

Equalizers

MINIFBQ FBQ800

MINI FBQ Ultra-Compact 9-Band Graphic Equalizer with FBQ Feedback Elimination

- Ultra-compact 9.5" graphic equalizer for studio and stage applications
- Revolutionary FBQ Feedback Detection System instantly reveals critical frequencies and can also be used as Audio Analyzer
- Additional Low Cut filter removes unwanted frequencies, e. g. floor rumble, mic thumps, wind noise
- Accurate 6-digit LED Input/Output meters and Level control for precise level indication
- High-quality illuminated faders, potentiometer and illuminated switches for long-term reliability
- Ultra low-noise audio operational amplifiers offer outstanding sound performance
- All Mini Series models can be stacked on top of each other to create an ultra-compact signal processor solution
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

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Why do I need an equalizer?

If we all lived in a perfect world, there would be no need for audio equalization. Sound systems would be perfect and would reproduce perfect signals in all their glorious perfection. Also, everyone in that perfect world would like the same amount of bass, midrange and high frequency, and there would be no such thing as feedback. But the world isn't perfect, is it? Even the best sound system can benefit from the use of a good EQ—like the FBQ800.

How does it work?

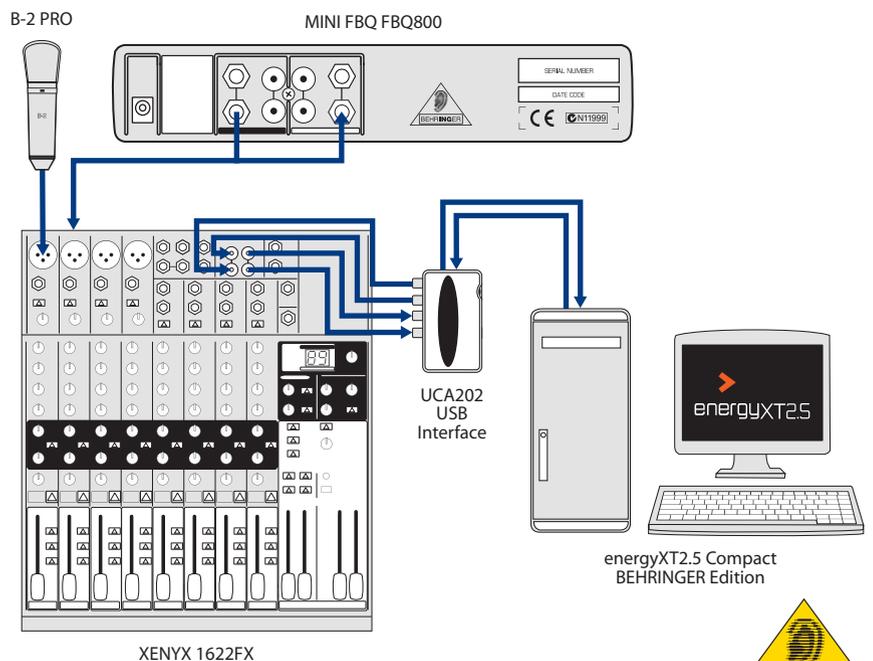
Imagine the frequency range of the sound you hear as a highway, a very wide one with nine lanes. Each of these "lanes" represents a single octave of the sonic spectrum. The first four lanes, labeled 63 - 500 (Hz) contain the really



low frequency sound content, mainly bass, bass vocals, and the kick and tom drums. The three lanes labeled 1 k, 2 k and 4 k (Hz), make up the fundamental zone of most musical instruments and the male and female vocals. 8 k and 16 k cover the frequency range of cymbals, snare drums and higher pitched percussion instruments.

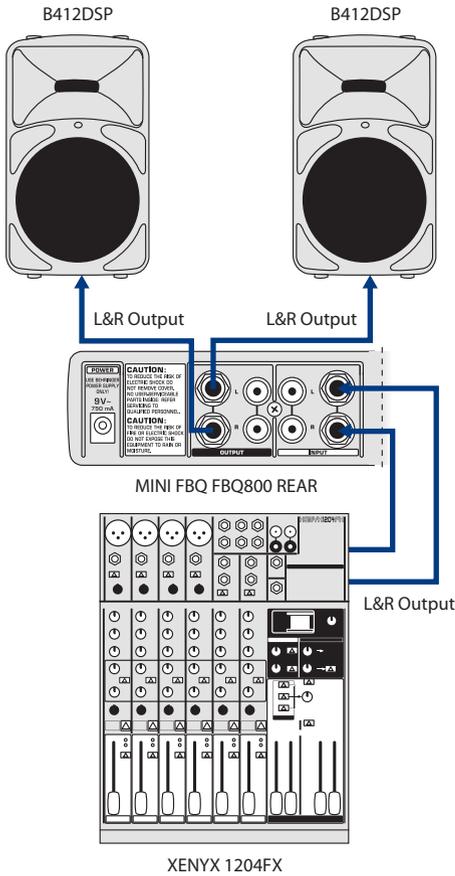
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Podcast Setup



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Small Live Setup



The FBQ800 allows you to control the flow of audio traffic in each of these nine lanes. When properly applied, EQ makes it possible to hear all of these frequency ranges equally, thus the term equalization.

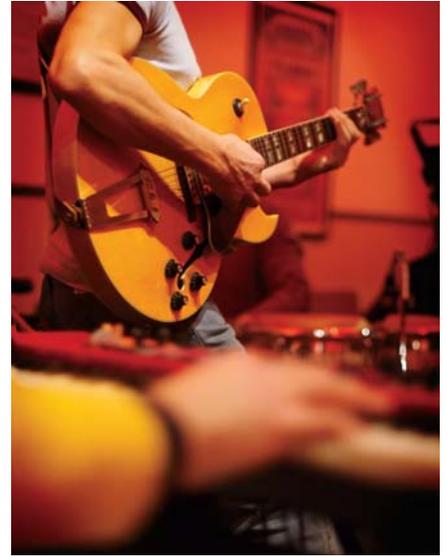
Feedback elimination

When a specific frequency, or range of frequencies, reaches too high a level, feedback occurs—that all-too-familiar squeal or howl you get when the mic is too close to the speaker. Basically, feedback happens when there is so much of a particular frequency that it is picked up by the mic and run through the system again. That's why feedback typically gets louder and louder the longer it's allowed to occur. Needless to say, this kind of feedback is very undesirable.

This is where the FBQ800's Feedback Detection System really works its magic. In this ingenious circuitry, LEDs on the individual faders light up when that frequency band is approaching the danger zone. All you need do is lower the illuminated slider until the LED blinks out—voilà, feedback problem solved! What once required a highly trained ear is now an activity that even a child can master.

Sonic toolkit...

That really is the best way to describe the FBQ800. With its nine frequency bands, you easily fine-tune your sound and instantly eliminate feedback. And each fader can be used to boost or cut the frequency range it controls by as much as 12 dB (and that's a lot!).

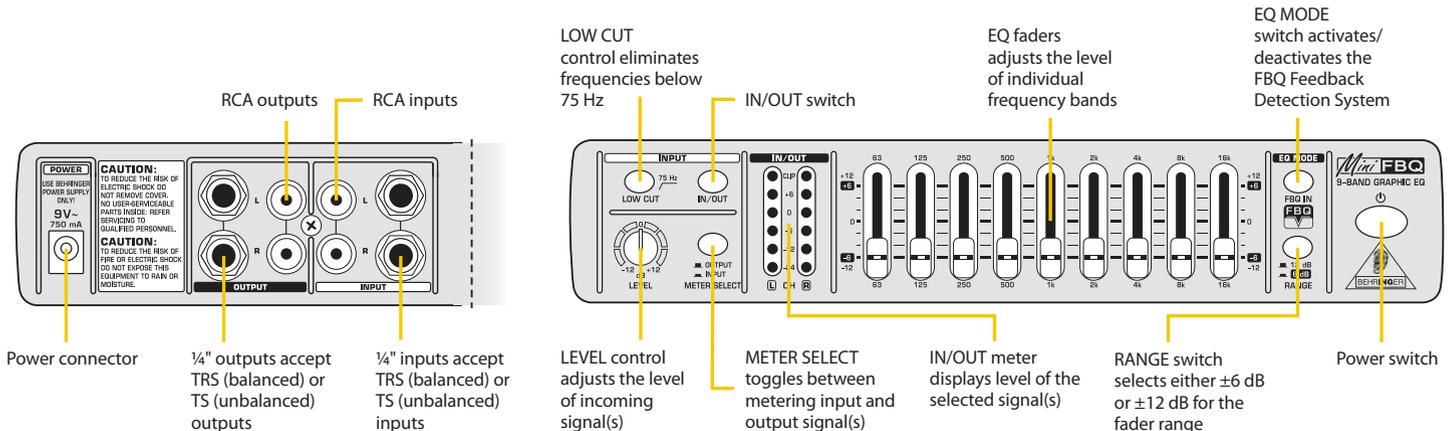


Special attention is paid to the low frequency zone. In addition to low frequency faders, the FBQ800 features a Low Cut filter for removing unwanted low frequencies such as floor rumble, room resonance, electrical hum, etc. This is especially handy if your system is being used for speech rather than music.

To boost or to cut, that is the question

Raising and lowering specific frequency bands can improve the frequency response of any room's acoustics. For instance, if the room you're in is "bass-heavy," lowering the 63 and 125 Hz faders can help eliminate an overall "boomy" or "muddy" sound. Likewise, gently boosting the 8 and 16 k sliders can add sparkle to a somewhat "dark" mix. Are the vocals

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getting lost in the mix? Raising the level of the 1 k slider can help bring them out.

It's important to note that raising a single fader level is not always the best solution; it's often better to lower the bands surrounding the frequency you want to bring out, and then boost the overall volume level to achieve better headroom.

Built for accuracy and reliability

Speaking of headroom, FBQ800's 6-digit LED Input/Output meters and level control are provided for precise level maintenance. Long-term reliability is ensured, thanks to high-quality illuminated faders and switches, and our ultra low-noise audio operational amplifiers provide outstanding sonic performance. In addition, all Mini Series components may be stacked to create an ultra-compact signal processing solution.

INPUT

Type	¼" TRS connectors (balanced) or RCA connectors (unbalanced)
Impedance	approx. 20 kΩ, balanced approx. 10 kΩ, unbalanced
CMRR	40 dB typical @ 1 kHz
Max. input level	+15 dBu

OUTPUT

Type	¼" TS connectors (unbalanced) or RCA connectors (unbalanced)
Impedance	approx. 120Ω
Max. output level	+15 dBu

SYSTEM SPECIFICATIONS

Frequency response	10 Hz to 200 kHz, -3 dB
Dynamic range	110 dB, 10 Hz to 22 kHz
Distortion	0.003 % typical @ 0 dBu
Crosstalk	< 80 dBu @ 1 kHz
Signal-to-noise ratio	10 Hz - 22 kHz < 95 dB @ 0 dBu, a-weighted

GRAPHIC EQUALIZER

Type	9 analog stereo bands
Control range	±6 dB or ±12 dB, switchable
Bandwidth	1 octave

OTHER FEATURES

Low-cut filter	75 Hz (12 dB/octave)
Input level control	-12 dB to +12 dB

POWER SUPPLY

Mains connection	external power supply, 9 V ~ / 750 Ma
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MAINS VOLTAGE

USA/Canada	120 V~, 60 Hz
U.K./Australia	240 V~, 50 Hz
China	220 V~, 50 Hz
Europe	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
Power consumption	approx. 7.0 W

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	1 8/9 x 9 5/9 x 4 5/8"
	48 x 243 x 120 mm
Weight	0.86 lbs / 0.39 kg

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