

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

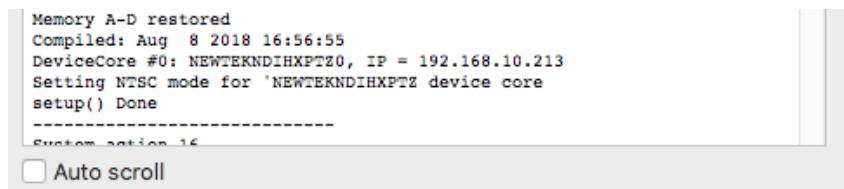
- Index 1: **Video Standard**

- 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:

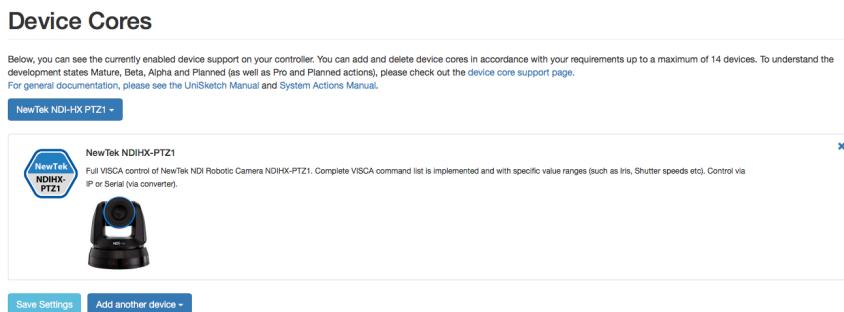


```

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

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

SKAARHOJ DEVICE CORES

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:

The screenshot shows the SKAARHOJ Device Cores page. On the left is a sidebar with icons for Controller Configuration, Device Cores (selected), Manage Configurations, Manage Media, Button Labels, and Firmware Overview. The main area is titled "Device Cores". It contains two entries:

- NewTek NDIHX-PTZ1**: A camera icon with the text "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)." To its right, a red box highlights "Device core number 0".
- Generic VISCA**: A camera icon with the text "Generic VISCA implementation for Serial and IP based robotic cameras. Control via IP or Serial (via converter)." To its right, a red box highlights "Device core number 1".

At the bottom are "Save Settings" and "Add another device" buttons.

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.

The screenshot shows the SKAARHOJ Manage Media page. The sidebar is identical to the previous page. The main area is titled "Manage Media". It contains the following sections:

- Device Core Options**: A text input field containing "D0:0=1".
- Strings**: A "String 1" input field containing "Speed Lim".
- Images**: A preview image of a camera menu with the text "1: < - CANCEL - > CAMERA/RESET" and "Change Image Delete" buttons.

At the bottom are "Save Settings" and "Add Image" buttons.

SKAARHOJ DEVICE CORES

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:

