

## **SB-5118/SB-7118** 18" Cinema Subwoofers

## **Features**

- SB-5118 features a 500 W, 18" transducer
- SB-7118 features a 700 W, 18" transducer
- Frequency range extends to below 25 Hz when used with the correct B6 filter
- DCP and SF-3 signal processors optionally available
- Enclosures feature vandal-resistant woofer mounting bolts





Part of the DCS Digital Cinema Speaker Series, QSC's SB-5118 and SB-7118 subwoofers offer a unique solution that addresses the requirements of digital motion picture soundtracks. Featuring a high excursion, 18" low-frequency transducer mounted in ported enclosures, these systems extend response to the lowest audible frequency.

The two custom 18" transducers were developed especially for cinema use. The woofers feature 4" voice coils and vented pole pieces to ensure cool operation, even at high power levels. Cooler temperatures increase driver lifespan and decrease power compression at high drive levels. Undercut pole pieces provide a symmetrical magnetic gap, reducing second harmonic distortion. Enclosures are constructed heavily- brucedof high-quality MDF Panels.

Large, fully radiused ports ensure smooth airflow, especially at higher drive levels. This prevents potentially audible port turbulence noise. Both internal and external port openings are flared. With symmetrical port loading, the bass ports are evenly spaced on each side of the transducers, making internal pressure more uniform across the back surface of the woofer. This prevents the cone from being displaced to one side or another by unbalanced air pressure, reducing the chance of driving the voice coil out of the center of the gap at high drive levels.

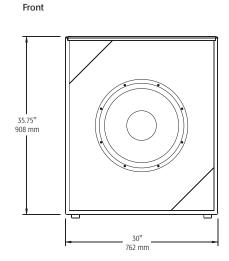
The SB-5118 and SB-7118 are specially designed cinema subwoofers, featuring 500 and 700 watt, respectively, 18" (460 mm) low-frequency transducers mounted in ported enclosures. The enclosures are tuned to 25 Hz and use a B6 alignment. These should be used with the B6 boost filter option provided by the QSC SF-3 Subwoofer Filter modules or the QSC Digital Cinema Processor to ensure extended response to the lowest audible frequencies. Meeting cinema requirements for the extended low-frequency response differentiates the SB-5118 and SB-7118 from more conventional "rock-and-roll" subwoofer systems. Their frequency range extends to below 25 Hz when used with the correct B6 filter

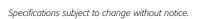
## SB-5118/SB-7118 Details

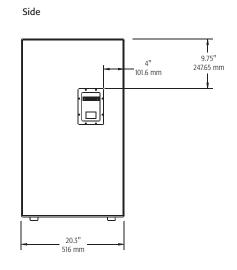
Specifications	SB-5118	SB-7118
Frequency Range <sup>1</sup>		
-6 dB half space	24 Hz – 100 Hz	22 Hz – 100 Hz
-10 dB half space	19 Hz – 250 Hz	19 Hz – 250 Hz
Maximum Output <sup>2</sup>		
Calculated Peak at Rated Power	129 dB	131 dB
Calculated Continuous	123 dB	125 dB
Impedance	8Ω nominal	8Ω nominal
Maximum Input Power <sup>3</sup>		
100 hours of 6 dB crest factor IEC 60268-5 noise spectrum	800 W RMS	1200 W RMS
2 hours of 6 dB crest factor pink noise, 50 Hz – 20 kHz, AES method	1000 W RMS	1500 W RMS
Recommended Amplifier Power	1600 W RMS maximum	2600 W RMS maximum
Sensitivity 1 watt/1 meter, half space	96.5 dB	98 dB
Transducer	18" (457 mm) 500 W high efficiency subwoofer transducer featuring a 4" (100 mm) copper coil on a Kapton former	18" (457 mm) 700 W high efficiency subwoofer transducer featuring a 4" (100 mm) copper coil on a glass fiber former
Recommended Processing	LF boost frequency = 25 Hz, Q = 2.0, Gain = +6 dB provided QSC processor	
Connectors	Barrier strip screw terminals accept up to #10 AWG stranded wire, four terminals; two inputs and two parallel outputs	
Enclosure	B6 alignment, vented enclosure with symmetrical port design, tuned to 25 Hz, constructed of MDF and heavily braced. Features vandal resistant woofer mounting bolts	
Dimensions (HWD)	35.75" x 30" x 20.3" (908 mm x 762 mm x 516 mm)	
Weight – Net	160 lb (72.4 kg)	162 lb (73.3 kg)

 $<sup>^{1}</sup>$  All frequency ranges specified refer to measured free field response (half space,  $2\pi$ ).

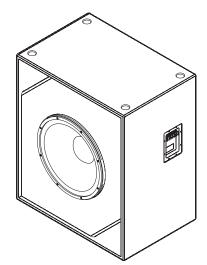
## SB-5118/SB-7118 Technical Drawings



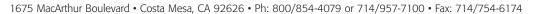
















 $<sup>^{2}</sup>$  Calculated SPL at 1m, (half space,  $2\pi$ ), speaker operating at rated RMS power with pink noise within specified frequency range.

<sup>&</sup>lt;sup>3</sup> Maximum input power tested in accordance with IEC 60268-5 recommendations, 50 Hz – 20 kHz band limiting, 6 dB signal crest factor.