

SPL SUB18



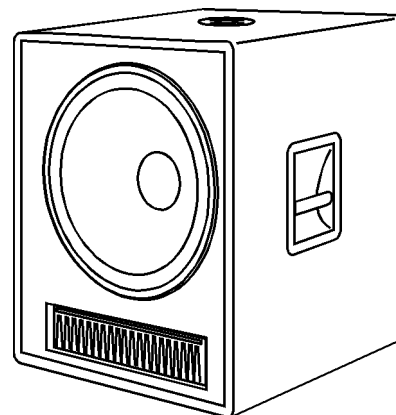
Applications:

Low Frequency enhancement of:

- Concert Sound Reinforcement
- Auditorium Installations
- Dance Clubs
- Houses of Worship
- Theatre and Film
- Corporate A/V

Features:

- Fully integrated amplifier/speaker combination
- High power and low distortion provide true sonic accuracy
- ISC system protection
- A flexible Sub Bass solution for all applications



ABOUT THE SPL18

The SPL SUB18 is an integrated subwoofer and amplifier combination, using a single 18" long throw driver. It is designed to provide extended low frequency from 40 Hz to 100 Hz to enhance existing speaker systems.

The cabinet is built throughout from premium grade void free plywood, with extensive bracing to reduce unwanted coloration, and is painted in multiple textured coats of catalysed polyurethane.

Originally designed as a complementary sub bass cabinet for the SPL12, the SPL SUB18 can easily be used with other speaker systems. Since its control electronics and amplifier are built-in, the SPL SUB18 is the perfect add-on when more low frequency output is required - for any system!

All that's required to vary the system setup are some patch leads and an AC power feed.

INSIDE INFORMATION

The all new amplifier design inside the SPL SUB18 uses existing proven analog amplifier technology for predictable operation in all professional applications.

Its transformer based power supply and Mosfet drive circuitry both enable a reduced parts count for long term reliability. Plus, with their inbuilt self regulation, Mosfets are accepted as being the most thermally reliable and predictable amplifier output stage available.

The 18" bass driver and the output of the amplifier section are perfectly

matched to form a composite unit that is designed to do only one thing, and do it extremely well.

BENEFITS

The benefits, both acoustic and practical, of the amplifier/speaker combination are many:

- Improved speaker response. The close-coupled design delivers greater actual power at the speaker and improves the damping factor.
- Thermal reliability. Thanks to our unique heat exchange/cooling design, the harder the system is driven, the more efficiently the heat exchanger operates.
- There is no power loss caused by long runs of loudspeaker cable - typically 30 meters (100') or more. All the amplifier power is delivered to the speaker.
- An elegant all in one solution - amp, processor, speaker are combined. There are no amp racks to store and cool, no heavy speaker cabling to run.
- Reduced number of connections contributes to inherent low noise, and greatly reduces the possibility of ground loops.

OTHER FEATURES

- L and R mix to mono built in. With separate inputs and loop through outputs for Left and Right channels, the SPL SUB18 needs no special setting up when run in a mono Sub configuration.
- Phase Switch and Level control on rear panel for compatibility with existing systems

- 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 a performance.

As well, an extra auxiliary AC power output is fitted as standard, so that systems can be powered in a serial/daisy chain layout rather than a radial manner, 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, with no need for speaker cabling, extra amplifiers or amp racks.
- The modular concept means total flexibility, with system inventory 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 SPL series successfully combines state of the art design with practical, proven technology to deliver an integrated speaker/amplifier solution with all the dynamic impact and transparent audio that today's audiences 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 performance day after day, night after night.

Architects' and Engineers' Specifications

The speaker system shall be an active subwoofer system powered by an internal power amplifier. This amplifier shall have an onboard 24dB Linkwitz Riley crossover at 100 Hz.

The frequency response of the system shall be 40Hz - 100Hz +/- 4dB and shall contain a Low Frequency 18" 460mm 8 ohm driver.

The amplifier power shall be 400 Watts RMS 8 ohms. The amplifier type shall be a Lateral MosFet design. THD shall be <.01% and the High-pass filter shall be -3dB down@ 35Hz.

Loudspeaker protection shall include anti-clipping circuitry, relay muted input, and relay switched output sensing DC and RF error.

There shall be Left and Right Input 3 pin Female XLR connectors, polarity Pin 2 +, Pin 3 -, Pin 1 Ground, and the Input Impedance shall be 44K Balanced (electronic), with a nominal input level of 0dB for nominal rated amplifier output.

There shall also be corresponding 3 pin Male XLR Input Loop Connectors, polarity Pin 2 +, Pin 3 -, Pin 1 Ground for continuation of the input signal(s) to other parts of the system. There shall also be a subwoofer volume control and a 180° Phase Reverse switch on the input panel.

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 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 600 VA (600 Watts).

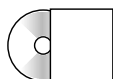
The transformer type shall be Toroidal

The integrated self powered speaker system shall be the ARX SPL SUB18

SPL SUB18 Specifications

Frequency response	40Hz - 100Hz +/- 4dB
Loudspeaker type	18" 450mm 8 Ohms
Size	730H x 510W x 580D
Weight	60 Kgs
Input Connectors	3 pin Female XLR, polarity Pin 2 +, Pin 3 -, Pin 1 Ground
Input Impedance	44K Balanced (electronic)
Nominal input level	0dB for nominal rated amplifier output
Input Loop Connectors	3 pin Male XLR, polarity Pin 2 +, Pin 3 -, Pin 1 Ground
Sub Level Control	-10dB to +6dB, detented for 0dB
Phase Reverse	Normal or 180° reversed
Crossover Frequency	100Hz
Crossover Type	24dB Linkwitz Riley Filter type
Highpass Filter	-3dB @ 35Hz 24dB Linkwitz Riley
Sensitivity	98dB @ 1 W, 1 metre
Maximum SPL	128 peak, 125 continuous
Amplifier power	400 Watts RMS 8 ohms, 625 W 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
Status LEDs	AC Power, Protection Active
AC Power	110V / 220V / 240V 50 / 60Hz
AC Power Input	Neutrik PowerCon locking type NAC 3 FCA
AC Power Loop	Neutrik PowerCon locking type NAC 3 FCB
AC Power protection	User resettable external circuit breaker
AC Wattage Max	600 VA (600 Watts)
Transformer type	Toroidal

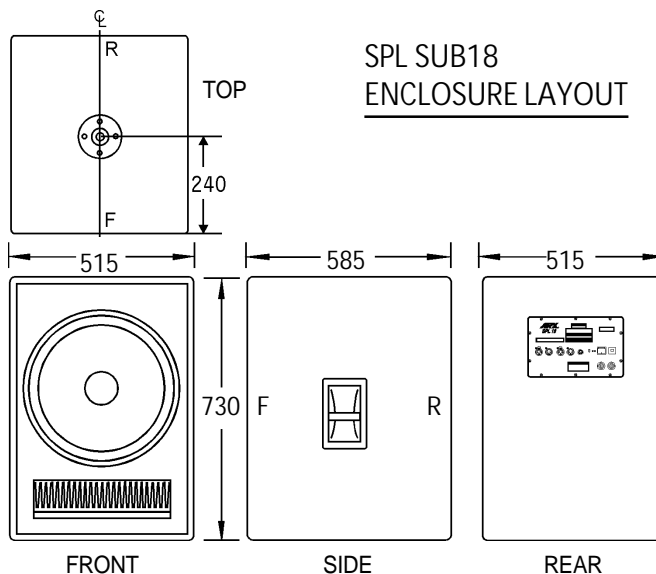
ARX Systems are based in Melbourne, Australia, where all ARX Products are assembled and tested in our 'state-of-the-art' manufacturing facility. For over 20 years ARX has designed, manufactured and supported Audio Products for Professional users and applications worldwide.



Specifications available on disk and CD ROM



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



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