

SHERMANN Audio

G3

Preliminary data

The G3 extremely high level delivery - low distortion.

The G3 is a medium power requirement, high efficiency model designed to be used in pairs or multiples.

Primary locations for use are the widest variety of public events ranging from theatres to arenas and outdoor festivals.

The 12" bass/mid/s.

The G3 is equipped with two highly efficient 12" low mid drivers selected for their fast reaction in their pass band of 80 - 700 Hz.

Mounted on a 60° dual array baffle area the 12" drivers offer depth and realism to the lower vocal region.

In addition, instrumental response including drums and percussion are reproduced with amazing accuracy.

The 2" coaxial upper mid/hf.

The G3 features a low distortion co-axial compression driver whose dual 16 ohm voice coils each handle specific frequency bands.

Operating from 800Hz the larger voice coil is then crossed at 6.3KHz to a smaller coil which handles all of the very high frequencies above.

This outstanding compression driver is attached to a sturdy GRP horn unit whose dispersion pattern is an accurate 60° x 40°.

The G3 cabinet.

Built from Eastern European birch plywood the G3 is shaped in a conventional pattern for ease of transport, stacking and flying.

Rear sides are angled at 30° making the use of two wide a successful option especially within wider than deep rooms.

For flying purposes the G3 is equipped with three point track and may also be fitted with M10 inserts to enable use with its dedicated yoke bracket.

Two large insert handles are fitted at the rear with a pair for vertical lift and a pair for horizontal lift.

A deep recessed dual socket input and plywood skids are fitted to the G3.

Finally, the gigging version of this model is coated with Sherman's heavy duty textured material we've named SW-Coat.

The results.

The G3, a high technology loudspeaker that's easier to use than almost any other loudspeaker system.

It's ability to offer accurate dispersion in singles or multiples places control of the coverage firmly with the engineer.

The reduction of not only rigging time but the amount of cabinets needed to be used has been a prime consideration in the development of the G3.

The G3 will replace from four to six boxes of mini line array in terms of output levels with superior directional capability and intelligibility.

It may also be stacked and raised above bass bins far more easily than a multi-box line array.

The required DSP settings are not extensive in fact, the G3 may be used with minimal EQ provided the recommended filter points are correctly set.

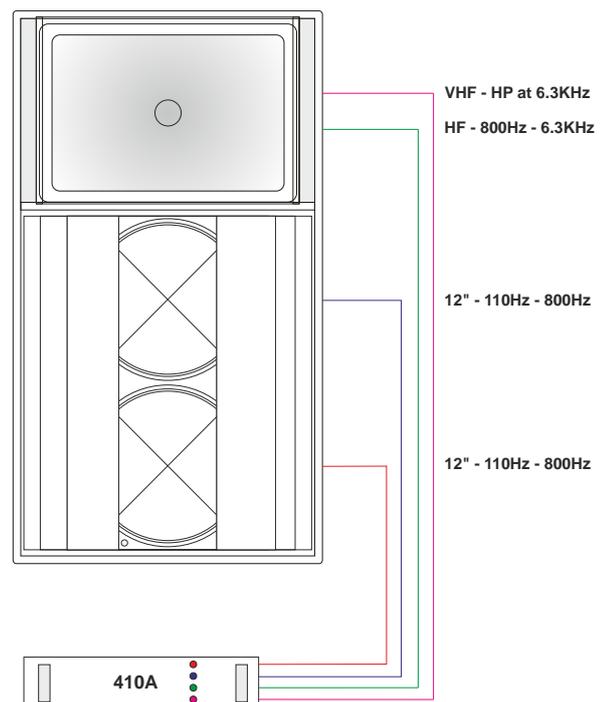
The technicals.

Please see page 2 for mechanical and technical details.

Warning.

It should be remembered that the G3 is capable of high pressure levels therefore care should be taken in its positioning with regard to your employees and audience.

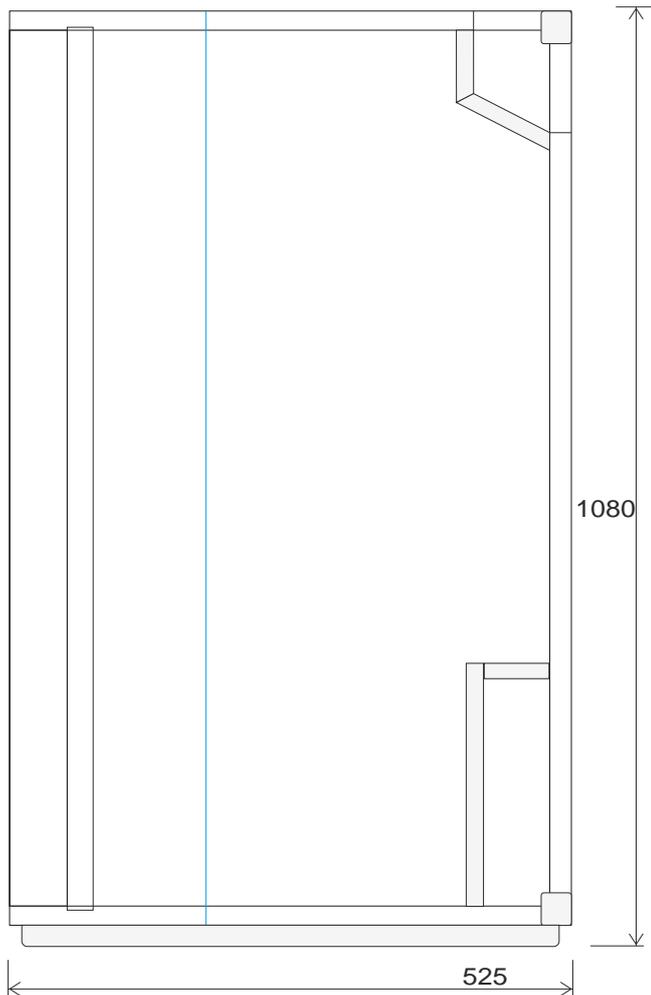
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System

Format	4 way (tri-amped drive)
Impedance - low	8 ohms x 2
Impedance - mid	16 ohms
Impedance - high	16 ohms
AES power - low	700 w x 2
AES power - mid	150 w
AES power - high	40w

Performance

O/P level at rated power	137 dB @ 1m
Frequency range	80 Hz - 21 KHz (\pm 3dB)
Dispersion above 350 Hz	60° x 40° (H x V)

Drive unit - 12"

Drive unit size	316 mm / 12" x 2
Voice coil diameter	76 mm / 3"
Chassis	cast aluminium
Magnet	neodymium
Mounting	6mm caphead bolts x 4

Drive unit - Coaxial

Drive unit exit	51 mm / 2"
Voice coil (Mid)	89 mm / 3.5"
Voice coil (HF)	44 mm / 1.73"
Magnet	neodymium
Diaphragm (Mid)	composite
Diaphragm (HF)	composite
Driver / Horn mounting	6mm socket bolts x 4

Dimensions

Height	1080 mm - 42.50"
Depth	525 mm - 20.66"
Width	600 mm - 23.62"
External volume	338 lts - 11.96 ft ³
Weight	51 Kgs - 112lbs

Cabinet

Panels	12, 15 & 18mm birch ply
Baffles	24 mm birch ply
Cabinet external	SW-COAT as standard
Handles x 2	Top and bottom back
Handles x 8	Side lift in two planes
Grille	Coated steel mesh & foam
Skids	15mm plywood

Connections NL8

Connector	NL8 x 2 (pins linked)
Low mid 12"	Pins 1+ 1-
Low mid 12"	Pins 2+ 2-
High mid	Pins 3+ 3-
VHF	Pins 4+ 4-

Flying & stand mount hardware

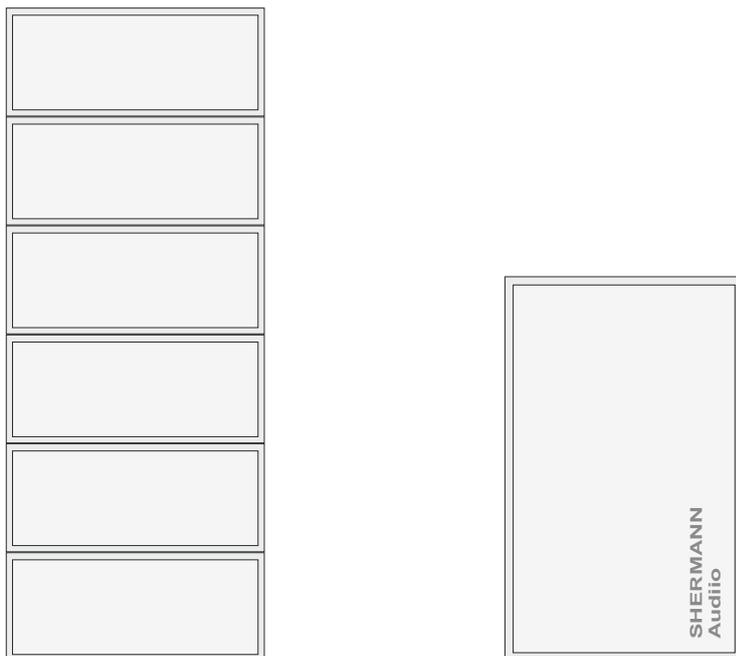
Flying points - fitted	GS-TA3 (GS-TA5 option)
Safety tie - fitted	GS track
Yoke bracket fittings - opt'	10mm nut plates

* Please Note - digital crossover settings are available for Ashly, XTA, BSS, Klark-Teknik and Xilica models.
The front foam used on this cabinet is not fire retardant.

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Shermann G3 medium weight 3 way front of house box - v - 6 box mini line-array



Cabinets shown to scale.

Cabinet	2 x 8" + HF line array	Shermann G3 (with coaxial comp' driver)
Number of cabinets	6	1
Total weight excl' external flying hardware	172kgs	48kgs
Nominal sound pressure level @ 1m / 5m / 10m	136B / 122dB / 116dB	137dB / 123dB / 117dB
Transport size excl' flight cases	13.7cu ft / 388 lts	4.31cu ft / 128 lts
Horizontal dispersion above 700Hz (-6dB)	100° (note: more likely from 1-8KHz upwards)	60°
Vertical dispersion above 700Hz (-6dB)	36° (note: more likely from 1-8KHz upwards)	40°
Power requirement AES (LF)	2 x 1,600w @ 3ohm	700w @ 8ohm x 2 *
Power requirement AES (Mid)	2 x 240w @ 3ohm	150w @ 16ohm *
Power requirement AES (VHF)	n/a	40w @ 16ohm *
Approx' flying time	7 minutes	1.5 minutes
Approx' connection time	1.5 minutes	20 seconds
Flying tilt upwards	Parameter not offered	20° (when fitted with M10 nutplates)
Flying tilt downwards	Parameter not offered	70°
Flying rotation	Parameter not offered	360°
Use in theatre with raked seating >1200 capacity	Reflection off side walls - limited vertical dispersion	Ideal (superior vertical dispersion)
Use in many multi-purpose venues - flat floor	Reflection off side walls - reduced vocal definition	Ideal (narrower horizontal dispersion)
Use outdoors	OK - but not easily flown without truss frame	Ideal (easily stacked)
Overall vocal delivery	Poor to average (multiple position midrange drivers)	Superb wide band response
Lower instrument response	Reduced (due to the use of 8" drivers)	2 x 12" drivers horn loaded
Upper instrument response	Not perfect (response speed difference between 8" & 1")	Fast transient delivery (100Hz - 12.5Khz)

Conclusion

Whilst this 6 box line array has fashionable advantages, in the final analysis it's over 3.8 times larger, 4.2 times heavier and 3.5 times more expensive than the compact, point source **Shermann G3**

When you consider its limitations of use the line array is a very efficient waste of money for the majority of UK gigs.

The line array supporters club will argue that the **Shermann G3** cannot be used in all situations however, it's our argument that the **G3** will produce superior results far more often throughout the year for UK gigs and tours than the line array system as shown.

There is another equally important argument - sound quality.

The **Shermann G3** is simply streets ahead of the line array in two of the more important areas - audio intelligibility and accurate coverage.

*** Please Note**

The **G3** is driven by the **Shermann 412A** four channel power amplifier.

In this manner each drive unit has an amp channel to power it although the 12" drivers are run from one channel of the DSP.

Two **G3** may therefore be driven from one **Shermann 412A** using a simple 8 way link cable between the cabinets.