EVENT® OPAL

specifications

specifications - general

system

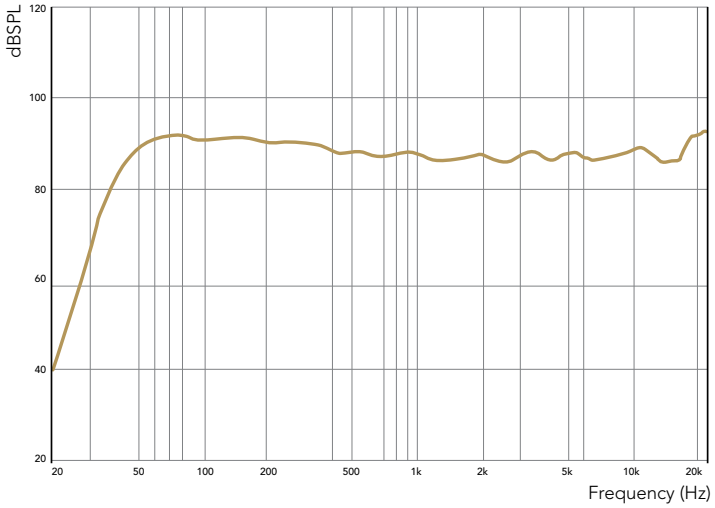
Frequency Response	35Hz – 22kHz (see graph)
Crossover Frequency	1600Hz
Crossover Type	Acoustic 8th Order (48dB/Oct)
3rd Harmonic Distortion @ 90dB SPL, 1m	500 - 7kHz - 0.08% 200 - 20kHz - 0.2% <200Hz - 1.5%
Acoustic Output - SPL @ 1m Long Term (80Hz - 20kHz) Peak (80Hz - 20kHz)	 111dB 114dB
Signal Input	Combo XLR, ¼" TRS (bal/unbal)
Input Sensitivity	.755 v/rms is 0dBu
AC Input Voltage	110-120V or 220-240V (selectable) 90-110V (Japan)
AC Input Connector	2-Pin IEC
Average Long-Term Power Consumption	220 watts
Quiescent Power Consumption	<20 watts

physical

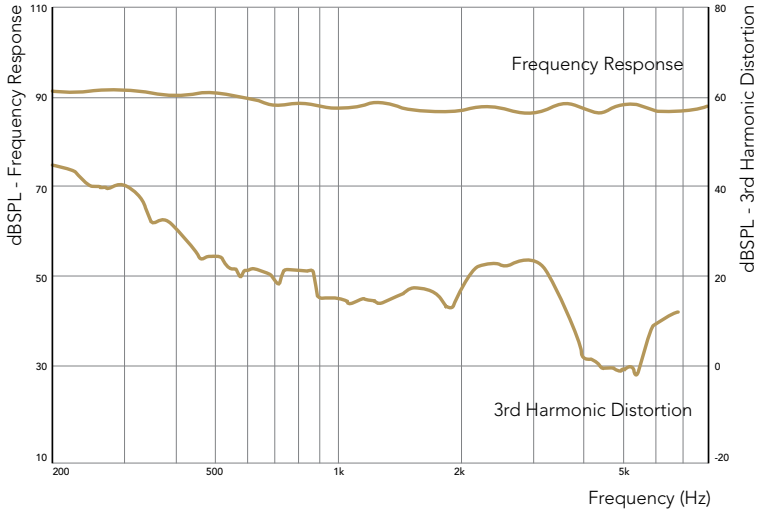
Cabinet Volume	28 Litres
Cabinet Construction	High Pressure Injection-Moulded Aluminium
Cabinet Finish	Black Powdercoat
Low Frequency Vents	Two Variable Impedance Ports (patent pending)
Waveguide Construction	High Pressure Injection-Moulded Aluminium
Waveguide	Elliptical waveguide - Rotatable
Mounting Points	Four each M8 Omni-mount Pattern
Cabinet Dimensions	295mmW x 450mmH x 273mmD 11.6"W x 17.7"H x 10.8"D
Cabinet Weight	21.2kg 46.74lb
Shipping Dimensions	390mmW x 575mmH x 380mmD 15.4"W x 22.6"H x 15"D
Shipping Weight	24.3kg 53.57lb
Operating Temperature Range	5-35 ° C / 40-95 ° F
Agency Approvals	CE, UL, CCC, C-Tick, SASO, NON, EK, PSE

specifications - graphs

frequency response



frequency response vs 3rd harmonic distortion



specifications - drivers

low frequency transducer - EX8

Piston Diameter	180mm (7.1”)
Voice Coil Configuration	X-Coil double Low distortion design
Voice Coil Diameter	66mm (2.6”)
Shortening Coil Diameter	65.2mm (2.56”)
Former Material	High Strength Polyamide - Glass Fiber
Voice Coil Wire	Copper Clad Al
Magnet Type	Neodymium
Magnetic Gap Design	XBL - Split Gap
Impedance Nominal in Cabinet	5 Ohms
Cone Type	Carbon fiber composite
Power Handling	
Continuous Pink Noise	240 watts
Program Power	360 watts
Peak Power	720 watts

high frequency transducer - ULD1

Dome Diameter	25.4mm (1”)
Voice Coil Diameter	25.0mm (0.98”)
Magnet Type	Neodymium
Impedance DCr	6 Ohms
Impedance Nominal in Cabinet	5 Ohms
Dome Type	Beryllium Copper
Power Handling	
Continuous Pink Noise	25 watts (above 1.6kHz)
Program Power	50 watts (above 1.6kHz)
Peak Power	100 watts (above 1.6kHz)

low frequency amplifier

Frequency Response	20Hz - 20kHz (±0.1dB)
Operating Band Pass	20Hz - 1,600Hz
Total Harmonic Distortion	0.009% @ 300 watts into 5 ohm load
Voltage Gain	24dB
Long Term Power @ 5 Ohms*	270 watts
Continuous Power @ 5 Ohms**	387 watts
Burst Power @ 5 Ohms***	600 watts
Output Topology	Class AB
Cooling	Convection - Aluminium Heat Sink

high frequency amplifier

Frequency Response	20Hz - 20kHz (±0.1dB)
Operating Band Pass	1,600Hz - 20,000Hz
Total Harmonic Distortion	0.003% @ 90 watts into 5 ohm load
Voltage Gain	15dB
Long Term Power @ 5 Ohms*	50 watts
Continuous Power @ 5 Ohms**	112 watts
Burst Power @ 5 Ohms***	140 watts
Output Topology	Class AB
Cooling	Convection - Aluminium Heat Sink

* Both high frequency and low frequency were measured simultaneously for this specifictation.

** Continuous power was measured using 1kHz sine wave signal

*** Burst power was measured using a 1kHz burst tone waveform where the burst portion contains four cycles (on) and the low level (off) signal contains 200 cycles. This test signal succinctly represents the strain and demands placed on the amplifier by music content containing high transients.

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