



KEY FEATURES

- Very High Output
- Compact size for a very good output-to-weight ratio
- Horn-loaded configuration
- High-strength, water repellent cone
- 96KHz / 40 bit floating point CORE processing with PRONET remote control
- Digitally controlled Class D amplifier module with SMPS

APPLICATIONS

The SW121HLA subwoofer is designed to deliver high-quality low frequency reproduction where very high output is a key requirement, together with well defined and deep basses and fast transient response.

TECHNICAL SPECIFICATIONS

SYSTEM

System's Acoustic Principle	Horn-Loaded Subwoofer
Frequency Response (± 3 dB)	31 Hz – 80 Hz (Processed)
Maximum Peak SPL @ 1m	141 dB

TRANSDUCERS

Type	Single Neodymium 21" (530mm), 5.3" (135mm) VC
Cone	Carbon fiber reinforced treated cellulose cone
Voice Coil Type	Split winding four layers ISV copper coil
Suspension	Triple Silicon Spider

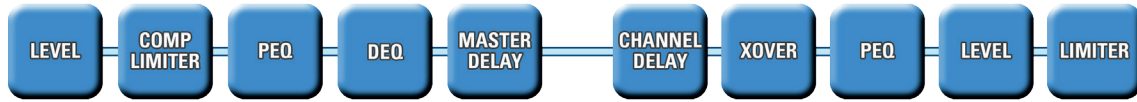
ELECTRICAL

Input Impedance	20 k Ω balanced, 10 k Ω unbalanced
Input Sensitivity	+4dBu / 1.25 V
Signal Processing	CORE processing, 96kHz / 40bit floating point SHARC DSP, 24 bit AD/DA converters
Direct access Controls	4 Presets (Standard/InfraSub/Cardioid/ User), Network Termination, GND Link
Remote Controls	PRONET control software
Network protocol	CANBUS
Amplifier Type	Class D with SMPS and PFC, Variable Switching Frequency
Output Power	4000W
Mains Voltage Range (Vac)	90 - 260V 50/60Hz
IN / OUT Connectors	Neutrik XLR-M / XLR-F
IN / OUT Network Connectors	ETHERCON®(NE8FAV)
Mains Connector	PowerCon TRUE1 (NAC3PX In/Out)
Cooling	Variable speed DC fan

ENCLOSURE & CONSTRUCTION

Physical Dimensions	
Width	589 mm (23.18") x 801 mm (31.53") x 1022 mm (40.23")
Enclosure Material	15mm, reinforced phenolic birch
Paint	High resistance, water based paint
Wheels	4 heavy-load 100 mm ϕ
Net Weight	78.2 Kg (172.40 lbs.) - without wheels

SIGNAL PROCESSING and POWER AMPLIFIERS



The system processing is based on the **CORE DSP platform** designed by the PROEL R&D Laboratories using one of the most advanced SHARC DSP for audio application. It features 40bit, 96kHz floating point resolution and top-quality 24bit AD/DA converters, for a perfect signal integrity, a dynamic range in excess of 110dB and a superior sonic performance. Thanks to its massive processing power, the CORE platform is capable of providing the most sophisticated algorithms for speaker processing, together with remote control and networking capability.



The PRONET control software, working on a solid and reliable CANBUS based network protocol, provides an intuitive interface for the remote control of the whole system, with the possibility of eqing, delaying, increasing the protections and monitoring the status of the amplifier.

The SW121HLA is powered by **DA SERIES** digital power modules, a new generation of CLASS D power amplifier with digitally-controlled SMPS. The innovative technology used for these amplifiers (including also the use of a variable switching frequency) offers performances at the top of the range, such as a superior sound definition at any audio frequency, very high dynamics also for low level signals and very low distortion even at the maximum power. The superior sound quality can be compared with top-of-the-range AB-class analog systems, while the DA modules feature a higher dynamics, very compact size and light weight and efficiency above 90%.



The DA module employed for powering the SW121HLA includes a universal regulated switch mode power supply with PFC (Power Factor Correction) and delivers in an ultra-compact package a maximum power of 4000W.

