

Glossary

AC - Alternating Current.

ADM - Audio Definition Model. A metadata specification for describing channel-based, object-based, or scene-based audio.

ASCII - American Standard Code for Information Interchange.

ASIO - Audio Stream Input/Output. A soundcard driver protocol from Steinberg Media Technologies GmbH that allows musicians and sound engineers to access PC soundcards directly without going through Microsoft Windows.

Array – a grouping of speakers. Example: 3 individual speakers grouped as the Left Surround channel instead of 1 speaker.

AU – Audio Units

Bed – A logical grouping of tracks/inputs/outputs in relation to a speaker configuration. Bed audio can range in width from stereo to 7.1.2. An example in post-production could be – 7.1.2 Music Bed, 7.1.2 Dialog Bed, 7.1.2.

BIOS - Basic Input/Output System. A type of firmware used to perform hardware initialization when a computer starts up.

BWF - Broadcast Wave Format. An extension of the Microsoft Waveform Audio Format (WAV) file format to include metadata important to broadcast applications. This format is specified in EBU Tech 3285.

B-format A speaker-independent representation of a soundfield.

CAF - Broadcast Wave Format. An extension of the Microsoft Waveform Audio Format (WAV) file format to include metadata important to broadcast applications. This format is specified in EBU Tech 3285.

channel configuration - A standard for describing a sound system with front, surround, and overhead channels. The first numeral represents the number of front channels, the second represents the number of surround channels, and the third represents the number of height channels. For example, 3/2/2 indicates that there are three front channels, two surround channels, and two height channels.

container - A formatted file (such as an MP4 file) comprising one or more multiplexed elementary streams and including format-specific metadata.

Core Audio – Built in audio subsystems of MAC OSX

CPU - Central processing unit.

DAMF – Dolby Atmos Master File Set. A three file master set comprised of .atmos, .atmos metadata, and .atmos audio.

DAW - Digital audio workstation. An electronic device or computer software application used to record, edit, and produce audio files.

dBFS - Decibels full scale. The amplitude of a signal relative to a digital full-scale signal.

dbTP = Decibel True Peak

DCP – Digital Cinema Package

Dolby Audio Bridge – A core audio emulation that provides 130 channels of DAW output.

Dolby Digital Plus - An advanced perceptual audio-coding system that expands and improves Dolby Digital coding technology, with higher bandwidth efficiencies, support for additional channels, and enhanced metadata capabilities.

Dolby RMU - Dolby Rendering and Mastering Unit.

DSP - Digital signal processor. A specialized microprocessor optimized for digital signal processing.

DVI - Digital Visual Interface. A video display interface used to connect a video source, such as a display controller, to a display device, such as a computer monitor.

EQ - Equalization. The adjustment of audio frequency responses for practical or aesthetic reasons.

FFOA - First frame of action. The point on a film reel or corresponding file at which the program content begins.

Fps - Frames per second. The number of unique consecutive images (frames) an imaging device produces in one second.

frame - In audio, a series of PCM samples or encoded audio data representing the same time interval for all channels in the configuration. Metadata pertaining to the frame can be carried within the frame or separately, depending on context.

HD - High definition.

HTML – HyperText Markup Language

I/O - Input/output. The communication between a system and an entity outside the system, such as another system or a human being.

IAB - Immersive Audio Bitstream.

IMF – Interoperability mastering format.

immersive stereo - A technology that delivers a virtualized immersive experience to headphones or stereo speakers through a Dolby AC 4 bitstream with appropriate stereo content and metadata that converts the stereo signal into the virtualized experience.

IP - Internet Protocol.

IP address - Internet Protocol address. A numerical identifier assigned to a device that is a member of a network that uses the IP for communication.

JOC – Joint Object Coding – Dolby Digital 5.1 Dolby Digital Plus bitstream with the addition of specific metadata to carry Dolby Atmos. The 5.1 “core” contain all the audio present in the Atmos mix and is backwards compatible with non-Atmos use cases.

LFE - Low-Frequency Effects. A band-limited channel specifically intended for deep, low-pitched sounds.

LKFS – Loudness, K-weighted, relative to full scale.

Lo/Ro – sums the rear and side surrounds in equal measure.

LTC - Linear timecode. A timecode developed by the Society of Motion Picture

and Television Engineers (SMPTE) that provides a time reference for editing, synchronization, and identification.

Lt/Rt – Downmixes from 5.1 – 2.0

LU – Loudness Units (decibels)

MADI - Multichannel Audio Digital Interface. A communications protocol for an interface that carries multiple channels of digital audio, defined by the Audio Engineering Society. Also known as AES10.

MPEG-4 An MPEG standard (ISO/IEC 14496) for a group of audio and video coding formats and related technologies.

MTC – MIDI Time Code

OAMD – Object Audio Metadata. Positional X, Y, Z, panning coordinates recorded along with object size.

OAR – Object Audio Renderer. Used during mixing with the Dolby Atmos Renderer and for Dolby Atmos Master File playback. The OAR “renders” the Bed to available speakers and the Object audio to spatial coordinates supplied by the OAMD.

object - An audio signal plus associated object audio metadata.

OEM - Original equipment manufacturer. A manufacturer that provides a complete hardware and software system to the consumer.

PC - Personal Computer.

PCI - Peripheral Component Interconnect. A local computer bus that supports functions in a standardized format.

PCM - Pulse code modulation. A method that is used to convert analog signals into digital, binary, coded pulses by sampling the analog signal, quantizing each sample independently, and converting the resulting quantized values into a digital signal.

playlist - An extended .m3u8 file that contains one or more uniform resource identifiers (URIs). A URI can point to another playlist or to a media file.

ProLogic IIx – A matrix encoding technology originally developed for encoding rear surrounds of 7.1 mixes into 5.1 to provide 7.1 playback in home theatres from 5.1 sources.

rendering - Processing of audio content to adapt it to specific speaker layouts, such as 5.1 and 7.1 speaker feeds, or headphones and sound bars.

RMU - Rendering and Mastering Unit.

RMW – Rendering and Mastering Workstation

SMPTE - Society of Motion Picture and Television Engineers.

Spatial Coding – A process that dynamically groups nearby audio from Beds and Objects using loudness and positional algorithms into “elements” that contain their own OAMD.

UI - User interface.

UPS - Uninterruptible power supply.

USB - Universal Serial Bus. A standard that defines the cables, connectors, and communications protocols used in connections between computers and electronic devices.

WAV - Waveform Audio Format. An audio bitstream file format.