

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

- › [dbx](#) /
- › [dbx 231s Dual Channel 31-Band Equalizer User Manual](#)

## dbx 231s

# dbx 231s Dual Channel 31-Band Equalizer User Manual

Model: **231s** | Brand: **dbx**

## INTRODUCTION

The dbx 231s Dual Channel 31-Band Equalizer is designed to meet the needs of demanding sound reinforcement environments, offering precise control over audio frequencies. It features two 31-band channels of 1/3-octave equalization, adjustable input gain, switchable boost/cut ranges, and clear output level metering. This manual provides essential information for setting up, operating, and maintaining your dbx 231s equalizer.

## SETUP

Proper setup is crucial for optimal performance of your dbx 231s equalizer. Follow these steps to connect your unit.

### Physical Connections

The dbx 231s offers versatile connectivity options for integration into various audio systems.

- **Inputs:** Connect your audio source (e.g., mixer, pre-amplifier) to the 1/4" **TRS** or **female XLR (pin 2 Hot)** input jacks on the rear panel. Ensure secure connections for both channels.
- **Outputs:** Connect the equalizer's outputs to your amplifier or next audio device using the 1/4" **TRS** or **male XLR (pin 2 Hot)** output jacks.
- **Power:** Connect the supplied power cable to the unit and then to a suitable AC power outlet.



Figure 1: Front view of the dbx 231s Dual Channel 31-Band Equalizer, showing the dual channels and 31 faders per channel.

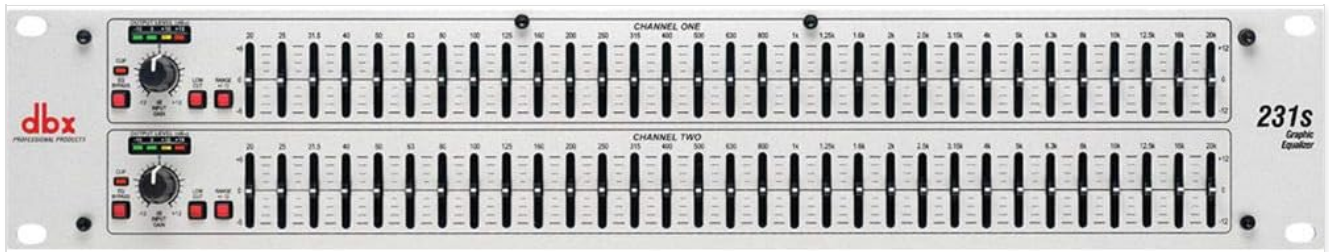


Figure 2: Close-up of the dbx 231s front panel, highlighting the input gain, range switches, and output level meters.

## OPERATING THE EQUALIZER

The dbx 231s provides intuitive controls for precise audio equalization. Familiarize yourself with the front panel controls for effective operation.

### Front Panel Controls

- **Input Gain Control:** Each channel features a rotary knob to adjust the input gain, providing a 12 dB range. This allows you to match the input level from your source to the equalizer.
- **Range Switch:** A switch allows you to select between **6 dB** or **12 dB** boost/cut ranges for the frequency bands. The 6 dB range offers finer control, while the 12 dB range provides more dramatic adjustments.
- **Bypass Switch:** The front panel bypass switch allows you to quickly compare the equalized signal with the original, unprocessed signal. When engaged, the equalizer circuitry is bypassed.
- **Frequency Faders:** The 31 faders per channel correspond to 1/3-octave frequency bands, allowing you to boost or cut specific frequencies. Adjust these faders to shape the tonal characteristics of your audio.
- **Output Level Meters:** Each channel is equipped with 4-Segment LED ladders for monitoring output levels. Monitor these indicators to prevent clipping and ensure optimal signal integrity.

### Basic Equalization Techniques

Start with all frequency faders at the 0 dB (center) position. Make small, incremental adjustments to individual frequency bands to achieve the desired sound. Use the bypass switch frequently to evaluate the impact of your adjustments.

- **Cutting vs. Boosting:** Often, cutting unwanted frequencies is more effective than boosting desired ones, as it can reduce noise and improve clarity.
- **Room Correction:** Use the equalizer to compensate for acoustic anomalies in your listening environment, reducing standing waves or reflections.
- **Vocal/Instrument Shaping:** Adjust specific frequency bands to enhance the presence, warmth, or clarity of vocals and instruments.

## MAINTENANCE

To ensure the longevity and reliable performance of your dbx 231s equalizer, follow these maintenance guidelines:

- **Cleaning:** Regularly wipe the unit with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or strong chemicals, as they may damage the finish or internal components.
- **Ventilation:** Ensure that the ventilation slots on the unit are not obstructed. Proper airflow is essential to prevent overheating.
- **Environment:** Operate the equalizer in a dry, dust-free environment with stable temperature. Avoid exposing the unit to extreme temperatures, humidity, or direct sunlight.
- **Cable Management:** Keep all audio and power cables neatly organized and free from kinks or excessive tension to prevent damage.

## TROUBLESHOOTING

If you encounter issues with your dbx 231s, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No sound output	Incorrect cable connections, unit not powered on, bypass switch engaged, input gain too low.	Check all audio cables and power connections. Ensure the unit is powered on and the bypass switch is disengaged. Increase input gain.
Distorted sound	Input or output levels too high (clipping), faulty cables, damaged components.	Reduce input gain and check output level meters for clipping. Replace suspect cables. If distortion persists, contact support.
Hum or noise	Ground loop, faulty cables, interference from other equipment.	Ensure all equipment is properly grounded. Use balanced cables where possible. Try isolating the unit from other electrical devices.
Faders not responding	Bypass switch engaged, internal fault.	Disengage the bypass switch. If the issue continues, contact customer support.

## SPECIFICATIONS

Key technical specifications for the dbx 231s Dual Channel 31-Band Equalizer:




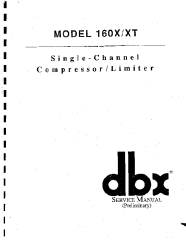


- **Channels:** Dual 31-band, 1/3-octave constant Q frequency bands
- **Boost/Cut Range:** Switchable 6 dB or 12 dB
- **Input Gain Range:** 12 dB
- **Sliders:** 20mm nonconductive
- **Output Level Monitoring:** 4-Segment LED ladders
- **Inputs:** 1/4" TRS and female XLR (pin 2 Hot)
- **Outputs:** 1/4" TRS and male XLR (pin 2 Hot)
- **Frequency Response:** 10Hz to 50kHz
- **Dynamic Range:** 112 dB
- **Item Weight:** 7.9 pounds
- **Product Dimensions:** 19 x 6 x 3.5 inches
- **Country of Origin:** China
- **Model Number:** 231s

## WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official dbx website or the comprehensive User Guide available in PDF format. A digital copy of the User Guide can be found at: [dbx 231s User Guide \(PDF\)](#).

For further assistance, contact dbx customer support through their official channels.

## Related Documents - 231s

	<p><a href="#">dbx 12 Series Graphic Equalizers: Operation Manual &amp; Specifications</a></p> <p>Comprehensive operation manual and technical specifications for the dbx 1215 and 1231 graphic equalizers. Covers safety, features, operating controls, installation, performance specifications, and technical support.</p>
	<p><a href="#">dbx 2-Series Graphic Equalizers User Manual</a></p> <p>User manual for the dbx 2-Series Graphic Equalizers, detailing features, safety instructions, installation, operation, typical applications, and technical specifications for professional audio equipment.</p>
	<p><a href="#">dbx Model 166 Two-Channel Gated Compressor/Limiter Service Manual</a></p> <p>Comprehensive service manual for the dbx Model 166 Two-Channel Gated Compressor/Limiter, providing detailed technical specifications, operational guidance, hookup diagrams, circuit descriptions, troubleshooting steps, and alignment procedures for technicians and audio professionals.</p>
	<p><a href="#">dbx 160XT Single-Channel Compressor/Limiter Service Manual</a></p> <p>This service manual provides detailed information on the dbx 160XT Single-Channel Compressor/Limiter, covering its features, operation, connections, applications, and technical specifications for professional audio environments.</p>
	<p><a href="#">dbx 1046 Quad Compressor Limiter Operation Manual</a></p> <p>Comprehensive operation manual for the dbx 1046 Quad Compressor Limiter, detailing its features, controls, applications, and installation for professional audio systems. Learn about its V2™ VCA technology for enhanced performance.</p>
	<p><a href="#">dbx DJdi 2-Channel Passive Direct Injection Box Owner's Manual</a></p> <p>Owner's manual for the dbx DJdi 2-channel passive direct injection box. Details warranty, technical support, front and rear panel descriptions, usage, operation, and specifications for audio professionals.</p>