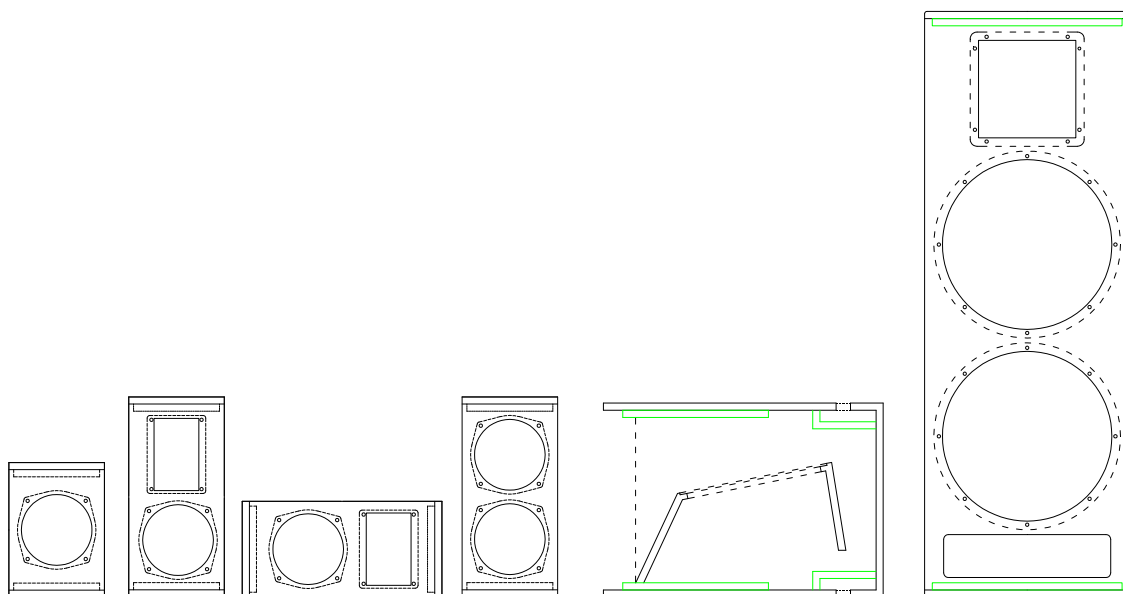


ENCLOSURE DESIGNS 2009



beyma //

beyond making sound

Hereby we introduce six new enclosure designs as a complement of the designs introduced last year and with the aim of offering a wider range of tools and the most complete information in order to obtain the best performance from our loudspeakers.

The new content will be an excellent guide for those who are looking for building high performance and high quality sound systems in small and compact sizes. Optimal choices for a wide number of applications, from a domestic HiFi or Home Cinema system to a professional installation system. We also complement the previously introduced professional PA systems (FR family) with a versatile two way bass reflex design of double 15" woofer and compression driver.

The selection of Beyma loudspeakers in this new catalogue includes some of our latest and most innovative products, like the 12SW1300Nd high power 12" subwoofer with HELICEX® technology or the 6" coaxial unit 6CX200Nd.

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 an accurate best sound response. Furthermore, in some designs we propose alternative combinations of drivers that may also be taken into account, and that are proved to offer an excellent performance.

Two types of enclosure can be found in this book:

- **FULL RANGE SYSTEMS**

- Four compact full range designs:

- Two configurations with the TPL-150 pleated diaphragm and 6P200Nd/6P200Fe woofers (open to user preference on ceramic or neodymium magnet system). For a versatile solution depending on the application needs (horizontal or vertical position of the cabinet) and outstanding quality response in the whole frequency range.

- A double 6,5" driver design with the 6CX200Nd coaxial unit and the 6P200Nd/6P200Fe woofers which will deliver an impressive bass response and excellent power handling.

- An ultra compact cabinet with the 6CX200Nd coaxial. High quality full range response and high power handling in a very low volume bass reflex cabinet. High versatility for several applications.

- The FR215 is a two way PA system designed to offer a powerful full range response thanks to the use of a double 15" woofer and a 1,4" compression driver. Please see the different combinations of speakers in the technical information.

- **SUBWOOFER ENCLOSURES**

A high efficiency design for 12" high power subwoofers. Suitable for our new 12SW1300Nd with HELICEX® technology and for the 12P1000Nd subwoofer.

The perfect complement to reinforce the lowest part of the frequency spectrum in combination with the compact full range designs explained above.

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

Thank you very much for the confidence in our products.

Acústica Beyma s.l.
May 2009

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Full Range Systems

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FRI06/T 2 way system - 200 W AES – 6P200Nd/6P200Fe, TPL-150	8
FRI06/TH 2 way system - 200 W AES – 6P200Nd/6P200Fe, TPL-150	11
FR206 2 way system - 400 W AES - 6P200Nd/6P200Fe, 6CX200Nd	14
FR215A 2 way double 15" PA system – 1400 W AES – 15G40, SMC65 (Other combinations of speakers in the file information)	17

Subwoofer Enclosures

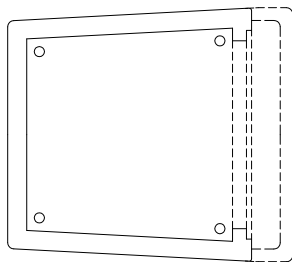
SBI2 12" Bass reinforcement - 1300 W AES – 12SW1300Nd (Other combination of speakers in the file information)	20
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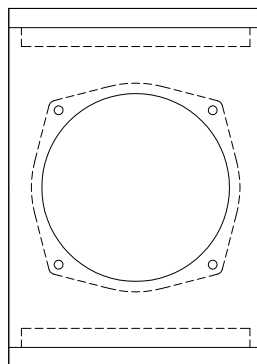
Technical Specifications

Acoustic cabinet:	FR106
Description:	Full Range Ultra Compact System
Power AES:	200 W.
Power Program:	400 W.
Sensitivity 2,83v @ 1m:	92 dB.
Max. SPL continuous:	115 dB.
Max. SPL peak:	121 dB.
Frequency response:	60 - 20.000Hz.
Coverage (H x V):	70° Conical
Loudspeaker:	6CX200Nd (technical datasheet available at www.beyma.com)
Crossover:	FP-106
Hardware:	External
Internal Net Volume	5,73 Liters
Vent dimensions	50mm. Diameter / 116mm. length

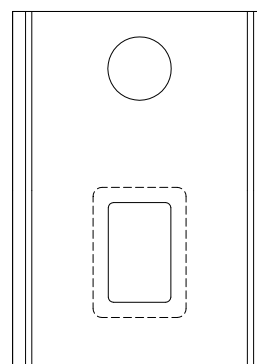
Lateral vista sección /
Lateral section



Vista frontal / Front View

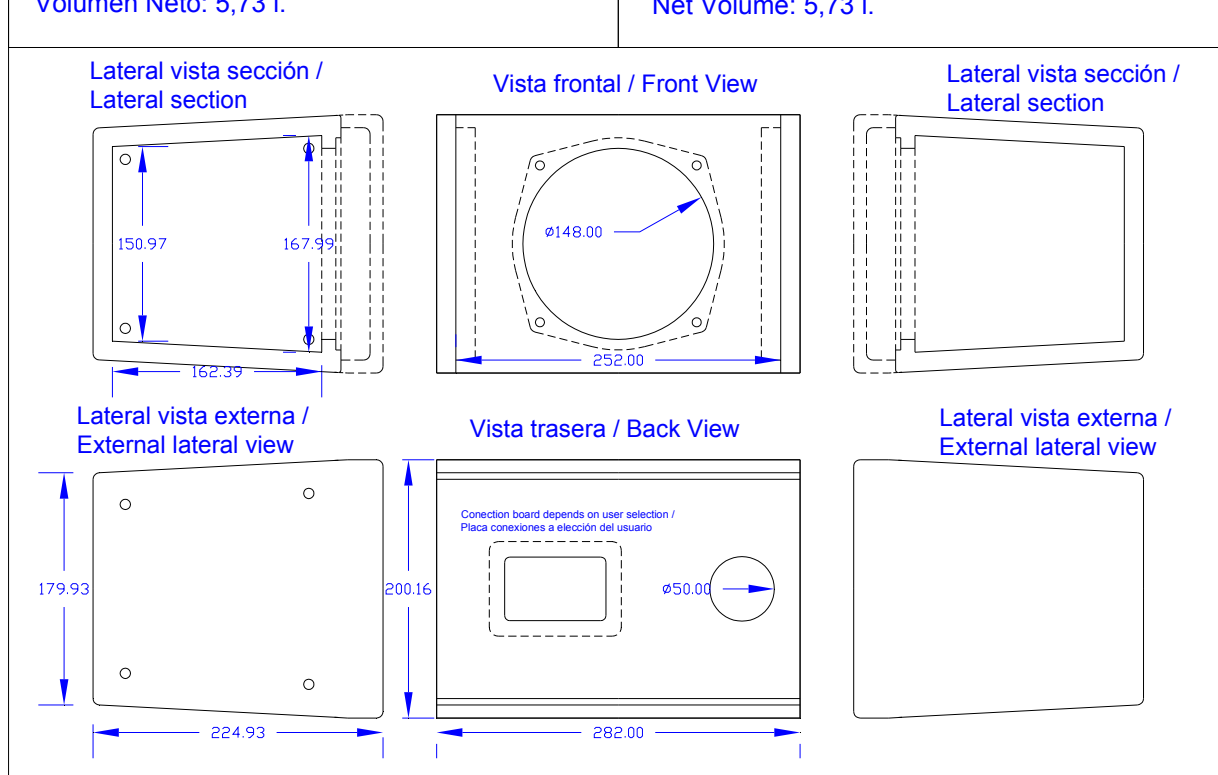


Vista trasera / Back View



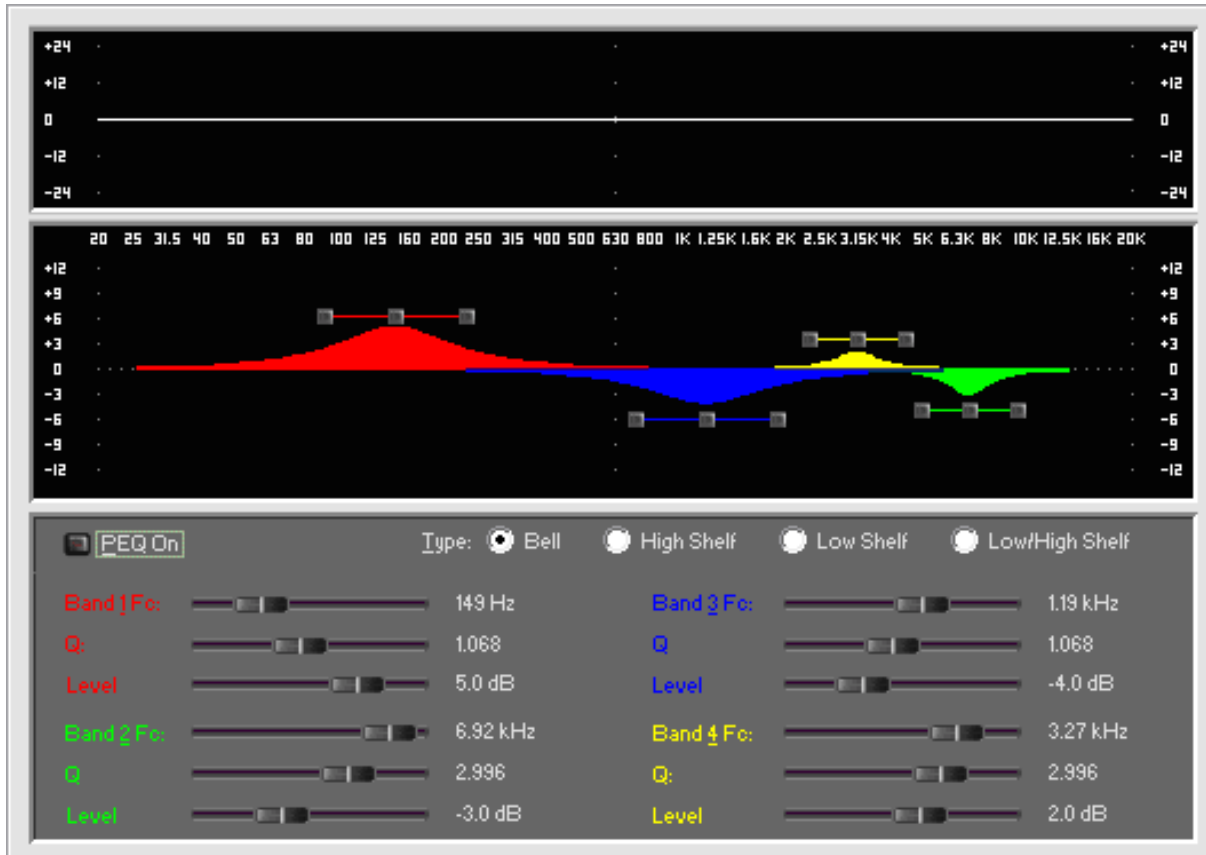
Modelo: FR106
 Unidades de cad en mm.
 Construido en tablero de 15 mm.
 Alojamiento altavoces rebaje 4 mm.
 Alojamiento placa conexiones rebaje 6 mm.
 Resonador: Diametro. 50 mm. Long. 116 mm.
 Volumen Neto: 5,73 l.

Model: FR106
 Units of cad in mm.
 Panels thickness: 15 mm.
 Rabbet for speaker cut out diameter: 4 mm.
 Rabbet for connections panel: 6 mm.
 Vent: 50 mm. diameter; 116 mm. length
 Net Volume: 5,73 l.

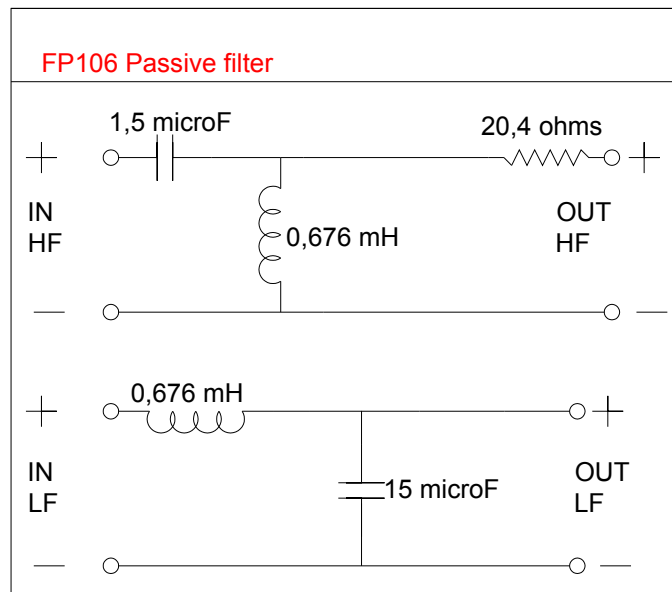


Note: These drawings show the basic internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com

Nota: Estos planos muestran información básica de dimensiones internas y externas. Toda la información detallada de dimensiones y cotas se encuentra en el fichero CAD, que puede descargarse desde la zona "Recursos" en www.beyma.com



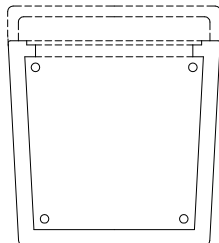
FR106 Crossover



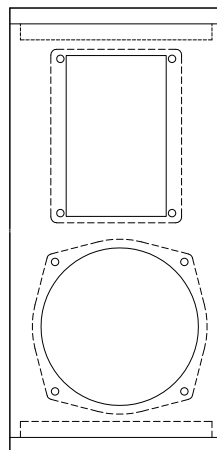
Technical Specifications

Acoustic cabinet:	FR106/T
Description:	2 Way System. 6,5" and High Frequency unit
Power AES:	200 W.
Power Program:	400 W.
Sensitivity 2,83v @ 1m:	93 dB.
Max. SPL continuous:	116 dB.
Max. SPL peak:	122 dB.
Frequency response:	60 - 23.000Hz.
Coverage (H x V):	120° x 30°
Bass Loudspeakers:	6P200Nd or 6P200Fe (technical datasheets available at www.beyma.com)
High Frequency unit:	TPL-150
Crossover:	FP-106/T
Hardware:	External
Internal Net Volume	8,75 Liters
Vent dimensions	50mm. Diameter / 116mm. length

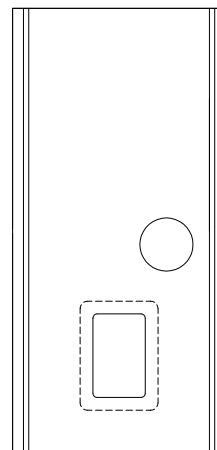
Lateral vista sección /
Lateral section

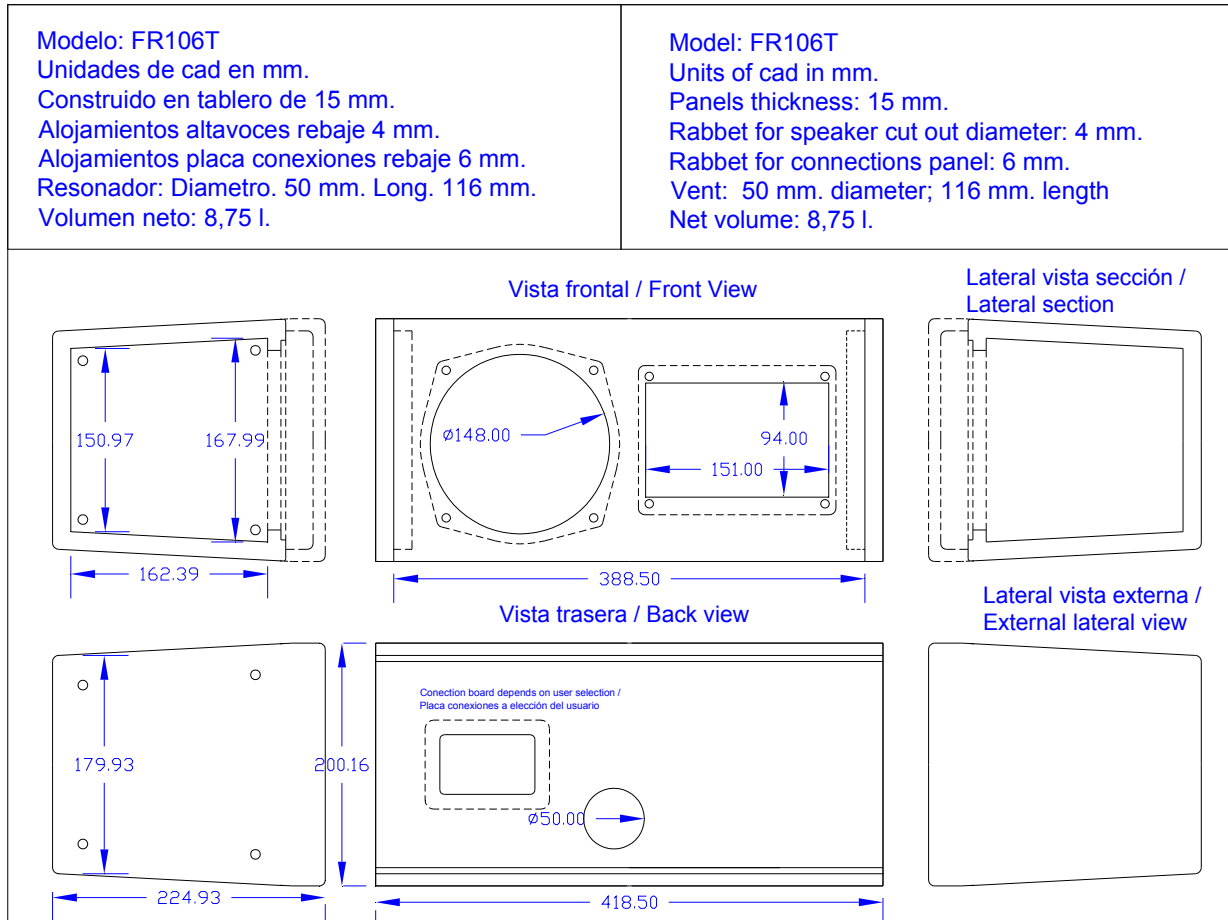


Vista frontal / Front View



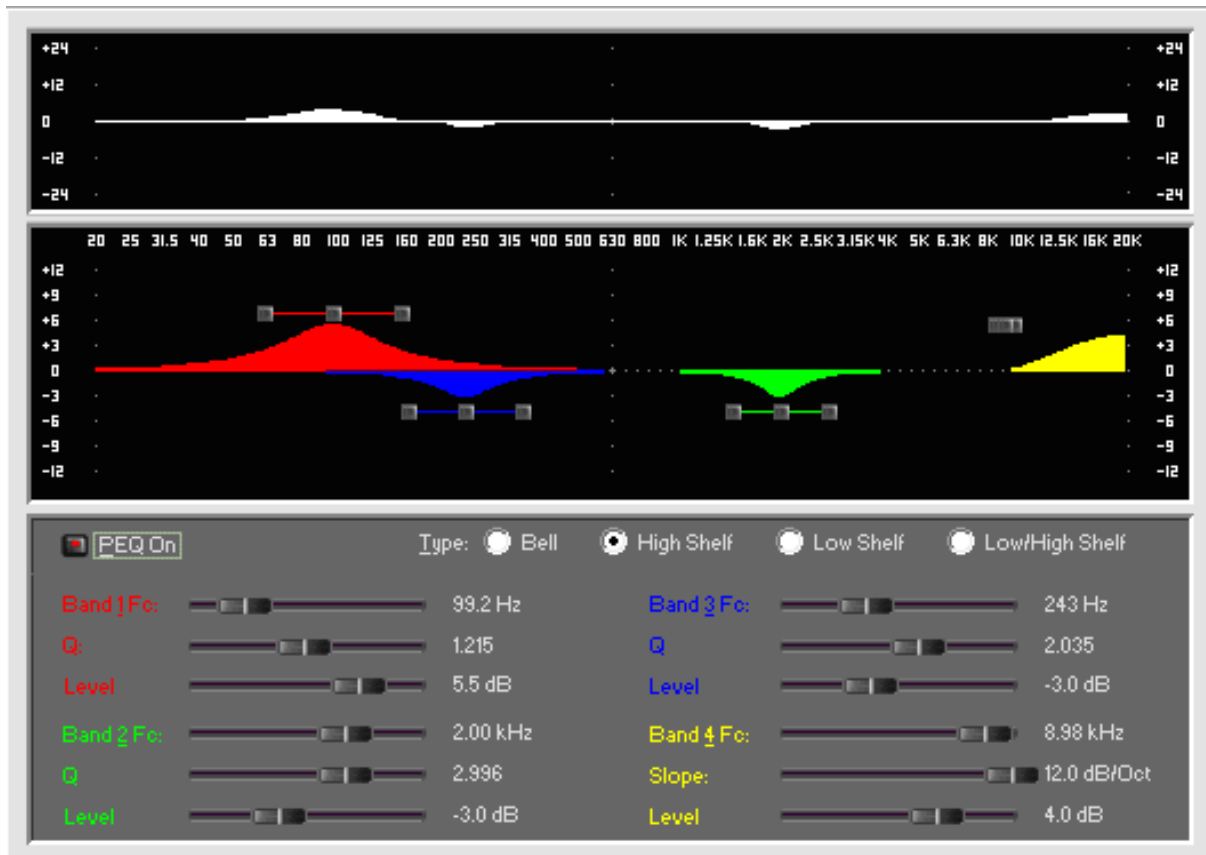
Vista trasera / Back view



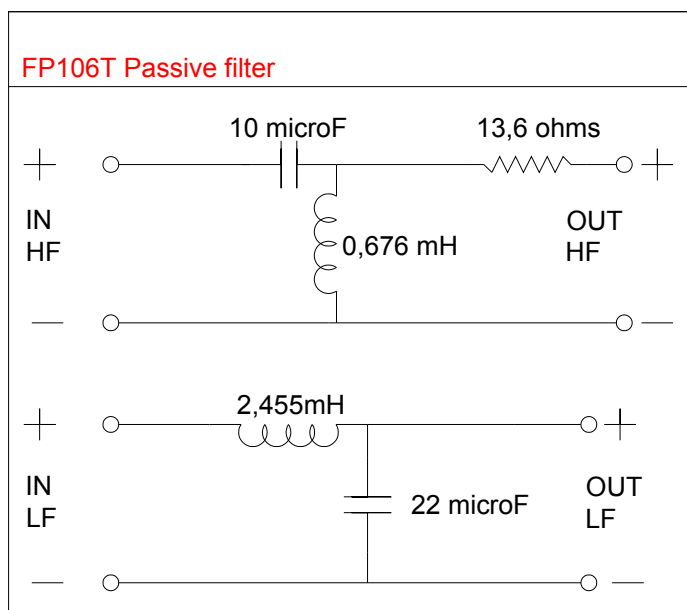


Note: These drawings show the basic internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com

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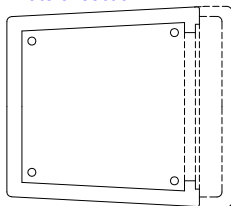
FR106/T Crossover



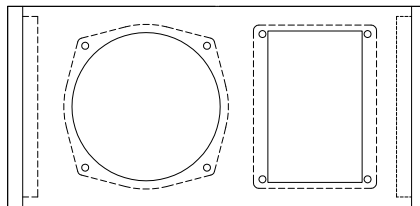
Technical Specifications

Acoustic cabinet:	FR106/TH
Description:	2 Way System. 6,5" and High Frequency unit
Power AES:	200 W.
Power Program:	400 W.
Sensitivity 2,83v @ 1m:	93 dB.
Max. SPL continuous:	116 dB.
Max. SPL peak:	122 dB.
Frequency response:	60 - 23.000Hz.
Coverage (H x V):	120° x 30°
Bass Loudspeakers:	6P200Nd or 6P200Fe (technical datasheets available at www.beyma.com)
High Frequency unit:	TPL-150
Crossover:	FP-106/T
Hardware:	External
Internal Net Volume	8,75 Liters
Vent dimensions	50mm. Diameter / 116mm. length

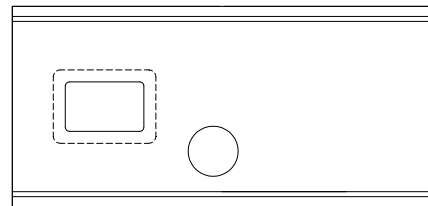
Lateral vista sección /
Lateral section

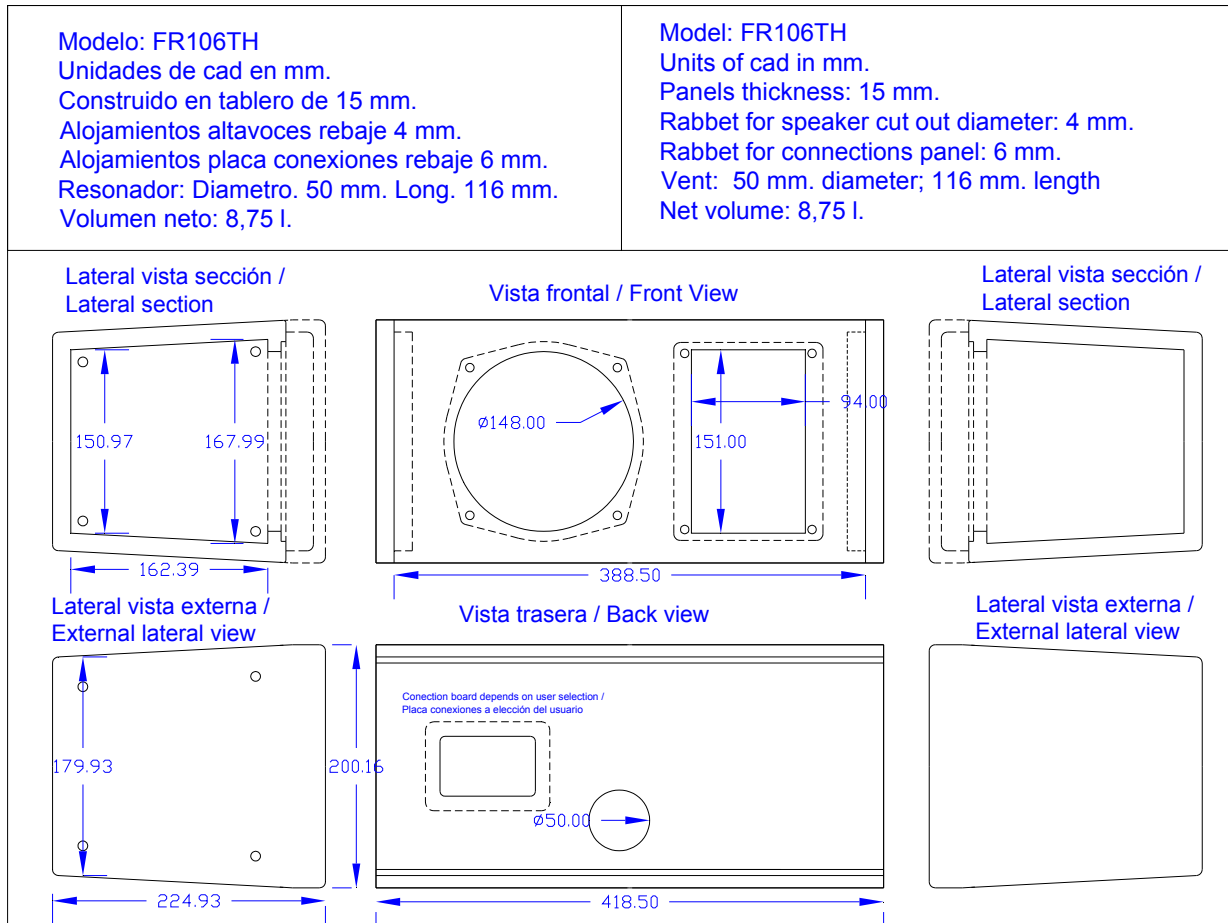


Vista frontal / Front View



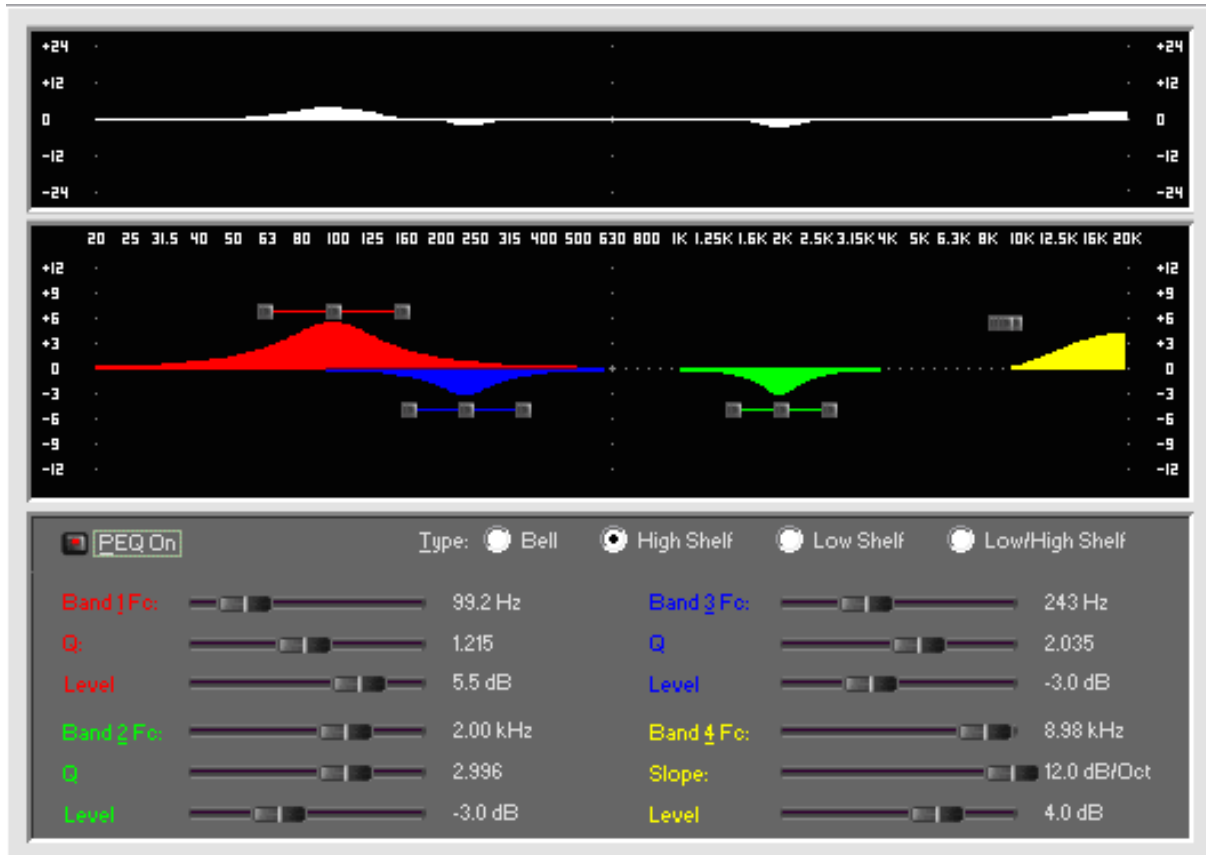
Vista trasera / Back view



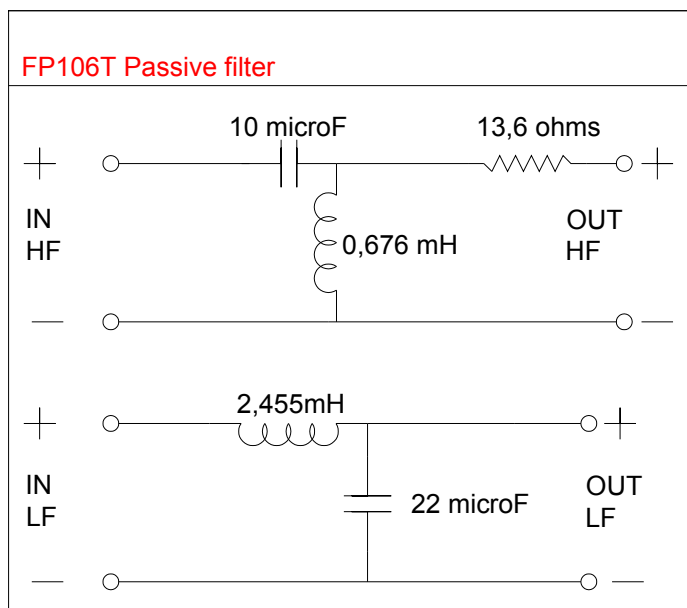


Note: These drawings show the basic internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com

Nota: Estos planos muestran información básica de dimensiones internas y externas. Toda la información detallada de dimensiones y cotas se encuentra en el fichero CAD, que puede descargarse desde la zona "Recursos" en www.beyma.com

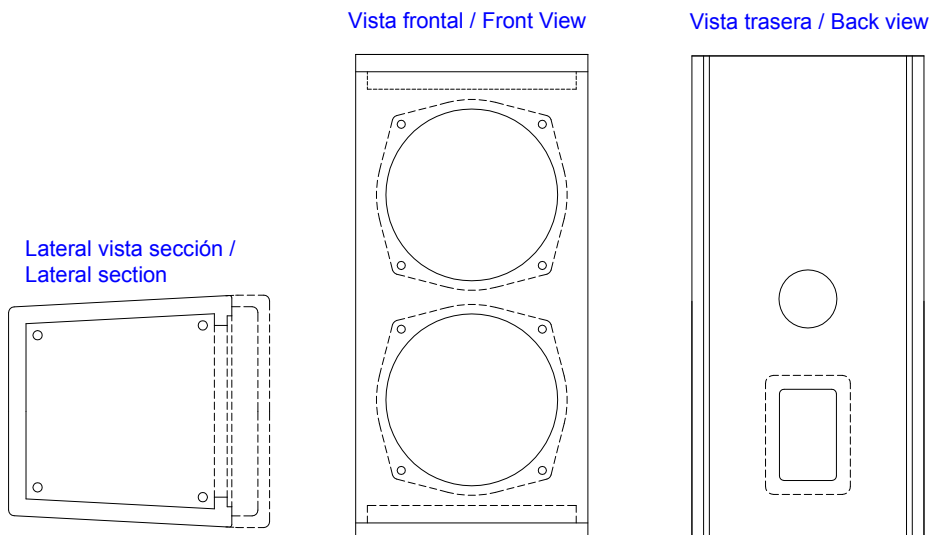


FR106/TH Crossover



Technical Specifications

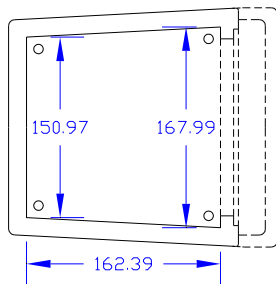
Acoustic cabinet:	FR206
Description:	2 Way Compact System. 6,5" Woofer and Coaxial unit
Power AES:	400 W.
Power Program:	800 W.
Sensitivity 2,83v @ 1m:	93 dB.
Max. SPL continuous:	119 dB.
Max. SPL peak:	125 dB.
Frequency response:	60 - 20.000Hz.
Coverage (H x V):	70° Conical
Bass Loudspeakers:	6P200Nd or 6P200Fe (technical datasheets available at www.beyma.com)
Coaxial unit:	6CX200Nd (technical datasheet available at www.beyma.com)
Crossover:	FP-206
Internal net volume:	8,75 liters
Vent dimensions	50 mm. Diameter / 116 mm. length



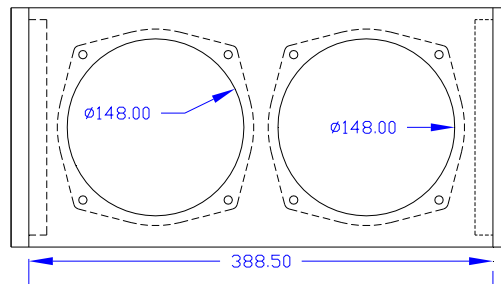
Modelo: FR206
 Unidades de cad en mm.
 Construido en tablero de 15 mm.
 Alojamiento altavoces rebaje 4 mm.
 Alojamiento placa conexiones rebaje 6 mm.
 Resonador: Diámetro. 50 mm. Long. 116 mm.
 Volumen neto: 8,75 l.

Model: FR206
 Units of cad in mm.
 Panels thickness: 15 mm.
 Rabbet for speaker cut out diameter: 4 mm.
 Rabbet for connections panel: 6 mm.
 Vent: 50 mm. diameter; 116 mm. length
 Net volume: 8,75 l.

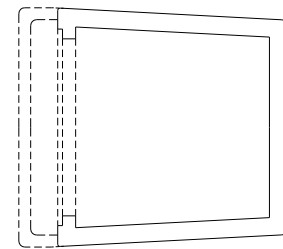
Lateral vista sección /
 Lateral section



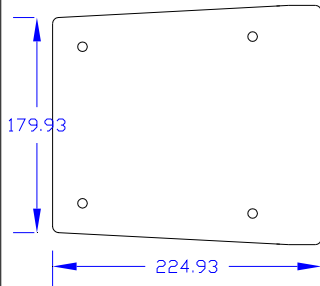
Vista frontal / Front View



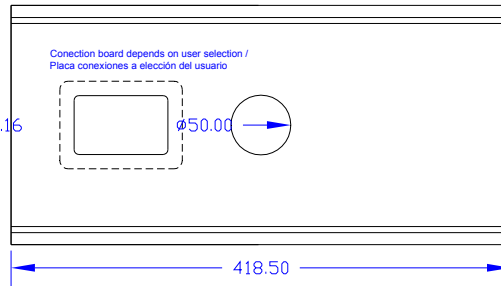
Lateral vista sección /
 Lateral section



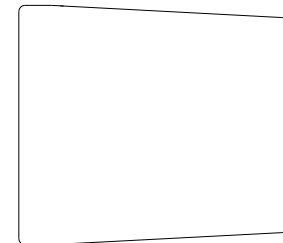
Lateral vista externa /
 External lateral view



Vista trasera / Back view

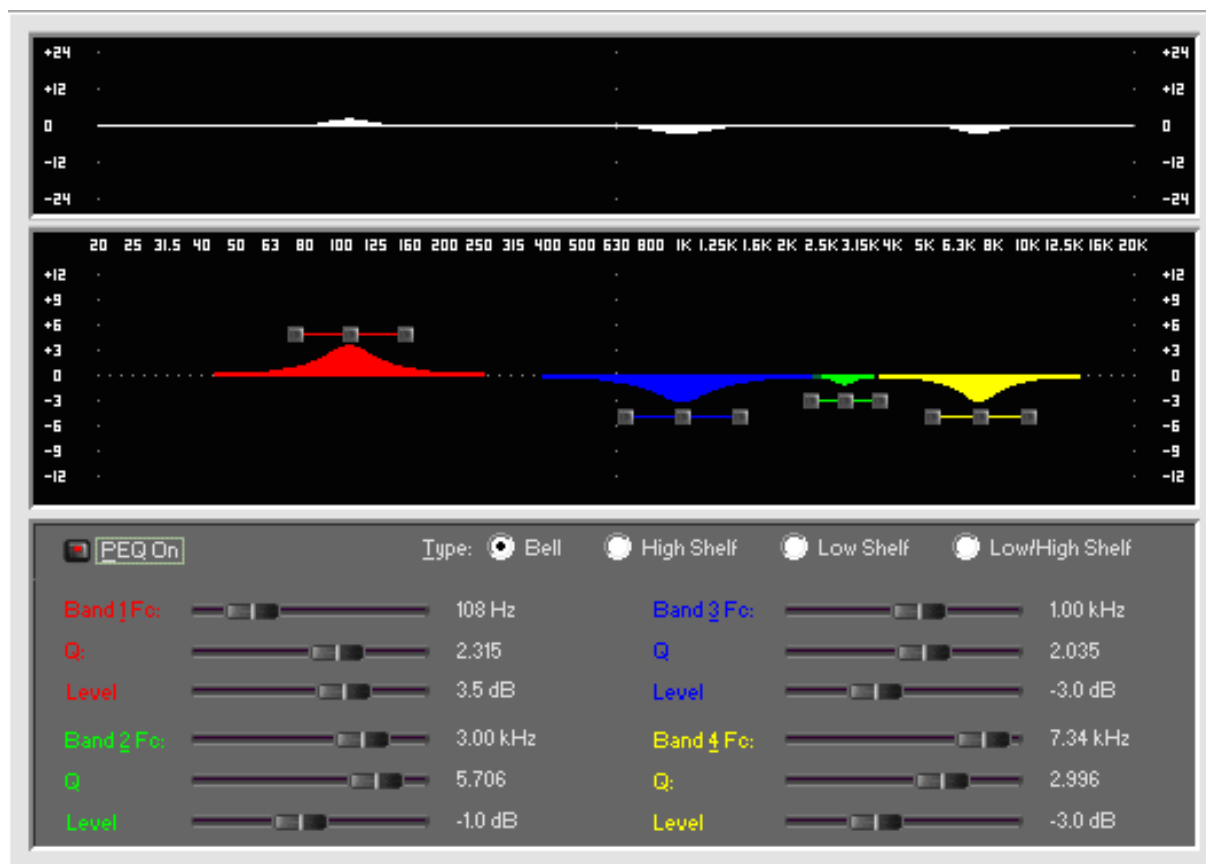


Lateral vista externa /
 External lateral view

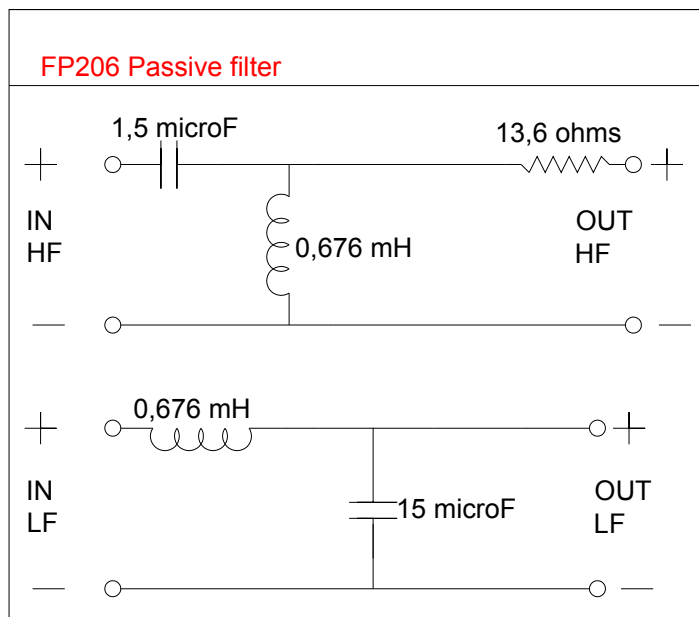


Note: These drawings show the basic internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com

Nota: Estos planos muestran información básica de dimensiones internas y externas. Toda la información detallada de dimensiones y cotas se encuentra en el fichero CAD, que puede descargarse desde la zona "Recursos" en www.beyma.com



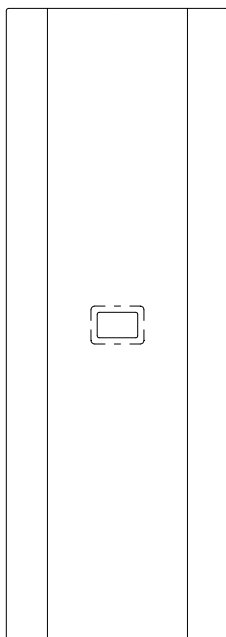
FR206 Crossover



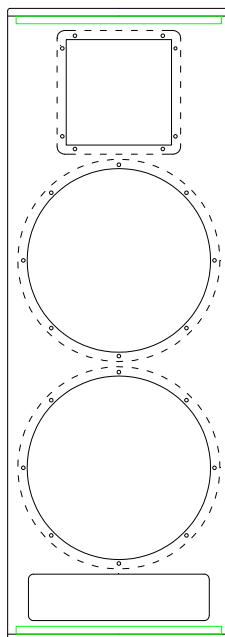
Technical Specifications

Acoustic cabinet:	FR215
Description:	2 Way System. Double 15" and High Frequency unit
Power AES:	1400 W.
Power Program:	2800 W.
Sensitivity 2,83v @ 1m:	97 dB.
Max. SPL continuous:	128 dB.
Max. SPL peak:	134 dB.
Frequency response:	40 - 20.000Hz.
Coverage (H x V):	80° x 50°
Bass Loudspeakers:	2 x 15G40 (Other suitable combinations: 15P1000Fe or 15P1000Nd or 15G450N) (technical datasheets available at www.beyma.com)
Compression Driver:	SMC65 (Other suitable combinations: SMC65Nd or CP755Nd or CP755Ti or CP755Nd/Al) (technical datasheets available at www.beyma.com)
Constant Directivity Horn:	TD-385 (Other suitable combination: TD-365 (60° x 50°))
Crossover:	FP-215
Hardware:	External
Net Volume	162 Liters
Vent dimensions	350x90x15 mm.

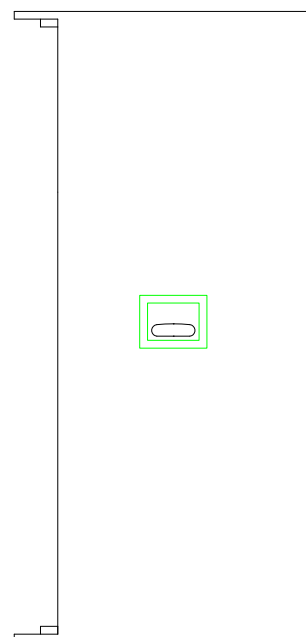
Rear view / Vista trasera



Front view / Vista frontal

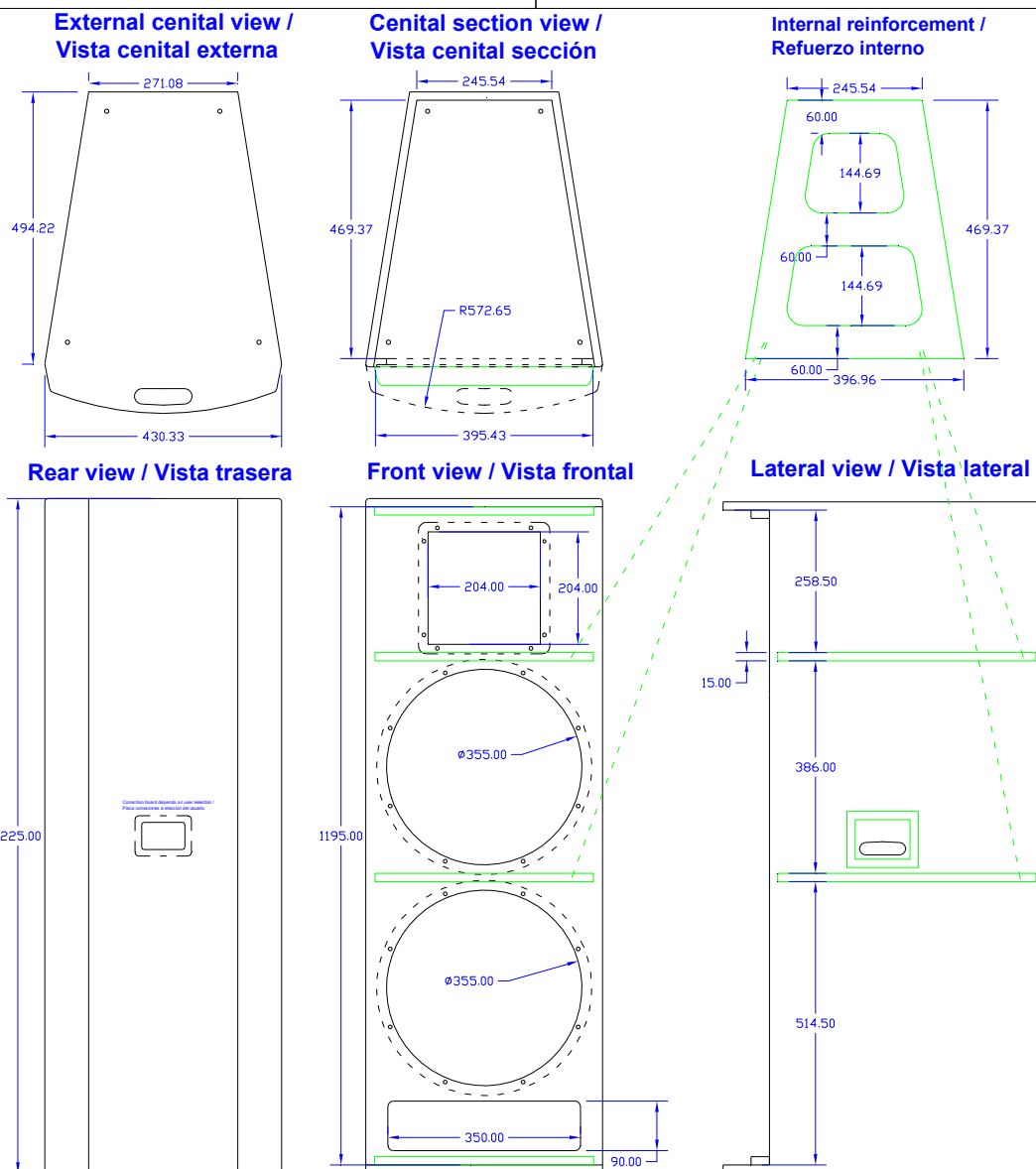


Lateral view / Vista lateral

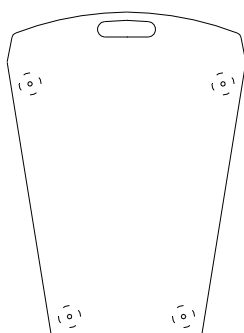


Modelo: FR215
 Unidades de cad en mm.
 Construido en tablero de 15 mm.
 Alojamiento altavoces rebaje 4 mm.
 Alojamiento placa conexiones rebaje 6 mm.
 Alojamiento tacos base rebaje 6 mm.
 Volumen neto: 162 l.
 Dimensiones resonador: 350x90x15 mm.

Model: FR215
 Units of cad in mm.
 Panels thickness: 15 mm.
 Rabbet for speakers cut out diameter: 4 mm.
 Rabbet for connections panel: 6 mm.
 Rabbet for base feet: 6 mm.
 Net volume: 162 l.
 Vent dimensions: 350x90x15 mm.

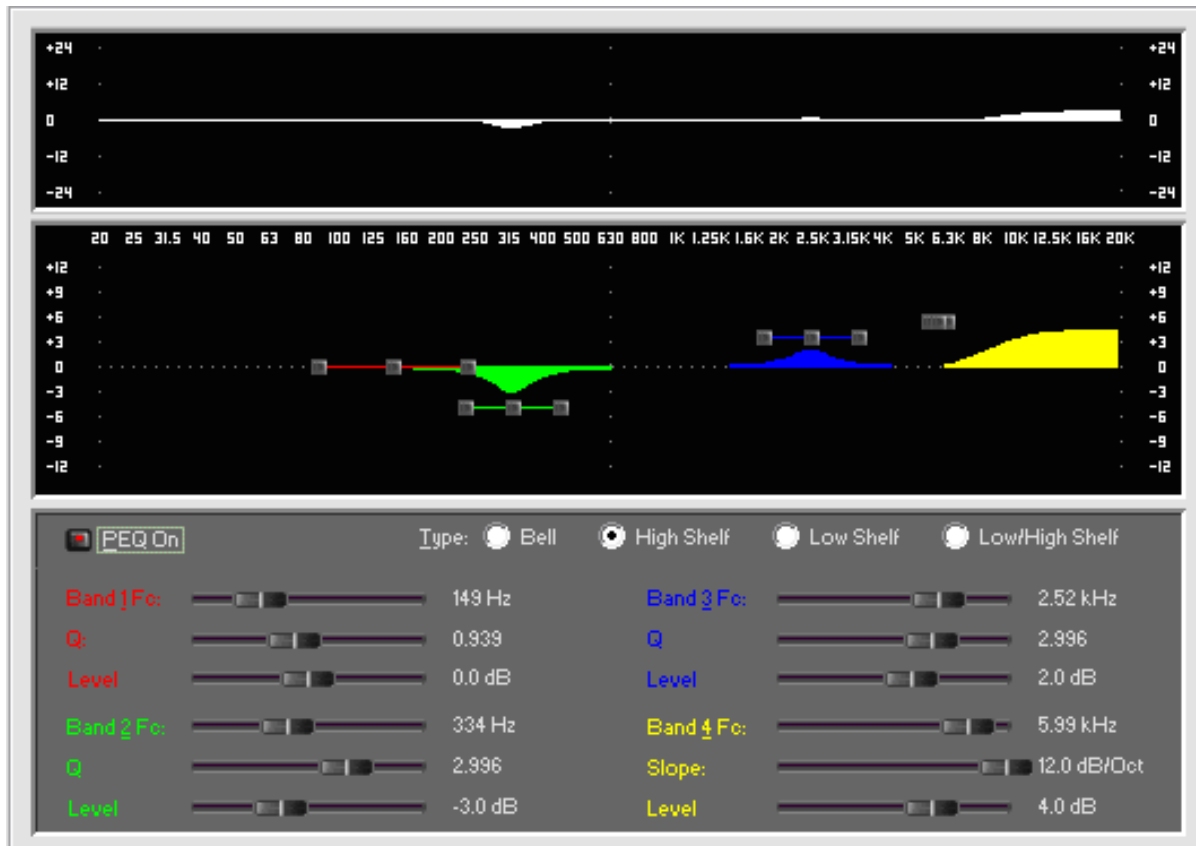


Base

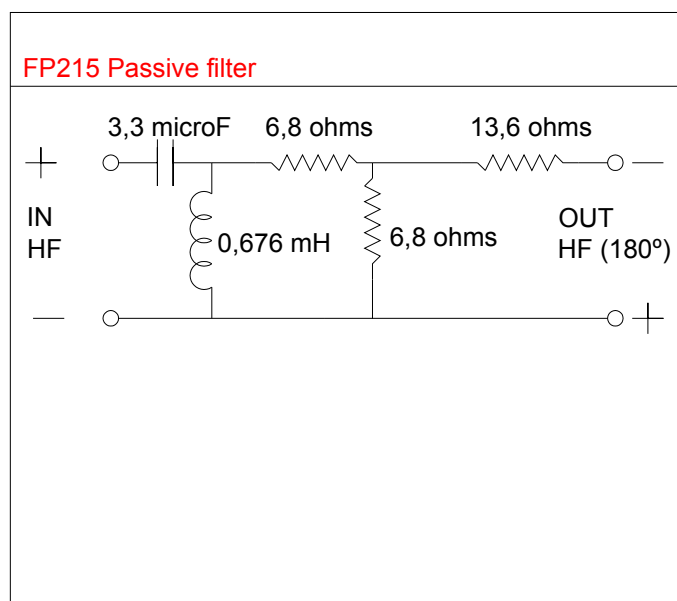


Note: These drawings show the basic functional internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com. Please note that the accessories (handle, grills and grill supports, connection board, etc.) shown in these drawings can be modified depending on the user selection. If further information is needed please do not hesitate to contact us.


Nota: Estos planos muestran información funcional básica de dimensiones internas y externas. Toda la información detallada de dimensiones y cotas se encuentra en el fichero CAD, que puede descargarse desde la zona "Recursos" en www.beyma.com. Por favor tenga en cuenta que los accesorios (asas, cajetines, rejillas y soportes para rejillas, placa de conexiones, etc.) mostrados en estos planos pueden ser cambiados en función de la elección del usuario. No dude en contactar con nosotros si precisa de información adicional.

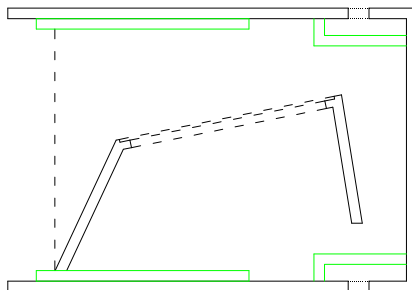
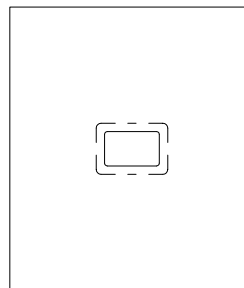
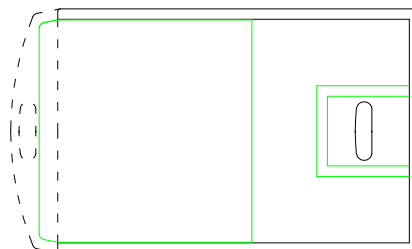
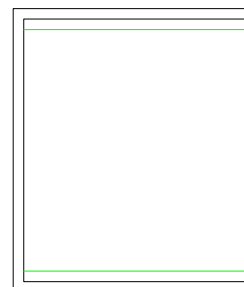


FR215 Crossover



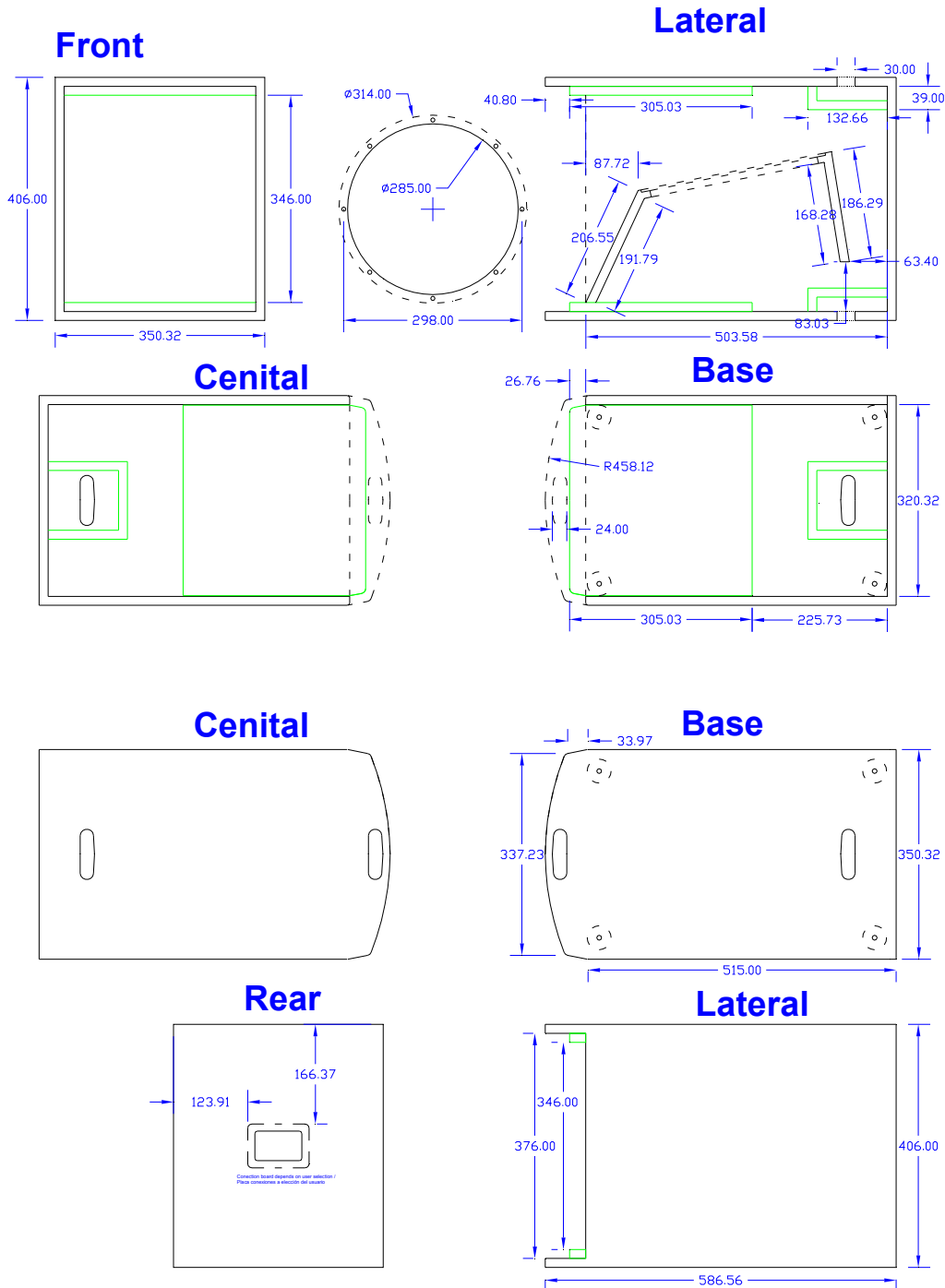
Technical Specifications

Acoustic cabinet:	SB12
Description:	Bass reinforcement. 12" subwoofer.
Power AES:	1.300 W.
Power Program:	2.600 W.
Sensitivity 2,83v @ 1m:	96 dB.
Max. SPL continuous:	127 dB.
Max. SPL peak:	133 dB.
Frequency response:	35 - 175 Hz
Bass Loudspeakers:	12SW1300Nd with 
	(Other suitable combination: 12P1000Nd)

Lateral**Rear****Central****Front**

Modelo: SB12
 Unidades de cad en mm.
 Construido en tablero de 15 mm.
 Alojamiento altavoces rebaje 4 mm.
 Alojamiento placa conexiones rebaje 6 mm.
 Alojamiento tacos base rebaje 6 mm.

Model: SB12
 Units of cad in mm.
 Panels thickness: 15 mm.
 Rabbet for speaker cut out diameter: 4 mm.
 Rabbet for connections panel: 6 mm.
 Rabbet for base feet: 6 mm.



Note: These drawings show the basic functional internal and external dimensions. All the detailed information related to dimensions can be found in the CAD file, which can be downloaded from the "Resources" section at www.beyma.com. Please note that the accessories (handle, grills and grill supports, connection board, etc.) shown in these drawings can be modified depending on the user selection. If further information is needed please do not hesitate to contact us.

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