EURORACK

Technical Specifications

Version 1.3 July 2004



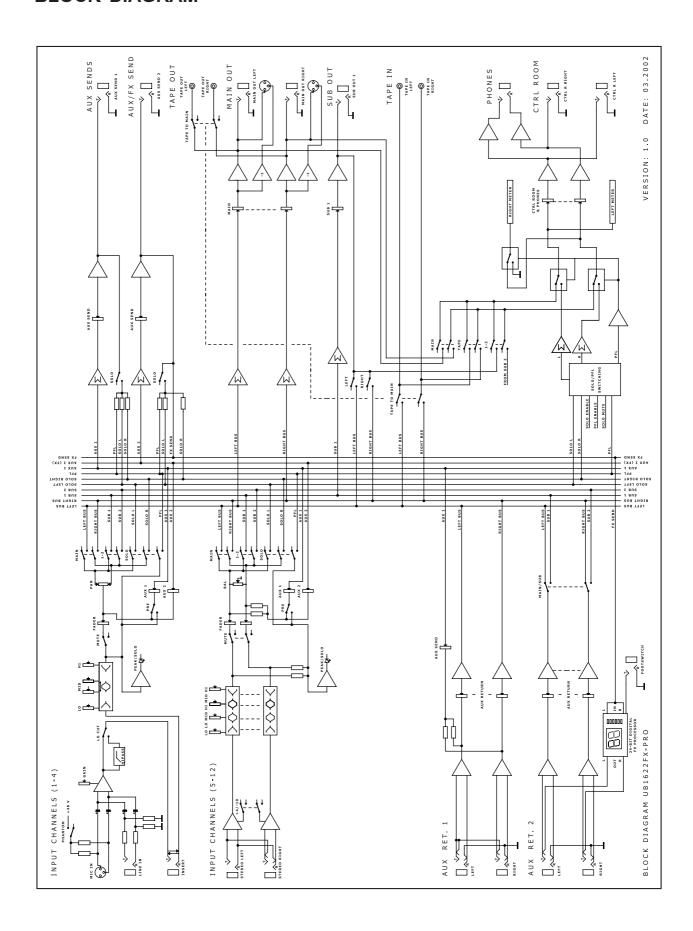


EURORACK

Ultra Low-Noise Design 16-Input 2/2-Bus Mic/Line Mixer with Premium Mic Preamplifiers 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)
- ▲ 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
- ▲ Effective, extremely musical 3-band EQ with semi-parametric mid band plus switchable low-cut filter on all mono channels
- ▲ Inserts on each mono channel for flexible connection of outboard equipment
- ▲ 12 balanced high-headroom line inputs with +4/-10 level selection on stereo channels
- ▲ State-of-the-art 4580 operational amplifiers provide lowest noise and distortion—better than 4560 op amps
- ▲ 2 aux sends per channel: 1 pre/post fader switchable for monitoring/FX applications, 1 post fader (for internal FX or as external send)
- ▲ Peak LEDs, mute, main mix and subgroup routing switches, solo and PFL functions on all channels
- ▲ 2 subgroups with separate outputs for added routing flexibility
- ▲ 2 multi-functional stereo aux returns with flexible routing
- ▲ Main mix outputs with jack and gold-plated XLR connectors, separate control room, headphones and stereo tape outputs
- ▲ Control room/phones outputs with multi-input source matrix
- ▲ Tape inputs assignable to main mix or control room/phones 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 the most demanding conditions
- ▲ Rack mount brackets included
- ▲ Conceived and designed by BEHRINGER Germany. Made in China

BLOCK DIAGRAM



SPECIFICATIONS

Microphone inputs (IMP Invisible Mic Preamp)

Type XLR, electronically balanced, discrete input circuit

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 / 133.3 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)

+10 to +60 dB Gain range

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

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 @ 0dB Gain

Fade-out attenuation¹ (Crosstalk attenuation)

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

Frequency response

Microphone input to main out

+0 dB / -1 dB <10 Hz - 90 kHz <10 Hz - 160 kHz +0 dB / -3 dB

Stereo inputs

Type 1/4" TRS connector,

electronically balanced

Impedance approx. 20 k Ω Max. input level +22 dBu

EQ mono channels

Low 80 Hz / ±15 dB

Mid 100 Hz - 8 kHz / ±15 dB 12 kHz / ±15 dB High

EQ stereo channels

80 Hz / ±15 dB Low Low Mid 500 Hz / ±15 dB High Mid $3 \text{ kHz} / \pm 15 \text{ dB}$ 12 kHz / ±15 dB Hiah

Aux sends

Type 1/4" TS connector, unbalanced

Impedance approx. 120 Ω

Max. output level +22 dBu

Stereo aux returns

Type 1/4" TRS connector.

electronically balanced

Impedance approx. 20 k Ω bal. / 10 k Ω unbal.

Max. input level +22 dBu Main outputs

1/4" TS connector unbalanced Type Impedance approx. 240 Ω balanced /

120 Ω unbalanced

Max. output level +22 dBu

Control room outputs

1/4" TS connector unbalanced Type

Impedance approx. 120 Ω +22 dBu Max. output level

Headphones outputs

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

DSP 24-bit

Converter 24-bit Sigma-Delta,

64/128-times oversampling

Sampling rate 46,875 kHz

Main mix system data²

Noise

Main mix @ -co, Channel fader @ -∞ -101 dB

Main mix @ 0 dB,

Channel fader @ -oo -96 dB

Main mix @ 0 dB,

Channel fader @ 0 dB -83 dB

Power supply

Power consumption

100 - 240 V~: T 1.6 A H 250 V Fuse Mains connection

Standard IEC receptacle

Physical/weight

Dimensions (H x W x D) approx. 3 7/8" x 11 7/8" x 13 7/8"

(97 mm x 301 mm x 351 mm)

Weight (net) approx. 3.3 kg

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.

BEHRINGER is constantly striving to manintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or illustrated.

Technical specifications and appearance subject to change without notice. The information contained herein is correct at the time of printing. The names of companies, institutions or publications pictured or mentioned and their respective logos are registered trademarks of their respective owners. Their use neither constitutes a claim of the trademarks by BEHRINGER® nor affiliation of the trademark owners with BEHRINGER®. BEHRINGER® accepts no liability for any loss which may be suffered by any person who relies either wholly or in part upon any description, photograph or statement contained herein. Colours and specification may vary slightly from product. Products are sold through our authorised dealers only. Distributors and dealers are not agents of BEHRINGER® and have absolutely no authority to bind BEHRINGER® by any express or implied undertaking or representation. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of BEHRINGER Spezielle Studiotechnik GmbH. BEHRINGER® is a registered trademark.

ALL RIGHTS RESERVED. © 2004 BEHRINGER Spezielle Studiotechnik GmbH, Hanns-Martin-Schleyer-Str. 36-38, 47877 Willich-Münchheide II, Germany. Tel. +49 2154 9206 0, Fax +49 2154 9206 4903