

the overall dynamic range at the output from all sources, but it was considered that when the amplifier was driven into slipping, the subjective effects were rather rough. However, with an output around 100W this will hardly apply to domestic conditions.

Subjectively, this was considered to be a particularly 'clean' amplifier at all power levels, and overall there is much to praise in its design, construction and performance.

#### General Data

Hum modulation at rated output into 8 $\Omega$	
50/100/150Hz	0dB
Damping factor ref 8 $\Omega$ at 1 kHz	65
D C offset at loudspeaker and headphones L/R	13/17mV
Crosstalk at 1W output 100Hz/1kHz/10kHz	-68/-62/-43dB
Loudness control effect ref 1kHz 100Hz/10kHz	+5/+1dB
Frequency response deviation from 20Hz to 20kHz aux/tape/tuner	<0.5dB

#### Power performance

Power output into 8 $\Omega$ both L/R	94W
Power output into 8 $\Omega$ single L/R	110W
Power output into 4 $\Omega$ both L/R	—W
Power output into 4 $\Omega$ single L/R	—W
Burst output into 8 $\Omega$ single L/R	121W
Burst output into 4 $\Omega$ single L/R	—W
Power output into half rated load L/R 4 $\Omega$	163W
Power bandwidth 8 $\Omega$ 40W L/R	10Hz to 23/43kHz
Power bandwidth 4 $\Omega$ —W L/R	—kHz

#### Distortion

Total harmonic distortion at 1W into 8 $\Omega$	
1kHz/10kHz	0.03/0.04%
Total harmonic distortion at 1W into 4 $\Omega$	
1kHz/10kHz	—%
IM distortion at half rated power into 8 $\Omega$	
DF2 1/10/100kHz	>80/76/38dB
IM distortion at half rated power into 8 $\Omega$	
DF3 1/10/100kHz	>80/>80/52dB
IM distortion at 1W from auxiliary input DF3	
1/10/100kHz	>80/>80/>80dB
IM distortion at 1W from phono input DF3	
1/10/100kHz	>80/>80/70dB

#### Noise performance

Noise ref to input — average L/R CCIR/22kHz	
aux/tuner/tape	100/105dBV
Noise ref to input — average L/R CCIR/22kHz	
Phono	115/116.5dBV
Noise ref to input — average L/R CCIR/22kHz	
Mic	—dBV
Output noise power at zero volume (8 $\Omega$ )	
CCIR/22kHz	0.13/0.05 $\mu$ W
Worst case volume setting auxiliary input (8 $\Omega$ )	
CCIR/22kHz	0.20/0.05 $\mu$ W
Burst dynamic range aux input ref 8 $\Omega$ worst channel CCIR	90dB

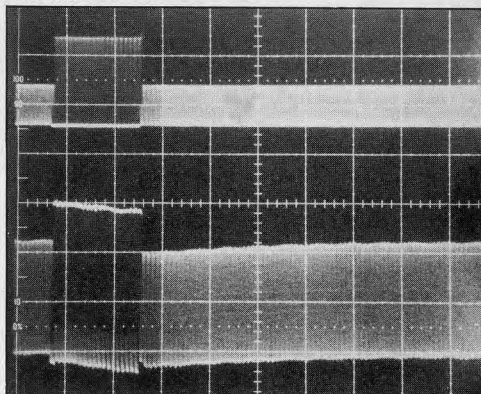
#### Inputs and outputs

Input impedance on aux/tuner/tape	
	70/51; 41/33; 78/56k 210; 230; 100pF
Input impedance on phono	46k 330pF
Input impedance on mic	—

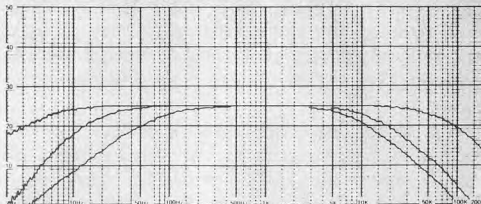
Input sensitivity and clipping point at 1kHz aux/tuner/tape	200mV 20V*
Input sensitivity and clipping point at 1kHz phono	3.1mV 380mV
Input sensitivity and clipping point at 1kHz mic	—mV
Output voltage and impedance for rated output — headphone	25V 700 $\Omega$
Output voltage and impedance for rated output — tape	200mV VARIO
Output voltage and impedance for rated output — DIN	92mV 86k $\Omega$

Typical selling price including VAT £410.00

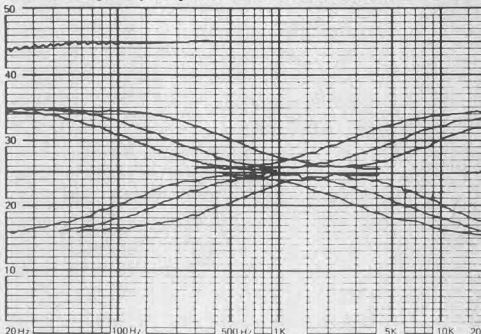
\*See text



Overload recovery performance



Overall frequency response and effect of filters



Effect of tone controls and accuracy of RIAA equalisation