

Technology • Art • Sound  
Manufactured by  
**elettromedia**



# Mille PRO

**OWNER'S MANUAL**

Sub

**HERTZ**  
The Sound Experience

[hertz-audio.com](http://hertz-audio.com)

## Oversættelse / Danish

Tillykke med købet af vores produkt. Din tilfredshed med vores produkter er vores højeste prioritet; den tilfredshed, der opleves af dem, der higer efter at opleve følelsen af god lyd i bilen. Denne manual forsyner dig med hovedinstruktionerne til at installere og anvende systemet korrekt. Der er dog flere mulige måder at anvende systemet. For mere information, kan du altid kontakte en pålidelig sælger eller vores tekniske support på support@lelctromedia.it. For installationen påbegyndes bedes du læse vejledningen grundigt igennem, da der ellers risikeres uforståelig skade på produktet.

1. Alle dele skal være sikkert fastspændt til køretøjet. Det samme gøres gældende for alle andre installationer du kan have bygget. Sikr dig altid at dine installationer er sat ordentligt fast. En del, der løsnes under kørsel, kan lede til seriøs fare for passagerer såvel som andre køretøjer.
2. Benyt altid beskyttelsesbriller under anvendelse af værktøj, da splinter eller restprodukter kan blive luftbårne.
3. For at undgå skader på produktet, opbevar da altid delene i den originale emballage, indtil de skal installeres.
4. Under ingen omstændigheder bør der udføres installationer i motorrummet.
5. Før påbegyndelse af installationen, sluk da hovedenheden og alle andre ydelsystemer, for at undgå skader.
6. Sørg for, at den lokation, du vælger at udføre installationen, ikke forstyrrer den normale drift af mekaniske eller elektriske apparater i køretøjet.
7. Placer ikke højtalere hvor de kan sættes for ved, høj luftfugtighed, støv eller skidt.
8. Installer ikke komponenter eller kabler i nærheden af køretøjets elektroniske eller mekaniske enheder.
9. Vær meget forsigtig, når du borer eller skærer ind i bilens chassis; sørg for at der ikke er ledninger eller strukturelle elementer væsentlige for køretøjets funktioner under eller i det valgte område.
10. Når der lægges kabler, sørg da altid for, at disse ikke kommer i nærheden af skarpe kanter eller bevægelige dele. Sørg for, at alle kabler er fastgjort og beskyttet i hele deres længde og at isoleringen er selvsukkende.
11. Brug kun kabler med den korrekte markering (AWG), som er angivet heri.
12. Når der trækkes kabler gennem huller i bilens chassis, sørg da altid for at beskytte kablet med en gumming. Sørg for udførlig beskyttelse af kabler, der lægges i nærheden af varmegerenerende komponenter.
13. Påsæt aldrig ledninger på bilens yderside.
14. Anvend kabler og des lige af god kvalitet, som dem, der kan findes i Connection-kataloget.
15. Garanti: For mere information besøg da Hertz's hjemmeside.



**Oplysninger om affald fra elektrisk og elektronisk udstyr (for de europæiske lande, der organiserer den separate indsamling af affald)**

Produktet markeret med en skraldespand på hjul med et X henover må ikke bortskaffes sammen med det almindelige husholdningsaffald. Disse elementer skal afleveres på en genbrugsstation. Er du i tvivl om din lokale genbrugsstation modtager disse elementer, kontakt da enten kommunen eller genbrugsstationen selv. Genbrug og korrekt bortskaffelse bidrager til beskyttelsen af miljøet og forhindrer skadelige virkninger på sundheden.

## Nederlands / Dutch

**Gefeliciteerd met uw aankoop van ons product. Uw tevredenheid is de eerste eis waar onze producten aan moeten voldoen: evenals de tevredenheid van diegenen die naar de ervaring van de geluidsemotie in de auto verlangen. Deze handleiding is opgesteld om de belangrijkste instructies te volgen die nodig zijn voor het installeren van het systeem zodat deze optimaal gebruikt kan worden. Echter, het bereik van mogelijke toepassingen is breed: voor verdere informatie, wees zo vrij om contact op te nemen met uw vertrouwde leverancier of onze technische ondersteuning op de e-support@lelctromedia.it. Lees voor de installatie van de componenten de instructies in deze handleiding zorgvuldig door. Niet-naleving van deze instructies kan tot onbedoelde letsel of schade aan het product veroorzaken.**

1. Alle onderdelen moeten stevig aan de constructie van het voertuig worden bevestigd. Doe hetzelfde bij het installeren van aangepaste structuren die u hebt gebouwd. Controleer of uw installatie stevig en veilig is. Componenten die tijdens het rijden losraken, kunnen ernstige letsel aan de passagiers veroorzaken, maar kunnen ook ernstige schade aan andere voertuigen veroorzaken.
2. Draag altijd beschermende brillen wanneer u gebruik maakt van gereedschappen zodat splinters en andere productresten niet in uw ogen kunnen komen.
3. Om incidentele schade te voorkomen, laat het product in de originele verpakking totdat u klaar bent voor de uiteindelijke installatie.
4. Voer geen installatie in de motorruimte uit.
5. Voordat u met de installatie begint, zet de hoofdeenheid en andere audio-systeemapparaten uit, om mogelijke schade te voorkomen.
6. Zorg ervoor dat de locatie die u voor het installeren van de componenten wilt gebruiken niet de normale werking van mechanische of elektrische apparaten van het voertuig stoort.
7. Installeer geen luidsprekers waar zij aan water, buitensporige vochtigheid, stof of vuil blootgesteld kunnen worden.
8. Installeer geen kabels of componenten in de buurt van elektronische of mechanische voorzieningen van het voertuig.
9. Wees zeer voorzichtig bij het boren of snijden in het chassis en controleer of er onder of in het geselecteerde gebied geen kabels of structurele elementen voorkomen, die essentieel zijn voor de werking van het voertuig.
10. Zorg bij het leggen van de kabels ervoor dat de kabels niet met scherpe randen in contact komen of in de buurt van bewegende mechanische apparaten komen te liggen.
11. Zorg ervoor dat ze goed vastzitten en met zelfdovende isolatie over de gehele lengte beschermd zijn.
12. Gebruik alleen kabels met de juiste doorsnede (AWG) zoals hiernaast aangegeven.
13. Wanneer de kabel door een gat in het chassis van het voertuig wordt doorgevoerd, bescherm deze kabel dan met een rubbering (pakkingring). Zorg voor passende bescherming voor kabels die dicht bij warmte genererende apparaten lopen.
13. Laat geen draden aan de buitenkant van het voertuig lopen.
14. Gebruik hoogwaardige kwaliteitskabels, connectoren en accessoires, die u in de verbindingscatalogus kunt vinden.
15. Garantiecertificaat: Voor meer informatie bezoek de website van Hertz.



**Informatie met betrekking tot de verwerking van afgedankte elektrische en elektronische apparatuur (voor de Europese landen die het afval gescheiden verzamelen)** Producten die zijn gemarkeerd met een doorgekruiste vuilnisbak op welkies mogen niet met het gewone huishoud vuilnis weggegooid. Deze elektrische en elektronische producten dienen te worden gerecycled door geschikte faciliteiten, die in staat zijn om deze producten en componenten te verwerken. Om te weten te komen hoe en waar deze producten ingeleverd kunnen worden bij het dichtstbijzijnde recycling/inzamelingspunt, verzoeken wij u om contact op te nemen met uw lokale gemeente. Het op correcte wijze recyclen en inzamelen van afval draagt bij aan de bescherming van het milieu en het voorkomen van schadelijke effecten op de gezondheid. A životního prostředí před škodlivými vlivy.

## English / English

**Congratulations on purchasing our product. Your satisfaction is the first requirement that our products must meet: the same satisfaction as the one gained by those who long for experiencing the car audio emotion. This manual has been drawn to provide the main instructions required to install and use the system properly. However, the range of possible applications is wide; for further information, please feel free to contact your trusted dealer or our technical support at the email support@lelctromedia.it. Before installing the components, please carefully read all of the instructions contained in this manual. Failure to respect these instructions may cause unintentional harm or damage to the product.**

1. All components must be firmly secured to the vehicle structure. Do the same when installing any custom structures you may have built. Confirm your installation is solid and safe. A component coming loose while driving may cause serious damage to the passengers, as well as to other vehicles.
2. Always wear protective eyewear when using tools, as splinters or product residue may become airborne.
3. In order to avoid incidental damage, keep the product in the original packaging until you are ready for the final installation.
4. Do not carry out any installation inside the engine compartment.
5. Before starting with the installation turn the head unit and all other audio system devices off, avoiding any possible damage.
6. Make sure that the location you choose to install the components does not interfere with the normal operation of any mechanical or electrical devices of the vehicle.
7. Do not install loudspeakers where they may be exposed to water, excessive humidity, dust or dirt.
8. Do not install the components or make cable run close to electronic or mechanical devices of the vehicle.
9. Be very cautious when drilling or cutting into the vehicle chassis, making sure there are no cables or structural elements essential to the vehicle underneath or in the selected area.
10. When routing cables, make sure that the cable does not come in contact with sharp edges or near moving mechanical devices. Make sure that it is firmly attached and protected along its entire length and its insulation is self-extinguishing.
11. Only use cables with the proper section (AWG) indicated herein.
12. When running the cable through a hole in the vehicles chassis, protect the cable with a rubber ring (grommet). Be sure to provide proper protection for cables running close to heat-generating devices.
13. Do not run the wires outside of the vehicle.
14. Use top quality cables, connectors and accessories such as found in the Connection catalogue.
15. Warranty certificate: For more information visit the Hertz website.



**Information on electrical and electronic equipment waste (for those European countries which organize the separate collection of waste).** Products which are marked with a wheeled bin with an X through it must not be disposed of together with ordinary domestic waste. These electrical and electronic products must be recycled in proper facilities, capable of managing the disposal of these products and components. In order to know where and how to deliver these products to the nearest recycling/disposal site please contact your local municipal office. Recycling and disposing of waste in a proper way contributes to the protection of the environment and to prevent harmful effects on health.

**Türkçe / Turkish**

Ürünümüzü satın aldığınız için kutanız. Ürünlerimizin karşılması gereken ilk koşul sizin mutluluğunuzdur: arabada ses duygusunu yaşamayı özlemlerin ulaştığı mutluluğun aynıdır. Bu klavuz, sistemin doğru olarak kurulumu ve kullanımı için gereken temel talimatları sağlamak üzere hazırlanmıştır. Ancak mümkün olan uygulama şekilleri çok çeşitlidir. Daha fazla bilgi için lütfen yetkili bayinizle veya support@elettramedia.it e-posta adresinden teknik destek servisimizle temas kurmaktan çekinmeyiniz. Bileşenleri kurmadan önce lütfen bu klavuzdaki tüm talimatları dikkatle okuyunuz. Bu talimatların göz ardı edilmesi ürüne istemeden zarar veya hasar verilmesine neden olabilir.

1. Tüm bileşenler araç yapısına sıkıca tutturulmalıdır. Kendi yaptığınız diğer özel yapılan da aynı şekilde tutturunuz. Kurulumlarınızın sağlam ve güvenli olmasını sağlayınız.
2. Sürüş sırasında bir bileşenin çözülmesi yolculara veya diğer araçlara ciddi hasar verebilir.
3. Aletleri kullanırken koruyucu gözlük kullanınız, zira lehim esnasında zararlı gazlar ortaya çıkacaktır.
4. Olası bir hasardan kaçınmak için mümkünse son kurulum için hazır olana kadar, ürünü orijinal ambalajı içinde muhafaza ediniz.
5. Kurulum işlemi motora keskinlikle yapmayınız.
6. Herhangi bir hasara neden olmamak için kurulumu başlamadan önce kafa birimini ve tüm diğer ses cihazlarını kapatınız.
7. Yapacağınız işlemlerin yerinin aracınızın halihazırdaki sistemlerinin çalışmasını engellemeyecek şekilde olmasını ya da aracınızın elektronik ve elektrik aksamına zarar vermeyecek şekilde takılmasını sağlayınız.
8. Hoparlörleri ıslanacakları yüksek nem veya kire maruz kalacakları ortamlara kurmayınız.
9. Bileşenleri veya kabloyu aramı elektrik kutusundan uzak tutunuz.
10. Araç şasisini delerken veya keserken çok dikkatli olunuz ve altta veya çalışılan bölgede kablo veya aramı aslı yapısal elemanları olmadığından emin olunuz.
11. Kabloları geçirirken, kabloların keskin kesici mekanik kısımların yakınından geçmediğinden emin olunuz. Kabloların uzatıldıkları güzergahta sıkıca tutulduğundan ve uygun yalıtım yaptığınızdan emin olunuz.
12. Sadece uygulanan güce uygun kesitte (AWG) kablo kullanınız.
13. Kabloyu aracınızın şasisindeki delikten geçirirken, kabloyu lastik bir halka (conta) ile sabitleyiniz. Isı üreten bölgelere yakın geçen kablolar için uygun koruma sağlaydığınızdan emin olunuz.
14. Kabloları aracınızın dışından geçirmeyiniz.
15. Kaliteli kablo, fiş ve aksesuar kullanınız. Bağlantı (Connection) kataloğuna bakabilirsiniz.
16. Garanti Belgesi: Daha fazla bilgi için Hertz web sitesini ziyaret edin.

**Elektrik ve elektronik aletlerin atılmasına ilişkin bilgi (atıkları ayırtan Avrupa ülkeleri için)**

Tekerlekli çöp kutusu resmi üzerinde bir X ile gösterilen ürünler normi atıklar gibi atılmamalıdır anlamına gelir. Bu elektrik ve elektronik aletlerin bu ürünlerin ve aksesuarların belirli kurallara dahilinde çalışan uygun tesislerde geri dönüştürülmesi gerekmektedir. En yakın geri dönüştürme/ atık merkezine bu ürünleri nasıl bırakacağınızı öğrenmek için lütfen belediyenize bağlanıya geçiniz. Ürünlerin uygun atık yollarıyla geri dönüştürülmesini sağlamakla çevreye büyük bir katkıda bulunmuş ve sağlığı zaarlı olmanın önüne geçmiş olursunuz.

**Hertz Warranty**

The Hertz products are warranted, under normal functioning conditions, for the period of time as set by the laws in force, against defects concerning materials or their manufacturing. The warranty is valid from the date of purchase, against receipt.

The warranty is not valid if:

- the product is damaged by incidents, installations and/or improper use, or by any other causes not depending on materials or manufacturing defects;
- the product is modified or tampered with by unauthorised people;
- its serial number has been altered or cancelled.

While the product is under warranty, defective parts will be repaired or replaced at the manufacturer's discretion.

The defective product, along with notification about it, must be returned to the dealer from which it was purchased together with the warranty certificate duly filled in. If the product is no longer under warranty, it will be repaired at the current costs.

Elettromedia s.r.l. does not undertake any liability for damages due to transportation.

Elettromedia s.r.l. does not take any responsibility for: costs or loss of profit due to the impossibility to use the product, other accidental or consequential costs, expenses or damages suffered by the customer.

Warranty according to laws in force.

For more information visit the Hertz website.

**Гарантия Hertz / Hertz**

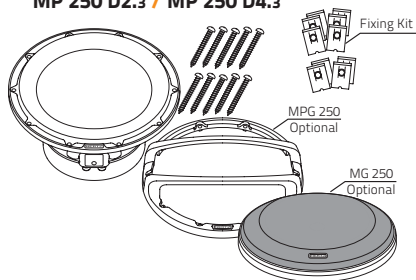
Продукция Hertz обладает гарантией в течение установленного текущими законами срока, при нормальных условиях использования, если она вызвана дефектами материалов или их производства. Гарантия действительна с даты покупки, подтвержденной чеком. Гарантия недействительна в следующих случаях:

- продукт поврежден в результате инцидентов, не касающихся материалов или производственных дефектов;
- продукт изменен или фальсифицирован неуполномоченными лицами;
- его серийный номер изменен или стерт.

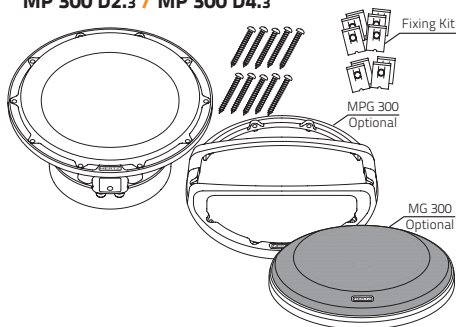
Если на продукт распространяется гарантия, его производитель принимает решение о ремонте или замене его неисправных деталей. Неисправный продукт необходимо передать распространителю, где он был куплен, предъявив полностью заполненный гарантийный сертификат. В случае если гарантия больше не распространяется на продукт, он будет отремонтирован по текущей стоимости. Мы не принимаем на себя обязательства, связанные с повреждениями вследствие транспортировки. Мы не несем ответственности за: расходы или потеря прибыли вследствие невозможности пользования данным продуктом, прочие случайные или возможные издержки, расходы или повреждения, покрытые клиентом. Гарантия в соответствии с действующим законодательством.

محتويات الحزمة / Съдържание на опаковката / 包裝內容 / 内装物 / Sadržaj pakiranja / Obsah balení / Pakkens inhoud / Pakket  
 inhoud / Packaging contents / Pakendi sisu / Pakkauksen sisältö / Contenu de l'emballage / Verpackungsinhalt / Περιεχόμενα  
 συσκευασίας / תוכן האריזה / A csomag tartalma / Isi kemasan / Contenuto dell'imballo / パッケージ内容 / 패키지 내용 / Lepakujuma  
 satura / Pakuotės turinys / Innhold / محتويات بسته / Zawartość opakowania / Conținutul de ambalaj / Conținutul pachetului /  
 Комплектация / Obsah balenia / Vsebina embalaže / Contenido del embalaje / Förpackningens innehåll / ส่วนประกอบผลิตภัณฑ์ / Paket içeriği

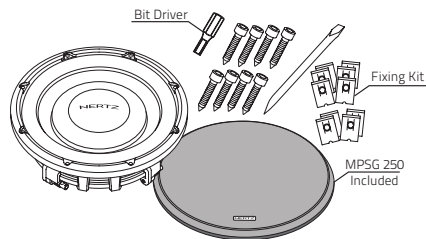
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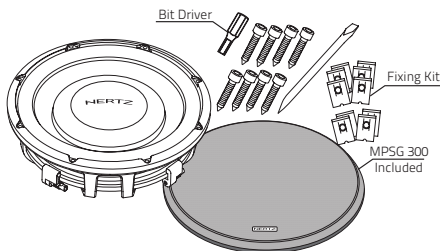
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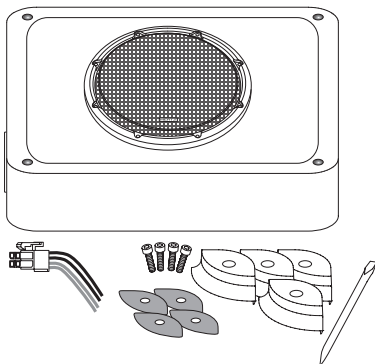
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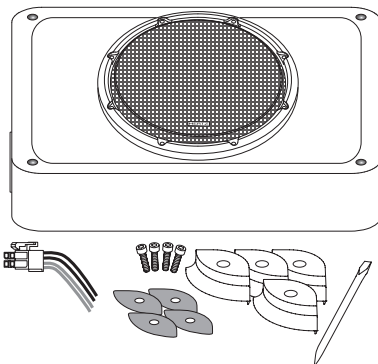
## MPS 300 S2 / MPS 300 S4



## MPBX 250 S2

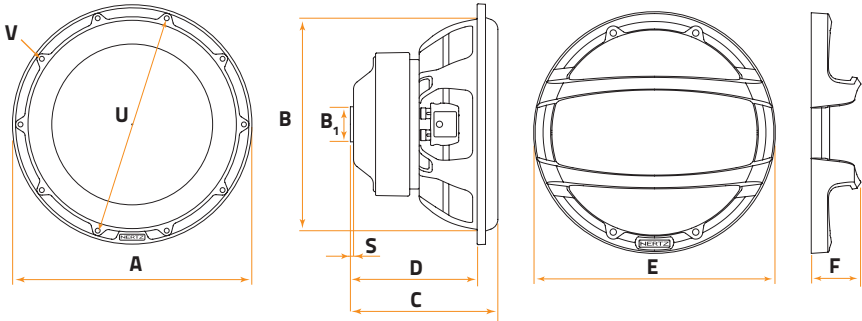


## MPBX 300 S2

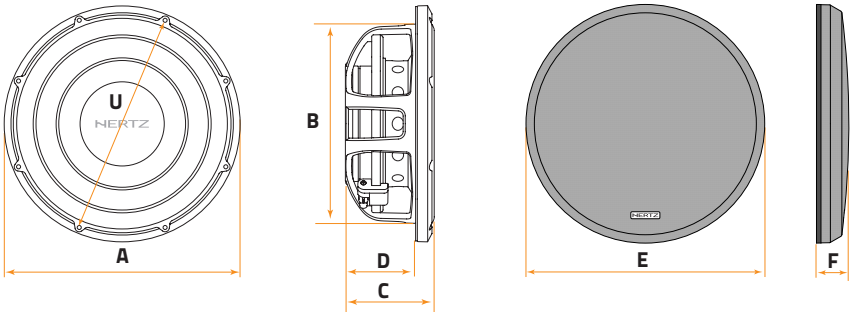


■ الحجم / Размер / 尺寸 / 規格 / Velikina / Velikost / Størrelse / Afmetingen / Size / Suurus / Koko / Dimensions / Größe / Διαστάσεις / גודל / Méretek / Ukuran / Ingombro / サイズ / Izmers / Dydis / Størrelse / اندازہ / Wielkość / Dimensão / Dimensiuni / Размер / Rozměry / Velikost / Tamaño / Storlek / عمارة / Ebat

**MP 250 D2.3 / MP 250 D4.3 - MP 300 D2.3 / MP 300 D4.3**

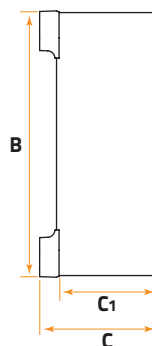
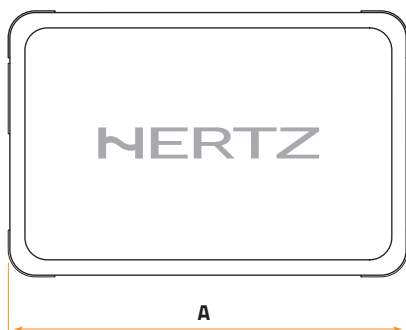


**MPS 250 S2 / MPS 250 S4 - MPS 300 S2 / MPS 300 S4**



|                                  | A     | B     | B <sub>1</sub> | C      | D    | E     | F    | U     | V    | S    |     |
|----------------------------------|-------|-------|----------------|--------|------|-------|------|-------|------|------|-----|
| <b>MP 250 D2.3 / MP 250 D4.3</b> | 268   | 236   | 39             | 160    | 141  | 274   | 58,5 | 250   | 5,5  | 3,50 | mm  |
|                                  | 10.55 | 9.29  | 1.54           | 6.3    | 5.55 | 10.79 | 2.3  | 9.84  | 0.22 | 0.14 | in. |
| <b>MP 300 D2.3 / MP 300 D4.3</b> | 321   | 287   | 39             | 187    | 164  | 328   | 60   | 302   | 5,5  | 3,5  | mm  |
|                                  | 12.64 | 11.3  | 1.54           | 7.36   | 6.46 | 12.91 | 2.36 | 11.89 | 0.22 | 0.74 | in. |
| <b>MPS 250 S2 / MPS 250 S4</b>   | 274,5 | 231,6 | -              | 103,2  | 82,6 | 244,6 | 38,9 | 255   | 5,5  | -    | mm  |
|                                  | 10.81 | 9.12  | -              | 4.06   | 3.25 | 9.63  | 1.53 | 10.04 | 0.22 | -    | in. |
| <b>MPS 300 S2 / MPS 300 S4</b>   | 318,3 | 282,5 | -              | 108,88 | 88   | 291,8 | 42,6 | 302   | 5,5  | -    | mm  |
|                                  | 12.53 | 11.12 | -              | 4.29   | 3.46 | 11.49 | 1.68 | 11.89 | 0.22 | -    | in. |

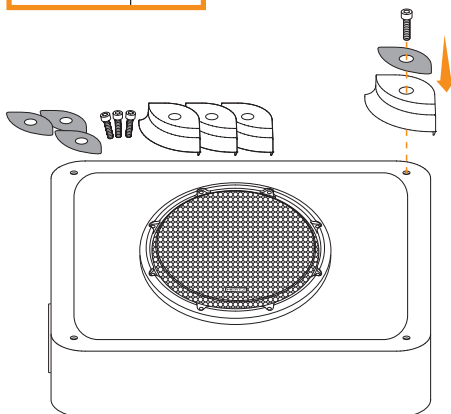
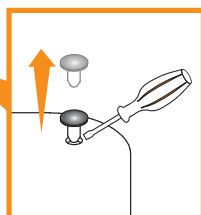
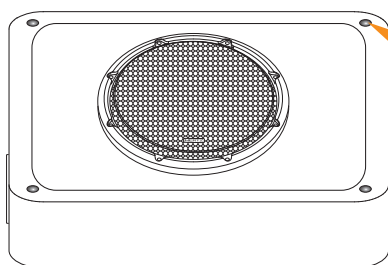
## MPBX 250 S2 / MPBX 300 S2



|                    | A     | B     | C    | C1   |     |
|--------------------|-------|-------|------|------|-----|
| <b>MPBX 250 S2</b> | 531   | 361   | 160  | 118  | mm  |
|                    | 20.91 | 14.21 | 6.30 | 4.65 | in. |
| <b>MPBX 300 S2</b> | 607   | 401   | 175  | 133  | mm  |
|                    | 23.90 | 15.79 | 6.89 | 5.24 | in. |

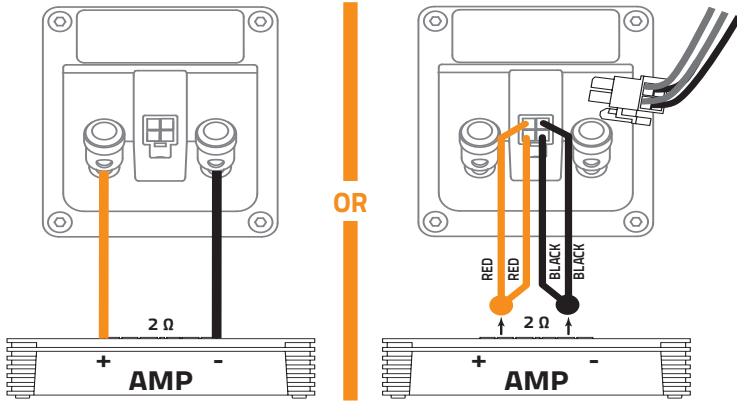
■ التثبيت / Монтаж / 安裝 / 安裝 / Montaža / Montáž / Montering / Montage / Mounting / Paigaldamine / Kiinnitys / Montage / Montage / Τοποθέτηση / הרכבה / Beszerelés / Pemasangan / Montaggio / マウント / 마운트 / Uzstādīšana / Montavimas / Montering / تنصيبه / Montaž / Montagem / Montaj / Монтаж / Montáž / Namestitev / Montaje / Montering / การใส่ไฟ / Montaj

## MPBX 250 S2 / MPBX 300 S2



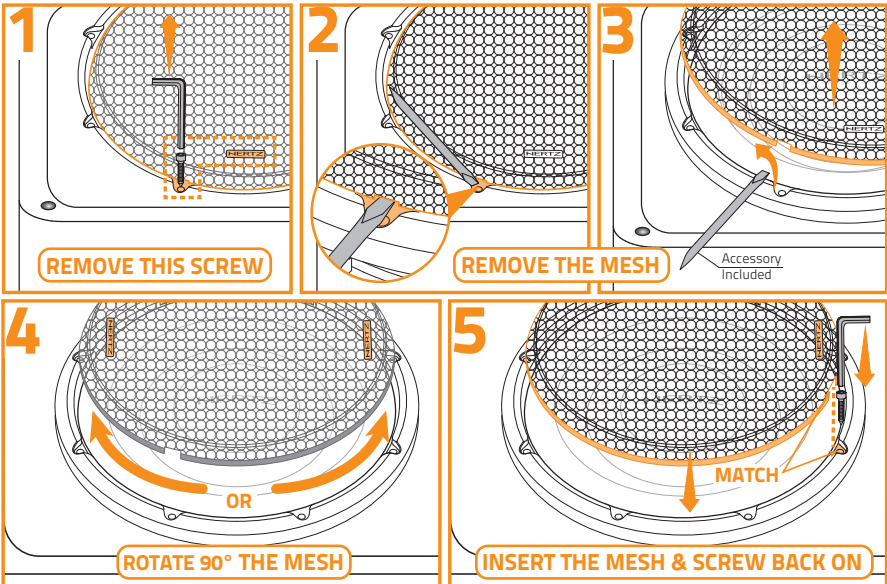
■ التوصيلات / Свързвания / 连接 / 连接 / Spajanje / Pripojeni / Forbindelser / Verbindungen / Connections / Ühendused / Kytkennät / Connexions / Verbindungen / Συνδέσεις / חיבורים / Csatlakozók / Sambungan / Connessioni / 接続 / 연결 / Savienojumi / Jungtys / Tilkoblinger / اتصالات / Połączenia / Ligações / Conectarea / Подключения / Pripojenie / Vezave / Conexiones / Anslutningar / การเชื่อมต่อ / Bağlantılar

**MPBX 250 S2 / MPBX 300 S2**



**MPBX 250 S2 / MPBX 300 S2**

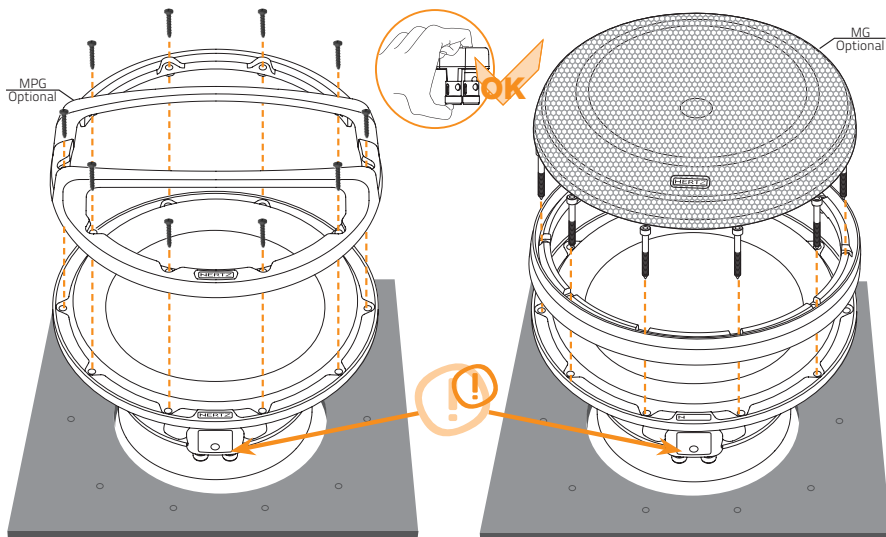
**HOW TO REMOVE / ROTATE 90° / INSERT MESH GRILLE**



# Mille

■ التثبيت / Монтаж / 安裝 / 安裝 / Montaža / Montáž / Montering / Montage / Mounting / Paigaldamine / Kiinnitys / Montage / Montage / Τοποθέτηση / הרכבה / Beszerelés / Pemasangan / Montaggio / 마운트 / Uzstādīšana / Montavimas / Montering / تجميع / Montaj / Montagem / Montaj / Монтаж / Montáž / Namestitev / Montaje / Montering / การติดตั้ง / Montaj

MP 250 D2.3 / MP 250 D4.3 - MP 300 D2.3 / MP 300 D4.3

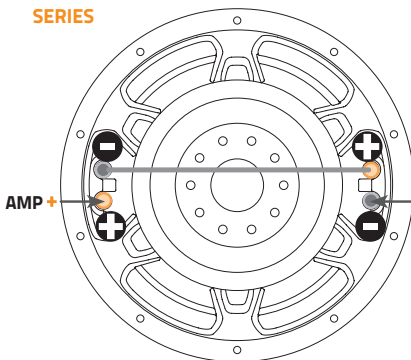


## IMPEDANCE

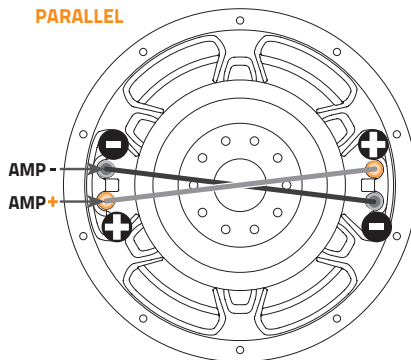
|                                | MP 250 D2.3 | MP 250 D4.3 |   |
|--------------------------------|-------------|-------------|---|
| 1 Speaker                      | 2+2         | 4+4         | Ω |
| 1 Speaker series               | 4           | 8           | Ω |
| 1 Speaker parallel             | 1           | 2           | Ω |
| 2 Speakers parallel - parallel | -           | 1           | Ω |
| 2 Speakers series - parallel   | 2           | 4           | Ω |
| 3 Speakers series - parallel   | 1.3         | 2.6         | Ω |

■ التوصيلات / Свързвания / 連接 / 连接 / Spajanje / Pripojení / Forbindelser / Verbindungen / Connections / Ühendused / Kytkennät / Connexions / Verbindungen / Συνδέσεις / חיבורים / Csatlakozók / Sambungan / Connessioni / 接続 / 연결 / Savienojumi / Jungtys / Tilkoblinger / اتصالات / Połączenia / Ligações / Conectarea / Подключения / Pripojenie / Vezave / Conexiones / Anslutningar / การเชื่อมต่อ / Bağlantılar

## SERIES



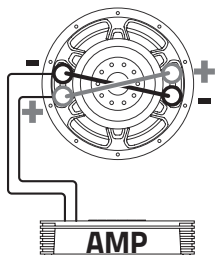
## PARALLEL



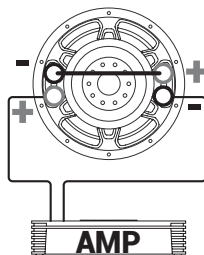


MP 250 D2.3 / MP 250 D4.3 - MP 300 D2.3 / MP 300 D4.3

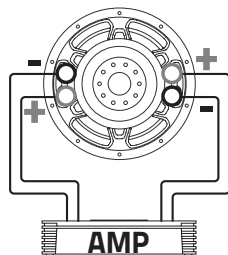
**1 SPEAKER IN PARALLEL**



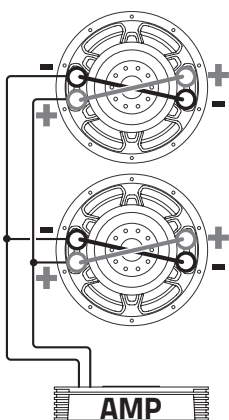
**1 SPEAKER IN SERIES**



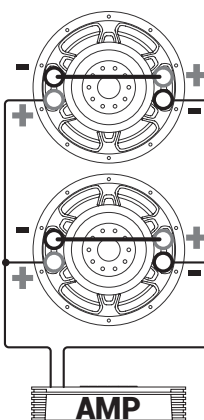
**1 SPEAKER SEPARATE**



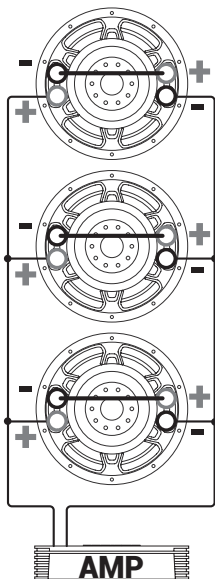
**2 SPEAKER  
PARALLEL/PARALLEL**



**2 SPEAKER  
SERIES/PARALLEL**



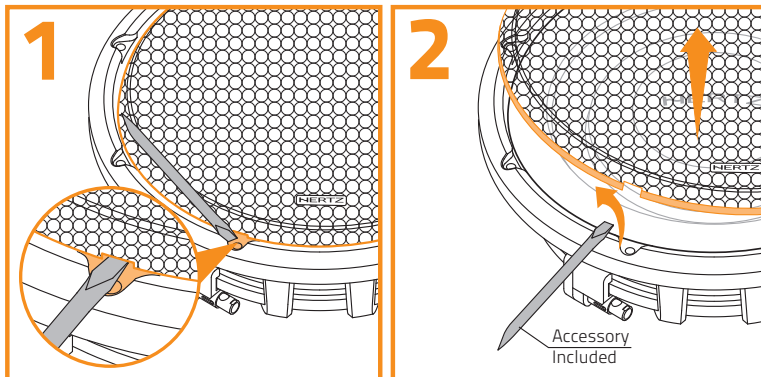
**3 SPEAKER  
SERIES/PARALLEL**



■ التثبيت / Монтаж / 安裝 / 安裝 / Montaža / Montáž / Montering / Montage / Mounting / Paigaldamine / Kiinnitys / Montage / Montage / Τοποθέτηση / הרכבה / Beszerelés / Pemasangan / Montaggio / マウント / 마운트 / Uzstādīšana / Montavimas / Montering / تجميعه / Montaž / Montagem / Montaj / Монтаж / Montáž / Namestitev / Montaje / Montering / การติดตั้ง / Montaj

MPS 250 S2 / MPS 250 S4 - MPS 300 S2 / MPS 300 S4

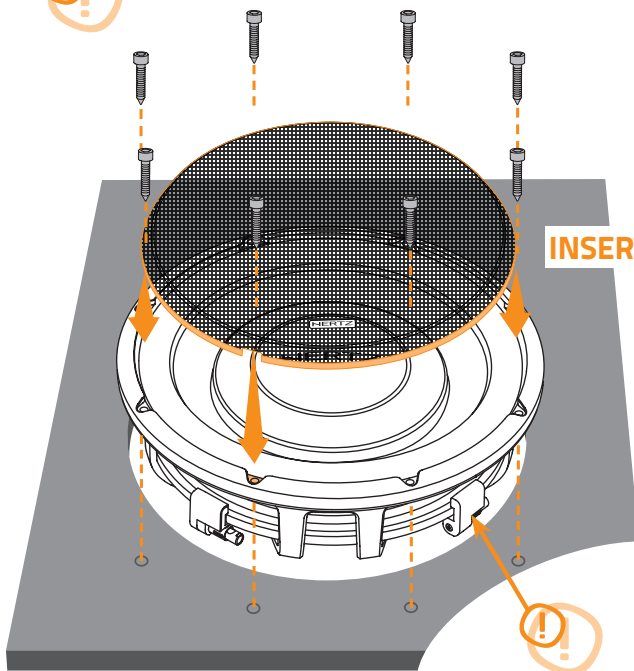
## HOW TO REMOVE / INSERT MESH GRILLE



### WARNING:



Pay attention not to damage the surround.



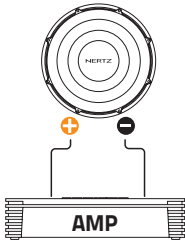
INSERT by PRESSING



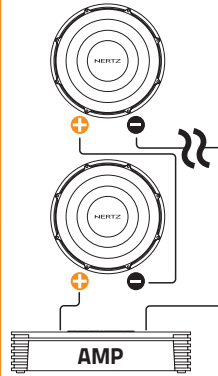
التوصيلات / Свързвания / 連接 / 连接 / Spojenie / Pripojení / Forbindelser / Verbindungen / Connections / Ühendused / Kytkennät / Connexions / Verbindungen / Συνδέσεις / חיבורים / Csatlakozók / Sambungan / Connessioni / 接続 / 연결 / Savienojumi / Jungtys / Tilkoblinger / اتصالات / Połączenia / Ligações / Conectarea / Подключения / Pripojenie / Vezave / Conexiones / Anslutningar / การเชื่อมต่อ / Bağlantılar

**MPS 250 S2 / MPS 250 S4 - MPS 300 S2 / MPS 300 S4**

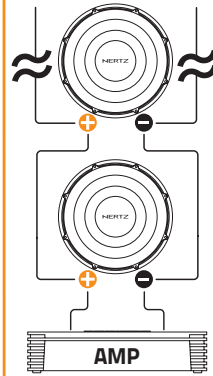
**1 SPEAKER**



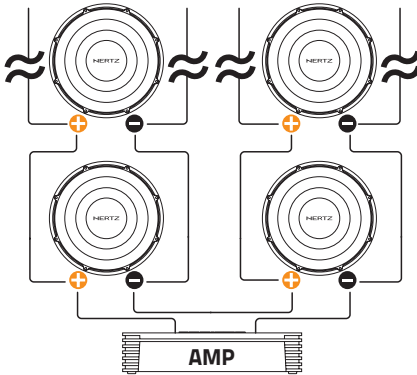
**SERIES**



**PARALLEL**



**MIXED**



| FREE AIR DC RESISTANCE |           | MPS 250 S2 | MPS 300 S2 | MPS 250 S4 | MPS 300 S4 |
|------------------------|-----------|------------|------------|------------|------------|
| Series                 | 1 Speaker | 2,2        | 1,9        | 3,4        | Ω          |
|                        | 2 Speaker | 4,4        | 3,8        | 6,8        | Ω          |
|                        | 3 Speaker | 6,6        | 5,7        | 10,2       | Ω          |
|                        | 4 Speaker | 8,8        | 7,6        | 13,6       | Ω          |
| Parallel               | 2 Speaker | 1,1        | 1          | 1,7        | Ω          |
|                        | 3 Speaker | 0,7        | 0,6        | 1,1        | Ω          |
|                        | 4 Speaker | 0,6        | 0,5        | 0,9        | Ω          |
| Mixed                  | 4 Speaker | 2,2        | 1,9        | 3,4        | Ω          |
|                        | 6 Speaker | 1,5        | 1,3        | 2,3        | Ω          |
|                        | 8 Speaker | 1,1        | 1          | 1,7        | Ω          |

المواصفات الفنية / Технические спецификации / 技術規格 / 技術規格 / Tehnički podaci / Technické údaje / Tekniske spesifikationer / Technische specificaties / Technical specifications / Tehnilised andmed / Tekniset tiedot / Caractéristiques techniques / Technische daten / Τεχνικά χαρακτηριστικά / מפרט טכני / Műszaki adatok / Spesifikasi teknis / Specifice technice / 技術仕様 / 기술 사양 / Tehniskā specifikācija / Techniniai duomenys / Tekniske spesifikasjoner / مشخصات فنی / Szczegóły techniczne / Especificações técnicas / Parametrii electro-acustici / Технические условия / Technické informácie / Tehnične specifikacije / Especificaciones técnicas / Tekniske spesifikationer / ความต้องการทางเทคนิค / Teknisk veriler

| Component | Size     | Power handling |            | Impedance | Magnet Size | Voice Coil Ø | Magnet | Cone | Weight of one component |
|-----------|----------|----------------|------------|-----------|-------------|--------------|--------|------|-------------------------|
|           |          | Peak           | Continuous |           |             |              |        |      |                         |
|           | mm (in.) | W              | W          | Ω         | mm (in.)    | mm (in.)     |        |      | Kg (lb.)                |

|                     |           |          |      |     |       |                                |           |                           |                                        |              |
|---------------------|-----------|----------|------|-----|-------|--------------------------------|-----------|---------------------------|----------------------------------------|--------------|
| <b>MP 250 D2.3</b>  | Subwoofer | 250 (10) | 1200 | 600 | 2 + 2 | 165 x 75 x 35 (6.5x2.95x1.38)  | 65 (2.56) | High density flux ferrite | Pressed-pulp cone with mineral powders | 8,2 (18.08)  |
| <b>MP 250 D4.3</b>  | Subwoofer | 250 (10) | 1200 | 600 | 4 + 4 | 156 x 80 x 35 (6.14x3.15x1.38) | 65 (2.56) | High density flux ferrite | Pressed-pulp cone with mineral powders | 7,8 (17.2)   |
| <b>MP 300 D2.3</b>  | Subwoofer | 300 (12) | 1200 | 600 | 2 + 2 | 165 x 75 x 35 (6.5x2.95x1.38)  | 65 (2.5)  | High density flux ferrite | Pressed-pulp cone with mineral powders | 8,63 (19.03) |
| <b>MP 300 D4.3</b>  | Subwoofer | 300 (12) | 1200 | 600 | 4 + 4 | 165 x 75 x 35 (6.5x2.95x1.38)  | 65 (2.56) | High density flux ferrite | Pressed-pulp cone with mineral powders | 8,63 (19.03) |
| <b>MPS 250 S2.3</b> | Subwoofer | 250 (10) | 1000 | 500 | 2     | 134 x 55 x 36 (6.28x2.17x1.42) | 38 (1.5)  | High density flux ferrite | Polypropylene                          | 5,11 (11.27) |
| <b>MPS 250 S4.3</b> | Subwoofer | 250 (10) | 1000 | 500 | 4     | 134 x 55 x 36 (6.28x2.17x1.42) | 38 (1.5)  | High density flux ferrite | Polypropylene                          | 5,11 (11.27) |
| <b>MPS 300 S2.3</b> | Subwoofer | 300 (12) | 1000 | 500 | 2     | 156 x 60 x 36 (6.14x2.36x1.42) | 38 (1.5)  | High density flux ferrite | Polypropylene                          | 6,64 (14.64) |
| <b>MPS 300 S4.3</b> | Subwoofer | 300 (12) | 1000 | 500 | 4     | 156 x 60 x 36 (6.14x2.36x1.42) | 38 (1.5)  | High density flux ferrite | Polypropylene                          | 6,64 (14.64) |

| Component | Size     | Power handling |            | Impedance | Dimensions<br>W x H x D | Voice Coil Ø | Magnet | Dome/Cone | Weight of one component |
|-----------|----------|----------------|------------|-----------|-------------------------|--------------|--------|-----------|-------------------------|
|           |          | Peak           | Continuous |           |                         |              |        |           |                         |
|           | mm (in.) | W              | W          | Ω         | mm (in.)                | mm (in.)     |        |           | Kg (lb.)                |

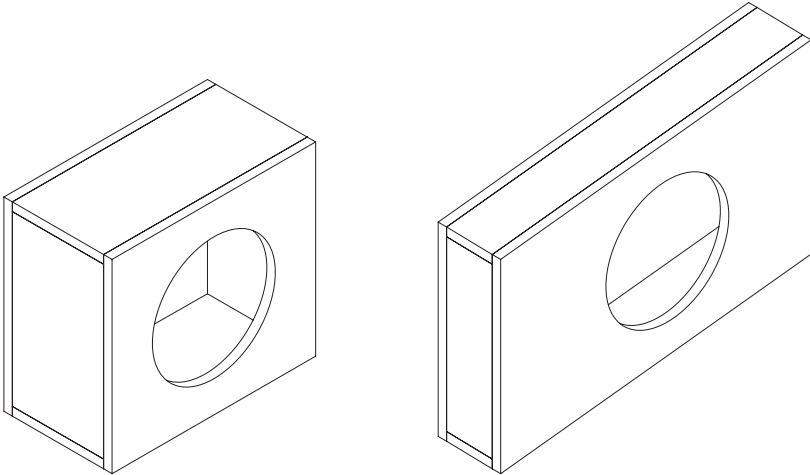
|                    |                              |          |      |     |   |                                   |          |                           |               |             |
|--------------------|------------------------------|----------|------|-----|---|-----------------------------------|----------|---------------------------|---------------|-------------|
| <b>MPBX 250 S2</b> | Passive Subwoofer Sealed box | 250 (10) | 1000 | 500 | 2 | 531 x 160 x 361 (20.91x6.3x14.21) | 38 (1.5) | High density flux ferrite | Polypropylene | 10,8 (23.8) |
| <b>MPBX 300 S2</b> | Passive Subwoofer Sealed box | 300 (12) | 1000 | 500 | 2 | 607 x 175 x 401 (23.9x6.89x15.79) | 38 (1.5) | High density flux ferrite | Polypropylene | 13,6 (30)   |

## ENCLOSURE DESIGN MP/MPS

In the following pages the Hertz Tech Team developed **Sealed** and **Reflex** designs for **MP** and **MPS subwoofers**. They are ready-to-build solutions, including the panel cut list, considering wood thickness 19mm (0.75in.) for MP and 16mm (0.63in.) for MPS series.

The  $V_b$  data is the net volume for the enclosure, i.e. it excludes the speaker volume, ports, any internal bracing and any other internal component.

The declared  $F_b$  is the actual tuning frequency of the box realized according to the ready-to-build solution. This geometry can not be accurately modeled using lumped parameter-based design software, hence those software may produce different results.



### REGULAR

### SHALLOW

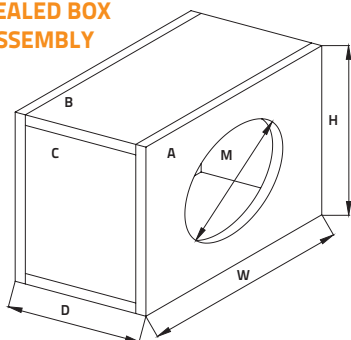
**Regular** and **Shallow** variants for **MPS** series provide the same performance in just a different shape. Regular has the widest application while Shallow is the "solution" where low-depth is a matter.

**Sealed** enclosure designs provide optimally damped response for tight and accurate bass reproduction offering high energy in the range 20Hz-40Hz.

Where a high SPL bass is desired, and space is not a problem, the **Reflex** designs are the best choice concentrating most of energy in the 40Hz-80Hz range.

## ENCLOSURE DESIGN MP 250 D2 / D4

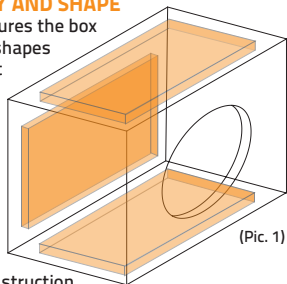
### SEALED BOX ASSEMBLY



### DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create.

However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.

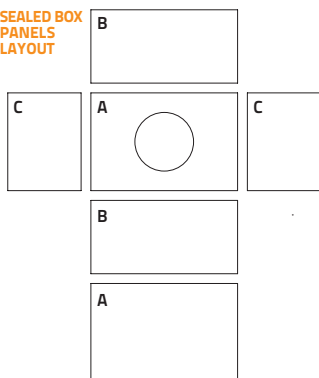


(Pic. 1)

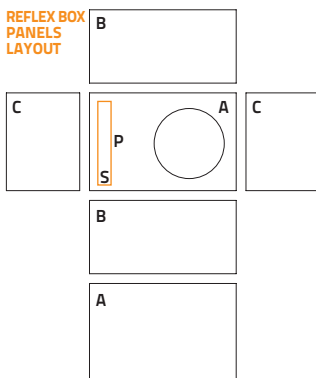
### BOX TECH DATA

| BOX<br>TECH<br>DATA           | Vb             | Fc / Fb | Qtc         | External dimensions<br>(Pic .1) |                |                | Mounting<br>Hole - M | Wood<br>Thickness | PxS-Port inner size |              | Lp-Port<br>length | Damping<br>Material |
|-------------------------------|----------------|---------|-------------|---------------------------------|----------------|----------------|----------------------|-------------------|---------------------|--------------|-------------------|---------------------|
|                               | l<br>(cu. ft.) | Hz      |             | W                               | H              | D              |                      |                   | P                   | S            |                   |                     |
|                               |                |         | mm<br>(in.) | mm<br>(in.)                     | mm<br>(in.)    | mm<br>(in.)    | mm<br>(in.)          | mm<br>(in.)       | mm<br>(in.)         |              |                   |                     |
| MP 250 D2.3<br>Sealed (Fc)    | 17<br>(0.60)   | 50      | 0,85        | 450<br>(17.72)                  | 350<br>(13.78) | 190<br>(7.48)  | 236<br>(9.29)        | 19<br>(0.75)      | -<br>-              | -<br>-       | -<br>-            | Pic. 1              |
| MP 250 D4.3<br>Sealed (Fc)    | 17<br>(0.60)   | 47      | 0,82        | 450<br>(17.72)                  | 350<br>(13.78) | 190<br>(7.48)  | 236<br>(9.29)        | 19<br>(0.75)      | -<br>-              | -<br>-       | -<br>-            | Pic. 1              |
| MP 250 D2/D4.3<br>Reflex (Fb) | 24,5<br>(0.96) | 38      | -           | 568<br>(22.36)                  | 330<br>(12.99) | 276<br>(10.87) | 236<br>(9.29)        | 19<br>(0.75)      | 292<br>(11.50)      | 50<br>(1.97) | 670<br>(26.38)    | Pic. 2              |

### SEALED BOX PANELS LAYOUT



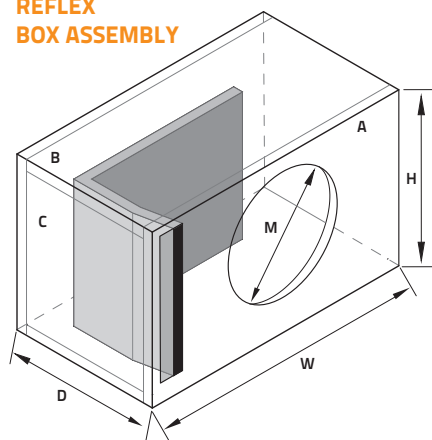
### REFLEX BOX PANELS LAYOUT



### PANELS CUT LIST

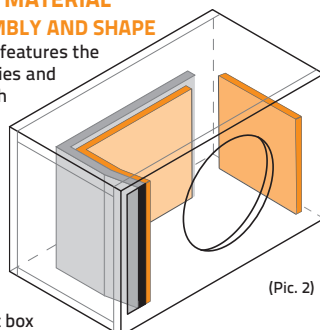
|                          | A                            | Qty | B                           | Qty | C                           | Qty |
|--------------------------|------------------------------|-----|-----------------------------|-----|-----------------------------|-----|
|                          | mm<br>(in.)                  | Pcs | mm<br>(in.)                 | Pcs | mm<br>(in.)                 | Pcs |
| MP 250 D2/D4.3<br>Sealed | 450 X 350<br>(17.72 x 13.78) | 2   | 450 x 152<br>(17.72 x 5.98) | 2   | 312 x 152<br>(12.28 x 5.98) | 2   |
| MP 250 D2/D4.3<br>Reflex | 568 x 330<br>(22.36 x 12.99) | 2   | 568 x 238<br>(22.36 x 9.37) | 2   | 292 x 238<br>(11.50 x 9.37) | 2   |

## REFLEX BOX ASSEMBLY



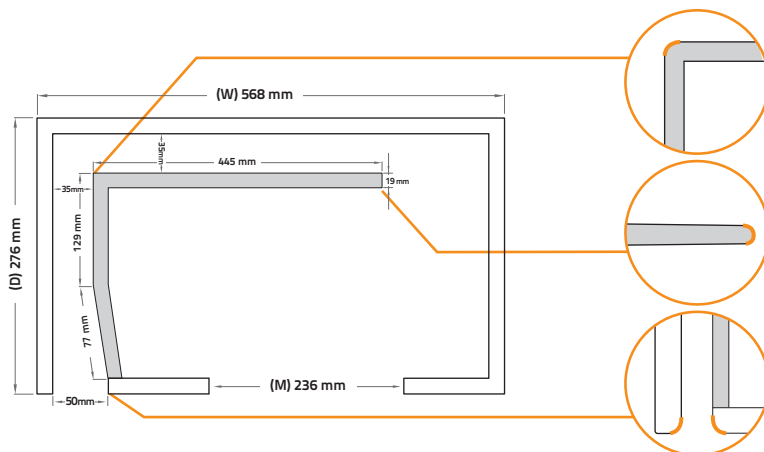
## DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.



(Pic. 2)

## SUGGESTED PORT POSITION/DIMENSION

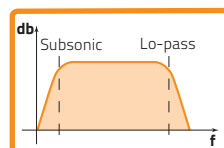


## ROUND SHAPE SUGGESTED AT THESE POINTS

## FILTER

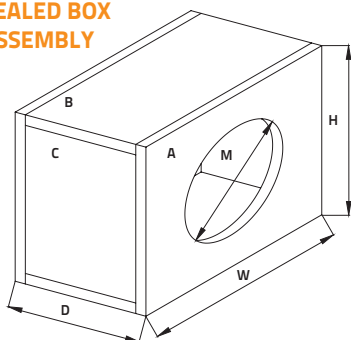
Suggested Subsonic filter cut-off | Suggested Lo-pass filter cut-off

|                          |                  |                      |
|--------------------------|------------------|----------------------|
| MP 250 D2/D4.3<br>Sealed | 15 Hz / 24dB Oct | 70-80 Hz / 24 db Oct |
| MP 250 D2/D4.3<br>Reflex | 20 Hz / 24dB Oct | 60-70 Hz / 24 db Oct |



## ENCLOSURE DESIGN MP 300 D2 / D4

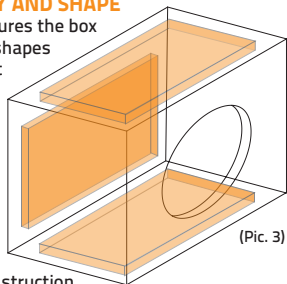
### SEALED BOX ASSEMBLY



### DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create.

However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.

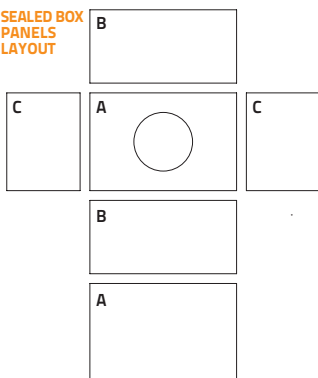


(Pic. 3)

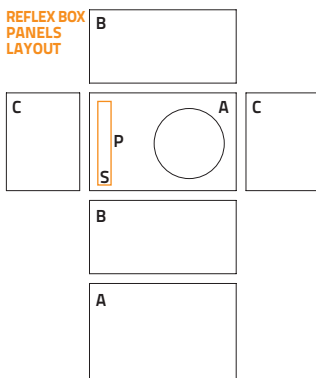
### BOX TECH DATA

|                               | Vb             | Fc / Fb | Qtc  | External dimensions<br>(Pic. 1) |                |                | Mounting<br>Hole - M | Wood<br>Thickness | PxS-Port inner size |              | Lp-Port<br>length | Damping<br>Material |
|-------------------------------|----------------|---------|------|---------------------------------|----------------|----------------|----------------------|-------------------|---------------------|--------------|-------------------|---------------------|
|                               | l<br>(cu. ft.) | Hz      |      | W                               | H              | D              |                      |                   | P                   | S            |                   |                     |
|                               |                |         |      | mm<br>(in.)                     | mm<br>(in.)    | mm<br>(in.)    |                      |                   | mm<br>(in.)         | mm<br>(in.)  | mm<br>(in.)       |                     |
| MP 300 D2.3<br>Sealed (Fc)    | 28<br>(0.99)   | 48      | 1    | 450<br>(17.72)                  | 360<br>(14.17) | 280<br>(11.02) | 287<br>(11.30)       | 19<br>(0.75)      | -<br>-              | -<br>-       | -<br>-            | Pic. 3              |
| MP 300 D4.3<br>Sealed (Fc)    | 28<br>(0.99)   | 48      | 0.82 | 450<br>(17.72)                  | 360<br>(14.17) | 280<br>(11.02) | 287<br>(11.30)       | 19<br>(0.75)      | -<br>-              | -<br>-       | -<br>-            | Pic. 3              |
| MP 300 D2/D4.3<br>Reflex (Fb) | 41<br>(1.61)   | 35.6    | -    | 620<br>(24.41)                  | 390<br>(15.35) | 330<br>(12.99) | 287<br>(11.30)       | 19<br>(0.75)      | 352<br>(13.86)      | 60<br>(2.36) | 744<br>(29.29)    | Pic. 4              |

### SEALED BOX PANELS LAYOUT



### REFLEX BOX PANELS LAYOUT

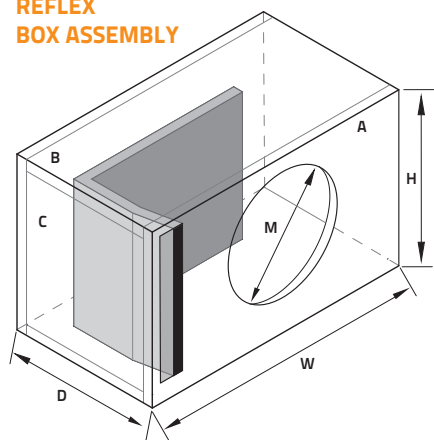


### PANELS CUT LIST

|                          | A                            | Qty | B                            | Qty | C                            | Qty |
|--------------------------|------------------------------|-----|------------------------------|-----|------------------------------|-----|
|                          | mm<br>(in.)                  | Pcs | mm<br>(in.)                  | Pcs | mm<br>(in.)                  | Pcs |
| MP 300 D2/D4.3<br>Sealed | 450 X 360<br>(17.72 x 14.17) | 2   | 450 x 242<br>(17.72 x 9.53)  | 2   | 322 x 242<br>(12.68 x 9.53)  | 2   |
| MP 300 D2/D4.3<br>Reflex | 620 x 390<br>(24.41 x 15.35) | 2   | 620 x 292<br>(24.41 x 11.50) | 2   | 352 x 292<br>(13.86 x 11.50) | 2   |

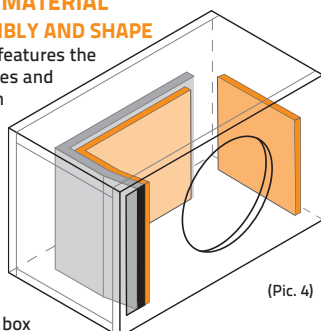


## REFLEX BOX ASSEMBLY



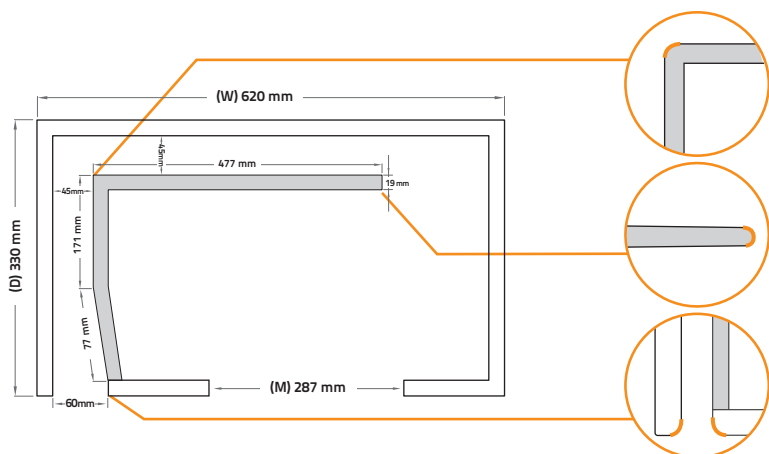
## DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.



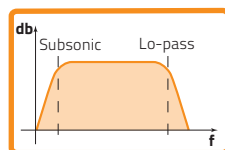
(Pic. 4)

### SUGGESTED PORT POSITION/DIMENSION



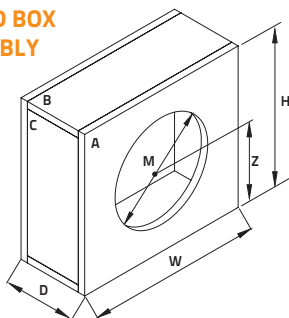
**ROUND SHAPE SUGGESTED  
AT THESE POINTS**

| <b>FILTER</b>                | <b>Suggested Subsonic filter cut-off</b> | <b>Suggested Lo-pass filter cut-off</b> |
|------------------------------|------------------------------------------|-----------------------------------------|
| <b>MP 300 D2/D4.3 Sealed</b> | 15 Hz / 24dB Oct                         | 70-80 Hz / 24 db Oct                    |
| <b>MP 300 D2/D4.3 Reflex</b> | 20 Hz / 24dB Oct                         | 60-70 Hz / 24 db Oct                    |



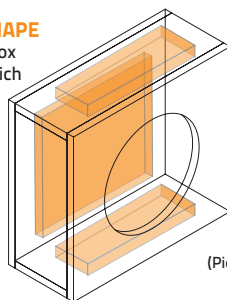
## ENCLOSURE DESIGN MPS 250 S2 / S4

### SEALED BOX ASSEMBLY



### DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.



(Pic. 5)

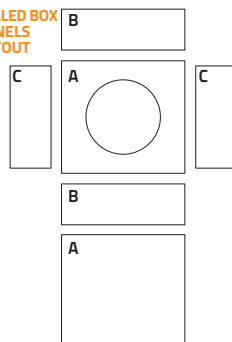
### BOX TECH DATA

|                                     | Vb             | Fc   | Qtc  | External dimensions<br>(Pic. 1) |                |               | Mounting<br>Hole - M | Wood<br>Thickness | Damping<br>Material |
|-------------------------------------|----------------|------|------|---------------------------------|----------------|---------------|----------------------|-------------------|---------------------|
|                                     | l<br>(cu. ft.) | Hz   |      | W                               | H              | D             |                      |                   |                     |
|                                     |                |      |      | mm<br>(in.)                     | mm<br>(in.)    | mm<br>(in.)   |                      |                   |                     |
| MPS 250 S2<br>Sealed <b>Shallow</b> | 14,2<br>(0.5)  | 47,7 | 0,68 | 615<br>(24.21)                  | 352<br>(13.86) | 110<br>(4.33) | 232<br>(9.13)        | 16<br>(0.63)      | Pic. 5              |
| MPS 250 S2<br>Sealed <b>Regular</b> | 14,2<br>(0.5)  | 47,7 | 0,68 | 386<br>(15.2)                   | 352<br>(13.86) | 160<br>(6.30) | 232<br>(9.13)        | 16<br>(0.63)      | Pic. 5              |
| MPS 250 S4<br>Sealed <b>Shallow</b> | 14,2<br>(0.5)  | 49   | 0,81 | 615<br>(24.21)                  | 352<br>(13.86) | 110<br>(4.33) | 232<br>(9.13)        | 16<br>(0.63)      | Pic. 5              |
| MPS 250 S4<br>Sealed <b>Regular</b> | 14,2<br>(0.5)  | 49   | 0,81 | 386<br>(15.20)                  | 352<br>(13.86) | 160<br>(6.30) | 232<br>(9.13)        | 16<br>(0.63)      | Pic. 5              |

### PANELS CUT LIST

|                                     | A                            | Qty | B                           | Qty | C                           | Qty |
|-------------------------------------|------------------------------|-----|-----------------------------|-----|-----------------------------|-----|
|                                     | mm<br>(in.)                  | Pcs | mm<br>(in.)                 | Pcs | mm<br>(in.)                 | Pcs |
| MPS 250 S2<br>Sealed <b>Shallow</b> | 615 x 352<br>(24.21 x 13.86) | 2   | 615 x 78<br>(24.21 x 3.07)  | 2   | 320 x 78<br>(12.60 x 3.07)  | 2   |
| MPS 250 S2<br>Sealed <b>Regular</b> | 386 x 352<br>(15.20 x 13.86) | 2   | 386 x 128<br>(15.20 x 5.04) | 2   | 320 x 128<br>(12.60 x 5.04) | 2   |
| MPS 250 S4<br>Sealed <b>Shallow</b> | 615 x 352<br>(24.21 x 3.07)  | 2   | 615 x 78<br>(24.21 x 3.07)  | 2   | 320 x 78<br>(12.60 x 3.07)  | 2   |
| MPS 250 S4<br>Sealed <b>Regular</b> | 386 x 352<br>(15.20 x 13.86) | 2   | 386 x 128<br>(15.20 x 5.04) | 2   | 320 x 128<br>(12.60 x 5.04) | 2   |

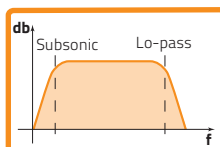
### SEALED BOX PANELS LAYOUT



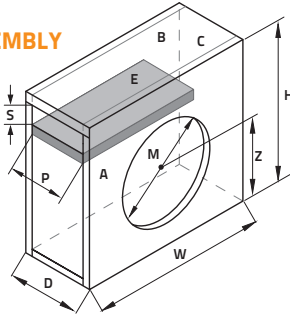
### FILTER

Suggested Subsonic filter cut-off Suggested Lo-pass filter cut-off

|                         |                  |                      |
|-------------------------|------------------|----------------------|
| MPS 250 S2/S4<br>Sealed | 15 Hz / 24dB Oct | 70-80 Hz / 24 db Oct |
| MPS 250 S2/S4<br>Reflex | 20 Hz / 24dB Oct | 60-70 Hz / 24 db Oct |

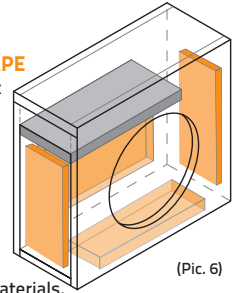


## REFLEX BOX ASSEMBLY



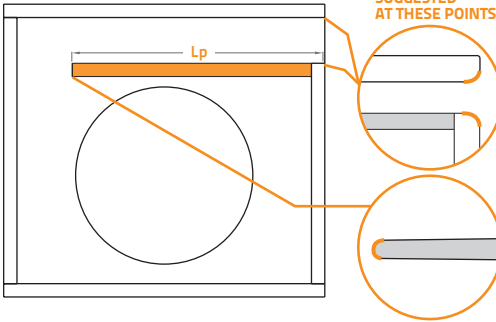
## DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.

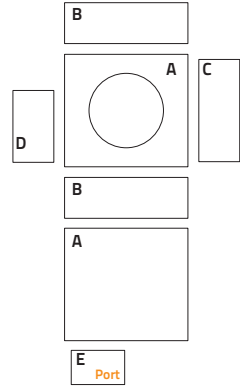


(Pic. 6)

## SUGGESTED PORT POSITION/DIMENSION



ROUND SHAPE  
SUGGESTED  
AT THESE POINTS



## BOX TECH DATA

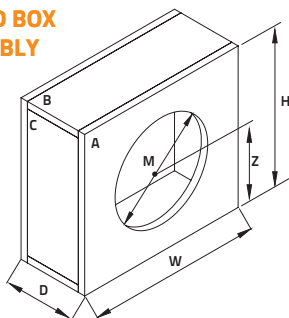
|                                     | Vb<br>l<br>(cu. ft.) | Fb<br>Hz | External dimensions<br>(Pic. 1) |                |               | Mounting<br>Hole - M | Wood<br>Thickness | PxS-Port<br>inner size |              |                | Lp-Port<br>length | Damping<br>Material |
|-------------------------------------|----------------------|----------|---------------------------------|----------------|---------------|----------------------|-------------------|------------------------|--------------|----------------|-------------------|---------------------|
|                                     |                      |          | W                               | H              | D             |                      |                   | Z                      | P            | S              |                   |                     |
| MPS 250 S2<br>Reflex <b>Shallow</b> | 17<br>(0.6)          | 35       | 817<br>(32.17)                  | 372<br>(14.65) | 110<br>(4.33) | 232<br>(9.13)        | 16<br>(0.63)      | 146<br>(5.75)          | 78<br>(3.07) | 63.7<br>(2.51) | 565<br>(22.24)    | Pic. 6              |
| MPS 250 S2<br>Reflex <b>Regular</b> | 17<br>(0.6)          | 35       | 660<br>(25.98)                  | 372<br>(14.65) | 130<br>(5.12) | 232<br>(9.13)        | 16<br>(0.63)      | 146<br>(5.75)          | 98<br>(3.86) | 50.7<br>(2)    | 565<br>(22.24)    | Pic. 6              |
| MPS 250 S4<br>Reflex <b>Shallow</b> | 19<br>(0.7)          | 35.5     | 882<br>(34.72)                  | 372<br>(14.65) | 110<br>(4.33) | 232<br>(9.13)        | 16<br>(0.63)      | 146<br>(5.75)          | 78<br>(3.07) | 65.7<br>(2.59) | 511<br>(20.12)    | Pic. 6              |
| MPS 250 S4<br>Reflex <b>Regular</b> | 19<br>(0.7)          | 35.5     | 713<br>(28.07)                  | 372<br>(14.65) | 130<br>(5.12) | 232<br>(9.13)        | 16<br>(0.63)      | 146<br>(5.75)          | 98<br>(3.86) | 52.3<br>2.06   | 511<br>(20.12)    | Pic. 6              |

## PANELS CUT LIST

|                                     | A                            |     | Qty | B                          |     | Qty | C                          |     | Qty | D                          |     | Qty | E                          |     | Qty |
|-------------------------------------|------------------------------|-----|-----|----------------------------|-----|-----|----------------------------|-----|-----|----------------------------|-----|-----|----------------------------|-----|-----|
|                                     | mm<br>(in.)                  | Pcs |     | mm<br>(in.)                | Pcs |     | mm<br>(in.)                | Pcs |     | mm<br>(in.)                | Pcs |     | mm<br>(in.)                | Pcs |     |
| MPS 250 S2<br>Reflex <b>Shallow</b> | 817 x 372<br>(32.17 x 14.65) | 2   |     | 817 x 78<br>(32.17 x 3.07) | 2   |     | 340 x 78<br>(13.39 x 3.07) | 1   |     | 276 x 78<br>(10.87 x 3.07) | 1   |     | 549 x 78<br>(21.61 x 3.07) | 1   |     |
| MPS 250 S2<br>Reflex <b>Regular</b> | 660 x 372<br>(25.98 x 14.65) | 2   |     | 660 x 98<br>(25.98 x 3.86) | 2   |     | 340 x 98<br>(13.39 x 3.86) | 1   |     | 289 x 98<br>(11.38 x 3.86) | 1   |     | 549 x 98<br>(21.68 x 3.86) | 1   |     |
| MPS 250 S4<br>Reflex <b>Shallow</b> | 882 x 372<br>(34.72 x 14.65) | 2   |     | 882 x 78<br>(34.72 x 3.07) | 2   |     | 340 x 78<br>(13.39 x 3.07) | 1   |     | 274 x 78<br>(10.79 x 3.07) | 1   |     | 495 x 78<br>(19.49 x 3.07) | 1   |     |
| MPS 250 S4<br>Reflex <b>Regular</b> | 713 x 372<br>(28.07 x 14.65) | 2   |     | 713 x 98<br>(28.07 x 3.86) | 2   |     | 340 x 98<br>(13.39 x 3.86) | 1   |     | 288 x 98<br>(11.34 x 3.86) | 1   |     | 495 x 98<br>(19.49 x 3.86) | 1   |     |

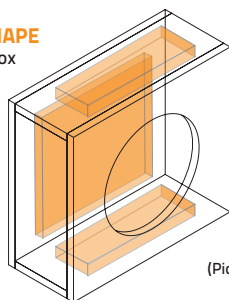
## ENCLOSURE DESIGN MPS 300 S2 / S4

### SEALED BOX ASSEMBLY



### DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.



(Pic. 7)

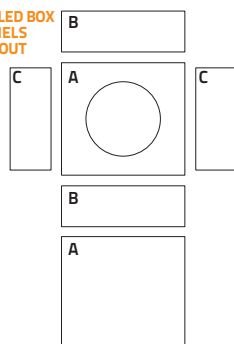
### BOX TECH DATA

|                                     | Vb            | Fc | Qty  | External dimensions<br>(Pic. 1) |                |               | Mounting<br>Hole - M | Wood<br>Thickness | Damping<br>Material |
|-------------------------------------|---------------|----|------|---------------------------------|----------------|---------------|----------------------|-------------------|---------------------|
|                                     | I             | Hz |      | W                               | H              | D             |                      |                   |                     |
|                                     | (cu. ft.)     |    |      | mm<br>(in.)                     | mm<br>(in.)    | mm<br>(in.)   |                      |                   |                     |
| MPS 300 S2<br>Sealed <b>Shallow</b> | 22,7<br>(0.8) | 47 | 0,68 | 770<br>(30.31)                  | 406<br>(15.98) | 115<br>(4.53) | 283<br>(11.14)       | 16<br>(0.63)      | Pic. 7              |
| MPS 300 S2<br>Sealed <b>Regular</b> | 22,7<br>(0.8) | 47 | 0,68 | 510<br>(20.08)                  | 406<br>(15.98) | 160<br>(6.30) | 283<br>(11.14)       | 16<br>(0.63)      | Pic. 7              |
| MPS 300 S4<br>Sealed <b>Shallow</b> | 22,7<br>(0.8) | 45 | 0,81 | 770<br>(30.31)                  | 406<br>(15.98) | 115<br>(4.53) | 283<br>(11.14)       | 16<br>(0.63)      | Pic. 7              |
| MPS 300 S4<br>Sealed <b>Regular</b> | 22,7<br>(0.8) | 45 | 0,81 | 510<br>(20.08)                  | 406<br>(15.98) | 160<br>(6.30) | 283<br>(11.14)       | 16<br>(0.63)      | Pic. 7              |

### PANELS CUT LIST

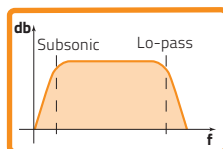
|                                     | A                            | Qty | B                           | Qty | C                           | Qty |
|-------------------------------------|------------------------------|-----|-----------------------------|-----|-----------------------------|-----|
|                                     | mm<br>(in.)                  | Pcs | mm<br>(in.)                 | Pcs | mm<br>(in.)                 | Pcs |
| MPS 300 S2<br>Sealed <b>Shallow</b> | 770 x 406<br>(30.31 x 15.98) | 2   | 770 x 83<br>(30.31 x 3.27)  | 2   | 374 x 83<br>(14.72 x 3.27)  | 2   |
| MPS 300 S2<br>Sealed <b>Regular</b> | 510 x 406<br>(20.08 x 15.98) | 2   | 510 x 128<br>(20.08 x 5.04) | 2   | 374 x 128<br>(14.72 x 5.04) | 2   |
| MPS 300 S4<br>Sealed <b>Shallow</b> | 770 x 406<br>(30.31 x 15.98) | 2   | 770 x 83<br>(30.31 x 3.27)  | 2   | 374 x 83<br>(14.72 x 3.27)  | 2   |
| MPS 300 S4<br>Sealed <b>Regular</b> | 510 x 406<br>(20.08 x 15.98) | 2   | 510 x 128<br>(20.08 x 5.04) | 2   | 374 x 128<br>(14.72 x 5.04) | 2   |

### SEALED BOX PANELS LAYOUT

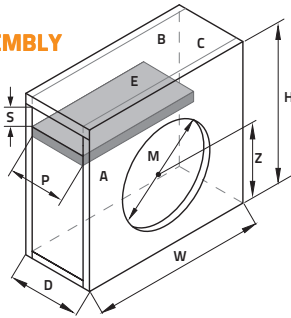


### FILTER

|                         | Suggested Subsonic filter cut-off | Suggested Lo-pass filter cut-off |
|-------------------------|-----------------------------------|----------------------------------|
| MPS 300 S2/S4<br>Sealed | 15 Hz / 24dB Oct                  | 70-80 Hz / 24 db Oct             |
| MPS 300 S2/S4<br>Reflex | 20 Hz / 24dB Oct                  | 60-70 Hz / 24 db Oct             |

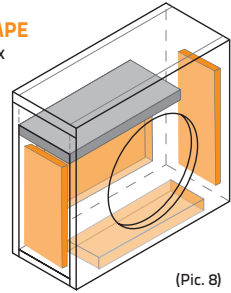


## REFLEX BOX ASSEMBLY



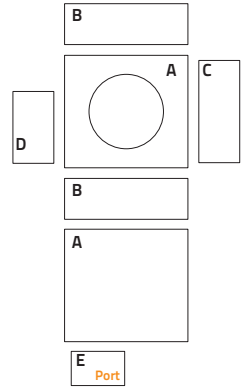
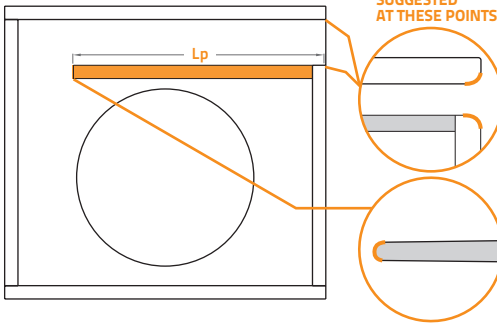
## DAMPING MATERIAL BOX ASSEMBLY AND SHAPE

This manual features the box assemblies and shapes which are easiest to create. However, the bass frequency performance can be noticeably improved with different box shapes, assembly methods and construction materials.



(Pic. 8)

## SUGGESTED PORT POSITION/DIMENSION



## BOX TECH DATA

|                                     | Vb<br>(cu. ft.) | Fb<br>Hz | External dimensions<br>(Pic. 1) |                |               | Mounting<br>Hole - M | Wood<br>Thickness | PxS-Port<br>inner size |               |                | Lp-Port<br>length | Damping<br>Material |
|-------------------------------------|-----------------|----------|---------------------------------|----------------|---------------|----------------------|-------------------|------------------------|---------------|----------------|-------------------|---------------------|
|                                     |                 |          | W                               | H              | D             |                      |                   | Z                      | P             | S              |                   |                     |
|                                     | mm (in.)        | mm (in.) | mm (in.)                        | mm (in.)       | mm (in.)      | mm (in.)             | mm (in.)          | mm (in.)               | mm (in.)      | mm (in.)       | mm (in.)          |                     |
| MPS 300 S2<br>Reflex <b>Shallow</b> | 26.9<br>(0.9)   | 34       | 817<br>(32.17)                  | 372<br>(14.65) | 110<br>(4.33) | 283<br>(11.14)       | 16<br>(0.63)      | 146<br>(5.75)          | 98<br>(3.86)  | 82.9<br>(3.26) | 605<br>(23.82)    | Pic. 8              |
| MPS 300 S2<br>Reflex <b>Regular</b> | 26.9<br>(0.9)   | 34       | 660<br>(25.98)                  | 372<br>(14.65) | 130<br>(5.12) | 283<br>(11.14)       | 16<br>(0.63)      | 146<br>(5.75)          | 133<br>(5.24) | 61.1<br>(2.41) | 605<br>(23.82)    | Pic. 8              |
| MPS 300 S4<br>Reflex <b>Shallow</b> | 36.8<br>(1.3)   | 33       | 882<br>(34.72)                  | 372<br>(14.65) | 110<br>(4.33) | 283<br>(11.14)       | 16<br>(0.63)      | 146<br>(5.75)          | 98<br>(3.86)  | 81.4<br>(3.20) | 460<br>(18.11)    | Pic. 8              |
| MPS 300 S4<br>Reflex <b>Regular</b> | 36.8<br>(1.3)   | 33       | 713<br>(28.07)                  | 372<br>(14.65) | 130<br>(5.12) | 283<br>(11.14)       | 16<br>(0.63)      | 146<br>(5.75)          | 133<br>(5.24) | 60<br>(2.36)   | 460<br>(18.11)    | Pic. 8              |

## PANELS CUT LIST

|                                     | A                             |     | Qty | B                           |     | Qty | C                           |     | Qty | D                           |     | Qty | E                           |     | Qty |
|-------------------------------------|-------------------------------|-----|-----|-----------------------------|-----|-----|-----------------------------|-----|-----|-----------------------------|-----|-----|-----------------------------|-----|-----|
|                                     | mm (in.)                      | Pcs |     | mm (in.)                    | Pcs |     | mm (in.)                    | Pcs |     | mm (in.)                    | Pcs |     | mm (in.)                    | Pcs |     |
| MPS 300 S2<br>Reflex <b>Shallow</b> | 895 x 422<br>(35.24 x 16.61)  | 2   |     | 895 x 98<br>(35.24 x 3.86)  | 2   |     | 390 x 98<br>(15.35 x 3.86)  | 1   |     | 307 x 98<br>(12.09 x 3.86)  | 1   |     | 589 x 98<br>(23.19 x 3.86)  | 1   |     |
| MPS 300 S2<br>Reflex <b>Regular</b> | 690 x 411<br>(27.17 x 16.18)  | 2   |     | 690 x 133<br>(27.17 x 5.24) | 2   |     | 379 x 133<br>(14.92 x 5.24) | 1   |     | 318 x 133<br>(12.52 x 5.24) | 1   |     | 589 x 133<br>(23.19 x 5.24) | 1   |     |
| MPS 300 S4<br>Reflex <b>Shallow</b> | 1112 x 422<br>(43.78 x 16.61) | 2   |     | 1112 x 98<br>(43.78 x 3.86) | 2   |     | 390 x 98<br>(15.35 x 3.86)  | 1   |     | 309 x 98<br>(12.17 x 3.86)  | 1   |     | 444 x 98<br>(17.48 x 3.86)  | 1   |     |
| MPS 300 S4<br>Reflex <b>Regular</b> | 836 x 422<br>(32.91 x 16.61)  | 2   |     | 836 x 133<br>(32.91 x 5.24) | 2   |     | 390 x 133<br>(13.39 x 5.24) | 1   |     | 330 x 133<br>(12.99 x 5.24) | 1   |     | 444 x 133<br>(17.48 x 5.24) | 1   |     |

■ المعلومات الكهرو صوتية / Электро-акустични параметри / 電聲參數 / 电声参数 / Elektro-akustički parametri / Elektroakustické parametry / Electro-Acoustic parametre / Elektro-akoestische parameters / Electro-Acoustic parameters / Elektroakustilised parameetrid / Sähköakustiset parametrit / Paramètres électro-acoustiques / Elektro-akustische Parameter / Ηλεκτρο-ακουστικές παράμετροι / פרמטרים אלקטרו-אקוסטיים / Elektro -akusztikus paraméterek / Parameter elektro-akustik / Parametri elettroacustici / 電氣音響パラメータ / 전자 어쿠스틱 파라미터 / Elektro-akustiskie parametrai / Elektriniai-akustiniai parametrai / Elektro-akustiske parametre / پارامترهای الکترواкуستیکی / Parametry elektro-akustyczne / Parametros electro-acústicos / Specificatii tehnice / Электроакустические параметры / Elektro-akustické parametre / Elektro-akustični parametri / Parámetros electroacústicos / Elektroakustiska parametrar / ເລັກ ອັກຸສຕິກ ພາລາມີເຕີ / Elektro-akústik parametreler

|             | MP 250 D2.3 * | MP 250 D4.3 * | MP 300 D2.3 * | MP 300 D4.3 * | MPS 250 S2 | MPS 250 S4 | MPS 300 S2 | MPS 300 S4 |
|-------------|---------------|---------------|---------------|---------------|------------|------------|------------|------------|
| D<br>mm     | 213           | 213           | 260           | 260           | 216,6      | 216,6      | 262,6      | 262,6      |
| Xmax<br>mm  | ± 17          | ± 17          | ± 17          | ± 17          | 16,8       | 16,8       | 16,8       | 16,8       |
| Re<br>Ω     | 0,85          | 1,8           | 1             | 1,9           | 2,2        | 3,3        | 1,9        | 3,4        |
| Fs<br>Hz    | 30            | 27            | 23            | 24            | 28         | 29         | 24         | 23         |
| Le<br>mH    | 0,65          | 1,6           | 0,63          | 1,6           | 2,67       | 3,65       | 1,48       | 3,75       |
| Vas<br>l    | 25            | 31            | 88            | 74            | 24,5       | 21,2       | 64,9       | 62,1       |
| Mms<br>g    | 182           | 187           | 221           | 235           | 250        | 234        | 295        | 320        |
| Cms<br>mm/N | 0,14          | 0,18          | 0,22          | 0,19          | 0,13       | 0,11       | 0,16       | 0,15       |
| BL<br>T·m   | 7,1           | 10,5          | 7,7           | 12            | 14,7       | 17,3       | 12,3       | 18,7       |
| Qts         | 0,54          | 0,5           | 0,48          | 0,42          | 0,41       | 0,48       | 0,51       | 0,42       |
| Qes         | 0,6           | 0,53          | 0,53          | 0,45          | 0,45       | 0,52       | 0,55       | 0,45       |
| Qms         | 5,92          | 5,8           | 5,9           | 5,9           | 5,3        | 5,6        | 7,5        | 6,3        |
| Spl<br>dB   | 83,5          | 83,5          | 86            | 86            | 82,5       | 83,5       | 84,5       | 85         |

\* The Thiele and Small parameters are measured with coils in parallel. For series coils specification multiply Re and Le by 4 and BL by 2, all other specifications remain the same.

The Thiele and Small parameters are measured after the speaker has been conditioned by a specific signal and represent the expected long term parameters after a short period of use.

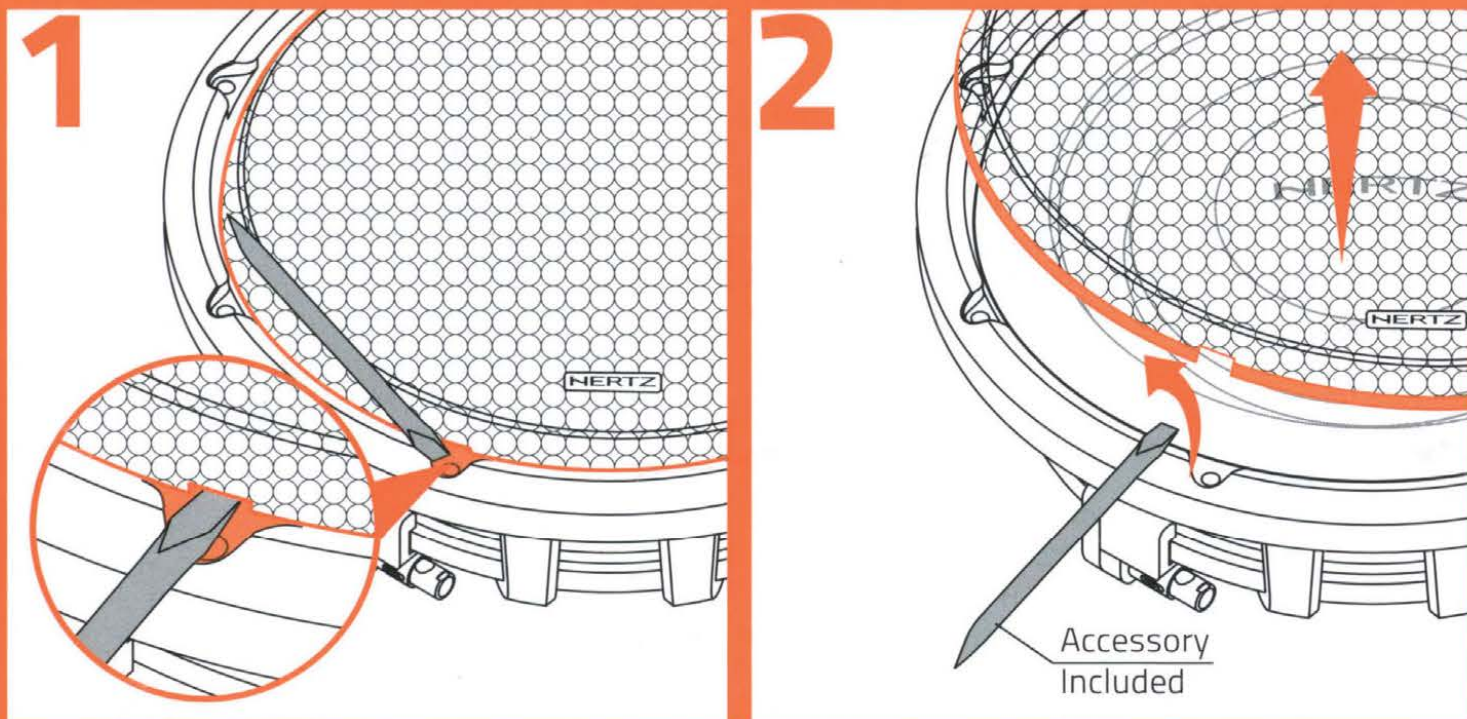


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Tutte le specifiche riportate sono soggette a cambiamento senza preavviso  
All specifications subject to change without notice  
F.MD72\_22 REV.G



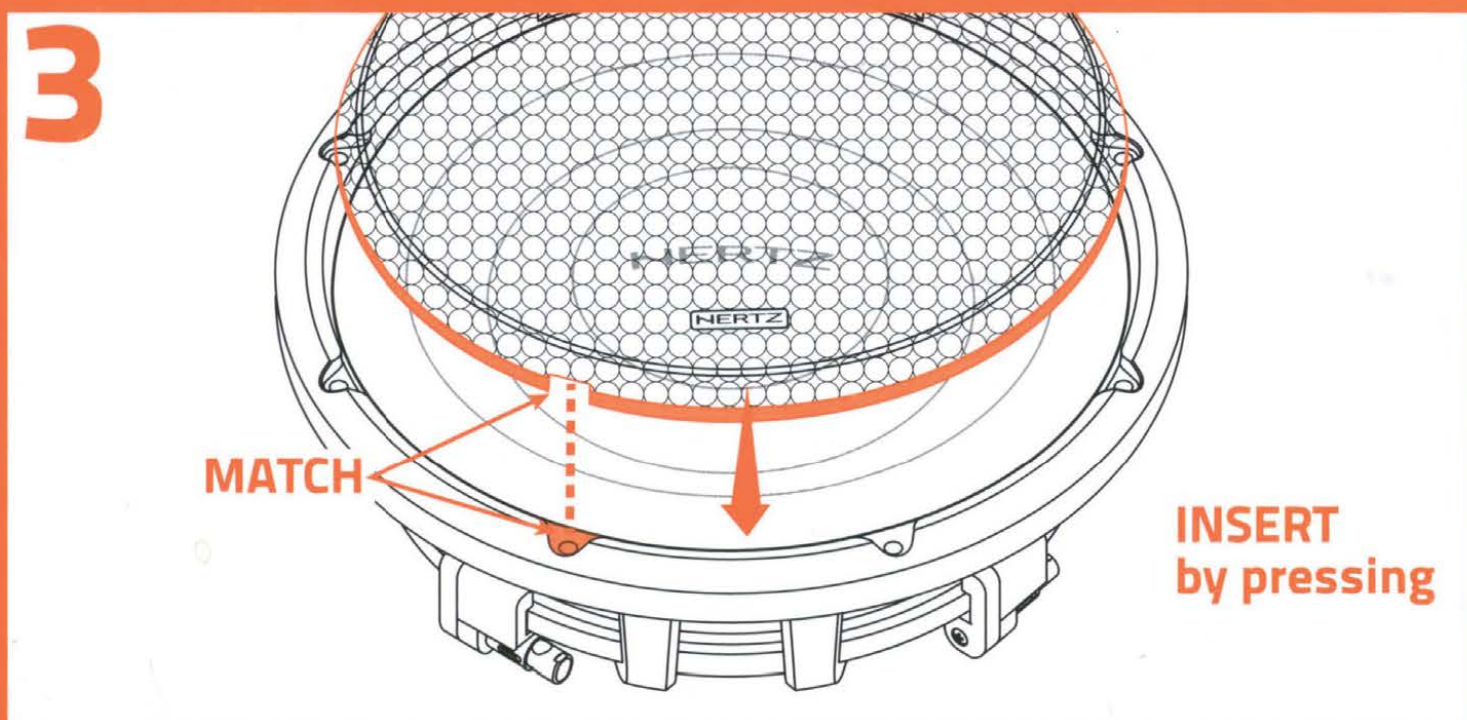
# HOW TO REMOVE / INSERT MESH GRILLE



## WARNING:



Pay attention not to damage the surround.



Mille

Pro

HERTZ

hertz-audio.com

# PRO MPS 300 S4

## SHALLOW SUBWOOFER

### 1000 W



Provided

#### TECHNICAL SPECIFICATIONS

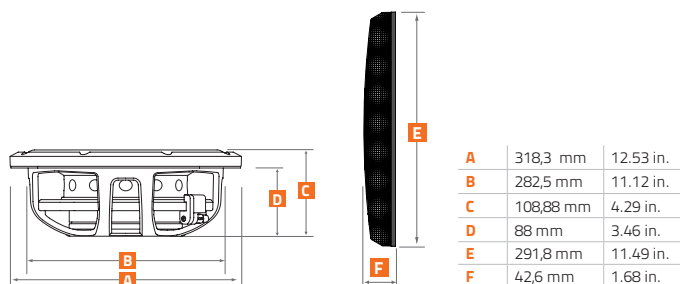
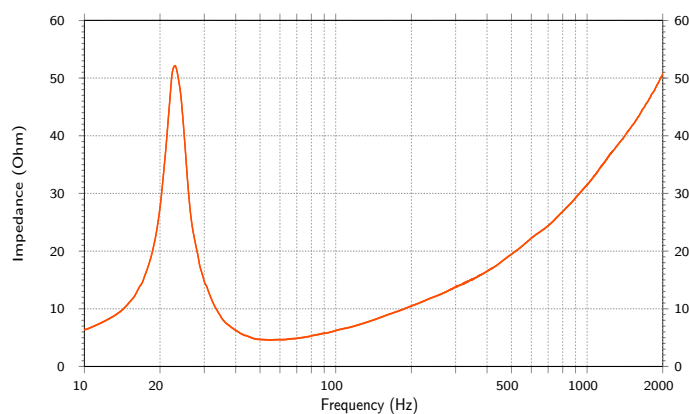
| Component                 |              | Subwoofer                          |
|---------------------------|--------------|------------------------------------|
| Woofer size               | mm (in.)     | 300 (12)                           |
| Voice Coil Ø              |              | 38 (1.5)                           |
| Power Handling            | W peak       | 1000                               |
|                           | W Continuous | 500                                |
| Impedance                 | Ω            | 4                                  |
| Centre to centre distance | mm (in.)     | 302 (11.89)                        |
| Magnet size               | mm (in.)     | 156 x 60 x 36 (6.14 x 2.36 x 1.42) |
| D x d x h                 |              |                                    |
| Total driver displacement | l (cu.in.)   | 1,2 (73.23)                        |
| Hole diameter             | mm (in.)     | 5.5 (0.22)                         |
| Weight of one speaker     | kg (lb)      | 6,64 (14.64)                       |
| Magnet                    |              | High density flux ferrite          |
| Cone                      |              | Polypropylene                      |
| *Xmech                    | mm (in.)     | 20 (0.79)                          |

\*Xmech: maximum mechanical excursion it indicates the motion range in the speaker linear functioning area, in both ways.

#### ELECTRO-ACOUSTIC PARAMETERS

|      |      |        |
|------|------|--------|
| D    | mm   | 262,59 |
| Xmax | mm   | 16,80  |
| Re   | Ω    | 3,4    |
| Fs   | Hz   | 23     |
| Le   | mH   | 3,75   |
| Vas  | l    | 62,13  |
| Mms  | g    | 320    |
| Cms  | mm/N | 0,15   |
| BL   | T·m  | 18,7   |
| Qts  |      | 0,42   |
| Qes  |      | 0,45   |
| Qms  |      | 6,3    |
| Spl  | dB   | 85     |

1. Ultra-shallow overall depth
2. 500W continuous power handling
3. Optimized for extremely-compact sealed enclosure 20-24L (0.7-0.8CF)
4. Air Intercooling Revolution (A.I.R.) prevents air-compression-related limitations
5. Unrivalled mechanical excursion, +20% over traditional designs
6. Six-layer copper voice coil (38mm/1.5 in.) ensures high thermal capacity
7. Non-vented rear design allows reduced enclosure depth
8. Robust screw-less mesh grille included with black screws provided
9. Die-cast aluminum frame
10. Solid horizontal 8AWG spring-loaded terminals
11. EID: Scan, Discover, Identify



From R&D to final product  
**KLIPPEL**  
since 2005

Technology • Art • Sound  
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