

MK350

MK350S and MK350N

Smart Device App



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Introduction

App Software

1

App Software for Tablets/Cell Phones

1 Introduction - App Software

This guide takes you through the installation, features and operations for the MK350 device App software (MK350S/N), which allows you to control the MK350 device using an Android/Apple based smart device (tablets or cell phones) over a wireless connection (using an App). Wireless allows you to control the MK350 device from a distance, using familiar tablet and cell phone touch screen manipulation.



Smart Device App 2

Installation

Register WiFi License for MK350
Download/Install App for Smart Device

2 Smart Device App Installation

You can use your Cell Phone or Tablet PC to control your MK350 device using a wireless connection. The MK350S or MK350N uses a “Wing SD card” with a built-in WiFi device.

You will need:

- Android or Apple (IOS) Smart Device (cell phone or tablet PC) with access to the internet
- MK350 Device (MK350S, MK350N)
- Wing SD Card from package

In this section you will:

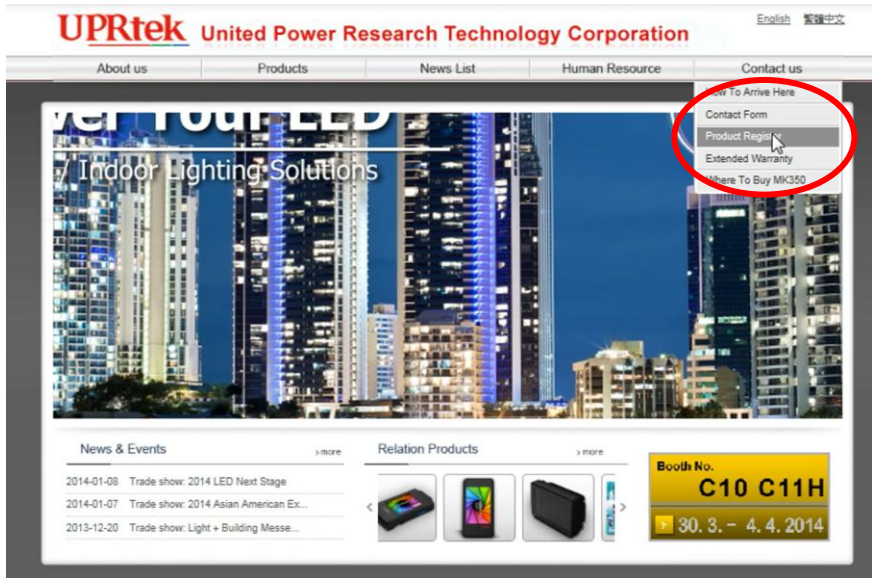
Step 1 - Register the WiFi License for the MK350S/N

Step 2 - Download an App for your Smart Device



Step 1 - Register your WiFi License (for MK350)

1. To register your WiFi license for the MK350S/N, use your laptop to visit the UPRtek website (www.uprtek.com) and then go the “Contact us” tool bar item and select “Product Register”.



The screenshot displays the UPRtek website header with the logo and navigation menu. The 'Contact us' menu is open, and the 'Product Register' option is highlighted. The main content area features a large image of a city skyline at night with the text 'LED / Indoor Lighting Solutions'. Below the image are sections for 'News & Events', 'Relation Products', and a booth number 'C10 C11H' for the dates '30. 3. - 4. 4. 2014'.

UPRtek United Power Research Technology Corporation

English 繁體中文

About us Products News List Human Resource Contact us

How To Arrive Here
Contact Form
Product Register
Extended Warranty
Where To Buy MK350

LED / Indoor Lighting Solutions

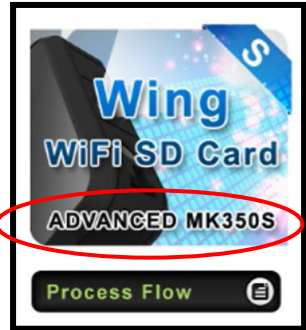
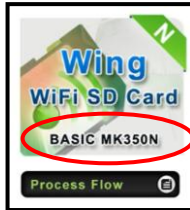
News & Events > more
2014-01-08 Trade show: 2014 LED Next Stage
2014-01-07 Trade show: 2014 Asian American Ex...
2013-12-20 Trade show: Light + Building Messe...

Relation Products > more
< >

Booth No. C10 C11H
30. 3. - 4. 4. 2014

1. On the next web page, click on the Wing WiFi SD Card image for your particular device.

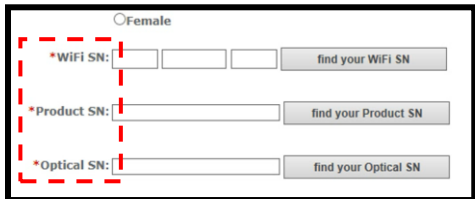
It is **IMPORTANT** that you press the right icon for your device model (MK350N or MK350S) or the registration will fail!



3. On the “Terms and Agreement” page, read the terms and then check the “I have read” box and click on “Next Step”.



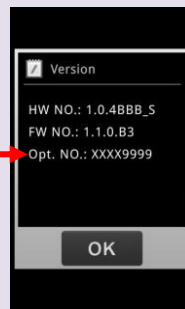
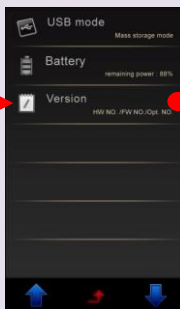
4. On the Registration Form page, in addition to other required information, you will have to supply three serial numbers.



MK350S

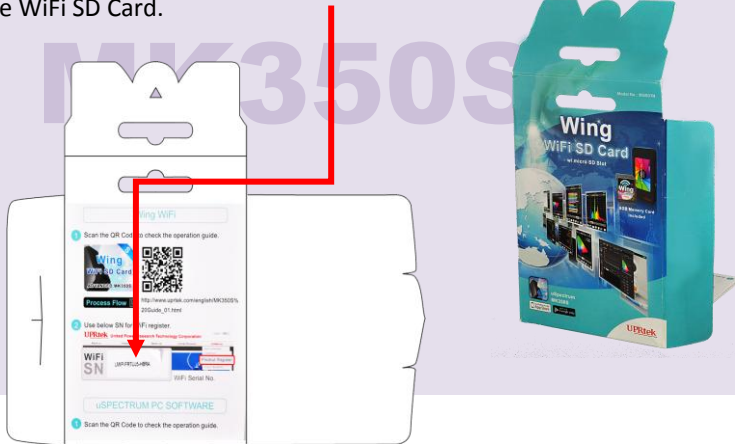


The **Product Serial Number** can be accessed by lifting off the back cover (remember to lift off cover by starting with the notch at the top end and working your way around the edges).



The **Optical No Serial Number** can be accessed from the Main MK350S screen, page 2 – tap the “OPTION” item. On the next screen, arrow down, locate and tap on the “Version” item.

The **WiFi Serial Number** is located on one of the inside flaps of the packaging material for the WiFi SD Card.

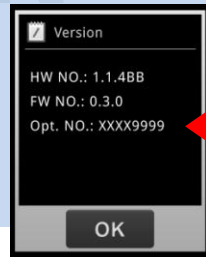


WiFi SN
WiFi Adapter Packaging

MK350N

Optical SN
MK350N Version Screen

Product SN
Bottom of MK350N



4. Press the Send Button



6. After a successful registration, you'll see the download WiFi button. But don't press the button yet!



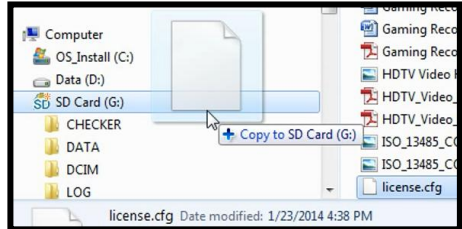
7. First insert an SD card into your PC.



8. Press the “Download WiFi License” button.



9. The downloaded file will be “LICENSE.CFG. Save the license file onto the SD Card (root directory).



10. Turn on your MK350S or MK350N device and let it startup.



11. Take the SD card from the PC/laptop and place it into the MK350 device.



The MK350 device will automatically upload the license. A message will appear on the device screen indicating that you have successfully applied the WiFi license. The device will then reboot.

Update WiFi function.
The activation is successful.
Please wait 20s to reboot.

You have now activated the WiFi license on your MK350 device.

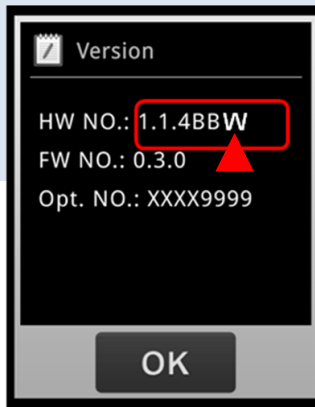
Note 

Also note that the MK350 device will reflect a successful license application by placing a “W” at the end of the HW No. on the Version screen.

Before Activation



After Activation

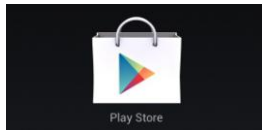


12. Take out the SD card for MK350 activation and put Wing card from the package and place it into the MK350 device before connect to smart device.



Step 2 – Download/Install App to Smart Device

A Smart Device is any of the Android or Apple (IOS) devices including cell phones and tablet PCs. The App download procedures are very similar between the two OS systems.

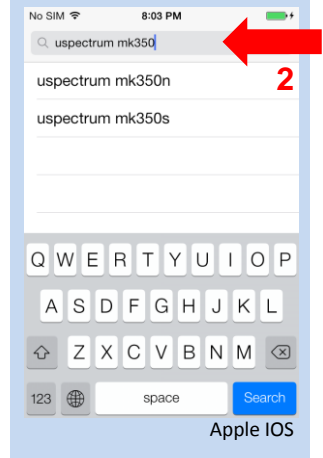


Google Play - Android



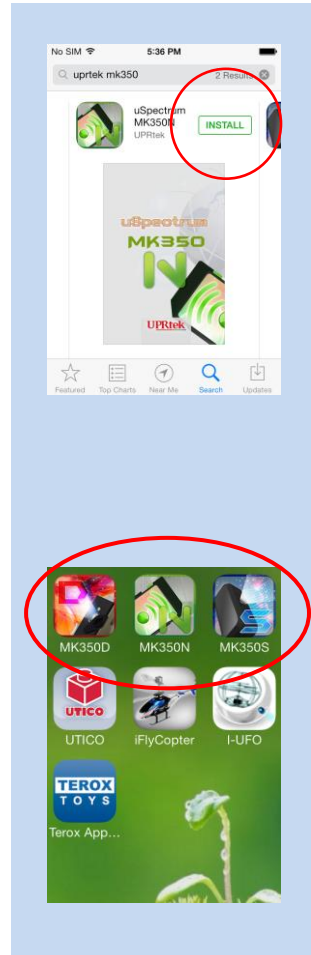
App Store – Apple IOS

1. Make sure your Smart Device has access to the Internet and go to “App Store” or “Google Play” to find the App.
2. Type in “uSpectrum mk350” in the App search box and select your device’s App (uspectrum mk350n or uspectrum mk350s) in the list that displays.



Apple IOS

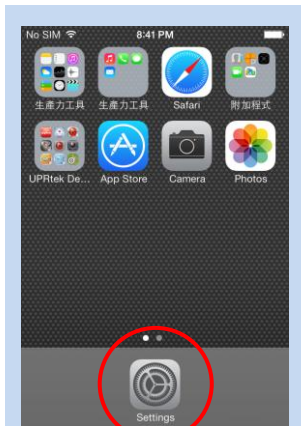
3. Tap to download the uSpectrum App for your device.



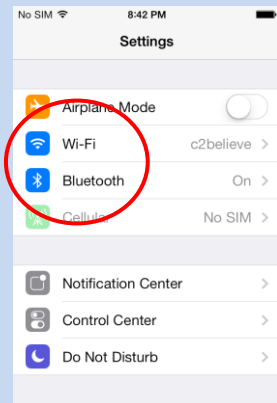
4. The App download will leave an App icon for you, but don't tap on the icon yet!

5. You must first make a wireless connection from Smart Device to the MK350 device. Go to the area on your Smart Device where you setup wireless connections. For the MK350N and MK350S, that would be for WiFi.

Note that the examples on the right are for Apple IOS, but Android procedures are similar.



Apple IOS

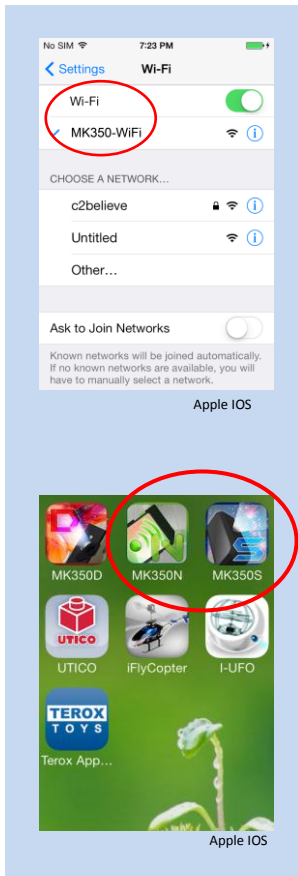


Apple IOS

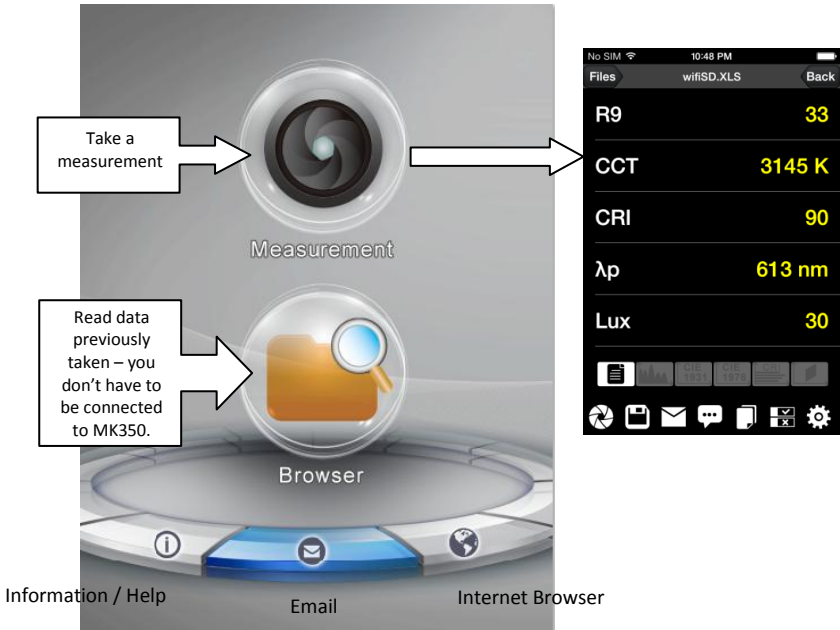
- The MK350 device should be listed in the available wireless device list (for the MK350N/S make sure that the Wing SD card is inserted). Connect to the device.

Note: If you want to change the name of your device, see Appendix I.

- After making the wireless connection from Smart Device to your MK350 device, you can tap on the MK350 App icon.



8. The initial screen is a graphical interface that allows you access to basic facilities. Press the “Measurement” button to take a measurement – it will take you to the MK350 App main screen. See the next section for a full description.

**Note**

You must make sure that the Wing SD card remains in your MK350S/N device while you are connected because the Wing SD card contains a physical wireless adapter

Smart Device App Operations

3

The Basic List

The Spectrum, CIE 1931/1976 Charts

The CRI & BIN Charts

The Capture Icon

The Save Icon

The eMail Icon

The Tips Icon

The Checker Icon

Remaining items on Tools list

3 Smart Device App Operations

The MK350S App and the MK350N App have very similar functions. However the MK350S App has a few more features because of the added capabilities of the MK350S device. We will cover the MK350S App and note where the MK350N App is different.

This is the main screen for the MK350S.

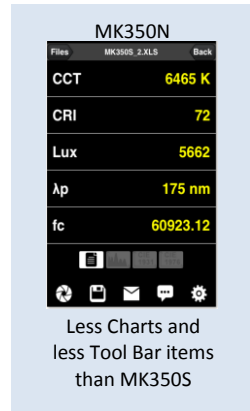
Browser for previously saved data



Main Data Area

Data /Chart Selector Bar

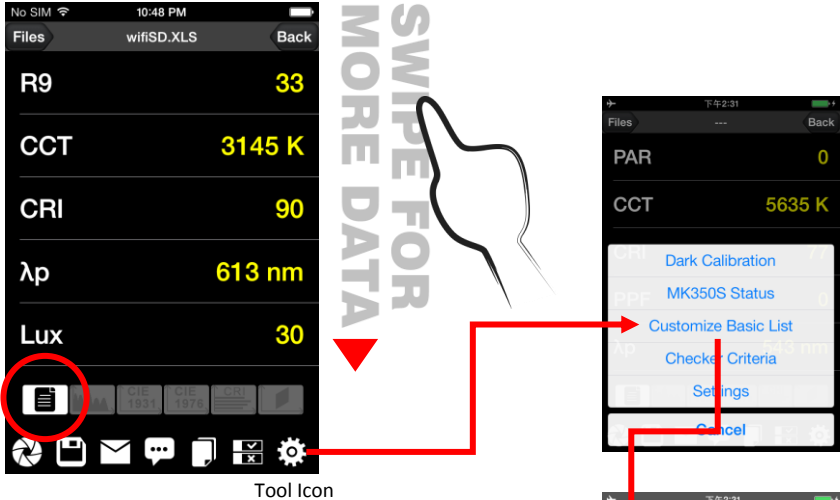
Menu Bar



Less Charts and less Tool Bar items than MK350S

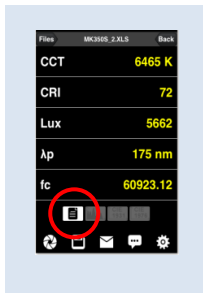
3.1 The Basic List

The Basic List for the App has an advantage over the MK350 device itself in that it is not limited to five items. The list can be customized using the Tool icon.



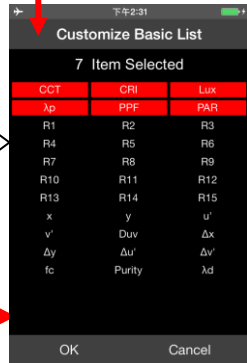
Tool Icon

MK350N both have Basic Lists



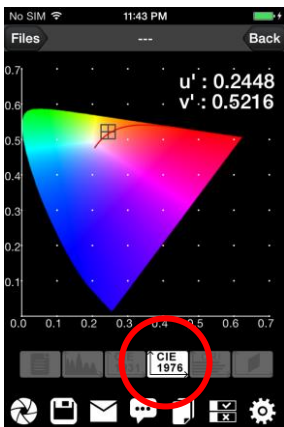
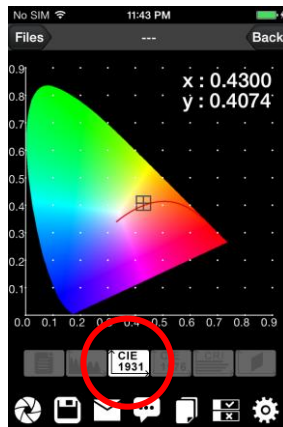
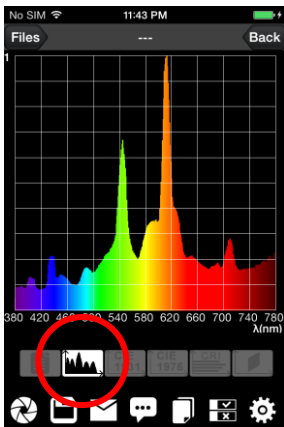
You can add or remove from the list by simply clicking on the item.

MK350N Basic List **cannot** be configured

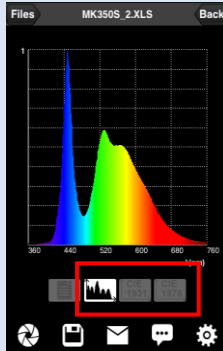


3.2 The Spectrum, CIE 1931/1976 Charts

Both MK350S and MK350N Apps have Spectrum, CIE 1931 and CIE 1976 charts.

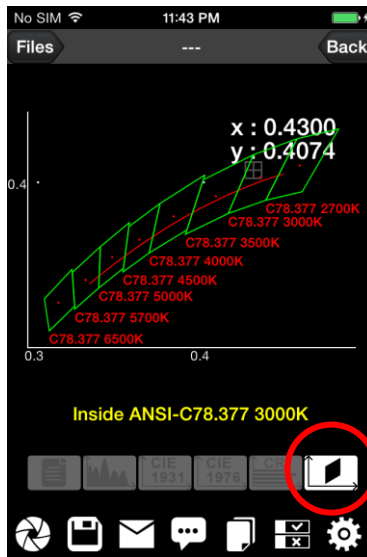
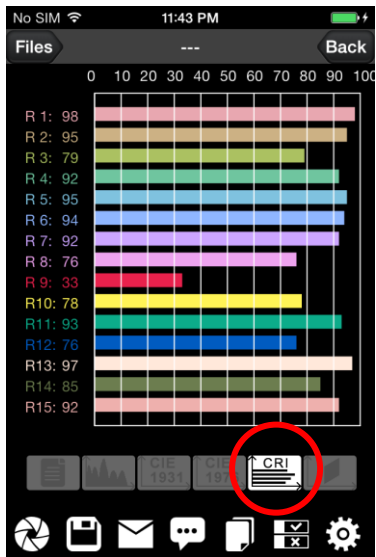


MK350N has same charts



3.3 The CRI & BIN charts

Only the MK350S App has the CRI chart and the BIN chart.



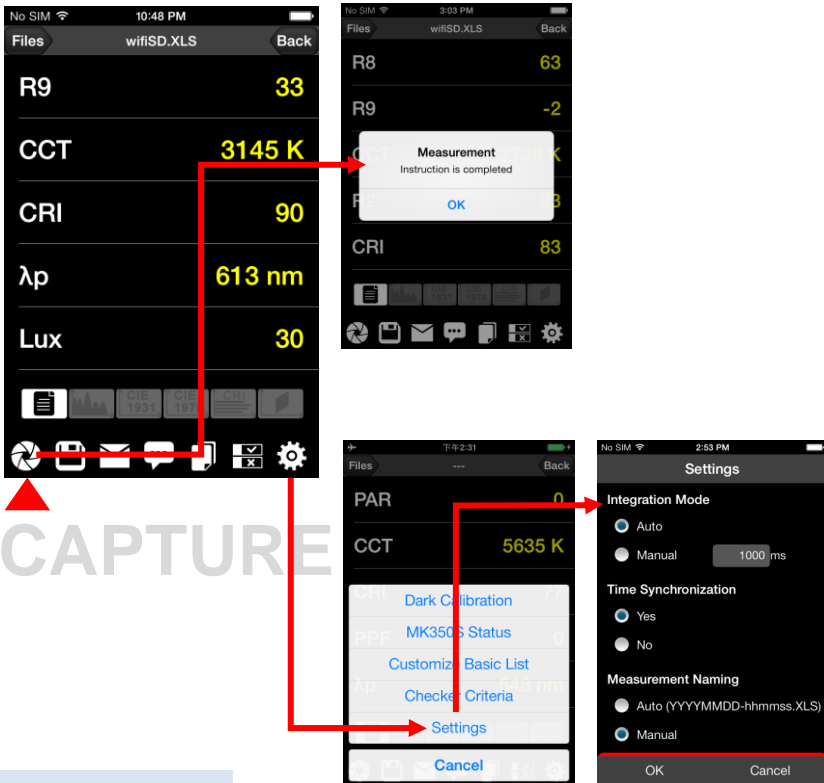
Note



The MK350N App does not have the CRI and BIN charts

3.4 The Capture Icon

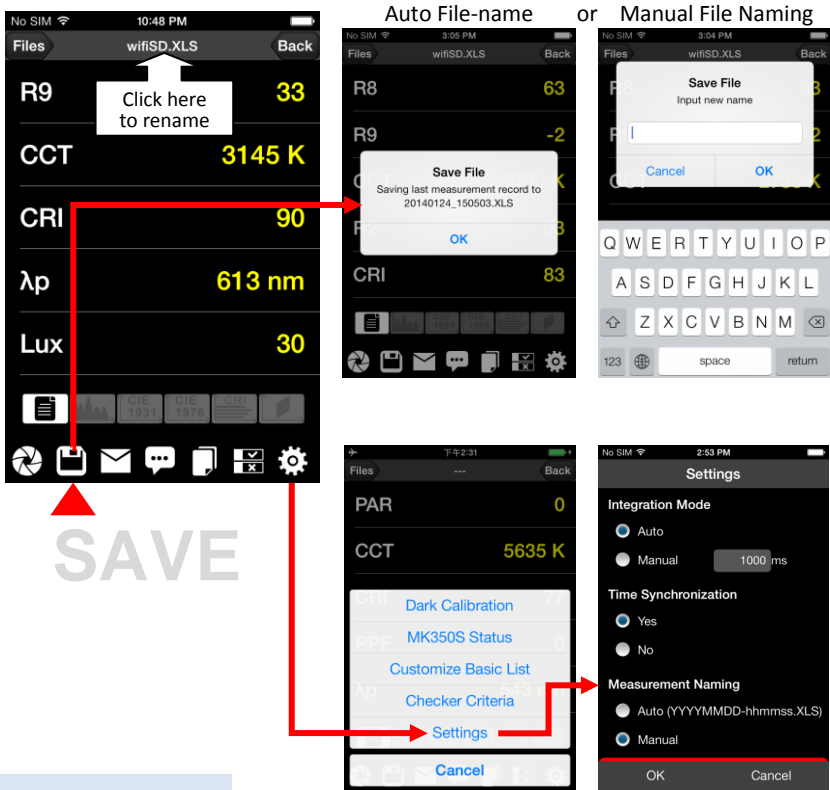
The Capture icon instructs the MK350 device to take a measurement. You can set the Integration Time (exposure time) using the Tool Icon.



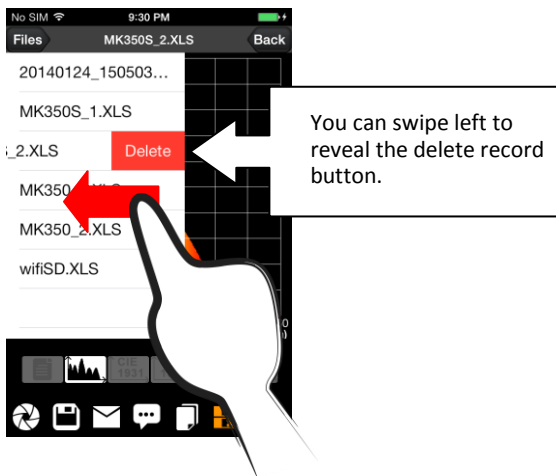
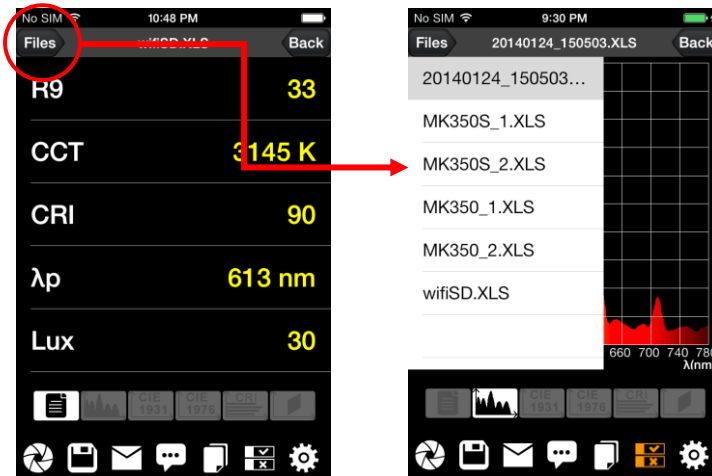
The MK350N is similar

3.5 The Save Icon

The Save Icon allows you to save all the data pertaining to the current measurement. You can go to the Tool Icon to set either “auto file name” generation or “manual file name” input.

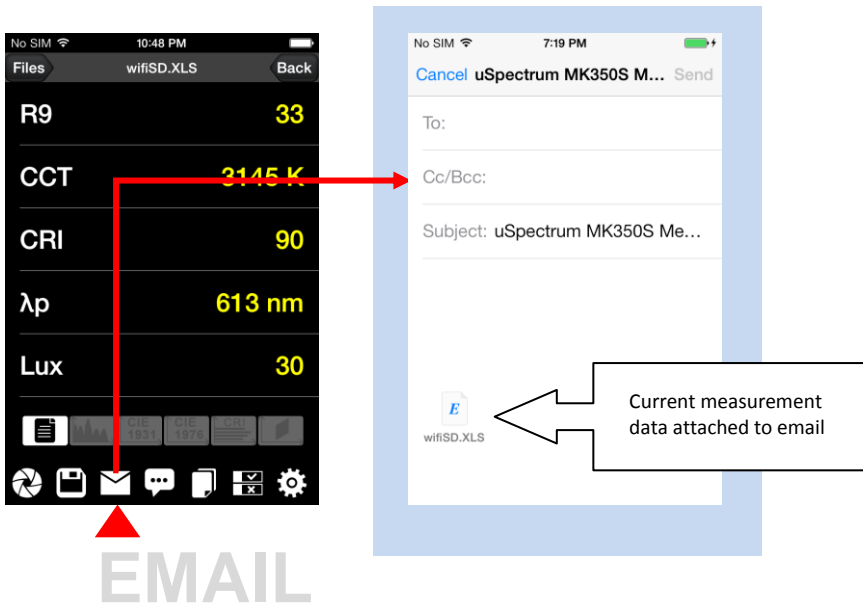


You can recall data saved previously to your Smart Device by clicking the “Files” item in the upper left corner.



3.6 The eMail Icon

The eMail icon brings up an email screen with the current measurement data attached.

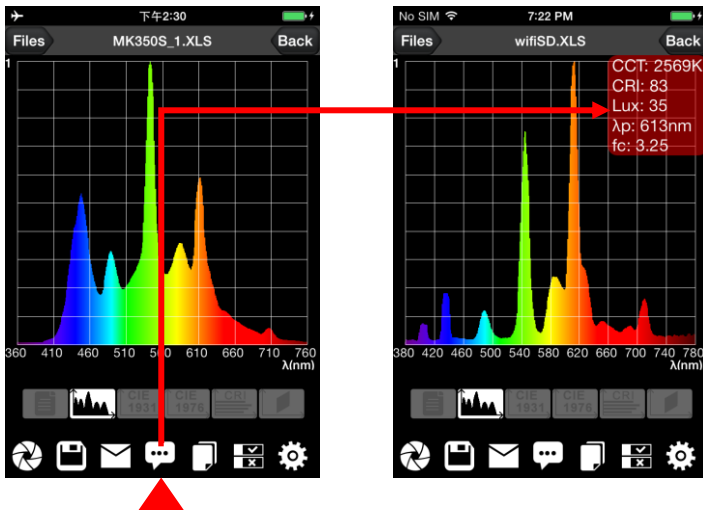
**Note**

If you are connected to the MK350, you will need to sever the connection and connect to the internet before sending the email.

The MK350N is similar

3.7 The Tips Icon

The Tips Icon simply brings up a “Basic List” pop-up on the current Chart screen (i.e. CIE 1931, CIE 1976, Spectrum etc.).



The MK350N is similar

3.8 The Checker Icon

The Checker Icon is used concurrently with the Basic List and displays a “pass or fail mark” column – the pass/fail criteria is based on ranges that are set in Tools > Checker Settings.

CHECKER

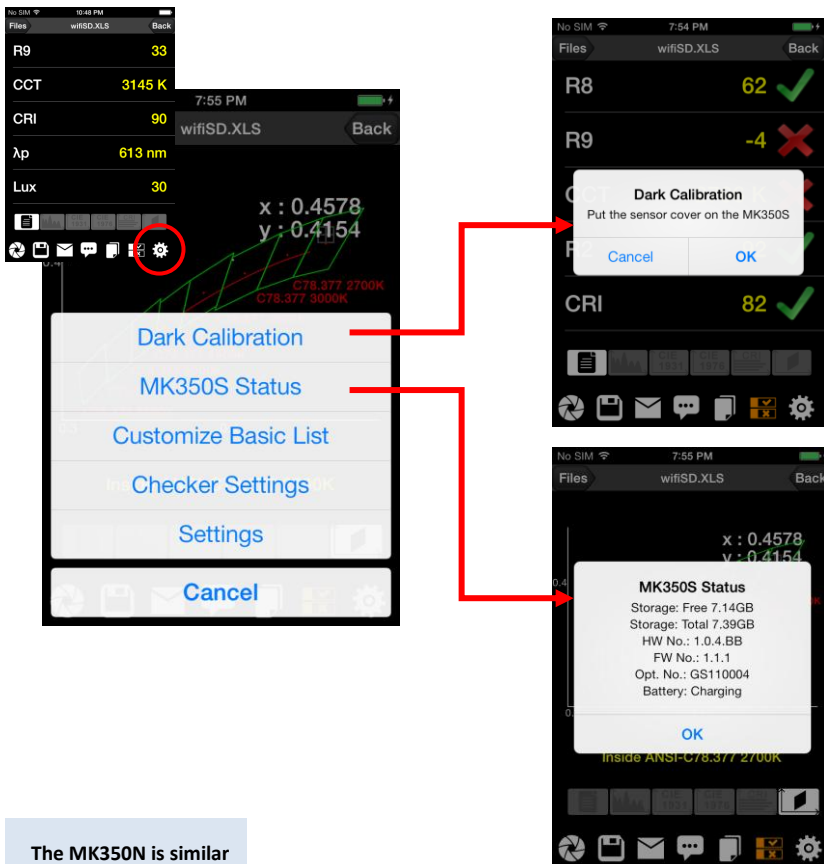
Item	MIN	MAX
R8	0	1000
R9	0	1000
CCT	0	1000
R2	0	1000
CRI	0	10000
R5	0	0
λp	0	0

OK Cancel

MK350N does not have the checker function

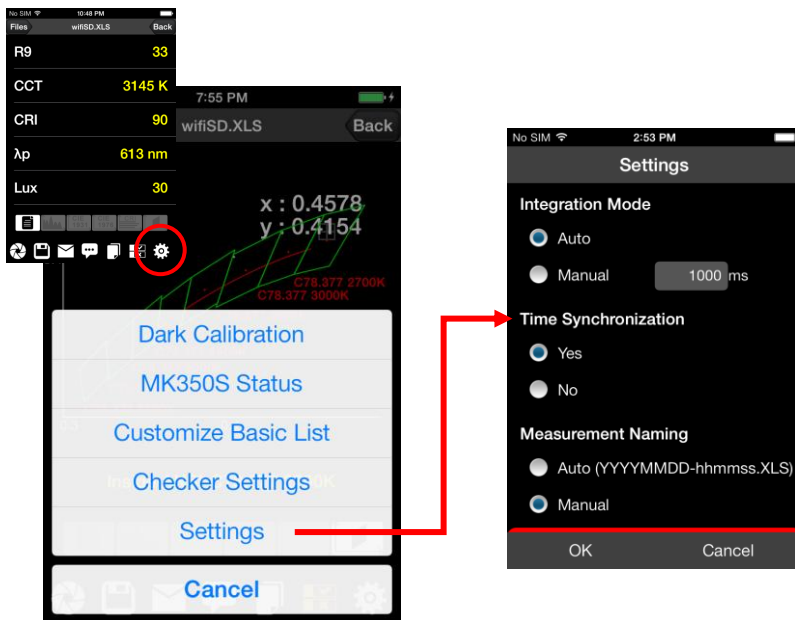
3.9 Remaining items on Tools list

The remaining items on the Tools list are “Dark Calibration” and “MK350 Status”.



The MK350N is similar

The “Settings” item also has a “Time Synchronization” option - when set to “Yes”, it syncs the MK350 device’s date/time to the Smart Device date/time.

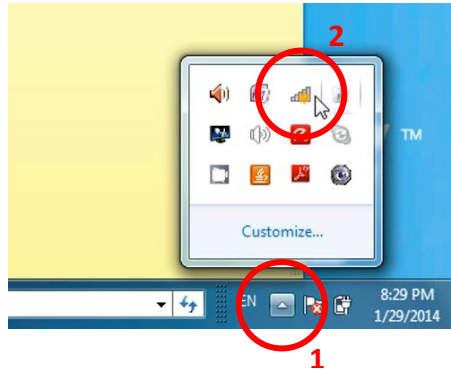


Appendix I – Name Conflicts with Apps

Using one Smart Device with several wireless MK350 devices can result in network naming conflicts because MK350 devices come with the same default SSID or network name.

You can remedy this by changing the SSID for each device with the following steps:

- 1) Use a laptop with wireless network and click on the “hidden icons” button¹ towards the lower right corner of Windows desktop.
- 2) Click on the “Internet Access” icon².



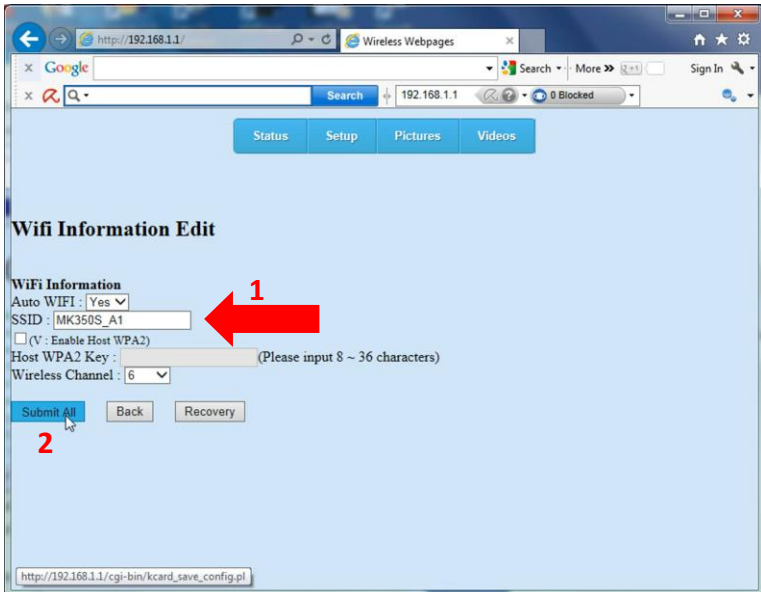
- 3) Select one of the MK350 devices in your environment – The default name will be MK350S_WiFi or MK350N_WiFi, depending on your model. Then hit the Connect button.



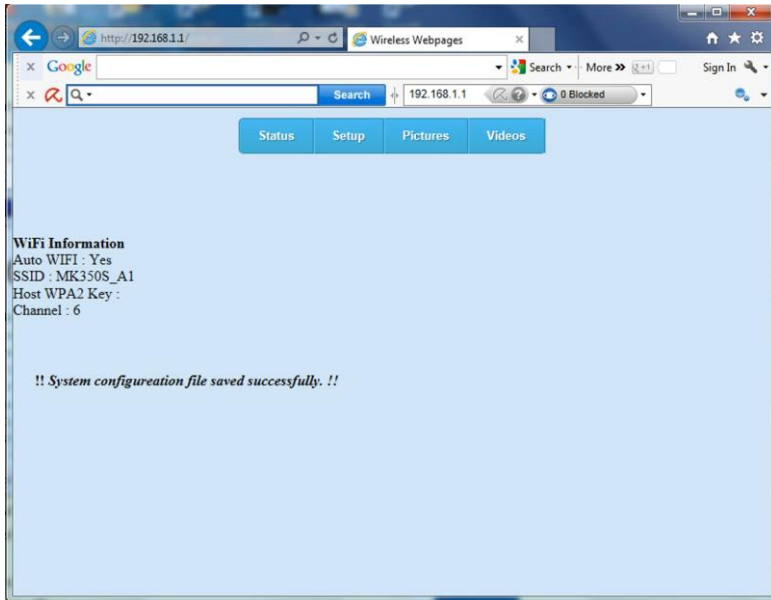
- 4) Next , bring up your internet browser and type 192.168.1.1 in the network address box. The web page below will appear. Press Setup².



5) Change the name in the SSID box and press “Submit All”



And now your MK350 device network name should be changed.



Do the same procedure for the other MK350 devices.