

Focusing Products from Aquest, Inc.

Aquest, Inc. has developed and is marketing a set of focusing products for the astronomer and astro-imager. A set of modular hardware and software products allow for multiple configurations to meet the needs of the wide variety of telescopes, focusers, cameras, and software used by amateur astronomers.

The newest and most exciting of these products, **PCFocus-LX™**, provides the only way to auto-focus or otherwise precisely control the Meade Microfocuser® from a personal computer (local or remote). The Meade® Microfocuser® is available separately or comes standard on all Meade LX-200GPS® telescopes.

Aquest products have already proven themselves in the field as highly reliable, easy to use, and able to perform exceptionally well. PCFocus™ and FocusAide™ were named "Hot Products for 2001" by Sky & Telescope magazine.

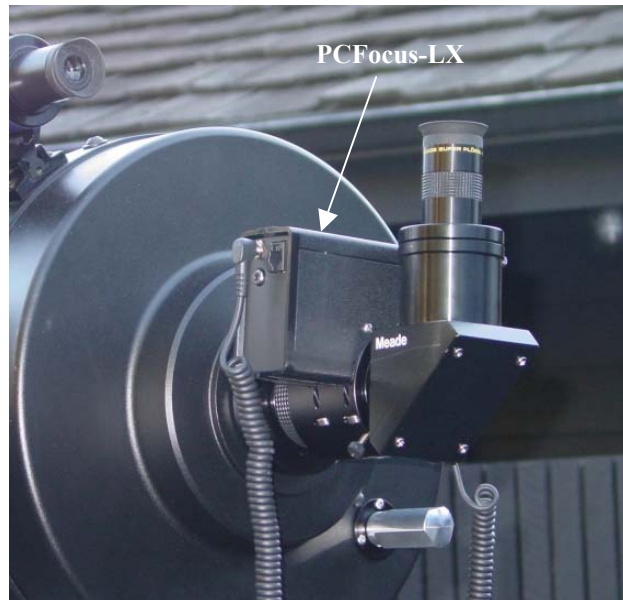
The line-up:

PCFocus is a control unit and software to allow personal computer control of Meade Microfocuser and JMI™ focusers. With PCFocus, these focusers can be precisely positioned in steps of 0.0005". Use of PCFocus with a JMI focuser requires the JMI DRO encoder and use with the Meade Microfocuser requires the PCFocus-LX™ add-on to the Microfocuser. PCFocus is great for remote control applications or use with auto-focusing software such as FocusAide, Maxim DL/CCD, CCDSoft, FocusMax, or others. The product consists of a control unit, cables, wall transformer (and included internal battery), and user's manual. Included software: PCFocus utility program for PC and remote control of the focuser, ASCOM focuser interface driver for use with any focusing software or scripting host, and a free, full function, trial version of FocusAide. Requires: a 133Mhz or greater personal computer running Windows (95/98/Me/2000/XP) with serial port or USB to serial adapter. Serial pass-thru is available to allow serial port sharing.



The PCFocus System

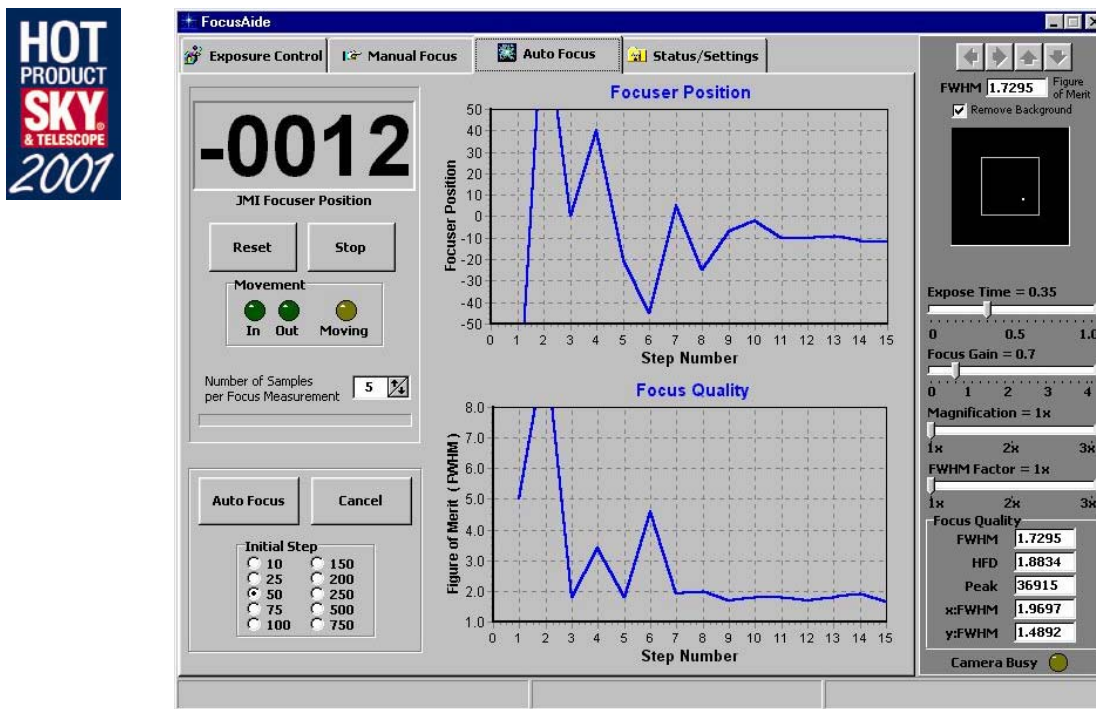
PCFocus-LX brings heretofore-impossible auto-focusing, temperature compensation, and other PC or remote control to the Meade LX-200GPS line of telescopes or telescopes equipped with the separately available Meade Microfocuser (standard on LX-200GPS telescopes). A simple add-on (which doesn't affect the Meade warranty) equips the Microfocuser with encoder capability allowing it to be controlled by the PCFocus unit and any auto-focusing and/or temperature compensation software. Installation is very simple and is performed by the user in less than 5 minutes. Installation entails simply removing the existing Microfocuser plastic covers and installing the PCFocus-LX in their place. No wiring is required. A cable is included which allows the PCFocus-LX to be connected to the LX-200 or LX-200PS panel focuser output so the AutoStar or LX-200 handset can manually move the focuser if desired. Switching between manual or automated movement is automatically controlled by the PCFocus-LX circuitry.



The PCFocus-LX installed
on a LX-200GPS with Microfocuser

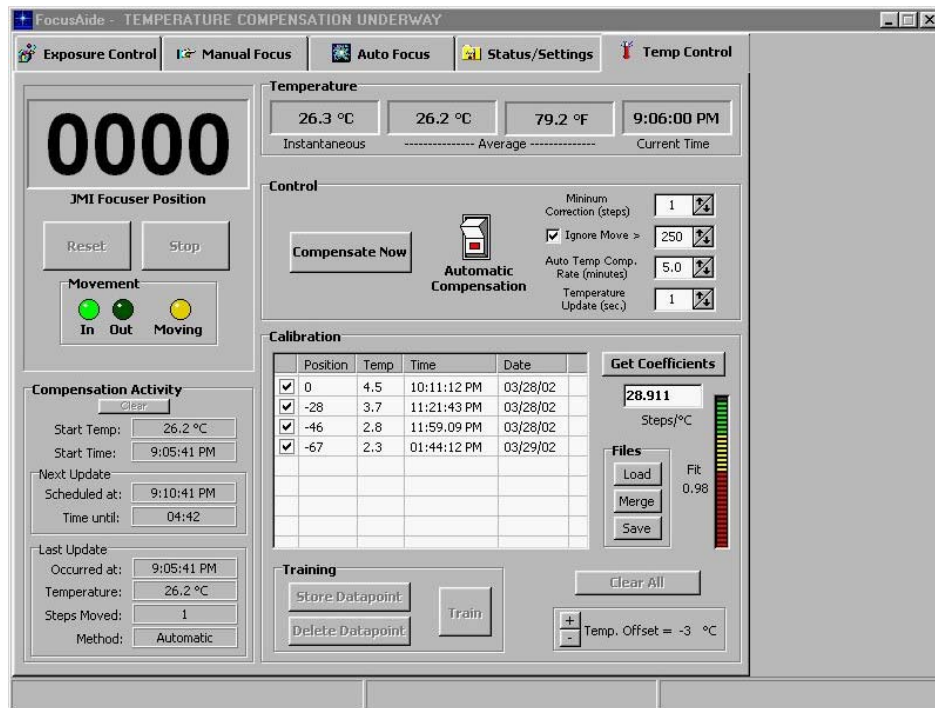
PCFocus-TC brings temperature compensation to Meade and JMI focusers. It is a factory, dealer, or user add-in board to the PCFocus unit allowing software such as FocusAide to make automatic focus corrections as temperature changes during an observing or imaging session. An internal temperature sensor is included (with offset correction for internally generated heat) plus an optional external sensor with 20' cable is available.

FocusAide is a complete focusing application for use with JMI, Optec™, RoboFocus™, Van Slyke™, and Meade Microfocuser focusers. It comes with software plug-ins for most popular CCD cameras (e.g. SBIG®, Starlight Xpress®). By integrating the personal computer, focuser, and CCD camera, FocusAide brings powerful focusing tools to scan or automatically focus the imaging system. Simply take an image, pick a star, and click the Auto Focus button. The rest is automatic and the result is fast and highly precise focus. It only takes 1-2 minutes for the whole sequence as shown in the following screen shot. Requires: PCFocus to control a JMI focuser or PCFocus and PCFocus-LX to control a Meade focuser. No additional hardware is required to control Optec, RoboFocus, or Van Slyke focusers.



Auto-focus screen shot

Optec and RoboFocus have built in temperature compensation. With the PCFocus-TC add-in board and FocusAide software, Meade and JMI focusers can be driven to adjust the focus at any time including when the temperature changes. With the exception of obtaining temperature from the PCFocus unit, all compensation is done in software running in the user's computer. This means any focuser that FocusAide can drive can move to a new position that the software has determined is required to keep your system in focus. Users can auto-focus at any time during a session to "touch up" the focus or store previous auto-focus information which is used to determine a new focus position if temperature changes. The FocusAide Temperature Control screen is shown here:



FocusAide Temperature Compensation Screen

FocusAide requires a 133Mhz or greater personal computer running Windows (95/98/Me/2000/XP) with serial port or USB to serial adapter. FocusAide must be registered within 15 days of the first use or the program will cease to operate.