uSECTRUM PC Software

Applicable Models : MK350S | MK350S Premium | MK350N | MK350N Plus | MK350N Premium | MK350D | PG100N | MK550T | MD100N



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Appendix I

► PC Requirements

ltem	Description						
Monitor resolution	1025 X 768 or higher						
Ram	1.0 GB or higher						
Color Depth	16-bit Color Depth or higher						
Processor	Inter Core II Duo @ 1.4GHz or higher						
	Inter Core Duo @ 2.0GHz or higher						
	AMD Athlon Neo X2 @ 1.6GHz or higher						
	Inter Atom @ 2.13GHz or higher						
	AMD Athlon 64X2 @1.7GHz or higher						
	Note: Most processors produced in 2010 or later should work properly.						
HD Space	300 MB free space						
Operating System	Windows XP						
	Windows 7						
	Window 8						
	Windows 10						



Appendix II

■The Version of uSpectrum Software

Version	Release Note
2.1.5.0	





uSPECTRUM Software Introduction

PC Software for Windows PCs/Laptops

This guide takes you through the installation, features and operations for the uSpectrum PC Software used with any of the spectrometer devices. It allows you to control the spectrometer device using a Windows based PC/laptop with a USB connection.

With the uSpectrum PC software, larger screens provide a much more convenient viewing environment for comparing, sorting and analyzing data.







Software Installation

- Download uSPECTRUM Software to PC
- Preparation on Stand-alone Device
- Getting Started

Software Installation

This section gives instruction on how to download uSPECTRUM, start installing the software and connect the spectrometer with a USB cable to start measurement. Requirements:

- Windows system
- Spectrometer (must support uSPECTRUM software)
- USB cable



2.1 Download uSPECTRUM Software to PC

Visit UPRtek Website (<u>www.uprtek.com</u>) and click on the following steps

Download uSPECTRUM

8

PRODUCTS \rightarrow Spectrum Application Software \rightarrow uSpectrum PC Software \rightarrow Files Download





Install uSPECTRUM

U	Spectru	ım

р

Extract the uSPECTRUM_Installer.exe from the compressed (zip) file that you just downloaded.

Start the uSPECTRUM _Installer.exe program and click *Next*. The installation may take a few moments.

💪 uSpectrum - InstallAware W	izard
o	Welcome to the InstallAware Wizard for uSpectrum
	The InstallAware Wizard will install uSpectrum on your computer.
	WARNING: This program is protected by copyright law and international treaties.
	To continue, click Next.
InstallAware	< Back Next > Cancel

When the installation is complete, press *Finish*.

💪 uSpectrum - InstallAware W	/izard
•	Completing the InstallAware Wizard for uSpectrum
	You have successfully completed the InstallAware Wizard for uSpectrum.
	To close this wizard, click Finish.
InstallAware	< Back Finish Cancel





Congratulations, you have completed the PC software installation.

2.2 Preparation on Stand-alone Device

Setting USB mode

Check USB mode of the device is selected *PC connection mode*.



▶PC to MK350 Connections

You will find a "uSPECTRUM" icon on your desktop. Click on it.





At this point, use the USB cable supplied in the packaging and connect it to the MK350N PREMIUM device and turn on the device.

ex. MK350N PREMIUM device.







Device status will show basic information after successful auto connection.

2.3 • Getting Started



Put the optical sensor closely to the light source.



Dark Calibration

Click on Setting \rightarrow Dark Calibration \rightarrow OK



Press *Capture* button to begin measurement.







Software Operation Guidelines

- MAIN TOOL BAR
- ► MAIN FUNCTION : GENERAL
- CIE CHART WINDOW
- DATA WINDOW
- DATA WINDOW TOOLS
- BASIC / CRI WINDOW
- LOG FEATURE
- ► THE BIN FEATURE
- CHECKER FEATURE
- TRANSMIT



3.1 Main Tool Bar

The yop menu bar contains convenient functions and settings.



Description						
Load historical data that is saved on your PC						
General Format is data previously saved by the spectrometer device onto the						
SD Card.						
Spectrum Format is data received from an outside source – it is a text file						
with pairs of wavelength and data as shown below (note that the wavelength						
and data are separated by a tab).						
380nm 0.003232						
381nm 0.006464						
382nm 0.007244						
383nm 0.005685						
384nm 0.006072						
Once you load the file you will be able to see Spectrum and CIE information						
for that data on the uSpectrum screen (note that it will not show in the						
"Data" area).						
Saves data onto your PC – data can be saved as Data, Image, Report or All.						
Data rows can also be "selected" to be saved by marking the "State" box for						
that row in the "Data" area.						
Instructs spectrometer to take a light measurement						

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Continuous	This function allows the spectrometer to continuously capture at very short
Capture	intervals allowing you to move the position of the-spectrometer and see
	changes immediately without having to press the capture button. Press this
	button and move the spectrometer device about and watch the spectrum
	change.
Auto Mode	Interval time for Continuous Capture is fixed
Manual Mode	Interval time is set manually when this item is selected (the interval is set in the next item below).



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3.2 • Main Function: General

The Spectrum Window displays the wavelength spectrum for a light measurement. Several captures can be presented at the same time (see Data Window) The x-axis = wavelength, y-axis = intensity.



You can see the spectral colors for an individual spectrum, but not all at the same time since they will overlap. First uncheck all the "State" boxes and click on one of the data items to the right of the "Saved" column to see the spectral colors for that row.



You can also adjust the graph parameters (x,y axis gradiation) as shown below.



Function	Description
1 Mode	Displays the high peak wave (λp) at 100% of the y-axis height (for each spectrum displayed)
F mode	When displaying several spectra at once, all are displayed with their "relative" intensities.



∞ mode	Y-axis height is fixed, based on values in the drop-down box or a value that you can type into the box.
Show Peak	When turned "On", the high peak (λp) and its half bandwidth are both marked
Mark	(see next page)

Selecting the "Mark" check box on the Data Window. This allows you to view numerical data for all measurements across a vertical cross section of the spectrum.



#1 - Check which spectrums you want to see numerical data for. #2 - Left click and drag this purple vertical line across the spectrum and watch the values change in the Mark'ed screen below.





∞ button with 9 units



1 button & Show Peak



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3.3 CIE Chart Window

The CIE Chart window can display either CIE 1931 or CIE 1976. You can display as many data as are selected in the "Data" window.











Left click n' drag your mouse to move the CIE chart on the screen.



3.4 Data Window

In the Data Window view, you can see a complete history of all of your captured light data in an organized table. Furthermore, this screen provides features to allow you to sort, organize and administrate easily and efficiently.



Select items to display in Spectrum and CIE charts

ï

Sort on any column - click on col. title

2	DATA													_		
] T _][State 🔻	R	emove 🔻	ו
	State	Colo	r Remove	Save	Saved	Туре	Name	Model	SN	Time		Memo		I-Time	x	-
			Remove	Save	No	Data	0000	MK3505	B13M0156	2015/03/07_12:2	7:17			428	0.3396	
			Remove	Save	No	Data	0001	MK350S	B13M0156	2015/03/07_12:2	7:30			474	0.4704	
			Remove	Save	No	Data	0003	MK350S	B13M0156	2015/03/07_12:2	8:10			1000	0.3975	
			Remove	Save	No	Data	0004	MK3505	B13M0156	2015/03/07_12:3	7:22			1000	0.3591	
			Remove	Save	No	Data	0005	MK3505	B13M0156	2015/03/07_12:3	7:42			1000	0.3594	
			Remove	Save	No	Data	0006	MK3505	B13M0156	2015/03/07_12:3	8:55			1000	0.3703	
																-
	• 🔳															
		C	elete item													
ighlight itom in	t item in charts		Data saved or not yet Make note								es, exc	eptio	on			
ing mg nc ne m m				saved reporting.							•					

To customize color, double clicks



Data values that marked with "N/A" indicate that the data was originally taken by a

spectrometer device which does not supply that information because of differences in versions.



Column	Description
State	Select the data row to be displayed in the charts
Color	Color of chart markers for a row of data
Remove	Click to delete data row
Save	Click to save data (in row) to PC
Saved	Data saved (Yes) or not yet saved (No)
Туре	"Data" means the data was captured by the spectrometer device. "File" means that the data was retrieved from the PC (previously saved data).
Name	If the data was retrieved from the PC, this will be the name of the file and location. Otherwise, it will be the Serial Number of the spectrometer device.
Model	Model of the spectrometer device that took the original measurement – MK350S, MK350S PREMIUM, MK350N PREMIUM, MK350N,MK350N+ , MK350D,PG100N
SN	Serial number of the spectrometer device that took the measurement. This can help when multiple spectrometer devices are concurrently in use.
Time	The date/time that the measurement was taken
Memo	Enter notes, memos, reminders, environment conditions.
I-Time	The Integration Time (exposure time) at the time the measurement was taken

The first 12 columns in the Data window are explained below.



3.5 Data Window Tools

There are convenient tools on the Data window to help you organize and administrate data.





3.6 Basic / CRI Window

You can choose to display either the Basic List, CRI chart, AI/CRI, TM30 in the lower right corner window.



Basic List



CRI



Place mouse over bars to see data values

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you can choose to display CAI/CRI location.

The Basic List has 5 items - you can replace any of the items using the setup screen.

- 1. Select an item to be replaced
- 2. Select the new item
- 3. Press the right-arrow
- 4. Press the Commit Button



Blue line as a reference light source and red line as a test light source.

🝯 BASIC Setup			c
y10	Rf	R8	1. LUX
u'10	Rg	R9	2. CCT
v'10	TLCI	R10	 3. CRI
LambdaD	GAI	R11	
deltax	CQS	R12	4. LambdaD
deltay	R1	R13	5. LambdaP
deltau'	R2	R14	
deltav'	R3	R15	
Purity	R4	PPFD	
S/P	R5	PFD-B	
fc	R6	PFD-G	
CRI	R7	PFD-R	



3.7 • Log Feature

The Log Feature automatically captures and logs light measurement at certain intervals. The data can be saved to the PC/laptop and recalled later.



After you press the log button, log screen appears (below).





Use the tool bar to delete log data or save log data to your PC. Saved log data can later be re-loaded and reviewed on the screen at a later time.

The Log screen has an item list window (mWm^2) – you can determine which of the items in the list are displayed on the graph by marking the check boxes.



In the graph above, the y, u',v' are actually displaying on the graph, but the values are so small that they are compressed towards the bottom. If you deselect the proportionately larger LUX and CCT values, the y, u', and v' values become visible (below).



4

Cance



You can also change the items on the list with the Setup button which brings up the Setup screen (see the Basic List).

Purity fc CRI	R10 R11		2. y
fc CRI	R11		2. y
CRI		\sim	2
	R12		3. U
R1	R13		4. v'
R2	R14		5. CCT
R3	R15		
R4	lambdaP		
R5	lambdaPV		
R6	PPF		
R7	PPF-UV		
R8	PPF-B		
	R1 R2 R3 R4 R5 R6 R7 R8	RI RI3 R2 R14 R3 R15 R4 lambdaP R5 lambdaPV R6 PPF R7 PPF-UV R8 PPF-B	RI RI3 R2 R14 R3 R15 R4 lambdaP R5 lambdaPV R6 PPF R7 PPF-UV R8 PPF-B

You can also use the display numerical values button to display numerical values for each point on the graphs.



The Log screen has an item list window (µmolm-2s-1) – you can determine which of the items in the list are displayed on the graph by marking the check boxes.

µmolm-2s-1	D/WCI Remaining located Remaining a	
		Cruce Mage
Der PPFD		Let reprote
PFD-FR		-
🗹 🔤 PFD-В		
💆 📃 PFD-G		0 PO4
💆 📕 PFD-R	2 4 6 8 100 10 10 20 <td>E 34 -43</td>	E 34 -43

You can also change the items on the list with the Setup button which brings up the Setup screen (see the Basic List).





You can also use the display numerical values button to display numerical values for each point on the graphs.

pmolm-2s-1	EVVCZ	Ante Mittanori anno 1
		& Court Made Sales temporary De Internal 10 sec Settemnal
PPFD		till ⊂ pas − SetTentTent Otro ab −
PFD-FR		
D PFD-G		5 C From 5 7058 5 C From 5 C From 7058
PFD-R	TRANSPORT	18, 13, 26

You can also change the color of the graph lines by double clicking in the colored box next to the measurement symbol (e.g. y, u') and then selecting from the color picker screen.



The Log Mode setup determines the intervals for automatic continuous captures. There are 2 modes – Timer, Count. The parameters for each mode will change as you select its radial button.





Timer Mode – Uses Interval and Total Time as parameters. In the example above, the spectrometer captures data every 5 seconds ¹ until it reaches 1 minute ².



Counter Mode – Uses Interval and Total Number of Captures. In the example (right), the spectrometer will capture data every 5 seconds ¹ until it reaches 10 captures ².



In all boxes you can either use the drop down menu or type in a value directly.

The I-Time (exposure time) for the Timer Mode and Count Mode stays constant during logging and is automatically or manually set on the tool bar at the top of the Log screen.



At the bottom of the Log screen is another tool bar which adjusts the y-axis, x-axis dimensions of the graph to allow you to see more or less data on the screen.



The *F* (*Fit*) *mode* adjusts the y-axis so that it can "fit" all values in the graph.

The *M mode* allows you to manually set the y-axis "min to max" values (use drop down boxes next to the radial button).



3.8 The BIN Feature

The BIN Feature is used to classify a light measurement within a given range of boundaries as mapped on the CIE charts. Press the Bin icon on the left panel.



Next, load a BIN chart by pressing Load BIN



Load a Bin chart

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You can find the Energy Star ANSI BIN C78.377 files where the uSpectrum files were installed – usually installed in:

c:/Program Files/uSpectrum/Examples/BIN or

c:/Program Files (x86)/uSpectrum/Examples/BIN

(We can accept file formats in ANSI C78.377.2011 and ANSI C78.377.2008)



After loading a file, you should see bin boundaries on the spectrum.





If you take a measurement (Capture button lower right), a mark will show you whether the measurement is within the acceptable boundaries for the Energy Star standards. You can use the Zoom tool to enlarge the screen.





You can also add to or remove boundaries from the current BIN chart by using the **BIN Editor**.





Enter in 4 sets of x,y coordinates for one BIN boundary and hit "Add Point". Note that you need to precede each point with a leading zero and decimal point (0.4813) for numbers less than 1. Also, Point 1 should represent the upper left corner of the boundary. Points 2, 3, 4 should continue in counter clockwise order. You can also modify points for removes points accordingly. Close the screen.

BIN Editor										
BIN Editor BIN Title		2008						_		
Point Name		E80					1 starter and the second secon			
Point 1 X	0.32	205 Y	0.3481							
Point 2 X	0.30	028 Y	0.3304		Add Point					
Point 3 X	0.30	068 Y	0.3113	🗲 — I	nodify Poin					
Point4 X	0.32	221 Y	0.3261	R	emove Poi					
E Allow O	verlap	oping					-			
Point Name	Del	P1 X	P1 Y	P2 X	P2 Y	РЗХ	РЗҮ	P4X	P4Y	•
E10		0.4813	0.4319	0.4562	0.4260	0.4373	0.3893	0.4593	0.3944	D
E20		0.4562	0.4260	0.4299	0.4165	0.4147	0.3814	0.4373	0.3893	
E30		0.4299	0.4165	0.3996	0.4015	0.3889	0.3690	0.4147	0.3814	
E40		0.4006	0.4044	0.3736	0.3874	0.3670	0.3578	0.3898	0.3716	
E50		0.3736	0.3874	0.3548	0.3736	0.3512	0.3465	0.3670	0.3578	
E60		0.3551	0.3760	0.3376	0.3616	0.3366	0.3369	0.3515	0.3487	
									Close	

A new boundary should appear in the data view.





Finally, you need to save your new BIN chart and import the chart into the spectrometer device.



The new chart will appear as follows when opened in Excel.

After you disconnect the spectrometer device from the PC, you should be able to see the new chart information.

		ı) -	(°' →) ∓	1			bin cha	rt.txt - Micros
	常月	ŧ	插入 版面	前配置 公式	じ 資料	校閱檢	視	
ľ		Calit	ori 🚽	12 - A A		■ ≫ -	🖥 自動換列	通用格式
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		D	б	- (*	f_{x}			
	A		В	С	D	E	F	G
1	BIN 83	8882						
2	LED La	mps						
3	0.4	813	0.4319					
4	0.4	562	0.426					
5	0.4	373	0.3893					
6	0.4	593	0.3944					
7								
8								

BI	N	A MOCE	91	
ССТ		0K		
BIN		_		
ENERGY	STAR AN	ISI C78.3	377-20	08
0.46			3400	гтрык
0.44		, 30%	· 4	h
0.42	4500	TH	Th	4
0.40	ROSEN /	1H	14	
0.38	11	47	1	
0.36			-	
0.34	24			
0.32				
0.30				
0.28 0.31	0.34 0.37	0.40 0	43 0,4	6 0.49
.	- 1			č –



There is also an Elliptical Bin feature that is very similar to the previous BIN feature but the bins are elliptical in shape as opposed to rectangular. You can access the Elliptical Bin feature with the slider button shown below.



The files you loaded for the Bin feature can also be loaded for the Ellipse feature (file contains both rectangular and elliptical bin data).



Once loaded you can add/remove ellipse boundaries using the *Ellipse Editor*. CCT is the name of the boundary and must be represented by a number between 2700-8000 (representing the CCT number). The x, y coordinates represent the center of the ellipse. The a, b represents the half-height and half-width of the ellipse. The angle represents the slant angle of the ellipse. You can reference the yellow line diagram below for a visual orientation.



EIN BIN	Sav BD	:- l	Auto Mode	Manual Mode	100 ms	Ed Ed	IN Ø Ellipse itor Editor	🥌 Import
-								
BIN Editor			_	_	_		_	
 Ellipse Editor 								2
ССТ:	70	000				!	a/	
x:	0.	3					<u>к</u> ь / «	
у:	0.	33				I	(an	gle)
a:	0.	002	-	Add Ellips	e		х,у	/
b:	0.	0009	1	Modify Ellip	se	i (*		
Angle(deg) :	58	3.57		Remove Ellip	ose			
						I .		
Ellipse Name	Del	х	У	a	b	Angle		
2700		0.4590	0.4120	0.00270	0.00140	53.70		
3000		0.4400	0.4030	0.00278	0.00136	53.22		
3500	\Box	0.4110	0.3930	0.00309	0.00138	54.00		
4000		0.3800	0.3800	0.00313	0.00134	53.72		
5000		0.3460	0.3590	0.00274	0.00118	59.62		
6500		0.3130	0.3370	0.00223	0.00095	58.57		
								Close

You can add the new boundary by clicking on the "Add Ellipse" button. When you close the screen, the new Ellipse boundary will appear.

After you return to the previous screen, you can "Save" the bin data and then "Import" it into the spectrometer device.





3.9 Checker Feature

The Checker screen is used to validate a light measurement against ranges of configurable criteria (e.g. CRI 90-100) and determine whether the light meets or fails the required criteria.



In the Checker screen, use the *Capture* button to take a measurement – pass condition shown below.





Checker Screen – Fail Condition

Save Result	Auto Mode Manual Mode	100 ms 🔹 🔒	term Lock Setting		
Feature	Value	Result	Min	Max	
LUX	93	 Image: A second s	0	10000	
* CCT	2803	1	0	10000	
· CRI	87.1	×	90	100	
🔹 fc	8.6	1	0	10000	
≊ x	0.44499	1	0	10000	
= y	0.39610	1	0	10000	
∞ u'	0.25935	1	0	10000	
⇒ V ^r	0.51942	1	0	10000	
		FAI			
Memo:					
		1			
		Fail			

You can change the Min-Max criteria by first clicking on "Term Lock" at the top of the Checker screen.

Save Result	Auto Mode	Manual Mode	100 ms	Term Lock	Setting

In "unlocked" mode, you can change the Min/Max values directly in their input boxes. You can also click the Setting icon to change the list on the screen (e.g. LUX, CCT, CRI and etc.).

Result A	Auto Manual Mode Mode	100 ms -	Term Setting		CHECKER Setup				
Feature		Result	Min	Max	I-Time	Purity	R11		1. LUX
× LUX	93	1		10000	x	fc	R12		2. CCT
CCT	2810	1		10000	У	CRI	R13		3 CRI
· CRI	87.2	1	9 0 I	100	u'	R1	R14		1.50
	8.6	1	C	10000	V'	R2	R15		4. TC
⇒ x	0.44472	1	c	10000	CCT	R3	lambdaP		5. x
= V	0 39643	1		10000	LUX	R4	lambdaPV		6. y
	0.25002			10000	lambdaD	R5	PPF		7. u'
	0.25902	×.		10000	Duv	R6	PPF-UV		8. v'
v.	0.51951		C	10000	deltax	R7	PPF-B		A. 1.
					deltay	R8	PPF-G		
hic ch	ock hov	,			deltau	R9	PPF-R	-	
ins ch		•	Enter	in new	deltav	R10	PPF-NIR		Commit 💢 Cai
empo	rarily								
	. '		value	es directly			See Bas	ic Lis	st for usa
lisrega	ird		into r	ange hov					
ritoria	chock		into i	unge box					
Jurgua	CHECK								



You must lock the "Term Lock" icon again before being able to capture another light measurement.



3.10 Transmit

Transmit is used to measure the transmittance between the standard light and the test sample. Press the Transmit icon on the left panel. There are 2 modes. Boundary mode and Center mode. The parameters for each mode will change as you select its radial button.





Automatically or Manually set on the Tool bar at the top of the Log screen.





Spectrometer Custom Programming

Manual Driver Download

UPRtek provides .dll libraries for users wishing to custom program Windows based applications for the spectrometer device. These .dll functions perform basic spectrometer device control and data access/retrieval functions.

The spectrometer developer's kit is loaded onto your PC when you install the PC Software. The .dll libraries, documentation and example code are all provided in the install directory, typically located in the directory shown below. But it may be different depending on where you originally installed the PC Software files.

🖌 🕞 🚽 🕨 Computer 🕨 OS_In	nstall (C:) 🕨 Program	m Files 🕨 uSpectrum 🕨	✓ 4 Search uSpec	trum
Organize 🔻 🛛 Include in library 🔻	Share with 🔻	New folder		≣ ▼ 🔳
🖻 퉲 Nero	•	Name	Date modified	Туре
🛛 퉬 Oracle		Dec.	1/22/2014 0-44 AM	File felder
🛛 퉬 Paragon Software		Driver	1/25/2014 5:44 AIV	File folder
🛛 퉬 Realtek		Evampler	1/23/2014 9:44 AM	File folder
Reference Assemblies		Ennts	1/23/2014 9:44 AM	File folder
🗅 🚺 Skype		images	1/23/2014 9:44 AM	File folder
🛛 🎍 Sony		lang	1/23/2014 9:44 AM	File folder
🛛 🍌 Starfield		Library	1/23/2014 9:44 AM	File folder
System Control Manager		📕 skin	1/23/2014 9:44 AM	File folder
Image: Second State S		way way	1/23/2014 9:44 AM	File folder
🛛 🎍 Toshiba		SiUSBXp.dll	10/11/2013 3:07 PM	Application extens
Twiddlebit	=	i updates	1/21/2014 3:53 PM	Configuration sett
USpectrum		👿 uSpectrum	1/21/2014 3:55 PM	Application
VideoLAN				
Windows Defender				
Windows Journal	*	•		



4.1 • Manual Driver Download

These procedures are performed when an error message showing that the uSpectrum driver has not been installed properly.

Step 1: On your Windows PC, click the Start Menu Icon (usually in lower left hand

corner) 1. The screen below will display. Right Click "Computer" and select "Properties".



Step 2: Select "Device Manager". Then, in the second screen, find the Device with an exclamation warning. It may be under "Other Devices", "USBXpress Device" or "Universal Serial Bus Controllers". Right click and select "Update Driver Software".

Eile Edit View Tools Help	items > System	Search Control Panel	~
Control Panel Home Device Manager Remote settings System protection Advanced system settings	View basic informa Windows edition Windows 7 Home Pr Copyright © 2009 M Corporation. All righ Get more features wi Windows 7	emium icrosoft its reserved. th a new edition of	
See also	System		
Action Center	Manufacturer:	Acer	
Windows Update	Model:	Aspire 3820	
Performance Information and Tools	Rating:	Step Windows Experience Index	r





Step 3: Select "Browse my computer for driver software". And then click the "Browse" button on the next screen.







Step 4: Browse to the uSpectrum Driver folder. It is typically in c:/Program Files/uSpectrum/Driver, where the installation files were placed. Click OK.

Browse For Folder	×	
Select the folder that contains drivers for your hardware.		
PerfLogs		
Program Files		
Program Files (x86)		
🖉 🎉 uSpectrum		
Doc 🔒		
Driver		
📕 x64		
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Examples		
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Step 5: Hit Next. The driver should install correctly and you should be able to bring up your uSpectrum software.

Il Update Driver Software - USB Spectrometer	
Browse for driver software on your computer	
Search for driver software in this location:	
Include subfolders	wsen
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and software in the same category as the device.	all driver
	Next Cancel
Dupdate Driver Software - USBXpress Device Windows has successfully updated your driver software Windows has finished installing the driver software for this device: USBXpress Device	