X12CLA

12" ACTIVE CLUSTER ARRAY SYSTEM

Xcellence

amate audio

Wi Fi™

WITH CWK-D

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.

KEY FEATURES

TRANSDUCER TECHNOLOGY

Two-way active constant curvature array speaker system composed by one 3.5-inch voice coil, neodymium magnet, 12" loudspeaker and one 2.5-inch titanium diaphragm neodymium driver coupled to a 100º x 15º exclusive high performance waveguide.

AMPLIFICATION

1500 W 3rd generation Class D built-in amplifier controlled by a dedicated DSP.

90% efficiency amplifier SMPS (switching mode power supply), allowing maximum power delivery with minimum consumption in an extremely low-weight and reduced size.

Rear connections and control panel with LCD screen to display the different settings, presets and adjustments done by the user. A capacitive keyboard guarantees the reliability of the system even under humidity and extreme weather conditions.

Exclusive and unique Overvoltage Protection which continuously monitors line voltage and instantly disconnects the system if the line voltage exceeds the maximum permissible level.

DSP & CONTROL

Internal DSP with all necessary signal processing (crossovers, EQs, delay, limiters, gain control, mute) as well as several useful presets to adjust X12CLA to different requirements.

Ethernet connection and full wireless control. The system can be monitored from any spot in the room.

DSPStudio® control software capable of adjusting and setting-up even the finest details and monitoring key parameters of the amplifier: input and output levels, clip limiter activation, amplifier temperature and network connection status.

DESIGN & ACCESSORIES

Several accessories allow easy flying. Inter-cabinet connection is set via lateral rigging bars, providing a 15º fixed angle between boxes.

Ergonomic handles for an easy and comfortable transport.

Baltic birch plywood cabinet with Polyurea® coating, offering maximum reliability and strength for touring as well as for high demanding applications.

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- **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**
- **ACCESSORIES FOR EASY INSTALLATIONS**

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 +23 configurable user memories
Crossover frequency	800 Hz
Frequency response (-10 dB)	58 Hz – 19 kHz
Components LF HF	12" neodymium woofer (3.5" voice coil) 2.5" titanium diaphragm neodymium driver
Directivity (HxV)	100º x 15º
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

SIDE VIEW

FRONTAL VIEW WITHOUT GRILLE
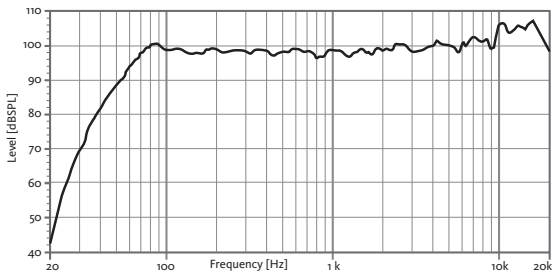
REAR VIEW

TOP VIEW
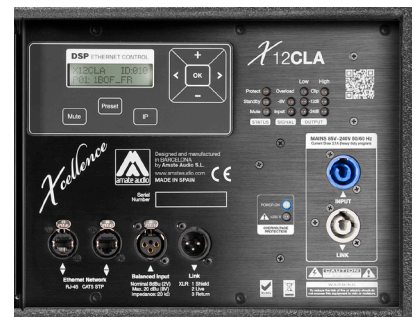
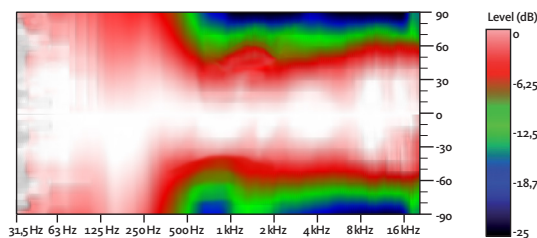CONNECTION PANEL

X12CLA

12" ACTIVE CLUSTER ARRAY SYSTEM
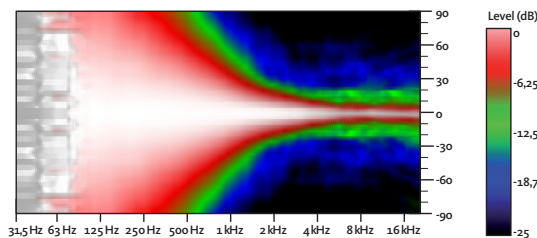
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FREQUENCY RESPONSE 1w/1m
(1BOX_FR PRESET) ONE CABINET

HORIZONTAL COVERAGE

VERTICAL COVERAGE

HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)

HORIZONTAL   VERTICAL
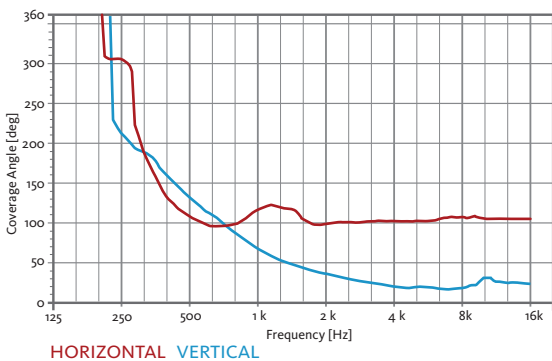
DIRECTIVITY INDEX (DI)

CAD DRAWING SCHEME

352 mm
640 mm
680 mm
485 mm

DSP STUDIO CONTROL SOFTWARE

"Instant access to outstanding sound"
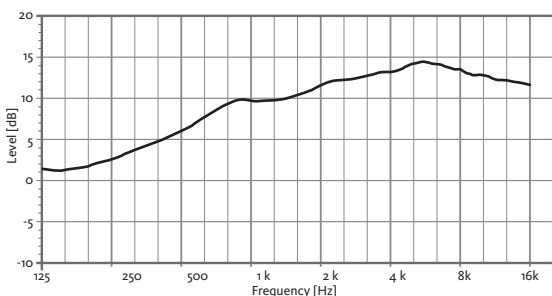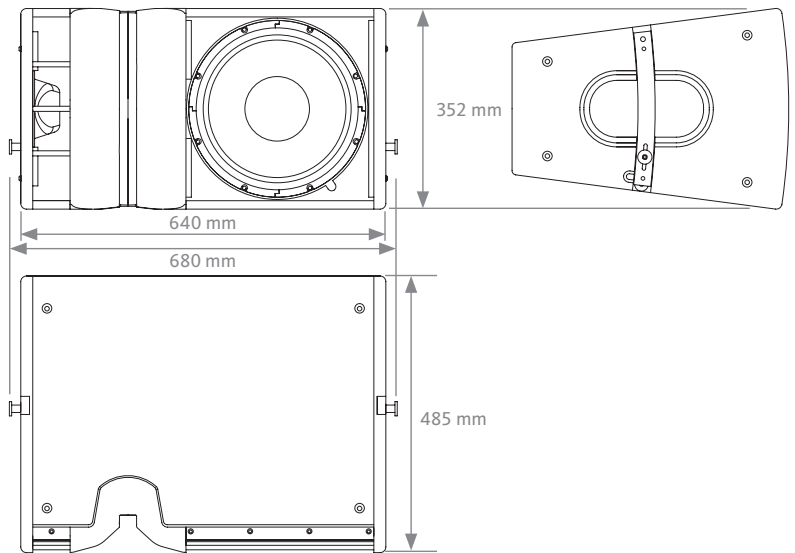
1
Configure your wifi network

2
Detect loudspeakers

3
Setup audio settings

4
Enjoy the best 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.

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iPad VERSION

Available on the App Store

WiFi™

PC VERSION

Download it from our website: www.amateaudio.com

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CONFIGURATION (MAXIMUM 4 CABINETS)

X12CLA provides extended versatility, by being deployable in either vertical array or horizontal point source cluster configurations; able to provide coverage with exact precission, dramatically reducing undesired reflections and frequency cancellations.

Inter-cabinet connection is set via lateral rigging bars, providing a 15º fixed angle between boxes.
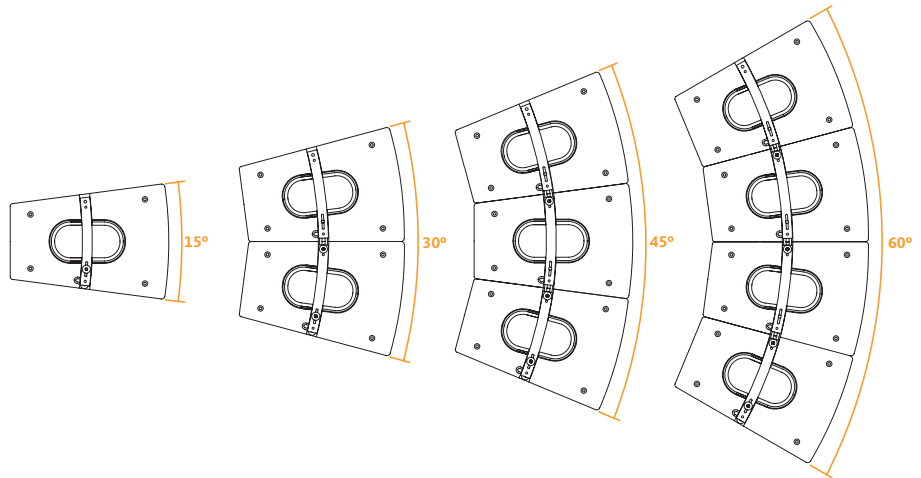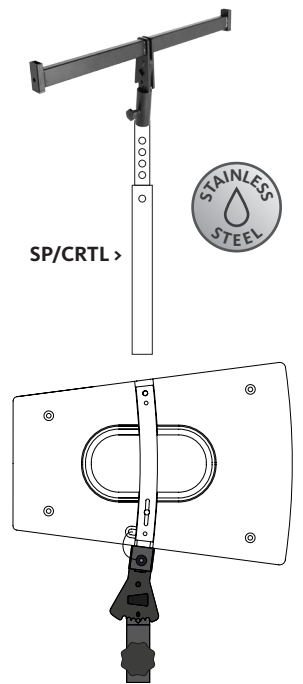

ACCESSORIES

FLIGHT CASE FC-X12CL
For two units of X12CLA

STACKING FRAME FR-X12CL/18
For stacking X12CLA sobre X18T

POLE MOUNT ADAPTOR ø 35
PA-X12CL

STAINLESS STEEL

SP/CRTL ›

FRAME ADAPTOR FA-X12CL/18
For X12CLA under X18T

STAINLESS STEEL

CLUSTER RIGGING CR-X12CL
For flying X12CLA

STAINLESS STEEL

TOURING BUMPER TA-X12CL
For flying X12CLA

STAINLESS STEEL

DISTANCE ROD M20
SP-CRTL
Ø: 35 mm
Length: 55 cm ~ 90 cm
Thread: M20

WIRELESS COMMUNICATION KIT
CWK-D

Bespoke control protocol that supports Wi-Fi connectivity through CWK-D

M8 RIGGING EYEBOLT
ACR-M8

STAINLESS STEEL