

# **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**

 Virtually any application where size is a critical issue and outstanding sonic performance is required.

## **Permanent Installations**

- Ideal compact main PA for music and speech or as part of a high output distributed system in larger venues.
- Houses of worship, schools, performing art centers, night clubs, stadiums and arenas.

# **Portable Applications**

- Ideal main PA for unobtrusive live music and speech reinforcement or as fill coverage in larger systems.
- Rental A/V, DJ systems, churches, schools, etc.



# PF Series Intelligent Amplifiers

Passive, bi-amped, 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 connector plate can be switched from passive to bi-amp operation or easily replaced by a PF Series Class D digital amplifier with loudspeaker specific processing. Their light-weight switching power supplies deliver 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 with a PF1-200R,

PF1-500R or PF2-500R RHAON empowered amplifier. RHAON empowers you with multi-channel digital audio distribution, user configurable DSP for maximum control, remote system 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 system, order the CFX121, CFX121-8 or CF121-5. For full-range nearfield applications, the CF121-2 with a 200 Watt PF1-200 is a logical choice. If you need Ethernet-based audio operations networking, order the CF121-2R, CF121-5R or CF121-52R; all are RHAON empowered.

# **CF/CFX Series**

CF121-2 Self-Powered CF121-5

Self-Powered

CF121-2R RHAON Empowered CF121-5R RHAON Empowered CF121-52R

RHAON Empowered

CFX121 Non-Powered **CFX121-8** 

Non-Powered

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

**PASSIVE: POWERED: NETWORKED** 



## Compact Design

Outstanding, full-range ± 3 dB, 70 Hz to 18 kHz performance in a compact, space-saving design.

RHAON Renkus-Heinz Audio Operations Network
 All self-powered CF121 loudspeakers 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.

## • Heavy-Duty 12" Woofer

Easily handles 500 Watts of program power.

## Passive or Bi-Amp Operation

CFX121 models can be operated in either passive or bi-amp mode.

## TECHNICAL INFORMATION

Power: CF121: 115 V AC or 230 V AC Sensitivity: CF121: 1.0 V for RPO **CFX121:** 500 W pgm at 4 Ohms **FX121-8:** 500 W pgm at 8 Ohms CFX121 & CFX121-8: 98 dB (1W/1m) CFX121-8:

Max. SPL: CF121-2 & -2R: 123 dB pgm, 126 dB peak

Connectors: CFX121: Screw terminals & looping Neutrik 4-pin CF121-5, -5R & -52R: 126 dB pgm, 129 dB peak Speakon style connectors

CFX121 & CFX121-8: 126 dB pgm, 129 dB peak Dispersion: 90° H by 60° V

Freq. Resp: ± 3 dB, 70 Hz to 18 kHz

**HF Driver:** 2" SSD203-8F driver, 40 W RMS, 80 W pgm **LF Driver:** 12" model SSL12-14F, 250 W RMS @ 4 Ohms,

except CFX121-8 which uses model SSL12-22, 8 Ohm, 250 W RMS woofer

**Enclosure:** Hardwood, perforated metal grille

Finish: Black or white paint Hardware:

6-point univ. mtg. hdw. (Metric M10 threads) U-bracket attachment points

35 mm (1 3/8") diameter tripod socket 23 1/8" H x 15 3/4" W x 14 1/2" D Dimensions:

(58.7 cm x 40 cm x 36.8 cm) 54.4 Lbs (24.7 Kg) net Weight: CF121-2 & -2R: **ČF121-5, -5R & -52R:** 57.4 Lbs (26.2 Kg) net CFX121 & CFX121-8: 52.4 Lbs (23.8 Kg) net

#### PF1-200 & PF1-500 DIGITAL AMPLIFIERS

Input: **Power:** PF1-200; 200 W RMS @ 4 Ohms PF1-500; 500 W RMS @ 4 Ohms Looping XLR; female in, male out

(pin 1 chassis, pin 2 +, pin 3 -) Switchable, 115 or 230 V AC, 50/60 Hz 2.4 A @ 120 V, 1.2 A @ 240 V Power: Freq. Resp: +0.0, -.5 dB, 20 Hz to 20 kHz THD Distortion: < 0.02% typical PF1-200:

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)

Power Connector: IEC Power connector

Idle current: 200 ma @120 V; 100 ma @ 240 V

Max inrush current: 1 A PF1-500: 5 A @ 120 V, 2.5 A @ 240 V

Idle current: 400 ma @120 V; 200 ma @ 240 V

Max inrush current: 1 A

#### PF1-200R & PF1-500R RHAON EMPOWERED AMPLIFIERS

The PF1-500R is identical to the PF1-500 except for the addition of the RHAON Network Interface; additional capabilities include:

Inputs: CobraNet: Dual RJ45 connectors; accept

Cat 5 copper cable. AES/EBU: Phoenix connectors;

Analog: Phoenix connectors

16, 20 or 24 bit PCM; 48 or 96 kHz sample Digital Format:

rate; selectable Network Latency.

Protection: Soft & Peak limiting, Excursion Control &

Thermal Regulation

## PF2-500R RHAON EMPOWERED AMPLIFIER

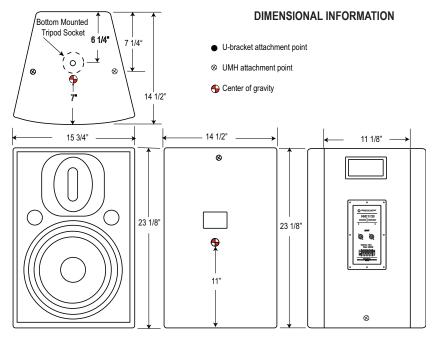
The PF2-500R is a RHAON empowered 500/200 W RMS bi-amplifier. It is identical to the PF1-500R except for also having a 200 Watt HF amplifier and associated electronic crossover.

**Power:** 6 A @ 120 V, 3 A @ 240 V Idle current: 500 ma @ 120 V; 250 ma @ 240 V. Max inrush current: 1 A

For additional details on the RHAON Audio Operations Network, refer to

www.renkus-heinz.com/Rhaon/Index.html.

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



## Note:

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

The rear view of a CFX121 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

