

CHOOSING THE RIGHT LOUDSPEAKER

PAY ONLY FOR WHAT YOU NEED

Speakers intended for fixed installation usually don't require features that facilitate portability or enhance durability, so you shouldn't have to pay for them. Many manufacturers have two versions of the same acoustic package - designed for either installation or portability.

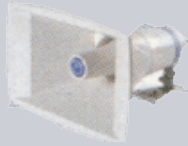
KEY FACTORS

1. Venue size and coverage area
2. Maximum SPL requirements
3. Aesthetics
4. Budget

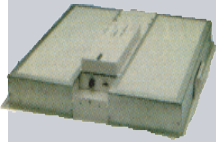
While all loudspeakers do basically the same thing - move air - there are many decisions in selecting the right type of loudspeaker for a commercial, fixed indoor installation. Here are some important factors to consider in identifying the best choice for your next install.

WHAT'S YOUR APPLICATION?

COMMON SPEAKER TYPES



Paging horns
Best for voice-paging applications in high noise environments.



Tile
Distributed mode loudspeaker disguised as a ceiling tile, best for corporate or office spaces.



Ceiling
Evolved beyond the 8-inch coax, today there are many full-range, high quality models available.



Column
One of the oldest multiple-driver designs, column speakers are optimal for many applications.



Small full-range
For business music (background/foreground) applications, these are commercial cousins to hi-fi bookshelf speakers.



Large full-range
This category covers a wide range of products, from small two-way to large, arrayable three-way systems.



Compact line array
A little brother to touring line array systems, compact line arrays are optimal for many large pro AV applications where pattern control is required.

Powered
Putting an amplified and signal processing in the speaker is the optimal solution for many applications.



Pew-back
Usually a custom model, a few manufacturers offer this speciality-application speaker.

APPLICATIONS BY MARKET SEGMENT	V E N U E S I Z E		
	SMALL	MEDIUM	LARGE
Corporate (boardrooms, conference/meeting rooms, offices)			
Paging/Public Address Systems	Paging horn, ceiling speaker, or tile speaker	Paging horn, ceiling speaker, or tile speaker	Paging horn, ceiling speaker, or tile speaker
Noise Making Systems	Ceiling speaker or tile speaker	Ceiling speaker or tile speaker	Ceiling speaker or tile speaker
Presentation & Multimedia Playback	Column	Large full-range or powered speaker	Large full-range
Institutional (education, government facilities, lecture halls, public auditoria, museums)			
Paging/Public Address Systems	Column	Column	Large full-range
Sound Reinforcement Systems	Column	Large full-range or powered speaker	Line array
House of Worship			
Sound Reinforcement Systems	Column	Large full-range	Large full-range or line array
Pew-Back Systems	Pew-back	Pew-back	Pew-back
Sports (arenas, bowling alleys, gymnasias)			
Paging/Public Address Systems	Paging horn	Paging horn or column	Paging horn or column
Sound Reinforcement Systems	Small full-range or large full-range	Large full-range	Custom
Entertainment (theme parks, cinemas, performing arts centers, nightclubs, concert halls, cruise ships, casinos)			
Sound Reinforcement Systems	Small full-range or large full-range	Large full-range or powered speaker	Large full-range or line array
Paging/Public Address Systems	Paging horn	Paging horn or column	Paging horn or column
Dance Music	Large full-range with subwoofer	Large full-range with subwoofer	Large full-range with subwoofer
Commercial (restaurants, retail, hotels, convention centers, medical offices, beauty salons, cruise ships)			
BG/FG Music Systems	Ceiling, tile or small full-range speaker	Ceiling, tile or small full-range speaker	Ceiling, tile or small full-range speaker
Paging/Public Address Systems	Paging horn, ceiling, tile, or small full-range speaker	Paging horn, ceiling, tile, or small full-range speaker	Paging horn, ceiling, tile, or small full-range speaker

SAFETY FIRST

Most quality professional loudspeakers *sound* good - but that's subjective. The real differentiation is in the installation details.

Hang points - look for metal bracing inside the cabinet that received the thread from a forged steel eyebolt or other safety-rated hardware. A "T-nut" is fine for mounting drivers, but not for hanging the weight of the cabinet over people's heads (unless it's a very small

enclosure). Carrying handles are also good for moving, but NOT as suspension points.

Cabinet construction - wood (or wood product) cabinets should be manufactured with joinery that includes both mechanical and adhesive fixation. For molded or plastic cabinets, examine the methods used for fixing the baffle, grille, and hang points. Some plastics "age" differently

than others, and what held together in year one may "relax" in year 10, especially if heat-producing equipment such as lighting is installed nearby.

Installation hardware - even if you're handy with a welding torch, look for brackets, fly-bars, and other hardware provided by the manufacturer. This will ensure a proper fit and a safe installation.