HESTIA

Instruction Manual EN 2024-08

Table of Contents

I. Package contents

The premium packaging contains the following elements :

1 hardcase
1 Hestia telescope
1 tripod - delivered in kit to be assembled
1 solar filter
1 solar pointer

We recommend that you keep the packaging box of your telescope so that you can use it to store the telescope when not in use or to send it back in case of a product return.

II. Product presentation

Harnessing the power of your smartphone and our cutting-edge technology, Hestia lets you capture the brilliance of the Sun, the beauty of the Moon and the captivating depths of the Universe - without complex setup or extensive astronomy knowledge. Simply place your smartphone over Hestia's eyepiece, align the device with the celestial object of your choice, let our super-friendly app guide you, and open up a whole new world of exploration.

Hestia enables you to add a 25x zoom to your smartphone camera, allowing you to observe the Universe up close and capture its beauty.

Compact, intuitive, and easy to use, it lets you discover and share the wonders of the night sky with your family or friends.

Thanks to its compact dimensions and light weight, the telescope is easy to carry in a hiking bag or carry-on suitcase. Its ergonomics offers the user an unforgettable experience regardless of observing conditions.

III. Warnings

Before use, please read this instruction manual carefully and observe all warnings and precautions.
Keep the documentation in an easily accessible place and ensure that all users are aware of it.

If you give or lend the device to another person, be sure to pass on the operating instructions.

The contents of this manual are subject to change. For the latest instructions on how to use this product, please refer to the manual available online at https://vaonis.com/documents
If you have any questions about your product, please visit https://www.vaonis.com or send us an e-mail at support@vaonis.com

- Hestia should never be pointed at the sun without Vaonis solar filter placed on the lens.
- Never look directly at the sun without adequate protection. Looking directly at the sun through telescope optics, without protection and without a solar filter, even for a short time, can lead to severe eye burns and potential loss of vision in the eye, even to blindness. Be careful with the focus ring.
- Never look at the sun with your smartphone without a solar filter, as this could damage it. It is also important to ensure that your smartphone does not overheat, which could happen if you leave it on the HESTIA telescope for too long or leave it out in the sun all day.
- Do not force focus ring rotation as this could damage Hestia and degrade the pictures quality.
- This instrument is composed of fragile optical and mechanical components. Protect the instrument as much as possible from shocks and vibrations in order to improve the life of your Hestia.
- Do not open the instrument. Do not attempt to disassemble, modify or repair the instrument as this will void the warranty. Contact support by email at support@vaonis.com
- Use only the accessories supplied by Vaonis and respect the conditions of use recommended by Vaonis.
- Store the product in a clean and dry place (preferably at room temperature and humidity less than 65°%).
- Do not immerse the product in water.
- Hestia is not a toy.
- The product is not intended for use by children under the age of 14.
- This product may be used by children of at least 14 years of age and by persons with reduced physical, sensory or mental capabilities or lack of experience, if they are properly supervised or instructed in the safe use of the product and are aware of the risks involved.
- Children must not play with the device.
- Cleaning and maintenance by the user must not be carried out by unsupervised children.
- Do not use chemical solvents (e.g. alcohol, thinner) or other flammable cleaning fluids to clean the product or its accessories.

IV. Installation

1. Install the Gravity app

Download on the App Store

GET IT ON Google Play

Gravity by Vaonis is the dedicated application for Hestia, helping you explore the wonders of our universe. Simply scan the QR code above to install the application on your smartphone.

The Gravity app will ask you to scan the QR code on the underside of the instrument to authenticate it. We recommend completing this step before mounting the device on the tripod. An internet connection is required for this step.

For security reasons, we recommend that you do not share your QR code.

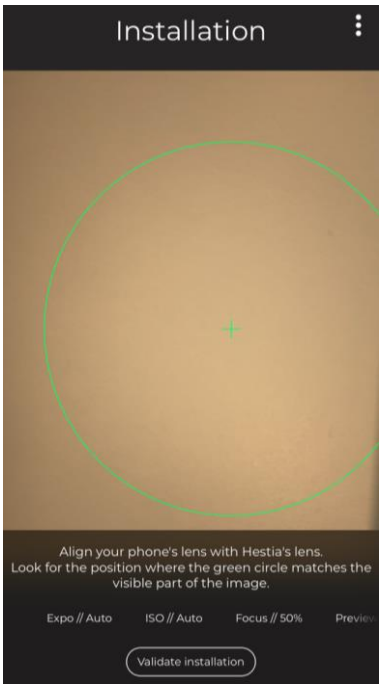
2. Attaching Hestia to the tripod and positioning the tripod

WARNING : The tripod should be fitted with a 2-axis (horizontal/vertical) fluid head, and you should take care not to exceed a pointing height of 85°. Once the tripod has been levelled, position your terminal on it and secure it properly, using the magnets supplied.

1. Scan the QR code on the back of Hestia.
2. Screw the turntable at the back of Hestia
3. Install Hestia on its tripod by following the instructions in the Gravity app. Make sure to tighten the vertical axis properly so that your phone can't fall when you install it.
4. Look for the flattest, hardest ground possible. Avoid stony or loose ground to ensure maximum stability.
5. Loosen the altitude pin each time you want to move up and down, then retighten it before releasing the handle.

3. Positioning mobile phone on Hestia

1. Position Hestia horizontally and ensure that the tripod is securely tightened.
2. Place your phone over Hestia, keeping the eyepiece in the center of the screen.
3. Bring the phone up to rest on the eyepiece. The eyepiece should remain visible in the center of the screen throughout.
4. Place the magnets to secure the phone.

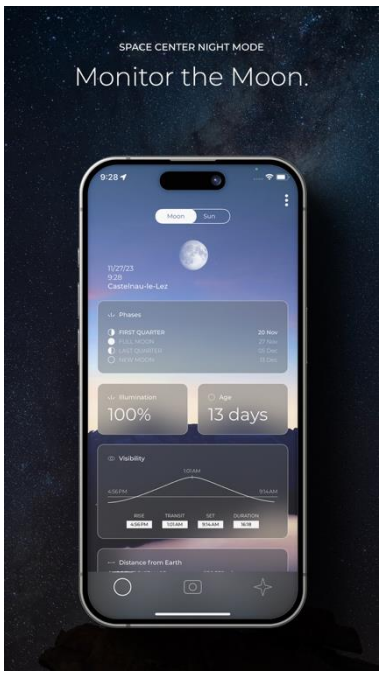


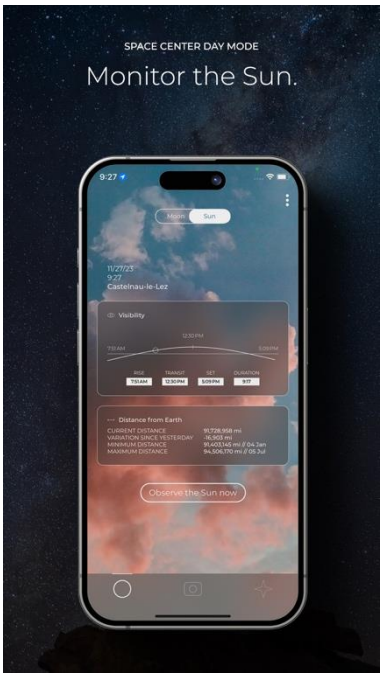
V. Operation

1. Using Gravity application

SPACE CENTER

Space Center is the home screen of the Gravity application. Here you'll find information on the ephemeris and options :

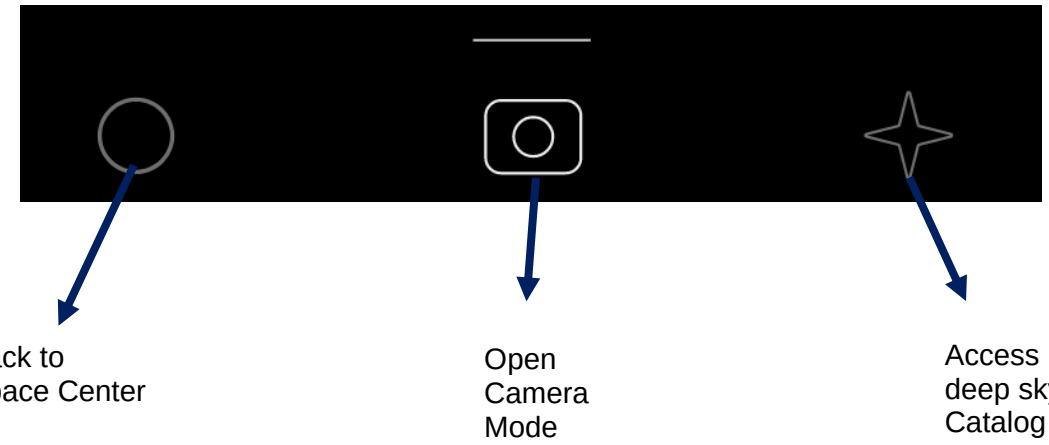




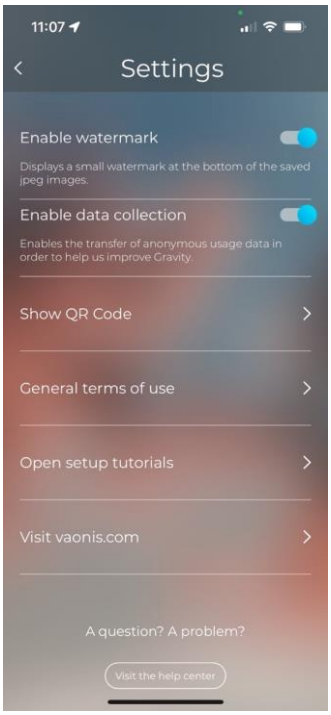
On this page you can find :

- City displayed (GPS position)
- Time
- Current date

Concerning the NavBar at the bottom of the screen, you will find the following icons :



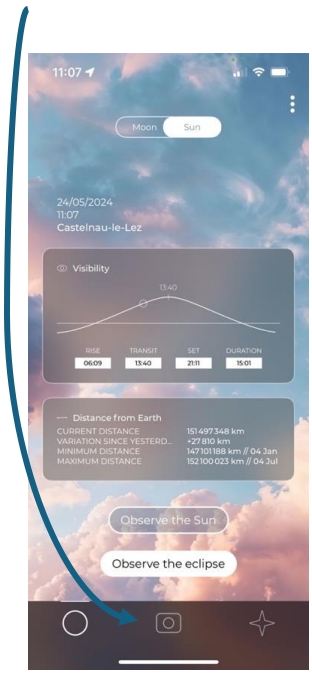
Parameters Access :



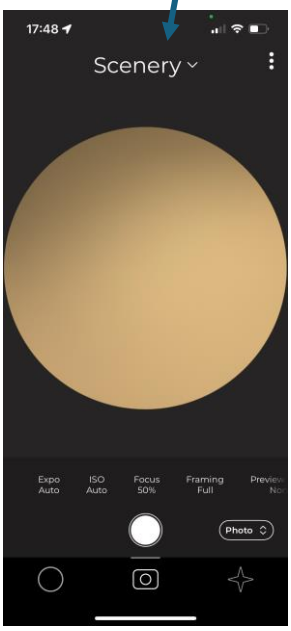
Choose your observation mode :

To access to the observation mode :

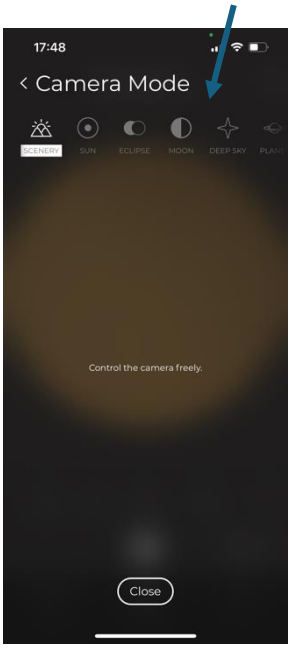
1. Click the camera mode



2. Open the observation possibilities



3. Choose your observation mode



LANDSCAPE MODE

With Gravity by Vaonis, your surroundings become a new playground. Observe and photograph distant landscapes or even wild animals in their natural habitat.

SOLAR AND LUNAR MODE

Easily and safely observe the closest star to Earth during the day using Hestia solar filter.Track the sun's activity and witness the evolution of solar spots and faculae. Track the sun activity by examining the variations on its visible surface. Once night falls, admire the details of the lunar craters and track the different phases of the Moon.

DEEP SKY & PLANET MODE

Observe the brightest objects in the deep sky.
The Gravity by Vaonis application will guide you step by step to help you take your own photos of galaxies, nebulae, and star clusters.

2. Getting started

Day observation :

Once the phone is positioned on Hestia, just follow those steps :

1.Face Hestia towards a uniformly luminous area, such as blue sky.

2. Adjust the position of the phone and magnets until you get the sharpest possible circle on the screen.

3. Confirm installation when the green circle on the screen is aligned and centered.

4. It is imperative to maintain the best possible alignment to ensure photo quality. If you move the magnets by mistake, you can restart the installation process via the camera menu.

Night observation :

1.If possible, install during the day or in the early evening to make it easier. Please refer to the "Daytime installation".

2.Otherwise, aim Hestia at the brightest possible spot (a streetlamp, a lighted wall, etc.), then make sure the tripod is tightly fastened.

3. Adjust the following camera settings: increase exposure time to approx. 0.3s, activate preview boost.
N.B: Increase ISO if image brightness is insufficient.

4. Place your phone over Hestia, keeping the eyepiece in the center of the screen.

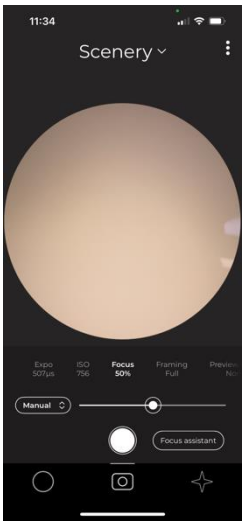
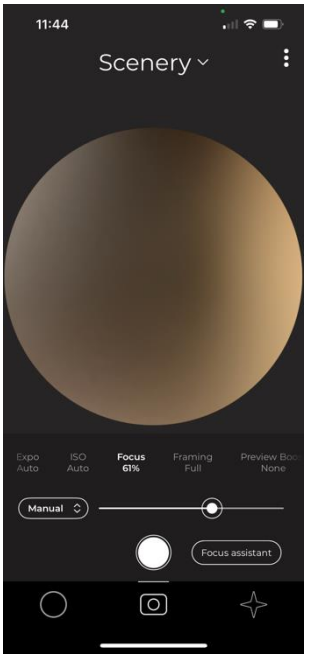
5. Bring the phone up to rest on the eyepiece. The eyepiece should remain visible in the center of the screen throughout.

6. Place the magnets to secure the phone.

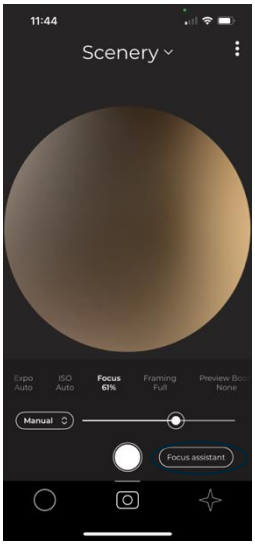
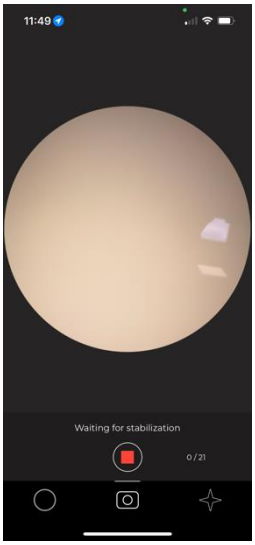
3. Camera settings

Mechanical Focus : Focusing must be adjusted with the focus ring according to the distance to the object.

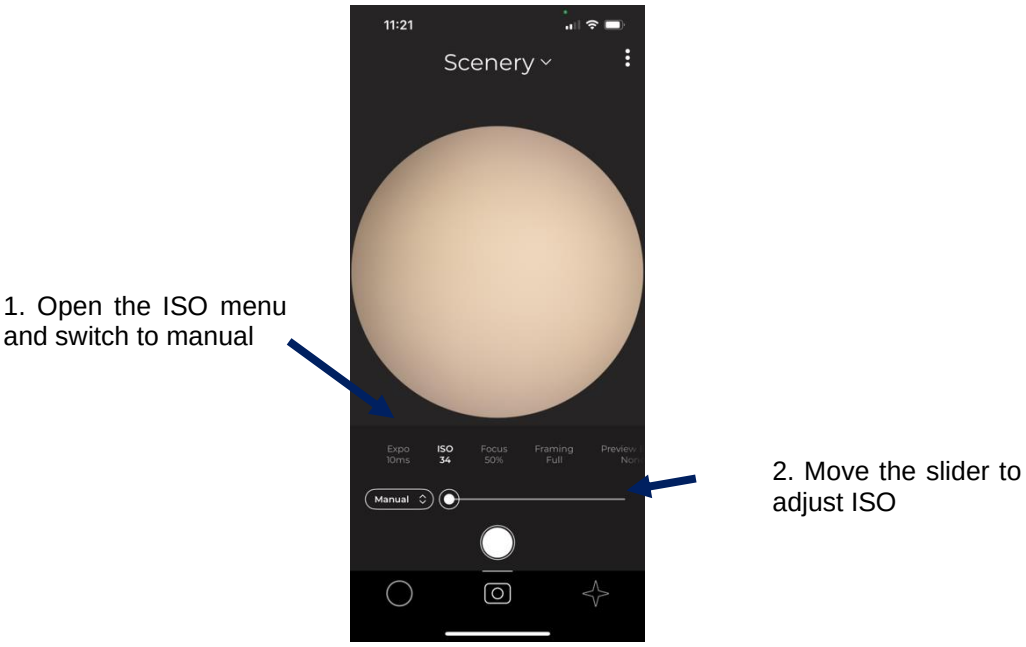
The minimum distance required to obtain a sharp image is at least 20m.

IMPORTANT : To get the sharpest images, focus must be done on the object you intend to observe. 1. Open the focus menu and switch to manual mode. 2. Set the cursor to 50%.	
3. Turn the focus ring to sharpen the image. Turn it outwards for near objects and inwards for far objects. At least one turn is required to have a noticeable effect on the image.	
4. Continue until you have the sharpest possible image. 5. In the focus menu, move the slider to improve image sharpness. 6. If the sharpest position is at the ends, you need to turn the focus ring: unscrew it if the slider is at 0%, screw it in if it's at 100%. 7. During the day, you can choose to switch back to automatic focus once the position of the ring is correct. Otherwise, proceed to the next step.	

Assistant Focus :

1. In the focus menu, press the “focus assistant” button.	
2. Let Gravity capture a series of images without moving Hestia.	
3. Once the sequence is complete, you can zoom into the image to see the details more clearly. 4. Select the image you feel is sharpest by moving the cursor. 5. Confirm the position once you've made your choice.	

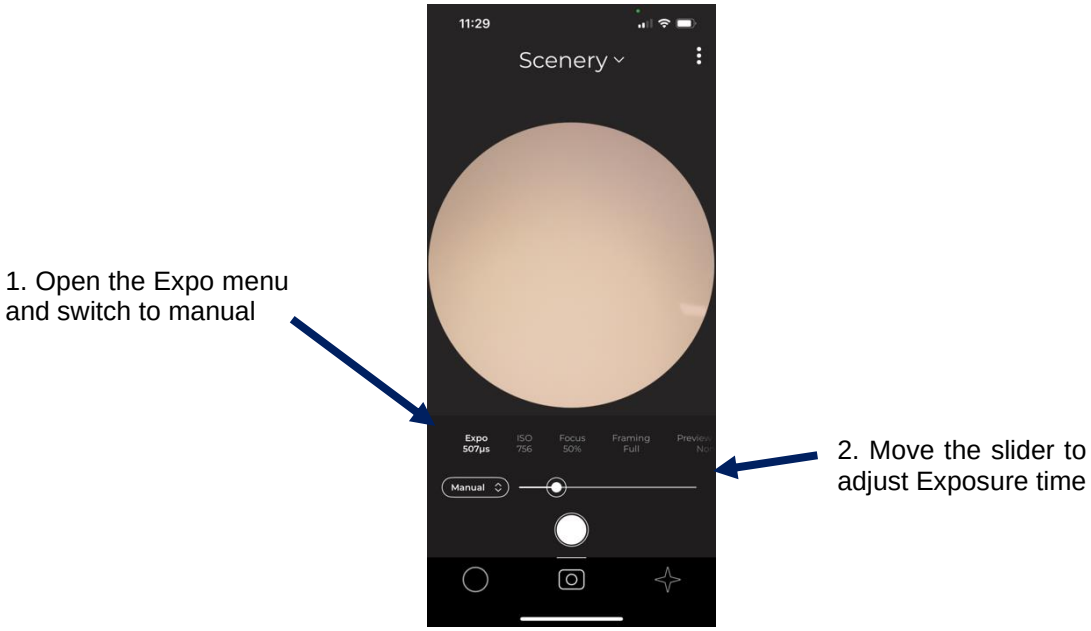
ISO : ISO in photography indicates the camera's sensitivity to light. A high ISO allows you to take photos in the dark, but may add grain to the image. A low ISO gives sharper photos for daylight shots where light is abundant.



Note that manual ISO control is linked to exposure time control.

Exposure time : Exposure time in photography determines how long the camera lets in light. A long exposure time will make the display appear less fluid and more sensitive to movement, but it will allow more light to be captured. To observe the stars, you should therefore choose the maximum value.

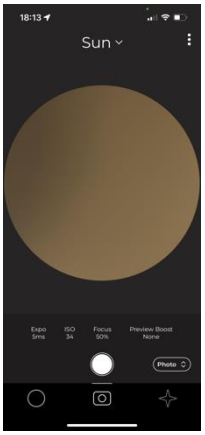
A short exposure time freezes the action and produces sharp images but requires more light. With a long exposure time, the image may be blurred and take a long time to appear.



Note that manual exposure control is linked to ISO control.

Solar observation :

IMPORTANT : When observing the sun, always use the Vaonis sun filter. Never look directly at the sun without the filter, otherwise you could injure yourself or damage your phone.

1. Select solar mode from the camera menu. 2. Install the Vaonis solar filter by screwing it onto the front of Hestia. N.B: the image becomes black, so only the sun will be visible once the filter is installed.	
1. Attach solar pointer to Hestia 2. Aim Hestia at the sun by manipulating the tripod. 3. Use the shadow of the solar pointer to help you aim at the sun. 4. Once the sun is centered on the screen, tighten the tripod's altitude axis.	
1. Adjust ISO if necessary to avoid saturating the image. 2. Adjust Focus. (See corresponding tutorial if necessary). 3. Take a photo using the central button.	

4. Deep sky observation (Beta)

1. Select deep sky mode from the camera menu, and close it without selecting a target for the moment.

2. Aim for an area of starry sky. You need to keep the exposure time at maximum, and possibly turn up the exposure time and preview boost so that the stars appear on the screen.

3. Adjust the focus to get the finest possible stars. (See focus tutorial if necessary).

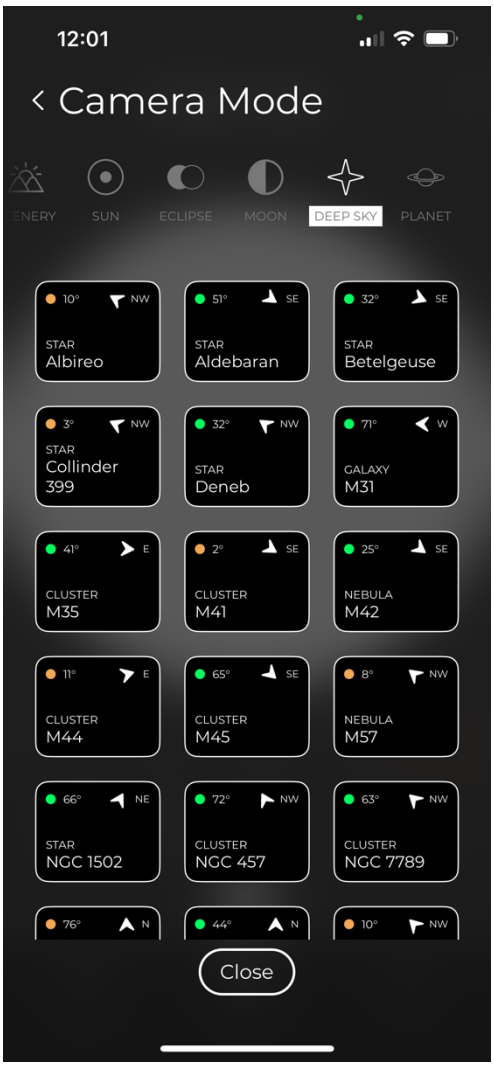
With long exposures, the slightest movement will blur the image, so it's best to use the assistant focus for this step.

4. Once you've made the settings for sharp images, open the camera menu again and choose a well-placed deep-sky target visible from your viewing location.

5. Gravity needs to perform an initial star field reconnaissance before it can guide you accurately. Target a star field and let Gravity perform its analysis. Continue until the analysis is successful, looking for a field with at least 6 bright stars.

6. Follow the pointing instructions to center your target. Depending on object distance and compass accuracy, it may be necessary to perform several star field scans.

7. Once the target is well centered, press the central button to start stacking. Gravity will take and accumulate several images to produce the best possible image. Make sure you don't move Hestia during this step to avoid blurred images.



VI. Accessories (OPTIONS)

Hestia Solar Filter :

- Never point Hestia at the sun without a Vaonis solar filter installed
- Only handle the filter by its edge to avoid dirtying or damaging it

Note:

- For optimal storage, we recommend storing the filter in its original plastic box.
- Cleaning and maintenance must be performed with caution. Only use wipes specifically intended for optical lenses.

VII. Care and maintenance

Hestia is an optical instrument, it is therefore fragile and requires a lot of precaution during its use.

The front lens must not come into contact with fingers, cloths, eyeglass cloths, liquids etc. Only specific wipes for optical lenses can be used.

The plastic shell can be cleaned with a soft cloth and soapy water.

Do not open the device under any circumstances. Do not attempt to disassemble, modify or repair the device, as this will void the warranty and may cause the instrument to malfunction. Otherwise the warranty may be void and the instrument may malfunction.

If any issue arises, please contact our Support Department at the following numbers : +33 4 84 98 00 21 (Europe) or +1 (646)-956-5933 (US/CA)

You can also reach us by email at support@vaonis.com.

VIII. Technical characteristic

IX. Warranty

Vaonis warrants that due care has been taken in the design and manufacturing of this equipment.

Vaonis warrants that the telescope will be free from defects in materials and workmanship for a period of two (2) years from delivery of the equipment.

Vaonis will repair or replace this product or part thereof when it is determined, after diagnosis with Vaonis support, that the product is defective in material or workmanship. The product will then be returned to Vaonis with the proof of purchase according to the conditions agreed upon with Vaonis regarding shipping and insurance costs.
The terms of this warranty are limited to the repair or replacement of the equipment.
Vaonis assumes no responsibility for theft or loss, damage or consequential or incidental expenses resulting directly or indirectly from the use of the equipment.

This warranty shall be void and of no effect in the event that the design or function of a product covered by this warranty has been altered, or the product has been subjected to misuse, mishandling or unauthorized repair.

Vaonis is not responsible for damage caused by misuse of the product.

Damage due to improper use, failure to follow these instructions or intervention by unauthorized personal is not covered by the warranty.

Failure or deterioration of the product due to normal wear and tear is not covered by this warranty.

If any warranty issue arise, or if you need assistance in using your telescope, contact support at support@vaonis.com

This warranty is valid for European customers who purchased this product from a Vaonis authorized dealer in Europe. For customers outside Europe, the warranty is only valid if the product was purchased from a Vaonis international distributor or an authorized reseller in the respective country. Please contact them for any warranty repairs.