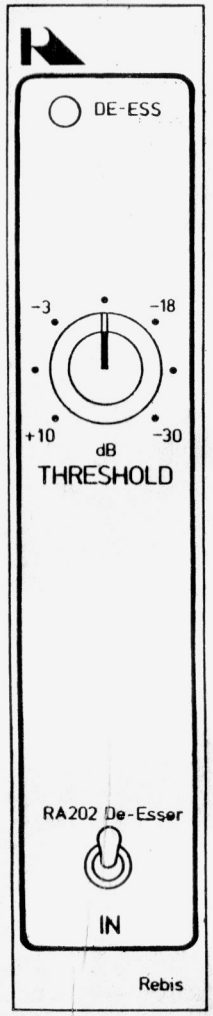
RA202 De-esser

OPERATORS MANUAL

Rebis Audio Limited,Kinver Street,Stourbridge,
West Midlands,DY8 5AB,England.
Telephone: (0384) 71865.Telex: 335494.



OPERATION

The RA202 works by compressing the signal when both (a) the 5 to 20KHz element rises above the threshold setting and (b) the level of the 5 to 20KHz band exceeds the level of the 20Hz to 5KHz band.
Compression is applied to the whole audio band to reduce not only the sibilance, but also the low frequency wind noise which is often associated with it.
The ideal position in the signal path for the RA202 is post eq and compression and pre reverb, special effects, etc.
Attack, release, ratio and frequency perameters have been pre-set so the operator has only to adjust the THRESHOLD control to achieve the effect required.
The IN/OUT switch enables the signal to bypass the electronics entirely, but the DE-ESS indicator remains operative to assist set-up in 'live' situations.
Note: A De-esser can only process one vocal track at a time, so simultaneous processing of a number of voices will require an RA202 for each track.

INSTALLATION

Pin Connections.

1) Keyway Slot.
9) Main 0 Volts.
10) +24 to + 40 volts
11) Screen.
13) Screen.
14) Output .
15) Screen
16) Input.

Pins 11, 13 and 15 are connected to 0 volts on the module.

Screened cables should be used for all signal connections, the screens being connected to 0 volts at the edge connector only for inputs and at the jackfield only for outputs.

Earthing.

When installing the module in a Rebis Frame ensure that it is firmly screwed in and that the rack is earthed, as it is essential both for safely and screening that the front panel is ultimately connected to mains earth.

TEST BENCH NOTES

Before proceeding with any set up instructions it is essential that the module has reached the temperature at which it will be working in its final position.
Allow at least an hour on power in the rack before unplugging the module and moving it to the test connector.

Equipment:

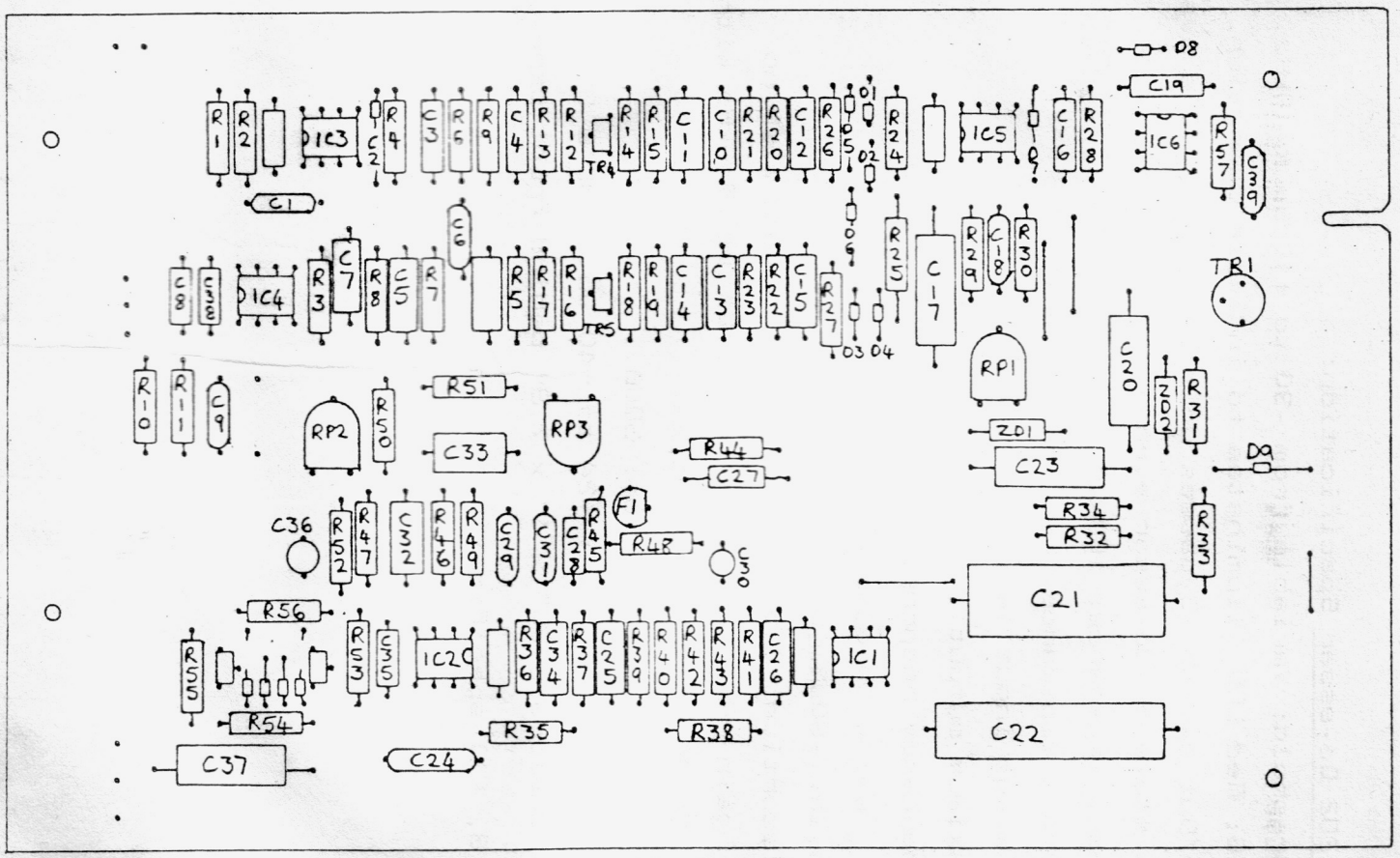
1.Sine-wave oscillator.
2.Millivoltmeter calibrated in dBs.
3.Distortion meter that works at 10KHz.
*N.B. If item 3 above is not available do not touch RP2 either in preliminary or set up instructions.

Preliminary:

THRESHOLD control fully anticlockwise.
RP1 and RP3 fully anticlockwise.
RP2 centred.*
Switch down.

Procedure:

1.Inject 1KHz @ 0dBm into input from oscillator. Meter module output and adjust RP3 until reading falls by 0.5dB.
2.Change input signal to 10KHz @ +10dBm.Adjust THRESHOLD control until output level is 0dBm, then turn RP3 anticlockwise until output rises 1dB.
3.Reduce input to 0dBm @ 10KHz and adjust the THRESHOLD control so that the output falls by 0.5dB.Now adjust RP1 so that the LED just comes on.
4.* Increase input back to +10dBm @ 10KHz, connect distortion meter to output and trim for a null.Now adjust RP2 for a minimum reading.



RA202 LAYOUT

RA202 De-esser Specification:

Threshold: Variable from -30 to +10dBm @ 10kHz.

LED: Red LED illuminates to indicate operation.

In/Out switch: Bypasses unit entirely.(LED shows state of de-esser even when switched out.)

Input impedance: 100kilohms.

Output impedance: Less than 1 ohm.

Maximum input level: +24dBm.

Maximum output level: +23dBm.

Frequency response: +0 -1.5dB 20Hz to20kHz. (Below threshold)

Noise: -80dBm,bandwidth 20Hz to20kHz.

Distortion: 0.05% THD @ +20dBm @ 1kHz with no gain reduction.Less than 0.2% THD @ 6kHz with 20dBs of gain reduction.

Maximum gain reduction: 30dB.

Power requirements: +24 to +40 volts DC @ 50mA.

Dimensions:5.25" x 1" x 7.9" behind front panel.

N.B. All specifications quoted with 40v supply.

Rebis Audio Ltd reserve the right to alter designs and specifications without prior notice.