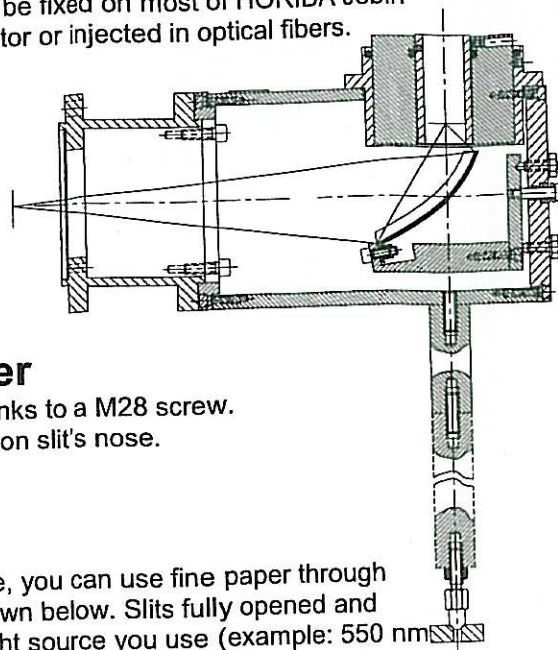


1427C optical device was designed to collect maximum flux. It can be fixed on most of HORIBA Jobin Yvon spectrometers. The collected light can be focused on a detector or injected in optical fibers.

## 1. General aspect

1427C : for iHR-Triax-FHR-series spectrometers  
23022650 : 1427C for JY spectrometers  
31505263 : 10mm-cylindrical-fiber adaptor  
23075600 : SMA-905-fiber adaptor  
23075610 : FC/PC-fiber adaptor



## 2. Mount the 1427C on the spectrometer

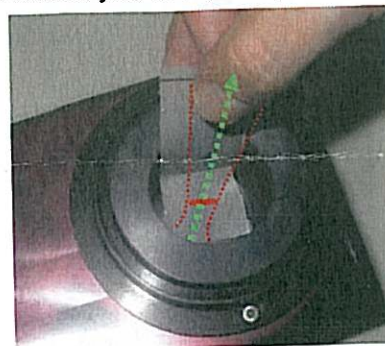
On JY spectrometers, 1427C is directly screwed on slit's nose thanks to a M28 screw.  
On iHR-FHR-Triax-series, 1427C is fixed thanks to 2 screws 6/32 on slit's nose.

## 3. Visual check

Use the target delivered with 1427C or, if you don't find it anymore, you can use fine paper through which you can see the light (ex: tracing paper) and place it as shown below. Slits fully opened and wavelength selected in visible range and in coherence with the light source you use (example: 550 nm for tungsten halogen source or 632.8 nm for HeNe laser)

This adjustment does not need high accuracy.

Slide the paper up and down and check it is centered on the exit axis. One position is the focus point and the spot shall be smaller at this distance. If you cannot see any light at the exit, first make sure visible light is getting out from the Spectrometer. Then, check the elliptical mirror is well fixed (screw with the spring). If necessary, change the X and Y adjustment thanks to the 2 screws shown in part 3.



## 4. Fine adjustments with a detector

Optimize the detector (or fiber) position.

First the detector height : make it slide up and down till you reach the maximum of flux.

Then the X and Y axis.

Cycle adjustments at least twice.

