How To Resize Images For The Club's Projector

What Can The Projector Do?

The projector can display images up to 1920 pixels wide and up to 1080 pixels high. Images that are sent to the projector that are less than these dimensions will not fill the screen.

Portrait and square images can never exceed the height of the screen: 1080 pixels and panorama images can never exceed the width of the screen: 1920 pixels.

Whatever shape your image is, it makes sense to use as much of the screen area as possible. Submitting an image of 1024 pixels x 768 pixels doesn't fill the screen in either dimension and just looks small on the screen. This doesn't help the appearance of your image.

Why Is Resizing Necessary?

Today's cameras and phones capture images with high resolution. The number of horizontal pixels can vary between 4,000 and 6,000 pixels or even more. This in turn means that image file sizes are huge. Large file sizes are impractical for storing on the club's web site. This means that you have to downsize your images and it makes sense to do so in a way that most closely matches the projector's native resolution.

Here's how to do it.

First Steps

Work up your image to your satisfaction (tonal corrections, straighten, crop etc.).

Using Photoshop Elements

- Select the Crop tool.
- Decide whether the width or the height is the limiting factor. If your image is portrait or square that will be the height. If the image is landscape, it is still likely to be the height unless the image is a panorama in which case it will be the width.
- If the height is limiting, type **1080 px** into the Height box of the crop tool. (note: if the width was limiting you would type **1920 px** into the Width box.) Leave the other dimension empty.

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Aspect Ratio:	Custom 👻	Width:	Height: 1080 px	Resolution:	pixels/inch

- Use the crop tool to draw completely around your image and then click on the green tick.
- The image is now resized correctly. Save it as a .jpg

Using Photoshop

• Use Image/Image Size and look at the dialog box.



- Make sure that the Resample box is ticked.
- The Resolution is irrelevant for projected images.
- Select Bicubic Sharper from the drop down box,
- Make sure the link icon between Width and Height is selected (this maintains the aspect ratio)
- Initially, the Width and Height will have the original image dimensions visible.
- Make sure that the dimensions are shown in pixels.
- Change the height to 1080.

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a to the part of the	● └── Height:	1080	Pixels	~
	Resolution:	300	Pixels/Inch	~
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- Look at the new Width dimension. If it is 1920 or less you have finished (because the height was the limiting dimension).
- If the Width exceeds 1920, then type 1920 into the Width dimension. The height will then change to less than 1080. This will happen for very wide or pano images.
- Save the resulting image as a jpg.

Using Lightroom

Lightroom is smarter than Photoshop Elements and Photoshop. You don't have to worry about which of the dimensions is limiting.

• After finishing with the Develop module, choose File/Export. You see the File/Export Dialog box.

Export To:	Hard Drive	•			
Preset:	Export One File				
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Burn Full-Sized JPEGs Export to DNG For Email For Email (Hard Drive) Helicon Focus Helicon Focus User Presets	Export To: Folder: Existing Files:	Same folder as original y (wherever each source p Put in Subfolder: Add to This Catalog Ask what to do	ohoto ihoto is located) HDTV Add to Stack:	Below Original 💌	•
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Plug-in Manager				Export	Cancel

- Start by choosing the Export Location. A good choice is to put the finished image in a subfolder of the original image. Use a subfolder name that will remind you what it contains. For example: HDTV reminds me that the folder will contain images that have been resized to fit with the HDTV specification of 1920 x 1080 pixels.
- Decide whether you want the result to be included in the catalogue and check or clear Add to This Catalog.
- In File Naming, decide whether you wish to rename the exported image. (The original filename is not altered.)
- In File Settings, set the settings as shown above. All three settings are important.
- Scroll down to see the rest of the dialog box (see next page).

Export One File		8
Export To:	Hard Drive	
Preset:	Export One File	
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Burn Full-Sized JPEGs	Image Format: JPEG Quality: 62	
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- In the Image Sizing section, set up as shown above. The Resolution field doesn't matter, but all the others must be as shown. This is where Lightroom is clever it works out which of the height or width is relevant and always resizes to fit within the specified dimensions.
- Apply Output Sharpening as desired. If you have already sharpened the image, choose Amount: Low.
- Choose whatever Metadata settings please you. Note that if you completely remove metadata you may be disqualified from some competitions, for example the WAPF Interclub.
- Note: You can save all of these settings for future use. Do this by clicking on the Add button near the bottom left of the dialog box. You see the following: (see over page)

Export One File		23			
Export To:	Hard Drive				
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▼ Lightroom Presets ▲	▼ File Settings	-			
Burn Full-Sized JPEGs Export to DNG For Email	Image Format: JPEG Quality: 62 Color Space: sRGB Imit File Size To: 850				
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	New Preset				
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Add Remove	Folder: User Presets Choose	-			
Plug-in Manager	Create Cancel Export Cancel				

- Complete the New Preset Dialog box and click on Create. Now you can use this preset every time you want to export a projected image.
- Finally Click on the Export button.

Tony Luha January, 2016