

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.

Compiling Firmware from Branch

Special note: In order to generate a firmware for the Device Core please use the branch: visca_angekis_implementation

Please observe this is subject to change without notice.

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

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 SKAARHOJ Device Cores configuration interface. The left sidebar has a navigation menu with items: Controller Configuration, Device Cores (selected), Manage Configurations, Manage Media, Button Labels, and Firmware Overview. The main content area is titled 'Device Cores'. It contains two entries:

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

Below the entries are two red boxes with labels:

- A red box around the 'NewTek NDIHX-PTZ1' entry is labeled 'Device core number 0'.
- A red box around the 'Generic VISCA' entry is labeled 'Device core number 1'.

At the bottom of the page 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.

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
```