



## Uncompromising Performance, Unequaled Versatility

The RHAON empowered BP15-2R and the externally-powered BPS15-1 and BPS15-2 15 inch subwoofers use advanced technology and application-driven engineering to bring live sound closer to the ultimate reference point: reality. Cutting edge woofer technology and high-order band-pass designs deliver outstanding bass performance. Versatile enclosure designs, combined with a wide range of mounting options and associated hardware, provide unrestricted flexibility for both portable and installed applications.

All BP15-2R subwoofers are RHAON empowered for flexible analog and digital signal distribution and loudspeaker management and control over a standard Ethernet network.

### Applications

- Virtually any application where the visceral impact obtainable only from high power subwoofers is required.
- Multi-channel A/V playback systems, live sound and music systems in clubs and disco's, performing art centers, theaters, houses of worship, etc.
- High quality speech and music systems, surround sound systems, board room systems, etc.
- A/V rentals, portable sound systems for performing artists and lecturers, small bands, choral groups, etc.



### PM-2LR Digital Amplifier

Passive or self-powered and networked, you can choose the system configuration that meets your needs. Select the BPS15-1K or BPS15-2K when the project dictates the use of external amplifiers and the self-powered BP15-2R for convenience and control in other applications.

The PM-2LR, the heart of the BP15-2R is a new kind of intelligent electronic system. It combines Class D digital amplification with RHAON, the Renkus-Heinz Audio Operations Network for comprehensive DSP controlled signal processing and control.

**RHAON** EMPOWERED RHAON empowers you with CobraNet digital audio distribution, user configurable DSP for maximum control, remote systems management from any Windows computer, life safety functions and more – all using standard Ethernet hardware and cable.

The PM-2LR has dual analog inputs, dual CobraNet inputs and an AES3id serial input. The onboard DSP is easily configured using RHAON software; it includes eight bands of parametric EQ, high and low shelving filters, delay and input level control. Critical operating parameters such as signal clipping, amplifier output voltage and current, and temperature are continually monitored with automatic alert functions.

## BP / BPS Subwoofers

### BPS15-1K

Single 15" Externally-Powered Subwoofer

### BPS15-2K

Dual 15" Externally-Powered Subwoofer

### BP15-2R

Dual 15" RHAON Empowered Subwoofer

### MAXIMUM CONTROL • MAXIMUM CHOICE



- **Powerful 15-Inch Subwoofers**  
Provide high-impact, high level sub-bass performance (136 dB peak SPL on the BPS15-2K).
- **BP15-2R Self-Powered 15" Subwoofers**  
With integral PM-2R amplifier and loudspeaker specific signal processing and protection also include RHAON for flexible digital signal distribution, loudspeaker management and control.
- **BPS15-1K and BPS15-2K Non-Powered Subwoofers**  
Same high performance as the self-powered BP15-2R only externally powered.
- **High Power, High Performance 15-Inch Woofers**  
With long throw magnetic structures assure linear cone movement at all power levels.
- **Great Versatility**  
All BP15-2R, BPS15-1K and BPS15-2K subwoofers are available in either portable or fixed installation versions in a wide choice of finishes. Weather resistant models are also available.

## TECHNICAL INFORMATION

### Input Sensitivity:

**BP15-2R:** 1.4 V (for rated power output)  
**BPS15-1K:** 96 dB (1 W/1m) @ 100 Hz  
**BPS15-2K:** 101 dB (1 W/1m) @ 100 Hz

**Max SPL – BP15-2R:** 133 dB program, 135 dB peak

**BPS15-1K:** 127 dB program, 130 dB peak

**BPS15-2K:** 133 dB program, 136 dB peak

**Freq. Response:** 35 Hz to 250 Hz

### Low Freq. Drivers:

**BP15-2R:** Model SSL15-11, 15" cone woofer;  
 800 W program @ 4 Ohms

**BPS15-1K & BPS15-2K:** Model SSL15-6K, 15" cone woofer;  
 800 W program @ 8 Ohms

**Power – BP15-2R:** See PM-2L Amplifier specifications

**BPS15-1K:** 800 Watts program @ 8 Ohms

**BPS15-2K:** 1600 Watts program @ 4 Ohms

**Enclosure:** 13 ply hardwood, heavily braced with perforated metal grille

**Finish:** Black or white paint, natural (unfinished) and custom colors; weather resistant

### Connectors:

**BP15-2R:** See PM-2RL specifications below

**BPS15-1K & BPS15-2K:** Looping 4-pin Neutrik or screw terminals

**Hardware:** Handles, pole socket, 3/8-16 universal mounting hardware

### Dimensions (H x W x D):

**BP15-1K:** 30" x 18" x 22.5"; 76.2 cm x 45.7 cm x 57.2 cm

**BP15-2R & BPS15-2K:** 42.5" x 21.25" x 32"; 108 cm x 54 cm x 81.3 cm

### Net Weight:

**BP15-2R:** 221 Lbs. (100 kg)

**BPS15-1K:** 95 Lbs. (43.8 kg)

**BPS15-2K:** 192 Lbs. (88.5 kg)

## PM-2LR AMPLIFIER

**PWR Rating (Watts):** 2 x 850 RMS, 950 Pgm, 1200 Peak (20 ms)

**Freq. Response:** +0.0, -5 dB, 20 Hz to 20 kHz

**THD Distortion:** < 0.01 % typical

**CMR:** > 90 dB, 30 Hz to 2 kHz

**Hum & Noise:** < 100 dB, 20 Hz to 20 kHz

**Input Sensitivity:** 1.4 V for RPO

**Damping Factor:** 135 (100 Hz to 400 Hz)  
 100 (400 Hz and above)

**Power Connector:** PowerCon locking connector

**Requirements:** 90/136 V AC or 180/260 VAC, 50/60 Hz  
 13 Amps @ 120 V, 6.5 Amps @ 240 V

**Idle Current:** 380 mA @ 120 V, 190 mA @ 240 V

**Max Inrush current**

**(soft start):** 14.5 Amps @ 120 V, 7.3 A @ 240 V

### Inputs

**Analog:** Dual inputs; looping XLR (female in & Male out) & Looping Phoenix connectors

**CobraNet:** Dual RJ 45 connectors (for redundancy)

**AESid Format:** AESid Format Serial Audio (AES/EBU input); Phoenix connector

**Controls:** LF, MF, HF Mute buttons

Up & Down Output Level push buttons

10 dB Input pad (on Analog 1 input)

Power On/Off, Push-To-Reset circuit breaker

**Computer Controls:** Gain, Mute, On/Standby, Input Selection; Compression, 9-Band Parametric EQ, Shelving & Rolloff Filters, Delay

**Status Indicators:** Power, Signal, Overdrive, Thermal, Mute, Input Pad

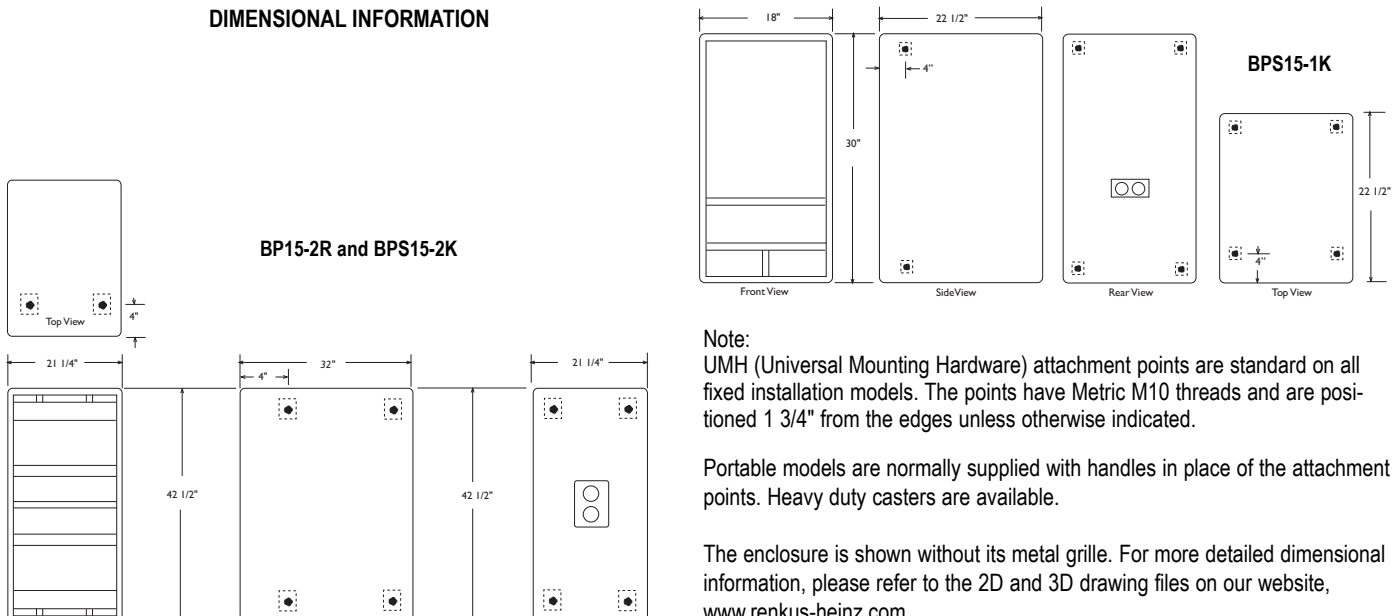
**Protection:** Soft & Peak Limiting, Excursion Control & Thermal Regulation

**Digital Format:** 16, 20 or 24 bit PCM; 48 or 96 kHz sample rate; selectable Network Latency.

For additional details on the RHAON Audio Operations Network, refer to [www.renkus-heinz.com/Rhaon/Index.html](http://www.renkus-heinz.com/Rhaon/Index.html).

**Note:** All analog inputs and outputs comply with AES Standard 48-2005 on interconnecting, grounding and shielding.

## DIMENSIONAL INFORMATION



### Note:

UMH (Universal Mounting Hardware) attachment points are standard on all fixed installation models. The points have Metric M10 threads and are positioned 1 3/4" from the edges unless otherwise indicated.

Portable models are normally supplied with handles in place of the attachment points. Heavy duty casters are available.

The enclosure is shown without its metal grille. For more detailed dimensional information, please refer to the 2D and 3D drawing files on our website, [www.renkus-heinz.com](http://www.renkus-heinz.com)