IN-BOX-8e SUB In-Wall Enclosure

For use with Atlantic Technology IWTS-8e SUB and IWTS-8 SUB only



Installation Instructions

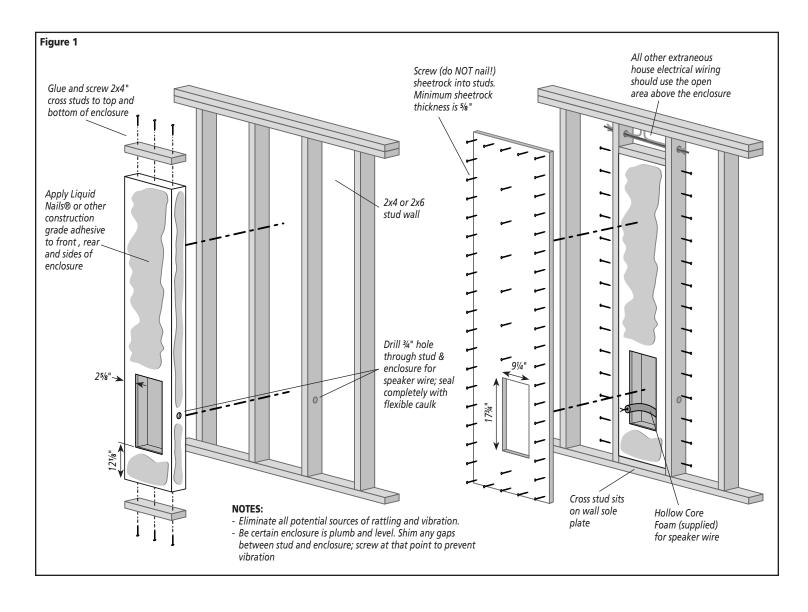
Quick Reference

- The In-wall Enclosure is designed for new construction and must be installed before the sheetrock is applied to the front of the wall studs.
- The sheetrock *must* be at least 5/8" or there will not be sufficient mounting depth behind the drivers.
- Use liberal amounts of construction adhesive and screw the enclosure every 6" or so (see illustration). Remember: Glue and Screw!
- 4 Locate the In-Wall Enclosure asymmetrically with respect to the room's dimensions. Avoid center-of-wall locations, or (when using two woofer modules) exact "mirror-image" locations.

Preparation

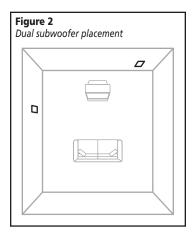
Be sure to follow all applicable local building codes and regulations!

- The shipping box has been designed to open along its entire length. Remove the enclosure from the box by opening the box along the marked side opening.
- In the parts bag there are 34 long screws for screwing the BOX to the studs.
- Cut two pieces of 2" x 4" measured to fit precisely between the two side studs. These will be placed directly below and directly above the enclosure, as shown in Fig. 1. The lower piece should rest on the wall shoe. The top piece should sit directly on top of the enclosure. These 2" x 4" pieces must be glued and screwed to the top and bottom of the enclosure before it is installed in the wall cavity.



Location

- Choosing the location for the subwoofer is a very important consideration. Since these are in-wall subwoofers and can't be moved once they are installed, very careful consideration should be given to their placement. In general, the most efficient transmission of bass energy into the room will be realized when the subwoofers are located directly adjacent to a wall/wall/floor juncture (a corner). This will create the most reflective waves of bass sound in the room, however it also can be the "boomiest" location in the room. Other possible location choices include:
- 2 Locating one woofer module in the front and one in the back of the room.
- 2 Locating the two woofer modules asymmetrically within the room (i.e. one near a corner, one towards the middle of a wall) to create random standing wave patterns. (Fig. 2)
- 4 Locating one or both woofer modules on a single wall. Once again, locating the woofers asymmetrically along a single wall may provide the best balance of clean bass impact versus one note boom.



Installation

- Temporarily place the enclosure within the stud cavity. Keep the front edge of the enclosure flush with the front edge of the studs. Mark places to drill 11/64 inch mounting screw holes in the studs, alongside the enclosure, approximately every 6 inches. Be sure to mark for holes at the locations of the top and bottom studs you have just mounted to the enclosure. Don't locate any holes within 1 inch of the front or rear face of the enclosure. Remove the enclosure and drill the holes in the studs, at the marked locations.
- Replace the enclosure within the stud cavity, once again being careful to keep the front edge of the enclosure even with the front edge of the studs. Be absolutely certain that it is plumb and level because if it's not the speaker will sit crooked in the wall, and this cannot be adjusted later. If there are any gaps between the studs and the enclosure sides shim them and put a screw through at that point to ensure that the studs won't vibrate against the box.
 - As shown in Figure 1, apply construction-grade adhesive to sides of enclosure when you install it between the studs.
- Push the supplied screws through the predrilled holes and screw them into the enclosure sides. Use care not to overtighten and strip any of the screws.
- 4 Drill a ¾" hole in the stud and through the side of the enclosure for the speaker wires. This hole should line up at the approximate center of the subwoofer module opening. After installing the speaker wire, caulk this hole generously with silicone construction caulk.
- Be sure that you have eliminated all potential sources of rattling before the wall board is applied.

- When the wallboard is applied it should be glued to the front and back of the enclosure as outlined above. It should also be screwed to the front and back of the enclosure as well. We recommend a vertical series of screws, centered on the enclosure, front and rear.
 - *Only* after the wall board is installed you may install the SUB 8 bass module according to the directions included with the woofer module.

Enclosure Dimensions

81 inches tall x $14\frac{1}{2}$ inches wide x $3\frac{1}{2}$ inches deep.

Cut out opening is 121/8 inch from the bottom of the box.

Important - Additional Notes

- This enclosure provides the correct volume to optimize the performance of the SUB 8 InWall subwoofer module. The SUB 8 module must be used with this enclosure for proper operation. The enclosure also provides moderate isolation of sound for the room adjacent to the subwoofer. However, since these are true subwoofers they generate substantial deep bass energy and there will still be significant sound energy transmitted through the house framework. This is an unavoidable consequence of mounting woofers in a wall.
- The correct amount of acoustically absorbent material (foam) is preinstalled in the enclosure and should be left as is within the enclosure. Please do not compact the material or add more damping material.
 - The enclosure is designed to fit in walls framed using 2" X 4" studs mounted on 16" centers, with wall board of at least 5/8 inch thickness. With some modification to the stud framing, it can also be installed between studs mounted on 24" centers. In all cases the front face of the enclosure must be kept flush with the front face of the studs. For studs mounted on 24" centers it is not recommended to install the enclosure to a stud on one side only. Instead, frame out from one or both studs to locate the enclosure solidly on both sides, wherever you desire within the stud cavity, and then attach as detailed below. In an 8 foot tall cavity there will be 12 inches of empty space. We recommend installing an extra 2" x 4" cap and foot above and below the enclosure which you glue and screw to the enclosure, and then screw to the side studs. Be sure to tell the electrician to run any AC lines above the enclosure and not to drill through it. It's also imperative to make sure any wires running within the wall are secured in such a way to ensure that they will not buzz or vibrate against any part of the wall. This should be checked in every stud bay in the wall, not just those adjacent to the woofer enclo-
- The SUB 8 woofer assemblies generate substantial vibrational energy and some of it will transfer into the wall. This vibration may eventually loosen the wall board and create "nail pops". To minimize such occurrences we strongly recommend that the wall board be screwed and glued to the studs (on both the front and back sides of the enclosure and extending out beyond the actual enclosure bay at least to the next stud bay on either side of the enclosure) and the enclosure face surfaces, using a powerful construction adhesive like Liquid Nails. Please follow all directions when using such adhesives, particularly concerning application and ventilation.