

PINNACLE PORTABLE TELESCOPE PIER

Review by Stephen W. Ramsden (spike@solarastrophotography.com)

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REVIEW:

I recently received the Pinnacle Portable Telescope Pier from Particle Wave Technologies in San Rafael, CA.

Here is the company info:

Particle Wave Technologies

16 Wellbrock HTS.
San Rafael, CA 94903
(415) 250-7406
info@pwtec.com

<http://www.pwtec.com/pinnacle.htm>

The Pinnacle Support System is a heavy duty light weight portable pier designed for the utmost in stability and support in a portable pier. I ordered it on October 10th, 2008 and it arrived on December 6th, 2008. It was very well packaged in a custom made box with an additional internal box shielded by packing nuts.

Inside the box was the pier, a parts bag, an instruction manual and a DDCap for my 2 inch telescope. What's a DDCap? It is a custom designed and engineered plug which holds drying powder and some special indicator concoction from the incredibly obsessive minds at PWT that promise to keep the inside of your telescope dry if used properly. It also looks really awesome on the end of your scope. What better way to keep your solar etalon or ITF rust free?





And fully inserted:



On to the Pier.

I placed the pier on the ground next to me so you can get an idea of it's size. I am 6'3" and 330 lbs of lean mean solar observing machine ☺. Here is how it looks in front of me, it is big!



This is the 45 inch non adjustable version. It comes in an adjustable height version also. The pier weighs in at around 33 lbs which is incredible to me after seeing it swallow up my CGE mount and all the scopes I could put on it without budging. This pier is really an awesome piece of machinery and well worth the \$3370 dollars and 8 week wait in my opinion.

Here is how it looked as I put it together:

Unfolded and leveled.



With the CGE mount on it.



With two large scopes on a dual ADM mounting plate and 50lbs of counterweights ready to align and observe.



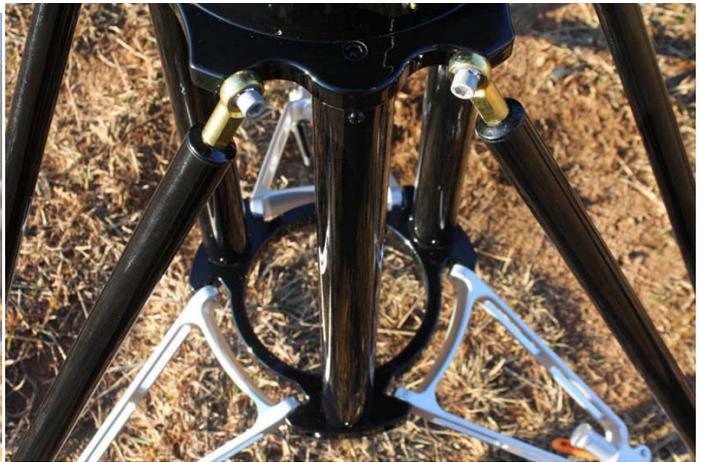
This process took 17 minutes from start to finish which is far less time than it did before when I struggle with the legs on the Celestron CGE tripod. The old tripod had a very poorly designed clamping system for adjusting leg height. In the 27 degree weather in which these photos were taken, the Celestron tripod legs could not be tightened enough to keep them from sliding when the weight of my setup was added to it. Since I do several school outreach programs I dared not raise my tripod up for fear that a kid would lean on it and maybe topple it over or at the least require a complete realignment. The Pinnacle has no such issues. The legs are fully adjustable and there are 2 ways to adjust the height of each leg. Neither of these methods attempts to support the full weight on the leg with a 1cm square piece of brass as the Celestron did.

The Pinnacle Portable Pier has so many extraordinary features it will be difficult to cover them all in this review but I will try. Let me note here that this pier is so advanced that I do not believe that I have realized a lot of its ingenuity yet. The following are things that jumped out at me on initial use.

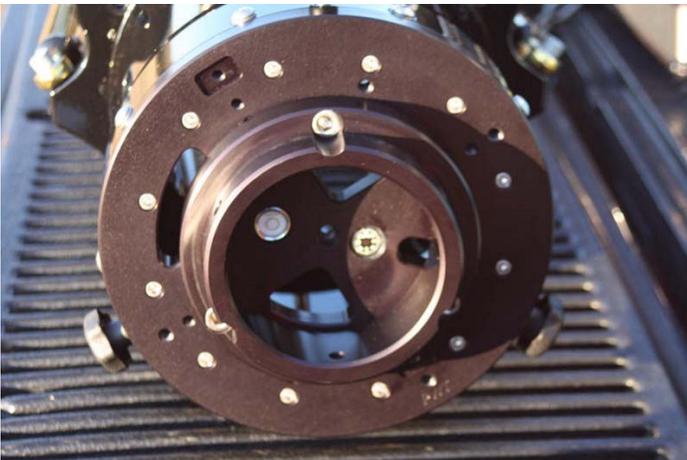
The entire pier is anodized in your choice of colors. Every single mm of this aluminum pier is smooth as silk and most of it has a very thick black anodized coat. The remaining aluminum and brass pieces which are not coated are extremely well machined. The bolts are all exceptionally well made and thick and meaty. The locking mechanisms on the leg are well thought out and machined perfectly. They are very smooth and just feel strong when you use them. The plastic tightening handles are thick and one is colored differently because it has more adjustment range than the other two. This leg goes on the high ground according to Shahin at PWT.



The 10 inch top is designed to accept most major brand mounts including Astrophysics among others. The entire top mount receiver plate rotates 360 degrees to assist in polar alignment. It is locked down with three plastic handled bolts.



There is a built in compass and level inside the CGE adaptor plate:



The CGE adaptor was machined and anodized perfectly. It is firmly attached yet removable in case I buy a better mount in the future.



The legs have a very well designed individual leveling system which is a bolt with a locking nut on the top attached to a swiveling aluminum foot. It never budged a micron after the desired leveling height was reached.



One more thing about the mount is that you can readily see how much time and thought was put into the engineering of this system. There are several places where pieces were machined especially to cut down on the weight without reducing the strength. It is really a wonder to use and to look at. I had a crowd of country boys out running their hunting dogs who come by in the field and just went on and on about how strong it was. They barely noticed the \$20,000 worth of mount and telescopes sitting on it.



THE BOTTOM LINE

Let me tell you point blank that this is the finest piece of astronomical equipment that I have ever laid eyes on at any price in my short tenure as a solar astronomer and I would strongly recommend its purchase to anyone who wants to take it to the next level with their mount.

Thank you for reading,

Stephen W. Ramsden

www.solarastrophotography.com