

# SSL AWS 900

**It's been one of the challenges of the era — how to combine and integrate the DAW with its mass of supporting analogue hardware. The answer is in an analogue desk with integrated and built-in DAW control — an analogue audio workstation if you like. ROB JAMES decides that someone had to do it and that others will follow.**

**D**AWS HAVE MATURED to the point where they can legitimately be considered professional audio tools for the most critical applications, including live recording. As the ends of the cost spectrum have converged into the middle ground several common themes have emerged. The emphasis has slowly shifted away from ever increasing feature lists to subjective and objective considerations of sound quality and ergonomics. In recent years it has become increasingly obvious that some form of hardware control other than the QWERTY keyboard and mouse is more than desirable in most applications and absolutely essential in others. There is a growing body of feeling that high quality analogue elements in the signal path have an increasing role to play, most significantly in music applications.

SSL knows there are a great many project and personal studios based around workstations. It also knows that to make a workstation into a successful project studio requires a bunch of other components for acquisition, signal routing, control and monitoring. If there was a state-of-the-art device combining analogue elements with DAW control, then why would people bother to do it the hard way? Especially if it could be made more convenient and familiar to use, a lot tidier and, possibly most important of all, just as affordable as a pile of outboard. This then is the premise behind the AWS 900. It pulls together an established set of analogue tools and practical DAW hardware control into a versatile and desirable package at a price accessible even to well-heeled amateurs.

Basic marketing principles dictate that a product should be designed to fulfil an identified need and be offered at an asking price that the market is likely to be prepared to pay. If the manufacturer cannot make a profit at this price there are really only two choices, compromise by cutting corners, or abandon the project. The AWS 900 carries an asking price of UK£48,500 and I carefully looked for evidence of shaved extremities. Part of the answer to the inevitable question, how can they do it for the price, is the fact that this is a 'one size fits all' product. There is only one option, the legs. If you do not need these because you want to build the console into custom furniture, or a flight case, you can save UK£500. Otherwise, if the specification fits the application, there are no compromises. Performance, engineering and sound is every bit as good as an XL 9000 K series.

So what do you get for the money? An integrated console with 24 analogue channels from the same stable as the XL 9000 K with mic, line and instrument inputs and signal processing, studio monitoring, bass management and DAW control.

The first thing that struck me about the AWS 900

was the size. It is much smaller than I was expecting. Photographs, without an operator to give some scale, are deceptive. The second impression was of solidity and discrete quality. As one indication of attention to detail, although the fader pitch is the same as an XL 9000 K, SSL commissioned special knobs for the AW 900. These are 1mm smaller in diameter and more in scale with the overall size of the board with the added bonus of providing more room for the digitally challenged (i.e. banana fingers).

The front buffer has been carefully dimensioned to accommodate the inevitable keyboard and mouse and the top of the meter bridge is deliberately angled to prevent precarious mounting of monitors. This is a completely self-contained console. Power supplies are internal and there are no cooling fans. The majority of connections are XLR and balanced jacks and there is really no necessity for a patchbay. In fact SSL will not be offering one unless somebody insists on having a one-off custom job with price to match. However, it provides a number of ingenious suggestions for customers who feel the need to roll their own. A third party supplier will be offering furniture to accommodate

## Analogue

**Each of the 24 channels has three inputs, SuperAnalogue mic, line and instrument. Flip overrides the global mic/line setting for the individual channel. The EQ section is similar, but not identical, to the XL 9000 K series. You only get a high pass 18dB/octave filter, no LPF. Default EQ curve here is E-series with G-series available at the press of a button.**

**Two FX sends are provided with primary and secondary buses plus an EFX bus to increase routing flexibility, there is also a stereo cue send with pan and an alternative B bus. Two of SSL's standard RMS compressors are assignable along with a G Series stereo mix bus compressor. There is a further compressor in the talkback chain accessible via inserts if needed. Each channel has a direct out.**

**Versatile solo modes include the usual destructive mode, an intercanceling Alt mode and a useful 'Solo in front' mode which provides a mix of stereo with the selected AFL signal. The relative levels of the AFL and stereo signals are adjustable.**

**Eight track buses supplement two main record and mix stereo outputs. The monitoring section offers two independent 5.1 main speaker outputs plus two stereo mini speaker outputs and includes four external summable 5.1 sources and four stereo. One of the 5.1 inputs has a 6-channel insert for an external processor and there is a 6-channel feed for an external meter.**

**There are masters for the two Stereo Cue and four Mono FX Sends. The EFX re-assign enables any Cue or Fx send to be used as a source for the eight track buses or the channel Direct Output instead of the pre or post channel fader signals. Two foldback mixers each have output level control, cut and AFL switches, and five summable inputs which can be sourced from the Cue STA, Cue STB, Record, Mix, External source and control room monitor outputs. Four Stereo Returns are included with Level, Cut, AFL, and discrete routing buttons to the foldback outputs, and direct access to the main Record and Mix buses via dedicated Pan and Width Controls.**

**A pink noise/tone oscillator can be routed to the track and main stereo buses.**





the console and outboard for those who require it.

An important key to understanding this board is the Focus button, which switches the focus of the surface between analogue and workstation. However, this does not mean you have access to just either or.

In the channel strips, the faders, mute, solo select and auto buttons have functions in both foci. The pan rotary encoder can also be used to adjust a variety of DAW parameters or the analogue channel level in Master Flip mode. The remainder of the surface strip is only relevant to analogue. Each channel has two meters in the upstand. These cater for stereo DAW channels with only the left-hand meter of each pair active for analogue. Two mode indicators, Edit and Rec, show which DAW channel is currently assigned to the centre section plug-in editor and show the record ready status of the DAW channel.

The learning curve will largely depend on the individual's level of familiarity with the specific DAW, especially keyboard shortcuts. Anyone who is already well up to speed with their workstation will quickly be at home with the AW 900. Versatility is a keynote. Ultimately, the modus operandi will be determined by the job in hand and the user's previous experience and preferences. For example, you could think of the system as a modern interpretation of the classic in-line paradigm but it is equally valid to think of it in 'layer' terms. As operators begin to appreciate the elegance of this surface, I believe the QWERTY keyboard and mouse will be largely relegated to housekeeping duties.

Hardware controllers and mixing consoles capable of controlling DAWs have sprung up like mushrooms in the moonlight over the last few years in flavours ranging from shitake to toadstool. All have promised much and, at best, have largely delivered. Two basic approaches to DAW control have emerged. Some manufacturers have elected to use proprietary protocols, effectively restricting the use of their controller to their own workstations, while others have followed a more open road. The most commonly used control protocol is the Mackie HUI and this is the protocol of choice here too. SSL has fully implemented it with three physical MIDI channels in and out.

## Control

Dedicated keys access many DAW control parameters. The designers have wisely eschewed a touch screen. Instead, the 5-inch TFT screen has four associated rotary encoders with push switches and four assign keys with two rows of eight soft keys. Paging keys allow viewing and control of plug-ins with many parameters. Five buttons in a vertical row give quick access to commonly used DAW windows such as the timeline or mixer windows.

Further buttons emulate keyboard short-cut and modifier keys. The upper four buttons duplicate standard computer keyboard functions, including Escape, Undo, Save and Enter. The lower four buttons duplicate the keyboard modifier keys. Used together these buttons can obviate the need for a keyboard and mouse for many operations.

The HUI protocol includes motion control so the AWS 900 includes a motion control panel with transport shortcut keys. Two rows of five buttons include the popular Audition, Pre, In, Out and Post shortcuts. The second row includes ReturnToZero, End, Loop, Q-Punch and DAW On-Line buttons. If you need 9-pin control, the DAW will have to provide it, most do.

Zoom/navigation controls allow for simple zooming, navigation and selection of DAW objects. Play, Record, Rewind, Fast Forward and Stop are big, friendly buttons but there is no reverse play... A jog/shuttle wheel performs a variety of DAW functions, depending on the individual DAW's capabilities.

The numeric keypad simply duplicates the keyboard numeric keypad of the DAW.



There is a common misconception that MIDI is either not fast enough or not accurate enough for this application. The truth is, as ever, more complex. If properly designed and implemented, a MIDI control solution can be as quick and accurate as you wish. But, the workstation implementation must be similarly well designed and executed. SSL's choice of the HUI protocol means the AWS 900 will work with all major workstations, including Pyramix, Pro Tools, Nuendo, Logic Audio, and many others, but the ultimate control performance will depend on the DAW. The same applies to automation. The console does not have a built in automation computer, the automation controls are simply remotes for workstation functions.

Before I saw the AWS 900 I was somewhat sceptical, suspecting it might be a cynical exercise in simply bolting on DAW control onto an analogue console. In truth it is nothing of the sort. My brief acquaintance with the AWS 900 was more than sufficient to convince me of the rightness of the concept and the holistic nature of the execution. One initial reaction was surprise at the relatively low number of dynamics modules from the company synonymous with a dynamics module in every channel. When I stopped to think about this more deeply, it was obvious

that a full complement of dynamics would have pushed the price point unnecessarily high for the majority of users who will never need them. Those who really do, can use the inserts to add more.

SSL has baked a most enticing confection. This is the first device that truly integrates first rank analogue console facilities with all the extra paraphernalia you really need to turn a workstation into the heart of a professional, productive, world class studio. Dedicated buttons fall readily to hand for routing, monitoring, talkback and many of the other little conveniences big-gun console users are familiar with and rightly expect.

Combine this with the same philosophy applied to DAW control and it is difficult to overestimate the benefits accruing from this level of integration. There is little or no premium to pay over the cost of assembling a piecemeal system using components of similar quality. SSL has impeccable credentials in digital and analogue audio engineering, not to mention control surface design. The AWS 900 continues this tradition and can only enhance the company's reputation.

If imitation is the sincerest form of flattery, SSL should be prepared to be extremely flattered. ■



**PROS** World class analogue for workstations; proper integration; lots of 'comfort' features; SSL logic.

**CONS** Dynamics provision will seem mean to some; SSL logic may seem odd to a generation brought up on DAWs; analogue strips more suitable for tracking than mixing in surround formats.

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