## NDI Studio Monitor for PTZ Camera Operators Quick Start Guide



In this video, we are going to review the latest features of the NewTek NDI Studio Monitor for use with PTZOptics NDI cameras and your favorite video production software including OBS, Wirecast, xSplit, TriCaster, Livestream Studio or vMix. The NDI Studio Monitor is an essential tool for video production professionals already using NDI video sources on their local area network. Studio Monitor is ideal for camera operators who want to gain a low-latency video preview of their PTZOptics NDI HX cameras located throughout their facility. Studio Monitor is also ideal for easily displaying a video output from your NDI compatible video production software such as OBS, Wirecast, vMix, Live Streaming Studio, MimoLive and many more.

The first use case will review is using the NewTek NDI Studio Monitor as a remote camera operator.

**Note:** If your PTZOptics camera is not NDI enabled, there is an upgrade process you can inquire about. PTZOptics does offer a free PTZ camera control app with video preview and XBox camera control features for all camera owners to use.



As an NDI PTZOptics Camera Operator, you will almost certainly be remotely controlling your cameras over IP. The first thing to do will be to open up the NDI Studio Monitor and right click the screen. This will open up all of the NDI Studio Monitor features. You will notice a list of all NDI sources will open up, where you can select the NDI camera you would like to control. If you have a USB Xbox joystick controller, you can connect it to your computer and enable it for use in the settings area under PTZ Controls. You can also use an IP Joystick from PTZOptics for camera operation or a mouse using the on-screen joystick. A little known feature about the NDI Studio monitor is the built-in hotkeys for PTZ camera operation. You can use the following hotkeys as a camera operator to improve your workflow.

## NDI Studio Monitor Hotkeys

Arrow keys : Pan, Tilt the camera.\*
\*/-: Zoom in, out.\*
Page Up, Page Down : Focus in, out.\*
Home/End : Exposure up, down.\*
F : Toggle auto-focus on or off
E : Toggle auto-exposure on or off
1-9 : Recall preset.
Ctrl + 1-9 : Store preset.



\*Hold CTRL key for higher precision control.

Arrow keys : Pan, Tilt the camera. Hold CTRL key for higher precision control.
+/- : Zoom in, out. Hold CTRL key for higher precision control.
Page Up, Page Down : Focus in, out. Hold CTRL key for higher precision control.
Home/End : Exposure up, down. Hold CTRL key for higher precision control.
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If you would like to access more advanced camera settings you can click the cog in the right-hand side of your screen at any time. You can record video in NDI studio monitor by clicking the red record button in the bottom left-hand side of the application. Our testing shows that Studio Monitor is only capable of recording NDI HX feeds directly to the hard-drive. This may change in a future update. This feature allows remote camera operators to record high-quality videos directly to their local hard-drive. These recordings can then be used in post-production or for video analysis. For example, a sports coach could easily set up a picture in picture using two cameras. One PTZOptics 30x camera to capture up-close details and a wide angle PTZOptics ZCam Camera to capture of the entire field. These recordings can then be used for presentations with coaches and athletes. Coaches can even use an NDI telestrator with a touch screen table to highlight plays just like you see in professional sports.



The next powerful use for the NDI Studio Monitor is for previewing video outputs. The NDI Studio Monitor is ideal for extending your camera and video production outputs to multiple video screens; lobbies, building façades, and billboards display giant screens, and so on. Providing video sources for these areas over traditional analog cabling was always impractical and HDMI distance limitations is a headache many of us have dealt with in the past. IP is, of course, the perfect solution because ethernet cabling can be run hundreds of feet and it can be plugged into a simple network switch.

We have already demonstrated how easy it is to display and NDI video feed inside NDI studio monitor. So now let's look at the integrated web server which can be accessed by scanning the QR code on the display when Studio Monitor first turns on. The integrated web server can turn your mobile device into a (password-protected) remote control. You can also access remote control of any Studio Monitor running on your network using the IP address available in the application area of the settings menu. Simply type the IP address into any web browser and you will be prompted to enter the default user name and password for NDI Studio monitor which is "admin" "admin".

From the NDI Studio monitor management page, you will see just how easy it is to update your signage options. You will see that you have the ability to overlay titles and graphics (even video) on the display. You can quickly set up a picture and picture or a full-screen overlay. To create a title for an overlay, think about using OBS with an NDI Output.

So there you have it. NDI Studio Monitor is a powerful tool for PTZOptics NDI Camera users and the NDI ecosystem as a whole. You can learn more about getting up to speed with IP video at PTZOptics.com/IP.