

Model No.

LT2-810-T72-BB

Lay-in Tile Ceiling Loudspeaker

INCLUDES:

- 8-inch 15W dual cone driver
- 25V/70V dual-voltage transformer
- 2x2 grille with subplate
- 0.147 cu.ft. enclosure



LT SERIES SPEAKERS are pro systems made for quick installation in suspended lay-in tile ceilings. The 2x2 assembly replaces a 2x2 ceiling tile. This model features an 8-inch 15W dual cone driver, 25V/70V dual voltage transformer, 2x2 white grille with black subplate and 0.147 cu.ft. enclosure.

FEATURES

PERFORMANCE: This model is ideal for applications providing commercial paging and/or background music.

DRIVER (810): The 8-inch 15W dual cone driver with 10 oz. magnet provides a step up in full range performance from the commercial industry standard, delivering solid performance and value for paging and/or background music applications that require clear communications.

- **Driver magnet:** 10 oz. ceramic, 3/4-inch hard fiber whizzer cone, 1-inch voice coil, 20-gauge steel frame with zinc-plated finish
- **Driver weight:** 2.0 lbs.
- **Driver depth:** 2.84 in.

TRANSFORMER: Factory-wired dual voltage 25V/70V transformer with primary taps at 0.25, 0.5, 1, 2 and 5W.

ENCLOSURE (8XD4): USA-certified steel enclosure with black powder coat finish.

- Volume: 0.147 cu.ft.
- Polyurethane foam disc
- Enclosure is offset on the grille assembly to accommodate above-ceiling obstructions.

GRILLE WITH SUBPLATE (2X2): Fine-perforation grille provides maximum free-air space for excellent sound transmission while maintaining an unobtrusive appearance in new or existing tile ceilings. USA-certified steel with white powder coat finish.

INSTALLATION:

- **Assembly Dimensions:** 23.75-in.L x 23.75-in.W x 4.5-in.H
- **Restraint Tabs:** The assembly features four restraint tabs for code compliance tie-offs.
- **Connections:** Driver leads exit enclosure through a metal clamp for fast connections — just splice connecting wires, push inside the enclosure, and tighten clamp.

COMPLIANCE & CERTIFICATIONS:

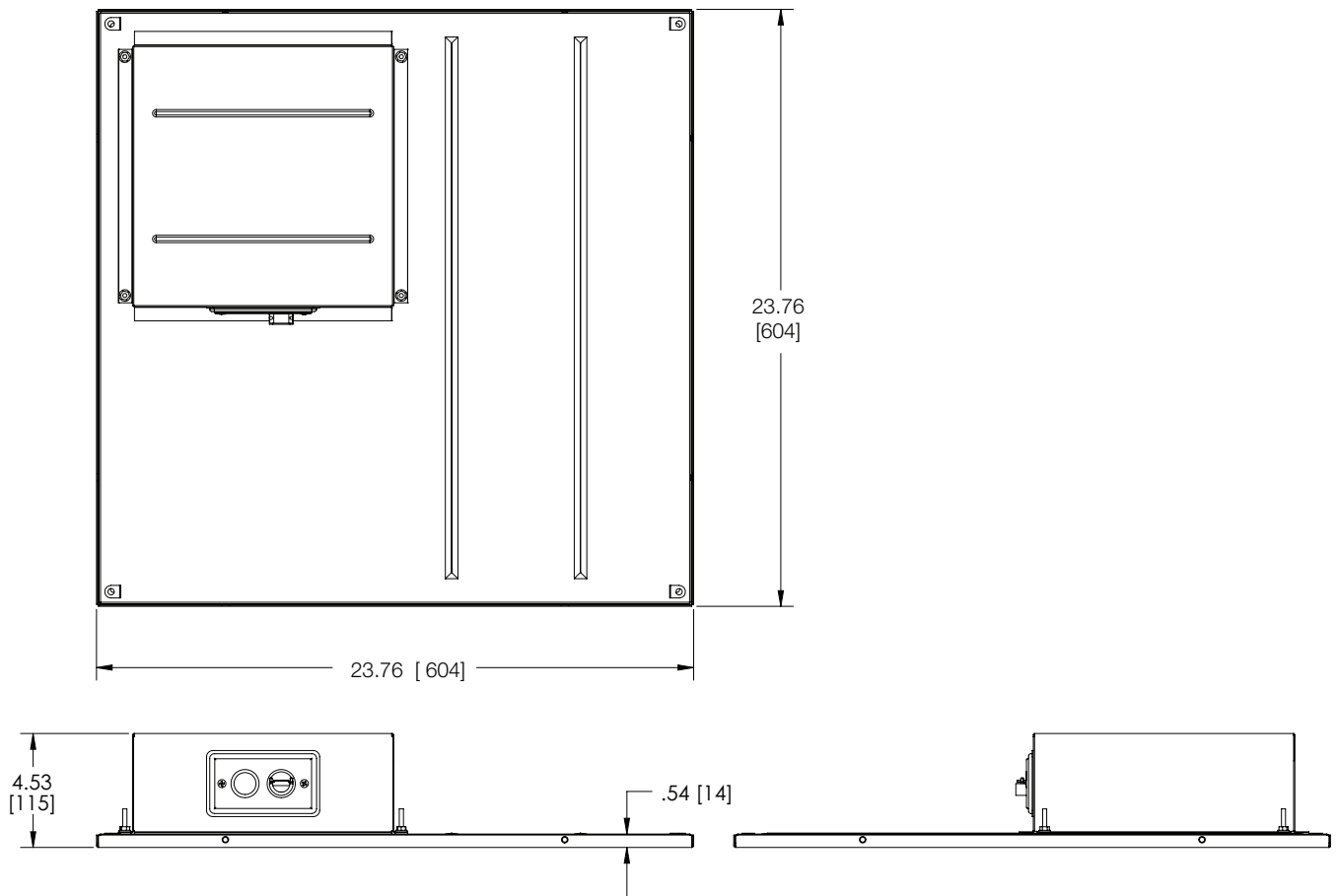
- Made in the USA with USA-certified steel and global components.
- UL 1480A General Signaling (USA); UL 2043 Suitable for use in plenum spaces; CSA C22.2 No. 205-12 General Signaling (Canada).
- Trade Agreements Act (TAA) compliant.
- Buy American Act (BAA) compliant.

FEATURES



TECHNICAL DRAWINGS

Dimensions are provided in inches.



A&E SPECIFICATIONS

The loudspeaker for suspended lay-in tile ceilings shall be Lowell Model LT2-810-T72-BB. The 2x2 assembly shall directly replace a 2x2 ceiling tile. Each unit shall include a factory-mounted driver mounted to a subplate and fine perforation steel grille with white powder coat finish. The driver shall be 8-inch dual cone with 15W power rating. It shall have a magnet weight of 10 ozs., frequency response of 54Hz-11.6kHz (± 6 dB); 50Hz-20kHz (± 6.6 dB) and average sensitivity of 97.9dB measured 1W/1M. The system shall include a steel backbox (.147 cu.ft. volume) with leads exiting through a metal clamp. The 25V/70V dual voltage transformer shall feature primary taps at 0.25, 0.5, 1, 2 and 5W. The assembly shall be made in the USA with USA-certified steel. It shall be UL Listed and Trade Agreements Act (TAA) compliant).

MODEL OVERVIEW

| Model No. | Driver | Transformer | Taps | Enclosure | Grille | Volume Control | Listed | Driver Specs (measured half space) | | |
|----------------|------------------|-------------|-------------------|-------------|--------|----------------|--------|------------------------------------|--------------------|--------------|
| | | | | | | | | Sensitivity* | Frequency Response | Dispersion** |
| LT2-810-T72-BB | 8" 15W dual cone | 25V / 70V | .25, .5, 1, 2, 5W | .147 cu.ft. | 2 x 2 | --- | --- | 97.9 dB | | 95° |

* Average SPL @ 1W/1M ** Conical @ 2kHz octave (-6dB)

DRIVER SPECIFICATIONS

| Driver No. | Size | Power Rating | Type | Ceramic Magnet | Frequency Response | Dispersion @ 2000Hz(-6dB) | Voice Coil Impedance | Voice Coil Diameter | Sensitivity 1W/1M | Max SPL* | Driver Depth | Driver Weight |
|------------|-------|--------------|-----------|----------------|--|---------------------------|----------------------|---------------------|-------------------|----------|--------------|---------------|
| 810 | 8 in. | 15W | dual cone | 10 oz. | 54Hz-11.6kHz (± 6 dB) 50Hz-20kHz (± 6.6 dB) | 95 degrees conical | 8 ohms | 1 in. | 97.9dB avg. | 109.7dB | 2.84 in. | 2.0 lbs. |

* Calculated value 1M @ driver power rating. See spec sheet for driver 810 for additional information.

TEST METHODOLOGIES: Lowell speaker systems are thoroughly tested to provide specifiers and contractors with accurate data. Test equipment includes the Gold-Line TEF-20 analyzer.

- **POWER HANDLING:** specification is based on EIA Standard RS-426B.
- **FREQUENCY RESPONSE:** describes the usable response range defined by a ± 6 dB window, which is useful in predictive engineering calculations.
- **SENSITIVITY:** is a computer calculation of the log average sound pressure level (SPL) over the entire engineering bandwidth as given in the Frequency Response (± 6 dB).
- **MAXIMUM SPL:** is calculated based on the Power Handling and the measured log average Sensitivity where Maximum SPL = (Sensitivity @ 1W1M) + 10 log (Power Handling).
- **DISPERSION ANGLE:** is defined as the angle of coverage that is no more than 6dB down from the on-axis value averaged over the 2kHz octave band. Since speech intelligibility is dependent upon the 2kHz octave, this specification is useful in designing voice reinforcement and music systems that provide even coverage and intelligibility. The polar plots illustrate how the system performs when hung in free space (360°) or half-space (180°) in the case of a recessed speaker.