

## DESCRIPTION:

The Standard Audio STRETCH is an API 500 series multi-band compression unit inspired by the classic tape Noise Reduction units from the 1970s and 1980s. While Noise Reduction units were typically used for reducing tape noise, engineers and producers would often “misuse” them and modify them to create sounds unobtainable by available compressors, limiters, and equalizers.

After analyzing many classic and vintage Noise Reduction units, the modifications performed, and the methods of use, we designed the STRETCH from the ground up to enable the modern engineer/producer to easily recreate those classic techniques and take them further.

## FEATURES/FUNCTIONS:

The input signal is split into 4 frequency bands and then each band is individually compressed with preset ratio, attack, and release settings tailored to each frequency band.

- LF Band: 20Hz - 110Hz
- MF Band: 110Hz - 3kHz
- HF3 Band: 3kHz - 20kHz
- HF9 Band: 9kHz - 20kHz
- Filter/Compression pushbutton: lets the user cycle continuously through 7 different filter combinations. Orange HPF and LPF front panel LEDs indicate the different combinations. The combinations are represented as follows:

ACTIVE BANDS	LF LED	HF LED	DESCRIPTION
LF, MF, HF3, HF9	OFF	PULSE	Full band but with added top sparkle above 9kHz
LF, MF, HF3	OFF	OFF	Full band
HF3	OFF	DIM	High End only (3kHz & up)
HF3, HF9	OFF	ON	High End only (3kHz and up with extra push above 9kHz)
LF	OFF	ON	Low End Only
LF, HF3	ON	DIM	Low End & High End Only
LF, HF3, HF9	ON	ON	Low End & High End only (with extra push above 9kHz)

- 100% analog signal path
- Highest quality, high reliability amplifier circuit design. High quality filter capacitors for filter stages.
- Engage pushbutton: Enables/Disables true hard-wired relay bypass circuit. Unit is engaged when pushbutton LED is lit.
- Filter/Compression pushbutton LED: Indicates when any of the active filter stages has reached 2dB of compression.
- Input Control: Allows the user to set the gain structure through the unit so that the desired amount of compression is occurring.
- Output Control: A post-mix circuit output level control allows the engineer to set the output level to DAW/Tape without altering the mix blend.
- Mix Control: Blend the STRETCH signal in with the un-processed input signal to vary the amount of effect desired.

## INSTRUCTIONS:

To use STRETCH: Start with the mix knob turned fully clockwise so that we may hear the 100% wet STRETCH signal. Since the STRETCH compression works on a unique range of level, we need to adjust the source level so that we are within the band of compression.

Adjust the STRETCH input control until the LED/Pushbutton labeled “Compression Filter” starts to light up with signal level. This indicates that the STRETCH compressor section is starting to work and that signal is hitting the compression threshold. At this point, you will begin to hear the compression.

Pressing the Compression Filter pushbutton switch will cycle between the seven different filter modes. Depending on the signal level and frequency content, you may need to adjust the input level control with the different filters engaged in order to hit the compression threshold. The compression/Filter LED will light up when signal in any active filter stage passes the compression threshold.

Once you have selected a filter mode and adjusted the input level, you may want to blend the wet signal in with the dry, unaffected input signal. By turning the Mix knob counter clock-wise, you can blend in the desired amount of effect. The output knob is post-mix knob and will change the level being sent to any device connected to the STRETCH output.

The engage pushbutton will toggle the true-hardwire relay bypass of the STRETCH.

## SOME RECOMMENDED USES:

- Add sparkle and air to Vocals (Lead and Background)
- Add low punch and/or bite to Drums (Kick, Snare, Toms, Rooms)
- Pull bite out of or add consistent sub to a bass guitar
- Sweeten and add air to acoustic guitar and strings
- Parallel process busses (even mix buss!) and add excitement and depth that cannot be replicated with any other available compressor or EQ combination.

For some 500 series based consoles (API 1608 for example), it may be necessary to connect the Stretch via unbalanced output to interface with the console properly. We have provided a jumper (labelled J2) on the Stretch PCB that lets the engineer choose the output configuration. Using the provided shorting plug, connect pins 2 & 3 for balanced operation (factory default). Connect pins 1 & 2 for unbalanced operation. Please do not hesitate to contact us if you have any questions.