

# SRM450 SPECIFICATIONS

## System Specifications

<i>Frequency Response (-3 dB)</i>	55 Hz – 18 kHz
<i>Frequency Range (-10 dB)</i>	45 Hz – 20 kHz
<i>Directivity Factor; Q (DI)</i>	9.95 (9.98), averaged 2 kHz to 10 kHz
<i>Max SPL Long-term @ 1m</i>	124 dB
<i>Max SPL Peak @ 1m</i>	127 dB
<i>Crossover</i>	Linkwitz-Riley, 24 dB/octave @ 1600 Hz

## Audio

<i>Input Type</i>	Balanced Differential
<i>Input Impedance</i>	20 kohms
<i>Input Protection</i>	RFI and level protected
<i>Sensitivity</i>	
Line:	+4 dBu (center detent)
Mic:	-36 dBu
<i>Maximum Input Level</i>	+22 dBu
<i>Low-Cut Frequency</i>	75 Hz, Second-order filter
<i>Acoustic Contour Equalization</i>	
Peaking:	+3 dB @ 100 Hz, +3 dB @ 12 kHz
<i>Operating Temperature Range</i>	-10°C to 45°C (14°F to 113°F)

## Power Amplifiers

### Low-Frequency Power Amplifier

<i>Rated Power</i>	300 watts*
<i>Rated THD</i>	< 0.1%
<i>Cooling</i>	Convection Extrusion
<i>Design</i>	Class D, Parametric Servo Feedback

### High-Frequency Power Amplifier

<i>Rated Power</i>	100 watts*
<i>Rated THD</i>	< 0.1%
<i>Cooling</i>	Convection Extrusion
<i>Design</i>	Conventional Class AB

\*Rated power is continuous rms wattage into transducer's rated impedance @ 5 kHz for the HF amplifier and @ 500 Hz for the LF amplifier.

## Transducers

### Low-Frequency Transducer

<i>Diameter</i>	12 in/300 mm
<i>Voice Coil Diameter</i>	3.0 in/75 mm
<i>Sensitivity (1W@1m)</i>	98 dB
<i>Nominal Impedance</i>	8 ohms
<i>Power Handling</i>	600 watts, program
<i>Frequency Range</i>	45 Hz – 3 kHz

### High-Frequency Transducer

<i>Diaphragm Diameter</i>	1.75 in/44.5 mm
<i>Diaphragm Material</i>	Heat treated titanium
<i>Sensitivity (1W@1m)</i>	106 dB
<i>Nominal Impedance</i>	8 ohms
<i>Power Handling</i>	100 watts, program
<i>Frequency Range</i>	1 kHz – 20 kHz

### Horn Design

<i>Type</i>	Conical and Exponential
<i>Mouth Size</i>	12 in/304.8 mm (W) x 7 in/177.8 mm (H)
<i>Throat Diameter</i>	1 in/25.4 mm
<i>Horizontal Coverage</i>	90° (1 kHz–20 kHz)
<i>Vertical Coverage</i>	45° (2.8 kHz–20 kHz)

## Line Input Power

<i>US</i>	120 VAC, 60Hz
<i>Recommended amperage service</i>	2.5 amps
<i>Europe</i>	230 VAC, 50Hz
<i>Recommended amperage service</i>	1.25 amps
<i>Japan</i>	100 VAC, 50/60Hz
<i>Recommended amperage service</i>	3.0 amps
<i>AC Connector</i>	3-pin IEC 250 VAC

## Control System Function

Electronic Crossover
Phase Alignment
Equalization
Parametric Equalization

## Safety Features

<i>Over-Excursion Protection</i>	Second-Order High-Pass Filter
<i>Thermal Protection</i>	Amplifier shutdown, auto-reset
<i>Low-Line Voltage Shut Down</i>	60% Nominal line
<i>Driver Protection</i>	Independent LF and HF compressors
<i>Low-Freq Roll-Off</i>	Dynamic, signal-level dependent

## Construction Features

<i>Basic Design</i>	Asymmetrical Trapezoidal
<i>Enclosure Alignment</i>	Sixth-Order
<i>Material</i>	Polypropylene
<i>Finish</i>	Midnight Blue, textured finish
<i>Handles</i>	One on each side, one on top
<i>Mounting Methods</i>	Integrated mounting points, M10 Two each located on each side, top, bottom, and rear of enclosure
<i>Grille</i>	Perforated metal with weather-resistant coating
<i>Display LEDs</i>	Signal Present, Peak, Power ON, and Thermal

## Physical Properties

<i>Height</i>	26.0 in/660 mm
<i>Width</i>	15.4 in/390 mm
<i>Depth</i>	14.8 in/376 mm
<i>Weight</i>	40 lb/18 kg

## Options

PA-A1 forged shoulder eyebolt hardware (M10 x 1.5 mm x 20 mm)
SPM100 (Speaker Pole Mount)

## Disclaimer

Since we are always striving to make our products better by incorporating new and improved materials, components, and manufacturing methods, we reserve the right to change these specifications at any time without notice.

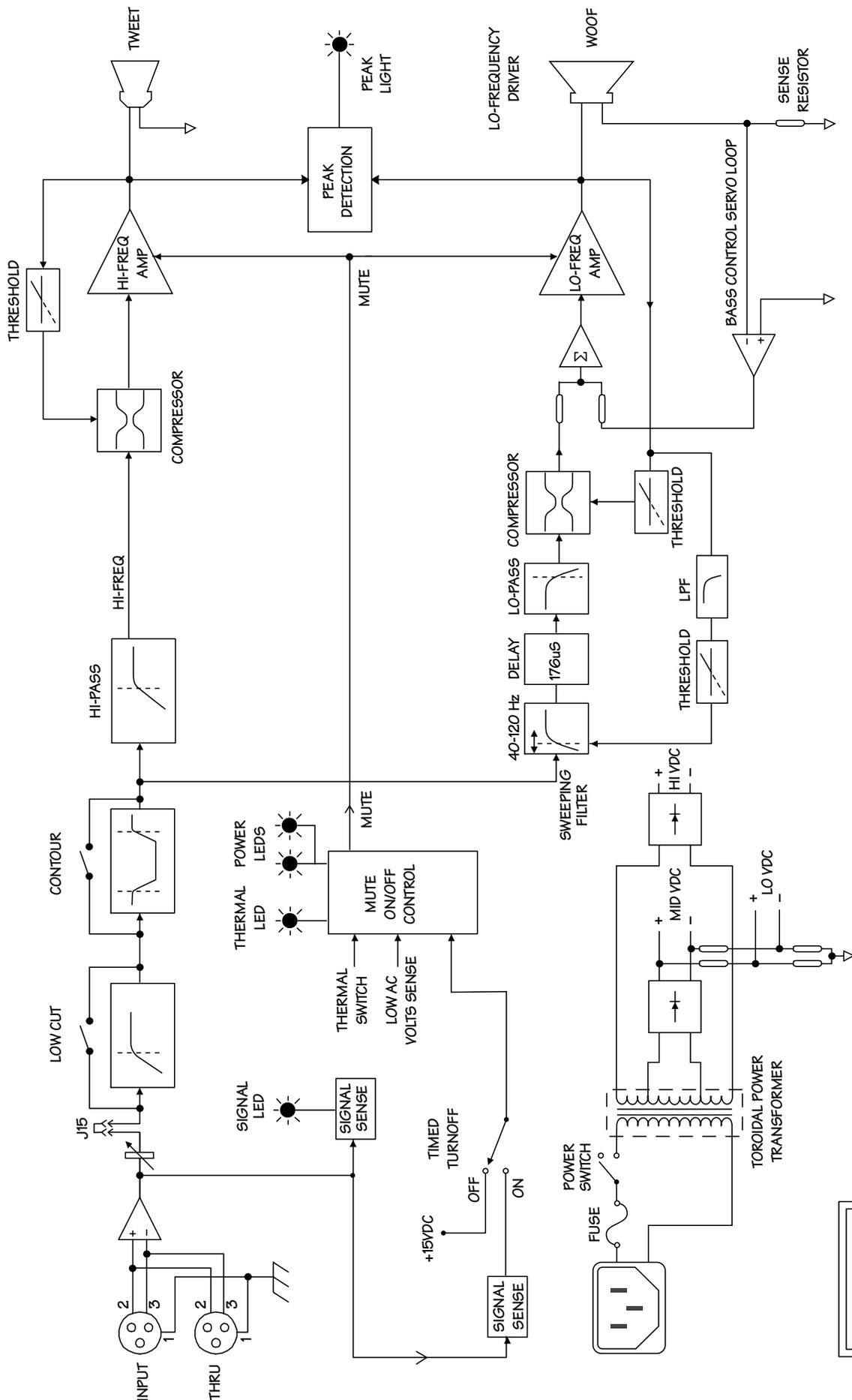
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# SRM450 v2 BLOCK DIAGRAM



MACKIE  
SRM450 v2  
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(075107)