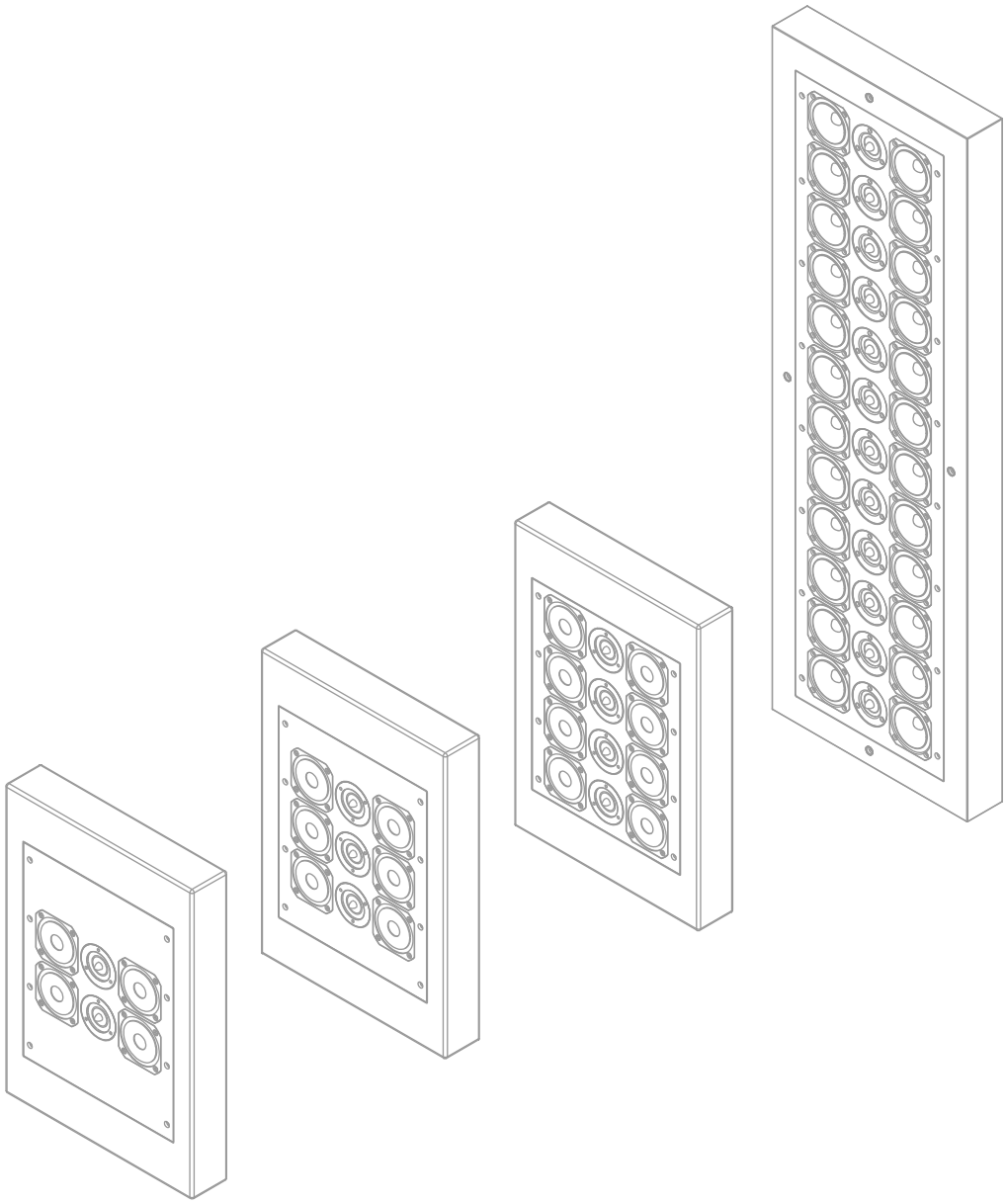
Artcoustic

Spitfire Series

Owners Manual

Two-Way Line Array Precision Monitor, with Vertical and Horizontal Symmetrically Controlled Beamwidth Array



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Spitfire Series

Vertical and Horizontal Symmetrically Controlled Beamwidth Array

Features:

- Controlled directivity on both vertical and horizontal axis
- High sound pressure levels without the use of compression horn
- Very low distortion
- Very low power consumption
- Wide frequency response 60Hz to 40kHz
- Fast, easy and simple installation
- Suitable for almost any application, from HiFi Systems, Home Cinemas, Screening Rooms and commercial applications
- Ultra-slim aesthetically pleasing cabinet design, designed to complement the latest LED and projection screen designs

Spitfire Overview:

Artcoustic's Symmetrically Controlled Beamwidth Array is a ground breaking analogue in-house loudspeaker technology, which enables superior controlled directivity on both vertical and horizontal axis.

With Symmetrically Controlled Beamwidth Array technology, it is possible to achieve very high sound pressure levels without the use of compression horn, very low distortion, very low power consumption and very flat frequency response, but still maintain the desired typical horn qualities, such as directivity and throw.

The Spitfire range is very flexible with compact dimensions and incredible frequency response and very high volumes, it has qualities that make it a truly unique product range.

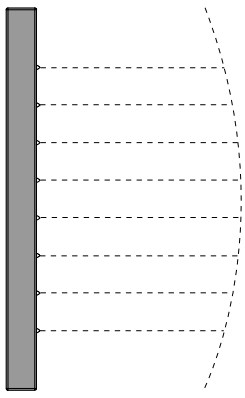
The ultra slim and lightweight cabinet design makes this series of speakers easy to install into any existing Architecture without sacrificing the aesthetics or the all-important sound quality

Components Overview:

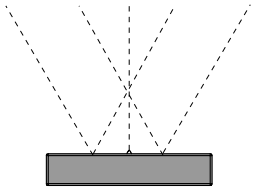
High Frequency driver:
Dual Ring Radiator diaphragm with highly linear suspension and low loss surrounds for high clarity and clean transient response. Copper caps for better HF extension and lower distortion and wave-guide center plug, copper-clad aluwire

Woofer:
Extra long excursion and aluminium Short Circuiting Ring, 4-layer voice coil, anodised aluminium for improved heat dissipation, combined with Distortion Reduced Motor

Crossover:
6 dB/octave low pass and 12 dB/octave high pass filter



Side view, Symmetrically Controlled Beamwidth Array:
High Sound pressure level at very Low power consumption, combined with controlled vertical directivity



Top view, Controlled Horizontal Directivity:
Symmetric minimum phase driver configuration for optimal polar response

Specification Spitfire 4-2

Transducer:
LF-MF 4 x 3 inch cone, Symmetric Phase Aligned
HF 2 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 Gold Plated Push Terminals

Performance:
Operating Range 60 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 80°
Axial Sensitivity (whole space SPL) LF/MF-HF 95 dB
Input Impedance Nominal Minimum 4 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 112dB @ 28watt
Weight 5.5 kg
Dimensions H: 500 W: 370 D: 67 mm

Finish:
Cabinet: Black

Specification Spitfire 8-4

Transducer:
LF-MF 8 x 3 inch cone, Symmetric Phase Aligned
HF 4 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 Gold Plated Push Terminals

Performance:
Operating Range 70 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 70°
Axial Sensitivity (whole space SPL) LF/MF-HF 101dB
Input Impedance Nominal Minimum 4 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 118dB @ 40watt
Weight 7 kg
Dimensions H: 500 W: 370 D: 67 mm

Finish:
Cabinet: Black

Specification Spitfire 6-3

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 1000 Hz High Pass
12 dB/octave 4000Hz

Connection:
Single Amped Gold Plated Push Terminals

Performance:
Operating Range 65 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 75°
Axial Sensitivity (whole space SPL) LF/MF-HF 98 dB
Input Impedance Nominal Minimum 4 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 115dB @ 28watt
Weight 6 kg
Dimensions H: 500 W: 370 D: 67 mm

Finish:
Cabinet: Black

Specification Spitfire 12-6

Transducer:
LF-MF 12 x 3 inch cone, Symmetric Phase Aligned
HF 6 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 Gold Plated Push Terminals

Performance:
Operating Range 65 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 60°
Axial Sensitivity (whole space SPL) LF/MF-HF 104 dB
Input Impedance Nominal Minimum 8 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 121dB @ 40watt
Weight 1 16 kg
Dimensions H: 1120 W: 370 D: 67 mm

Finish:
Cabinet: Black

Specification Spitfire 16-8

Transducer:
LF-MF 16 x 3 inch cone, Symmetric Phase Aligned
HF 8 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 Gold Plated Push Terminals

Performance:
Operating Range 75 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 55°
Axial Sensitivity (whole space SPL) LF/MF-HF 101 dB
Input Impedance Nominal Minimum 8 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 100 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 124dB @ 40watt
Weight 18 kg
Dimensions H: 1120 W: 370 D: 67 mm

Finish:
Cabinet: Black

Specification Spitfire 24-12

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

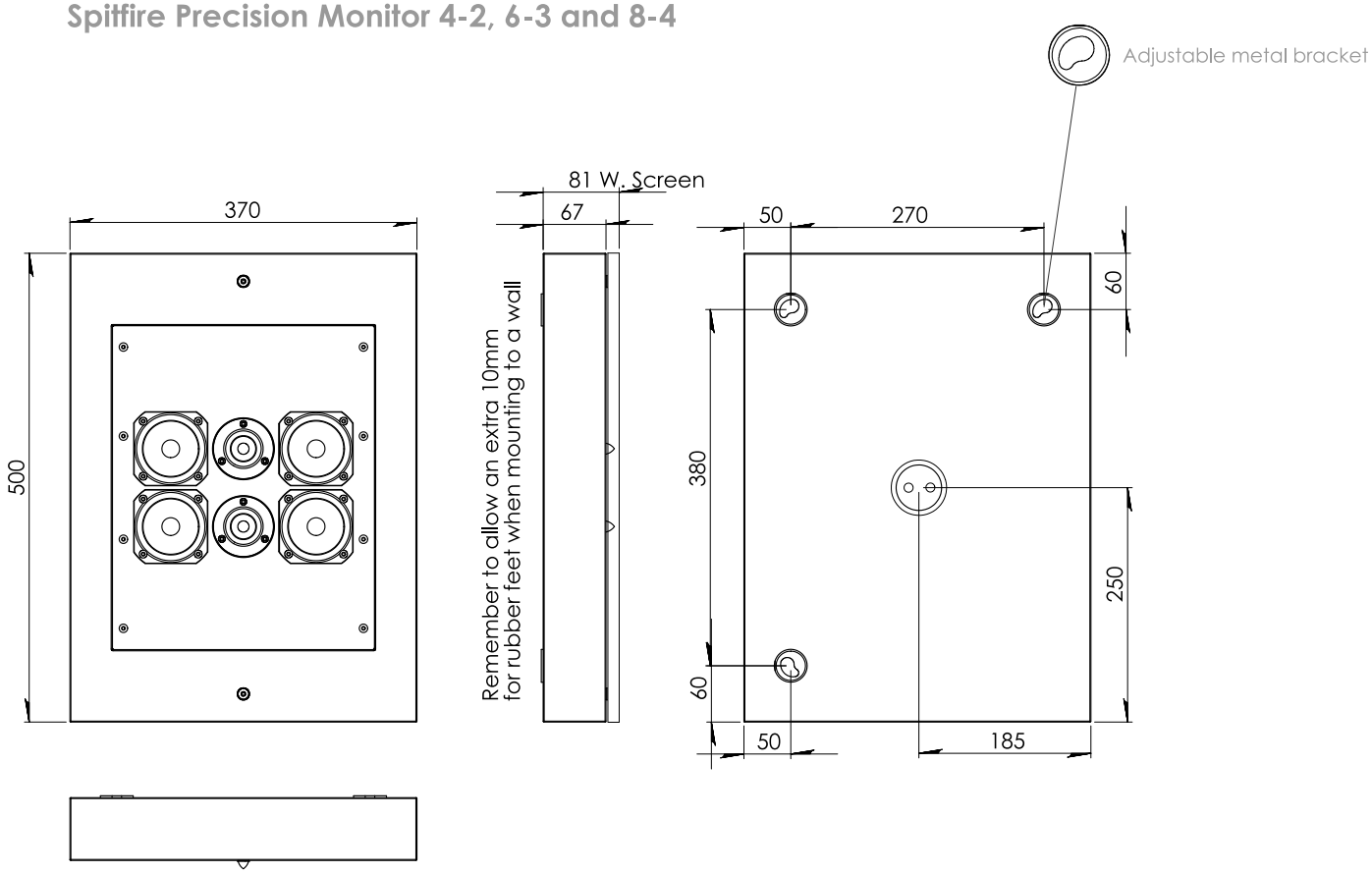
Crossover:
Low Pass Filter 6 dB/octave 1000 Hz High Pass
12 dB/octave 4000Hz

Connection:
Single Amped Gold Plated Push Terminals

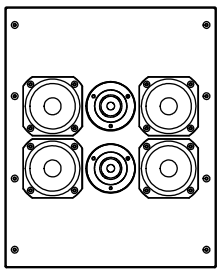
Performance:
Operating Range 75 Hz (-3dB) to 40 kHz
Nominal Beamwidth Horizontal 90° Vertical 40°
Axial Sensitivity (whole space SPL) LF/MF-HF 110 dB
Input Impedance Nominal Minimum 4 ohms
Recommended High Pass Filter =>100 Hz, 24 dB/octave
Maximum Power Handling 140 Watt
Calculated Axial Output Limit (whole space SPL)
Average Peak LF/MF-HF 130dB @ 30watt
Weight 22 kg
Dimensions H: 1120 W: 370 D: 67 mm

Finish:
Cabinet: Black

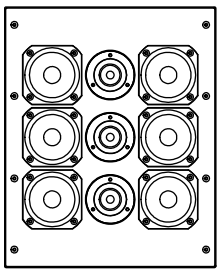
Spitfire Precision Monitor 4-2, 6-3 and 8-4



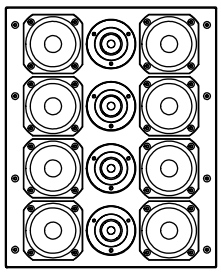
Spitfire Precision Monitor, 4-2, 6-3 and 8-4 module options



SL 4-2
Module

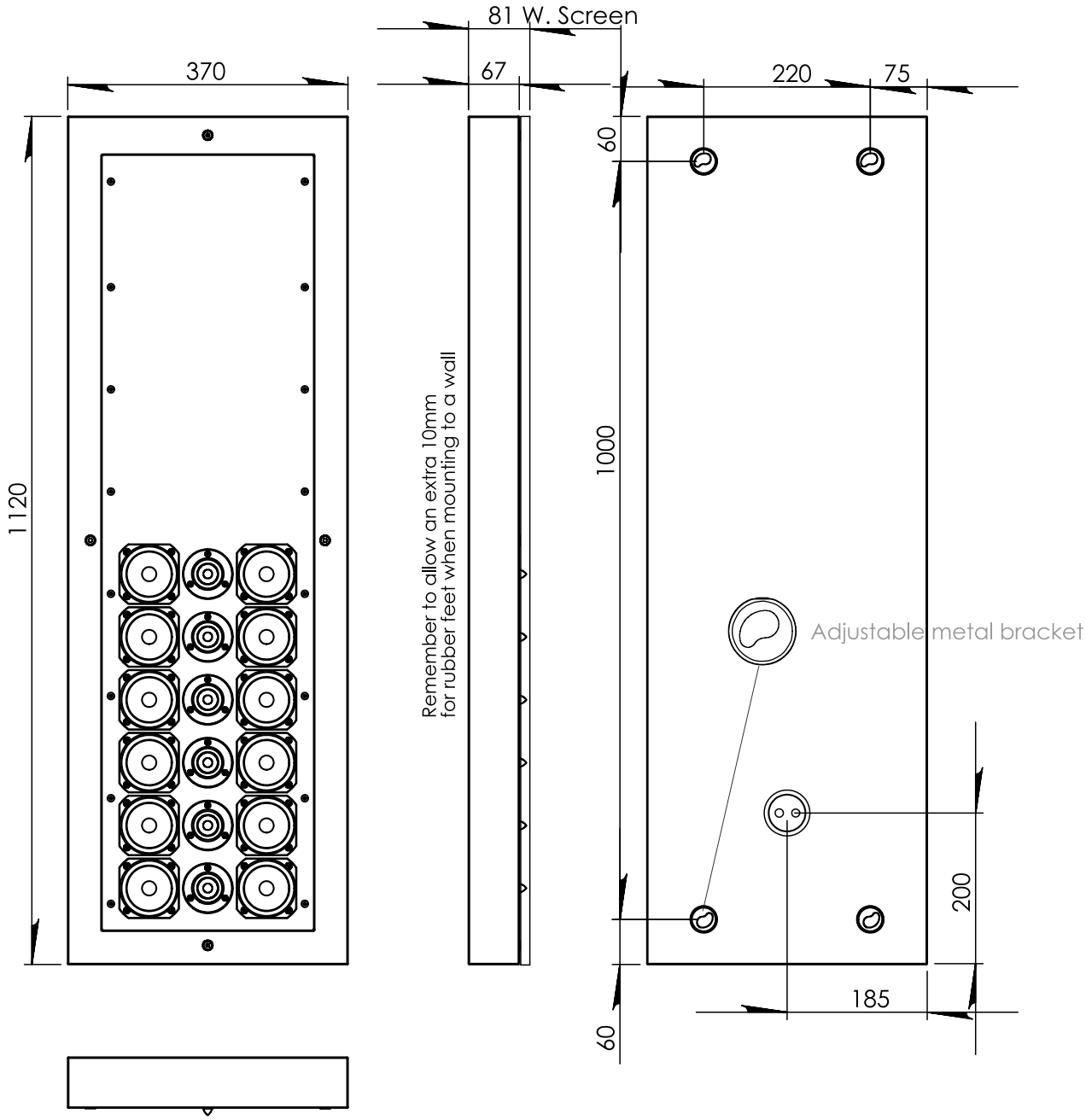


SL 6-3
Module

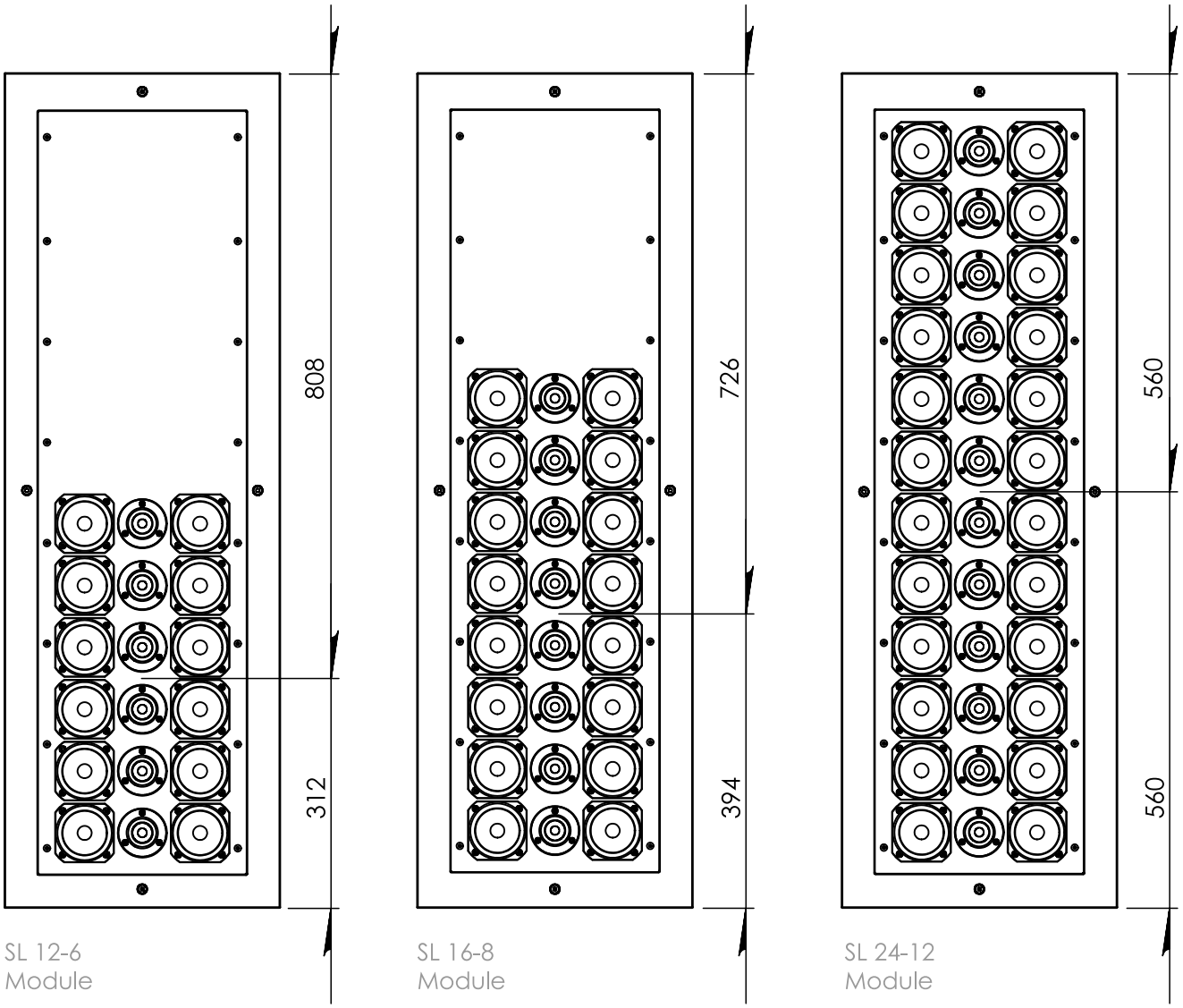


SL 8-4
Module

Spitfire Precision Monitor 12-6, 16-8 and 24-12



Spitfire Precision Monitor, 12-6, 16-8 and 24-12 module options



SL 12-6
Module

SL 16-8
Module

SL 24-12
Module

Low horizontal
Dispersion

High horizontal
Dispersion