

AS10SW

10" In-Wall Subwoofer

Congratulations on your purchase of the AudioSource AS10SW In-Wall Subwoofer. This product is designed to reproduce the Low Frequency audio portion of your home entertainment system with accuracy and detail that will satisfy the most discriminating listener.

Please read this Installation Manual to ensure the proper installation and performance of your AS10SW speaker.

Preparing for your Installation

Gather the necessary tools for your installation.

You will need the following tools:

- 1) A Keyhole or Drywall Saw
- 2) A Phillips Screwdriver
- 3) Masking Tape
- 4) A Pencil
- 5) A Bubble or Laser Level
- 6) A Tape Measure
- 7) A Stud Finder (recommended)
- 8) Your AS10SW Speaker

Placement

Plan your speaker placement carefully. Make certain that electrical, plumbing and any other services will not interfere within the walls where you plan to place your speakers. The AS10SW Speaker can be mounted in the walls or in the ceiling, but is typically used in walls. The AS10SW is best mounted within 4 feet of a room corner to take advantage of low frequency corner loading effects (this increases the output of the subwoofer by as much as 6dB- see figure 1). In addition, the AS10SW height should be no more than 3 feet from the floor.

Whenever possible, AudioSource recommends using 2 AS10SW, one in each of the front corners of the listening room for the best in low frequency reproduction. (see fig. 1)

Existing Construction

In most modern buildings the wall studs are positioned on 16" centers, providing a space between the studs of approximately 14 3/8". The AS10SW requires a mounting hole 10 11/16" wide and 10 11/16" high. Additionally, you should allow an extra inch in all directions behind the

wall surface to allow room for the "Easy-In" bracket that retains the frame to the wall surface.

Use a stud finder to locate the vertical studs behind the wall surface. You should now check for obstructions like cross bracing above and below the desired speaker location.

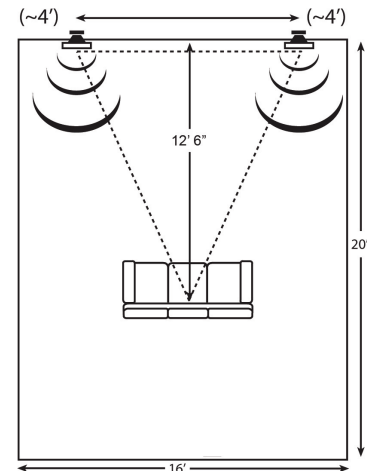


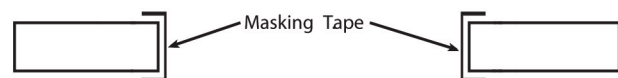
Figure 1

After selection of the mounting location, mark the hole to be cut out. A cut-out template is provided for your convenience. Locate and level the template, then mark with pencil on the wall surface. If you are unsure whether there are obstructions behind the wall surface where the speakers are to be mounted, cut a small hole in the center of your marked mounting location. Holding your drywall saw at a 45 degree angle (see Fig. 2) cut a square hole that you can use to find any obstructions, should they exist.



ROOM
Figure 2

Once it has been determined that there are no obstructions, cut the hole to mount the speaker using the drywall saw at a 90 degree angle to the wall surface. Cover the raw edges of the wallboard with masking tape (see Fig. 3). This will prevent the back pressure of the speaker from blowing loose gypsum dust out and on to the painted wall surface after installation. Do not allow the tape to extend more than 1/2" beyond the edge of the hole into the room. The frame of the AS10SW will cover and hide the tape.



ROOM
Figure 3

Next, run your speaker wire to your speaker locations. A UL rated CL3 speaker wire is recommended when running wire inside your walls (such as Phoenix Gold Innovative Home SS162W*). In many areas it may be required by code. When running your speaker wire you should avoid having the speaker wire run parallel to the 120V power lines to avoid picking up hum and interference from the power service. If the speaker wire needs to cross a 120V power line at a right angle, this is acceptable and should not create a problem.

If you are uncomfortable with running the speaker wire yourself in existing construction, it is recommended that you retain a qualified custom home installation specialist or electrician.

*Available in 3 convenient lengths: 50' mini-spool (M1650W), 100' mini-spool (M16100W), and 250' bulk spool (SS162W/250).

Installing the Subwoofer

Installation Tip! To further enhance the performance of your AS10SW speakers, the wall stud cavity where you plan to place your speakers can be stuffed with a generous quantity of fiberglass insulation. If un-insulated, stuff the area above and under the speaker opening with 6" thick insulation to a depth of approximately 2 feet beginning 1 foot above and 1 foot below the speaker opening. If the insulation is foil or paper backed, face the backing away from the AS10SW speaker. The addition of this insulation will help to prevent the unwanted transfer of sound into the otherwise large and resonant cavity of the un-insulated wall.

It is now time to connect the speaker wire to the AS10SW. Your speaker wire is usually coded to identify each conductor as either positive or negative. This can be by color coding, or one conductor may have a printed marking or at least a rib along one edge that you will not find on the other. Identify which type of polarity coding that your wire is using. You must carefully observe that the positive terminal of the speaker output on your amplifier is connected to the positive terminal of the AS10SW speaker. Likewise, the negative terminal of the amplifier's speaker output should be connected to the negative terminal of the AS10SW speaker.

Next, with the grill removed, unscrew the four frame screws so that there is a 1" space between the "Easy-In" bracket and plastic frame (Fig. 4).

Place the speaker in the wall opening with the top tipping toward the room opening, resting the bottom of the frame on the bottom drywall cut-out. Make sure that the speaker wire is not hanging against the speaker where it can vibrate and rattle as the speaker reproduces your music. Tip the speaker gently back into the drywall cut-

out, the top of the "Easy-In" bracket should just clear the top of the drywall cut-out. Next gently lift and center the AS10SW into the cutout, and begin to tighten the 4 "Easy-In" bracket screws. (Fig. 5)

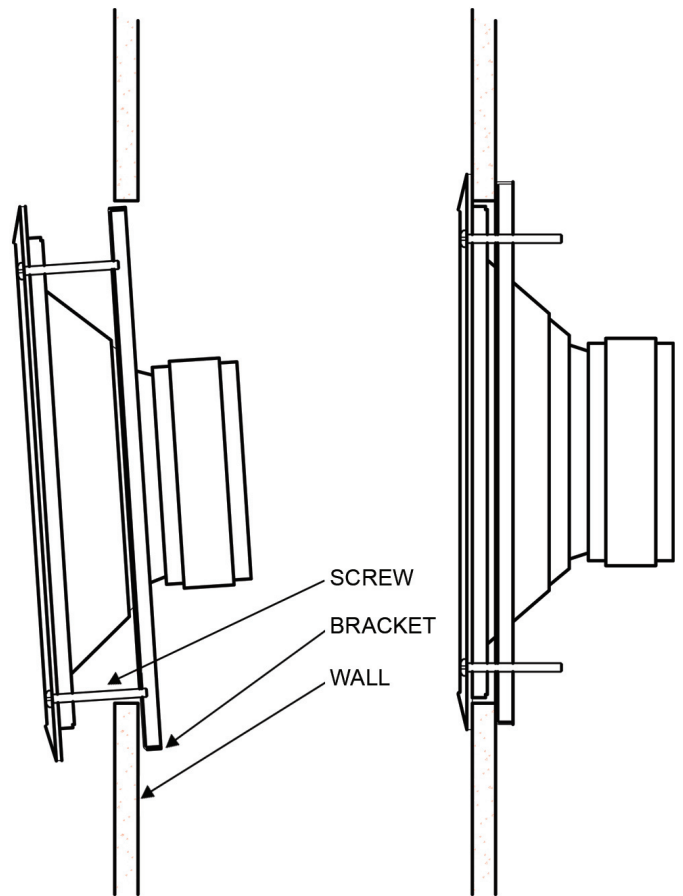


Figure 4

Figure 5

Tighten the four mounting screws in the same manner until the speaker is properly aligned and held tight to the wall surface. Caution: Do not over tighten! (Fig. 6)

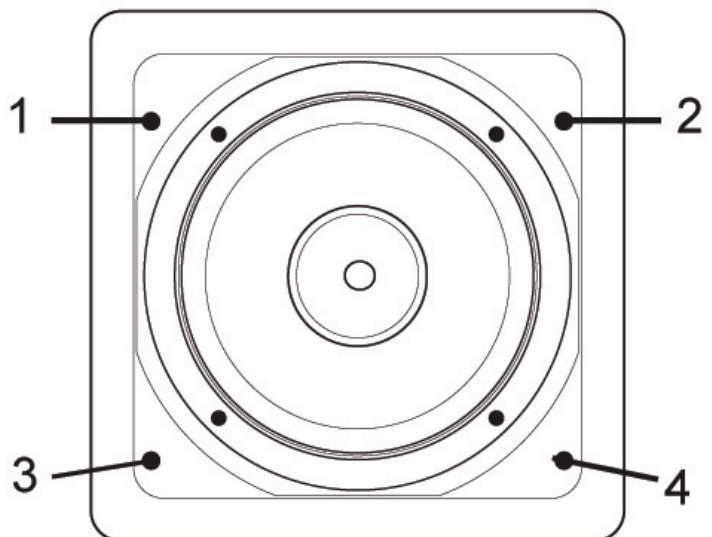


Figure 6

The AS10SW is designed to be used with the sub output of any 5.1 or 7.1 surround receiver/amplifier. If not using a sub output with active low pass crossover, we recommend using an external active crossover or a passive crossover with a minimum crossover slope of 12db per octave @ 100 Hz.

Installation Tip! Due to the high sound pressure levels subwoofers create at higher volume levels, it is possible that the drywall in the area next to the subwoofer could rattle against the wall's 2" x 4" framing. If this occurs, it is possible to stop the rattles by:

1. Stuffing more insulation into the wall cavity to dampen the sheetrock. Take care to keep the insulation away from the subwoofers magnet (there is little clearance from the back of the magnet to the back sheet rock once the AS10SW is mounted).
2. Install additional 2" x 4" bracing above and to the sides of the subwoofer cutout. Silicone caulking can be applied to both sides of the 2" x 4" to brace the wall (see Fig. 7).

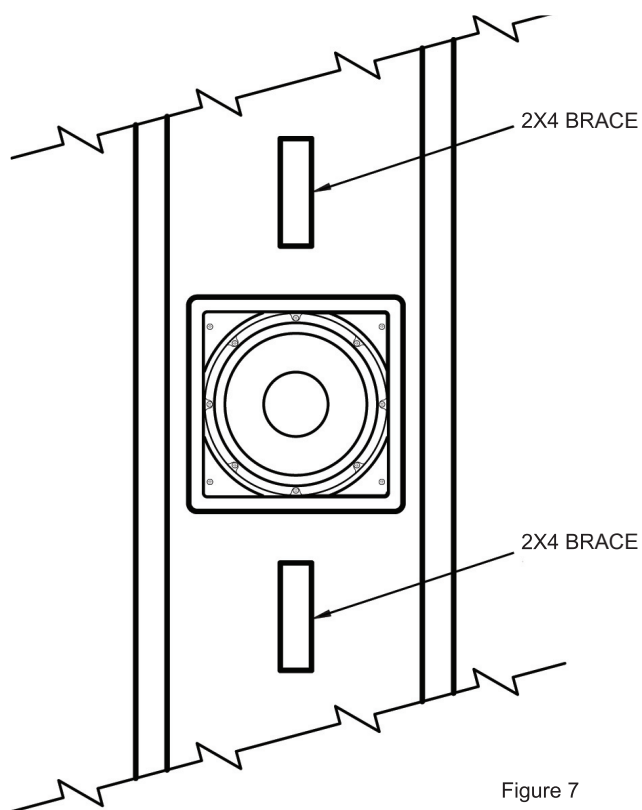


Figure 7

Painting the Speaker

A paint shield is included in the AS10SW speaker package. Place the paint shield inside the frame to protect the speaker. You can now safely paint the speaker frame to match your wall surface if you desire.

When painting the grill caution should be taken to ensure that paint does not clog or congest the perforated openings in the grill. This would prevent proper operation of the grill by restricting the airflow and sound from the speaker.

Removing the AS10SW Subwoofer

Should it ever become necessary to remove the AS10SW speaker from the wall, simply remove the grill and turn the four mounting screws counter-clockwise. Gently pull the AS10SW forward and lower the frame assembly so the mounting screws have direct contact with the bottom of the drywall cut-out. It should now be possible to tip the top of the AS10SW forward and draw the subwoofer out of the drywall cutout.

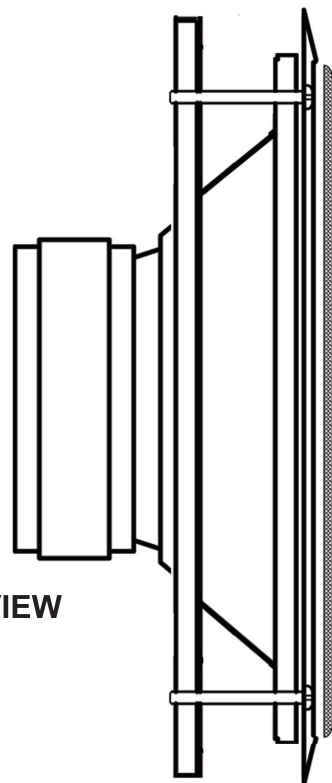
Recommended Speaker Wire Gauges

The resistance of the speaker wire in your installation can cause your subwoofer to perform at less than optimum quality level. Excess resistance caused by using an undersized speaker wire can result in loss of detail and definition in the low frequency region of your audio program, as well as a loss of dynamic range.

To prevent this effect in your installation we have recommended speaker wire gauges that should not exceed 0.5 Ohms resistance over the recommended length of wire run.

For the AS10SW subwoofer, we suggest the following minimum speaker wire gauge be used:

- 50' or less – 16 Gauge 2-Cond. CL3
- 50' – 150' – 12 Gauge 2-Cond. CL3
- 150' – 200' – 10 Gauge 2-Cond. CL3



AS10SW SIDE VIEW

AS10SW Specifications

Woofer	10" Carbon Poly Cone with Butyl Surround
Frequency Response	40 Hz to 200 Hz
Impedance	8 Ohm
Sensitivity	86dB@2.83V
Recommended Amp Power	25 to 150 Watts Continuous
Cut Out Dimension	10 11/16" x 10 11/16" (27.2cm x 27.2cm)

Two Year Limited Warranty

AudioSource, a division of Phoenix Gold, warrants this product against defects in materials and workmanship for a limited period of time. For a period of two (2) years from date of original purchase, we will repair or replace the product, at our option, without charge for parts. Customer must pay for all labor charges associated with the removal and re-installation of speakers for the limited period and all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized Phoenix Gold Retailers or Distributors. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized Phoenix Gold/AudioSource Retailer, or Distributor, when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, fire, flood, misuse, neglect, mis-handling, mis-application, alteration, faulty installation, modification, service by anyone other than Phoenix Gold, or damage that is attributable to Acts of God. It does not cover costs of transportation to Phoenix Gold or damage in transit. The customer should return their defective product, freight prepaid and insured, to Phoenix Gold only after receiving a Return Authorization.

Repair or replacement under terms of this warranty does not extend the term of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. If the defective product is discontinued Phoenix Gold may replace the product with an equivalent or superior product at its option. Any cost of re-installation or repair of wall or ceiling surface is the sole responsibility of the customer and that cost shall not be the responsibility of Phoenix Gold. Under no circumstances shall Phoenix Gold be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.



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