



## 2 Unpack the Boxes



Kymera 328i Spectrograph



Camera(s) (prefitted)



Grating Turret(s)



Slits/Coupling Interfaces



Output Port Adaptor(s)



Hex Key Set



Documentation [andor.oxinst.com/welcome](http://andor.oxinst.com/welcome)



Software (copy supplied)



I<sup>2</sup>C Cable



USB 2.0 Cable



Power Supply

Please follow these guidelines when unpacking the Kymera:

1. The Kymera should be placed in the environment it will be used in for a few hours before adjustment and first use.
2. Environment should be dust free.
3. Spectrograph should be placed on a flat, stable support (e.g. optical table); Spectrograph feet are designed to be secured on an optical table with appropriate screws.

The Kymera can be supplied with a range of accessories as specified at the time of ordering. Please check the supplied items against the packing list to ensure all items are present.

## 1 Prepare Your Facility



Handle the spectrograph and accessories with care.



Observe anti-static precautions when installing the spectrograph, camera and accessories.



Ensure sufficient clearance around spectrograph and power supply vents (Do **not** block vents when operating on benchtop).



Operation of the spectrograph close to intense pulsed sources (e.g. plasma and X-ray sources) may compromise performance.



Keep dry, <70% humidity non-condensing.



Use correct power supply and cables.



Operate at a constant temperature between 0°C and 30°C (temperature fluctuation during operation may result in calibration drift).

Store between -25°C and 50°C.

Please observe the following warning when lifting the spectrograph:

	⚠ CAUTION	⚠ ATTENTION
	Weight: >18kg. Two person lift required. Take care when lifting - unbalanced load.	Poids: >18kg. Deux personnes sont requises. Soulever avec précaution - charge inégalement répartie.

Refer to the user manual for further information.

## 3 Install Software (Solis or SDK2)

**You must have administrator access on your PC to perform this installation.**

These instructions cover installation of both Andor Solis and Andor SDK if ordered. A copy of the software is provided within the spectrograph box. Additionally, the latest software files are available to download on request, please sign in or create an account at [andor.oxinst.com/downloads](http://andor.oxinst.com/downloads)

Windows: Switch on the PC, run the setup exe from the supplied copy or the downloaded file: e.g. AndorSDK2Setup-<version>.exe

1. Confirm the version of software (minimum is v2.1.x).
2. Follow the on screen prompts.
3. Select the installation directory when prompted.
4. If prompted for select the required hardware (spectrograph and/or camera) type.
5. On the final window click on "Install". Continue to follow the on screen prompts.

**Kymera will require SDK2 or Solis installation, please see quick start guide for specific camera model software requirements.**

Online access to technical documentation is available at: [andor.oxinst.com/downloads](http://andor.oxinst.com/downloads)



## 4 Connect the Camera and Spectrograph

Refer also to your camera and Kymera 328i user manuals.

1. The 328i should be connected to the camera by one of the following options:

**Option 1: I<sup>2</sup>C cable** (supplied, if applicable), or **Option 2: USB cable** (provided).

2. If your spectrograph has a shutter, then this is controlled through the I<sup>2</sup>C cable (if used for the connection), or through the BNC connection via a cable from the camera (supplied), or for simple open/close operation no connection is required.

3. The accessories - motorised slits, filter wheel, shutter - are all 'plug and play' and do not require any setup.

4. Now proceed to Section 5.

### Connection Panel of the Kymera 328i



## 5 Connect the Camera to the PC

A pre-aligned camera and spectrograph package comes pre-fitted with a flange. For a standalone spectrograph, the unit is supplied with a camera flange, the camera must be attached to the flange and the flange attached to the spectrograph body with the screws supplied. Please see the spectrograph user guide for mounting information.

**Ensure that the camera AND the PC are switched OFF.**

### Connect the Camera to the PC

Depending on the camera model supplied there are three types of possible connectivity between the camera and the PC:

- USB 2.0 or 3.0
- USB 2.0 or 3.0 and I<sup>2</sup>C
- CameraLink

Note for Newton, iDus, iVac and iStar models the I<sup>2</sup>C connection is strongly recommended.

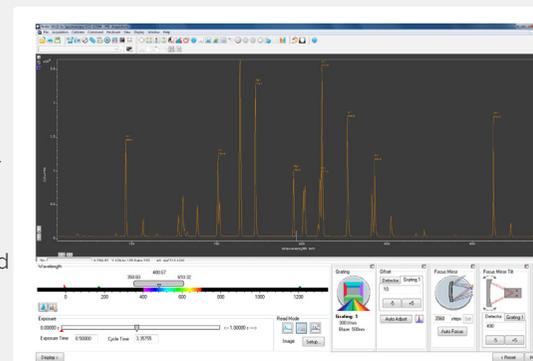
Please refer to the Quick Start Guide provided with the Andor camera for full installation directions applicable to the specific camera model.

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## 6 Setup Solis for the Kymera 328i

### Configure Solis for the Kymera 328i

1. Power on the Kymera and if appropriate the detector and wait until the short start-up tone signals it has finished system checks. Start Solis.
2. Solis will auto detect the Kymera and show a dialog on startup alerting the user of this.
3. Once fully loaded the spectrograph control UI will show with the auto detected peripheral controls.
4. Please refer to your camera and Kymera 328i user manuals for any further setup or calibration steps required before using your system.



Accessories are automatically detected and displayed in the Solis software.

## ? Troubleshooting

### Spectrograph is not recognised by Solis

- Ensure that the spectrograph has finished its system checks before attempting to connect with it.
- Check the connections between the camera, PC and spectrograph.

### Camera is not recognised by PC

- Check that the camera power and USB cable are connected securely and the mains power cable is inserted.
- Check that the drivers have been installed properly. (Control Panel /System/Hardware/Device Manager/Imaging Devices).

### Shutter is not opening

- The shutter should always be controllable open/closed in the Solis GUI (when shutter is present). When the I<sup>2</sup>C cable or the BNC input is used, the 'BNC' option should be selected in the software to enable operation of all shutter modes.
- Check opening/closing times have been properly setup

### Turret lid difficult to open

- Rotate the lid lock from the locked  to the unlocked  position.
- The turret lid can then be lifted up using the handle of the turret lid.

### Communication error when selecting side port

- When shipping, a locking screw is used to secure the flipper mirror in dual exit systems. This needs to be loosened fully or removed before use.

Please see the **Hardware Guide** for further information on **Troubleshooting**.

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