# BAG EN SELF-POWERED P-CRYSTAL-R TIME-ALIGN®



# SYSTEM COMPONENTS

#### **Enclosure:**

18 mm 13-ply birch plywood Horizontally arrayable

## Low Frequency Transducers:

2 - 12" Cone 3" Voice coil 95 oz. Magnet

# **High Frequency Transducer:**

1.4" Exit compression driver 3" Titanium diaphragm Elliptic conical horn

### Internal Amplification:

1 - Minima One

# **Grille:**

14 Gauge black powder coated perforated steel in an extruded aluminum frame with weather seal

#### Standard Hardware:

Rigging points

- 1 35 mm Stand adapter
- 2 Recessed handles
- 8 Machined aluminum speaker mounting clamps

# **End Caps:**

2 - 13-ply birch skid plates with protective UHMW polyethylene bumpers

## **ACOUSTIC AND ELECTRICAL**

# System Type:

2-way vented 2.5 ft3

10k  $\Omega$  Balanced XLR inputs with loop through

Input CAL Sensitivity: +4 dBu

# System Power:

1000 W continuous

# Frequency Response:

80 Hz to 18 kHz ±3 dB  $(4\pi \text{ Steradians})$ 

#### **Hi Pass Filter Frequency** Switchable:

-6dB @ 8 Hz, @ 50 Hz, @ 95 Hz

#### Dispersion:

55° Horizontal (-6 dB) 40° Vertical (-6 dB)

#### **Crossover Network:**

Passive Time-Align® equalizer type @ 1.9 kHz

# **Time Offset Between Drivers:**

< ± 25 Microseconds

#### **Maximum Acoustic Output:** 130 dBSPL

# **LED Indicators:**

Green. On Yellow, System Limit Red, System Fault or Sleep Mode

# **AC Power Requirements:**

88 Volts Minimum 270 Volts Maximum

# **PHYSICAL**

# Standard Finish:

Black Ro-Tex Finish

#### Dimensions:

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

### Weight:

115 lbs., 52 kg

# **Shipping Dimensions:**

20" x 47" x 21" 51 cm x 120 cm x 54 cm

# **Shipping Weight:**

129 lbs., 58.5 kg

# **APPLICATIONS:**

**Stadium Sound Reinforcement Auditorium Sound Reinforcement Church Sound Reinforcement Audio Visual Presentations Nightclub Applications Portable Sound Reinforcement** 

MINIMA ONE SELF-POWERED The P-CRYSTAL is a full range, long throw, self-powered loudspeaker system offering high fidelity, high efficiency and high power handling capacity. The P-CRYSTAL is designed for applications where high sound pressure and highly directive long throw capability are required. Units are designed to array for larger systems using ATM Flyware™. The P-CRYSTAL-R includes protective end caps, handles, a stand adapter, and quickrelease rigging attachment points. Constructed from 18 mm 13-ply birch plywood and finished in Ro-Tex, the P-CRYSTAL-R enclosure is durable and attractive.

**OPTIONAL CUSTOM FINISHES** Available in textured white paint or ready-to-stain natural birch for greater versatility in location and aesthetics. Also available in outdoor weather resistant package.

**ABOUT TIME-ALIGN®** 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.

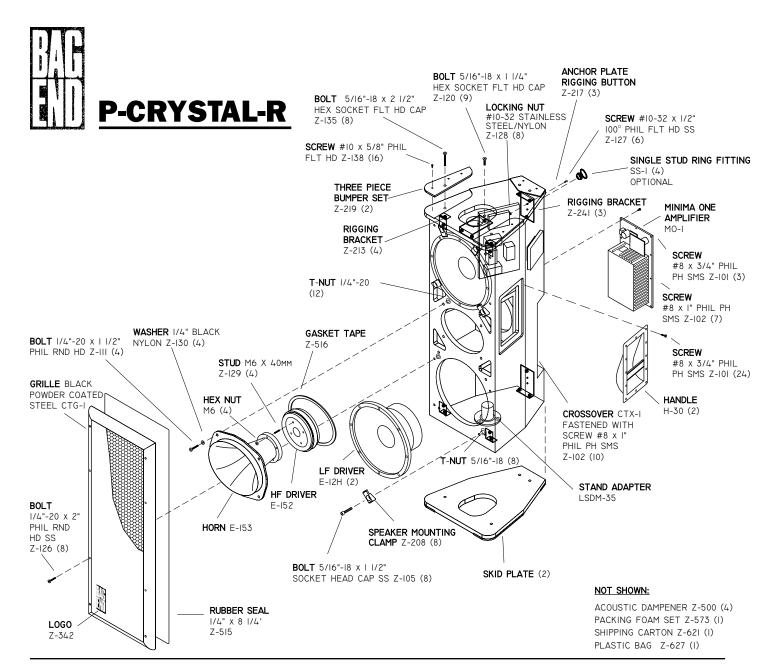
Along with state-of-the-art laboratory instruments, the proprietary Time-Align® generator, built by Ron Wickersham, is used in designing our loudspeaker systems. The Time-Align® generator is founded upon different underlying principles than are used in the more common Fourier based measurement equipment.

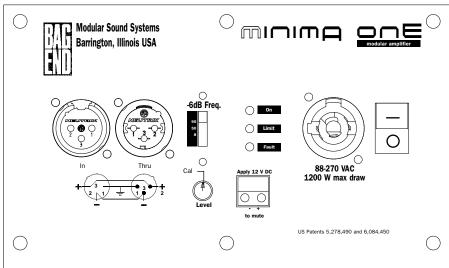
When comparing a genuine BAG END Time-Aligned™ speaker system to any other, our additional design work is easy to hear and appreciate. The dramatic clarity, realism, and overall pleasant sound of our Time-Aligned™ loudspeakers is noted throughout the world.

> **BAG END Loudspeakers** 22N272 Pepper Road Lake Barrington, Illinois 60010 USA Voice 847 382 4550 Fax 847 382 4551

> > www.bagend.com







# **ABOUT MINIMA ONE AMPLIFIER**

**TECHNOLOGY** The Minima One amplifier is both a hi fidelity and a high efficiency amplifier. More than 80% efficient the Minima One 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 requires no cooling fan. Incorporating patented technology the comparison circuit of the Minima One corrects every single cycle to drive error to zero at the end of each cycle. On average every 4 microseconds the one cycle modulator transforms and amplifies the input signal into the ideal natural pulse width modulation. Switching at 250KHz with the single cycle error correction insures extremely low distortion and high reliability.

The power factor corrected AC power input automatically and continuously adapts to any voltage between 88 and 270 volts. The Minima One is convenient to power and stable to use on any power grid in the world.