Audio Compression Cheat Sheet for Sound-Tech Volunteers

This cheat sheet is designed to help Sound-Tech volunteers understand and use audio compression effectively during services.

What Is Compression?

Compression reduces the dynamic range of audio—making loud sounds quieter and quiet sounds louder—so everything is more balanced and easier to hear.

Key Compression Terms (Made Simple)

Term	What It Means	Easy Explanation
Threshold	Volume level where compression starts	Only compress sounds louder than this
Ratio	How much compression is applied	How strong the compression is (e.g., 4:1 means for every 4 dB over threshold, only 1 dB gets through)
Attack	How quickly compression starts	How fast it reacts to loud sounds
Release	How quickly compression stops	How fast it lets go after the sound gets quiet
Gain (Makeup Gain)	Boosts the overall volume after compression	Turn it back up after squashing it

Common Settings for Church Audio

Source	Threshold	Ratio	Attack	Release	Gain
Vocals	-20 dB	3:1	10 ms	100 ms	+3 dB
Pastor Mic	-18 dB	4:1	5 ms	150 ms	+2 dB
Acoustic Guitar	-22 dB	3:1	15 ms	200 ms	+2 dB
Drums (Kick/Snare)	-10 dB	6:1	2 ms	100 ms	+4 dB
Backing	-15 dB	2:1	20 ms	300 ms	+1 dB

Tracks

Tip: Start with these settings and adjust by ear. If something sounds squashed or unnatural, ease off the ratio or raise the threshold.

Quick Tips

• Use your ears: If it sounds good, it is good.

• Don’t over-compress: Too much compression can make things sound lifeless.

• Watch the meters: Make sure you're not clipping (going into the red).

• Use presets: Many mixers and digital consoles have vocal/instrument presets—great starting points!