

14" COAXIAL ACTIVE SELF-POWERED SPEAKER SYSTEM

XCELLENCE







Get the best of two worlds: a revolutionary 14" coaxial loudspeaker performs as a 15" in the low frequencies, keeping vocals as clear as in a 12". Now with the new Active+ technology, F.I.R filters and Dante networking.

KEY FEATURES

TRANSDUCERS TECHNOLOGY

Coaxial two-way full range active self-powered speaker system composed by one 3-inch voice coil, neodymium magnet, 14" loudspeaker front loaded in a bass-reflex tuned enclosure and one 3-inch voice coil, titanium diaphragm, neodymium magnet compression driver.

AMPLIFICATION

1500 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 (Eco Mode) 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 X14FD 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.

2mm 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.

www.amateaudio.com DATA SHEET 1/4

X14**FD**

14" COAXIAL ACTIVE SELF-POWERED SPEAKER SYSTEM

XCELLENCE





DSP STUDIO CONTROL APP FOR WINDOWS AND MAC



COAXIAL SPEAKER



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
Analog input	Nominal: +8dBu. Max: +20dBu. 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	2.1 A (Heavy duty musical program)
SPL (1 m)	129 dB continuous musical program, 132 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	1k Hz
Frequency response (-10 dB)	48 Hz – 20 kHz
Components LF	14" neodymium woofer (3" voice coil)
HF	3" titanium diaphgram neodymium compression driver
Directivity (-6dB)	80° (H) x 80° (V)
Directivity factor (Q)	12.6
Directivity index (DI)	11 dB
Weight	23.6 Kg
Dimensions (HxWxD)	623 x 402 x 430 mm
Finish	Multilayer baltic birch plywood with high resistant black Polyurea® coating and protective rubber profiles
Grille	2 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

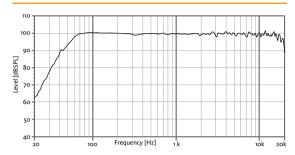


14" COAXIAL ACTIVE SELF-POWERED SPEAKER SYSTEM

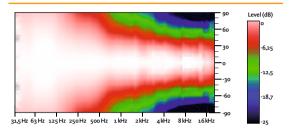
XCELLENCE



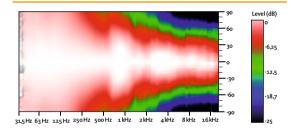
FREQUENCY RESPONSE 1w/1m (FLAT PRESET)



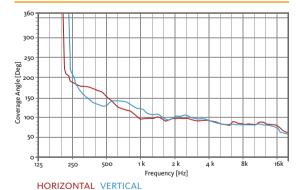
HORIZONTAL COVERAGE



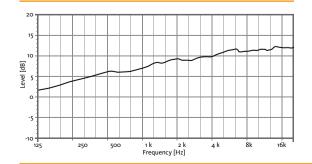
VERTICAL COVERAGE



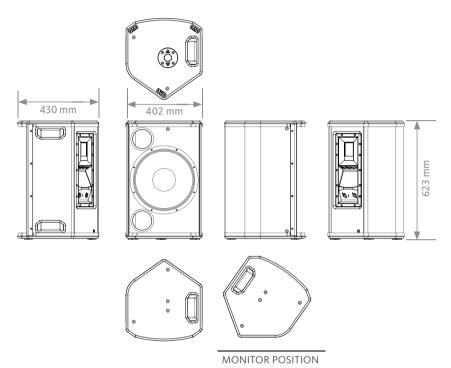
HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)



DIRECTIVITY INDEX (DI)



CAD DRAWING SCHEME



REAR CONTROL PANEL TOUCHSCREEN



www.amateaudio.com DATA SHEET 3/4



14" COAXIAL ACTIVE SELF-POWERED SPEAKER SYSTEM

XCELLENCE



ACCESSORIES

FLIGHT CASE FC-X14FD for two units of X14FD

FLYING BAR RB-L FLYING BAR WITH HOOK RB-L/GT

WALL MOUNT BRACKET









WALL MOUNT BRACKET

SP-WHR



TELESCOPIC DISTANCE ROD

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

SP-CRTL

SAFETY SLING

SC-15



M8 RIGGING EYEBOLT

ACR-M8

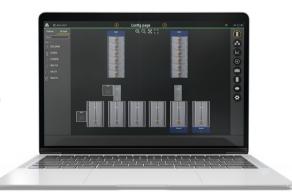


DSP STUDIO 4 CONTROL SOFTWARE

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