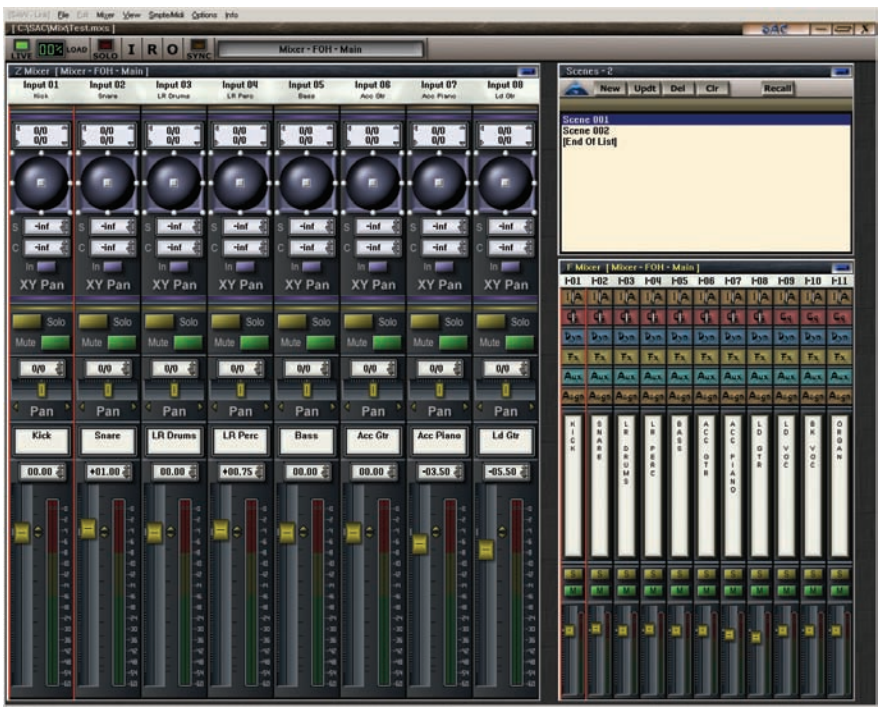
RML LABS

Software Audio Console

by Chuck Mitchell



I remember being at an AES show, in a listening room where attendees and several top engineers took turns in the sweet spot, to hear and feel the alleged psychological effects of digitally reproduced audio recordings. The audio was from one of the first digital multi-track tape recorders on the market. It was voodoo!

Years later, letting go of tape to completely trust hard drives was a heart-wrenching transition.

By the time we began virtual mixing in the studio, we realized that computer-based recording and mixing was here to stay. However, we felt uncomfortable armed with only a mouse. We needed controllers and interfaces to bridge the gap from tactile to virtual. Nowadays, I suspect that most of us are completely comfortable with the mouse for much of the mixing and actually use the controllers less than we anticipated. Looking back, every dark hallway led to another whole wing of tools and creativity.

Now we are faced with a similar challenge in the live arena. If we could escape from the box of steel and electronic components, we might actually wish for a complete, large-format, fully functional live console- not only for front-of-house, or even for video feeds, but maybe for each monitor mix as well.

That would be a huge room full of consoles, normally. With Software Audio Console by RML Labs, you not only have a FOH console, but 24 additional fully functional consoles. They can be dedicated as independent mixes for anything from monitor or IEM, to broadcast or venue mixes- all in the same, multi-remote-controllable software program. Depending on our ability to handle paradigm shifts, this could revolutionize live mixing in a similar way as what we've experienced in recording.

Many are aware of RML Labs, the exclusive but legendary D.A.W. software company that has its own small, (and devout) following of Saw Plus, Saw Pro, and currently Saw Studio users. Each PC based program has been primarily written by Bob Lentini, an audio engineer that was motivated many years ago to create a D.A.W. that felt like an entire studio. Even if you are comfortable with a different D.A.W. (and there are many that are now setting new standards), SawStudio has always been in a class of its own. Perhaps because of it looking and feeling like a real studio while being written in assembly code, avoiding much of the C++ and registry ties, allowing you to load full sessions in less than a second.

Now RML Labs has released another tool: Software Audio Console (or SAC) a software-based live mixing console, designed for live use with a PC, interface, and microphone preamps. Again, since the program is writ-

ten in assembly, it has the unique ability to work "around" XP so as to create a very stable environment, especially after following all of the Windows system clean-up steps on a good machine.

The amazing thing about the software is that it is literally "out of the box". Other than the interface hardware, the entire mixer is virtual, taking advantage of the new era of powerful PCs. With the better hardware and drivers, such as those offered by RME and others, the latency can be as low as 2 milliseconds, which rivals most popular digital consoles on the market.

At first glance, you see a behemoth 72-channel (stereo or mono) mixer that looks like any other standard high-end, large-format console. This console is born from the Saw Studio Console, but with a new way of handling live buffering.

Each channel has input source selects (L- R, Stereo), attenuation, phase select (L- R, Stereo), Swap, and six mono select variations. There are also five bands of full parametric EQ, each full frequency select, variable high and low pass filters.

The dynamics section of each channel contains a reversible gate with key and sweep-able band-pass filtering, and a compressor with the usual parameters and a gain reduction meter. There are also pre and post fader inline FX patch points that can implement Direct-X, VST, and a variety of third-party native SAW plug-ins. The main FOH console sports full 7.1 surround mixing capabilities as well.

On the output side, there are 24 output modules, each with FX plug-in patching and assignment. While the first eight are designed as assignable hardware output masters (to up to 72 hardware devices) the remaining 16 can be used as either audio sub-masters or "group latch" which functions like DCA's.

There are adjustable mixer "views"; Full, Exploded, Wide (box of all channel parameters), and "Zoom" as a scrolling channel strip. The F keys, along with Alt-F keys function as 24 presets for console views.

Navigating through the software is incredibly fast. You can also quickly select any multiple of channels and re-arrange, group-adjust and assign outputs. The Scene library list has extensive select-ability for parameters and channels, like that of any large-format console currently in the market. This is a massive, efficient, workable mixing console.

Being software-based with standard audio interfaces (up to 72 channels), all of the parameters above, with the exception of surround panning, are available on the FOH console, and each of the 24 "monitor" consoles. This includes optionally independent scenes for each as well.

This topology allows us the distinct advantage of using any combinations of mic pres you want! You are not stuck with a console full of pres that you may not want on everything. This also applies to plug-ins. You aren't limited by the wide variety of native but there are some in the Direct-X and VST arena that are actually written well enough to not affect your latency.

This is where your brain may get a little mushy. Each of these consoles can be independently remote-controlled via Ethernet using the free, downloadable "SAC Remote" PC software.

If you, like me, are a little skittish about using ONLY a mouse, touch screen, or tablet PC, then you have the option of purchasing any number of third-party controllers on the market that are supported by SAC controller driver-sets. In the case of the Behringer, you can get 24 faders if you'd like. I personally have had good success with the older Mackie controller. Each remote computer can independently use a MIDI-based controller.

I am a bit addicted to playing the mixer like an instrument. I will need to overcome and out-speed the tactile surface, like I did in recording. In the end, I am likely to end up with a laptop pad and/or a mouse.

Before you scream: "There's no way, too risky, not the ergonomic feel I'm used to!" Like hard-disk recording, we all started with: "That's crazy. I would never trust my recordings to a hard disk." Once we did, it changed everything.

This product's price is so low, and the advantages are so high that we have an obligation to first read the forums and user experiences on the SAC web site, and secondly, consider spending the mere $500 retail price to download the full version (or try out the free demo) and test it out for yourself in applications you are comfortable with. The actual cost varies based on the hardware, quantity and type of mic pres, and computer(s) you want. I happened to have 48 channels of pres and hardware for recording in one of my live venues that enabled me to explore it. So far, I have just been experimenting and haven't joined the growing numbers who use SAC rigs in real live situations who claim reliable and improved sound quality. Even so, I am completely blown away with the results and the potential implications that it brings. http://www.softwareaudioconsole.com ◆

Chuck Mitchell is Creative Audio Consultant at Voice Of The Arts, Inc. http://www.voiceofthearts.com

BY THE NUMBERS

24	72	7.1	5	$500
output modules	channel mixer	surround mixing	bands of parametric EQ	retail price