

# UB502

# EUROSTACK

## Technical Specifications

VERSION 1.4 January 2004

ENGLISH



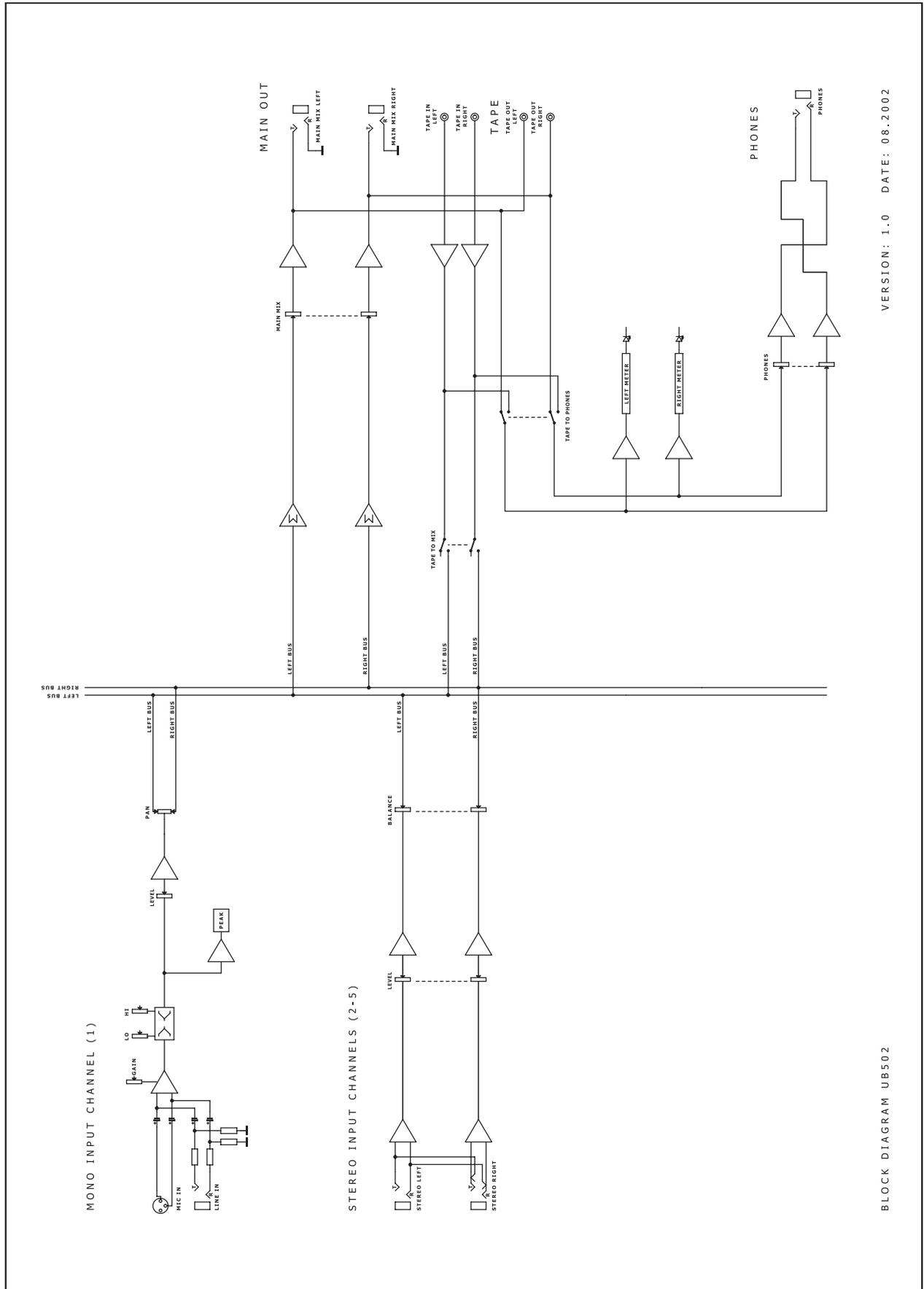
# EURORACK

## ULTRA-LOW NOISE DESIGN 5-INPUT 2-BUS MIXER

- ▲ Ultra-Low Noise ULN design, highest possible headroom, ultra-transparent audio
  
  - ▲ One new state-of-the-art, studio-grade IMP “Invisible” Mic Preamp 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)
  
  - ▲ Effective, extremely musical 2-band EQ and peak LED on mono channel
  
  - ▲ 5 balanced high-headroom Line inputs
  
  - ▲ State-of-the-art 4580 operational amplifiers provide lowest noise and distortion - better than 4560 op amps
  
  - ▲ Main mix outputs plus separate Headphone and stereo Tape output
  
  - ▲ Tape inputs assignable to Main mix or Headphone outputs
  
  - ▲ High-quality sealed rotary controls for long-term reliability
  
  - ▲ External power supply for noise-free audio and superior transient response
  
  - ▲ High-quality components and exceptionally rugged construction ensure long life
  
  - ▲ Conceived and designed by BEHRINGER Germany
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# EURORACK UB502

## BLOCK DIAGRAM



VERSION: 1.0 DATE: 08.2002

BLOCK DIAGRAM UB502

# EURORACK UB502

## SPECIFICATIONS

### Mono input

#### Microphone input (IMP "Invisible" Mic Preamp)

Type	XLR, electronically balanced, discrete input circuit
Mic E.I.N. (20 Hz - 20 kHz)	
@ 0 $\Omega$ source resistance	-134 dB / 135.7 dB A-weighted
@ 50 $\Omega$ source resistance	-131 dB / 133.3 dB A-weighted
@ 150 $\Omega$ 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 $\Omega$ balanced
Signal-to-noise ratio	110 dB / 112 dB A-weighted (0 dBu In @ +22 dB gain)

<b>Distortion (THD+N)</b>	0.005% / 0.004% A-weighted
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### Line input

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

### Fade-out attenuation<sup>1</sup> (Crosstalk attenuation)

Main fader closed	90 dB
Channel muted	89.5 dB
Channel fader closed	89 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

Type	1/4" TRS connector, electronically balanced
Impedance	approx. 20 k $\Omega$
Max. input level	+22 dBu

### EQ mono channels

Low	80 Hz / $\pm$ 15 dB
High	12 kHz / $\pm$ 15 dB

### Main outputs

Type	1/4" TRS connector, unbalanced
Impedance	approx. 120 $\Omega$ unbal.
Max. output level	+22 dBu

### Headphones output

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

### Main mix system data<sup>2</sup>

Noise	
Main mix @ - $\infty$ ,	
Channel fader - $\infty$	-106 dB / -109 dB A-weighted
Main mix @ 0 dB,	
Channel fader - $\infty$	-95 dB / -98 dB A-weighted
Main Mix @ 0 dB,	
Channel fader @ 0 dB	-84 dB / -87 dB A-weighted

### Power supply

Power consumption	13 W
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### Mains voltage

USA/Canada	115 V ~, 60 Hz, MXUL5 adapter
U.K./Australia	240 V ~, 50 Hz, MXUK5 adapter
Europe	230 V ~, 50 Hz, MXEU5 adapter
Japan	100 V ~, 60 Hz, MXJP5 adapter

### Dimensions

Dimensions (H x W x D)	1 5/6" / 1 1/2" (47 mm / 37 mm) x 5 1/4" (134 mm) x 7" (177 mm)
Weight (net)	approx. 0.55 kg (1.21 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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