Solid Sample Holder

Note: This document is also available in <u>PDF format</u> for improved print quality. PDF files are stored in the "\Manuals" folder on the Help & Videos CD-ROM.

For the Cary 4000, 5000, 6000i, Deep UV.

For details on the Cary 4, 5, 400, 500 solid sample holder see here

Part Number 00 100799 00

Installation category II Pollution degree 2 Safety class 1 (EN 61010-1)

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Figure 1: The Solid Sample Holder for the Cary 4000, 5000 and 6000i. This picture shows the base plate fitted with two solid sample holders.

To hold the solid samples, 2 'V' holders are supplied (one small and one large). These are held in place on the solid sample slides by two screws. For delicate samples, a spacer is provided. This is placed between the V-holder and the solid sample slide. Delicate samples are then held in place by their edge only.

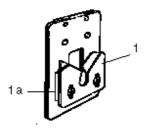


Figure 2: V-holder (1) and spacer (1a) attached to solid sample slide

Alternatively, you can attach a locking plate to a solid sample slide using the two 40 mm pins, as shown below. This arrangement is suitable for large samples.

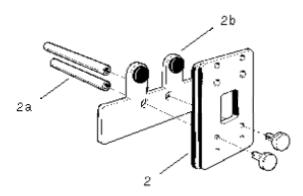


Figure 3: Solid sample slide (2) with pins (2a) and locking plate (2b)

Installation

The solid sample holder must be fixed onto the LockDown base plate before it can be installed into the Cary 4000/5000 or 6000i. To install the holder onto the base plate follow these instructions:

1. The Optical Rails need to be screwed into the removable base plate using the 1/8" hexagonal balldriver to tighten the two locating screws. The notch in the solid sample holder should be on the right hand side of the base plate (the back of the base plate has two post clamps).

Mot Tip

Some users may find it more convenient to have a set of optical rails permanently installed onto a base plate and simply install and remove the base plate as required.

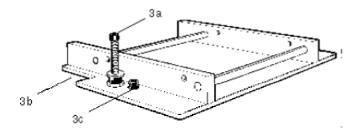


Figure 4: Optical rails showing the locating screw (3a), notch (3b) and adjustment screw (3c)

- 2. The other set of rails (if being used) should be placed in the reference position with the notch towards the left hand beam entrance window. The setup procedure for both sample and reference solid sample holders is otherwise the same.
- 3. Loosely clamp the slide holder to its base. Insert the slide holder onto the optical rails but do not tighten the clamping screw.

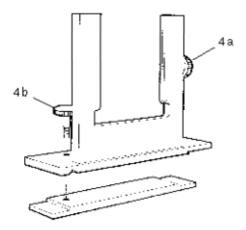


Figure 5: Slide holder showing the side screw (4a) and clamping screw (4b)

- 4. Insert the solid sample slide with attached V holder or locking plate into the centre of the slide holder and tighten the side screw.
- 5. The base plate is then locked into position into the sample compartment. Refer to the instructions for using the <u>lock down mechanism</u>.

() Hot Tip

It is better to place the solid sample slide into the slide holder so that the slide masks the light beam before it reaches the sample. This minimizes scattering of the light beam.

- 6. You now need to align the Solid Sample holder in the light beam. Close the sample compartment lid.
 - Press Start, Programs, Cary WinUV, Align to start the Align application. Select the Cary tab and check the Zero Order check box.
- 7. Place a piece of white paper in the light path and note where the light beam strikes the solid sample slide. The beam should be centred on the aperture.
- 8. If the beam is not centred, align it by first moving the slide holder along the optical rails to the centre of the sample compartment. Tighten the clamping screw on the slide holder. You will then need to use the 2.5 mm hexagonal balldriver to adjust the three adjusting screws on the optical rail base until the beam appears to be visually aligned.

Spare parts

Description	Part number	Picture
Solid sample holder (Contains optical rails, centre holder, Kit #1)	01 107162 90	
Optical rails	01 107193 90	
Side mounted slides	58 100081 00	99
Solid sample slide (centre mounted)	01 107194 90	
Solid Sample Holder kit (#1) Includes 1 each of: 10 mm aperture sample slide holder, 5 mm aperture sample slide, 1 mm aperture sample slide and Solid sample holder kit (#2) (99 100562 00).	99 100594 00	

Solid Sample Holder kit (#2) Includes 2 each of: V plate 3x45 mm, V plate 6x45 mm plus various screws and nuts to attach to the solid sample holders.	99 100562 00	
Individual lockdown plate	02 101790 00	

If you want to use liquid rather than solid samples with your Cary 5000 or 6000i, you need to use the Single Cell Holder provided with your instrument (part number 0010080000). If you are using a Cary 4000 you need to order a Solid Sample Holder from Varian as one is not supplied as standard with your instrument.

Alternatively, you can buy a variable path length cell holder available from Varian (part number 0210125300, 50 mm. 6610014000, 100 mm). This will slot into your solid sample holder base.

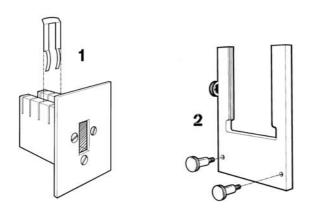


Figure 6: Optional accessories for the Solid Sample Holder: Variable path length cell holder (left) Side mounted slide (right)



Note

If you are going to use the RBA with the solid sample holder, you must install the lock down plate before installing the RBA.