

Audio-Technica AT-897 Line + Gradient Shotgun Condenser Microphone:
{Mainly used in video/film production, live news recording/interviews, etc.}



Since acoustic feedback frequently tends to occur at the room resonance frequencies – i.e. peaks in the reverberant sound field, the use of e.g. multi-band graphics equalizers in the sound reinforcement system to equalize/level-out the room response across the audio frequency band (*i.e.* to kill the room resonances), will substantially raise the feedback oscillation level, as shown in the figure below – the DBX 1231 dual 31-band graphics equalizer is one currently available example of such a device commonly used in electronic sound reinforcement systems.



The use of a 31-band graphics equalizer – with 1/3 octave/band can significantly help in leveling out resonances {as well as anti-resonances/dips} in a room's acoustics, as shown schematically in the figure below: