

# IPS18E-AD INFRASUB™

SELF-POWERED & SELF INFRA™ PROCESSED

## APPLICATIONS

Low Profile Subwoofer Installations	House of Worship
Recording Studio and Mastering	Theatrical Sound Reinforcement
Post Production and Screening Room	Nightclub Installation
Cinema Subwoofer	Surround Sound Low Frequency Effects

## DESCRIPTION

The IPS18E-AD is a self-powered and internally Infra™ processed single 18" low profile bass system designed for permanent installation. The internal Minima 7™ amplifier and Infra™ processing provides for convenient implementation and 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 to eliminate distortion or accidental overload. This insures the maximum output and robust system protection with virtually no audible effect.

The audio input includes two balanced summing inputs and a direct through output, providing high common mode rejection, to eliminate noise often present in systems with less optimized grounding and wiring schemes. Includes connection for optional REMCON-2, remote Dynamic Filter™ threshold indicator.



## SPECIFICATIONS

### System Type

Infrasub™ sealed chamber 3 ft<sup>3</sup>

### Enclosure

18 mm 13-ply birch plywood

### Finish

Black Ro Tex™ true water born environmental finish

### Grille

16 Gauge black powder coated perforated steel

### Low Frequency Components

EL-18A 18" Extended transducer, INFRA™ cone, 3" Voice coil, 120 oz Magnet

### Input Connector

2 XLR summing inputs w/ one XLR male loop through

### Internal Amplification

Minima 7™

### Input Impedance

10K ohms

### Input CAL Sensitivity

+4 dBu

### Maximum Continuous Amplifier Power

750 W

### LED Indicators

Green - On  
Yellow - Dynamic Filter™ threshold

### Mains Voltage Requirements

Auto sensing  
100 / 120 / 240 V

### Mains Current Requirements

2.3 A @ 120 V  
1.2 A @ 240 V

### Hardware

Optional F4 fly points available

### Fly Points Safe Working Load

200 lbs

### Crossover Type

Internal Infra™ integrator inside

### Low Frequency Limit

8 Hz

### Maximum Calculated Continuous Acoustic Output

Half Space @ 1 Meter  
10 Hz - 89 dB SPL  
20 Hz - 101 dB SPL  
40 Hz - 113 dB SPL  
80 Hz - 124 dB SPL

### Polarity

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

### Dimensions

15" h x 22" w x 28" d  
39 cm x 56 cm x 72 cm

### Weight

82 lbs  
37 kg

### Other Options

REMCON-2 Optional remote Dynamic Filter™ threshold indicator

### Custom Finishes

Optional custom finishes include white or unfinished ready to paint.

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## ABOUT INFRASUB™ TECHNOLOGY

Almost all designs and specifications for subwoofer systems are fixated on the frequency response domain. However, the impression of power and quality of a loudspeaker is equally related to the time domain. The long wavelengths associated with low frequencies, make this 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 musically connected sound as a Time-Aligned™ Infra™ system. The reason that an Infra™ subwoofer sounds dramatically better is because of its superior time

domain performance, as well as its extended low frequency response. 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 subwoofer designs perform 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. While the Infra™ dual Integrator does function as the system crossover, it does so without using a conventional low pass filter. The Infra™ integrator applies an inverse electrical response to the acoustical response of the Infra™ loudspeaker in its sealed enclosure. This provides both the upper frequency roll off and the extended frequency response while maintaining the hi sound quality often associated with a sealed box design. When comparing a genuine Bag End® Infra™ loudspeaker system to any other, our technology and design is easy to hear and appreciate. The dramatic clarity, realism, and overall pleasant sound of an Infra™ system is well noted throughout the world.

## ABOUT MINIMA 7™ AND INFRA™ SELF PROCESSING

Infra™ self processed systems incorporates our analog Infra™ dual integrator into the Minima 7™ input circuit. Infra™ Self Powered Systems accept a full range line level audio signal, and utilizes internal Infra™ processing to provide the extended low frequency acoustical response, as well as a uniform roll off, of the upper range of the subwoofer. The Dynamic Filter™ protection is included and preset to the amplifiers sensitivity, requiring no external setup. 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 universal AC power input automatically accepts 100, 120 or 240 volts allowing it to operate anywhere in the world.



## DIMENSIONS

