Shimadzu UV-1700 UV/Vis Spectrometer

Updated November 14, 2017

Instrument instructions can be found at:

c. **Open UV Probe 2.10.**
    i. (Start > All Programs > Shimadzu > UVProbe).
d. **Give control of instrument to computer.**
    i. On the instrument
        1. After the UV has finished its checks, the Mode screen will be displayed. Press the F4 key (PC Ctrl) on the instrument keypad to give control to the computer.
    i. On the computer
        1. Click on the "Spectrum" icon (far right in menu bar) to open the spectrum window, then click on "Connect" to switch control to PC.
e. **Enter sample information into UV log sheet.**

a. **Load method** (Edit > Method).
b. **Edit parameters.**
    i. Measurement Tab.
        1. Set the wavelength range – starting and ending values.
        2. Set scan speed.
        3. Set sampling interval.
        4. Under Scan Mode click Single.
    ii. Instrument Parameters Tab.
        1. Select absorbance as measurement mode.
        2. Click OK.
    iii. Change Y-axis range.
        1. Go to the overlay graph (select tab at top of graph or Graph > Overlay) and click on the minimum and maximum absorbance values.
        2. Enter a new value.
        3. When finished, click anywhere on the screen to get out of this mode.
c. **Save method** (File > Save As).
    i. Enter file name.
    ii. In the Save As Type list, click Method File (*.smd).
    iii. Click Save.

a. **Perform baseline correction.**
    i. Make sure sample and reference compartments are clear.
    ii. Be sure to "Autozero" before collecting the baseline to get the ABS at 0.000 (Instrument>Commands>Autozero).
    iii. Collect baseline (Instrument > Commands > Baseline).
    iv. When the Baseline Parameter box appears, enter the starting and ending values.
    v. Click OK.
b. **Insert sample** (front cell holder) **and reference** (back cell holder). Clear sides of the cuvette face left and right.
c. **Start scan** (Instrument > Commands > Start).

Using UV without Computer

a. **Read instructions carefully before using instrument**. Reading the bold sentences in each category will tell you what you need to know to run the instrument.
   i. Bullets are under the bold sentences when more detail is required.
   ii. At the end of the instructions is a frequently asked questions/troubleshooting section.

a. **Turn on instrument.**
   i. Wait for instrument to go through its initial checks.
   ii. Allow instrument to warm up for fifteen minutes.

b. **Enter sample information into UV log sheet.**

a. **Edit parameters.**
   i. Select **Spectrum** from **Mode Screen** (2 on keypad).
   ii. Change parameters – press numeric key on keypad that corresponds to the parameter you want to change, change the vhp174.62 465.9 Tm0 g0 G[(C)-2(ha)4(ng)10(e)4

Shimadzu UV-1700 Frequently Asked Questions

View > Graph will already be selected (this option cannot be deselected).

a. **View > Photometer Status.**
b. **Graph > Overlay.**
c. **Window > Spectrum.**

Print layouts are templates used when printing reports.

a. **Open Report Generator** (Window > Report Generator).
b. **Open a graph and edit it to display the information you want.**
c. **Save graph as a new name.**
d. **Return to spectrum screen** (Window > Spectrum).
e. **Open Quick Print** (View > Setting) **and select Quick Print tab**.
f. **Select the Overlay Spectrum Graph.**
    i. Click the Brower button and find the graph you created.
g. **Click Print Preview to make sure everything is correct** (File > Print Preview).
h. **Print graph** (File > Print).
i. **Return Overlay Spectrum Graph to its default.**
    i. Quick Print tab (View > Setting), hit the Reset button.

a. **Display legend** (Graph > Legend).
    i. Open spectra you would like to view.
    ii. Overlay view will show all the spectra open.
    iii. The Active view will only show the spectrum that was most recently opened.
b. **To delete graphs from the legend box, open** (File > Properties).
    i. Expand the folders until you see the RawData files.
    ii. Select and hit the Delete button to remove. This will remove the spectrum from memory, not from the disk.