# 2X2 Metal Enclosure Installation Instructions

# P/N # 10-0410-00-00



# IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS – PLEASE READ ENTIRE MANUAL BEFORE USING THIS PRODUCT.

Please read the instruction sheet prior to installation.

The **HSS 2x2 Metal Enclosure** is a mounting solution designed to provide in-ceiling tile flushmount for HSS-3000 audio components. The **HSS 2x2 Metal Enclosure** will accommodate one (1) or two (2) HSS-3000 speaker emitters (HSS audio components sold separately). Please confirm all measurements and compatibility for your installation configuration prior to installing this mounting hardware. Please consult your HSS Sales Representative with any compatibility/application questions: (888) HSS-2150.

**<u>CAUTION</u>**: Avoid potential personal injuries and property damage!

1.) Do not use product for any purpose not explicitly specified by manufacturer.

- 2.) If you do not understand these instructions, or have doubts about the safety of the installation, assembly or use of this product, contact manufacturer Customer Service or call a qualified contractor.
- 3.) Manufacturer is not responsible for damage or injury caused by incorrect assembly or use.
- 4.) Do not over-tighten screws or bolts.
- 5.) Be careful when using the ladder.
- 6.) The AMP box does not go in the ceiling. Place amp close to AC power and audio source. Place emitters up to 50' away if using 12 AWG plenum rated wire.

#### Additional tools needed for installation:

**Channel Lock Pliers** 

4mm Allen Wrench

Laser Pointer







### Provided hardware and tools:

(1) Metal Enclosure (White or Black)



(1) White Alum Screen Frame







(2) Wall Mounts



(2) 6-12 Ft. of 14 AWG Speaker wire (Use 12 AWG for > 12'. Wire Plenecon II #25227B 12AWG (UL) CL2P).



## STEP 1: Identify Parts

Identify components before you start. Place and organize all like hardware together to be sure that the parts needed for a secure installation are present. Also at this time, identify and familiarize yourself with the various parts of the Metal Enclosure Installation (**Figures 1A & 1B**).



Figure 1A



Figure 1B

## STEP 2: Installation of Emitters to the Metal Bracket

A.) Place one of the emitters face down. Install wall mount secure with screw on the bottom wall mount screw (**Figure 2A**).



B.) Using the second screw insert into the emitter safety harness (Figure 2B), which is attached to the Metal Bracket.



Figure 2B

C.) Install the screw into the mount top location (Figure 2C).



Figure 2C

D.) Place the metal bracket on top of the wall mount on the emitter. Tighten the Allen screw using the provided Allen wrench (**Figure 2D**). Make sure the Allen screw is very tight.



Figure 2D

E.) Tighten all 3 setscrews on the wall mount (Figure 2E).





F.) Repeat steps A – E for the other emitter. Final product should look like (Figures 2F & 2G). There are several mounting options depending on mounting location and angle.









#### STEP 3: Finding A Place for the 2X2

A.) Once you have located a place to install the 2X2 remove the ceiling tile and make sure there is enough space above to install the 2X2 (**Figure 3A**).



Figure 3A

B.) Remove the ceiling tile next to the selected location. This will help you install the 2X2 (Figure 3B).



Figure 3B

### STEP 4: Installation of the 2X2

A.) Turn the 2X2 at an angle and slide it through the ceiling tile removed for the 2X2 (Figure 4A).



Figure 4A

B.) Once you have pulled the 2X2 through the removed ceiling tile (**Figure 4B**) install the 2X2 into the removed ceiling tile (**Figure 4C**).









C.) Using T-Bar wire secure the 2X2 from ceiling at 2 locations (Figure 4D).





## **STEP 5: Installation of Metal Bracket**

A.) Remove the black cable grip from the metal bracket (**Figure 5A**).







Figure 5B

B.) Place the white ring for the black cable grip on top of the 2X2. Insert the black cable grip into the center hole of the metal bracket. Line up the black cable grip with the hole in the 2X2 (**Figure 5C**).



Figure 5C

C.) Hand tighten the white nut on top of the 2X2 onto the black cable grip (Figure 5D).



Figure 5D

D.) Once you have tightened the ring by hand grab channel lock pliers and make sure it is on tight (Figure 5E).



Figure 5E

#### **STEP 6: Installation of Wires**

A.) For lengths 12' to 50' we recommend using West Penn Wire Plenecon II #25227B 12AWG (UL) CL2P. Pull both wires threw the hole on the black cable grip, and then strip the ends. Install Banana Plugs on wire ends. (Figure 6A). We don't recommend cable longer than 50'.





B.) Next plug in the Banana Plugs into the emitters (Figures 6B & 6C).



Figure 6B



## **STEP 7: Adjusting the Emitters**

A.) Adjustment is much easier using a laser pointer. Emitter alignment laser can be fabricated or purchased separately thru Parametric Sound. (Figure 7A).





B.) Place the laser pointer on the emitter (Figure 7B). Move the emitter until the laser beam points to where you would like the sound to hit.



Figure 7B

### **STEP 8: Installation of Screen Frame**

A.) Once you are done plugging in the Banana Jacks and adjusting the emitters, you can install the Screen Frame (**Figure 8A**).



Figure 8A

B.) You must turn the Screen Frame at an angle and insert it into the 2X2 (Figure 8B).





C.) Don't force it in. That will break the frame (Figure 8C).



Figure 8C

### STEP 9: Putting tiles back

Once you are done installing the Screen Frame, you must re-install the removed ceiling tile used to help you install the 2X2 (**Figures 9A & 9B**).



Figure 9A



Figure 9B

STEP 10: Finish Product

The finished product should look like (Figure 10).



Figure 10