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Thanks to Stephanie Rudd and Mark Ochenduszko for their kind permission to use their beautiful images in Chapter 23 - y'all rock!!

Join my mailing list and receive my regular "Photoshop Quick Tip" newsletter - visit my website to sign up, or use the QR Code to the right:

www.wattsdigital.com

Feel free to contact me: john@wattsdigital.com

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I am, at my core, a custom photographic printer. I was first dragged kicking and screaming into the digital age: Now, I embrace it with a passion.

I have been privileged over the last 35+ years to work in partnership with some of the world's finest photographers. I also have a knack for making superior color prints for these photographers, as well as many serious amateurs. I've now taken that expertise and applied it to the world of digital imaging education.



It's safe to say that I've learned a few things over the years...

- I don't plan to teach you how to put children's heads on animals, or make flashing and rotating text, or how to create a surreal, mind-blowing digital masterpiece that defies logic. There's a place for it, but that's not my "gig" (think: Graphic Design / Photoshop Artistry) I teach Photoshop to and for photographers.
- What I can teach you is how to make a great color print / image using the basics of Photoshop to achieve your desired results. I think of Photoshop as my "digital enlarger." -- What I once used to do on a darkroom enlarger in the analog world I can now do in Photoshop with lots more control and options.
- Why should you listen to me? The same reason that you listen to your doctor: training and experience. Like your doctor, I've learned what generally works and what doesn't. Also, like your doctor, I'm constantly learning new things, and listening to new ideas (a doctor "practices" medicine, after all!) -- Hence, this book ...
- Although there's quite a bit of information available about PS, I'm NOT going to teach
  you a complete "Photoshop encyclopedia" instead, I'll focus on getting you up and
  running with a minimum of hassle, master the fundamentals of Photoshop, and get great
  results. Once you master the material I'll teach you, you'll be able to expand your
  "Photoshop Horizons", knowing you're starting with a solid foundation.

One other thing: as you read through this book, you'll have questions – that's a given. I don't want to leave you hanging or confused, so call me at **800-443-9701** or e-mail me, <a href="mailto:john@wattsdigital.com">john@wattsdigital.com</a>, if you've got a question -- I'll be happy to answer it.

Okay, so let's get started ...

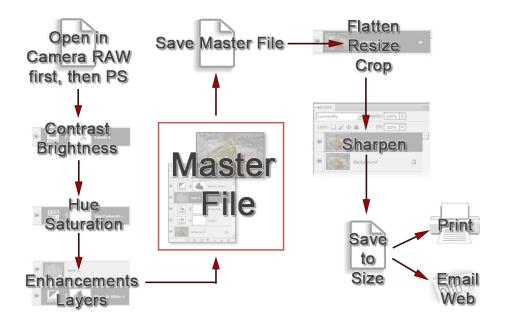
# **Table of Contents**

Preface	A
Table of Contents	B, C
How Best to Use This Book	D
Workflow Chart / Speed Keys  Photobox vs. Lightroom? Wrong Question!	E, F, G
Photohop vs Lightroom? Wrong Question!	H J
Suggested Hardware	J
Section 1 – The Foundation	1
1) Conventions, Concepts and Controls	3
2) The Master File and Workflow	7
3) General Preferences / Screen Colors	9
4) Color Settings Menu	11
5) Setting up your Workspace with Panels	13
6) The Tools Panel and the Color Picker	15
7) The Navigator and History Panels	17
8) The Document Window 9) Changing Numerical Values / The Cursor	19 21
10) Opening, Duplicating and Renaming Files	23
11) "Save" Options / File Naming Conventions	25
Try care options, the naming contentions	20
Section 2 – Control your Contrast & Color	27
12) Basic Elements of a Good Color Print	29
13) Contrast and Brightness	31
14) Hue and Saturation	33
15) Color Correction and the Color Wheel	35
16) The Levels Adjustment Layer	37
17) The Hue – Saturation Adjustment Layer	43
Section 3 – RAW Fundamentals	47
18) What is RAW, and why do I need it?	49
19) Adobe Camera RAW plug-in (ACR) to Photoshop Workflow	51
20) Using Camera RAW Filter for non-RAW files in Photoshop	54
21) The ACR Workspace	55
22) ACR in Action	57
23) The ACR-to-Photoshop Evolution Shown Visually	61
Section 4 – The Power of Layer Masks	63
24) Layer Masks and Adjustment Layers	65
25) The Layers Panel /The Adjustments Panel	67
26) The Properties Panel	69
27) Layer Mask Strategies and Basics	71
28) Selections: Tools and Techniques	73
29) The Brush Tool	75
30) The Magic Wand Tool	77
31) The Quick Selection tool	79
32) The Lasso Tool 33) Gaussian Blur / Select and Mask	81 83
our Saussian Dia / Octobe and Masic	03

Section 5 – The Finishing Touches	<u>87</u>
34) Dodging and Burning 35) Resize Your Image	89 91
36) Crop your Image	93
37) Sharpen your Image	97
38) The Clone Stamp and Healing Brush Tools	101
39) Time-savers: Actions / Straighten your Horizon	107
Section 6 – Organizing and Archiving your Files	109
40) Working with Bridge	111
41) Digital Imaging Backup Strategies	115
Section 7 – Color Management 101	117
42) The 3 Steps to Successful Color Management	119
43) Step 1 – The Monitor Profile	121
44) Step 2 – Using Printer Profiles	123
45) Step 3 - Lighting Conditions and Perception	125
46) (Optional) – Soft-Proofing / Gamut Warning	127
Section 8 – Printing your Image	129
Section 9 – Workflow Review / What's Next?	135
Section 10 - Reference & Links	137
COULDI TO TROTOTOTO & LITTLE	101

### Chapter 2 - The Master File and Workflow

If a picture is truly worth a thousand words, then here's an overall visual representation of the Workflow Chart on page "F" near the beginning of the book – notice that your Workflow centers on creating a Master File.



**Creating a Master File is NOT for every image:** it's for those images that you want to spend time with, doing all that's necessary to make your image "pretty". Here's where you pour your artistic "blood, sweat and tears" into your image, using the methods shown in this book.

What is a "Master File"? It's a 16-Bit, un-flattened, un-sharpened, un-cropped, un-resized file, designated as such in its file name, and saved as a .PSD or .TIFF (all of this discussed later throughout the book).

#### Why create a Master File?

- *It's Multi-purpose:* Use it to create separate files for a specific print size or printer, for the Web, for magazine output, etc. and you'll stay consistent between those files.
- It's easily correctable: for color, contrast, cropping, enhancements, etc. non-destructively (loss of digital information).
- Sharpening is applied according to your print size: Let's say that your Master File is created from a
  RAW file It might be around 12"x18" at 300 ppi If you sharpen for this size and reduce the file
  to prep for an 8x10 print, it will be over-sharpened.

By the way, this book is arranged in a manner similar to the chart above: **Sections 1 through 4** focus on the "left" side of the chart (consider this the "creative" side), and **Sections 5 through 8** dig into the right side of the chart (consider this the "procedural" side, except for cropping).

## Save your Master Files as TIFF or PSD files, not JPG files:

It is important to save your Master Files as TIFF's or PSD's, not as JPG's. Again, just to reiterate from Chapter 1, there are three reasons:

- Every time that you open, work on, and save a JPG, there is degradation because the JPG compression scheme is not "lossless" TiFF's and PSD's are "lossless"
- You cannot save a JPG in 16 Bit
- You cannot save a JPG with Layers

#### TIFF vs PSD:

My personal preference is to **save my Master File as a .PSD**, so as to further differentiate between my Master File and all other files - *plus*, a .PSD file saves faster, and has built-in "lossless" file compression, resulting in slightly smaller Master Files.

Other than that, there are no major differences between the TIFF format and the PSD format.

That being said, there are two related situations in which you might want to save your Master File as a .PSD rather than a .TIFF:

- 1. Your original file is large to begin with (over 200 MB)
- 2. Your Master File becomes large (over 200 MB)

#### Examples:

- It's not unusual for me to work with 200 to 400 MB 16-bit Drum Scans from film transparencies, and a Master File with many layers can easily become 600 or 700 MB, which makes things very cumbersome and slows down my computer tremendously if I save the Master File as a TIFF- not so if I'm working in the .PSD Format.
- If I'm working on a complicated RAW file that involves a lot of specialized layers, my Master File could easily get bigger than 200 MB, even though my original RAW was only 20 MB or so, again slowing down my computer if saved as a TIFF but not in a .PSD format.

Here's a link to one of my free videos (recorded live) that perfectly encapsulates how best to use Photoshop for the Photographer, with a diverse range of images - This is *Master File Creation & Workflow* in action!

• Think of it as a "study" video, if you will – heck, it's an hour & twenty minutes long! You can download copious notes), including a Table of Contents – just in case you cannot watch it all in one sitting, or need to refer back to it (and you will!).

See the video here (QR Code to the right): https://blog.main.wattsdigital.com/?p=2452



# Chapter 5 - Setting up your Workspace with Panels

See a 5-minute video on this chapter here (QR Code to the right): <a href="https://blog.main.wattsdigital.com/?p=1731">https://blog.main.wattsdigital.com/?p=1731</a>

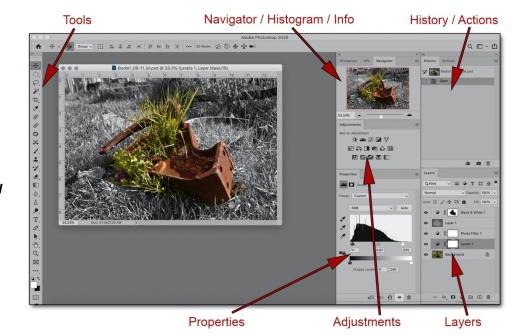


Think of **Panels** as miniature workspaces, each accomplishing a different function. There are almost two dozen different panels available to you, but in the spirit of K.I.S.S., I would suggest that you start with just nine, and add those you deem necessary as you gain more experience with Photoshop.

Below is a representation of the panels I would suggest that you set up on your Photoshop desktop to create a proper workspace:

Photoshop gives you a set of predefined workspaces: You can access these by going to the "Window" menu > "Workspace". I would start with the preset "Photography" Workspace, then I'd suggest that you add or subtract panels until you end up with just the following in your workspace:

- 1. Tools panel
- 2. Layers panel
- 3. History panel
- 4. Actions panel
- 5. Navigator panel
- 6. Info panel
- 7. Histogram panel
- 8. Adjustments Panel
- 9. Properties Panel



Feeling adventurous? Install a custom Photoshop Workspace Preference (.psw) file to help you get started (QR Code to the right): https://www.wattsdigital.com/freecolorwheelstuff.html





### Why these Panels?

These nine panels are the ones that you'll use most. As it is important to keep things simple (Remember K.I.S.S.!), stick with these to start – you cannot go wrong.

### Working with Panels in the Workspace:

- You'll notice that certain panels are "docked" to each other into Tab Groups: this is to save valuable
  "screen real estate" (By the way, "screen real estate" is not as critical if you use more than one
  monitor).
- **To add or remove a Panel from a Tab Grou**p, click on the **Tab**, hold down your left mouse button, and drag it into or out of the Group.
- To add a Panel to your workspace, go to the "Window" Menu, and simply place a checkmark beside the panel you wish to add. (Checked Panels are those visible in your Workspace)
- To move a Panel, place your mouse pointer over the name of the panel (the "tab"), you're your left mouse button down, and drag it to the desired location in your Workspace or Tab Group.



"Tab Group"

- To resize a Panel (where available), place your cursor over the bottom right corner of the panel, and your pointer will turn into a double sided arrow. Hold your left mouse button down, and drag the panel to the desired size.
- To delete a Panel, simply click on the "x" to the right of the name in the tab. You may have to remove this panel from a Tab Group to see it's "X". Don't worry if you accidentally delete a panel you need: you can go to the "Window" menu and "re-check" it.



Minimized Tab Group

• To minimize a Panel or Tab Group, click on the double arrow on the top right of the Panel or Tab Group. Click the double arrow again to expand to normal size.

**Panel Options:** In each panel, you'll notice a downward facing triangle with three parallel lines next to it in the upper right-hand portion of the panel. This gives you access to the Panel Options. Each panel will have a different set of options such as the size of the icons in the panel, the view available to you, and so on. You should explore these – For instance, I personally like larger icons in my layers panel.

**Hide All Panels:** If you're limited with screen "Real-estate" (small laptop, etc), use the "Tab" Key on your keyboard to hide all of your panels – perfect for looking at your images with a critical eye. Simply use the "Tab" Key again to get back to your Panels.

**Maximize your Workspace:** To avoid distractions, it's a good idea to "maximize" the Photoshop Program on your computer so that it "fills" your screen, avoiding other programs, icons, backgrounds, etc that might interfere with your Workspace.

**To save your Workspace:** Once you have set up your workspace, you can save it. Go to "Window" → "Workspace" → "New Workspace...", and when prompted, give it an appropriate name, then save it. You can easily access it again 3 ways:

- 1. "Workspace" → then click on your saved workspace in the menu choices
- 2. By clicking on the icon in the upper right corner of your Photoshop Workspace
- 3. By Resetting your Workspace: "Workspace" → "Reset (Name of Workspace)"

### Chapter 18 – What is RAW, and why do I need it?

- A Camera RAW file contains unprocessed, uncompressed 16-bit data from your digital camera. It's just information, but lots of it. It isn't really a file "format", like JPG or TIFF. It also doesn't have a Color Space (discussed in Chapter 1).
- You can't open a RAW file directly in Photoshop: You must first work with it in The Adobe Camera RAW Plug-in (ACR) before "sending" it to Photoshop (See Chapter 19). By the way, ACR is a separate program, but included with (and "linked to") Photoshop.
- You should be shooting in Camera RAW for your important work -- the results are worth it! The more information you are able to capture when you shoot, the more information you have to effectively create your image.
- Tonal Compression: This was discussed in Chapter 1, but this is a great time to review, with a
  visual diagram This is the inevitable reduction /degradation of the original scene from your eyes
  to the print. It's pure physics the range of colors reproduced shrinks throughout the process.

Let's say, for example, that our eyes see 100 shades of red. The camera, shot in RAW, may see 70 shades. Then Photoshop may see 60 shades of red, and the printer may only print 45 shades of the original 100 shades available.

		Ps	
What our eyes see	What your Camera sees	What Photoshop sees	What is actually printed
<i>JPG</i> → 100	40	30	15
<i>RAW</i> → 100	70	60	45

So, how can you minimize some of the effects of tonal compression? Three things:

- 1) Shoot in RAW (or scan in 16 bit)
- 2) Use a proper Color Working Space in Photoshop (discussed in chapter 4)
- 3) Have your Color Management "house" in order (discussed in the "Color Management" section)

# A RAW file is different from a JPEG in 2 major respects:

- 1) There's much more information in RAW (16 bit vs. JPG's 8 bit), even if it's not yet in the "visible spectrum" of light.
- 2) There's automatic "file compression & processing" built into the creation of a JPG, whether you want it or not.

#### 16 bit vs. 8 bit:

More information is a very good thing in photographic capture. Bit Depth is like the Earthquake Richter Scale: it's logarithmic - - a 6.0 earthquake is twice as powerful as a 5.0 earthquake, not just 20% more powerful, as the numbers on the scale would seem to indicate. Likewise, a 16-bit file is NOT twice as much information as an 8-bit file: it's hundreds of times more information.

(JPG) 8 Bit: 256 values of each color x 3 (RGB) = 17.7 Million combinations of RGB (RAW) 16 Bit: 65,000+ values of each color x 3 (RGB) = 281 Trillion combinations of RGB

### What is an .xmp file?

It's a separate ("sidecar"), tiny, glorified "text" file that contains "metadata" – you never need to directly open it.

Think of it as the "instructions" for all of that RAW information (which is never directly "changed"). It's generated as soon as you make any "modifications" to your RAW file, and saves those "instructions" in the same folder as your RAW file.

#### A few things to remember:

- 1) If you back up your RAW file, back up your .xmp file, too; it's in the same folder/location as your RAW file.
- 2) If you're working in "Bridge" and can't see the .xmp file, simply go to "View" Menu -> "Show Hidden Files".
- **3)** If you want to start over with your original "as shot" RAW capture, simply "trash" the .xmp file (very rare!).

### If your Camera shoots, RAW + JPG, then you should do so ...

It takes up little in memory, and gives you a quick "look-see" image that's been "processed" for contrast, color, etc. (albeit by a computer chip!). Oh, and I frequently hear folks say "My JPG looks better in Bridge or Lightroom!" - - read on, and you'll never believe that again!