



## SVBONY SV505C Astronomy Camera User Manual

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**SV505C**

**User Manual** EU Importer;

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## To customers

Hello, friends! You can download the SV505C User Manual pdf file or print this file.

SVBONY has the right to modify this document without prior notice. Please download the latest version from our official website.

Thanks for purchasing your new SVBONY astronomy camera! This manual will give you a brief introduction of the SV505C camera. Please read this manual completely before using it. If you have any questions, please feel free to contact us: Facebook: [www.facebook.com/svbony](https://www.facebook.com/svbony)

For software installation instructions and other technical support, please email us: [info@svbony.com](mailto:info@svbony.com)

## Package Including

1. SV505C Astronomy Camera X1
2. M42-CS Adapter X1
3. T2 Adapter X1
4. CS-C Adapter X1
5. 1.25-inch T-Adapter X1
6. 2-inch Cover X1
7. USB3.0 Cable X1
8. ST4 Cable X1
9. User Manual X1
10. Cleaning Cloth X1

## Camera Specification

1	Model	SVBONY SV505C
2	Sensor	IMX464 CMOS
3	Total Pixels	4.2 Megapixel
4	Diagonal	9mm
5	Maximum Resolution	2712×1538
6	Pixel Size	2.9μm× 2.9μm
7	Chip Size	7.9mmx4.5mm
8	Maximum Frame Rate	93FPS
9	Shutter Type	Rolling Shutter
10	Time of Exposure	64us-2000s
11	Readout Noise	2.9e-0.7e
12	QE Peak	80%
13	Full Well	12ke
14	ADC	12bit
15	Gain	0-500
16	ROI	YES
17	Bin	1X1 2X2
18	Digital Noise Cancellation	HCG
19	Compatible Systems	Windows, Linux OS Raspberry Pi, Mac os, Chrome os
20	Caching	DDR3 128M
21	Guide Port	ST4
22	Data Port	USB3.0
23	Adapter	1.25"/2"/ M42X0.75
24	Back Focal Length	6.5mm/12.5mm
25	Protective Window	AR Coating

## How to Use Astronomy Camera

### 4.1 Driver Installation

#### 1. Driver Download

You can download the latest driver from the SVBONY official website.

<https://www.svbony.com/Support/SoftWare-Driver/>

#### 2. Install the Native Driver

1. Double-click the driver installation package, select the language and enter the installation page
2. Click install and wait for completion
3. Check the driver installation. After the installation is complete, connect the camera to the USB port of the computer via a USB cable, and the camera will automatically recognize it.
4. Check the camera status in the device manager **Note:** Please do not connect the camera before installing the driver.



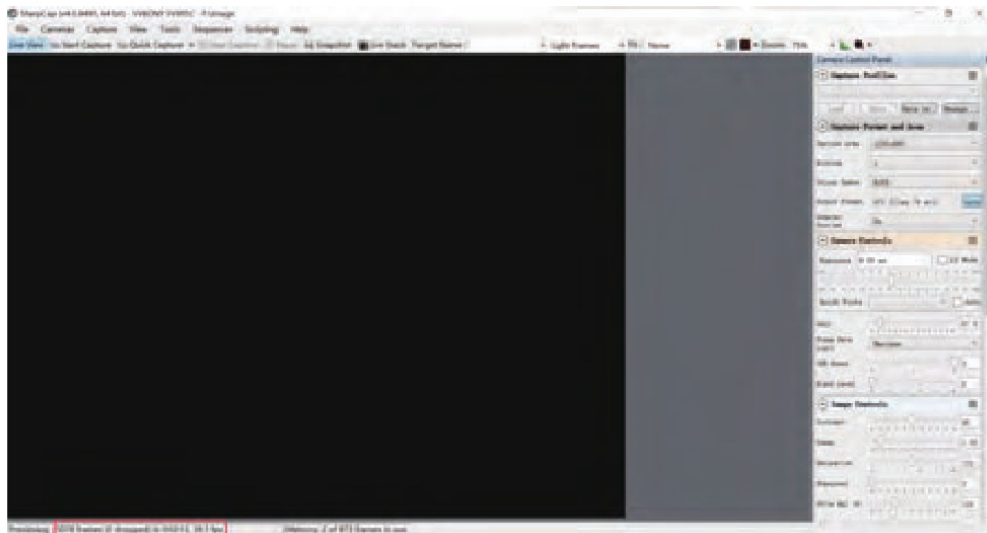
## 4.2 Shooting Software Installation

### 1. Installation and Use of Shooting Software

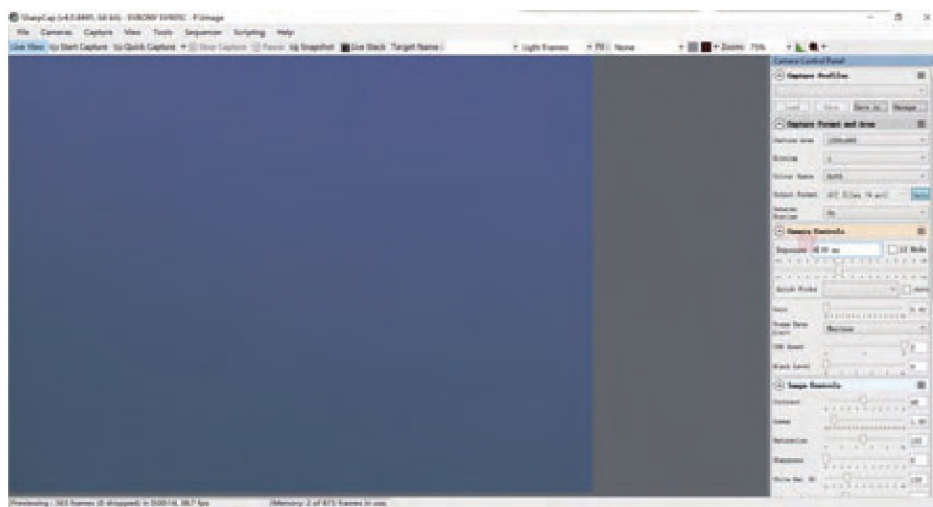
1. Use the SharpCap software to download the latest version from the sharp cap official website.
2. Click install, set the installation path (default), and the installation is complete.
3. After the installation is complete, perform a preliminary test. Open the software, find the model of Svbonny Camera in the camera drop-down menu and click connect.
4. Set the shooting storage path.
5. The introductory operation guide of sharp cap can be viewed in the “Help” option of the software. At the same time, the download of PDF format files is provided under “Documents” on the homepage of sharp cap official website, which can be downloaded and studied.

### 2. Checking of the Shooting Software

1. Check the frame rate



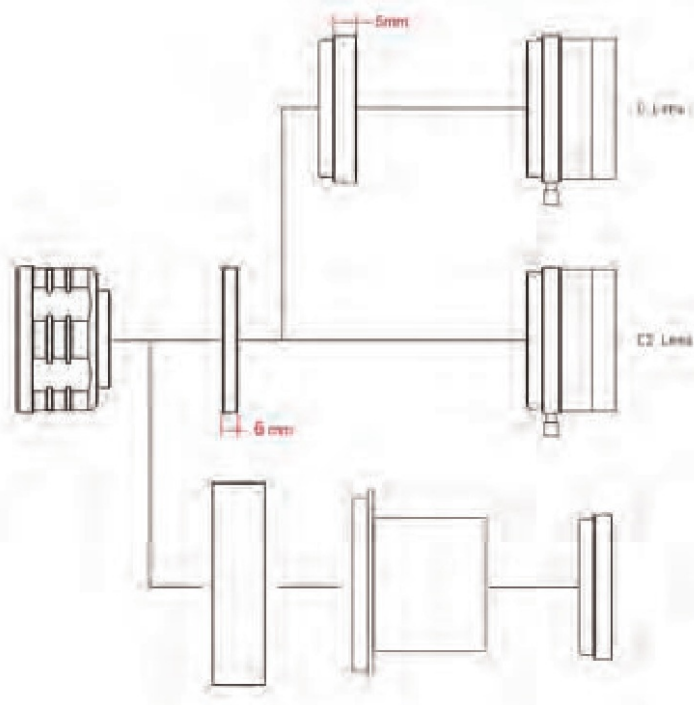
2. Remove the camera dust cover, adjust the exposure time, and the preview interface will have light and dark changes, indicating that the work is normal.



### 4.3 Guide Star Software Installation

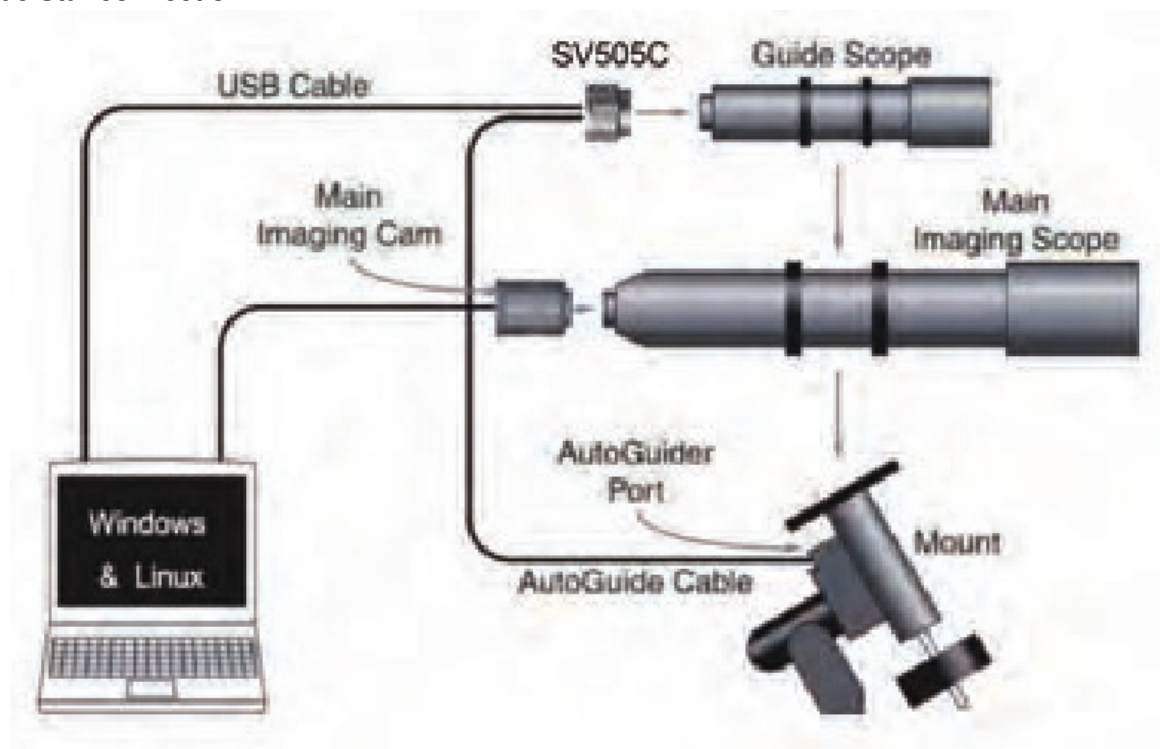
1. Using PHD2 software, download the latest version on the PHD2 official website, and there are also download links on the Svbyony official website.
2. Click Next, set the installation path (default), click Install, and the installation is complete.
3. About the PHD2 introductory operation guide, you can check it in the "Help" option of the software. At the same time, there is an introductory operation instruction manual on the homepage of the PHD2 official website, which can be downloaded and used for learning.
4. Questions about using the app with PHD2, general troubleshooting, bug reports, feature requests, and questions about the development of PHD2 can be found by posting in the Open PHD Guiding Google group.

### 4.4 Telescope Connection



1. Camera + T2 Adapter + 1.25-inch T-barrel + Filter + Telescope
2. Camera+M42-CS Adapter+CS Lens
3. Camera+M42-CS Adapter+CS-C Adapter+C Lens

#### 4.5 Guide Star connection



#### Structure



## Camera Cleaning

If you find dust on the CMOS sensor, you can remove the front half of the camera. Then use the cleaning kit for DSLR camera sensors to clean the CMOS sensor. You must be careful when cleaning it. You can also use a DSLR cleaning tool or lens tissue to clean it. Be careful not to use too much force, because the coating of the CMOS sensor is very fragile and can be scratched easily. The general identification of whether the dust is on the sensor or on the window glass is as follows.



## Quality Assurance

The Astronomy Camera warranty time is one year. Within the warranty period, if the camera fails to function, we will provide free after-sales maintenance service.

Besides the warranty days, we provide life-long maintenance services and charge only the parts that need repair or replacement. The buyer will pay for the postage of returning the camera to the factory to be repaired. Within the warranty period, if the following condition occurs, certain maintenance costs will be charged.

1. The malfunction and damage are caused by incorrect use, unauthorized repairs, and alteration.
2. The damage caused by fire, flood, earthquake, other natural disasters and secondary product damage.
3. The product malfunction was caused by the fall and transportation failures after purchase.
4. The malfunction and damage are caused by the other barriers (man-made factors or external devices).
5. Purchase without the warranty card and purchase invoices.



**ATTENTION!** Before using this device, read this guide which contains important operating instructions for safe usage and control for compliance with applicable standards and regulations.

**FCC Requirements:**

- Products authorized under Part 15 using SDoC or Certification require a label containing one of the following compliance statements
1. Receivers associated with licensed device service operations:  
This device complies with part 15 of the FCC Rules. Operation is subject to the a condition that this device does not cause harmful interference.
  2. Stand-alone cable input selector switch:  
This device complies with part 15 of the FCC Rules for use with cable television service.
  3. All other devices:
    - This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
      - (1) This device may not cause harmful interference, and
      - (2) this device must accept any interference received, including interference that may cause undesired operation.

### CE Requirements:

- (Simple EU declaration of conformity) Hong Kong Svbonny Technology Co.,Ltd declares that the equipment type is in compliance with the essential requirements and other relevant provisions of RED Directive 2014/30/EU and the ROHS Directive 2011/65/EU and the WEEE Directive 2012/19/EU; the full text of the EU declaration of conformity is available at the following internet address: [www.svbonny.com](http://www.svbonny.com).
- Disposal



■ The crossed-out wheeled bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area. IC Requirements: CAN ICES-3(B)/NMB-3(B)

### Avoid Choking Hazard



Small Parts. Not for children under 3 years.

### Approved Accessories



- **WARNING** This device meets the regulatory standards when used with the Svbonny accessories supplied or designated for the product.
- For a list of Svbonny-approved accessories for your item, visit the following website: <http://www.Svbonny.com>

### Warranty Card

Product Model	
Purchasing Date	
Defect Reason	
Dealer Name	
Telephone	
User's Name	
User's Address	
User's Email	

**Remarks:**

1. This guarantee card should be kept by the user, no replacement if lost.
2. Most new products carry a one-year manufacturer's warranty from the date of purchase.
3. The user can get the warranty and after-sales service as below:
  - Contact the seller where you buy.
4. For warranty service, you will need to provide a receipt proof of purchase from the actual seller for verification.

**Exclusions from Warranty Coverage:**

1. To any product damaged by accident.
2. In the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs.
3. If the serial number has been altered, defaced, or removed.

**FCC Caution:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with a minimum distance between 20cm the radiator your body: Use only the supplied antenna.






CE FC RoHS  

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Web: [www.svbony.com](http://www.svbony.com)

## Documents / Resources

  <small>SV505C User Manual</small>	<a href="#">SVBONY SV505C Astronomy Camera</a> [pdf] User Manual SV505C, 2A3NOSV505C, SV505C Astronomy Camera, Astronomy Camera, Camera
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## References

-  [NY.com, Your Personal Guide to New York City](#)
-  [Test Page for the Nginx HTTP Server on Red Hat Enterprise Linux](#)
-  [Svbony - Astronomer's favorite brand](#)
-  [SoftWare-Driver](#)