



## **Atik Infinity User Manual**

Version 1.0 – September 2015



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## **1. Introduction**

Congratulations on your purchase of an Atik Infinity Camera. This manual will help you get the most out of your Atik camera so please take the time to read it thoroughly and you'll soon be ready to discover new worlds.

Atik Cameras provide exceptional value for money, superior performance and unparalleled ease of use. They are the result of extensive research and development, each one having been designed and built with the requirements of the most demanding astronomer in mind. Your Atik camera incorporates state-of-the-art design and materials, and will be your trusted astronomy companion for a long time to come.

### ***1.1 Further information***

For installation instructions and other useful information please refer to the Quickstart guide which was shipped with the camera. More detailed information on the software is given in the Infinity software guide, a PDF file of which is copied to your computer hard drive by the software installer. Further information, including a number of 'Getting Started' tutorial videos, is available on our website at <http://www.atik-cameras.com>.

## 2. Pack Contents

This pack includes:



1. Atik Infinity camera
2. USB cable
3. Car lighter type power cable
4. CD with software and manuals
5. Quickstart Guide

### 3. Getting to know your camera

#### 3.1 Camera Parts



- 1. USB port
- 2. ST4 compatible guide port
- 3. Guide port LED
- 4. 2.1mm centre-positive 12V DC input

#### 3.2 Sensor

The sensors available in the Atik Infinity cameras are listed below:

	Monochrome	Colour
<i>Atik Infinity</i>	SONY ICX825ALA	SONY ICX825AQA

Due to the very clean nature of these CCDs, dark frames are unnecessary in most cases. This is due to the low noise which stands at an amazing 6 electrons RMS typical.

### ***3.3 Analog to Digital Converter (ADC)***

The Analog to Digital Converter (ADC) is a 16-bit ADC. This means that your Atik camera will allow you to record subtle levels of gray, providing you with enhanced dynamic range when capturing an image.

### ***3.4 Power Consumption***

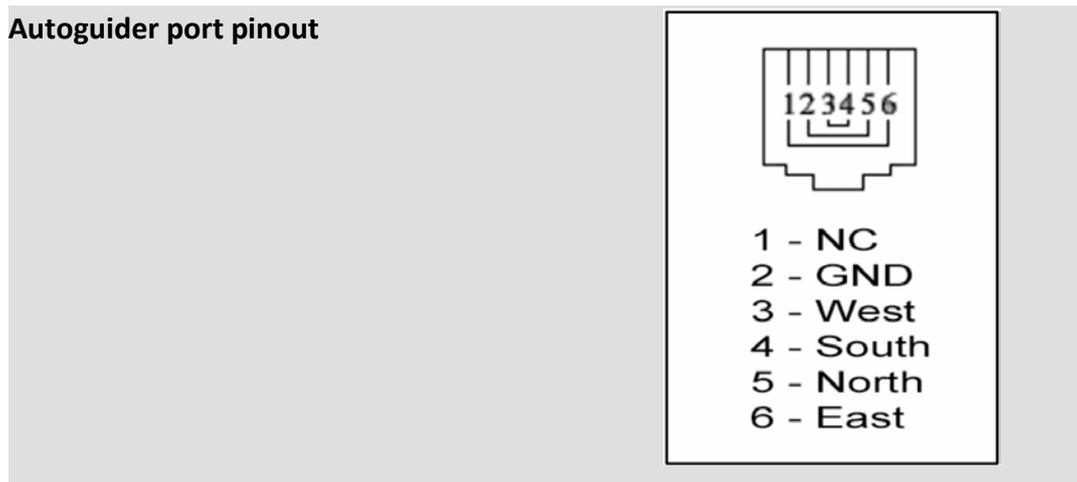
Your Atik camera was designed to have low power consumption: please see the table in section 4 for details specific to your camera model. The 2.1mm centre-positive DC input is compatible with a wide range of 12V DC supplies.

**WARNING:** If you have purchased the optional mains power adaptor, please note that it is for indoor or observatory use only. There is a risk of electric shock if the adaptor is used in damp environments or outside. If in doubt, do not use the adaptor and consult a trained electrician.

### ***3.5 USB Port***

The Atik Infinity cameras use a USB 2.0 high-speed interface, allowing 2 to 3 full-frame image downloads per second.

### ***3.6 ST4 Compatible Guide Port***



### ***3.7 Guide Port LED***

The guide port LED will become active only when the ST4 guiding relay circuits are active in the camera.



#### 4. Technical Information Summary

	Infinity
Image sensor	Sony ICX825
Resolution	1392x1040
Pixel size (um)	6,45x6,45
ADC	16bit
Readout noise (Typ.)	6e
Cooling	Passive
Regulated cooler	No
Water assist	No
Maximum exposure	120s
Minimum exposure	0,001s
PC Interface	USB2
Power requirements	12VDC, 1A
Backfocus	13mm ±0.5
Thread	M42x0,75
Weight	340g
Mono or OSC	Either

The following table gives the angular resolution per pixel with certain focal distances. The formula to calculate any other focal length is:

$$(Pixel\ Size\ (\mu m) / Focal\ Distance\ (mm)) * 206.3 = angular\ resolution\ (arcseconds/pixel)$$

Focal Length	Atik Infinity
250	5,32
300	4,44
350	3,80
400	3,32
450	2,99
500	2,66
550	2,42
600	2,22
650	2,05
700	1,90
750	1,77
800	1,66
850	1,57
900	1,48

## 5. Declaration of Conformity

### EU Declaration of Conformity



This product carries the CE Mark in accordance with the related European Directive. CE Marking is the responsibility of:

Perseu, SA  
R. Dr. Agostinho Neto, 1D  
2690-576 Sta Iria da Azoia  
Portugal

### Critical Applications

This product is not designed for any “critical applications”. “Critical applications” means life support systems, medical applications, connections to medical devices, commercial transportations, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage.

This product is not a toy.

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### 5.1 Disposal of the camera

When no longer required do not dispose of this electronic device with general household waste. To minimise pollution and protect the environment the camera should be recycled. Local recycling drop off points available under the Waste from Electrical and Electronic Equipment (WEEE) regulations which will accept the camera. For further information contact Perseu SA at the above address, or the shop from which the camera was bought.





## 6. Servicing and Repairs

Repairs, servicing and upgrades are available through your local dealer or by emailing [support@atik-cameras.com](mailto:support@atik-cameras.com)

**Please note that modifications to the camera and/or accessories which are undertaken without the manufacturer's written permission will void the warranty.**

## 7. Warranty

The equipment is guaranteed against defective design, manufacture or materials for a period of one year from the date of purchase.

This means that Atik Cameras will repair or replace the equipment at its sole option, at no charge to the purchaser for parts or for labour, if the fault is reported within the guarantee period, provided however that Atik Cameras is able to duplicate the defect or problem at its facilities. This warranty does not apply to damage that occurred as a result of abuse or misuse, abnormal service or handling, damage which may have been caused either directly or indirectly by another product, or if the equipment has been altered or modified in any way, or if the damage was caused by repairs or service provided or attempted by anyone other than Atik Cameras. This warranty does not include or provide for incidental or consequential damages.

To exercise your rights under this warranty, you must return the equipment to the dealer from whom it was purchased together with proof of purchase and a clear description of the fault. If it's not possible to return the equipment to your dealer, you should contact Atik Cameras. Equipment returned to Atik Cameras must be sent in appropriate packaging and at your expense (insurance is recommended), together with proof of purchase, a return address and a clear description of the fault.

This does not affect your statutory rights.