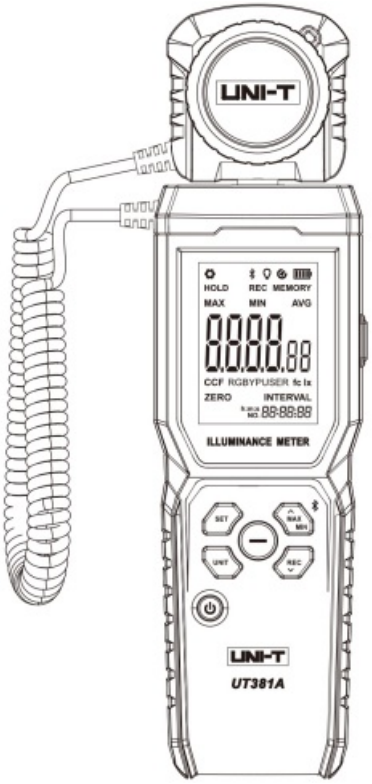
UNI-T UT381A Series Illuminance Meters User Manual



Contents

UT381A
Illuminance Meter
User Manual

1. Introduction

UT381A is a safe and reliable digit illuminance meter with wide range measurement, widely used in lighting applications, laboratory, office, commercial venue and others.

2. Features

- Wide range measurement, 0~max. 400000 lx.
- Probe of integrated, split and rotatable design, applicable for different site measurement.
- Data measurement record, max.99 sets of data.
- MAX/MIN/ AVG
- Bluetooth transmission and phone APP are supported. Record check and export through Phone APR

3. Configuration

1) Illuminance meter …….. 1
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4) Strap …….. 1
5) AAA Battery …….. 3
6) Protective cap …….. 1 (on the probe sensor)

Please contact agency if any components are missing or damaged.

4. Operation Safety

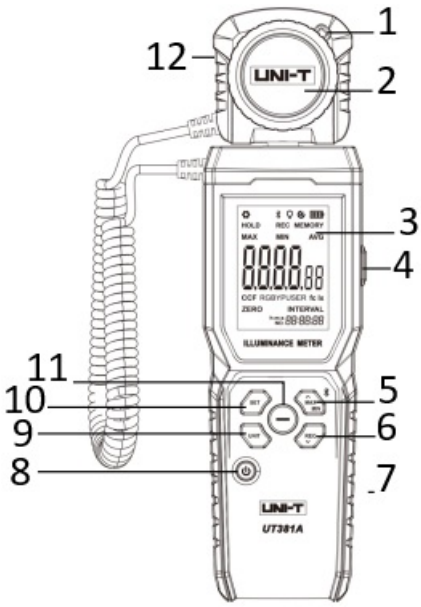
Please read the Operation Safety carefully and follow these steps.

⚠ “Warning” means possible dangerous situation and operation.
“Caution” means some elements of damage to product or testers.

- Install the strap into the hole of protective cap and probe to avoid the protective cap missing.
- Check the meter and accessories for any damage or abnormal phenomenon before using. Do not use the meter if the case is apparently damaged, LCD does not work or it is not working properly in any way.
- Do not open the meter randomly and change the internal circuit to avoid damage.
- Replace the battery when low battery appears on screen.
- Do not store or use the meter in high temperature, high humidity, flammable, explosive or strong electromagnetic environment.
- Use soft cloth and neutral detergent to clean the case. Do not use abrasives or solvent.
- Store the meter in dark place when you do not use it.
- Pay attention to the cleaning of sphere sensor on probe to avoid scratch.

5. Components and Buttons

A. Components



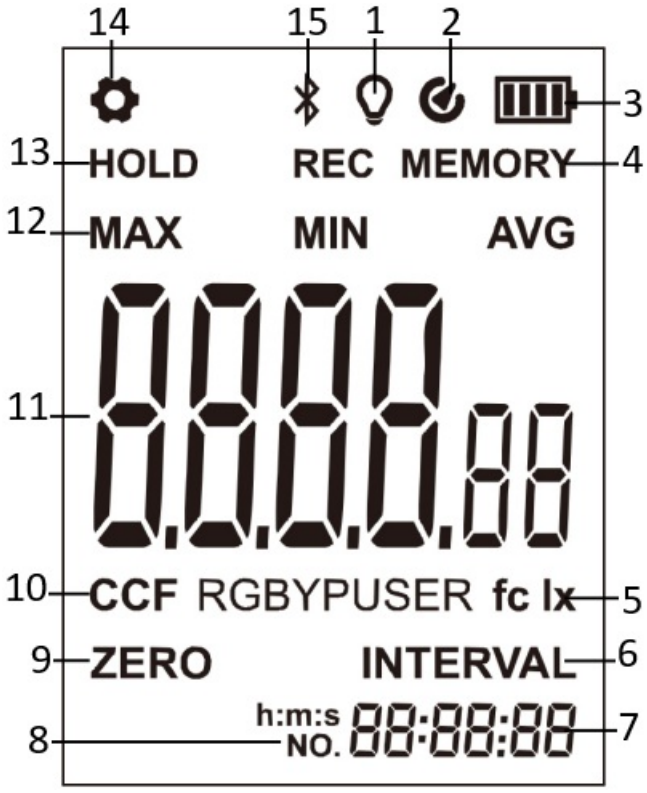
1. Sensor Protective Cap
2. Sphere Light Sensor (Under the Protective Cap)
3. LCD Screen
4. Switch Button
5. MAX/MIN /AVG/Up/ Bluetooth
6. Record/Down
7. Battery cover(Rear)
8. Power ON/OFF
9. Unit
10. Setting

11. Confirm
12. Probe (Rotatable and Split Measurement)

B. Buttons

Button	Short Press	Long Press
SET Setting	Enter/Exit menu	/
UNIT Unit	Unit switch (lx/fc)	/
Power ON/OFF	Turn on/off backlight	Turn on/off
Confirm	Data hold/Confirm	Enter/Exit record check
MAX MIN MAX/MIN	MAX /MIN/AVG/UP	Turn on/off Bluetooth
REC Record	Data record/Down	/
Switch Button	Digits switch (record check/time setting)	/

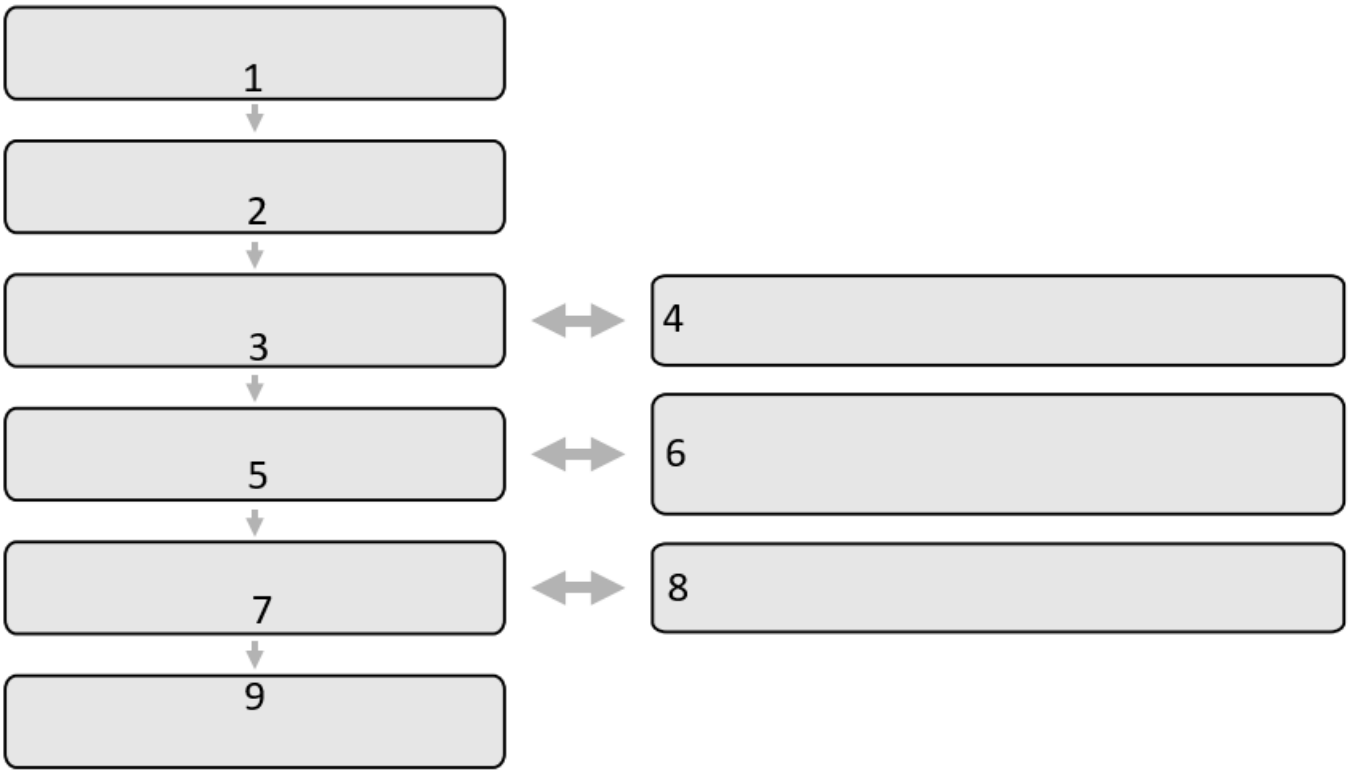
6. LCD Display



1. Backlight
2. Auto Power Off
3. Battery Capacity
4. Data Record
5. Unit
6. Record Interval
7. Time
8. Record NO.
9. Zero Calibration
10. Color Correction Coefficient
11. Reading
12. MAX/MIN/AVG
13. Data Hold
14. Setting
15. Bluetooth

7. Instruction

A. Basic Measurement Procedure



1. Install the Battery.
2. Power on and detach the sensor Protective cap.
3. Set parameter.
4. Default is the real-time measuring interface. Skip this step if not needed.
5. Place the probe and start to measure.
6. Probe is in a horizontal arrangement. Sensor is facing up or its window is perpendicular to the measured light source

7. Save the measuring value.
8. Record Max. 99 sets of data. Skip this step if not needed.
9. Power off and close the sensor Protective cap.

B. Buttons Operation

a. 

Setting

Basic Steps:
a) Short press button SET to enter/exit setting menu in the real-time measuring interface.
b) Short press button"MAX up "orREC down "to switch the setting options.
c) Short press button "confirm" to enter the option.
d) Short press button "MAX up" or"REC down" to change the setting.
e) Short press button "confirm" to finish.

Specific Settings are as Follows:

1, Record Setting: Short press button "confirm" when "REC" appears on the screen, and "REC/INTERVAL" on the screen starts flashing. Short or long press button "MAX up" or "REC down" to set the time interval of record (Max.59s), and short press button "confirm" to finish. "INTERVAL" in the lower right side of screen is flashing when exit the setting menu, which means the record interval setting, then short press button "REC", "REC" on the screen starts flashing and record automatically. Short press button "REC" to stop recording during the period, and press again to continue.

If set the time interval of record 0s, INTERVAL is not displayed in the real-time measuring interface. Here is the manual recording, press "REC" once, record data once.

Record Max. 99 sets of data and when it is not available, the screen briefly displays the 99th set of data ,then back to the "INTERVAL" flashing interface automatically. At this time, short press "REC", "FULL" displayed.

2, Record check: When the record function is off in the real-time measuring interface, long press button "confirm" to enter/exit record check, the single digit of recording NO. is flashing. Short or long press button "MAX up" or "REC down" to check data 1st ~99th back and forth, at this time, short press "switch button" to switch the flashing digits of NO. to check the data quickly.

Notes: Press button "UP/DOWN" to check the 01-99set of data, it cannot be cyclically switched when long press the button. Out of the range of 00-99set of data, the flashing digit is cyclically switched between 0-9. For example, if default is the single digit flashing: press DOWN from 00, cyclically showed 00-09-08-07 ….. 00, press UP from 99, cyclically showed 99-90-91-92 …. 99.

3, Factory Reset: SFr is displayed on the screen, short press button "confirm"and character n starts flashing, then short press button "MAX up" or " REC down" to switch to character Y flashing, finally short press button "confirm" to finish.

4, Data Record Deletion: dEL is displayed on the screen, short press button "confirm" and character n starts flashing, then short press button "MAX up" or " REC down" to switch to character Y flashing, finally short press button "confirm" to delete data.

5, Zero Calibration: ZERO is displayed in the lower left side of the screen, close the sensor Protective cap first and short press button "confirm"and character n starts flashing, then short press button "MAX up" or " REC down" to switch to character Y flashing, finally short press button "confirm"to finish.

Remark: Sensor protective cap must be closed before the zero calibration, or it cannot be switched to character Y. Please close the sensor protective cap and be zero calibration first before measurement when in Low-level light (below 10 |x)

6, Time Setting: Time is displayed on the lower right side of the screen, short press button “confirm” first then short press “switch button” to switch the digit flashing of hour,minutes and seconds. Short or long press button “MAX up” or “REC down” then short press button “confirm” to finish. Time is also automatically updated with the Bluetooth connection.

7, Auto Power Off: is displayed on the top right side of the screen, short press button “confirm” first then short press button “MAX up” or “REC down” to switch to ON/OFF, finally short press button “confirm” to finish. (Auto power off if no operation in 10 minutes).

8, Color Correction Coefficient CCF: CCF and color correction coefficient type is displayed on the screen, short press button “confirm” first then short press button “MAX up” or “REC down” to switch between color R (red)/G (green)/B (blue)/Y (yellow)/ (purple)/USER and coefficient, finally short press button “confirm” to exit the setting interface and back to the real-time measuring interface with chosen CCF color light value displayed. USER option is the customized definition of color coefficient, short press button “confirm” to enter the function, then short press button “MAX up” or “REC down” to customize coefficient. Short press “switch button” to switch digits, finally short press button “confirm “to finish.

b. Other Buttons

1. 

Unit: Switch between metric unit lx and imperial unit fc.

2. 

Record:

(1) manual record: Press button once and record once in the real-time measuring interface (without record interval setting). Automatic record: press button to record data automatically after setting record interval. Please check the”Record Setting” for details.

(2) Scroll down when set the menu and check the data record.

3. 

MAX/MIN:

(1) short press button to switch the current MAX, MIN, AVG and real-time value. Icon MAX/MIN/AVG will be flashed when long press button 1 second in the MAX/MIN/ AVG interface, then restarts to measure MAX/MIN/AVG value.

(2) Long press button to turn on/off Bluetooth in the real-time measuring interface.

(3) Scroll up when set the menu and check the data record.

Remark: No APP connection but with Bluetooth on, there is no setting action, no MAX/MIN and record check.

4.  Confirm: Short press button to hold/release the current data in the measuring interface. Long press button to enter/exit the record check. Short press button to confirm the options in the setting interface.

8. Specification

Specification		
Range	0~400000 lx	
Resolution	0~99.99 lx (99.99 fc)	0.01lx (0.01 fc)
	100~999.9 lx (999.9 fc)	0.1 lx (0.1 fc)
	1000~400000 lx (37160 fc)	1 lx (1 fc)
Accuracy	±3% calibration as per standard light source when in 2856K. ±6% the other visual light source.	
Unit Switch	lx, fc, 1fc=10.764 lx	
Auto Range Switch	√	
MAX/MIN/AVG	√	
Data hold	√	
Color Correction Coefficient (CCF)	√	
Backlight	√	
Bluetooth APP	√	
Data Record	99 sets	
Record Interval	1~59 seconds	
Measuring Methods of Probe	Integrated(rotatable), split design	
Real-time	Time is automatically updated with manual setting or phone APP connection.	
Over-range Indication	OL display	
Low Battery Indication	Auto power off when low battery icon flashes for 10s	
Auto Power Off	Auto power off if no operation in 10 minutes. (cancelable)	
Battery	AAA*3	
Battery Life	Over 100 hours (Alkaline batteries, Bluetooth and Backlight is off.)	
Working Temperature and Humidity	-10°C~50°C, <90%RH (non-condensing)	
Storage Temperature and Humidity	-20°C~70°C, <80%RH (non-condensing)	
Size	235*64.5*40 mm	
Weight	About 257g, not battery included	

* Indoor
* EMC Standard: EN IEC 61326-1:2021

9. Bluetooth APP Installation

a. Instruction
Please install iENV first.
b. APP Installation
Please search “iENV” in APP Store for IOS system.
Please search “iENV2.0″in Play Store for Android system.
c. APP Bluetooth Connection
Power on and enter the real-time measuring interface, long press button “MAX” of meter and the Bluetooth icon starts flashing. Open the Bluetooth function and “iENV” APP of phone, connecting the meter when phone appears UT381A. The Bluetooth icon will stop flashing when two machines successfully connected.

Attention: Android 10 or later needs opening the location function at the same time.

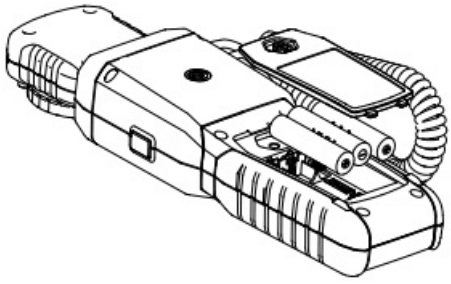
10. Maintenance

a. General

a) Do not scratch or pollute the white sphere sensor of probe. Please close the Protective cap when you do not use it.
b) Replace battery when low battery appears on the screen.
c) Remove battery when the meter not used for a long time.
d) Do not open the case of meter
e) Maintenance and service must be implemented by qualified professionals or specified departments.

b. Battery Replacement

a) Battery of 1.5 V *3 (AAA), see the picture for details.
b) The panel is facing up, release the quick release screw and open the battery cover to install the new battery.
c) Close the battery cover and tighten the quick release screw.
d) Please use the battery of same type.



* No other notice if any changes.
* Due to different batches of product, physical picture may be associated with some small differences in kind, whichever is requested. Experimental data provided in the page is from internal laboratory of UNI-T, but it should not be a reference for customer to place orders. Any questions, please contact the customer service, thanks!

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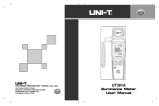
Documents / Resources

	UNI-T UT381A Series Illuminance Meters [pdf] User Manual UT381A Series Light Meters, UT381A, Series Light Meters, Light Meters, Meters