

BAG END SELF POWERED SELF INFRA PROCESSED

INSTALLATION SERIES

IPD12E-I

S P E C I F I C A T I O N S



SYSTEM COMPONENTS

Enclosure:

18 mm 13-ply birch plywood

Low Frequency Transducers:

2 - 12" INFRA cone
2.5" Voice coil
80 oz. Magnet

Interior Amplification:

1 - Minima One

Grille:

16 Gauge black vinyl coated perforated steel

Standard Hardware:

Rigging points

ACOUSTIC AND ELECTRICAL

System Type:

Infrasub Sealed chamber
(1.4 ft³)

Input: Ingenius®

48K Ω Balanced XLR and 1/4" input with XLR loop through

Input CAL Sensitivity: +4 dBu

System Power:

500 W continuous

Frequency Response:

8 Hz to 95 Hz ± 3 dB

Hi Pass Filter Frequency:

Switchable:

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

Crossover Network:

Internal INFRA Integrator

Maximum Acoustic Output:

Half Space @ 1 Meter
10 Hz - 94 dB SPL
20 Hz - 106 dB SPL
40 Hz - 118 dB SPL
80 Hz - 127 dB SPL

LED Indicators:

Green, On
Yellow, Dynamic Filter Threshold
Red, System Fault or Sleep Mode

Line Voltage Requirements:

Universal voltage range
88 - 270 Volts, auto sensing

Line Current Requirements:

1.7 A with 120 V supply (amplifier at full output with audio program material)

Remote Turn On/Off:

Low Voltage Contacts

PHYSICAL

Finish:

Black Textured Finish

Dimensions:

28" h x 18" w x 15" d
72 cm x 46 cm x 39 cm

Weight:

75 lbs.
34 kg

Shipping Dimensions:

18" x 30" x 21"
46 cm x 77 cm x 54 cm

Shipping Weight:

83 lbs.
38 kg

APPLICATIONS:

Film & Video Post Production

5.1 Digital Format Subwoofer

PA System Installations

Recording Studio

Mastering Facility

Home Theater

Discotheque

IPD12E-I The IPD12E-I is a self processed and self powered double 12" Installation bass system. The internal Minima One amplifier and Infra processing accepts a full range signal for convenient wiring.

The internal Infra integrator, amplifier and loudspeaker process the full range signal into a flat response low frequency acoustic output. The Dynamic Filter protection threshold is internally preset and eliminates distortion and accidental overload. This insures the maximum output and robust system protection with virtually no audible effect.

The audio input incorporates an InGenius balanced line receiver. This provides very high common mode rejection to eliminate noise present in sound systems with less optimized grounding and wiring schemes.

The internal Minima-One amplifier incorporates a high efficiency low power consumption green design with advanced digital switching to automatically accept any line voltage from 88 to 270 volts. Beyond simply auto sensing the Minima One actually fully operates on any voltage and any wave form allowing full power to be maintained during brown outs or voltage swings. Low voltage contacts are provided for installations to remotely turn the amplifier on and off.

ABOUT INFRASUB TECHNOLOGY Almost all specifications for subwoofer systems are fixated on the frequency response domain. However, the impression of power and quality is equally related to the time domain performance of a system. Because of the long wavelengths of low frequencies, this is particularly true with subwoofers.

Likewise, the maximum SPL is not a very reliable way to judge the impact of a subwoofer. A poor time domain performer will not have the same impact or natural sound as a time correct INFRA system.

The reason that INFRA technology sounds dramatically better than the others is because of their superior time domain performance. The INFRA subwoofer maintains the bass energy in a tight packet, aligned with the upper range signal, providing a greater body impact and a seamless musical connection with the main loudspeakers.

Conventional sub designs perform so poorly in the time domain because designers have used methods that sacrifice the phase response for more control over the frequency response (e.g., steep low pass filter slopes, vented speaker enclosures, and narrow bandwidth systems). With the INFRA technique, we do not degrade the phase response while extending the frequency response.

The INFRA dual integrator functions to extend both the low frequency response and roll off the hi frequency response without the use of a low pass filter. Adding a low pass filter, analog or digital, will have a degrading effect on the time domain performance of the INFRA subwoofer. A low pass filter adds signal delay to the sound which varies with frequency. Also, narrowing the pass band increases the influence of the rolloff on both ends of the subwoofer spectrum. The result is the smearing of the arrival times of the low frequency sound components, changing the timbre and downgrading the impact of transient sounds.

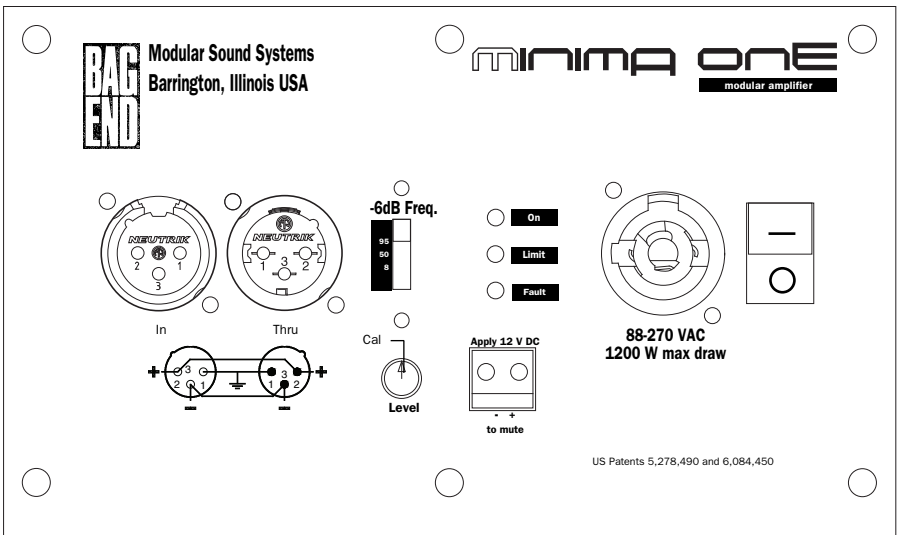
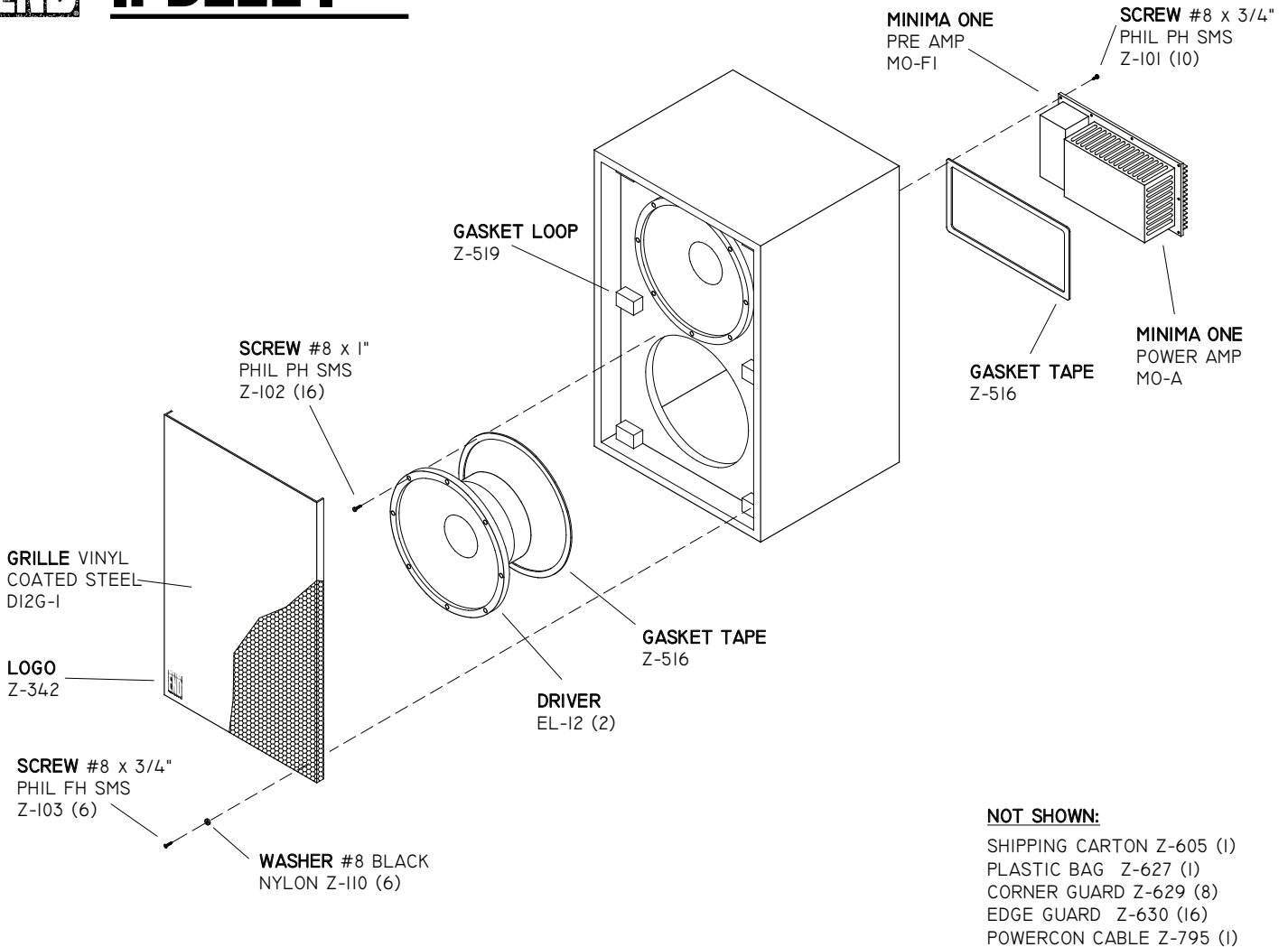
Bag End INFRA subwoofers are designed as no-compromise, high fidelity reproduction systems. We believe they are the finest Bass systems available, regardless of price.

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IPD12E-I



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.