

Accuphase E 202

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Ranking amongst the most powerful and the most expensive of the amplifiers the Accuphase E 202 has many sensible features. To start with, the overall frequency response is flat where it needs to be and rolls off at a sensible point, in addition to which a steep low pass filter and high pass filter can be switched into circuit. Whilst the high pass filter operates at 30Hz which is a good choice, the low pass filter operating at 6kHz is aimed at too low a frequency for the optimum.

In addition to these filters, there is a subsonic filter associated with the disc input which provides 6dB attenuation at 10Hz, but this is really an unnecessary addition to the existing high pass filter. The rotary switch type treble and bass controls operate in 2dB steps at 10kHz and 100Hz and are limited to ± 10 dB which is all that is necessary. The balance between channels was to all intents and purposes unaffected by any controls other than the balance control which is of the full range type.

On the input end there are two auxiliary and two phono inputs, plus a tuner input. Whilst one phono input is of fixed sensitivity and impedance, the other has variable sensitivity and switched impedance selection. In addition to the basic inputs, provision is made for two tape recorders with switched tape monitoring or tape dubbing from one recorder to the other. Front panel stereo jack connectors duplicate the rear panel phono connectors for one tape unit — a useful feature.

A further rear panel feature is that the pre-amplifier and power amplifier can be switch

separated, thus providing an interface for equalisers and such at a voltage level of 450mV for rated output. Three sets of loudspeakers can be connected to the amplifier, with front panel switch selection of any individual loudspeaker, or speaker A and one other, with an off position for headphone listening via the front panel stereo jack socket.

As with many amplifiers, a mode switch is provided. This allows normal stereo, reversed channels, mono, or either difference signal in the form of the wanted channel less the sum of left and right.

The final obvious feature of this amplifier is two illuminated meters which are scaled like VU meters and which work in conjunction with a range switch. Like the meters fitted to almost all other amplifiers this is a feature which is of little practical use, as the meters are far too slow to indicate transients and to give any guidance about overload conditions. This was verified by listening tests where transients clipped hard at between -10 and -15 dB meter indication on the 0dB range.

An unusual control on the rear panel is a damping factor control which has three positions giving damping factors of 66, 6 or 1. The effect of this selection on the reproduction of a double bass was dramatic, with all but the high damping factor giving exceedingly boomy reproduction.

Listening tests were impressive with a good transient attack, but as expected from the measurements, the low pass filter had a dramatic effect.

Examination of the performance figures

shows that the amplifier behaves well into 4 or 8 ohm loads, but certainly takes exception to 2 ohms, it is therefore recommended that it should not be used with 4 ohm loudspeakers

Input and output voltages were sensible, and the associated impedances and clipping levels were satisfactory.

Overall, this is a good practical amplifier with plenty of power and a sensible performance, but at rather a high price.

General Data

Hum modulation at rated output into 8Ω	
50/100/150Hz	0dB
Damping factor ref 8Ω at 1 kHz	64*
D C offset at loudspeaker and headphones L/R	8/4mV
Crosstalk at 1W output 100Hz/1kHz/10kHz	-80/-67/-46dB
Loudness control effect ref 1kHz 100Hz/10kHz	+7/+0dB
Frequency response deviation from 20Hz to 20kHz aux/tape/tuner	0.5dB

Power performance

Power output into 8Ω both L/R	128W
Power output into 8Ω single L/R	142W
Power output into 4Ω both L/R	185/186W
Power output into 4Ω single L/R	215/216W
Burst output into 8Ω single L/R	144W
Burst output into 4Ω single L/R	231W
Power output into half rated load L/R 2Ω	19/16W
Power bandwidth ref 8Ω 50W L/R	10Hz to 68/63kHz
Power bandwidth ref 70 W L/R	10Hz to 61/54kHz

Distortion

Total harmonic distortion at 1W into 8Ω	
1kHz/10kHz	0.05%
Total harmonic distortion at 1W into 4Ω	
1kHz/10kHz	0.07/0.06%
IM distortion at half rated power into 8Ω	
DF2 1/10/100kHz	-71/75/62dB
IM distortion at half rated power into 8Ω	
DF3 1/10/100kHz	->80/>80/71dB
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/>80/72dB

Noise performance

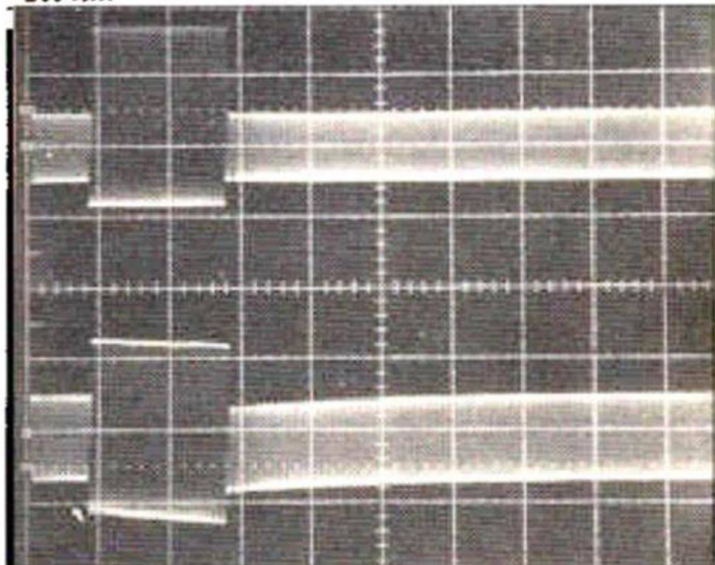
Noise ref to input — average L/R CCIR/22kHz	
aux/tuner/tape	101/106.5dBV
Noise ref to input — average L/R CCIR/22kHz	
Phono	113/115dBV
Noise ref to input — average L/R CCIR/22kHz	
Mic	-dBV
Output noise power at zero volume (8Ω)	
CCIR/22kHz	0.10/0.03μW
Worst case volume setting auxiliary input (8Ω)	
CCIR/22kHz	0.63/0.20μW
Burst dynamic range aux input ref 8Ω worst channel CCIR	87.5dB

Inputs and outputs

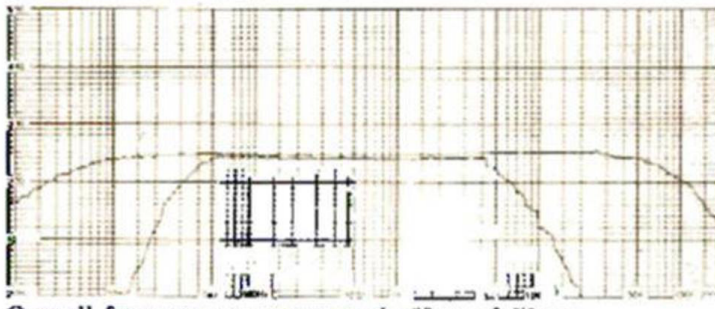
Input impedance on aux/tuner/tape	155/148k 210pF
Input impedance on phono	49k 15pF
Input impedance on mic	-pF

Input sensitivity and clipping point at 1kHz	
aux/tuner/tape	160mV 20V
Input sensitivity and clipping point at 1kHz	
phono	2.8mV 420mV*
Input sensitivity and clipping point at 1kHz mic	-mV
Output voltage and impedance for rated output —	
headphone	28V 810Ω
Output voltage and impedance for rated output —	
tape	160mV 5000Ω
Output voltage and impedance for rated output —	
DIN	-kΩ
Typical selling price including VAT	£580.00

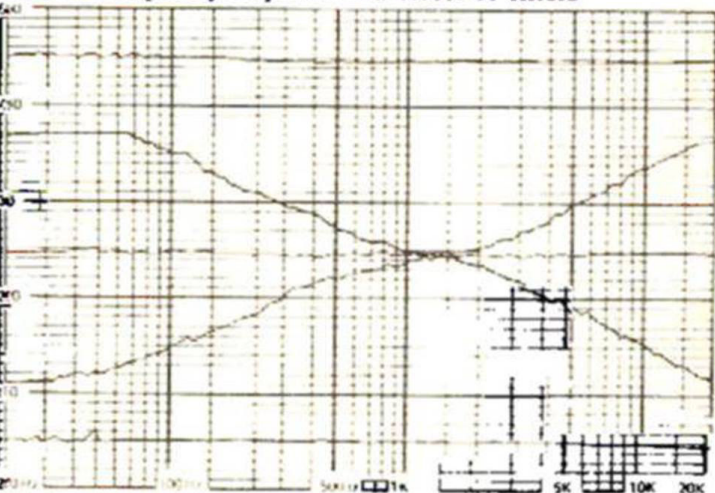
*See text



Overload recovery performance



Overall frequency response and effect of filters



Effect of tone controls and accuracy of RIAA equalisation