

## Upgrade Yourself with IP4AP

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*This article first appeared in my Fishing for Photons column on Cloudy Nights. All text and images Copyright Craig Stark, 2009.*

We're going to take a bit of a break from the series on SNR and explore another side of astrophotography. It's a side that many inclined to think of this as purely technical or as being entirely scientific have can have a tougher time with. But, it's a side that's just as important as getting good quality raw data. I'm speaking, of course, of the artistic part of the *technical art* equation. The best raw data going in can still lead to an uninspiring image at the end and mediocre data going in can lead to something that will still draw you in. The question before us, then, is how do we go about transforming our raw images into something memorable?

If you think you're going to get the answer in the rest of the article, you'll be sorely disappointed. I have no magic button here, no ideal stretch, no answer to great composition. By way of analogy, while I'd love to be one, I'm not a finish carpenter. Sure, I'd love to be able to make fine furniture and I've got a few basic pieces around the house that we're not horribly embarrassed to have about, but I'm no true craftsman. Near my old house, there was a great wood-working shop and whenever I'd go in to pick up something small I'd drool over the wonderful tools there until an employee would come over with a towel and say "Stop it!". Sadly, I knew, that even if I dropped tens of thousands of dollars there, I'd not become a true craftsman, able to make truly fine things. Sure, I'd get a bit better with more accurate tools, but that wasn't the main limiting factor. Heck, craftsmen of the past made a lot nicer stuff than I have with a lot simpler tools. No, the problem here is in my lack of knowledge. Things sure seem simple (cut to the right size and shape, assemble...), but there's a lot more to it. To get better, I'd have to work at it myself and I'd have to learn from someone who actually knows what he or she is doing.

Astrophotography is no different. I'd love to be the expert who could show you all the ins and outs and give you not only the "physical" tools (curves, DDP, sharpening, smoothing, etc.), but, at least as importantly, giving you the "mental" or "creative" tools - the knowledge of when and how to apply these physical tools. But, I'm not that guy. Well, let me rephrase that to be a bit more accurate. I'm closer now to being that guy than I was before and I'm willing to share with you all how I've gotten better.

I've gotten better by having a teacher. My teacher has been Warren Keller's IP4AP tutorials. I've met Warren personally at a number of astro conferences and he's as nice a guy as you're ever going to meet. He also knows more about using Photoshop for astrophotography than I'll ever know and is willing to share his expertise in the form of a series of video tutorials. At MWAIC (Midwest Astro-Imaging Conference) this year, I managed to sweet-talk Warren and his business partner Peter Proulx into a review copy of their latest product, the *Photoshop Foundations for Astrophotography Superdisk*.

The *Superdisk* is a collection of 51 Photoshop tutorials and 5 Astroart tutorials. The tutorials are the same ones found on the main [IP4AP site](#), but packaged nicely together and readily watchable offline. There are 21 videos in the "Basic" series, 12 in "Intermediate Part 1", and 18 in "Intermediate Part 2". The length of each video varies a bit, but they average about 6

minutes - a nice size chunk in my book. The *Superdisk* DVD runs \$119.95, which I should note is about the cost of viewing each of the series online. With the DVD, you do get the convenience of being able to watch it while offline - a clear benefit. Currently, the DVD is available from AVA, High Point Scientific, OPT, and, in the UK, Ian King.

So, what do the videos cover? The videos in the Basic series are, well as the name might suggest, basic. Don't let this think you shouldn't watch them if you've been using Photoshop already though. I've been using Photoshop at work and for astrophotography for years. I thought I'd not learn anything in the Basic series, but I sure did. I didn't know about things like "history snapshots" and even the very simple trick of not only sampling the intensity in an image when you're in *Curves* (knew that), but the alt-shift-click (alt-command-click on the Mac) to lay a point in *Curves* at the intensity under the cursor? Nope, it was new to me (I'd always just tried to remember where the dot appeared on the curve after I sampled it).

Moving into the Intermediate series, Warren really hits his stride and the real merit of the video format comes through. Here, you're looking at things like color adjustment (bias, scaling, saturating), sharpening, smoothing, noise reduction, star enhancement, gradient removal, etc. Sure, I knew the basics of a number of these, but I picked up a lot of tricks even in my first viewing of the tutorials (I'm now going back through and trying to pick up what I missed on the first pass.)

For those of you who may have tried his free videos on the web (or have bought any of the earlier ones online), one of the changes in the newest videos (Intermediate Part 2) is the the new Flash player used. Of course, it's got the standard play/pause/jog kinds of controls, but it also has a few more tricks. It's got a full-screen view that will zoom the image in or out to nicely fill your screen. If you've got a lower-resolution screen, this is a big help as it lets you see the whole of Warren's screen on your screen no matter how big or small yours might be. For me, as it blew the image up (I've got a nice big screen on my MacBook Pro here), the quality suffered a bit. Besides, quite often, I'd have Photoshop open while the video was playing and watching in the normal "windowed" mode (video playing in your browser window) so that I could try things out on the fly. So, your mileage may vary with this feature, but it's certainly a nice option to have. Another nice feature of the new videos is that you've got a full transcript of what Warren was saying (click on the "i" in the control and then click on the "About" button). This was useful a few times in going back to try to remember some detail of a step (the "Chapters" view also lets you find things quickly.) My only regret here is that the text wasn't able to be copied onto the system clipboard. That would have made for a very easy way to take notes! Finally, you'll find that in the new videos, Warren makes extensive use of zooming in on the details of the controls as he's going along. Again, this is a welcome addition as there's no way to miss any key steps.

In chatting with folks about the videos, I've occasionally gotten the comment that Warren's delivery can be a bit slow and that he can be a bit campy. The latter I don't mind at all as it helps to remind us that this is supposed to be a fun hobby. The former, I must admit, that I started off seeing as a con as well. There were a few times when I'd think, "C'mon mate, I know, I know, now get to the next bit!" But then a curious thing would happen. He'd be going along at the same pace he'd been going the whole time and I'd find myself saying, "Wait a minute- what did he just do?" I might even grab the slider and watch a bit again to make sure I really got what he was saying and doing. His pace hadn't changed. What had changed was whether I already knew what he was talking about. Since it's rather difficult to project psychic

powers through the DVD and know just what bits the viewer already knows and just what is new to him or her, Warren picks a steady pace and sticks with it. Sure, some bits will seem slow if you already know them (and you can always fast forward- I'd suggest not, however as there can be some neat gems in there even when you think you know all there is to know about a topic), but the pace caters well to a broad audience and you'll appreciate it on bits that you don't know so well.

I'd like to leave you with what I feel is the fundamental *raison d'être* of the IP4AP tutorials. What we're doing here in amateur astrophotography is, in my opinion, best viewed as *technical art*. Technical art requires craftsmanship which in turn requires a clear understanding of an array of tools. To do it well, we need to know not only what tools are out there and how to use them, but also when to use them. We need to know the traditional uses of the tools, their strengths, and their weaknesses. That is, we need to know the standard practices of the trade. To be truly proficient and even to move beyond, we need to master non-traditional uses of the tools and know the various tricks of the trade. This is true whether we're trying to make a beautiful picture of a galaxy or whether we're trying to make a fine piece of furniture with artful inlays and wonderful details to entertain the eye.

This is where IP4AP's video format really comes in. Just watching them won't turn you into the world's greatest astrophotographer. It's not that easy (and if it were, it wouldn't be that rewarding). But, watching them (potentially several times) will teach you what a number of these tools are, what they do, how to use them, and when to use them. You get to see a craftsman not only describe the tools, but demonstrate how they work and how to use them. By paying close attention, trying them out yourself, and then going back to the videos, you can learn a lot about how to use Photoshop - the biggest, most powerful toolbox we have at our disposal.

While I'm no "pro" at this, I've been doing this for more than a few years and I've been using Photoshop for a lot longer, making me not a real newbie at this either. I can say without hesitation that I learned a lot from the tutorials and that their bang for the buck is huge. I can't think of how I could spend \$120 on my rig or my processing software and make anywhere near as big an improvement in my images. No \$120 upgrade to my gear - or upgrade costing a lot more than that - could improve my images more than the upgrade to myself I got by taking the time to watch, learn, and be trained.