

## Re: Skysensor 2000-PC availability?

**Source:** <http://sci.tech-archive.net/Archive/sci.astro.amateur/2005-01/1916.html>

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**From:** Szaki ([szaki10\\_at\\_comcast.net](mailto:szaki10_at_comcast.net))

**Date:** 01/10/05

Date: Mon, 10 Jan 2005 10:48:05 -0800

"Roger Hamlett" <[rogerspamignored@ttelmah.demon.co.uk](mailto:rogerspamignored@ttelmah.demon.co.uk)> wrote in message  
news:1OtEd.206\$SN.11@newsfe6-gui.ntli.net...

>

> "Szaki" <[szaki10@comcast.net](mailto:szaki10@comcast.net)> wrote in message  
> news:T96dnU0rN4Ms53zcRVn-oQ@comcast.com...

>> Why you had to move the goto to your GP mount?

>> Not happy with the Celestron GT?

>> All these cheap goto systems, that Meade or Celestron makes uses standard  
>> DC motors, vs. SS2K use stepping motors, lot more accurate. For example,  
>> I can be over 100x power or more and slew from one object to another and  
>> they all come into my eyepiece field view. SS2K even locate objects on  
>> the Moon, after proper alignment, controler has the database too.

>> I owned LX200 and Nexstars, but I'm very impressed with the SS2K. There  
>> is the reason for the high price and demand for the SS2K. FCC killed it  
>> off here in the US.

>> Julius

> Incorrect.

> The Meade, Celestron, and SS2K systems, *all* use DC servo motors, not  
> steppers. The difference is in the quality of the motor itself (the design  
> in the SS2K, is a 'zero cogging' servo motor, while the ones used in the  
> Meade scopes, on early units, were basically 'slot car' motors – the  
> Celestron NS scopes, and the CGE, both use proper servo motors, while the  
> advanced series, and the current normal Meade units, use a slightly higher  
> quality 'normal' motor – more poles to the armature, but not a  
> zero-cogging design).

Any where I look reads, SS2K motors are steppers, not servo.

Am I corect?

Julius

### STEPPER MOTORS vs. SERVO MOTORS

#### STEPPER MOTORS

Stepper motors are permanent magnetic motors that 'step' one increment each time the controller gives its control electronics one pulse. This is done with the assumption that the shaft rotates the specified number of steps. No realtime feedback is provided to assure the motor maintains pace with the desired motion sequence.

### SERVO MOTORS

Servo motors are standard DC or brushless motors with an encoder feedback loop. The computer reads the position of the motor and controls the power applied to the motor. Servo motors are faster moving point to point and are better at accelerating very heavy loads.