

R Series *by Shermann®*

RS5^{v2}

Shermann's **RS5^{v2}** is a three way compact, lightweight, concert loudspeaker supplied in bi-amp drive format.

The RS5^{v2} maintains the very high standards of speech and music reproduction established by its predecessor. Vocals and instruments are reproduced with amazing detail and separation.

Originally designed by Ken Hughes in December 2001 the new 2008 model offers further advantages for the touring PA company or larger venues.



Weight saving in the **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^{v2} 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 midrange drivers.

A glance at many of the settings for these types of mid-band drivers will show that very often several dB needs to be removed over a wide bandwidth to obtain a smooth, peak-free 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.

In total contrast the mid band of the RS5 is inherently smooth in fact, it's 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.

Optional hardware includes flying points & safety tie set plus a unique hinge plate assembly which assists cabinet alignment during flying and stacking.

Also available - M12 nutplates for use with a Shermann yoke assembly to enable cabinet tilt during pole mounting or flying from 2" bar.

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

Handles (top & bottom)

Large steel recessed steel flip type

Handles (side)

Two per side - insert style

Finish

Textured Protective Coating / TRC paint for installed products

Grille

Heavy duty mesh c/w acoustically transparent foam and engraved logo

Skids

Bottom mounted easily replaced 15mm plywood skids

*Flying Points (options)**

GS-CF4 side mounted track plates and rear hinge plates

RNP-12 side mounted yoke style M12 nut plate fittings

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 + 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**

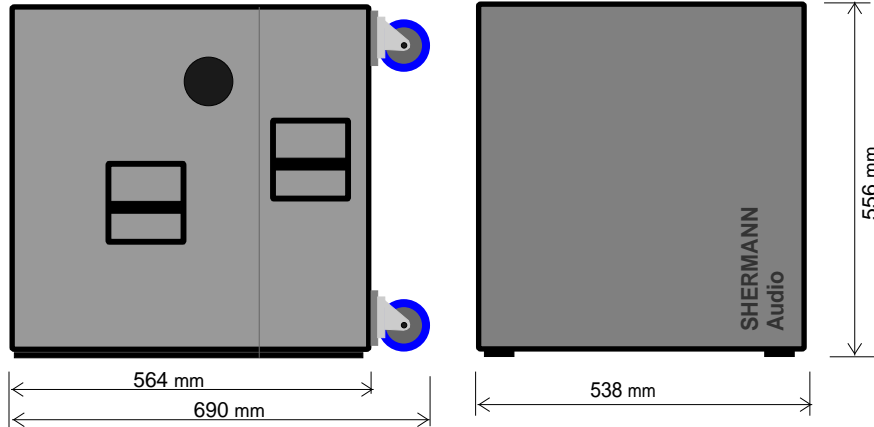
*Sockets are parallel linked on all pins
eg. 1+ to 1+ (see diagram)*

Crossover frequencies

The RS5 must be used with pre-set parameters installed by Shermann and available for all Ashly, XTA, BSS, Klark-Teknik and other suitable digital loudspeaker management systems

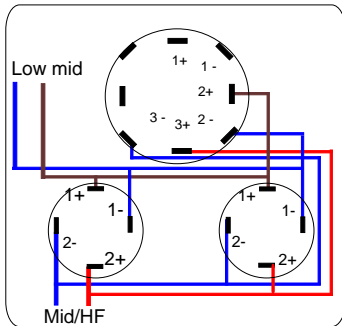
* Options must be requested at time of ordering.

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NL4/NL8 input plate

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



Speaker Cables

We recommend the use of **2.5mm²** or **4mm²** OFC cabling with all Shermann full range cabinets.

Wherever possible, cable lengths should not exceed 10 metres for 4 ohm loading (*2 x 8ohm RS5 in parallel*); cabinet link cables should not exceed 2 metres.

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

RS5 stacked showing castor positions, standard twin NL8 input plates, safety tie points, hinge plates and a hinge assembly normally used when the cabinets are either stacked or flown.

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 Shermann product please fax, call or email us - contact details are shown below.

Textured Protective Coating.

The coating currently applied to Shermann loudspeakers is an extremely hard wearing textured finish designed to protect the loudspeaker cabinet during normal use.

Damage may be caused through contact with sharp objects or if stacked against flight cases or any other item with metal fittings during transportation.

Whilst this style of coating is generally accepted as more durable than a paint finish it should be accepted that TPC is not armour plating and as such, may indeed be scratched or damaged.

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 as 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)	80Hz / 4th order

Low mid section

Rec' amp' power @ 8 ohm	300 - 500 watts rms
Programme power	1000 watts

Mid/HF section

Rec' amp' power @ 8 ohm	200 - 300 watts rms
Programme power	600 watts

Performance

Sensitivity @ 1w/1m	103 dB
Output (peak)	132 (138) dB @ 1m
Frequency response	60 Hz - 17.5 KHz
Dispersion > -5 KHz	90° x 30°

Drive unit - LF

Drive unit size	304 mm / 12"
Voice coil diameter	76 mm / 3"
Chassis	Cast aluminium
Magnet	Neodymium
Mounting	5mm 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	44 mm / 1.75"
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 ³)
Weight	43.2 Kgs (95 lbs)

The front foam used on this cabinet is not fire retardent.



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