

LT2-810 Series

Lay-in Tile Ceiling Loudspeaker

INCLUDES:

- 8-inch 15W dual cone driver
- 25V or 25V/70V transformer (model dependent, see p.2)
- 2x2 grille with subplate
- 0.147 cu.ft or 0.228 cu.ft. enclosure (model dependent, see p.2)



LT2-810-T72-BB-SW (shown)



Select models
(see series overview, p.2)



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 series features an 8-inch 15W dual cone driver, 2x2 white grille with black subplate and steel enclosure. Options available with 25V or 25V/70V dual voltage transformer and hand-adjustable tap selector switch (model dependent).

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 25V transformer with primary taps at 0.5, 1, 2, and 4W or dual voltage 25V/70V transformer with primary taps at 0.25, 0.5, 1, 2 and 5W (model dependent).

ENCLOSURE: USA-certified steel enclosure.

- Volume (model dependent, see p.2):
 - Round with black finish (0.147 cu.ft.)
 - Square galvanized steel (0.228 cu.ft.)
- Isolation pad.
- Enclosure is offset on the grille assembly to accommodate above-ceiling obstructions.
- Hand-adjustable tap selector switch (model dependent, see p.2)

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.
- Trade Agreements Act (TAA) compliant.
- Buy American Act (BAA) compliant.
- **Model Dependent (see series overview, p.2):**
 - UL 1480A General Signaling (USA);
 - UL 2043 Suitable for use in plenum spaces;
 - CSA C22.2 No. 205-12 General Signaling (Canada).

SERIES A&E SPECIFICATIONS

The loudspeaker for suspended lay-in tile ceilings shall be Lowell Model _____ (LT2-810-BB; LT2-810-425-BB; LT2-810-T72-BB; LT2-810-T72-BB-SW). 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 oz., frequency response of 54Hz-11.6kHz (±6dB); 50Hz-20kHz (±6.6dB) and average sensitivity of 97.9dB measured 1W/1M. The assembly shall be made in the USA with USA-certified steel and shall be Trade Agreements Act (TAA compliant) and Buy American Act (BAA) compliant.

Model Dependent Specifications:

Model LT2-810-BB shall include a 0.147 cu.ft. backcan with black finish. Driver leads shall exiting through a metal clamp.

Model LT2-810-425-BB shall have a 25V transformer with primary taps at 0.5, 1, 2 and 4W. It shall include a 0.147 cu.ft. backcan with black finish. Driver leads shall exiting through a metal clamp.

Model LT2-810-T72-BB shall have a 25V/70V dual voltage transformer with primary taps at 0.25, 0.5, 1, 2 and 5W. It shall include a 0.228 cu.ft. galvanized steel backbox with leads exiting through a metal clamp. It shall be UL Listed.

Model LT2-810-T72-BB-SW shall have a 25V/70V dual voltage transformer with primary taps at 0.25, 0.5, 1, 2 and 5W. It shall include a 0.228 cu.ft. galvanized steel backbox with leads exiting through a metal clamp and shall feature a hand-adjustable tap selector switch. It shall be UL Listed.

SERIES OVERVIEW

Model No.	Driver	Transformer	Taps	Enclosure	Grille	Tap Selector	UL Listed	Sensitivity*	Driver Specs (measured half space) Frequency Response	Dispersion**
LT2-810-BB	8" 15W dual cone	---	---	.147 cu.ft.	2 x 2	---	---	97.9 dB	54Hz-11.6kHz (±6dB) 50Hz-20kHz (±6.6dB)	95°
LT2-810-425-BB	8" 15W dual cone	25V	.5, 1, 2, 4W	.147 cu.ft.	2 x 2	---	---	97.9 dB	54Hz-11.6kHz (±6dB) 50Hz-20kHz (±6.6dB)	95°
LT2-810-T72-BB	8" 15W dual cone	25V / 70V	.25, .5, 1, 2, 5W	.228 cu.ft.	2 x 2	---	Yes	97.9 dB	54Hz-11.6kHz (±6dB) 50Hz-20kHz (±6.6dB)	95°
LT2-810-T72-BB-SW	8" 15W dual cone	25V / 70V	.25, .5, 1, 2, 5W	.228 cu.ft.	2 x 2	Yes	Yes	97.9 dB	54Hz-11.6kHz (±6dB) 50Hz-20kHz (±6.6dB)	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 (±6dB) 50Hz-20kHz (±6.6dB)	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 GoldLine TEF-20 analyzer.

- **POWER HANDLING:** specification is based on EIA Standard RS-426B.
- **FREQUENCY RESPONSE:** describes the usable response range defined by a ± 6dB 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 (± 6dB).
- **MAXIMUM SPL:** is calculated based on the Power Handling and the measured log average Sensitivity where Maximum SPL = (Sensitivity @ 1W/1M) + 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.

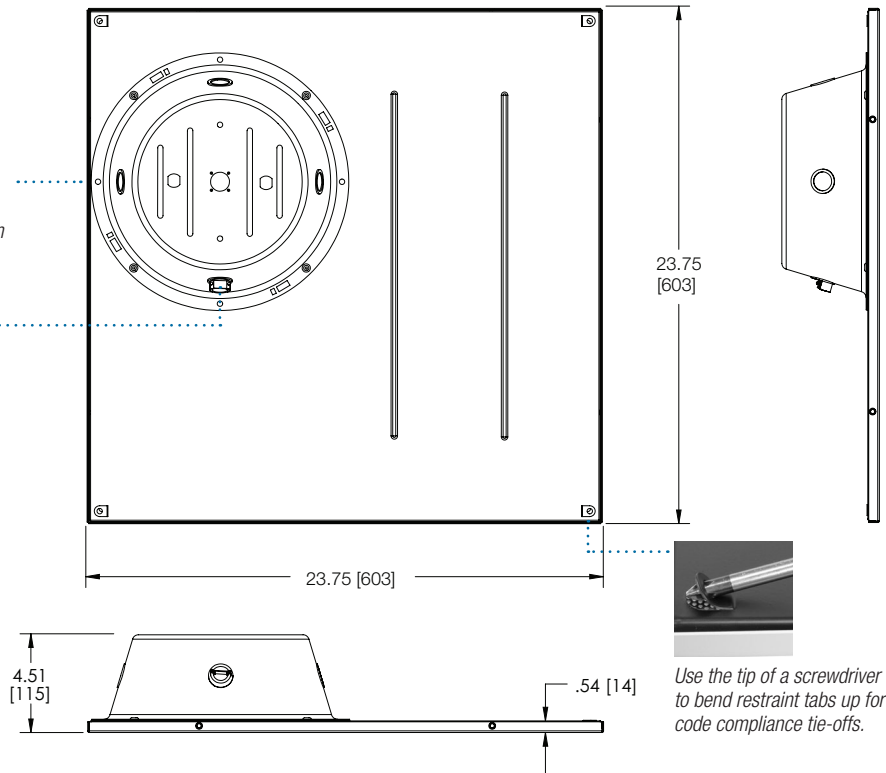
TECHNICAL DRAWINGS

Dimensions are provided in inches.

LT2-810-BB

Enclosure is offset on the 2x2 grille assembly to accommodate plenum obstructions

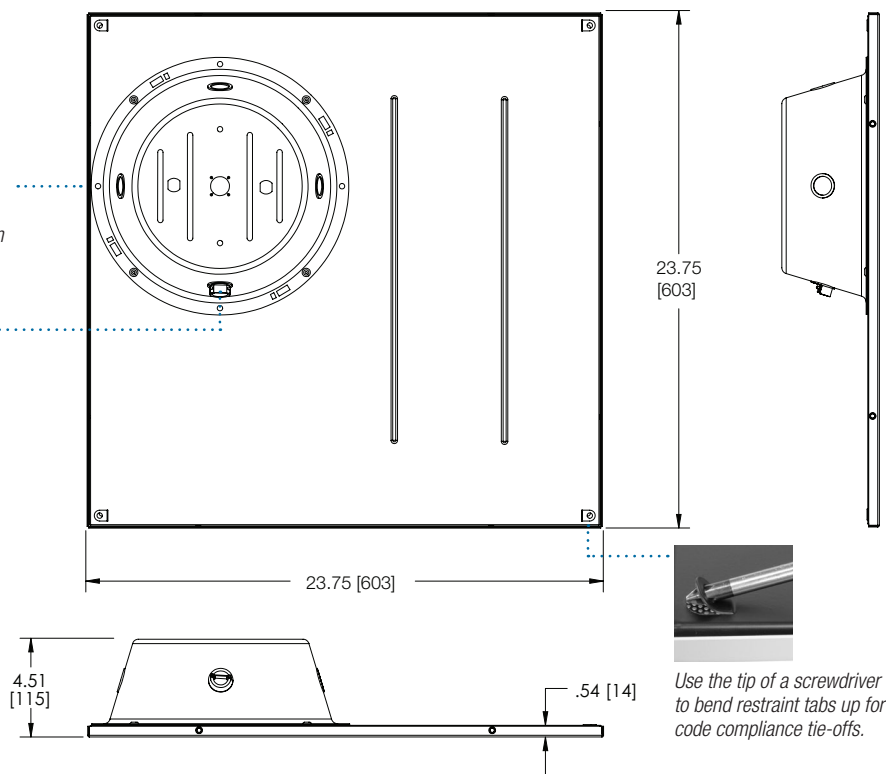
Driver leads exit through a metal clamp for fast connections.



LT2-810-425-BB

Enclosure is offset on the 2x2 grille assembly to accommodate plenum obstructions

Driver leads exit through a metal clamp for fast connections.



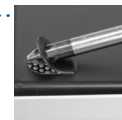
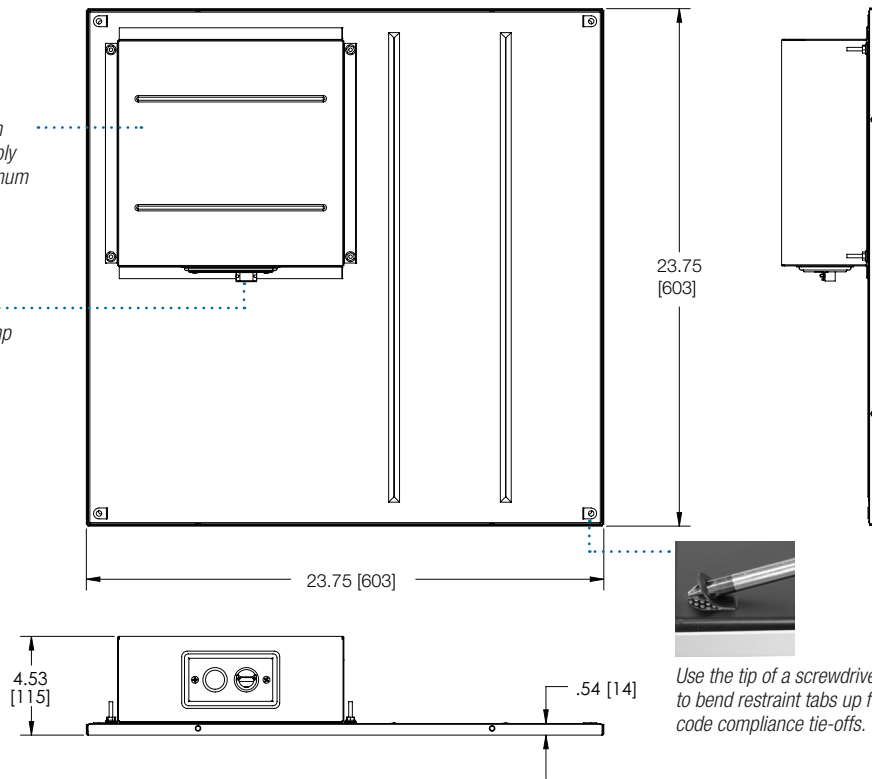
TECHNICAL DRAWINGS

Dimensions are provided in inches.

LT2-810-T72-BB

Enclosure is offset on the 2x2 grille assembly to accommodate plenum obstructions

Driver leads exit through a metal clamp for fast connections.



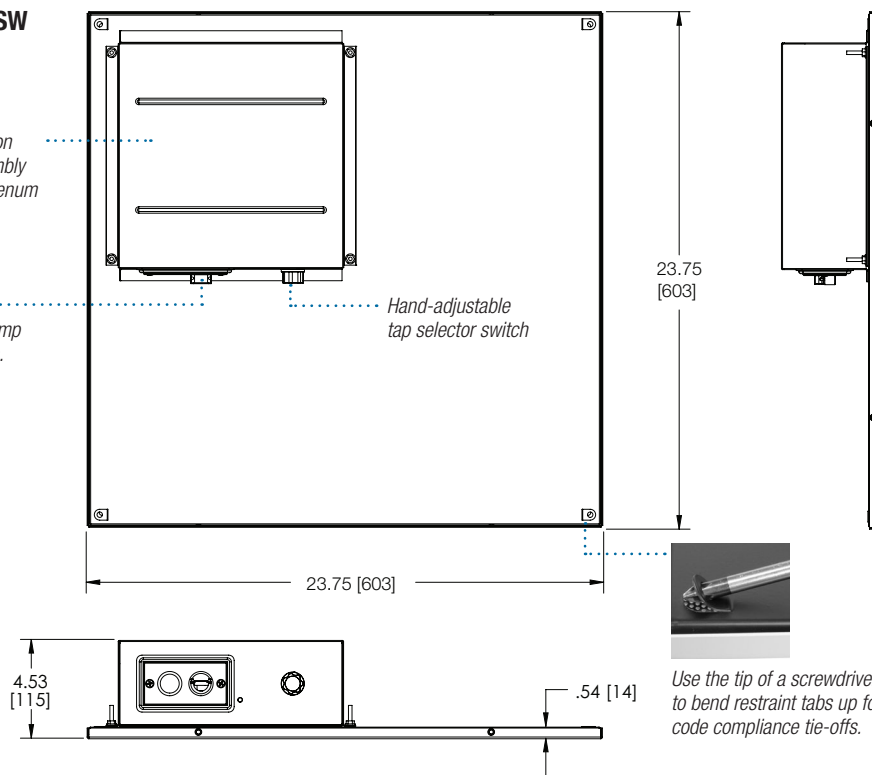
Use the tip of a screwdriver to bend restraint tabs up for code compliance tie-offs.

LT2-810-T72-BB-SW

Enclosure is offset on the 2x2 grille assembly to accommodate plenum obstructions

Driver leads exit through a metal clamp for fast connections.

Hand-adjustable tap selector switch



Use the tip of a screwdriver to bend restraint tabs up for code compliance tie-offs.