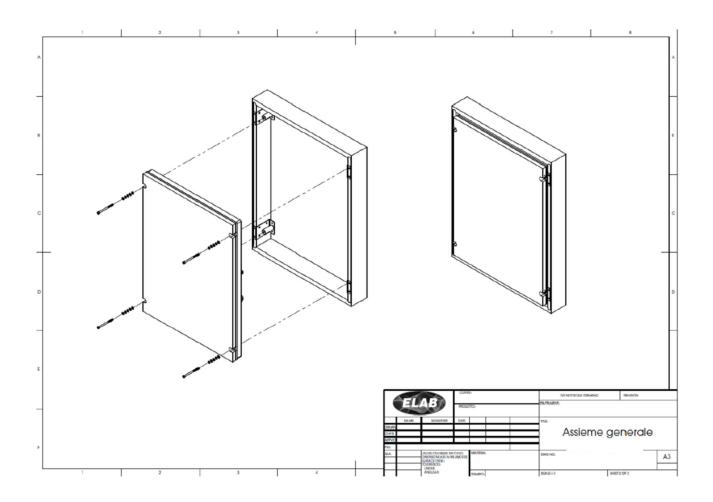


## **INVISIBLE LOUDSPEAKERS AI64 SERIES**

# **INSTALLATION INSTRUCTIONS**



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<u>General Guidelines</u>: This instructions are written assuming the Installer possesses skill in the proper use and knowledge of hand and power tools, awareness of local Fire/Building Codes, and familiarity with the environment behind the surface of the wall/ceiling where the loudspeaker is to be installed. It also assumed that the site has been pre-wired.

### PRODUCT OVERVIEW

The ELAB model Al64M is a full-range loudspeaker designed to be installed in Walls or Ceilings of ½" or 5/8" drywall, and become truly invisible after installation, matching any interior decor. The loudspeaker may be painted with any Water based Latex Paint, or covered with selected (Light) fabrics and wall coverings.

# **APPLICATIONS**

Plasterboard ceilings, plasterboard wall, masonry wall

### **SUPPLIED ACCESSORIES:**

- TLE64M wood mounting frame.
- Bags of socket head bolts MA 4x70 mm,
- Flat washer
- Rubber Standoffs
- Speaker overlays.
- Mounting Teplate

### **RECOMMENDED TOOLS:**

Socket head driver.

Spackling knife.

Straightedge.

Wallpaper squeegee.

Pencil.

280/320 Grit Silicone Carbide sanding screen.

Overlay adhesive.

Mounting Teplate

<u>VERY IMPORTANT NOTICE</u>: The front surface ( Diaphragm ) of the Al64M loudspeaker utilizes a flat polystyrene material.

The front surface is the sound radiating material!!!

Although it is extremely resistant to mechanical damage and is unaffected by environmental extremes, <u>care should be observed during handling</u>.

Utilization of dust mask and protective eye-glasses are recommended during all

phases of installation.

# **POSITIONING THE MOUNTING TEMPLATE (only for plasterboard installation)**

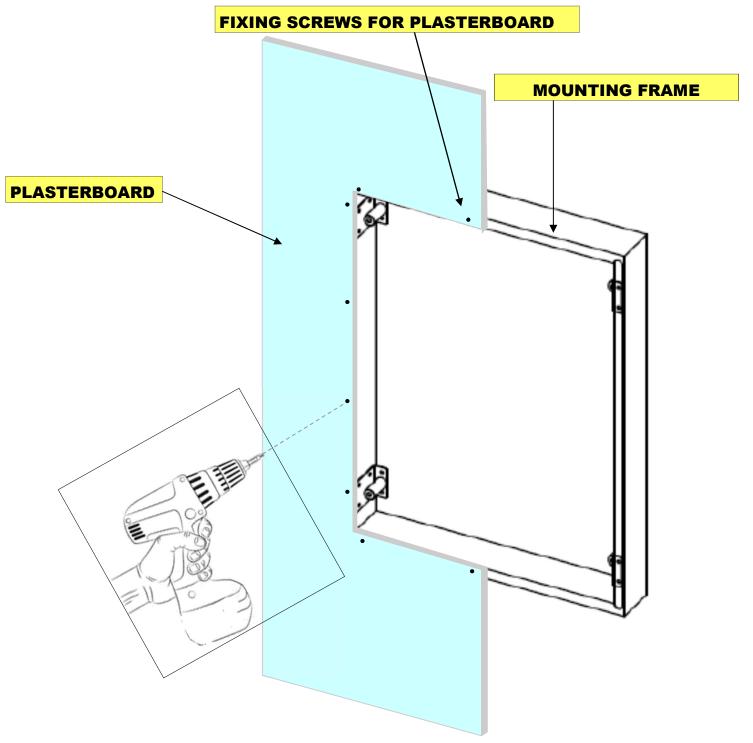
- Apply the mounting template in the previously identified position with adhesive paper tape.
- •Mark the perimeter of the template with a pencil (black border) and then cut the plasterboard to obtain the correct dimensions corresponding to the internal light of the wooden frame.



# 1. FIXING THE MOUNTING FRAME ON PLASTERBOARD

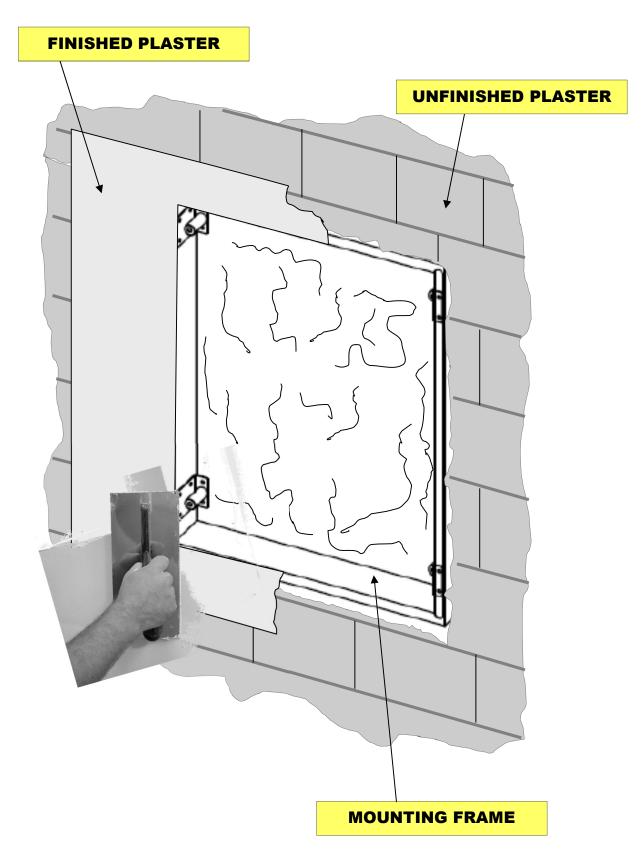
For retrofit into existing construction locate where the speaker(s) is to be mounted and identify the wall/ceiling location .Mark an area like the internal area of the wood mounting frame. Cut and remove the sheetrock.Insert the wood mounting frame obliquely through then opening until it passes entirely through. Manoeuvre the mounting frame until it is aligned and centred to the opening.

Complete the mounting frame installation by sheetrock metal screw ( not supplied )



# 2. FIXING THE MOUNTING FRAME ON WALL

Wall up the wood frame with a 1 (one) Cm. depth from the wall



## 3. ACOUSTIC INSULATION

Apply a large panel of rock wool or similar for acoustic insulation



## 4. INSTALLING THE LOUDSPEAKERS

- 1. Retrieve the following: four(4) rubber standoffs + four (4) M5 x 70 mm. Socket head bolts + washers.
- 2. Place the rubber standoffs on the posts of the mounting brackets on the mounting frame.



 $\frac{\text{NOTE}}{\text{NOTE}}: \text{rubber standoff will compress allowing the loudspeaker to be levelled with walls/ceiling thickness ranging from $1/2$" to $5/8$". Any installation with surface materials other than specified will require different length screws, alterations to the standoffs and may impede proper installation of the loudspeaker.}$ 

3. Connect the speaker wires to the correct positive (+) and negative (-) loudspeaker polarity, using suitable method by crimping and soldering.



 $\underline{\textbf{NOTE: isolate and secure the connection}} \text{ . Make sure the wires will not in contact with the back of the loudspeaker surf}$ 

IMPORTANT: never allow the loudspeaker to hang from the speaker wire.

4 Align the loudspeaker mounting holes with the rubber standoffs. Insert the bolts with the washers and tighten enough to firmly hold the loudspeaker in place.



- 5 Remove protective card board from the face of the loudspeaker.
- 6 Using a straight edge, alternately tighten the bolts until the unit is perfectly level to the surrounding surfaces.





7 Check each corner and on both axis. **IMPORTANT**: the loudspeaker surface must be level with the finished wall/ceiling

# **5. SEALING AND FINISHING**

- 1 Prepare a batch of supplied joint compound and completely fill the gaps around the loudspeaker, utilizing a spackling knife.
- 2 Remove excess compound and allow to dry a minimum of 6 hours.





NOTE: If the compound falls inside the cavity, add joint compound to thicken the mix. Time may vary depending on the temperature/humidity on the room.

IMPORTANT: Do not apply compound over the loudspeaker front surface. A small amount of overlap at edges is acceptable.

- 3 Once completely dry, sand and smooth utilizing drywall sanding screen. Observe care not to sand the loudspeaker surface.
- 4 Prepare a second batch of compound and apply a second layer to the joint. Using a portable work light, examine the surface while changing light directions. Smooth any imperfections. Allow to dry a minimum of 6 hours.
- Once completely dry, sand and smooth. Carefully examine the surface and smooth any imperfections. Clean the surface area with a damp cloth or sponge.
- 6 Apply transparent insulating water base paint 5 cm beyond the loudspeaker area. Wait completely dry.
- 7 Retrieve one Overlay and overlay adhesive ( not supplied ).



On a work-table apply the overlay adhesive to the one surface of the overlay. Next carefully apply the overlay on the centred loudspeaker surface.





- 9 NOTE: The overlay will become completely saturated upon contact with the surface.
- 10 Immediately after contact, remove wrinkles and excessive adhesive using plastic smoother or squeegee. Start from the centre of the overlay and proceed to the outside edges. Apply sufficient pressure to displace the excess adhesive, being careful not to tear overlay.
- 11 <u>NOTE</u>: Assure the loudspeaker surface is fully covered and overlay is completely bonded to the wall and loudspeaker. If not, remove the overlay, clean the surface and, with new overlay, repeat previous steps.
- 12 Clean excess from the sides of the overlay and wipe the entire area with a wet sponge. Allow overlay to dry for a minimum of 4 hours.

13 Prepare a small amount of joint compound. Apply around overlay edges, feathering with a drywall taping knife. Allow to dry a minimum of 3 hours.



14 Once completely dry, sand and smooth edges. Examine the surface with the work-light and smooth any imperfections.

# 6. FINAL FINISH NOTE

At this point The ELAB Al64M invisible loudspeaker is ready to be painted with water base paint or covered with wallpapered



## 7. GUARANTEE EXCLUSION

Except as specified below, the guarantee covers all defects in material or workmanship of the loudspeaker. The following are not covered by the guarantee.

### **VERY IMPORTANT**:

- Do not paint the loudspeaker with oil base paint.
- Do not cover the loudspeaker with excessively thick or rigid wallpaper.
- Do not cover the loudspeaker with a thick texture coating.





MADE IN ITALY

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