



**MARTIN AUDIO**  
LONDON

**CX-2 COMPACT COAXIAL LOUDSPEAKER**

**EX-2 EQUALISER/CROSSOVER**

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## CX-2 ULTRA COMPACT CO-AXIAL LOUDSPEAKER

The CX-2 is a high performance ultra-compact loudspeaker. It uses a newly developed 30cm coaxial full range driver (HF driver mounted on rear of bass driver magnet, projecting through magnet to horn contained within the bass cone).

The HF compression driver and bass magnet are located to a massive die-cast frame, ensuring that the motor unit will withstand the severest of drops without damage.

Both bass and treble drivers use edge-wound voice coils, as these produce 20% increase in efficiency and substantially improve heat dissipation. A very high temperature coil assembly is used in the bass driver, to provide positive protection against overdriving. This avoids the need to use fuses or other protection devices which can degrade sound quality.

A precision multi element passive crossover blends the two drivers at 1.5KHz. This has been carefully designed to smooth the mid and high mid bands, making further equalisation in these areas largely unnecessary.

The coaxial driver is mounted in a 40 litre enclosure, vented with four distributed ports for increased low frequency efficiency and power handling.

### SPECIFICATION

Type .....	2-way coaxial 30cm (12") driver
Frequency Response .....	50Hz - 20KHz
Crossover .....	1500Hz multi element passive
Voice Coils .....	LF 75mm (3") HF 44mm (1.73")
System Rated Impedance ...	8 ohms
Rated Power .....	150 W continuous average power (LF)
Programme Power .....	300 W
Recommended Amp Power ....	100 W - 300 W into 8 ohms
Rated Dispersion .....	90°x40° (HF)
Sensitivity .....	97dB at 1 W, 1m (100 - 5KHz)
Connectors .....	1 XLR female, 1 XLR male, 2 mono ¼" jack sockets
Dimensions (WxHxD) .....	52cmx35.5cmx35cm (20½"x13½"x13½")
Weight .....	20.5Kg (45lbs)



## EX-2 EQUALISER - CROSSOVER

This is the first unit of its type to be commercially produced. It avoids the need to purchase a separate electronic crossover for add-on subwoofers. Innovative circuit design makes this possible with very little increase in cost. Thus the user benefits from having a full time available crossover that is precisely matched to the system by the designer.

Skilled design of the CX-2 coaxial driver eliminates any equalisation requirement between 150Hz and 5KHz. Equalisation is provided at the low frequency end, limited to +6dB at 50Hz, with subsonic rolloff (below the box tuning frequency) to avoid excessive cone excursion. HF equalisation of +4dB at 15KHz is provided to compensate for the response of the compression driver/horn combination.

When additional low frequency output is required, an internal electronic crossover can be switched in, providing a mono bass signal below 120Hz, with stereo signals above this frequency. Equalisation similar to that provided in the "normal" mode is used, operating at a lower frequency to suit typical ported sub bass cabinets. The choice of a mono sub bass output is deliberate: it avoids acoustic feedback caused by operating an analogue record source in close proximity to high output bass cabinets, by rendering the pickup cartridge insensitive to vertical vibration components. It allows the possibility of using a single centrally located bass cabinet, with attendant savings in space and cost. This scheme can also improve bass quality, since when listening away from the central axis of spaced apart bass speakers, cancellation will occur (in the near field) when the path length difference is a half wavelength.

Differential balanced inputs are provided via XLR style connectors, with unbalanced inputs on mono jack sockets. Since the unit is intended to be used in close proximity to power amplifiers, outputs are unbalanced  $\frac{1}{4}$ " mono jack sockets.

### SPECIFICATION

Input Impedance .....	18K electronically balanced/ 36K unbalanced
Output Impedance .....	50 ohms unbalanced
Gain .....	+6dB at 1KHz
Maximum Output Level .....	+18dBm
Power Requirements .....	110 VAC 50/60Hz 220 VAC 50/60Hz
Fuse .....	100mA slowblow
Dimensions (WxHxD) .....	48cmx4.4cmx8.2cm (19"x1.75"x3.25")
Weight .....	0.875Kg (1.93lbs)