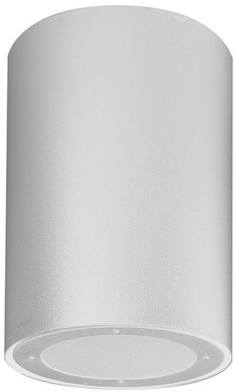
Lowell™
Distributed Audio, Power & Rack Solutions

8" 50W coaxial loudspeaker #IMC8A-TS32-1W

ships ready for installation
features 8" 50W coaxial driver & 70V 32W transformer

iMount® pro sound



Includes:
- 8 inch coaxial driver
- 70V 32W transformer
- Steel enclosure (1.25 cu.ft.) w/forged eyebolts
- White grille

US STEEL grille | enclosure

Made in the USA with global components

features

- **Description:** Ready-to-install high performance loudspeaker for suspended installations provides quality sound distribution of foreground or background music in all kinds of commercial venues—it's ideal for high ceiling/ high energy applications like clubs and bars, sporting facilities, concourses, hotel ballrooms, transportation terminals, convention centers, and exhibit halls.
- **Driver (#8A50):**
  - 8" 50W driver features a 20 oz. LF magnet with 1.4" copper voice coil to drive a polyproylene cone with half-roll rubber surround for long cone travel and good edge damping. A post-mounted tweeter is a 1" balanced-drive dome protected by Ferrofluid and a first-order high-pass filter.
  - See the spec sheet for driver #8A50 for more information.
- **Transformer (#TLS-3270):**
  - 70V 32W transformer for superior music fidelity in 70V distributed applications has a screwdriver-adjustable tap selector switch accessible through an opening in the grille.
  - Part of Lowell's 20/20 AudioVision™ line, the transformer offers true 20Hz-20kHz performance with full frequency response and high power handling to allow the speaker to operate at full potential while providing a stable load to the amplifier. The transformer allows a distributed speaker system to sound imperceptibly the same as a transformerless direct-to-voice-coil system but with easier wiring, reduced labor, and less expense.
- **Enclosure:**
  - The 1.25 cu.ft. precision-formed U.S. steel cylindrical enclosure (19" x 12" dia.) features a white powder epoxy finish and 1-1/2" thick premium acoustic lining.
  - 1/4"–20 forged eyebolts are screwed into mounting nuts for secure suspended installation (flyware by others).
  - Externally accessible connections are terminated through a 4" x 4" flush cover plate.
- **Grille:**
  - Perforated steel grille with white powder epoxy finish (≈ 11.8" dia.)

IMC Series Summary

Model No.	*Driver*	*Transformer*	*Enclosure*	*Grille**	*Std.Ctn. Pack*	*Ctn.Wt. (lbs.)*
IMC12Q-TS100-2W	12" 250W coaxial	70V 100W	2 cu.ft.	14.6" dia.	1	52
IMC12P-TS100-2W	12" 150W coaxial	70V 100W	2 cu.ft.	14.6" dia.	1	41
IMC8P-TS32-2W	8" 100W coaxial	70V 32W	2 cu.ft.	14.6" dia.	1	41
IMC8A-TS32-1W	8" 50W coaxial	70V 32W	1.25 cu.ft.	11.8" dia.	1	23

**Approximate overall diameter*

Note: Black and custom color grilles and enclosures are available upon request. Additional charges and/or delivery times may apply.

Lowell™
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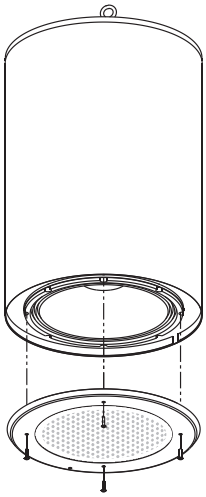
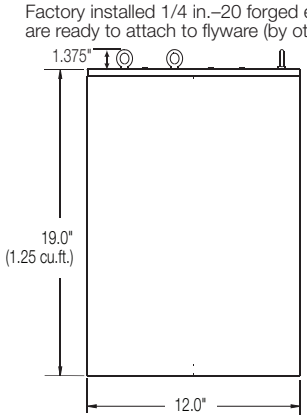
8" 50W coaxial loudspeaker #IMC8A-TS32-1W

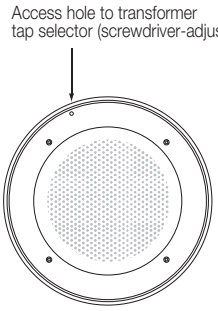
a&e specifications

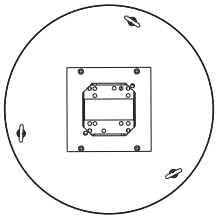
The speaker for suspended installation shall be Lowell iMount® Model #IMC8A-TS32-1W which shall feature an 8 in. 50W driver mounted in a white cylindrical steel acoustic enclosure (19 in. high x 12 in.dia.; 1.25 cu.ft. volume) with 1-1/2 inch thick acoustic lining, forged 1/4 inch-20 eyebolts screwed into mounting nuts for suspended installation using flyware by others. It shall include a perforated steel architectural grille (≈11.8 in.dia.) with white finish. System frequency response shall be 65Hz–12.3kHz (±6dB) and 50Hz–20kHz (±8.2dB) with average sensitivity of 89.1dB @1W/1M. Dispersion shall be 95 degrees conical @2kHz octave measured 6dB down. The system shall have a driver with 20oz. magnet, 1.4 in. copper voice coil driving a polypropylene cone with half-roll rubber surround, and post-mounted tweeter (1 inch balanced drive dome).The speaker shall include a wired 70V 32W transformer with screwdriver-adjustable tap selections accessible through the grille.

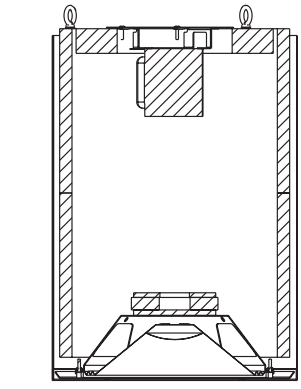
technical drawings











technical specifications

System Specifications: #IMC8A-TS32-1W

Driver No.	*Driver Rating*	*Driver Size*	*Driver Type*	*Enclosure Volume*	*Enclosure Dimensions*	*System Response*	*System Dispersion**	*System Sensitivity (SPL)***
8A50	50W (8 ohm)	8 in.	Coaxial	1.25 cu.ft.	19 in. high x 12 in. diameter	65Hz–12.3kHz (±6dB) 50Hz–20kHz (±8.2dB)	95 degrees conical @2kHz octave (–6dB)	89.1dB Avg @1W/1M 106.1dB Max @50W/1M

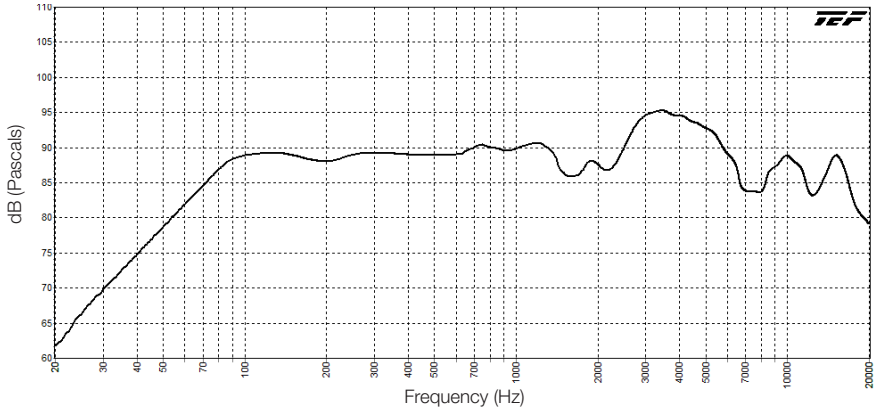
** For help in determinging speaker spacing, go online (www.lowellmfg.com) and see the paper, "Distributed Speaker Spacing for the Integrator." An online calculation tool—the Speaker Spacer—is also available.*
*** Maximum sensitivity is calculated based on power rating and measured sensitivity.*

Transformer Specifications: #TLS-3270

Transformer No.	*Primary Voltage*	*Power Rating*	*Primary Taps*	*Secondary Impedance*	*Core Size*	*Insertion Loss*	*Frequency Response*
TLS-3270	70V	32W	32, 16, 8W	8, 4 ohms	1.25 x 1.25 in.	.6dB	20Hz–20kHZ (±1dB)

** Lowell's 20/20 AudioVision™ series of transformers offer true 20Hz–20kHz performance for full fidelity audio in distributed applications.*

SPL vs. FREQUENCY (1W/1M, full space, on-axis)

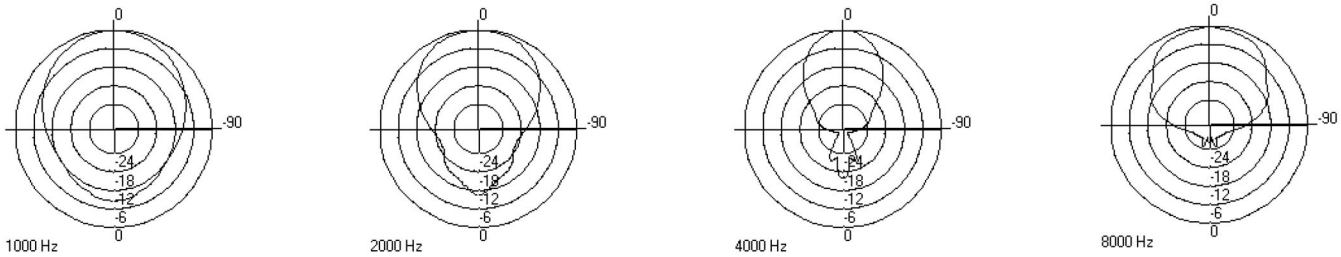


IMPEDANCE

See driver spec sheet for specifications and impedance curve.

Tap Voltage	*Transformer Tap Power Value*	*Theoretical Tap Impedance*	*Tap Impedance Measured with 1kHz Impedance Meter*
70 V	8W	625 ohms	850
70 V	16W	312.5 ohms	425
70 V	32W	156.25 ohms	212

POLAR DATA (full space)



TEST METHODOLOGIES

Lowell iMount® 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 E.I.A. 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 @ 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.

installation & wiring

The iMount™ loudspeaker is designed to mount in an open area using forged eyebolts (installed) and flyware (by others).

MOUNTING NOTE: *The speaker system must be mounted in accordance with local, state, Federal and industry regulations. It is the owner and/or user's responsibility to evaluate the reliability of any rigging/support method for their application. Rigging/ installation should be carried out only by experienced professionals.*

Hanging Suspended by Forged Eyebolts:

The contractor shall employ the services of a qualified certified rigger for the installation of this product. Only load-rated hardware with a design factor of at least X5 should be used to suspend this product. The rigging system design is solely the responsibility of the installing contractor and the rigging design should be reviewed and certified by a professional structural engineer.

Typical Wiring Method (Fig. 1):

Remove the 4 in. x 4 in. cover plate located on the rear of the enclosure. Remove the knockout plug in the plate and install a UL Listed conduit connector or cable clamp as appropriate. Connect the field signal wiring to the two conductors sticking out of the rear of the enclosure (red is positive, black is negative). Push the connections and all excess wire into the enclosure and to one side of the transformer bracket. Re-attach the cover plate to the enclosure.

Alternate Wiring Method — in/out conduit (Fig. 2):

Remove the 4 in. x 4 in. cover plate located on the rear of the enclosure. Install an approved 4 x 4 extender ring, attaching it to the mounting holes where the cover plate was secured. Select wiring entry positions on the side of the extender ring and remove the corresponding knockouts. Install conduit connectors and secure conduit. Make wiring connections (red is positive, black is negative). If the unit is being installed above a ceiling, push the wiring and connectors into the enclosure and to one side of the transformer bracket.

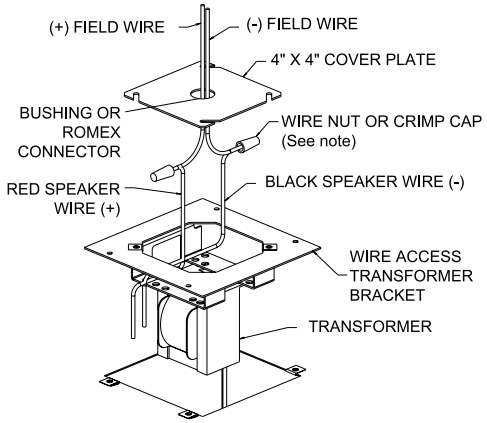
Transformer Settings (Fig. 3):

After the speaker system is installed, remove the grille from the enclosure. Locate the screwdriver-adjustable speaker tap selector (next to the speaker cone). **Important! Before turning the power on** use a screwdriver to turn the switch counter-clockwise until you reach the lowest tap setting, then turn the switch clockwise incrementally to the desired tap setting. (Starting at the lowest position avoids accidental selection of the wrong tap.)The selector switch will still be accessible through a hole in the grille after the grille has been mounted.

Grille Installation:

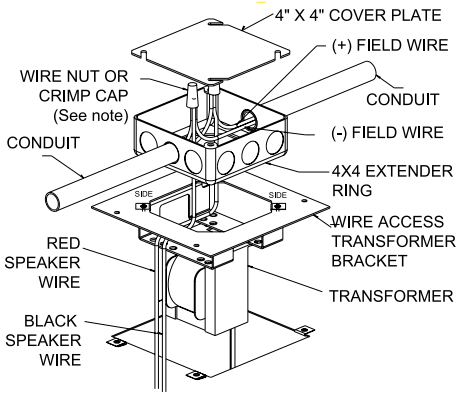
Mount the perforated grille over the speaker cone using 8- 32 screws provided.

FIGURE 1: Typical Wiring



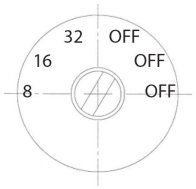
Note: PUSH FINISHED CONNECTIONS INTO THE REGION BESIDE THE TRANSFORMER

FIGURE 2: Alternate Wiring (conduit)



NOTE: PUSH FINISHED CONNECTIONS INTO THE REGION BESIDE TRANSFORMER

FIGURE 3: Transformer Settings (32W)



Switch Position	Transformer
1	8
2	16
3	32
4	OFF
5	OFF
6	OFF