



User Manual



20 X zoom Full HD 3G SDI HDMI and IP Streaming BOX camera - MaximusH265Pro

MaximusH265Pro

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1.Precautions

▲ Electronic

The electrical safety standards of the country and region must be strictly observed in the installation and use of this product.

There is no power switch in the body of this product. When the product fails, please cut off the power supply of the socket or cut off the connection between the power supply with the socket. The video cable and control cable should be shielded and wired independently, and cannot be mixed with other cables.

▲ Transportation

During transportation, storage and installation, it is necessary to prevent damage caused by heavy pressure, severe vibration, immersion, etc. This product is transported in the form of integral packaging.

▲ Installation

Please refer to the user installation manual carefully during installation. Handle the camera components gently, do not force the structural components, otherwise it may cause mechanical failure. The camera lens is an advanced optical product that avoids direct touch by hand to avoid lens scratching and affect image quality.

▲ Requirement of Maintenance

All installation and maintenance work on this unit should be performed by a qualified service technician or system installer.

▲ Prohibition of dis-assembly, without permission

Do not disassemble the camera and protective cover. There are no user-serviceable parts in the product. It should be repaired by professional maintenance personnel.

▲ Working Environment

Environment Temperature: -10°C ~ +50°C Humidity: <95% Input Voltage:

DC12V±2V Max Power consumption: 12W

▲ Don't direct using the Camera aim to bright object.

Do not aim the camera at a bright object. Whenever it was working or not, Never aim at the sun or other bright objects, otherwise it will caused the camera blurred or halo images.

2. Function

2.1 Camera technical Parameter

Electronics		Communication	
Constant Voltage	DC12V	Baudrate	2400/4800/9600/19200/38400
Power Consumption	12W	Protocol	VISCA /Pelco -P/D /ONVIF
Encoding	Built-in	ID	1 ~255
Operation Environment	-10° ~ +50°		
Humidity	0~95%		
Installation	DESKTOP / Wall Mount / Ceiling		
Presets	255	N.W	1.2kg

2.2 Camera Parameter

Model	20X
Spec	
Sensor	1/2.8" Progressive CMOS
Effect Pixel	3.27 Megapixel
Zoom	20X Optical Zoom, 12X Digital Zoom
Lens	f=4.7mm-94.0mm
Iris	F1.6(W)-F3.5(T)
Horizontal of view	3.2°(T) ~ 60.2°(W)
Min. Distance	30CM
Min. Illumination	0.5Lux (Day) · 0.1Lux (Night) · 0.005Lux (DSS)
Gain	Auto/Manual
Focus	Auto/Manual
S/N Ratio	≥50dB
Shutter	1/25 (1/30)s - 1/ 30000s
Presets	255 presets
Communication	RS-232/RS-485/ ONVIF
Protocol	VISCA · PELCO-D · PELCO-P, ONVIF
Video Format	1080P60/59.94/50/30/29.97/25, 1080i 60/59.94/50/30/25, 720P 60/59.94/50/30/29.97
Video Output	3G- SDI HDMI IP Streaming(RTMP/RTSP/RTMPS)

2.3 Technical Specification

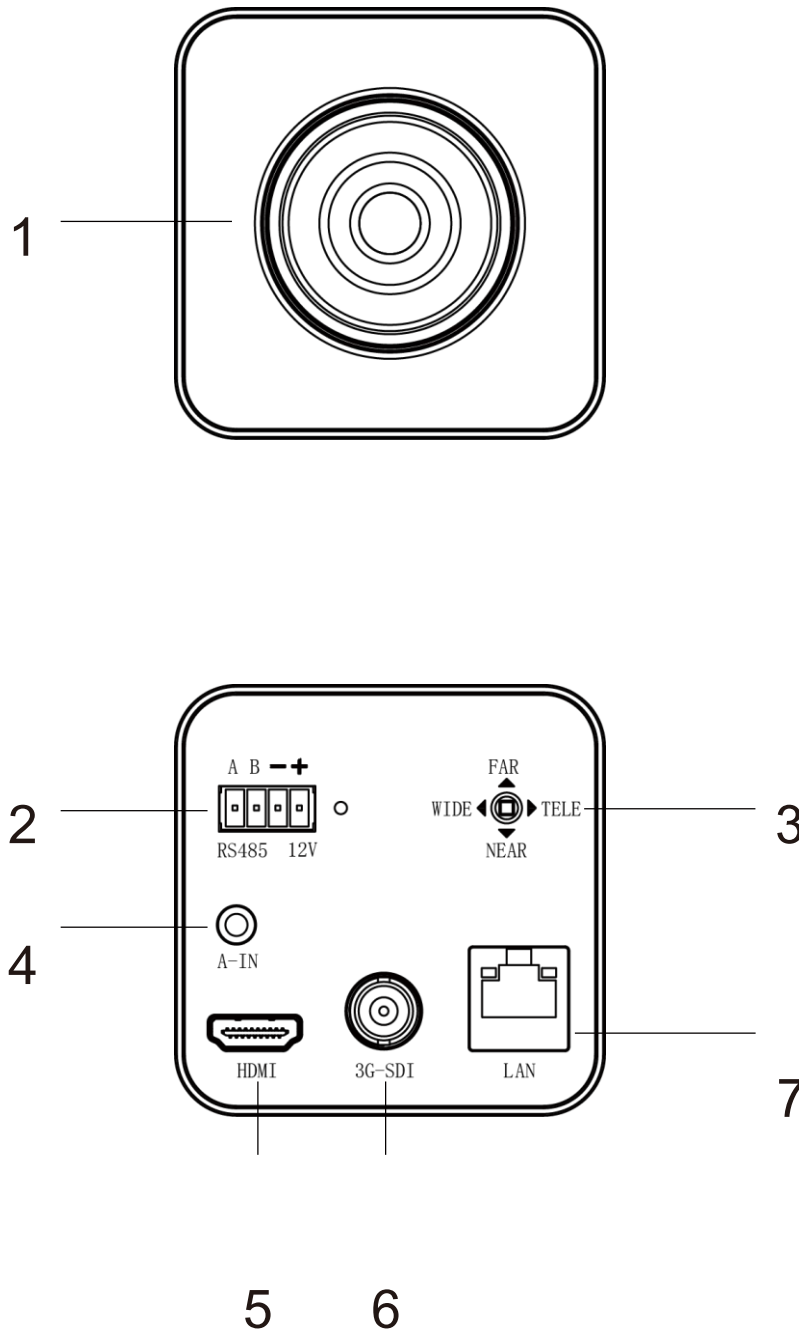
➤ Input/Output Interface

- Video Output : 3G-SDI / HDMI / IP Streaming
- Audio Input: 3.5mm Audio Input Interface
- Audio Output: 3G-SDI / HDMI/ IP Interface
- Input/Output Control Interface : 2PIN Terminal · 3.50mm
- Power Interface : 2PIN Terminal or Power Over Ethernet (POE+)

➤ Parameter

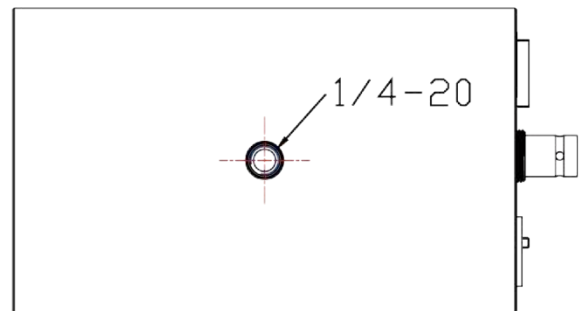
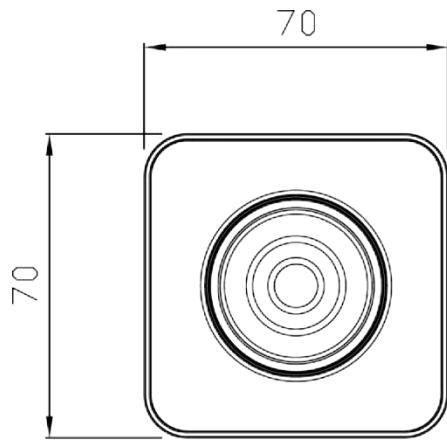
- Using IP(RJ45) or RS485 Communication system, which can using PTZ Controller or PC to control Camera.
- Improve the image quality of real-time images by using the newly developed digital signal processor (DSP).
- Built-in attenuation filter that physically removes IR (infrared). This filter can be turned on or off automatically, providing high quality images for shooting environments of different brightness.
- The five-direction button at the end of the camera can easily and quickly change any parameters of the camera.
- Default IP Address: 192.168.1.162
- Built-in Audio Input, Audio encode standard support G.711, G.722, G.722.1, G.728, G.722.1C, ACC
- Support multiple interface SDI/HDMI/IP Streaming 3-Ways simultaneous video output
- Support POE+ Function (Optional)

3.0 Camera Interface instruction



- 1. LENS
- 2. Terminal Pin/ RS485 & Power Supply
- 3. FIVE-DIRECTION BUTTON
- 4. 3.5mm AUDIO INPUT
- 5. HDMI Video output
- 6. 3G-SDI Video Output
- 7. LAN/RJ45 Network for Streaming or Power Over Ethernet(POE+)

3.1 Dimension(mm)



4.0 Camera Menu Setting

1. Long Press "Center Button" over 3 secs, to Enter Main Menu
2. Press Up/Down to Selection Menu, Press L/R Direction Button To setting the menu

4.1 EXPOSURE

Enter Main Menu, Press Up/Down to **【EXPOSURE】** , Press Right Button to enter Sub-menu, as like Picture

- **【AE MODE】**

Optional: AUTO/SHUTTER/IRIS/BRIGHT

- **【SHUTTER /IRIS / BRIGHT】**

To modify different Exposure parameter with, Different Mode. It can setting range as follows

【Shutter】 Shutter Priority:

AE Level can adjustment 1/30, 1/50, 1/60,1/90,1/100,1/125,1/180,1/250, 1/350,1/500,1/750,1/1000,1/1500,1/2000, 1/2500.1/3500,1/5000,1/10000

【IRIS】 IRIS Priority: AE Level can adjustment F1.6-F32

【BRIGHT】 Bright Priority: AE Level can adjustment F32/0DB-F1.6/28DB

【EXPCOMP】 It means Exposure Compensation, it adjustment-10.5dB ~10.5dB

【BACK LIGHT】 it can adjustment OFF/ON according to different environment

【HLC】 HIGHT LIGHT COMPENSATION, It can adjustment from 0 -15, default setting "8"

- **【FLICKER】** It can setting to ON/OFF

- **【GAMMA】** It can setting to from 0-9, default setting "6"

MAIN MENU

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

EXPOSURE

AE MODE: AUTO
 AE LEVEL: N/A
 EXPOCOMP: 0DB
 BACK LIGHT: OFF
 HLC: 8
 FLICKER: OFF
 GAMMA: 6
 —BACK
 EXIT

4.2 COLOR

Enter Main Menu, Press Up/Down to **【COLOR】** ,
 Press Right Button to enter Sub-menu, as like Picture
 And Move the cursor to **WB MODE**

COLOR	
WB MODE:	AUTO
SATURATION:	N/A
COLOR HUE:	6
- BACK	
EXIT	

- **【WB MODE】** WHITE BALANCE MODE

Optional: AUTO/INDOOR/OUTDOOR/OPW/ATW/MANUAL/3000K4000K/5000K6500K
 Default setting "AUTO"

- **【SATURATION】** it can adjustment 60%-200%, default 90%
- **【COLOR HUE】** Setting Valued ranged: -14 - 14, default setting"6"

4.3 PICTURE

Enter Main Menu, Press Up/Down to **【PICTURE】** ,
 Press Right Button to enter Sub-menu, as like Picture
 Move cursor to **BRIGHT** And **RIGHT DIRECTION** To
 Enter for setting

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

- **【BRIGHT】** To adjustment Valued from 0 -14, default "7"
- **【CONTRAST】** To Setting Valued ranged: 0-14, default"7"
- **【SHARPNESS】** To Setting Valued ranged: 0-15, default"7"
- **【ICR】** To Setting: COLOR / BLACK, default "Color"
- **【STYLE】** To Setting Image Style: Standard /Bright /RTSP /SOFT, Default setting" Standard"

4.4 P/T/Z

Enter Main Menu, Press Up/Down to **【P/T/Z】** , Press Right Button to enter Sub-menu, as like Picture

P/T/Z	
FLIP:	OFF
AF MODE:	AUTO
SHARPNESS:	7
AF SENS:	NORMAL
PRESET FREEZE:	OFF
—BACK	
EXIT	

- **【FLIP】** Image Flip To Setting: ON/OFF, default " OFF"
- **【AF MODE】** Auto Focus Mode to Setting by AUTO /Manual / Z- Trigger, default " Auto"
- **【AF SENS】** Auto Focus Sensitivity Level, you can Setting LOW / NORMAL, default" NORMAL"
- **【PRESET FREEZE】** Camera Preset Freeze function, when it turn on, the camera will be movement direct from Presets A TO B Presets without Path. You can setting ON/OFF, default"OFF"
- **【IO FUN】** To Setting: OFF、ICR、PERSET

4.5 NOISE REDUCE

Enter Main Menu, Press Up/Down to **【NOISE REDUCE】** , Press Right Button to enter Sub-menu, as like Picture

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

- **【2D NR】** 2D Noise Reduce
- To Setting valued ranged: 1-5, default Valued "2"
- **【3D NR】** 3D Noise Reduce
- To Setting valued ranged: 1-5, default Valued "3"

【DYN HOT PIXEL】 DYNAMIC HOT PIXEL To Setting OFF /ON STATUS, Default "OFF"

4.6 VIDEO OUT

Enter Main Menu, Press Up/Down to **【VIDEO OUT】**

, Press Right Button to enter Sub-menu, as like

Picture

And move the cursor to **VIDEOOUT**

【VIDEOOUT】 VIDEO OUTPUT FORMAT SETTING

It can support Video output format as follows:

1080P60/59.94, 1080P50,1080P30/29.97, 1080P25

- When you changed the video output format
Please restarting / Reboot the camera for
verification

【REBOOT】 TO RESTART CAMERA

【DIGITAL AUDIO】 DIGITAL AUDIO OUTPUT MODE, When it Turn ON, The camera Audio output can support through HDMI & 3G-SDI And IP(LAN),
When it Turn OFF, The Camera Audio Output only support Through IP(LAN)

4.7 SYSTEM SETUP

Enter Main Menu, Press Up/Down to **【SYSTEM**

SETUP】, Press Right Button to enter Sub-menu, as

like Picture,And move the cursor to **SYSTEM INFO**

It will display camera default system information

FIRMWARE V1.03
PROTOCOL: VISCA
BAUDRATE: 9600
CAM ADDRESS: AUTO
IP: 192.168.1.162
VIDEOOUT: 1080P60/59

VIDEO OUT

VIDEOOUT: 1080P60/59
REBOOT
DIGITAL AUDIO: ON
—BACK
EXIT

SYSTEM SETUP

SYSTEM INFO
LANGUAGE: ENGLISH
ZOOM LABEL: OFF
PRTOCOL: VISCA
ADDRESS: AUTO
BAUDRATE: 9600
—BACK
EXIT

【LANGUAGE】 Can setting to Camera Menu Language,Default ENGLISH LANGUAGE

【ZOOM LABLE】 Can setting ON/OFF, When you turn on, the camera output image will be display Optical Zoom Number, when you Turn Off, the Optical Zoom number will be disappear.

【PROTOCOL】 Communication Protocol, can setting to PELCO P/ PELCO D, VISCA, Default "VISCA" PROTOCOL, Which can working by VISCA OVER IP(UDP) Through PTZ Controller. When you control it through RS485, must be setting Protocol to PELCO P or PELCO D.

【ADDRESS】 Camera Address, Can setting to AUTO, 1-255; default setting "AUTO"

【BAUDRATE】 Camera Baud rate, can setting 2400/4800/9600/19200/38400bps, default setting "9600", the valued number is more bigger then the communication distance more short.

- when you using RS485 to control the camera, the camera ID/ Protocol/ Baudrate must be keep the same setting with your PTZ Controller. And Only working for PELCO P/D Protocol.
- When you using IP(VISCA OVER IP) interface to Control the camera, the Camera ID/IP Address must be keep same setting with your PTZ Controller, and Only working for VISCA Protocol

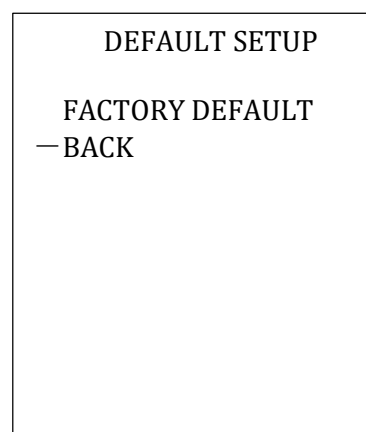
4.8 DEFAULT SETUP

Enter Main Menu, Press Up/Down to **【DEFAULT SETUP】** , Press Right Button to enter Sub-menu, as like Picture, and move the cursor to **FACTORY DEFAULT**

【FACTORY DEFAULT】 Factory Default RESTORE

When you changed the setting, and can back to default

The customers can using this function to restore factory default Setting.



5.0 Maintenance Service Terms

5.1 Range of Warranty

- The product will be maintained free for one year.
- The product will be obtained the free maintenance service if the same malfunction appears again within three payable maintenance months.
- Malfunction of products caused by force majeure (such as war, earthquake, lightning strike and so on), abuse, non-standard operation, change of construction, non-normal wear or accident are non-free of warranty;
- Please prevent from the damage which is caused by heavy pressure , the fierce vibration and soaks in the process of transportation and storage, which does not belong to the free maintenance range.
- Please adopt the way of fission package or original package to transport because the product damage dose not belong to the free maintenance scope if you use the whole packing way , not the original packing way.
- The maintenance services will not be free when the pan/tilt module is disassembled or serviced by the user voluntarily.
- Our company implements the lifetime payable service if the product in malfunction has surpassed the warranty period.
- To the products with defect if it's in the period of warranty, please fill in the form of warranty information correctly, describe the trouble in details, and provide original sales invoice or its copy.
- For the damage and loss which was caused by the user's specifically application, factory won't bear any risk and responsibility. The factory compensation made by breach of faith, negligence or tortuous won't exceed the amount of the products. The factory won't bear any responsibility for the special, unexpected and continue damage caused by any other Reasons.
- Our company has the final right of explanation for the above terms.

5.2 Warranty Terms

If the products are within the warranty time, the buyer should fill in the warranty card and send back together with the products.

5.3 RMA Shipping

If the product needs repaired , you can return it to the manufacturer through the supplier or directly. If you choose the later , please contact us in order to speed up the process. And our company only undertake the one-way freight from manufacturer to customer after maintenance.

Products Warranty Cards

User Information

Date: ___ Day ___ Month ___ Year

Name		Purchased Date	
Add			
Tel/Fax		Post Code	
Purchased Place			
Model/Specs		S/N	
Malfunction Phenomenon			
Distributor(Chop)		User Signature	

★ User files are warranty and basic documents, please fill in and keep them carefully & Saved it