

First impressions of the Allen Heath SQ V1.6
Update

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So after a long wait, Allen & Heath finally released their latest update for their SQ-Line of mixers.

This update arrived at the same time as their new SQ-Rack mixer — these two seem to have been developed alongside each other.

0.1 New Features

0.1.1 Splittable Matrices

This feature is explained easily: The existing 3 Stereo Matrices of the SQ can now be split individually to get up to 6 mono matrices.

Each Matrix has the full processing capabilities as before.

0.2 Scene Management

The Scene Management also got a considerable upgrade in terms of features and usability — even cross-fades are now possible

This is a massive win for theater or musical productions, where scenes are also often arranged into a cue list for different ensembles.

This is a completely new feature on the SQ which is well known from other Allen & Heath desks like the dLive or the SQ's a spiritual predecessor, the GLD-Line.

0.3 Rework of the USB Interface

Behind the Scenes, the USB Interface software of the SQ's FPGA seems to have been reworked completely.

Now, the SQ supports the usage of the internal USB-Recorder and the USB Audio Interface simultaneously — so no more switching between SQ-Drive and USB-B!

0.3.1 Better Latency via USB

Allen & Heath also made some enhancements to USB latency.

When measuring this, I was able to find a measurable decrease in round-trip-latency, which is really nice if using the USB interface for external effects (f. e. reverbs).

Latency Tests Testing Setup:

- Channel 1 set to USB Input 1
- Main L is routed to USB Output 1
- RTL Utility is used for round trip latency measurements
- 32 Samples at 96 kHz

Testing Results:

- V1.5.11: 12.104ms
- V1.6: 7.031ms

0.4 New DEEP Processors

This update also added two new DEEP channel compressors: A LA-2A emulation and an SSL-Bus Compressor emulation.

They are both migrated down from dLive and Avantis so sound the same as on those consoles — in my opinion, they are phenomenal, and the price warrants them over f.e. Waves plugins, which tend to be less stable than anything running on the console's own DSP.