## **Exciters/Enhancers**

Exciters, or enhancers, create a brighter, more punchy, more detailed sound that is full of presence. Though they make the sound seem louder, they don't actually raise the peak signal level at all.

Exciters need to be inserted in-line so that there is no phase discrepancy between the processed and unprocessed signals.

## Types of Exciters:

- (1) Harmonic Exciter useful for replacing highs and detail. The signal is sent to a side-chain and to a high pass filter. The signal is then subjected to distortion which adds high frequency harmonics. These harmonics are then filtered so that the resulting harmonics are confined to the upper register. This ultimately brightens the sound. Be careful to use only a subtle mix of the processed sound.
- (2) Dynamic EQ An EQ is a type of exciter. You can dynamically shape an EQ setting by patching an audio signal into an EQ, compressing the signal, then combine the EQ/compressed signal with the unprocessed signal.
- (3) Phase Manipulation Enhancer Since high frequencies don't travel as far as low frequencies, some enhancers function to try and correct that problem. They do this by slightly delaying the low frequencies.
- (4) Sub Harmonic Synthesis Creates the impression of deep bass. The signal is first routed through several bandpass filters, then sent to a flip-flop circuit which halves the frequencies producing a note an octave lower. The more highcut filtering used in the EQ stage, the more smooth the result will be.