

BASSCUBE™ 8S

BASSCUBE™ 10S

POWERED SUBWOOFERS

USER MANUAL

C A M B R I D G E®
SOUNDWORKS



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



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 this product

WARNING

DO NOT OPEN

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SUBWOOFER’S COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVISIQUE

POUR EVITER TOUT RISQUE DE CHOC ELECTRIQUE, NE PAS DEMONTER LE COUVERCLE DU HAUT PARLEUR. AUCUN ENTRETIEN DES PIECES INTERIEURES N’EST REQUIS. TOUT SERVICE D’ENTRETIEN NE DOIT ETRE EFFECTUE QUE PAR DU PERSONNEL D’ENTRETIEN QUALIFIE.

READ AND HEED IMPORTANT SAFETY WARNING ON BACK OF SUBWOOFER ENCLOSURE

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, INSERT FULLY.

ATTENTION:

POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU’AU FOND.

IMPORTANT NOTICE:

THE SERIAL NUMBER IS LOCATED ON THE SUBWOOFER’S BACK PANEL. PLEASE WRITE THIS NUMBER DOWN AND KEEP IT IN A SECURE AREA. THIS IS FOR YOUR SECURITY.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS – All safety and operating instructions should be read before the subwoofer is operated.

RETAIN INSTRUCTIONS – The safety and operating instructions should be retained for future reference.

HEED WARNINGS – All warnings on the subwoofer and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS – All operating and use instructions should be followed.

CLEANING – Unplug the subwoofer from the wall outlet or other power source before cleaning. Use a damp cloth for cleaning.

ATTACHMENTS – Do not use any adapters or attachments not recommended by Cambridge SoundWorks as they may cause hazards.

WATER AND MOISTURE – Do not use the subwoofer near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool or other similar areas.

ACCESSORIES – Do not place the subwoofer on an unstable cart, stand, tripod, bracket, or table. The subwoofer may fall, causing serious injury to a child or adult and serious damage to the product.

VENTILATION – Slots, openings and metal fins in the cabinet are provided for ventilation, to ensure reliable operation of the subwoofer and to prevent it from overheating. These areas must not be blocked or covered such as by placing the product on a bed, sofa, very deep pile rug, or other similar surface. The subwoofer should not be placed in a built-in installation such as a bookcase or rack.

HEAT – The subwoofer should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

POWER SOURCES – The subwoofer should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

POLARIZATION – The subwoofer is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION – The AC power cords should be routed so that they are not likely to be walked on. No object should bring weight to bear on the AC power cords.

LIGHTNING – For added protection for the subwoofer during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the subwoofer due to lightning and power-line surges.

OVERLOADING – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY – Never use probes of any kind to reach into the subwoofer as they may touch dangerous voltage points or short parts that could result in a fire or electric shock. Never spill liquid of any kind on the subwoofer.

SERVICING – Do not attempt to service the subwoofer yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE – Unplug the subwoofer from the wall outlet or other power source and refer servicing to qualified service personnel under the following conditions:

- a) When the power-cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the subwoofer.
- c) If the subwoofer has been exposed to rain or water.
- d) If the subwoofer does not operate normally by following the operating instructions; or exhibits a distinct change in performance.
- e) If the subwoofer has been dropped or damaged in any way.

REPLACEMENT PARTS – When replacement parts are required, be sure the service technician uses replacement parts specified by Cambridge SoundWorks or have the same characteristics as the original part. Substandard substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK - Upon completion of any service or repairs to the subwoofer, ask the service technician to perform safety checks to determine that the subwoofer is in proper operating condition.

INSPECTING FOR DAMAGE

Examine each part carefully for shipping damage. If there is any, do not install or use the system. Return the subwoofer to the store or merchant where you made the purchase or call Cambridge SoundWorks at 1-800-FOR-HIFI (1-800-367-4434) for assistance.

SPECIFICATIONS

(including feet and controls on rear panel)

BassCube 10S:

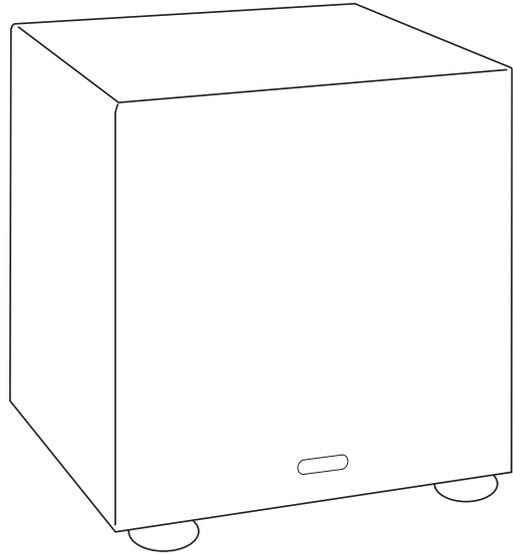
Dimensions: 15"H x 13 1/2"W x 14 3/4"D

Weight: 35 lbs.

BassCube 8S:

Dimensions: 13"H x 11 1/2"W x 12 1/8"D

Weight: 25 lbs.



OPERATING CONTROLS, INPUTS AND OUTPUTS

1. OFF AUTO ON

Set this switch to **AUTO** for normal use. The subwoofer will “power up” rapidly when an audio signal is sensed. The subwoofer will revert to a standby mode after about 15 minutes of no signal. The standby mode uses less power. Set this switch to **ON** should you wish to prevent the subwoofer from entering its standby mode.

2. SUBWOOFER LEVEL

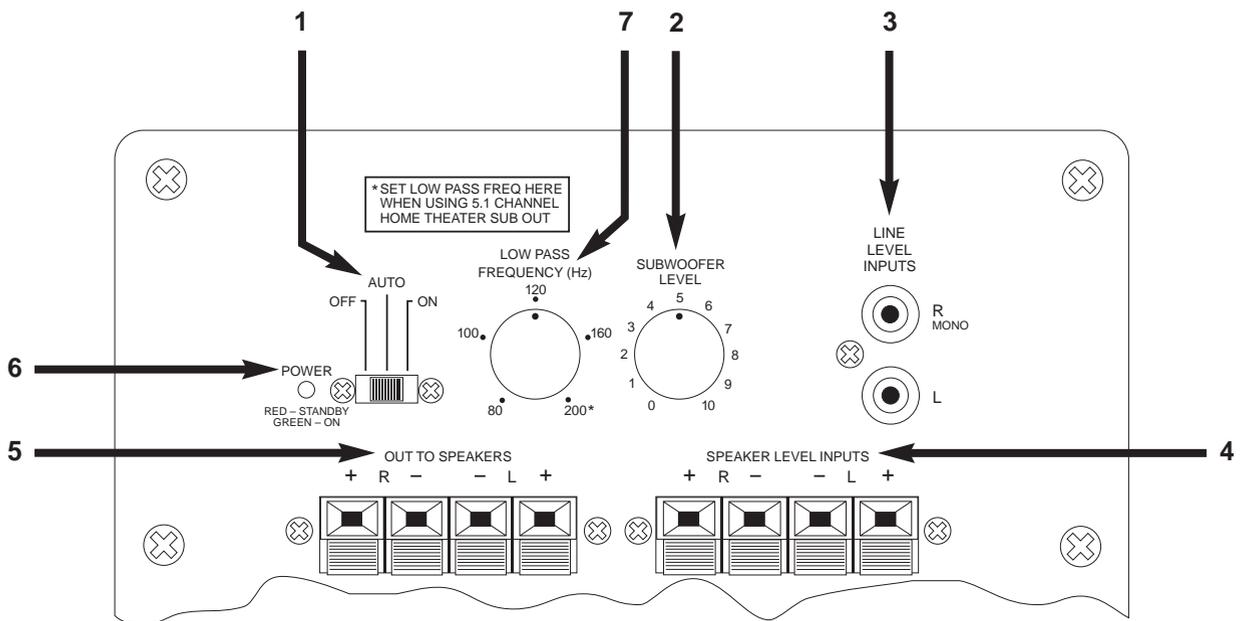
This control sets the overall output level of the subwoofer.

3. LINE LEVEL INPUTS

The Subwoofer Out (or preamplifier outputs) from your audio system connect to these inputs.

4. SPEAKER LEVEL INPUTS

If you do not have, or do not wish to use a line level output from your audio system, you can connect speaker wire from your audio system’s left and right speaker outputs to these inputs.



BassCube 8S Back Panel Diagram

5. OUT TO SPEAKERS

Connect your left and right speakers to these outputs if you use the **SPEAKER LEVEL INPUTS**.

6. POWER indicator

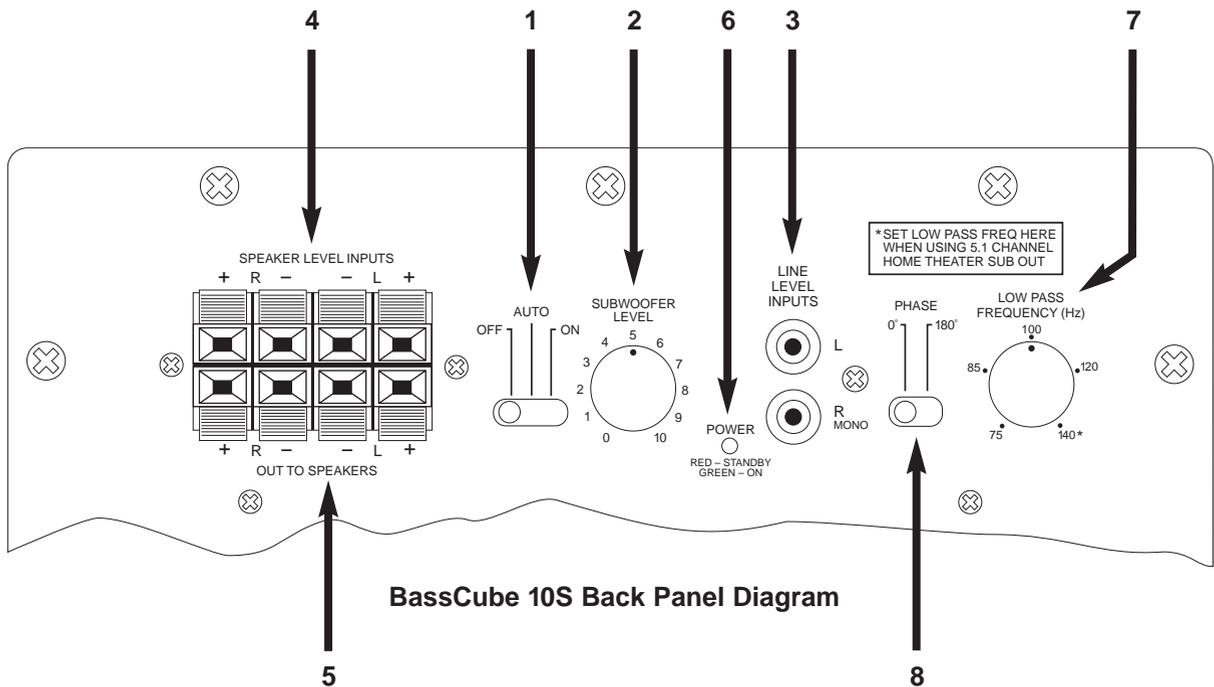
Glowes green during normal operation. Glowes red in standby mode.

7. LOW PASS FREQUENCY

When you connect a BassCube to the Subwoofer Out of a 5.1 channel Dolby Digital® or DTS® audio system, set this control at its full clockwise rotation. If you connect a BassCube with speaker wires, or to the Subwoofer Out of a stereo receiver, adjust this control higher for small main speakers and lower for large main speakers (see page 13).

8. PHASE (BassCube 10S only)

The main speakers and the subwoofer may cancel each other out across the small range of frequencies where they overlap. This control will counteract this effect.



CONNECTIONS

About your audio components:

You can connect a BassCube to a receiver, an integrated amplifier, a preamplifier/power amplifier combination, or other audio component. For brevity, this manual will refer only to a “receiver,” but the instructions will also apply to any audio component.

You can use a line level signal output from one of these components (like a subwoofer output) or speaker level outputs, but not both types of outputs simultaneously. Always set the BassCube’s power switch to **OFF** before making any connections.

Line Level Connection

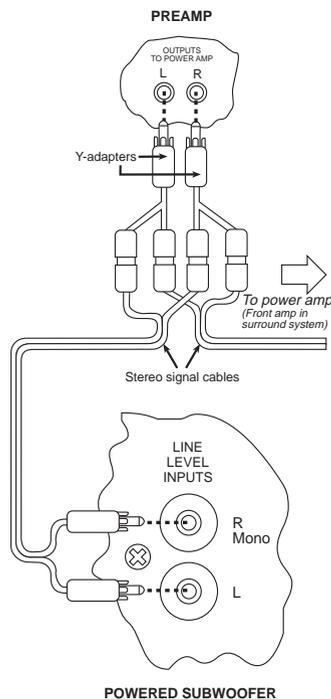
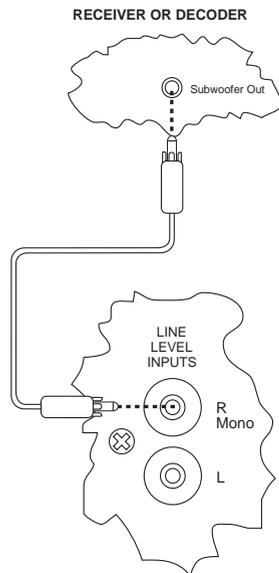
You need a signal cable for this type of connection, usually with an RCA plug at both ends. Connect the BassCube as described below:

Dolby Digital (or DTS) receiver: Connect a mono signal cable from the RCA jack labeled Subwoofer Out (or possibly LFE or just SUB) on the receiver to the BassCube’s **R (mono) LINE LEVEL INPUT**. Set the **LOW PASS FREQUENCY** control to its full clockwise setting.

Dolby Surround® or Stereo receiver with subwoofer output: Connect a mono signal cable from the RCA jack labeled Subwoofer Out (or possibly just SUB) on the receiver to the BassCube’s **R (mono) LINE LEVEL INPUT**. Set the **LOW PASS FREQUENCY** control according to the guide on page 13.

Preamplifier/power amplifier: If your preamplifier has a pair of unused volume-controlled signal outputs, use a stereo signal cable with RCA jacks at both ends to connect it to the BassCube’s **LINE LEVEL INPUTS**.

Otherwise, use two “Y” adapters (Cambridge SoundWorks A1Y1M2FY, one RCA plug to two RCA jacks or equivalent) as shown in the diagram to create an additional pair of signal outputs to connect your BassCube.



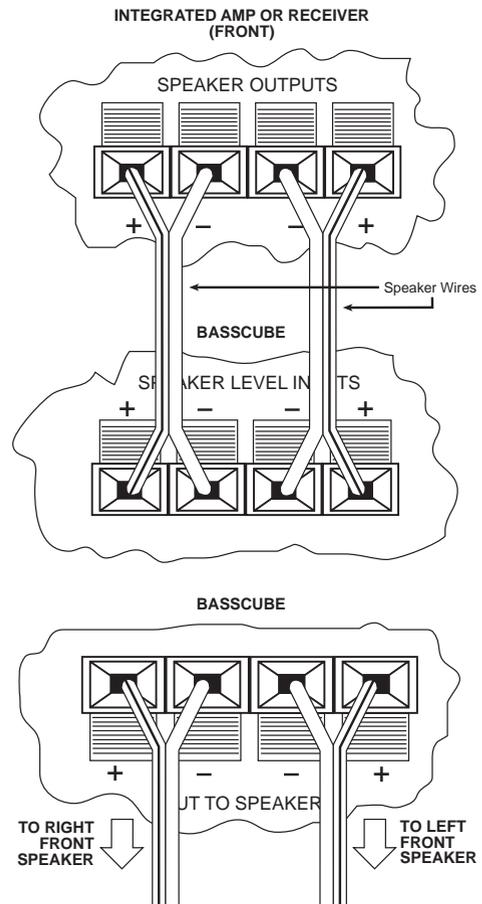
Speaker Level Connection

Connect speaker wire from the receiver's left and right speaker outputs (the main or front connectors) as shown in the diagram. Connect speaker wire from the BassCube's **OUT TO SPEAKERS** connectors to your left and right speakers. Set the **LOW PASS FREQUENCY** control according to the guide on page 13.

Note: When you activate the Subwoofer Out jack on a Dolby Digital audio system, bass signals to the main speakers are automatically filtered out. This is a feature of a Dolby Digital decoder's bass management system. How much bass is filtered out of the main speakers depends on the Dolby Digital settings. If too much bass is filtered out, your audio system will have weak output in the frequency range where your subwoofer and main speakers overlap. This frequency range is often referred to as "midbass."

If you suspect your system has weak midbass output, first make sure your subwoofer's **LOW PASS FREQUENCY** control is set at its full clockwise rotation. Then check your audio system to see if its Dolby Digital decoder has a "crossover" or "high-pass" frequency adjustment for the main speakers. If it does, set it at its lowest frequency setting. These two adjustments should provide you with consistent bass output.

Unfortunately, there may not be an adjustment on your audio system's Dolby Digital decoder for main speaker bass (other than small or large), or it may be hard to hear any improvement. In this case, you can insure accurate midbass output by inactivating the Subwoofer Out jack of your Dolby Digital audio system. (This doesn't "remove" any of the bass signals present in a Dolby Digital recording. The Dolby Digital decoder just sends the Low Frequency Effects channel and all bass signals through the speakers designated as Large.) Set your Dolby Digital decoder's



Front speaker size setting to Large and the Center and Rear speaker size settings to Small. Then connect the BassCube and front speakers as described above in Speaker Level Connections. Afterwards, you can use the BassCube's **LOW PASS FREQUENCY** and **SUBWOOFER LEVEL** controls to achieve proper midbass output.

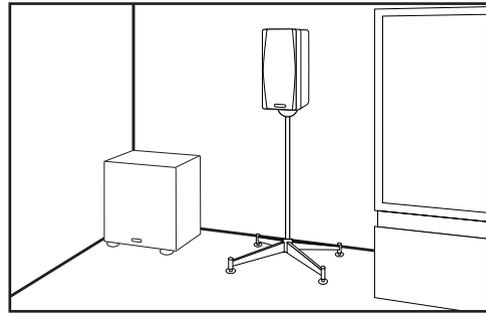
PLACEMENT

The subwoofer should be placed on the floor. Its location in the room affects its output. The output increases the closer the subwoofer is placed to the intersection of walls and floors (see diagrams).

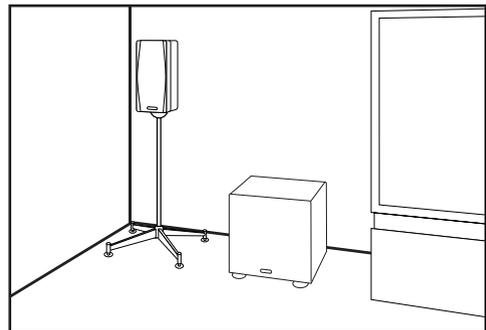
Some Advantages Of Corner Placement: Corner placement also provides the most consistent output from deep bass to upper bass. Since corner placement “forces” more of the bass energy toward the center of the room, you can operate the subwoofer at a lower overall gain setting than if it was in the middle of a wall. This reduces the amount of bass someone in a nearby room will hear.

Other locations: Any position in a room can be used, but a position away from the intersection of two room surfaces has two drawbacks. The subwoofer will not achieve as strong an output as near a wall, and the output across the subwoofer’s range will be less consistent.

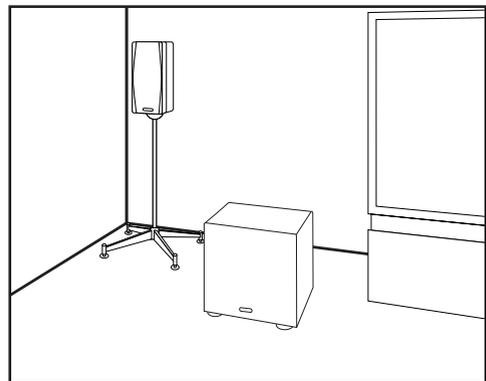
Ventilation: Because the subwoofer requires ventilation, do not place it inside a wall unit or any piece of furniture. Also, don't place it near heat sources or against furniture, draperies or other material that will block the free flow of air from around the subwoofer.



Maxium Bass Output



Moderate Bass Output



Least Bass Output

FINAL SETUP

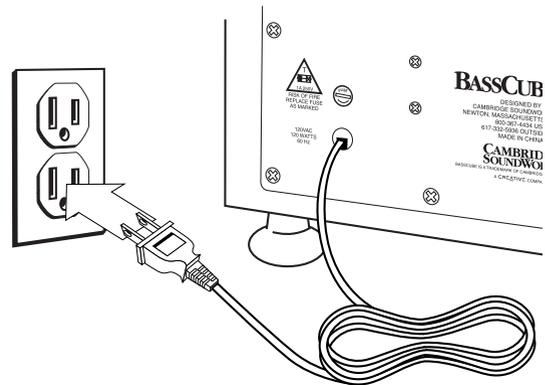
Power Connections

Make sure the BassCube's power switch is in the **OFF** position. Insert the BassCube's power cable into an AC wall outlet (The switched accessory outlets on receivers are not recommended for use with a BassCube). Turn the BassCube's power switch to the **AUTO** position.

Test Your Setup

Once all connections have been made, test your sound system to verify that the subwoofer produces bass output. Advance the **SUBWOOFER LEVEL** control to the 10 o'clock position. Turn on your receiver and play a CD or movie you know to have significant bass. Listen for the subwoofer output as you increase your receiver's volume control up to a moderate volume level. If you don't hear any output from the subwoofer, slowly advance the **SUBWOOFER LEVEL** until you hear output.

If you still don't get any output, recheck your connections.



Adjusting For Best Performance

We recommend you adjust the BassCube in the following sequence:

1. Set the **LOW PASS FREQUENCY** according to the guide on page 13.

2. Set the **SUBWOOFER LEVEL** control by ear, until you are happy with the overall bass balance.

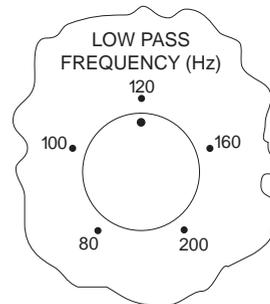
3. (BassCube 10S only) Set the **PHASE** switch by ear, listening for slightly stronger output.

Phase switch adjustment: Play program material with a constant beat or bass output (like a kick drum in a rock recording). Have someone else operate the switch while you LISTEN FOR any output difference from your preferred listening position. Leave the **PHASE** switch in the setting that provides the louder output. It's possible you will not hear a difference. This is normal.

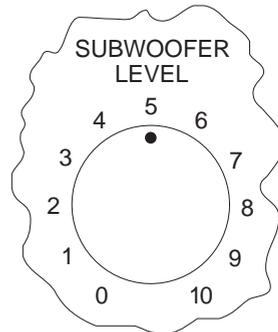
If you heard an increase in bass output, you could reset the **SUBWOOFER LEVEL** control to compensate.

BassCube 8S control is shown.
BassCube 10S control is similar.

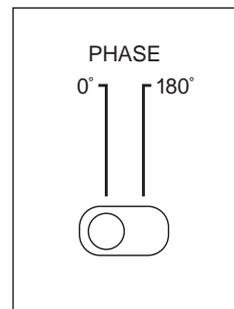
1.



2.



3.



BassCube 10S only.

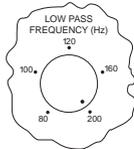
LOW PASS CONTROL SETTINGS

The **LOW PASS FREQUENCY** control on a BassCube is continuously variable. The following recommendations describe specific settings, but feel free to choose an intermediate setting if it sounds best to you.

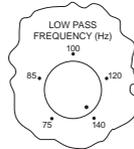
Dolby Digital® sound systems

A Dolby Digital decoder provides its own processing when you activate the decoder's Subwoofer Out jack. Set the BaseCube's **LOW PASS FREQUENCY** control at its fully-clockwise position; this will effectively bypass it (see examples below).

Note: A Dolby Digital receiver has a large/small speaker selector and a Subwoofer Out jack On/Off selector. We recommend setting the first option to SMALL for the Front, Center and Rear speakers in your system, unless the speakers are floor-standing, with a ten-inch woofer or larger.



BassCube 8S

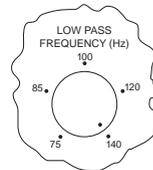


BassCube 10S

Dolby Surround (Pro Logic) and Stereo sound systems

Follow the guidelines in the next column when both your main speakers and your subwoofer are driven by a full range signal. This is the case in a stereo component system or a Dolby Surround with Pro Logic system.

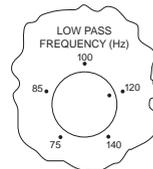
The BassCube 10S **LOW PASS FREQUENCY** control is shown in the next column. The guidelines apply equally to the BassCube 8S **LOW PASS FREQUENCY** control.



140 Hz

Use a 140 Hz setting for small "satellite"-type main speakers ("minispeakers") or any speaker with a single four-inch low frequency driver or smaller. Use this setting with these Cambridge SoundWorks main speakers:

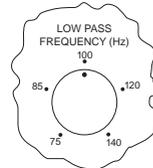
Ensemble III satellites
Ensemble IV satellites



120 Hz

Use a 120 Hz setting for larger satellite main speakers and the smallest bookshelf speakers. Use this setting with these Cambridge SoundWorks main speakers:

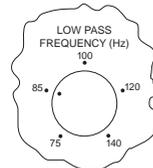
Ambiance 52
MovieWorks® satellites
Ensemble® satellites
Ensemble II satellites
Newton Series™ MC200



100 Hz

Use a 100 Hz setting for medium size bookshelf speakers. Use this setting with these Cambridge SoundWorks main speakers:

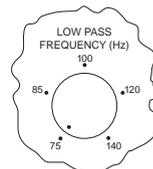
Model 17
Ambiance® 62
Ambiance 82
Newton Series M50
Newton Series MC300



85 Hz

Use an 85 Hz setting (or 80 Hz on BassCube 8S) for large size bookshelf speakers and small floor-standing speakers. Use this setting with these Cambridge SoundWorks main speakers:

Model 6
Tower III
Newton Series M60
Newton Series M80
Newton Series MC500



75 Hz
(BassCube 10S only)

Use 75 Hz for large floor-standing speakers. Use this setting with these Cambridge SoundWorks main speakers:

Tower II
Tower

Cleaning the Cabinets

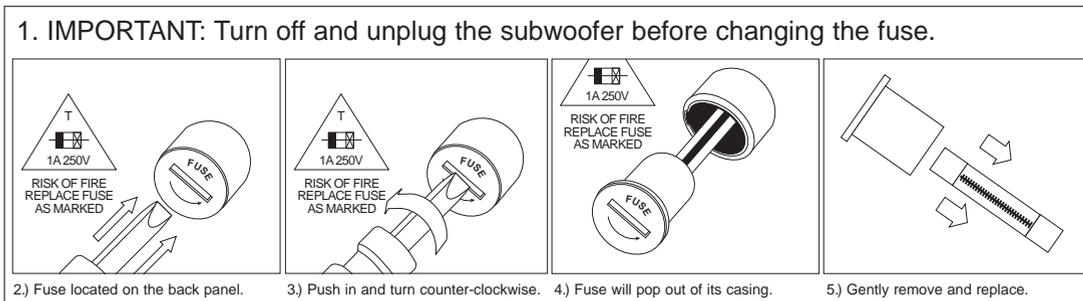
If more than dusting is needed, the finish on the subwoofer can be cleaned with a window or vinyl cleaning product. Avoid spraying the cleaner underneath the cabinet to prevent damage to the speaker. Avoid placing the BassCube on a wet or damp carpet.

Final Adjustment Note:

Use a variety of your favorite program material (video or audio) when adjusting the subwoofer output. Once you arrive at the best setting, leave the **SUBWOOFER LEVEL** control at that setting. Use your audio system tone controls to make temporary bass output adjustments.

We hope you enjoy the new sonic dimensions your BassCube subwoofer reveals to you.

Fuse Replacement



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