

CRANE SONG

STC-8 COMPRESSOR / LIMITER REVIEW

By Eddie Ciletti

MANUFACTURER: Crane Song Ltd., 2117 East 5th Street, Superior, WI 54880 USA Tel: 715-398-3627 Fax: 715-398-3279

APPLICATION: Audio dynamics processor

SUMMARY: Stereo or dual-mono compressor/limiter

STRENGTHS: "Shape" feature is unique and improves the functionality of Attack and Release controls. High-voltage Class A circuitry delivers +25 dBm at the outputs. Remote control of side chain.

WEAKNESSES: None

PRICE: \$3,200.00

There are a handful of classic compressor/limiters. Problem is that most are mono and no two are alike for use on the mix buss. The Crane Song STC-8 is a brand new dual-channel compressor/limiter. If you're on the fence trying to decide whether to buy new, used or retro, the STC-8's discrete Class A circuitry won't disappoint. A formidable competitor, it is unlike all recent designs — there are neither VCAs nor optical attenuators.

One control — S - H - A - P - E — alters the attack and release curves. This single feature has reprogrammed my approach to dynamics processing. I normally start with the slowest attack and fastest release settings and usually don't go beyond half of the available range for either. So many modern limiters sound like fecal matter at the fastest attack setting that I simply avoid going in that direction.

NEW DIRECTION

The STC-8 allowed me to start with faster-than-typical attack time because the "shape" control determines the severity of the processing. Like all of the pots, SHAPE is calibrated from 0 to 10 which, when turned clockwise, goes from gentle to aggressive. Once set, it allows a more usable range of both the attack and release controls.

The robust, one-eighth inch front panel is adorned with green knobs and its only "vacuum" device is a bright green pilot lamp. Pleasing to look at, the STC-8 is not at all about superficial sexy-knob hype. Inside is where the business is done — Class A from input to output, so the STC-8 always maintains sonic integrity. Only the control circuitry uses ICs.



A FEW WORDS ABOUT LOGIC

The STC-8 is a stereo (or dual-mono) device with a logical front panel layout. No kidding. How many dual-channel devices place the bypass switches at the farthest possible extremes? I've got car-pool tunnel from such products. On the STC-8, all of the toggle switches are in one centrally located column. From top to bottom, these are: Left Channel IN/OUT, Right Channel IN/OUT, STEREO LINK and MODE. MODE selects the odd/even harmonic content. (More about that in a moment.) Bypass is hardwired via relays.

COMPRESSOR AND LIMITER

There are two rows of controls for each channel. On the bottom are the compressor parameters — THRESHOLD, ATTACK, RELEASE and SHAPE. The top row includes the Peak Limiter THRESHOLD pot, a sixteen-position PRESET switch, a three-position meter switch and the GAIN pot.

Access all compressor parameters by setting the PRESET switch to the "V" at the 5:30 position. Each quadrant of this switch has A, B and C presets which are optimized for vocals, punch and program averaging, respectively. Three of the four quadrants have "smart" features like Auto Release and dynamic Attack MODification. A-MOD allows the peak limiter to modify the attack time of the compressor.

The south-east quadrant features the beaches of the Carolinas as well as a tour of Graceland in Memphis. OK, it's really the three "ABC" presets and the aforementioned fully-variable position. The ability to lock in certain parameters while leaving a minimal number of tweaks provides a useful starting point. (A full disclosure of preset defaults are in the manual.) In addition, the Attack Modification feature makes the compressor do more of the dirty work, freeing up the peak limiter — which is broadcast fast — to do a more precise job.

THE MANUAL

The operator's manual is clearly written and thorough as well as being an excellent tutorial on dynamics processing. That and using the STC-8 actually taught me something. Illustrations show how the STC-8 modifies the attack envelope, graphs indicate how the compressor and limiter interact and a chart attempts to quantify elusive attack, release and ratio variables. Also included is a block diagram and the pinout for the unconventional side chain port, a DB-15 connector that includes remote activation. Inputs and outputs are standard XLR connectors.

VERY ILLUMINATING

The STC-8 has a very useful LED bargraph display to indicate gain reduction, peak reduction and output level. When set to gain reduction, a single LED confirms that the peak limiter is engaged. As mentioned earlier, the MODE switch selects the harmonic content. Fast release times typically generates odd-order harmonics (HARA mode). The MODE switch can turn these into more pleasing even-order (octave) harmonics (KI mode). On program, this effect is subtle, but when I really squashed a drum kit, HARA mode is brighter while KI mode is warmer.

EASY LISTENING

I challenged the compressor/limiter with bare vocals, acoustic guitars and lots of program. "Before" and "after" program samples are available below or at Craig Anderton's Sound Stage and Studio (keyword SSS on AOL). Mix buss compression is a challenge easily met by the STC-8. Presets make smoothing bass or vocal tracks easy with enough reserve power to zoom in and makes tweaks.

The Crane Song chassis is both physically and sonically robust. A major contender, it is versatile without compromise. And, unlike products that have lots of questionable features crammed into no space, STC-8 users won't go blind or suffer repetitive stress syndrome. The STC-8 makes it easy to get in to the ballpark. You'll work very hard to throw it a curve.