

X102FD

2x 10" HIGH PERFORMANCE TWO-WAY ACTIVE
SELF-POWERED FULL-RANGE SPEAKER SYSTEM

XCELLENCE



Dante™
Act+ve

The X102FD has been developed as a powerful and compact, more efficient point source alternative to line arrays in medium size application environments. The design objective was to optimally achieve the highest quality sound at the highest possible output levels from the most compact enclosure possible.

KEY FEATURES

TRANSDUCERS TECHNOLOGY

Two-way full range active self-powered speaker system composed by two direct radiating 2.5-inch voice coil, neodymium magnet 10" loudspeakers mounted on two mid frequency phase plugs and one 3-inch voice coil, titanium diaphragm, neodymium magnet compression driver loaded to a 80° x 60° rotatable horn.

AMPLIFICATION

3000 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.

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).

DSP & CONTROL

ACTIVE+ DSP technology with all necessary signal processing (crossovers, EQ's, delay, limiters, gain control, mute) as well as several useful presets to adjust the X102FD to different requirements.

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

Rear connections and control panel with 3.5" TFT colour touch screen to display the different settings, presets, volume and adjustments done by the user.

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

Double Ethernet connection with integrated Ethernet switch and Dante™ audio networking protocol that uses standard IP networks to receive high-quality, uncompressed audio with near-zero latency.

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.

DESIGN & ACCESSORIES

M8 rigging points for easy flying.

Ergonomic handles for an easy and comfortable transport.

1.5 mm speaker grille 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.

35mm diameter pole mount socket mounted on the bottom side for a standard tripod.

Protective rubber profiles.

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DSP STUDIO CONTROL APP FOR WINDOWS



WITH CWK-D



EXCLUSIVE HIGH PERFORMANCE ROTATABLE HORN



EXCLUSIVE LOW FREQUENCY PHASE PLUG



LIGHT NEODYMIUM COMPONENTS



> 250 V OVERVOLTAGE PROTECTION



MULTIPLE PRESETS AVAILABLE



HIGH RESISTANT POLYUREA® PAINT



ACCESSORIES FOR EASY INSTALLATIONS

TECHNICAL FEATURES

Amplifier (program power)	2500 W (LF) + 500 W (HF) Class D Bi-amplified				
Analog input	Nominal: +8dBu. Max: +20dBu. Impedance: 20kΩ Balanced				
Audio networking	Dante™ audio networking input, 1 channel, 48kHz				
Mains	Universal Switch Mode Power Supply 85-265 V / 45-65 Hz				
Average current draw	3.3 A (Heavy duty musical program)				
SPL (1 m)	136 dB musical program, 139 dB peak				
Built-in DSP	64-bit processing unit. Includes factory presets				
AD/DA converters	24 bit – 48 kHz				
Standby mode consumption	< 5 W				
Adjustable delay line	294 ms / 100 m				
Crossover frequency	850 Hz				
Frequency response (-10 dB)	58 Hz – 19 kHz				
Components	<table border="0"> <tr> <td>LF</td> <td>2x 10" neodymium woofers (2.5" voice coil)</td> </tr> <tr> <td>HF</td> <td>1x 3" titanium diaphragm, neodymium magnet compression driver</td> </tr> </table>	LF	2x 10" neodymium woofers (2.5" voice coil)	HF	1x 3" titanium diaphragm, neodymium magnet compression driver
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HF	1x 3" titanium diaphragm, neodymium magnet compression driver				
Directivity (-6dB)	80° (H) x 60° (V) / 60° (H) x 80° (V) (rotated horn)				
Directivity factor (Q)	12.6				
Directivity index (DI)	11 dB				
Weight	32 Kg				
Dimensions (HxWxD)	704 x 330 x 460 mm				
Finish	Multilayer baltic birch plywood with high resistant black Polyurea® coating and protective rubber profiles				
Grille	1.5 mm steel with grey micro-foam cloth				
Rigging	M8 points				
Connectors	1x XLR input / 1x XLR link / 1x AC PowerCon® input / 1x AC PowerCon® link / 1 x EtherCon® RJ45 input / 1 x EtherCon® RJ45 link				



TOP VIEW



BOTTOM VIEW



FRONTAL VIEW WITHOUT GRILLE



SIDE VIEW

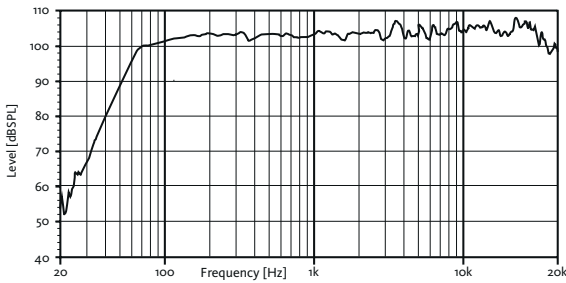


REAR VIEW

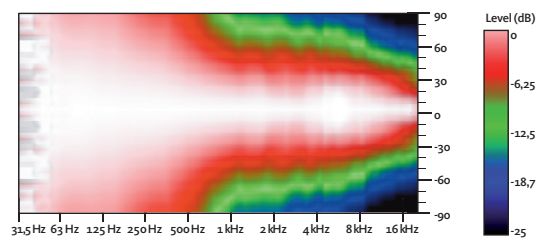
X102FD 2x 10" HIGH PERFORMANCE TWO-WAY ACTIVE SELF-POWERED FULL-RANGE SPEAKER SYSTEM XCELLENCE



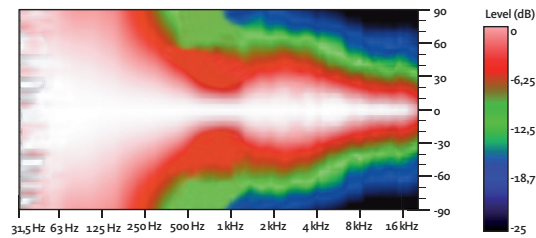
FREQUENCY RESPONSE 1w/1m (FLAT PRESET)



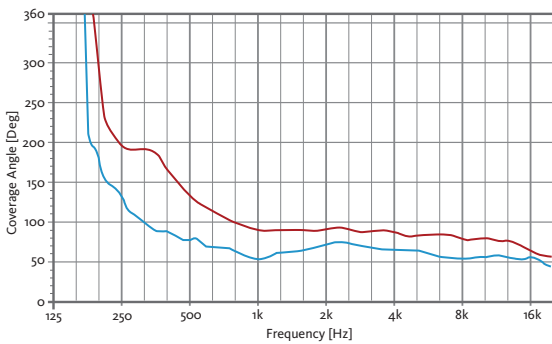
HORIZONTAL COVERAGE



VERTICAL COVERAGE

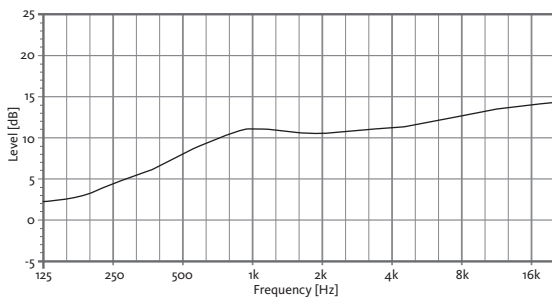


HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)

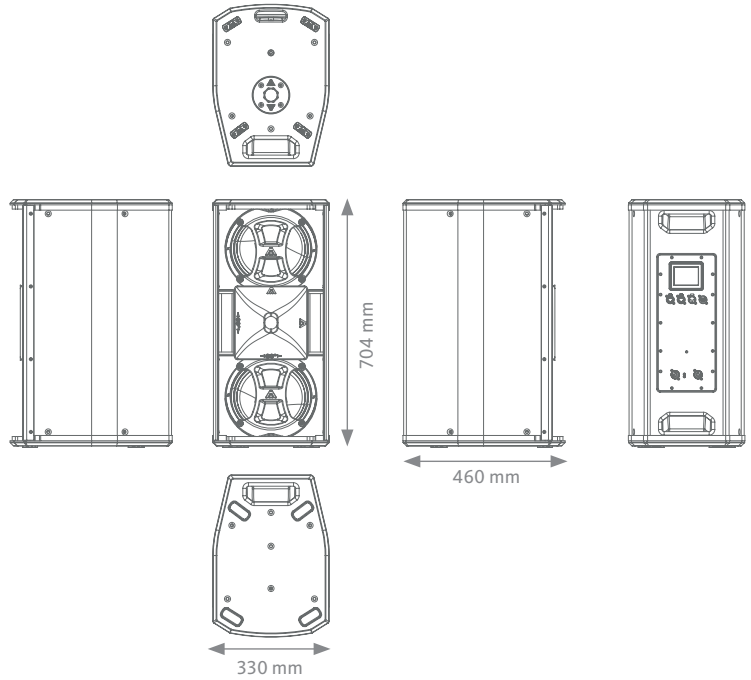


HORIZONTAL VERTICAL

DIRECTIVITY INDEX (Di)



CAD DRAWING SCHEME



REAR CONTROL PANEL TOUCHSCREEN



DSP STUDIO 3 CONTROL SOFTWARE

The application utilises a bespoke control protocol that supports that supports Ethernet and WI-FI connectivity (control over IP).

It allows to address the ethernet-enabled amp and DSP modules in the Xcellence series cabinets, affording the user visual feedback on amplifier status and the ability to edit processor values from any spot in the venue.

Download it from our website: www.amateaudio.com



Dante™ is a trademark of Audinate Pty Ltd.

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ACCESSORIES

FLIGHT CASE FC-X102FD
for two units of X102FD



FLYING BAR HR-L for one cabinet



FLYING BAR WITH HOOK HR-L/GT for one cabinet



FLYING BAR HR-L102 for two cabinets



WALL MOUNT BRACKET SP-WHR for one cabinet



TELESCOPIC DISTANCE ROD SP-CRTL

ø: 35 mm
Length: 55 cm ~ 90 cm
Thread: M20



SAFETY SLING SC-15



PROTECTIVE COVER NC-X102FD
for one unit of X102FD



M8 RIGGING EYEBOLT ACR-M8



WIRELESS COMMUNICATION KIT CWK-D

Bespoke control protocol that supports Wi-Fi connectivity through CWK-D. Not for use with DANTE.

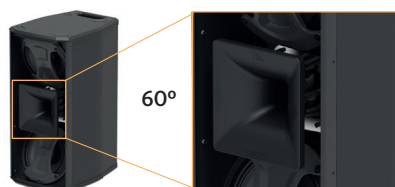


SMART ROTATABLE HORN

A truly multifunctional system, the X102FD is enabled for use in both vertical and horizontal planes, with the rotatable horn being a simple 'pull, rotate and return' solution; no tools required.

VERTICAL PLANE

80°(H) x 60°(V) to 60°(H) x 80°(V)

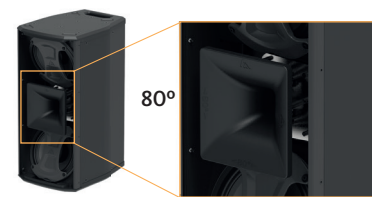


Horn dispersion
80°(H) x 60°(V)

80°



Smart rotatable horn.

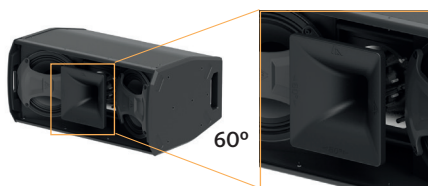


Horn dispersion
60°(H) x 80°(V)

60°

HORIZONTAL PLANE

80°(H) x 60°(V) to 60°(H) x 80°(V)

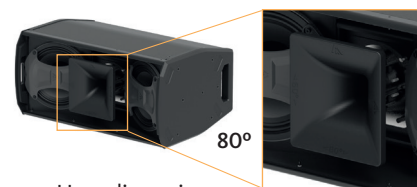


Horn dispersion
80°(H) x 60°(V)

80°



Smart rotatable horn.



Horn dispersion
60°(H) x 80°(V)

60°