



QBx Sub

Powered Subwoofer
Owner's Manual



Snell





IMPORTANT SAFETY INSTRUCTIONS



WARNING: To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.



The lightning flash with arrowhead symbol, 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 a risk of electric shock to persons.



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

- 1. Read Instructions:** All the safety and operating instructions should be read before the product is operated.
- 2. Retain Instructions:** The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings:** All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions:** All operating and use instructions should be followed.
- 5. Water and Moisture:** The product should not be used near water—for example, a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 6. Carts and Stands:** The product should be used only with a cart or stand that is recommended by the manufacturer. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



- 7. Wall- or Ceiling-Mounting:** The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation:** The product should be situated so that its location or position does not interfere with its proper functioning. For example, the product should not be situated on a bed, sofa, rug, or similar surface that may obstruct the heat sink surfaces, nor placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air near the heat sink surfaces.
- 9. Heat:** The product should be situated away from heat sources such as radiators, stoves, or other products that produce heat.
- 10. Power Sources:** The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
- 11. Grounding or Polarization:** This product may be 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.

- 12. Power Cord Protection:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords and plugs, convenience receptacles, and the point where they exit from the product.

- 13. Cleaning:** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

- 14. Nonuse Periods:** The power cord should be unplugged from the outlet when left unused for long periods of time.

- 15. Object and Liquid Entry:** Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the product.

- 16. Lightning:** For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges.

- 17. Damage Requiring Service:** The product should be serviced if any of the following events occur:

- A. The power supply cord or the plug has been damaged;
- B. Objects have fallen or liquid has been spilled into the product;
- C. The product has been exposed to rain;
- D. The product does not appear to operate normally or exhibits a marked change in performance; or
- E. The product has been dropped or the enclosure damaged.

- 18. Servicing:** The user should not attempt to service the product beyond what is described in the operating instructions. For all other servicing, consult your dealer or contact Snell Acoustics.



Declaration of Conformity
Konformitätserklärung
Déclaration de Conformité
Declaración de Conformidad
Verklaring de Overeenstemming
Dichiarazione di Conformità

We/Wir/Nous/WIJ/Noi:
Snell Acoustics, Inc.
143 Essex Street, Haverhill, MA 01832 U.S.A.

declare under sole responsibility that the
product

QBx Sub

to which this declaration relates, is in
conformity with the following standards or
other normative documents: auf das sich
diese Erklärung bezieht, mit der/den
folgenden Norm(en) oder Richtlinie(n)
übereinstimmt; auquel se réfère cette
déclaration est conforme à la (aux) norme(s)
ou au(x) document(s) normatif(s); al que se
refiere esta declaración es conforme a la(s)
norma(s) u otro(s) documento(s) normati-
vo(s); waarnaar deze verklaring verwijst, aan
de volende noem(en) of richtlijn(en)
beantwo-ordt: a cui si riferisce questa
dichiarazione è conforme alla/e schuente/i
norma/o docu-mento/ i normativo/i.

European Users:

This equipment has been tested and found to
comply with the following European
directive:

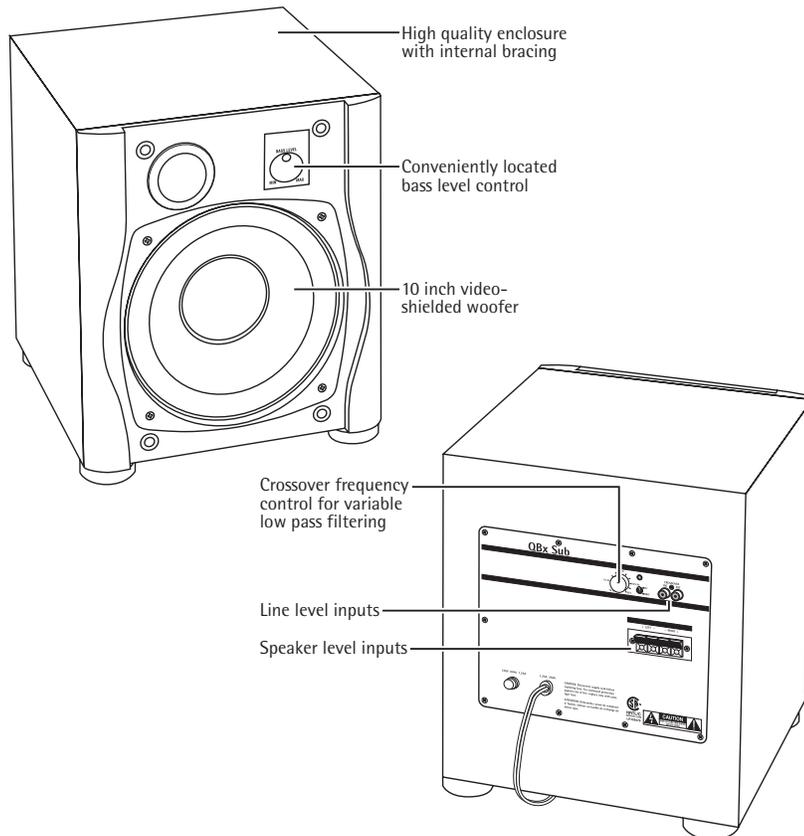
- (i) EMC Directive 89/336/EEC amending
directive 92/31/EEC 93/68 EEC as per
 - EN 50081-1: 1992 according to
 - EN55013: 1990 Class B
 - EN50082-1: 1997 according to
 - EN61000-4-2: 1995
 - EN61000-4-3: 1997
 - EN61000-4-4: 1995

- (ii) Low Voltage Directive (Safety) 72/23/EEC
as per EN60065: 1993



SPECIFICATIONS

Frequency Response ($\pm 3\text{dB}$)	35-150Hz
Subwoofer Amplifier Power	100 watts, <math><0.5\%</math> THD, 20-150Hz
Subwoofer Crossover	70-150Hz 24dB/octave low-pass
Crossover Bypass	Yes
Bass Unit	10 inch video-shielded woofer
Enclosure Type	Ported
Cabinet Construction	3/4-inch walls with internal bracing
Dimensions (HxWxD)	14 ³ / ₈ " x 13" x 12 ⁵ / ₁₆ " (365 x 330 x 313 mm)
Shipping Weight	34 lbs (15.42kg)
Finish	Black Painted Oak or Cherry





PRODUCT DESCRIPTION

The QBx ("Quiet Box") Sub is a powered subwoofer that delivers the dynamic bass foundation that is essential for lifelike reproduction of music in the home.

The amplifier in the QBx Sub has a built-in variable crossover that makes it easy to achieve a seamless blend with the main speakers. A 24dB/octave low-pass filter prevents the subwoofer from being easily localized by ear, increasing placement flexibility. An external crossover input is provided for use with home theater electronics that perform their own bass management functions.

The high-power amplifier and computer-optimized tuning of the QBx Sub enable it to produce impressive, deep bass at high output levels from a remarkably compact enclosure. In addition, it features a limiter circuit that tracks the input signal to the subwoofer and prevents the amplifier from being driven into audible distortion. The benefit: The bass stays clean and strong at any listening level.

Auto on-off amplifier switching and easily accessible controls make the QBx Sub as convenient to use as it is exciting to listen to.

CONNECTIONS

NOTE: Power is always supplied to the subwoofer electronics unless it is unplugged. The auto-on circuitry only activates or deactivates the power amplifier. Make sure your subwoofer and receiver are unplugged when making the connection.

Line Level

Use the line level inputs with most systems. These inputs accept the line level signal from your receiver's subwoofer output. The subwoofer's circuitry filters out the high frequencies and sends the remaining low frequencies to the subwoofer power amplifier.

Speaker Level

Use these high-level terminals with receivers that do not have subwoofer output. The speaker inputs accept both left and right channel speaker signals from your receiver.



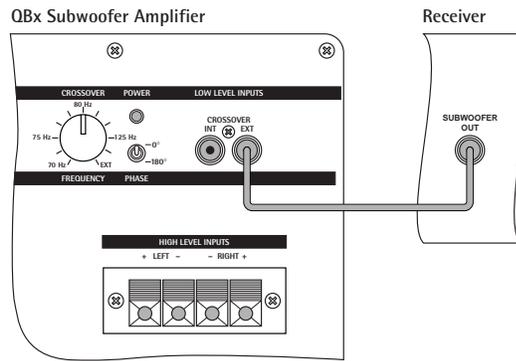


Connecting the QBx Sub to a Digital 5.1 Channel Home Theater System

Digital 5.1 home theater electronics dedicate one channel (the ".1" of 5.1) to reproduce the special low-frequency effects (LFE) information (such as explosions and thunder) contained in digitally encoded soundtracks.

Select "subwoofer-yes" from your receiver's set-up menu. Hooked up this way, the receiver's amplifier is relieved of having to reproduce the difficult low bass signals that can drive the receiver into audible distortion.

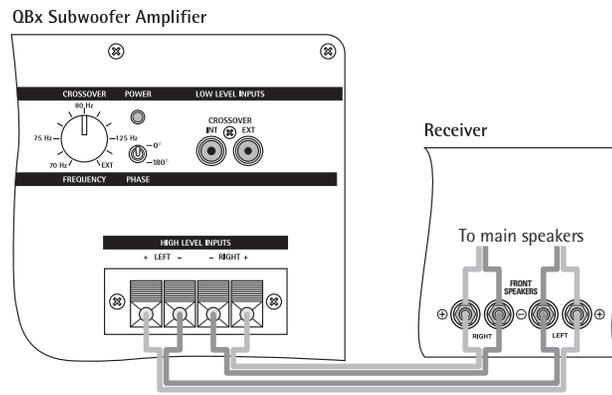
Use an RCA cable (not included), as shown, to connect your digital receiver's subwoofer output to the subwoofer. Use the "Crossover Ext" input.



If you do not wish to run RCA cables to your subwoofer, you may use speaker wire to connect the subwoofer in parallel with your main speakers. The subwoofer does not present any additional load to your receiver.

Select "subwoofer-no" from your receiver's set-up menu. This sends the LFE signal to the main left and right speakers, and thus to the subwoofer. Consult your receiver's owner's manual for more details.

When using the speaker wire hookup, the subwoofer's built-in crossover is engaged. As a starting point, set the crossover control on the subwoofer about 10Hz higher than the lower limit of your main speakers' bass response. Fine-tune the crossover setting by ear for the smoothest blend with your main speakers. The best setting of the crossover control will depend on speaker placement and personal preference.



Be sure to connect "+" to "+" and "-" to "-".



Connecting Your Subwoofer to Stereo or Dolby® Pro Logic® Systems

For stereo or Dolby Pro Logic systems, the easiest method is to use the same speaker wire connections as are used for connecting to a 5.1 home theater system. See the illustration at the bottom of the facing page.

When using speaker wire or the "Crossover Int" input, the subwoofer's built-in crossover is engaged. As a starting point, set the crossover control on the subwoofer about 10Hz higher than the lower limit of your main speakers' bass response. Fine-tune the crossover setting by ear for the smoothest blend with your main speakers. The best setting of the crossover control will depend on speaker placement and personal preference.

CONTROLS

Bass Level Control

This control adjusts the sound level of the subwoofer. It is located behind the grille on the front of the cabinet. Grasp the top and bottom edges of the grille and pull the grille straight off the front of the cabinet. A typical setting is for the control is around the 12 o'clock position. See the information in the preceding sections on connection for more details.

Crossover Control

This control, located on the amplifier panel on the rear of the cabinet, adjusts the frequency of the low-pass filter for the subwoofer. See the information in the preceding sections on connection for more details.

Polarity Switch

This switch, also located on the amplifier panel on the rear of the cabinet, selects regular (0°) or inverted (180°) polarity for the subwoofer. Set this switch to provide the fullest, most dynamic bass. The distinction of phase will be most audible on low-frequency percussion instruments or music with a continuously repeating bass line.

NOTE: Power is always supplied to the subwoofer electronics unless it is unplugged. The auto-on circuitry only activates or deactivates the power amplifier.

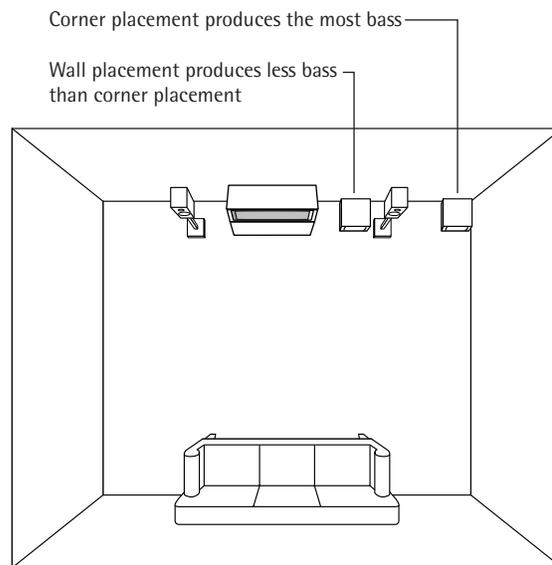


PLACEMENT

Place the QBX Sub next to a wall or in a corner near your main speakers. Typically, the sound is best when the subwoofer is within 15 feet (5m) of the main speakers. However, the sharp 24dB/octave crossover roll-off permits placement farther from the main speakers if necessary. Since the ear is unable to localize the low frequencies of the subwoofer, the bass still appears to come from the main speakers.

The level of bass output from the QBX Sub will vary at different positions in a room. When placed near walls, its loudness is emphasized. Corner placement provides the most bass output, while placement near only one wall will provide somewhat less bass. Placement completely away from walls may produce too little bass. Regardless of how you place the QBX Sub, you can adjust its level with the level control. If you move the QBX Sub, recheck the setting of the polarity switch. Use the setting that yields the louder and more dynamic sound.

IMPORTANT: Do not place the QBX Sub where there is a chance of contact between the rear panel amplifier plate and drapes or furniture. Avoid obstructing air flow to the back of the unit.





LIMITED WARRANTY

During the warranty period, Snell Acoustics will repair, for the original owner, any defect in materials or workmanship that occurs in normal use of the speaker system, without charge for parts and labor. The warranty period for all parts of the QBx, except the amplifier, is five (5) years. The warranty period on the amplifier is one (1) year.

Your responsibilities are to use the product according to the instructions supplied, to provide safe and secure transportation to an authorized Snell Acoustics service representative, and to present proof of purchase from an authorized Snell dealer in the form of your sales slip when requesting service.

Excluded from this warranty is damage that results from abuse, misuse, accidents, shipping, repairs, or modifications by anyone other than an authorized Snell Acoustics service representative. This warranty is void if the serial number has been removed or defaced.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

If Service Seems Necessary

Contact the dealer from whom you purchased the speaker system. If that is not possible, call us at 978-373-6114, or write to:

Snell Acoustics
143 Essex Street
Haverhill, MA 01832

We will promptly advise you of what action to take. If it is necessary to return your speaker system to the factory, please ship it prepaid in the original factory packaging. Please note that Snell Acoustics will not be held liable for shipping damage due to improper packaging. After it has been repaired, we will return it freight-prepaid in the U.S. or Canada.



Snell

143 Essex Street
Haverhill, MA 01832
phone: 978-373-6114
fax: 978-373-6172
email: info@snellacoustics.com
www.snellacoustics.com

©1999 Snell Acoustics. All Rights Reserved.
Specifications are subject to change without notice.
Covered by patents issued and/or pending.
Part #542-1011

