

# MULTICOM PRO-XL MDX4600



## Technical Specifications

VERSION 1.2 September 2002

ENGLISH



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# MULTICOM PRO-XL

**INTERACTIVE REFERENCE-CLASS 4-CHANNEL EXPANDER/GATE/COMPRESSOR/ PEAK LIMITER WITH DYNAMIC ENHANCER AND LOW CONTOUR FILTER**



- ▲ Switchable IKA (Interactive Knee Adaptation) program-adaptive compression circuitry combines the advantages of hard-knee and soft-knee characteristics
- ▲ IRC (Interactive Ratio Control) expander/gate circuitry for virtually inaudible noise suppression
- ▲ Switchable dynamic Enhancer for brilliant, lively audio even with heavy compression
- ▲ IGC (Interactive Gain Control) peak limiting circuitry combines clipper and program limiter for reliable and inaudible protection against signal peaks
- ▲ Switchable Low contour filter prevents “pumping” due to low-frequency dominated compression
- ▲ Stereo couple function selectable for channels 1/2 and 3/4
- ▲ Ultra low-noise 4580 operational amplifiers and state-of-the-art VCA's
- ▲ Separate 8-segment LED meters for input/output levels and gain reduction
- ▲ Selectable operating level (+4 dBu/-10 dBV)
- ▲ Servo-balanced inputs and outputs with ¼” TRS and gold-plated XLR connectors
- ▲ High-quality components and exceptionally rugged construction ensure long life
- ▲ Conceived and designed by BEHRINGER Germany

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**SPECIFICATIONS**

**AUDIO INPUTS**

Type	XLR and 1/4" TRS connectors, HF-shielded, servo-balanced
Impedance	
+4 dBu	90 kΩ bal., 45 kΩ unbal. @ 1 kHz
-10 dBV	180 kΩ bal., 90 kΩ unbal. @ 1 kHz
Operating level	+4 dBu/-10 dBV (switchable)
Max. input level	+22 dBu balanced and unbalanced
CMRR	typ. 40 dB, >60 dB @ 1 kHz

**AUDIO OUTPUTS**

Type	XLR and 1/4" TRS connectors Electronically controlled servo-balanced output stage
Impedance	95 Ω bal., 50 Ω unbal. @ 1 kHz
Max. output level	+21 dBu, +20 dBm balanced and unbalanced

**SIDCHAIN INPUTS**

Type	1/4" TS connector, unbalanced, HF-shielded, DC-decoupled
Impedance	45 kΩ
Max. input level	+24 dBu

**SIDCHAIN OUTPUTS**

Type	1/4" TS connector, unbalanced, HF-shielded, DC-decoupled
Impedance	50 Ω
Max. output level	+21 dBu

**SYSTEM SPECIFICATIONS**

Bandwidth	20 Hz to 20 kHz, +0/-0.5 dB
Frequency range	0.35 Hz to 200 kHz, +0/-3 dB
S/N ratio	115 dB, unweighted, 22 Hz - 22 kHz
THD	0.008 % typ. @ +4 dBu, 1 kHz, gain 1 0.07 % typ. @ +20 dBu, 1 kHz, gain 1
IMD	0.01 % typ. SMPTE
Crosstalk	-110 dB @ 1 kHz

**EXPANDER/GATE SECTION**

Type	IRC (Interactive Ratio Control) expander
Threshold	variable (OFF to +10 dB)
Ratio	variable (1:1 to 1:8)
Attack	<1 msec/50 dB, program-dependent
Release	variable SLOW: 100 msec/1 dB, FAST: 100 msec/100 dB

**COMPRESSOR SECTION**

Type	IKA (Interactive Knee Adaptation) compressor
Threshold	variable (-40 to +20 dB)
Ratio	variable (1:1 to ∞:1)
Attack/release	variable (manual or automatic)
Auto characteristic	wave adaptive compressor
Manual attack time	variable (0.3 msec/20 dB to 300 msec/20 dB)
Manual release time	variable (0.05 sec/20 dB to 5 sec/20 dB)
Auto attack time	typ. 15 msec for 10 dB, 5 msec for 20 dB, 3 msec for 30 dB
Auto release time	program-dependent, typ. 125 dB/sec
Output	variable (-20 to +20 dB)

**PEAK LIMITER SECTION**

Type	IGC (Interactive Gain Control) peak limiter
Level	variable (0 dB to OFF (+21 dBu))
Ratio	∞:1
Level 1 limiter type	clipper
Attack	"zero"
Release	"zero"
Level 2 limiter type	program limiter
Attack	program-dependent, typ. <5 msec
Release	program-dependent, typ. 20 dB/sec

**DYNAMIC ENHANCER SECTION**

Type	IDE (Interactive Dynamic Enhancer)
Filter frequency	2.5 kHz (lower cut-off frequency)
Characteristic	high-pass filter (6 dB/oct.)
Boost	max. 28 dB @ 7.5 kHz

**POWER SUPPLY**

Mains voltage	USA/Canada 120 V ~, 60 Hz U.K./Australia 240 V ~, 50 Hz Europe 230 V ~, 50 Hz
General export model	100 -120 V ~, 200 -240 V ~, 50 - 60 Hz
Power consumption	max. 18 W
Fuse	100 -120 V ~: T 630 mA H 200 -240 V ~: T 315 mA H
Mains connection	standard IEC receptacle

**DIMENSIONS/WEIGHT**

Dimensions	approx. 1 3/4" (44.5 mm) x 19" (482.6 mm) x 8 1/2" (217 mm)
Weight	approx. 2.25 kg (4.96 lbs)
Shipping weight	approx. 3.45 kg (7.61 lbs)

BEHRINGER makes every effort to ensure the highest standard of quality. Necessary modifications are carried out without notice. Thus, the specifications and design of the device may differ from the information given in this manual.

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