



# SolidDrive™



INDUCTION DYNAMICS®

## INSTALLATION & USE GUIDE for SolidDrive in-wall subwoofers

### Experience True Audio Perfection

Induction Dynamics extensive line of audio products makes it easy to create the ultimate audio system, regardless of installation requirements. Induction Dynamics builds these products with only the most select components and materials; and utilizes numerous unique and proven technologies.



## SOLIDDRIVE IN-WALL SUBWOOFER INSTALLATION

SolidDrive subwoofers are easily installed into walls both before drywall and with existing drywall and deliver well-defined bass while remaining virtually invisible in a room.

### Getting Started with SolidDrive Subwoofers

#### What's included with the SolidDrive subwoofers for in-wall installation and what is supplied by the installer

A SolidDrive SW7 Subwoofer consists of:

One (1) SolidDrive subwoofer with return air vent grille and mounting hardware.

A SolidDrive SW8 Subwoofer consists of:

One (1) SolidDrive subwoofer with speaker grille and mounting hardware.

*\*Installation of the subwoofers requires four (4) 2" 6d box nails, 2" flat head wood screws or 2" drywall screws to secure the enclosure mounting straps to the face of the wall studs and six (6) 2 1/2" wood screws to secure the subwoofer enclosure between wall studs; and butt connectors, wire nuts, solder and electrical tape, or solder and heat-shrink insulation and (recommended) to make the electrical connections to the amplifier (supplied by the installer).*

## PREPARE FOR THE IN-WALL INSTALLATION

Before beginning your installation, measure the bay (the space between studs) where you intend to install the subwoofer enclosure. Although 16" centers are the standard for framing construction, you will likely find many variations. As the subwoofer width is 14 3/8", a spacing of at least 14 3/8" between the studs is necessary. For the simplest installation and best results, select a bay that is clear of any obstructions such as electrical wiring, gas or water pipes, or consider relocating the obstructions to an adjacent bay.

The subwoofer enclosure is intended to be positioned between the wall studs and rest on the bottom plate between the studs. The bottom (toe) plate is the 2" x 4" stud lying horizontally on the floor, to which the vertical studs supporting the drywall are nailed. In most cases there will be enough height for the return air grille of the SW7 and the speaker grille of the SW8 to clear the base molding.

**NOTE:** In custom homes, the base molding may be taller than 6". In this case, you may wish to add a spacer to raise the subwoofer enclosure above the bottom plate to avoid a cutout in the molding for the air return vent or speaker grille.

Carefully unpack the SolidDrive subwoofer. Open each end of the carton and carefully slide the subwoofer enclosure out of the carton. Do not pull the subwoofer enclosure from the packing carton using the speaker wires as a handle.

### SELECTING THE SUBWOOFER LOCATION

To obtain the best possible sound in the listening room, it is desirable to place the subwoofer as close as possible to the speakers it is supporting. The front wall next to the speakers is preferred with a second option being an adjacent wall also close to the speakers. Avoid placing the woofer on an opposite wall from the main speakers whenever possible as large physical separation of the bass and mid/high sounds can be disconcerting to the listeners.

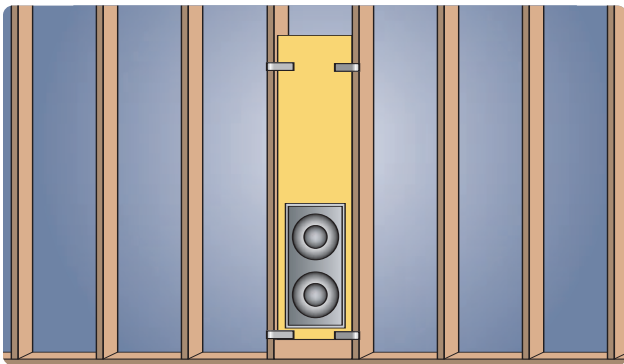
When using the SolidDrive subwoofers in a multi-room system, a separate woofer in each room is recommended. In a large room where the goal is distributed or background sound, then multiple woofers may be necessary to avoid distracting bass localization. Locations near the floor or ceiling will enhance the subwoofer output level.

## STEP 1. Mount the enclosure onto the wall studs.

Two lengths of steel retaining straps are screwed to the face of the enclosure and have been folded down the sides for shipping. Unfold and straighten the steel straps so that the ends stick straight out at a 90° angle to the sides of the enclosure

Center the enclosure between the wall studs, and nail or screw the straps to the face of the studs on each side of the enclosure (Figure 1). To avoid vibration between the wall studs and the SW7 enclosure screw three wood screws per side through the stud and into the enclosure 4" down from the top, at center and 4" up from the bottom. This will secure the subwoofer in place. Use six screws per side on the SW8.

Figure 1. SolidDrive Subwoofer installed with bracket mounted to studs



## STEP 2. Make the electrical connections.

Once the subwoofer is in place you are ready to connect the speaker leads to the amplifier leads. The wire in the enclosure is 16-gauge plenum rated UL approved stranded copper wire. You can make connections a number of ways including butt connectors, wire nuts, or electrical tape and solder. A soldered connection with heat-shrink insulation is the recommended way to splice the amplifier and subwoofer wires. If you need to remove the woofer from the enclosure, please note the (+) terminals are indicated in red.

**NOTE:** The SW7.iwp is the passive version and has a couple of unique features. It contains a passive attenuator, which allows the bass level to be properly matched to the rest of the music spectrum. It uses a dual coil 7" driver together with passive low pass circuitry, which allows it to be driven directly with the same stereo or monaural amplifier that is being used to power the main speakers. To fully utilize the

SW7.iwp's capability, you will need to run stereo pairs of speaker wire from your source location to the subwoofer location during pre-wire.

## STEP 3. Complete the finishing touches.

Once installation and finishing of the drywall is completed, install the supplied grille over the subwoofer opening.

### SW7.IWA & SW7.IWP SUBWOOFERS

After subwoofer installation the drywall will be installed followed by painting the walls. A metal bracket is mounted to the face of the 7" subwoofer enclosure and is a guide for the cutout hole needed in the drywall for the vent that conceals the woofer. The low resonant foam on the face and back serves as an absorptive barrier to prevent vibration between the cabinet and the drywall.

Once installation and finishing of the drywall is complete, install the supplied grille over the woofer opening. The SW7.iw's grille is a standard 12" x 10" steel return-air vent. Using the vent/grille as a template, center it over the woofer opening and mark the screw holes with a pencil. Remove the vent/grille and drill a 3/32" pilot hole making certain you drill deep enough to penetrate the enclosure. Center the vent/grille over the pilot holes making sure the vent openings are pointed toward the floor and insert the screws supplied with the vent. Tighten the mounting screws until the vent is snug against the drywall. Be careful not to over torque the screws to avoid distorting the steel vent frame.

The return-air vent is paintable to blend flawlessly with any room's décor.

### SW8.IW SUBWOOFER

After subwoofer installation the drywall will be installed followed by painting the walls. The wood baffle over the opening in the enclosure is to be used as a guide for cutting a hole through the drywall. This needs to be removed after the drywall is up and when you are ready to install the flange and driver assembly into the enclosure.

The low resonant foam on the face and back serves as an absorptive barrier to prevent vibration between the cabinet and the drywall.

The perforated metal grille is paintable to blend flawlessly with any room's décor.

# SolidDrive™ SUBWOOFERS



## SolidDrive Subwoofer Specifications

Model	SolidDrive SW7.iwa (active)*	SolidDrive SW7.iwp (passive)**	SolidDrive SW8.iw (active)*
Woofer	7" Mica/Graphite	7" Mica/Graphite	Dual 8" Mica/Graphite Polypropylene Cones
Amplifier	A4	None	A4
Frequency Response (Hz)	28-160 Hz	28-160 Hz	25-160 Hz
Impedance	4 Ohms	4 Ohms	4 Ohms
Enclosure Dimensions/ Mounting Space	42" H x 14 3/8" W x 3 3/8" D	42" H x 14 3/8" W x 3 3/8" D	72" H x 14 3/8" W x 3 3/8" D
Enclosure	Sealed	Ported	Sealed
Grille Cutout Dimensions	11 5/8" H x 8 1/2" W	11 5/8" H x 8 1/2" W	20 1/2" H x 8 3/8" W
Weight (subwoofer)	36 lb (in enclosure) 16.3 kg	36 lb (in enclosure) 16.3 kg	51 lb (in enclosure) 23.1 kg
Recommended Room Size	Up to 1800 cubic ft.	Up to 1800 cubic ft.	1800 - 3300 cubic ft.

\* Multiple subwoofers of the same model can be utilized with a single A4 amplifier. \*\* The passive version is designed to be connected to the same amplifier

## A4 Subwoofer Amplifier Specifications

200 watts/350 watts peak

Three modes (Sub, LFE, and Wide-Range)

User-adjustable gain control matches the sub to any system's efficiency

Internal crossover range from 40 – 160 Hz, 0°/180° phase switch

Variable Low Frequency Equalization from -3 dB to +6 dB allows for tuning to a room's acoustics

Will power multiple subwoofers of the same model

Dimensions 1.875" H x 17.75" W x 11.75" D

Weight 18 lb / 8.2 kg



SolidDrives, SolidDrive  
Subwoofers, and A4 Amplifier  
come with a 7-year warranty.

### WARRANTY

The product is guaranteed for 7 years from date of purchase. Any misuses or modifications to this equipment in any way will void the warranty.

### WARNING

Read instructions prior to operating. To reduce the risk of fire or electric shock, do not expose this product to rain or moisture. Unplug prior to cleaning and clean with a damp cloth. There are no user-serviceable parts in this product, please refer all servicing to qualified personnel.



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