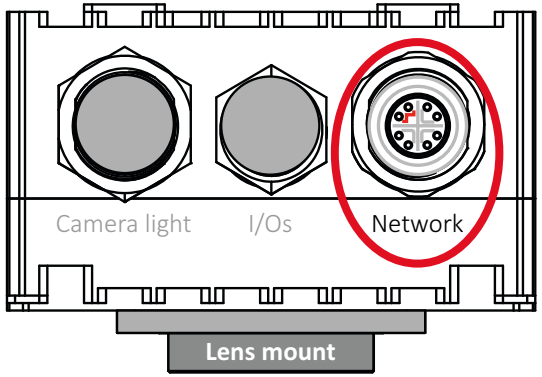
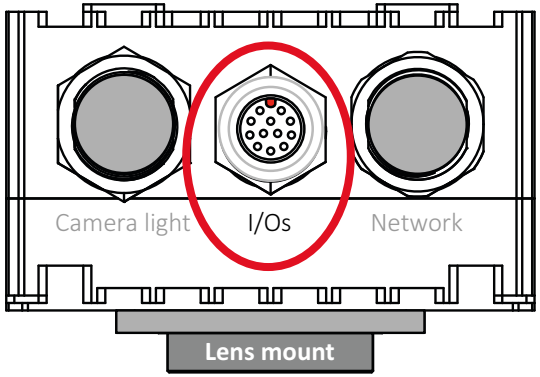
Get your Alecs running

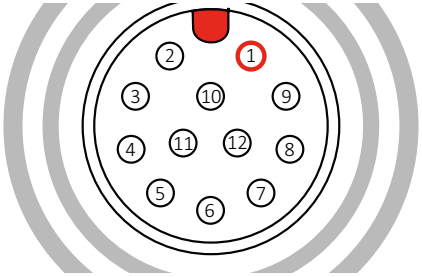
Allied Vision

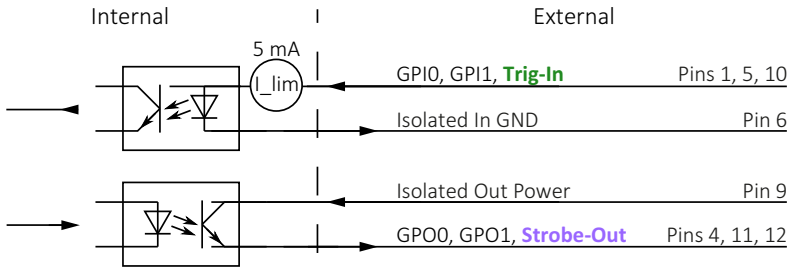
1 Connect to the network



2 Connect power and I/Os







Pin	Color (1)	Signal	Direction	Level	Description
1	Brown	GPI0	In	$V_{in(high)}$ = 3.0 to 24.0 VDC (2) $V_{in(low)}$ = 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 (±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 kΩ external resistor in series.
[3] Logical signals are: **Line0**, **Line1**, see next:

Logical line	Direction	Connector	Electrical line	Active when	Usage (example)
Line0	Input	12-pin I/O connector	Trig-In	Level = High	*FrameStart*
Line1	Output	12-pin I/O connector	Strobe-Out	Level = High	*ExposureActive*
		5-pin lighting connector	Strobe PNP-Out	Level = High	

Note: GPI0, GPI1, GPO0, and GPO1 are SoM I/Os that can be controlled by the transport layer module.

Material damage by wrong powering

Provide power input:

- Alecs only: 24 VDC ±10% and ≥1.5 A
- Alex with RMX140 ring light: 24 VDC ±10% and ≥7 A

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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).

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

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

   2.1. Easiest:
   - 2.1.1. 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).
   - 2.1.2. See open eVision Web Demonstrator on page 116.

   2.2. Full feature exploration with **Vimba X Viewer**
   (with small restrictions in performance due to X11 forwarding):
   - 2.2.1. On Windows systems, install an SSH client with X support (such as **MobaXterm X11** server).
   - 2.2.2. Connect to Alecs with
     `ssh -X alecs@192.168.1.10`
   - 2.2.3. Open **VimbaXViewer**.

   2.3. Most versatile (LXB-G1-...-**NX**... **models only**):
   - 2.3.1. Type in the Terminal
     `source .venv/bin/activate`
     to access the virtual environment.
   - 2.3.2. Copy **stream.sdp** to your receiving system.
   - 2.3.3. Run
     `send_stream.py <destination IP>`
     using Python on your Alecs.

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

4 Get more information

Item	Link
Alecs User Guide	www.alliedvision.com/en/support/alecs-documentation
Alecs Features Reference	www.alliedvision.com/en/support/alecs-documentation
Jetpack BSP	Please contact your Allied Vision Sales representative or visit www.alliedvision.com/en/about-us/contact-us/contact-sales.
Vimba X documentation	www.alliedvision.com/en/products/software/vimba-x-sdk
STEP file downloads	www.alliedvision.com/en/support/alecs-documentation
Accessories	www.alliedvision.com/en/products/accessories
Distribution partners	www.alliedvision.com/en/avt-locations/avt-distributors
Support	www.alliedvision.com/en/support www.alliedvision.com/en/about-us/contact-us/technical-support-repair-/-rma

Alecs downloads:

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