FL 6500/8500 4-Position Multi-Cell Holder Installation Instructions

This instruction sheet describes the installation of this accessory which is used with the FL 6500/8500 Fluorescence Spectrometer.

NOTE: *Read these instructions before you install this accessory.*

Contacting PerkinElmer

Supplies, replacement parts, and accessories can be ordered directly from PerkinElmer, using the part numbers.

See our website:

http://perkinelmer.com

PerkinElmer's catalog service offers a full selection of high-quality supplies.

To place an order for supplies and many replacement parts, request a free catalog, or ask for information:

If you are located within the U.S., call toll free 1-800-762-4000, 8 a.m. to 8 p.m. EST. Your order will be shipped promptly, usually within 24 hours.

If you are located outside of the U.S., call your local PerkinElmer sales or service office.

Features

- Easy to install
- 4-position cell holders
- Suitable size for the standard

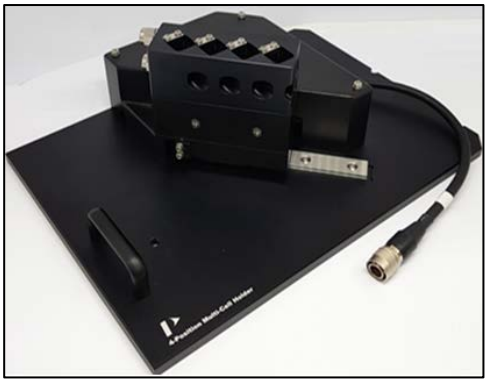


Figure 1 4-Position Multi-Cell Holder (P/N:N4201025)

PerkinElmer, 710 Bridgeport Avenue,
Shelton, CT 06484-4794, U.S.A

Produced in the USA.

Dimensions and Specifications

Physical Characteristic	Specifications
Moving distance of one cell (mm)	12.8
Moving distance of four cells (mm)	38.4
Moving time of one cell (sec)	1.55
Moving time of four cells (sec)	4.3
Dimensions (mm)	190 (W) X 267 (D) X 98 (H)
Weight (Kg)	1.62

Configuration of the 4-Position Multi-Cell Holder

- 4-Position Multi-Cell Holder

Figure 2 4-Position Multi-Cell Holder Configuration

- Four Teflon Blocks (P/N: N4202033)

Installation

1. Prepare the FL 6500/8500 Fluorescence Spectrometer to install this accessory.
2. Connect the instrument power cord and the communication cable.

3. Loosen the accessory fixing bolt and remove the current sample accessory.

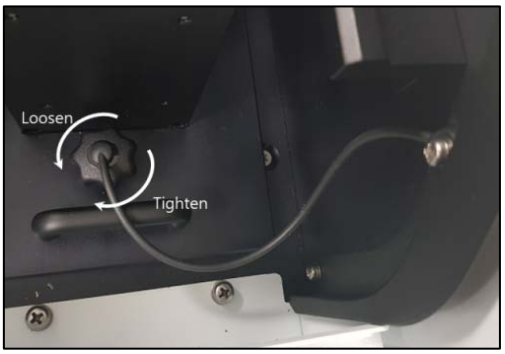


Figure 3 Loosening the accessory fixing bolt

4. Pull out the cell holder by hand.

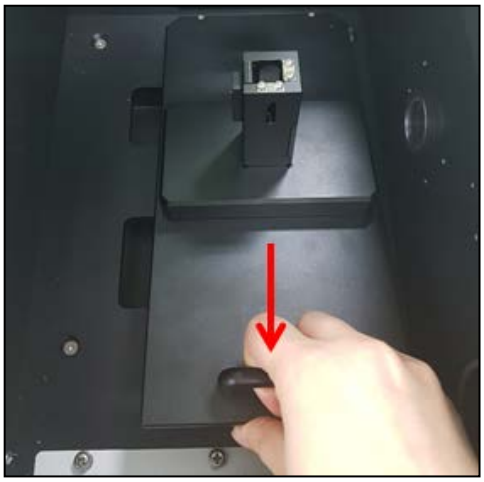


Figure 4 Pulling out the cell holder

5. After checking the pogo pin position in the sample compartment, place the 4-Position Multi-Cell Holder to be fit into the pogo pin well.

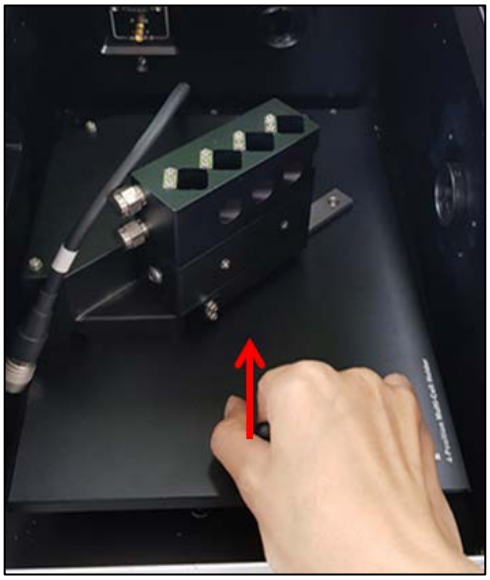


Figure 5 Installing the accessory

6. Tighten the accessory fixing bolt again.
7. Connect the M1 cable of 4-Position Multi-Cell Holder to the accessory communication port inside of the sample compartment.

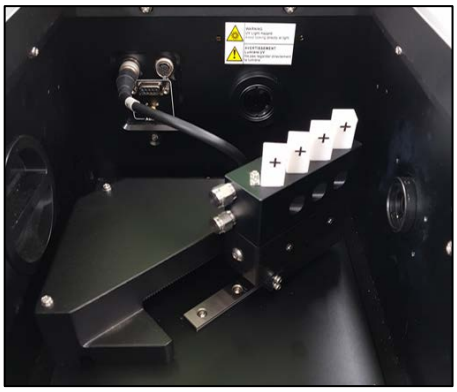
Figure 6 Connect the M1 cable

8. Close the sample compartment cover.
9. Turn on the instrument.

Calibration of Multi-Cell Position

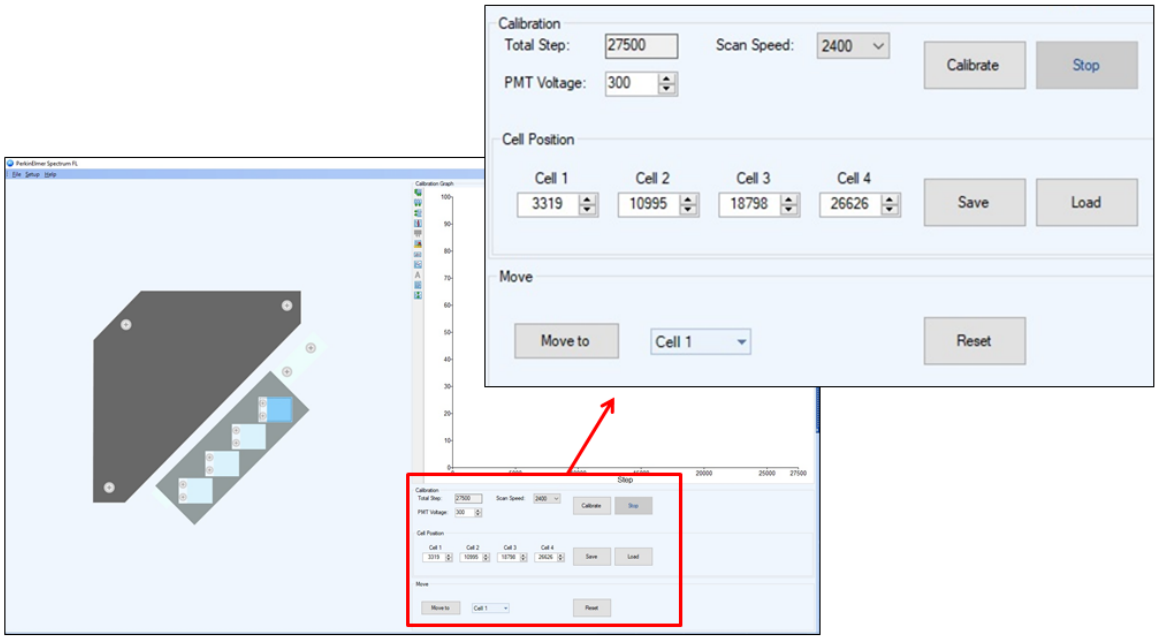
Calibrate the beam position of the 4-Position Multi-Cell Holder when it is installed for the first time or beam position is observed to be incorrect.

1. Put the four Teflon blocks into each cell holder.



2. Close the sample compartment cover.
3. In the spectrum FL software, click the **Accessory** icon to perform the calibration.

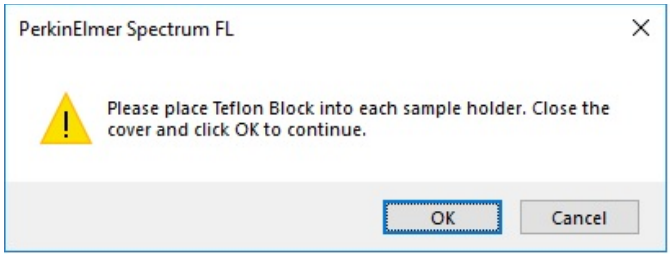
4. The following window appears.



Command	Function
Total Step	The total accessory step number is fixed at 27500.
Scan Speed	Select the calibration scan speed. 30, 60, 240, 1200, 2400, 12000 nm/min. Default is 2400 nm/min.
PMT Voltage	Enter the PMT voltage. Ensure that the intensity of the Teflon block is not saturating.
Calibration	Used to perform the Multi-cell calibration.
Stop	Used to stop the Multi-Cell calibration.
Cell Position	Show saved steps about each cell position of the Multi-cell.
Save	Used to save the calibrated result.
Load	The last stored cell position value is loaded.
Move to	Used for moving Multi-Cell position. Select a cell position and click Move to button.
Reset	Used to move to '0' step of Multi-Cell position.

5. Set the PMT voltage and click **Reset** to format the Multi-Cell steps.

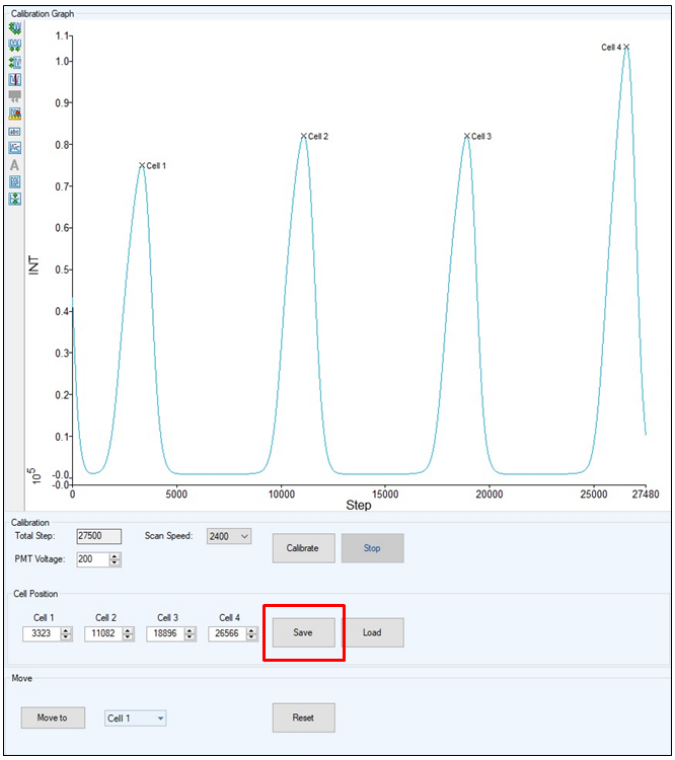
6. Click **Calibration**, and then the following dialog box will appear. Click **OK**.



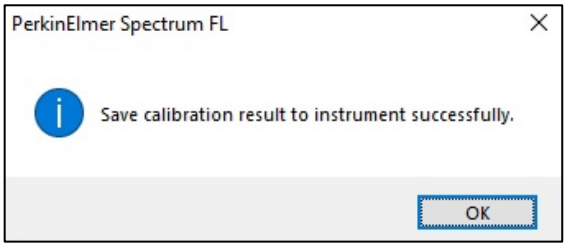
7. The Multi-Cell calibration will start.

NOTE: *If the peaks do not look as shown in step 8 or any peak is saturated, click **Stop**, and then go back to step5 and lower the PMT Voltage value and resume the calibration.*

8. When calibration is finished, click **Save** to save the result.

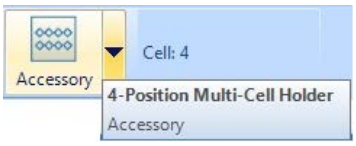


9. The following message box appears, click **OK**.



Measurement

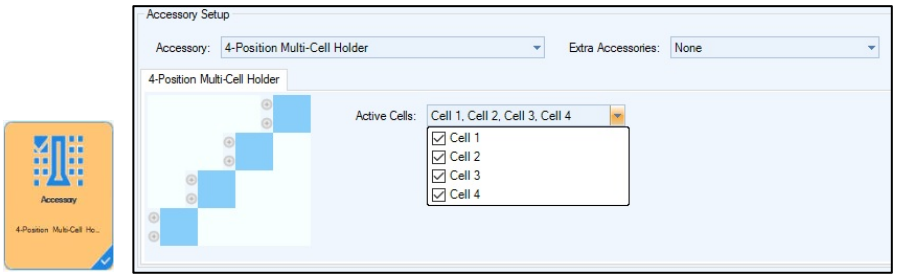
1. Double click on the **Spectrum FL** software and select a measurement mode.
2. Check the recognition of **Accessory**.



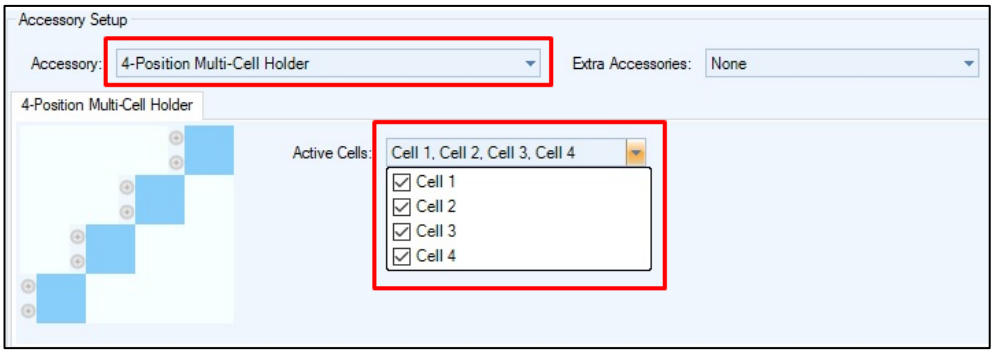
3. Set up the measurement parameters in turn.

NOTE: *For more details of the method setup, refer to the Spectrum FL Software Users Guide.*

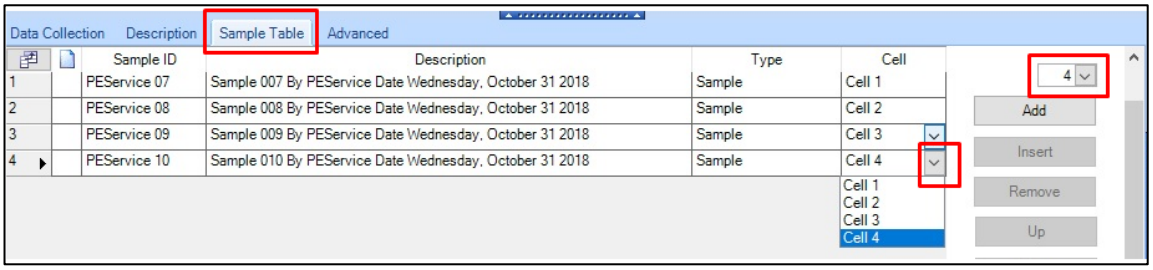
4. As you click the **Accessory** tab in **Data Collection**, the following window appears.



5. Select **4-Position Multi-Cell Holder** and select cells to be used.



6. Set the number of samples, type and cell position for measurement in the **Sample Table** tab.



7. Click **Save** to save the method after setting up the parameters.
8. Put samples into the sample holder and close the sample compartment lid.
9. Select the **Run** icon.
10. Input the sample name and select **OK**.
11. Check the spectrum and results. Save or print the data if required.

Troubleshooting

When the Multi-Cell does not move

1. Check the connection status between the M1 cable and the accessory communication port.

When the cell holder position is not aligned precisely

1. Recalibrate the Multi-Cell holder if the light beam does not go through the center of the cell holder hole.

2. If the intensity value is still low after the recalibration, the source lamp may have deteriorated and need replacement. Contact your local PerkinElmer service office.

When the Multi-Cell does not reset

If the accessory fails to reset, the photo interrupter switch inside the multicell holder needs replacing. Contact your local PerkinElmer service office.