

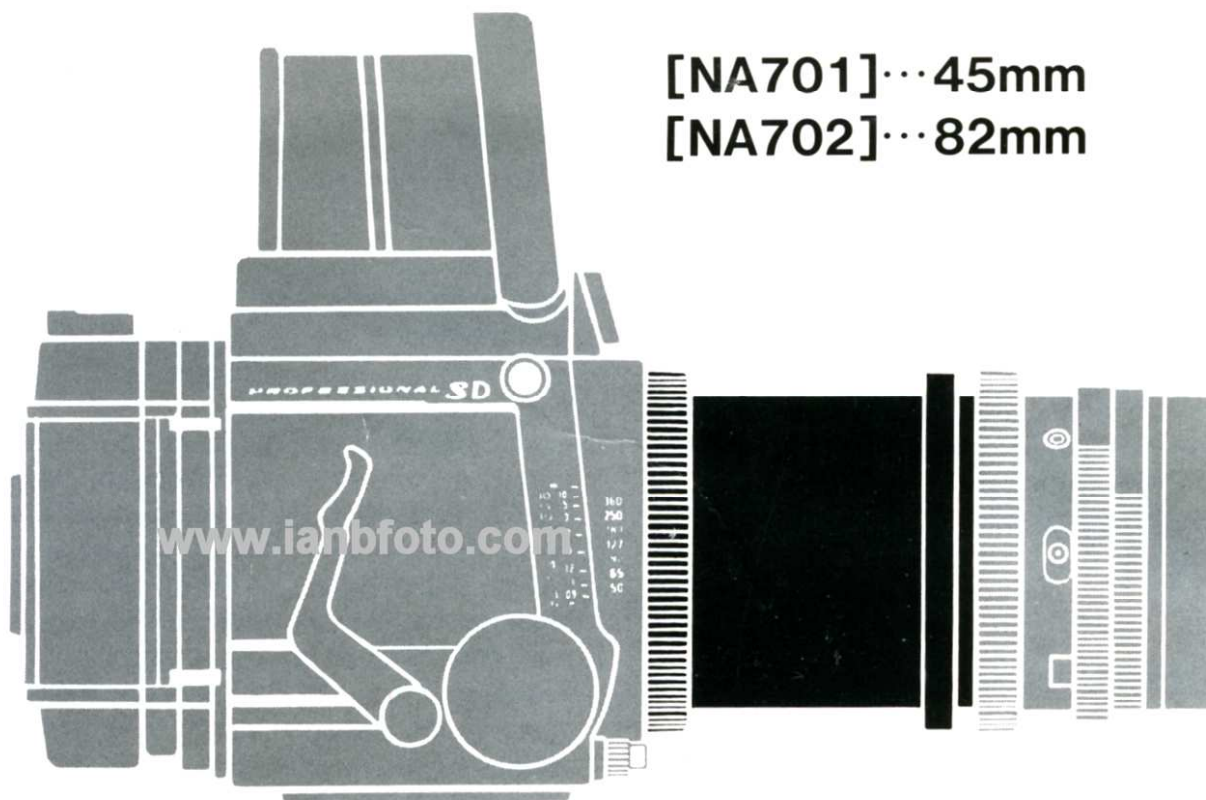
RB67 Pro-SD

Mamiya

オート中間リング Auto Extension Tubes Automatik-Zwischenringe Bagues macro

[NA701]···45mm

[NA702]···82mm



日本語 使用説明書

English Instructions

Deutsch Bedienungsanleitung

Français Mode d'emploi

Special Features

When desiring to approach the subject closer than the bellows extension of the camera permits, Auto Extension Tubes are used. Because shutter and aperture coupling is fully retained when mounted on Auto Extension Tubes the lens operates in the normal manner, greatly simplifying close-up photography.

- These Auto Extension Tubes are for exclusive use with the Mamiya RB67 Pro-SD.

Auto Extension Tubes are available in two size, both of which operate identically. They may also be used in combination. Extension (length) of the tubes follow:

- NA701...45mm
- NA702...82mm
- NA701+NA702...127mm

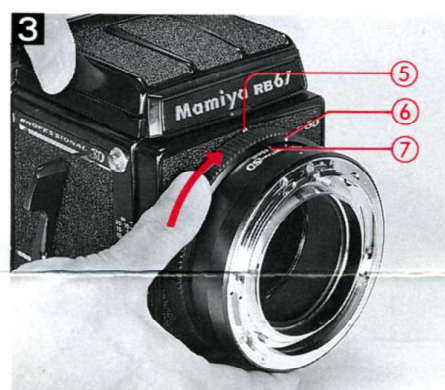


Before Mounting Auto Extension Tube

1. Set the mirror (2) by pushing the Cocking Lever (1) completely down. (Photo 1)
2. Rotate the Cocking Pin of the tube (3) until it is aligned with the red dot. When the pin is released, it will return to the green dot (G). (Photo 2)
3. Repeat the same procedure with the lens (not necessary if the lens shutter is already cocked).

Mounted Auto Extension Tube

1. Rotate Bayonet Ring of the tube, aligning the white dot on the ring (6) with the red index on top of the tube (7).
2. While aligning the red index of the tube (7) with the red dot on the camera body (5), seat the tube properly on the camera body mount, and lock it in place by firmly rotating the Bayonet Ring clockwise. (Photo 3)



English

3. Rotate the Bayonet Ring of the lens also, aligning its white dot ⑨ with the central red index of the lens.
4. Align the central red index of the lens with the red dot of the tube ⑧, mounting the lens and locking it in place by twisting the Bayonet Ring clockwise. (Photo 4)
If the lens does not fit into the mount of the tube properly, twist the lens to-and-fro slightly until it does, and then lock it in place by twisting the Bayonet Ring clockwise.

Using Both Tubes Simultaneously

1. Rotate the cocking pin of each tube, aligning it with the red dot.
2. Align the white dot on the Bayonet Ring of each tube with the red index on the tube.
3. Mount one tube onto the other (the order of the tubes does not matter).
4. Mount the combination of tubes on the camera body. Finally, mount the lens on the tube combination.



Removing the Tubes

1. Push the Cocking Lever ① all the way down.
2. Twist the Bayonet Ring of the lens completely counterclockwise and remove the lens.
3. Twist the Bayonet Ring of the tube counterclockwise and remove the tube from the camera body. (Photo 5)

Precautions

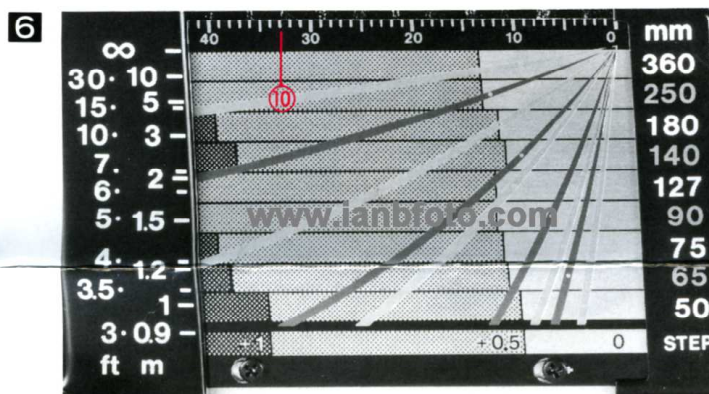
Instead of removing them individually, the combination of lens and tube can be removed from the camera body if desired; however, after removing the tube from the lens, make sure the shutter of the lens is cocked before remounting the lens on the camera body.

Close-up Photography

Because the shutter and diaphragm automation of a lens mounted on Auto Extension Tube is fully retained operation of the lens is the same as when it is mounted on the camera body.

However, because the exposure factors appearing on the Exposure Compensation Scale no longer apply when using extension tubes, refer to the Close-up Tables.

1. Mirror-up operation is recommended for optimum results in close-up photography.
2. Use as small an aperture as possible.



3. Avoid using combinations other than NA701+NA702 (e.g. NA702+NA702).
4. Vignetting will occur with Polaroid Land Pack Film Holder if the 180mm or 250mm lens is mounted on the NA701+NA702 tube combination with bellows extended.
5. Do not use the 37mm, 50mm, 500mm, and the Shift 75mm lens on an extension tube.

Determining the Exposure Factor

1. Determine the bellows extension by checking the Bellows Extension Scale ⑩ which is found above the Focal Length Scale. In the illustration above, the bellows extension is 42mm. (Photo 6)

2. Read the exposure factor for the appropriate lens and extension tube combination in the right-hand column of the Close-up Table (Bellows Extension/ Exposure Factor column).

For example, assume that the combination of 127mm lens and Extension Tube NA702 is used. If the bellows extension were the same as in the above illustration (42mm), the exposure factor would be +2 stops (steps) according to the Close-up Table. With an exposure factor of +2 stops, exposure would be increased by making the shutter speed two stops longer (such as changing 1/60 sec to 1/15 sec) or the aperture two stops larger (such as changing f/22 to f/11).



NA701...45mm NA702...82mm NA701+NA702...127mm

レンズの種類 Lens	中間リング Tube	撮影倍率 Magnification	被写体距離 (cm) Subject Distance	写る大きさ (cm) Area Covered	繰出量目盛 Bellows Extension (mm) 露出修正値 Exposure Factor (STEP)
KL 65mm f/4	(NA701)	0.68~1.38	8.7~ 3.9	(8.2×10.2)~(4.1× 5.0)	
KL 75mm f/3.5	(NA701)	0.60~1.21	12.8~ 6.4	(9.4×11.7)~(4.7× 5.8)	
KL 90mm f/3.5	(NA701)	0.49~1.00	20.0~10.7	(11.3×14.1)~(5.6× 7.0)	
	(NA702)	0.90~1.41	11.7~ 8.1	(6.2× 7.7)~(4.0× 5.0)	
	(NA701)+(NA702)	1.39~1.90	8.1~ 6.4	(4.0× 5.0)~(3.0× 3.7)	+2.5
KL 127mm f/3.5	(NA701)	0.35~0.72	41.6~23.4	(15.8×19.6)~(7.8× 9.7)	
	(NA702)	0.65~1.01	25.4~18.3	(8.7×10.8)~(5.6× 6.9)	
	(NA701)+(NA702)	1.00~1.36	18.4~15.0	(5.6× 7.0)~(4.1× 5.1)	+2.5
Macro C 140mm f/4.5	(NA701)	0.32~0.65	52.3~30.7	(17.3×21.5)~(8.6×10.7)	
	(NA702)	0.59~0.91	33.0~24.5	(9.6×11.9)~(6.1× 7.6)	
	(NA701)+(NA702)	0.91~1.23	24.6~20.5	(6.2× 7.6)~(4.5× 5.6)	+2.5
Soft C 150mm f/4	(NA701)	0.30~0.61	59.5~34.1	(18.7×23.2)~(9.3×11.5)	
	(NA702)	0.55~0.85	36.8~26.9	(10.3×12.7)~(6.6× 8.2)	
	(NA701)+(NA702)	0.85~1.15	27.1~22.3	(6.6× 8.2)~(4.9× 6.0)	+2.5
C 180mm f/4.5	(NA701)	0.25~0.51	86.3~49.9	(22.4×27.8)~(11.1×13.8)	
	(NA702)	0.46~0.71	53.8~39.6	(12.3×15.3)~(7.9× 9.8)	
	(NA701)+(NA702)	0.71~0.96	39.8~33.0	(7.9× 9.8)~(5.8× 7.2)	+1.5
C 250mm f/4.5	(NA701)	0.18~0.37	160.7~93.0	(30.4×37.7)~(15.2×18.6)	
	(NA702)	0.34~0.52	100.2~74.1	(16.7×20.7)~(10.7×13.3)	+2
	(NA701)+(NA702)	0.52~0.71	74.4~62.0	(10.8×13.4)~(7.9× 9.8)	+2
C 360mm f/6.3	(NA701)	0.12~0.25	352.2~206.6	(44.8×55.6)~(22.1×27.5)	
	(NA702)	0.23~0.36	222.2~165.4	(24.6×30.5)~(15.8×19.5)	+2
	(NA701)+(NA702)	0.35~0.48	166.2~139.0	(15.9×19.7)~(11.7×14.5)	+2
(APO) KL 210mm f/4.5 *	(NA701)	0.21~0.43	118.9~69.3	(26.2×32.5)~(12.9×16.1)	
	(NA702)	0.39~0.61	74.6~55.3	(14.4×17.8)~(9.2×11.4)	+2
	(NA701)+(NA702)	0.60~0.82	55.6~46.3	(9.3×11.5)~(6.8× 8.4)	+2
(APO) KL 250mm f/4.5 *	(NA701)	0.18~0.37	159.3~91.9	(30.5×37.8)~(15.1×18.7)	
	(NA702)	0.34~0.52	99.2~72.9	(16.7×20.8)~(10.7×13.3)	+2
	(NA701)+(NA702)	0.52~0.71	73.2~60.7	(10.8×13.4)~(7.9× 9.8)	+2
(APO) KL 350mm f/5.6 *	(NA701)	0.13~0.26	313.9~180.2	(42.9×53.3)~(21.2×26.4)	+1.5
	(NA702)	0.24~0.37	194.5~142.4	(23.6×29.2)~(15.1×18.7)	+1.5
	(NA701)+(NA702)	0.37~0.50	143.1~118.2	(15.2×18.9)~(11.2×13.9)	+2