

# HFA110 ACTIVE 2-Way Full-Range Speaker USER MANUAL

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#### INTRODUCTION

Thank you for purchasing a NEXT-proaudio HFA110 ACTIVE 2-Way Full-Range Speaker. This manual will provide you with useful and important information about your HFA110 element. Please devote some time reading this manual, and keep it at hand for future reference. NEXT-proaudio is concerned with your safety and well-being, so please follow all instructions and heed all warnings. Also, a better understanding of some specific features of the HFA110 will help you to operate it to its full potential. With a continuous evolution of techniques and standards, NEXT-proaudio, reserves the right to change the specifications of its products without early warning. For the most current data, please visit our website: www.next-proaudio.com

#### UNPACKING

NEXT HFA Series are built in Europe (Portugal) by NEXT-proaudio, according to the highest standards and thoroughly inspected before they leave the factory. When unpacking your HFA110, examine it carefully for any signs of possible transit damage and inform your dealer immediately if any such damage has occurred.

It is suggested that you retain the original packaging so that the HFA110 can be repacked in the future if necessary. Please note that NEXT-proaudio and its authorized distributors cannot accept any responsibility for damage to any returned product through the use of non-approved packaging.

#### HFA SPEAKER SERIES OVERVIEW

The HFA speaker series are fully powered PA systems, designed to deliver high output and dynamics, extreme linearity and fidelity for unrivalled performance at a very competitive price.

Entirely manufactured in Portugal, the HFA speaker series uses superb quality custom made components, loading birch plywood enclosures coated by a scratch resistant textured paint to assure an outstanding performance and durability.

The integration with the new DPAmplifier modules with up to 1650 Wrms, and the advanced digital signal processing, set a new standard for distortion, noise and thermal efficiency. A surprisingly simple handling concept lets you plug in and play straight away. Configure the system by selecting the right preset and let the system do the rest.

Containing an asymmetric horn that ranges from 50° in the horizontal far-field to 100° in the horizontal near-field and 50° vertical, fully rotatable, means you can use it either vertical or on its side and still maintain the same directivity pattern (only available on HFA110, HFA112 and HFA115). To widen the possibilities of this series, two models with different high frequency section horn were created. The HFA212 maintains a 60°H x 40°V dispersion pattern, better for stacking and larger venue applications. Where single speaker (per side) applications are required, there is the wide version of this model, the HFA212W, which maintains a more appropriate 80°H x 60°V dispersion pattern. It is also possible, in all HFA models, rotate the high frequency section horn in order to change the sound directivity.

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#### SAFETY FIRST

Please pay close attention to this chapter. Failure to comply with these instructions may result on injury or death.

# **DANGER – HEARING DAMAGE**



NEXT HFA Series systems are capable of producing extremely high sound pressure levels and should be used with care. Hearing loss is cumulative and can result from levels above 90dB if people are exposed for a long period. Never stand close to loudspeakers driven at high levels.



# CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICE TO QUALIFIED PERSONNEL

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- Do not use your HFA110 near any sources of water, like swimming pools, lakes, water streams, exposed to rain, high humidity environments or any other source of water or moisture.
- Use only a soft dry cloth to clean your HFA110.
- Never place your HFA110 in a way that prevents air flow near the amplifier. A minimum clearance distance of 6cm should be kept between the amplifier and any near surface.
- Never use your HFA110 too close to any heat source, such as radiators, or any other device that produces heat.
- When mounted on a pole, always ensure that the floor or structure where the stack will take place is even and can withstand the weight.
- Place cables in a way that they do not present a trip hazard.
- Do not place any objects on top of the stack, they can fall accidentally and cause injuries.
- Do not attempt to move the enclosures while connected.
- Do not attempt to service the HFA110 beyond what is described in this manual. All
  other service or repair of this product should be carried only by qualified personnel.
- To prevent electric shock, do not use any extension cord, receptacle or other outlets where the blades of the connectors cannot be fully inserted.
- Precautions should be taken to prevent grounding failure or polarity switch.
- It is advised to unplug the HFA110 during storms or when not in use for a long period of time.

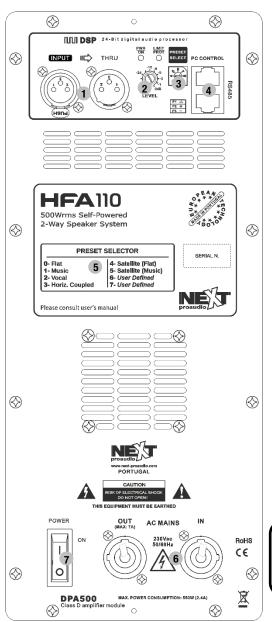
#### RIGGING AND SUSPENSION SAFETY CONSIDERATIONS

HFA Series enclosures are designed for portable applications, but can be suspended by means of the threaded inserts provided. These enclosures are fitted internally with steel corner reinforcement brackets to ensure that each cabinet is strong enough to be hung from its top.

 Before rigging or suspending NEXT HFA Series systems, inspect all components and all hardware for any signs of damage or missing parts. If you find any damaged, corroded or deformed parts, do not use them, replace them immediately.

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- Do not use hardware that isn't load rated or that its rating is not enough to handle the system's weight with a good safety factor (minimum 4:1).
- Suspended systems installation should only be carried out by qualified personnel.
- Always use adequate protective clothing and equipment to prevent possible injuries.
- Be sure you understand all local and national regulations regarding equipment installation.



# HFA110 POWER AMPLIFIER AND DSP

The HFA110 was designed to achieve a simple to use and deploy versatile system. The HFA110, like all HFA series models, is prepared to be completely plug'n play, having already six pre-determined configurations that cover almost all situations. But if you're not happy with any of those, there are also two available user defined configurations, which can be used to adapt the system to your needs using the NEXT-proaudio SOUNDWARE¹ software and the supplied RS485 to USB converter.

Here is a brief description of the amplifier panel:

- 1- Signal Input/Output
- 2- Level Adjustment Potentiometer
- 3- Preset Selector
- 4- RS485 Communication Interface
- 5- List of Available Presets
- 6- AC Mains Power Input/Output
- 7- Power On/Off Switch



Never operate the HFA series Speakers in a way that maintains the Limiter Led consistently on.

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<sup>&</sup>lt;sup>1</sup> Download NEXT-proaudio SOUNDWARE at www.next-proaudio.com/downloads

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#### **HFA110 Preset List:**

- 0- Flat: Flat frequency response
- 1- Music: Frequency response adapted for music reproduction (SPL level boosted at low frequencies and ear compensation, due to high SPL levels, at the mid-high frequency range)
- 2- Vocal: Frequency response adapted for voice speech. (High Pass Filter at 90Hz and EQing for an improved intelligibility
- 3- Horiz. Coupled: Frequency response adapted for the sound reproduction with two units, one very next to the other. (Low Shelf Filter to compensate the bass coupling).
- 4- Satellite (Flat): Flat frequency response when playing with a subwoofer. (High Pass Filter at 120Hz 24dB/Oct Linkwitz-Riley)
- 5- Satellite (Music): Frequency response adapted for music reproduction when playing with a subwoofer (High Pass Filter at 120Hz 24dB/Oct Linkwitz-Riley and ear compensation, due to high SPL levels, at the mid-high frequency range)
- 6- User Defined: Free memory for user storage (Customized preset can be saved on this memory positon)
- 7- User Defined: Free memory for user storage (Customized preset can be saved on this memory positon)

#### WARRANTY

NEXT-proaudio's products are warranted, by NEXT-proaudio, against <u>manufacturing defects</u> in materials or craftsmanship over a period of 5 years for the passive loudspeakers, and 2 years for all other products counting from the date of original purchase. The original receipt of purchase is mandatory for warranty validation purposes, and the product must have been bought from a NEXT-proaudio authorized dealer.

The warranty can be transferred to a subsequent owner during the warranty period; however, this cannot extend the warranty period beyond the original warranty period of five years from the original date of purchase stated on the NEXT-proaudio's invoice.

During the warranty period NEXT-proaudio will, at its own discretion, either repair or replace a product which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorized NEXT-proaudio service agent or distributor.

NEXT-proaudio cannot be held responsible for defects caused by unauthorized modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by this manual and/or NEXT-proaudio. NEXT-proaudio is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied. This warranty does not affect your statutory rights.

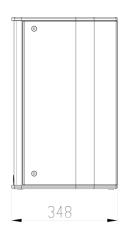
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# TECHNICAL SPECIFICATIONS

NEXT HFA110 TECHNICAL SPECIFICATIONS					
Speaker Type	ACTIVE 2-Way Speaker				
Frequency Response (-6dB)	58Hz – 19.000Hz				
Calculated Max. SPL (Cont./Peak)	125dB / 128dB (Full-Space)				
Components	LF: 1 x 10" / 2.5" Voice Coil Custom B&C Speaker				
Components	HF: 1 x 1" / 1.7" Voice Coil Custom Compression Driver				
Directivity (H x V)	50°-100° x 50° (User Rotatable), Tailored Dispersion Technology				
Amplifier Technology	2 Channel Switched Mode Class AB with DSP				
LF Power (RMS)	400W				
HF Power (RMS)	100W				
Construction	12mm Multi-laminate Birch Plywood, Screwed and Glued				
Finish	Black Textured Scratch Resistant Paint (also available in other colours)				
Grille	Steel, Black Finish (also available in other colours)				
Dimensions (W x H x D)	304 x 559 x 348 mm				
Net Weight	19 kg				
Shipping Weight	21 kg				

# **DIMENSIONS**





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#### **CONTACTS**

In case of any doubts or need of information just:

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