

# Simple setup of Ethernet control for Apogee Aspen cameras

#### Applicable to Apogee Aspen

This guide demonstrates how to setup Ethernet control of an Apogee Aspen camera using a network switch.

### Initial considerations

If not already done so, download and install the Apogee SDK from the Andor website<sup>[1]</sup>. Full instructions for installation of Apogee drivers can be found in the **Apogee Driver Installation and Verification test** document in the Support section of the Andor website<sup>[2]</sup>.

For demonstration and verification purposes, this document has been created using an Aspen camera on the *Apogee Camera Control Demo Program*, freely available from the Andor website <sup>[3]</sup>. The following process will be similar for other applications.

### Ethernet Communication Setup

- Ensure the USB cable is disconnected from the camera.
- Using a network switch and Ethernet cables connect the switch, camera and PC together as shown in the diagram below before powering up the camera.



- Run the *Apogee Camera Control Demo Program*. The operating system may generate a security warning when starting the program. Select *Run* to allow the program to start.
- When the program starts, select Discover from the Camera menu to open the Camera and Filter Wheel Selection Window

🖳 Apoge	ee Camera	a Control De	emo		
File	Options	Camera	Filter Wheel	View	Help
	🖂 [	Conr	nect		
🖬 🖬 🕌		Discover			<u> </u>
Imag	ing Mo	Disco	onnect		
Mode Sit		IO Po	IO Port Assignments		
Sequence	Count		1		,



- Select *Ethernet* as the Connection Interface and then press the *Search* button.

Any device that is detected will be listed in the *Search for Device* window. Select the device you wish to control and then press OK. **Be sure to take a note of the camera IP address listed in the** *Id One* field and in the selected device field.

Connection Interface	F Ethernet	Broadcast Address:	172 . 26	. 39 . 255
earch for Devices				
Nama	- Interface	10000		107.00
Aspen 230	ethemet	172.26.35	73	80
Search_	Network Search Progress			
Search				

If the connection is successful then the camera model will be listed in the *Camera Info* section in the bottom left corner of the program Window. The CCD temperature will also be displayed indicating that the drivers have successfully been installed and the program can successfully communicate with the camera.

Apogee Camera Control I	Jemo	
File Options Camera	Filter Wheel View Help	
	P (i) 🖬 🔿	
Binning X	1	
Binning Y	1	
Readout Control		
Pipeline Download	ON	
AD Gain 1	47 🚖	
AD Offset 1	300 🜲	
AD Gain 2	47	
AD Offset 2	286	
Camera Info		
Driver Version: 5.5.32.321		
Sensor Size: 2048 x 204	3	
Firmware Version: 306		
Camera Model Aspen-230		
USB FW Version: a11		
Cilian Ullimati Carata	ol 👩	
Filter Wheel Contro		
Model Model		



The camera IP address can be used to enable Ethernet control of the camera when using 3<sup>rd</sup> party software packages such as Maxim-DL.

If you require further information or assistance, please contact your local Andor Product Support representatives <sup>[2]</sup>.

## Useful links

<sup>[1]</sup> Andor driver pack for Apogee cameras - <u>http://www.andor.com/pdfs/software/apgSwInstall-x86.zip</u> <sup>[2]</sup> Product Support - <u>http://www.andor.com/ContactSupport</u>

<sup>[3]</sup> Apogee Camera Control Demo Program - <u>http://www.andor.com/pdfs/software/ApogeeCameraControlDemo.exe</u>.