



### Commanding Performance, Compelling Value

Sound that makes performances and audiences truly come alive doesn't come easy. But CF & CFX Series loudspeakers put the power of unique Renkus-Heinz developments like Complex Conic horns to work for you. Versatile enclosure designs, go-anywhere hardware and rugged construction help solve your sound reinforcement challenges easily and quickly. 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.

Every CF & CFX Series loudspeaker is engineered by Renkus-Heinz to unrivaled standards of quality and innovation. Before we'll ship them, your loudspeakers have to meet our exacting requirements for performance that will make you proud and durability that will keep you sounding great.

#### Applications

- Stage monitor and foldback systems.
- Ideal for both install and portable applications ranging from houses of worship, schools, night clubs, performing art centers and portable/rental systems.



#### PF Series Intelligent Amplifiers

Passive, powered or networked: you can choose the CF/CFX system that suits your needs at any time. At the factory or in the field, the CFX passive connector plate can be switched from passive to bi-amp operation or easily replaced by a PF1-200 series Class D digital amplifier with loudspeaker specific processing. The PF1-200's lightweight switching power supply delivers 70% efficiency at full output,

reducing AC requirements and eliminating the need for a cooling fan.



Whenever you are ready for Ethernet audio networking, your CF/CFX loudspeakers are too; just replace the connector plate or the PF1-200 with a PF1-200R RHAON empowered amplifier equipped for connection to the Renkus-Heinz Audio Operations Network. RHAON empowers you with multi-channel 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 cabling.

If you need an outstanding high-power 12-inch 2-way stage monitor, order the CFX121M. For full-range nearfield applications, the CF121M-2 is a logical choice. If you need Ethernet-based audio operations networking, order the RHAON empowered CF121M-2R.

## CF / CFX Series

**CF121M-2**  
Self-Powered

**CF121M-2R**  
RHAON Empowered

**CFX121M**  
Non-Powered

**12" Woofer + 2" HF**  
**2-Way Complex Conic Loudspeakers**

**PASSIVE : POWERED : NETWORKED**



- **Compact Design**  
Outstanding, full-range  $\pm 3$  dB, 70 Hz to 18 kHz performance in a compact, space-saving design.
- **RHAON Renkus-Heinz Audio Operations Network**  
All self-powered CF121M series cabinets are available with RHAON for flexible digital signal distribution, loudspeaker management and control.
- **Exclusive 90° by 60° Complex Conic Design**  
Provides constant beamwidth/directivity without the problems of conventional rectangular horns; can be rotated 90° within the cabinet for wide or deep listening spaces.
- **2" Extended Range Titanium HF Driver**  
Provides smooth, low distortion high frequency performance to 18 kHz and beyond.
- **Heavy-Duty 12" Woofer**  
Easily handles 500 Watts of program power.
- **Passive or Bi-Amp Operation**  
CFX121M models can be operated in either passive or bi-amp mode.

### TECHNICAL INFORMATION

<b>Sensitivity:</b> CF121M-2 & CF121M-2R: 1.0 V for RPO CFX121M: 98 dB (1W/1m)	<b>Power: CF121M-2 &amp; -2R:</b> 115 V AC or 230 V AC <b>CFX121M:</b> 500 W pgm at 4 Ohms
<b>Max. SPL:</b> <b>CF121M-2 &amp; -2R:</b> 124 dB peak <b>CFX121M:</b> 128 dB peak	<b>Connectors: CFX121M:</b> Screw terminals & looping Neutrik 4-pin Speakon style connectors
<b>Dispersion:</b> 90° H by 60° V	<b>Finish:</b> Black; custom color optional
<b>Freq. Resp:</b> ± 3 dB, 70 Hz to 18 kHz	<b>Hardware:</b> Handles
<b>HF Driver:</b> 2" SSD203-8F driver, 40 W RMS, 80 W pgm	<b>Dimensions:</b> 23" H x 15 1/2" W x 15" D (58.4 cm x 39.4 cm x 38.1 cm)
<b>LF Driver:</b> 12" model SSL12-14F, 250 W RMS @ 4 Ohms, 500 W pgm	<b>Weight: CF121M-2 &amp; -2R:</b> 52.4 Lbs (23.9 Kg) net <b>CFX121M:</b> 48.4 Lbs (22 Kg) net
<b>Enclosure:</b> Hardwood, perforated metal grille	

### PF1-200 DIGITAL AMPLIFIER

<b>Power:</b> 200 W RMS @ 4 Ohms	<b>Controls:</b> Gain (screwdriver adjustable)
<b>Freq. Resp:</b> +0.0, -5 dB, 20 Hz to 20 kHz	<b>Power Connector:</b> IEC Power connector
<b>THD Distortion:</b> < 0.02% typical	<b>Input:</b> Looping XLR; female in, male out (pin 1 chassis, pin 2 +, pin 3 -)
<b>Hum &amp; Noise:</b> <100 dB (A weighted)	<b>Power:</b> Switchable, 115 or 230 V AC, 50/60 Hz 2.4 A @ 120 V, 1.2 A @ 240 V
<b>Damping:</b> >100	Idle current: 200 ma @120 V; 100 ma @ 240 V
<b>Input:</b> 10K Ohm balanced differential	Max inrush current: 1 A
<b>Sensitivity:</b> 1.0 V for RPO	
<b>CMR:</b> 74 dB	

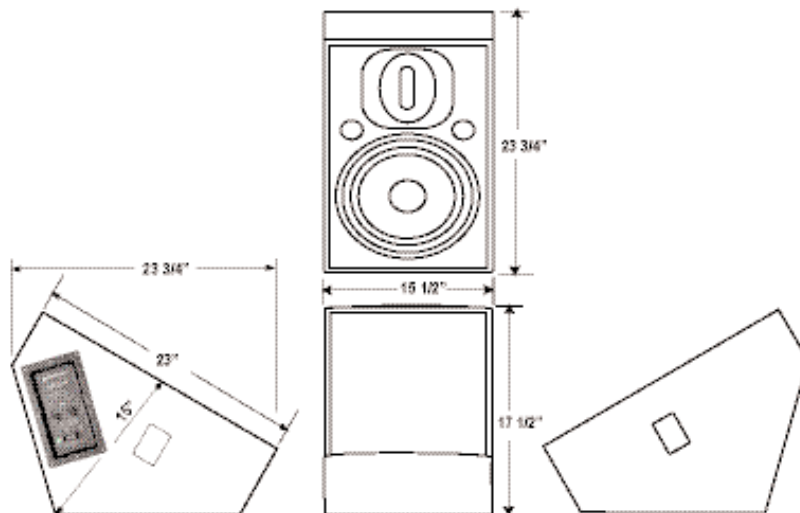
### PF1-200R RHAON EMPOWERED AMPLIFIER

The PF1-200R is identical to the PF1-200 except for the addition of the RHAON Network Interface; additional capabilities include:

<b>Inputs:</b> CobraNet: Dual RJ45 connectors; accept Cat 5 copper cable. Analog: Phoenix connectors	<b>Protection:</b> Soft & Peak limiting, Excursion Control & Thermal Regulation
<b>Digital Format:</b> 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 <a href="http://www.renkus-heinz.com/Rhaon/Index.html">www.renkus-heinz.com/Rhaon/Index.html</a> .

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

### DIMENSIONAL INFORMATION



#### Note:

The rear view of a CFX121M 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](http://www.renkus-heinz.com).