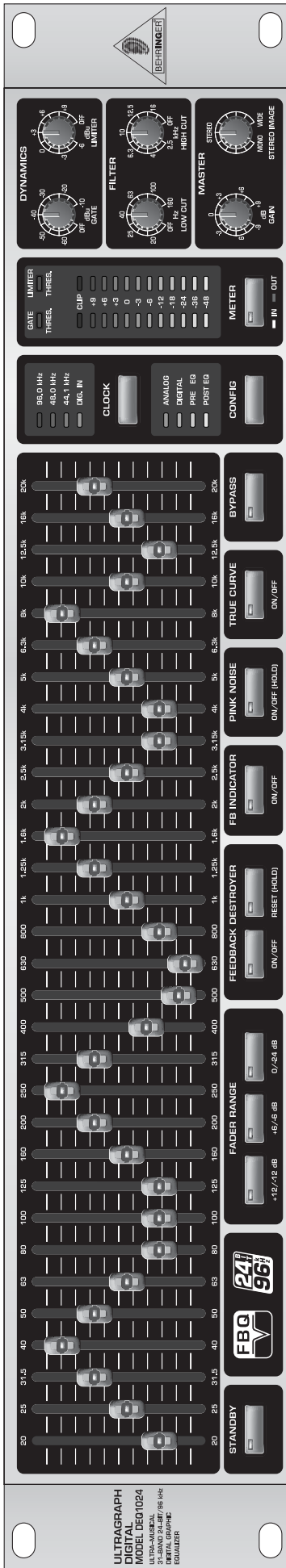


ULTRAGRAPH DIGITAL DEQ1024



Specifications

Version 1.0 July 2003

ENGLISH

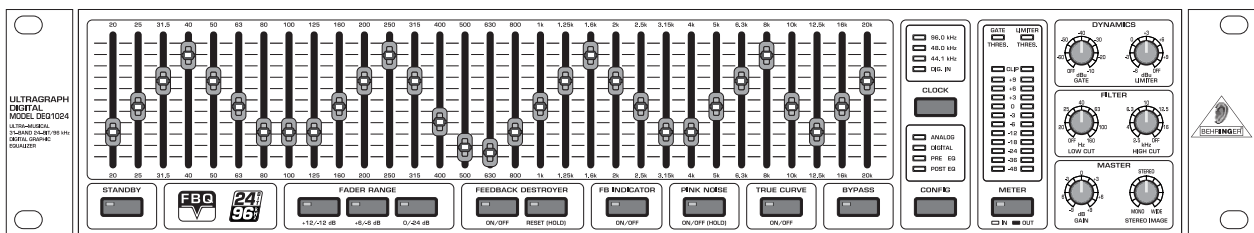
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ULTRAGRAPH DIGITAL DEQ1024

ULTRAGRAPH DIGITAL

Digital Stereo 31-Band 24-Bit/96 kHz Equalizer/Feedback Destroyer/Dynamics Processor



- ▲ Ultra high-resolution processor for all EQ, RTA and dynamic applications, especially for PA and audiophile mastering
- ▲ Unique TRUE CURVE Function—what you see on the faders is what you get as frequency response
- ▲ Revolutionary FBQ DETECTION system instantly reveals critical frequencies and can also be used as Audio Analyzer
- ▲ Automatic and ultra-fast Feedback Destroyer plus feedback indication via fader LEDs
- ▲ “Inaudible” Noise Gate/Peak Limiter function plus amazing Stereo Imager for spatial enhancement
- ▲ Additional sweepable high and low cut filters for removal of unwanted frequencies like floor rumble and high-frequency noise
- ▲ Integrated Pink Noise generator for perfect room and loudspeaker equalization
- ▲ Digital AES/EBU and S/PDIF interface and selectable sample rates (44.1, 48, 96 kHz)
- ▲ Ultra high-resolution 24-bit/96 kHz A/D- and D/A converters and high-performance 24/48-bit MOTOROLA® DSP for ultimate sonic resolution
- ▲ Relay-controlled hard-bypass with an auto-bypass function during power failure (failsafe relay)
- ▲ Highly accurate, 2 x 12-digit LED meters for easy input and output level setting
- ▲ Ultra high-quality, illuminated 45-mm faders, sealed rotary controls and illuminated switches
- ▲ Servo-balanced inputs and outputs on gold-plated XLR and ¼" TRS connectors
- ▲ Internal switch-mode power supply for maximum flexibility (100 - 240 V~), noise-free audio, superior transient response and lowest possible power consumption
- ▲ Extremely rugged construction ensures long life even under the most demanding conditions
- ▲ Designed in Germany. Manufactured under ISO9000 certified management system

ULTRAGRAPH DIGITAL DEQ1024

SPECIFICATIONS

ANALOG INPUTS

Type	electronically balanced
Connector	XLR
Impedance	22 k Ω at 1 kHz
Max. input level	+12 or +22 dBu, switchable
CMRR	80 dB typ.

ANALOG OUTPUTS

Type	servo-balanced
Connector	XLR
Impedance	100 Ω at 1 kHz
Max. output level	+12 or +22 dBu, switchable

SYSTEM SPECIFICATIONS

Frequency response	15 Hz to 35 kHz, +/- 3 dB
Signal-to-noise ratio	104 dBu, a-weighted, 22 Hz - 22 kHz
THD	0.004 % typ. @ +4 dBu, 1 kHz, gain 1
Crosstalk	< -85 dB, 22 Hz - 22 kHz

BYPASS

Type	Relay, hard-bypass in case of power failure
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DIGITAL INPUTS

Type	XLR transformer-balanced
Standard	AES/EBU or S/PDIF
Input impedance	110 Ω
Nom. input level	0.2 - 5 V peak-to-peak

DIGITAL OUTPUTS

Type	XLR transformer-balanced
Standard	AES/EBU or S/PDIF
Impedance	110 Ω
Output level	2 - 5 V peak-to-peak

DIGITAL PROCESSING

Converter	24-bit Delta-Sigma, 64/128 oversampling
Sample rate	44.1 kHz, 48 kHz, 96 kHz

GRAPHIC EQUALIZER

Type	analog 1/3-oct EQ
Frequency range	20 Hz to 20 kHz 31 1/3-oct. bands according to ISO frequencies
Bandwidth	1/3-oct.
Control range	+/-6, +/-12 dB or 0/-24 dB (switchable)

FEEDBACK DESTROYER (FBD)

Type	digital signal analysis for feedback identification
Filter	max. 10 digital notch filters per channel, automatic feedback suppression system
Frequency range	20 Hz - 20 kHz
Bandwidth	1/10-oct.
Control range	-48 dB in 6 dB-steps

MASTER

Gain	-9 dB to +9 dB
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FILTER

Low Cut	20 Hz to 160 Hz (12 dB/oct.)
High Cut	2.5 kHz to 16 kHz (12 dB/oct.)

DYNAMICS

Type	gate and limiter with digital IGC (Interactive Gain Control)
Threshold	variable: -60 to -10 dB (gate) variable: -6 to +9 dB (limiter)

FUNCTION SWITCHES

Bypass	switch, to deactivate equalizer functions
Meter in/out	selects between input and output metering
Fader range	sets the maximal cut/boost for the 31 bands
Standby	switches into standby mode
Pink noise	-48 dB to 0 dB
FB indicator	recognition of frequency band intensity
True Curve	Algorithm for achieving filter curve linearity

DISPLAYS

Input/output level	12-digit LED display: -48/-36/-24/ -18/-12/-6/-3/0/+3/+6/+9 dB/CLIP
Function switch	LED display of each switch (except for clock and configuration switches)

POWER SUPPLY

Voltage	85 to 250 V~, 50/60 Hz, auto range
Power consumption	typ. 10 W
Fuse	T 1 A H
Mains connector	Standard IEC receptacle

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	approx. 3.5" (89 mm) x 19" (482.6 mm) x 5.3" (135 mm)
Shipping weight	approx. 2.5 kg (5 lbs)

BEHRINGER continuously strives to assure the highest quality standards possible. Required modifications may be implemented without prior notice. Technical data and the appearance of the unit may deviate from the above values and/or illustrations.

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