

# Device: IO Industries Victorem 4KSDI-Mini



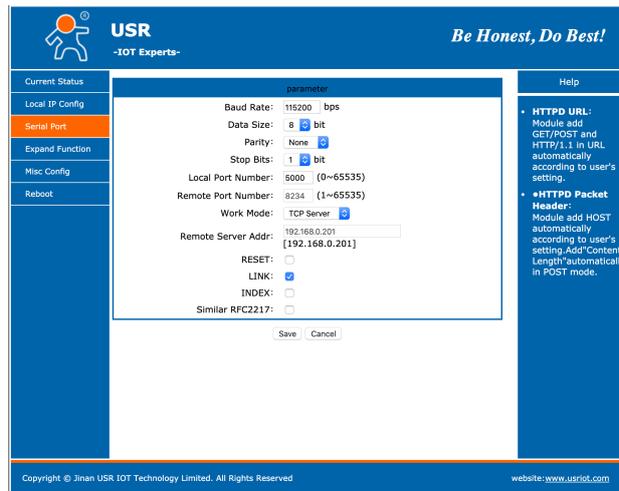
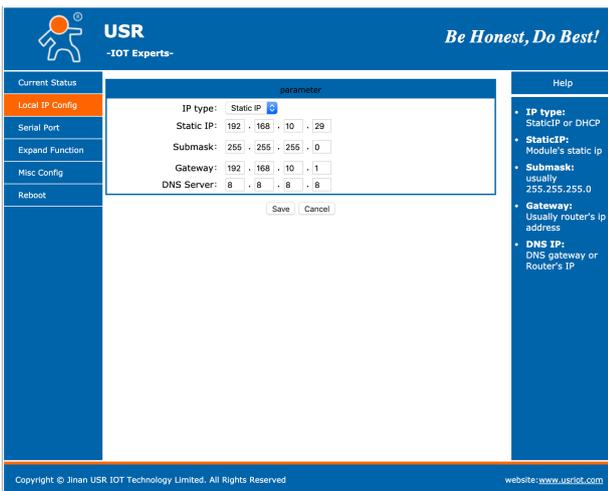
## Introduction

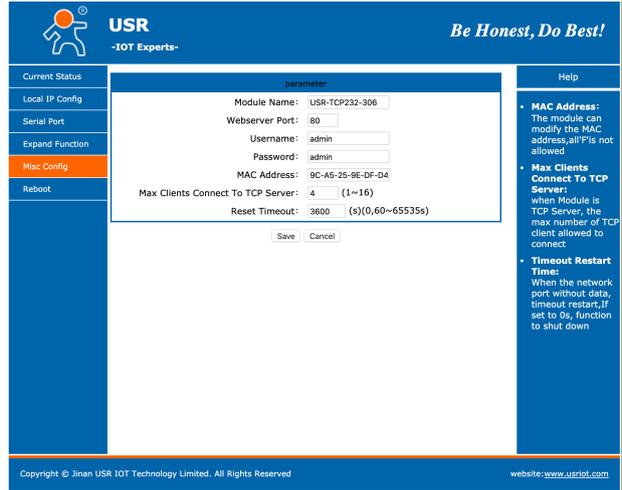
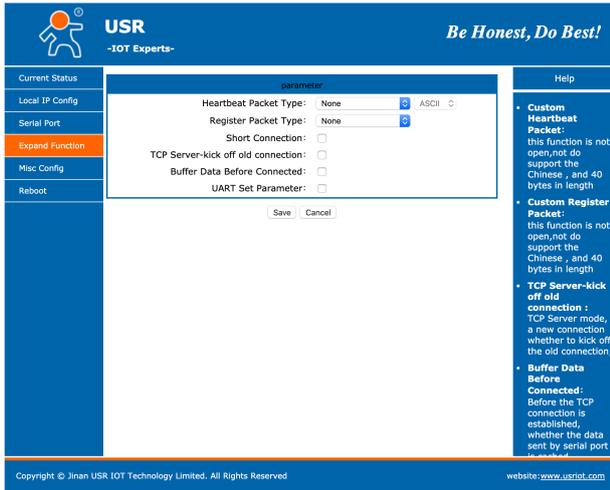
The Victorem from IO Industries can be controlled from SKAARHOJ panels using a Ethernet-Serial converter. The Device Core is still in Alpha

## Ethernet to Serial connection

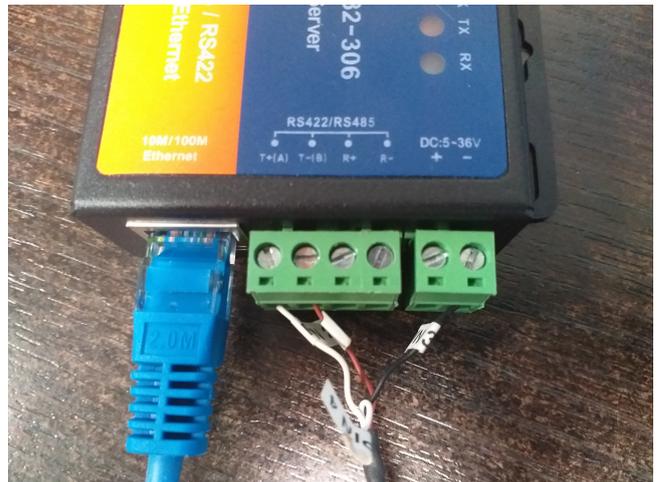
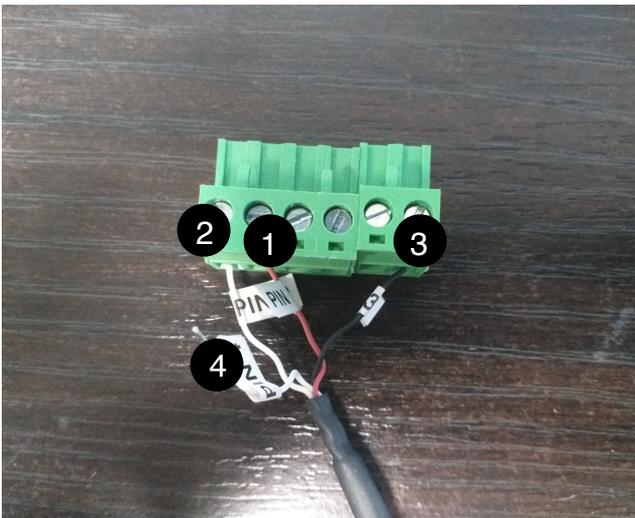
To communicate via serial (RS-485) to the camera you need an Ethernet-Serial converter. We suggest you get a TCP232-306 from USR- <https://www.usriot.com/products/serial-to-ethernet-server.html>

Below you will find screenshots of how to configure the USR-TCP232-306 converter (found on the web interface of the TCP232-306). Notice the IP address of the TCP232-306 (Static IP Address) must match the IP settings of the Victorem Device Core.





## Wiring to the Camera/Converter



Another model we have had success with is the 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 Victorem Device Core.

In the settings below the Baud Rate is set to 115200, Serial Type to RS485 and Transmit Timer to 50.

The screenshot shows the web interface for a SERIAL TO ETHERNET CONVERTER (P/N: XS1200 WWW.USCONVERTERS.COM) with version 3.6.1(18/08). The interface has three tabs: Basic, Advance, and Security. The 'Advance' tab is selected, showing 'Serial Settings' and 'Network Settings'.

**Serial Settings:**

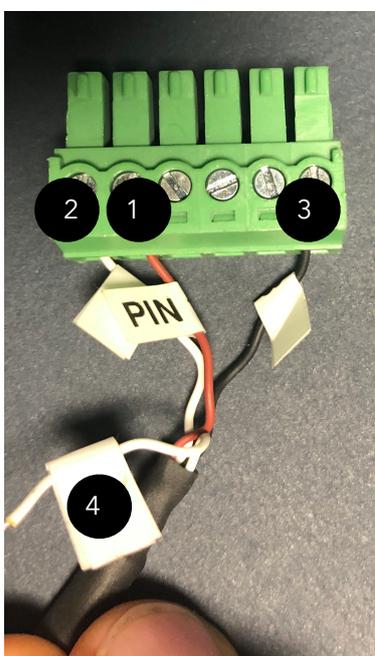
- Device Name: DSM1
- Data Baud Rate: 115200
- Data Bits: 8
- Data Parity: None
- Stop Bits: 1
- Flow Control: None
- Serial Type: RS485

**Network Settings:**

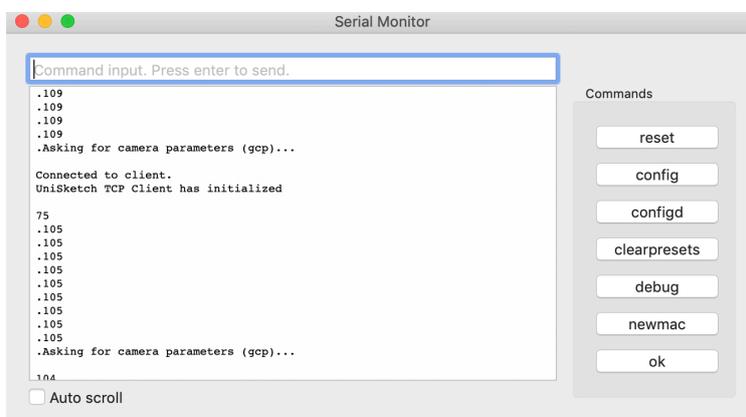
- DHCP Client: Disable
- Static IP Address: 192.168.10.38
- Static Subnet Mask: 255.255.255.0
- Static Default Gateway: 192.168.10.1
- Static DNS Server: 192.168.10.1
- Connection Type: TCP
- Transmit Timer: 50 (Note: Please enter an integer between 10~65535 ms)
- Server/Client Mode: Server
- Server Listening Port: 5000 (Note: Please enter an integer between 1~65535)
- Client Destination Host Name/IP: 192.168.10.166 (Note: Please enter host name or IP address)
- Client Destination Port: 5000 (Note: Please enter an integer between 1~65535)

Buttons at the bottom: Apply, Cancel, Reboot, Restore default.

Wiring to the Camera/Converter Confirm Connection



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



When the Serial Monitor reports

- .Asking for camera parameters (gcp)...
- Connected to client.
- UniSketch TCP Client has initialized

connection to the Serial Converter and the camera have been established.

## Device Configurations

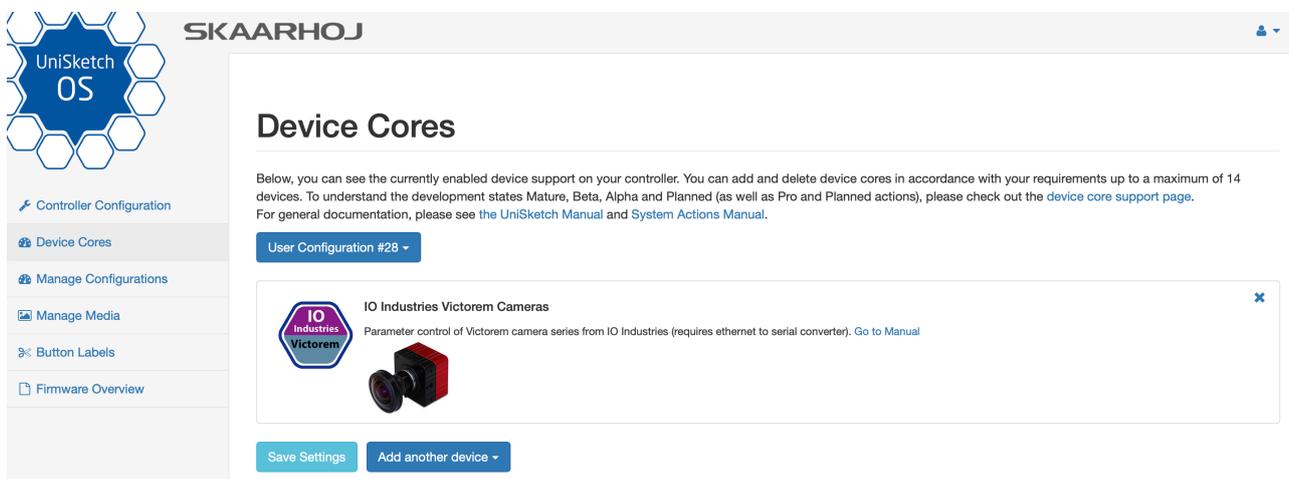
Device configuration options exist:

- Index 0: **Disable requirement for feedback from camera (unidirectional communication)**
  - If "1" = Requirement is disabled

### Example I:

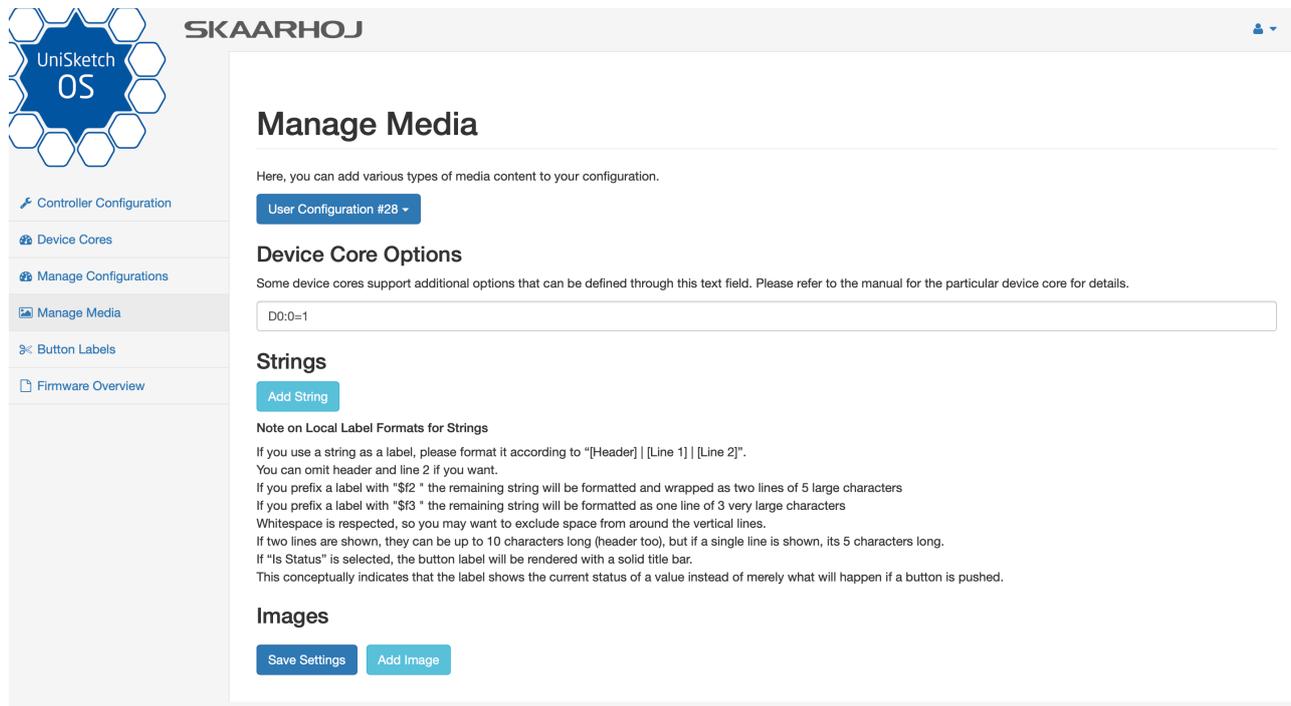
Enabling "Disable requirement" could look like this device configuration code: "D0:0=1" where the general form would be "Dx:y=z" where "x" is the number of the device core as installed on the controller (starting with zero for the first device core), "y" the index number and "z" the value for that index.

If the IO Industries device core is the first like below:



The screenshot shows the SKAARHOJ UniSketch OS interface. On the left is a navigation menu with options: Controller Configuration, Device Cores, Manage Configurations, Manage Media, Button Labels, and Firmware Overview. The main content area is titled "Device Cores" and includes a sub-header "User Configuration #28". Below this, there is a list of device cores. The first entry is "IO Industries Victorem Cameras", which includes a small image of a camera and a link to "Go to Manual". At the bottom of the device list, there are two buttons: "Save Settings" and "Add another device".

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



The screenshot shows the UniSketch OS configuration interface. On the left is a sidebar with navigation options: Controller Configuration, Device Cores, Manage Configurations, Manage Media (selected), Button Labels, and Firmware Overview. The main content area is titled 'Manage Media' and includes a 'User Configuration #28' dropdown. Below this is the 'Device Core Options' section with a text input field containing 'D0:0=1'. The 'Strings' section features an 'Add String' button and a note on local label formats for strings. The 'Images' section has 'Save Settings' and 'Add Image' buttons.

## Manage Media

Here, you can add various types of media content to your configuration.

User Configuration #28

### 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.

### Strings

Add String

**Note on Local Label Formats for Strings**

If you use a string as a label, please format it according to "[Header] | [Line 1] | [Line 2]". You can omit header and line 2 if you want.

If you prefix a label with "\$f2 " the remaining string will be formatted and wrapped as two lines of 5 large characters

If you prefix a label with "\$f3 " the remaining string will be formatted as one line of 3 very large characters

Whitespace is respected, so you may want to exclude space from around the vertical lines.

If two lines are shown, they can be up to 10 characters long (header too), but if a single line is shown, its 5 characters long.

If "Is Status" is selected, the button label will be rendered with a solid title bar.

This conceptually indicates that the label shows the current status of a value instead of merely what will happen if a button is pushed.

### Images

Save Settings Add Image

## Actions

An excerpt of the actions in the Device Core

IO Industries Victorem Cameras: Exposure Mode  
IO Industries Victorem Cameras: Shutter  
IO Industries Victorem Cameras: Iso  
IO Industries Victorem Cameras: Gain  
IO Industries Victorem Cameras: AEC Min/Max  
IO Industries Victorem Cameras: AEC Target  
IO Industries Victorem Cameras: AEC Speed  
IO Industries Victorem Cameras: Aperture  
IO Industries Victorem Cameras: Master Pedestal  
IO Industries Victorem Cameras: TWB  
IO Industries Victorem Cameras: TWB Speed  
IO Industries Victorem Cameras: One-Push WB  
IO Industries Victorem Cameras: Color Temp  
IO Industries Victorem Cameras: Color Matrix  
IO Industries Victorem Cameras: Color Offset  
IO Industries Victorem Cameras: Saturation  
IO Industries Victorem Cameras: LUT 1D  
IO Industries Victorem Cameras: LUT 3D  
IO Industries Victorem Cameras: LUT RGB 1D  
IO Industries Victorem Cameras: Gamma  
IO Industries Victorem Cameras: Gamma Reset  
IO Industries Victorem Cameras: Black Balance  
IO Industries Victorem Cameras: Image Enhance  
IO Industries Victorem Cameras: Overshoot  
IO Industries Victorem Cameras: Chroma Err Correction  
IO Industries Victorem Cameras: Profiles  
IO Industries Victorem Cameras: Reset to PUP  
IO Industries Victorem Cameras: Link Configuration  
IO Industries Victorem Cameras: Resolution  
IO Industries Victorem Cameras: Sampling  
IO Industries Victorem Cameras: Frame Rate  
IO Industries Victorem Cameras: Zone Position  
IO Industries Victorem Cameras: Zone Overlay  
IO Industries Victorem Cameras: Test Pattern  
IO Industries Victorem Cameras: Image Flip  
IO Industries Victorem Cameras: OSD Primary  
IO Industries Victorem Cameras: Fan Control  
IO Industries Victorem Cameras: Menu