



Professional Broadcast  
PTZ Joystick Controller

**CCU-IP**

OPERATION GUIDE

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**CAUTION:**

RISK OF ELECTRIC SHOCK.  
DO NOT OPEN.

**CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK)  
NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**WARNING**

*This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.*

**PRECAUTION**

*This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.*

**WARNING**

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, cause excessive heat or fire
3. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
4. Do not place conductive objects (e.g. screw drivers, coins, metal items, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.

Warning continues

5. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock
6. If any unusual smells or smoke come from the unit, stop using the product. Immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.
7. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way.
8. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.

## PRECAUTION

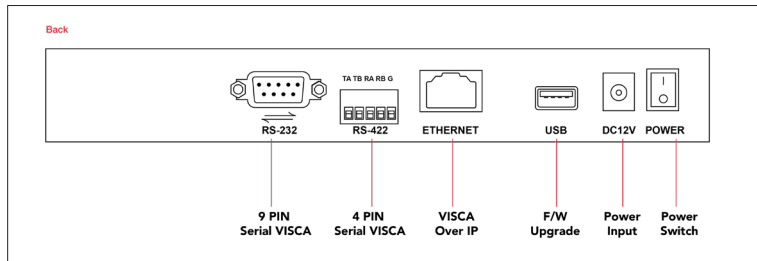
Please read this Operation Guide before installing and using the camera & retain this copy for your reference.

1. Always follow the instructions in the operations guide when applying power. Fire and equipment damage can occur if power is applied incorrectly. For the correct power supply, refer to the specifications page.
2. Do not use camera if fumes, smoke or a strange odor is emitted from the camera, or if it seems not functional correctly. Disconnect the power source immediately and consult with your supplier.
3. Do not use the camera in extreme environments where high temperatures or high humidity exists. Use the camera under conditions where temperatures are between 32°F ~ 104°F, and humidity is below 90%.
4. If installed close to a TV, radio transmitter, magnet, electric motor transformer or audio speakers the magnetic field generated may interfere with or distort the image.
5. Try to avoid fluorescent light reflections, unstable light conditions, direct pointing toward the sun. Use caution when operating the camera in the vicinity of spotlights or other bright lights and light reflecting objects.
6. To prevent damage, do not drop the camera or subject it to strong shock or vibration.

## FEATURES

- Capable of controlling up to 7 cameras via VISCA over UDP/TCP and Sony VISCA over UDP and Sony VISCA RS232/422.
- Onscreen LCD for accurate setting adjustments
- LED Silicone buttons for precision and prolong use
- Precise AIDA Function layout for full control of our PTZ Lineup
- PoE Compatible for single-wire runs
- Ergonomic design for comfort and ease of use
- Plug and play design for setup in minutes

## CCU-IP OUTPUT DIAGRAM

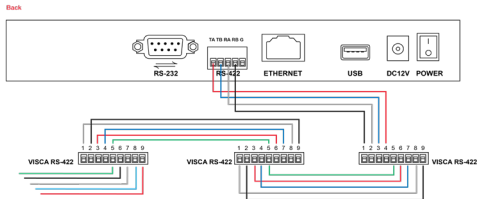


## RS422 Connection:

Using RS422 requires the specific connection labeled above. In order to chain more cameras, please go out of the first camera with the following wiring and into the next with the guide above. Once complete, please select protocol VISCA, and address and baudrate to set the camera.

### Tip:

Don't forget to set the ID address for each camera.



Joystick Camera#1

Ra < ..... > TXD IN-  
 Rb < ..... > TXD IN+  
 Ta < ..... > RXD IN-  
 Tb < ..... > RXD IN+

< ..... >

Camera#2

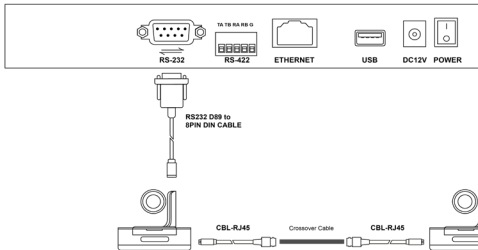
TXD OUT+ < ..... > RXD IN+  
 TXD OUT- < ..... > RXD IN-  
 RXD OUT+ < ..... > TXD IN+  
 RXD OUT- < ..... > TXD IN-

## RS232 Connection:

For RS232 connection, please connect a RS232 Visca cable (comes free with any AIDA PTZ Purchase) and connect the controller to the in port of the RS232 on the back of the camera. Any more cameras require additional RS232 mini-din cables, or CBL-RJ45 cables (purchased separately) for longer distance. Once complete, please select protocol VISCA, and address and baudrate to set the camera.

**Tip:** Don't forget to set the ID address for each camera.

Back

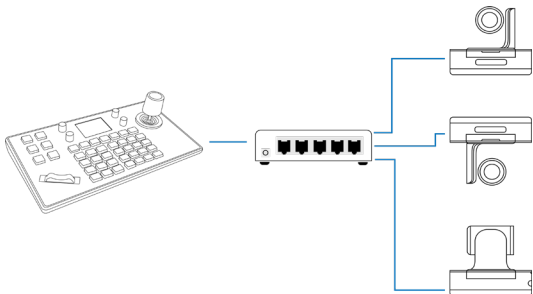


### RJ45 Connection:

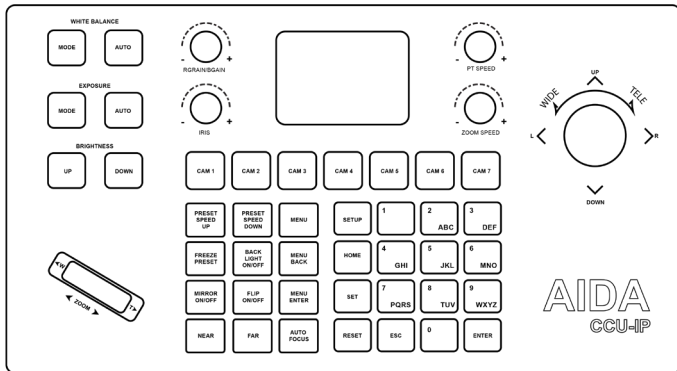
To connect, please make sure the cameras are on the same switch as the CCU-IP. The controller comes default with a static IP address of 192.168.1.108. If you want to change this, enter the camera menu by pressing the SETUP button, and look for network attributes. Here you can adjust the IP, or change the controller to DHCP mode.

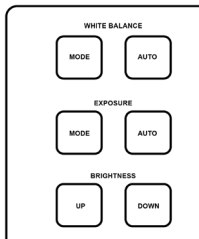
To connect to the camera, please have the IP addresses of the camera on hand, and add a network device. From there, plug in the camera number, Sony VISCA protocol, and IP address and port (52381 by default)

After confirming, the LCD screen will let you know if its connected or not.









### WHITE BALANCE

**White Balance Mode** – Toggle through the applicable white balance modes the camera has to offer.

**White balance Auto** – Instantly switch to Auto white balance mode.

### EXPOSURE

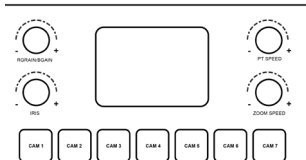
**Exposure Mode** – Toggle through the applicable exposure modes the camera has to offer.

**Exposure Auto** – Instantly switch to Auto exposure mode.

### BRIGHTNESS

**Brightness up** – instantly increase the brightness of the picture by an interval.

**Brightness down** – instantly decrease the brightness of the picture by an interval.



1: **RGAIN/BGAIN +/-** - Instantly change to manual white balance mode and change either the red or blue gain. By clicking the knob, you will select the next selection (default Rgain)

2: **PT SPEED** – Controls the pan tilt speed of the camera by intervals.

3. **IRIS**– instantly switch to manual auto exposure mode and adjust the opening and closing of the iris.

4. **ZOOM SPEED** – changes the speed at which the camera zooms by intervals.

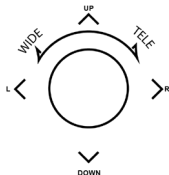
5. **CAMERA SELECTION** – used to select each camera set by the user. The button that is lit up is the currently selected camera.

PRESET SPEED UP	PRESET SPEED DOWN	MENU
FREEZE PRESET	BACK LIGHT ON/OFF	MENU BACK
MIRROR ON/OFF	FLIP ON/OFF	MENU ENTER
NEAR	FAR	AUTO FOCUS

- PRESET SPEED UP** - Increase the speed at which the camera moves between presets by intervals
- PRESET SPEED DOWN** – Decrease the speed at which the camera moves between presets by intervals
- MENU**– Open and close the Camera menu
- FREEZE PRESET** – toggle on and off the freeze preset command, which freezes the image inbetween preset usage
- BACKLIGHT ON/OFF** – Toggle on and off the backlight of the camera
- MENU BACK** - Used to go back in submenus of the camera
- MIRROR ON/OFF** – Toggle on and off to mirror the image of the camera
- FLIP ON/OFF**– Toggle on and off to flip the image of the camera (if the camera allows it)
- MENU ENTER** – Used to enter a submenu of the camera (if the camera allows it)
- NEAR** – Instantly switches to manual focus mode and initiates the focusing of the lens to nearby objects in intervals.
- FAR**– Instantly switches to manual focus mode and initiates the focusing of the lens to further objects in intervals.
- AUTO FOCUS** – Instantly switch back to auto focus so the PTZ auto focus on its own.

## SECTION: 3

SETUP	1	2 ABC	3 DEF
HOME	4 GHI	5 JKL	6 MNO
SET	7 PQRS	8 TUV	9 WXYZ
RESET	ESC	0	ENTER



- 1: **SET UP** - Enter the menu of the controller
- 2: **HOME** - Instantly recalls the PTZ to its home position
- 3: **SET** - Press to initiate a saving of a preset
- 4: **RESET** - Press to initiate a deletion of a preset
- 5: **ESC** - Used to go back in the camera control menu
- 6: **ENTER** - Used to enter a sub menu of the controller
- 7: **KEYPAD** - Used to recall and create presets.

	Upward		Downward		Left
Operating	Output Control	Operating	Output Control	Operating	Output Control
	Right		Zoom +		Zoom -

- 1: **JOYSTICK** - Used to pan tilt, and zoom the camera, as well as navigate in PTZ and Controller menus.
- 2: **ENTER** - Used to enter submenus in the controller

## Network Device

```

> Camera : -
Protocol :
IP Add  :
Port    :

```

**ADD NETWORK DEVICE**

- **CAMERA** : Using the keypad, select which number you would like to set the camera
- **PROTOCOL** : Using the joystick, cycle through the various protocols and choose the correct one.
- **IP ADD** : Enter the IP address of the camera you want to control
- **PORT** : Enter the VISCA port number of the camera (default for AIDA PTZ: 52381) power frequency in order to minimize video flicker.

**Aa:** *Once you press enter, you will be prompted back to the same submenu.  
Press escape to go back*

## Network Device

```

> Camera : -
Protocol :
Address  :
Baudrate :

```

**ADD ANALOG DEVICE**

- **CAMERA** : Using the keypad, select which number you would like to set the camera
- **PROTOCOL** : Using the joystick, cycle through the various protocols and choose the correct one
- **ADDRESS** : Enter the cameras physical address ID that you want to control
- **BAUDRATE** : Select the baudrate the camera is currently using

**Aa:** *Once you press enter, you will be prompted back to the same submenu.  
Press escape to go back*

## Device List

1/7

```
Camera :
Protocol :
IP Add. :
Port :
```

```
Protocol :
Address :
Baudrate :
```

## Static

```
> IP : . . . .
Gateway :
Mask :
```

## DEVICE LIST

- **1/7** : This sub menu allows you to see the protocol, address, and other important information of each camera.

## NETWORK ATTRIBUTE

- **DHCP** : Sets the camera to DHCP, automatically taking a IP address assigned by a router

**Aa**: *Once complete, the controller will restart.*

- **STATIC IP** : Allows you to manually set the cameras IP address.
  - IP: Using the keypad, manually set the keyboards IP address
  - Gateway: Using the keypad, manually set the keyboards gateway address
  - Mask: Using the keypad, manually set the keyboards gateway mask

**Aa**: *Once complete, the controller will restart.*

## Keyboard Setting

1. Add Network Device
2. Add Serial Device
3. Device List : Inquire
4. Network Attribute : Static
- > 5. Backlight : ON
6. Button Tone : ON
7. Factory Reset
8. System Info
9. VISCA Response : Enable

## System Info

Software Version :  
 Hardware Version :  
 Web Version :  
 Gateway :  
 Sub Netmask :

**BACKLIGHT**

Toggle on or off the button sounds of the keyboard.

**BUTTON TONE**

Toggle on or off the button sounds of the keyboard.

**FACTORY RESET**

Factory reset the camera

**Aa:** *Once complete, the controller will restart.*

**SYSTEM INFO**

Enter this submenu to get the controllers information

- a. Software Version: Displays the software version of the controller
- b. Hardware Version: Displays the hardware version of the controller
- c. Web Version: Displays the web version of the controller
- d. Gateway: Displays the current gateway of the controller
- e. Subnet Mask: displays the current subnet mask of the controller.

### ADDING A NETWORK DEVICE (IP)

- 1.** Ensure that all connections to the controller and network are fastened. Please power the controller and allow it ample time for its first boot up.
- 2.** Once the controller has booted up, please preset the [SETUP] button on the camera to enter the menu.
- 3.** In the controller menu, please select Add Network Device.
- 4.** In the Camera section, please use the keypad on the controller to assign a number to this device. This will be used to recall it with the CAM buttons. Press enter once set.
- 5.** Next, select the correct protocol for the camera. Cycle through the options. If you are using any AIDA PTZ with a network connection, please select SONY VISCA(UDP). Once set, press enter.
- 6.** Under IP, using the keypad enter the correct IP address of the camera. Make sure that they are on the same network for this to work. Press enter once done.
- 7.** For Port, please enter the VISCA port of the camera. For our PTZ's, the default is 52381. You can find it in your PTZ camera settings as well. Press enter when done.
- 8.** It will say successfully at the bottom if it worked. Press ESC to exit the menus, and press the designated CAM button to see if you can control the camera.
- 9.** Repeat the steps to add more cameras.

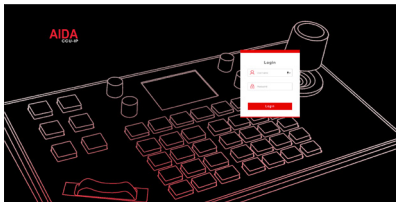


### ADDING A SERIAL DEVICE

1. Ensure that all connections to the controller and network are fastened. Please power the controller and allow it ample time for its first boot up.
2. Once the controller has booted up, please preset the [SETUP] button on the camera to enter the menu.
3. In the controller menu, please select Add Analog Device.
4. In the Camera section, please use the keypad on the controller to assign a number to this device. This will be used to recall it with the CAM buttons. Press enter once set.
5. Next, select the correct protocol for the camera. Cycle through the options. Once set, press enter.
6. Under Address, enter the camera's set address ID using the keypad. Once complete, press enter.
7. For Baudrate, cycle through the selection of baudrates and match your PTZ's. Once complete, press enter. It will say successfully at the bottom if it worked. Press ESC to exit the menus, and press the designated CAM button to see if you can control the camera. You might have to hold the joystick enter button down to enter serial mode if you have not already done it.
8. Repeat the steps to add more cameras.

The CCU-IP will natively come at the IP address of **192.168.1.108**.

Please note that if you are not able to access the web browser and are getting errors, recheck your network and make sure that the CCU-IP's IP address matches.



### CONNECTING TO THE WEB PORTAL

1. Log into your main browser and attempt to connect to the IP address of the camera. Natively the IP address is 192.168.1.108. You should get an image like this:
2. Log in using the following default credentials:

Username: admin

Password: 111111

#### Note

If you forget your credentials, you can manually default the credentials by factory resetting the board via the controller setup menu.

Camera	IP	Port	Network Protocol	Baudrate	Address	Serial Protocol	Modify
1		52381	UNKNOWN	0	1	UNKNOWN	
2		52381	UNKNOWN	0	2	UNKNOWN	
3		52381	UNKNOWN	0	3	UNKNOWN	
4		52381	UNKNOWN	0	4	UNKNOWN	
5		52381	UNKNOWN	0	5	UNKNOWN	
6		52381	UNKNOWN	0	6	UNKNOWN	
7		52381	UNKNOWN	0	7	UNKNOWN	

Camera	IP	Port	Network Protocol	Baudrate	Address	Serial Protocol	Modify
1		52381	UNKNOWN	0	1	UNKNOWN	
2		52381	UNKNOWN	0	2	UNKNOWN	
3		52381	UNKNOWN	0	3	UNKNOWN	
4		52381	UNKNOWN	0	4	UNKNOWN	
5		52381	UNKNOWN	0	5	UNKNOWN	
6		52381	UNKNOWN	0	6	UNKNOWN	
7		52381	UNKNOWN	0	7	UNKNOWN	

Camera:

Mode:

Network:

Protocol:

IP:

Port:

Serial:

Protocol:

Baudrate:

Address:

Save

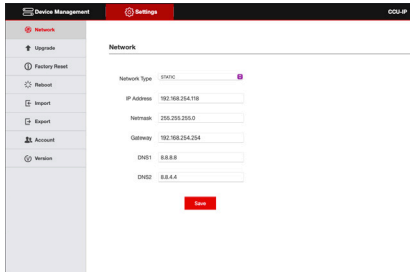
## USING THE WEB PORTAL

The web portal has a variety of tools created to help optimize your setup experience with the CCU-IP fast and efficiently.

On the main screen, you are able to modify each camera's setting slot.

Set up instructions using the web portal are the same as adding an IP camera via the LED screen.

Please follow those directions in the previous **Section 4**.



## SETTINGS TABS

Under the settings tab you will find a couple of optimizable settings.

1. **Network:** Adjust the CCU-IP's network settings, such as DHCP or Static IP addresses, as well as changing the Static IP address settings.
2. **Upgrade:** Used for potential future firmware upgrades. As of now there is no new firmware released.
3. **Factory Reset:** Clicking the reset button will factory reset the controller. Do note that if you changed your IP address, the CCU-IP will factory default back to IP Address 192.168.1.108.
4. **Reboot:** Clicking the restart button will power cycle the controller. No settings will be lost.
5. **Import:** Allows you to import any saved AIDA CCU-IP preset files. This will change all of your settings.
6. **Export:** Allows you to export your current AIDA CCU-IP settings into a preset file, which can later be imported to the same or other controllers.
7. **Account:** Create multiple user accounts to access the controller.
8. **Version:** Displays the current CCU-IP version numbers.

### FAQ

- **My device is not powering on:**

Please make sure that you are using the given power supply, or PoE+ power supply that is recommended.

- **My device is stuck initializing:**

Please remove the power source and restart it again. If the problem persists, please contact our support team via email or phone.

- **My device is connected to the network, but I can't open the web interface:**

Please ensure you are connecting to the correct IP address. Also double check to see if your CCU-IP is on the same IP address as your cameras and network. Please refer to video references on our Youtube Channel if you are unsure how to do that.

- **My device is connected to my camera, but I can't control:** Please ensure that the connections are fastened. Follow the specific steps mentioned in adding IP or Analog cameras. If the problem still persists, please contact our support team via email or phone.

- **I don't remember my password to the web interface:**

Please factory reset your device through the LCD screen on the controller. This will reset the all saved settings, including network, cameras and account info.

- **My third-party camera isn't being controlled:**

Please ensure the correct settings for your third-party camera is correct. The above process is only tested on AIDA Imaging cameras, so third-party cameras may have a different settings which will need to be tweaked on the controller. It would be best to reach out to our support team for more info on how to connect.

- **Some controls aren't working:**

Please note that all functions on the keyboard controller are made for the most up to date PTZ firmware for our cameras. IF your AIDA Imaging PTZ camera is not up to date, there will be functions that will not work on your controller. Also note that all third-party cameras functions may not be fully supported, so use at your own risk.

**SYNCHRONIZATION**

<b>Control Protocol</b>	VISCA, VISCA over IP
<b>Control Interface</b>	RS-232 / RS-422 / RJ-45
<b>Number of Camera Supported</b>	7
<b>Dimensions</b>	12.625 x 7 x 4.25 (W x D x H)
<b>Weight</b>	4lbs ( Net Weight )
<b>Power</b>	PoE / 12VDC

*\*Specification are subject to change without notice.*

**Visit us:**

[www.aidaimaging.com/support](http://www.aidaimaging.com/support)

**E-mail us:**

[support@aidaimaging.com](mailto:support@aidaimaging.com)

**Give us a Call:**

Toll Free: 844.631.8367 | Tel: 909.333.7421

Operating Hours: Mon-Fri | 8:00am – 5:00pm PST



#### Disposal of Old Appliances

1. When this crossed-out wheel bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream in accordance to laws designated by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.



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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.