Equalizers

MINIFBQ FBQ800

Ultra-Compact 9-Band Graphic Equalizer with FBQ

- 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
- Accurate 6-segment LED input/output meters and Level control for precise level indication
- High-quality illuminated faders, potentiometers 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



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.

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.

Continued on next page





MINIFBQ FBQ800

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

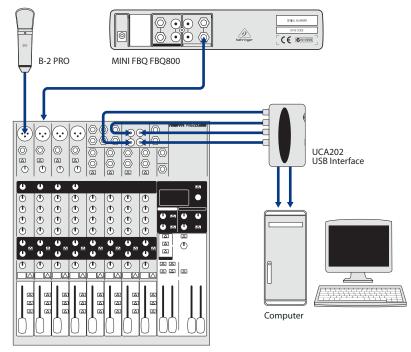
Raising and lowering specific frequency bands can improve the frequency response of any room's acoustics. For instance, if the room you're in is "bass-heavy," lowering the 63 and 125 Hz faders can help eliminate an overall "boomy" or "muddy" sound. Likewise, gently boosting the 8 and 16 k sliders can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

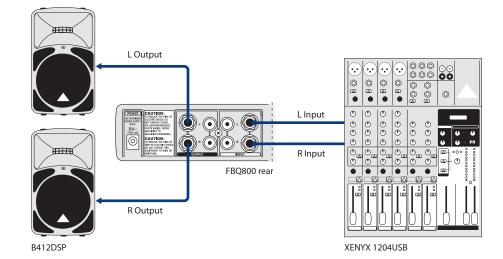
Speaking of headroom, FBQ800's 6-digit LED Input/Output meters and level control are provided for precise level maintenance. Long-term reliability is ensured, thanks to high-quality illuminated faders and switches, and our ultra low-noise audio operational amplifiers provide outstanding sonic performance.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

Podcast Setup



XENYX X1622USB

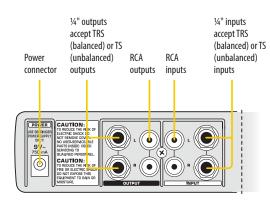
Small Live Setup



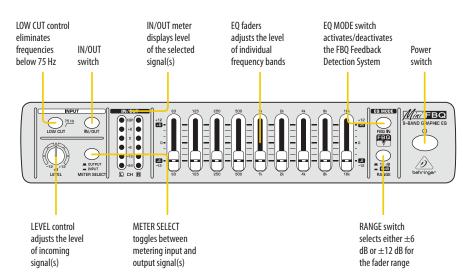
Page 3 of 3

MINIFBQ FBQ800

Rear View Panel



Front View Panel



Specifications

| Туре | 1/4" TRS connectors (balanced) or RCA connectors (unbalanced) |
|------------------|---|
| Impedance | approx. 20 k Ω , balanced approx. 10 k Ω , unbalanced |
| CMRR | 40 dB typical @ 1 kHz |
| Max. input level | +15 dBu |

| output | |
|-------------------|--|
| Туре | ¼" TS connecotrs (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 a-weighted | 10 Hz - 22 kHz < 95 dB @ 0 dBu, |

| Graphic Equalizer | |
|---------------------|---------------------------------------|
| Туре | 9 analog stereo bands |
| Control range | \pm 6 dB or \pm 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 |
| Mains voltage | |
| USA/Canada | 120 V~, 60 Hz |
| U.K./Australia | 240 V~, 50Hz |
| China | 220 V~, 50 Hz |
| Europe | 230 V~, 50 Hz |
| Japan | 100 V~, 50 - 60 Hz |
| Power consumption | approx. 7.0 W |

| Dimensions/Weight | | |
|---|--|--|
| 1.88 x 9.55 x 4.72"/48 x 242.6 x 120 mm | | |
| 1.32 lbs/0.6 kg | | |
| | | |

Please note these specifications are preliminary and conceptual in nature, and as such are subject to change as product development progresses. This information is supplied for market research purposes only and is not to be made public in any manner. This document is solely the property of The MUSIC Group, or one of its subsidiaries, and must be surrendered upon request of the owner

For service, support or more information contact the BEHRINGER location nearest you:

Europe MUSIC Group Services UK Tel: +44 156 273 2290

Email: CARE@music-group.com

USA/Canada **MUSIC Group Services NV Inc.** Tel: +1 702 800 8290 Email: CARE@music-group.com

Japan MUSIC Group Services JP K.K. Tel.: +81 3 6231 0454 Email: CARE@music-group.com

Technical specifications and appearances are subject to change without notice and accuracy is not guaranteed. BEHRINGER is part of the MUSIC Group (music-group.com). All trademarks are the property of their respective owners. MUSIC Group accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colors and specifications may vary from actual product. MUSIC Group products are sold through authorized fulfilliers and resellers and resellers are not agents of MUSIC Group and have absolutely no authority to bind MUSIC Group by any express or implied undertaking or representation. This manual is copyrighted. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of MUSIC Group IP Ltd. ALL RIGHTS RESERVED. © 2012 MUSIC Group IP Ltd. Trident Chambers, Wickhams Cay, PQ. Box 146, Road Town, Tortola, British Wrigin Islands. 985–10000–00352



