & sound to TV compatible Video & Audio
Temporal		Pertains to Time
tera	SI Units	prefix Symbol T Eg teragram (Tg) = 1000000000000grams Or 10^{12}
terminal	Computer	A VDU & Keyboard with access to Server is a Dumb Terminal. A smart Terminal also has a CPU
Tetrahedron	maths	A 4 sided solid
Text	Computer	Data consisting of standard ASCII or ANSI characters only
TFT	Computer	Thin Film Transistor display. As in the display on our Euphonix, Protools or the SSL G4
threshold		Level/amplitude at which a stimulus is just strong enough. Eg Threshold of hearing = just audible
Thru Box	MIDI	Box with one MIDI In and multiple MIDI Thru ports.
THX	Film	Tomlinson Holman Experiment; A set of playback specifications laid down by Lucasfilm Ltd & licensed to movie theatres & manufacturers of home cinema equipment.
timbre		Perceived tonal quality of a sound based on the pitch and harmonic content.
transducer		Device that converts one form of energy into another. Eg a Microphone converts sound to volts.
Transient	Acoustics	Abrupt change in signal amplitude at the start of a sound Eg percussion
Tympanic membrane	The Ear	Eardrum
Ultrasonic	Acoustics	Above audible range generally taken to be >20 kHz
U-Matic	Video	3/4in Cassette based Video format from Sony. Also used for Stereo Digital Audio
Unbalanced Line	Electronics	A coaxial cable with the outer screen at 0 volts or ground potential & an AC signal carried by the central conductor. Used for domestic & Semi-Pro equipment.
unidirectional	microphones	Microphone whose sensitivity is dominant in one direction. Implies a Cardioid polar pattern

unity Gain	Electronics	an electronic system where the signal is output at the same level as is input
UNIX	Computer	Operating system, generally command line. Nearly all big servers run Unix
URL	Computer	uniform resource locator. Syntax to describe WEB locations. Eg http://www.alchemea.com
USB	Computer	Universal Serial Bus.Hot swappable, serial computer connection. Vers 1.1
User Bits	Timecode	SMPTE/EBU timecode has 32 bits (generally arranged as 8x 4bit words) for any information, including a second set of timecode values, the user wishes.
uuencode	Computer	Popular method of sending Binary files via ASCII based E-mail. Originally a UNIX application
Variable area	Film	Analogue optical soundtrack. The Soundtrack area is either black or clear, the width of the clear portion varying with amplitude. See variable density
Variable density	Film	Analog Optical soundtrack, shading, opacity or density of the track varies with sound amplitude change.
VBAP	Surround Sound	Vector Based Amplitude Panning, aims to create phantom images between playback loudspeakers by splitting a single signal between them & varing the level.
VCA	Electronics	Voltage Controlled Amplifier; a circuit or IC the gain of which is controlled by a DC voltage. Much used in Dynamics units & mix automation
VCO	Electronics	Voltage Controlled Oscillator
VDU	Computer	Visual display Unit. A computer monitor
velocity of sound	acoustics	Speed of sound in air @ 0degC & 50% relative humidity is 331.6 m/s. As speed is proportional to the square root of absolute temperature = about 12 m/s greater at 20degC. It's nearly independent of frequency, slowing down slightly with frequency. Will be altered by wind velocity. The formula to give a good approximation for the speed of sound in other gases at standard temperature and pressure can be obtained from $c = \sqrt{\gamma \times P / \rho}$ where gamma is the ratio of specific heats, P is 1.013E5 Pa and ρ is the density. (ρ = Greek letter rho) Sound travels much faster in solids, typically about 5,000m/s.
Vertical Sync	Video	Sync pulse at start of each field of a TV image, 50Hz {Europe etc} or 59.94 {Americas etc}
VGA	Computer	Video Graphics Array. VDU monitor standard for the PC etc gives a picture 600x480 Pixels in size
VGA connector	Computer	15 pin sub miniature D connector of same size as standard 9pin D connector. Carries separate Red Green Blue + sync + audio signals
VHS	Video	Video Home System; Cassette based, 0.5 tape generally CrO2 type
VITC	Timecode	Vertical Interval Time Code. On a video image, a pair of lines (generally outside normal viewing area) can be used to carry Timecode Including user bit information. T/c will be readable even when tape stationary
Vocoder	Fx Unit	Unit that analyses the frequency content of an exciter signal (usually voice) in real-time (FFT) and reproduces this spectrum on another sound (carrier: guitar, synth) with a dynamic graphic equalizer. Makes instruments talk. Very popular effect.

VRAM	Computer	Video RAM. Even faster than regular RAM
VTR	Video	Video Tape Recorder
WAN	Computer	Wide Area Network. Network covering a large area Eg many buildings
Watt	Electronics	Unit of electric power =one joule per sec. Or 1 Amp DC & load resistance of 1 Ohm
wave form		Shape of a signal wave.
wavelength		Distance between successive similar points on a wave.
White noise	Acoustics	Equal probability of any frequency component.Sounds like Intense hiss. White is an analogy to light where equal frequency content gives white light (see pink Noise)
Wild Track	Film	Wild = not synchronized to picture. Audio recording made without the camera running
wildcard	Computer	as in the game of Poker. But a single Character is equivalent to a range of characters. Eg * mean any number of char, ? Means any single char.
Windows 2000	Computer	Microsoft 32 bit graphically based operating system. Developed from Win NT
Windows 95	Computer	Microsoft 32 bit graphically based operating system.
Windows 98	Computer	Microsoft 32 bit graphically based operating system.
Windows NT	Computer	NT = New Technology. 32bit operating system from Microsoft (r)
Word	Computer	Collection of Bits eg 8bit or a Byte size word
WORM	Digital	Write Once Read Many, Eg CD-R & DVD-R IE data storage with no Re-Writing possible
Wow and Flutter	Analog	Wow {an onomatopoeia} is low frequency speed/pitch variations to replayed audio, Flutter being high speed variations
WWW	Computer	World-Wide Web, like a LAN or WAN but covers the world
X.25	Computer	A networking protocol
Xmodem	Computer	A File transfer protocol, able to transfer binary files, has error correction
XVGA	Computer	XtraSuper Video Graphics Array. VDU monitor standard for the PC etc gives a picture 1024x768 Pixels in size
Y	Video	Luminance or B&W part of a video signal. Confusingly in Graphic /print media It's Yellow as in YMCK
Ymodem	Computer	file transfer protocol, able to transfer binary files, has error correction.
yocto	SI Units	prefix Symbol y Eg yoctogram (yg) = 1E-24grams Or 10 ⁻²⁴
yotta	SI Units	prefix Symbol Y Eg yottagram (Yg) = 1E+24grams Or 10 ²⁴
Z	Electronics	Symbol for Impedance measured in Ohms at a specific frequency (often 1kHz)
zepto	SI Units	prefix Symbol z Eg zeptogram (zg) = 1E-21grams Or 10 ⁻²¹
zetta	SI Units	prefix Symbol Z Eg zettagram (Zg) = 1E+21grams Or 10 ²¹
Zmodem	Computer	a file transfer protocol, able to transfer binary files, has error correction.
Ω	Electronics	Ohm, unit used to measure resistance & Impedance frequency, the perception of pitch also can be affected by other factors such as intensity and spectrum.
		wall of sound A theoretical concept employed by early workers in stereo at Bell
		Laboratories; a two-dimensional wavefront.
		XY stereo The arrangement of two directional microphones in a coincident stereo

		pickup.
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