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SOUND RECORDING TERMS

¼" or guitar cable – A high impedance cable.

Acoustic treatment – The addition of absorptive materials, baffles, Z-brackets or floating walls and floors and the removal of highly reflective areas in order to create the best possible sound in a room or area. These unwanted reflections produce a false aural picture during playback by boosting frequencies in the listening space.

Bass trap – An acoustic treatment device or material placed in corners of a control room whose purpose is to clear up the sound of the room by eliminating bass frequency reflections.

Bias – An electrical current that is sent through the tape heads during recording in order to insure that a minimal level of magnetization is going on at all times. This increases the frequency response of the recording by making it easier for high-frequency portions of a signal to reach tape. Bias increases tape-hiss because it produces a random non-pattern on the tape surface which is reproduced as noise.

Bit – A unit of data recorded as digital information. Eight bits = 1 byte.

Bounce – A process by which one moves data recorded on one track to another track.

Bus – An output channel on a console or DAW. A source for exporting a signal.

Condenser microphone - Operate on electrostatic instead of electromagnetic principle. The capsule consists of two thin plates, one fixed and one movable. The plates form a capacitor or condenser. A condenser is an electric device capable of storing an electric charge.

Because the diaphragm's output is of extremely high impedance, it is fed through an impedance conversion amplifier which is placed into the circuit at close proximity to the diaphragm in order to prevent hum and noise. This is why condenser microphones require a power supply voltage in order to operate.

Console – A mixing board or control surface.

Control room – The room in a studio containing the mixing console, outboard gear, tape machine or hard drives, monitors and patch bay. The nerve center of the recording studio. The engineer and producer spend most of their time in this room.

DAW – Digital Audio Workstation.

Decay -

Dynamic microphone – Dynamic microphone uses electromagnetic induction to generate an output signal.

In theory: whenever an electrically conductive metal cuts across the flux lines of a magnetic field, a current of a specific magnitude and direction will be generated within the metal.

Direct Box (DI) – A transformer used to change the output impedance from high impedance (1/4') to low impedance (XLR) or vice versa.

EQ - The process of altering the levels of frequencies that comprise a signal. Also called "equalization."

EQ Types:

- R/C (resistance/capacitance) provides treble and bass controls. Found on most home stereos and cheap PA systems. This type of EQ enables boosting or cutting of a fixed band of frequencies.
- Graphic (click-stop) You can alter the range of frequencies being equalized.
- Sweepable-band EQ allows one to manually sweep the band from one of the spectrum to the other and stop at any desirable frequency.
- Parametric EQ is the most sophisticated. Parametric EQ is sweepable and allows broadening or narrowing the desired frequencies. One can precisely control the precise frequencies and how much boost or reduction one wants to place on the frequency.

Flat frequency response - Equal output of all frequencies.

Hertz – the number of cycles per second.

I/O – In/out. Describes the inputs and outputs of a console, DAW or studio.

Monophonic – An instrument capable of reproducing one note at a time.

Overdub -

Phantom power - +48 volts. This boost in power allows condenser microphones to output the necessary signal for recording to tape or hard disk.

Pre-amp -

Patchbay –

Polyphonic – An instrument capable of playing one or more notes simultaneously.

Punch -

Reflection -

Returns -

Reverb -

Ribbon microphone - Similar principle to dynamic mic except that the diaphragm is made of extremely thin aluminum.

Because the diaphragm is light (compared to the coil of the dynamic mic), a step-up transformer must be used to bring the output impedance up from 2 ohms to the acceptable range of 150 – 600 Ω .

Sends -

Stereo – A three dimensional field allowing the listener to hear left, right and depth.

Typically, stereo is notated as L/R.

Track -

Tracking -

TT cable -

XLR cable -

CREDITS:

http://www.rolandus.com/glossary_main.asp

The Musician's Guide to Home Recording (McIan/Wichman) ISBN 0.8256.1378.7