

# **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, 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 easily replaced by a PF1-200 or PF1-500 Class D digital amplifier with loudspeaker specific processing. Their lightweight 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 or PF1-500R RHAON empowered amplifier equipped for connection to the Renkus-Heinz Audio Operations Network. 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.

If you need an outstanding high-power 12-inch 2-way system, order the CFX121 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 or the CF121-5R; both are RHAON empowered.

# **CF/CFX Series**

**CFX121** 

**CF121** 

Non-Powered

Self-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 CF121 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.

#### Built-in Crossover

Includes EQ and high frequency protection; in the CFX121 eliminates need for a separate electronic crossover and bi-amplification.

#### **TECHNICAL INFORMATION**

Sensitivity: CF121-2/2R & CF121-5/5R: 1.0 V for RPO Power: CF121-2/2R & CF121-5/5R: 115 V AC or 230 V AC

CFX121: 98 dB (1W/1m) CFX121: 500 Watts program at 4 Ohms

Max. SPL: CF121-2/2R: 123 dB program, 126 dB peak Connectors: CFX121: Screw terminals & looping Neutrik 4-pin

CF121-5/5R: 126 dB program, 129 dB peak SpeakOn style connectors

**CFX121:** 126 dB program, 129 dB peak Finish: Black or white paint

Dispersion: 90° H by 60° V

Hardware: 6-point univ. mtg. hdw. (#6 metric threads) Freq. Resp: ± 3 dB, 70 Hz to 18 kHz U-bracket attachment points

Tripod socket

**Dimensions:** 23 1/8" H x 15 3/4" W x 14 1/2" D HF Driver: 2" SSD203-8F driver.

40 W RMS, 80 W program (58.7 cm x 40 cm x 36.8 cm)

LF Driver: 12" model SSL12-14F, 250 W RMS @ 4 Ohms, Weight: CF121-2/2R: 54.4 Lbs (24.7 Kg) net 500 W program CF121-5/5R: 56.4 Lbs (25.7 Kg) net

CFX121: 52.4 Lbs (23.8 Kg) net

Enclosure: Hardwood, perforated metal grille

**PF1-200 & PF1-500 AMPLIFIERS** 

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

**Power:** PF1-200: 200 W RMS @ 4 Ohms PF1-500; 500 W RMS @4 Ohms **Freq. Resp:** +0.0, -.5 dB, 20 Hz to 20 kHz

PF1-200: 2.4 A @ 120 V, 1.2 A @ 240 V Idle current: 200 mA @ 120 V; 100 mA @ 240 V Max inrush current: 1 A, Universal 90-260 VAC, 50/60 Hz **THD Distortion:** < 0.02% typical

Hum & Noise: <100 dB (A weighted) **Damping:** >100

Input: 10K Ohm balanced differential

**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, Switchable 115-230 VAC, 50/60 Hz Sensitivity: 1.0 V for RPO CMR: 74 dB

Controls: Gain (screwdriver adjustable) Power: Power: EC Power connector

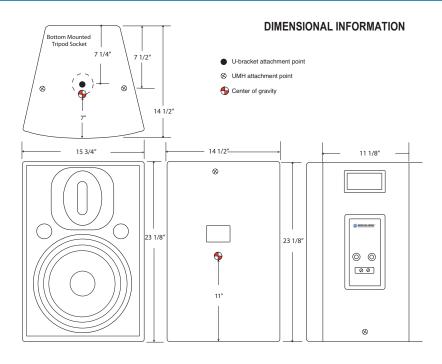
#### PF1-200R & PF1-500R RHAON EMPOWERED AMPLIFIERS

The PF1-200R & PF1-500R are identical to the PF1-200 & PF1-500 except for Digital Format: 16, 20 or 24 bit PCM; 48 or 96 kHz sample rate; selectable Network Latency. the addition of the RHAON Network Interface; additional capabilities include: Soft & Peak Limiting, Excursion Control & Protection:

Input: CobraNet; dual RJ45 connectors; accept Thermal Regulation Cat 5 copper cable.

For additional details on the RHAON Audio Operations Network, refer to AES/EBU Phoenix connectors; Renkus-Heinz brochure # RH 606. Analog Phoenix connectors

Note: All analog inputs and outputs comply with AES Standard 45-2005 on interconnecting, grounding and shielding.



#### Note:

The UMH (Universal Mounting Hardware) attachment points have #6 metric 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

