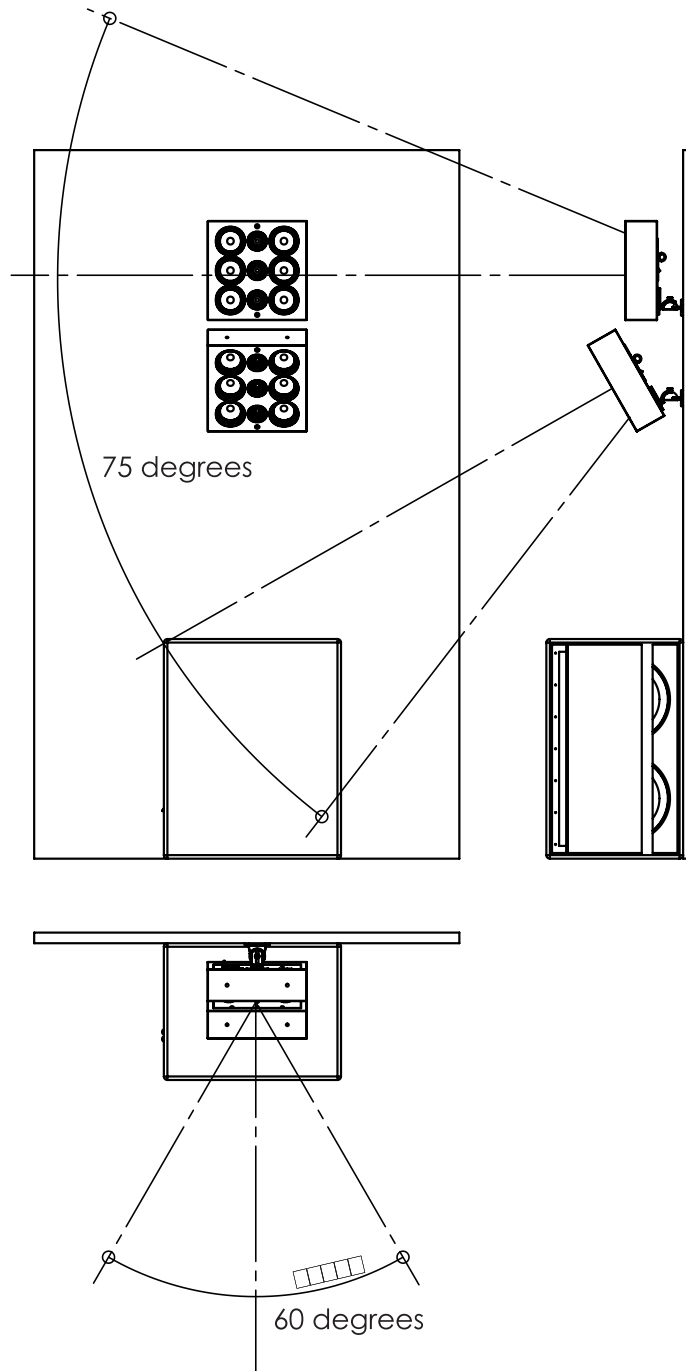


PERFORMANCE SERIES OWNERS MANUAL



Welcome to the world of Artcoustic!

Congratulations with your purchase of the Artcoustic Performance series product.

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 array options is capable of 130+dB 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 and fixed installation 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.

Thank you for purchasing an Artcoustic product.

All the best,
The Artcoustic Team

PERFORMANCE SERIES FEATURES

Performance Series 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

PDA1000 Amplifier features

PDA1000 only occupies a 1U rack space and weighs as little as 2.8 kg making it an ideal choice in a already crowded equipment rack.

- Input sensitivity control
- Signal presence, clip and protection indicator
- balanced Input via XLR
- Stable performance down to 4 ohms.
- Auto turn on, turn off - signal sensing
- Crossover, low-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- Crossover, hi-pass, full range, 100 Hz. and 400 Hz. 24 dB. per octave
- ASOF (Artcoustic Subwoofer Continued Filter) Slam, depth 1 and depth 2
- High current bi-polar technology
- Extended protection circuit

SPECIFICATIONS

Specifications Performance A6 Narrow Dispersion Array Speaker

Transducer:

LF/MF 6 x 3 inch cone, Symmetric Phase Aligned

HF 3 x 1 inch Dual Ring Radiator, Symmetric Phase Aligned

Crossover:

Low Pass Filter 6 dB/octave

High Pass 12 dB/octave

Connection:

Single Amped Speakon Terminals and binding posts

Performance:

Operating Range 70 Hz (-6dB) to 20 kHz

Nominal Beamwidth Horizontal 60° Vertical 45° -6dB

Input Impedance Nominal Minimum 11 ohms

Sensitivity 1 Watt @ 10 ohm 95 dB Full Space, 98 dB Half Space

Long Term SPL 90 Watt 115 dB Full Space, 118 dB Half Space

Short Term (Damage) SPL 150 watt 117 dB Full Space, 120 dB Half Space

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

Weight 5.5 kg

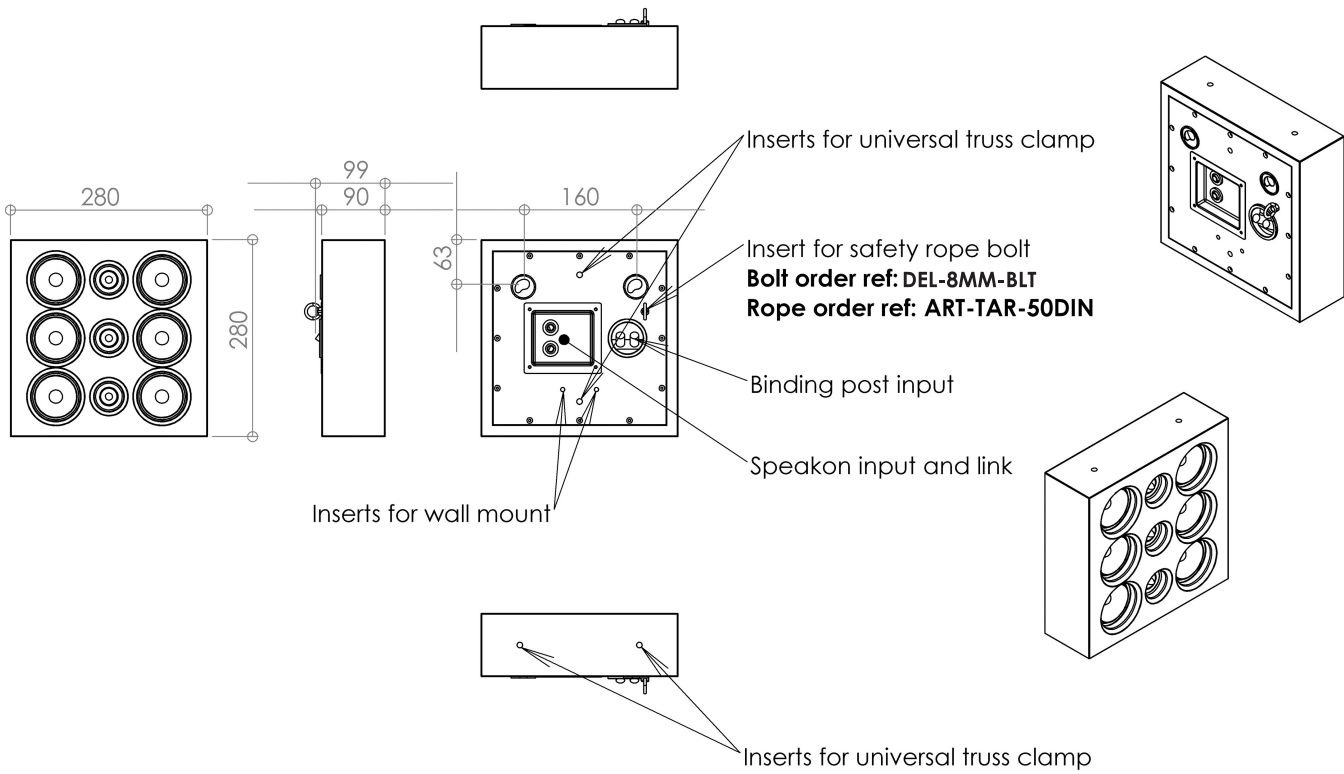
Dimensions H: 280 W: 280D: 99 mm

Cabinet: Black Performance Finish.

Performance A6

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

PERFORMANCE A6 SCHEMATICS



SPECIFICATIONS

Specifications Performance PS2 Subwoofer

Single Sub unit specifications - Single amp

Transducer:

LF 2 x 10 inch cones

Connection:

Single Amped Speakon and push terminals

Performance:

Operating Range 25 Hz (-6dB) to 400Hz

Input Impedance Nominal Minimum 8 ohms

Sensitivity 1 Watt @ 12 ohm 98 dB Half Space

Long Term SPL 320 Watt 124 dB Half Space

Short Term (Damage) SPL 600 watt 126 dB Half Space

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

Weight 30kg

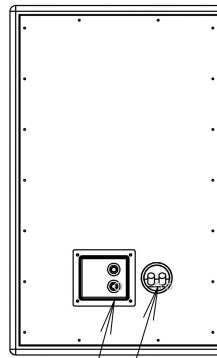
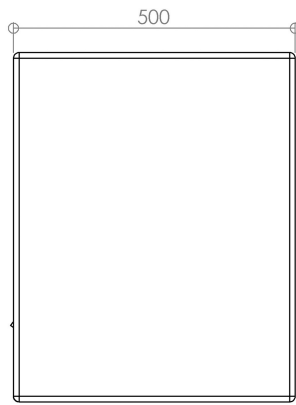
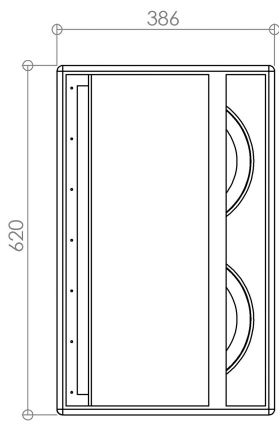
Dimensions H: 620 W: 386 D: 500 mm

Cabinet: Black Performance Finish

Performance PS2 Subwoofer

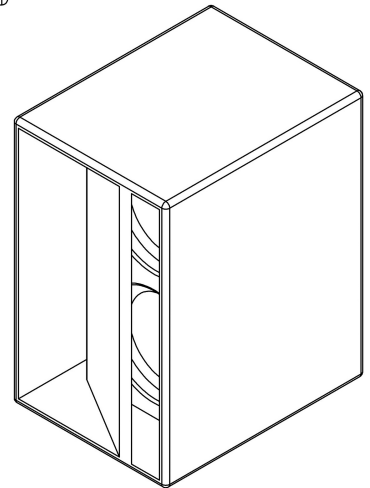
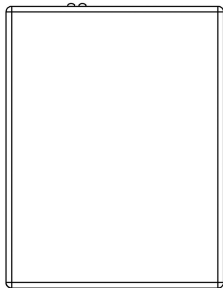
The Performance PS2 sub, is a dual cone coupled design, with a directional horn load and it has an even further extension in the dynamic range combined with very high sound pressure level at frequencies below 25Hz. The Performance PS2 sub has 2 x long throw 10" bass units for impressive power, depth and dynamics. Use multiples for medium to large rooms.

PERFORMANCE PS2 SCHEMATICS



Speakon input and link

Gold plated binding posts



SPECIFICATIONS

Specifications Performance PS4 Subwoofer

Single Sub unit specifications - Single amp

Transducer:

LF 4 x 10 inch cones

Connection:

Single Amped Speakon Terminals and binding posts

Performance:

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

Input Impedance Nominal Minimum 6 ohms

Sensitivity 1 Watt @ 6 ohm 101 dB Half Space

Long Term SPL 640 Watt 130 dB Half Space

Short Term (Damage) SPL 1200 watt 132 dB Half Space

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

Weight 54kg

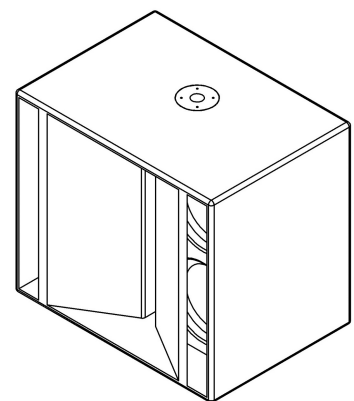
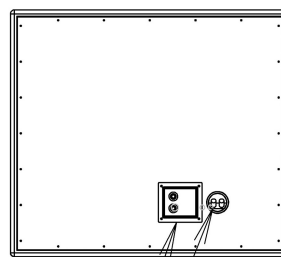
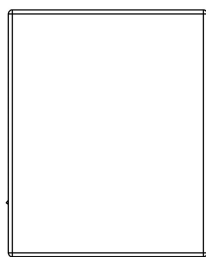
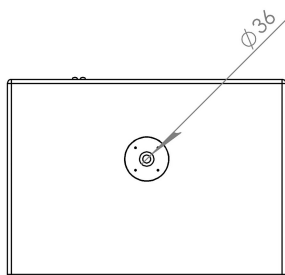
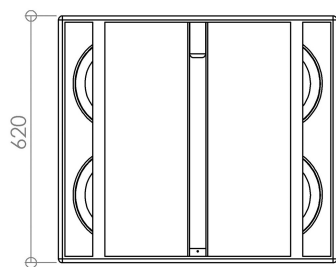
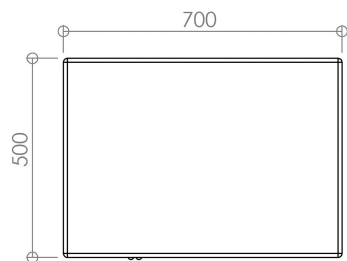
Dimensions H: 620 W: 700 D: 500 mm

Cabinet: Black Performance Finish.

Performance PS4 Subwoofer

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 SCHEMATICS



SPECIFICATIONS

Specifications Performance PS6 Subwoofer

Single Sub unit specifications - Single amp

Transducer:

LF 6 x 10 inch cones

Connection:

Single Amped Speakon Terminals

Performance:

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

Input Impedance Nominal Minimum 9 ohms

Sensitivity 1 Watt @ 9 ohm 103 dB Half Space

Long Term SPL 960 Watt 134 dB Half Space

Short Term (Damage) SPL 1800 watt 136 dB Half Space

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

Weight 77kg

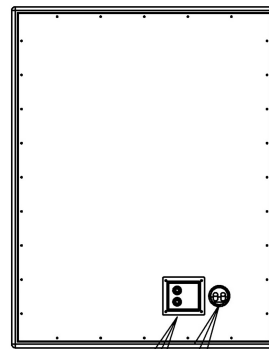
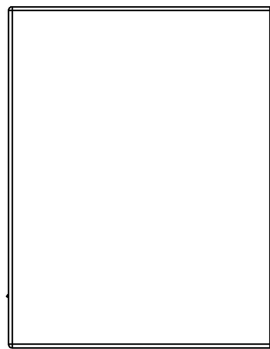
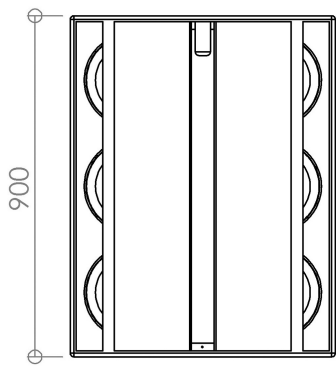
Dimensions H: 900 W: 700 D: 700 mm

Cabinet: Black Performance Finish.

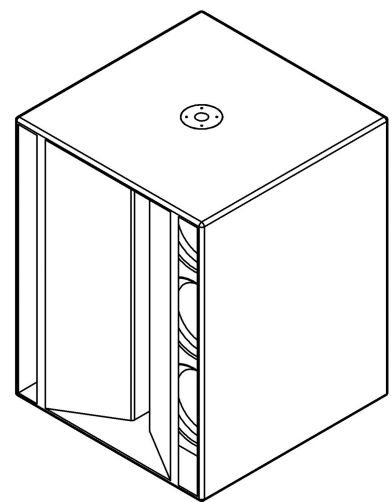
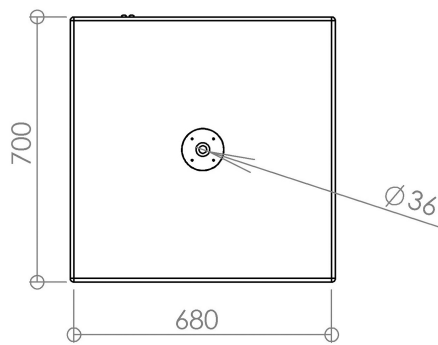
Performance PS6 Subwoofer

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 SCHEMATICS



Speakon input and link
Gold plated
binding posts



DOLBY DARDT SPECIFICATIONS

Dolby Audio Room Design Tool Software

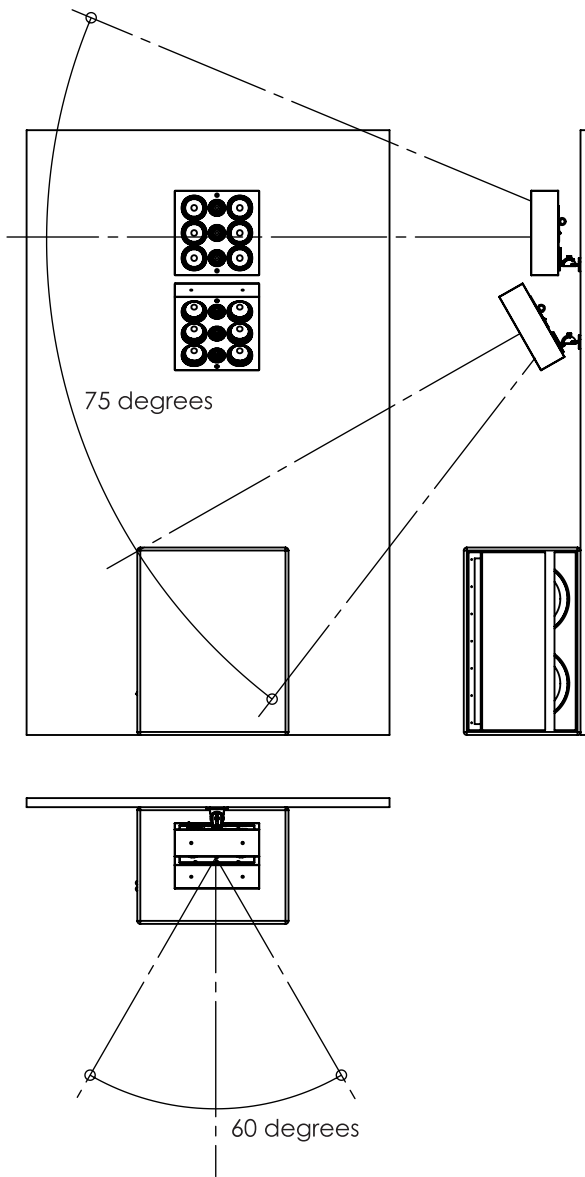
Artcoustic loudspeakers has proudly been included in the Dolby (DARDT) Dolby Audio Room Design Tool software, which is a highly advanced program helping installers world-wide specifying the right type and amount of speakers for a given size room, the Dolby DARDT setup is mainly made with focus on larger size cinemas, but can also be used for smaller type of home cinema and multi-purpose media-rooms. With DARDT it has now somehow become easier to source the right speakers, which boast suitable SPL, dispersion pattern and power handling, on top of that, DARDT can in a straight forward way, help calculating exact speaker positions, mount angles amongst many other important and helpful details involved with a state-of-the-art multi-channel audio installation.

In this manual we illustrate the Artcoustic screen speaker setup as they have been included in the DARDT files, as it necessarily for Dolby specified screen speakers to operate down to 45 Hz each array combination has been matched with a suitable LFE Artcoustic subwoofer.

For more information on DARDT, please contact Artcoustic. artcoustic@artcoustic.com

DOLBY DARDT SPECIFICATIONS

DARDT PERFORMANCE A6 ARRAY 1



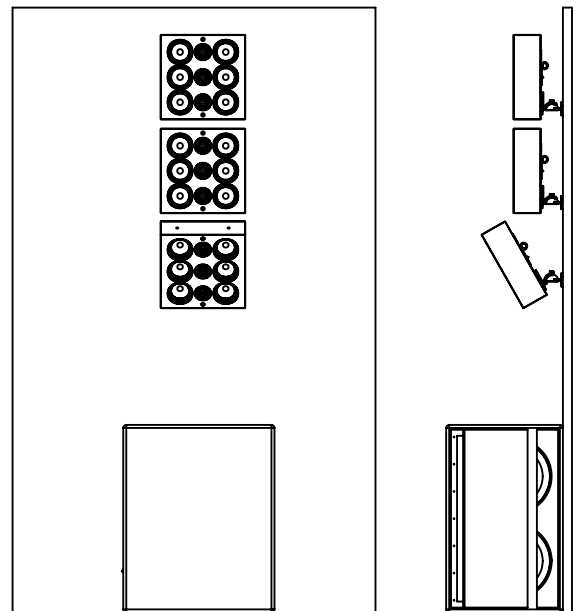
2 x Performance A6 Array 1. Single amp channel parallel connection:

Operating Range 70 Hz (-6dB) to 20 kHz
 Nominal Beamwidth Horizontal 60° Vertical 75° -6dB
 Input Impedance Nominal Minimum 5.5 ohms
 Sensitivity 1 Watt @ 5.5 ohm 101 dB Full Space,
 104 dB Half Space
 Long Term SPL 180 Watt 124 dB Full Space,
 127 dB Half Space
 Short Term (Damage) SPL 300 watt 126 dB Full Space,
 129 dB Half Space
 Recommended High Pass Filter =>100 Hz, 24 dB/octave

1 x Performance PS2 sub. Single amp channel:

Operating Range 25 Hz (-6dB) to 400Hz
 Input Impedance Nominal Minimum 8 ohms
 Sensitivity 1 Watt @ 12 ohm 98 dB Half Space
 Long Term SPL 320 Watt 124 dB Half Space
 Short Term (Damage) SPL 600 watt 126 dB Half Space
 Recommended Low Pass Filter =>100 Hz, 24 dB/octave

DARDT PERFORMANCE A6 ARRAY 2



3 x Performance A6 Array 2. Single amp channel parallel connection:

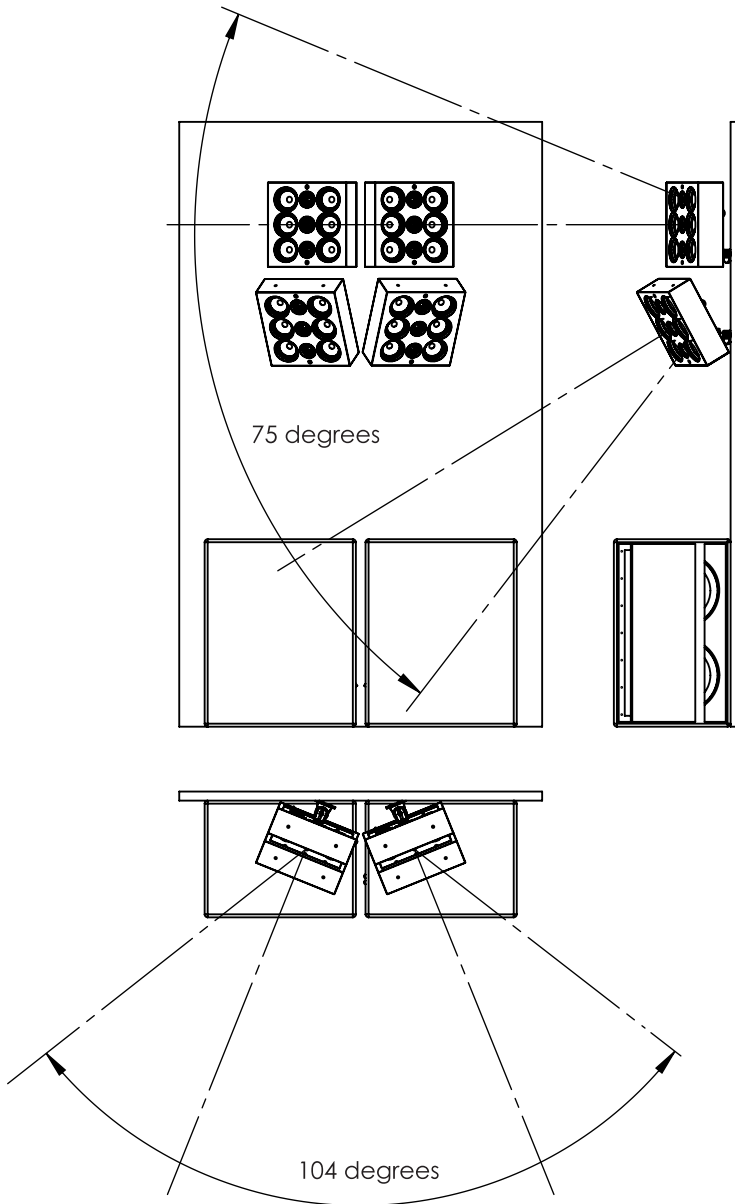
Operating Range 70 Hz (-6dB) to 20 kHz
 Nominal Beamwidth Horizontal 60° Vertical 75° -6dB
 Input Impedance Nominal Minimum 4 ohms
 Sensitivity 1 Watt @ 4 ohm 104 dB Full Space,
 107 dB Half Space
 Long Term SPL 270 Watt 129 dB Full Space,
 132 dB Half Space
 Short Term (Damage) SPL 450 watt 131 dB Full Space,
 134 dB Half Space
 Recommended High Pass Filter =>100 Hz, 24 dB/octave

1 x Performance PS2 sub. Single amp channel:

Operating Range 25 Hz (-6dB) to 400Hz
 Input Impedance Nominal Minimum 8 ohms
 Sensitivity 1 Watt @ 12 ohm 98 dB Half Space
 Long Term SPL 320 Watt 124 dB Half Space
 Short Term (Damage) SPL 600 watt 126 dB Half Space
 Recommended Low Pass Filter =>100 Hz, 24 dB/octave

DOLBY DARDT SPECIFICATIONS

DARDT PERFORMANCE A6 ARRAY 3



4 x Performance A6 Array 3. Single amp channel parallel connection:

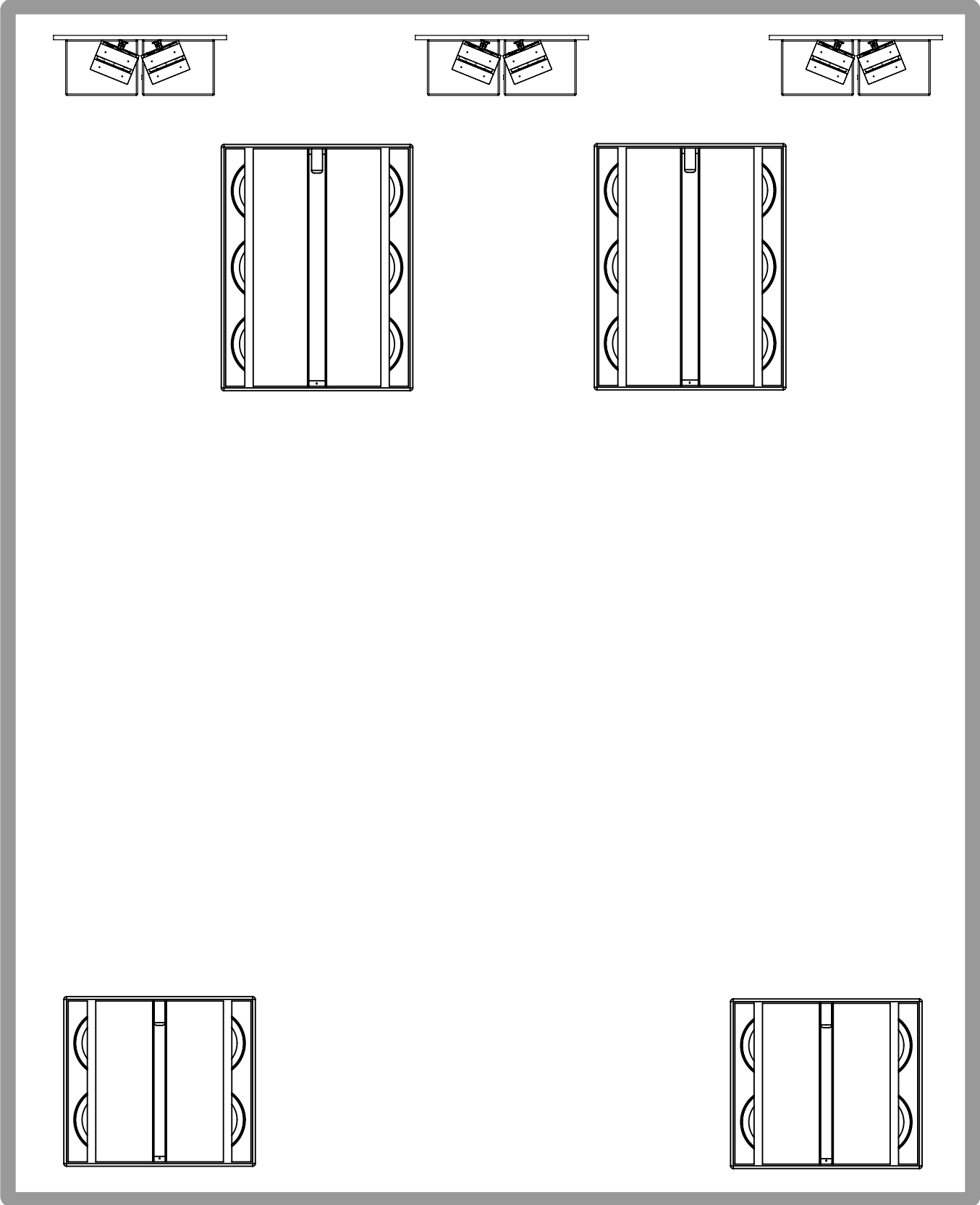
Operating Range 70 Hz (-6dB) to 20 kHz
Nominal Beamwidth Horizontal 104° Vertical 75° -6dB
Input Impedance Nominal Minimum 5.5 ohms
Sensitivity 1 Watt @ 2.75 ohm 107 dB Full Space,
110 dB Half Space
Long Term SPL 360 Watt 133 dB Full Space,
136 dB Half Space
Short Term (Damage) SPL 600 watt 136 dB Full Space,
139 dB Half Space
Recommended High Pass Filter =>100 Hz, 24 dB/octave

2 x Performance PS2 sub single amp channel parallel connection:

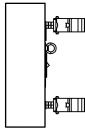
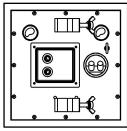
Operating Range 25 Hz (-6dB) to 400Hz
Input Impedance Nominal Minimum 6 ohms
Sensitivity 1 Watt @ 6 ohm 104 dB Half Space
Long Term SPL 640 Watt 133 dB Half Space
Short Term (Damage) SPL 1200 watt 136 dB Half Space
Recommended Low Pass Filter =>100 Hz, 24 dB/octave

DOLBY DARDT SPECIFICATIONS

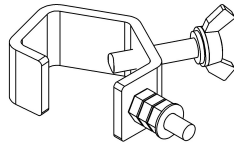
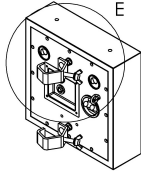
For ultimate performance, specify additional surround subwoofers, either Performance PS4 or PS6



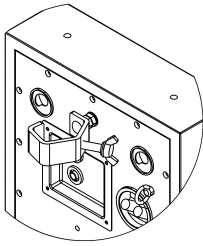
PERFORMANCE A6 RIGGING



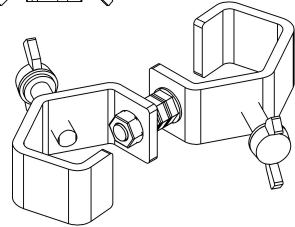
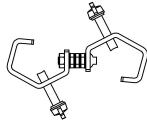
Order ref: Art-PAS1



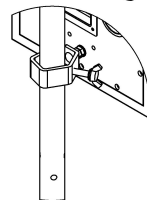
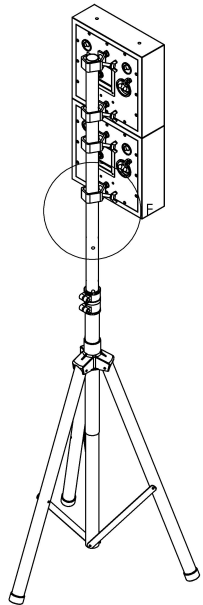
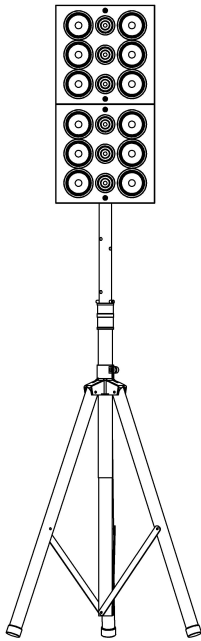
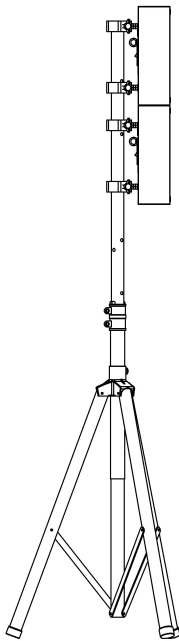
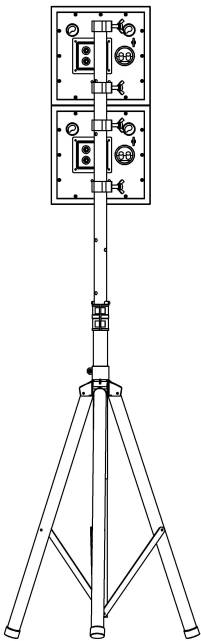
Universal 28mm-50mm truss clamp for rigging



DETAIL E
SCALE 1 : 5

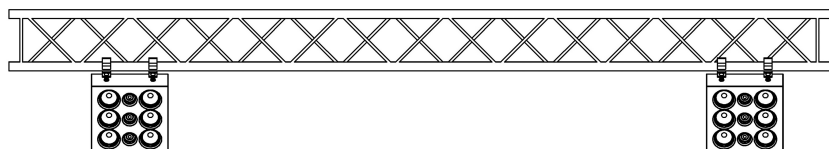
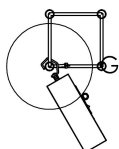
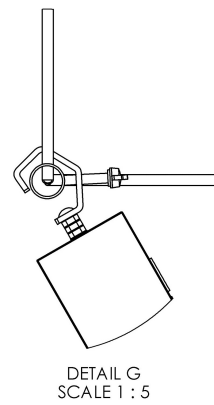
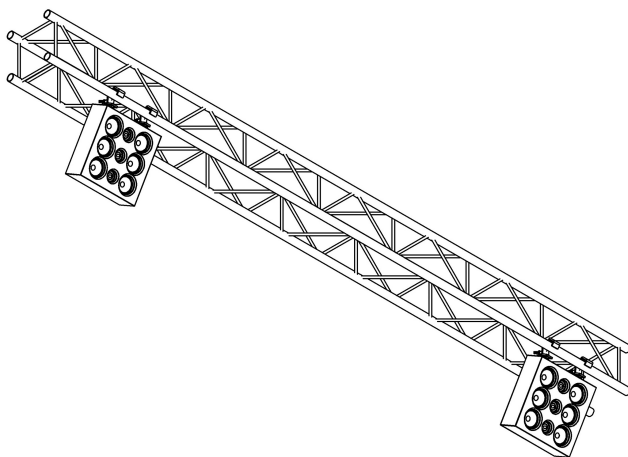
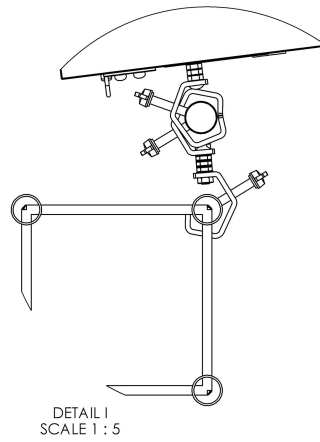
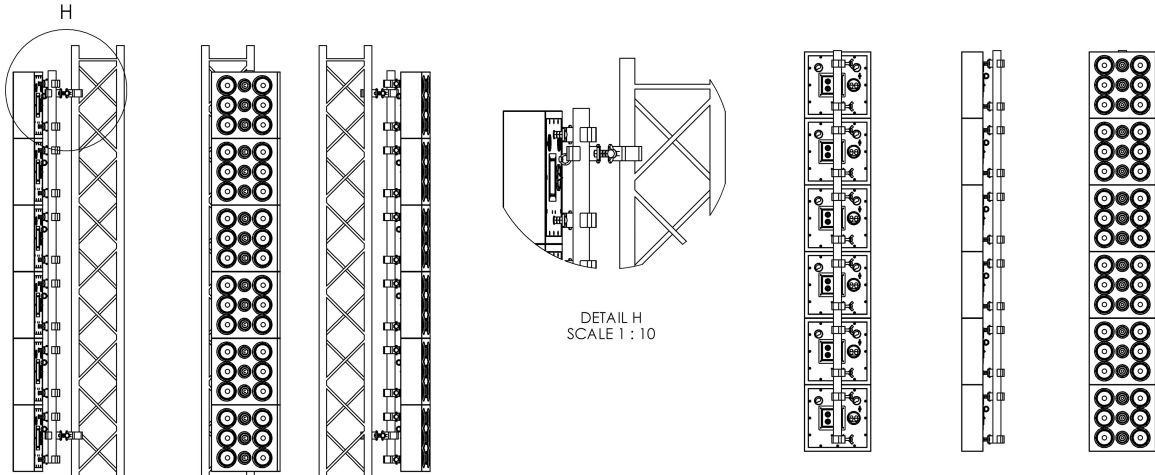


Combined universal 28mm-50mm truss clamp for rigging

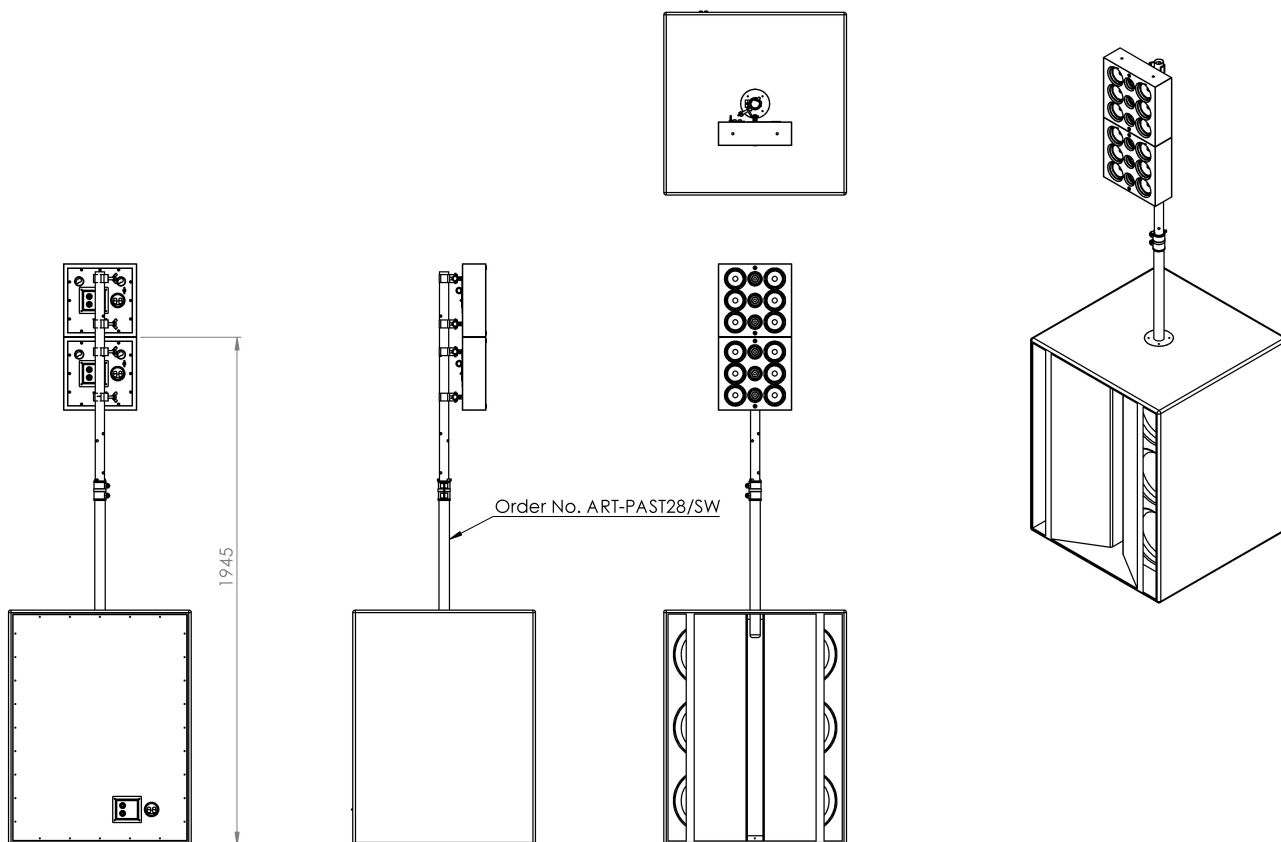
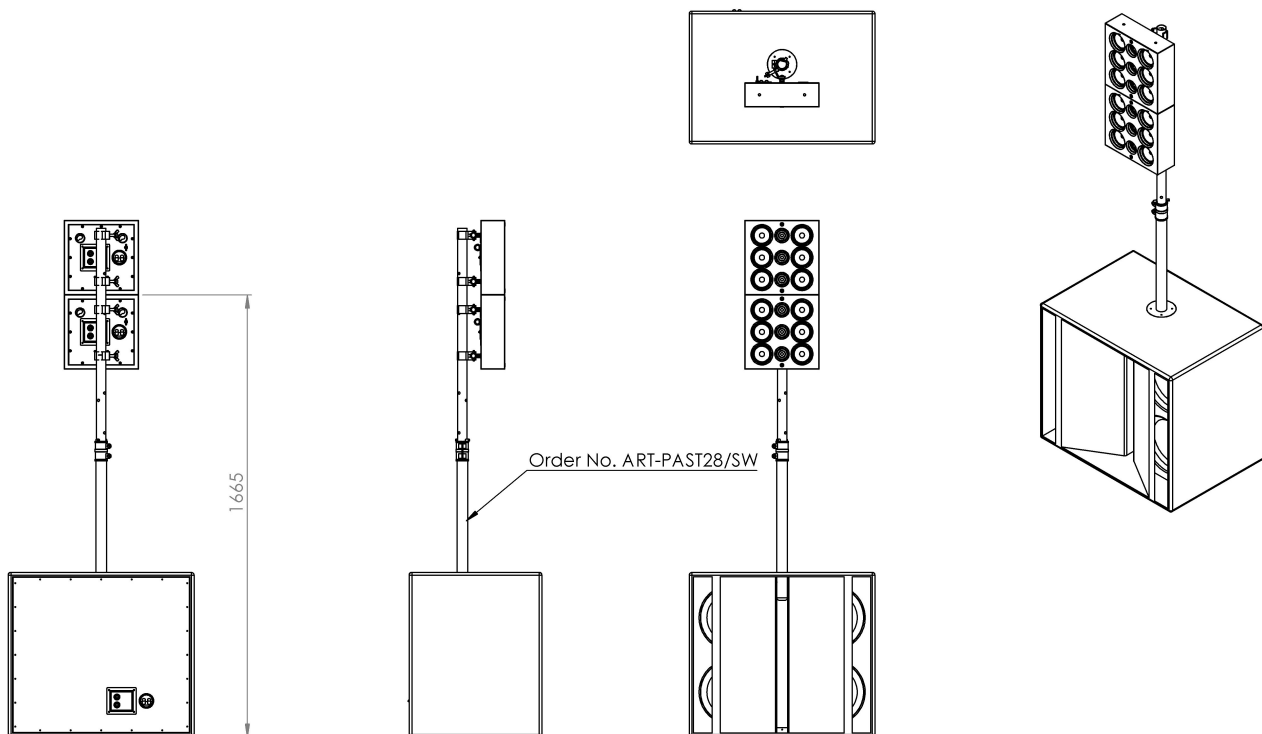


DETAIL F
SCALE 1 : 5

PERFORMANCE A6 RIGGING



PERFORMANCE A6 SUB-SAT



PDA1000 FEATURES

Small size and weight

PDA1000 only occupies a 1U rack space and weighs as little as 2.8 kg making it an ideal choice in a already crowded equipment rack.

Incredible class D amplifier performance

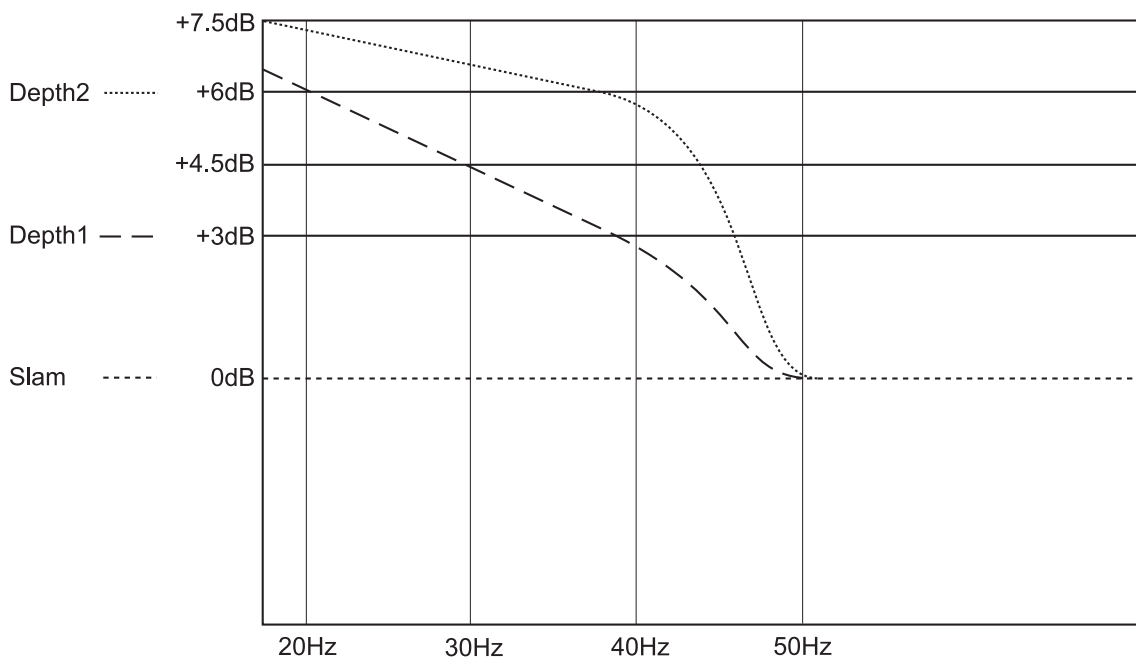
2 x 300 watt 8 ohm and 1000 watt single channel bridged

Convenient features

- Input sensitivity control
- Signal presence, clip and protection indicator
- balanced Input via XLR
- Stable performance down to 4 ohms.
- Auto turn on, turn off - signal sensing
- Crossover, low-pass, full range, 100 Hz. and 400 Hz. 24 dB per octave
- Crossover, high-pass, full range, 100 Hz and 400 Hz 24 dB per octave
- ASOF (Artcoustic Subwoofer Optimized Filter) Slam, depth 1 and depth 2
- High current bi-polar technology
- Extended protection circuit

Ensure the input setting switch is moved to the correct position for the application. The EQ switch is designed specifically for Artcoustic subwoofers.

ASOF EQ. Filters and filter slopes explained.



Slam

Flat response with no EQ added to the signal. Recommended setting for environments where less dynamics and lower distortion is required.

Depth 1

EQ slope optimized for smaller Artcoustic subwoofer models, such as IWS-10, CPH-10 and Impact 1. The Depth 1 setting, mainly enhances the very deep frequencies, below 35 Hz. This setting is good for installations with main focus on 2-channel music reproduction.

Depth 2

EQ slope optimized for the medium to large Artcoustic subwoofers. The Depth 2 setting has a more conservative slope and a 10 Hz higher entry point, enhancing frequencies from around 45 Hz and down. This setting is optimised for cinema and public address installations.

SPECIFICATIONS

PDA1000 Technical Specification

stereo:

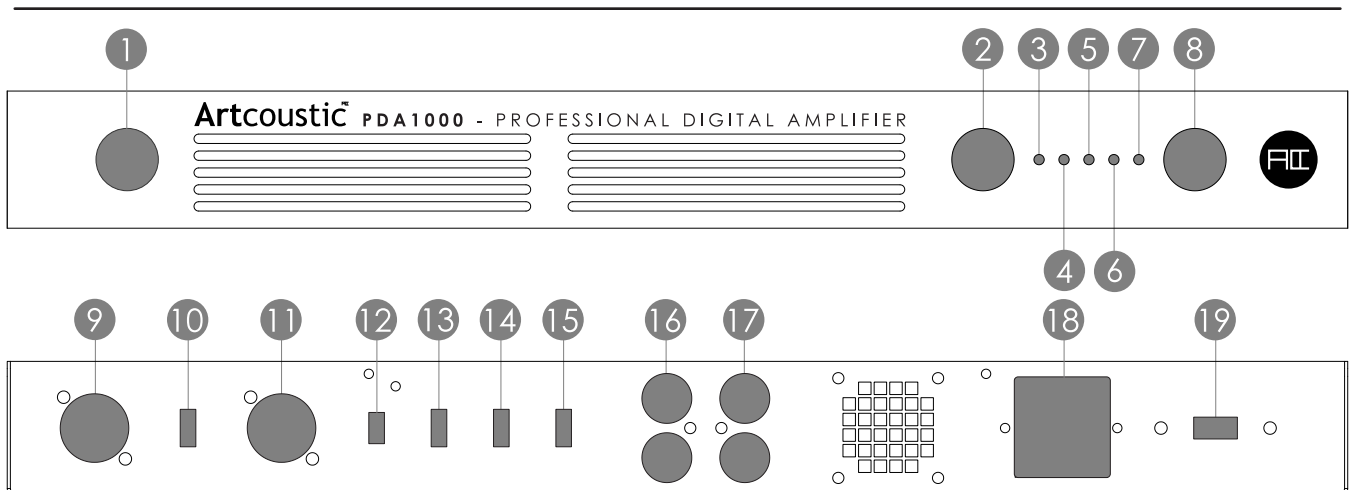
- 4 Ohm (500W+500W)
- 8 Ohm (300W+300W)
- 12 Ohm (240W+240W)
- 16 Ohm (180W+180W)

Bridged:

- 4 Ohm not recommended
- 8 Ohm (1000W)
- 12 Ohm (800W)
- 16 Ohm (600W)

Max Power Consumption: 1300 watt / 3400 BTU/H

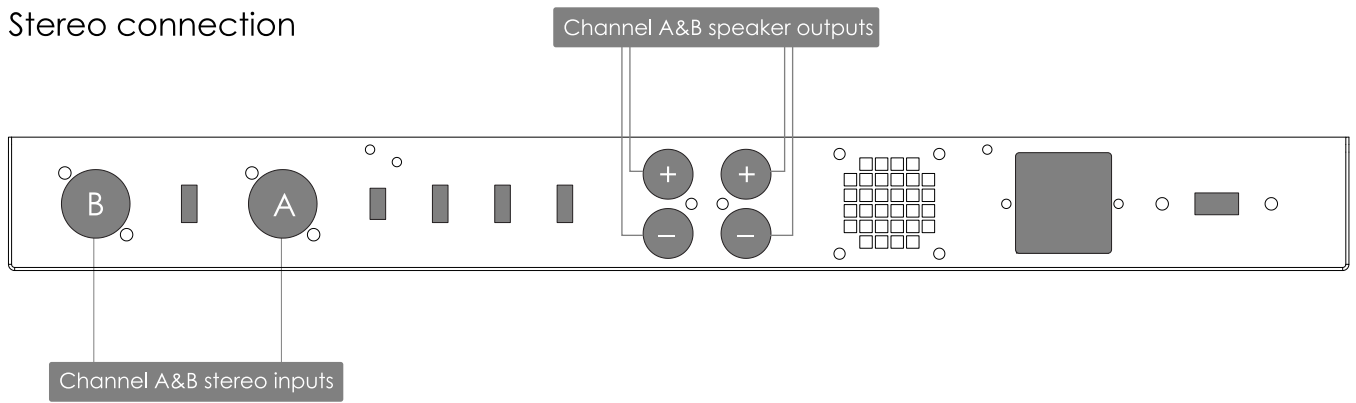
- Full range: 20 Hz - 20 KHz \pm 0.5 dB
- Low-pass: 100 Hz 24 dB/oct 400 Hz 24 dB/oct
- Hi pass: 100 Hz - 20 KHz 24 dB/oct 400 Hz - 20 kHz 24 dB/oct
- S/N Ratio: >103 dB
- THD (at 1 watt into 8 ohms) 1KHz <0.05%
- Damping factor: >300
- Input impedance: 20 Kohms balanced
- Maximum input level: 7 V
- Load impedance: 4-8 ohm
- Input sensitivity: (0 dB)
- Power supply: 115 V/230 V-50/60 Hz
- Input terminal: XLR
- Output terminal: Binding post
- Protection: Heat, over current, Short and DC
- Dimensions (H x W x D) : 44 x 430 x 180 mm
- Weight: 2.8 Kg



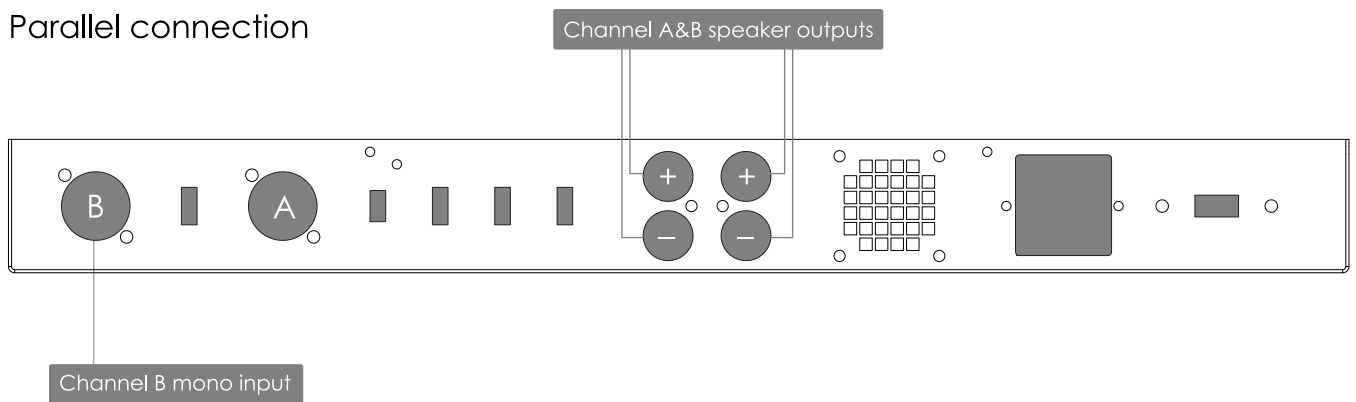
1. On/Off Switch
2. Channel A Volume Control
3. Channel A Signal Indicator
4. Channel A Clip Indicator
5. Power On Indicator
6. Channel B Clip Indicator
7. Channel B Signal Indicator
8. Channel B Volume Control
9. Channel B XLR Balanced Input (**Bridged Subwoofer Input**)
10. Input Setting, Parallel, Stereo and Bridged
11. Channel A XLR Balance Input
12. Ground Lift
13. High-Pass Filter
14. Low-Pass Filter
15. ASOF EQ
16. Channel B Speaker Outputs
17. Channel A Speaker Outputs
18. AC Power Socket
19. Voltage Selector

CONNECTIVITY

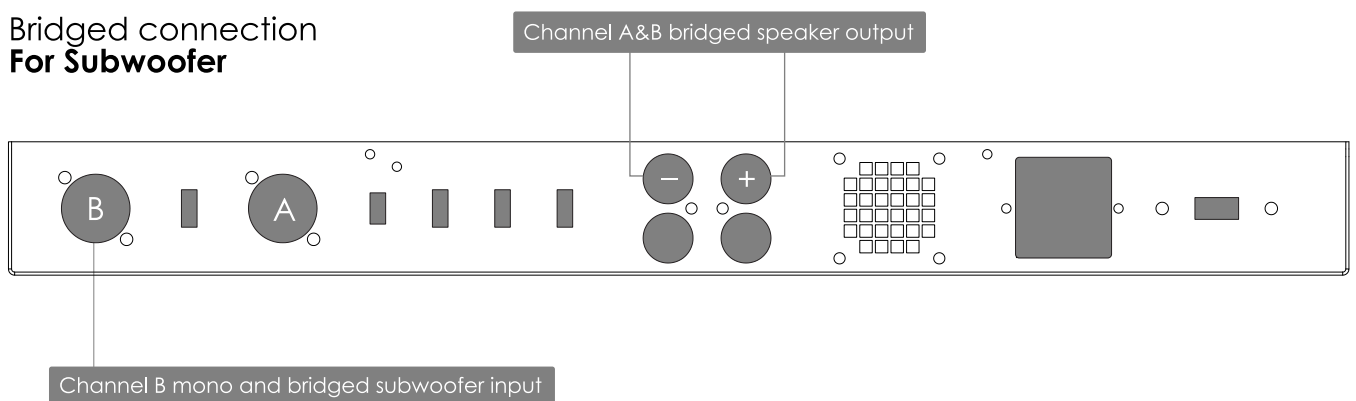
Stereo connection



Parallel connection

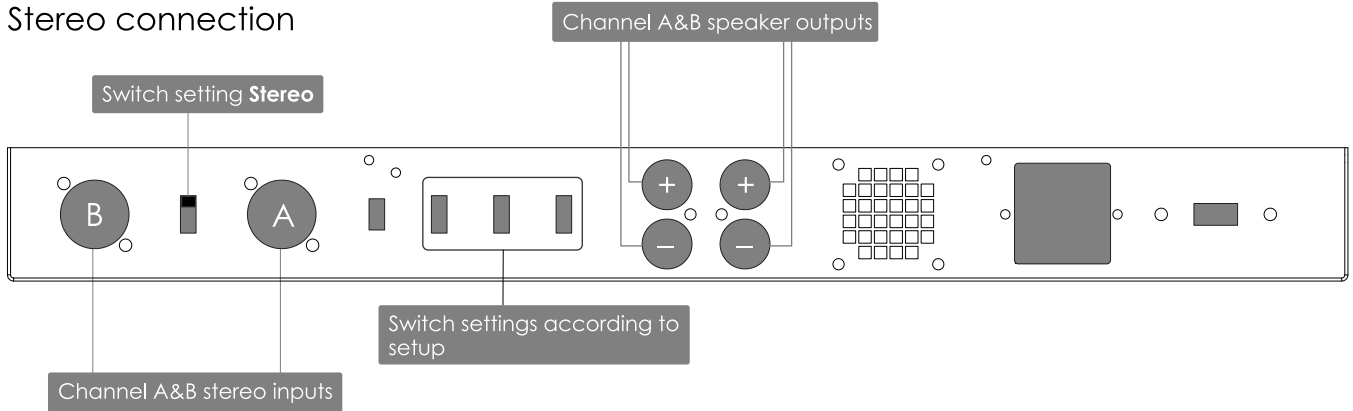


Bridged connection For Subwoofer

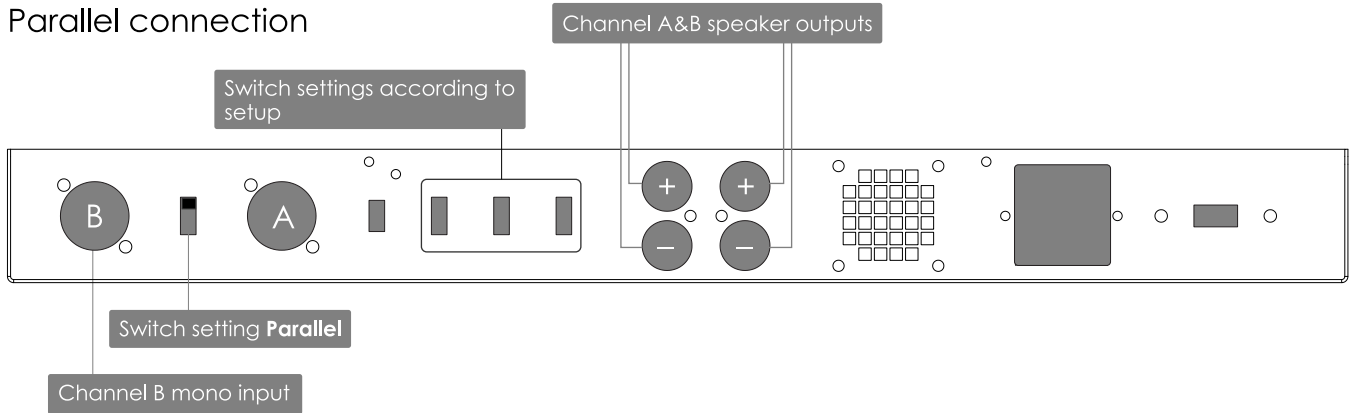


CONNECTIVITY

Stereo connection

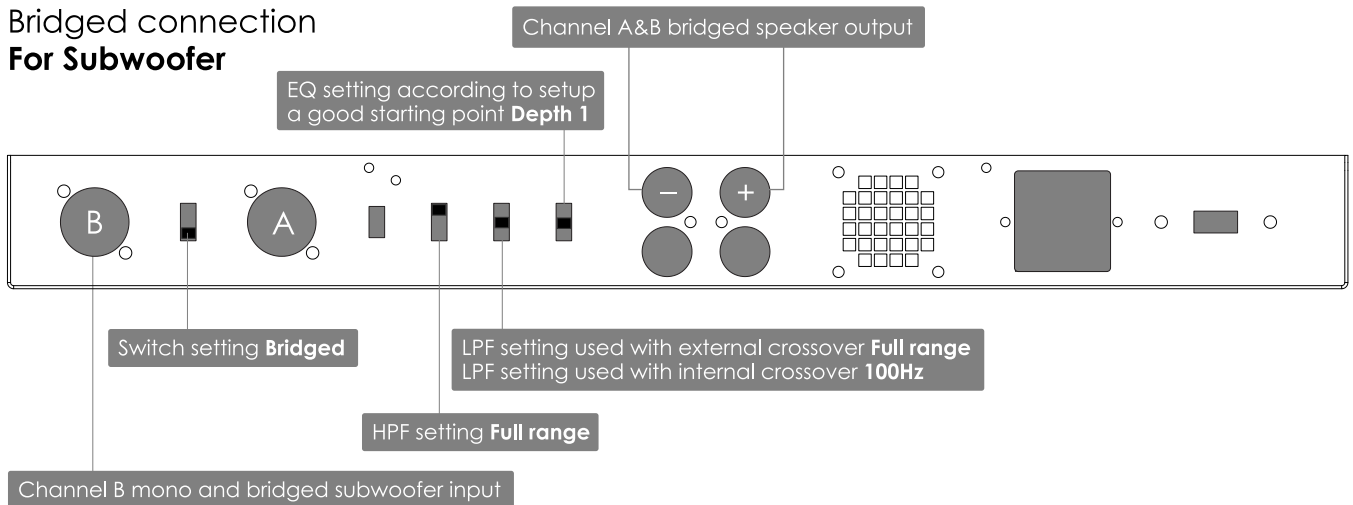


Parallel connection



IMPORTANT SUBWOOFER SETTINGS

Bridged connection For Subwoofer



CONNECTIVITY

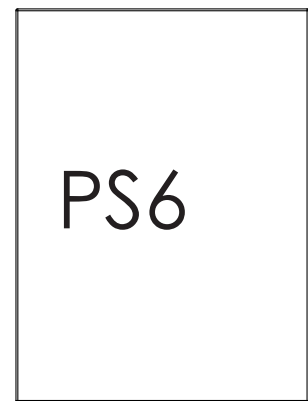
Maximum allowed Performance Series subwoofers per bridged channel.



2 pcs. PS2 in parallel
nominal impedance 6 ohm

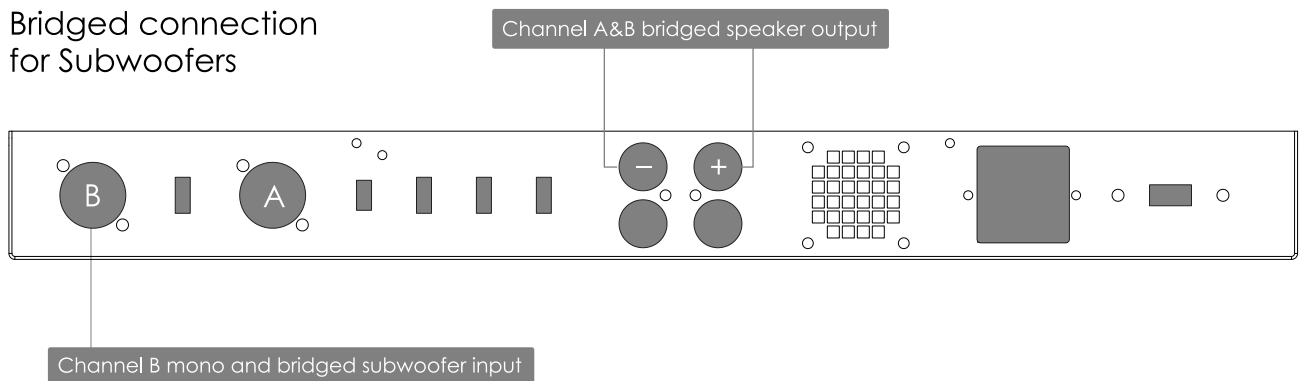


1 pcs. PS4
nominal impedance 6 ohm



1 pcs. PS6
nominal impedance 9 ohm

Bridged connection
for Subwoofers



SAFETY INSTRUCTIONS

SAFETY:

1. Do not use this product near water.
2. Clean rear panel only with dry cloth.
3. Do not block any ventilation openings.
4. Do not install near any heat sources, such as radiators, heat registers, stoves.
5. If wall mounted, make sure sufficient rawl plugs and matching screws are being used.

Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally or has been dropped. To completely disconnect unit power from the AC mains, disconnect the unit's power cord from the mains socket.

WARNING:

To reduce the risk of fire and electric shock do not expose this product to rain or moisture.

1. Do not place product filled with liquids such as vases on the product .
2. Do not open product. There are no user-serviceable parts inside.
3. Always use the power supply shipped with this product, using a power supply with wrong voltage or polarity, can damage the electronic

This product complies with Part 15 of the FCC Rules. Its operation is subject to the following two conditions:

This product may not cause harmful interference,

This product must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARRANTY:

Is valid only for products purchased from an authorized Artcoustic retailer or dealer.

Is valid from the date of purchase for a period of 3 years for passive loudspeakers, 2 years for powered loudspeakers and electronics.

Is limited to the repair of the equipment (which could be a repair or replacement at our discretion, neither of which affects your original warranty). Neither transportation, nor any other costs, nor any risk for removal, transportation and installation of products is covered by this warranty.

Is only valid for the original owner. It is not transferable.

Will not be applicable in cases other than defects in materials and/or workmanship at the time of purchase and will not be applicable:

For deterioration of component parts, the nature of which is to become worn or depleted with use, such as batteries.

For damages caused by incorrect installation, connection or packing.

For damages caused by any use other than correct use described in the user manual, negligence, modifications, or use of parts that are not made or authorized by Artcoustic UK Ltd.

For damages caused by faulty or unsuitable ancillary equipment.

For damages caused by accidents, lightning, water, fire heat, war, public disturbances or any other cause beyond the reasonable control of Artcoustic UK Ltd. And its appointed distributors.

If it is found necessary to return the product for repair, you may be given a Return Merchandise Authorization. You should not return the product without this authorization, if given.

To validate your warranty, you will need to produce the original sales invoice or other proof of ownership and date of purchase.