

Home, Studio & Office Archiving Tips: *THE WHYS & HOWS OF SECURELY PRESERVING PRECIOUS ORAL HISTORY, MUSIC, IMAGES, FAMILY MEMORIES, VIDEO & DOCUMENTS TO PRODISC CD-R AND DVD-R*

Why archive to PRODISC CD-R and DVD-R?

- **SECURITY** - Write-once, non-erasable **PRODISC** gold archiving CD-R and DVD-R optical formats provide the most secure, cost effective, physical archiving solution for precious family photos, office documents, oral history, music and video for up to 300 years, depending on storage and handling.
- **RELIABILITY** – Relying on any computer hard drive (internal / external / removable / raid) as a sole archiving solution without a separate physical backup for irreplaceable or valuable archive files can be very dangerous, as hard drives are notorious for mechanical or platter failure without warning due to budget priced poor quality components or design faults not evident at time of purchase. As such, any archived files on these drives will most likely be completely lost – data recovery procedures are rarely successful and very expensive. Other potential threats to archived files on computers include inadvertent erasure, system conflicts, viruses and power spikes – **PRODISC** archive gold media provides an extremely reliable solution, completely unaffected by such hazards.
- **STABILITY** - Correctly recorded high quality recordable optical media is arguably the most stable condition for all precious data with nil susceptibility to damage from magnetic fields and low level impact damage with the data layer well protected by impervious air and waterproof coating membrane ('**PRODISC** 'Data Seal' DVD-R(G) 4.7Gb Archive Gold' has an additional scratch proof protective coating on the recording surface).
- **QUALITY** - **PRODISC** archive gold CD-R and DVD-R discs are manufactured to the worlds' highest manufacturing standards of optical, chemical and substrate engineering and have been comprehensively proven over 15 years by most major Australian government archiving organisations.
- **COMPATIBILITY** - Backwards compatibility of CD and DVD with next generation (HD) formats is now assured over many years to come for both set top stand alone HD players and computer hosted HD drives: any future multi-layer or holographic 12cm optical disc formats will also have to provide backwards compatibility for these enormously successful formats to ensure rapid market acceptance.
- **TECHNOLOGY** - From 1994 onward, all **PRODISC** archiving CD-R products have employed Mitsui's unique fade proof phthalocyanine recording layer combined with 99.9% pure (24 karat) gold reflective layer, affording a non-oxidising optical surface for effective data retrieval for up to 300 years, subject on storage and handling conditions.
- **PURE GOLD** - Other disc manufacturers claim various use of "gold" in describing their media products, including one well known retail brand which specifies the inclusion of an additional silver layer to their gold archive product – only **pure gold** will survive the attack of oxidisation over very long periods of storage and, at around AU\$1,500 per ounce, this is indeed a precious commodity.

PRODISC

PRODISC Systems Pty Ltd P.O. Box 1666, Neutral Bay, NSW, 2089, Australia
Tel: 61 2 9016 4415 Fax: 61 2 9909 3270 info@prodisc.com.au www.prodisc.com.au ABN 81 078 094 729

- **LONGEVITY** - Choose your optical media for family archiving carefully, and if you have time, start further research into media longevity with visits to the websites of the Library of Congress (USA), NIST (USA) and the National Library of Australia to gather more in depth information on the many independent studies conducted on optical media stability.
- **BONA FIDES** - Following are some examples of major government, archiving, cultural, defence and educational organisations which have consistently relied on PRODISC archival grade optical media over many years to preserve the cultural, historical, scientific, financial, music and film history of Australia and New Zealand;
 - ABC Archives
 - Australian Broadcasting Corporation
 - Australian Film Commission
 - Australian Museum of Australia
 - ANU Photography
 - CAAMA
 - CSIRO
 - Department of Defence
 - Museum of Sydney
 - National Archives of Australia
 - National Film & Sound Archives
 - National Library of Australia
 - National Library of New Zealand
 - National Museum of Australia
 - NSW Health
 - NSW Police
 - NZ Radio Archives
 - Opera Australia
 - QLD Health
 - Reserve Bank of Australia
 - State Library of NSW
 - State Library of SA
 - State Library of Victoria
 - State Library of WA
 - Theosophical Fellowship
 - UNESCO
 - University of NSW
 - University of Sydney

How to archive to CD-R and DVD-R

- Storage – ideally, once the **PRODISC** gold archive preservation master has been written, the disc should be placed carefully (without touching the recorded surface) in a ‘**PRODISC** Fullsize Black Archive Flexicase’ for long term storage and featuring a clear plastic overlay wrap for inclusion of external titling and indexing. These cases are manufactured from a flexible, durable, stable polymer based material which has excellent resistance to moisture, fatigue, soiling and impact.
- For best results the assembled masters should then be stored in a cool, ventilated dark space.
- Handling should be kept to a minimum. Most major archive organisations follow the protocol of mastering/storing data to a ‘**PRODISC** Gold Archive’ CD-R/DVD-R – the preservation master – and then burning a second copy – the reference or access copy – on the next grade down in **PRODISC** products, known as the “**PRODISC** Premium” range which employs high purity silver instead of gold as a reflective layer. The preservation master should then only be required if further reference or access copies are required.
- Archiving to the ‘**PRODISC** Gold Archive’ range of CD-R/DVD-R can provide up to 100-300 years of archive life in the correct storage and handling conditions (see above).

- Archiving to the '**PRODISC** Premium' range of CD-R/DVD-R can provide up to 50-100 years of archive life in the correct storage and handling conditions (see above).

Recording / Writing / Burning tips

- Ensure burning software is set to the specified record speeds for the disc product selected (**PRODISC Systems** recommends burn speeds for every **PRODISC** recordable product).
- Always keep unwritten discs data/recordable face down in the supplied **PRODISC** quality retail cases or spindle pods to minimise exposure to dust and airborne debris which can cause uncorrectable errors when recording due to the dust particles interfering with laser tracking.
- Even in well maintained air conditioned environments, dust particles can quickly collect on all surfaces. '**PRODISC** Super Duster' is highly recommended for cleaning each disc before recording and also for keeping the recording drive disc tray free of dust build up.
- For removal of finger prints or smudges a special **PRODISC** optical cleaning cloth (please see below "Accessories") can be employed by dusting off solid debris first and then gently wiping the disc in a straight line from the centre of the disc to the outer edge. If smudge remains, immediately transfer data to another clean archive disc.
- Use of any other lens cloths, paper or tissue products will lead to scratches on the surface coating, possibly contributing to errors.
- Under no circumstances should any adhesive label be applied to the disc printable surface. Over time, adhesive chemicals will breakdown and then eat through to the recorded data and corrupt/destroy stored files.
- While it is safest to simply print jacket identifier to the disc packaging case and leave the discs unmarked, labelling by quality inkjet printer or solvent free, water-based, disc-safe marker can be used if necessary.

PRODISC Archiving Products and Accessories

CDR

- "**PRODISC CD-R 74 Reference Archive Gold**" – Matt *Gold* Inkjet Printable: high speed, preservation archiving, 50-300 year archive life
- "**PRODISC CD-R 74 Audio Master Gold**" – Matt White Inkjet Printable: low speed audio/data mastering, preservation and archiving 100-200 year archive life
- "**PRODISC CD-R 74 Premium White**" – Matt White Inkjet Printable: general audio/data mastering and archiving, 50-100 year archive life
- "**PRODISC CD-R 74 Premium Platinum**" – Matt *Silver* Inkjet Printable: general audio/data mastering and archiving, 50-100 year archive life
- "**PRODISC CD-R 80 AquaGlass Premium**" – Super Photo Gloss White Inkjet Printable: high capacity dual layer, premium, 10-20 year archive life

DVDR

- “**PRODISC 'Data Seal' DVD-R(G) Archive Gold**” – Matt *Gold* Inkjet Printable: high speed critical archiving, 50-180 year archive life
- “**PRODISC DVD-R(G) 4.7 Archive Gold**” – Matt White Inkjet Printable: high speed critical archiving, 40-80 year archive life
- “**PRODISC DVD+R DL 8.5 AquaGlass Premium**” – Super Photo Gloss White Inkjet Printable: high capacity dual layer, premium, 20-25 year archive life

PACKAGING

- “**PRODISC** Black Archive Flexicase, Fullsize” – archive safe with plastic overlay for label insertion
- “**PRODISC** Black Archive Flexicase, Slimline” – as above but slim version for space saving storage

ACCESSORIES

- “**PRODISC** Super Duster” – Laboratory grade compressed air essential for all disc and disc drive cleaning
- “**PRODISC** CD-R / DVD+/-R Cleaning Cloth” – for scratch free removal of smudges and finger prints

PRODISC