

# SQ



**ALLEN & HEATH**

# The Sound of Speed

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

# SQ

SQ sets a new standard for compact digital mixers, with the fastest workflow in the industry, 12 stereo mixes +LR for ample IEM capability and comprehensive audio networking, remote I/O and recording options. Built on our latest generation 96kHz FPGA XCVI core, it delivers pristine high-resolution audio quality, an ultra-low latency of <math><0.7\text{ms}</math>, variable bit depth for optimised dynamic range, and the sheer power to embed our acclaimed DEEP plugins into all 48 input channels and all mixes.

Don't get left behind.  
Discover 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;math&gt;&lt;0.7&lt;/math&gt;</b> ms LATENCY	<b>DEEP</b> PROCESSING READY	<b>AMM</b> AUTOMATIC MIC MIXER	<b>SQ</b> 4YOU	<b>SQ</b> MixPad

## The Mixing Experience

We think that you should decide how the mixer operates, not the other way around. That's why we've packed SQ with options that let you design your own workflows. Channels and mixes can be individually dragged and dropped to any strip, with custom naming and colour coding on the displays, so you're in full control of the layout. All models feature assignable SoftKeys and SQ-6 and SQ-7 offer Soft Rotaries with LCD displays, so you get to choose which functions you always want at your fingertips. Each strip features our patented Chromatic Channel Metering system, giving at-a-glance level indication using variable brightness and colour. A 'channel to all' mix button instantly accesses all send levels and assignments for the selected channel.



## 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.

Browse the available DEEP plugins at: [shop.allen-heath.com](http://shop.allen-heath.com).



# RackExtra FX

Allen & Heath has a well-earned reputation for legendary classic reverbs, gated reverbs, delays, crafting FX emulations that rival the very best modulators and more. 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 All FX have dedicated stereo returns so you don't need to waste input channels.



# Expandable up to 48 mics

Thanks to its SLink intelligent port, SQ can be expanded up to a total of 48 mic inputs via other Allen & Heath digital systems. You can even connect to another SQ, Qu or dLive system for two way audio patching.



# Advanced AMM

SQ's advanced automatic mic mixers (AMMs) make it a natural choice for mixing conferences, panel talks and TV shows. They're 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. Two fully independent 24 channel AMMs can be utilised for two separate zones or combined into a single 48 channel AMM for larger events.



# 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 directly to another SLink port, a Qu mixer or to a gigaACE option card in a dLive system.

## DX Hub

The DX Hub features four 32x32 channel DX ports for connection of remote DX expanders, and a 128x128 channel GigaACE port for a single connection to the SQ. It is designed to be used remotely like the DX units themselves, and allows you to connect up to eight DX168s. This means you could source your 48 inputs from a selection of up to 128 remote sockets, with just one cable between FoH and stage.



# Application Diagrams

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



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



SQ expanded with 3x DX168s connected to a DX-Hub for full 96kHz operation, 48 remote inputs and 24 remote outputs



# SQ-7

32 onboard preamps. 33 faders.



- 96kHz FPGA processing
- 48 Input Channels
- DEEP Processing ready
- 33 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
- 32x32 USB audio interface
- SQ-Drive direct recording to USB
- AES output
- Chromatic channel metering
- Integrated LED illumination
- Dedicated physical controls
- 16 Assignable SoftKeys
- 8 Assignable Soft Rotaries
- Channel LCD displays

# SQ-5

16 onboard preamps. 17 faders.



- 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
- 32x32 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. 25 faders.



- 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
- 32x32 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  
SQ-7 Dust Cover – AP11334

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