

# 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 7 cameras. In general this is the limit for our VISCA over IP Device Cores and our integration have 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 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

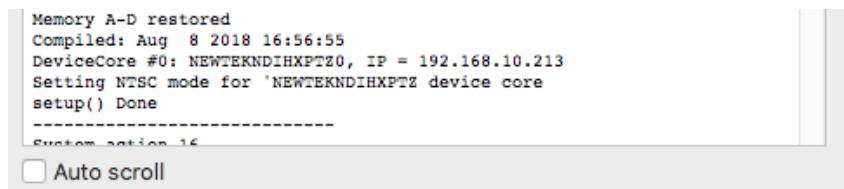
- Index 1: **Video Standard**

- 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:

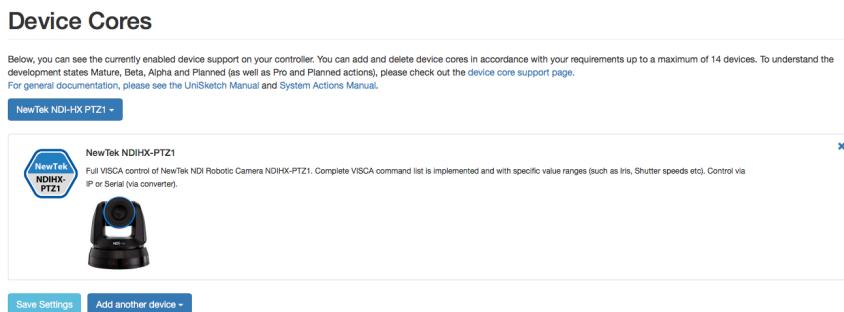


```

Memory A-D restored
Compiled: Aug 8 2018 16:56:55
DeviceCore #0: NEWTEKNDIHXPTZ0, IP = 192.168.10.213
Setting NTSC mode for 'NEWTEKNDIHXPTZ device core'
setup() Done
-----
System action 14
 Auto scroll

```

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



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.

D0:1=2

## 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:

**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](#).

[Test NewTek Serial](#)

**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).



Device core number 0

**Generic VISCA**  
Generic VISCA implementation for Serial and IP based robotic cameras. Control via IP or Serial (via converter).



Device core number 1

[Save Settings](#) [Add another device](#)

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.



**SKAARHOJ**

UniSketch  
OS

Controller Configuration

Device Cores

Manage Configurations

Manage Media

Button Labels

Firmware Overview

## Manage Media

Here, you can add various types of media content to your configuration.

**Test NewTek Serial ▾**

### 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.

D0:0=1

### Strings

**Add String**

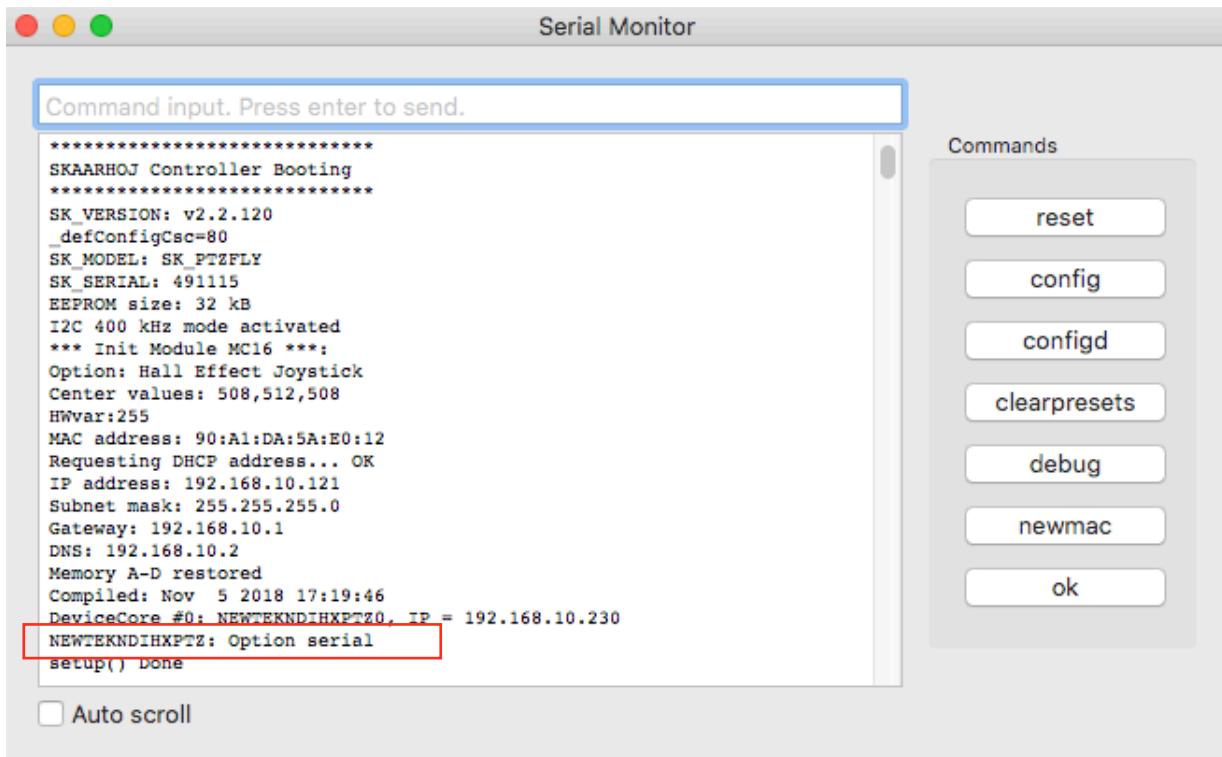
String 1: Speed Lim

### Images

1.  Change Image Delete

**Save Settings** **Add Image**

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
```