

VISCA Camera Control Unit & Software

AIDA



CCS-USB



SW for Windows

SW for Mac

Operation Guide

Ver. 1.0 / Oct 2016

**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.

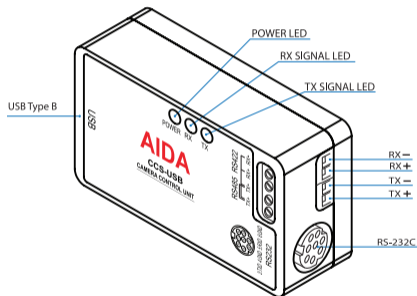
1. Be sure to use only the standard cable that is specified in the specification sheet. Using any other cable or pin layout could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the cable or opening the housing may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect external power source to the product.
4. When connecting VISCA cable, fasten it securely and firmly. A falling unit may cause personal injury.
5. Do not place conductive objects (e.g screw drivers, coins, metal items, etc.) or containers filled with water on top of the device. Doing so may cause personal injury due to fire, electric shock, or falling objects.

6. Do not install the device in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
7. 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.
8. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way.
9. 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 converter & 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 input, refer to the specifications page.
2. Do not use the device if fumes, smoke or a strange odor is emitted from the device, or if it seems not functional correctly. Disconnect the device from all equipments immediately and consult with your supplier.
3. Do not use the device in extreme environments where high temperature or hi humidity exists.
Use the device under conditions where temperatures are between 32°F ~ 104°F, and humidity is below 90%.
4. To prevent damage, do not drop the device or subject it to strong shock or vibration.



CCS-USB

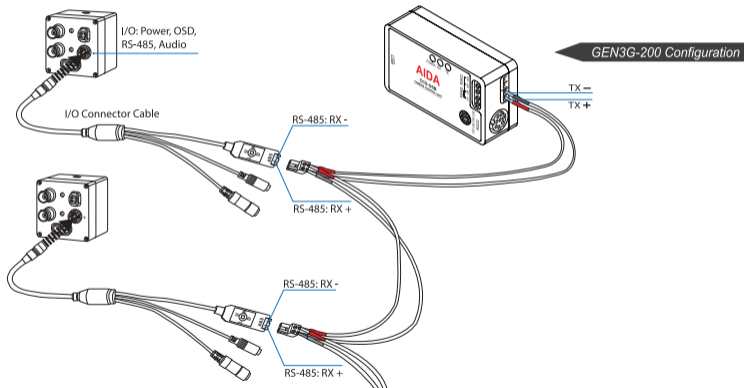


- SONY VISCA Compatible and work with most of major VISCA protocol products.
- Support PELCO Pan / Tilt / Zoom / Focus protocol.
- Control up to 7 VISCA products.
- User friendly software interface.
- Support RS-232, RS-485, RS-422.
- USB interface for easy installation.
- Windows and MAC OSX compatible.
- Compact and rugged design.

Connection: Using RS-485

When connecting through RS-485 connection.

- 1 Connect TX+ of CCS-USB to RX+ of GEN3G-200 and TX- of CCS-USB to RX- of GEN3G-200.

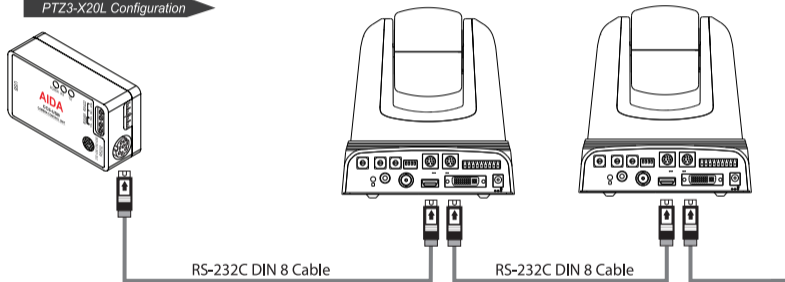


- 2 Connect another pair of 485 cable to the same connector when connecting multiple cameras.

When connecting through RS-232 connection.

- 1 Use VISCA 8-pin Din cable to connect CCS-USB to 232 Input.

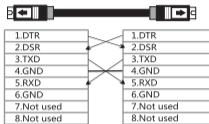
PTZ3-X20L Configuration



- 2 Use VISCA RS-232C OUT on the camera to connect to RS-232C IN on the next camera. Daisy chaining is up to 7 cameras.
- 3 When using third party cameras, make sure the pin layout before running the RS-232C cable.

VISCA IN/OUT

RS-232C DIN 8 Cable Pin Assignment



- 1 If you are using PTZ3-X20L, follow the cable pin assign shown in the table.
- 2 If you are using other cameras with RS-232, be sure to check the pin assignment. You may need to customize the cable.

RS-232C Mini Din to RJ45 Gender Changer Pin Assignment

- 1 CCS-USB comes with 8 pin mini Din connector to RJ45 gender changer. If you need to customize cable pin assignment, use CAT5/6 cable to change the cable layout.



- 2 When using the gender changer in pairs, make sure to use crossover cable.



1 Download Software.

MAC version of AIDA CCS is available on AIDA website.

Download software from www.aidaimaging.com under support page.

2 Driver Installation.

Most of recent MAC has built-in driver for CCS-USB.

If your MAC does not recognize CCS-USB, download the driver file from www.aidaimaging.com under support page.

When driver is properly installed, CCS-USB will appear as follow.

The screenshot shows the 'System Information' window on a MacBook Air. The 'Hardware' section is expanded to 'USB'. The 'USB Device Tree' shows a hierarchy: USB 2.0 Bus > Hub > FT232R USB UART. Below this, the 'Host Controller Driver' is listed as 'AppleUSBEHCIPCI'. The 'Hub' section shows details for the 'FT232R USB UART' device, which is highlighted with a red box. A blue arrow points from the text 'USB 2.0 Bus FT232R USB UART' on the right to the highlighted device name in the screenshot.

Host Controller Driver: AppleUSBEHCIPCI	
PCI Device ID:	0x1c26
PCI Revision ID:	0x0005
PCI Vendor ID:	0x8086
Hub:	
Product ID:	0x2513
Vendor ID:	0x0424 (SMSC)
Version:	3.03
Speed:	Up to 480 Mb/sec
Location ID:	0x010000 / 1
Current Available (mA):	1000
Current Required (mA):	2
Extra Operating Current (mA):	0
Built-in:	Yes
FT232R USB UART:	
Product ID:	0x6001
Vendor ID:	0x0403 (Future Technology Devices International Limited)
Version:	6.00
Serial Number:	A95F7F7L
Speed:	Up to 12 Mb/sec
Manufacturer:	FTDI
Location ID:	0x0110000 / 2
Current Available (mA):	1000
Current Required (mA):	90
Extra Operating Current (mA):	0

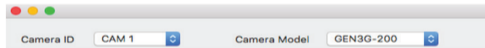
USB 2.0 Bus FT232R USB UART

Software & Driver: Mac

- 3 Launch AIDA CCS-USB software and
- 4 Select CCS-USB device which appears from System Report.



- 5 Select Baudrate. Make sure the selected baudrate matches the baudrate set from the camera.
- 6 Click Open button to initiate communication.
- 7 Select Camera ID and choose Camera Model.



AIDA CCS V1

Camera ID: CAM 1 Camera Model: GEN3G-200 usbserial-A9SF... 9600 Open

GEN3G-200

IMAGE

Contrast: [Slider]

Saturation: [Slider]

Sharpness: [Slider]

Day / Night: COLOR NIGHT Effect: OFF NEGATIVE

Noise Reduction: OFF LOW MIDDLE HIGH

Gamma: STANDARD STRAIGHT LOW MIDDLE HIGH

Flip: OFF Defog: OFF

Mirror: OFF Image Stabl: OFF

EXPOSURE

AUTO MANUAL SHUTTER FLICKERLESS

Exp. Comp: [Slider]

Gain: [Slider]

AGC Limit: [Slider]

Shutter: INDOOR OUTDOOR DEBLUR

Sens-Up: [Slider]

WHITE BALANCE

AUTO PUSH MANUAL ATW 3000K 5000K 8000K

BACKLIGHT

OFF SPOT WDR BLC

SYSTEM

INITIALIZE CAM INIT

MEMORY SET

RECALL

GENLOCK / AUDIO

GenLock: OFF

Audio: OFF

Volume: [Slider]

OSD

UP

RIGHT ENTER LEFT

DOWN

PTZ-X20L Interface: Mac

AIDA CCS V1

Camera ID: CAM 1 Camera Model: PTZ-X20L usbserial-A9SF... 9600 Open

PTZ-X20L

PAN TILT ZOOM

L/U UP R/U Zoom: WIDE TELE

LEFT HOME RIGHT Focus: NEAR FAR

L/D DOWN R/D Z/F Speed

Pan Tilt Speed Focus: AUTO MANUAL PUSH

Preset Save: 1 2 3 4 5 6

Preset Move: 1 2 3 4 5 6

WHITE BALANCE

AUTO PUSH MANUAL ATW INDOOR OUTDOOR

IMAGE

Saturation

Sharpness

Picture Effect: OFF B&W Negative

Noise Reduction: OFF LOW MIDDLE HIGH

Day / Night: DAY NIGHT AUTO

WDR: OFF

EXPOSURE

AUTO MANUAL SHUTTER IRIS BRIGHT

Exp. Comp: OFF

Gain

Gain Limit

Shutter

IRIS

Bright

Slow Shutter: OFF

The screenshot displays the AIDA CCS V1 software interface on a Mac. At the top, the window title is "AIDA CCS V1". Below the title bar, there are three colored window control buttons (red, yellow, green) on the left. The main interface is divided into several sections:

- Camera Information:** Camera ID is set to "CAM 1", Camera Model is "3rd Party", and the serial port is "usbserial-A9SF..." with a baud rate of "9600". An "Open" button is located to the right.
- 3rd Party:** A sub-section header.
- PAN TILT ZOOM:** Contains buttons for L/U, UP, R/U, Zoom (WIDE, TELE), LEFT, HOME, RIGHT, Focus (NEAR, FAR), L/D, DOWN, R/D, Z/F Speed (slider), Pan Tilt Speed (slider), Focus (AUTO, MANUAL, PUSH), Preset Save (1-6), and Preset Move (1-6).
- WHITE BALANCE:** Contains buttons for AUTO, PUSH, MANUAL, INDOOR, and OUTDOOR, with a large empty text area below.
- IMAGE:** Contains Picture Effect (OFF, B&W, Negative), Day / Night (DAY, NIGHT, AUTO), and Backlight (OFF).
- EXPOSURE:** Contains buttons for AUTO, MANUAL, SHUTTER, and IRIS, with sliders for Gain, Shutter, and IRIS.
- SEND (HEX):** Contains a text input field and a "Send VISCA Command" button.

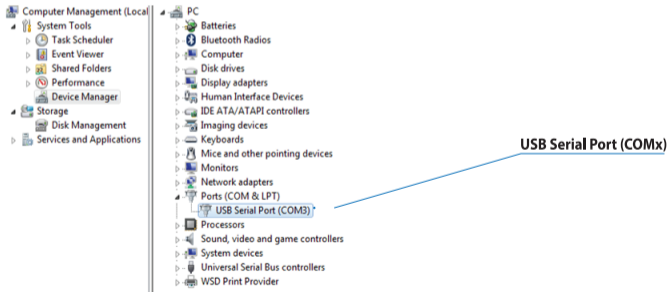
Software & Driver: Windows

1 Download Software.

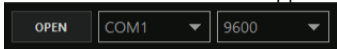
*Windows version of AIDA CCS is available on AIDA website.
Download software from www.aidaimaging.com under support page.*

2 Driver Installation.

*Most of recent Windows has built-in driver for CCS-USB.
If your PC does not recognize CCS-USB, download the driver file from www.aidaimaging.com under support page.
When driver is properly installed, CCS-USB will appear as follow.*



- Launch AIDA CCS-USB software and
- Select CCS-USB device which appears from Device Manager.



- Select Baudrate. Make sure the selected baudrate matches the baudrate set from the camera.
- Click Open button to initiate communication.
- Click on camera model name below Camera ID to choose between three different camera models.

CAM1	CAM2	CAM3	CAM4	CAM5	CAM6	CAM7	OTHER
PTZ3-X20L	PTZ3-X20L	GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	CAM 8
GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	GEN3G-200	CAM 8 ▼
PTZ3-X20L	PTZ3-X20L	PTZ3-X20L	PTZ3-X20L	PTZ3-X20L	PTZ3-X20L	PTZ3-X20L	
3rd Party	3rd Party	3rd Party	3rd Party	3rd Party	3rd Party	3rd Party	

- Once the dropdown menu is open, camera model can be assigned from CAM1 through CAM7.

GEN3G-200 Interface: Win

AIDA Version 1.0

CAM1 CAM2 CAM3 CAM4 CAM5 CAM6 CAM7 OTHER
GEN3G-200 PTZ3-X20L GEN3G-200 GEN3G-200 GEN3G-200 GEN3G-200 GEN3G-200 CAM 8 Orange OPEN COM1 9600

IMAGE

Contrast

Saturation

Sharpness

Day / Night Effect

Noise Reduction

Gamma

Flip Off DEFOG Off

Mirror Off Image Stabilizer Off

EXPOSURE

AUTO SHUTTER MANUAL FLICKERLESS

Gain

Shutter

WHITE BALANCE

AUTO MANUAL PUSH ATW 3000K 5000K 8000K

One Push Trigger

BACKLIGHT

OFF WDR BLC SPOT

SYSTEM

INITIALIZE

Memory

GENLOCK / AUDIO

GENLOCK Off

Audio Off

Volume

OSD

AIDA Version 1.0

CAM1 CAM2 CAM3 CAM4 CAM5 CAM6 CAM7 OTHER
 PTZ3-X20L PTZ3-X20L GEN3G-200 GEN3G-200 GEN3G-200 GEN3G-200 GEN3G-200 CAM 8

Orange OPEN COM1 9600

PAN TILT ZOOM

Joystick Key

Zoom **WIDE** **TELE**

Focus **NEAR** **FAR**

Z/F Speed

Focus Mode **AUTO** **MANUAL** **PUSH**

PRESET

Preset No. Nick Name

Preset1

SAVE **MOVE**

WHITE BALANCE

AUTO **PUSH** **MANUAL** **OUTDOOR** **ATW** **INDOOR**

Red Gain

Blue Gain

IMAGE

Saturation

Sharpness

Picture Effect **OFF** **B&W** **Negative**

Noise Reduction **OFF** **LOW** **MIDDLE** **HIGH**

Day / Night **DAY** **NIGHT** **AUTO**

WDR Off

EXPOSURE

AUTO **MANUAL** **SHUTTER** **IRIS** **BRIGHT**

EXP. COMP Off

Gain

Gain Limit

Shutter

IRIS

Bright

Slow Shutter Off

Third party interface: Win

The screenshot shows the AIDA software interface for controlling a camera. The window title is "AIDA" and the version is "Version 1.0". The interface is divided into several sections:

- Top Bar:** Contains camera selection tabs (CAM1 to CAM8), a color dropdown menu (set to "Orange"), an "OPEN" button, a COM port dropdown (set to "COM1"), and a baud rate dropdown (set to "9600").
- PAN TILT ZOOM:** Features a joystick and key control area, zoom buttons (WIDE, TELE), focus buttons (NEAR, FAR), a Z/F Speed slider, and focus mode buttons (AUTO, MANUAL, PUSH).
- PRESET:** Includes fields for Preset No. (set to "PRESET 1") and Nick Name, with "SAVE" and "MOVE" buttons.
- WHITE BALANCE:** Offers selection between AUTO, MANUAL, PUSH, OUTDOOR (selected), and INDOOR.
- IMAGE:** Contains picture effect buttons (OFF, B&W, Negative), day/night buttons (DAY, NIGHT, AUTO), and a backlight slider (set to "Off").
- EXPOSURE:** Provides controls for Gain, Shutter, and IRIS, each with a slider.
- SEND [HEX]:** Includes a text input field and "Send VISCA Command" and "CLEAR" buttons.

1. CCS-USB does not control my camera.

- Make sure driver is installed properly.
- Check Camera ID and Baudrate.
- Check if the connected camera supports VISCA protocol.
- Check if Power LED is on.
- Check cable connections and pin assignments.

2. Does CCS-USB require power adaptor?

- CCS-USB acquires power through USB cable. Additional power is not required.

3. How do I control multiple cameras?

- Daisy chain connection is required to control multiple cameras. Make sure that camera support daisy chain connection.
- CCS-USB allows up to 7 VISCA devices.

4. Can I use AIDA software with other control devices?

- AIDA software requires CCS-USB to function properly.

5. What is the maximum cable distance?

- RS-232 standard is limited up to 15 m(50 ft). If the cable is longer than the limit, then CCS-USB may not respond properly.
- RS-485 standard is limited up to 1,200m(4,000 ft).

6. Does CCS-USB work with any VISCA compatible products?

- Most of VISCA compatible products will work with CCS-USB.

AIDA



Disposal of Old Appliances

1. When this crossed-out wheeled 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 with 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.