

# KS118 Active Subwoofer

# FAQ

## Q. What is the difference between the KS118 and the KW181?

- A. There are many differences:
- Nearly double the peak power with a 3600W Class D Amplifier (1800 W + 1800 W bridged)
  - Custom-designed long excursion, tour-grade woofer with 4" voice coil
  - More powerful DSP, offering improved amplifier and driver protection
  - LCD display for advanced functionality and control
  - Increased output (max SPL) and frequency response (LF extension)
  - Cardioid mode settings for directional frequency deployment (requires two or more KS118 subs)
  - Backing grille cloth (similar to K.2) for a clean, professional look
  - Can be deployed both horizontally or vertically

## Q. What loudspeaker pole do I use with my KS118?

- A. The SP-16X (16" extension pole), SP-26 (26" loudspeaker pole), and the SP-36 (36" loudspeaker pole), are all compatible with any KS Series subwoofer. All pole models have M20 threads that screw into the pole cup(s) on the KS Series Subwoofers. Please consult the KS Series User Manual for detailed guidelines about loudspeaker pole combinations together with QSC main loudspeakers.

## Q. What is DEEP™ mode?

- A. DEEP™ mode is a proprietary algorithm that offers additional low frequency extension and output (optimal for bass-heavy electronic and dance music). Unlike the DEEP mode of the KW181, the KS118 DEEP mode has no incidence on sensitivity. Thus, it will allow you to drive the KS118 at lower frequencies without reducing the available headroom.

## Q. Which High-Pass filter (crossover) setting do I use with my QSC loudspeakers?

- A. Use the default 80 Hz setting with your K.2 and CP Series loudspeakers, and the 100 Hz crossover setting for KW, KLA and legacy K loudspeakers.

## Q. What does "FRONT" and "REAR" mean in the Cardioid menu?

- A. When deploying a cardioid subwoofer array, at least one KS118 needs to be facing towards the audience, and one facing away from the audience towards the stage. Consult the KS Series User Manual for deployment options that meet your space and cardioid requirements, but be sure to set the

KS118 facing towards the audience to "FRONT" and the one facing away from the audience to "REAR."

## Q. When I select either Cardioid Front or Cardioid Rear mode, the delay setting always resets to zero?

- A. Cardioid arrays rely on exact alignment of the front & rear firing subs, therefore each subwoofer in the array must be referenced to the same delay time. While this function is not disabled it is reset to zero to ensure accurate Cardioid behavior. It is important that any delay change from 0 ms be applied equally to all subwoofers in the array.

## Q. When I select the Cardioid "rear" mode, some menu features are labeled as "locked." Why can't I change those parameters?

- A. The Cardioid rear modes in the KS118 are optimized to provide low frequency directionality, so those functions will remain locked until you turn cardioid mode to "OFF."

## Q. Is my KW181 transport cover compatible with my KS118?

- A. The KS118 has its own transport cover (KS118-CVR). A KW181 transport cover may fit the KS118, but the openings to access the handles will not line up correctly.

## Q. How do I make my DSP settings (presets/scenes etc) and input gains tamper-proof?

- A. An accessory Lock-out Cover (KS-LOC) is available, and sold separately.

## Q. My K.2 Series loudspeakers have QSC Weather Covers for temporary inclement weather protection. How can I protect the KS118 from short-term weather events in outdoor applications?

- A. The KS118 weather cover accessory (KS OUTDOOR COVER, available separately) can be installed over the amplifier module for protection from direct weather, but still allowing access to the control panel and connections in both vertical and horizontal orientations.

## Q. Is the KS118 flyable?

- A. The KS118 does not have hardware intended for flying. For a flyable sub, please see the KLA181 or passive GP118-sw.

## Q. On the Specification sheet, the Maximum SPL (Sound Pressure Level) of the KS118 appears to be only 1 dB higher than the KW181. Does the KS118 only go 1 dB louder than the KW181?

**A.** When measuring the maximum SPL of a loudspeaker or subwoofer, the peak level is taken into account, but not the QUALITY of the sound at that volume. While the KW181 does a great job at performing clearly and loudly, in order to achieve maximum SPL it is well into DSP limiting and protection, and may not sound as clear at high volumes as it does at lower volumes. With the larger amplifier and new woofer in the KS118, there is significantly more headroom and dynamic clarity before the onboard limiter and protection circuitry are activated, giving you a clearer, fuller sound at higher SPLs than you could previously achieve with the KW181.

**Q. Can I use my KS118 and KW181 subwoofers together?**

**A.** While the tonality of the KS118 and the KW181 may not quite match, you can use them deployed in the same setup. The feet receivers on the side of the KS118 are placed to also receive the feet of the KW181, so by putting the KS118 on its side you can nest the KW181 on top of it securely.

**Q. Why does the rear LCD display dim?**

**A.** The rear LCD display will dim after 30 seconds of inactivity. This is to reduce ambient light glowing from the rear of the KS118 on dark stages.

**Q. What is the maximum Delay time available?**

**A.** The maximum Delay time is 100 ms, which equates to approximately 112.6 ft (34.3 m).

**Q. Can I still defeat the Front Power LED?**

**A.** Yes. Similar to the KW181, the front LED can be defeated in the SETTINGS menu.

**Q. Can I adjust the contrast on the rear LCD display in different light settings (i.e. indoors vs outdoors)?**

**A.** Yes. The contrast can be adjusted from the SETTINGS menu.

**Q. Does the KS118 REALLY have a 3600-Watts peak power amplifier, and why is that important?**

**A.** The KS118 utilizes the same amplifier that was developed for the KS212C (2x 1800 W peak, or 2x 900 W continuous) and in this case both channels have been bridged to power a single 18-inch woofer instead of running one woofer per channel. This power specification has been measured (rather than calculated, as was the industry standard when KW181 was launched).

It is important to note that none runs continuous noise when playing music through a PA system. Played-back audio is quite dynamic and live audio is the most dynamic. It is critically important that the complete loudspeaker system (not solely the driver or the amplifier) is capable of handling sharp transients, which require additional power, while the loudspeaker has been running at a constant level for some time. Subwoofer dynamic headroom is crucial in order to reflect faithfully the energy of the music. Hence, peak power is very important, perhaps even more so than continuous power in a high SPL product like the KS118.

**Q. What is the size difference between the KS118 and its predecessor, the KW181?**

**A.** If you use a KW181 positioned on its side (so that the reflex port is on the ground) and add an additional frame for the new grille, you will have the dimensions of the KS118. If you were to stack a KW181 onto a KS118 deployed horizontally, both boxes would nearly display the same width. Having rubber feet on both the enclosure's bottom AND side, the KS118 is now far more versatile in deployment than the KW181.