

# R4-IV Full Range Loudspeaker



### **APPLICATIONS**

Live Sound Reinforcement Performing Arts Centers Houses of Worship Stadiums/Arenas Cruise Ships/Dance Clubs Sports Facilities

## **FEATURES**

Max Output 137 dB SPL
LF Device: 18 in. (457.2mm)
MF Device: 12 in. (304.8mm)
HF Device: 2 in. (50.8mm)
Integrated Corner Cargo Track
Rigging
Rotatable 90°H x 40°V HF
Epoxy Mastic Finish
EP-8 Connector

### **GENERAL DESCRIPTION**

The R4-IV is a full range, three-way loudspeaker system that remains one of Clair Brothers most popular cabinets. The R4-IV incorporates an innovative Directional Baffle Midrange System (DBM $^{\text{TM}}$ ) that creates high intelligibility. The R4-IV has been engineered for optimal individual performance or in horizontal or vertical arrays.

This touring cabinet is also ideal as an installed system for clubs, proscenium theaters, auditoriums, and amphitheaters. A single 18" transducer produces solid low end reproduction. High frequency is provided by a 2" compression driver attached to a 90°H x 40°V (or 60°H x 40°V) constant-directivity horn, which may be rotated for several coverage options. An independently loaded midrange transducer is augmented through the DBM™ system.

The DBM™ is not a conventional horn, but an extension of the conical shape of the twelve-inch midrange transducer. The R4-IV is thus able to achieve high intelligibility ("Q") without

the harshness inherent in traditional horn-loaded systems.

With the introduction of this system, the R4-IV delivers improved overall response, requiring no additional low frequency reinforcement. The result is smooth, transparent reproduction of speech and music program material.

Constructed of Baltic birch, the cabinet stands up to the requirements of any professional audio application. Notched extruded aluminum corners provide rigging and dolly caster support as well as added protection against corner abrasions.

#### **OPTIONS & ACCESSORIES**

DOL-R4 — (1) Pair R4 Dolly/Transport Wheels
 R4-TB / -NUNCHUCK — Hanging Fixtures
 Top-Bar and Nunchuck Assemblies
 60° H x 40° V Constant Directivity Horn
 Custom Rigging
 Custom Colors Available

Call or e-mail Clair Brothers for more information on available options. (717-665-4000) e-mail: sales@clairbrothers.com

# R4-IV Full Range Loudspeaker

AUDIO SPECIFICATIONS		
Loudspeaker Type		Three-Way Active
Frequency Response (+/- 2dB)	Single Cabinet	40Hz–18kHz
Recommended Power Amplifier		1200-1800W @ 8 Ohms
Sensitivity (1 Watt @ 1 Meter)	LF MF HF	99 dB SPL 103 dB SPL 113 dB SPL
Maximum Output	Cont. Peak	131 dB SPL 137 dB SPL
Drivers	LF MF HF	(1) 18 in. (457.2mm) (1) 12 in. (304.8mm) (1) 2 in. (50.8mm)
Nominal Impedance	LF MF HF	8 Ohms 8 Ohms 16 Ohms
Power Handling	LF MF HF	800W 300W 150W
Dispersion	Nominal -6dB Optional	90° H x 40° V (Rotatable) 60° H x 40° V (Rotatable)
Input Connection		(1) EP-8 Connector

#### MECHANICAL SPECIFICATIONS

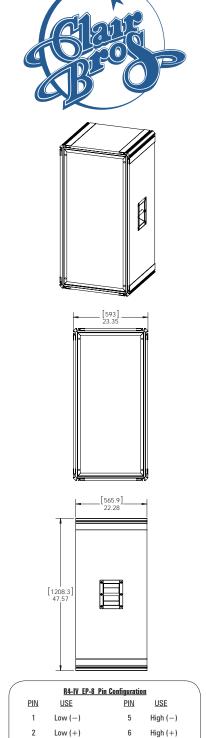
Enclosure	Shell Finish	18mm, 13-Ply Baltic Birch Black Epoxy Mastic
Grille		Powder-Coated Steel, Foam Backed
Dimensions	Height Width Depth	47.57 in. (1208.3mm) 23.35 in. (593.0mm) 22.28 in. (565.9mm)
Weight		247 lbs. (112.0kg)
Shipping Weight		259 lbs. (117.5kg)

Note: All wattage figures are calculated using the rated nominal impedance.

Clair Brothers products are designed to perform optimally by utilizing factory recommended proprietary DSP settings.

#### ARCHITECT AND ENGINEER SPECIFICATIONS

The loudspeaker shall be a three-way active system featuring a total of three drivers. The bass section shall have one 18" driver capable of handling 800 watts of pink noise with a 6 dB crest factor for 8 hours (as per EIA RS-426-A standard). The midrange



R4-IV EP-8 Pin Configuration						
PIN	<u>USE</u>	PIN	<u>USE</u>			
1	Low (-)	5	$High\left(-\right)$			
2	Low (+)	6	High (+)			
3	Mid (-)	7	Open (-)			
4	Mid (+)	8	Open (+)			

section shall be Clair Brothers' Directional Baffle Midrange™ system with a 12" driver / DBM™system capable of handling 300 watts of continuous pink noise with a 6 dB crest factor for 8 hours (as per EIA RS-426-A standard). The midrange driver shall be loaded independent of the low frequency components, occupying its own sealed cavity. The high frequency section shall have a single 2" compression driver and shall be attached to a 90°H x 40°V constant-directivity horn (with option of 60°H x 40°V horn). The driver shall be capable of handling 150 watts (1 kHz-10 kHz) of pink noise with a 6 dB crest factor for 2 hours (as per AES-1984 and ANSI S4.26-1984 standards). The crossover frequencies shall be 250 Hz and 1.6 kHz. The enclosure shall be constructed of 18mm, 13-ply Baltic birch and be covered with black epoxy mastic. The R4-IV shall also feature notched extruded aluminum corners. Dimensions shall be 47.57" high, 23.35" width, and 22.28" deep. The system weight shall be 247 lbs. (112.0kg). The loudspeaker shall be the R4-IV.

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