Five Audio Specs Necessary for Film Distribution & Broadcast

1. **Loudness**: The LKFS (Loudness Units Relative to Full Scale) is usually -23 to -25 db throughout the project. But each network is different. This number refers to long-term measurements as opposed to short-term (e.g. a 10 second window).

2. **Maximum (True) Peak**: the very loudest parts of your audio. Most networks are -10 but some are -2 and some networks require different true peak readings for different deliverables (e.g. stereo mix -10, surround mix -2).

3. **Stereo vs. Surround Sound**: Stereo is comprised of Left and Right channels. 5.1 surround sound is Left, Center, Right, Left Rear, Right Rear, and LFE (low-frequency effects), or sub-woofer.

4. **Dolby Pro Logic II, LT/RT and Lo/Ro**: 5-channel (5.0) mix that has been matrix encoded into a stereo 2-channel mix called an LT/RT (Left Total/Right Total). Popular in U.S. television markets, but being phased out of film in favor of Digital Cinema Packages (DCP). A Lo/Ro mix is a 5.1-to-stereo down mix without using the Dolby Pro Logic II encoding.

5. **Stems**: the separated elements of your full soundtrack. They can be single elements (e.g. VO, music, dialog, etc.) or several elements mixed (e.g. M&E). In dipped stems, each stem remains at the varying levels set for a full mix (e.g. music lower during VO). Undipped stems remain at one even level throughout the program so that international distributors can re-dip the stems to account for the differences in the length of different languages.

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