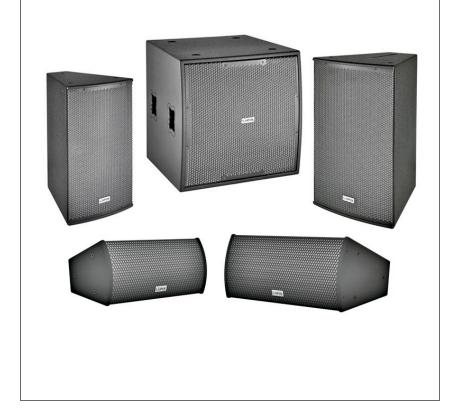
HR Series

USER MANUAL

HR-6 HR-8 HR-1564/7 & HR-1596/7 HR-1264/7 & HR-1296/7 HR-1564/5 & HR-1596/5 HR-1264/5 & HR-1296/5 HR-28 HR-26 HR-218/36 HR-218/20 HR-215S HR-18/10





INTRODUCTION

To facilitate the correct and reliable use of the HR cabinets we have designed this instruction manual, please read it before proceeding to install the cabinet.

Please observe the technical data carefully and do not ignore the instructions included within this manual.

Manufacturer



LYNX Pro Audio S.L. Calle 1 - Pol. Ind. Picassent E-46220 Picassent (Valencia)



CE CERTIFICACTION, EUROPEAN PRODUCT





CONTENTS

• SAFETY PRECAUTIONS	5
• CABINET CONNECTIONS	
Normative	6
Connectors	8
Recommendations	10
• CABINET INSTALLATION	
Mounting devices	16
Installation accessories	16
Coverage change with the rotatable horn	16
Mode passive or bi-amp	18
RAINBOW 3D ACOUSTIC SIMULATION SOFTWARE	19
• EACH MODEL TECHNICAL DATA	20
CERTIFICATIONS AND GUARANTEE	45



Before starting to use this device, please read this instruction manual carefully. Keep these instructions in the place where the equipment will be used and with easy access to them.



Heavy equipment

Apply back protection when using the system. Avoid loading and unloading at heights.



• Hearing damage risk

These systems can reproduce large quantities of sound pressure which can damage hearing. Take precautions if you are going to be near them for extended amounts of time and do not get too close.



• Hanging / Flying

Do not hang the cabinets from the handles or from any other part other than the designated hanging point. When flying this system please observe the technical and "Rainbow" software data carefully. Never exceed the maximum safe working loads or ignore the instructions included within this manual. Use Only flying accessories provided by Lynx Pro Audio S.L. Rigging must be always carried out by professionals.



• Delicate Material

Please ensure no foreign object or water enters the speaker. Only clean the unit with dry cloths. Do not use solvents.



• Overheating / Fire risk

To reduce the risk of the speaker over heating, avoid direct contact with sunlight. Avoid placing the unit close to heat inducing objects such as radiators. Do not cover the equipment in use and do not block any ventilation openings. Do not put naked flame, such as lighted candles, close or on top of the unit.



• Electromagnetic and interferente emissions

Avoid placing objects which through electromagnetic waves can damage the unit, such as mobile phones, lap tops, magnetic strip cards etc.

This system complies with normatives

EN 55103-1 (1)

EN 55103-2 (2)

- (1) This device may not cause harmful interferences.
- (2) This device may receive interference including interferences that may cause undesired working.

•IMPORTANT NOTE

This Equipment must be used in accordance with these instructions and by trained professional personnel only. This equipment should not be used in places with extreme tropical climates. Don't expose this apparatus to extreme humidity and or temperature values.





CABINET CONNECTIONS

Normative

The HR cabinets meet the following standards:

EN 55103-1:1996: Electromagnetic compatibility. Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use (-1 Emmision).

EN 55103-1:1996: Electromagnetic compatibility. Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. (-2 Immunity)

EN 60065:2002: Audio, video and similar electronic apparatus. Safety requirements.

Connectors

The HR cabinets have a connection panel at the rear of the cabinet. This consists of 2 internally bridged Neutrik NL4-MP connectors which apply no process to the signal.







Note: If pins +-2 are not used they will still be internally bridged.

The following table indicates which pins are used for all the models, with passive and bi-amplified modes.

PASSIVE	Connector	Speakon connections	per box	Impedance	Rated power	Program power
HR-6	NL4MP	±1	2	16 Ω	200 W AES	400 W AES
HR-8	NL4MP	±1	2	8Ω	300 W AES	600 W AES
HR-1564/7	NL4MP	±1	2	8Ω	700 W AES	1400 W AES
HR-1596/7	NL4MP	±1	2	8Ω	700 W AES	1400 W AES
HR-1264/7	NL4MP	±1	2	8Ω	700 W AES	1400 W AES
HR-1296/7	NL4MP	±1	2	8Ω	700 W AES	1400 W AES
HR-1564/5	NL4MP	±1	2	8Ω	500 W AES	1000 W AES
HR-1596/5	NL4MP	±1	2	8Ω	500 W AES	1000 W AES
HR-1264/5	NL4MP	±1	2	8Ω	500 W AES	1000 W AES
HR-1296/5	NL4MP	±1	2	8Ω	500 W AES	1000 W AES
HR-28	NL4MP	±1	2	4Ω	500 W AES	1000 W AES
HR-26	NL4MP	±1	2	8/4Ω	400 W AES	800 W AES
HR-218/36	NL4MP	±1	2	4Ω	3600 W AES	7200 W AES
HR-218/20	NL4MP	±1	2	4Ω	2000 W AES	4000 W AES
HR-215S	NL4MP	±1	2	4Ω	2000 W AES	4000 W AES
HR-18/10	NL4MP	±1	2	8Ω	1000 W AES	2000 W AES

BI-AMP	Connector	Speakon connections	per box	Impedance	Rated power	Program power
HR-1564/7	NL4MP	LF±1/HF±2	2	8Ω	700 W / 80 W	1400 W / 160 W
HR-1596/7	NL4MP	LF ±1/HF ±2	2	8Ω	700 W / 80 W	1400 W / 160 W
HR-1264/7	NL4MP	LF±1/HF±2	2	8Ω	700 W / 80 W	1400 W / 160 W
HR-1296/7	NL4MP	LF ±1/HF ±2	2	8Ω	700 W / 80 W	1400 W / 160 W
HR-1564/5	NL4MP	LF ±1/HF ±2	2	8Ω	500 W / 60 W	1000 W / 120 W
HR-1596/5	NL4MP	LF ±1/HF ±2	2	8Ω	500 W / 60 W	1000 W / 120 W
HR-1264/5	NL4MP	LF ±1/HF ±2	2	8Ω	500 W / 60 W	1000 W / 120 W
HR-1296/5	NL4MP	LF ±1/HF ±2	2	8Ω	500 W / 60 W	1000 W / 120 W
HR-28	NL4MP	LF ±1/HF ±2	2	4Ω	500 W/ 70 W	1000 W / 140 W
HR-26	NL4MP	LF±1/HF±2	2	8/4Ω	400 W / 70 W	800 W / 140 W

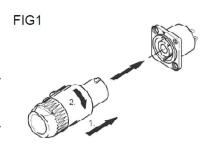


Connectors

To connect the speakon follow the instructions in fig. 1:

Insert the male speakon in its corresponding hole and turn right until it clicks. This fixes it safely and strongly and helps stop it being pulled out by mistake.

At the other end of the cable connect in the same way to the amplifier channel.





Furthermore the cabinets HR-6 and HR-8 can be supplied with 4 terminal blocks (7.62 mm between pins) instead of the Neutrik NL4-MP.

Recommendations

Always ensure cables are in good condition. Know the recommended cable length and thickness according to the cabinet and quantity you are installing. An incorrect connection can affect the functioning of the system or even damage it. Cable thickness will vary according to cabinet impedance, quantity and distance. This is especially important when connecting Subwoofers.

As a guide, please see the following table which outlines the thickness depending on the power and length of cable.

Maximum recommended cable length for low impedance systems							
				Maximum recommended lenght (in meters)			
Wire section	AWG number	Cable resistance in 100 meters	2Ω	4Ω	8Ω	16 Ω	
13.3 mm²	6	0.25 Ω	24	57	122	253	
6.63 mm²	8	0.49 Ω	12	28	61	126	
5.26 mm ²	10	0.62 Ω	10	23	48	100	
3.31 mm²	12	0.99 Ω	6	14	30	63	
2.08 mm ²	14	1.57 Ω	4	9	19	40	
1.31 mm²	16	2.49 Ω	2	6	12	25	
0.82 mm²	18	3.98 Ω	2	4	8	16	
0.52 mm ²	20	6.28 Ω	1	2	5	10	
0.33 mm²	22	9.89 Ω	1	1	3	6	

Bear in mind Ohm ratings on the amplifiers used to power the cabinets. For example, 2 ohm amplifier configurations are not recommended due to the excessive power from the amp output.

Never connect more cabinets than recommended in parallel. With parallel connections, the total impedance can be calculated by dividing the impedance of 1 cabinet by the number connected.



· Coverage change with the rotatable horn

Many HR cabinets enable the horn to be rotated offering further coverage options. The rotatable horn feature enables the installer to also set the cabinet up horizontally whilst maintaining the horn features such as horizontal and vertical coverage. This is helpful in installs with low ceilings or where esthetically the cabinet looks better horizontally.

The following HR cabinets have rotatable horns:

HR-1564/7 (60° x 40°)

HR-1596/7 (90° x 60°)

HR-1264/7 (60° x 40°)

HR-1296/7 (90° x 60°)

HR-1564/5 (60° x 40°)

HR-1596/5 (90° x 60°)

HR-1264/5 (60° X 40°)

 $HR-1296/5 (90^{\circ} \times 60^{\circ})$

HR-28 (90° x 60°)

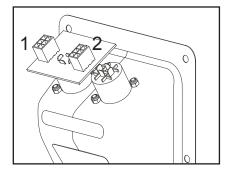
 $HR-8 (90^{\circ} \times 60^{\circ})$



To turn the horn the user must first remove the cabinet grill, unscrew the horn, rotate it 90° and screw it back in. Just be sure to maintain the connection and put the grill back on.

Mode passive or bi-amp:

All the HR cabinets are supplied from the factory in passive mode. To change from passive to bi-amp mode is very simple, you only have to unscrew the connector pannel located at the rear of the cabinet and change the cable from the PASSIVE plug to the ACTIVE plug. These plugs are marked on the circuit board.



Change the cable from one plug to the other and screw the connector pannel again. That's all.

You will have the cabinet ready in bi-amp mode, with pin \pm 1 connected to Low Frequencies and pin \pm 2 connected to High Frequencies.

NOTE: The bi-amp mode works without the internal crossover so without its protection for the speakers.



CABINET INSTALATION

Mounting advices:

- The HR cabinets are designed to be used in all kind of fixed installations.
- Cabinets must be installed and suspended by professional installers.
- All responsibility lies with the installation company.
- Never place the safety of personnel at risk.
- Always check the accessories, slings etc are in good condition and the suspension point is secure and free of excess weight, vibration, etc.
- Be careful where the cabinets are suspended from.

Installation accessories:

The HR cabinets are designed to be used in installations and the full range cabinets come with rigging points so that they can be easily installed. To fix the cabinets to a wall or to hold them from the ceiling is very easy using some simple accessories:



AGR-10 Eye bolt for all the full range HR cabinets.



SC-FC1 Install stud for HR-1564/7 , HR-1596/7 , HR-1264/7 and HR-1296/7



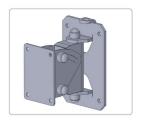
SC-FC2 Heavy duty stud for HR-1564/7, HR-1596/7, HR-1264/7 and HR-1296/7



UBR-28 UBR-26 UBR-6 UBR-8 Horizontal bracket for HR-28 or HR-26 or HR-6 or HR-8



WB-10/2 Wall bracket for HR6



WB-20/2 Wall bracket for HR-8



RAINBOW 3D Acoustic Prediction Software

Lynx Pro Audio's R&D department is working on Rainbow 3D, a new acoustic simulation software with dynamic 3D features. With a sophisticated design, Rainbow 3D stands out for its speed, being able to provide a simulation in just a few seconds. It also provides algorithms for beam steering and optimizing the listening area.

• Designed from scratch by professionals

Rainbow 3D has been programmed from scratch by Lynx Pro Audio engineers, using new programming procedures that achieve an effective simulation with really low calculation time.

• Multiple listening zones

The program can simulate all Lynx Pro Audio's acoustic enclosures located in a 3D space, including the classic side, top and front views. It can also define multiple listening zones and allows offset positioning and symmetry. Blueprint images, textures and PNG format pictures can be imported.

Unlimited sound sources

Allows the acoustic simulation for an unlimited number of sound sources and audio systems. You can place as many systems (subwoofers, line arrays, columns and individual boxes) as you desire. Also, the line arrays can be placed in stack or flown configuration.

Beam steering

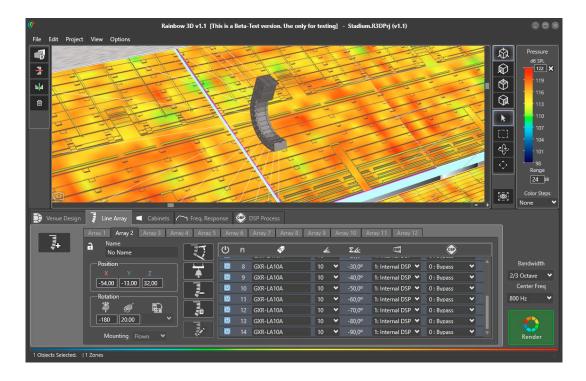
Rainbow 3D has the ability to add DSP processing to the simulation and uses algorithms to control the directivity (beam steering) in columns, without the need to tilt them physically, being able to divide the column into several beams that point to different zones.

Accurate optimization thanks to FIR filters

Optimized algorithms are used in the listening area to improve the sound coverage and the frequency response. This feature can be executed in a matter of seconds. Additionally, the export of FIR coefficients can be performed with the optimization for later loading in the DSP via Ethernet or a USB device. In the near future direct communication with Lynx Pro Audio and OCS will be available.

Multiple measures and tools

Likewise, the R&D department is developing multiple measurement and analysis tools for the calculated data. For example, the sound pressure curves (SPL) in the listening areas and the capture of virtual measurements that show the frequency response in the points of location indicated and added. Among other tools you will find autosplay and a wizard to set up different subwoofer arragements.





HR-6 DATASHEET

• HR-6

Ultra compact, light and very versatile passive enclosure specially designed for all types of installation projects, both indoors and outdoors (outdoor version available). It consists of a 6.5" transducer (impedance 16 ohm) and a 1" high frequency Mylar tweeter. It offers 119 dB SPL (400 W program).

It is an excellent solution for large installation projects or basic installations. It has a complete range of accessories to provide an easier installation. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 1 x 6.5", 2" voice coil

• HF: 1 x Tweeter 1" – 1.25" aluminium voice coil, Mylar diaphragm

Frequency range: 62 Hz - 20 KHz (-10dB) Frequency response: 88 Hz - 18 KHz (± 3dB)

Sensitivity: 93 dB (1W@1m) Max SPL / Peak: 116 dB - 122 dB Peak

Coverage angle: 90° H x 90° V

Power: 200 W (400 W program, 800 W peak)

Crossover: Passive Nominal impedance: 16Ω

Connectors: 2 x Neutrik Speakon NL4MP / 4 x Terminal Block 7.62 mm between pins

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 300 x 236 x 220 mm (H x W x D)

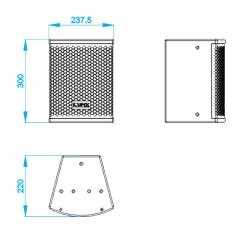
Weight: 7.5 Kg (17 lbs)

Key features

- Ultra-compact
- Versatile sound reinforcement
- High performance
- 90° x 90° wide dispersion
- ARK processor optimised preset
- Multiple rigging / mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Multi media spaces
- Public address





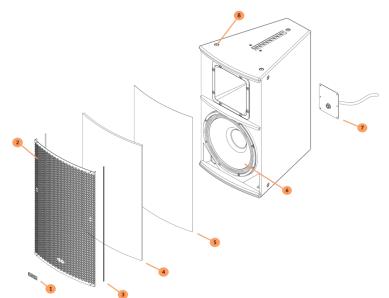
• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours

Black polyurea coating with microtextured metal parts.

RAL available on request. Polyurea coating with aliphatic colour paint.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.

12

8. M10 stainless steel 316 L screws (A4).



HR-8 DATASHEET

• HR-8

Passive ultra compact, lightweight and very versatile enclosure especially designed for all types of installation projects. It consists of a 8" transducer with Neodimium magnet and a 1" high frequency compression driver. It offers 125 dB SPL (600 W program).

It is an excellent solution for all types of fixed installations and has a complete range of accessories to provide an easier installation. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 1 x 8" Neodimium – 2" aluminum voice coil kapton cone

• HF: 1" Exit compression Driver, 1.75" aluminium voice coil, Polyester diaphragm

Frequency range: 60 Hz - 20 KHz (-10dB) Frequency response: 78 Hz - 18 KHz (± 3dB)

Sensitivity: 97 dB (1W@1m)

Max SPL / Peak: 122 dB – 128 dB Peak Coverage angle: 90° x 90° rotatable

Power: 300 W (600 W program, 1200 W peak)

Crossover: Passive Nominal impedance: 8Ω

Connectors: 2 x Neutrik Speakon NL4MP / 4 x Terminal Block 7.62 mm between pins

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 420 x 274 x 298 mm (H x W x D)

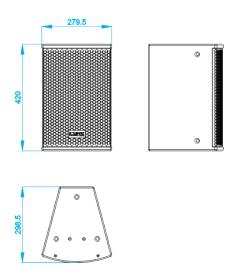
Weight: 10 Kg (22 lbs)

Key features

- Ultra-compact
- Versatile sound reinforcement
- High performance
- 90° x 90° wide dispersion
- ARK processor optimised preset
- Multiple rigging / mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Multi media spaces
- Public address



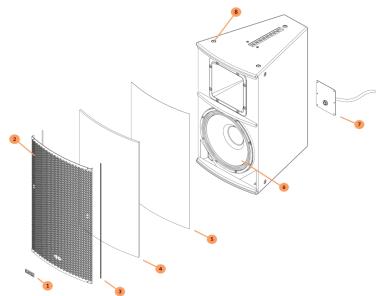


Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- $1.\, An odized \, a luminium \, logo \, for \, durability \, outdoors.$
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-1564/7 & HR-1596/7 DATASHEET

HR-1564/7 & HR-1596/7

High performance, ultra-compact, full range, two way bi-amp/passive cabinet. It consists of a 15" transducer and a 1.4" high frequency compression driver.

They offer 2 dispersion options. The model HR-1564/7 provides a narrow dispersion of 60° x 40° (rotatable) and the model HR1596/7 offers a wide dispersion of 90° x 60° (rotatable). 129dB SPL (1400W program)

This cabinet is ideal for a wide variety of applications and has a range of accessories that provide an easier assembly. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 15", 3.5" aluminium voice coil, waterproof front side cone treatment,

neodymium magnet

• HF: 1.4" Exit compression Driver, 2.5" aluminium voice coil, Titanium diaphragm

Frequency range: 58 Hz - 20 KHz (-10dB) Frequency response: 64 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 94 dB (1W@1m)

Max SPL / Peak: Passive Mode: 123dB - 129dB Peak

Bi-Amp LF: 126dB - 132dB Peak Bi-Amp HF: 127dB - 133dB Peak

Coverage angle: Constant directivity horn (Rotatable)

90° x 60° (HR-1596/7) / 60° x 40° (HR-1564/7)

Power: Passive mode: 700 W (1400 W program, 2800 W peak)

Bi- Amp LF: 700 W (1400 W program, 2800 W peak) Bi-Amp HF: 80 W (160 W program, 320W peak)

Crossover: Bi-amp / Passive (selectable)

Nominal impedance: 8Ω Passive / Bi-amp LF 8Ω , HF 8Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 790 x 444.5 x 541 mm (H x W x D)

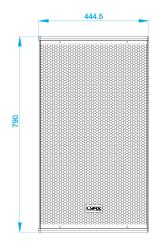
Weight: 32 Kg (70.5 lbs)

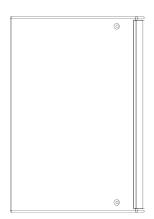
Key features

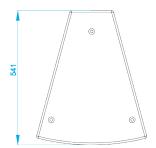
- Versatile sound reinforcement
- High performance
- Coverage 60°x40° or 90°x60°, rotatable horns
- ARK processor optimised preset
- Precisse band pass directivity control
- Multiple rigging and mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Conferences
- Public address







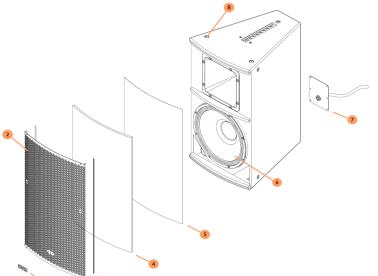


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-1564/5 & HR-1596/5 DATASHEET

HR-1564/5 & HR-1596/5

High performance, ultra-compact, full range, two way bi-amp/passive cabinet. It consists of a 15" transducer and a 1" high frequency compression driver.

They offer 2 dispersion options. The model HR-1564/5 provides a narrow dispersion of 60° x 40° (rotatable) and the model HR1596/5 offers a wide dispersion of 90° x 60° (rotatable). 129dB SPL (1000W program).

This enclosure is ideal for a wide variety of applications and has a range of accessories that provide an easier assembly. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 15", 2.5" voice coil, Malt Cross Cooling System

• HF: 1.4" Exit compression Driver, 1.75" aluminium voice coil

Frequency range: 58 Hz - 20 KHz (-10dB) Frequency response: 63 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 96 dB (1W@1m)

Max SPL / Peak: Passive Mode: 123dB - 129dB Peak

Bi-Amp LF: 125dB - 131dB Peak Bi-Amp HF: 126dB - 132dB Peak

Coverage angle: Constant directivity horn (Rotatable)

90° x 60° (HR-1596/5) / 60° x 40° (HR-1564/5)

Power: Passive mode: 500 W (1000 W program, 2000 W peak) Bi- Amp LF: 500 W (1000 W program, 2000 W peak)

Bi-Amp HF: 60 W (120 W program, 240W peak)

Crossover: Bi-amp / Passive (selectable)

Nominal impedance: 8Ω Passive / Bi-amp LF 8Ω , HF 8Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 790 x 444.5 x 541 mm (H x W x D)

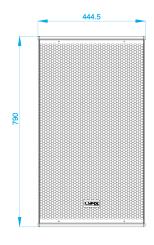
Weight: 30 Kg (66 lbs)

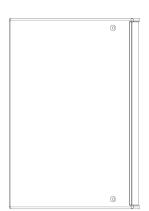
Key features

- Versatile sound reinforcement
- High performance
- Coverage 60°x40° or 90°x60°, rotatable horns
- ARK processor optimised preset
- Precisse band pass directivity control
- Multiple rigging and mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Conferences
- Public address







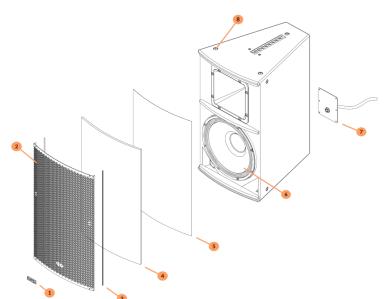


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-1264/7 & HR-1296/7 DATASHEET

HR-1264/7 & HR-1296/7

High performance, ultra-compact, full range, two way bi-amp/passive cabinet. It consists of a 12" transducer and a 1.4" high frequency compression driver.

They offer 2 dispersion options. The model HR-1264/7 provides a narrow dispersion of 60° x 40° (rotatable) and the model HR1296/7 offers a wide dispersion of 90° x 60° (rotatable). 129dB SPL (1400W program).

This cabinet is ideal for a wide variety of applications and has a range of accessories that facilitate its assembly. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 12", 3.5" aluminium voice coil, waterproof front side cone treatment,

neodymium magnet

• HF: 1.4" Exit compression Driver, 2.5" aluminium voice coil, Titanium diaphragm

Frequency range: 59 Hz - 20 KHz (-10dB) Frequency response: 65 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 94 dB (1W@1m)

Max SPL / Peak: Passive Mode: 123dB - 129dB Peak

Bi-Amp LF: 125dB – 131dB Peak Bi-Amp HF: 127dB – 133dB Peak

Coverage angle: Constant directivity horn (Rotatable)

90° x 60° (HR-1296/7) / 60° x 40° (HR-1264/7)

Power: Passive mode: 700 W (1400 W program, 2800 W peak)

Bi- Amp LF: 700 W (1400 W program, 2800 W peak)
Bi-Amp HF: 80 W (160 W program, 320W peak)

Crossover: Bi-amp / Passive (selectable)

Nominal impedance: 8Ω Passive / Bi-amp LF 8Ω , HF 8Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 705 x 377 x 495 mm (H x W x D)

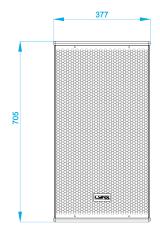
Weight: 26 Kg (57 lbs)

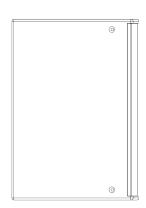
Key features

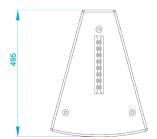
- Versatile sound reinforcement
- High performance
- Coverage 60°x40° or 90°x60°, rotatable horns
- ARK processor optimised preset
- Precisse band pass directivity control
- Multiple rigging and mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Conferences
- Public address







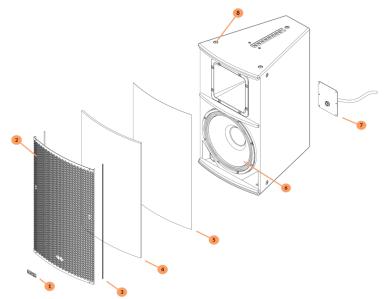


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-1264/5 & HR-1296/5 DATASHEET

HR-1264/5 & HR-1296/5

High performance, ultra-compact, full range, two way bi-amp/passive cabinet. It consists of a 12"transducer and a 1" high frequency compression driver.

They offer 2 dispersion options. The model HR-1264/5 provides a narrow dispersion of 60° x 40° (rotatable) and the model HR1296/5 offers a wide dispersion of 90° x 60° (rotatable).

This enclosure is ideal for a wide variety of applications and has a range of accessories that provide an easier assembly. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 12", 2.5" voice coil, Malt Cross Cooling System

• HF: 1.4" Exit compression Driver, 1.75" aluminium voice coil

Frequency range: 60 Hz - 20 KHz (-10dB) Frequency response: 65 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 94 dB (1W@1m)

Max SPL / Peak: Passive Mode: 121dB - 127dB Peak

Bi-Amp LF: 124dB – 130dB Peak Bi-Amp HF: 126dB – 132dB Peak

Coverage angle: Constant directivity horn (Rotatable)

90° x 60° (HR-1296/5), 60° x 40° (HR-1264/5)

Power: Passive mode: 500 W (1000 W program, 2000 W peak) Bi- Amp LF: 500 W (1000 W program, 2000 W peak)

Bi-Amp HF: 60 W (120 W program, 240W peak)

Crossover: Bi-amp / Passive (selectable)

Nominal impedance: 8Ω Passive / Bi-amp LF 8Ω , HF 8Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 15 mm premium birch plywood Dimensions: 705 x 377 x 495 mm (H x W x D)

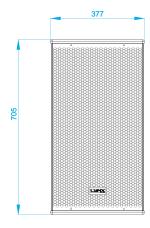
Weight: 25 Kg (55 lbs)

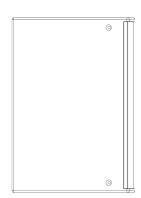
Key features

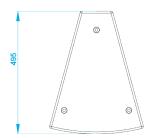
- Versatile sound reinforcement
- High performance
- Coverage 60°x40° or 90°x60°, rotatable horns
- ARK processor optimised preset
- Precisse band pass directivity control
- Multiple rigging and mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Conferences
- Public address







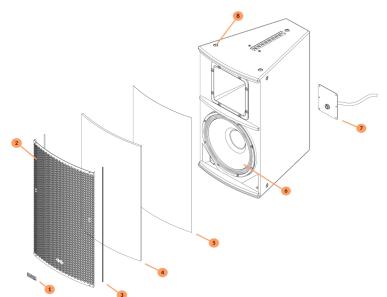


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-26 DATASHEET

• HR-26

The HR-26 enclosure is a high-performance passive full range, with an excellent power-size ratio. It consists of two 6.5" transducers (at 80hm impedance) and a 1"high frequency compression driver. It offers a wide dispersion of 90° x 60° and 122dB SPL (800W program).

This enclosure offers a selectable operation between bi-amp or passive mode and is ideal for a wide variety of applications and has several accessories that provide an easier installation. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 2 x 6.5", 2" voice coil

• HF: 1" Exit compression Driver, 1.75" aluminium voice coil, PM-4 polymer diaphragm

Frequency range: 72 Hz - 20 KHz (-10dB) Frequency response: 78 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 90 dB (1W@1m)

Max SPL / Peak: Passive Mode: 117dB - 122dB Peak

Bi-Amp LF: 119dB - 125dB Peak Bi-Amp HF: 125dB - 131dB Peak

Coverage angle: 80° H x 60 ° V Constant directivity horn

Power: Passive mode: 400 W (800 W program, 1600 W peak)

Bi- Amp LF: 400 W (800 W program, 1600 W peak) Bi-Amp HF: 70 W (140 W program, 280W peak)

Crossover: Bi-amp / Passive (selectable)
Nominal impedance: 8Ω – also available in 4Ω Connectors: $2 \times$ Neutrik Speakon NL4MP
Finish: Polyurea coating, black colour
Material: 15 mm premium birch plywood
Dimensions: $249 \times 568 \times 252 \text{ mm}$ (H x W x D)

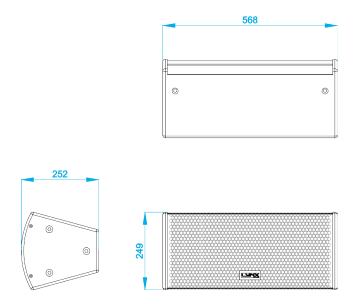
Weight: 15 Kg (33 lbs)

Key features

- Ultra-compact light weight
- Versatile sound reinforcement
- High performance
- 80° x 60° wide dispersion
- ARK processor optimised preset
- Multiple rigging / mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Multi media spaces
- Public address





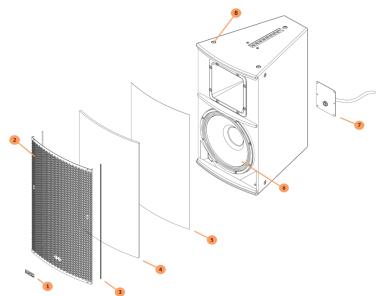
• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.

RAL available on request. Polyurea coating with aliphatic colour paint.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.

24

8. M10 stainless steel 316 L screws (A4).



HR-28 DATASHEET

• HR-28

The HR-28 enclosure is a high-performance passive full range, with an excellent power-size ratio. It consists of two 8" hexacone transducers and a 1" high frequency compression driver. It offers a wide dispersion of $90^{\circ} \times 60^{\circ}$ and $126 \, \text{dB} \, \text{SPL} \, (1000 \, \text{W} \, \text{program})$.

This enclosure offers a selectable operation between bi-amp or passive mode and is ideal for a wide variety of applications and has several accessories that provide an easier installation. Although this cabinet can be used without a processor, we strongly recommend that the cabinet presets are applied for maximum optimization and performance.

For Low Frequency reinforcement, several subwoofer options are available.

Technical Data:

Components:

• LF: 2 x 8", 2" aluminium voice coil, hexacone cone

• HF: 1" Exit compression Driver, 1.75" aluminium voice coil, Polyester diaphragm

Frequency range: 54 Hz - 20 KHz (-10dB) Frequency response: 60 Hz - 18 KHz (± 3dB)

Sensitivity: Passive Mode: 93 dB (1W@1m)

Max SPL / Peak: Passive Mode: 120 dB - 126 dB Peak

Bi-Amp LF: 120 dB - 126 dB Peak

Bi-Amp HF: 125 dB – 131 dB Peak

Coverage angle: 90° x 60 ° (Rotatable)

Power: Passive mode: 500 W (1000 W program, 2000 W peak)

Bi- Amp LF: 500 W (1000 W program, 2000 W peak) Bi-Amp HF: 70 W (140 W program, 280W peak)

Crossover: Bi-amp / Passive (selectable)

Nominal impedance: 4Ω Passive / Biamp LF 4Ω , HF 8Ω

Connectors: 2 x Neutrik Speakon NL4MP
Finish: Polyurea coating, black colour
Material: 15 mm premium birch plywood
Dimensions: 665 x 279 x 298 mm (H x W x D)

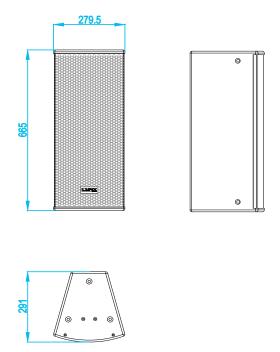
Weight: 17 Kg (37 lbs) Fittings: 11 x M10 points

Key features

- Ultra-compact light weight
- Versatile sound reinforcement
- High performance
- 90° x 60° wide dispersion
- ARK processor optimised preset
- Multiple rigging / mounting options

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Multi media spaces
- Public address



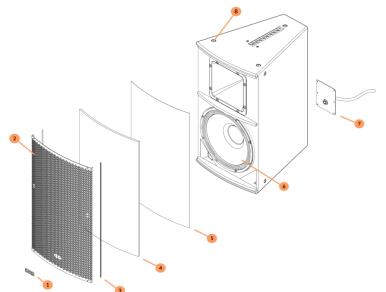


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-218/36 DATASHEET

• HR-218/36

The HR218 / 36 is a high performance passive subwoofer designed to work in conjunction with the full range of the HR series, offering a powerful high power boost between 34 and 200 Hz.

High power, sub-bass cabinet with dual 18" low frequency transducers in bass reflex, direct radiation configuration. 145dB SPL (7200W Program).

This enclosure offers an extraordinary power-volume-weight ratio, being a highly versatile sub-system in all types of installation projects.

Technical Data:

Components:

• LF: 2 x 18", 4" tetracoil dual voice coil

Frequency range: $29 \, \text{Hz} - 200 \, \text{Hz} \, (-10 \, \text{dB})$ Frequency response: $34 \, \text{Hz} - 200 \, \text{Hz} \, (\pm 3 \, \text{dB})$ Sensitivity: $103 \, \text{dB} \, (1 \, \text{W@1m}) \, \pi$ Max SPL / Peak: $139 \, \text{dB} - 145 \, \text{dB}$ Peak

Coverage angle: Omnidirectional

Power: 3600 W (7200 W program, 14400 W peak)

Crossover: Active Nominal impedance: 4Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 18 mm premium birch plywood Dimensions: 585 x 1080 x 781 mm (H x W x D)

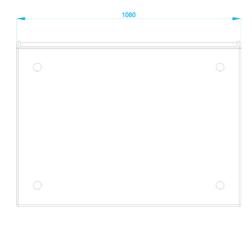
Weight: 82 Kg (180 lbs)

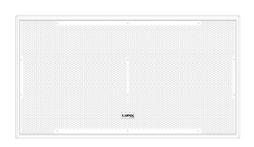
Key features

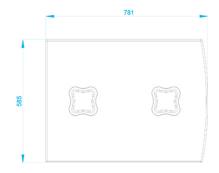
- Incredible size to power ratio
- Versatile sound reinforcement
- High performance 3600 W
- ARK processor optimised preset

- Club & bar installations
- Live sound
- Theatres
- Houses of worship
- Multi media spaces
- Sound reinforcement







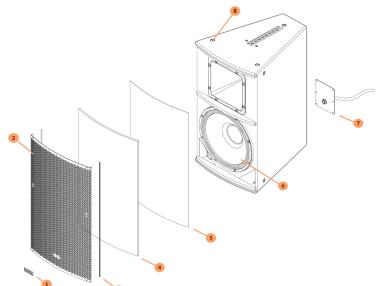


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- $5.\ 35$ ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-218/20 DATASHEET

• HR-218/20

The HR218/20 is a high performance passive subwoofer designed to work in conjunction with the full range of the HR series, offering a powerful reinforcement for low frequencies.

Medium power, subwoofer cabinet with dual 18" low frequency transducers in bass reflex, direct radiation configuration. 142dB SPL (4000W Program).

This enclosure offers an excellent power-volume-weight ratio, being a very versatile subwoofer in all types of installation projects.

Technical Data:

Components:

LF: 2 x 18", 3" copper voice coil
 Frequency range: 40 Hz - 200 Hz (-10dB)
 Frequency response: 46 Hz - 200 Hz (± 3dB)
 Sensitivity: 105 dB (1W@1m) π
 Max SPL / Peak: 136 dB - 142 dB Peak

Coverage angle: Omnidirectional

Power: 2000 W (4000 W program, 8000 W peak)

Crossover: Active Nominal impedance: 4Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 18 mm premium birch plywood Dimensions: 585 x 1080 x 624 mm (H x W x D

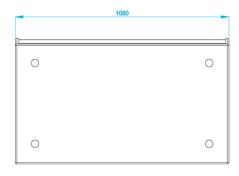
Weight: 68 Kg (150 lbs)

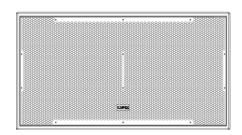
Key features

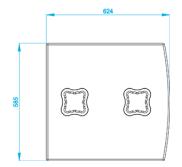
- Incredible size to power ratio
- Versatile sound reinforcement
- High performance 2000 W
- ARK processor optimised preset

- Club & bar installations
- Live sound
- Theatres
- Houses of worship
- Multi media spaces
- Sound reinforcement







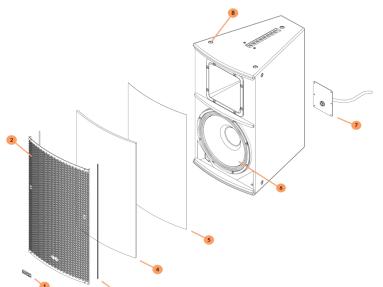


• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-215S DATASHEET

HR-215S

The HR-215S is a high-performance compact subwoofer designed to work with the HR range full range cabinets, offering impressive low-frequency reinforcement with an excellent power-volume-toweight ratio.

High power, ultra compact, sub-bass cabinet with two 15" low frequency transducers with rubber suspension in triple band-pass configuration. 139dB Peak (4000W program).

Technical Data:

Components:

Coverage angle:

• LF: 2×15 " transducers Frequency range: 30 Hz - 160 Hz (-10dB) Frequency response: 35 Hz - 150 Hz ($\pm 3\text{dB}$) Sensitivity: 100 dB (1W@1m) π Max SPL / Peak: 133 dB - 139 dB Peak

Power: 2000 W (4000 W program, 8000 W peak)

Quasi omnidirectional

Crossover: Active Nominal impedance: 4Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 18 mm premium birch plywood Dimensions: 644 x 463 x 600 mm (H x W x D)

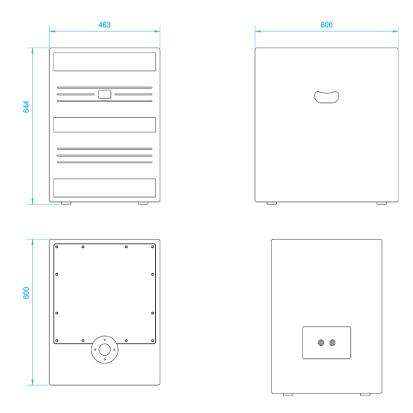
Weight: 59 Kg (130 lbs)

Key features

- Ultra compact triple band-pass
- Versatile sound reinforcement
- High performance 1200 W
- ARK processor optimised preset

- Club & bar installations
- Live sound
- Theatres
- Houses of worship
- Multi media spaces
- Sound reinforcement

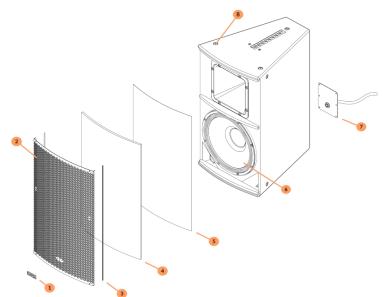




• Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Black polyurea coating with microtextured metal parts. RAL available on request. Polyurea coating with aliphatic colour paint.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).



HR-18/10 DATASHEET

• HR-18/10

The HR-18/10 is a compact subwoofer with a great power-volumeweight ratio. This cabinet is designed to work together with the full range units of the HR series, offering significant reinforcement for the low frequencies.

Medium power, subwoofer cabinet with one 18" low frequency in bass reflex, direct radiation configuration. 135dB SPL (2000W Program).

Technical Data:

Components:

• LF: 1 x 18", 3" copper voice coil
Frequency range: 40 Hz - 200 Hz (-10dB)
Frequency response: 46 Hz - 200 Hz (± 3dB)
Sensitivity: 101 dB (1W@1m) π
Max SPL / Peak: 129 dB - 135 dB Peak

Coverage angle: Omnidirectional

Power: 1000 W (2000 W program, 4000 W peak)

Crossover: Active Nominal impedance: 8Ω

Connectors: 2 x Neutrik Speakon NL4MP

Finish: Polyurea coating - other colours (RAL) available

Material: 18 mm premium birch plywood
Dimensions: 511 x 505 x 681 mm (H x W x D)

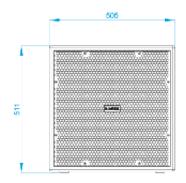
Weight: 32 Kg (70.5 lbs)

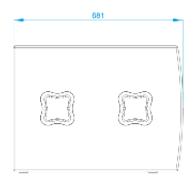
Key features

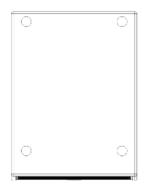
- Incredible size to power ratio
- Versatile sound reinforcement
- High performance 1000 W
- ARK processor optimised preset

- Club & bar installations
- Sound reinforcement
- Theatres
- Houses of worship
- Multi media spaces
- Public address







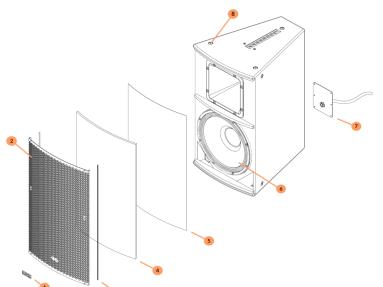


Weather-resistant version:

Our Weather-resistant speakers are designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Colours:

Black polyurea coating with microtextured metal parts.



- 1. Anodized aluminium logo for durability outdoors.
- 2. Stainless steel 1 mm 316 L grill. Also available in aluminum with protective layer and micro textured paint.
- 3. Weatherstrip edging for extreme protection.
- 4. Acoustex filter: hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions.
- 5. 35 ppi Acoustic foam to protect against dust particles.
- 6. Waterproof protected cone on both sides
- 7. Aluminum back plate with pressure gland for an extra tight connection and easy installation.
- 8. M10 stainless steel 316 L screws (A4).





DECLARATION OF CONFORMITY

Lynx Pro Audio S.L.

Calle 1 - Pol. Ind. Picassent 46220 Picassent (Valencia) SPAIN - EU Tel.: (+34) 961 10 96 01

Tel.: (+34) 961 10 96 01 www.lynxproaudio.com

Lynx Pro Audio S.L. declares that HR series are in conformity with the following EC directives:

Low Voltage Directive2014/35/UEElectromagnetic Compatibility EMC2014/30/UERoHS Directive2011/65/UERAEE (WEEE)2012/19/UE

In accordance with Harmonized European Norms:

EN 60065:2014 Audio, video and similar electronic apparatus. Safety requirements

EN 55032:2012 Electromagnetic compatibility. Product family standard for audio, video, audiovisual

and entertainment lighting control apparatus for professional use. Part 1: Emission.

EN 55103-2:2009 Electromagnetic compatibility. Product family standard for audio, video, audiovisual

and entertainment lighting control apparatus for professional use. Part 2: Immunity.

EN 50581:2012 Technical documentation for the assessment of electrical and electronic products

with respect to the restrictions of hazardous substances.

HR models: HR-6 HR-8 HR-26 HR-28 HR-1264/5

HR-1296/5 HR-1264/7 HR-1296/7 HR-1564/5 HR-1596/5 HR-1564/7 HR-1596/7 HR-215S HR-18/10 HR-218/20

HR-218/36





LYNX PRO AUDIO GUARANTEE

Lynx products are guaranteed against every kind of manufacturing fault 3 year after the date of sale. When products are under guarantee, the repairing and the free supplying of the device parts in order to correct any kind of defect are guaranteed by Lynx Pro Audio S.L. In the case that the product could not be returned to the factory for checking and repairing, Lynx Pro Audio S.L. would supply all the necessary parts.

Lynx Pro Audio S.L. is not responsible for any damage or defect caused during the transport or caused by an undue or improper handling y a non-authorized person during the life of this guarantee.

All our products undergo rigorous tests and quality controls. We guarantee the characteristics described here within and their quality against any fabrication defect.

The user loses all warranty rights if he incorporates or carries out any modification to the product, if he uses it outside of the stated safe working loads or does not secure the system properly using all the pins in their corresponding holes.

For any question regarding the product, the user must quote the model and serial number.

WEEE Declaration: Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime. Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product please contact Lynx Pro Audio S.L.