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Wooler and District Camera Club

A Plain Person's Guide to Competition Rules

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1 The Club rules for photographs for competitions

The Club rules§ given in the programme for the 2019/2020 season are

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**"Maximum size of entries for Digital images:
jpeg - 1400 wide x 1050 high. 72 dpi.
(Please note height must not exceed 1050)"**

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If you don't know about editing and storing digital images using a computer, the rules are about as clear as mud. If so, read on.

2   What the rules say, and don't say

2.1 What does JPEG mean?

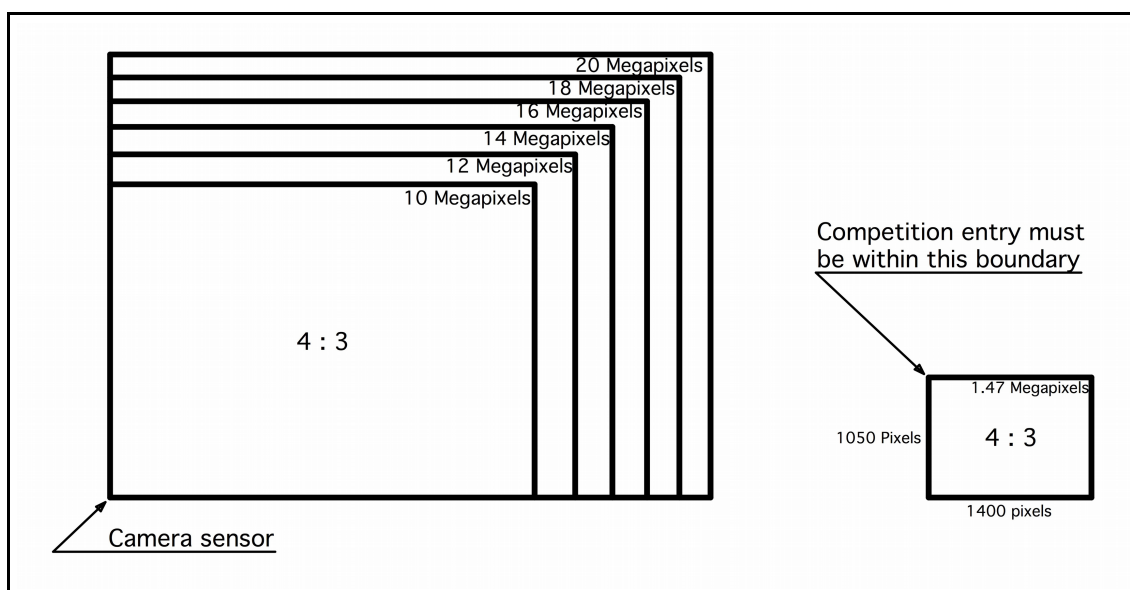 A "jpeg" is a "file" in a particular "format".

A "file" is what is on the SD card in the camera after the picture has been taken. (It can be viewed in the camera by pressing the ▶ button.) The file will have an obscure "file name" such as "IMGP5432", which is generated by the camera. All file names are different: that is, IMGP5433 is different from IMGP5432 because it's the next picture. The camera keeps count (strictly, of the shutter actuations).

A "format" is essentially the rules for constructing a file, so that any computer can use the file. (The rules are like the grammar and spelling of English: done properly, any English-speaker will understand.) There are many different file formats, almost all of which you don't need to know about. You will know a file is in JPEG format because the file name will end in ".jpg", as in IMGP5432.jpg.

2.2 What does 1400 wide x 1050 high mean?

The units of "1400 wide x 1050 high" are pixels ("px"), a contraction of "**pi**cture[**x**]**el**ement". A Megapixel (usually MP or Mp) is one million pixels, and today even moderately-priced digital cameras have sensors of between 10 and 20 Megapixels. Put simply, lots of pixels means lots of detail in the image.

The diagram below shows the difference, in pixel units, between what a camera provides, and what the rules allow. "4:3" is the aspect ratio, the ratio of width to height, of the sensors of many digital cameras. Easy numbers: a 4:3, 12-Megapixel sensor has 4000 x 3000 = 12,000,000 pixels.

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§   The rule "**File size not to exceed 900KB**" in the February 2019 version of this guide now is omitted as no longer necessary, for the 2019/2020 and subsequent seasons. Section 2.4 describing this rule, however, has been retained to explain the difference between file size in KB and image size in pixels.

The aspect ratio of the *largest* landscape-orientation competition entry is also 4:3, and contains 1400 x 1050 = 1,470,000 pixels, or 1.47 MPx.   What is obvious from the diagram is than any image, straight from the camera, contains much more detail than is allowed by the competition rules. So for competitions, all images straight from the camera will need resizing or cropping, or both.

If the JPEGimage from your camera is 4:3 and you are happy with it, you just need to resize to 1400 x 1050 pixels. If you want a more letter-box landscape shape, a square shape, or if you want to select a portrait-shaped part of a landscape camera image, you need to crop first and resize.

2.2 What does "72 dpi" mean?

"dpi" means dots per inch. In much the same way that 4:3 aspect ratio is a relic of now-superseded computer screens, so is 72 dpi. Its practical value is that any judge's screen, however elderly, will properly display 1400 x 1050 pixel, 72 dpi competition images at full size..

The operating system of any recent computer will sort out how to display an image full-screen, and you will not notice any effect of dpi. Only if you try to *print at 100%* will 72 dpi have any effect. You will get a slightly fuzzy, 19.4" x 14.6" print from a 1400 x 1050 pixel image.

2.3 What does "Please note height must not exceed 1050" mean?

This means that the height dimension of any image, landscape or portrait, must be no more than 1050 pixels. It is a consequence of requiring that an image can be displayed full-size on a 1400 x 1050 pixel screen.

2.4 What did "File size not to exceed 900KB" mean? (*NB - this rule is now omitted*)

File size in KB (**k**ilo**b**ytes) is different from image size in pixels. The two are related: lots of pixels means more kilobytes. The KB file size determines how much *memory* is needed to store the image, on a disk drive in a computer, on an SD card in a camera, or on a memory stick.

JPEG files can be "compressed" to reduce the memory required. When you save your file, you can reduce its size by reducing the JPEG "quality". JPEG compression degrades image quality, and each save causes further degradation. To see how, zoom into a compressed image: at high magnification you'll see a mosaic of squares that aren't there in the original image. So saving with your chosen quality setting should be the very last step in preparing your competition entries. A 1400 x 1050 pixel JPEG image is unlikely to much exceed 900KB even at the highest quality setting.

3   Why must we have these rules?

The rules say nothing about what comes out of your camera, or how you choose to process your image using one of many image editing programs. Indeed, the rules don't even say that you have to use a camera. The reason is obvious. How do you say what image-recording device, what software, and what computer a competitor should use? You can't.

WDCC has over 30 members. If each member submits two images for two competitions, that is a total of more than 120 images, and about 100 MB of files, to send to the judge of the evening. We do not know how the judge will view the files in order to judge our work. But we do know that if our images are no bigger than 1400 x 1050 pixels, any judge can do his or her work.

So one reason for the rules is to make the playing field as level as possible for each competitor, by asking that we all enter JPEG files of the right size. Another equally important reason is not to make the judge's job harder than it need be.

4   What if I don't comply with the rules?

Submitting images larger than the rules permit is *taking unfair advantage*, because larger images are of better quality than smaller, compliant images.

The Club now instructs competition judges not to consider entries that do not comply with the rules.