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PTZ Optics

3 Year Manufacturer



PTZ Optics

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CAMERA MODEL #	12X-SDI	12X-USB	20X-SDI	20X-USB
MSRP	\$1,599	\$1,699	\$1,699	\$1,799
OPTICAL ZOOM	12X	12X	20X	20X
FIELD OF VIEW	72.5°	72.5°	60.7°	60.7°
RESOLUTION	1080P @ 30FPS	1080P @ 30FPS	1080P @ 30FPS	1080P @ 30FPS
USB VIDEO	USB 2.0 UPDATES ONLY	USB 3.0 FOR VIDEO	USB 2.0 UPDATES ONLY	USB 3.0 FOR VIDEO
HDMI	1	1	1	1
HD-SDI	1	×	4	×
CVBS	1	1	1	1
IP STREAMING	1	1	1	v
RS-232 IN/OUT	1	1	1	1
64 PRESETS	.01° ACCURACY	.01° ACCURACY	.01° ACCURACY	.01° ACCURACY
AUDIO IN	🗸 3.5mm	🗸 3.5mm	🗸 3.5mm	🗸 3.5mm
MIN LUX	0.5 LUX	0.5 LUX	0.5 LUX	0.5 LUX
WIDE DYNAMIC RANGE	1	1	×	×
3D NOISE CANCELLATION	1	1	1	1

SUPERSPEED

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CERTIFIC USB





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PTZ

OPTICS 20X SDI

3 Year Manufacturer Warranty

Video Conferencing Camera

The PTZ Optics 20X-SDI is a 1080p camera with 20X optical zoom for capturing HD images at long distances. With support for HD-SDI, HDMI, and IP Streaming (H.264) this camera is ideal for broadcasting high definition video signals for broadcast or video conferencing applications.

KEY FEATURES

PTZ OPTICS

- 60.7 degree wide-angle lens.
- High performance in low illumination situations.
- Full 1920x1080p HD Resolutions up to 30 frames per second.
- 2D and 3D noise reduction with our latest "low noise CMOS sensor".
- Conforms to ONVIF IP Streaming Standards
- RJ-454 H.264 Streaming port (Control Software is open source)
- HDMI, HD-SDI, IP Streaming (All Simultaneuos)

Camera & Lens

Video CMOS Sensor	1/3" CMOS, 2.12 Mega Pixels
Frame Rate	1080p/30, 1080p/25, 720p/60,
	720p/50, NTCS, PAL
Lens	20x, F4.42mm-88.5mm, F1.8-F2.8
Lens Zoom	20x, 16x Digital Zoom
Field of View	60.7°
Min Lux	0.5 Lux at F1.8, AGC ON
Shutter Speed	1/25s - 1/10000s
SNR	≥55dB
Vertical Flip & Mirror	Supported
Horizontal Angle of View	60.7° - 3.36°
Vertical Angle of View	34.1° - 1.89°

Pan &	Tilt	Movement
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Pan Movement	±170°
Tilt Rotation	-30°- +90°
Presets	245 Presets

Rear Board Connectors Video Output Interface HDMI, HD-SDI, CVBS Network Interface RJ45 Audio Interface Line In/Line Out, 3.5mm **Communication Interface** RS-232, RS485 Baud Rate 2400/4800/96000 bits Power Supply Interface Power Adapter (DC IN 12V) **USB** Interface USB 2.0 (for firmware updates only) **Electrical Index Power Supply** 8W Input Voltage 12V DC (10.8 - 13.0V DC) **Physical Specifications Dimension inches** 5"W x 6.5"H x 6.63"D (8.6" Height Extended) **Dimensions milimeters** 127 W x 167 H x 168 D (204 Height Ext) **Box Dimensions** 9"x9"x10" | 228mmx254mmx228mm 3.25 lbs. (1.47 kg) Camera Weight **Boxed Weight** 5.4 lbs. (2.45 kg)

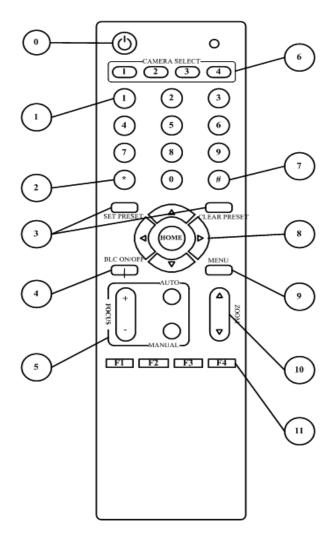
WHAT'S IN THE BOX

20X Zoom IP Camera **Power Adapter IR Remote Control** RS-232C to RS-485 Cable User Manual





1. Audio LINE IN Interface	7. RJ45 Interface
2. CVBS Interface	8. HDMI Interface
3. System Select Switch	9. HD-SDI Interface
4. RS485 Jack	10. USB2.0
5. RS232 IN jack	11. DC 12V Jack
6. RS232 OUT Jack	12. Power Switch



0. Standby Button

Press this button to enter standby mode. Press it again to enter normal mode. (Note: Power consumption in standby mode is approximately half of the normal mode)

1. Position Buttons

To set preset or call preset

2. * Button

3. Set/Clear Preset Buttons Set preset: Store a preset position [SET PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset positionClear preset: Erase a preset position[CLEAR PRESET]+ Numeric button (0-9) Or: [*]+[#]+[CLEAR PRESET]: Erase all the preset individually.

4. BLC (Backlight Compensation) ButtonBLC ON/OFF: Press this button to enable the backlight compensation. Press it again to disable the backlight compensation.(NOTE: Effective only in auto exposure mode) Note: If a light behind the subject, the subject will become dark. In this case, press the backlight ON / OFF button. To cancel this function, press the backlight ON / OFF button.

5. Focus Buttons

Used for focus adjustment. Press [AUTO] adjust the focuses on the center of the object automatically. To adjust the focus manually, press the [MANUAL] button, and adjust it with [Focus+] (Focus on far object) and [Focus-] (Focus on near object)

6. Camera Select Buttons

Press the button corresponding to the camera you want to operate with the remote controller.

7. # Button

8. Pan/Tilt Control Buttons

Press arrow buttons to perform panning and tilting. Press [HOME] button to face the camera back to front

9. Menu Setting

Menu button: Press this button to enter or exit the OSD menu

10. Zoom Buttons Zoom : Zoom In Zoom : Zoom Out

11. Set Camera IR Address Buttons

[*]+[#]+[F1]: Address1 [*]+[#]+[F2]: Address2 [*]+[#]+[F3]: Address3 [*]+[#]+[F4]: Address4



OPTICS 20X USB



PTZ OPTICS Video Conferencing Camera

The PTZ Optics 20X-USB is a 1080p camera with 20X optical zoom for capturing HD video at long distances. With support for USB, HDMI and IP Streaming (H.264) this camera is ideal for broadcasting high definition video signals for broadcast or video conferencing applications.

KEY FEATURES

- 60.7 degree wide-angle lens.
- High performance in low illumination situations.
- Full 1920x1080p HD Resolutions up to 30 frames per second.
- 2D and 3D noise reduction with our latest "low noise CMOS sensor".
- Conforms to UVC 1.0 & ONVIF IP Control Protocols
- RJ-454 H.264 Streaming port (Control Software is open source)
- HDMI, USB 3.0, IP Streaming (All Simultaneuos)

Camera & Lens

Video CMOS Sensor	1/3" CMOS, 2.12 Mega Pixels
Frame Rate	1080p/30, 1080p/25, 720p/60,
	720p/50, NTCS, PAL
Lens	20x, F4.42mm-88.5mm, F1.8-F2.8
Lens Zoom	20x, 16x Digital Zoom
Field of View	60.7°
Min Lux	0.5 Lux at F1.8, AGC ON
Shutter Speed	1/25s - 1/10000s
SNR	≥55dB
Vertical Flip & Mirror	Supported
Horizontal Angle of View	60.7° - 3.36°
Vertical Angle of View	34.1° - 1.89°

Pan & Tilt Movement

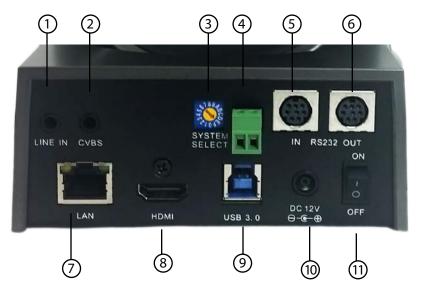
Pan Movement	±170°
Tilt Rotation	-30°- +90°
Presets	245 Presets

WHAT'S IN THE BOX

20X Zoom IP Camera Power Adapter IR Remote Control USB 3.0 Cable RS-232C to RS-485 Cable User Manual

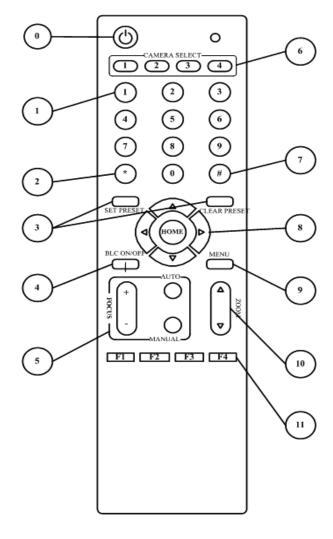
Rear Board Connectors

Video Output Interface	USB 3.0, HDMI, CVBS
Network Interface	RJ45
Audio Interface	Line In/ Line Out, 3.5mm
Communication Interface	RS-232, RS485
Baud Rate	2400/4800/96000 bits
Power Supply Interface	Power Adapter (DC IN 12V)
USB Interface	USB 2.0 (for firmware updartes only)
Electrical Index	
Power Supply	8W
Input Voltage	12V DC (10.8 - 13.0V DC)
Physical Specifications	
Dimension inches	5″W x 6.5″H x 6.63″D (8.6″ Height Extende
Dimensions milimeters	127 W x 167 H x 168 D (204 Height Ext)
Box Dimensions	9"x9"x10" 228mmx254mmx228mm
Camera Weight	2.25 (1.47)
	3.25 lbs. (1.47 kg)



- 1. Audio LINE IN Interface
- 2. CVBS Interface
- 3. System Select Switch
- 4. RS485 Jack
- 5. RS232 IN jack
- 6. RS232 OUT Jack

- 7. RJ45 Interface
- 8. HDMI Interface
- 9. USB 3.0 Interface
- 10. DC 12V Jack
- 11. Power Switch



0. Standby Button

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5. Focus Buttons

Used for focus adjustment. Press [AUTO] adjust the focuses on the center of the object automatically. To adjust the focus manually, press the [MANUAL] button, and adjust it with [Focus+] (Focus on far object) and [Focus-] (Focus on near object)

6. Camera Select Buttons

Press the button corresponding to the camera you want to operate with the remote controller.

7. # Button

8. Pan/Tilt Control Buttons

Press arrow buttons to perform panning and tilting. Press [HOME] button to face the camera back to front

9. Menu Setting

Menu button: Press this button to enter or exit the OSD menu

10. Zoom Buttons Zoom : Zoom In Zoom : Zoom Out

11. Set Camera IR Address Buttons

[*]+[#]+[F1]: Address1 [*]+[#]+[F2]: Address2 [*]+[#]+[F3]: Address3 [*]+[#]+[F4]: Address4



OPTICS 12X USB



PTZ OPTICS Video Conferencing Camera

The PTZ Optics 12X-USB is a 1080p camera with 12X optical zoom for capturing wide angles. With support for USB 3.0, HDMI & IP Streaming (H.264) this camera is ideal for broadcasting high definition video signals for broadcast or video conferencing applications.

KEY FEATURES

- 72.5 degree wide-angle lens.
- Wide Dynamic Range
- High performance in low illumination situations.
- Full 1920x1080p HD Resolutions up to 30 frames per second.
- 2D and 3D noise reduction with our latest "low noise CMOS sensor".
- Conforms to UVC 1.0 & ONVIF IP Control Protocols
- RJ-454 H.264 Streaming port (Control Software is open source)
- HDMI, USB 3.0, IP Streaming (All Simultaneuos)

Camera & Lens

Video CMOS Sensor	1/3" CMOS, 2.12 Mega Pixels
Frame Rate	1080p/30, 1080p/25, 720p/60,
	720p/50, NTCS, PAL
Lens	12x, F3.5mm-42.3mm, F1.8-F2.8
Lens Zoom	12x, 16x Digital Zoom
Field of View	72.5°
Min Lux	0.5 Lux at F1.8, AGC ON
Shutter Speed	1/25s - 1/10000s
SNR	≥55dB
Vertical Flip & Mirror	Supported
Horizontal Angle of View	72.5° - 6.9°
Vertical Angle of View	34.1° - 1.89°

Pan & Tilt Movement

Pan Movement	±170°
Tilt Rotation	-30°- +90°
Presets	245 Presets

WHAT'S IN THE BOX

12X Zoom IP Camera Power Adapter IR Remote Control USB 3.0 Cable RS-232C to RS-485 Cable User Manual

Rear Board Connectors

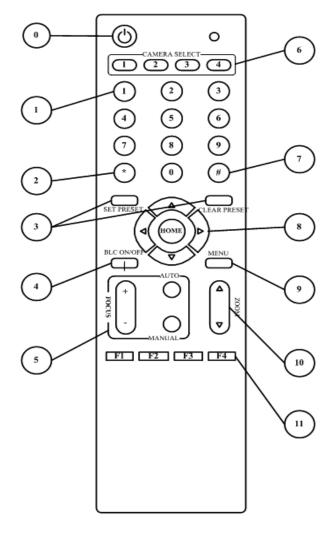
Video Output Interface	USB 3.0, HDMI, IP Streaming, CVBS
Network Interface	RJ45
Audio Interface	Line In/ Line Out, 3.5mm
Communication Interface	RS-232, RS485
Baud Rate	2400/4800/96000 bits
Power Supply Interface	Power Adapter (DC IN 12V)
USB Interface	USB 3.0
Electrical Index	
Power Supply	8W
Input Voltage	12V DC (10.8 - 13.0V DC)
Physical Specifications	5
Dimension inches	5″W x 6.5″H x 6.63″D (8.6" Height Extended
Dimensions milimeters	127 W x 167 H x 168 D (204 Height Ext)
Box Dimensions	9″x9″x10″ 228mmx254mmx228mm
Camera Weight	3.25 lbs. (1.47 kg)
Boxed Weight	5.4 lbs. (2.45 kg)

DATA SHEET PTZ Optics Specifications & Diagrams



- 1. Audio LINE IN Interface
- 3. System Select Switch
- 4. RS485 Jack
- 5. RS232 IN jack
- 6. RS232 OUT Jack

- 7. RJ45 Interface
- 8. HDMI Interface
- 9. USB 3.0 Interface
- 10. DC 12V Jack
- 11. Power Switch



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Used for focus adjustment. Press [AUTO] adjust the focuses on the center of the object automatically. To adjust the focus manually, press the [MANUAL] button, and adjust it with [Focus+] (Focus on far object) and [Focus –] (Focus on near object)

6. Camera Select Buttons

Press the button corresponding to the camera you want to operate with the remote controller.

7. # Button

8. Pan/Tilt Control Buttons

Press arrow buttons to perform panning and tilting. Press [HOME] button to face the camera back to front

9. Menu Setting

Menu button: Press this button to enter or exit the OSD menu

10. Zoom Buttons Zoom : Zoom In Zoom : Zoom Out

11. Set Camera IR Address Buttons

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The PTZ Optics 12X-SDI is a 1080p camera with 12X optical zoom for capturing wide angles. With support for HD-SDI, HDMI, and IP Streaming (H.264) this camera is ideal for broadcasting high definition video signals for broadcast or video conferencing applications.

KEY FEATURES

- 72.5 degree wide-angle lens.
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Camera & Lens

Video CMOS Sensor	1/2.7" CMOS, 2.07 Mega Pixels
Frame Rate	1080p/30, 1080p/25, 720p/60,
	720p/50, NTCS, PAL
Lens	12x, F3.5mm-42.3mm, F1.8-F2.8
Lens Zoom	12x, 16x Digital Zoom
Field of View	72.5°
Min Lux	0.5 Lux at F1.8, AGC ON
Shutter Speed	1/25s - 1/10000s
SNR	≥55dB
Vertical Flip & Mirror	Supported
Horizontal Angle of View	72.5° - 6.9°
Vertical Angle of View	44.8° - 3.9°

Pan & Tilt Movement

Pan Movement	±170°
Tilt Rotation	-30°- +90°
Presets	245 Presets

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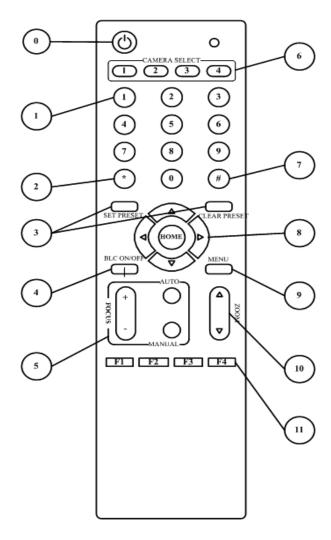
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Communication Interface	RS-232, RS485
Baud Rate	2400/4800/96000 bits
Power Supply Interface	JEITA type Power Adapter (DC IN 12V)
USB Interface	USB 2.0 (for firmware updates only)
Electrical Index	
Power Supply	8W
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- 1. Audio LINE IN Interface
- 2. CVBS Interface 8
- 3. System Select Switch
- 4. RS485 Jack
- 5. RS232 IN jack
- 6. RS232 OUT Jack

- 7. RJ45 Interface
- 8. HDMI Interface
- 9. HD-SDI Interface
- 10. USB2.0
- 11. DC 12V Jack
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11. Set Camera IR Address Buttons

[*]+[#]+[F1]: Address1 [*]+[#]+[F2]: Address2 [*]+[#]+[F3]: Address3 [*]+[#]+[F4]: Address4





Simultaneous Streaming Applications





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12X IP



12X USB

20X IP





