

# Device: Angekis Saber Plus U3D-12FHD6



## Introduction

A large number of parameters can be controlled on the Angekis Saber Plus camera. Control is via VISCA over IP. The Device Core have been developed on a Angekis Saber Plus U3D-12FHD6 camera. The Firmware on the camera have the following details



Control Version	1.0.0.1
Device Name	4K Conference Camera
Serial Number	e2a0c4d7ef1b
Bootloader Version	V1.0.0
System Version	V1.0.0
App Version	V368

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.

## Support for Block inquiry commands

The Device Core and the camera supports block inquiry commands for some parameters (see below). This means

- Settings from the camera is sent back to the controller so parameters are always in sync
- If connecting multiple controllers to the same camera then changes made on controller #1 will be reflected on controller #2 as well

The supported actions for block inquiry are the following

- Reverse
- Image Flip
- AE
- Focus mode
- WB mode
- Zoom position
- Focus Position
- R Gain
- B Gain
- Iris
- Gain
- Aperture Gain
- Shutter

## Number of Cameras possible to control

Please notice from the Angekis Saber Plus 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 Angekis Saber Plus 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 Angekis Saber Plus Device Core installed per controller.

## Device Configurations

Device configuration options exist:

- Index 0: **VISCA over IP/Serial**
  - If "0" = VISCA over TCP (default)
  - If "1" = VISCA over Serial
  - If "2" = VISCA over IP
- Index 1: **Video Mode**
  - If "0" = PAL (default)
  - If "1" = NTSC
- Index 2: **Number of connected Cameras in Device Core**
  - If "0" = 7 (default)
  - If "1-7" = Setting limit of 1-7 number of cameras the Device Core will connect to

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.

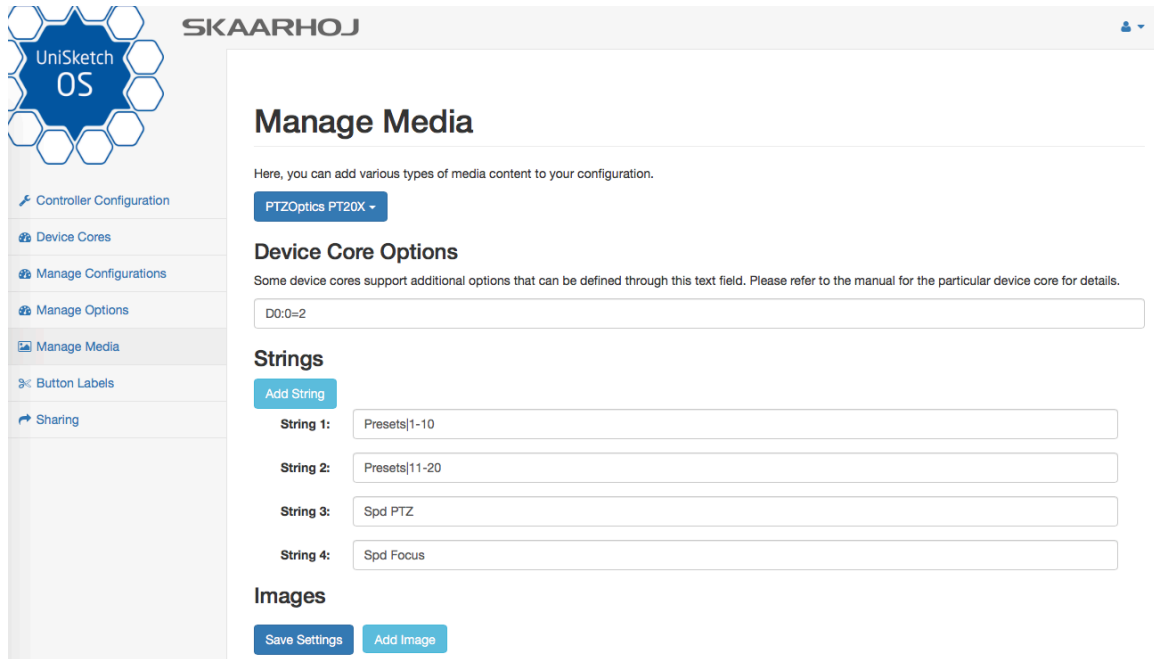
If the Angekis Device Core is the first like below (here represented with NewTek Device Core)

The screenshot shows the UniSketch OS interface with the 'Device Cores' section active. The left sidebar contains navigation links: Controller Configuration, Device Cores, Manage Configurations, Manage Media, Button Labels, and Firmware Overview. The main content area is titled 'Device Cores' and includes a description of device support and a 'Test NewTek Serial' button. Two device cores are listed:

- NewTek NDIIHX-PTZ1**: Full VISCA control of NewTek NDI Robotic Camera NDIIHX-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). This core is highlighted with a red box labeled 'Device core number 0'.
- Generic VISCA**: Generic VISCA implementation for Serial and IP based robotic cameras. Control via IP or Serial (via converter). This core is highlighted with a red box labeled 'Device core number 1'.

At the bottom of the device list, there are buttons for 'Save Settings' and '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.



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:

```
D0[0] = 1
DeviceCore #0: Angekis saber 4K 0, IP = 192.168.10.80
ClientVISCAserialIP: __deviceIdx: 0
ClientVISCAserialIP::begin()
VISCAbase: DISABLING retransmit
Angekis Saber 4K using PAL mode
setup() Done
-----
```

Example on how it looks when setting NTSC mode

```
D0[1] = 1
DeviceCore #0: Angekis saber 4K 0, IP = 192.168.10.80
ClientVISCAoverTCP: __deviceIdx: 0
VISCAbase: DISABLING retransmit
Angekis Saber 4K using NTSC mode
setup() Done
-----
```

## Actions

An excerpt of the actions in the Device Core

Angekis Saber Plus: Pan  
Angekis Saber Plus: Tilt  
Angekis Saber Plus: Pan/Tilt  
Angekis Saber Plus: Zoom  
Angekis Saber Plus: Zoom (Binary)  
Angekis Saber Plus: Focus  
Angekis Saber Plus: Focus (Binary)  
Angekis Saber Plus: Focus One Push  
Angekis Saber Plus: Focus Settings  
Angekis Saber Plus: Zoom Settings  
Angekis Saber Plus: Exposure Mode  
Angekis Saber Plus: Iris  
Angekis Saber Plus: Shutter  
Angekis Saber Plus: Gain  
Angekis Saber Plus: AE Comp  
Angekis Saber Plus: Bright  
Angekis Saber Plus: White Balance  
Angekis Saber Plus: WB One Push  
Angekis Saber Plus: WB R/B Gain  
Angekis Saber Plus: Saturation  
Angekis Saber Plus: Brightness  
Angekis Saber Plus: Contrast  
Angekis Saber Plus: Sharpness  
Angekis Saber Plus: Noise Reduction  
Angekis Saber Plus: Picture Effect  
Angekis Saber Plus: Preset  
Angekis Saber Plus: System  
Angekis Saber Plus: PTZ Cruise Control  
Angekis Saber Plus: PTZ Trace  
Angekis Saber Plus: Speed Limit  
Angekis Saber Plus: Camera Select