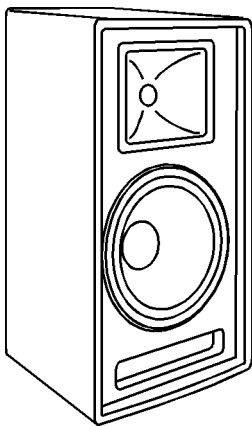


SPL 8H

INTEGRATED SELF POWERED
LOUDSPEAKER SYSTEM



Applications:

- Auditorium Installations
- Houses of Worship
- Theatre and Film
- Corporate A/V
- Sound Reinforcement in-fill

Features:

- Slimline design provides excellent coverage and sightlines
- Powerful, low distortion electronics give true sonic accuracy



ABOUT THE SPL 8H

The ARX SPL 8H is an ultra compact integrated 2 way speaker and amplifier combination. It features a new 8" (205mm) Low frequency driver and a 1" (25mm) High Frequency driver on a modified radial flat front horn flare. This unobtrusive slimline package provides excellent 80H x 60V coverage while preserving audience sightlines with minimal impact on architectural features.

The trapezoidal cabinet features a heavy duty steel mesh protective grille, finished in multiple textured coats of ARX Charcoal catalysed polyurethane. It is supplied 'ready-to-work', with a stand mount fitted as standard. Flying options can be ordered and factory fitted as required.

INSIDE INFORMATION

The amplifier design inside the SPL 8H uses existing proven ARX analog amplifier technology for predictable operation in all professional applications. Its transformer based power supply and Mosfet drive circuitry enable a reduced parts count for long term reliability. With their inherent self regulation, Mosfets are accepted as being the most thermally reliable and predictable amplifier output stage available.

The SPL 8H's unique fan-assisted amplifier heat exchanger provides reliable, consistent heat dispersion even at maximum SPL.

On power-up, the SPL 8H system provides an initial flat frequency response. All equalizing is intended to be done from the audio source - typically a parametric or graphic EQ.

BENEFITS

The acoustic and practical benefits of this amplifier/speaker combination are many:

- Improved speaker response. The closely coupled design delivers greater actual power at the speaker and improves the damping factor. Frequency response is optimised and phase response is idealised with no potential for mis-adjustment
- Thermal reliability. Our fan-assisted temperature management system comes from ultra-reliable mission-critical computer systems with extended MTBF** criteria.
- There is no power loss caused by long runs of loudspeaker cable which can typically be 30 metres (100') or more. All the amplifier power is delivered to the speaker.
- An elegant all in one solution - amplifier, speaker processor and loudspeaker are combined in the one cabinet. There are no amplifier racks to store and cool, no heavy speaker cabling to run.
- Reduced number of connections contributes to inherent low noise, increased reliability and greatly reduces the possibility of ground loops.

OTHER FEATURES

- Noiseless turn on/turn off.
- Interactive System Control, our transparent speaker protection system, keeps the SPL 8H functioning well within the drivers' Safe Operating Area at all times
- Locking AC power connectors. By

using the Neutrik PowerCon design, the power connector locks to the cabinet, avoiding the problem of a connector vibrating loose during use.

- Auxiliary Audio Loop out, to connect the signal chain to multiple cabinets.
- An Auxiliary PowerCon AC power output is fitted as standard, so that systems can be powered in a serial/daisy chain layout rather than radially from a central point, thus reducing the cabling required.

At ARX we have designed the SPL series to be a true 'building block' audio system.

- It is truly cost effective, without the need for speaker cabling, extra amplifiers or amp racks.
- Ease of installation - simply connect AC power and a signal.
- The modular concept means system inventory is kept at the most efficient level. To increase or decrease the size of the system, simply add or remove cabinets as required.
- With a lower parts count than standard systems, and under-stressed components used throughout, mechanical and electrical reliability is consistent with world's best practice.

To sum up, the ARX SPL 8H successfully combines state of the art loudspeaker design with practical, proven amplifier technology. It delivers an ultra compact integrated speaker/amplifier package with the dynamic impact and transparent audio that today's users expect.

Every ARX speaker system provides innovative solutions designed to deliver ultimate audio reproduction.

Our integrated self powered speaker systems, like every audio product we make, have been engineered for flawless long-term performance.

Architects' and Engineers' Specifications

The loudspeaker system shall be an active two way reflex system powered by an internal power amplifier with an onboard 24dB Linkwitz Riley crossover at 1500 Hz.

The frequency response of the system shall be 80Hz - 20KHz +/- 4dB. The loudspeakers shall be a Low Frequency 8" 205mm 8 ohm driver and a 1" (25mm) High Frequency compression driver with modified flat front radial horn flare. Dispersion shall be a nominal 80° Horizontal x 60° Vertical.

The amplifier power shall be 150 Watts RMS at 8 ohms. The amplifier type shall be a Lateral Mosfet design. THD shall be <.01%.

Rated SPL @ 1 metre shall be 126 dB peak, 120 continuous, averaged across cabinet frequency response.

The Highpass filter shall be -3dB down @ 75Hz. Loudspeaker protection shall include anti-clipping circuitry, relay muted input, relay switched output sensing DC and RF error.

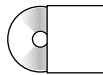
The Input connector shall be 3 pin Female XLR, polarity Pin 2 +, Pin 3 -, Pin 1 Ground, and the Input Impedance shall be 44K Balanced, with a nominal input level of 0dB for rated amplifier outputs.

There shall also be a 3 pin Male XLR Input Loop Connector, polarity Pin 2 +, Pin 3 -, Pin 1 Ground (directly connected to input).

AC Power input shall be preset at either 110V/220V/240V 50/60Hz. The AC Power Input shall be the Neutrik PowerCon type NAC 3 FCA, and the AC auxiliary output shall be the Neutrik PowerCon type NAC 3 FCB. AC Power protection shall be provided by a user resettable external circuit breaker. Maximum AC Wattage shall be 300 VA (300 Watts).

The power transformer type shall be Toroidal. The integrated self powered speaker system shall be the ARX SPL 8H

Specifications available on CD ROM.
Latest updates available at:
www.arx.com.au

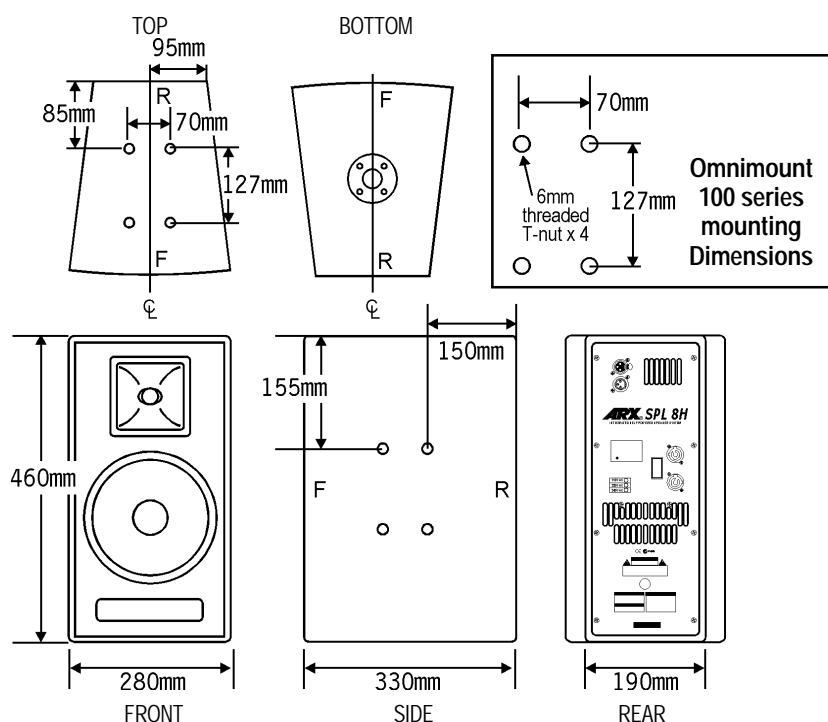


Our policy is one of continuous improvement, and therefore we reserve the right to change designs without notice. However, unless otherwise stated, specifications will always equal or exceed those previously given.

SPL 8H Specifications

Frequency response	80Hz - 20KHz +/- 4dB
Loudspeaker type	Low Frequency 8" 205mm 8 Ohm High Frequency 8 Ohm; FerroCooled Flat front radial horn flare 80H x 60V 460H x 280W x 330D, 7.5° taper to back
HF Flare type	
Size	22Kg
Weight	Nominal 80° H x 60° V
Dispersion	
Input Connector	3 pin Female XLR, polarity Pin 2 +, Pin 3 -, Pin 1 Ground
Input Impedance	44K Balanced
Nominal input level	0dB for nominal rated amplifier output
Input Loop Connector	3 pin Male XLR, polarity Pin 2 +, Pin 3 -, Pin 1 Ground
Crossover Frequency	1800Hz
Crossover Type	24dB Linkwitz Riley Filter type
Highpass Filter	-3dB @ 75Hz 24dB Linkwitz Riley
Maximum SPL	126 peak, 120 continuous
Amplifier power	150 Watts RMS 8 ohms, 220 peak
Amplifier type	Lateral Mosfet
THD	<.01%
Loudspeaker protection	ISC amplifier anti-clipping circuitry Relay muted input Relay switched output sensing DC and RF error Green AC power, Red System Protect
Status LEDs	
AC Power	Preset: 110V / 220V / 240V 50 / 60Hz
AC Power Input	Neutrik PowerCon type NAC 3 FCA
AC Power Loop	Neutrik PowerCon type NAC 3 FCB
AC Power protection	User resettable external circuit breaker
AC Wattage Max	300 VA (300 Watts)
Transformer type	Toroidal
Mounting points	T-Nuts for Omnimount 100 series on top and one side

ARX Systems are based in Melbourne, Australia, where all ARX Products are assembled and tested in our 'state-of-the-art' manufacturing facility. For over 20 years ARX has designed, manufactured and supported Audio Products for Professional users and applications worldwide.



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