

URSA MAJOR Space Station SST-206

The Return of the Big Bear

This stellar name takes us back to the year 1977, the year of the first digital reverberation/delay unit, the Space Station SST-282. Now, lo and behold, we have a modernised version, the SST-206, utilising today's technology, but creating effects with the characteristic sounds of the original—at a lower price.

By Philippe David

1977, the year of punk music, the year when things got turned upside down, the year Christopher Moore decided to quit Lexicon and start his own company. He plunges into digital, sets up a lab in his basement and benefits from logistic and administrative support from his former colleagues at Lexicon.

The Ursa Major Space Station SST 282, a digital reverb and echo chamber, saw the light and was sold, at that time, at one-third the price of its competitors in the same technological field. It is also the third digital reverb ever, after the EMT 250 and the Quad-Eight CPR-16, both more powerful and more expensive.

The whole first production run of 5 units of the SST-282 was sold in...France!

Eight years follow, marked by good sales worldwide.

Then, in 1986, Ursa Major is acquired by AKG.

Some time later on, Chris Moore discovers SST-282 activity on e-Bay and decides to revive it using modern technology. I remember an article by Dominique Blanc Francard in the ubiquitous magazine Zero-Vu, saying – quote: *“The annoying thing about this piece of equipment is that the complexity of controls creates unbelievable possibilities.”* Annoying or unbelievable possibilities? Unbelievable possibilities, rather...

SST-206

Exit the 3U rack chassis of the SST-282—now it is so small that it can be handheld, making it resemble the remote controls of familiar digital reverbs. However, this new Big Bear (Ursa Major in Latin) comes in an even smaller size, only 1.5 cm thick! Exit analog inputs and outputs, because Chris Moore replaced them by a single AES input/output, capable of recognizing any frequency between 32 and 96 kHz, from 16 to 24 bits. Since its nominal functioning is set to 48 kHz, this means that at 44.1 kHz the delay times will be about 10% longer, and proportionately be shorter above 48 kHz (88.2 and 96 kHz). Its power supply and AES cables are at the end of a breakout cable: too bad, because there is enough space for a Sub-D connector...Having said this, it is faithful to the original characteristics, using a powerful DSP (Motorola 56311 at 141 MHz) to emulate the response of the vintage SST-282. In its day, the converters of this machine operated at 11 bit floating point at a sampling rate of only 16 kHz, thus allowing a pass band of only 7 kHz (manufacturer's specifications) for the typical SST programs (two of the four accessible by means of the encoder situated at the lower right hand).

Vintage and modern

Chris Moore then, has carefully modeled the original product's limitations in the new programs, baptised SST Echo and SST Reverb—vintage sound indeed! But because the power of the hardware allowed going beyond that, he implemented a really very interesting room simulation algorithm, “Room”, as well as a position “Program”, offering 16 different algorithms, featuring delays, echos, slap-backs, large hall simulations and no less than 4 comb filters recalling flangers, even though there is no reinsertion.

"It would take half a dozen pages to go into the details of the numerous possibilities of this atypical processor, loaded with an impressive number of parameters," wrote Dominique Blanc Francard. The functions of the potentiometers depend on the setting of the 4 general programs of the SST-206, which at first glance makes it a complicated processor, but in the end one gets accustomed to this philosophy after a bit of practise, and in any event finds several classical effects along the way...

The input signal can be adjusted, as can the balance between clean feed and processed sound. One can play with the delay times, equalise low and high frequencies so that the timbre is modified at each repetition, the number of which is adjusted by means of the reinsertion. Pre-delay can be controlled as well as the levels of the first reflections. The 4 delay times of the Audition delay taps are set at different delay times which change according to the type of the selected effects.

On the vintage programs, echo and reverb, the processor converts the channels into mono to be reconverted into a stereo output, based on the variety of delays.

The only negative comment one could make about this otherwise very uncommon processor, is the lack of a user memory. Once the user has found an interesting setting, he will have to take notes of it.

Five stars

This little magic box sounds very good. I love the vintage emulations and the pseudo-flangers which gave excellent results on my favorite instruments, not to forget the slap-backs. This tool with a myriad of possibilities finds itself at the crossroads of experimenting and simple and straightforward use. It sounds good under all circumstances.

Plus

*The quality of the effects, the myriad possibilities, the playful ergonomics, its price.
(US\$ 1995 in 1977!)*

Minus

*A Sub-D would have avoided a restrictive cable.
Lack of user memory.*