

ArtcousticTM Loudspeakers

Spitfire Control Series Subwoofer

High Sound pressure Level Professional Subwoofers

Owners Manual



www.artcoustic.com

Spitfire Control 1

Dual Coupled Professional Subwoofer

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

Spitfire SL Subwoofer Overview:

For the ultimate in low-frequency performance, the Spitfire subwoofer delivers awesome bass reproduction. It is one of the most dynamic, powerful and controlled subwoofers on the market, making it ideal for professional applications, such as recording and film studios, dedicated cinemas and fixed installations in general. This model changes the way subwoofers are perceived. Employing two 10" SL long-throw woofers, and the SL bass system to reproduce low frequency signals accurately and effortlessly, with high power handling and extremely low distortion, right down to 20Hz.

The Spitfire subwoofer is ideal for use in high-end installations where sound quality is paramount, such as mid-field to full-space studio monitoring, for private cinema installations, and for commercial use in bars, restaurants and corporate presentation facilities, including commercial movie theatres.

The Spitfire Control 1 subwoofer is available with an optional PA-750 single channel amplifier. Other high quality professional grade amplifier with a minimum of 600watt into 8 ohms can be used



Components Overview:

Woofers:

Extra long excursion and Aluminum Short Circuiting Ring, 4-layer voice coil, anodized aluminum for improved heat dissipation, combined with Distortion Reduced Motor

Cabinet:

Dual Bass Reflex

Specification Spitfire Control 1 Subwoofer

Transducer:

LF 2 x 10 inch long throw cones

Connection:

Single Amped Gold Plated Push Terminals

Performance:

Operating Range 20 Hz to 120 Hz

Nominal Beamwidth omni directional

Axial Sensitivity (half space SPL) LF 95 dB

Input Impedance Nominal Minimum 11 ohms

Maximum Power Handling 500 Watt

Calculated Axial Output Limit (half space SPL) Average Peak @ 20Hz 107dB @ 30Hz 113dB @ 40Hz 118dB

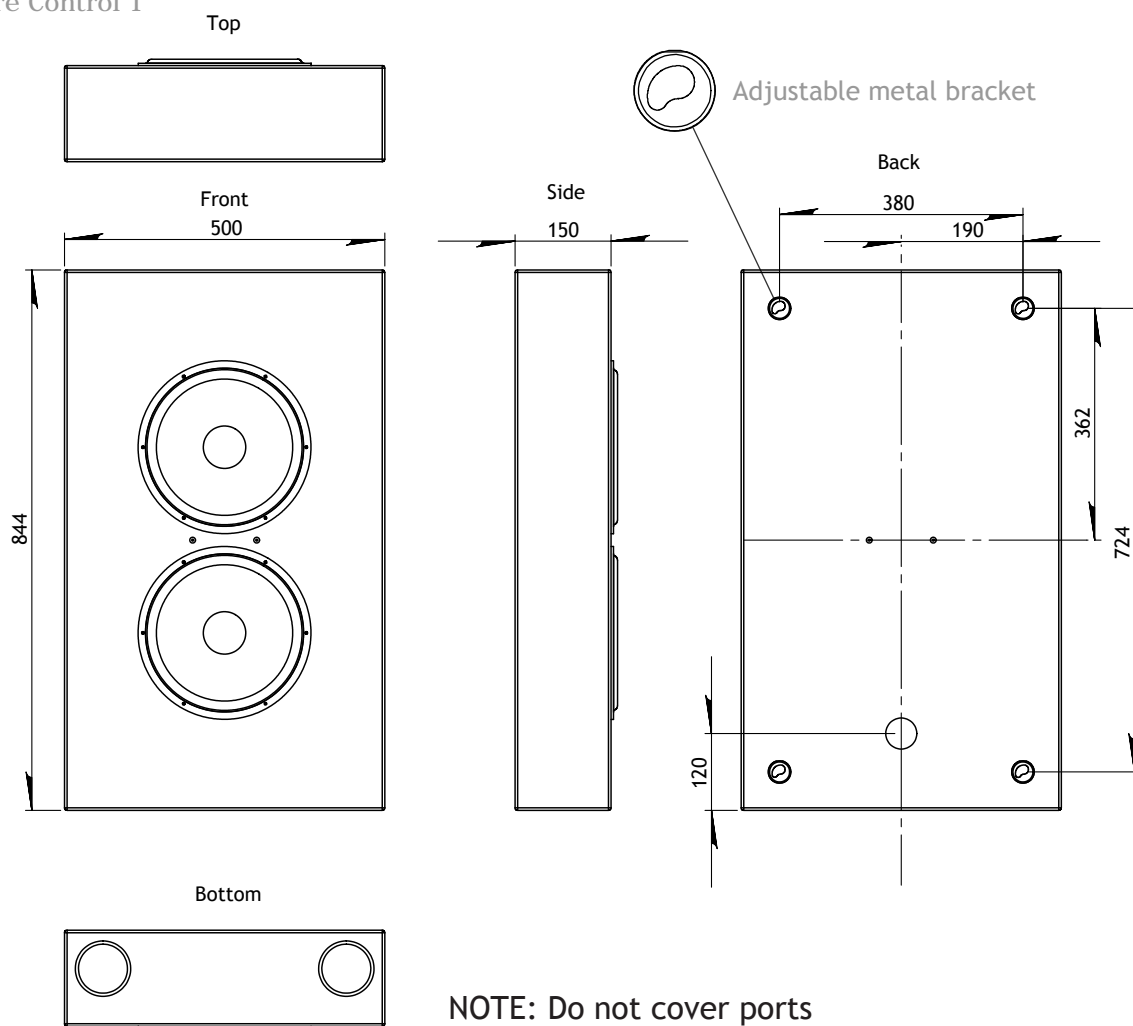
Weight 22 kg

Dimensions H: 844 W: 500 D: 150 mm

Finish:

Black Paint

Spitfire Control 1



Spitfire Control 2

Dual Coupled Professional Subwoofer

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

Spitfire SL Subwoofer Overview:

For the ultimate in low-frequency performance, the Spitfire subwoofer delivers awesome bass reproduction. It is one of the most dynamic, powerful and controlled subwoofers on the market, making it ideal for professional applications, such as recording and film studios, dedicated cinemas and fixed installations in general. This model changes the way subwoofers are perceived. Employing two 10" SL long-throw woofers, and the SL bass system to reproduce low frequency signals accurately and effortlessly, with high power handling and extremely low distortion, right down to 20Hz.

The Spitfire subwoofer is ideal for use in high-end installations where sound quality is paramount, such as mid-field to full-space studio monitoring, for private cinema installations, and for commercial use in bars, restaurants and corporate presentation facilities, including commercial movie theatres.

The Spitfire Control 2 subwoofer is available with an optional PA-750 single channel amplifier. Other high quality professional grade amplifier with a minimum of 600watt into 8 ohms can be used



Components Overview:

Woofers:

Extra long excursion and Aluminum Short Circuiting Ring, 4-layer voice coil, anodized aluminum for improved heat dissipation, combined with Distortion Reduced Motor

Cabinet:

Dual Bass Reflex

Specification Spitfire Control 2 Subwoofer

Transducer:

LF 2 x 10 inch long throw cones

Connection:

Single Amped Gold Plated Push Terminals

Performance:

Operating Range 20 Hz to 120 Hz

Nominal Beamwidth omni directional

Axial Sensitivity (half space SPL) LF 95 dB

Input Impedance Nominal Minimum 11 ohms

Maximum Power Handling 500 Watt

Calculated Axial Output Limit (half space SPL) Average Peak @ 20Hz 111dB @ 30Hz 117dB @ 40Hz 121dB

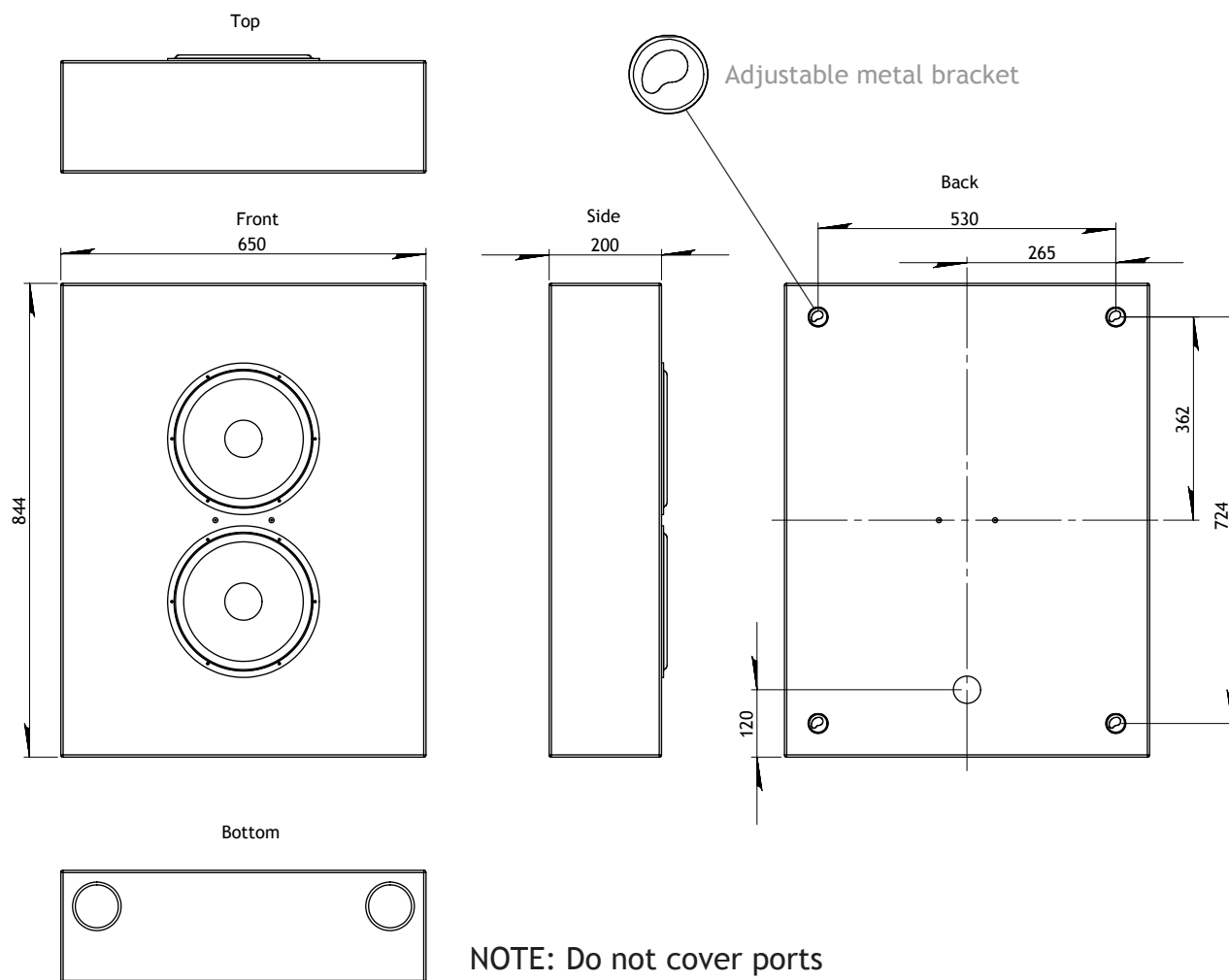
Weight 29 kg

Dimensions H: 844 W: 650 D: 200 mm

Finish:

Black Paint

Spitfire Control 2



Spitfire Control 3

Triple Coupled Professional Subwoofer

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



Spitfire SL Subwoofer Overview:

For the ultimate in low-frequency performance, the Spitfire subwoofer delivers awesome bass reproduction. It is one of the most dynamic, powerful and controlled subwoofers on the market, making it ideal for professional applications, such as recording and film studios, dedicated cinemas and fixed installations in general. This model changes the way subwoofers are perceived. Employing three 10" SL long-throw woofers, and the SL bass system to reproduce low frequency signals accurately and effortlessly, with high power handling and extremely low distortion, right down to 15Hz.

The Spitfire subwoofer is ideal for use in high-end installations where sound quality is paramount, such as mid-field to full-space studio monitoring, for private cinema installations, and for commercial use in bars, restaurants and corporate presentation facilities, including commercial movie theatres.

The Spitfire Control 3 subwoofer is available with an optional PA-750 single channel amplifier. Other high quality professional grade amplifier with a minimum of 600watt into 8 ohms can be used

Components Overview:

Woofers:

Extra long excursion and Aluminum Short Circuiting Ring, 4-layer voice coil, anodized aluminum for improved heat dissipation, combined with Distortion Reduced Motor

Cabinet:

Triple Bass Reflex

Specification Spitfire Control 2 Subwoofer

Transducer:

LF 3 x 10 inch long throw cones

Connection:

Single Amped Gold Plated Push Terminals

Performance:

Operating Range 15 Hz to 120 Hz

Nominal Beamwidth omni directional

Axial Sensitivity (half space SPL) LF 95 dB

Input Impedance Nominal Minimum 16 ohms

Maximum Power Handling 750 Watt

Calculated Axial Output Limit (half space SPL) Average Peak @ 15Hz 112dB @ 20Hz 116dB @ 30Hz 121dB @ 40Hz 124dB

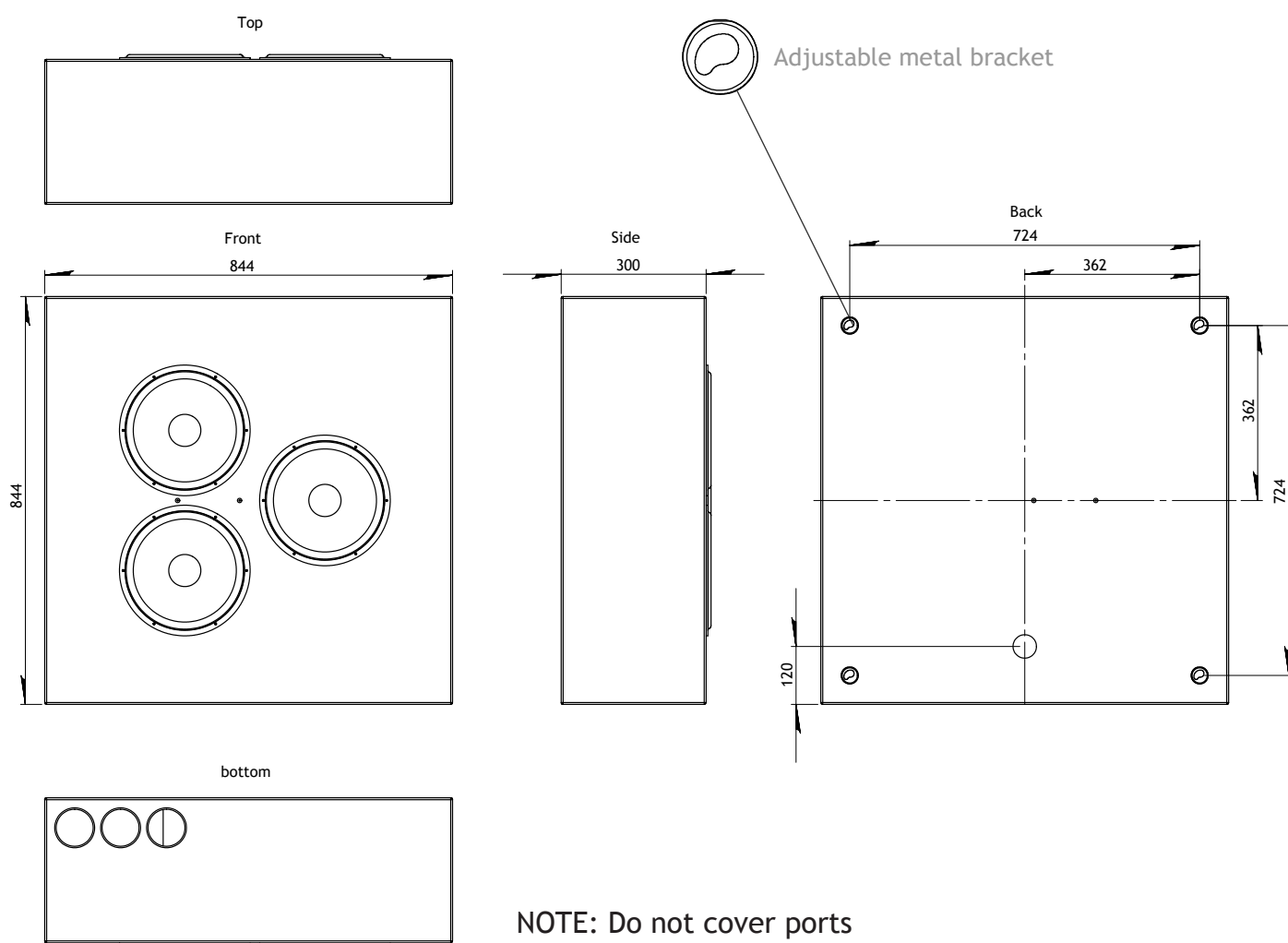
Weight 47 kg

Dimensions H: 844 W: 844 D: 300 mm

Finish:

Black Paint

Spitfire Control 3



Artcoustic™ Loudspeakers PA-250 & PA-750 Power Amplifier

Professional Single Channel Amplifier

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-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 its 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 8ohm and 750 watt 8ohm.

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
- Subwoofer crossover, full range, 80Hz. and 120Hz. 24dB. per octave
- 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 Technical Specification

Output power 20Hz-20KHz RMS program channel
4 ohm □ 400 WRMS
8 ohm □ 250 WRMS

Frequency response
Full range: 20HZ-20KHZ ± 0.5dB
Sub:20HZ-80HZ 24 dB / oct
20HZ-120HZ 24 dB / oct

S/N Ratio: >95 dB
THD (at 1W into 8ohms, 1KHz): <0.05%
Damping factor: >300
Input impedance: 20Kohms balanced, 10Kohms unbalanced
Maximum input level: 3V
Load impedance: 4-8 ohm
Input sensitivity: 1.0 (0 dB)
Power supply: 115V/230V-50/60Hz
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 : 12.7Kg



PA-250 Power Amplifier Functions

- a. □ Input sensitivity control
- b. □ Subwoofer crossover, full range, 80Hz. and 120Hz. cut high frequency cut 24dB per octave
- c. □ XLR balanced audio input
- d. □ XLR balanced audio link
- e. □ RCA unbalanced audio input
- f. □ RCA unbalanced audio link
- g. □ Speaker output terminals
- h. □ Main power fuse
- i. □ Main power input socket
- j. □ Voltage selector 110V. to 230V.)
- k. □ Input & Clip LED indicator
- l. □ On/off main switch (PA-250 & PA-750 are equipped with a automatic power on/off function, so no need to turn the amplifier off on main switch)
- m. □ Power LED indicator

PA-750 Technical Specification

Output power 20Hz-20KHz RMS program channel
8 ohm □ 750 WRMS

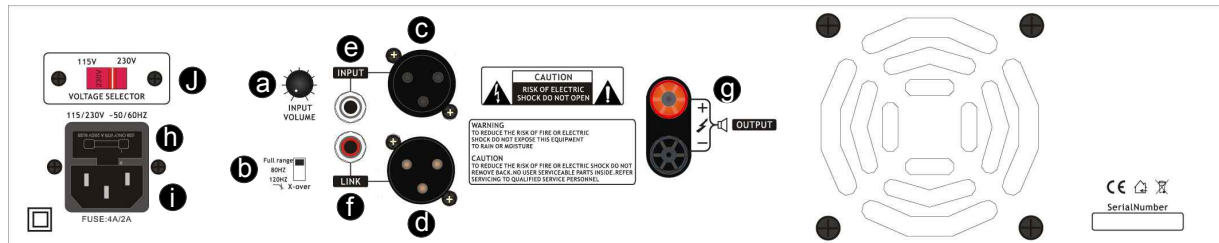
Frequency response
Full range: 20HZ-20KHZ ± 0.5dB
Sub:20HZ-80HZ 24 dB / oct
20HZ-120HZ 24 dB / oct

S/N Ratio: >105 dB
THD (at 1W into 8ohms, 1KHz): <0.05%
Damping factor: >500
Input impedance: 20Kohms balanced, 10Kohms unbalanced
Maximum input level: 3V
Load impedance: 4-8 ohm
Input sensitivity: 1.0 (0 dB)
Power supply: 115V/230V-50/60Hz
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

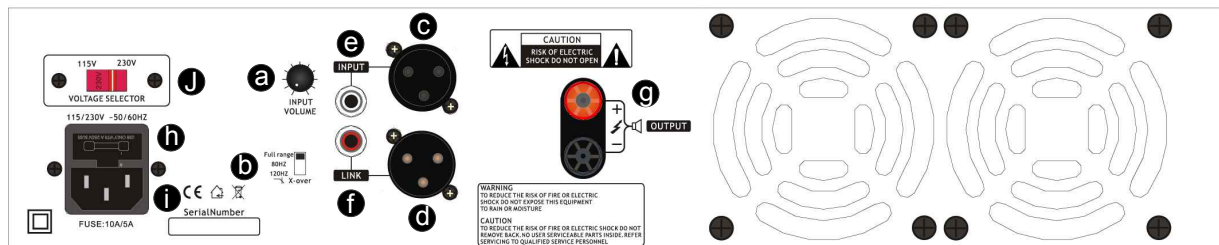
Artcoustic™ Loudspeakers PA-250 & PA-750 Power Amplifier

Professional Single Channel Amplifier

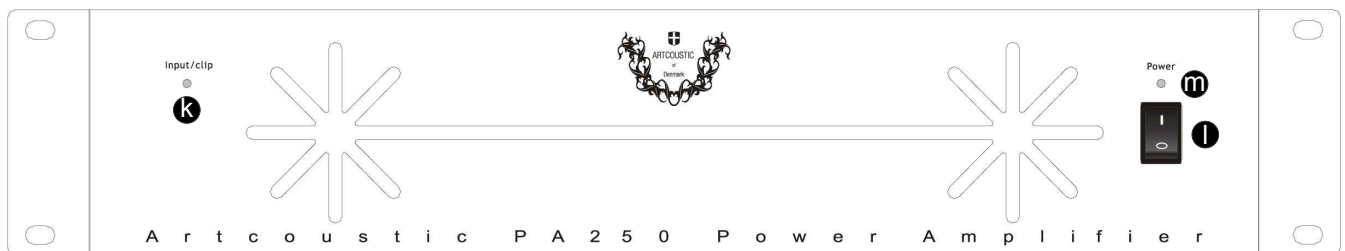
PA-250 Rear Panel



PA-750 Rear Panel



PA-250 Front Panel



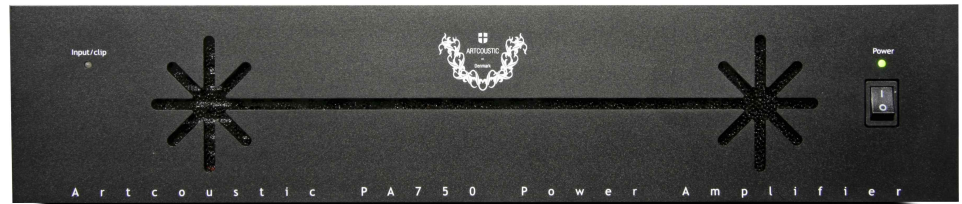
PA-750 Front Panel



Artcoustic™ Loudspeakers PA-250 & PA-750 Power Amplifier

Professional Single Channel Amplifier

PA-250 Front Panel



PA-750 Front Panel with optional rack mount



PA-250 Rear Panel



PA-750 Front Panel



ArtcousticTM Loudspeakers PA-250 & PA-750 Power Amplifier

Professional Single Channel Amplifier



Connect up to two Spitfire Control subwoofers Average impedance 4-8ohm load

