

# Device: BirdDog P4K



## Introduction

The BirdDog P4K Device Core is still in alpha with most of the feature set available to control. At this point control is VISCA over IP.

Please notice currently the BirdDog P4K camera does support block inquiry commands over IP, however not all current settings on the camera will be transmitted back to our controllers.

-Some settings may start with a display of ? but should reflect true once set.

-Some settings my start at a default different then the current camera state but will reflect true once set.

The implementation is done on BirdDog P4K Firmware version: **P4K 21.02.178**

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.

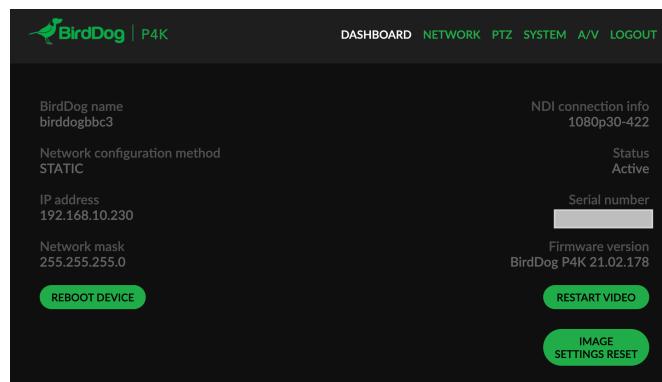
In this manual it is worth noticing that one should not add *additional* Device Cores to control multiple cameras. This is possible from the same Device Core but proper steps should be ensured (consecutive IP addresses on the cameras) for a good user experience.

## Known Bugs

### RESTART VIDEO

When a camera power cycles it can be necessary to "RESTART VIDEO" to regain control over the camera. If a SKAARHOJ controller loses connection to the camera during operation, it can be necessary to press "RESTART VIDEO" to regain control over the camera.

We are working on determining the root of this issue in the VISCA over IP integration in the BirdDog Camera itself.



### PRESET RECALL

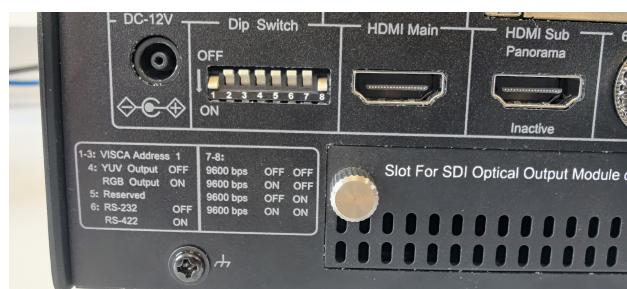
Recalling presets can make the camera stop responding for a few seconds.

### PRESET RECALL VIA NDI

When recalling presets from an NDI source, such as an NDI Monitor or NDI based switcher, it can be possible for the Skaarhoj controllers to lose connection to the BirdDog camera. When this happens pressing Restart Video is required. Currently the best solution is to use your Skaarhoj controller for recalling presets.

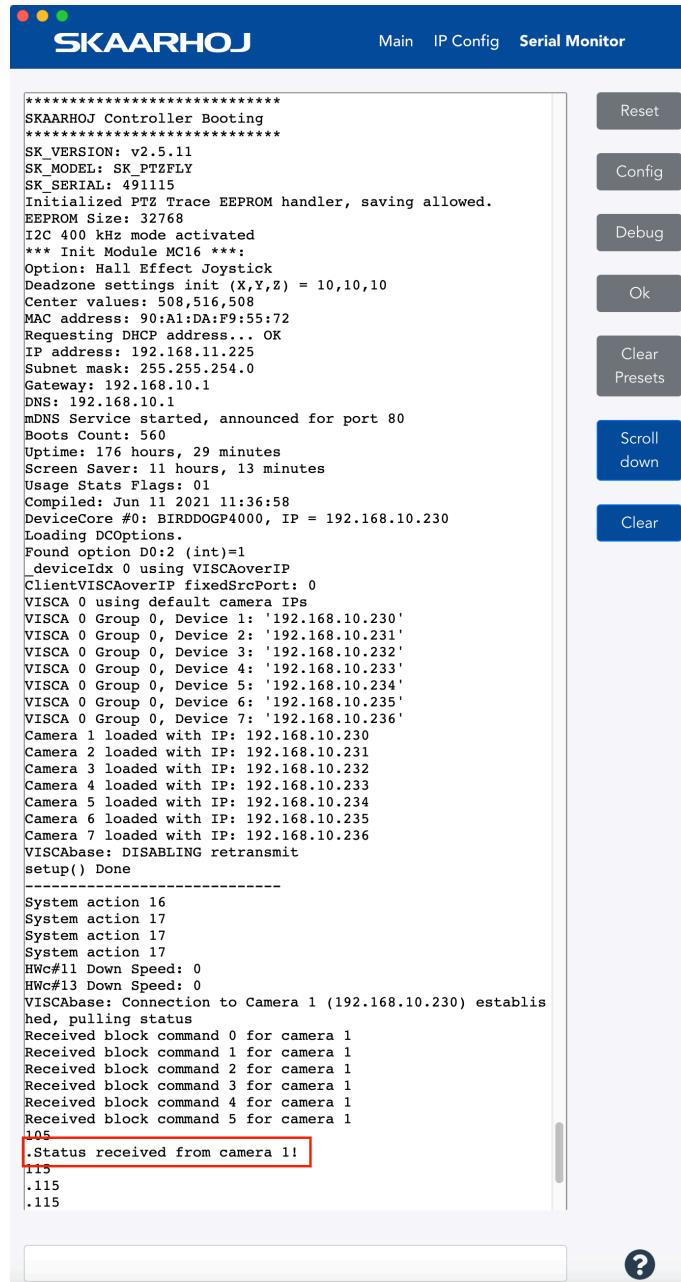
## On Camera Dip Switch Settings

- 1:Visca Address= on
- 2:Visca Address= off
- 3: Visca Address= off
- 4: YUV Output= off
- 5: Reserved= off
- 6: RS-232/RS-422= off
- 7: Bps= off (combined with 8 for 9600 Bps)
- 8: Bps= on (combined with 7 for 9600 Bps)



## Connection

When a controller have successfully established connection to the camera the serial monitor will report "Status received from camera x!"



The screenshot shows a computer window titled "SKAARHOJ" with the tab "Serial Monitor" selected. The main area displays a log of text output from a device. The log includes:

- Boot information: SKAARHOJ Controller Booting, SK\_VERSION: v2.5.11, SK\_MODEL: SK\_PTZFLY, SK\_SERIAL: 491115.
- Initialization: Initialized PTZ Trace EEPROM handler, saving allowed. EEPROM Size: 32768.
- I2C configuration: I2C 400 kHz mode activated, \*\*\* Init Module MC16 \*\*\*; Option: Hall Effect Joystick.
- Deadzone settings: init (X,Y,Z) = 10,10,10.
- Network configuration: Center values: 508,516,508, MAC address: 90:A1:D4:F9:55:72, Requesting DHCP address... OK, IP address: 192.168.11.225, Subnet mask: 255.255.254.0, Gateway: 192.168.10.1, DNS: 192.168.10.1.
- Service startup: mDNS Service started, announced for port 80.
- System statistics: Boots Count: 560, Uptime: 176 hours, 29 minutes, Screen Saver: 11 hours, 13 minutes, Usage Stats Flags: 01.
- Build information: Compiled: Jun 11 2021 11:36:58, DeviceCore #0: BIRDDOGP4000, IP = 192.168.10.230.
- Device configuration: Loading DCOptions, Found option D0:2 (int)=1, \_deviceIdx 0 using VISCAoverIP.
- VISCA configuration: ClientVISCAoverIP fixedSrcPort: 0, VISCA 0 using default camera IPs, VISCA 0 Group 0, Device 1: '192.168.10.230', VISCA 0 Group 0, Device 2: '192.168.10.231', VISCA 0 Group 0, Device 3: '192.168.10.232', VISCA 0 Group 0, Device 4: '192.168.10.233', VISCA 0 Group 0, Device 5: '192.168.10.234', VISCA 0 Group 0, Device 6: '192.168.10.235', VISCA 0 Group 0, Device 7: '192.168.10.236'.
- Camera loading: Camera 1 loaded with IP: 192.168.10.230, Camera 2 loaded with IP: 192.168.10.231, Camera 3 loaded with IP: 192.168.10.232, Camera 4 loaded with IP: 192.168.10.233, Camera 5 loaded with IP: 192.168.10.234, Camera 6 loaded with IP: 192.168.10.235, Camera 7 loaded with IP: 192.168.10.236.
- Base configuration: VISCAbase: DISABLING retransmit, setup() Done.
- System actions: System action 16, System action 17, System action 17, System action 17.
- HWc#11 Down Speed: 0, HWc#13 Down Speed: 0.
- Base connection: VISCAbase: Connection to Camera 1 (192.168.10.230) established, pulling status.
- Command processing: Received block command 0 for camera 1, Received block command 1 for camera 1, Received block command 2 for camera 1, Received block command 3 for camera 1, Received block command 4 for camera 1, Received block command 5 for camera 1.
- Status message: .105, .Status received from camera 1!, .115, .115, .115.

On the right side of the window, there are several buttons: Reset, Config, Debug, Ok, Clear Presets, Scroll down, and Clear. A question mark icon is at the bottom right.

## Device Configurations

Device configuration options exist. For most use cases, it is not needed to change any of the device core options settings.

### Device Core Options (Alpha)

**BirdDog P4K**

IP matrix: Auto-fill

**Group 1**

Camera 1  Add Group  
Add Camera

**Connection Type:** VISCACoverIP▼

**Video Mode:** PAL ▾

**Destination Port:** 52381

**Source Port:**

**Use Strict Connection Strategy:** No ▾

**Set Inquiry Delay:** 500

**Instant PTZ control:** No ▾

## Action Overview

|                              |                                  |
|------------------------------|----------------------------------|
| BirdDog P4K: Pan             | BirdDog P4K: Chroma Suppress     |
| BirdDog P4K: Tilt            | BirdDog P4K: Detail Level        |
| BirdDog P4K: Pan/Tilt        | BirdDog P4K: Detail Auto         |
| BirdDog P4K: Zoom            | BirdDog P4K: Detail Parameters   |
| BirdDog P4K: Zoom (Binary)   | BirdDog P4K: Noise Reduction     |
| BirdDog P4K: Focus           | BirdDog P4K: NR Settings         |
| BirdDog P4K: Focus (Binary)  | BirdDog P4K: Gamma Mode          |
| BirdDog P4K: Focus One Push  | BirdDog P4K: Picture Effect      |
| BirdDog P4K: Focus Settings  | BirdDog P4K: Gamma Settings      |
| BirdDog P4K: Zoom Settings   | BirdDog P4K: Preset              |
| BirdDog P4K: Exposure Mode   | BirdDog P4K: Preset Drive        |
| BirdDog P4K: Iris            | BirdDog P4K: System              |
| BirdDog P4K: Shutter         | BirdDog P4K: Iris (Binary)       |
| BirdDog P4K: Gain            | BirdDog P4K: Shutter (Binary)    |
| BirdDog P4K: AE Speed        | BirdDog P4K: Camera Group Select |
| BirdDog P4K: Ex-Comp. Enable | BirdDog P4K: PTZ Cruise Control  |
| BirdDog P4K: Ex-Comp. Level  | BirdDog P4K: PTZ Trace           |
| BirdDog P4K: AE Comp         | BirdDog P4K: Speed Limit         |
| BirdDog P4K: Gain Limit      | BirdDog P4K: Auto Shift level    |
| BirdDog P4K: Gain Point      | BirdDog P4K: Camera Select       |
| BirdDog P4K: Gain Point Pos  |                                  |
| BirdDog P4K: Max Shutter     |                                  |
| BirdDog P4K: Min Shutter     |                                  |
| BirdDog P4K: White Balance   |                                  |
| BirdDog P4K: WB One Push     |                                  |
| BirdDog P4K: WB R/B Gain     |                                  |
| BirdDog P4K: Matrix          |                                  |
| BirdDog P4K: Matrix Color    |                                  |