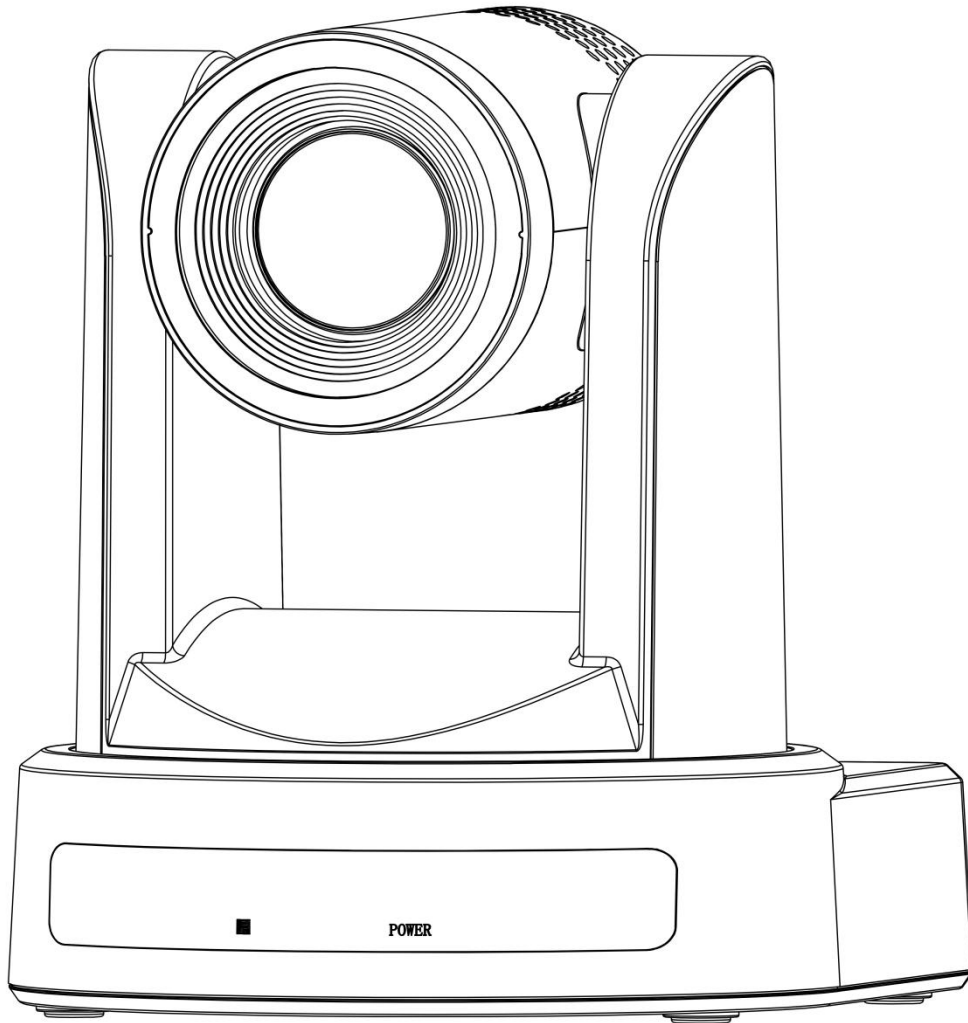


HD PTZ Video Camera

User Manual



Foreword

Thank you for selecting this series of Video Conference Cameras.
Please read and understand this Operations Manual before using the product.

Warning!

To prevent this product or any other products connected from damage, this product can only be used within a predetermined range.

- Avoid raining or moisture environment;
- Do not remove product casing. Use certified personnel for installation and reparation;
- Do not use beyond the limitation of temperature, humidity or power voltage range;
- When cleaning the camera lens, use a soft, dry cloth; when seriously dirty, please use a mild detergent and wipe gently. Do not use strong cleaning agents or corrosive cleaner so as not to scratch the lens and affecting image quality.

Notes

This manual covers the installation and use of a variety of models of our company's products, please distinguish the products' features, parameters, and their installation instructions according to the ordered products model No..

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Attentions

▼ Electric Safety

Installation and operation must accord with electric safety standard.

▼ Caution to transport

Avoid stress, vibration and soakage in transport, storage and installation.

▼ Polarity of power supply

The power supply of the product is ±12V, and the polarity of the power plug is shown as following.



▼ Careful of installation

Do not move the camera by seizing the camera head. Do not rotate camera head by hand; otherwise, mechanical trouble will occur.

This series item must put on the smooth desk or platform, and it cannot be installed slant ways;

If the camera is installed on TV or computer, the base can be fixed by four double-sided adhesive trays.

The product housing is made up of organic material, it is prohibited to contact any liquid, gas or solid material that may cause shell corrosion, and make sure no obstacle in rotation range during installation.

Do not power on before installation is completed.

▼ Don't disassemble discretionarily

We are not responsible for any unauthorized modification or dismantling.

⚠Attention!

Electromagnetic filed under certain rate may affect camera image!

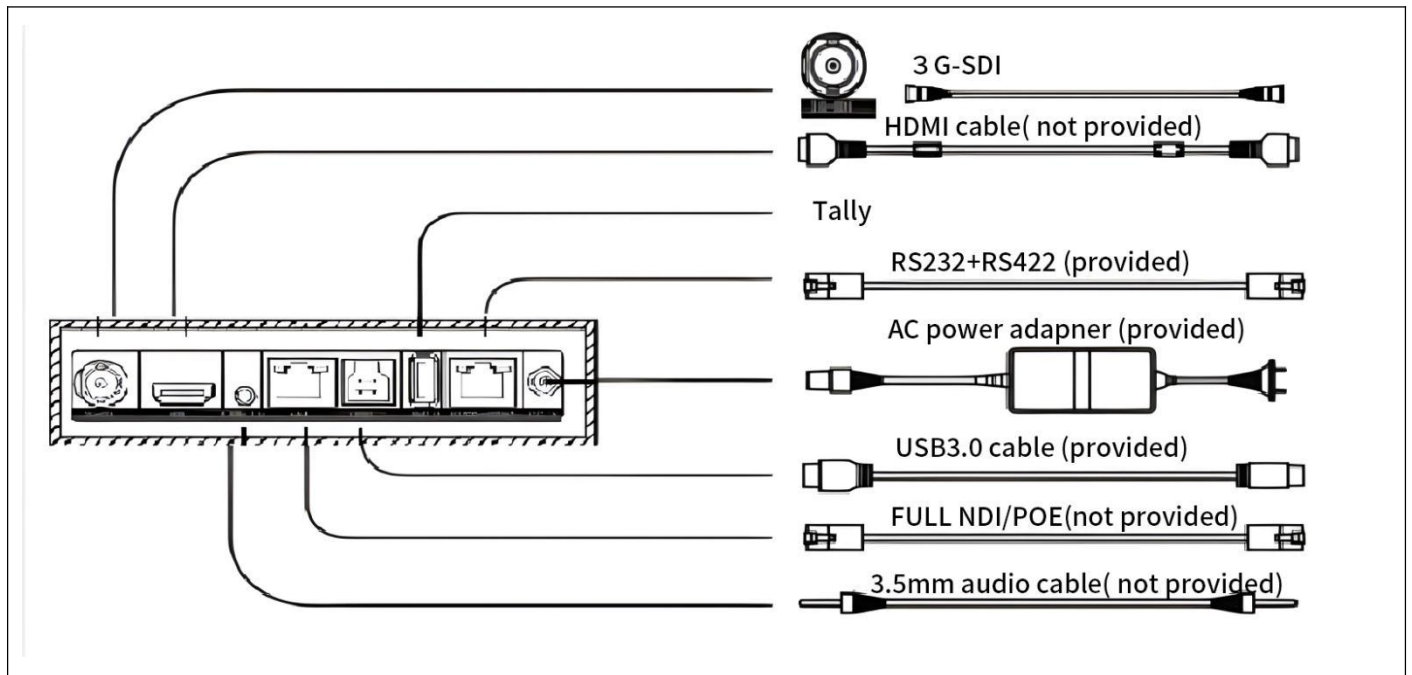
Accessory

When you unpack, check that all the supplied accessories are included:

Camera.....	1
Power Adapter.....	1
3m USB3.0 line (provided)	1
Cable	1
Control port junction box.....	1
Mounting bracket (wall bracket or hoisting bracket) (provided).....	1
Remote Controller	1
User Manual.....	1

Quick Start

1、 Please make sure all wiring are correct before power on.



Camera Performance

- **Precise positioning, quiet and smooth PTZ control**

By adopting high accuracy Algorithm for PTZ Control, precise location($\pm 0.1^\circ$), it works extremely quiet and moves smoothly and very quickly to designated position.

- **Real HD image**

Adopt 1/2.8 inch, 5.0 effective megapixels HQ“Exmor R” CMOS Sensor, achieve 1920*1080 high quality image with super high resolution. Focus on meeting the need for picture fluency while ensuring the the ultra-high definition.

- **Low noise and high SNR:**

Adopt advanced 2D&3D noise reduce technology and low noise CMOS sensor to reduce the noise.

- **12X 20x optical zoom 12x digital zoom**

- **1080P60 HDMI video output**

Support 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59etc.HD video formats.

- **1080P60 USB3.0 video output**

Support 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59etc.HD video formats.

- **1080P60 FULL NDI video output**

Support 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59etc.HD video formats.

- **3G-SDI HD output**

Supports various high-definition video formats, such as 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59etc.

- **USB3.0 output**

Support 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59etc.HD video formats.

- **Multiple control interface**

support NDI, RS232, RS422/485, infrared remote control and so on. It can be controlled in different ways.

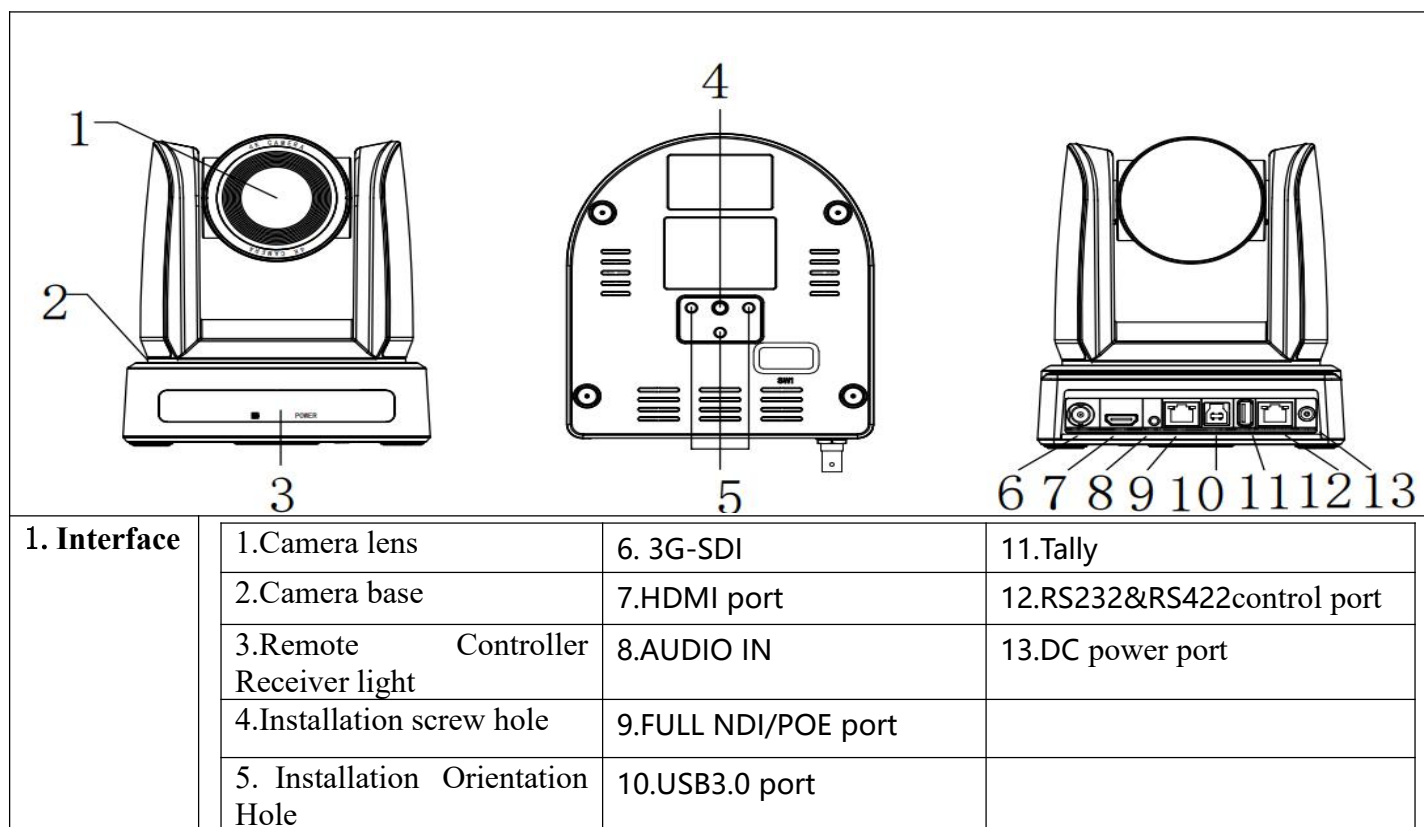
- **Multiple control protocols**
Supports NDI, VISCA OVER IP, VISCA, and PELCO-P/D protocols
- **255 preset positions**
255 positions can be preset through serial port, including level, pitch, zoom to preset, even if the camera is powered off, the preset data can be saved.
- **Multi-functional remote controller**
Equipped with simple remote control, it can not only use for level, pitch and zoom control, but also can set the parameters through remote control menu.
- **2 Power Supply Modes**
Supports POE power supply (NDI port) and DC12V power supply.
- **OSD Chinese/English menu function**
Various OSD menu, feasible for remote controller to control Chinese/English OSD menu.

Camera Specifications

Camera		
Signal system	1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59	
Sensor	1/2.8 inch HQ CMOS Sensor, 5.0 effective megapixels	
Scanning mode	progressive	
Optical zoom	20X 12X	
Minimum illumination	Support ultra-low illumination: 0.1Lux@F1.6(color), 0.01Lux@F1.6 (b&w)	
Shutter	1/30s ~ 1/10000s	
White balance	Indoor/Outdoor/Auto/Manual	
BLC	Yes	
DNR	2D&3D DNR	
SNR	≥52dB	
Focal length	20X f=5.5 ~ 110mm 12X f=4 ~ 48mm	
Horizontal view angle	20X:58°(wide end) ~ 2.9°(far end) 12X:70.5°(wide end) ~ 5.9°(far end)	
Pan rotation	±170°	
Tilt rotation	-30° ~ +90°	
Pan control Speed	1 °/s ~ 100 °/s	
Tilt control Speed	1 °/s ~ 60 °/s	
Image flip	Yes	
Preset number	255	
Accuracy of preset	±0.1°	
Input/Output Interface		
HD video interface	HDMI	Max 1080P60
	USB3.0	Support USB3.0 video output, Max 1080P60
	3G-SDI	1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59
	(IP) FULL NDI	Code: FULL NDI 1080P60/1080P50/1080P30/1080P25/720P60/720P50/1080P59/1080P29/720P59 network protocol: VISCA OVER IP,VISCA IP protocol
Communication interface	1 *, RS-232 IN, Longest distance: 30 m, VISCA/Pelco-D/Pelco-P protocol 1 *, RS-422 , Longest distance: 1200 m,VISCA/Pelco-D/Pelco-P protocol	
Power interface	JEITA Type (DC IN 12V) HEC3800	
General Specifications		
Input voltage	AC110V-AC220V to DC12V/2A	
Input current	DC12V(DC11.5-DC12.5V)	
Working temperature	0°C~ +45°C	
Storage temperature	-10°C~+60°C	
Power consumption	12W(max)	
Dimension	Refer to “Dimension”	
Package size	355mmX270mmX255mm	

Notice: Specifications and information of the camera are for reference only, and the contents are subject to change without prior notice.

Camera Interface Function



IR Remote Controller Explanation

1. Power key

After press ,the camera will step into standby mode. Press again, the camera will self-test again and back to HOME position. (Note: If power-on mode is turned on and Preset 0 is set, it will automatically point to the specified preset position.)

2. Camera select key

Choose the camera address ready for control.

3. Position key

Set or run presets.

4. *key #key

5. Focus key: focus control

Auto focus: enter into auto focus mode

Manual focus: the camera focus mode is manual; switch the camera focus mode to manual focus by pressing[focus +] or [focus -] to adjust.

6. Zoom key

Zoom+: lens near, **Zoom-**: lens far

7. Clear preset key

Clear preset key: +0-9 number key

8. Pan-tilt key

Press \wedge key :Up

Press \vee key :Down

Press \leftarrow key :Left

Press \rightarrow key: Right

HOME key: Return to the middle position

9. BLC on/off key

Back light compensation ON/OFF(Reserved)

10. Menu key

Open or close the OSD menu(Reserved)

Enter / exit the OSD menu or return to the previous menu.

11. Camera IR remote control address setting

【*】+【#】+【F1】：Camera Address No. 1

【*】+【#】+【F2】：Camera Address No. 2

【*】+【#】+【F3】：Camera Address No. 3

【*】+【#】+【F4】：Camera Address No. 4

12. Key combination functions

1) 【#】+【#】+【#】：cancel all preset bits	2) 【*】+【#】+【6】：restore factory defaults
3) 【*】+【#】+【9】：flip switch	4) 【*】+【#】+【7】：switch to left/right image
5)【#】+【#】+【0】：switch to video format1080P60	6) 【#】+【#】+【1】：switch to video format1080P50
7)【#】+【#】+【2】：switch to video format1080I60	8) 【#】+【#】+【3】：switch to video format1080I50
9)【#】+【#】+【4】：switch to video format720P60	10) 【#】+【#】+【5】：switch to video format720P50
11) 【#】+【#】+【6】：switch to video format1080P30	12) 【#】+【#】+【7】：switch to video format1080P25

Serial port Communication Control

Under normal working condition, the camera can connect one VISCA control equipment.

➤ RS232 communication control

Control the camera through RS232, RS232 serial port parameter shown as following:

Baud rate: 2400/4800/9600 b/s;

Start bit: 1 bit;

Data bit: 8 bit;

Stop bit: 1 bit;

Check bit: none.

➤ RS485 communication control

Control the camera through RS485, half duplex mode:

Baud rate: 2400/4800/9600 b/s;

Start bit: 1 bit;

Data bit: 8 bit;

Stop bit: 1 bit;

Check bit: none.

After power on, the camera first go left, then back to the middle position. Self-test is finished after the zoom moved to the farthest and then back to the nearest position. If the camera saved 0 preset before, it will be back to that position after initialization. At this point, the user can control the camera by the serial commands.

Protocol List(Omitted)

The camera serial port follows VISCA protocol, the camera can be controlled according to the standard protocol if secondary development is needed; please contact the manufacturer to get a detailed list of protocol if needed.

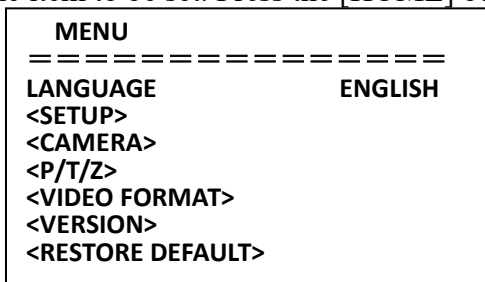
MENU SETTING

Notice: the menu displays only two lines. Please refer to the following for specific items.

- [↑↓]SELECT: press up/down arrow keys to select the menu
- [← →]MODIFY: press left/right arrow keys to modify parameters
- [MENU]BACK: press menu key to return/enter the menu
- [HOME]COMFIRM: press [Home]key to confirm

1. MENU

Press [MENU] button to display the main menu on the normal screen, using arrow button to move the cursor to the item to be set. Press the [HOME] button to enter the corresponding sub-menu.



LANGUAGE: Language setting, Chinese / English

SETUP: System setting

CAMERA: Camera setting

PTZ: Pan tilt setting

VIDEO FORMAT: video format setting

VERSON: camera version setting

RESTORE DEFAULT: Reset setting

[↑↓] SELECT: for selecting menu

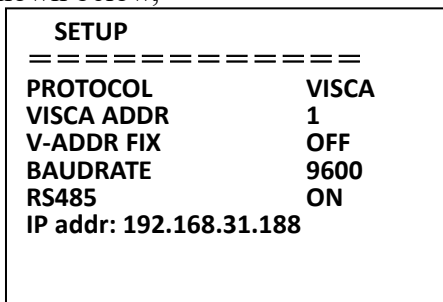
[← →] MODIFY: for modify parameters

[MENU] BACK: Press [MENU] to return

[HOME] CONFIRM: Press [Home] to confirm

2. SETUP

Move the pointer to the <SETUP> in the Main Menu, click the **[HOME]** key and enter into the <SETUP> as shown below,



PROTOCOL: VISCA

VISCA ADDR: VISCA=1~8

V-ADDR FIX: On/Off

BAUD RATE: 2400/4800/9600

RS485 : ON

IP addr : 192.168.31.188

3. CAMERA PARAMETER SETTING

Move the pointer to the <CAMERA> in the Main Menu, click the **[HOME]** key and enter the <CAMERA> as follow.

CAMERA	
=====	
<EXPOSURE>	
<COLOR>	
<IMAGE>	
<FOCUS>	
<NOISE REDUCTION>	
Color style	Standard
OSD DIR	OFF

EXPOSURE: Enter into Exposure setting
COLOR: Enter into Color setting
IMAGE: Enter into Image setting
FOCUS: Enter into Focus setting
NOISE REDUCTION: Enter into Noise reduction
Color style: Standard/cust1/cust2/cust3
OSD DIR: OFF/90°/180°/270°

3.1 EXPOSURE

Move the cursor to the <EXPOSURE> item in the main menu and press [HOME] button, <EXPOSURE> menu appears, as shown in the following figure.

EXPOSURE	
=====	
Mode	Auto
GAIN	2
EV Level	0
BLC	OFF
Flicke	50Hz
G.limit	32
DRC	16
AI EXPOSURE	OFF
AE ZONE	Ctr

MODE:AUTO SAE AAE Manual
GAIN:0~100
EV LEVEL:-7~7
BLC: On/Off
FLICKE:OFF 50HZ 60HZ
G.LIMIT:0~254
DRC:0~120
AI EXPOSUER: ON/OFF
AE ZONE:Ctr Top Btm Gbl

3.2 COLOR

Move the cursor to the <COLOR> item in the main menu and press [HOME] button, <COLOR> menu appears, as shown in the following figure.

COLOR	
=====	
WB Mode	AUTO
CCT	6500
Color Index	50
RG Tuning	50
BG Tuning	50
GG Tuning	50
Saturation	50
Hue	50

WB Mode: Auto, Indoor, Outdoor, ATW, Manual,CCT
CCT:2500~9000
Color Index:0~100
RG Tuning:0~100
BG Tuning:0~100
GG Tuning:0~100

Saturation: 0~100

Hue:0~100

3.3 IMAGE

Move the cursor to the <IMAGE> item in the main menu and press [HOME] button, <IMAGE> menu appears, as shown in the following figure.

IMAGE	
=====	
Brightness	50
Contrast	50
Sharpness	50
FLIP-H	OFF
FLIP-V	OFF
B/W MODE	DAY
Gamma	Default
DZoom	OFF

Brightness: 0~100

Contrast: 0~100

Sharpness: 0~100

FLIP-H: ON/OFF

FLIP-V: ON/OFF

B/W-MODE: DAY/NIGHT

Gamma:Default ,1~4

DZOOM: Digital zoom options: ON/OFF

3.4 FOCUS

Move the cursor to the <FOCUS> item in the main menu and press [HOME] button, <FOCUS> menu appears, as shown in the following figure.

FOCUS	
=====	
FOCUS MODE	AUTO
AF-Zone	Default
AF-Sensitivity	Middle
Near Limit	30cm
Far Limit	60M
AI FOCUS	OFF

FOCUS MODE: AUTO/MANUAL

AF-Zone:Default/Top/Center/Bottom/All

AF-Sensitivity:Middle/High/Low

Near Limit: 10cm/30cm/50cm/75cm/1M

Far Limit:INF/21M/60M/100M/180M

AI FOCUS:ON/OFF

3.5 NOISE REDUCTION

Move the cursor to the <NOISE REDUCTION> item in the main menu and press [HOME] button, <NOISE REDUCTION> menu appears, as shown in the following figure.

NOISE REDUCTION	
=====	
NR-2D	1
NR-3D	3
DEFOG	13
Dynamic Hot Pixel	50

NR-2D: OFF, 1~5

NR-3D: OFF, 1~8

DEFOG:OFF,AUTO,1~20

Dynamic Hot Pixel:0~100

4. P/T/Z

Move the cursor to the <P/T/Z> in the Main Menu, click the **【HOME】** key and enter the <P/T/Z> as follow.

P/T/Z	
=====	
Spd by zoom	ON
IR Speed	10
PSPD by zoom	OFF
Pro speed	10
Zoom speed	6
Pro LRSET	OFF
Image Freezing	OFF

SPD BY ZOOM: The depth of field scale switch for IR Remote, Optional items: ON/OFF

IR SPEED: Set the PTZ speed for remote controller 1~16

PSPD by zoom:ON/OFF

Pro speed:4~16

Zoom speed:1~8

Pro LRSET:ON/OFF

Image Freezing:ON/OFF

5. VIDEO FORMAT

Move the cursor to the < VIDEO FORMAT > in the Main Menu, click the **【HOME】** key and enter the < VIDEO FORMAT > as follow.

1080P model

VIDEO FORMAT
1080P60
1080P50
1080P30
1080P25
720P60
720P50
1080P59
1080P29
720P59

Video format: 1080P60、1080P50、1080P30、1080P25、720P60、720P50、1080P59.94、1080P29.97
720P59.94

6. VERSION

Move the cursor to the < VERSION > in the Main Menu, click the **【HOME】** key and enter the < VERSION > as follow.

VERSION	
=====	
Arm ver:	16:0:2 2024-6-18
Cam ver:	0.1.00 2024-6-26

ARM Version: Display MCU version information

Cam version:Display FULL NDI version information

7. RESTORE DEFAULT

Move the cursor to the <RESTORE DEFAULT> in the Main Menu, click the **【HOME】** and enter the <RESTORE DEFAULT> as follow.

RESTORE DEFAULT	
=====	
RESTORE ALL	NO
SET OPRESET	NO

RESTORE ALL: YES/NO

SET O PRESET: YES/NO, Set the preset position 0

Notice: Instructions about the menu above are for reference only, and the contents are subject to change without prior notice.

HDMI USAGE

1. The interface to the backboard is HDMI
2. Requirements for wire rods: recommend HDMI ultra-high-definition,
3. Receive end: support HDMI.

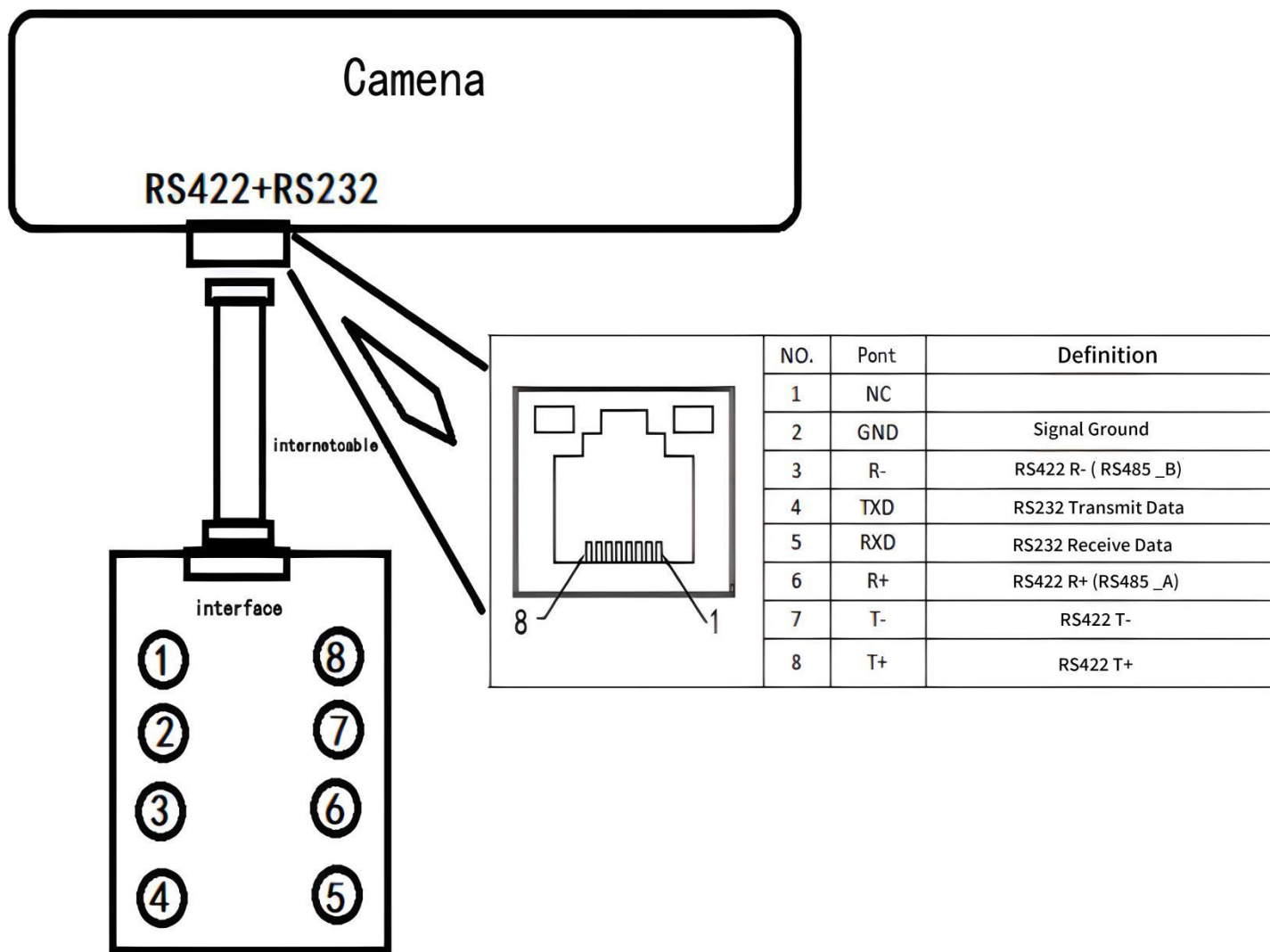
USB3.0 USAGE

- 1.The interface to the backboard is USB3.0 B port.
- 2.Requirements for wire rods: recommend USB3.0 ultra HD extension cable,
- 3.Receive end: support USB3.0 or above.

3G-SDI USAGE

1. Signal standards SMPTE ST 424, SMPTE ST 292, SMPTE ST 259-C and DVB-ASI
2. Cable requirements: Broadcast grade HD coaxial 75-5 video cable (recommended sdi digital HD cable BNC cable 75-5)
3. Transmission distance: ≤ 50 meters.

RS422&RS232 CONNECTING METHODS



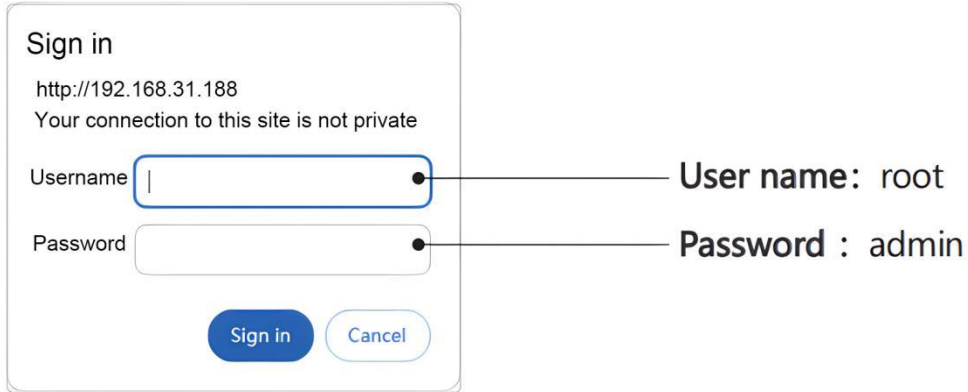
Notice:

- 1.RS232 must be connected to TXD,RXD,GND
- 2.RS422must be connected to T+,T-,R+(A),R-(B)
- 3.RS485must be connected to R+(A),R-(B).

NDI Network settings

1. Login UI interface method

View the screen display IP:192.168.31.188. Change the computer IP to 192.168.31.X (not the same IP as the device), connect the device and computer directly through a network cable, or connect the device computer to a Gigabit switch.



Username:Factory default is “root”

Password:The factory default is “admin”

2. Equipment Status

NDI CONVERTER®					
	Status	Network	NDI®	PTZ	System
NDI Convert™	Hardware version	V1.0			
System Information	Firmware version	ENCODE-20240819			
	Web version	29254c9c-20240819			
	CPU	Memory	Temperature	Start Time	
	27.60 %	6.52 %	71.12 °C	00h:06m:35s	
Ethernet	Speed	IP Address	Send	Receive	
	1000 Mbps	192.168.31.188	0 Kbps	0 Kbps	
Information	Video Source	Serial Port	Tally Status		
	NDI_12	ttyPS1	Close		

System Information

Hard version:Device hardware current number

Firmware version:Device firmware current number control IC

Web version:the current number of the web page UI interface

CPU:CPU ratio of device main control IC

Memory: the memory ratio of the device master IC

Temperature: the temperature of the device master IC

Start time: the time from the device to now

Ethernet

Speed: 1000M Bandwidth of the switch to which the current device is connected IP

IP address: the IP of the current device

Send: current size of data output as encoder

Receive: Current size of received data as decoder

Information

Video source: Name of the current device

Serial port : USB port connection status when controlling PTZ

Tally status: The current mode of the Tally lamp

3. Network

NDI CONVERTER® Device Network NDI® PTZ System root

ETHERNET
Set the device IP address.

DHCP:

IP Address: 192.168.31.188

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.31.1

MAC Address: 00:0C:35:00:1E:E9

Set

NDI BRIDGE

Name: ndi

IP Address:

Port: 5990

Key:

Run Stop

BRIDGE STATUS NDI Bridge is not running

ETHERNET

DHCP: DHCP automatically assigns IP addresses based on switches or routers

(Note: Switches or routers are more likely to have built-in DHCP function)

IP address: Modify the device IP address

Sub net mask: Modify the device sub net mask

Default gateway: Modify the device gateway

Mac Address: The Mac address of the current device is not modifiable

Set: After each modification, click will save the above information

NDI BRIDGE

Name: The name of the host

IP Address: The public IP address of the host

Port: Host Port

Key: Host Key

4. NDI

The screenshot shows the NDI Converter web interface with a dark header containing the title 'NDI CONVERTER®' and navigation tabs: 'Status', 'Network', 'NDI®', 'PTZ', and 'System'. A user profile icon labeled 'root' is in the top right. The main content area is divided into three sections:

- Video-Audio:** Includes a 'Source name' field with 'NDI_12', a 'Video quality' field with '80', and an 'Audio input' dropdown menu currently set to 'Line In' with a 'Set' button below it.
- Transmission Mode:** Includes a 'Protocol' dropdown menu currently set to 'UDP', with 'UDP' and 'TCP' as visible options.
- Tally Control:** Includes a 'Switch status' dropdown menu currently set to 'Close', with 'Close', 'Program', and 'Preview' as visible options.

Video-Audio

Source Name: Modify the current device name

Video quality: modified NDI coding bandwidth 50-200 the arger the number, the greater the bandwidth, the greater the delay, the clearer the picture quality. The smaller the number, the smaller the bandwidth, the smaller the delay, and the more blurred the picture quality.It is recommended to use 80.

Audio Input:Line in

Transmission Mode

Protocol: UDP/TCP

Tally Control

Switch status: Close/Program/Preview

5. PTZ

NDI CONVERTER® Status Network NDI® **PTZ** System root

PTZ Parameters

Protocol: VISCA

Baud rate: 9600

Device ID: 1

Set

PTZ Control

Directional arrows: Up, Down, Left, Right, and combinations.

Control buttons: Zoom+, Zoom Stop, Zoom-, Focus+, Focus Stop, Focus-, AF, Home, MF.

HS(1-24 levels): 10

VS(1-20 levels): 10

PTZ Parameters

Protocol: VISCA protocol

Baud rate: Select communication baud rate

Device ID: the ID of the video camera

Set: Save the current PTZ parameter options

PTZ Control

Control the direction of the camera

Control the zoom parameters of the camera, focusing parameters

Control the horizontal motion speed of the camera, and the vertical motion speed

6. System

NDI CONVERTER® Status Network NDI® PTZ System root

USER

New User:

Password1:

Password2:

Set

System Language

Language: English

Set

System Upgrade

Firmware Name: No file chosen

(Please select the corresponding firmware file first and then click the "System Upgrade" button.)

(Attention: Do not upload by multiple people at the same time. During the upgrade process (3 minutes), do not power off midway. The system will automatically restart after the upgrade.)

Update

System Settings

Restart Reset

USER

New User:Create a new username

Password1:Create new password

Password2:Repeat new password

Set:set up

System Language

Language:English/Chinese

Set:set up

System Upgrade

Firmware Name:Select the upgraded file, note that there is no Chinese path

Up data:After selecting the file, click the button. After the upgrade, the system will automatically restart,and the upgrade process can not be cut off

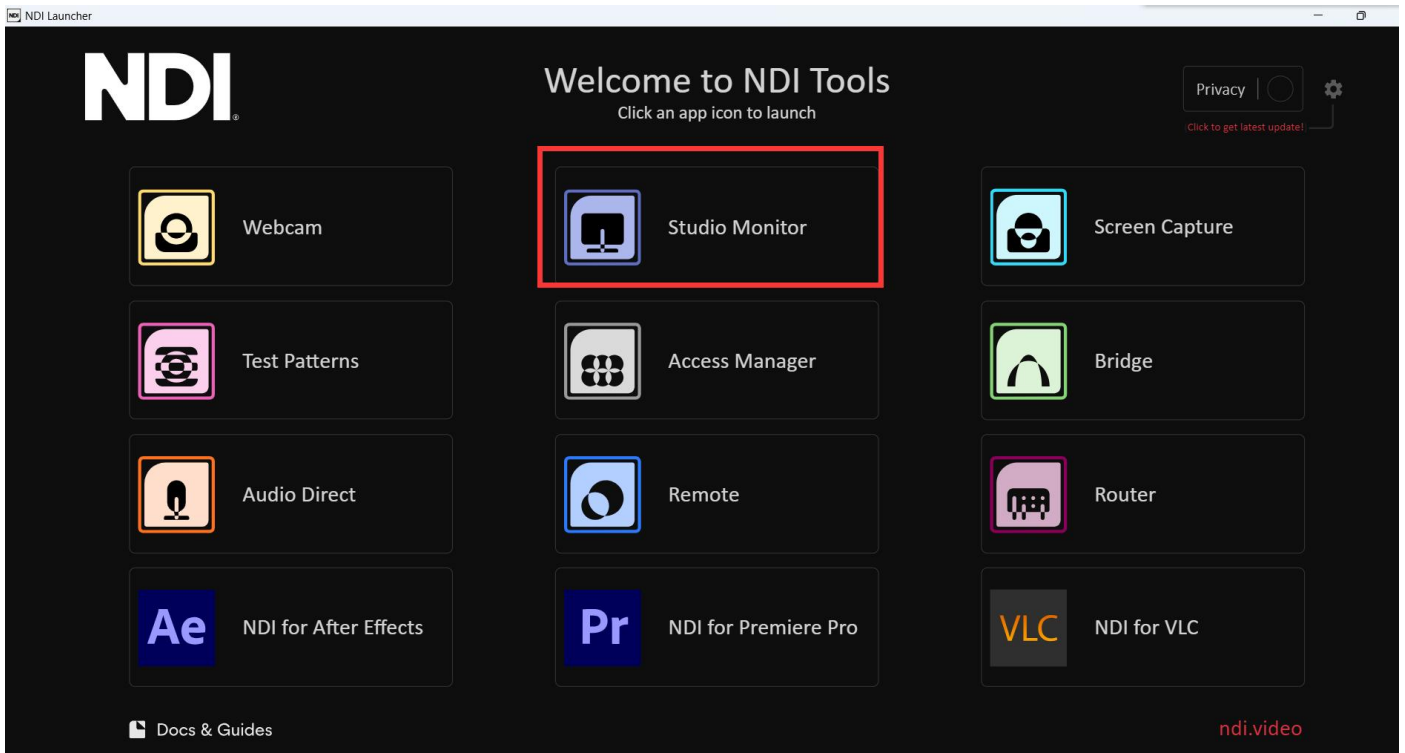
System settings

Restart:the system restart

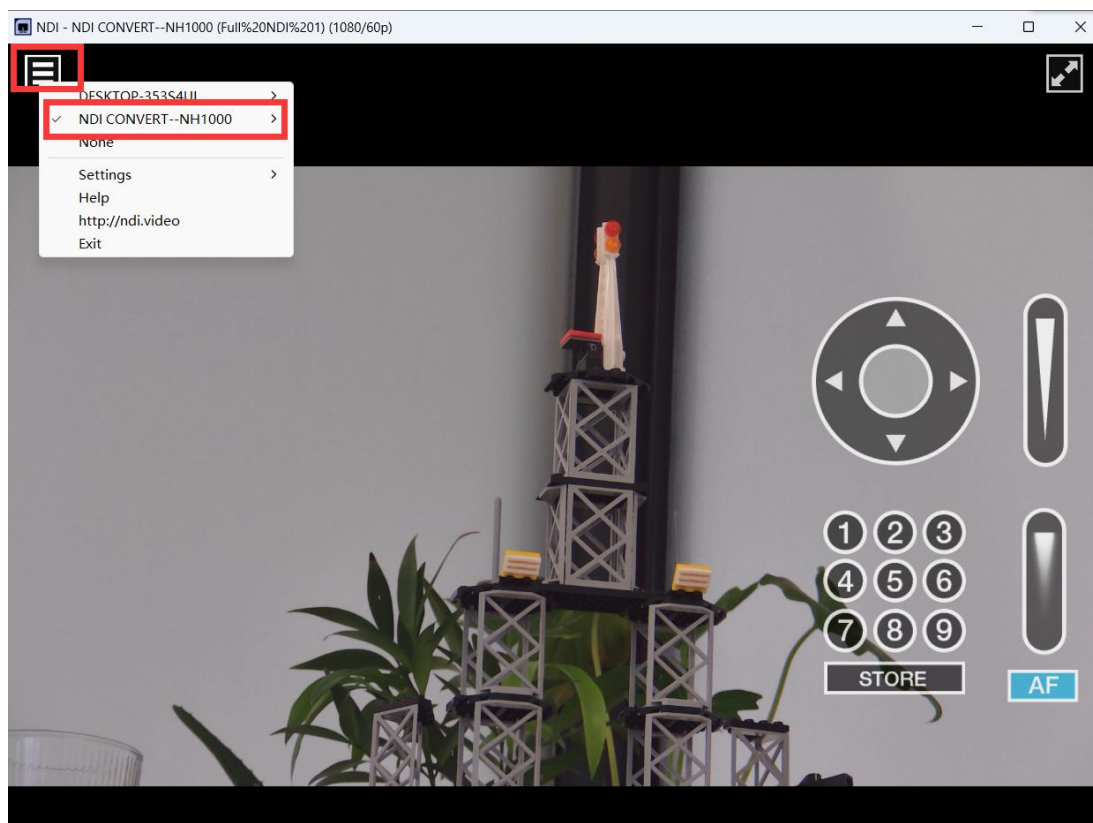
Reset:the system is reset to the initial state

NDI video source preview

1. Open the NDI Tools toolkit (the toolkit is free and can be downloaded by yourself). Select “Studio Monitor”.

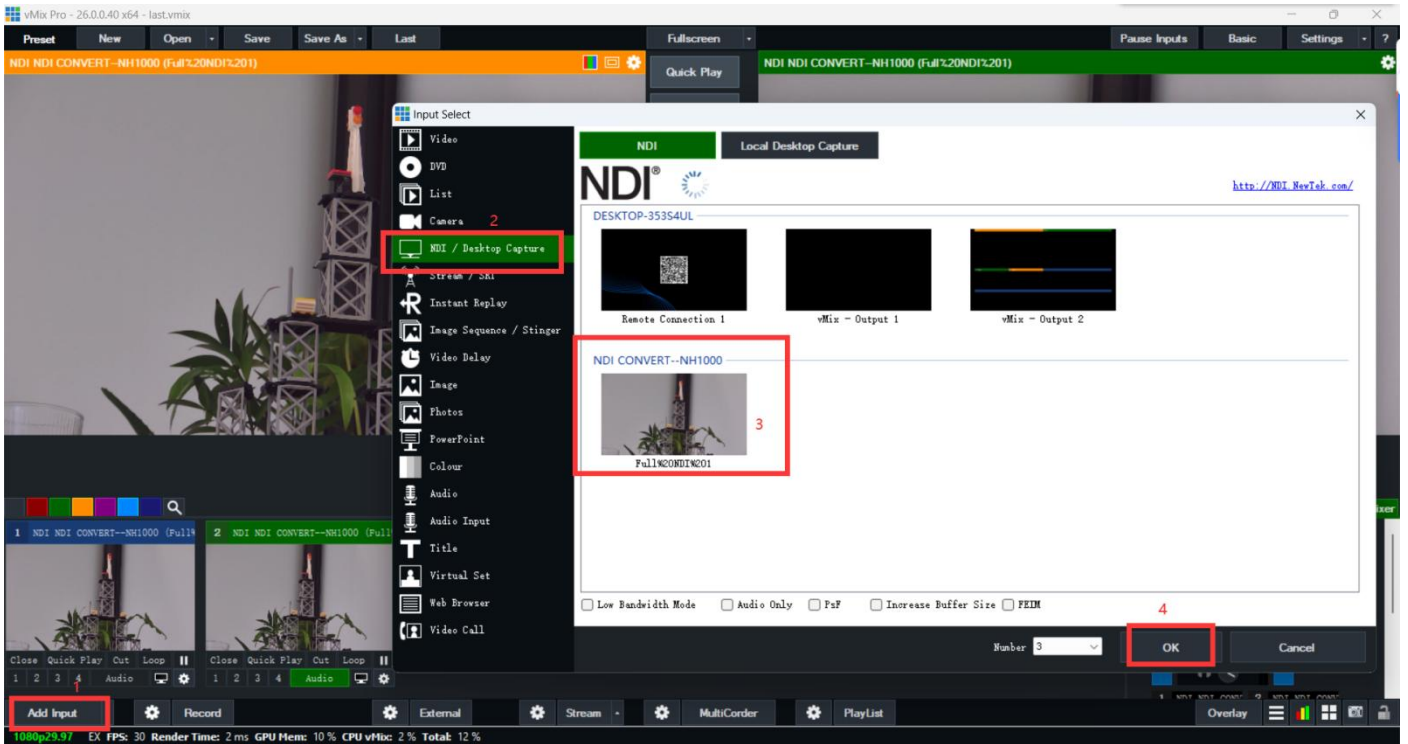


2. Select NDI video source from the menu in the upper left corner of “Studio Monitor” to preview the NDI video screen.



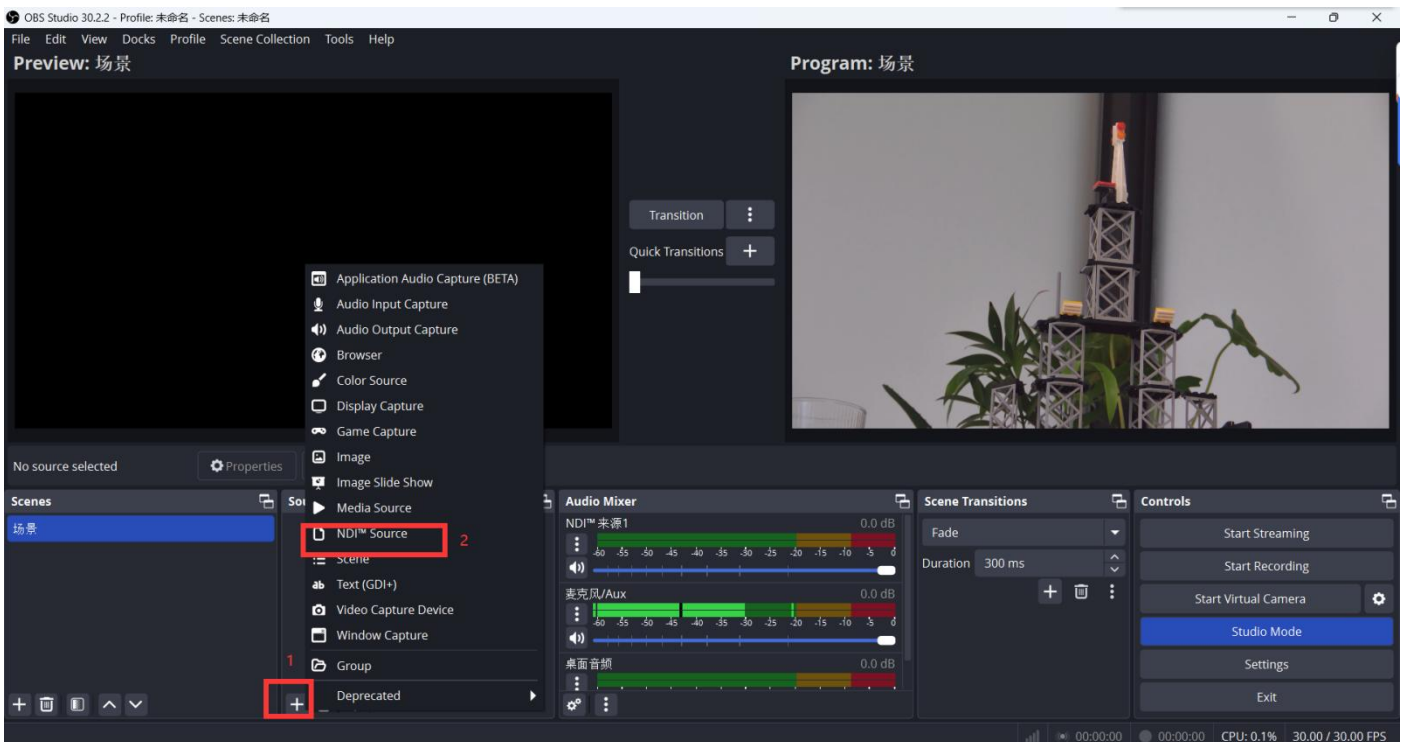
Open the NDI video source in the “vMix” software.

1, open “vMix” software, add input - NDI | Desktop Capture - add NDI video name.

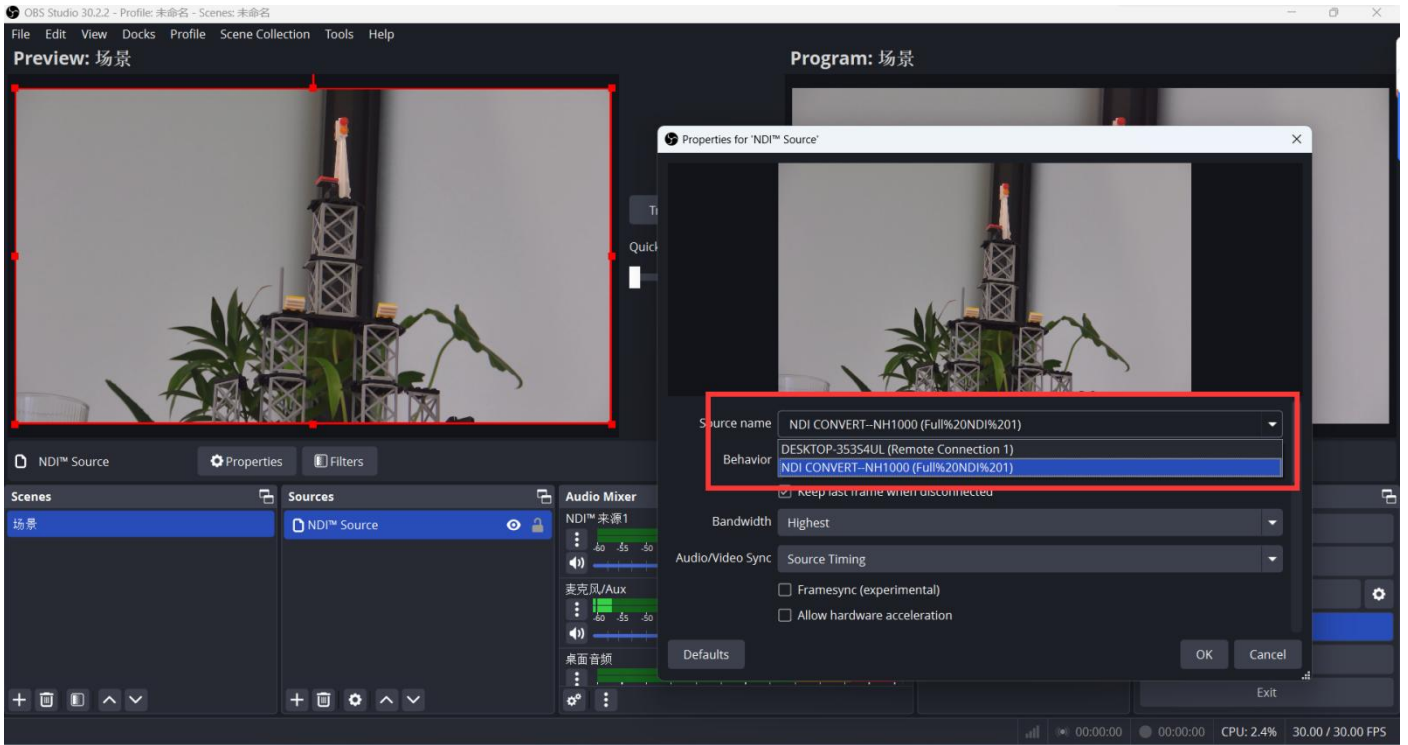


Open NDI video source in “OBS Studio” software.

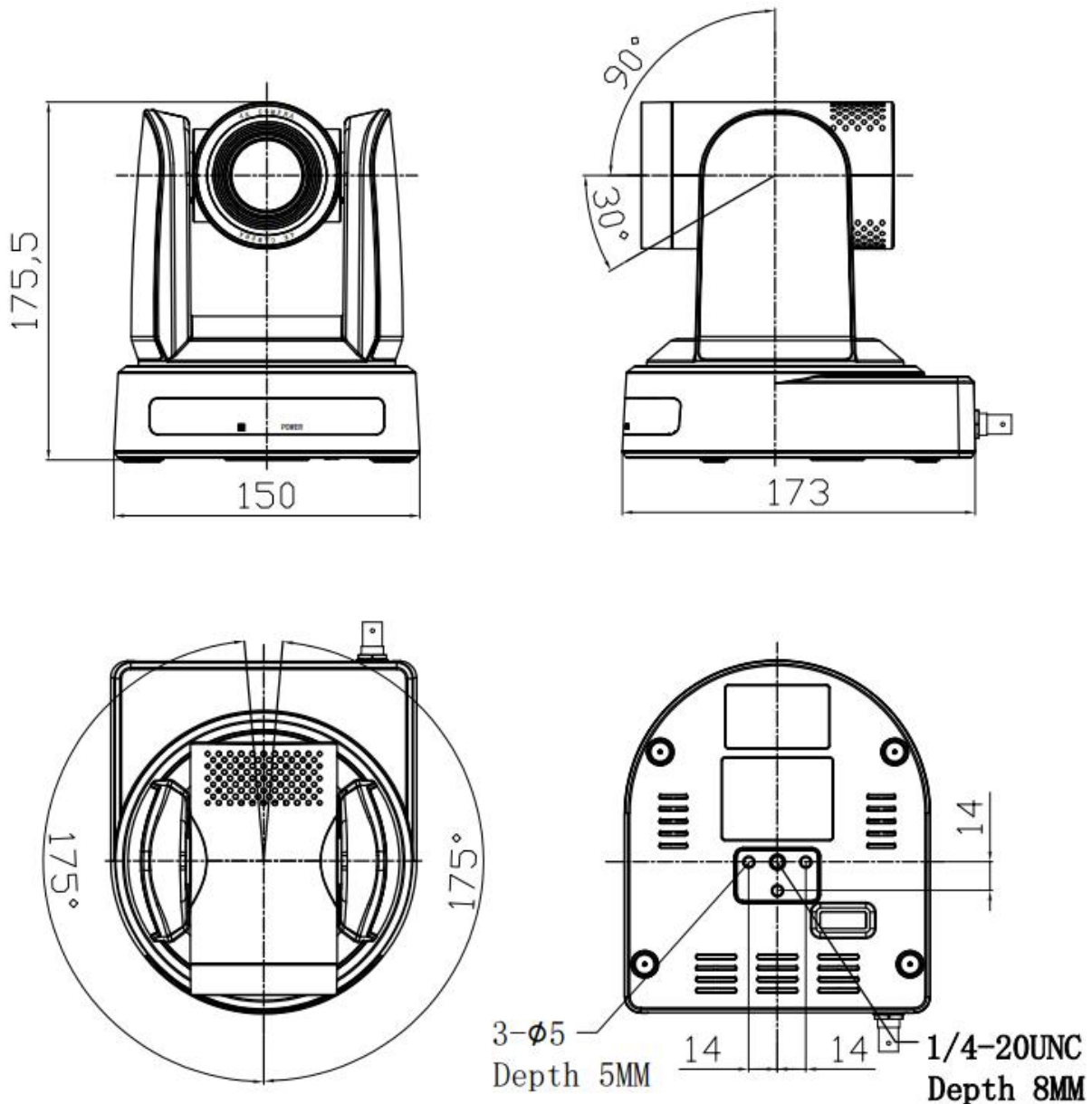
Note: OSB software needs to install NDI plug-in, NDI plug-in can be downloaded from OBS official website. You can download the NDI plug-in from the OBS website. You can open the NDI video source only after installing the NDI plug-in.



Select the NDI source name to get the NDI video source screen



Installation Size Chart



Camera Maintenance and Fault Handling

Camera Maintenance

- If camera is not used for long time, please turn off the power switch and disconnect the AC power adapter from the AC socket after use.
- Use soft cloth or tissue to clean the camera housing.
- Use soft cloth to clean the lens; use neutral cleaner to wipe gently when faced with serious surface dirt. Do not use strong or corrosive cleaner so as not to scratch the lens and affect the image.

Avoid using in the following conditions:

- The camera should avoid shooting extremely bright objects, such as sunlight, lights.
- Avoid working under unstable lighting conditions, otherwise the image will flash.

- Avoid using around facilities that emit high-powered radio waves, such as television stations or radio stations.

Fault Handling

Image

1) No video output

- a, Check whether the camera power supply is connected, the voltage is normal, the power indicator is on.
- b, Check Whether the camera can self-check after restarted.
- c, Check whether the DIP switch at the bottom is normal
- d, Check whether the cable of video platform or television is connected properly.

2) Image intermittence

- a, Check whether the video output cable or video display is in a normal state.

3) Image dithering appears when the camera lens is at the maximum magnification

- a, Check whether the camera is solidly installed.
- b, Check Whether there are vibrating machinery or objects around the camera
- c, Must be gigabit switch

4) Remote controller cannot work

- a, Replace with a new battery
- b, Check whether the battery is installed on the remote controller or low
- c, Check whether the working mode of the camera is correct
- d, Check whether the camera address is correct.

5) Serial port cannot work

- a, Check whether the working mode of the camera is correct
- b, Check whether the control cable is connected properly

6) Power supply mode

- Gigabit POE power supply, or use standard power supply.

7) Log in the UI interface

- Must be in the same local area network can log in. Modify the IP address of the computer to 192.168.31.X (Not the same IP address as the device). After in can modify the device IP.

8) DHCP

- After turning on the DHCP function in the UI interface, when MENU--->SETUP--->IP ADDR is 0.0.0.0, it is because the Gigabit switch does not have its own DHCP function. Please change to a Gigabit switch with DHCP function.

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