

# R Series *by ShermannAudio*

## RS5

The Shermann® **RS5** is a compact, lightweight, three way, concert loudspeaker supplied in bi-amp drive format.

The RS5 maintains the highest standards of speech and music reproduction throughout the audio range combining vocal accuracy and clarity with impressive instrumental detail.

Designed by Ken Hughes in December 2001 and launched soon afterwards this powerful, compact model has been used successfully on numerous high-profile gigs and tours.



Weight saving in the robust **RS5** has been achieved through the use of newly developed drivers featuring neodymium magnet assemblies which also have the additional advantages of very high efficiency and low distortion.

A horn-loaded 12" bass/mid drive unit fitted with a neodymium magnet assembly is front mounted into its optimally sized enclosure.

This method of mounting eliminates the requirement for a removable back thereby improving the structural integrity of the cabinet and further reducing weight.

A superb 1" HF driver equipped with a neodymium magnet assembly mounted on a Shermann horn unit and two GM17/50 midrange units are vertically aligned on a centrally located, easily removed mid/hf pod.

The mid/hf pod assembly also acts as a phase plug providing low compression loading for the 12" bass/mid driver.

The RS5 offers premium performance as a front-of-house PA box whether flown or stacked in singles or multiples.

### **Horn loaded mids v non horn loaded mids.**

Much issue is made over the efficiency of horn loaded mids in 'line array' cabinets. Having seen the EQ settings for the mid-band section in one design it was noted that several dB had been removed over a wide bandwidth to obtain a smooth response. It can only be assumed that such a huge cut was necessary due to this mid-horn's design however, such a large reduction would virtually eliminate the anticipated efficiency gains of horn loading.

The RS5's mid band is inherently smooth, within 2dB over almost 3 octaves, allowing vocals to be mixed above instrument levels with comparative ease.

### **Touring the RS5**

Versatility is the keyword with all Shermann products and the RS5 has been designed to maximise use within a wide variety of system combinations.

The RS5 was primarily designed for use with the R118B however, subsequent live gig evaluation has shown that the RS5 is not restricted to use in pairs with two or four R118B but also operates superbly in central clusters, stacked systems and flown multiples.

Standard hardware includes dual flying points & safety tie set plus, a unique hinge / helping strap assembly which assists cabinet alignment during flying and stacking.

Six strategically placed handles and four rear mounted 100mm swivel castors are fitted to assist transportation, stacking and storage.

Fully tested and certificated hanging bars are available for the RS5.

### **Installing the RS5**

The numerous advantages of fully equipped Shermann touring boxes are also available to the installer.

From a fully equipped instal model to a totally basic version with no handles and castors the RS5 may also be specified in a variety of painted finishes.

Our expertise in the installation market allows us to offer superb sounding systems which are highly efficient, cost-effective and fully compatible with our customer's requirements.

### **Exterior fittings**

**Handle** (top & bottom)

Large steel recessed steel flip type

**Handles** (side)

Steel recessed steel bar type

**Finish**

Heavy duty black carpet or optional textured paint finish - any colour \*

**Grille**

Heavy duty welded mesh on steel frame c/w acoustically transparent foam and engraved logo.

**Skids**

Bottom mounted easily replaced 15mm plywood skids

**Flying Points** (supplied)

GS-CF4 side mounted track plates and rear strap/hinge plates.

### **Construction**

**Cabinet shell**

15 & 18mm multi-laminate Scandinavian birch plywood.

**Baffle assembly**

18mm multi-laminate Scandinavian birch plywood.

### **Connections**

Standard input plate

Speakon NL8 x 2

Low mid - pin 2+ **hot** / pin 2- **cold**

Mid/HF - pin 3+ **hot** / pin 3 - **cold**

Input plate(option) \*

Speakon NL4 x 2 plus NL8 x 1 NL4

Low mid - pin 1+ **hot** / pin 1- **cold**

Mid/HF - pin 2+ **hot** / pin 2 - **cold**

NL8

Low mid - pin 2+ **hot** / pin 2- **cold**

Mid/HF - pin 3+ **hot** / pin 3 - **cold**

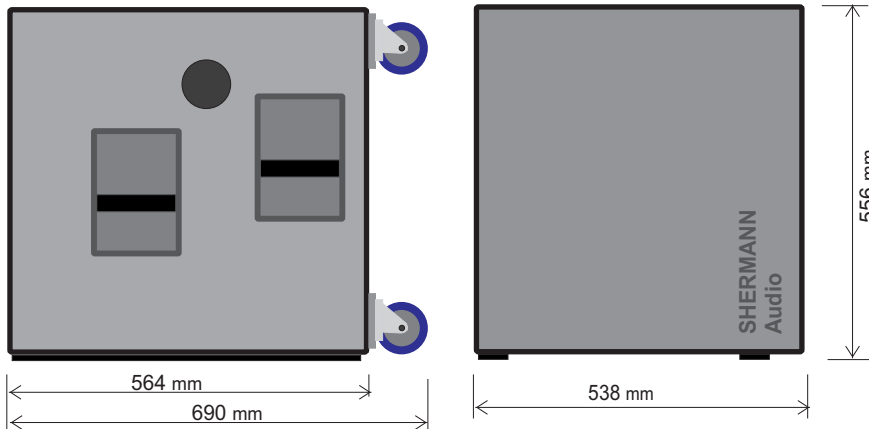
*Sockets are parallel linked on all pins eg. 1+ to 1+ (see diagram)*

### **Crossover frequencies**

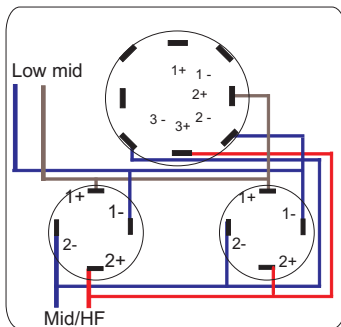
RS-5 must be used with pre-set parameters installed by Shermann and available for all XTA, BSS, Klark-Teknik, Alto, Void and other suitable digital loudspeaker management systems

\* Options must be requested at time of ordering.

## RS5



NL4/NL8 input plate  
(twin NL8 plate wired to 2+ 2- & 3+ 3-)



### Speaker Cables

We recommend the use of **2.5mm<sup>2</sup>** or **4mm<sup>2</sup>** OFC cabling with all Sherman full range cabinets.

Wherever possible, cable lengths should not exceed 10 metres for 4 ohm loading (*2 x 8ohm R3w in parallel*); cabinet link cables should not exceed 2 metres.

Please call for details on Sherman cables - contact info' shown below.



RS 5 stacked showing castor positions, standard twin NL8 input plates, safety tie points, hinge plates and a hinge assembly normally used when flying.

#### Please note

We would like to draw your attention to the likelihood of hearing damage from prolonged exposure to high sound pressure levels.

Care should be taken when using cabinets in close proximity to the audience, musicians or artists.

For further information on the safe operation of any Sherman product please fax, call or email us - contact details are shown below.

The information within this data sheet is accurate and correct at the time of publication.

It is recommend that all technical information is verified with the company before inclusion in quotations or tender documents.

The company will not be held responsible for losses or difficulties arising from errors, changes or omissions.

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### Technical Specifications

#### System

Format	3 way, bi-amp drive
Network	PCN-5 x 2
Nom' impedance	8 ohms (both sections)
Hi-pass filter (-3dB point)	60Hz / 4th order

#### Low mid section

Rec' amp' power @ 8 ohm	300 - 450 watts rms
Continuous Programme	600 watts
Short term peak	1,200 watts

#### Mid/HF section

Rec' amp' power @ 8 ohm	200 - 350 watts rms
Continuous Programme	450 watts
Short term peak	900 watts

#### Performance

Sensitivity @ 1w/1m	103 dB
Output (peak)	132 (138) dB @ 1m
Frequency response	60 Hz - 17.5 KHz
Dispersion > -5 KHz	120° x 30°

#### Drive unit - LF

Drive unit size	304 mm / 12"
Voice coil diameter	76 mm / 3"
Chassis	Cast aluminium
Magnet	Neodymium
Mounting	6mm caphead bolts x 4

#### Drive unit - MF

Drive unit size	165 mm / 6.5"
Voice coil diameter	38 mm / 1.5"
Chassis	cast aluminium
Magnet	Ferrite
Mounting	5mm caphead bolts x 4

#### Drive unit - HF

Drive unit exit	25 mm / 1"
Voice coil diameter	51 mm / 2"
Magnet	Neodymium
Diaphragm	titanium
Horn mounting	5mm c/s socket bolts x 4

#### Dimensions

Height	556 mm (21.88")
Depth	564 mm (22.20")
Depth over castors	690 mm (27.25")
Width	538 mm (21.20")
External volume	148 lts ( 5.22 ft <sup>3</sup> )
W eight	43.2 Kgs ( 95 lbs)



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