

## 12" HIGH PERFORMANCE STAGE MONITOR









The N12SM is a highly portable, lightweight and powerful stage monitor with superb musical performance and pristine sound, offering outstanding full-range response, high SPL low-distortion mid and low range frequencies, thanks to its exceptional 12" LF and 1,75" HF neodymium transducers.

### **KEY FEATURES**

### TRANSDUCERS TECHNOLOGY

Two-way full range active speaker system composed by one direct radiating 3-inch voice coil, neodymium magnet 12" loudspeaker and one 1,75-inch voice coil diameter, PETP diaphragm neodymium magnet compression driver loaded to an asymmetrical horn (50° to 100° x 55° dispersion).

## **AMPLIFICATION**

 $700~W~3^{\rm rd}~$  generation Class D built-in amplifier controlled by a dedicated DSP.

90% efficiency amplifier SMPS (switching mode power supply), allowing maximum power delivery with minimum consumption in an extremely low-weight and reduced size.

Side connections and control panel with LCD screen to display the different settings, presets, volume and adjustments done by the user. Our SensitiveTouch® capacitive sensor keypad guarantees the reliability of the system even under humidity and extreme weather conditions.

Double PowerCon® (input & link).

#### **DSP & CONTROL**

Internal DSP with all necessary signal processing (crossovers, EQ's, delay, limiters, gain control, mute, input dynamic compressor) as well as several useful presets to adjust N12SM to different requirements.

The on-screen output power display and the front NITID backlight help to easy monitor the system. The backlight can be switched on or off, or set to indicate when the system is limiting.

ALC (Adaptative Loudness Compensation) to improve the listening experience when the cabinet is used at low musical levels.

ECO Mode available.

5-band EQ menu with five equalizers.

#### **DESIGN & ACCESSORIES**

Ergonomic handles for an easy handling.

Double position for adaptable coverage.

2 mm speaker grille with black mesh, exclusively designed with an optimum perforation gradient and attractive appearance.

Multilayer birch plywood cabinet with Polyurea® coating, offering maximum reliability and strength for touring as well as for high demanding applications.

Protective rubber profiles.

www.amateaudio.com









LIGHT NEODYMIUM COMPONENTS



ASYMMETRICAL **DISPERSION HORN** 



MULTIPLE **PRESETS AVAILABLE** 



HIGH RESISTANCE POLYUREA® PAINT



**DOBLE POSITION** FOR ADAPTABLE COVERAGE

## 12" HIGH PERFORMANCE STAGE MONITOR

**TECHNICAL FEATURES** 

Amplifier (program)		600 W (LF) + 100 W (HF) – Class D Bi-amplified
Input Sensitivity		8 dBu – 1.94 V
Input Impedance		20 kΩ Balanced
Maximum input level		20 dBu
Mains		Universal Switch Mode Power Supply 85-265 V / 45-65 Hz
Average current draw		0.7 A (Heavy duty musical program)
SPL (1 m)		128 dB continuous musical program, 131 dB peak
Built-in DSP		48-bit. Includes factory presets
AD/DA converters		24 bit – 48 kHz
Standby mode consumption		< 5 W
Adjustable delay line		118 ms / 40 m
Crossover frequency		1k8Hz
Frequency response (-10 dB	)	58 Hz - 19 kHz
Components		12" neodymium woofer (3" voice coil) 1.75" PETP diaphragm neodymium driver
Directivity (HxV)		50° to 100° x 55° assymetrical
Directivity factor (Q)		12.6
Directivity Index (DI)		11 dB
Weight		18 kg
Dimensions (HxWxD)		459 x 364 x 570 mm
Finish		Multilayer birch plywood with high resistant black Polyurea® coating and protective rubber profiles.
Grille		2 mm steel with black acoustic mesh
Rigging		No
Connectors		1 x XLR input / 1x XLR link / 1x AC PowerCon input /

1x AC PowerCon link



### **CONTROL PANEL**

Our latest digital signal processing (DSP) is integrated with 3rd generation Class D amplification and operated via our dedicated SensitiveTouch™ keypad technology. With no mechanical components or moving parts, the SensitiveTouch™ capacitive sensor keypad is highly responsive, weatherproof and durable compared with conventional electronic controls and effectively failsafe.

With the SensitiveTouch™ keypad and display, you can configure the N12SM for use on-stage in just in seconds.



RIGHT SIDE VIEW



FRONT VIEW WITHOUT GRILLE



LEFT SIDE VIEW



**REAR VIEW** 

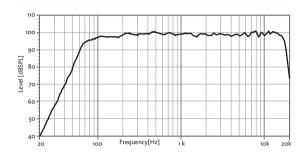


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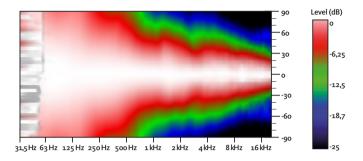




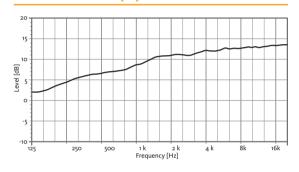
## FREQUENCY RESPONSE 1w/1m (FLAT PRESET)



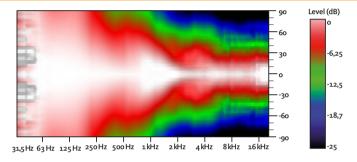
## **HORIZONTAL COVERAGE**



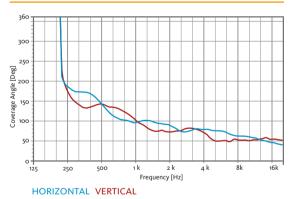
## **DIRECTIVITY INDEX (DI)**



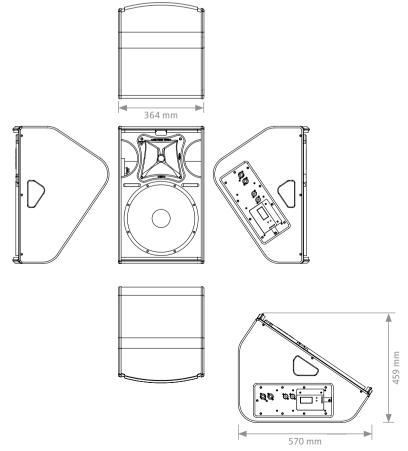
#### **VERTICAL COVERAGE**



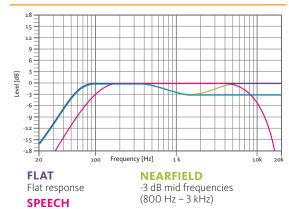
## **HORIZONTAL & VERTICAL BEAMWIDTH (-6dB point)**



## **CAD DRAWING SCHEME**



## **BUILT-IN PRESETS**



**SMOOTH**-3 dB mid and high frequencies

HPF 100 Hz

LPF 8 kHz



## 12" HIGH PERFORMANCE STAGE MONITOR

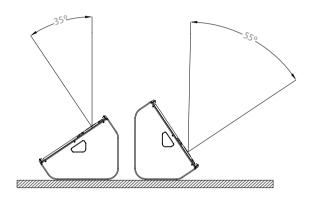




#### **ACCESSORIES**

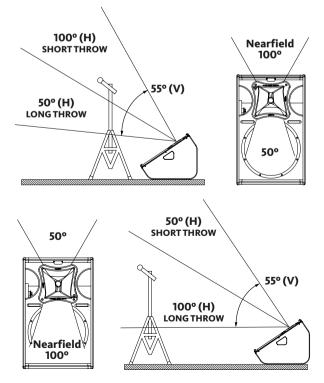


#### **DOUBLE POSITION MONITOR**



### **ASSYMETRICAL DISPERSION HORN**

It allows to optimize the coverage depending on its position.



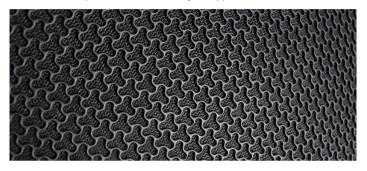
H: Horizontal dispersion

V: Vertical dispersion

### **DISCOVER NÍTID**

## **UNIQUE DESIGN**

Distinguishing details include the speaker grille, exclusively designed for an attractive appearance, maximum protection, and with **the best perforation coefficient in the market, for improved sound quality.** The Polyurea® finish offers durable protection for the birch-ply cabinet, and electronic circuits and controls are smartly protected against moisture. A wide range of accessories is provided for whatever your application is.



#### THE PERFECT BALANCE

**NÍTID** series is the culmination of an intensive program of research, development and optimization, to achieve the greatest possible power and performance from the most compact sized cabinet. Every aspect of its form factor has resulted from examination and consideration of optimum acoustic response, ergonomics, construction and appearance.



## **AMAZING PERFORMANCE**

The integrated **'plug & play'** active power and control system includes DSP presets for rapid setup and amazing sound, and the comprehensive control interface includes instantly recallable presets for setting up the **NÍTID** in just a few seconds. The accurate match between transducers, DSP and amplifiers provide a fully optimized system for the most demanding applications.

