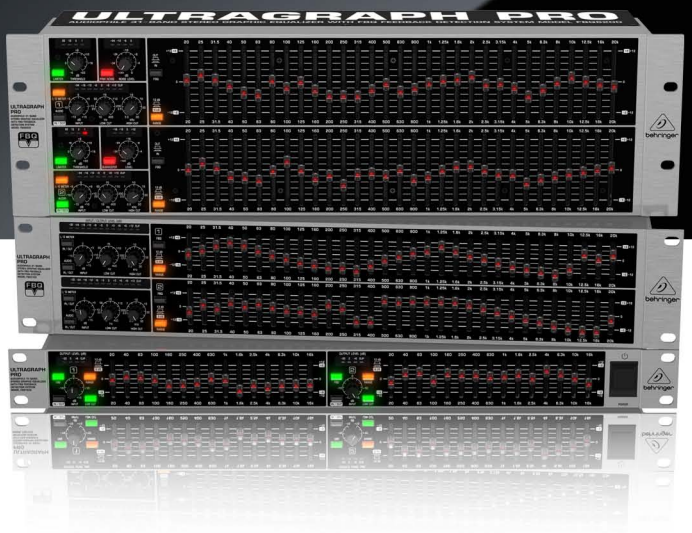
ULTRAGRAPH PRO FBQ6200/FBQ3102/FBQ1502



Audiophile Multi-Band Stereo Graphic Equalizers with FBQ Feedback Detection System

ULTRAGRAPH PRO FBQ6200 — Audiophile 31-Band Stereo Graphic Equalizer with FBQ Feedback Detection System

- Audiophile 31-band stereo graphic equalizer for live and studio applications
- Dedicated Limiters with gain reduction meters for each channel protect your sound system from overload and distortion
- Pink noise generator provides test signals to adapt your sound system to any room acoustics
- Relay-controlled hard bypass with an auto-bypass function during power failure (failsafe relay)

ULTRAGRAPH PRO FBQ3102 — Audiophile 31-Band Stereo Graphic Equalizer with FBQ Feedback Detection System

- Professional 31-band stereo graphic equalizer for live and studio applications
- Relay-controlled hard bypass with an auto-bypass function during power failure (failsafe relay)

ULTRAGRAPH PRO FBQ3102 — Audiophile 31-Band Stereo Graphic Equalizer with FBQ Feedback Detection System

- Professional 15-band stereo graphic equalizer for live and studio applications

Professional audio engineers have known for decades that a good EQ makes all the difference in how a performance is perceived. Although multi-band graphic equalizers have been around for a long time, they have changed very little… until now! BEHRINGER ULTRAGRAPH PRO Series equalizers take a giant leap forward technologically, providing robust feature sets and our proprietary FBQ Feedback Detection System—at a price that makes them a must-have for anyone who records or operates a live sound system.

How Does Equalization Work?

Imagine the audio frequency range as a very wide highway with lots of "lanes". Each of these lanes represents a specific frequency band.

- The lanes on the left side contain the really low frequency content, mainly bass, bass vocals, and the kick and tom drums
- The middle lanes make up the fundamental zone of most musical instruments and the male and female vocals
- The right-hand lanes have all the high-frequency stuff, such as snare drums, cymbals, higher pitched percussion instruments and the content that adds sizzle to the mix

BEHRINGER FBQ-PRO EQs allow you to control the flow of audio traffic in each of these lanes. The more lanes (bands) you have, the more control you have over the final sound. When properly applied, EQ makes it possible to hear all of these frequency ranges equally, thus the term equalization.

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ULTRAGRAPH PRO FBQ6200 / FBQ3102 FBQ1502

Common features

- Revolutionary FBQ Feedback Detection system instantly reveals critical frequencies and can also be used as audio analyzer
- Mono subwoofer output with dedicated level control and adjustable crossover frequency
- Additional sweepable high and low-cut filters for each channel remove unwanted frequencies e.g. floor rumble, hiss etc. (low-cut switch only FBQ1502)
- Highly accurate 8-segment LED input/output metering and input gain controls for easy level setting
- Ultra-low noise audio operational amplifiers for highest signal integrity
- Servo-balanced inputs and outputs with ¼" TRS and gold-plated XLR connectors
- Shielded toroidal power transformer for ultra-low noise performance
- High-quality components and exceptionally rugged construction ensure long life
- Conceived and designed by BEHRINGER Germany

Special Tools for Low Frequencies

The low-frequency sound range requires special attention. That's why the FBQ-PRO Series features a Low Cut filter, in addition to the frequency faders, to help remove unwanted low frequencies such as floor rumble, room resonance, electrical hum, etc. This filter is preset on the FBQ1502 to remove all content below 25 Hz, which can really eat into your power amp's headroom. On the FBQ3120 and FBQ6200 models we take it a step further, including variable High- and Low-Cut filters per channel with a sweepable frequency dial for even more control.

Crossover Not Required

Speaking of special low-frequency tools, all three FBQ-PRO models feature a dedicated subwoofer output with an adjustable (30 – 200 Hz) cut-off frequency. Balanced XLR Outs are provided so you can connect to power amps, or directly to your active subwoofers, without any additional hardware—just another example of how BEHRINGER saves you money.

FBQ Feedback Detection System

The FBQ Feedback Detection System is one of the most outstanding features of our graphic equalizers. This ingenious circuitry helps you recognize and eliminate feedback frequencies immediately. When feedback is sensed in a specific frequency range, the LED on the associated fader lights, so you know at a glance which fader to lower to eliminate the feedback. BEHRINGER'S proprietary FBQ Feedback Detection System makes it easy for even the novice operator to defeat live sound's natural enemy—feedback!

Stereo or Double-Duty?

There are two reasons to buy a stereo EQ—to run your Front Of House (FOH) system in stereo, or to use one side for mono FOH while the other side EQs your monitors, which is usually where feedback problems start.

FBQ6200's Added Features

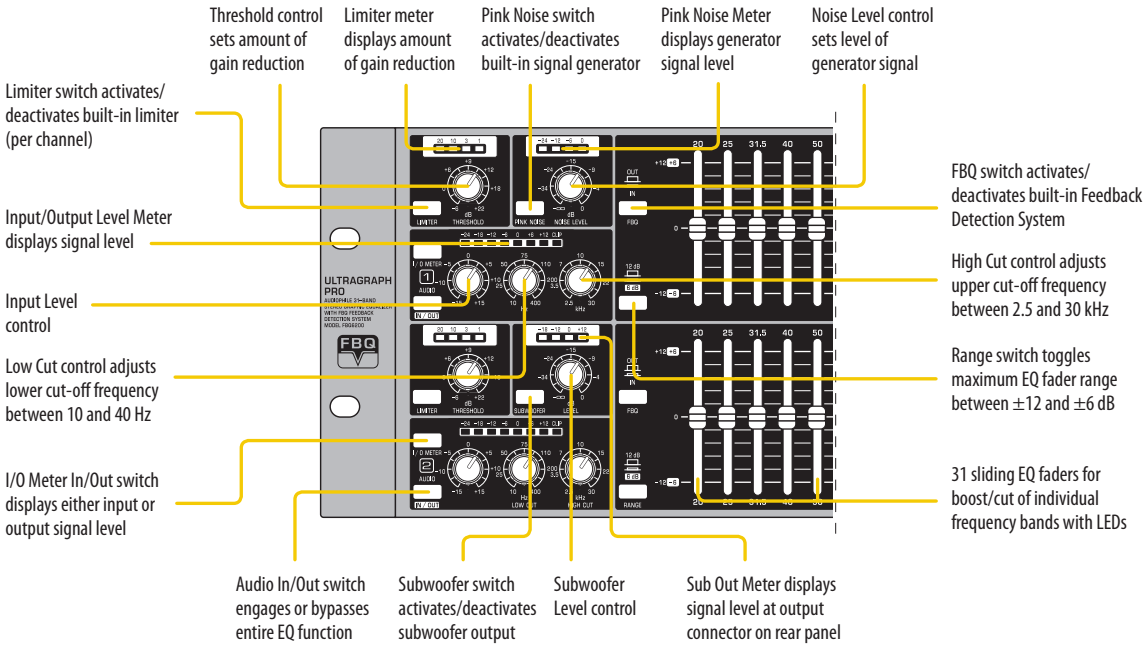
The flagship of the series, the FBQ6200 has all the features mentioned above, plus switchable Limiters per channel with separate Threshold controls, long-throw 45 mm frequency faders for added precision, and a built-in Pink Noise generator that enables the FBQ6200 to pull double-duty as an audio spectrum analyzer.

Superb Audio, Sound Value

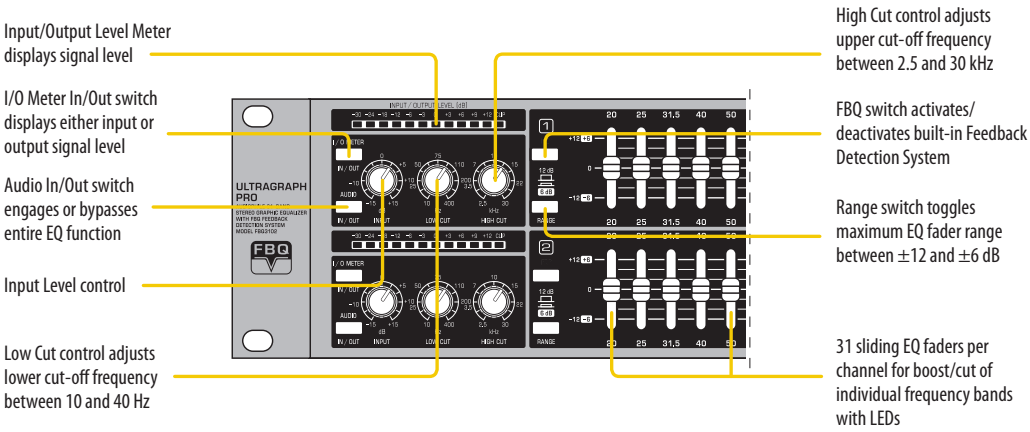
FBQ-PRO Series graphic EQs bring out the best in your sound system, and your performance, whether you use them in the studio or at your next live gig. We dare you to compare the FBQ1502, FBQ3102 or FBQ6200 against the competition. Once you do, you'll choose BEHRINGER again and again for both audio quality and value. Test Drive one today at your authorized BEHRINGER dealer.

ULTRAGRAPH PRO FBQ6200 / FBQ3102 FBQ1502

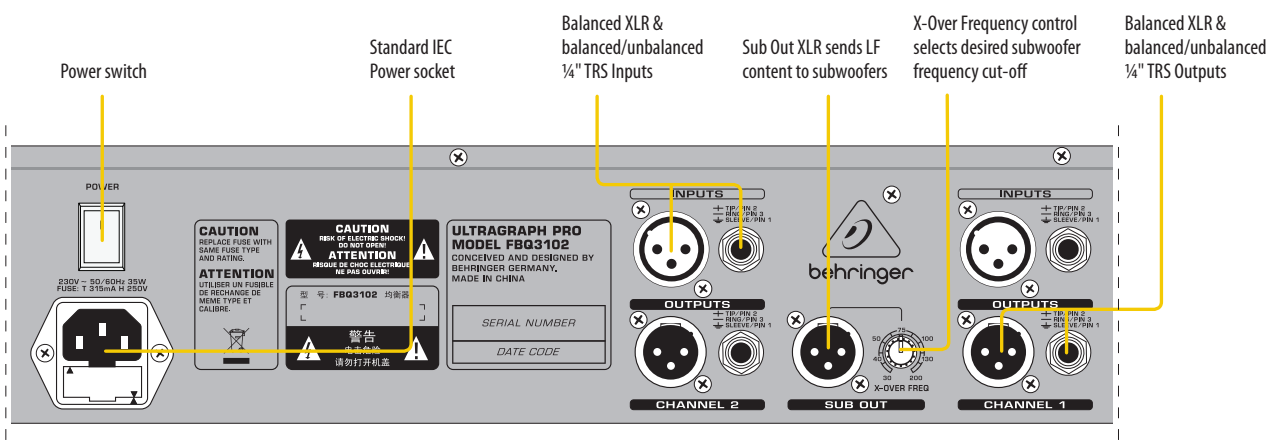
FBQ6200 Front Panel



FBQ3102 Front Panel

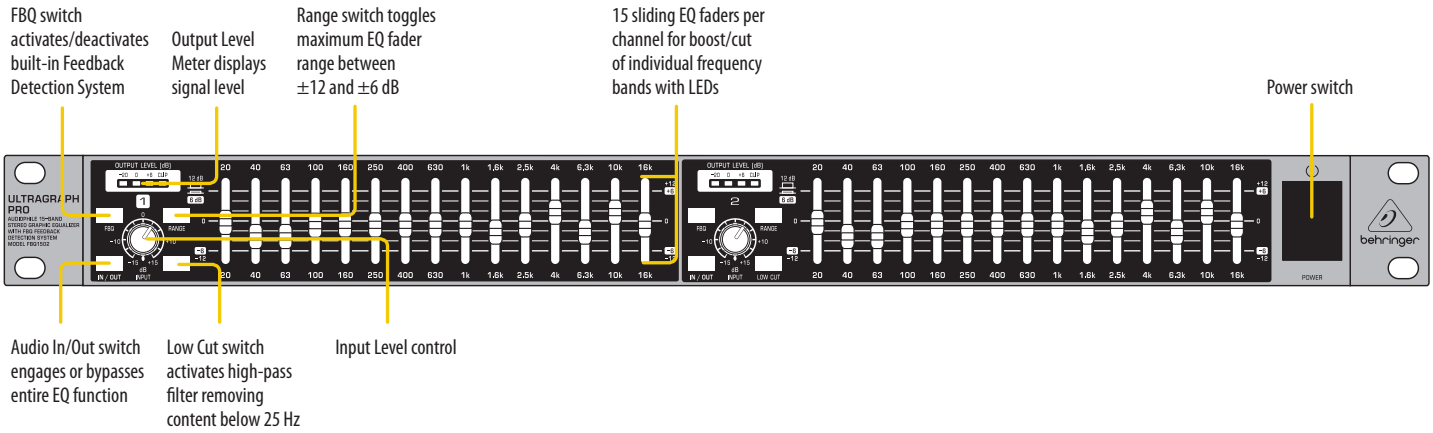


FBQ6200 / FBQ3102 Rear Panel

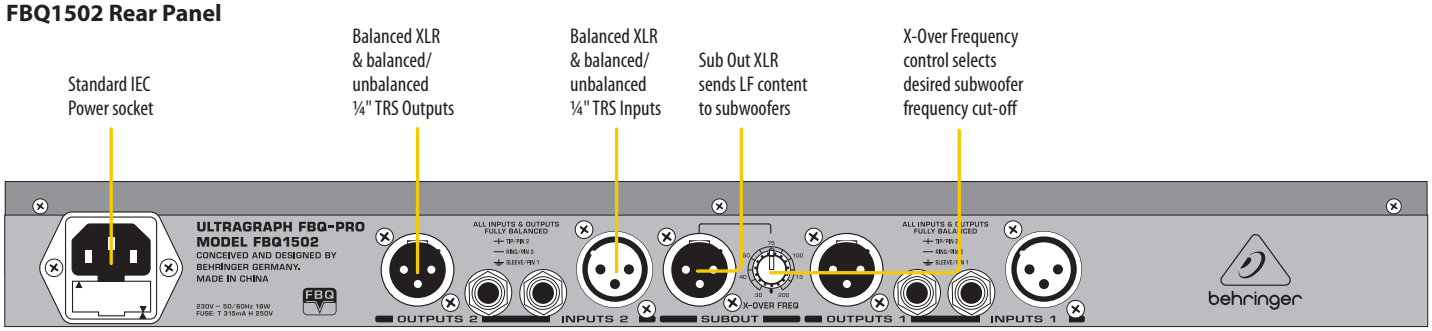


ULTRAGRAPH PRO FBQ6200 / FBQ3102 FBQ1502

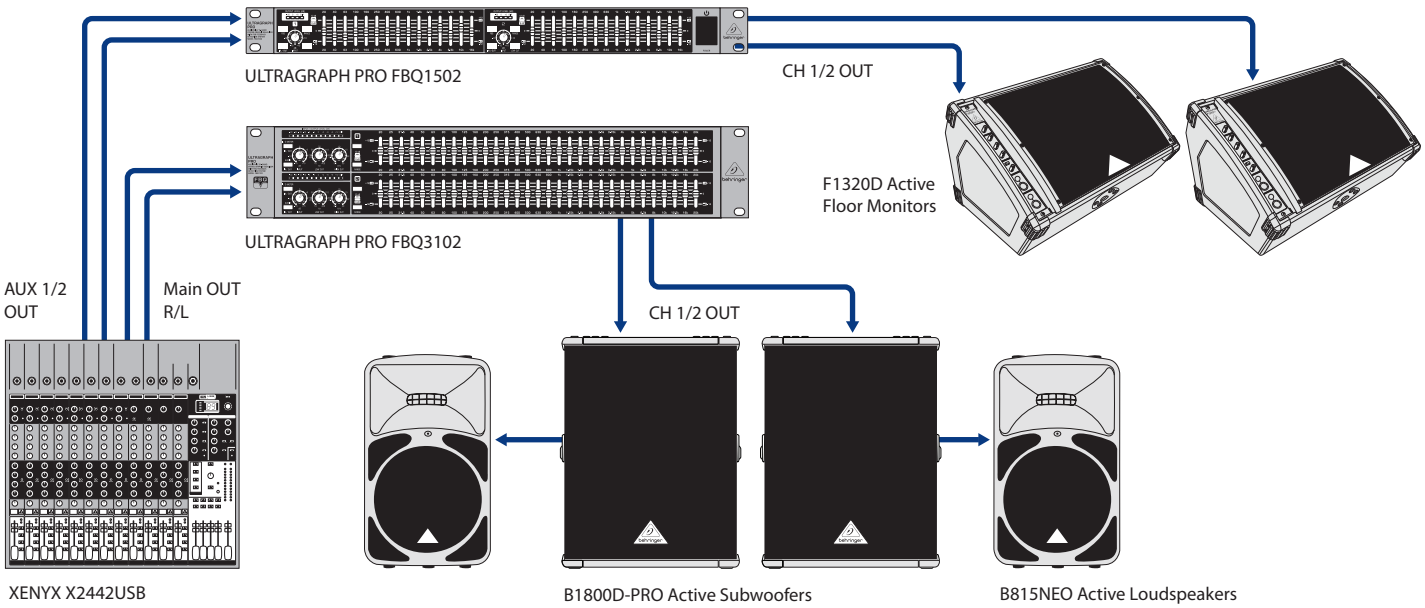
FBQ1502 Front Panel



FBQ1502 Rear Panel



Stereo PA with Two Monitor Mixes



ULTRAGRAPH PRO FBQ6200 / FBQ3102 FBQ1502

Specifications

FBQ6200

Audio Inputs	
Inputs	RF-filtered, servo-balanced XLR and ¼" TRS connectors
Impedance	40 kW balanced and unbalanced
Maximum input level	+21 dBu balanced and unbalanced
CMRR	typ. 40 dB, >55 dB @ 1 kHz

Audio Outputs	
Outputs	servo-balanced XLR and ¼" TRS connectors
Subwoofer Out	balanced XLR connector, level variable off to 0 dB
Crossover frequency	variable, 30 - 200 Hz

System Specifications	
Frequency response	10 Hz to 30 kHz, ±3 dB
S/N ratio	22 Hz to 22 kHz >94 dB @ +4 dBu
Distortion (THD)	typ. 0.006% @ +4 dBu, 1 kHz, Gain 1
Crosstalk	typ. -65 dB @ 1 kHz

Roll-Off Filter Section	
Type	12 dB/oct., Butterworth
Input	variable (-15 dB to +15 dB)
Low Cut	variable (10 Hz to 400 Hz)
High Cut	variable (2.5 kHz to 30 kHz)

Graphic Equalizer	
Type	analog 31-band equalizer
Frequency range	20 Hz to 20 kHz in 31 1/3-octave bands (ISO frequencies)
Bandwidth	1/3 octave
Control range	±6 dB or ±12 dB (switchable)

Limiter Section	
Attack/Release	20 msec / 90 msec
Threshold	variable, -6 dB to +22 dB (off)
LED meter	Gain reduction 20/10/3/1 dB

Noise Generator	
Type	Pink noise, level variable, off to 0 dBu,
LED level meter	-24/-12/-6/0 dB

Function Switches	
FBQ	activates the FBQ Feedback Detection System
Audio In/Out	switch to bypass the equalizer functions
I/O Meter In/Out	switches the meter display from input to output
Range	shift of the maximum cut/boost range for all 31/15 bands
Low Cut	—
Limiter	activates the limiter
Pink Noise	activates the noise generator
Subwoofer	activates the subwoofer output

Indicators	
Input/output level	8-segment LED display: -24/-18/-12/-6/0/+6/+12 dB/CLIP
Subwoofer	4-segment LED display: -18/-12/0/+12 dB

Power Supply	
Mains Voltage	
USA / Canada	120 V~, 60 Hz
Europe / U.K. / Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
general export model	120/230 V~, 50 - 60 Hz
Power consumption	22 W
Fuse	100 - 120 V~: **T 630 mA H** / 200 - 240 V~: **T 315 mA H**
Mains connection	standard IEC receptacle

Dimensions / Weight	
Dimensions (H x W x D)	approx. 5.90 x 5.23 x 18.97" approx. 150 x 133 x 482.0 mm
Weight	approx. 6.70 lbs approx. 3.04 kg

FBQ6200

Audio Inputs	
Inputs	RF-filtered, servo-balanced XLR and ¼" TRS connectors
Impedance	40 kW balanced and unbalanced
Maximum input level	+21 dBu balanced and unbalanced
CMRR	typ. 40 dB, >55 dB @ 1 kHz

Audio Outputs	
Outputs	servo-balanced XLR and ¼" TRS connectors
Subwoofer Out	balanced XLR connector
Crossover frequency	variable, 30 - 200 Hz

System Specifications	
Frequency response	10 Hz to 30 kHz, ±3 dB
S/N ratio	22 Hz to 22 kHz >94 dB @ +4 dBu
Distortion (THD)	typ. 0.006% @ +4 dBu, 1 kHz, Gain 1
Crosstalk	typ. -65 dB @ 1 kHz

Roll-Off Filter Section	
Type	12 dB/oct., Butterworth
Input	variable (-15 dB to +15 dB)
Low Cut	variable (10 Hz to 400 Hz)
High Cut	variable (2.5 kHz to 30 kHz)

Graphic Equalizer	
Type	analog 31-band equalizer
Frequency range	20 Hz to 20 kHz in 31 1/3-octave bands (ISO frequencies)
Bandwidth	1/3 octave
Control range	±6 dB or ±12 dB (switchable)

Limiter Section	
Attack/Release	—
Threshold	—
LED meter	—

Noise Generator	
Type	—
LED level meter	—

Function Switches	
FBQ	activates the FBQ Feedback Detection System
Audio In/Out	switch to bypass the equalizer functions
I/O Meter In/Out	switches the meter display from input to output
Range	shift of the maximum cut/boost range for all 31/15 bands
Low Cut	—
Limiter	—
Pink Noise	—
Subwoofer	—

Indicators	
Input/output level	12-segment LED display: -30/-24/-18/-12/-6/-3/0/+3/+6/+9/+12 dB/CLIP
Subwoofer	—

Power Supply	
Mains Voltage	
USA / Canada	120 V~, 60 Hz
Europe / U.K. / Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 H
general export model	120/230 V~, 50 - 60 Hz
Power consumption	22 W
Fuse	100 - 120 V~: **T 630 mA H** / 200 - 240 V~: **T 315 mA H**
Mains connection	standard IEC receptacle

Dimensions / Weight	
Dimensions (H x W x D)	approx. 5.90 x 3.50 x 18.99" approx. 150 x 89 x 482.6 mm
Weight	approx. 5.82 lbs approx. 2.64 kg

ULTRAGRAPH PRO FBQ6200 / FBQ3102 FBQ1502

FBQ1502

Audio Inputs

Inputs	RF-filtered, servo-balanced XLR and ¼" TRS connectors
Impedance	40 kW balanced and unbalanced
Maximum input level	+21 dBu balanced and unbalanced
CMRR	typ. 40 dB, >55 dB @ 1 kHz

Audio Outputs

Outputs	servo-balanced XLR and ¼" TRS connectors
Subwoofer Out	balanced XLR connector
Crossover frequency	variable, 30 - 200 Hz

System Specifications

Frequency response	10 Hz to 30 kHz, ±3 dB
S/N ratio	22 Hz to 22 kHz >94 dB @ +4 dBu
Distortion (THD)	typ. 0.006% @ +4 dBu, 1 kHz, Gain 1
Crosstalk	typ. -65 dB @ 1 kHz

Roll-Off Filter Section

Type	12 dB/oct., Butterworth
Input	variable (-15 dB to +15 dB)
Low Cut	switchable, Cutoff @ 25 Hz
High Cut	—

Graphic Equalizer

Type	analog 15-band equalizer
Frequency range	20 Hz to 16 kHz in 15 bands (ISO frequencies)
Bandwidth	2/3 octave
Control range	±6 dB or ±12 dB (switchable)

Limiter Section

Attack/Release	—
Threshold	—
LED meter	—

Noise Generator

Type	—
LED level meter	—

Function Switches

FBQ	activates the FBQ Feedback Detection System
Audio In/Out	switch to bypass the equalizer functions
I/O Meter In/Out	—
Range	shift of the maximum cut/boost range for all 31/15 bands
Low Cut	activates the high pass filter
Limiter	—
Pink Noise	—
Subwoofer	—

Indicators

Input/output level	4-segment LED display: -20/0/+6 dB/CLIP (output only)
Subwoofer	—

Power Supply

Mains Voltage	
USA / Canada	120 V~, 60 Hz
Europe / U.K. / Australia	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
general export model	120/230 V~, 50 - 60 Hz
Power consumption	22 W
Fuse	100 - 120 V~: **T 630 mA H** / 200 - 240 V~: **T 315 mA H**
Mains connection	standard IEC receptacle

Dimensions / Weight

Dimensions (H x W x D)	approx. 8.46 x 1.75 x 18.99" approx. 215 x 44.5 x 482.6 mm
Weight	approx. 5.15 lbs approx. 2.34 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.

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