

Solid state (CF/SD) recorders

Compact flash are the most recent type of digital recorder. They record onto CF (Compact Flash) or SD memory cards, which are the same type of cards that digital cameras and PDAs use. They are solid state recorders, which means that they have no moving parts and are thus more durable than DAT or CD recorders. Their battery life ranges from acceptable to excellent, depending on the model. Most of the models also have acceptable built-in microphones, and they all have jacks for external microphones (although the type of microphone which works best varies from model to model). The size of recorder varies extensively from model to model, as does the price. The smallest model is little larger than a mobile (cell) phone, while other models are the size of DAT or CD recorders.

Recording can be done in uncompressed raw 16 or 24bit PCM, or compressed mp3. The recordings are easy to transfer to computer with a card reader (which saves the battery of the recorder). The sample recordings on this site were made with a Marantz PMD670 recorder and were recorded at 44,100 Hz (16 bit).

It seems (so far at least) that all brands have positive and negative reviews. Some think the Edirol R-1 recorder is very good, for example, although others have noted very low input levels for microphone inputs (although they are better for line in, so if you have to digitise analogue tapes it is useful). The Marantz PMD670 seems to be a solid and flexible machine, although again the levels seemed to be on the low side for recording and it is not very portable. It is also rather complicated and to get to some of the settings you need a screwdriver.

The Edirol R-09 and M-Audio Microtrac both produce excellent recordings. The Microtrac has the disadvantage that its battery is built in, and thus cannot be swapped. If the battery runs flat while the recording is made, there's not alternative but to recharge it before continuing. The Edirol R-09 uses AA batteries, but the battery and SD card case are extremely flimsy and easy to break.

Other problems that have been reported include the loss of data if the machine is turned off without first being stopped. The CF cards should be reformatted before use, and used only for audio recording. That is because non-audio files stored on the card are not recognised as taking up space on the card. If you reach the capacity of the card, it will stop recording, even though the machine does not recognise the card as being full. This has led to data loss.