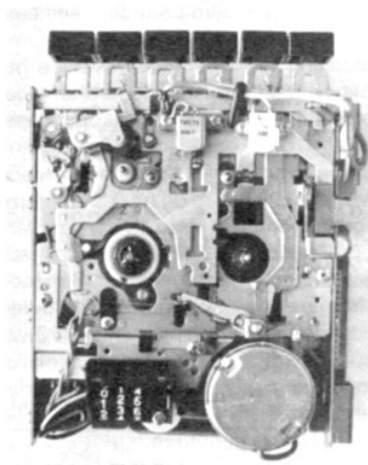


Tinkering with an Inexpensive Cassette Deck

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Accompanied by the slogan 'Tophit 1980', Radio-Service Twenthe is offering a built-in front-loader cassette deck for the low price of 32.50. Radio-Service Twenthe often manages to offer interesting industrial surplus to the amateur at a reasonable price, and this cassette deck is another example of that. A handy tinkerer can easily turn this cassette deck into a mono cassette recorder; for personal computer users this is a golden opportunity to get hold of suitable cassette recorders with a tape mechanism.

Technical data

Automatic recording level control.

Automatic switch-over to CrO₂.

Automatic tape end shut-off.

Bandwidth 60...10 kHz Fe₂O₃.
 60...12 kHz CrO₂.

Signal-to-noise ratio better than 55 dB.

Winding time C60 100 s.

Tape speed 4.76 cm/s at supply voltage 9 V ± 0.2%.

Permissible supply voltage 6.6...10.8 V.

Average current consumption 100 mA.

Three-digit tape counter.

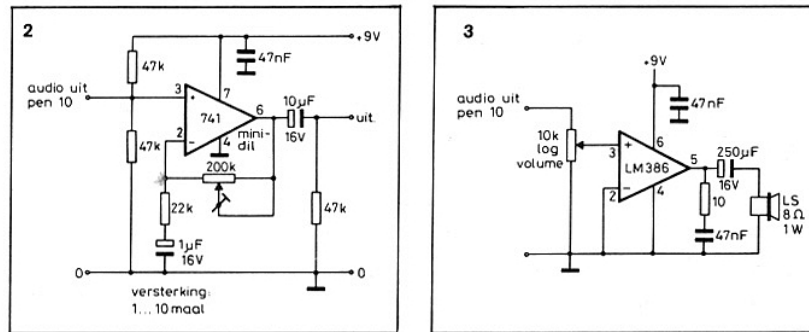


Fig. 2 An amplifier with a gain of 1...10.

Fig. 3 A power amplifier with an output of 0.5 W.

The output signal of the cassette deck, available on pin 10, is sufficient for most amplifiers. Should extra preamplification be necessary, also for computer applications, Fig. 2 offers a simple solution in the form of an amplifier with a gain of 1 to 10. A power amplifier with an output of 0.5 W around the LM386 amplifier IC, as shown in Fig. 3, can be connected straight to the cassette recorder.

Features of the cassette deck

The cassette deck was originally developed as part of the Touring 108 radio cassette recorder from ITT Schaub-Lorenz and, as usual with this kind of equipment, it is a front-loader model, mono, with automatic recording level control. Worth mentioning are the automatic tape end shut-off mechanism and the three-digit counter.

The electronics used are of good quality. On playback, noise, hum and motor interference are minimal. Any hum that does occur can be combated by shielding the circuit board with, for example, a small aluminium plate. Motor interference is due to an incorrect power supply and wiring of the supply lines. At the moment it is not yet known whether a cassette holder is available for this cassette deck; otherwise you will have to make one yourself.