Ursa Major Space Station SST 206 Reverb

BY DR. FREDERICK J. BASHOUR

Ursa Major, a small company in Belmont, MA, began selling its Space Station digital reverb and effects unit in May 1978, the third entrant in the fledgling digital reverb market (after the ground-breaking $7,000 EMT 250 and the Quad Eight CPR-16). The Space Station occupied the lowest cost segment of the market ($1,995) for the next several years and continued to sell for the next eight years. Christopher Moore was the principal founder of Ursa Major and designed both the original and the new Space Station.

While the original Space Station SST 282 was a hefty three-rack space unit, the new SST 206 is packaged in what appears to be its remote; however the "remote" is the entire unit! It can be easily held in one hand during operation, since it measures only 6.4 x 4.8 x 0.6 inches. Based on a 150 MHz Motorola DSP chip, it provides AES/EBU digital 1/O, and accepts 24-bit audio at 44.1 kHz or 48 kHz. It is powered by a small external supply built into its breakout cable and operates at all AC voltages.

FEATURES

The SST 206's unique 12-foot breakout cable is hardwired to the top side of the tiny unit. The first few feet of the opposite end of this cable are simply an IEC power cord which connects to a small in-line power supply. One foot back towards the Space Station, two short AES/EBU XLR cables emerge from a carefully-wired harness. After hooking them up, you'll have about 10 feet of cable running back to the "remote," which can be easily laid on your console or coffee table. But the Space Station's unconventional physical layout is only the beginning of its uniqueness.

All the conventional reverb units I've ever owned (e.g. Lexicon, Kurzweil, Yamaha, Roland) could be described as sharing a similar structure with factory and user presets. With this type of gear, I had always made my reverb settings by finding a suitable factory preset, and then tweaking it until its sound satisfied me. However, learning to use the preset-less SST 206 turned out to be quite a revelation. Having spent so many years tweaking presets had given me (and, I'm certain, most of my readers) a pretty good understanding and "internalization" of what the typical reverb adjustment parameters really do. Thus, after about two minutes of playing around with the Space Station's 12 knobs, I was not only fully confident of my ability to design my own reverbs from scratch, but was actually hooked on the process! Using the SST 206 for me was sort of like improvising on the piano, and now feels just about as intuitive.

Fast Facts

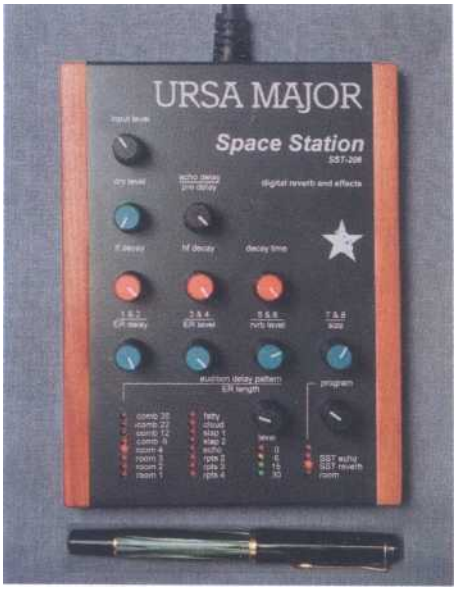
- **Applications:**
  Studio, post production, live sound
- **Key Features:**
  Classic reissue of the Ursa Major Space Station reverb and effects unit; 24-bit; 44.1 kHz, 48 kHz sample rates; AES/EBU digital I/O
- **Price:**
  $1,395
- **Contact:**
  Seven Woods Audio at 616-489-6292, www.sevenwoodsaudio.com.

IN USE

Here's a capsule description of how I went about doing that. First of all, the Space Station's 12 knobs have one of three colors of inserts - black, blue and red. Two of the four black knobs control input (dry) level, and select between the two basic SST "programs," echo and reverb, and the new modem "room" reverb. With the latest V. 3.0 firmware upgrade, each of the two SST programs has a "vintage" (7 kHz bandwidth and 80 dB dynamic range for delayed sound,) and modern (24-bit, 22 kHz bandwidth, 120 dB dynamic range) set of possibilities. The other two black knobs step you through 16 "audition delay patterns" within the SST reverb and echo programs and (in SST echo mode only), adjust the delay time of the single feedback tap.

Once I'd set the four black knobs appropriately, I'd adjust the four blue knobs, which are mix level controls for the four pairs of delay taps in SST modes, and adjustments for early reflections delay and level, reverb level and room size in the SST 206's "room" mode. The three red knobs control the familiar parameters of decay time and separate modifications to low and high frequency decay time.

The room reverberation program is a fully modern complex algorithm (possible only with heavy-duty DSP) featuring stereo input, no



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response to 22 kHz, maximum decay time of several minutes, 24-bit 1/O and processing, an independent predelay control and extensive manipulation of early reflection patterns. It is definitely competitive with the finest Lexicon, TC Electronic or Kurzweil reverbs. I was also impressed that, in over six months of use, the little Space Station never crashed, nor behaved in any way other than completely predictably.

Since I have often criticized gear for being difficult for "visually challenged" people like myself to read and adjust, I'll state here that the SST 206 is possibly the most clearly-labeled piece of equipment I have in the studio. The white lettering on a charcoal gray background is easily legible in any light, and the color-coding on the knob inserts, the 24 tiny red LEDs (at just the right brightness) in front of the audition delay algorithm choices, and the logical arrangement of its twelve controls bespeak great care and sensitivity to good equipment design.

SUMMARY

At a street price of around $1,200, the Ursa Major Space Station is certainly not the most inexpensive reverb available but, since it produces unique effects unobtainable elsewhere, and also offers a reverberation program absolutely competitive with the best available, I consider it quite a bargain! I would recommend it to any engineer who wants to "play" his reverb and effects processor like a musical instrument. Trust me, you'll have a blast!

Dr. Fred Bashour holds a Yale Ph.D. in Music Theory, and currently performs as a jazz pianist and church organist, in addition to working as a classical music producer/engineer. During the past 25 years, he has received credits on hundreds of recordings.