RENKUS-HEINZ

PN112   PN212

Single & Dual 12" PowerNet Subwoofers

PNX112   PNX212

Single & Dual 12" Externally-Powered Subwoofers

ACTIVE • POWERED • NETWORKED
MAXIMUM CONTROL • MAXIMUM CHOICE

Uncompromising Performance, Unequalled Versatility

Self-powered PowerNet PN and non-powered PNX Series loudspeakers unite advanced technology and application-driven engineering to bring live sound closer to the ultimate reference point: reality. Cutting edge driver technology and unique innovations such as our Complex Conic horns deliver natural sounding music and intelligible speech. Advanced options like intelligent onboard amplification and RHAON - the Renkus-Heinz Audio Operations Network - help you build sophisticated sound systems that are easy to use. Wherever audiences and operators demand superior performance and ease of use, PN/PNX loudspeakers are the choice for transparent, reference quality performance.

All PN and PNX series loudspeakers are handcrafted especially for you in our Foothill Ranch, California facility. Numerous custom options are available.

Applications

• Virtually any application where the visceral impact obtainable only from high power subwoofers is required.

Permanent Installations
• Ideal for live music and speech reinforcement, club/disco systems and high power distributed systems.
• Churches, schools, performing art centers, night clubs, stadiums and arenas.

Portable Applications
• Ideal for live music and speech reinforcement, portable DJ systems and high output distributed systems.
• Rental A/V, DJ systems, churches, schools, etc.

PN-1/PN-1R PowerNet Amplifiers

The PN-1, the heart of PowerNet performance, is a new kind of intelligent electronics system. It combines low feedback Class A/B amplification and comprehensive signal processing into a single compact unit. Crossovers and parametric EQ are integrated into the signal path. Loudspeaker specific processing senses when output levels are about to damage the system and limits them to safe levels.

The PN-1R adds RHAON, the Renkus-Heinz Audio Operations Network. RHAON empowers you with full control over digital audio distribution, loudspeaker specific DSP and remote control/ monitoring -- all using standard Ethernet hardware and cable.

The PN-1R has dual analog inputs, dual CobraNet inputs and an AES3 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.

If you need Ethernet-based audio operations networking, order the single 12" RHAON empowered PN112-SUBR or the dual 12" PN212-SUBR.

• **Powerful Single and Dual 12-inch Subwoofers**
  Provide high-impact sub-bass performance (128 dB peak SPL on the PNX112-SUB & 134 dB peak SPL on the PN212-SUB).

• **RHAON Renkus-Heinz Audio Operations Network**
  Self-powered PN112-SUBR and PN212-SUBR models include RHAON for flexible digital signal distribution, loudspeaker management & control.

• **PN112-SUB & PN212-SUB PowerNet Subwoofers**
  Include the PN-1 Class A/B amplifier with loudspeaker specific signal processing and protection.

• **PNX112-SUB & PNX212-SUB Non-Powered Subwoofers**
  Same high performance as the self-powered PN series subs only externally powered. Weather resistant models are available.

• **High Power, High Performance 12-inch woofers**
  With long throw magnetic structures and dual channel air cooling.

• **Great Versatility**
  All PN series subwoofers are available in either portable or fixed installation versions in a wide choice of finishes.

TECHNICAL INFORMATION

Sensitivity
PN112-SUB & PN212-SUB: 1.4 V for RPO
PN112-SUBR & PN21-SUBR: 1.0 V for RPO
PNX112-SUB: 96 dB (1W/1m)
PNX212-SUB: 99 dB)1W/1m)

Max SPL
PN112-SUB & PN112-SUBR: 124 dB peak
PNX112-SUB: 126 dB peak
PN212-SUB & PN212-SUBR: 127 dB peak
PNX212-SUB: 134 dB peak
Freq. Response: 40 Hz to 120 Hz
LF Drivers
PN112-SUB: Model SSL12-10, 12" woofer;
800 W pgm @ 4 Ohms
PNX 212-SUB: Dual model SSL12-11, 12" woofer;
800 W pgm @ 8 Ohms (each)
Enclosure: Multi-ply hardwood, perforated metal grille

Power – All PN Series: 115 V AC or 230 V AC, 50/60 Hz
PNX112-SUB: 800 Watts program at 4 Ohms
PNX212-SUB: 1600 Watts program at 4 Ohms
Connectors–PNX Series: Screw terminals & looping Neutrik 4-pin
SpeakOn style connectors
Finish: Black, white or custom color paint
Natural (unfinished), Weather Resistant
Hardware Options: 16-point univ. mtg. hdw.; tripod socket
PN Weather Resistant Kit
Dimensions:
PN112 Series: 20 1/2" H x 15 1/2" W x 22 1/2" D
(52.1 cm x 39.4 cm x 57.2 cm)
PN212 Series: 14 1/2" H x 32" W x 23 1/4" D
(36.8 cm x 81.3 cm x 59.1 cm)
Weight:
PN112-SUB & PN112-SUBR: 82 Lbs (37.2 Kg) net
PNX112-SUB: 72 Lbs (32.7 Kg) net
PN212-SUB & PN212-SUBR: 113 Lbs (51.3 Kg) net
PNX212-SUB: 103 Lbs (45.7 Kg) net

PN-1 AMPLIFIER

Power Rating: 300 W RMS @ 8 Ohms
Freq. Response: +0.0, -.5 dB, 20 Hz to 20 kHz
THD Distortion: < 0.02% typical
Hum & Noise: <100 dB (A weighted)
Damping: >100
Input: 10K Ohm balanced differential
Sensitivity: 1.0 V for RPO
CMR 74 dB
Controls: Gain (screwdriver adjustable)

Connectors
Input: Looping XLR; female in, male out (pin 1 chassis, pin 2 +, pin 3 -)

Power: IEC Power connector

Power: 90-136 VAC or 180-260 VAC 50/60Hz.
4 A @ 120 V, 2 A @ 240 V
Idle current: 300 ma @ 120 V;
150 ma @ 240 V
Max inrush current: 10 A

PN-1R RHAON EMPOWERED AMPLIFIER

The PN-1R amplifier is identical to the PN-1 except for the addition of the RHAON Network Interface; additional capabilities include:

Inputs:
CobraNet: dual RJ45 connectors;accept CAT 5 copper cable.

Analog: Phoenix connectors

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

Digital Format: 16, 20 or 24 bit PCM; 48 or 96 kHz sample rate; selectable Network Latency.
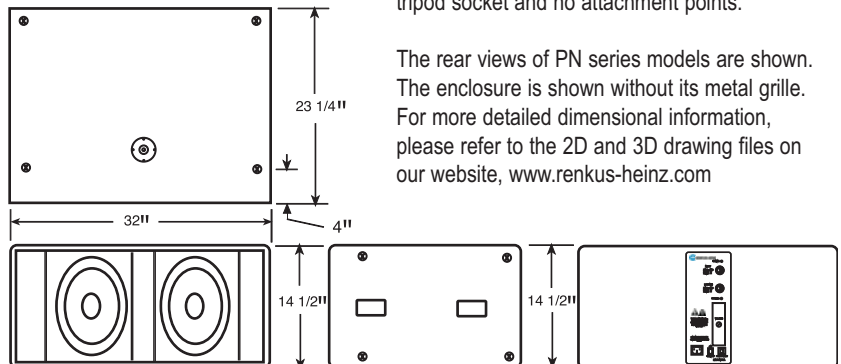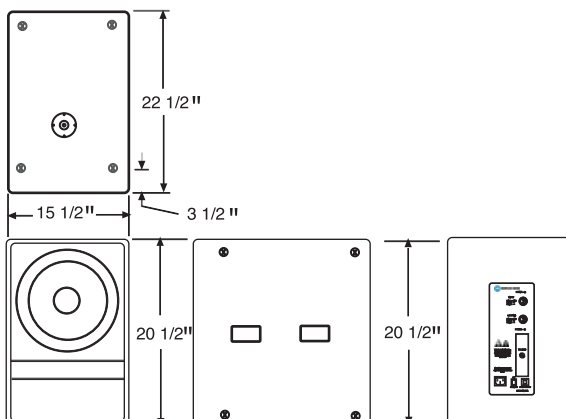**Protection:** Soft & Peak Limiting, Excursion Control & Thermal Regulation

For additional details on the RHAON Audio Operations Network, refer to www.renkus-heinz.com/Rhaon/Index.html

DIMENSIONAL INFORMATION

PN/PNX112-SUB

PN/PNX212-SUB

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

Portable models are normally supplied with a tripod socket and no attachment points.

The rear views of PN series models are shown. 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