Behringer FBQ6200HD

Behringer ULTRAGRAPH PRO FBQ6200HD Instruction Manual

High-Definition 31-Band Stereo Graphic Equalizer with FBQ Feedback Detection System

1. INTRODUCTION

This manual provides essential information for the proper setup, operation, and maintenance of your Behringer ULTRAGRAPH PRO FBQ6200HD High-Definition 31-Band Stereo Graphic Equalizer. Please read this manual thoroughly before operating the device to ensure optimal performance and safety.

Key Features:

- **Revolutionary FBQ Feedback Detection System:** Instantly reveals critical frequencies and can also be used as an audio analyzer.
- **Pink Noise Generator:** Provides test signals to adapt your sound system to any room acoustics.
- **Dedicated Limiters:** With gain reduction meters for each channel, these protect your sound system from overload and distortion.
- Audiophile 31-band stereo graphic equalizer for live and studio applications.

2. SETUP

Proper setup is crucial for the performance of your ULTRAGRAPH PRO FBQ6200HD. Follow these steps for initial installation and connection.

2.1 Unpacking and Placement

Carefully unpack the equalizer and ensure all components are present. Place the unit in a stable, well-ventilated area, preferably in a standard 19-inch equipment rack. Ensure adequate space for cable connections and heat dissipation.

2.2 Connecting the Equalizer

The FBQ6200HD features balanced XLR and 1/4-inch TRS connectors for inputs and outputs, ensuring high

signal integrity.

Figure 2.1: Rear Panel Connections. This image displays the rear panel of the Behringer ULTRAGRAPH PRO FBQ6200HD, highlighting the various input and output ports, including balanced XLR and 1/4-inch TRS connectors for both channels, and the power input.

1. **Power Connection:** Connect the supplied power cable to the AC input on the rear panel and then to a suitable power outlet.
2. **Audio Input:** Connect your audio source (e.g., mixing console, audio interface) to the **INPUT** connectors (XLR or 1/4-inch TRS) on the rear panel. Use Channel 1 for the left signal and Channel 2 for the right signal in stereo applications.
3. **Audio Output:** Connect the **OUTPUT** connectors (XLR or 1/4-inch TRS) to your next audio device in the signal chain (e.g., power amplifier, active speakers). Use Channel 1 for the left signal and Channel 2 for the right signal.
4. **Subwoofer Output:** The unit includes a dedicated subwoofer output with adjustable crossover frequency. Connect this output to your subwoofer's input.

3. OPERATING INSTRUCTIONS

The ULTRAGRAPH PRO FBQ6200HD offers precise control over your audio frequencies. Familiarize yourself with the front panel controls for effective operation.
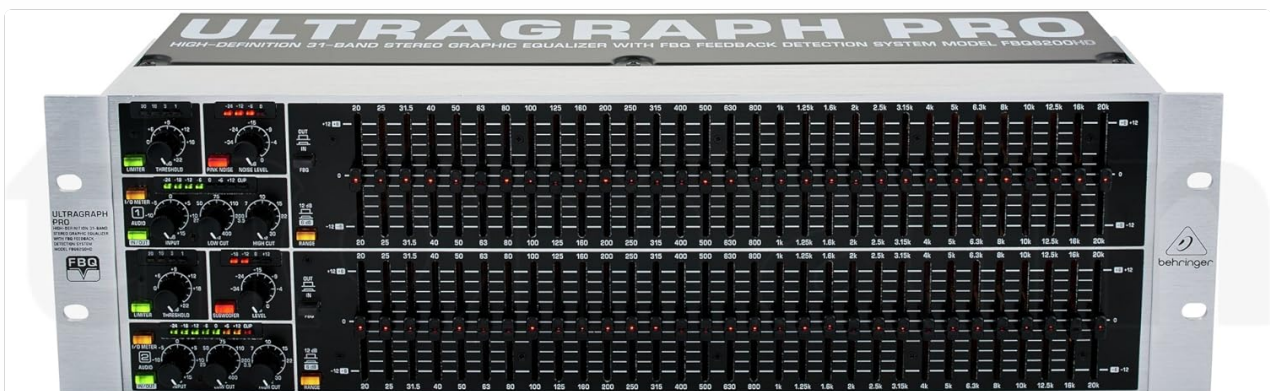

Figure 3.1: Front Panel Overview. This image shows the complete front panel of the Behringer ULTRAGRAPH PRO

FBQ6200HD, displaying the 31-band faders for each stereo channel, input/output level meters, gain controls, FBQ feedback detection buttons, low cut/high cut filters, and limiter controls.

3.1 Front Panel Controls

- **31-Band Faders:** Adjust the gain for each of the 31 frequency bands per channel. These faders allow for precise shaping of the audio spectrum.
- **Input/Output Level Meters:** LED indicators display the signal level for each channel, helping to prevent clipping and ensure optimal gain staging.
- **Input Gain Control:** Adjusts the overall input level for each channel.
- **Low Cut/High Cut Filters:** Engage these filters to remove unwanted low-end rumble or high-frequency hiss from your signal.
- **FBQ Feedback Detection:** Press the FBQ button to activate the feedback detection system. LEDs on the faders will illuminate to indicate problematic frequencies, allowing you to quickly cut them.
- **Limiter:** Activate the limiter to protect your system from sudden peaks and distortion. The gain reduction meters show the amount of limiting applied.
- **Pink Noise Generator:** Use this feature to generate a pink noise signal for room equalization and system calibration.
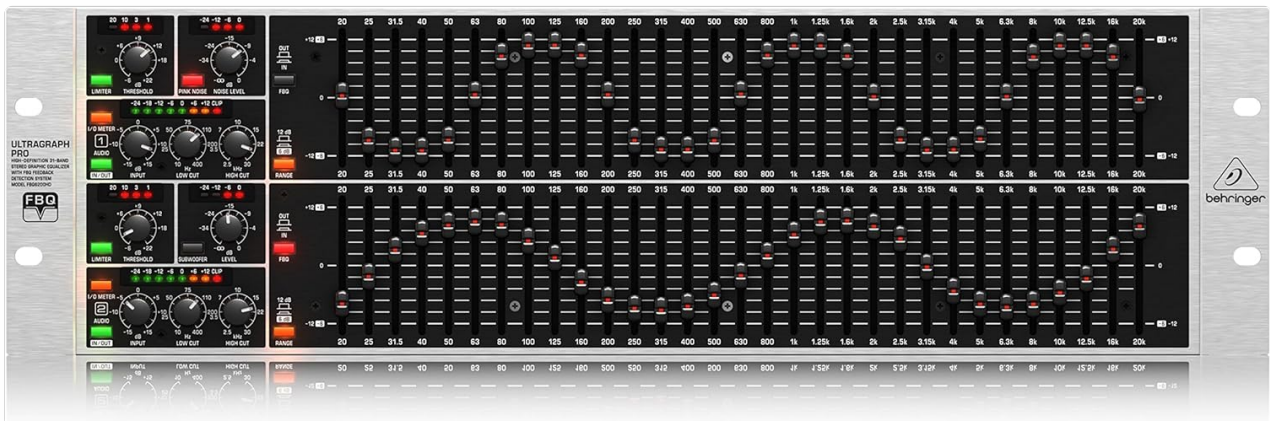

Figure 3.2: Detailed View of Controls. This image provides a closer look at the faders, input/output meters, and the FBQ feedback detection buttons on the Behringer ULTRAGRAPH PRO FBQ6200HD, illustrating the granular control available for audio adjustment.

3.2 Using the FBQ Feedback Detection System

The FBQ system is designed to quickly identify and eliminate feedback frequencies. To use it:

1. Ensure your microphones are active and pointed towards the speakers (if applicable for feedback testing).
2. Press the **FBQ** button for the channel you wish to analyze.
3. The LEDs on the 31-band faders will light up, indicating the frequencies where feedback is occurring.
4. Gently lower the faders corresponding to the illuminated LEDs until the feedback is eliminated.

4. MAINTENANCE

To ensure the longevity and optimal performance of your ULTRAGRAPH PRO FBQ6200HD, follow these maintenance guidelines.

4.1 Cleaning

- Disconnect the unit from power before cleaning.
- Use a soft, dry cloth to wipe down the exterior.
- Avoid using abrasive cleaners, solvents, or waxes, as these can damage the finish and controls.
- Keep faders and knobs free from dust and debris. A soft brush or compressed air can be used for hard-to-reach areas.

4.2 Storage

When not in use for extended periods, store the equalizer in a cool, dry place, away from direct sunlight and extreme temperatures. If possible, keep it in its original packaging or a protective case to prevent dust accumulation and physical damage.

5. TROUBLESHOOTING

If you encounter issues with your ULTRAGRAPH PRO FBQ6200HD, refer to the following common troubleshooting steps.

- **No Power:** Ensure the power cable is securely connected to both the unit and a working power outlet. Check the power switch position.
- **No Audio Output:** Verify all audio cables are correctly connected to the inputs and outputs. Check the input gain and output levels on the equalizer and connected devices. Ensure the EQ Bypass button is not engaged if you expect equalization.
- **Distorted Audio:** Check input and output levels to ensure they are not clipping (indicated by red LEDs on the meters). Reduce gain if necessary. Ensure the limiter is not excessively compressing the signal.
- **Feedback Issues:** Activate the FBQ Feedback Detection system to identify and cut problematic frequencies. Ensure microphones are not too close to speakers.
- **Unresponsive Controls:** Power cycle the unit. If the issue persists, contact customer support.

6. SPECIFICATIONS

Specification	Value
Model Number	FBQ6200HD
Item Weight	5.06 pounds (2.3 Kilograms)
Product Dimensions	19.02 x 5.43 x 5.24 inches
Body Material	Silver
Color Name	Silver & Black
Connector Type	XLR

Specification	Value
Hardware Interface	1/4-inch Audio
Power Source	Corded Electric
Output Wattage	4580 Watts
Controls Type	Knob
What's in the Box	Stereo Graphic Equalizer

7. WARRANTY AND SUPPORT

Specific warranty information and detailed support contacts are typically provided with your product packaging or on the manufacturer's official website. Please refer to these resources for comprehensive warranty terms, service, and technical assistance.

For further assistance, please visit the Behringer Store or consult the official Behringer website.