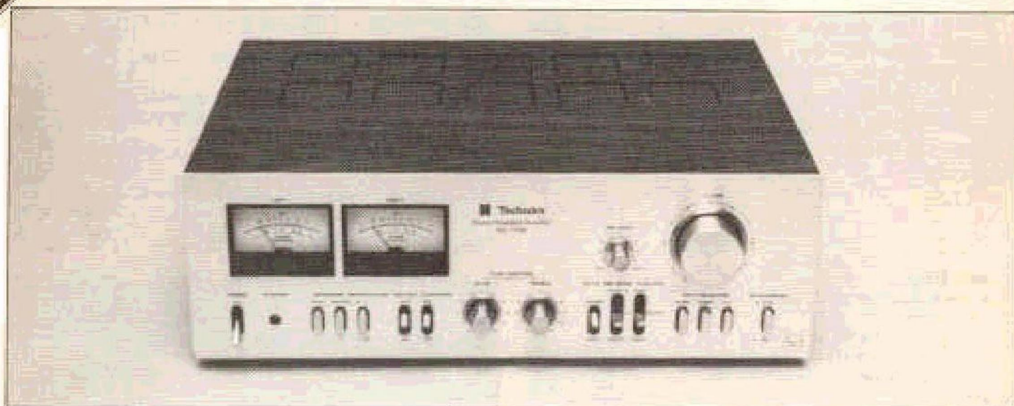




In many ways, this amplifier, the bigger brother of the Technics SU-7300, may well be of particular interest because of its overall performance and the facilities which it offers, although outside the lower price bracket.

The three basic inputs for a magnetic phono cartridge, tuner and auxiliary are selected by neat push-button switches, whilst the two tape connections are controlled by three position toggle switches. These permit monitoring either tape unit, and also tape dubbing in either direction.

All the inputs had a practical sensitivity and good overload margins, but the input impedance variations of the high level inputs were rather large and also it is felt that the capacitive component of the high level input impedances is on the high side at over 300pF.

Input signal connections are, with the exception of one tape connection which also has a DIN compatible connector, phono sockets; the two sets of loudspeakers outputs are terminals, either or both sets of loudspeakers being selected by push-button switches. Examination of the power output capability of the amplifier shows that it is quite happy with single 4 ohm loudspeakers and the manufacturer wisely recommends the use of 8 ohm loudspeakers where two sets are to be used simultaneously.

Further facilities include a sensible low pass filter, which is subjectively useful for reducing noise without having a drastic effect upon music, the usual loudness control which has an 8dB bass boost at 100Hz and peculiarly, a 1dB treble cut at 10kHz, and a mono/stereo

switch. In addition, there is what has been termed a 'subsonic equaliser' associated with the phono input. This is in fact a very sensible addition of a high pass filter for reducing turntable rumble, the filter having a well chosen -3dB point at 30Hz and a rate of attenuation of 12dB per octave.

The treble and bass controls are of the eleven position switched type providing ± 10 dB range at 100Hz and at 10kHz, and with the exception of the extreme positions, the increments between steps are reasonable, but the extreme steps are too large.

The remaining front panel controls consist of the balance control which was found to have excellent performance whilst providing a full range, so that either loudspeaker could be muted, and the volume control which was well suited to both loudspeaker and headphone listening. However, it was found that the high noise at the worst case volume setting was particularly objectionable with headphones, and none too good with loudspeakers.

In other respects the noise performance was good, with the noise associated with the phono input being outstandingly good. Also the crosstalk between input source and across the tape monitor switch was unusually good.

The power bandwidth and both harmonic and intermodulation distortion were excellent at both half power and at 1W output with the intermodulation distortion at 100kHz being outstandingly low.

The amplifier includes two front panel meters which are calibrated in Watts with respect to 8 ohms and in decibels in relation to

full power output, and whilst these meters do not read fast transients it is pleasing to say that they are much faster than meters fitted to many amplifiers. In addition, the meter sensitivity is controlled by a switch which provides an X10 sensitivity, and this completes the list of facilities.

The standard of construction of this amplifier was very good both internally and externally.

General Data

Hum modulation at rated output into 8 Ω
50/100/150Hz 0dB
Damping factor ref 8 Ω at 1 kHz 71
D C offset at loudspeaker and headphones L/R 6/2mV
Crosstalk at 1W output 100Hz/1kHz/
10kHz -52/-52/-51dB
Loudness control effect ref 1kHz 100Hz/10kHz +8/-1dB
Frequency response deviation from 20Hz to
20kHz aux/tape/tuner <0.5dB

Power performance

Power output into 8 Ω both L/R 58W
Power output into 8 Ω single L/R 67W
Power output into 4 Ω both L/R 80W
Power output into 4 Ω single L/R 96/97W
Burst output into 8 Ω single L/R 70/72W
Burst output into 4 Ω single L/R 117/122W
Power output into half rated load L/R 2 Ω 95/101W
Power bandwidth 8 Ω 25W L/R 10Hz to 110kHz
Power bandwidth 4 Ω 30W L/R 10Hz to 80kHz

Distortion

Total harmonic distortion at 1W into 8 Ω
1kHz/10kHz 0.04/0.03%
Total harmonic distortion at 1W into 4 Ω
1kHz/10kHz 0.06/0.05%
IM distortion at half rated power into 8 Ω
DF2 1/10/100kHz -75/78/73dB
IM distortion at half rated power into 8 Ω
DF3 1/10/100kHz -80/80/73dB
IM distortion at 1W from auxiliary input DF3
1/10/100kHz -80/80/73dB
IM distortion at 1W from phono input DF3
1/10/100kHz -80/80/68dB

Noise performance

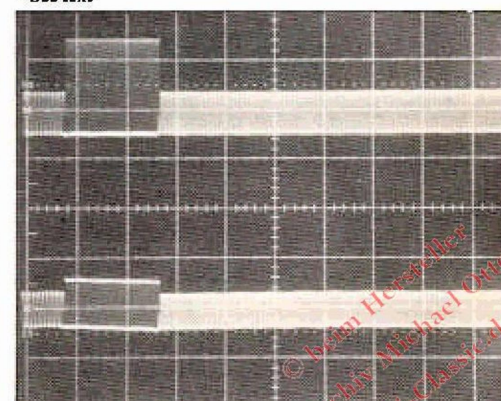
Noise ref to input — average L/R CCIR/22kHz
aux/tuner/tape 103/107.5dBV
Noise ref to input — average L/R CCIR/22kHz
Phono 115/118.5dBV
Noise ref to input — average L/R CCIR/22kHz
Mic -dBV
Output noise power at zero volume (8 Ω)
CCIR/22kHz 0.08/0.03 μ W
Worst case volume setting auxiliary input (8 Ω)
CCIR/22kHz 0.25/0.06 μ W
Burst dynamic range aux input ref 8 Ω worst
channel CCIR 88.5dB

Inputs and outputs

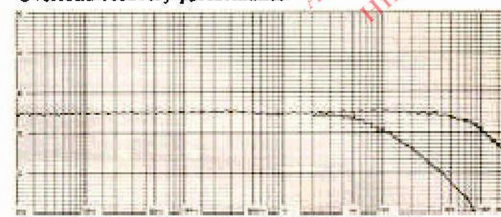
Input impedance on aux/tuner/tape
..... 136/36-tape 192/43k 315/160pF
Input impedance on phono 51k 200pF
Input impedance on mic —

Input sensitivity and clipping point at 1kHz
aux/tuner/tape 160mV 20V
Input sensitivity and clipping point at 1kHz
phono 2.9mV 165mV*
Input sensitivity and clipping point at 1kHz mic -mV
Output voltage and impedance for rated output —
headphone 20V 333 Ω
Output voltage and impedance for rated output —
tape 160mV VARIO
Output voltage and impedance for rated output —
DIN 31mV 75k Ω
Typical selling price including VAT £160.00

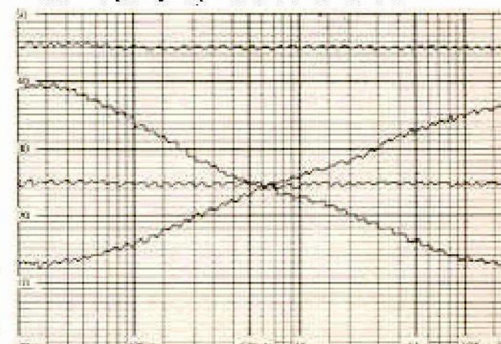
*See text



Overload recovery performance



Overall frequency response and effect of filters



Effect of tone controls and accuracy of RIAA equalisation