

TS-W306C TS-W306DVC 1000 W_{MAX.} / NOM. 400W

TS-W256C TS-W256DVC 800 W_{MAX.} / NOM. 350W

CAR-USE COMPONENT SUBWOOFER
HP D'EXTREME-GRAVE AUTOMOBILE
SUBWOOFER PARA AUTOMÓVIL

Be sure to read this instruction manual before installing this speaker.
 Prière de lire obligatoirement ce manuel d'installation avant de monter les haut-parleurs.

Antes de instalar el altavoz es importante que lea estas instrucciones.
 Leia este manual de instruções antes de instalar o alto-falante.

⚠ WARNING



Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. PIONEER and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.
- Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.



We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, PIONEER ELECTRONICS and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel

Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.



⚠ PRECAUCION

Para evitar avería de sus altavoces, sírvase observar las siguientes precauciones. Si la música se reproduce anormalmente o cuando se reciben sonidos adicionales, baje el volumen. Esto puede presentarse debido a la excesiva carga sobre los altavoces. El sonido puede oírse anormalmente si se desconecta el cono del altavoz o cuando la bobina móvil se pone en contacto con el conjunto magnético. En estas circunstancias, es necesario bajar el volumen hasta el punto donde desaparezcan estos fenómenos. Si su amplificador cuenta con un control de ganancia, sería mejor bajar ligeramente este control para evitar que ocurran los fenómenos mencionados. En algunos casos, si el sistema está provisto de un equalizador, el control de graves de esta unidad puede reajustarse también para evitar que ocurra dicho problema. Si desea lograr un volumen más alto que el obtenido con el altavoz provisto, se recomienda añadir altavoces adicionales al sistema. Con esta adición, es posible aumentar considerablemente el nivel sonoro del sistema. En ciertos casos, usted podrá duplicar la salida del sistema sin ningún deterioro en la calidad sonora. Cuando instale los altavoces, o después de haberlos instalado, cerciórese de que sus diafragmas no reciban golpes (por ejemplo, al dejar caer objetos puntiagudos sobre ellos) ya que podrían danarse. Ya que este altavoz está siendo usado continuamente encendido a todo volumen, la temperatura del circuito magnético aumentará, evite tocarlo directamente con la mano o poniendo algo cerca de él. Si se calentara, podría causar quemaduras, deformación o daños de las cosas alrededor del altavoz. Si se utiliza este altavoz tal como es instalado en un gabinete cuyo volumen es mayor que el del tamaño recomendado o si se utiliza solo al aire libre, no solamente se deteriorará en duración sino también se estropeará.

Con el objeto de evitar el daño debido a niveles excesivos de entrada, PIONEER recomienda utilizar este altavoz junto con amplificadores cuya potencia de salida continua efectiva sea menor que la potencia nominal de entrada de este altavoz.

⚠ PRECAUÇÃO

Para evitar danos nos seus alto-falantes, por favor, tome os seguintes cuidados. Caso se perceba, a altos volumes, que a música está distorcida ou que existem sons estranhos, abaixe o volume. Isso deve ser causado por entrada excessiva nos alto-falantes. O som que você está ouvindo pode ser devido no desconectar o cone do alto-falante, ou no contato da bobina voçilica com a montagem magnética. Nestas circunstâncias, sugere-se abaixar o volume para um nível abaixo do ponto em que estes fenômenos ocorrem. Se o seu amplificador possui o controle de amplificação, é aconselhável abaixar esse controle levemente para prevenir a recorrência dos fenômenos. Em alguns casos, caso o sistema conter com o equalizador, o controle de grave do componente pode ser também reajustado para prevenir problemas. Caso se desejar produzir volumes ou níveis de pressão do som (spl) maior que o alto-falante pode produzir, recomenda-se a instalação de alto-falantes adicionais no sistema. Com isso, é possível conseguir um aumento nos níveis de pressão do som. Em alguns casos, você consegue-se duplicar a captação de saída do sistema sem qualquer deterioração na qualidade do som. Na hora da instalação dos alto-falantes, ou após a instalação, certifique-se de que os diafragmas não estão sujeitos a choques diretos (como, por exemplo, queda de objetos pontiagudos sobre os mesmos), pois isso danifica o alto-falante. Como este alto-falante é usado continuamente através de giros de alta velocidade, a temperatura do circuito magnético torna-se alta. Por isso, evite tocá-lo diretamente com as mãos ou deixar objetos na sua proximidade. Se ele estiver quente, poderá causar queima, deformação ou deixar objetos à sua volta. O uso deste alto-falante dentro de uma caixa cujo volume é maior que o recomendado, ou sua colocação ao ar-livre (sem a caixa), não só poderá diminuir a sua vida, como também, poderá fazer com que deixe de funcionar.

A fim de evitar danos causados por níveis excessivos na entrada, a PIONEER recomenda que se utilize este alto-falante conjugado com amplificadores cuja potência de saída continua (RMS) seja menor que a potência nominal de entrada deste alto-falante.



⚠ CAUTION

To prevent damage to your speakers please observe the following caution. At high volume levels if the music sounds distorted or additional sounds are perceived lower the volume. This may be caused by excessive input to the speakers. The sound you are hearing could be the speaker cone becoming out of control or it may be the voice coil actually coming into contact with the magnetic assembly. Under these circumstances, it is prudent to lower the volume to just below the point where these phenomena occur. If your amplifier has a gain control it would be advisable to lower this control slightly to prevent this from recurring. In some cases, if there is an equalizer in the system, the bass control on this unit could also be readjusted to prevent this from happening. If higher volume or sound pressure levels (spl) than those which the speaker can reproduce are desired, it is recommended that additional speakers be added to the system. By doing so it is possible to gain significant increases in sound pressure levels. In some cases, you may double the perceived system output without any deterioration in sound quality. When installing the speakers, or after installation make sure not to subject the diaphragms to direct shock (for example, dropping sharp-edged objects onto them) as the speakers may be damaged. Since this speaker is continuously used being turned on full blast, temperature of the magnetic circuit rises, avoid touching it directly by hand and placing something near it if it is heated, it may cause a burn, deformation or damage to peripheral things. If this speaker is used as it is mounted on a cabinet whose volume is larger than the recommended size or used alone in a free air, it will not only be deteriorated in durability but also be out of order. PIONEER recommends that this speaker be used in conjunction with amplifiers whose continuous (RMS) output is lower than the nominal input power of this speaker.

Never connect only one voice coil of this Dual Voice Coil (DVC) speaker. Both voice coils must be connected to the amplifier for correct operation.

● DESIGNED FOR ENCLOSURE USE

C and DVC series subwoofers are designed to provide optimum bass performance when used in a speaker enclosure with appropriate internal volume. If the internal volume of the enclosure is smaller than the recommended size, the speaker will not be able to reproduce frequencies as low as that of the recommended enclosure. If the internal volume of the enclosure is larger than what is recommended, it will adversely affect the frequency response characteristics and performance of the speaker. This is commonly referred to as under-damped alignment. Over excursion of the subwoofer may result. PIONEER recommends the speaker enclosure be manufactured with 3/4" MDF particle board. Always glue and screw the enclosure together to ensure it is correctly sealed. Whenever possible seal all edges with silicone caulking as well. PIONEER recommends that the inner wall of the enclosure be covered with a sound-absorbing material to provide better sound quality. These suggestions should be followed when building a ported enclosure as well. If this product is used in free-air conditions (without an enclosure), insufficient damping causes the sound without accuracy and reduces the power handling capability to 1/4 of its usual levels. It may result in permanent damage to the product.

● FEATURES

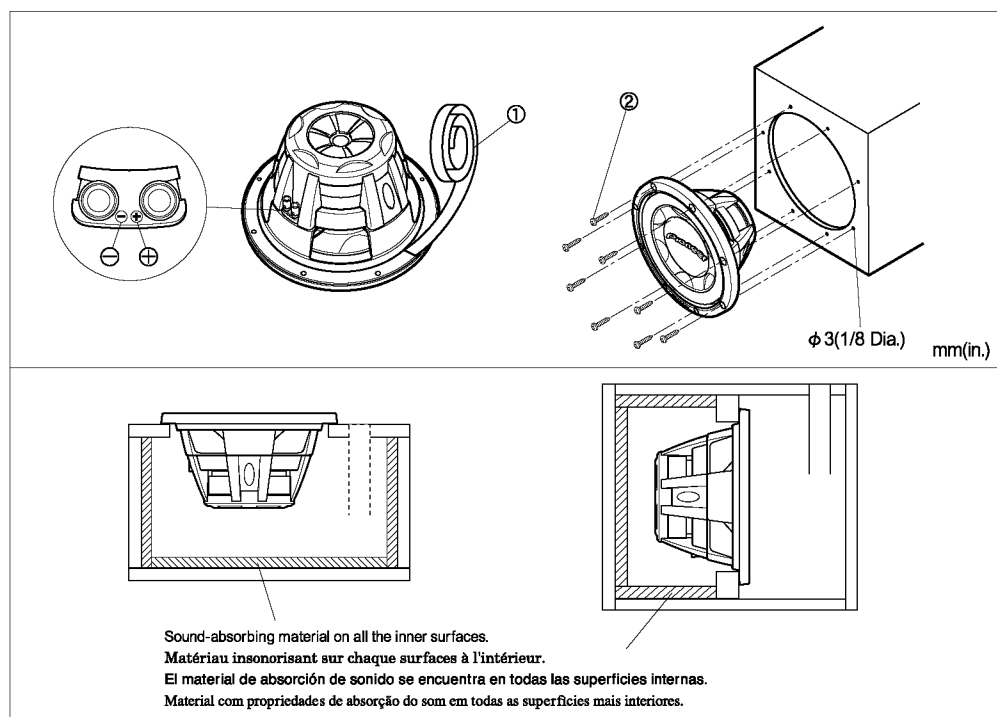
1. **LARGE MAGNET & HIGH POWER MOTOR ASSEMBLY** : Powerful design to produce loud & tight bass response.
2. **WIDE ROLL, 3-LAYER FIBER WOVEN RADIAL SURROUND** : Precisely controls the huge power handling and extended excursion, resulting in louder, more controlled bass response with improved durability.
3. **INTERLACED ARAMID FIBER REINFORCED IMPP CONE** : Superior strength & rigidity required to produce extremely powerful bass with clean, clear sound.
4. **EXTENDED EXCURSION DESIGN** : Provides longer travel (excursion) to create seriously loud bass.
5. **4-LAYER, LONG VOICE COIL DESIGN** : High power and long excursion capability for deeper, louder, more impactful bass.
6. **EXPANDED POLE YOKE** : Greatly improves linearity during large excursions by expanding the magnetic field.
7. **VENTED POLE YOKE** : allows for better heat dissipation and increased power handling.
8. **BEST TUNED PARAMETERS** : CAD computer simulations were used to achieve powerful bass performance, superb sound quality and extreme reliability.

● SPECIFICATIONS ● CARACTERISTIQUES ● ESPECIFICACIONES ● ESPECIFICAÇÕES

Model	Size	Nominal power	Max.music power	Nominal impedance	Sensitivity	Frequency response	Magnet weight	Displacement
Modèle	Taille	Puissance nominale	Puissance musicale maximum	Impédance nominale	Sensibilité	Bande passante	Poids aimant	Déplacement
Modelo	Tamaño	Potencia nominal	Máxima potencia de musica	Impedancia nominal	Sensibilidad	Respuesta de frecuencia	Peso del imán	Desplazamiento
Modelo	Tamanho	Potência nominal	Potência máxima da música	Impedância nominal	Sensibilidade	Resposta de frequência	Peso do magneto	Deslocamento
TS-W306C	12" (30cm)	400W	1000W	4Ω	89dB/W	18-500Hz	2,400g (83oz)	0.117cu.ft 3.30liters
TS-W306DVC	12" (30cm)	400W	1000W	dual 4Ω	89dB/W	18-500Hz	2,400g (83oz)	0.117cu.ft 3.30liters
TS-W256C	10" (25cm)	350W	800W	4Ω	87dB/W	18-600Hz	2,100g (74oz)	0.069cu.ft 1.95liters
TS-W256DVC	10" (25cm)	350W	800W	dual 4Ω	87dB/W	18-600Hz	2,100g (74oz)	0.069cu.ft 1.95liters

Model	Revc	Levc	Fs	Qms	Qes	Qts	Vas	Rms	Mms	Cms	Diam	BL	Xmax
Modèle	(Ω)	(mH)	(Hz)				(cu.ft) (liters)	(N.S/m)	(g)	(m/N)	(inch) (mm)	(T.m)	(inch) (mm)
Modelo													
Modelo													
TS-W306C	3.0	1.98	32.6	10.82	0.43	0.42	1.964	2.592	148.11	1.9×10 ⁻⁴	9.5	13.92	0.34
TS-W306DVC	dual 3.0	3.32(8Q)	32.9	10.8	0.5	0.48	56.582	2.589	135.27	1.7×10 ⁻⁴	242	18.57(8Q)	8.7
							51.759				9.4		
TS-W256C	3.0	2.01	35.6	11.94	0.46	0.44	0.889	2.295	122.43	1.6×10 ⁻⁴	7.9	13.46	0.41
							26.161				10.4		
TS-W256DVC	dual 3.0	3.25(8Q)	35.4	10.46	0.52	0.5	0.955	2.453	115.49	1.8×10 ⁻⁴	7.9	17.62(8Q)	0.45
							27.023				11.5		

● HOW TO INSTALL ● MODE D'INSTALLATION ● INSTALACION ● COMO INSTALAR



● PARTS INCLUDED ● PIECES COMPRIS ● PIEZAS INCLUIDAS ● PECAS INCLUIDAS



① — Speaker

② — Screws

● DVC (DUAL VOICE COIL) CONNECTION
● CONEXIÓN DE DVC (DOBLE BOBINA MÓVIL)

● CONNEXION DVC (DOUBLE BOBINE MOBILE)
● CONEXÃO DVC (BOBINA DE VOZ DUAL)

Connection Connexion Conexión Conexões	Speaker wiring Câblage des haut-parleurs Conexión de los alambres de los altavoces Ligagens do altolante	Advantage Avantage Ventajas Vantagem	SEE VOIR VER VEJA
4Ω Bridged mono(Paralelo) 4Ω Mono pontée(Paralelo) 4Ω Sistema monofónico puenteado(Paralelo) 4Ω Mono em ponte (Paralelo)	8Ω Wiring 8Ω Câblage 8Ω Conexión de los alambres 8Ω Ligagens	Good for higher sensitivity Une sensibilité plus élevée Apropiado para una mayor sensibilidad Bom para maior sensibilidade	1
2Ω Stereo 2Ω Stéréo 2Ω Sistema estereofónico 2Ω Estéreo	2Ω Wiring 2Ω Câblage 2Ω Conexión de los alambres 2Ω Ligagens	Good for higher sensitivity Une sensibilité plus élevée Apropiado para una mayor sensibilidad Bom para maior sensibilidade	1
2Ω Bridged mono 2Ω Mono pontée 2Ω Sistema monofónico puenteado 2Ω Mono em ponte	2Ω Wiring 2Ω Câblage 2Ω Conexión de los alambres 2Ω Ligagens	Good for higher sensitivity Une sensibilité plus élevée Apropiado para una mayor sensibilidad Bom para maior sensibilidade Note: Verify that your amplifier can operate in a 2Ω mono configuration. Remarque: Vérifier que l'amplificateur peut fonctionner en configuration mono sous charge 2Ω. Aviso: Asegúrese de que el amplificador puede ser operado en una configuración monofónica de 2Ω. Nota: Verifique se o seu amplificador pode operar em configuração mono de 2Ω.	2

△ CAUTION: Never connect only one voice coil of this Dual Voice Coil (DVC) speaker. Both voice coils must be connected to the amplifier for correct operation.
△ ATTENTION: Ne jamais connecter une seule bobine mobile de ce haut-parleur de Double Bobine Mobile (DVC). Les deux bobines doivent être connectées sur l'amplificateur afin d'assurer un fonctionnement correct.
△ PRECAUCIÓN: Nunca conecte una única bobina del altavoz Double Bobina Móvil (DVC). Se deben conectar ambas bobinas al amplificador para que funcione correctamente.
△ PRECAUÇÃO: Nunca ligue apenas um fio de voz deste altalante de Bobina de Voz Dual (DVC). Para um correcto funcionamento, ambos os fios têm de estar ligados ao amplificador.

● RECOMMENDED ENCLOSURE VOLUMES / PORT SIZES
● VOLÚMENES DE LA CAJA / TAMAÑOS DE LAS PUERTAS RECOMENDADOS

● CONCEPTION POUR CAISSON / EVENT
● VOLUME DA CAIXA / TAMANHO DO ORIFICIO RECOMENDADOS

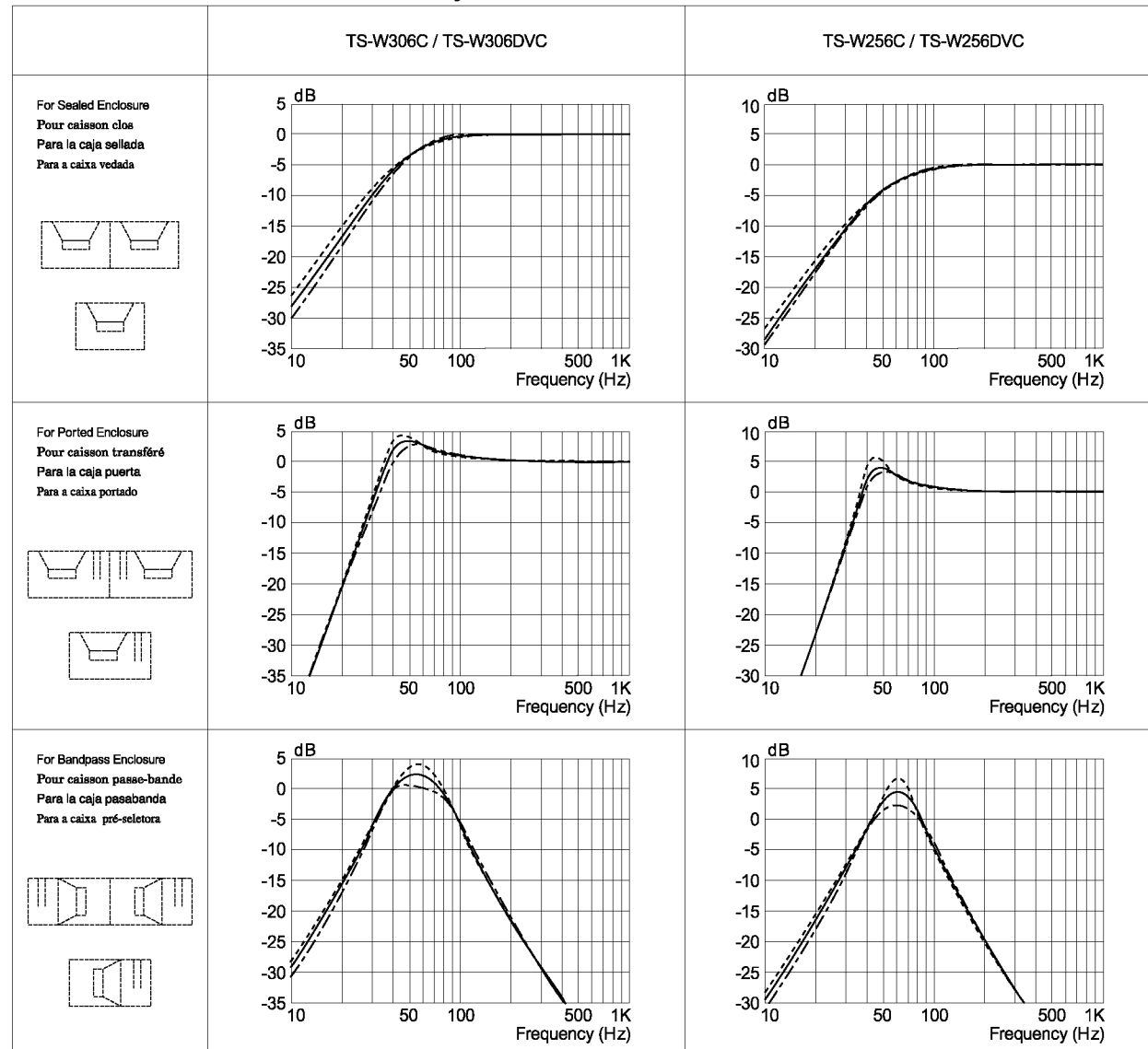
SEE VOIR VER VEJA	For Sealed Enclosure Pour caisson clos Para la caja sellada Para a caixa vedada	For Ported Enclosure Pour caisson transféré Para la caja puerta Para a caixa portada	For Bandpass Enclosure Pour caisson passe-bande Para la caja pasabanda Para a caixa pré-seletoza
1			
2			
RECOMMENDATION RECOMMANDATION RECOMENDACIÓN RECOMENDAÇÃO	<p>①</p> <p>TS-W306C 1.25cu.ft (35.4liters) TS-W256C 0.8cu.ft (22.6liters) TS-W306DVC 1.25cu.ft (35.4liters) TS-W256DVC 0.8cu.ft (22.6liters)</p>	<p>② ③</p> <p>TS-W306C 1.85cu.ft (46.7liters) TS-W256C 1.1cu.ft (31.1liters) TS-W306DVC 1.65cu.ft (46.7liters) TS-W256DVC 1.1cu.ft (31.1liters)</p>	<p>④ ⑤ ⑥</p> <p>TS-W306C 0.9cu.ft (25.5liters) TS-W256C 0.6cu.ft (17.0liters) TS-W306DVC 0.9cu.ft (25.5liters) TS-W256DVC 0.6cu.ft (17.0liters)</p>
MAXIMUM MAXIMUM MÁXIMA	<p>①</p> <p>TS-W306C 1.75cu.ft (49.5liters) TS-W256C 1.25cu.ft (35.4liters) TS-W306DVC 1.75cu.ft (49.5liters) TS-W256DVC 1.25cu.ft (35.4liters)</p>	<p>② ③</p> <p>TS-W306C 2.05cu.ft (58.0liters) TS-W256C 1.55cu.ft (43.9liters) TS-W306DVC 2.05cu.ft (58.0liters) TS-W256DVC 1.55cu.ft (43.9liters)</p>	<p>④ ⑤ ⑥</p> <p>TS-W306C 1.1cu.ft (31.1liters) TS-W256C 0.8cu.ft (22.6liters) TS-W306DVC 1.1cu.ft (31.1liters) TS-W256DVC 0.8cu.ft (22.6liters)</p>
MINIMUM MINIMUM MÍNIMA	<p>①</p> <p>TS-W306C 0.85cu.ft (24.1liters) TS-W256C 0.65cu.ft (18.4liters) TS-W306DVC 0.85cu.ft (24.1liters) TS-W256DVC 0.65cu.ft (18.4liters)</p>	<p>② ③</p> <p>TS-W306C 1.25cu.ft (35.4liters) TS-W256C 0.9cu.ft (25.5liters) TS-W306DVC 1.25cu.ft (35.4liters) TS-W256DVC 0.9cu.ft (25.5liters)</p>	<p>④ ⑤ ⑥</p> <p>TS-W306C 0.7cu.ft (19.8liters) TS-W256C 0.45cu.ft (12.7liters) TS-W306DVC 0.7cu.ft (19.8liters) TS-W256DVC 0.45cu.ft (12.7liters)</p>

The recommended enclosure volumes include speaker displacement.
Les volumes de caisson recommandé comprennent le déplacement HP.
Los volúmenes encuadrados recomendados incluyen el desplazamiento del altoparlante.
Os volumes encuadrados recomendados incluem o deslocamento do alto-falante.

● TEMPLATE ● CALIBRE ● PLANTILLA ● GABARITO

Model Modèle Modelo Modelo	Cutout hole Orifice de découpe Agujero cortado Furo de corte	Mounting depth Profondeur d'encastrement Profundidad de montaje Profundidade de montagem
TS-W306C / TS-W306DVC	φ 278 (10-7/8Dia.)	157 (6-1/8)
TS-W256C / TS-W256DVC	φ 238 (9-3/8Dia.)	143 (5-5/8)

● CHARACTERISTICS ● CARACTERISTIQUES ● CARACTERÍSTICAS ● CARACTERÍSTICAS



—— RECOMMENDED VOLUME VOLUME RECOMMANDÉ VOLÚMEN RECOMENDADO VOLUME RECOMENDADO
- - - - MAXIMUM VOLUME VOLUME MAXIMUM VOLÚMEN MÁXIMO VOLUME MÁXIMO
..... MINIMUM VOLUME VOLUME MINIMUM VOLÚMEN MÍNIMO VOLUME MÍNIMO

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