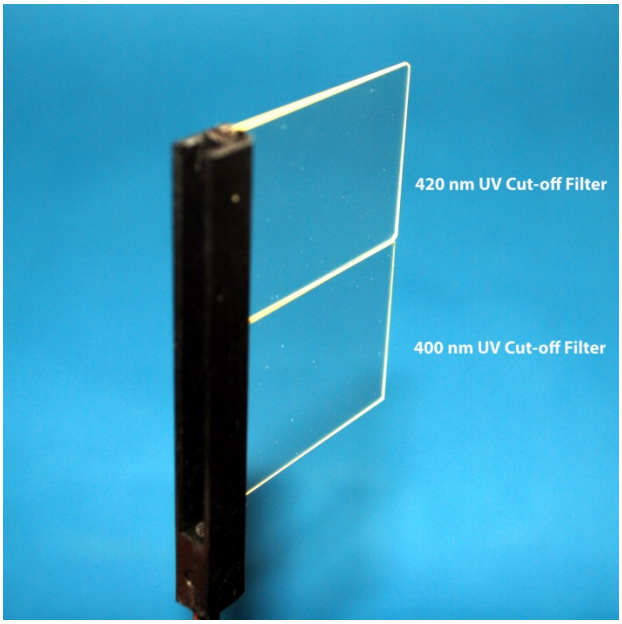
Addendum to UltraScan Pro User's Manual

Description



A 400 nm UV cut-off filter comes as standard in this instrument to set the UV filter position to Nominal, Calibrated, IN and Custom positions.

This kit adds an additional **420 nm UV Cut-off filter** for IN (UV excluded) and Out operation only.

The label for the UV cut-off filter means that the 50% internal transmission point of the filter is at that spectral point. Since cut-off filters do not cut the transmission with a straight edge, this means that the standard "400 nm" UV cut-off filter begins to cut around 410 nm (100% transmission), is down to 50% internal transmission at 400 nm and at 0% transmission at 390 nm.

A "420 nm" UV cut-off filter begins to cut around 430 nm (100% transmission), is down to 50% internal transmission at 420 nm and at 0% transmission at 400 nm.

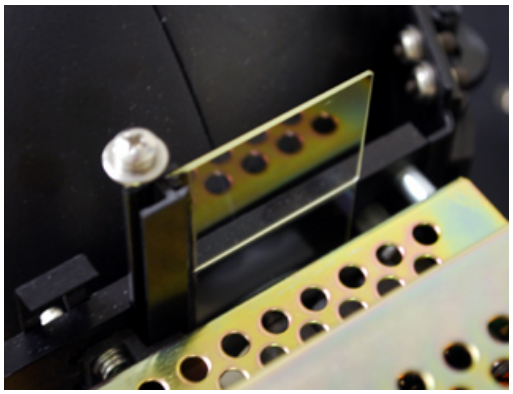
While both are used as UV exclusion filters, the 400 nm allows a slight amount of UV to pass while the 420 nm has a more complete UV cut-off. Measurements taken with the 420 nm UV cut-off filter IN the optical path allow color measurements to reflect only the base color of the product without any UV optical brightening effect. It will also allow better agreement with instruments that have a 420 nm UV cut-off filter as standard.

This CMR is installed by HunterLab at factory.

If the version number listed in EasyMatch QC (Help/About) is less than 4.20, software upgrade to the current released version (purchased separately) will be required to allow the software to recognize the presence of this 420 nm UV Cut-off Filter option.

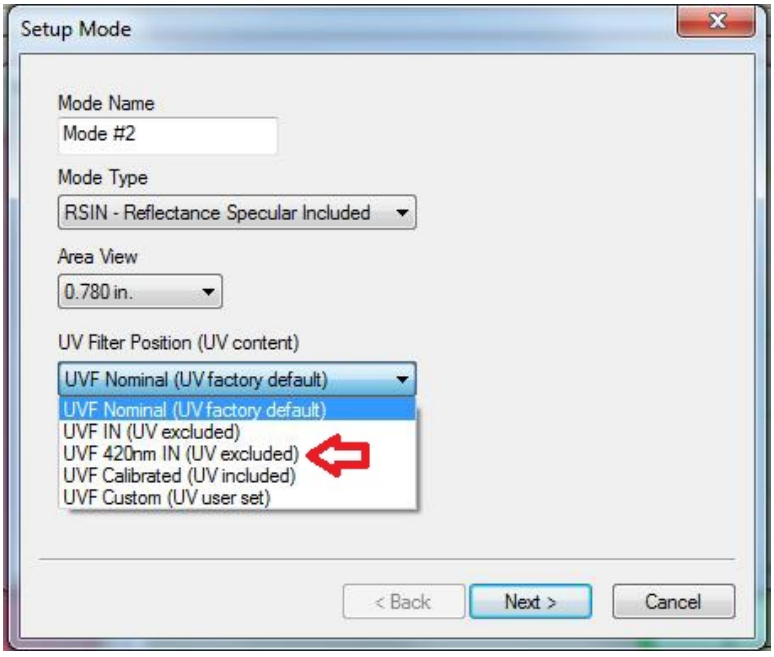
Installation

This CMR-3104 420 nm UV Cut-off Filter option is factory installed, either as new or by returning the unit to the factory.

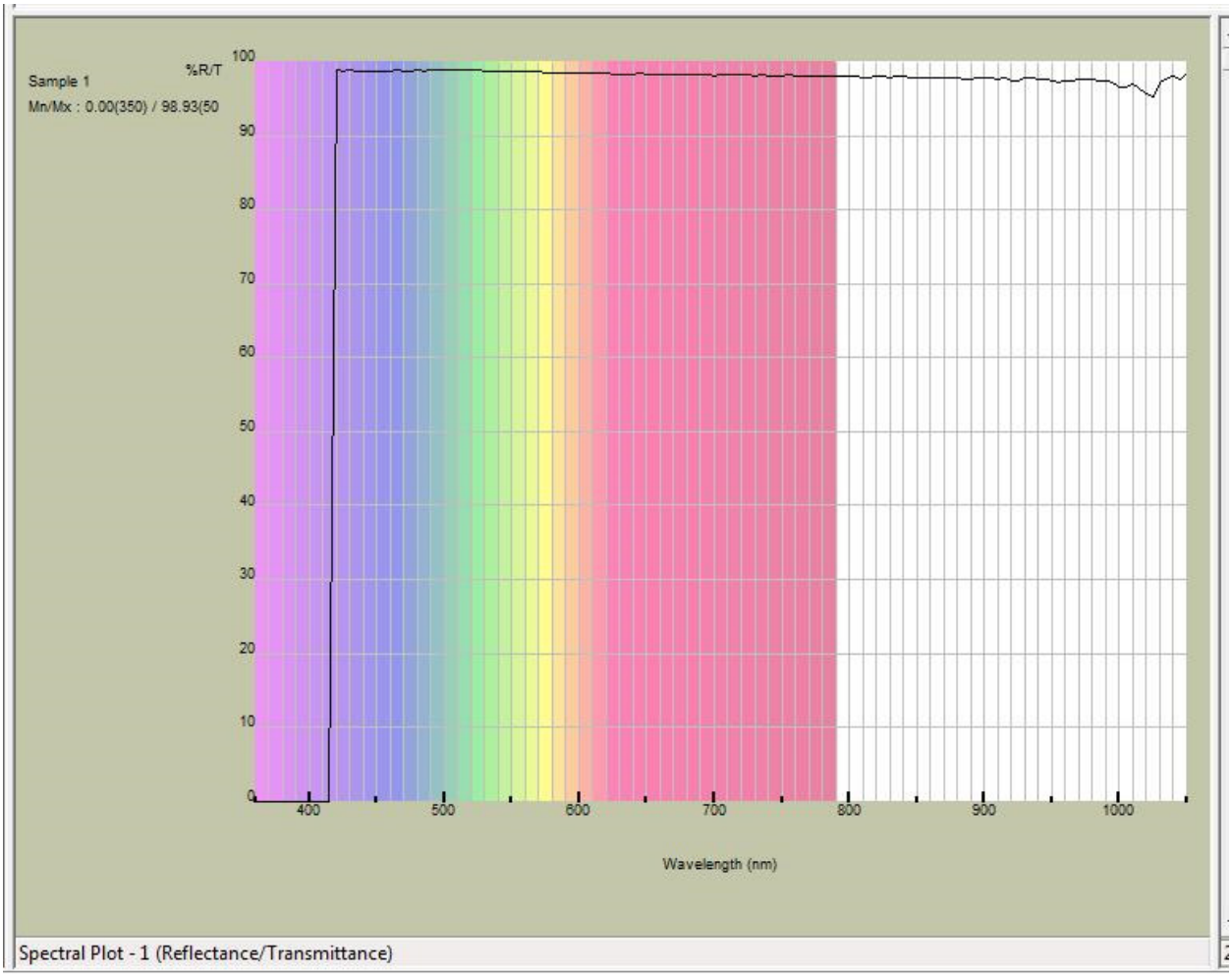


Operation

1. Close EZMQC and turn the USPRO off using the rocker switch that is at the back of the instrument where the power cable connects to the instrument.
2. Start up the USPRO and wait a minute or so as it cycles through system checks. The sensor will beep when finished and the green LED light will be on in front.
3. Start EasyMatch QC software and go to Help/About to verify that the software version is 4.20 or higher.
4. To verify that the 420 nm UV cut-off filter is installed and recognized, standardize the instrument in RSIN – Reflectance Specular Included; 0.780in (19 mm) area of view with 25 mm diameter port; and the UV filter position set to **UV 420nm IN (UV excluded)**.



5. Measure the calibrated white tile and note a distinct fall-off starting at 430 nm should be noticed in the Spectral Plot view


Sample 1
%R/T
Mn/Mx : 0.00(350) / 98.93(50
100
90
80
70
60
50
40
30
20
10
0
400
500
600
700
800
900
1000
Wavelength (nm)
Spectral Plot - 1 (Reflectance/Transmittance)