

Photonic Cleaning Technologies presents: Tim Hutchison



The Horsehead and Flame

I have always been a photography enthusiast. In my early 20's I began getting serious about landscape and nature photography. However, my family and my professional career as the founder and CEO of a small software company consumed the majority of my time. Photography for me was always a side hobby. I was fortunate to be able to retire at 50 years of age. One day, after breakfast, I made the mistake of suggesting a better way to load the dishwasher to my wife. I was politely (ahem) told that she "...did not need someone to CEO the house..." and that perhaps I should find a team to coach, or something else to keep busy. That year, she purchased a Celestron Edge HD8 telescope for me as a birthday gift. I was absolutely hooked the very first night.



IC1318a in Cygnus



The Lagoon Nebula



The Trifid Nebula

My first attempt at astrophotography was an absolutely terrible image of M42 taken with a Nikon D810 (unmodified). Still, I was so excited that I couldn't wait to get out the next night. Like everyone in this hobby, I proceeded to purchase more and more gear. I live in a suburb of Pittsburgh, PA where we have a lot of cloudy nights and borte 5-ish skies. While I still have the Edge HD8, my current main telescope here in the backyard is a Takahashi TOA-130, a 10Micron GM1000-HPS mount, QHY600M camera, and Filters from Chroma Technologies. I built a small roll-off-roof observatory in my backyard to house this rig.

I also have a remote telescope at Deep Sky West. That rig is a Takahashi TOA-150, 10Micron GM2000-HPS II mount, and an SBIG STXL-16200 camera also with Chroma filters. In an effort to maximize my astrophotography opportunities here in Pittsburgh, as well as make remote operations as easy as possible, I decided that fully automated systems were the way to go. I used Voyager from Starkeeper di Orazi Leonardo as the centerpiece of my automation strategy, augmented with a fair bit of custom software that I developed for this purpose.

Both in the backyard and for my remote system, I simply log in and define the target that I want to shoot, the number of exposures/filters that I want, and the binning/gain/offset for each. Rules defined in the software for lunar separation, maximum lunar illumination, altitude, and others are used to select the appropriate target/filter to shoot for each hour of shooting.



California Nebula in Narrowband



Croc's Eye Galaxy



Cygnus Wall Region of NGC7000

When the weather conditions are right, the roof opens, and the system goes to work. I simply return in the morning to see what was shot and reject any bad frames. The quality of my images has improved. Also, the number of images that I am able to complete has increased. I am always shooting the best target at the time for each hour of the night. Plus, I am able to make use of imaging time that may open up late at night or early in the morning that I otherwise would have missed.

I encountered First Contact Polymer from Photonic Cleaning Technologies when I was searching for a solution to clean the corrector plate for my SCT telescope. I was very hesitant to dismantle the telescope and was worried about scratching or otherwise damaging the optics. First Contact seemed like the perfect solution. I couldn't believe how easy it was to use and what a terrific job it did, even on my initial attempt. Since then, I began using it on all of my telescopes as well as all of my filters. I find it to be effortless and safe, and that it does a perfect job every time. With telescopes that are out in the observatory 24/7/365, a fast, effective, and safe cleaning solution is an absolute must. I am happy to have found First Contact.

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<https://www.astrobin>

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