



series



The SHO Series low frequency transducers integrate all significant performance aspects of professional audio devices into a truly state of the art design.

The SHO Series of professional loudspeakers represents the pinnacle of loudspeaker development for the 21st century. Utilizing such advanced concepts as oversized 15" cones with true 15" cone diameter and extra large sumound, ultra-sophisticated heatsink topology, The SHO Series low-frequency drivers can deliver punishing levels of sound all night without the faintest hint of fatigue. Our revolutionary Constant Directivity Hi Frequency Driver design provides tight pattern control, as well as a horn that can be rotated 60 x 40 or 40 x 60 for a wide range of placement options.

Available in wedge, dual, single and subwoofer configurations, the SHO series from Wharfedale are capable of extreme sound pressure levels for extended periods. The SHO Series loudspeakers are the easiest and most cost effective way to improve just the ticket for today's demanding installations or touring bands.



FEATURES

- The 5" Voice Coil
- 17% more radiating area and bass power
- Tight pattern control
- Compact Dimensions
- Rotating horn configurations
- Pure Titanium HF driver diaphragm
- Neodymium Iron Boron LF driver magnet

APPLICATIONS

In the SHO Series, Wharfedale Pro offers a complete range of solutions for a wide variety of sound reinforcement and public address applications. From small club systems to large indoor and outdoor venues, there's a SHO Series combination for each.

SHO Series full-range cabinets are available in 12-inch two-way, dual 12-inch two-way, 15-inch two-way or dual 15-inch two-way configurations. Each is fitted with fly points for suspension in touring or permanent installations, and a recessed pole-mounting well to facilitate pole or stand mounting. Completing the SHO Series is a 12-inch, 2-way monitor wedge and a choice of three high-power subwoofers.



SHO Series Loudspeakers:

SH1294



- 2-way loudspeaker system
- 1 x 12" LF driver with true 12" piston diameter
- 5" LF voice coil for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 90° x 40° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 95 dB sensitivity with 1000 Watts (continuous) power handling

SH1294M



- 2-way loudspeaker, specifically for stage monitor use
- 95 dB sensitivity with 1000 Watts (continuous) power handling
- 1 x 12" LF driver with true 12" piston diameter
- 5" LF voice coil for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 90° x 40° degree constant-directivity horn

SH2296



- 2-way loudspeaker system
- 2 x 12" LF drivers, each with true 12" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 90° x 60° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 99dB sensitivity with 2000 Watts (continuous) power handling

SH2264



- 2-way loudspeaker system
- 2 x 12" LF drivers, each with true 12" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 60° x 40° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 99 dB sensitivity with 2000 Watts (continuous) power handling

SH1564



- 2-way loudspeaker system
- 1 x 15" LF driver, with true 15" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 60° x 40° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 96 dB sensitivity with 1500 Watts (continuous) power handling

SH1596



- 2-way loudspeaker system
- 1 x 15" LF driver, with true 15" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 90° x 60° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 96 dB sensitivity with 1000 Watts (continuous) power handling

SH2564



- 2-way loudspeaker system
- 2 x 15" LF drivers, each with true 15" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 60° x 40° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 98 dB sensitivity with 2000 Watts (continuous) power handling

SH2596



- 2-way loudspeaker system
- 2 x 15" LF drivers, each with true 15" piston diameter
- 5" LF voice coils for high power handling and reliability
- Efficient HF compression driver with rare-earth magnet, 3.25" voice coil and pure Titanium diaphragm
- Fully rotatable 90° x 60° degree constant-directivity horn
- Easily configured for full-range or bi-amp application
- 98 dB sensitivity with 2000 Watts (continuous) power handling

SHO Series Subwoofers

SH1500



- high-power subwoofer system
- 1 x 15" LF driver, with true 15" piston diameter
- 5" LF voice coils for high power handling and reliability
- High efficiency, 96 dB (2.83V/1 meter) sensitivity
- 1000 Watts (continuous) power handling

SH1800



- high-power subwoofer system
- 1 x 18" LF driver, with true 18" piston diameter
- 5" LF voice coil for high power handling and reliability
- High efficiency, 98 dB (2.83V/1 meter) sensitivity
- Advanced thermal management for superior reliability
- 98 dB sensitivity with 1000 Watts (continuous) power handling

SH2800



- high-power subwoofer system
- 2 x 18" LF driver, each with true 18" piston diameter
- 5" LF voice coils for high power handling and reliability
- High efficiency, 102 dB (2.83V/1 meter) sensitivity
- Advanced thermal management for superior reliability
- 98 dB sensitivity with 2000 Watts (continuous) power handling



A new breed of woofer

What the industry refers to as a 15" woofer typically has a radiating area (cone) of about 15 1/4". The oversized SHO woofer has an effective radiating area of 16 1/2", with equivalent area increases in the 12" and 18" models. That means over 17% more radiating area-and 17% more bass power-in the same physical form factor.



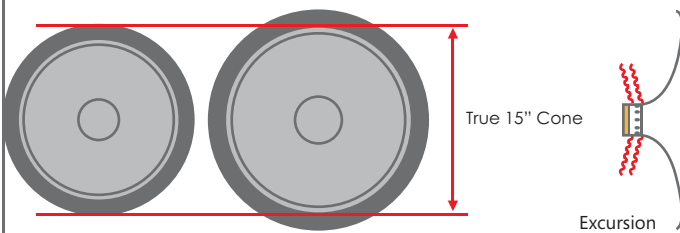
A larger coil

A bigger coil means faster movement and tighter bass. Our competitors settle for 4" (100mm) voice coils. SHO Low Frequency Transducers use 5" (127mm) voice coils. Twenty five percent larger-they can play louder and handle more power without damage.

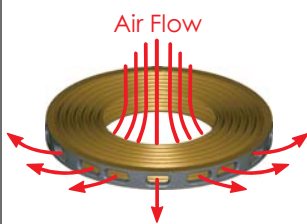
Superior active cooling system



Electricity flowing through the voice coil generates heat that must be dissipated. Standard solutions include cooling slots, vanes and exotic materials but none as elegant as the unique 'Thermal Forest' in the SHO Series. Directly coupled to the metal around the magnetic gap, this system transfers voice coil heat to a highly conductive aluminium ring and out through 196 cylindrical "cooling towers".



Ultra-tight suspension for maximum linear output-the dual spider



The Wharfedale approach to double spiders - 50% wider

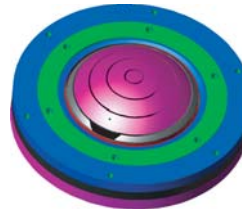
SHO low frequency transducers use a dual spider that's 50% wider than anyone else's. These two spiders act like dual bearings, handling the extra stresses of high output whilst working together with the cooling system to pump more air through the heart of the transducer. The extra benefit of these extra wide dual spiders is longer linear cone travel-up to two full inches - with no reduction in the cone area unlike our competitors.

A completely new HF compression driver

SHO Series uses a brand new large format compression driver design. A robust and lightweight Neodymium Iron Boron (it's the most powerful magnetic alloy on the planet and it weighs 70% less than standard materials) magnet structure works with a 3 1/4" diameter voice coil composed of copper clad windings on a heat resistant Kevlar[®] frame. This drives an 82.6mm pure Titanium diaphragm with a close spaced, four-slit phase plug that assures high acoustic damping and silky smooth high frequency output.



Large format compression driver with a 3.25" pure Titanium diaphragm & 1.45" exit throat



The driver is a nominal 3.25 inch coil/diaphragm assembly loaded on a 4 slit circumferential phase plug.

Waveguides

The SHO Series constant directivity high frequency wave guides are fully optimized for maximum control and directivity



The SHO H64 and H96 are fully rotatable constant directivity wave guides with 60 degree by 40 degree (H64) or 90 degree by 60 degree (H96) coverage patterns. The four large cut outs allow maximum component density on the front baffle, but still offer full rotation of the horn. This allows suspension of the enclosure both vertically and horizontally, allowing a very high degree of installation flexibility.



The SHO H94 features a constant directivity wave guide with a 90 degree by 45 degree coverage pattern. The full rotation capability of the horn allows for maximum flexibility in placement without loss of coverage.

Both the H64 and H94 for constant directivity horns, and optimized flare rates and mouth areas designed to produce exceptional polar control, down to the lowest frequencies of operation.

The SHO series includes 1x15", 2x15", 1x12", 1x12" monitor/utility enclosures, as well as 2x12", 1x18" and 2x18" subwoofer enclosures. All incorporate 18mm birch plywood construction for incredible strength and durability. Internal flying/rigging points (eight M10 points designed for use with forged shoulder eye bolts) provide for rugged and safe flown installations.

SHO enclosures feature soft polymer co-injected handles for optimum comfort when transporting and lifting.

SHO Series Specifications

Model	SH1294	SH1294M	SH2264	SH2296	SH1564	SH1596
Frequency Response	55Hz-20kHz	55Hz-20kHz	45Hz-20kHz	45Hz-20kHz	45Hz-20kHz	45Hz-20kHz
Coverage Pattern	90 x 40	90x40	60x40	90x60	60x40	90x60
Crossover Frequency	1600Hz	1600Hz	1600Hz	1600Hz	1600Hz	1600Hz
Power Rating						
Continuous	1000 W	1000 W	2000 W	2000 W	1000 W	1000 W
Program	2000 W	2000 W	4000 W	4000 W	2000 W	2000 W
Peak	4000 W	4000 W	8000 W	8000 W	4000 W	4000 W
Sensitivity (2.83V@1m)	95dB	95dB	99dB	99dB	96dB	96dB
Low Frequency Driver	1x12"	1x12"	2x12"	2x12"	1x15"	1x15"
Voice Coil Size / Magnet Material	5" voice coil/ NdFeB	5" voice coil/ NdFeB	5" voice coil/ NdFeB	5" voice coils/ NdFeB	5" voice coils/ NdFeB	5" voice coils/ NeFeB
High Frequency Driver	large format	large format	large format	large format	large format	large format
Voice Coil Size / Magnet Material	3.25 coil/NdFeB	3.25 coil/NdFeB	3.25 coil/NdFeB	3.25 coil/NdFeB	3.25 coil /NeFeB	3.25 coil/NeFeB
Nominal Impedance	8 ohms	8 ohms	4 ohms	4 ohms	8 ohms	8 ohms
Points of M10 Inserts	22	0	22	22	22	22
Dimensions (H x W x D)						
mm	555x375x425(mm)	570x375x332(mm)	962x375x425(mm)	962x375x425(mm)	750x438x440(mm)	750x438x440(mm)
inches	21.85"x14.76"x16.73"	22.44"x14.76"x13.07"	37.87"x14.76"x16.73"	37.87"x14.76"x16.73"	29.52"x17.24"x17.32"	29.52"x17.24"x17.32"
Construction Material	18mm plywood	18mm plywood	18mm plywood	18mm plywood	18mm plywood	18mm plywood
Finish	White/Black Paint	White/Black Paint	White/Black Paint	White/Black Paint	White/Black paint	White/Black paint
Handle Quantity	2	1	4	4	2	2
Net Weight	31kg/68.2 lbs	25kg/55 lbs	50kg/110 lbs	50kg/110 lbs	39kg/85.8 lbs	39kg/85.8 lbs
Gross Weight	36kg/79.2 lbs	30kg/66 lbs	56kg/123.2 lbs	56kg/123.2 lbs	45.5kg/100.1lbs	45.5kg/100.1lbs

Model	SH2564	SH2596	SH1500	SH1800	SH2800
Frequency Response	35Hz-20kHz	35Hz-20kHz	45Hz-200Hz	42Hz-300Hz	35Hz-300Hz
Coverage Pattern	60x40	90x60			
Crossover Frequency	1600Hz	1600Hz	150Hz max	150Hz max	150Hz max
Power Rating					
Continuous	2000 W	2000W	1000 W	1000 W	2000 W
Program	4000 W	4000 W	2000 W	2000 W	4000 W
Peak	8000 W	8000 W	4000 W	4000 W	8000 W
Sensitivity (2.83V@1m)	98dB	98dB	96 dB	98 dB	102dB
Low Frequency Driver	2x15"	2x15"	1x15"	1x18"	2x18"
Voice Coil Size / Magnet Material	5" voice coil/ NdFeB	5" voice coils/ NdFeB	5 " Voice Coil / NdFeB	5"Voice Coil / NdFeB	5" Voice Coil/ NdFeB
High Frequency Driver	large format	large format			
Voice Coil Size / Magnet Material	3.25 coil/NdFeB	3.25 coil/NdFeB			
Nominal Impedance	4 ohms	4 ohms	8 ohms	8 ohms	4 ohms / 8 ohms
Points of M10 Inserts	20	20			
Dimensions (H x W x D)					
mm	1166x438x440(mm)	1166x438x440(mm)	456x640.5x660.5(mm)	532x641x822(mm)	601x1030x 870(mm)
inches	45.9"x17.24"x17.32"	45.9"x17.24"x17.32"	17.95" x 25.21" x 26"	20.94 " x 25.23" x 32.38"	23.66" x 40.55" x 34.25"
Construction Material	18mm plywood	18mm plywood	18mm plywood	18mm plywood	18mm plywood
Finish	White/Black Paint	White/Black paint	Black Paint	Black Paint	Black Paint
Handle Quantity	4	4	2	4	4
Net Weight	56kg/123.2 lbs	56kg/123.2 lbs	44kg /96.8 lbs	50.5kg/ 111.1 lbs	94kg /206.8 lbs
Gross Weight	64kg/140.8 lbs	64kg/140.8 lbs	48kg /105.6 lbs	62.5kg/ 137.5 lbs	113kg/ 248.6 lbs



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