



Model Number:

PT20X-SDI-GY-G2 (gray)
 PT20X-SDI-WH-G2 (white)
<http://ptzoptics.com/20x-sdi/>

PTZOPTICS Broadcast & Conference Camera

The PTZOptics 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, recording, or video conferencing applications.

KEY FEATURES

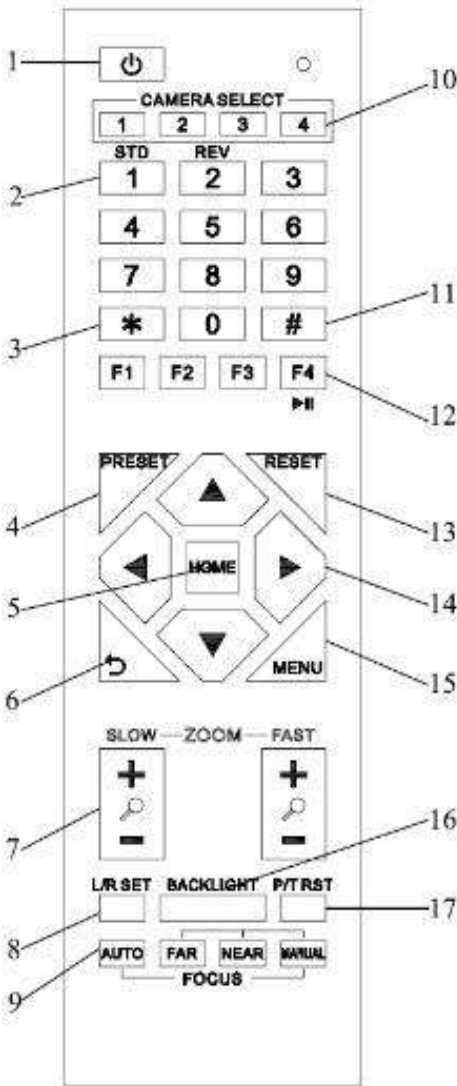
- 60.7 degree wide-angle lens.
- High performance in low light scenarios with Wide Dynamic Range.
- Full 1920x1080p HD Resolutions up to 60 frames per second.
- 2D and 3D noise reduction with our latest “low noise CMOS sensor”.
- RS232 & RS485 (Serial), and IP (LAN/WAN) control
- H.264, H.265, & MJPEG streaming over RJ-45 LAN port
- HDMI, 3G-SDI, & IP streaming (all 3 simultaneously)
- PoE (Power over Ethernet) or 12VDC
- RTMP & RTSP IP streaming

WHAT'S IN THE BOX

- 20X Zoom 3G-SDI Camera
- Power Adapter + Cord
- IR Remote Control
- RS-232C Cable
- User Manual

| Camera & Lens | |
|--------------------------|--|
| Video Sensor | 1/2.7" CMOS, 2.12 Mega Pixels |
| Frame Rates | 1080p/60, 50, 30 & 25, 1080i/60 & 50, 720p/60, 50, 30 & 25 |
| Frame Rates (CVBS) | 576i/30, 480i/30 |
| Focal Length | 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 Environment | Indoor |
| Pan & Tilt Movement | |
| Pan Movement | ±170° |
| Tilt Rotation | Up: 90°, Down: 30° |
| Presets | 10 via IR (255 via Serial or IP) |

| Rear Board | |
|-------------------|---|
| Video Output | HDMI, 3G-SDI, IP Streaming, CVBS |
| Network Interface | RJ45 |
| Audio Interface | Line In, 3.5mm (HDMI & IP Stream Only) |
| Communication | RS-232, RS485, PELCO-D/P |
| Baud Rate | 2400/4800/9600 bits |
| Power Supply | JEITA type Power Adapter (DC IN 12V) |
| 3G-SDI Interface | BNC – 75 Ohm, Female |
| USB 2.0 Interface | Future Use |
| Electrical Index | |
| Power Supply | 12W (Max) |
| Input Voltage | 12V DC (10.8 - 13.0V DC) or PoE 802.3af |
| Physical | |
| Dimension (in.) | 5.6W x 6.5H x 6.7D (7.8H max w/ Tilt) |
| Dimensions (mm) | 142W x 164H x 169D (198H max w/ Tilt) |
| Box Dimensions | 9"x9"x10" 229mmx254mmx229mm |
| Camera Weight | 3.10 lbs. (1.41 kg) |
| Boxed Weight | 5.4 lbs. (2.45 kg) |



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 (0-9)

To set preset or call presets and for Special Shortcut Functions.

3. * (asterisk) Button

For use with multiple function buttons (see 12)

4&13. Set/Clear Preset Buttons

Set preset: Store a preset position [PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset position.
Clear preset: Erase a preset position [RESET] + Numeric button (0-9)
Note: [*] + [#] + [RESET]: Erase all presets.

5&14. Pan/Tilt & Home Control Buttons

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

6. Return Button

Press button to return to previous menu.

7. Zoom Buttons (Slow & Fast)

Zoom+: Zoom In (Slow and fast speeds)
Zoom-: Zoom Out (Slow and fast speeds)

8. L/R Set Button

Set the left & right direction of panning control. Hold [L/R Set] + Press [1]: Normal panning direction. Hold [L/R Set] + Press [2]: Left and right panning 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 then adjust focus 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 IR remote controller.

11. # Button

For use with multiple function buttons (see 12)

12. Multiple Function Buttons

Function 1. Set camera IR address function: Press 3 keys consecutively to set the camera's IR address as follow:

[*] + [#] + [F1]: IR Address 1

[*] + [#] + [F2]: IR Address 2

[*] + [#] + [F3]: IR Address 3

[*] + [#] + [F4]: IR 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 Button

OSD Menu Settings: Press this button to enter or exit the OSD (on screen display) menu.

16. Backlight Button

Backlight (aka BLC) button: Press this button to enable backlight compensation. Press it again to disable backlight compensation. NOTE: Effective only in auto exposure mode. NOTE: If there is a light behind the subject, the subject will appear dark (i.e. silhouetted). In this case, press the backlight button to turn BLC On . To cancel this function, press the backlight button to turn BLC Off.

17. P/T RST Button

Press the button to self-calibrate the pan and tilt positions and limits.

Special Shortcut Functions

[*] + [#] + [1]: Display OSD menu in English

[*] + [#] + [3]: Display OSD menu in Chinese











[*] + [#] + [4]: Show IP address

[*] + [#] + [6]: Quickly restore default settings







[*] + [#] + [8]: Show the camera FW version

[*] + [#] + [9]: Quickly set mounting mode (vertical flip / normal)








Product Line

| | | | | |
|---|------------------------|---|------------------------|---|
|  | PT12X-SDI-GY-G2 |  | PT12X-SDI-WH-G2 | 1080p PTZ camera, 12X optical zoom, 3G-SDI, HDMI, IP Streaming |
|  | PT12X-USB-GY-G2 |  | PT12X-USB-WH-G2 | 1080p PTZ camera, 12X optical zoom, USB3.0, HDMI, IP Streaming |
|  | PT20X-SDI-GY-G2 |  | PT20X-SDI-WH-G2 | 1080p PTZ camera, 20X optical zoom, 3G-SDI, HDMI, IP Streaming |
|  | PT20X-USB-GY-G2 |  | PT20X-USB-WH-G2 | 1080p PTZ camera, 20X optical zoom, USB3.0, HDMI, IP Streaming |
|  | PT20X-ZCAM-G2 | | | 1080p Box Camera, 20X optical zoom, 3G-SDI, IP Streaming |
|  | PTVL-ZCAM-G2 | | | 1080p Box Camera, Variable Lenses (4X included), 3G-SDI, IP Streaming |

Control Accessories

| | | | | |
|---|---------------------------|--|--|--|
|  | PT-BRDCSTR-(L,E,P) | | | Remote PTZ Head for handheld-broadcast cameras (3 models) |
|  | DB9M-F-xx | | | Extension Cable, DB9M-F, Plenum, 4 lengths shown in ft. (xx=25, 50, 75, 100) |
|  | VISCA-xx | | | Daisy Chain Cable, miniDIN8-MM, 4 lengths shown in ft. (xx=25, 50, 75, 100) |
|  | HDSDI-xx | | | 3G SDI Cable, BNC-MM, Plenum, 4 lengths shown in ft. (xx=25, 50, 75, 100) |
|  | HC-JOY-G2 | | | RS232, RS485, RS422, 3D Joystick and Keyboard, VISCA, Pelco-P, Pelco-D |
|  | PT-JOY | | | IP control, 4D Joystick and Keyboard, Durable Metal Case |

Mounting Accessories

| | | | | |
|---|-------------------|---|-----------------|---|
|  | HCM-1-BK |  | HCM-1-WH | Small Wall Mount, mounts directly to wall or box with supplied hardware |
|  | HCM-2-BK |  | HCM-2-WH | Large Wall Mount, mounts directly to wall or box with supplied hardware |
|  | HCM-1C-WH | | | Small Open Ceiling Mount, mounts to 1"NPT pipe |
|  | HCM-2C-WH | | | Large Open Base Ceiling Mount, mounts to 1"NPT pipe |
|  | PT-CM-1-BK | | | Surface Ceiling Mount, mounts directly to ceiling or box w/ suppl. hardware |

