

SQ



**ALLEN & HEATH**

# SQ



<b>48</b> INPUT CHANNELS	<b>36</b> BUSSES	<b>12</b> STEREO AUX/GROUP MIXES	<b>8</b> FX ENGINES	<b>3</b> STEREO MATRIX	<b>AES</b> DIGITAL OUT	<b>ME</b> PERSONAL MIXING
<b>SLink</b> REMOTE AUDIO	<b>64x64</b> I/O PORT	<b>32x32</b> USB AUDIO INTERFACE	<b>DAW</b> MIDI CONTROL	<b>SQ-Drive</b> MULTITRACK RECORD/PLAY	<b>CHROMATIC</b> CHANNEL METERING	<b>7"</b> CAPACITIVE TOUCHSCREEN
<b>96</b> kHz	<b>96</b> bit MIX BUS	<b>&lt;0.7</b> ms LATENCY	<b>DEEP</b> PROCESSING READY	<b>PHASE COHERENT MIXES</b>	<b>AMM</b> AUTOMATIC MIC MIXER	

# The Sound of Speed

96kHz digital mixers for live sound, AV and installation.



Built on our latest generation 96kHz FPGA XCVI core, SQ sets a new standard for compact digital mixers, delivering pristine, high resolution audio with a class-leading latency of  $<0.7\text{ms}$ .

**Don't get left behind. Discover SQ.**



# 96kHz XCVI Core

SQ is a future-proofed, next-generation console, powered by Allen & Heath's 96kHz XCVI FPGA engine. XCVI delivers class-leading high resolution audio quality, ultra-low latency of <math><0.7\text{ms}</math>, variable bit depth for ultimate precision and noise performance, mix coherency down to the sample, and the sheer power to handle high channel / mix counts and ample FX / processing.



# Flexible Multitrack Recording

The integrated SQ-Drive makes it quick and easy to capture a 96kHz multitrack or stereo recording of the show direct to a USB key or drive. No software setup, no soundcard driver issues and no extra laptop to bring to the performance. SQ-Drive is also a smart way to manage walk-in music.

Also provided is a built-in 32x32 96kHz audio interface for multitrack recording, backing tracks or virtual soundcheck applications. The interface is Core Audio and ASIO compliant and comes complete with MIDI and DAW control capabilities.



# DEEP Processing

SQ's DEEP processing architecture allows owners to hand-pick boutique compressor and preamp emulations to suit their style and needs.

DEEP plugins can be embedded directly within the mixer's inputs and mix channels, all without adding system latency or setup hassles.

# The Mixing Experience

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With each new design, the Allen & Heath team strives to get closer to the ultimate mixing experience.

SQ's dashboard is centred around a high-resolution 7" capacitive touchscreen, framed by an array of high-grip, illuminating encoders to create an intuitive, integrated blend of clear visual feedback and immediate, hands-on control.

Channels and mixes can be dragged and dropped to any strip, with custom naming and colour coding on the colour strip displays, allowing you to build a mixing environment that mirrors your own workflow.

Each strip features our patented Chromatic channel metering system, giving you at-a-glance level indication thanks to LEDs with variable brightness and colour. A 'channel to all' mix button instantly accesses all sends from the selected channel. SQ-5 and SQ-6 offer 8 and 16 SoftKeys respectively, that can be assigned to the functions you want at your fingertips. SQ-6 also offers 4 assignable Soft Rotaries each with a colour LCD display



# Expandable up to 48 mics

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Thanks to its SLink intelligent port, SQ can also be expanded up to a total of 48 mic inputs via a family of 96kHz and 48kHz rack and stage box expanders (e.g. AB168, AR2412, AR84 and DX168), making it a flexible solution for owners of other Allen & Heath digital systems. You can even connect to another SQ or a dLive system for two way audio patching.



## Advanced AMM

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SQ's advanced automatic mic mixer (AMM) features make it a natural choice for mixing conferences, panel talks and TV shows. It's fully integrated in the mixer too, with no extra latency, so you don't need to route the audio to an internal DSP rack or an external plugin system.



# RackExtra FX

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Allen & Heath has a well-earned reputation for crafting FX emulations that rival the very best plug-ins, but with none of the associated hassle.

SQ is armed with 8 stereo FX engines and features the acclaimed RackExtra library of emulations of legendary classic reverbs, gated reverbs, delays, modulators and more.

All FX have dedicated stereo returns so you don't need to waste input channels.

# Connections



## I/O Port

The I/O port accommodates SQ option cards including Dante, Waves, and SLink, enabling applications such as multitrack recording, broadcast feeds and FoH / Monitor splits.

It also future-proofs your SQ mixer against fast-changing AoIP standards.

## USB Interface

A built-in 32x32 interface streams 96kHz multitrack audio to and from the core of the SQ, allowing access to the high quality preamps and processing without adding extra stages of AD/DA conversion. ASIO and Core Audio compliant, and with support for our DAW Control Driver, SQ is able to take on all kinds of recording and playback responsibilities.

## Network

The Ethernet network port enables SQ to send and receive control messages over a network connection. Connect an external router or access point for wired or wireless mixing control via an app, or use MIDI over TCP/IP for automation and system integration.

## SLink

SQ's intelligent SLink port supports multiple protocols allowing you to expand your SQ via our 96kHz and 48kHz remote audio units.

It lets you add ME-1 and ME-500 personal mixers directly, or using the ME-U hub.

You can even connect to another SQ's SLink port, or to a gigaACE option card in a dLive system.

# Application Diagrams

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SQ expanded using AR2412 + AB168  
40 remote inputs + 20 remote outputs + ME system



SQ expanded with 2 x DX168 for full 96kHz operation  
32 remote inputs + 16 remote outputs



SQ to SQ direct 96kHz connection using gigaACE  
Send and receive all assignable I/O



# SQ-5

16 onboard preamps. 16+1 faders.



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- 96kHz FPGA processing
  - 48 Input Channels
  - DEEP Processing ready
  - 17 Faders / 6 Layers
  - 12 Stereo mixes + LR
  - 3 Stereo Matrix
  - 8 Stereo FX Engines + dedicated returns
  - 7" capacitive touchscreen
  - SLink port for remote audio / expansion
  - 64ch I/O Port for audio networking
  - 32×32 USB audio interface
  - SQ-Drive direct recording to USB
  - AES output
  - Chromatic channel metering
  - Integrated LED illumination
  - Dedicated physical controls
  - 8 Assignable SoftKeys
  - Channel LCD displays
  - 19" rack mountable

# SQ-6

24 onboard preamps. 24+1 faders.



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- 96kHz FPGA processing
  - 48 Input Channels
  - DEEP Processing ready
  - 25 Faders / 6 Layers
  - 12 Stereo mixes + LR
  - 3 Stereo Matrix
  - 8 Stereo FX Engines + dedicated returns
  - 7" capacitive touchscreen
  - SLink port for remote audio / expansion
  - 64ch I/O Port for audio networking
  - 32×32 USB audio interface
  - SQ-Drive direct recording to USB
  - AES output
  - Chromatic channel metering
  - Integrated LED illumination
  - Dedicated physical controls
  - 16 Assignable SoftKeys
  - 4 Assignable Soft Rotaries
  - Channel LCD displays

# SQ



## Accessories

Tablet Shelf - SQ-BRACKETX  
SQ-5 Rack Mounting Kit - SQ-5-RK19X  
SQ-5 Dust Cover - AP11332  
SQ-6 Dust Cover - AP11333

# **ALLEN & HEATH**

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