



eVision

Image Analysis Software Tools

// QUICKSTART GUIDE

Designing In Alecs Smart Cameras Seamlessly

V1.1.0

// Get your Alecs Smart Camera running



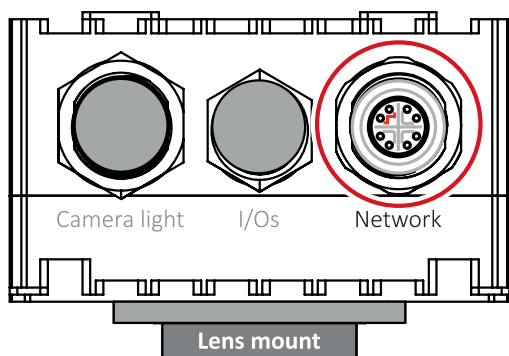
Material damage by wrong powering

Provide power input:

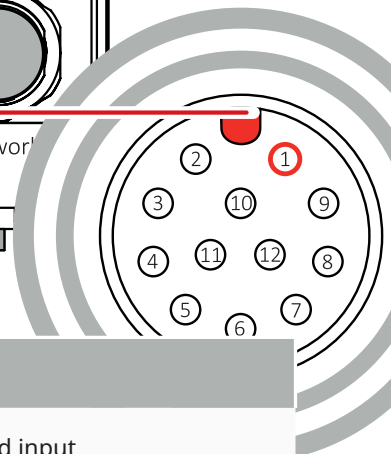
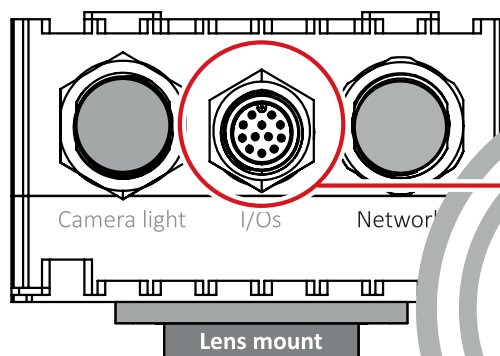
// Alecs only: 24 VDC $\pm 10\%$ and ≥ 1.5 A

// Alecs with RMX140 ring light: 24 VDC $\pm 10\%$ and ≥ 7 A

// 1 Connect to the network



// 2 Connect power and I/Os



Pin	Color (1)	Signal	Direction	Level	Description
1	Brown	GPI0	In	Vin(high) = 3.0 to 24.0 VDC (2) Vin(low) = 0 to 1.0 VDC	Opto-isolated input
2	Orange	RS485+	In/Out	Max. common mode range ± 25 VDC	RS485 interface, positive
3	Yellow	RS485-	In/Out	See Pin 2 (RS485+)	RS485 interface, negative
4	Green	GPO0	Out	Open emitter, max. 10 mA	Opto-isolated output
5	Blue	GPI1	In	See Pin 1 (GPI0)	Opto-isolated input
6	Purple	OPTO-IN-GND	—	0 VDC	Opto-isolated input ground
7	Red	PWR-IN	In	24 VDC ($\pm 10\%$)	Power supply voltage
8	Black	PWR-GND	—	0 VDC	Supply ground
9	Gray	OPTO-OUT-PWR	In	Max. 30 VDC	Power for Opto-isolated output
10	White	Trig-In (3)	In	See Pin 1 (GPI0)	Opto-isolated trigger input
11	Pink	GPO1	Out	See Pin 4 (GPO0)	Opto-isolated output
12	Light green	Strobe-Out (3)	Out	See Pin 4 (GPO0)	Opto-isolated strobe trigger output

(1) Open ends of power and I/O cables by Allied Vision (2) For >24.0 to 36 VDC, connect a 3.3 k Ω external resistor in series. (3) Logical signals are: Line0, Line1, see next.

// 3 Acquire a first image

Alecs uses JetPack 6.2 (Jetson Linux 36.4.3) that is based on Ubuntu 22.04 LTS (Long Term Support).

Set up an SSH (Secure Shell Protocol) connection: IP address: 192.168.1.10 | User name: alecs | Password: alecs

Select from these 3 options to quickly get an image from Alecs:

//1 EASIEST

- // Start **open eVision Demonstrator** in the browser of any PC in the same network:
<http://192.168.1.10:8080> (Step 1 SSH is not needed)
- // See open eVision Web Demonstrator

//2 FULL FEATURE EXPLORATION WITH VIMBA X VIEWER

(with small restrictions in performance due to X11 forwarding):

- // On Windows systems, install an SSH client with X support (such as **MobaXterm X11** server).
- // Connect to Alecs with
`ssh -X alecs@192.168.1.10`
- // Open **VimbaXViewer**.

//3 MOST VERSATILE (LXB-G1-...-NX... models only):

- // Type in the Terminal
source .venv/bin/activate to access the virtual environment.
- // Copy **stream.sdp** to your receiving system.
- // Run
`send_stream.py <destination IP>`
using Python on your Alecs.

Start **stream.sdp** with **VLC Player**
(for example) on your receiving system.



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