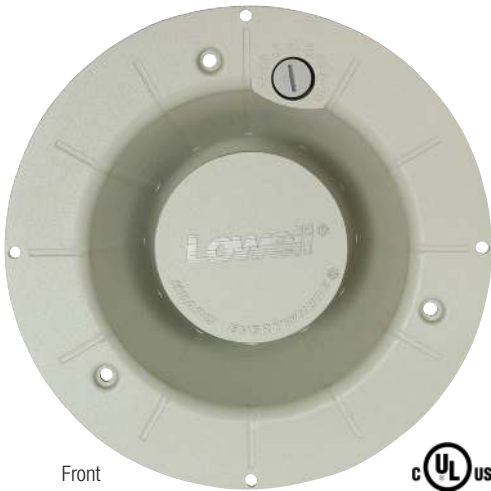


15W paging/re-entrant horn with transformer
ideal for school intercom systems (25V)



Front



Rear

See pg. 4-5 for accessories and help with model selection.

features.

- **Description:** Ready-to-install re-entrant horn with weather-resistant housing is engineered for versatile labor-saving installation in brick, concrete block, plaster, or drywall (indoors or outdoors, recessed or surface-mount). For paging and general voice communications (25V, 70V, 100V or 8ohm). Ideal for school intercom systems (25V).

Note: This model will require some accessories for installation.

- **Features:**

- 15W compression driver
- 25V/70V/100V transformer (screwdriver-adjustable tap selector switch in front and rear)
- Self-contained cast aluminum housing with moisture-seal cover
- Network Grey powder epoxy finish
- Provides clear intelligibility with high SPL output over the extended vocal range.

- **Installation:**

- Recessed or surface-mount (mounts in 4 inch deep spaces)*
- Simple two-wire hookup to the pigtail (in UL approved junction box) or through the waterproof gland-type cable fitting. (See instruction sheet.)
- Indoors or outdoors in brick, concrete block, plaster, drywall, acoustic tile
- For retrofit applications, the horn will also accept a an E.I.A. standard grille for an 8 in. speaker and the UL Listing will remain valid.
- This model requires accessories for installation (U-bracket, backbox with grille, or custom rigging hardware).

- **Third Party Listings:**

- UL1480A General Signaling (USA)
- UL2043 suitability for use in return air plenum space (USA)
- CSA C22.2 No. 205-12 General Signaling (Canada)

LUH series overview

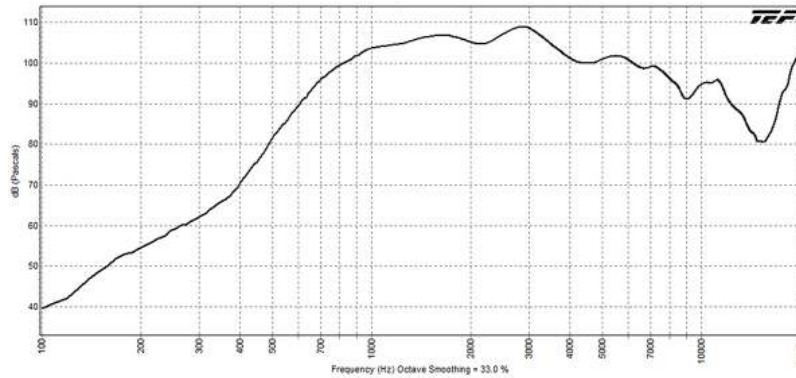
Model No.	Speaker Features / Capabilities			Assembly Includes			Applications		
	Driver	Transformer	8 ohm	Mounting Dogs	Trim Ring	Press-fit Grille	General Signaling & Paging	Fire Protective Signaling	Intercom Systems (25V only)
LUH-15TA	15W	25/70/100V	✓	✓	✓	✓	✓	---	✓
LUH-15TX	15W	25/70/100V	✓	---	---	---	✓	---	✓

Assembly that includes trim ring and grille can be mounted with or without them, depending on application.

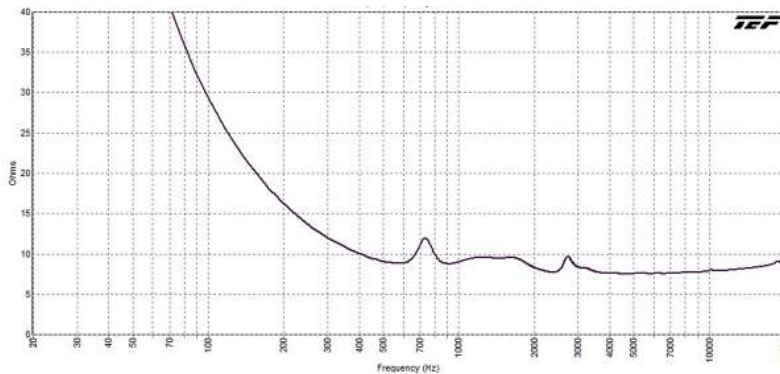
See page 4-5 for more help with model selection and accessories.



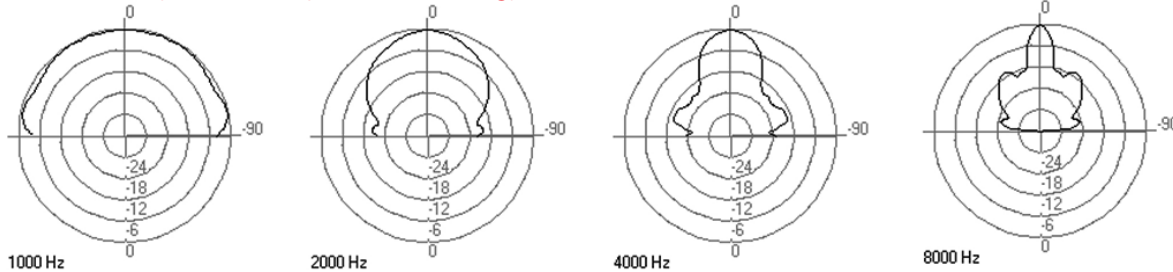
spl vs. frequency 1W/1M (8ohm input)



impedance (8ohm input)



polar data (180° half space mounting)



scope of performance & power tests

Lowell drivers and loudspeaker systems are tested to provide specifiers and contractors with data that reflects the performance of production products. Testing equipment includes the GoldLine TEF-20 analyzer (for performance measurements) and the LinearX LMS measurement system (for Thiele-Small Parameters).

Power rating is tested based on EIA Standard RS-426B.

Frequency response data is provided which is the measured frequency response range (defined by +6dB) which is useful in predictive engineering calculations.

Sensitivity (SPL) data is presented in two ways: Log Average SPL is a computer calculated log average of the SPL measured at 1 meter with 1 watt input over the stated frequency response range. Maximum SPL is calculated based on the measured log average SPL and the power rating of the speaker.

Thiele-Small Parameters for raw drivers are measured using the LinearX LMS measurement system. These parameters are useful in determining the optimum type and size of enclosure for a specific driver.

Impedance data is presented in three ways: Nominal Impedance is the generally accepted impedance for use in making comparisons with competitive products; the Impedance Curve is a graphical representation of the impedance that is measured in the lab and gives the impedance of the device over the audio frequency range; Minimum Impedance is the lowest impedance measurement at a frequency within the specified frequency response range of the speaker.

Polar data is presented for the averaged one octave band surrounding the center frequencies of 1000Hz, 2000Hz, 4000Hz, and 8000Hz. Radial polar response curves show the relative change in sound pressure level as one moves from directly on-axis to an increasingly off-axis listening position. Since coaxial speaker drivers are symmetrical in the vertical and horizontal directions, only one set of polar plots will be presented for coaxial drivers and speaker systems incorporating coaxial drivers.

Dispersion Angles: For more information on dispersion angles visit lowellmfg.com to download the white paper "Distributed System Speaker Spacing for the Integrator" or try the online Speaker Spacer app for quick calculations.

- Conical Dispersion is the angle of coverage where the SPL at an equal distance from the speaker is no more than 6dB down from the on-axis value over the 2000Hz octave band. Conical Dispersion can be used to compare two speakers, if the conical dispersion is provided for each.
- Linear Dispersion is the angle of coverage where the SPL at the average listening height (where listeners' ears would be) is no more than 6dB down from the on-axis value over the 2000Hz octave band. Linear Dispersion is used to determine the proper speaker spacing in distributed speaker systems.



a&e specifications

The re-entrant horn shall be Lowell Model LUH-15TX, which shall include a self-contained compression driver in cast aluminum weather-resistant housing that can be installed in 4 inch deep (minimum) space. Power rating shall be 15 watts continuous. Frequency response shall be 740Hz–7.4kHz (±6dB). Sound pressure level shall be 105dB (1W1M) average, 116.8dB SPL (max) 15W/1M calculation based on power rating and measured sensitivity. Dispersion shall be 80 degrees conical @2000Hz (-6dB). Unit shall include a 100/70/25V transformer with taps selectable on front and rear of horn, and includes an 8ohm transformer bypass input. The horn will ship ready for standard two-wire connection with cable exiting through a rear waterproof gland-type connector. Housing shall be 7.1 in. diameter at its widest measure with an 8 in. diameter flat face and feature Network Grey powder epoxy finish. The assembly shall mount with a U-style mounting bracket (Lowell Model LUH-BRKT, ordered separately), a separate grille and backbox (for standard 8 in. speaker, 4 in. minimum depth, ordered separately), or custom rigging hardware (by others).

accessories (order separately).

NOTE: Unihorn Models #LUH-15TA and #LUH-15TX may be mounted to most industry standard 8" speaker grilles. This will not void the UL Listing.



LUH-VRG
vandal-resistant grille
cast aluminum
indoor / outdoor



LUH-BOX
recessed or surface box
stainless steel
indoor / outdoor



LUH-BOX-INT
recessed or surface box
cold rolled steel
indoor only



SQLK-8L
vandal-resistant security grille
cast aluminum
indoor only



P875X-4
4"D recessed box
cold rolled steel
indoor only



P875X-6
6"D recessed box
cold rolled steel
indoor only



LUH-BRKT
U-bracket
aluminum w/stainless steel
mounting hardware
indoor / outdoor



LUH-TP
trim plate
aluminum
indoor / outdoor



LUH-RIB
rough-in bridge
steel
indoor only



LUH-TBAR
tile bridge
galvanized steel
indoor only



CB84
4"D surface box
cold rolled steel
indoor only

Requires grille
#SQLK-8L



CB86-6
6"D surface box
cold rolled steel
indoor only

Requires grille
#SQLK-8L



model selection — type of install



- LUH-15TA includes:**
- 15W driver with transformer and tap selector
 - Cast aluminum housing with mounting dogs
 - Press-fit mesh grille with trim ring

- **Model #LUH-15TA** offers the greatest flexibility as it includes a press-fit grille and trim ring that can be mounted or not, according to the needs of the project.

Location	Application	Accessories (required)	Accessories (optional)
Indoor	• Exposed	• LUH-BRKT (bracket) or custom rigging hardware	• LUH-VRG (grille)
	• Recessed (existing drywall)	-----	• LUH-VRG (grille)
	• Recessed (before drywall is installed)	• LUH-RIB (rough-in bridge)	• LUH-VRG (grille)
	• Recessed (drop tile ceiling)	• LUH-TBART (t-bridge)	• LUH-VRG (grille)
	• Recessed (masonry)	• LUH-BOX-INT (backbox) & LUH-TP (trim plate)	• LUH-VRG (grille)
Outdoor	• Surface-mount	• LUH-BOX-INT (backbox)	• LUH-VRG (grille)
	• Exposed	• LUH-BRKT (U-bracket) or custom rigging hardware	• LUH-VRG (grille)
	• Recessed (masonry)	• LUH-BOX (backbox) & LUH-TP (trim plate)	• LUH-VRG (grille)
	• Surface-mount	• LUH-BOX (backbox)	• LUH-VRG (grille)



- LUH-15TX includes:**
- 15W driver with transformer and tap selector
 - Cast aluminum housing

- **Model #LUH-15TX** is the economical choice for applications that do not require a press-fit grille, trim ring, or mounting dogs.

Location	Application	Accessories (required)	Accessories (optional)
Indoor	• Exposed	• LUH-BRKT (U-bracket) or custom rigging hardware	• LUH-VRG (grille)
	• Recessed (existing drywall)	• SQLK-8L (grille) & P875X-4 or P875X-6 (backbox)	• SS Series (support rails)
	• Recessed (before drywall is installed)	• SQLK-8L (grille) & P875X-4 or P875X-6 (backbox)	• SS Series (support rails)
	• Recessed (masonry)	• SQLK-8L (grille) & P875X-4 or P875X-6 (backbox)	-----
	• Surface-mount	• SQLK-8L (grille) & CB84 or CB86-6 (backbox)	-----
Outdoor	• Exposed	• LUH-BRKT (bracket) or custom rigging hardware	• LUH-VRG (grille)

