

EUROACK UB1222FX-PRO

Technical Specifications

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ENGLISH



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EURORACK

Ultra Low-Noise Design 16-Input Mic/Line Mixer with Premium Mic Pre-amplifiers, FBQ Feedback Detection System and 24-Bit Multi-FX Processor

- ▲ Ultra low-noise ULN design, highest possible headroom, ultra-transparent audio
- ▲ 4 new state-of-the-art, studio-grade IMP “Invisible” Mic Preamps with:
 - 130 dB dynamic range for 24-bit, 192 kHz sampling rate inputs
 - Ultra-wide 60 dB gain range
 - Lowest possible distortion 0.0007% (20 Hz - 20 kHz)
- ▲ Revolutionary, patent-pending FBQ Feedback Detection System instantly reveals critical frequencies
- ▲ Integrated 24-bit digital stereo FX processor with 99 great-sounding VIRTUALIZER presets including reverb, delay, chorus, compressor, tube distortion, vinylizer and more plus 1 kHz test tone generator
- ▲ Voice Canceller function on dedicated CD/tape return channel for easy-to-use sing-along applications
- ▲ Breathtaking XPQ 3D stereo surround effect for more vitality and enhanced stereo image
- ▲ 7-band stereo graphic EQ allows precise frequency correction of monitor or main mixes
- ▲ 4 fully equipped stereo input channels featuring 2 additional mic inputs on channels 5/6 and 7/8, 3-band EQ and input trim control
- ▲ Effective, extremely musical 3-band EQ plus switchable low cut filter on all mono channels
- ▲ Inserts on each mono channel for flexible connection of outboard equipment
- ▲ 12 high-headroom line inputs
- ▲ Standby-switch mutes all mic channels during breaks while background music is provided via CD/tape or line inputs
- ▲ State-of-the-art 4580 operational amplifiers provide lowest noise and distortion—better than 4560 op amps
- ▲ 2 aux sends per channel: 1 pre fader for monitoring, 1 post fader (for internal FX and/or as external send)
- ▲ Clip indication and gain level set LEDs plus mute switches for each channel allow fast and accurate level setting
- ▲ 2 multi-functional stereo aux returns
- ▲ Balanced main mix outputs with gold-plated XLR connectors, headphone/control room output and stereo tape outputs
- ▲ Switchable +48 V phantom power for condenser microphones
- ▲ Long-wearing 60-mm logarithmic-taper ALPS® faders and sealed rotary controls
- ▲ Internal switch-mode power supply for maximum flexibility (100 - 240 V~), noise-free audio, superior transient response plus lowest possible power consumption for energy saving
- ▲ Extremely rugged steel construction ensures long life even under most demanding conditions
- ▲ Rack mount brackets included
- ▲ Designed in Germany. Manufactured under ISO9001 certified management system

5. SPECIFICATIONS

Mono inputs

Microphone inputs (IMP "Invisible" Mic Preamp)

Type	XLR, electronically balanced, discrete input circuitry
Mic E.I.N. (20 Hz - 20 kHz)	
@ 0 Ω source resistance	-134 dB / 135.7 dB A-weighted
@ 50 Ω source resistance	-131 dB / 133.5 dB A-weighted
@ 150 Ω source resistance	-129 dB / 130.5 dB A-weighted

Frequency response	<10 Hz - 150 kHz (-1 dB), <10 Hz - 200 kHz (-3 dB)
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Gain range	+10 to +60 dB
Max. input level	+12 dBu @ +10 dB Gain
Impedance	approx. 2.6 k Ω balanced
Signal-to-noise ratio	110 dB / 112 dB A-weighted (0 dBu In @ +22 dB Gain)

Distortion (THD+N)	0.005% / 0.004% A-weighted
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Line input

Type	1/4" TRS connector, electronically balanced
Impedance	approx. 20 k Ω balanced 10 k Ω unbalanced
Gain range	-10 to +40 dB
Max. input level	+22 dBu @ 0 dB Gain

Fade-out attenuation¹ (Crosstalk attenuation)

Main fader closed	98 dB
Channel muted	85 dB
Channel fader muted	85 dB

Frequency response

Microphone input to main out	
<10 Hz - 90 kHz	+0 dB / -1 dB
<10 Hz - 160 kHz	+0 dB / -3 dB

Stereo inputs

Channels 5/6, 7/8	
Microphone input	
Type	XLR microphone connector, electronically balanced
Impedance	approx. 2.6 k Ω balanced
Gain range	0 dB to +40 dB
Max. input level	+2 dBu

Stereo inputs

Type	2 x 1/4" TRS connector, unbalanced
Impedance	approx. 40 k Ω @ 0 dB Gain
Gain range	-20 dB to +20 dB
Max. input level	+22 dBu @ 0 dB Gain

Channels 9/10, 11/12

Type	2 x 1/4" TRS connector, unbalanced
Impedance	approx. 40 k Ω @ 0 dB Gain
Gain range	-20 dB to +20 dB
Max. input level	+22 dBu @ 0 dB Gain

CD/tape in

Type	RCA connectors
Impedance	approx. 10 k Ω
Max. input level	+22 dBu

EQ mono channels

Low	80 Hz / ± 15 dB
Mid	2.5 kHz / ± 15 dB
High	12 kHz / ± 15 dB

Low cut	80 Hz, 18 dB/oct.
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EQ stereo channels

Low	80 Hz / ± 15 dB
Mid	2.5 kHz / ± 15 dB
High	12 kHz / ± 15 dB

MON/FX send

Type	1/4" TS connector, unbalanced
Impedance	approx. 120 Ω
Max. output level	+22 dBu

Aux returns

Type	1/4" TRS connector, unbalanced
Impedance	approx. 10 k Ω
Max. input level	+22 dBu

Main outputs

Type	XLR, electronically balanced
Impedance	approx. 240 Ω balanced / 120 Ω unbalanced
Max. output level	+28 dBu

Headphone output

Type	1/4" TRS connector, unbalanced
Max. output level	+19 dBu / 150 Ω (+25 dBm)

CD/tape out

Type	RCA connectors
Impedance	approx. 1 k Ω
Max. output level	+22 dBu

DSP

Converter	Texas Instruments® 24-bit Sigma-Delta, 64/128-times oversampling
Sampling rate	46,875 kHz

Main mix system data²

Noise	
Main mix @ - ∞ , Channel fader - ∞	-99 dB / -101 dB A-weighted
Main mix @ 0 dB, Channel fader - ∞	-84 dB / -87 dB A-weighted
Main mix @ 0 dB, Channel fader @ 0 dB	-80 dB / -82 dB A-weighted

Power supply

Power consumption	40 W
Fuse	100 - 240 V ~: T 1.6 A H
Mains connection	Standard IEC receptacle

Physical

Dimensions (H x W x D)	approx. 97 mm (3 7/8") x 345 mm (13 18/32") x 334 mm (13 5/32")
Weight (net)	approx. 3.80 kg (8.38 lbs.)

Measuring conditions:

- 1 kHz rel. to 0 dBu; 20 Hz - 20 kHz; line input; main output; unity gain.
- 20 Hz - 20kHz; measured at main output. Channels 1 - 4 unity gain; EQ flat; all channels on main mix; channels 1/3 as far left as possible, channels 2/4 as far right as possible. Reference = +6 dBu.

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BEHRINGER Spezielle Studiotechnik GmbH, Hanns-Martin-Schleyer-Str. 36-38,
47877 Willich-Müncheide II, Germany
Tel. +49 2154 9206 0, Fax +49 2154 9206 4903
