



X12CLA

**CONSTANT CURVATURE ARRAY
OR POINT SOURCE CLUSTER ?**



*Great sound
from Barcelona
since 1972*

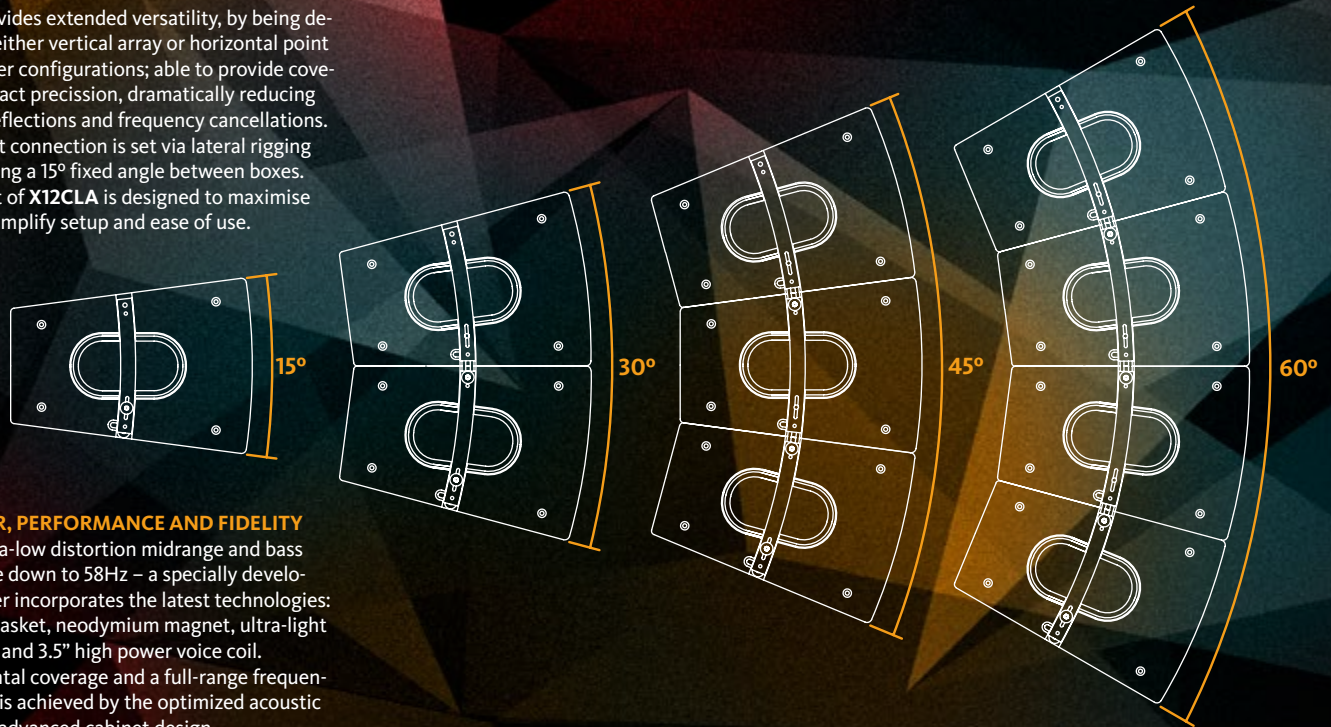
X12CLA

A true compact array. The X12CLA is a constant curvature array that combines ultra-compact form with astounding levels of performance. Light-weight, safe and easy to setup and carry, it performs far beyond expectations, thanks to a custom high frequency waveguide, advanced acoustic design and integrated 1500 W amplification with DSP.

REASONS TO love it:

1 ARRAY OR CLUSTER: ADAPTABLE PRECISION COVERAGE

X12CLA provides extended versatility, by being deployable in either vertical array or horizontal point source cluster configurations; able to provide coverage with exact precision, dramatically reducing undesired reflections and frequency cancellations. Inter-cabinet connection is set via lateral rigging bars, providing a 15° fixed angle between boxes. Every aspect of X12CLA is designed to maximise safety and simplify setup and ease of use.



2 POWER, PERFORMANCE AND FIDELITY

For ultra-low distortion midrange and bass performance down to 58Hz – a specially developed 12" driver incorporates the latest technologies: aluminium basket, neodymium magnet, ultra-light coated cone and 3.5" high power voice coil. 100° horizontal coverage and a full-range frequency response is achieved by the optimized acoustic pattern and advanced cabinet design.



3 UNIQUE INTEGRATED WAVEGUIDE: GREATER PERFORMANCE

The isophasic waveguide developed by Amate Audio's engineers achieves an exceptional long throw with consistent frequency and directivity. Loaded with a 2.5" voice coil and neodymium magnet driver, the assembly is designed and carefully optimized for the X12CLA, providing a side-lobe free vertical dispersion with crystal clear high frequency response.



4 DIGITAL PROCESSING AND AMPLIFICATION

X12CLA features a cutting-edge digital electronics, including high resolution AD/DA converters. Powerful remote controllable DSP capabilities with 48-bit/96 kHz internal architecture provides precise crossover filters, parametric EQ, limiters, and additional advanced features. The DSP is perfectly matched with a third-generation Class-D amplifier, ensuring the full control of power delivery to the loudspeakers at all times.



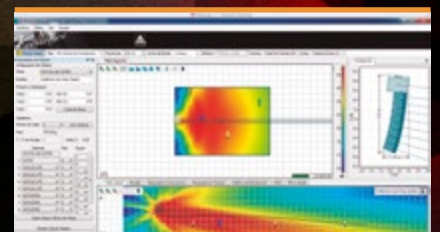
5 ASSURED SECURITY WITH AMATE AUDIO'S OVERVOLTAGE PROTECTION

Our unique, innovative overvoltage protection circuit continuously monitors line voltage, instantly disconnecting the system when mains voltage exceeds the maximum permitted level. The system restarts automatically when voltage returns to normal. No more worries about damage from unstable AC power lines.



6 ACOUSTICAL PREDICTION FOR SUPERIOR INSTALLATIONS

Free EASE and EASE FOCUS libraries allow you to predict the performance of a specific Xcellence system in any given space, prior to installation. The powerful EASE software calculates 3D coverage maps, speech intelligibility, reverberation times and other acoustical parameters – even before a room is built. *Using exactly the right number of X12CLA cabinets for your application will also save you time and money! Careful planning brings improved results!*



X12CLA

12" ACTIVE CLUSTER ARRAY SYSTEM

Xcellence



DSP STUDIO CONTROL APP
FOR IPAD & WINDOWS



WITH CWK-D



**EXCLUSIVE HIGH
PERFORMANCE
WAVEGUIDE**



**ARRAY & CLUSTER
APPLICATION**



**LIGHT NEODYMIUM
COMPONENTS**



**> 250 V
OVERVOLTAGE
PROTECTION**



**MULTIPLE PRESETS
AVAILABLE**

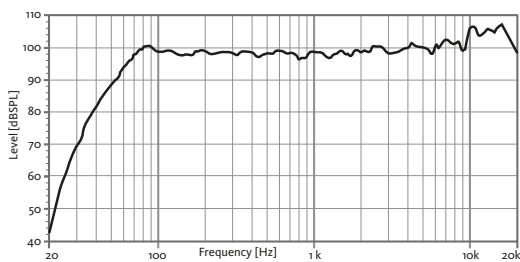


**HIGH RESISTANT
POLYUREA® PAINT**

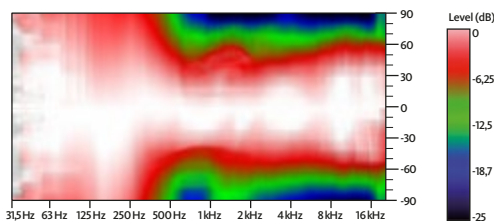
TECHNICAL FEATURES

Amplifier (program power)	1000 W (LF) + 500 W (HF) – Class D Bi-amplified
Input sensitivity	8 dBu – 1.94 V
Input Impedance	20 kΩ Balanced
Mains	Universal Switch Mode Power Supply 85-265 V / 45-65 Hz
Average current draw	2.1 A (Heavy duty musical program)
SPL (1 m)	129 dB continuous, 132 dB peak
Built-in DSP	48 bit
AD/DA converters	24 bit – 96 kHz
Presets	Built-in presets to cover the most standard applications
Crossover frequency	800 Hz
Frequency response (-10 dB)	58 Hz – 19 kHz
Components	LF 12" neodymium woofer (3.5" voice coil) HF 2.5" titanium diaphragm neodymium driver
Directivity (HxV)	100° x 15°
Directivity factor (Q)	20
Directivity index (DI)	13 dB
Weight	31.5 kg
Dimensions (HxWxD)	352 x 640 / 680 (including ball lock pins) x 485 mm
Finish	Multilayer baltic birch plywood with high resistant black Polyurea® coating
Grille	1.5 mm steel with grey micro-foam cloth
Rigging	Stainless-steel integrated rigging bars
Connectors	1x XLR input / 1x XLR link / 1x AC PowerCon input / 1x AC PowerCon link / 1x EtherCon RJ45 input / 1x EtherCon RJ45 link

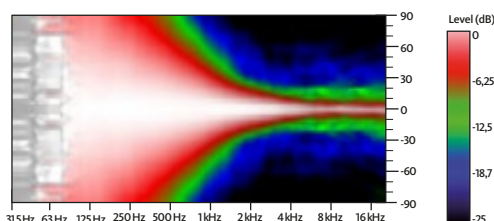
FREQUENCY RESPONSE 1w/1m (1BOX_FR PRESET) ONE CABINET



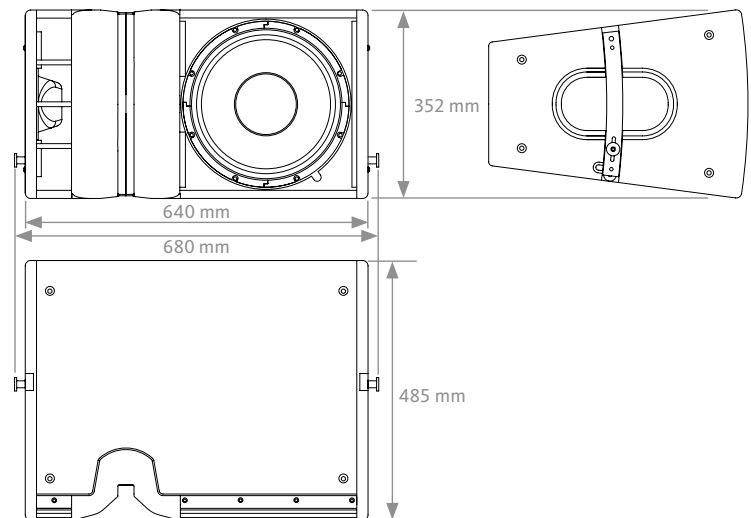
HORIZONTAL COVERAGE



VERTICAL COVERAGE



CAD DRAWING SCHEME



CONNECTION PANEL (REAR VIEW)



DSP STUDIO® CONTROL SOFTWARE



“Instant access to outstanding sound”

Once an X12CLA system is flown and in position, optimize the system performance with Amate Audio's DSP Studio® control software.

Parameters such as gain, limiter, polarity, delay and 5 custom parametric EQs can be managed via the software.

Several elements may be controlled at the same time using grouping functions. The software also gives comprehensive information about the amplifier status: input and output levels, heat-sink temperature, clip and protection indications. DSP Studio® is available for PC and iPad.



iPad VERSION

Available on the
App Store



PC VERSION

Download it from our website:
www.amateaudio.com



*Great sound
from Barcelona
since 1972*

Xcellence

is a product
created, designed and manufactured
in Barcelona – SPAIN by

Amate Audio S.L.

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