

## **K FAMILY**

## ACTIVE LOUDSPEAKER SOLUTIONS

Portable PA
Installed Sound
Rental Sound
TouchMix & K Family
K for Musicians









# K FAMILY ACTIVE LOUDSPEAKERS

Converging our expertise in loudspeaker, amplifier, and digital signal processing technologies, QSC has created a spectrum of active loudspeakers designed with one common goal – accurate acoustical performance for the widest selection of applications. Ranging from a compact and potent eightinch, two-way utility loudspeaker to a fixed-arcuate line array system, all K Family models feature common power modules, DSP and performance characteristics - irrespective of their size or configuration. Models are differentiated primarily by coverage angle, bass extension, woofer diameter and enclosure size. With the K Family there is no "good, better, best" – only "best, best, best".

#### **COMMON FEATURES:**

- Directivity Matched Transition (DMT<sup>™</sup>)
- Advanced DSP including Intrinsic Correction<sup>™</sup> and DEEP<sup>™</sup>
- 1000 watt Class D Power Module
- · Comprehensive patching and control
- GuardRail<sup>™</sup> Protection
- · Highly Efficient Power Consumption
- Premium-grade materials and construction
- · Easy-to-Deploy Rigging and Mounting
- · Remote Gain Control





Night after night, venue after venue, K Family active loudspeakers provide levels of performance, flexibility, portability and reliability, unparalleled by any other loudspeaker line. Designed with the user in mind, every feature is thoughtfully implemented to provide both entertainer and audience a most satisfying experience.

## INTEGRATED MIXER (MIC/LINE)

The K and KW Series are capable of connecting to just about any audio source – a microphone, MP3/CD player, a musical instrument or mixing console. Inputs can also be



KW152 Back Panel

combined and mixed at the rear panel. For instance, a microphone and CD player can be combined for background music with announcements. Or, a musical instrument, MP3 player and microphone can all be combined for solo entertainer applications. XLR outputs are provided for either loop-thru daisy-chaining of multiple K Family loudspeakers or providing a balanced output to the front-of-house or monitor mixer.

## EFFICIENT USE OF AVAILABLE POWER

All K Family products feature a highly efficient 1000 watt Class D power amplifier module which draws very little current from the wall, even at full power. A mid-size system consisting of two subs and two full-range boxes can comfortably run off a single 15A, 120VAC (8A, 230V) outlet, leaving plenty of available power for backline equipment or stage monitoring.

## THREADED SUBWOOFER POLE SOCKET, LOW-NOISE CASTERS AND TILT-DIRECT™

All K Family subwoofers feature an M20 threaded pole socket which accommodates a positive-fit threaded speaker pole. Unlike typical open-cup designs that can cause a speaker to wobble or tilt in the subwoofer receptacle, the K and KW Series threaded mounting system assures a snug, safe fit. Both the KSub and KW181 ship complete with a threaded speaker pole included. The KW181 and



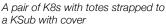
Andy Vargas

KSub are also outfitted with low-noise casters for maximum portability, while handy and durable totes and covers ensure maximum protection and convenience during transport. The K8, K10, K12, KW122 and KW152 also feature Tilt-Direct™ pole sockets allowing a 7.5-degree downward tilt with a simple turn of a dial.

#### **MAINS OR MONITORS**

In addition to providing frontof-house duty, three K Family models (K10, K12, KW122) can be utilized horizontally, as a floor wedge, providing high-output, quality stage monitoring without any compromise in performance.







KW122 on pole over KW181



#### EASY TO CHOOSE -EASY TO DEPLOY

Because of their common electronics and acoustic performance, selecting the right K Family loudspeaker is made easy. Models can easily be mixed-and-matched for perfect coverage and deployed in a myriad of ways to maximize coverage in any fixed installation. All two- and three-way K and KW models can be suspended via their M10 fittings. Additionally, all K Series two-way enclosures can be mounted to truss, beams or other suitable structures using optional yoke mount accessories. A KLA line array can be economically deployed solely via its M10 fittings — the use of an array frame is optional.

The KLA Series line array features the SOLO™

Daryl's House Club, Pawling, NY



(Single-Operator Logistics) rigging system. Entirely selfcontained, SOLO completely revolutionizes the way fixed arcuate line arrays are deployed. With this unique system, installers can quickly assemble (and disassemble) a line array in a fraction of the time of comparable systems - without the need for special tools or external hardware. In less than ten seconds, installers can quickly and effortlessly secure two KLA boxes together, significantly lowering labor costs. Light weight, self-powered and easy to deploy, KLA may very well represent a client's first real opportunity to fully embrace line array technology.

### DMT™ – CHOOSE YOUR COVERAGE

A typical line of installation loudspeakers offers a variety of woofer sizes, each combined with a choice of several waveguide patterns. This approach however, ignores one obvious point - the coverage of the woofer is unaffected by the high-frequency waveguide. Woofer coverage narrows as frequency increases! The larger the woofer, the narrower its coverage will be at the crossover point. The QSC DMT™ (Directivity Matched Transition) design concept addresses this challenge. All K Family models feature an axisymmetric waveguide matched in coverage to the directivity of the woofer at the crossover. So instead of ignoring or battling the laws of acoustics, K Family

loudspeakers work with them. The result - consistent sound reproduction across the loudspeakers' nominal coverage area. An added benefit being that every K and KW full-range model can be installed in either vertical or horizontal orientation, without the need to rotate the waveguide.

#### **ENERGY EFFICIENCY**

A common theme for modern construction is energy efficiency, and QSC has not ignored this critical

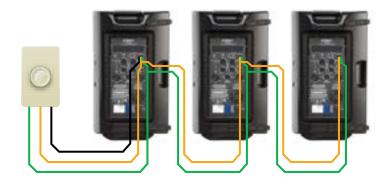
K Series with M10 Kit

requirement. Not only is the Class D amplifier in each K Family loudspeaker incredibly efficient, drawing very little current during use, but when the loudspeaker's DSP does not sense input signal for 5 minutes, it automatically enters Standby mode - effectively shutting down the amplifier, conserving energy and extending the life of the product. Once input signal is detected again, the processor instantly turns the amplifier back on without any noticeable audio delay.

#### **REMOTE GAIN**

The Remote Level Control featured on all K Family products offers the venue a clean and easy way to control the output level of an entire K Family installation using a single, simple 10k ohm wall mount pot. With the twist of a knob, the pastor, club manager or other designated personnel can quickly and easily make on-the-fly level adjustments without the need of a mixer. For greater control, two separate wall controllers can be utilized — one for the full-range enclosures and the other for the subwoofers — or better yet, controlling multiple zones.

Remote Level Control





### YOUR "GO-TO" BOX EVERY TIME

As a production company, the tools of your trade need to deliver the maximum return on your investment. K Family models can be your "go-to" products for an incredible

number of applications and may be utilized and mixed-and-matched in multiple ways. Given their sonic consistency across the entire line and combined with unparalleled flexibility, K Family products easily handle duties as diverse as front-of-house main PA, stage monitors, side or front fills, DJ monitors, backline amplification, etc. The multi-purpose design means that your K Family products will be out working for you all the time.

#### **RUGGED CONSTRUCTION**

QSC's attention to quality in design and manufacturing is legendary. Over 40 years of proven experience has gone into the development of the K Family. For enduring reliability, we've constructed the K Family from only the finest materials available. K and KLA Series enclosures are molded from the same class of high-impact ABS used for items such as auto parts and football helmets. Our KW Series enclosures (as well as all K Family subwoofers) are constructed of premium birch plywood, cut to precise tolerances using CNC routers and carefully assembled with advanced, industrial adhesives and hardware. And just for good measure, we protect all the drivers with heavy-gauge steel grilles on front of the enclosures. With construction like that, you'll rent out your K Family inventory with confidence knowing that the loudspeakers will remain in service for many years.

#### **POWER EFFICIENCY**

K Family loudspeakers feature an incredibly efficient power amplifier, alleviating concerns about AC power consumption, and in many cases the need for 3-Phase power altogether. In fact, the

amp module is so efficient that up to five K Family loudspeakers can operate on a single 15A, 120VAC (8A, 230V) circuit! Furthermore, the 100 - 240 volt universal power supply helps to prevent system malfunctions during unexpected power sags, common with diesel generators.

QSC also understands the unique requirements of audio production companies, and has purposefully added a number of production-friendly features, such as locking IEC power plugs on all K & KW models, and loop-thru powerCON plugs on all KLA models.

## EASY TO OPERATE, EASY TO DRY HIRE

The integrated mixer functions found on the K and KW Series input panel can handle up to three simultaneous inputs as well as mix and/or redistribute the incoming signal. For many AV or simple PA applications, no external mixer or direct box is required. For dry hire companies, the simplicity, protection, and fool-proof nature of K Family



2 KLA12 on pole over KLA181

loudspeakers means that you'll spend less time educating customers how to use them, they will get consistently great results in the field, and your inventory will be far less likely to be damaged by overly enthusiastic operators.

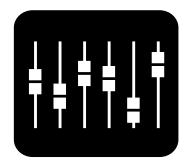
KW153, KW181 mains, KW122 monitors



K Series on a stand with Tilt-Direct™ engaged







#### **TOUCHMIX**

QSC TouchMix compact digital mixers are designed for musicians, production professionals and live performance venues that need the power and capability of a large "concert" mixing console in a compact, affordable and easy to use form. TouchMix-8 and TouchMix-16 mixers have the functionality to satisfy demanding professionals combined with a range of features and functions that help the less experienced user achieve quality results. The TouchMix has been designed with K Family in mind providing built-in, optimal K gain settings for all K models to ensure

optimal gain staging, ultra-low signal to noise ratio and ease of use, making any gig easy to set up and configure. With TouchMix and K Family, you don't have to be a sound guy to sound like one.

## Professional Results Made Easy

- Simple Mode makes getting great results easy and fast similar to the "Auto" function on a DSLR camera.
- Advanced Mode gives Pro users total control over all mixer parameters.
- Wizards and preset libraries created specifically for live sound reinforcement assist the user with channel setup, effects selection and more.

## "Big Mixer" Features and Specifications

- 4-band full parametric EQ and variable high-pass filter on all input channels.
- Full featured compressor and gate on all input channels.



TouchMix K Settings

- Four premium stereo DSP's with a full selection of professional digital effects.
- 1/3 octave graphic EQ, notch filters, limiters and delay on main and aux outputs, 8 DCA's and 8 mute groups.
- High quality microphone preamps with channel selectable phantom power.
- Multiple monitor mixes including ability to drive in-ears directly.
- Multi-track recording/playback direct to external USB hard drive (not included.) No computer required.
- Free downloadable TouchMix Control iOS (iPad, iPhone, iPod Touch) and Android tablet and smartphone app available for complete wireless control of entire mixer (tablet) or aux mix (smartphone).

#### **Compact and Complete**

- Approximately the size and weight of a small laptop computer.
- Operation via internal color touch-screen and rotary dial, mobile device or both simultaneously.
- USB Wi-Fi adapter included. No additional network hardware required for remote control.
- Includes padded carrying case for protection and easy transport.

TouchMix digital mixers and K Family loudspeakers are each remarkable products in their own right. Together, their combination of performance, versatility, ease of use and of course, genuine QSC reliability, is nothing short of amazing.



TouchMix-16 plus dual iPad's running TouchMix Control App.

5 K FAMILY

## MUSI-CIANS

The IDEAL instrument stage amplifier should accurately reproduce the instrument's full-range sound just like your favorite pair of studio monitors do - unfortunately studio monitors make poor stage amplifiers. Thanks to the unique features such as DMT and Intrinsic Correction, the K Family of loudspeakers offer studio-quality stage reinforcement for your instruments. And with 1000 watts of pure Class D power available, they are more than capable of playing at volumes that can keep up with the other instruments on stage.



Jonathan Cain

#### K FOR KEYBOARDS

K Family loudspeakers offer studio-quality reinforcement for your keyboard rig, allowing you to play with maximum dynamics and expression. And because each is outfitted with 1000 watts of pure Class D power, there is more than ample output level to drive the rhythm and support all the other musicians on stage. They also offer an incredibly flexible range of configurations so regardless of

whether you play in mono or stereo, positioned as a wedge or on a pole (or both), with a PA or without - you, the band, and the audience will all enjoy every nuance of your performance.

#### **K FOR ACOUSTIC & BASS GUITAR**

When Acoustic guitarists and Bass players walk onto a stage, the first thing they do is plug their instrument straight into a direct box to feed the main PA loudspeakers. The reason for this is simple – full-range PA loudspeakers provide the ideal sonic range to reproduce these instruments, capturing and amplifying the high frequency detail in a way that stage amplifiers cannot. This is the same reason why K Family loudspeakers make the ideal stage amplifier for your acoustic guitar or bass. Furthermore, the wide off-axis coverage of the K Family DMT waveguides means that the other members of the band can better hear and interact with you on stage.

#### K FOR ELECTRIC GUITARS

In recent years the use of amplifier modeling technology has become increasingly popular. Between the various modeling pedals, preamps, pods, i-devices and even computers, the modern guitarist has more control over the desired sound than at any time before. However many guitarists using modeling processors are finding that a traditional guitar amplifier is not entirely satisfactory. That's because the guitar amplifier adds its own colorations and characteristics to the modeled replication of an amplifier. What's needed to take full advantage of a modeling processor is a fullrange loudspeaker system designed for accurate audio reproduction, and the K Family of products provides the perfect solution.



The adoption of digital drums by mainstream drummers has reached an all time high, especially as the tactile response and sound quality of electronic drum kits becomes ever more realistic. Properly reproducing the sound of an electronic drum kit is a demanding task. The system

Dweezil Zappa



Omar Hakim

has to have the dynamic headroom to accommodate the transient snap of a snare drum, frequency response to accurately render the high frequencies of a cymbal and the power to reproduce a satisfying kick drum. The K Family is up for the challenge and will blanket the drummer, band members and audience with studio-quality drum sounds. K Family subwoofers will be especially appealing to drummers looking for the full impact of a concert drum mix. Whether choosing the small footprint of the KSub or the low-frequency extension of the KW181, both offer dual inputs and throughputs for use with a pair of your favorite K Family top boxes.



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