

**HiFi ENGINE®**

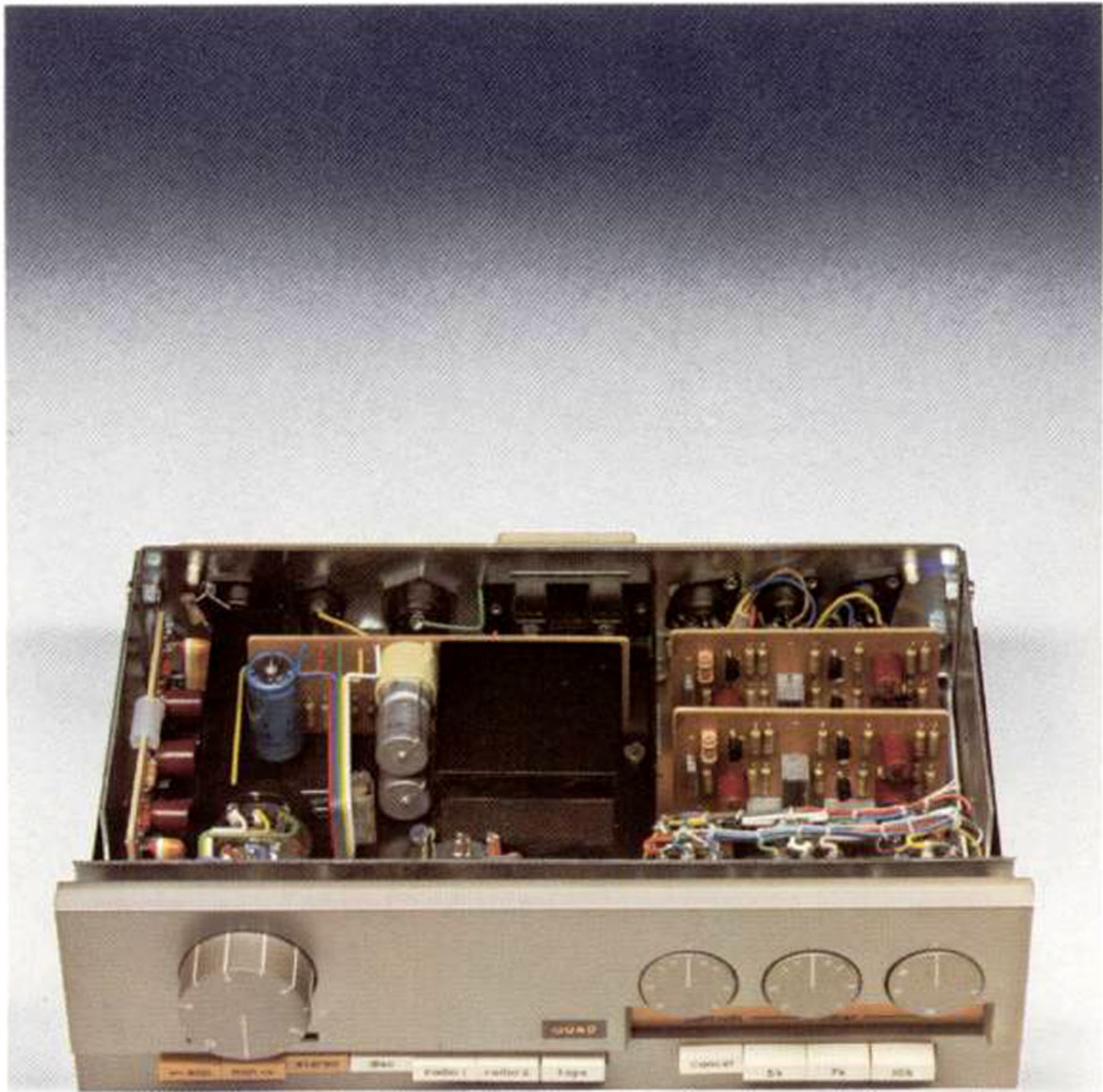
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# QUAD

33







The external design continues the Quad tradition of practical simplicity, which has won prizes and worldwide acclaim. The internal appearance is unmistakably Quad and reflects concern with quality of manufacture and ease of service.



# QUAD 33

## Control Unit

The Quad 33 selects and controls the radio tuners, gramophone pickup and tape recorder connected to it and feeds the loudspeakers via the power amplifier, providing for stereo, or mono on either or both channels, from all inputs, plus monitoring and track selection facilities for tape.

Quad units may be used either free-standing or mounted in a cabinet, with plenty of scope for individual preference in layout design.

The standard Quad system of mounting is used, requiring only a rectangular cut-out for which a template is provided.

### **Controls**

The controls are comprehensive but simple and are logically grouped to facilitate selection and control of the programme.

### **Filters**

The filter is essential with modern good quality speakers and helpful at any time. It removes surface noise, tracing distortion and similar shortcomings in the upper frequency range of the recording or broadcast, and the two control filter system\* achieves this to a very fine degree without intruding unnecessarily into the harmonic range so essential for realistic reproduction.

Another fixed, built-in, filter cuts out (without affecting the normal low frequency response of the equipment) unwanted signals at frequencies below 20Hz, due to mechanical causes in motors and turntable mechanisms.

### **Bass and treble**

Entirely separate from the filters are the bass and treble controls which provide independent adjustment of tonal balance when required. This operation is symmetrical and smooth without any unpleasant 'steps' in the response.

### **Every pickup correctly matched**

To change the pickup matching, merely remove the Disc Adaptor and plug it in again with another edge leading: four matching circuits on one board with provision to accommodate any future development in pickup design simply by changing the board.

The input load is purely resistive over the entire audio bandwidth.

### **Tape**

Any signal passing through the Quad 33 may be recorded without affecting normal reproduction or monitored off the tape (AB monitoring) as desired. The plug-in tape adaptor carries independent pre-set adjustments of signal level for both recording and replay on each channel, to suit the tape recorder in use. Again, since this is a plug-in board, any future or special requirements can be met merely by replacing the board, thus adding further to the versatility of the Quad 33.

\*a major feature of Quad equipment since 1950.

# QUAD 33

## Quad 33 Control Unit Specification

**Distortion:** All controls level, 0.5V rms output, with any input 0.02%; any control settings and any level within overload ratings <0.1%: both at 30–10kHz.

**Residual Noise:** 0–30 phon weighting 15.7kHz bandwidth: <–90dB controls level or cancel.

**Frequency Response:** Any input, any output, RIAA or flat as appropriate:  $\pm 0.5$ dB 30–20kHz.

**Tone Controls:**  $\pm 1$ dB of curves shown opposite.

**Filters:** To curves shown opposite at 5kHz, 7kHz and 10kHz  $\pm 5\%$ .

**Interchannel Balance:** Within 1dB with volume control varied from maximum to –45dB.

**Balance Control Range:** 9dB either way.

**Crosstalk:** Dependent on input source impedances. Replay/record typically better than 70dB; interchannel typically better than 40dB: both at 30–10kHz.

**Power input:** 100–130 or 200–260V. 50–60Hz. 1.5 watts.

**Weight:** 3Kg.

**Dimensions:** Width 260mm. Height 92mm free-standing, 83mm panel only. Depth 165mm free standing, 140mm behind cabinet panel when mounted. (Allow 64mm beyond rear panel for connectors).

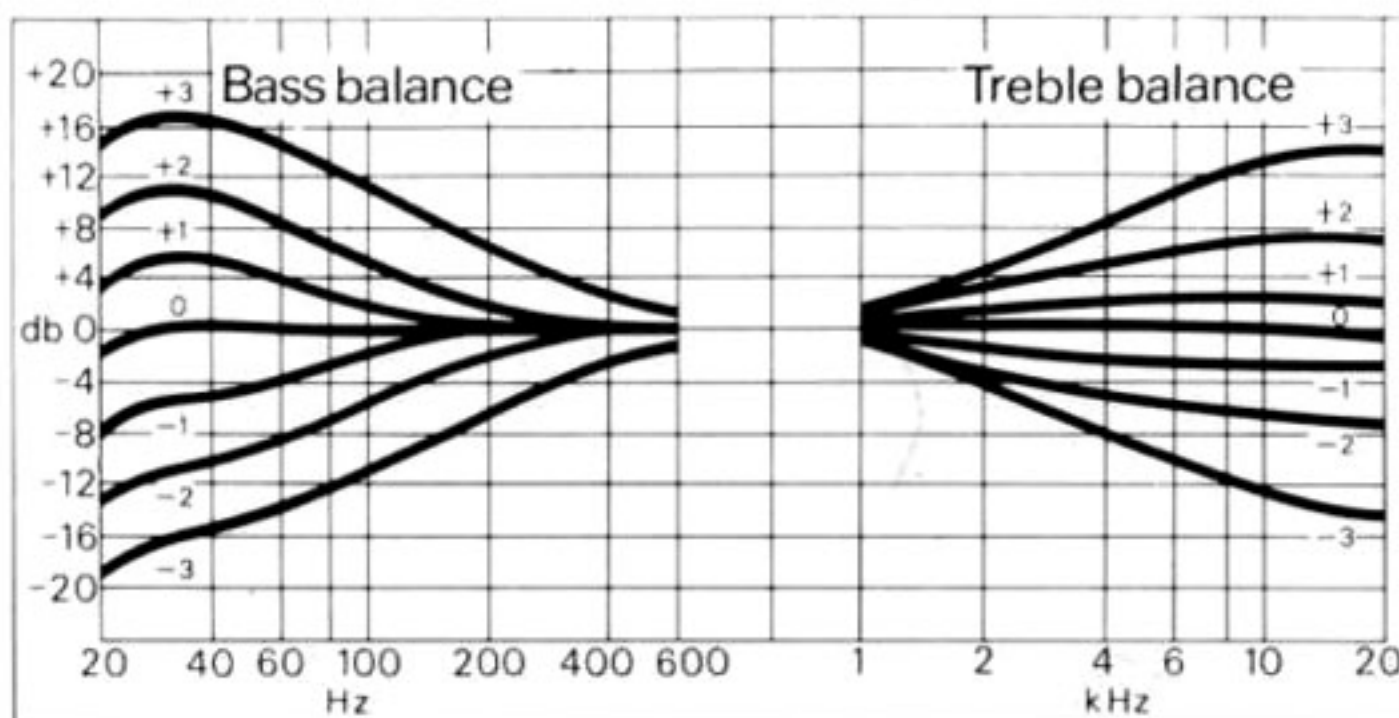
### Inputs (all voltages rms)

	Rec. Source Impedance 1.	Load Impedance 2.	Input Level for 0.5V Main Output 3.	Maximum Input 4.	Signal to noise referred to level in Col. 3. 0–30 phon weighting.
Radio	20K $\Omega$ or less	100K $\Omega$	100mV	2V	>85dB
Tape Replay	H any	40K $\Omega$	1V	10V	>85dB
	M any	40K $\Omega$	400mV	4V	>85dB
	L any	40K $\Omega$	100mV	1V	>85dB
Disc	M1 Low Output Magnetic 0.5–2mV/Cm/Sec.	68K $\Omega$	2mV at 1kHz	40mV at 1kHz	70dB
	M2 High Output Magnetic 1.5–6mV/Cm/Sec.	68K $\Omega$	5.6mV at 1kHz	120mV at 1kHz	80dB
	C1 Ceramic 450–800pF 25–80mV/Cm/Sec.	Special	100mV at 1kHz	1.2V at 1kHz	
S	FOR SPECIAL REQUIREMENTS				

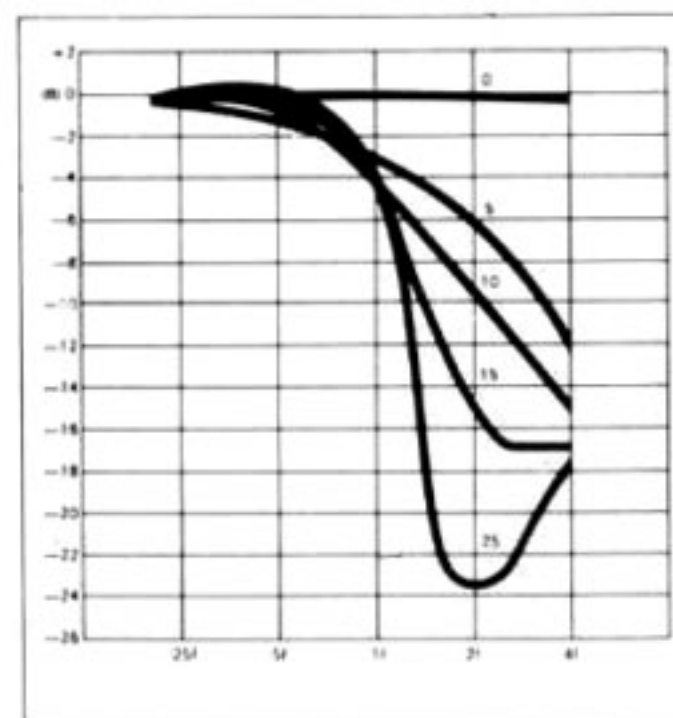
### Outputs (all voltages rms)

	Level	Source Impedance	Recommended Load Impedance	Maximum Cable Lengths – Using 20pF/ft Screened Lead.
To Power Amplifier	0.5V	1K $\Omega$	10K $\Omega$ or over	100 feet
To Tape Recorder	H 100mV*	200 $\Omega$	25K $\Omega$ or over	150 feet
	M 20mV*	800 $\Omega$	any	any
	L 3.7mV*	180 $\Omega$	any	any

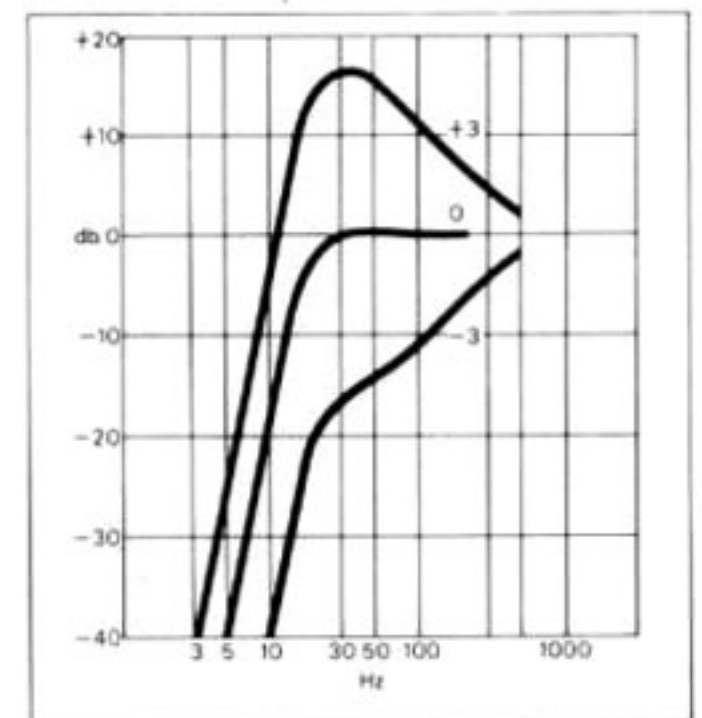
\*30% programme modulation



Bass and treble controls



Variable high frequency filter



Fixed low frequency filter (at limits of bass control settings)

**QUAD** for the closest approach to the original sound

The Acoustical Manufacturing Co. Ltd., Huntingdon, England.



QUAD is a registered trade mark.