

Copying 35 mm slides to CD or DVD

For those who want to do it themselves there will be a demonstration using a flatbed scanner and digital camera.

Larry Lavery, 10 March 2011 CIG meeting

RGS Volunteering

A two way street..

- **The committee benefits from you**
- **You learn new skills**

Get involved in a committee that interests you.

Agenda

- **Some basics**
- **Step by step**
- **Commercial Services**
- **Flatbed scanner demo**
- **Digital camera demo**
- **Questions**

Basics

Slide Aspect Ratio is 3:2

Actual size 36 mm X 24 mm

Fits a 4 X 6 print, 8 X 12 etc.

Resolution

DPI – dots per inch same as

PPI – pixels per inch

Select 300 PPI for the output resolution to give you the option to make prints or view on a monitor.

Monitor resolution is evolving from 72 DPI to 96 DPI

Basics

Resolution cntd.

**A 4 X 6 Print requires
(4)(300) X (6)(300) or
1200 X 1800 pixels**

**(This will be our yardstick for gauging
quality)**

**Use the maximum resolution your
scanner or camera can achieve.
Memory is cheap.**

Basics

Computer editing

Needed to crop, straighten and possibly touch up the slide images.

My preference for the home user is Photoshop Elements but you may select others from this list.

http://en.wikipedia.org/wiki/Comparison_of_raster_graphics_editors

File format

Use TIF if available. You can edit and save this format without loss of quality.

Basics

Other Settings

Colorspace - Set to Adobe RGB, the Industry Standard

Your computer monitor can reproduce only 60% - 70% of the Adobe RGB color space. You will see the full range of colors in the printed photo.

Limit your color adjustments! Don't mess with what you can't see.

Basics

Other Settings

Bit Depth – Amount of color information in each pixel.

Amateur usually 24 bits

Professional usually 48 bits

Only high end Photo Editor programs support 48 bits of color information.

Step by Step

- 1. Wash hands and do not touch the transparency.**
- 2. Organize slides by group or chronological order.**
- 3. Select slides you want to copy. Typically 30% are discarded.**
- 4. Number the slides**
- 5. Store slides in a protective sleeve.**
<http://www.printfile.com/slide-pages.aspx>
- 6. Remove dust with compressed air or camel hair brush.**

Step by Step

7. Scan slides

8. Open images in a Photo Editor program. Straighten, crop and save as TIF.

9. Save to good quality CD/DVD – Verbatim , Sony etc.

10. Verify quality by printing a few and inspecting the result.

11. Store slides in a dry, temperature controlled environment.

Commercial Copying

Recall our yardstick was 1200 X 1800 pixels for a 4 X 6 300 ppi print.

Rowe Photo <http://www.rowephoto.com/>

1024 X 1536 pixel scan to JPEG, TIFF

\$8 for 1st scan

\$1.50 for each additional scan

150 slides costs approx \$232

2048 X 3072 pixel scan to JPEG, TIFF

\$13 for 1st scan

\$1.80 for each additional scan

150 slides costs approx \$281

Commercial Copying

Recall our yardstick was 1200 X 1800 pixels for a 4 X 6 300 ppi print.

Media Transfer Service

<http://www.mediatransferservice.com/>

2400 X 3600 pixel scan to JPEG, 48 bit
TIFF with Photoshop post processing
\$200 minimum project fee

\$1.45 per scan for slide 1 - 299

\$1.35 per scan for slide 300 - 399

...

\$.65 per scan for slide 1000 and up
150 slides costs approx \$218

Flatbed Scanner example

EPSON V300

Suggested retail \$99

Scanner Type: Flatbed color scanner

Optical Resolution: 4800 dpi

Hardware Resolution: 4800 x 9600 dpi

Maximum Resolution: 12,800 dpi

Effective Pixels: 40,800 x 56,160 (4800 dpi)

Color Bit Depth: 48-bit internal / external

Grayscale Bit Depth: 16-bit internal / external

Optical Density: 3.2 Dmax

Maximum Scan Area: 8.5" x 11.7"

Digital Camera slide copier example

Optika

Suggested retail \$29





**Thanks to John Schroth
for his help preparing this
presentation.**

Time for 'Show and Tell'

Any questions?

