High Performance, High Sound Pressure Level Sound System

Owners Manual





Performance Series

High Performance, High Sound Pressure Level Sound System

Features:

- Long throw bass units
- High long term power handling
- Very low distortion
- Very high SPL
- Remarkable dynamic range and transient response
- Fast, easy and simple installation
- Suitable for a wide range of applications:
 Dedicated Cinemas, Screening Rooms and most commercial applications

Performance Series Overview:

The Performance Series is a unique cocktail, combining the award winning Artcoustic array technology, multi coupled sub units and high pressure levels, all carefully aligned within well-ordered Danish design principals.

The Performance Series full stack is capable of 140dB sound pressure level. It has been designed and engineered for a diverse range of applications, such as medium to large size cinema rooms, fixed installation public address systems and extending even further towards the demanding club stack market.

With our unique multiple cone array technology, we achieve a very flat audio response from 15Hz – 20kHz, with extremely low distortion, guided directivity and all combined with very high sound pressure levels.

The Performance P12-6 array speaker and PS6 subwoofers is available with an optional PA-750 single amplifier. Other high quality professional grade amplifier with a minimum of 750watt into 8 ohms can be used



Specifications P12-6 Narrow Dispersion Array Speaker

Transducer:

LF/MF 12 x 3 inch cone, Symmetric Phase Aligned HF 6 x 1 inch Dual Ring Radiator, Symmetric Phase Aligned This model can be used as a single sound reinforcement speaker, or mounted as multiples with adjustable angles.

It is also ideal either wall mounted or ceiling mounted as surround and overhead speaker in larger sound pressure level demanding cinema applications

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

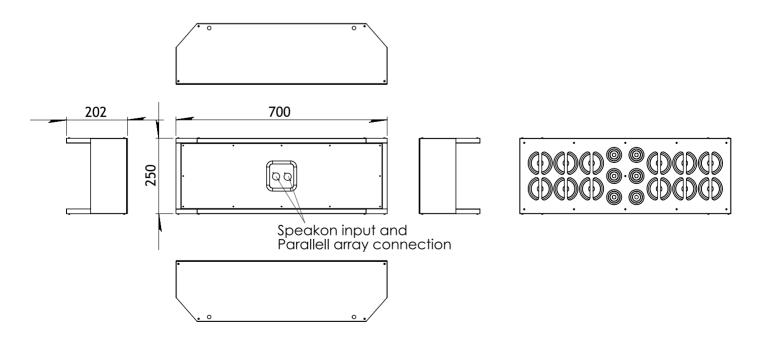
Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6dB) to 20 kHz
Nominal Beamwidth Horizontal 60° Vertical 45°-6dB
Axial Sensitivity (half space SPL) LF/MF-HF 106 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF/MF-HF 126dB @ 40watt
Input Impedance Nominal Minimum 12 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Weight 14 kg
Dimensions H: 250 W: 700 D: 100 mm

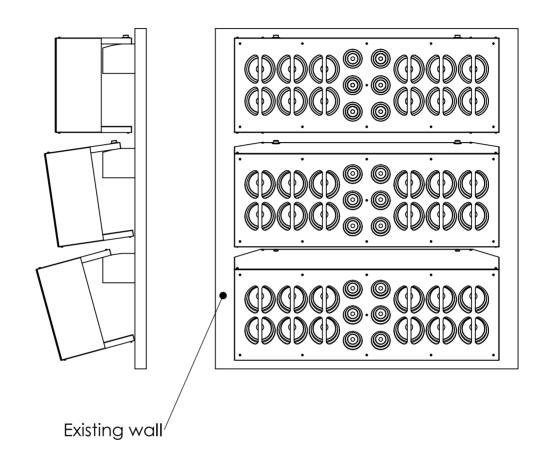
Cabinet: Black, RAL, NCS, Tikkurila, Gloss

Performance P12-6 Array Speaker

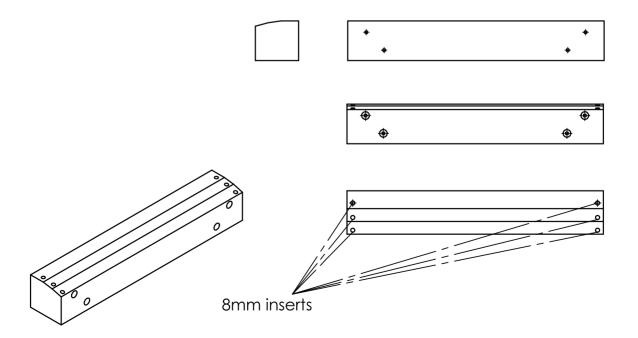




Adjustable wall mounted array, for optimal vertical dispersion

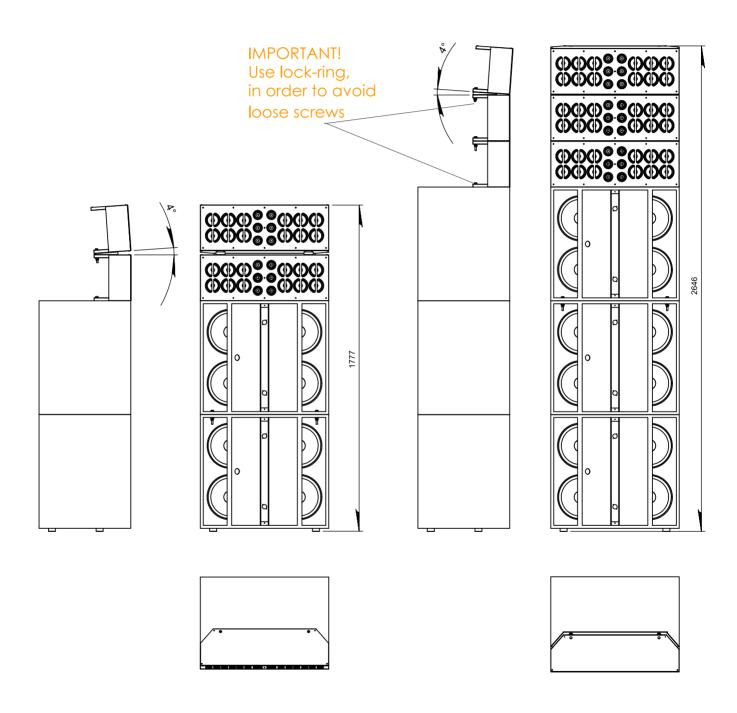


3 step wall mount bracket





PS4 Stack options, optional array angle, 0 degrees, 4 degrees, 8 degrees, 12 degrees, both inward and outward array



Specification Performance PS4 Subwoofer

Single Sub unit specifications - Single amped

Transducer:

LF 4 x 10 inch cones

Connection:

Single Amped Speakon Terminals

Performance:

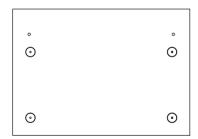
Operating Range 20 Hz (-6dB) to 400Hz
Axial Sensitivity (Half space SPL) LF 103 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF 125dB @ 450watt
Input Impedance Nominal Minimum 8 ohms
Recommended Low Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 400 Watt
Weight 50kg

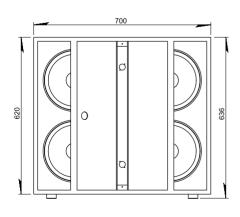
Cabinet: Black, RAL, NCS, Tikkurila, Gloss

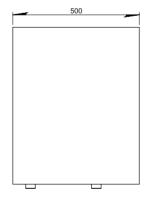
Dimensions H: 620 W: 700 D: 500 mm

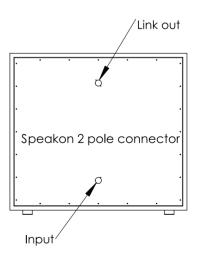
The PS4 is a multi-drive unit coupled, high sound pressure level and very low f6 point (25Hz) subwoofer, making it suitable for the most demanding applications. The PS4 can be used as a single subwoofer for typical sub-sat applications, or as a more powerful stackable solution, catering for larger cinema installations and the demanding high output club and public address scene.

Performance PS4 Subwoofer



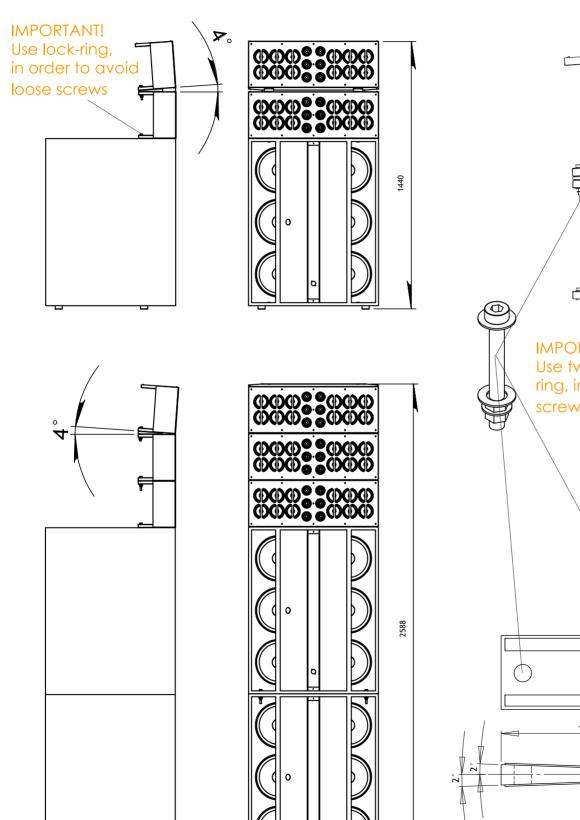


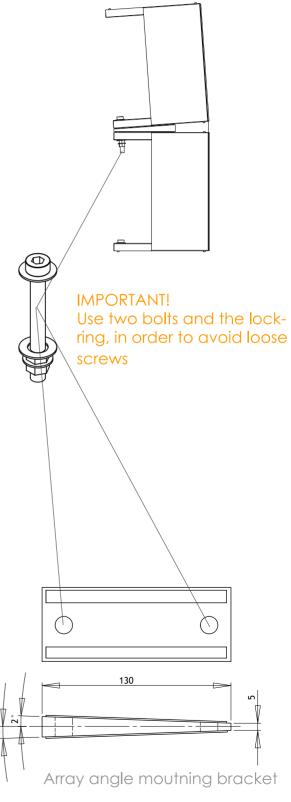






PS6 Stack options, optional array angle, 0 degrees, 4 degrees, 8 degrees, 12 degrees, both inward and outward array







Specification Performance PS6 Subwoofer

Single Sub unit specifications - Single amped

Transducer:

LF 6 x 10 inch cones

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 20 Hz (-6dB) to 400Hz

Axial Sensitivity (Half space SPL) LF 108 dB

Calculated Axial Output Limit (half space SPL)

Average Peak LF 136dB @ 370watt

Input Impedance Nominal Minimum 4 ohms

Recommended Low Pass Filter =>100 Hz, 24 dB/octave

Maximum Power Handling 400 Watt

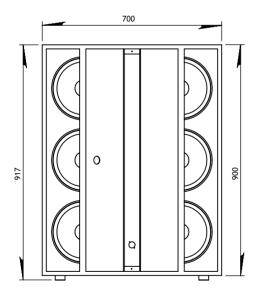
Weight 90kg

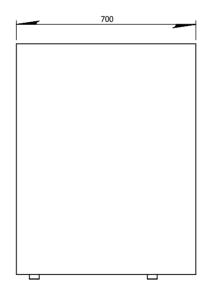
Dimensions H: 900 W: 700 D: 700 mm

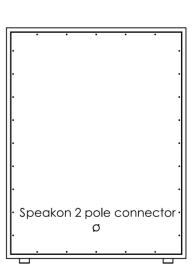
Cabinet: Black, RAL, NCS, Tikkurila, Gloss

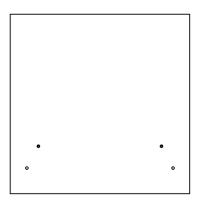
The PS6 is a multi-drive unit coupled, high sound pressure level and very low f6 point (20Hz) subwoofer, making it suitable for the most demanding applications. The PS6 can be used as a single subwoofer for typical sub-sat applications, or as a more powerful stackable solution, catering for larger cinema installations and the demanding high output club and public address scene.

Performance PS6 Subwoofer









Sub satellite option PS-4

Top array specifications - Single amped

Transducer:

LF-MF 24×3 inch cone, Symmetric Phase Aligned HF 12×1 inch Dual Ring Radiator, Symmetric Phase Aligned

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6 dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45° (top angled 55°)

Axial Sensitivity (half space SPL) LF/MF-HF 112 dB Calculated Axial Output Limit (half space SPL) Average Peak LF/MF-HF 132dB @ 30watt Input Impedance Nominal Minimum 6 ohms Recommended High Pass Filter =>100 Hz, 24 dB/octave Maximum Power Handling 100 Watt Sub unit specifications - Singled amped

Transducer:

LF 4 x 10 inch cones

Connection:

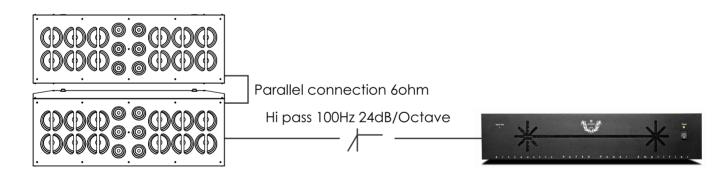
Single Amped Speakon Terminals

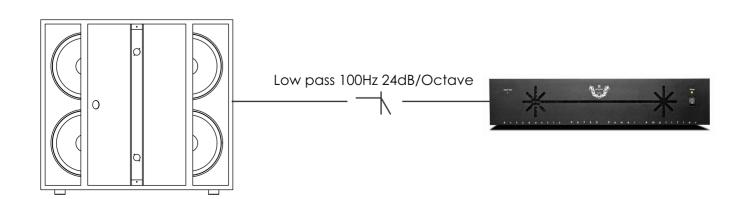
Performance:

Operating Range 20 Hz (-6dB) to 400Hz
Axial Sensitivity (Half space SPL) LF 103 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF 130dB @ 450watt
Input Impedance Nominal Minimum 8 ohms
Recommended Low Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 400 Watt

Weight 50kg

Dimensions H: 620 W: 700 D: 500 mm





Stack option PS4 1

Top array specifications - Single amped

Transducer:

LF-MF 24×3 inch cone, Symmetric Phase Aligned HF 12×1 inch Dual Ring Radiator, Symmetric Phase Alianed

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Dimensions H: 500 W: 700 D: 100 mm

Performance:

Operating Range 55 Hz (-6dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45°(top angled 55°)

Axial Sensitivity (half space SPL) LF/MF-HF 112 dB Calculated Axial Output Limit (half space SPL) Average Peak LF/MF-HF 132dB @ 30watt Input Impedance Nominal Minimum 6 ohms Recommended High Pass Filter =>100 Hz, 24 dB/octave Maximum Power Handling 100 Watt Weight 28 kg Sub units specifications - Singled amped

Transducer:

LF 8 x 10 inch cones

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 20 Hz (-6dB) to 400Hz

Axial Sensitivity (Half space SPL) LF 111 dB

Calculated Axial Output Limit (half space SPL)

Average Peak LF 139dB @ 450watt

Input Impedance Nominal Minimum 4 ohms

Recommended Low Pass Filter =>120 Hz, 24 dB/octave

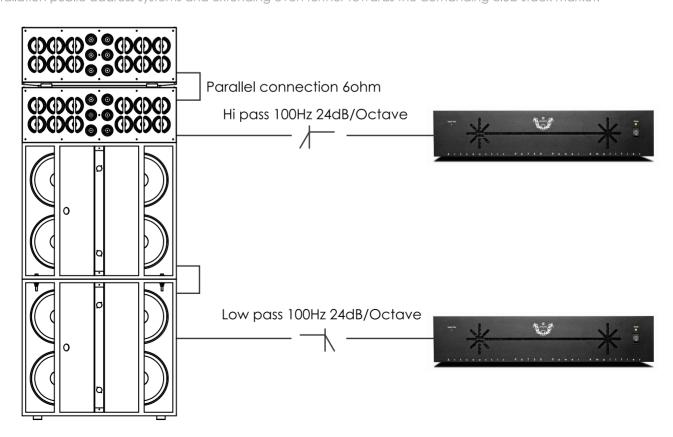
Maximum Power Handling 400 Watt

Weight 100kg

Dimensions H: 1777 W: 700 D: 700 mm

Stack option PS4 1 combined weight 128kg Stack option PS4 1 combined Dimensions H: 1777 W: 700 D: 500 mm

The Performance Series PS4 stack option 1 is capable of 139dB low frequency sound pressure level. It has been designed and engineered for a diverse range of applications, such as medium to large size cinema rooms, fixed installation public address systems and extending even further towards the demanding club stack market.





Stack option PS4 2

Top array specifications - Single amped

Transducer:

LF-MF 36×3 inch cone, Symmetric Phase Aligned HF 18×1 inch Dual Ring Radiator, Symmetric Phase Alianed

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6 dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45°(top angled down 60°)

Axial Sensitivity (half space SPL) LF/MF-HF 115 dB Calculated Axial Output Limit (half space SPL) Average Peak LF/MF-HF 135dB @ 25watt Input Impedance Nominal Minimum 4 ohms Recommended High Pass Filter =>100 Hz, 24 dB/octave Maximum Power Handling 100 Watt Sub units specifications - Singled amped

Transducer:

LF 12 x 10 inch cones

Connection:

Bi Amped Speakon Terminals

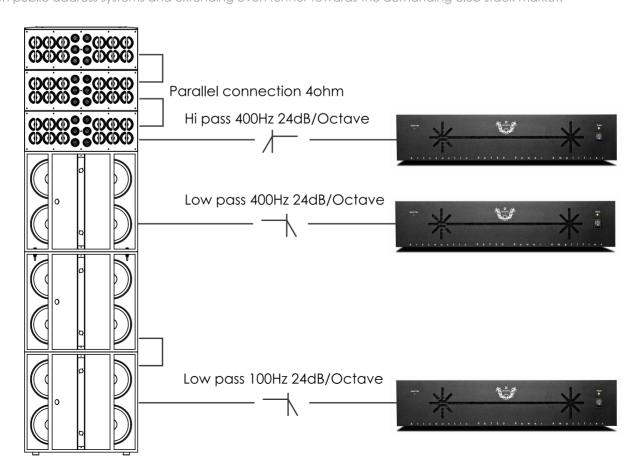
Performance:

Operating Range 20 Hz (-6dB) to 400Hz
Axial Sensitivity (Half space SPL) LF 114 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF 142dB @ 450watt
Input Impedance Nominal Minimum 4 & 8 ohms
Recommended Low Pass Filter =>120 & 400 Hz, 24
dB/octave
Maximum Power Handling 400 Watt

Weight 178 kg Dimensions H: 2646 W: 700 D: 500 mm

Stack option PS4 2 combined weight 178kg Stack option PS4 2 combined Dimensions H: 2646 W: 700 D: 500 mm

The Performance Series PS4 stack option 2 is capable of 142dB low frequency sound pressure level. It has been designed and engineered for a diverse range of applications, such as medium to large size cinema rooms, fixed installation public address systems and extending even further towards the demanding club stack market.



Sub satellite option PS6

Top array specifications - Single amped

Transducer:

LF-MF 24 x 3 inch cone, Symmetric Phase Aligned HF 12 x 1 inch Dual Ring Radiator, Symmetric Phase Aligned

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6 dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45° (top angled 55°)

Axial Sensitivity (half space SPL) LF/MF-HF 112 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF/MF-HF 132dB @ 30watt
Input Impedance Nominal Minimum 6 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt

Sub unit specifications - Singled amped

Transducer:

LF 6 x 10 inch cones

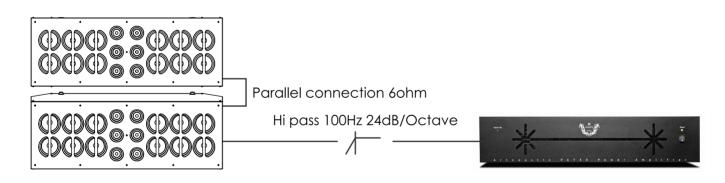
Connection:

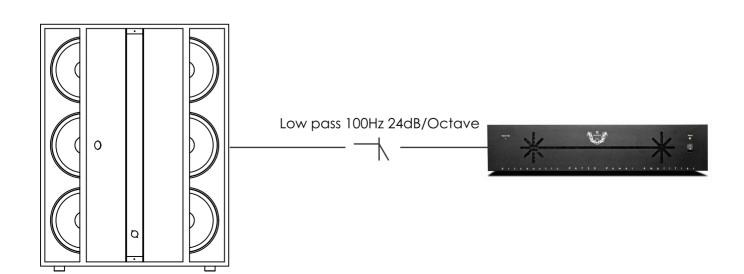
Single Amped Speakon Terminals

Performance:

Operating Range 20 Hz (-6dB) to 400Hz
Axial Sensitivity (Half space SPL) LF 108 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF 136dB @ 370watt
Input Impedance Nominal Minimum 4 ohms
Recommended Low Pass Filter =>120 Hz, 24 dB/octave
Maximum Power Handling 400 Watt

Weight 90kg Dimensions H: 900 W: 700 D: 700 mm





Stack option PS6 1

Top array specifications - Single amped

Transducer:

LF-MF 24 x 3 inch cone, Symmetric Phase Aligned HF 12 x 1 inch Dual Ring Radiator, Symmetric Phase Alianed

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45°(top angled 55°)

Axial Sensitivity (half space SPL) LF/MF-HF 112 dB
Calculated Axial Output Limit (half space SPL)
Average Peak LF/MF-HF 132dB @ 30watt
Input Impedance Nominal Minimum 6 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Weight 28 kg

Dimensions H: 500 W: 700 D: 100 mm

Sub unit specifications - Singled amped

Transducer:

LF 6 x 10 inch cones

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 20 Hz (-6dB) to 400Hz

Axial Sensitivity (Half space SPL) LF 108 dB

Calculated Axial Output Limit (half space SPL)

Average Peak LF 136dB @ 370watt

Input Impedance Nominal Minimum 4 ohms

Recommended Low Pass Filter =>120 Hz, 24 dB/octave

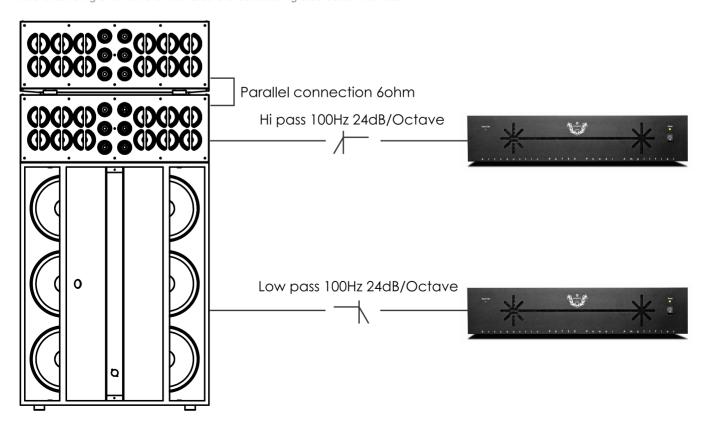
Maximum Power Handling 400 Watt

Weight 90kg

Dimensions H: 900 W: 700 D: 700 mm

Stack option PS6 1 combined weight 118kg Stack option PS6 1 combined Dimensions H: 1440 W: 700 D: 700 mm

The Performance Series PS6 stack option 1 is capable of 136dB sound pressure level. It has been designed and engineered for a diverse range of applications, such as medium to large size cinema rooms, fixed installation public address systems and extending even further towards the demanding club stack market.



Stack option PS6 2

Top array specifications - Single amped

Transducer:

LF-MF 36 x 3 inch cone, Symmetric Phase Aligned HF 18 x 1 inch Dual Rina Radiator, Symmetric Phase

Crossover:

Low Pass Filter 6 dB/octave 1000 Hz High Pass 12 dB/octave 4000Hz

Connection:

Single Amped Speakon Terminals

Performance:

Operating Range 55 Hz (-6 dB) to 20 kHz Nominal Beamwidth Horizontal 80° Vertical 45° (top angled down 60°)

Axial Sensitivity (half space SPL) LF/MF-HF 115 dB Calculated Axial Output Limit (half space SPL) Average Peak LF/MF-HF 135dB @ 25watt Input Impedance Nominal Minimum 4 ohms Recommended High Pass Filter =>100 Hz, 24 dB/octave Sub unit specifications - Bi-amped

Transducer:

LF 12 x 10 inch cones

Connection:

Bi Amped Speakon Terminals

Performance:

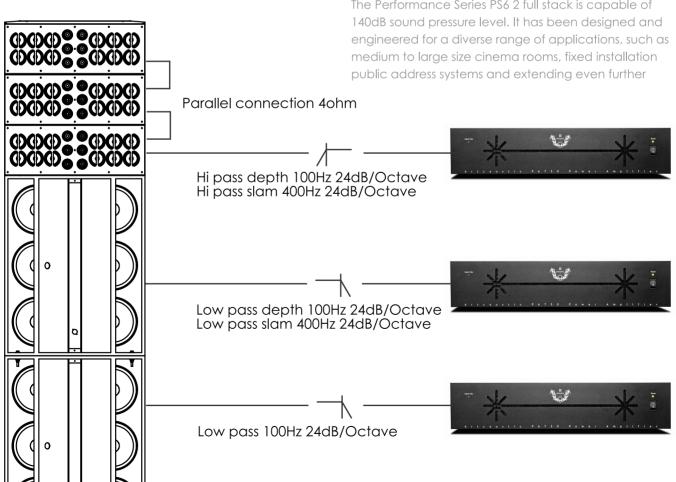
Operating Range 20 Hz (-6dB) to 400Hz Axial Sensitivity (Half space SPL) LF 115 dB Calculated Axial Output Limit (half space SPL) Average Peak LF 139dB @ 370watt Input Impedance Nominal Minimum 4 ohm Recommended Low Pass Filter => 100 to 400 Hz, 24 dB/octave

Maximum Power Handling 400 Watt

Stack option PS6 2 combined weight 222kg

Stack option PS6 2 combined Dimensions H: 2588 W: 700 D: 700 mm

The Performance Series PS6 2 full stack is capable of 140dB sound pressure level. It has been designed and medium to large size cinema rooms, fixed installation public address systems and extending even further



PA-250 & PA-750 Professional Single Channel Amplifier

Artcoustic has designed and engineered the PA-250 & PA-750 Professional Single Channel Amplifier. The PA-250 & PA-& PA-750 performs smoothly and accurately even in the most demanding conditions. The PA-250 & PA-750 is matched to all the Artcoustic subwoofer's impedance and tonality, making a perfect match with amazing detail, control and dynamics.

The PA-250 & PA-750 offers incredible single channel performance in a rack mountable chassis just 2U high. This together with it's high performance and silent running dual fan speed cooling system means it is suitable for almost any application, from recording studios to commercial bars & restaurants, high quality hi-fi and home cinema systems. It features one single mono block with a total of 250 watt 80hm and 750 watt 8 ohm.

Artcoustic PA-250 & PA-750 single channel amplifier features

- Only 2 rack units high, means It has a very high output while occupying minimal rack space.
- Input sensitivity control.
- Signal presence and protection indicator.
- Unbalanced input via RCA connectors, balanced
- Input via XLR
- Stable performance down to 4 ohms.
- Auto turn on, turn off signal sensing
- Crossover, **PA-250** low-pass, full range, 100 Hz. and 120 Hz. 24 dB. per octave
- Crossover, **PA-750** low-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- Crossover, **PA-750** hi-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- EQ. PA-750 Slam, depth 1 and depth 2
- High current bi-polar technology.
- Single monoblock amplifier PCB design
- Extended protection circuit.
- Step less Fan system(Temperature controlled)
- Totally protected against overheating and shorting and includes DC prevention at the output stage.
- 1 year warranty.

PA-250 features



PA-750 features



PA-250 Technical Specification

4 ohm 400 WRMS 8 ohm 250 WRMS

Power consumption: 300 watt / 1024BTU/H

- Full range: 20 Hz-20 KHz ± 0.5 dB
- Low-pass: 20 Hz-100 Hz 24 dB / oct. 20 Hz-120 Hz 24 dB / oct
- S/N Ratio: >95 dB
- THD (at 1 W into 8 ohms, 1 KHz): <0.05%
- Damping factor: >300
- Input impedance: 20 Kohms balanced, 10 Kohms unbalanced
- Maximum input level: 3 V
- Load impedance: 4-8 ohm
- Input sensitivity: 1.0 (0 dB)
- Power supply: 115 V/230 V-50/60 Hz
- Cooling: Step less Fan system (Temperature controlled)
- Input terminal: RCA, XLR
- Output terminal: Binding post
- Protection: Heat, over current, Short and DC
- Dimensions (H x W x D) : $90 \times 430 \times 253$ mm
- Weight: 12.7Kg

PA-750 Technical Specification

8 ohm 750 WRMS

Power Consumption: 800 watt / 2730BTU/H

- Full range: 20 Hz-20 KHz ± 0.5 dB
- Low-pass: 20 Hz-100 Hz 24 dB / oct. 20 Hz-400 Hz 24 dB / oct
- Hi pass: 100 Hz-20 KHz 24 dB / oct. 400 Hz-20 kHz 24 dB / oct
- S/N Ratio: >105 dB
- -THD (at 1 W into 8 ohms, 1 KHz): <0.05%
- Damping factor: >500
- Input impedance: 20 Kohms balanced, 10 Kohms unbalanced
- Maximum input level: 3 V
- Load impedance: 4-8 ohm
- Input sensitivity: 1.0 (0 dB)
- Power supply: 115 V/230 V-50/60 Hz
- Cooling: Step less Fan system (Temperature controlled)
- Input terminal: RCA, XLR
- Output terminal: Binding post
- Protection: Heat, over current, Short and DC
- Dimensions (H x W x D) : 90 x 430 x 253mm
- Weight : 15.5Kg

PA-250 Front Panel



PA-750 Front Panel with optional rack mount



PA-250 Rear Panel



PA-750 Front Panel



