

Storing Your Digital Pictures

You may keep your pictures on your computer hard-drive, most modern ones would hold a lot. Trouble is you may lose them all if your computer goes down or the disk gives up. Backing-up on an external system is the wise thing to do.

External Hard Drives

These are getting cheaper by the week and are very easy to use. You can get hold of a 250Gb drive now for around £100. That's 333 CDs worth of memory space, and all immediately accessible - no rooting through jewel cases.

The drive is just the same as the one inside your computer, but it is only going to be doing a tiny fraction of the work, so should easily outlast your computer's hard drive.

CDs, DVDs (Optical Media)

Even with an external drive you would be wise to back-up on "optical-media" too. They are cheap and easy to use and a DVD will hold about 4.3Gb of pictures (that's nearly 500 RAW files from a Canon 350D).

When CDs first appeared they were hailed as indestructible and everlasting - typical exaggeration by the press. Now there are scare stories of us all not being able to retrieve data in a year or two. Is it true?

For How Long Will Data Stored on Optical Media Be Retrievable?

Scare stories are rife. Media will not only deteriorate rapidly, they say, but the equipment and software will not be around to read it in a few years time.

The truth about the longevity of disks is that nobody can tell how long they will last. The American **National Institute of Standards and Technology** has reported on disk longevity for librarians and they seem to think that if the disk works on day 1 it should last many years (perhaps a century plus), **if handled and stored correctly**. Last year there was a lot in the American technical press about CDRs that use a different (phthalocyanine) dye as the recording layer, they (and the DVD equivalents) may also use gold instead of silver as the reflecting layer because it is more inert. I couldn't source any over here at the time but they are now available at **Warehouse Express** (Delkin Gold - CDs £1 each DVDs just under £2 each). New versions are on their way with a more scratch resistant coating. NIST don't comment on these or indeed any specific brands but expects that our recordable disks will out last the music ones - so we seem fairly safe.

With DVDs you are better going for -R types, though the +R should usually work.

Never use the Re-Writables, they use a different chemical dye which is definitely not archive! They will deteriorate quite rapidly.

Handling the Disks

Recording, handling and storage can radically affect the life of a disk. Here are some guidelines.

- Burn slowly. You don't get a lot of choice with DVDs but CDs can be recorded at ridiculous speeds, choose a slower one.
- Never touch the recording surface, hold the disk by its edges or spindle hole.
- Organic solvents can damage disks so, for labelling, use a water-based ink. In any case **only write on the clear area** near the spindle hole, nowhere else on the back and certainly **never** on the recording side. The recording dye and reflective layer are only just below the "label side" surface on CDRs.
- Don't use labels.
- Keep disks in jewel boxes (the plastic cases CDs are sold in), where the step near the spindle keeps the recording surface away from any contact. Only take them out to record data or read it, then put them straight back. Store the cases upright - like books. Don't flex them too much when taking them out of the cases.
- Keep your disks away from damp. Temperature - well, if you are comfortable, your disks will probably be too; 4-20°C, 20-50% RH.
- Never wipe or clean them unless there is an obvious need (visible dirt or mis-reading). Then just use a soft cloth, special cleaner (or iso-propyl alcohol) is only for stubborn marks - wipe radially (outwards from the centre). Solvents WILL, however damage the "label" side of the disk.
- Keep disks out of sunlight, the UV and heating effects can be very damaging.
- Don't buy vast stocks of disks, they deteriorate more rapidly before they are used.

With, effectively, two copies of your files (one on external HD and another on CD or DVD) you should be safe. If you wear belt and braces though a second backup disk of each set of file could be kept, perhaps one of the RAW images and one of the Adobe Digital Negatives.

There is an opportunity to save disk space in not saving file conversions, TIFFS especially take a lot of space, You could save the RAW files and only the converted files you work on.

Even if I do all this and my disks are OK, won't technological advances render them obsolete anyway?

Manufacturers are looking at standardising methods of storing picture data. Nevertheless we all know about obsolescence! Right now you might be thinking of burning your old videotapes onto DVD. This is the way to keep your data readable. I translated all my BBC computer data that was important to me while it was still possible to do so. Don't delay when technological change like this is happening and you'll be OK. John Royle 2nd March 2006

References:

www.lcpu.org.uk then select Forum, where topics like this are often discussed. A thread there prompted this article.
www.itl.nist.gov the search for report 500-252. If you are reading an electronic version of this account the hotlink is
<http://www.itl.nist.gov/div895/carefordisc/CDandDVDCareandHandlingGuide.pdf>

www.digitalfaq.com/media/dvdmedia.htm this reference deals more with specific makes of disk, but the data is not very relevant to what is available in the country - much good advice though.