

# Device: Minrray UV510A-S12/S20



## Introduction

A large number of parameters can be controlled on the Minrray UV510A-S12/S20 camera. Control is via VISCA over IP. The Device Core have been developed on a Minrray UV510A-S20-ST-IR camera. The Firmware on the camera have the following details

MODEL: UV510A-S20-ST-IR	MCU Version V2.4.1 2018-7-12
POWER: DC12V	Camera Version V2.4.7 2018-9-12
	AF Version V2.5.3 2018-4-2
S/N: 2018-10-0199	

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.

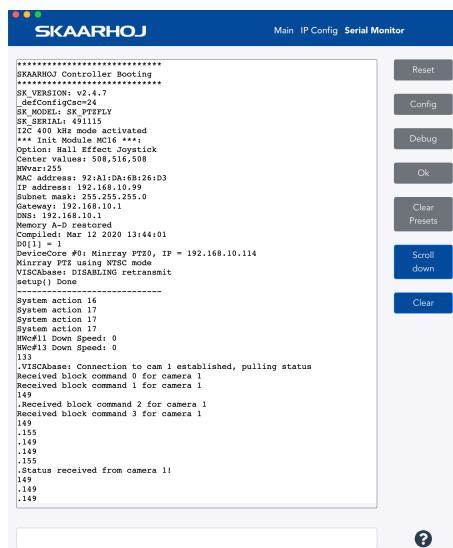
In this manual it is worth noticing that one should not add *additional* Device Cores to control multiple cameras. This is possible from the same Device Core but proper steps should be ensured (consecutive IP addresses on the cameras) for a good user experience.

## Number of Cameras possible to control

Please notice from the Minrray 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 Minrray 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 Minrray Device Core installed per controller.

## Confirm Connection

The Serial Monitor from the Firmware Application can be used to monitor connection status.



# Device Configurations

Device configuration options exist:

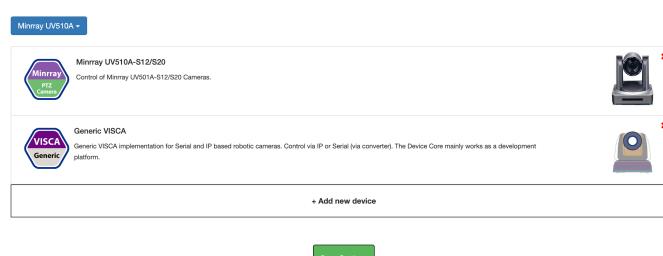
- Index 0: **VISCA over IP/Serial**
    - If "0" = VISCA over IP
    - If "1" = VISCA over TCP
    - If "2" = VISCA serial over IP
  - Index 1: **Video Standard**
    - If "0" = Reserved
    - If "1" = Pal mode
    - If "2" = NTSC mode

### 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 Minrray device core is the first like below:



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: Mar 12 2020 12:29:09
D0[0] = 1
DeviceCore #0: Minrray PTZ0, IP = 192.168.10.114
ClientVISCAoverTCP: __deviceIdx: 0
Minrray PTZ using PAL mode
VISCAbase: DISABLING retransmit
setup() Done
```

## Actions

An excerpt of the actions in the Device Core

```
Minrray UV510A-S12/S20: Pan
Minrray UV510A-S12/S20: Tilt
Minrray UV510A-S12/S20: Pan/Tilt
Minrray UV510A-S12/S20: Zoom
Minrray UV510A-S12/S20: Zoom (Binary)
Minrray UV510A-S12/S20: Focus
Minrray UV510A-S12/S20: Focus (Binary)
Minrray UV510A-S12/S20: PT Limit (Planned)
Minrray UV510A-S12/S20: Focus Settings
Minrray UV510A-S12/S20: Exposure Mode
Minrray UV510A-S12/S20: Iris
Minrray UV510A-S12/S20: Shutter
Minrray UV510A-S12/S20: Ex-Comp. Enable
Minrray UV510A-S12/S20: Ex-Comp. Level
Minrray UV510A-S12/S20: Gain Limit
Minrray UV510A-S12/S20: Wide Dynamic Range Mode
Minrray UV510A-S12/S20: Bright
Minrray UV510A-S12/S20: Flicker Cancel
Minrray UV510A-S12/S20: White Balance
Minrray UV510A-S12/S20: WB One Push
Minrray UV510A-S12/S20: AWB Sensitivity
Minrray UV510A-S12/S20: WB R/B Gain
Minrray UV510A-S12/S20: Hue
Minrray UV510A-S12/S20: Saturation
Minrray UV510A-S12/S20: Brightness
Minrray UV510A-S12/S20: Contrast
Minrray UV510A-S12/S20: Sharpness
Minrray UV510A-S12/S20: Dynamic Hot Pixel
Minrray UV510A-S12/S20: NR 2D
Minrray UV510A-S12/S20: NR 3D
Minrray UV510A-S12/S20: Gamma
Minrray UV510A-S12/S20: Picture Effect
Minrray UV510A-S12/S20: Preset
Minrray UV510A-S12/S20: Preset Drive
Minrray UV510A-S12/S20: Image Flip
Minrray UV510A-S12/S20: System
Minrray UV510A-S12/S20: PTZ Cruise Control
Minrray UV510A-S12/S20: PTZ Trace
Minrray UV510A-S12/S20: Speed Limit
Minrray UV510A-S12/S20: Auto Shift level
Minrray UV510A-S12/S20: Camera Select
```