

# TECHNICAL INFORMATION

## HR824 MK2 Specifications

### Enclosure

#### Materials and Construction:

¾-inch (19 mm) thick MDF cabinet construction with internal bracing to add to cabinet stiffness.

Piano-black gloss finish.

Die-cast aluminum exponential wave guide for controlled, wide dispersion from high-frequency driver and Zero Edge Baffle™ to minimize diffraction around the cabinet edges.

Open cell adiabatic “foam fill” acoustical damping material absorbs internal reflections, preventing delayed sound coloration.

Flush-mount connector system allows monitor to be placed against a wall without need for connector clearance.

### Transducers

#### Low-frequency driver:

Diameter:	8.75 inches (222mm)
Sensitivity (2.83V, 1 m):	91 dB SPL
Nominal Impedance:	4 ohms
Voice Coil Diameter:	1.6 inches (40 mm)
Frame:	Die-cast magnesium
Magnet:	Ferrite
Fully shielded:	Ferrite opposing magnet

#### High-frequency driver:

Sensitivity (2.83V, 1m):	91 dB SPL
Nominal Impedance:	6 Ω
Power Handling (Long Term/Program):	20/50 watts
Frequency Range:	1.6 kHz to 22 kHz
Diaphragm/Suspension:	Titanium with polymer suspension
Voice Coil Diameter:	1.0 inch (25.4 mm)
Magnet:	Neodymium
Bucking Magnet:	Ferrite opposing magnet

#### Passive Radiator:

6-inch x 12-inch (152mm x 305mm) mass-loaded elliptical flat piston with variable thickness filleted edge rubber surround.

### Crossover Section

#### Crossover Type:

Modified Linkwitz-Riley, 24 dB/octave @ 1900 Hz

### Amplifier Section

#### Low-frequency power amplifier

Rated Power (at 1 kHz with 1% THD):

150 watts

Rated Load Impedance: 4 ohms

Burst Power Output: 350 watts

Rated THD (1W to -1 dB of rated power):

0.1 %

Slew Rate: 35V/μS

Distortion (THD, SMPTE IMD, DIM 100):

< 0.035%

#### Signal-to-Noise

(20Hz-20kHz, unweighted, referenced to 150W into 4Ω):

> 102 dB

Cooling: Convection

Design: Class AB, Parametric Servo Feedback

#### High-frequency power amplifier

Rated Power(at 1 kHz with 1% THD):

100 watts

Rated Load Impedance: 6 ohms

Burst Power Output: 210 watts

Rated THD (1W to -1 dB of rated power):

0.1 %

Slew Rate: 35V/μS

Distortion (THD, SMPTE IMD, DIM 100):

< 0.035%

#### Signal-to-Noise

(20 Hz-20 kHz, unweighted, referenced to 100 W into 6 ohms):

> 102 dB

Cooling: Convection

Design: Conventional Class AB

### System Specifications

Input Type:	Balanced Differential (XLR and 1/4" TRS) Unbalanced (RCA)
Input Impedance:	20 kΩ Balanced 10 kΩ Unbalanced
Input Protection:	RFI and Level Protected
Maximum Input Level:	+20 dBu
Low Frequency Filter:	-3 dB @ 37 Hz, 2nd-order transitional high-pass filter -3 dB @ 47 Hz, 4th-order Chebyshev high-pass filter -3 dB @ 80 Hz, 4th-order Butterworth high-pass filter

HF Equalization: ±2 dB @ 10 kHz, shelving

#### Acoustic Space:

A position: -4 dB @ 50 Hz, shelving

B position: -2 dB @ 50 Hz, shelving

C position: Flat

#### Compressor:

Independent high and low frequency overload detection

Low Line Voltage Shut Down: 60% of Nominal Line

Thermal Protection: Amplifier Shut-Down, Auto Reset

Muting: 5 seconds at turn-on

Driver Protection: Independent LF and HF Detection

Overall Compression