



Model Number:  
 PT20X-USB-GY-G2 (gray)  
 PT20X-USB-WH-G2 (white)  
<http://ptzoptics.com/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 & H.265) 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 60 frames per second.
- 2D and 3D noise reduction with our latest “low noise CMOS sensor”.
- Conforms to UVC 1.0 IP Control Protocols
- RJ-45 H.264 & H.265 Streaming port (Control Software is open source)
- HDMI, USB 3.0, IP Streaming (All Simultaneous)

#### WHAT'S IN THE BOX

- 20X Zoom USB 3.0 Camera
- Power Adapter + Cord
- IR Remote Control
- USB 3.0 Cable
- RS-232C Cable
- User Manual

#### 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
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 IR Presets (Up to 255 via RS-232 & UVC)

#### Rear Board Connectors

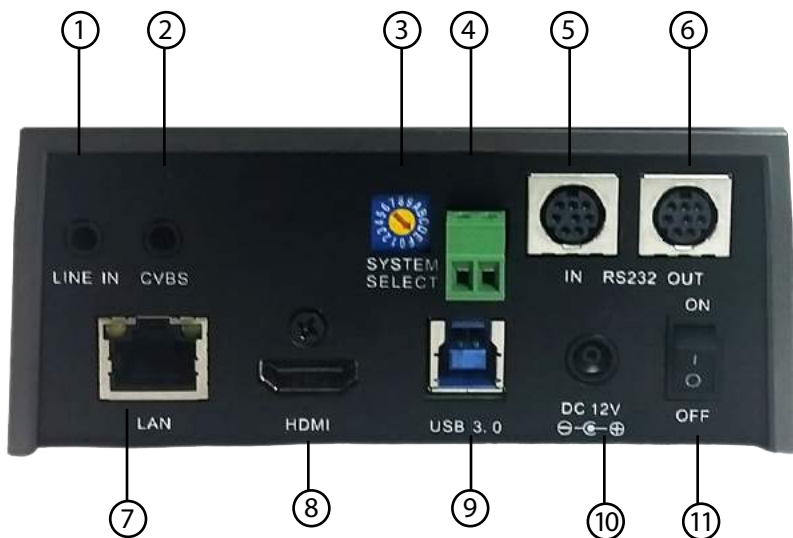
Video Output Interface	USB 3.0, HDMI, IP Streaming, CVBS
Network Interface	RJ45
Audio Interface	Line In, 3.5mm (IP Stream Only)
Communication Interface	RS-232, RS485
Baud Rate	2400/4800/9600 bits
Power Supply Interface	JEITA Type Power Adapter (DC IN 12V)
USB 3.0 Interface	USB 3.0 *(requires quad core processor)
USB 2.0 Interface	(future use)

#### Electrical Index

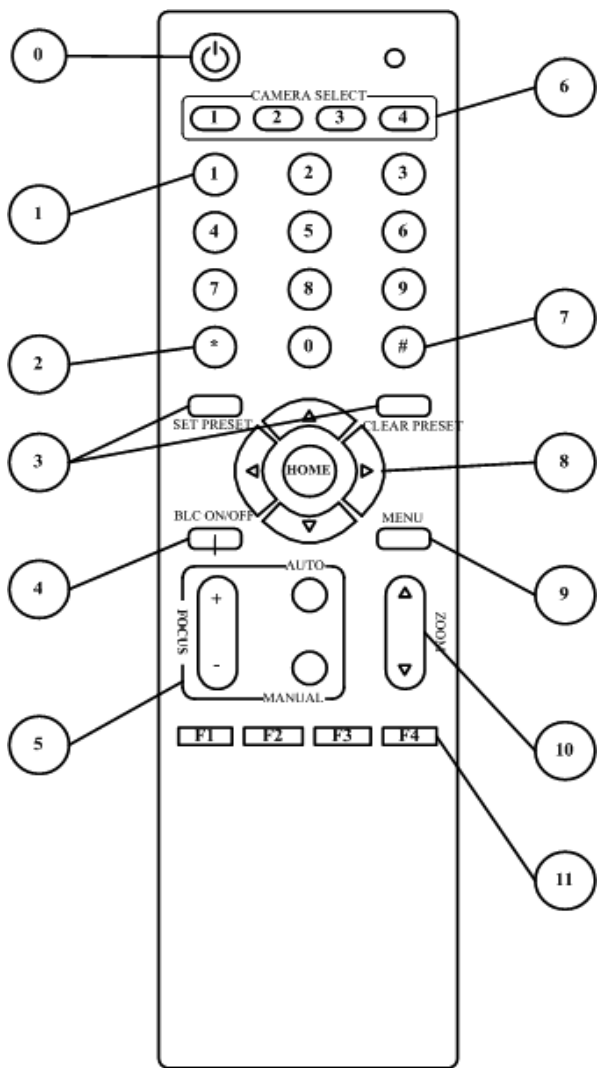
Power Supply	12W 24W(Max)
Input Voltage	12V DC (10.8 - 13.0V DC)

#### Physical Specifications

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

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 position  
**Clear preset:** Erase a preset position [CLEAR PRESET] + Numeric button (0-9)  
 Or: [\*]+[#]+[CLEAR PRESET]: Erase all the preset individually.

**4. BLC (Backlight Compensation) Button**

**BLC 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