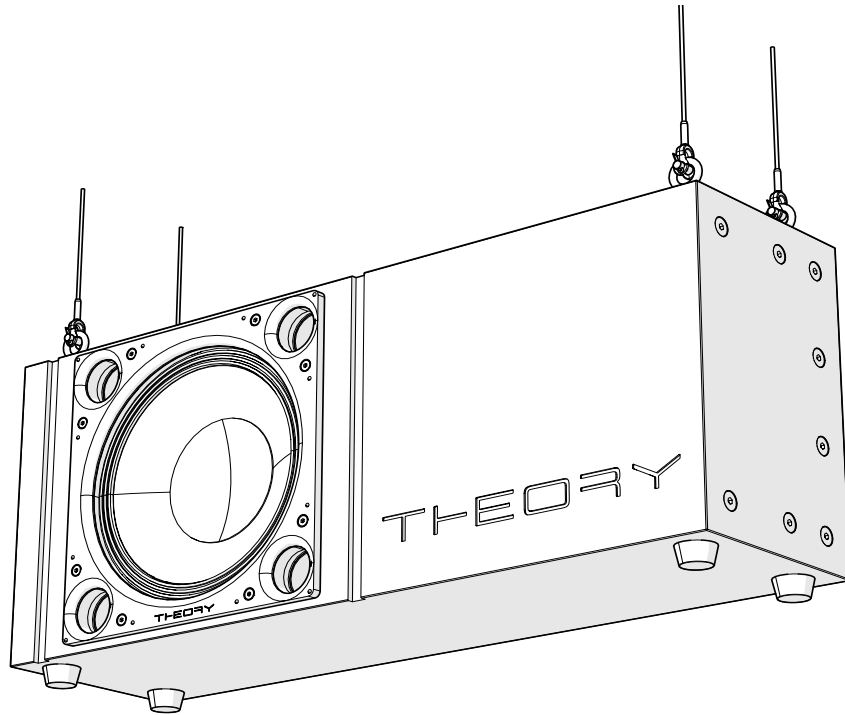


iws12-9 Install Subwoofer



QUICK START INSTALLATION
GUIDE

Rev A 230726

THEORY
THEORY AUDIO DESIGN

LIMITED WARRANTY

Disclaimer : THEORY AUDIO DESIGN, LLC is not liable for any damage to loudspeakers or any other equipment that is caused by negligence or improper use or installation of this product, including damage caused by connecting Theory loudspeakers and subwoofers to third party amplifiers.

THEORY AUDIO DESIGN, LLC 5-Year Limited Loudspeaker and Subwoofer Warranty

THEORY AUDIO DESIGN, LLC guarantees its loudspeaker and subwoofers products to be free from defective materials and/or workmanship for a period of five (5) years from the date of sale, and will replace defective parts and/or repair malfunctioning products under this warranty when the defect occurs under normal installation and use - provided that the unit is returned to our factory or one of our authorized service centers via prepaid transportation with a copy of proof of purchase (sales receipt). This warranty provides that the examination of the return must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subject to misuse, neglect, accident, improper installation or where the date code has been removed or defaced. THEORY shall not be liable for incidental and/or consequential damages. The warranty gives you specific legal rights. This limited warranty is not transferable. Customer may have rights which vary from state to state.

In the event that this product was manufactured for export and sale outside of the United States or its territories, then this limited warranty does not apply. Removal of the serial number on this product, or purchase of this product from an unauthorized dealer will void this limited warranty.

EXCLUSIONS

To the extent permitted by law, the warranty set forth above is in lieu of, and exclusive of, all other warranties, express or implied, and is the sole and exclusive warranty provided by Theory Audio Design, LLC. All other express and implied warranties, including the implied warranties of merchantability, implied warranty of fitness for use, and implied warranty of fitness for a particular purpose are specifically excluded.

Theory Audio Design, LLC shall not be liable for consequential, incidental, economic, property, bodily injury, or personal injury damages arising from the product, any breach of this warranty or otherwise.

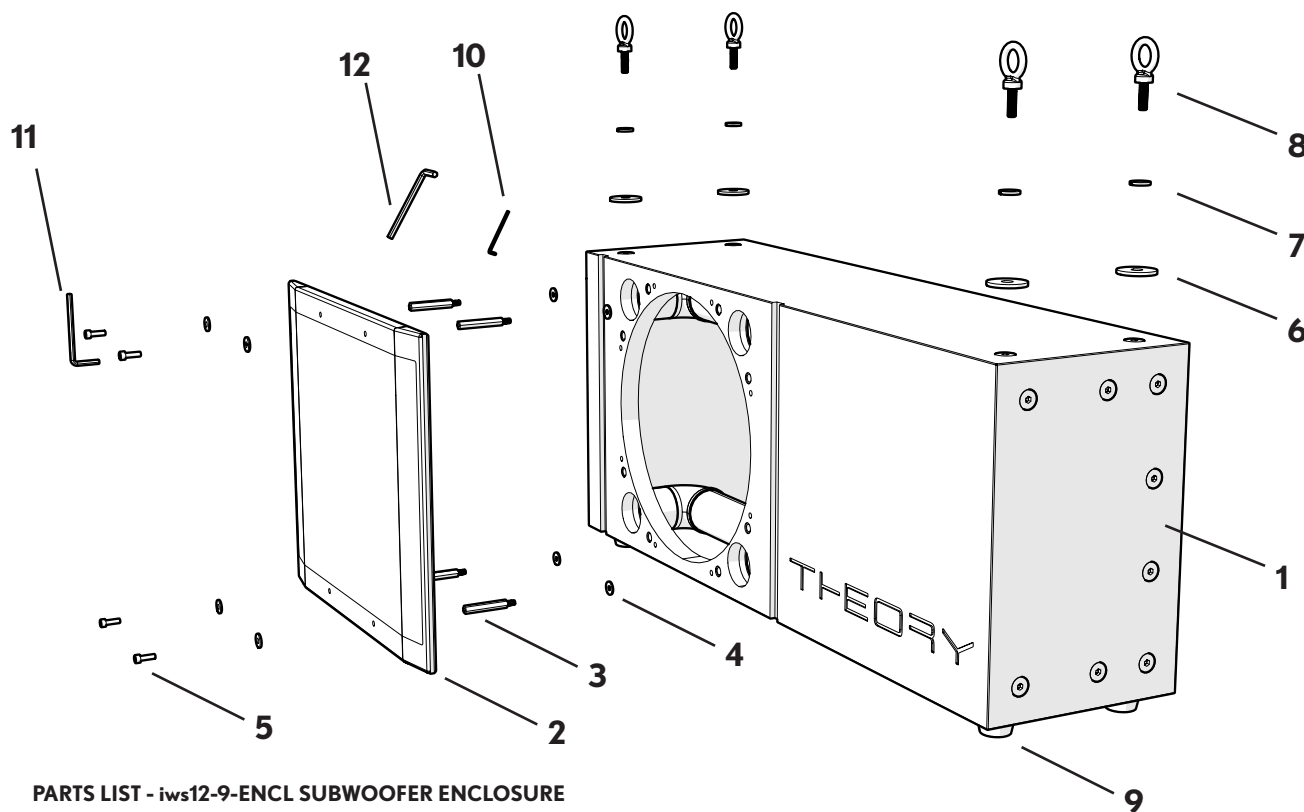
This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of THEORY'S express warranty

Periodically this warranty is updated. To obtain the most recent version of THEORY'S warranty statement, please call +1-949-245-0505.

IMPORTANT SAFETY INSTRUCTIONS

1. Read all instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Clean only with a dry cloth.
6. Install in accordance with manufacturer's instructions.
7. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
8. Use only attachments/accessories specified by THEORY AUDIO DESIGN, LLC.
9. Use only with hardware, brackets, stands, and components sold with the apparatus or supplied by THEORY AUDIO DESIGN, LLC.
10. Mount only to solid architectural walls and ceilings.
11. USE SAFETY CABLE WHEN INSTALLING OVERHEAD.
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus is damaged in any way.
13. **Connect to Theory Amplified Loudspeaker Controllers ONLY. Do not connect to third-party amplifiers. Doing so will void the product warranty and potentially damage the loudspeaker.**

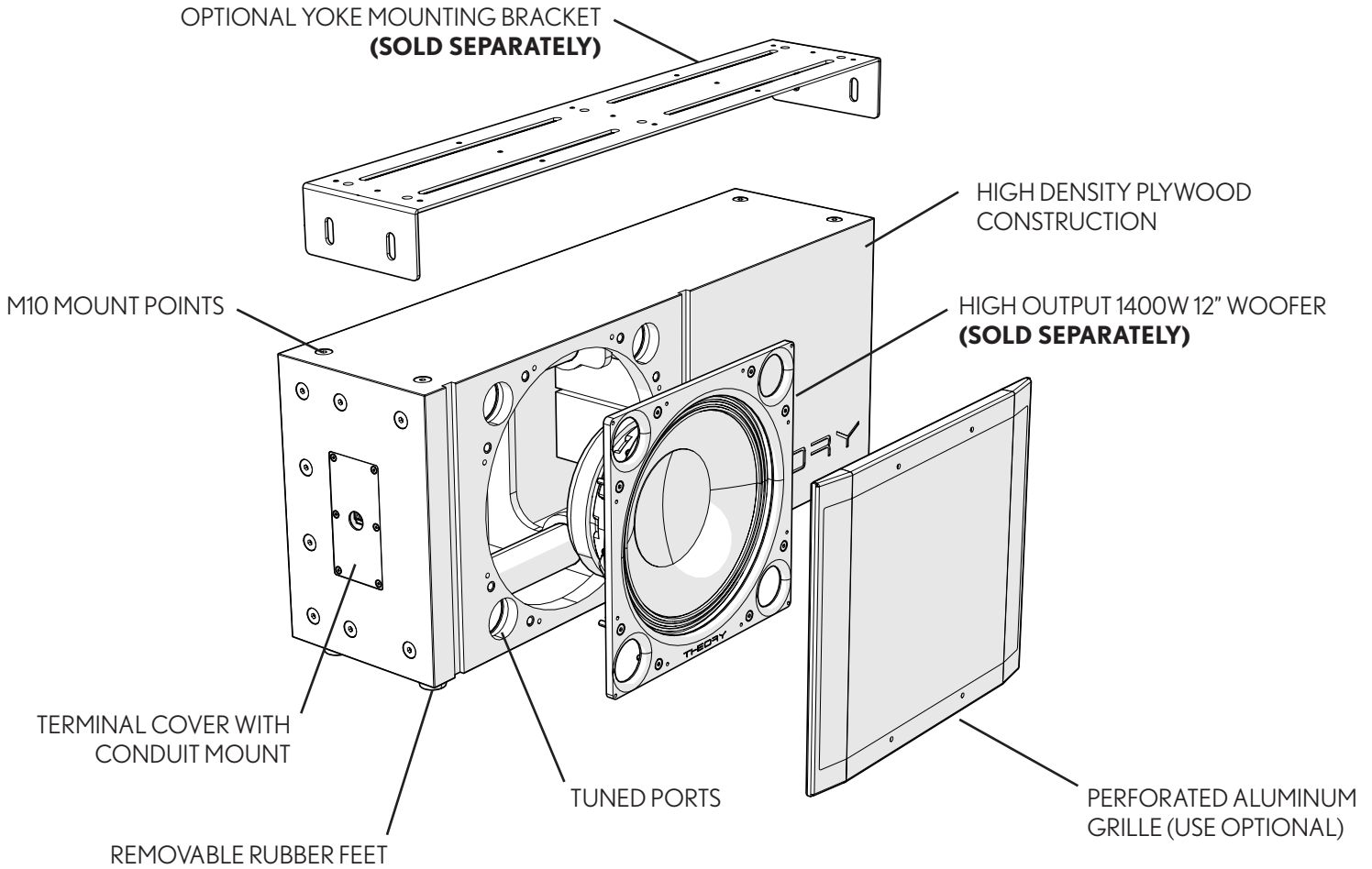
PARTS LEGEND - iws12-9 ENCLOSURE



PARTS LIST - iws12-9-ENCL SUBWOOFER ENCLOSURE

1. iws12-9 ENCLOSURE - QTY:1
2. iws12-9 GRILLE (USE OPTIONAL) - QTY:1
3. M5 GRILLE OPTIONAL STANDOFFS - QTY:4
4. M5 WASHERS - QTY:8
5. M5 CAP SCREWS - QTY: 4
6. M10 FLAT WASHERS - QTY: 4
7. M10 LOCK WASHERS - QTY: 4
8. M10 EYEBOLTS - QTY: 4
9. REMOVABLE RUBBER FEET - QTY: 4
10. 2.5mm HEX WRENCH - QTY:1
11. 4mm HEX WRENCH - QTY:1
12. 6mm HEX WRENCH - QTY:1

PRODUCT FEATURES



iws12-9 IS PART OF A SYSTEM OF MODULAR PRODUCTS FROM THEORY

The iws12-9 Subwoofer System is comprised of the iws12-9-ENCL Enclosure and the iws12-SPKR Speaker Assembly. These components are sold separately as part of the iws12 range of Theory Modular Subwoofer Systems.

OPERATING MODES - SAFETY CONSIDERATIONS

OPERATING MODES - SAFETY CONSIDERATIONS - INDOOR/OUTDOOR INSTALLATIONS

Your Theory iws12-9 Subwoofer system operates at 8-ohms nominal impedance. Two iws12-9 Subwoofers systems can be safely operated wired in parallel on a single Theory Amplified Loudspeaker Controller channel. Do not exceed two units wired in parallel per channel.

Your Theory iws12-9 Subwoofer System may be installed on the surface of ordinary architectural walls and ceilings, or may be flown overhead using proper cables and rigging hardware. If installed overhead, a safety cable must be used to tether the loudspeaker to a rigid architectural structural element such as an architectural stud or joist.

The iws12-9-ENCL Enclosure includes a perforated aluminum grille. Use of the grille is optional and will impact the performance of the subwoofer. (See section 2).

Your Theory iws12-9 Subwoofer system requires extensive signal processing and therefore must be driven by Theory Amplified Loudspeaker Controllers only. Theory loudspeakers and Loudspeaker Controllers work together as a system.

DO NOT CONNECT YOUR THEORY LOUDSPEAKER TO THIRD PARTY AMPLIFIERS AS DOING SO WILL VOID THE LOUDSPEAKER WARRANTY.

1 - INSTALLATION OPTIONS

FLOOR, SURFACE, FLY

Your Theory iws12-9 Subwoofer System can be installed in many different ways, making integration into even challenging interiors painless. Below is a list of installation options available. Before you begin your project, review the options and select the method that best suits your project.

1a. - FLOOR MOUNT - FEET

The iws12-9-ENCL Subwoofer Enclosure includes 4 vibration isolation rubber feet on the bottom surface of the enclosure.

The iws12 can simply be placed on the ground or on a structurally-safe shelf on its rubber feet.

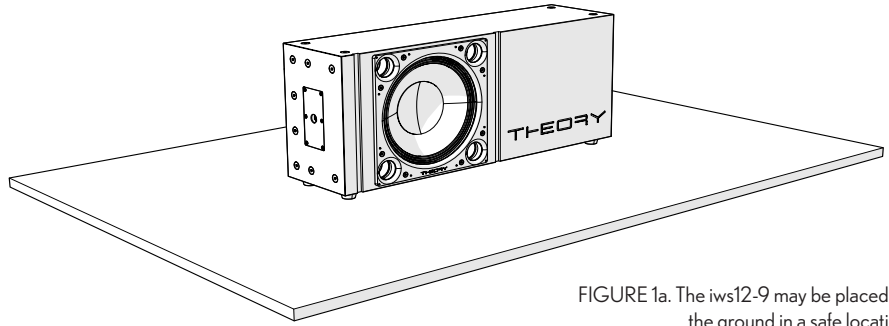


FIGURE 1a. The iws12-9 may be placed on the ground in a safe location.

1b. - FLOOR MOUNT - YOKE

To anchor the iws12-9 Subwoofer System to the floor or horizontal structural surface, the optional iws12-9-YOKE mounting bracket can be anchored to the mounting surface then the iws12-9 assembly can be attached to the Yoke.

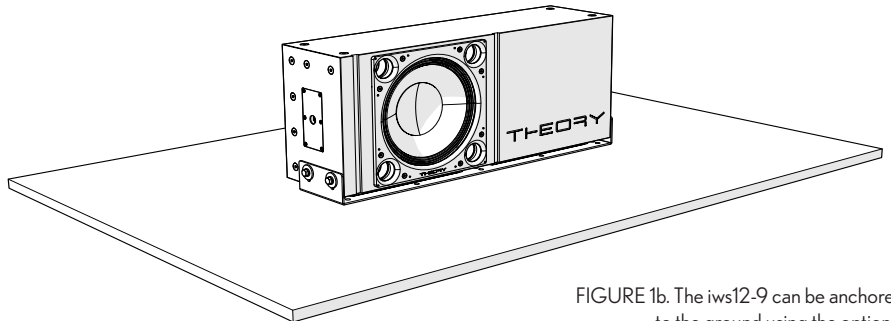


FIGURE 1b. The iws12-9 can be anchored to the ground using the optional iws12-9-YOKE mounting bracket.

1c. - WALL MOUNT - ONE YOKE

To anchor the iws12-9 Subwoofer System to a structural wall, the optional iws12-9-YOKE mounting bracket can be anchored to the wall structural elements then the iws12-9 assembly can be attached to the Yoke.

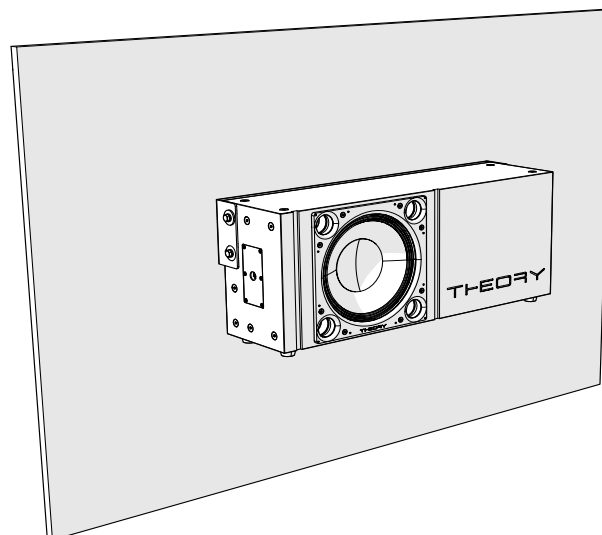


FIGURE 1c. The iws12-9 can be anchored to a wall using the optional iws12-9-YOKE mounting bracket.

1 - INSTALLATION OPTIONS (cont'd)

1d. - WALL MOUNT - TWO YOKES

In installations where additional mounting security is desired, two optional iws12-9-YOKE mounting brackets can be anchored to the wall structural elements then the iws12-9 assembly can be attached to the yokes.

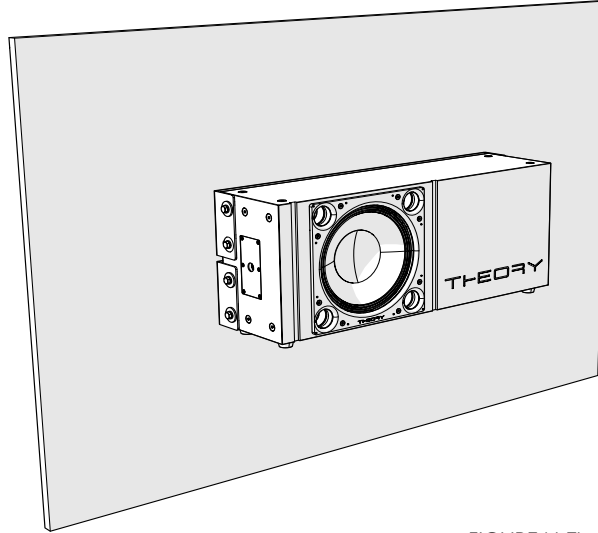


FIGURE 1d. The iws12-9 can be anchored to a wall using two optional iws12-9-YOKE mounting brackets.

1e. - CEILING MOUNT - YOKE

To anchor the iws12-9 Subwoofer System to a structural ceiling, the optional iws12-9-YOKE mounting bracket can be anchored to the ceiling structural elements then the iws12-9 assembly can be attached to the yoke.

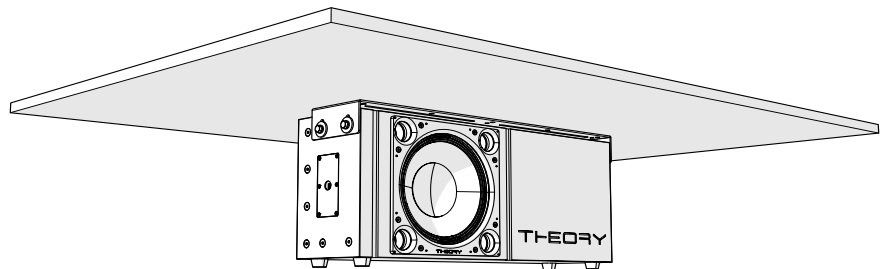


FIGURE 1e. The iws12-9 can be anchored to a hard ceiling using the optional iws12-9-YOKE mounting bracket.

1f. - FLY

To fly the iws12-9 Subwoofer System use the included M10 rigging eyebolts and four of the M10 rigging points on the top surface of the enclosure.

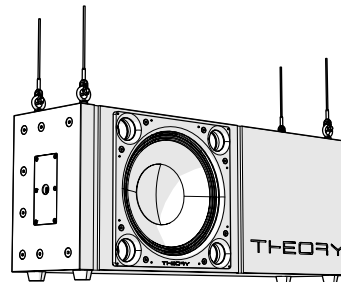


FIGURE 1f. The iws12-9 may be flown using the included M10 rigging eyebolts.

2 - ASSEMBLY

2a. - INSTALL SPEAKER ASSEMBLY

Connect subwoofer driver to enclosure wire harness.

Connect the enclosure wire harness to the speaker assembly driver terminals making sure to connect the red (positive) wire to the red (positive) driver input, and the black (negative) wire to the black (negative) driver input.

Install speaker assembly into enclosure.

Install the iws12-SPKR Speaker Assembly using the M5 flat head screws provided with the iws12-SPKR kit. The rubber gasket attached to the back of the driver baffle will insure a tight seal is achieved. Tighten all 8 screws uniformly and securely. **See Figure 2a.**

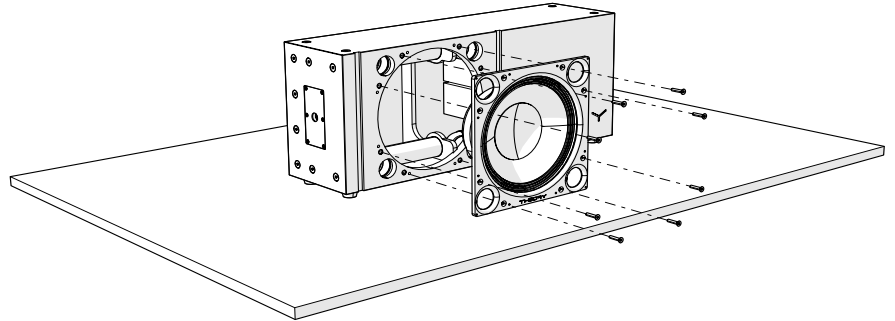


FIGURE 2a. Connect the enclosure wire harness to the speaker assembly driver input terminals and install speaker assembly into enclosure using provided M5 screws.

2b. - USING OPTIONAL PERFORATED GRILLE

Use the optional perforated aluminum grille only when necessary to protect driver from potential damage, when it is necessary to prevent foreign object ingress, or when maximum subwoofer output will be moderate during typical use.

The iws12-9 subwoofer system provides powerful and extended low frequency response (to 24Hz!) To accomplish this powerful output, the subwoofer driver and especially the ports will pump air at high velocity in and out of the subwoofer enclosure. Placing a metal mesh (grille) in front of the driver and ports can create some subtle turbulence noises at very high output.

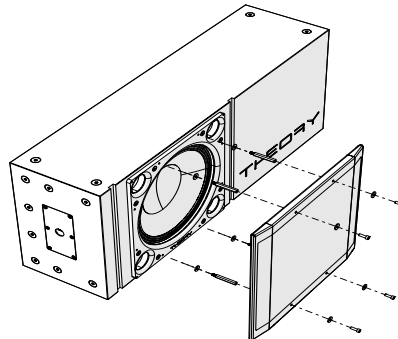


FIGURE 2b. Perforated Aluminum Grille. The provided perforated aluminum grille may be attached to the speaker assembly baffle as shown in low and moderate output systems.

Installations where maximum output will be low.

In systems where the maximum output level of the subwoofer will be low, such as background music in commercial spaces, the grille can be attached directly to the baffle with no spacers required. This will achieve the cleanest appearance. **See Figure 2c.**

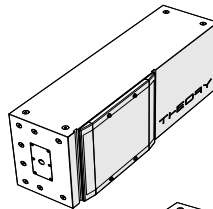


FIGURE 2c. Low Output Systems

The grille may be installed directly against the speaker baffle using the M5 cap screws and washers as shown.

Installations where maximum output will be moderate.

In systems where the maximum output level of the subwoofer will be moderate, such as foreground music in commercial spaces, the grille can be attached using the provided M5 standoffs. This will move the grille farther away from the turbulent air but will still provide protection to the driver. **See Figure 2d.**

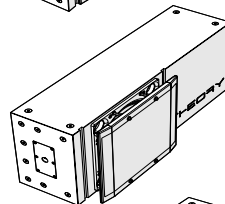


FIGURE 2d. Moderate Output Systems

The grille may be installed using the provided M5 stainless steel standoffs and M5 cap screws and washers as shown.

Installations where maximum output will be high.

In systems where the maximum output level of the subwoofer will be high, it is best to install the subwoofer out of harm's way (above listeners) and **omit installing the grille**. This will provide remarkably clean, remarkably LOUD and POWERFUL bass response. **See Figure 2e.**

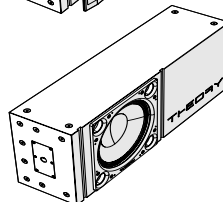


FIGURE 2e. High Output Systems

For highest clean output possible, the grille should be omitted.

3 - INSTALLATION

3a. - YOKE

For installations using the iws12-9-YOKE mounting bracket, first attach the yoke to the mounting surface making sure to secure the yoke to architectural structural members (studs) or to masonry or another architectural structure adequate to support the weight of the subwoofer. Use only the correct lag bolts or masonry bolts (not included) to mount the bracket. In critical installations, consult a structural engineer to design an optimized installation solution to insure safety.

Once the yoke is securely fastened to the architectural surface, remove the M10 flat head screws from the M10 mount points needed for your configuration. Carefully hold the subwoofer in place and mount it to the yoke using the M10 washers, lock washers and heavy-duty hex head bolts provided as shown in Figure 3b.

DO NOT INSTALL THE HEX BOLTS WITHOUT THE LOCK WASHERS.

ALWAYS ATTACH AN ADDITIONAL SAFETY TETHER TO THE SUBWOOFER WHEN

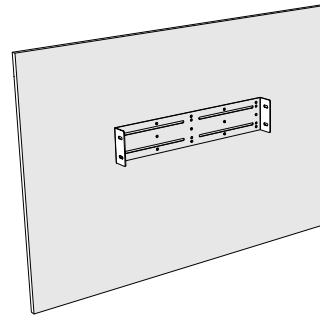


FIGURE 3a. Securely mount iws12-9-YOKE to architectural surface first.

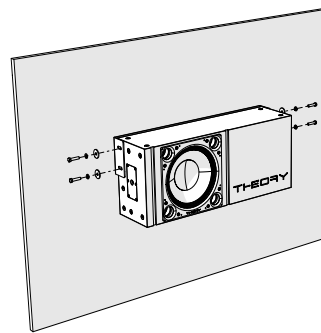


FIGURE 3b. Carefully hold the subwoofer enclosure in place and mount it to the yoke bracket using the supplied M10 washers, lock washers and bolts as shown.

3b. - FLYING

To fly the iws12-9 Subwoofer System overhead, remove the four M10 flat head screws installed in the four corners of the top surface. In their place, install the included M10 rigging eyebolts making sure to use the large M10 flat and locking washers as shown.

DO NOT INSTALL THE EYEBOLTS WITHOUT THE LOCK WASHERS.

Once the eyebolts, flat washers and lock washers have been installed, the iws12-9 Subwoofer System can be suspended from proper steel suspension cables. Consult a structural engineer to design an optimized installation solution to insure safety.

ALWAYS USE ALL FOUR RIGGING POINTS WHEN FLYING.

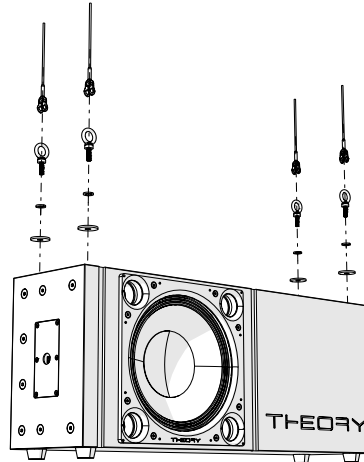


FIGURE 3c. The iws12-9 Subwoofer System may be flown using supplied M10 Eyebolts, washers and lock washers.

3c. - STANDING

To stand the iws12-9 Subwoofer System on its included rubber feet, simply determine a safe location for the subwoofer to sit and place it carefully making sure it is out of harm's way, especially if you won't be installing the optional perforated grille.

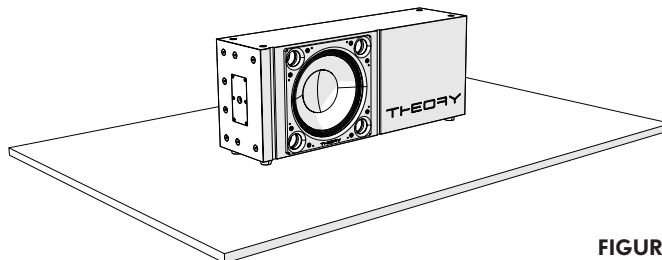


FIGURE 3d. The iws12-9 Subwoofer System can stand on it's rubber feet on any qualified level surface.

4 - CONNECTIONS

4a. - CONNECTING THE SUBWOOFER

The iws12-9 Subwoofer System, though compact, is an extremely powerful system and can easily handle input powers of up to 1500W. As such, 12 gauge speaker wire or larger should be used. Do not use speaker wire smaller than 12ga.

Remove terminal cover and Euro plug.

Remove the aluminum terminal cover and retain the cover and screws. See Figure 4a.

Route speaker wire through terminal cover and connect to Euro plug.

Route the speaker wire through the round hole in the center of the terminal cover. Connect the speaker wire leads to the Euro plug using the screw clamps in the plug openings. Make sure to observe correct audio polarity. See Figure 4b.

Insert Euro plug into Euro socket.

Once the wires are properly secured into the Euro plug, insert the plug securely into the Euro socket inside the recess in the iws12-9 enclosure. See Figure 4c.

Replace terminal cover.

Once the plug has been secured into the input socket, replace the terminal cover using the original screws retained from 4a. See Figure 4d.

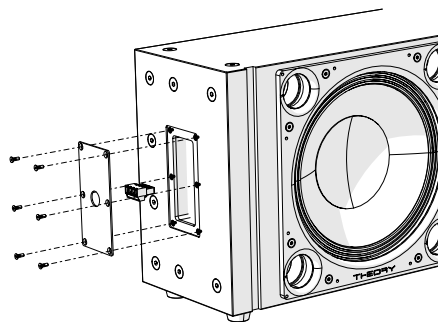


FIGURE 4a. Remove the input terminal cover and retain the cover and screws.

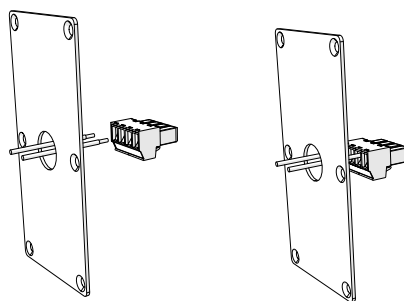


FIGURE 4b. Route the speaker wire through the hole in the terminal cover and connect to Euro plug making sure to observe correct polarity.

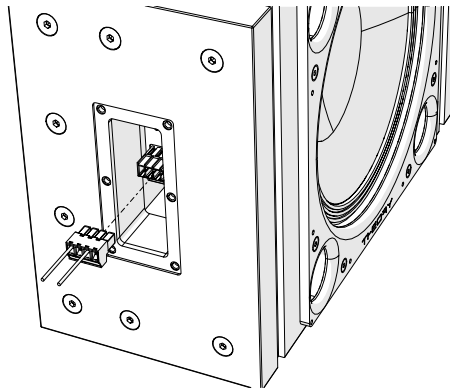


FIGURE 4c. Insert the Euro plug into the Euro socket. (Terminal cover not shown).

PARALLEL OPERATION

Two iws12-9 Subwoofer Systems may be safely operated wired in parallel to a single Theory Amplified Loudspeaker Controller channel.

The Euro plug allows for easy "looping" to the second subwoofer via it's parallel output connections.

Using the second (unused) set of "+" and "-" connections on the input Euro Plug, run two-conductor speaker wire from this plug to the input Euro plug of the second iws12-9 Subwoofer.

DO NOT PARALLEL MORE THAN TWO iws12-9 SUBWOOFER SYSTEMS ON A SINGLE AMPLIFIER CHANNEL.

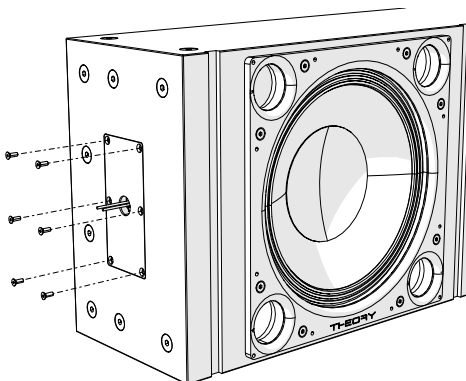


FIGURE 4d. Replace the terminal cover using original screws.

4 - CONNECTIONS (cont'd)

4b. - USING CONDUIT

In installations where conduit is required or desired, 1/2" conduit may be terminated directly to the iws12-9 terminal cover.

Install 1/2" NPT conduit adapter (not included) in terminal plate round hole prior to wiring plug.

A threaded male-female type 1/2" conduit adapter (not included) can be secured into the iws12-9 terminal cover as shown. See Figure 4e.

Route speaker wire through conduit adapter and terminal cover and connect to Euro plug.

Route the speaker wire through the adapter in the center of the terminal cover. Connect the speaker wire leads to the Euro plug using the screw clamps in the plug openings. Make sure to observe correct audio polarity. See Figure 4b.

Insert Euro plug into Euro socket.

Once the wires are properly secured into the Euro plug, insert the plug securely into the Euro socket inside the recess in the iws12-9 enclosure. See Figure 4c.

Replace terminal cover.

Once the plug has been secured into the input socket, replace the terminal cover using the original screws retained from 4a. See Figure 4d.

Connect conduit to adapter.

Once the terminal cover is in place, connect the conduit (not included) to the conduit adapter. See Figure 4f.

PARALLEL OPERATION

Two iws12-9 Subwoofer Systems may be safely operated wired in parallel to a single Theory Amplified Loudspeaker Controller channel.

The Euro plug allows for easy "looping" to the second subwoofer via it's parallel output connections.

Using the second (unused) set of "+" and "-" connections on the input Euro Plug, run two-conductor speaker wire from this plug to the input Euro plug of the second iws12-9 Subwoofer.

DO NOT PARALLEL MORE THAN TWO iws12-9 SUBWOOFER SYSTEMS ON A SINGLE AMPLIFIER CHANNEL.

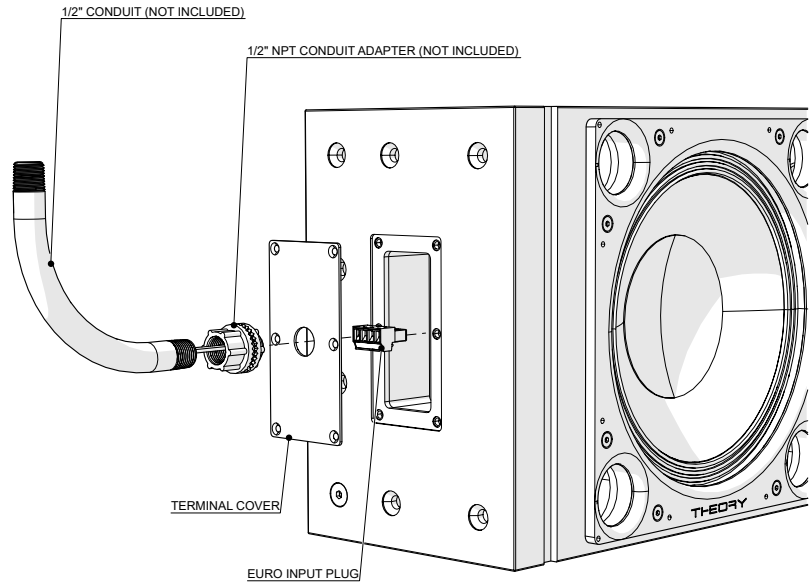


FIGURE 4e. Install 1/2" NPT conduit adapter (not included) into the iws12-9 terminal cover hole prior to wiring plug.

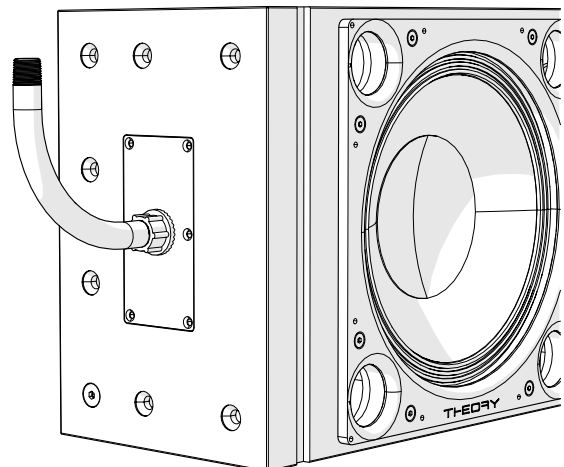


FIGURE 4f. Completed conduit installation shown.

5 - SPECIFICATIONS

OPERATION:	Passive, 8-ohms (up to two may be wired in parallel per amp channel) Requires 1 Theory Loudspeaker Controller Amplifier Channel
DRIVERS:	1 x 12" Theory 4" Voice Coil Long Throw Woofer
MOUNTING POINTS:	M10 Yoke and Eyebolt Mount Points (24x)
BANDWIDTH:	24Hz - 125Hz, -3dB
SENSITIVITY:	95.5dB/W
POWER HANDLING:	700W (AES); 1400W (Continuous)
POWER REQUIREMENTS	Requires Theory Amplified Loudspeaker Controller
MAXIMUM OUTPUT:	124dB SPL @ 1m (AES); 127dB @ 1m (Continuous)
NOMINAL IMPEDANCE:	8-ohms
COLORS:	Black
DIMENSIONS:	14" H x 34" W x 9.4" D (No grille) 14" H x 34" W x 10.4" D (Grille installed on baffle) 14" H x 34" W x 11.8" D (Grille installed on standoffs)
WEIGHT:	49 lbs. Each
INCLUDED ACCESSORIES:	Rubber Isolation Feet Perforated Aluminum Grille
OPTIONAL ACCESSORIES:	Yoke Surface Mount Bracket

© 2023 THEORY AUDIO DESIGN, LLC. All rights reserved.

Theory Audio Design routinely engages in programs to improve, modify and revise its products without notice or obligation. As such, your product may differ slightly from what is shown in this guide.

THEORY AUDIO DESIGN, LLC

25741 Atlantic Ocean Drive, Suite B
Lake Forest, CA 92630

Tel: 949-245-0505

www.theoryaudiodesign.com