JBL

EON518S Portable Self-Powered 18", Bass-Reflex Design

Professional Series

Applications:

- Live sound reinforcement, speech and vocals, music playback in entertainment, A/V, and institutional venues – especially when ease of use and portability are important factors.
- Extending the low-frequency output performance of powered and non-powered full-range speaker systems.
- Optimized for complete compatibility with EON[®] full-range speakers.

Features:

- ► 500 watt High-Performance Powered Subwoofer System
- True portability weighing only 29.5 kg (65 lb)
- ▶ Compact enclosure
- Designed handles with comfort rubber grips for easy transport
- ▶ 18" Differential Drive[®] low-frequency driver with neodymium magnet for low-distortion and light weight
- Efficient Class-D digital amplifier technology
- Stereo balanced loop-through outputs
- Integrated and switchable High Pass Filter on loop-through outputs
- Easy "daisy-chain" connections for extending the system
- ▶ Polarity reverse selector
- Integrated 36 mm pole mount socket for sub/satellite applications
- ▶ Rugged DuraFlex[™] finish

The EON518S is an 18-inch, direct radiating, high performance powered compact subwoofer system. Designed to extend low frequency performance of any EON system. It also offers the convenience of an integrated crossover and stereo loop-thru capability. The EON518S is comprised of a 460 mm (18") Differential Drive[®] woofer driven by a 500 watt Class-D digital amplifier.

The amplifier input panel offers stereo or mono line level inputs via balanced XLR connectors as well as a single channel speaker level input via a ¼ inch TS phone jack. Signal processing, crossover functionality and limiting for the system is integrated into the input section functionality. Overall subwoofer input sensitivity is controlled by a single easy grip knob and a simple switch enables polarity reversal for sub/satellite system optimization. Signal present and limit lights indicate performance status. An additional switch is provided to defeat the illuminated logo in theatre applications.

The enclosure has been engineered for maximum performance and absolute minimum size. Constructed of 18 mm plywood it is coated in JBL's rugged DuraFlex[™] finish. It also features a full screen-backed steel grille designed into a rugged copolymer bezel for maximum component protection. For comfortable portability the EON518S features two large ergonomic rubber grip handles.



Specifications:

System Type:	Self powered 18", bass-reflex design
Frequency Range (-10 dB):	36 Hz - 130 Hz
Frequency Response (±3 dB):	42 Hz - 100 Hz
Crossover Frequency:	120 Hz (HPF selectable on outputs)
System Power Rating:	500 W continuous, 1000 W peak
Distortion:	Less than 0.1% at rated power
Maximum SPL:	129 dB
Signal indicators:	Limit: Red LED indicates input overload condition Signal: Green LED indicates signal present
Input Gain:	- Infinity to +4 dBu
Input Impedance:	Nominal 20k Ohms (balanced)
Polarity:	0° or 180° phase shift
LF Driver:	1 x JBL 268G 460 mm (18") Differential Drive [®] integrated woofer with dual voice coils, 4 ohm impedance
Enclosure:	18 mm, plywood
Suspension / Mounting:	36 mm pole socket on top
Finish:	DuraFlex [™] finish
Grille:	Powder coated perforated steel with acoustically transparent black screen backing.
Input Connectors:	Balanced XLRs with loop through (stereo) to balanced XLR satellite outputs. ¼" Speaker level input.
XLR Pin Assignments:	Pin 2 (+), Pin 3 (-), Pin 1 (GND)
AC input:	120 – 230 V, 50/60 Hz
Dimensions (H x W x D):	617 mm x 569 mm x 652 mm (24.3 in x 22.4 in x 25.7 in)
Net Weight:	29.5 kg (65 lb)

JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

EON518S Portable Self-Powered 18", Bass-Reflex Design

On Axis Frequency Response

Block Diagram



Dimensions



22.4 (569)





Dimensions in inches (mm)

Input Panel





www.jblpro.com

the rules of sound

artseries.→



ACTIVE SPEAKER

RCF ART 310-A is an active, wide dispersion 2 way sound reinforcement speaker, . It integrates a high power 350 watt amplifier, a complete electronic processor section and RCF low distortion, high power neodymium transducers. The system is unique in its class for output and vocal intelligibility.

The new 10" neodymium woofer is the result of the latest refinement in year of RCF experience in compact 2 way speakers. Features a 2,5 " voice coil, very high efficiency and controlled bass reproduction.

The compression driver uses a new 1.5" Mylar dome design and optimised geometry radial phase plug. This innovative design is powered from a high flux neodymium magnet offering a very open and natural midrange sound with extreme precision in high frequency reproduction.

A generous 2 step class H design is used to power the low frequencies and the compression driver amplifier is a warm and clear class AB design.

The input section presents a XLR input connector that is switchable from microphone to line levels. A master volume control and a useful XLR loop through link guarantee the best versatility.

All the system is housed in a strong , very lightweight, polypropylene composite enclosure . The woofer is protected from a strong, powder coated, metal grille. The cabinet features 2 M10 threaded fly points, a 35 mm stand adaptor plus an ergonomic top handle for easy transportation.

Applications

ART 310-A is the reference speaker in the 10" size. Incredible amplifier power, high quality neodymium transducers, very compact size cabinet. From live sound, playback and monitoring to corporate events and presentations, ART 310-A is the ideal speaker in all the situations where the output of a PA and the size of a studio monitor is required. Superb deep bass punch, very linear and precise frequency response.

Features

- 350 watt Monolithic bi-amplification, 300 watt low frequency and 50 watt high frequency power
- 127 dB max SPL
- Wide dispersion, 90 x 70 low distortion, constant directivity horn
- 10" neodymium high power woofer
- 1" neodymium, high frequency driver
- Electronic equalization, phase alignment, limiter and protection
- Mic/Line XLR input, XLR signal output
- 1 comfortable top handle for easy transportation and positioning
- Two M10 fly points and built in pole mount adaptor

ACOUSTICAL SPECIFICATIONS

Frequency response:	50 - 20 Khz
Max SPL:	127 dB
Coverage angle:	90° x 70°
Directivity Factor; Q (DI):	10.5 (10)
Compression driver:	neo 1"
Woofer:	neo 10"

INPUT SECTION

Input signal (Impedance):	bal/unbal
Input connector:	jack/xlr
Output signal connector:	xlr
Input sensitivity:	0 dBu
Mic. input sensitivity:	-40 dBu

PROCESSOR SECTION

Crossover frequencies:	1800 Hz
Protections:	DC / short cir.
Limiter:	fast limiter
Master volume:	yes
Music / Voice eq:	yes
Remote control option:	yes

AMPLIFIER

Nominal power:	350 Watt	
High frequencies:	ab / 50 Watt	
Low frequencies:	H / 300 Watt	
Cooling:	Convection	

PHYSICAL

Composite PP
21.14" x 13.27" x 12.4" (537x337x315 mm)
27.34 lbs. (12,4 kg)
2 M10 flying points
1 top
yes
Antrhracyte gray











Normalized Vertical off-axis Response. Below the box



the rules of sound



Horizontal 1/3 Polar Plot













Vertical 1/3 Polar Plot













CSI PRODUCT SPECIFICATIONS FOR DESIGNERS, SPECIFIERS, AND CONSULTANTS (ALSO KNOWN AS "A&E SPECIFICATIONS") The following are "Part 2 Products" CSI-type specifications. It is assumed that "Part 1 General – Administrative and Procedures" and "Part 3 Execution – Installation and Maintenance" are part of an overall audio system or project specification. PART 2 PRODUCTS

2.01 Approved Manufacturer/Product

A. RCF, Via Raffaello 13, 42010 Mancasale, Reggio Emilia, Italy.

B. Model number: ART 310A

2.02 Design

Configuration	Compact 2 way speaker
LF Sub-section	10" woofer, 2,5" voice coil
HF Sub-section	1" neodymium

2.03 Acoustical Proprieties

Nominal dispersion angle:	Horizontal: 90° - Vertical: 70°
Axial frequency range:	50Hz-20kHz

2.04 Physical Properties

Cabinet:	Composite PP
Rigging inserts:	2 M10 fly points and built in pole mount adaptor
Color:	Anthracyte gray
Grille:	Custom perforated steel grille with open-cell poly fiber backing
Input Connectors:	jack/xlr
Dimensions (H x W x D):	21.14" x 13.27" x 12.4" (537x337x315 mm)
Weight:	27.34 lbs. (12,4 kg)

2.05 Accessories

AC S140

Alluminium speaker floor stand with folding base end telescopic rod, tube Ø 35 mm





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