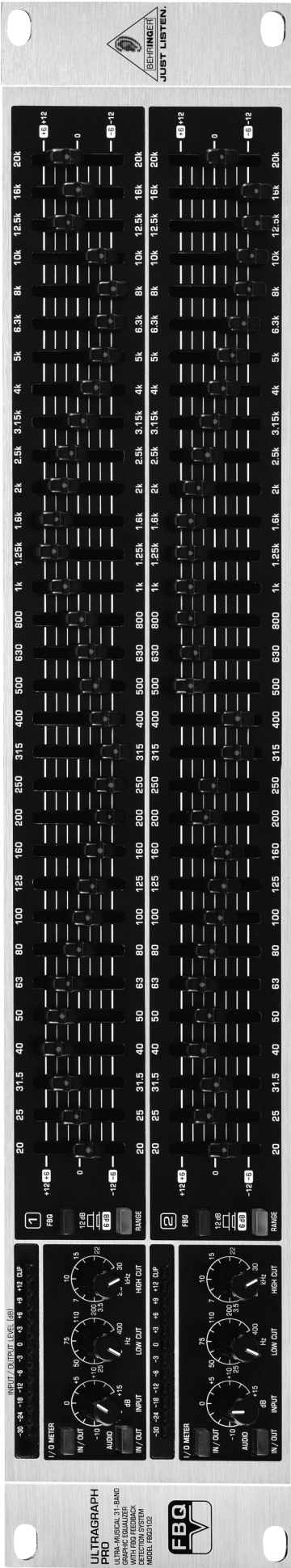


# ULTRAGRAPH PRO FBQ3102



## Technical Specifications

Version 1.1 October 2003

ENGLISH

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# ULTRAGRAPH PRO FBQ3102

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## ULTRAGRAPH PRO

### Ultra-Musical 31-Band Stereo Graphic Equalizer with FBQ Feedback Detection System

- ▲ Professional 31-band stereo Graphic Equalizer for both live and studio applications
- ▲ Revolutionary, patent-pending FBQ Feedback Detection System instantly reveals critical frequencies and can also be used as Audio Analyzer
- ▲ Dedicated mono subwoofer output with adjustable crossover frequency
- ▲ Additional sweepable high and low cut filters for each channel remove unwanted frequencies e.g. floor rumble, tape hiss etc.
- ▲ Highly accurate 12-digit LED input/output metering and input gain control for easy level setting
- ▲ Ultra low-noise audio operational amplifiers offer outstanding sound performance
- ▲ Relay-controlled hard-bypass with an auto-bypass function during power failure (failsafe relay)
- ▲ Servo-balanced inputs and outputs with 1/4" TRS and gold-plated XLR connectors
- ▲ High-quality illuminated faders, detent ALPS® potentiometers and illuminated switches for long-term reliability
- ▲ Shielded toroidal power transformer for ultra low-noise performance
- ▲ Extremely rugged all-metal chassis ensures long life even under the most demanding conditions
- ▲ Designed in Germany. Manufactured under ISO9000 certified management system

# ULTRAGRAPH PRO FBQ3102

## SPECIFICATIONS

	ULTRAGRAPH PRO FBQ6200	ULTRAGRAPH PRO FBQ3102	ULTRAGRAPH PRO FBQ1502
<b>AUDIO INPUTS</b>			
INPUTS	RF-filtered, servo-balanced XLR and 1/4" TRS connectors		
Impedance	40 k $\Omega$ balanced and unbalanced		
Maximum input level	+21 dBu balanced and unbalanced		
CMRR	typ. 40 dB, >55 dB @ 1 kHz		
<b>AUDIO OUTPUTS</b>			
OUTPUTS	servo-balanced XLR and 1/4" TRS connectors		
SUBWOOFER OUT	balanced XLR connector, level variable off to 0 dB	balanced XLR connector	
Crossover frequency	variable, 30 - 200 Hz		
<b>SYSTEM SPECIFICATIONS</b>			
Frequency response	10 Hz to 30 kHz, +/-3 dB	10 Hz to 200 kHz +/-3dB	
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 @ 1kHz		
<b>ROLL-OFF FILTERSECTION</b>			
Type	12 dB/oct., Butterworth		
Input	variable (-15 dB to +15 dB)		
Low Cut	variable (10 Hz to 400 Hz)	switchable, Cutoff @ 25 Hz	
High Cut	variable (2.5 kHz to 30 kHz)	-	
<b>GRAPHIC EQUALIZER</b>			
Type	analog 31-band equalizer	analog 15-band equalizer	
Frequency range	20 Hz to 20 kHz in 31 1/3-octave bands (ISO frequencies)	20 Hz to 16 kHz in 15 bands (ISO frequencies)	
Bandwidth	1/3 octave	2/3 octave	
Control range	+/-6 dB or +/-12 dB (switchable)		
<b>LIMITER SECTION</b>			
Attack/Release	20 msec / 90 msec	-	
Threshold	variable, -6 dB to +22 dB (off)	-	
LED meter	Gain reduction 20/10/3/1 dB	-	
<b>NOISE GENERATOR</b>			
Type	Pink noise, level variable, off to 0 dBu,	-	
LED level meter	-24/-12/-6/0 dB	-	
<b>FUNCTION SWITCHES</b>			
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	-	-	activates the high pass filter
Limiter	activates the limiter	-	-
Pink Noise	activates the noise generator	-	-
Subwoofer	activates the subwoofer output	-	-
<b>INDICATORS</b>			
Input/output level	8-segment LED display: -24/-18/-12/-6/0/+6/+12 dB/CLIP	12-segment LED display: -30/-24/-18/-12/-6/ -3/0/+3/+6/+9/+12 dB/CLIP	4-segment LED display: -20/0/+6 dB/CLIP (output only)
Subwoofer	4-segment LED display: -18/-12/0/+12 dB	-	-

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<b>POWER SUPPLY</b>			
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	35 W	35 W	22 W
Fuse	100 - 120 V~: <b>T 630 mA H</b>		
	200 - 240 V~: <b>T 315 mA H</b>		
Mains connection	standard IEC receptacle		
<b>DIMENSIONS/ WEIGHT</b>			
Dimensions (approx.) (H x W x D)	133.5 mm x 482.6 mm x 150 mm	89 mm x 482.6 mm x 150 mm	44.5 mm x 482.6 mm x 215 mm
	5 ¼ " x 19" x 5 7/8"	3 ½" x 19" x 5 7/8"	1 ¾" x 19" x 8 3/8"
Weight	approx. 2.70 kg	approx. 2.5 kg	approx. 2.15 kg
	approx. 5.95 lbs	approx. 5.51 lbs	approx. 4.74 lbs

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