



Cercis Astro

FocusStar™ Controller - Model 410 Astronomical Telescope Focusing Accessory PRODUCT & ORDERING INFORMATION

**FocusStar
Precision Stepper
Motor Mounted to
Takahashi 180ED
Astrograph with
Canon 20Da**



Cercis FocusStar is a digital telescope focuser, with 4-digit LED readout, dual stepper motor outputs, 9 user-assigned focus preset positions, and optional temperature sensor. It can be used stand-alone or computer controlled via a USB interface—and stores presets and temperature information in its non-volatile memory.

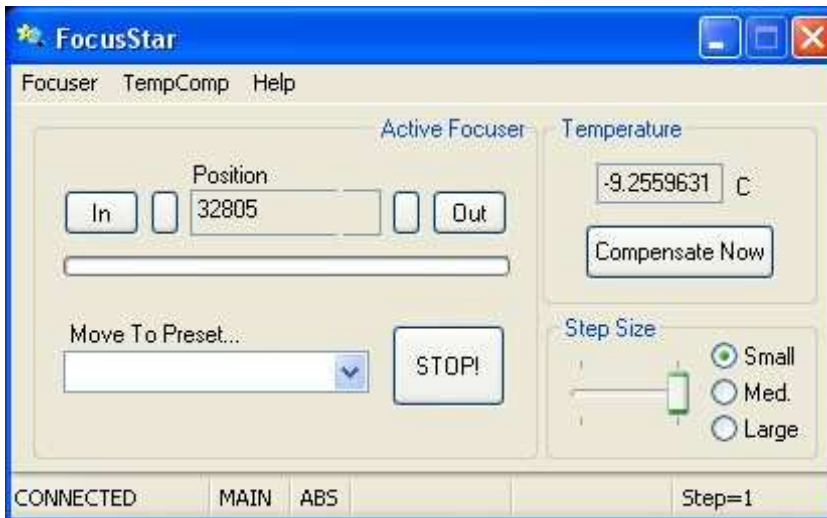
FocusStar includes a full-function Windows[®] control program with ASCOM drivers. The motor is mounted to the telescope with a bracket (chose to fit the telescope type). FocusStar—in a 4.7" X 3.7" X 1.3" sturdy metal case—is supplied with 12 V AC power transformer, USB cable, software CD and one motor assembly. Options are: second motor (for telescope or autoguider), temperature sensor, and telescope brackets. Refer to Ordering Information on reverse, or at www.cercisastro.com.

Computer Interface Screens

The Main Dialog Box is shown below. FocusStar enables user to move to stored presets, manage temperature compensation, and initiate temperature management.

Temperature sensing can compensate for focus shifts—particularly in Schmidt-Cassegrain telescopes—due to ambient temperature changes. FocusStar records temperature characteristics in non-volatile memory.

FocusStar may be used with CCD or DSLR cameras connected to the telescope. It is compatible with Cercis Astro DslrStar. Both FocusStar and DslrStar may be used with computer or in standalone mode.



FocusStar Features

Remote Telescope Focuser

Standalone or PC Controlled

Up to 9 User-Assigned Presets

Dual Focus Motor Control

Built-In Temperature Compensation

**Windows[®] Control Program
with ASCOM Drivers**

Custom Telescope Focuser Brackets

System Requirements (recommended minimum):

Memory: 256Mb **Speed:** 500MHz

Graphics: 24 bit high color



Specifications subject to change with notice. All specs @ 25C

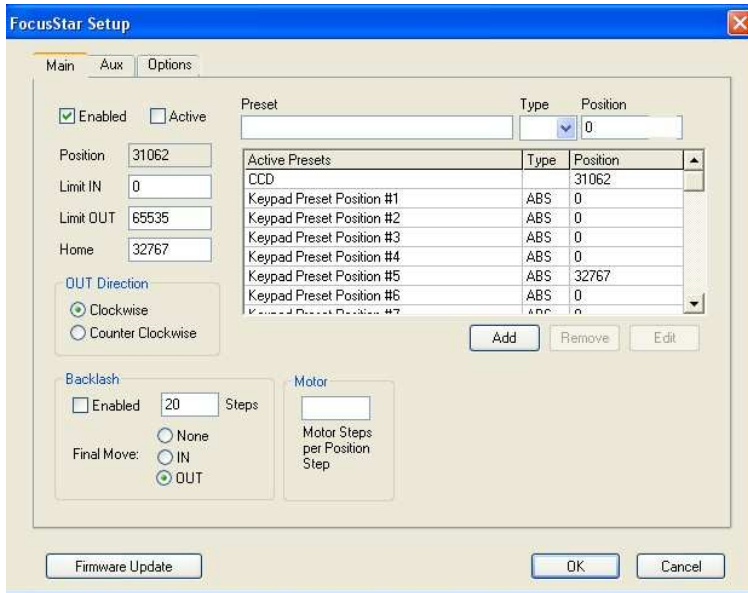
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FocusStar Setup Screen

The Setup Screen below shows 9 user-assigned keypad presets, as well as maximum/minimum limits set by user for the telescope eyepiece. The FocusStar can be used with one or many telescopes. It is a self-contained unit, that does not require any additional remote control or push-button devices.

Brackets will be available for most common telescopes. Precise measurement of telescope may be required to support those unfamiliar ones. Please contact Cercis Astro for assistance.



Focus—FocusStar can focus either from a remote location using computer commands—or in the observatory using up/down keys while looking through the eyepiece or selecting from your presets.
Brackets—Brackets for telescopes will be added as they are available. Yours not here? Please ask.



Ordering Information

FocusStar includes the controller, one stepper motor with cable, Windows® software, AC/DC A624P Wall Transformer* and USB cable. Longer motor cable, a precision temperature sensor, and optional automobile power jack, are sold separately.

To order, please email info@cercisastro.com or call or fax. VISA MASTERCARD, AMEX, personal check, or money orders accepted.

Features

FocusStar Controller	FocusStar Windows Software
Dual Focus Motor Controller (main and auxiliary)	Full control of FocusStar from computer
Control Focus Position via Keypad	Control Focus Position via Software
Up to 9 Focus Preset Positions (user-assigned)	Absolute or Relative Moves are Possible
Four-digit red LED display of menus & status	Manage keypad presets & unlimited additional software presets
Add/Edit/Delete presets, Configure Temperature Compensation and Focuser Parameters	Manage all aspects of temperature compensation features
Accurate temperature compensation using optional thermistor sensor input—measures exact temperature at telescope	Separate ASCOM Interface for Main & Auxiliary Motors
USB computer interface - no USB-to-serial converters or parallel cards	Setup all Focuser Parameters including limits, step size, home position, etc.
Sturdy all-metal enclosure Standard 12V car battery power requirements, with protective fuse	Update Controller Firmware using FocusStar software

Operating & Mechanical Data

Dimensions	in.	4.68 X 3.68 X 1.18
Weight—DslrStar	oz	11
Weight—shipping (est) incl motor & bracket	lb	5
Temperature Range—Operating	C (F)	-35 to +50 (-30 to 120)
Temperature Range—Storage	C (F)	-35 to +50 (-30 to 120)

FocusStar Controller/Software	Part No	Price
FocusStar (includes one Motor, CD, AC Adapter, USB cable)	410*	\$279.00
Stepper Motor	Part No	Price
Stepper Motor (optional) (one motor incl w/ FocusStar)	A640	\$100.00
Telescope Focuser Motor-Mount Bracket	Part No	Price
Refractors—ex. Takahashi FS102, etc	A641	\$ 100.00
Schmidt-Cassegrain—ex. Celestron C9.25, etc.	A642	\$ 100.00
Takahashi 180ED astrograph	A643	\$ 200.00
Stepper Motor Cable*	Part No	Price
8 ft. Cable (one cable supplied with each motor)	A644*	\$ 20.00
Temperature Monitor Cables	Part No	Price
Temperature Sensor Cable (10 ft.)	A615	\$ 25.00
Power Adaptors & Accessories	Part No	Price
Adapter—US 120V, 12V, 2A, 1.3mm ID/3.5mm OD cntr pos	A624P*	\$ 35.00
US or International Switching Adapter 90-264 VAC/47-63Hz, ID1.3 /OD3.5 mm ctr pos (US, UK, Aus, Euro plug)	A625P	\$ 35.00 US/ Euro incl
Auto Power Plug Cable (Cigarette Lighter Plug)	A616	\$ 15.00

*FocusStar incl Motor, CD, A624P, USB & Motor cable. Excel, C++, Visual Basic, Windows are registered trademarks of MicroSoft Corp.