

## **GLOSSARY OF TERMS COMMONLY USED IN DIGITAL MUSIC**

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**A/D** - Analog to Digital Conversion

**AES/EBU Professional Interface** - A standard for sending and receiving digital audio

**Bass** - The lower range of audio frequencies up to approximately 250 Hz

**Bit** - The smallest unit of digital information representing a single "0" or 1

**Byte** - A grouping of eight information bits

**Cardioid Pattern** - A microphone pick up pattern

**CD-ROM** - Compact Disc

**Clock Signal** - The signal put out by a circuit that generates steady even pulses or steady codes used for synchronization

**Coax** - Two-conductor cable consisting of one conductor surrounded by a shield

**D/A** - Digital To Analog Converter

**dB** - Decibel, a unit used in comparing signal strengths

**Digital Recording** - The process of converting audio signals into numbers that represent the waveform and storing these numbers

**Direct Box** - An electronic device utilizing a transformer or amplifier to change the electrical output of an electric instrument

**Directional Pattern** - In microphones, a term meaning the same thing as the term Pick Up Pattern

**Dropout** - A very short absence of signal in magnetic recording or any very short loss of an audio signal

**Expander** - A device that causes expansion of the audio signal

**File** - A collection of digital data stored in a computer's memory bank

**Filter** - (1) A device that removes signals with frequencies above or below a certain point called the cut-off frequency (2) An equalizer section (3) The action of removing signals of some frequencies and leaving the rest.

**Flat** - (1) Lower in musical pitch. (2) A slang used to describe the sensitivity to frequency of a microphone, amplifier, etc., usually within 2 dB.

**Frequency** - The number of cycles of a waveform occurring in a second

**Gain** - The amount of increase in audio signal strength, often expressed in dB

**Generation** - The number of times that the recorded audio signal has been copied

**Generation Loss** - The amount of clarity lost in the audio copy, due to added noise and distortion.

**Graphic Equalizer** - A device with several slides controlling the gain of audio signal present

**Hard Disk (Hard Disc)**- A storage unit for digital data that has rigid disks coated with magnetic material in a housing that includes the drive mechanism

**Hard Disk Recording** - The recording of digital audio onto a hard disc.

**Headphones** - Devices that can be worn on the head with small speakers that fit over the ears (or perhaps into the ears)

**High Frequencies** - The audio frequencies from 6000 Hz and above

**Hypercardioid Pattern** - A microphone pick up sensitivity pattern where the least sensitive pick up point is more than 90 degrees but less than 150 degrees off

**Input** – (1) The jack or physical location of where a device receives a signal. (2) The signal being received by a device.

**Interface** - Any device that allows one unit to communicate with another unit when they cannot do so by just feeding each

**I/O** - Input/Output

**Jack** - A connector mounted on the case of a device or on a panel

**Level** - The amount of signal strength

**Limiter** - A device that reduces gain when the input voltage exceeds a certain level

**Line Level** - An amplified signal level put out by an amplifier and used as the normal level that runs through the interconnecting cables in a control room.

**Line Out (Line Output)** - Any output that sends out a line level signal

**Live Recording** - Recording where all the musicians are playing at once and overdubbing is not done

**Low End** - slang for bass-frequency signals (below 250 Hz).

**Master** – (1) The original recording, used for making copies. (2) To make an original recording

**Mic Level** - The very low audio voltage level that comes out of a studio microphone.

**MIDI** - Musical Instrument Digital Interface; a system of number signals used to communicate performance information to and from musical instruments making music.

**MIDI Controller** - A device that puts out MIDI signals to control synthesizers or sound

modules

**MIDI Sequencer** - A computer that can record and playback MIDI data to control the performance of MIDI controlled musical instruments or devices in a series of timed steps.

**Noise Filter** - A filter used, which passes only signals with the intended audio frequencies eliminating noise signals at other frequencies.

**Noise Floor** - The level of the noise, in dB, below the signal

**Noise Gate** - A gate used to turn off an audio channel when noise but not signal is present.

**Noise Reduction** - Any device to remove noise in a device or system.

**Normalize** - To adjust the level of a selection so that the highest peak is at the maximum recording level of the medium

**Omni-Directional** - In microphones, picking up evenly from all directions

**Outboard Equipment** - Equipment that is used with, but is not a part of, a console.

**Output** - (1) The jack or physical location of where a device sends out a signal. (2) The signal put out by a device.

**Overload** - To put too much signal level into thereby causing distortion

**Patch Cord** - A cable with two plugs on it to interconnect two patch jacks in the patch bay

**Peak** - The highest point in the audio waveform

**Phone Plug (Jack)** - A plug (or its mating jack) with a diameter of 1/4 inch and a length of 1 1/4 inches used for interconnecting audio

**Pro Tools** - A trade name of Digidesign for a hard disk digital audio recording system

**Rack Mount** - To mount in an equipment rack

**RAM** - Random Access Memory (memory stored in the computer and immediately available for use and updating)

**Sample Rate** - The number of times per second that samples are taken

**Sample Rate Conversion** - The conversion of digital audio at one sample rate to digital audio at a different sample rate without first converting the signal to analog

**Scratch** - temporary

**Sequence** - (1) A playing of musical events automatically by some device, in a step-by-step order. (2) The action of programming a computer to play musical events, automatically, in a stepped order

**Sequencer** - A computer that can be programmed to play a stepped order of musical

events

**Shielded Cable** - Cable that has a shield around an inner conductor or inner conductors

**Shotgun Microphone** - A microphone with a long line filter to make the microphone pick up much better in one direction than in any other direction

**Signal Processing** - Changing the sound of the instrument or other sound source with equalizers, limiters, compressors and other devices "processing" them to be recorded onto a master

**Tape Hiss** - The noise of recorded tape

**Time Code** - Short for SMPTE Time Code (a standardized timing and sync signal)

**Unity Gain** - No increase or decrease in signal strength at the output of an amplifier or device compared to the signal strength at the input

**Waveform** - The shape made by the fluctuations of a quantity over time

**XLR Connector** – (1) A common 3 pin connector used in balanced audio connections. (2) A microphone Cable