

Uncompromised Performance - Unequaled Versatility

The self-powered PowerNet ST and non-powered STX Series loudspeakers unite advanced technology and application-driven engineering to bring live sound closer to the ultimate reference point: reality. Patented CoEntrant M/H transducers, Class D Digital Amplification and unique innovations such as our Complex Conic horns combine to deliver natural sounding music and intelligible speech. Wherever audiences and operators demand superior performance and ease of use, ST/STX loudspeakers are the choice for transparent, reference quality performance.

All ST4LR PowerNet loudspeakers 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 additional low frequency energy is needed and outstanding sonic performance is required.
- Multi-channel A/V playback systems, live sound and music systems in clubs and disco's (with associated ST4R and STX4 full-range 3-way loudspeakers).
- Array modules for theatrical and concert sound systems, sound reinforcement systems in houses of worship.



PM-1R PowerNet Digital Amplifier

Passive or self-powered and networked, you can choose the system configuration that meets your needs. Select the STX4L when the project dictates the use of external amplifiers and the self-powered PowerNet ST4LR for convenience and control in other applications.

The PM-1LR, the heart of the PowerNet ST4LR 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-1LR 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.

ST / STX Series

STX4L

Non-Powered

ST4LR

Powered

Dual 12" Low Frequency Loudspeaker Module

PASSIVE : POWERED : NETWORKED



- **Compact Dual 12-Inch Low Freq. Loudspeaker Modules**
Are a perfect match to the ST/STX4 when additional low frequency energy is needed.
- **Flexible Input Configurations**
Choose an external amplifier or go self-powered with the PM1LR PowerNet Amplifier with RHAON for flexible analog and multi-channel digital signal distribution, computer control and supervision.
- **ST4LR PowerNet Low Frequency Module**
With PM-1LR PowerNet digital amplifier with RHAON.
- **STX4L Non-Powered Low Frequency Module**
Same high performance as the PowerNet ST4LR only non-powered. Rated at 1600 Watts program at 4 Ohms.
- **Dipolar Low Frequency Design**
Provides superior low frequency directional control in the vertical plane.
- **High Power, High Performance 12-Inch Woofers**
Deliver accurate 40 Hz to 500 Hz response, 136 dB peak SPL performance.
- **Trapezoidal Enclosures**
Are identical in size and shape to the ST4R and STX4 full range loudspeakers.

TECHNICAL INFORMATION

Sensitivity
ST4LR: 1.4 V for rated power output
STX4L (1W/1m): 101 dB

Max SPL
ST4LR: 133 dB peak
STX4L: 136 dB peak

Freq. Response: 40 Hz to 500 kHz

LF Drivers: Dual 12" model SSL 12-11 woofers; 3" VC each 400 W RMS (800 W RMS total)

Crossover Points: 500 Hz

Enclosure: Multi-ply hardwood, perforated metal grille

Power: STX4L: 800 Watts RMS at 4 Ohms

Connectors: STX4L: Neutrik 4-pin connectors or screw terminals

Finish: Black, white or custom paint, TuffTex, Natural (unfinished), Weather resistant

Hardware Options: 12-point universal mtg hardware, Handles, AeroQuip fly-track, R-Hang hardware

Dimensions: 30 1/4" H x 16 5/8" W x 23 1/2" D
 (76.8 cm x 42.2 cm x 59.7 cm)

Weight

ST4LR: 130 Lbs. (59 Kg) net
STX4L: 100 Lbs (45.4 Kg) net

PM-1LR AMPLIFIER

PWR Rating (Watts): 850 RMS

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
 6.3 Amps @ 120 V, 3.2 Amps @ 240 V
Idle Current: 250 mA @ 120 V, 125 mA @ 240 V

Max Inrush Current (Soft Start): 9.6 Amps @ 120 V, 4.8 A @ 240 V

Inputs

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

CobraNet: Dual RJ 45 connectors (for redundancy)

AES3 Format: AES3 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

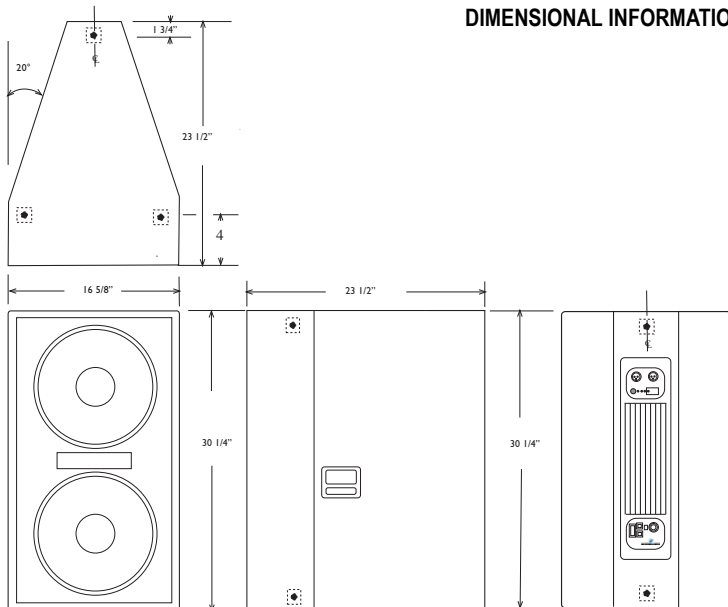
Status Indicators: Power, Signal, Overdrive, Thermal, Mute, Input Pad

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.

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

DIMENSIONAL INFORMATION



Note:

The UMH (Universal Mounting Hardware) attachment points have Metric M10 threads and are positioned 1 3/4" from the edges unless otherwise indicated. Portable models are normally supplied with handles and no attachment points.

The rear view of a ST4LR is 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.



RENKUS-HEINZ

Renkus-Heinz, Inc., 19201 Cook Street, Foothill Ranch, CA 92610-3501, USA
 Tel: +1 949-588-9997 • Fax: +1 949-588-9514 • Sales@renkus-heinz.com • www.renkus-heinz.com

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