A Quick Guide for setting up a PTZOptics NDI|HX camera

For use with PTZOptics cameras when using vMix or OBS

Determining if your PTZOptics camera has an NDI|HX license

- Identifying a pre-licensed PTZOptics
  - Cameras featuring a serial number that starts with one of the following letters is a pre-licensed NDI|HX camera from PTZOptics
    n, o, p, q, r, s, t, u, v
- If the serial number does NOT start with one of those letters the camera requires an NDI license to be applied.
  - NDI licenses can be acquired from PTZOptics distributors, resellers or directly from NewTek

Note: First Generation PTZOptics P/T/Z cameras are unable to support NDI
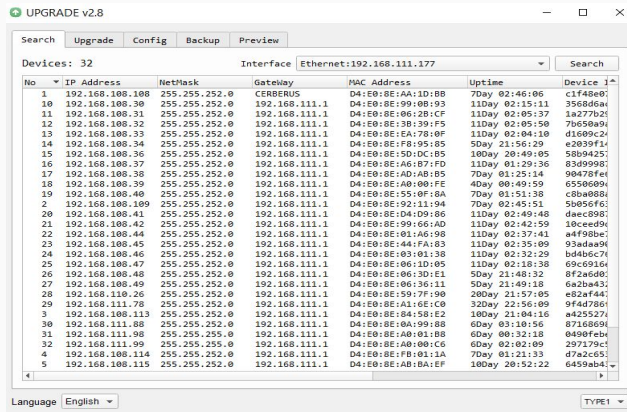
Network Setup Instructions

Using the IR Remote Control & UPGRADE TOOL

First connect your camera to the same network as your PC and turn them both on

Using the IR Remote press [*] + [#] + [4] to set your camera to DHCP mode

Next you will need to install the PTZOptics UPGRADE TOOL (Windows or Mac)

Once installed and open click the [**Search**] button to discover the camera on your network

In the event that this is on a network without a DHCP server / router more in depth instructions to assist in network setup can be found HERE.

Network Setup Instructions

Using only the UPGRADE TOOL

First connect your camera to the same network as your PC and turn them both on
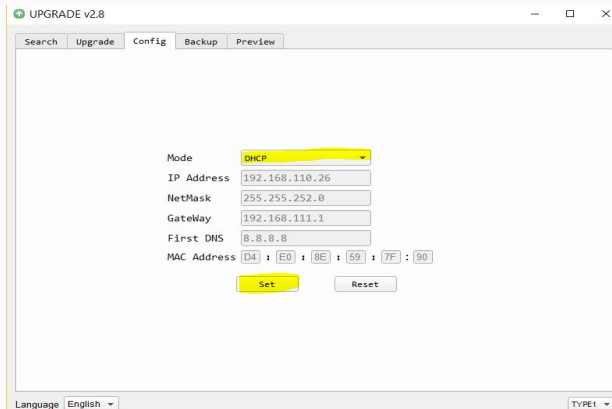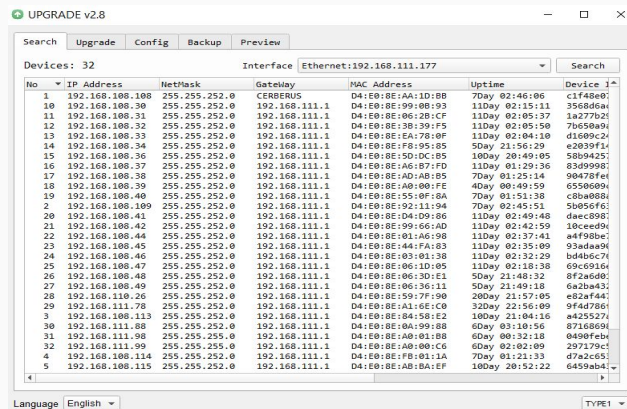
Next you will need to install the PTZOptics UPGRADE TOOL (Windows or Mac)

Once installed and opened click the [**Search**] button to discover the camera

Right click on the camera's IP address and select "**config**".

In the config section change the mode dropdown from manual to DHCP and click the [**Set**] button

Now return to the Search tab and click the [**Search**] button to discover the cameras new IP

In the event that this is on a network without a DHCP server / router more in depth instructions to assist can be found HERE.

Adjusting the NDI Resolution and Frame Rate

Using the cameras IP address we discovered in the previous steps type it into a web browser

http://<camera ip>/

When prompted to login use the following default credentials

User: admin

Password: admin

Select the "**Video**" section to choose from some default NDI Presets for resolutions and frame rate. Make sure to click [**Apply**] and then reboot the camera after any adjustments you wish to commit.

Note: These settings can be further fine tuned based on your use case

NDI Preset	NDI High Bandwidth Mode	NDI Low Bandwidth Mode
Ultra	3840x2160 @ 30 FPS	640x360 @ 30FPS
High	1920x1080 @ 60 FPS	640x360 @ 30FPS
Medium	1920x1080 @ 30 FPS	640x360 @ 30FPS
Low	1280x720 @ 60 FPS	640x360 @ 30FPS

Acquiring NDI Tools to use NDI

The freely available NDI Tools are required to use NDI on your computer.

These tools can be acquired directly from NewTek HERE.

Download and install the NDI Tools for your operating system making sure to restart after the installation has completed.

Note: For use with a Windows PC only the NDI tools are required. For use with a Mac PC both the NDI Tools and the NDI|HX driver must be installed.

NDI® Tools
for Windows

- NDI Studio Monitor
- NDI Scan Converter
- NDI Virtual Input
- NDI VLC Plugin
- NDI for Adobe Creative Cloud
- NDI Import I/O for Adobe CC
- NDI Access Manager
- NDI Test Patterns
- NDI|HX Driver

DOWNLOAD

NDI® Tools
for Mac

- NDI Video Monitor
- NDI Scan Converter
- NDI Virtual Input
- NDI for Adobe Creative Cloud
- NDI Import I/O for Adobe CC
- Access Manager
- NDI|HX Driver*

Separate installer provided

DOWNLOAD

NDIAnalysis™
for Windows

NDI® Analysis Tool (Beta)
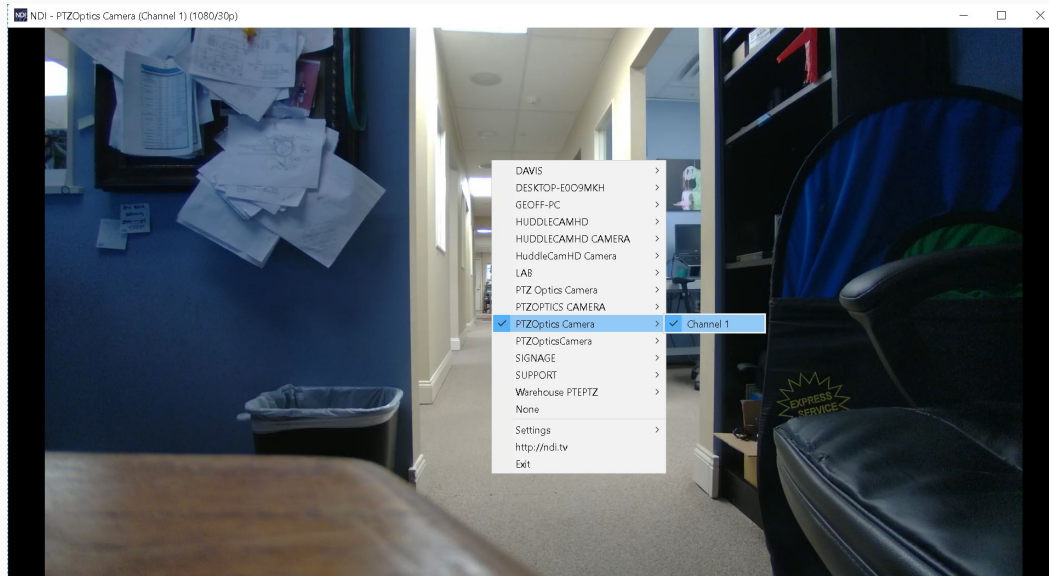- Find Sources
- Diagnose

DOWNLOAD

Minimum System Requirements

NDI Tools
- Microsoft Windows operating system (32-bit compatible; 64-bit recommended)
  - NDI Scan Converter requires Windows 8 or better along with a DirectX 11 compatible video card
  - NDI Virtual Input require Windows 7 or better
  - All other NDI Tools require Windows Vista or better
- Mac-compatible versions of NDI Tools require Mac OS X or better
- Intel Core i3 CPU or better (Intel i5 CPU or better recommended)
- 6GB RAM or better

NDI for Adobe Creative Cloud
- 64-bit Microsoft Windows 7 or better (PC); Mac OS X or better (Mac)
- Intel Core i5 CPU or better recommended
- 2GB RAM or better
- Adobe® Creative Cloud® membership (compatible applications include After Effects® CC, Premiere Pro® CC, Prelude® CC, and SpeedGrade® CC)

NDI Tools to view NDI Sources

Included in the NDI Tools is an application called "Studio Monitor," for Windows PCs, or "Video Monitor," for Mac PCs.

For a Windows PC, launch "Studio Monitor" and right click on the viewing window to see discovered NDI sources, clicking to select and view the source.

For a Mac PC launch "Video Monitor" and go to the File option in your menu bar. Select a discovered NDI source to begin viewing.
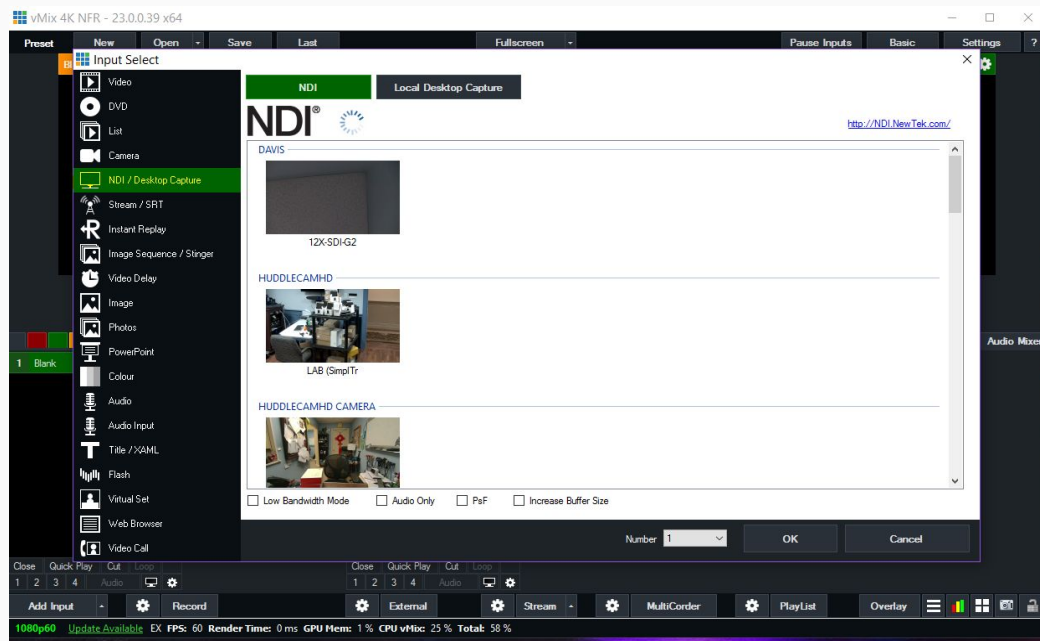
Adding an NDI source into vMix

To use NDI within vMix you must first have NDI Tools installed on your Windows PC

Open vMix and click the [**Add Input**] button.

Navigate to the "NDI / Desktop Capture" option.

You should see the NDI source for your camera, select this source and click [**OK**].

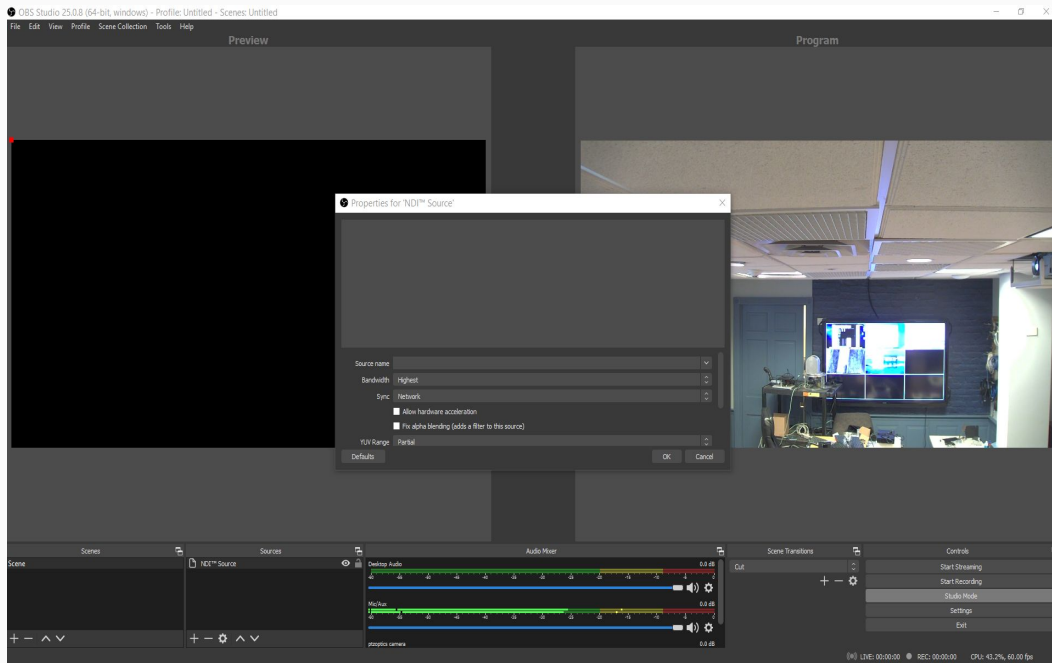You should now see your NDI video in vMix

Adding an NDI source into OBS

To use NDI within OBS you must first have NDI Tools installed on your Windows PC and the OBS NDI Plugin that can be found [HERE](#)

Make sure OBS is closed during plugin installation

Once installed you click [**+**] to add an NDI source by selecting the NDI Source input option. Discovered NDI sources will be displayed in the "Source Name" drop down to select from.

Click the [**OK**] button to add the NDI source to your OBS production.

Have some additional Questions?

If you are having problems setting up your PTZOptics camera(s) please contact the PTZOptics Support for further assistance using one of the options below.

EMail Support

support@ptzoptics.com

Submit a Ticket

help.ptzoptics.com

Chat with Support

help.ptzoptics.com

Call Support

484-593-2584
800-486-5276 x.1004

PTZOptics support is typically available Monday through Friday
from 8:00 AM - 6:00 PM EST/EDT.