

Seven Woods Space Station SST-206

Always a little cynical about product reissues — whether they just pander to nostalgia and if they can still bring something worthwhile to the party — **KEITH SPENCER-ALLEN** says they can be spectacular when done correctly.

THE ORIGINAL URSA MAJOR Space Station ST-282 was launched at the end of the 1970s when digital effects boxes were in their infancy. It was among the first units capable of digital reverberation and delay effects but cost about a third that of the competition.

With analogue I-O, it was principally a 255ms delay line with 24 taps. Designer Chris Moore had written an algorithm that allowed 15 of the taps to be time modulated, 8 to be paired as tap outputs, and one for echo repeat. Despite the 7kHz bandwidth, a sampling rate of around 16kHz, and audible artefacts in the tail ends of signals, it allowed a far wider range of effects than its relative simplicity might suggest, and it was easy to use. You had the impression that its creator was on your side. The Space Station sold, unchanged, until about 1986.

Almost any modern digital reverb would run rings round the original Space Station in terms of ability, would be quieter, have fewer 'nasties', and offer greater digital fidelity. So just resurrecting the original 3U rack box would not have worked.

Instead, Moore, the original designer, has taken a completely fresh look at the mechanics of signal processor design and launched the Space Station SST-206, which displays the same kind of originality of purpose. A Motorola 24-bit processor is used to simulate the original 12-bit floating-point converters, the restricted bandwidth and odd artefacts. However, Moore has also added a fully featured Room program that has no connection to the original concept at all. And the recent V3 software release has added SST+ versions of the Space Station that address virtually all of the shortcomings of the original program. So the SST-206 is now a rather different proposition.

Opening the packaging you find what looks like a knob-laden remote control, low and flat with wooden side panels, but this is the unit. A permanent 12ft cable exits the rear and breaks out into a small in-line power supply and two XLR connectors that are for AES-EBU I-O. There are no other connectors.

The compact size of the unit means it can be hand-held or sit quite happily on a console. Despite being dubious about the efficiency of this arrangement I have to report to being won over through use particularly when I found that it would wedge happily



processor. Eight of these are labelled Audition Delay Taps and are paired as L&R outputs giving four controls. These taps go directly to the output mixer and don't have any role in reverb or feedback effects. The time delay for the Audition Delay Taps are set by the audition delay patterns arranged as families of effects — rooms, combs, delay clusters and space repeats with a total of 16 options.

Additionally there are dedicated delay taps for feedback effects such as reverb, etc. These are not individually controllable but will be picked up by the Audition Delay Taps when re-circulated. For a single tap, select the SST Echo program while the SST reverb setting selects all the randomised feedback taps for a thicker reverb effect. Description beyond this explanation is wasted because the way that the controls interact means that experimentation is more profitable.

I didn't have an original Space Station to hand to compare the SST-206 to but as far as I remember it seems very similar but has a sense of cleanliness about

of material. There are certainly some occasions where the 'dirty', limited bandwidth effect of the original Space Station works. Equally the SST+ version makes some of the Space Station capabilities usable in situations where the original just wouldn't fit.

The real advantage of the SST-206 is that effective delay and reverb programs are available with easily accessible knob-per-function control. This is particularly true on the Room program where you have instant access to 12 different parameters or individual knobs.

My original questioning of the usefulness of reissued products has been undermined by this successful implementation. In straight digital reverb terms this may be missing some features but you do get a compact relatively low-cost unit (UK£899) with five operational programs, and all the character of a classic effects box. The replacement of aging original Space Stations may be the initial market but if you want a useful, unique effects device with a modern application and plenty of originality, this may be for you. ■

PROS

Original and modern versions of classic effects unit in compact form; loads of character.

CONS

Lacking features expected in modern units — parameter storage, MIDI.

EXTRAS

For those too young to have tripped over one of these units, the original ST-282 was a handsome hi-tech looking beast (for the time).



The Seven Woods website includes some valuable inside info on the genesis of the unit and a priceless snap of the fathers of digital reverb.

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analogue I-O, it was principally a 255ms delay in 24 taps. Designer Chris Moore had written an algorithm that allowed 15 of the taps to be time delayed, 8 to be paired as tap outputs, and one for echo. Despite the 7kHz bandwidth, a sampling rate of 16kHz, and audible artefacts in the tail ends of the delay, it allowed a far wider range of effects than its simplicity might suggest, and it was easy to use. The impression that its creator was on your side. The Space Station sold, unchanged, until about 1986.

Most any modern digital reverb would run rings around the original Space Station in terms of ability, to be quieter, have fewer 'nasties', and offer better digital fidelity. So just resurrecting the original Space Station box would not have worked.

Chris Moore, the original designer, has taken a completely fresh look at the mechanics of signal processing and design and launched the Space Station SST-206 which displays the same kind of originality of design. A Motorola 24-bit processor is used to emulate the original 12-bit floating-point converters, restricted bandwidth and odd artefacts. However, Moore has also added a fully featured Room program which has no connection to the original concept at all. The recent V3 software release has added SST+ modes of the Space Station that address virtually all the shortcomings of the original program. So the Space Station is now a rather different proposition.

Looking at the packaging you find what looks like a vintage remote control, low and flat with wooden side panels, but this is the unit. A permanent 12ft power lead fits the rear and breaks out into a small in-line power supply and two XLR connectors that are for analogue I-O. There are no other connectors.

The compact size of the unit means it can be hand-carryed quite happily on a console. Despite being a bit heavy about the efficiency of this arrangement I can report to being won over through use. Early when I found that it would wedge happily on a meter bridge.

As always, it's covered in rotary knobs — 12 in total — if the electronics are modern the control concept is timeless. They reproduce all the functions found on the original unit and are labelled accordingly, and some also have secondary labels that indicate their function in the new mode. All the pushbutton functions of the original Space Station are now handled by the two lowest knobs — the top one sweeping through the Audition Delay patterns with the selected function indicated by an LED, the bottom right-hand knob selects the program from SST Echo, SST reverb, Room, with the SST + modes achieved by turning the knob further clockwise causing the function LED to flash.

If you come to this unit without Space Station software, you will need to understand how it works. There are multiple output taps from the delay



processor. Eight of these are labelled Audition Delay Taps and are paired as L&R outputs giving four controls. These taps go directly to the output mixer and don't have any role in reverb or feedback effects. The time delay for the Audition Delay Taps are set by the audition delay patterns arranged as families of effects — rooms, combs, delay clusters and space repeats with a total of 16 options.

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I didn't have an original Space Station to hand to compare the SST-206 to but as far as I remember it seems very similar but has a sense of cleanliness about the sound. The new SST+ program is a revelation in comparison, with its full 24-bit operation, 22kHz bandwidth, reduced modulation noise, and a new feature — the Audition Delay Taps can now be turned off completely and so remove the early reflection from a reverb signal. In the echo mode, the delay now goes up to 670ms and the decay can be indefinite.

One of the reasons that the Space Station was much praised decades ago was the way that it was easy to create appropriate effects. Direct control of early reflections with the Audition Delay Taps allowed very thick effects to be created particularly around percussion, guitars and voice. Longer reverbs could be used while still retaining clarity, again through the use of the ADT. If the alternative was the use of an EMT plate, then this was a major creative enhancement.

I spent some time playing with the unit on a range

situations where the original just wouldn't fit. The real advantage of the SST-206 is that effective delay and reverb programs are available with easily accessible knob-per-function control. This is particularly true on the Room program where you have instant access to 12 different parameters on individual knobs.

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