



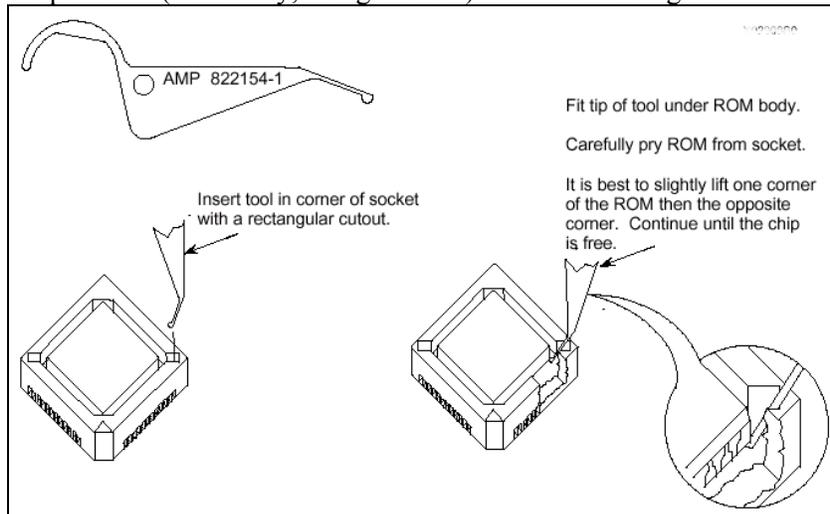
SEVEN WOODS AUDIO, Inc.
Concepts, Products, and Circuits for Audio • Analog / Digital

Installation notes to upgrade SST-206 from ver 2 to ver 3 software

Upgrade Kit contents: Version 3 software in EEPROM, Allen key, and extraction tool

Step by step instructions:

- 1) Unplug the unit from the AC mains
- 2) Remove the knobs (pull off)
- 3) Loosen the four screws that hold the wood side pieces
- 4) Turn over and remove the five screws that hold the top and bottom halves of the shell together
- 5) Turn over again and gently pry the two halves apart
- 6) Separate the top cover from the PCB (it lifts off, sometimes with some resistance)
- 7) Place the PCB on the bench with the cable extending away from you
- 8) Be sure you have discharged any static electric charge that may have built up on your body by touching a grounded surface in your work area.
- 9) Locate the EEPROM in its socket, center upper right (it's the only socketed part)
- 10) Note that the EEPROM is installed with pin 1 (small triangle on IC side with beveled edge) facing right
- 11) Use the special tool provided (the skinny, straighter end) and with the finger notch facing up



- 12) Insert the straighter end into the right lower hole between the socket and the EEPROM until it is fully under the IC corner. Gently pry up and watch as the lower right corner of the IC is lifted part way out of the socket
- 13) Move the tool to the upper left corner, reinsert, and lift again. The IC will come free of the socket.
- 14) Remove the new IC from its bag and identify the side with pin 1. Carefully position the IC over the socket so it is completely centered, with pin 1 pointing right.
- 15) Using your thumb, press the IC downwards. Stop if you feel significant resistance—this means the IC is not truly centered. Adjust its position if needed and continue until the IC descends squarely into the socket and is fully seated.
- 16) Make sure the insulator sheet is still in position snapped onto the reverse side of the PCB
- 17) Reverse the disassembly steps. Note that the box is a tight fit. I suggest first getting the top cover back in place, seated fully on the pot bushings and with the cable strain relief fully wedged into its half mounting

hole. Then squirm the bottom half into place with the other side of the strain relief fully wedged into its half mounting hole.

- 18) Replace the five bottom screws (NOTE THAT THE FIVE BOTTOM SCREWS ARE SHORTER THAN THE FOUR SIDE SCREWS—DON'T MIX THEM UP!).
- 19) Re-tighten the side screws and replace the knobs.
- 20) With the SST-206 placed so that its LEDs are visible, plug the unit into the AC mains to turn it on. You should see all LEDs flash on three times to confirm that the software is revision s and that it has booted properly.

Please call if you have any difficulty.

PLEASE RETURN THE EXTRACTION TOOL AND THE EEPROM TO ME AT THE ADDRESS BELOW.

Description of changes

In Software Revision 3, Seven Woods Audio has added new "+" (plus) versions of the original Space Station algorithms. These retain the intent and basic character of the original product, but improve upon them by taking advantage of a new algorithm invention and the full bandwidth and signal resolution inherent in the Motorola DSP chip.

The new "invention" is an algorithmic modification that at last gives Space Station users the ability to vary the level of the audition delay taps while retaining a constant mid to late reverberant tail. This answers the plaintive query of old, "Yes, but can't I have the reverberation without the reflections?" Now you can, and the difference is dramatic!

Details

Attribute	(SST-282) SST- reverb	SST+ reverb
Audition tap bandwidth	20-7kHz	20-22kHz
Modulation	62.5uS steps	20.8uS steps (reduced modulation noise))
Early reflection level control	None: early reflections are always present (audition delay taps)	Adjustable from fully off to fully on. When off, the sound field is more distant, less coherent.
Converter resolution	11 bit instantaneous floating point for 84dB dynamic range	24 bit linear PCM, for wide dynamic range.

Table 1 Comparison of original and plus versions of SST reverb mode

Attribute	(SST-282) SST- echo	SST+ echo
Echo bandwidth	20-7kHz	20-22kHz
Echo delay time (max)	256ms	670ms
Decay time (max)	About 10s.	Indefinitely long
Converter resolution	11 bit instantaneous floating point for 84dB dynamic range	24 bit linear PCM, for wide dynamic range.

Table 2 Comparison of original and plus versions of SST echo mode

The two new programs can be accessed by turning the Program control clockwise until the LED beside the SST - reverb or the SST - echo text is flashing. In the SST + Reverb program, The Early Reflection level is controlled by the echo delay / predelay control, with ER's off at full CCW and on at full CW.

Thursday, February 12, 2004