

Intro to Digital – Steven Sauve
What's a Digital Device?

Many of the devices you find in a recording studio are running digitally. They're using little computer chips to do all the work. Here are a few that you should know about:

DAT Machines – Digital Audio Tape machines are very much like a cassette deck, only digital. Usually only made for stereo signals, not multitrack.

Digital Multitrack Tape Machines – Machines such as the Alesis ADAT, Tascam DA88, and machines by Fostex, Roland, etc. They will usually record and playback 8 tracks, using some kind of digital tape.

Hard Drive Recording Systems – Systems like ProTools, Cubase, Logic, and Vegas are able to record many tracks. They are designed to run on a computer, or they can come in a standalone form, no computer needed. These systems usually come in two pieces: the *digital audio interface* where you connect your microphones and instruments and where you listen to the sounds, and the *software* with which you work on the recording. A well known system is ProTools LE software and the Digidesign M-Box 2. The soundcard in some PCs and all Macintoshes is a digital audio interface, though it's really not good enough for recording!

CD Players and Recorders – All audio CD players are digital, and some of them can even output the music digitally, instead of converting it to analog first. There are also CD recorders that can record audio just like a cassette deck can. They may only have analog inputs and outputs.

Digital Effects Devices – Many effects devices (reverbs, chorus, delay, compressors, and Eqs) are processing the sound digitally. Guitar processors like Line 6 products are digital.

Synthesizers and Keyboards – These are almost all running digitally these days. They may use samples or modeling to produce their sounds.