

## SDTNOVA SV-SDI0550

# SDTNOVA HD SDI Camera SV-SDI0550 Instruction Manual

Brand: SDTNOVA | Model: SV-SDI0550

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your SDTNOVA HD SDI Camera (Model SV-SDI0550). This 2 MP 1080P HD Digital CCTV Security Camera features a 1/2.8" CMOS sensor and a 5-50mm manual varifocal HD 3MP lens, designed for various surveillance applications. Please read this manual thoroughly before using the product to ensure proper functionality and safety.

## 2. PRODUCT OVERVIEW

### Key Features:

- Adopting 1/2.8 CMOS image sensor, HD-SDI 2 MP 1080P output and CVBS output.
- OSD Menu at the back including D-WDR (Digital-WDR)/ DS-WDR (double scan-WDR) With 5-50mm Manual Varifocal HD 3MP Lens.
- 1080P high definition image quality, effective resolution up to 1920\*1080, no latency, no compression, low loss and real-time transmission.
- HD-SDI 2MP 1080P HD Digital CCTV Security Camera color without night vision.
- Mini metal shell with double 1/4 Inch Screw Thread without power adaptor.

### What's in the Box:

- SDTNOVA HD SDI Camera (Model SV-SDI0550)
- 5-50mm Manual Varifocal HD 3MP Lens (pre-installed or separate)
- DC12V 1A Adapter
- SDI Cable
- Instruction Manual



**Figure 2.1:** The camera packaging and included accessories, typically featuring the camera body, lens, power adapter, and SDI cable.

## 3. SETUP

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### 3.1 Component Identification



**Figure 3.1:** Rear panel of the camera, highlighting the HD-SDI output, CVBS output, DC12V power input, and OSD Menu Control joystick.



**Figure 3.2:** Side view of the camera, showing the 1/4" screw thread for mounting on tripods or other camera accessories.

### 3.2 Lens Installation

The camera comes with a 5-50mm manual varifocal lens. If not pre-installed, carefully screw the lens into

the camera body's CS mount. Ensure it is securely fastened but do not overtighten.

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**Video 3.1:** This video demonstrates the process of attaching an interchangeable lens to a similar camera model, showcasing the secure mounting of the lens onto the camera body.

### 3.3 Power Connection

Connect the provided DC12V 1A power adapter to the DC12V input port on the rear of the camera. Ensure the power source is stable and meets the camera's requirements.

### 3.4 Video Output Connection

The camera supports both HD-SDI and CVBS video outputs. Choose the appropriate output based on your monitoring equipment.

- **HD-SDI Output:** Connect an SDI cable from the camera's SDI port to an SDI-compatible monitor or recorder for 1080P high-definition video.
- **CVBS Output:** Connect a CVBS cable from the camera's CVBS port to a standard analog monitor or DVR. This output is useful for initial setup and OSD menu access if your primary display does not immediately show SDI signal.

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**Video 3.2:** This video illustrates the connection of a similar camera model to a monitor using an SDI cable, demonstrating the process of establishing a video feed.

## 4. OPERATING INSTRUCTIONS

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### 4.1 Manual Varifocal Lens Adjustment

The 5-50mm varifocal lens allows you to manually adjust the zoom and focus to achieve the desired field of view and clarity.

1. **Zoom Adjustment:** Rotate the zoom ring on the lens to adjust the focal length (5mm for wide view, 50mm for telephoto).
2. **Focus Adjustment:** After setting the zoom, rotate the focus ring until the image on your monitor is sharp and clear.



**Figure 4.1:** The SDTNOVA HD SDI Camera with its 5-50mm manual varifocal lens, showing the rings for zoom and focus adjustment.

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**Video 4.1:** This video demonstrates the manual adjustment of zoom and focus on the camera lens, showing how to achieve a clear image at different focal lengths.

## 4.2 OSD Menu Control

The On-Screen Display (OSD) menu allows you to configure various camera settings such as White Balance, Exposure, ISO, Electronic Shutter, Brightness, Contrast, Sharpness, Saturation, and more. Access the OSD menu using the joystick control on the rear of the camera.

1. **Access Menu:** Press the joystick button to enter the OSD menu.
2. **Navigate:** Use the joystick (Up, Down, Left, Right) to navigate through menu options.
3. **Select/Adjust:** Press the joystick to select an option or confirm a setting. Move the joystick Left/Right to adjust values.
4. **Exit:** Navigate to the "Exit" option or press and hold the joystick for a few seconds to exit the menu.

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**Video 4.2:** This video demonstrates how to access and navigate the On-Screen Display (OSD) menu using the joystick control on the camera, allowing for configuration of various image settings.

## 5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the camera body. For the lens, use a specialized lens cleaning solution and cloth to avoid scratches.
- **Environment:** Operate the camera within the specified working temperature range (-10°C to 60°C). Avoid exposure to extreme moisture, dust, or direct sunlight for prolonged periods.
- **Connections:** Periodically check all cable connections (power, SDI, CVBS) to ensure they are secure and free from damage.

## 6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No video signal on monitor.	<ul style="list-style-type: none"><li>◦ Loose cable connection.</li><li>◦ Incorrect video output selected on monitor/DVR.</li><li>◦ Incorrect resolution/frame rate setting in OSD menu.</li><li>◦ Power issue.</li></ul>	<ul style="list-style-type: none"><li>◦ Check all SDI/CVBS cable connections.</li><li>◦ Ensure monitor/DVR is set to the correct input (SDI or CVBS).</li><li>◦ If using SDI, try connecting via CVBS first to access OSD menu. Adjust "HDMI Resolution" or "Frame Rate" (e.g., from 1080_60P to 1080_60I or 1080p 30Hz) in the OSD menu under "Setup" to match your display's compatibility.</li><li>◦ Verify power adapter is correctly connected and supplying 12V.</li></ul>
Image is blurry or out of focus.	<ul style="list-style-type: none"><li>◦ Lens focus not adjusted.</li><li>◦ Lens zoom not adjusted.</li></ul>	<ul style="list-style-type: none"><li>◦ Manually adjust the focus ring on the lens until the image is sharp.</li><li>◦ Adjust the zoom ring to achieve the desired field of view, then refocus.</li></ul>
OSD menu not appearing or unresponsive.	<ul style="list-style-type: none"><li>◦ Joystick malfunction.</li><li>◦ No video signal to display OSD.</li></ul>	<ul style="list-style-type: none"><li>◦ Ensure the joystick is not stuck and functions correctly.</li><li>◦ Confirm video signal is present on a monitor (try CVBS output if SDI is problematic).</li><li>◦ If OSD menu is not visible due to resolution issues, follow the blind button sequence: Push – Up – Up – Push – Down – Down – Down – Right (x2 or more) to navigate to resolution settings and adjust.</li></ul>

## 7. SPECIFICATIONS

Feature	Specification
Model	SV-SDI0550
Image Sensor	1/2.8" CMOS Sensor
Effective Pixels	1920(H)*1080(V) / 2MP
Resolution	1080P 25(PAL) / 30(NTSC) FPS
Lens	5-50mm Manual Varifocal HD 3MP Lens CS Mount
Angle of View	42°~110°
Video Output	HD-SDI, CVBS
Power Supply	DC12V 1A
Dimensions	4.96 x 1.73 x 1.73 inches
Weight	Approx. 195g (14.4 ounces)
Working Temperature	-10°C~60°C
Special Features	Image, Motion Detection, Night Vision (Color only, no IR), Portable

## 8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or contact SDTNOVA customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

For further assistance, please visit the official SDTNOVA Store:[SDTNOVA Store on Amazon](#).