

# X212AFD

2x 12" THREE-WAY ACTIVE LINE  
ARRAY SPEAKER SYSTEM

## XCELLENCE



Dante™  
Act+ve



The X212AFD is the flagship of the Xcellence series and the epitome of audio perfection performance. Breakthrough technologies, cutting-edge acoustic design, the highest quality, precision-engineered, in-built DSP with F.I.R. filters, tailor-made components and materials and Dante networking.

### KEY FEATURES

#### TRANSDUCER TECHNOLOGY

Three-way line array active speaker system composed by two direct radiating 3-inch voice coil, neodymium magnet 12" loudspeakers, four 1.5-inch voice coil, neodymium magnet 6" loudspeakers mounted on two mid frequency phase plugs and two 3-inch voice coil, titanium diaphragm, neodymium magnet compression drivers coupled to a 100° x 8° exclusive high performance waveguide.

#### AMPLIFICATION

4000 W 3rd generation Class D built-in amplifier controlled by a dedicated multichannel 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 touch screen to display the different settings, presets, volume and adjustments done by the user.

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

Automatic low power consumption mode (EcoMode) available, when no signal present at the input.

Double PowerCon (input link)

Maximum 1 cabinet linked.

#### DSP & CONTROL

Internal DSP with all necessary signal processing (crossovers, EQ's, delay, limiters, gain control, mute) as well as several useful presets to adjust the X212AFD to different requirements.

Advanced signal processing using F.I.R. (Finite Impulse Response) filters.

Automatic input overload prevention circuit: prevents overloading the A/D converter input.

Double Ethernet connection with integrated Ethernet switch. Wireless control available through external hardware CWK-D: the system can be monitored from any spot in the room.

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

Dante™ Input available at both RJ-45 ports. The unit can be connected directly to Dante sources over a wired Ethernet network

#### DESIGN & ACCESSORIES

Several accessories allow easy flying and stacking.

Connectors are placed on an inclined plane to increase protection against rain or moisture.

Ergonomic handles for an easy and comfortable transport.

1.5 mm speaker grilles with grey micro-foam cloth, exclusively designed with an optimum perforation gradient and attractive appearance.

Multilayer 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 WINDOWS AND  
MAC



**EXCLUSIVE HIGH  
PERFORMANCE  
WAVEGUIDE**



**EXCLUSIVE MID  
PHASE PLUG**



**LIGHT NEODYMIUM  
COMPONENTS**



**> 250 V  
OVERVOLTAGE  
PROTECTION**



**MULTIPLE PRESETS  
AVAILABLE**



**HIGH RESISTANT  
POLYUREA® PAINT**



**ACCESSORIES FOR  
EASY INSTALLATIONS**

**TECHNICAL FEATURES**

<b>Amplifier (program power)</b>	2000 W (LF) + 1000 W (MF) + 1000 W (HF) Class D Tri-amplified						
<b>Analog input</b>	Nominal: +8dBu. Max: +20dBu. Impedance: 20kΩ Balanced						
<b>Audio networking</b>	Dante™ audio networking input, 1 channel, 48kHz						
<b>Mains</b>	Universal Switch Mode Power Supply 85-265 V / 45-65 Hz						
<b>Average current draw</b>	3.7 A (Heavy duty musical program)						
<b>SPL (1 m)</b>	141 dB continuous musical program, 144 dB peak						
<b>Built-in DSP</b>	64-bit processing unit. Includes factory presets						
<b>AD/DA converters</b>	24 bit – 48 kHz						
<b>Standby mode consumption</b>	< 5 W						
<b>Adjustable delay line</b>	294 ms / 100 m						
<b>Crossover frequency</b>	200 Hz / 1 kHz						
<b>Frequency response (-10 dB)</b>	42 Hz – 18 kHz						
<b>Components</b>	<table border="0"> <tr> <td><b>LF</b></td> <td>2x 12" neodymium woofers (3" voice coil)</td> </tr> <tr> <td><b>MF</b></td> <td>4x 6" neodymium woofers (1.5" voice coil)</td> </tr> <tr> <td><b>HF</b></td> <td>2x 3" titanium diaphragm, neodymium magnet compression drivers</td> </tr> </table>	<b>LF</b>	2x 12" neodymium woofers (3" voice coil)	<b>MF</b>	4x 6" neodymium woofers (1.5" voice coil)	<b>HF</b>	2x 3" titanium diaphragm, neodymium magnet compression drivers
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<b>HF</b>	2x 3" titanium diaphragm, neodymium magnet compression drivers						
<b>Directivity (-6dB)</b>	100° (H) x 8° (V)						
<b>Directivity factor (Q)</b>	64						
<b>Directivity index (DI)</b>	18 dB						
<b>Weight</b>	64.6 kg						
<b>Dimensions (HxWxD)</b>	372 x 1100 x 657 mm						
<b>Finish</b>	Multilayer baltic birch plywood with high resistant black Polyurea® coating						
<b>Grille</b>	1.5 mm steel with grey micro-foam cloth						
<b>Rigging</b>	Stainless-steel black painted integrated rigging bars						
<b>Connectors</b>	1x XLR input / 1x XLR link / 1x AC PowerCon® input / 1x AC PowerCon® link / 1 x EtherCon® RJ45 input / 1 x EtherCon® RJ45 link						



SIDE VIEW



FRONTAL VIEW WITHOUT GRILLES



TOP VIEW



REAR VIEW

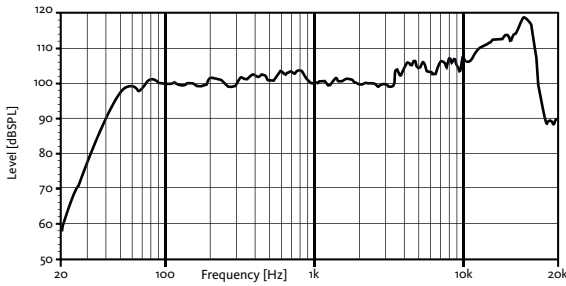
# X212AFD

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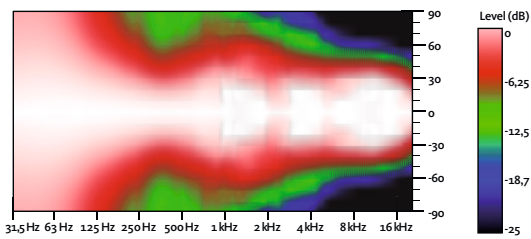
XCELLENCE



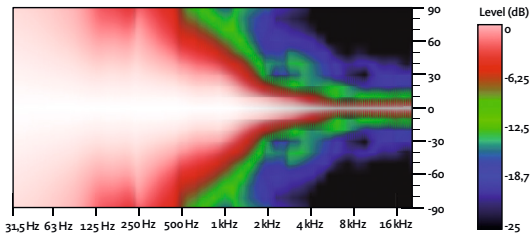
## FREQUENCY RESPONSE 1w/1m (HP60\_FLAT PRESET) ONE CABINET



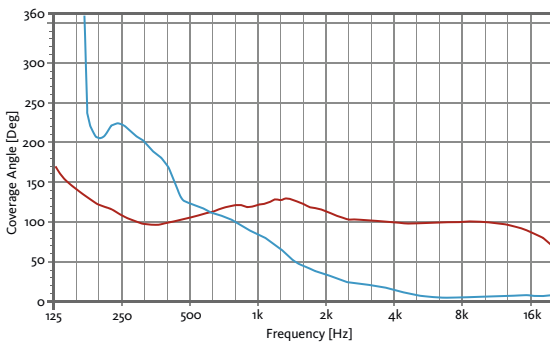
## HORIZONTAL COVERAGE



## VERTICAL COVERAGE

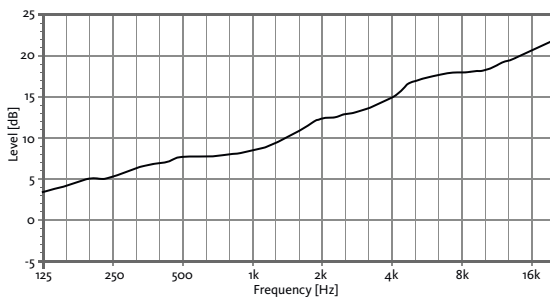


## HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)

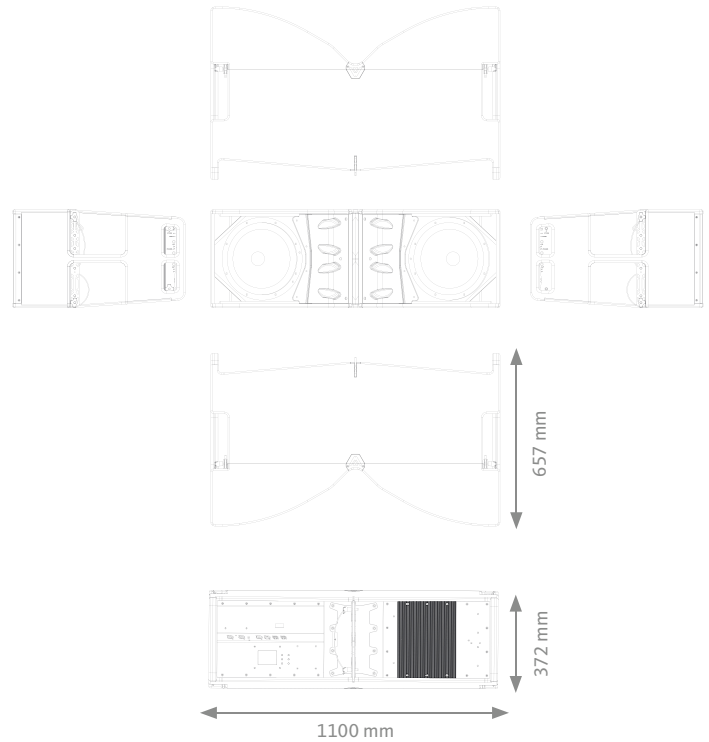


HORIZONTAL VERTICAL

## DIRECTIVITY INDEX (Di)



## CAD DRAWING SCHEME



## CONTROL PANEL



# X212AFD

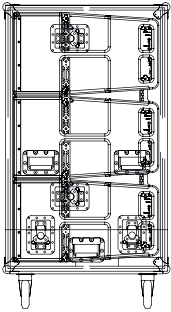
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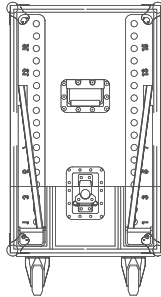


## ACCESSORIES

**FLIGHT CASE FC-X212AF**  
For three units of X212AFD



**FLIGHT CASE FC-TAX212**  
For two units of TA-X212



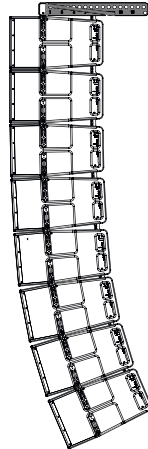
**TROLLEY TR-X212**  
For four units of X212AFD. Includes  
protection cover



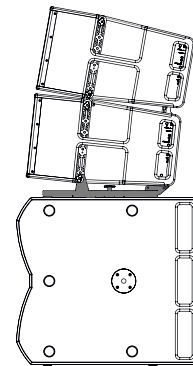
**FRAME ADAPTOR FA-X210/212**  
For X210 underneath X212AFD



**TOURING BUMPER TA-X212**  
For flying of X212AFD



**STACKING FRAME FR-X212**  
For X212AFD over X218WFD



## DSP STUDIO 4 CONTROL SOFTWARE

The 4th generation of the DSPStudio software allows the remote control and monitoring of the device via Ethernet. Ready for both Windows and MacOS, and also touchscreen friendly, the software allows the control of several devices associated in arrays and groups. An offline mode is also available, so you can create your project without the need of a live connection with the devices.

Three different views are available:

- **Config Page:** add your devices in the desktop, assign names and organise them in arrays, groups and views.
- **Tuning Page:** ready to use when tuning the system. Assign individual or global gain, PEQ or delays to the devices, groups or arrays
- **Live Page:** Monitor constantly the status of the system. Limiters, temperature and mains voltage



Download it from our website: [www.amateaudio.com](http://www.amateaudio.com)