

# PTZ Camera for HDVS-300 Soft Codec Conferencing System







# Version Information

Version	Release Date	Notes
1	10/17	Initial release
2	02/18	Restriction for USB cable length
3	04/18	Moved API to separate document; improved documentation on controlling camera



# Welcome to Atlona!

Thank you for purchasing this Atlona product. We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration only takes a few minutes and protects this product against theft or loss. In addition, you will receive notifications of product updates and firmware. Atlona product registration is voluntary and failure to register will not affect the product warranty.

To register your product, go to http://www.atlona.com/registration

# Sales, Marketing, and Customer Support

#### Main Office

Atlona Incorporated 70 Daggett Drive San Jose, CA 95134 United States

Office: +1.877.536.3976 (US Toll-free) Office: +1.408.962.0515 (US/International)

Sales and Customer Service Hours Monday - Friday: 6:00 a.m. - 4:30 p.m. (PST)

http://www.atlona.com/

#### International Headquarters

Atlona International AG Ringstrasse 15a 8600 Dübendorf Switzerland

Office: +41 43 508 4321

Sales and Customer Service Hours Monday - Friday: 09:00 - 17:00 (UTC +1)

## **Operating Notes**

As of this writing, there are no firmware updates for this product. When new firmware is released, update instructions will be included with the firmware and will be appended to this manual.



**IMPORTANT:** Visit http://www.atlona.com/product/AT-HDVS-CAM for the latest firmware updates and User Manual.



# Atlona, Inc. ("Atlona") Limited Product Warranty

#### Coverage

Atlona warrants its products will substantially perform to their published specifications and will be free from defects in materials and workmanship under normal use, conditions and service.

Under its Limited Product Warranty, Atlona, at its sole discretion, will either:

repair or facilitate the repair of defective products within a reasonable period of time, restore products to their
proper operating condition and return defective products free of any charge for necessary parts, labor and
shipping.

OR

• replace and return, free of charge, any defective products with direct replacement or with similar products deemed by Atlona to perform substantially the same function as the original products.

OR

• refund the pro-rated value based on the remaining term of the warranty period, not to exceed MSRP, in cases where products are beyond repair and/or no direct or substantially similar replacement products exist.

Repair, replacement or refund of Atlona products is the purchaser's exclusive remedy and Atlona liability does not extend to any other damages, incidental, consequential or otherwise.

This Limited Product Warranty extends to the original end-user purchaser of Atlona products and is non-transferrable to any subsequent purchaser(s) or owner(s) of these products.

#### **Coverage Periods**

Atlona Limited Product Warranty Period begins on the date of purchase by the end-purchaser. The date contained on the end-purchaser 's sales or delivery receipt is the proof purchase date.

#### Limited Product Warranty Terms – New Products

- 10 years from proof of purchase date for hardware/electronics products purchased on or after June 1, 2013.
- 3 years from proof of purchase date for hardware/electronics products purchased before June 1, 2013.
- Lifetime Limited Product Warranty for all cable products.

#### Limited Product Warranty Terms – Refurbished (B-Stock) Products

• 3 years from proof of purchase date for all Refurbished (B-Stock) hardware and electronic products purchased on or after June 1, 2013.

#### Remedy

Atlona recommends that end-purchasers contact their authorized Atlona dealer or reseller from whom they purchased their products. Atlona can also be contacted directly. Visit www.atlona.com for Atlona's contact information and hours of operation. Atlona requires that a dated sales or delivery receipt from an authorized dealer, reseller or end-purchaser is provided before Atlona extends its warranty services. Additionally, a return merchandise authorization (RMA) and/or case number, is required to be obtained from Atlona in advance of returns.

Atlona requires that products returned are properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization or case number will be refused. Atlona, at its sole discretion, reserves the right to reject any products received without advanced authorization. Authorizations can be requested by calling 1-877-536-3976 (US toll free) or 1-408- 962-0515 (US/international) or via Atlona's website at www.atlona.com.

#### **Exclusions**

This Limited Product Warranty excludes:

Damage, deterioration or malfunction caused by any alteration, modification, improper use, neglect, improper
packaging or shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of
nature.



### Atlona, Inc. ("Atlona") Limited Product Warranty

- Damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Atlona to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.
- Equipment enclosures, cables, power supplies, batteries, LCD displays, and any accessories used in conjunction with the product(s).
- Products purchased from unauthorized distributors, dealers, resellers, auction websites and similar unauthorized channels of distribution.

#### **Disclaimers**

This Limited Product Warranty does not imply that the electronic components contained within Atlona's products will not become obsolete nor does it imply Atlona products or their electronic components will remain compatible with any other current product, technology or any future products or technologies in which Atlona's products may be used in conjunction with. Atlona, at its sole discretion, reserves the right not to extend its warranty offering in instances arising outside its normal course of business including, but not limited to, damage inflicted to its products from acts of god.

#### **Limitation on Liability**

The maximum liability of Atlona under this limited product warranty shall not exceed the original Atlona MSRP for its products. To the maximum extent permitted by law, Atlona is not responsible for the direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

#### **Exclusive Remedy**

To the maximum extent permitted by law, this limited product warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. To the maximum extent permitted by law, Atlona specifically disclaims all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If Atlona cannot lawfully disclaim or exclude implied warranties under applicable law, then all implied warranties covering its products including warranties of merchantability and fitness for a particular purpose, shall provide to its products under applicable law. If any product to which this limited warranty applies is a "Consumer Product" under the Magnuson-Moss Warranty Act (15 U.S.C.A. §2301, ET SEQ.) or other applicable law, the foregoing disclaimer of implied warranties shall not apply, and all implied warranties on its products, including warranties of merchantability and fitness for applicable law.

#### **Other Conditions**

Atlona's Limited Product Warranty offering gives legal rights, and other rights may apply and vary from country to country or state to state. This limited warranty is void if (i) the label bearing the serial number of products have been removed or defaced, (ii) products are not purchased from an authorized Atlona dealer or reseller. A comprehensive list of Atlona's authorized distributors, dealers and resellers can be found at www.atlona.com.



# Important Safety Information



CAUTION: TO REDUCT THE RISK OF ELECTRIC SHOCK DO NOT OPEN ENCLOSURE OR EXPOSE TO RAIN OR MOISTURE. NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

The information bubble is intended to alert the user to helpful or optional operational instructions in the literature accompanying the product.

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this product near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install or place this product near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- 9. Do not defeat the safety purpose of a polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
- 11. Only use attachments/accessories specified by Atlona.
- 12. To reduce the risk of electric shock and/or damage to this product, never handle or touch this unit or power cord if your hands are wet or damp. Do not expose this product to rain or moisture.
- 13. Unplug this product during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the product has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.



# FCC Statement



FCC Compliance and Advisory Statement: This hardware 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. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed or 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: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.



# Table of Contents

Introduction	8
Features	8
Package Contents	8
Panel Description	9
IR Remote Control	10
Installation Connection Instructions Mounting Instructions Connection Diagram	<b>11</b> 11 11 13
Basic Operation Initialization Procedure Home Position Controlling the Camera Tilt Pan (Rotation) Tilt and Pan Combinations Zoom Focus Backlight Compensation (BLC) Standby Mode Managing Presets Saving Presets Clearing a Preset Recalling Presets Function List	<b>14</b> 14 15 16 16 16 17 18 18 18 19 19 20 20 20 20 20 20 20
WebGUI	22
Appendix Specifications	<b>29</b> 29
Index	30



# Introduction

The Atlona AT-HDVS-CAM is an enterprise-grade PTZ camera designed for use with the AT-UHD-HDVS-300-KIT in soft codec conferencing applications. It features a USB interface for video and camera control. The HDVS-CAM seamlessly integrates with the HDVS-300-KIT for a complete, automated conferencing system that includes AV and USB extension, plus automatic input selection and display powering when a PC is connected. The HDVS-CAM delivers high performance, professional-quality imaging with video resolutions up to 1080p @ 30 Hz, as well as fast and accurate auto-focusing, and a fast yet quiet pan and tilt mechanism. This PTZ camera is ideal for a wide range of small to medium-sized meeting spaces, classrooms, and training rooms.

## Features

- Available video resolutions from 176x144 up to 1080p @ 30 Hz
- · Fast and accurate auto focus, plus auto white balance and auto exposure modes
- Fast and quiet pan and tilt mechanism
- USB 2.0 interface for video and camera control
- Multi-element zoom lens with 10x optical zoom and a 60.9° horizontal field of view
- · Picture controls available for brightness, color, saturation, contrast, sharpness, and gamma
- TCP/IP, RS-232, USB, and IR control convenient handheld IR remote control included
- High performance imaging, fine detail, and color rendering with 1/2.8" low-noise, HD CMOS sensor

## Package Contents

1 x AT-HDVS-CAM

- 1 x Wall mounting plate
- 4 x Mounting screws
- 1 x IR Remote Control
- 1 x USB A cable (2 meters)
- 1 x VISCA to RS-232 DB-9 adapter
- 1 x AAA battery
- 1 x Installation Guide



# Panel Description





#### 1. RS-232

Connect included VISCA to RS-232 adapter here to control the camera with a third party software or hardware controller.

#### 2. USB

Connect the included USB A cable to this port from the USB port of the AT-UHD-HDVS-300-RX.

#### 3. LAN

Connect to a network switch to control the unit via TCP/IP or webGUI.

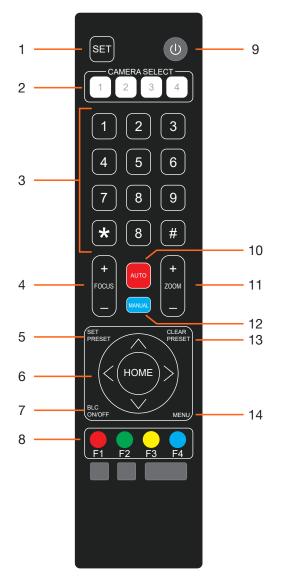
#### 4. DC 12V

Connect the included 12V power supply to this port.



# **IR Remote Control**

The AT-HDVS-CAM comes with an IR remote control for full control of the camera and use of the OSD menu.



#### 1. SET

As of this writing, this key is not defined.

#### 2. CAMERA SELECT

Press these button to select which camera is being controlled.

#### 3. Keypad

Numbers 0 through 9 are used to select define/recall presets, and other functions.

#### 4. FOCUS

Press this rocker switch to adjust the focus. Pressing the "+" to focus on objects that are near. Press "-" to focus on objects that are far.

#### 5. SET PRESET

Assigns a preset for the current camera position. Refer to Managing Presets (page 20) for more information.

#### 6. Cursor Controls

Press these buttons to control the position of the camera. Press the left-arrow or right-arrow to rotate the camera left or right. Press the up-arrow or down-arrow to tilt the camera up or down.

#### 7. BLC ON/OFF

Enables or disables Back Light Compensation (BLC). Refer to Backlight Compensation (BLC) (page 19) for more information.

8. Camera Remote Controller Address buttons As of this writing, these buttons are not defined.

#### 9. Power button

Press this button to toggle power on or off. Press and hold this button for three seconds to place the camera in standby mode. Refer to Standby Mode (page 19) for more information.

#### 10. AUTO

Press this button to enable auto focus mode.

#### 11. ZOOM

Press this rocker switch to adjust the zoom. The camera lens has a zoom of 10X (4.7 mm to 47 mm). Press "+" to increase the zoom factor. Press "-" to decrease the zoom factor.

12. MANUAL

Press this button to enable manual focus mode.

#### **13. CLEAR PRESET**

Press this button to clear a preset. Refer to Managing Presets (page 20) for more information.

#### 14. MENU

Press this button to display the On-Screen Display (OSD) menu system.



# Installation

### **Connection Instructions**

- 1. Connect the Ethernet cable to the LAN port on the back of the AT-HDVS-CAM.
- Connect the included USB cable to from the USB port on the AT-HDVS-CAM, to an available USB port on the AT-UHD-HDVS-300-RX.

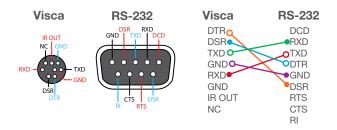


NOTE: Atlona strongly discourages the use of USB cables beyond 12 feet (3.5 meters) in length.

- 3. \*Optional\* Connect the Visca to RS-232 cable to the Visca port for RS-232 control.
- 4. Connect the included DC 12V power cable to the unit.



**IMPORTANT:** The included power supply should always be used when the camera is controlled with the AT-UHD-HDVS-300-C-KIT.



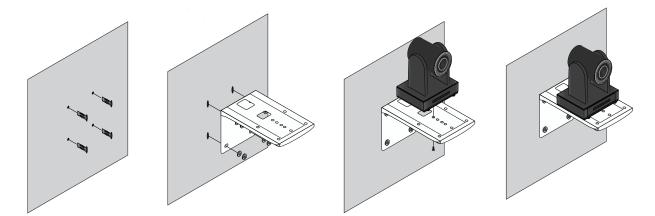
### **Mounting Instructions**

The AT-HDVS-CAM has two installation options, wall mount (included) and ceiling mount (purchased separately).

#### Wall Mount installation

The install the AT-HDVS-CAM, 4 M6 swelling bolts, 1 1/4 20UNC bolt, 4 M6 nuts & shims, the included wall mount bracket, and the AT-HDVS-CAM are needed.

- 1. Install the M6 swelling bolts in a rectangular pattern on the wall, 100 mm wide and 50 mm high.
- 2. Attached the wall mount bracket onto the wall, by placing them on the M6 swelling bolts and securing it with the M6 nuts and shims.
- 3. Once the wall mount bracket is secure on the wall, place the camera on the top of the wall mount bracket and secure it with the 1/4 20UNC bolt.

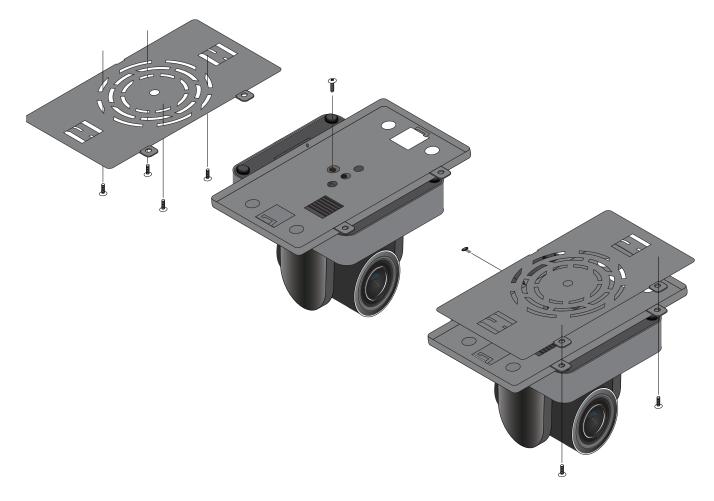




#### Ceiling Mount installation

To install the AT-HDVS-CAM, 4 PA3X30 self-tapping screws, 4 PM3X6 screws, 4 screw stoppers, 1 1/4 20UNC screw, the optional ceiling upper and lower covering plates, and the AT-HDVS-CAM are needed.

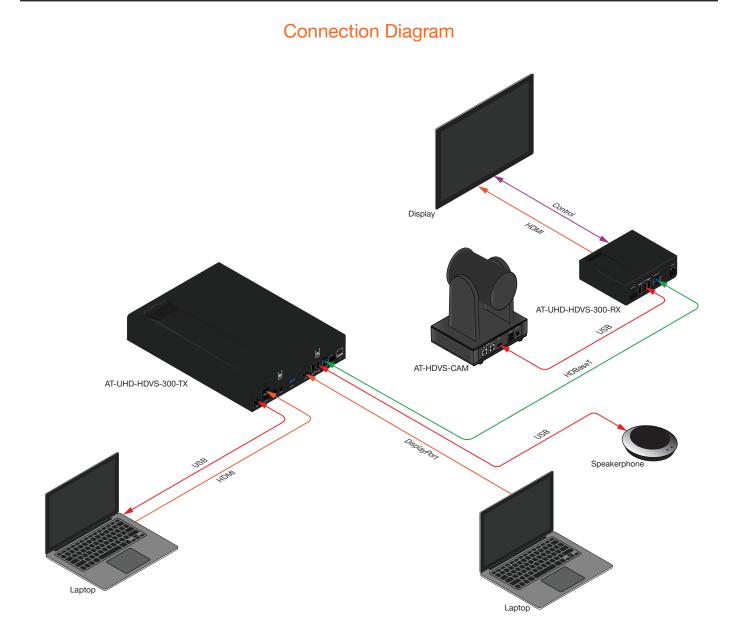
- 1. Install the 4 screw stoppers in the ceiling.
- 2. Connect the upper ceiling covering plate to the screw stoppers using the PA3X30 self-tapping screws.
- 3. Connect the lower ceiling covering plate to the bottom of the AT-HDVS-CAM using the 1/4 20UNC screw.
- 4. Mount the lower ceiling covering plate to the upper ceiling plate using 3 PM3X6 bolts.



**NOTE:** The camera picture will need to be inverted for video to be viewed correctly. View the AT-HDVS-CAM manual for instructions on how to invert video.



## Installation





## **Basic Operation**

### **Initialization Procedure**

Once both power and USB are connected to the AT-HDVS-CAM, the camera will go through an initialization procedure. During this process, a flashing red LED indicator will be displayed. When the AT-HDVS-CAM is ready for use, the LED indicator on the front panel will be solid green. The AT-HDVS-CAM will repeat this process each time it is powered on.

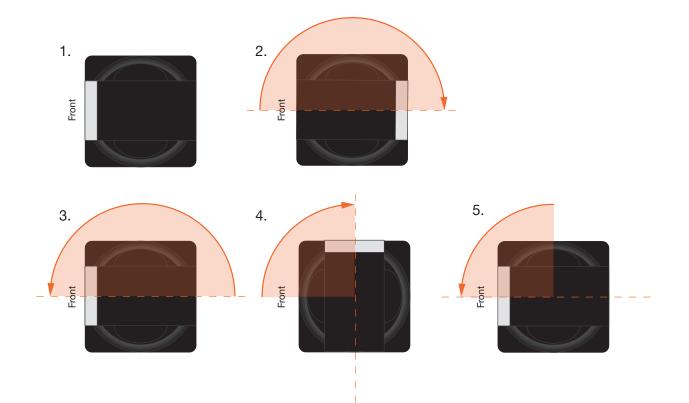


Flashing red LED during initialization



Camera "ready" state

- 1. Starting position.
- 2. The included 12 V DC power supply and USB cable are connected. The camera will rotate approximately 180 degrees. Camera lens assembly will be tilted forward, approximately 45 degrees, during the initialization process.





- 3. The camera then returns to its starting position. Once in this position, the camera lens will zoom-in as part of the initialization process.
- 4. Camera will rotate 90 degrees.



**NOTE:** If a USB cable is not connected from the AT-HDVS-CAM to a host computer, then the initialization process will stop at Step 4 and the blinking LED on the front panel will turn off. To complete the initialization process, connect a USB cable from the AT-HDVS-CAM to a computer.

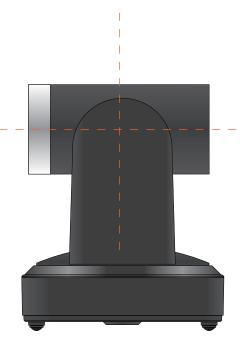
5. Camera returns to the starting position and the camera lens tilt setting will be set to 0 degrees.

### **Home Position**

"Home" position is a term that is used throughout this manual. When the AT-HDVS-CAM is in home position, the camera is facing forward and has no tilt angle, as shown in the illustration below:



Front



Left Side



### Controlling the Camera

The AT-HDVS-CAM can be controlled using the included IR Remote Control or through the webGUI. Refer to the WebGUI (page 22) for more information about accessing the webGUI.

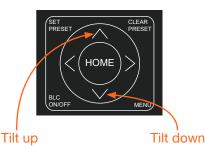
#### Tilt

The camera tilt range is approximately -45 degrees to +90 degrees. Use one of the following methods to adjust the camera tilt.



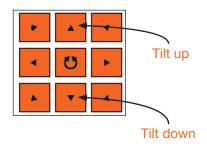
#### **IR Remote Control**

- Press and release the up or down arrow button to adjust the tilt of the camera in small increments.
- Press and hold the up or down arrow button to adjust the camera tilt at a faster rate.
- Press the HOME button to return the camera to the "home" position.



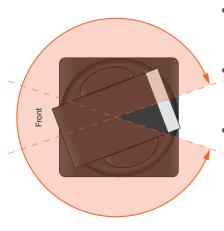
#### webGUI

- 1. Click **Control** in the side menu bar.
- 2. Click the up-arrow or down-arrow button to tilt the camera up or down, respectively.
- Click the icon in the center to return the camera to the "home" position.



#### Pan (Rotation)

The camera pan range is approximately 360 degrees. Use one of the following methods to adjust the camera pan.



#### **IR Remote Control**

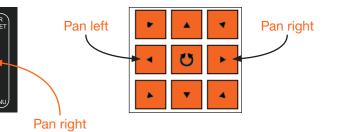
- Press and release the left or right arrow button to adjust the camera tilt in small increments.
- Press and hold the left-arrow or right-arrow button to adjust the camera tilt at a faster rate.
- Press the **HOME** button to return the camera to the "home" position.

HOME

Pan left

#### webGUI

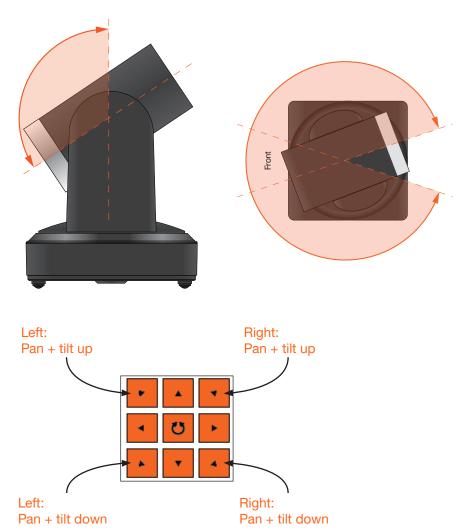
- 1. Click **Control** in the side menu bar.
- 2. Click the left arrow or right arrow button to tilt the camera up or down, respectively.
- Click the icon in the center to return the camera to the "home" position.





#### Tilt and Pan Combinations

The webGUI provides a method for combining both tilt and pan motion. Note that this function is *not* available on the included IR Remote Control.



#### webGUI (only)

- 1. Click **Control** in the side menu bar.
- 2. Click the diagonal arrow buttons to simultaneously tilt and pan the camera in the desired direction:
  - Upper Diagonal-left arrow Pans and rotates camera up and to the left.
  - Lower Diagonal-left arrow Pans and rotates camera down and to the left.
  - Upper Diagonal-right arrow Pans and rotates camera up and to the right.
  - Lower Diagonal-right arrow Pans and rotates camera down and to the right.
- 3. Click the *icon* in the center to return the camera to the "home" position.

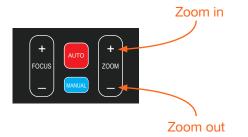


#### Zoom

The camera is provides a zoom factor up to 10x. Use one of the following methods to adjust the camera zoom.

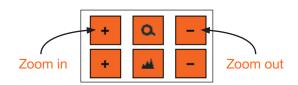
#### **IR Remote Control**

- Locate the **ZOOM** rocker switch on the IR Remote Control.
- Press and release + to zoom-in or press to zoomout.
- Press and hold the these buttons to zoom-in or zoom-out at a faster rate.



#### webGUI

- 1. Click **Control** in the side menu bar.
- 2. Click + to zoom-in or click to zoom out.



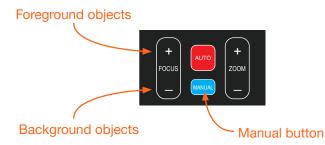
#### Focus

When positioning the camera on an object, it may be necessary to adjust the focus for a clear image. The AT-HDVS-CAM can be set to auto focus or manual focus. By default, the AT-HDVS-CAM is set to auto-focus mode.

**NOTE:** In order to manually control the focus, the AT-HDVS-CAM must be in manual focus mode. Press the **MANUAL** button to enter manual focus mode.

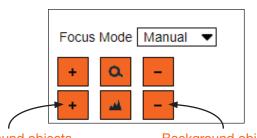
#### **IR Remote Control**

- Press and release the MANUAL button.
- Locate the **FOCUS** rocker switch on the IR Remote Control.
- Press and release + to increase focus on objects in the foreground. Press and release the - to focus on objects in the background.
- Press and hold the these buttons to adjust the focus at a faster rate.



#### webGUI

- 1. Click **Control** in the side menu bar.
- Set the AT-HDVS-CAM to manual focus mode by selecting Manual from the Focus Mode drop-down list.
- 3. Click + to focus on foreground objects or click to focus on background objects.



Foreground objects

Background objects

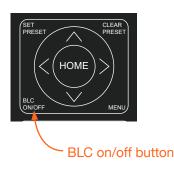


#### Backlight Compensation (BLC)

BLC is a feature which automatically adjusts the exposure control of the camera. When enabled, BLC will attempt to increase the ambient foreground light and "darken" any background light. For example, a subject standing in front of a window in the daytime, will produce a sillhouetted effect. Enabling BLC will compensate for the difference in lighting.

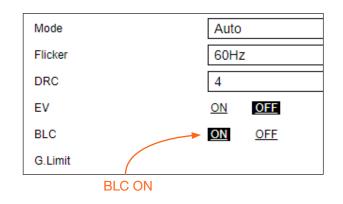
#### **IR Remote Control**

- 1. Point the IR Remote Control at the front of the AT-HDVS-CAM.
- Press and release the BLC ON/OFF button to toggle BLC on or off.



#### webGUI

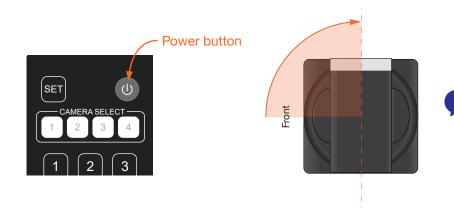
- 1. Click **Exposure** in the side menu bar.
- 2. Click ON to enable BLC. Click OFF to disable BLC.



#### Standby Mode

Placing the AT-HDVS-CAM in standby mode will power-down the camera. Placing the camera in standby mode is managed using the IR Remote Control.

- 1. Point the IR Remote Control at the front of the AT-HDVS-CAM.
- 2. Press and hold the () button for three seconds.
- 3. The camera will rotate 90 degrees and the camera lens assembly will tilt approximately 45 degrees. The camera is now in standby mode.
- 4. Press and hold the U button for three seconds to wake the camera. After the camera is awake, it will return to the home position.



**NOTE:** The camera will always be set to the home position after this sequence is performed. To return the camera to the last position, either position it manually or recall the saved preset.

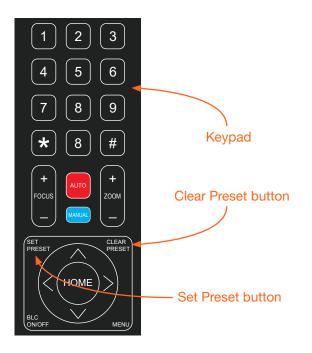


### Managing Presets

Camera positions can be stored to local memory and recalled at a later time. Presets are stored and recalled using the included IR Remote Control. Up to 10 presets can be saved.

#### Saving Presets

- 1. Set the camera in the desired position.
- 2. Point the IR Remote Control at the front of the AT-HDVS-CAM.
- 3. Press the SET PRESET button.
- 4. Press the desired number on the IR Remote Control keypad to assign the position of the camera to the preset.



#### **Clearing a Preset**

Presets can be erased. It is not necessary to clear a preset, before saving a new camera position in the same preset. If a preset is saved to an existing preset, it will be overwritten.

- 1. Press the **CLEAR PRESET** button.
- 2. Press the desired number on the IR Remote Control keypad to clear the preset.



**NOTE:** To clear all presets, press and release the [#] key on the keypad, three times.

#### **Recalling Presets**

- 1. Point the IR Remote Control at the front of the AT-HDVS-CAM.
- 2. Press the number of the desired preset from the IR Remote Control keypad.
- 3. The camera will be set to the position defined by the preset.



### **Function List**

The included IR Remote Control provides a set of functions which can be used to change the behavior of the AT-HDVS-CAM. Each function is invoked by sequentially pressing the following series of keys on the keypad.

Function	Keystrokes
Clear all presets	[#] + [#] + [#]
Flip video horizontally and vertically	[*] + [#] + [9]
Reset username, password, and IP address	[*] + [#]
Switch video format to 1080p60	[#] + [#] + [0]
Switch video format to 1080p50	[#] + [#] + [1]
Switch video format to 1080i60	[#] + [#] + [2]
Switch video format to 1080i50	[#] + [#] + [3]
Switch video format to 720p60	[#] + [#] + [4]
Switch video format to 720p50	[#] + [#] + [5]
Switch video format to 1080p30	[#] + [#] + [6]
Switch video format to 1080p25	[#] + [#] + [7]
Switch video format to 720p30	[#] + [#] + [8]
Switch video format to 720p25	[#] + [#] + [9]



## WebGUI

The AT-HDVS-CAM includes a built-in webGUI, which allows easy management and control of all features. Follow the instructions below to access the webGUI.

- 1. Use an IP scanner to determine the IP address of the AT-HDVS-CAM. The default IP address is printed on an adhesive label, attached to the bottom of the camera base. Each camera has a unique default IP address.
- 2. Launch a web browser.
- 3. In the address bar, type the IP address of the AT-HDVS-CAM.
- 4. Enter the following information on the **Login** page.

Login:	root
Password:	Atlona

5. Click the **Login** button.

Technical Su	upport: US: 1 (877) 538-3976 International: 1 (408) 962-0515	AT-HDVS-CAM
Admin Login		
Username	root	
Password	XXXXXXXXXXXX	
Login	Clear	

6 The status page will display, giving all the general information of the AT-HDVS-CAM.

	1 (877) 536-3976 International: 1 (408) 962		AT-HDVS-C
Home	System Informatio	n Download Log	
Status	Model	AT-HDVS-CAM	
Firmware	MAC Address	B8:98:D4:01:FA:49	
Device Settings	Serial Number	135513	
Device Settings	MCU Firmware	V0.0.0 0-0-0	
System	Camera Firmware	V2.3.7 2017-9-15	
NetWork	AF Firmware	V3.0.2 2017-4-21	
User Reset	<u> </u>		
Reber			
Visual Settings			
Picture			
Focus			
Exposure			
Noise Reduction			
OSD			

7 Select firmware from the side menu.

	505.370 International: 1 (408) 092.6515	AT-HDVS-CAM
Home  Status Firmware  Device Settings  System System User	Firmware Status           System           Mcu         V0.0.0.0-0.           Camera         V2.3.7.2017-9-15           Auto Focus         V3.0.2.2017-4-21           Check for the most recent Imware updated	
Reset     Visual Settings     Picture     Focus     Exposure     Noise Reduction     OSD	Firmware Update Update File Update File Update File	
Camera Control Logout		



#### System

MCU - Displays the current OSD software.

Camera - Displays the current unit software.

Auto Focus - Displays the software for auto focus.

#### **Firmware Update**

Browse - Select browse and search the local computer for the firmware.

Update - Load the selected file to the unit.

		0	
Technical Support: US: 1 (877) 53	6-3976 International: 1 (408) 962-051	5	AT-HDVS-CAM
Home	Information		
Status	mormation		
• Firmware	Device Name	AT-HDVS-CAM	
Device Settings	Device ID	1	
System		Save Cancel	
NetWork     User	Time		
Reset	Date Format	YYYY-MM-DD 🔻	
Visual Settings	Date Separator	1	
	Zone	(GMT+08:00)Beijing, Hongkong 💌	
Picture     Focus	Hour Type	24 Hours 🔻	
Exposure	NTP Enable		
Noise Reduction	Update Interval	1 day 🗸	
• OSD	Host URL	time.nist.gov	
Camera	Host Port	123	
Control		Save Cancel	
Logout	Time Synchronization	1	
	Sync Type	Computer Time	
	Computer Time	2017-09-25 18:24:51	

#### Information

Device Name - Displays the SKU of the unit.

Device ID - Displays the ID of the AT-HDVS-CAM.

#### Time

Date Format - Select how the date will display on video and saved files.

Date Separator - Select the symbol to display between date format.

Zone - Select the time zone for the camera.

Hour Type - Select the way the time displays through the day.

NTP Enable - Enable or disable time synchronization.

Update Interval - Decide the amount of time between synchronizations.

Host URL - The unit will synchronize to the time of the url typed in this field.

Host Port - Type the port to ensure communication between the camera and the host URL.

#### **Time Synchronization**

Sync Type - Decide the device the camera will sync to.

Computer Time - Displays the current time of the selected synchronization type.

8 Select network from the side menu.



Technical Support: US: 1 (	77) 536-3976 International: 1 (408) 962-0515	AT-HDVS-CAN
Home	Network Settings	
Status Firmware	DHCP OFF	
	IP Address 192.168.1.254	]
Device Settings	Subnet 255.255.255.0	]
System	Gateway 0.0.0.0	]
NetWork User	MAC Address B8:98:D4:01:FA:49	]
Reset	Save Cancel	
Visual Settings	Port Settings	
Picture	Data 3000	1
Focus Exposure	Web 80	]
Noise Reduction	Onvif 2000	Ĩ
OSD	Soap 1936	Ĩ
Camera	RTMP 1935	Ĩ
	Rtsp 554	]
Control	Visca 1259	Ĩ
Logout		-
	Save Cancel	
	DNS Settings	
	Preferred 0.0.0.0	]
	Alternative 0.0.0.0	]

#### **Network Settings**

DHCP - Switch between DHCP (ON) and static (OFF).

IP Address, Subnet, Gateway - This will display the current IP settings on DHCP. When set to static, fill in the IP address, netmask, and gateway.

MAC Address - Displays the MAC Address of the AT-HDVS-CAM.

#### **Port Settings**

Data port - Set to a value between 0 and 65535. Default is 3000.

Web Port - Set to a value between 0 and 65535. Default is 80.

Onvif Port - Set to a value between 0 and 65535. Default is 2000.

Soap Port - Set to a value between 0 and 65535. Default is 1936.

RTMP Port - Set to a value between 0 and 65535. Default is 1935.

RTSP Port - Set to a value between 0 and 65535. Default is 554.

Visca Port - Set to a value between 0 and 65535. Default is 3001.

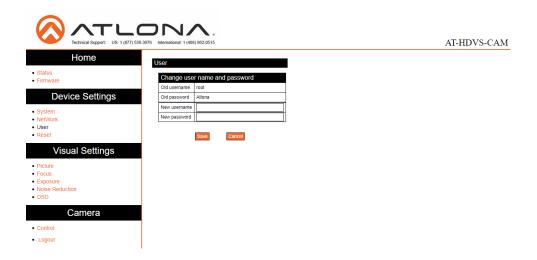
#### **I** NOTE: The AT-HDVS-CAM will restart automatically after the save button is pressed.

#### **DNS Settings**

Preferred - Set the preferred DNS server. Default is 0.0.0.0. Alternative - Set the alternate DNS server. Default is 0.0.0.0.

9 Select User from the side menu.





#### User

Update the username and password of the AT-HDVS-CAM webGUI.

10 Select Reset from the side menu.

	3976 International: 1 (408) 962-0515		AT-HDVS-CAM
Home	Easter Deast		
Status     Firmware	Factory Reset Reset to Factory Default Settings ?	Factory Reset	
	Reboot		
Device Settings	Reboot the Device ?	Reboot	
<ul> <li>System</li> <li>NetWork</li> <li>User</li> <li>Reset</li> </ul>			
Visual Settings			
Picture     Focus     Exposure     Noise Reduction     OSD			
Camera			
Control			
Logout			

#### **Factory Reset**

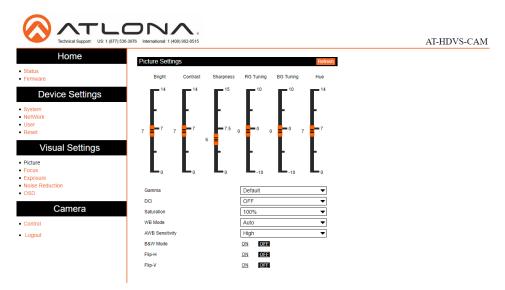
Factory Reset - Sets the device back to the original factory settings.

#### Reboot

Reboot - Reboots the AT-HDVS-CAM.

11 Select Picture from the side menu.





#### **Picture Settings**

Brightness - Set to a value between 0 and 14. Default is 6.

Contrast - Set to a value between 0 and 14. Default is 8.

Sharpness - Set to a value between 0 and 15. Default is 7.

Gamma - Set the gamma value of the camera. Values are default, 0.45, 0.50, 0.52, and 0.55.

DCI (Dynamic Contrast Improvement) - Set to a value between 1 and 8 or OFF.

Saturation - Set to a value between 60% and 200%. Default is 80%.

WB Mode - Select between Auto, 3000K, 3500K, 4000K, 4500K, 5000K, 5500K, 6000K, 6500K, 7000K, Manual, and OnePush.

AWB Sensitivity - Select between low, middle, and high.

B & W Mode - Toggle color between black and white (ON) and color (OFF). Default is off.

Flip-H - Flip the picture horizontally. Default is off.

Flip-V - Flip the picture vertically. Default is off.

#### 12 Select Focus from the side menu.

	536-3976 International: 1 (408) 962-0515		AT-HDVS-CAM
Home	Focus Settings	Refresh	
• Status • Firmware	Focus Mode	Auto	
Device Settings	Auto Focus Zone Auto Focus Sensitivity	Center   Low	
<ul> <li>System</li> <li>NetWork</li> <li>User</li> <li>Reset</li> </ul>			
Visual Settings			
Picture     Focus     Exposure     Noise Reduction     OSD			
Camera			
Control			
Logout			

#### **Focus Settings**

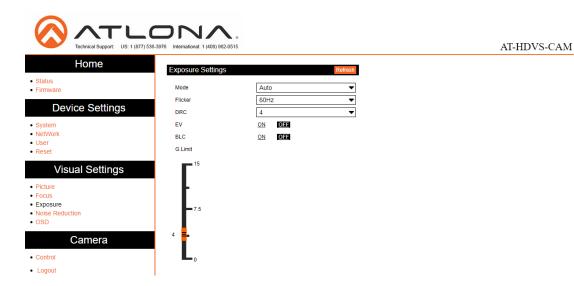
Focus Mode - Switch between Auto, Manual, or OnePush.

Auto Focus Zone - Switch the zone between Top, Center, Bottom, and All.

Auto Focus Sensitivity - Switch between High, Middle, and Low.

13 Select Exposure from the side menu.





#### **Exposure Settings**

Mode - Switch between Auto, Manual, SAE, AAE, and Bright.

Flicker - Switch between OFF, 50Hz, and 60Hz.

DRC (Dynamic Range) - Set to a value between 1 and 8, or OFF.

EV (Exposure Compensation) - Toggle EV on and off.

BLC (Backlight Compensation) - Toggle backlight compensation on and off.

G.Limit (Gain Limit) - Set to a value between 0 and 15. Default is 3.

14 Select Noise Reduction from the side menu.

	0-070 International: 1 (408) 962.0515	AT-HDVS-CAM
Home • Status • Firmware	Noise Reduction Settings         Refresh           NR-2D Reduction         3         •           NR-3D Reduction         3         •	
Device Settings  System NetWork User Reset	Dynamic Hot Pixel OFF 💌	
Visual Settings  Picture Focus Exposure Noise Reduction OSD		
Camera Control Logout		

#### **Noise Reduction Settings**

NR-2D Reduction - Set to a value between OFF, 1 and 7, or Auto.

NR-3D Reduction - Set to a value between OFF, 1 and 8.

Dynamic Hot Pixel - Set to a value between 1 and 5, or OFF.

15 Select OSD from the side menu.



	6.3976 International: 1 (406) 992-0515	AT-HDVS-CAM
• Status	OSD Settings	
Firmware	Show Time	
Device Settings	Show Title  Time Font Color  White	
System     NetWork	Title Font Color White  Scale Font with Resolution	
User     Reset	Main Stream OSD Font Size 48	
Visual Settings	Sub Stream OSD Font Size 48	
Picture     Focus     Exposure     Noise Reduction     OSD	USD Diset © Time ● Title ▲	
Camera		
Control	Save Cancel	
Logout		

#### **OSD Settings**

Show Time - Toggle the time on and off on the on screen display.

Show Title - Toggle the title on and off on the on screen display.

Time Font Color - Set the time's font color. Values are White, Black, Yellow, Red, and Blue.

Title Font Color - Set the time's font color. Values are White, Black, Yellow, Red, and Blue.

Scale Font with Resolution - Toggle the font scaling on and off.

Main Stream OSD Font Size - Set the font size between 8 and 200.

Sub Stream OSD Font Size - Set the font size between 8 and 200.

OSD Offset - Use the buttons to position the OSD information on the screen.

16 Select Control from the side menu.

	00000000000000000000000000000000000000	AT-HDVS-CAM
Home • Status • Firmware	Camera Control Pant-Tilt-Zoom Focus Mode Auto	
Device Settings  • System • NetWork • User • Reset		
Visual Settings  • Picture • Focus • Exposure • Noise Reduction • OSD	Stream W:H Record Snap Zoom Full	
Camera     Control     Logout		

#### Logout

#### **Camera Control**

Pan-Tilt-Zoom - Use the buttons to adjust the camera's view and position.

Focus Mode - Switch between Auto, Manual, and OnePush. Use the buttons to adjust the focus.

Preset - Set the current position settings to a preset and save.

Video buttons - Adjust video settings with these buttons.



# Appendix

## Specifications

Video			
HD/SD/VESA (all resolutions are @30/25/20/15/10/5Hz)	1080p, 720p, 1024x768, 1024x576, 960x540, 800x600, 640x360, 720x576, 640x480, 352x288, 320x240, 320x180, 176x144		
Viewing Angle	6.43° (telephoto), 60.9° (wide-angle)		
Effective Pixels	2.07 million		
Total Pixels	2.10 million		
Focus Settings	Auto / Manual		
F-Stop	f/1.6 - f/3.0		
Focal Length	4.7 mm - 47 mm		
Zoom Ratio	10:1		
Exposure Compensation	-7 ~ +7		
Minimum Illumination	0.5 lux @ f/1.8 with Automatic Gain Contol ON		
Signal-to-Noise Ratio (SNR)	> 55 dB		
Control Protocol	VISCA/Pelco-D/Pelco-P		
Pan Rotation	+170° to -170°		
Tilt Rotation	-30° to +90°		
Pan Control Speed	0.1 - 180° / sec		
Tilt Control Speed	0.1 - 80° / sec		
Temperature	Fahrenheit	Celsius	
Operating	14 to 122	-10 to 50	
Storage	-14 to 140	-10 to 60	
Operating Humidity (RH)	20% to 80%, non-condensing		
Storage Humidity (RH)	20% to 95%, non-condensing		
Power			
Consumption	12 W		
Supply	Input: 110 - 220 V AC, 50/60 Hz Output: 12 V DC, 1 A		
Dimensions	Inches	Millimeters	
H x W x D	6.59 x 5.90 x 5.90	167.5 x 150 x 150	
Weight	Pounds	Kilograms	
Device		1.4	
	3.08	1.4	
Certification	3.08	1.4	



## Index

## В

### Backlight Compensation 19

## С

Camera focus 18 home position 15 initialization procedure 14 panning / rotation 16 tilt 16 tilting and panning 17 zoom 18 Connection diagram 11 instructions 11 Contents package 8 Customer support 3

## F

FCC statement 6 Features 8

## 

Installation *11* IR Remote Control *10* 

## 0

Operating notes 3

### Ρ

Panel descriptions 9 Password resetting 21 Presets deleting 20, 21 recalling 20 saving 20

## S

Safety information 6 Specifications 29 Standby Mode 19

### V

Video flipping 21

## W

Warranty 4





© 2018 Attona Inc. All rights reserved. "Attona" and the Attona logo are registered trademarks of Attona Inc. All other brand names and trademarks or registered trademarks are the property of their respective owners. Pricing, specifications and availability subject to change without notice. Actual products, product images, and online product images may vary from images shown here.