

**CENTON**

**MR 20 RINGFLASH**



**INSTRUCTIONS**

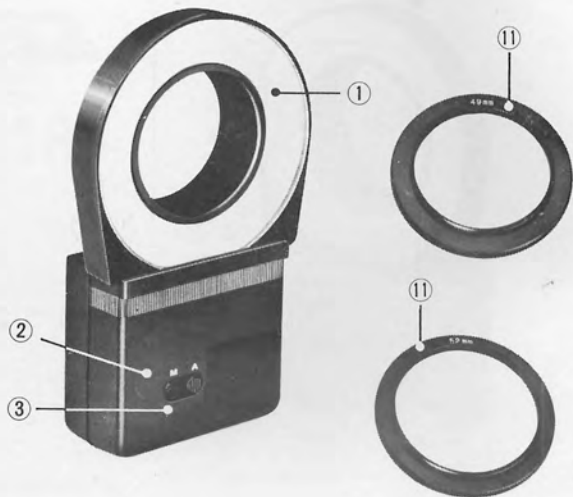
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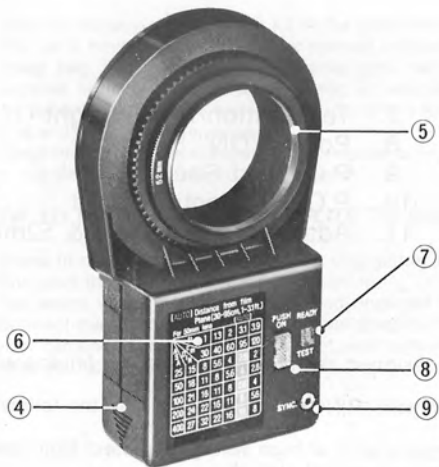
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## English

### DESCRIPTION

- |                                 |                              |
|---------------------------------|------------------------------|
| 1. RING Flash Window            | 7. Test Button/Ready Light   |
| 2. Auto Sensor Eye              | 8. Power "ON" Switch         |
| 3. Auto/Manual Switch           | 9. P.C. cord Socket          |
| 4. Battery Compartment Lid      | 10. P.C. Connecting Cord     |
| 5. Series VII Screw Ring (Male) | 11. Adaptor Ring 49mm & 52mm |
| 6. Flash Guide Table            |                              |

### MR 20 RINGFLASH

- This RING FLASH is automatic flash unit designed particularly for close-up photography and easy to use.
- In order to gain the maximum benefit from your RING FLASH please read the following instruction carefully.
- Please remember that the electronic flashguns work at high voltages, protect from damp conditions and do not dismantle-except by a qualified station.

## **BATTERY INSTALLATION**

1. Slide the battery compartment lid in the direction of the **arrow** for about 2mm until resistance is felt. The lid is hinged and can now be opened outward.
2. Insert two "AA" size alkaline batteries into the compartment, taking care that the positive and negative terminals are correctly aligned as indicated.
3. We recommend alkaline batteries for use in this flashgun because of their longer life, and endurance to a wider temperature range
4. Clean the battery and compartment contacts at regular intervals. Remove the batteries if the flashgun is not likely to be used for a long period.

## **HOW TO INSTALL THE MACRO-LITE TO CAMERA**

1. Screw in one of the series VII thread ring generally available at any camera store onto your camera lens, and then install the Lens Flash on it.
2. The series VII 49mm and 52mm thread rings are included in this unit.
3. Connect the synchrocord one end (male-plug) to the back of this unit (female-plug) and other end to your camera "X" contact, and then set your camera shutter speed to "X" setting or 1/60 sec. (Please refer your camera instruction booklet).

## **OPERATION**

1. Set your camera ASA speed in accordance with your film in use.
2. Push the "ON" switch button. Green indicator lamp will light up indicating "power on". When fully charged, the red ready light lamp will blink indicating the unit is ready for operation.
3. Test the unit by depressing the test button located on the back of the unit.
4. After operation, the unit will automatically recycle and when fully charged, the red ready lamp will again blink indicating the unit is now ready for further operation.
5. After fully charged and unit is left for longer period without use, the green light will automatically turn off, however, as long as the red ready lamp blinking, the unit is always ready to use.

## **AUTOMATIC USE**

1. Set the "A" (auto)/"M" (manual) switch to "A" position.
2. If you are using ASA100 film speed, set your camera aperture to F5.6. In this case, automatic operation range is 30-95 cm (1-3.1 feet).
3. If you are using other than ASA100 film speed, please refer F setting guide table printed on the back of the unit for proper setting.

## **MANUAL USE**

1. Set the "A" (auto)/"M" (manual) switch to "M" position.
2. When in manual use, set the F setting in accordance with the F exposure guide table printed on the back of the unit (Focal length 50mm only).

3. When you wish to determine accurate distance or you wish to use macro lens, please refer and determine the F setting from the guide tables in this booklet.

## PRECAUTIONS

1. Should the unit fail to operate for any reason other than depleted batteries please refer to qualified service personnel. A high voltage capacitor is incorporated in the unit.
2. Remove the batteries if the unit is not in use for any period exceeding say 2 or 3 weeks.
3. Keep the unit dry and store in a moisture-free environment.
4. When photographing outdoors or in a large room or hall where there are no effective reflecting surfaces nearby, it is necessary to set the camera lens at a wider aperture than that indicated in the exposure table (1 or 2 f stops).
5. Ready-light. If the ready-light remains on after the unit has been switched off, no harm results from leaving the charge to gradually disperse or to discharge by pressing the open flash button. However, to preserve battery life, it is preferable not to discharge the unit.
6. Close-up photography. With extension tubes or bellows, the extra exposure for close working is best determined by reference to the factors provided with the extension tubes or the approximate scale of reproduction with bellows.  
The exposure factor =  $(1 \div \text{scale})^2$ . Thus, at a scale of 1:1, for example, the exposure factor is 4× and the lens aperture should be opened two stops.

## SPECIFICATIONS

Guide number:	5 (ASA 100 in meter)
Recycling time:	10sec. with alkaline batteries
Number of flashes:	120 with alkaline batteries
Angle of coverage:	80°
Auto setting:	F5.6 (ASA 100 in meter)
Auto effective range:	30-95cm (1-3.1 feet)
Automatic power off:	Green lamp turns off when or after fully charged
Ready lamp:	Red ready lamp blinks when fully charged
Applicable lens:	The focal length more than 50mm
Flash rotation:	360° rotation possible
Power source:	Two AA size alkaline batteries
Dimensions:	150 × 90 × 36mm
Weight:	200g without batteries

- Because we continually strive to improve our products, we may change specifications without prior notice



# EXPOSURE TABLE MANUAL USE

## 50mm LENS

A S D A I N	in ft cm	12	16	20	24	28	32	35	39	43	47
		1	1.3	1.6	2	2.3	2.6	3	3.3	3.6	4
		30	40	50	60	70	80	90	100	110	120
25	15	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4	4	2.8	2
50~64	18~19	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4	4	2.8
100	21	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4	4
200	24	22	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4
400	27	22 $\frac{1}{2}$	22	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4

## 60mm LENS

A S D A I N	in ft cm	12	16	20	24	28	32	35	39	43	47
		1	1.3	1.6	2	2.3	2.6	3	3.3	3.6	4
		30	40	50	60	70	80	90	100	110	120
25	15	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	2
50~64	18~19	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8
100	21	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4
200	24	22	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4
400	27	22 $\frac{1}{2}$	22	11 $\frac{1}{2}$	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$

## 70mm LENS

		in	12	16	20	24	28	32	35	39	43	47
A S A D I N c m	ft	1	1.3	1.6	2	2.3	2.6	3	3.3	3.6	4	
	m	30	40	50	60	70	80	90	100	110	120	
25	15	8	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	2	
50~64	18~19	8 $\frac{1}{2}$	8	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	
100	21	11 $\frac{1}{2}$	8 $\frac{1}{2}$	8	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	
200	24	22	11 $\frac{1}{2}$	8 $\frac{1}{2}$	8	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	
400	27	22 $\frac{1}{2}$	22	11 $\frac{1}{2}$	8 $\frac{1}{2}$	8	8	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	

## 80mm LENS

		in	12	16	20	24	28	32	35	39	43	47
A S A D I N c m	ft	1	1.3	1.6	2	2.3	2.6	3	3.3	3.6	4	
	m	30	40	50	60	70	80	90	100	110	120	
25	15	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	2	
50~64	18~19	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	
100	21	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	
200	24	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	
400	27	22 $\frac{1}{2}$	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	

## 90mm LENS

		12	16	20	24	28	32	35	39	43	47
		in	ft	1	1.3	1.6	2	2.3	2.6	3	3.3
		30	40	50	60	70	80	90	100	110	120
25	15	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	2
50~64	18~19	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8
100	21	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4
200	24	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4
400	27	22 $\frac{1}{2}$	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6 $\frac{1}{2}$	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$

## 100mm LENS

		12	16	20	24	28	32	35	39	43	47
		in	ft	1	1.3	1.6	2	2.3	2.6	3	3.3
		30	40	50	60	70	80	90	100	110	120
25	15	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8	2
50~64	18~19	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4	2.8
100	21	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4	4
200	24	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4
400	27	22 $\frac{1}{2}$	22	11	8 $\frac{1}{2}$	8	5.6 $\frac{1}{2}$	5.6	5.6	4 $\frac{1}{2}$	4 $\frac{1}{2}$