



12407 Mukilteo Speedway, Ste. 130, Lynnwood, WA 98087
 Phone: (800) 438-4026 Fax: (877) 721-6107
 info@amkspeakers.com www.amkspeakers.com

AMK Commercial Series

PSA 615

Self Amplified 6.5" Coaxial Loudspeaker Assembly



The **AMK PSA615** powered speakers feature a 30 watt Class D digital design amplifier, with > 75% efficiency for the main speaker. These units are available as single master speakers or sets with an unpowered companion speaker (**PSA615-P**). The speaker combines high performance, power handling, and a very smooth response.

The loudspeaker driver, CX602, is one of the few transducers in the commercial sound industry that produces and meets the standards of recording studio. Excellent dispersion, wide bandwidth, and a smooth frequency response make this the top choice for today's overhead commercial applications.

There are wide ranges of the application for this unit, especially in educational markets and corporate boardrooms where direct input of the signal from the processor is desired (i.e., projectors, laptops, or any line level device)

Features:

- * All metal construction, including baffle
- * High performance 6½" coaxial loudspeaker with wide dispersion
- * Self powered with 20 watt Class D amplifier
- * **UL Listed Speaker Enclosure (UL 1480, UL 2043)**

Innovative Features

Each system includes a renowned AMK Coaxial loudspeaker like those already installed in hundreds of locations

Easy to install

- All-metal swivel mounting system allows standard installation of speakers without having to align the enclosure to the tile bridge
- This installation procedure is quick and unique to the industry
- Architecturally pleasing white perforated metal grille that uses a unique metal spring system for a "no visible hardware finished look and the ease of a "snap on" installation

Custom Manufacturing Options

- Custom depth back enclosures are available
- Power supply available internal or

Safety

- The use of all-metal attachment parts makes for an overall safer installation
- All-metal swivel prevents breakage of swivel during installation
- All-metal swivel mounting system is not easily compromised by fire

Sound

- The plenum compatible back enclosure is designed to maximize the performance of this studio quality speaker

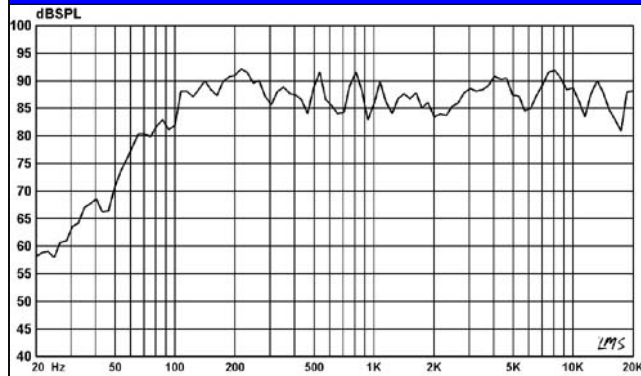
Specifications

Frequency Response	65 Hz - 20 kHz
Voice-coil diameter	1"
Average Beamwidth @ 2 kHz	144 deg.
Magnet Weight	13 oz
Magnet Material	Barium Ferrite
Tweeter	13mm Polyamide Soft Dome
Woofer Cone	Polypropylene
Surround Material	Inverted Rubber
Crossover Frequency	5.0 kHz
Depth of the Enclosure	10 in.
Diameter of the Grille	12.75 in.
Enclosure Mounting	Metal Swivel Clamp

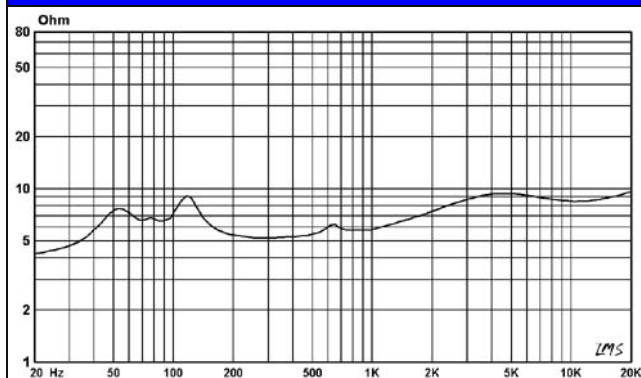
Amplifier Specifications

Amplification	30 watt Class D design amplifier
Amplifier Efficiency	> 75%
Total Harmonic Distortion	< 0.2%
Signal to Noise Ratio	>95dB
Protection	Protected as to short circuit to supply and ground, as well as minimum current
Controls	Input potentiometer level adjustment

FREQUENCY RESPONSE



IMPEDANCE CURVE



Model Options

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

Model	Power Supply	Power Connection	Input Connection	Signal Input	Slave input/output connections
PSA615-CFM	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	3.81mm three position Phoenix type connector	One balanced audio input nput	Screw terminal block connectors
Added Suffixes: PSA615-CFM-P (Set of Powered and Companion Speaker) PSA615-CFM-RVC (Powered speaker with the remote control) PSA615-CFM-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-CFM-2	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	(2) 3.81mm three position Phoenix type connector	Two balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-CFM-2-P (Set of Powered and Companion Speaker) PSA615-CFM-2-RVC (Powered speaker with the remote control) PSA615-CFM-2-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-CFM-3	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	(3) 3.81mm three position Phoenix type connector	Three balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-CFM-3-P (Set of Powered and Companion Speaker) PSA615-CFM-3-RVC (Powered speaker with the remote control) PSA615-CFM-3-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-CFM-4	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	(4) 3.81mm three position Phoenix type connector	Four balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-CFM-4-P (Set of Powered and Companion Speaker) PSA615-CFM-4-RVC (Powered speaker with the remote control) PSA615-CFM-4-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-CFS	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	3.81mm four position Phoenix type connector	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-CFS-P (Set of Powered and Companion Speaker) PSA615-CFS-RVC (Powered speaker with the remote control) PSA615-CFS-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-JFM	12Volt 2A desktop power supply	2.5mm N jack	3.81mm three position Phoenix type connector	One balanced audio input nput	Screw terminal block connectors
Added Suffixes: PSA615-JFM-P (Set of Powered and Companion Speaker) PSA615-JFM-RVC (Powered speaker with the remote control) PSA615-JFM-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-JFM-2	12Volt 2A desktop power supply	2.5mm N jack	(2) 3.81mm three position Phoenix type connector	Two balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-JFM-2-P (Set of Powered and Companion Speaker) PSA615-JFM-2-RVC (Powered speaker with the remote control) PSA615-JFM-2-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-JFM-3	12Volt 2A desktop power supply	2.5mm N jack	(3) 3.81mm three position Phoenix type connector	Three balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-JFM-3-P (Set of Powered and Companion Speaker) PSA615-JFM-3-RVC (Powered speaker with the remote control) PSA615-JFM-3-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-JFM-4	12Volt 2A desktop power supply	2.5mm N jack	(4) 3.81mm three position Phoenix type connector	Four balanced audio Inputs	Screw terminal block connectors
Added Suffixes: PSA615-JFM-4-P (Set of Powered and Companion Speaker) PSA615-JFM-4-RVC (Powered speaker with the remote control) PSA615-JFM-4-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-JFS	12Volt 2A desktop power supply	2.5mm N jack	3.81mm four position Phoenix type connector	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-JFS-P (Set of Powered and Companion Speaker) PSA615-JFS-RVC (Powered speaker with the remote control) PSA615-JFS-RVC-P (Set of powered speaker with the remote control and a companion speaker)					

Model Options

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

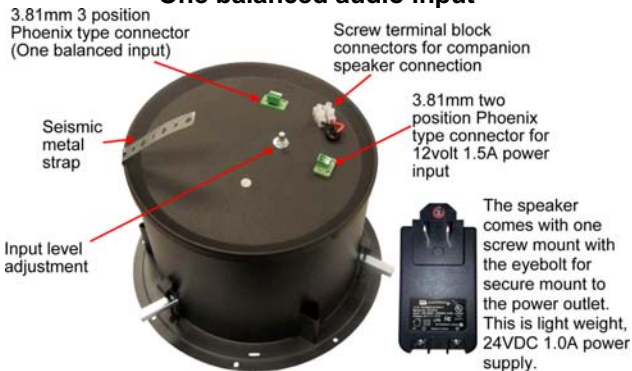
Model	Power Supply	Power Connection	Input Connection	Signal Input	Slave input/output connections
PSA615-MD	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	3.5mm miniplug jack	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-MD-P (Set of Powered and Companion Speaker) PSA615-MD-RVC (Powered speaker with the remote control) PSA615-MD-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-MD2	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	(2) audio inputs of 3.5mm miniplug jack	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-MD2-P (Set of Powered and Companion Speaker) PSA615-MD2-RVC (Powered speaker with the remote control) PSA615-MD2-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-MDL	12Volt 2A desktop power supply	2.5mm N jack	3.5mm miniplug jack	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-MDL-P (Set of Powered and Companion Speaker) PSA615-MDL-RVC (Powered speaker with the remote control) PSA615-MDL-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-MD2L	12Volt 2A desktop power supply	2.5mm N jack	(2) audio inputs of 3.5mm miniplug jack	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-MD2L-P (Set of Powered and Companion Speaker) PSA615-MD2L-RVC (Powered speaker with the remote control) PSA615-MD2L-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-OM	12Volt 2A desktop power supply	2.5mm N jack	One RCA phono jack	One unbalanced Input	Screw terminal block connectors
Added Suffixes: PSA615-OM-P (Set of Powered and Companion Speaker) PSA615-OM-RVC (Powered speaker with the remote control) PSA615-OM-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-RPM	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	One RCA phono jack	One unbalanced audio input nput	Screw terminal block connectors
Added Suffixes: PSA615-RPM-P (Set of Powered and Companion Speaker) PSA615-RPM-RVC (Powered speaker with the remote control) PSA615-RPM-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-RPS	24v 1A, screw mount, ITE wall wart power supply	3.81mm two position Phoenix type connector	Two RCA phono jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-RPS-P (Set of Powered and Companion Speaker) PSA615-RPS-RVC (Powered speaker with the remote control) PSA615-RPS-RVC-P (Set of powered speaker with the remote control and a companion speaker)					
PSA615-SM	12Volt 2A desktop power supply	2.5mm N jack	Two RCA phono jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: PSA615-SM-P (Set of Powered and Companion Speaker) PSA615-SM-RVC (Powered speaker with the remote control) PSA615-SM-RVC-P (Set of powered speaker with the remote control and a companion speaker)					

MODEL CONFIGURATIONS ILLUSTRATIONS

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

PSA615-CFM

One balanced audio input



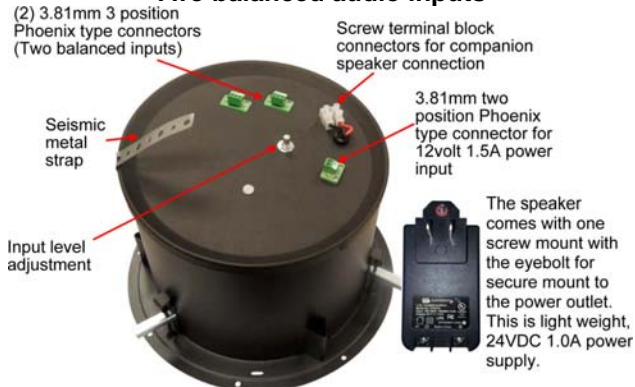
PSA615-CFM-RVC

One balanced audio input Remote wall mount volume control



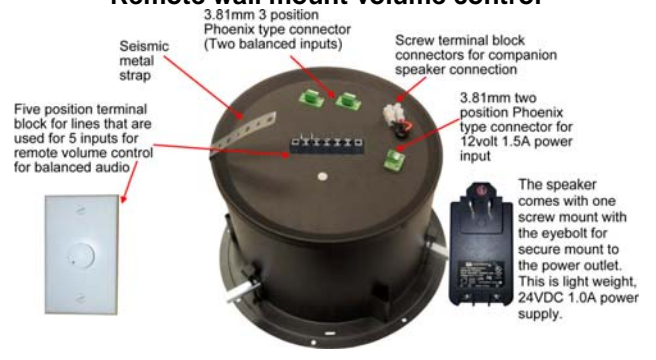
PSA615-CFM-2

Two balanced audio inputs



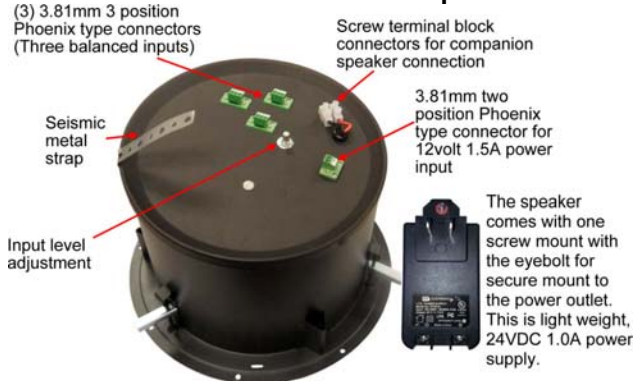
PSA615-CFM-2-RVC

Two balanced audio inputs Remote wall mount volume control



PSA615-CFM-3

Three balanced audio inputs



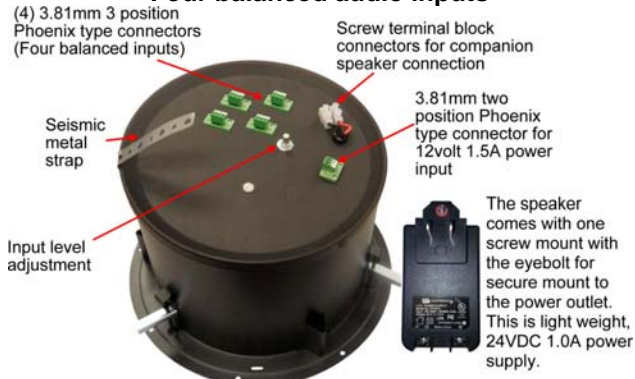
PSA615-CFM-3-RVC

Three balanced audio inputs Remote wall mount volume control



PSA615-CFM-4

Four balanced audio inputs



PSA615-CFM-4-RVC

Four balanced audio inputs Remote wall mount volume control



MODEL CONFIGURATIONS ILLUSTRATIONS

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

PSA615-CFS

One unbalanced audio input



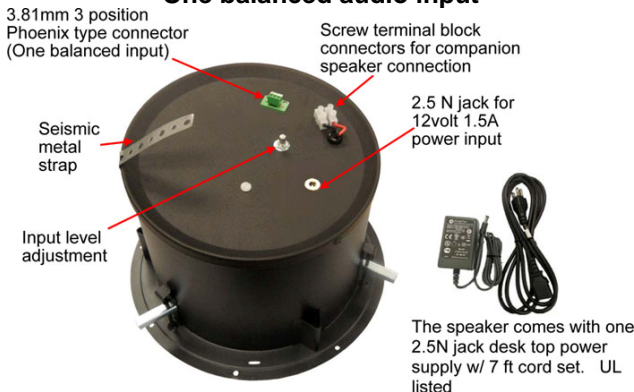
PSA615-CFS-RVC

One unbalanced audio input Remote wall mount volume control



PSA615-JFM

One balanced audio input



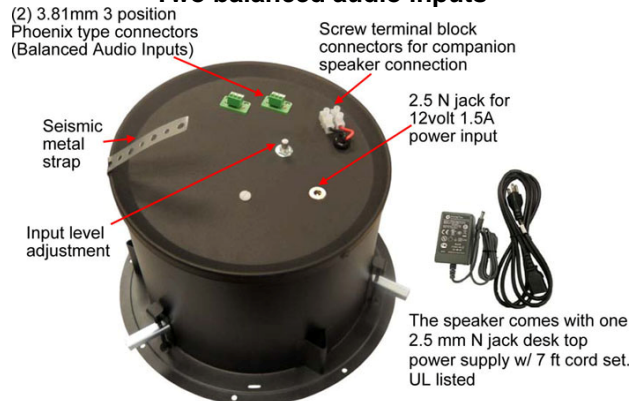
PSA615-JFM-RVC

One balanced audio input Remote wall mount volume control



PSA615-JFM-2

Two balanced audio inputs



PSA615-JFM-2-RVC

Two balanced audio inputs Remote wall mount volume control



PSA615-JFM-3

Three balanced audio inputs




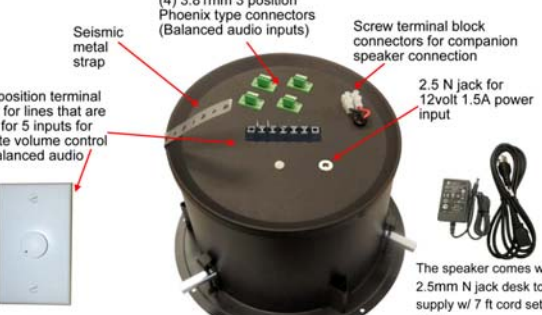
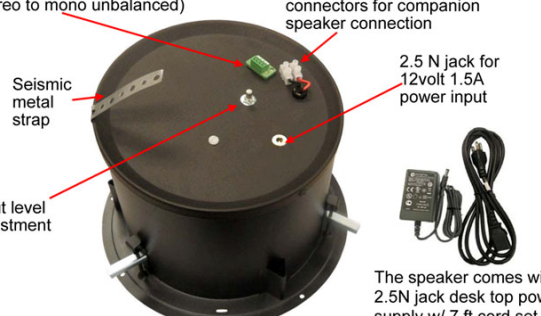
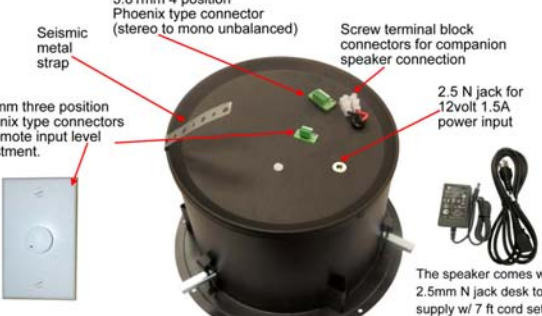

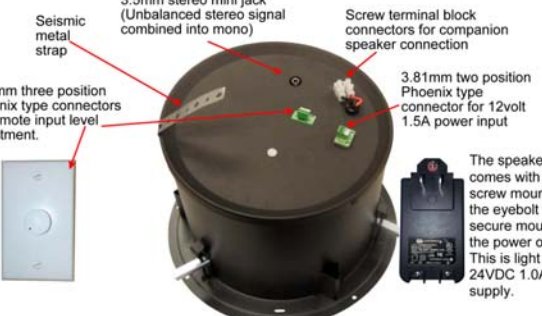


PSA615-JFM-3-RVC

Three balanced audio inputs Remote wall mount volume control



MODEL CONFIGURATIONS ILLUSTRATIONS

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

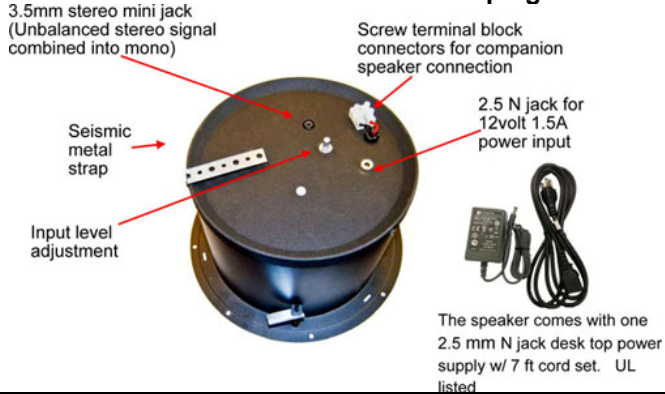
<p>PSA615-JFM-4 Four balanced audio inputs</p> <p>(4) 3.81mm 3 position Phoenix type connectors (Balanced Audio Inputs)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>2.5 N jack for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>Input level adjustment</p> <p>The speaker comes with one 2.5 mm N jack desk top power supply w/ 7 ft cord set. UL listed</p> 	<p>PSA615-JFM-4-RVC Four balanced audio inputs Remote wall mount volume control</p> <p>(4) 3.81mm 3 position Phoenix type connectors (Balanced audio inputs)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>2.5 N jack for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>Five position terminal block for lines that are used for 5 inputs for remote volume control for balanced audio</p> <p>The speaker comes with one 2.5mm N jack desk top power supply w/ 7 ft cord set. UL listed</p> 
<p>PSA615-JFS One unbalanced audio input</p> <p>3.81mm 4 position Phoenix type connector (stereo to mono unbalanced)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>2.5 N jack for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>Input level adjustment</p> <p>The speaker comes with one 2.5N jack desk top power supply w/ 7 ft cord set. UL listed</p> 	<p>PSA615-JFS-RVC One unbalanced audio input Remote wall mount volume control</p> <p>3.81mm 4 position Phoenix type connector (stereo to mono unbalanced)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>2.5 N jack for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>3.81mm three position Phoenix type connectors for remote input level adjustment</p> <p>The speaker comes with one 2.5mm N jack desk top power supply w/ 7 ft cord set. UL listed</p> 
<p>PSA615-MD One 3.5 stereo to mono mini plug</p> <p>3.5mm stereo mini jack (Unbalanced stereo signal combined into mono)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>3.81mm two position Phoenix type connector for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>Input level adjustment</p> <p>The speaker comes with one screw mount with the eyebolt for secure mount to the power outlet. This is light weight, 24VDC 1.0A power supply.</p> 	<p>PSA615-MD-RVC One 3.5 stereo to mono mini plug Remote wall mount volume control</p> <p>3.5mm stereo mini jack (Unbalanced stereo signal combined into mono)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>3.81mm two position Phoenix type connector for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>3.81mm three position Phoenix type connectors for remote input level adjustment</p> <p>The speaker comes with one screw mount with the eyebolt for secure mount to the power outlet. This is light weight, 24VDC 1.0A power supply.</p> 
<p>PSA615-MD2 Two 3.5 stereo to mono mini plug</p> <p>(2) 3.5mm stereo mini jacks (Unbalanced stereo signal combined into mono)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>3.81mm two position Phoenix type connector for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>Input level adjustment</p> <p>The speaker comes with one screw mount with the eyebolt for secure mount to the power outlet. This is light weight, 24VDC 1.0A power supply.</p> 	<p>PSA615-MD2-RVC Two 3.5 stereo to mono mini plug Remote wall mount volume control</p> <p>(2) 3.5mm stereo mini jacks (Unbalanced stereo signal combined into mono)</p> <p>Screw terminal block connectors for companion speaker connection</p> <p>3.81mm two position Phoenix type connector for 12volt 1.5A power input</p> <p>Seismic metal strap</p> <p>3.81mm three position Phoenix type connectors for remote input level adjustment</p> <p>The speaker comes with one screw mount with the eyebolt for secure mount to the power outlet. This is light weight, 24VDC 1.0A power supply.</p> 

MODEL CONFIGURATIONS ILLUSTRATIONS

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

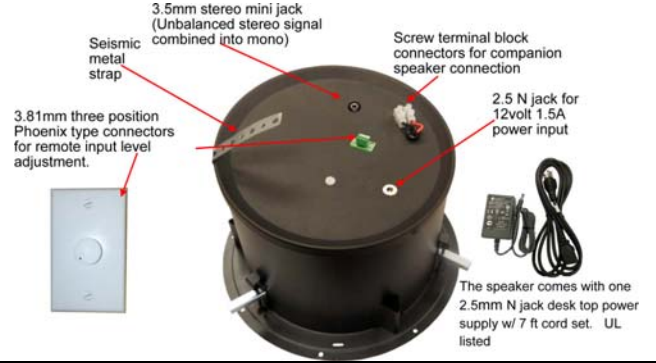
PSA615-MDL

One 3.5 stereo to mono mini plug



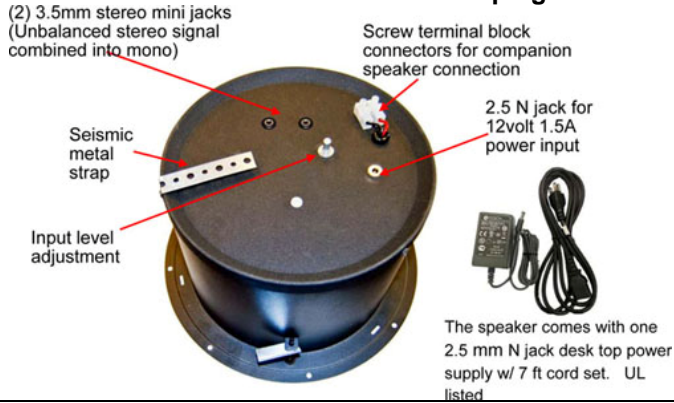
PSA615-MDL-RVC

One 3.5 stereo to mono mini plug Remote wall mount volume control



PSA615-MD2L

Two 3.5 stereo to mono mini plug



PSA615- MD2L-RVC

Two 3.5 stereo to mono mini plug Remote wall mount volume control



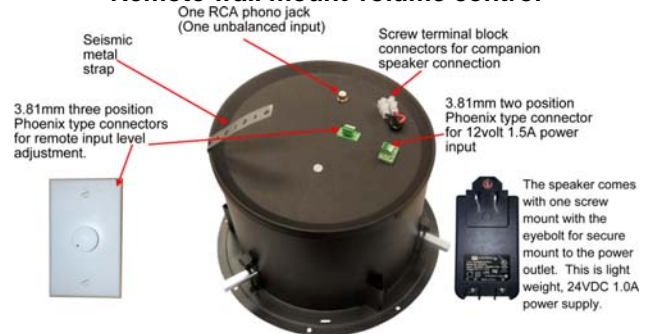
PSA615-RPM

One RCA audio input jack



PSA615-RPM-RVC

One RCA audio input jack Remote wall mount volume control



MODEL CONFIGURATIONS ILLUSTRATIONS

(Please visit www.amkspeaker.com/build to build your own choices of self amplified speakers)

PSA615-RPS

Two RCA audio input jacks

Two RCA phono jacks
(stereo to mono unbalanced)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

Input level
adjustment

3.81mm two position
Phoenix type connector
for 12volt 1.5A power
input

The speaker comes with one
screw mount with the eyebolt for
secure mount to the power outlet.
This is light weight, 24VDC 1.0A power
supply.

PSA615-RPS-RVC

Two RCA audio input jacks

Remote wall mount volume control

Two RCA phono jacks
(stereo to mono unbalanced)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

3.81mm three position
Phoenix type connectors
for remote input level
adjustment.

3.81mm two position
Phoenix type connector
for 12volt 1.5A power
input

The speaker comes with one
screw mount with the eyebolt for
secure mount to the power outlet.
This is light weight, 24VDC 1.0A power
supply.

PSA615-OM

One RCA audio input jack

One RCA phono jack
(One unbalanced input)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

Input level
adjustment

2.5 N jack for
12volt 1.5A
power input



The speaker comes with one
2.5N jack desk top power
supply w/ 7 ft cord set. UL
listed

PSA615-OM-RVC

One RCA audio input jack

Remote wall mount volume control

One RCA phono jack
(One unbalanced input)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

3.81mm three position
Phoenix type connectors
for remote input level
adjustment.

2.5 N jack for
12volt 1.5A
power input



The speaker comes with one
2.5mm N jack desk top power
supply w/ 7 ft cord set. UL
listed

PSA615-SM

Two RCA audio input jacks

Two RCA phono jacks
(stereo to mono unbalanced)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

Input level
adjustment

2.5 N jack for
12volt 1.5A
power input



The speaker comes with one
2.5N jack desk top power
supply w/ 7 ft cord set. UL
listed

PSA615-SM-RVC

Two RCA audio input jacks

Remote wall mount volume control

Two RCA phono jacks
(stereo to mono unbalanced)

Screw terminal block
connectors for companion
speaker connection

Seismic
metal
strap

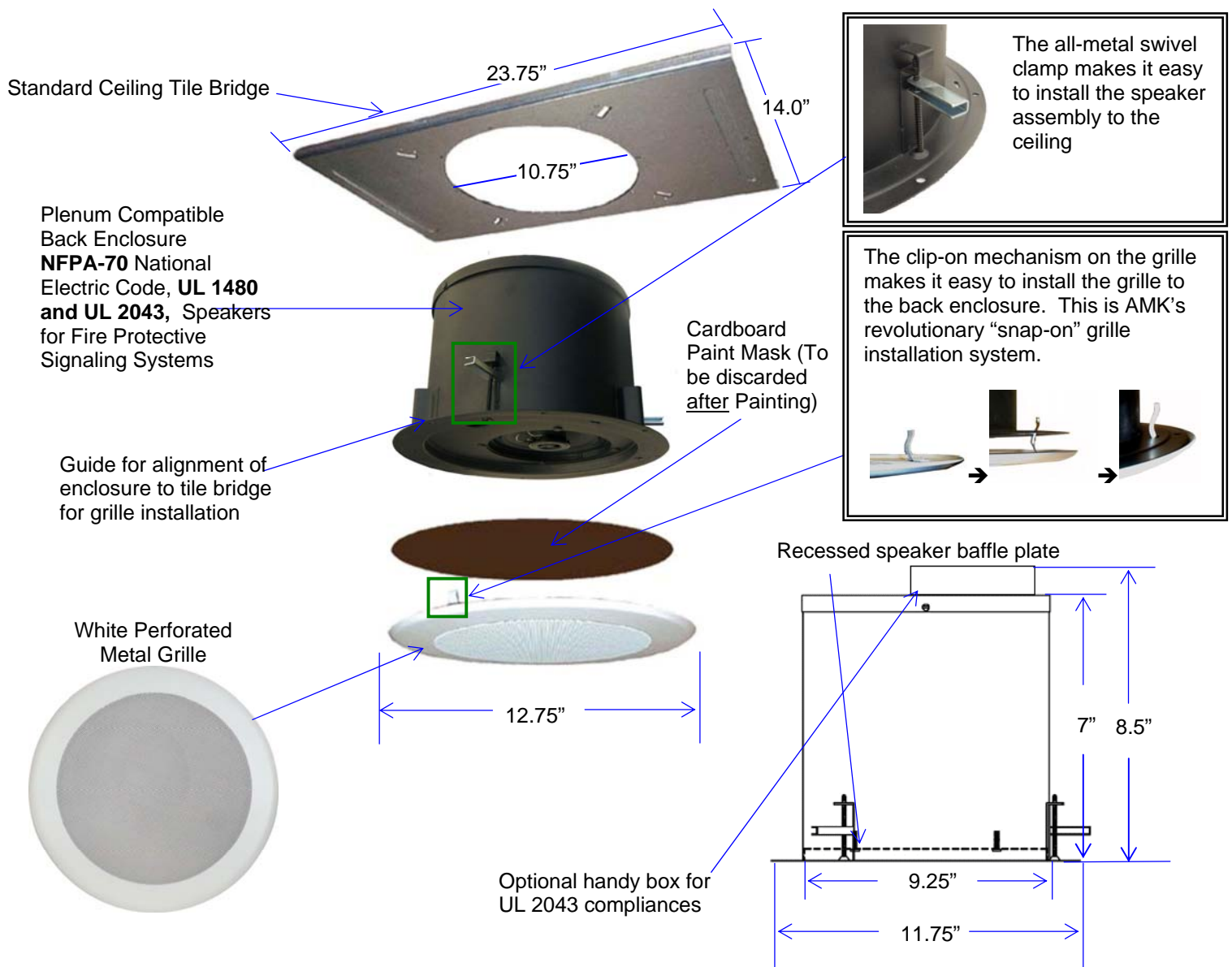
3.81mm three position
Phoenix type connectors
for remote input level
adjustment.

2.5 N jack for
12volt 1.5A
power input



The speaker comes with one
2.5mm N jack desk top power
supply w/ 7 ft cord set. UL
listed

PSA 615 ILLUSTRATION



Power Supplies



12Volt 2A desktop power supply



24v 1A, screw mount, ITE wall wart power supply

Architect's & Engineer's Specifications

The powered loudspeaker system shall be **AMK PSA 615(-_____)**. The speaker shall feature a 15watt Class D design amplifier, with >75% efficiency for the speaker. The powered speaker assembly in the system shall be of the coaxial type with an 6.5" woofer of polypropylene, an inverted rubber surround, and a 1" polyamide soft dome tweeter mounted on a post. The loudspeaker system shall have a white metal round grille that screws into the rim of the mounting enclosure. The system shall have input potentiometer for level adjustment.

The transducer in the loudspeaker system shall be AMK CX 601 coaxial loudspeaker. The woofer shall have a 13 oz. (369g) Barium Ferrite magnet. The two reproducer sections shall be coupled through a built-in capacitor bypass crossover. The crossover frequency shall be at 5.0 kHz. The low frequency reproducer shall have 1" (25.4mm) voice coil and the high frequency reproducer shall have 0.51" (13mm) voice coil.

The system shall have a frequency response of 65 Hz- 20 kHz (+/- 5dB). The power handling shall be 25watts at 4 ohm impedance. The sensitivity shall be 91dB at 1watt / 1meter.

The rim diameter shall be 11.75". The enclosure diameter shall be 9.25". The depth of the enclosure shall not exceed 11.75". The system shall include a tile bridge. The system shall have a metal strap for attachment to the structure for seismic protection.

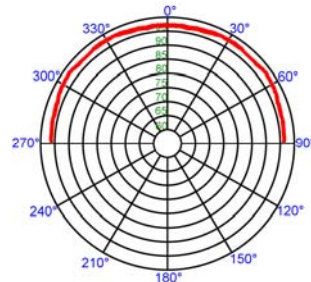
The total weight of the unit system shall not exceed 9.0 lbs.

The loudspeaker system shall be AMK Innovations model **PSA 615(-_____)**.

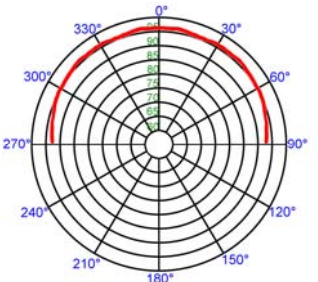
Conforms to EIA Standards: RS-276-A, RS-278-B, RS-426-A

Polar Responses

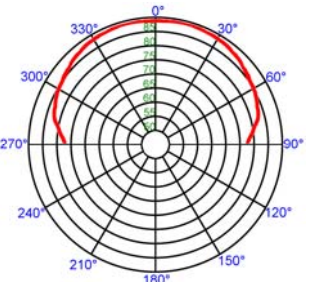
250 Hz



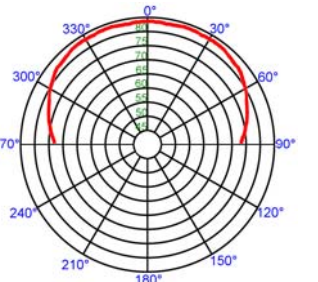
500 Hz



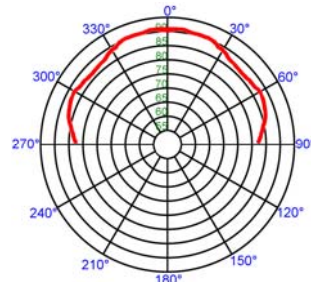
1 kHz



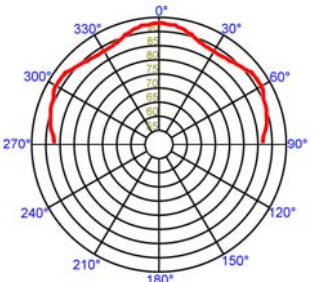
2 kHz



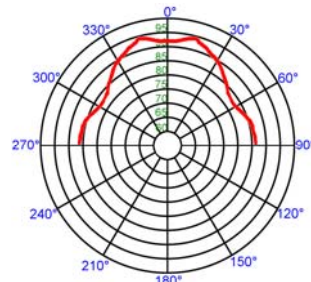
3 kHz



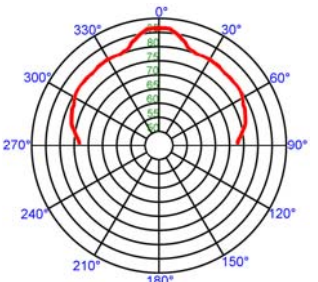
4 kHz



8 kHz



16 kHz



Freq	Deg	Q	DldB
250 Hz	100°	3.8	5.8
500 Hz	96°	4.8	6.8
1 kHz	79°	6.8	8.3
2 kHz	72°	6.7	8.2
3 kHz	66°	9.2	9.6
4 kHz	86°	8.4	9.2
8 kHz	40°	7.1	8.5
16 kHz	16°	15.3	11.8