Thank you for purchasing a CRI Illuminance Meter CL-70F.

This Quick Guide introduces the basic operation of this instrument. Please refer to “Operating manual” on the CD-ROM (included with product) for usage details.

1. Confirming the Bundled Items

This instrument and the following accessories are included. Confirm if any accessories are missing after unpacking.

<table>
<thead>
<tr>
<th>Quick Guide</th>
<th>Main Body</th>
<th>CD-ROM</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Operating Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- CRI Illuminance Meter CL-70F Utility</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Part Designations

The part designations are as follows.

[Front View]
- Light Receptor
- Light Selection Ring
- Power Button
- Display Panel
- Measuring Button
- Tripod Socket
- Memory Button
- Battery Cover Latch
- Battery Cover
- Menu Button

[Bottom View]
- Strap Eyepiece
- USB Connector
- Battery Holder
- Battery Cover Latch

[Battery Cover Section]
- Tabs

3. Operation Method

The operation method of this instrument’s Display Panel is described.

* By touching an icon with your finger, you can select your intended setting or item.
* (Ex.) Shutter Speed Selection Screen
  - Top Icon: Touch to advance to the lowest value.
  - Scroll Bar: Touch and slide up or down to scroll settings.
  - One Step Icon: Touch up or Down Icon to advance one position.
  - Bottom Icon: Touch to advance to the highest value.
  - * A blue illumination under icons indicates which icons are operational.
  - * Blue bar indicates value selected.

5. Turning the Power ON

After installing the batteries, turn the Light Selection Ring  to the dark calibration position (1) and turn ON this instrument by pressing the Power Button  . After the Opening screen displays (for 2 seconds) in the Display Panel, dark calibration starts. After dark calibration properly ends, the Display Mode Selection screen displays.

Set the dark calibration position. Press Power Button  .

- Touch Up or Down
- One Step Icon

6.1. Measurement Preparation (Measuring Mode, Display Mode)

You can change screens after turning the power ON as follows. Changes from the Display Mode Selection Screen to the Measurement Screen.

- Pressing Menu Button  shifts to the Display Mode Selection screen.

<table>
<thead>
<tr>
<th>Measuring Mode Selection Screen</th>
<th>Measurement Screen (Text Mode)</th>
<th>Measurement Mode Selection Screen</th>
</tr>
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<tbody>
<tr>
<td>Ambient Light Mode Icon</td>
<td>Measures continuous light such as sunlight, tungsten, fluorescent, LED lights</td>
<td></td>
</tr>
<tr>
<td>Flash Light Cordless Mode Icon</td>
<td>Detects flash brightness without meter-flash connection after Measuring Button pressed to arm meter for 90 seconds and flash fired separately. Measure by triggering a flash during the wait time.</td>
<td></td>
</tr>
<tr>
<td>Flash Light Cord (PC) Mode Icon</td>
<td>Detects flash brightness with PC (synchronous) cord flash connection.</td>
<td></td>
</tr>
</tbody>
</table>

* If something is missing, contact the sales agent.
* Batteries (size AA) and a USB cable are not included. Please prepare them in advance yourself.
* The “CRI Illuminance Meter CL-70F”, included as an accessory of this product, can be used to save data, display memorized values and graphs, and perform settings when the meter is connected by USB to computers or tablets.
* Please set Light Selection Ring for dark calibration” is displayed, set the Light Selection Ring  to the range L (icon at the middle) for ALL ambient light. For flash light, set the ring to “H” (icon at the top) for high-power (brighter than 560lx) flash or “L” (icon at the middle) for low-power flash (lower than 640lx).
* “Please set Light Selection Ring for dark calibration” appears, set the Light Selection Ring  to the dark calibration position to start calibration.
* * Blue bar indicates value selected.

6.2. Setting Screen

- Touch the “OK” icon to confirm. Even after you have confirmed the language, you can change it.

7. Input of Figures/Characters

8. Setting Method of Characters and Figures (Character Setting Screen, Figure Setting Screen)

No. Key Description
1 1/A/a Shifts between figures/upper case/ lower case letters
2 0-9, ABC, abc, ty, hyphen, period Change the character input to the English alphabet (ABC)
3 Delete Deletes the character at the cursor position
4 Movements Move input position
5 Keypad Shifts between Standard Keypad and Qwerty Keypad
6 OK Confirms the input value and returns to the original screen
7 Cancel Cancels the input and returns to the original screen

* If Dark Calibration Position Confirmation screen appears, set the Light Selection Ring  to Dark Calibration position and perform calibration again.
* To turn OFF the power, press and hold the Power Button for more than one second.
* Please wait 3 or more seconds between turning the power ON/OFF.

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* * Please wait 3 or more seconds between turning the power ON/OFF.

* * Please wait 3 or more seconds between turning the power ON/OFF.
6-2. Display Mode

Press Measuring Button  to take a measurement in each Display Mode. Press Memory Button  to memorize measured value.

7. Customizing Measuring Displays

You can customize displayed information to see exactly what you need in single view. A blue illumination under icons indicates which icons are operational.

Display Item List

<table>
<thead>
<tr>
<th>No.</th>
<th>2°</th>
<th>10°</th>
<th>Icon</th>
<th>Name</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>🟢</td>
<td>CRI</td>
<td></td>
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<tr>
<td>2</td>
<td></td>
<td></td>
<td>🟢</td>
<td>CIE1976</td>
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<tr>
<td>3</td>
<td></td>
<td></td>
<td>🟢</td>
<td>Spectrum</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>🟢</td>
<td>Measuring Screen CRI Display</td>
<td></td>
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<tr>
<td>5</td>
<td></td>
<td></td>
<td>🟢</td>
<td>Measuring Screen Spectrum Display</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>🟢</td>
<td>Measuring Screen Text Display</td>
<td></td>
</tr>
</tbody>
</table>

8. Functions

Touching the "Tool Box (2°)" icon in any measurement screen shifts the display to the Tool Box screen where frequently used functions can be accessed. Preset Selection will be grayed out and cannot be selected if no preset has been created in the Setting Mode.

9. Setting

Touching the "Setting" icon in the Display Mode Selection screen shifts the display to the Setting screen. Here you can set functions and display methods required for measurement in advance. Settings displayed are as follows.

Menu Button  will abort any setting operation and return the screen to Display Mode Selection.

10-1. Contents of Setting

Customize

- Unit of Illuminance
- Spectrum Y-axis Scale
- Auto Power OFF
- Backlight Brightness
- Auto Dimmer
- Language
- Reset Customized Items

10-2. Contents of Setting

- Edit a Preset
- Preset Editing (2°) Page 1
- Preset Editing (2°) Page 2
- Preset Editing (2°) Page 3

- Display information
- Product Information
- Perform Dark Calibration?

Intended Usage

The meter is designed for: measuring correlated color temperature, deviation, color rendering index (CRI), illuminance, tristimulus value, chromaticity coordinates, dominant wavelength and excitation purity of various lighting sources such as LEDs, organic EL’s and projectors.

Power Supply

- AA batteries : 1.5V x 2 (alkaline, manganese)
- USB bus-power : 5V/500mA or less via USB cable when connected to computer (Limited Power Source or Class 2 Power Source)

Environmental Condition

- Indoor use
- Altitude of operation (m) : Max 2000 m
- Pollution degree (PD) : PD2
- Operating temperature : -10°C ~ 40°C (without condensation)
- Operating humidity : 85%RH or less (at 35°C) without condensation

SAFETY PRECAUTIONS

WARNING

- Do not use or store the product in a place where it may be dropped and damaged by impacts or shocks. Also, exercise care not to subject the product to vibrations or impact when handling.
- Do not use or store the product in a place where it may be submerged in water, or it may come in contact with moisture. There is a danger of electric shock and product failure.
- Before removing or replacing the battery or USB cable, always turn the power switch OFF. Otherwise, the product may fail.
- Avoid using the product in locations where it may be subjected to dust, humidity, direct sunlight or near radiation sources. Do not use or store the product near high voltage. There is a danger of electric shock and product failure. Additionally, do not use the product in locations where it may be exposed to heat or direct sunlight. There is a danger of electric shock and product failure. In some cases, the meter may be damaged by these mechanical shocks.
- Do not place the product on an unstable or tilted bench. Otherwise, it may drop and you may be injured.
- Do not measure a bright object that emits light exceeding the measuring range (wavelength and intensity). The product may fail.
- Be careful that the neck strap does not come loose when carrying the product, as the meter may drop and you may be injured.
- Before measuring or replacing the battery or USB cable, always turn the power switch OFF. Otherwise, the product may fail.