Digital Photography Day – What Photographers are to achieve

C.R. Handbook pps 37-46 (2015), Supplements 1-9 and “Photographers & Compilers” on Website.

What we are to achieve

Historic England the national *archive*. **The definitive national photographic record of Church artefacts**.
Complete Record in .pdf + Photographic Record of TIFF photographs.

First, produce the TIFF photographs.

Standard:

1. To produce - Good, true A4 photographic print;
2. In permanent “lossless” format i.e. TIFF.

Good true A4 Print

1. A **pixel** is information recorded as a digital code and stored in a **memory**.
2. A **Dot** is that information as seen on a screen or printed (dots of ink).

For good print of 300**dpi** - 300**ppi** is the minimum. 3:2 = 9” x 6” [4:3 = 9” x 6.75”]	9” x 300ppi = 2700 pixels long side 6” x 300ppi = 1800 pixels short side
	

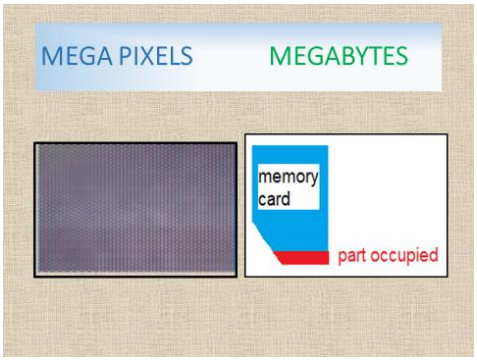
2700 x 1800 = 4,860,000 pixels Near enough 5 megapixels.

3. **But** Photographs of detail to be enlarged. Take at more ppi to allow for enlargement. Say, on a setting between 7 and 10 megapixels:

4. Adjust, but do not enhance.
5. A true, accurate evidential picture.

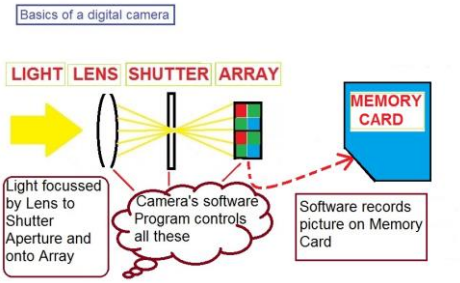
TIFF format

Megapixels and Megabytes



Pixel = quality (resolution) **Byte = volume**

Compression



I00IIII0I00III0000I0I0IIII00II0000I0I0III
III00I0IIII0000II0I etc.

Amateur camera taking JPEG set at 5,000,000 **pixels** (5MP) ≈ 15,000,000 **bytes** (15MB)

Too much information for the camera and our purpose

Camera on "**fine**" or "**best**" reduces **bytes** volume **by 75%** i.e. 15MB becomes 3.75MB on *average*

Infinite shades of colour become 256 shades of colour (2^8) @ 8 bits a pixel

JPEG is everyday and "lossy". Further minus of approx 10% every time saved or copied.

TIFF is "lossless", cleverer. More MB, but computer can cope. In the range 10-20MB

Jpeg must be saved as TIFF immediately to avoid further loss.

RAW – those using should know what they are doing, but must end up with 8 bit TIFFs.

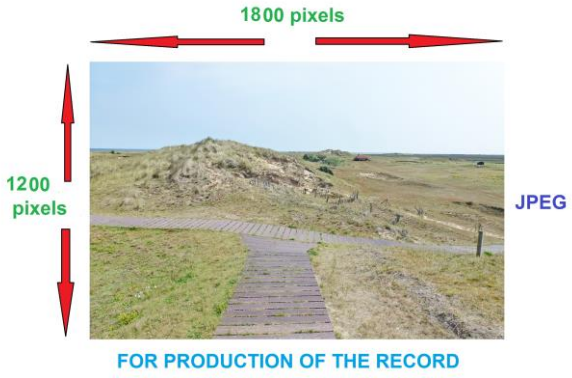
TIFF is the archive quality format. File size 10-20 megabytes in TIFF.

PHOTOGRAPHS FOR THE RECORD (Jpegs)

Derived from TIFF masters.

CHURCH	PRINTED
LOCAL RECORD OFFICE	PRINTED
HISTORIC ENGLAND	MEMORY STICK
CHURCHCARE LIBRARY	MEMORY STICK
V&A	GOLD CD

Lesser standard for insertion into pages of the Record for printing and digital delivery:

Standard size 6" x4"	6" x 300ppi = 1800 pixels long side 4" x 300ppi = 1200 pixels short side
	

1,800 x 1,200 = 2,160,000 pixels or 2.16 megapixels *approximately*

Why not use Jpegs as taken?

1. Too large (megabytes) because taken to 9" x 6" (5 megapixel) standard, not 6" x 4". Ease of handling for Compilers, transmission and smaller memory space;
2. Original Jpegs must be processed in TIFF format to prevent loss and then converted back;
3. Identical numbering with TIFFs.

Compiler inserts into text, then saves the whole in .pdf/A format.

Jpegs, also go on memory sticks for Historic England and ChurchCare Library, in Section Folders.

WORKING PHOTOGRAPHS FOR RECORDERS

Small megabyte size Jpegs for temporary use and easy transmission (possibly 1 megabyte or less)

As requested by Recorders.

Might need high quality picture of detail

PATTERN OF WORKING

Basically lists from Group Leader & Section Recorders, but:

- Can start with obvious needs:
- Windows, especially detail
- Memorials especially detail
- Silver & Brass (including marks)
- Intro Outside, E-W, W-E

Advise Recorders what you can do to help them. They might not know what a camera can achieve.

When and how to work

- CHURCH LIGHTS and COLOUR BALANCE
- TRIP RISK
- RECORDERS GETTING IN THE WAY
- TOO MUCH SUNLIGHT
- WORKING AT HEIGHT

2017 Project – no great change for Photographers

Privacy & Copyright – under review

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