

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 may start at a default different than 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.

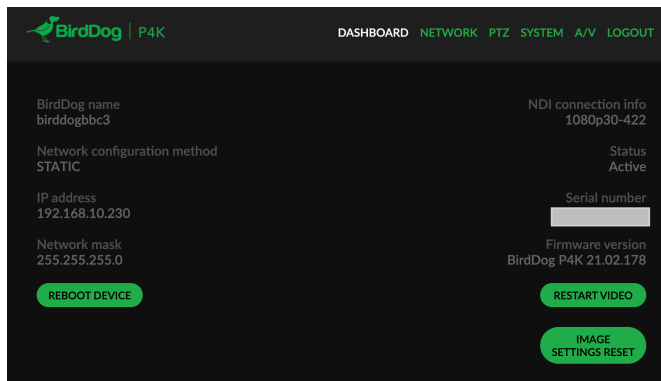
In this manual it is worth noticing that one should not add *additional* Device Cores to control multiple cameras. This is possible from the same Device Core but proper steps should be ensured (consecutive IP addresses on the cameras) for a good user experience.

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

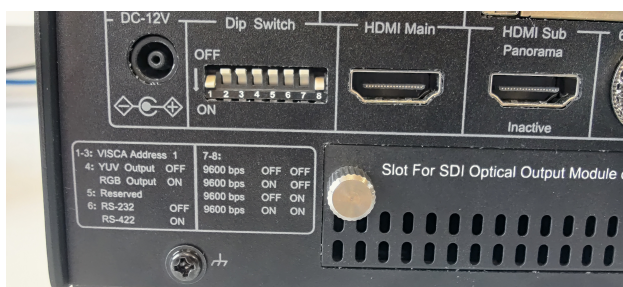
Recalling presets can make the camera stop responding for a few seconds.

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 the SKAARHOJ Serial Monitor interface. The top navigation bar includes 'Main', 'IP Config', and 'Serial Monitor'. The main area displays a log of system boot and configuration messages. A red box highlights the message: ".Status received from camera 1!". To the right of the log are several control buttons: Reset, Config, Debug, Ok, Clear Presets, Scroll down, and Clear. A help icon (?) is located at the bottom right of the interface.

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*****
SKAARHOJ Controller Booting
*****
SK_VERSION: v2.5.11
SK_MODEL: SK_PTZFLY
SK_SERIAL: 491115
Initialized PTZ Trace EEPROM handler, saving allowed.
EEPROM Size: 32768
I2C 400 kHz mode activated
*** Init Module MCL6 ***
Option: Hall Effect Joystick
Deadzone settings init (X,Y,Z) = 10,10,10
Center values: 508,516,508
MAC address: 90:A1:DA: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
mDNS Service started, announced for port 80
Boots Count: 560
Uptime: 176 hours, 29 minutes
Screen Saver: 11 hours, 13 minutes
Usage Stats Flags: 01
Compiled: Jun 11 2021 11:36:58
DeviceCore #0: BIRDDOGP4000, IP = 192.168.10.230
Loading DCOptions.
Found option D0:2 (int)=1
_deviceIdx 0 using VISCAoverIP
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 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
VISCAbase: DISABLING retransmit
setup() Done
-----
System action 16
System action 17
System action 17
System action 17
HwC#11 Down Speed: 0
HwC#13 Down Speed: 0
VISCAbase: Connection to Camera 1 (192.168.10.230) established, pulling status
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
105
.Status received from camera 1!
115
.115
.115
    
```

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	
X Camera 1	<input type="text"/> Add Group
	<input type="button" value="Add Camera"/>

Connection Type:

Video Mode:

Destination Port:

Source Port:

Use Strict Connection Strategy:

Set Inquiry Delay:

Instant PTZ control:

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 | |