

THOR BROADCAST

User Manual



**PTZ 20x Zoom Live Streaming HD 1080p
Camera with SDI-HDMI-USB Outputs**

MaximusProX

Content

1. Precaution	3
2. Product Introduction	4
2.1 Camera Technical Parameters	4
2.2 Product Feature.....	5
3. Using Instructions	6
3.1 Camera Interface	6
3.2 RS232 Interface Specification	7
3.3 Camera Dimension	8
3.4 Remote Controller Specification.....	9
4. Operation Instruction	10
4.1 Camera ID Select.....	10
4.2 Pan/Tilt Control	10
4.3 Menu Display	10
4.4 Focus.....	11
4.5 Back Light Compensation	11
4.6 Zoom.....	11
4.7 Presets Setting & Call and Reset	12
4.8 Image Flip & P/T Restart	12
4.9 Function of Touch Button	13
5. Camera Setting	13
5.1 EXPOSURE.....	13
5.2 COLOR.....	14
5.3 PICTURE	14
5.4 P/T/Z.....	15
5.5 Noise Reduction	15
5.6 Video Format	16
5.7 System Setting	16
5.8 Restore Default.....	16
6. Network Connecting.....	17
6.1 Mode of Connecting	17
6.2 CGI /APK login.....	19
7. Installation Instruction.....	29
8. Maintenance Service Terms	30
8.1 Warranty Policy	30
8.2 Warranty range.....	30
8.3 Warranty Condition	30
8.4 Shipping cost of RMA or replaced.....	30
8.5 Warranty.....	31

1. Precaution

●Electrical Safety

Confirm country and local electrical safety standard when using or installing the product. The product itself has no power switch. Please stop power supply or plug out power socket when it is not in good working. Video wire and control wire should be insulated and individual connected, can't mix-up with other wires.

●Transportation with Care

Product should be protected against extremes of stress, vibration and moisture in transport, storage and installation.

●Power Supply

12V DC power, and Power on Ethernet Function optional.

●Installation with Care

Don't turn camera head manually. Doing so may result in mechanical damage. Product should be put on stable horizontal table, and should not be installed at a tilt.

Don't apply corrosive liquid, gas or similar, to avoid damaging the cover which is made up of plastic material.

Make sure there is no obstacle with the camera's rotational range when installing. Never power on before installation has been completed.

●Prohibited Unauthorized Disassemble

There is no part for users to disassemble voluntarily. Thor is not responsible for any unauthorized modification or dismantling.

2. Product Introduction

21 Camera Technical Parameters

Model	MaximusProX
Specifications	
Camera Parameters	
CMOS Sensor	1/2.8"Exmor CMOS
Effective Pixels	2.38 Megapixels
Video Format	1080P60/59.94/50/30/29.97/25;1080i60/59.94/50;720P60/59.94/50/30/25
Optical Zoom	20x Optical
Focus	f=4.7~94.0mm
Horizontal Field of View	3.5 ° (T) ~ 65°(W)
F-number	F1.6 ~ F2.8
Min. Illumination	0.05Lux(F1.8,AGC:ON)
Digital Noise Reduction	2D&3D
White Balance	Auto/Manual/Indoor/outdoor/White Balance/3000K/4000K/5000K/6500K
Focus	Auto/Manual
Iris	Auto/Manual
Backlight Compensation	1-7/Off
Control Panel	Brightness, Hue, Saturation, Contrast, Sharpness
Interface Parameters	
Video Output Interface	USB 2.0, USB 3.0 HDMI, 3G-SDI, IP Streaming
Video Network Coding	H.264,H.265,MJPEG
Communication	1X RS232 IN, 1X RS232 Out, 1X RJ45, RS485
Control Protocol	VISCA/PELCO-D/PELCO-P/Visca Over IP/ONVIF
Baud Rate	2400/4800/9600/115200
Audio Input	Double Channel 3.5mm Linear Input
Audio Compression Format	ACC,G711A,G711U
Network Interface	100M internet access(10/100BASE-TX), supply network with VISCA/PELCO-D/PELCO-P control protocol,ONVIF
Network Protocol	TCP/IP, HTTP, RTSP, RTMP, RTMPS, Onvif, DHCP, Multicast, etc.
Power Interface	DC-038 Outlet(DC12V), RJ45(Power Over Ethernet)
Mechanical Parameters	
Pan Rotation Angle	-178°~ +178°
Vertical Angle of View	-30°~ +90°
Pan Speed Range (per second)	0.1~180°/s
Tilt Speed Range (per second)	0.1~120°/s
Presets	255
Other Parameters	
Power Adapter	AC100V~AC240V in, DC12V/2A out
Input Voltage	DC 12V
Power Consumption	12W
Storage Environment	-10°C ~ +60°C / 20% ~ 95%
Working Environment	-10°C ~ +50°C / 20% ~ 80%
Standard Accessory	Power adapter, RS232 pallet, 2-bit RS485 terminal, Remote control, Instruction book
Optional Accessory	Installation Bracket

22 Product Feature

➤ 1080P Full High-definition

1/2.8 inch high quality CMOS sensor, can reach maximum 1920 x 1080 resolutions and output frame rate up to 60fps.

➤ 20X Optical Zoom with wide horizontal of view 65°

The camera has advanced video image processing technology & full HD 1/2.8" CMOS Sensor, 20X Optical Zoom, Max resolution up to 1080P@60fps

➤ Low Noise

High SNR of CMOS sensor, combined with 2D and 3D noise reduction algorithm, effectively reduces noise even under low illumination conditions, to ensure that the picture can still remain clean and clear.

➤ Rich and Perfect Interface

Output High-definition HDMI, 3G-SDI and high-definition wired LAN, USB2.0 or USB3.0 could simultaneously output video four ways.

➤ Quiet Pan and Tilt Movement

A high-precision stepping motor and advanced motor drive chip makes sure it rotates stably under different speeds and without any noise or howling.

➤ Remote Control

You can control the camera with the follow: by RS232, RS485, LAN, Visca, PELCO-P/D, Onvif, Visca Over IP Protocol and Remote Control.

➤ Presets Image Freezing

Freezing preset images when transferring presets, which could shield the image during transferring.

➤ Multi-preset

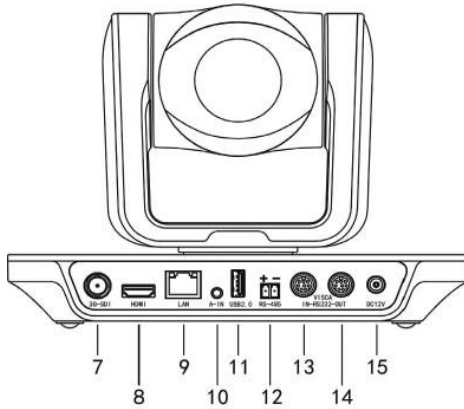
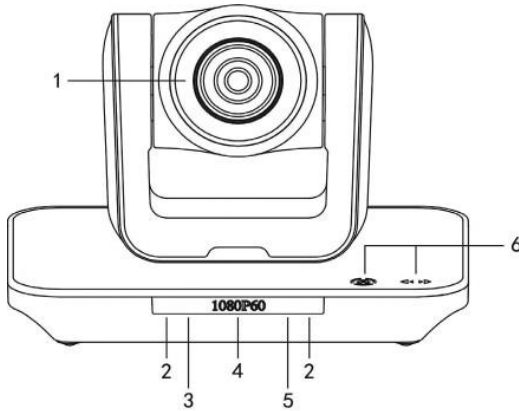
Support as many as 255 presets. (Remote control can only set 9 presets.)

➤ Multiple Network Protocol

Support ONVIF, GB/T28181, RTSP, RTMP, RTMPS protocol, and also can be extended according to users' requirement.

3. Instructions

3.1 Camera Interface



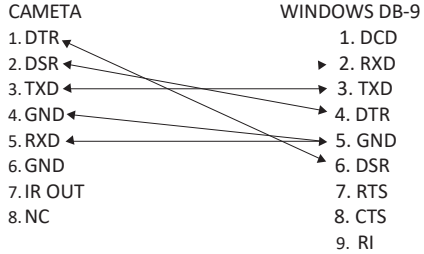
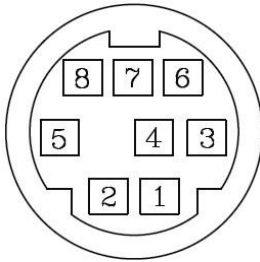
- 1. Lens
- 2. IR Receiver
- 3. Power Led
- 4. OLED
- 5. Standby Led

- 6. Touch Panel
- 7. 3G-SDI Output
- 8. HDMI Output
- 9. LAN Interface
- 10. Audio Interface

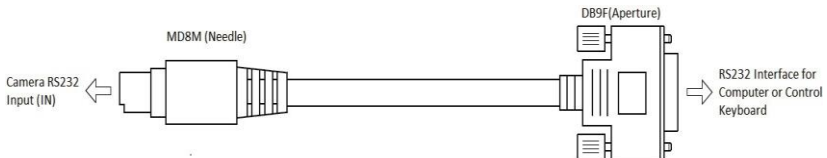
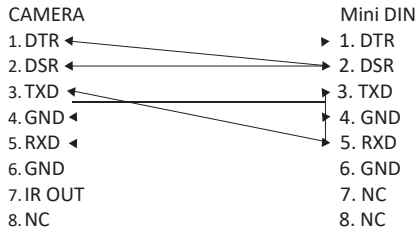
- 11. USB 2.0 or USB3.0
- 12. RS485 Interface
- 13. RS232 IN
- 14. RS232 OUT
- 15. DC12V Input

32 RS232 Interface Specification

Connect Between Computers or Control Keyboard and Camera

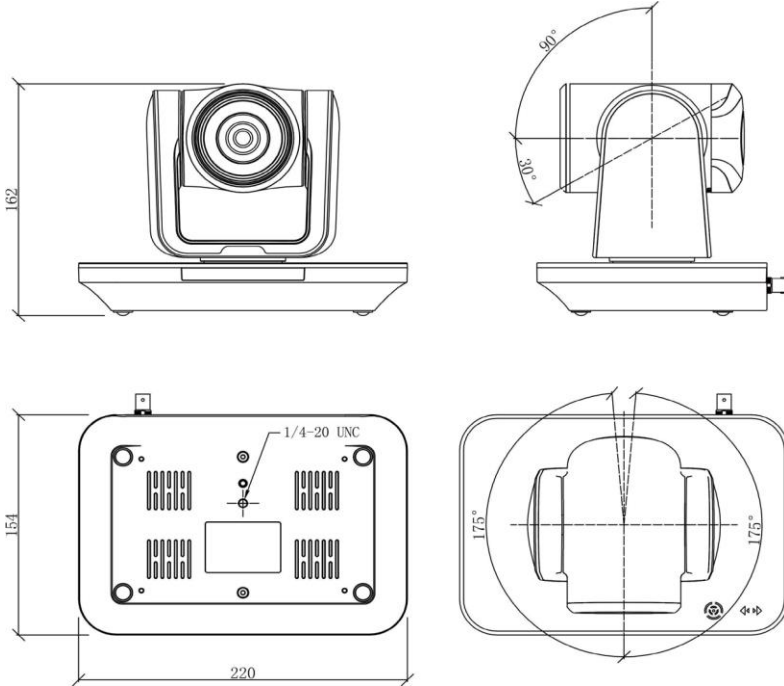


RS232 INPUT		
NO.	Function	Definition- specification
1	DTR	Data Set Ready
2	DSR	Data Set Ready
3	TXD	Transmit Data
4	GND	Ground
5	RXD	Receive Data
6	GND	Ground
7	IR OUT	IR Signal Output
8	NC	No Connect

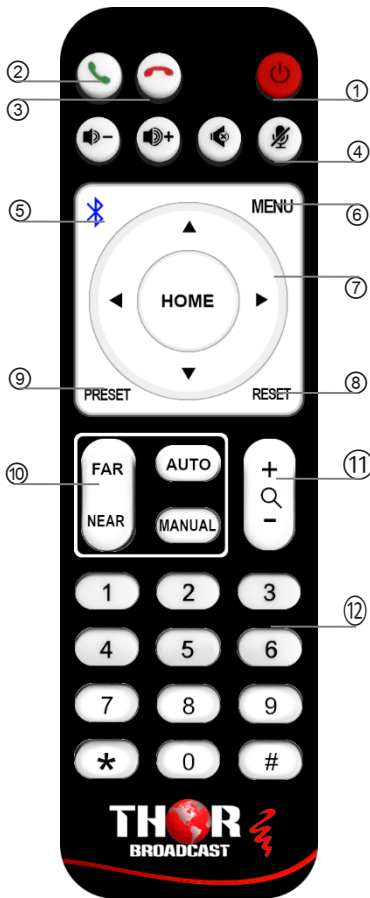


3.3 Camera Dimensions

The size of the MaximusProX HD video conference camera is as below:



3.4 Remote Control Specs



	Key	Function
1	Power Key	After pressing, the camera enters standby mode
2	P/T RST Key Flip Key	After pressing, the camera enters self-check Set the camera image to flip
3	Camera	Select the camera to be
4	S ect Key BLC Key	c tr ed Turn on/off BLC
6	Menu Key	Enter/Exist Menu
7	Camera PTZ Control Key	Press HOME button, the camera return to the middle position
8	Preset Setting Key	Press "Preset"+Number(1-9) to save the corresponding Preset
9	Preset Reset Key	Press "Reset"+Number(1-9) to reset the corresponding Preset
10	Focus Key	[AUTO]:Automatic focus [MANUAL]: Manual focus [FAR]: Manual focus, make the far object clearer [NEAR]: Manual focus, make the near object clearer
11	Zoom Key	+ increase, - decrease
12	Number Key	Cooperate with setting / calling Preset

Note:

1. If the remote control does not work properly, please replace the battery.
2. If there is object between the remote control and the remote control sensor on the camera, the camera will not work properly, so when using the remote control, the remote control will directly towards the remote sensor of the front part of the camera.

4. Operation Instructions

4.1 Camera ID Select



Select the target camera ID (from No.1 to No.4)
When the camera ID is over 4, select No.1 will enable you to operate the camera.

4.2 Pan/Tilt Control



Turn up Press [▲] button

Turn down Press [▼] button

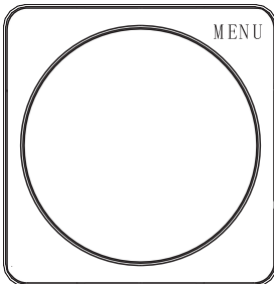
Turn left Press [◀] button

Turn right Press [▶] button

Reposition Press [HOME] button

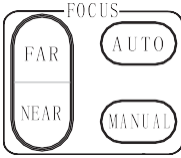
Press the corresponding buttons to adjust the angle of the lens. Tip: Click on the direction button will enable the camera rotating in a slow speed, while keep pressing the direction button in a period of time will enable the camera rotating in a fast speed.

4.3 Menu Display



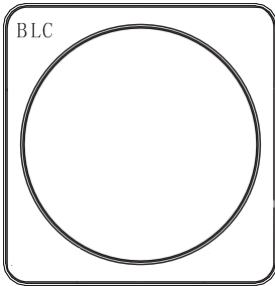
Click the [MENU]Button, Display[PTZ]Camera menu, Once again then Turn OFF Menu

44 Focus



- [AUTO] Enable camera automatically focus
- [MANUAL] Switch to manually control mode
- [FAR] Manually focus the distant object
- [NEAR] Manually focus the nearby object

45 Back Light Compensation



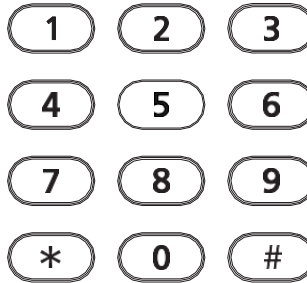
Click the [BLC] Button, it was turn ON/OFF Back light compensation

46 Zoom



Click the [+] Button, it was the camera Zoom in
Click the [-] Button, the camera will be Zoom Out

4.7 Presets Setting & Call and Reset



1. Save the preset press [PRESET] button first, then press any of the numbers you need (from1-9) to save the preset.

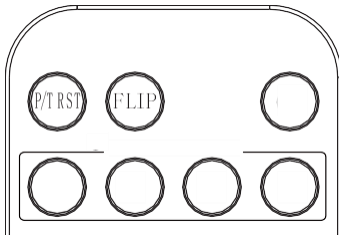
Note: You can save at most 9 presets through the remote controller.

2. Call the preset press the saved preset number from1-9 will activate the corresponding preset position.

Note: Call a preset number has not been saved will be invalid.

3. Reset the preset Press [RESET] button firstly, then press the number (from1-9) will clear the corresponding preset.

4.8 Image Flip & P/T Restart



Click the [FLIP] Button, the Image will be changed to flip, it was application for Ceiling installation.

Click the [P/T RST]Button, the camera will be restart and back to home position.

4.9 Touch Button

1. Double click the breathing light on the camera touch panel, and wake up the touch button, the breathing light will keep lighting.
2. Click [⊙] on the camera touch panel, select the parameters to modify, including: output format, protocol, baud rate, address code
3. Click [] to modify parameters, and click [⊙] to confirm the change, at last restart the camera to make settings take effect.

5. Menu Setting

1. Operate remote controller, press the [MENU] button to display the OSD menu.
2. Press the arrow keys to select the menu, press left and right button to set the camera.

5.1 EXPOSURE

Press the [MENU] button to display the OSD menu, press arrow keys to move to EXPOSURE and then press right button to enter sub menu, as the right picture.

- [AE MODE]: AUTO/SHUTTER/IRIS
- [EXPOSURE SETTING]: Press right button, for optional as Follows
- [AUTO]:N/A
- [SHUTTER]: shutter priority mode:
1/1-1/10000
- [IRIS]: iris priority mode: F1.6-F24
- [EXPCOMP]: -3.5DB - 3.5DB, OFF
- [BACKLIGHT]: 1-7/OFF
- [FLICKER]: 50HZ, 60HZ, OFF
- [GAMMA]:0-9

MAIN MENU

EXPOSURE
 COLOR
 PICTURE
 P/T/Z
 NOISE REDUCE
 VIDEO OUT
 SYSTEM SETUP
 DEFAULT SETUP
 EXIT

EXPOSURE

AE MODE: AUTO
 AE LEVEL: N/A
 EXPCOMP: OFF
 BACKLIGHT: OFF
 FLICKER: 50HZ
 GAMMA: 5
 BACK
 EXIT

52 COLOR

Press the [MENU] button to display the OSD menu, press arrow keys to move to COLOR and then press right button to enter sub menu, as the right picture.

- [WB MODE]: AUTO/INDOOR/OUTDOOR/ONE-SHOT/ATW/MUNUAL/3000K/4000K/5000K/6500K
- [SATURATION]: 60%-200%
- [COLOR HUE]: 0-14
- [RED GAIN]: 0-255(only under MANUAL)
- [BLUE GAIN]: 0-255(only under MANUAL)

COLOR	
WB MODE:	AUTO
SATURATION	100%
COLOR HUE:	7
BACK	
EXIT	

53 PICTURE

Press the [MENU] button to display the OSD menu, press arrow keys to move to [PICTURE] and then press right button to enter sub menu, as the right picture.

- [BRIGHT] : 0-14
- [CONTRAST] : 0-14
- [SHARPNESS] : 0-15
- [ICR] : COLOR/BLACK
- [STYLE]: STANDARD/CLEAR/BRIGHT/RTSP/GENTAL

PICTURE	
BRIGHT:	8
CONTRAST:	7
SHARPNESS:	5
ICR:	COLOR
STYLE:	STANDARD
BACK	
EXIT	

54 P/T/Z

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [P/T/Z], press right button to the sub menu, as the right picture shown.

- [FILP]: ON/OFF
- [L/R DIRECTION]: ON/OFF
- [AF MODE]: AUTO/MANUAL/ZOOM
- [AF SENS]: NORMAL/LOW
- [PRESET FREEZE]: ON/OFF
- [D ZOOM]: ON/OFF
- [P/T]:NORMAL/TRACING
- [PRESET SPEED]:1-24

P / T / Z	
FLIP:	OFF
L/R DIRECTION:	OFF
AF MODE:	AUTO
AF SENS:	NORMAL
PRESET FREEZE:	OFF
D ZOOM:	ON
P/T:	NORMAL
PRESET SPEED:	24
BACK	
EXIT	

55 Noise Reduction

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [NOISE REDUCTION], press right button to the sub menu, as the right picture shown.

- [2D NR]: 0-5 / OFF
- [3D NR]: 0-5 / OFF
- [DYN HOT PIXEL]: ON/OFF

NOISE REDUCE	
2D NR:	2
3D NR:	3
DYN HOT PIXEL:	OFF
BACK	
EXIT	

56 Video Format

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [VIDEOOUT], press right button to the sub menu, as the right picture shown.

- [VIDEO OUT]:1080P60/59.94/50/30/29.94/25;
1080I60/59.94/50;720P60/59.94/50/30/25

VIDEO OUT

VIDEO OUT: 108030
RESTART
BACK
EXIT

57 System Setting

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [SYSTEM SETTING], press right button to the sub menu, as the right picture shown.

- [SYSTEM INFO]: press right button to the sub menu, as the right picture shown
- [LANGUAGE]: CHINESE/ENGLISH
- [ZOOM LEVEL]: ON/OFF
- [PROTOCOL]: VISCA/PELCO-D/PELCO-P
- [ADDRESS]: 1-255
- [BAUDRATE]:2400/4800/9600/19200/38400

SYSTEM SETUP

SYSTEM INFO
LANGUAGE: CHINESE
ZOOM LEVEL: ON
PROTOCOL: VISCA
ADDRESS: AUTO
IP: 192.168.1.162
BAUDRATE: 9600
BACK
EXIT

58 Restore Default

Press the [MENU] button to display the OSD menu, press the arrow keys to move to [DEFAULT], press right button to make the OSD parameter return to the default.

DEFAULT SETUP

FACTORY DEFAULT
BACK

6. Network Connection

6.1 Connecting via Network Cable

Direct Mode: Connect camera with computer through network cable directly.

LAN Connect Mode: Camera could connect to the Internet by router then users could log in through browser.

Note: Don't put the wires and cables somewhere easily accessible by people, as this could easily put your cameras in harm's way.

The camera's default IP is 192.168.1.162

First, open [Properties] on computer's local network, then select "Internet Protocol Version 4(TCP/IPv4)" and double click or click its [Properties] and enter. And then click [Advanced] to enter into Advanced TCP/IP Settings. Input IP to the [WINS server] and click [Add] to finish.

Users could change the camera IP address within the relevant network segment.

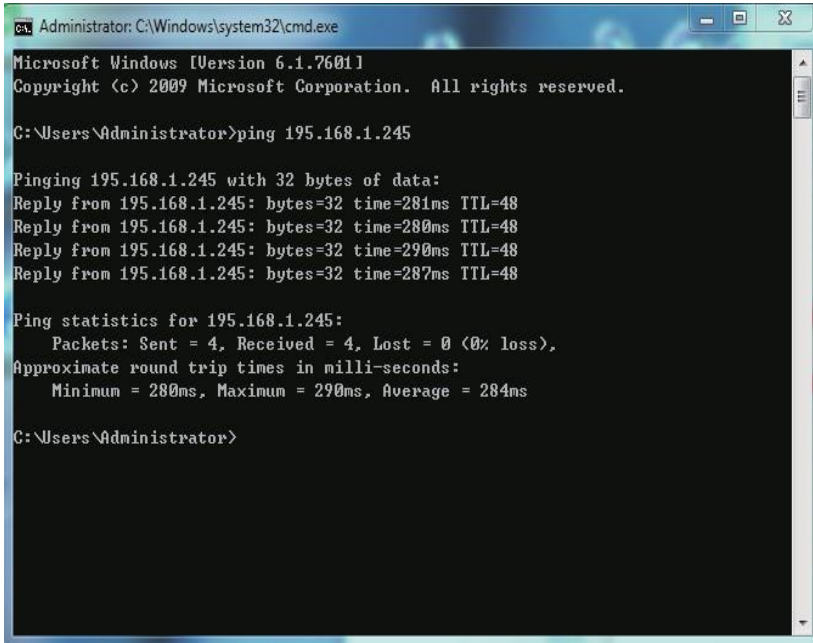
LINK: We made this short instruction manual for how to connect a device to IP and apply it to the same subnet as your PC. This is for a different device, but follow the same rules.

<https://thorbroadcast.com/upload/files/394/how-to-connect-hdmi-rf-petit-to-pc-via-ethernet.pdf>

Follow these instructions but use the IP Address **192.168.1.162**

Note: Avoid IP collision with other computers or IP equipment when adding IP address. Please make sure whether the IP you need is available or not before adding.

Verify if the net segment works. Open [Start] on the computer and input cmd to "operation" and click "enter" then input ping 192.168.1.245 to DOS commend window and press enter. It comes up with the information as the below picture shows that means the net segment works.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

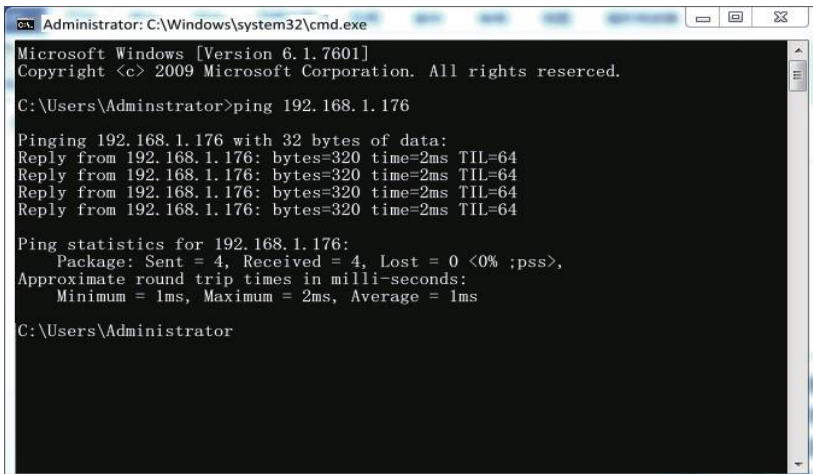
C:\Users\Administrator>ping 195.168.1.245

Pinging 195.168.1.245 with 32 bytes of data:
Reply from 195.168.1.245: bytes=32 time=281ms TTL=48
Reply from 195.168.1.245: bytes=32 time=280ms TTL=48
Reply from 195.168.1.245: bytes=32 time=290ms TTL=48
Reply from 195.168.1.245: bytes=32 time=287ms TTL=48

Ping statistics for 195.168.1.245:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 280ms, Maximum = 290ms, Average = 284ms

C:\Users\Administrator>
```

After product finishes self-checking, follow the steps above to check if the network works. For example, open DOS command window and input ping 192.168.1.162 and press the ENTER button. If it comes up with information as below picture, it means network working.



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ping 192.168.1.176

Pinging 192.168.1.176 with 32 bytes of data:
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64
Reply from 192.168.1.176: bytes=320 time=2ms TTL=64

Ping statistics for 192.168.1.176:
    Package: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\Users\Administrator>
```

62 NMS GUI login

621 GUI Login – Internet Explorer Login

Open the client software (before turning on the client software, first turn off the anti-virus software such as 360, avoid being mistaken for viruses and be prohibited from running by 360). By default, admin login with user name and password can preview, record, screenshot, PTZ control, audio and video. Operations such as encoding configuration. At present, this version can be run on Windows7/32/64bits & windows 8 or higher. Multiple cameras are supported in the LAN for simultaneous display (up to 9 devices at the same time).

6.2.2. GUI Overviews

6.2.2.0 Interface Preview

User Name : admin Pass Word : admin

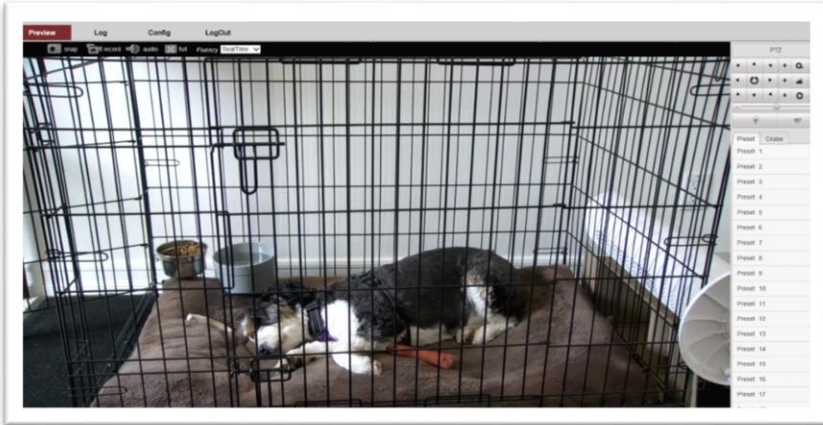
User Name:

Pass Word:

Language: ▼

Tip: please download and install the ActiveX. [File](#)

After successful login, the system will automatically search for cameras connected to the LAN, and will enter the management interface as shown in the following pictures.



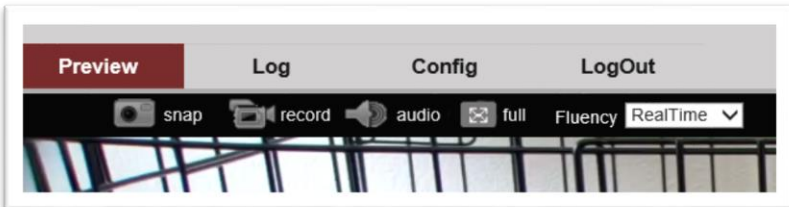
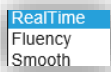
The first window shown is the PREVIEW – which will show a live shot of whatever is in front of your camera

6.2.2.1 Live Pictures and Videos

Near the top you have multiple options for taking video, snaps, audio and fluency of the image on the camera, these can be found under the preview button



Also to the right the FLUENCY button has a small drop down



6.2.2.2 Audio


Click "Voice"  Button to Turn on/off Audio (Default is ON)

Note: when the Streaming Mode is selection " Video Streaming", the Audio will not be output

6.2.2.3 Screenshot


Click "Screenshot" Button  to select the saved path to save the current camera screen image.

6.2.2.4 Video Record

Click "Record" Button  to select the saved path to save the current camera Video Output.

Note: Clicking the play and pause button during the recording process is invalid.

6.2.2.5 Full Screen Display

In single-Image or multi-Image display, double-click the screen in the video area to achieve full-screen display. Double-click again to exit full-screen display. Or Click "Full-Screen"  Button can also achieve full screen display.

6.2.2.6 Pan, Tilt, Zoom In/Out Control

The PTZ control is as shown in the figure below. You can find this pad on the right side of the preview picture.

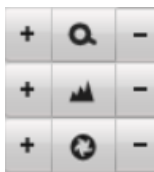
i. PTZ Control

Used to control the camera and to operate the current camera operations such as PTZ, zoom, focus, preset functions.

ii. Focus Mode

These buttons are for zoom, focus, and iris; uses the - & +

The camera will immediately react, setup up to 99 presets



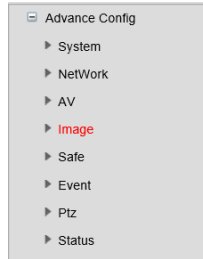
6.2.2.7 Image Setting

The image settings are as shown below. Double-click the camera searched in the list to adjustment the brightness and contrast, chroma, saturation, sharpness, etc functions of the current camera.

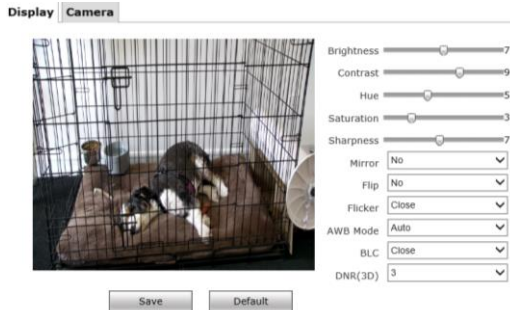
First Click CONFIG at the top of the page



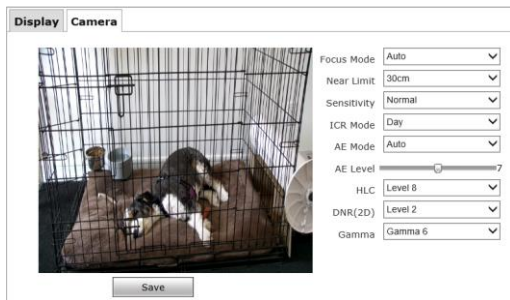
Then click IMAGE on the left hand column



Finally you will see the menu options – DISPLAY and CAMERA are on two different tabs



DISPLAY TAB



CAMERA TAB

Brightness Adjustment

Click or drag the brightness control slider to change the brightness of the camera, and the label on the right will display the value of the brightness. The range of brightness varies (0-14).

Contrast Adjustment

Click or drag the Contrast control slider to change the contrast of the camera, and the label on the right will display the value of the contrast. The range of brightness varies (0-14).

Hue (chroma) control

Click or drag the Chroma control slider to change the chroma of the camera, and the label on the right will display the value of the chroma. The range of brightness varies (0-14).

Saturation control

Click or drag the Saturation control slider to change the Saturation of the camera, and the label on the right will display the value of the Saturation. The range of Saturation varies (60%-200%).

Sharpness control

Click or drag the Sharpness control slider to change the Sharpness of the camera, and the label on the right will display the value of the Sharpness. The range of Sharpness varies (0-15).

HLC

Click or drag the HLC control slider to change the HLC of the camera, and the label on the right will display the value of the HLC. The range of HLC varies (0-15).

BLC (Backlight Compensation)

Click or drag the BLC control slider to change the BLC of the camera, and the label on the right will display the value of the BLC. The range of BLC varies (0-15).

2D Noise reduction control

Select 2D noise reduction by the drop-down menu, turn on noise reduction and select different levels of noise reduction. Noise reduction level (1-5).

3D Noise reduction control

Select 3D noise reduction by the drop-down menu, turn on noise reduction and select different levels of noise reduction. Noise reduction level (1-5).

Anti-flicker control

Through the drop-down menu to select turn on /off the anti-flicker function and select 50Hz or select 60Hz.

Video Style

Select different video styles through the drop-down menu, video style: standard, Bright, RTSP, Soft styles.

Mirror

Click left of the mirror button to turn on the mirror function NO/YES

FLIP

Click left of the Flip button to turn on the flip function - NO/YES

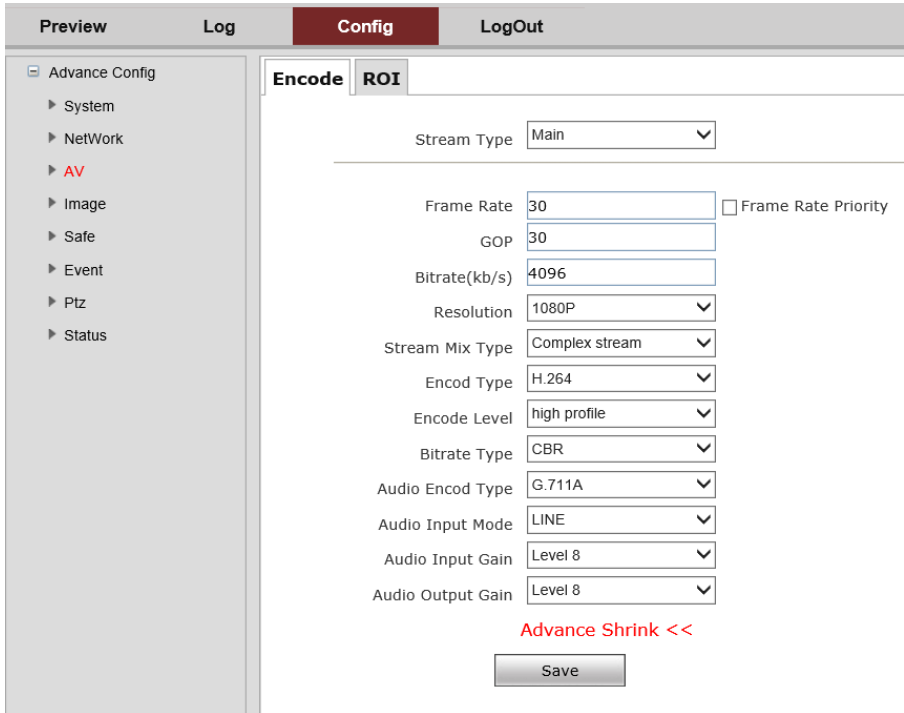
Save and default Restore

On the "Save" button to save all image settings information in the current camera "Image Settings".

On the "Restore Default" button, the system will restore the current camera "Image Settings" factory defaults.

6.2.2.8 Audio & Video

The encoding settings of audio and video are as shown in the figure below. From the left side menu click AV and then you can click Advance Expand to launch more advanced options



The screenshot shows the 'Config' tab selected in the top navigation bar. On the left, a sidebar menu has 'AV' highlighted in red. Below the sidebar, the 'Encode' sub-tab is active, showing the following settings:

- Stream Type: Main (dropdown)
- Frame Rate: 30 (input field) Frame Rate Priority
- GOP: 30 (input field)
- Bitrate(kb/s): 4096 (input field)
- Resolution: 1080P (dropdown)
- Stream Mix Type: Complex stream (dropdown)
- Encod Type: H.264 (dropdown)
- Encode Level: high profile (dropdown)
- Bitrate Type: CBR (dropdown)
- Audio Encod Type: G.711A (dropdown)
- Audio Input Mode: LINE (dropdown)
- Audio Input Gain: Level 8 (dropdown)
- Audio Output Gain: Level 8 (dropdown)

At the bottom of the settings area, there is a red link 'Advance Shrink <<' and a grey 'Save' button.

i. Main Streaming

- a. Streaming Frame Rate: Input 1-30 to setting Streaming Framer rate, default 30.
- b. GOP: Input 1-60 to setting valued of Frame Interval, default 30.
- c. Bit Rate: Input 1-10240 to Setting Video Bite Rate, default 4096.
- d. Resolution: Through drop-down menu to selection Resolution, 1080P or 720P
- e. Stream Mix Type: Through drop-down menu to selection Video Stream or Complex Stream, default Complex Streaming.

Note: When you select Video Stream, "Audio" will automatically select OFF

- f. Encode Type: "MJPEG", "H.264", "H.265".

When you select "MJPEG", the Encode level is only available Base Profile.

When you select to "H.264" or "H.265", Encode level has "Base Profiles/Main Profile", High Profile for selection.

g. Encode Level: "Base Profile", "Main Profile", "High Profile".

According to "Encode Type" to select the Encode Level.

h. Bit rate type: "CBR", "VBR", "FIX QP" which are "Fixed Bit Rate", "variable Bit Rate", "coded bit Rate".

Note: When "CBR" is selected, "stream quality", "IFrame", "PFrame" cannot be selected and edited.

When "VBR" is selected, "IFrame", "PFrame" can't be edited.

When "FIX QP" is selected, "Quality" can be edited.

i. Streaming Quality: "High", "Middle", "Low", Streaming quality only valid when the Bit Rate type is "VBR".

k. IFrame: Input 1-51 Volume to setting IFrame, default 30.

Note: IFrame only valid when the Bit Rate type is "FIX QP".

l. PFrame: Input 1-51 Volume to set frame by frame quality, default 30.

Note: Pframe only valid when the Bit Rate type is "FIX QP".

i. Audio: Through drop-down Menu to Select ON/OFF Audio Input.

Noted: When Selected "ON", "Streaming Model" will be automatically set to Complex Stream. When Selected "OFF", "Streaming Model" will be automatically set to Video Stream.

m. Audio Encoding: "G.711A", "G.711B", "AAC_LC".

n. Audio Input Type: "MIC", "LINE".

o. Input Volume: Through Drop-down menu "Mute" or 1-10 Grade to selection the Voice Input Volume.

p. Output Volume: Through Drop-down menu "Mute" or 1-10 Grade to selection the Voice Output Volume.

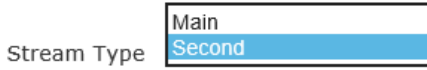
r. Save and default Restore.

Click "Saved" Button to save the Main-Streaming Parameters.

Click "default Restore" Button to Restore the Main-streaming Parameters setting to default.

ii. *Sub-Streaming*

Here under the drop down menu of stream type, you can switch to Second



You can change the Resolution



As you can see it can change to VGA, QVGA, and 720P

6.2.2.9 Internet Settings

The network configuration page can be opened by going to CONFIG then on the left hand menu clicking on NETWORK

IP, DNS Config

a. IP Config

Supports automatic IP address and manual configuration of IP.

The system defaults to manual mode.

IP: 192.168.1.162

Mask: 255.255.255.0

Gate Way: 192.168.1.1

b. DNS Config

Supports automatic DNS address and manual configuration of IP.

The system defaults to manual mode.

DNS1: 8.8.8.8

DNS2: 8.8.4.4

c. Saved & Restore Default

Click "Save" button, to Save current Camera settings of IP, DNS.

Click "default" Button, to restore default setting of Current Camera.

Noted: If you modify IP Network Segment, the Gateway also need to Revised, Otherwise, The Video image won't display.

SERVICE

a. MSG Port: default 8080

b. RTSP Port: default 554

c. RTMP Port: default 1935

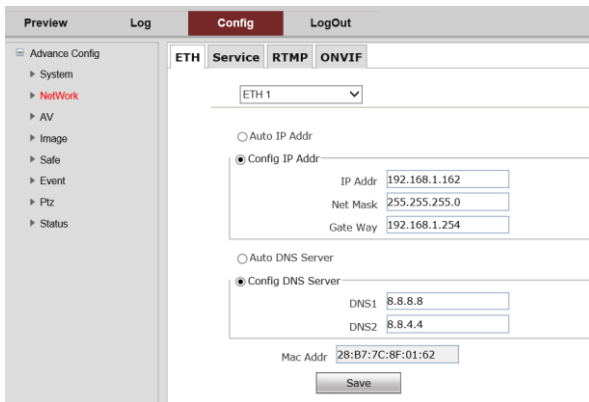
d. HTTP Port: default 80

Note: Changing the port number requires restarting the camera to valid. In order to avoid port conflicts, please be careful to modify.

i. RTSP Streaming address

Default Main Streaming:rtsp://192.168.50.190:554/0/0/0

Default Sub-Streaming:rtsp://192.168.50.190:554/0/0/1



ii. RTMP Config

- a. RTMP Auth: Through an empty box, check it for “OFF”“ON”RTMP function.
- b. Stream type: Through the drop-down menu “Main Stream”, “Second Stream”.
- c. Port: To Set RTMP Port, default 1935.
- d. RTMP Server address : default : rtmp://14.146.230.121/live/puas
- e. Save & Restore default.

Click “Save” Button to Save RTMP setting of current camera.

Click “Default” to restore the default setting of RTMP of Camera.

iii. ONVIF Config

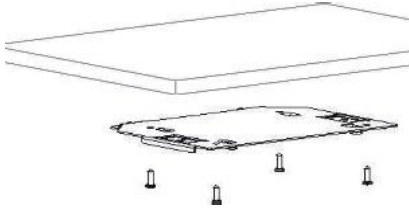
- a. ONVIF Authentication: Authentication enabled, default not Enabled.
- b. ONVIF Server Port: default 8554.
- c. ONVIF RTSP Authentication: Authentication enable, default not Enable.
- d. RTSP Port: ONVIF RTSP Port, default 8554.
- e. Save & Restore default.

Click “Save” Button to Save the ONVIF Parameters of Camera.

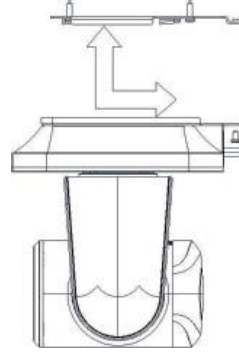
Click “default” Button to restore the ONVIF Parameter to default of Camera.

7. Installation Instruction (Ceiling/Wall Mount/Tripod)

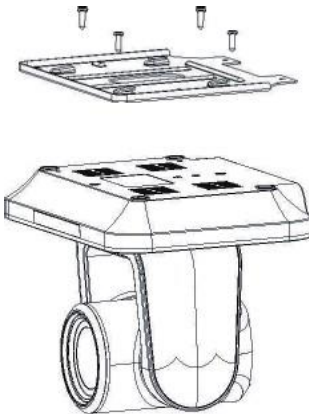
1. To drill 4 M4 screw hole in ceiling (see below sketch), use 4 pcs STP4x16 cross screws to fix the upside-down installation board of video conference camera on ceiling.



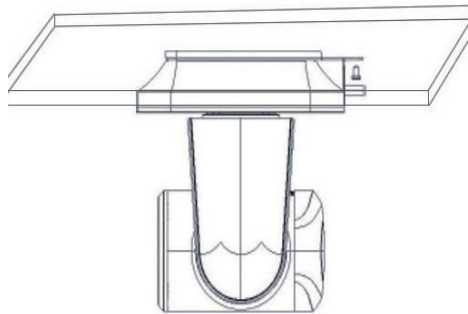
3. Hang the discreteness made in step2 on the installation board, showed as the below sketch.



2. Use 4 pcs M3x4 cross screws to fix the video conference camera on the connection board, showed as the below sketch.



4. Use 3 pcs M3x4 cross screws to fix the connection board and installation board, showed as the below sketch.



8. Warranty & Maintain Service Terms

8.1 Warranty Policy

- All of the products from Thor Broadcast have (2) Years Warranty.
- We only provide RMA or free parts for maintain service for over two years of products.
- The product that exceeds the warranty period, Thor will charge maintenance fees or in the form of sales accessories & parts.
- All of the dates are calculated based by serial numbers and sales dates.

8.2 Warranty range

- Duo to force majure reasons (Such as acts of God, Earthquakes ,Lightning, etc) or improper use, Installation errors and other non-normal operation or accident by failure is not covered by free warranty.
- All of the products must have original package and original packing materials for transport. Opening the camera without the clear consent of Thor will void all warranty.
- The Company has the final right of explanation for the above terms.

8.3 Warranty Conditions

- The buyer needs to send the malfunctioned products to our indicated address with the RMA number issued by Thor and the RMA form.

8.4 Shipping cost of RMA or replaced

- Thor will only cover the cost of shipping back to the customer, customer is responsible for shipping the defective product and RMA to Thor.

For Further Tech Support
1-800-521-Thor(8467)
support@thorfiber.com