

Device: AIDA PTZ3-X20L



Introduction

The PTZ3-X20L from AIDA can be controlled from SKAARHOJ panels using a Ethernet-Serial converter.

Ethernet to Serial connection

To communicate via serial (RS-232) to the AIDA 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.

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Below you will find screenshots of how to configure the XS1200 converter (found of the web interface of the XS1200). Notice the IP address of the XS1200 (Static IP Address) must match the IP settings of the AIDA PTZ3-X20L Device Core.

In the settings below the Baud Rate is set to 9600 and Serial Type to RS232. The camera must match these settings.

The screenshot shows the configuration interface for the XS1200 converter. The top header includes the device logo, part number (PART: XS1200), website (WWW.USCONVERTERS.COM), and a Logout link. The interface is divided into tabs: Basic (selected), Advance, and Security. The Basic tab contains two sections: **Serial Settings** and **Network Settings**.

Serial Settings:

- Device Name: DSM1
- Data Baud Rate: 9600
- Data Bits: 8
- Data Parity: None
- Stop Bits: 1
- Flow Control: None
- Serial Type: RS232

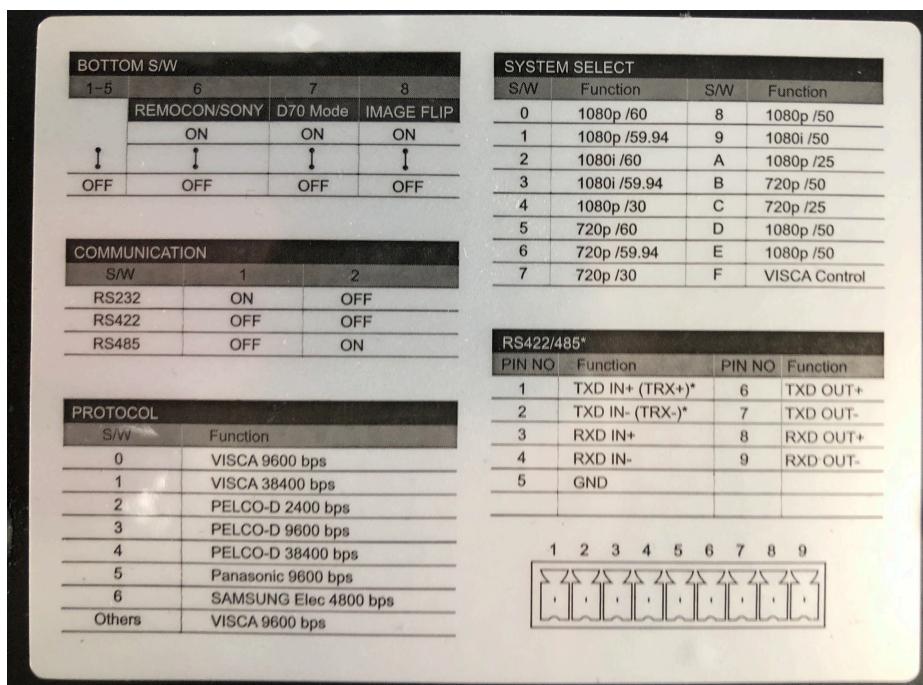
Network Settings:

- DHCP Client: Disable
- Static IP Address: 192.168.10.89
- Static Subnet Mask: 255.255.255.0
- Static Default Gateway: 192.168.10.1
- Static DNS Server: 168.95.1.1
- Connection Type: TCP
- Transmit Timer: 100 (with validation message: Please enter an integer between 10~65535 ms)
- Server/Client Mode: Server
- Server Listening Port: 5000 (with validation message: Please enter an integer between 1024~65535)
- Client Destination Host Name/IP: 192.168.2.2 (with validation message: Please enter host name or IP address)
- Client Destination Port: 5000 (with validation message: Please enter an integer between 1024~65535)

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

Settings on Camera

The settings on the Camera must match the settings from the XS1200 converter.



This image shows the configuration guide for the XS1200 camera, detailing the settings for various pins on the bottom of the camera.

| BOTTOM S/W | | | | SYSTEM SELECT | | | |
|------------|--------------|----------|------------|---------------|--------------|-----|---------------|
| 1-5 | 6 | 7 | 8 | S/W | Function | S/W | Function |
| ON | REMOCON/SONY | D70 Mode | IMAGE FLIP | 0 | 1080p /60 | 8 | 1080p /50 |
| ON | ON | ON | ON | 1 | 1080p /59.94 | 9 | 1080i /50 |
| OFF | OFF | OFF | OFF | 2 | 1080i /60 | A | 1080p /25 |
| | | | | 3 | 1080i /59.94 | B | 720p /50 |
| | | | | 4 | 1080p /30 | C | 720p /25 |
| | | | | 5 | 720p /60 | D | 1080p /50 |
| | | | | 6 | 720p /59.94 | E | 1080p /50 |
| | | | | 7 | 720p /30 | F | VISCA Control |

| COMMUNICATION | | | RS422/485* | | | |
|---------------|-----|-----|------------|-----------------|--------|----------|
| S/W | 1 | 2 | PIN NO | Function | PIN NO | Function |
| RS232 | ON | OFF | 1 | TXD IN+ (TRX+)* | 6 | TXD OUT+ |
| RS422 | OFF | OFF | 2 | TXD IN- (TRX-)* | 7 | TXD OUT- |
| RS485 | OFF | ON | 3 | RXD IN+ | 8 | RXD OUT+ |
| | | | 4 | RXD IN- | 9 | RXD OUT- |
| | | | 5 | GND | | |

| PROTOCOL | | | | | | | | |
|----------|-----------------------|---|---|---|---|---|---|---|
| S/W | Function | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 0 | VISCA 9600 bps | ✓ | | | | | | |
| 1 | VISCA 38400 bps | | ✓ | | | | | |
| 2 | PELCO-D 2400 bps | | | ✓ | | | | |
| 3 | PELCO-D 9600 bps | | | | ✓ | | | |
| 4 | PELCO-D 38400 bps | | | | | ✓ | | |
| 5 | Panasonic 9600 bps | | | | | | ✓ | |
| 6 | SAMSUNG Elec 4800 bps | | | | | | | ✓ |
| Others | VISCA 9600 bps | | | | | | | |



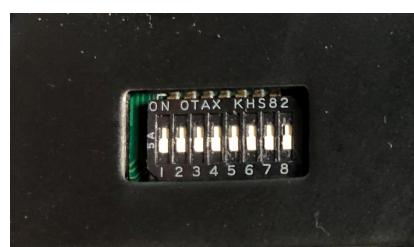
Notice

Address ID: 1

Protocol: 0 (for VISCA 9600 bps)

System Select: 9 (for 1080i/50 - can be something else)

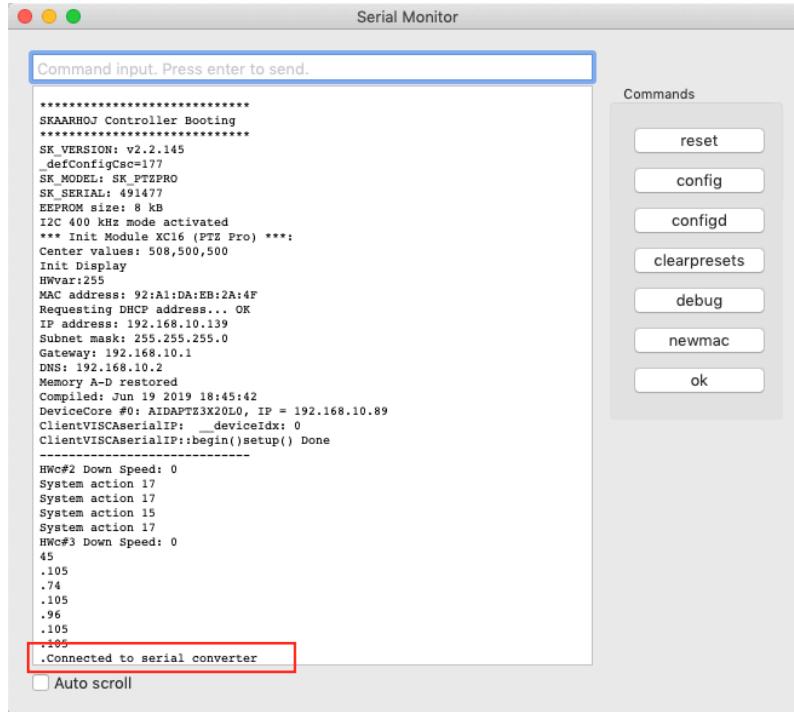
Communication: Dip 1 to ON for RS232



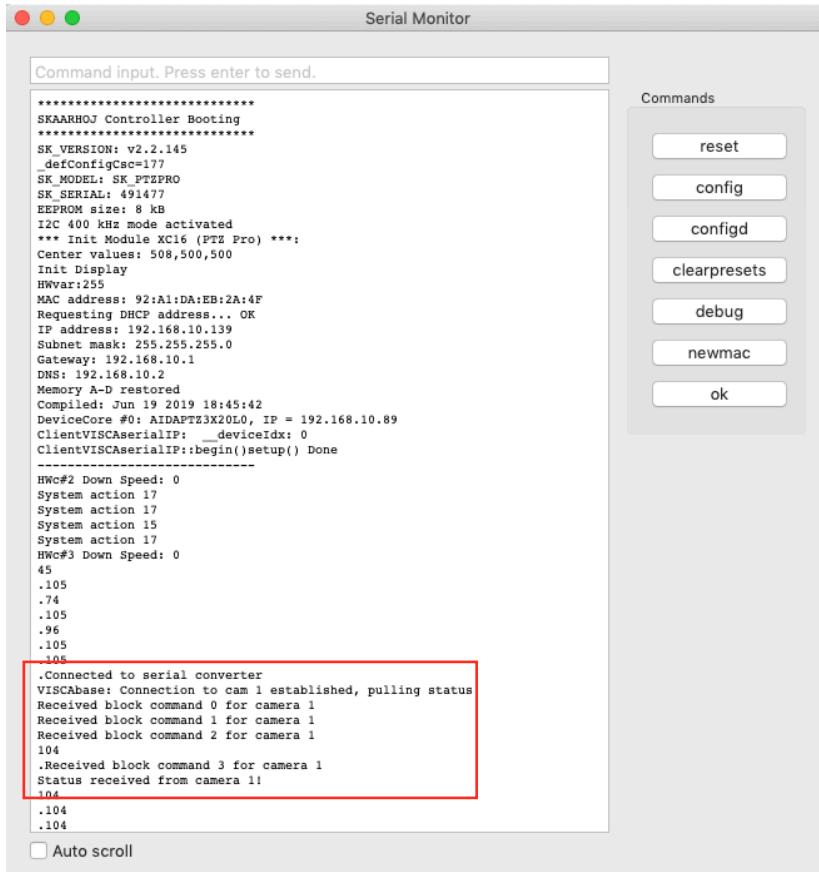
Confirm Connection

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.



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



Actions

An excerpt of the actions in the AIDA PTZ3-X20L Device Core

```

AIDA PTZ3-X20L: Pan
AIDA PTZ3-X20L: Tilt
AIDA PTZ3-X20L: Zoom
AIDA PTZ3-X20L: Focus
AIDA PTZ3-X20L: Focus One Push
AIDA PTZ3-X20L: PT Limit (Planned)
AIDA PTZ3-X20L: Focus Settings
AIDA PTZ3-X20L: Zoom Settings
✓ AIDA PTZ3-X20L: Exposure Mode
AIDA PTZ3-X20L: Iris
AIDA PTZ3-X20L: Shutter
AIDA PTZ3-X20L: Gain
AIDA PTZ3-X20L: Ex-Comp. Enable
AIDA PTZ3-X20L: Ex-Comp. Level
AIDA PTZ3-X20L: AE Comp
AIDA PTZ3-X20L: Gain Limit
AIDA PTZ3-X20L: Bright
AIDA PTZ3-X20L: White Balance
AIDA PTZ3-X20L: WB One Push
AIDA PTZ3-X20L: WB R/B Gain
AIDA PTZ3-X20L: Tone adjustments
AIDA PTZ3-X20L: Chroma Suppress
AIDA PTZ3-X20L: Aperture Gain
AIDA PTZ3-X20L: Noise Reduction
AIDA PTZ3-X20L: Gamma
AIDA PTZ3-X20L: Picture Effect
AIDA PTZ3-X20L: Preset
AIDA PTZ3-X20L: Preset Drive
AIDA PTZ3-X20L: System
AIDA PTZ3-X20L: Speed Limit
AIDA PTZ3-X20L: Auto Shift level
AIDA PTZ3-X20L: Camera Select

```

Controlling Multiple Cameras

Locally we have just tested control of 1 camera connected to the XS1200 but it should be possible to daisy chain multiple cameras.

Camera Select Action



The Camera Select Action can be assigned on a controller to visually see if connection have been established. When assigned to a button it will light up.



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When pressed (and the controller is configured) the other AIDA actions will present themselves.



Picture

