Red 7
microphone preamplifier and dynamics

The Red 7 is a combined microphone preamplifier and compressor/de-esser. As with the Red 6, the inclusion of the microphone preamplifier in the Red 7 makes it an excellent recording tool, since it can accept mic level input (from microphones and low output instruments) in addition to line level input (such as from a tape machine or high output instrument).

Instead of using a channel on a mixing desk when recording from a microphone, you can use the Red 7 to record direct to a track on tape, monitoring using the tape return from the tape machine. This ensures the highest quality signal onto tape, since it removes unwanted elements from the signal chain and so reduces the amount of noise added to the signal.

There are four separate parts to the Red 7:

- Microphone preamplifier
- Compressor
- De-esser and Exciter
- High-pass filter

Microphone Preamplifier

The microphone preamplifier has all the features of a single channel of a Red 1, with the following additions:

- You can switch between mic and line level inputs using the switches on either side of the meter. The red switch to the left of the meter activates the mic level input, and allows you to use the mic gain control next to it. The green switch to the right of the meter activates the line level input, and allows you to use the line level gain control

- The gain switch for the microphone input (labelled 24 - 60) modifies the amount of gain available with the gain control. When the gain switch is not lit, you can add between -6 dB and +24 dB gain to the input signal; when the switch is lit, you can add between 24 dB and 60 dB gain.
- The gain control at the right hand end of the module in a final fader level output. This lets you trim the output level of the Red 7 to match the input level of the next device.

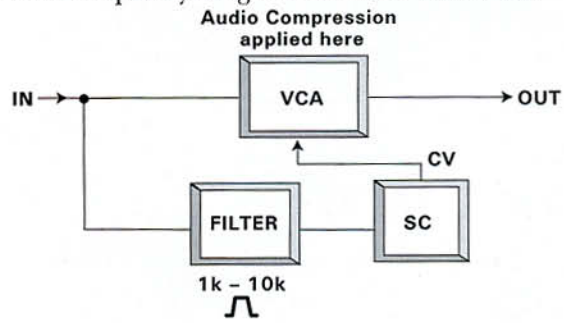
If you need information on how to use any of the other features of the microphone preamplifier, refer to the section on the Red 1 earlier in this guide.

Compressor

The compressor has all the features of a single channel of a Red 3. If you need information on how to use the compressor, refer to the section on the Red 3 earlier in this guide.

De-esser and Exciter

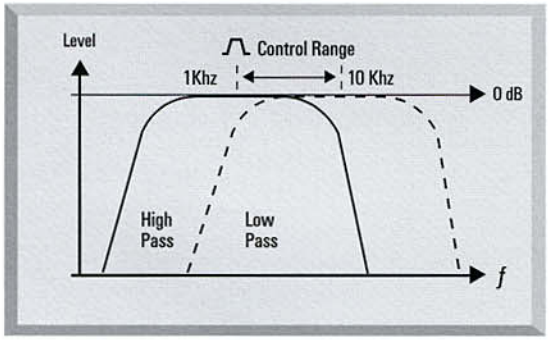
The de-esser lets you remove excessive sibilance from a vocal performance, by selecting the frequency range that contains the sibilants and heavily compressing when the frequency range exceeds the threshold.



The exciter is the opposite of the de-esser - it amplifies the selected area of the frequency spectrum. It is good for resurrecting an old recording, or for restoring the dynamic range of an instrument, so putting life back into it and letting it sit higher in the mix.

Controls

⎍ controls a band pass filter, which is a combination of high- and low-pass filters on a single control. As this control is adjusted, both filters change in unison, blocking the high and low signals so that only a narrow band of frequencies can pass between them.



Moving the control isolates different small parts of the frequency spectrum. Move the control until you start compressing the frequency range containing the sibilance, or start amplifying the frequency range you want to restore with the exciter.

High-pass Filter

The high-pass filter is provided to remove rumble and bass lift on microphones, since the Red 7 is designed so that it can be the only item in the signal chain between a microphone and the tape machine.

For more information on a using high-pass filter, see the section on the Red 2 earlier in this guide.