



Full Range Loudspeaker Point Source, Single 12" Coaxial, 2.5" HF 2-way Bi-amplified, Passive MF/HF

## **Key Features:**

Multiple Horn Coverage Patterns Rotatable Horns in 45° Increments Multiple Mounting Points Multiple Installation Bracket Options

## **Applications:**

High output sound reinforcement Stage fill, side fill, and outfill applications Schools and Auditoriums Houses of Worsip sound systems Theaters and Club sound systems Theme Parks

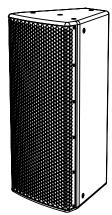
The C12XL is a coaxial loudspeaker system designed to deliver superior output levels that exceed conventional premium 2-way systems, with superior pattern control, directional consistency and a precise transient response that only a coaxial loudspeaker can provide. This is accomplished by the addition of a second 12" low frequency loudspeaker, mounted in a separate, optimally sized and vented enclosure within the same cabinet. The result is a true full range loudspeaker in a versatile and highly compact size.

The C12XL features an advanced high frequency waveguide that also acts as a phasing plug for the 12" cone loudspeaker. The horn is quite large for its size, yielding consistent pattern control and a low crossover point. the phasing plug improves the response of the cone loudspeaker, minimizing the equalization and phase correction needed, thus aiding the transition between sources over the crossover band.

The enclosure features a 40" trapezoidal angle to allow close mountings to walls or ceilings, with little to no impact on sightlines. Its tailorable pattern control, easy mounting and array ability with RMS Acoustics array brackets allow a simple, cost effective method to tailor a sound reinforcement solution to achieve the best possible acoustical results in almost any space. Optimized nonlinear venting improves the low frequency impedance compared to conventional enclosures, while maintaining better mechanical cone control when low frequency extension is required. The result is tight, punchy bass and a low frequency extension not achievable by traditional 2-way enclosures.

The cabinet is crafted from premium multi-ply birch with a finely textured polyurethane finish that is impact and UV resistant. A powder-coated, punched and laser cut steel grille protects the cabinet internal from the elements. Full weather protection and custom color finishes are also available. The weatherized options provides an IP54 rating.

The optimum processed loudspeaker solution for the C12XL is the Linea Research 44M10 series and 44C10 series amplifiers, with propriety presets provided by RMS Acoustics. Linea Research 48M20 and 88C20 series amplifiers can also be used, when extremely high low frequency output is required.



## **System Specifications:**

YSTEM:		
Frequency Range (-10dB) ^1	38 Hz - 20 kHz	
Frequency Response (+/-3dB)	50 Hz - 18 kHz	
System Sensitivity (1w, 1m)^2	101dB	Measured on LF band, average SPL over 300 to 2 kHz region. HF Sensitivity significantly higher
Maximum SPL Continuous (1m)	130dB	
Maximum SPL Peak (1m)	136dB	
Long Term Power Rating (IEC)^3	LF MF/HF	250W, 500W, 1000W (Continuous, Pgm, Peak) 375W, 700W, 1400W (Continuous, Pgm, Peak)
Long Term Power Rating (AES)^4	LF MF/HF	1000W (2800W Peak), 2 hrs, 600W 100Hr 700W (2800W Peak), 2 hrs, 470W 100Hr
Nominal Coverage Pattern		70° Horizontal x 50° Vertical (Standard), 90° Horizontal x 55° Vertical (Sta dard), 120° Horizontal x 60° Vertical (Wide) -6dB Isophase
System Crossover		1200 Hz Proprietary FIR overlay, 300 Hz MF/HF electronic IIR w/ all pass and FIR phase correction
	SPKR-12-0007	LF Driver - 12" Neodymium cone loudspeaker with 3.5" voice coil, shorting ring and high performance convective cooling technology
Transducers	SPKR-12-006	MF/HF Coaxial Driver - 12" Neodymium loudspeaker with 3" LF voice coil, 2.5" HF voice coil
	SPKREP-1-0006	HF Driver Replacement - 1.4" exit Neodymium compression driver with 2.5" voice coil, shorting ring and advanced phase plug geometry
Impedance	LF, Passive MF/HF	Impedance - 8 Ohm, 8 Ohm
HYSICAL:		
Input Connectors		Dual Neutrik NL4MP Connectors
Enclosure Materials		15 and 18mm Birch Hardwood Ply 1.3mm layers
Grille Materials		Cold Rolled steel, Epoxy powder coat, Acoustically transparent black foam backing
Finishes		Black finish (Standard) Polurethane textured spray
		Additional Finishes available - See Options Below
Suspension and Mounting		Proprietary internal, captive rigging 3/8-16 Internal Flyware Standard, optional M10
Dimensions		13.5" w x 13" d x 31" h (343 mm x 330 mm x 788 mm)
Weight		75 Lb (31.4 kg) Net 84 Lb (38.2 kg) Shipping
Finish Options		-X (Weatherized), -W (White), -C (RAL Custom Color) Upcharge applies
Optional Accessories & Rigging Hardware	C12XL-HU	Horizontal U Bracket specific to C12XL
	WM-L	RMS-Acoustics wall mount large with lateral orientation and vertical tilt
	C12-AF	Two box array frame for C12/C12XL

1. Full Space, 4pi conditions

2. Measured Maximum SPL, based on power compression observation of 3dB

3. IEC Shaped pink noise with 6dB Crest Factor

4. AES Standard AES2-2012, one decade pink noise with 6dB Crest factor within device's applicable operating band, free air. Standard AES 2 hr rating are specific for low frequency transducers.