



Equalisation

I have noticed some pretty wild settings being used lately (eg +15dB at 13KHz, +15dB LF EQ). **It is quite possible to damage speakers, amplifiers, and ears with such extreme settings.**

EQ is used to a) prevent feedback

b) make the speaker, vocalist, or instrument sound natural, and be heard clearly.

Here are a few guidelines:

1. If you don't know exactly what you're doing, leave the EQ section out.
2. **A cut is worth a thousand boosts.** Use cuts to notch out feedback, and get rid of unwanted sounds (eg muddy low-mids, sibilance). Most vocalists will need about 6dB cut between 350 to 450Hz. The low frequencies can be cut back on these too (as well as guitar, piano etc). This will allow the drums and bass to be heard without boominess from the PA.
3. When a boost is required, less is more. Each +3dB means twice the power is required! Find the appropriate frequency and boost as little as possible to achieve the result.
4. A lapel mic requires special treatment: some cut at around 800 Hz is usually required to prevent feedback. It may be that a little (eg 2dB) boost is required at the high frequencies.