StreamSpot®

NDI™

PTZOptics 20X-NDI
Broadcast and Conference Camera
MFR # *PT20X-NDI-WH (White) and PT20X-NDI-GY (Gray)*

The 20X-NDI Broadcast and Conference Camera from PTZOptics, allows you to output up to a 1080p60 signal simultaneously via HDMI, SDI, and NDI or IP outputs (NDI and IP share the same RJ45 port). The NDI protocol, NewTek's innovative IP technology, gives you low-latency access to audio and video devices anywhere on your network for various A/V applications. You won't be restricted to sources connected directly to a single system. The 20X-NDI comes with a NewTek NDI license, so you're set to go right out of the box. The camera also has a composite output that can be used on its own (without any of the other outputs at the same time) to deliver 576i/480i resolution.

The 20X-NDI has a 4.4 - 88.5mm lens providing a 20x zoom range which is best used in midsize settings. The NDI versions of the PTZOptics 20x cameras are ideal for streaming applications, houses of worship, sports streaming, live productions and events, and when cable runs might be an issue (when you'd rather run Ethernet cables instead of coax). The camera does well in low-light conditions owing to a fast f/1.8 - 2.8 lens aperture and minimum illumination requirement of only 0.5 lux. On top of this, built-in wide dynamic range and 2D and 3D noise reduction further enhance the broadcast experience. The camera is completely open-source so developers can customize everything as they prefer using simple HTML.

The 20X-NDI can be powered over PoE or using the included power supply. It offers RS-232 and RS-485 serial control, an audio line-in for HDMI and NDI/IP streams, and 10 presets via the included IR remote control or 255 via serial or IP control.

Key Features

- Simultaneous 1080p60 output via HDMI, SDI, and NDI/IP
- Low-latency NDI video
- Composite output (576i/480i)
- 20x zoom
- Minimum illumination requirement of only 0.5 lux, for better low-light performance
- Built-in wide dynamic range and 2D/3D noise reduction
- PoE support
- RS-232 and RS-485 serial control
- Audio line-in for HDMI and NDI/IP streams
- 10 presets via the included IR remote control or 255 via serial or IP control
- H.264, H.265, and MJPEG streaming over RJ45 port
- Open-source design

Specifications

Image Sensor	2.1 MP, 1/2.7" CMOS
Output	NDI: NDI|HX (over IP interface) IP Interface: 1 x RJ45 3G-SDI: 1 x BNC (75 Ohms) HDMI: 1 x HDMI type A Composite: 1 x 1/8" / 3.5 mm
Audio Line In	Analog Audio: 1 x 1/8" / 3.5 mm (NDI/IP, HDMI)
Resolution	NDI/IP/SDI/HDMI: 1080p: 60/50/30/25 1080i: 60/50 720p: 60/50/30/25 Composite: 576i: 30 480i: 30 Note: All the outputs can stream up to 1080p60 simultaneously except for composite. When you use composite, the other outputs turn off.
Lens	4.42 - 88.5mm, f/1.8 - 2.8
Zoom	20x optical
Field of View	Horizontal: 3.36° (tele) to 60.7° (wide) Vertical: 1.89° (tele) to 34.1° (wide)

Minimum Illumination	0.5 lux at f/1.8, AGC on
Shutter Speed	1/30 - 1/10000 sec
SNR	≥55 dB
Flip / Mirror	Vertical
Working Environment	Indoor
Pan	±170°
Tilt	Up: 90° Down: 30°
Presets	10 via IR (255 via serial or IP)
Communication	RS-232: 1 x 8-pin mini DIN input, 1 x 8-pin mini DIN output RS-485: 1 x 2-pin PELCO-D/P NDI
Compression	H.264, H.265, and MJPEG streaming over RJ45 LAN port
Baud Rate	2400 / 4800 / 9600 bits
Input Voltage	12 VDC (10.8 - 13 VDC) or PoE 802.3af
Power Supply	JEITA-type power adapter (12 VDC in) included
Power Consumption	12 W (max)
USB	USB 2.0 (future manufacturer use only, will not transmit video)
Dimensions	5.6 x 6.5 x 6.7" / 14 x 16 x 17 cm 5.6 x 7.8 x 6.7" / 14 x 20 x 17 cm (with tilt)
Weight	3 lb / 1.4 kg

Packaging Info

Package weight: 5.27 lb
Box Dimensions (L x W x H): 11.35 x 9.35 x 9.25"