AIDA Imaging HD-NDI-CUBE

AIDA HD-NDI-Cube Full HD NDI|HX IP POV Camera User Manual

Comprehensive instructions for the setup, operation, and maintenance of your AIDA HD-NDI-Cube camera.

Important Safety Information

- Read all instructions carefully before operating the device.
- Keep this manual for future reference.
- Do not expose the camera to moisture or extreme temperatures.
- Use only the power adapter specified for this device.
- Do not attempt to disassemble or modify the camera. Refer all servicing to qualified personnel.
- Ensure proper ventilation around the camera during operation.

Package Contents

Verify that all items are present in the package:

- AIDA HD-NDI-Cube Camera
- Power Adapter (typically included for operation)
- Documentation (this manual)
- *Note: The product listing generically mentions "item" for 'whats_in_the_box'. This manual assumes the camera unit and necessary power supply are included.*

Setup

1. Physical Installation

The AIDA HD-NDI-Cube camera features versatile mounting options for various applications.

- Identify a suitable location for the camera, ensuring it is stable and has clear line of sight for its intended use.

- Utilize the top and bottom tripod mounts for secure attachment to tripods, stands, or other mounting hardware.
- Ensure adequate space for cable connections and ventilation.

Figure 1: Side view of the AIDA HD-NDI-Cube camera, showing its compact form factor.

2. Connectivity

Connect the camera to power and network for operation.

1. **Power Connection:** Connect the provided 12V DC power adapter to the "12VDC" port on the rear of the camera. Plug the adapter into a suitable power outlet. The power indicator LED should illuminate.
2. **Network Connection:** Connect an Ethernet cable from your network switch or router to the "IP/NDI|HX" Ethernet port on the rear of the camera. This connection is essential for NDI|HX video streaming and IP control.
3. **Lens Installation:** If a C/CS mount lens is not pre-installed, carefully attach your desired C/CS mount lens to the camera body. Ensure it is securely fastened.

Figure 2: Rear panel of the AIDA HD-NDI-Cube, showing the IP/NDI|HX Ethernet port and 12VDC power input.

Figure 3: Front and side view of the AIDA HD-NDI-Cube camera, highlighting the C/CS lens mount and SVC port.

Operating Instructions

1. Initial Power On

Once connected to power and network, the camera will initiate its startup sequence. The power indicator LED will confirm the device is on.

2. Accessing the Web UI

The camera features an accessible web user interface (UI) for configuration and control.

1. Ensure your computer is on the same network as the camera.
2. Use a network scanner tool (e.g., NewTek NDI Tools) to discover the camera's IP address on your network.
3. Open a web browser and enter the camera's IP address into the address bar.
4. Log in using the default credentials (refer to the camera's specific documentation for default username/password, typically "admin" / "admin" or similar).
5. From the web UI, you can adjust image parameters, network settings, and stream directly to social media platforms.

3. NDI|HX Video Streaming

The AIDA HD-NDI-Cube outputs Full HD 1080p60 NDI|HX video, compatible with NDI-enabled software and hardware.

- Once the camera is connected to the network, it should be discoverable by NDI-compatible applications (e.g., OBS Studio, vMix, TriCaster).
- In your NDI receiving software, select the AIDA HD-NDI-Cube as an NDI source.
- Adjust video settings within your software or the camera's web UI as needed for optimal performance.

Maintenance

1. Cleaning

- Ensure the camera is powered off and disconnected from all sources before cleaning.
- Use a soft, dry cloth to wipe the camera body. Do not use liquid cleaners or aerosols.
- For the lens, use a specialized lens cleaning cloth and solution to avoid scratches.

2. Firmware Updates

Periodically check the AIDA Imaging official website for available firmware updates. Firmware updates can improve performance, add features, and resolve issues.

- Download the latest firmware from the manufacturer's support page.
- Follow the specific instructions provided with the firmware update package for installation via the camera's web UI.
- ***Caution:*** *Do not power off the camera during a firmware update, as this may cause irreversible damage.*

Troubleshooting

No NDI Signal Detected

- **Network Connection:** Ensure the Ethernet cable is securely connected to both the camera and the network switch/router. Verify network activity lights on the camera's Ethernet port.

- **IP Addressing:** Confirm that the camera and the receiving computer are on the same IP subnet. Incorrect subnet masks can prevent NDI discovery. Access the camera's web UI to verify or adjust network settings. A firmware update may be required to resolve specific IP addressing issues.
- **Software Permissions:** If using software like OBS Studio on Windows, ensure the application is run with administrator privileges. Some NDI implementations require elevated permissions to access network streams.
- **Firewall Settings:** Check firewall settings on your computer and network to ensure NDI traffic is not being blocked.

Intermittent Signal Loss

- **Network Stability:** Verify the stability and bandwidth of your network. NDI|HX requires a stable network connection.
- **Cable Integrity:** Inspect Ethernet cables for damage. Try replacing cables if issues persist.
- **Firmware:** Ensure the camera's firmware is up to date. Older firmware versions may have known stability issues.

Poor Image Quality

- **Lens Focus:** Adjust the focus of the C/CS mount lens.
- **Lighting Conditions:** Ensure adequate and appropriate lighting for your scene.
- **Web UI Settings:** Access the camera's web UI to adjust image parameters such as exposure, white balance, and color temperature.
- **Digital Zoom:** Avoid excessive digital zoom, as it can degrade image quality on 1080p cameras. Consider variable focus lens replacements for optical zoom capabilities.

Technical Specifications

Feature	Specification
Brand	AIDA Imaging
Model Number	HD-NDI-CUBE
Sensor Type	1/3" Progressive Scan CMOS
Video Capture Resolution	1080p (Full HD)
Effective Video Resolution	2.07 MP
Connectivity Technology	Ethernet (NDI|HX)
Lens Mount	C/CS Mount
Minimum Focal Length	1 Millimeter (*Lens dependent*)
Maximum Focal Length	4 Millimeters (*Lens dependent*)
Maximum Aperture	3 f (*Lens dependent*)
Focus Type	Fixed Focus (*Lens dependent*)
Form Factor	Compact
Color	Black
Features	Low Light Capability
Image Stabilization	No
Water Resistance Level	Not Water Resistant
Supported Audio Format	PCM, MP3, AAC
Video Capture Format	ASF
Supported Image Format	JPEG
Image Aspect Ratio	16:9
White Balance Settings	Auto
Exposure Control Type	Program (P)
Shooting Modes	Manual, Automatic, Program (P)
Compatible Devices	PC or Mac
UPC	686091739809

Warranty and Support

Warranty Information

AIDA Imaging products are typically covered by a manufacturer's warranty. For specific warranty terms and conditions, including duration and coverage details, please refer to the warranty card included with your product or visit the official AIDA Imaging website.

Keep your proof of purchase for warranty claims.

Customer Support

For technical assistance, troubleshooting beyond this manual, or service inquiries, please contact AIDA Imaging customer support.

- Visit the official AIDA Imaging website for support resources, FAQs, and contact information.
- Have your product model number (HD-NDI-CUBE) and serial number ready when contacting support.