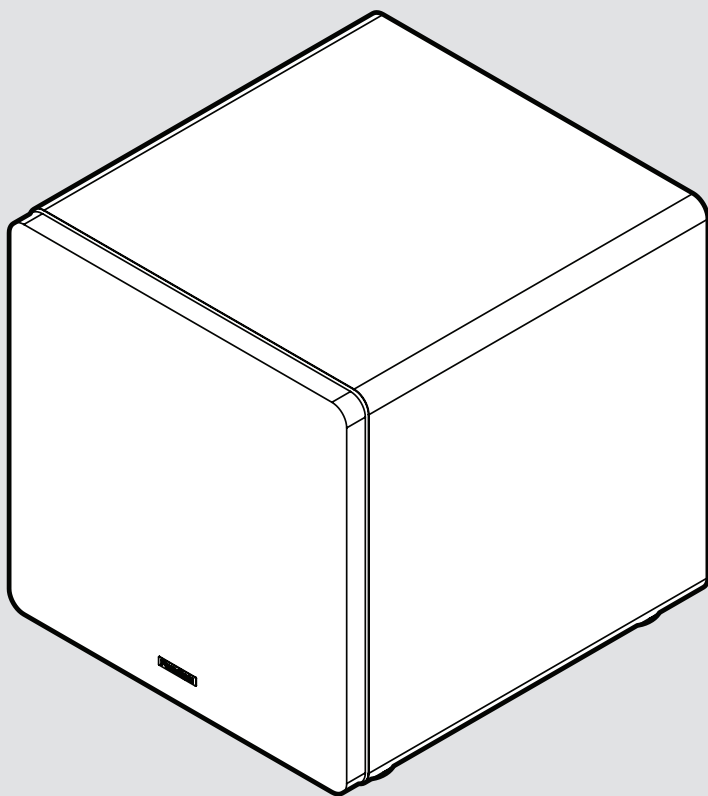


Paradigm®

ESSENTIALS

SUB 12®



Owner's
Manual



The lightning bolt flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of potentially “dangerous voltage” within the product’s enclosure that may be sufficient to constitute a risk of electric shock.



Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



In accordance with the European Union WEEE (Waste Electrical and Electronic Equipment) directive effective August 13, 2005, we would like to notify you that this product may contain regulated materials which upon disposal, according to the WEEE directive, require special reuse and recycling processing. For this reason Paradigm has arranged with our distributors in European Union member nations to collect and recycle this product at no cost to you.

WARNING!

- Refer servicing to a qualified technician.
- To prevent fire or shock hazard, do not expose this module to moisture.
- Turn subwoofer off should any abnormal conditions occur.



To find your local distributor please contact the dealer from whom you purchased this product, email support@paradigm.com or visit the dealer locator at www.paradigm.com.

WARNING!

Changes or modification to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

Notes:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Please note, only this product itself falls under the WEEE directive. When disposing of packaging and other related shipping materials we encourage you to recycle these items through the normal channels.

EU COMPLIANCE INFORMATION

Hereby, PML Sund International declares that this Essentials Sub 12® is in compliance with the essential requirements and other relevant provisions of the following EU Compliance Directive Information.

- Conforms to European Union Low Voltage Directive 2014/35/EU;
- European Union EMC Directive 2014/30/EU;
- European Union Eco-Design Directive 2009/125 and EC;
- European Union WEEE Directive 2012/19/EU;
- European Union Restriction of Hazardous Substances Recast (RoHS2) Directive 2011/65/EU;
- European Union Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) Directive 2006/121/EC;
- You may obtain a free copy of the Declaration of Conformity by contacting your dealer, distributor, or PML Sound International's worldwide headquarters.

Contact information can be found here:

<http://www.paradigm.com>

PROTECTIVE EARTHING TERMINAL (IF APPLICABLE)

The apparatus should be connected to a mains socket outlet with a protective earthing connection.



Maximum temperature 40°C

Min temperature -33°C

Max altitude 2000m

Max humidity 95% non-condensing



L'éclair avec le symbole d'une pointe de flèche, dans un triangle équilatéral, est destiné à alerter l'utilisateur de la présence d'une « tension dangereuse » potentiellement à l'intérieur du boîtier du produit qui peut être suffisante pour constituer un risque de choc électrique.



Lorsque la fiche secteur ou un coupleur d'appareil est utilisé comme dispositif de déconnexion, le dispositif de déconnexion doit rester facilement utilisable.



Le point d'exclamation dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'instructions importantes d'utilisation et de maintenance (entretien) dans la documentation accompagnant l'appareil.



Conformément à la directive DEEE (déchets d'équipements électriques et électroniques) de l'Union européenne en vigueur le 13 août 2005, nous souhaitons vous informer que ce produit peut contenir des matériaux réglementés qui, une fois éliminés, selon la directive DEEE, nécessitent un traitement spécial de réutilisation et de recyclage. Pour cette raison, Paradigm s'est arrangé avec nos distributeurs dans les pays membres de l'Union européenne pour collecter et recycler ce produit sans frais pour vous.

ATTENTION!

- Confiez l'entretien à un technicien qualifié.
- Pour éviter tout risque d'incendie ou d'électrocution, n'exposez pas ce module à l'humidité.
- Éteignez le caisson de basses si des conditions anormales surviennent.



Pour trouver votre distributeur local, veuillez contacter le revendeur auprès duquel vous avez acheté ce produit, envoyez un e-mail à support@paradigm.com ou visitez le localisateur de revendeurs sur www.paradigm.com.

ATTENTION!

Les changements ou modifications apportés à cet appareil non expressément approuvés par la partie responsable de la conformité pourraient annuler le droit de l'utilisateur à utiliser l'équipement.

Remarques:

Cet équipement a été testé et déclaré conforme aux limites d'un appareil numérique de classe B, conformément à la partie 15 des règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions, peut provoquer des interférences nuisibles aux communications radio. Cependant, rien ne garantit que des interférences ne se produiront pas dans une installation particulière. Si cet équipement provoque des interférences nuisibles à la réception radio ou télévision, ce qui peut être déterminé en éteignant et rallumant l'équipement, l'utilisateur est encouragé à essayer de corriger les interférences en prenant une ou plusieurs des mesures suivantes :

- Augmentez la séparation entre l'équipement et le récepteur.
- Connectez l'équipement à une prise sur un circuit différent de celui auquel le récepteur est connecté.
- Consultez le revendeur ou un technicien radio/TV expérimenté pour obtenir de l'aide.



Attention, seul ce produit lui-même relève de la directive DEEE. Lorsque vous jetez les emballages et autres matériaux d'expédition connexes, nous vous encourageons à recycler ces articles par les voies normales.

INFORMATIONS SUR LA CONFORMITÉ UE

Par la présente, PML Sound International déclare que cet Essentials Sub 10® est conforme aux exigences essentielles et aux autres dispositions pertinentes des informations suivantes sur la directive de conformité de l'UE.

- Conforme à la directive basse tension 2014/35/UE de l'Union européenne ;
- Directive CEM de l'Union européenne 2014/30/UE ;
- Directive d'écoconception de l'Union européenne 2009/125 et CE ;
- Directive DEEE 2012/19/UE de l'Union européenne ;
- Refonte de la directive 2011/65/UE sur la restriction des substances dangereuses (RoHS2) de l'Union européenne ;
- Directive 2006/121/CE sur l'enregistrement, l'évaluation, l'autorisation et les restrictions des produits chimiques (REACH) de l'Union européenne ;
- Vous pouvez obtenir une copie gratuite de la déclaration de conformité en contactant votre revendeur, distributeur ou le siège mondial de PML Son international.

Les coordonnées peuvent être trouvées ici : <http://www.paradigm.com>

BORNE DE MISE À LA TERRE DE PROTECTION (LE CAS ÉCHÉANT)

L'appareil doit être connecté à une prise secteur avec une connexion de mise à la terre de protection.



Température maximale 40°C
Température minimale -33°C
Altitude maximale 2000m
Humidité maximale 95 % sans condensation

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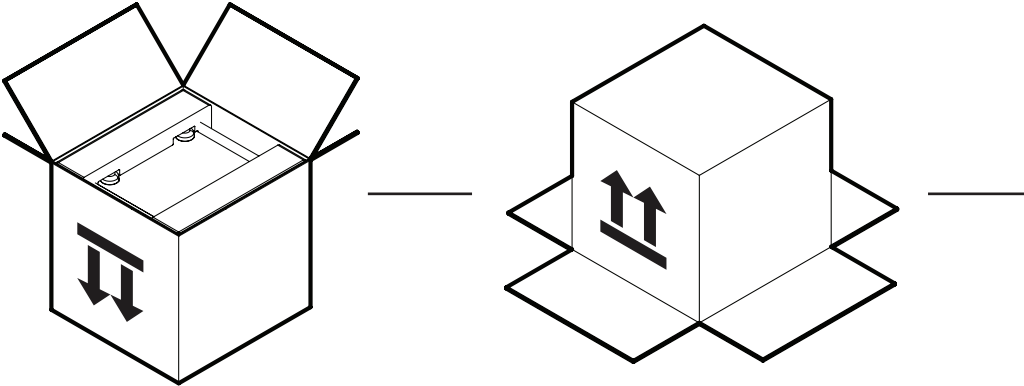
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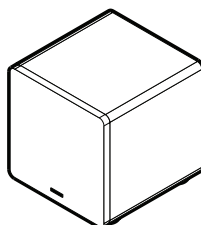
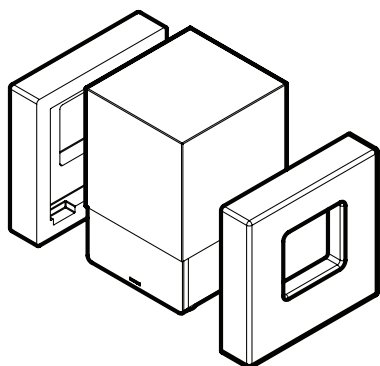
Record your serial number here for easy reference. You will need this information when filling out your warranty registration. The serial number is located near the binding posts and on the product carton.



UNBOXING & CONTENTS



Paradigm®
ESSENTIALS
SUB 12®



CONTROLS

Low-Pass Filter

The Low-Pass Filter lets you adjust the Low-Pass frequency for the left and right inputs. The Low-Pass filter value sets the point where the subwoofer will begin to “roll off” or gradually reduce its output. You do not want your subwoofer playing sounds that are too high in frequency, nor do you want to give your subwoofer too little content to play. This control does not act like a “brick wall” where it completely cuts off sounds above the chosen value, again, it marks the point where the subwoofer will gradually fade out.

If you are using this subwoofer as an LFE channel in a home theater system, or your electronic device already has a built-in Low-Pass Filter, set this control to Bypass. In this mode your electronics will handle the bass management instead of the subwoofer. If your device has a Low-Pass Filter and you do not set the subwoofer's Low-Pass Filter to “Bypass” then you will essentially have 2 filters stacked on top of each other which can significantly reduce the bass output in certain ranges.

If you are using this subwoofer in a 2-channel stereo system, or with a device that does not have a built in Low-Pass Filter, set this control to your desired value. As a general rule, the Low-Pass Filter in these systems is typically set in increments of 20Hz (40/60/80/100) and typically will not exceed 80Hz. 80Hz is often a good starting point for a wide variety of systems. You will not harm anything by experimenting with different settings here. Choose the one you think sounds best.

Volume

Most AV Receivers or Processors have some form of auto-setup/calibration feature that will typically set the levels of the speakers and subwoofer(s). If using this feature, you can set the volume knob on the subwoofer to roughly the halfway point and let the system calibrate the level for you. If you desire more or less bass than what it configures for you, simply adjust the subwoofer volume control (or the subwoofer level control in your electronics) to achieve your preferred sound.

Power Mode

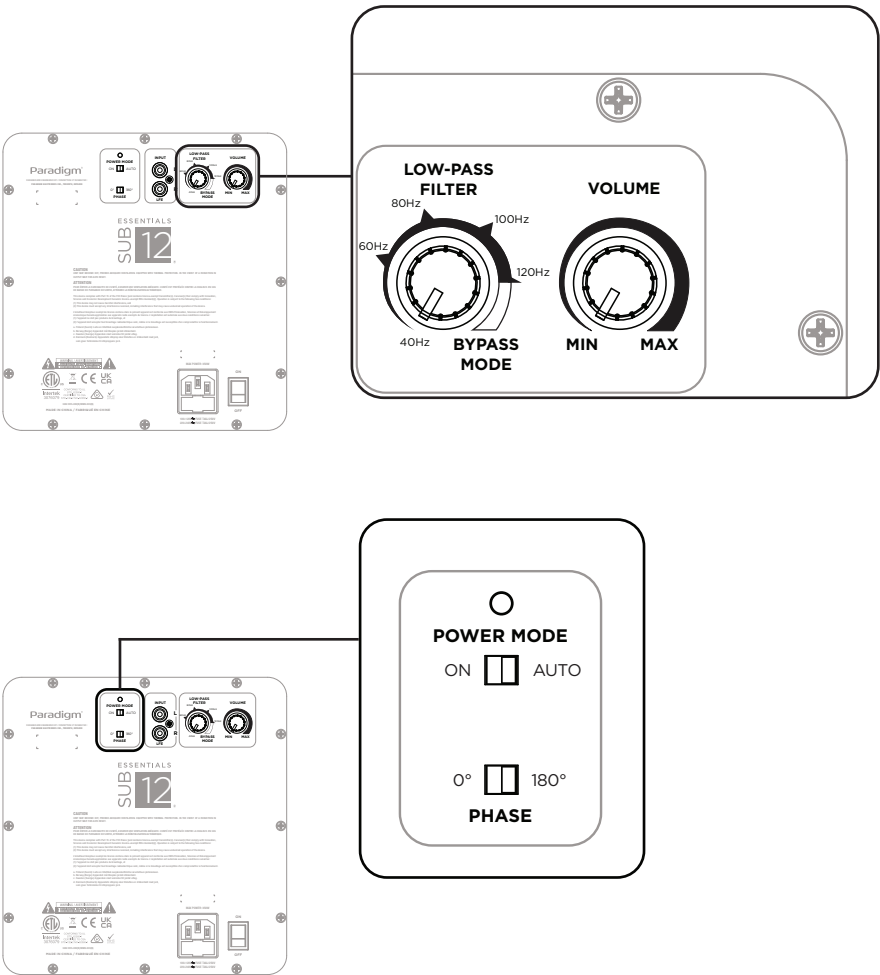
This subwoofer features a signal-sensing power supply that when set to “AUTO” will automatically turn the subwoofer on when a signal is detected on either the Left or Right RCA inputs. It will also power off the subwoofer after sensing no signal for several minutes. The “ON” power mode leaves the subwoofer powered on and ready to play all the time with no delay, but will draw more power while not actively in use.

Phase

The Phase switch allows you to adjust the phase of the subwoofer to 0 or 180°. The Phase control is entirely dependent on numerous factors including the size and configuration of your listening environment, the placement of the unit, and seating arrangement. Due to the way bass sound waves develop in different rooms; there is no rule of thumb for setting phase. For instance, if your room has a peak at the subwoofer crossover area, you may wish to set the phase so the actual acoustic outputs of the subwoofer and main speakers are out of phase. Experiment and try different settings and be patient, ultimately choose the setting that sounds best to you using a variety of content you like to listen to.

Phase continued

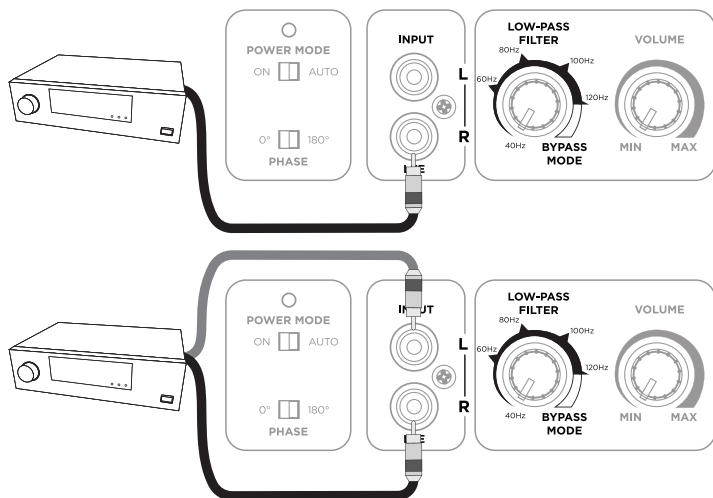
If you are using the subwoofer to augment other Paradigm products, we suggest starting with the phase set at 0°. In a system where phase and polarity are properly set, the main speakers and subwoofer should work together and sound as if there is more total bass in the system. If your main speakers and subwoofers are out of phase their sound waves will cancel each other and total bass output in the system will sound decreased.



AUDIO SIGNAL CONNECTIONS

Line Level Input (Left In / Right In)

Connect from the Main Out/Pre Out/Sub Out on your receiver/pre-amp/electronic device. The setting for the Low-Pass Filter control is applied to the signal received through these inputs unless the Low-Pass filter control is set to Bypass. The Left and Right inputs will be summed internally, so the subwoofer will play content from the Left input, Right input or both simultaneously. Either of the inputs can be used if your device only has a single output.



AC Power Connection



The power cord should not be installed, removed, or left detached from the subwoofer while the other end is connected to an AC power source. The IEC power cord should be firmly inserted into the AC power receptacle on the rear connection panel of the subwoofer, then to any convenient AC wall outlet. The sub also integrates a signal-sensing power supply that automatically switches off after sensing no music signal for several minutes (this will occur when the power switch is set to 'Auto'). Your subwoofer is wired for the power service supplied in the country of original consumer sale. The AC power rating applicable to a particular unit is specified both on the packing carton and on the serial number plate attached to the subwoofer. If you remove your subwoofer from the country of original sale, be certain that AC power supplied in any subsequent location is suitable before connecting and operating the subwoofer. Substantially impaired performance or severe damage may occur to the subwoofer if operation is attempted from an incorrect AC power source.

Break In

☑ ⌚ 50 hrs

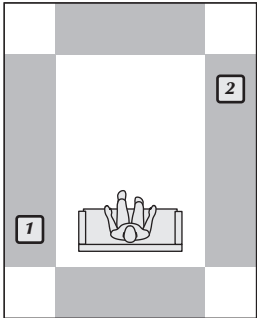
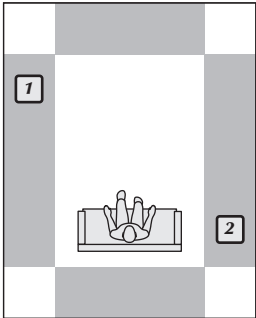
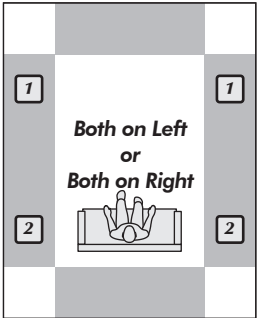
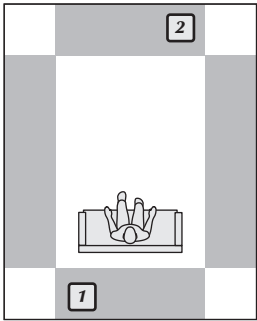
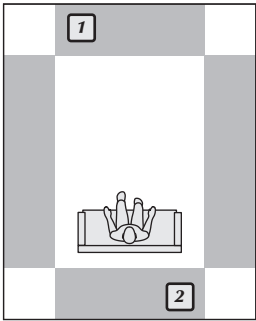
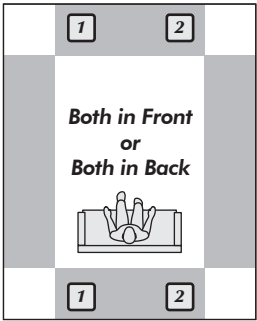
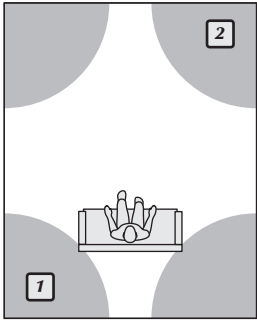
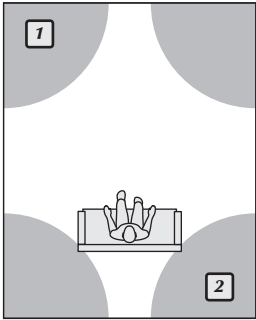
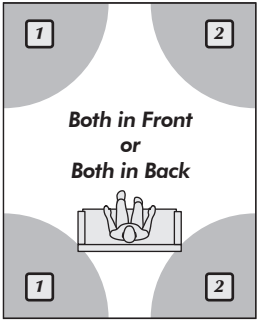
Our custom made woofers require approximately 50 hours of breakin at moderate listening levels before their optimal performance occurs. This will factor in on any critical listening and judgment.

PLACEMENT

Placement

As a starting point, we recommend placing the subwoofer in one of the shaded areas below. The corners will typically yield the highest output, while the front wall near the speakers typically provides the most seamless blend with the main speakers.

When using multiple subwoofers try to place them in opposite corners or opposite walls in order to help spread the bass into the room more evenly. For even better results, try and place the subwoofers at opposite ends of the room as illustrated in the below diagrams.



BENEFITS OF MULTIPLE SUBWOOFERS

The benefits of using multiple subwoofers are well known. Having two (or more) subwoofers in a system can reduce distortion by sharing the load across multiple woofers, allowing each subwoofer to do less work in order for the system to achieve the same volume. Multiple subs can also be used to smooth out the frequency response in your room as bass energy will now enter the room at multiple positions, instead of only one. This technique allows each subwoofer to help fill in gaps in bass output caused by room size, construction, and placement that may otherwise be unavoidable when using only a single subwoofer. The most obvious benefit for those interested in maximum impact, is the increase in maximum potential volume as your woofer count goes up. Last but not least, a more visually symmetrical look can be achieved when an equal number of subwoofers are placed in a room. This is an upgrade path that can always be followed at a later date for those looking to further improve performance.

TROUBLESHOOTING

No Output

- Check that all system components are turned on and source material is playing.
 - Check speaker wires and connections.
 - Check all interconnecting cables.
 - If you are unable to resolve your problem, please contact your dealer or Paradigm customer service (see below).
-

CONTACTING CUSTOMER SERVICE

Email

support@paradigm.com

GENERAL INFORMATION

WARRANTY INFORMATION

Paradigm Electronics Inc. warrants this subwoofer to be free of manufacturing defects in material and workmanship, subject for a period of 3 years. This warranty expires on the anniversary of the product's date of delivery.

The warranty is only valid if purchase of this product was made through an authorized Paradigm dealer or distributor. A copy of the original receipt of sale from an authorized Paradigm dealer or distributor is required for any warranty work.

SERVICE

Should you use your Paradigm product in a country other than the one in which it was originally purchased, we ask that you note the following:

1. The appointed Paradigm distributor for any given country is responsible for warranty servicing only on units distributed by or through it in that country in accordance with its applicable warranty.
2. Should a Paradigm product require servicing in a country other than the one in which it was originally purchased, the end user may seek to have repairs performed by the nearest Paradigm distributor, subject to that distributor's local servicing policies, but all cost of repairs (parts, labor, transportation) must be borne by the owner of the Paradigm product.
3. If, after owning your speaker for six months, you relocate to a country other than the one in which you purchased your speaker, your warranty may be transferable. Contact Paradigm for details.

SERIAL NUMBER

The serial number is located on back of the subwoofer, directly below the Paradigm logo. The serial number may also be found on the product carton.

Ask Your Dealer

Your Paradigm dealer can suggest many options for optimal subwoofer placement. They also have many tools at their disposal, such as experience, familiarity with the associated equipment, and even sound analysis equipment which may make the task of determining optimal subwoofer placement easier.

Enjoy Yourself

Paradigm subwoofers are very refined and will benefit from care in setup. With the above placement tips in mind you will find, over months of listening, that small changes can result in measurable differences. As you live with your subwoofer, do not be afraid to experiment with positioning until you find the optimal relationship between your room, settings and subwoofer that gives you the best results. Your efforts will be rewarded!

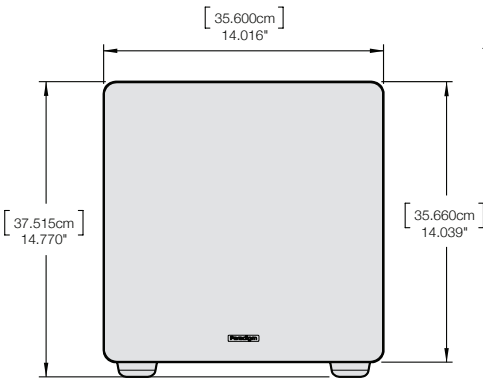
SPECIFICATIONS*

Essentials Sub 12®

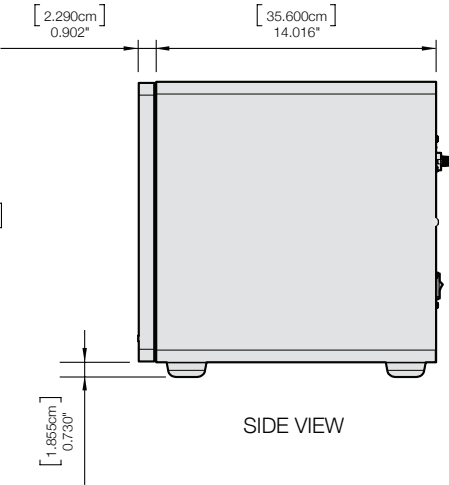
Frequency Response	24Hz-200Hz (in bypass mode)
Low Frequency Driver	12" polypropylene cones
Cabinet	Front-Firing
Amplifier Power	350watt (700watt peak)
Inputs	Left and Right RCA inputs
Weight	29.10 lbs (13.2kg)
Dimensions (HxWxD)	14.770" x 14.016" x 14.906" (37.515cm x 35.600cm x 37.860cm)
Depth for model including the rear controls	15.617" (39.667cm)
Finishes	Black

**Specifications are subject to change without notice.*

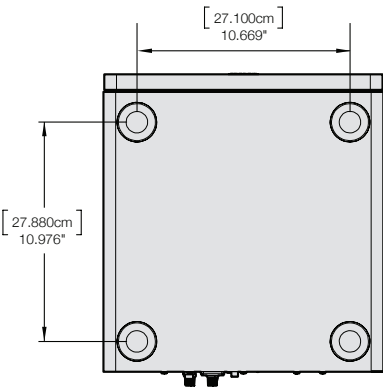
PRODUCT DIMENSIONS



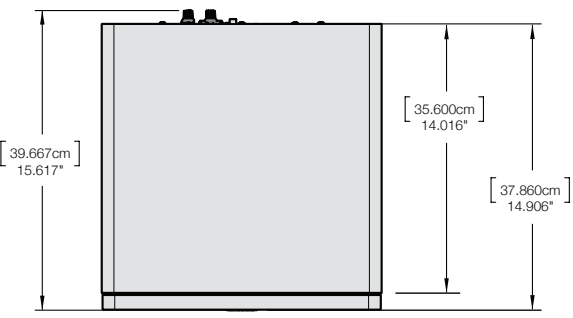
FRONT VIEW



SIDE VIEW



BOTTOM VIEW



TOP VIEW

