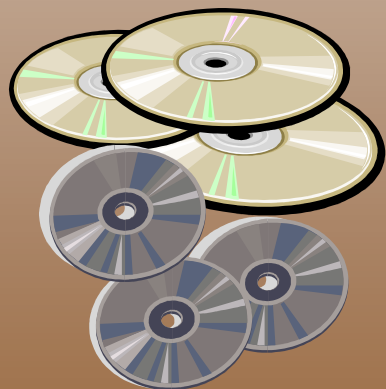


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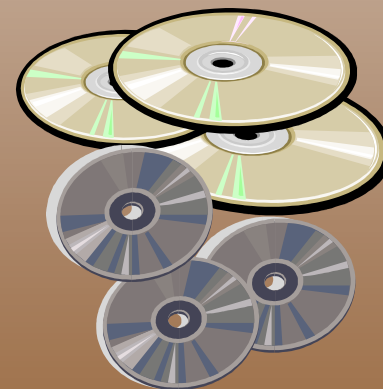


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Storage of Digital Photos on Optical Discs



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Canadian
Heritage

Patrimoine
canadien

Canada

Storing Digital Photos on Optical Discs

Formats

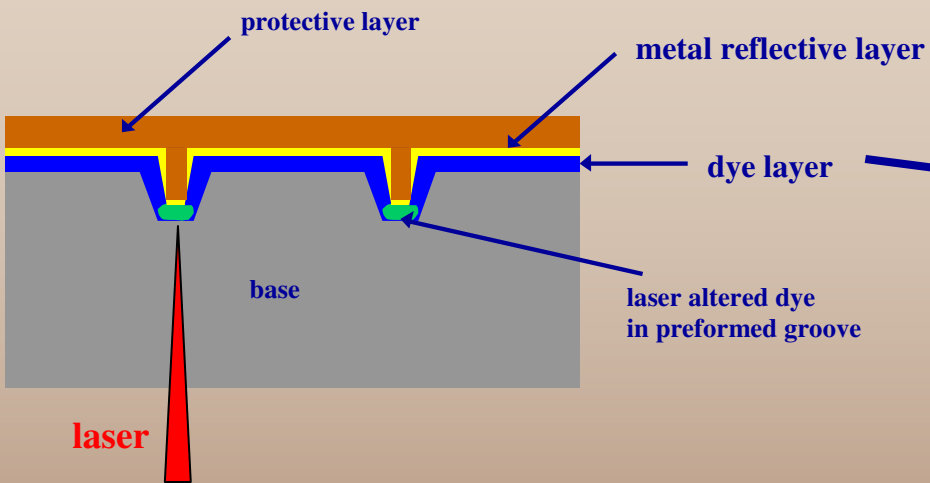
Category 1: Erasable

- **CD-RW, DVD-RW, DVD+RW**
 - low stability
- **DVD-RAM, MO, UDO, PDD, BD-RE (blu-ray erasable)**
 - not in widespread use, unknown stability

Category 2: Write-once

- **WORM, BD-R (blu-ray recordable)**
 - not in widespread use; unknown stability
- **CD-R, DVD-R, DVD+R**
 - best current optical disc storage options
 - variable stability

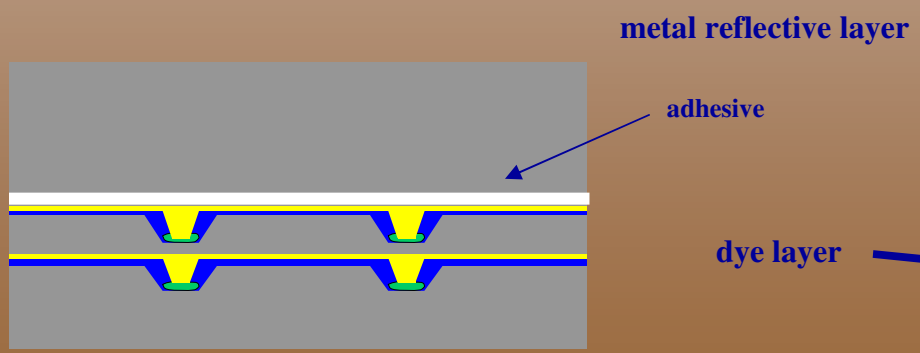
CD-R



silver - corrosion
silver alloy - corrosion
gold - stable

cyanine - unstable
azo - unstable
phthalocyanine - stable

DVD±R



silver - corrosion
silver alloy - corrosion
gold - stable

cyanine/azo - ?

Storing Digital Photos on Optical Discs

Maximizing Longevity

Select discs with good stability

- for CD-Rs choose gold metal layer and phthalocyanine dye (\$2 per disc)
- for DVD-Rs choose gold metal layer (\$3 per disc)
- MAM (Delkin; Kodak Preservation Disc)
 - CodesPro Media (on Gladstone)



Storing Digital Photos on Optical Discs

Maximizing Longevity

Proper recording

- **record at moderate speeds**
 - 4x-12x for CD-R; 4x-8x for DVD-R
- **ensure media is clean and free of dust/fingerprints**
- **ensure discs and recorder are compatible**
 - follow manufacturer specifications
 - use quality media and recorder
 - for recordable DVDs, choose –R instead +R or dual layer recordable DVD
 - check readability of files

Proper storage

- **regular size jewel case, vertical storage, no adhesive labels or writing on disc surface, avoid warm and humid conditions**

Recommendation

Create 2 or more copies of your digital photos and store on different media in different locations.

1st copy

- Use “gold” CD-Rs or DVD-Rs

2nd copy

- Hard Drive – internal, external, other