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AMK Commercial Series

## PT 802

2x2 Self Amplified  
 6.5" Coaxial Loudspeaker Assembly



### Features

- \* Systems install quickly into suspended tile ceilings and are supported by the T-bar grid.
- \* Systems include a complete powered speaker with UL based plenum enclosure.
- \* Fine perforated grilles blend with ceiling tiles and provide excellent acoustic transparency.
- \* Self powered with 15 watt Class D amplifier

The **AMK PT802** 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. The speaker combines high performance, power handling, and a very smooth response.

The loudspeaker driver, CX802, 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)

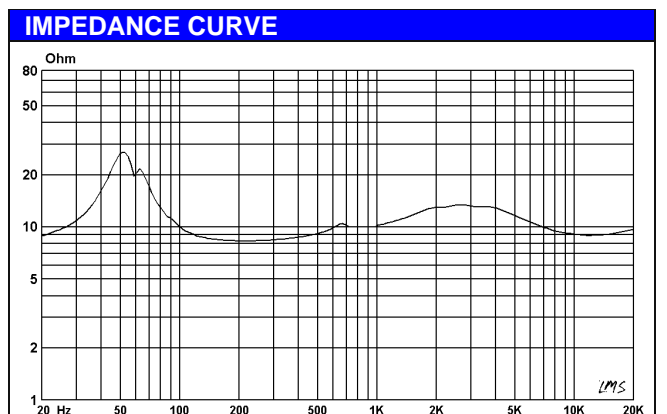
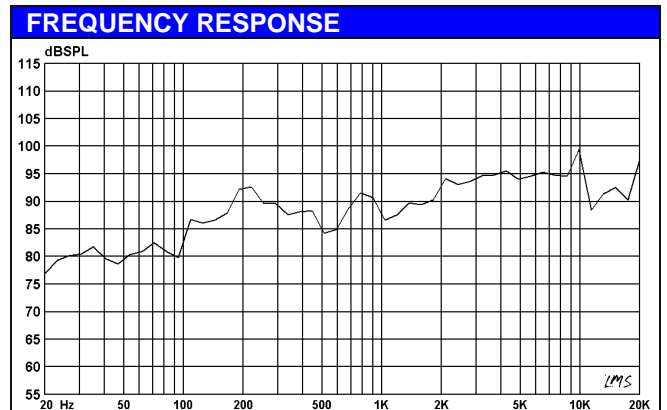
They are shipped ready to install and require no speaker cut-outs in the tile or time consuming assembly. 2' x 2' Systems are designed to replace a standard 2' x 2' tile and are supported by the T-bar grid.

Assemblies include a factory wired speaker mounted to a 2' x 2' subplate with a fine perforated grille and mounted AMK powered speaker enclosure. The backbox is offset to one side of the 2' x 2' grille allowing it to be rotated in the ceiling to install around plenum obstructions. Several options are available for the line level audio and power connections. Each is designed and manufactured to assure consistent performance with clear intelligibility and wide dispersion.

Architectural Grilles feature a fine perforated pattern for a clean unobtrusive appearance. Grilles are engineered to provide maximum free-air space for excellent speaker sound transmission while achieving virtually invisible presentation of the speaker in new or exiting tile ceilings. 2' x 2' grilles simply replace a 2' x 2' tile. All are formed from perforated steel and finished in white powder epoxy for long lasting appearance.

Specifications	
Frequency Response	55 Hz - 20 kHz
Voice-coil diameter	1"
Average Beamwidth @ 2 kHz	144 deg.
Magnet Weight	20 oz
Magnet Material	Barium Ferrite
Tweeter	13mm Polyamide Soft Dome
Woofer Cone	Polypropylene
Surround Material	Inverted Rubber
Crossover Frequency	5.5 kHz
Depth of the Enclosure	7 in.
Dimension of Grille	2' x 2'

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



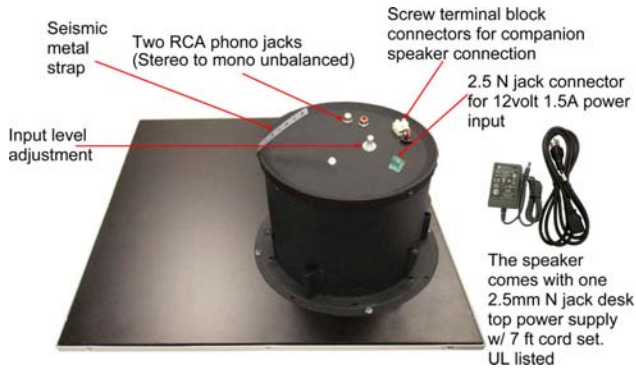
## MODEL OPTIONS

Model	Power Supply	Power Connection	Input Connection	Signal Input	Slave input/output connections
<b>PT802-SM</b>	External 24Volt	2.5mm N jack	Two RCA phono jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-SM-P</b> (Set of Powered and Companion Speaker) <b>PT802-SM-RVC</b> (Powered speaker with the remote control) <b>PT802-SM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-OM</b>	External 24Volt	2.5mm N jack	One RCA phono jack	One unbalanced Input	Screw terminal block connectors
Added Suffixes: <b>PT802-OM-P</b> (Set of Powered and Companion Speaker) <b>PT802-OM-RVC</b> (Powered speaker with the remote control) <b>PT802-OM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-RPS</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	Two RCA phono jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-RPS-P</b> (Set of Powered and Companion Speaker) <b>PT802-RPS-RVC</b> (Powered speaker with the remote control) <b>PT802-RPS-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-RPM</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	One RCA phono jack	One unbalanced Input	Screw terminal block connectors
Added Suffixes: <b>PT802-RPM-P</b> (Set of Powered and Companion Speaker) <b>PT802-RPM-RVC</b> (Powered speaker with the remote control) <b>PT802-RPM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-MD</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	3.5mm Mini jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-MD-P</b> (Set of Powered and Companion Speaker) <b>PT802-MD-RVC</b> (Powered speaker with the remote control) <b>PT802-MD-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-MD2</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	Two 3.5mm Mini jacks	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-MD2-P</b> (Set of Powered and Companion Speaker) <b>PT802-MD2-RVC</b> (Powered speaker with the remote control) <b>PT802-MD2-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-RPM</b>	12 Volt for external higher amperage multi unit supply (User option for power source)	3.81mm two position Phoenix type connector	One RCA phono jack	One unbalanced Input	Screw terminal block connectors
Added Suffixes: <b>PT802-RPM-P</b> (Set of Powered and Companion Speaker) <b>PT802-RPM-RVC</b> (Powered speaker with the remote control) <b>PT802-RPM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-JFS</b>	External 24Volt	2.5mm N jack	3.81mm four position Phoenix type connector	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-JFS-P</b> (Set of Powered and Companion Speaker) <b>PT802-JFS-RVC</b> (Powered speaker with the remote control) <b>PT802-JFS-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-JFM</b>	External 24Volt	2.5mm N jack	3.81mm three position Phoenix type connector	One balanced Input	Screw terminal block connectors
Added Suffixes: <b>PT802-JFM-P</b> (Set of Powered and Companion Speaker) <b>PT802-JFM-RVC</b> (Powered speaker with the remote control) <b>PT802-JFM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-CFS</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	3.81mm four position Phoenix type connector	Stereo to Mono unbalanced	Screw terminal block connectors
Added Suffixes: <b>PT802-CFS-P</b> (Set of Powered and Companion Speaker) <b>PT802-CFS-RVC</b> (Powered speaker with the remote control) <b>PT802-CFS-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-CFM</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connector	3.81mm three position Phoenix type connector	One balanced Input	Screw terminal block connectors
Added Suffixes: <b>PT802-CFM-P</b> (Set of Powered and Companion Speaker) <b>PT802-CFM-RVC</b> (Powered speaker with the remote control) <b>PT802-CFM-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-CFM-2</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connectors	(2) 3.81mm three position Phoenix type connector	Two balanced Inputs	Screw terminal block connectors
Added Suffixes: <b>PT802-CFM-2-P</b> (Set of Powered and Companion Speaker) <b>PT802-CFM-2-RVC</b> (Powered speaker with the remote control) <b>PT802-CFM-2-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					
<b>PT802-CFM-4</b>	External 24Volt w/ Screw Terminal	3.81mm two position Phoenix type connectors	(4) 3.81mm three position Phoenix type connector	Four balanced Inputs	Screw terminal block connectors
Added Suffixes: <b>PT802-CFM-4-P</b> (Set of Powered and Companion Speaker) <b>PT802-CFM-4-RVC</b> (Powered speaker with the remote control) <b>PT802-CFM-4-RVC-P</b> (Set of powered speaker with the remote control and a companion speaker)					

# MODEL OPTION CONFIGURATIONS

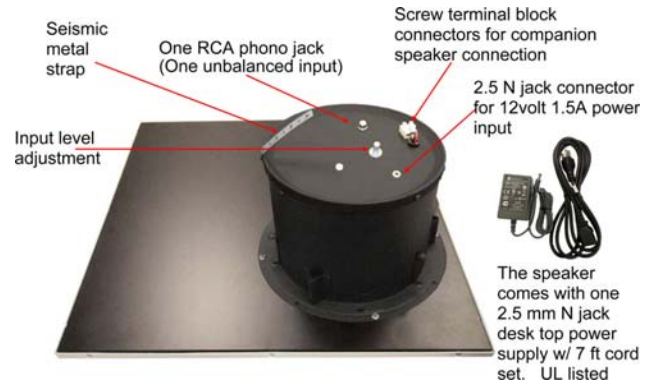
## PT802-SM

**Stereo to mono unbalanced**



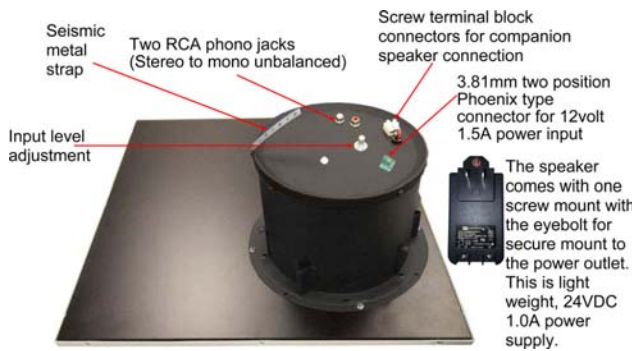
## PT802-OM

**One unbalanced input**



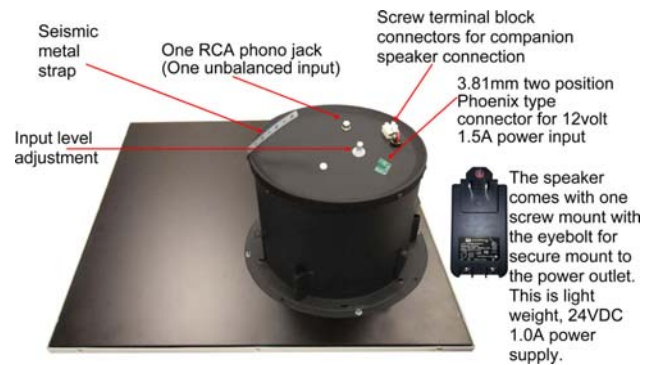
## PT802-RPS

**Stereo to mono unbalanced**



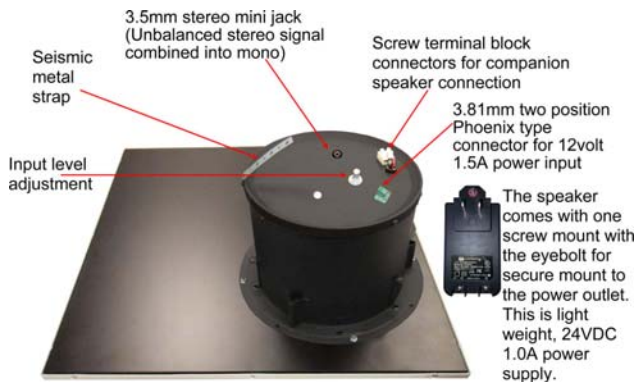
## PT802-RPM

**One unbalanced input**



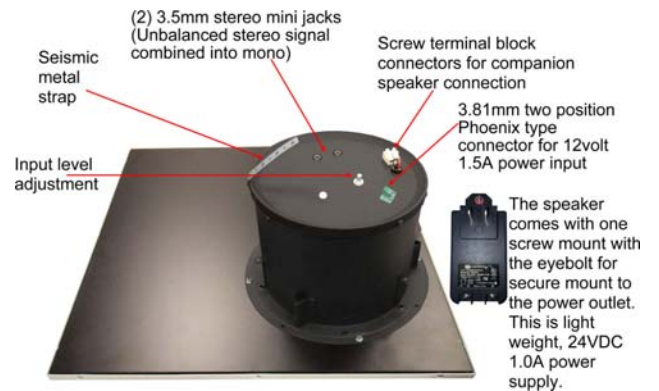
## PT802-MD

**Stereo to mono unbalanced**



## PT802-MD2

**Stereo to mono unbalanced**



# MODEL OPTION CONFIGURATIONS

## (For powered unit)

**PT802-JFS**  
Stereo to Mono unbalanced

Seismic metal strap

3.81mm 4 position Phoenix type connector (Stereo to Mono Unbalanced)

Screw terminal block connectors for companion speaker connection

2.5 N jack connector for 12volt 1.5A power input

Input level adjustment

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

**PT802-JFM**  
One balanced input

Seismic metal strap

3.81mm 3 position Phoenix type connector (One balanced input)

Screw terminal block connectors for companion speaker connection

2.5 N jack connector for 12volt 1.5A power input

Input level adjustment

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

**PT802-CFS**  
Stereo to Mono unbalanced

Seismic metal strap

3.81mm 4 position Phoenix type connector (Stereo to Mono Unbalanced)

Screw terminal block connectors for companion speaker connection

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

Input level adjustment

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.

**PT802-CFM**  
One balanced input

Seismic metal strap

3.81mm 3 position Phoenix type connector (One balanced input)

Screw terminal block connectors for companion speaker connection

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

Input level adjustment

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.

**PT802-CFM-2**  
Two balanced input

Seismic metal strap

3.81mm 3 position Phoenix type connector (Two balanced inputs)

Screw terminal block connectors for companion speaker connection

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

Input level adjustment

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.

**PT802-CFM-4**  
Four balanced input

Seismic metal strap

3.81mm 3 position Phoenix type connector (Four balanced inputs)

Screw terminal block connectors for companion speaker connection

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

Input level adjustment

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.

## Architect's & Engineer's Specifications

The self amplified speaker system for suspended tile ceilings shall be AMK PT Series Model PT802(-\_\_\_\_) with grille size of 2' x 2'. 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 8" woofer of polypropylene, an inverted rubber surround, and a 1" polyamide soft dome tweeter mounted on a post.

The transducer in the loudspeaker system shall be AMK CX 802 coaxial loudspeaker. The woofer shall have a 20 oz. Barium Ferrite magnet. The two reproducer sections shall be coupled through a built-in capacitor bypass crossover. The crossover frequency shall be at 5.5 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 55 Hz- 20 kHz (+/- 5dB). The power handling shall be 40watts at 8 ohm impedance. The sensitivity shall be 91dB at 1watt / 1meter.

The system shall be on 2' x 2' metal perforated grille and 7" deep powered speaker enclosure attached on the back of the grille.

The loudspeaker system shall be AMK Innovations model **PT 802(-\_\_\_\_)**.

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

## Polar Responses

