# X82FD

**2x 8" HIGH PERFORMANCE TWO-WAY ACTIVE FULL-RANGE SPEAKER SYSTEM**

## XCELLENCE

amate audio

Dante™

Act⁺ve

The X82FD constitutes a significant improvement in high-performance point source design, featuring a lightweight and compact 8" format based on the successful 2x10" concept of the best-selling X102FD. This model is engineered to deliver outstanding acoustic power with exceptional vocal articulation. In its reduced dimensions, the X82FD achieves remarkable maximum SPL levels. The perfect choice for medium-sized applications requiring high sound quality and efficient space utilization, setting new standards in portability and acoustic performance.

## KEY FEATURES

### TRANSDUCERS TECHNOLOGY

Two-way full range active speaker system composed by two direct radiating 2-inch long excursion dual voice coil, neodymium magnet 8" loudspeakers and one 3-inch voice coil, titanium diaphragm, neodymium magnet compression driver loaded to a 80º x 60º 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 X82FD 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 handle for an easy and comfortable transport.

1.5mm 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.

# X82FD

**2x 8" HIGH PERFORMANCE TWO-WAY ACTIVE FULL-RANGE SPEAKER SYSTEM**

**XCELLENCE**

amate audio

**DSP STUDIO** CONTROL APP FOR WINDOWS AND MAC

**EXCLUSIVE HIGH PERFORMANCE HORN**

Nd **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: +8 dBu. Max: +20 dBu. Impedance: 20 kΩ 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 | | 2.9 A (Heavy duty musical program) |
| SPL (1 m) | | 134 dB continuous musical program, 137 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 | | 800 Hz |
| Frequency response (-10 dB) | | 68 Hz – 19 kHz |
| Components | LF | 2x 8" neodymium woofers (2" long excursion dual voice coil) |
| | HF | 1x 3" titanium diaphragm, neodymium magnet compression driver |
| Directivity (-6 dB) | | 80º(H) x 60º(V) |
| Directivity factor (Q) | | 12.6 |
| Directivity index (DI) | | 11 dB |
| Weight | | 23 Kg |
| Dimensions (HxWxD) | | 624 x 303 x 402 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
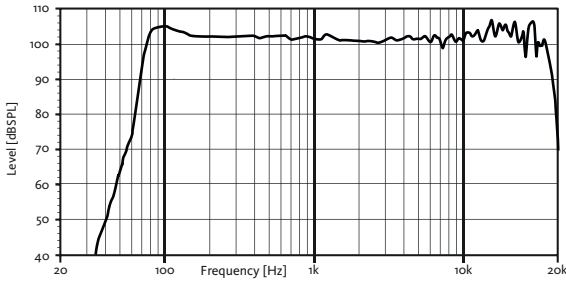
SIDE VIEW

REAR VIEW

# X82FD

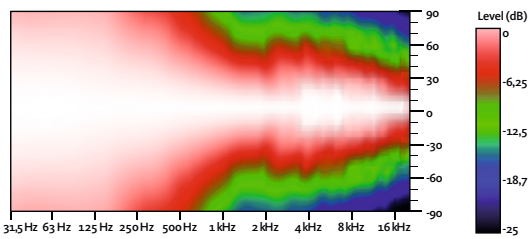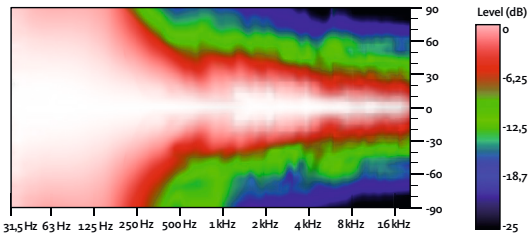### 2x 8" HIGH PERFORMANCE TWO-WAY ACTIVE FULL-RANGE SPEAKER SYSTEM

## XCELLENCE

amate audio

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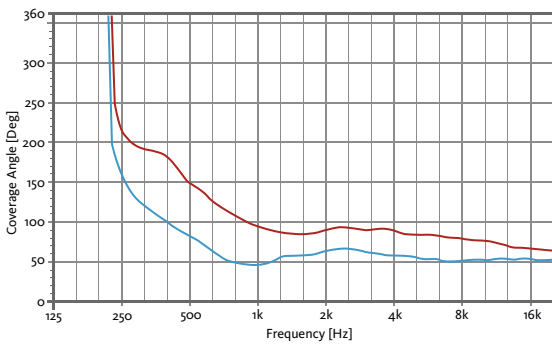


## HORIZONTAL COVERAGE



## VERTICAL COVERAGE



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



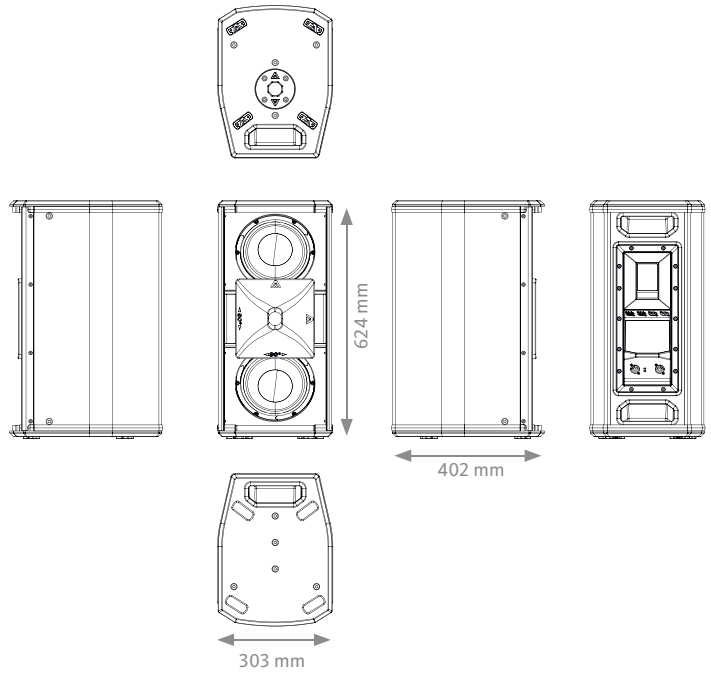HORIZONTAL    VERTICAL

## DIRECTIVITY INDEX (DI)
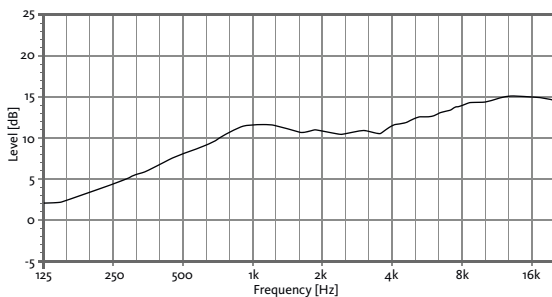


## CAD DRAWING SCHEME



624 mm

402 mm

303 mm

## 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



PC VERSION         MAC VERSION

Download it from our website: *www.amateaudio.com*

# X82FD

### 2x 8" HIGH PERFORMANCE TWO-WAY ACTIVE FULL-RANGE SPEAKER SYSTEM

## XCELLENCE

## ACCESSORIES

**FLIGHT CASE  FC-X82FD**
for two units of X82FD

**FLYING BAR**
**RB-S**  for one cabinet

**FLYING BAR WITH HOOK**
**RB-S/GT** for one cabinet

**WALL-MOUNT BRACKET**
**SP-WHR**

**SAFETY SLING**
**SC-15**

**M8 RIGGING EYEBOLT**
**ACR-M8**

**TELESCOPIC DISTANCE ROD**
**SP-CRTL**

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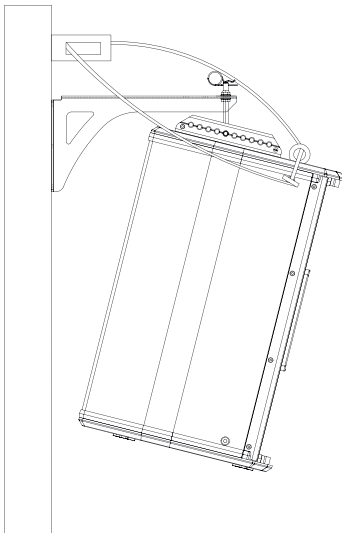Length: 55 cm ~ 90 cm
Thread: M20

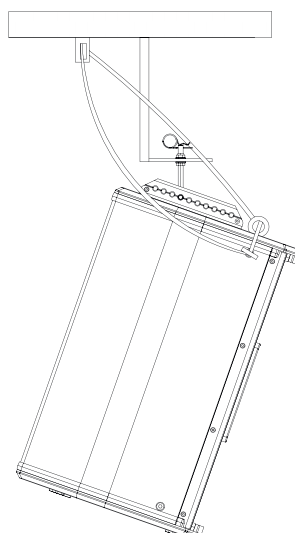**PROTECTIVE COVER**
**NC-X82FD**
for one unit of X82FD

## REAR CONTROL PANEL TOUCHSCREEN

## VERTICAL WALL-MOUNT / SP-WHR + SC-15

## VERTICAL COLUMN-MOUNT / RB-S + SC-15

## VERTICAL TRUSS-MOUNT / RB-S/GT + SC-15