BATTERY OPERATION

i. Open the battery Compartment cover.

ii. Insert two 1.5V penlight batteries following the (+) (−) signs as indicated inside and replace the cover.

- FOR BEST RESULTS USE ALKALINE BATTERIES
- USE FRESH BATTERIES REGULARLY
- THE BATTERIES SHOULD BE INSERTED IN CORRECT POSITION

ATTACHING FLASH UNIT TO YOUR CAMERA

i. Loosen the lock ring, insert the FLASH UNIT into your camera's accessory shoe, then tighten the flash unit with the lock ring.

ii. Slide the ON-OFF switch to the ON position (A red mark will show) and you will hear a humming sound indicating the flash unit is operating. In a few seconds, the ready indicator lamp lights up, showing that the FLASH UNIT is ready to flash.

iii. Set the shutter speed of your camera to the proper setting for electronic flash use or 1/60 second. (Read your camera owner's manual for details on the flash synchronization)
MANUAL OPERATION

i. Set the AUTO/MANUAL Selector to white mark.

ii. Focus on your subject and note the flash-to-subject distance.

iii. Read the Exposure Calculator chart which determines proper exposure. Example: In case of film speed ASA 100 (DIN21) and 9 meter (30 feet) distance, the proper aperture is F2.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>1.1</th>
<th>1.6</th>
<th>2.3</th>
<th>3.2</th>
<th>4.5</th>
<th>6.4</th>
<th>9</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT</td>
<td>3.7</td>
<td>5.4</td>
<td>7.5</td>
<td>10.7</td>
<td>15</td>
<td>21.4</td>
<td>30</td>
<td>FT</td>
<td></td>
</tr>
<tr>
<td>ASA</td>
<td>50/64</td>
<td>11</td>
<td>8</td>
<td>5.6</td>
<td>4</td>
<td>2.8</td>
<td>2</td>
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<td>18</td>
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<td>16</td>
<td>11</td>
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<td>2.8</td>
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<td>27</td>
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<tr>
<td></td>
<td>1000</td>
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<td>16</td>
<td>11</td>
<td>8</td>
<td>5.6</td>
<td>4</td>
<td>5.6</td>
<td>31</td>
</tr>
</tbody>
</table>
Calculation of F-stop without use of EXPOSURE CALCULATOR.

Guide Number (G.N.)

\[ F\text{-stop} = \frac{\text{Guide Number}}{\text{Distance}} \]

Guide Number Table:

<table>
<thead>
<tr>
<th>Film Speed (ASA)</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>400</th>
<th>1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide Number</td>
<td>9</td>
<td>13</td>
<td>18</td>
<td>26</td>
<td>36</td>
<td>58</td>
</tr>
<tr>
<td>(in meter)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guide Number</td>
<td>30</td>
<td>43</td>
<td>60</td>
<td>86</td>
<td>120</td>
<td>190</td>
</tr>
<tr>
<td>(in feet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AUTO OPERATION

This flash unit has two automatic operation settings designated by the colors, yellow and blue. The yellow setting is for shooting at distance of up to 15 Feet at F4 (ASA100/DIN21).

For longer distance, use the blue setting which allows shooting up to 30 Feet at F2 (ASA 100/DIN21)

i. Set the Auto/Manual Selector to yellow or blue mark.

ii. Read along the yellow or blue line according to your selection at (i), at the row of your film speed (ASA/DIN) find the aperture. Set this aperture on your camera.

iii. Your flash automatically controls lights output and sets the correct exposures for the subject within the automatic flash range. Once you set the aperture (f-stop) on your camera, there is no need to change it again while taking pictures within the available automatic flash range.
<table>
<thead>
<tr>
<th>Auto/Manual Selector Position</th>
<th>ASA100</th>
<th>ASA400</th>
<th>Auto Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>F4</td>
<td>F8</td>
<td>1-4.5 Meter (3-15 Feet)</td>
</tr>
<tr>
<td>Blue</td>
<td>F2</td>
<td>F4</td>
<td>1.8-9 Meter (6-30 Feet)</td>
</tr>
</tbody>
</table>
SPECIFICATIONS:

Power Source: Two 1.5V size AA ALKALINE Batteries

Recycling Time: 5 – 10 sec.

Battery Life: Approx. 100 Flashes (Depends on the type of batteries)

Flash Duration: Auto: 1/30,000 to 1/1,000 sec
               Manual: 1/1,000 sec

Angle of Illumination:
   Horizontal: 60°
   Vertical: 45°

Color Temperature: Same as Sunlight During Day

Guide Number: 18 ASA 100 in meter
              60 DIN 21 in feet

Output: 700 BCPS

Sensor Measuring Angle: Approx. 20°

Auto Operation Range: (ASA 100/DIN 21)
   Yellow mode F4 3 – 15 Feet
   Blue mode F2 6 – 30 Feet

Weight (without batteries): Approx. 4 oz.

Size: 63 (W) x 45 (D) x 100 (H) mm

Specifications subject to change without notice.