

Musical Frequency Chart with Equalization Notes

Equalizer Usage		Zones	Acoustic guitar	Bass guitar	Drums				Electric guitar	Vocals		
1/3 octave centers (Hz)	Audible octaves				C	K	S	T		M	F	
20	1) 20-40Hz	A) 10-20Hz, subharmonic. Always cut with a high pass filter. <20Hz is below the range of human hearing.										
25												
31.5												
40	2) 40-80Hz	B) 20-100Hz (sub bass), sub/thump, bass and kick drum. Boost or cut. Lowest bass guitar note is 41Hz.		High pass at 40-50Hz, no usable bass below 40Hz.								
50												
63												
80	3) 80-160Hz	C) 100-250Hz (bass), low end of instruments, everything lives here. Boost or cut. Fat or thin sound, too much is boomy.		Thickness around 80-100Hz.								
100												
125												
160	4) 160-320Hz	D) 250-500Hz (low midrange), boxy or muddy if too much, clutter zone. Cut to fix. Boost around 300Hz to add bass clarity.		Muddiness around 200Hz.								
200												
250												
315	5) 320-640Hz	E) 500-1,000Hz (midrange), honky, boxy, papery, cardboard, vocal/guitars nasally. Boost at 1,000Hz can create horn like quality. Too much is fatiguing.		300-600Hz boost to thicken the sound.								
400												
500												
630	6) 640-1,280Hz	F) 1,000-3,000Hz (upper midrange), Move sound forward or back, vocals. Boost or cut. Hearing is very sensitive here. Too much boost at 3,000Hz is fatiguing.		600-800Hz cut to make room for other instruments.								
800												
1,000												
1,250	7) 1,280-2,560Hz	G) 3,000-6,000Hz (presence), edge/bright, be careful, not enough is dull.		1,000-3,500 use to move the guitar to the front of the mix, especially for finger picking.								
1,600												
2,000												
2,500	8) 2,560-5,120Hz	H) 6,000-10,000Hz (brilliance), presence, add to make less dark, make stand out. Vocal sibilance.		3,500-12,000Hz for sparkle or brilliance. Start boosting at the low end first.								
3,150												
4,000												
5,000	9) 5,120-10,240Hz	I) 10,000-15,000Hz (brilliance), air, halo effect. Boost unless de-essing. Too much boost raises hiss and is fatiguing.		3,500-12,000Hz for sparkle or brilliance. Start boosting at the low end first.								
6,300												
8,000												
10,000	10) 10,240-20,480Hz	J) >15,000Hz, may low pass at 16,000 to 18,000 on master buss.										
12,500												
16,000												
20,000												