

# Device: Panasonic PTZ RS422

Please observe. For controlling Panasonic PTZ Cameras we have two Device Cores.

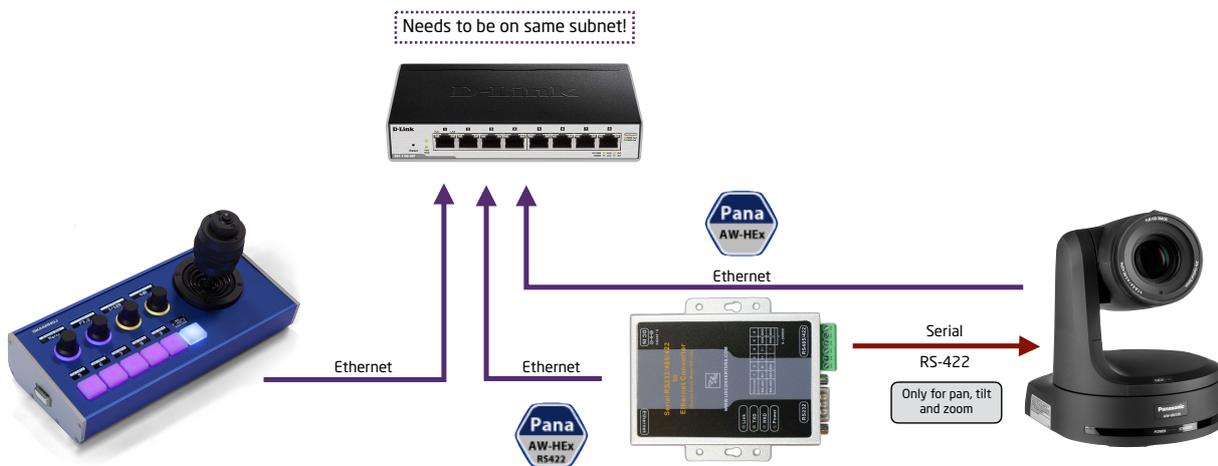
- Panasonic PTZ
- Panasonic AW-HEx RS422 (**will be available from UniSketch firmware version v.2.2.130**)

The **Panasonic PTZ** Device Core is the most comprehensive Device Core and is the one we recommend using. All of our default configurations utilize that Device Core so please look in that manual for details.

The development of the **Panasonic AW-HEx RS422** Device Core which this manual describes is solely used for pan, tilt and zoom via serial control. This have been developed as pan, tilt and zoom control via the serial interface is slightly more responsive. Therefore to get full control of the Panasonic PTZ Cameras *both* Device Cores must be utilized as the **Panasonic AW-HEx RS422** Device Core will *only* provide pan, tilt and zoom. The Device Core is designed to control just *one* camera. It is not possible to daisy chain cameras on the serial connector.

## Ethernet to Serial connection

To communicate via serial (RS-422) to the Panasonic PTZ 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 realize 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 realize 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 of the web interface of the XS1200).

**SERIAL TO ETHERNET CONVERTER**  
**PART: XS1200**  
**WWW.USCONVERTERS.COM**

Logout

Basic    Advance    Security

**Serial Settings**

Device Name:

Data Baud Rate:

Data Bits:

Data Parity:

Stop Bits:

Flow Control:

Serial Type:

**Network Settings**

DHCP Client:

Static IP Address:

Static Subnet Mask:

Static Default Gateway:

Static DNS Server:

Connection Type:

Transmit Timer:   
 Please enter an integer between 10~65535 ms

Server/Client Mode:

Server Listening Port:   
 Please enter an integer between 1024~65535

Client Destination Host Name/IP:   
 Please enter host name or IP address

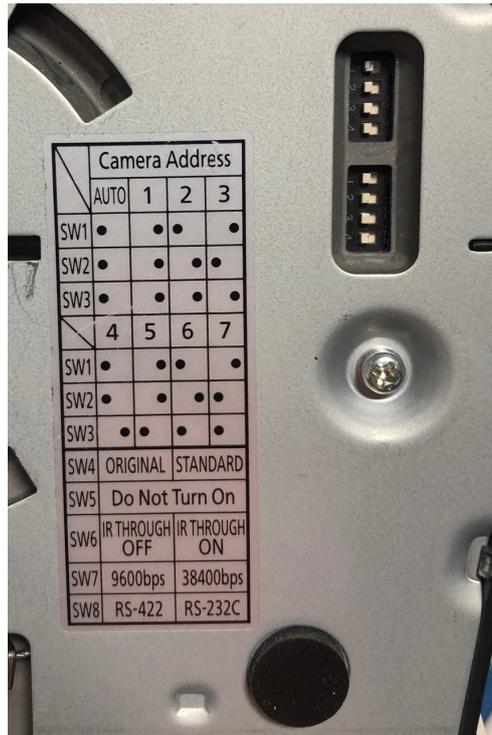
Client Destination Port:   
 Please enter an integer between 1024~65535

Apply    Cancel    Reboot    Restore default

Make sure to set up an IP address in your range here. This is the IP address you must also set up inside the SKAARHOJ controller for the Device Core! Here it is set to 192.168.10.230 and corresponding subnet mask.

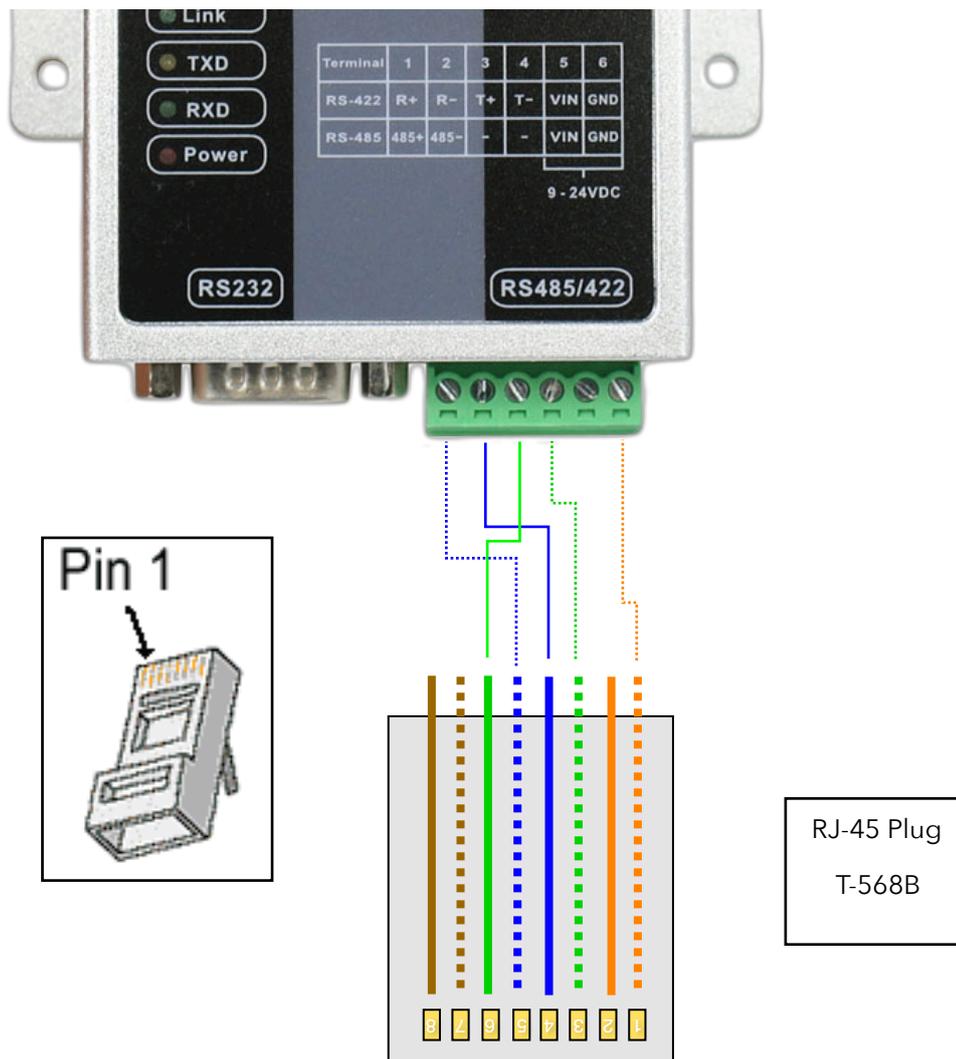
## SKAARHOJ DEVICE CORES

For serial commands set the camera to RS-422 and baudrate 9600bps via the dip switches.



### RS-422 Cable Wiring

Follow the below guide for cabling instructions. Instructions are inspired by the official Panasonic Documentation found here: [ftp://ftp.panasonic.com/provideo/guide/rs-422\\_cable\\_wiring\\_guide.pdf](ftp://ftp.panasonic.com/provideo/guide/rs-422_cable_wiring_guide.pdf)



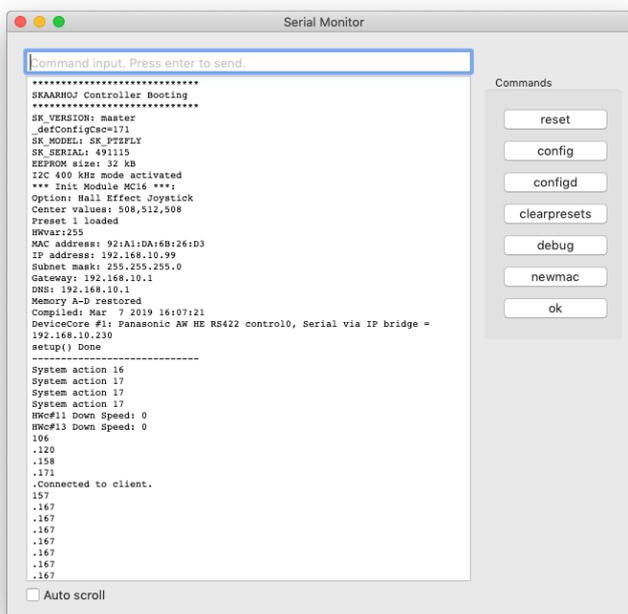


This is a overview of the actions implemented in the Device Core

Panasonic AW-HEX RS422: Pan  
 Panasonic AW-HEX RS422: Tilt  
 Panasonic AW-HEX RS422: Pan/Tilt  
 Panasonic AW-HEX RS422: Zoom  
 Panasonic AW-HEX RS422: Zoom (Binary)

### Confirm Connectivity

When the SKAARHOJ controller connects to the XS-1200 "Connected to client" will appear in the serial monitor



## Assigning Actions

In order to utilize the Panasonic AW-HEX RS422 Device Core you should exchange relevant hardware component actions and generate a new firmware to your controller.

#11 **LR**

Normal CP

Panasonic PTZ: Pan Mem AA Mem K

#11 **LR**

Normal CP

Panasonic AW-HEX RS422: Pan Mem K

#12 **UD**

Normal CP

Panasonic PTZ: Tilt Mem AA Mem K

#12 **UD**

Normal CP

Panasonic AW-HEX RS422: Tilt Mem K

#13 **Rotate**

Normal CP

Panasonic PTZ: Zoom Mem AA Mem K

#13 **Rotate**

Normal CP

Panasonic AW-HEX RS422: Zoom Mem K

#14 **Top button**

Normal CP

Panasonic PTZ: Pan/Tilt Mem AA Home Mem K

#14 **Top button**

Normal CP

Panasonic AW-HEX RS422: Pan/Tilt Home Mem K

Actions from the "regular" Panasonic PTZ Device Core

Actions from the Panasonic AW-HEX RS422 Device Core

# Panasonic RS-422 Cable Wiring Instructions

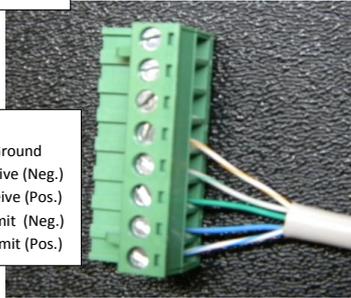
From:

[ftp://ftp.panasonic.com/provideo/guide/rs-422\\_cable\\_wiring\\_guide.pdf](ftp://ftp.panasonic.com/provideo/guide/rs-422_cable_wiring_guide.pdf)

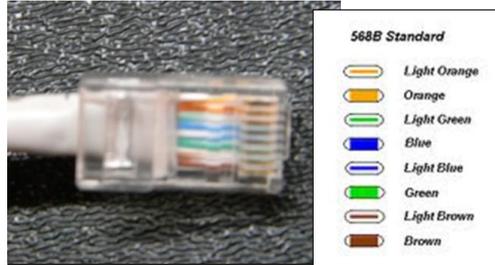
## RS-422 Cable Wiring

Serial Connector Plug

Legend	
White w/ Orange stripe	GND = Ground
White w/ Green Stripe	R- = Receive (Neg.)
Green-Solid	R+ = Receive (Pos.)
Blue-Solid	T- = Transmit (Neg.)
White w/ Blue Stripe	T+ = Transmit (Pos.)



RJ-45 Plug



568B Standard	
	Light Orange
	Orange
	Light Green
	Blue
	Light Blue
	Green
	Light Brown
	Brown

