

## Device: NewTek NDI-HX PTZ1



### Introduction

A large number of parameters can be controlled on the NewTek NDI-HX PTZ1. Control is via VISCA over IP (and not NDI).

The implementation is done on NewTek NDI-HX PTZ1 Firmware version: VHR116j

Please see the "PTZ Manual" at <https://www.skaarhoj.com/support/manuals/> to learn more about PTZ control in general from SKAARHOJ controllers and in particular network recommendations.

In this manual it is worth noticing that one should not add *additional* Device Cores to control multiple cameras. This is possible from the same Device Core but proper steps should be ensured (consecutive IP addresses on the cameras) for a good user experience.

### Number of Cameras possible to control

Please notice from the NewTek NDI-HX PTZ1 Device Core it is possible to control up to 7 cameras. In general this is the limit for our VISCA over IP Device Cores and our integration has not been tested above 7 cameras. If you want to control more than 7 cameras you will need to add an additional Device Core and configure the controller accordingly. None of our default configuration utilities support 2 x NewTek NDI-HX PTZ1 Device Cores. As we have never tested with more than 7 cameras, we do not know how well performance and stability will be in such a configuration setup. We recommend only having 1 x NewTek NDI-HX PTZ1 Device Core installed per controller.

## Device Configurations

Device configuration options exist:

- Index 0: **VISCA over IP/Serial**
  - If "1" = VISCA over Serial
- Index 1: **Video Standard**
  - If "0" = Reserved
  - If "1" = Pal mode
  - If "2" = NTSC mode

Example:

Enabling "Video Standard" to NTSC mode could look like this device configuration code: "D0:1=2" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:

```
Memory A-D restored
Compiled: Aug  8 2018 16:56:55
DeviceCore #0: NEWTEKNDIHXPZ0, IP = 192.168.10.213
Setting NTSC mode for 'NEWTEKNDIHXPZ' device core
setup() Done
-----
System action 16
 Auto scroll
```

Example: If the NewTek device core is the first like below:

### Device Cores

Below, you can see the currently enabled device support on your controller. You can add and delete device cores in accordance with your requirements up to a maximum of 14 devices. To understand the development states Mature, Beta, Alpha and Planned (as well as Pro and Planned actions), please check out the [device core support page](#). For general documentation, please see the [UniSketch Manual](#) and [System Actions Manual](#).

NewTek NDIHX-PTZ1 -



**NewTek**  
NDIHX-PTZ1

**NewTek NDIHX-PTZ1**

Full VISCA control of NewTek NDI Robotic Camera NDIHX-PTZ1. Complete VISCA command list is implemented and with specific value ranges (such as Iris, Shutter speeds etc). Control via IP or Serial (via converter).



Save Settings
Add another device -

Then setting the "Video Standard" would be set by this configuration under "Manage Media" on your configuration page for your controller on [cores.skaarhoj.com](http://cores.skaarhoj.com)

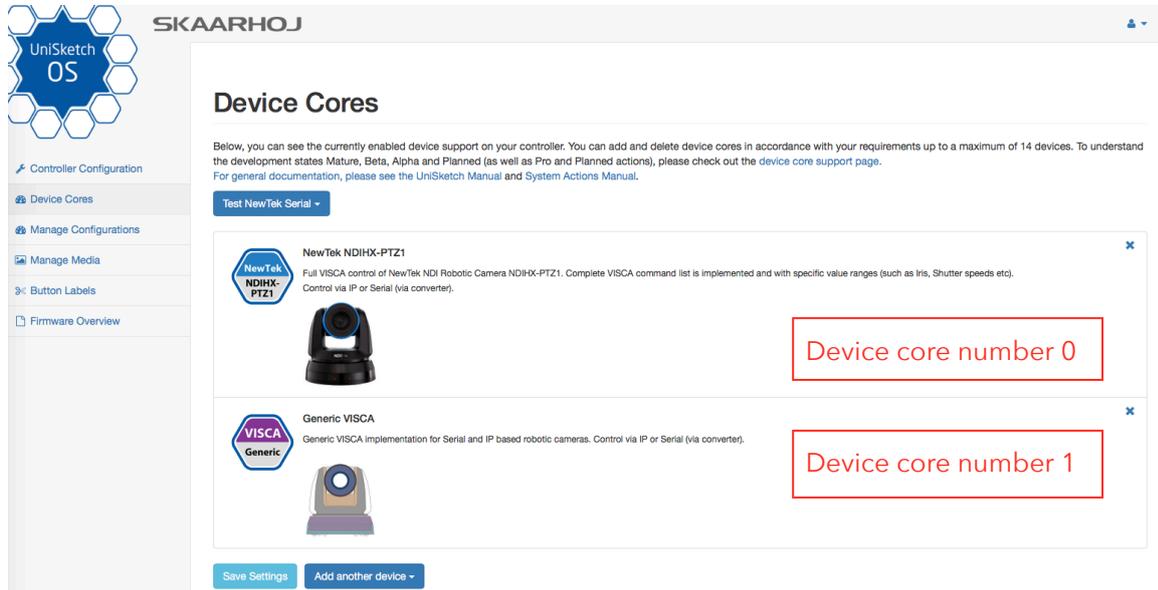
## Device Core Options

Some device cores support additional options that can be defined through this text field. Please refer to the manual for the particular device core for details.

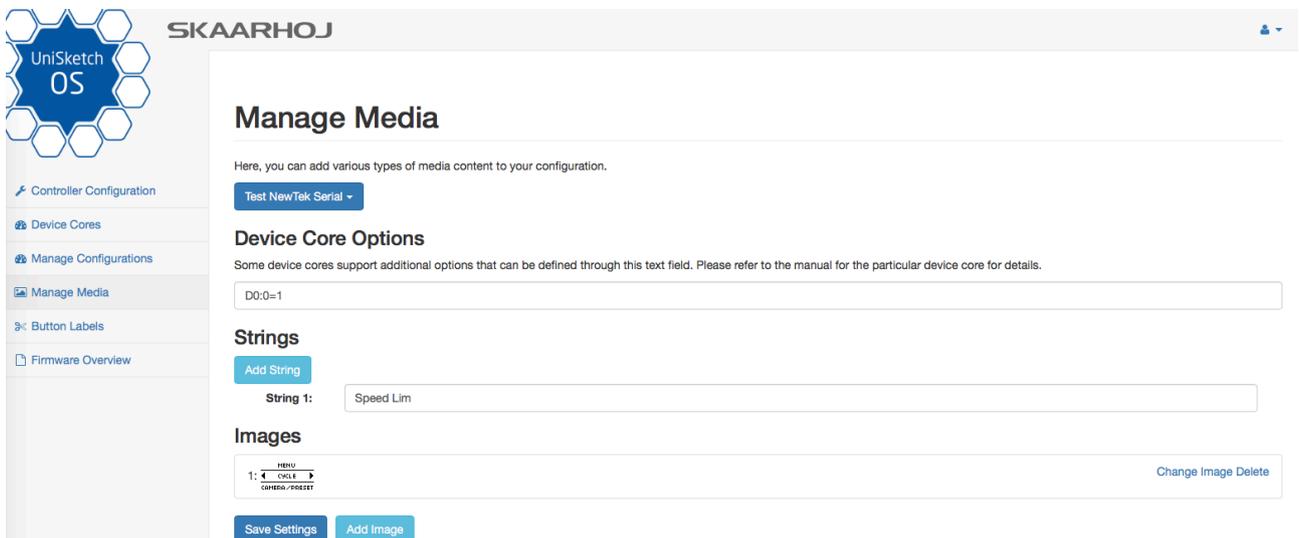
Example:

Enabling VISCA over serial could look like this device configuration code: "D0:0=1" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

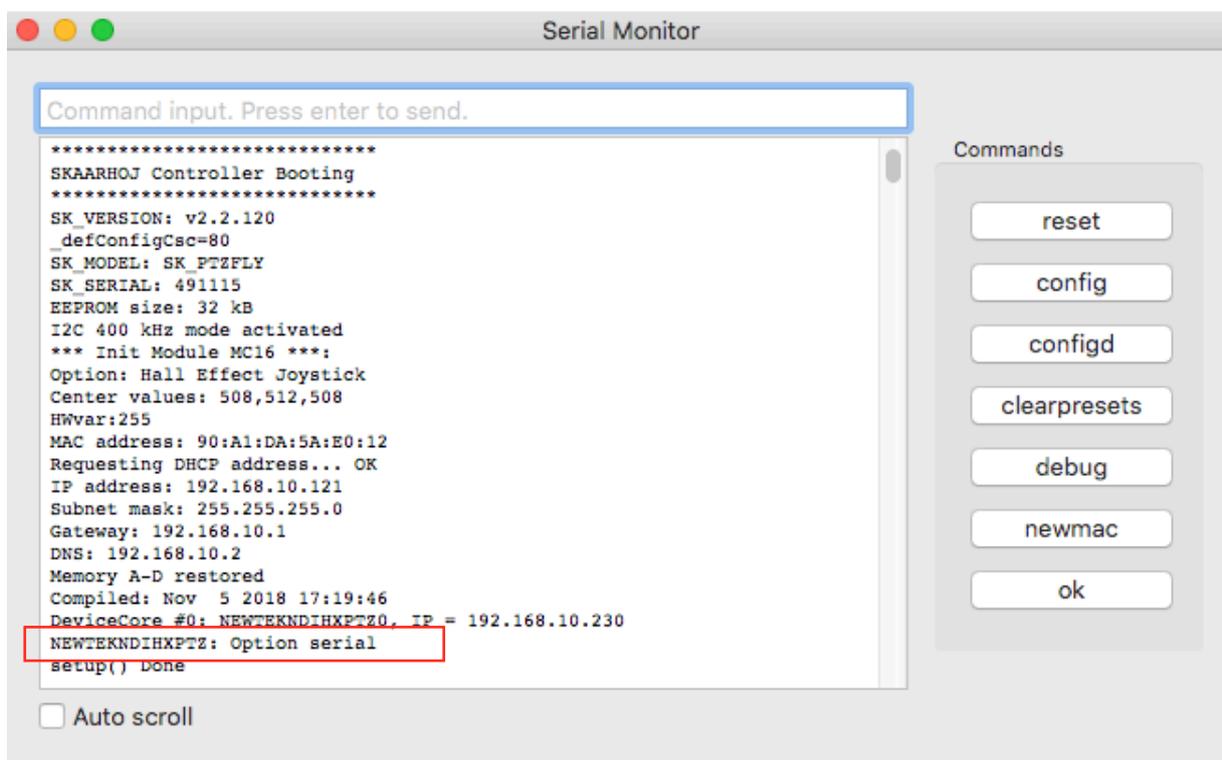
If the NewTek NDIHX-PTZ1 Device Core is the first like below:



Setting VISCA over serial would be set by this configuration under "Manage Media" on the configuration page for your controller. Access this by pressing "Online Configuration" in the Firmware Application. Remember to save on the configuration page *and* press "Check for updates" in the Firmware Application.



To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:



## Actions

An excerpt of the actions in the Device Core

- NewTek NDIHX-PTZ1: Pan
- NewTek NDIHX-PTZ1: Tilt
- NewTek NDIHX-PTZ1: Pan/Tilt
- NewTek NDIHX-PTZ1: Zoom
- NewTek NDIHX-PTZ1: Zoom (Binary)
- NewTek NDIHX-PTZ1: Focus
- NewTek NDIHX-PTZ1: Focus (Binary)
- NewTek NDIHX-PTZ1: Focus One Push
- NewTek NDIHX-PTZ1: PT Limit (Planned)
- NewTek NDIHX-PTZ1: Focus Settings
- NewTek NDIHX-PTZ1: Exposure Mode
- NewTek NDIHX-PTZ1: Iris
- NewTek NDIHX-PTZ1: Shutter
- NewTek NDIHX-PTZ1: Gain
- NewTek NDIHX-PTZ1: Ex-Comp. Enable
- NewTek NDIHX-PTZ1: Ex-Comp. Level
- NewTek NDIHX-PTZ1: AE Comp
- NewTek NDIHX-PTZ1: Gain Limit
- NewTek NDIHX-PTZ1: Iris Limit
- NewTek NDIHX-PTZ1: Wide Dynamic Range Mode
- NewTek NDIHX-PTZ1: White Balance
- NewTek NDIHX-PTZ1: WB One Push
- NewTek NDIHX-PTZ1: WB R/B Gain
- NewTek NDIHX-PTZ1: Tone adjustments
- NewTek NDIHX-PTZ1: Sharpness
- NewTek NDIHX-PTZ1: Noise Reduction
- NewTek NDIHX-PTZ1: 3D Noise Reduction
- NewTek NDIHX-PTZ1: Gamma
- NewTek NDIHX-PTZ1: Picture Effect
- NewTek NDIHX-PTZ1: Preset
- NewTek NDIHX-PTZ1: System
- NewTek NDIHX-PTZ1: Skin tone
- NewTek NDIHX-PTZ1: Black Level
- NewTek NDIHX-PTZ1: PTZ Cruise Control
- NewTek NDIHX-PTZ1: PTZ Trace
- NewTek NDIHX-PTZ1: Speed Limit
- NewTek NDIHX-PTZ1: Auto Shift level
- NewTek NDIHX-PTZ1: Camera Select