PTZOPTICS® 20X SDI (GEN 2)

PTZOPTICS
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 3G-SDI, HDMI, and IP Streaming (H.264, H.265 & MJPEG) 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 and Wide Dynamic Range.
- Full 1920x1080p HD Resolutions up to 60 frames per second.
- 2D and 3D noise reduction with our latest "low noise CMOS sensor".
- RS232, RS485 & IP Control
- RJ-45 H.264, H.265 & MJPEG Streaming port
- HDMI, 3G-SDI, IP Streaming (All Simultaneuos)

WHAT'S IN THE BOX

20X Zoom 3G-SDI Camera

Power Adapter + Cord

IR Remote Control

RS-232C Cable

User Manual

Camera & Lens

Video CMOS Sensor	1/2.7" CMOS, 2.12 Mega Pixels
Frame Rate	1080i/60 & 50, 1080p/60 & 50, 1080p/30 & 25, 720p/60, 50, 30 & 25
Lens	20x, F4.42mm-88.5mm, F1.8-F2.8
Lens Zoom	20x
Field of View	60.7°
Min Lux	0.5 Lux at F1.8, AGC ON
Shutter Speed	1/30s - 1/10000s
SNR	≥55dB
Vertical Flip & Mirror	Supported
Horizontal Angle of View	3.36° (tele) to 60.7° (wide)
Vertical Angle of View	1.89° (tele) to 34.1°(wide)
Working Enviornment	Indoor

Pan & Tilt Movement

Pan Movement	±170°
Tilt Rotation	Up: 90°, Down: 30°
Presets	10 IR Presets (up to 255 via RS-232)

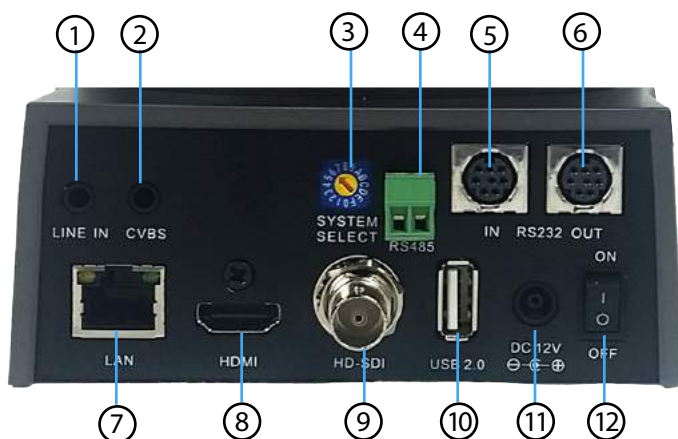## Rear Board Connectors

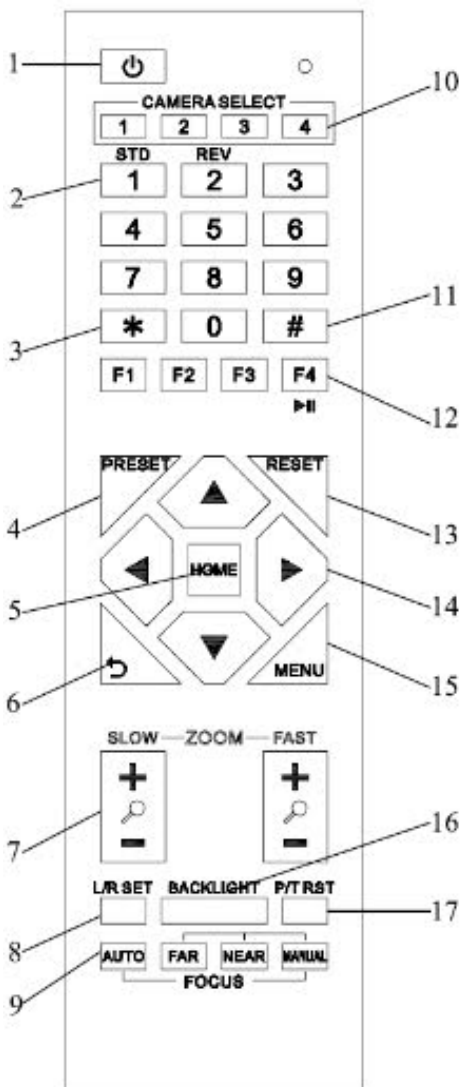|	
Video Output Interface	HDMI, 3G-SDI, IP Streaming, CVBS
Network Interface	RJ45
Audio Interface	Line In, 3.5mm (IP Stream Only)
Communication Interface	RS-232, RS485
Baud Rate	2400/4800/9600 bits
Power Supply Interface	JEITA Type Power Adapter (DC IN 12V)
USB Interface	USB 2.0 (future use)

Electrical Index

Power Supply	12W (Max)
Input Voltage	12V DC (10.8 - 13.0V DC)

Physical Specifications

Dimension (in.)	5.56W x 6.63H x 5.88D (7.25H w/ Tilt Up)
Dimensions (mm.)	142W x 169 H x 150 D (185H w/ Tilt Up)
Box Dimensions	9"x9"x10" | 228mmx254mmx228mm
Camera Weight	3.10 lbs. (1.41 kg)
Boxed Weight	5.4 lbs. (2.45 kg)

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

1. 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.

2. Position Buttons
To set preset or call preset.

3. * Button
For multiple function.

4&13. Set/Clear Preset Buttons
Set preset: Store a preset position [PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset position NOTE: Preset 0 - 9 via remote control and the rest from web, keyboard and the serial port. Clear preset: Erase a preset position [RESET] + Numeric button (0-9), or: [*] + [#] + [RESET]: Erase all presets

5&14. Pan/Tilt Control Buttons
Press the arrow buttons to perform panning and tilting. Press the [HOME] button to face the camera back to front.

6. Return Button
Press the button to back previous menu.

7. Zoom Buttons
Zoom+: Zoom In (Slow and fast speed) Zoom-: Zoom Out (Slow and fast speed)

8. L/R Set Button
Set the left & right direction of remote control.
[L/R Set] + [1]: Normal direction.
[L/R Set] + [2]: Left and right direction will be reversed.

9. Focus Buttons
Used for focus adjustment. Press [AUTO] to adjust the focus on the center of the object automatically. To adjust the focus manually, press the [MANUAL] button, and adjust it with [Far] (focus on far object) and [Near] focus on near object).

10. Camera Address Select Buttons
Press the button corresponding to the camera which you want to operate with the remote controller.

11. # Button
For multiple function

12. Multiple Function Buttons
Function 1. Set camera IR address: Press 3 keys contiguously can set camera IR address as follow:
[*] + [#] + [F1]: Address 1
[*] + [#] + [F2]: Address 2
[*] + [#] + [F3]: Address 3
[*] + [#] + [F4]: Address 4
Function 2. Image freezing function Press [F4] to start the freeze function. The word "Freeze" displays on the upper left corner. After five seconds, the display disappears automatically (though the freeze feature continues). To cancel the freeze, press the [F4] key the word "Unfreeze" displays on the upper left corner. After five seconds, the display disappears automatically.

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

16. Backlight Button
Backlight button: 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 there is a light behind the subject, the subject will appear dark. In this case, press the backlight ON / OFF button.
To cancel this function, press the backlight ON / OFF button.

16. 17. P/T RST Button
Press the button to self-calibrate pan and tilt once again.
Shortcut Set Function
[*] + [#] + [1]: Display OSD menu in English
[*] + [#] + [3]: Display OSD menu in Chinese
[*] + [#] + [4]: Show IP address
[*] + [#] + [6]: Quickly restore the default settings
[*] + [#] + [8]: Show the camera version
[*] + [#] + [9]: Quickly set mount mode (flip / normal)