

## VISIONARY DESIGN

The dbx 3215 Graphic Equalizer is a high performance multifunctional unit designed to deliver all the flexibility and power that professional users demand. Featuring long-throw precision sliders, switchable high- and low-pass filters, balanced / unbalanced connectors, and ultra low-noise performance, the 3215 is more than equal to any critical audio task requirements.

The 3215 offers 2-channels of 15 ISO standard center, $2 / 3$ octave constant $Q$ frequency bands in a single package. Selectable 6 or 12 dB of boost/cut gives the user superior signal processing control, while the use of low tolerance components yields accurate frequency centers. Features variable high pass and switchable low pass filters. The unit also includes a passive bypass system that completely removes the equalizer from the audio path when power is off. Also included is an active bypass that allows comparison of the equalized signal with the original.

## REVOLUTIONARY ENGINEERING

XLR, barrier strip, and $1 / 4$ inch tip-ring-sleeve connectors make the unit easy to integrate into any type of balanced or unbalanced audio system.

Housed in a rugged 2U EIA standard 19 " cold-rolled steel chassis, the 3215 will stand up to years of abuse, making it a valuable asset for permanent installations or touring companies.

Recording studios, broadcast facilities, sound reinforcement engineers, musicians, and sound contractors alike will find that the straightforward design and versatile signal control options make the 3215 a powerful audio tool.
dbx uses only the highest quality, low tolerance components, ensuring excellent reliability and uncompromising sound quality. From permanent installations to sound contracting, critical audio to sound reinforcement, the 3215 delivers total performance.

## FEATURES

- 15 ISO standard center $2 / 3$ octave constant $Q$ frequency bands
- Variable high pass and switchable low pass 12 dB /octave filters
- Electronically balanced inputs, servo balanced outputs
- XLR, barrier strip, and TRS connectors
- Switchable 6 or $12 d B$ boost/cut
- Low phase shift circuit design
- -12/+15dB of input gain
- Passive bypass removes equalizer from signal path when power is off
- 8 segment LED headroom bar graph
- Chassis ground lift capability
- Toroidal power supply transformer

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## DUAL CHANNEL 15 BAND GRAPHIC EQUALIZER



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The graphic equalizer shall have two identical channels, each with an audio frequency response of 20 Hz to $20 \mathrm{kHz}, \pm 0.1 \mathrm{~dB}$, an unbalanced input impedance of not less than $25 \mathrm{k} \Omega$ and a balanced input impedance of not less than $50 \mathrm{k} \Omega$ with a maximum input level of not less than +22 dBu . The unit shall have rear panel $1 / 4^{\prime \prime}$ TRS phone jacks, barrier strip and XLR jacks for inputs and outputs, accepting either balanced or unbalanced signals. The output impedance shall be no more than $100 \Omega$ balanced, $50 \Omega$ unbalanced, with a maximum output level of not less than +21 dBu into an unbalanced or balanced load with a minimum load impedance of $600 \Omega$. Total Harmonic Distortion plus Noise shall not be more than $0.003 \%$ at +4 dBu input level and 1 kHz , all faders flat. The unit shall have a Noise level of not more than -92 dBu at the $\pm 6 \mathrm{~dB}$ boost/cut range setting with all faders flat across a test bandwidth of 22 Hz to 22 kHz . The unit's operating dynamic range shall be not less than 114 dB .

Each of the unit's two channels shall have 15 constant Q frequency band filters with center frequencies on $2 / 3$ octave ISO standard centers ranging from 20 Hz to 20 kHz ; a High Pass filter with a 12 dB per octave slope and a selectable corner frequency with a range from 25 Hz to 200 Hz ; and a Low Pass filter with a 12 dB per octave slope and a corner frequency of 15 kHz . Each channel's 15 filter bands shall be controlled by front panel, 45 mm linear sliders with a maximum boost per frequency band of +12 dB and a maximum cut per band of 12 dB . There shall also be a master attenuator for each channel with a range from -12 dB to +15 dB . The unit shall have a front panel Power switch and the following controls for each channel: range selector switch for either $\pm 6 \mathrm{~dB}$ maximum cut and boost or $\pm 12 \mathrm{~dB}$ maximum cut and boost per band; EQ In/Out switch; High Cut Filter In/Out switch; Low Cut filter In/Out switch. The following front panel indicator LEDs shall exist for each channel: Power, and Headroom Level (8) at $3,6,12,18,24,30,36$, and 42 dB . The unit shall have separate chassis and signal ground lift lugs on the rear panel, a relay bypass and be capable of accepting the optional installation of certain specified input and output transformers. The power requirements shall be 100 , $120,230 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$, at 30 watts via a detachable IEC type AC cable. The 2 U high, full rack width graphic equalizer shall be a dbx 3215 .
dbx engineers are constantly working to improve the quality of our products. Specifications are, therefore subject to change without notice.

## SPECIFICATIONS

| Frequency Response: 20 Hz to $20 \mathrm{kHz}, \pm 0.1 \mathrm{~dB}$ (all faders flat) | Output Impedance: 100 ohms balanced, 50 ohms unbalanced |
| :---: | :---: |
| Control Centers: 15 ISO Standard, $2 / 3$ octave bands per channel from 25 Hz to 16 kHz : $25,40,63,100,160,250,400$, | Maximum Output Level: +22 dBu |
| $630,1 \mathrm{k}, 1.6 \mathrm{k}, 2.5 \mathrm{k}, 4 \mathrm{k}, 6.3 \mathrm{k}, 10 \mathrm{k}$, and 16 k . | Dynamic Range: 114 dB |
| High Pass Filter (LO CUT): $12 \mathrm{~dB} / o c t a v e, ~ v a r i a b l e ~$ from 25 Hz to 200 Hz . | Input Level Indicator: 3 to $42 \mathrm{~dB}, 8$ segments |
| Low Pass Filter (HI CUT): $12 \mathrm{~dB} /$ cotave, 15 kHz | THD + Noise: <.003\% (at 1 kHz, +4 dBu input, test bandwidth 22 Hz to 22 kHz ) |
| Nominal Control Range: $\pm 6 \mathrm{~dB}$ or $\pm 12 \mathrm{~dB}$ cutboost | Power Requirements: 100, 120, 230 VAC $50 / 60 \mathrm{~Hz}$, |
| Noise Level: <-92 dBu @ $\pm 6 \mathrm{~dB}$ boost/cut range (faders <br> flat, test bandwidth | 30 watts |
| 22 Hz to 22 kHz ) | Dimensions: $3.5^{\prime \prime} \mathrm{H} \times 19 \mathrm{l}$ W $\times 7.9^{\prime \prime} \mathrm{D}$ |
| Input Impedance: 50K ohms balanced, 25 K ohms unbalanced | Weight: 9 lbs |
| Maximum Input Level: +22 dBu (ref.:0.775 Vrms) |  |

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