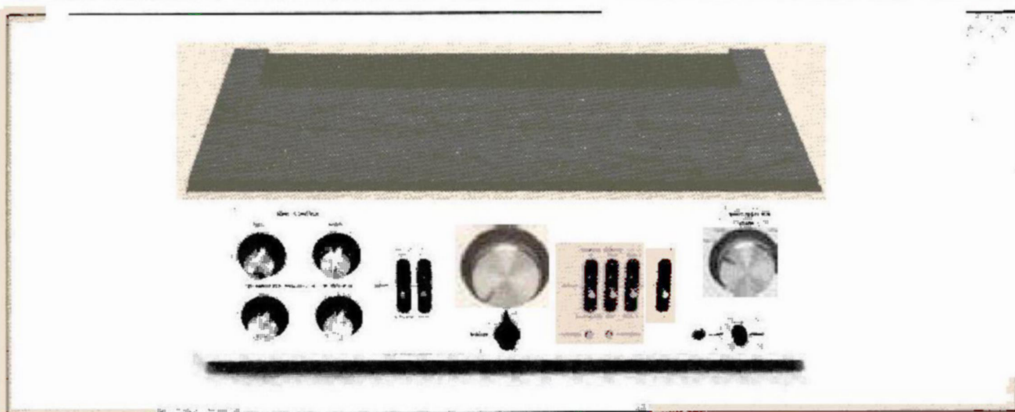




The Luxman 80V has an expensive appearance, the front aspect being a shiny alloy panel with heavily knurled knobs with readily visible inbuilt 'pointers', and the whole is surrounded in a rosewood cabinet.

Both externally and internally the finish is very good, with clearly laid-out printed circuit boards and properly identified components, plus good soldering and tidy cabling.

There was, however, some concern from the electrical safety aspect in the area of the mains sockets (which are blanked off to meet UK regulations), as the clearance between the tag on one of these and the mains transformer was on the small side and bending the rear panel inwards could produce a short from chassis to mains.

Rear panel phono socket type inputs are provided for a tuner, two auxiliaries and two magnetic phono cartridges plus two tape units. In addition, one of the tape connections has a DIN compatible connection. All input/output connections were found to have sensible sensitivities and overload performance plus a reasonably constant input impedance. It was, however, felt that the impedance of the phono inputs was on the high side at 60k ohms.

Tape monitoring is provided by means of a three position toggle switch, as is dubbing in either direction between tape units. Crosstalk across the monitoring switch was not particularly good, but this problem was minimal with the input selector switch.

Further toggle switches provide mono/stereo/stereo reverse modes and also two forms of loudness control, one of which

affected the bass only, and the other of which affected the treble and bass.

Very good treble and bass tone controls are fitted, both of which have three position switches for selecting a defeat mode or a choice of two turnover frequencies, and are themselves eleven-position switches with adequately fine steps in frequency response.

As is to be seen from the adjacent plot, two degrees of high pass filter and of low pass filter are available, and subjective effects of the low pass filters were found to be good. It is however, felt that a higher rate of attenuation could have been justified for the high pass filters in an amplifier in the price range.

The balance control, which is of the full range variety, was excellent in operation with a smooth mid-range effect. In addition, the volume control had very good performance with both loudspeakers and headphones, the operation of this control or the tone controls not upsetting the balance of the amplifier channels.

The final controls are two pushbutton switches for selecting either or both pairs of loudspeaker terminals, with a headphone jack also being provided. The amplifier performed well into its rated load of 8 ohms, giving a good distortion performance except for the half power intermodulation distortion which was on the high side.

High level input noise is adequate, but the performance of the phono inputs could well be a few decibels better, the output noise at the worst volume setting is too high and clearly audible on headphones and loudspeakers.

In fact, the dynamic range available with this amplifier can be bettered by many, but the performance under overload conditions was found to be satisfactory and the subjective performance was rated as good but with possibly a slightly muffled high frequency performance on plucked instruments. The latter may well be associated with the high frequency intermodulation performance and also the slightly restricted power bandwidth.

General Data

Hum modulation at rated output into 8Ω	0dB
50/100/150Hz	67
Damping factor ref 8Ω at 1 kHz	67
D C offset at loudspeaker and headphones L/R 102/109mV	
Crosstalk at 1W output 100Hz/1kHz/10kHz	-68/-64/-46dB
Loudness control effect ref 1kHz 100Hz/10kHz	+5dB
Frequency response deviation from 20Hz to 20kHz aux/tape/tuner	0.5dB

Power performance

Power output into 8Ω both L/R	58W
Power output into 8Ω single L/R	68/67W
Power output into 4Ω both L/R	—W
Power output into 4Ω single L/R	—W
Burst output into 8Ω single L/R	79W
Burst output into 4Ω single L/R	—W
Power output into half rated load L/R 4Ω	101/99W
Power bandwidth 8Ω 25W L/R	10Hz to 22/20kHz
Power bandwidth 4Ω —W L/R	—kHz

Distortion

Total harmonic distortion at 1W into 8Ω	
1kHz/10kHz	0.07%
Total harmonic distortion at 1W into 4Ω	
1kHz/10kHz	—%
IM distortion at half rated power into 8Ω	
DF2 1/10/100kHz	—74/76/28dB
IM distortion at half rated power into 8Ω	
DF3 1/10/100kHz	—80/80/35dB
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	—80/80/67dB

Noise performance

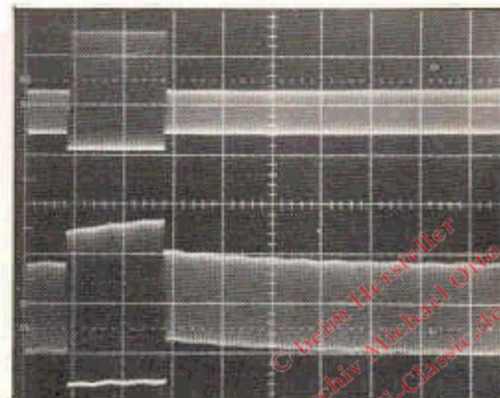
Noise ref to input — average L/R CCIR/22kHz	
aux/tuner/tape	100.5/105.5dBV
Noise ref to input — average L/R CCIR/22kHz	
Phono	112/114.5dBV
Noise ref to input — average L/R CCIR/22kHz	
Mic	—dBV
Output noise power at zero volume (8Ω)	
CCIR/22kHz	0.20/0.07μW
Worst case volume setting auxiliary input (8Ω)	
CCIR/22kHz	0.04/0.16μW
Burst dynamic range aux input ref 8Ω worst channel CCIR	84dB

Inputs and outputs

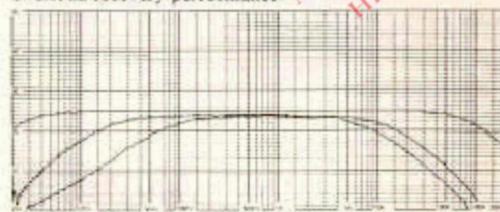
Input impedance on aux/tuner/tape	
	52/45 tape 63/52k 270; 180pF
Input impedance on phono	60k 65pF

Input impedance on mic	—
Input sensitivity and clipping point at 1kHz	
aux/tuner/tape	120mV >20V
Input sensitivity and clipping point at 1kHz	
phono	2.3mV 175mV
Input sensitivity and clipping point at 1kHz mic	—mV
Output voltage and impedance for rated output —	
headphone	2.6V 90Ω
Output voltage and impedance for rated output —	
tape	120mV VARIS
Output voltage and impedance for rated output —	
DIN	60mV 77Ω

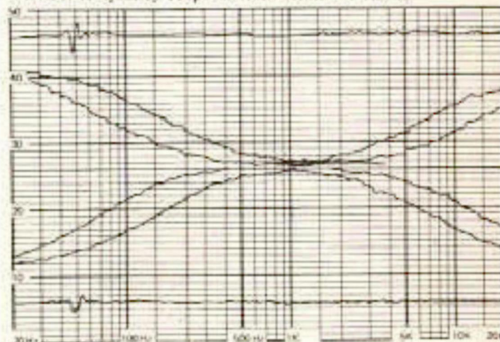
Typical selling price including VAT £300.00



Overload recovery performance



Overall frequency response and effect of filters



Effect of tone controls and accuracy of RIAA equalisation