PTZOptics

Share Your Vision

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NDI®|HX using NDI® 4 Broadcast & Streaming Camera

The PTZOptics 12X-NDI is a 1080p camera with 12X optical zoom for capturing both wide angles and long shots. With support for NDI®|HX, 3G-SDI, HDMI, and IP streaming (H.264, H.265, & MJPEG), this camera is ideal for broadcasting high definition video signals for broadcast, recording, video conferencing, or live streaming applications.

Key Features

- 72.5° wide-angle lens
- 1920x1080p Full HD Resolutions up to 60 frames per second
- High performance in low light scenarios with Wide Dynamic Range
- 2D and 3D noise reduction with our latest "low noise CMOS sensor"
- Simultaneous HDMI, 3G-SDI, & NDI®|HX using NDI® 4 / IP streaming
- H.264, H.265, or MJPEG compression when IP streaming
- Support for NDI® Discover Server
- Photobooth capable
- Custumizable Presets – PTZ Motion Sync or Image Freeze
- PTZOptics VISCA (RS232 / RS485), PTZOptics VISCA over IP (TCP/IP / UDP), & NDI® 4 control
- PoE (Power over Ethernet) **or** 12V DC power supply

What's in the Box

12X Zoom NDI|HX Camera
Power Adapter + Cord
IR Remote Control
RS-232C Cable
Quick Start Guide
(2) AAA Batteries

Camera & Lens	
Video Sensor	1/2.7" CMOS, 2.07 Megapixel
Frame Rates (HD)	**1080p**-60/50/30/25/59.94*/29.97*
	1080i-60/50/59.94*
	720p-120**/60/50/30/25/59.94*
Frame Rates (SD)	**576i**-30 **480i**-30
Focal Length	12X, F3.5mm-42.3mm, F1.8-F2.8
Min Lux	0.05 Lux (@F1.8, AGC ON)
Shutter Speed	1/30s – 1/10000s
SNR	≥55dB
Horizontal Field of View	6.9° (tele) ~ 72.5° (wide)
Vertical Field of View	3.9° (tele) ~ 44.8° (wide)

*Broadcast framerates are considered BETA and may not work on all platforms

**720p-120 is only available over NDI|HX / IP streaming

Pan & Tilt Movement	
Pan Rotation	±170
Tilt Movement	Up: 90°, Down 30°
Presets	10 via IR (255 via Serial or IP)

Camera Connection	
Video Outputs	NDI®|HX, HDMI, 3G-SDI, IP, CVBS
Audio Interface	Line in, 3.5mm (Unbalanced Stereo)
Network Interface	RJ45 10/100/1000 Ethernet port
HDMI Interface	HDMI ver. 1.3
SDI Interface	BNC Female
Control Interfaces	RS-232, RS-485, Pelco-D/P, IR, NDIv4
Power Supply Interface	JEITA type Power Adapter

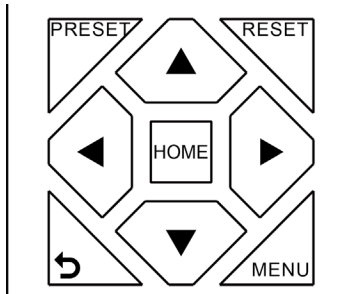| Power Specifications	
Power Supply	12W (Max)
Input Voltage	12V DC (10.8 – 13.0V DC) or PoE 802.3af*

*Do not power over DC & PoE simultaneously!
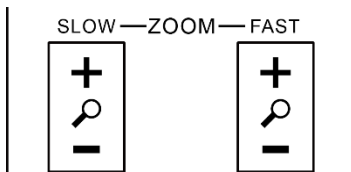
Physical Specifications	
Dimensions W x D x H	5.6" x 7.88" x 6.5"
Dimensions W x D x H	142mm x 169mm x 164mm
Camera Weight	3.2 lbs (1.45 kg)

1. Pan & Tilt Control

Tilt Up: [▲]
Tilt Down: [▼]
Pan Left: [◄]
Pan Right: [►]
Face camera to front: [Home]

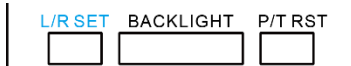## 2. Zoom Control

Zoom In: [+] Fast or Slow
Zoom Out: [−] Fast or Slow
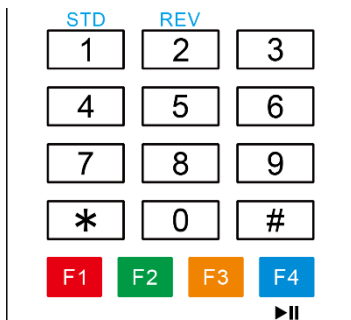
3. Focus Control

Auto Focus Mode: [Auto]
Manual Focus Mode: [Manual]
Focus Far: [Far]
Focus Near: [Near]

4. Backlight, L/R Set, & P/T RST Controls

Reverse Pan Control: [L/R Set] + [1]
Standard Pan Control: [L/R Set] + [2]
Backlight Compensation: [Backlight]
Self-Calibrate Test: [P/T RST]

5. Presets – Setting, Calling, and Clearing
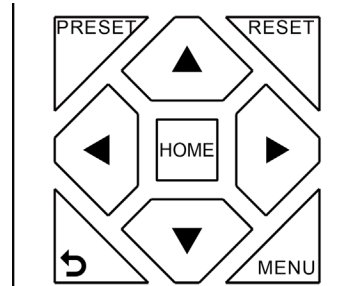
Set Preset: [Preset] > [0-9]
Call Preset: [0-9]
Clear Preset: [Reset] > [0-9]
Clear All Presets: [*] > [#] > [Reset]

6. Image Freeze

Toggle Image Freeze   [►II]

7. On Screen Display Menu
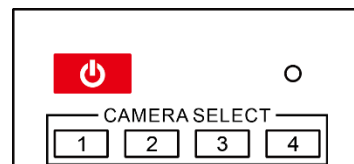
Open / Close OSD: [Menu]
OSD Up: [▲]
OSD Down: [▼]
OSD Left: [◄]
OSD Right: [►]
OSD Enter: [Home]
OSD Back: [↶]

8. Change Camera IR Address

Address 1:   [*] > [#] > [F1]
Address 2:   [*] > [#] > [F2]
Address 3:   [*] > [#] > [F3]
Address 4:   [*] > [#] > [F4]

9. Camera Select

IR Address 1:   [Cam Select 1]
IR Address 2:   [Cam Select 2]
IR Address 3:   [Cam Select 3]
IR Address 4:   [Cam Select 4]

10. Standby Control

Toggle Standby Mode   [⏻]

11. Camera Shortcuts

[*] > [#] > [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)

[*] > [#] > [Manual]: Resets IP information to default

[*] > [#] > [4]: Enable Dynamic IP address

[L/R Set] + [1] (STD): Normal Pan controls

[L/R Set] + [2] (REV): Reverses Pan controls

[#] > [*] > [#] > [1]: Sets IP address to 192.168.100.81

[#] > [*] > [#] > [2]: Sets IP address to 192.168.100.82

[#] > [*] > [#] > [3]: Sets IP address to 192.168.100.83

[#] > [*] > [#] > [4]: Sets IP address to 192.168.100.84

[#] > [*] > [#] > [5]: Sets IP address to 192.168.100.85

[#] > [*] > [#] > [6]: Sets IP address to 192.168.100.86

[#] > [*] > [#] > [7]: Sets IP address to 192.168.100.87

[#] > [*] > [#] > [8]: Sets IP address to 192.168.100.88

[#] > [*] > [#] > [9]: Sets IP address to 192.168.100.89

[#] > [*] > [#] > [0]: Sets IP address to 192.168.100.80