SCHOLAR Model 118

Install Version

The SCHOLAR Model 118 is one of the finest subwoofers available for sound reinforcement applications. It is intended to enhance the performance of fullrange loudspeaker systems by providing maximum lowfrequency impact. Its single 18-inch woofer is rated to handle 600-watts RMS. Sonic integrity, high SPL output, moderate size, and application flexibility make the Model 118 unique among subwoofers. From the lowest to the highest sound pressure levels, the Model 118's design provides unparalleled bass articulation and musicality. Effective when used in single-cabinet applications, the Model 118's performance excels when used in a multi-cabinet array configuration. Due to its innovative enclosure geometry multiple cabinets couple very effectively, resulting in excellent bass definition and room-pressurizing effect.

The term SCHOLAR is MacPherson's acronym for Self-Cornering-HOrn Line ARray, describing the Model 118's unique deployment characteristics. When arrayed in a self-cornering vertical line array, the result is optimum low-frequency summation and directivity control. With a SCHOLAR array, a veritable "acoustic corner" of low-frequency output is created. In this way multiple cabinets take advantage of their own bandspecific eighth-space loading.

The Model 118 utilizes a band-pass design with critically damped tuning to achieve numerous performance advantages. Unlike most subwoofers that require extensive electronic manipulation, the Model 118 does not require any special processing. Only the standard high-pass and low-pass functions provided by an electronic crossover are required for optimal reproduction.

How does the SCHOLAR Model 118 sound? Rather than modifying or exaggerating the source material, the Model 118 faithfully reproduces only the intended low-frequency slice of the audio spectrum. Unwanted content, primarily cone distortion, is trapped by the acoustic properties inherent in the enclosure's design. The result is nothing short of stunning—room pressurizing, highly defined low-frequency impact. When first



experiencing the Model 118, the absence of the distortion associated with most other subwoofers is immediately apparent—the Model 118 simply doesn't have the typical "sub" sound. The magic of the Model 118's performance becomes even more evident when it is used as part of a complete reinforcement system. Then the articulate low-frequency output plays its part in a properly implemented full-bandwidth system.

A natural question arises as to how one Model 118 will compare to a high-quality direct-radiating dual 18-inch subwoofer. In some cases, one Model 118 may not produce as much apparent SPL as a dual 18-inch design. When compared one-on-one using only low-frequency content it may not seem as "loud." But in many cases the difference can be misleading, as the distortion inherent in direct-radiating systems is often perceived as loudness. But this is type of perceived loudness is certainly unwelcome! When combined with full-range cabinets, as in a normal listening environment, the Model 118's effective loudness becomes very prominent. Thanks to the highly efficient coupling in the recommended SCHOLAR configuration, two Model 118's will completely dominate one dual 18-inch subwoofer.

- **Features** Excellent in array configurations
 - Highly musical reproduction
 - Minimal unwanted artifacts
 - Available attachment points for overhead-suspension applications



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In fact, they will often outperform two dual 18-inch subwoofers as well. But raw SPL is only part of the story, the real strength of the Model 118 is its sonic excellence. The result is impressive—dynamic, accurate, and musical.

The Model 118 Install Version was optimized to provide a cost-effective solution for permanent installation applications. The physical dimensions of the Model 118 were carefully selected to maximize usefulness. With an overall height of just over 23 inches, cabinets can be used under stages, designed into theatrical sets, incorporated into dance-club facilities, and used in many space-limited applications.

The Model 118 Install Version is available in two configurations. The standard configuration is intended for permanent applications that do not involve overhead suspension. Four heavy-duty thermoplastic skid rails are incorporated into the cabinet. They serve important physical and acoustic roles. The rails provide protection for the cabinet's finish, as well as interlocking adjacent cabinets when used in an array configuration. Acoustically, the skid rails provide a high-impedance interface between each cabinet and adjacent surfaces. This works to maintain the energy within the Model 118's enclosure, helping to preserve the character and accuracy of the reproduced signal.

The second install version contains 16 threaded fastener attachment points for overhead-suspension applications. These attachment points allow a Model 118 cabinet to be suspended individually or secured into a grid system. The attachment points are not intended for use in a cabinet-to-cabinet suspension arrangement.



Two Model 118-IN Subwoofers in a SCHOLAR Configuration

SCHOLAR Model 118 Install Version Specifications

Standard Configurations

M118-IN: Install Version

M118-INF: Install Version with Attachment Points

Frequency Response

 \pm 3dB, 30Hz to 120Hz

Recommended Crossover Points

30Hz high-pass, 80Hz low-pass, 24dB per octave

Nominal Impedance

8 ohms

Sensitivity

98dB, one watt, one meter

Maximum SPL

126dB, broadband, one meter, one minute

Recommended Amplifier Power

600 watts RMS into 8 ohms

Connectors

Two, Neutrik NL4

Attachment Points (M118-INF)

16, 3/8-16 threads. Mating fasteners require minimum thread length of 1.25 inches.

Enclosure

Hardwood plywood, textured black lacquer finish, powdercoated perforated steel grill with open-cell foam backing

Dimensions - Overall (M118-IN)

23.2 inches high (58.9cm)

35.5 inches wide (90.2cm)

30.0 inches deep (76.2cm)

Includes skid rails on two surfaces

Dimensions - Overall (M118-INF)

22.5 inches high (57.2cm)

35.5 inches wide (90.2cm)

30.0 inches deep (76.2cm)

Weight

162 pounds (73.7kg)

Warranty

Three years from date of original purchase

Contents subject to change without notice. Dimensions provided for general reference only.



SCHOLAR Model 118

Install Version

M118-IN: Install Version

M118-INF: Install Version with Attachment Points

