

PCRYSTAL2-R TIME-ALIGN[®]

SELF-POWERED

APPLICATIONS

Stadium Sound Reinforcement	Theatrical Sound Reinforcement
Auditorium Sound Reinforcement	Portable Sound Reinforcement
Nightclub Installations	Portable DJ Systems
House of Worship	Theatrical Sound Reinforcement

DESCRIPTION

The PCRYSTAL2-R is a portable self-powered Minima 7™, full range, portable loudspeaker system offering high fidelity, high efficiency and high output. Constructed from 15mm 13-ply birch plywood with a black Ro Tex™ finish, leaves the enclosure durable and attractive. Its designed for applications where high sound pressure and highly directive long throw capability are required. The Time-Aligned™ studio quality sound provides detail and clarity at a distance. The PCRYSTAL2-R produces high definition sound over its narrow controlled coverage angle making audience coverage effective in various configurations. Engineered for mid and far field performance it is well known for its exceptional fidelity and high output capability.

Designed as a portable speaker the fly points and handles allow the CRYSTAL2-R to be easily transported and setup. The audio input incorporates an InGenius® balanced line receiver providing very high common mode rejection to eliminate noise often present in systems with less optimized grounding and wiring schemes. The internal Minima 7™ amplifier incorporates a high efficiency low power consumption green design with advanced digital switching to automatically switch and accept line voltage from 100 to 240 volts.



SPECIFICATIONS

System Type:

2-way vented 2.5 ft³

Enclosure:

15 mm 13-ply birch plywood horizontally arrayable

Finish:

Black Ro Tex™ true water born environmental finish

Grille:

14 Gauge black powder coated perforated steel in a welded extruded aluminum frame

Low Frequency Components:

2 - E-12 12" Transducers, 2.5" Voice coil, 80 oz Magnet

High Frequency Components:

Transducer, 1.4" Exit compression driver, 3" Titanium diaphragm, Elliptic conical waveguide

Input Connector:

XLR 1/4" combo with XLR loop through

Internal Amplification:

Minima 7™

Input Impedance:

48K ohms

Input CAL Sensitivity:

+4 dBu

Maximum Continuous Amplifier Power:

750 W

High Pass Filter:

Switchable: -6 dB @ 8 Hz; @ 50 Hz; @ 95 Hz

Overload Protection:

Internal limiter

LED Indicators:

Green - On
Yellow - System limit
Red - System fault or sleep mode

Mains Voltage Requirements:

Auto sensing
100 / 120 / 240 V

Mains Current Requirements:

2.3 A @ 120 V
1.2 A @ 240 V

Hardware:

2 - Recessed handles
35 mm Stand adapter
Fly points
Optional Crystal-F1 or Crystal-F2 rigging kit for flying multiple cabinet arrays
Optional steel yoke U-bracket

Fly Points Safe Working Load:

200 lbs Upper most rigging points

Crossover Type:

Passive Time-Align® equalizer type @ 1.9 kHz

Frequency Response:

80 Hz to 18 kHz ±3 dB

Low Frequency Limit:

80 Hz

Maximum Calculated Continuous Acoustic Output:

130 dB SPL @ 1 m

Coverage Pattern:

55 degrees horizontal (-6 dB)
40 degrees vertical (-6 dB)

Polarity:

A positive asymmetrical signal applied to pin 2 will result in a positive asymmetrical acoustical pressure

Dimensions:

39.5" h x 14.5" w x 17" d
101 cm x 37 cm x 44 cm

Weight:

115 lbs
52 kg

Custom Finishes:

Optional custom finishes include white or unfinished ready to paint.

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PCRYSTAL2-R TIME-ALIGN®

ABOUT TIME-ALIGN® TECHNOLOGY

Time-Align® assures that the fundamental and overtones of a complex, transient, acoustical signal are presented to the listener in the same relationship as the electrical signal at the input terminals of the loudspeaker. The conventional loudspeaker spreads out the sound in time. When a rapid series of transients occur the results are blurring and lost detail. With Time-Align®, a transient is presented as a tight package of energy, with the same time relationships as the natural sound. This means that a rapid series of transients will be heard clearly.



True Time-Alignment™ requires much more than just physically lining up the loudspeaker components. It requires consideration of the driver placement, driver delay and adjustment of the crossover delay parameters. This achieves the precise simultaneous acoustical arrival time of each driver throughout the crossover region.

The first Time-Aligned™ Loudspeaker was invented by EM Long Associates in 1976 utilizing the Time-Align® generator invented and built by Ronald Wickersham. In 1980 Bag End® incorporated Time-Align® technology into our full range loudspeaker systems. Along with state-of-the-art laboratory instruments, the proprietary Time-Align® generator is still in use today to verify the time domain performance of our loudspeaker systems. When comparing a genuine Bag End® Time-Aligned™ loudspeaker system to any other, our technology and design is easy to hear and appreciate. The dramatic clarity, realism, and overall pleasant sound of our Time-Aligned™ systems are well noted worldwide.

ABOUT MINIMA 7™ SELF POWERED

The Minima 7™ amplifier is both a high fidelity and a high efficiency amplifier. With efficiency well over 80%, it provides more power to the loudspeakers, and creates

less heat in the amplifier. In real world applications there is practically no heat emitted from the amplifier and thus it requires no cooling fan. The AC power input automatically adapts to any voltage between 88 and 270 volts.

ABOUT OUR RO TEX™ FINISH

The durable Ro Tex™ finish is found on Bag End™ “R” series or Road cabinets. Ro Tex™ is a water base, environmentally safe finish that is made in Europe and is uniquely strong and long lasting. As it solidifies and attaches to the wooden cabinet it bonds with the wood to make a super hard permanent finish. It is lightly textured offering both an attractive and rugged finish.

The optional Crystal2 rigging kit s shown flying multiple cabinets in an array.

DIMENSIONS

