

# ***SEKONIC***

EXPOSURE METER

***FLASHMATE L-308BII***

**Operating Instructions**

## Operating instructions

---

### SAFETY PRECAUTIONS

This manual uses the following safety labels for  **WARNING** and  **CAUTION** that you must follow.

#### **WARNING**

Indicates hazards or unsafe practices that can result in severe personal injury or death.

#### **CAUTION**

Indicates hazards or unsafe practices that can result in personal injury or damage to your L-308BII exposure meter.

#### **CAUTION**

Indicates an operation note or limitation you must use. Please read the notes to avoid an incorrect L-308BII operation.

#### **NOTE(S)**

Provides the reference information and related functions that are useful for your L-308BII operations.

#### **WARNING**

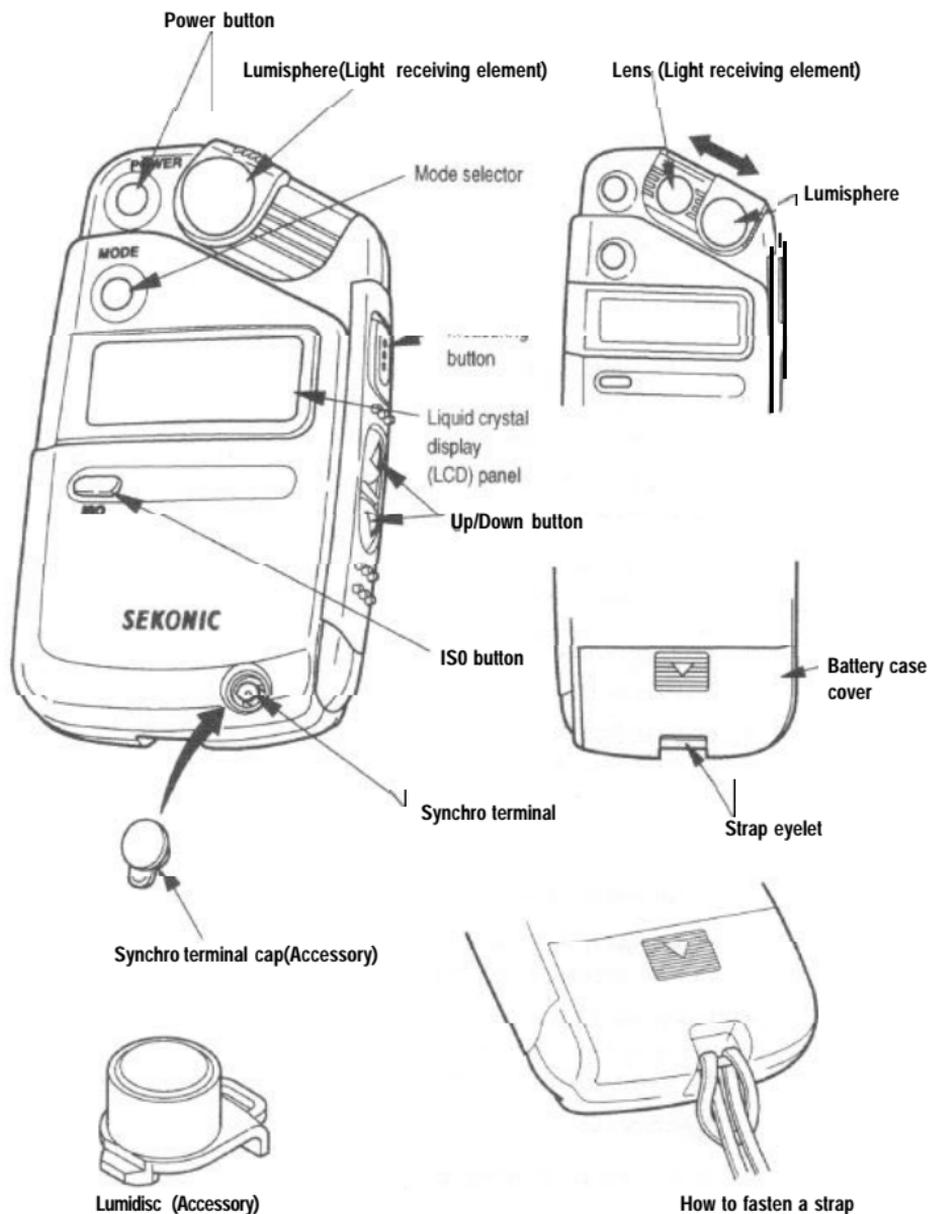
- In the interest of safety, when your L-308B11 is not in use please ensure that the strap, lumidisc, syncro terminal cap and optional syncro cord are stored out of the reach of young children. If not, it could prove fatal.
- Never drop dry cells in a fire. Also, do not jumper, disassemble, or overheat the dry cells. If done, the cells may explode and you may be injured or the ambient may be contaminated.

#### **CAUTION**

- Never plug in or remove the synchro cord with your wet hand or at a wet place; or, the high voltage of the flash may leak, causing you an electrical shock.

SAFETY PRECAUTIONS .....	i
CONTENTS .....	ii
1. Parts Designations .....	
2. Display .....	2
2.1 LCD panel .....	2
3. Mode Selection .....	3
3.1 Switching between incident light metering and reflected light metering .....	3
3.2 How to fit the Lumidisc .....	3
3.3 How to remove the Lumidisc .....	3
4. Light-receiving Method .....	4
4.1 Incident light metering .....	4
4.2 Reflected light metering .....	4
5. Preparation for Measurement .....	5
5.1 Inserting the battery .....	5
5.2 Battery check .....	5
5.3 Auto Power-off .....	5
5.4 Measurement mode setup .....	5
5.5 Setting up film speed (ISO) .....	6
5.6 Setting up shutter speed (T) .....	6
5.7 Setting up number of frames per second (f/s) .....	6
6. Ambient Light Measurement .....	7
6.1 Mode Selection .....	7
6.2 Measurement of EV (Exposure Value) .....	7
7. Flash Measurement with cord .....	8
7.1 Setting up of the flash measurement with cord and making measurement in this mode .....	8
8. Flash Light Wireless Measurement .....	9
8.1 Flash light wireless measurement .....	9
9. How to use the Lumidisc .....	10
9.1 How to measure light contrast .....	10
9.2 Using the L-308BII as an illuminance meter .....	10
10. Specifications .....	11
11. Instructions and Maintenance Notes. ....	12

# 1. Parts Designations



## 2. Display

### 2.1 LCD panel

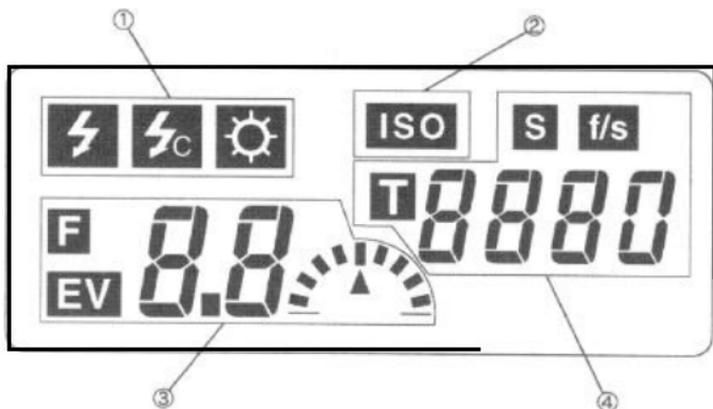
#### ① Mode selection

-  Ambient light measurement
-  Flash measurement without cord
-  Flash measurement with cord

#### ② **ISO** ISO film speed display. See Page 6.

Press the ISO button, and **ISO** is displayed.

The mode symbols are switched in the following sequence:  →  →  → 



#### ③ Aperture/EV/Battery/Others

"b.c" Battery capacity  See Page 5.

**F** Aperture value (Indicated by a number and dots )

**EV** Exposure value (Indicated by a number and dots ) See Page 7.

E.u Under exposure

E.o Over exposure

#### ④ Shutter speed/film frame count/film speed display. See Page 6.

**T** Shutter speed

**S** Shutter speed in seconds

**f/s** Number of frames per second

Film speed is displayed if the ISO button is pressed.

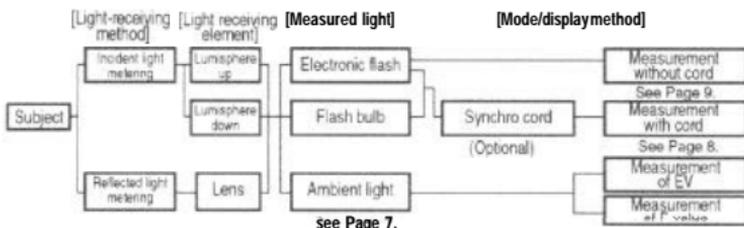
One full stop is shown by 9 bars.

A single bar indicates one tenth stop.



### 3. Mode Selection

Your L-308BII can measure both incident and reflected light in both ambient light and flash light (electronic flash or flash bulb) modes. You can switch the modes as follows:



#### 3.1 Switching between incident light metering and reflected light metering

Slide the lumisphere and stop it at the clicking position of "a" or "b" (See Fig.1 and 2).

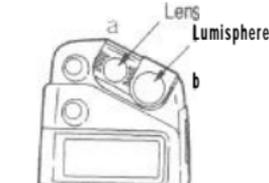


Fig. 1 Incident light metering

Fig. 2 Reflected light metering

Fig. 3

Caution: Slide the lumisphere by pushing the part as shown in Fig. 3.

#### 3.2 How to fit the Lumidisc

- 1 Slide the Lumisphere to the right for reflected light metering. (See Fig. 5)
- 2 Insert the part (B) of the lumidisc aslant in the groove (A) of L-308BII. (See Fig. 6). Then depress the strap eyelet (C) toward the L-308BII body. (See Fig. 7)

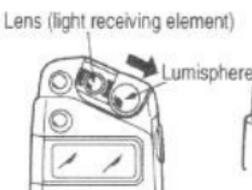
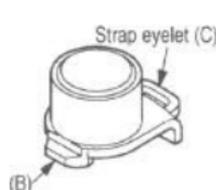


Fig.4 Lumidisc

Fig. 5

Fig. 6

Fig. 7

#### 3.3 How to remove the Lumidisc

Take reverse procedures described above to remove the Lumidisc.

Caution: You may break the lumidisc if you do not take care when fitting and removing,

## 4. Light-receiving Method

### 4.1 Incident light metering

Hold L-308BII close to the subject, point the lumisphere towards the camera, and measure the incident light intensity, (Fig. 8)



Fig. 8

Caution:

Do not fit the Lumidisc next to the Lumisphere when you take incident light metering. Otherwise, the Lumidisc will affect the exposure in proper reading.

### 4.2 Reflected light metering

You can meter the reflected light of the object by pointing the L-308BII's lens at the object from the camera's position. (Fig. 9).

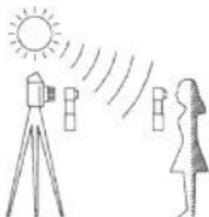


Fig. 9

Caution:

If you measure from the camera position, the entire object is measured in average. If you want to measure only a part of the object, do it at as close a position as possible to the part measured. Take care so that the part measured may not be shadowed by the meter, etc.

# 5. Preparation for Measurement

## 5.1 Inserting the battery

Use a 1.5-volt, type-AA battery.

Use a manganese dry cell (R6P) or an alkaline one (LR6).

Never use any of other types.

- 1 To remove the battery case cover simply slide it in the direction of the arrow.
- 2 Insert the battery in the battery case aligning the polarities as indicated on the inside of the case. (Fig. 10)
- 3 Slide the battery case cover along the unit to close it. Check that the cover is securely closed.

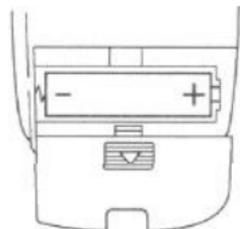


Fig. 10

## 5.2 Battery check

Depress the POWER button, and the LCD panel ("b.c" message

and bar marking  displays the current battery level.

The battery level is indicated by a number of bars for one second. Then, the LCD panel automatically switches to the normal measurement mode.

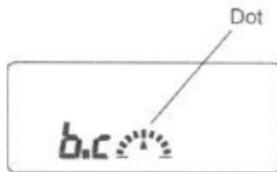


Fig. 11

### CAUTION

- If the LCD message is abnormal or if nothing occurs when you press an operation button, remove the battery. Wait at least 10 seconds. Then insert the battery (in the correct polarity) and try again.

### NOTES

- You can sustain battery level display by holding down the Power button.
- When the battery level is indicated by only two or three dots, prepare a new battery. When the battery capacity drops below the limit, the "b.c" display blinks and then disappears.

## 5.3 Auto Power-off

To save battery capacity, the L-308BII is automatically turned off (and all readings are erased) 4 minutes after your last operation.

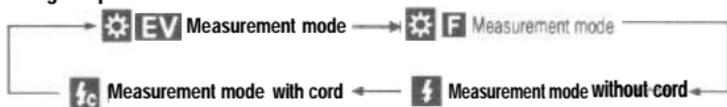
### NOTE

- If the Auto-OFF function works, the mode and values you have already set up are saved in memory (but, the values you have measured are not) and are displayed when you turn on the power button again.

## 5.4 Measurement mode setup

Press the mode selection button to select the desired measurement mode.

Mode switching sequence:



NOTE

- If you press the mode selector in the ambient light measurement mode while holding down the ISO button, the display is toggled between EV and F values (Fig. 12 and 13). If it is toggled after measurement, the measurement data is automatically recalculated and redisplayed.



Fig. 12



Fig. 13

## 5.5 Setting up film speed (ISO)

- ① Press the ISO button, and a film speed value is displayed (Fig. 14).
- ② Set up the film speed by pressing the Up or Down button while holding down the ISO button. If you press the Up button, the speed increases; if you press the Down button it decreases. If you hold down the Up/Down button for more than one second, the speed changes continuously.

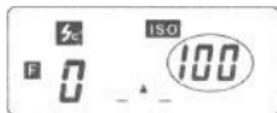


Fig. 14

NOTE

- You can set up the film speed either before or after measurement.

## 5.6 Setting up shutter speed (T)

Set up the shutter speed used by pressing the Up or Down button (Fig. 15). If you press the Up button, the speed increases; if you press the Down button it decreases. If you hold down the Up/Down button for more than one second, the speed changes *continuously*.



Fig. 15

NOTES

- In the case of ambient light, you can set up the shutter speed in a range of 60 and 1/8000 sec.
- In the case of flash light, you can set up the synchronizing shutter speed in a range of 1 and 1/500 sec. After 1/500 sec, 1/75 1/80 1/90, and 1/100 sec. are displayed in order. You can select any one you want.

## 5.7 Setting up number of frames per second (f/s)

The film frame counts are displayed after 1/8000 set of shutter speed in the ambient light mode. Choose any count you want (Fig. 16).

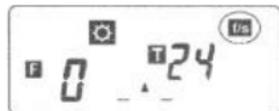


Fig. 16

NOTES

- The f/s count options are: 8, 12, 16, 18, 24, 25, 30, 32, 64, and 128. These values represent those used with the shutter angle 180 degrees.
- This setting up is used for a motion picture camera only.

# 6. Ambient Light Measurement

## 6.1 Mode Selection

- 1 Press the mode selector to enter the ambient light measurement mode.
- 2 Set up the film and shutter speeds.
- 3 Press the measuring button, and the aperture value is displayed (Fig. 17).



Fig. 17

### NOTES

- Fig. 17 shows the shutter speed 1/125, and aperture F2.0+3/10 measured.
- In the ambient light measurement mode, light measurement is continuously conducted while the measuring button is kept depressed.
- If you changed the film speed (ISO) or the shutter speed (T) value after measurement, the measurement value is automatically recalculated and displayed again.
- E.u (underexposure error) or E.o (overexposure error) is displayed if the metering range is exceeded. If E.u was displayed, reduce the shutter speed; if E.o was displayed, increase it. (Fig. 18) (Fig. 19)

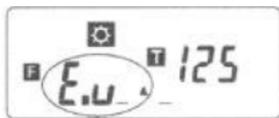


Fig. 18



Fig. 19

## 6.2 Measurement of EV (Exposure Value)

Press the mode selector to enter the EV measurement mode. Press the measuring button, and the EV value is displayed (Fig. 20).



Fig. 20

### NOTE

- "EV" represents a specific amount of light, and is a combination of a shutter speed and an aperture value.

# 7. Flash Measurement with cord

## 7.1 Setting up of the flash measurement with cord and making measurement in this mode

- 1 Press the mode selector to enter this mode (Fig. 21).
- 2 Set up the film and shutter speeds.



Fig. 21

Caution:

- Set up the shutter speed which has been already set up on your camera.
- If you measure the flash bulb light, make sure that the shutter speed set is within the synchronizing range.

- 3 Connect the synchro cord to the L-308BII's synchro terminal (Fig. 22).



Fig. 22

Caution:

- Some of the flash types may fire at the time you connect the synchro cord to the synchro terminal or you operate the L-308BII's power button.

- 4 Press the measuring button, and the flash fires and the aperture value is displayed (Fig. 23).



Fig. 23

CAUTION

- If the shutter speed is changed after measurement, the measurement is lost and the aperture value is cleared to zero (0).

NOTES

- If the flash does not fire, use flash measurement without cord.
- If the film speed is changed after measurement, the measurement data is automatically recalculated and redisplayed.
- When the measuring range is exceeded, "E.u" (underexposure) or "E.o" (overexposure) appears, change the shutter speed or the light source.

\* Synchro cord (optional):

A 5-meter-long synchro cord with three plugs is available for synchronous metering between your L-308BII, the camera and the flash unit. It is very convenient as no cord replacement is required during shooting pictures. The L-308BII is also equipped with a connector terminal lock for securing cable connection.



To flash unit      To camera

# 8. Flash Light Wireless Measurement

(Measurement without using the synchro cord)

## 8.1 Flash light wireless measurement

- 1 Press the mode selector to enter this mode (Fig. 24).
- 2 Set up the film and shutter speeds.

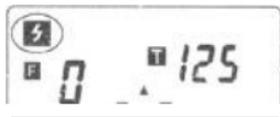


Fig. 24

Caution: Set up the shutter speed which has been already set up on your camera.

- 3 Press the measuring button. After releasing it, the lightning bolt icon blinks showing that your L-308BII is in a stand-by mode (Fig.25); this holds for about 90 seconds.
- 4 If the flash is fired, L-308BII receives the flash light and displays an aperture value (Fig.26). After firing, the stand-by mode holds for another 90 seconds. You can repeat measuring so long as the mark is blinking.
- 5 If the mark goes out, press the measuring button again to make another measurement.

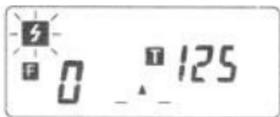


Fig. 25



Fig. 26

- Caution:
- No flash bulb measurement is supported. If you want to do this measurement, enter the mode of flash measurement with cord, connect a synchro cord, and make a measurement.
  - If the shutter speed is changed after measurement, the measurement is lost and the aperture value is turned to zero (0).

### NOTES

- If the film speed is changed after measurement, the measurement data is automatically recalculated and redisplayed.
- Your L-308BII may not detect the flash fired if its light amount is small relative to the ambient light. In such a case, change to the mode of flash measurement with cord, connect the synchro cord and make measurement.
- E.u (underexposure error) or E.o (overexposure error) is displayed if the metering range is exceeded. In such a case, readjust the light amount or changing shutter speed and try again.

# 9. How to use the Lumidisc

## 9.1 How to measure light contrast

- ① Fit the Lumidisc on the light receiving part.  
See page 3 '3.2 How to fit the Lumidisc'.
- ② Select the light mode you are going to use with the mode selector.
- ③ Hold the L-308BII close to the subject and point the Lumidisc toward the main light source (turn off the auxiliary light source). Take reading.
- ④ Keep holding the L-308BII close to the subject and point the Lumidisc toward the auxiliary light source (turn off the main light source).
- ⑤ Compare the difference in brightness between the main and auxiliary light sources, and determine the contrast.

Difference in aperture value	Contrast
1	2 : 1
1 1/2	3 : 1
2	4 : 1
3	8 : 1
4	16 : 1
5	32 : 1

(Example) If you read F16 for the main light source and F8 for auxiliary light source, the difference between them is two F stops. Then you will obtain 4:1 contrast as shown in the above table.

### NOTE

- To obtain exposure, hold the L-308BII close to the subject and point the Lumisphere towards the camera with the main light and auxiliary light on.

## 9.2 Using the L-308B II as an illuminance meter

- ① Fit the Lumidisc on the light receiving part.
- ② Select the EV metering mode and set the film speed at ISO 100.
- ③ Face the Lumidisc toward the lighting and hold the L-308BII parallel to the subject and take reading.
- ④ Determine the brightness level using the following conversion table.

### ☆ EV to lx conversion table

$1/16$ EV \ EV	0	1	2	3	4	5	6	7	8
0.0	2.5	5.0	10	20	40	80	160	320	640
0.5	3.5	7.1	14	28	57	110	230	450	910
$1/16$ EV \ EV	9	10	11	12	13	14	15	16	17
0.0	1300	2600	5100	10000	20000	41000	82000	160000	330000
0.5	1800	3600	7200	14000	29000	58000	120000	230000	460000

(Example) If you read EV 9  the approx. illuminance value is 1800lx.

$1/16$ EV \ EV	9
0.0	↓
0.5	1800

# 10. Specifications

---

Type	● Digital exposure meter for ambient and flash metering
Light-receiving method	● Incident and reflected light metering system
Light-receiving section	● Incident light: Lumisphere, Lumidisc ● Reflected light: Lens (light receiving angle of 40°)
Light receiving element	● Silicon photo diode
Metering systems	● Ambient light: Shutter speed-priority metering ● Flash light: With synchro cord Without synchro cord
Measuring range (ISO 100)	● Ambient light: EVO to EV19.9 (at 0.1 EV step) ● Flash: F1.4 to F90+ 0.9 stop (at 0.1 AV step)
Repeat accuracy	±0.1 EV or less
Calibration constant	● Incident light metering: C = 340 (lumisphere), C = 250 (lumidisc) ● Reflected light metering: K = 12.5
Display range	● ISO (film speed): 3 to 8000 (at 1/3 SV step) ● T (shutter speed): Ambient light: 60 sec to 1/8000 sec (at 1 TV step) f/s (frames/sec): 8, 12, 16, 18, 24, 25, 30, 32, 64, 128 Opening angle: 180 degrees Flash: 1 sec to 1/500 sec (at 1 TV step), and 1/75, 1/80, 1/90, 1/100 ● Aperture: 0.5 to 90.9 (at 0.1 AV step) ● EV (Exposure Value): -5 to 26.2
Other function	● Out-of-range metering: "E.u" (underexposure) or "E.0" (overexposure) warning indication ● Battery check ● Auto power-off
Battery used	● A single type-AA battery (Alkaline or manganese), 1.5V
Operating temperature range	● 0°C to +40°C
Storage temperature range	● -20°C to +60°C
Dimensions	● Approx. 63W x 110H x 22D mm
Weight	● Approx. 80 g (without battery)
Standard accessories	● Soft case, strap, lumidisc, soft case for lumidisc, synchro terminal cap, AA battery

The specifications and appearance of the L-308BII are subject to change without notice due to improvement.

# 11. Instructions and Maintenance Notes

Caution:

- To avoid damaging your L-308611, never drop it or subject it to impact.
- Avoid keeping your L-308BII in places of high temperature or humidity.
- Avoid excessive temperature changes, otherwise condensation will occur, resulting in malfunction
- Remove the battery if your L-308BII is not to be used for a long time.

## MAINTENANCE NOTES

- Keep the surfaces of the lumisphere, lens and Lumidisc clean and free from dust, foreign particles and scratches.
- Wipe off dirt with a soft or silicon cloth, Never use solvent such as thinner or benzine.