Manuals+ — User Manuals Simplified.

SVBONY SV905C Astronomy Camera User Manual

Contents

SVBONY SV905C Astronomy Camera

Instruction

Congratulations and thanks for purchasing our SVBONY SV905C camera! The manual is an introduction about SVBONY SV905C camera for you. Please read the manual completely before using it. If you have any product questions, please feel free to contact us in time: **info@svbony.com**.

The SVBONY SV905C camera is specially designed for guiding and can also be used for astrophotography. Its stable guiding performance will definitely impress you!For software information and more technical information, please refer to the "SUPPORT" section of our official website: www.svbony.com.

Camera model and sensor type

Model	Color/Black and white	USB interface	Sensor
SV905C	Color	USB2.0	IMX225

Specification

Model	SV905C
Sensor	SONY IMX225
USB Type	Type-C USB 2.0
Total pixels	1.2M pixel
Diagonal	6mm
Maximum resolution	1280*960
Pixel size	3.75μm* 3.75μm
Image area	5.6mm*3.2mm
Maximum frame rate	39FPS
Shutter type	Rolling Shutter
Time of exposure	64us-2000s

Read noise	4.0e
QE peak	75%
Full well charge	13ke
ADC	12bit
Gain	0-720
ROI function	Yes
Bin	1×1 2×2
Digital noise reduction	HCG mode
Video format	AVI

Communication interface	Direct Show interface
Application software	Windows OS: Sharpcap, Firecapture, PHD2, ASCOM platform Linux OS: AstroDMX capture for Linux Raspberry Pi: AstroDMX Capture Mac OS: AstroDMX Capture
Compatible system	Windows7,Windows10,and Main Stream Linux OS,Raspberry Pi, Mac OS
Working temperature	− 5℃ 45℃
Storage temperature	− 20℃ 60℃
Working humidity	20% RH-80% RH
Storage humidity	20% RH-95% RH
Power consumption	<0.5W
Back intercept	7.5mm/12.5mm
Protective glass	AR Coating

Camera introduction

Appearance

ST4 Guide port

USB2.0 Type-C
Data interface

Guiding software installation

1. Camera driver installation
    1. Driver download: You can copy the camera driver through the presented CD or download the latest driver through the SVBONY official website: **https://www.svbony.com/Support/SoftWare-Driver/**
    2. Install the Windows 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 computer's USB port 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.
2. Shooting software installation
    1. Install and use shooting software
        1. Use Sharpcap software: download the latest version from the Sharpcap official website.
        2. Click Install, set the installation path (default) to complete the installation.
        3. After the installation is complete, perform a preliminary test; open the software, find the Svbony Camera model in the camera drop-down menu; click Connect.
        4. Set the shooting storage path.
        5. The instructions for getting started with Sharpcap can be viewed in the "Help" option of the software. At the same time, a PDF format file is available for download under "Documents" on the homepage of Sharpcap's official website, and you can learn after downloading.
    2. Check the shooting software
        1. Check the frame rate
        2. Remove the camera dust cover and adjust the exposure time; There are light and dark changes in the preview interface, indicating that it is working properly.
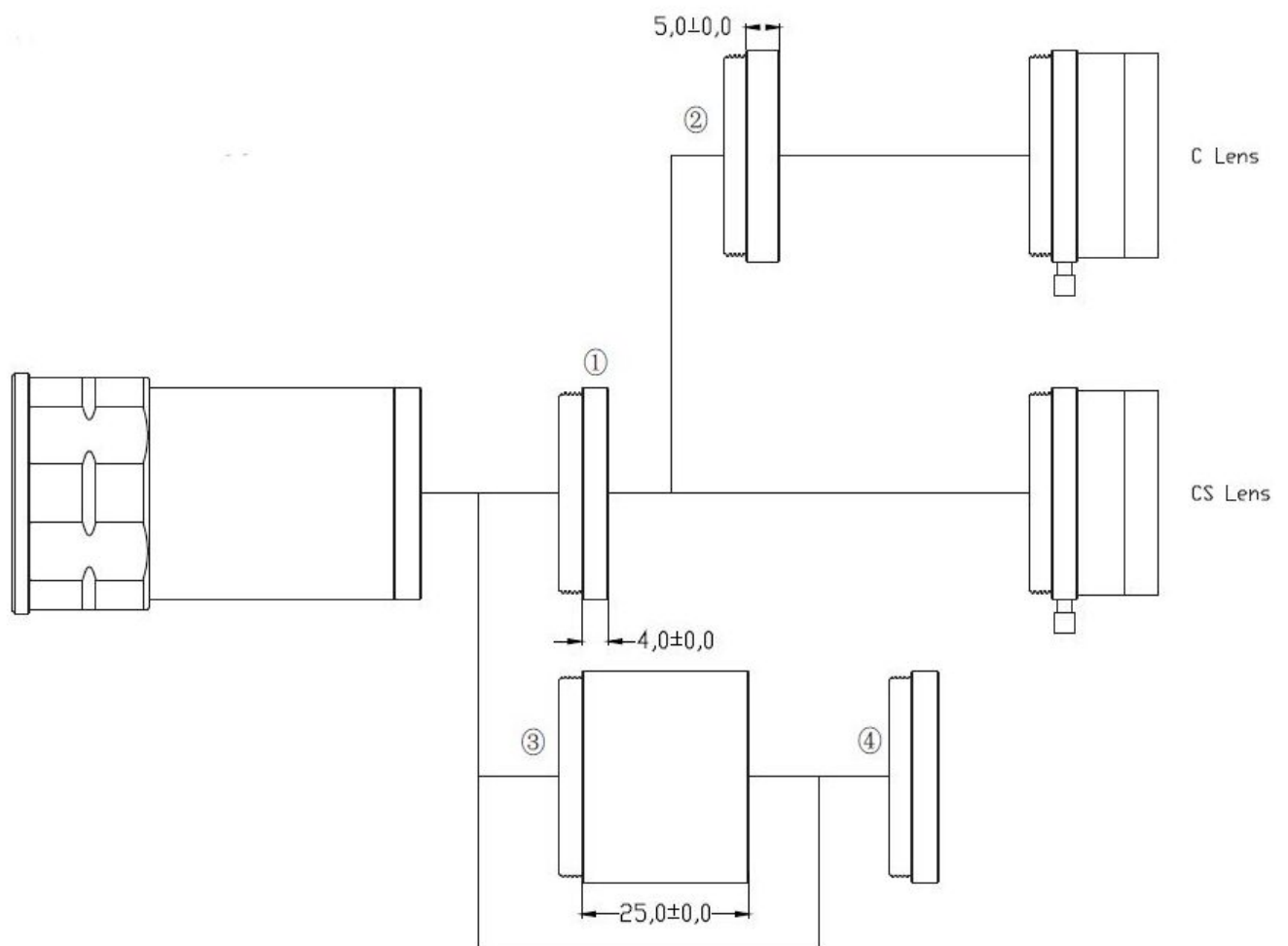3. Guiding software installation
    1. Use PHD2 software: download the latest version on the PHD2 official website (There is also a guide step for the download link on the svbony official website).
    2. Click Next and set the installation path (default); click Install to complete the installation.
    3. The guidance on the introductory operation of PHD2 can be viewed in the "Help" option of the software. At the same time, there is an introductory operation manual on the homepage of PHD2 official website

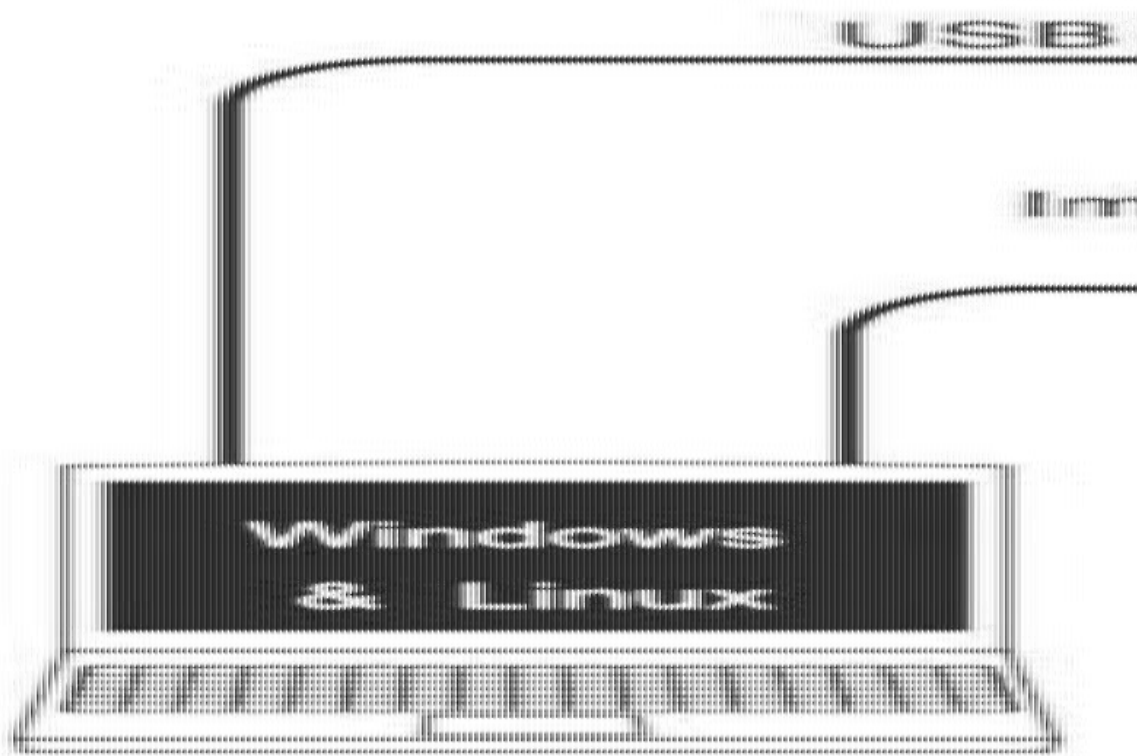which can be downloaded for learning and use.

4. For PHD2 application issues; general troubleshooting; error reports; feature requests and PHD2 development issues, you can post in the Open PHD Guiding Google team to find out the reasons.
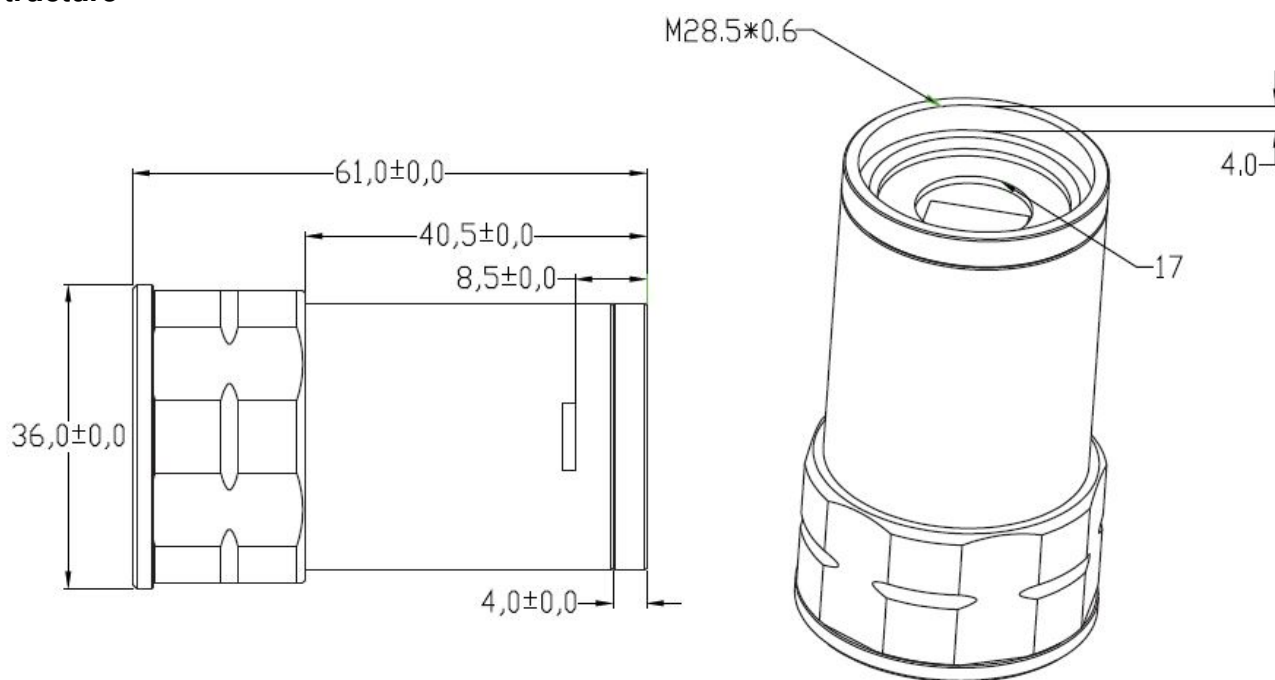
Accessory Connection

1. M28.5-CS Adapter Ring
2. CS-C Adapter Ring
3. 1.25" Extension Tube
4. 1.25"Filter

Connecting

Structure

General Clean

SV905C camera is equipped with protection window glass and the inside of the color sensor is dry and sealed. If you want to clean the sensor, we recommend that you do it during the day, with better light so that you can see the dust clearly: please connect the camera to the telescope firstly; then point the telescope to a bright place; next install a barlow lens to see the dust. Please adjust the exposure to make sure not to overexpose.`

1. For larger dust, it is recommended to blow off the dust on the glass surface with air;

2. The shadow of the dust is recommended to be removed by the software in the flat field frame.

Quality Assurance & Warranty

The Astronomy Camera warranty time is one year. Within 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 camera to factory to be repaired. Within the warranty period, if the following condition occurs, certain maintenance costs will be charged.

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

FCC Requirements

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.

CE Requirements:
•(Simple EU declaration of conformity) Hong Kong Svbony 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.svbony.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**

- This device meets the regulatory standards when used with the Svbony accessories supplied or designated for the product.

- For a list of Svbony-approved accessories for your item, visit the following website: **http://www.Svbony.com**

Warranty Card

Product Model	
Purchasing Date Defect Reason	
Dealer Name	
Telephone	
Users' Name	
Users' Address	
Users' 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 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 vcation

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.

Hong Kong Svbony Technology Co.,Ltd
Add: Unit B, 5th Floor, Gallo Commercial Building, 114-118 Lockhart Road, Wanchai, Hong Kong
Facebook: facebook.com/svbony
E-mail: info@svbony.com
Web: www.svbony.com

Documents / Resources

SvBONY	**SVBONY SV905C Astronomy Camera** [pdf] User Manual SV905C, 2A3NOSV905C, SV905C Astronomy Camera, SV905C, Astronomy Camera

References

- 🌐 **Svbony - Astronomer's favorite brand**
- 🌐 **SoftWare-Driver**