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MINOLTA

# AUTO METER III

(n)



OWNER'S MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
MANUAL DE INSTRUCCIONES

## (II)

$\Delta$ EV	* Ratio of illuminance (Main/Sub)
1	2 : 1
1½	3 : 1
2	4 : 1
3	8 : 1
4	16 : 1
5	32 : 1

\* Beleuchtungs-Verhältnis  
oder Kontrast  
(Haupt-/Nebenwert)

\* Rapport d'éclairage  
(Principal/Sub)

\* Relación de iluminación  
(Principal/Sec.)

\*\* EV (Ganzzahl)  
(Nombre entier EV)  
(EV-Entero)

\*\*\* EV (Nachkomma)  
(Decimal EV)  
(EV-decimal)

## (III)

** (EV-Integer)	A
-2	0.625
-1	1.25
0	2.50
1	5.00
2	10.0
3	20.0
4	40.0
5	80.0
6	160
7	320
8	640
9	1280
10	2560
11	5120
12	10200
13	20500
14	41000
15	81900
16	164000
17	328000
18	655000
19	1310000

## (IV)

*** (EV-Decimal)	B
.0	1.00
.1	1.07
.2	1.15
.3	1.23
.4	1.32
.5	1.41
.6	1.52
.7	1.62
.8	1.74
.9	1.87

## (V)

**MINOLTA  
AUTO METER III**

ISO (ASA/DIN)	CINE TIME (ASA)
12 / 12°	8 15 0
25 / 15°	12 30 +1/3
50 / 18°	16 30 0
100 / 21°	18 30 -1/3
200 / 24°	24 50 0
400 / 27°	32 60 0
800 / 30°	64 120 0
1600 / 33°	128 250 0
3200 / 36°	
6400 / 39°	



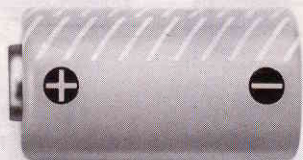
(B)



(T)



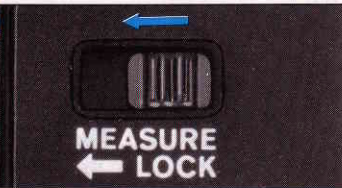
(C)



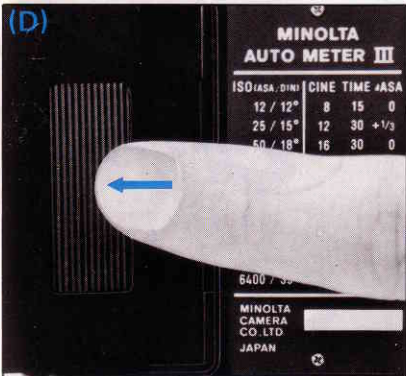
(E)



(G)



(D)



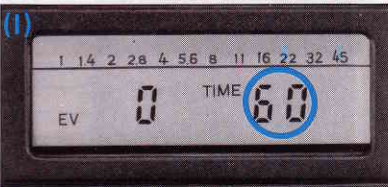
(F)



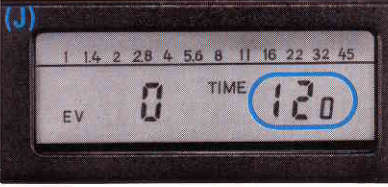
(H)

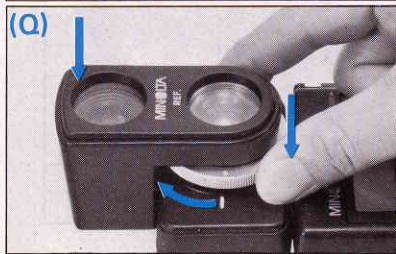
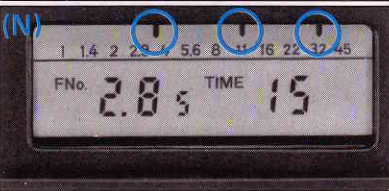
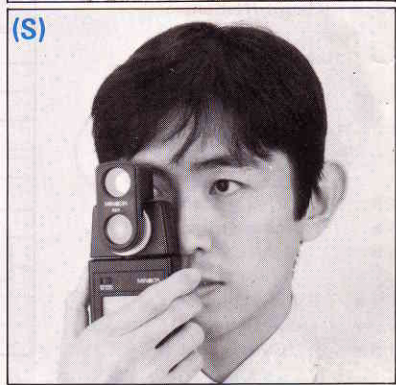
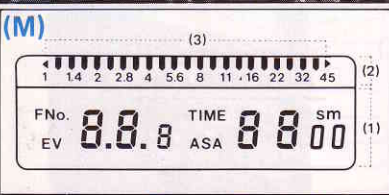
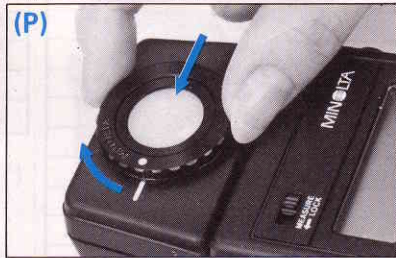
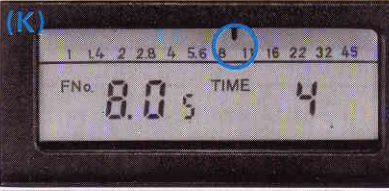


(I)



(J)





## ENGLISH (pp. 1 – 17)

The Minolta Auto Meter III offers for the first time, the combined advantages of microprocessor technology and liquid-crystal digital/analog display with memory capability.

Utilizing a high-sensitivity silicon photo cell and a specially designed microprocessor circuit, the multi-function Auto Meter III makes precise measurements of incident or reflected light. Simply pressing the appropriate key inputs or changes ASA and time settings, and gives the applicable EV or f-number readout to within 1/10 of a stop.

Besides digital/analog display of exposure data, the Auto Meter III also incorporates a memory circuit that can store one or two previous measurements and display them on the analog scale. This greatly simplifies comparison of readings for determination of exposure and lighting ratios. Recall and clear keys enable digital display of memorized data and erasing of the memory for future inputs.

The Minolta Auto Meter III is also compatible with a full system of versatile accessories, that attach quickly and easily to the meter's rotating head by bayonet mount or accessory-receptor jack.

For best results, it is recommended that you read and observe all applicable sections of this manual.

Throughout the text you will find a series of letters and numbers. Each of these refers to a picture on the fold-out pages at the front.

**NAMES OF PARTS**

(A-1)	Diffuser-bayonet index
(A-2)	Spherical diffuser
(A-3)	Receptor-bayonet index
(A-4)	Accessory-receptor jack
(A-5)	Measurement-lock switch
(A-6)	Display window
(A-7)	Memory-clear key
(A-8)	ASA/exposure-time selector key
(A-9)	Increase key
(A-10)	Decrease key
(A-11)	F-number/EV-display key
(A-12)	Recall key
(A-13)	Memory key
(A-14)	Strap eyelet
(B-15)	Measuring button
(B-16)	Battery-chamber cover
(B-17)	ASA/ISO conversion table
(B-18)	Cine table

**CONTENTS**

<b>PREPARATION AND BASICS</b>	<b>2</b>
Installing the battery	2
Power consumption	2
Installing key guard	3
Setting the film speed	3
Setting measuring time (shutter speed)	4
Selecting display mode	4
Analog display	5
Memory function	6
Measurement-lock switch	6
Over- and under-range warnings	7
Attaching and removing diffusers and other accessories	7
<b>TAKING MEASUREMENTS</b>	<b>8</b>
Incident-light measurement	8
Reflected-light measurement	9
Measurement of light ratios	11
Measurement of illuminance	12
Cine measurement	12
Enlarging-exposure measurement	13
<b>ACCESSORIES</b>	<b>14</b>
Viewfinder 10°	14
Reflected-light attachment	14
Flat diffuser	14
Mini Receptor	14
Minolta Booster II	14
Spot mask	15
4X and 8X ND diffusers	15
<b>SPECIFICATIONS</b>	<b>15</b>
<b>CARE AND STORAGE</b>	<b>17</b>



## PREPARATION AND BASICS

### Installing the battery

The Auto Meter III is powered by a single 6v alkaline-manganese (4LR44, Eveready 537 or equivalent), 6v lithium (2CR-1/3N or equivalent) or 6.2v silver-oxide (4SR44, Eveready 544 or equivalent) battery (C).

To install the battery:

1. Remove the battery-chamber cover by pressing down on it, and then sliding it in the direction of the arrow as shown (D).
2. Insert the battery, positioning it as illustrated inside the battery chamber.
3. Replace the cover by realigning it, then sliding it towards the meter until it snaps into place.

After the battery has been installed, it will take several seconds for the display to initially appear and stabilize. The meter will then show the display seen in (H).

### NOTE

- If the battery is not installed properly, the meter will not operate.

### Power consumption

Although there is a constant power supply to the memory, the meter's power consumption in the non-measuring mode is minimal, so a power switch is not necessary. Instead, the meter employs an automatic cancelling feature that clears the display approximately two minutes after a measurement has been taken or the last key has been released. To activate the meter when the display is off, press the recall key (the most recent measurement will appear in the display), or press the measuring button (the most recent measurement will appear if the meter is in the ASA-setting/display mode; a new measurement is taken and displayed if the meter is in the time-setting/display mode).

When the battery's power level drops to a level almost insufficient for operation, the display will blink for approximately eight seconds when the measuring button is pressed. If this happens, replace the battery with a fresh one. When the battery is completely exhausted, the display will remain blank after pressing the measuring button or recall key.

### NOTE

- If the meter is not to be used for two weeks or more, it is advisable to remove the battery.

### Installing key guard

Supplied with the Auto Meter III is a key guard which can be installed to help prevent accidentally pressing the input or display keys if the meter is laid on its face.

To install the guard, peel off its protective backing (E) and carefully align the guard around the increase, decrease, and ASA/TIME keys as shown (F).

Press the guard into place with a firm pressure.

### NOTE

- Even with the guard installed, it is not recommended to place the meter face down, as the keys and display window might be damaged.

### Setting the film speed

When the battery is installed, the meter will already be in the ASA-setting/display mode, and a film speed of ASA 100 will appear (H). When the meter is turned on by pressing the measuring button, a new measurement is taken and displayed or by pressing the recall key, the most recent measurement will appear in the display. If the meter is in the time-setting/display mode, press the ASA/TIME key to put the meter into ASA-setting/display mode.

To set either a higher or lower film speed, press the increase (↑) or decrease (↓) key repeatedly until the desired ASA appears. Each press of either key changes the display in 1/3-stop increments until the upper limit (6400 ASA) or the lower limit (12 ASA) of the meter's display range is reached.

### NOTE

- IN THE ASA-DISPLAY MODE, THE METER CANNOT TAKE A READING, and only the increase, decrease, and ASA/TIME keys will operate.
- The meter can only be set for ASA. If you use film with a DIN rating, consult the conversion table on the back of the meter to find its ASA equivalent. The table reflects the change of the ASA and DIN film ratings into the combined ISO standards that are now being used by film manufacturers.

### Setting measuring time (shutter speed)

After the film speed has been set, press the ASA/TIME key to put the meter into its time-setting/display mode. The display will then show the most recently set shutter speed. If the battery has just been installed, "60" (1/60 sec.) will be displayed.

To set a higher or lower shutter speed, press the increase ( $\uparrow$ ) or decrease ( $\downarrow$ ) key repeatedly until the desired shutter speed is displayed. Each time either key is pressed, the display will be changed by one full stop. The meter's shutter-speed display range is from 1/2000 sec. to 30 minutes, plus 1/50 sec. (which comes after the 30 min. when pressing the decrease key) for taking movies at 24 fps.

If the displayed shutter-speed figure is followed by a small letter "s", this denotes a speed in full seconds, and a small "m" designates speeds in minutes. If there is no letter designation, the shutter speed is the reciprocal in seconds of the number displayed (e.g., "30" represents 1/30 sec.).

After the ASA/TIME key has been pressed and a shutter speed has been set, the meter is ready to take a measurement.

### NOTE

- The third and fourth digit of the ASA and shutter-speed display can show only zeros. Therefore, the ASA and shutter-speed setting of "125" will appear as "120" (J), and ASA "1250" will be displayed as "1200". Despite this, the meter is correctly calibrated for these settings.

### Selecting display mode

The Auto Meter III has two display/measurement modes: f-number and EV (exposure value). To select either mode, press the "FNo/EV" key until the desired mode designation ("FNo" or "EV") appears in the display window.

When a measurement is taken in the f-number mode, a digital aperture figure will appear in the display window. Next to this figure there is a small one-place decimal display that shows necessary exposure decrease in 1/10 stops. For example, if the digital aperture display is f/8.0 and the decimal figure is "0", the lens

should be set at exactly  $f/8.0$ . If the display shows  $f/8.0$  and a decimal figure of "5" (K), then exposure should be decreased by  $5/10$  or  $1/2$  stop. The lens should be set halfway between  $f/8$  and  $f/11$  (L).

In the f-number mode, the ASA and shutter-speed settings will have a direct effect upon the f-number displayed. After a measurement has been made, the ASA and shutter speed can be reset and the displayed aperture figure will change accordingly.

The EV-display mode is used to check illuminance levels (p. 12), subject and lighting contrast (p. 11), and other lighting conditions. In this mode the display readout will be in EV steps, and only changes in the ASA setting will affect the EV-digital display.

#### NOTE

- You can alternate between these two modes at any time after a measurement has been taken.

#### Analog display

In addition to the digital display (M-1), the Auto Meter III has an analog aperture-scale display along the top of the display window (M-2). This display, when used in conjunction with the memory function, will show up to three separate readings so that exposure or contrast calculations can be easily made.

When a measurement is made in either of the meter's display modes, a pointer will appear above the aperture figure that corresponds to the one shown by the digital display in the f-number display mode. The analog scale is marked in half-stop increments, so the pointer may also appear between two aperture figures depending upon the digital display's decimal figure. For example, if the digital display is from  $f/8.0_8$  to  $f/11_2$ , the analog pointer will appear directly above  $f/11$ . If the digital display is from  $f/11_3$  to  $f/11_7$ , the pointer will be between  $f/11$  and  $f/16$ .

After a measurement has been taken, any changes in ASA or shutter-speed settings will also be reflected by the analog pointer.

### Memory function

To use the memory function of the Auto Meter III, take a measurement and press the memory key. The display will briefly go blank and then reappear if the reading has been inputted to the meter's memory. You can now take a second reading, and another analog pointer will appear on the display, as well as a new digital readout. This second reading can also be entered by pressing the memory key again, and then a third reading can be made. Unless there is an overlap, as many as three analog pointers can be displayed (N). The digital display will show the final measurement taken, and previous readings inputted to the memory can be displayed one after another by repeated pressing and holding down of the "RECALL" key.

If more than two readings are inputted to the memory, a large letter "E" will appear in the display (O). Pressing the recall key will clear the "E" and return the display of your last measurement.

To clear the memory, either press the memory-clear (M-CLR) key.

### NOTE

- If the memory is clear, "O" will appear when the recall key is pressed.
- The analog display has triangular indicators (M-3) that will appear at either end of the scale if the digital display goes below  $f/1.0_2$ , or above  $f/32_8$ . These indicators are also part of the meter's over- and under-range warning display.
- After measurements have been taken and inputted to the memory, any subsequent change of ASA or shutter-speed settings will be reflected in both analog and digital displays.

### Measurement-lock switch

When the meter is not being used, slide the measurement-lock switch in the direction of the arrow (G) to prevent accidentally taking a measurement and wasting battery power. No further measurements can then be taken, and the display will clear approximately two minutes after the last measurement was taken or the last key has been released.

### NOTE

- The ASA/TIME key, increase key, and decrease key are also locked when the measurement-lock switch is engaged. Pressing any other key when the display is off will cause the display to come on and the keys to function as usual.

### Over- and under-range warnings

When a measurement is made that is over or under the meter's display or measuring range, a large letter "E" will appear in the display window.

If the "E" and a triangular indicator (M-3) on the analog scale appear when a reading is taken with the meter in the f-number display mode, the reading is out of the meter's display range. In this case, changing the ASA and/or shutter-speed setting of the meter will allow you to obtain a display without taking another measurement.

When the "E" appears without a triangular indicator, the reading is over or under the meter's measuring range. In this case, take another measurement.

### Attaching and removing diffusers and other accessories

The standard spherical diffuser (A-2), optional ND spherical diffusers (T-7), reflected-light attachment (T-2), flat diffuser (T-3) and Spot Mask (T-6) are attached and removed as follows:

1. Align the dot on the rim of the diffuser or accessory with the receptor-bayonet index, and insert the bayonet into the receptor-head socket (P).
2. Turn the diffuser or accessory clockwise as far as it will go (about 1/8 turn) to secure it.
3. To remove a diffuser or accessory, turn it counterclockwise until its dot is aligned with the receptor-bayonet index and lift it out of the receptor-head mount.

The optional Viewfinder 10° (T-1) is attached and removed as follows:

1. Position the viewfinder to the receptor head as shown (Q), and align the red dot on its grooved ring with the receptor-bayonet index.
2. Insert the viewfinder's bayonet into the receptor mount, and while applying slight pressure to depress the meter's mode-change pin, turn the ring clockwise as far as it will go to secure the viewfinder.
3. To remove the Viewfinder 10°, turn the grooved ring counterclockwise until the red dot is aligned with the meter's receptor-bayonet index, then lift the viewfinder out of the receptor socket.

The accessory Mini Receptor (T-4) and Booster II (T-5) are both attached by inserting their plugs into the Auto Meter III's accessory-receptor jack located on the side of the meter body.

#### NOTE

- With the exception of the Minolta Booster II and Mini Receptor, attaching a diffuser or accessory to the meter automatically sets the meter for the method of light measurement (reflected or incident) for which the accessory is designed. When the Booster II and Mini Receptor is used the standard spherical diffuser should be attached to the meter.
- If the method of measurement is changed while the meter is in use, all inputted data will be cleared and "O" will appear in the display window.
- Further details on the accessories mentioned in this section can be found in the "ACCESSORIES" section of this manual (pp. 14 – 15), as well as other operational sections of the manual.

## TAKING MEASUREMENTS

### Incident-light measurement

To use the Auto Meter III for normal incident-light readings, attach the standard spherical diffuser and proceed as follows:

1. Turn on the meter by pressing the measuring button or recall key, and set the applicable film speed.
2. Press the ASA/TIME key to put the meter into its measuring mode, then set the desired shutter speed.
3. Select either the f-number or EV-display mode.
4. Hold the meter at the subject position so that the spherical diffuser is pointed directly towards the camera and is receiving the same light as the subject (R). The meter's receptor head can be turned up to 270° to aid in positioning of the meter.

5. With the meter in position, press the measuring button all the way in and hold it until a display fully appears in the display window. The meter will continue to take and display readings as long as the button is held in.  
To hold a displayed reading, release the measuring button.
6. If neither the over- nor under-range warning is indicated in the window, set the camera as the meter display indicates.

#### NOTE

- Once a reading has been taken, the meter's ASA and shutter speed settings can be changed to find the correct exposure for different film and shutter-speed combinations.
- For special purposes, incident readings can also be made with the optional Mini Receptor (T-4), flat diffuser (T-3), and 4X or 8X spherical ND diffusers (T-7).

#### Reflected-light measurement

Reflected-light readings are made using either the optional Viewfinder 10° (T-1) or reflected-light attachment (T-2).

To use the Viewfinder 10°, attach it as described on page 7 and proceed as follows:

1. Turn on the meter and set the applicable film speed.
2. Press the ASA/TIME key to put the meter into its measuring mode, and set the desired shutter speed.
3. Select either the f-number or EV-display mode.
4. Rotate the meter's receptor head to the right 180° or until the eyepiece of the Viewfinder 10° at a convenient angle for viewing.
5. Look through the eyepiece at your subject from the camera position (S). The broken circle in the finder indicates the field of its 10° angle of acceptance, while the dot indicates the center of the field.



6. With the area to be measured visible within the circle, push the measuring button (B-15) all the way in to take your reading. Hold the button in until the display fully appears and stabilizes, then release the button to hold the display and reading.

If neither over- nor under-range warning is indicated, set the camera as the meter display indicates.

To use the reflected-light attachment (T-2), mount it to the meter as described on page 7 and proceed as follows:

1. Follow steps 1 through 3 as described for the Viewfinder 10°.
2. With the reflected-light attachment pointed towards the center of the subject or picture area, push the measuring button (B-15) all the way in and hold it to take your reading. Release the button to hold the reading and display. The attachment's approx. 40° angle of acceptance is about that needed to cover the field of a normal lens.
3. Set your camera as indicated by the meter's display.

#### CAUTION

The reflected-light attachment designed for the Minolta Auto Meter II and Flash Meter II will not depress the pin in the receptor-head's mount, so a plus 3 EV compensation must be made if they are used with the Auto Meter III.

#### NOTE

- The Viewfinder 10° can also be used to determine subject contrast or brightness ratios as indicated on page 11.

### Measurement of light ratios

To determine the ratio of illuminance between two light sources, proceed as follows:

1. Attach the flat diffuser (T-3) to the meter, and turn the meter on by pressing the measuring button or recall key.
2. Put the meter into its EV-display mode. With the meter at the subject's position, point the diffuser directly towards the main light source and take a reading.
3. Press the memory key to input the reading to the meter's memory, then point the diffuser at the secondary light source and take a second reading.
4. Find the difference in EV steps between the first and second readings. This can be done either by noting the number of steps between the pointers of the analog scale, or by using the recall key and subtracting the EV digital figure for the second reading from the EV digital figure of the first reading. For example, if the first reading for the main light source was EV 10.0 and the second reading was EV 8.0, there is a difference of two EV steps.
5. Find the number corresponding to the difference between the two readings in the left-hand column of Table II. The ratio of illuminance between the main and secondary light source is to the right of this figure.

In our example, reading the table (II) would show that for a two EV step difference, the ratio would be 4 to 1, or that the main light source is four times brighter than the secondary light source.

Subject contrast ratios and lighting ratios can also be found using the same procedure and table when the 10° Viewfinder or 40° reflected-light attachment is used with the Auto Meter III.

### Measurement of illuminance

The Auto Meter III, when used with the optional flat diffuser (T-3), can provide an illuminance measurement in luses (lx).

To obtain an illuminance measurement, proceed as follows:

1. Attach the flat diffuser to the Auto Meter III as indicated on p. 7 and turn the meter on by pressing the measuring button or recall key.
2. Set a film speed of ASA 100, and put the meter into its EV-display mode.
3. With the diffuser disk in the desired position (normally, parallel and as close as possible to the surface where the light is to be measured), take a reading and obtain an EV readout in the display window.
4. Take the integer EV figure displayed, and find the corresponding figure in Table III. Now take the decimal EV figure displayed, and find its corresponding figure in Table IV. To the right of each of these numbers in the tables are another set of numbers, which are then multiplied together, and their products is the illuminance measurement in luses (lx).

For example, if the meter displays a reading of EV 10.7, find the figure next to the number 10 in Table III and multiply it by the number next to the 7 figure in Table IV to obtain the lux units. For this example the numbers would be:

$$\text{Illuminance} = (\text{III-A}) \times (\text{IV-B}) = (\text{lx.})$$

$$\text{Illuminance} = 2560 \times 1.62 = 4150 (\text{lx.})$$

#### NOTE

- For precise measurement of illuminance, use the Minolta Illuminance Meter.

### Cine measurement

The Auto Meter III can be used to meter light for exposure with movie cameras having shutter sector openings of 180°.

Table V, which is also on the back of the meter, indicates the meter settings and compensation necessary for various frames-per-second rates.

To use the meter and table for cine measurement, proceed as follows:

1. Turn the meter on by pressing the measuring button or recall key, and set the applicable film speed.
2. When using a filming rate of 24 frames per second (fps), set the shutter speed on the meter to 1/50 sec. (no ASA compensation is necessary). For other filming rates, find the frames-per second speed in the "Cine" column of Table (V). Reading across to the right, find the shutter-speed setting and ASA compensation needed (in ASA-setting/display mode, each press of the increase or decrease key changes the ASA by 1/3 stop). Set the meter accordingly, and put the meter into its f-number measuring mode.
3. Take the reading in the normal manner, and set the camera's lens aperture according to the meter's f-number readout and make your exposure.

#### NOTE

- Cameras having shutter sector openings of 160° and 220° can also be used by adjusting exposure -0.2 stops, and +0.3 stops, respectively.

#### Enlarging-exposure measurement

Using the accessory Spot Mask (T-6), the Auto Meter III can be used in the darkroom to memorize and help make enlarging exposures.

The first step is to select a negative or slide which has an area of medium density or tone, such as a skin tone, that is found in most of your pictures. Then without using the meter, make a satisfactory test enlargement by trial and error. With all conditions the same as they were for the test print, turn the enlarger on and place the meter on the easel so the area of medium density or tone is projected onto the meter's spot mask. Put the meter into its EV-display mode and take a reading. Press the memory key to input the reading.

Project each subsequent similar-quality negative or slide on the easel, and place the meter in the area that corresponds to the metered density or tone in your test print. Hold the meter's measuring button in, and adjust the enlarging lens aperture until the EV-display matches that of your original reading of the test print. Use the same exposure time as for your test print.

## ACCESSORIES

### **Viewfinder 10° (T-1)**

This finder attaches to the Auto Meter III and allows it to make reflected-light measurements with a 10° angle of acceptance. The meter can thus be used to accurately spot-measure exposure for parts of a subject or scene, or within the approximate angle of view of certain telephoto lenses.

### **Reflected-light attachment (T-2)**

With an approx. 40° angle of acceptance, this attachment permits taking reflected-light measurements which correspond to the field of view of most normal lenses.

### **Flat diffuser (T-3)**

With this diffuser attached, the Auto Meter III can be used to measure the illuminance value of light, as well as the brightness ratio between light sources.

### **Mini Receptor (T-4)**

This very small remote receptor plugs into the head of the Auto Meter III, and is used to measure incident light in otherwise inaccessible positions. It is therefore particularly useful for close-ups and photomacrography.

### **Booster II (T-5)**

When plugged into the accessory-receptor jack on the head of the Auto Meter III, this separate sensor enables making accurate measurement of brightness at an SLR eyepiece, on an SLR focusing screen or view camera groundglass, through the eyepiece of a microscope, or at the film plane of a full-frame 35mm camera.

The Booster II may also be used for ordinary direct reflected-light measurement, with an approx. 60° angle of acceptance.

**Spot Mask (T-6)**

This small attachment enables the Auto Meter III to be used in the darkroom for calculating enlarging exposure data.

**4X and 8X spherical ND diffusers (T-7)**

Each of these spherical diffusers incorporates a neutral-density element, and is used when light is too bright to be measured normally. With the 4X diffuser, the meter's upward range is extended by two stops (2 EV); with the 8X, by three stops (3 EV).

Operation of the meter remains the same as with the standard spherical diffuser.

**MINOLTA AUTO METER III SPECIFICATIONS**

Type: Multiple-function exposure meter (for incident or reflected continuous light) with digital-analog readout on liquid-crystal display and memory by microprocessor

Detector: Silicon photocell; receptor head rotates 270°

Light receptor: Incident: Spherical diffuser; optional flat or 4X, 8X ND diffusers  
Reflected: Optional 40°-angle reflected-light attachment or Viewfinder 10°

Separate detectors: Optional Mini Receptor (for incident light) or Minolta Booster II (for reflected light), connected through accessory-receptor jack

**Measuring ranges**

at ASA 100: Incident: EV -2.4 to 19.1  
Reflected: EV 1 to 22.5

Accuracy: ±0.1 EV repeatability

Electronic components: Hermetically sealed microprocessor chip and custom-designed liquid-crystal display with separate 3-digit readout and 4-digit input sections (each with surrounding unit identifications, former with decimal) and analog array

**Controls:** Measuring button (operable only in "TIME" display mode); alternating film-speed/exposure-time input/display key with ASA/TIME, increase and decrease keys; alternate f-number/EV-number display key; memory, recall, and memory-clear keys; measurement-lock switch

**Readouts/displays:** Digital:

F-numbers: 0.7 to 64 + 0.9 stop in 0.1-stop increments

EV-numbers: -5.4 to 28.5 in 0.1-stop increments

ASA indexes: 12 to 6400 in 1/3-stop increments

Exposure times: 30 min. to 1/2000 sec. in 1-stop increments

Analog:

F-numbers: 1.0 to 45 in 1/2-stop increments

(up to 3 indications possible with memory)

Both digital and analog/memory readouts change automatically to reflect ASA/TIME input changes.

**Memory:** 2-measurement capacity, both indicated on analog array with digital recall

**Power source:** One 6v alkaline-manganese (4LR44, Eveready 537 or equivalent), 6v lithium (2CR-1/3N or equivalent) or 6.2v silver-oxide (4SR44, Eveready 544 or equivalent) battery

**Other:** External receptor jack on head, ISO (ASA/DIN) and exposure-time/cine conversion tables on back of body, strap eyelet

**Accessories:** Included: Spherical diffuser, neck strap, case-key guard Illuminance conversion table

Optional: 40° reflected-light attachment, Minolta Booster II, Viewfinder 10°, Mini Receptor, 4X and 8X ND spherical diffusers, flat diffuser

**Size:** 132 x 69 x 31mm (5-3/16 x 4-3/16 x 2-11/16 in.)

**Weight:** 150g (5-5/16 oz.) without power cell

## CARE AND STORAGE

- Do not press on or damage the indication-display window.
- Do not subject the meter to shocks or vibration.
- Do not leave the meter in places subject to high humidity or corrosive chemicals, or to temperatures higher than  $55^{\circ}\text{C}$  ( $130^{\circ}\text{F}$ ), such as inside a locked motor vehicle, or lower than  $-20^{\circ}\text{C}$  ( $-5^{\circ}\text{F}$ ) as the meter may be permanently damaged.
- If the meter is used in temperatures higher than  $50^{\circ}\text{C}$  ( $120^{\circ}\text{F}$ ) or lower than  $-10^{\circ}\text{C}$  ( $15^{\circ}\text{F}$ ), operation may be unsatisfactory.
- Do not leave the meter in sunlight or near sources of heat, such as stoves, strong lights, etc.
- If the meter is left or placed in direct sunlight for a long period of time, the indication-display window will turn black. In this case, remove the meter from the light and the display will slowly return to normal.
- The meter body may be wiped with a silicone-treated cloth to clean it. Do not allow alcohol or chemicals of any other kind to touch its surface.
- If the meter is not to be used for two or more weeks, it is advisable to remove the battery.
- When the meter is to be stored, place it in its original packaging and put it in an air-tight container with an appropriate amount of dehumidifying agent, such as silica gel.
- Never attempt to disassemble the unit. Any repairs necessary should be undertaken only by an authorized Minolta service facility.

Specifications subject to change without notice