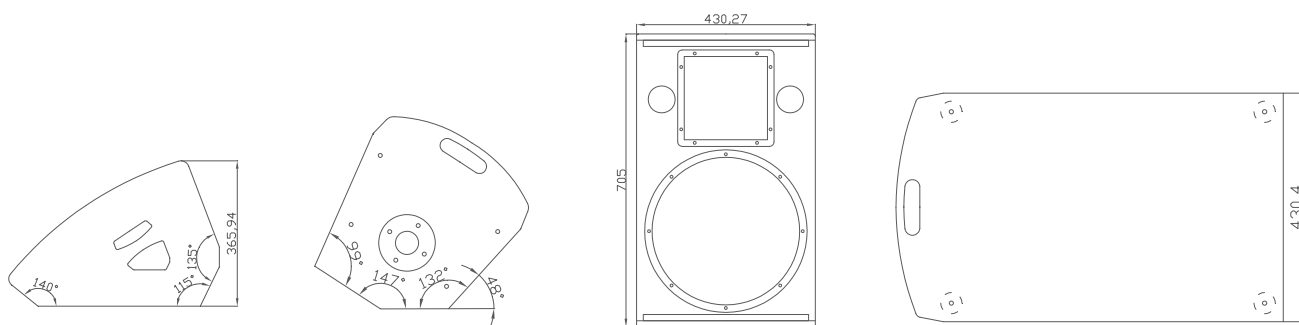


ENCLOSURE DESIGNS 2008



beyma //

beyond making sound

Beyma introduces a new range of enclosure designs created for obtaining the best performance from our latest loudspeakers and following the current trends in the market.

The new designs cover the needs for a wide number of applications, from the high power subwoofer enclosures to the compact stage monitors, offering a wide range of designs that include optimum performance, compact sizes and attractive designs.

The selection of Beyma loudspeakers in this new catalogue includes some of our latest and most innovative products, like the P1200Nd high power subwoofers or the pleated diaphragm tweeter TPL-150, which delivers an outstanding high frequency sound to a professional application. The design of specific passive crossover networks for some models as well as the different combination of drivers was carefully studied looking for a balanced system as well as the best sound response.

Three types of enclosure can be found in this book:

- **FULL RANGE SYSTEMS**

Versatile PA systems designed in two way configuration. These cabinets can be used as small or medium size PA systems, as well as stage monitors. They are also prepared to be mounted on a stand or to attach a rigging system.

In order to allow all these features, the horns used in all these models can be rotated so that the cabinet can be used in vertical or horizontal position.

A wide variety of Beyma loudspeakers combinations can be found here. Our aim is to offer different options but always keeping the synergy among the different components and looking for the best final result.

- **SUBWOOFER ENCLOSURES**

High efficiency designs for high power subwoofers. These systems will deliver an optimum sub bass performance as well as an extended SPL using the minimum volume. An impact in size and in response thanks to the P1200Nd and P1000Nd subwoofers and the ultra efficient P80Nd series.

- **STAGE MONITORS**

Compact designs for an application where the space, in many cases, is highly limited. The design has been made for keeping a low height of the monitor in order to avoid any obstacle in the visual of the first rows. Attractive and functional profiles with the best sonic response from our coaxial drivers.

All the designs include detailed information of the cabinets, the components, the passive crossover network layout (when necessary) and our recommendations for the settings in order to obtain the best performance from every enclosure (filtering information and EQ presets).

Thank you very much for the confidence in our products.

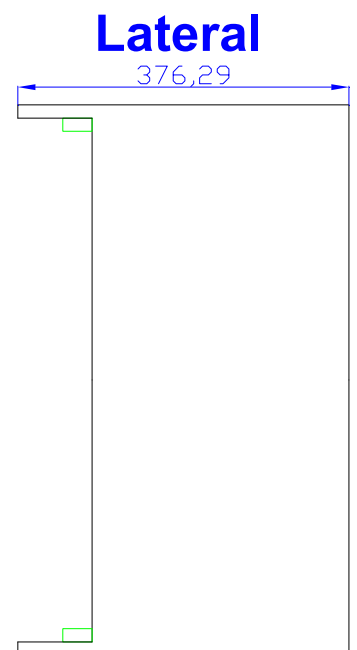
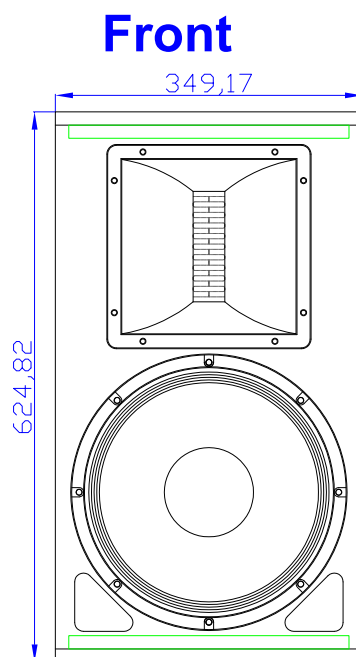
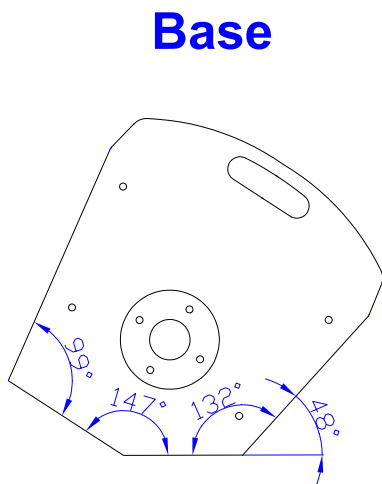
Acústica Beyma s.l.
May 2008

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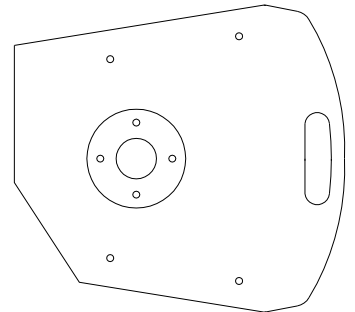
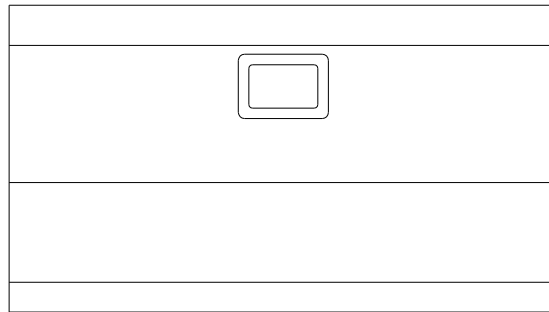
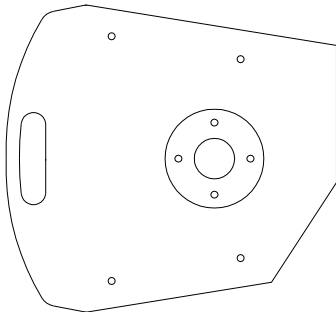
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Technical Specifications

Acoustic cabinet:	FR12A
Description:	2 Way System. 12" and High Frequency unit
Power AES:	350 W.
Power Program:	700 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	122 dB.
Max. SPL peak:	128 dB.
Frequency response:	43 - 25.000Hz.
Coverage (H x V):	90° x 40°
Bass Loudspeakers:	12MW/ND
Compression Driver:	TPL150
Constant Directivity Horn:	TD TPL
Crossover:	FP12A/1
Hardware:	External

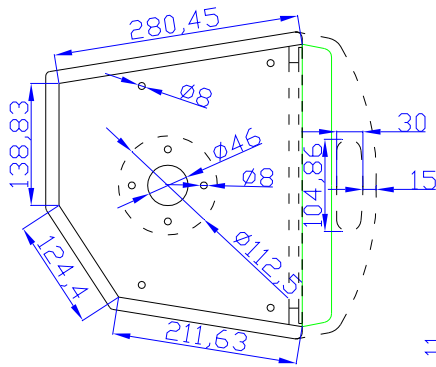


Rear

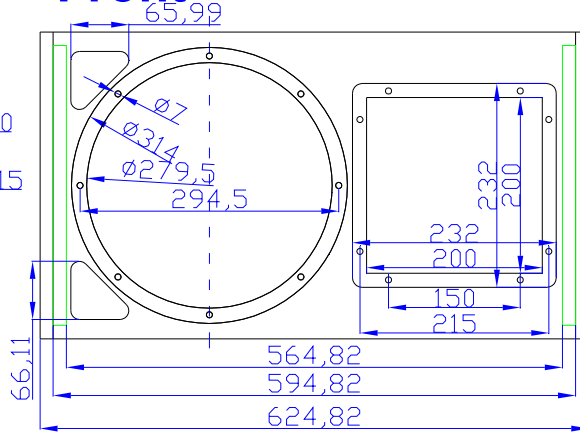


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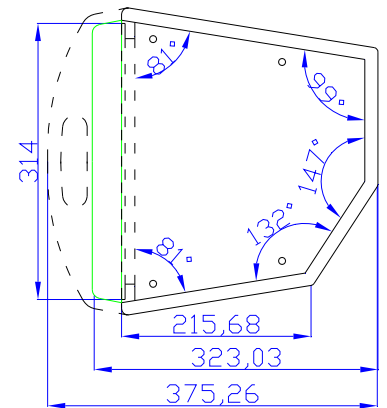
Base



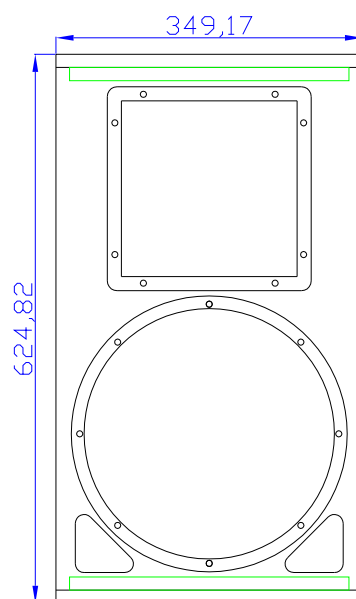
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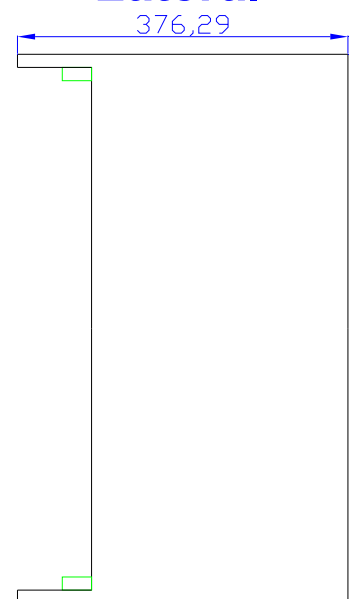
Central



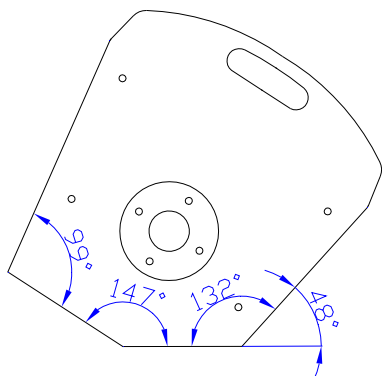
Front



Lateral



Base



12MWNd

KEY FEATURES

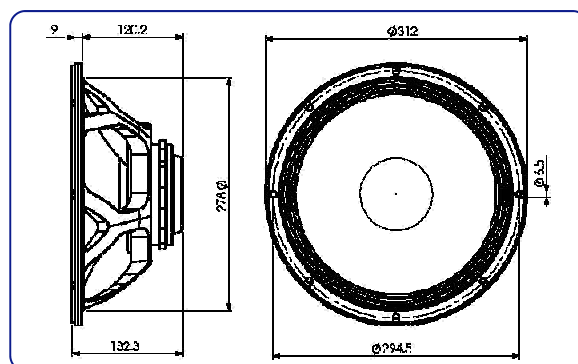
- Good power handling (350 W AES)
- Sensitivity: 97 dB @ 2.83V
- Extended frequency response (35-5000 Hz)
- Neodymium magnets
- Aluminium customized basket

TECHNICAL SPECIFICATIONS

- Nominal diameter 300 mm. 12 in.
- Rated impedance 8 ohms
- Minimum impedance 7 ohms
- Power capacity* 350 w AES
- Program power 700 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 35 - 5000 Hz
- Voice coil diameter 62.4 mm. 2.5 in.
- Magnetic assembly weight 2.54 kg. 5.59 lb.
- BL factor 16.9 N / A
- Voice coil length 19.5 mm
- Air gap height 10 mm
- X damage (peak to peak) 30 mm



DIMENSION DRAWINGS



TPL-150

KEY FEATURES

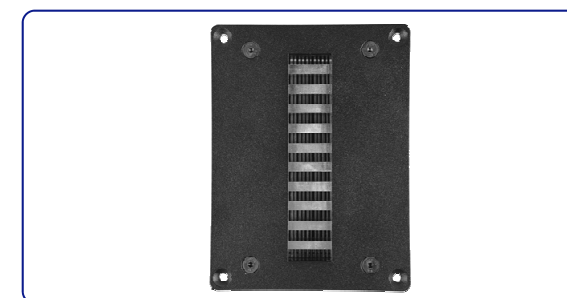
- Superior sound reproduction quality
- Extended frequency response (1 - 23 kHz)
- High sensitivity (99 dB)
- Extremely linear frequency response
- Low distortion
- Designed for the high frequencies reproduction

TECHNICAL SPECIFICATIONS

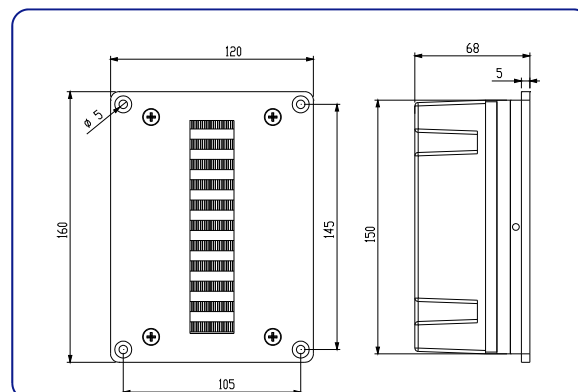
- Rated impedance 8 ohms
- D.C. Resistance 5.9 ohms
- Power capacity* 80 w AES above 1 kHz
- Program power 160 w above 1 kHz
- Sensitivity** 99 dB 1w @ 1m
- Frequency range 1- 23000 Hz
- Voice coil diameter 100 mm. 4 in.
- Recommended Crossover 1 kHz or higher (12 dB/oct. min.)
- Net weight 2.18 kg. 4.8 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 2.5 - 20 kHz.



DIMENSION DRAWINGS



TD-TPL

KEY FEATURES

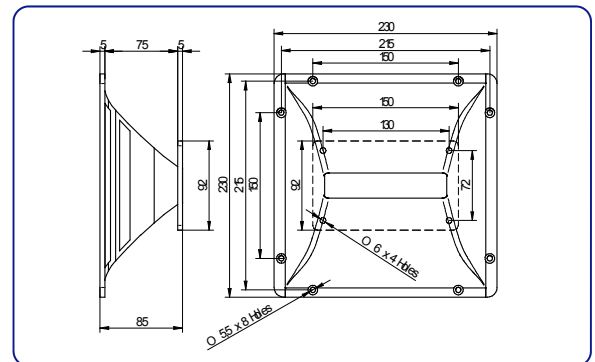
- Designed to be used with TPL-150 tweeter
- Coverage angles of 80° in the horizontal plane and 30° in the vertical plane
- Precise directivity control in the pass band
- Cast aluminium construction

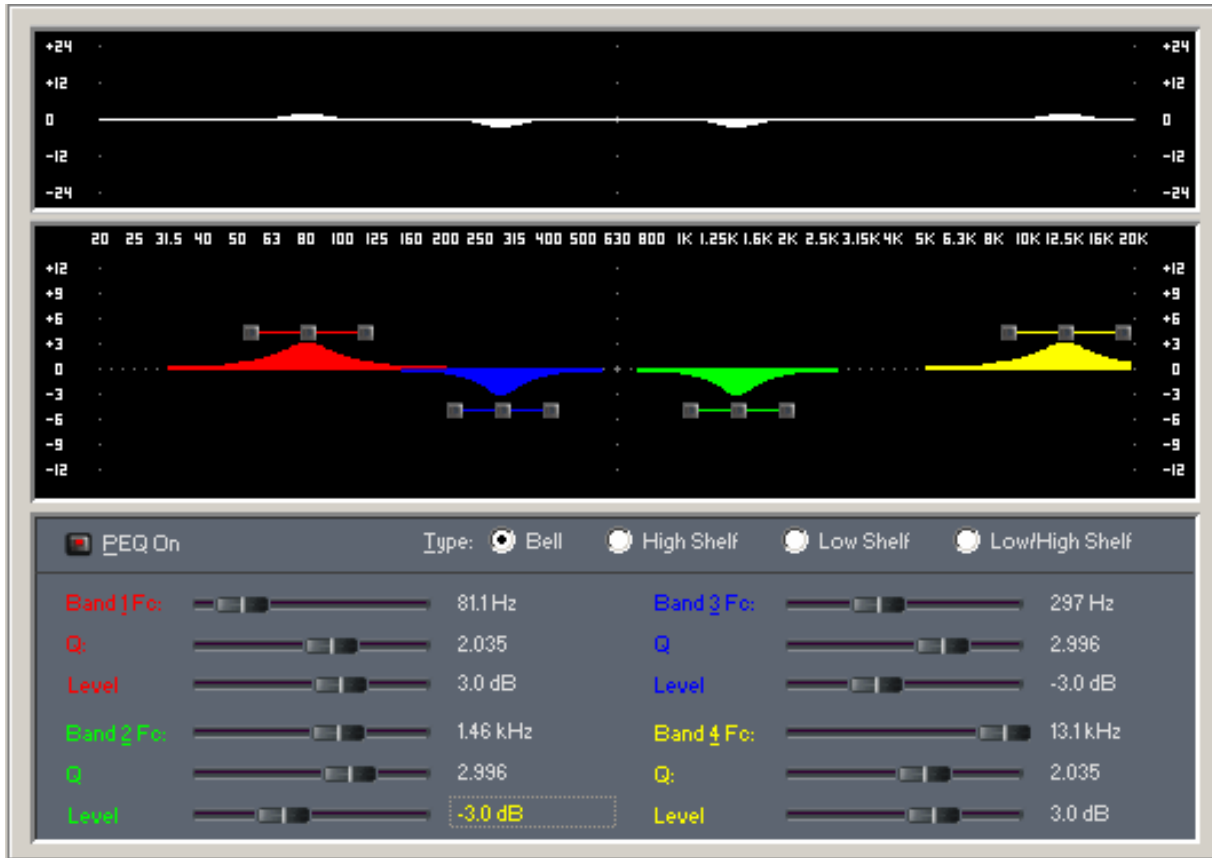
TECHNICAL SPECIFICATIONS

- Throat dimensions (WxH) 12 x 208 mm. 0.47 x 8.19 in.
- Horizontal beamwidth 80° (+9°, -20°)
(-6 dB, 1.2 - 16 kHz)
- Vertical beamwidth 30° (+27°, -21°)
(-6 dB, 2 - 16 kHz)
- Directivity factor (Q) 27 (average 1.2 - 16 kHz)
- Directivity index (DI) 13 dB (+6 dB, -4.5 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 230x230x85 mm.
9.05x9.05x3.35 in.
- Cutout dimensions (WxH) 195x195 mm.
7.68x7.68 in.
- Net weight 1.5 kg. 3.3 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 5 mm. diameter bolt circle.

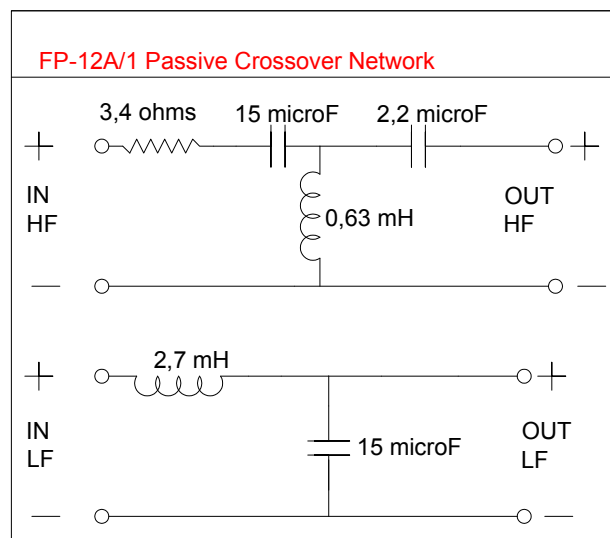


DIMENSION DRAWINGS



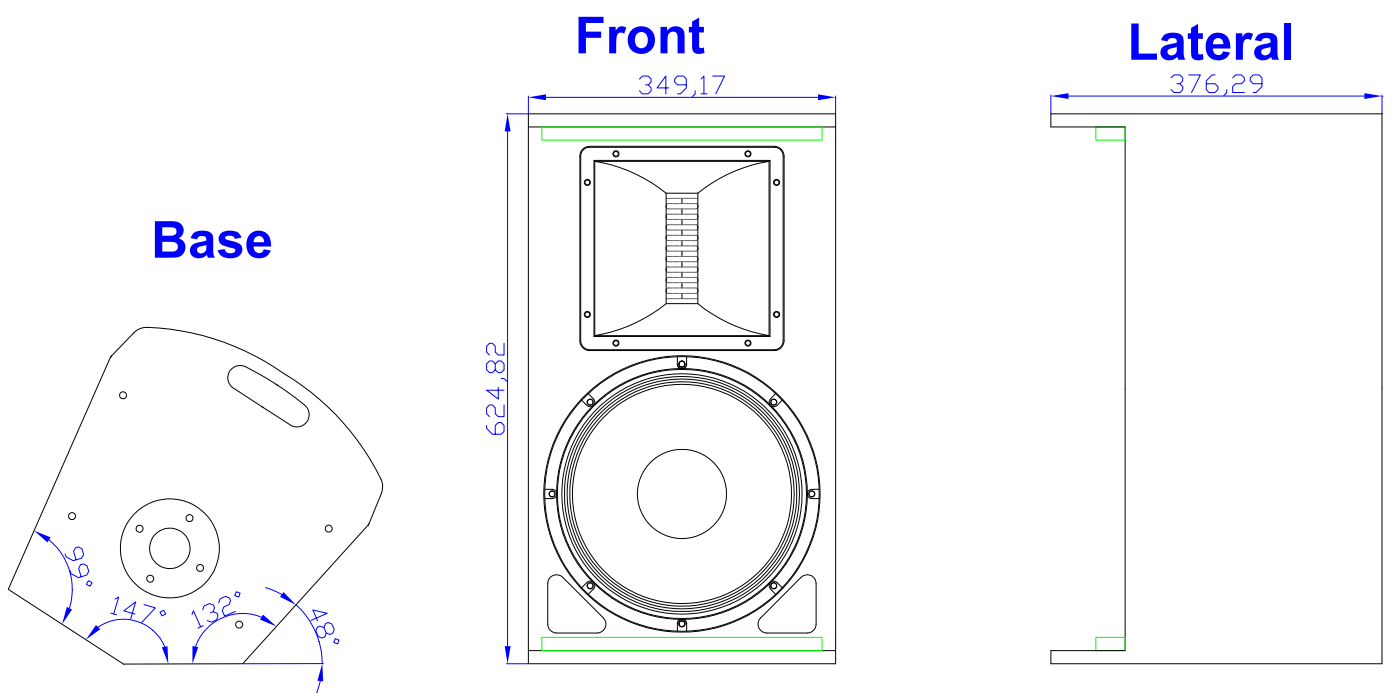


FR12A/1 Crossover

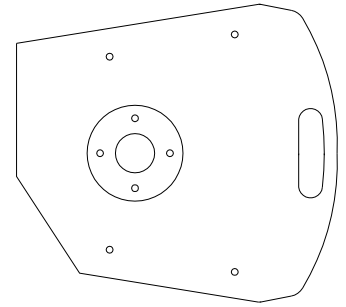
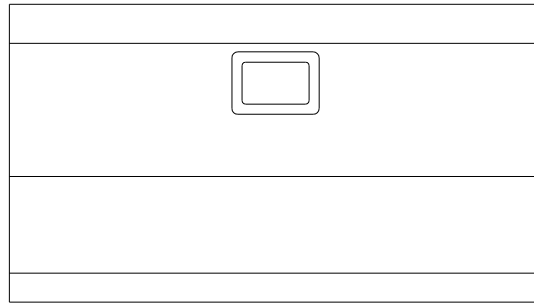
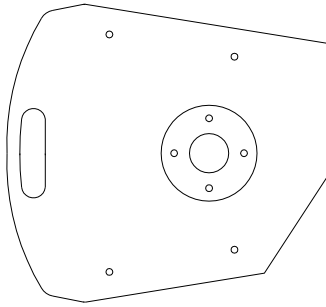


Technical Specifications

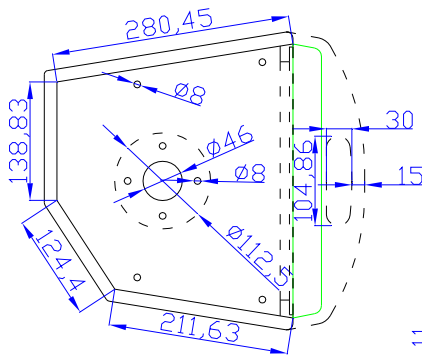
Acoustic cabinet:	FR12A
Description:	2 Way System. 12" and High Frequency unit
Power AES:	400 W.
Power Program:	800 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	123 dB.
Max. SPL peak:	129 dB.
Frequency response:	45 - 25.000Hz.
Coverage (H x V):	90° x 40°
Bass Loudspeakers:	12G40
Compression Driver:	TPL150
Constant Directivity Horn:	TD TPL
Crossover:	External
Hardware:	External



Rear

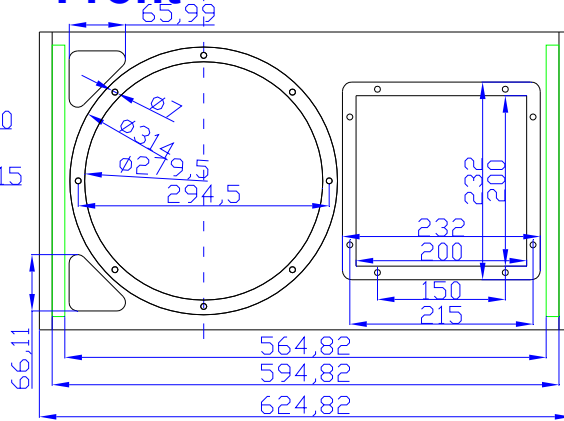


Base

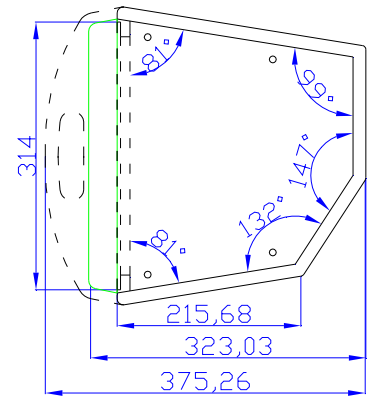


Section

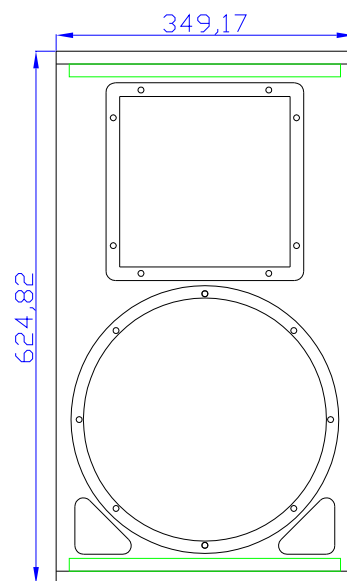
Front



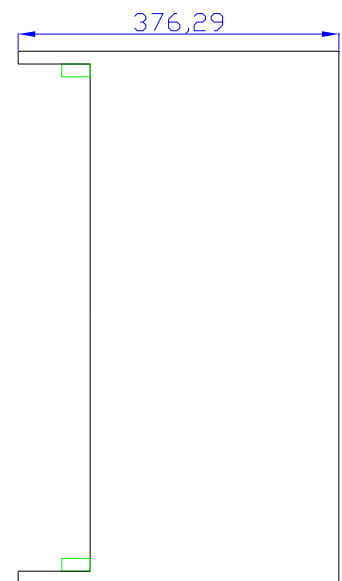
Central



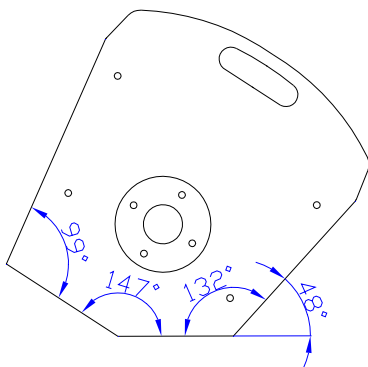
Front



Lateral



Base



12G40

KEY FEATURES

- High power handling (500 W AES)
- 3" edgewound copper voice-coil with polyimide fiber glass former
- Optimum winding length for increased linear excursion
- Designed for woofer applications

TECHNICAL SPECIFICATIONS

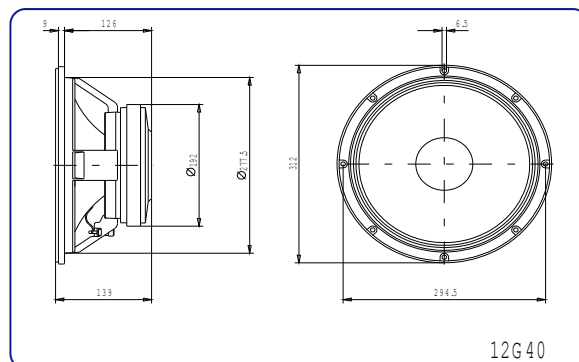
- Nominal diameter 300 mm. 12 in.
- Rated impedance 8 ohms
- Minimum impedance 6.7 ohms
- Power capacity* 500 w AES
- Program power 1000 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 35 - 4000 Hz
- Voice coil diameter 77 mm. 3 in.
- Magnetic assembly weight 6.3 kg. 13.9 lb.
- BL factor 18.4 N / A
- Voice coil length 20 mm
- Air gap height 8 mm
- X damage (peak to peak) 28 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.



DIMENSION DRAWINGS



TPL-150

KEY FEATURES

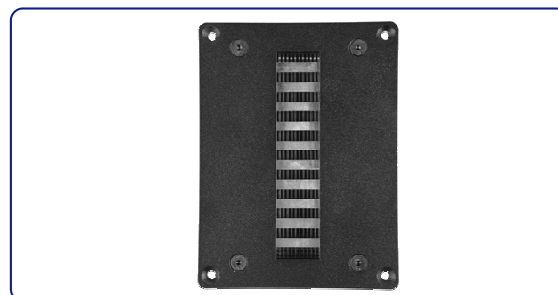
- Superior sound reproduction quality
- Extended frequency response (1 - 23 kHz)
- High sensitivity (99 dB)
- Extremely linear frequency response
- Low distortion
- Designed for the high frequencies reproduction

TECHNICAL SPECIFICATIONS

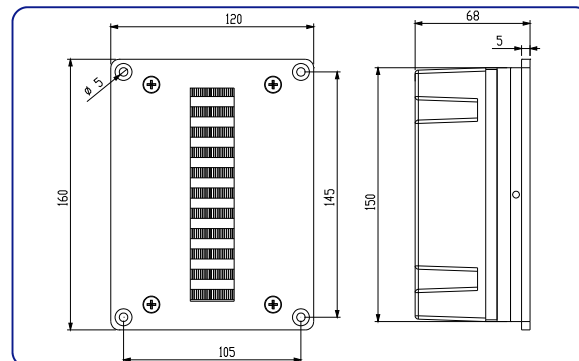
- Rated impedance 8 ohms
- D.C. Resistance 5.9 ohms
- Power capacity* 80 w AES above 1 kHz
- Program power 160 w above 1 kHz
- Sensitivity** 99 dB 1w @ 1m
- Frequency range 1- 23000 Hz
- Voice coil diameter 100 mm. 4 in.
- Recommended Crossover 1 kHz or higher (12 dB/oct. min.)
- Net weight 2.18 kg. 4.8 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 2.5 - 20 kHz.



DIMENSION DRAWINGS



TD-TPL

KEY FEATURES

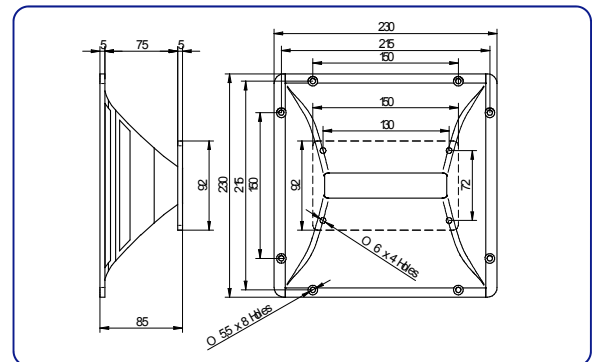
- Designed to be used with TPL-150 tweeter
- Coverage angles of 80° in the horizontal plane and 30° in the vertical plane
- Precise directivity control in the pass band
- Cast aluminium construction

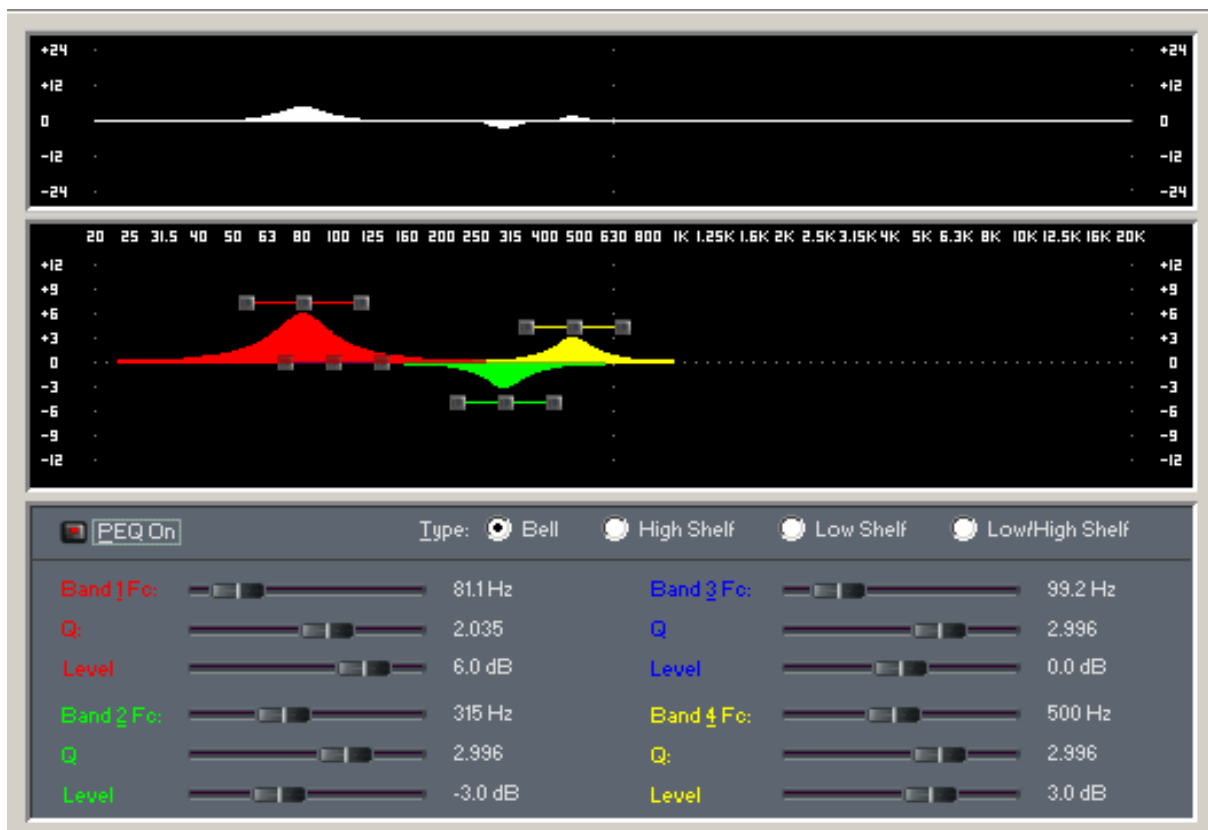
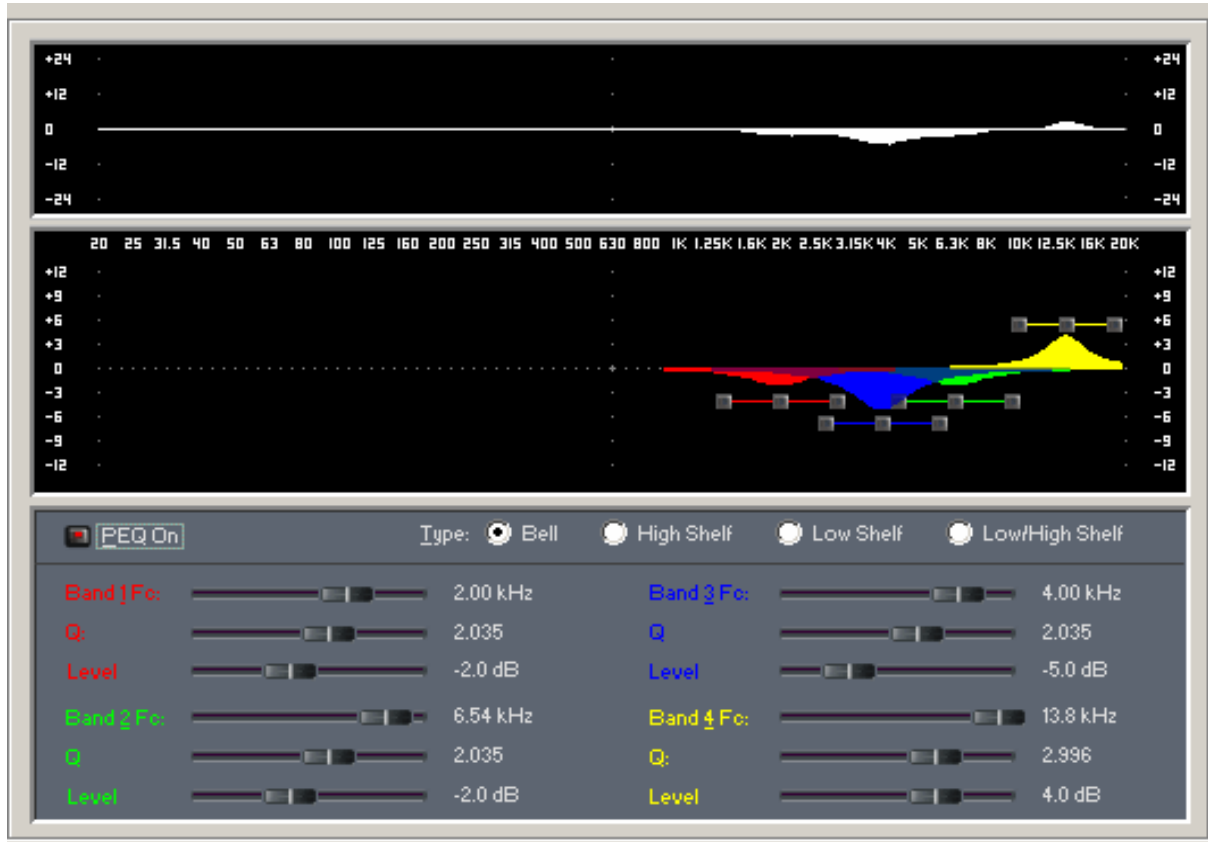
TECHNICAL SPECIFICATIONS

- Throat dimensions (WxH) 12 x 208 mm. 0.47 x 8.19 in.
- Horizontal beamwidth 80° (+9°, -20°)
(-6 dB, 1.2 - 16 kHz)
- Vertical beamwidth 30° (+27°, -21°)
(-6 dB, 2 - 16 kHz)
- Directivity factor (Q) 27 (average 1.2 - 16 kHz)
- Directivity index (DI) 13 dB (+6 dB, -4.5 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 230x230x85 mm.
9.05x9.05x3.35 in.
- Cutout dimensions (WxH) 195x195 mm.
7.68x7.68 in.
- Net weight 1.5 kg. 3.3 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 5 mm. diameter bolt circle.

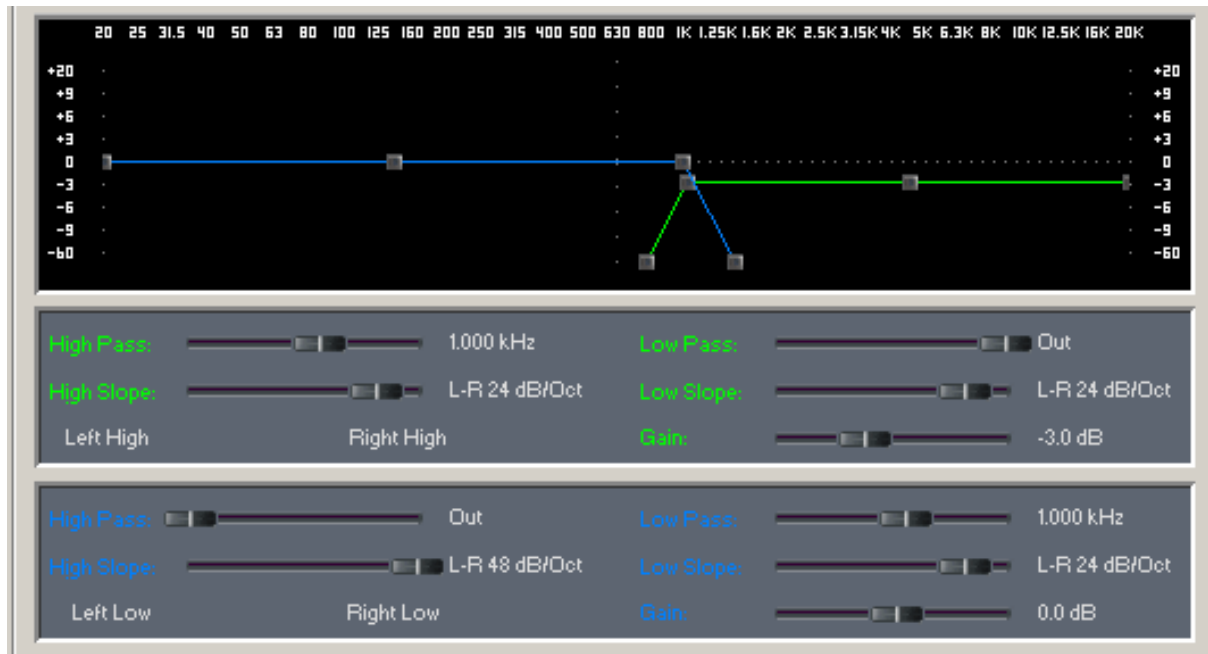


DIMENSION DRAWINGS





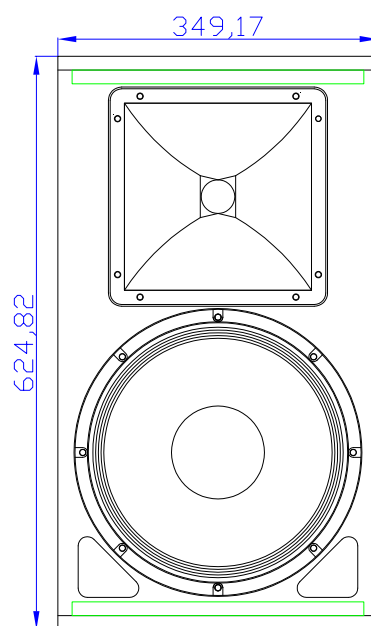
FR12A/2 Crossover



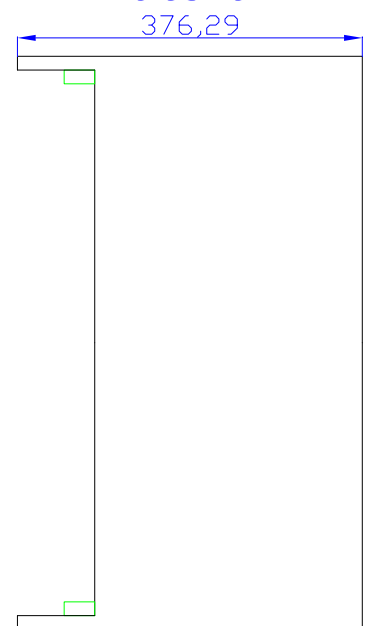
Technical Specifications

Acoustic cabinet:	FR12B
Description:	2 Way System. 12" and High Frequency unit
Power AES:	350 W.
Power Program:	700 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	122 dB.
Max. SPL peak:	128 dB.
Frequency response:	45 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	12MW/ND
Compression Driver:	CP755/ND
Constant Directivity Horn:	TD-385
Crossover:	FP-12B/1
Hardware:	External

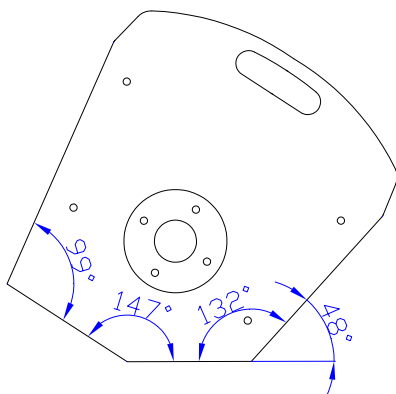
Front



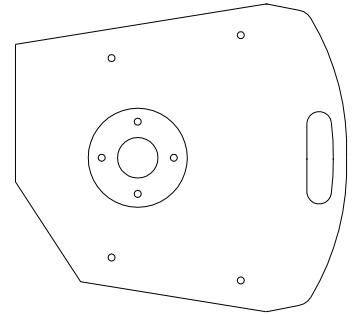
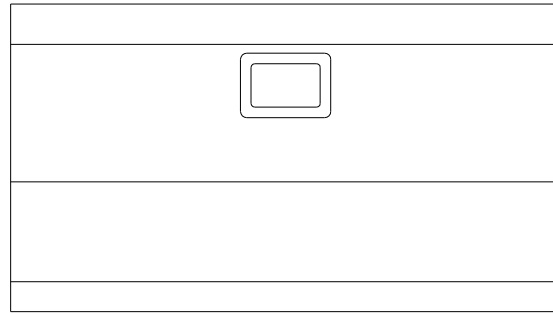
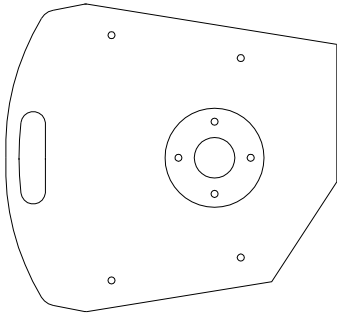
Lateral



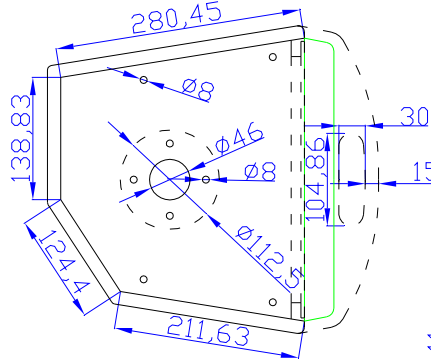
Base



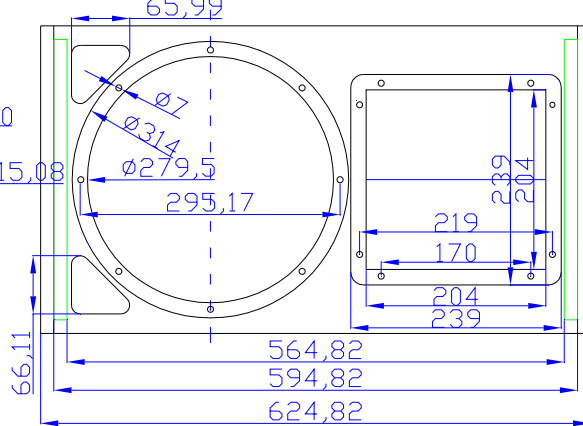
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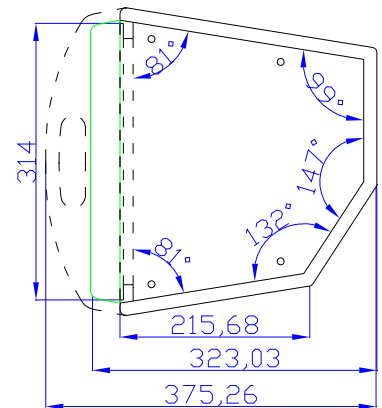
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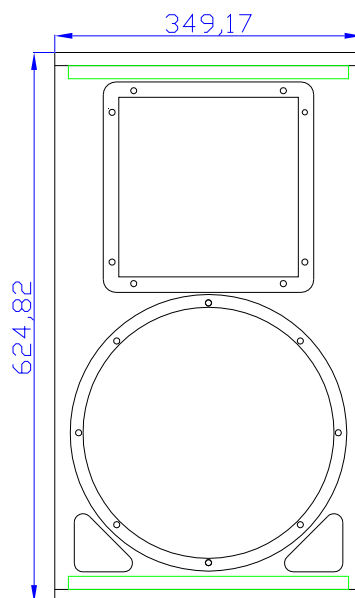
Front



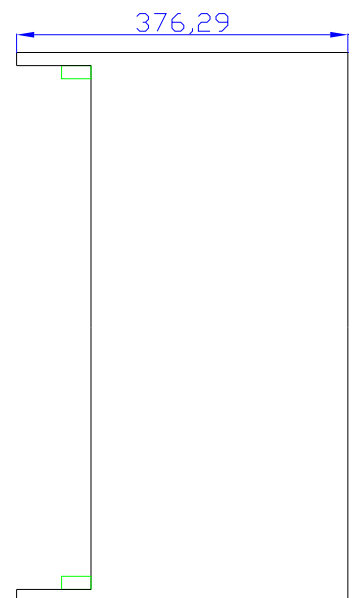
Central



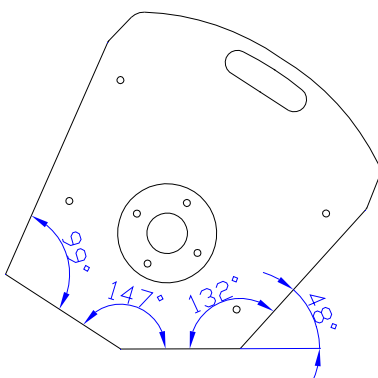
Front



Lateral



Base



12MWNd

KEY FEATURES

- Good power handling (350 W AES)
- Sensitivity: 97 dB @ 2.83V
- Extended frequency response (35-5000 Hz)
- Neodymium magnets
- Aluminium customized basket



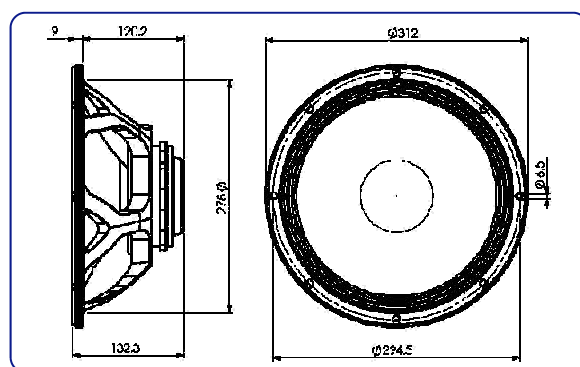
TECHNICAL SPECIFICATIONS

- Nominal diameter 300 mm. 12 in.
- Rated impedance 8 ohms
- Minimum impedance 7 ohms
- Power capacity* 350 w AES
- Program power 700 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 35 - 5000 Hz
- Voice coil diameter 62.4 mm. 2.5 in.
- Magnetic assembly weight 2.54 kg. 5.59 lb.
- BL factor 16.9 N / A
- Voice coil length 19.5 mm
- Air gap height 10 mm
- X damage (peak to peak) 30 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



CP-755Nd

KEY FEATURES

- Composite structure diaphragm (Titanium dome & Mylar surround)
- Light neodymium magnet
- Optimized titanium phasing plug
- Superior high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- High sensitivity (112 dB)



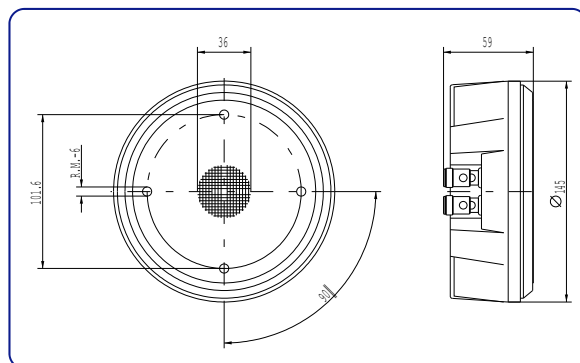
TECHNICAL SPECIFICATIONS

- Throat diameter 3.6 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 70 w AES above 1 kHz
- Program power 140 w above 1 kHz
- Sensitivity** 112 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 2.96 kg. 6.51 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.
 **Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1 - 7 kHz and Coupled to a TD565 horn.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

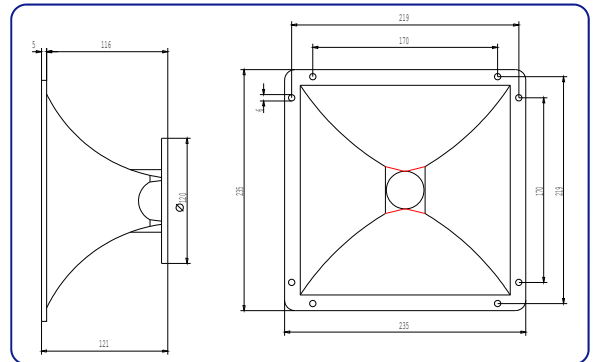
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

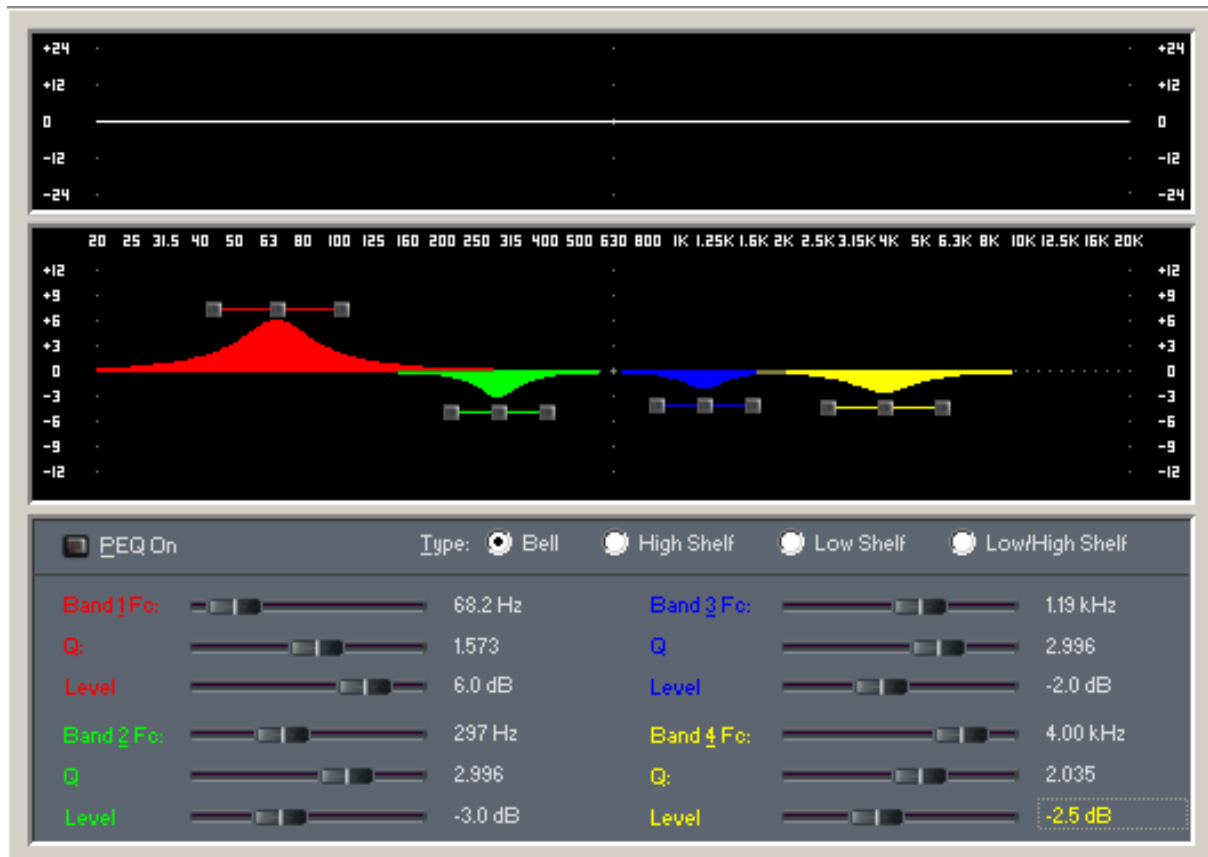
TECHNICAL SPECIFICATIONS

- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.

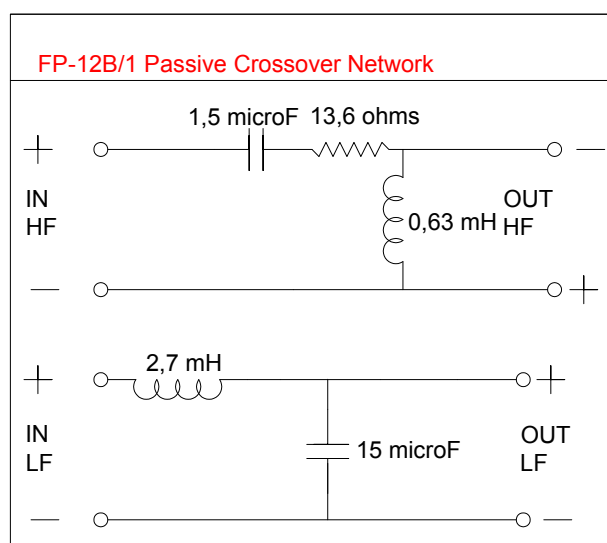


DIMENSION DRAWINGS



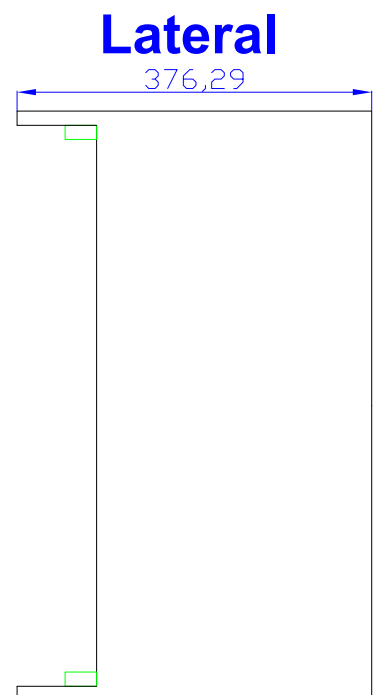
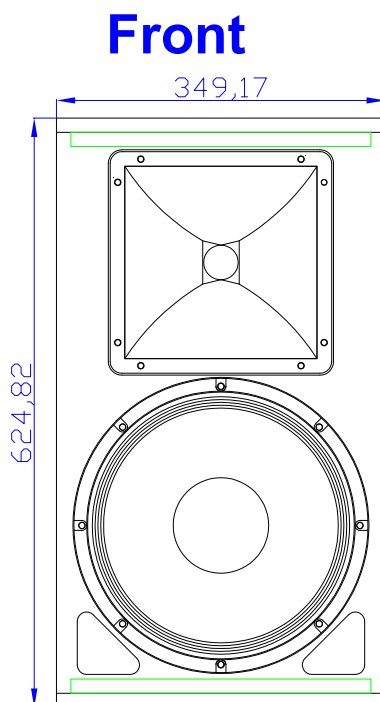
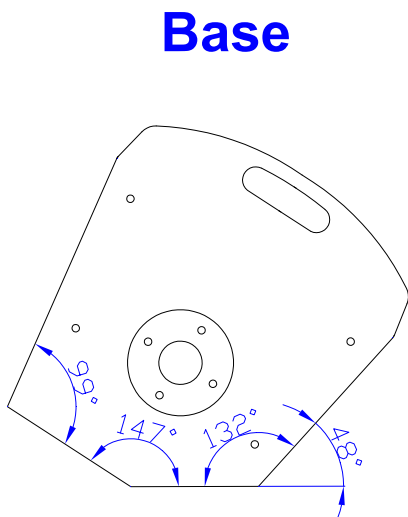


FR12B/1 Crossover

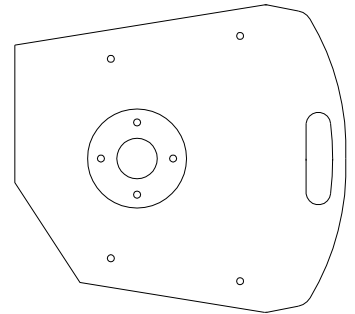
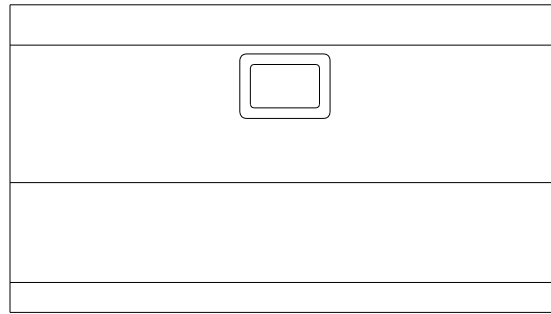
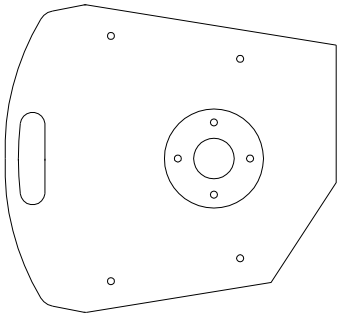


Technical Specifications

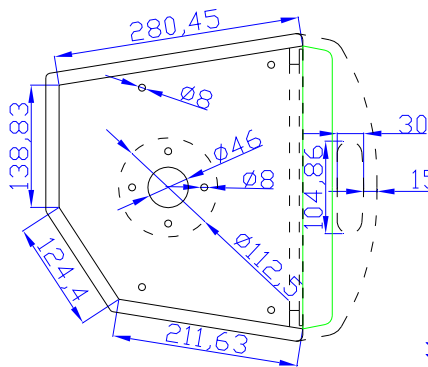
Acoustic cabinet:	FR12B
Description:	2 Way System. 12" and High Frequency unit
Power AES:	400 W.
Power Program:	800 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	123 dB.
Max. SPL peak:	129 dB.
Frequency response:	45 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	12G40
Compression Driver:	CP755/ND
Constant Directivity Horn:	TD-385
Crossover:	FP-12B/2
Hardware:	External



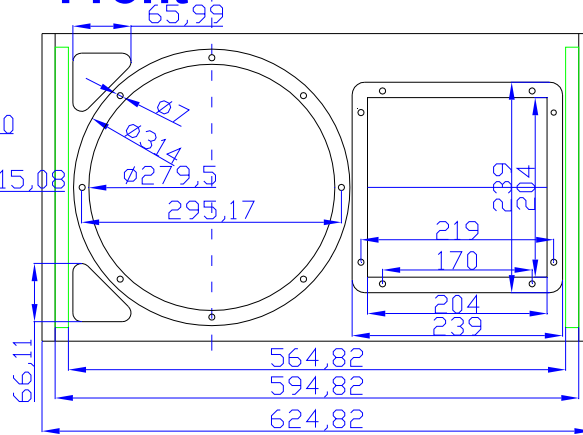
Rear



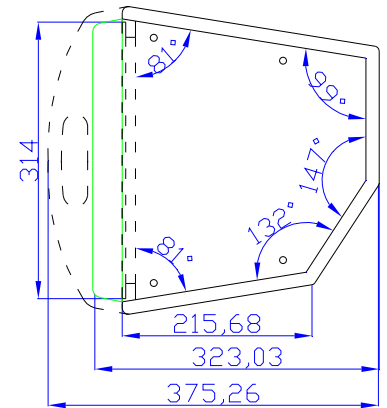
Base



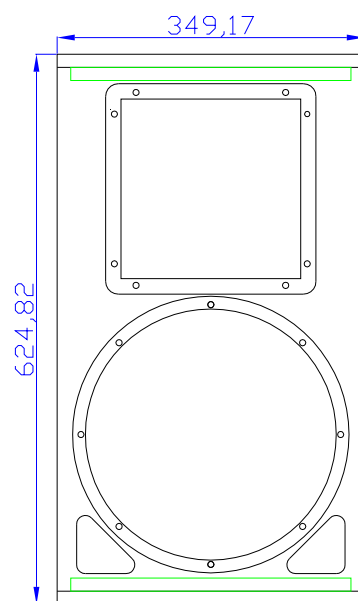
Front



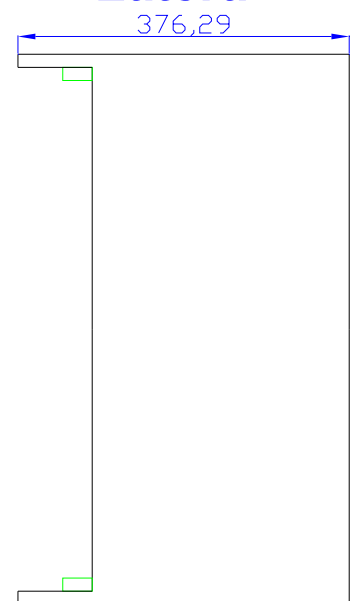
Central



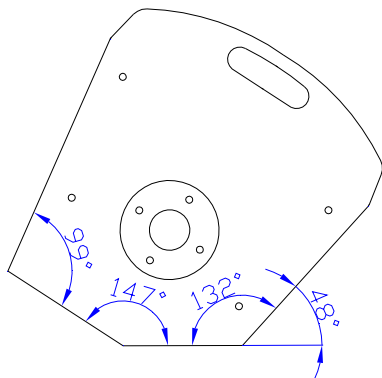
Front



Lateral



Base



12G40

KEY FEATURES

- High power handling (500 W AES)
- 3" edgewound copper voice-coil with polyimide fiber glass former
- Optimum winding length for increased linear excursion
- Designed for woofer applications



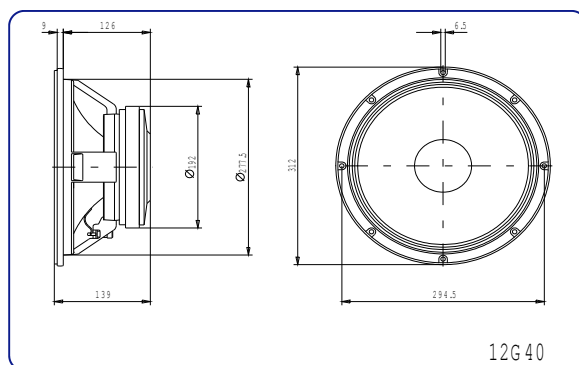
TECHNICAL SPECIFICATIONS

- Nominal diameter 300 mm. 12 in.
- Rated impedance 8 ohms
- Minimum impedance 6.7 ohms
- Power capacity* 500 w AES
- Program power 1000 w
- Sensitivity 97 dB 2.83v @ 1m @ 2rt
- Frequency range 35 - 4000 Hz
- Voice coil diameter 77 mm. 3 in.
- Magnetic assembly weight 6.3 kg. 13.9 lb.
- BL factor 18.4 N / A
- Voice coil length 20 mm
- Air gap height 8 mm
- X damage (peak to peak) 28 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



CP-755Nd

KEY FEATURES

- Composite structure diaphragm (Titanium dome & Mylar surround)
- Light neodymium magnet
- Optimized titanium phasing plug
- Superior high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- High sensitivity (112 dB)



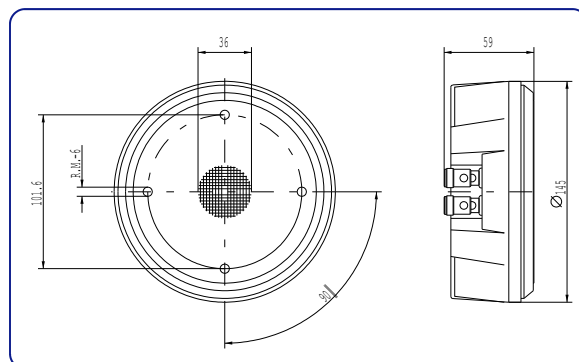
TECHNICAL SPECIFICATIONS

- Throat diameter 36 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 70 w AES above 1 kHz
- Program power 140 w above 1 kHz
- Sensitivity** 112 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 2.96 kg. 6.51 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.
 **Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1 - 7 kHz and coupled to a TD565 horn.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

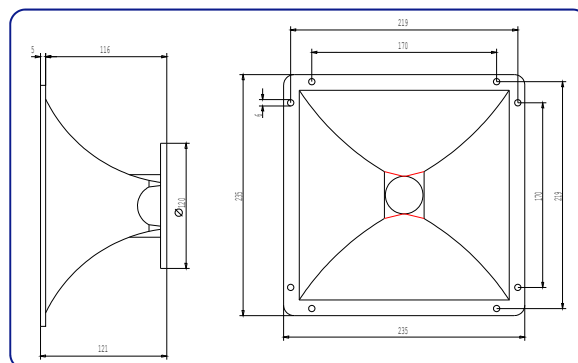
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

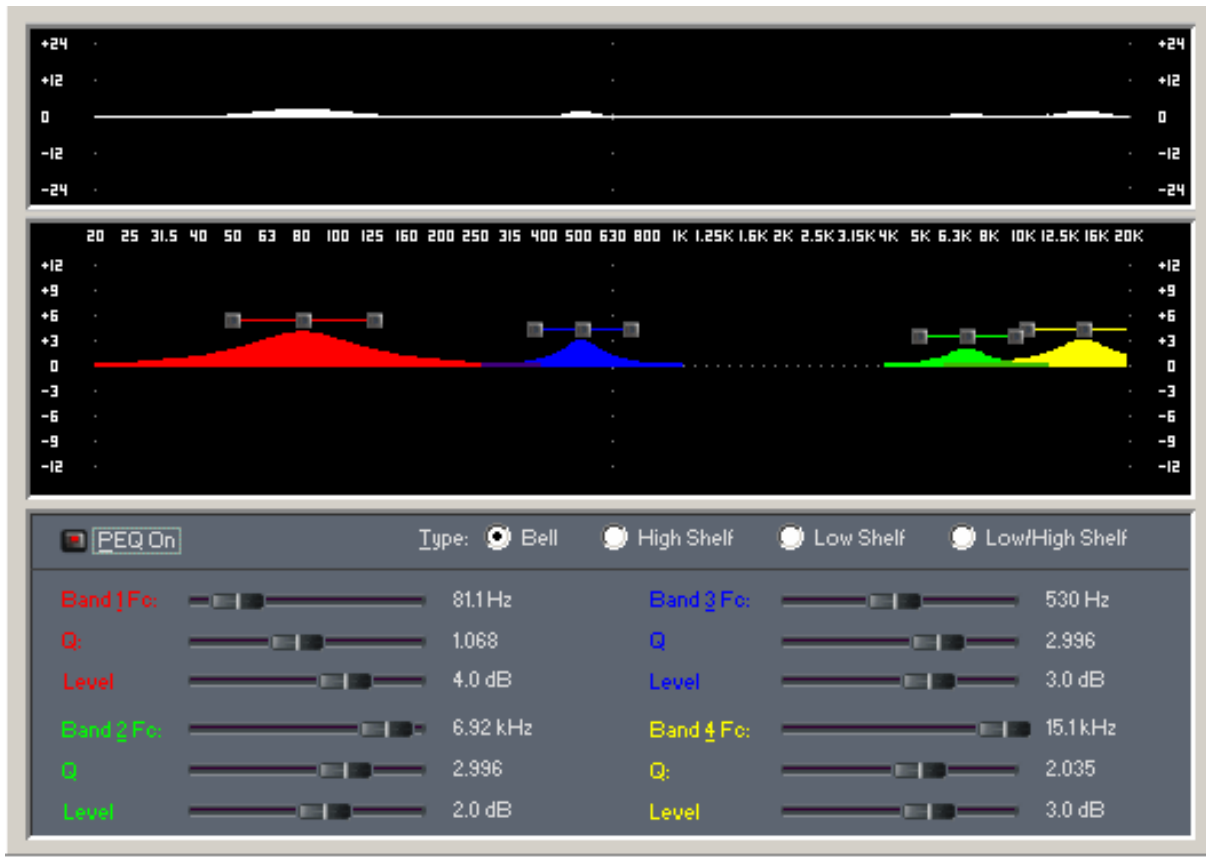
TECHNICAL SPECIFICATIONS

- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.

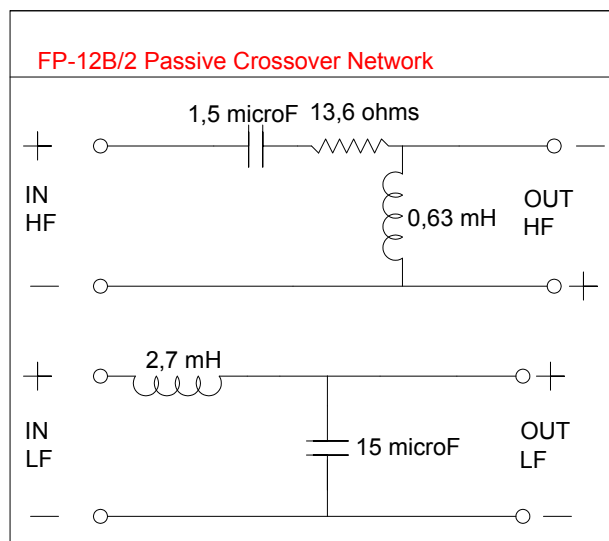


DIMENSION DRAWINGS





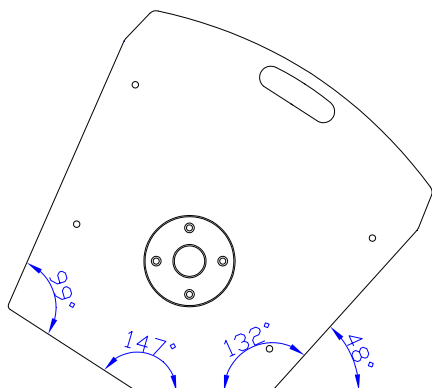
FR12B/2 Crossover



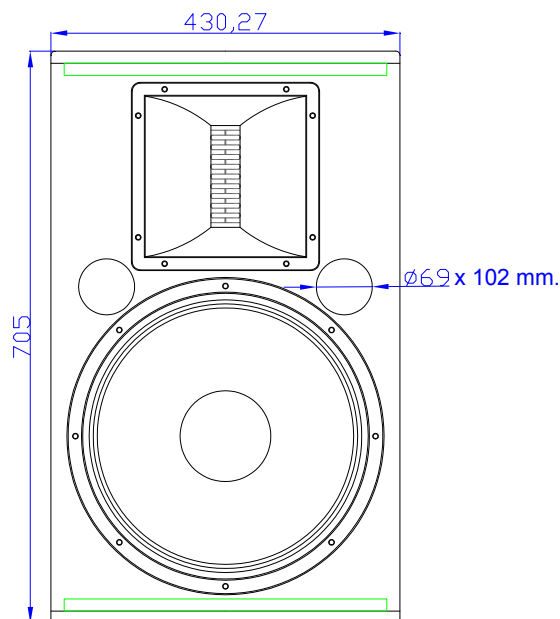
Technical Specifications

Acoustic cabinet:	FR15A
Description:	2 Way System. 15" and High Frequency unit
Power AES:	1.000 W.
Power Program:	2.000 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	127 dB.
Max. SPL peak:	133 dB.
Frequency response:	40 - 20.000 Hz.
Coverage (H x V):	90° x 40°
Bass Loudspeakers:	15P1000ND
Compression Driver:	TPL150
Constant Directivity Horn:	TD TPL
Crossover:	External
Hardware:	External

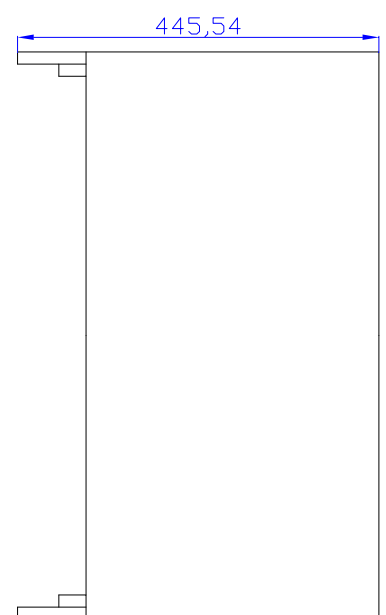
Base



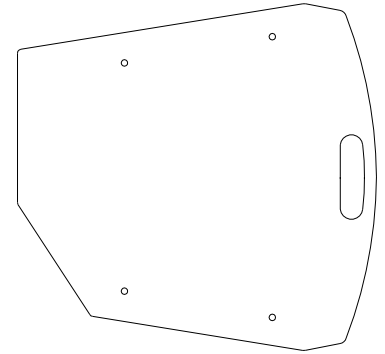
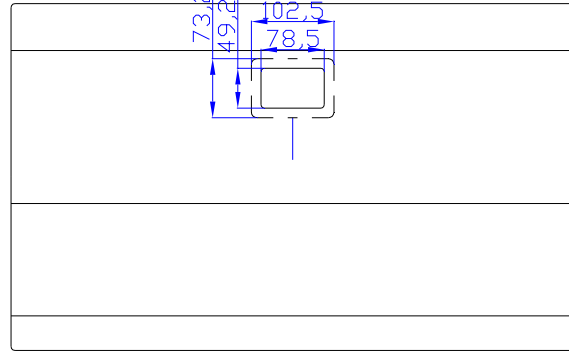
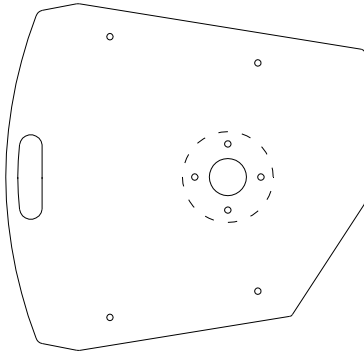
Front



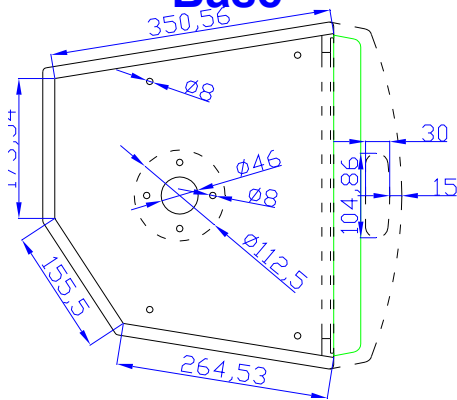
Lateral



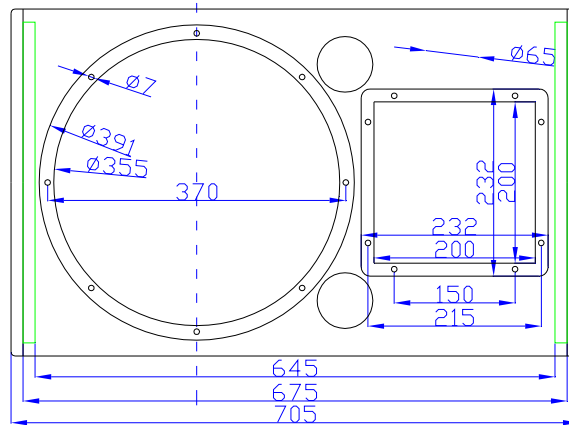
Rear



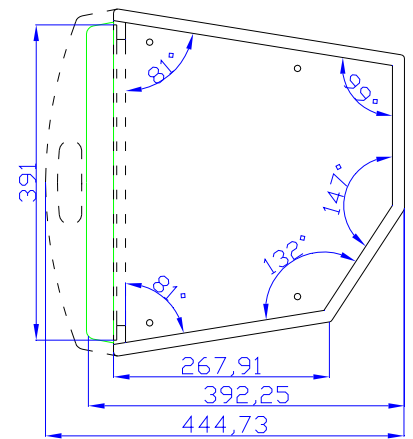
Base



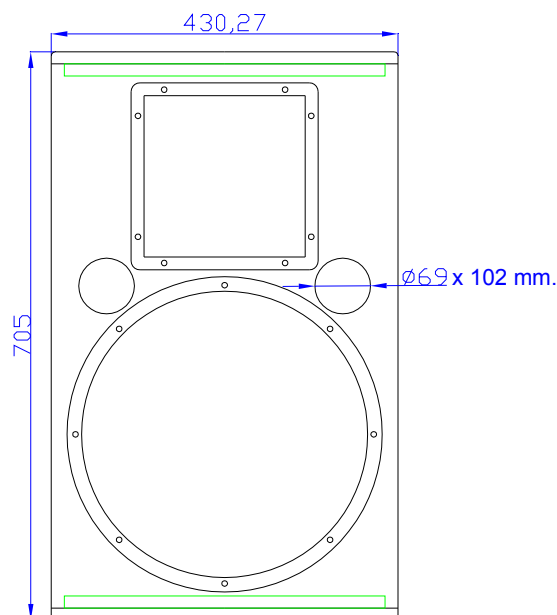
Section Front



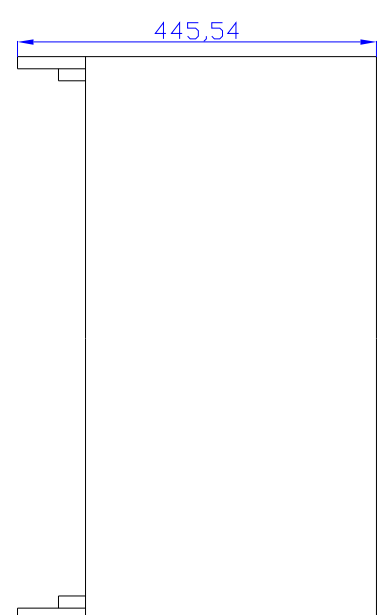
Central



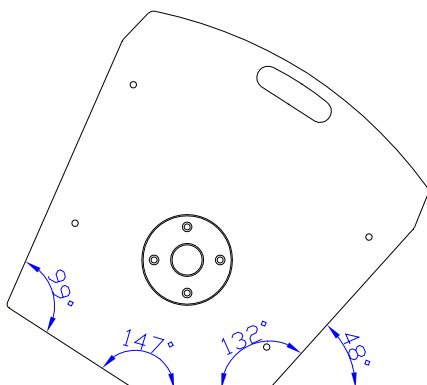
Front



Lateral



Base



15P1000Nd

KEY FEATURES

- Real 1000 W AES power handling
- Sensitivity: 97 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: Xmax ± 8 mm.
- Massive mechanical displacement capability: 52 mm p-p



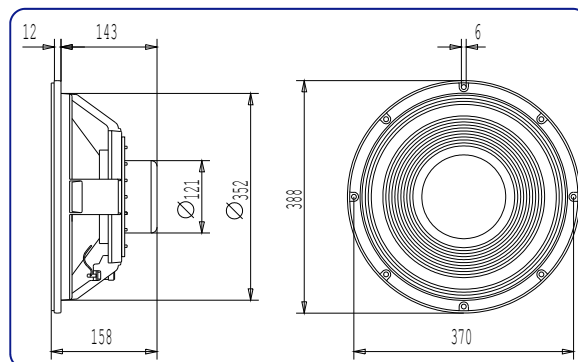
TECHNICAL SPECIFICATIONS

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 6.3 ohms
- Power capacity* 1000 w AES
- Program power 2000 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 30 - 2000 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 4.62 kg. 10.16 lb.
- BL factor 24.3 N / A
- Voice coil length 21 mm
- Air gap height 12 mm
- X damage (peak to peak) 52 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

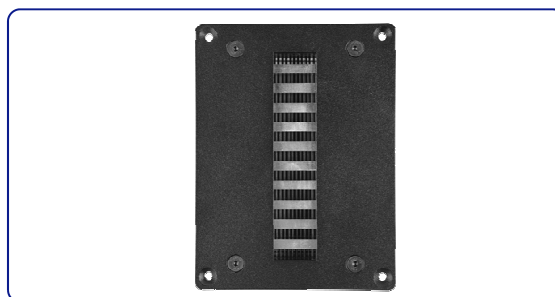
DIMENSION DRAWINGS



TPL-150

KEY FEATURES

- Superior sound reproduction quality
- Extended frequency response (1 - 23 kHz)
- High sensitivity (99 dB)
- Extremely linear frequency response
- Low distortion
- Designed for the high frequencies reproduction



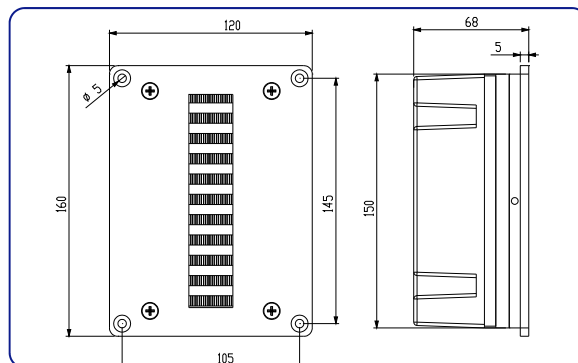
TECHNICAL SPECIFICATIONS

- Rated impedance 8 ohms
- D.C. Resistance 5.9 ohms
- Power capacity* 80 w AES above 1 kHz
- Program power 160 w above 1 kHz
- Sensitivity** 99 dB 1w @ 1m
- Frequency range 1- 23000 Hz
- Voice coil diameter 100 mm. 4 in.
- Recommended Crossover 1 kHz or higher (12 dB/oct. min.)
- Net weight 2.18 kg. 4.8 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.
 **Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 2.5 - 20 kHz.

DIMENSION DRAWINGS



TD-TPL

KEY FEATURES

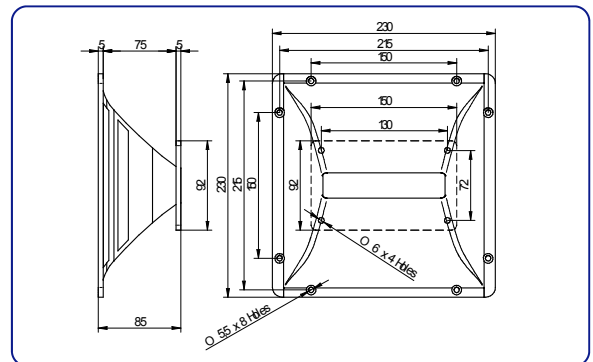
- Designed to be used with TPL-150 tweeter
- Coverage angles of 80° in the horizontal plane and 30° in the vertical plane
- Precise directivity control in the pass band
- Cast aluminium construction

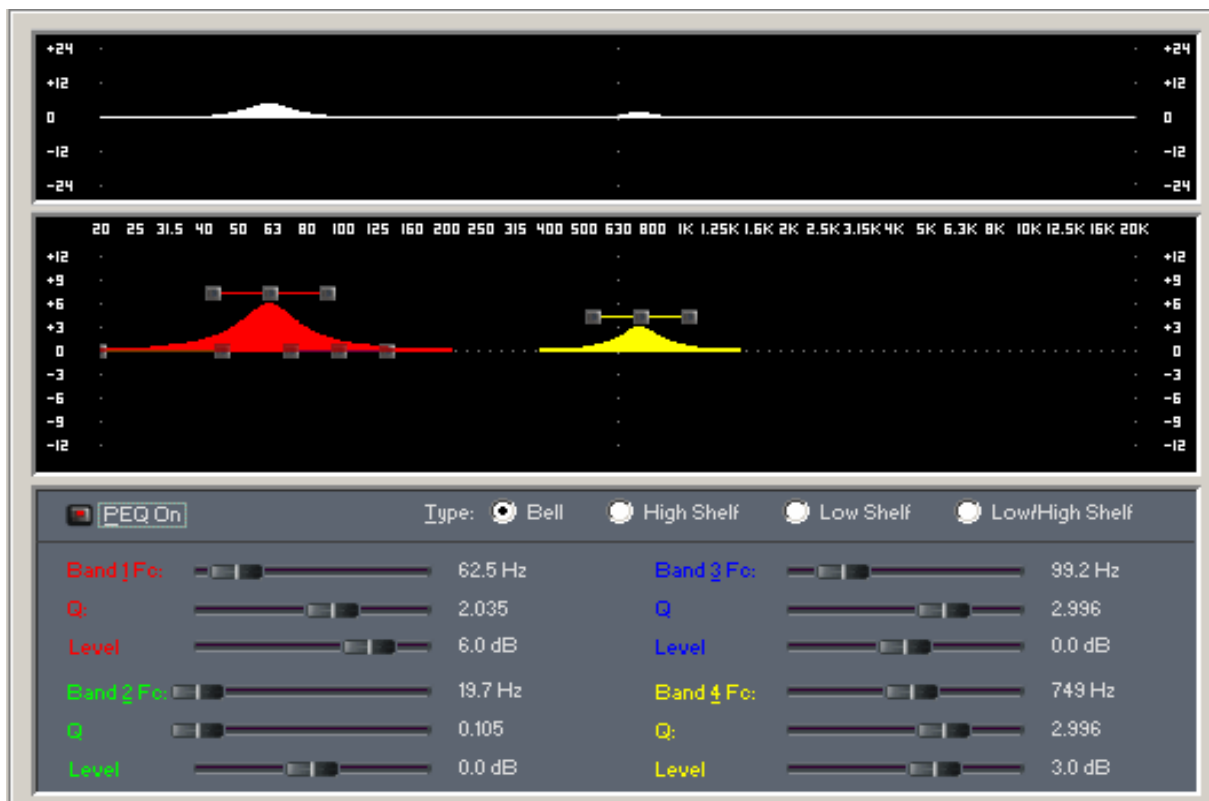
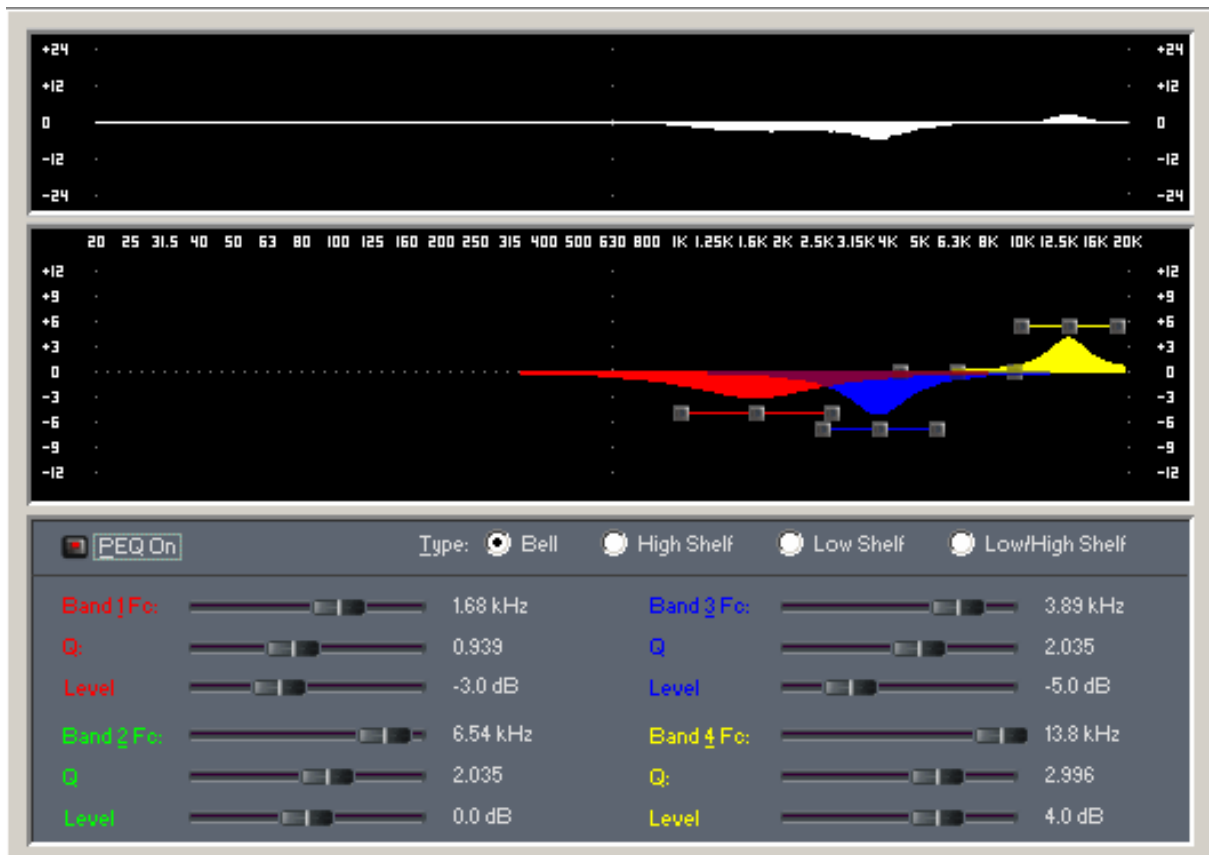
TECHNICAL SPECIFICATIONS

- Throat dimensions (WxH) 12 x 208 mm. 0.47 x 8.19 in.
- Horizontal beamwidth 80° (+9°, -20°)
(-6 dB, 1.2 - 16 kHz)
- Vertical beamwidth 30° (+27°, -21°)
(-6 dB, 2 - 16 kHz)
- Directivity factor (Q) 27 (average 1.2 - 16 kHz)
- Directivity index (DI) 13 dB (+6 dB, -4.5 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 230x230x85 mm.
9.05x9.05x3.35 in.
- Cutout dimensions (WxH) 195x195 mm.
7.68x7.68 in.
- Net weight 1.5 kg. 3.3 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 5 mm. diameter bolt circle.

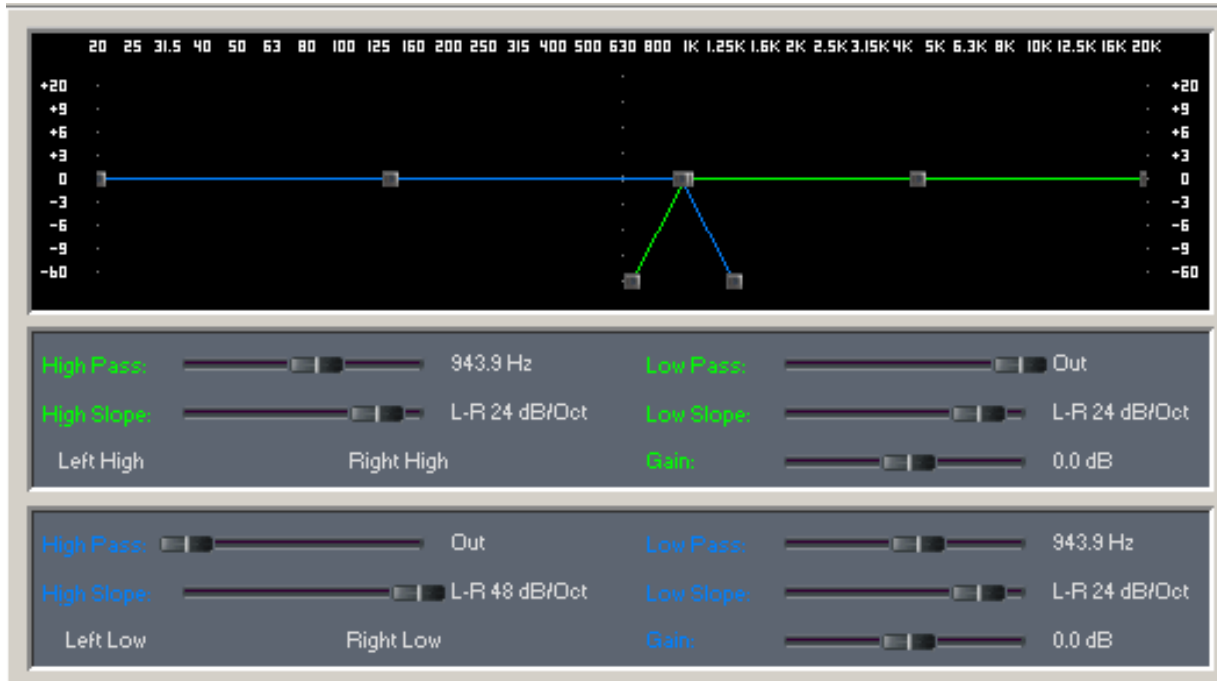


DIMENSION DRAWINGS





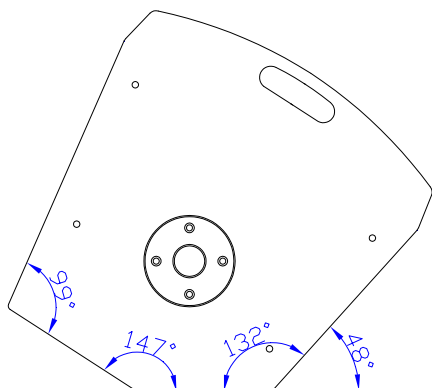
FR15A/1 Crossover



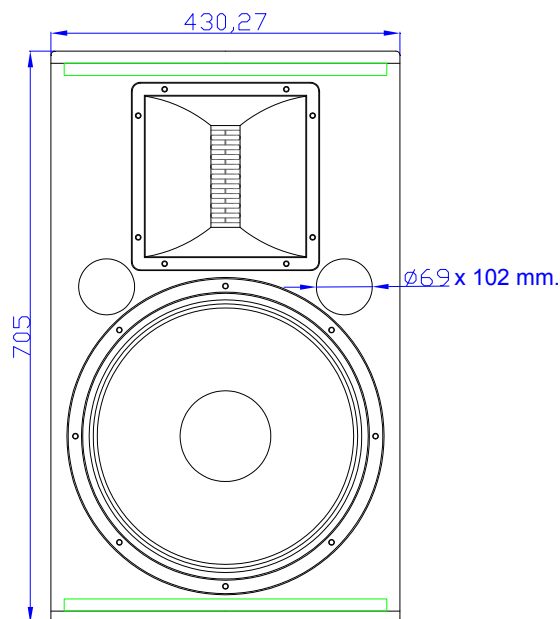
Technical Specifications

Acoustic cabinet:	FR15A
Description:	2 Way System. 15" and High Frequency unit
Power AES:	800 W.
Power Program:	1.600 W.
Sensitivity 2,83v @ 1m:	100 dB.
Max. SPL continuous:	129 dB.
Max. SPL peak:	135 dB.
Frequency response:	45 - 25.000Hz.
Coverage (H x V):	90° x 40°
Bass Loudspeakers:	15P80ND
Compression Driver:	TPL150
Constant Directivity Horn:	TD TPL
Crossover:	External
Hardware:	External

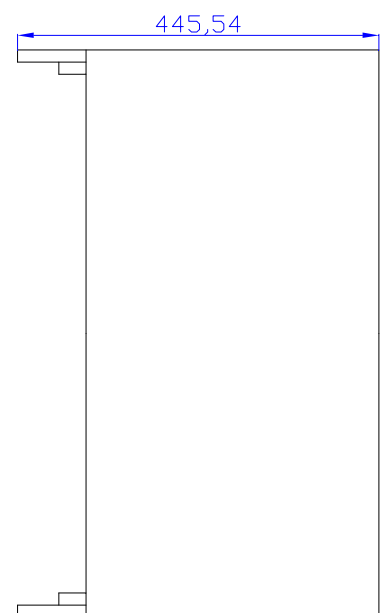
Base



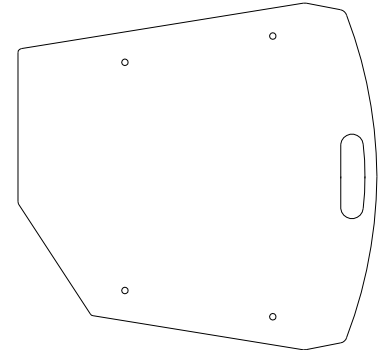
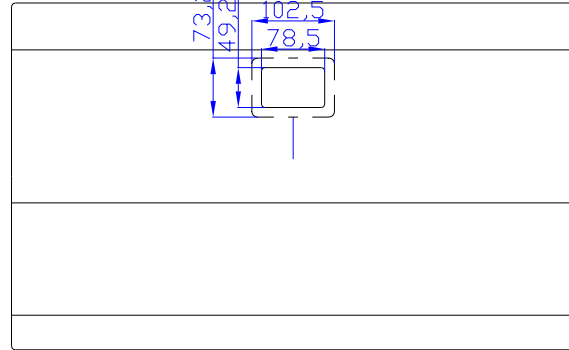
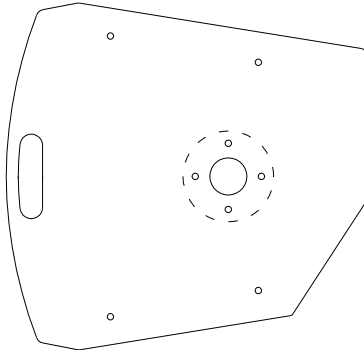
Front



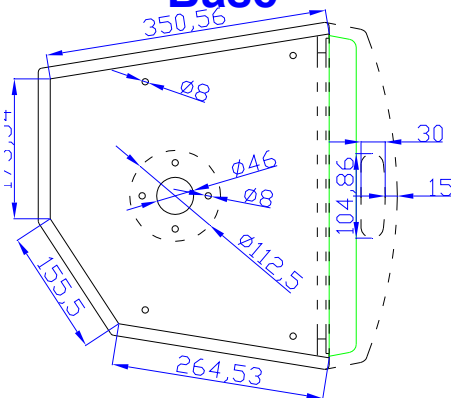
Lateral



Rear

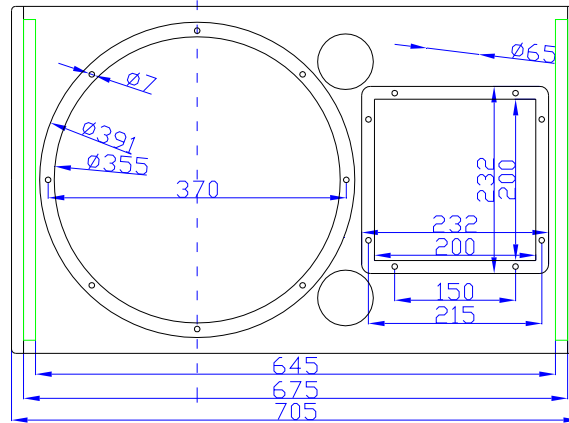


Base

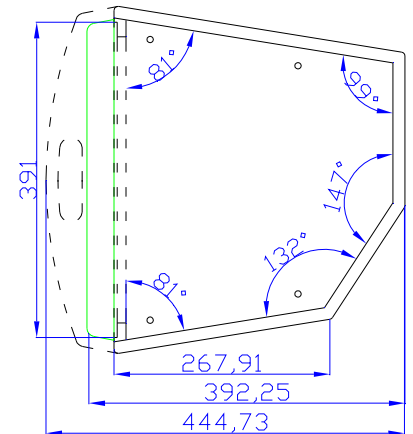


Section

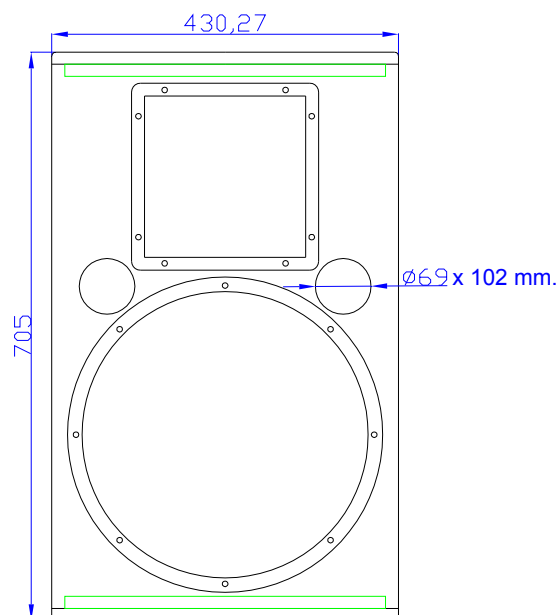
Front



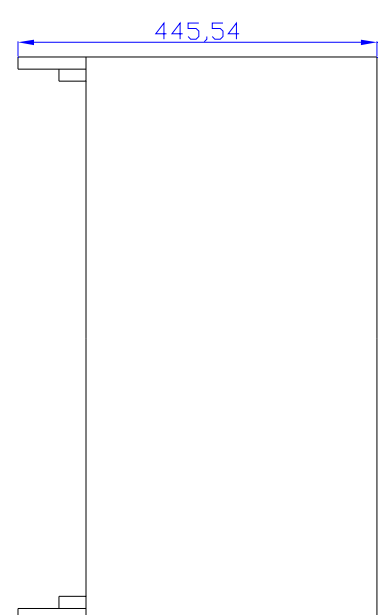
Central



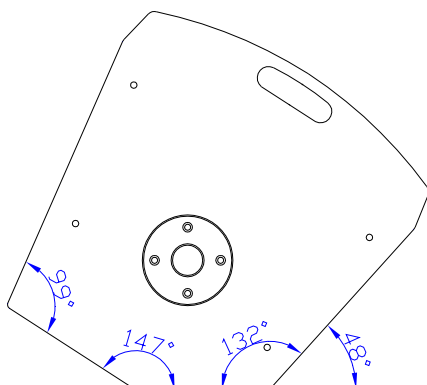
Front



Lateral



Base



15P80Nd

KEY FEATURES

- Real 800 W AES power handling
- Sensitivity: 100 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 7.5$ mm.
- Massive mechanical displacement capability: 52 mm p-p

TECHNICAL SPECIFICATIONS

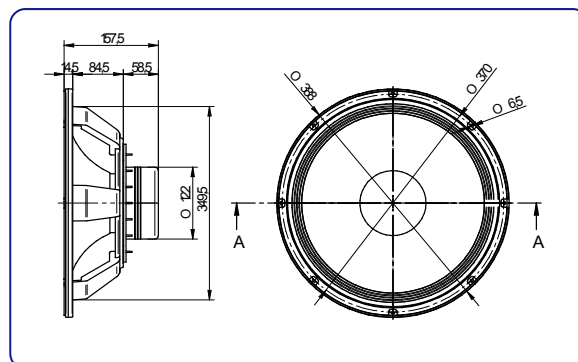
- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 6.6 ohms
- Power capacity* 800 w AES
- Program power 1600 w
- Sensitivity 100 dB 2.83v @ 1m @ 2π
- Frequency range 30 - 5000 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 4.62 kg. 10.16 lb.
- BL factor 23.6 N / A
- Voice coil length 20 mm
- Air gap height 12 mm
- X damage (peak to peak) 52 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.



DIMENSION DRAWINGS



TPL-150

KEY FEATURES

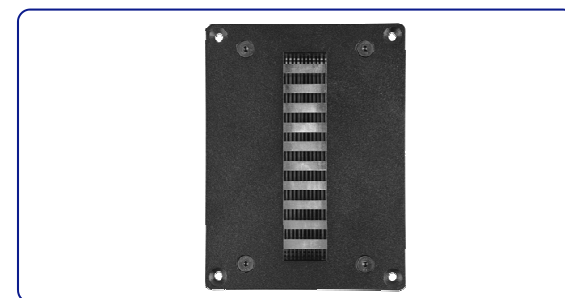
- Superior sound reproduction quality
- Extended frequency response (1 - 23 kHz)
- High sensitivity (99 dB)
- Extremely linear frequency response
- Low distortion
- Designed for the high frequencies reproduction

TECHNICAL SPECIFICATIONS

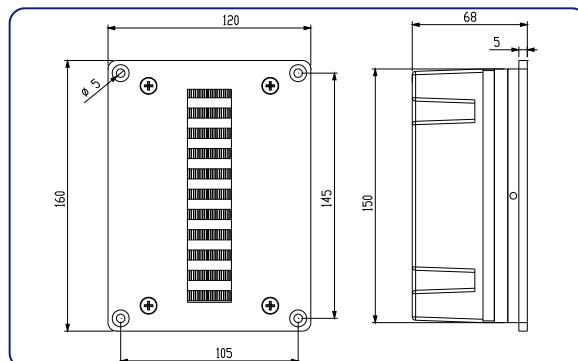
- Rated impedance 8 ohms
- D.C. Resistance 5.9 ohms
- Power capacity* 80 w AES above 1 kHz
- Program power 160 w above 1 kHz
- Sensitivity** 99 dB 1w @ 1m
- Frequency range 1- 23000 Hz
- Voice coil diameter 100 mm. 4 in.
- Recommended Crossover 1 kHz or higher (12 dB/oct. min.)
- Net weight 2.18 kg. 4.8 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 2.5 - 20 kHz.



DIMENSION DRAWINGS



TD-TPL

KEY FEATURES

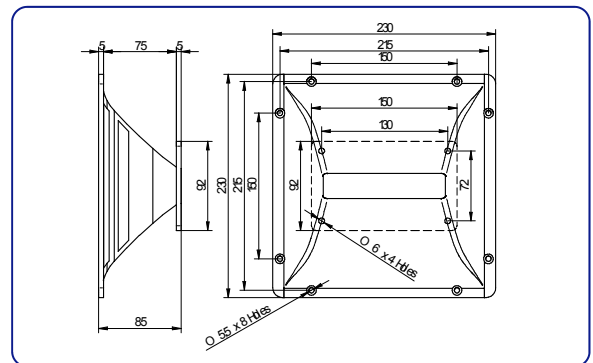
- Designed to be used with TPL-150 tweeter
- Coverage angles of 80° in the horizontal plane and 30° in the vertical plane
- Precise directivity control in the pass band
- Cast aluminium construction

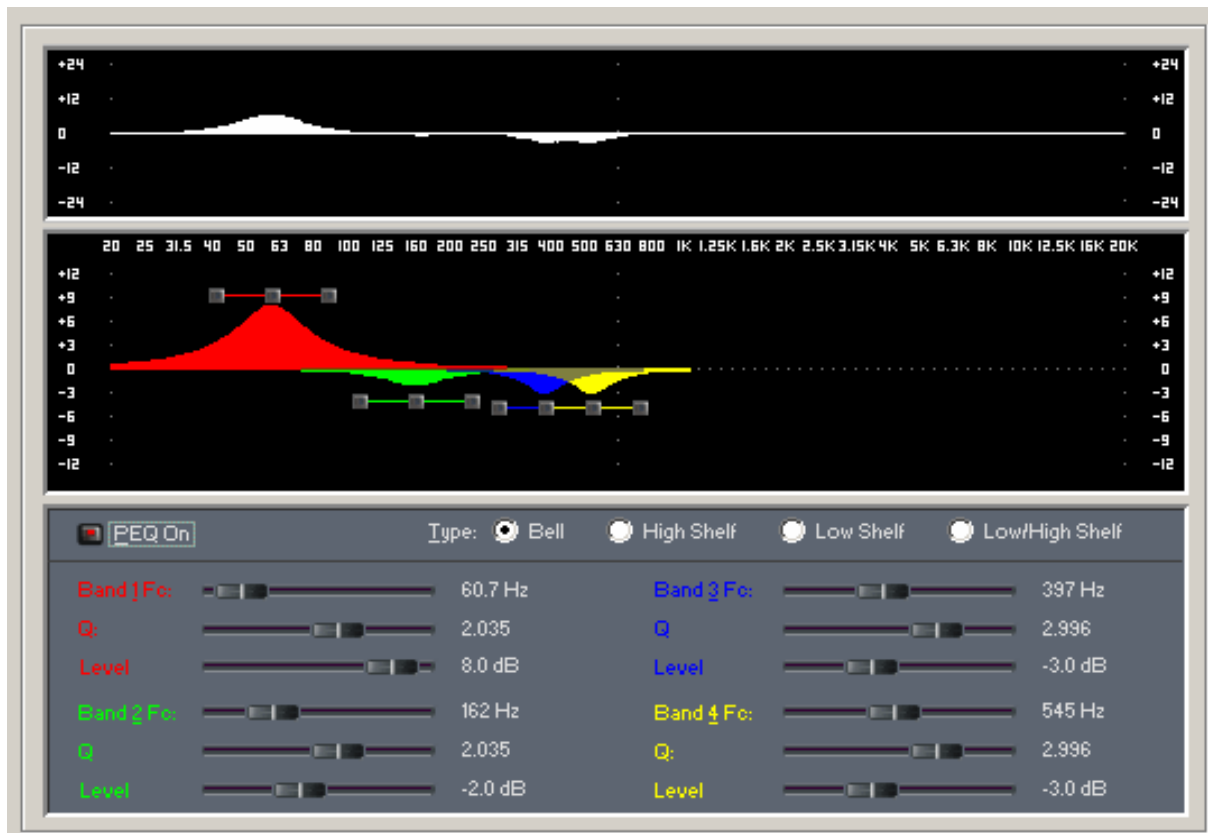
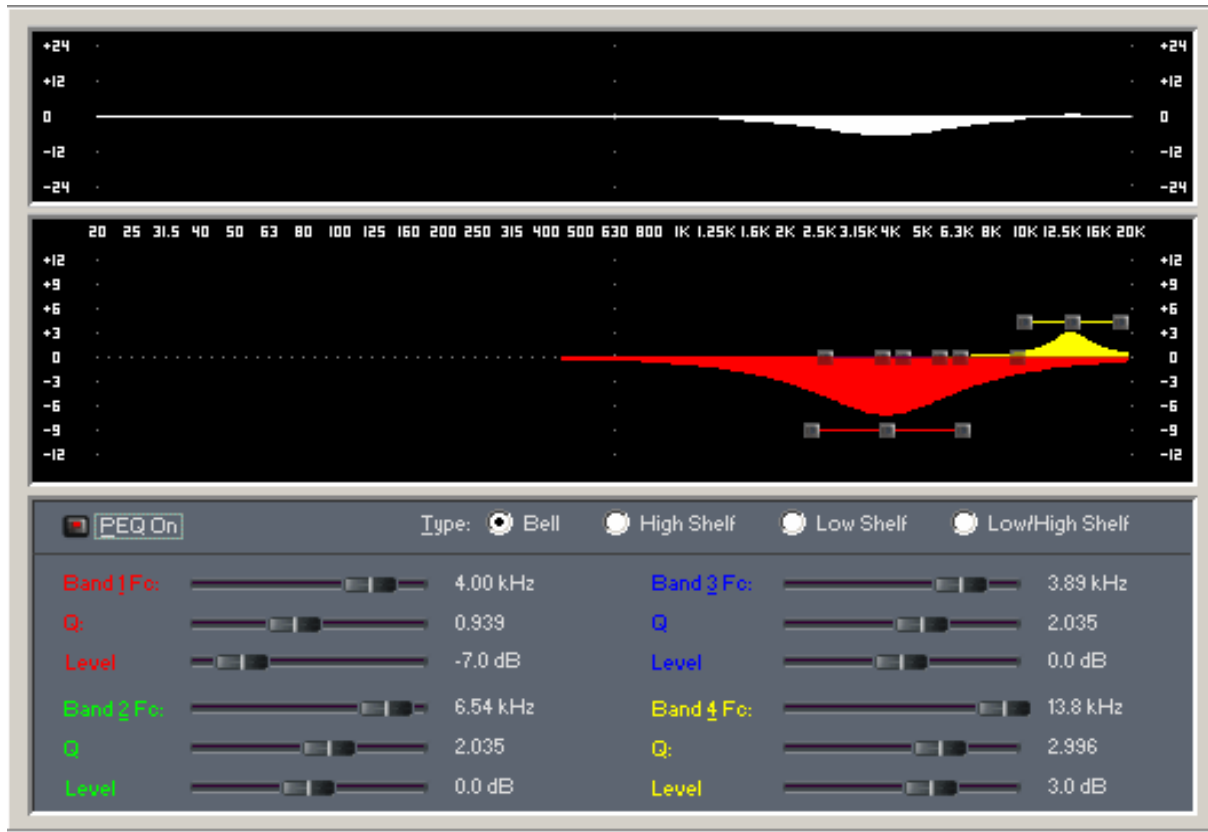


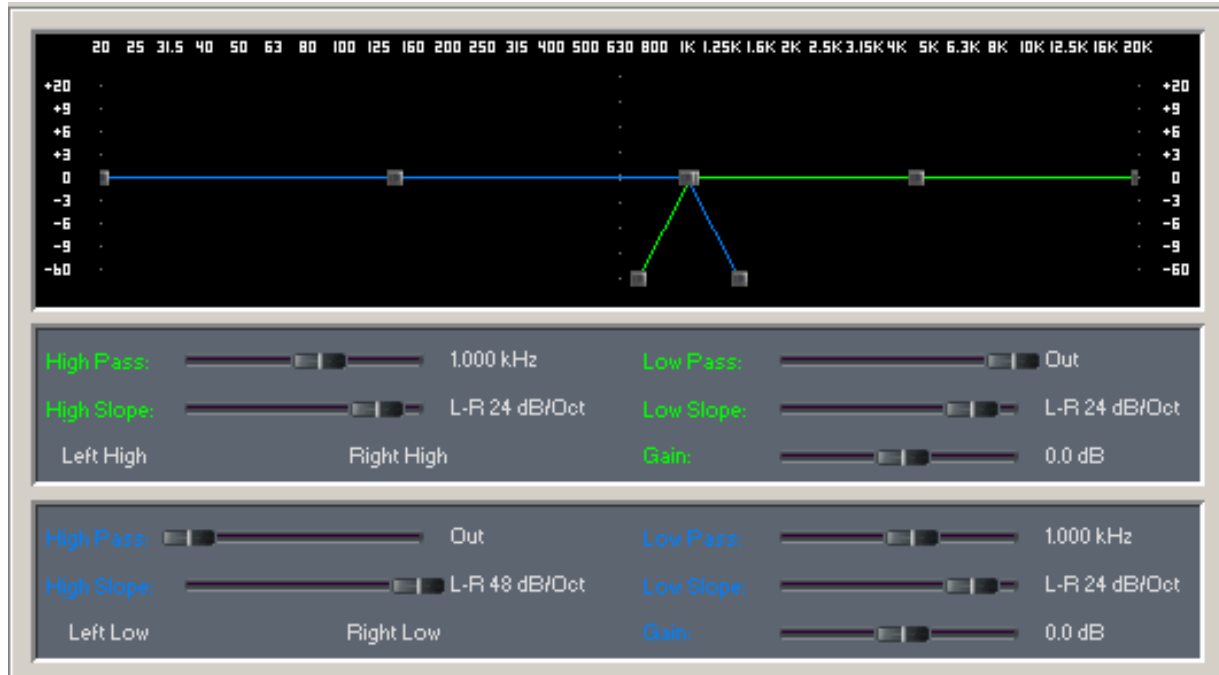
TECHNICAL SPECIFICATIONS

- Throat dimensions (WxH) 12 x 208 mm. 0.47 x 8.19 in.
- Horizontal beamwidth 80° (+9°, -20°)
(-6 dB, 1.2 - 16 kHz)
- Vertical beamwidth 30° (+27°, -21°)
(-6 dB, 2 - 16 kHz)
- Directivity factor (Q) 27 (average 1.2 - 16 kHz)
- Directivity index (DI) 13 dB (+6 dB, -4.5 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 230x230x85 mm.
9.05x9.05x3.35 in.
- Cutout dimensions (WxH) 195x195 mm.
7.68x7.68 in.
- Net weight 1.5 kg. 3.3 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 5 mm. diameter bolt circle.

DIMENSION DRAWINGS

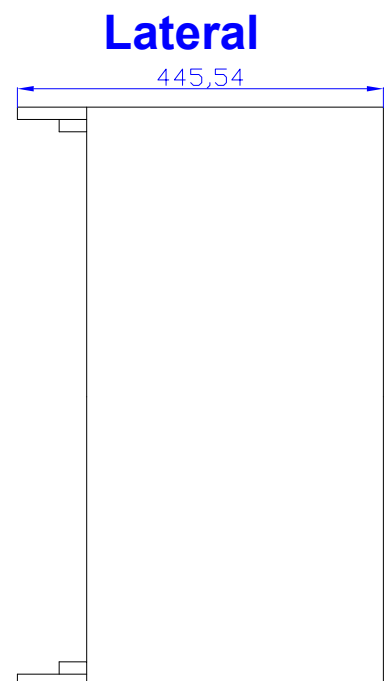
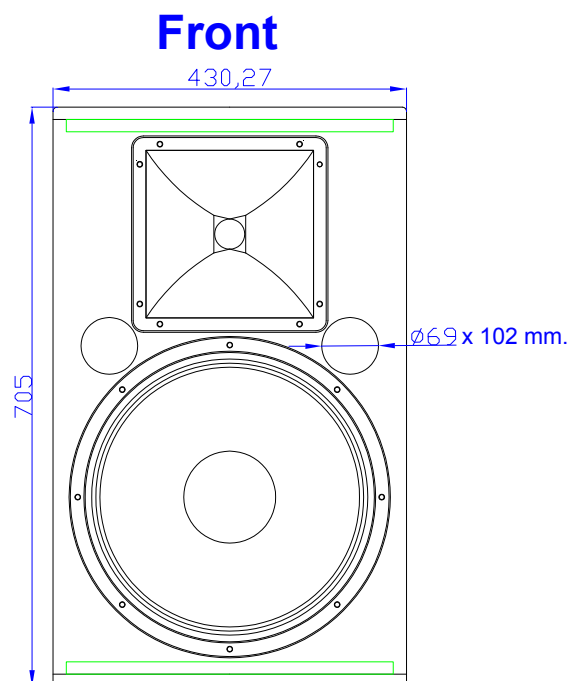
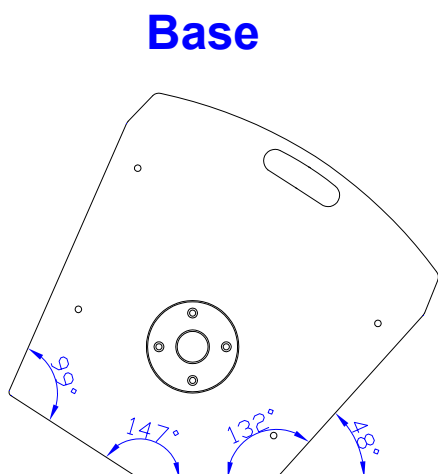




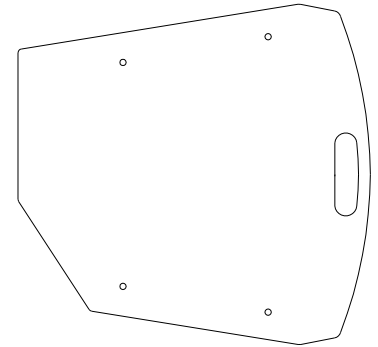
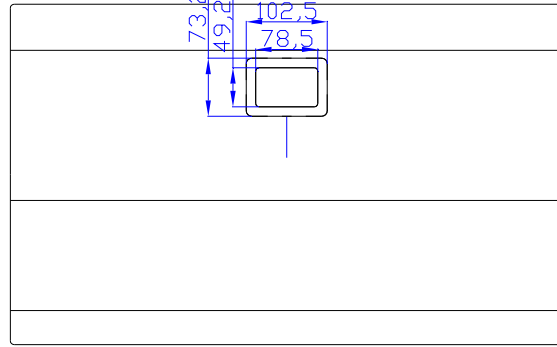
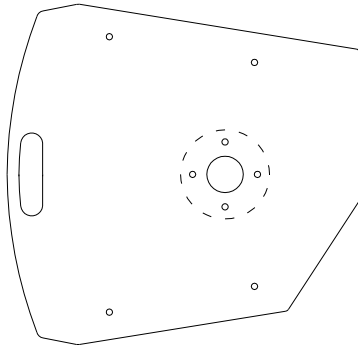


Technical Specifications

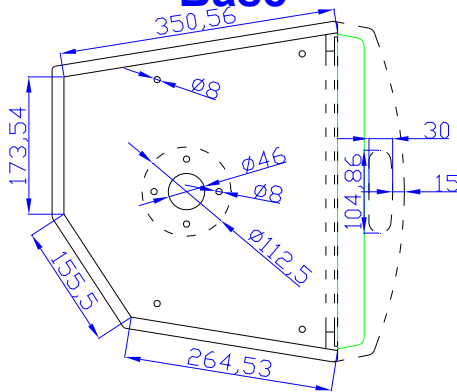
Acoustic cabinet:	FR15B
Description:	2 Way System. 15" and High Frequency unit
Power AES:	1.000 W.
Power Program:	2.000 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	127 dB.
Max. SPL peak:	133 dB.
Frequency response:	40 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	15P1000ND
Compression Driver:	CP-755/TI
Constant Directivity Horn:	TD-385
Crossover:	External
Hardware:	External



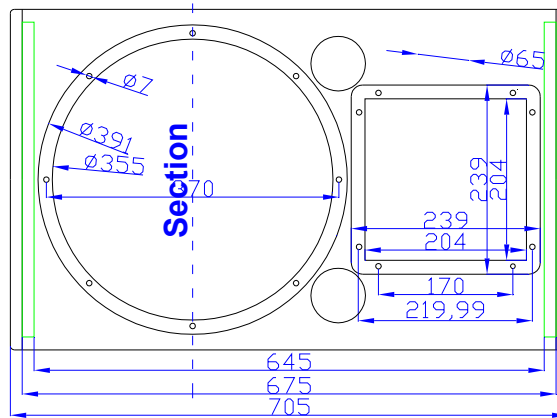
Rear



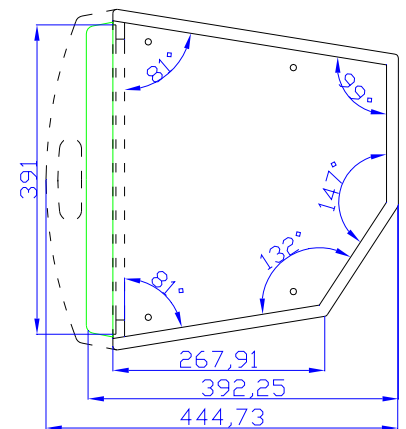
Base



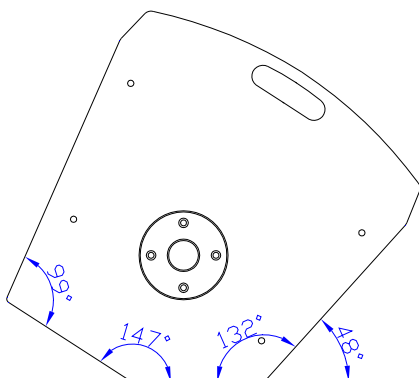
Front



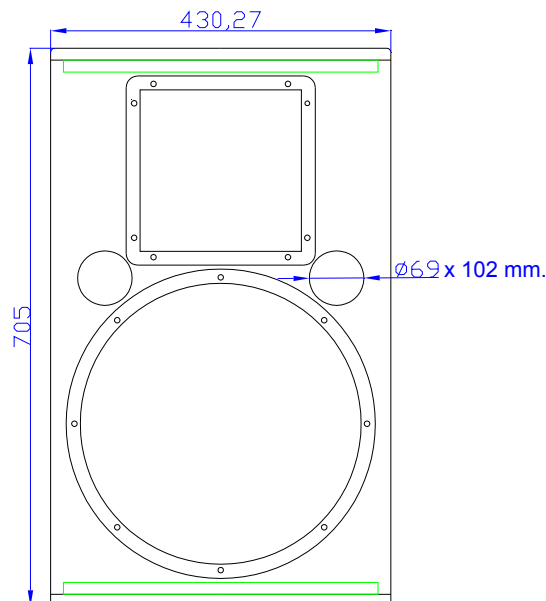
Central



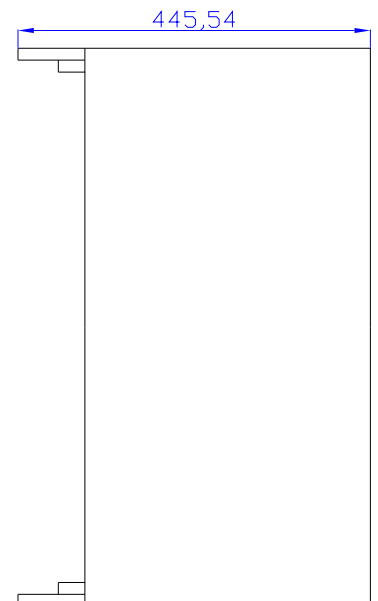
Base



Front



Lateral



15P1000Nd

KEY FEATURES

- Real 1000 W AES power handling
- Sensitivity: 97 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 8$ mm.
- Massive mechanical displacement capability: 52 mm p-p



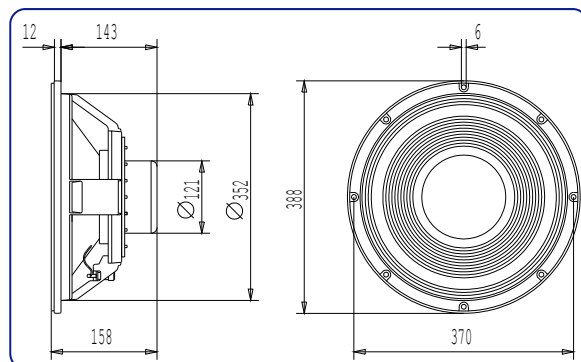
TECHNICAL SPECIFICATIONS

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 6.3 ohms
- Power capacity* 1000 w AES
- Program power 2000 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 30 - 2000 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 4.62 kg. 10.16 lb.
- BL factor 24.3 N / A
- Voice coil length 21 mm
- Air gap height 12 mm
- X damage (peak to peak) 52 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



CP-755Ti

KEY FEATURES

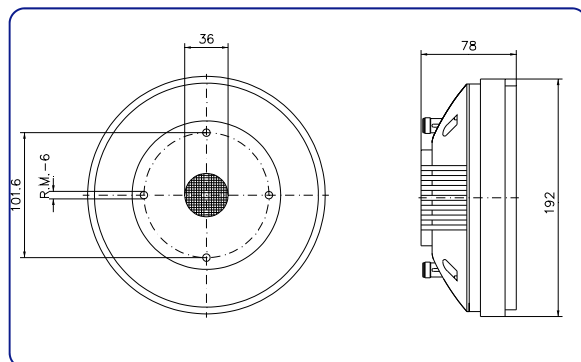
- Composite structure diaphragm (Titanium dome & Mylar surround)
- Optimized titanium phasing plug
- Superior high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- High sensitivity (110 dB)



TECHNICAL SPECIFICATIONS

- Throat diameter 3.6 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 90 w AES above 1 kHz
- Program power 180 w above 1 kHz
- Sensitivity** 110 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 6.75 kg. 14.85 lb.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

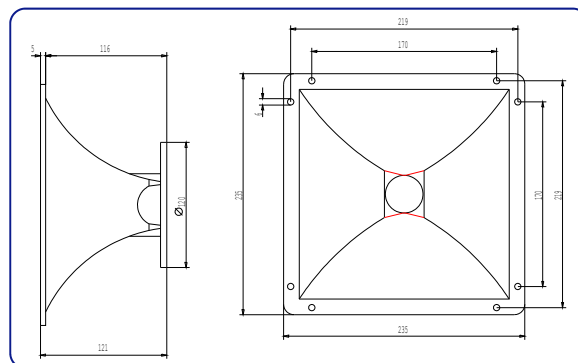
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

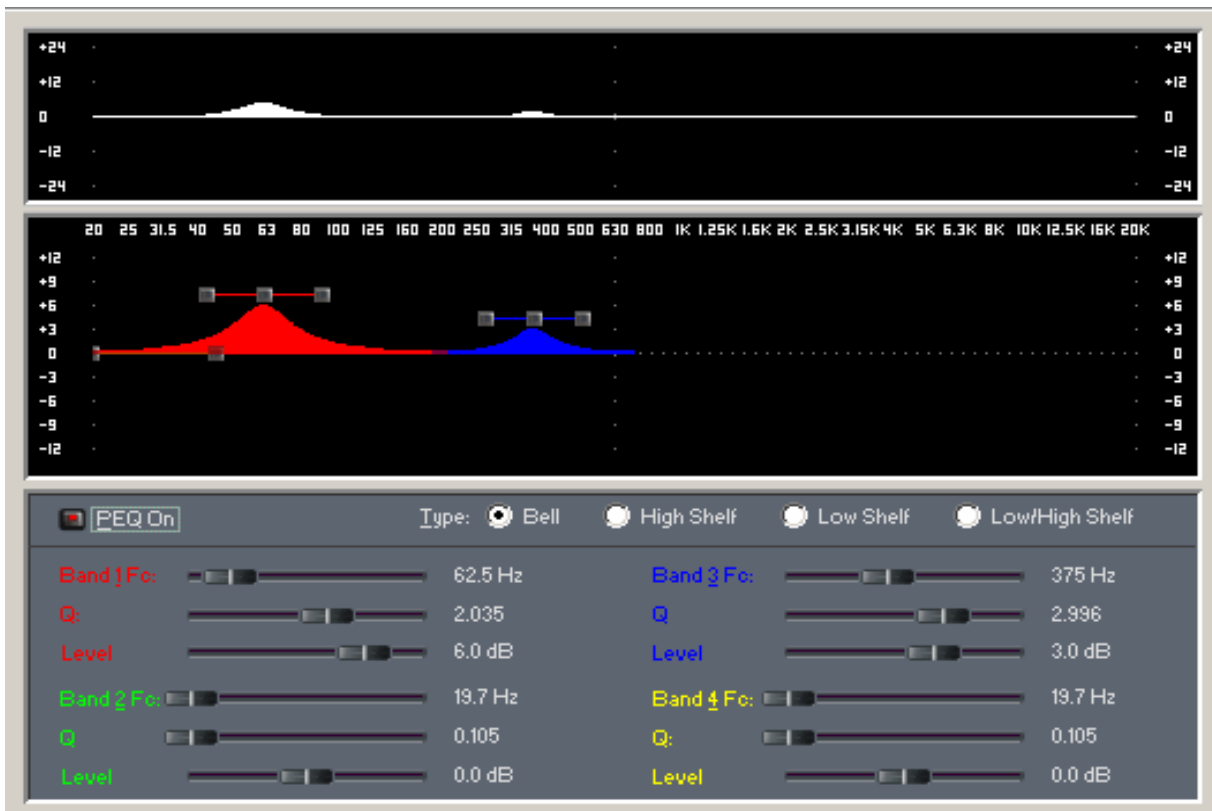
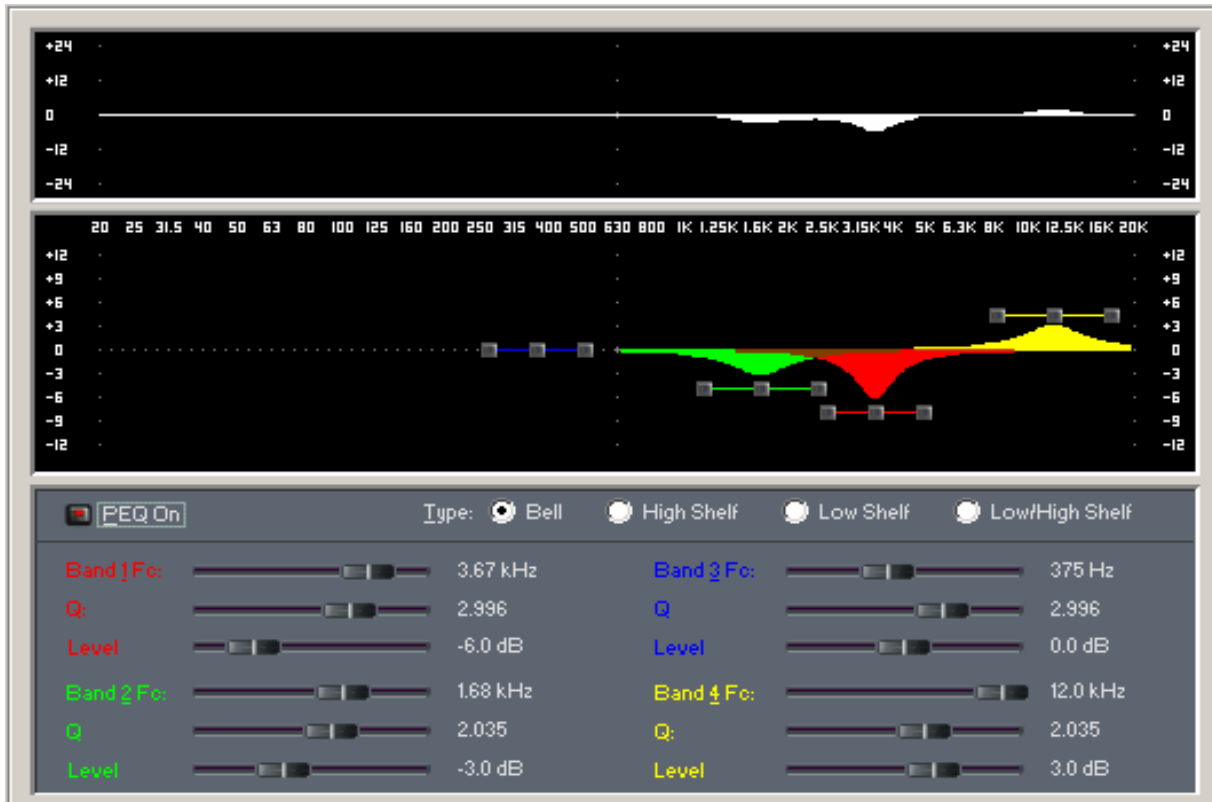
TECHNICAL SPECIFICATIONS

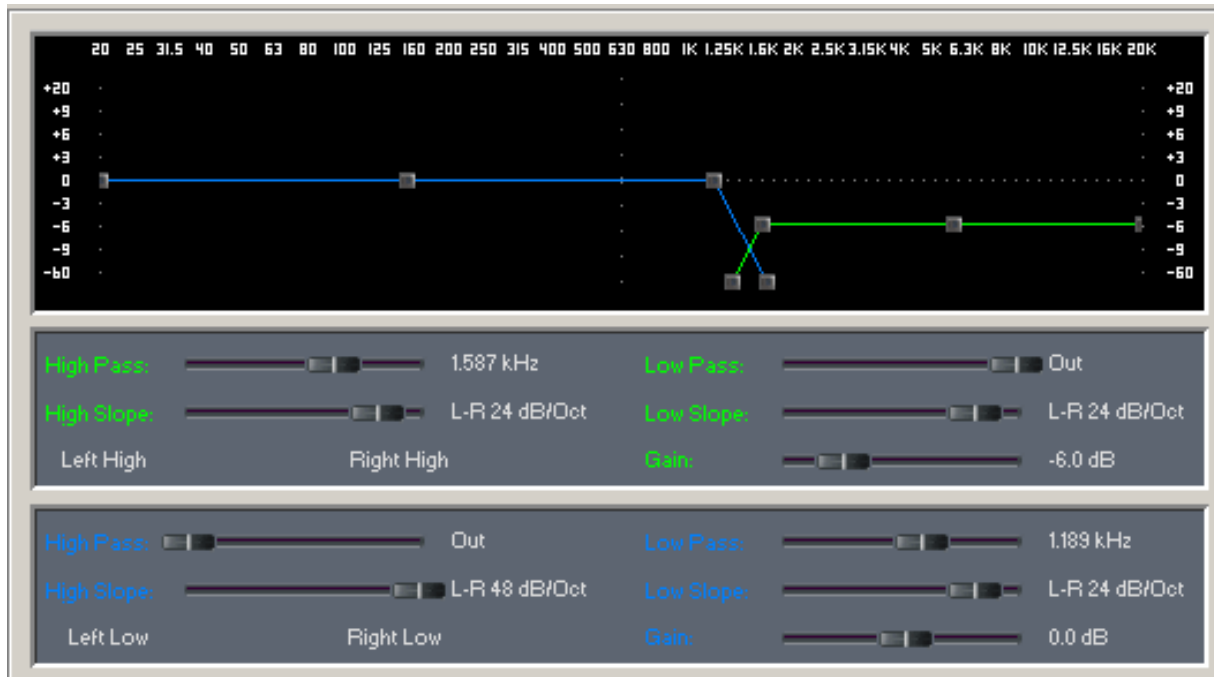
- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.



DIMENSION DRAWINGS

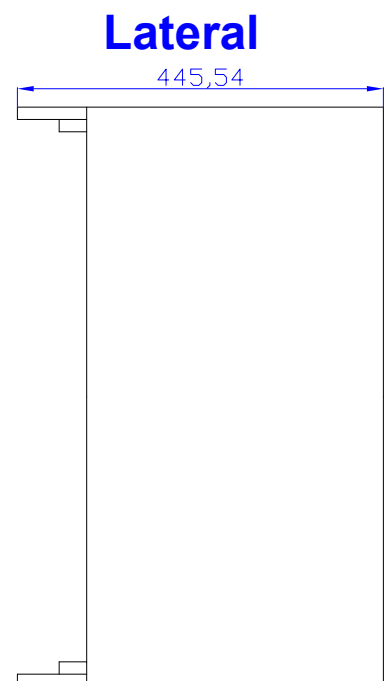
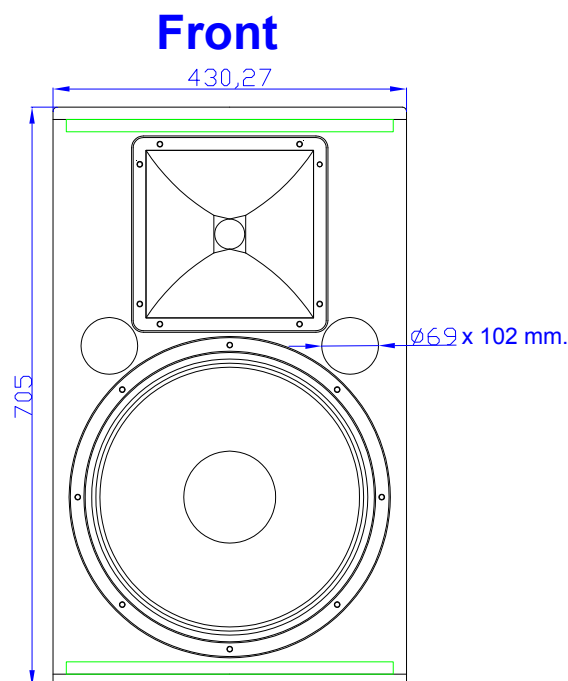
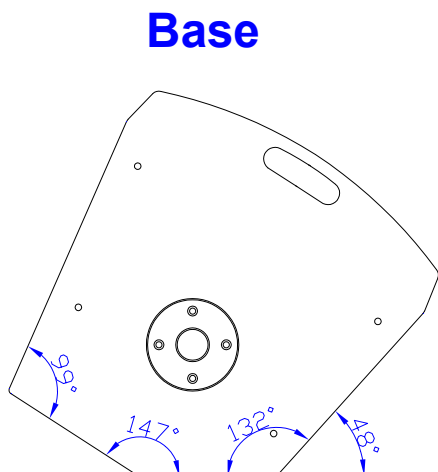




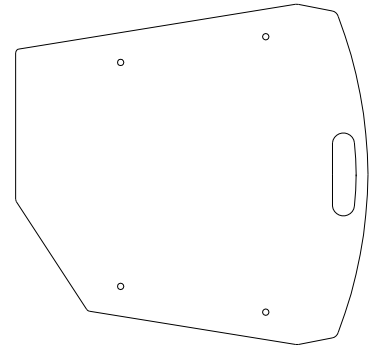
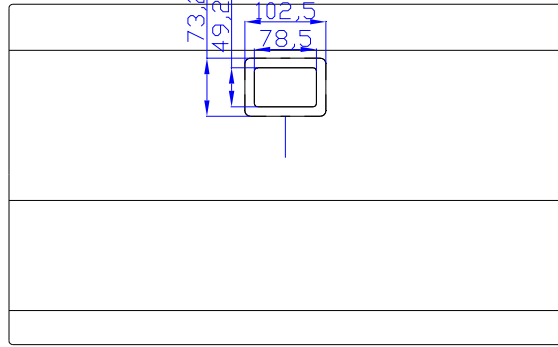
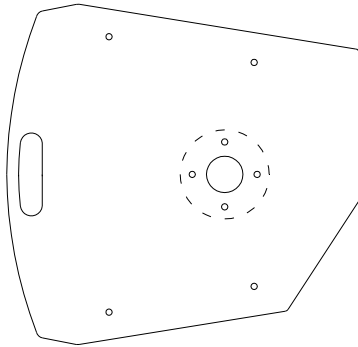


Technical Specifications

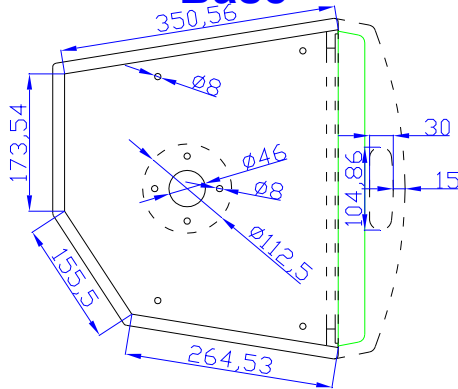
Acoustic cabinet:	FR15B
Description:	2 Way System. 15" and High Frequency unit
Power AES:	800 W.
Power Program:	1.600 W.
Sensitivity 2,83v @ 1m:	100 dB.
Max. SPL continuous:	129 dB.
Max. SPL peak:	135 dB.
Frequency response:	45 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	15P80ND
Compression Driver:	CP-755TI
Constant Directivity Horn:	TD-385
Crossover:	External
Hardware:	External



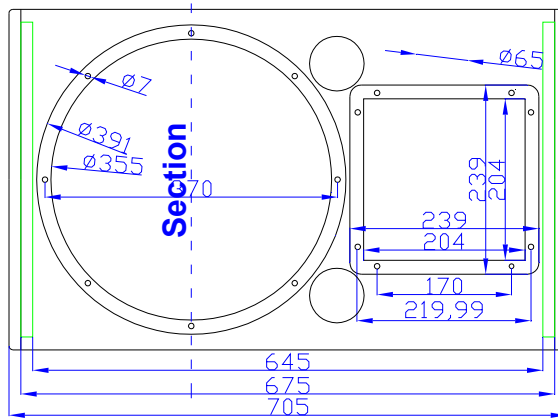
Rear



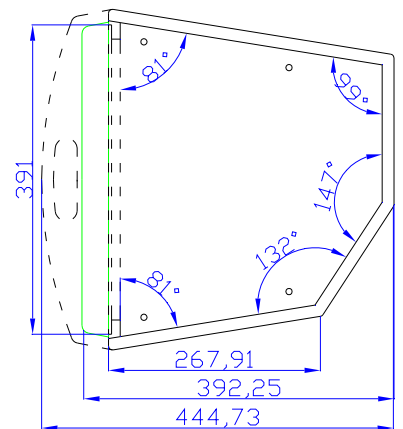
Base



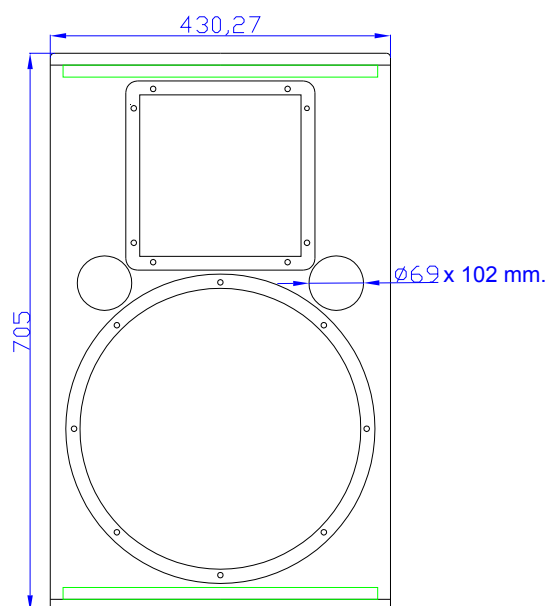
Front



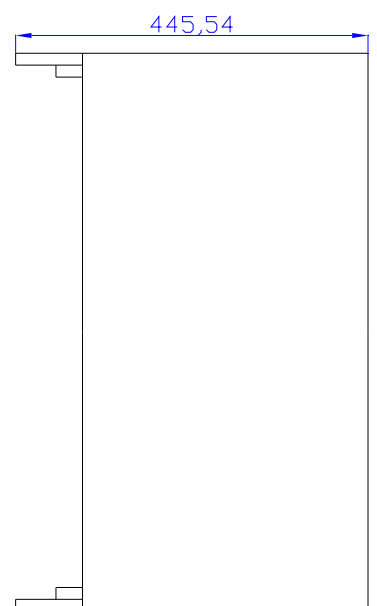
Central



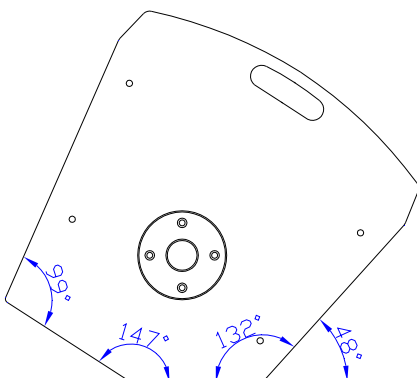
Front



Lateral



Base



15P80Nd

KEY FEATURES

- Real 800 W AES power handling
- Sensitivity: 100 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 7.5$ mm.
- Massive mechanical displacement capability: 52 mm p-p

TECHNICAL SPECIFICATIONS

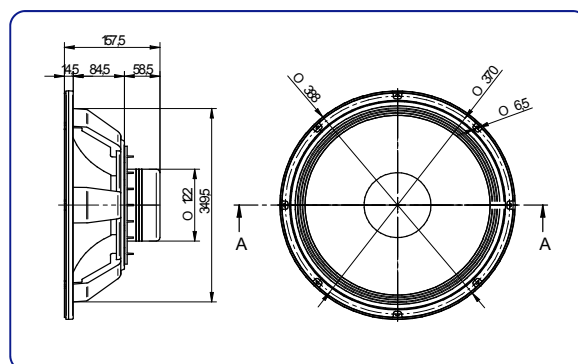
- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 6.6 ohms
- Power capacity* 800 w AES
- Program power 1600 w
- Sensitivity 100 dB 2.83v @ 1m @ 2π
- Frequency range 30 - 5000 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 4.62 kg. 10.16 lb.
- BL factor 23.6 N / A
- Voice coil length 20 mm
- Air gap height 12 mm
- X damage (peak to peak) 52 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.



DIMENSION DRAWINGS



CP-755Ti

KEY FEATURES

- Composite structure diaphragm (Titanium dome & Mylar surround)
- Optimized titanium phasing plug
- Superior high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- High sensitivity (110 dB)

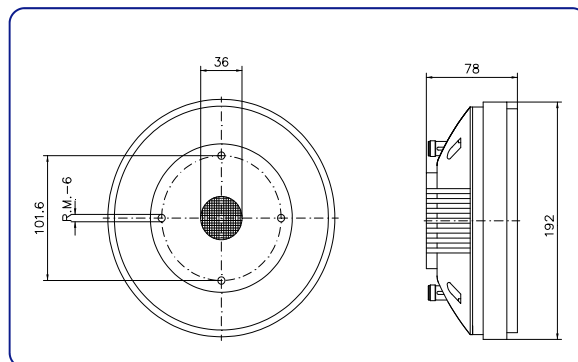
TECHNICAL SPECIFICATIONS

- Throat diameter 3.6 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 90 w AES above 1 kHz
- Program power 180 w above 1 kHz
- Sensitivity** 110 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 6.75 kg. 14.85 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1 - 7 kHz and Coupled to a TD565 horn.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

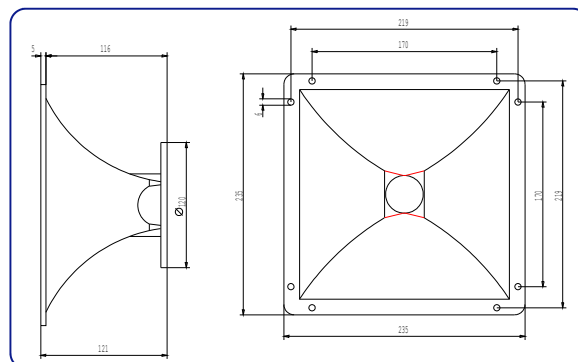
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

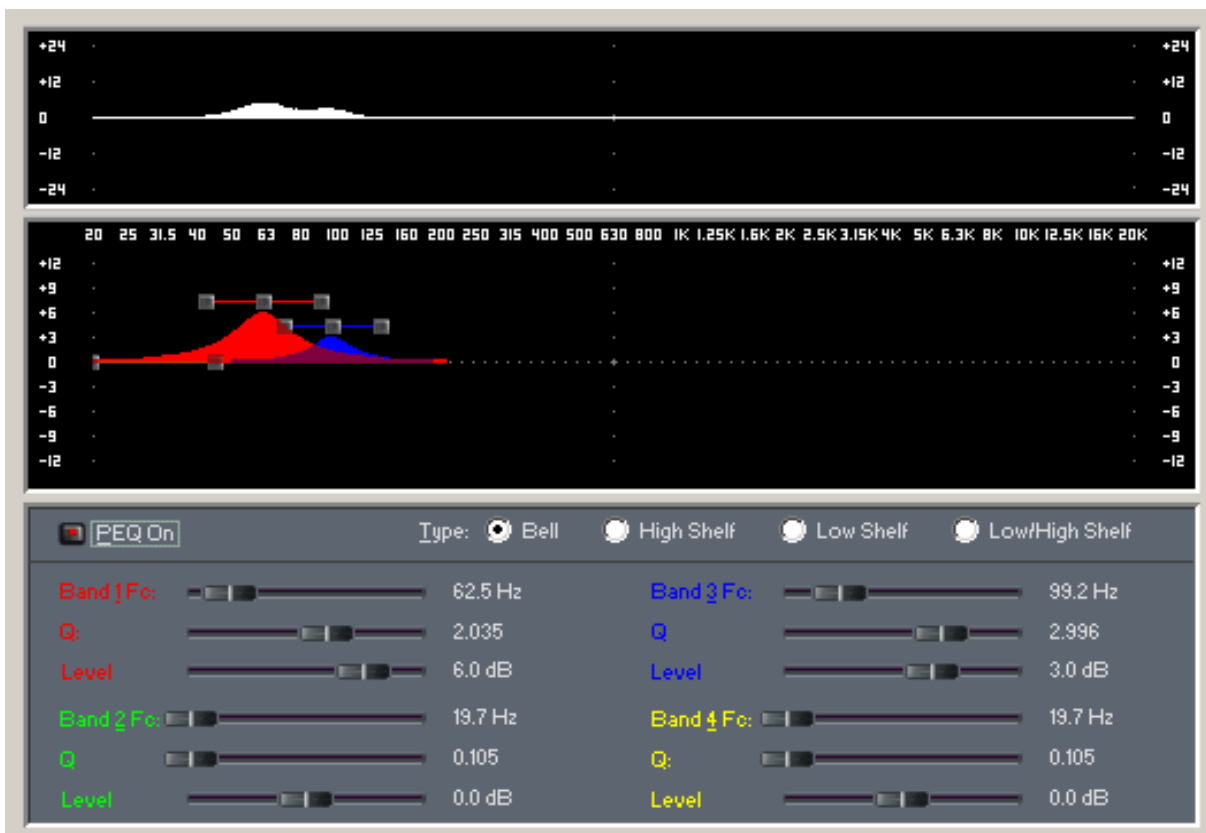
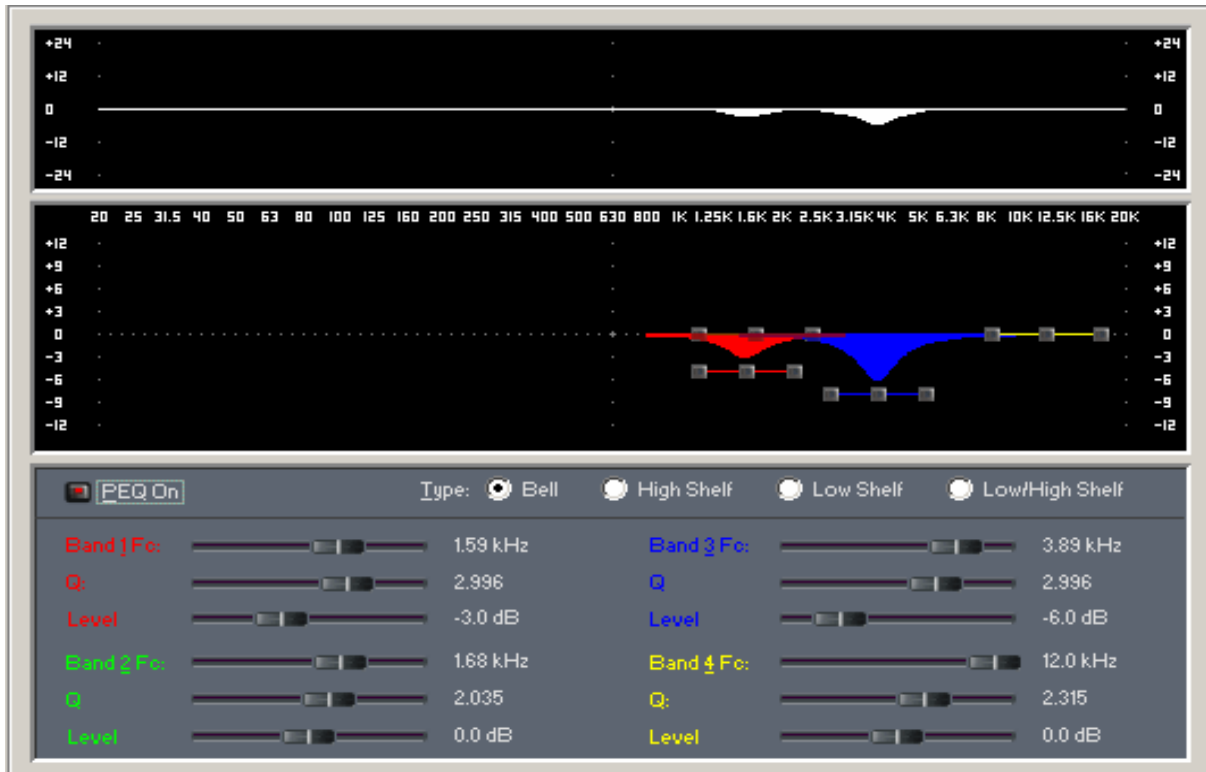
TECHNICAL SPECIFICATIONS

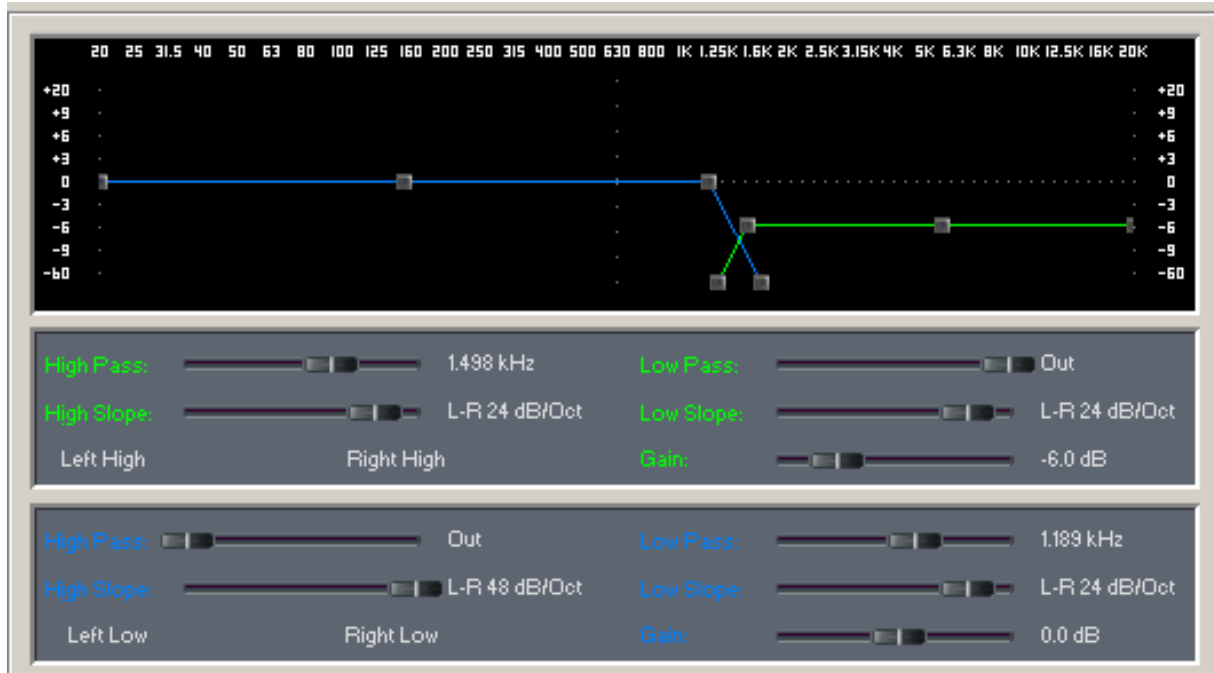
- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.



DIMENSION DRAWINGS



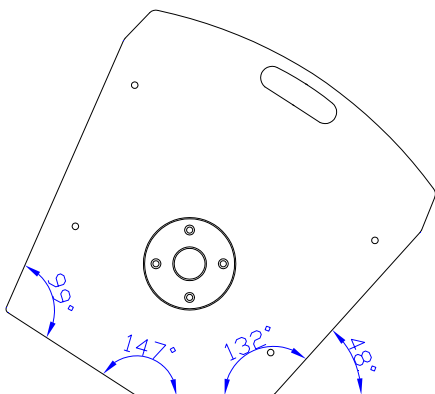




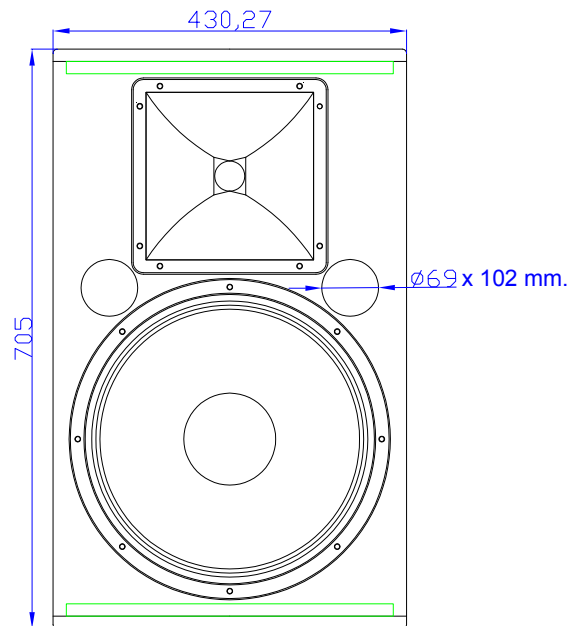
Technical Specifications

Acoustic cabinet:	FR15B
Description:	2 Way System. 15" and High Frequency unit
Power AES:	400 W.
Power Program:	800 W.
Sensitivity 2,83v @ 1m:	99 dB.
Max. SPL continuous:	125 dB.
Max. SPL peak:	131 dB.
Frequency response:	43 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	15MW/ND
Compression Driver:	SMC65/ND
Constant Directivity Horn:	TD-385
Crossover:	FP-15B/3
Hardware:	External

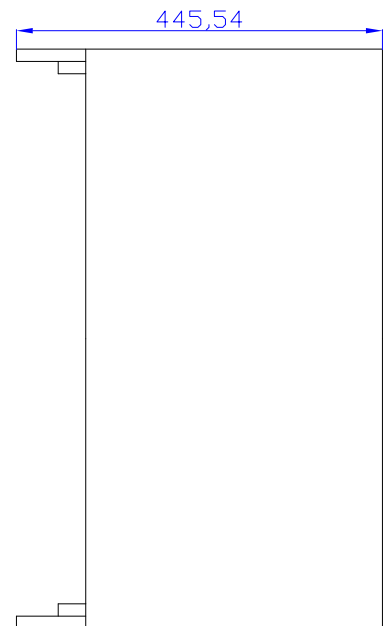
Base



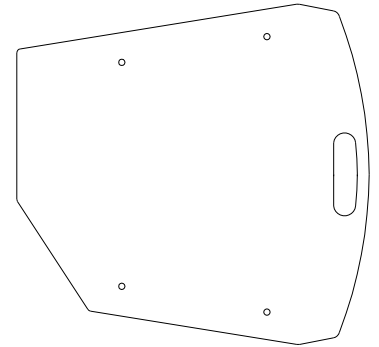
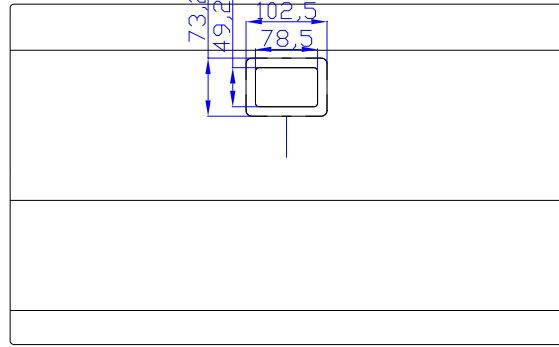
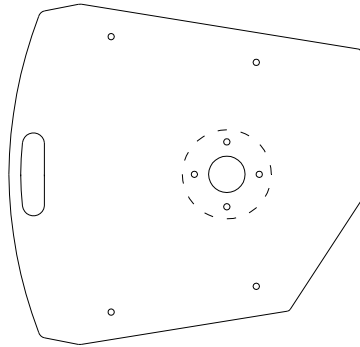
Front



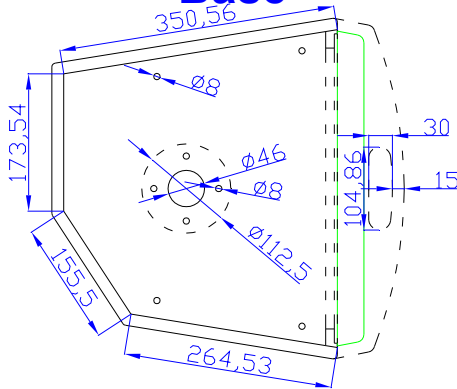
Lateral



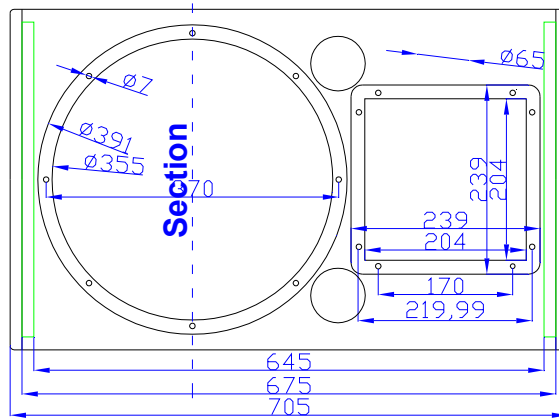
Rear



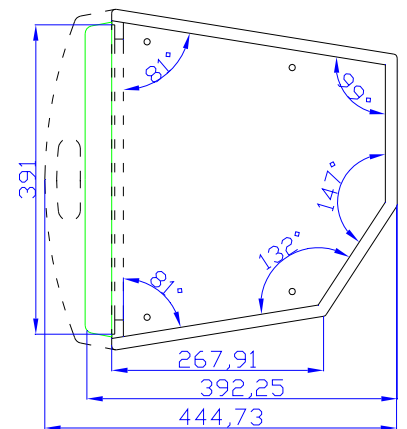
Base



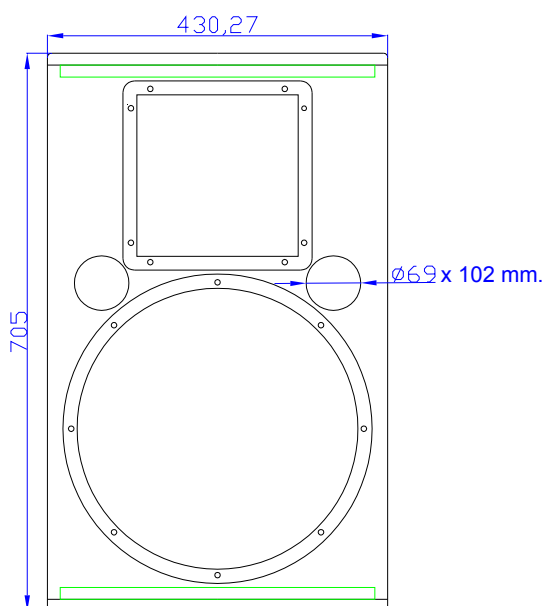
Front



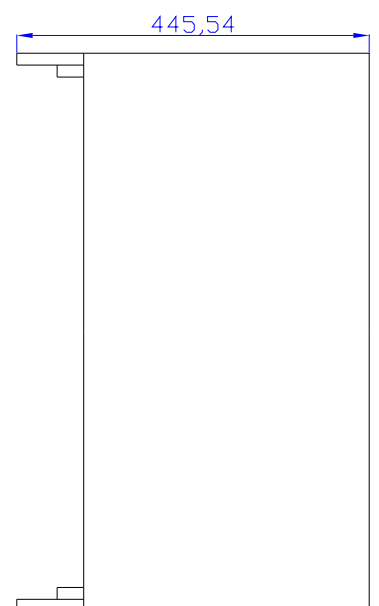
Central



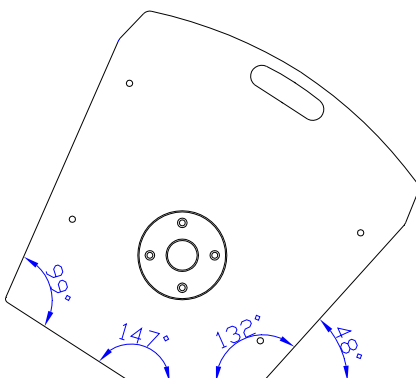
Front



Lateral



Base



15MWNd

KEY FEATURES

- Good power handling (400 W AES)
- Excellent sensitivity (99 dB)
- Extended frequency response (30 - 3500 Hz)
- Neodymium magnet system
- Aluminium customized basket



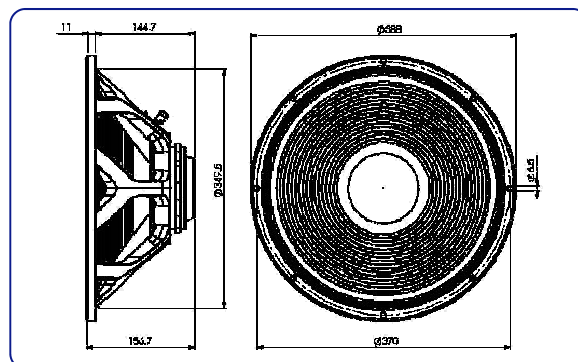
TECHNICAL SPECIFICATIONS

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 5.8 ohms
- Power capacity* 400 w AES
- Program power 800 w
- Sensitivity 99 dB 2.83v @ 1m @ 2π
- Frequency range 30 - 3500 Hz
- Voice coil diameter 62.4 mm. 2.5 in.
- Magnetic assembly weight 2.54 kg. 5.59 lb.
- BL factor 17.2 N / A
- Voice coil length 17.5 mm
- Air gap height 10 mm
- X damage (peak to peak) 27.5 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



SMC65Nd

KEY FEATURES

- Composite structure diaphragm (Titanium dome & Mylar surround)
- 3" edgewound aluminium ribbon voice coil
- Excellent high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- Low weight Neodymium magnet
- High sensitivity (108 dB)



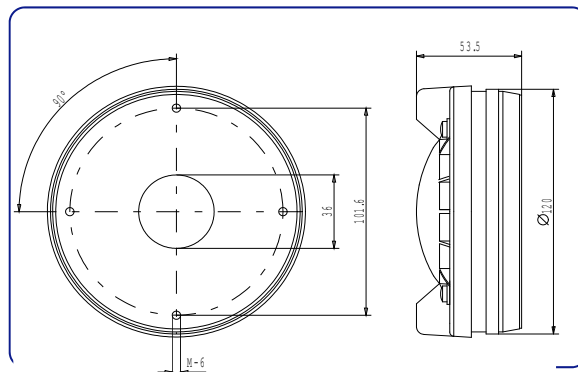
TECHNICAL SPECIFICATIONS

- Throat diameter 3.6 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 70 w AES above 1 kHz
- Program power 140 w above 1 kHz
- Sensitivity** 108 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 2.2 kg. 4.84 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1 - 7 kHz and coupled to a TD385 horn.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

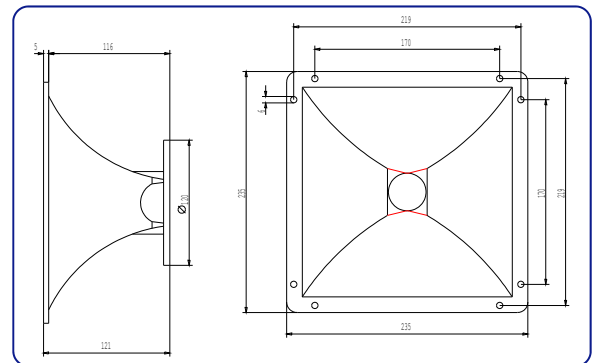
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

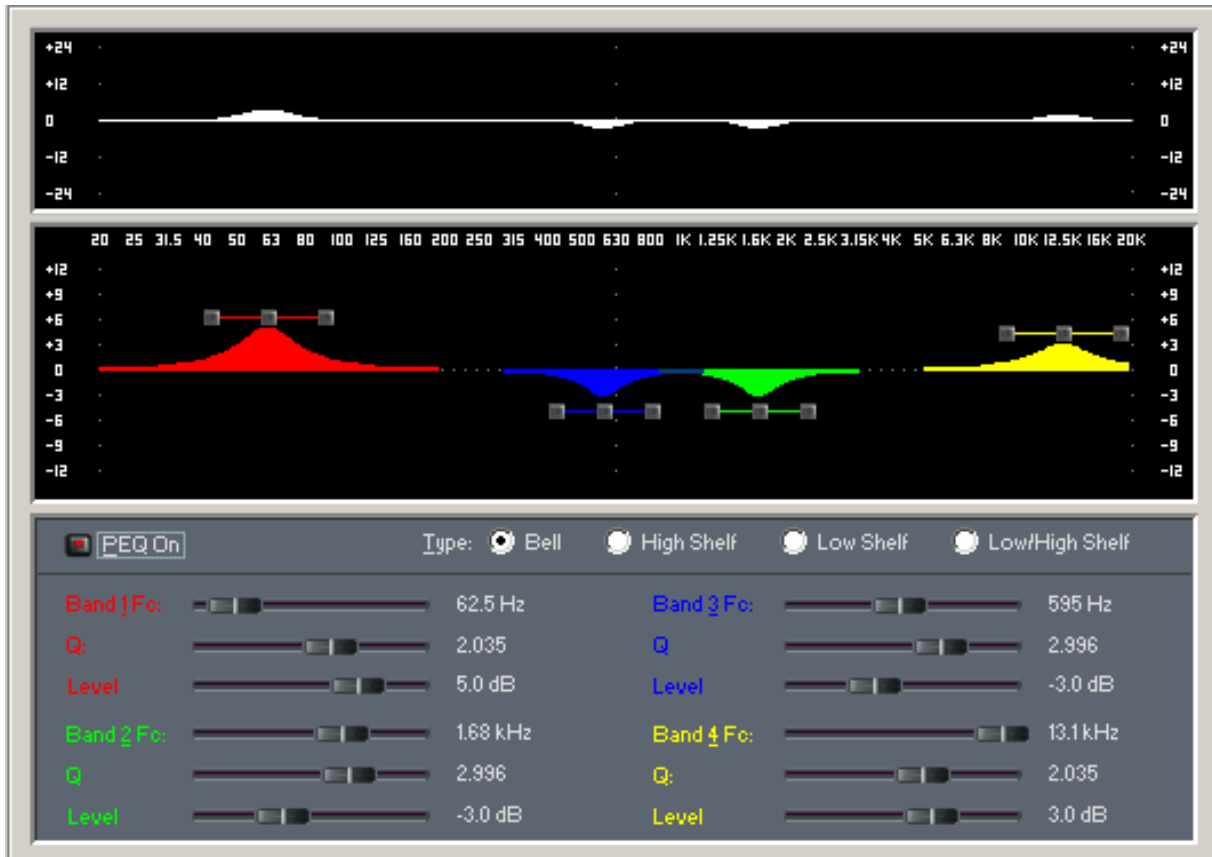
TECHNICAL SPECIFICATIONS

- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.

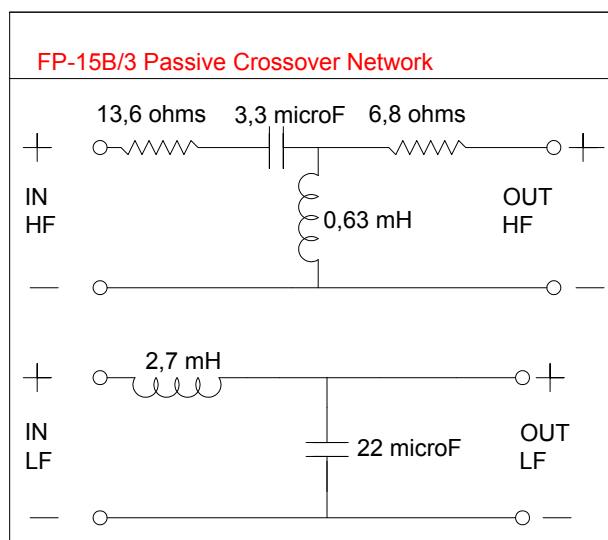


DIMENSION DRAWINGS



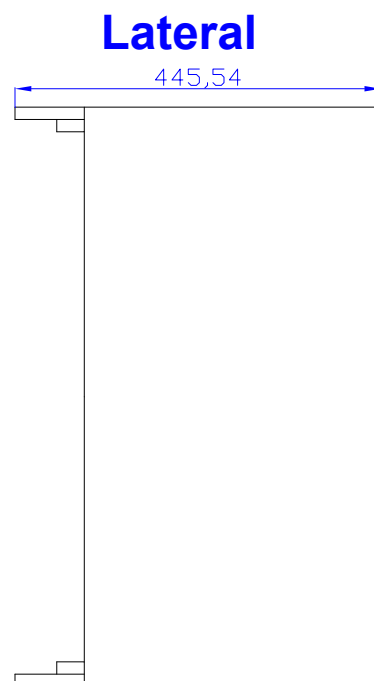
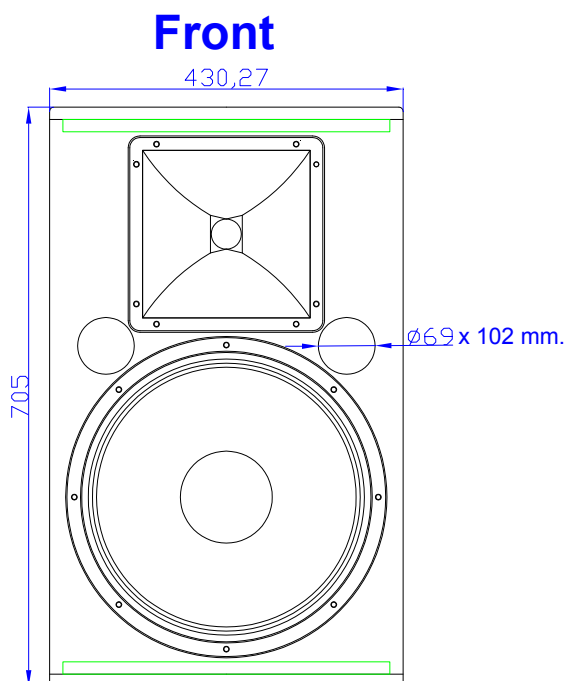
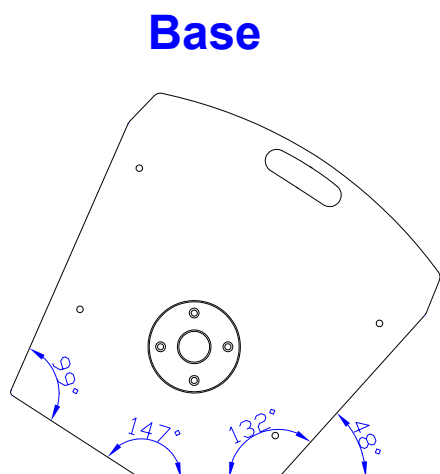


FR15B/3 Crossover

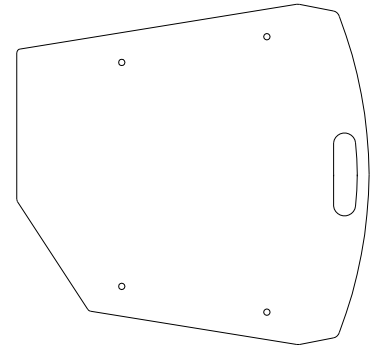
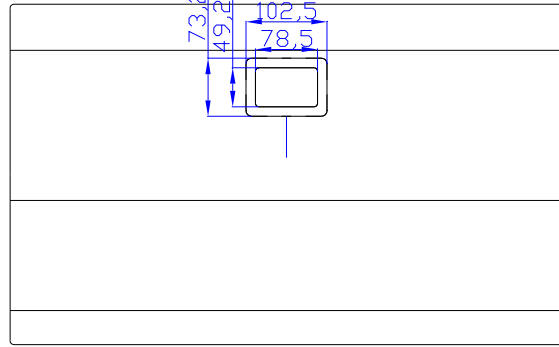
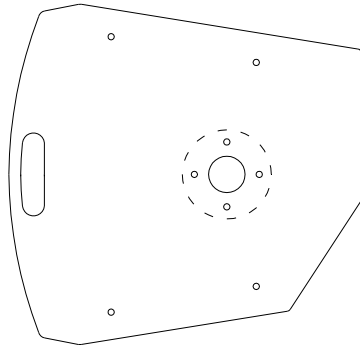


Technical Specifications

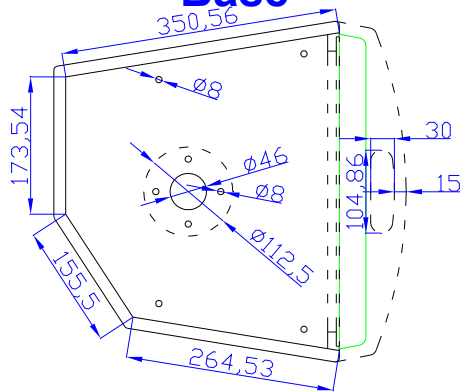
Acoustic cabinet:	FR15B
Description:	2 Way System. 15" and High Frequency unit
Power AES:	700 W.
Power Program:	1.400 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	125 dB.
Max. SPL peak:	131 dB.
Frequency response:	43 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	15G40
Compression Driver:	SMC65/ND
Constant Directivity Horn:	TD-385
Crossover:	FP-15B/ 4
Hardware:	External



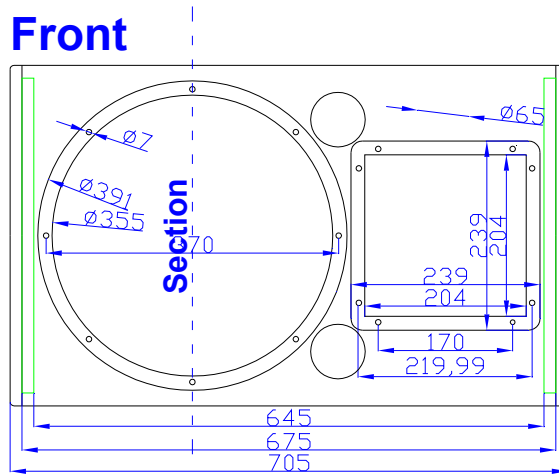
Rear



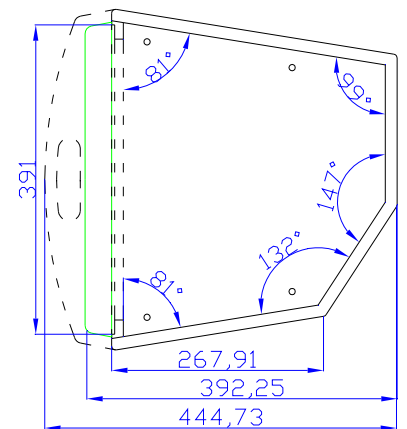
Base



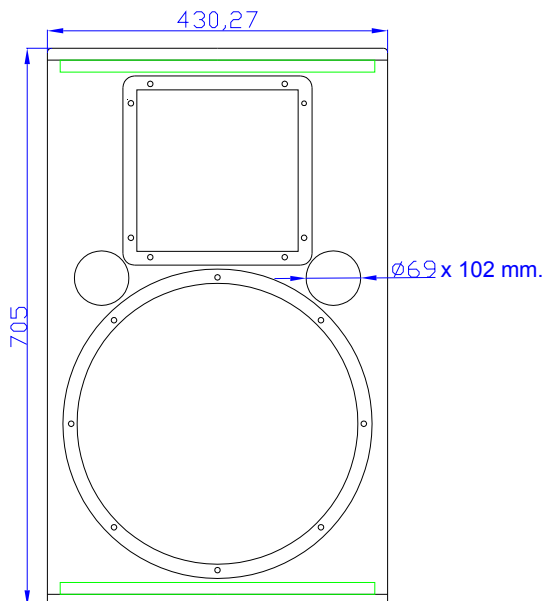
Front



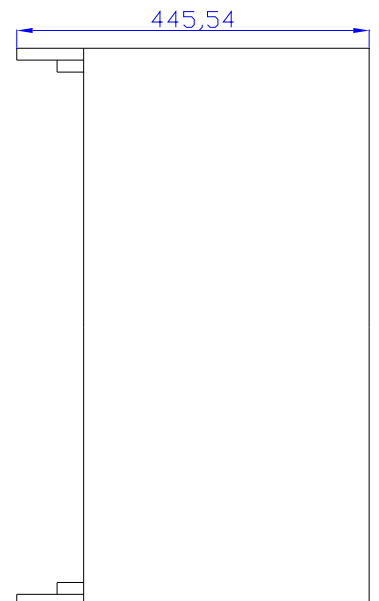
Central



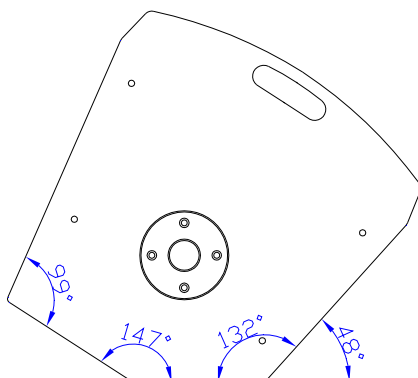
Front



Lateral



Base



15G40

KEY FEATURES

- High power handling (700 W AES)
- Waterproof paper cone
- 4" edgewound copper voice coil with polyimide fiber glass former
- Optimum winding length for increased linear excursion
- Spiders of improved temperature behaviour, retaining good mechanical properties at high power



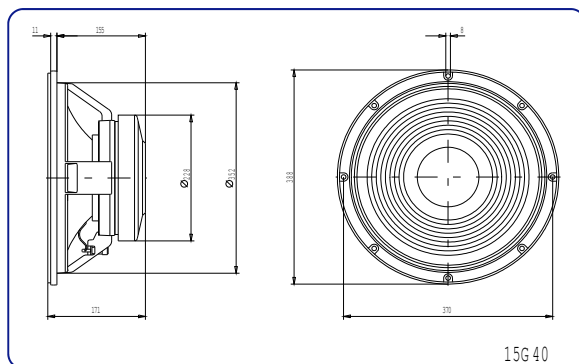
TECHNICAL SPECIFICATIONS

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 7 ohms
- Power capacity* 700 w AES
- Program power 1400 w
- Sensitivity 97 dB 2.83v @ 1m @ 2π
- Frequency range 25 - 1500 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 9 kg. 19.8 lb.
- BL factor 23 N / A
- Voice coil length 23 mm
- Air gap height 9.5 mm
- X damage (peak to peak) 33 mm

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

DIMENSION DRAWINGS



SMC65Nd

KEY FEATURES

- Composite structure diaphragm (Titanium dome & Mylar surround)
- 3" edgewound aluminium ribbon voice coil
- Excellent high frequencies sound reproduction quality
- Extended frequency response (0.6 - 20 kHz)
- Low weight Neodymium magnet
- High sensitivity (108 dB)



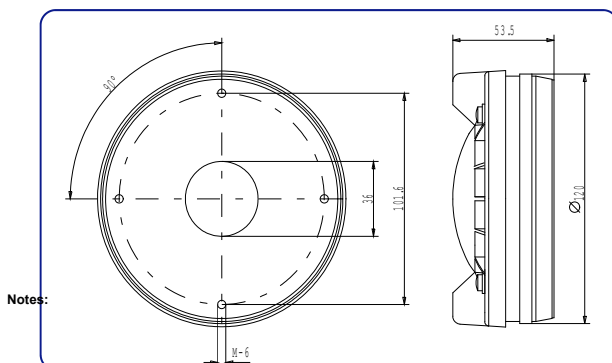
TECHNICAL SPECIFICATIONS

- Throat diameter 3.6 mm. 1.4"
- Rated impedance 8 ohms
- D.C. Resistance 5.5 ohms
- Power capacity* 70 w AES above 1 kHz
- Program power 140 w above 1 kHz
- Sensitivity** 108 dB 1w @ 1m
- Frequency range 600- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Recommended Crossover 800 Hz or higher (12 dB/oct. min.)
- Net weight 2.2 kg. 4.84 lb.

Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.
**Sensitivity was measured at 1 m distance, on axis, with 1 w input, averaged in the range 1 - 7 kHz and Coupled to a TD385 horn.

DIMENSION DRAWINGS



TD-385

KEY FEATURES

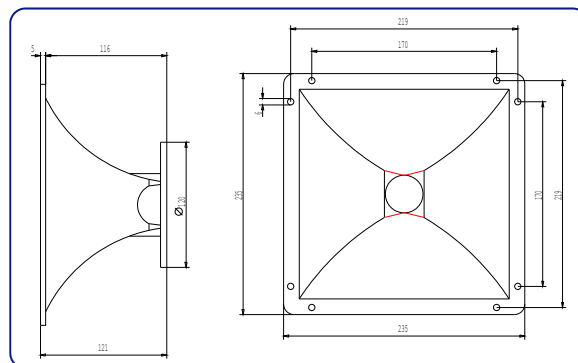
- Designed for compression drivers with 1.4" throat diameter
- It provides uniform response, on and off-axis with a neutral and natural frequency reproduction
- Coverage angles of 80° in the horizontal plane and 50° in the vertical plane
- Precise directivity control in the pass band
- Its square form provides more versatility when mounting in the enclosure

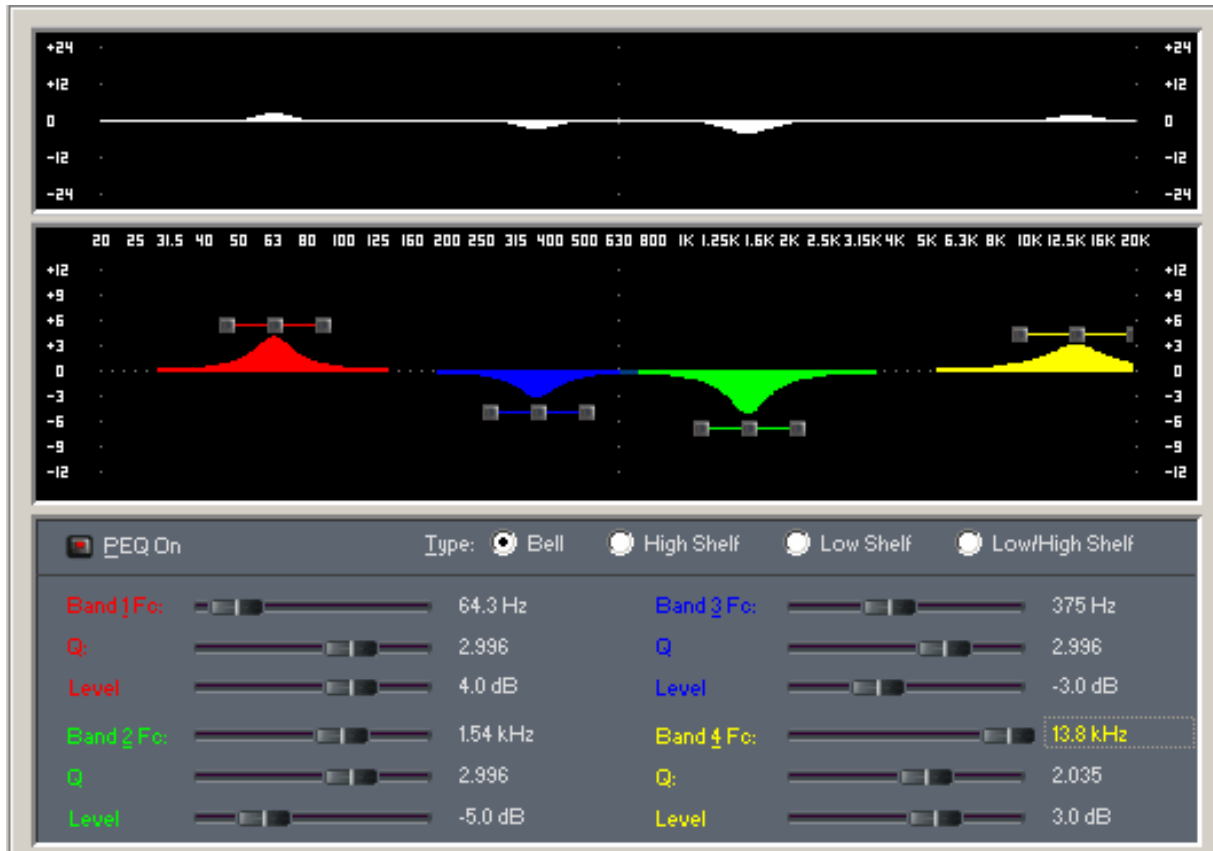
TECHNICAL SPECIFICATIONS

- Throat diameter 36 mm. 1.4 in.
- Horizontal beamwidth 80° (+16°, -32°)
(-6 dB, 1 - 20 kHz)
- Vertical beamwidth 50° (+29°, -14°)
(-6 dB, 1.6 - 20 kHz)
- Directivity factor (Q) 12.4 (average 0.63 - 16 kHz)
- Directivity index (DI) 10.5 dB (+3.5 dB, -3.2 dB)
- Cutoff frequency 800 Hz
- Dimensions (WxHxD) 235x235x120 mm.
9.25x9.25x4.72 in.
- Cutout dimensions (WxH) 204x202 mm.
8.03x7.95 in.
- Net weight 1.2 kg. 2.64 lb.
- Shipping weight 1.53 kg. 3.37 lb.
- Construction Cast aluminium.
Connection of driver by four screws on a 101.6 mm. diameter bolt circle.

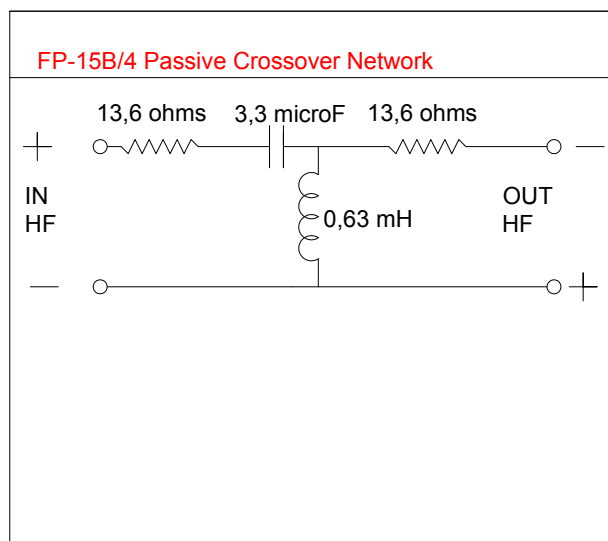


DIMENSION DRAWINGS



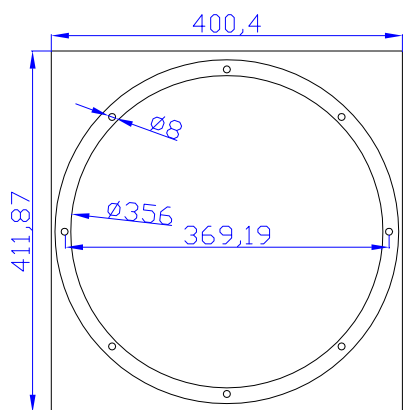


FR15B/4 Crossover

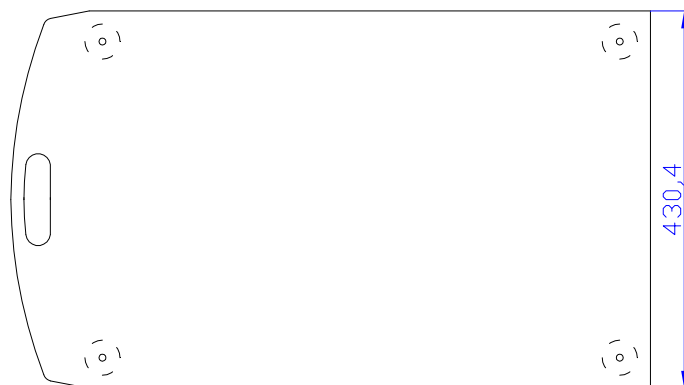


Technical Specifications

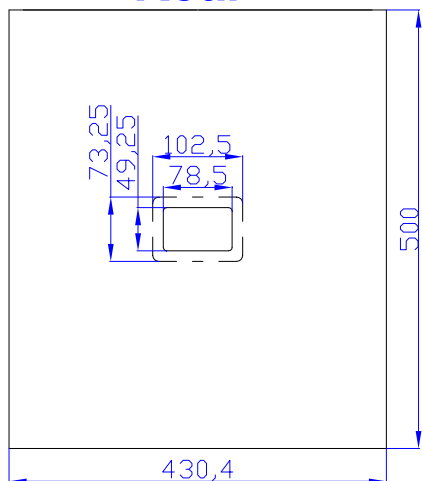
Acoustic cabinet:	SB15
Description:	Bass reinforcement. 15" Subwoofer
Power AES:	1.200 W.
Power Program:	2.400 W.
Sensitivity 2,83v @ 1m:	100 dB.
Max. SPL continuous:	131 dB.
Max. SPL peak:	137 dB.
Frequency response:	35 - 200 Hz.
Bass Loudspeakers:	15P1200ND



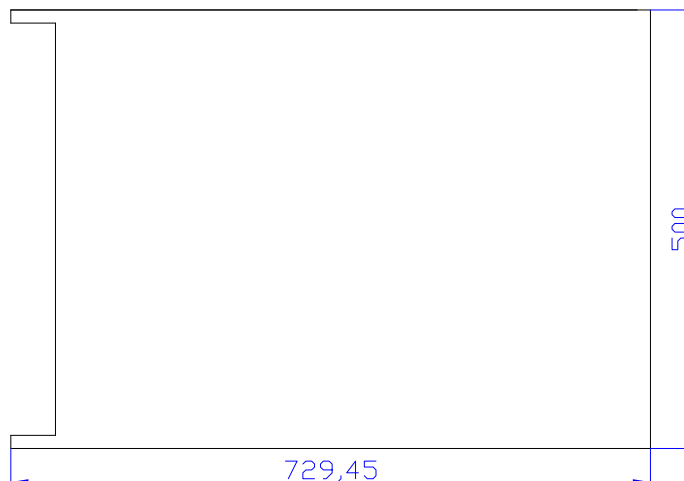
Base



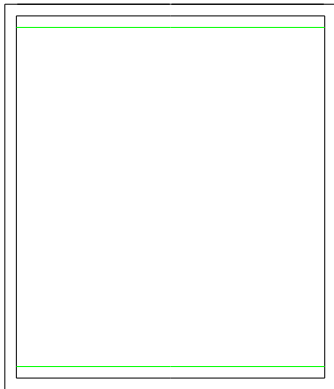
Rear



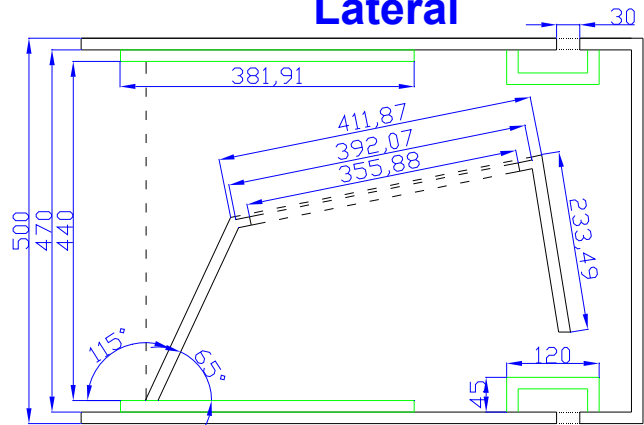
Lateral



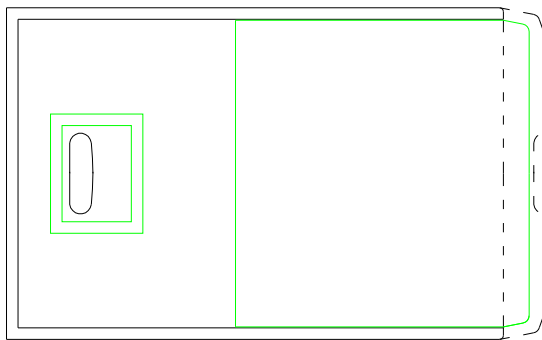
Front



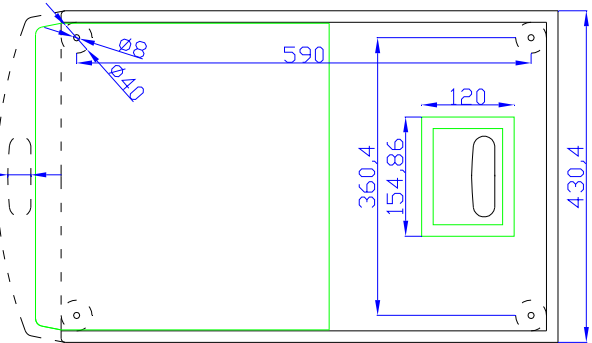
Lateral



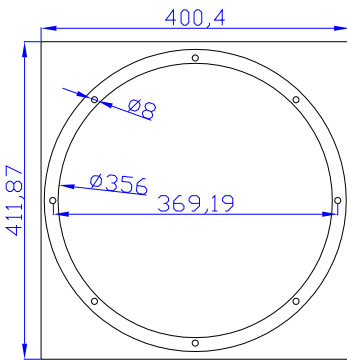
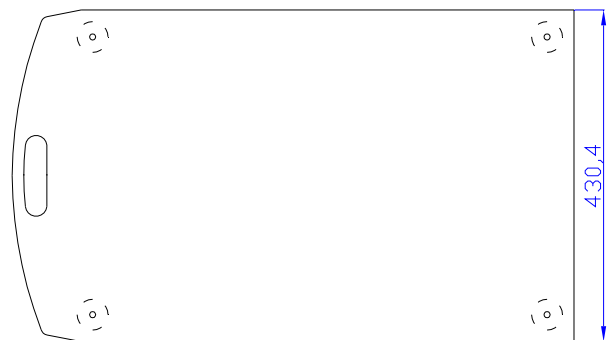
Central



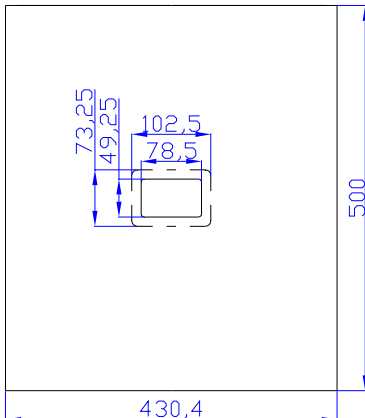
Base



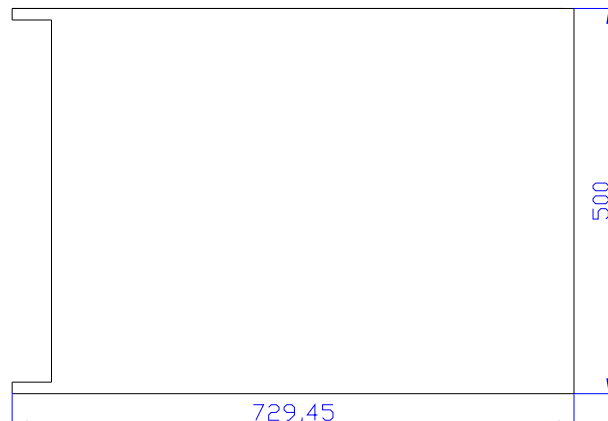
Base



Rear



Lateral



15P1200Nd

KEY FEATURES

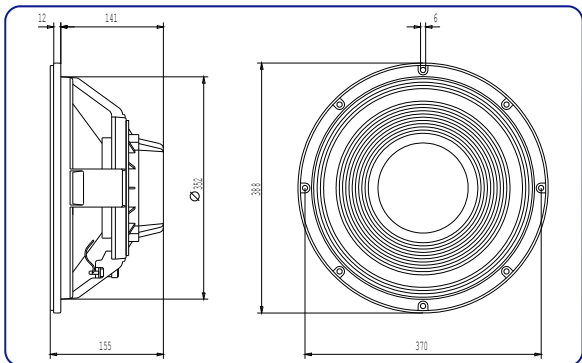
- Real 1200 W AES power handling
- Sensitivity: 97 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 9.5$ mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

- | | |
|----------------------------|-----------------------|
| • Nominal diameter | 380 mm. 15 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 6.1 ohms |
| • Power capacity* | 1200 w AES |
| • Program power | 2400 w |
| • Sensitivity | 97 dB 2.83v @ 1m @ 2π |
| • Frequency range | 30 - 2000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 6 kg. 13.2 lb. |
| • BL factor | 26.3 N / A |
| • Voice coil length | 25 mm |
| • Air gap height | 14 mm |
| • X damage (peak to peak) | 52 mm |

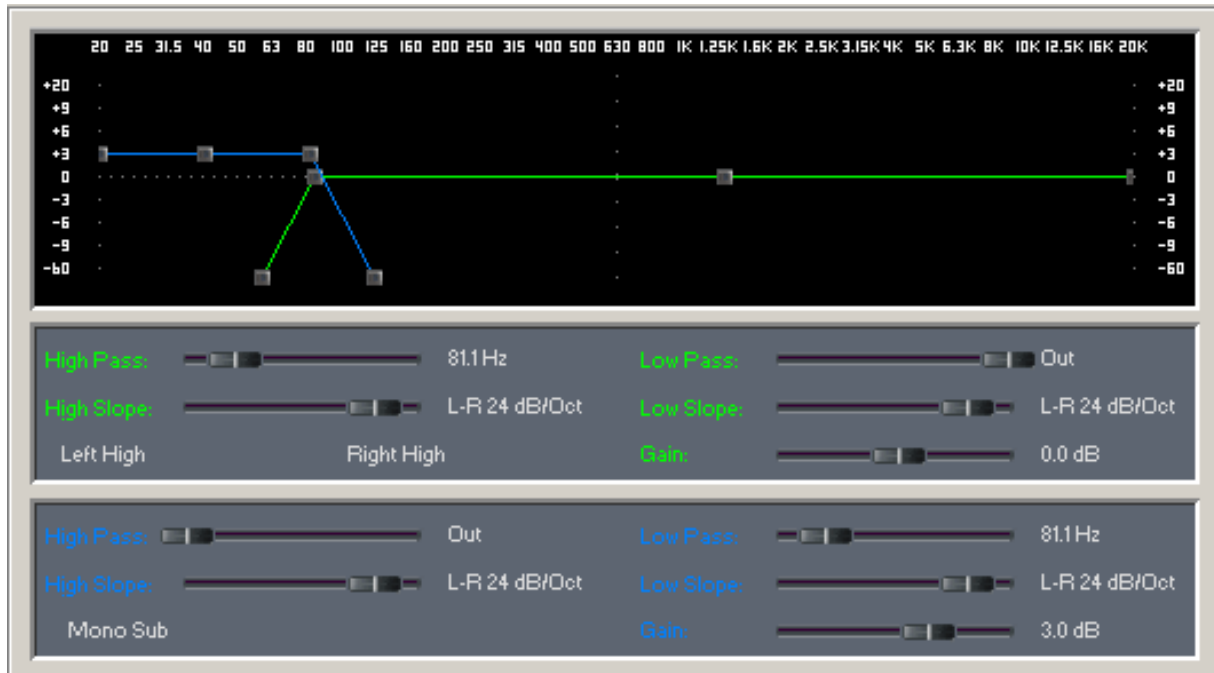
DIMENSION DRAWINGS



Notes:
 *The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

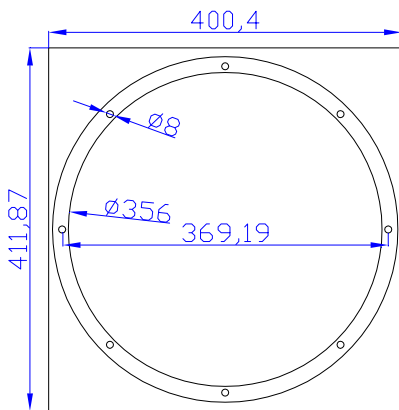
SB15/1 Presets



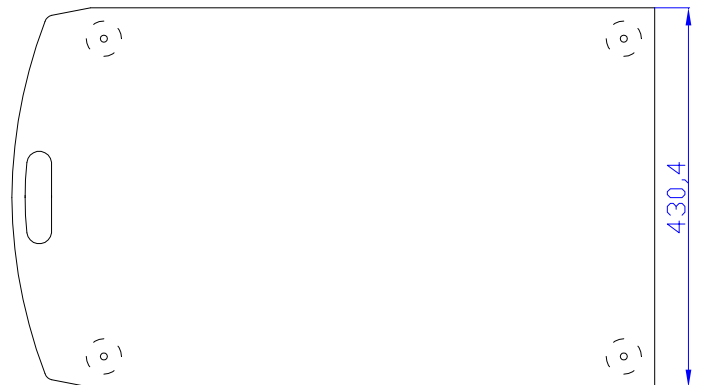


Technical Specifications

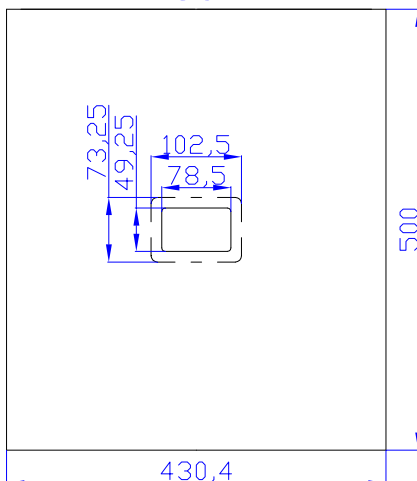
Acoustic cabinet:	SB15
Description:	Bass reinforcement. 15" Subwoofer
Power AES:	1.000 W.
Power Program:	2.000 W.
Sensitivity 2,83v @ 1m:	100 dB.
Max. SPL continuous:	130 dB.
Max. SPL peak:	136 dB.
Frequency response:	35 - 200 Hz.
Bass Loudspeakers:	15P1000ND



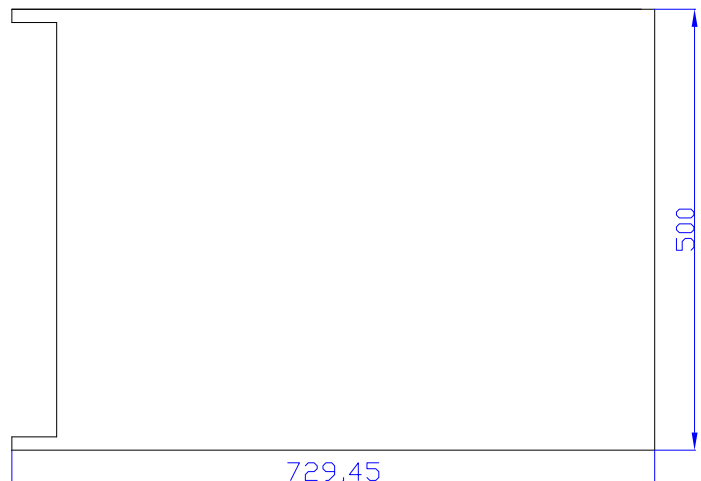
Base



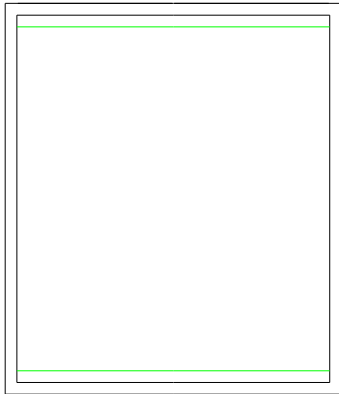
Rear



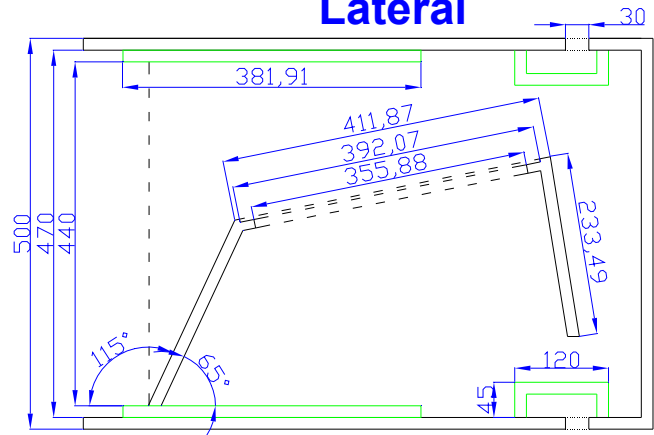
Lateral



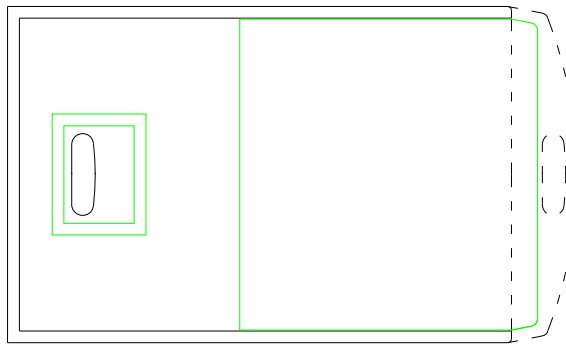
Front



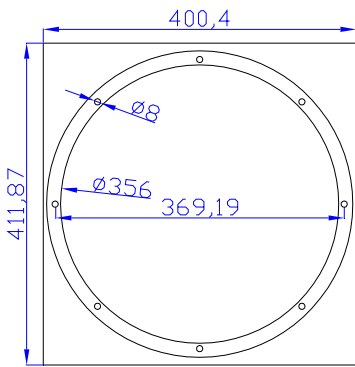
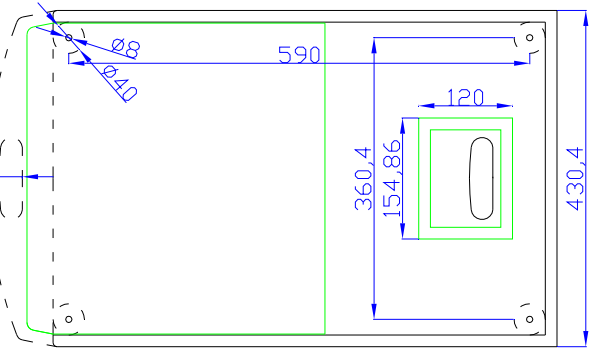
Lateral



Central



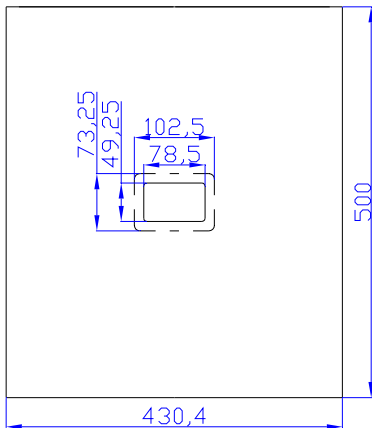
Base



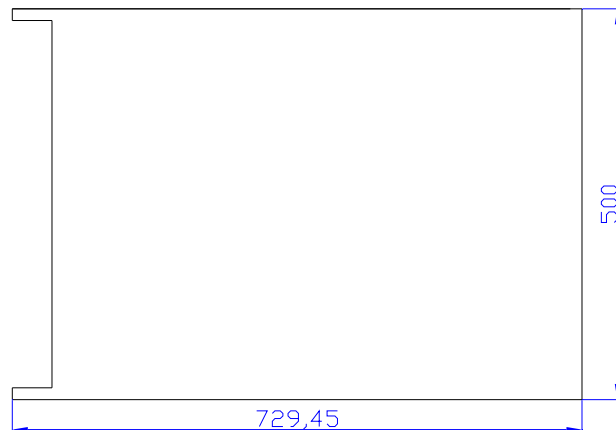
Base



Rear



Lateral



15P1000Nd

KEY FEATURES

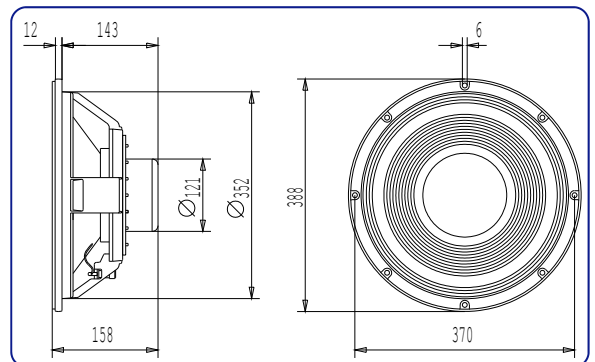
- Real 1000 W AES power handling
- Sensitivity: 97 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 8$ mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

- | | |
|----------------------------|-----------------------|
| • Nominal diameter | 380 mm. 15 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 6.3 ohms |
| • Power capacity* | 1000 w AES |
| • Program power | 2000 w |
| • Sensitivity | 97 dB 2.83v @ 1m @ 2π |
| • Frequency range | 30 - 2000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 4.62 kg. 10.16 lb. |
| • BL factor | 24.3 N / A |
| • Voice coil length | 21 mm |
| • Air gap height | 12 mm |
| • X damage (peak to peak) | 52 mm |

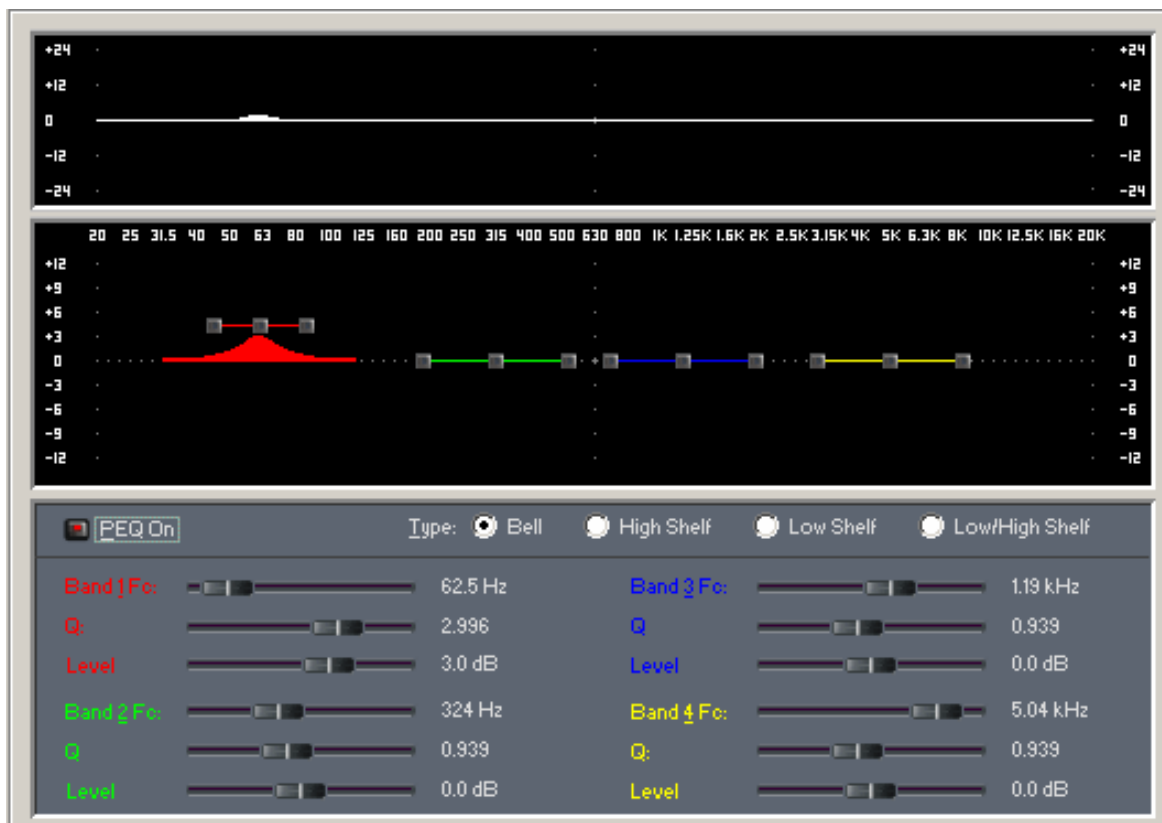
DIMENSION DRAWINGS

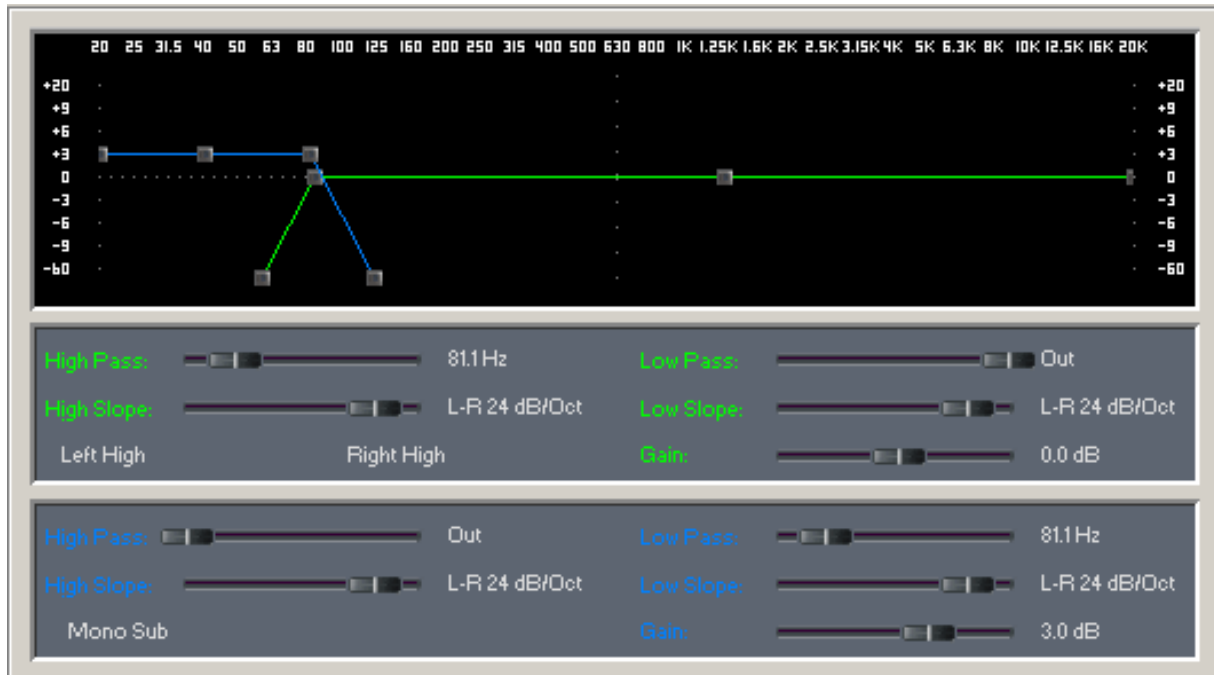


Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

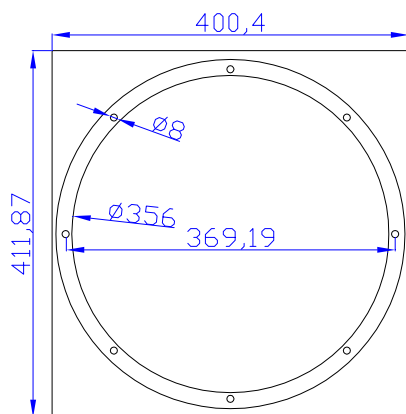
SB15/2 Presets



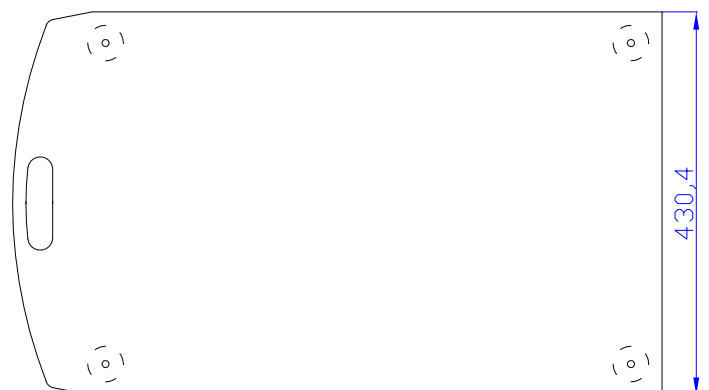


Technical Specifications

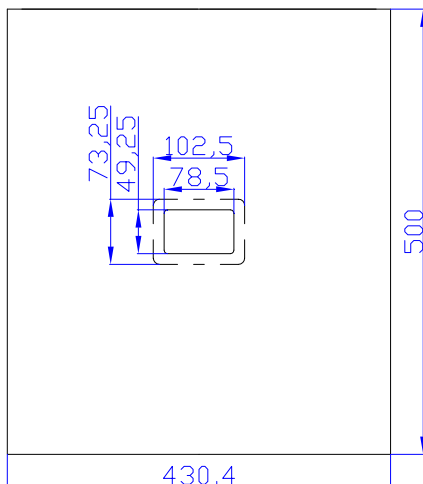
Acoustic cabinet:	SB15
Description:	Bass reinforcement. 15" Subwoofer
Power AES:	800 W.
Power Program:	1.600 W.
Sensitivity 2,83v @ 1m:	103 dB.
Max. SPL continuous:	132 dB.
Max. SPL peak:	138 dB.
Frequency response:	40 - 200 Hz.
Bass Loudspeakers:	15P80ND



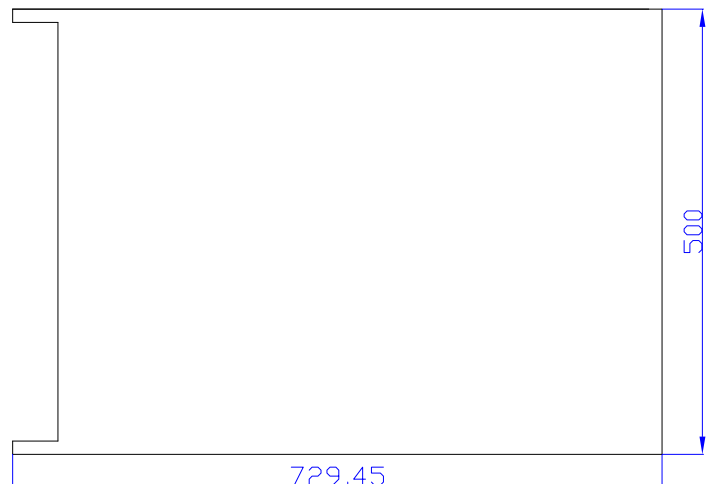
Base



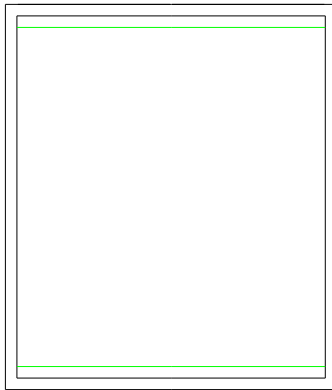
Rear



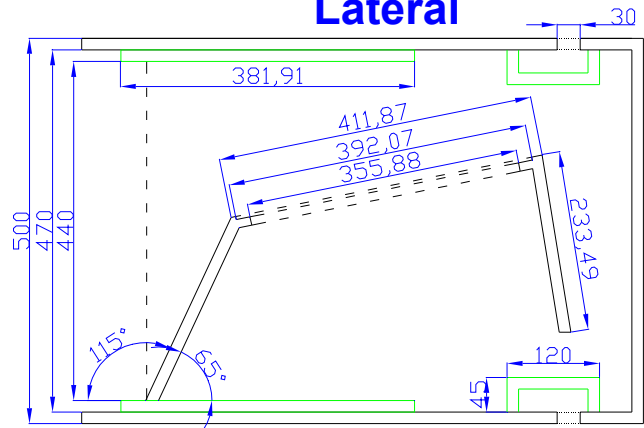
Lateral



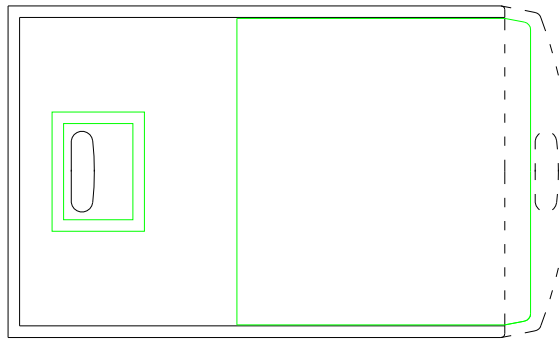
Front



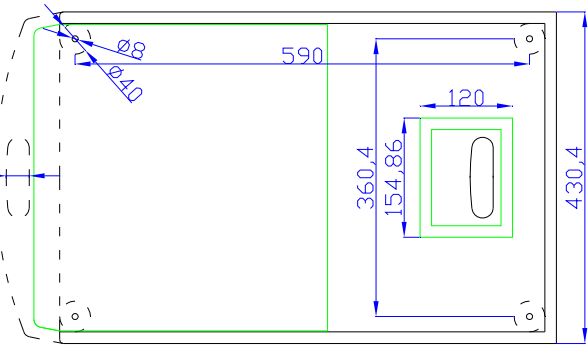
Lateral



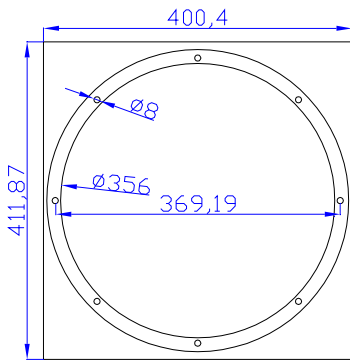
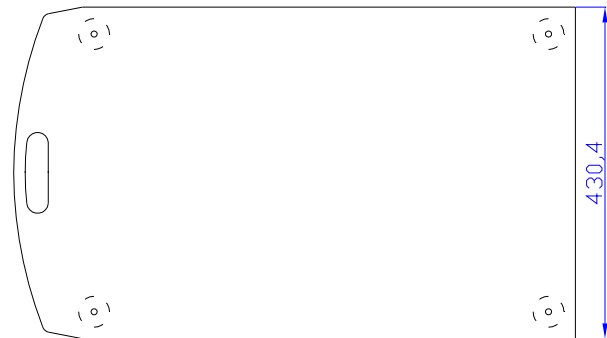
Central



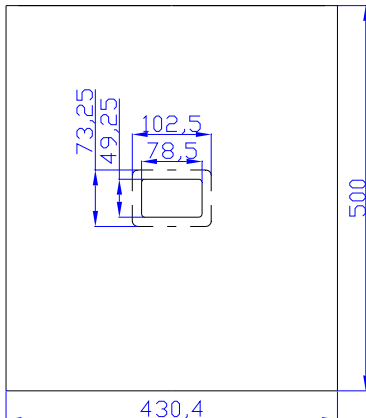
Base



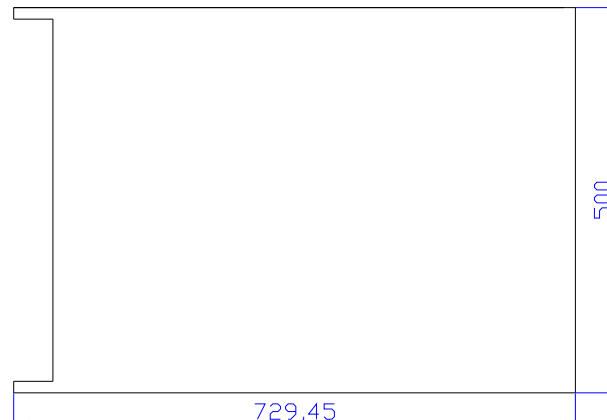
Base



Rear



Lateral



SB15/3 Drivers

15P80Nd

KEY FEATURES

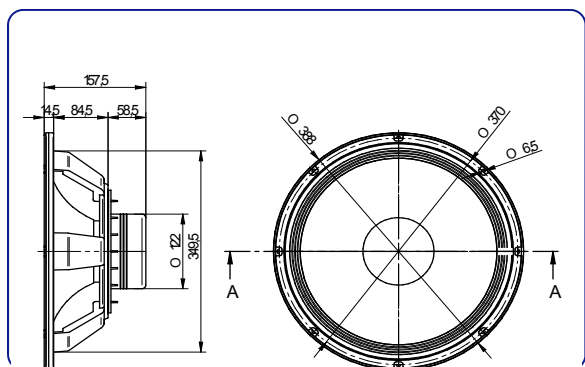
- Real 800 W AES power handling
- Sensitivity: 100 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 7.5$ mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

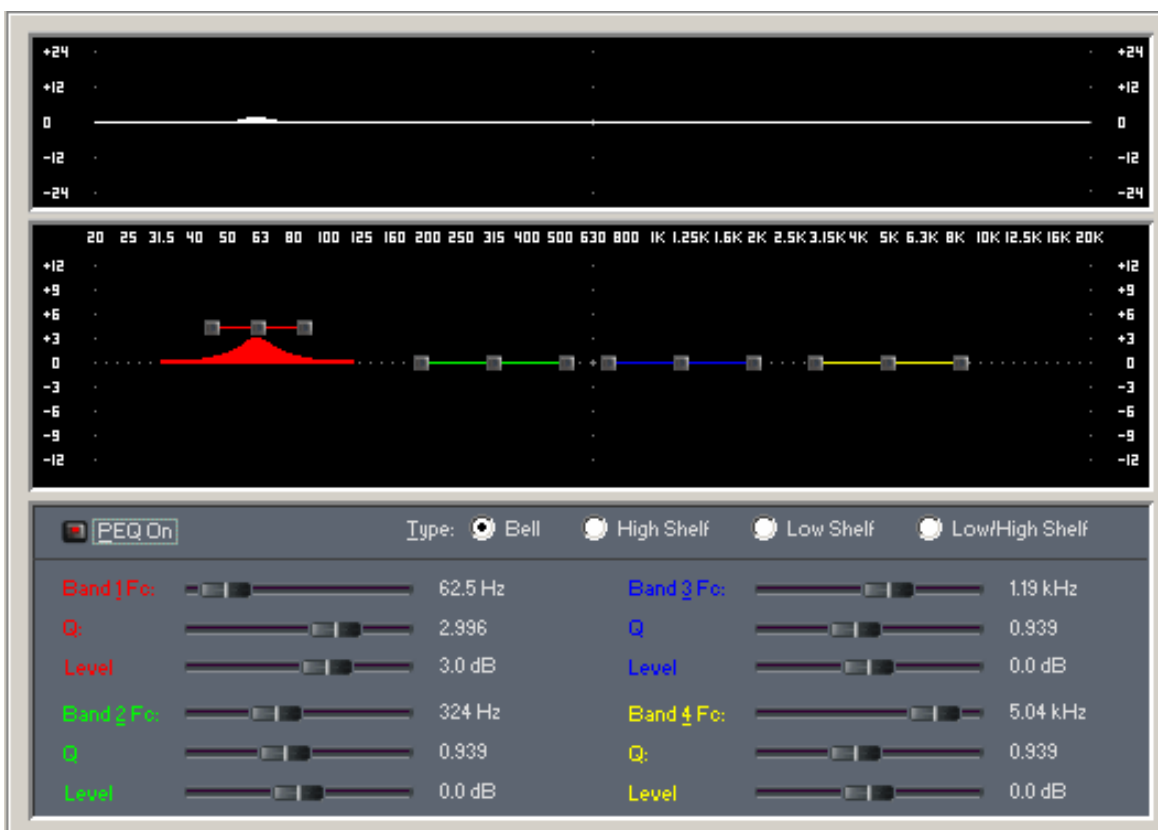
- | | |
|----------------------------|------------------------|
| • Nominal diameter | 380 mm. 15 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 6.6 ohms |
| • Power capacity* | 800 w AES |
| • Program power | 1600 w |
| • Sensitivity | 100 dB 2.83v @ 1m @ 2π |
| • Frequency range | 30 - 5000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 4.62 kg. 10.16 lb. |
| • BL factor | 23.6 N / A |
| • Voice coil length | 20 mm |
| • Air gap height | 12 mm |
| • X damage (peak to peak) | 52 mm |

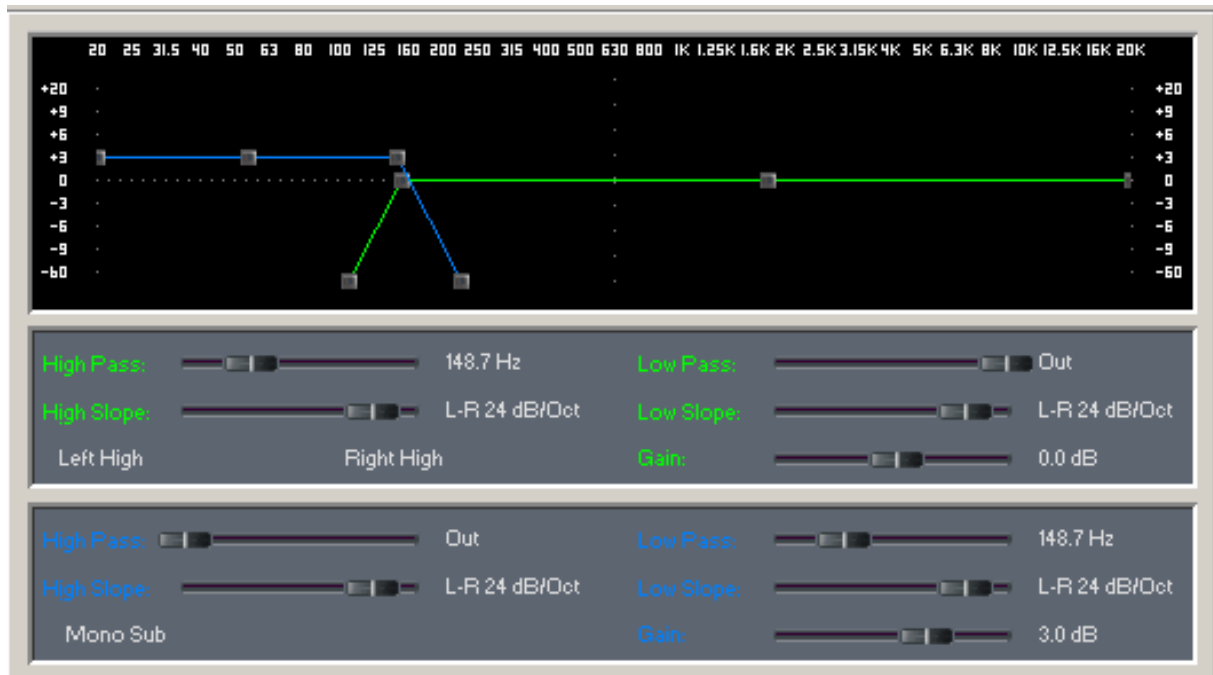
DIMENSION DRAWINGS



Notes:
 *The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

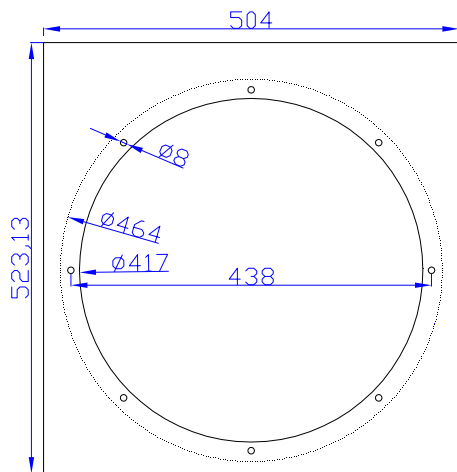
SB15/2 Presets



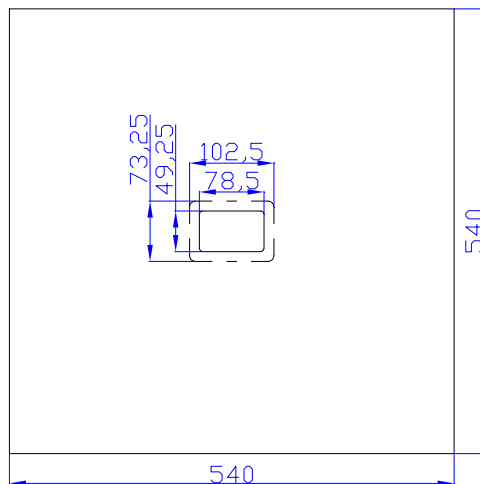


Technical Specifications

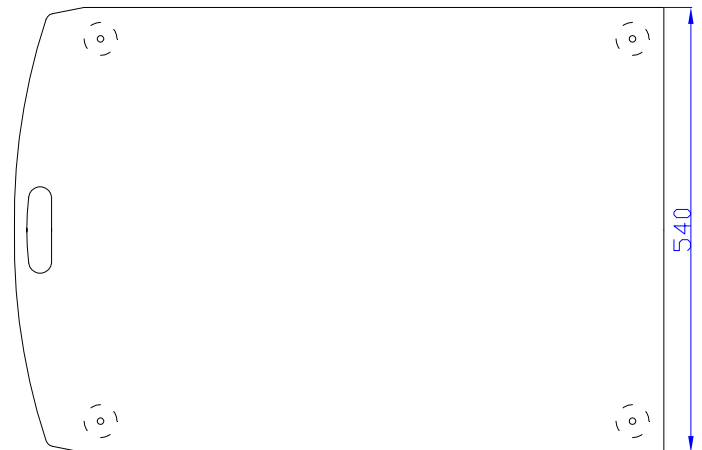
Acoustic cabinet:	SB18
Description:	Bass reinforcement. 18" subwoofer.
Power AES:	1.200 W.
Power Program:	2.400 W.
Sensitivity 2,83v @ 1m:	101 dB.
Max. SPL continuous:	132 dB.
Max. SPL peak:	138 dB.
Frequency response:	33 - 200 Hz
Bass Loudspeakers:	18P1200ND



Rear



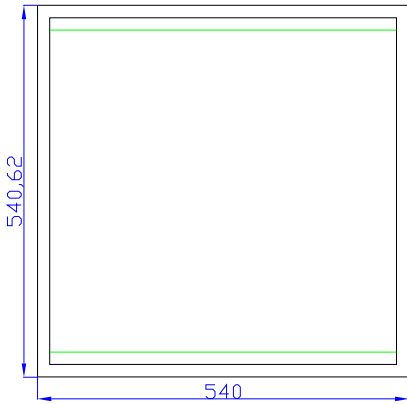
Base



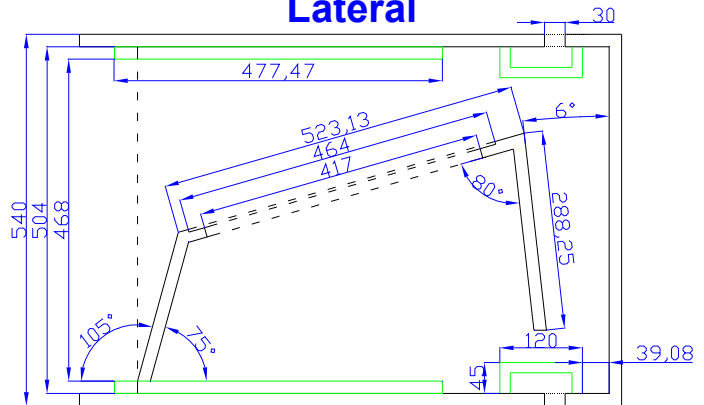
Lateral



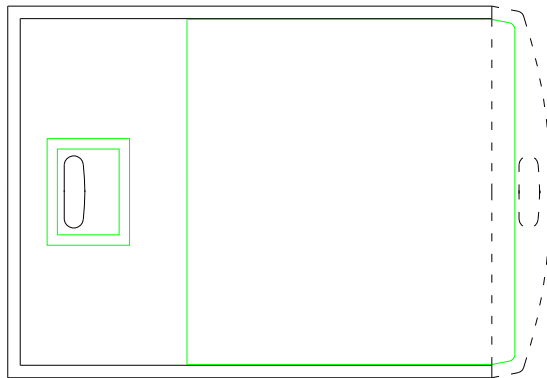
Front



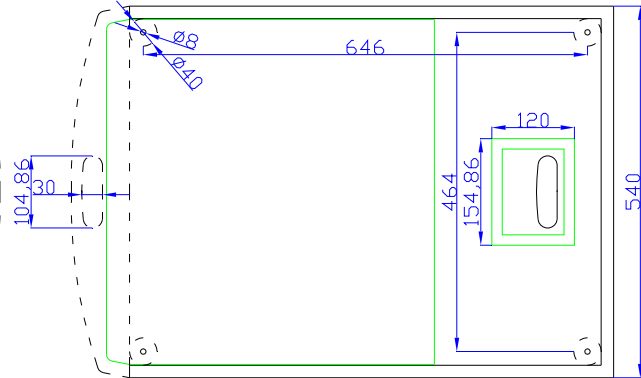
Lateral



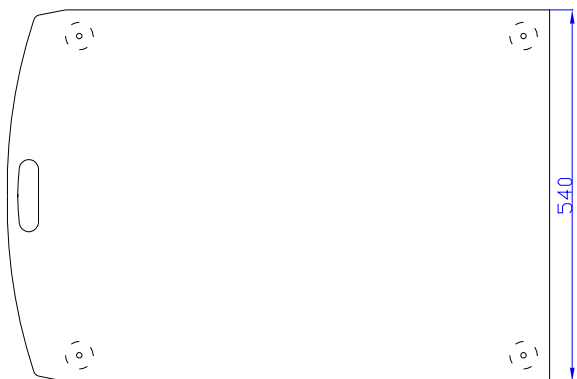
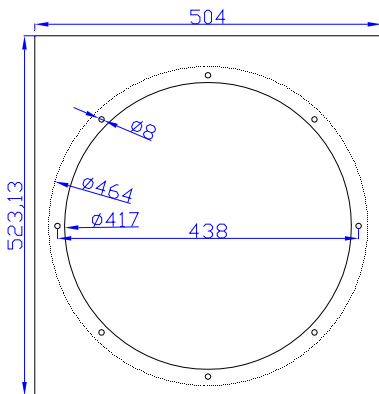
Central



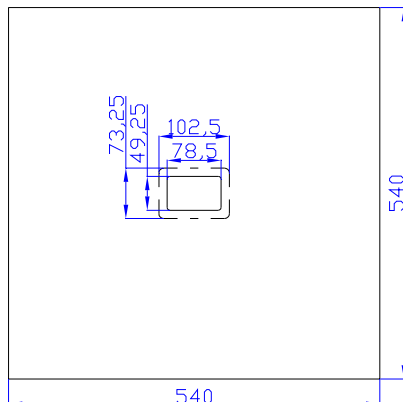
Base



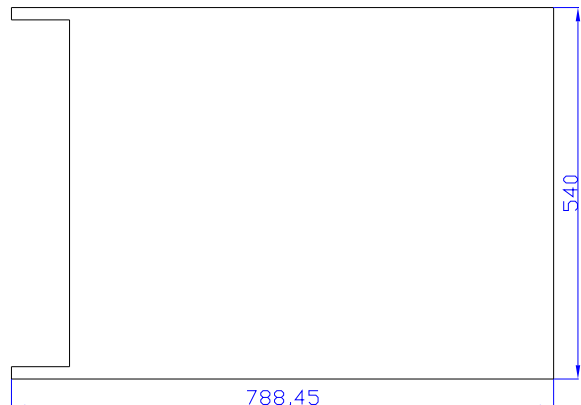
Base



Rear



Lateral



18P1200Nd

KEY FEATURES

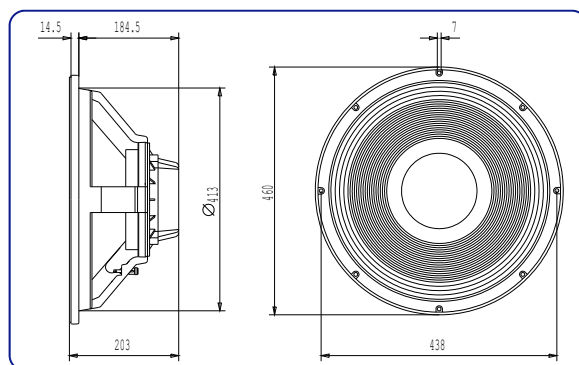
- Real 1200 W AES power handling
- Sensitivity: 98 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 9.5$ mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

- | | |
|----------------------------|-----------------------|
| • Nominal diameter | 460 mm. 18 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 6 ohms |
| • Power capacity* | 1200 w AES |
| • Program power | 2400 w |
| • Sensitivity | 98 dB 2.83v @ 1m @ 2π |
| • Frequency range | 25 - 2000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 6 kg. 13.2 lb. |
| • BL factor | 26.3 N / A |
| • Voice coil length | 25 mm |
| • Air gap height | 14 mm |
| • X damage (peak to peak) | 52 mm |

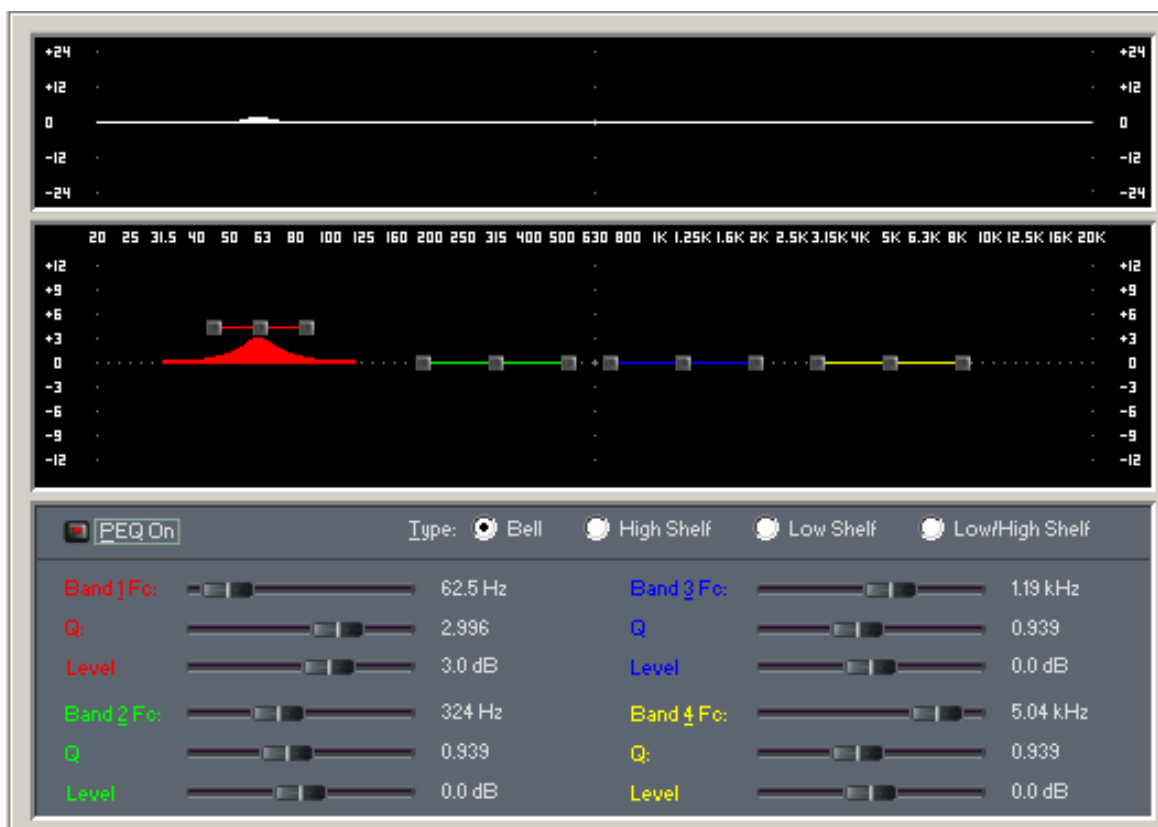
DIMENSION DRAWINGS

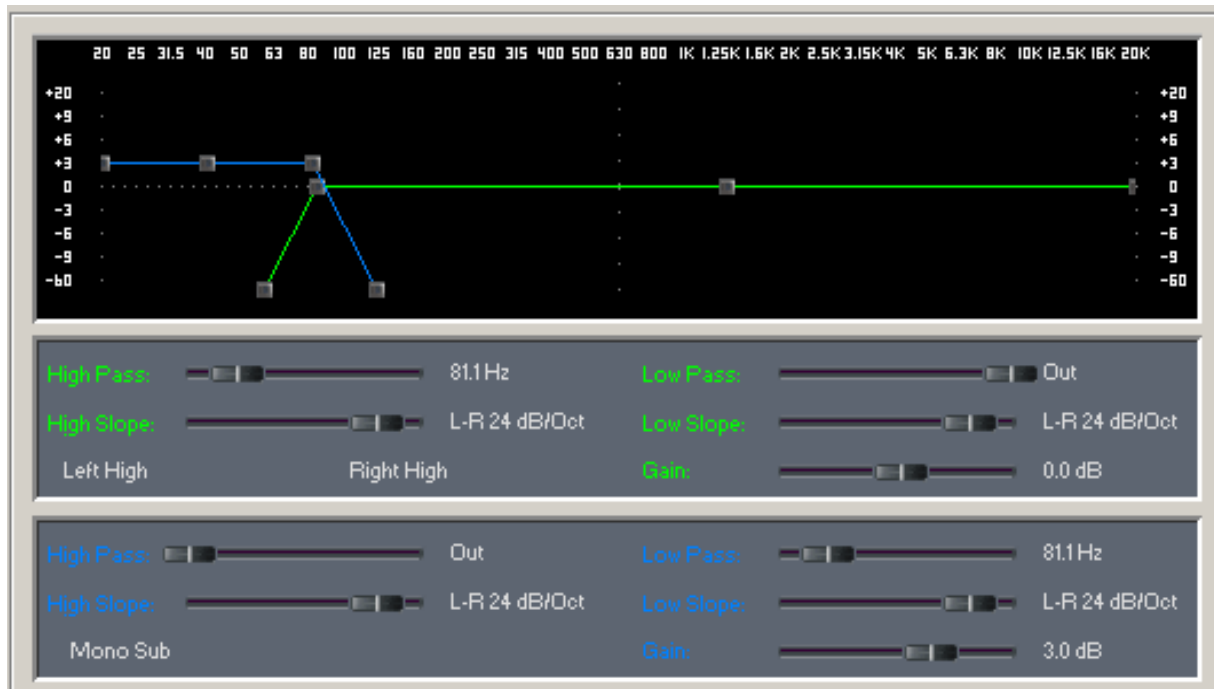


Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

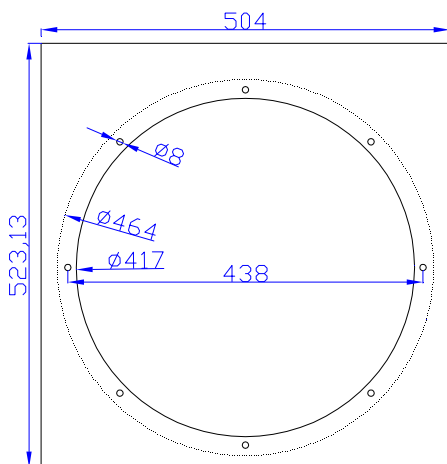
SB18/1 Presets



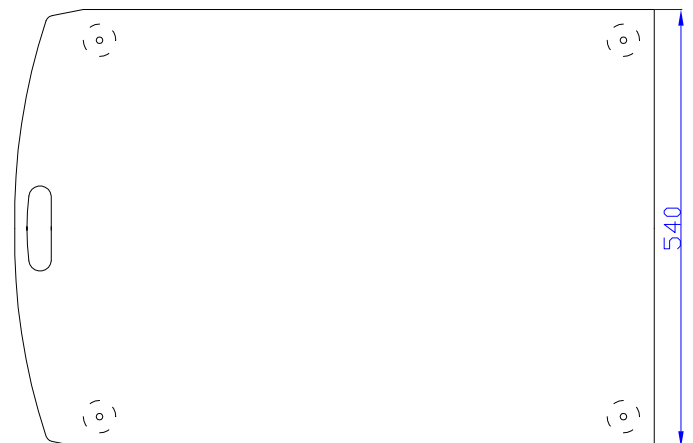


Technical Specifications

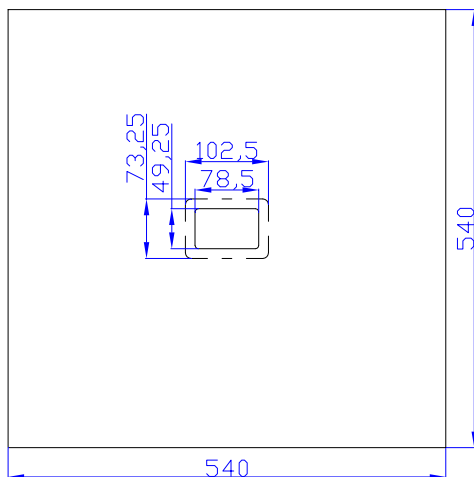
Acoustic cabinet:	SB18
Description:	Bass reinforcement. 18" subwoofer.
Power AES:	1.000 W.
Power Program:	2.000 W.
Sensitivity 2,83v @ 1m:	101 dB.
Max. SPL continuous:	131 dB.
Max. SPL peak:	137 dB.
Frequency response:	33 - 200 Hz.
Bass Loudspeakers:	18P1000ND



Base



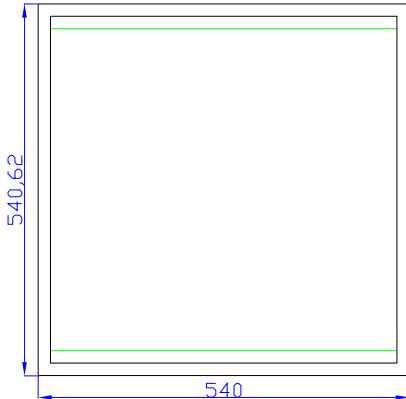
Rear



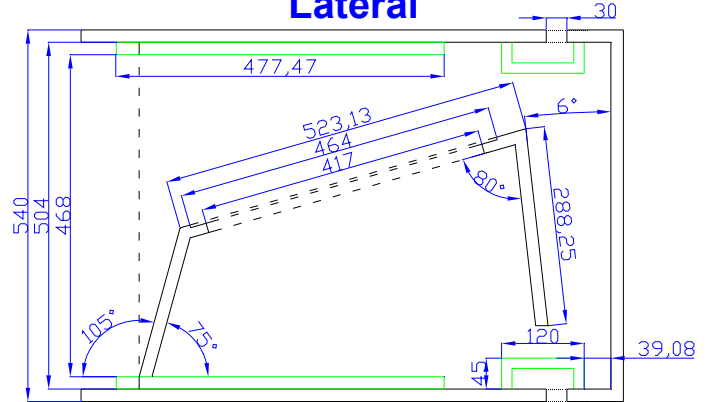
Lateral



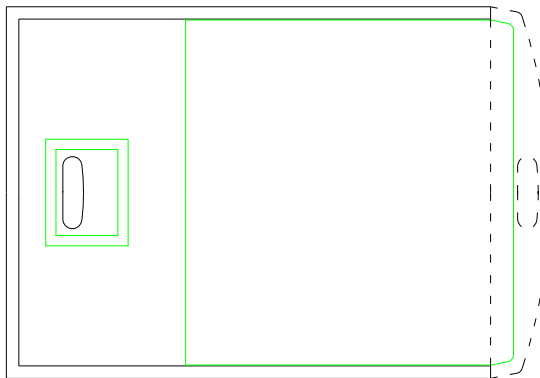
Front



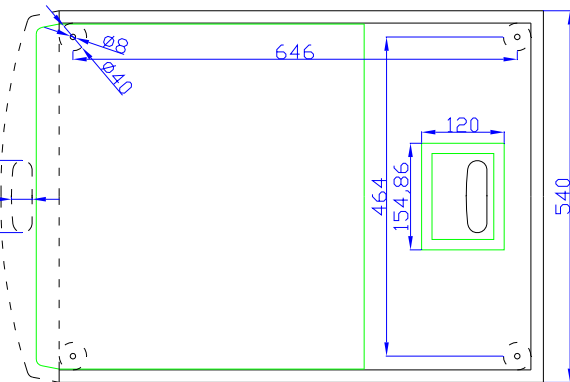
Lateral



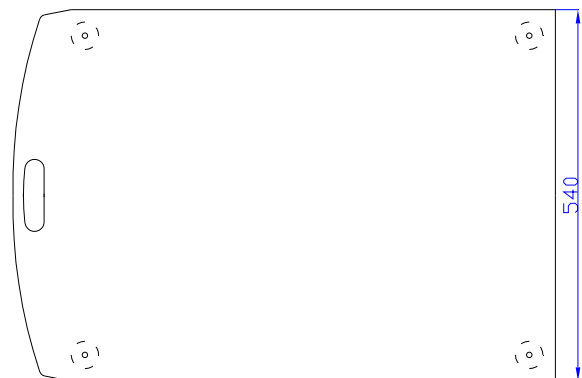
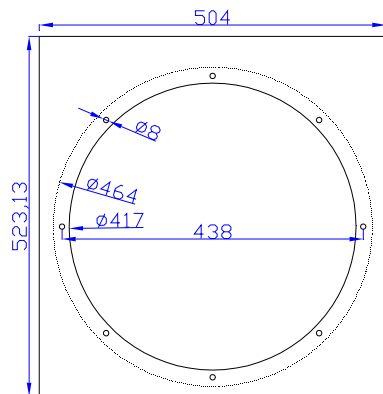
Central



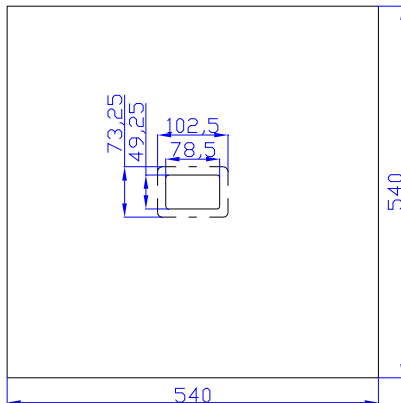
Base



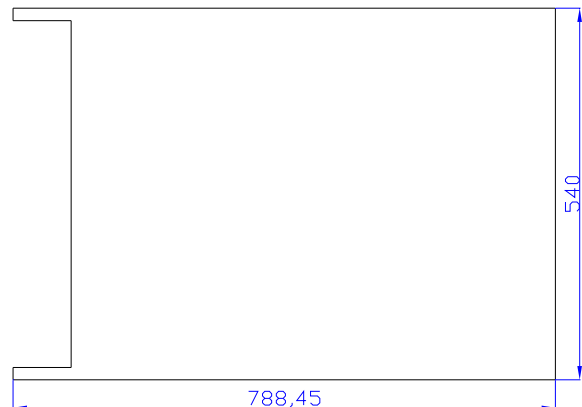
Base



Rear



Lateral



18P1000Nd

KEY FEATURES

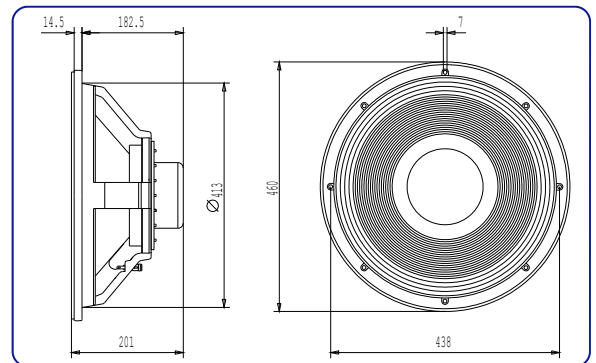
- Real 1000 W AES power handling
- Sensitivity: 98 dB @ 2.83V
- 4" Duo Technology voice coil
- Forced air convection circuit for low power compression
- Extended controlled displacement: $X_{max} \pm 8$ mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

- | | |
|----------------------------|-----------------------|
| • Nominal diameter | 460 mm. 18 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 6.2 ohms |
| • Power capacity* | 1000 w AES |
| • Program power | 2000 w |
| • Sensitivity | 98 dB 2.83v @ 1m @ 2π |
| • Frequency range | 25 - 2000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 4.62 kg. 10.16 lb. |
| • BL factor | 24.3 N / A |
| • Voice coil length | 21 mm |
| • Air gap height | 12 mm |
| • X damage (peak to peak) | 52 mm |

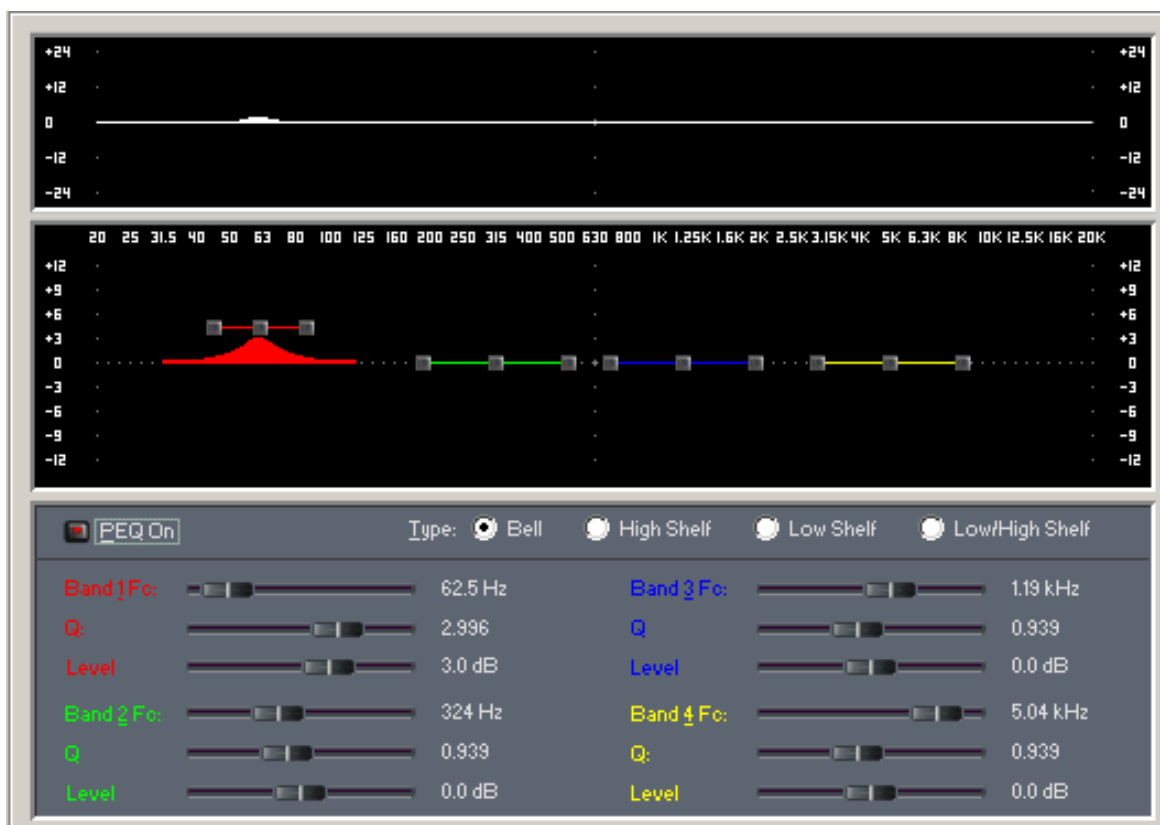
DIMENSION DRAWINGS

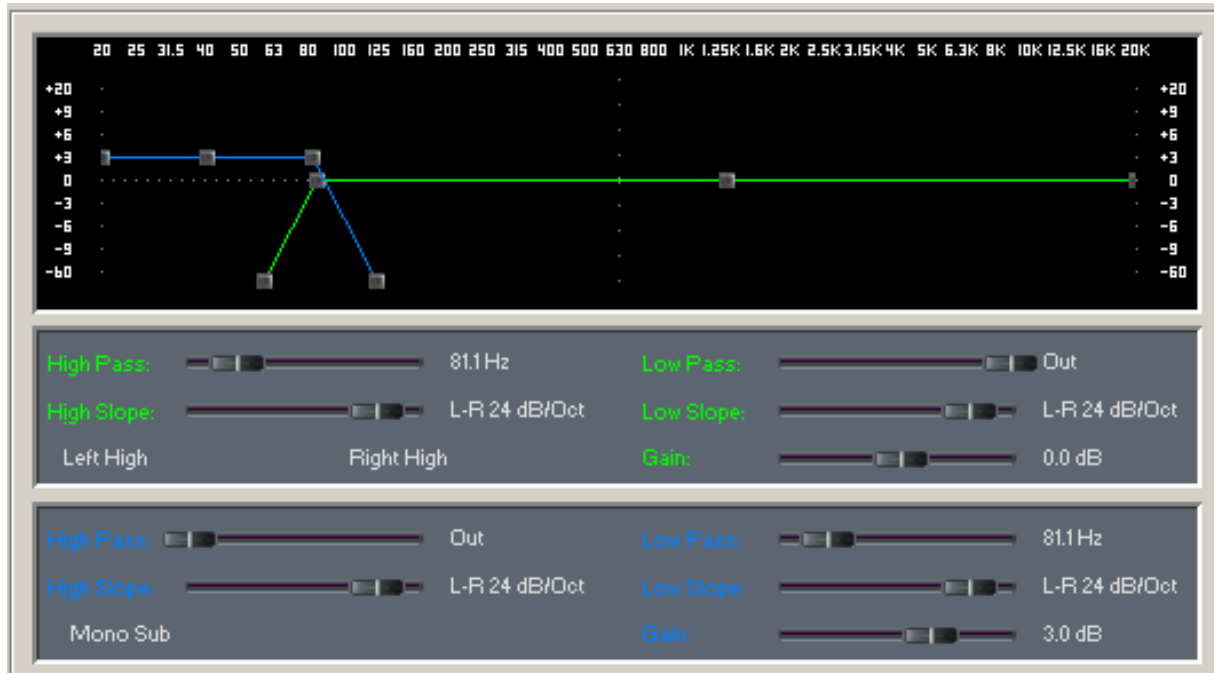


Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
Program power is defined as the transducer's ability to handle normal music program material.

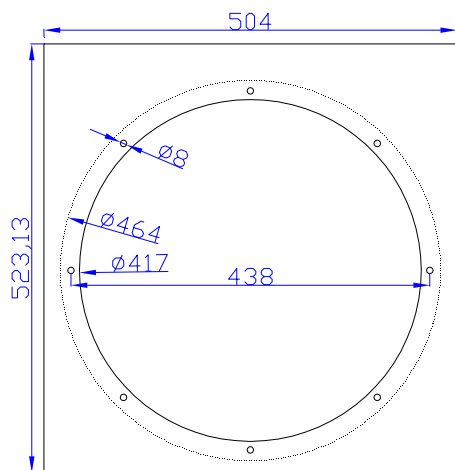
SB18/2 Presets



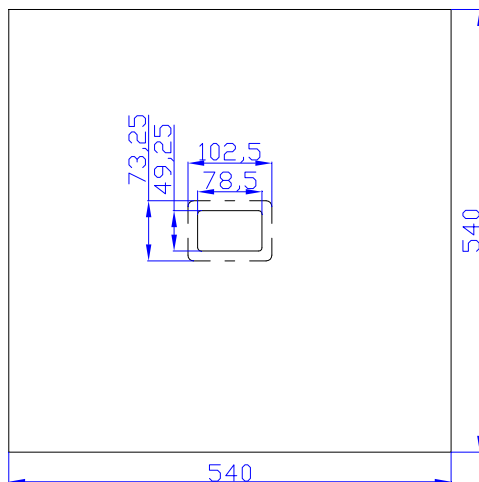


Technical Specifications

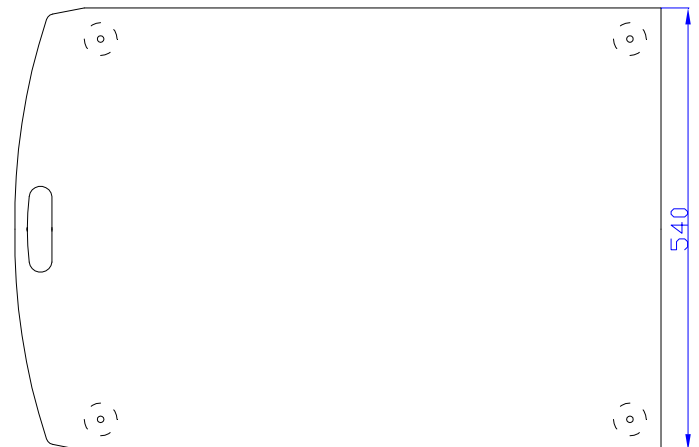
Acoustic cabinet:	SB18
Description:	Bass reinforcement. 18" subwoofer.
Power AES:	800 W.
Power Program:	1.600 W.
Sensitivity 2,83v @ 1m:	102 dB.
Max. SPL continuous:	131 dB.
Max. SPL peak:	137 dB.
Frequency response:	37 - 200 Hz.
Bass Loudspeakers:	18P80ND



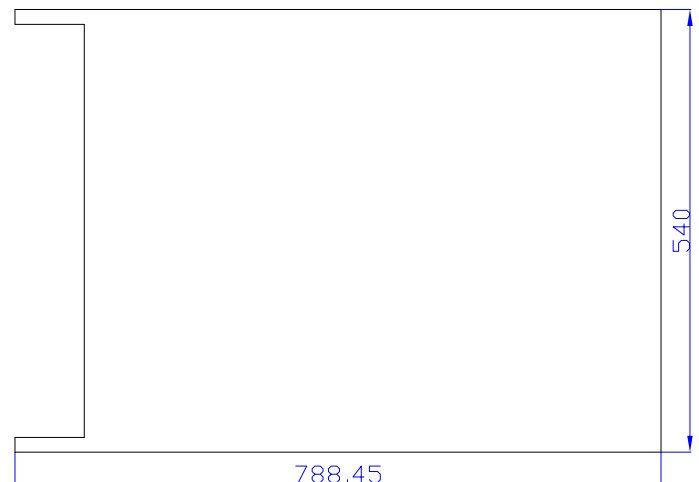
Rear



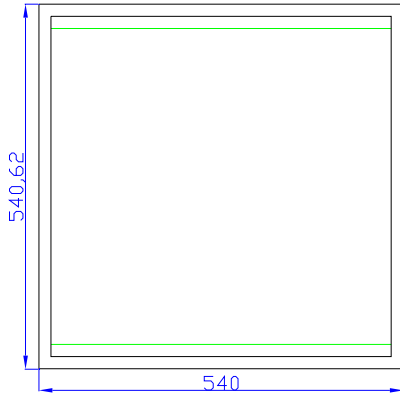
Base



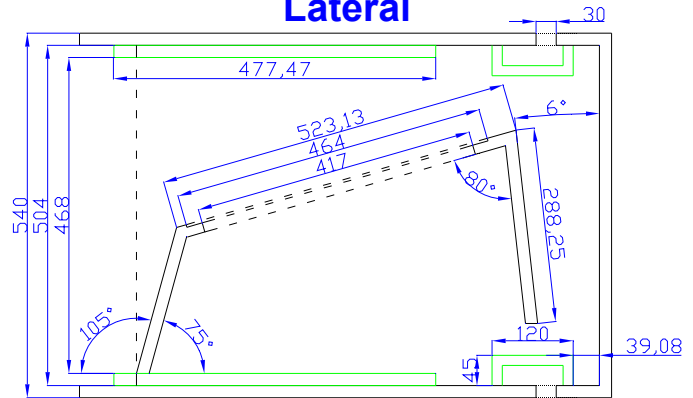
Lateral



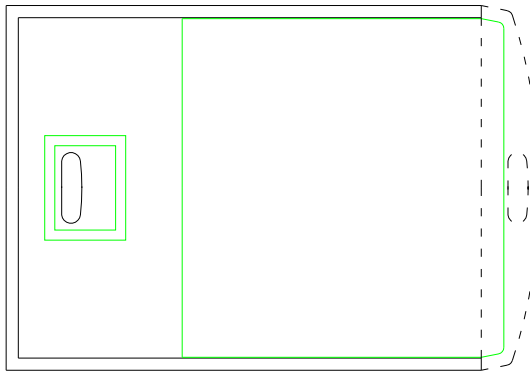
Front



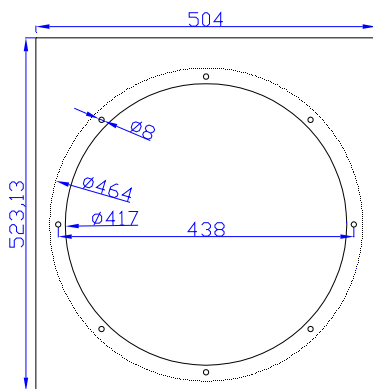
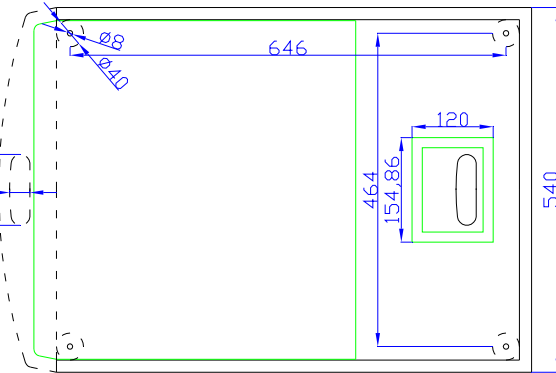
Lateral



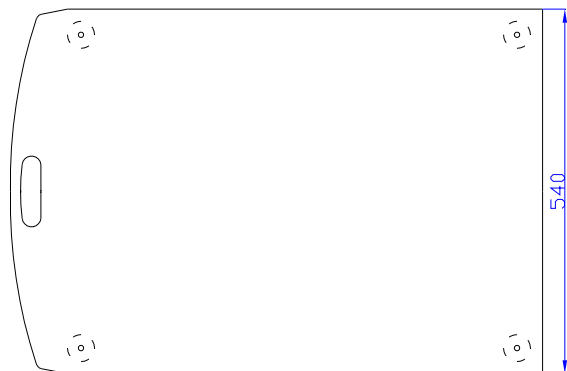
Central



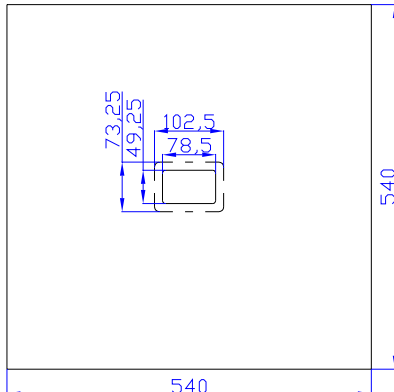
Base



Base



Rear



Lateral



18P80Nd

KEY FEATURES

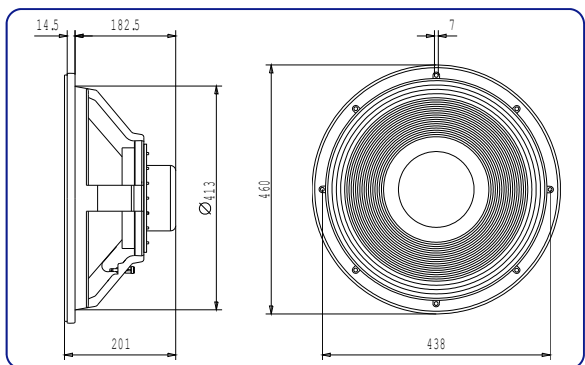
- Real 800 W AES power handling
- Sensitivity: 100 dB @ 2.83V
- 4" Duo Technology voice coil
- Carbon fiber reinforced paper cone
- Forced air convection circuit for low power compression
- Extended controlled displacement: Xmax ± 7.5 mm.
- Massive mechanical displacement capability: 52 mm p-p



TECHNICAL SPECIFICATIONS

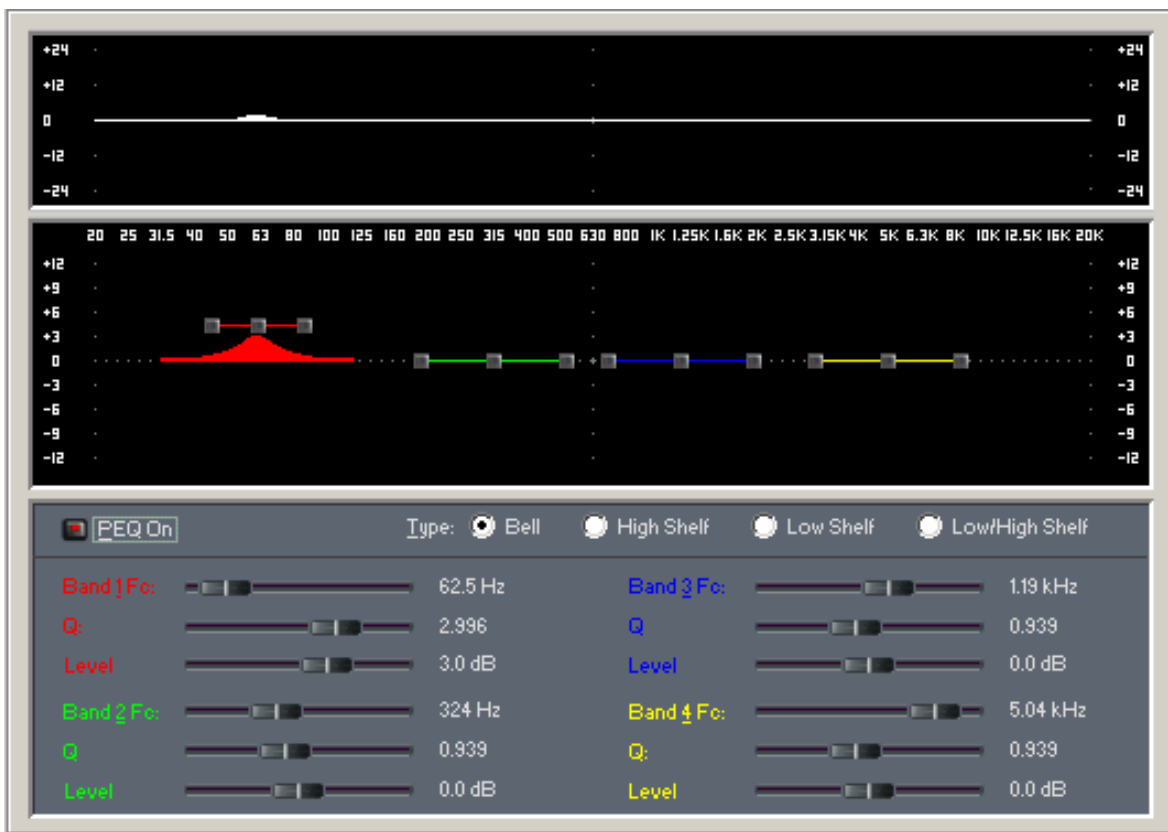
- | | |
|----------------------------|------------------------|
| • Nominal diameter | 460 mm. 18 in. |
| • Rated impedance | 8 ohms |
| • Minimum impedance | 5.8 ohms |
| • Power capacity* | 800 w AES |
| • Program power | 1600 w |
| • Sensitivity | 100 dB 2.83v @ 1m @ 2π |
| • Frequency range | 25 - 4000 Hz |
| • Voice coil diameter | 100 mm. 4 in. |
| • Magnetic assembly weight | 4.62 kg. 10.16 lb. |
| • BL factor | 21.9 N / A |
| • Voice coil length | 20 mm |
| • Air gap height | 12 mm |
| • X damage (peak to peak) | 52 mm |

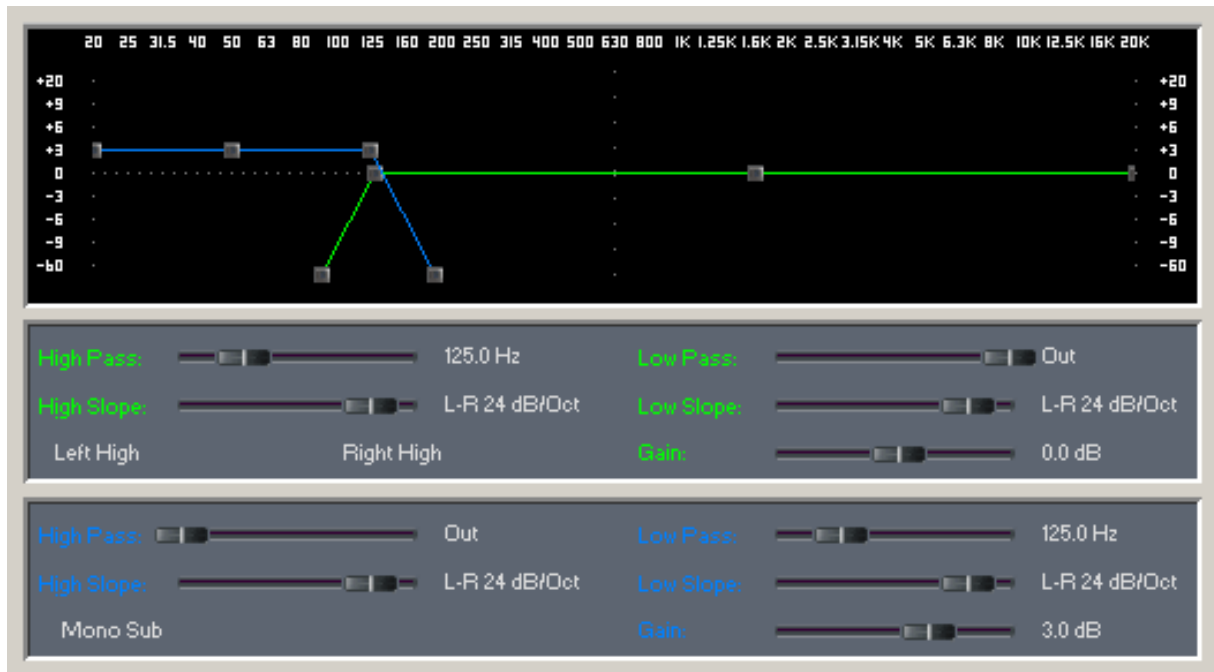
DIMENSION DRAWINGS



Notes:
 *The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

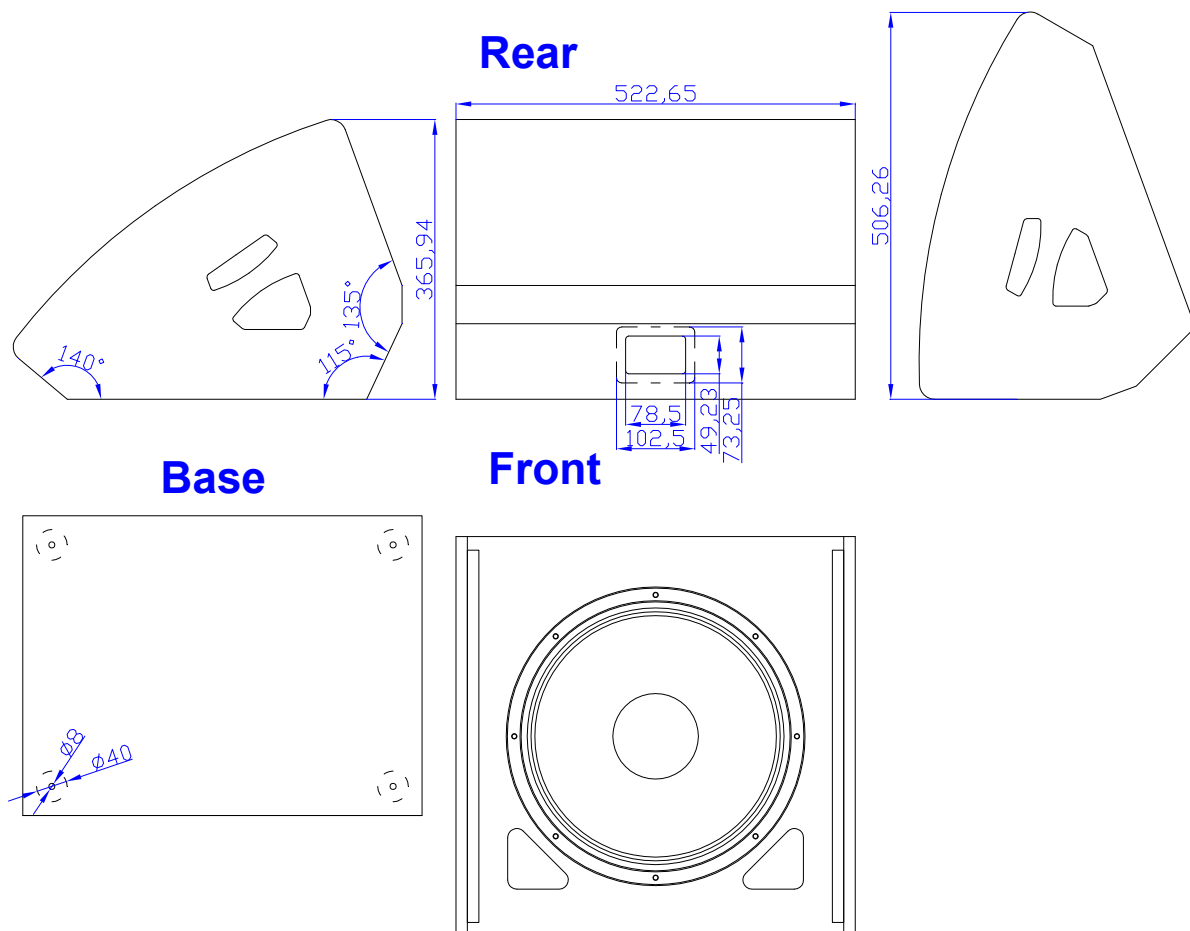
SB18/3 Presets

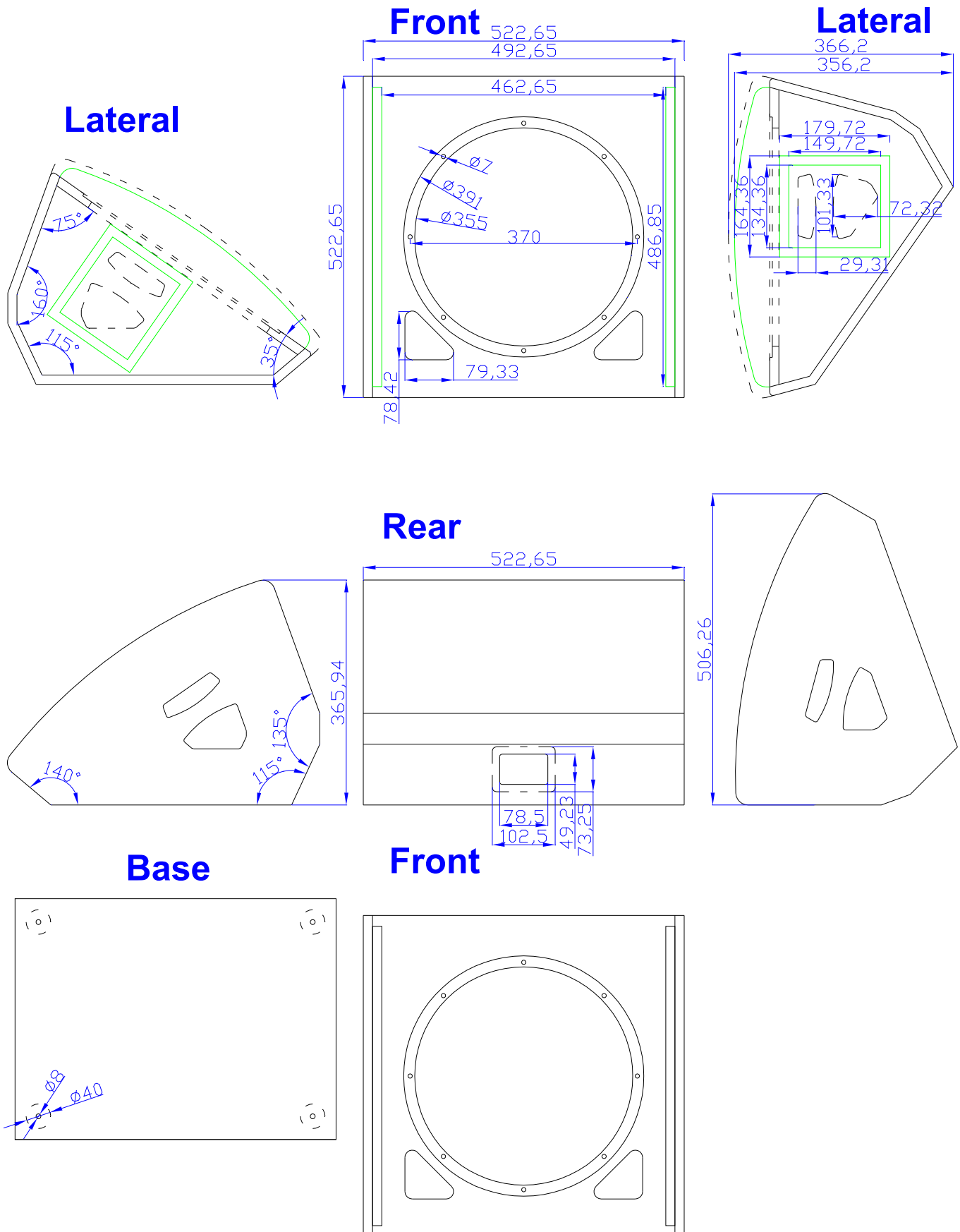




Technical Specifications

Acoustic cabinet:	SM15
Description:	Stage monitor. 15" coaxial
Power AES:	350 W.
Power Program:	700 W.
Sensitivity 2,83v @ 1m:	99 dB.
Max. SPL continuous:	124 dB.
Max. SPL peak:	130 dB.
Frequency response:	43 - 20.000Hz.
Coverage (H x V):	80° conical
Loudspeaker:	15XA38ND
Crossover:	FC-15/1





15XA38Nd

KEY FEATURES

- 15" bass loudspeaker and 2" exit compression driver combination
- Excellent power handling: 350 W AES (LF unit) - 90 W AES (HF unit)
- Extended and linear frequency response (25-20000 Hz)
- High sensitivity: 99 dB (LF unit) - 105 dB (HF unit)
- Low weight (common neodymium magnet system for both units)
- Bass loudspeaker designed for compact bass reflex cabinets



TECHNICAL SPECIFICATIONS

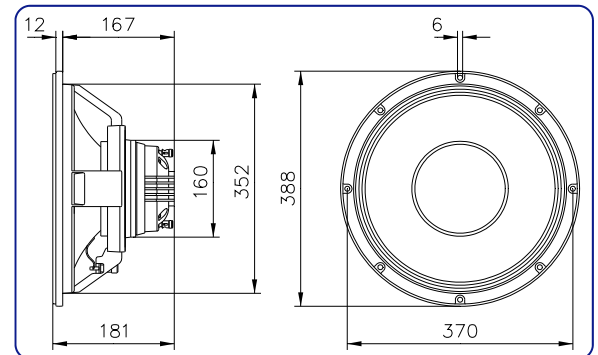
LF Unit

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 7.6 ohms
- Power capacity* 350 w AES
- Program power 700 w
- Sensitivity 99 dB 2.83v @ 1m @ 2π
- Frequency range 25 - 3500 Hz
- Voice coil diameter 100 mm. 4 in.
- Magnetic assembly weight 4.2 kg. 9.24 lb.
- BL factor 18.2 N / A
- Voice coil length 16 mm
- Air gap height 9 mm
- X damage (peak to peak) 28 mm

HF Unit

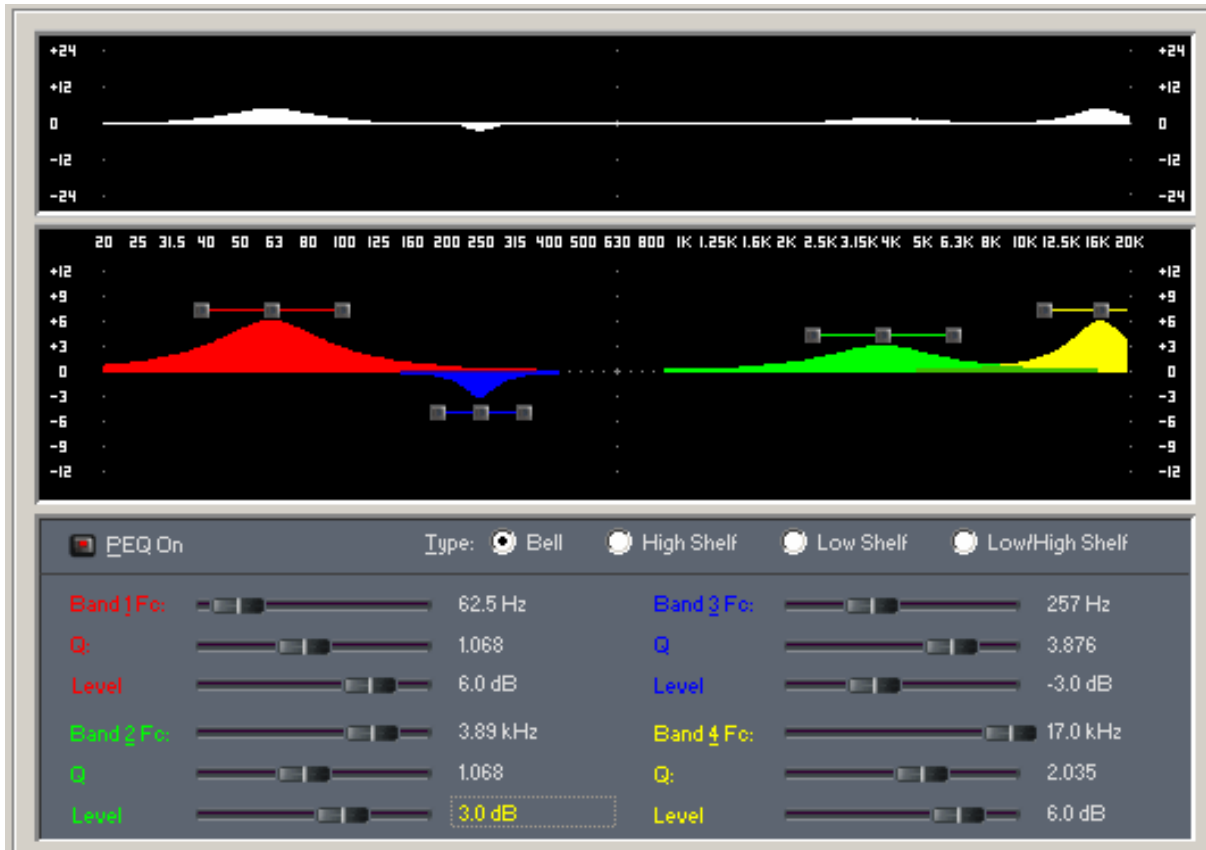
- Throat diameter 50.8 mm. 2 in
- Rated impedance 16 ohms
- Power capacity* 90 w AES above 1 kHz
- Program power 180 w above 1 kHz
- Sensitivity** 105 dB 1w @ 1m
- Frequency range 500- 20000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.

DIMENSION DRAWINGS

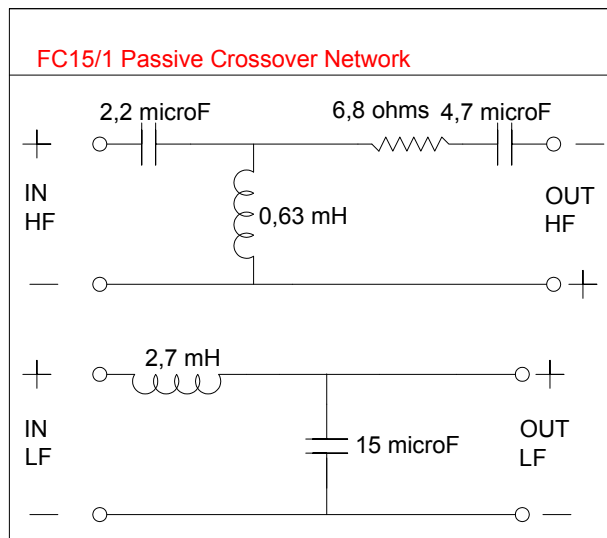


Notes:

*The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.

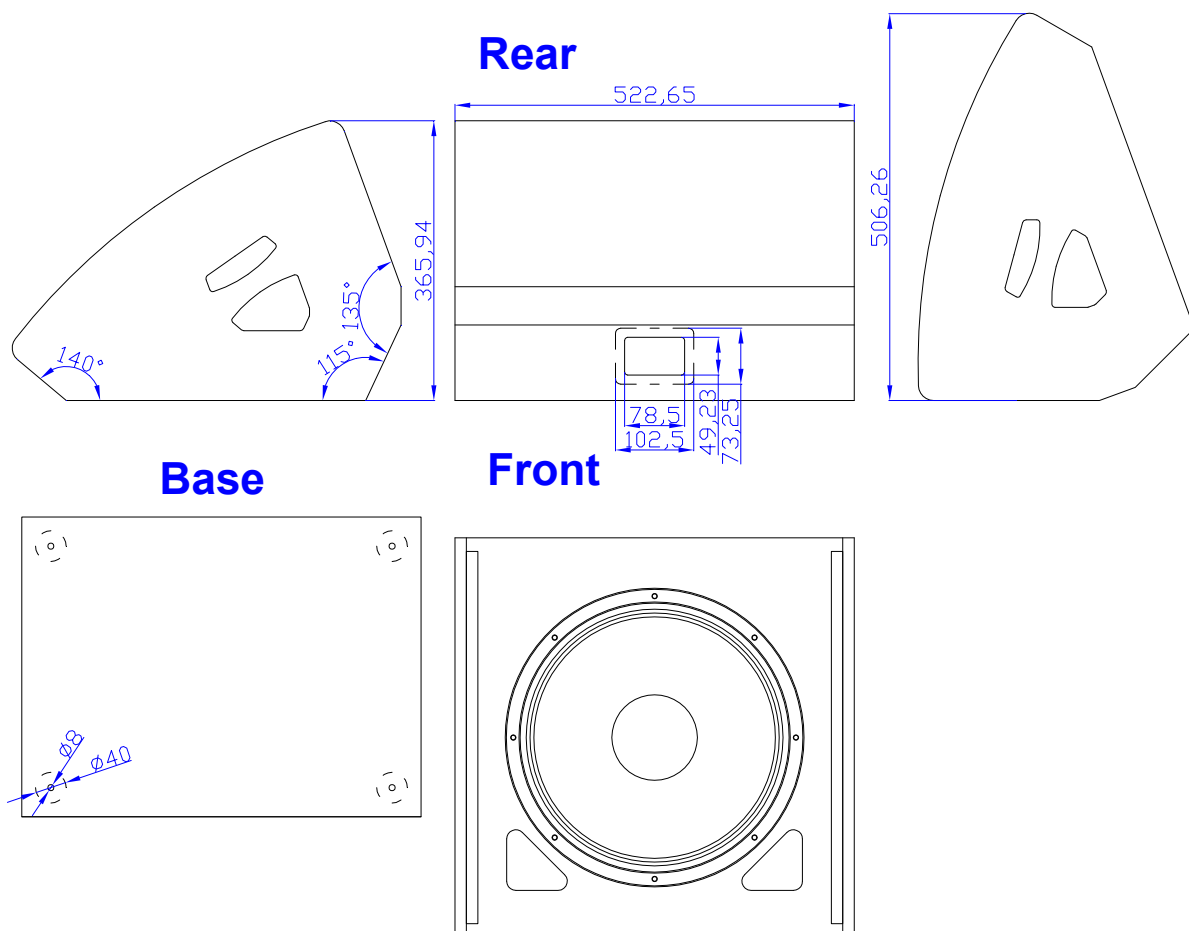


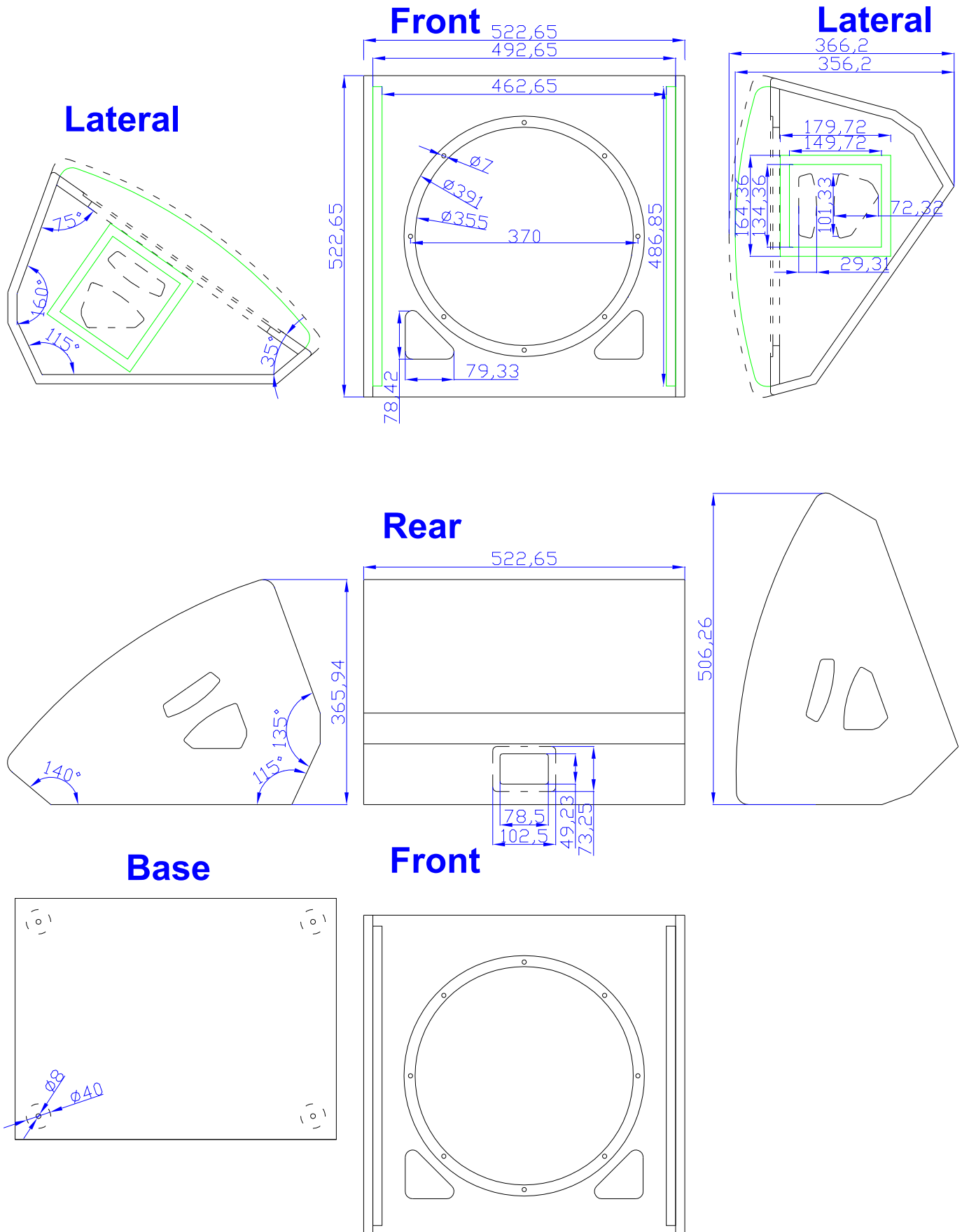
SM15/1 Crossover



Technical Specifications

Acoustic cabinet:	SM15
Description:	Stage monitor. 15" coaxial.
Power AES:	300 W.
Power Program:	600 W.
Sensitivity 2,83v @ 1m:	99 dB.
Max. SPL continuous:	124 dB.
Max. SPL peak:	130 dB.
Frequency response:	43 - 17.000Hz.
Coverage (H x V):	90° conical
Loudspeaker:	15KX
Crossover:	FC-15/2





15KX

KEY FEATURES

- 15" bass loudspeaker and 2" exit compression driver combination
- Excellent power handling: 300 W AES (LF unit) - 100 W AES (HF unit)
- Titanium diaphragm compression driver
- Low weight thanks to the common magnet system for both units
- Coherent response
- Bass loudspeaker designed for compact bass reflex cabinets

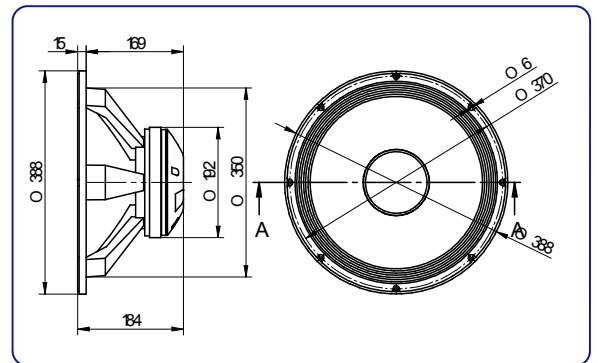


TECHNICAL SPECIFICATIONS

LF Unit

- Nominal diameter 380 mm. 15 in.
- Rated impedance 8 ohms
- Minimum impedance 7.3 ohms
- Power capacity* 300 w AES
- Program power 600 w
- Sensitivity 99 dB 2.83v @ 1m @ 2π
- Frequency range 25 - 3000 Hz
- Voice coil diameter 77 mm. 3 in.
- Magnetic assembly weight 6.4 kg. 14.11 lb.
- BL factor 14.5 N / A
- Voice coil length 13 mm
- Air gap height 8 mm
- X damage (peak to peak) 28 mm

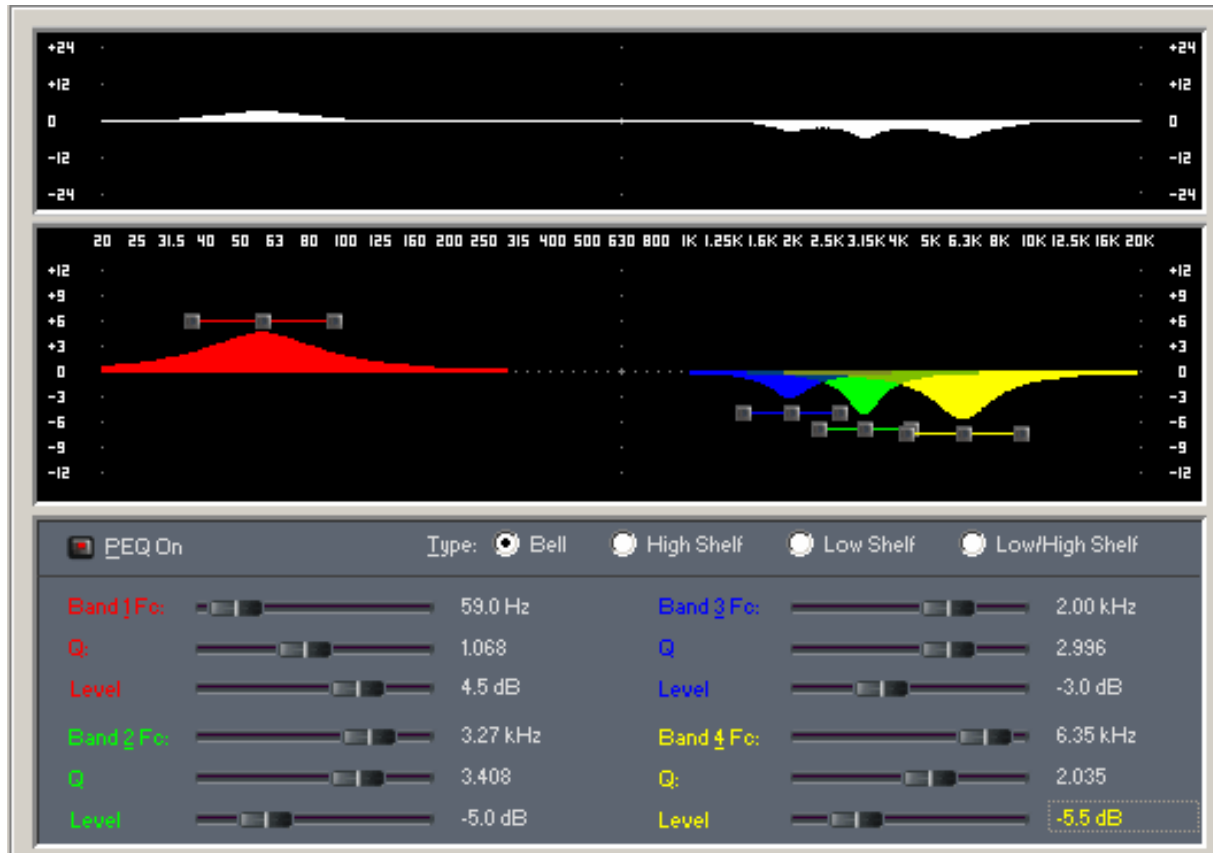
DIMENSION DRAWINGS



HF Unit

- Throat diameter 50.8 mm. 2 in
- Rated impedance 8 ohms
- Power capacity* 100 w AES
- Program power 200 w above 1 kHz
- Sensitivity** 105 dB 1w @ 1m
- Frequency range 800– 17000 Hz
- Voice coil diameter 72.2 mm. 2.87 in.
- Dispersion 90° conical

Notes:
 *The power capacity is determined according to AES2-1984 (r2003) standard.
 Program power is defined as the transducer's ability to handle normal music program material.



SM15/2 Crossover

