## SKAARHOJ DEVICE CORES

# Device: JVC KY-PZ100



## Introduction

A large number of parameters can be controlled on the JVC KY-PT100 camera. Control is via VISCA over IP. The integration was developed using firmware version: V0200-0128

Please see the "PTZ Manual" at <u>https://www.skaarhoj.com/support/manuals/</u> 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.

## Number of Cameras possible to control

Please notice from the JVC KY-PT100 Core it is possible to control up 7 cameras. In general this is the limit for our VISCA over IP Device Cores and our integration have not been tested above 7 cameras. If you want to control more than 7 cameras you will need to add an additional Device Core and configure the controller accordingly. None of our default configuration utilities 2 x JVC Device Cores. As we have never tested with more than 7 cameras, we do not know how well performance and stability will be in such a configuration setup. We recommend only having 1 x JVC KY-PT100 Device Core installed per controller.

## **Confirm Connection**

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



## **Device Configurations**

Device configuration options exist:

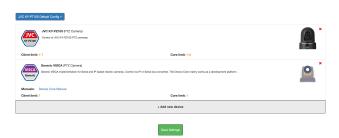
- Index 0: VISCA over IP/Serial
  - If "0" = VISCA over IP
  - If "1" = VISCA serial over IP

#### Example:

Enabling VISCA over serial 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.

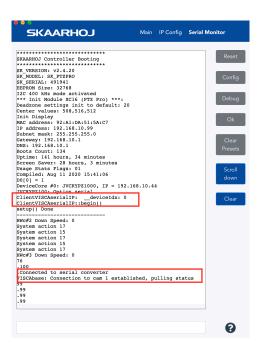
Device Core Options
Some device cores support additional options that can be defined through this text field. Please refer to the manual for the particular device core for details.
D0:0=1

If the JVC device core is the first like below:



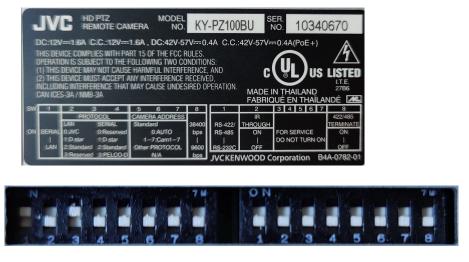
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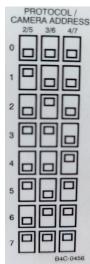
To confirm that a device configuration is in fact detected by the controller, please check it out on the serial monitor where it will be mentioned:



## **Settings on Camera**

There are multiple dip switches on the bottom of the JVC KY-PZ100 to control connection via IP or Serial.





Switch Number	LAN	SERIAL
1	Off	On
2	Off	Off
3	On	On
4	Off	Off
5	Off	Off
6	Off	Off
7	Off	Off
8	Off	Off

# **Ethernet to Serial connection**

To communicate via serial (RS-232C) to the JVC KY-PZ100 camera you need an Ethernet-Serial converter. We suggest you get a USR-TCP232-306 from USR IOT - <u>https://www.pusr.com/products/ethernet-to-serial-converters-usr-tcp232-306.html</u>

Below you will find screenshots of how to configure the USR-TCP232-306 converter (found of the web interface of the USR-TCP232-306). Notice the IP address of the USR-TCP232-306 (Static IP Address) must match the IP settings of the KY-PZ100 Device Core.

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

	USR Be Honest, Do Best!			
Current Status		Status		Help
Local IP Config	Module Name:	USR-TCP232-306		Current IP
Serial Port	Current IP Address:	192.168.10.44		Address:
	MAC Address:	9c-a5-25-9e-e0-00		default IP of module
Expand Function		0.0.0.0 / 0 byte / 0 byte		Remote
Misc Config		0.0.0.0/ 0 byte / 0 byte		IP/TX/RX:
Reboot		0.0.0.0/ 0 byte / 0 byte		IP of server or device connecting
		0.0.0.0/ 0 byte / 0 byte		with module;reset
		0.0.0.0/ 0 byte / 0 byte 121384/ 137580 bytes		for disconnect TX/RX:data volume
				that each server or device communicates with module;reset for disconnect
				TX Count/RX Count: a total of data volume that servers or devices communicate with module;reset for power off
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# Actions

An excerpt of the actions in the Device Core

JVC KY-PZ100: Pan/Tilt
JVC KY-PZ100: Zoom (Binary)
JVC KY-PZ100: Focus (Binary)
JVC KY-PZ100: Focus One Push
JVC KY-PZ100: Focus Settings
JVC KY-PZ100: Zoom Settings
JVC KY-PZ100: Exposure Mode
JVC KY-PZ100: Iris
JVC KY-PZ100: Shutter
JVC KY-PZ100: Gain
JVC KY-PZ100: AE Level
JVC KY-PZ100: Gain Limit
JVC KY-PZ100: White Balance
JVC KY-PZ100: WB One Push
JVC KY-PZ100: WB R/B Gain
JVC KY-PZ100: Detail
JVC KY-PZ100: Noise Reduction
JVC KY-PZ100: Preset
JVC KY-PZ100: Preset Drive
JVC KY-PZ100: System
JVC KY-PZ100: PTZ Cruise Control
JVC KY-PZ100: PTZ Trace
JVC KY-PZ100: Auto Shift level
JVC KY-PZ100: Camera Select