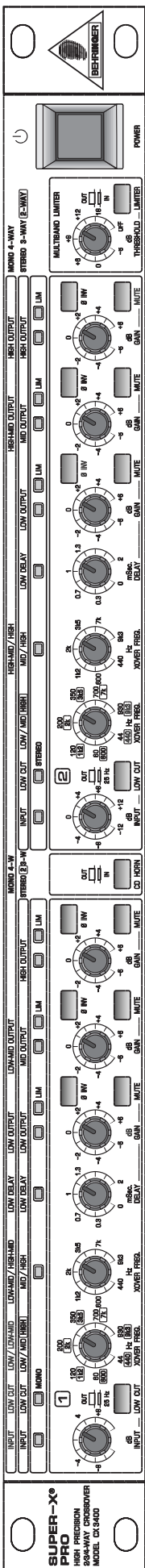


# SUPER-X<sup>®</sup> PRO CX3400



## Technical Specifications

VERSION 1.2 November 2000

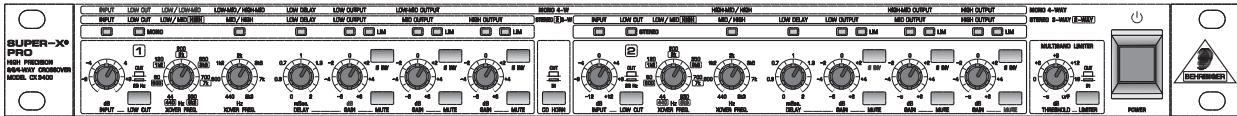
ENGLISH



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# SUPER-X<sup>®</sup> PRO

**HIGH-PRECISION STEREO 2-WAY / 3-WAY / MONO 4-WAY CROSSOVER WITH LIMITERS MODEL CX 3400**



- ▲ Professional high-precision stereo 2-way/3-way/mono 4-way crossover
- ▲ World-class performance Linkwitz-Riley filters with 24 dB/octave
- ▲ Absolutely flat summed amplitude response, zero phase difference
- ▲ Individual output Gain controls for all bands
- ▲ Individual Limiter on each output for optimal loudspeaker protection
- ▲ Individual output Mute switches for easy band adjustment
- ▲ Individual Phase reverse switches for instant phase correction
- ▲ Switchable 25 Hz Low cut filter on each input for low-frequency driver protection
- ▲ “Low Sum” function provides low-level mono output for subwoofer operation
- ▲ Adjustable time delay for phase alignment between drivers
- ▲ CD horn equalization for constant directivity horn compensation
- ▲ Servo-balanced, gold-plated XLR connectors for all inputs and outputs
- ▲ Ultra high precision potentiometers for ultimate accuracy and repeatability
- ▲ Ultra low-noise 4580 audio operational amplifiers for outstanding sound performance
- ▲ Illuminated switches for secure operation in dark stage environments
- ▲ Shielded toroidal mains transformer for minimal noise interference
- ▲ High-quality components and exceptionally rugged construction ensure long life
- ▲ Conceived and designed by BEHRINGER Germany

# SPECIFICATIONS

## INPUT

|                  |  |
|------------------|--|
| Connectors       | XLR  |
| Type             | Electronically servo-balanced, RF filtered |
| Impedance        | Balanced >50k Ohms, unbalanced >25k Ohms   |
| Max. Input level | +22 dBu typical, balanced or unbalanced    |
| CMRR             | >40 dB, typically >55 dB at 1 kHz          |

## OUTPUT

|                   |  |
|-------------------|--|
| Connectors        | XLR  |
| Type              | Electronically servo-balanced, RF filtered |
| Impedance         | Balanced 60 Ohms, unbalanced 30 Ohms       |
| Max. Output Level | +20 dBm balanced/unbalanced                |

## PERFORMANCE

|                        |   |                    |
|------------------------|---|--------------------|
| Bandwidth              | 20 Hz to 20 kHz, +0/-0.5 dB               |                    |
| Frequency Response     | <5 Hz to >90 kHz, +0/-3 dB                |                    |
| Signal to Noise        | Ref.: +4 dBu, 20 Hz to 20 kHz, unweighted |                    |
|                        | <b>Stereo Mode:</b>                       | <b>Mono Mode:</b>  |
| Low Output             | >93 dBu                                   | >93 dBu            |
| Low-Mid Output         |   | >94 dBu            |
| Mid Output             | >95 dBu                                   |                    |
| High-Mid Output        |   | >94 dBu            |
| High Output            | >90 dBu                                   | >88 dBu            |
| Dynamic Range          | >106 dB, unweighted                       |                    |
| THD & Noise            | <b>Limiters Off</b>                       | <b>Limiters On</b> |
|                        | <0.04%                                    | <0.5               |
| Interchannel Crosstalk | High to Low:                              | <93 dB             |
|                        | High to Mid:                              | <94 dBu            |
|                        | Mid to Low:                               | <95 dBu            |
|                        | High to High-Mid:                         | <95 dBu            |
|                        | High-Mid to Low-Mid:                      | <95 dBu            |
|                        | Low-Mid to Low:                           | <92 dBu            |

## CROSSOVER

|                                |  |                   |
|--------------------------------|--|-------------------|
| Filter Type                    | Linkwitz-Riley, 24 dB/Octave, state-variable |                   |
| <b>Stereo Mode Frequencies</b> | <b>x1</b>                                    | <b>x10</b>        |
| Low/High                       | 44 to 930 Hz                                 | 440 Hz to 9.3 kHz |
| Low/Mid                        | 44 to 930 Hz                                 | 440 Hz to 9.3 kHz |
| Mid/High                       | 440 Hz to 9.3 kHz                            |                   |
| <b>Mono Mode Frequencies</b>   | <b>x1</b>                                    | <b>x10</b>        |
| Low/Low-Mid                    | 44 to 930 Hz                                 | 440 Hz to 9.3 kHz |
| Low-Mid/High-Mid               | 440 Hz to 9.3 kHz                            |                   |
| High-Mid/High                  | 440 Hz to 9.3 kHz                            |                   |

## FUNCTION SWITCHES

### Front Panel

|              |  |
|--------------|--|
| Low Cut      | Activates 25 Hz Butterworth, 12 dB/Octave high-pass filter |
| Mute         | Mutes the individual output                                |
| Phase Invert | Inverts the phase at the individual output                 |
| CD Horn      | Corrects CD horn frequency response above 3.5 kHz          |
| Limiter      | Activates the limiter function for all outputs             |

### Rear Panel

|                 |  |
|-----------------|--|
| Xover Frequency | Multiplies crossover frequency range by 10                   |
| Mode            | Selects stereo/mono and 2/3/4-way operation                  |
| LF Sum          | Selects normal stereo or mono-summed low frequency operation |
|                 | ON=Channel 1 + 6dB louder / Channel 2: the same as before    |

## CONTROLS

|                 |   |
|-----------------|---|
| Input           | Controls the input gain (+/-12 dB)                    |
| Xover Frequency | Controls the crossover frequency                      |
| Delay           | Controls the delay at the low output (0 to 2 msec.)   |
| Gain            | Controls the output gain (+/-6 dB)                    |
| Threshold       | Controls the threshold of the limiter (- 6 dB to OFF) |

## POWER SUPPLY

|                   |                         |  |
|-------------------|-------------------------|--|
| Mains Voltages    | 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. 22 W               |  |
| Fuse              | 100 - 120 V ~ :         | <b>T 630 mA H</b>                        |
|                   | 200 - 240 V ~ :         | <b>T 315 mA H</b>                        |
| Mains Connection  | Standard IEC receptacle |  |

## PHYSICAL

|                 |  |
|-----------------|--|
| Dimensions      | 1,75" (44,5 mm) * 19" (482,6 mm) * 8,5" (217 mm) |
| Net Weight      | 3 kg   |
| Shipping Weight | 4,3 kg   |

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