

Owner's Manual

**AMC**

Sub 12

Snell

## SPECIFICATIONS

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Frequency Range ( $\pm 2$ dB):	20 Hz to 80Hz
Driver Complement:	One 12" Cast frame woofer in a front-vented enclosure
Dimensions:	Enclosure: 53" H x 14 1/4" W x 6 7/8" D Trim Ring: 15 1/4" x 15 1/4" Drywall Opening 14 3/8" x 14 3/8"
Installation Environment:	New Construction or Retrofit
Weight:	70 lbs. each
Parts Provided:	1- AMC Sub 12 1-Instruction Manual
Available Options:	Metal trim ring and grille finished in black or white. Custom colors available for an additional charge.

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NOTE: Woofer may be installed after framing and dry wall procedure completion.

## PRODUCT DESCRIPTION

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The Snell AMC Sub 12 serves one simple function – it extends the bass response of an audio system down to the limits of audibility. In doing so, it gives the system the sonic foundation needed to deliver the full impact of movie sound tracks and the deepest fundamentals of music. Just as impressive as the bass extension the Sub 12 provides, is the fact that it can be mounted in any wall, ceiling or floor constructed of standard 2" x 8" lumber mounted on 16" centers.

The AMC Sub 12 is truly an exceptional value. A specially designed cast-frame 12" woofer permits long linear excursion resulting in excellent frequency response and dynamic range for bass performance that can be felt as well as heard. Many other subwoofers designed for custom installation use the space inside the wall for an enclosure. The size and shape of that space, and amount and type of insulation that may be in the wall, dramatically affects the sound the speaker produces. In contrast the AMC Sub 12 is a complete enclosed system. This ensures consistent, predictable performance.

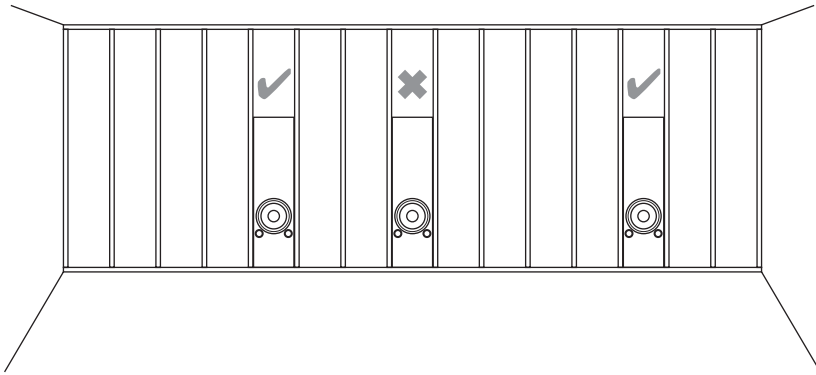
When the goal is to make the subwoofer disappear, leaving only the impact of the audio/video sound track, or the deepest musical fundamentals, the AMC Sub 12 is the ultimate choice.

## Placement

Placement of your new AMC Sub12 is very important in achieving the smoothest possible bass response. The design of the AMC Sub 12 allows for many installation options. While the traditional subwoofer cabinet is vertical with the woofer toward the bottom, the AMC Sub12 can be placed on its side, vertically with the woofer toward the top, or even in the floor or ceiling.

One of main things to do when selecting an installation location is to avoid places that are symmetrical with the dimensions of the room. This helps avoid peaks and dips in the response of the subwoofer. (These response errors are the result of the bass sound waves interacting with the room – reinforcing some frequencies and canceling others.)

A useful placement guideline is the "rule of odd fractions". This means that you should try to place the subwoofer  $1/3$  or  $1/5$  of the way along the wall. Take for example, a wall that is about 20 feet long. It has 15 between-the-stud spaces. The Sub 12 should never be mounted in the eighth space – that would put it in the center of the wall. Rather it should be mounted in the third or fifth space – putting the subwoofer  $1/5$  or  $1/3$  of the wall along the wall.



In some situations, it may not be possible to install the subwoofer into a wall. In this case the ceiling, floor, or even a closet are options. Wherever the AMC Sub 12 is installed it must be securely mounted. If it is not securely mounted, its substantial bass output may produce rattles. In addition, be sure that the connectors are accessible for electrical hook-up.

## INSTALLATION INSTRUCTIONS

**Note:** This manual assumes the installer possesses skill in the proper use of hand and power tools, a knowledge of local building and fire codes and a familiarity with the environment behind the wall or ceiling in which the speakers will be installed.

As with all Snell in-wall loudspeakers, securing the unit to the internal wall structure is extremely important. With the AMC Sub 12 this is particularly important, because the powerful low frequency sound it produces can cause any loose objects within the wall or around the room to vibrate or rattle. Be sure to examine the area where the AMC Sub12 is to be installed and secure or relocate any items that may rattle.

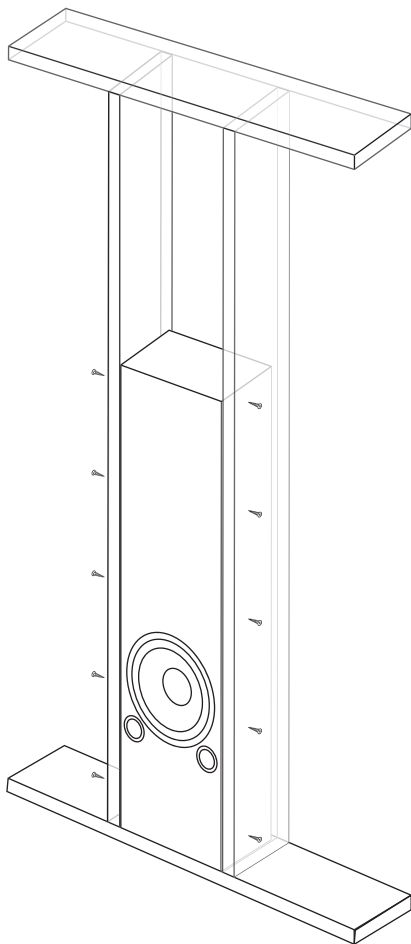
### Preconstruction

The AMC Sub12 is 53" high by 14<sup>1</sup>/<sub>4</sub>" wide by 6<sup>7</sup>/<sub>8</sub>" deep. Given its depth relative to a traditional wall depth of 3<sup>1</sup>/<sub>2</sub>", you will need to construct a "double-studded" wall. This will give you approximately 7<sup>1</sup>/<sub>2</sub>" of depth in which to install the 6<sup>7</sup>/<sub>8</sub>" cabinet.

The AMC Sub12 should be solidly coupled to the studs on either side of the cabinet and to the drywall in front of it. To help achieve a solid coupling, apply rope-type window caulking material between the sides of the cabinet where they meet the studs and to the front of the cabinet above the woofer. This will help prevent rattling while the Sub12 is operating.

Use 3" wood screw to secure the AMC Sub12 to the 2" x 8" studs. Bring the face of the AMC Sub12 baffle right up to the front edge of the wall stud. Drive ten of the wood screws through the studs on either side of the Sub12 and into the cabinet. The screws should be equally spaced from the top of the cabinet to just above the woofer.

Once the AMC Sub 12 is secured to the wall studs, the drywall can be installed. The drywall will cover the AMC Sub 12 except for a 14<sup>3</sup>/<sub>8</sub>" square opening around the woofer and ports to accommodate the grille/trim ring. See the "Grille Installation" section on the following page. The 12" woofer may be removed from the cabinet to protect it from damage while the wall construction is completed.



## Retrofit

Retrofit installations require more work than new construction installations, because most walls are constructed with conventional 2" x 4" studs. In such situations, an additional wall section will have to be constructed on top of the existing wall in order to have the  $6\frac{7}{8}$ " of depth needed to install the AMC Sub 12 cabinet. In some rooms, this approach is actually beneficial because the wall construction can create an interesting column which breaks up the traditional four flat walls common in most decors.

Once the second wall (or trim column) is constructed, install the AMC Sub12 enclosure as described in the Preconstruction section. To complete the drywall installation over the face of the AMC Sub 12 cabinet, cut out a  $14\frac{3}{8}$ " square hole in the drywall to expose the woofer and ports.

## ELECTRICAL CONNECTION

Snell recommends soldering spade lugs on the speaker wire and then securing the spades to the binding posts firmly with a nut driver or wrench to ensure a solid, long-term connection. Be sure to connect the positive (+) amplifier terminal to the RED binding post of the Sub12, and negative (-) amplifier terminal to the BLACK binding post, to achieve the correct polarity. All wire has a stripe on one side, or ridges molded into the insulation, or some other marking to make it easy to trace the connections be sure the wire are connected properly.

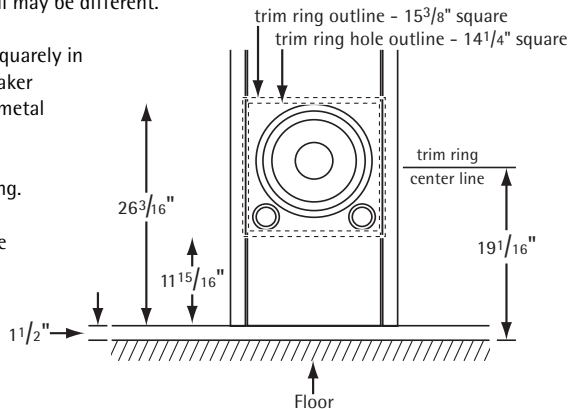
## OPTIONAL GRILLE INSTALLATION

An optional grille kit is available for the Snell AMC Sub 12. The kit includes a grille covered with black or off-white acoustically transparent cloth. Also included is a metal trim ring that gives the installation a clean, finished appearance. The trim ring is painted to match the grille cloth. The trim ring can be easily repainted to match your wall color. Grille kits in custom colors are available from Snell at an additional charge.

First, install the metal grille trim ring. It is designed to finish the hole and provide for a flush grille mounting. The depth of the trim ring will accommodate a minimum wall thickness of  $\frac{1}{4}$ ". Since most walls are made of material that is  $\frac{1}{2}$ " or more thick there will typically be a gap between the back of the trim ring and the front of the AMC Sub 12.

Installation of the trim ring requires a hole that is at least  $14\frac{1}{8}$ " square. The outer edge of the trim ring is  $15\frac{3}{8}$ " square so the hole may be slightly larger. The hole must be horizontally centered on the AMC Sub 12 cabinet. In a typical installation, the hole will be centered  $19\frac{1}{16}$ " above the floor. In a non-standard installation, the vertical center of the grille may be different.

Once the trim is positioned squarely in the hole, fasten it to the speaker enclosure with the 12 sheet metal screws provided. Drive the mounting screws in only far enough to secure the trim ring. Driving the screw in too far will deform the trim ring. The cloth covered grille insert is held in place on the trim ring with velcro strips.



## LISTENING LEVELS AND POWER HANDLING

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The power recommendation for the system assumes you will operate the amplifier in a way that will not produce distortion. All speakers can be damaged by even a modest amplifier if it is producing distortion. If you hear a gritty noise or other signs of strain, turn down the volume. Prolonged or repeated operation of your speakers with a distorted signal can cause damage that is not covered by the warranty. It is especially important that you do not overdrive the bass capability of smaller speakers. Watch for noises, such as pops, caused by the music's bass line. Use of the loudness control and/or full bass boost at louder volumes is likely to overdrive the woofer. Use such controls sparingly.

## HOW TO CARE FOR YOUR SPEAKERS

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- ▶ Use a soft terry cloth towel slightly dampened with water, glass cleaner, or a diluted mild detergent. The towel should be just damp enough to wipe the surface clean without leaving a trail of moisture.
- ▶ Do not use abrasive cleaners or any cleaner containing chemicals harsher than those found in glass cleaner.

## LIMITED WARRANTY

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For five years from the date of purchase, 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.

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

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