

**SIMON
TILLBROOK**
reaches for the
complimentary
Thesaurus to relate
his time with this
new pre-amp.

The SPL GainStation 1 is a single-channel pre-amp/DI that employs two custom-built Class-A amp stages supplied by 60-volt operating voltage, one solid-state and one based around the 12AX7LPS valve. These two amps are placed serially with the solid-state amp preceding the valve amp, so the stages can be used individually, or they can be combined with additive gain.

This is something that we have been using in guitar amplifiers to shape sound for some considerable time, but it is the first time I have seen this kind of amplifier arrangement in a single pre-amp unit. I was looking forward to hearing the possibilities that this would give me in such a device.

There are a few options with the GainStation 1. You can have Lundahl input transformers fitted, which give an additional 7dB of passive gain, as well as their distinctive sound plus a digital output board that can deliver 24/96 performance. My review model was fitted with both of these options, and a 3U rack shelf for mounting up to four GainStation 1s.

Front Panel

On the front panel we are presented with a row of six mini toggle switches, three rotary controls and some LEDs.

The first rotary control adjusts the amount of gain through the solid-state amp stage with up to 63dB gain

SPL GAINSTATION 1

MIC LINE AND INSTRUMENT PRE-AMP

(an additional 7dB of gain should be added to the scale with the Lundahl transformers fitted.) This is followed by the gain control for the valve amp. When fully anticlockwise the amp is hard bypassed via a relay, when engaged provides an additional 26dB of gain.

The final rotary control is for Output Level. This sits at the end of the signal chain, and can provide up to 6dB of additional output gain, or 26dB of cut.

The first toggle switch selects between microphone and Hi-Z input sources, and this is followed by a high-pass filter set at 50Hz with a 12dB/octave slope.

There is also a phase reverse switch and an impedance selector. The latter is a three-way switch that allows us to select 200Ω, 1.2 and 10kΩs options. This gives great flexibility for matching to a wide variety of different microphones types and sources.

A phantom power switch comes just before the final, and most interesting switch labelled Limiter. This can switch between two different types of limiting after the gain stages and immediately before the output gain.

The first option is a peak limiter with the threshold set to +20dBu. This employs the use of 'special' diodes that convert the signal peaks into a form of saturation to give a very forgiving and unobtrusive effect, unless driven hard of course. The other option is a FET limiter that is only available if the valve amp stage is in use. This FET circuit works alongside the peak limiter to effect a reduction in the signal amplitude. This effect is more medium to heavy compression in use.

Indicator LEDs for power, limiter, and phantom power are provided as well as a collection of LEDs for level. I found this to be a little tricky in practice. The five LEDs labelled -30, 0dB, 9, 18 and Clip show the level just prior to the output gain control. They also vary in intensity relative to the decibel increments between the LEDs provided.

The last LED with the legend AD OVL comes on approximately 0.5dB before 0dBfs.

Rear Connections

Balanced inputs for both Microphone and Hi-Z inputs are provided on XLR and TRS connectors respectively. Balanced analogue outputs on both XLR and TRS connectors are here. These are wired in parallel, so if you use both simultaneously, one with an unbalanced connector, this will cause the other socket to operate unbalanced as well.

With the digital board fitted, both SPDIF and optical outputs are available. Output resolution is set at 24-bit, but two switches allow selection between 44.1kHz, 48kHz, 88.2kHz, and 96kHz sampling frequency. A Sync Input on an RCA connector lets you sync to a master source such as a computer sound card. There is no provision for accepting word clock as a sync source.

A final TRS connector, AD in 2, allows you to access the AD converter with an external signal. This can be combined or run alongside the GainStation 1 main signal.

In Session

From the moment I first rotated the Clean Gain control, I knew I was going to like the GainStation 1. I had the opportunity to use the GainStation 1 on a variety of signals with a wide choice of dynamic and condenser microphones.

In all cases the solid-state amp proved to be very quiet and transparent. The detail of high-frequency signal was top notch, beautifully crisp transients and a solid and full

sound. With two GainStation 1 units, with stereo recording I am sure a wide airy sound could be easily achieved and controlled. The solid-state stage of the GainStation 1 is one of those pre-amps that seem to squeeze the best traits from whichever microphone you choose to use with it.

Things really start to get interesting when you slowly dial in the tube stage of the GainStation 1. Instant warm colouration comes into play. The more you increase the Tube Gain, you go from some very nice low-mid warmth to really extreme saturated sounds.

Spending time with the balance between clean and tube stages, as you would with a guitar amp, gives a very wide, sometimes surprising, but always nice range of tonal options.

Combining the two amp stages with the output limiter increases the variations possible to a much greater extent. You have to spend a little time getting a feel for the GainStation's variations, but it's time well spent. Varying the impedance of the microphone input, especially with ribbon microphones reaped good results.

Using the Hi-Z input gave equally impressive results. Not the usual tinny sounding DI, but a full, rounded, big sound was delivered with ease. □

INFORMATION

£ SPL GainStation 1 base unit £669 + VAT;
GainStation AD £669 + VAT.

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