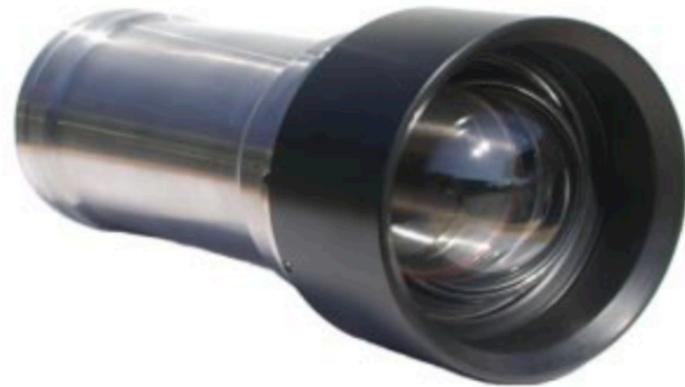


# Device: INSITE PACIFIC Mini Zeus



## Introduction

The Mini Zeus from INSITE PACIFIC can be controlled from SKAARHOJ panels using a Ethernet-Serial converter. The camera block inside the Mini Zeus is a Sony FCB-EV7100

## Know Bugs:

Iris control currently suffer under af bug making values off and difficult to control. Work in progress...  
Manual Exposure mode provides better iris control than Iris priority Exposure mode.

## Ethernet to Serial connection

To communicate via serial (RS-232) to the camera you need an Ethernet-Serial converter. We suggest you get a XS1200 from US Converters - <http://www.usconverters.com/serial-rs232-device-server>

There is a quirk you should know about: The XS1200 only accepts a single TCP connection at a time and it will take some time to realise if a client disconnected silently before it allows a new connection. In essence this means if the SKAARHOJ controller was connected and is rebooted without disconnecting, the XS1200 Server may not realise this before after some time. Therefore you may need to powercycle it along with the SKAARHOJ controller to make sure it will accept a connection.

Below you will find screenshots of how to configure the XS1200 converter (found on the web interface of the XS1200). Notice the IP address of the XS1200 (Static IP Address) must match the IP settings of the Mini Zeus Device Core.

In the settings below the Baud Rate is set to 38400, Serial Type to RS232 and Transmit Timer to 50.

The screenshot shows the configuration interface for a SERIAL TO ETHERNET CONVERTER PART: XS1200 from WWW.USCONVERTERS.COM. The interface is divided into sections for Basic, Advance, and Security settings. The Advance tab is selected, displaying the following configuration:

**Serial Settings**

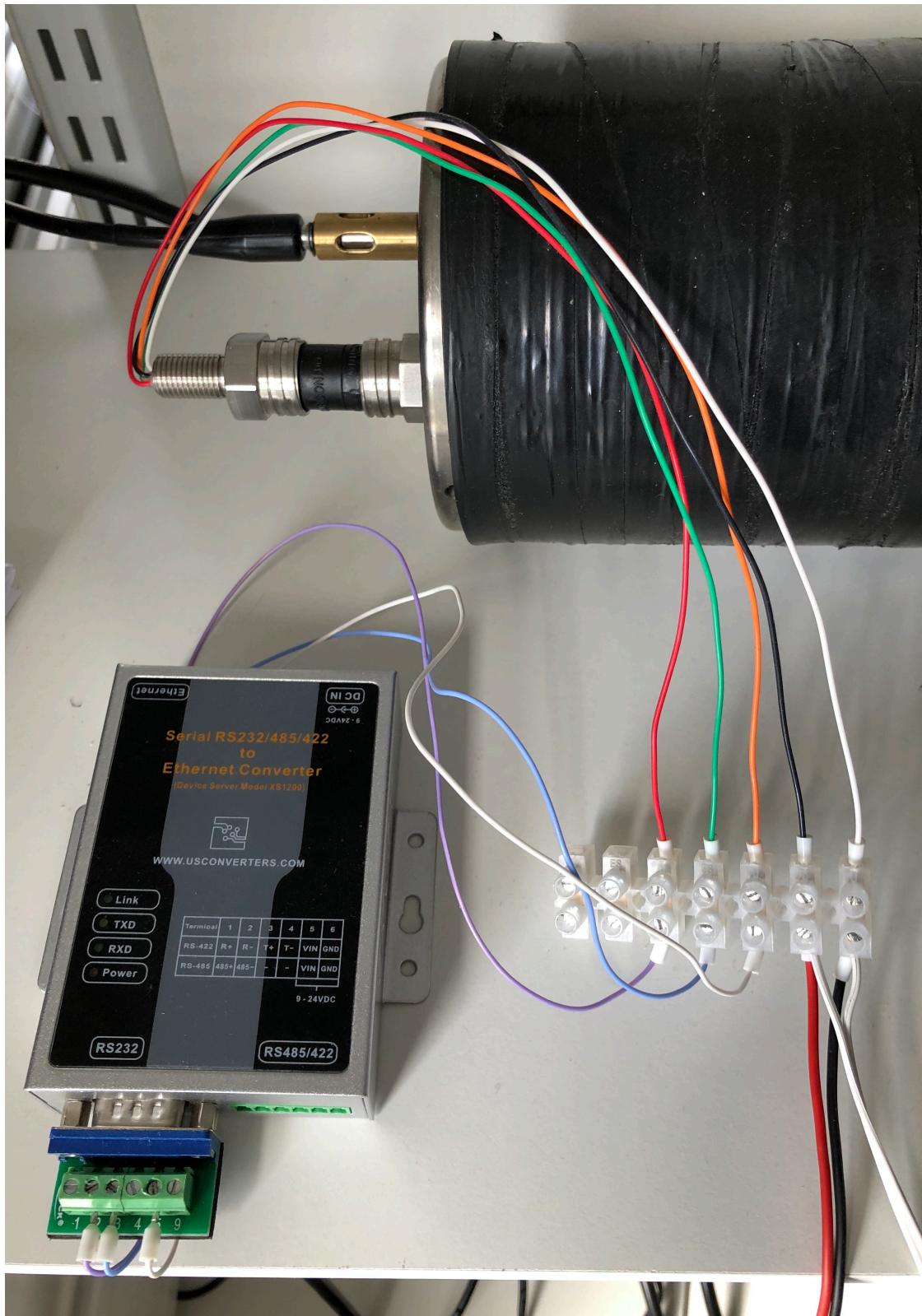
Device Name	DSM1
Data Baud Rate	38400
Data Bits	8
Data Parity	None
Stop Bits	1
Flow Control	None
Serial Type	RS232

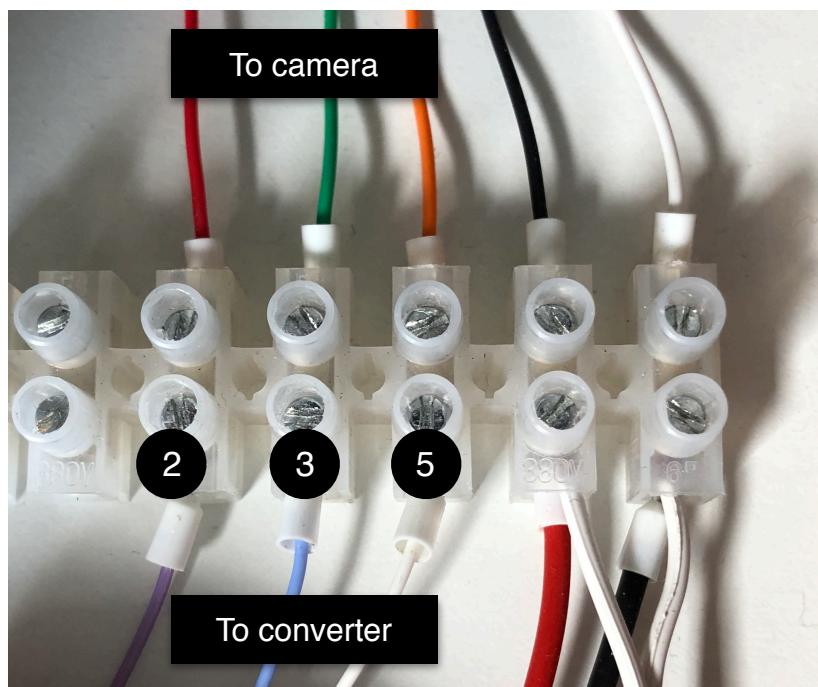
**Network Settings**

DHCP Client	Disable
Static IP Address	192.168.10.35
Static Subnet Mask	255.255.255.0
Static Default Gateway	192.168.10.1
Static DNS Server	192.168.10.2
Connection Type	TCP
Transmit Timer	50 Please enter an integer between 10~65535 ms
Server/Client Mode	Server
Server Listening Port	5000 Please enter an integer between 1024~65535
Client Destination Host Name/IP	192.168.10.212 Please enter host name or IP address
Client Destination Port	5000 Please enter an integer between 1024~65535

At the bottom of the interface are four buttons: Apply, Cancel, Reboot, and Restore default.

Wiring to the Camera/Converter





## Device Configurations

Device configuration options exist:

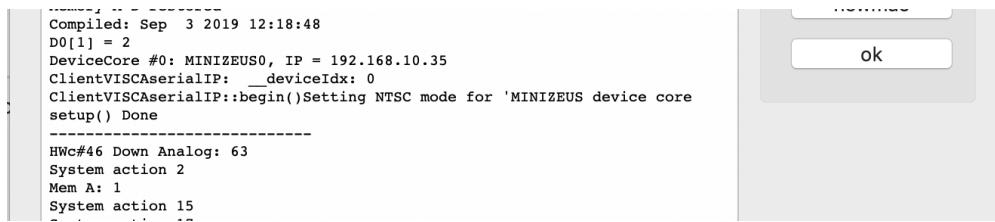
- Index 1: **Video Standard**

- If "0" = Reserved
- If "1" = Pal mode
- If "2" = NTSC mode

Example:

Enabling "Video Standard" to NTSC mode could look like this device configuration code: "D0:1=2" 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.

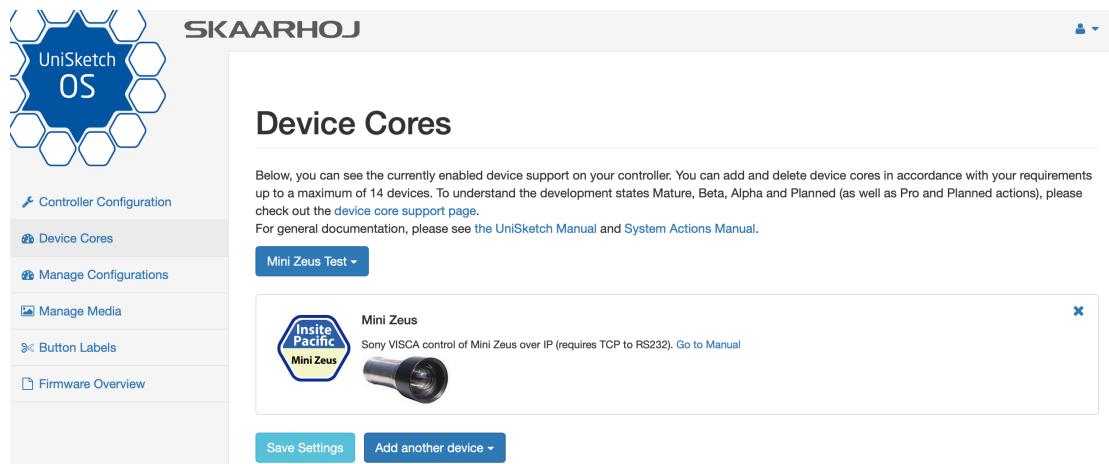
To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:



```
Compiled: Sep 3 2019 12:18:48
D0[1] = 2
DeviceCore #0: MINIZEUS0, IP = 192.168.10.35
ClientVISCAserialIP: _deviceIdx: 0
ClientVISCAserialIP::begin()Setting NTSC mode for 'MINIZEUS device core
setup() Done
-----
HWC#46 Down Analog: 63
System action 2
Mem A: 1
System action 15
```

The serial monitor shows the configuration command "D0:1=2" being sent to the device, followed by the response indicating the mode has been set to NTSC. To the right, a screenshot of a software interface shows a modal dialog with the word "OK" in the center.

Example: If the Mini Zeus device core is the first like below:



The screenshot shows the UniSketch OS Device Cores configuration page. On the left, there's a sidebar with links: Controller Configuration, Device Cores (which is selected and highlighted in blue), Manage Configurations, Manage Media, Button Labels, and Firmware Overview. The main content area is titled "Device Cores". It displays a list of supported device cores, with "Mini Zeus Test" currently selected. Below the list, there are two buttons: "Save Settings" and "Add another device". The "Mini Zeus" entry in the list includes a thumbnail image of the device and a brief description: "Sony VISCA control of Mini Zeus over IP (requires TCP to RS232). Go to Manual".

Then setting the "Video Standard" would be set by this configuration under "Manage Media" on your configuration page for your controller on [cores.skaarhoj.com](https://cores.skaarhoj.com)

### Device Core Options

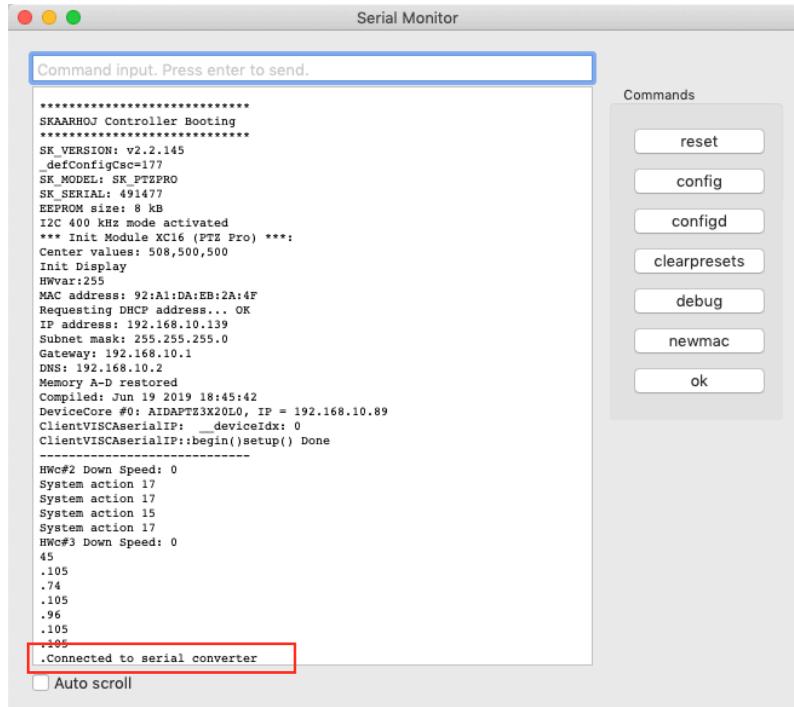
Some device cores support additional options that can be defined through this text field. Please refer to the manual for the particular device core for details.

D0:1=2

## Confirm Connection

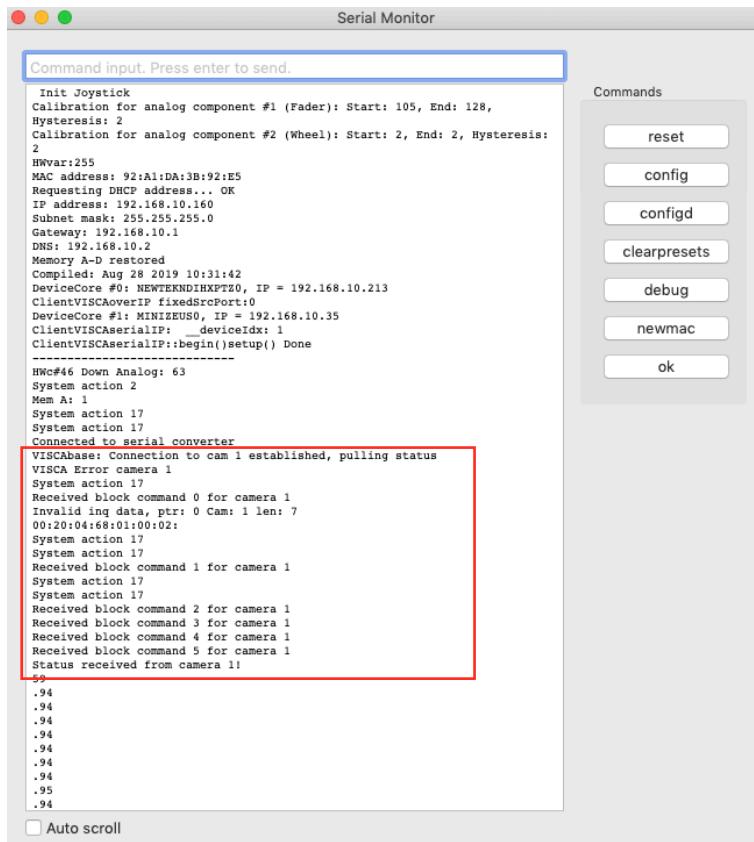
The Serial Monitor from the Firmware Application can be used to monitor connection status.

When the Serial Monitor reports ".Connected to serial converter" connection to the XS1200 have been established, but this does **not** necessarily mean connection to the camera have *also* been established.



Illustrated with another Device Core but same principle

In order to verify connection to the camera the Serial Monitor must state the below commands



## Actions

An excerpt of the actions in the Device Core

- Mini Zeus: Zoom
- Mini Zeus: Zoom (Binary)
- Mini Zeus: Focus
- Mini Zeus: Focus Settings
- Mini Zeus: Exposure Mode
- Mini Zeus: Iris
- Mini Zeus: Shutter
- Mini Zeus: Gain
- Mini Zeus: Gain Limit
- Mini Zeus: White Balance
- Mini Zeus: WB One Push
- Mini Zeus: WB R/B Gain
- Mini Zeus: Chroma Suppress
- Mini Zeus: Aperture Gain
- Mini Zeus: Preset
- Mini Zeus: System
- Mini Zeus: Speed Limit
- Mini Zeus: Auto Shift level
- Mini Zeus: Camera Select