

# X10FD

10" HIGH PERFORMANCE TWO-WAY  
ACTIVE FULL-RANGE SPEAKER SYSTEM

XCELLENCE



Dante™  
Act+ve

The X10FD is the most compact point source system in the Xcellence series: a refined and powerful loudspeaker that shares the same engineering DNA as the larger Xcellence models. Its optimized design ensures precise tonal balance and clarity, making the X10FD an exceptional choice for portable PA or as a high-definition complement within the Xcellence range.

## KEY FEATURES

### TRANSDUCER TECHNOLOGY

Two-way full range active speaker system composed by one direct radiating 3-inch voice coil, neodymium magnet 10" loudspeaker and one 1.7-inch voice coil, HF polymer diaphragm, neodymium magnet compression driver loaded to an asymmetrical rotational horn (50° to 100° x 55° dispersion).

### AMPLIFICATION

Onboard 1000 W 3rd generation Class D amplification.

Universal switch mode power supply (SMPS) with Power Factor Correction (PFC), allowing constant power delivery from 85 to 265 VAC input and high efficiency (>90%), with extremely compact lightweight form factor.

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 EcoMode low power consumption mode when no signal input present.

Connectors mounted on an inclined, recessed moulded connector plate for improved security and environmental protection.

Double PowerCon® connectors (input & link).

### ADVANCED DSP SYSTEM CONTROL

Onboard 64-bit precision DSP loudspeaker system control manages amplifier gain and cross-over settings, peak and thermal limiters and mutes. Includes adjustable 294 ms / 100 m delay line for extensive alignment delay and 5-band fully configurable parametric EQ.

High-order FIR filtering ensures fully phase coherent PEQ adjustment and absolute phase alignment of common cabinet couplings.

Extensively R&D'd factory presets provide instantaneous system configuration for common applications.

Operation and monitoring of system parameters, presets and user-adjustments is via Amate Audio's unique rear-panel 3.5" TFT colour touchscreen GUI.

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

Recessed ergonomic carry handles.

Exclusive 1.5mm grey micro-foam cloth speaker grilles with optimum perforation gradient and aesthetic appearance.

Multilayer birch plywood cabinet with Polyurea® coating, providing maximum robustness and strength for touring, events production, venue installation and other highly demanding applications.

35 mm 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 AND  
MAC



**ASYMMETRICAL  
DISPERSION  
HORN**



**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>	800 W (LF) + 200 W (HF) Class D Bi-amplified
<b>Analog input</b>	Nominal: +8 dBu. Max: +20 dBu. Impedance: 20 kΩ 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>	1.7 A (Heavy duty musical program)
<b>SPL (1 m)</b>	128 dB musical program, 131 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>	1k4 Hz
<b>Frequency response (-10 dB)</b>	53 Hz – 19 kHz
<b>Components</b>	<b>LF</b> 10" neodymium woofer (3" voice coil) <b>HF</b> 1 x 1.7" HF polymer diaphragm, neodymium magnet compression driver
<b>Directivity (HxV)</b>	50° to 100° (H) x 55° (V)
<b>Directivity factor (Q)</b>	12.6
<b>Directivity index (DI)</b>	11 dB
<b>Weight</b>	19 Kg
<b>Dimensions (HxWxD)</b>	554 x 303 x 370 mm
<b>Finish</b>	Multilayer baltic birch plywood with high resistant black Polyurea® coating and protective rubber profiles
<b>Grille</b>	1.5 mm steel with grey micro-foam cloth
<b>Rigging</b>	M8 points
<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



FRONTAL VIEW  
WITHOUT GRILLE



SIDE VIEW



REAR VIEW

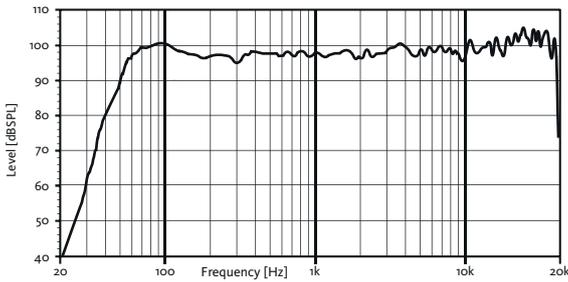
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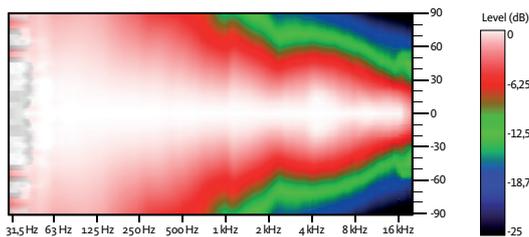
# XCELLENCE



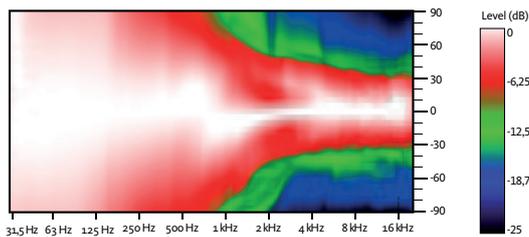
## FREQUENCY RESPONSE 1w/1m (FLAT PRESET)



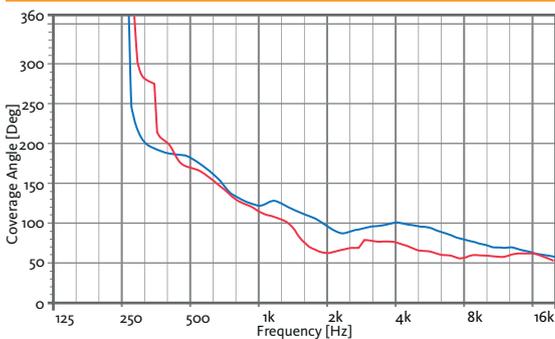
## HORIZONTAL COVERAGE



## VERTICAL COVERAGE

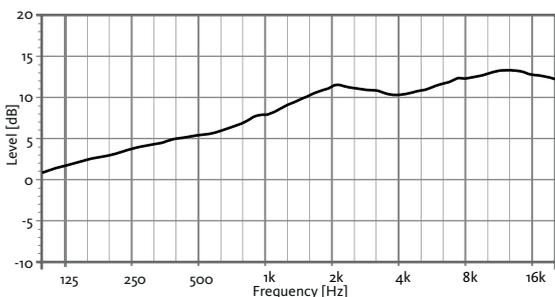


## HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)

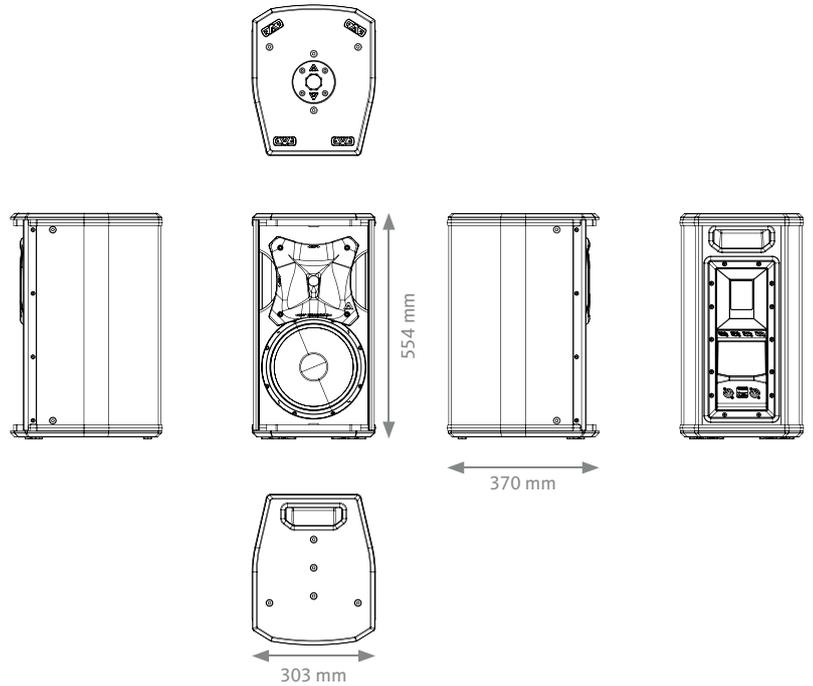


HORIZONTAL VERTICAL

## DIRECTIVITY INDEX (Di)



## CAD DRAWING SCHEME

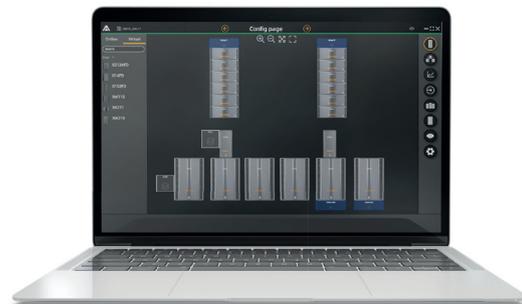


## DSP STUDIO 4 CONTROL SOFTWARE

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)

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## ACCESSORIES

**FLIGHT CASE FC-X10FD**  
for two units of X10FD



**FLYING BAR WITH HOOK RB-S/GT**



**WALL MOUNT BRACKET UB-L**



## REAR CONTROL PANEL TOUCHSCREEN



**TELESCOPIC DISTANCE ROD SP-CRTL**

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



**SAFETY SLING SC-15**



**WALL-MOUNT BRACKET SP-WHR**



**M8 RIGGING EYEBOLT ACR-M8**



**FLYING BAR RB-S**

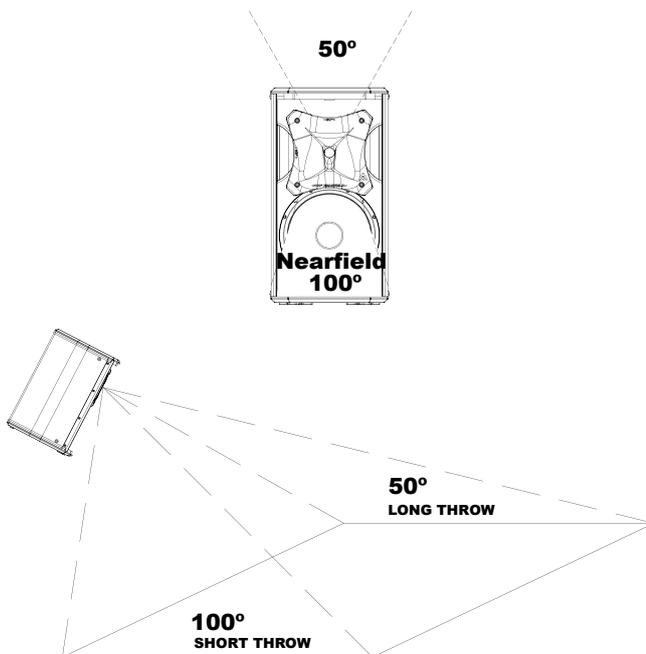


## ASYMMETRICAL DISPERSION HORN

It allows you to optimize the coverage depending on its position.

### VERTICAL POINT SOURCE USE

We need wide coverage (100°) for the closest listeners and narrow coverage (50°) for the distant audience.



### HORIZONTAL POINT SOURCE USE

We need wide coverage (100°) for the closest listeners and narrow coverage (50°) for the distant audience.

