

# SOUND & TONE GLOSSARY

**attack:** the initial crispness of the note; it can be fast or slow, crisp or dull.

**balance:** the characteristic of an instrument in which the upper, mid, and lower tones have very similar loudness.

**bass:** the notes on the lower strings; the lower frequencies.

**bloom:** the way a note seems to get louder just after the initial attack.

**bright:** a pronounced upper harmonic that accentuates the upper register.

**chimey:** sustains with shimmery, high harmonics.

**chops:** refers to musical proficiency; for example, a player with good chops a skilled player.

**chorus:** in a song, the part that either repeats or is considerably different from the verse; electronically, a very short delay, 20-50 milliseconds, blended with the original signal for a dreamy effect.

**clarity:** the way notes and chords are distinct and well defined, but not strident.

**compression:** the way a sound is altered to prevent overly loud or overly soft sounds, keeping the overall volume to a narrower dynamic range; compression may enhance sustain, or it may limit the level that might cause distortion.

**cutting power:** the ability to be heard through a variety of instruments and tones. Usually associated with loudness, a pronounced attack and upper-harmonic content.

**decay:** the portion of the note immediately after the attack, just between attack and sustain.

**definition:** clearly established pitch and attack.

**depth:** the positive attribute of low notes; a guitar with good depth has strong – not strident, boomy or mushy – bass notes.

**dry or dryness:** defined primarily by the fundamental and low-order harmonic content; often used to describe a guitar without complex harmonic content.

**duration:** a measure of time usually associated with sustain; the amount of time a chord or note lasts when played (most chords will last six to twelve seconds).

**dynamic range:** The audible and musically useable output of an instrument from its quietest to its loudest.

**dynamics:** an instrument's ability to produce different sounds when played very softly, softly, medium, and hard; also, the range of the guitar's output from soft to loud. See dynamic range.

**evenness of response:** when the notes from an instrument are very close in amplitude and harmonic content.

**full:** usually refers to abundant fundamental and harmonics.

**fundamental:** the root note, separate from its harmonic content.

**harmonics:** the naturally occurring peaks in the frequency response of an instrument that correspond to intervals above the root note, in the form of octaves, higher fourths and fifths, and some odd intervals.

**intonation:** the ability of an instrument to play in tune through its entire range, which is accomplished via a technique called compensation.

**midrange:** the range defined by the middle strings of the guitar; the part of the sound spectrum that gives punch to tone.

**mwaa:** occasionally used to describe the initial onset or attack of a fretless bass; it is a tone between the bloom of the note and a subtle buzz.

**organic:** natural sounding; without an obvious imbalance; without electronics.

**overtones:** usually describe the harmonic content of the notes, separate from the fundamental; sometimes used to describe dissonant or unpleasant tones that are part of the total voice.

**percussiveness:** often associated with a strong attack; more recently, the tone generated by striking the instrument in the manner of a drum.

**piano-like:** big sounding, with bold harmonics and a super clear fundamental; also associated with a strong, quick attack and long sustain.

**projection:** the ability of an instrument to be heard at a distance beyond the immediate area of the player.

**punch:** the combination of strong mids and a strong attack.

**resonance:** the natural tendency of materials to vibrate at particular frequencies; the colloquial term to describe the liveliness of an instrument, or the lack of it.

**response:** a combination of the harmonic content and the way the guitar feels to the player.

**rich:** an instrument with abundant harmonic content.

**rings:** sustains with clarity.

**scooped:** compared to a flat response curve, a scooped curve has a broad dip in the midrange frequencies.

**separation:** the clarity between notes, characterized by the ability to hear each note.

**shimmery:** even more high harmonics than sparkly, and extending to higher frequencies.

**sparkly:** lots of separate high harmonics of the notes.

**sustain:** the length of time the note is audible after the initial attack, and the brief period while the note is at its loudest.

**tap tone:** tapping a piece of wood pre-cut for a guitar back or top and listening for the tone; used to voice a guitar's top and back, helping the luthier to control, enhance, adjust, or otherwise alter the voice of a guitar.

**thick:** strong harmonics closely related to the individual notes.

**timbre:** a group of characteristics that create the overall tonal character of the instrument. Overall tonal character may be bass heavy, treble heavy, or well balanced; the midrange may be prominent or scooped; various aspects of the harmonic content may sustain longer than others.

**tonal rise and decay time:** half of the scheme by which a sound is defined with respect to amplitude. Attack is first, rise time is the few milliseconds immediately after, decay is the very brief period from the highest amplitude to when the note settles into its sustain period, and release is the rapid decline in amplitude before it becomes inaudible.

**treble:** the notes on the upper strings; the upper frequencies.

**voice:** the total package of the tone, timbre, volume, resonance, and all other aspects of the guitar's sound.

**volume:** the loudness of an instrument; the amount of air enclosed by the body of the instrument.

**warmth:** slightly softened mids and upper harmonics, leaving a less sharp attack of the notes.