



# Installation Instructions

**CERTIFICATION**

**UL Listed 1480, 1480A (Type F, G):  
UL Listed 2043:**

**ASTM E84:  
CSFM Certified #7320-2288:0500:**

When installed per supplied installation instructions and requirements of NEC/AHJ Suitable for use in air-handling spaces. Material and construction permits use where ceiling plenum is part of the air handling system  
Includes integral backbox that meets/exceeds flame and smoke test w/ 3hr. burn rating Listed as speakers for use with separately listed compatible fire alarm control units

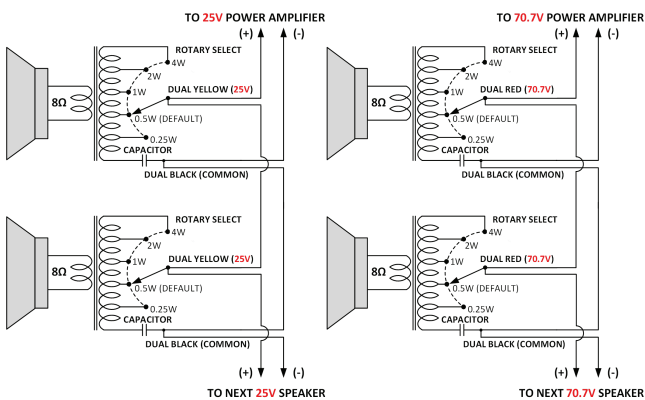
**INSTALLATION INSTRUCTIONS**

- Cut ceiling tile as required:
  - 2' x 2' tile – No cutting required
  - 2' x 4' tile – Cut tile in half on 4' side
- Install a 24" T-bar trim piece where required (not supplied).

Required only if using conduit clamp fitting **other than what is provided with product.**

- Loosen, but do not remove screws** on cover plate; slide plate to large keyhole position and lift plate from assembly.
- Remove cable/conduit clamp fitting from cover plate;** Install UL Listed metallic enclosure entry fitting for plenum cable or flex whip.
- Feed supply cable through whip to speaker wires.** Make connections per wiring diagram; Use appropriate connectors to meet any required codes.
- Replace cover plate and tighten cover plate screws. When cover plate is secured, all connections/splices must be inside of the enclosure.

- Remove cover from electrical box. Remove knockout from desired location on electrical box and install UL Listed metallic enclosure entry fittings. Remove only the knockout(s) that will be used. Verify code requirements with local AHJ.
- Make the following field wiring connections inside of electrical box:



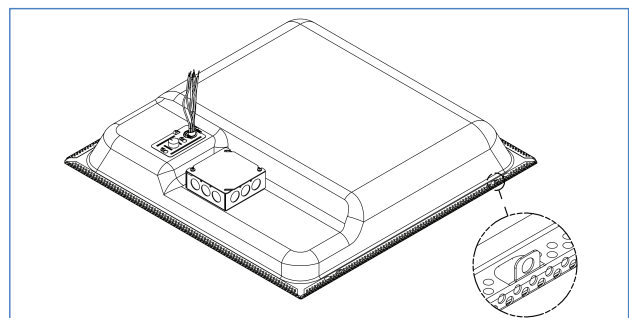
Voltage (VRMS)	Tap (Watts)	OSPL (dBA)
25	0.25	78.2
25	0.5	81.0
25	1	84.0
25	2	87.1
25	4	89.7
70.7	0.25	78.2
70.7	0.5	81.0
70.7	1	83.9
70.7	2	86.9
70.7	4	89.6

- Connect one common (BLACK) wire from the UL22DM to the existing field wiring common wire. Use the second common (BLACK) wire from the UL22DM to the next speaker common wire.
- In 25 Volt systems, connect the positive (YELLOW) wire from the UL22DM to existing field wiring positive wire. Use the second positive (YELLOW) wire from the UL22DM to the next speaker positive wire.  
  
In 70 Volt systems, connect the positive (RED) wire from the UL22DM to existing field wiring positive wire. Use the second positive (RED) wire from the UL22DM to the next speaker positive wire.
- Tighten screws on cable clamp.

**IMPORTANT:**

- Be sure to insulate all unused wires from each other, the enclosure, and electrical ground.
- Use code compliant connectors for all field wiring connections.
- Verify all code requirements with local AHJ before selecting connection method.
- Do not modify factory applied finish.
- Line supervision voltage must not exceed 150V
- Do not use UL22DM without device or customer supplied cover plate mounted to the front of speaker assembly.

- Make added device (e.g., strobe, smoke detector, etc.) connections on front and back of speaker using 4 internal feed-through wires and UL Listed connectors according to device manufacturers recommendations. Verify added device is securely mounted to UL22DM.
- Attach electrical box cover.
- Place assembly onto ceiling grid.



TIE-OFF TAB x 4

**IMPORTANT:**

- AHJ/ local codes may require tie-off to structure. Bend up tie-off tabs as shown above and install as directed.
- AHJ/ local codes may require tie-down to grid. Recommended fasteners (not supplied): Quam Kit #118 includes twelve (12) hold down clamps and twenty-four (24) self-drilling screws. Place clamp over tile grid support rail and edge of speaker assembly, insert two (2) screws into clamp and tighten.

- Place remaining ceiling tile into grid opening as required.

