

12 channels analog mixer description

Each channel has:

- Microphone pre-amplifier: gain 6 to 52dB in steps of 2 dB
- Gain fine 0 -1dB
- Phantom power (+48V), switch per channel
- HP filter: 40Hz 12dB/octave
- Mix on/off switch
- Pan potentiometer
- PFL switch
- Alps fader
- Insert with jack connector (is also a direct output)

The monitor unit has:

- Master output via potentiometer and a direct output without potentiometer, XLR out.
- Direct input L and R with Jack: extra input on the Mix bus.
With a separated pre-amplifier it is a 14 channel mixer
- Monitor with: volume and balance potentiometer, mono switch and XLR out
- Headphone with potentiometer and jack out
- Select switch: Mix, Pfl, Tape
- Tape return input with XLR
- Talk back with internal microphone, switch, volume and XLR out
- Oscillator switch (for calibration) with XLR: 7,75V_{eff} +20dBu
- Meter output (for external meter) with jack

Connections:

- All XLR: pin 2=hot, pin 3=cold (balanced)
- Insert: Tip=send Ring=return
For direct out: connect Tip and Ring, Tip or Ring is output
- Direct input: Tip+Ring=input (unbalanced)
- Headphone, meter: Tip=Left Ring=Right

Technical specifications

- Frequency response: 1.7 Hz to 500 KHz (-3dB)
- Maximum level microphone input and direct input: 5,5V (+17dBu)
- Maximum level all outputs and insert input: 11V (+23dBu)
- Impedance all outputs: 75Ohm
- Impedance microphone input: 5KOhm
- Impedance insert and direct input: 10KOhm
- Channel separation, 1 kHz to 20 KHz: 75dB
- Signal to noise ratio (all channels off) 95dB (ref = 0dBu input signal, A-weighted)
- CMRR at 1KHz >90dB
- Phantom power: 48V, 10mA per channel
- Mixer size: 46*37*20cm, weight: 6,6kg
- Power supply weight: 2kg

Pre-Amplifier part:

Measurements at gain	6 dB	53 dB	Notes
Equivalent noise level	3 μ V	0,19 μ V	A-weighted, Ri = 39 Ohms
Signal to noise ratio	108 dB	132 dB	ref = 0dBu input signal, A-weighted
Distortion 1 kHz 2nd Harmonic	-121 dB	-90 dB	7V output level
3rd Harmonic	-118 dB	-105 dB	
Distortion 10 kHz 2nd Harmonic	-110 dB	-103 dB	7V output level
3rd Harmonic	-90 dB	-107 dB	