

## Annual Product Calibration

This product is a high-precision measurement device with sensitive, please use with care. To ensure the accuracy of measurements, it is recommended to have the unit calibrated once a year. Please contact your agent or our customerservice department for calibration service.

## Product Notes and Precautions

- 1.The MK550T Spectroradiometer contains sensitive components. Please unpack with care, as any trauma to the unit may damage the equipment. Contact your agent if the unit appears not to be operating normally. Do not attempt any repairs – all repairs must be performed by qualified service agents.
- 2.Most LCD screens have a very small and inconsequential defective pixel rate (usually less than 0.1%). This results in occasional pinpoints of white or other colors but will not affect the accuracy of measurements.



## Precautions / Warnings

Please read the following precautions to avoid fire, excessive heat, chemical leakage and explosion.

- Do not disassemble or modify the battery.
- Do not expose the battery to heat (fire) or water/moisture.
- When disposing used/old batteries, wrap with insulation tape to shield the battery from electrical contact with metallic objects, which might ignite a fire or explosion.
- If the unit is plugged into the power adapter and the battery seems to be overheating, or if there is smoke or peculiar odors emanating from the unit, unplug immediately to avoid the possibility of fire.
- However, do not touch the cables if there is heat emanating from near the cables as melted or deformed cables could expose wiring and result in burns or electric shock.
- Do not use cloth or anything to wrap or cover the equipment while charging – this could cause the unit to overheat, melting the casing or causing fire.
- If the unit is accidentally immersed in water, or if moisture has seeped inside, or metal objects have dropped into the casing, immediately remove the battery to avoid fire or electric shock.
- Do not operate or store the battery in high-temperature environments - it will cause battery leakage and/or shorten the life of the battery .
- Do not use paint thinner, benzene or other organic solvents to clean the equipment – this may damage the exterior finish or touch screen, and may even ignite fire.



# MK550T User Manual



uSPECTRUM  
PC Software



uFLICKER  
PC Software

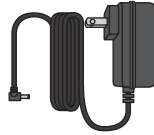
## Packing Contents



MK550T  
Spectroradiometer



Battery



Power Adaptor

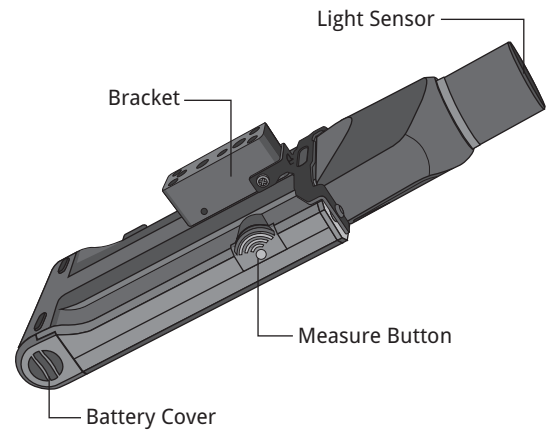
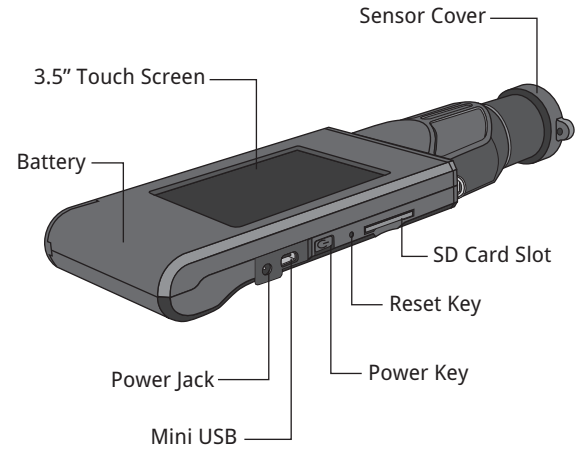


USB Cable



User Manual

## Product Description



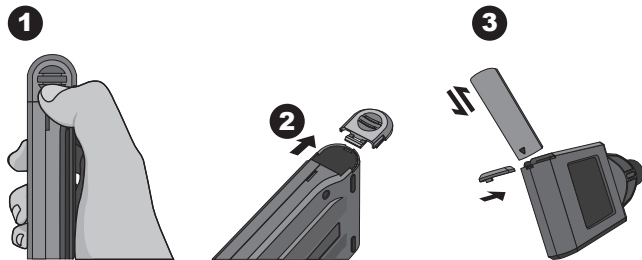
## Getting Started - 1

### ■ Battery installation :

Step1. Hold MK550T , then press the battery cover.

Step2. Press the battery cover down to remove it.

Step3. Install the battery after removing battery cover.

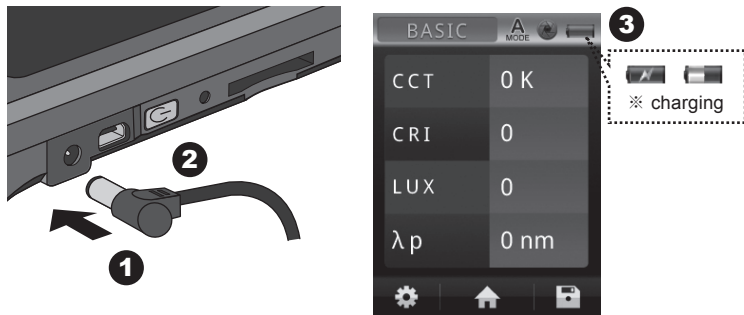


### ■ Battery charging :

1. Plug power charging cable into power jack to start charging.

2. Power Off Status: Users can check power key, it will light in red while charging and off after being fully charged.

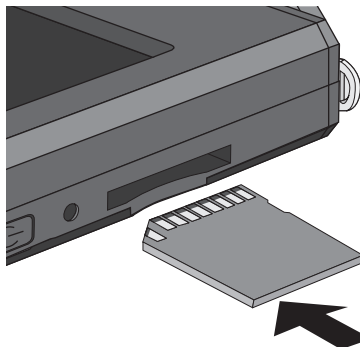
3. Power On Status: Users can check MK550T screen, it will appear a lightning symbol to indicate charging, and lightning symbol will disappear after being fully charged.



1. Please charge the battery for 6 hours at first time usage.
2. To avoid any interruption while measuring, please check battery status before use.
3. Please purchase a new battery if it gets low easily after being fully charged, which means battery life comes to an end.
4. Usage time will depends on battery life, MK550T battery can operate 5 hours after being fully charged.

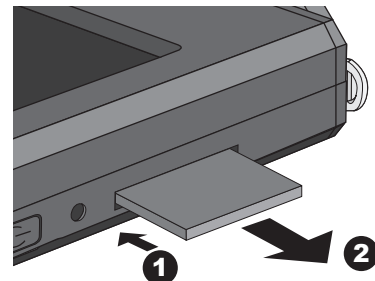
## Getting Started - 2

### ■ Installing the SD Card :

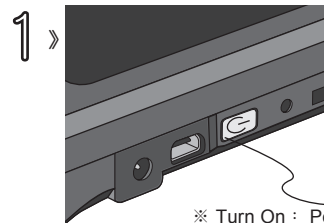


※ Insert the memory card according to the direction.

### ■ Remove the SD Card :



※ Press to remove the SD card



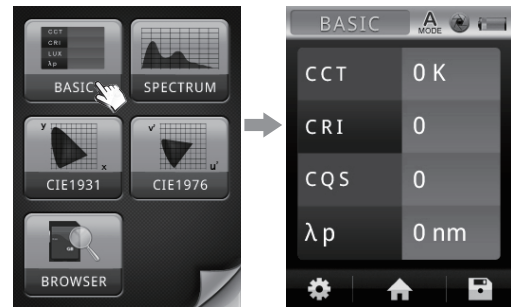
※ Turn On : Power key lights up in green light.  
Turn Off : The green light will turn off.

### ■ Power On / Off

Turn on the power :  
Press the power key for 1 second.

Turn off the power :  
Press the power key for 3 seconds.

2 » tap the "BASIC" item

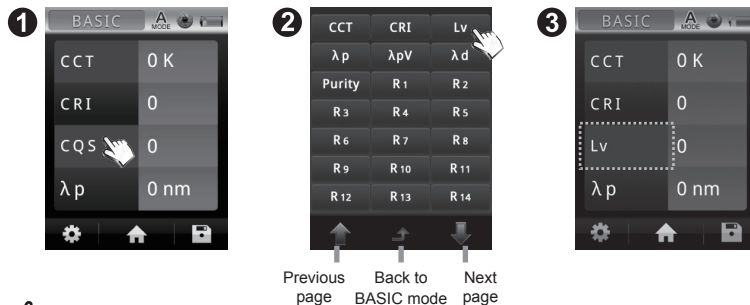


### 3 » customizing BASIC mode list

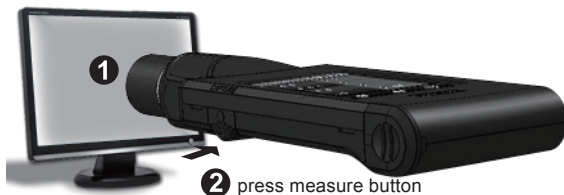
Step1. Tap the box of measuring unit

Step2. Select an item from the list

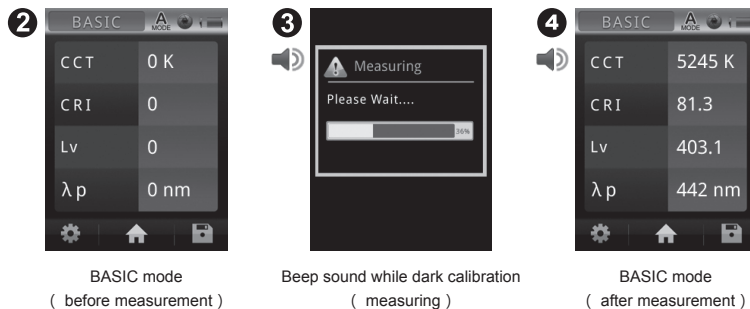
Step3. The new data item will be displayed



### 4 » taking a measurement



press measure button



Step1. Point sensor head at panel with suggest angle 0°.

Step2. Press the measure button

Step3. Beeps once while execute dark calibration automatically. The measurement progress is shown on the screen.

Step4. After twice beep sound, measured data will be displayed on the screen.

### 5 » save measured data



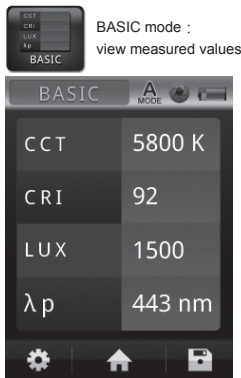
Step1. Tap the save icon in the lower right corner.

Step2. Tap "Yes"

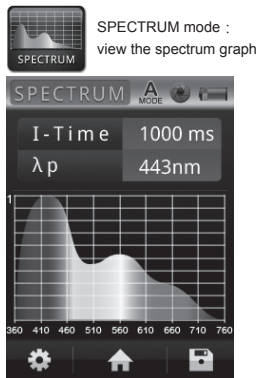
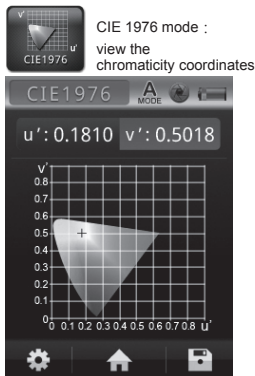
Step3. Measurement data is now saved in SD card. Tap "OK" and then return to the BASIC mode.

# Measurement Modes

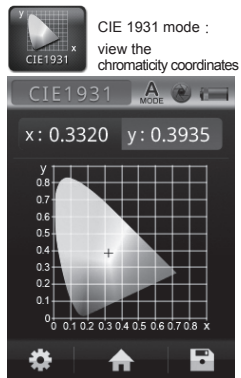
# Option Function Setting



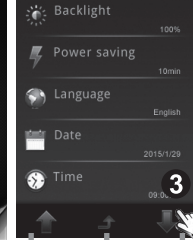
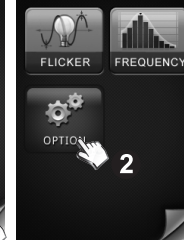
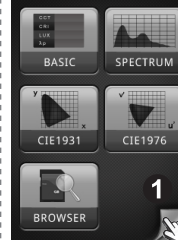
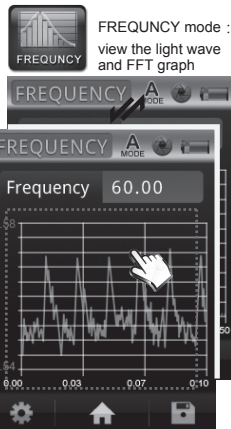
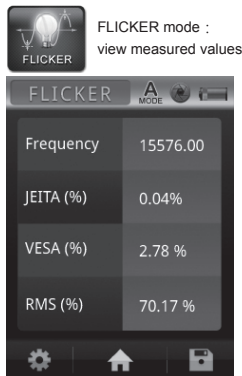
※can be customized units of measure



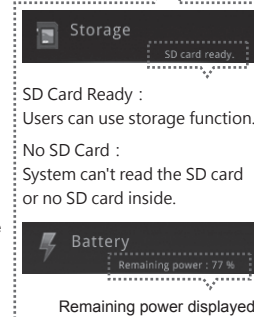
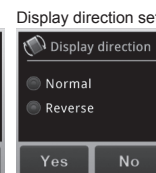
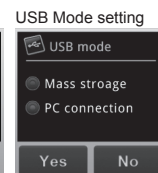
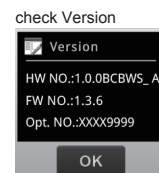
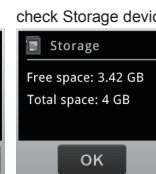
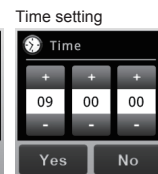
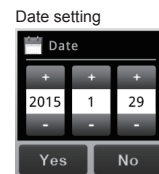
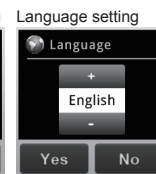
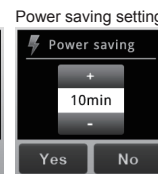
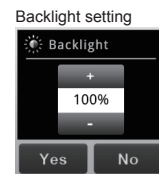
※can be customized units of measure



※touch the graph to switch



Previous page Back to main menu Next page



Remaining power displayed

+ / - : Adjust key  
Yes / No : End of the setting

▶ Measurement mode - BASIC / SPECTRUM / CIE1931 / CIE1976 / FLICKER / FREQUENCY

▶ Integration mode - Auto / Manual

▶ Capture function - One time / Continuous

▶ Battery capacity

▶ Measurement setting

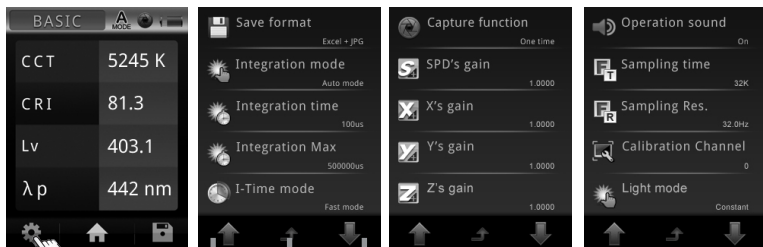
▶ Back to main menu

▶ Save data

- Please set up date and time before saving the files.
- Users can set up auto power-off time to saving battery power. Default auto power-off setting is 10 minutes.

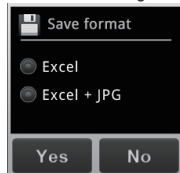
## Measurement Setting

## Continuous Measurement

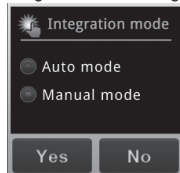


Previous page  
Back to measurement mode  
Next page

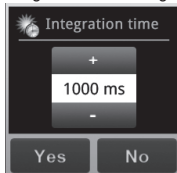
Save format setting



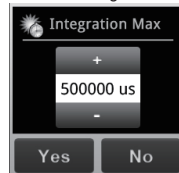
Integration mode setting



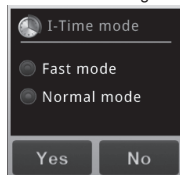
Integration time setting



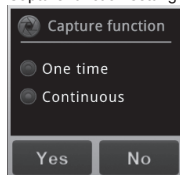
setting maximum integration time



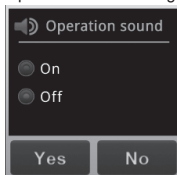
I-Time mode setting



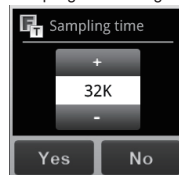
Capture function setting



Operation sound setting



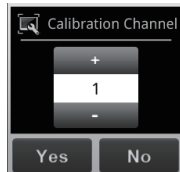
Sampling time setting



Sampling resolution setting



Calibration channel setting



Light mode setting

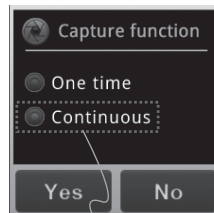


SPD'gain setting

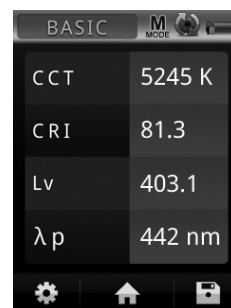


+ / - : Adjust key  
Yes / No : End of the setting  
± : plus and minus  
BS : backspace  
OK : save the setting

X'gain, Y'gain and Z'gain also use keyboard to set the values.



select Continuous

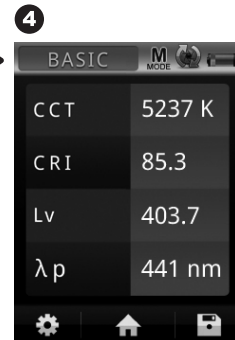


BASIC mode  
( start measurement )  
press measure button



※The capture symbol is rotating when MK550T is processing continuous measurement.

measurement interval depends on integration time



BASIC mode  
( after measurement )  
press the measure button again to see the measurement results.

Step1. Select "Continuous"

Step2. Point sensor head at panel with suggest angle 0°. Press the measure button.

Step3. Processing the continuous measurement

Step4. Press measure button again to stop continuous measurement.



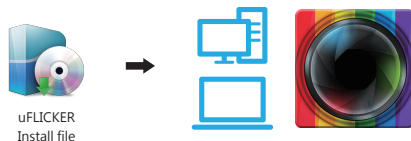
1. Continuous measurement has no beep sound after press capture key.
2. Users cannot save the measurement data while processing continuous measurement.
3. Adjust the integration time is only allowed in the manual mode.

## Connecting with uFLICKER

## Connecting with uSPECTRUM

### Install uFLICKER PC software

Install uFLICKER software on the PC. Then you can connect it with the system for USB control of measurement.



### Set USB PC connection mode

- 1 Select "OPTION".
- 2 Select "USB mode".
- 3 Select "PC connection" and press Yes.

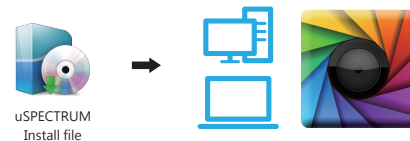


### Measure



### Install uSPECTRUM PC software

Install uSPECTRUM software on the PC. Then you can connect it with the system for USB control of measurement.



### Set USB PC connection mode

- 1 Select "OPTION".
- 2 Select "USB mode".
- 3 Select "PC connection" and press Yes.



### Measure

