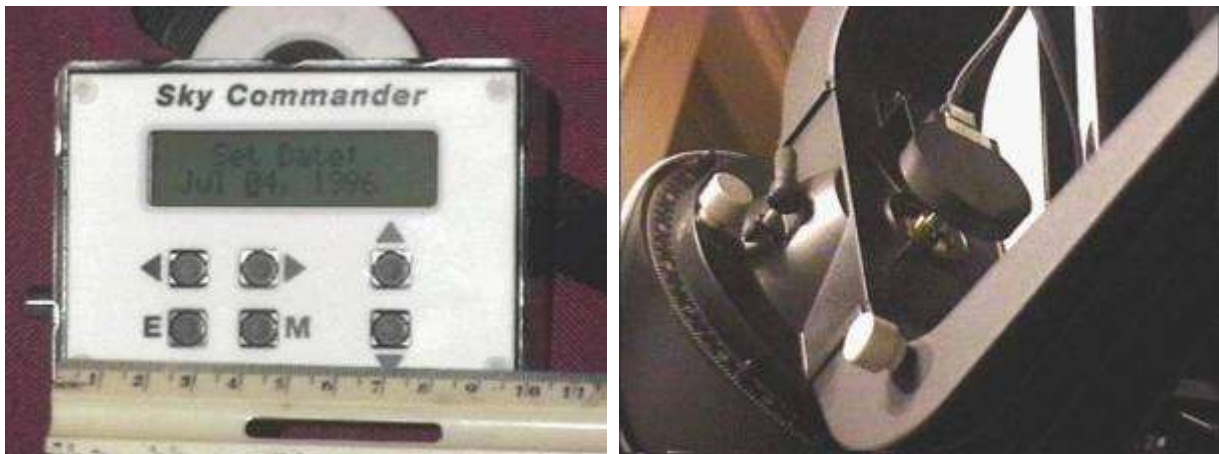


## Sky Commander

### Introduction



### Contributed by Steve Banbury

Operating Voltage: 5.5 to 13.8 VDC

Supply Current: 10 mA typical (scope stationary)

Display Heater Current; 120 mA (thermostatically controlled. Uses only ext 12 v power)

Battery Life: 30 Hours Typical

Encoder Type: (RJ45 connector) Optical rotary 4k step standard, 8K with Ver 4.0 software max: 32767

Max rotational speed: 3000 steps per second on internal 9V power; 6000 steps per sec on external 12 V.

Operating temp: 0 to 50 deg C on internal 9V battery -25 to 50 deg C on external 12 V power

Displayed Resolution: 0.1 min RA and 1 arc min in Dec

Display type: 2X16 character hi contrast super twist yellow/green LCD with adjustable intensity

Serial Port: (RJ11 connector) 300 to 38.4kbaud 1start bit, 8 data bits, no parity, 1 stop bit.

Software compatibility: Megastar, Earth Centered Universe, Guide, The Sky

Number Of Objects Displayed: 9000

Specific Catalogs: 12—Messier, NGC, IC (1st & 2nd index catalogs), Barnard, Berkeley, Collinder, Melotte, Trumpler, UGC, Double, Planets, and Special (for manually entered RA/Dec coord's of up to 59 user selectable entries)

Alignment Capability: 1 or 2 Star (from a database of 41 stars)

Scope support: Fork, German Equatorial, or Dobsonian

### Adjustable Features:

Search and Identify object at indicated position

Limit Search Magnitude

Display Mode (RA/Dec or Az/EI)

Display Intensity

Battery Monitor

Realign on Object

Equatorial table Reset (only for Dobs)

**Price:** Sky Commander (CMP-SC-1000--\$275),

RS232 Option to connect to a PC (OPT-RS-232--\$15),

Shipping costs (\$8 US).

## **Users comments:**

LCD display intensity does not impact dark adapted eyes The 41 Alignment stars are not available in the search catalog, only in initial alignment, requiring reinitialization of unit to realign on a local star. Unit will not complete reinitialization while Megastar is connected and running. Unit works perfectly with 8192 count per step encoders without special care to move the scope slowly

Having summarized the salient technical features of the Sky Commander, I'd like to relate my personal experience with it. My reactions after the very first evening using the Sky Commander were: "Why did I wait so long to buy one of these things?!!" I easily located objects almost as quickly as I could think of what to view next. This stands in stark contrast to the amount of time I have spent painstakingly hunting down these same objects here in the light polluted skies of the San Francisco Bay area! I have spent countless hours with a red flashlight in my mouth adjusting the position of my C8 and trying to read its minuscule and rather coarse setting circles.. The Sky Commander way is definitely much more pleasant!

There are numerous other units marketed. A large percentage of these are actually built by Tangent Computers, and packaged into various housings by the companies who market them. All of the other units I looked at used red LED displays and the size of the display characters was too small to read comfortably for my eyes. The Sky Commander LCD is much more legible. I suspect power drain is less on the Sky Commander than units using LED's, but haven't measured any for proof. A small dose of practicality is probably worth mentioning to the prospective buyer of any digital setting circle unit.

The telescope RA and DEC axes are never perfectly orthogonal. The result is that after aligning perfectly on an object in one region of the sky, if one moves a large angular distance to a different object in a different region of the sky, it may easily be outside the field of view of the eyepiece. But it doesn't matter! If one simply realigns on a star within 10 or 20 degrees of the object being sought, the errors associated with the lack of perfect alignment in the scope axes become less significant. On my 10 year-old mass-produced Celestron C8, this technique consistently produces such satisfying results that I would never bother to try to improve the alignment of the scope axes.

To conclude, there are all sorts of people for whom astronomy is a hobby. There are purists who believe that one should become sufficiently acquainted with the sky to "star hop" to an object to be observed. There are masochists with red flashlights in their mouths. Digital setting circles make it easier to spend more time observing and/or imaging.. I love mine!!

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