



rm4 – Technical Details

The microphone amplifier and equaliser are taken from the Raindirk Audio professional range of recording consoles. All controls are very functional and responsive with overlapping frequency ranges to provide comprehensive signal manipulation. The rm4 is a full wide band unit with absolute minimum of colouration and phase changes and wide frequency response and high noise margins. The rm4 module has a microphone amplifier, a simple compressor and short equaliser and variable high pass filter. An internal power supply is fitted using a toroidal transformer.

INPUT Low noise microphone amplifier with a gain range of 10 to 70dB
Wide frequency response -1dB at gain 30dB, 6Hz to 75KHz The signal falls away
Typical figures -1dB at gain 50dB, 19H to 75KHz smoothly above 75KHz
-1dB at gain 70dB 10Hz to 75KHz without distortion.
Low CMRR and distortion . @ gain 30dB CMRR >70dB 50Hz to 20KHz
Input, electronically balanced, impedance 3.3Kohms.
Line level input via high impedance input attenuator to microphone input, input impedance 33Kohm.
Input noise level R_s 50 ohms B/W 20Hz to 20KHz, EQ out.
-132dB at a gain 70dB, 62db margin
-125dB at a gain of 40dB, 85dB margin
-100dB at minimum gain, 5dB, 95dB margin
Phase change switch.

COMPRESSOR A simple single FET compressor offering 2:1 compression and a threshold level control. Originally included to satisfy the clients who were overdubbing TV advertisements, jingles etc. to prevent amplifier overload when voice artists varied their voice level!

EQUALISER High frequency control Shelving response
Frequency turnover points at 8K and 12KHz
Gain range +/- 15dB.
Mid frequency controls Full parametric with control of frequency and b/width.
Frequency range 25Hz to 1K6Hz plus x10 range switch
extending range to 250Hz –16KHz.
Band width 0.5 to 5
Gain range +/- 15dB
Bass control Shelving response.
Frequency range 30 to 360 Hz
Gain range +/- 15dB
EQ BYPASS SWITCH

HIGH PASS FILTER Outside main equaliser with its own in/out switch.
Used for effect or eliminate low frequency rumble.
Attenuation slope -12dB per octave.
Frequency range 25 to 360 HZ.

OUTPUT Electronically balanced, 60dB at 50 Hz and 10KHz

CONNECTIONS Final inputs and outputs via XLR connectors. (Pin 1 Ground, 2 hot & 3 cold).

