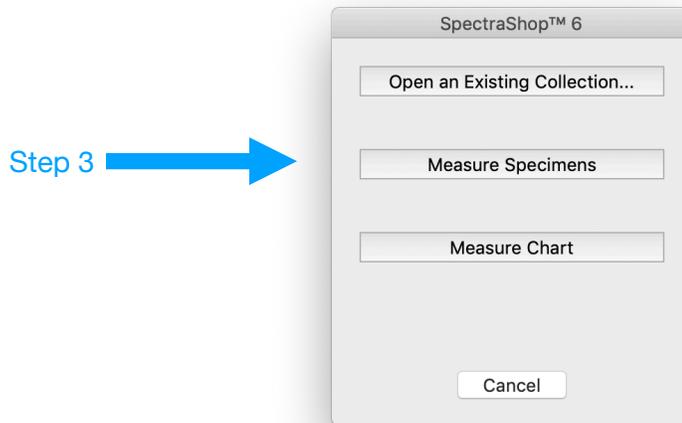


# Tutorial: Measure Reflective Specimens

**Step 1** Connect your instrument to the computer.

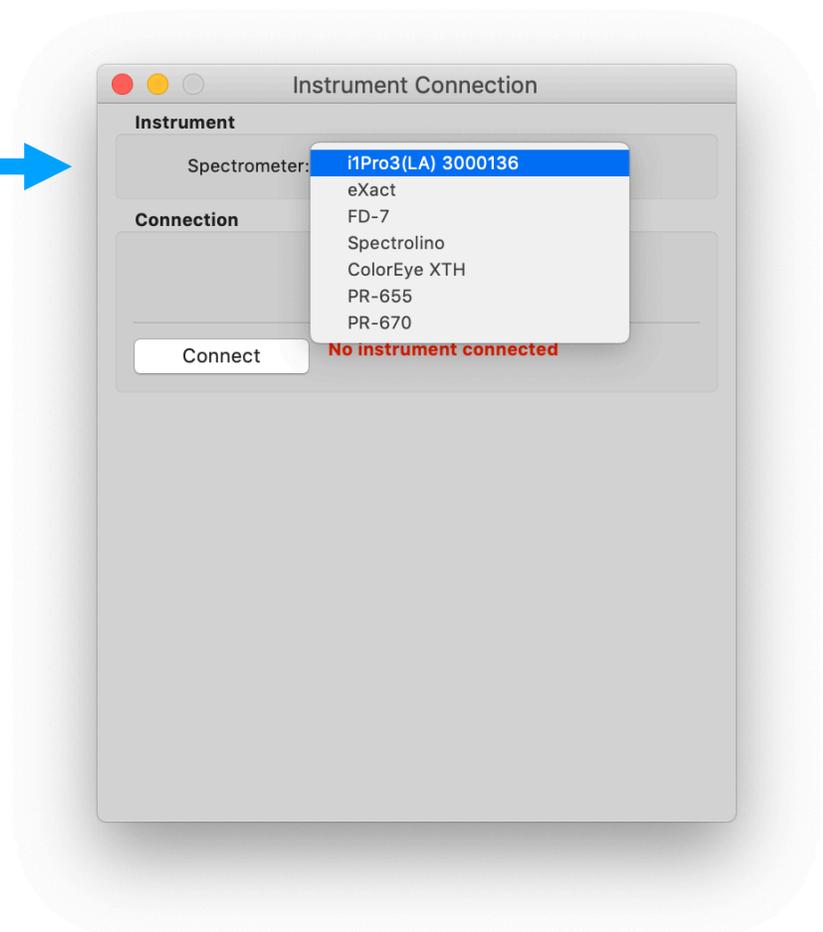
**Step 2** Start SpectraShop.

**Step 3** Click the *Measure Specimens* button.



**Step 4** Select your instrument

Step 4 →



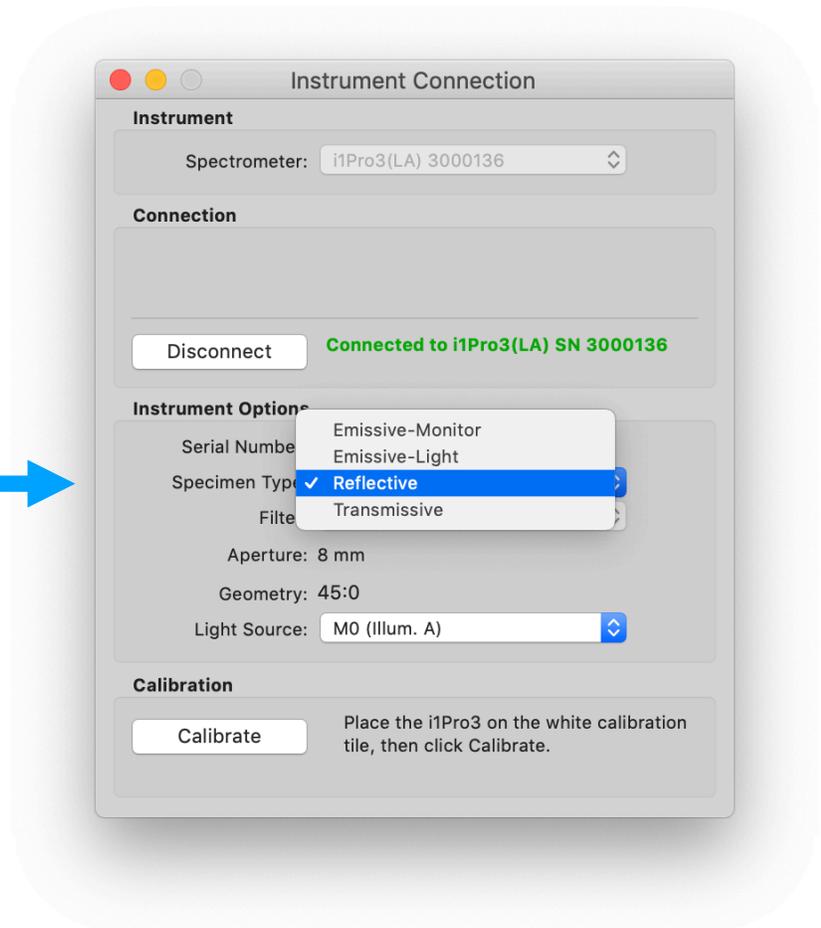
**Step 5** If there is a **Connect** button, click it.

In this example, the i1Pro3 is automatically connected to the program.

**Step 6** Select the type of specimens to measure.

For this tutorial, select *Reflective*.

Step 6 →

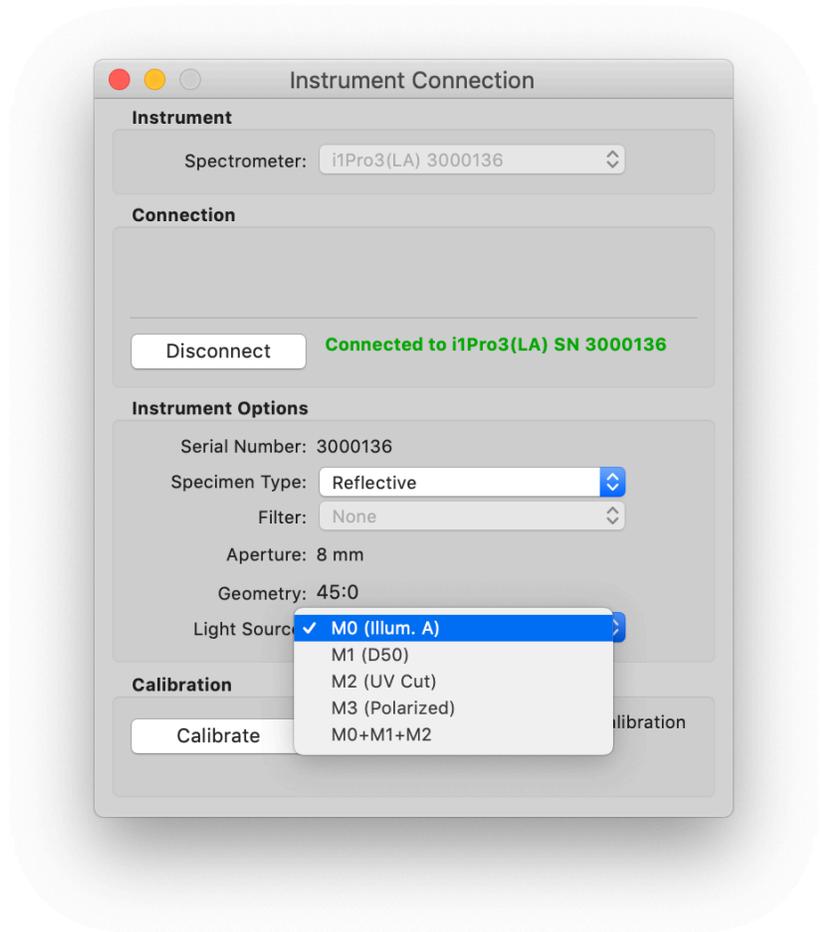


**Step 7** Choose the instrument options, if available.

Some instruments have choices for filters and apertures. The geometry is fixed in the instrument's design, but recorded here because it is important documentation for some specimens.

### Step 8 Choose the *Light Source*.

Some instruments have the ability to produce, or simulate, multiple light sources. The i1Pro3(LA) used in this example can use M0 (Illum. A), M1 (D50), M2 (UV Cut) or M3 (Polarized). It can also measure with 3 light sources; M0, M1 and M2, simultaneously. When the M3 light source is selected, the Filter will change to show that the M3 polarizing filter must be added to the instrument.



### Step 9 Place the instrument on its calibration tile.

### Step 10 Click *Calibrate*.

When the calibration is completed successfully, the *Measure Reflective Specimens* window will appear.

### Step 11 Enter the Specimen Information.

By default the *Auto Naming* feature is active, which will automatically generate *Identifier 1* for each measured specimen. The naming scheme follows this format:

Prefix Separator Value

These three parts are concatenated into the *Identifier*.

Any *Prefix* may be entered.

The *Separator* may be anything, or one of the preset choices; “-”, “\_”, “ ”, or no separator may be chosen from the popup menu.

The *Value* is numeric and may be any number. It will be incremented by the *Inc* amount after each specimen is measured. The number of *Digits* for the *Value* may be set from 1 to 5, inclusive.

When *Auto Naming* is deselected, *Identifier 1* needs to be manually entered after each specimen is measured.

### Step 12 Enter the Measurement parameters.

Selecting more than one *Measurement/Specimen* will average the specified number of measurements. As each intermediate measurement is made a high pitched tone is sounded. A low pitched tone is produced when the last measurement in the set is made.

The choice of *Backing* to use behind each specimen depends on the transparency of the specimen and the desired effect. See the note below for guidance.

### Step 13 Select the Specimen Routing.

As a time saving feature, as the specimens are measured they will always be sent to the topmost collection window, also called the “current window”. This is indicated by a gray checkbox and cannot be changed.

Reflective specimens may also optionally be sent to the *Difference Tool*; into either the *Reference* or *Test* list, selected from the popup menu.

### Step 14 Measure the specimens.

Click the *Start* button.

The measurements may be made by either pressing the button on the instrument or by clicking the window’s *Measure* button.

As each specimen is measured, the data is sent to the *Specimens* list of the topmost collection window and optionally to the chosen list in the *Difference Tool*.

**Note:** If the cursor is positioned in the *Identifier 1* field before the measurement is made, then the name will be selected and highlighted when the measurement is finished. This allows for rapidly typing in the next specimen’s identifier without having to reposition the cursor while manually naming specimens.

**Step 15**      **Disconnect the instrument when finished measuring.**

When all the specimens have been measured, click the *Disconnect* button in the *Instrument Connection* window to prevent accidentally measuring additional specimens.

## How to Choose a Backing

### Is the specimen on an opaque substrate?

- |     |  |
|-----|--|
| Yes | Select <i>White</i> , <i>Black</i> , <i>Self</i> , or enter the actual substrate material.   |
| No  | Select <i>Black</i> if the specimen has something on the back side that will affect the measurement.<br><br>Select <i>White</i> if the specimen has nothing on the back side to affect the measurement and a closer approximation of the object's appearance is desired. |