

SXH218

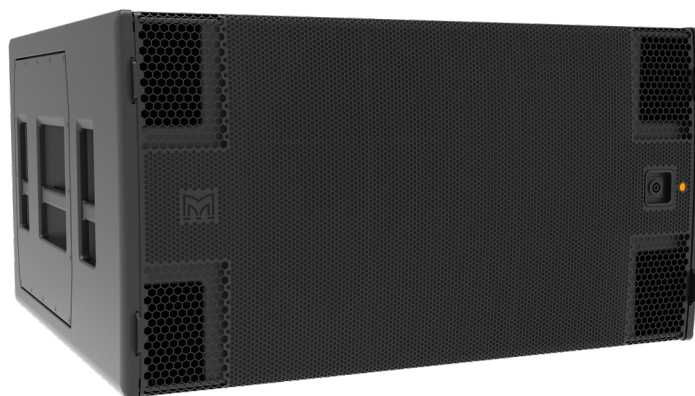
Hybrid® Horn/Reflex, Dual-driver Subwoofer

Features

- Ultra-high output ground-stacked subwoofer
- Hybrid® horn/reflex loading for maximum acoustic efficiency and low frequency extension
- Dual long-excursion 18" (460mm)/4.5" (115mm) voice coil neodymium drivers
- Forward or rear-facing operation

Applications

- Outdoor festivals
- Stadiums, arenas and theatres
- Concert halls
- Nightclubs
- Outdoor restaurant, bar and hotel entertainment areas
- Concourses and Theme Parks



The SXH218 is an extremely powerful subwoofer capable of producing 148dB peak output at 1m. It is the ideal partner for Wavefront Precision WPC and WPL arrays where maximum low frequency output is required as well as a standalone solution for premium permanent installations such as nightclubs.

Its Hybrid® horn/reflex loading combines the acoustic efficiency and impact of bass horn technology with the low frequency extension of a reflex design, enabling it to produce significantly higher output levels than a traditional reflex-loaded subwoofer. With an operating range of 32-150Hz \pm 3dB, it features dual long-excursion 18" (460mm)/4.5" (115mm) voice coil neodymium drivers, with water resistant cones and triple roll surrounds.

Also available is the SXHF218, a version of the SXH218 with flying hardware. It can be incorporated at the top of a WPL array, or more commonly flown as a separate array alongside. Like the ground-stack version, a combination of forward and rear-facing enclosures can be configured with specific directional properties.

Both the SXH218 and SXHF218 can be powered by either a single channel of a Martin Audio iK42 4-channel amplifier, or a bridged pair if maximum output is required. The connector sockets are wired so that one four-core cable from the amplifier

will power two subwoofers. Subwoofer settings are determined by a pre-determined parameter set in Vu-Net when used in conjunction with iK42, or settings are available from the Martin Audio website when used with alternative amplifiers.

We provide this subwoofer with a set of four castors. A transit cover is available as optional accessory.

From Q2 2026, the SXH218 has front and rear LED indicators and adds a front-mounted NL4 input connector, bringing the total to three NL4 connectors, including the two on the rear. A new grille and updated connectors allow this version to meet stringent environmental testing standards.

You can illuminate the LED indicators via Vu-Net software to identify each enclosure on the circuit. The rear LED is intended for use in cardioid setups.

The third NL4 input connector on the front improves cabling for subwoofers used in cardioid configurations. For outdoor use, you no longer need a WRKIT, but you must seal all three NL4 sockets. Use the correct cable connectors (NLT4FX or NLT4FX-BAG) for connected sockets and install Martin Audio weatherproof NL4 sealing plugs in unused sockets. This provides an IP rating of IP54 for the connections.

SXH218

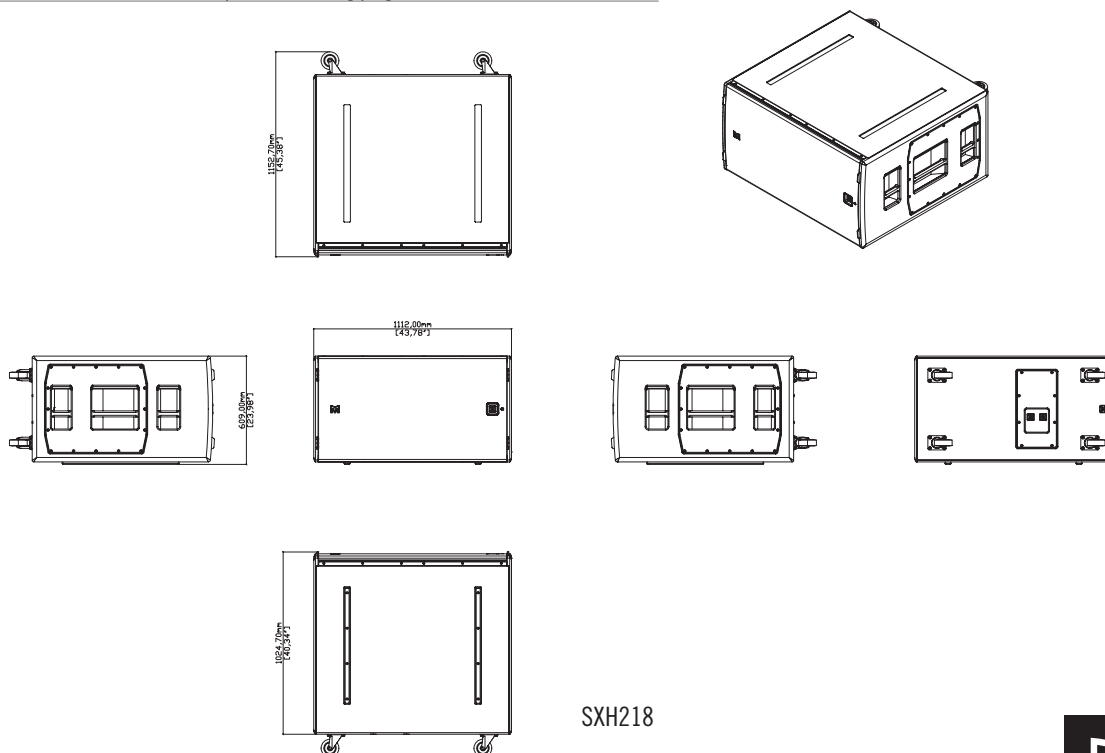
Hybrid® Horn/Reflex, Dual-driver Subwoofer

Technical Specifications

TYPE	Hybrid® horn/reflex subwoofer
FREQUENCY RESPONSE (1)	32Hz – 150Hz ±3dB, -10dB @ 27Hz
DRIVERS	2 x 18" (460mm)/4.5" (115mm) voice coil, long excursion, neodymium magnet, waterproof cone
RATED POWER (2)	3,400W AES, 13,600W peak
RECOMMENDED AMPLIFIER	iKON iK42 bridged for full output
SENSITIVITY (10)	107dB
MAXIMUM SPL(9)	142dB continuous, 148dB peak, 154dB peak with crest factor 4
NOMINAL IMPEDANCE	4 Ohms
DISPERSION (-6dB)	Omnidirectional/or Cardioid (paired)
ENCLOSURE	Multi-laminate birch/poplar ply
FINISH	Hard-wearing textured black paint (RAL 9005)
PROTECTIVE GRILLE	Black perforated steel
ENVIRONMENTAL TESTING (11)	IP rating IP21 MIL-STD-810H ISO 4892-2 Solar Radiation ISO 12944-6 Category C3 Corrosion resistance
LED INDICATORS	Two LEDs: one front, one rear (rear LED for cardioid subs)
CONNECTORS	3 x NLT4MPXX-BAG (one front, two rear) IP54 weather-resistant seal with NLT4FX, NLT4FX-BAG or weatherproof NL4 sealing plug
PIN CONNECTIONS (INPUT ON FRONT)	1+/-1-
PIN CONNECTIONS (INPUT ON REAR)	1+/-1-
PIN CONNECTIONS (LINK ON REAR)	1+/-1- linked to 2+/-2- 2+/-2- linked to 1+/-1-
FITTINGS	Two skids on base, with mating channels on top Four rear-mounted 100mm (4in) castors supplied 6 x bar handles, 3 on each side 4 x fittings for optional transit cover
DIMENSIONS (INCL SKIDS)	(W) 1112mm x (H) 609mm x (D) 1023mm (1151mm incl. castors) (W) 43.8in x (H) 24in x (D) 40.3in (45.3in incl. castors)
WEIGHT	124 kg (273 lbs), with castors 127.5 kg (281 lbs)
ACCESSORIES	Transit cover SXH218TC Weatherproof NL4 sealing plug

Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4pi) space at 2 metres with 2.83v input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 1 metre, half (2pi) space.
- (10) Measured in half (2pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.
- (11) For details, see martin-audio.com/environmentaltesting



Martin Audio Ltd
Century Point, Halifax Road, High Wycombe
Buckinghamshire HP12 3SL, England

Telephone: +44 (0) 1494 535 312
Email: info@martin-audio.com

All information is Copyright © 2026 Martin Audio Ltd.

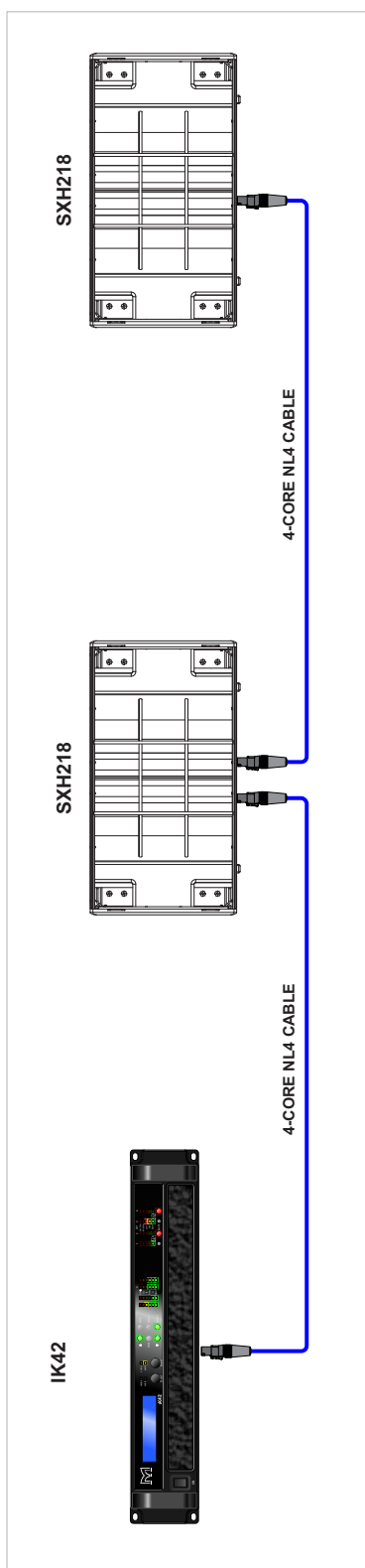


www.martin-audio.com

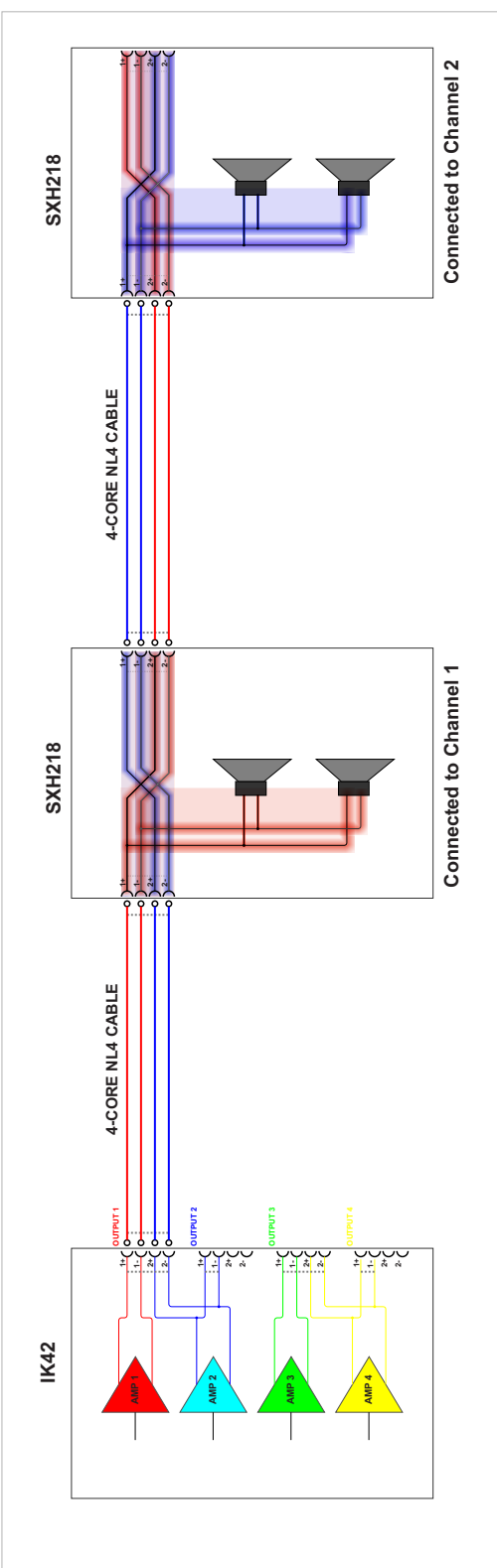
SXH218

Hybrid® Horn/Reflex, Dual-driver Subwoofer

Wiring Two SXH218s from independent channels of an iK42 with 4-core speaker cables



SCHEMATIC



SXH218

Hybrid® Horn/Reflex, Dual-driver Subwoofer

Environmental Testing

IEC 60529 Ingress Protection

This standard defines the IP rating system, which classifies the degree of protection an enclosure provides against the ingress of solid objects (dust) and liquids (water).

Rating Scale

FIRST DIGIT (Solid Object Protection): Scale 0-6

- 0 No protection
- 1 Objects >50mm (hands)
- 2 Objects >12.5mm (fingers)
- 3 Objects >2.5mm (tools, wires)
- 4 Objects >1mm (small wires)
- 5 Dust protected (limited ingress)
- 6 Dust-tight (no ingress)

SECOND DIGIT (Liquid Protection): Scale 0-8

- 0 No protection
- 1 Dripping water (vertical)
- 2 Dripping water (15° tilt)
- 3 Spraying water (60° angle)
- 4 Splashing water (all directions)
- 5 Water jets (low pressure)
- 6 Powerful water jets
- 7 Temporary immersion (1m, 30 min)
- 8 Continuous immersion (depth specified)

MIL-STD-810H

This U.S. Department of Defense standard specifies environmental tests to evaluate the ability of equipment to withstand harsh environmental conditions.

What it Tests

Temperature:

- Low temperature (storage and operation)
- High temperature (storage and operation)
- Temperature shock

Humidity:

- Constant and cyclic humidity testing

Solar Radiation:

- UV exposure testing at high intensity

Salt Fog/Salt Spray:

- Corrosion resistance testing

Rain & Water:

- Rain (blowing and dripping)

Dust & Sand:

- Particle resistance

Vibration & Shock:

- Mechanical stress testing

ISO 4892-2 Solar Radiation

This standard defines laboratory methods for exposing plastics and other materials to xenon arc lamps to simulate the effects of natural sunlight (UV radiation and visible light).

What it Tests

Colour fading/change

Gloss loss

Surface cracking

Material degradation

Physical property changes

ISO 12944-6 Corrosion Resistance

This standard outlines laboratory test methods for assessing the performance of protective paint systems against corrosion in various atmospheric environments.

Category	Exterior Environment	Interior Environment
C1 (Very Low)	Not Applicable	Heated buildings with clean atmospheres (e.g. offices, shops, schools, hotels)
C2 (Low)	Atmospheres with low pollution (mostly rural areas)	Unheated buildings where condensation can occur (e.g. depots, sports halls)
C3 (Medium)	Urban/industrial atmospheres with moderate SO ₂ pollution; coastal areas with low salinity	Production rooms with high humidity and some pollution (e.g. food plants, laundries)
C4 (High)	Industrial/coastal areas with moderate salinity	Chemical plants, swimming pools, coastal shipyards