

LIS8T LIS8+T LIS8XT

Lay-in Speaker Packages with 8" Cone Speaker



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■ FEATURES

- One-piece Assembly Saves Installation Cost
- Choose Between 5, 10-ounce Twin Cone or Coaxial Model
- Grille Matches Ceilings and Fixtures
- Dual 70.7/25-volt Xfrmr for Use in Most Applications

■ DESCRIPTION

The Penton Audio LIS Series full-range, lay-in speaker packages are economical one-piece assemblies designed to speed installation in traditional 2' x 4' and 2' x 2' suspended tile ceilings. Conservatively rated each unit combines a speaker, 70.7/25-volt transformer and enclosure, all attached to grid assembly that also serves as a tile bridge.

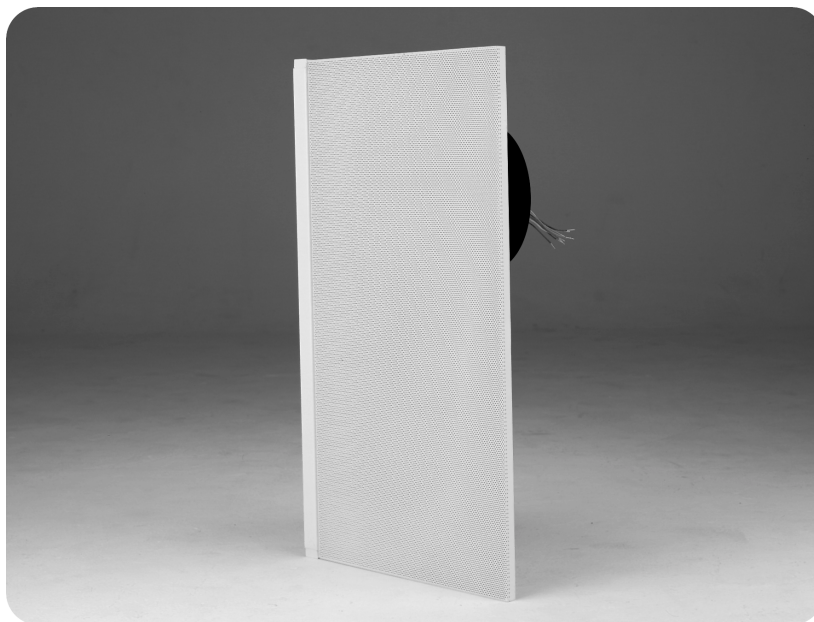
The LIS Series exclusive swaged support lines up the grille with the tile. It is not just pleasing to the eye, but is convenient for the installer. Enclosure has 6" five-conductor wire exiting the housings through through the top.

Models use different assemblies; LIS8T and LIS8+T employing twin-cones and a 5-watt transformer. (The LIS8+T has a 15-watt speaker with a 10-ounce magnet.) An 8-watt transformer is stock on the coaxial LIS8XT which has a treated cone with rubber surround and a post-mounted, 3" paper-cone tweeter having a 1/2" moving coil.

■ APPLICATION

This family of products is for lightning-fast installation. When mounting in a traditional 2' x 2' or 2' x 4' dropped ceiling, only one perpendicular cut to the acoustical tile is needed.

The LIS Series is ideal for voice transmission, music and signal reproduction. Use these in commercial locations including offices, banks, educational institutions, restaurants, hotel/motels and other industrial/institutional/governmental applications where precise transmission of audio is required.



■ SPECIFICATIONS

- **CONE SPEAKER SIZE:**
8" (203 mm)

- **FREQUENCY RESPONSE (SEE FIG 1)**
LIS8T: 60-20,000 Hz \pm 6 dB
LIS8+T: 60-20,000 Hz \pm 6 dB
LIS8XT: 50-16,000 Hz \pm 6 dB

- **POWER HANDLING (RAW DRIVER):**
LIS8T: 10 watts
LIS8+T: 15 watts
LIS8XT: 20 watts

- **SPL @ 1w 1m:**
LIS8T: 95 dB
LIS8+T: 96 dB
LIS8XT: 94 dB

- **DISPERSION @ 2 kHz (6 dB Down):**
LIS8T: 100°
LIS8+T: 100°
LIS8XT: 96°

- **DIRECTIVITY Q FACTOR @ 2 kHz**
LIS8T/LIS8+T: 6.90
LIS8XT: 6.80

- **CONE MATERIAL AND SURROUND:**
LIS8T/LIS8+T: Self-edged Paper
LIS8XT: Treated Paper

- **TRANSFORMER MAX INSERTION LOSS:**
LIS8T/LIS8+T: 1.5 dB
LIS8XT: 0.8 dB

- **CONE DESIGN:**
LIS8T/LIS8+T: Twin Cone
LIS8XT: Coaxial

- **LIS8XT TWEETER TYPE:**
3" Paper Cone with 1/2" Moving Coil

- **CONNECTION:**
Via Wire Nuts

- **70.7-VOLT TRANSFORMER TAPS**
LIS8T/LIS8+T: 5, 2, 1, 0.5, 0.25
LIS8XT: 8, 4, 2, 1, 0.5

- **70.7-VOLT TRANSFORMER IMPEDANCE:**
LIS8T: 1K, 2.5K, 5K, 10K, 20K
LIS8+T: 1K, 2.5K, 5K, 10K, 20K
LIS8XT: 625, 1.25K, 2.5K, 5K, 10K

- **25-VOLT TRANSFORMER TAPS:**
LIS8T/LIS8+T: 5, 2, 1, 0.625, 0.25
LIS8XT: 8, 4, 2, 1, 0.5

- **25-VOLT TRANSFORMER IMPEDANCE:**
LIS8T: 125, 312, 625, 1K, 2.5K
LIS8+T: 125, 312, 625, 1K, 2.5K
LIS8XT: 78, 156, 312, 625, 1.25K

- **TRANSFORMER TAP CHANGE:**
Five-conductor Plenum-rated Wire

- **BAFFLE MATERIAL:**
ABS with Molded-in UV Inhibitor

- **MAGNET WEIGHT:**
LIS8T: 5.34 oz
LIS8+T/ LIS8XT: 10 oz

- **FINISH**
Non-reflective White Powder-coated Epoxy Paint

- **APPROVALS:**
CE

- **DIMENSIONS L-W-D; INCH (MM):**
23.74" x 12.84 x 4.53
(603 x 326 x 115)

- **NET WEIGHT LBS (KGS):**
LIS8T: 9.07 (4.12)
LIS8+T: 9.62 (4.37)
LIS8XT: 10.26 (4.66)

LIS8T

LIS8+T

LIS8XT

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:

Unit shall be Penton Audio USA Model (LIS8T/LIS8+T/LIS8XT) or approved equal. Unit shall be a 1-piece assembly comprised of a damped high-compliance 8" loudspeaker, factory-mounted, 70.7/25-volt transformer, tile bridge, enclosure and 1' x 2' grille.

(LIS8T speaker shall include a 10-watt, twin-cone speaker and transformer having power taps of 5, 2, 1, 0.5 and 0.25 watts. Output shall be 95 dB @ 1 watt, 1 meter. Frequency response shall be 60-20 kHz.)

(LIS8+T speaker shall include a 15-watt, twin cone speaker with 10-ounce magnet and 5-watt transformer. Transformer shall have power taps of 5, 2, 1, 0.5 and 0.25 watts. Output shall be 96 dB @ 1 watt, 1 meter. Frequency response shall be 60-20 kHz.)

(LIS8XT speaker shall include a coaxial speaker with 10-ounce magnet, treated paper cone and 3" paper cone tweeter with 1/2" moving coil. Transformer shall have power taps of 8, 4, 2, 1 and 0.5 watts. Frequency response shall be 50-16 kHz. Output shall be 94 dB @ 1 watt, 1 meter.)

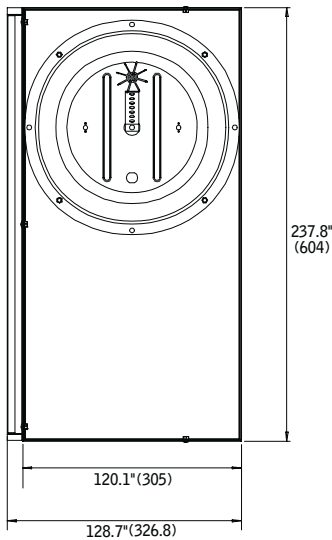


Fig 3: Front View

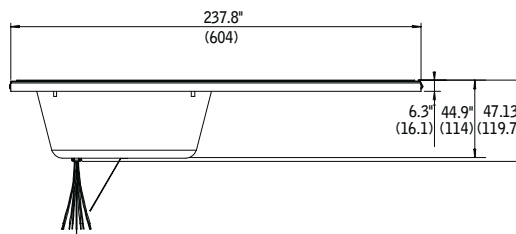


Fig 4: Side View

LIS8T/LIS8+T			LIS8XT		
Watt	25V	70.7V	Watt	25V	70.7V
White	----	0.25	White	----	0.5
Violet	----	0.5	Violet	----	1
Blue	----	1	Blue	----	2
Green	0.25	2	Green	0.5	4
Yellow	0.5	5	Yellow	1	8
Orange	1	----	Orange	2	----
Red	2	----	Red	4	----
Brown	5	----	Brown	8	----

Fig 5: Wattage Taps

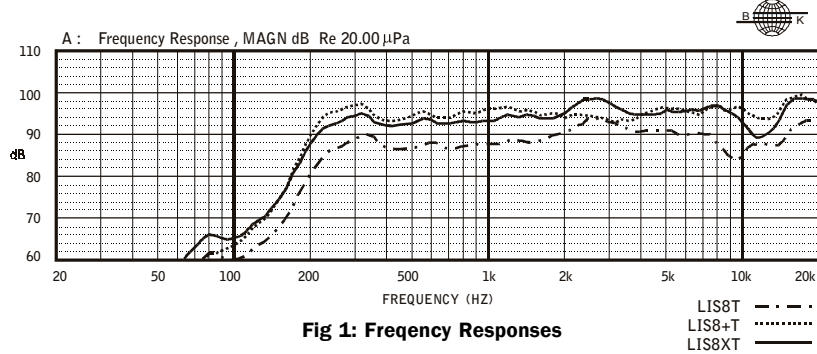


Fig 1: Frequency Responses

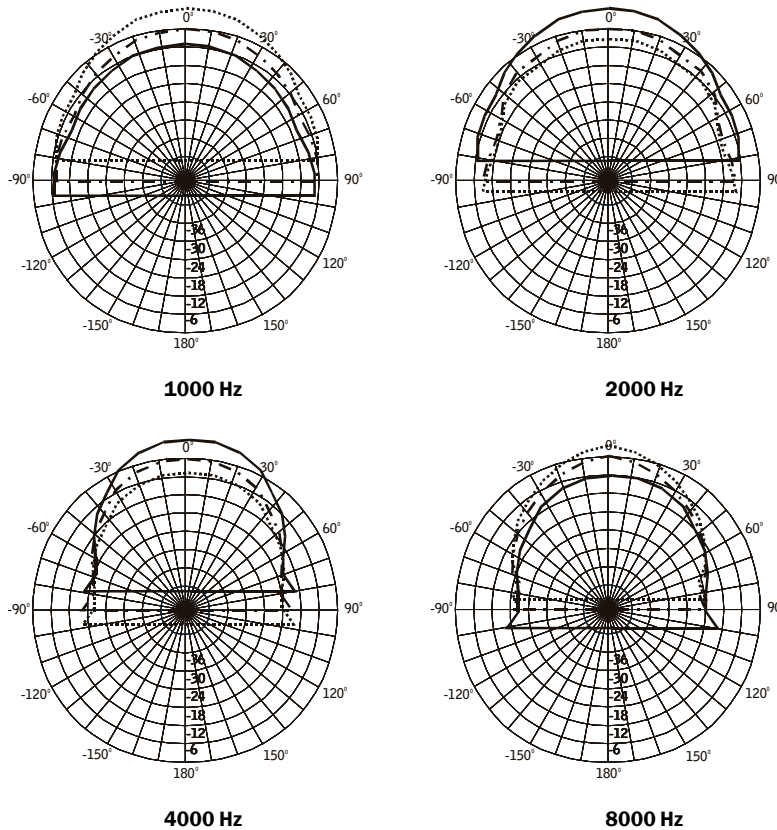


Fig 2: Polar Patterns

