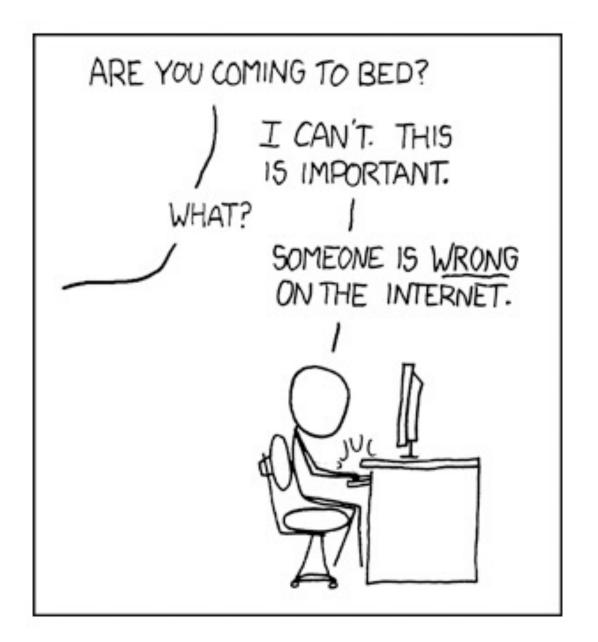
Printing for Competitions

Presentation by Eric Schoch

Photo Venture Camera Club

Feb. 8, 2024

Everybody who prints has opinons and recommdations about how to do it best.



These are mine.

XKCD: https://xkcd.com/386/

Keys to a Successful Competition Print

- Calibrate your display
- Select a good photo with impact
- Edit in a wide color space
- Create the image to print
 - If printing yourself: Correct size and ICC profile
 - If using a third-party printer: Correct size and color space (probably sRGB)

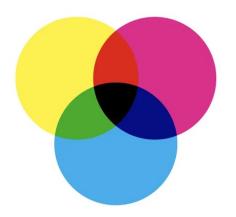
Computer screens and paper are not alike

- We want our prints to look like the images on our screens, but...
- Images on your screen are lit by adding red, green and blue in different proportions: RGB
- Images on paper are subtractive the inks subtract colors, so what you see are the colors reflected back to you. Inks: cyan, magenta, yellow and black: CMYK
- The type of paper used, and the light under which it is viewed, will affect how a print appears.

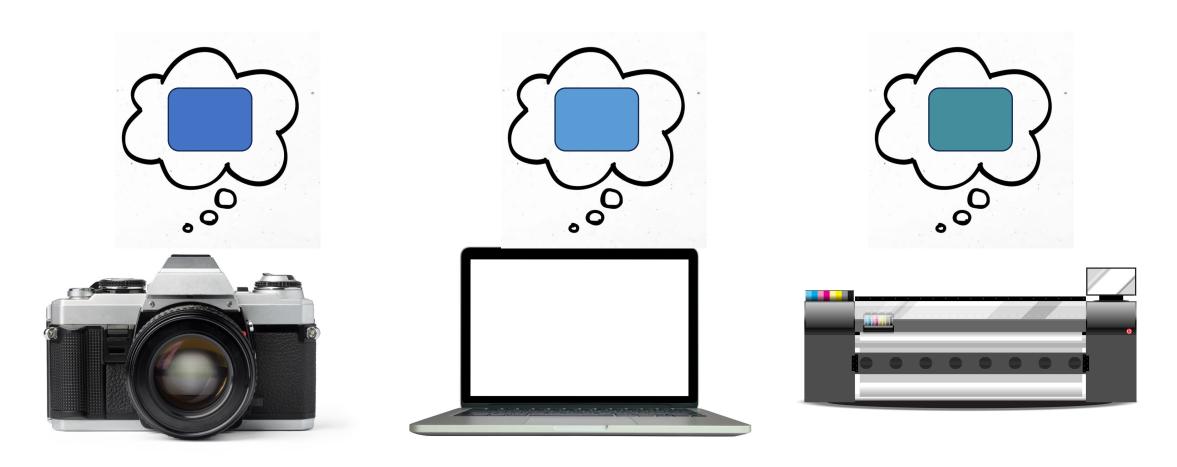
RGB Color Mode



CMYK Color Mode



Cameras, computers & printers need translators



What to do? Calibrate your monitor

Calibration is key to getting consistent colors

- Calibration is key to eliminating prints that are too dark
 - For printing, most uncalibrated monitors are too bright
 - Result: Prints that are too dark

Example Calibration Tools



Display SL

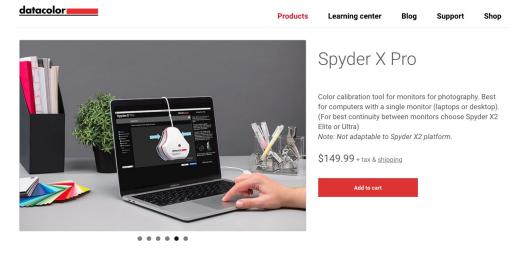
SKU: CCDISSL

\$169.00

Display calibration made easy

- . An advanced SL (standard luminance) sensor for current LCDs
- · Recommended for still image and video editing with industry-standard settings
- Easy to use and powerful Calibrite PROFILER software for Mac and Windows OS
- · USB-C connection (with USB-A adapter included)
- · Calibrate multiple displays connected to the same computer
- Travel and storage pouch keeps your device safe from dust and damage
- · Smaller, fully recyclable packaging
- · Find the right solution for you! Click here for a helpful comparison chart

https://calibrite.com/us/product/display-sl/



Lens-based color engine provides a higher level of color accuracy, intended for use with a computer with 1 monitor, though color profiles can be made for multiple displays based on computer's LUT capacity. Spyder X Pro features room-light monitoring, automatic profile changing and precise screen color, shadow detail and white balance.

Specifications User Guides and Quick Start

- · Features quick and easy single-click calibration and wizard workflow with 12 predefined calibration targets for advanced color accuracy.
- SpyderProof functionality provides before-and-after evaluation of your display and allows you to see the difference using your own images.
- Spyder X Pro is fully supported on Windows 7 32/64 and above as well as Mac OS X 10.10 and above. The monitor resolution needs to be 1280×768 or greater, a 16-bit video card (24-bit recommended) is required, 1GB of available RAM and 500MB of available hard disk. An Internet connection for software download is also required.

Calibration steps

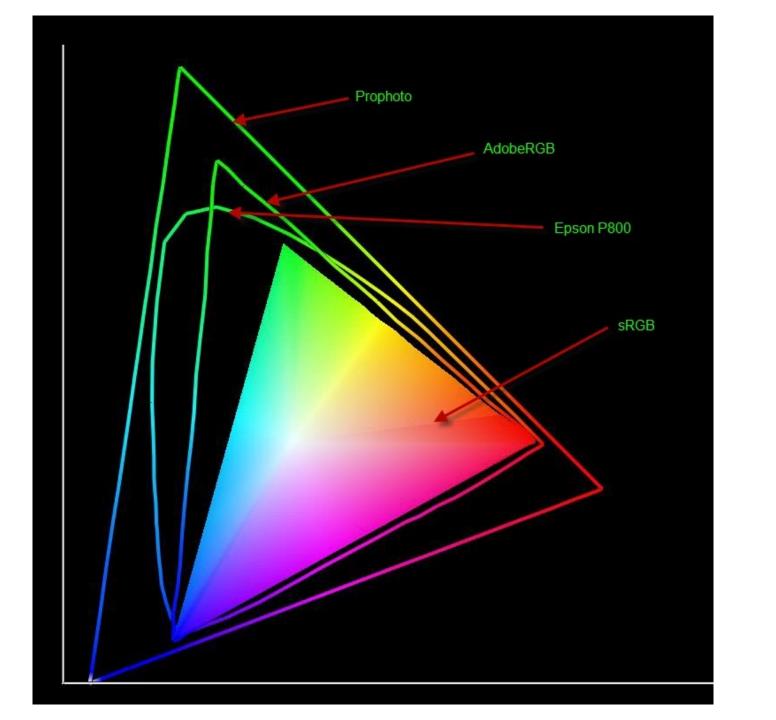
- Wait until monitor warms up about 30 minutes
- Software should be able to tell what type display you have, or you may have to tell it
- Calibrate in lighting conditions similar to those used when editing avoid any bright light pointed at your screen
- White point: D65/6500 Kelvin (for matte paper and my room lighting, mine is set to 5800K = warmer)
- Luminance: 120 cd/m2
- Gamma: 2.2 (some say 1.8 for Macs, but I use 2.2)

Color Space

- Mathematical model for describing how colors are displayed
 - sRGB Smallest range of color will provide somewhat consistent results for online viewing
 - Adobe RGB Larger range of color
 - ProPhoto RGB Largest range of color
- Lightroom uses ProPhoto RGB internally
- Modern monitors can display most of the Adobe RGB color space
- Modern printers can print much or most of the Adobe RGB color space
- Future monitors and printers may do even better
- (Of course, there's still the issue of what the papers can reproduce we won't worry about that now.)

Less relevant for our printing purposes:

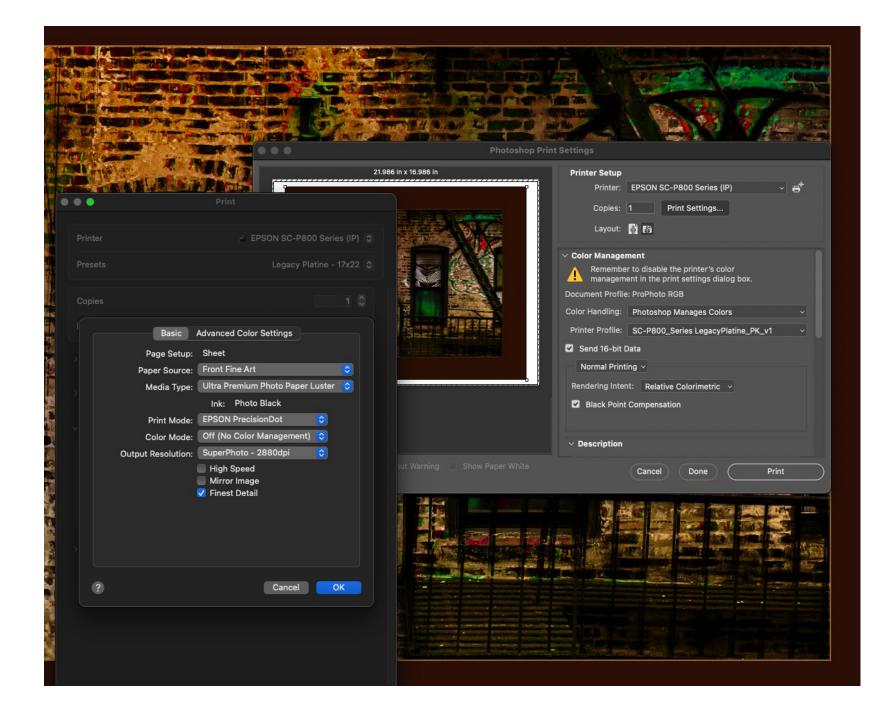
• Display-P3 – Developed by Apple for its screens and devices. Large range of color



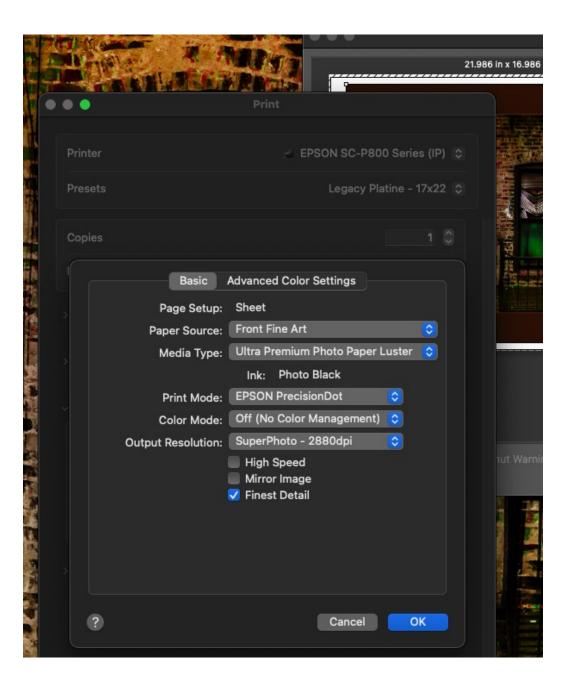
Printing Your Photographs

- Option 1 Make your own prints
 - Example: Epson P800
 - Prints on paper up to 17 x 22 inches
 - 16 x 20 print
 - Dry-mounted by Janet Ballew at Frame It! Inc.

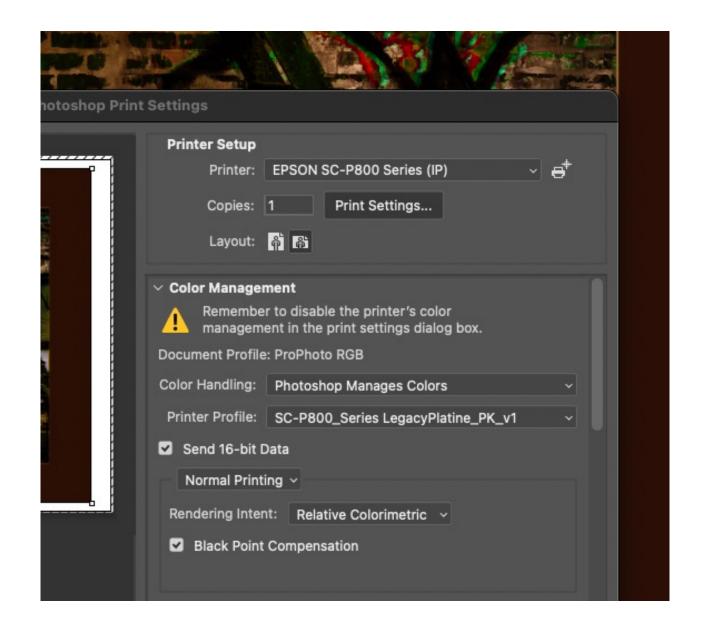
Example:
Printing from Photoshop
(Epson P800 printer)



Example:
Printing from Photoshop
(Epson P800 printer)



Example:
Printing from Photoshop
(Epson P800 printer)



Example:
Printing from
Epson Print Layout
(Epson P800 printer)



Resolution

- PPI Pixels per inch
 - Epson printers 360 for "best" results
 - Canon printers 300 for "best" results
 - Flexible 240, or even 180, may be fine depending image quality, print size, viewing distance
- For online/web/phone viewing:
 - Resolution is irrelevant
 - Only number of pixels matters

ICC Profiles

- ICC profiles provide data to ensure consistent color representation for specific printer (ink) and paper combinations, e.g.
 - "SC-P800_Series LegacyPlatine_PK_1" is the ICC profile that tells the Epson P800 printer how to print accurate colors on Epson Legacy Platine paper
- Installing ICC profiles Windows
 - https://www.redrivercatalog.com/profiles/how_to_install_ICC_color_profiles.
 html
- Installing ICC profiles Mac
 - https://www.redrivercatalog.com/profiles/how_to_install_ICC_color_profiles mac_apple.html

Rendering intent – John Paul Caponigro

Perceptual

 A perceptual rendering intent preserves the overall color appearance by changing all colors in the source space to fit the destination space. The perceptual rendering intent is favored for images that contain many out-of-gamut colors.

Relative Colorimetric

• A relative colorimetric rendering intent maps the white of the source space to the white of the output. It reproduces in-gamut colors exactly and clips out-of-gamut colors to the nearest reproducible color. The relative colorimetric rendering intent is a good choice for images where more of the colors are in-gamut than out-of-gamut.

Rendering intent – Red River Paper

- Difference between Relative Colorimetric and Perceptual:
 - How they handle colors when converting between different color spaces, especially concerning outof-gamut colors (colors that fall outside the range of the target device).
 - Relative Colorimetric prioritizes accuracy for in-gamut colors
 - Perceptual prioritizes preserving the visual relationship between all colors.

Or to put it another way...

Perceptual:

 Aims to preserve the visual relationship between color so it's perceived as natural to the human eye, even though the color values themselves may change. This intent is suitable for photographic images with outof-gamut colors.

Relative Colorimetric:

- Compares the white of the source color space to that of the destination color space and shifts all color accordingly. Out-of-gamut colors are shifted to the closest reproducible color in the destination color space. Relative colorimetric preserves more of the original colors in an image than Perceptual.
- As for Black Point Compensation: Just check it and forget it

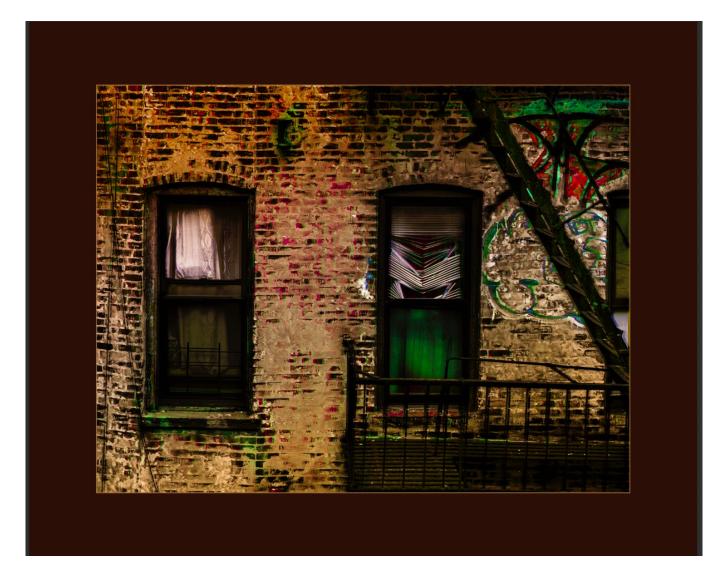
Printing Your Photographs

- Third party printers
 - IPPG's official State Fair printer ACI (American Color Imaging)
 - Understands PPA-style prints
 - Mounted appropriately for competitions
 - Discounts for Indiana State Fair
 - Two options:
 - Self-Service: No adjustments to prints are made by ACI
 - Full-Service: Prints are viewed under competition spotlights, adjustments are made
 - Complaints that Full-Service prints come out too dark
 - Interface for uploading and ordering prints is needlessly complex
 - Can be expensive
 - As of 2/7/24, couldn't find "competition prints" option on their web site / uploading app. ???

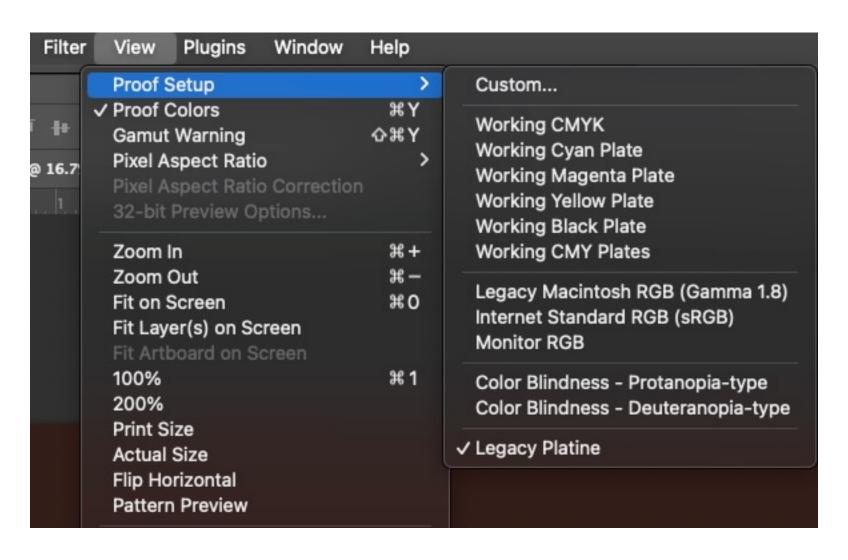
Third Party Printers (cont.)

- Check their FAQ or Support documents for specifics
 - When in doubt: High quality JPEG, 300 DPI, sRGB color space
 - Watch out for automatic color correction turn it off
 - See if they offer test prints
- Examples (examples only, not recommendations, not saying other vendors are not good):
 - Printique (Adorama):
 - 300 DPI, at appropriate size. For example: for 16x20 print, 4800 x 6000 pixels
 - JPEG or TIF, sRGB color space
 - Bay Photo:
 - Provides ICC profiles (for soft-proofing only)
 - Supports files with sRGB, Adobe1998 RGB and ProPhoto RGB embedded color profiles
 - TIF, JPEG or PNG files accepted, JPG preferred
 - Recommends you NOT resize your images (!)

What's soft-proofing?



What's soft-proofing?



What's soft-proofing?



Indiana State Fair requirements

- 2023 rules still available:
 - https://cdn.saffire.com/files.ashx?t=fg&rid=IndianaStateFair&f=Indiana_Arts.
 pdf
 - (Google "Indiana state fair photography contest 2023" and click the link to "Indiana Arts Building.")

The 12 Elements...

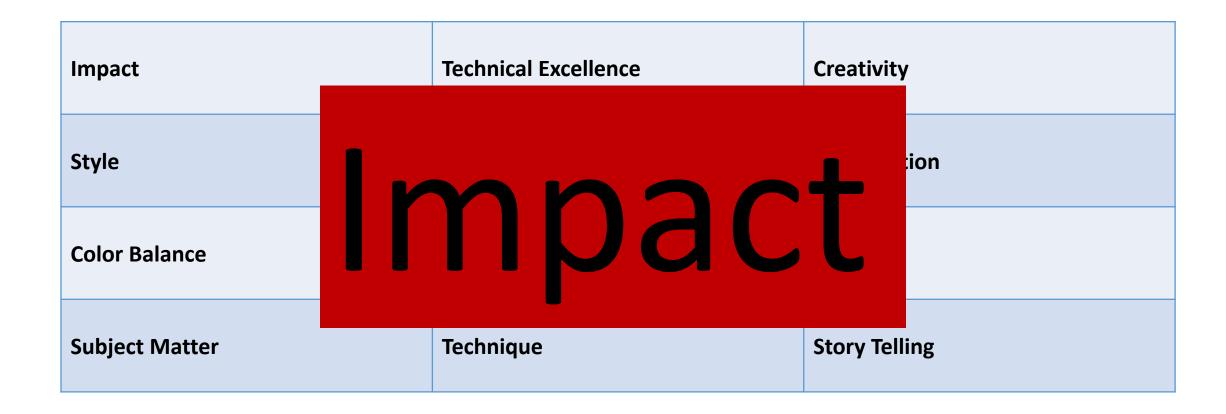
Impact	Technical Excellence	Creativity
Style	Composition	Presentation
Color Balance	Center of Interest	Lighting
Subject Matter	Technique	Story Telling

The 12 Elements...

- From the Indiana State Fair Photography Division rules:
 - https://cdn.saffire.com/files.ashx?t=fg&rid=IndianaStateFair&f=Indiana_Arts.
 pdf

- PPA's 12 elements of a merit image
 - https://www.ppa.com/events/photo-competitions/the-12-elements-of-a-merit-image

The 12 Elements...



Presentation – Traditional Mats

- Please, no pink (or purple, or lime green, or...) colored mats
- For the Fair, and other PPA-like competitions, clients, and yourself:
 - Carefully selected colors
 - Not white. Maybe.
 - Carefully selected double mats
 - Beware the 3/16ths inch thick limit at the State Fair
- For other exhibitions and competitions, and maybe clients and yourself:
 - Often, white or off-white mats, maybe gray or black
 - No colored mats, you heathens!;)
 - Unless, of course, clients want colored mats

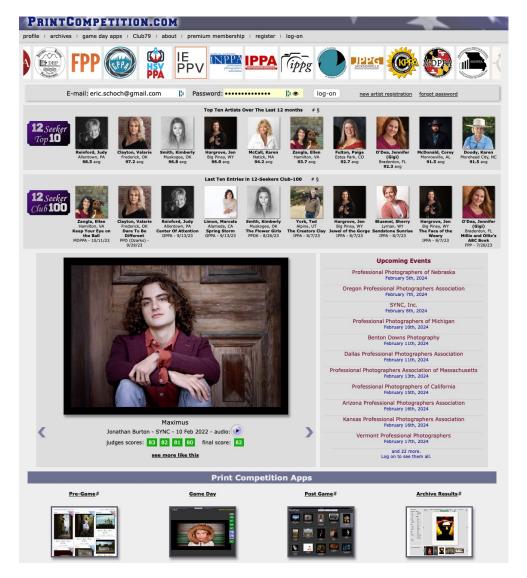
Presentation – Digital Mats

- Preferred by judges. They say. Some judges?
- Easy to make
- Easy to create nice strokes (thin line between picture and mat)
- Easy to create subtle effects drop shadows
- Easy to go overboard (see above: no pink mats...)

Digital mat example: Tami Mohs



Printcompetition.com



Printcompetition.com

INTCOMPETITION.COM	og-off		
a delines of game day apps a class of a design of premium membership and	, , , , , , , , , , , , , , , , , , , ,		
To enter events you FIRST must be a member of PrintCompetition.com	Basic Access	Premium All Access	Premium All Access
You have 3 options	\$14	\$14	\$51
rintCompetition.com is an independent organization. We do not receive irection or funding from PPA or any other professional photography trade	every year	every 3 months	every year
rganizations. The sole funding source for this project is from you, the		auto renew	auto renew
mage maker, through memberships. Basic membership is the minimum ve ask, however it's our loyal Premium Members that keep rintCompetition.com afloat.		lifetime price lock	lifetime price lock
* You must also pay each association's entry fee according to their terms. * Lifetime Price Lock requires no more than 30 day lapse in membership.	get this	get this	get this
Membershi	p Features		
Enter any event in 2024*	4	✓	4
Access to our 114,820 image archive (and growing)		*	*
Listen to 37,650 audio clips of judges debate (and growing)		*	4
Pre-Game app to scope out the competition		*	4
GameDay app to follow all the action		✓	4
Post-Game app to research the results		✓	4
Individual judges score breakdown		✓	4
Instant text message and email when your image is scored		✓	4
Text Notification that your image will be judged soon		*	*
Eligible for these exclusive clubs: 12 Seeker Club 100 Top 10		•	*
Cancel Any Time		✓	*
	get this	get this	get this

Other exhibits and competitions

- Nature's Inspirations Art Show Cool Creek Park Nature Center
 - Feb. 17 March 3
 - Entry forms were due Feb. 2 (!). Forms and info via Amanda Smith, Hamilton County Parks & Recreation Dept., amanda.smith@hamiltoncounty.in.gov
- Kokomo Art Association Photo Show, Kokomo Art Center
 - March 1-30.
 - Entries accepted Saturday, 2/24, 12-4 pm
 - https://www.kaaonline.org
- IN-Focus: Anderson Museum of Art
 - April 7-May 25
 - Entries accepted March 22-23, 10 am to 5 p.m.
 - Matted entries only no frames!
 - Opening reception and awards: Sunday, April 7, 2-4 p.m.
 - Info and forms: https://www.andersonart.org/call-for-artists/
- IPPG Online Image Competition
 - April 13, 2024
 - Entry deadline: April 12, 2024, at 11 pm Eastern time
 - Enter at PrintCompetition.com
 - Log in or create an account if necessary. Then click on IPPG when asked to select an association, and follow instructions

Other exhibits and competitions

- Figures of Speech: Anderson Museum of Art
 - July 7 September 2, 2023
 - Translate figures of speech, such as "When Pigs Fly," into works of art
 - https://www.andersonart.org/wp-content/uploads/2023/04/2023-Prospectus.pdf
- Open Lens Exhibit and Competition: Hamilton County Artists Association
 - August 4-26, 2023
 - Deadline for Entry: July 28, 2023
 - https://www.hcaa-in.org/open-lens
- Delphi Photography Show Delphi Opera House and Opera House Gallery, Delphi, Ind.
 - July 29 September 2, 2023
 - Notices with registration forms sent out in May via email
- Honeywell Annual Photography Show Honeywell Center, Wabash, Ind.
 - August 28 September 29, 2024
 - Artwork dropoff August 26, 11 am noon, 5 7 pm
 - https://78bfaab1-3ae8-47cb-ad97-2497373a26e3.usrfiles.com/ugd/78bfaa_bd3c176fce6d44df902a9921a82e2895.pdf
- Images of Nature: Eagle Creek Park and Riviera Camera Club
 - Saturday October 7 Sunday October 22, 2023
 - https://www.rivieracameraclub.org/images-of-nature-competition

Competition and exhibition listings

- Indy Arts Council
 - https://indyarts.org/indyarts-e-news/
- Aurora PhotoCenter
 - Keep an eye out for opportunities
 - https://www.auroraphoto.org or Instagram: @auroraphotocenter
- C4E Calls for Entry
 - Get on their email list
 - https://www.callforentries.com
- Lenscratch
 - http://lenscratch.com
 - Fine art photography daily news, profiles and more
 - Massive list of resources, including calls for entry:
 - http://lenscratch.com/resources/callsforentry/

How Eric makes digital mats

- 1. Open image in Photoshop
- 2. Unlock the background layer:
 - Double click on the background layer.
 - New layer dialog box opens. Change the name from Layer 0, or don't. Click OK
 - Background layer name has changed, and it's now unlocked
- 3. Create a new layer below the image layer
 - Hold down CTRL (Windows) or CMD (Mac) and click on the create new layer icon
 - A new transparent layer appears (Layer 1)
- 4. Choose canvas size (probably 16 x 20 inches)
 - Make sure the new blank layer (probably Layer 1) is selected
 - Go to the Photoshop menu bar and choose Image > Canvas Size...
 - The resulting dialog box shows the current canvas size the size of your image
 - Make sure it's showing sizes in Inches
 - Make sure Relative is unchecked
 - Enter the size of your mat next to Width: and Height:
 - Click OK
 - You should now have a transparent mat around the image.

How Eric makes digital mats

- 4. Fill the new mat with color.
 - In the layers palette menu, click on Adjustment Layer icon (black and white circle)
 - Select Solid Color...
 - The Color Picker menu box appears
 - Use the options in the menu or (better yet) use the eyedropper to select a color from the image.
 - Keep trying colors with the eyedropper tool until you have a mat color to complement your image
 - Click OK
- 5. Create a drop shadow (optional)
 - Select the image layer (layer 0, unless you changed it)
 - Select fx in the layers palette menu
 - Choose Drop Shadow...
 - Drag down and to the right from the lower right corner of the image for the shadow you want
 - Adjust with the sliders as wanted
 - Click OK

How Eric makes digital mats

- 6. Create a stroke (optional)
 - Select the image layer
 - Click on fx at the bottom and choose Stroke...
 - Click on the box next to Color:
 - Use the Color Picker menu to select the stroke color suggest the eydropper tool
 - Select a stroke size 7 to 10 pixels?
 - Click OK
- 7. Add texture to the mat
 - Select the bottom layer (Color Fill, unless you changed it)
 - Click on fx, and choose Bevel and Emboss
 - Click on the word Texture (not just the checkbox)
 - Select a texture from the Pattern: box
 - Adjust with scale and depth
 - Click OK