

HFA 206/HFA 206p ACTIVE/Passive 2-Way Full-Range Vertical Array USER MANUAL

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INTRODUCTION

Thank you for purchasing a NEXT HFA206(p) **ACTIVE**/Passive 2-Way Full-Range Vertical Array. This manual will provide you with useful and important information about your HFA206 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 HFA206(p) 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 HFA206, 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 HFA206 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 HFA206 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 HFA206.
- Never place your HFA206 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 HFA206 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 HFA206 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 HFA206 during storms or when not in use for a long period of time.

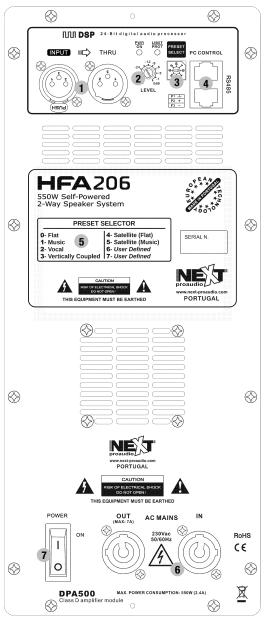
RIGGING AND SUSPENSION SAFETY CONSIDERATIONS

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.



HFA206 POWER AMPLIFIER AND DSP

The HFA206 as all HFA series models, was designed to achieve a simple to use and deploy versatile system. The HFA206, like all HFA series models, is prepared to be completely plug' n play, having already six predetermined 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.

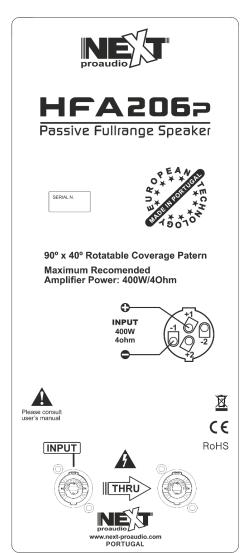
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¹ Download NEXT-proaudio SOUNDWARE at www.next-proaudio.com/downloads

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HFA206 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 110Hz 24dB/Oct Linkwitz-Riley)
- 5- Satellite (Music): Frequency response adapted for music reproduction when playing with a subwoofer (High Pass Filter at 110Hz 24dB/Oct Linkwitz-Riley and ear compensation, due to high SPL levels, at the midhigh frequency range)
- 6 / 7- User Defined: Free memory for user storage (Customized presets can be saved on this memory positons)



HFA206p

The HFA206 is the only HFA series speaker that has both active (HFA206) and passive (HFA206p) (4Ω) versions. Able to deliver an extremely high output and dynamics for its size, extreme linearity and fidelity, is one of the best solutions in terms of price/quality ratio in the market. A built-in passive crossover, connected on speakON Points 1+ and 1-, provides the perfect frequency and phase response. It is advisable to operate it with an high pass filter at 85 Hz in a full-range operation mode. When used with the HFA112s, self-powered subwoofer, it becomes the perfect solution for any kind of small venues. The HFA112s is able to power not only the HFA112s itself, but also any passive satellite or group of satellites, as long as the minimum total impedance doesn't reach below 4Ω . In this case. (HFA112s + HFA206p) it is only possible to connect one HFA206p to the subwoofer. The HFA112s, like all HFA series models, is prepared to be completely plug' n play, having already six pre-determined configurations that cover almost all situations.

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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.

TECHNICAL SPECIFICATIONS

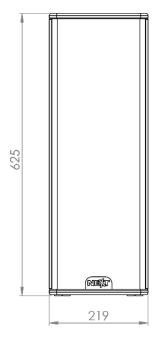
NEXT HFA206 TECHNICAL SPECIFICATIONS			
Speaker Type	ACTIVE 2-Way Vertical Array		
Frequency Response (-6dB)	80Hz – 19.000Hz		
Calculated Max. SPL (Cont/Peak)	121dB/127dB (Full-Space)		
Components	LF: 2 x 6.5" / 1.5" Voice Coil Custom Speaker		
Components	HF: 1 x 1" / 1.75" Voice Coil Custom Compression Driver		
Directivity (H x V)	90° x 40° (User Rotatable)		
Amplifier Technology	2 Channel Switched Mode Class D with DSP (500W)		
LF Power (RMS)	400W		
HF Power (RMS)	100W		
Construction	12mm Multi-laminate Birch Plywood, Screwed and Glued		
Finish	Black Textured Scratch Resistant Paint		
Grille	Steel, Black Finish (also available in other colours)		
Dimensions (W x H x D)	219 x 625 x 259 mm		
Net Weight	15.7 kg		
Shipping Weight	16.9 kg		

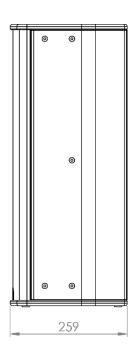
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NEXT HFA206p TECHNICAL SPECIFICATIONS			
Speaker Type	Passive 2-Way Vertical Array		
Frequency Response (-6dB)	80Hz – 19.000Hz		
Sensitivity (1W@1m)	95dB (Full-Space)		
Calculated Max. SPL (Cont/Peak)	121dB/127dB (Full-Space)		
Components	LF: 2 x 6.5" / 1.5" Voice Coil Custom Speaker		
Components	HF: 1 x 1" / 1.75" Voice Coil Custom Compression Driver		
Directivity (H x V)	90° x 40° (User Rotatable)		
Program Power	500W		
Nominal Impedance	4Ω		
Sensitivity (1W@1m)	95dB (Full-Space)		
Construction	12mm Multi-laminate Birch Plywood, Screwed and Glued		
Finish	Black Textured Scratch Resistant Paint		
Grille	Steel, Black Finish (also available in other colours)		
Dimensions (W x H x D)	219 x 625 x 259 mm		
Net Weight	14.4 kg		
Shipping Weight	15.6 kg		

DIMENSIONS





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CONTACTS

In case of any doubts or any information just:

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