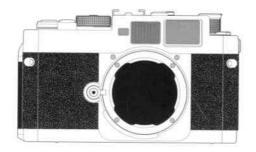


BEDIENUNGSANLEITUNG INSTRUCTION MANUAL MANUEL D'INSTRUCTIONES MANUAL DE INSTRUCCIONES 使用説明書



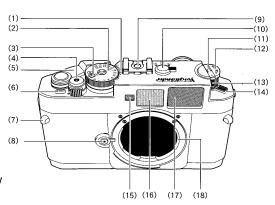
BESSA-R2M, R3M

Congratulations on the purchase of your new Bessa rangefinder! This is a compact and lightweight camera with a VM lens mount. Quick and accurate focusing is easy. Just turn the focusing ring until the doubled images of your subject seen at the finder's center converge into a single image.

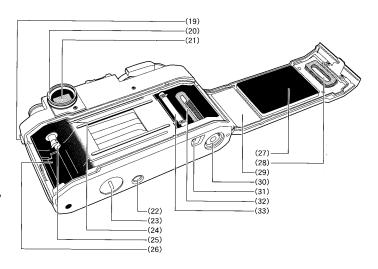
You can easily get the proper exposure by using the TTL exposure metering. LED indicators displayed in the viewfinder will guide you. This camera has a mechanical shutter system and uses the battery only for metering.

Description of Parts

- (1) Shutter Speed Index
- (2) Shutter Speed ISO/ Film Speed Ring
- (3) Film Speed Window
- (4) Shutter Release Button
- (5) Film Advance Lever
- (6) Film Counter
- (7) Neck Strap Eyelet
- (8) Lens Release Button
- (9) Accessory Shoe
- (10) Frame Selector Lever
- (11) Film Rewind Crank
- (12) Film Rewind Knob
- (13) Film Rewind Crank Tip
- (14) Backdoor Lock Lever
- (15) Rangefinder Window
- (16) Bright-line Frame Illumination Window
- (17) Viewfinder Window
- (18) VM Lens Mount

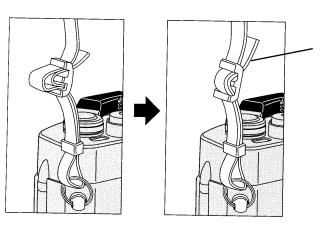


- (19) Synchro Contact
- (20) Finder Frame
- (21) Viewfinder
- (22) Tripod Socket
- (23) Battery Chamber Lid
- (24) Film Guide Rails
- (25) Rewind Fork
- (26) Film Cartridge Chamber
- (27) Film Pressure Plate
- (28) Film Cartridge Confirmation Window
- (29) Back Door
- (30) Winder Coupler
- (31) Film Rewind Button
- (32) Film Take-up Spool
- (33) Film Sprockets



Attaching the neck strap

Attach the neck strap to the camera as illustrated below.



Be sure the protective end of the strap is on the inside.

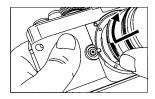
Mounting/Removing Lens

M (Bayonet) Mount lens

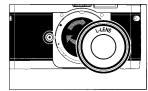
- To mount the lens, match the red mark on the camera body with the red mark on the lens barrel, then insert the lens into the camera body and turn the lens clockwise until it clicks.
 To remove the lens from the camera body, press the Lens
- 2. Release Button(8) and turn the lens all the way counter clockwise, then lift it straight out of the mount.

●L Mount lens

- Mount M-Bayonet Adapter Ring (sold separately) on the camera body.
 - *Any one of three types of M-Bayonet Adapter Ring can be used. *Refer to the instruction manual for M-Bayonet Adapter Ring to mount it on the camera body.
 - Align the lens mount screw with that of the M-Bayonet Adapter
- Ring, then turn the lens clockwise.
 *Pay attention not to over-tighten the lens to the body.
 - To remove the lens from the camera, turn the lens
- counterclockwise.







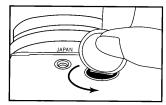
Inserting Batteries

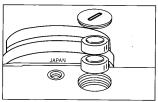
- 1. Turn the Battery Chamber Lid (23) counter clockwise using a coin or screwdriver.
- 2. Two LR44 alkaline or two SR44 silver oxide batteries may be used to power the camera.
- 3. Place the batteries so that both positive (+) sides are toward the bottom of the battery chamber.
- 4. Turn the Battery Chamber Lid (23) clockwise until it closes firmly.

Battery Check

- 1. Lightly press the Shutter Release Button(4). If the LED in the viewfinder does not light(or blink), then the batteries need replacing or have been loaded incorrectly.
- 2. Replace both batteries as necessary.
- Until winding the Film Advance Lever, the exposure-metering switch is locked.

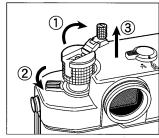
Caution: Keep batteries away from infants and small children. In case a battery is accidentally swallowed, call a doctor immediately.

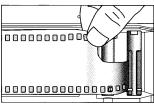




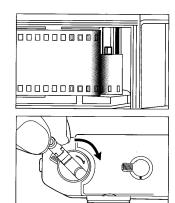
Loading Film

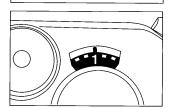
- To open the Back Door (29), unfold and lift the Film Rewind Crank(11) up, then pull the Film Rewind Knob(12) up while holding the Backdoor Lock Lever(14) in the release position. When the Back Door is opened, the Film Counter (6) will automatically reset to "S."
 Insert the film cartridge into the Film Cartridge Chamber
- (26) so that the protruding end of the film cartridge is on the bottom. Do this in a place away from direct sunlight. Rotate the Film Rewind Crank carefully while pushing down lightly on the Film Rewind Knob until the film locks on the
- Film Rewind Fork (25).
 Insert the film leader into the grooves of the Film Take-up Spool (32) and place it so that the sprockets engage the
- 4. film edge perforations.





- 5. Check that the film perforations are properly engaged by the teeth of the Film Sprockets (33) and that the film slides smoothly along the Film Guide Rails (24) while turning the Film Advance Lever (5) lightly in order to advance the film. Do not touch the shutter curtain.
- Gently close the Back Door and push it until it clicks and locks shut.
- 7. Remove the slack by turning the Film Rewind Crank (11) gently in the direction of the arrow until the loaded film is properly tensioned. Stop turning the crank when it is tight, and then return the crank to its original position. Advance the film a few frames and operating the Film
- 8. Advance Lever until the Film Counter (6) indicates "1". Make sure that the Film Rewind Knob rotates slightly each time the film is advanced, which will tell you that the film is advancing properly.

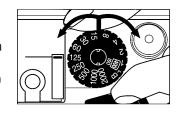




Film Speed Setting

- 1. Film speed (ASA/ISO) is indicated on the outside of the film package or in the film instructions.
- 2. To set the Film speed: lift the Film Speed Ring (2) and turn it until the arrow indicator on the inner ring points to the corresponding Film speed value which can be seen through the Film Speed Window (3).

Caution: Make sure to set the film speed exactly at the detent, not in between, othewise proper shutter speed will not be shown in the viewfinder.



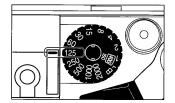
Exposure Metering

How the viewfinder LED shows over-exposure, correct exposure, or under exposure:

Exposure Setting (Shutter Speed Priority)

- 1. Turn the Shutter Speed Ring (2) so that the indicator line aligns with the desired shutter speed value. Be sure that the dial clicks into position.
- With brighter light, fast moving subjects, or when using fast film, it is recommended to use higher shutter speeds to adjust to correct exposure value.

+2 blinks O blinks ······	over exposure by over 2EV
+2 lights O blinks ······	over exposure by 2EV
+1.5 lights O blinks ·······	over exposure by 1.5 EV
+1 lights O blinks ·····	over exposure by 1 EV
+0.5 lights O blinks ······	over exposure by 0.5 EV
O lights	Correct exposure
-0.5 lights O blinks ······	under exposure by 0.5EV
-1 lights O blinks ······	under exposure by 1 EV
-1.5 lights O blinks ·······	under exposure by 1.5 EV
-2 lights O blinks ······	under exposure by 2 EV
-2 lights O blinks ······	under exposure by over 2 EV



3. Here is a list of situations and their recommended shutter speeds (assuming the film being used is ISO 100/21):

Conditions	Shutter speed
Stationary subject in subdued light	1-1/15
Indoors in normal conditions	1/30-1/60
Outdoors on a fine day	1/125-1/250
Seaside in midsummer	1/500-1/2000
Mountain area with snow	1/500-1/2000
Fast moving subjects	1/500-1/2000

- 4. To check exposure, lightly press the Shutter Release Button (4) and turn the aperture ring until the LED indicates exposure is correct. When LED indicates over exposure, turn the aperture ring in the direction of greater f/value. If LED indicates under exposure, turn the aperture ring to a smaller f/value to adjust to correct exposure value.
- 5. Gently push down Shutter Release Button.

Note: Outside the exposure metering range of your camera (EV1 to EV19), the Exposure meter will not function properly.

Exposure Setting (Aperture Priority)

- 1. Turn the aperture ring until the index on the lens barrel indicates the desired f/value.
- The suitable aperture value changes according to the brightness of the subject, the depth-of-field desired, or the film speed of the film in use. Typical settings of the aperture with ISO 100/21 film are as below.

Condition	F value
Indoors in normal conditions	F2 - F4
Outdoors on a cloudy day	F4 - F8
Outdoors on a fine day	F8 - F11
Seaside in midsummer	F11 - up
Mountain area with snow	F11 - up

- 3. Click points are provided each speed setting on the Film Speed Ring. When setting the film speed, make sure that it clicks positively on a speed position, not in between.
- 4. To check exposure, lightly press the Shutter Release Button (4) and turn the Shutter speed dial until the LED lights in the finder align. When you have a situation of overexposure, then turn the shutter speed dial to the higher shutter speed and if a situation of under exposure, then turn the shutter speed dial to the lower shutter speed setting.

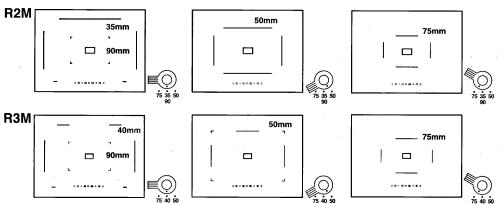
Note: Outside the exposure metering range of your camera (EV1 to EV19), the exposure meter will not function properly.

Selecting Framelines

Turn the Frame Selector Lever (10) and the frame illustrated below will be shown in the finder. Each frame shows the field of view for the lens indicated.

Select the frame pattern according to the focal length of the lens you have mounted on the camera.

Additionally, parallax is automatically corrected according to the shooting distance.



Focusing 1

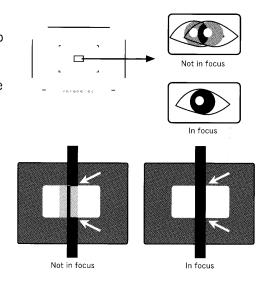
For accurate focusing, with subjects such as a group of people, a "double image" viewfinder with a central focus zone will ensure that sharp images are easily recorded.

To achieve this, simply turn and adjust the focusing ring on the lens until the double image converges to one.

Focusing 2

For accurate focusing of architectural or technical subjects with vertical lines, use the "Split image" focusing option. To achieve this, simply turn and adjust the focusing ring on the lens so that the lines join together.

* When focusing, make sure to put your eye in the middle of the Viewfinder.



Holding Camera

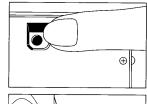
- Hold the camera in the palm of your right hand. This will allow you to use your left hand to support the underside of the camera and also allow it to turn the aperture and focus rings of the lens.
- 2. Hold the camera body steadily and place your right index finger lightly on the shutter release button.
- Press your right elbow lightly against your body and then look through the rangefinder eyepiece to steady the camera against your face. Then relax your right arm holding the camera.

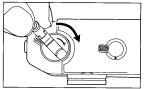


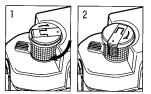


Rewinding the Film

- When the roll of film ends, the advance lever will no longer advance. Check the Film Counter (6) display. If the Film Counter shows that the all the frames of the loaded film have been exposed, then the film needs to be rewound.
- 2. Press the Film Rewind Button (31) on the bottom of the camera.
- 3. Unfold the Film Rewind Crank (11) and turn it in the direction of the arrow. In case if the Film Rewind Crank Tip (15) stops in between Film Rewind Knob (14) and camera body (fig.1), after press the film Rewind Button (34) turn the Film Rewind Knob (14) till the Film Rewind Crank Tip (15) will be in the free space to unfold (fig.2)
- 4. When the winding tension eases, the film is completely wound into the cartridge and is ready to be removed.
- Pull up the Film Rewind Knob (12) and pull the Backdoor Lock Lever (14) in order to open the Back Door and take out the film.
- 6. Remove the film cartridge in a place away from direct sunlight.





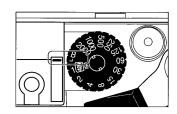


Note: If the film reaches the end of the roll during a film advance stroke, then the film advance lever will lock. Rewind the entire roll, then complete the stroke of the film advance lever after removing the cartridge.

"B" (Bulb) setting

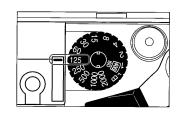
- With the Film Speed Ring (2) set at "B" position, the shutter will remain open for as long as the Shutter Release Button (4) is pressed.
- 2. This setting is useful when an exposure longer than one second is required, such as in night photography.
- 3. Be sure to use a tripod and/or cable release when using long shutter times to avoid camera shake.

Note: We recommend that you remove the batteries to avoid wasting energy when you use the "B" setting.



Flash Photography

- 1. Simply fit the flash unit into the Accessory Shoe (9).
- 2. Set the Film Speed Ring (2) at 1/125 sec. or slower.
- Set the corresponding aperture value form the Guide Number of your flash unit by operating the aperture ring and follow the instruction given in the manual of your flash unit.



Optional Accessories

Trigger Winder

This accessory screws into the bottom of the camera and lets you pull a trigger with your left hands that allows a rapid series of exposures.

Side Grip

This improves your right hand's grip on the camera. Also adds weight to stabilize shooting.

M bayonet adapter ring

This M bayonet adapter ring is necessary to use L mount lenses on your Bessa camera. (Can also be used on other M bayonet cameras).



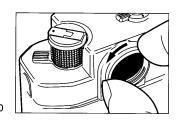


Diopter Lens

Diopter lenses in 6 types (-3, -2, -1, +1, -2, +3) are available as optional accessories to compensate for your eyeglass prescription.

Attaching a diopter lens

- Turn the rubberized Finder Frame (20) counter clockwise to detach it.
- Screw the selected Diopter Correction Lens in clockwise.
 Note: Ask your dealer for details.



Specifications

Type: 35mm camera with focal plane shutter and TTL metering

system featuring LED display.

Film Format: 35mm film, 24x36mm

Lens Mount: VM mount

Shutter: Vertically moving mechanical metal focal plane shutter B, 1-

1/2000 sec

Finder magnification: x1.0 Bessa-R3M

x0.7 Bessa-R2M

Framelines: 40mm, 50mm, 75mm, 90mm (Bessa-R3M)

35mm, 50mm, 75mm, 90mm (Bessa-R2M)

Focusing: Coincidence type. Infinity -0.7m

Exposure display: By LED indicator in viewfinder.

Exposure Metering System: Center-weighted average metering.

Exposure Coupling Range: EV1-19(ISO 100, F1.4, 1sec. - F16, 1/2000sec)

Flash Terminal: X synchronic contact synchronized at 1/125sec or slower

speed

Film Advance: By single and/or multiple ratcheting lever action. Double

exposure lock system. 120-degree throw and 45-degree

stand off

(Trigger winder available as optional extra.)

Film Rewind: By film rewind button and rewind crank.

Film Counter: Additive type with auto reset by opening the backdoor.

Film Speed Range: ISO 25 - 3200 by 1/3 steps.

Power Source: Two 1.5V Alkaline batteries(LR44) or Silver oxide

batteries(SR44)

Dimensions: $135.5(W) \times 81(H) \times 33.5(D)$ mm

Weight: 430g

Note: These specifications and external appearance are subject to change without prior notice.