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## PHA™ Family of High Performance Array Speakers

The PHA™ (Pragmatic High-performance Array) speakers have extremely compact footprint for applications in architectural audio, digital signage, corporate boardroom audio, houses of worship, retail merchandizing kiosks, educational class rooms, theme parks, public venues, airports, train stations, bus depots, sports arena, health and fitness clubs, etc. These speakers offer high performance, uniform and well-defined dispersion patterns, excellent speech intelligibility and music clarity where sound needs to be transmitted over long distance or wider coverage area.

The PHA™ family of speakers have a footprint of 2 inch x 2 inch (5 cm x 5 cm) only and are available in varying lengths from 9 inches to 42 inches, making the longer arrays ideally suited for LCD and plasma displays in digital signage applications. These patent-pending speakers are manufactured using unique advanced technology drivers that offer a full range frequency response. The speakers are very well suited for both in-doors as well as weather-protected outdoors applications.

The PHA™ family of speakers offers excellent and well-defined sound dispersion patterns. When mounted vertically, these sound columns have a uniform and wide dispersion covering almost 360 degrees along the vertical axis. This makes the PHA™ family of speakers ideally suited for applications in public address venues such as theme parks, airports, train stations, bus depots, houses of worship, sports arenas, fitness clubs, gymnasiums, etc. When mounted horizontally, the sound bars have a very well defined dispersion along the horizontal axis. The speakers project a fairly narrow sound beam focused straight down the median. This tightly controlled dispersion pattern makes the PHA™ family of speakers ideally suited for digital signage, retail merchandizing kiosks, educational classrooms, museums, art galleries, theme parks and even residential home theater applications. The higher efficiency of these line-array speakers allow to cover more than 300 ft. distances.

The speakers are currently offered in attractive White and Black colors to match most applications. A variety of mounting option kits includes surface mounting on commercial walls and drop-tile ceilings. The speakers offer a full-range frequency response from 100 Hz to 20 KHz and continuous power handling up to 100 Watts. These speakers have an impedance of 4 – 6 ohms and are ideally matched to Pragmatics' many mono-block and stereo amplifiers such as the MBA and SAA families.



PHA-16 Displayed

Available Models:	PHA-4	PHA-8	PHA-16	PHA-25
Dimensions:	2" x 2" x 9"	2" x 2" x 18.5"	2" x 2" x 25"	2" x 2" x 41.97"
Power Handling:	15 - 60 Watts	30 - 75 Watts	60 - 150 Watts	100 - 300 Watts
Sensitivity (rated@1W/1m):	89 dB SPL	90 dB SPL	93 dB SPL	95 dB SPL
Finish (all models):	Black, White or Silver			