

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

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2 Introduction

This document will help you understand some methods for preparing, mounting and storing prints. Although its intent is primarily for making prints ready to submit in to camera club prints competitions, the suggestions presented in this document will be useful for the casual/temporary display of prints in one's home or office.

The digital age of photography has made it easier than ever to create high to gallery quality prints at home for relatively little cost with access to ink jet printers. These printers can be purchased for home, accessed through specialty printing shops or at the local Walmart or Costco.

Many people never think of printing their images these days. The widespread use of social media to share images directly from a smart phone or posting of images that have been post processed from a digital camera seems to be good enough. Budding amateurs, experienced enthusiasts and seasoned professionals can all benefit from printing images. There is a lot to be learned about photography by printing one's images, including the fact that you see a lot more of the nuances of composition just by studying your printed image. Technical aspects that are missed or glossed over when you see it on screen are usually quite noticeable by studying the print.

There is a great deal of satisfaction in printing your photos. It is the final step in bringing your art to completion. To hold it in your hand. To see it on a wall, large and framed, from different angles, in different light all adds to the photography experience.

As with any hobby, there are costs involved. Your camera, lenses, tripod, bags, accessories all cost money. Many people have paid thousands of dollars to get the latest most advanced, sharpest cameras and lenses, with ~50 megapixels... all so they can export the images to under 1200 pixels wide to share on social media. There's not much point in having a \$5000 camera with 50 megapixels to do that. You could get by with a smart phone or compact camera.

Printing your images involves some investment in a few tools and materials. There are many reasons people don't print their work, here are a few that come up all the time:

1. My images aren't good enough to print.
2. I don't have space to store all the prints after the competition
 - a. My walls are already full
3. It is too expensive to print
4. What if I don't like the image after I print it?
5. I don't know how to mount the print
6. I don't have the tools needed to cut mats
7. It takes too much time to make/order prints and mount them

Although many of these points sound reasonable, this document will help you find ways to make it easier for you to embrace printing your images and getting them mounted for competition and your enjoyment.

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I will try to address the points above...

1. My images aren't good enough to print.

If you have faith enough in your work to submit them to pictorial competitions, then you should not fear submitting a printed version to prints competitions

2. I don't have space to store all the prints after the competition

- a. My walls are already full

This document will suggest ways in which you can store and display your prints at home or in your office and save space

3. It is too expensive to print

Printing can be costly if you are constantly having to buy supplies. Buying a good quality printer and ink supplies is pricey, but over time the price per print is cheaper, better quality, and you can instantly reprint if you damage a print before competition. Sending out to a lab is more cost effective for general quality prints, but if you want gallery/sellable prints on archival papers, respectable labs will charge on average 15-20 times the price of what it would cost you to do it on your quality home printer. As you get more serious about printing, a decent photo quality printer is a tool you should aspire to, just as you would aspire to a full frame high resolution camera and pro lenses.

4. What if I don't like the image after I print it?

This is a problem. Does that mean you didn't like it on screen? As you progress with your photography skills you will be able to better discern what makes a great image. Simply by entering competitions, attending judging nights and networking with people at camera clubs, social media groups and meetups, you will get better. And as you get better you will look at older images/prints and say "What was I thinking?"

5. I don't know how to mount the print

This document will show you how to do this using a method that is acceptable to judges, reusable, and will allow you to display your prints at home or in the office.

6. I don't have the tools needed to cut mats

There are mat cutting devices available for sale at art stores and online. Your camera club may have one already that you can use. You can also buy mats in bulk pre-cut online and this document lists suppliers and how to reuse the mats many times over.

7. It takes too much time to make/order prints and mount them

It does require some time to be set aside before competition to get your prints in order. You can reduce the time it takes if you have everything ready before hand (mats cut, prints made, backer boards), reducing the overall assembly time to just a few minutes per print. This document suggests reusing mats and backer boards making them ready for the next competition.

3 Preparation

When entering prints competitions, you need to decide how much you want to spend on getting an image from its digital form into a hardcopy that is mounted and acceptable for judging.

It is important to understand that requirements for entering a prints competition at a club level does not require the print to be “gallery” ready. The print does not need to be printed on gallery/archival expensive papers and in fact many clubs will not accept a print that has been printed on archival costly papers. Likewise, using archival mounts and matting, adhesives and frames are not expected. Many clubs will not accept plaque mounted prints or canvas prints. You need to consult the rules of the club you are submitting to what the requirements are.

3.1 Aspect Ratios and Sizes

When choosing your images to submit to prints competitions it is a good idea to choose a size that takes advantage of the maximum overall size restrictions allowable by the competition rules. This will allow the judges a better view of your image without handicapping your submission due to smaller size.

To keep costs down and make it easier for you to obtain and or create and reuse your mounting materials for multiple competitions, you should try to keep your image crops within the standard sizes and aspect ratios. Not only will this save you money, it will make it easier to obtain pre-cut mats and mounting boards should you choose to buy from an online supplier rather than make your own. It also makes it a little easier to get prints made at neighbourhood labs such as Costco and Walmart.

Aspect ratios are standards that have been defined over the years based on technologies from the period that the standard was set. For example the ratio 4:3 was introduced in 1892 as the standard for silent film format. Later, 4:3 was used for North American TV screen size, which was carried forward to computer monitors and later to the digital image format from the early digital cameras and is still in use today with compact cameras and micro four thirds cameras.

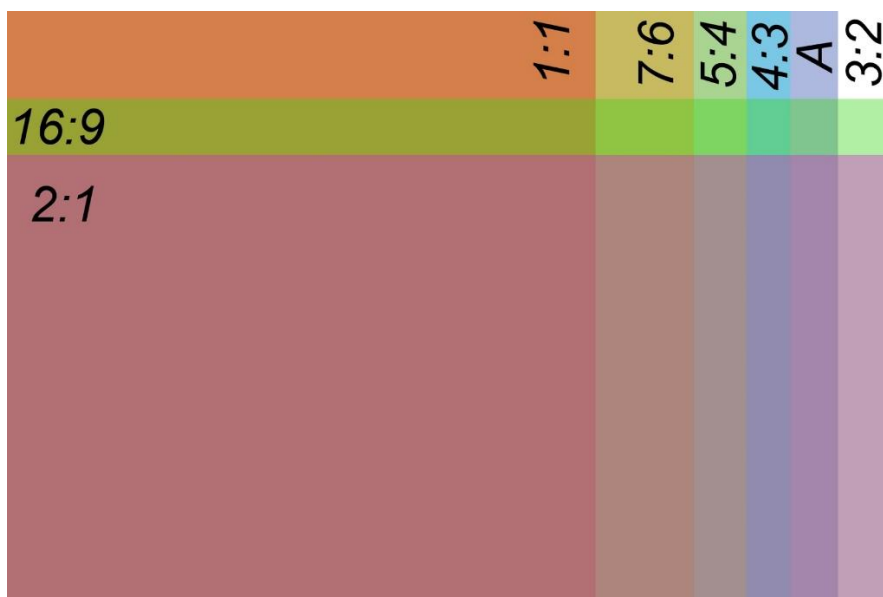


Figure 1 Aspect Ratio Frame Comparison

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Digital cameras have native aspect ratios dictated by the overall size of the sensor. Most cameras have settings that can change the default aspect ratio. Changing the settings in the camera to allow for a different aspect ratios such as 4:3 is handy for composition, however by deviating from the native aspect ratio you will lose overall maximum size of the output image in jpg, but raw files will still have the native aspect ratios. Cropping the image in post to a standard aspect ratio allows the photographer to keep consistency in their portfolio, and allows for standardization of reusable mounting materials, which in turn makes materials more economical and easier to source.

Most current digital cameras have a native aspect ratio of 3:2. This aspect ratio has been in use for quite a while because it is the size of the 135 film frame or 35mm camera frame size now commonly referred to as “full frame”. The 3:2 aspect ratio is not ideal when dealing with prints. Until recently there has been little support for 3:2 aspect ratio in framing and printing supplies. Photo paper and photo printers still utilize standards based on traditional photo sizes and (or to be more correct international paper size standards). For example, a standard 3:2 photo size is 8”x12”. This size does not fit on a standard 8”x10” photo sheet of paper. It forces one to print to a 13”x19” sheet of paper which wastes a lot of paper. The next 3:2 size up is 16”x24” which is too big for the standard 17”x22” photo sheet. Likewise finding mats and frames to fit 3:2 is harder than finding mats and frames for 8x10 and 16x20. This leaves the photographer in a position where they have to decide to crop the image to 5:4 or 4:3 to fit in a standard 16”x20” mat or to downsize the print to 11.5”x16.25” to fit on a standard 13”x19” photo sheet and then cut a custom mat and backer board.

Aspect ratios can be confusing for people that print. Strange things can happen if you make assumptions. When working with a 16x20 overall print size, which is what a lot of clubs set as their maximum total dimension, it is a 5:4 aspect ratio. The print size you need to mount in a 16x20 mat with an even 2” border on all sides would be 12x16 which is 4:3 not 5:4!

3.1.1 Settling on an Aspect Ratio

You need to decide what aspect ratio you want to use for your submission to the prints competitions. The aspect ratio will determine what size of print you need to create. If you are printing your own prints on a home printer, you can make the print any size you want while still accommodating a standard aspect ratio. If you depend on a commercial lab such as Costco, Walmart or Henry’s your choices of print size are limited. The following are the standard sizes of prints available at commercial labs:

Lab Print Sizes	Ratio
4x6	5:4
5x7	7:5
8x10	5:4
8x12	3:2
11x14	
12x18	3:2
16x20	5:4
24x36	3:2
20x30	3:2

Table 1 Common Print Sizes Available at Commercial Labs

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3.1.2 4:3 Works Well for Competition

By far your best choice is to either start composing or cropping your images using a 4:3 aspect ratio. This fits nicely into the 5:4 16"x20" matted mount **with the added benefit of fitting perfectly into the 1050x1400 size requirement for projected/pictorial images!**

Composing your images in camera by setting the aspect ratio to 4:3, you can be sure that you get what you expect in your frame and you won't be cropping out important elements in post processing to accommodate 4:3 after the fact. The image below shows a 3:2 image cropped to 4:3.



3.1.3 16x20 Submissions

This is the target size that you should strive for. This size will give you the largest image to put in front of the judges. When matted the image size is 12x16. Matted images always have a more finished look to them than a borderless print, but if you depend on commercial labs for printing you should go borderless.

3.1.3.1 Lab or Home Printed 16x20 Borderless (5:4)

As you have seen in Table 1 there are only two sizes available that are 5:4 aspect ratio. One is the 8"x10" print, which is small for judging, and the other is the full size 16"x20" which leaves you no room for matting. Go with the 16"x20" and mount it directly to a backer-board using adhesives. **Remember 16"x20" is 5:4 aspect ratio so be sure to crop your images in 5:4 for a full 16"x20" size before sending to the lab for printing.** This way you aren't leaving it up to the lab technician to decide where you want your image cropped.

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3.1.3.2 Home Printed 16x20 Matted (4:3)

As mentioned earlier if you decide to mat your print, 16"x20" total outside dimensions is actually a 5:4 aspect ratio. For the print to fit in to the mat however it will need to be 4:3 aspect ratio to give you an even 2.25" border all the way around. Matting your prints is where composing and cropping to the 4:3 aspect ratio comes in to play. If you are a micro four thirds camera user you are all set to go because the native ratio is 4:3.

Here is the mat layout for a 16"x20" mount using the free app MatWorks! (Windows only) by Giorgio Trucco which can be downloaded here: <https://matworks.software.informer.com/download/>:

The screenshot displays the MatWorks software interface, which is used for calculating mat dimensions. The interface is divided into several sections:

- Input Fields:** MAT SIZE 1 (") is 16, MAT SIZE 2 (") is 20, and MAT LAYOUT is Landscape. PRINT SIZE 1 (") is 13, PRINT SIZE 2 (") is 19, and PRINT LAYOUT is Landscape. IMAGE SIZE 1 (") is 12, IMAGE SIZE 2 (") is 16, and IMAGE LAYOUT is Landscape.
- MATTING STYLE:** The MAT STYLE is set to Single Mat. The matting style options are Centered (selected), Bottom Weighted, and Double Bottom Weighted.
- Overlap and Distance:** MAT over IMAGE OVERLAP (") is 0.25. MAT to MAT DISTANCE (") is empty.
- Calculate:** A red button labeled "Calculate" is present.
- Back Mat:** Width is 20, Height is 16. Mat Size (") is 20, 16.
- Single Mat:** Width is 20, Height is 16. Mat Opening (") is 15.5, 11.5. Bottom Weight (") is 2.25.
- Double Mat:** Width and Height are empty. Mat Size (") is empty. Mat Opening (") is empty. Bottom Weight (") is empty.
- Mats Dimensions Preview (Drawing is in Scale):** A preview window showing a photograph of a desert landscape with cacti and flowers, framed by a yellow mat. The mat is divided into sections: Back Mat (yellow), Print Paper (white), Single Mat Opening (red), and Double Mat Opening (green).
- Footer:** by: Giorgio Trucco, www.gt-photography.com

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3.1.4 3:2 Submissions

As you have seen in the Table 1, there are at least four 3:2 choices to be had, but only 8"x12" will fit within the 16"x20" restriction of the prints competition with a mat, and that size is rather small.

3.1.4.1 Lab Printed 3:2 with Standard Mat

The "full frame" 3:2 8"x12" can be mounted under a standard 12"x16" mat providing a 2.25" even border all the way around. Here is MatWorks! Configuration for a *8x12" lab print:

The screenshot displays the MatWorks! software interface for configuring a 3:2 print. The interface is divided into several sections:

- Input Fields:** MAT SIZE 1 ("), MAT SIZE 2 ("), PRINT SIZE 1 ("), PRINT SIZE 2 ("), IMAGE SIZE 1 ("), and IMAGE SIZE 2 ("). Values are set to 12, 16, 8, 12, 8, and 12 respectively.
- Layout Options:** MAT LAYOUT, PRINT LAYOUT, and IMAGE LAYOUT, all set to "Landscape".
- MATTING STYLE:** Includes radio buttons for "Centered" (selected), "Bottom Weighted", and "Double Bottom Weighted". A "MAT STYLE" dropdown is set to "Single Mat".
- Overlap and Distance:** MAT over IMAGE OVERLAP (") is set to 0.25. MAT to MAT DISTANCE (") is empty.
- Calculate:** A red button labeled "Calculate".
- Mat Dimensions:** A table showing dimensions for Back Mat, Single Mat, and Double Mat. The Single Mat section shows a Mat Size of 16x12, a Mat Opening of 11.5x7.5, and a Bottom Weight of 2.25.
- Preview:** A window titled "Mats Dimensions Preview (Drawing is in Scale)" showing a photograph of a desert landscape with a red border. Below the preview are checkboxes for "Back Mat", "Print Paper", "Single Mat Opening" (checked), and "Double Mat Opening".
- Footer:** Text indicating "by: Giorgio Trucco" and "www.gt-photography.com".

3.1.4.2 Lab or Home Printed 3:2 Borderless


Your second option with commercial lab or home printed images is to forgo matting the print and mount the image directly on a backer-board. In this case you would order or print a 12"x18" print and mount it directly on to a backer-board using adhesives.

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3.1.4.3 Home Printed 3:2 with Custom Mat

By printing your own 3:2 print you can increase the image size to maximize your image in front of the judges and still include a 2" mat border. Here are the MatWorks! settings for a custom 3:2 mat and print.

<table border="1"><tr><td>MAT SIZE 1 (")</td><td>MAT SIZE 2 (")</td><td>MAT LAYOUT</td></tr><tr><td>14.5</td><td>20</td><td>Landscape</td></tr></table>	MAT SIZE 1 (")	MAT SIZE 2 (")	MAT LAYOUT	14.5	20	Landscape	<table border="1"><tr><td>PRINT SIZE 1 (")</td><td>PRINT SIZE 2 (")</td><td>PRINT LAYOUT</td></tr><tr><td>13</td><td>19</td><td>Landscape</td></tr></table>	PRINT SIZE 1 (")	PRINT SIZE 2 (")	PRINT LAYOUT	13	19	Landscape	<table border="1"><tr><td>IMAGE SIZE 1 (")</td><td>IMAGE SIZE 2 (")</td><td>IMAGE LAYOUT</td></tr><tr><td>11</td><td>16.5</td><td>Landscape</td></tr></table>	IMAGE SIZE 1 (")	IMAGE SIZE 2 (")	IMAGE LAYOUT	11	16.5	Landscape	<table border="1"><tr><td>Back Mat</td><td>Width</td><td>Height</td></tr><tr><td>Mat Size (")</td><td>20</td><td>14.5</td></tr></table>	Back Mat	Width	Height	Mat Size (")	20	14.5	<p>Mats Dimensions Preview (Drawing is in Scale)</p> 
MAT SIZE 1 (")	MAT SIZE 2 (")	MAT LAYOUT																										
14.5	20	Landscape																										
PRINT SIZE 1 (")	PRINT SIZE 2 (")	PRINT LAYOUT																										
13	19	Landscape																										
IMAGE SIZE 1 (")	IMAGE SIZE 2 (")	IMAGE LAYOUT																										
11	16.5	Landscape																										
Back Mat	Width	Height																										
Mat Size (")	20	14.5																										
MATTING STYLE			<table border="1"><tr><td>Single Mat</td><td>Width</td><td>Height</td></tr><tr><td>Mat Size (")</td><td>20</td><td>14.5</td></tr><tr><td>Mat Opening (")</td><td>16</td><td>10.5</td></tr><tr><td>Bottom Weight (")</td><td colspan="2">2</td></tr></table>	Single Mat	Width	Height	Mat Size (")	20	14.5	Mat Opening (")	16	10.5	Bottom Weight (")	2														
Single Mat	Width	Height																										
Mat Size (")	20	14.5																										
Mat Opening (")	16	10.5																										
Bottom Weight (")	2																											
<table border="1"><tr><td>MAT STYLE</td><td><input checked="" type="radio"/> Centered</td></tr><tr><td></td><td><input type="radio"/> Bottom Weighted</td></tr><tr><td></td><td><input type="radio"/> Double Bottom Weighted</td></tr></table>			MAT STYLE	<input checked="" type="radio"/> Centered		<input type="radio"/> Bottom Weighted		<input type="radio"/> Double Bottom Weighted	<table border="1"><tr><td>Double Mat</td><td>Width</td><td>Height</td></tr><tr><td>Mat Size (")</td><td></td><td></td></tr><tr><td>Mat Opening (")</td><td></td><td></td></tr><tr><td>Bottom Weight (")</td><td></td><td></td></tr></table>	Double Mat	Width	Height	Mat Size (")			Mat Opening (")			Bottom Weight (")									
MAT STYLE	<input checked="" type="radio"/> Centered																											
	<input type="radio"/> Bottom Weighted																											
	<input type="radio"/> Double Bottom Weighted																											
Double Mat	Width	Height																										
Mat Size (")																												
Mat Opening (")																												
Bottom Weight (")																												
<table border="1"><tr><td>MAT over IMAGE OVERLAP (")</td><td>MAT to MAT DISTANCE (")</td></tr><tr><td>0.25</td><td></td></tr></table>			MAT over IMAGE OVERLAP (")	MAT to MAT DISTANCE (")	0.25		<p>by: Giorgio Trucco www.gt-photography.com</p>																					
MAT over IMAGE OVERLAP (")	MAT to MAT DISTANCE (")																											
0.25																												
<p>Calculate</p>																												
<p><input type="checkbox"/> Back Mat <input type="checkbox"/> Print Paper <input checked="" type="checkbox"/> Single Mat Opening <input type="checkbox"/> Double Mat Opening</p>																												

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3.1.5 1:1 (Square) Submissions

If you choose to submit 1:1 aspect ratio submissions, you can do so. Commercial labs may have a problem with this size since they try to stretch the image to fill one of the 5:4 or 3:2 aspect ratio prints. Costco can do this size if you talk to the printer tech that is on duty. They will make special accommodations but it will take longer since it has to be done manually. If you have a home printer you can easily do it. Mats in 1:1 format are considered custom, and you will either need to cut your own or order custom cut mats.

3.1.5.1 1:1 Borderless 16x16

Just print a full 16x16 and mount to a backer-board using adhesives.

3.1.5.2 1:1 Matted 16x16

Print your image on your home printer to 12"x12" and use a custom 16"x16" mat. Since you are printing on a 13"x19" sheet, just trim back the excess to 13"x13" Here are the MatWorks! details:

The screenshot shows the MatWorks! software interface. On the left, there are input fields for MAT SIZE 1 (16), MAT SIZE 2 (16), PRINT SIZE 1 (13), PRINT SIZE 2 (13), and IMAGE SIZE 1 (12), IMAGE SIZE 2 (12). Below these are options for MAT LAYOUT and PRINT LAYOUT (both set to Square). The MATTING STYLE section includes MAT STYLE (Single Mat), MAT STYLE (Centered, Bottom Weighted, Double Bottom Weighted), MAT over IMAGE OVERLAP (0.25), and MAT to MAT DISTANCE. A red 'Calculate' button is at the bottom. On the right, there are tables for Back Mat, Single Mat, and Double Mat dimensions. A preview window shows a seal's face on a yellow mat with a red border. A legend at the bottom identifies the colors for Back Mat, Print Paper, Single Mat Opening, and Double Mat Opening.

<u>Image Crop Ratio</u>	<u>Max Mat</u>	<u>Photo Paper Size Req.</u>	<u>Print IMG Size</u>	<u>Mat Opening</u>	<u>Mat Border (inches)</u>
1:1	16x16	13x19	12x12	11.5x11.5	2.25x2.25
3:2*	12x16	8x12	8x12	7.5x11.5	2.25x2.25
3.2	14.5x20	13x19	11x16	11.5x16.5	2x2
4:3	16x20	13x19	12x16	11.5x15.5	2.25x2.25

Table 2 Summary of Mat and Print Sizes. *Standard mat and lab print size.

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4 Supplies

To mount your prints you will need some supplies. These supplies are available on the web and at local stores in your town or city. Consider the amount of supplies you need upfront because usually its more cost effective to buy quantities and having a supply on hand will save you from having to run out and buy stock the last minute before a competition is due only to find out your local store is sold out (it happens).

You don't need to buy everything in the supplied list. Only buy what your need to get the job done. Mounting is all about options and what your needs are. If you aren't matting your prints and are going to be using prints from a lab, you may not need any matting tools or materials, but you will need backer-boards of some type, some adhesives, an ultra-sharp Olfa knife, a long straight edge ruler and maybe a brayer roller.

If you want to cut your own mats you will need a good quality mat cutter or use the one at the club if they have one.

The amount you buy upfront should be based on how many competition entries you intend to make in the season, whether you intend to keep mounted images for other competitions later on such as CAPA or TCC Salon, or if you belong to multiple clubs. Also take into account any images you intend to give away or keep for your own walls. If you want to recycle mats and backer-boards you can save some money.

4.1 Materials & Tools

Here is a list of common materials you should obtain depending on your needs.

Materials	Supplier	Approx. \$ ea.
1" painter's tape (green or blue variety)	1,6,7	\$4.00
Corrugated Plastic Sheets 16x20 precut	4	\$4.00
Corrugated Plastic Sheets 32x48	3	\$15.00
Foam-board sheets 20x30x3/16"	5	\$2.00
Foam-board sheets 32x40x3/16"	3,4	\$6.00
Mat 12x16 Precut (for 3:2 8x12) Qty min 6	9	\$5.00
Mat 16x20 Precut (for 4:3 12x16) Qty min 6	9	\$7.00
Mat Board 32x40 non-archival in white	3,4	\$9.00
Photo paper, lustre or glossy premium 13x19 50 sheets	10,11	\$90+
Removable labels Avery 06468 (Canada) or 5163 (US)	12	\$17.00
Tools		
Brayer roller 4"	2,3,4	\$19.00
Mat Cutter Logan #350-1 Compact Classic (minimum)	3,4	\$250.00
Metal Straight Edge Ruler 48"	1,6,7	\$15.00
Olfa "L" Utility Knife Ratchet Lock 18mm	1,6,7	\$9.00
Olfa Knife 18mm black blades (LBB)	1,6,7	\$9.00
Rollataq 16oz Adhesive	2	\$18.00
Rollataq 300 Hand Applicator Starter Kit	2	\$50.00
SCOTCH Photo Mount 4.2oz can	2	\$14.00
T-Square 36"	3,4,8	\$27.00

Suppliers	
1	Canadian Tire
2	CarrMclean.ca
3	Curry's
4	Deserres
5	Dollarama
6	Home Depot
7	Lowe's
8	Michael's
9	MatShop.ca
10	Henry's
11	Vistek
12	Staples

Table 3 List of Materials, Tools & Suppliers

5 Printing

This section is where you get down to the actual printing of your work. By now you will have decided on the aspect ratio of your image and cropped accordingly. You will have post processed the image to your liking, cleaned up any dust spots on your image and are now ready to attempt a print.

Photo printers are specialized for printing images. While most home printers have the capability to print photos, many are not suited to reproduce the breadth of colours, contrasts, quality and sizes that a dedicated photo printer can produce. Most general purpose colour ink jet printers are great at printing pages of text and the occasional graphic image, but they usually only have four ink cartridges which limits their usefulness as a photo printer. Dedicated photo printers have eight to twelve ink cartridges including three to four levels of black ink and are usually wide enough to print on 17" wide paper.

Printing can be challenging at first, and if you have just bought a shiny new photo printer you should be prepared to experiment. Experimenting means you will run through some paper and ink as you get know and understand the process. This is the stage where you will appreciate having your monitor colour calibrated, since the output of most printers will look different than what you see on your screen. The amount of that difference depends greatly on the calibration of your monitor, the paper you select for your printer, and the printer and it's inks.

It is recommended that you stick with a good quality paper and inks from the manufacturer of your printer. This will simplify things and allow you to use the manufacturer supplied ICC profiles for the printer/paper combination you select.

ICC profiles are provided by the paper manufacturers. These profiles are created using a wide variety of printers that have been made over the years so that the printer output will closely match what you see on your calibrated screen.

To learn more about printing, there is a wealth of information in this book... it is well worth buying!:

"Fine Art Printing for Photographers: Exhibition Quality Prints with Inkjet Printers" by Uwe Steinmueller & Juergen Gulbins 2013 or later edition ISBN-10: 1937538249

If you don't have a photo printer at home, sending your work out to a commercial lab to have it printed is the next best thing. Photo labs have some restrictions and requirements for the types of files they accept, and sizes of output (output sizes were covered in section 2.1.1). How to export JPG files to submit to a commercial lab will be covered in this section.

5.1 Software

There are many ways to output your image to your own photo printer, to export the image to a JPG file for a commercial lab, or to export to a JPG file for viewing on a projected screen/social media.

There are specialized printing software packages that are available but those are expensive and are usually for high volume pros and are overkill for competition printing hence they won't be covered in this document.

The software you use to post process your images more than likely has built in tools to print and export. Some software only has rudimentary capabilities for both printing (which limits and makes it more difficult to get what you expect) and for exporting, while others are very flexible in what settings you can adjust for both. It is beyond the scope of this document to cover all of the RAW editing software packages out there, however this document will focus on four of the most popular packages available at the time of this writing:

- Adobe LightRoom Classic
- Adobe PhotoShop CC
- DXO PhotoLAB 2
- Skylum Luminar 3

5.2 Exporting to JPG

For competition there are two reasons why you will need to export you images to a JPG file. One is to submit a digital version of your image to the competition for projecting your images during presentation of the awards, and the other reason is to submit your images to a commercial lab if you don't have a photo printer at home. Each of these JPG exports have very different requirements, dictated by your club's projected image restrictions and the lab's restrictions and requirements. Don't submit a projected image JPG to a lab, the printed image will be ruined.

To get your images out to a commercial lab, you need to provide them with a file. This file will need to comply with the lab's maximum file size and colour space restrictions. Labs have the ability to accept files over the internet, or for you to put them on a USB memory stick or SD card and walk in to the lab and submit them. By submitting your images online to Costco or Walmart you will save about \$1 per print over walk in orders.

5.2.1 Export a JPG File for Lab Prints

Labs have restrictions on the size of images both overall file size, colour space requirements, file type and resolution (pixels per inch).

Fortunately if one uses the lab with the lowest requirements for the above settings, they will work with all labs. The lab with the lowest maximums at the time of this writing is Walmart Canada, which has a maximum file size of 20MB, and all other settings are on par with other labs. Since we are going to be using JPG files, we won't come close to 20MB.

Max File Size	20MB
Colour Space	sRGB
File Type	JPG
Resolution (PPI)	300

Table 4 Lab Image Export Requirements

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

5.2.1.1 Export a Lab Image using Adobe LightRoom Classic

Adobe LightRoom Classic is a very powerful RAW converter with many rich features for exporting and printing. It incorporates many of the Photoshop capabilities with a much more intuitive/easy to use interface. To export from LightRoom Classic, simply right click on the selected image and select “Export”, or go to the top menu, click on File, and click on “Export...”. You will be presented with the following pop up dialogue box (Windows, but Mac should be the same):

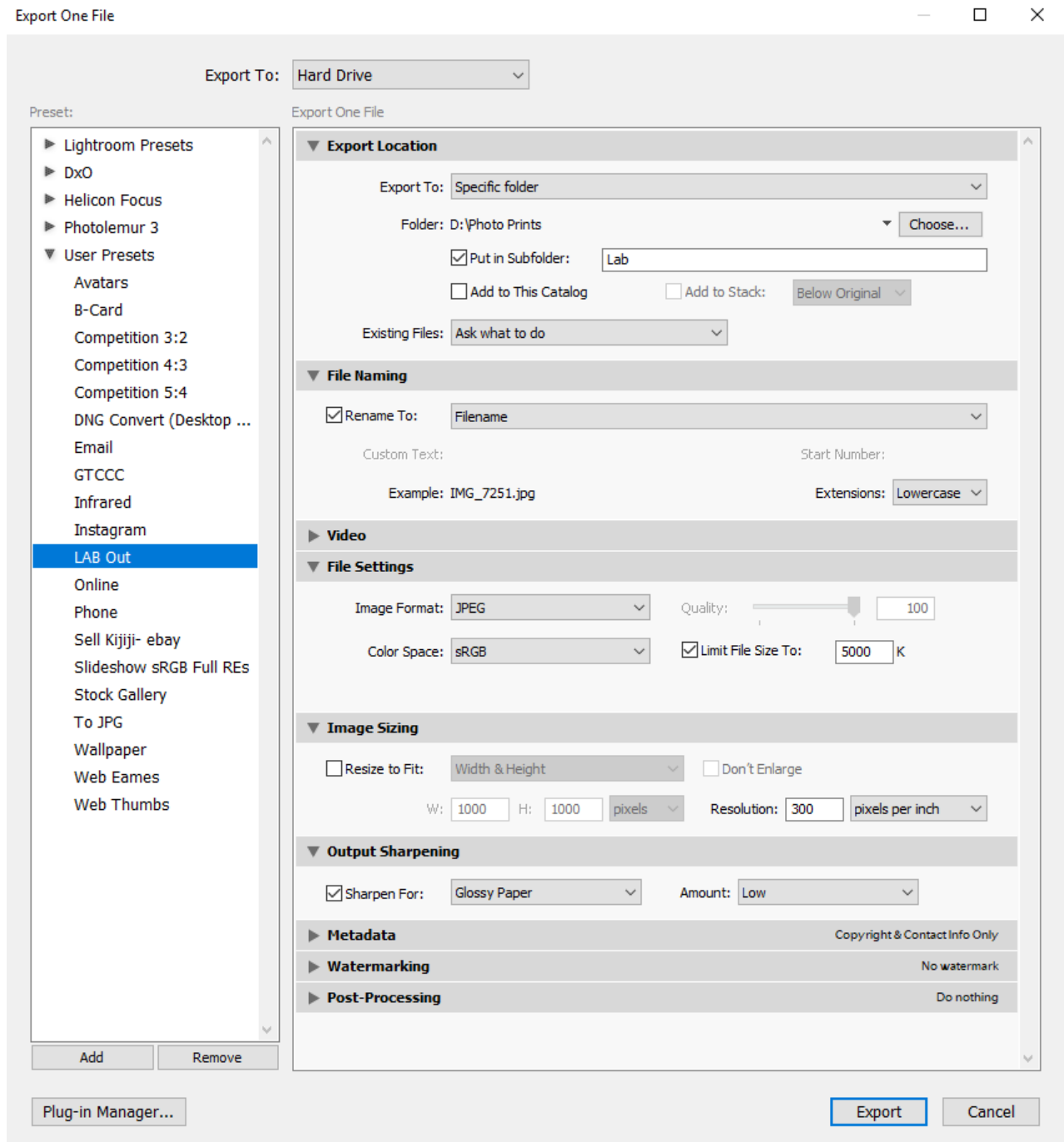


Figure 2 LightRoom Classic Export Dialogue

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The nice thing about LightRoom Classic Export is that you can create User Presets for exports that you do regularly. This will save you time in trying to think about what settings are needed every time you want to export an image for a particular use. Create a Lab preset and use it every time.

Presets are listed down the left hand side of the export dialogue screen. In this example I have created a “LAB Out” preset. For creating a lab ready JPG file there are only five settings you need to make:

1. Export Location, Set this to the folder on your computer that you intend to store your lab prints in
2. File Naming, You can leave this default which is to use the name of the image file (I usually rename my files in LightRoom prior to export)
3. File Settings, “Image Format” will be JPG, “Colour Space” will be sRGB check the “Limit File Size To” box and key in 5000k (5 MB)
4. Image Sizing, un-check “Resize to Fit” and set “Resolution” to 300 PPI ← this is important for prints!
5. Output Sharpening, If you have sharpened a lot in post processing (hopefully you didn’t overdo it), uncheck “Sharpen For”. Otherwise check the “Sharpen For” and select Glossy Paper, and set “Amount” to Low or Standard
6. Click “Add” underneath the Preset column on the left and give your preset a name
7. Click “Export” on the bottom right to export the image.

Your Image is now ready to send the lab.

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5.2.1.2 Export a Lab Image using Adobe Photoshop CC

Adobe Photoshop is just about the most flexible when it comes to exporting and printing. It is also one of the more difficult programs to understand. LightRoom Classic is derived from Photoshop and has a subset of the options that are available in Photoshop. Photoshop is a multistep process to export a file to meet the requirements of the lab. Here is the Photoshop workflow:

1. First Change the Image Size. Click on the Image Menu at the top, and select “Image Size...”. Leave everything as is except uncheck “resample” and then make sure that “Resolution” is set to 300 Pixels/Inch.

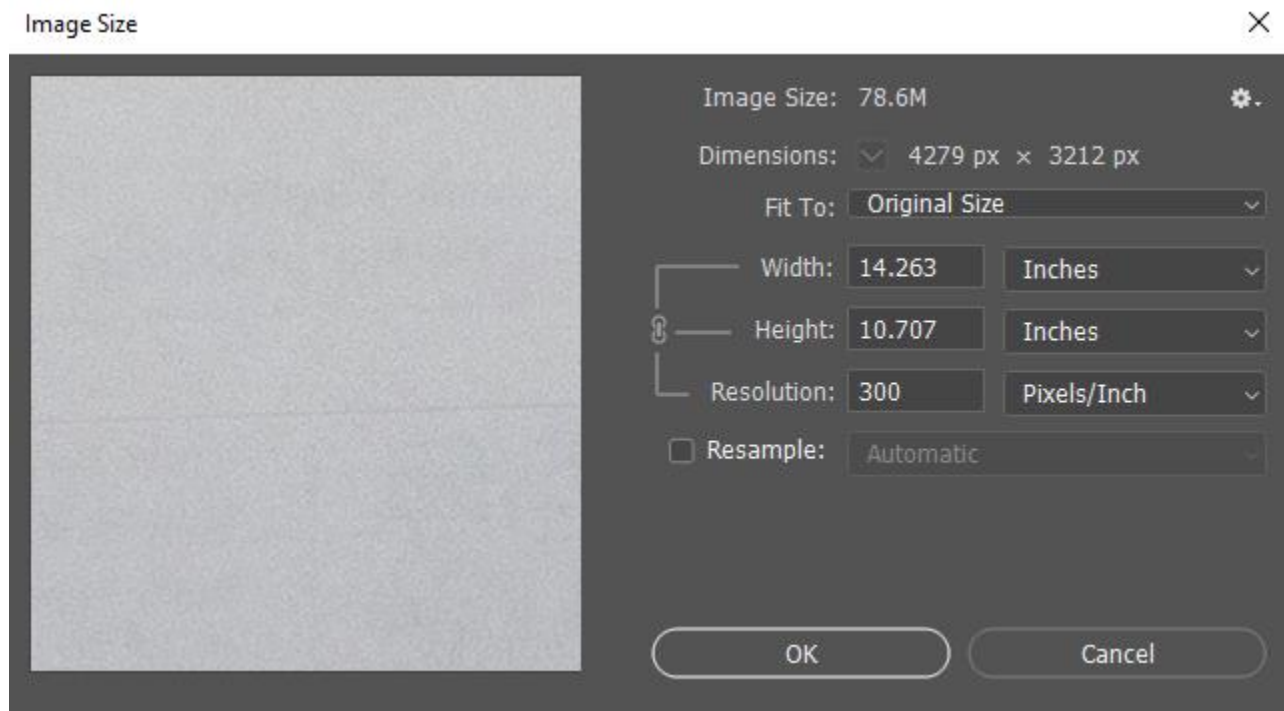


Figure 3 Photoshop CC Image Size Dialogue

2. Set the Colour Space of the image. Click on the Edit Menu at the top, and select “Assign Profile...”. If the “Working Profile” isn’t already set to sRGB, click the “Profile” Button and select “sRGB IEC61966-2,1” and click OK

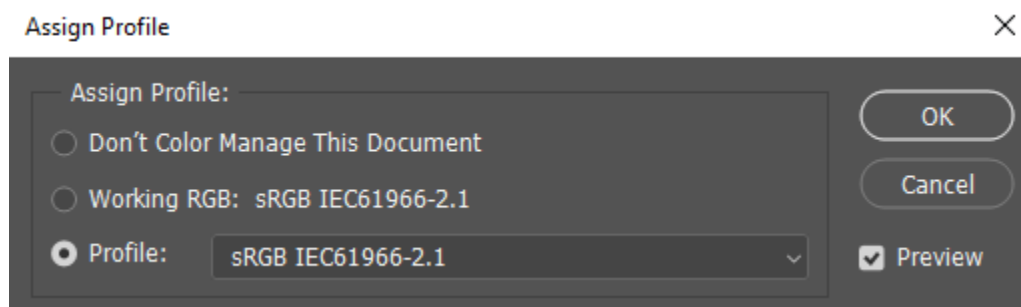


Figure 4 Photoshop Assign Colour Profile Dialogue

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3. We aren't going to use the "Export" feature of Photoshop because it is too specific in its ways, instead we will use the "Save As..." feature under the "File" menu at the top. First select the folder you want to save to, change the Save as type to JPEG, then choose the name you want to use or leave it as default. Be sure that the "ICC Profile is sRGB and it is checked, then click "Save".

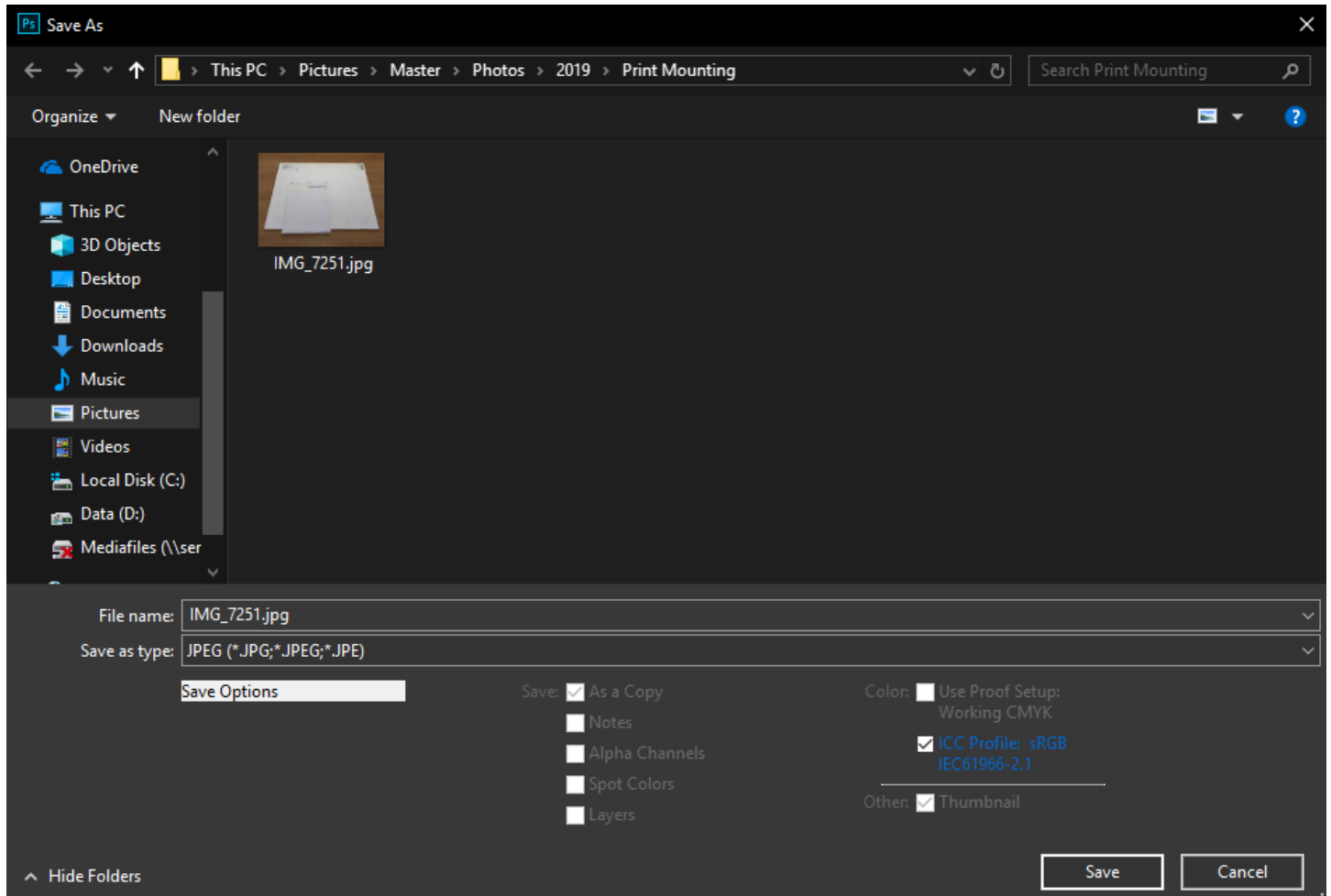


Figure 5 Photoshop Save As Dialogue

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The next dialogue that pops up will allow you to specify the JPG file settings. You can set these at maximum since the labs allow file sizes up to 20MB, but if you are working with a large megapixel camera you made need to reduce the file size slider to keep the output under 20MB. Leave the "Format Options" to Baseline (Standard). Then click OK. Your file will be saved in the folder you chose. Be sure to check the output from the lab for colour correctness. Even though Photoshop saves the sRGB colour space profile in the JPG, the image doesn't display the same on screen as it would being exported from LightRoom with the sRGB profile.

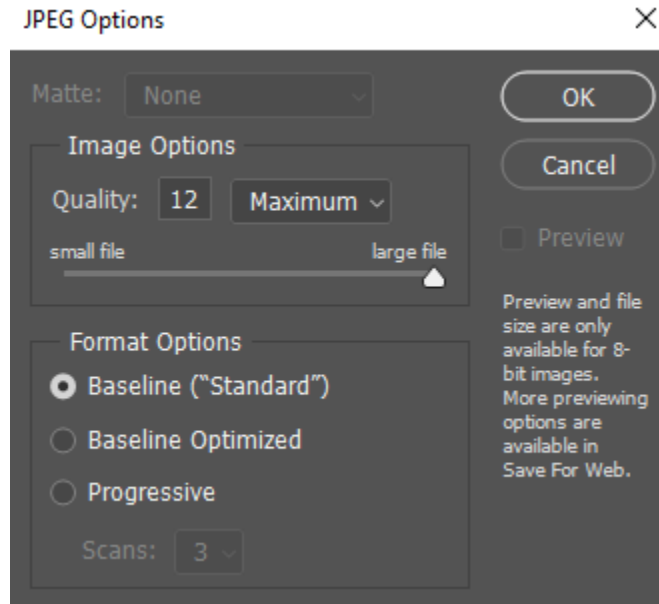


Figure 6 Photoshop JPG File Options Dialogue

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

5.2.1.3 Export a Lab Image using DXO Photolab 2

DXO Photolab 2 is the latest version of this RAW converter. Previous versions, Photolab 1 and Optics Pro should function that same as Photolab 2. DXO is really quite straight forward to export a JPG. Like Lightroom it allows you to create export presets so you can easily export files for different uses. Here I have created one for LAB Out. DXO is known for it's RAW conversion engine, providing excellent quality output, however that comes with a price, the conversion is quite slow and has about a 30% larger file size than LightRoom or Photoshop. Here are the details for DXO settings.

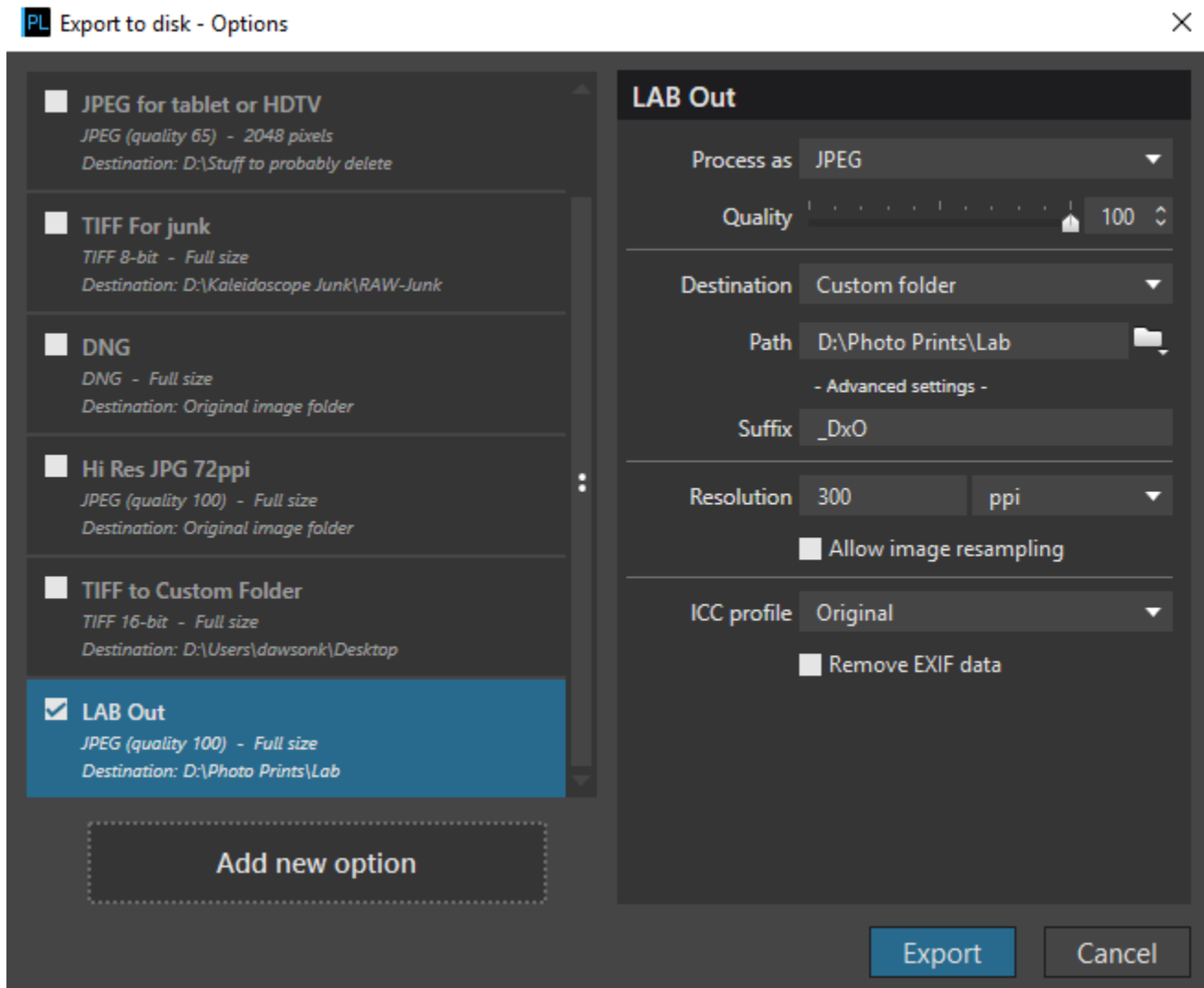


Figure 7 DXO Photolab 2 Export Dialogue

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

5.2.1.4 Export a Lab Image using Skylum Luminar 3

Skylum (Previously MacPhun) Luminar 3 is a relatively new RAW converter on the market. Since Adobe's change to a subscription model, Luminar has gained in popularity due to it still being a purchase rather than subscription. Luminar is still growing and with that it has a lot of growing pains. The interface and cataloguing functions are changing rapidly with each update and features are still being added. The latest version as of this writing is 3.02.2186. The Export function has been beefed up considerable in version 3.x and is now quite usable. To access it go to "File" at the top and select "Export..." from the export dialogue popup. Settings are easy to figure out. Be sure to select a resolution of 300 pixel/inch. Luminar is not quick to export a JPG file, but it's faster and it's output file size is smaller than DXO.

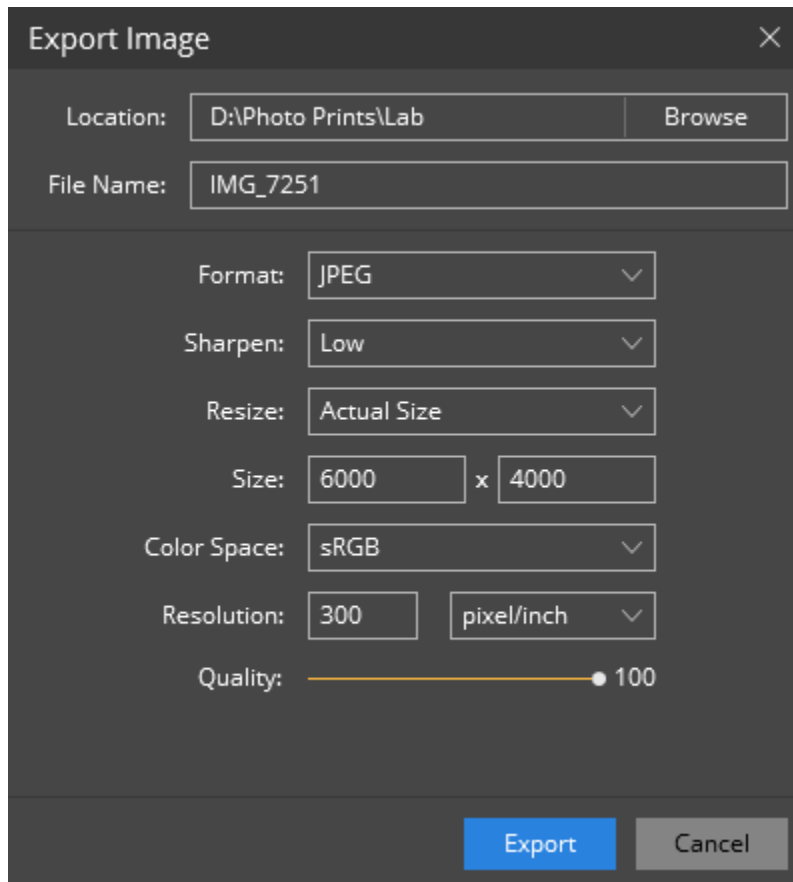


Figure 8 Luminar Export Dialogue

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Suggested Methods for Preparation, Mounting and Storage

5.2.2 Exporting a JPG File for Projection

All competitions require a digital image to be submitted. Clubs and online competitions each have their own requirements as to what they expect for a digital image. There are file size restrictions, maximum height and width restrictions, sRGB colour space requirements, and pixels per inch requirements.

These digital images are used for judging and award presentation. Exporting a clean sharp image that meets the maximum requirements is important, especially for the judging portion of the competition. Submitting images that don't meet requirements may mean poorer scores and or disqualification.

Pixels per inch (PPI) can be reduced drastically for screen or projection viewing. This lowers the overall file size, but image quality will not be reduced. 72 PPI is the recognized standard for screen and projection viewing and is widely used on the Web.

The maximum height and width allowances can be difficult to understand and achieve, but some software packages make it much easier to do.

The same software and workflows used for exporting JPG files for lab printing can be used for digital print exporting. The only things that change are the numbers in the settings.

5.2.2.1 Understanding Maximum Height & Width Restrictions

Many people have problems getting their images set to the right size on export. It is a confusing task and software doesn't always come to the rescue for you. Maximum height and width restrictions are usually imposed by the projection equipment being used for judging and presentation. Many digital projectors have a maximum resolution of 1050x1400 which is a 4:3 aspect ratio. If you try to export an image that is not in the 4:3 aspect ratio to fit into 1050x1400 your image will be cropped or stretched (distorted) to meet the size. You'll need to make adjustments to either the maximum height or maximum width in pixels **but not both!** You will need to keep the ratio "locked" if your software allows this in its export settings.

There are some factors to be aware of. Landscape vs. portrait oriented images. No matter what aspect ratio you use, Portrait images will **ALWAYS** be the maximum height allowed. If the maximum height is 1050, then your image height will always be 1050. It will be the width that is adjusted down. With landscape oriented photos you could have both height or width variations depending on aspect ratio. These height and width sizes can be calculated using a multiplication factor for each aspect ratio and entered manually in to software that doesn't automatically calculate this for you. See Table 5, below.

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Suggested Methods for Preparation, Mounting and Storage

Landscape				
Aspect Ratio	Size	Height	Width	Multiply width by
3:2	12x18	933	1400	0.67
4:3	12x16	1050	1400	0.75
				Multiply height by
5:4	16x20	1050	1313	1.25

Portrait				
Aspect Ratio	Size	Height	Width	Multiply height by
3:2	18x12	1050	700	0.67
4:3	16x12	1050	788	0.75
5:4	20x16	1050	840	0.80

Table 5 Projected image export size chart

In Table 5 you see the multiply factors to calculate either the needed height or width. The numbers in green are fixed competition limits for the important side, the numbers in red are derived from the multiply factor. If you have custom cropped your images, the numbers in Table 5 probably will not apply. You will have to experiment until you get output that comes within the 1050x1400 limit without distorting your image.

Landscape can be tricky because a 5:4 image can actually go over the width size limit if the height is 1050. You must calculate the width in this case and use 1050 as the height.

Portrait is straight forward. They can all be calculated from the known maximum height of 1050. If you have a 3:2 Portrait image, you know that your maximum height can be 1050. To get the width you need to keep your image from distorting, you would multiply 1050 x 0.67 which would give you your target width of 700 pixels. Round up to the next whole number in all cases.

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5.2.2.2 Exporting Projection Images using Lightroom Classic

To export an image for digital display from LightRoom Classic, simply right click on the selected image and select “Export”, or go to the top menu, click on File, and click on “Export...”. You will be presented with the following pop up dialogue box:

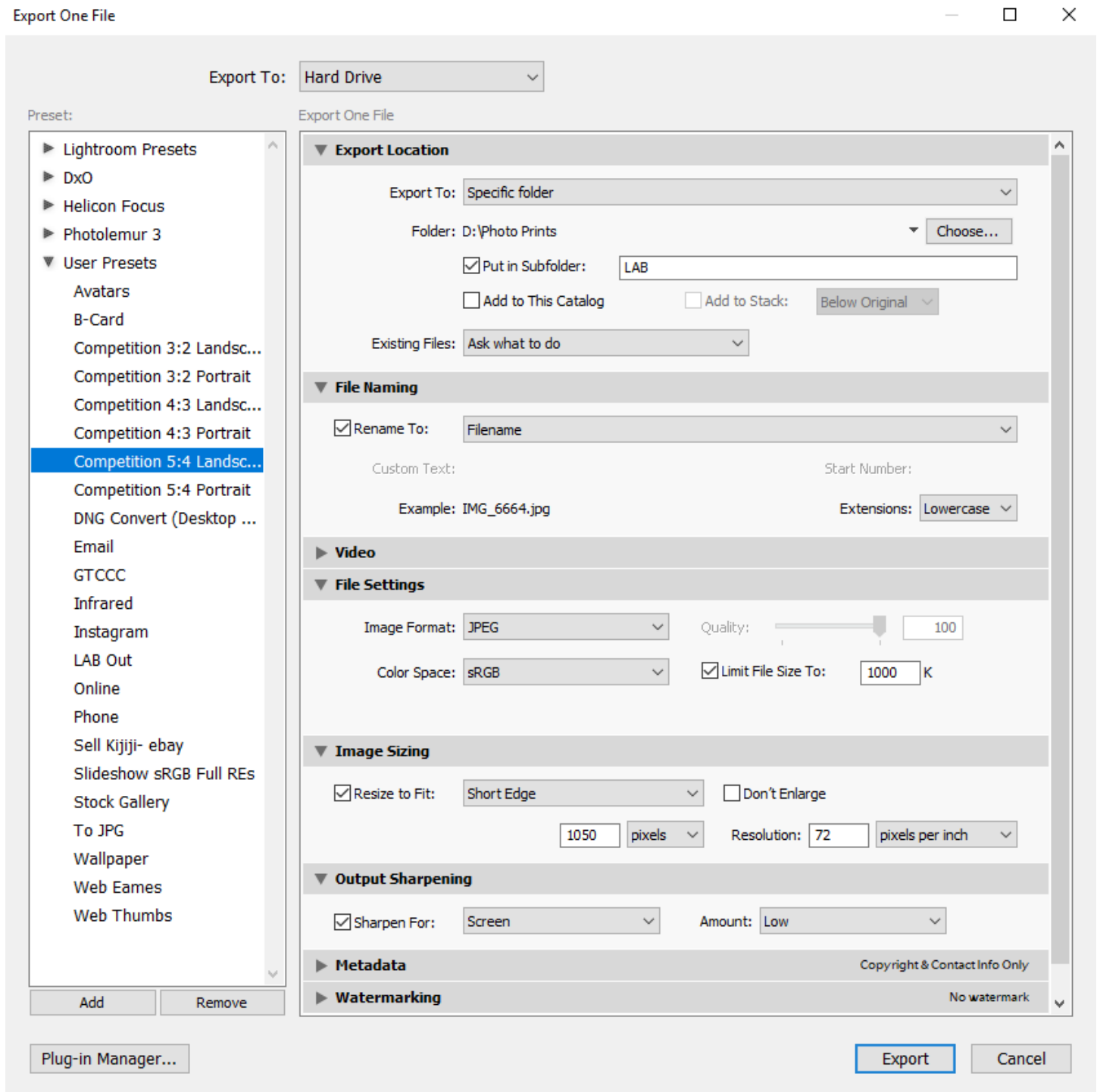


Figure 9 LightRoom Classic Digital Image Export Dialogue

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Suggested Methods for Preparation, Mounting and Storage

Remember with LightRoom Classic Export you can create presets for your image exports, saving you from configuring the settings every time you export. Learn how to create presets and make use of them. In the example above I have created presets for Competition 3:2, 4:3, and 5:4 for both landscape and portrait images. Here are the LightRoom Classic export settings:

1. Export Location, Set this to the folder on your computer that you intend to store your lab prints in
2. File Naming, You can leave this default which is to use the name of the image file (I usually rename my files in LightRoom prior to export)
3. File Settings, "Image Format" will be JPG, "Colour Space" will be sRGB check the "Limit File Size To" box and key in 1000k (1 MB). The File size limit is dictated by the competition so set it based on that. LightRoom will do it's best to keep it close to that size but not over.
4. **Landscape:** Image Sizing, un-check "Don't Enlarge", check "Resize to Fit" and then select "Long Edge", "1400" Pixels for 3:2 landscape, or "Short Edge" and then select "Short Edge", "1050" Pixels for 4:3 or 5:4 landscape (as in Table 5).
5. **Portrait:** Image Sizing, un-check "Don't Enlarge", check "Resize to Fit" and then select "Long Edge", "1050" Pixels (as in Table 5).
6. Set "Resolution" to 72 PPI, it doesn't matter what this is set to for digital viewing, it only makes a difference for prints.
7. Output Sharpening, If you have sharpened a lot in post processing (hopefully you didn't overdo it), uncheck "Sharpen For". Otherwise check the "Sharpen For" and select Glossy Paper, and set "Amount" to Low or Standard
8. Click "Add" underneath the Preset column on the left and give your preset a name
9. Click "Export" on the bottom right to export the image.
10. Verify that your images are meet the maximum pixel width and depth after export using Windows File Properties:

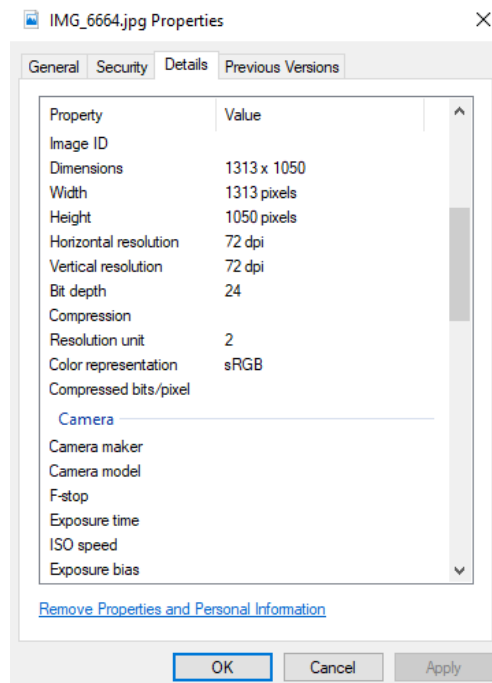


Figure 10 Check exported image File Properties to verify height and width

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Suggested Methods for Preparation, Mounting and Storage

5.2.2.3 Exporting Projection Images using Photoshop CC

Adobe Photoshop is just about the most flexible when it comes to exporting and printing. It is also one of the more difficult programs to understand. LightRoom Classic is derived from Photoshop and has a subset of the options that are available in Photoshop. Photoshop is a multistep process to export a file to meet the requirements of the lab. Here is the Photoshop workflow:

1. We aren't going to use the "Save As..." feature of Photoshop this time it doesn't give us the control we need, instead we will use the "Export As..." feature under the "File" menu at the top.
 - a. First change the "Format:" to type JPG
 - b. Set "Image Size" height or width (not both) based on the info from Table 5, Photoshop will calculate the other dimension
 - c. In the Color Space section check the box under "Convert to sRGB"
 - d. Click "Export All..."

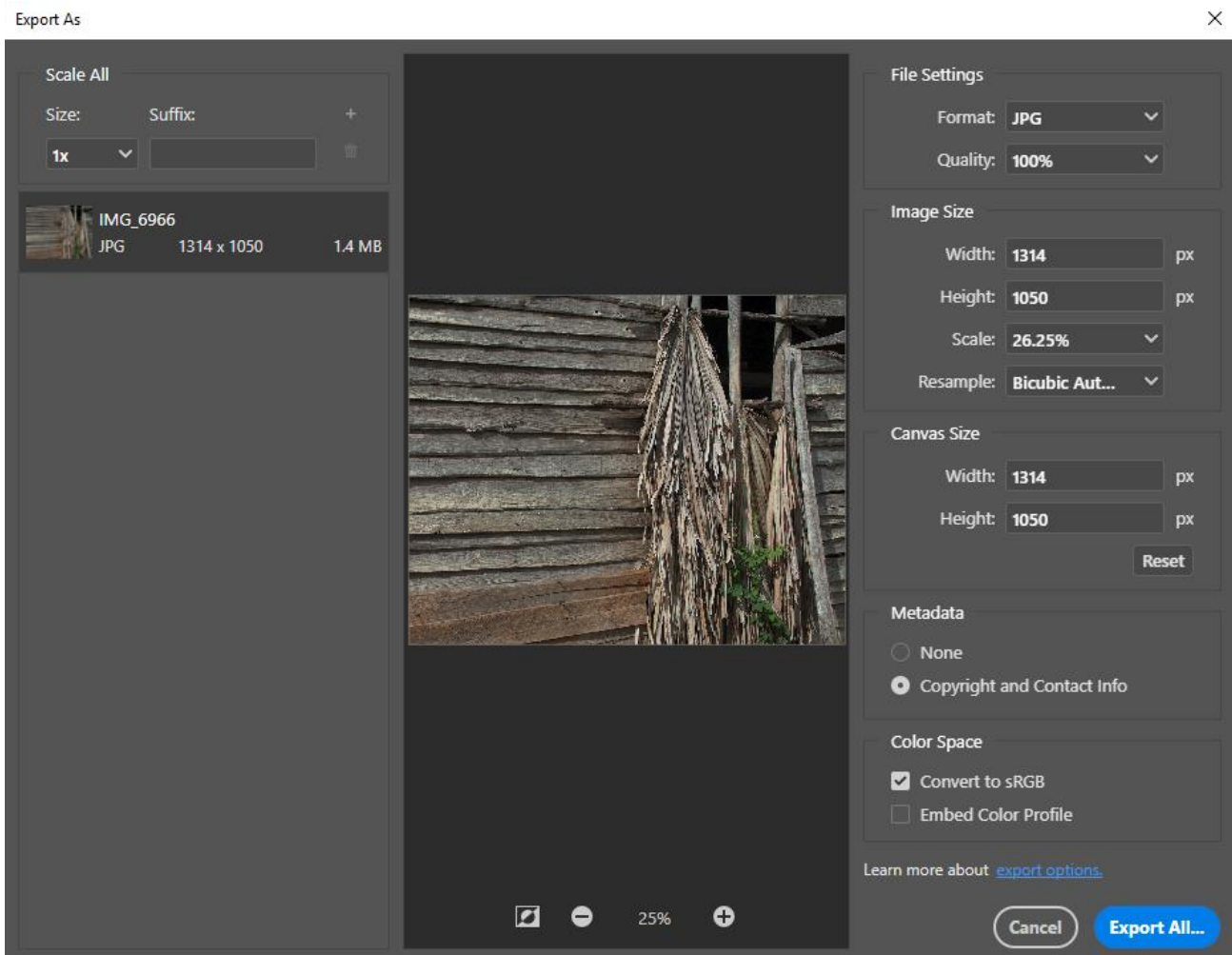


Figure 11 Photoshop CC Export As... Settings Dialogue

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2. You are then presented with the Export Save Dialogue. Select the folder that you want to export the file to, change the name if you like and click “Save” at the bottom.

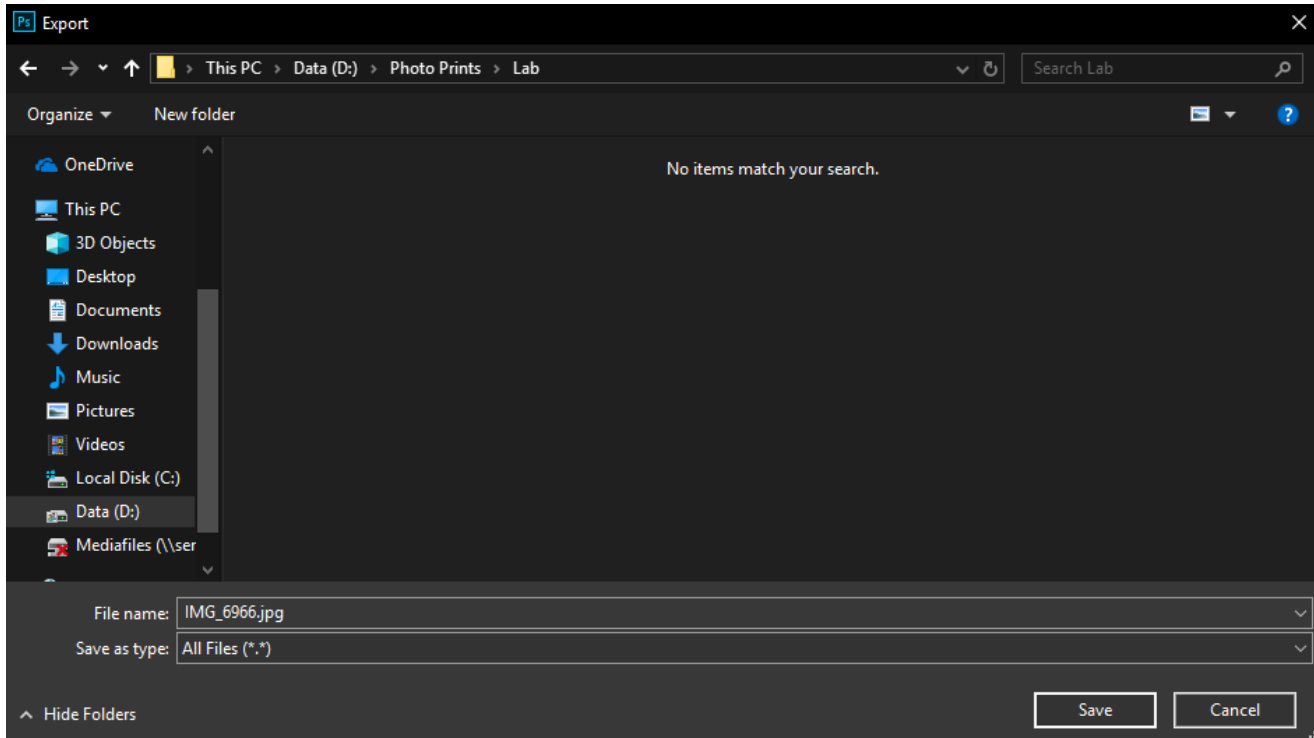


Figure 12 Photoshop Export As... Save Dialogue

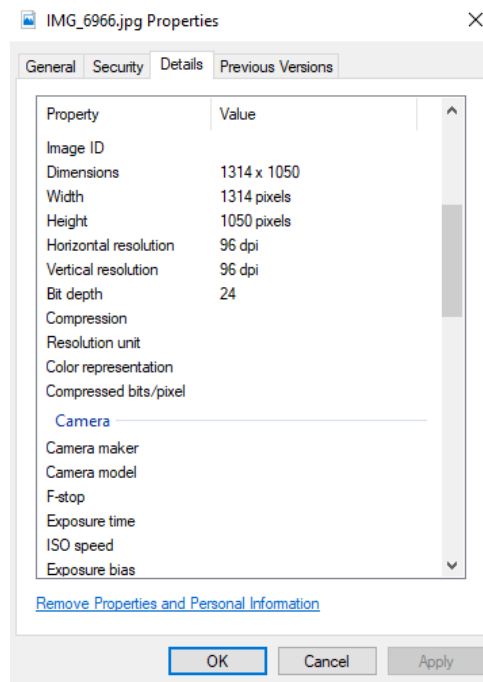


Figure 13 Verify the Image size and resolution using File Properties

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5.2.2.4 Exporting Projection Images using DXO Photolab 2

DXO Photolab 2 is less flexible in its export controls than LightRoom or Photoshop. Here are the settings to export a JPG digital image for projection. Again you can create a preset for digital image if you like.

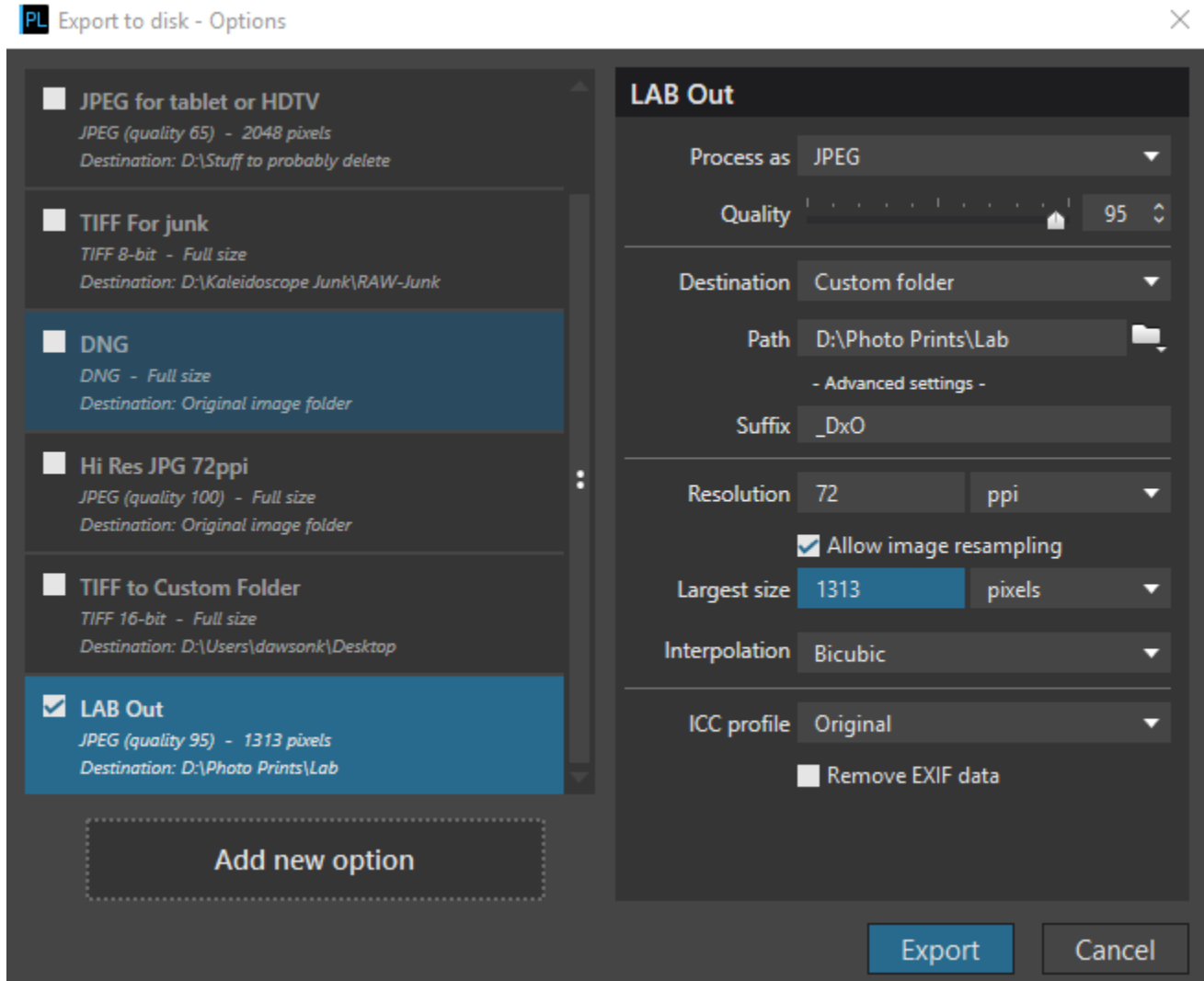


Figure 14 DXO Photolab 2 Digital Image Export Dialogue

By default PhotoLab 2 will not show any pixel width or height control. It actually only allows you to set the long edge so refer to Table 5 for your aspect ratio and enter in the appropriate long edge size, or if you have custom crops experiment by changing the long edge number until you get the biggest image possible that meets the height and width restrictions. To show the “Largest size” field, check the box labeled “Allow image resampling”. Also to keep the overall byte size of the image to about 1MB change the “Quality” slider to about 95.

Remember to verify your file size and dimensions using file properties in your operating system finder (Mac) or File Explorer (Windows).

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5.2.2.5 Exporting Projection Images using Skylum Luminar 3

You have already had a look at Luminar 3's Export module to export lab ready image. The export screen needs very little adjustment to it's settings to generate a digital image that is suitable for projection. Change the "Resize:" setting to either short edge or long edge depending if your image is landscape or portrait. Change the "Size:" setting to the appropriate pixel width or height from Table 5, and drop the "Quality:" slider down to about 90 to keep the image within the 1MB range. Remember to verify your file size and dimensions using file properties in your operating system finder (Mac) or File Explorer (Windows).

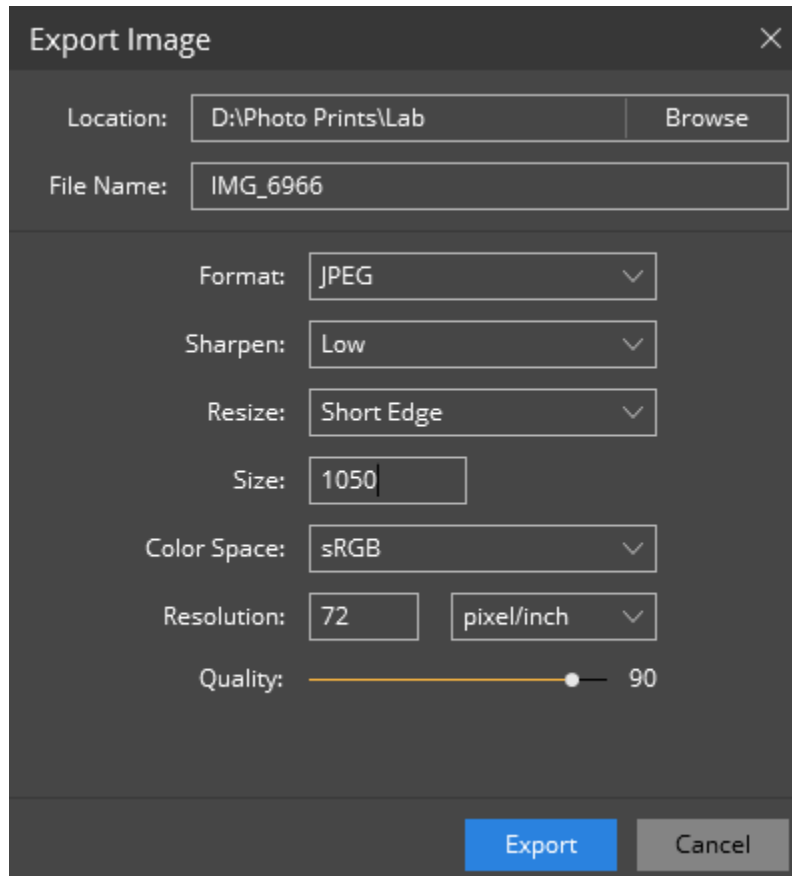


Figure 15 Luminar Export Dialogue

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Suggested Methods for Preparation, Mounting and Storage

5.2.3 Printing a Physical Print

Printing your images is the ultimate final step in your creative vision. Getting a hard copy of your image provides a certain satisfaction that can't be had by viewing a digital image alone. There's the satisfaction that you have taken your initial vision and turned it into something tangible. Something that you can hold in your hand, or hang on your wall. Everything about a print is about the final presentation of your work. The pride you will have in its printed form is the culmination of all the work you have put in to the image from it's composition to the subtle tones and even the texture of the paper it's printed on. Prints are where you will learn the most about your work. You will see things in prints that you don't see in digital images. You may very well need to print the same image a few times, because you will see things that need correcting, that you totally missed in your digital image. But once you get the image to the point of being great in print you will have learned a lot about how to post process your images so they look their best.

5.2.3.1 Home Printing on a Photo Quality Printer

Because printing is a large subject and there are many different printers on the market and software used to print to a printer, it is beyond the scope of this document to go into detail about how to print on a home printer.

I mentioned a great reference guide for home printing. I really can't recommend this book strongly enough. If you want to get serious about printing and or just need help in understanding the process, you can surf for hours on the web and come up with bits and pieces, or you can get this book and it will explain to you what you need to know all in one place. It covers colour calibration, ICC profiles, matting, mounting, printer reviews, paper reviews, image cleanup and much more.

“Fine Art Printing for Photographers: Exhibition Quality Prints with Inkjet Printers” by Uwe Steinmueller & Juergen Gulbins 2013 or later edition ISBN-10: 1937538249

- Lightroom Classic has a fantastic Print module that makes it really easy to output your images.
- DXO Optics Pro/PhotoLab 2 has a powerful print module.
- Photoshop CC has powerful printing capabilities and does a great job but it is much more complicated than most people will like.
- Luminar 3 at the present time has nothing but a basic Windows or Mac print interface. There are no controls whatsoever.

If you are not satisfied with your current RAW editor's print module or it doesn't offer much control, you have other options available in standalone printing software. These packages range in price depending on your needs but are well respected and provide a lot of control and settings, and also work with many printers and papers.

- Qimage Ultimate by DDI Software <http://www.ddisoftware.com/qimage-u/index.html>
- IMAGEPRINT R.E.D. or Black by ColorByte Software <https://www.colorbytesoftware.com/>
- Mirage By DINAX <https://dinax.com/mirage-2/?lang=en>

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5.2.4 Lab Printing

If you don't have a home printer, you can get pretty good results using a consumer/commercial photo lab. These labs offer many quality ranges from traditional photo printing using chemicals and light sensitive photo paper "chromogenic" prints, to gallery quality archival prints on specialty papers using top notch inkjet photo printers usually referred to as "Giclée" prints. Prices range from about \$9 to \$70 for a 16x20 print, with the lower prices being the chromogenic type of print.

For club competition it is not advised to submit archival "Giclée" quality prints do to the chance of loss or damage during the duration of the competition.

Having any modifications done to the image by the technicians in the lab is prohibited. In the spirit of competition the image must be the complete work of the photographer, and it has only been recently that lab printed submissions have been allowed. All mounting should be done by the photographer as well. No frames allowed.

5.2.4.1 Lab Printing - Walmart

Walmart Canada stores have photo labs. These labs offer a wide range of options for sizes, and mounting. They offer novelty photo items such as T-shirts, mugs, canvas and plaque mounts.

You can submit your order in store or online for pickup at the store. If you order online, a 16x20 chromogenic print will be about \$1 cheaper than walking in to place the order at \$8.99.

Walmart does not offer Giclée type prints.

Comparing the quality of the Walmart print against the same image file printed on my Epson Stylus Pro 3880, the results were quite good. The print wasn't quite as sharp, colours were a little more saturated, and contrast was similar.

The Website for Walmart Canada's Photo Centre is: <https://www.walmartphotocentre.ca/>

5.2.4.2 Lab Printing - Costco

Costco Canada currently has photo lab services in some of their stores. At the time of writing this document, Costco U.S. has just announced the closing of their photo labs throughout the U.S. and will remove the remaining labs as the equipment breaks down. In other words they are not investing any more money in the upkeep of the photo labs due to decline in demand for printed photos. You must have a Costco membership to use their photo lab services.

One thing that separates Costco from the average photo lab is that they provide ICC printer profiles to their customers. These ICC profiles make it easier to edit your image and optimize it for their printers so that what you see on your screen is closer to what you get from their printers. The ICC profile once installed on your computer will allow you to "Soft Proof" your image during editing. Soft proofing simulates on screen what the image will look like on paper from their printers. As you soft proof the image, you can tweak settings to bring out more colour, contrast etc.

You can find the ICC profiles (as well as a lot of printing tutorials and info) here:

<https://www.drycreekphoto.com/icc/>

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Like Walmart, Costco currently offers many services at reasonable prices. Larger prints are handled on their large format Epson Inkjet printers with quality photo paper. 16x20 prints are handled on their Fuji Frontier chromogenic printers on either lustre or glossy paper. You can either walk in with a file and submit through a kiosk machine, or go online and save \$1 off the price of a 16x20 by ordering through the following website:

<https://www.costcophotocentre.ca>

Costco prints are also quite good. Compared to Walmart, the print is less sharp and less saturated. The Costco sample print I ordered from the same file I used to print at Walmart and my Epson 3880, contained a ½" white border at the bottom that I had to trim off. This did not affect the overall size of the print leaving it at 16x20. Although the image was not as sharp as the Walmart print, the colour was truer, but the contrast was a little less. I did not use the ICC profile to tweak the image before sending it in. I wanted to test the print without modification. Nevertheless, the print was fine for club competition.

5.2.4.3 Lab Printing - Henrys

Like Walmart and Costco, Henry's offers a walk in and online photo lab service with many options to choose from. All of their prints are chromogenic. A 16x20 is \$18.99 at the time of this writing. I have not tested the Henry's service. You can order online at this website: <https://henrysphotocentre.com/>

5.2.4.4 Lab Printing - Vistek

Vistek offers a premium photo printing service. They offer some chromogenic services but nothing bigger than 12" high so the best you can do is 12x18 for \$15.99, or if you like panoramic shots you can go all the way up to 12x36 at \$22.99.

The quality of Vistek prints is high but this is overkill for club competition.

Their photo lab website is: <https://vistek-toronto.photofinale.com/>

6 Mounting

Mounting your print is an important part of presenting your work to the judges. You can choose to mat or go borderless. If you are lab printing it is probably a good idea to not mat the print and just use the full 16x20 print without a border. This will present your image in the maximum size allowed but requires care in how you mount the image to the backer board.

Judges consider mounting to be at least 20% of the score of the printed image. If you have a poor mount you could lose up to 2 points in your overall score.

Poor mounting examples:

- prints that are mounted crooked
- backer board showing or ragged edges
- tape showing on the front
- improper selection of mat colour
- images that are falling off the backboard
- prints that have bubbles or waves/uneven surfaces
- dirty mats
- scratches/marks on prints
- images that are excessively cropped by the mat

You need to take as much care in your mounting process as you can. This is the final step before you set put your work in front of the judges. Don't blow it with a bad mount!

6.1 Matting

Matting your print gives a classic finished look. Temporary matting in club competition acts as a frame around your print. It adds a level of professionalism to most images that seem incomplete in a borderless version. Nature images can stand alone without a border, as well as most abstracts. Most other images will look more refined with a mat.

A mat cutter is not a necessity. There may be one available to use at your club. Check with your Prints Chair to see if one is available. Mat cutters do more than just cut mats. They can be used for easily cutting large sheets of foam-core or plasti-core down to size. You can use it to trim the edges of a borderless print (to make sure the edges are clean and true. If you are going to do a lot of matting, you should consider buying one.

If you want to forgo the labour and expense if cutting your own mats, you can just order precut mats from an online supplier. Matshop.ca has reasonable pricing and they are located in Canada. There are minimum quantities that you need to meet to place an order but that is fairly low at a quantity of six minimum.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

6.1.1 Mat Colour

Part of your mounting decision is to choose a suitable mat colour. Classic white is a standard choice and it works well with both colour and mono prints. Be sure to get white, not ivory or creamy whites which will dull your print presentation. The last thing you should do is the chose offbeat colours. They will have limited purpose reusability. The whole idea with this document is to re-use the materials for multiple competitions to try to keep costs down, so sticking to the basic whites or blacks, sometime neutral grey will service our needs.



Figure 16 Mat colour samples

You can cut “L” shaped mat colour samples with your mat cutter or you can request samples from MatShop of the colours you want. This makes it easy to compare results on your print to see which colour works best for the print. Keep in mind that 80% of the time the white mat will do the job, and the others will just appear to clash.



Figure 17 Mat samples places on print for evaluation

6.2 Destructive Mounting

Destructive print mounting can be bordered or not bordered depending on if you use mat board, or if you use foam-board or plasti-core as a backer board. Do not use foam-board or plasti-core if you intend to use the backer board as a border. Destructive mounting has the advantage of requiring the least amount of materials and offering the largest viewable area of your printed image. It is not recommended to attempt to tape or tack the photos to the backer board because the photo will have an uneven surface in the light box and it will show badly to the judges. You also run the risk of the image falling off the backer board while handling.

You can go full 16x20 and not have to reduce or crop down your image to accommodate a mat border. The disadvantages of the destructive mount are that you will not be able to “un-mount” the image for storage and reuse your materials and there is considerable labour and mess of gluing the print to a backer board. If you make a mistake, the print is usually ruined. This is why it is a “destructive” mounting method.

If you are mounting your image without a mat border, you should be adhering your print directly to a backer board using either a good quality adhesive made for photos or dry-mount equipment. A dry-mount press is quite expensive and bulky to have at home, and unless you have access to dry mounting equipment, your only option is adhesives. Your club might have the dry-mount equipment so enquire with your Prints Chairperson.

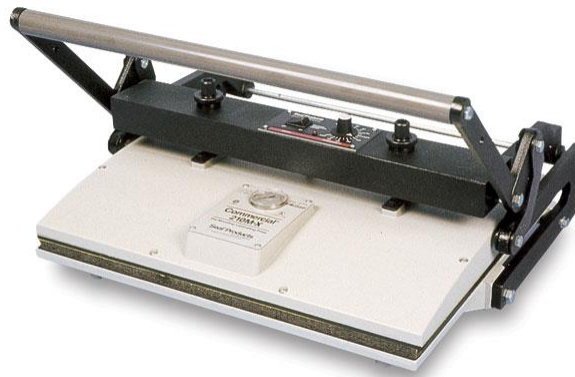


Figure 18 Dry-mount press



Figure 19 Dry-mount iron

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

Adhesives can be messy, smelly and can leave residue on the print surface unless you are extremely careful. Many are spray adhesives and they will make it difficult to center your print on the backer board once you have placed it, so you need to be precise in setting the print down on the backer board the first time. You also need to ensure that you do not trap any air bubbles under the print because they will show during judging and you may lose points.

A good product for adhering prints for a backer board is the Daige Rollataq Kit. The kit consists of a specially formulated adhesive and a roller applicator that applies the adhesive to the back of the image cleanly and with just the right amount of adhesive. The print is then placed in the backer board and you have time to make minor alignments before the adhesive sets. If you are permanently mounting photo to a backer board with adhesive, you should also purchase a good quality brayer roller to get the image glued down properly. Be careful to choose a roller that is perfectly flat and does not have any curve to it and don't apply too much pressure or you will crease and damage your print.

You can view a video the Rollataq kit in use here: <https://youtu.be/IYOma741w64>



Figure 20 The Daige Rollataq 300 Kit



21 Quality Brayer Roller

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

6.3 Non-Destructive Mounting

Non-destructive print mounting generally consists of a system that allows the photographer to assemble and disassemble the mounted print, and to reuse the print and the materials such as the mat and backer board many times.

Being able to reuse the supplies is key to keeping costs down while participating in club prints competitions. Another benefit is that it will allow you store the print away in an album/portfolio or to have the image professionally framed or mounted for permanent display.

There are only a few ways to non-destructively mount a print for competition, but the variances are basically the materials used to keep the mount together. By far the least expensive and least labour intensive is to use painter's tape. A good quality painter's tape in 1 inch width is perfect and is only about \$6 per roll. This is the tape that painters use to mask out the edges of walls and is usually blue or green in colour. Do not use plain masking tape or it will damage your prints, mats, and backer boards when you try to remove it.

6.3.1 Procedure to Non-Destructively Mount Prints for Competition

It's easy to produce a beautiful temporary mount to submit for club Prints Competitions. This method will help you make sure that you aren't docked points by the judges for a poor quality mount and allow you to reuse the materials and save money. As a bonus you can remove the print intact and file it in an album/portfolio or have it mounted professionally for wall hanging.



1. Gather your materials and the print

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



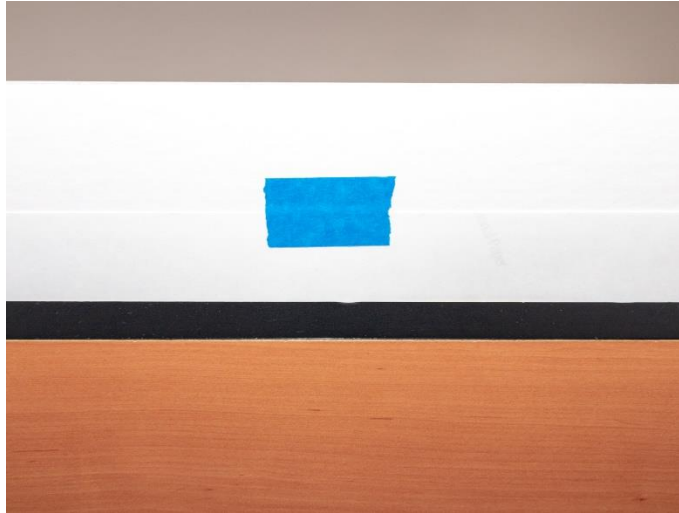
2. Carefully place the cut mat over the print face up. Align the edges so the print is centered and level. Be sure nothing important is cropped and no white print borders are showing.



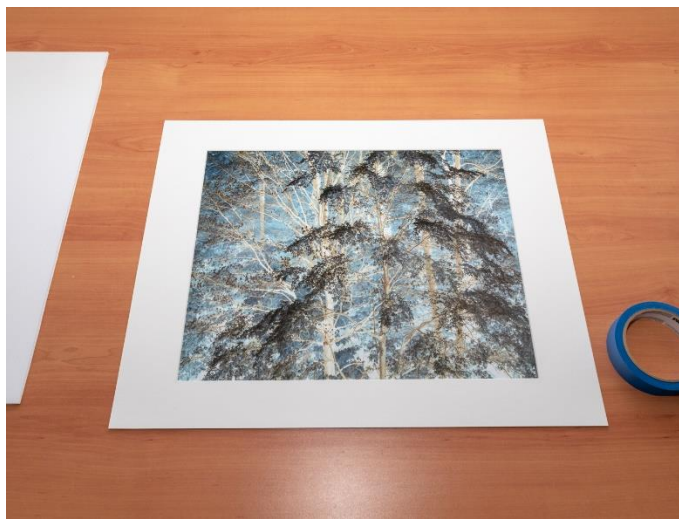
3. Without dislodging the print under the mat, carefully slide the mat to the edge of your work table so that you can see where the print is under the mat (as below)

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



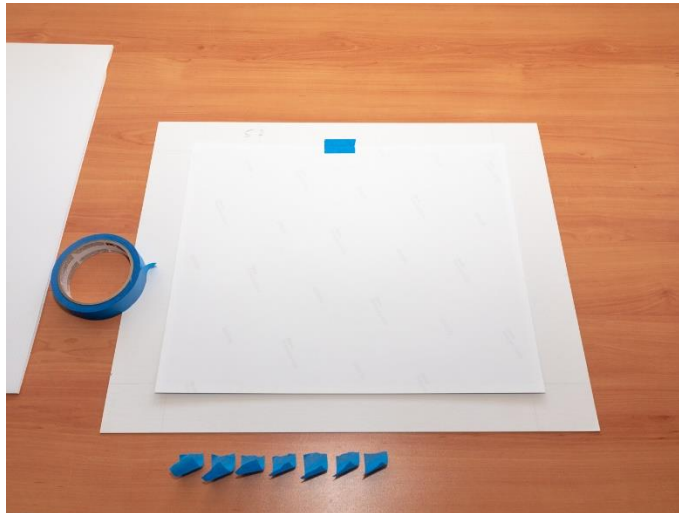
4. Hold the mat and print in place over the edge of the table and carefully place a piece of painter's tape on the edge of the print and mat.



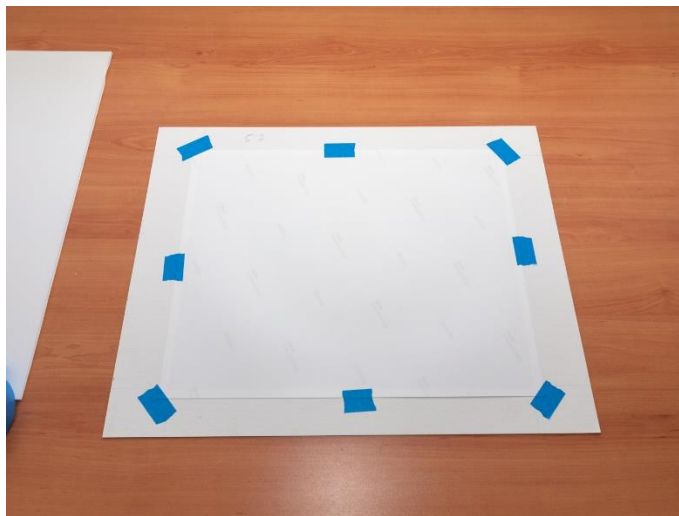
5. Slide the mat and print back on the work surface being careful not to disturb the alignment. If you happen to shift the print in the mat, correct the problem.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



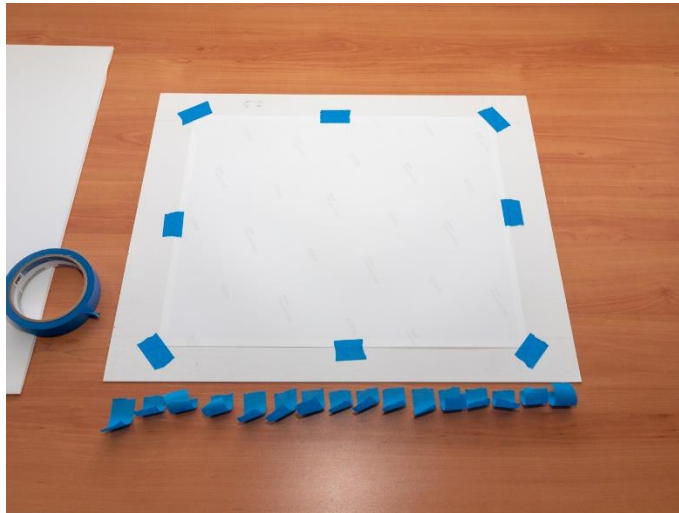
6. Carefully turn the mat and print over. Pre cut 7 pieces of tape



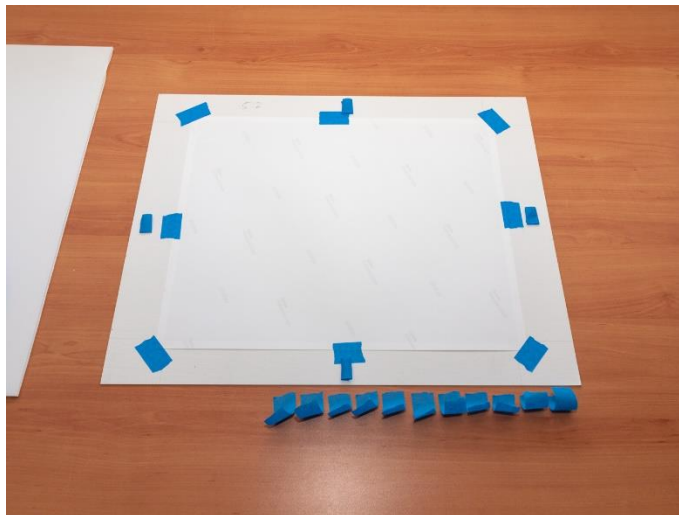
7. Tape down the print in the 8 positions as shown above. Be sure not to buckle the print by pulling it too tight in any one direction. It is best to stagger the tape placement as you go by adding one piece at a time on the opposite side from the last piece. This will keep the tension even.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



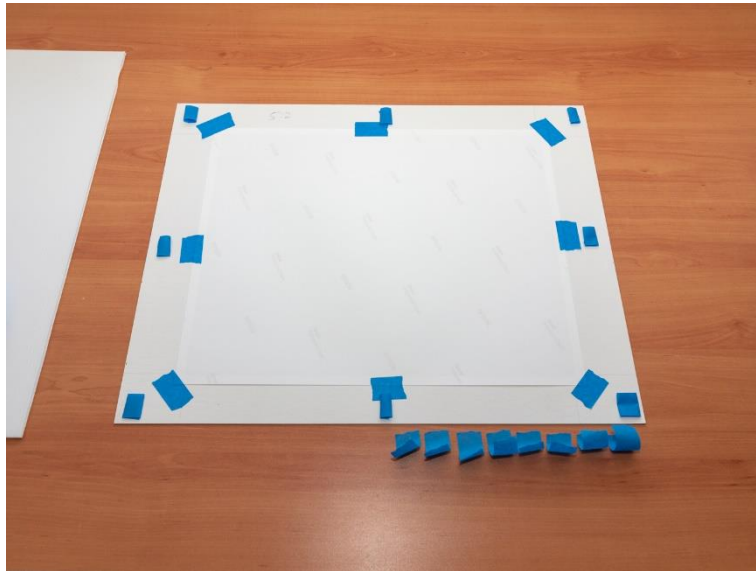
8. Pre cut 16 pieces of tape about 1.5 inches long each



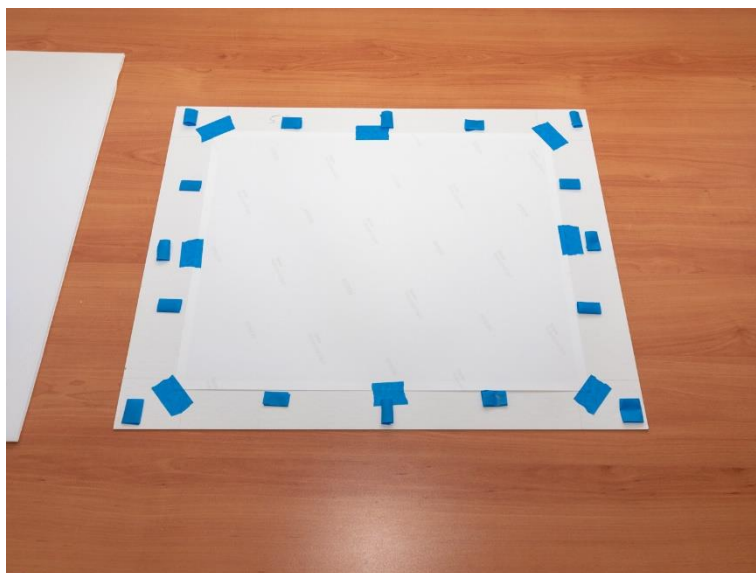
9. Fold/roll each piece back over itself sticky side out, and start applying the tape to the back of the mat in the positions shown.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



10. Continue to place the tape rolls around the edge of the mat until all sixteen are used. Rotate the “tape rolls” so that they have horizontal and vertical orientations on the mat. This will help to prevent the mat from sliding off the backer board due to gravity over time.



11. All tape rolls in position

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



12. Ready your backer board on the work surface



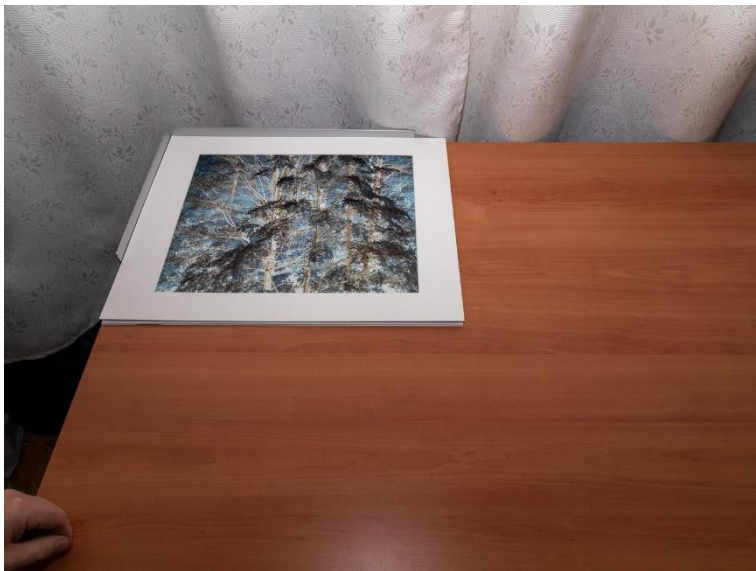
13. Flip the mat/print over so that the tape roll side is in line with the backer board. Carefully set one edge down over the backer board while aligning it. I have installed two rails on the corner of my table to make it easier to keep things in alignment.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



14. "Roll" the /mat/print over the backer board until it is completely laid down on the backer board



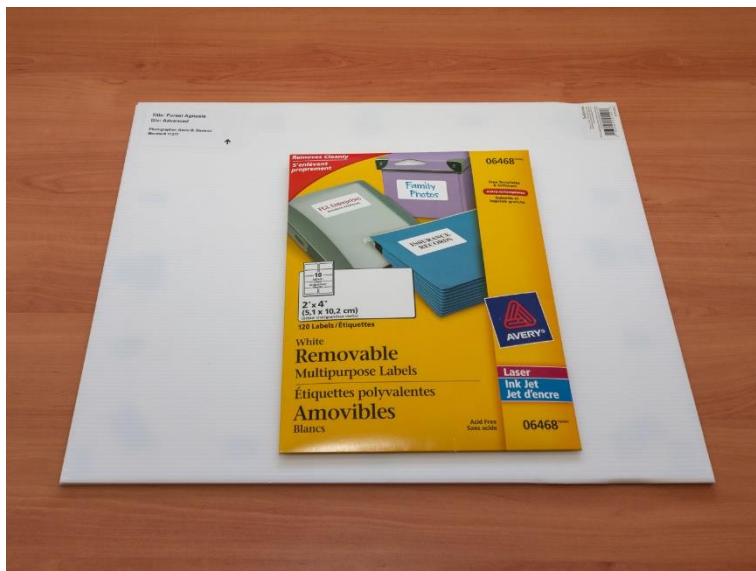
15. Print is now in position on backer board. Correct any alignment issues at this point. When you are satisfied with the mount, press it down all the way around the mat.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



16. If you are reusing your mats and you have any marks on them from handling, use an architectural eraser to remove the marks. If you have ink or other stains you will have to discard the mat.



17. Using Avery 06468 (Canada) or 5163 (US) Removable labels, print your labels for the back of your entry on following the instruction and formatting required by the competition.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage



18. Place the label on the back of the backer board. As you can see, they are easily removable but stick well enough to last the competition.

Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

7 After the Competition

After the competition, you have options as to what to do with your prints. Many people have limited space to store mounted prints. One option is to tear down the temporary mounts that you have after the competition ends and the prints have been returned to you. You can then store the prints without their mounts in an album or you can display your prints on a picture ledge mounted on a wall in your home. If you destructively mount, then storage will continue to be an issue, but home display is still an option.

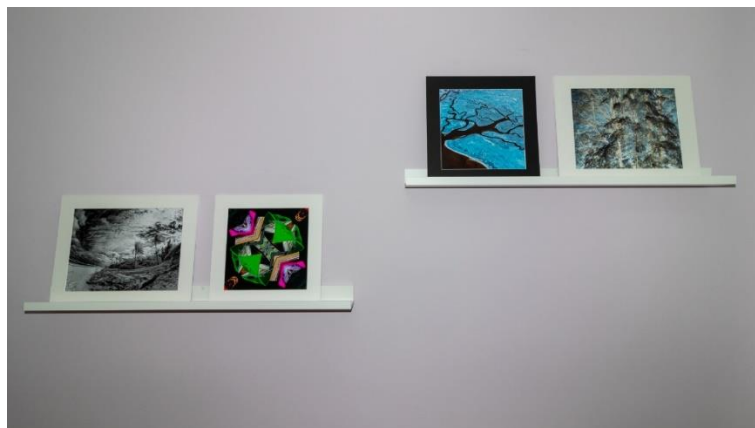
7.1 Home Display

Displaying your prints in your home on picture ledges is a great idea. You get to enjoy your prints after the competition, and picture ledges have the advantage of making it easy to swap out your prints at any given time! You could set up a rotation of your favourite prints. They serve another purpose before competition where you can put up test prints and “live” with them for a while. If you still like them after a month or so, chances are the judges will too! Having a print up on the wall to look at every day also helps you detect technical errors that you may want to correct before submitting the print for judging. Picture ledges are available at Home Depot/Lowes in glass metal and wood.

At the time of the writing Ikea has picture ledges available in two sizes and they are reasonably priced:



Figure 22 Ikea MOSSLANDA Picture ledge, black or white \$9.99 55cm & \$14.99 115cm



Camera Club Prints Competitions

Suggested Methods for Preparation, Mounting and Storage

7.2 Unmounting

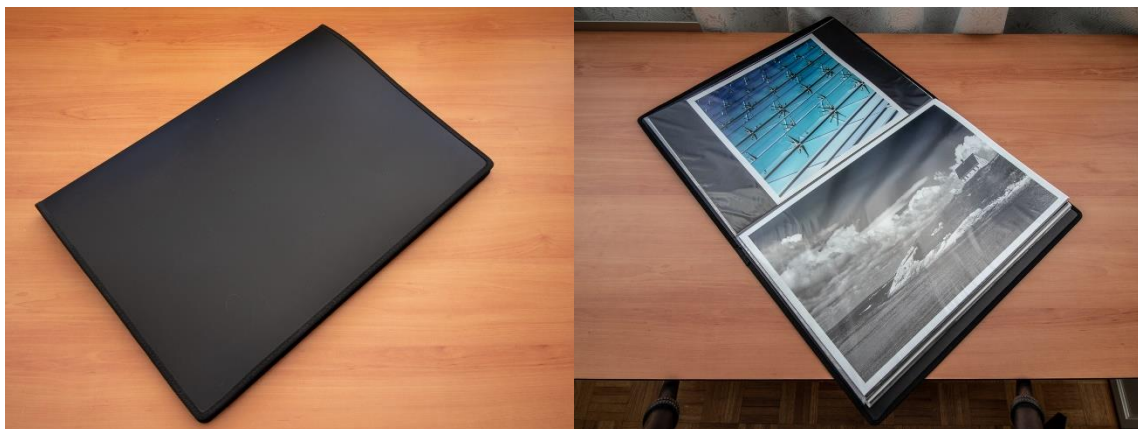
If you have chosen to non-destructively mount your prints you have the ability to take them apart and reuse the materials many times over for competitions. To unmount your prints carefully pull the mat away from the backer board starting on one side. Do this slowly and patiently!! Separate the mat from the print and once the mat is fully off the backer board, remove all the tape that is left on all pieces. Leave the tape holding the print until last. When removing the tape hold the print to the mat, peel the tape away from the print side first peeling back toward the mat. Be careful not to damage the print by trying to lift the edge of the tape up. Clean your mat with an architectural eraser to remove any marked areas. Remove the name label from the back of the backer board.

7.3 Storage

After removing your print from the temporary mount you need a place to store it. You can buy print storage boxes which are basically like print sized, archival acid free shoe boxes that no one will ever look in to see your prints or you can use print albums or portfolio binders to hold your prints. Albums are perfect for viewing your prints because you can pass them around to family and friends to have a look, and it makes it easier for you to sort and find your prints when you want to submit them to other competitions. Itoya makes some sturdy yet affordable print albums in standard photo paper sizes.



Figure 23 Itoya 13" x 19" Presentation Book Black Art Profolio Evolution with 24 Pages Model EV-12-13 \$27.95 Vistek



8 Tips

1. Clamp down your straight edge ruler to make cuts in mat board and backer boards
2. Mat board, plati-core and foam-board are tough to cut. You must use the sharpest Olfa blades you can get and change them often. The “Black” Olfa blades are the best you can get, they are much sharper than the silver blades and will make your job tremendously easier and save you from creating ragged edges.
3. Some adhesive sprays will not adhere to plasti-core or foam board. Water based adhesives are hit and miss stick with 3M products or RollaTaq
4. If shopping for mats and backer boards online, order price break quantities you will save some money. Also watch for sales, most vendors have a sale once or twice a year. Get together with other club members and split the costs of orders in bigger quantities.
5. Don’t wait until the last minute to assemble your entries for competition. You will be rushed, make mistakes and or poor choices. You may not be able to get your supplies in time.
6. Mat cutters make great straight edge cutters for large sheets of mat board, foam-board and plasti-core
7. Use a clean work surface free from oils, dust and dirt.
8. Attach rails to one corner of your work table to create a square edge, this will make it easier to assemble and align mats to backer boards.
9. Use a home printer to print your removable labels. Avery templates are available for most computers or you can use their online templates.
10. Temporary mounted prints using painters tape will need to be pressed back together occasionally if the tape starts to “relax”. You can avoid this by stacking your mounts after putting them together and putting some heavy books around the edges of the stack for a day or so before submitting the prints.
11. Commercial photo labs need lead time to print your images. You can expect at least 24 hrs, or longer depending on their load.
12. Use your picture ledges to “preview” your prints for upcoming competitions. By looking at them on the wall you will notice things you like and don’t like, and technical problems will be more evident than just seeing them on the screen.
13. Switch out your prints on your picture ledges regularly so that you can appreciate more of them. Remember if you like the print you will leave it up longer. If the print doesn’t do it for you (or someone else in the family) you will know soon enough.
14. Colour calibrate your screen regularly. Monitors change with age. Less expensive monitors have poorer colour calibration capabilities. If you aren’t using Apple equipment it is more important to calibrate. If you have older monitors you should seriously look at getting new IPS type monitors, and an X-Rite or DataColor calibration device.
15. Photo Inkjet printer inks can settle in the cartridge over time. Take them out and gently shake them if you haven’t printed for a while.
16. Photo printers are notorious for clogged heads. Clogged heads lead ink waste as the printer tries to clean itself and/or to expensive repairs or outright junking of the printer. Keep a supply of 8x10 lustre/satin photo paper on hand and be sure to print a photo at highest resolution at least once a month, if not every two weeks.
17. Handle photo paper with clean white cotton gloves with putting the paper in the printer. Oil from your hands can cause the ink to be repelled from the paper when printing.