FIBONAX

Camera Series User Manual

For FIBONAX CAMERA(Nova8M) and FIBONAX Nova200

Item	Specification / Notes
Manual Version	V1.0 - revised with SharpCap UVC/ASCOM clarification
Applicable Models	FIBONAX CAMERA(Nova8M) / FIBONAX Nova200
Driver Support	UVC Plug-and-Play / DirectShow / FIBONAX ASCOM Camera Driver
Support	support@fibonax.net | www.fibonax.net
Release Date	[2026-05-01]

1. Important Information

Thank you for choosing the FIBONAX Camera Series. This manual explains basic hardware setup, UVC plug-and-play use, ASCOM driver installation, and connection with common third-party astronomy software.

Product Family Notice

FIBONAX CAMERA(Nova8M) and FIBONAX Nova200 are part of the same FIBONAX astronomy camera family. They share the same software architecture and are supported by the FIBONAX ASCOM Camera Driver. Depending on the model, hardware specifications such as sensor, resolution, exposure range, and device name may vary. Please refer to the specifications table and the actual software display for your specific model.

Intended Use

The camera is designed for lunar, planetary, and basic astronomy imaging through a compatible telescope. It can also be used for basic USB video preview and testing. Long-exposure deep-sky imaging may require a tracking mount, suitable optical system, careful focusing, and software configuration.

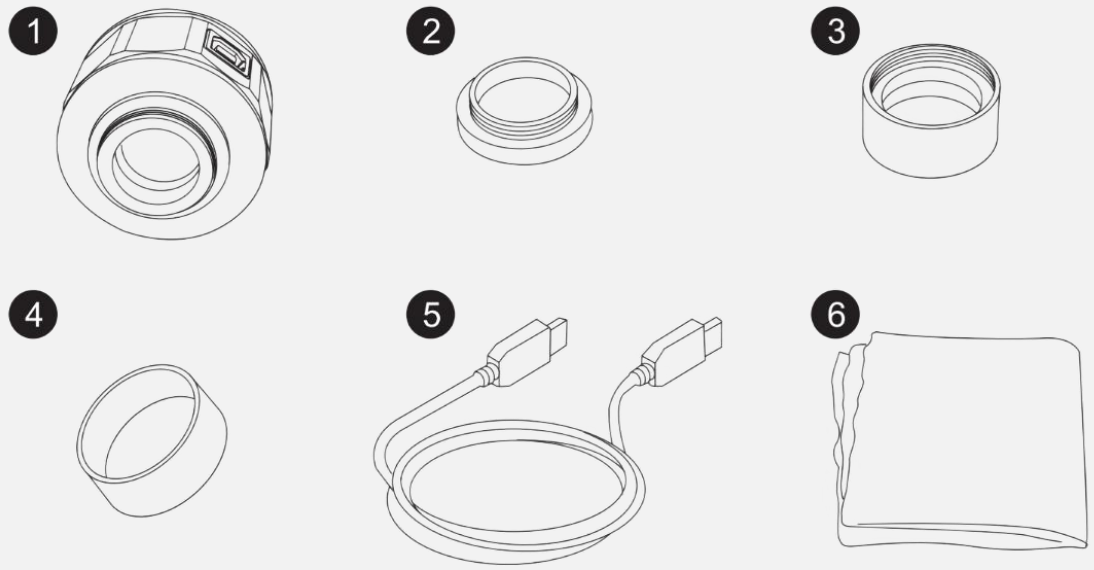
Safety and Handling

- Do not touch the sensor window or optical surface with fingers.
- Keep the camera away from dust, moisture, water, and falling impact.
- Install the dust cover when the camera is not in use.
- Avoid pointing the telescope or camera directly at the Sun without a proper certified solar filter.
- Store the camera in a clean and dry environment.

2. Package Contents

The package contents may vary by bundle or sales channel. Use the table below as the standard checklist and leave any unavailable accessory unchecked.

No.	Item	Included / Notes
1	FIBONAX astronomy camera	[√]
2	1.25 inch UV/IR filter	[√]
3	1.25 inch adapter tube	[√]
4	1.25 inch dust cover	[√]
5	USB cable	[√]
6	Dustless cleaning cloth	[√]

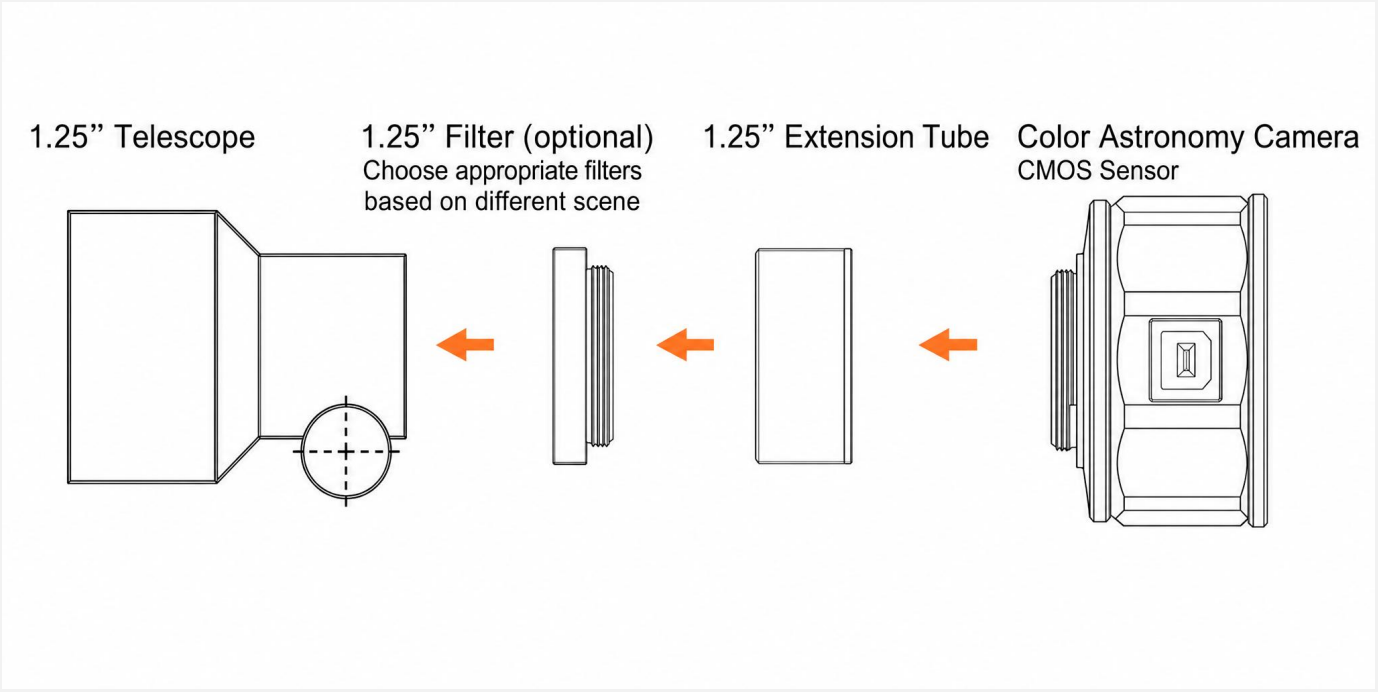


Before First Use

Check that the camera body, adapter, USB cable, and optical accessories are clean and undamaged. If any item is missing or damaged, contact FIBONAX support before use.

3. Product Overview

The FIBONAX Camera Series can be installed into a standard 1.25 inch telescope eyepiece holder. The actual appearance may vary by model.



Typical Optical Connection

Step	Connection Element	Notes
1	Telescope eyepiece holder	Use a compatible 1.25 inch interface.
2	Optional 1.25 inch filter	Install only if needed. FIBONAX 1.25" Telescope Filters can be stacked .
3	1.25’’ extension tube	Insert carefully and lock with the telescope thumbscrew.
4	FIBONAX camera	Camera body
5	USB cable to computer	Connect directly to the computer whenever possible.

Focusing Reminder

The camera does not autofocus. Use the telescope focusing wheel to manually adjust focus until the preview image becomes sharp.

4. Specifications

Specification	FIBONAX CAMERA(Nova8M)	FIBONAX Nova200
Product family	FIBONAX Camera Series	FIBONAX Camera Series
Camera type	UVC astronomy camera / ASCOM-compatible camera	UVC astronomy camera / ASCOM-compatible camera
Connection	USB	USB
Image sensor	CMOS sensor	CMOS sensor
Active pixel array / resolution	[3840x2160]	[1920x1080]
Maximum frame rate	[60fps]	[30fps]
Exposure control	Auto / manual, software-dependent	Auto / manual, software-dependent
Exposure range	[0~30s]	[0~30s]
Output format	[MJPG / YUY2]	[MJPG / YUY2]
ADC resolution	[12bits]	[10bits]
Supported operating systems	UVC/DirectShow: Windows/macOS/Linux depending on software; ASCOM driver: Windows with ASCOM Platform	UVC/DirectShow: Windows/macOS/Linux depending on software; ASCOM driver: Windows with ASCOM Platform
ASCOM driver support	Supported through FIBONAX ASCOM Camera Driver	Supported through FIBONAX ASCOM Camera Driver
Typical software	SharpCap via UVC/DirectShow or ASCOM; AMCap via UVC/DirectShow; N.I.N.A via ASCOM	SharpCap via UVC/DirectShow or ASCOM; AMCap via UVC/DirectShow; N.I.N.A via ASCOM
Weight	[110g]	[110g]
USB cable length	[1.5m]	[1.5m]

Compatibility Notice

Software compatibility may vary depending on operating system version, USB controller, astronomy software version, driver installation status, and the connection mode selected in the software. Always use the latest official FIBONAX driver package when testing ASCOM mode.

5. Basic Hardware Setup

1. Remove the camera dust cover.
2. If needed, install the 1.25 inch filter onto the adapter or telescope accessory thread.
3. Insert the camera into the telescope 1.25 inch eyepiece holder.
4. Gently tighten the telescope thumbscrew to secure the camera. Do not overtighten.
5. Connect the supplied USB cable to the camera and then to the computer.
6. Open your selected capture software and choose the correct camera connection mode.

Recommended First Test

Test	Recommended Setup	Purpose
Daytime indoor test	Point telescope at a bright object through a window or use a safe indoor target.	Confirm USB connection and preview.
Daytime outdoor test	Use very short exposure and low gain.	Check focus and overexposure behavior.
Moon test	Use short exposure and low to medium gain.	Confirm astronomy capture workflow.
ASCOM workflow test	Install ASCOM Platform and the FIBONAX ASCOM Camera Driver, then connect through an ASCOM-compatible program such as N.I.N.A or SharpCap ASCOM camera selection.	Confirm ASCOM driver connection and camera control.

6. UVC Plug-and-Play Mode

In UVC mode, the camera works as a standard USB video camera. This mode is commonly used for quick preview, video capture, and basic imaging.

Mode	Description	Typical Software
UVC Mode	Standard USB video camera mode. Usually no special astronomy driver selection is required.	SharpCap, AMCap, system camera applications
ASCOM Mode	Camera is controlled through the FIBONAX ASCOM Camera Driver.	N.I.N.A ,Sharpcap and other ASCOM-compatible astronomy software

Using UVC Mode

1. Connect the camera to the computer using the USB cable.
2. Open a UVC-compatible capture application.
3. Select the FIBONAX camera from the camera list. The displayed name may vary by model or operating system.
4. Adjust resolution, exposure, gain, brightness, and other camera controls as available in the software.
5. Adjust telescope focus manually until the image is sharp.

Important

Installing the ASCOM driver does not remove or replace UVC/DirectShow plug-and-play functionality. In software such as SharpCap, both a direct UVC/DirectShow camera entry and a FIBONAX ASCOM camera entry may appear. Select the one that matches your workflow.

7. FIBONAX ASCOM Camera Driver

The FIBONAX Camera Series supports the FIBONAX ASCOM Camera Driver. After installing the ASCOM Platform and the FIBONAX ASCOM Camera Driver, supported FIBONAX camera models such as FIBONAX CAMERA(Nova8M) and FIBONAX Nova200 can be connected through ASCOM-compatible astronomy software.

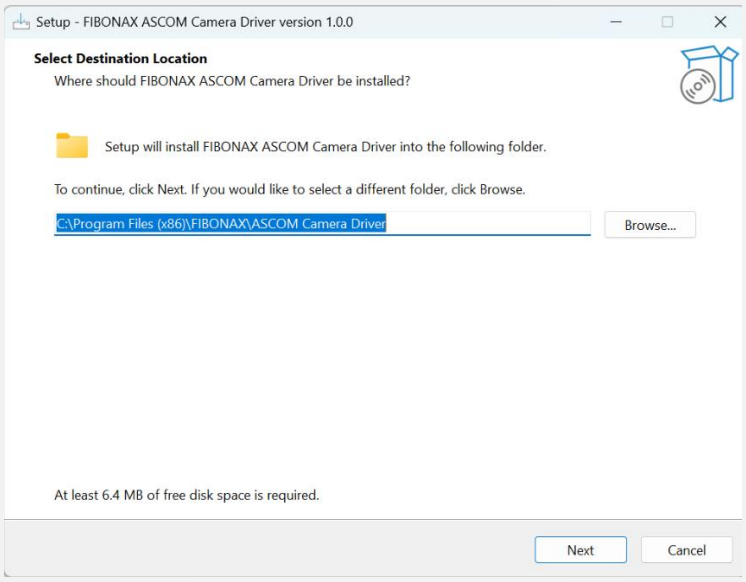
The FIBONAX ASCOM Camera Driver acts as a bridge between ASCOM-compatible astronomy software and the FIBONAX UVC camera family. This allows third-party astronomy software to access the camera through the ASCOM camera interface while keeping the camera's native UVC/DirectShow connection available.

Download Location

Item	Specification / Notes
ASCOM Platform	Official ASCOM website
FIBONAX ASCOM Camera Driver	FIBONAX support page / GitHub Release / customer support link: www.fibonax.net
Support Email	support@fibonax.net | cfstar22@126.com

Installation Steps

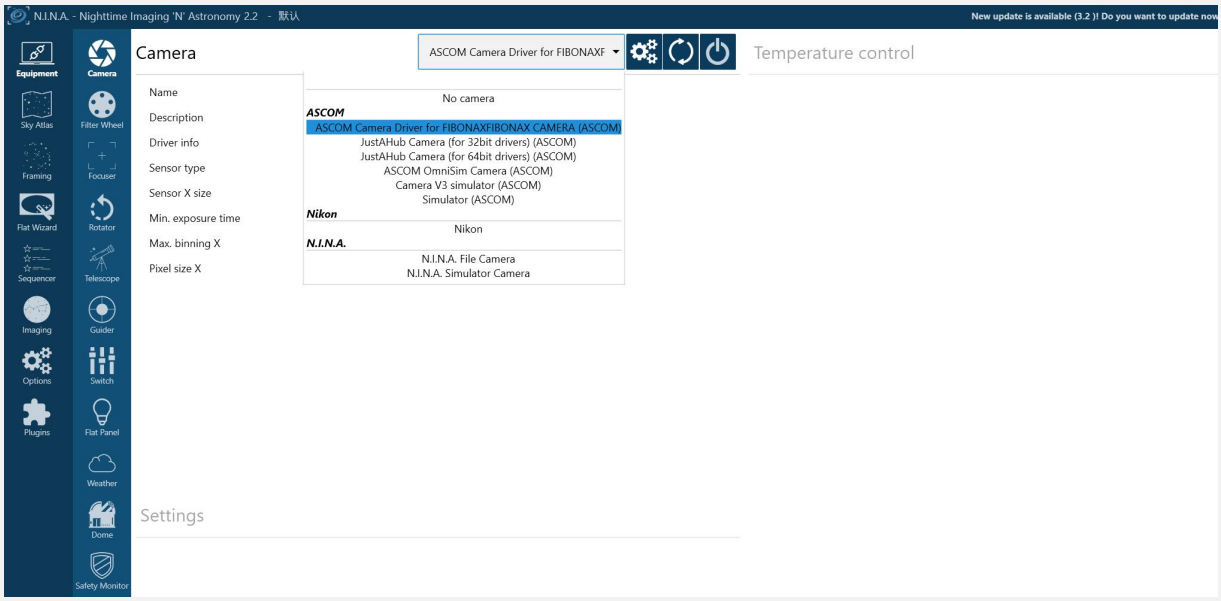
1. Download and install the latest ASCOM Platform.
2. Download the FIBONAX ASCOM Camera Driver installer.
3. Run the FIBONAX driver installer with administrator permission if required.
4. Restart the astronomy software after installation.
5. Connect the FIBONAX camera to the computer by USB.
6. Open ASCOM-compatible astronomy software and select the FIBONAX camera from the ASCOM chooser.



8. Connecting in N.I.N.A

N.I.N.A can connect to the FIBONAX Camera Series through the FIBONAX ASCOM Camera Driver.

1. Install the ASCOM Platform.
2. Install the FIBONAX ASCOM Camera Driver.
3. Connect the FIBONAX camera to the computer using the USB cable.
4. Open N.I.N.A.
5. Go to Equipment > Camera.
6. Select ASCOM Camera as the camera type.
7. In the ASCOM chooser, select FIBONAX Camera. The exact display name may vary by driver version.
8. Click Connect.
9. Set exposure time, gain, image format, and capture options according to your target.



Suggested First Test Settings

Target	Exposure	Gain	Notes
Daytime test	1 ms - 10 ms	Low	Avoid overexposure. Use a safe target.
Moon	1 ms - 30 ms	Low to medium	Adjust according to brightness and telescope aperture.
Planetary imaging	5 ms - 50 ms	Medium	Use short exposures and capture multiple frames when possible.
Basic star field test	0.5 s - 2 s	Medium to high	Tracking mount recommended. Results depend on sky and telescope.

9. Using with SharpCap and Other Capture Software

SharpCap can use FIBONAX cameras in two ways when the required driver/software components are available: direct UVC/DirectShow connection and ASCOM driver connection. Both paths can work, but the software interface, available controls, and workflow may look different.

SharpCap Selection	Connection Path	When to Use
DirectShow / UVC camera entry, such as FIBONAX Nova200	SharpCap -> DirectShow/UVC -> FIBONAX camera	Recommended for quick preview, focusing, lunar/planetary video capture, daytime testing, and users who want the simplest connection.
ASCOM camera entry, such as FIBONAX ASCOM Camera Driver	SharpCap -> ASCOM -> FIBONAX ASCOM Camera Driver -> FIBONAX UVC camera	Use this when testing ASCOM compatibility or when you want to use the same ASCOM driver workflow used by other astronomy programs.

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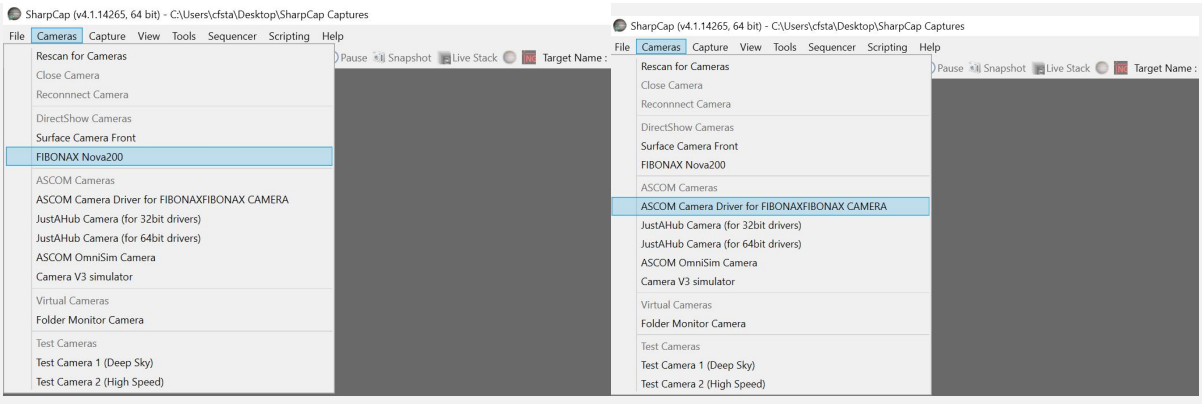
Important Note for SharpCap Users

Do not assume that SharpCap cannot use ASCOM cameras. If the FIBONAX ASCOM Camera Driver is installed correctly, SharpCap may show an ASCOM camera option in addition to the direct UVC/DirectShow camera option. Choose the direct UVC/DirectShow entry for the simplest live-video workflow, or choose the ASCOM camera entry to test or use the ASCOM driver path.

Basic SharpCap Workflow

1. Connect the camera to the computer.
2. Open SharpCap.
3. Select the FIBONAX camera from the camera list.
4. Choose the desired resolution and frame rate.
5. Adjust exposure and gain.
6. Focus the telescope manually.
7. Capture still images or video according to your target.



10. Exposure, Gain, and Focus Tips

Symptom	Likely Cause	Recommended Adjustment
Image is white or overexposed	Exposure or gain is too high	Reduce exposure time first, then reduce gain.
Image is black or too dark	Exposure or gain is too low, lens cap installed, or target not in field	Remove cap, center target, increase exposure gradually.
Image is blurry	Telescope is not focused	Adjust telescope focusing wheel slowly.
Image is noisy	Gain is too high or exposure is too long	Reduce gain, improve lighting, stack multiple frames if applicable.
Target drifts quickly	No tracking or poor mount alignment	Use a tracking mount or adjust alignment.

Practical Notes

- Start with short exposures for bright objects such as the Moon.
- Increase exposure gradually for dimmer targets.
- For the best planetary results, capture many short-exposure frames and use stacking software if desired.
- For longer exposure testing, use a stable tripod or tracking mount.
- Always confirm focus before evaluating image quality.

11. Troubleshooting

Problem	Possible Cause	Solution
Camera not found in software	USB connection issue or software did not refresh device list	Reconnect USB, try another USB port, restart software.
UVC camera works, but ASCOM camera does not connect	ASCOM Platform or FIBONAX ASCOM Camera Driver is not installed correctly, or the software has not been restarted	Install or reinstall the ASCOM Platform and FIBONAX ASCOM Camera Driver, restart the software or PC, then select the FIBONAX ASCOM camera entry.
SharpCap shows both UVC and ASCOM camera entries	Both connection methods are available	This is normal. Select the UVC/DirectShow entry for direct video capture, or select the ASCOM entry to use the FIBONAX ASCOM driver path.
FIBONAX Camera not shown in ASCOM chooser	Driver not installed, installed under a different name, or software not restarted	Reinstall the driver, run as administrator if needed, restart the astronomy software or PC, and check the exact FIBONAX ASCOM camera display name.
Preview appears but image is too bright	Exposure or gain too high	Reduce exposure and gain.
No image after connection	Lens cap installed, telescope not focused, target not centered	Remove cap, adjust focus, center target.
First frame looks different	Camera settings are initializing	Capture another frame after settings stabilize.
Image size or resolution unexpected	Software selected a different format, ROI, binning, or connection mode	Check resolution, binning, ROI, capture format, and whether you selected UVC/DirectShow or ASCOM mode.

When Contacting Support

Please provide: camera model name, whether you selected UVC/DirectShow or ASCOM mode, driver version, operating system, astronomy software name/version, screenshots of the error, and a short description of the connection steps.

12. Warranty and Support

The product warranty period is one year unless otherwise stated by the sales channel. Warranty service covers failures caused by product quality issues under normal use. It does not cover damage caused by misuse, unauthorized repair, impact, moisture, natural disasters, or other non-product factors.

Support Information

Item	Specification / Notes
Brand	FIBONAX
Website	www.fibonax.net
Support Email	support@fibonax.net
Driver Download	www.fibonax.net

Warranty Card

Field	Information
Product Number	
Purchasing Date	
Defect Reason	
User Name	
Telephone	
User Address	
User Email	
Warranty Terms Confirmation	