



iMount™ Series family of rectangular and cylindrical systems
(8" system components for model group IM8S shown below)



2 cu.ft. rectangular systems include:



Square white (-SW)



Square black (-SB)

2 Grille Choices



8" 100W Subwoofer with
optional 100W Transformer

iMount™ 100W Rectangular Subwoofer Assemblies Include:

- Model 8S100 (8" 100W) subwoofer driver mounted in a rectangular acoustic enclosure (2 cu.ft.) with forged eyebolts.
- Transformer option using 20/20 AudioVision™ TLS Series with true 20Hz - 20kHz performance.
- Choice of architectural grille in square white (-SW) or square black (-SB).

iMount™ Family

Lowell's iMount™ family of speaker systems with rectangular or cylindrical acoustic enclosures provide specifiers and systems integrators with versatile packaged solutions for high performance suspended speaker installations. Visit the Lowell website for detailed information on the entire family of iMount™ Systems.

Description

iMount™ Model Group IM8S features Lowell's 8" subwoofer driver Model 8S100 (100W) mounted in to a rectangular 2 cu.ft. acoustic enclosure with installed 1/4" x 20 forged eyebolts and choice of architectural grille in black or white. Ready-to-install systems feature externally accessible speaker connections and optional 20/20 AudioVision™ transformer for superior music fidelity in distributed applications. iMount Model Group IM8S is ideal for applications where a subwoofer combined with other speaker systems will enhance the enjoyment of music in the low frequency spectrum including clubs and sports bars, sporting facilities, airport terminals and concourses, hotel ballrooms, and other large spaces where full audio quality is desired.

The 8S100 subwoofer driver features a large 33oz. magnet and a 1.5-inch voice coil wound on a Kapton former. Frequency response of the driver itself is 30Hz - 1000Hz+4dB with a 2nd order low-pass at 150Hz. The driver is mounted into the enclosure with terminations accessible through a top mounted 4" x 4" cover plate.

For distributed applications, iMount™ subwoofer systems are available with optional 100W transformer Model TLS100 which is Lowell's exclusive 20/20 AudioVision™ Series offering true 20Hz - 20kHz performance. The full frequency response of Series TLS, combined with its high power handling, allows the driver to operate at full potential while providing a stable load to the amplifier. The significance is that Series TLS transformers allow a distributed speaker system to sound imperceptibly the same as a "transformerless" direct to voice coil system with the benefit of easier wiring layout, less expensive wire, and reduced labor cost.

Enclosure is precision-formed steel with anti-vibration ribs, Soundstop Board™, 1-1/2" thick premium acoustic lining, and forged 1/4" x 20 eyebolts screwed into riveted mounting nuts for secure suspended installation using flyware by others.

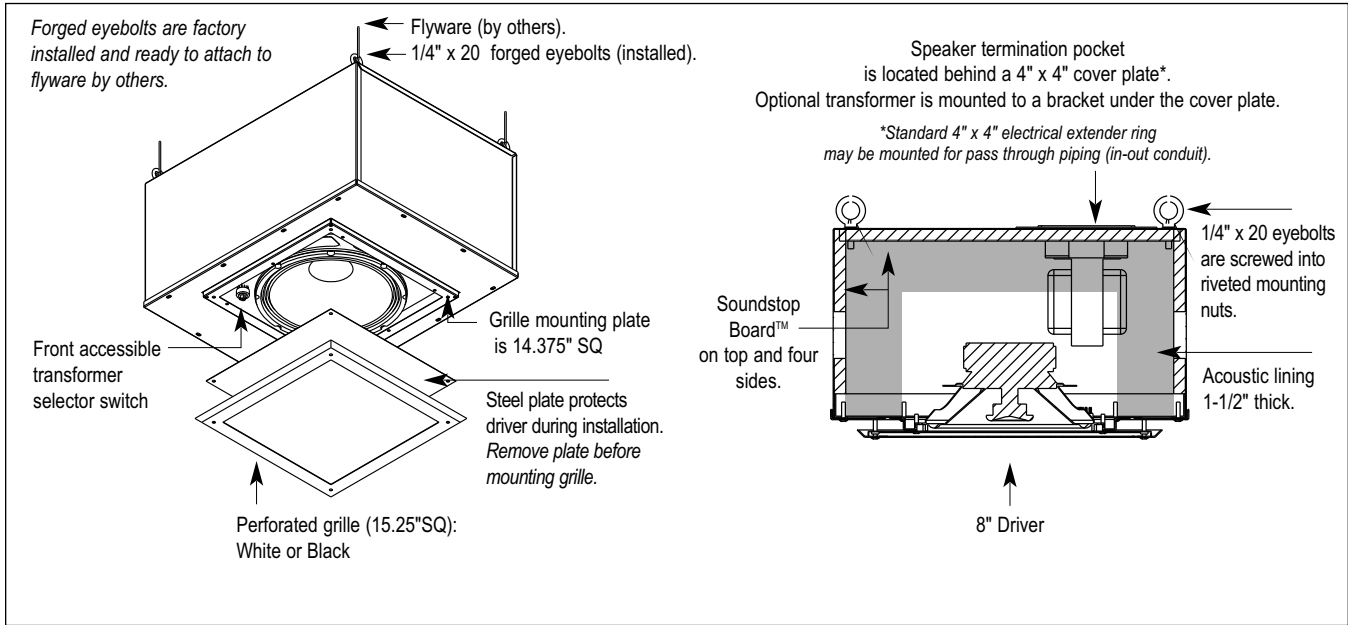
Square grilles are perforated steel in choice of white or black. White grilles are ideal for applications where the speaker is suspended into a tile, sheetrock or plaster ceiling. Black grilles are preferred in open construction installations as they blend in with the black enclosure. Grilles and enclosures are finished in durable powder epoxy.

Systems are shipped one per carton with a steel plate mounted over the driver to protect it during shipping and installation (discard plate at installation/finish stage). When the driver cover plate is removed, the front mounted transformer selector switch is accessible for convenient tap selection. The switch is covered when the grille is installed in the mounting holes vacated by the protective cover plate.

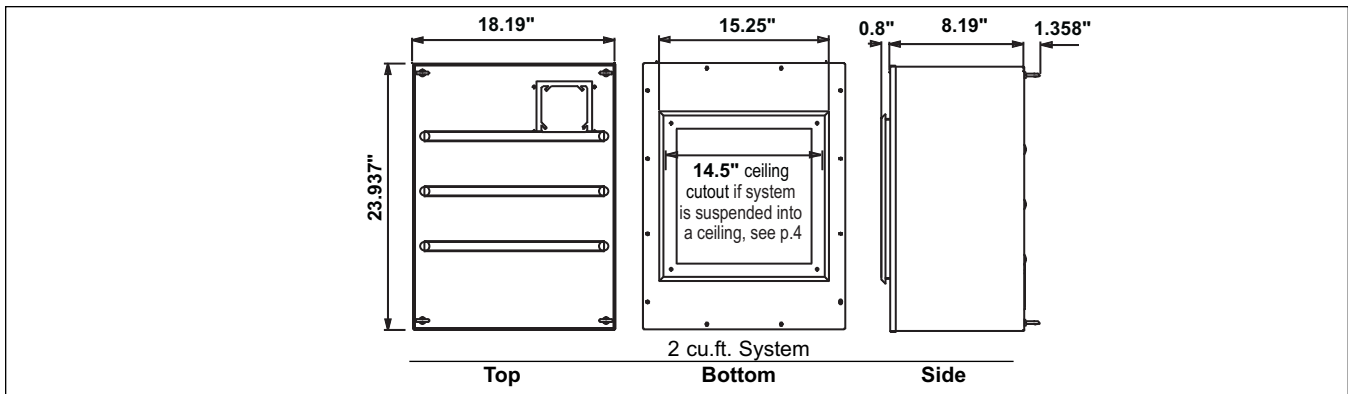


iMount™ Speaker Systems

Model Group IM8S, 8" 100W Rectangular Subwoofer Assembly



IM8S System ships wired and ready for installation.



IM8S system dimensions

Specifications - iMount Model Group IM8S (measured in 2 cu.ft. rectangular enclosure with grille on)

Driver Model	Driver Rating	Driver Size	Driver Type	System Volume	System Dimensions	System Response	System Dispersion	Sensitivity (SPL) 1W / 1M
8S100	100W	8"	Subwoofer	2 cu.ft.	8"H x 18"W x 24"L.	40Hz - 197Hz±7dB	Omni-directional below 200Hz	89.5dB Avg. 109.5dB Peak

Model Assemblies - iMount Model Group IM8S

2 cu.ft. System	Driver Model	Transformer Model (70V) (see details below)	Grille Style (Included)	Mounting Hardware (installed)	Weight lbs.
IM8S-2SW	8S100	---	Square White	(4) 1/4" x 20 forged eyebolts	26
IM8S-2SB	8S100	---	Square Black	(4) 1/4" x 20 forged eyebolts	26
IM8S-TS100-2SW	8S100	TLS10070	Square White	(4) 1/4" x 20 forged eyebolts	34
IM8S-TS100-2SB	8S100	TLS10070	Square Black	(4) 1/4" x 20 forged eyebolts	34

Transformer Option

Model	TLS10070*
70V Taps	100, 64, 32W
Response	20Hz-20kHz

*TLS Series is Lowell's 20/20 AudioVision transformer series with true 20Hz - 20kHz performance for full fidelity audio in distributed applications.

AUDIO

12"/10"
Speakers & Accessories



8"
Speakers & Accessories

6"
Speakers & Accessories

4"
Speakers & Accessories

Horn
Speakers & Accessories

Masking
Speakers & Generators

Control
Accessories & Electronics

Systems



iMount™ Speaker Systems

Model Group IM8S, 8" 100W Rectangular Subwoofer Assembly

Test Methodology

Lowell iMount™ Systems are thoroughly tested to provide specifiers and contractors with solid, accurate data. Performance tests are conducted on randomly selected final production assemblies. Test equipment includes the GoldLine TEF-20 analyzer and a LinearX LMS measurement system. The power handling capability is based on EIA Standard RS-426B.

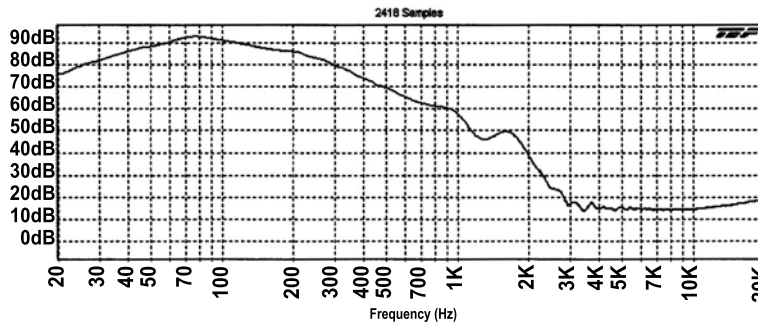
Frequency Response data is provided in two ways: Nominal - which is the generally usable response range and Limited Bandwidth - (defined by \pm dB) which is useful in predictive engineering calculations. Average Sensitivity (SPL), as documented here, is a computer calculation of the octave-weighted average over the entire engineering bandwidth as shown in the frequency response (\pm dB). *Peak sensitivity, is calculated based on the maximum power rating and measured sensitivity.* Dispersion Angle is defined as the angle of coverage that is no more than 6dB down from the on-axis value averaged over the 2000 Hz octave band. Since speech intelligibility is very dependent upon the 2000 Hz octave, this specification is quite useful in designing paging systems that provide even coverage and intelligibility. The polar graphs illustrate how the system will perform when hung in free space (360°). Detailed specifications on the specified driver

used in an iMount™ system are also available on the Lowell website at www.lowellmfg.com. Driver specification sheets are located in the speaker driver section.

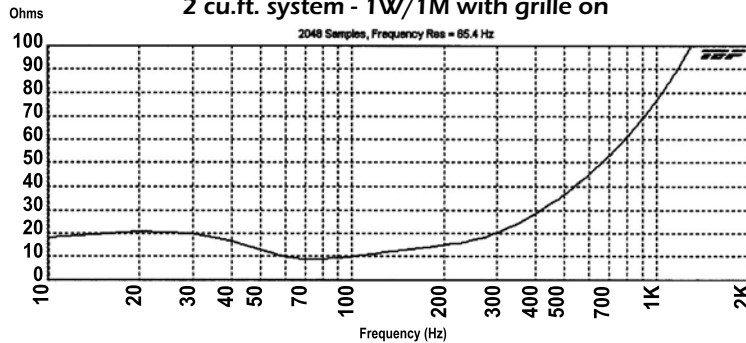
A & E Specifications

The speaker for suspended installation shall be Lowell iMount system Model IM8S-_____ with 8" 100W subwoofer Model 8S100 mounted into an acoustic enclosure with a volume of 2 cu.ft., installed forged eyebolts, and square steel architectural grille painted_____ (white, black). Frequency response of the iMount™ system shall be 40Hz-197Hz \pm 7dB with average sensitivity of 89.5dB. Dispersion shall be 360 degrees @ 2000Hz measured 6dB down. Overall dimensions shall be 8"H x 18W" x 24"L. System driver Model 8S100 shall have an 8-inch cone, 33oz magnet, and a 1.5" voice coil wound on a Kapton former. For distributed applications, the driver shall include a wired 70V 100W transformer Model TLS10070 with primary taps at 100W, 64W, and 32W. Transformer tap selections shall be adjustable on the front of the assembly. System enclosure shall be welded steel construction with anti-vibration ribs. Soundstop Board™, 1-1/2" thick acoustic lining. It shall have forged 1/4" x 20 eyebolts screwed into riveted mounting nuts for suspended installation using flyware by others.

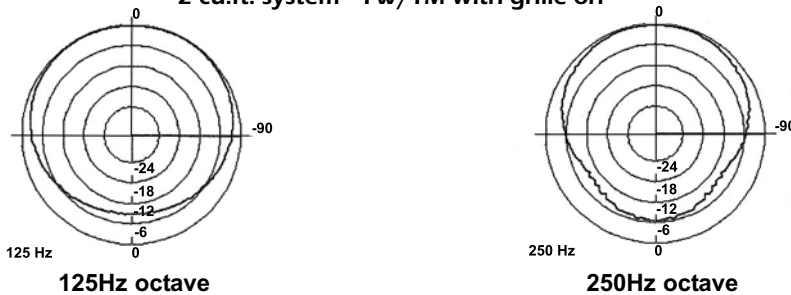
SPL vs. Frequency
2 cu.ft. system - 1W/1M - with grille on



Impedance
2 cu.ft. system - 1W/1M with grille on



Polar Data 360°
2 cu.ft. system - 1W/1M with grille on





iMount™ Speaker Systems

Model Group IM8S, 8" 100W Rectangular Subwoofer Assembly

Installation

Mounting Note: For all methods, it is important to note that 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.

There are three basic ways to install an iMount Model Group IM8S speaker system. 1) Hang the system using the installed forged eyebolts and flyware (by others) so that it is suspended in an open area (see figure 1). 2) Hang the system using the installed forged eyebolts and flyware (by others) so that it is suspended into a rigid or tile ceiling (see figure 2). 3) Hard mount or "rear anchor" the system to structural members or unistrut using bolts by others (illustration not shown).

Typical Wiring Method

Remove the 4" x 4" cover plate located on the rear of the speaker system. 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 speaker system. Red is positive, black is negative. Push the connections and all excess wire into the speaker system and to one side of the transformer bracket. Reattach the cover plate to the rear of the speaker system. (See Figure. 3)

Alternate wiring method - Use when in/out conduit is specified.

Remove the 4" x 4" cover plate located on the rear of the speaker system. Install an approved 4x4 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 corresponding knockouts. Install conduit connectors and secure conduit. Make wiring connections (Red-positive, black-negative). If the unit is being installed above a ceiling, push the wiring and connectors into the speaker system and to one side of the transformer bracket. (See Figure. 4)

Transformer settings

After the speaker system is installed, locate the screwdriver adjustable speaker tap selector by the speaker cone. Important! Using the screwdriver, set the switch to the desired tap level (see Transformer Power Tap chart). The selector switch will be covered when the grille is mounted.

Grille installation.

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

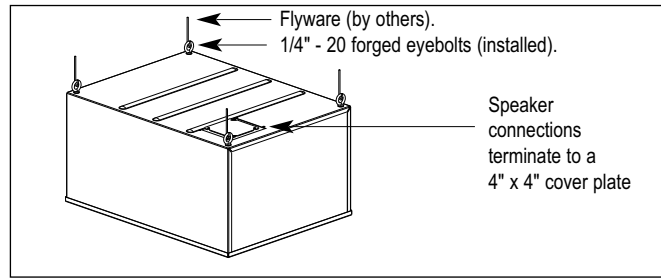


Figure 1: iMount™ system is suspended using installed forged eyebolts and flyware by others in an open area (360 degree full space mounting).

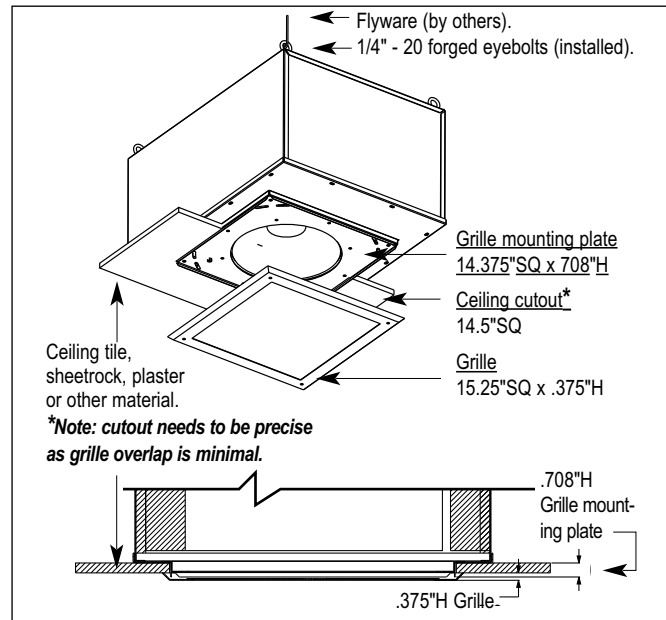


Figure 2: iMount™ system is suspended using installed forged eyebolts and flyware by others into a rigid or tile ceiling (180 degree half space mounting).
Note: load support is on eyebolts not ceiling.

--- 100W ---	
Switch Position	Model
1	16
2	32
3	64
4	100
5	Off
6	Off

Transformer Power Tap Settings

The tap selector is a 6-position switch. **Before turning on power**, ensure that the tap settings are in the correct position. Turn the switch counter-clockwise to the lowest tap setting. Then turn the switch incrementally clockwise to the desired tap setting. Starting at the lowest position avoids accidental selection of the wrong tap.

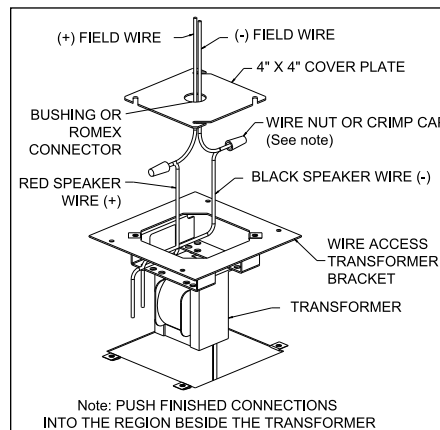


Figure 3: Typical Wiring Diagram

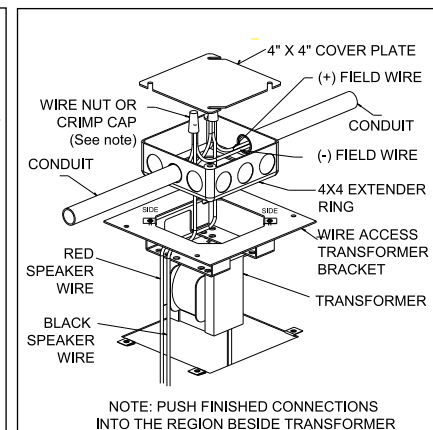


Figure 4: Wiring Diagram when in/out conduit is specified.