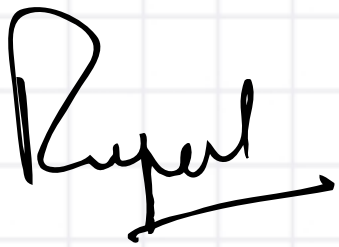
Compressor/Limiter

System 9098

Classic Design
Performance & **Reliability**
The **Magical** Sound of
Mr. Rupert Neve
Brought to you by **AMEK**

"The inclusion of a Compressor/Limiter in my System 9098 product family is justified by the continuing popularity of the famous old 2254 devices I designed in the late 1960's. More than 25 years later, their performance undeniably still brings benefits to engineers and producers seeking inconspicuous control over the dynamic range of microphone signals. The same principles have been applied to the System 9098 Compressor/Limiter.
"Considerable advances have been made in technology and I am now able to provide a much more flexible device which retains all of the character and musicality of the original design while incorporating some exciting new features."



Compressor

Threshold/Ratio/Attack/Release
These controls effect the dynamics of the compressor by controlling how much the signal is compressed and how long it takes to reach full compression and return to normal.

Auto
The release time can be automatically varied depending on the nature of the incoming signal. Short term overloads will release quickly and long term overloads more slowly.

Hard Knee
The "Hard Knee" switch selects a less gradual shape to the compression curve.

Limiter

Level
Sets the maximum signal level to pass through the limiter.

Release
Changes the time taken for gain reduction to return to zero after limiting.

Fast Attack
Selecting "fast attack" allows even short term transients to cause gain reduction.

Output Gain
The drop in output level caused by compression/limiting can be compensated for using the output gain control.

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Side Chain In
Selecting "Side Chain In" allows equalisers or delays to be inserted into the side chain which feeds the compressor. This means gain reduction can be frequency dependent.

Ambience
The ambience switch is a unique feature of the RNCL, which allows background (ambient) noise to be reduced and various other useful effects.

Gain Reduction
When selected to "G/R" the meter indicates '0' in the absence of an input signal or any gain reduction. If the signal exceeds the compression threshold or limit level, the amount of gain reduction is displayed.
In ambience mode, the meter continues to show the amount of compression or limiting, but due to the nature of the ambience mode, no longer reads the reduction in the output signal level.

AMEK

by Rupert Neve the designer®

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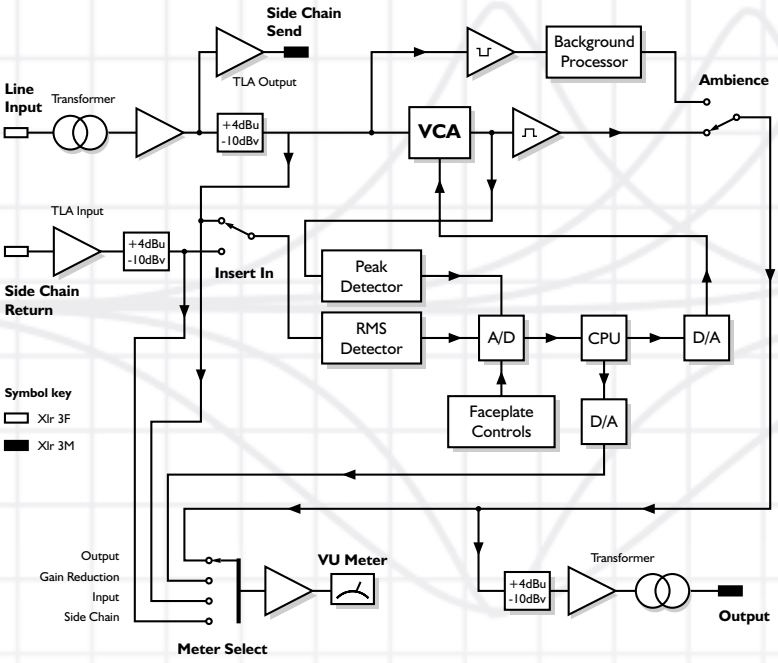

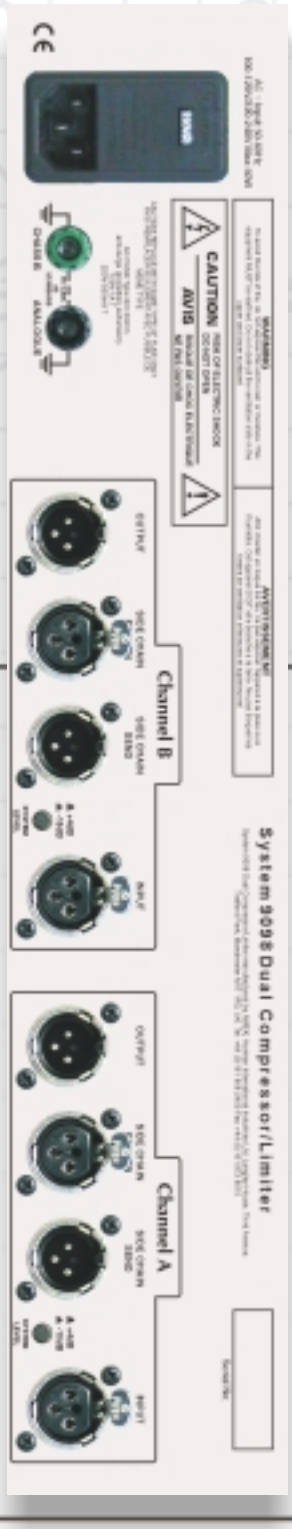

Specification

Noise - 150R source. Measured with RMS rectifier, 22Hz - 22kHz filter.

No lim/comp in circuit	-100 dBu
Lim and/or comp. in circuit	-92 dBu

Frequency Response - measured from a 150R source and driving a 10K load. Compressor & limiter in circuit but no gain reduction.

20Hz - 20kHz	+/-0.2dB
<10Hz and >120 kHz	-3dB

THD + Noise - 1kHz tone from a 150R source and driving a 10K load.

+20dBu output - no comp/limiter in circuit	0.002%
+20dBu i/p compressed @ 3:1 to give +10dBu o/p	0.006%
+20dBu i/p limited to give +10dBu o/p	0.006%

Crosstalk - One channel i/p @ +20dBu. Signal (w.r.t. +20dBu) measured at other output.

better than 105dB at 20Hz and 1kHz
better than 90dB at 20kHz

Note: Figures apply whether or not limiting/compression is enabled.

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