

# 2008 DAYSTAR SolareDi 60MM PENTA DEDICATED SOLARSCOPE

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## MANUFACTURERS INFORMATION:

SolareDi  $\alpha$  series 60mm telescope

[ [See photos through 60mm](#) ]



DayStar Filters is both pleased and excited to announce our latest and most dramatic updated development: the SolareDi  $\alpha$  series 60mm telescope. As a multi-functional, ready to use dedicated hydrogen alpha solar telescope, it combines performance, refinement and sophistication that will dazzle the user, whether professional or amateur enthusiast.

SolareDi  $\alpha$  is in production now and available for fast shipment.

SolareDi  $\alpha$  is an entry level telescope boasting both a modest pricetag and out-of-the-box application. But  $\alpha$  offers room to grow with 60mm clear aperture and full 35mm blocking filter elements and an included robust 2" focusing platform for a wide variety of solar imaging choices.



Both Visual and Photographic

Both Tripod and Dovetail Mount

2" dual speed Moonlite Focuser

Instant tilt wing shift tuning

60mm aperture and 35mm Blockers

Same DayStar Trade-in / Upgrade Policy

10 Year Warranty



**Specifications:**

Clear Aperture: 60mm  
Focal Length: 1375mm  
Limiting Resolution: 2.8 Arcseconds

Operating Temperature: approx. 50-90° F



Wavelength Shift range: 2.5Å  
100% safe and fully blocked directly through the OTA

Reaches focus using the following:  
1.25" eyepiece, 2" eyepiece, ToUCam, Lumenera, SBIG, SLR, DSLR, afocal, CCTV Video, 2X - 5X Barlow lenses with any combination included above.



**Includes:**

Complete Ha Solar Telescope  
2" dual speed Moonlite Focuser  
12mm Eyepiece  
Solar Finder  
Dovetail / 1/4-20 threaded mounting foot.

Performance engineered for flexibility, the SolaREDi has been rigorously tested for ease of operation, function, reliability and adaptability with various cameras.



SolaREDi telescopes are in production now.  
Call your local dealer or our toll-free number now for further details.

SolaREDi Alpha is available in the following choice of bandpasses:

SolaREDi Alpha 0.7Å Hepta:	\$1795
SolaREDi Alpha 0.5Å Penta:	\$2495
SolaREDi Alpha 0.3Å Tria:	\$5395

**REVIEW:**

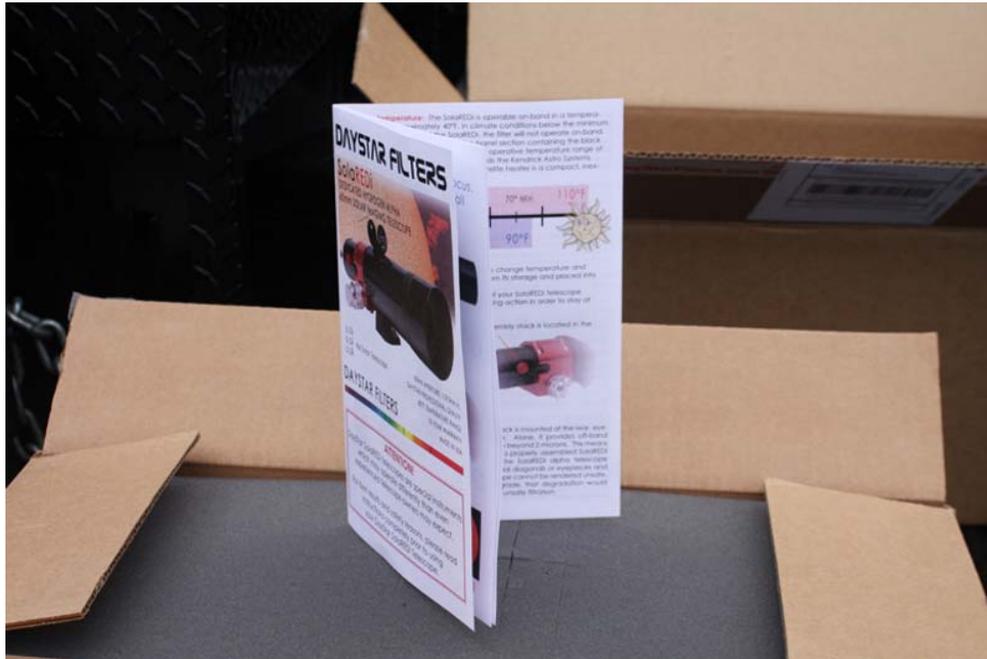
This is a review of the Daystar SolaRedi 60mm 0.5A Penta dedicated solarscope as delivered from Daystar Filters in December, 2008. This is a new product and an admirable attempt at providing some competition to the other major players in the Halpha market. I was incredibly disappointed in almost every aspect of this purchase from the complete lack of customer support to the lengthy delay in shipping or responding to any customer emails or phone calls. I restrained myself from writing a review for 1 month after this purchase so that I could settle my ill will and try and give a detailed and valid review without tainting it with my extreme displeasure over the way this all was handled. I will say that Daystar has made adjustments to their web page claims regarding shipping times of this product I suspect in response to my contacts with them. I am hoping that since mine was among the first to ship that maybe they have

reevaluated this product launch and made some changes for the better. The following is just the facts without the emotions, hopefully.

The Daystar Penta arrived via the US Postal Service Priority mail (?) in an excellently prepared shipping box. It was a clean brown cardboard box and had a very professional look about it with a 4 color label on one end and Daystar shipping tape all over it.



Inside the outer box was another inner cardboard box which was excellently prepared. This box opened up to reveal a BEAUTIFUL black and red telescope snugged into a foam liner. There was no case for the scope, just the foam. Inside the box was also a warranty card and an instruction manual. This is the best prepared and most aesthetically pleasing package yet from any solar manufacturer that I have seen. I was very excited.



The telescope was wrapped in a piece of red gift paper with 2 rubber bands around it and then placed into a thick clear plastic bag. It was quite attractive and the wrapping made it feel like it was a Christmas gift. I was still very excited.



A case would have been nice but it was clearly not included in the manufacturers information.



I did notice that the foam was about the same size as the new PST case that I had received as a replacement for one Meade had lost in their repair facility in Mexico. I think that with very little modification, the telescope and foam would fit perfectly into the PST case. The scope was very attractive to look at. From the business end to the eyepiece it included a flexible rubber lens cap, a black metal shield which had a silver ring inside that stepped down the 80mm objective to 60mm for some reason screwed onto a long black metal tube with a red Daystar logo painted on the side. On top of the tube was an INCLUDED Televue Sol-Searcher. It fit the design perfectly.



The tube led to an absolutely breathtaking precision engineered Moonlite focuser. It was a Crayford style 10:1 focuser with a beautiful engraved logo. The chrome focusing knobs were meaty and well sized. The focuser was by far the best part of this entire experience. It was smoother than my Feathertouch and worked perfectly under large loads.



Both the coarse and fine adjustment knobs were on the same side of the drawtube.



Moonlite should be recognized for this truly fine product. It was VERY nice.

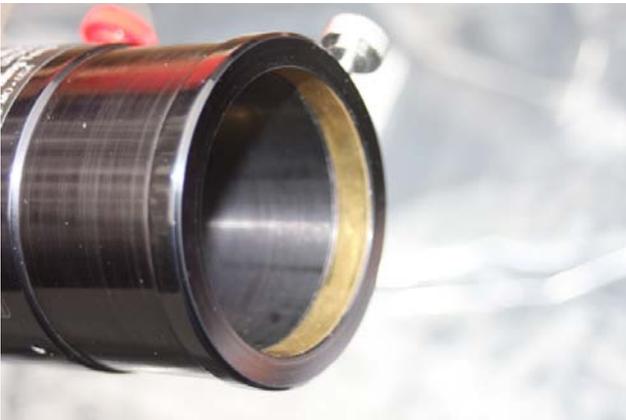
When you passed the focuser there was a preinstalled Televue 4X Powermate Barlow.



The barlow/drawtube had a sticker on it with the serial number and the minimum operating temperature stamped on it. This scope was rated for a minimum temperature of 73 degrees Fahrenheit. I should have asked about this when ordering but for the life of me I could not remember seeing that anywhere on the web page and it certainly was not mentioned to me when ordering. Since this experience I have found the information to now be placed prominently in the specifications area on the web page. Whatever the situation was, I was completely unaware of this temperature restriction. Had I known of this requirement I would obviously not have ordered it as it was the middle of winter and the ambient temperature outside was 36F on the day of delivery. I later learned that these scopes have a 40F temperature range in which they are usable. That means that I would have to wait until summer for the air to get somewhere in between 73F and 113F before I could use it. This was unacceptable to say the least and the start of the bad part of this experience. More about dew heaters later.



Half way down the drawtube was a black plastic screw that had a red head. This was the control for the “tilting” mechanism to get the filter on and off band to see different features. It was flimsy at best and did not seem to be very tight. It moved in and out about 3 turns each way and controlled what appeared to be a completely separate red glass filter of some sort on the inside of the tube. When you turned it you could see the glass tilting inside of the drawtube. The screw was not secured very well and felt like it was going to fall out at any moment. I did not work with it just yet as I did not know what it was or how to use it.



On the end of the drawtube was a very nicely engineered 2 inch/1 ¼ inch end with brass compression rings and one thick metal screw to secure either size device.



I removed the rubber lens cap off of the objective to find some sort of granular white substance caked on the inside of the objective. I looked at my buddy and we both had a sinking feeling. I don't know what it was but it definitely was not supposed to be there. It looked like the desiccant inside a moisture absorbing pouch but I could not tell for sure.

Here is a closeup:



There were oily smudges around the outside of the objective and along the entire tube. I don't know if these were related or not. I was very disappointed at this development as I had just plunked down almost \$2500 for this scope.

I certainly expected a better pre-shipment inspection than this. It is possible that this happened in shipping from something exploding inside the tube but I did not investigate further. We called Daystar and of course some guy there said it was our fault or something like that. Upon further "more intense persuading" they agreed to send us a new objective. They would not authorize a complete return for whatever reasons but I promised that I would not get too far into the abysmal customer service from Daystar in this review.

A few days passed and I received a new objective that was clean and clear. I installed it and put it onto a Vixen Portamount and took it outside. It was clear and approximately 56F. The image was blurry with no detail whatsoever on the edge or the disk. The solar image looked just like an out of focus red ball. No amount of adjusting or tweaking improved the image in any way.



I spoke to my dealer about how best to heat the scope. I was told to wrap a dew heater around the tilting mechanism and let it heat up. I did so but since I could not tell what temperature it had attained it was a waste of time. After 2 hours of heating the image remained unchanged as a blurry red disc with no detail.

I decided to get serious with the heating so I went out and bought a stick-on aquarium thermometer and placed it next to the tilting screw. I heated it again the next day for 1 hour and it attained a temperature of 81F. Still nothing but a blurry red ball.

I then got even more serious as I thought that maybe the entire tube had to be heated up. I cut up a pair of thermal socks for use as an insulator. I wrapped a 14 inch dew heater from my other scope all the way from the objective to the

focuser. Then I wrapped two more 5 inch dew heaters on each side of the tilt wheel. I then covered the entire telescope with the winter socks.



I controlled this monstrosity with a four way Astrozap dew heater set to maximum attached to a Celestron Power Tank. It was a ridiculous setup to say the least. I powered this bad boy up for about a half hour and reached 85F according to the aquarium thermometer.

No matter what I did to any part of this scope at any temperature the image never changed even slightly from a blurry red ball with no detail whatsoever. It was very disappointing. I was now finished with this scope and no longer had any confidence that this scope would work under any circumstances.

This is the part where my responsibility to the reader takes over and I should mention the horrid customer service received from this company. I was given every excuse in the book as to how I did not understand the technology or my dealer messed it up or somehow or how I was expecting too much out of such an “inexpensive” product, etc... I was so mad at these people for this treatment that I contemplated other “more formal” action. But in the end, my dealer felt that it was more important to remain calm and keep dealing with Daystar based upon their reputation in the marketplace.

He returned the scope and absorbed the loss on this one and the other one that I talked a friend into ordering along with mine. He believes that this is just a glitch and surely Daystar will work out the bugs and provide us with a working product in order to retain that reputation. As of the date of this review the scopes are still sitting in his shop. I never opened the box for the other one that had an operating range of 53F to 93F so I cannot tell you if this one was just a lemon or not. I can tell you that I will require a LOT of convincing before I have anything to do with this company again.

They should have at the very least returned this product immediately and replaced it with a working .5A filter of any make or configuration in order to satisfy a VERY patient and hopeful customer. Had it been my company I would have paid the shipping and replaced it with a working model or simply sent out one of my other products that I knew would have worked in order to keep the customer happy. I advised them that I did reviews for solar scopes as a hobby when I ordered this thing. Surely they could have done a little more than just dismissing my complaints as invalid in order to get the sales going for their new product? Daystar did offer to send me the 12mm eyepiece that was supposed to be in the box according to their web site details but I declined.

### **THE BOTTOM LINE**

In my opinion this is by far the most attractively designed dedicated solar scope on the market right now. It was a couple of hundred dollars overpriced when compared to LUNT's .5A scope and seriously underpriced compared to Coronado's 60mm .5A offering. Its feel and design were absolutely stunning. The Moonlite focuser was awesome and the included Televue Sol-Searcher, dovetail mounting bracket and full color instruction manual should be a lesson to the other solar scope companies out there on how to sell a total solar scope package to a beginner or novice user.

Unfortunately the telescope never presented any usable image under any conditions and therefore was a complete waste of time and money. If this was a properly assembled and “personally eyeball tested” Halpha scope as I was assured over and over again by Daystar then this product is nothing more than a very expensive paper weight and you would have to be out of your mind to order one.

Thank you for reading,

Stephen W. Ramsden

[www.solarastrophotography.com](http://www.solarastrophotography.com)