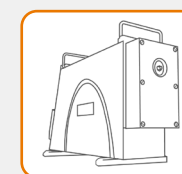




2 Unpack the Spectrograph

Spectrograph



Mechelle

Accessories



I²C Cable



90 µm core,
UV-enhanced
fibre optic
cable



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



Software
(copy supplied)



Camera

Please follow these guidelines when unpacking the Mechelle:

1. The Mechelle 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); Mechelle feet are designed to be secured on an optical table with appropriate screws.

The Mechelle may be supplied with a range of different accessories. 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. Lift spectrograph with handle provided and not using the camera, this could cause misalignment of the system.



Use correct power supply and cables.



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



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.



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



Performing procedures, using controls, or adjusting the spectrograph other than as specified in the manual may result in hazardous radiation exposure.



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



Keep dry, <70% humidity non-condensing.

Refer to the user manual for further information

3 Install Software (SDK2 or Solis)

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 Mechelle box. Additionally, the latest software files are available to download on request, please sign in or create an account at 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.

Mechelle will require SDK2 or Solis installation, please see quick start guide for specific camera model software requirements, for example, iStar sCMOS will require SDK3 installation.

Online access to technical documentation is available at: andor.oxinst.com/downloads



4 Connect the Camera

 Ensure that the camera AND the PC are switched OFF.

Camera Mounting

The camera will be prefitted to the Mechelle, if further information is required please see Mechelle user guide.

Connect the Camera to the Mechelle

Use the supplied I²C cable to connect the camera to the Mechelle. The I²C cable is required for shutter and temperature control.

Connect the Camera to the PC

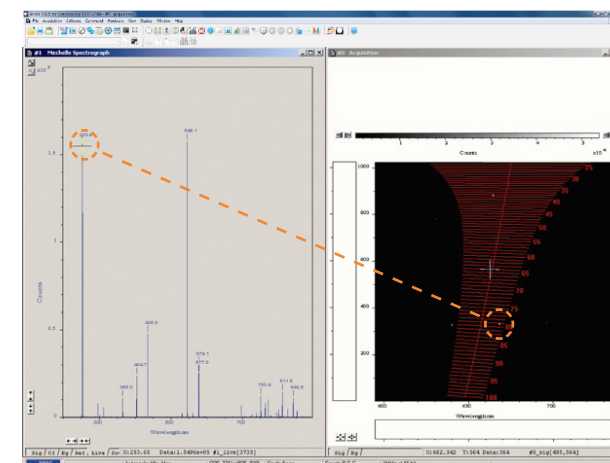
The camera must be connected to the PC via a USB connection. Please refer to the Quick Start Guide provided with the Andor camera for full installation directions applicable to the specific camera model.

Online access to technical documentation is available at: andor.oxinst.com/downloads

5 Set up Solis on the Mechelle

Configuring Solis for the Mechelle

1. Follow instructions on Quick Start Guide supplied with camera for model specific install instructions.
2. Power on the camera and wait until the short start-up tone signals it has finished system checks.
3. Start Solis.
4. In Solis, Mechelle must be selected in the Hardware -> Setup spectrograph tab.
5. Mechelle configuration is done by clicking on the Mechelle Setup button. Refer to user manual for details of the different setup options available for spectral information extraction.
6. For Spectral and Intensity calibration procedures, please consult user manual.



Above Solis software and data captured from an Hg Ar calibration source.

? Troubleshoot

Shutter is not opening

- The shutter should always be controllable open/closed in the Solis GUI (when shutter is present).
- Check opening/closing times have been properly setup.

The optics in the Mechelle spectrograph are factory adjusted before delivery and the design features few adjustable or moving parts. Therefore it requires minimal interaction once setup in the software and in use. Refer to the troubleshooting sections of your camera and software guides. If you need further assistance please contact Andor Customer Support.

Online access to technical documentation is available at: andor.oxinst.com/downloads