

# IPS18E-R INFRASUB™

SELF-POWERED & SELF INFRA™ PROCESSED

## APPLICATIONS

Portable Sound Reinforcement      Low Frequency Drum Monitor  
Portable DJ Systems                  Low Frequency Special Effects  
Theatrical Sound Reinforcement

## DESCRIPTION

The IPS18E-R is a self-powered and internally Infra™ processed single 18" portable bass system. 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 and 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:

2 - Recessed handles  
35 mm Pole mount adapter  
Optional fly points

### Crossover Type:

Internal Infra™ integrator inside

### Frequency Response:

8 Hz to 95 Hz ±3 dB

### Low Frequency Limit:

8 Hz

### Maximum Calculated Continuous Acoustic Output:

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

### Polarity:

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

### Dimensions:

21" h x 22" w x 18" d  
54 cm x 56 cm x 46 cm

### Weight:

75 lbs  
34 kg

### Other Options:

REMCN-2 Optional remote Dynamic Filter™ threshold indicator

### Custom Finishes:

Optional custom finishes include white or unfinished ready to paint.



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# IPS18E-R INFRASUB™

## 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.

## 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.

## DIMENSIONS

