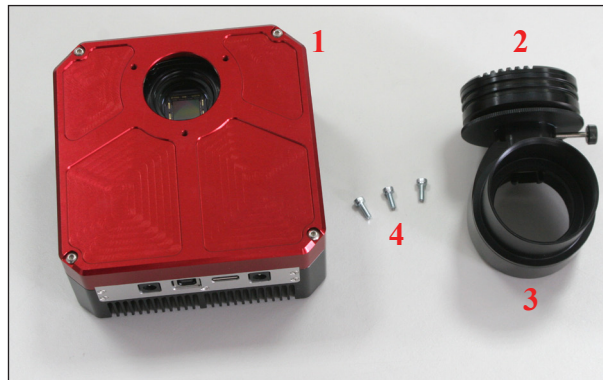


# Atik One with guider kit - Assembly

Thank you for purchasing the Atik One guider kit. It was designed to ease the task of autoguiding, while eliminating differential flexure, something that is a nightmare for any astrophotographer.

## Components of the kit

The Kit is shipped in 2 boxes, and includes all you need to start imaging right away:



1 - Atik One camera; 2 - Atik GP (attached to OAG); 3 - OAG body with 2" adapter; 4 - mounting screws

## Attaching the guider module to the Atik One

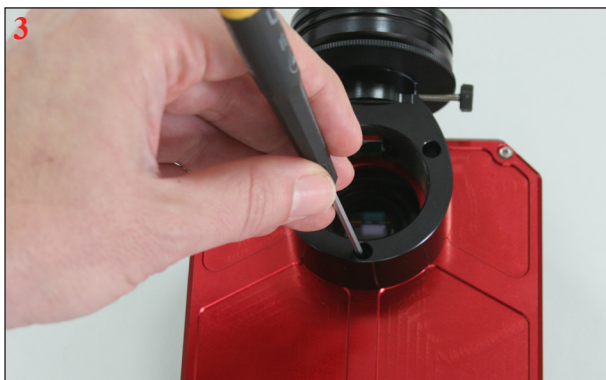
Attaching the guider module to the Atik One is a very simple task. Just follow these instructions:



1- Take the 2" adapter off the main body.



2- Align the module with the 3 holes and attach it to the Atik One camera, using the 3 supplied screws.



3- Verify that the 3 screws are secure (careful not to over-tighten). The module should now be securely attached to the Atik One camera.



4- Screw back in the 2" adapter onto the module.

## Using the guider module

The guider module is very easy to use and adjust. Looking at all components individually:



The main body (6) is where all the action happens. The pickup prism diverts some of the light through 90°, to the guide camera. You can attach the guider module to the telescope using the 2" adapter (5), or by using any T-thread accessory directly to the main body.



To adjust the pickup prism, you need to slightly undo the locking screw (the access hole is just below the locking screw), making sure that you don't loosen it too much. There's a captive recess that will prevent the prism support from falling, but this will not work if the screw is undone too much, causing the support to fall out of place.

Use your finger to move the prism support to the desired position, and then tighten the locking screw. Again, the correct position will depend on telescope used. As an example, if a SCT is used you'll probably want to lower the prism as much as possible, to get better star shapes, without having a shadow on the main camera CCD.

## Focusing your OAG

One of the great features of the guider module is the extremely smooth focus mechanism:



Simply adjust the focusing ring counter-clockwise, and the camera support will smoothly and precisely go up: turn clockwise, and it will go down. It's as easy as that! When focused, just tighten the locking screw slightly (don't over tighten!), so that the assembly keeps rock solid! There's a total travel of about 5mm which, will be enough to make it easy to focus the guide camera.

# Atik One with guider kit - Software

The Atik One Kit software installation is quite simple, as long as the steps below are completed in order:

-Before connecting the cameras, insert the Software CD on your drive and run the file "SetupArtemisUniversal.exe". Follow the prompts, selecting any needed optional software. Make sure "Drivers" is ticked! You will get a prompt to authorize the drivers installation, just press

-Plug the USB cable into the main camera, and then into your computer, and power up the camera. A "New hardware found" message should immediately be visible. Just follow the prompts, clicking on "Continue anyway" if prompted. That's it! The camera is now installed and ready to use.

- Now plug the Guider camera to the auxilliary USB port on the Atik One. Again, a "New hardware found" message should immediately be visible. Just follow the prompts, clicking on "Continue anyway" if prompted. The Atik GP camera is now installed and ready to use.

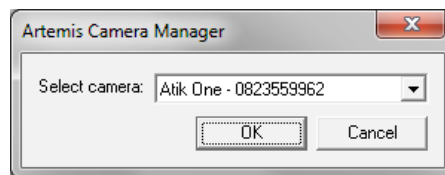
## The Artemis Capture application

Your camera comes with a simple and easy-to-use application called "Artemis Capture", which provides functions for image capture and display; camera configuration; telescope focusing; autoguiding; and image sequencing with an optional filter wheel. Images can be saved in several popular formats for further processing with your favorite image processing application.

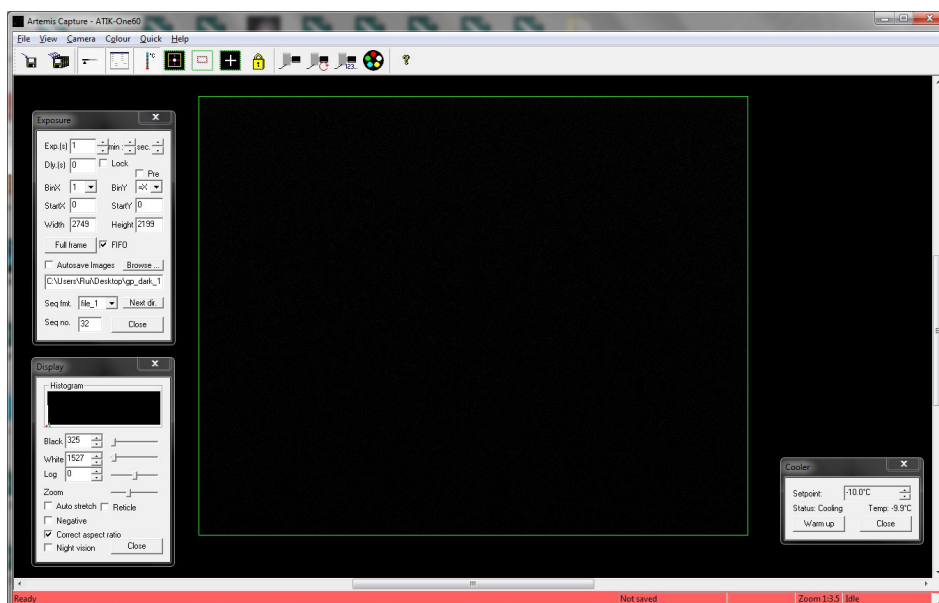
Artemis Capture is installed by default when you run "SetupArtemisUniversal.exe". Make sure you tick the appropriate boxes if want to install the optional "GP Acquire" planetary app and plug-ins for popular image capture applications. Plug-ins are supplied for Maxim DL™, AstroArt, CCDSoft™ and ASCOM. You can run the setup again later on, if you need to.

## Using the camera and software for the first time

Full instructions for using the Artemis software are given in its user manual which is provided on the installation folder in PDF format. However, the following information will help you get autoguiding working without effort. After loading Artemis Capture, you will see this window:



Before proceeding, a bit of extra information. Currently, Artemis Capture can only control one camera at the time. However, this small shortcoming can be easily circumvented by opening up a second instance of the program: One will control the main camera, the other will control the guider camera. The window above is exactly for this, telling which software instance controls what. For your first instance and for now, just select the Atik One. You will then see the window below:



The top left window controls exposure duration, binning and other camera options. You can leave most of the settings at their default settings for now. The bottom left window controls the way the image is displayed. Keep in mind that the settings here only affect the display, not the data in the image itself. The bottom right window is the cooler control. For a complete explanation of all settings and options, please see the full Artemis Capture manual, either on the CD or on the installation folder.

## The first image

To begin, centre your telescope visually on a moderately bright star. Put the camera on the telescope's focuser and press the F1 key. This will immediately initiate an exposure of 0.1s. When the exposure is complete, you should see a strongly defocused star on your computer screen. Congratulations! Everything is working as expected. If the star is grossly saturated (a completely white circle), then you should manually select a shorter exposure in the Exposure window.

## Focusing

Depending on how out-of-focus the star is, click on the Sub-frame button and select an area around the star. This will limit the size of the image which needs to be downloaded to the computer, making the display update more rapidly. Click on the Loop button. This will start an exposure that will repeat until the Loop button is pressed again. Adjust your telescope focus until the star image is sharp, rather than a large circle. Artemis Capture offers a simple tool to help you find the best focus. To activate it, simply double-click on a star, and the Star Tracking window will pop up, showing the brightness level and FWHM of the star. Best focus is the point at which the FWHM is smallest and the brightness level is highest. Keep in mind that this feature works best when the star is not saturated, so if the star has a brightness level approaching 65000, you should either shorten your exposures or select a fainter star.

## Autoguider

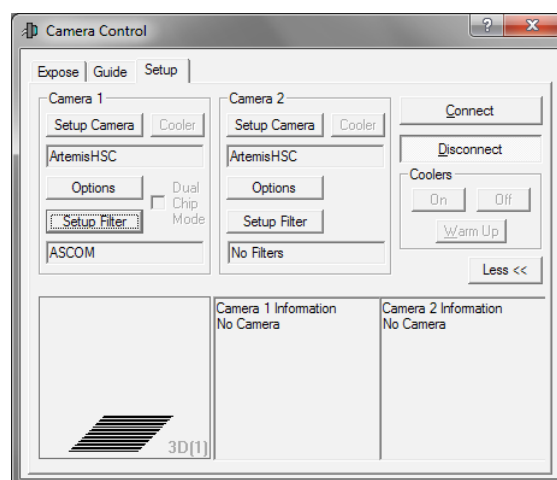
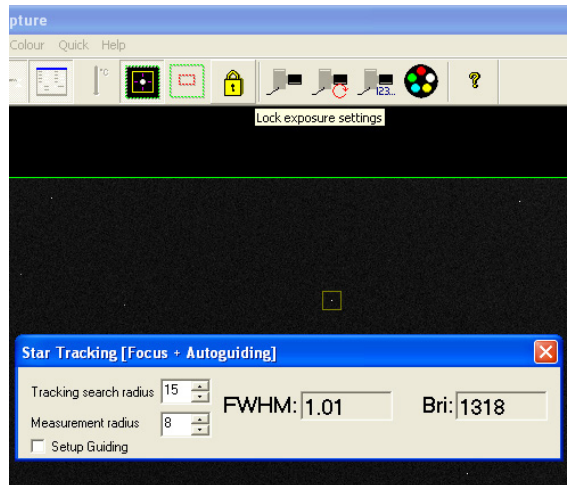
Now is time to open another instance of Artemis Capture. Once you do it, it will immediately connect itself to the Atik GP without any prompts, since the Atik One is already taken by the other instance. You should now repeat the same steps as before to focus the Atik GP. If finding a star is difficult, try increasing the exposure or move the telescope around a bit. After focusing your guide camera, you are ready to start imaging. Please refer to the Quickstart guide manual that was shipped with the camera (booklet) and/or the Artemis Capture manual (PDF) for full instructions on how to operate the software.

## MaximDL™ plug-in specifics

The driver files for the Atik cameras is installed during the initial camera setup (if you selected to install it). If you don't have the plug in installed yet, just re-run the setup application and select it when prompted. Be aware that you will need to have Maxim DL installed first. It is also important to have the ASCOM Platform ([www.ascom-standards.org](http://www.ascom-standards.org)) already installed, as it will be needed to control the internal filter wheel.

So, please make sure you select the "ASCOM Driver for Internal filter wheel" and "MaximDL plug-in" when you run the setup.

After opening MaximDL, open the camera control window. For camera 1 and 2, select the "ArtemisHSC" driver. For the filter wheel, select ASCOM and on the advanced settings, select "Atik Internal Filter Wheel".



Once you press "Connect", a prompt will ask for you to select which will be camera 1. Usually this will be the Atik One, so just press "ok". Filter wheel will initialize and position itself on position 1. Everything will now be ready to go.

Again, thank you for choosing an Atik product. Happy imaging!