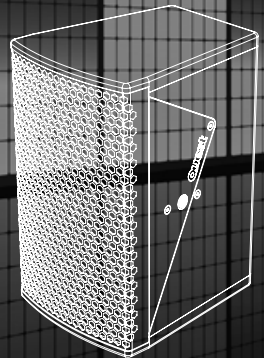


User Manual

MODEL: HPI5



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Safety Precautions

- Be sure to read the instructions in this section carefully before use.
- Make sure you observe the instructions in this manual as the conventions of safety symbols and messages are very important.
- We also recommend you keep this instruction manual handy for future reference.

Safety Symbol and Message Conventions

Safety symbols described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating your product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of any risks.



WARNING

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.



WARNING

When Installing the Unit

- Do not expose the unit to rain or an environment where it may be exposed to water or other liquids, as doing so may result in damage to the bass driver or corrosion of the steel protective grill.
- Do not cut, kink, otherwise damage nor modify the speaker cable. Also use speaker cable of at least 1.5mm core diameter. In addition, avoid locating the speaker cables close to heaters, high traffic areas or locations where the cables can be damaged.
- Avoid installing or mounting speaker boxes in unstable locations and when flying, use the hardware designed for the speaker box and fix securely to a solid wall. Failing to do so may result in the unit falling, causing personal injury and/or property damage.
- Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.
- Never hang a speaker box from only one rigging point. Use multiple points and attach a safety line to a point strong enough to take the weight of the speaker box.

When the Unit is in Use

- Turn down the amplifier before switching on the amplifier. If there is no sound, check the speaker connections. Speaker connectors must be locked in place.
- Should any of the following irregularities be found during use, immediately switch off the amplifier power, disconnect the power supply plug from the AC outlet and contact your nearest Quest dealer:
- If you detect smoke or a strange smell coming from the unit,
- If the unit falls and the unit case is damaged,
- If it is malfunctioning (no HF or low frequency output).

Make no further attempt to operate the unit if it is found to be in any of the above conditions as this may cause fire or electric shock.



WARNING

Flying the box from one insert must not be attempted! Improper installation may result in damage, injury or death.

General Description

The HPI5 is an ultra compact full frequency 16 ohm impedance multi purpose 2-way passive speaker system designed for discrete very high fidelity audio installations where a low visual profile yet high output is required.

It is suited to full range front-of house sound for short and mid throw applications in both stand alone applications or in a distributed system. (See HPI Series bass speaker systems).

The HPI5, like all speakers in the HPI Series have been designed to perform perfectly without the requirement of dedicated system processors.

Features

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The HPI5 has a number of features designed to increase performance and versatility for a professional sound installation environment.

A great deal of attention was paid to the details of the design to make the HPI5 both sonically impressive and functionally suited to all aspects of ultra compact mobile and permanently installed sound reinforcement.

High Powered Purpose Designed Components

A powerful 1" diaphragm high frequency driver matched to a Quest designed mid/short throw horn flare delivers a hi fidelity high frequency response with a medium throw capability.

The HPI5 is a bass-reflex design where the porting is specifically dimensioned to match the low frequency range capabilities of the high powered 5" transducer, despite the relatively small dimensions of the driver and the enclosure.

Exceptional vocal and midrange response makes the HPI5 an exceptional performer when it comes to vocal projection and reproduction of acoustic instrumentation.

Functional Design

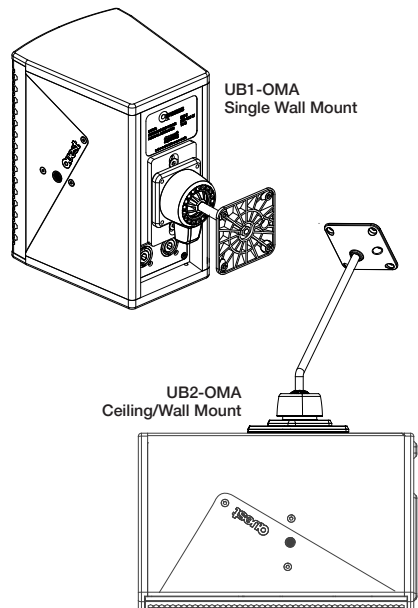
Not just stylish, but practical. The recessed input panel and innovative installation bracketing system allows a visually tidy installation in both vertical and horizontal installation. The speaker impedance of 16 ohms means that 4 units can be connected to each channel of a 4 ohm minimum amplifier.

Solid Build Construction

Built for long life in high heavy duty cycle environments, the HPI5 is well suited to all professional applications. The ply timber casing, high powered components and heavy gauge power-coated steel grill make the HPI5 "a tough package for a tough world".

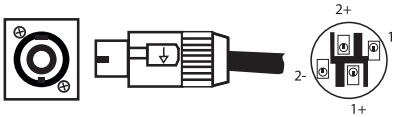
Rigging Options

The HPI speaker rigging system includes various mounting options and components for the HPI5. Whether your requirements are for touring or highly specific installations, there is a perfect solution readily available.



Getting The Best From Your HPI5

Connections



Two Neutric Speakon model NL-4 connectors are mounted in a recessed panel on the rear surface of the box. This allows the speaker box to be set flat against a wall without physical interference to the speaker connector.

- The connector input is wired pin 1+ and pin 1-
- Pin 2 is not connected

Take care when inserting the Speakon connector twisting the connector until it locks into place. Reverse the procedure to disconnect.

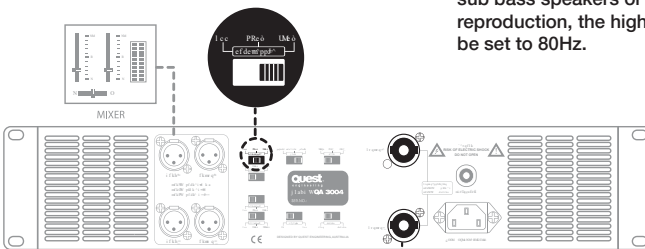
Suitable Amplification

The HPI5 is a 16 ohm enclosure and can be connected in multiple parallel connections to an amplifier channel. In the case of a 4 ohm minimum amplifier, this means that four HPI5 speakers can be connected to each channel.

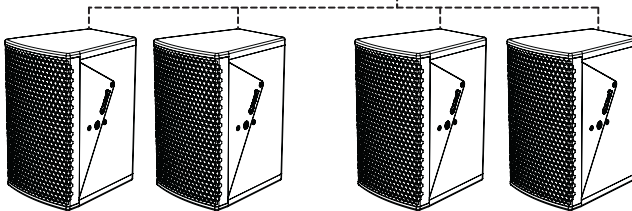
The HPI5 is a mid power level high efficiency system, so ultra high power is not necessary to obtain high sound pressure levels. The recommended power range per amplifier channel is 350-450 watts RMS into an 8 ohm load or up to 900/1,000 watts RMS into a 4 ohm load. The HPI5 will work well with the Quest QA2004/3004 amplifiers. The QM1000P sub/satellite amplifier can also be employed when a compact amplifier installation is required to power a 4 x HPI5 and 2 x HPI12S system.

Setting the QA amplifier's high pass filter at 80Hz if the system will be driven hard in a full range application. If you are intending to add sub bass speakers or use for mainly vocal reproduction, the high pass filter should also be set to 80Hz.

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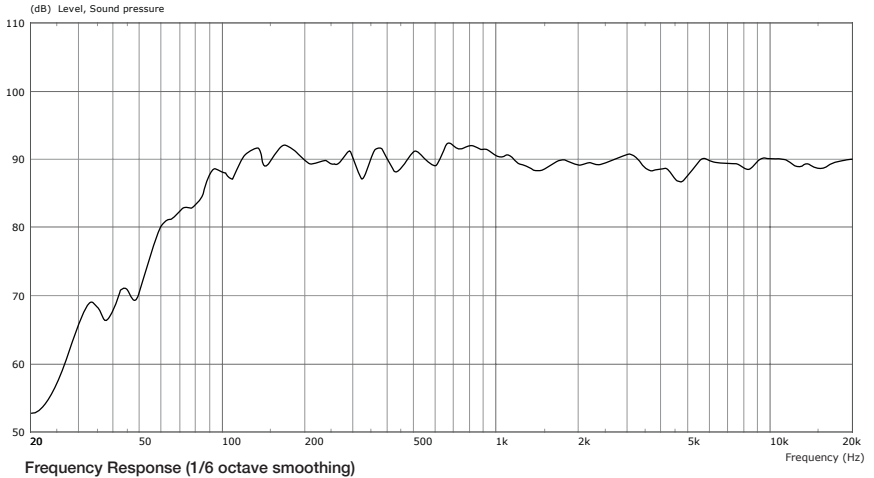
Reducing low frequency output will make more amplifier power available for clean vocal reproduction for full range sound, set the high pass filter to 80Hz.



Recommended HPI5 Amplifier Configuration

HPI5 Specifications

Typical Frequency Response



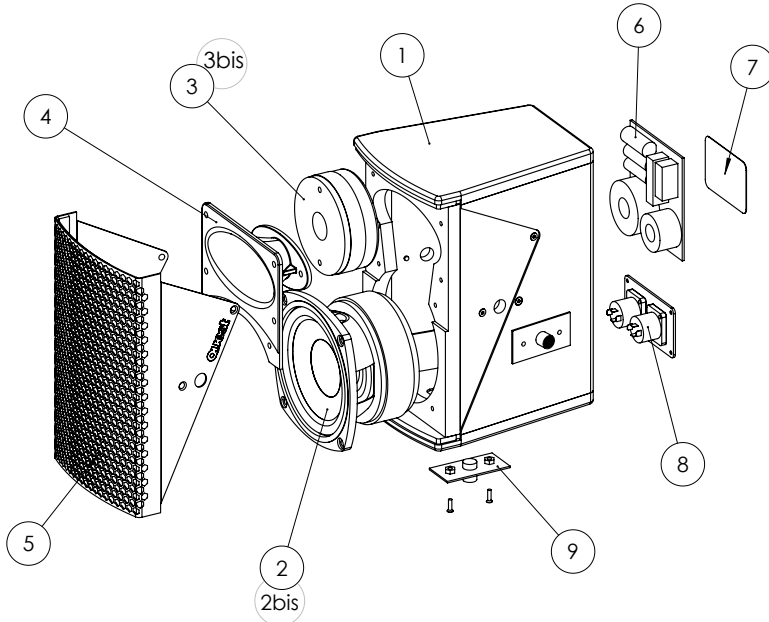
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Technical Specifications

Power Handling (recommended amplifier @ 8 ohms)	300W RMS
Frequency Response	90-20 kHz (+/-3dB)
Sensitivity (1w @ 1m)	90.5dB @ 1kHz
Maximum SPL @ 1m*	117dB
Impedance	16 ohms
Connections & Wiring	2x Speakon NL4 [1+/- In; 2+/- through]
Woofer	5" ferrite high-power woofer
Tweeter	1" compression driver on elliptic wave guide
Directivity	90° horizontal ; 60° vertical
Dimensions (HxWxD)	248 x 150 x 182 mm (speaker) 325 x 220 x 250 mm (single carton) 325 x 400 x 250 mm (dual carton)
Weight	5.7kg Net (speaker) 6.2kg Gross (single carton) 11.9 kg Gross (dual carton)

* calculated

HPI5 Reference Diagram



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No.	Description	Spare Part
1	Wooden Cabinet	HPI5C
2	Woofer - 5" - 150W RMS - 16 ohms	T5001
2bis	Recone Kit for T5001 (5" woofer)	RT1005
3	Compression Driver 1.0" exit (1.4" voice-coil, 25W RMS, 16 ohms)	T1013
3bis	Compression Driver Recone (diaphragm for T1013)	RT1013
4	Horn-Flare for HPI5 (plastic injected PP)	HWGHPI5
5	Complete Grill (perforated steel with acoustically transparent foam)	HGHPI5
6	Passive Filter Network (assembly) for HPI5	AXHPI5
7	Manufacturer Information (sticker)	HMSHPI5
8	Connection Plate (with 2 Neutrik NL4 connectors)	HCPHPI5
9	Internal Metal Plate (x3)	HIPHPI5

Register Your Product

Thank you for choosing Quest. Please take the time to complete your product registration card which is included with the packaging.

Registering your Quest Engineering product will:

- **CONFIRM YOUR WARRANTY**
- **REGISTER YOUR PRODUCT**
- **PROTECT YOUR NEW PRODUCT**

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