

## Device: Avonic CM71-IP



### Introduction

A large number of parameters can be controlled on the Avonic CM71-IP camera. Control is via VISCA over IP. The Firmware on the camera have the following details

#### Update

MCU Version	V2.4.6 2019-12-18
Camera Version	V2.4.7 2020-1-6
AF Version	V1.0.5 2019-9-20
Update File	<input type="button" value="Choose File"/> No file chosen

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.

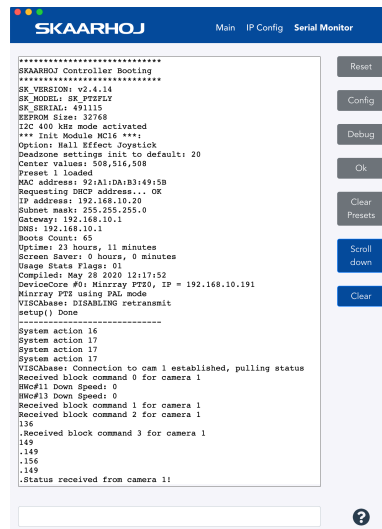
In this manual it is worth noticing that one should not add *additional* Device Cores to control multiple cameras. This is possible from the same Device Core but proper steps should be ensured (consecutive IP addresses on the cameras) for a good user experience.

### Number of Cameras possible to control

Please notice from the Avonic 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 Avonic 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 Avonic 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 Mode**
  - If "0" = PAL mode (default)
  - If "1" = NTSC mode
- Index 2: **Number of Cameras**
  - If "0" = 7 (default)
  - If "1-7" = the defined number of cameras

Example:

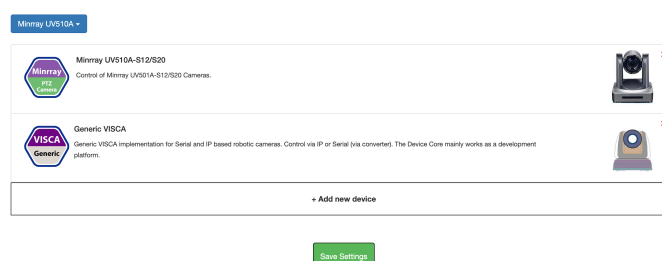
Enabling VISCA over serial could look like this device configuration code: "D0:0=1" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

### 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

If the Avonic 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
```

## Port Settings

Our implementation was made with the Avonic CM71-IP default Port Visca setting of 1259.

**Port Settings**

Port Data	<input type="text" value="3000"/>
Port Web	<input type="text" value="80"/>
Port Onvif	<input type="text" value="2000"/>
Port Soap	<input type="text" value="1936"/>
Port RTMP	<input type="text" value="1935"/>
Port Rtsip	<input type="text" value="554"/>
Port Visca	<input type="text" value="1259"/>

## Actions

An excerpt of the actions in the Device Core

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