

SEKONIC

Illuminometer

i-346


Operating Manual


■ Table of Contents

Safety Precautions	1
1. Parts Designations	3
2. Explanation of LCD Screen Information	4
3. Before Using	5
3-1. Inserting the Battery	5
3-2. Power ON/OFF	5
3-3. Checking the Battery Capacity	6
3-4. Replacing Battery during Measurement	6
3-5. Automatic Power OFF Function	7
4. Basic Operation	8
4-1. Basic Operation Flowchart and Setting the Measuring Mode	8
5. Measurement	9
5-1. Continuous Measuring Mode	9
5-2. Single Measuring Mode	9
5-3. Timer Measuring Mode	10
6. Other Setting	11
7. Specifications	12

■ Safety Precautions


Before using this product, please read this "Safety Precautions" for proper operation.

 **Warning** The warning symbol indicates the possibility of death of serious injury if the product is not used properly.


 **Caution** The caution symbol indicates the possibility of minor to moderate personal injury or product damage if the product is not used properly.

Note: The note symbol indicates cautions or restrictions when using the product. Please read all notes to avoid errors in operation.

Reference: The reference symbol indicates additional information about the controls or related functions. Reading these is recommended.

 **Warning**

<ul style="list-style-type: none">● Do not place batteries in open flame, attempt to short them, disassemble them, apply heat to them, or recharge them (except rechargeable batteries). They may burst and cause fire, serious injury, or damage to the environment.

 **Caution**

<ul style="list-style-type: none">● Do not handle this product with wet hands, or leave it in the rain or in a location where it may be splashed with water or come into contact with moisture. This may result in damage to the product.● Do not attempt to disassemble the product for modification or parts replacement.
--

■ Safety Precautions

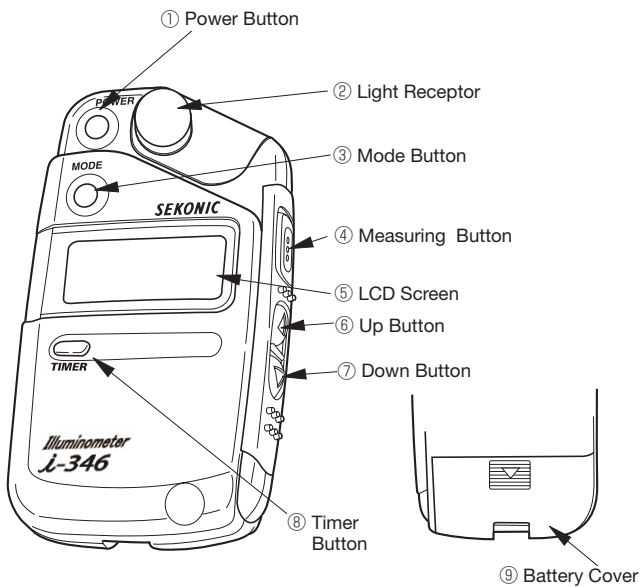
Note:

- Be sure not to drop the meter or subject it to sudden impact, as the meter will be damaged,
- Do not store the meter in areas of high temperature or high humidity, as the meter will be damaged.
- Be careful of condensation caused by sudden changes in temperature. It will cause damage or malfunction of the meter.
- If the temperature goes below -10°C , the response of the liquid crystal display will slow down greatly and the display will become difficult to read. Between $0\sim 10^{\circ}\text{C}$, the liquid crystal display response will slow down somewhat but the meter will not be harmed. Also, if the temperature exceeds 50°C , the liquid crystal display will darken and become difficult to read, but when it return to room temperature it will return to its normal condition.
- If the meter is left in direct sunlight or near a heater, the temperature of unit's surface will rise and may result in damage. Please be careful when using the meter in these types of locations.
- If the meter will not be used for an extended period of time, it is recommended to remove the batteries to avoid possible damage caused by battery leaking.

Maintenance Notes

- Be careful not to allow the light receptor to become dusty, dirty or scratched as this may affect the accuracy of the reading.
- Do not use organic solvents such as benzene or paint thinner to clean the surface of the light receptor.

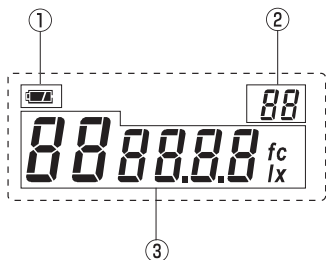
1. Parts Designations



2. Explanation of LCD Screen Information




Display of the i-346

*This diagram is for explanation purpose.



① Battery Capacity Indicator (See page 6)

② Measuring Mode Display

-  Displayed at the continuous measuring mode. (See page 9)
-  Displayed at the single measuring mode. (See page 9)
-  Displayed at the custom setting mode. (See page 11)

③ Illumination Value/ Timer Display

Measured illuminance is displayed.

Display example



Set timer second is displayed. (See page 10)

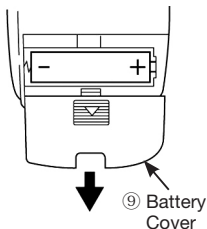
Display example



3. Before Using

3-1. Inserting the Battery

- 1) Requires type-AA 1.5-volt battery.
- 2) Slide the battery cover in the direction of the arrow to remove. Slide down Battery Cover ⑨ in the direction of the arrow to move.
- 3) Insert the battery observing the polarity with the +, - marks in the battery compartment.
- 4) Align Battery Cover ⑨ with main unit and slide shut. Make sure that the cover is properly in place and closed.



Caution

- Do not place batteries in open flame, attempt to short them, disassemble them, apply heat to them, or recharge them (except rechargeable batteries). They may burst and cause fires, serious injury, or damage to the environment.

Note:

- Please insert the battery minus "-" side first. When removing the battery, remove it plus "+" side first.
- If the meter will not be used for an extended period of time, it is recommended to remove the battery to avoid possible damage caused by battery leaking.

3-2. Power ON/OFF

Power ON : Press the Power Button ① .

Power OFF : Press and hold the Power Button ① for 1 second or longer and the meter will turn off.

Note:

- A three second pause between power ON and OFF is recommended to avoid damage to the meter.

Reference:

- If the LCD does not light, check that the battery capacity is sufficient, and check that the battery positive and negative terminals are not reversed.

3. Before Using

3-3 Checking the Battery Capacity

When the Power Button ① is ON, the battery power indicator on the LCD Screen ⑤ is displayed.



(Displayed) Sufficient battery power remaining.



(Displayed) Low battery power remaining. Have a spare battery ready.



(Blinking) When the indicator blinks, replace the battery immediately.

Reference:

- The LCD screen will appear and immediately switch off, when the battery power is very low. The battery should be replaced immediately. Having a spare battery is recommended.
- A fresh battery is capable of continuous readings of;
Manganese 10 hours
Alkaline 20 hours (based on Sekonic measuring.)

3-4 Replacing Battery during Measurement

- 1) Always turn the power OFF before replacing battery. If battery is removed with the power ON, the setting can no longer be recalled.
- 2) If an unexpected display, i.e. settings other than selected, appears on the LCD after battery replacement or while operating the meter, or the meter does not respond when a button is pressed, remove the battery, wait at least 10 seconds, and then re-install them.

3-5 Automatic Power OFF Function

To save battery capacity, the meter will be automatically turned off about 4 minutes after the last button is pressed.

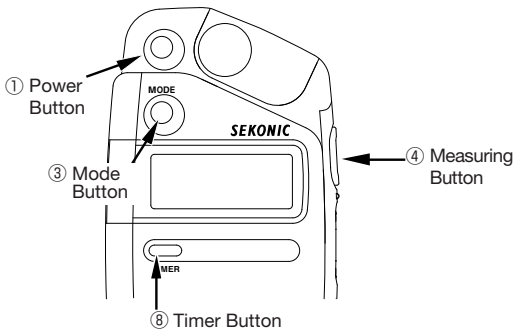
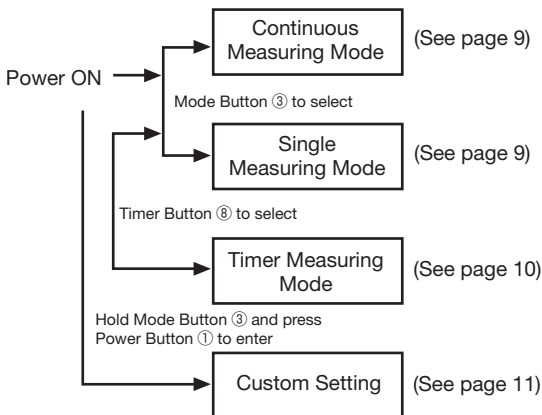
Reference:

- Even if automatic power off function works or the power is turned off by pressing the Power Button ①, the setting of timer is memorized.
- Automatic power OFF function is not available while continuous measuring mode.
- If the Power Button ① is pressed and held when the power is off, the meter will turn ON for about 1 minute, and then turn OFF automatically.
(Battery capacity can be saved even if the Power button is pressed during transport.)

4. Basic Operation

4-1. Basic Operation Flowchart and Setting the Measuring Mode

- 1) To enter the Custom Setting to select either Lux or FC, hold the Mode Button ③ and press the Power Button ①.
- 2) Select the measurement mode by pressing the Mode Button ③ or Timer Button ⑧. Measuring modes are switched according to the chart below.



5-1. Continuous Measuring Mode

Press the Measuring Button ④, and the measured value is displayed according to the Illuminance change.

- 1) Press the Mode Button ③ and enter the Continuous Measuring Mode.
("C" is displayed at the upper right corner of the LCD.)
- 2) Press the Measuring Button ④ and read the measured value after confirming that it becomes stable. Press the Measuring Button ④ again to hold the illuminance value at the time.

Note:

- Try to minimize the influence of the person taking the measurement or other to the light receptor.
- Collimate the light receptor against the light source when taking measurements.
- Auto power off function doesn't work in continuous measuring mode.
- It is not possible to enter the timer measuring mode even if the Timer Button ⑧ is pressed while measurement in continuous measuring mode.

Reference:

- It is possible to take a measurement without the influence of surroundings if the person taking measurements move away and using the timer measuring function. (See Page 10.)
- When brightness (or darkness) exceeds the measuring range of the product, "OVER" (or "UNDER") will blink to indicate that measuring is not possible.

5-2. Single Measuring Mode

Measured value is displayed when the Measuring Button is pressed.

- 1) Press the Mode Button ③ and enter the Single Measuring Mode.
("S" is displayed in the upper right corner of the LCD.)
- 2) Press the Measuring Button ④ and display the illuminance at the time.

Reference:

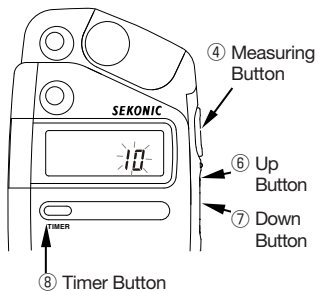
- When brightness (or darkness) exceeds the measuring range of the product, "OVER" (or "UNDER") will blink to indicate that measuring is not possible.

5. Measurement

5-3. Timer Measuring Mode

Measurement (single measurement) is made after counting the set timer seconds in advance.

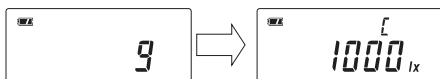
- 1) Press the Timer Button ⑧, and the set timer seconds in advance appears at the upper right corner of the LCD to enter the timer measuring mode.
- 2) Press the Up Button ⑥ or Down Button ⑦ to set the timer seconds used.



Available setting range: 1 to 60 seconds.

- 3) Press the Measuring Button ④ to start counting. Measurement is made after counting the set timer seconds. (Single measurement).

Display example



Reference:

- The setting range for the timer is from 1 to 10 seconds (in 1 second step) and from 10 to 60 seconds (in 10 seconds step).
- The set timer seconds is changed continuously by keeping pressing the Up Button ⑥ or Down Button ⑦.

6-1. Custom Setting

Unit of illuminance (Lux or Foot-candle) can be switched by custom setting.

- 1) To enter the custom setting, the meter must first be turned off. Press Mode Button ③ and turn the power on. "CS" is displayed at the upper right corner of the LCD.
- 2) Lux ("lx") or Foot-candle ("fc") will change each time the Mode Button ③ is pressed. Turn off the power after selecting the desired unit.

Display example



7. Specifications

Type	<ul style="list-style-type: none">● Illuminometer
Light receptor element	<ul style="list-style-type: none">● Silicon photo diode
Measurement cycle	<ul style="list-style-type: none">● 0.5 seconds
Measurement range	<ul style="list-style-type: none">● 2.50 lx to 200,000 lx● 0.23 fc to 18,600 fc
Display	<ul style="list-style-type: none">● Unit: Lux (lx), Foot-candle (fc)● Significant digits: 3 digits
Linearity	<ul style="list-style-type: none">● +/-5% (23°C +/- 2°C)
Other functions	<ul style="list-style-type: none">● Out of measurement range: UNDER or OVER warning display● Battery power indicator display● Automatic power OFF function (About 4 minutes after last operation)
Battery use	<ul style="list-style-type: none">● AA battery 1.5V x 1 (Alkaline, manganese, lithium, NiMH)
Operating temperature	<ul style="list-style-type: none">● 0°C ~ 40°C
Storage temperature	<ul style="list-style-type: none">● -20°C ~ 60°C
Dimensions	<ul style="list-style-type: none">● Approx. 63 (width) x110 (height) x22 (depth) mm
Weight	<ul style="list-style-type: none">● Approx. 95 g (with battery)
Included accessories	<ul style="list-style-type: none">● Soft case

Features and specifications are subject to change without notice.

SEKONIC CORPORATION

7-24-14, Oizumi-Gakuen-cho, Nerima-ku Tokyo 178-8686 JAPAN
TEL +81-3-3978-2335 FAX +81-3-3978-5229
<http://www.sekonic.com>

JJ1097561