

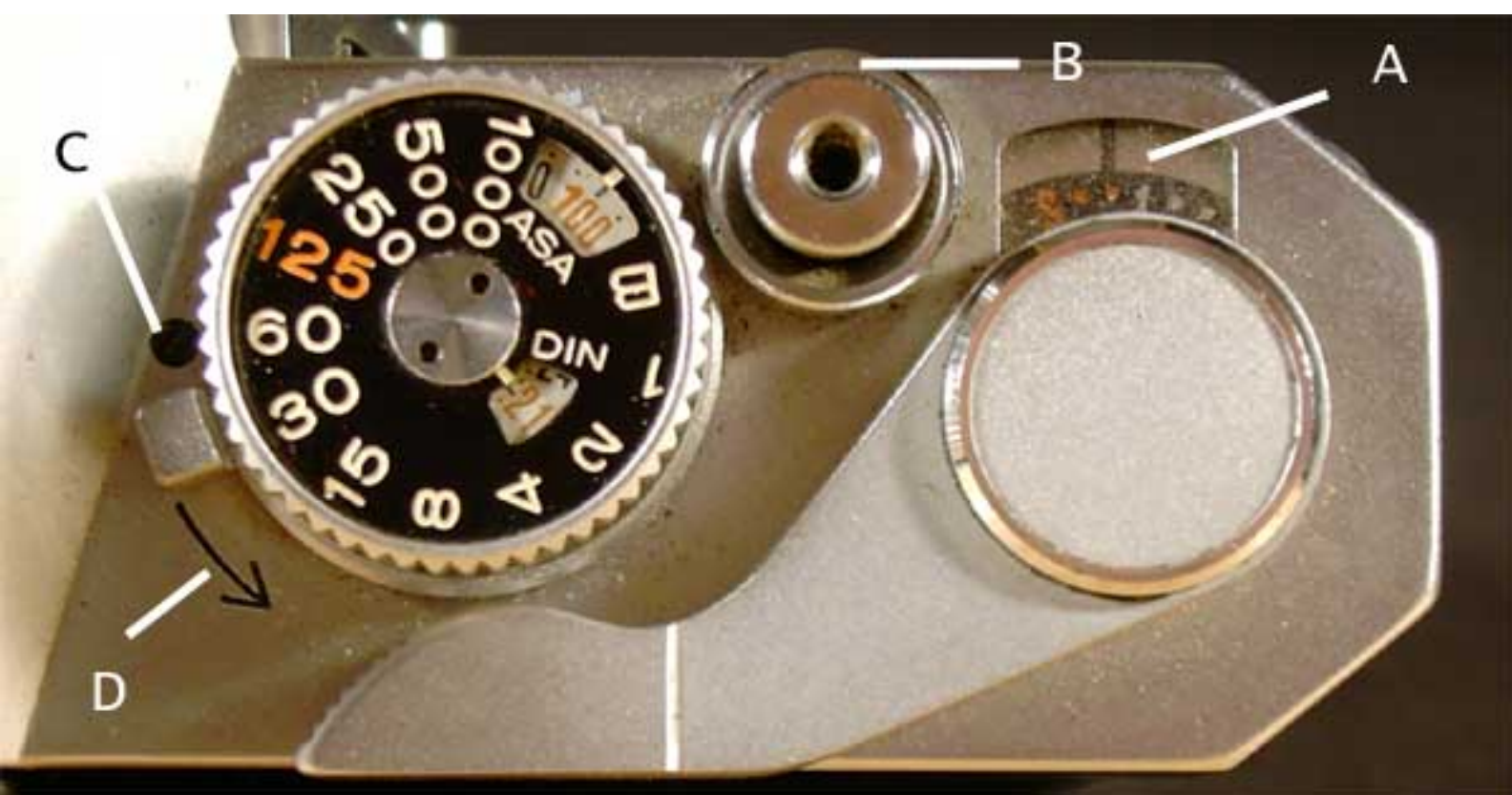


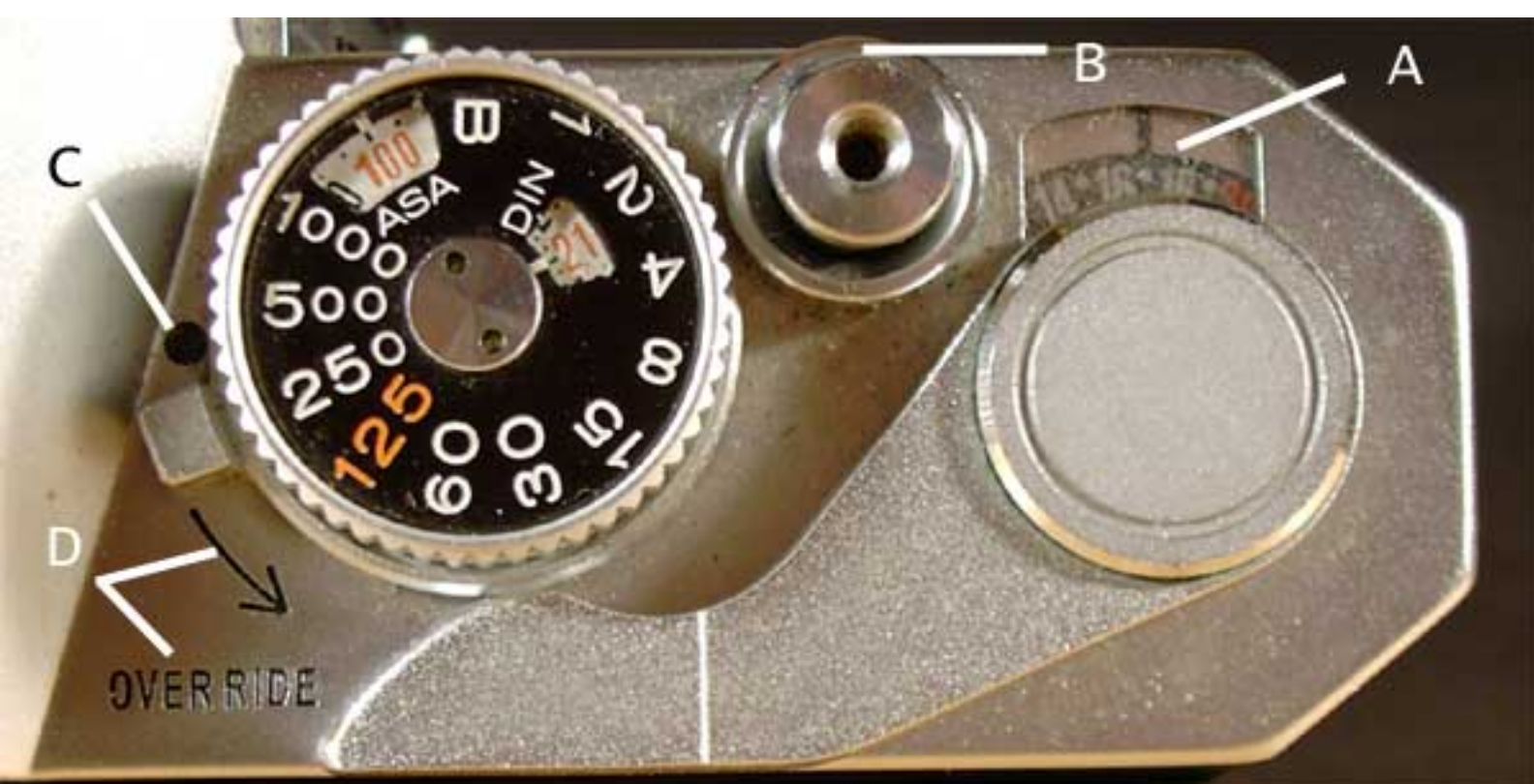


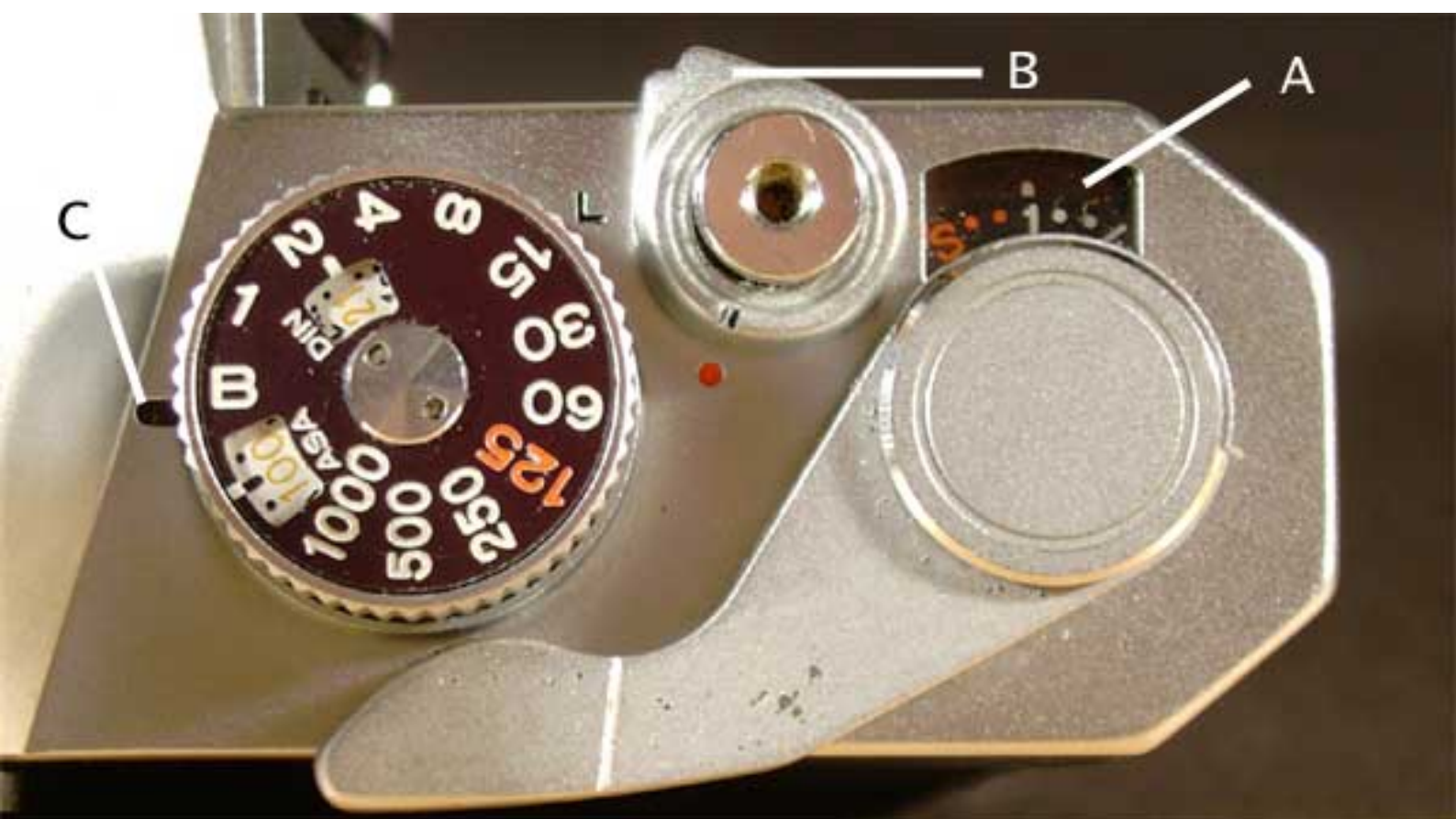












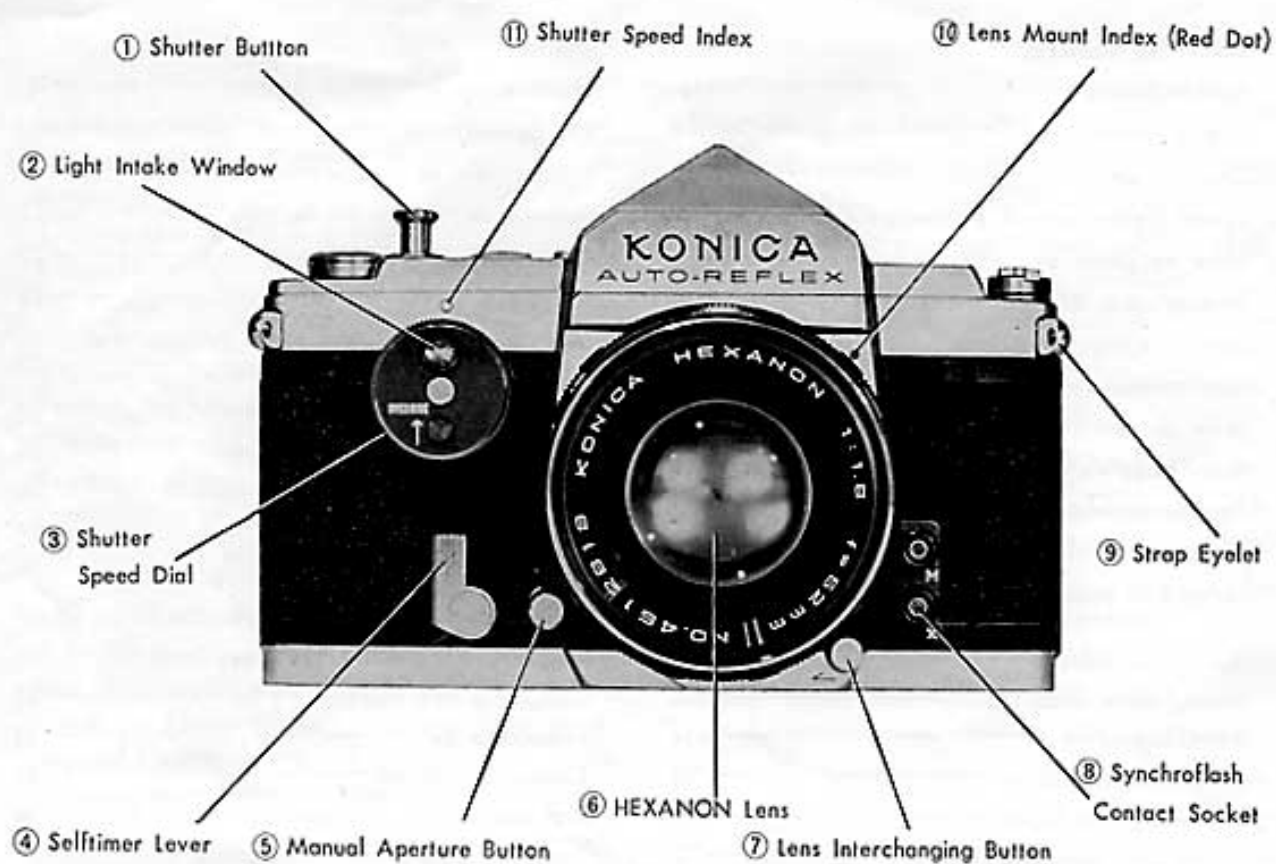
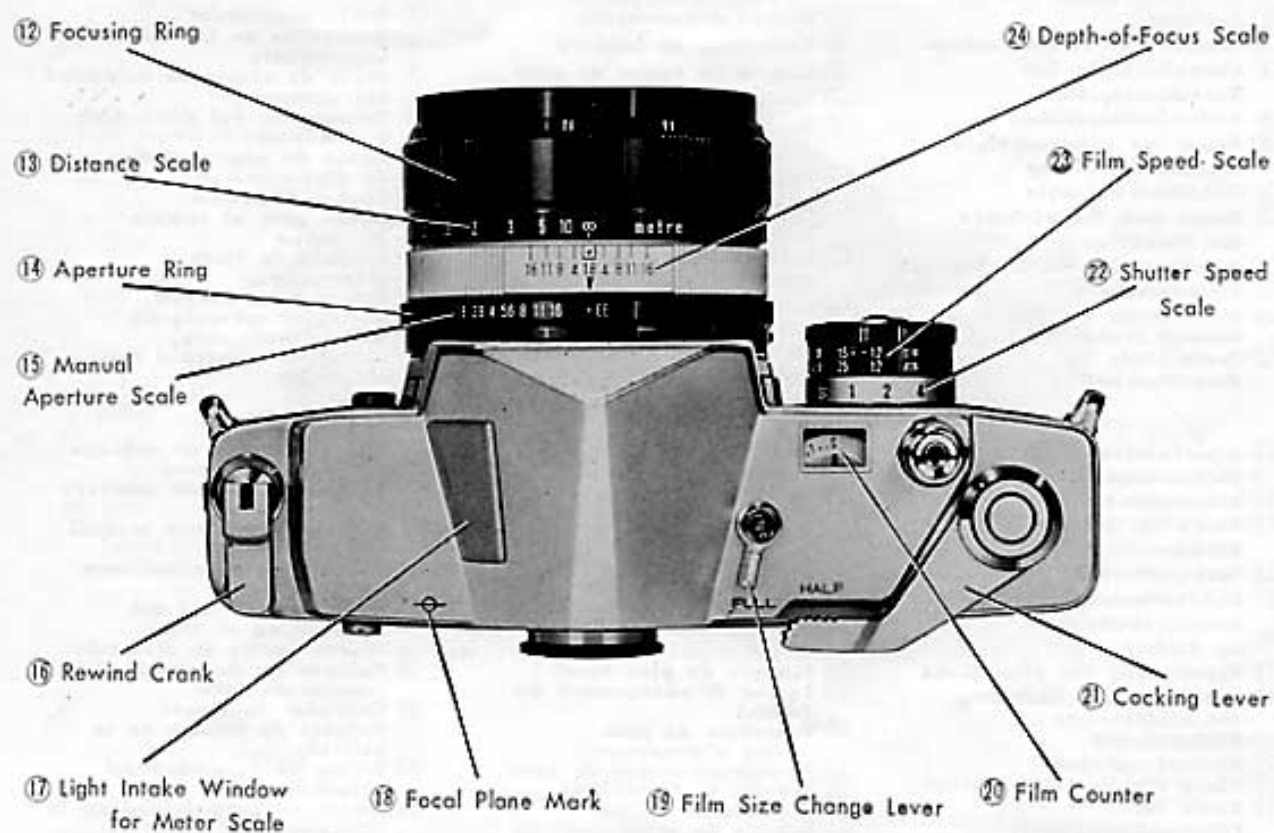


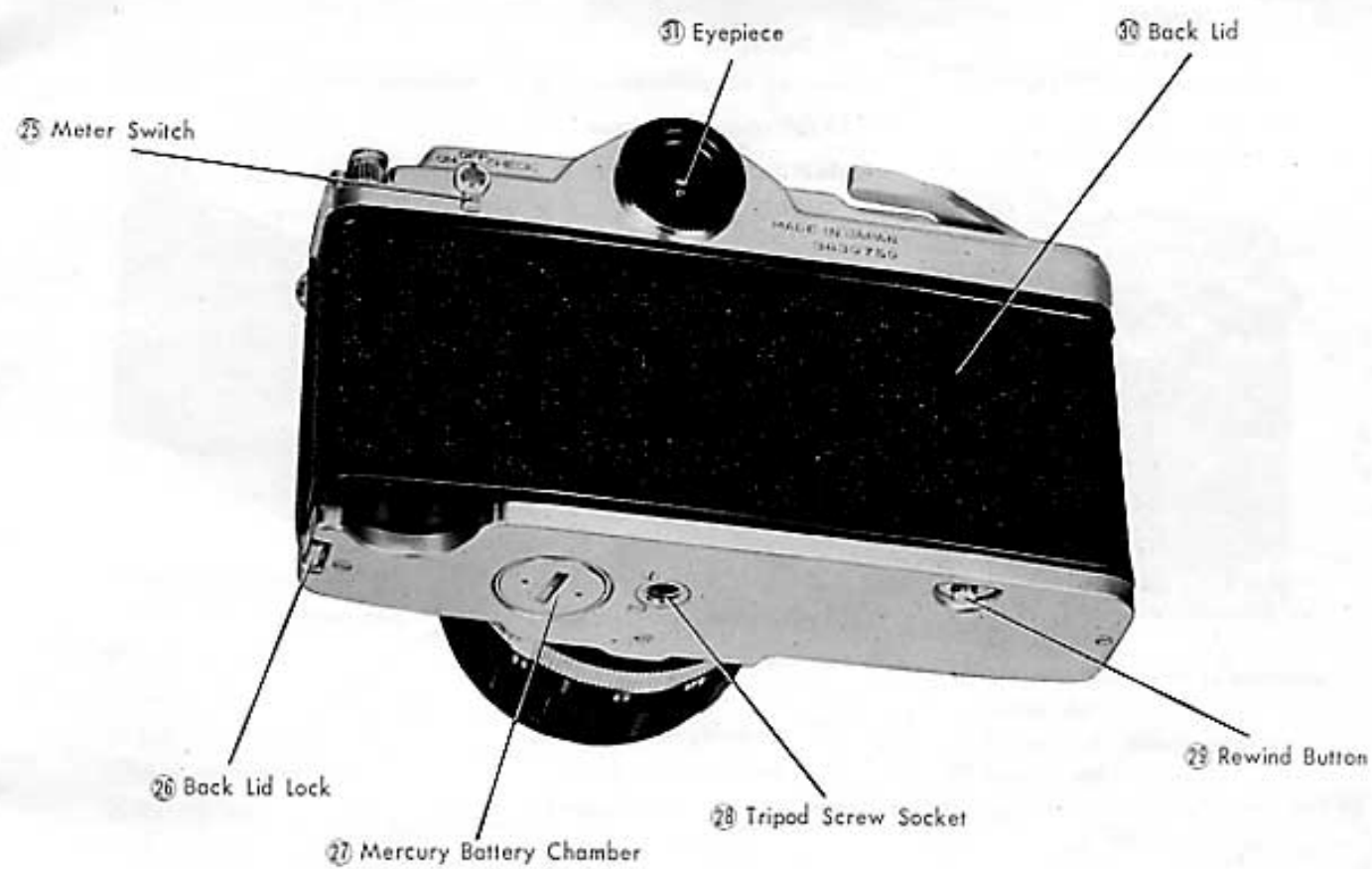
Table des matieres

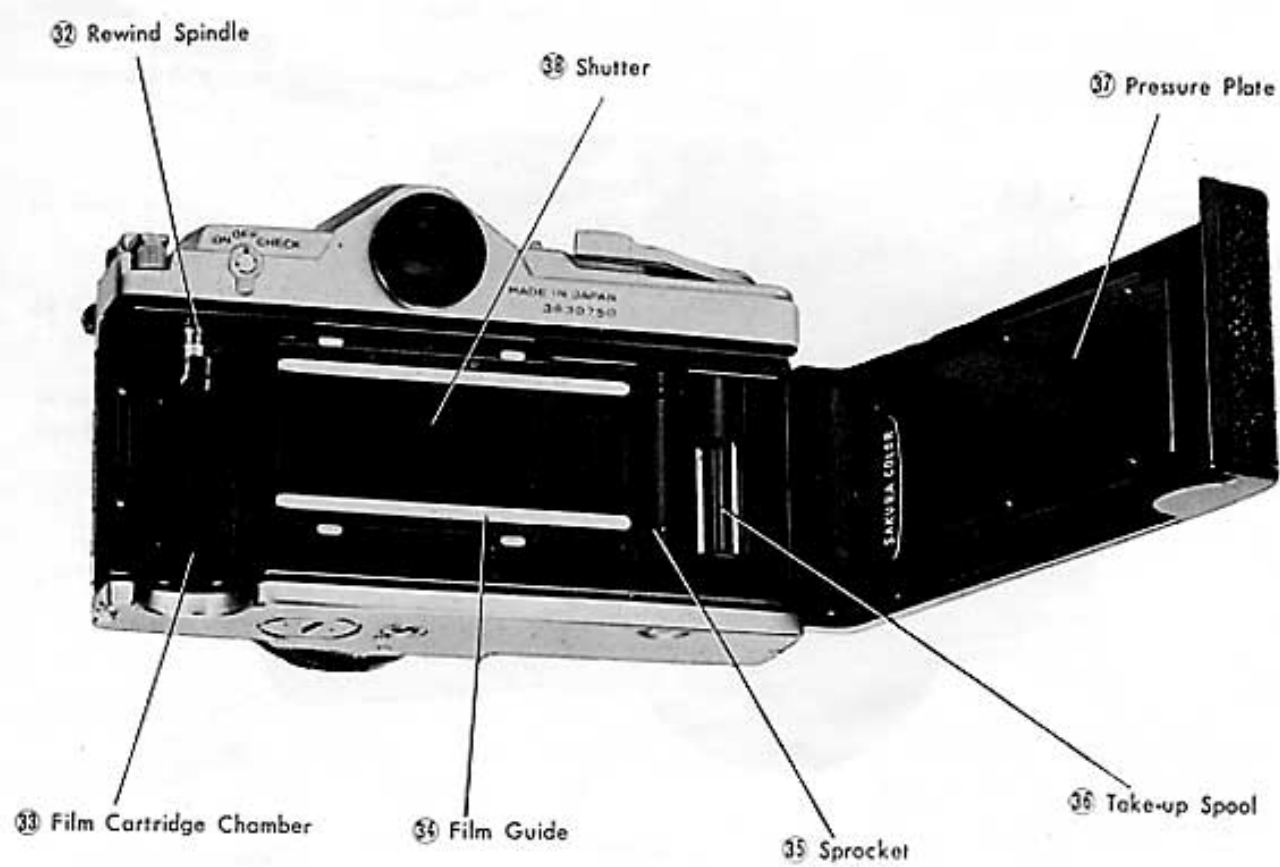
Nomenclature	5
Pile à mercure	10
Contrôle de pile	11
Levier d'entraînement et compteur de pose ...	11
Mise en place de pellicule	12
Photographie EE	18
Gamme d'exposition correcte et avertisseurs ...	20
Changement de format	23
Mise au point et viseur	25
Rebabinage de pellicule	26
Fonctionnement de l'auto-déclencheur	27
Changement d'objectif	29
Lorsque la cellule photo-électrique incorporée n'est pas utilisée	30
Bouton de déblocage	31
Photographie avec synchro-flash	33
Demi-exposition	34
Utilisation de filtres	35
Profondeur de foyer	36
Ouverture manuelle	37

Indice

Nombre de las partes	5
Pila de mercurio	10
Verificación de la pila	11
Palanca de avance de la película	11
Cómo cargar de la película	12
Fotografía a EE	18
Límite de exposición correcta y Marca de caución	20
Cambio de tamaño de fotografía	23
Cómo enfocar y mirar el visor	25
Enrollamiento inverso de la película	26
Cómo emplear el disparador automático	27
Intercambio de lentes	29
Cuando no utiliza el mecanismo de EE	30
Botón de sobrepaso ("override")	31
Fotografía con flash	33
Exposición de "B"	34
Cuando usa filtros	35
Profundidad del enfoque	36
Apertura manual del diafragma	37







- ① Auslöser
- ② Fenster für Lichtaufnahme
- ③ Einstellscheibe für Verschlusszeiten
- ④ Selbstauslöserhebel
- ⑤ Knopf für handbetätigte Blendeneinstellung
- ⑥ HEXANON-Objektiv
- ⑦ Knopf zum Auswechseln des Objektivs
- ⑧ Anschluss für Blitzlichtgerät
- ⑨ Tragriemenöse
- ⑩ Markierung für Objektivfassung (roter Punkt)
- ⑪ Markierung für Verschlusszeiten

- ⑫ Scharfeinstellung
- ⑬ Entfernungsskala
- ⑭ Blendeneinstellung
- ⑮ Skala für handbetätigte Blendeneinstellung
- ⑯ Rückspulkurbel
- ⑰ Lichtaufnahmefenster für Anzeigevorrichtung im Sucher
- ⑱ Markierung für Filmfläche
- ⑲ Hebel für die Änderung des Bildformats
- ⑳ Bildzahlwerk
- ㉑ Filmaufzughebel
- ㉒ Skala für Verschlusszeiten
- ㉓ Skala für Filmempfindlichkeit
- ㉔ Skala für Tiefenschärfe

- ① Bouton d'obturateur
- ② Collecteur de lumière
- ③ Cadran de temps de pose
- ④ Levier d'auto-déclencheur
- ⑤ Bouton de réglage d'ouverture manuel
- ⑥ Objectif HEXANON
- ⑦ Bouton d'objectif interchangeable
- ⑧ Prise de flash synchronisé (borne)
- ⑨ Oeil de le courroie
- ⑩ Indice pour la fixation de l'objectif (Point rouge)
- ⑪ Indice de temps de pose

- ⑫ Anneau de mise au point
- ⑬ Echelle de distances
- ⑭ Anneau de réglage d'ouverture
- ⑮ Echelle de réglage d'ouverture manuel
- ⑯ Levier de rebabinage
- ⑰ Collecteur de lumière pour posamètre à l'intérieur du viseur
- ⑱ Marque du plan focal
- ⑲ Levier du changement de format
- ㉑ Compteur de pose
- ㉒ Levier d'armement
- ㉓ Echelle de temps de pose
- ㉔ Echelle de sensibilité d'émulsion
- ㉕ Echelle de profondeur de foyer

- ① Botón disparador
- ② Ventanilla de luz del exposímetro
- ③ Disco de escala de velocidad del obturador
- ④ Palanquilla del disparador automático
- ⑤ Botón de apertura manual de diafragma
- ⑥ Lentes HEXANON
- ⑦ Botón para el cambio de lentes
- ⑧ Enchufe de flash sincronizado
- ⑨ Ojal para la correa
- ⑩ Índice de montaje de lente (punto rojo)
- ⑪ Índice de velocidad del obturador

- ⑫ Anillo selector de enfoque
- ⑬ Escala de distancia
- ⑭ Anillo selector de apertura de diafragma
- ⑮ Escala de apertura manual de diafragma
- ⑯ Palanca de enrollamiento inverso
- ⑰ Ventanilla de luz del medidor en el visor
- ⑱ Marca básica de distancia
- ⑲ Palanquilla de cambio de tamaño de foto
- ㉑ Contador de tomas
- ㉒ Palanca de avance de la película
- ㉓ Escala de velocidad del obturador
- ㉔ Escala de sensibilidad de la película
- ㉕ Escala de profundidad focal

Mercury Battery

- 1 Unscrew the lid of the battery chamber (27) by turning it in a counterclockwise direction.
- 2 Insert the battery so that the end bearing the + mark faces up and matches the + mark of the lid. When the lid is replaced, the + marks should touch each other.

Quecksilberbatterie

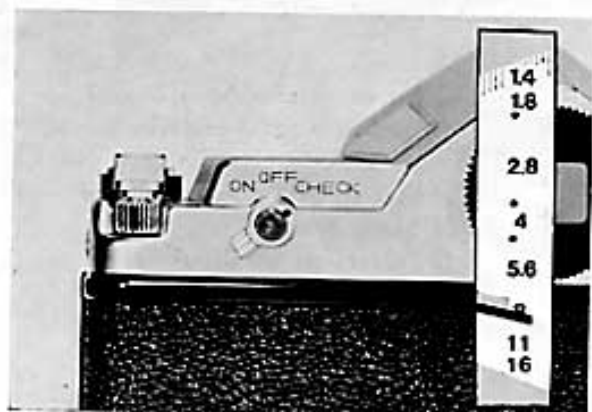
- 1 Schrauben Sie den Deckel der Batteriekammer (27) durch Drehen im Gegenuhrzeigersinn ab!
- 2 Legen Sie die Batterie so ein, dass das Ende mit der + Markierung der + Markierung des Deckels gegenüberliegt. Wird der Deckel wieder aufgeschraubt, berühren sich die + Markierungen.

Pile à mercure

- 1 Le couvercle de cette chambre (27) se détache lorsqu'on le tourne dans le sens inverse des aiguilles d'une montre.
- 2 Placez la pile de façon que le bout marqué de la croix + concorde avec la même marque sur le couvercle.

Ponga la pila de mercurio

- 1 Quite la tapa (27) de la cámara para la pila de la Cámara, dándole vuelta al sentido izquierdo.
- 2 Coloque la pila de mercurio de tal manera que la marca + de la pila se enfrente con la marca + de la tapa.



Battery Check

Set the meter switch (25) to "CHECK". The meter needle (49) visible in the viewfinder will begin swinging. If the battery is working, the needle will stop swinging at or beyond the check mark (46).

Batterieprüfung

Stellen Sie den Belichtungsmesser (25) auf "CHECK". Der Zeiger (49) im Sucher bewegt sich. Wenn die Batterie nicht erschöpft ist, bleibt der Zeiger bei oder jenseits der Kontrollmarkierung (46).

- ②⑤ Hebel für Belichtungsmesser
- ②⑥ Verriegelung des Rückendeckels
- ②⑦ Kammer für Quecksilberbatterie
- ②⑧ Gewinde für Stativ
- ②⑨ Rückspulknopf
- ③① Rückendeckel
- ③② Suchereinblick

- ②⑤ Commutateur de posemètre
- ②⑥ Serrure du couvercle de dos
- ②⑦ Chambre de pile à mercure
- ②⑧ Taraud de trépied
- ②⑨ Bouton de rebobinage
- ③① Couvercle de dos
- ③② Oculaire

- ②⑤ Palanquilla del exposímetro
- ②⑥ Seguro de la tapa trasera
- ②⑦ Cámara para la pila de mercurio
- ②⑧ Rosca para el trípode
- ②⑨ Botón para el enrollamiento inverso
- ③① Tapa trasera
- ③② Ocular

- ③② Rückspulspindel
- ③③ Raum für Filmpatrone
- ③④ Filmführung
- ③⑤ Zahnrad
- ③⑥ Aufwickelspule
- ③⑦ Filmandruckplatte
- ③⑧ Verschluss

- ③② Axe de rebobinage
- ③③ Chambre à cartouche
- ③④ Entraînement de pellicule
- ③⑤ Tambour
- ③⑥ Bobine enrouleuse
- ③⑦ Plaque de pression
- ③⑧ Obturateur

- ③② Eje de enrollamiento inverso
- ③③ Cámara para el cartucho de película
- ③④ Riel de guía para la película
- ③⑤ Rueda dentada
- ③⑥ Carrete de enrollamiento
- ③⑦ Lámina de presión
- ③⑧ Obturador

Film Loading

- * Use 35mm film which comes in a safety cartridge.
- * Avoid direct sunlight when loading camera with film.

Filmeinlegen

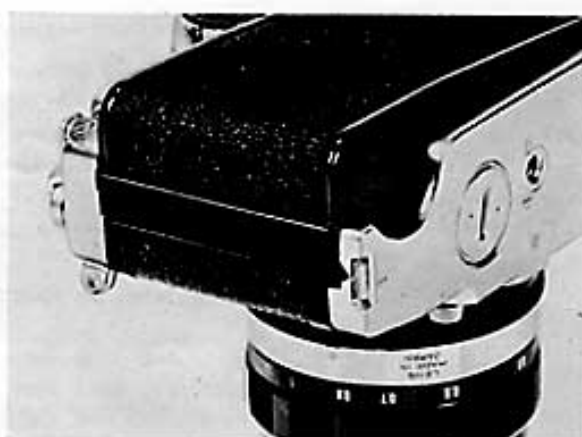
- * Verwenden Sie 35mm Film in Sicherheitspatrone!
- * Vermeiden Sie beim Filmeinlegen direktes Sonnenlicht!

Mise en place de pellicule

- * Utilisez la pellicule 35mm en cartouche de sécurité.
- * Lorsque vous disposez la pellicule dans l'appareil, évitez le soleil direct.

Cómo cargar de la película

- * Utilice la película de 35mm que viene en el cartucho de seguridad.
- * Evite la luz directa del sol cuando carga la película.

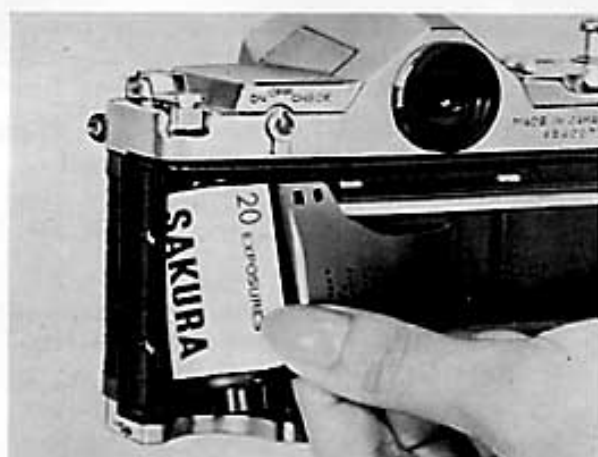


1 Draw the back lid lock 26 to open the back lid 30.

1 Ziehen Sie die Rückendeckelverriegelung 26 heraus und öffnen Sie den Rückendeckel 30!

1 Tirez la serrure du couvercle de dos 26 et ouvrez le couvercle 30.

1 Tire para afuera el seguro de la tapa trasera 26 y abra la tapa trasera.

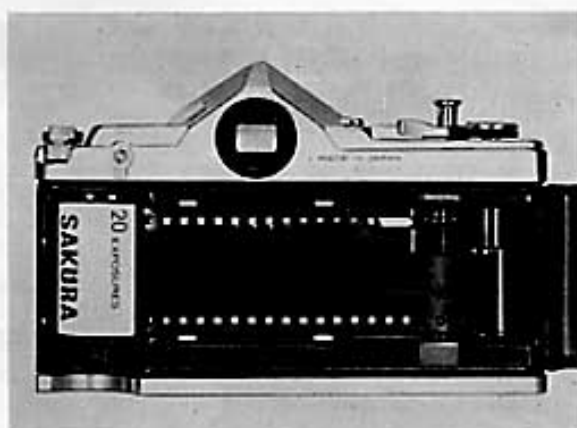


② Place the film cartridge into the cartridge chamber ③.

② Legen Sie einen neuen Film in Sicherheitspatrone in den Patronenraum ③ ein!

② Placez dans la chambre à cartouche ③, la cartouche de sécurité avec la pellicule vierge.

② Coloque en la cámara para el cartucho de película ③ el cartucho con la película nueva.



③ Insert the film leader tip into the take-up spool ⑤.

③ Stecken Sie den Filmanfang in die Aufwickelspule ⑤!

③ Insérez l'avance de la pellicule dans la bobine enrouleuse ⑤.

③ Meta la tira de película en la ranura de la carrete de enrollamiento ⑤.

Contrôle de pile

Tournez le commutateur de posemètre ②⑤ jusqu'à l'indication "CHECK" (contrôle) et l'aiguille du posemètre ④⑨ à l'intérieur du viseur commencera à osciller. Si la pile n'est pas usée, l'aiguille s'arrêtera soit à la marque de contrôle ④⑥, soit au delà de cette même marque.

Cocking Lever and Film Counter

- * Make sure that the cocking lever is fully cocked at all times.
- * The film counter ②⑩ advances one step (one step for two half-frame pictures) each time the transport lever is fully cocked and indicates the number of pictures you have taken.

Filmaufzughebel und Bildzählwerk

- * Drücken Sie den Filmaufzughebel jedesmal bis zum Anschlag durch!
- * Das Bildzählwerk ②⑩ schaltet eine Zahl weiter (eine Zahl für zwei Halbformatbilder), wenn der Filmaufzughebel gedrückt wird, und zeigt die Zahl der aufgenommenen Bilder an.

Levier d'armement et Compteur de pose

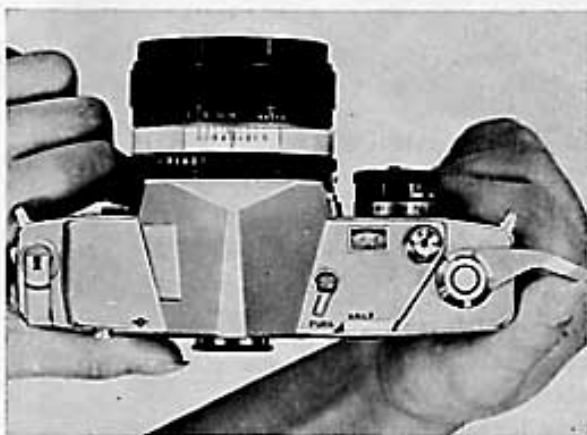
- * Contrôlez bien que le levier d'armement est entièrement armé.
- * Le compteur de pose ②⑩ avancera d'un cran (d'un cran également pour deux poses demi-format) chaque fois que le levier d'armement est tourné à fond, et indique le nombre des prises effectuées.

Palanca de avance y Contador de tomas

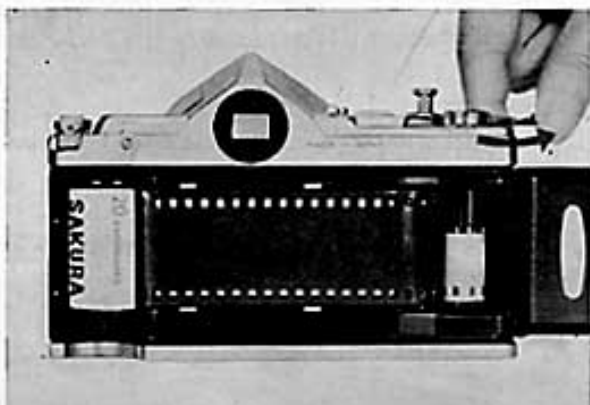
- * Opere siempre la palanca de avance hasta asegurar la parada en el final de su movimiento.
- * Cada vez que opera la palanca de avance de película, el contador de tomas ②⑩ avanza por un paso (un paso por cada dos fotos en el medio tamaño) e indica el número de fotos tomadas.

Verificación de la pila

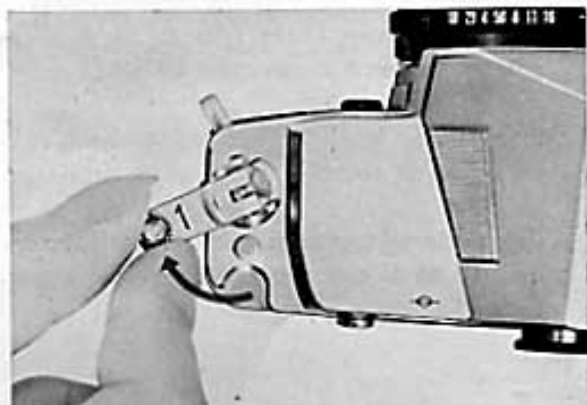
Al poner a CHECK la palanquilla del exposímetro ②⑤ oscilará la aguja indicadora del exposímetro ④⑨ dentro del visor. Cuando la pila tiene suficiente fuerza, la aguja indicadora se detendrá posando de la marca de verificación de pila ④⑥.



- ④ Turn the transport lever ② to wind the film onto the spool. Make sure that the sprocket claws ③ engage the film perforations, before closing the back lid.
- ④ Drücken Sie den Filmaufzughebel ② durch und transportieren Sie den Film weiter! Achten Sie darauf, dass die Zahnräder ③ in die Randlelöcher des Films greifen, bevor der Rückendeckel geschlossen wird!
- ④ Tournez le levier d'entraînement ② pour enrouler la pellicule à la bobine. Contrôlez bien que les dents du tambour ③ engagent les perforations de pellicule, avant de fermer le couvercle de dos.
- ④ Enrolle la película sobre la carrete, dando vuelta a la palanca de avance de la película ②. Después de confirmar que los dientes de la rueda dentada ③ hayan agarrado la perforación (los orificios en la película), cierre la tapa trasera.



- ⑤ After closing the back lid, lift the rewind crank ⑥ and gently turn it in the direction indicated by the arrow mark until all film slack has been taken up.
- ⑤ Klappen Sie nach dem Schliessen des Rückendeckels die Rückspulkurbel ⑥ hoch und drehen Sie sie leicht in Pfeilrichtung, bis der Film straff angezogen ist.
- ⑤ Après avoir fermé le couvercle de dos, relevez le levier de rebobinage ⑥ et tournez-le doucement dans le sens indiqué par la flèche jusqu'à ce que la pellicule soit bien tendue.
- ⑤ Después de cerrar la tapa, levante la palanca de enrollamiento inverso ⑥, déle lentamente vueltas al sentido de la flecha para no dejar aflojamiento en la película.



Electric-Eye Photography (Automatic)

- * The film speed is indicated on the film box and the instruction sheet.
- * Make sure that the film speed is properly set at all times. Incorrect setting will lead to incorrect exposure.
- * The film speed is calibrated in ASA and DIN. ASA is the American standard and DIN the European.



1 Set the film speed scale 23.



2 Set the EE mark of the aperture ring 14 to the index mark

Hold the edge of the shutter speed dial 3 between your fingers and raise the dial, then turn it to line up the film speed rating with the triangular red mark.

Turn the aperture ring to line up the dot of the EE mark with the red arrow index mark. The ring will click into position at this point.

Film Speed Scale

ASA	12	(16)	(20)	25	(32)	(40)	50	64	(80)	100	(125)	(160)	200	(250)	(320)	400	(500)	(640)	800
DIN	12	.	.	15	.	.	18	.	.	21	.	.	24	.	.	27	.	.	30



- 3 Turn the shutter speed dial ③ and choose your shutter speed

It is advisable to preset the shutter speed at 250 for bright, clear weather; 125 for clear weather; 60 for cloudy weather and 30 for indoors.



- 4 Turn the meter switch ④ to the "ON" position to operate the meter

When the camera is not to be used, turn the switch to OFF to prevent the battery from running down.



- 5 While looking through the viewfinder at the subject, make sure the meter ⑤ is visible in the viewfinder

If the meter needle ⑤ is seen swinging within the correct exposure range ⑥—that is, within the aperture calibrations of the lens mounted on your camera—you will be able to secure correct exposure.

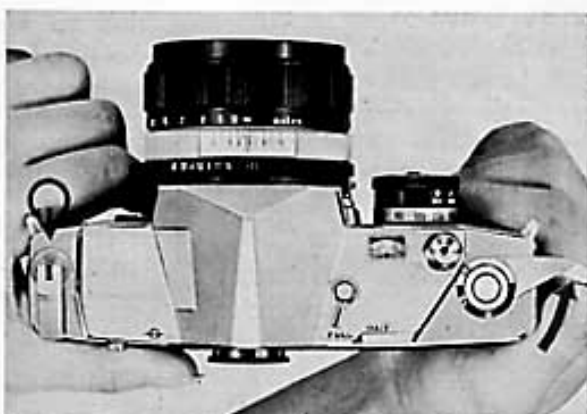
- ⑥ Turn the cocking lever and depress the shutter button ①. Repeat this blank-shot action once for 35mm and three times for half-frame pictures. The film counter ② should indicate one step before the numeral "1".
- ⑥ Drücken Sie den Filmaufzughebel durch und drücken Sie den Auslöser ①! Wiederholen Sie diese Blindaufnahme bei Vollformat einmal und bei Halbformat noch dreimal! Das Bildzählwerk ② muss jetzt eine Stufe vor der Zahl "1" stehen.
- ⑥ Tournez le levier d'armement et appuyez sur le bouton d'obturateur ①. Répétez cette prise à vide encore une fois (pour le demi-format, effectuez trois autres prises à vide). Le compteur ② doit indiquer un cran avant le chiffre "1".
- ⑥ Opere la palanca de avance de película, oprima el botón disparador ①, y haga una exposición franca para la foto del medio 4 exposiciones francas para el medio tamaño. Entonces, el contador de tomas ② indicará un punto anterior al número 1.

When the film is properly taken up on the spool, you will see the rewind knob revolve counter-clockwise. If not, the film is not being properly transported.

Wenn der Filmtransport richtig erfolgt, dreht sich der Rückspulknopf im Gegenuhreigersinn. Wenn nicht, wird der Film nicht richtig transportiert.

Lorsque la pellicule est enroulée correctement sur la bobine enrouleuse, le bouton de rebobinage doit tourner dans le sens inverse des aiguilles d'une montre.

Cuando la película se enrolla correctamente sobre la carrata, girará el eje de enrollamiento inverso cada vez que opera la palanca de avance de película.



* If Meter Needle shows Underexposure, choose a slower shutter speed, and make sure that the needle swings within the correct exposure range. If the needle does not come within this range although the shutter speed dial is fully turned, there is not enough light to take pictures using the electric-eye system.

* If Meter Needle shows Overexposure, choose a faster shutter speed.

* Wenn der Zeiger eine Unterbelichtung anzeigt, stellen Sie eine längere Verschlusszeit ein und beobachten Sie, ob der Zeiger innerhalb des Bereichs für eine richtige Belichtung bleibt! Falls der Zeiger nicht in diesem Bereich steht, obwohl die Verschlusszeit so weit wie möglich verlängert wird, sind die Lichtverhältnisse nicht geeignet, um Aufnahmen mit dem EE-System zu machen.

* Wenn der Zeiger eine Überbelichtung anzeigt, verkürzen Sie die Verschlusszeit!

* Si l'aiguille du posemètre indique la sous-exposition, choisissez un temps de pose plus long. Contrôlez bien pour que l'aiguille oscille à l'intérieur de la gamme d'exposition correcte. Si l'aiguille n'oscille pas dans cette zone, même après avoir tourné à fond le cadran de temps de pose, l'éclairage est trop sombre pour faire des photos avec la cellule photoélectrique incorporée.

* Si l'aiguille indique la sur-exposition, choisissez un temps de pose plus court.

* Cuando la aguja indicadora señala el fallo de exposición, seleccione una velocidad más lenta del obturador. Y si la aguja indicadora entra en el límite de exposición correcta, podrá tomar fotos a EE. Si la aguja indicadora no entra en el límite de exposición correcta aun cuando se dé toda vuelta al disco de velocidad de obturador, no podrá tomar fotos a EE porque es excesivamente oscuro.

* Cuando la aguja indicadora señala el exceso de exposición, cambie en una velocidad de obturador más rápida.



Correct Exposure Range and Warning Signals

As long as the meter needle 49 is visible within the correct exposure range (or within the aperture calibrations of the lens mounted on your camera), it is possible to take pictures under the electric-eye system. The needle indicates the lens aperture. The red marks seen at both ends of the meter scale in the viewfinder are warning signals for an $f/1.4$ lens. If an $f/1.4$ lens is mounted on your camera and the needle points to either red mark, you will not be able to secure correct exposure.

Bereich der richtigen Belichtung und Warnsignale

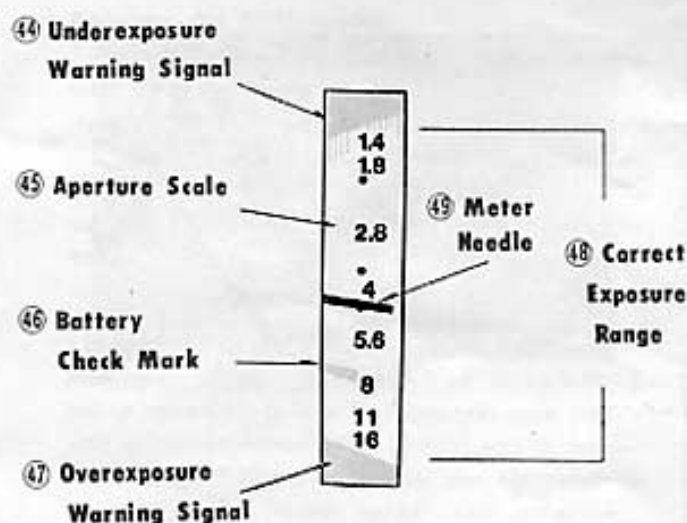
Solange der Zeiger 49 innerhalb des Bereichs der richtigen Belichtung (oder innerhalb des Blendenbereichs des Objektivs) steht, sind Aufnahmen nach dem EE-Verfahren möglich. In diesem Fall zeigt der Zeiger die Blendenwerte an. Die roten Markierungen an beiden Skalenenden im Sucher sind Warnsignale für ein $f/1.4$ -Objektiv. Wenn die Kamera mit einem $f/1.4$ -Objektiv ausgerüstet ist und der Zeiger auf eine der roten Markierungen weist, ist eine richtige Belichtung nicht mehr möglich.

Camme d'exposition correcte et avertisseurs

Si l'aiguille du posemètre 49 est visible à l'intérieur de la gamme d'exposition correcte (ou dans les limites du calibrage d'ouverture) il est possible de réaliser des photos avec le système de cellule photo-électrique incorporée. L'aiguille indique l'ouverture. Les marques rouges qui se trouvent à deux bouts de l'échelle du posemètre visible à l'intérieur du viseur sont des avertisseurs pour un objectif de $f/1.4$. Si vous utilisez l'objectif $f/1.4$, et que l'aiguille s'arrête sur une des deux marques rouges, l'exposition ne sera pas correcte.

Límite de la exposición correcta y Marca de caución

Cuando la aguja indicadora 49 del exposímetro se encuentra dentro del límite de exposición correcta (en el límite de la escala de diafragma del lente en uso), se indica que es posible fotografiar a EE. Y la aguja indicadora señala la apertura de diafragma a la cual trabaja. Las dos zonas rojas que se encuentran en el medidor dentro del visor, es la marca de caución para con el lente de $F/1.4$, es decir, si la aguja indicadora está en estas zonas rojas con el lente de $F/1.4$, no se obtendrá la exposición correcta.



44 Warnsignal bei Unterbelichtung 45 Blendenskala 46 Markierung für Batteriekontrolle
47 Warnsignal bei Überbelichtung 48 Bereich der richtigen Belichtung 49 Zeiger

44 Avertisseur de sousexposition 45 Echelle d'ouverture 46 Marque de contrôle de pile
47 Avertisseur de surexposition 48 Gamme d'expositions correctes 49 Aiguille du posemètre

44 Marca de caución por falta de exposición Escala de apertura de diafragma 46 Marca de verificación de la pila 47 Marca de caución por exceso de exposición 48 Límite de exposición correcta 49 Aguja indicadora del exposímetro

The correct exposure range also differs according to lens brightness. If, in the viewfinder, you can see the needle above the numeral on the meter scale which denotes the maximum opening of your lens, your film will be underexposed. Underexposure warning signals for each lens are given in the following table:

Warning Signal Lens	Correct Exposure Range	
	Underexposure Warning Signal	Overexposure Warning Signal
F / 1.4	Upper Red Mark (Near numeral 1.4)	Lower Red Mark (near numeral 16) for all lenses
F / 1.8	Strips of upper red mark	
F / 2.8	Upper edge of numeral 2.8	
F / 3.5	Intermediate point between 2.8 and 4	
F / 4.5	Intermediate point between 4 and 5.6	

Change in Picture Size

Operate the film size change lever (19) on top of the camera body for whichever size you prefer, full size (24 × 36 mm) or half-frame (18 × 24 mm).

It is not advisable to change the picture size after a certain number of pictures are taken on a roll of film. If it is absolutely necessary to do so, take the following steps:

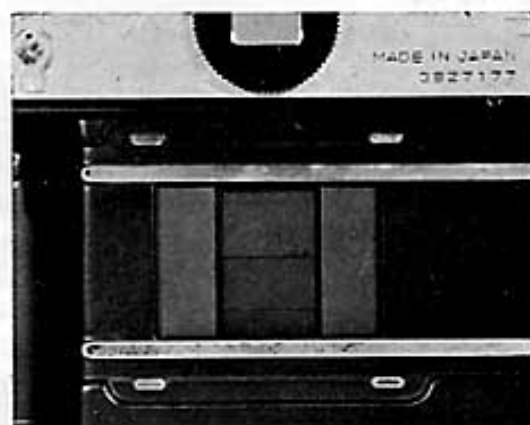
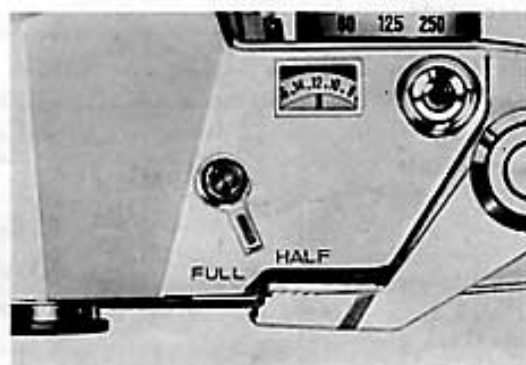
Manipulation Order	1	2
Change in Size		
Full Size to Half-Frame (FULL) → (HALF)	Wind Film	Flip Lever
Half-Frame to Full Size (HALF) → (FULL)	Flip Lever	Wind Film

No matter what size the film size setting is, all pictures, as the film is advanced, are counted in terms of full size.

An erroneous manipulation will bring about overlapped pictures.

* The film size change lever must be moved until it completely clicks into position.

* The mark (43) for the half-frame will appear in the viewfinder when the lever is set to HALF.



EE-Aufnahmen

- 1 Einstellung der Filmempfindlichkeitsskala (ASA) 23.
- 2 Bringen Sie die EE-Markierung auf dem Blendeneinstellring 14 mit der Index-Markierung zur Deckung!
- 3 Drehen Sie die Einstellscheibe für die Verschlusszeit 3 und stellen Sie die gewünschte Zeit ein!
- 4 Stellen Sie den Belichtungsmessorhebel 25 auf "ON"!
- 5 Kontrollieren Sie die Anzeige des Belichtungsmessers im Sucher 42, während Sie durch den Sucher auf das Motiv schauen!

Wenn sich der Zeiger 49 innerhalb des Bereichs für richtige Belichtung 48 — d. h. innerhalb des Blendebereichs des Objektivs — bewegt, wird der Film richtig belichtet. Bei EE-Aufnahmen brauchen Sie nur die Kamera auf das Motiv einzustellen und den Auslöser zu drücken.

Photographie EE (Automatique, avec cellule photo-électrique incorporée)

- 1 Réglez l'échelle de la sensibilité (ASA) 23.
 - 2 Faites concorder la marque EE de l'anneau d'ouverture 14 avec la marque indice.
 - 3 Tournez le cadran de temps de pose 3 et choisissez le temps de pose.
 - 4 Mettez le commutateur de posemètre 25 à la position "ON".
 - 5 Tout en visant l'objet, contrôlez le pose-mètre 42 visible à l'intérieur du viseur.
- Si l'aiguille du posemètre 49 oscille à l'intérieur de la gamme de l'exposition correcte 48 — c'est-à-dire dans les limites du calibrage d'ouverture de l'appareil — cela indique l'exposition est automatiquement réglée. Pour la photographie avec la cellule photoélectrique incorporée, visez l'objet et appuyez sur le bouton d'obturateur.

Fotografía a EE (Automática)

- 1 Coloque a la marca indicadora la escala de sensibilidad 23, de acuerdo con el índice de su película.
- 2 Coloque a la marca indicadora la marca EE del anillo selector de apertura de diafragma 14.
- 3 Dando vuelta al disco de velocidad de obturador 3, determine la velocidad de obturador que desea dar.
- 4 Coloque a "ON" la palanquilla de exposímetro 25. Entonces el exposímetro empezará a trabajar.
- 5 Mire la escala de apertura de diafragma dentro del visor, apuntando el objeto en el visor 42. Cuando la aguja indicadora 49 se encuentra dentro del límite de exposición correcta 48 (que es el límite de la escala de diafragma en uso), se obtendrá la exposición correcta.

Änderung des Bildformates

Zur Einstellung des Vollformates (24×36 mm) oder des Halbformates (18×24 mm) wird der Hebel für die Änderung des Bildformates ⑱ oben am Kameragehäuse benutzt. Es ist nicht zu empfehlen, das Bildformat zu ändern, wenn Sie auf einem Film bereits einige Aufnahmen gemacht haben. Sollte es jedoch unbedingt erforderlich sein, verfahren Sie folgendermassen.

Changement de format

Manipulez le levier du changement de format ⑱ qui se trouve sur le haut de l'appareil, pour choisir soit le format normal (24×36 mm) soit le demi-format (18×24 mm). Il n'est pas recommandé de changer le format après avoir effectué plusieurs prises sur une bobine de pellicule. Toutefois, si un tel changement est absolument nécessaire, procédez-y de la façon suivante :

Cambio del tamaño de foto

Cambiando la posición de la palanquilla de cambio de tamaño de foto ⑱ que se encuentra en la parte superior de la Cámara, podrá cambiar en cualquier de los dos tamaños las fotos, uno de tamaño íntegro (24×36 mm) y otro de medio tamaño (18×24 mm).

Reihenfolge	1	2
Formatänderung		
Vollformat in Halbformat (FULL) → (HALF)	Film aufziehen	Hebel umstellen
Halbformat in Vollformat (HALF) → (FULL)	Hebel umstellen	Film aufziehen

* Wenn das nicht geschieht, können doppelt belichtete Bilder entstehen!

Ordre	1	2
Changement de format		
Format entier au demi-format	Enroulez la Pellicule	Tournez le levier
Demi-format au format entier	Tournez le levier	Enroulez la Pellicule

* Si le levier n'est pas mis à cette position, on risque de faire des superpositions.

Orden de operación	1	2
Cambio del tamaño		
Del íntegro al medio (FULL) → (HALF)	Enrolle la película	Mueva la palanquilla
Del medio al íntegro (HALF) → (FULL)	Mueva la palanquilla	Enrolle la película

* Si se equivoca en esta operación, resultarán a salir dobladas las fotos consecutivas.

Focusing and Viewfinder



Out of Focus

Falsche Einstellung

Mauvais réglage

Cuando no está enfocado



In Focus

Richtige Einstellung

Bon réglage

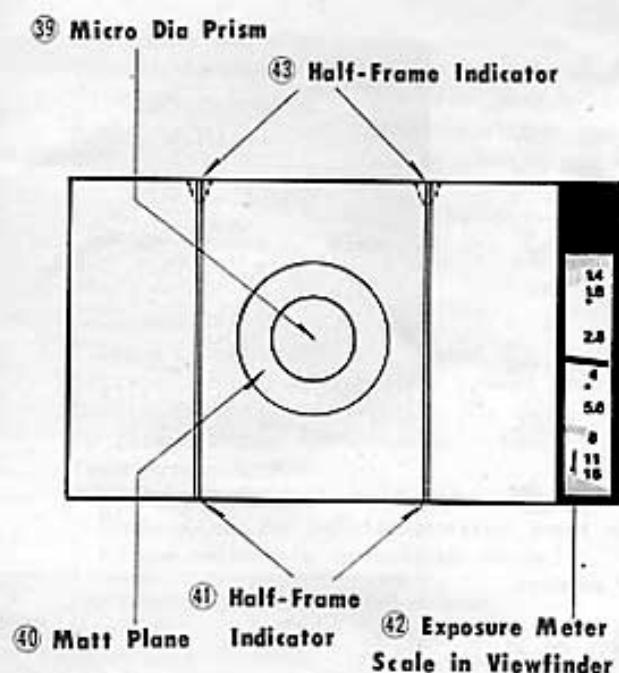
Cuando está enfocado



For focusing, turn the focusing ring (12) and look at the image as appears in the micro dia prism at the center of the viewfinder. If it is out of focus, the image will appear fuzzy. If it is in focus, the image will be clear and sharp. The image will appear clearly on the matt plane (40) around the prism.

The image seen in the viewfinder is precisely the same as that seen through the taking lens. The image seen in the viewfinder is always photographed, regardless of subject distance or lens used.

In half-frame photography, the area which appears within the half-frame marks of the viewfinder, is the area which will be transmitted to the film.



- 39 Mikro-Dia-Prisma 40 Mattscheibe
 41 Halbformatrahmen 42 Skala im Sucher
 43 Markierung für Halbformat
 39 Prisme micro-diamant 40 Plan maté
 41 Indicateur de demi-format 42 Echelle de
 posemètre à l'intérieur du viseur 43 Marque
 de demi-format
 39 Prisma de "microdia" 40 Zona deslustrada
 41 Límite de foto de medio tamaño 42 Escala
 de apertura de diafragma 43 Indicador de
 foto de medio tamaño

Scharfeinstellung und Sucher

Drehen Sie zur Scharfeinstellung den Scharfeinstellring ⑫ und beobachten Sie das Motiv, das auf dem Mikro-Dia-Prisma in der Mitte des Suchers erscheint. Das Sucherbild ist genau dasselbe wie das vom Objektiv aufgenommene. Es ist daher stets das Bild, das vom Film festgehalten wird, unabhängig von der Entfernung oder der Art des benutzten Objektivs.

Mise au point et viseur

Pour la mise au point tournez l'anneau de mise au point ⑫ et observez l'image qui apparaîtra sur la prisme micro-diamant qui se trouve au centre du viseur. L'image qui apparaît dans le viseur est exactement la même que celle que l'on pourrait voir à travers l'objectif. Tout ce qui est visible dans le viseur est toujours reproduit sur la photo, abstraction faite de la distance ou de la nature de l'objectif.

Cómo enfocar y cómo mirar el visor

El enfoque se obtiene en el prisma "dia micro" ③⁹ que está en el centro del visor, dando vuelta al anillo selector de enfoque ⑫.

En el visor podrá ver el objeto en la posición tal cual está y la imagen vista en el visor, es la precisa imagen de la foto, sin diferencia alguna de la distancia corta o larga a que se toma la foto o aún con el lente sobrepuesto de intercambio.

* En la fotografía del tamaño medio, la vista dentro del límite de medio tamaño en el visor, será la extensión de vista en la foto.

Self Timer Operation

Operate the film transport cocking lever ② before the self timer lever is fully turned. (The lever may be set before the cocking lever is operated.) Depress the shutter button ①, and the self timer will begin to work. The shutter will be released after an interval of about 9 seconds.

* Do not stand in front of the camera when you depress the shutter button. Otherwise, the meter will measure the light reflected from your body.

Selbstauslöser

Drücken Sie den Filmaufzughebel ②, bevor Sie den Hebel für selbstauslöser betätigen! (Sie können aber auch die umgekehrte Reihenfolge wählen.) Drücken Sie den Auslöser ①, so beginnt der Selbstauslöser zu arbeiten. Nach 9 Sekunden wird der Verschluss ausgelöst.

* Stellen Sie sich beim Drücken des Auslösers nicht vor die Kamera, da der Belichtungsmesser sonst nur das Licht, das Ihr Körper reflektiert, aufnehmen würde!

Fonctionnement d'auto-déclencheur

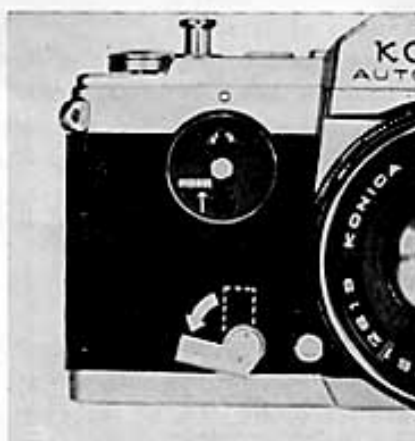
Manipulez le levier d'armement ② avant de tourner à fond le levier d'auto-déclencheur. Toutefois, le levier peut être mis à sa position, avant même de manipuler le levier d'armement. Appuyez sur le bouton d'obturateur ① et l'auto-déclencheur commencera à fonctionner. Il y aurait un interval de 9 secondes environ, avant que l'obturateur ne soit déclenché.

* Ne vous mettez pas devant l'appareil pour appuyer sur le bouton d'obturateur. Autrement, le pose-mètre mesurera la luminosité telle qu'elle est à l'ombre de votre corps.

Cómo usar el disparador automático

Después de operar la palanca de avance de película ②, dé la palanca de disparador automático ④ hasta al final (o estas operaciones pueden hacerse viceversa). Al oprimir el botón disparador ①, el disparador automático empezará a funcionar y en unos 9 segundos se disparará el obturador.

* Cuando va a oprimir el botón disparador, usted no debe estar delante de la Cámara porque de esta manera la exposición quedará ajustada automáticamente con la sombra de usted mismo.



Film Rewind

- 1 Depress the rowind button 29. It will remain depressed, until the film transport is advanced when loading a new roll of film.
- 2 Flip up the rewind crank 16 and turn it in the direction indicated by the arrow mark. This action will take exposed film back into the cartridge.
- 3 The rowind action comes to an end when there is a sudden easing of the load on the rewind crank. Open the back lid and take out the cartridge.

Filmrücktransport

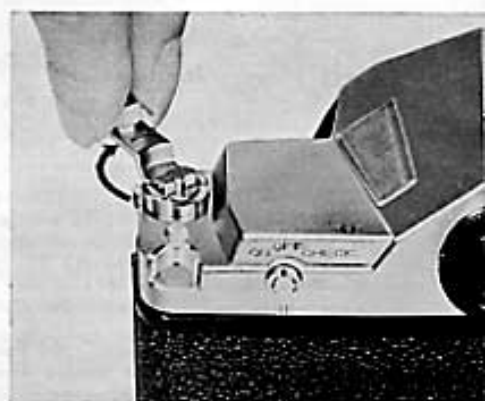
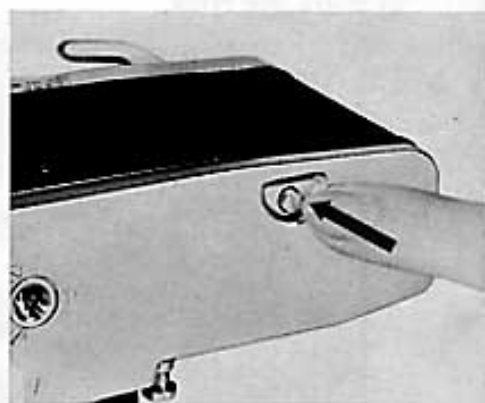
- 1 Drücken Sie den Rückspulknopf 29! Er wird in dieser Stellung verharren, bis ein neuer Film eingelegt und transportiert wird.
- 2 Klappen Sie die Rückspulkurbel 16 hoch und drehen Sie sie in Pfeilrichtung! Der belichtete Film wird in die Patrone zurückgespult.
- 3 Wenn die Spannung an der Rückspulkurbel plötzlich nachlässt, ist der ganze Film zurückgespult.

Rebobinage de pellicule

- 1 Appuyez sur le bouton de rebobinage 29. Lorsque celui-ci est enfoncé, il restera bloqué à cette position.
- 2 Soulevez le levier de rebobinage 16 et tournez-le dans le sens de la flèche. De cette façon, la pellicule est rebobinée dans la cartouche.
- 3 Le rebobinage est terminé, lorsqu'il n'y aura plus de résistance pour tourner le levier.

Enrollamiento inverso de la película

- 1 Oprima el botón para el enrollamiento inverso 29. Este botón se permanecerá oprimido una vez oprimido.
- 2 Levante la palanca de enrollamiento inverso 16 y déle vuelta al sentido de la flecha. Entonces, la película volverá enrollada en el cartucho.
- 3 Al sentir de repente el aflojamiento de película en el enrollamiento inverso de la película, el enrollamiento inverso está completado.



Interchanging of Lenses

To Dismount Lens: Depress the lens interchanging button ⑦ in the direction indicated by the arrow mark. Hold the outer rim, coated in aluminum color, of the lens barrel and turn it counterclockwise until the red dot of the lens comes in line with the red dot on the camera body. The lens barrel may now be pulled out of the camera.



To Mount Lens: Align the red dot on the lens with the red dot on the camera body and then sink the lens barrel into the camera body. Hold the lens barrel's outer rim, coated in flat aluminum color, and then turn the lens barrel clockwise until it clicks into position.





Objektivwechsel

Abnehmen des Objektivs: Drücken Sie den Knopf zum Objektivwechsel ⑦ in Pfeilrichtung! Drehen Sie das Objektiv an dem aluminiumfarbenen Aussenrand im Gegenuhzeigersinn, bis sich der rote Punkt des Objektivs und der des Kameragehäuses decken! Nehmen Sie das Objektiv ab!

Einsetzen des Objektivs: Bringen Sie den roten Punkt des Objektivs mit dem des Kameragehäuses zur Deckung und setzen Sie das Objektiv in die Kamera ein! Drehen Sie das Objektiv am Aussenrand im Uhrzeigersinn bis zum Anschlag!

Remplacement des objectifs

Pour démonter l'objectif: Appuyez le bouton d'objectif interchangeable ⑦ dans le sens de la flèche. Tenez le bord extérieur, c'est-à-dire la partie peinte en couleur d'aluminium de la monture d'objectif et tournez-la dans le sens inverse des aiguilles d'une montre jusqu'à ce que le point rouge sur l'objectif concorde avec celui du corps de l'appareil. Il ne faut surtout pas tirer sur la monture de l'objectif pour le retirer.

Pour monter l'objectif: Faites concorder le point rouge sur le corps de l'appareil avec le point qui se trouve sur la monture d'objectif et enfoncez ce dernier. Tenez le bord extérieur de la monture, bord peint en couleur d'aluminium, et ensuite tournez la monture d'objectif dans le sens des aiguilles d'une montre jusqu'à ce qu'elle se bloque.

Cambio de lente

Para quitar el lente: oprimiendo el botón para el cambio de lente ⑦, tome la parte blanca del portaobjetivo, haga girar al sentido izquierdo (al sentido contrario al de las agujas del reloj) y saque el lente cuando el punto rojo del portaobjetivo se quede ajustado con el punto rojo del cuerpo de la Cámara.

Para colocar el lente: Poniendo en línea los dos puntos indicadores (puntos rojos) en el portaobjetivo y el cuerpo de la Cámara, encaje el portaobjetivo correctamente. Después, tomando la parte blanca del portaobjetivo, dále vuelta al sentido derecho (al sentido de las agujas del reloj) hasta que se pare, y el lente quedará asentado.

When EE Device Is Not in Use

If you want to adjust exposure for a special photographic purpose, turn the aperture ring ⑭ to separate its "EE" mark from the index mark and determine your desired exposure with the manual aperture scale ⑮. In this case, the meter ④② is coupled to film speed and shutter speed to give the proper aperture. Note the aperture as indicated by the meter and turn the manual aperture ring so that the numeral denoting this aperture aligns with the index mark.

Wenn das "Elektrische Auge" nicht benutzt wird

Wenn Sie die Belichtung für aussergewöhnliche Verhältnisse einstellen wollen, drehen Sie den Blendeneinstellring ⑭ so, dass die EE-Markierung nicht mehr gegenüber der Index-Markierung steht! Stellen Sie die Belichtung auf der Blendenskala für Handbetätigung ⑮ ein! In diesem Fall zeigt der Zeiger im Zusammenhang mit der Filmempfindlichkeit und der Verschlusszeit die richtige Blende an. Lesen Sie diesen Blendenwert ab und drehen Sie den Blendeneinstellring für Handbetätigung dementsprechend!

Lorsque la cellule photo-électrique incorporée n'est pas utilisée

Si vous désirez régler manuellement l'exposition, tournez l'anneau d'ouverture ⑭ et éloignez la marque "EE" de la marque indice et déterminez l'ouverture à l'aide de l'échelle d'ouverture manuelle ⑮. Le pose-mètre ④② visible à l'intérieur du viseur fonctionnera en couplage avec la sensibilité d'émulsion et le temps de pose, et indiquera l'ouverture appropriée. Prenez note de la valeur de l'ouverture qu'indique le pose-mètre et réglez l'anneau d'ouverture manuelle de façon que le chiffre correspondant à la valeur indiquée concorde avec la marque indice.

Cuando no utiliza el mecanismo de EE

Cuando quiere seleccionar la apertura especial en casos excepcionales, coloque la marca EE del anillo selector de apertura ⑭ fuera de la marca indicadora y seleccione la apertura por la escala de apertura manual de diafragma ⑮. En esta condición la escala de apertura de diafragma en el visor ④② trabajará como el exposímetro de acción combinada con la sensibilidad de película y la velocidad de obturador, y señala la apertura de la exposición correcta. Lea este valor de apertura de diafragma y haga el ajuste con este valor en el anillo selector de apertura manual de diafragma.

Synchroflash Photography

A handy accessory clip is available for mounting a compact flash gun on the camera.

* For use of Class M flashbulbs, the flashgun must be connected with the top-hole M (8), and the electronic flashgun with the X.



Exposure Determination for Synchroflash Photography

In synchroflash photography, the light emitted from flashbulbs is used as the light source for taking pictures. The exposure is consequently determined with the manual aperture scale according to the distance between the subject and the bulb.

The aperture may be determined by dividing the guide number of your flashbulb by the distance. The guide number is given on the bulb package.

$$f\text{-number} = \frac{\text{Guide Number}}{\text{Distance}}$$

No guide number is shown for certain types of flashbulbs; instead, f-numbers corresponding to taking distances are indicated. For electronic flash use guide numbers given on the rating sheets which come with the unit.

Override Button

When the meter needle goes beyond its coupling range, the shutter speed dial refuses to turn. If the camera is not in use for EE photography and you desire to choose a shutter speed beyond this stop, raise the override button just below the meter light intake and turn the shutter speed dial to select the desired speed.

**Handbedienungsknopf (Override-Knopf)**

Wenn der Zeiger über dem Kupplungsbereich hinaus ausschlägt, lässt sich die Einstellscheibe für die Verschlusszeit nicht mehr drehen. Falls die Kamera nicht für EE-Aufnahmen benutzt wird und Sie eine Verschlusszeit über diesen Bereich hinaus wünschen, drücken Sie den Handbedienungsknopf und stellen Sie die gewünschte Zeit ein!

Bouton de déblocage

Lorsque l'aiguille du pose-mètre dépasse la gamme de couplage, le cadran de temps de pose sera bloqué. Si vous ne recourez pas au système de cellule photo-électrique incorporée, et que vous désirez choisir un temps de pose au del de la limite ci-dessus, appuyez sur le bouton de déblocage et tournez le cadran pour sélectionner le temps de pose désiré.

Botón de Override (de sobrepaso)

El disco de escala de velocidad de obturador se parará y no moverá más cuando pase el límite de acción del mecanismo combinado. Cuando no es de fotografía a EE y cuando quiero seleccionar una velocidad de obturador fuera de este límite, dé vuelta al disco de escala de velocidad de obturador, levantando el botón Override (de sobrepaso).

B (Bulb) Exposure

Set "B" on the shutter speed scale to the index mark and depress the shutter button, the shutter will be kept open until your finger is removed from the button. Use this method for exposures of more than one second.

* A Tripod is screwed into the tripod tap-hole provided to the bottom part of the camera body. It is advisable to use a cable release specially prepared for the Konica Auto-Reflex.

B-Aufnahmen

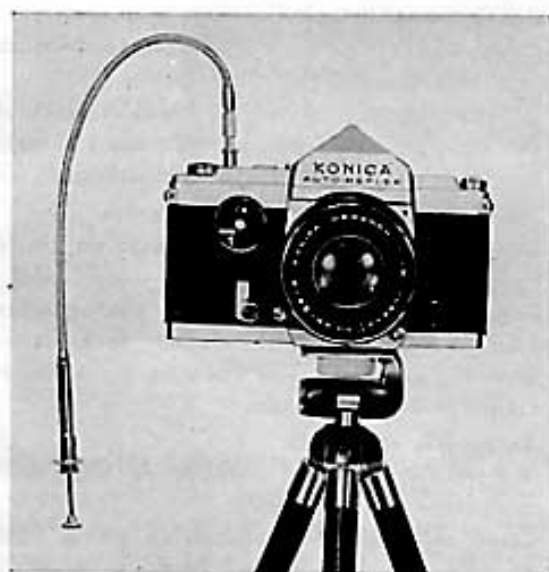
Wird der Verschluss auf "B" eingestellt und der Auslöser gedrückt, so bleibt der Verschluss geöffnet, solange der Auslöser gedrückt wird. Verwenden Sie diese Einstellung bei Aufnahmen mit einer Belichtungszeit von mehr als einer Sekunde!

Demi-exposition (Bulb)

Faites concorder l'indication "B" sur l'échelle de temps de pose avec la marque indice et appuyez sur le bouton d'obturateur, celui-ci restera ouvert aussi longtemps que le bouton sera enfoncé. Cette méthode est utilisable pour un temps de pose plus long qu'une seconde.

Exposición de "B"

Cuando oprime el botón disparador con la posición de "B" de la escala de velocidad de obturador, se hará la exposición de "B" y el obturador permanecerá abierto mientras que el botón está oprimido, y el obturador cerrará al soltar el dedo. Se usará esta exposición para dar la exposición de un segundo o más.



Synchroblitzlichtaufnahmen

* Bei Blitzlichtbirnen der M-Klasse wird das Blitzlichtgerät an den Kontakt "M" ⑧, ein Elektronenblitzgerät an "X" angeschlossen.

Belichtungsregelung für Synchroblitzlichtaufnahmen: Bei Synchroblitzlichtaufnahmen wird das Licht, das die Blitzlichtbirne ausstrahlt, als Lichtquelle benutzt. Die Belichtung wird daher auf der Blendenskala für Handbetätigung unter Berücksichtigung der Entfernung zwischen Motiv und Kamera geregelt.

Photographie avec flash synchronisé

* En cas d'utilisation des ampoules de classe M, l'équipement flash doit être connecté à la prise "M" ⑧, et l'équipement de flash électronique à la prise "X".

Réglage d'exposition pour les photographies avec flash: Lorsqu'il s'agit de photos réalisées avec flash, l'éclairage est assuré par la lumière émise par les ampoules de flash. L'exposition doit donc être réglée à l'aide de l'échelle d'ouverture manuelle, en tenant compte de la distance qui sépare l'objet visé de l'ampoule.

Fotografía con flash

* Enchufe en M del enchufe de flash ⑧ cuando usa la bombilla del tipo M; en X cuando emplea el aparato estroboscópico.

Cómo seleccionar la exposición en la fotografía con flash: Hay que seleccionar la exposición de acuerdo con la distancia desde el origen del relámpago hasta el objeto, por medio de la escala de apertura manual de diafragma.

Konica Auto-Reflex**Flash Synchronization**

The Konica Auto-Reflex "M" tap-hole is designed to have a time lag of 18 milli-seconds.

Shutter Speed Flashbulb		1 2 4 8 15 30 60 125 250 500 1000										
		Tap-hole										
M	Class M	○	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○	○
X	Strobe	○	○	○	○	○	○	○	×	×	×	×
	Class F	○	○	○	○	○	○	×	×	×	×	×

○ Synchronized × Not synchronized

Use of Filters

When a filter is mounted on the lens, it is necessary to adjust the exposure according to the filter factor. If the film speed scale is used in making this adjustment, it is possible to take pictures under the electric-eye system. Turn the film speed ring so that the index mark lines up with the numeral which is obtained by dividing the film speed rating of your film by the filter factor. Let us assume, for example, that ASA 100 film and a 2X filter are used. $\frac{\text{ASA } 100}{2} = \text{ASA } 50$ Set the index mark to "50" on the film speed scale.

Filter

Wenn ein Filter auf das Objektiv aufgeschraubt wird, ist es erforderlich, die Belichtung unter Berücksichtigung des Verlängerungsfaktors des Filters einzustellen. Für EE-Aufnahmen führt man dies auf der Filmempfindlichkeitsskala aus. Drehen Sie den Ring für die Filmempfindlichkeit so, dass sich die Markierung die Zahl, die sich durch Division der Filmempfindlichkeit durch den Verlängerungsfaktor des Filters ergibt, decken! Wenn z.B. ein ASA 100-Film und ein Filter mit dem Verlängerungsfaktor 2 verwendet werden, gibt also $\frac{\text{ASA } 100}{2} = \text{ASA } 50$ Stellen Sie also die Markierung auf die Zahl "50" der Filmempfindlichkeitsskala ein!

Emploi de filtres

Lorsqu'un filtre est monté sur l'objectif, il est nécessaire de régler l'exposition en tenant compte du facteur de filtrage. Si on a recours à l'échelle de sensibilité, pour faire ce réglage, il est possible d'utiliser la système de la cellule photo-électrique incorporée. Tournez l'anneau de sensibilité de façon que la marque indice concorde avec le chiffre, quotient de la sensibilité d'émulsion par le facteur de filtrage. Par exemple, si la sensibilité d'émulsion est d'ASA 100 et que l'on utilise un filtre 2X :

$\frac{\text{ASA } 100}{2} = \text{ASA } 50$ Donc, le chiffre "50" sur l'échelle de sensibilité doit concorder avec la marque indice.

Cuando usan los filtros

Cuando usa el filtro, es necesario hacer el ajuste de exposición según el valor de multiplicación del filtro.

Haciendo el ajuste por medio de la escala de sensibilidad de película, podrá fotografiar a EE. Haga el re-ajuste de la escala de sensibilidad de película con el valor correspondiente al índice de sensibilidad de la película en uso (ASA) dividido por el valor de multiplicación del filtro.

Supongamos un ejemplo de que va a usar el filtro de 2X de multiplicación con la película de ASA 100. $\frac{\text{ASA } 100}{2} = \text{ASA } 50$ Entonces ponga "50" de la escala de sensibilidad de película a la marca

indicadora y podrá fotografiar a EE.

Manual Aperture

The Konica Auto-Reflex lens, equipped with completely automatic apertures, is always at full aperture. If you want to check the depth of focus, turn the aperture ring to have the "EE" mark come off the index mark, determine the exposure with the manual aperture scale ⑮, depress the manual aperture button ⑤ and look into the viewfinder.

Handbetätigte Blendeneinstellung

Das Objektiv der Konica Auto-Reflex ist mit dem vollautomatischen Blendenmechanismus versehen. Er ist stets voll geöffnet. Wenn Sie die Tiefenschärfe prüfen wollen, drehen Sie den Blendeneinstellring, bis die EE-Markierung nicht mehr der Index-Markierung gegenüberliegt! Stellen Sie die Blende auf der Blendenskala für Handbetätigung ⑮ ein, drücken Sie den Knopf für handbetätigte Blendeneinstellung ⑤ und richten Sie dann den Sucher auf das Motiv!



Ouverture manuelle

Le Konica Auto-Reflex étant muni d'un système complètement automatique du réglage d'ouverture, l'objectif est toujours ouvert. Si vous désirez contrôler la profondeur de foyer, tournez l'anneau d'ouverture, pour déplacer la marque "EE" de l'indice, réglez l'ouverture à l'aide de l'échelle d'ouverture manuelle ⑮, appuyez sur le bouton d'ouverture manuelle ⑤ et ensuite visez à travers le viseur.

Escala de apertura manual de diafragma

Como el diafragma es totalmente automático, siempre está abierto totalmente. Cuando desea confirmar la profundidad del enfoque exacto, ponga el anillo selector de apertura de diafragma fuera de EE y luego la apertura deseada, y oprimiendo el botón de apertura manual de diafragma ⑤, mire el visor y podrá confirmarlo.

Depth of Focus

The depth-of-focus scale ②④ has identical f-numbers on both sides of the distance index mark ⑤①. Check this scale after the camera is focused on the subject, and you will realize the depth of focus, which is represented by the area sandwiched between the two identical f-numbers.

Tiefenschärfe

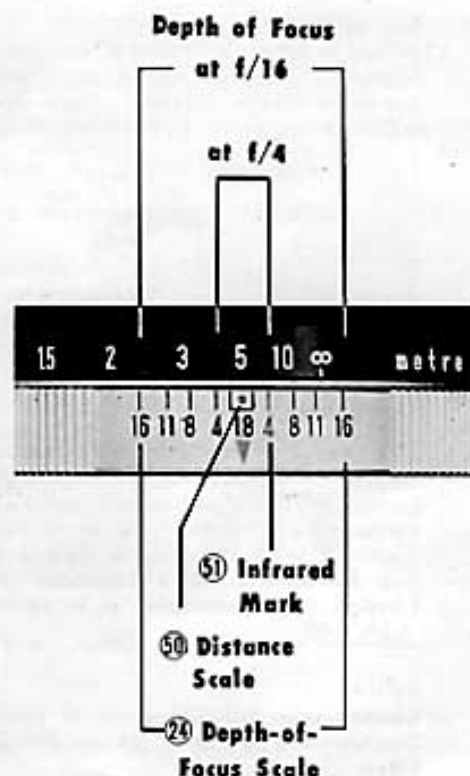
Auf der Tiefenschärfeskala ②④ ist zu beiden Seiten der Entfernungsmarkierung ⑤① die Blendenreihe sichtbar. Nach dem Einstellen der Entfernung ist mit Hilfe dieser Skala der Tiefenschärfenbereich ablesbar. Er wird auf beiden Seiten von dem Blendenwert begrenzt, den Sie auch am Objektiv eingestellt haben.

Profondeur de foyer

L'échelle de profondeur de foyer ②④ est munie aux deux côtés, de la marque indice de distance ⑤①, des chiffres-f. Référez-vous à cette échelle après la mise au point, ce qui vous permettra de prendre connaissance de la profondeur de foyer, représentée par la zone qui se trouve entre les deux chiffres-f identiques.

Profundidad del enfoque

La escala de la profundidad de diafragma ②④ tiene los números identificadores de f en ambos lados de la marca índice de distancia ⑤①. Verifique esta escala después de enfocar el objeto, y Ud. podrá darse cuenta de la profundidad del enfoque que representa el área comprendida entre los dos números identificadores de f.



②④ Tiefenschärfeskala ⑤① Entfernungsskala ⑤① Ausgleichsmarkierung bei Infrarot-Aufnahmen
②④ Echelle de profondeur de foyer ⑤① Marque de compensation infrarouge
②④ Escala de profundidad focal ⑤① Indicador de la distancia ⑤① Marca de corrección para la fotografía infrarroja

**Interchangeable Lenses
for Konica Auto-Reflex**

21mm



28mm



35mm



52mm



135mm



200mm



400mm



800mm





Type	Name of lens	Taking Angle	Lens Construction	Aperture Device	Aperture Scale	Closest Distance	Filter	Hood	Weight
Wide-angle	Hexanon AR 21mm f/4	90°	7-group 11-element	EE fully automatic	EE and f/4-16	0.3 m (1 ft)	77 mm screw-in	80 mm clip-on	340 g
"	Hexanon AR 28mm f/3.5	73°	7-group 7-element	EE fully automatic	EE and f/3.5-16	0.3 m (1 ft)	55 mm screw-in	57 mm clip-on	200 g
"	Hexanon ARP 28mm f/3.5	73°	6-group 7-element	Manual, preset	f/3.5 to 22	0.3 m (1 ft)	58 mm screw-in	60 mm clip-on	270 g
"	Hexanon AR 35mm f/2.8	63°	5-group 6-element	EE fully automatic	EE and f/2.8-16	0.3 m (1 ft)	55 mm screw-in	57 mm clip-on	235 g
"	Hexanon ARP 35mm f/2.8	63°	5-group 6-element	Manual, preset	f/2.8 to 22	0.3 m (1 ft)	55 mm screw-in	57 mm clip-on	235 g
Standard	Hexanon AR 52mm f/1.8	45°	5-group 6-element	EE fully automatic	EE and f/1.8-16	0.45 m (1.5 ft)	55 mm screw-in	55 mm screw-in	210 g
"	Hexanon AR 57mm f/1.4	42°	5-group 6-element	EE fully automatic	EE and f/1.4-16	0.45 m (1.5 ft)	55 mm screw-in	55 mm screw-in	290 g
Telephoto	Hexanon AR 135mm f/3.5	18°	4-group 4-element	EE fully automatic	EE and f/3.5-16	1.5 m (5 ft)	55 mm screw-in	55 mm screw-in	370 g
"	Hexanon ARP 135mm f/3.5	18°	4-group 4-element	Manual, preset	f/3.5-22	1.5 m (5 ft)	55 mm screw-in	55 mm screw-in	370 g
"	Hexanon ARP 200mm f/3.5	12°	5-group 5-element	Manual, preset	f/3.5-22	2.5 m (8 ft)	67 mm screw-in	67 mm screw-in	870 g
"	Hexanon ARM 400mm f/4.5	6°	4-group 4-element	Manual, click	f/4.5-32	8 m (25 ft)	55 mm behind-lens	95 mm screw-in	2.7 kg
"	Hexanon ARM 800mm f/8	3°	1-group 2-element	Manual, click	f/8-45	20 m (70 ft)	55 mm behind-lens	Pull-out	5.6 kg
Reflex Telephoto	Reflex Hexanon ARM 1000mm f/8	2.5°	6-group 7-element	light adjustment with ND filter	f/8-22	30 m (90 ft)	55 mm behind-lens		8.3 kg
Zoom	Hexanon Zoom AR-H 47-100mm f/3.5	35-17°	8-group 13-element	EE fully automatic	EE and f/3.5-16	2 m (7 ft)	52 mm screw-in	52 mm screw-in	450 g
"	Hexanon Zoom ARP 70-230mm f/4.5	32-11°	8-group 13-element	Manual, preset	f/4.5-22	2.5 m (9 ft)	67 mm screw-in	67 mm screw-in	1.3 kg
"	Hexanon Zoom ARM 58-400mm f/4	41-6°	9-group 14-element	Manual, click	f/4-32	5 m (16 ft)	55 mm behind-lens	113 mm screw-in	4.3 kg

Accessories to Konica Auto-Reflex

Filters : A wide variety of filters are available for black-and-white and color films. Use filters for better picture effects.

Lens Hood : The lens hood is indispensable for preventing peripheral rays of light from accidentally falling on taking lens. It is advisable to use the lens hood for picture-taking at all times.

Accessory Clip II : If you want to use a flashgun or electronic flashlight, use the Accessory Clip II, which is attached to the viewfinder eyepiece.

Eyesight Adjustment Lenses : It is advisable to use an eyesight adjustment lens for far-sighted and near-sighted eyes. Attached to the viewfinder eyepiece assembly, the lenses come in the four different types of +3, +2, +1 and -2.5 diopters.

Konica Lens Mount Adapters : These adapters are for use with the the Konica FM, FP, and FS lenses.

Exakta Lens Mount Adapter II : This adapter is designed to use various Exakta interchangeable lenses on the Konica Auto-Reflex.

Practica Lens Mount Adapter II : This adapter is designed to mount various Practica lenses on the Konica Auto-Reflex.

Attachment Lens II : If the Attachment Lens II is screwed in on the taking lens, you can take close-up pictures with the fully automatic aperture mechanism.

No. 1 for 64 - 32cm (25 - 12 in) No. 2 for 36 - 26 cm (14 - 10 in)

Konica Auto Ring : The automatic aperture can be used with extension rings and extension bellows as a semiautomatic aperture only when equipped with the Konica Auto Ring.

Extension Ring II : The Extension Ring II, placed between the camera body and the lens barrel, is used for copying work and close-up photography. The use of a set of base rings and three intermediate rings makes it possible to take close-ups, the images of which are as large in size as the subjects.

Extension Bellows II : This handy tool can be used to take pictures, whose images are larger in size than the subjects. It is fit for use in close-up photography requiring continuous changes in subject-lens distance and in taking pictures of miniature samples.

Extension Bellows IID and Slide Copier : The IID is a deluxe extension bellows and has a wider range of extension and contraction. It is fit for a wider range of close-up. The Slide Copier, used with the IID, is designed to reproduce color film and negatives.

Angle Finder II : The use of the Angle Finder II makes it possible to look into the viewfinder from above the camera. This simplifies the manipulations required for low-angle photographs, close-ups, copying, and microscopic work.

Konica Mini-Flash : The Konica Mini-Flash is a miniature flashgun designed for use with capless flashbulbs. The protector cover is usable as a safety cover for flashbulbs. It comes with a guide number table.

Microscope Adapter II : This adapter is used in taking microscopic pictures only with microscope object and eyepiece lenses. With this adapter, it is possible to check the field of view and focusing and take pictures while observing the object placed on the microscope.

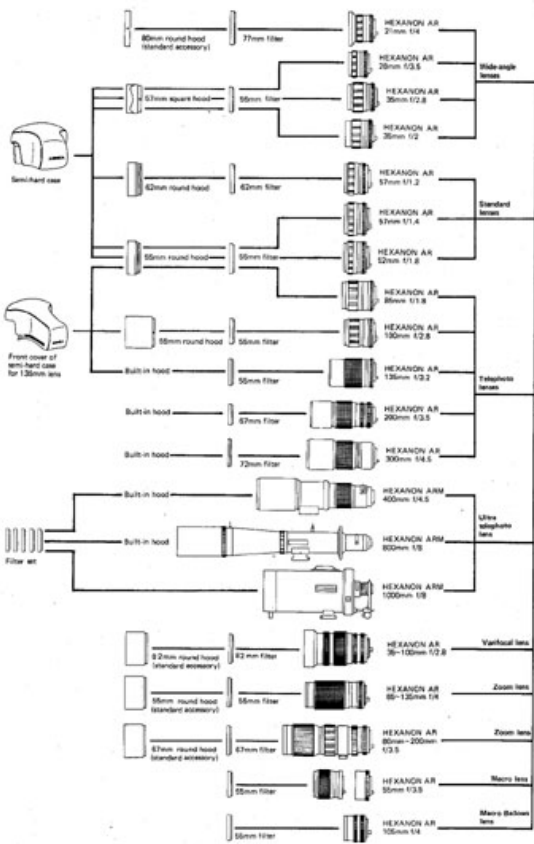
Copy Stand : With a camera mounted on a support, the stand is used for the effective reproduction of prints, pictures, and paintings, smaller in size than the format of B4 (257 × 364mm).

Types of Konica Filters

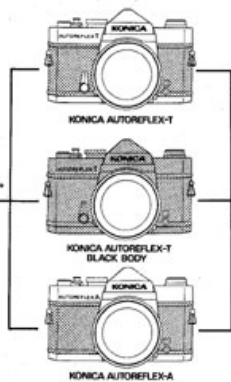
Color	Name	Effects
Colorless	UV (L39)	Absorbs only ultra-violet rays. Used for color-photography since it produces no effects on colors. Also serves as a lens protector.
Light Yellow	Y1 (Y44)	Absorbs ultra-violet rays, purple and blue. For landscapes, portraits and snapshots. Assures proper contrast in brightness and dimensional effects. For black-and-white.
Yellow	Y2 (Y48)	
Dark Yellow	Y3 (Y52)	
Orange	O1 (O56)	Produces powerful contrast due to its wide absorbing range. For mountains, distant scenes and architecture. For black-and-white.
Red	R1 (R60)	Extremely strong contrast. Daytime landscapes sometimes look as if they were night scenes. Can be used with infrared film. For black-and-white.
Yellowish Green	PO 0	Brings film characteristics closest to the human eyes. Shows colors naturally. For outdoor portraits as it has the same characteristics as the light yellow filter.
Light gray	ND 2	Absolutely no effect on colors reduces light. Used with both color and black-and-white. Light is reduced 1/2 with ND2, 1/4 with ND4 and 1/8 with ND8.
Gray	ND 4	
Dark gray	ND 8	
Light pink	SKYLIGHT	Like the ND filter, it absorbs ultra-violet rays. Prevents distant scapes with sky and shades from becoming bluish in color pictures. For color film.
Light amber	A 2	Absorbs blue light from shadows; also from cloudy scenes. Use to reduce color temperature for daylight-type color film.
Light blue	B 2	Absorbs red from scenes taken at sunrise and sunset. Raises color temperature for daylight-type color film.
Blue	B 8	Used with flashbulbs (clear bulbs) and daylight-type color film to reduce red tone and raise color temperature.
Dark blue	B12	Used with photo-reflector lamp (3,200° K) and daylight-type color film to reduce red tone and to raise color temperature.

Specifications for the Konica Auto-Reflex

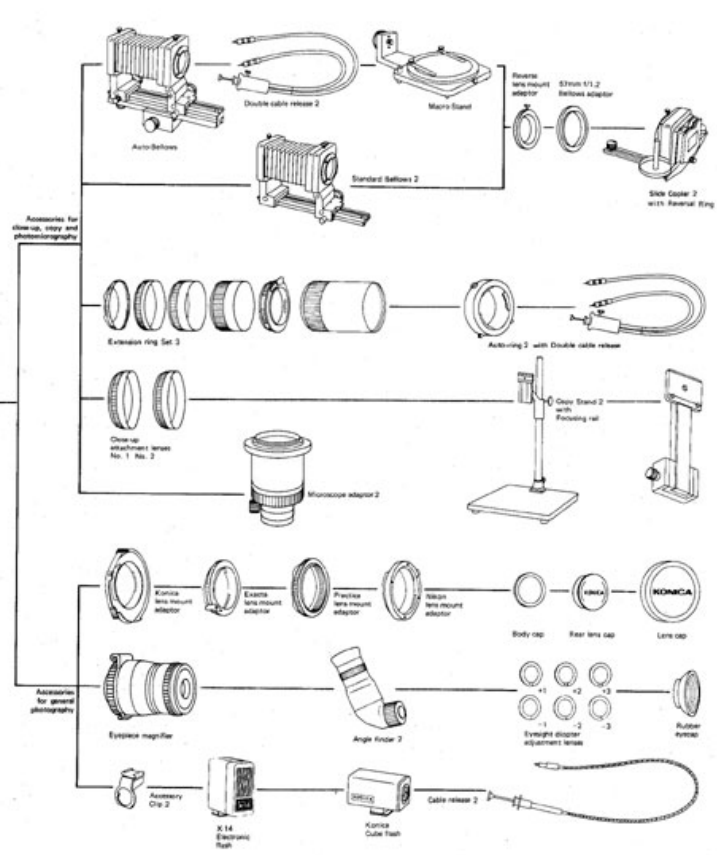
Picture Size :	24 × 36 mm and 18 × 24 mm (half-frame), picture size changeable.
Film :	35 mm film in safety cartridge.
Standard Lens :	Hexanon f/1.4 57 mm of 5-group and 6-element construction or Hexanon f/1.8 52 mm of 5-group and 6-element construction. Closest taking distance 0.45 meter (1.5 ft.).
Mount :	Konica II bayonet mount, 47 mm diameter, 40.5 mm flange back.
Aperture Device :	Fully automatic aperture (automatic full opening), manual aperture checker for depth of focus.
Shutter :	Copal Square with 1 to 1/1000 second plus B calibrated in 1:1 progression. Built-in self timer, synchro MX contacts. Coupled to all Class M bulbs at all speeds and to electronic flashlight at 1 to 1/125 second with X synchro.
Finder :	Pentaprism eye-level viewfinder. Focusing is done with micro dia prism in center of viewfinder. Half/full frame change marks and CdS meter visible in viewfinder.
Exposure Adjustment :	Fully automatic EE mechanism with highly sensitive CdS meter. Aperture scale used for manual operation.
CdS Meter :	Reflected light type with intake angle of 26° (vertical) and 34° (horizontal). Powered by a 1.3V mercury battery with battery checker.
Electric Eye :	Coupled to EV 2 to 18 with ASA 100. Film speed scale ranges from ASA 12 to 800 (DIN 12 to 30).
Film Wind :	Wound by single lever action. Film wind changes shutter. Aperture automatically set. Wind angle 190°, pull-out angle 10°.
Film Rewind :	Rewound by crank after rewind button is depressed. Rewind button returns to original position.
Filters :	Screw-in type, screw diameter 55 mm, pitch 0.75 mm.
Hood :	Screw-in type, 55 mm.
Dimensions and Weight :	145.5(W) × 94.5(H) × 88.5(L) mm, 910 grams with f/1.8 lens. 145.5(W) × 94.5(H) × 89.5(L) mm, 990 grams with f/1.4 lens.



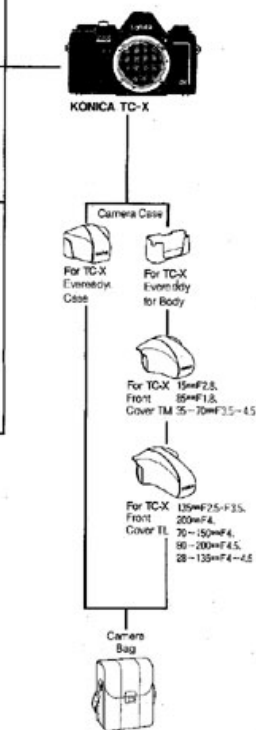
KONICA AUTOREFLEX SYSTEM DIAGRAM

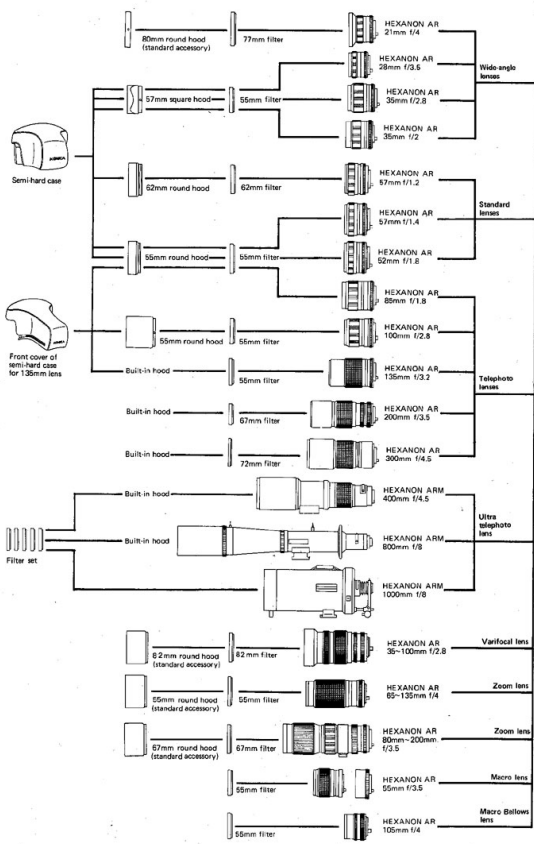


All lens hoods supplied with case.

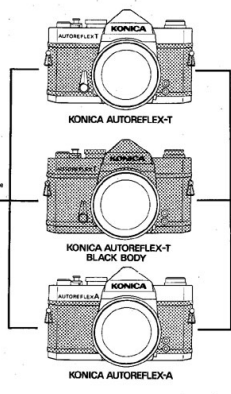


KONICA FT-1 and TC-X SYSTEM

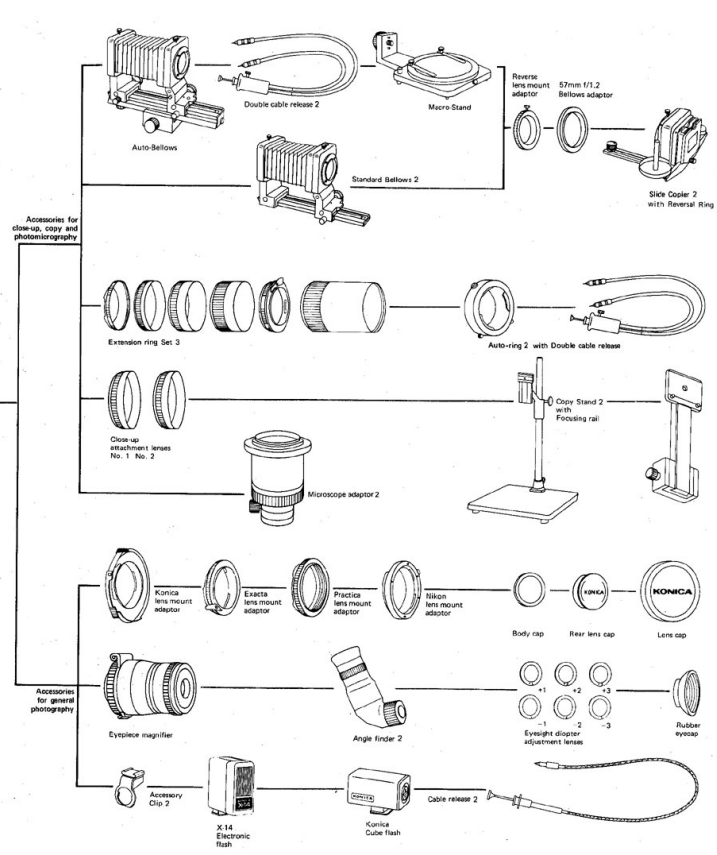




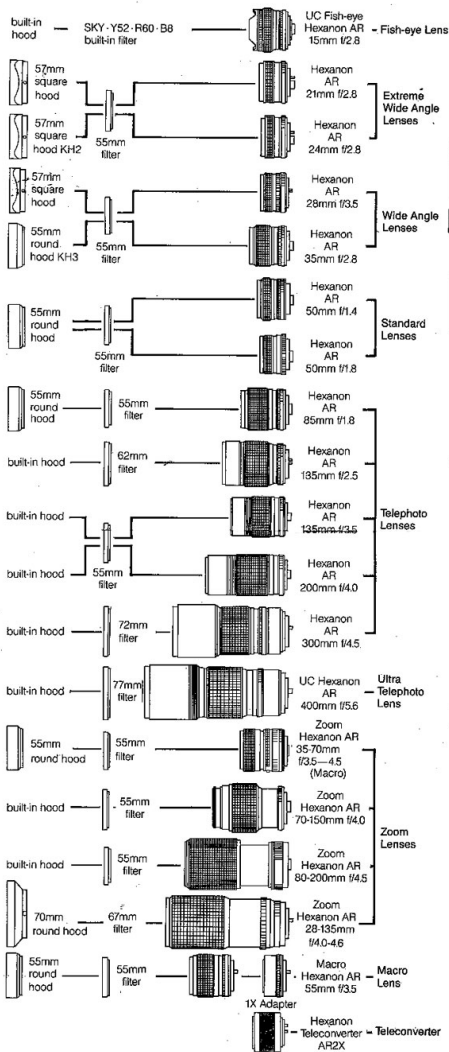
KONICA AUTOREFLEX SYSTEM DIAGRAM



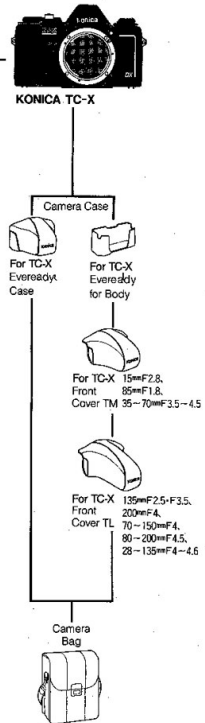
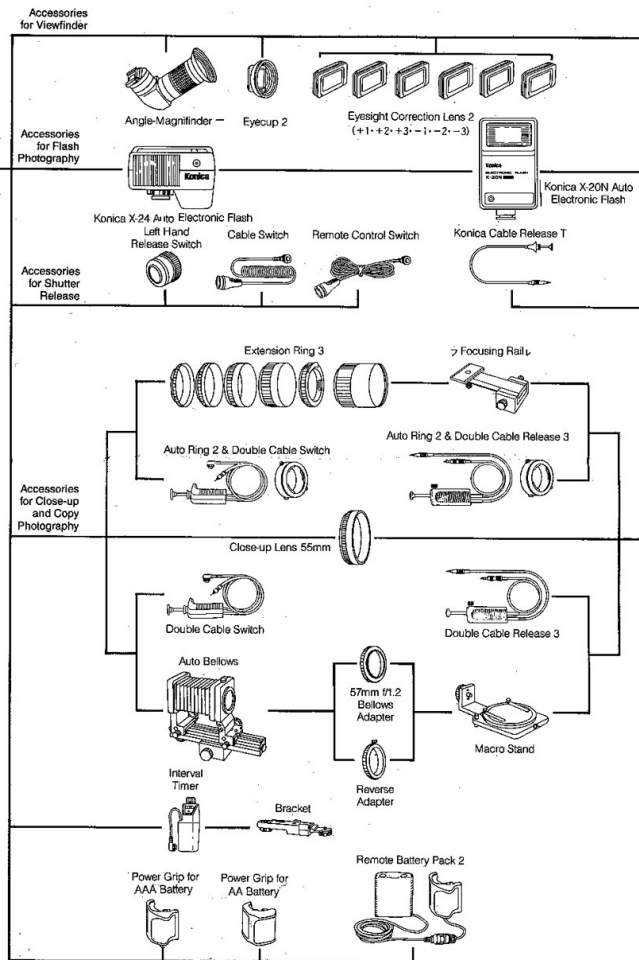
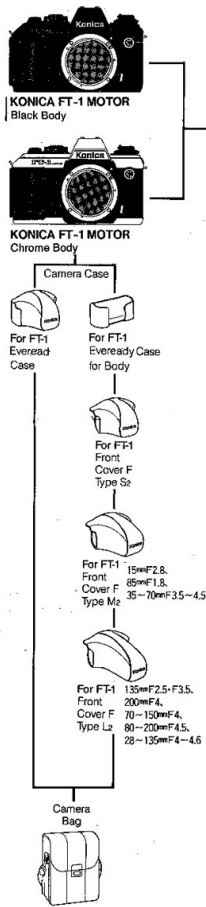
All lens hoods supplied with case.

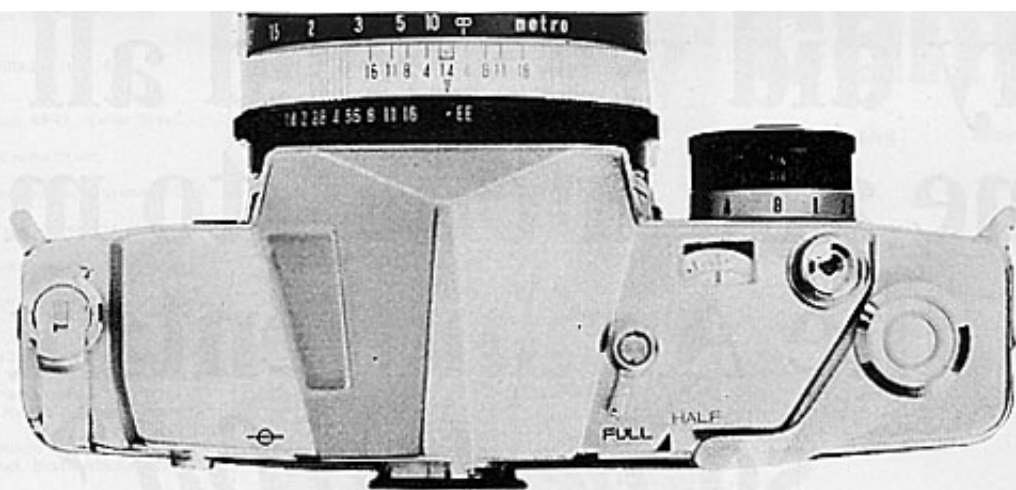


HEXANON LENSES



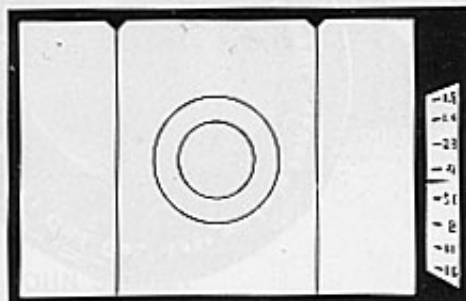
KONICA FT-1 and TC-X SYSTEM





Was unterscheidet die Konica Auto-Reflex von den gut 50 anderen 35-mm-SLR-Kameras auf dem Markt?

Sie besitzt das erste vollautomatische Belichtungssystem, das je in eine SLR-Berufskamera 35 mm mit Schlitzverschluss eingebaut wurde. Nehmen wir einmal an, Sie hätten mit $1/250$ bei $F/4$ belichtet und möchten nun die Schärfentiefe vergrössern. Zu diesem Zwecke genügt es, dass Sie den Verschlusszeitwähler z. B. auf $1/60$ stellen – und die Kamera blendet selbsttätig auf die richtige Öffnung hinunter.



Schon daraus können Sie erkennen, dass die Konica Auto-Reflex nicht in die Hände des Anfängers gehört. Sie ist die Kamera der fortgeschrittenen Amateure oder Berufsfotographen, die in gewissen Situationen einfach keine Zeit für Belichtungsmessungen haben und trotzdem ihre Kamera einigermaßen steuern möchten. Um Film zu sparen (oder Ihnen das Aufnehmen von Filmstreifen zu ermöglichen), besitzt die Kamera einen Schalter, mit welchem zwei Platten vor die Filmebene geschoben werden können. Dadurch wird die

Negativgrösse halbiert, was Ihnen 72 statt 36 Aufnahmen ermöglicht.

Dazu stehen 13 Hexanonobjektive von $f: 5/21$ mm bis zum Teleobjektiv $f: 8/1000$ mm zur Verfügung.

Sie finden die Auto-Reflex wie auch andere erstklassige Konica-Photo- und -Filmkameras bei Photohändlern in der ganzen Welt.



KONICA

Herstellerin:
KONISHIROKU PHOTO INDUSTRY CO. LTD.
TOKIO, JAPAN

Auslandsbüro:
KONICA EUROPE c/o Deutsche Mitsubishi Export-Import GmbH, Hamburg 30, Deutsche Bundesrepublik
Vertretung für die Schweiz: RUMITAS GmbH, Zürich



The first automatic professional SLR that doesn't give you the needle.



Every other professional SLR that calls itself "automatic" isn't. They all force you to match a needle in the viewfinder before your exposure is set.

Only Konica Auto-Reflex eliminates this slow, awkward, manual operation. And actually provides full exposure automation.

You can simply point and shoot, and see the f/stop selected by the camera in the viewfinder. It also offers the option of total manual control . . . only when you want it.

When you consider this unique advantage, plus the internationally acclaimed quality of Hexanon lenses (available only on the

Konica Auto-Reflex), you'll understand why so many pro's are putting their money on this remarkable tool.

Specifications:

Konica Auto-Reflex. Supplied with interchangeable Hexanon 52mm f1.8 or 57mm f1.4. Fully automatic exposure control. Sensing CdS cell cross-couples to all lenses, sets proper f/stop for any selected shutter speed. Meter in viewfinder tells you which f/stop is selected by sensing cell. Copal-S square all-metal focal plane shutter, 1 sec. to 1/1000 plus B. Instant return mirror. Built in self-timer. Unrestricted choice of full or half-frame format at the flick of a lever (half-frame "stretches" film, delivers twice the number of exposures; also increases effective

focal length of lenses). Microdiaphragm assures faster, sharper focusing. Depth-of-field preview button. M-synch at all speeds, X-synch to 1/125. Exclusive Insta-Grip (IGL) Loading, for effortless loading and unloading of standard 35mm film.

See your Konica dealer for the full story of this unprecedented camera. Its price: less than you'd imagine, for such performance-packed equipment. Write for Norman Rothschild's authoritative 12-page illustrated report. Konica Camera Corp., Box 1070, Woodside, N.Y. 11377.

A BERKEY PHOTO COMPANY

KONICA Auto-Reflex

"The Lens Alone Is Worth the Price"

What are the basic features of a professional single-lens reflex? Auto-return mirror. Focal plane shutter. A full range of automatic lenses.

But most automatic lenses aren't. When you shoot, they close down to your pre-set shooting aperture and reopen automatically. That's all. Who sets the shooting aperture? *You do it. Manually.*

The Konica Auto-Reflex's automatic lens is automatic. Of course it closes to shooting aperture and reopens automatically. It also selects the shooting aperture. *The lens does it. Automatically.*

You don't press any buttons. You don't turn any rings. You don't match any needles. Your viewfinder doesn't darken. Your meter sensitivity isn't affected by the speed of your lens.

You just select the shutter speed to the action once...aim, focus, and shoot. Your exposure is correct. Automatically. Every time, shot after shot.

And the Konica Auto-Reflex *tells you* what f-stop it selected, so you're always aware of your approximate depth of field, without stopping down. Want a deliberately "wrong" exposure, for some special effect? Just set f-stop manually, as you would on any camera. The meter is still there to advise you, or to check your judgment, but you're free to depart from its advice.

The Konica Auto-Reflex is the only fully professional camera with *fully automatic* exposure control. But there are more facets to Konica's speed and ease of operation.

The world-famous Hexanon lenses (including an ultra-wide, 90° 21mm), make the Auto-Reflex a total photographic system, and lock on with a twist of the smooth, fast-changing Konica bayonet mount.

The durable, utterly accurate, all-metal focal-plane shutter synchronizes at all speeds to 1/1000 second for flashbulbs

and to 1/125 second for electronic flash, preventing "ghost" images when shooting action flash in bright light.

And only Auto-Reflex offers you unrestricted choice of full-frame or half-frame format. You can double your picture opportunities. Flick a lever, and those four or five remaining frames on a standard roll of 35mm offer eight or ten more shots. The professional will also welcome the half-frame feature as a natural for shooting filmstrips. And like all advanced Konica models, the Auto-Reflex features IGL (Insta-Grip Loading) and a contoured, cut-away film chamber for instant unloading.

To see how Konica Auto-Reflex can help you get better pictures, automatically, read the authoritative new 12-page report by photographer and author Norman Rothschild. At your dealer, or write today: Konica Camera Corporation, P.O. Box 1070, Woodside, N.Y. 11377.

A BAKER PHOTO COMPANY

Any 'automatic' single lens reflex without this diaphragm setting isn't automatic.



WITH 55MM F3.5 HEXANON,
\$269.95, PLUS CASE.



Konica Auto-Reflex

"The lens alone is worth the price"

April, 1967

Revolutionäre Neuerung auf dem Gebiet der einäugigen Spiegelreflex-Kamera: KONICA AUTOREFLEX T

(Oder: «Sie brauchen keine Zitternadel im Sucher mehr zu beobachten»)

Mit der Konica Autoreflex T wurde die extremste Verbesserung der einäugigen Spiegelreflexkamera realisiert. Die Zeit, da Sie den Blendeneinstellring am Objektivträger drehen mussten, um einen schwankenden Zeiger im Sucherfenster in die richtige Position zu manövrieren, ist endgültig vorbei. Die Konica Autoreflex T besorgt dies dank einer ausgeklügelten Kombination zwischen der Lichtmessung durchs Objektiv und einem elektrischen Auge

absolut vollautomatisch. Alles, was Sie zu tun haben, ist die Schärfeeinstellung – und dann drücken Sie ab! Keine andere Kamera der Welt verfügt über einen derartigen automatischen Mechanismus der Blendeneinstellung – es ist eine Errungenschaft, wie ausschliesslich Konica sie zu bieten imstande ist. Hier ist kein Raum, um alle übrigen sensationellen Vorteile der Konica Autoreflex T aufzuzählen. Ueberzeugen Sie sich davon, indem Sie sich diese Kamera bei Ihrem Händler vorlegen lassen.



Die neue gediegene KONICA COMPACT 8
Die kleinste und leichteste Filmkamera der Gegenwart! Legen Sie die Filmpatrone ein – schon ist sie aufnahmebereit! Stecken Sie die Kamera in Ihre Rocktasche, um sie immer bei sich zu haben. Ob Anfänger oder erfahrener Filmer: Sie werden vom lichtstarken und farbfreundlichen f1,8-Objektiv begeistert sein!

KONICA

KONISHIROKU PHOTO IND. Co., LTD.
No. 3, 1-chome, Muromachi-Nihonbashi,
Chuo-ku, Tokyo, Japan

If it's not a Konica, it's not automatic.



A lot of professional
35mm SLRs claim full auto-
mation.

Only *one* delivers it: The Konica
Autoreflex-T. Totally, instantly, and through
a complete array of automatic Hexanon lenses.

A unique EE program linkage couples the lens
to the Autoreflex-T's center-weighted behind-the-lens
meters.

These sensitive CdS cells read the light available and
set the proper exposure for you. Unlike so-called "auto-
matic" cameras, the Autoreflex-T never makes you match
needles, twist aperture rings or make manual adjustments—
unless you want to.

And, because you see the f/stop setting in the view-
finder, you always know what's happening without taking
your eye away from the subject.

Only one camera can offer all this convenience:

KONICA® AUTOREFLEX-T
Tomorrow's camera today.

With 52mm f/1.8 lens, under \$250; with 57mm f/1.4, under \$290;
with 57mm f/1.2, under \$360. See the full Konica system with
lenses from 21mm to 2000mm (shown here with the 80-
200mm Auto Zoom), at better camera stores. Konica
Camera Corp., Box 1070, Woodside, N.Y. 11377.

KONICA AUTOREFLEX T GIVES YOU PHOTOGRAPHIC FREEDOM



Tomorrow's camera...
today.

OREFLEX

T

KONICA

1:1.2 f=57mm

HEXANON

KONICA

Some time in the future, other 35mm SLRs will attempt to offer full automation. But only *one* professional SLR has it now: the Konica Autoreflex-T. Its sensitive behind-the-lens meters read the light available—no matter how suddenly it changes—and set the diaphragm to the correct aperture. Instantly. Automatically.

All you do is focus and shoot. No rings to twist, no needles to match; no manual adjustments to make—*unless you want to*.

And you always know what's happening. Because the f/stop being set by the electric eye is always visible in the viewfinder.

Eventually, you may be able to get this convenience and versatility from other cameras. But you can own a Konica now. Why wait?

With 52mm f/1.8 Hexanon lens, under \$250; with 57mm f/1.4, less than \$290; with 57mm f/1.2 under \$360. See the full system of Konica lenses (21mm to 2000mm) and accessories at better camera stores. Konica Camera Corp., Box 1070, Woodside, New York 11377.

KONICA®
AUTOREFLEX-T

Only one single lens reflex camera has automatic exposure control.

No other single lens reflex camera on the market today can do what the Konica Autoreflex T can do—set the aperture for you automatically. It lets you take action shots and those never-happen-again situations without wasting time centering a needle in the viewfinder.

As you compose, the needle automatically points to the aperture being set by the metering system. This amazing performance is made possible by Konica's exclusive automatic exposure control, the first and only system of its kind in the world.

And to match this system, Konica offers a superb line of interchangeable Hexanon lenses ranging from 21mm to 1,000mm, plus three zoom lenses.

Another special feature of the Autoreflex T is an all metal focal plane shutter with speeds B—1000 sec.

Pros who would like to set their own exposure time and aperture can use a simple switch for manual operation.

A camera for the pro and the advanced amateur. This is the one.

KONICA 
AUTOREFLEX

KONISHIROKU PHOTO IND. CO., LTD.
No. 1, Nihonbashi-Muromachi 3-chome,
Chuo-ku, Tokyo, Japan

Konica Europe:
c/o Deutsche Mitsubishi Export-Import
GmbH, Hamburg 36, Neuer Wall 54,
W. Germany

Rumitas GmbH:
Robbergstrasse 56, CH-8102
Oberengstringen, Zurich, Switzerland

Konica Camera Corporation:
25-20 Brooklyn-Queens, Expressway
West, Woodside, N.Y. 11377, U.S.A.



This is the one.

A "MUST" FOR A MODERN CAMERA... EE MECHANISM

The essence of a 35mm camera is its capacity for shooting rapid and candid shots. It is a proven fact that the facility for rapid shooting is available only when an EE mechanism is provided. I would expect that in the foreseeable future, all the TTL type SLR cameras which are now on the market throughout the world will have no choice but to be equipped with an EE device. The SLR type Konica Autoreflex with its combined built-in TTL device and EE mechanism is, without a doubt, today's 35mm camera.

THE INCREASING DEMAND FOR THE EE MECHANISM FOR HIGHER CLASS CAMERAS

Originally, the EE mechanism was developed in order to be incorporated into a beginner's camera. Thus, a camera with an EE has been associated with a popular type model. Konica, however, adopted the EE mechanism with an entirely different point of view. It is quite evident that as the grade of a camera is enhanced, so is the demand for a greater facility for shooting rapid and candid shots. With the Konica Autoreflex, it is possible to shoot at a critical shutter shooting chance 3.2 seconds quicker than with other TTL type SLR

cameras. Furthermore, the interchangeable lenses, ranging from a 21 ultra-wide angle lens to a 200mm telephoto lens, can be changed with no problem in mounting and setting, thereby greatly facilitating the EE photography. The rapid shooting of the Konica Autoreflex is further reinforced by means of a unique system for saving film loading time, the "Easy-Loading System", an outstanding advantage of Konica. The EE mechanism of the Konica Autoreflex can be easily released to change the camera to manual operation. Then it can be used as a shutter pre-set type camera with a built-in semi-continuous light meter, and with the capacity, for accommodating lenses up to a 1000 mm ultra-telephoto lens to enable a photographer to shoot spontaneously in regular and special effect photography.

SOLUTION FOR WEAK POINTS OF TTL LIGHT MEASUREMENT

In order to cope with the irregularity of light measurement effected through a wide-angle lens or a telephoto lens, a pair of CdS cells are incorporated into a special structure. Thus, it has been made possible to obtain correct and uniform exposures using lenses ranging from an ultra-telephoto lens to an ultra-wide angle lens without irregularity. When it is necessary to use bellows, close-up lenses or lenses of other

manufacturers, the Konica Autoreflex can be used as a stopped-down-lens aperture camera by simply adjusting the meter needle to the index point visible inside the viewfinder. In this respect, the Konica Autoreflex is very conveniently designed.

HIGH RESOLUTION POWER... CLEAR IMAGE

The standard lenses for the Konica Autoreflex are, Hexanon F/1.8 52mm, F/1.4 57mm and F/1.2 57mm. These lenses are made of newly developed glass materials and are designed with utmost precision under computerised production lines. The undesirable aberrations which have been prone to occur with a large diameter lens are completely eliminated, and a clear image with a high extent of resolution is always available.

UNIQUE LENS COATING

In order to reproduce natural colours in their natural state, Konica has developed a rose-pink lens coating, a unique development to improve the lens capacity. The conventional amber-purple lens coating has several weaknesses but the development of the rose-pink coating has solved all of these. The rose-pink coating is applied to all the Hexanon lenses.

Why Does the Desire to Own A Precision Camera Increase Along with Your Knowledge of the Mechanism?



KONICA
AUTOREFLEX

KONISHIROKU PHOTO IND. CO., LTD.
No. 1, Nihonbashi Muromachi 3-chome, Chuo-ku, Tokyo, 103 Japan

Your SLR is obsolete.

Sorry. We know how deflating those words can be. But unless you own a Konica Autoreflex-T, we can't guarantee that you'll never hear those words again.

We can be sure about the Autoreflex-T. For this new-generation 35mm SLR, the world's only professional SLR with *total* automation, is the forerunner of cameras to come.

And it's here *now!* To take those once-in-a-lifetime pictures you never thought possible.

You simply frame, focus and shoot. The Autoreflex-T does the rest. Its center-weighted, behind-the-lens meters accurately read the light available—no matter how suddenly it may change—and automatically set the

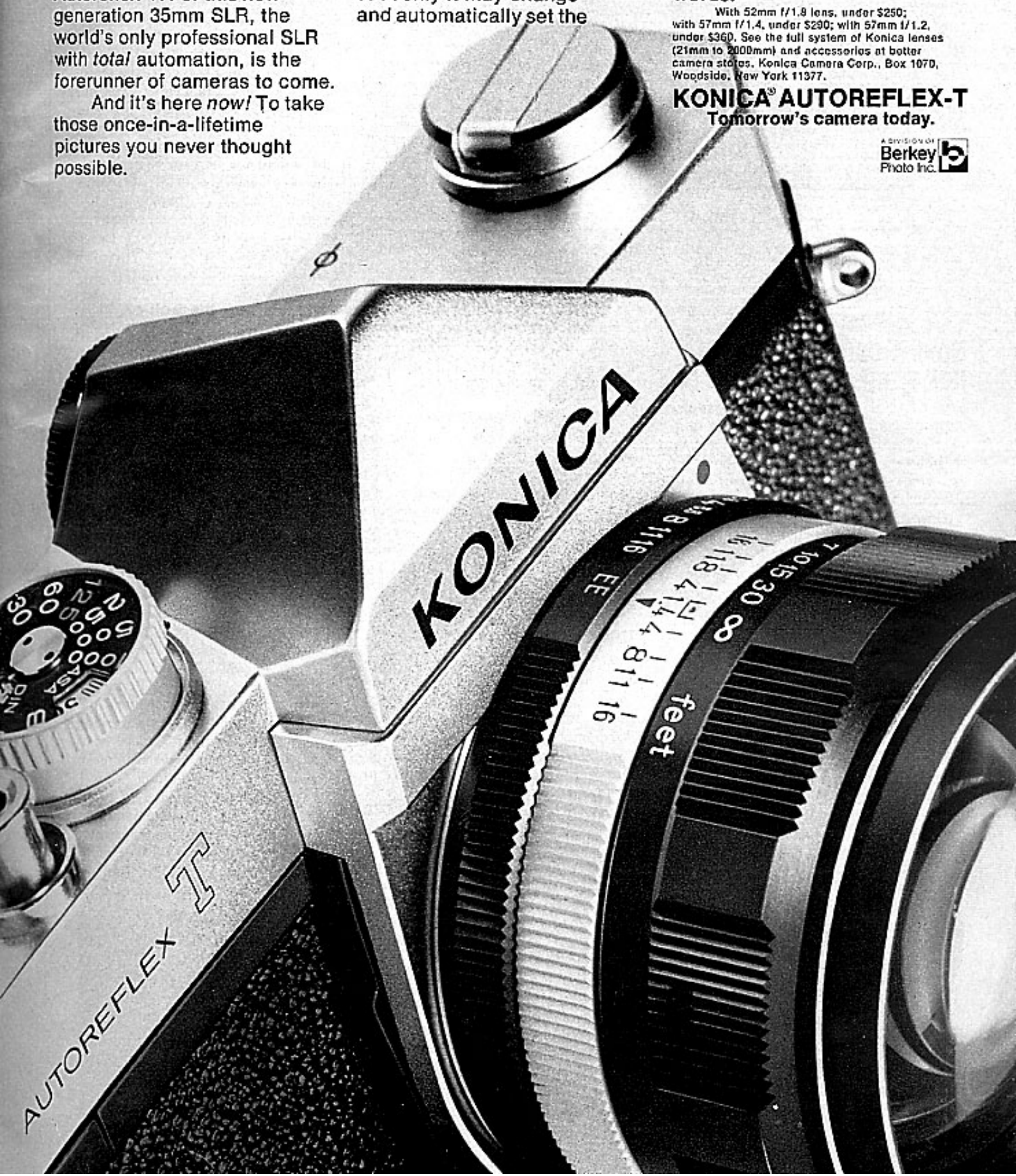
correct f/stop. With any Konica automatic Hexanon lens.

No needles to match. No rings to twist. No manual adjustments (*unless you want to*). And no more discouraging words.

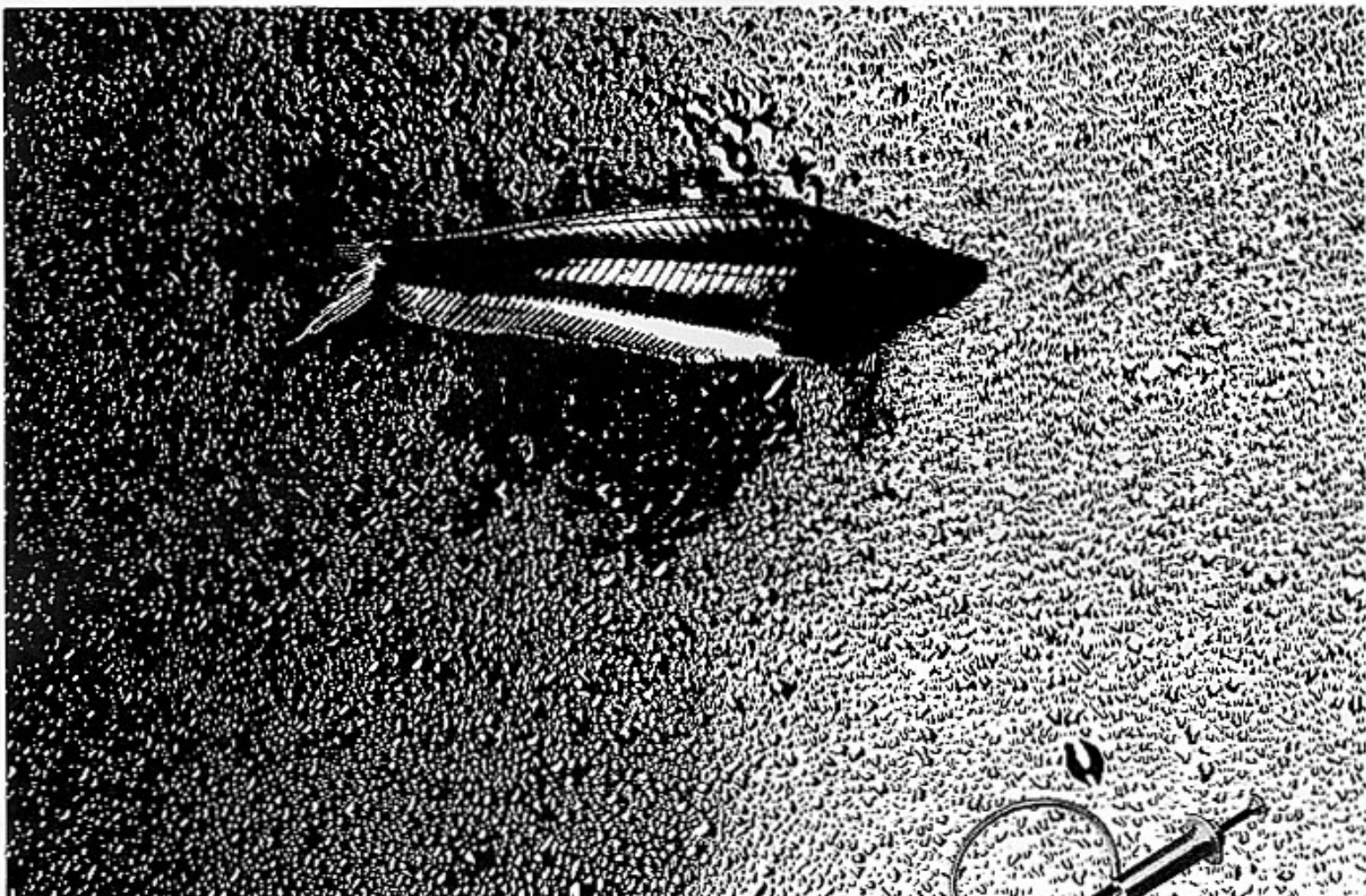
With 52mm f/1.9 lens, under \$250; with 57mm f/1.4, under \$290; with 57mm f/1.2, under \$360. See the full system of Konica lenses (21mm to 2000mm) and accessories at better camera stores. Konica Camera Corp., Box 1070, Woodside, New York 11377.

KONICA[®] AUTOREFLEX-T
Tomorrow's camera today.

A Division of
Berkey
Photo Inc. 

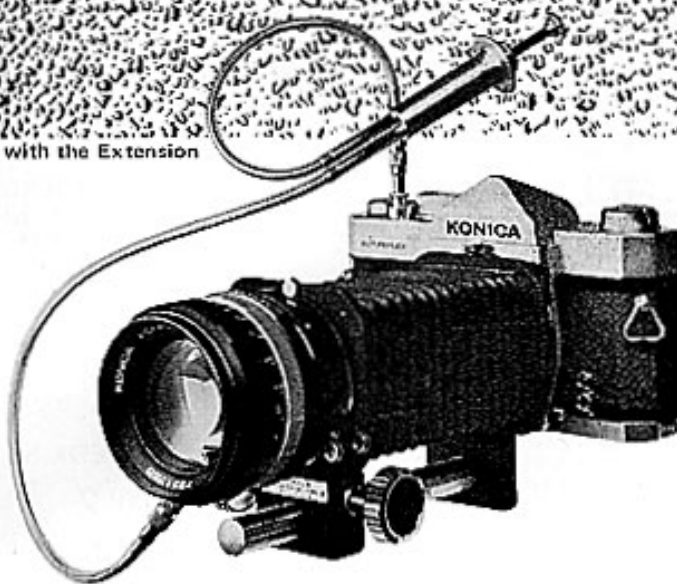


Uncover New Worlds of Vision by the Eye of Konica



Transparent cat fish: Total length - 19mm Photographed by Konica Autoreflex T with the Extension Bellows II, Auto Ring and Double Cable Release.

Such as, The Mysterious Beauties of the Marine World



Extension Ring II: Capable of photographing up to the actual size. Close-up attachment lenses are also available.

This close up was taken by placing a tropical fish flat on a glass plate coated with a thin layer of paraffin and by applying light from below. The lighting was effected through a sheet of white paper by a flood lamp. Shade was deliberately pre-arranged on the white paper. Adequate distance was provided so that the shade would not exert its effect positively.

When switched to manual, Konica Autoreflex T frees you from all the fuss of making complex calculations otherwise required when taking close-up photographs. If the Auto Ring and the Double Cable Release are coupled when fitting bellows or extension

rings, the aperture mechanism can work semi-automatically. This will enable you, the photographer, to quickly settle the correct aperture and focus while looking through a view finder with ample light.

The light measuring system of the Autoreflex T works with a pair of CdS cells embedded in a deep hood. This is the device that allows you to solely concentrate on the art of designing the best image in the framework, even under the most complicated lighting conditions. Explore the immense and fantastic world of close-up photography with your Konica Autoreflex T.

KONICA
AUTOREFLEX

RUMITAS GmbH: Rebbergstrasse 56, CH-8102 Oberangstringen, Zurich, Switzerland
KONICA EUROPE: c/o Deutsche Mitsubishi Export-Import GmbH
Hamburg 36, Neuer Wall 54, W. Germany
KONICA CAMERA CORPORATION: 25-20 Brooklyn-Queens, Expwy West, Woodside, N.Y. 11377, U.S.A.
KONISHIROKU PHOTO IND. CO., LTD. No.1, Nihonbashi Muromachi 3-chome, Chuo-ku, Tokyo, 103 Japan



PHOTOKINA '70

Konica, The Focus of Shutterbug Conversation.

"TTL plus EE? That's a great mechanism!
It's exactly what I've been looking for.
Can you really take pictures with 21mm up to 200mm
while the EE is in action?
Then that makes lens interchanging so much easier and faster.
This is just the thing for those professional quick shots."

"Oh, look at this small camera!
Weighs only 370 grams?
I can carry it around in my handbag."

"This can easily slip into your pocket.
I can't believe it's a full-size camera.
It's fantastic."

"I think it's terrific that this camera can also be worked manually.
Close-ups with bellows will no longer be such a fussy business."

"Look at this attractive coating on the lens.
It's called the 'Rose Coating'.
I imagine the colors
must be very true to life."

"I see. This red mark for 1/125 sec.
means the electronic flash
is synchronized at 1/125."

HEXANON

"I love the interchangeable lens range.
It's amazing that an EE camera can take
so many different interchangeable lenses."

"Look how fast this wind-up reel works.
You can be sure to get
quick shots with this."

"I can get everything looking
through this viewfinder.
Range, flash, aperture,
shutter speed,"



AUTOREFLEX T

C35

KONICA

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If you don't have the time use **KONICA**

*Konica Autoreflex T,
the quickest single
lens reflex camera
with metal focal plane
shutter.*

*Catch with your Konica
the most important
moments! It's so easy.*

*Konica works fully
automatic. You only
have to focus ...
everything else is done
by the camera.*

*The Hexanon lens
is color-dynamically
coated and its quality
is well known all
over the world.*

*Many accessories
are available for
the Konica.
One can chose
between
interchange-
able lenses
from 21 to
1000 mm
(upto 300 mm
fully
automatic).
The CdS
exposure
meter
measures the
light through
open aperture.
X-synchronisation
upto 1/125 sec.
Shutter speed: B, 1 to
1/1000 sec. A large
accessory programme.*



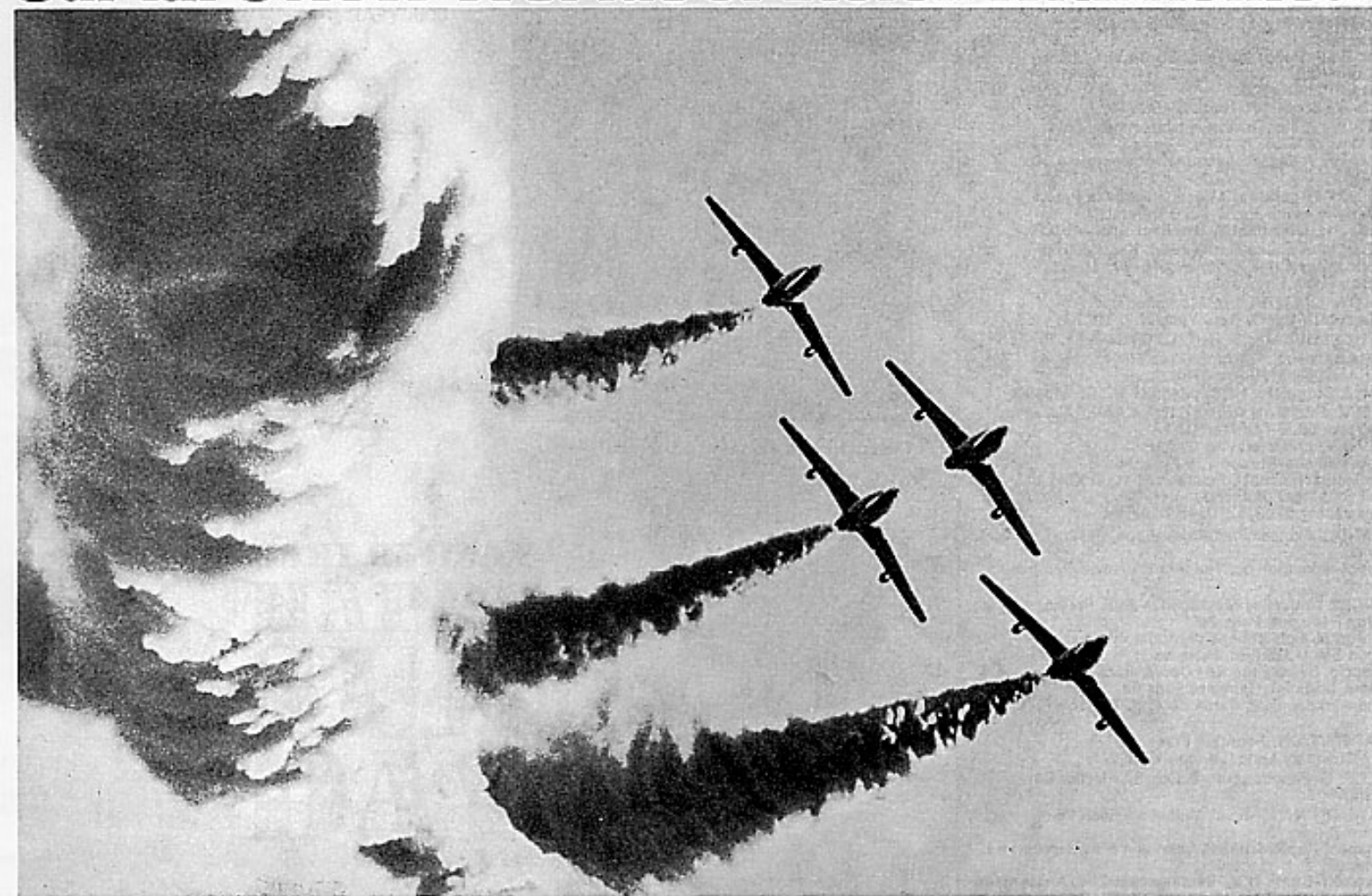
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KONICA CAMERA CORPORATION: 25-20 Brooklyn-Queens Expwy West, Woodside, N.Y. 11377, USA

General Representatives for Switzerland: Rumitas, 8102 Oberengstringen ZH

Capture New Worlds of Vision with Konica



Photographed by Konica Autoreflex T with Hexanon Auto 300mm F3.5 Exposure: Automatic Exposure Control

such as ... the soaring flight of a supersonic jet



Jet fighters performing aerial acrobatics at the speed of sound! Climbing into skies of ever-changing light at 1,100 km/h, they present an elusive and challenging subject to capture on film.

We have the most natural choice of camera for this task—the Konica Autoreflex-T.

Fitted with a telephoto lens, this remarkable SLR with Automatic Exposure Control will perfectly expose a supersonic jet sliding out of a barrel roll or pulling out of a loop. All you need do is compose and shoot. Konica's unique AEC system does the rest. The result—a photographic statement that does justice to

your skill.

For tracking a jet, you might want to use the extremely compact 300mm AR Hexanon lens—strong enough to bring its image down to earth but light enough to hand-hold and follow its lightening-fast flight. Whatever you're shooting, you'll find a razor-sharp, high performance automatic lens to fit your needs from a 21mm ultra wide angle to a 300mm telephoto. And in the higher tele ranges—400mm to 1000mm—there are pre-set Hexanon optics to increase further the versatility of your Konica Autoreflex-T. In each instance, you can shoot with complete confidence in Konica's unique

exposure system. Using two CdS cells in a special arrangement, it will provide you consistently with more accurately exposed pictures than any SLR on the market—even when shooting against tricky back-lighting or under changing light conditions.

Whether shooting a fast-paced sports scene or the unexpected antics of wildlife, you'll find the Konica Autoreflex-T highly reliable under all conditions. It takes the uncertainty out of photography and opens up an entire new world of vision to capture on film.

KONICA
AUTOREFLEX

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Mitsubishi International KONICA Division: Hamburg 36, Neuer Wall 54, W. Germany
KONICA CAMERA CORPORATION: 25-20 Brooklyn-Queens Expwy West, Woodside, N.Y. 11377, U.S.A.
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KONICA

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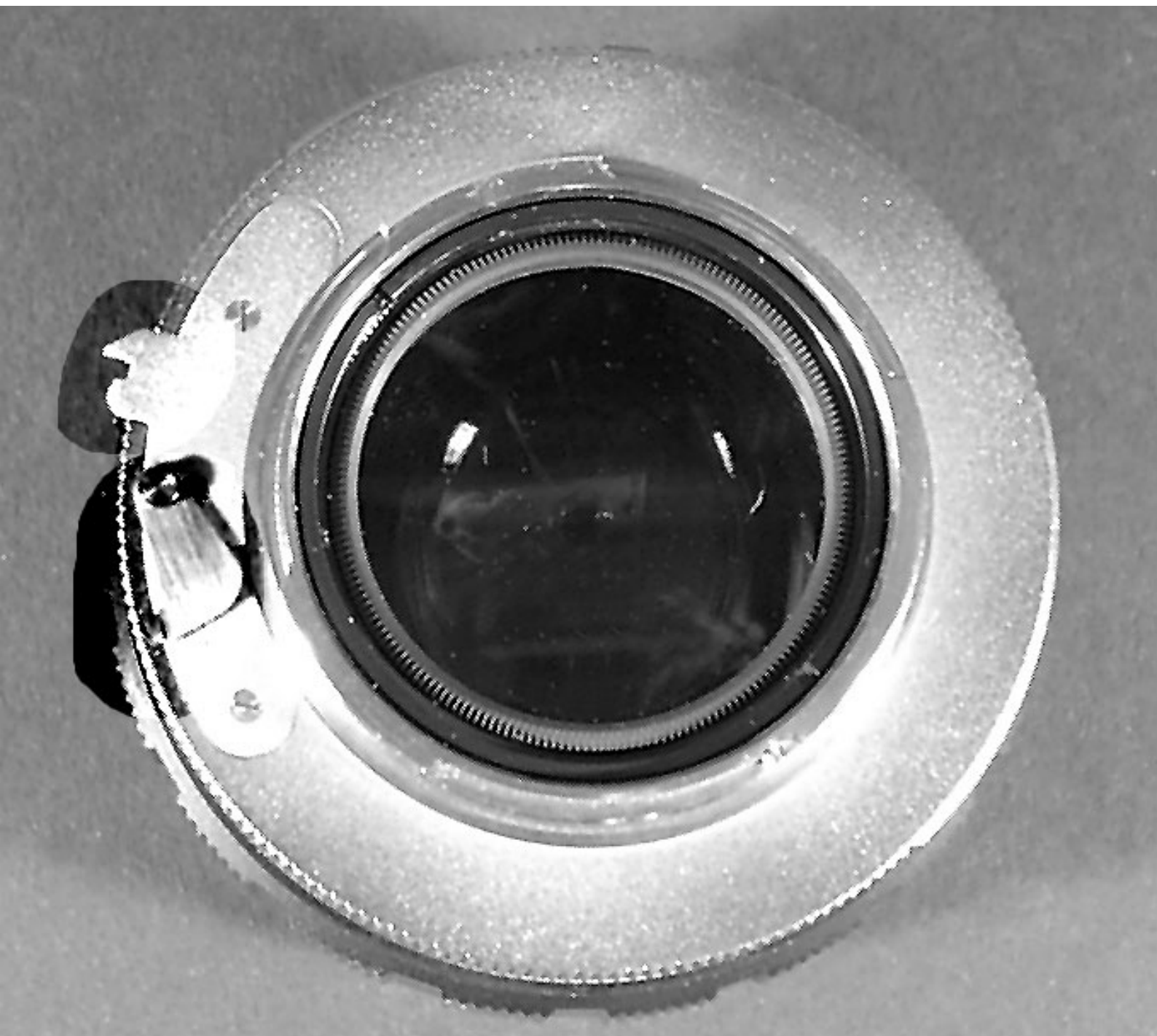














Konica

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F



INSTRUCTION BOOKLET

KONICA



KONISHIROKU PHOTO IND. CO., LTD.
Tokyo, Japan

PRINTED IN JAPAN 4011-N

KONICA

FS



INSTRUCTION BOOKLET

KONISHIROKU PHOTO INDUSTRY COMPANY, LTD. appreciates your choice of one of its finest products. The KONICA FS single-lens reflex, incorporating a pentaprism for parallax-free, full-picture-size viewfinding and focusing, is a superbly designed and engineered camera guaranteed to give impressive performance and enduring pleasure. In conjunction with the fast, sharp and brilliant HEXANON lens, there is provided KONISHIROKU's unique HIGHSYNCHRO metallic focal plane shutter which permits full synchronization at all shutter speeds with class M flashbulbs, and up to 1/125 second exposures with electronic flash equipment. Also provided is the automatic aperture, which in conjunction with the quick return mirror, gives a clear, brilliant image of the subject in the viewfinder without any prolonged blackout. Interchangeable HEXANON lenses, both wide-angle and telephoto are available for instantaneous changes by means of the handy KONICAMOUNT.

CAUTIONS

- When mounting lens, do not hold manual aperture lever.
- Never touch the reflex mirror. Remove particles of dust with soft-hair brush or a small feather.
- Never touch the shutter. It is of extremely thin construction, and is precisely adjusted.
- Never operate cocking lever while shutter is in action at "B" setting or any of the slower shutter speeds.

—TABLE OF CONTENTS—

General Description of the KONICA FS.....	4
Nomenclature—1	6
Nomenclature—2	7
Nomenclature—3	8
Nomenclature—4	9
Operating the Cocking Lever	10
Loading Film	12
Picture-Taking	18
Focusing and Viewfinding	20
Shutterspeed and Aperture	22
Lens Removal and Attachment	26
Synchroflash Photography	28
Selftimer	30
Depth of Field	31
Film Rewind	34
Exposure Guide	36
Depth of Field Table	38

GENERAL DESCRIPTION of the KONICA FS

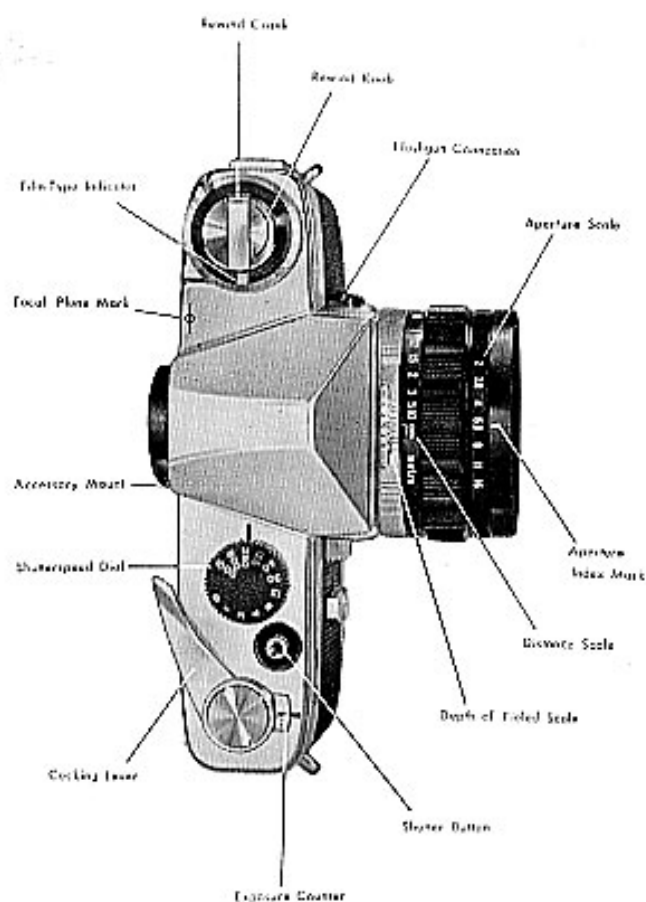
Negative Size	24 X 36 mm
Film	35 mm in safety cartridge
Standard Lens	HEXANON 1/2, f = 50 mm, improved amber-coated anastigmat of 6-element, 5-group construction; minimum distance range, 0.6 meter.
Lens Mount	Bayonet flange KONICAMOUNT (40 mm diameter, flange 40.5 mm)
Aperture Mechanism	Full automatic closing to pre-selected setting, manual closing for depth of field check.
Viewfinder	Pentaprism reflex type, correct picture-size image, at eyel level.
Reflex Mirror	Full-automatic, quick-return, perpendicular action mirror.
Shutter	HIGH SYNCHRO all-metal, focal-plane type, equidistantly scaled in multiples of 2, single axis non-rotating shutter speed dial. Settings: B, 1, 2, 4, 8, 15, 30, 60, 125, 250, 500, and 1000
Selftimer	Self-contained in camera body. Setting angle, 70°. Full delay

— 4 —

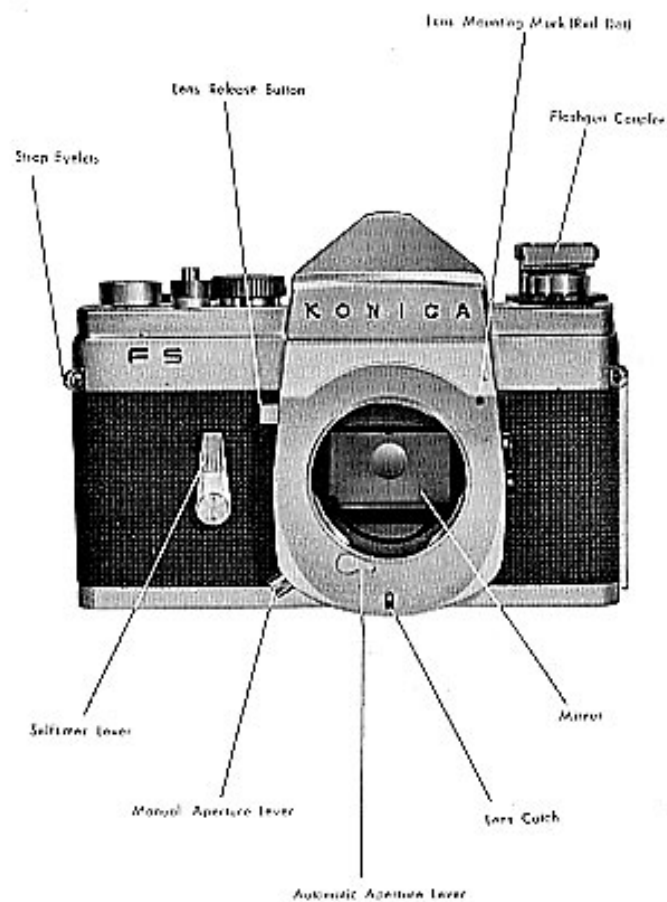
Synchroflash Settings	duration, approximately 10 seconds. M and X settings. M settings gives full flash synchronization at all shutter speeds (automatic time-lag adjustment) with class M flashbulbs. Synchronization accurate up to and including 1/125 second. With electronic flash (strobe). Flashgun connection, JIS Type B
Cocking Lever	Single-stroke thumb operated type (180° swing). Simultaneous film advance and shutter cocking; positive double exposure prevention.
Other Features	Automatic exposure counter (self-resetting). Crank film rewind. Self-resetting rewind button.
Lens Hood	Slip-over type, 57 mm diameter.
Filters	Screw-in type, 55 mm diameter. 0.75 mm screw pitch.
Dimensions & Weight	145 X 102.5 X 80 mm 940 grams (with standard lens)

— 5 —

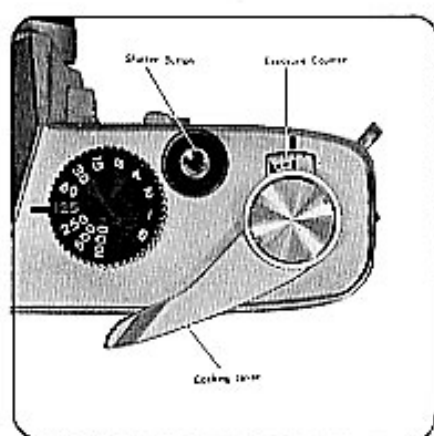
NOMENCLATURE—1



NOMENCLATURE—2



OPERATING THE COCKING LEVER



- Push cocking lever through its stroke until it stops. Film will be advanced one frame, while the shutter mechanism will be cocked.
- The exposure counter will move one step for each action of the cocking lever. After indicating "36" the exposure counter is disengaged.
- When after picture-taking the exposed film is rewound back into its safety cartridge, and the backlid is opened, the exposure counter automatically resets itself and points at triangular start mark.

- Cultivate the habit of operating the cocking lever just before shooting a picture. It is not good to leave the shutter mechanism cocked for any length of time; and besides there is the risk of wasting film through accidental release of the shutter.
- Shutter speed setting changes can be effected either before or after cocking.
- If the cocking lever jumps part way through its stroke at the end of a roll of film, do not force. Keep rewind button depressed and complete stroke of the cocking lever. It will then spring back to its original position.

FOR BEST RESULTS USE SAKURA FILMS

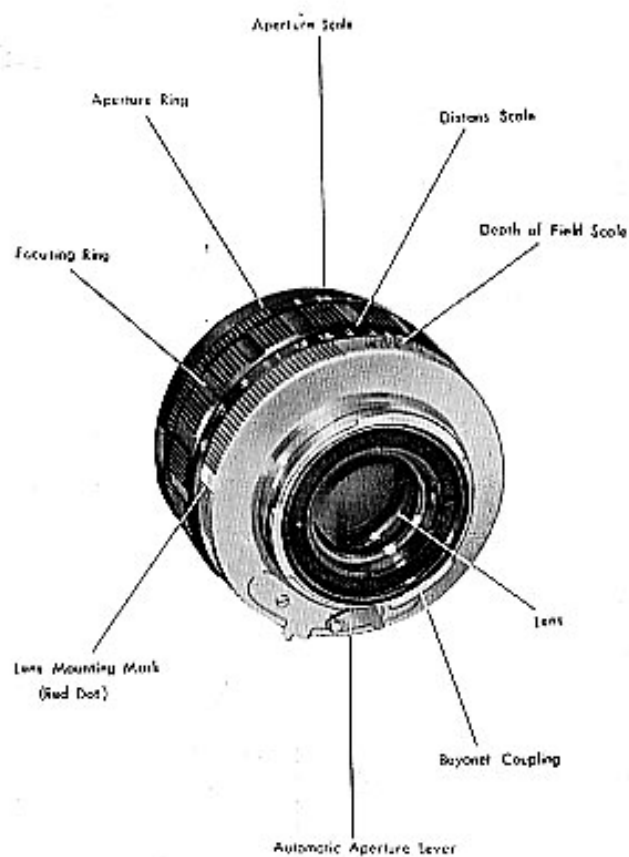
	ASA Rating	
	Endlight	Tungsten
KONIPAN S	50	40
KONIPAN SS	100	80
KONIPAN SSS	200	160
KONICOLOR NEGATIVE	50	
SAKURA COLOR REVERSAL	10	
KONIPAN REVERSAL	40	32

SAKURA INFRARED 750
peak Sensitivity 750 mμ
Sensitivity range, 640 to 820 mμ

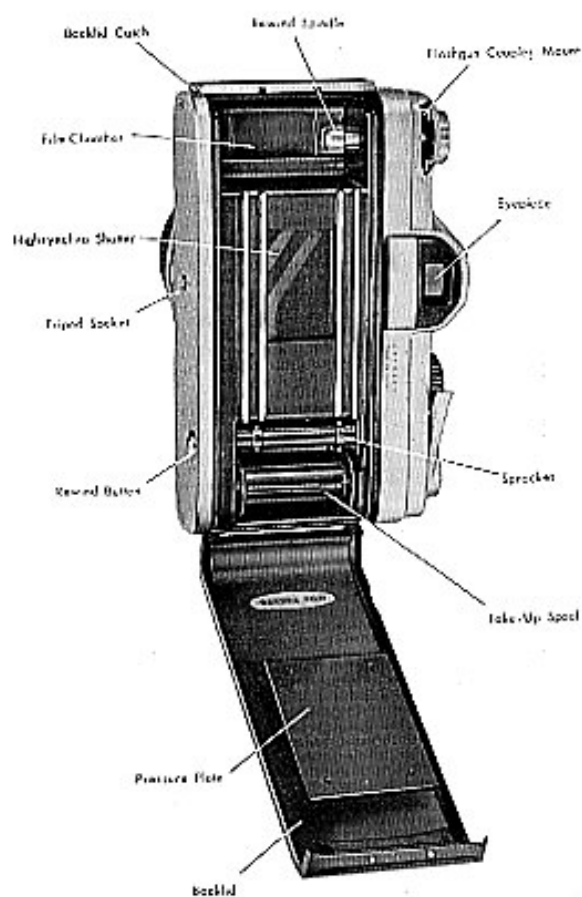


KONISHIROCKU PHOTO CO., LTD.

NOMENCLATURE—3



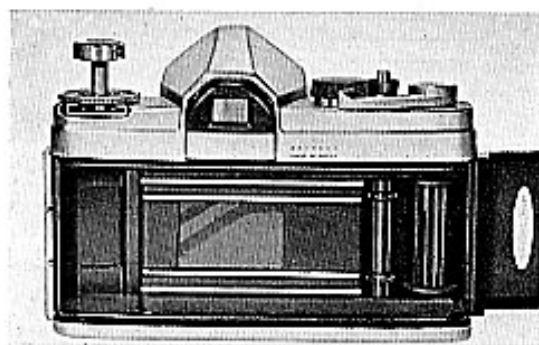
NOMENCLATURE—4



LOADING FILM

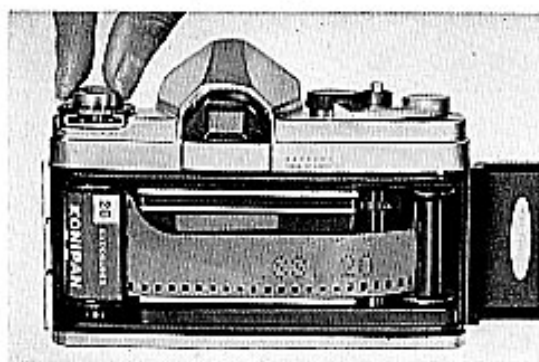
- The KONICA FS uses 35-millimeter miniature camera film, either monochrome or color, preloaded in safety cartridges.
- When loading or unloading film, always avoid direct light. Work under subdued illumination. When no other shade is available, use your own body to block direct sunlight.
- The flashgun coupler can be removed by pulling toward rear.

- 1 Pull backlid catch and open backlid. Keep rewind spindle pulled out.

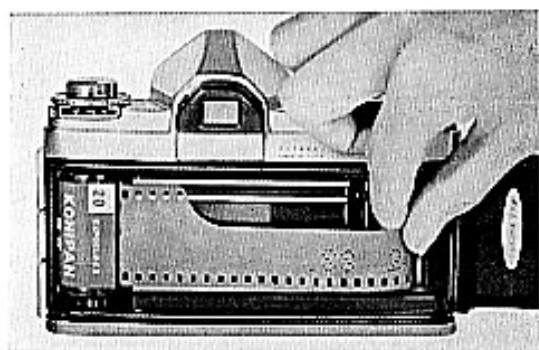


— 12 —

- 2 Insert safety cartridge containing unexposed film in the film chamber, and push rewind spindle back into original position, turning it a little to engage spool of safety cartridge.

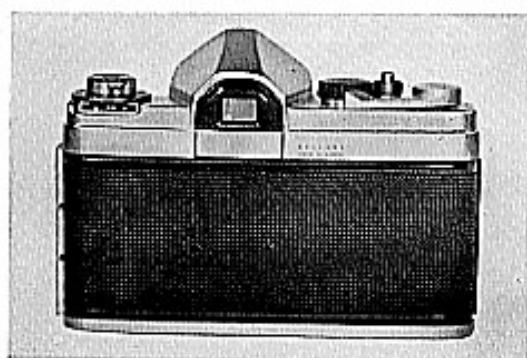


- 3 pull out enough film to reach across the film gate. Matching the edge of the film to the flange of the take-up spool, insert film end in the slit of the spool core (take-up spool turn freely, so bring slit into position for easy insertion of film end).

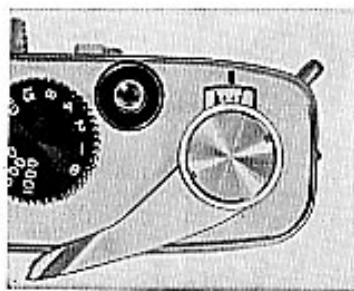


— 13 —

- 5 Close backlid, and press shutter button. Turn rewind knob in direction of arrow to take up slack of film.



- 6 Operate cocking lever, then press shutter button. Repeat these actions. Then the exposure counter will indicate the black dot one step ahead of 1.

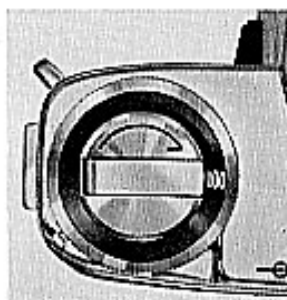


The camera is now ready for picture-taking.

- 7 If, when going through the actions of 6 above, the film is being advanced and taken up properly, the rewind knob will turn counterclockwise against the arrow indication. If the rewind knob does not turn, then the film is not being taken up. Open backlid and secure film end to take-up spool, repeating the steps described above.

FILM TYPE INDICATOR

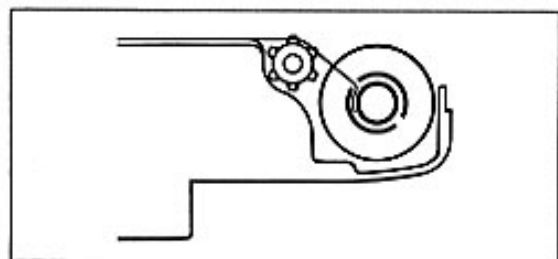
After loading camera with film, always set film type indicator to type of film in use. The numerals correspond to the ASA rating (filmspeed), while the blue section is for monochrome (black and white), and the red for color.



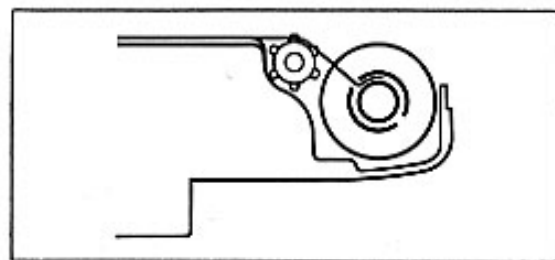
KONIFILTERS FOR THE KONICA FS

K'S CODE	Type	Color	Exposure Factor		Principal Uses
			Daylight	Tungsten	
SL 39	U V	nil	1.0	1.0	For absorption of ultraviolet rays, or for permanent use for protection of lens.
SY 48	Y 1	yellow	1.5	1.2	General color correction for pictures of people, scenery, etc.
SY 52	Y 2	yellow	2.5	1.3	
SG 56	E 1	orange	4.0	2.0	For emphasis of sky and contrasts in mountain and distant scenes, or for infra-red film.

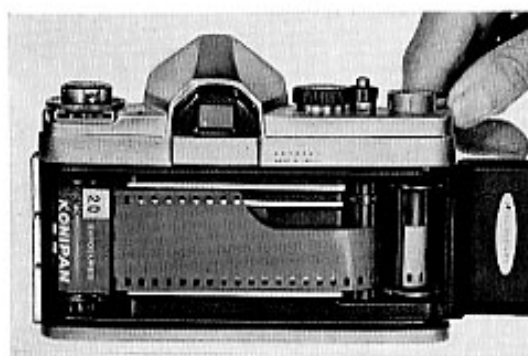
- If film end is inserted in the take-up spool slit in the manner shown here, it will easily detach at the end of rewind action.



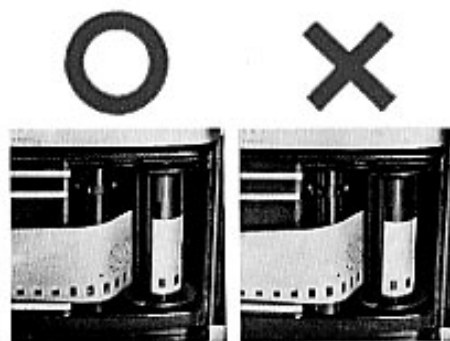
- If film end happens to be inserted in take-up spool in the manner shown here, it will not slip out of slit at completion of rewind into safety cartridge. In this case, do not force. Open backlid and release film by gently tugging with fingertips.



- ④ Operating the cocking lever while guiding the film perforations onto the sprocket teeth will cause the film to be taken up on the take-up spool.

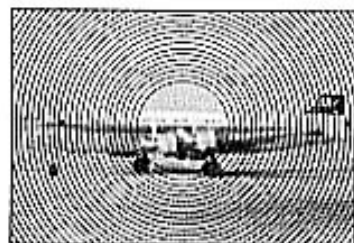


Perforations are fitted onto sprocket teeth

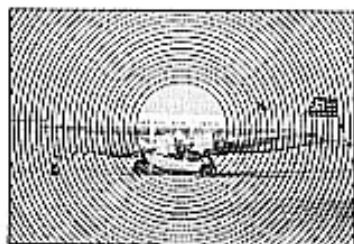


FOCUSING AND VIEWFINDING

Focusing can be done either before or after cocking because the mirror of the KONICA FS is always correctly positioned for accurate register of the focusing and viewing image.



Focus is incorrect when the image of the subject is fuzzy.



Focus is correct when the viewfinder image is clearly and sharply delineated.

Focusing

Is effected by sighting the subject through the eyepiece (viewfinder) and by turning the focusing ring. When the image of the subject is clearly and sharply projected on the focusing screen, the camera is focused correctly.

Viewfinder

The image seen in the viewfinder is that of the subject caught by the camera lens and projected right side up onto the focusing (viewing) screen by the pentaprism. Since there is no shifting of the viewing axis there can be no parallax (sighting error due to displacement of line of sighting from line of picture taking). No matter at what distance or angle, and regardless of the focal length of the lens in use, the image rendered on the viewing screen is exactly the same as that projected on the film.

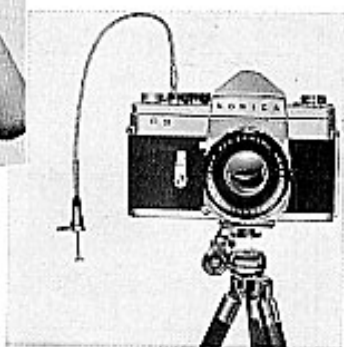
Quick-Return Mirror and Automatic Aperture

The full-automatic aperture mechanism closes down the aperture to pre-selected setting instantaneously upon pressing the shutter button. Simultaneously, the reflex mirror springs up and out of the way, and the shutter opens to register the image of the subject on the film. As soon as shutter action is completed, the mirror drops back to its original position, while the aperture automatically returns to full-open position. Consequently, the viewfinder is blacked out for a fraction of a second, only during actual exposure of film. The subject is in full view in full brightness both before and after picture-taking.

Focal Plane Mark

Indicated the position of the film, and distances to the subject are measured from this plane.

PICTURE-TAKING



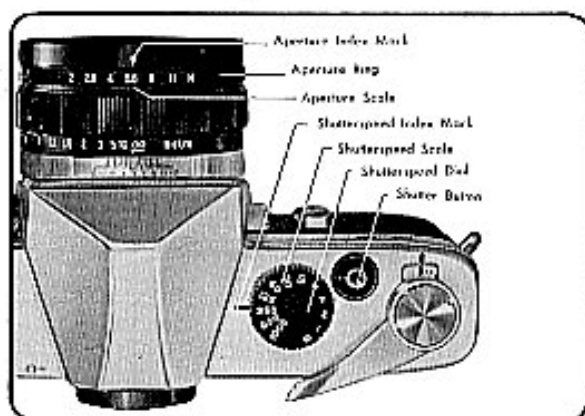
First, make sure that there is film in the camera. Examine your subject, note how the light plays on it, and judge the brightness (preferably with an electric exposure meter); then choose the appropriate shutter-speed and aperture settings to obtain correct exposure. Next sight the subject through the viewfinder. Turn the focusing ring to bring the image of the subject in the viewfinder into sharp focus. Operate cocking lever.

Holding the camera lightly but firmly with both hands, obtain additional steadiness by holding camera against cheek, forehead, or nose. Compose your picture on the viewfinder screen, then gently bear down on the shutter button, carefully avoiding any jerk that might spoil the negative through blurring. The subject of your choice is now imprinted on the film.

Before taking your next picture, be sure to operate the cocking lever to move the film to the next frame, and to set the shutter mechanism. When the available number of exposures on the film had been completed, rewind film into its safety cartridge, open backlid and unload.

When using a tripod, attach camera by means of tripod socket at bottom of the body. Cable release can be attached by screwing into socket at center the shutter button.

SHUTTER AND APERTURE



HIGHSYNCHRO SHUTTER

The metallic focal plane shutter of the KONICA FS is a new development which gives superior performance in all respects. Metallic construction makes it proof against cold, heat and wear; while extremely rapid transit across the shorter length of the negative (in about 7.5 milliseconds) permits the use of a wide slit at the highest shutter speed.

This not only results in high stability of exposure durations, with reduction of distortion in reproductions of subject in rapid motion, but permits accurate synchronization with class M flashbulbs at all shutter speeds, as well as matching, up to 1/125 second, with the instantaneous flash of electronic flash (strobe) equipment.

Shutter speed Dial may be turned to give shutter speed settings ranging from "B" (bulb—manual timing of shutter action) to 1/1000 second. The colored setting "125" indicates the correct speed for synchronization of electronic flash.

Function of the Shutter

- [1] **Stopping (freezing) of Subjects in Motion** Unless fast shutter speeds are used in shooting things in rapid motion, blurring of their photographed image cannot be avoided. The closer the moving object to the camera, the faster must be the shutter speed.
- [2] **Regulation of the Amount of Light Striking the Film** The shutter can be used, like the aperture, to regulate the amount of light reaching the surface of the film. For the same aperture setting, each step up for faster shutter speed will result in a halving of the amount of exposure. Each step down will double the exposure.

SHUTTER SPEED — RANGE										
B	1	2	4	8	15	30	60	125	250	500/1000

The KONICA FS is equipped with an automatic aperture which normally remains fully open for viewing and focusing, and closes down to any preselected position only during the action of the shutter.

Function of Aperture

- 1 The Aperture Regulates the Intensity of the Light Passing through the Lens. The size of aperture is controlled by the aperture ring, and with each step on the aperture dial, the intensity of light is either doubled or halved. At $f/2.8$, the intensity of light passing through the lens is half that at $f/2$, while at $f/2.8$ double the strength at $f/4$ is provided. Since aperture size can be changed without interruption, any setting along the scale can be used to provide fine adjustment of exposure.
- 2 The Aperture also Regulates the Depth of Field. When the camera is focused on a certain subject, objects in front of and behind it remain sharply defined only within certain definite limits. This focusing tolerance is known as "depth of field," and varies with the size of aperture. The smaller the aperture, the greater the depth of field.

APERTURE RANGE (F /)						
2	2.8	4	5.6	8	11	16

Relationship Between Shutterspeed and Aperture

When taking pictures, the correct exposure is obtained by choice of a suitable combination of shutterspeed and aperture size. Correct exposure is meant the right density of the negative image imprinted on the film by action of light. Consequently, the intensity of the light reflected by the subject and its surroundings must be known. This is possible by using an electric exposure meter. However, when using monochrome (black and white) film which has considerable latitude, it is possible to obtain good results, without going too far wrong, by figuring out the shutterspeed and aperture settings by the exposure guide given elsewhere in this booklet. The conditions which one must bear in mind in deciding exposure are: filmspeed (ASA rating, indicating sensitivity of the film); time of year; weather; time of day; and the nature of the subject.

Since the shutterspeed scale and aperture scale are both equidistantly graduated in multiples of two, once one correct combination is found, other equally valid combinations are easily obtained. If the shutterspeed is reduced a step, then aperture is closed one step; and so on. For instance, if you wish to obtain double the exposure you would be getting with $1/125$ at $f/11$, then you must either reduce shutterspeed to $1/60$, or increase aperture to $f/8$. The same exposure is provided by: $1/60$ at $f/16$, $1/125$ at $f/11$, and $1/250$ at $f/8$.

LENS REMOVAL AND ATTACHMENT

- The interchangeable lenses of the KONICA FS are easily slipped on or off by a 55-degree twist of the lens barrel in the bayonet flange KONICAMOUNT.

To Detach Lens While keeping lens catch depressed, turn lens barrel counterclockwise until the red dots on the lens barrel and camera body are in alignment. The lens barrel then will easily slip out of the mount.



To Attach Lens Match red dots of the lens barrel and camera body, then insert lens barrel squarely in the mount. Turn clockwise until the lens catch engages with a click.



- When the lens is fitted to the camera body, the automatic aperture levers on the body and the lens are automatically coupled.
- When attaching lens, keep fingertips away from manual aperture lever. Do not touch or hold.

INTERCHANGEABLE LENSES FOR KONICA FS (KONICA Mount)

HEXANON 1/2	f = 35mm Automatic aperture
HEXANON 1/2.8	f = 35mm Automatic aperture
HEXANON 1/1.8	f = 85mm Automatic aperture
HEXANON 1/2.8	f = 100mm Automatic aperture
HEXANON 1/2.8	f = 135mm Manual control aperture
HEXANON 1/3.5	f = 135mm Automatic aperture
HEXANON 1/3.5	f = 200mm Manual pre-set aperture
HEXANON 1/4.5	f = 400mm Manual pre-set aperture
HEXANON 1/8	f = 800mm Manual pre-set aperture

SELFTIMER



The selftimer mechanism is set by turning the selftimer lever about 70 degrees, either before or after cocking the camera. With the selftimer set, pressing the shutter button will not immediately release the shutter, but will trigger off the selftimer mechanism which, after a delay of about 10 seconds, will activate the shutter.

- The selftimer can be used at all shutter speed settings except "B"
- For delays shorter than normal, turn selftimer lever through arc smaller than maximum.
- Shutter speeds can be changed at will after selftimer is set.
- Besides self-photography, the selftimer is useful for completely jerk-free operation of the shutter in micro-photography, copying work, and other picture-taking requiring utmost precision.

DEPTH OF FIELD

When a subject is brought into sharp focus, there is always a certain range, in front of and behind the subject, in which sharp register of objects can be obtained. This range is called "depth of field."

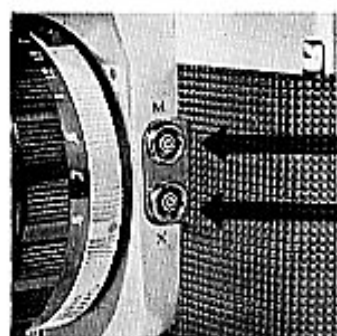
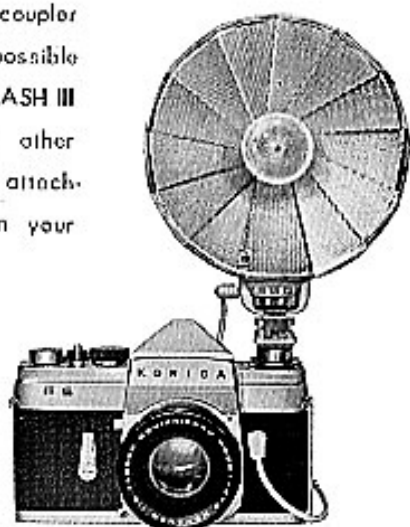
- At a given distance, the smaller the aperture the greater the depth of field.
- At a given aperture setting, the farther away the subject the greater the depth of field. Depth of field decreases as the distance becomes closer.
- More depth is available beyond the subject in exact focus than in front.
- If the distance and the aperture setting are the same, a lens of shorter focal length will have greater depth of field than a lens of long focal length.

The available depth of field (focusing tolerance) can be ascertained, with the KONICA FS, in the following ways:

- 1 Visual check by use of the manual aperture control.
- 2 Scale indication on the depth of field scale.

SYNCHROFLASH PHOTOGRAPHY

With the flashgun coupler in position, it is possible to mount KONIFLASH III and III M and other pocket type flash attachments directly on your KONICA FS.



When using class M flashbulbs, plug cord connector in "M" setting connection.

When using electronic flash (strobe), use "X" setting connection.

FLASH SYNCHRONIZATION CHART

Shutter speed Setting		1	2	4	8	15	30	60	125	250	500	1000
M	Class M	○	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○	○
	Class F	○	○	○	○	○	×	×	×	×	×	×
X	STROBE	○	○	○	○	○	○	○	○	○	○	○
	Class F	○	○	○	○	○	○	×	×	×	×	×

○ mark proper synchronization.
 × mark non-synchronization.

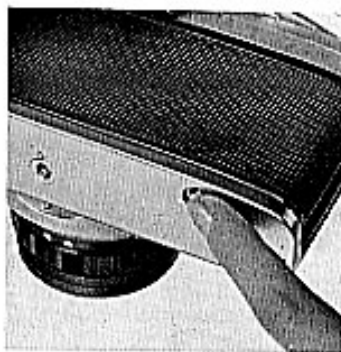
In synchroflash or flashlight photography, exposure is determined by the intensity of the flash, and the distance between the source of light and the subject. The instructions accompanying the flashbulb or electronic flash equipment will show a "guide number." By dividing the guide number with the distance between flash and subject, the correct f /value can be obtained for proper exposure.

For example: When using KONIPAN 55 film at shutter speeds of $1/50$ or slower, the guide number for TOSHIBA SUPER ZERO flashbulb is 42. If the distance to the subject (from the flashbulb) is 5 meters, then the correct aperture size is $42 \div 5 \div 8$. The aperture, in this case, should be set at $1/8$.

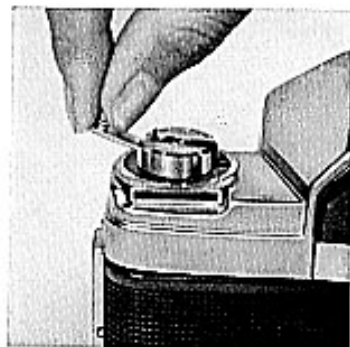
FILM REWIND

- When the roll of film contained in the safety cartridge comes to the end, the cocking lever will cease to move. Do not apply force in an attempt to complete its stroke. Leave cocking lever as it is, and rewind film back into safety magazine.
- If, at end of film, the cocking lever joins part way through its stroke, it can be released by keeping the rewind button depressed while completing cocking action. Rewind of film, however, can be done with the cocking lever in any position.

- 1 Push rewind button (a single push will release sprocket for rewind).



- 2 Erect rewind crank and turn in direction of arrow (clockwise). Exposed film will be taken up into the safety cartridge.



- 3 Open backlid, and pull out rewind crank and knob to release safety cartridge for removal.



- Toward end of rewind operation, resistance will be felt when end of film is detached from the take-up spool, then the load will suddenly be lightened. Stop rewind at this point in order to leave end of film protruding from safety cartridge.
- When removing safety cartridge from camera, always avoid direct lighting. Work in the shade.

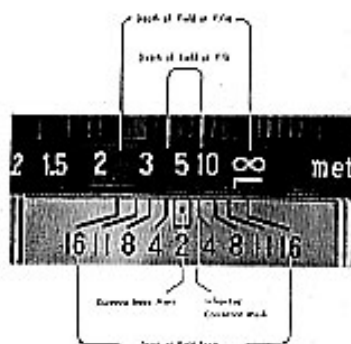
Visual Check of Depth of Field



The automatic aperture of the KONICA FS lenses remains at full opening for focusing and sighting, regardless of the pre-selected setting for picturetaking. However, the pre-selected setting can be obtained by pushing the manual aperture lever, so it is possible to see on the focusing screen the degree of sharpness lost in front of and behind the main subject at the aperture size selected for actual exposure.

- By holding down the manual aperture lever when turning the aperture ring, it is possible to set aperture at the right point for any desired depth of field as judged by sight.

Depth of Field Indication on Depth of Field Scale

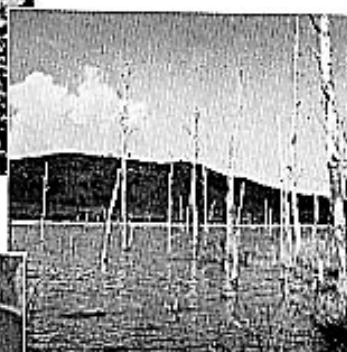


The depth of field scale is on the index mark side of the distance scale, and gives ranges, which can be read off the distance scale on both sides of the focused distance, for various aperture settings. For example: with aperture set at $f/4$, and with the main subject in focus at a distance of 5 meters, it is possible to obtain sharp register of all objects within the range bracketed by imaginary spheres 4 meters and 7 meters away from the camera (a meter in front of, and 2 meters behind the subject). At $f/16$, it is possible to obtain sharp images from a distance of 2.5 meters to almost infinity (∞).

Infra-Red Correction Mark

When using Infra-red film in conjunction with a red filter for infra-red photography, the focus must be corrected for the shorter wavelengths of the rays involved. First focus in the usual manner. Note the distance indicated on the distance scale, then shift this distance reading to the infra-red correction mark (red figure "4").

EXPOSURE GUIDE



The most important thing in picture-taking is to obtain correct exposure of the film. The shutter speed and aperture settings for correct exposure depend on such factors as: sensitivity of film (ASA rating), season, weather, time of day, lighting conditions, and nature of the subject. The tabulation given below is a simplified exposure guide taking into account these factors.

SEASONAL EXPOSURE GUIDE (Clear sky, frontal lighting, no filter)

Subject-Matter \ Season	Spring	Summer	Autumn	Winter
Scenes with sky, distant mountains, seaside	f/16	f/22	f/16	f/11
Wide vistas, bright medium range scenes	f/11	f/16	f/11	f/8
Outdoors shots of people, street scenes	f/8	f/11	f/8	f/5.6
Close-ups of people, animals, still life	f/4	f/5.6	f/4	f/2.8

- KONIPAN SS film (ASA 100)
- Shutter speed, 1/250 second
- Time of Day: between 2 hours after sunrise to 2 hours before sunset
- Double exposure in mornings and evenings; give 4 to 8 times indicated exposure when picturing in shade.
- Double indicated exposure when using KONIPAN S (ASA 50), halve exposure when using KONIPAN SSS (ASA 200)

KONICA FS ACCESSORIES

(not furnished with camera)

KONIHOOD lens hood, slip-over type, 57mm diameter

KONIFILTERS screw-in type, 55mm diameter, 0.75 mm screw pitch.

SL 39(Ultraviolet) SY 48(Yellow #1)

SY 52(Yellow #2), SO 56(Red #1)

ANGLE FINDER

This attachment permits viewing and focusing from above. Convenient for low angle pictures, close range photography, copying work, and microphotography.

EXTENSION RING SET, COPYING ATTACHMENT LENS

For ultraclose-range and copying work.

M E M O

LENS No.

BODY No.

DEPTH OF FIELD TABLE

HEXANON F/2 f=50mm

circle of confusion = 3/100mm (in feet)

Feet F No.	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	m
2	2'00"	2'00"	2'11"	3'05"	3'11"	4'10"	6'09"	9'05"	13'08"	25'00"	143'02"
	2'01"	2'00"	3'01"	3'07"	4'01"	5'02"	7'04"	10'08"	16'07"	37'05"	∞
2.8	2'00"	2'05"	2'11"	3'05"	3'11"	4'10"	6'07"	9'02"	13'03"	23'06"	105'11"
	2'01"	2'07"	3'01"	3'07"	4'02"	5'01"	7'05"	11'00"	17'04"	41'07"	∞
4	2'05"	2'05"	2'11"	3'04"	3'10"	4'09"	6'05"	8'11"	12'07"	21'06"	74'03"
	2'01"	2'07"	3'01"	3'08"	4'02"	5'01"	7'08"	11'05"	18'06"	48'11"	∞
5.6	2'01"	2'05"	2'10"	3'04"	3'09"	4'07"	6'03"	8'06"	11'10"	19'04"	53'01"
	2'01"	2'07"	3'02"	3'08"	4'03"	5'05"	8'00"	12'02"	20'08"	48'11"	∞
8	1'11"	2'05"	2'10"	3'03"	3'08"	4'06"	6'00"	8'00"	10'30"	16'09"	37'03"
	2'01"	2'08"	3'02"	3'10"	4'05"	5'08"	8'06"	13'05"	24'08"	45'10"	∞
11	1'11"	2'04"	2'09"	3'02"	3'07"	4'04"	5'05"	7'05"	9'10"	14'05"	27'02"
	2'01"	2'08"	3'04"	3'11"	4'05"	5'00"	8'02"	15'05"	32'07"	∞	∞
16	1'10"	2'03"	2'08"	3'00"	3'05"	4'01"	5'03"	6'08"	8'00"	11'09"	18'10"
	2'02"	2'09"	3'05"	4'02"	4'11"	6'07"	10'09"	20'07"	41'06"	∞	∞

(F 2 50)

(in meters)

Meter F No.	0.6	0.7	0.8	1.0	1.2	1.5	2.0	3.0	5.0	10.0	∞
2	0.59	0.69	0.79	0.93	1.17	1.46	1.92	2.82	4.58	8.28	45.16
	0.01	0.71	0.81	1.02	1.23	1.54	2.08	3.20	5.60	12.79	∞
2.8	0.59	0.69	0.79	0.98	1.16	1.44	1.89	2.76	4.35	7.67	32.28
	0.03	0.71	0.82	1.03	1.24	1.56	2.12	3.29	5.88	14.40	∞
4	0.59	0.68	0.78	0.97	1.15	1.42	1.85	2.67	4.12	6.98	22.63
	0.61	0.72	0.82	1.04	1.26	1.59	2.17	3.43	6.36	17.70	∞
5.6	0.59	0.68	0.77	0.95	1.13	1.39	1.80	2.56	3.85	6.23	16.19
	0.62	0.72	0.83	1.05	1.28	1.63	2.25	3.64	7.14	25.82	∞
8	0.58	0.67	0.76	0.93	1.10	1.35	1.73	2.41	3.52	5.37	11.36
	0.62	0.73	0.85	1.08	1.32	1.70	2.38	4.00	8.77	18.80	∞
11	0.57	0.66	0.75	0.91	1.07	1.30	1.64	2.24	3.17	4.53	8.29
	0.63	0.75	0.86	1.11	1.37	1.79	2.75	4.59	12.29	∞	∞
16	0.56	0.64	0.72	0.88	1.02	1.22	1.52	2.02	2.72	3.69	5.73
	0.65	0.77	0.90	1.17	1.47	1.95	2.96	6.07	37.73	∞	∞

(F 2 50)

POINTERS AND CAUTIONS

- ★★The KONICA FM is equipped with a battery-excited CDS exposure meter. The exposure meter will not function unless the mercury battery supplied with the camera is properly inserted.
- ★★If the selector is turned to "OFF" when you are not taking pictures, the drain on the battery can be reduced. When your camera is out of use for any length of time, remove the mercury battery and keep in a cool dry place.
- ★★When, at the end of your film, the cocking lever stops half way through its stroke, never use force. Keep the rewind button depressed while pushing the cocking lever through its full travel. It will then spring back to original position.
- ★★When fitting or removing lens from the camera body, avoid touching the manual aperture control.
- ★★Avoid touching the mirror. If dust or lint must be removed use a soft-hair water-color brush.
- ★★The shutter mechanism is a delicate component which has been precisely adjusted. The vanes, moreover, are extremely thin. Do not touch or attempt to oil or adjust.
- ★★Never operate the cocking lever while the shutter is functioning at B or at low shutter speed.

HINWEISE UND BEMERKUNGEN

- ★★Die KONICA FM ist mit einem batterie-gepeisten CDS-Beleuchtungsmesser. Der Beleuchtungsmesser wird nicht arbeiten, wenn die Quecksilberbatterie nicht versehen richtig eingelegt ist.
- ★★Wenn man den Umschalter auf "OFF" schaltet, während man keine Aufnahme macht, wird die Lebensdauer der Batterie verlängert. Wenn die Kamera nicht benutzt wird, nehmen Sie die Batterie heraus und bewahren Sie sie auf einen kühlen, trocknen Platz auf.
- ★★Falls sich am Ende des Films der Aufzughebel nicht mehr weiterbewegen lässt, nie Gewalt anwenden! Den Rückspulknopf drücken und gleichzeitig den Aufzughebel bis zum Ende bewegen. Er wird dann in die Ausgangsstellung zurückspringen.
- ★★Beim Objektivwechsel vermeiden Sie, die handbetätigte Blendeneinstellung zu berühren.
- ★★Den Reflexspiegel nicht berühren. Zum Entfernen von Staub usw. benutzen Sie eine Bürste aus weichem Haar.
- ★★Der Verschlussmechanismus ist ein präzises Bauelement, das sorgfältig reguliert ist. Die Lamellen sind ausserst dünn. Berühren Sie daher diesen Mechanismus nicht oder versuchen Sie nicht, ihn zu schmieren oder zu regulieren.
- ★★Bewegen Sie nie den Aufzughebel, während sich der Verschluss bei B oder kleineren Geschwindigkeiten betreibt.

REPERES ET PRECAUTIONS A PRENDRE

- ★★ La KONICA FM est munie d'un posemètre Cds incorporé et alimenté à pile à mercure. Ce posemètre ne fonctionne pas avant que l'on n'insère la pile à mercure fournie avec l'appareil.
- ★★ Si le sélecteur est tourné à la position "OFF" (hors service) la tension de la pile baisse beaucoup moins qu'au moment du service. Toutefois, si vous n'utilisez pas l'appareil pendant longtemps, ayez soin d'ôter la pile et de la conserver dans un endroit frais et sec.
- ★★ Lorsque vous aurez pris la dernière photo avec une bobine de pellicule, et que le levier d'armement ne peut être tiré à fond, n'y forcez jamais. Tout en appuyant sur le bouton de rembobinage, vous tirez à fond le levier. De cette façon, le levier regagnera sa position initiale.
- ★★ Lorsque vous montez ou ôtez l'objectif du boîtier, ne touchez pas au contrôleur manuel d'ouverture.
- ★★ Évitez de toucher au miroir. Si vous voulez ôter des poussières sur le miroir, utilisez une brosse de peinture avec des poils molles.
- ★★ Le mécanisme d'obturateur est extrêmement délicat, monté avec une très haute précision. Le rideau est très fin. N'essayez jamais d'y toucher ou de l'huiler.

MANEJOS Y CAUCIONES

- ★★ Se emplea la pila de mercurio para el exposímetro de célula de sulfuro de cadmio (Cds) en la KONICA FM, y el exposímetro no funcionará si no se le inserta debidamente la pila de mercurio que va con la Cámara.
- ★★ Cuando no usa la Cámara, déjese en OFF el selector-interruptor para evitar el inútil desgaste de la pila. Cuando Ud. no usa la cámara por mucho tiempo, sáquese de la Cámara la pila de mercurio y guárdela en un sitio fresco y seco.
- ★★ Cuando la palanca de carga no mueva en la mitad de su movimiento en el último paso de avance, jamás debe darle fuerza. Oprimiendo el botón de enrollamiento inverso, dese vuelta a la palanca hasta que se pare, para hacer volver a la posición original.
- ★★ Al poner y quitar el lente, no debe tocar con el dedo la palanca de control manual de diafragma. No debe tocar al espejo. Cuando se encuentra polvo, límpieselo con las plumas suaves.
- ★★ Como el mecanismo de obturador está ajustado a alta precisión y como sus laminillas son muy delgadas, jamás debe tocarlo.
- ★★ Nunca debe dar enrollamiento a la película, mientras que el obturador está funcionando a B o a velocidad baja.

KONICA

KONISHIROKU PHOTO IND. CO., LTD.
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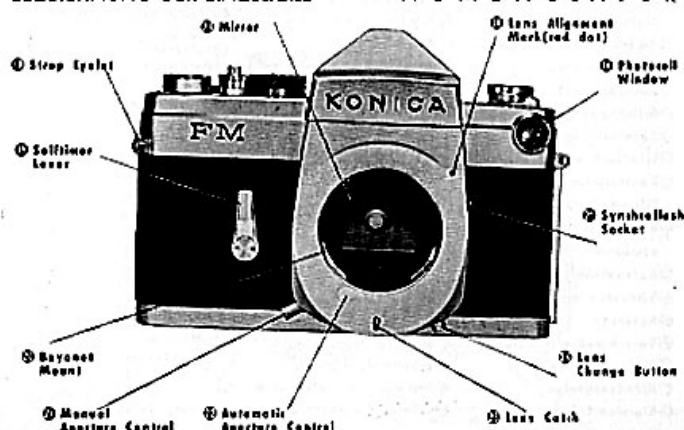


KONICA
FM

INSTRUCTION BOOKLET

NOMENCLATURE
BEZEICHNUNG DER EINZELTEILE

NOMENCLATURE
NOMENCLATURA



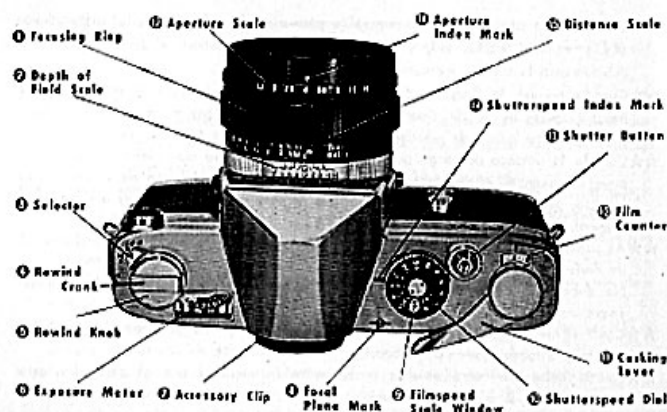
- ① Tragrömmenbo
- ② Selbstauslöser
- ③ Bajonettfassung
- ④ Handbetätigte
BlendenEinstellung
- ⑤ Automatische
BlendenEinstellung
- ⑥ Objektivegriff
- ⑦ Knopf zum
Objektivwechsel
- ⑧ Anschluss für
Blitzlichtgerät
- ⑨ Photozellenfenster
- ⑩ Markierung für
ObjektivEinstellung
(roter Punkt)
- ⑪ Spiegel

- ⑫ Oeillet
- ⑬ Levier d'auto-déclencheur
- ⑭ Monture bayonnette
- ⑮ Contrôleur manuel
d'objectif
- ⑯ Contrôleur automatique
d'ouverture
- ⑰ Agrofe d'objectif
- ⑱ Bouton de changement
d'objectif
- ⑲ Douille de synchronisation
de lampe-éclair
- ⑳ Fenêtre de la cellule
photoélectrique
- ㉑ Masque d'alignement
d'objectif (point rouge)
- ㉒ Miroir

- ㉓ Ojal para la correa
- ㉔ Palanca de disparador
automático
- ㉕ Una de montaje del
portaobjetivo
- ㉖ Palanca de operación
manual de diafragma
- ㉗ Palanca de diafragma
manual
- ㉘ Metal roscado de montaje
de lente
- ㉙ Botón para cambiar el
lente
- ㉚ Adaptador para flash
sincronizado
- ㉛ Ventanilla de luz para el
exposímetro
- ㉜ Indicador de acoplamiento
de lente (Punto rojo)
- ㉝ Espejo

NOMENCLATURE
BEZEICHNUNG DER EINZELTEILE

NOMENCLATURE
NOMENCLATURA



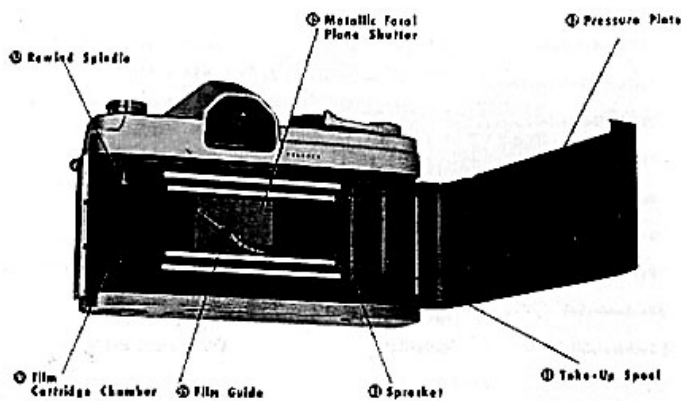
- 1 Entfernungseinstellring
- 2 Tiefenschärfenskala
- 3 Umschalter
- 4 Rückspulknob
- 5 Rückspulknopf
- 6 Belichtungsmesser
- 7 Zubehörflechte
- 8 Filmflächemarkierung
- 9 Kontrollfenster für Filmempfindlichkeit
- 10 Verschlusszeitstellung
- 11 Aufzughebel
- 12 Bildsuchwerk
- 13 Auslöser
- 14 Verschlusszeitanzeiger
- 15 Entfernungsskala
- 16 Blendenanzeige
- 17 Blendenskala

- 1 Anneau de mise au point
- 2 Echelle de profondeur
- 3 Sélecteur de champ
- 4 Levier de rembobinage
- 5 Bouton de rembobinage
- 6 Posamètre
- 7 Agrafe pour accessoire
- 8 Marque du plan focal
- 9 Fenêtre de la sensibilité de pellicule
- 10 Cadran de temps de pose
- 11 Levier d'armement
- 12 Compteur de pose
- 13 Bouton d'obturateur
- 14 Marque-index de temps de pose
- 15 Echelle de distance
- 16 Marque-index d'ouverture
- 17 Echelle d'ouverture

- 1 Anillo de enfoque
- 2 Escala de profundidad focal
- 3 Selector
- 4 Palanca de enroscamiento inversa
- 5 Botón de enroscamiento inverso
- 6 Exposímetro de acción combinada
- 7 Moqueta para accesorio
- 8 Marca de distancia focal
- 9 Ventanilla de rapidez de la película
- 10 Cuadrante de la velocidad de obturador
- 11 Palanca de enroscamiento
- 12 Contador de tomas
- 13 Botón disparador
- 14 Índice de la velocidad de obturador
- 15 Escala de distancia
- 16 Índice del diafragma
- 17 Escala de apertura

NOMENCLATURE
BEZEICHNUNG DER EINZELTEILE

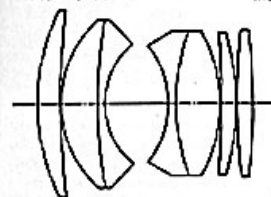
NOMENCLATURE
NOMENCLATURA



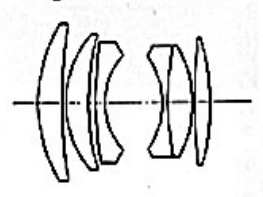
① Rückspulspindel
② Patronekammer
③ Filmführung
④ Zahnrad
⑤ Aufwickelspule
⑥ Filmandruckplatte
⑦ Schlitzverschluss
aus Metall

① Bobina de rembobinaje
② Cavité à cartouche
③ Enroulement de pellicule
④ Tambour
⑤ Bobine de pellicule
⑥ Plaque de pression
⑦ Obturateur focal
métallique

① Tije de enrollamiento
inverso
② Cámara del cartucho
de película
③ Guía de la película
④ Diente de rueda
⑤ Carrete de portapelícula
⑥ Laminilla de peso
⑦ Obturador de metal



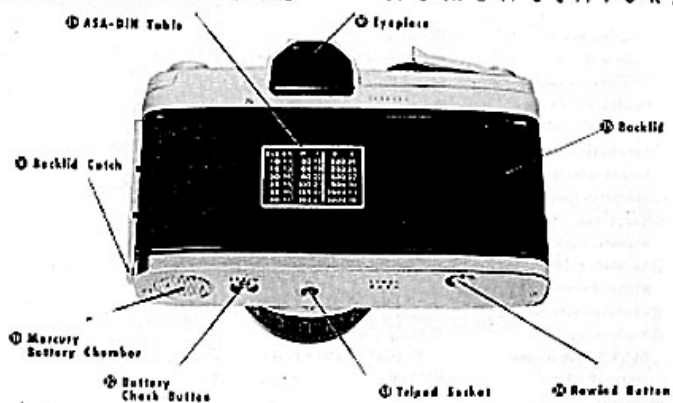
HEXANON 1/1.4, f=52mm



HEXANON 1/1.8, f=52mm

NOMENCLATURE
BEZEICHNUNG DER EINZELTEILE

NOMENCLATURE
NOMENCLATURA



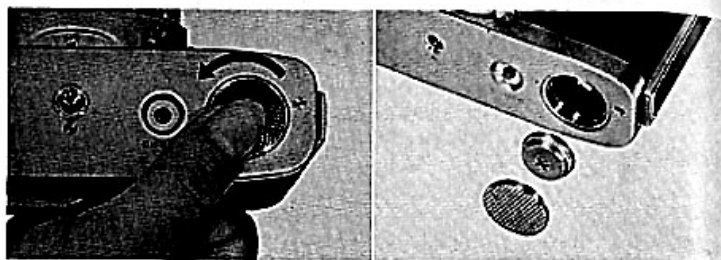
- ① ASA-DIN-Tabella
- ② Rückendeckelverschluss
- ③ Quecksilberbatteriekammer
- ④ Profknopf für
Batteriespannung
- ⑤ Gewinde für Stativ
- ⑥ Rückdeckel
- ⑦ Suchereimblick

- ② Tableau ASA-DIN
- ② Agrafe de couvercle de
dos
- ② Cavité pour la pile à
mercure
- ② Bouton de contrôle de
la pile
- ② Douille de trépied
- ② Bouton de ramblinage
- ② Couvercle de dos
- ② Oeillet

- ② Cuadro comparativo de
ASA y DIN
- ② Cierre de la tapa trasera
- ② Cámara de la pila de
mercurio
- ② Botón para verificar
la pila
- ② Tornillo para el trípode
- ② Botón de enroscamiento
inverso
- ② Tapa trasera
- ② Ventanilla del visor

INSERTING THE MERCURY BATTERY
EINLEGEN DER QUECKSILBERBATTERIE

COMMENT INSERER LA PILE A MERCURE
COMO INSERTAR LA PILA DE MERCURIO



For proper functioning of the built-in exposure meter, the mercury battery furnished with the camera must be placed in the mercury battery chamber.

1. To open the mercury battery chamber at the bottom side of the camera, apply the ball of your finger or thumb to the cover, and turn to the left (counterclockwise).
2. Place the mercury battery in the chamber so that the positive (+) end faces upward to meet the + mark on the inside of the cover. Replace and screw down the cover.

Zur richtigen Betätigung des eingebauten Belichtungsmessers ist eine Quecksilberbatterie in die Batteriekammer einzulegen.

1. Um die Batteriekammer am Boden der Kamera zu öffnen, setzen Sie Ihren Finger an den Deckel und drehen Sie nach links (im Anti-Uhrzeigersinn).
2. Legen Sie die Quecksilberbatterie in die Kammer so ein, dass sich der positive Pol (+) nach oben richtet und der +-Marke an der Innenseite des Deckels passt. Dann setzen Sie den Deckel wieder auf und schrauben Sie an.

Pour que le posemètre incorporé fonctionne correctement, il faut insérer la pile à mercure fournie avec l'appareil dans la cavité spécialement prévue à cette fin.

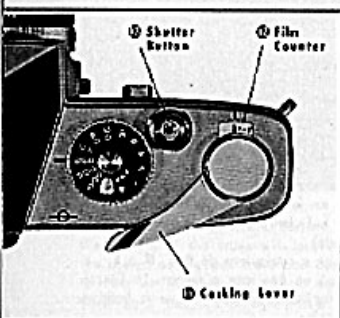
1. Pour ouvrir la cavité en question qui se trouve sur le fond de l'appareil, appuyez sur le couvercle avec votre doigt, et tournez le vers la gauche. (dans le sens des aiguilles d'une montre)
2. Placez la pile à mercure dans la cavité de façon à ce que le pôle positif (+) soit en haut faisant face à la marque + au revers du couvercle. Remettez le couvercle et fermez-le.

Colóquese en la cámara de pila de mercurio la pila de mercurio que va con la Cámara. Como el exposímetro de célula de sulfato de cadmio (CdS) funciona a la electricidad de pila de mercurio, el exposímetro no trabaja si se olvida ponerlo.

1. Dése vueltas a la izquierda con el yema de dedo a la tapa de la cámara de pila de mercurio que se encuentra en la parte inferior de la Cámara de pila de mercurio.
2. Póngase la pila de tal manera que la marca + se enfrente con la + de la tapa, y después ciérrasela atornillándola.

COCKING LEVER AND FILM COUNTER AUFZUGHEBEL UND BILDZAHLWERK

LEVIER D'ARMEMENT ET COMPTEUR DE POSE PALANCA DE ENROLLAMIENTO Y CONTADOR DE TOMAS



★★When the cocking lever is pushed to the end of its travel, the film is advanced one frame, and the film counter moves up one step. Then the shutter and mirror-trip mechanisms are brought into cock.

★★Once the cocking lever has been worked, and has returned to start position, it will remain locked until the shutter is released. After release of the shutter, it will remain inoperable until the cocking lever is again worked. Accidental double exposures are thus positively prevented.

★★Each time the cocking lever is operated, the film counter will advance one step until numeral 36 is indicated. At this position the film counter is disengaged, and will not move further. Upon opening of the backlid, the film counter automatically returns to start position (▲).

★★Wenn der Filmaufzughebel über seinen ganzen Bewegungsbereich betätigt wird, wird der Film um ein Bild weitertransportiert, und das Bildzahlwerk schaltet eine Zahl weiter. Gleichzeitig werden der Verschluss und der Spiegelchaftmechanismus gespannt.

★★Das Bildzahlwerk bewegt sich um eine Zahl weiter, wenn der Aufzughebel betätigt wird, bis die Zahl 36 gezeigt wird. Darüber hinaus lässt sich das Bildzahlwerk nicht bewegen. Wenn der Rückendeckel geöffnet wird, springt das Zahlwerk automatisch in die Ausgangsstellung zurück.

★★Lorsque le levier est tiré à fond, la pellicule avance d'une image, le compteur de pose avance d'un chiffre et l'obturateur et le mécanisme de miroir escamotable sont enclenchés.

★★Chaque fois que le levier d'armement est actionné, le compteur de pose avance d'un chiffre jusqu'à ce qu'il indique le chiffre 36. A cette position, le compteur ne fonctionnera plus. Il revient à sa position initiale lorsqu'on ouvre le couvercle de dos.

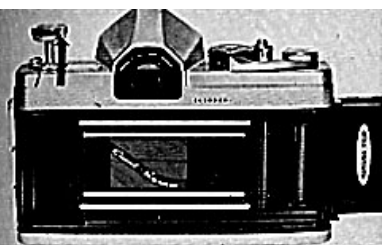
★★Dada una operación de la palanca de enrollamiento, la palanca no puede ser operada de nuevo a no ser que se disparo una vez el disparador. Y, cuando se dispara una vez, no puede volver a dispararse el obturador sin que se dé una nueva operación a la palanca de enrollamiento, y así este mecanismo evita automáticamente las exposiciones dobles.

★★El contador de tomas se avanza de un número cada vez que se opere la palanca de enrollamiento y al 36 se queda libre. Al abrir la tapa trasera de la Cámara el contador de tomas vuelve a la marca del comienzo a sea a la marca.

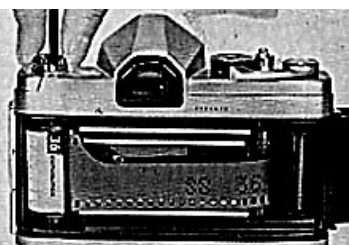
FILM LOADING FILM EINLEGEN

COMMENT CHARGER L'APPAREIL D'UNE BOÎTE DE PELLICULE COMO CARGAR DE LA PELICULA

- 1 Die Rückendeckelsperre ausziehen und den Rückendeckel öffnen. Den Rückspulknopf und die Spindel ausziehen.
- 2 Den Film in Sicherheitspatrone in die Patronenkammer einlegen, wobei das herausragende Ende der Patrone nach dem Boden der Kamera zeigt. Den Rückspulknopf herunterdrücken und ihn dabei nach rechts oder links drehen, damit er fest sitzt und die Patrone sicher greift.
- 3 Tirez sur l'agrafe du couvercle de dos pour débloquer et ouvrez le. Tirez à fond le levier de rembobinage et tournez.
- 4 Le côté à bouton de la cartouche doit être posé au fond de l'appareil, dans la cavité à la cartouche. Remettez le levier de rembobinage tout en le tournant légèrement à droite et à gauche pour qu'il soit bien enfoncé et qu'il s'engage bien dans la cartouche.
- 5 Tirándose el cierre de la tapa trasera de la cámara, ábrase y déjese extraído el de la película, dándose vueltas derecha e izquierda, y aprímala en la posición original.
- 6 Colóquese el eje saliente del cartucho de la película, en la parte inferior de la cámara de la película, dándose vueltas derecha e izquierda, y aprímala en la posición original.



- 1 Pull the backlid catch to release and open the backlid. Pull out fully the rewind knob and spindle.



- 2 With the knob end of the safety cartridge pointed toward the bottom of your camera, insert the safety cartridge in the film cartridge chamber, and push down the rewind knob while turning it slightly right and left so that it sinks down fully, catching the safety cartridge to hold it secure.

BATTERY POWER CHECK PRÜFEN DER BATTERIESPANNUNG



When the battery check button at the bottom of the camera is pressed, the meter needle will move and come to rest at the battery check mark (red guide line) if enough power is being provided.

CONTROLE DE LA TENSION VERIFICACION DE LA PILA

★★ Battery check can be done with the selector at any position -- OFF, H, or L.

★★ With normal use, the mercury battery should last for about a year. The mercury battery does not gradually decline in voltage as it is discharged. There will be a sharp drop when its service life is ended.

★★ When battery check shows the mercury battery to be weak (the meter needle does not move up to the battery check mark), replace with a new, fresh battery.

★★ The battery for the KONICA FM should be one of the following:
MALLORY RM-425R PX-13
EVEREADY E 425
GE No. 425 all rated at 1.3 volt

Drückt man den Knopf zum Prüfen der Batteriespannung am Boden der Kamera, wird sich der Zeiger im Belichtungsmesser bewegen und bei einer Kontrollmarka (roter Leitlinie) liegen, wenn die Batterie noch brauchbar ist.

★★ Das Prüfen der Batteriespannung kann man in jeder Lage des Umschalters machen -- OFF, H oder L.

★★ Bei normalem Gebrauch hat die Batterie eine Lebensdauer von etwa einem Jahr. Die Spannung der Batterie verringert sich aber nicht allmählich. Sondern es gibt einen scharfen Abfall, wenn die Nutzlebensdauer zu Ende kommt.

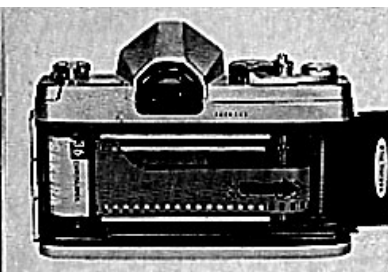
Lorsqu'on appuie sur le bouton de contrôle de pile, l'aiguille se déplacera et s'arrêtera à la marque de contrôle (ligne rouge) montrant qu'il y a suffisamment de puissance.

★★ Le contrôle peut en être effectué avec le sélecteur posé à n'importe quelle position OFF, H or L.

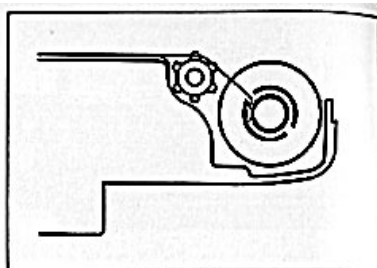
★★ Aux codences d'utilisation moyenne, la pile à mercure doit durer au moins environ un an. La tension de cette pile ne baisse pas graduellement mais elle tombe subitement lorsqu'elle est usée.

Oprimase el boton de verificación de la pila que está en la parte inferior de la Cámara y empezará oscilar la aguja indicadora. Si la pila tiene suficiente fuerza, la aguja se para dentro de las marcas de verificación (línea roja de guía).

Puédese hacer esta verificación de la pila con el selector a cualquiera de OFF, H o L.
★★ En los casos generales, la pila de mercurio durará un año más o menos. La fuerza eléctrica de esta clase de pila tiene la característica de que no va o baja gradualmente por los usos, sino que se agota de golpe.



③ Pull out the film across the film gate, and insert the end of the film in the slit of the take-up spool which can be brought into convenient position by applying fingertip pressure to turn.



★★ If the film end is inserted as shown in the cut, the end will slip out easily at completion of rewind. The manner shown is recommended for normal use.

③ Den Film ausziehen und über den Filmkanal führen. Ein Ende des Films in den Schlitz der Aufwickelspule stecken. Die Spule kann mit dem Finger gedrückt und gedreht werden, so dass sich der Schlitz in eine günstige Stellung bringen lässt.

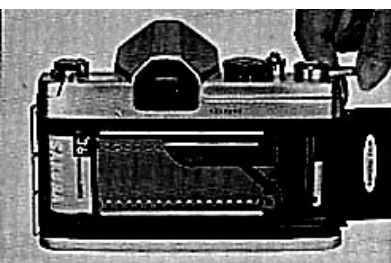
★★ Wenn das Filmente wie gezeigt gesteckt ist, wird es bei einem vollendeten Zurückspulen leicht ausgleiten. Die gezeigte Weise zum Filmeinlegen ist im allgemeinen zu empfehlen.

③ Sortez le bout de la pellicule et insérez le dans la fente de la bobine réceptrice qui peut être tournée au bout du doigt pour que la fente soit bien placée.

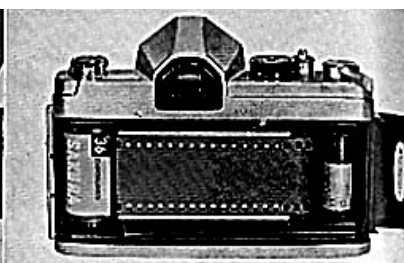
★★ Si le bout de l'avance de la pellicule est correctement insérée dans la fente, il ressortira facilement lorsqu'on rembobine la pellicule. La photo montre la manière la plus appropriée pour ce faire.

③ Insértase el extremo de la película en la rendija de la carrete recipiente, haciéndose ajustes para que ambas orillas de la película se corran junto a los rúedos de la carrete. Como la carrete se gira, búsquese la posición más conveniente para insertarlo película.

★★ Estando ya insertado el extremo de la película como se señala en el dibujo, la película se sale fácilmente de la carrete cuando se completa el enrollamiento inverso de la película expuesta, y se recomienda insertarla de esta manera.



4) While fitting the film perforations to the teeth of the sprocket, operate the cocking lever to wind the film onto the spool.



5) Repeat cocking lever operation until the perforations on both sides of the film are engaged by the sprocket. Close the backlid, then gently turn the rewind crank in the direction indicated by the arrow mark to take up all slack inside the safety cartridge.

4) Während man die Zahnräder in die Rundlöcher des Films fassen lässt, betätigt man den Filmzughebel.

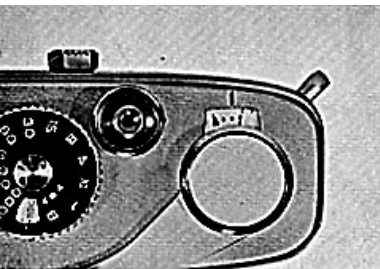
5) Die Betätigung des Aufzughebels wiederholen, bis die Zahnräder in die Rundlöcher des Films sicher fassen. Den Rückendeckel schließen, dann die Rückspulkrurbel in der Pfeilrichtung leicht drehen, um den Film straff ziehen zu können.

4) Tout en engageant les perforations de la pellicule aux dents du tambour, actionnez le levier d'armement pour que la pellicule passe sur la bobine.

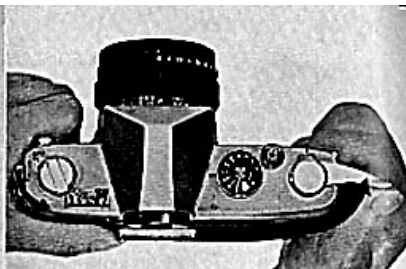
5) Répétez ceci jusqu'à ce que les perforations en haut et en bas de la pellicule s'engagent entièrement aux dents du tambour. Fermez le couvercle de dos et tournez doucement le levier de rebobinage dans le sens indiqué par la flèche pour bien tendre la pellicule à l'intérieur de la cartouche.

4) Ajustándose la perforación de la película (los orificios en la película) en los dientes del tambor de enrollamiento, dése vueltas a la palanca de enrollamiento y la película se quedará enrollada sobre la carrete recipiente.

5) Opérese la palanca de enrollamiento hasta que las perforaciones de ambos orillos de la película, se enganchen en los dientes, ciérrese la tapa trasera de la cámara, y dése vuelta suave a la palanca de enrollamiento inverso en la dirección de la flecha con el fin de dar a la película la debida tensión.



Make two blank shots by cocking and pressing the shutter button. This should bring the film counter to one step before the numeral 1 (this position is indicated by a dot).



★★Ascertaining proper take-up of film

When the film inside the camera is being advanced and taken up properly, the rewind knob should turn counter-clockwise (all slack of the film must have been taken up beforehand). If the rewind knob does not move, the film is not being transported. Recheck then and open the backlid for going over the film loading procedure again.

⑥Zwei Blindaufnahmen machen. Dies bringt das Bildzählwerk in die Stellung, die um eine Stufe vor Zahl 1 liegt.

(Diese Stellung ist mit einem Punkt gezeigt.)

★★Feststellen eines richtigen Filmtransportes

Wenn der Film richtig transportiert und aufgewickelt wird, dreht sich der Rückspulknopf im Gegenuhrzeigersinn. Wenn sich der Rückspulknopf nicht bewegt, wird der Film nicht transportiert.

⑥Déclenchez l'obturateur à plusieurs reprises pour faire des prises à vide. Ce faisant, on peut faire apparaître la marque qui se trouve juste avant le chiffre 1 sur la fenêtre du compteur de pose. (cette position est indiquée par un point).

★★Pour contrôler l'enroulement de la pellicule

Lorsque la pellicule à l'intérieur de l'appareil avance et s'enroule correctement, le bouton de rembobinage doit tourner contre le sens des aiguilles d'une montre. (la pellicule doit être bien tendue avant la première prise de vue).

⑥Empújese la palanca de enrollamiento y dése disparo vano al botón disparador dos veces; entonces el contador de tomas indica el punto antes del 1.

★★Para verificar el enrollamiento correcto de película

Cuando la película se enrolla correctamente, el botón de enrollamiento inverso se gira en la dirección izquierda. Si no se gira así, la película no está enrollándose correctamente, y deberá arreglar nuevamente la inserción de la película.

EXPOSURE METER OPERATION BELICHTUNGSMESSER

P O S E M E T R E MANEJO DEL EXPOSIMETRO SINCRONIZADO

- ① Umschalter
- ② Fotozellenfenster
- ③ OFF-Markierung
- ④ H-Markierung
(Heller Bereich)
- ⑤ L-Markierung
(Dunkler Bereich)
- ⑥ Blendenskala für hellen Bereich
- ⑦ Blendenskala für dunklen Bereich
- ⑧ Leitlinien
- ⑨ Zeiger
- ⑩ Batterieprüfmarkierung

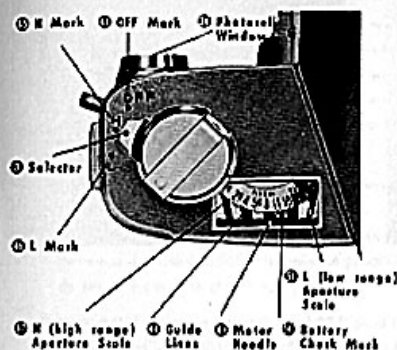
- ⑪ Sélecteur
- ⑫ Fenêtre de cellule photoélectrique
- ⑬ Marque OFF
- ⑭ Marque "H"
- ⑮ Marque "L"
- ⑯ Echelle d'ouverture H (gamme haute)
- ⑰ Echelle d'ouverture L (gamme basse)
- ⑱ Aiguille du posimètre
- ⑲ Marque de contrôle de pile
- ⑳ Echelle d'ouverture L (gamme basse)

- ① Sélecteur
- ② Ventana de fotocélula
- ③ Marca OFF
- ④ Marca H (Sensel de alto nivel de luz)
- ⑤ Marca L (Sensel de bajo nivel de luz)
- ⑥ H (Alto nivel de luz)
- ⑦ Escala de diafragma
- ⑧ Línea de guía
- ⑨ Aguja indicadora en la pile
- ⑩ Punte para verificar la pile
- ⑪ L (Bajo nivel de luz)
- ⑫ Escala de diafragma

FILMSPEED (ASA) SCALE ECHELLE DE SENSIBILITE DE PELICULES (ASA)
EIMEMPFINDICHKEITSSKALA (ASA) ESCALA DE SENSITIVIDAD (ASA) DE LA PELICULA

ASA	10	12	16	20	25	32	40	50	64	80	100	125	160	200	250	320	400	500	640	800	1000	1250	1600	2000	2500	3200
-----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------

The dot marks denote intermediate values as shown in parentheses.

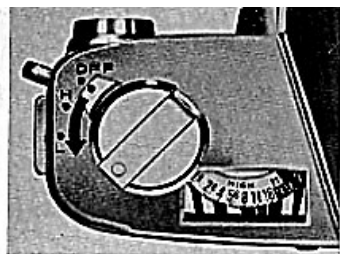


The exposure meter needle position must be traced through the guide lines to give the aperture setting (f/ value) on the aperture scales of the meter. In the illustration, the needle indicates f/8.

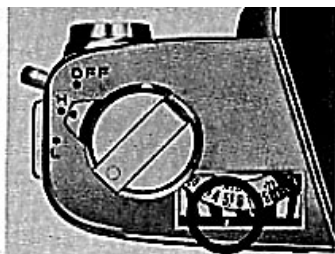
Die Anzeige im Belichtungsmesser wird durch die Leitlinien zu einem entsprechenden Blendenwert übertragen. Im Bild zeigt der Messer f/8 an.

La lecture de la valeur d'ouverture est faite en suivant les lignes-guides à partir de l'endroit indiqué par l'aiguille du posimètre. Sur la photo l'aiguille indique par exemple f/8.

La aguja indicadora no enfreniase directamente con el indice para el diafragma, sino que indica la linea de guia. Por ejemplo, el caso de la fotografia indica f/8.



3 Set the selector at "M" for outdoor photography, or at "L" for indoor work and poor lighting conditions.



4 Point the camera (photo cell window) toward your subject, and read the aperture value indicated by the meter needle through the guide lines. When the selector is at "M", use the black scale; when at "L", use the orange figures.

3 Den Umschalter bei Aufnahmen im Freien auf "M" und bei Aufnahmen im Zimmer oder unter ungünstigen Bedingungen auf "L" schalten.

4 Die Kamera (das Photozellenfenster) auf das Motiv richten und den angezeigten Blendenwert ablesen. Ist der Umschalter in der "M"-Stellung, benutzen Sie die schwarze Skala. In der "L"-Stellung kommt die orange Skala in Anwendung.

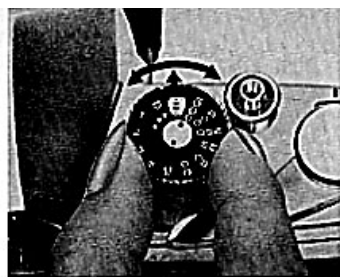
3 Ajustez le sélecteur à la marque "M" pour les photos en plein air et à la marque "L" pour les photos à l'intérieur ou prises à un endroit où il n'y a pas suffisamment d'éclairage.

4 Dirigez votre appareil vers l'objet (fenêtre de la cellule) et lisez la valeur de l'ouverture indiquée sur l'échelle par l'aiguille du posemètre. Lorsque sélecteur est la marque "M" utilisez l'échelle en noir et lorsqu'il est à la marque "L", utilisez les valeurs en orange.

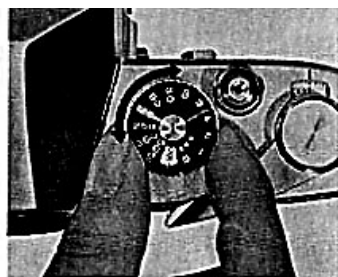
3 Elija la posición del selector-índice de exposímetro. Al aire libre durante el día, póngaselo a H, y a L en el lugar de escasa luz o en el interior.

4 Dese al objeto la Cámara o sea la ventanilla de luz del exposímetro y léase el índice que la aguja indicadora de exposímetro indique.

Cuando el selector está a H, léase el índice negro y el índice naranjado cuando el selector está a L.



1 First, set the filmspeed (ASA number) of your film on the camera by lifting and turning the outer rim of the shutter speed dial.



2 Next determine and set the shutter speed. Depending on the subject-matter, choose the most suitable shutter speed, then set the shutter speed dial accordingly. Operation is simplified if you use 1/250 second for bright outdoor work, and 1/30 for indoor photography.

1 Erstens die Filmempfindlichkeit (ASA-Wert) durch Ausziehen und Drehen des Aussenrandes der Verschlusszeiteinstellscheibe einstellen.

2 Zweitens die Verschlusszeit festlegen und einstellen. Je nach dem Motiv eine passende Verschlusszeit wählen und dementsprechend an der Einstellscheibe drehen. Es wäre einfach, wenn man 1/250 für Aufnahmen im Freien und 1/30 für Aufnahmen Zimmer anwendet.

1 Tout d'abord ajustez votre appareil à la sensibilité de la pellicule utilisée, en tournant le col extérieur du cadran de temps de pose.

2 Ensuite déterminez et fixez le temps de pose, selon l'objet à prendre. Et réglez le cadran de temps de pose à la valeur choisie. Le procédé sera simple si vous utilisez toujours 1/250 de seconde pour les photos en plein air et 1/30 de seconde pour les photos à l'intérieur.

1 Ajuste el índice de la sensibilidad ASA de la película. Levantando el rededor del disco de escala de la velocidad de obturador y girándolo, hágase aparecer el número correspondiente del índice ASA de la sensibilidad de su película.

2 Elija la velocidad del obturador. Según el objeto que fotografíar, elijase de antemano una velocidad del obturador en el disco de la escala de velocidad de obturador. Es más conveniente ajustarlo a 1/250 de segundo al aire libre y a 1/30 en el interior.



15 On the aperture scale of your camera lens, set the value indicated by the exposure meter. If an intermediate setting is indicated, adjust the aperture control of the lens to the same position.

15 Auf der Blendenskala des Objektivs den angezeigten Wert einstellen. Wenn ein Zwischenwert angezeigt ist, stellt man dementsprechend ein.

15 Réglez l'échelle d'ouverture sur l'objectif à la valeur indiquée par l'aiguille du posamètre. Si l'indication en est intermédiaire entre deux valeurs rondes, réglez l'échelle au mi-chemin entre deux valeurs.

15 Arréglese la escala de diafragma con el índice de diafragma que le indicaba el exposímetro. Cuando el exposímetro indica un punto intermedio, arréglese la escala de diafragma también al igual punto intermedio.

ASA - DIN TABLE ASA - DIN TABELLE

ASA	DIN	ASA	DIN
10	11	50	18
16	13	64	19
20	14	80	20
25	15	100	21
32	16	125	22
40	17	160	23
		200	24
		250	25
		320	26
		400	27
		500	28
		640	29
		800	30
		1000	31
		1250	32
		1600	33
		2000	34
		2500	35
		3200	36

TABEAU DES VALEURS ASA ET DIN CUADRO DE COMPARACION DE ASA Y DIN

The filmspeed scale of the KONICA FM indicates filmspeed in ASA numbers. When using film rated by DIN standards, the equivalent ASA rating can be obtained by referring to the ASA-DIN Table on the back of the camera.

Die Filmeempfindlichkeitsskala der KONICA FM ist nach ASA-Norm. Wenn ein Film nach DIN-Norm benutzt wird, kann ein entsprechender ASA-Wert durch die ASA-DIN Tabelle auf dem Rücken der Kamera umgerechnet werden.

L'échelle de sensibilité de pellicule du KONICA FM indique la sensibilité en valeurs ASA. Lorsque vous utilisez une bobine de pellicule dont la sensibilité est indiquée en valeurs DIN, les valeurs équivalentes en ASA pourront être obtenues en se référant au tableau ASA-DIN qui est au dos de l'appareil.

La escala de sensibilidad de película en el exposímetro de KONICA FM, está arreglada a ASA. Cuando usa la película cuya sensibilidad está señalada en el índice DIN, úsese convertirlo en el de ASA según el cuadro de comparación que se encuentra en la tapa trasera de la Cámara. Los valores ASA y DIN que están lado a lado, representan una sensibilidad igual de las películas.

CAMERA GRIP AND
SHUTTER BUTTON OPERATION
HALTEN DER KAMERA UND AUSLÖSER

COMMENT TENIR L'APPAREIL
ET FAIRE FONCTIONNER LE BOUTON
COMO APUNTAR LA CÁMARA
Y DISPARAR EL OBTURADOR



To make pictures of extreme clarity and good definition, proper care must be taken when shooting not to impart any motion to the camera. Jerking will result in blurred pictures.

Because a steady reliable grip is necessary, make it a rule to hold your camera with both hands, and steady further by contact with some part of your face. Press gently down on the shutter button with the ball of your index finger.

Um scharfe und ausgezeichnete Bilder zu erzeugen, muss man darauf achten, keine Bewegung der Kamera zu geben. Ruckartige Bewegungen verursachen verwackelte Bilder. Wir möchten Ihnen empfehlen, die Kamera bei Aufnahmen mit beiden Händen zu halten und an irgendeinen Teil Ihres Gesichtes zu pressen, um dadurch eine möglichst stabile Lage zu erreichen. Den Auslöser leicht drücken.

Pour faire des photos très nettes et bien définies, il faut faire attention à ne pas donner de secousse inutile à l'appareil lorsqu'on déclenche. À défaut de cette précaution les photos prises seront floues.

Comme il faut tenir bien l'appareil, tenez-le toujours avec deux mains, et appuyez le centre vos joues par exemple. Appuyez doucement sur le bouton d'obturateur avec le bout de votre index.

Para obtener las fotografías de fino enfoque, es preciso tener la Cámara firmemente y no debe darle ni el mínimo movimiento al apretar el botón disparador. Tengelala con dos manos y procérese la mayor estabilidad posible, manteniéndola pegada a la cara, por ejemplo, a la nariz o a la frente, y apriemela suavemente con el botón disparador con la yema del dedo para dar disparo el obturador.

FOCUSING AND SIGHTING SCHARFEINSTELLUNG UND BLICKEN

MISE AU POINT ET CADRAGE ENFOQUE Y COMO MIRAREN EL VISOR

To focus the **KONICA FM**, sight your subject through the eyepiece, watch the portion of the subject inside the center focusing spot, and turn the focusing ring. When out of focus, the image in the focusing spot appears checkered; but when the camera is properly focused on the subject, the image is sharp and clear, while the portions in the other area also appear in proper sharpness.

Scharfeinstellung erfolgt bei **KONICA FM** dadurch, dass man durch den Sucher auf das Motiv blickt, den Motivteil in einem Kreis in der Mitte des Suchers betrachtet und den Scharfeinstellring dreht. Wenn die Scharfeinstellung nicht richtig ist, ist das Bild im Kreis verschwommen. Bei einer richtigen Scharfeinstellung ist das Bild scharf und klar.

Pour régler la mise au point avec le **KONICA FM**, regardez l'objet à travers l'oculaire, et cadrez-le à l'intérieur du point de focalisation. Ensuite tournez l'anneau de mise au point. Lorsque la mise au point n'est pas correcte, l'image dans le point de focalisation est doublée; mais lorsque le réglage est correct, l'image est nette et claire, et la partie de l'objet qui n'est pas dans le point de focalisation devient également claire.

Para enfocar, mírese en el visor y dése vueltas al anillo del enfoque. Cuando está del mal enfocado, la imagen se verá deformada, y cuando está bien enfocado la imagen así como también las imágenes en el contorno más circunferencial se ven nítidas.



Subject is out of focus
Scharfeinstellung ist nicht richtig
Objet est mal visé

Cuando está mal enfocado



Subject is in focus
Scharfeinstellung ist richtig
Objet est bien visé

Cuando está bien enfocado



FILM REWIND REMBOBINAGE DE PELLICULE FILMZURÜCKSPULEN ENROLLAMIENTO INVERSO DE LA PELLICULA

When you have used up the film loaded in your camera, the exposed film must be rewound back into its safety cartridge.

Wenn der ganze Film belichtet ist, muss er in die Patrone zurückgespult werden.

Lorsque vous avez terminé une bobine de pellicule, celle-ci doit être rembobinée dans la cartouche de sécurité.

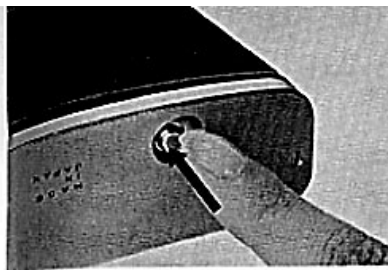
Cuando termina de tomar vistas en número total de exposiciones de la película puesta en su Cámara, enróllese nuevamente la película en el cartucho original.

[1] When at the end of your film the cocking lever stops before completion of its stroke, never apply force. Keep the rewind button depressed, and move the cocking lever as far as it will go. It will then return to its original position.

[2] To rewind film into its safety cartridge, first press the rewind button. It will remain depressed.

[3] Erect the rewind crank, and turn in the direction indicated by the arrow. This operation rewinds the film into its safety cartridge.

[4] Continue rewinding until the load on the rewind crank is suddenly eased. This can be easily sensed by feel. When this happens you know that the end of the film has become detached from the take-up spool, and that the exposed portion of the film is safely lock in the cartridge. Open the backlid, and remove the safety cartridge.



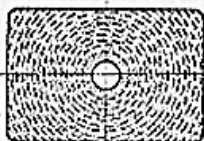
[1] Falls sich am Ende des Films der Aufzughebel nicht mehr weiterbewegen lässt, nie Gewalt anwenden! Den Rückspulknopf drücken und gleichzeitig den Aufzughebel bis zum Ende bewegen. Er wird dann in seine Ausgangsstellung zurückspringen.

[2] Zum Zurückspulen des Films drückt man zuerst den Rückspulknopf. Er wird in dieser Stellung verharren.

[3] Die Rückspulkurbel hochklappen und in Pfeilrichtung drehen. Dadurch wird der Film in die Patrone zurücktransportiert.

[4] Weiter zurückspulen, bis die Spannung an der Rückspulkurbel plötzlich nachlässt. Dies kann man leicht bemerken. Dann hat sich das Filmmende von der Aufwickelspule getrennt, und der Filmtail, der die aufgenommenen Bilder enthält, befindet sich sicher in der Patrone. Den Rückendeckel öffnen und die Patrone herausnehmen.

- ① Matteo Gebiet
- ② Mikro-Diagramma
- ③ Fresnelgebiet
- ④ Zone mate
- ⑤ Micro-diaprisma
- ⑥ Zone de Fresnel
- ⑦ Superficie mate
- ⑧ Micro "Diaprisma"
- ⑨ Superficie colectora de luz



- ⑩ Mat Area
- ⑪ Microdiaprisma
- ⑫ Fresnel Area

★★The Viewfinder

Because the viewfinder of the KONICA FM utilizes the main lens through a reflecting mirror and image-righting pentagonal prism, the subject is seen in correct orientation, with absolutely no parallax, precisely as it will be reproduced on the film.

★★Sucher

Bei der KONICA FM wird das Bild durch das Objektiv über den Spiegel und das Pentaprisma zum Sucher geführt. Das Motiv wird in ganz aufrechter Lage betrachtet, wobei die Parallaxe vollkommen ausgeschaltet wird. Und das gleiche Bild fällt auf den Film.

★★Visuer

Le visuer du KONICA FM utilise l'objectif principal à l'aide d'un miroir de reflexion, et d'un prisme pentagonal pour redressement d'image, l'objet n'est pas renversé dans le visuer, et il n'y a aucun parallaxe. Donc l'image que vous voyez dans le visuer, est celle même que vous aurez sur la photo.

★★Viser

La KONICA FM está provisto del visor de prisma pentagonal, por lo cual se puede ver la imagen en la postura natural y se evita el paralaje. La misma imagen que se ve en el visor se fotografiará sobre la película, en el fotograma de cerca o de lejos así como aun cuando se cambie el lente.

★★Quick return mirror and fully automatic aperture

The aperture remains fully open until the shutter mechanism is released, when the aperture automatically closes down to pre-selected size. The mirror moves up to permit light to pass through the open shutter and impinge on the film. The instant the shutter closes, the mirror returns to reflex position, while the aperture again opens up to the full.

★★Schnell zurückspringender Spiegel und vollautomatische Blende

Die Blende bleibt in voller Öffnung, bis der Verschluss ausgelöst wird, und springt dann automatisch auf einen vorgewählten Wert zurück. Beim Auslösen klappt der Spiegel weg, und das Licht fällt auf den Film ein. Sobald der Verschluss zugeht, kommt der Spiegel in Reflexstellung zurück, wobei die Blende wieder zur vollen Öffnung gelangt.

★★Miroir au retour instantané et réglage d'ouverture complètement automatique

L'ouverture reste complètement ouverte jusqu'à ce que le mécanisme d'obturateur ne soit déclenché, le déclenchement d'obturateur referme automatiquement l'ouverture jusqu'à la valeur préalablement choisie. Le miroir se déplace pour laisser passer la lumière à travers l'obturateur ouvert et celle-ci s'impose sur la pellicule. Au moment même où l'obturateur se ferme, le miroir retourne à la position reflex, tandis que l'ouverture s'ouvre de nouveau complètement.

★★Espejo de rápido retorno y diafragma automático de apertura total

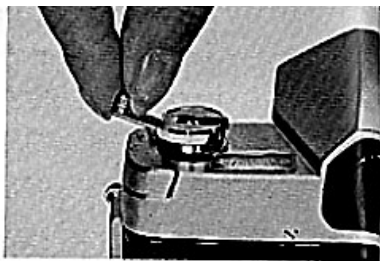
Por el espejo de rápido retorno y el mecanismo de diafragma automático de apertura total, el diafragma, a la vez que es oprimida el botón disparador, se cierra al valor f. previamente establecido, desde el estado de apertura total, se salta el espejo y se dispara el obturador, e instantáneamente el espejo vuelve a su posición original y el diafragma vuelve a abrirse a la apertura total.

[1] Lorsque la fin d'une bobine, le levier d'armement ne peut être tiré à fond, n'y appliquez pas la force. Appuyez sur le bouton de rebobinage, et tirez le levier d'armement à fond. Il regagnera ainsi sa position initiale.

[2] Pour rebobiner la pellicule dans la cartouche de sécurité, appuyez d'abord sur le bouton de rebobinage. Il restera dans cette position enfoncée.

[3] Tirez le levier de rebobinage et tournez dans le sens indiqué par la flèche. Ceci rebobinera la pellicule dans la cartouche de sécurité.

[4] Continuez à rebobiner jusqu'à ce que vous ne sentiez plus de résistance sur le levier. Ceci peut être senti très facilement. Ce relâchement de la tension sur le levier de rebobinage signifie que vous avez rebobiné toute la pellicule et que le bout en est détaché de la bobine réceptrice. Ouvrez donc maintenant le couvercle de dos et ôtez la cartouche de sécurité.



[1] Cuando se termina el rollo de película y cuando no se mueve la palanca a la mitad del camino al terminarse el último enrollamiento, no se debe dar fuerza. Primero oprímase el botón de enrollamiento inverso y dejándolo oprimido, dése vueltas a la palanca para enrollar hasta pararse, y déjese en la posición original.

[2] Oprímase el botón de enrollamiento inverso. El botón una vez aprimado, se quedará oprimido.

[3] Levántese la palanca de enrollamiento inverso y désele vueltas en la dirección de la flecha. Y así la película va enrollándose nuevamente en el cartucho de seguridad.

[4] Cuando se siente floja el enrollamiento, eso quiere decir que el enrollamiento se ha completado. Entonces, ábrase la tapa trasera y sáquese el cartucho con la película.

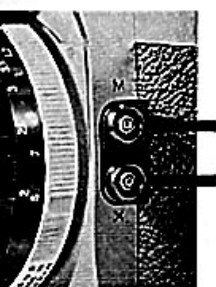
★★The rewind button, which remains depressed during rewind, will spring out automatically next time the cocking lever is operated.

★★Der Rückspulknopf, der während des Rücktransportes in gedrückter Stellung verhört, wird automatisch zurückspringen, wenn der Aufzughebel aufs neue betätigt wird.

★★Lorsque le bouton de rebobinage qui reste enfoncé au cours de rebobinage, ressort automatiquement lorsque le levier d'armement sera fonctionné.

★★El botón que se queda oprimido, vuelve a levantarse al dar nuevo enrollamiento (avante) de la película.

FLASH PHOTOGRAPHY PHOTOS AVEC LAMPE-ECLAIR
BLITZLICHTAUFNAHMEN FOTOGRAFIA A FLASH



When using class M flashbulbs, plug in the connector cord to the "M" setting synchroflash socket.
When using an electronic flash unit, connect to the "X" socket.

Beim Gebrauch von Blitzlampen der M-Klasse das Anschlusskabel an M-Kontakt anschliessen.
Beim Gebrauch eines Elektronenblitzgerätes an X-Kontakt anschliessen.

Quand on utilise les ampoules de classe M, mettez le fil connecteur dans la douille de synchronisation au positionnement "M".
Lorsque l'on utilise la lampe-éclair électronique, connectez à la douille "X".

Cuando se usa la bombilla de la clase M, conectase el cable de conexión a M, y a X el aparato estroboscópico.



★★ Deciding on Aperture Setting

Since in synchroflash photography, the main source of lighting is the flashbulb or electronic flash unit, the brightness of the subject is determined by the intensity of the flash and the distance from the flash to the subject. Shutter speed does not play a part in exposure control, so the aperture setting depends on the intensity of the flash (indicated by "guide number") and the distance between the flash and the subject. The aperture value is computed by dividing the guide number (given on the flashbulb carton or accompanying instructions) by the distance from the flash to the subject, thus:

$$\text{aperture value} = \frac{\text{"guide number"}}{\text{distance}}$$

With some flashbulbs, a table giving the correct aperture setting for various distances is provided.

SELFTIMER OPERATION AUTODECLENCHER SELBSTAUSLÖSER MANEJO DEL DISPARADOR AUTOMATICO

When you wish to use the selftimer for delayed shutter action, turn the selftimer lever as far as it will go, either before or after cocking the camera. When the shutter button is pushed, the selftimer will start functioning, and shutter release will not occur until about ten seconds later.



- ★★ All shutter speed settings except B.
- ★★ Shorter delayed action by regulating the extent to which the lever is pushed.
- ★★ Self-photography, souvenir photos in which you wish to be included, and in special cases, such as microphotography, when shutter button jerk must be minimized.
- ★★ Shutter speed settings can be freely changed after the selftimer has been set.

Wenn Sie den Selbstauslöser verwenden wollen, drehen Sie den Selbstauslöserhebel bis zum Anschlag. Dies kann entweder nach oder vor dem Filmvortzug erfolgen. Drücken Sie den Auslöser, beginnt der Selbstauslöser seine Betätigung, und die Auslösung erfolgt nach 10 Sekunden Vorlaufzeit.

- ★★ Kurze Vorlaufzeit durch Regeln der Hebelbetätigung.
- ★★ Die Verschlusszeit kann auch nach der Spannung des Selbstauslösers eingestellt werden.

Lorsque vous voulez utiliser un autodeclencheur pour l'actionnement retardé d'obturateur, tournez le levier d'auto-declencheur jusqu'à ce qu'il s'arrête, avant ou après l'actionnement du levier d'armement. Lorsque l'obturateur est appuyé, l'auto-declencheur commence à fonctionner, et l'obturateur est déclenché environ 10 secondes après.

- ★★ Un retardement plus court, en n'appuyant pas à fond sur le levier.
- ★★ Les positionnements du temps de pose peuvent être variés librement après enclenchement de l'auto-declencheur.

Después de dar empuje de la palanca de enrollamiento, córguese el disparador automático dándole vueltas al completo (a vice versa), oprímase el botón disparador y el disparador automático empieza a funcionar y a unos 10 segundos después se dispara el obturador.

- ★★ Si quiere acortar el tiempo de funcionamiento, córgueselo menos.
- ★★ El disparador automático es muy útil no solamente en el tomar vistas en las que Ud. mismo desea estar, sino también para las fotografías muy de cerca o en las fotografías microscópicas en las que se requiere mantener la cámara en la mayor y extrema estabilidad posible.

★★ Festlegen der Blende

Bei Blitzlichtaufnahmen ist die Hauptlichtquelle Blitzlampe oder Elektronenblitzgerät. Die Helligkeit des Motivs wird dann durch die Lichtintensität des Blitzgerätes und die Entfernung zwischen dem Blitzgerät und dem Motiv bedingt. Da die Verschlussgeschwindigkeit zur Belichtungsregelung keine Rolle spielt, hängt die Blendeneinstellung von der Lichtintensität des Blitzgerätes (mit "Leitzahl" angegeben) und der Entfernung ab. Die Blende wird durch Dividieren der Leitzahl (auf der Blitzlampenpackung oder in der Gebrauchsanweisung angegeben) durch die Entfernung errechnet:

$$\text{Blende} = \frac{\text{Leitzahl}}{\text{Entfernung}}$$

Bei manchen Blitzlampen gibt es eine Tabelle, auf der richtige Blenden für verschiedene Entfernungen direkt abzulesen sind.

★★ Pour flash l'ouverture

Etant donné que la Photo avec lampe-éclair est réalisée avec l'éclairage donné par une ampoule de lampe-éclair ou un équipement électronique, l'éclairage de l'objet est déterminé par l'intensité de lumière fournie par ces matériels. Le temps de pose ne joue pas de rôle pour contrôler l'exposition dans ce cas. Il dépend de l'intensité de lumière fournie par la lampe-éclair (indiqué par le chiffre-guide) et la distance entre la lampe et l'objet. La valeur d'ouverture peut être calculée en divisant le chiffre guide (donné sur la boîte d'ampoules ou sur une note accompagnant les ampoules) par la distance entre la lampe et l'objet, ainsi:

$$\text{Valeur d'ouverture} = \frac{\text{chiffre guide}}{\text{distance}}$$

Avec un certain nombre d'ampoules, un tableau donnant l'ouverture appropriée pour différentes distances, est fourni.

★★ Determinación del diafragma

Como la fotografía con flash es tomar vistas al relampago de la bombilla de flash, se determinará la apertura del diafragma que se determinará de acuerdo con el volumen y fuerza de la luz que echa la bombilla y la distancia hasta el objeto. El valor de diafragma se determina dividiendo el número-guía de la bombilla de flash en uso por el número de la distancia. El número índice de la bombilla está escrito en la cajetilla de la misma.

$$\text{Valor del diafragma} = \frac{\text{Número-guía}}{\text{Distancia}}$$

En algunas clases de bombilla de flash, no se indica el número-guía, sino que se indica directamente el valor de diafragma correspondiente a la respectivas distancias.

- mark.....proper synchronization
- × mark.....non-synchronization
-synchronisiert
- ×.....nicht synchronisiert
-synchronisation correcte
- ×.....synchronisation incorrecte
-Se sincronizan
- ×.....No se sincronizan

KONICA FM FLASH SYNCHRONIZATION CHART
KONICA FM BLITZLICHTSYNCHRONISIERUNGSTABELLE
TABLEAU DE SYNCHRONISATION
DE LAMPE-ÉCLAIR AVEC LE KONICA FM
SYNCRONIZACION DE FLASH EN KONICA FM

Distancia		1	2	4	8	15	30	60	125	250	500	1000
M	Class M	○	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○	○
	Class F	○	○	○	○	○	×	×	×	×	×	×
X	STROBE	○	○	○	○	○	○	○	×	×	×	×
	Class F	○	○	○	○	○	×	×	×	×	×	×

LENS CHANGING OBJEKTIVWECHSEL

★★Because the KONICA FM utilizes the one-sixth-turn KONICA bayonet flange lens mount, removal and fitting of lenses are simple, easy and speedy. Lenses can be changed at any time, whether or not the camera is cocked.

To detach the lens, hold the base of the lens barrel, and while pressing the lens change button turn counterclockwise to the left until motion is stopped (with the lens alignment mark opposite the red dot on the camera body). The lens can then be lifted out.

CHANGEMENT D'OBJECTIF CAMBIO DE LENTES



★★Die KONICA FM verwendet die KONICA-Bajonettfassung, die durch Drehen um 50° abnehmbar ist. Daher ist der Objektivwechsel ausserst einfach und schnell. Objektive sind jederzeit auswechselbar, gleich, ob der Filmaufzug gemacht ist oder nicht.

Um das Objektiv abzunehmen, hält man den Bodenteil des Objektivs. Während man den Knopf zum Objektivabnehmen gedrückt hält, dreht man das Objektiv im Gegenuhzeigersinn bis zum Anschlag. (Die Objektivmarkierung dem roten Punkt am Kameragehäuse gegenüberstellen.) Jetzt kann das Objektiv abgenommen werden.

★★Avec le KONICA FM il est très simple d'ôter ou de monter l'objectif, puisque la monture d'objectif est du type baïonnette d'un sixième du tour. L'objectif peut être changé n'importe quand même si l'appareil est armé.

Pour ôter l'objectif, tenez la base du canon d'objectif et tout en poussant le bouton de changement d'objectif tournez l'objectif vers la gauche dans le sens opposé des aiguilles d'une montre jusqu'à ce qu'il ne s'arrête (avec la marque d'alignement s'opposant à la marque rouge sur le boîtier). A ce moment, l'objectif peut être soulevé.

★★La KONICA FM está provista la montura de bayoneta de lente, por medio de la cual el cambio de lente se hace muy sencilla y rápidamente, dándole solo 1/6 de vuelta. Se puede cambiar de lente antes o después de cargar el disparador.

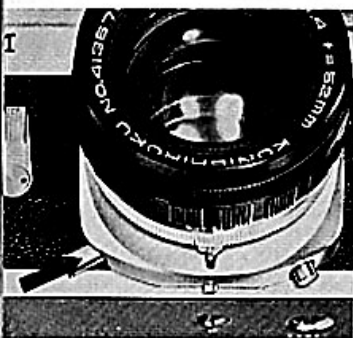
Para quitar el lente, tómese la base del portaobjetivo, dése vuelta a la izquierda hasta parar (o sea hasta que se queden enfrentados los dos puntos rojos que respectivamente están marcados en el portaobjetivo y en el cuerpo de la cámara) y se suelta el porta-objetoivo.

MANUAL APERTURE CONTROL
MANUELLE BLINDENKONTROLLE

CONTROLEUR MANUEL D'OUVERTURE
MANUAL DEL DIAFRAGMA
Y SU VERIFICACION

With your **KONICA FM** in normal focusing and sighting set-up, the aperture is fully open for maximum brightness, while the depth of field is at minimum for focusing ease. By using the manual aperture control, it is possible to make a visual check of the actual focusing tolerance available at the aperture setting you have selected. Upon operation of the manual aperture control, the aperture closes down to the pre-set value, and the image in the viewfinder becomes an exact reproduction of what will be registered on the film. The sharpness of register of objects other than the main subject can be visually ascertained.

★★ It is possible to determine the best aperture setting by turning the aperture control while keeping the manual aperture control in action.



Bei **KONICA FM** ist die Blende zum Scharfeinstellen und Anvisieren voll geöffnet, um maximale Helligkeit zu erreichen. Dabei ist die Tiefenschärfe minimal, um die Scharfeinstellung zu erleichtern. Durch manuelle Blendenkontrolle kann man aber die zur Verfügung stehende Tiefenschärfe bei der gewählten Blende prüfen. Durch manuelle Blendenkontrolle klappt die Blende auf den vorgewählten Wert zu, und im Sucher erscheint das wirklich aufzunehmende Bild. Die Bildschärfe der Nebensubjekte ist auch aktuell festzustellen.

Avec le **KONICA FM**, pour la mise au point et le cadrage normaux, l'ouverture complète pour mieux éclairer le viseur, et la profondeur de champ est retenue au minimum pour faciliter la mise au point. En utilisant le contrôleur manuel d'ouverture, il est possible de contrôler à l'œil la tolérance de focalisation appropriée pour la valeur d'ouverture que vous aurez choisie. Lorsqu'on manipule le contrôleur d'ouverture, l'ouverture referme jusqu'à la valeur préétablie, et l'image dans le viseur devient exactement la reproduction de ce que vous allez avoir sur la photo. L'acuité de la reproduction des objets outre que ceux qui sont visés peut donc être contrôlée.

Aunque el índice de diafragma esté a cualquier índice, el diafragma mismo está totalmente abierto. Sin embargo, si el botón de operación manual de diafragma está a cierto punto, el diafragma se cierra hasta el índice previamente establecido, y puede observarse en el visor, la imagen principal y desenfoque del fondo así como la profundidad focal de la vista.

To attach lens to the camera, grasp the base of the lens barrel, and note the position of the lens alignment mark (red dot). With the red dots on the lens barrel and the camera body matching, lower the lens barrel gently into the lens mount, and when firmly inserted, turn clockwise to the right until it stops and is held secure by the lens catch.

★ ★ When the lens is attached to the body, the automatic aperture links of the camera body and the lens are automatically coupled.

★ ★ While attaching the lens to the body, the manual aperture control should not be touched. See that your fingers are not on this control.

HEXANON f/2.8 f = 35 mm	full automatic aperture.	presetting aperture.
HEXANON f/2.8 f = 100 mm	full automatic aperture.	presetting aperture.
HEXANON f/3.5 f = 135 mm	full automatic aperture.	presetting aperture.
HEXANON f/3.5 f = 200 mm	presetting aperture.	
HEXANON f/4.5 f = 400 mm	manually operated aperture.	
HEXANON f/8 f = 800 mm	manually operated aperture.	



Um das Objektiv aufzusetzen, den Boden des Objektivs greifen und die Markierung des Objektivs (roten Punkt) beobachten. Wenn der rote Punkt der Markierung an der Kamera gegenübersteht, stecken Sie das Objektiv leicht in die Fassung. Dann das Objektiv im Uhrzeigersinn drehen, bis es zu einem Anschlag kommt und durch eine Klemme gefasst wird.

★ ★ Wenn das Objektiv aufgesetzt wird, werden eine automatische Blendenregelungsrichtung am Kameragehäuse und das Objektiv automatisch zusammen gekuppelt.

★ ★ Beim Aufsetzen des Objektivs soll man die manuelle Blendenkontrolle nicht berühren.

Pour attacher l'objectif, tenez la base du canon d'objectif, et faites concorder les marques rouges sur le canon et sur le boîtier. Abaissez l'objectif vers le boîtier et insérez-le et tournez vers la droite dans le sens des aiguilles d'une montre jusqu'à ce qu'il s'arrête.

★ ★ Lorsque l'objectif est monté sur le boîtier, la liaison entre l'objectif et le boîtier pour contrôle automatique d'ouverture s'établit.

★ ★ Lorsqu'on monte l'objectif sur le boîtier, il ne faut pas toucher au contrôleur automatique d'ouverture. Contrôlez bien que vos doigts ne sont pas sur ce contrôleur.

Para poner el lente, tégase enfrente los dos puntos rojos, métaselo correctamente, dése vuelta a la derecha tomando la base del portaoobjetivo y la una del portaoobjetivo se engancho, y el lente se queda acoplado firmemente.

★ ★ Al acoplarse al lente, se conecta automáticamente el mecanismo de diafragma automático tanto en el portaoobjetivo como en el cuerpo de la Cámara.

★ ★ Al acoplar el lente no se debe oprimir con el dedo el botón manual de diafragma.

EINZELHEITEN DER KONICA FM

Bildformat	24x36mm (Normales Kleinbildkameraformat)
Film	35mm Kleinbildkamerafilm in Sicherheitspatrone
Normalobjektiv	HEXANON 1:1,4/52mm, 7 Linsen in 5 Gruppen oder HEXANON 1:1,8/52mm, 6 Linsen in 5 Gruppen Verbesserte Bernsteinvergütung; Minimolenformung 0,6m (2 Fuss)
Objektivfassung	KONICA-Bajonettfassung (40mm Durchmesser, 40,5mm Flanschdurchmesser)
Blendenmechanismus	vollständige Blende zum Scharfeinstellen und Blenden; automatische Schließung auf vorgewählte Blende bei Auslösung; handbetätigte Einstellung zum Prüfen der Tiefenschärfe
Sucher	Pentaprisma; aufrechtes Bild; Sucher in Augenhöhe; 0,84x Vergrößerung
Scharfeinstellung	präzise Einstellung durch Mikro-Prisma; Bildschärfe in der Mitte des Sucherfeldes kontrolliert; Einfachste Bedienung.
Spiegel	springt schnell zurück; Senkrechter Gang des vorderen Spiegelrandes.
Verschluss	COPAL SQUARE Schlitzverschluss aus Metall; durch einrastende Einstellscheibe reguliert; gleichmäßig abgestuft in folgender Reihe: B, 1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000

Belichtungsmesser	eingebaut; mit Quecksilberbatterie gespeister CdS-Belichtungsmesser; gekuppelt mit Belichtungseinstellung in Kombination mit Blendenwahl; zwei Einstellbereiche; Messwinkel je 30° in horizontaler und vertikaler Richtung; Knopf zum Prüfen der Batteriespannung.
Messbereich des Belichtungsmessers	EV 2 bis EV 18 bei ASA 100 Filmsensibilität, L-(dunkler) Bereich: EV 2 bis EV 10, H- (heller) Bereich: EV 10 bis EV 18
Selbstauslöser	im Gehäuse eingebaut; Schließwinkel 70°; maximale Vorlaufzeit 10 Sekunden.
Blitzlichtanschluss	M und X-Kontakt; vollsynchronisierte Blitzlichtaufnahmen bei allen Verschlusszeiten mit Blitzlampen der M-Klasse; bis 1/125 Sek. mit Elektronenblitzlicht.
Aufzugmechanismus	eingängig; mit Daumen zu bedienen; Aktionswinkel 180°; transportiert gleichzeitig Film; Sperre gegen Doppelbelichtung
Anderes	Bildzählwerk springt selbsttätig zurück; Kurbel zum Zurückspulen; selbsttätig zurückspringender Rückspulknopf
Gegenlichtblende	aufsetzbare Spezialgegenlichtblende mit 57mm Durchmesser
Filter	einschraubbar, 55mm Durchmesser, 0,75mm Steigung
Abmessungen, Gewicht	145 (Breite) x 102,5 (Höhe) x 85,5 (Tiefe) mm; 1097 g mit 1:1,4 Normalobjektiv 145 (Breite) x 102,5 (Höhe) x 80 (Tiefe) mm; 973 g mit 1:1,8 Normalobjektiv.

PARTICULARS OF THE KONICA FM

Negative size	24 x 36 mm (standard 35 mm miniature camera size)
Film	35 mm miniature camera film in safety cartridge.
Standard Lens	HEXANON f/1.8, f = 52 mm, 7 elements in 5 groups or HEXANON f/1.8, f = 52 mm, 6 elements in 5 groups Improved amber-coated. Minimum distance, 0.6 meter (2 feet)
Lens Mount	Bayonet flange KONICA mount (40 mm diameter, 40.5 mm diameter flanges)
Aperture Mechanism	Full aperture for focusing and sighting, automatic close-down to pre-selected setting while shutter is open. Manual control for depth of field check.
Viewfinder	Pentaprism, correct-orientation, eye-level viewfinder. 0.83 x magnification.
Focusing	Precise focusing by micro-diaphragm focusing spot at center of viewfinder image. Extreme ease of adjustment.
Mirror	Instantaneous return type, with perpendicular travel of the forward edge.
Shutter	COPAL SQUARE all-metal focal plane shutter, controlled by non-revolving shutter speed dial, equidistantly scaled in 2 x steps: 8 1/2 1/4 1/8 1/15 1/30 1/60 1/125 1/250 1/500 1/1000.

Exposure Meter	Completely self-contained, mercury-battery-excited cadmium sulphide (CdS) exposure meter coupled to shutter speed control for cross-reference to obtain correct aperture setting. Dual (high-low) range. Subject coverage angle, 30° vertically and horizontally. Battery check button provided.
Exposure Meter Range	EV 2 to EV 18 at ASA 100 film speed. L (low brightness) range: EV 2 to EV 10. H (high brightness) range: EV 10 to EV 18.
Selftimer	Contained in camera body. Setting angle, 70°. Full delay time, 10 seconds.
Synchroflash	M and X settings. Full flash synchronization at all shutter speeds with class M flashbulbs. Up to 1/125 second with electronic flash.
Cocking Mechanism	Single-stroke, thumb-operated cocking lever at top of camera. 180° swing, automatic filmwind, double exposure prevention.
Other features	Automatic self-estimating film counter, crank film rewind, self-resetting rewind button.
Lens Hood	Special slip-on lens hood, 57 mm diameter.
Filters	Screw-in type, 55 mm diameter, 0.75 mm screw pitch.
Dimensions	145 (w) x 102.5 (h) x 85.5 (d) mm 1,697 grams with f/1.8 standard lens.
Weight	145 (w) x 102.5 (h) x 80 (d) mm 973 grams with f/1.8 standard lens.

CARACTERISTIQUES DU KONICA FM

Format	24x36mm (Petit format standard pour les appareils de 35mm)
Pellicule	Pellicule pour Appareil petit format 35mm en cartouche de sécurité.
Objectif standard	HEXAGON f/1.4, f=35mm, 7 éléments en 5 groupes HEXAGON f/1.8, f=35mm, 4 éléments en 5 groupes Revêtement autoreflechissant en ombre, distance minimum de 0.60 mètre (2 pieds)
Monture d'objectif	Montureboîtonnette KONICA (Monture de 40mm de diamètre, et de 40.5mm de diamètre)
Mécanisme d'ouverture de diaphragme	Ouverture complète pour la mise au point et le cadrage, fermeture automatique jusqu'à la valeur préalablement réglée au moment du déclenchement d'obturateur. Contrôle manuel de la profondeur de champ.
Viseur	Pentaprisme, image non-renversée, système à œillet, magnification de 0.83x
Mise au point	Mise au point précise avec point de focalisation micro-diplôme au centre du viseur. Extrême facilité de réglage.
Mise	Type retour instantané, avec rail perpendiculaire vers l'avant.
Obturateur	Obturateur focal entièrement métallique COPAL SQUARE, contrôlé par un cadran de temps de pose avec blocage équilibrant 1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000
Posemètre	Complètement intégré posemètre en cadmium sulphure (CdS) alimenté de pile à mercure couplé au contrôle de temps de pose

	pour obtenir un positionnement correct d'ouverture. Gamme double (haut-bas). Angle de couverture d'objet: 30° à l'horizontal et vertical respectivement un bouton de contrôle de pile.
Gamme de posemètre	eV 2 à eV 18 à la sensibilité d'ASA 100. Gamme L (faible éclairage): eV 2 à eV 10. Gamme M (éclairage puissant): eV 10 à eV 18.
Autodéclencheur	Incorporé. Angle de positionnement: 90°. Retardement de 10 secondes.
Lampe-éclair synchronisée	Positionnements M et X. Synchronisation complète avec tout temps de pose, lampe de classe M, jusqu'à 1/125 de sec. avec lampe-éclair électronique
Mécanisme d'armement	Cours simple, levier d'armement fonctionné au doigt, en haut de l'appareil. Angle de course 180°, bobinage automatique de pellicule, système de sécurité pour éviter la double prise.
Autres caractéristiques	Compteur de poses automatiquement réenclenché, Rembobinage de pellicule à manivelle, bouton de rebobinage à réenclenchement automatique.
Parasoleil	Parasoleil spécial à glissement, 57mm de diamètre.
Filtres	Type à vis, 35mm de diamètre, filaté à 75mm.
Dimensions poids	145 (large) x 102.5 (haut) x 85.5 (profond) mm 1.092 g avec objectif standard f/1.8 145 (large) x 102.5 (haut) x 80 (profond) mm 973 g avec objectif standard f/1.8

ESPECIFICACIONES DE KONICA FM

Medida de la negativa	24x36mm (tamaño normal de la cámara de la película de 35mm.)
Película	Película de 35mm. en el cartucho de seguridad
Lentes standard	HEXANON f/1.4, f=52mm, 7 elementos en 5 grupos, o HEXANON f/1.8, f=52mm, 6 elementos en 5 grupos Revestimiento antirreflejado mejorado Distancia mínima: 0.6 metro (2 pies)
Montaje delante	Montaje KONICA de montura de bayonet (40mm. de diámetro, rebordes de 40.5mm.)
Mecanismo de diafragma	Diafragma totalmente automático de apertura total con el dispositivo manual para verificar la profundidad focal.
Visor	Pentaprismo, imagen de inversión normal, visible al nivel del ojo Ampliación: 0.83x
Enfoque	Fácil y rápido enfoque de precisión por el mira "Diaprisma"
Espejo	Tipo de retorno instantáneo, de levantamiento vertical del extremo delantero del espejo
Obturador	COPAL SQUARE, con marca-nalce de enfoque, escala de equidistancia y de multiplicación escalonada. Cuadrante de la velocidad sin giro: 8, 1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000
Exposímetro	Exposímetro de super alta sensibilidad de CdS, acoplado y combinado con la velocidad del obturador. Tipo de luz reflejada, interruptor de alto y bajo nivel de luz. Ángulo de captación de la luz: 30° para abajo, arriba, izquierda y derecha.

Alcance de medición	EV2-EV18 = ASA 100 L (Bajo nivel): EV2-EV 10 H (Alto nivel): EV10-EV18
Disparador automático	Empetrado en el cuerpo de la cámara. Ángulo para cargar: 30°, tiempo de la acción: 10 segundos.
Sincronización de flash	M y X. Sincronización completa de todas las velocidades con bombilla de flash de la clase M. (Ajuste automático de tiempo de acción) Sincronización a estroboscópica hasta 1/125 de segundo
Mecanismo de enrollamiento de la película	Por la palanca de la parte superior se enrolla a una sola acción a 100% carga automática del disparador, previniendo las exposiciones dobles.
Demos dispositivos	Contador automático de tomas, manubrio de enrollamiento inverso de la película, saliera automática del botón de enrollamiento inverso.
Pantalla para lente	Especial de tipo de quitapán, de 57mm.
Filtros	Del tipo de rosca, rosca de 55mm de diámetro, peso de 0.75mm.
Medida y peso	La Cámara de lente f/1.4: Ancho 145mm x Alto 102.5mm x Espesor 85.5mm Peso: 1.097 gramos La Cámara de lente f/1.8: Ancho 145mm x Alto 102.5mm x Espesor 80mm

KONICA



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INSTRUCTION BOOKLET

DEPTH OF FIELD TABLE
TABELLE DER TIEFENSCHÄRFE

TABLEAU DE PROFONDEUR DU CHAMP
CUADRO DE PROFUNDIDAD FOCAL

f No.	0.6	0.7	0.8	1.0	1.2	1.5	2.0	3.0	5.0	10.0	∞
1.4	0.60 0.43	0.69 0.51	0.79 0.61	0.99 0.81	1.18 1.01	1.47 1.23	1.94 1.66	2.54 2.06	4.63 3.15	6.58 4.41	59.45 ∞
1.8	0.60 0.61	0.69 0.71	0.79 0.81	0.96 1.02	1.18 1.22	1.46 1.54	1.93 2.07	2.64 3.17	4.57 5.32	6.49 12.37	51.59 ∞
2	0.59 0.61	0.69 0.71	0.79 0.81	0.98 1.02	1.17 1.23	1.45 1.55	1.92 2.09	2.61 3.22	4.48 5.60	6.60 13.10	13.64 ∞
2.8	0.59 0.61	0.69 0.72	0.78 0.82	0.97 1.03	1.16 1.24	1.44 1.57	1.89 2.13	2.74 3.31	4.30 5.97	7.37 14.95	29.71 ∞
4	0.58 0.61	0.68 0.72	0.78 0.82	0.96 1.04	1.14 1.26	1.41 1.60	1.84 2.19	2.64 3.47	4.00 6.51	6.83 19.02	20.83 ∞
5.6	0.58 0.62	0.67 0.73	0.77 0.83	0.95 1.06	1.12 1.29	1.38 1.65	1.78 2.28	2.53 3.31	3.78 7.43	6.01 29.87	14.53 ∞
8	0.58 0.63	0.66 0.75	0.76 0.85	0.94 1.09	1.10 1.33	1.35 1.72	1.71 2.43	2.37 4.13	3.49 9.34	5.17 ∞	10.43 ∞
11	0.57 0.64	0.64 0.77	0.74 0.87	0.90 1.12	1.06 1.39	1.28 1.82	1.62 2.64	2.19 4.81	3.07 11.07	4.28 ∞	7.65 ∞
16	0.56 0.65	0.62 0.80	0.72 0.93	0.87 1.39	1.01 1.53	1.20 2.02	1.49 3.10	1.93 6.68	2.62 87.65	3.10 ∞	5.20 ∞

(F1.4, F1.8 52)

f No.	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	∞
1.4	1'00" 2'01"	2'08" 2'07"	3'02" 3'01"	3'05" 3'07"	3'11" 4'01"	4'11" 5'03"	6'02" 7'03"	8'05" 10'06"	11'09" 15'02"	26'01" 35'04"	193'01" ∞
1.8	2'03" 2'01"	2'05" 2'07"	2'13" 2'01"	2'11" 2'07"	2'11" 2'01"	2'10" 2'02"	2'09" 2'04"	2'08" 2'03"	2'07" 2'02"	2'06" 2'01"	2'05" 2'00"
2	2'03" 2'01"	2'05" 2'07"	2'13" 2'01"	2'11" 2'07"	2'11" 2'01"	2'10" 2'02"	2'09" 2'04"	2'08" 2'03"	2'07" 2'02"	2'06" 2'01"	2'05" 2'00"
2.8	2'03" 2'01"	2'05" 2'07"	2'13" 2'01"	2'11" 2'07"	2'11" 2'01"	2'10" 2'02"	2'09" 2'04"	2'08" 2'03"	2'07" 2'02"	2'06" 2'01"	2'05" 2'00"
4	2'03" 2'01"	2'05" 2'07"	2'13" 2'01"	2'11" 2'07"	2'11" 2'01"	2'10" 2'02"	2'09" 2'04"	2'08" 2'03"	2'07" 2'02"	2'06" 2'01"	2'05" 2'00"
5.6	1'11" 2'01"	1'03" 2'07"	2'10" 2'02"	2'08" 2'04"	2'08" 2'04"	2'07" 2'03"	2'06" 2'02"	2'05" 2'01"	2'04" 2'00"	2'03" 2'00"	2'02" 2'00"
8	1'11" 2'01"	2'04" 2'03"	2'09" 2'03"	2'08" 2'03"	2'08" 2'03"	2'07" 2'03"	2'06" 2'02"	2'05" 2'01"	2'04" 2'00"	2'03" 2'00"	2'02" 2'00"
11	1'11" 2'01"	2'04" 2'03"	2'09" 2'03"	2'08" 2'03"	2'08" 2'03"	2'07" 2'03"	2'06" 2'02"	2'05" 2'01"	2'04" 2'00"	2'03" 2'00"	2'02" 2'00"
16	1'10" 2'00"	2'03" 2'00"	2'08" 2'00"	2'07" 2'00"	2'07" 2'00"	2'06" 2'00"	2'05" 2'00"	2'04" 2'00"	2'03" 2'00"	2'02" 2'00"	2'01" 2'00"

(F1.4, F1.8 52)

KONICA



FP

—TABLE OF CONTENTS—

General Description of the KONICA FP	6	Focusing and Sighting	22
Nomenclature — 1	8	Shutterspeed and Aperture	25
Nomenclature — 2	9	Lens Changing	30
Nomenclature — 3	10	Synchroflash Photography	32
Nomenclature — 4	11	Selftimer Operation	34
Cocking Lever Operation	12	Depth of Field	35
Film Loading	14	Film Rewind	38
Film Roring and Type Indicator	19	Interchangeable HEXANON Lenses	40
Flashgun Mount	19	Special Accessories for the KONICA FP	41
Picture-Taking	20		

KONISHIROKU PHOTO IND.CO., LTD. is grateful for your special interest in the KONICA line of outstanding cameras.

Your KONICA FP is a vastly improved version of the KONICA FS, a highgrade pentaprism type reflex camera which has won acclaim throughout the world. The new Model FP features extra sharp focusing by virtue of the patented "microdiaprism" focusing spot for easy and accurate judgment of precise adjustment in conjunction with the extremely high resolving power of the superb HEXANON lenses. The accurate and efficient metallic focal plane shutter permits full synchronization at all shutter speeds with class M flashbulbs, and at speeds up to 1/125 second with instantaneous electronic flash equipment. Quick return mirror in conjunction with fully automatic aperture reduces viewing blackout to a minimum, while all the conveniences, including cross-coupled, cadmium sulphide KONICA LIGHTMETER for automatic exposure control, are available. Your satisfaction is guaranteed.

A full range of HEXANON interchangeable lenses, from wide-angle to telephoto, equipped with quick change KONICA mount as well as copying and close-range accessories makes your KONICA FP the most versatile of all 35-millimeter miniature cameras.

CAUTIONS

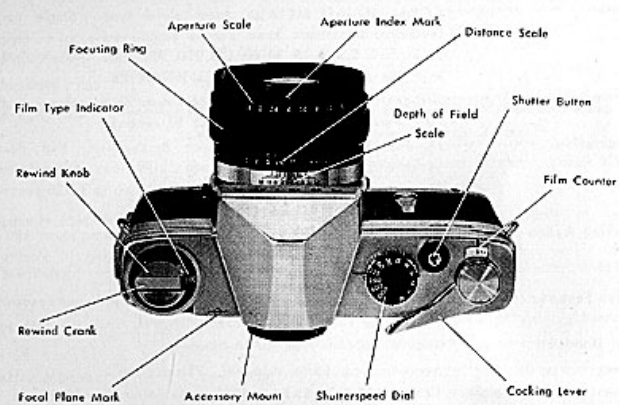
- When fitting or removing lens, do not touch manual aperture lever.
- Never touch the reflex mirror. To remove dust, use a soft hair brush.
- Never tamper with the shutter mechanism. Besides being precisely adjusted, the metallic vanes are paper-thin.
- Never operate cocking lever while shutter is in action.

GENERAL DESCRIPTION

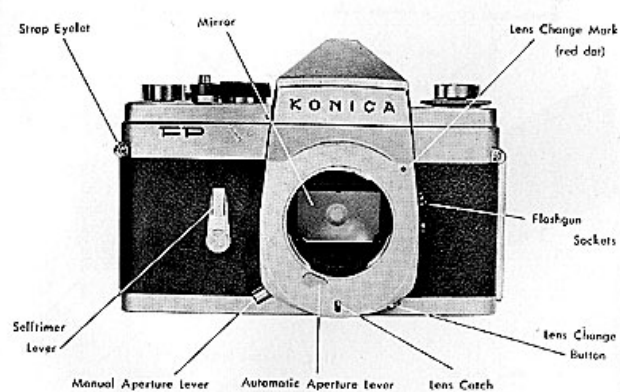
Negative Size.....	24 × 36 mm
Film Used	35-mm in safety cartridge
Standard Lens.....	HEXANON f/1.4, f=52mm, 7 elements in 5 groups, improved amber coated, minimum focusing range 2 feet
Lens Mount.....	Bayonet type KONICA mount (40-mm diameter, flange back 40.5mm)
Aperture Mechanism	Full automatic with manual control for depth of field checking
Viewfinder.....	Full negative size, pentaprism reflected, correctly oriented image. Eye-level viewing
Focusing.....	"Microdiapirism" focusing spot at center of viewing field for quick and accurate focus adjustment
Reflex Mirror.....	Lower edge rectilinear rise type, designed of instantaneous return

Shutter.....	COPAL SQUARE METALLIC focal plane type. Single non- revolving adjustment knob scaled equidistantly in multiples of 2 : B, 1, 2, 4, 8, 15, 30, 60, 125, 250, 500, 1000 Cross-couples with clip-on type KONICA Cds LIGHTMETER
Selftimer.....	Self-contained in camera body. Maximum delay setting angle 70° Maximum action delay about 10 seconds
Synchroflash	M and X settings by JIS type B sockets. Full flash synchronization at all shutter speeds with class M flashbulbs, M setting (automatic time lag adjustment) up to 1/125 second with electronic flash, X setting
Cocking Action	Single-stroke, thumb-operated cocking lever (swing about 180°) Simultaneous film wind and shutter cocking Positive prevention of multiple exposure
Other Features	Self-resetting film counter; crank film rewind; self-resetting film rewind button & c.
Lens Hood	Special slip-over type, 57mm diameter
Filters	Screw-in type, 55mm diameter, .73mm pitch
Dimensions and Weight	145 × 102.5 × 85.5mm 1050grams (w/standard lens)

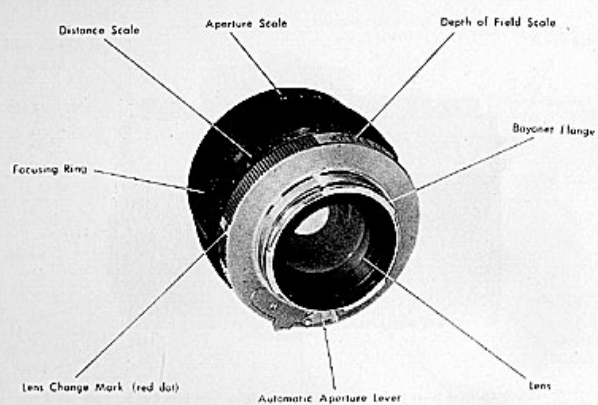
NOMENCLATURE — 1



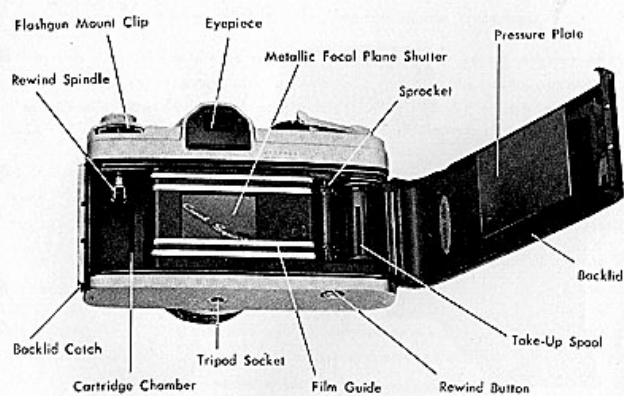
NOMENCLATURE — 2



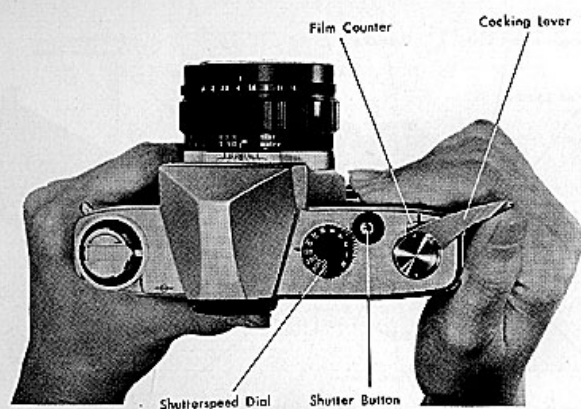
NOMENCLATURE — 3



NOMENCLATURE — 4



COCKING LEVER OPERATION



■ When the cocking lever is moved fully through its stroke, the film is advanced one frame, the mirror return mechanism is set, and the shutter is cocked.

■ With each full stroke of the cocking lever, the film counter moves one step up to 36 where it becomes disengaged. When after rewind of exposed film into its safety cartridge the backlid is opened, the film counter automatically returns to the triangular start mark.

■ Cultivate the practice of cocking immediately before taking a picture. It is harmful to keep the shutter and mirror mechanism cocked and under tension for too long, while, by leaving your camera uncocked until ready for picture taking the risk of unintentional exposures is minimized.

■ Shutter speed adjustments may be made either before or after cocking.

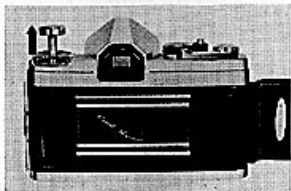
■ The cocking lever may jam part way through its stroke when the end of the film is reached. In this case, keep the rewind button depressed when operating the cocking lever. Its stroke can be completed so that return to original position will take place.

FILM LOADING

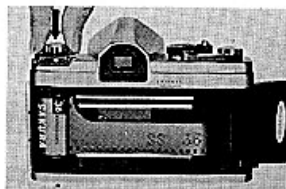
■ The KONICA FP uses 35-millimeter film, monochrome or color, 20 or 36 exposure, preloaded in safety cartridge.

■ When loading or unloading film, always work in the shade. When no other protection is available, use your own body to shield your camera and film.

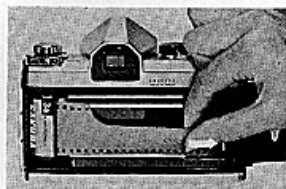
- ① Pull backlid catch to release backlid which swings open on hinge. Pull out rewind knob as far as it will go.



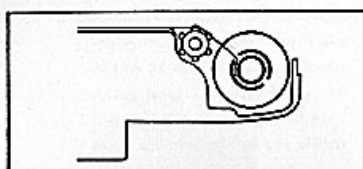
- ② Insert safety cartridge containing unexposed film in the cartridge chamber. Lock in position by returning the rewind knob to original position while turning slightly so that rewind spindle engages the cartridge spool.



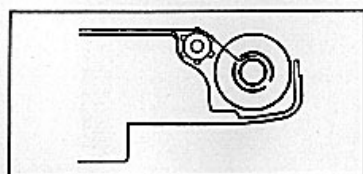
- ③ Turn the take-up spool so that its slit is conveniently located. Insert the end of the film in this slit.



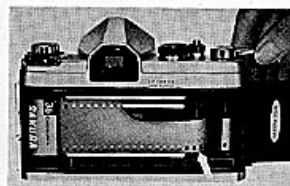
■ Insert end of film in the manner shown here. It will disengage easily upon completion of rewind after picture-taking.



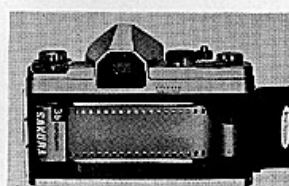
■ If the film is inserted in the manner shown here, it will not come off the take-up spool at the end of the rewinding operation. In this case, do not apply force to the rewind crank. Open the backlid, and release film by using your fingertip.



④ Making sure that the perforations on the lower side of the film engage the teeth of the sprocket, operate the cocking lever. The film should be wound smoothly onto the take-up spool.

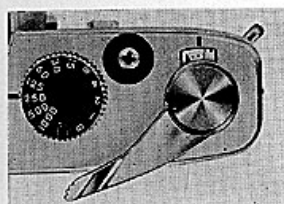


⑤ Push shutter button, and repeat cocking action until perforations on both sides of the film are caught on the sprocket. Close the backlid. Turn the rewind knob clockwise (as indicated by the arrow mark) to take up slack.



⑥ Operate the cocking lever twice. Then the film counter will indicate the dot preceding numeral 1.

The loaded film is now in proper position for its first exposure.



■ If the film is correctly loaded, the rewind knob should turn counterclockwise (against the arrow mark) when the cocking lever is operated. If the rewind knob does not turn, the film is not being taken up properly. Open the backlid and check the loading operations step by step.

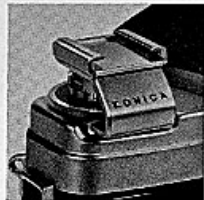
FILM RATING AND TYPE INDICATOR

After loading your camera with film, set the film indicator to show the speed rating (ASA number) and type (monochrome or color) of the film you are using. Blue is for monochrome or color negative; red is for color positive (reversal).



FLASHGUN MOUNT

This special accessory is used for attaching a flashgun or electronic flash head to your camera. When the flashgun mount is fitted in the clip under the rewind knob, your KONICA FP can be readily equipped with such flashguns as the KONIFLASH III or KONIFLASH III M.



PICTURE-TAKING



With your KONA FP loaded with film, first decide on the combination of shutter speed and aperture that will give correct exposure for the subject you intend to photograph. Set your selected shutter speed and aperture values. Sight your subject through the eyepiece and viewfinder, then turn the focusing ring to obtain maximum sharpness.

Gripping your camera with both hands, and holding it firmly against your face to obtain maximum steadiness, compose your picture in the viewfinder. With great care not to impart the slightest jerk, gently apply fingertip pressure to the shutter button. You now have an imprint of your subject on your film.

Before taking your next picture, operate the cocking lever to advance the film one frame. Repeat the steps described above for picture-taking. When the film in your camera has been used up, and you have made 20 or 36 exposures, rewind the film into its safety cartridge (the rewind operation is described later), open the backlid, and remove the safety cartridge now holding exposed film.

To mount your KONA FP on a tripod, screw the tripod head into the tripod socket on the base plate. A cable release can be screwed into the screw socket at the center of the shutter button.

FOCUSING AND SIGHTING

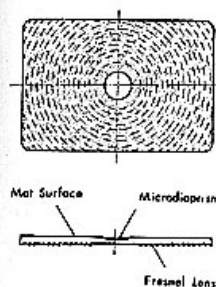
Focus your subject through the eyepiece and viewfinder. Turn the focusing ring to obtain the sharpest possible image. In the KONICA FP cocking action introduces no error due to shift of mirror position. Accurate focusing is possible at any time, either before or after operation of the cocking lever.



Subject is out of focus



Subject is in sharp focus



Magnified view of a portion of the "microdiaprisms" screen.

The "microdiaprisms" focusing spot is a unique KONISHIROKU development consisting of a geometrical pattern of hexagonal prisms of minute size. This special focusing screen shows the subject sharp and clear and intact when in proper focus, but when there is even a slight error of adjustment the image is minutely broken up in six directions. This permits focusing of extreme accuracy with maximum ease.



Focusing by means of point sources of light at night is particularly easy since a distinctive pattern becomes visible when focusing is correct.

Sighting Image

The viewfinder image is in correct orientation, and is exactly as registered on the film by virtue of the reflecting action of the pentagonal prism. There is absolutely no parallax regardless of distance, while lenses change calls for no adjustment whatsoever.

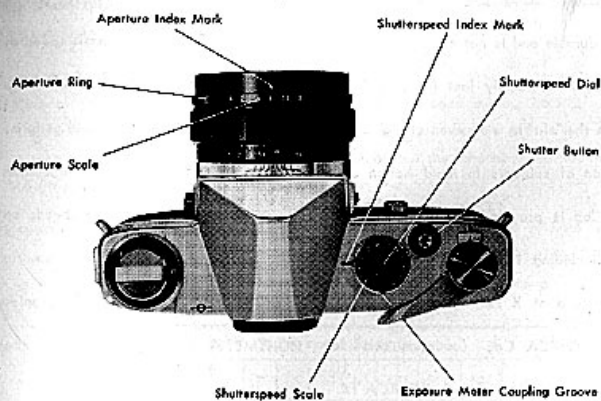
Quick Return Mirror and Full Automatic Aperture

When the shutter button is operated, the automatic aperture immediately closes down to preset size (*f*/value), the reflecting mirror flicks up and out of the way, the focal plane shutter opens and closes at preset shutter speed, the mirror returns to viewing position, and the aperture opens up fully. Thus only during the instant of picture-taking is the viewfinder image blacked out, and the subject can be seen at maximum brightness both before and after exposure.

Focal Plane Mark

The focal plane mark (⊖) engraved on the top of the camera indicates the position of the photosensitive surface of the film. All distances to the subject are measured from this position.

SHUTTERSPEED AND APERTURE



Aperture Settings are equidistantly spaced. Increase or decrease of aperture size by a step means doubling or halving of the intensity of the light passing through the lens. At $f/4$, the intensity of the light impinging upon the film is half that at $f/2.8$. $f/4$ gives double the exposure of $f/5.6$. However, intermediate steps can be used because aperture size change is continuous. In the KONICA FP, the aperture mechanism is fully automatic to provide full aperture for viewing and focusing, with automatic close down to pre-determined value only at shutter action or by manual operation for checking depth of field.

Function of the Aperture

- ① Regulation of the intensity of the light passed through the lens. When the subject is dimly lit the aperture must be opened up, while when extremely strong light is encountered the aperture is closed down.
- ② Regulation of the depth of field (focusing tolerance). The larger the aperture the smaller becomes the available depth of field, and vice versa.

Aperture Settings							
1.4	2	2.8	4	5.6	8	11	16

Relationship Between Shutterspeed and Aperture

Correct exposure in picture-taking is obtained by a proper combination of shutterspeed and aperture settings. Correct exposure means giving the film the right amount of light to obtain proper density and gradation from highlights to dark shadows. As already mentioned, the factors to be considered for correct exposure are filmspeed, the nature of the subject, and the various conditions of lighting. Until experience is gained, it is advisable to rely upon the simplified exposure table, or upon a good exposure meter. Because both shutterspeed and aperture are scaled in steps of multiples of 2, exposure can be halved or doubled simply by shifting one of the two controls by a step. For instance, if your camera is set at $f/11$ at $1/250$ second, exposure can be doubled either by opening up the aperture to $f/8$ or by reducing shutterspeed to $1/125$ second. By the same token, exposure can be kept unchanged if shutterspeed and aperture settings are shifted together step-by-step in a given relationship. For example, $1/250$ second at $f/8$, $1/125$ second at $f/11$, and $1/60$ second at $f/16$ should give identical exposure results.

The COPAL SQUARE metallic focal plane shutter of your KONICA FP is notably durable and is not affected by extremes in heat and cold. The transit speed of its vanes is extremely fast (about 7.5 millisecond across the shorter distance), while because the "slit" is wide even at high shutterspeeds the timing is accurate and uniform. Distortion of subjects in rapid motion does not occur. Because automatic regulation of time lag is provided, full flash synchronization is possible at all shutterspeeds up to and including 1/1000 second in conjunction with class M flashbulbs, and up to 1/250 second at X setting with electronic flash equipment. The shutter dial couples to the KONICA CdS (cadmium sulphide) LIGHTMETER which clips on over the pentaprism housing of your KONICA FP.

The Shutterspeed Dial click stops at all settings from B to 1000. The colored numeral 125 indicates the top speed for electronic flash synchronization.

Function of the Shutter

- ① One of the functions of the shutter is to stop or freeze moving objects. High shutterspeeds are used to prevent blurring of subjects in rapid motion. For a given motion, the closer the subject the higher must be the shutterspeed to eliminate blurring.
- ② Another important function of the shutter is to regulate the amount of light reaching the film. While the aperture functions by controlling the intensity of the light, the shutter controls the time during which light is permitted to enter the camera.

Shutterspeed Settings											
B	1	2	4	8	15	30	60	125	250	500	1000

LENS CHANGING

■ Because the interchangeable lenses for your KONICA FP are provided with bayonet type, triple flange KONICA mount fittings, they can be speedily fitted or removed by a slight twist of about $1/6$ turn.

To Remove Lens While keeping the lens change button depressed, turn lens counterclockwise to the left until it stops (and the red dots on the lens and body are in alignment). The lens can then be lifted out.



To Attach Lens Match the lens change marks (red dots) on the lens barrel and camera body, and gently lower lens into the body. Turn to the right (clockwise) until it comes to a full stop with the lens catch locking the lens in position.



■ Upon attaching the lens to the body, the automatic aperture levers of the body and the lens couple automatically.

■ When attaching lens, be sure that you do not touch the manual aperture lever

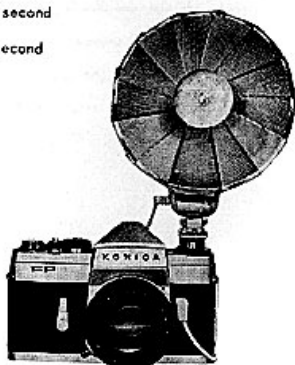


SYNCHROFLASH PHOTOGRAPHY

The KONICA FP COPAL SQUARE focal plane shutter permits full flash synchronization up to 1/1000 second using class M flashbulbs, and up to 1/125 second with electronic flash.



When using Class M Flashbulbs, plug the flashgun cord connector into the socket marked M. Use socket marked X for electronic flash equipment.



Synchroflash photography is accomplished by means of the light emanating from a flashbulb or electronic flash tube. Correct exposure is determined by the intensity of the flash and the distance between the flash and the subject. A guide number is indicated for each type of flashbulb. Dividing the guide number by the distance between the light source and the subject will give you the aperture value for correct exposure.

FLASH SYNCHRONIZATION TABLE

Flashbulb Setting		Shutter Speed									
		1	2	4	8	15	30	60	125	250	500/1000
M	Class M	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○
	Class F	○	○	○	○	○	×	×	×	×	×
X	STROBE	○	○	○	○	○	○	○	×	×	×
	Class F	○	○	○	○	○	×	×	×	×	×

○ mark proper synchronization,
X mark non-synchronization.

For example: with the Toshiba Super O flashbulb in conjunction with ASA 100 film the guide number for shutter speeds up to 1/50 second is 42. If the distance from flash to subject is 5 meters, then the aperture setting for correct exposure is $42/5 \approx 8$ (1/8).

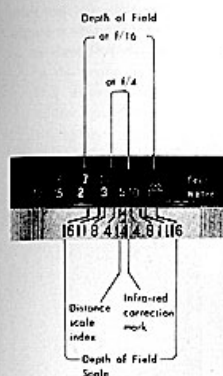
Visual Check



Normally, the viewfinder image is at maximum brightness at full aperture (giving minimum depth of field). Operation of the manual aperture lever closes down the diaphragm to pre-set value, and it is possible to check by sight how sharply what objects will actually register.

■ It is possible, by sighting your subject while keeping the manual aperture lever depressed, to adjust the aperture ring to give the desired amount of depth of field.

Depth of Field Scale

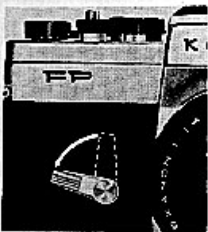


Scale graduations are provided on both sides of the distance scale index mark. The range bracketed by the aperture (f/) value in use is the depth of field available.

Infra-Red Correction Mark

When using infra-red film in conjunction with filters of reddish hue for infra-red photography, first focus in the normal way. Note the distance on the distance scale, and shift that distance to the infra-red correction mark (red numeral 4) to obtain corrected focus.

SELFTIMER OPERATION



The selftimer lever can be set either before or after cocking. The maximum setting angle is about 70° and this will give about 10 seconds delayed shutter action.

- The selftimer can be used for all shutter speeds except B (bulb).
- To shorten delay time, use smaller setting angle.
- Shutter speed can be changed after selftimer is set.
- In addition to use of selftimer for self-photography,

It is specially useful in close-range, copying and microscopic photographs as well as when camera jerk must be assiduously avoided.

DEPTH OF FIELD

Once your camera is properly focused on a certain subject, there will be a certain range, in front of and behind the point of exact focus, within which sharp register of image can be achieved. This range, which depends on aperture size and distance, is known as the depth of field (focusing tolerance). The following are the attributes of depth of field:

- At a given distance, depth of field is greater the smaller the aperture, and vice versa.
- At a given aperture setting, depth of field is greater the greater the distance between camera and subject.
- The depth behind the point of exact focus is greater than in front.
- For a given aperture size and distance, the depth of field is greater the shorter the focal length of the lens in use.

With your KONICA FP the available depth of field can be checked in two ways:

- ① Visually, by operation of the manual aperture lever to obtain a viewfinder image identical to that which will register on the film.
- ② By referring to the depth of field scale adjacent to the distance scale.

INTERCHANGEABLE HEXANON LENSES



- HEXANON f/2.8 f = 35 mm
w/full automatic aperture
w/presetting aperture
- HEXANON f/2.8 f = 100 mm
w/full automatic aperture
w/presetting aperture
- HEXANON f/3.5 f = 135 mm
w/full automatic aperture
w/presetting aperture
- HEXANON f/3.5 f = 200 mm
w/presetting aperture
- HEXANON f/4.5 f = 400 mm
w/presetting aperture
Lens Hoods and Filters
(UV, Y1, Y2, R1, R2)
Complete set of lenses in
wooden carrying case

KONICA Cds LIGHTMETER

The new KONICA Cds LIGHTMETER clips on over the pentaprism housing of the KONICA FP, and couples to the shutter speed dial of the camera. Because cadmium sulphide is used instead of the conventional selenium cell, the sensitivity range is vastly greater, while the coverage angle of about 40° approximates that of the standard lens facilitating exposure measurements from camera position.



TYPE : Cds Cell, Reflected Light, 2-Range

RANGE : (using film of ASA 100 rating) from LV 2 (1 second at f/2)
to LV 18 (1/1000 at f/16)

Power Source : 1.3 V mercury cell type MD

Power Source Check : Button provided for instantaneous visual check

Film Rating Range : from ASA 6 (DIN 9) to ASA 3200 (DIN 37)

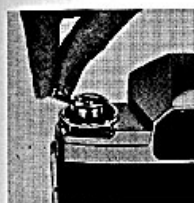
FILM REWIND

- 1 Push in the rewind button (it is self-resetting, so a single push suffices)

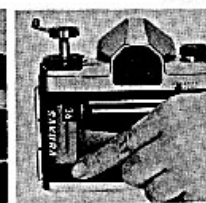
- When the film in your camera has been used up, the cocking lever may stop part way through its stroke. In such cases, never apply force.
- If the cocking lever jams at end of film, push in the rewind button and keep depressed while pushing the cocking lever to end of its stroke to permit it to return to original position.



- 2 Erect the rewind crank, and turn clockwise in the direction indicated by the arrow mark. The exposed film will be wound back into its safety cartridge



- 3 When all the exposed film is taken up into the safety cartridge, open the backlid, pull out the rewind knob, and remove the safety cartridge



- When at completion of rewind the end of the film becomes detached from the take-up spool, there will be felt some resistance followed by a sudden easing. Stop rewinding immediately if you wish to leave the end of film protruding from the safety cartridge.
- Work in the shade when removing safety cartridge from your camera.

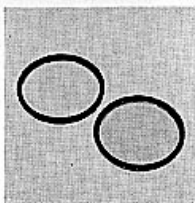
KONIHOOD

The KONIHOOD lens hood shields the lens from extraneous rays and reflections, and is particularly necessary for synchroflash photography. Designed for maximum efficacy, the lock screw prevents dislocation during picture-taking.



KONIFILTERS

Optically precise and scientifically designed filters mounted in metal frames for screw-in mounting. Types available: SL 39 (UV), SY 48 (Y1), SY52 (Y2), SO56 (R1)



ANGLE FINDER ATTACHMENT

Permits sighting and focusing from above to permit low camera position as well as added convenience for close-range photography, copying and microphotography.



EXTENSION RINGS

Fitted between the body of the KONICA FP and the any interchangeable lens, these rings increase the focusing range to permit extreme close-up photography of high magnitude up to actual size. Various combinations for changes of range. Indispensable for copying works, documentaries, scientific and industrial applications & c.

CLOSE-UP AUXILIARY LENSES

These lenses screw into KONICA FP lenses to permit close range photography without disconnecting the automatic aperture mechanism. Available in two ranges

#1 for distances of 64 to 36 cm (2'01" to 1'02")

#2 for distances of 36 to 28 cm (1'02" to 11")

The two combined permits shortening the distance to 24 centimeters. (9 $\frac{1}{2}$ ")



EXAKTA LENS ADAPTOR

This adaptor permits use of all EXAKTA type lenses on your KONICA FP.



CAMERA CASE FRONT COVER

This interchangeable camera case front cover permits permanent mounting of the KONICA CdS LIGHTMETER on your KONICA FP.



LENS EXTENSION BELLOWS

This flexible lens extension system permits versatile close-range work for copying, documentation, scientific and industrial photography, & c. Magnification from X 1 to X 2.5.

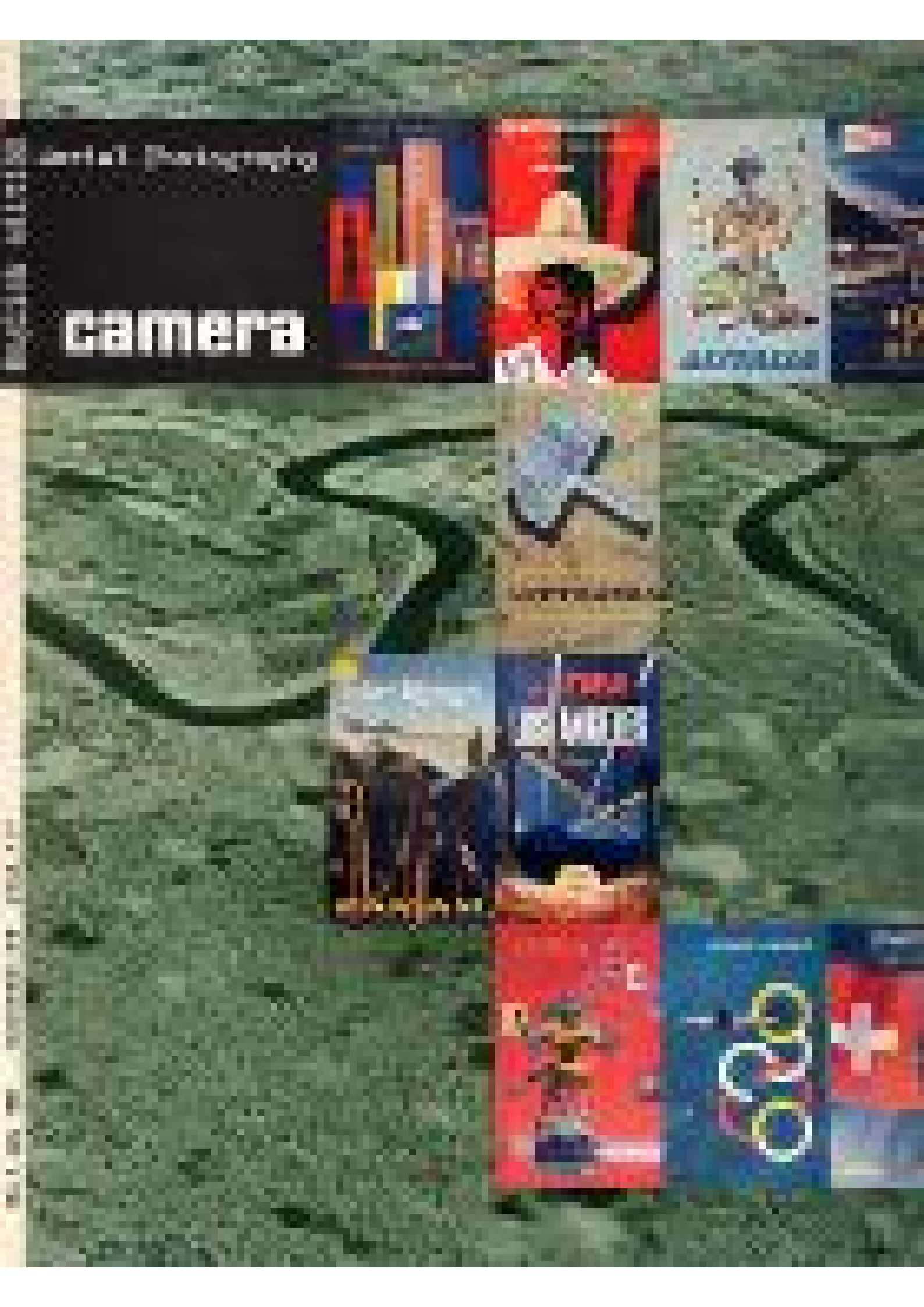


CAMERA



camera





Serial Photography

camera

PHOTO

CAMERA



CAMERA



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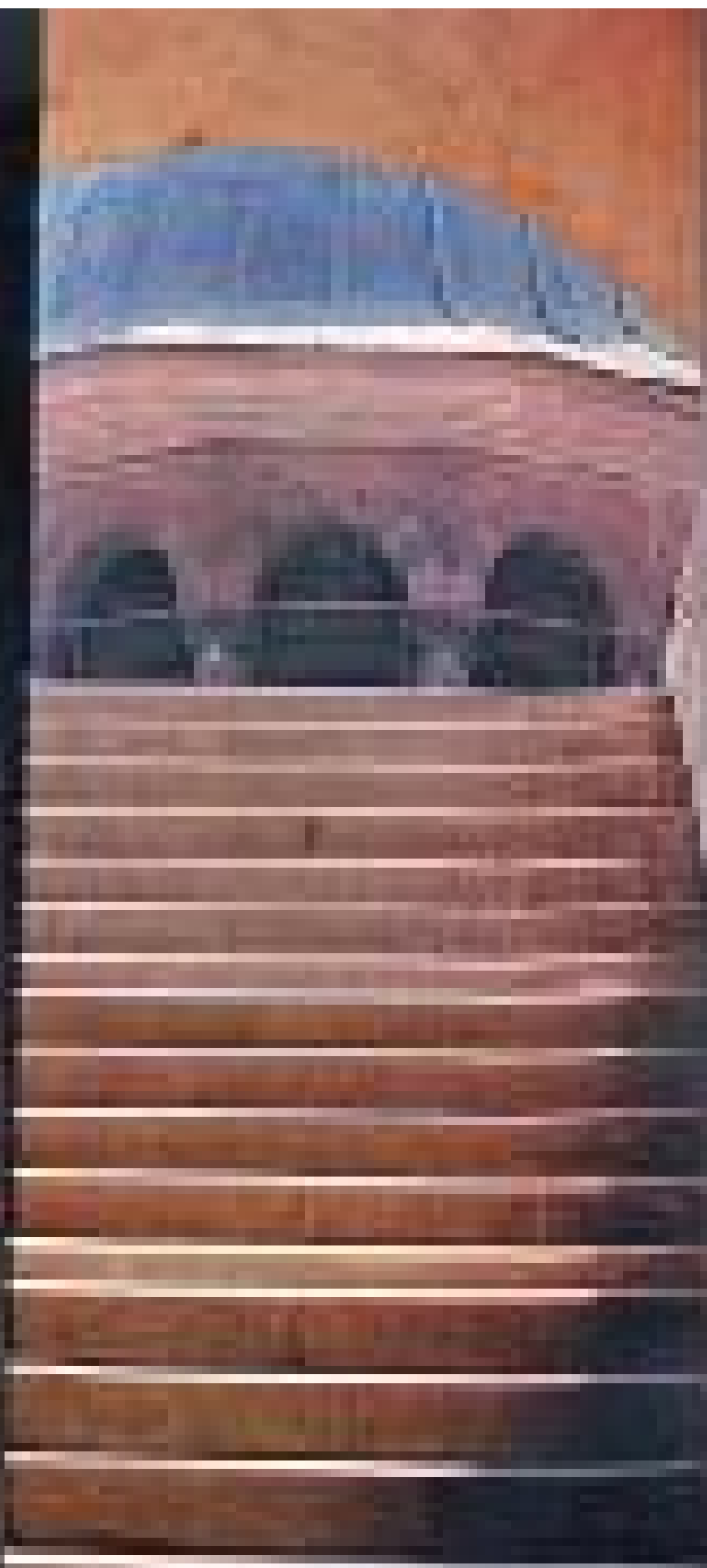
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camera



САМЕРА



Camera



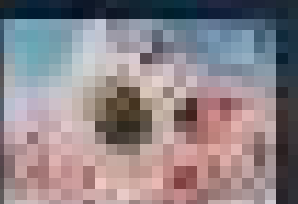
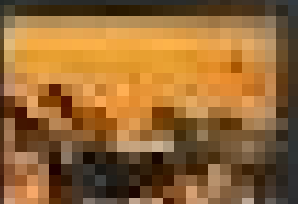
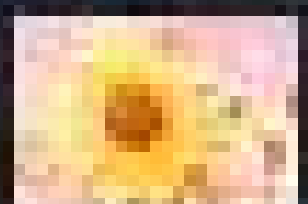
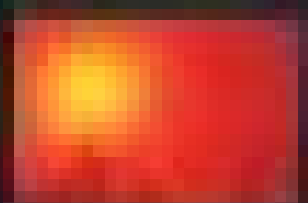
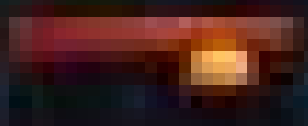
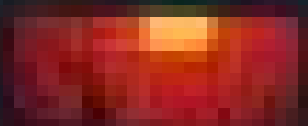
CAMERA



СВМЕРЬ



camera



camera



СЭМЕРЭ





Camera



DEPTH OF FIELD TABLE

HEXANON $f/1.4$ $f = 52$ mm

circle of confusion $3/100$ mm (in meters)

Meter F.No.	0.6	0.7	0.8	1.0	1.2	1.5	2.0	3.0	5.0	10.0	∞
1.4	0.60 0.61	0.69 0.71	0.79 0.81	0.99 1.01	1.18 1.22	1.47 1.53	1.94 2.06	2.86 3.15	4.63 5.44	8.58 11.98	59.45 ∞
2	0.59 0.61	0.69 0.71	0.79 0.81	0.98 1.02	1.17 1.23	1.45 1.55	1.92 2.09	2.81 3.22	4.48 5.66	8.09 13.10	41.64 ∞
2.8	0.59 0.61	0.69 0.72	0.78 0.82	0.97 1.03	1.16 1.24	1.44 1.57	1.89 2.13	2.74 3.31	4.30 5.97	7.52 14.96	29.77 ∞
4	0.59 0.61	0.68 0.72	0.78 0.82	0.96 1.04	1.14 1.26	1.41 1.60	1.84 2.19	2.64 3.47	4.06 6.51	6.80 19.02	20.87 ∞
5.6	0.58 0.62	0.67 0.73	0.77 0.83	0.95 1.06	1.12 1.29	1.38 1.65	1.78 2.28	2.53 3.71	3.78 7.42	6.04 29.87	14.93 ∞
8	0.58 0.63	0.66 0.75	0.76 0.85	0.93 1.09	1.09 1.33	1.33 1.72	1.71 2.43	2.37 4.13	3.43 9.38	5.17 ∞	10.48 ∞
11	0.57 0.64	0.64 0.77	0.74 0.87	0.90 1.12	1.06 1.39	1.28 1.82	1.62 2.64	2.19 4.81	3.07 14.07	4.38 ∞	7.65 ∞
16	0.56 0.65	0.62 0.80	0.72 0.91	0.87 1.19	1.01 1.50	1.20 2.02	1.49 3.10	1.96 6.68	2.62 87.85	3.50 ∞	5.29 ∞

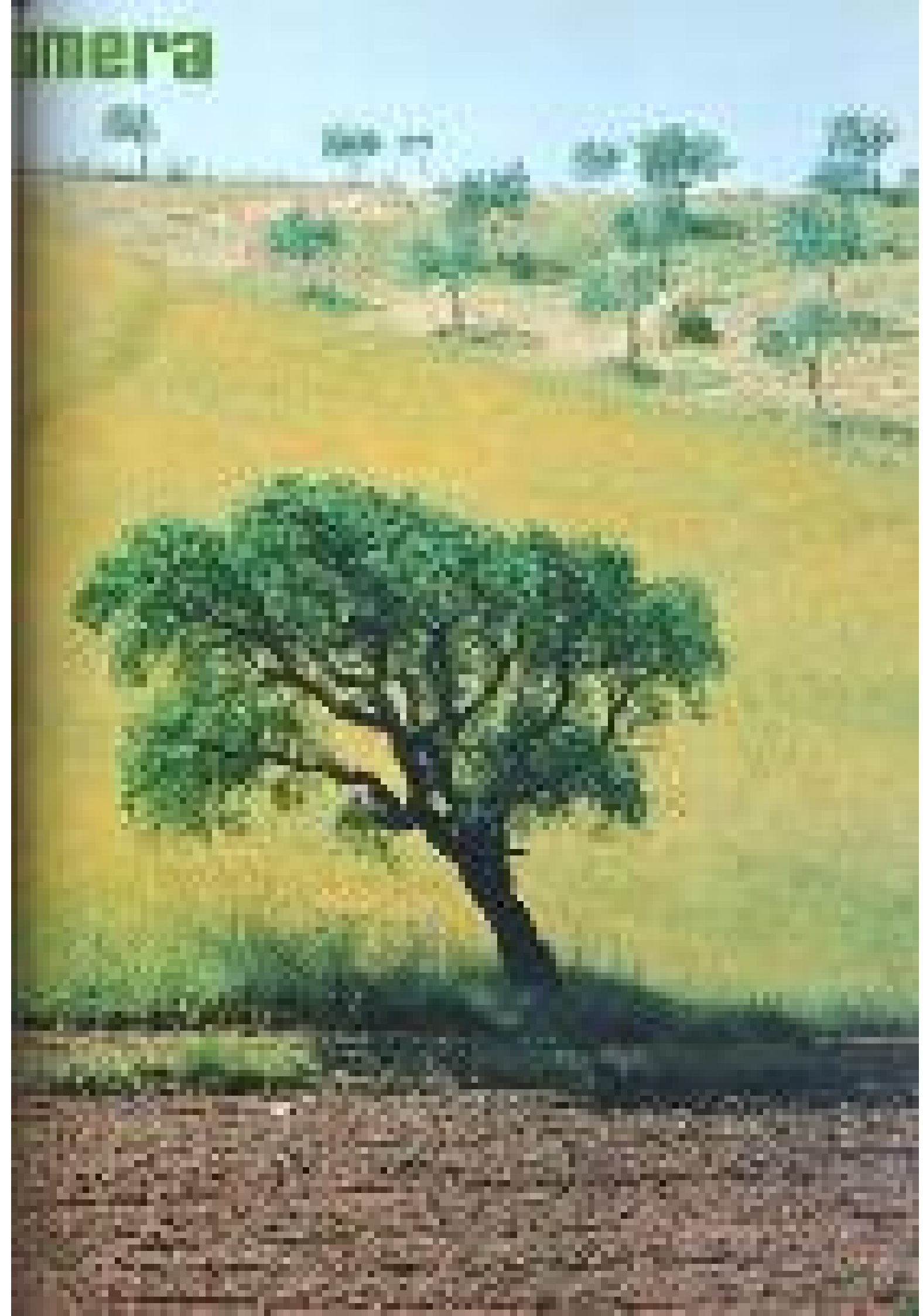
(F1.4 52)

HEXANON $f/1.4$ $f = 52$ mm

circle of confusion $3/100$ mm (in feet)

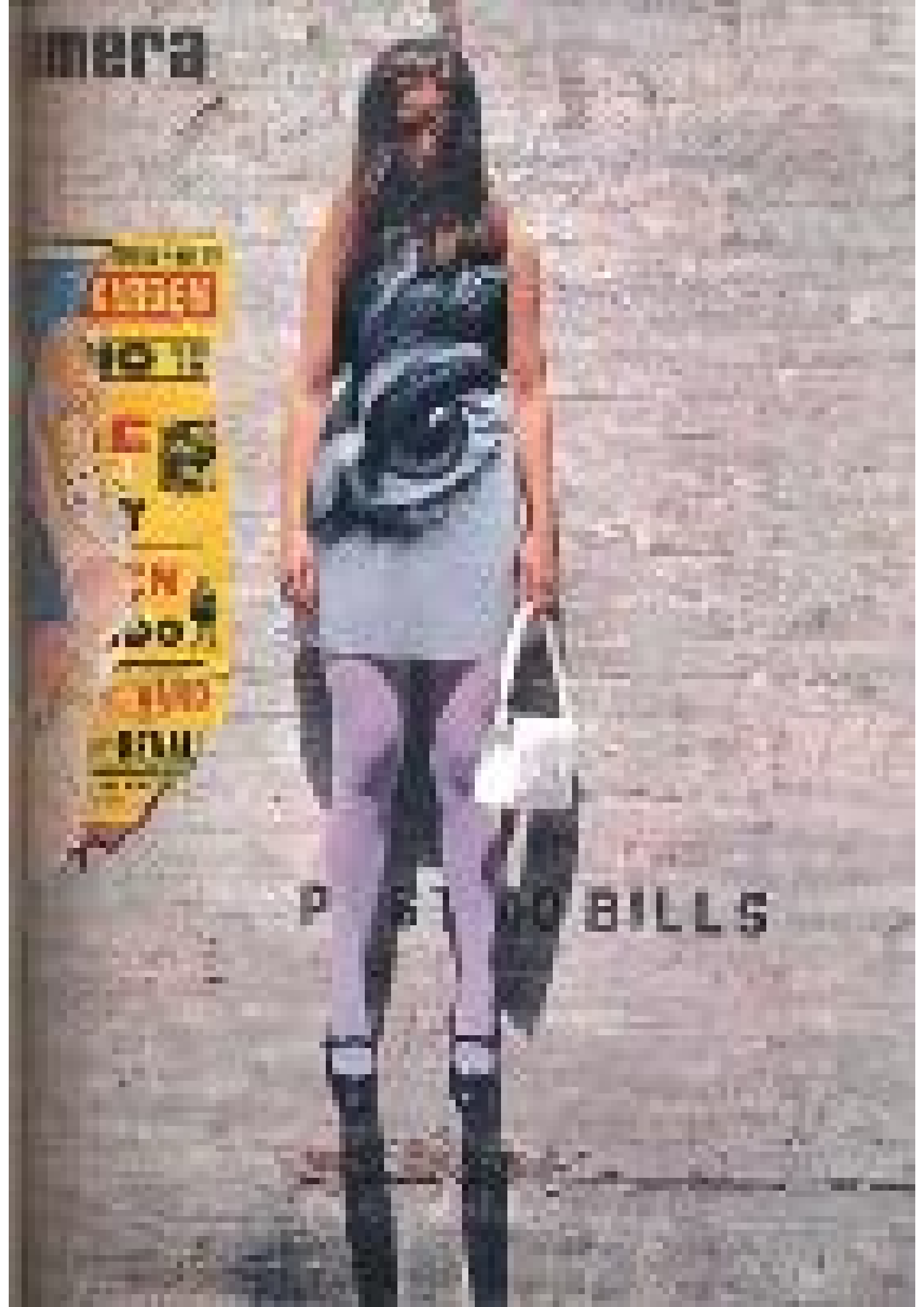
Feet F.No.	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	∞
1.4	2'00" 2'01"	2'06" 2'07"	3'00" 3'01"	3'05" 3'07"	3'11" 4'01"	4'11" 5'01"	6'09" 7'03"	9'06" 10'06"	14'00" 16'02"	26'01" 35'04"	195'01" ∞
2	2'00" 2'01"	2'06" 2'07"	2'11" 3'01"	3'05" 3'07"	3'11" 4'01"	4'10" 5'02"	6'08" 7'04"	9'04" 10'09"	13'07" 16'09"	24'08" 38'03"	136'08" ∞
2.8	2'00" 2'01"	2'05" 2'07"	2'11" 3'01"	3'05" 3'07"	3'10" 4'02"	4'09" 5'03"	6'07" 7'06"	9'01" 11'01"	13'01" 17'02"	23'01" 43'00"	97'08" ∞
4	2'00" 2'01"	2'05" 2'07"	2'11" 3'01"	3'04" 3'08"	3'10" 4'03"	4'08" 5'04"	6'05" 7'09"	8'10" 11'07"	12'05" 19'00"	21'00" 52'11"	68'06" ∞
5.6	1'11" 2'01"	2'05" 2'07"	2'10" 3'02"	3'04" 3'09"	3'09" 4'04"	4'07" 5'06"	6'02" 8'01"	8'05" 12'05"	11'07" 21'00"	18'09" 76'05"	49'00" ∞
8	1'11" 2'01"	2'04" 2'08"	2'10" 3'03"	3'03" 3'10"	3'08" 4'05"	4'05" 5'09"	5'11" 8'08"	7'10" 13'10"	10'07" 26'01"	16'02" ∞	34'05" ∞
11	1'11" 2'01"	2'04" 2'09"	2'09" 3'04"	3'02" 4'00"	3'06" 4'08"	4'03" 6'01"	5'02" 9'06"	7'03" 16'02"	9'05" 36'04"	13'10" ∞	25'01" ∞
16	1'10" 2'02"	2'03" 2'10"	2'08" 3'06"	3'00" 4'03"	3'04" 5'00"	4'00" 6'09"	5'01" 11'04"	6'06" 22'09"	8'02" 106'06"	11'02" ∞	17'04" ∞

(F1.4 52)









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1.55

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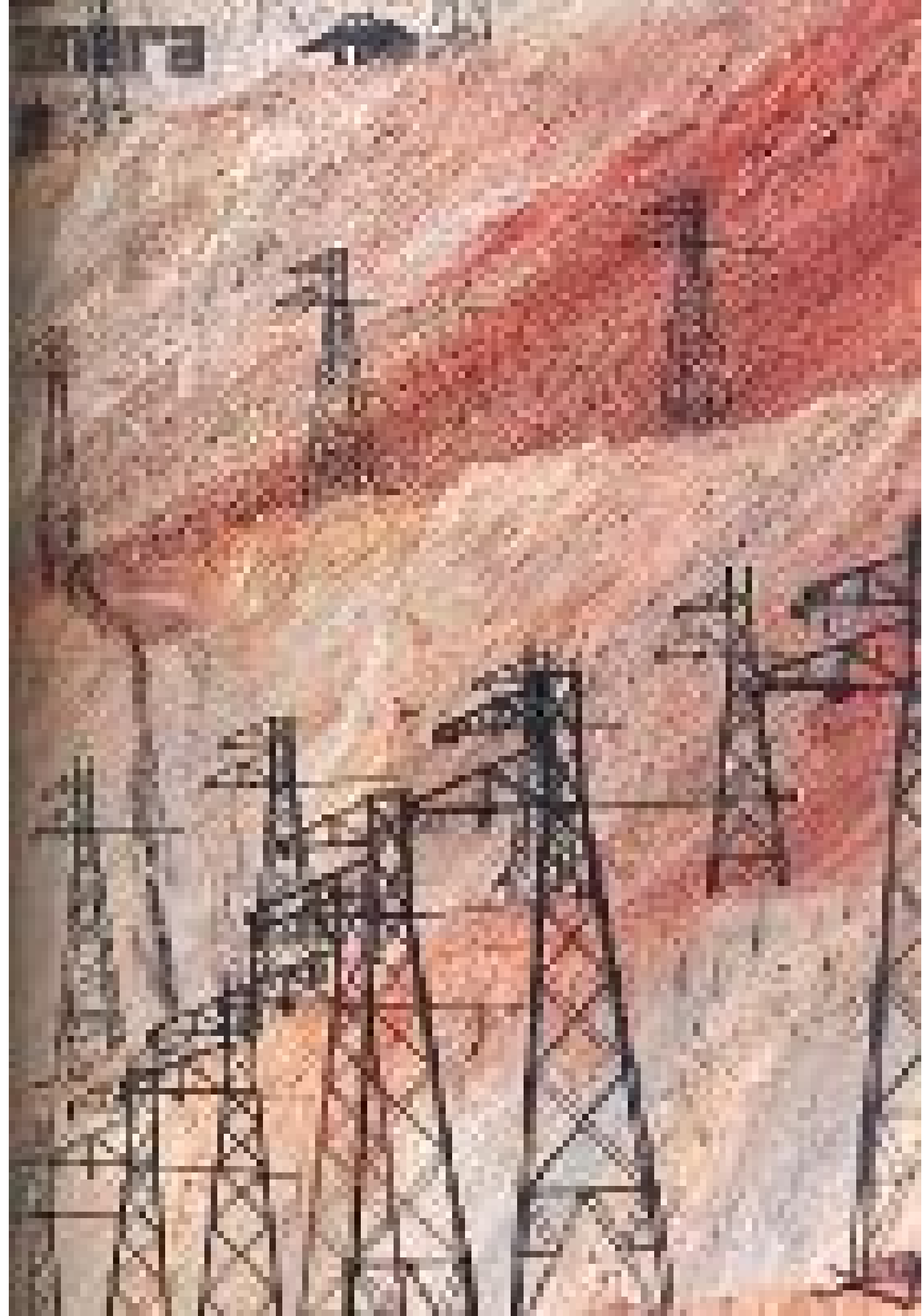
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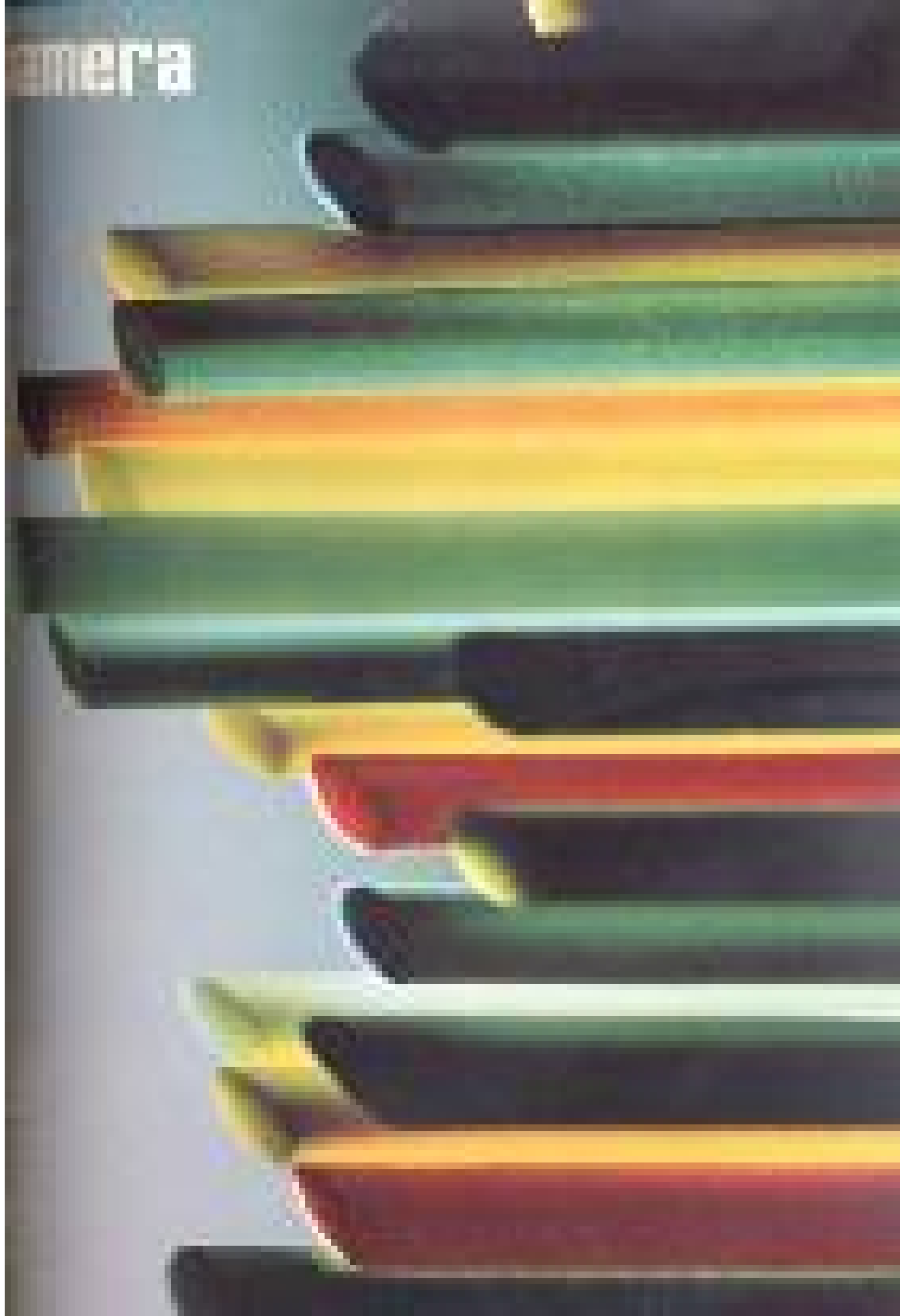
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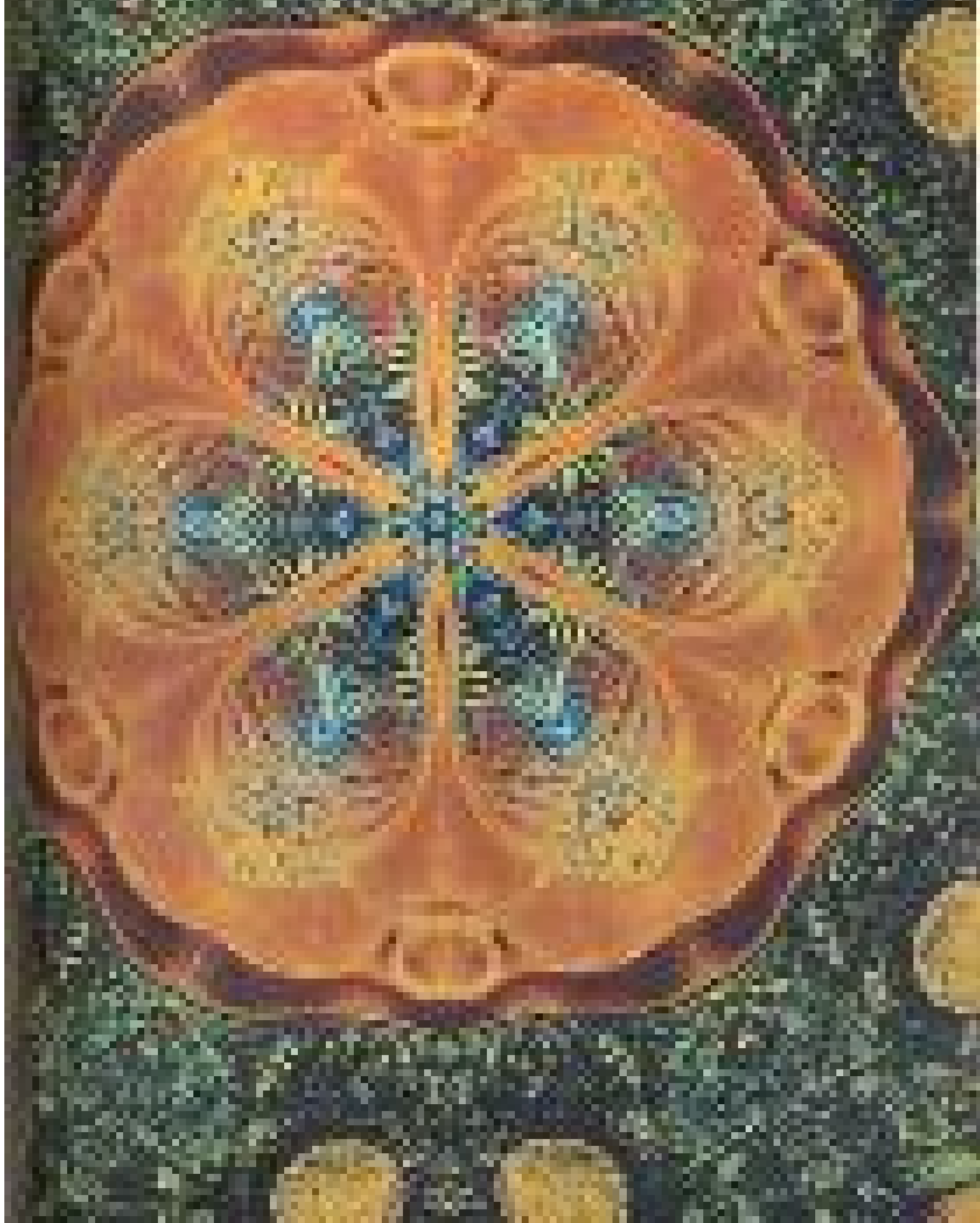
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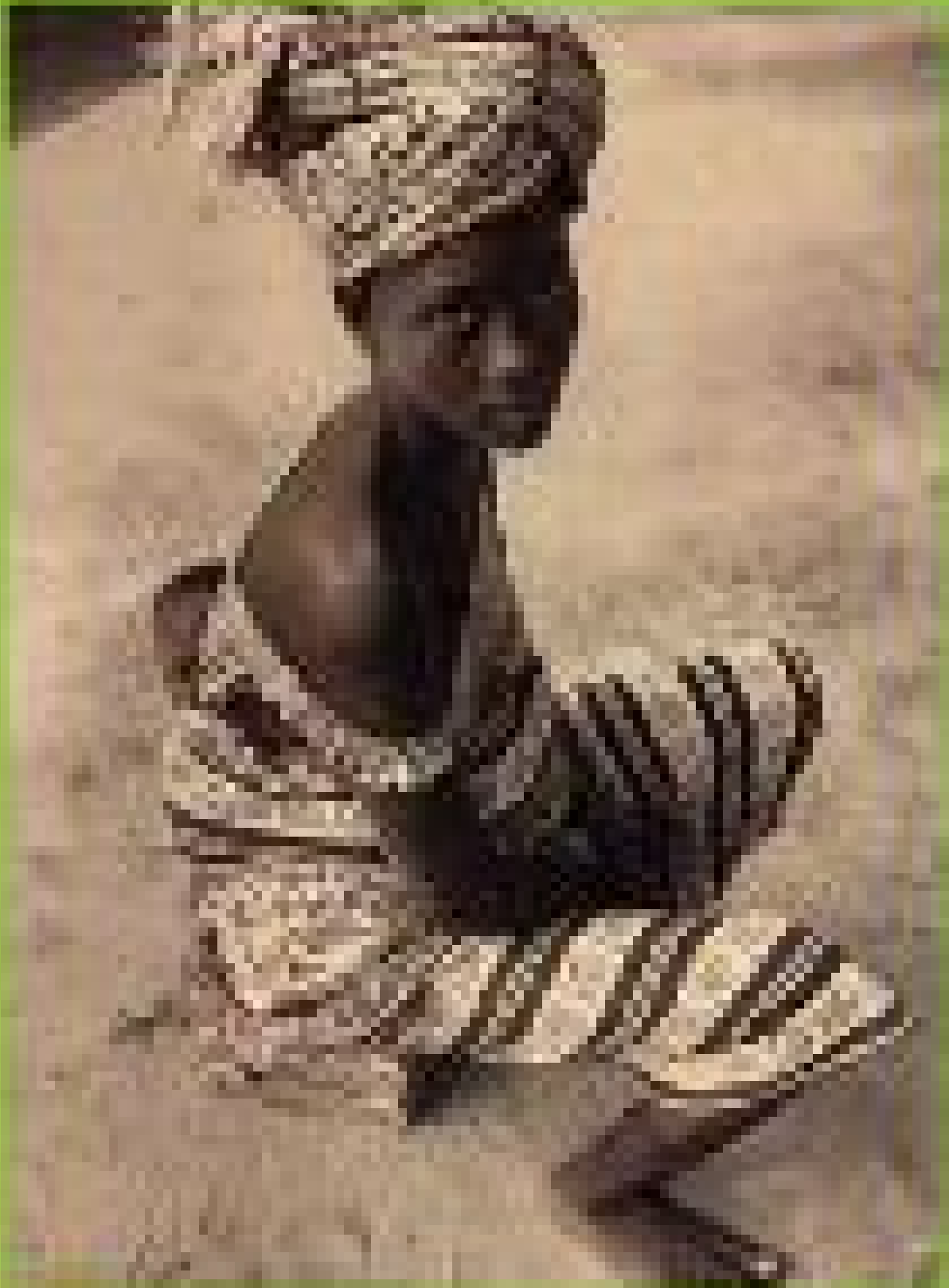


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CHAPTER 3

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CHAPTER 3





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Camera

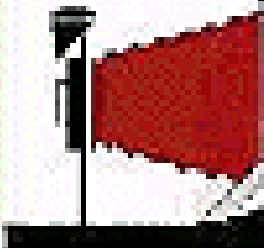


2011



CATHERY





IDCC

INTERNET DIRECTORY OF CAMERA COLLECTORS



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CONTENTS



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Camera's



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CEMENT



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COMET



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СЕМЬЯ



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СЭМЕРА



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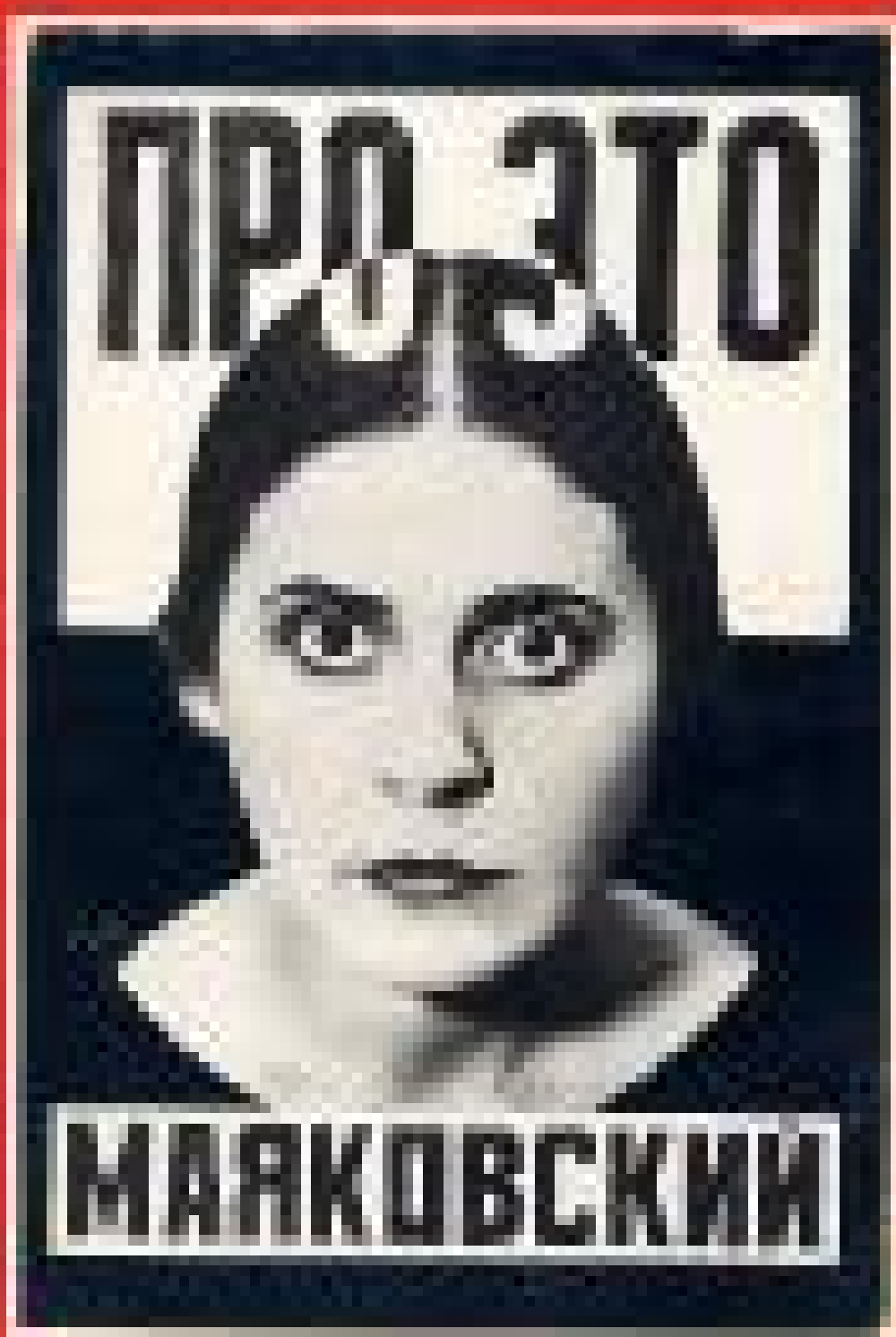


camera





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СВМЕГА



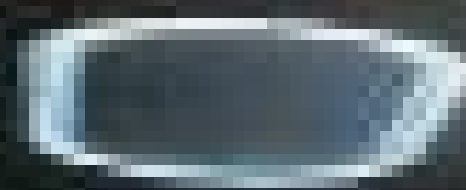
CONTENTS



camera



СЭМБЭ



CENTER

The DARKROOM

by JAMES M. HARRIS and JAMES M. HARRIS

UNUSUAL AND UNUSUAL PHOTOGRAPHY

THE DARKROOM

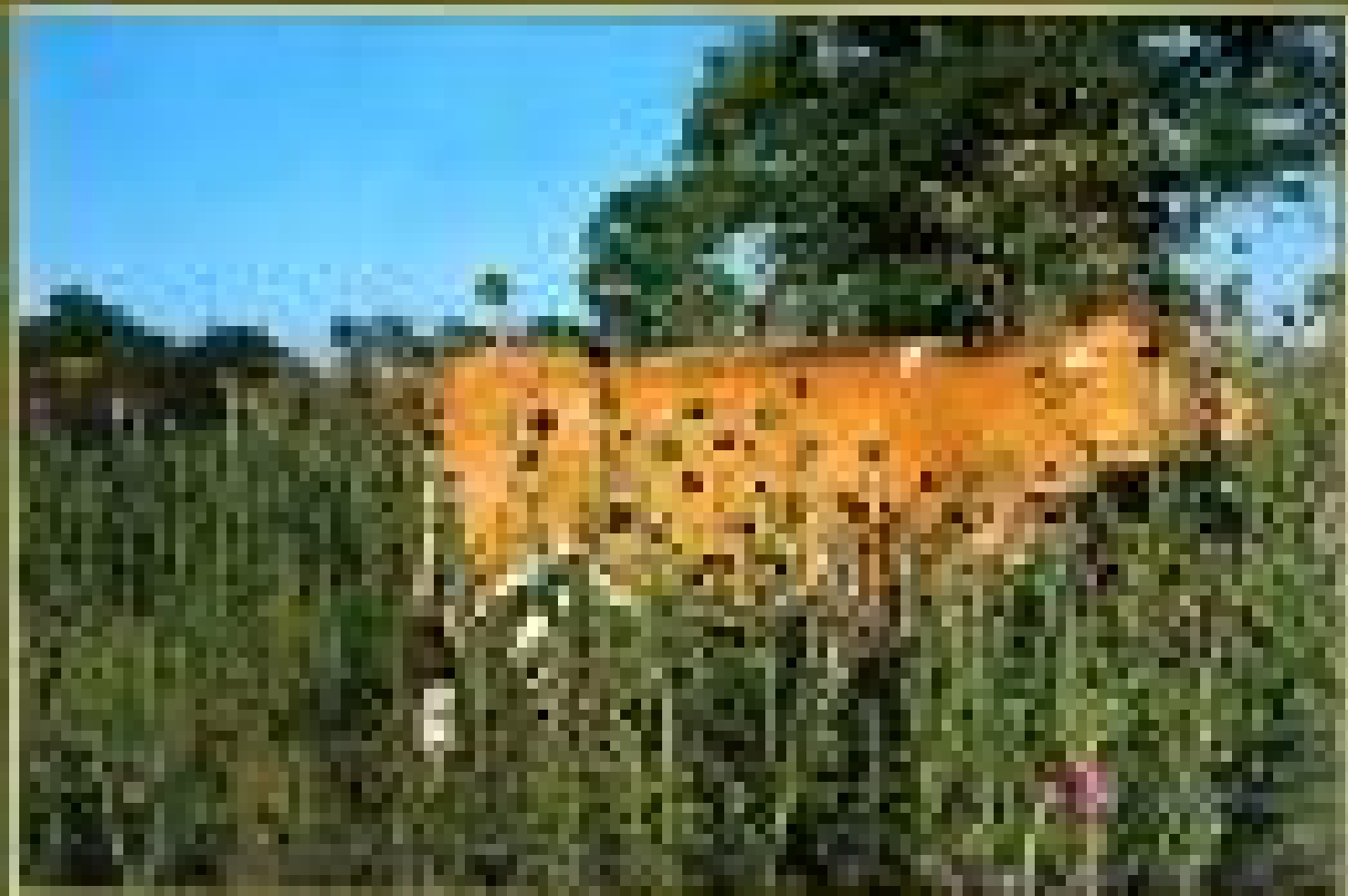
THE DARKROOM



THE DARKROOM

THE DARKROOM

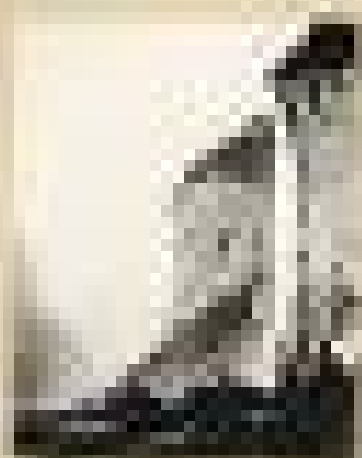
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САМЕРА



camera



camera



CAMERA



Case Report



СЭМЕРА

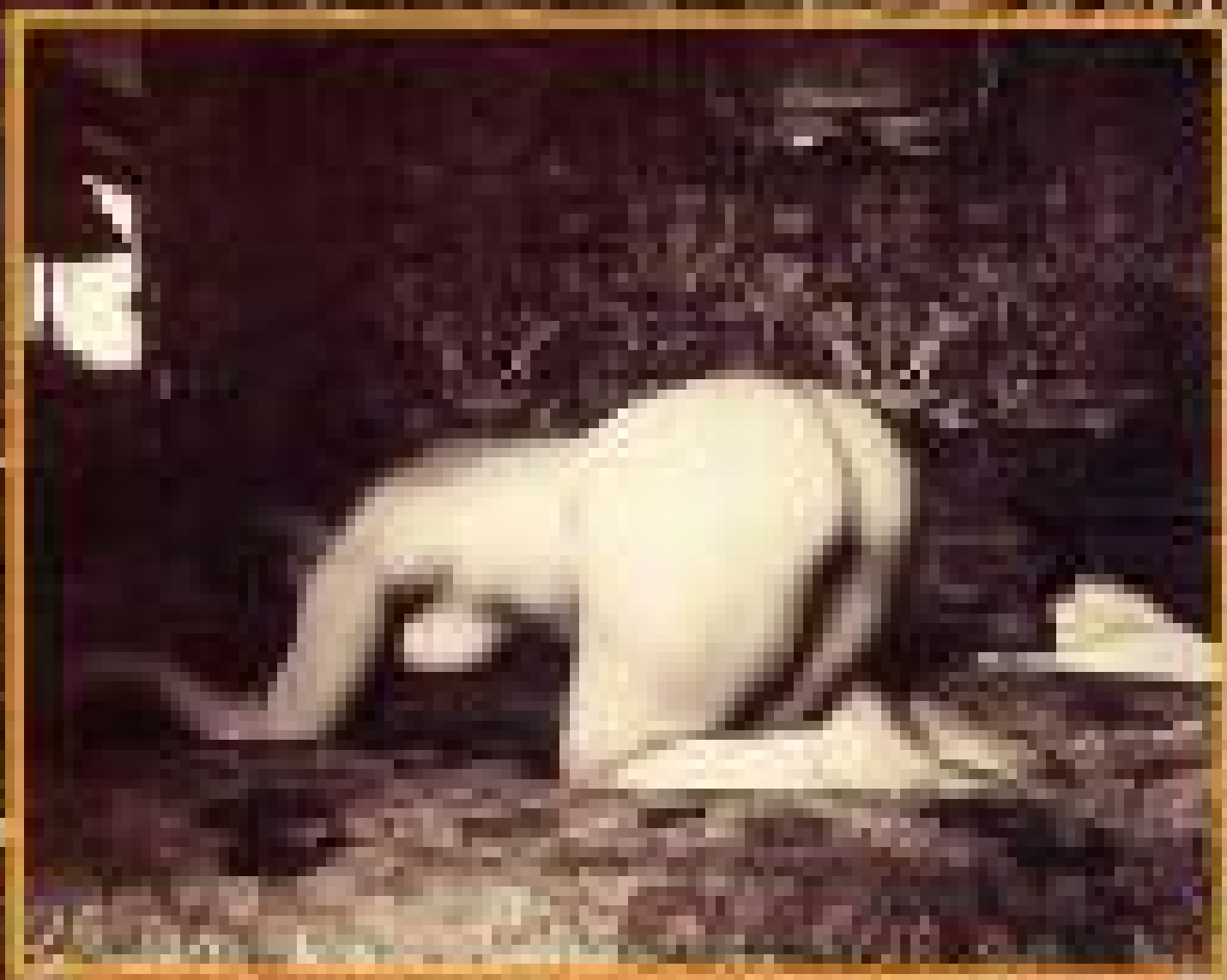


camera





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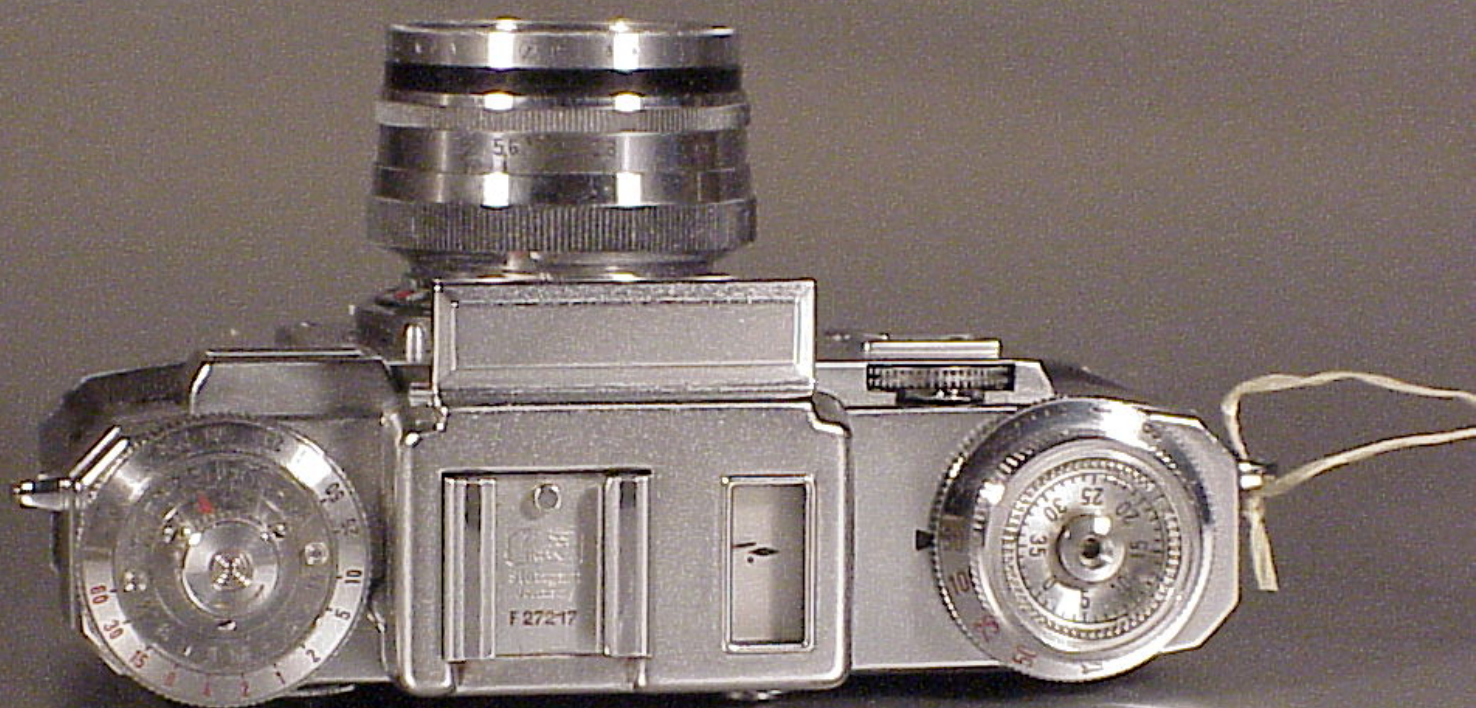
















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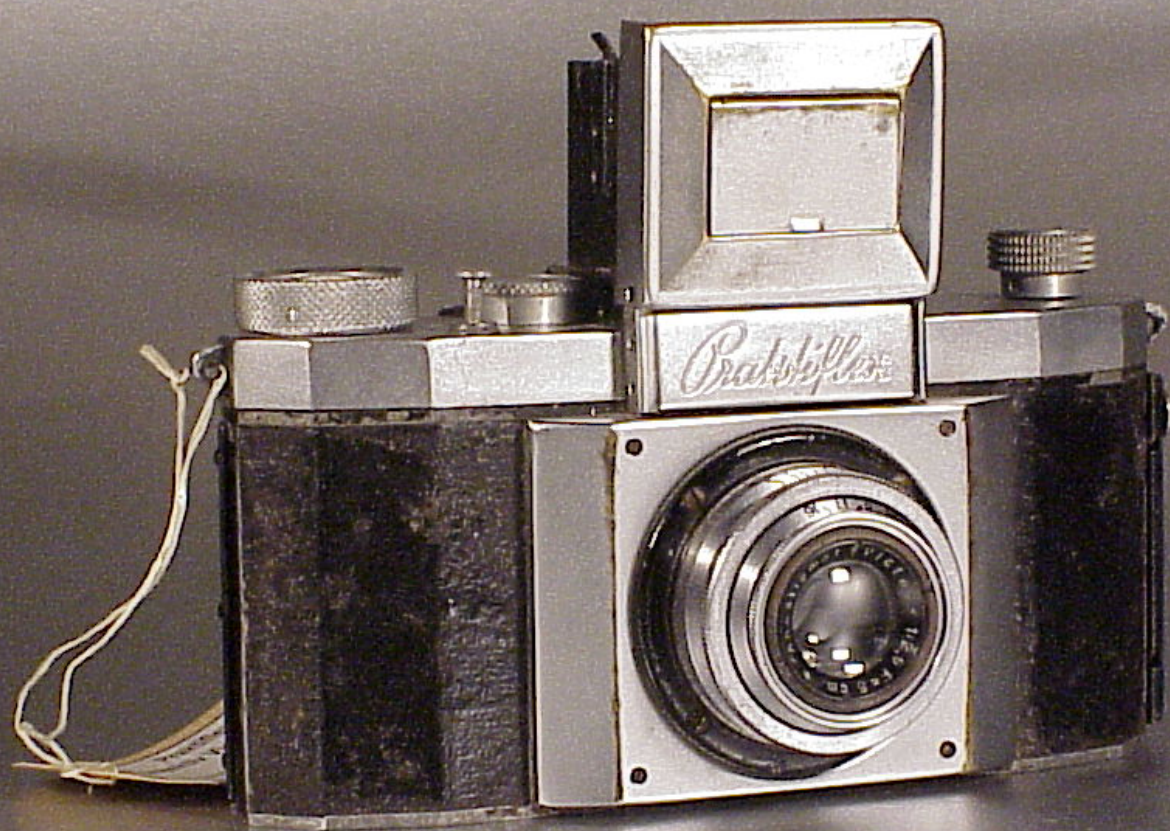














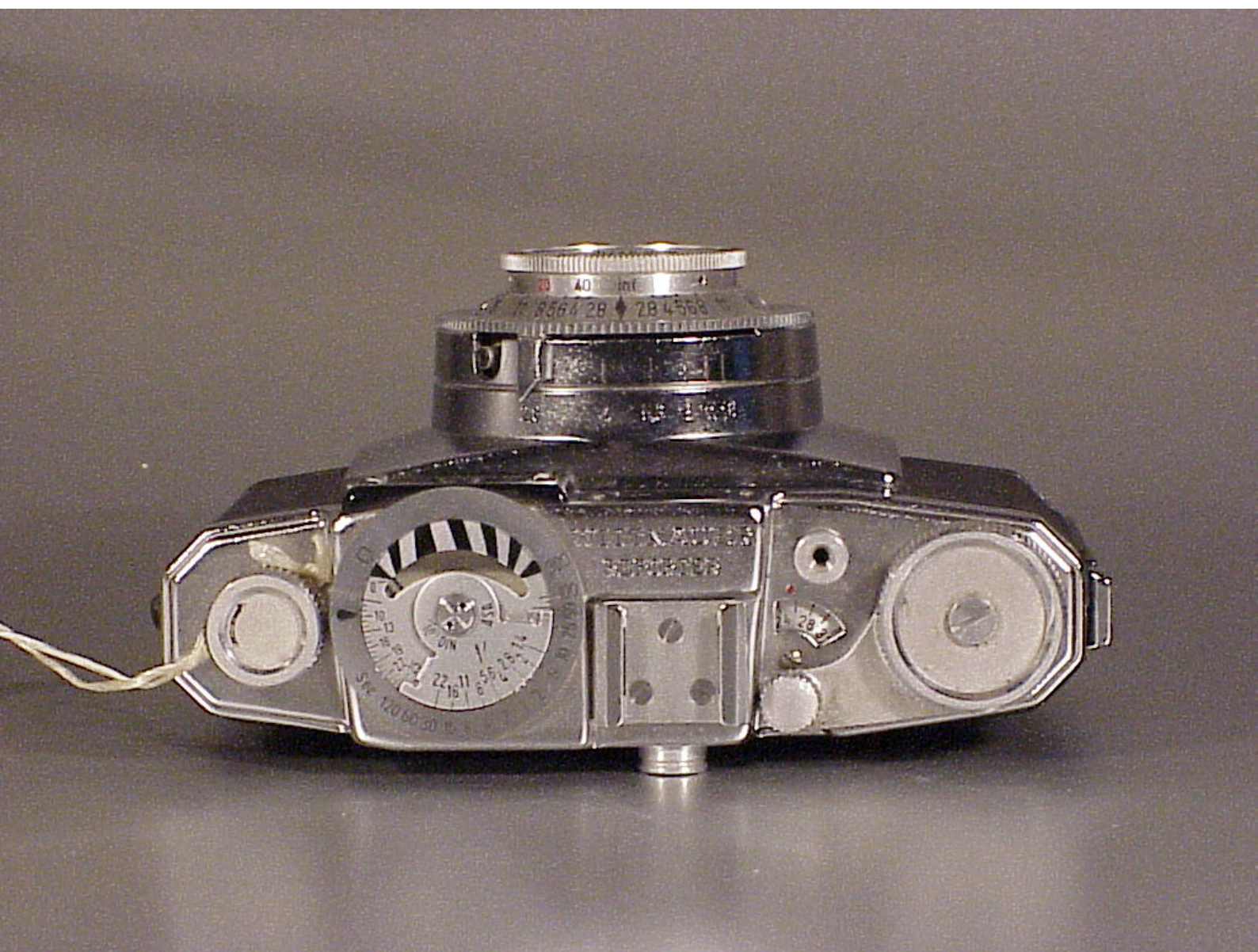




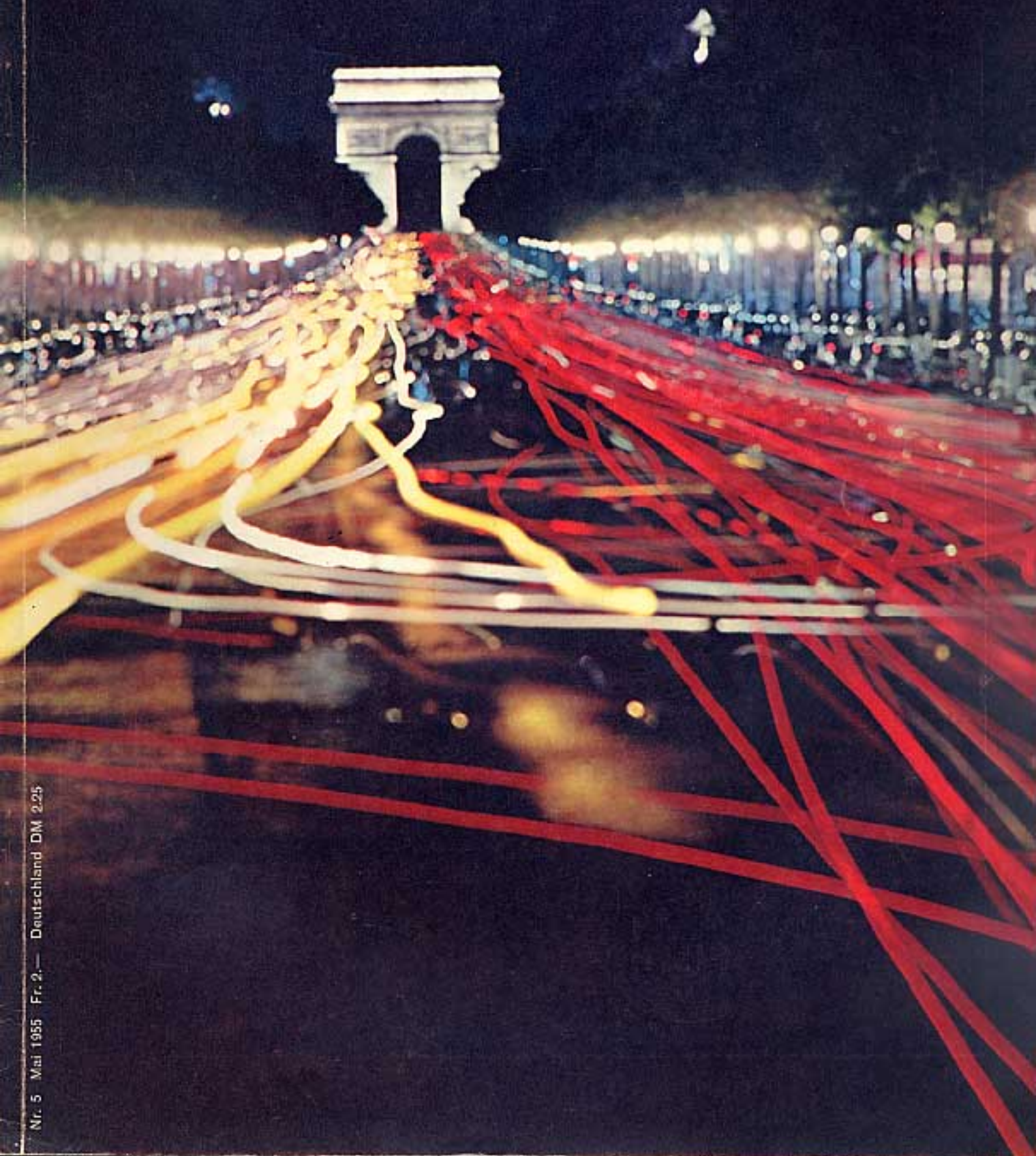




Wiltner Chronex
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VERO



camera



camera



Internationale Monatsschrift für Photographie und Film
International Magazine
for Photography and Motion Picture
Revue mensuelle internationale de la photographie
et du film

Juli 1953
Nr. 7 / 32. Jahrgang
Schweiz Fr. 2.—
Ausland Fr. 2.50
Deutschland DM 2.25

English edition

Aerial Photography

camera



camera



camera



camera



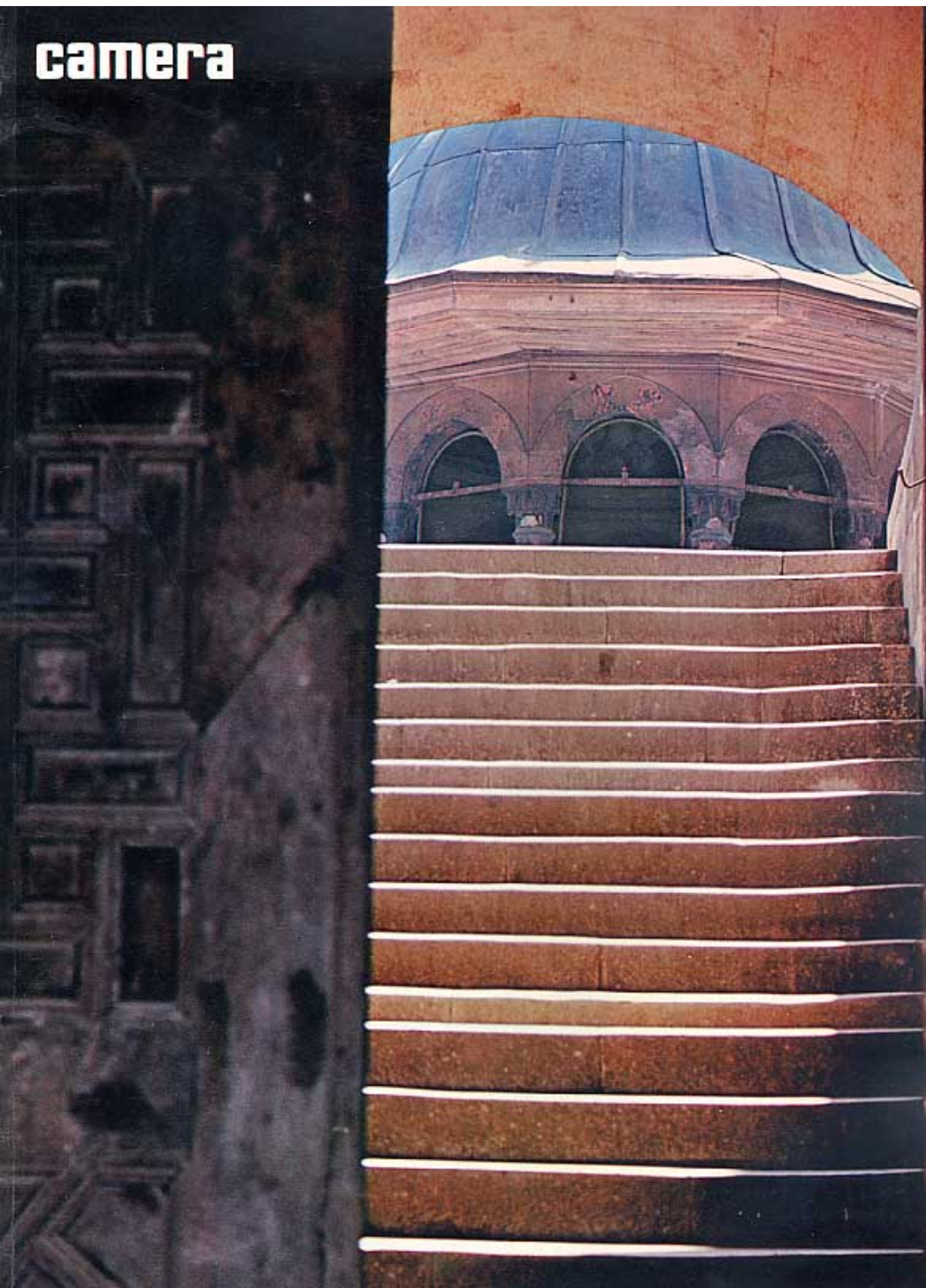
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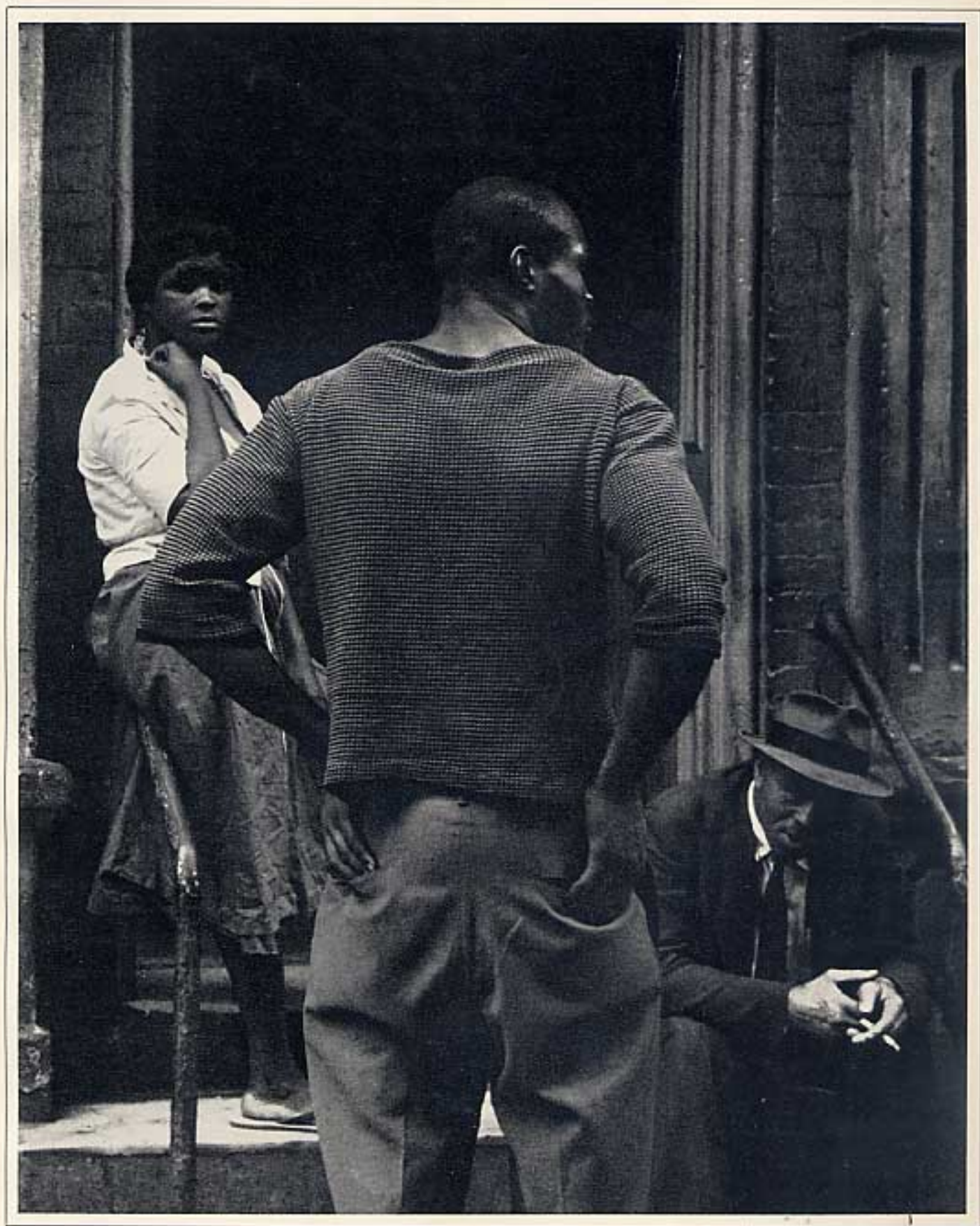
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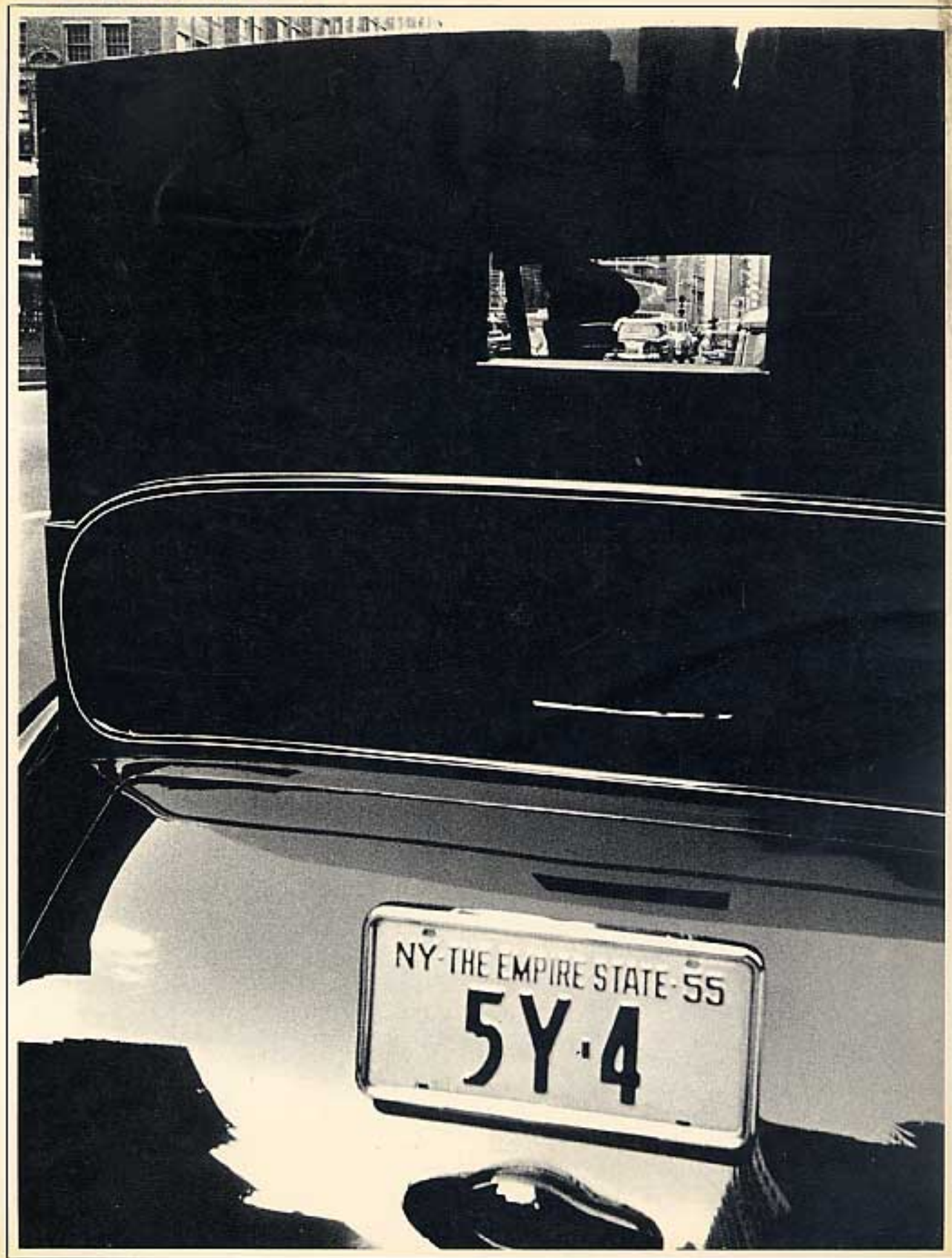
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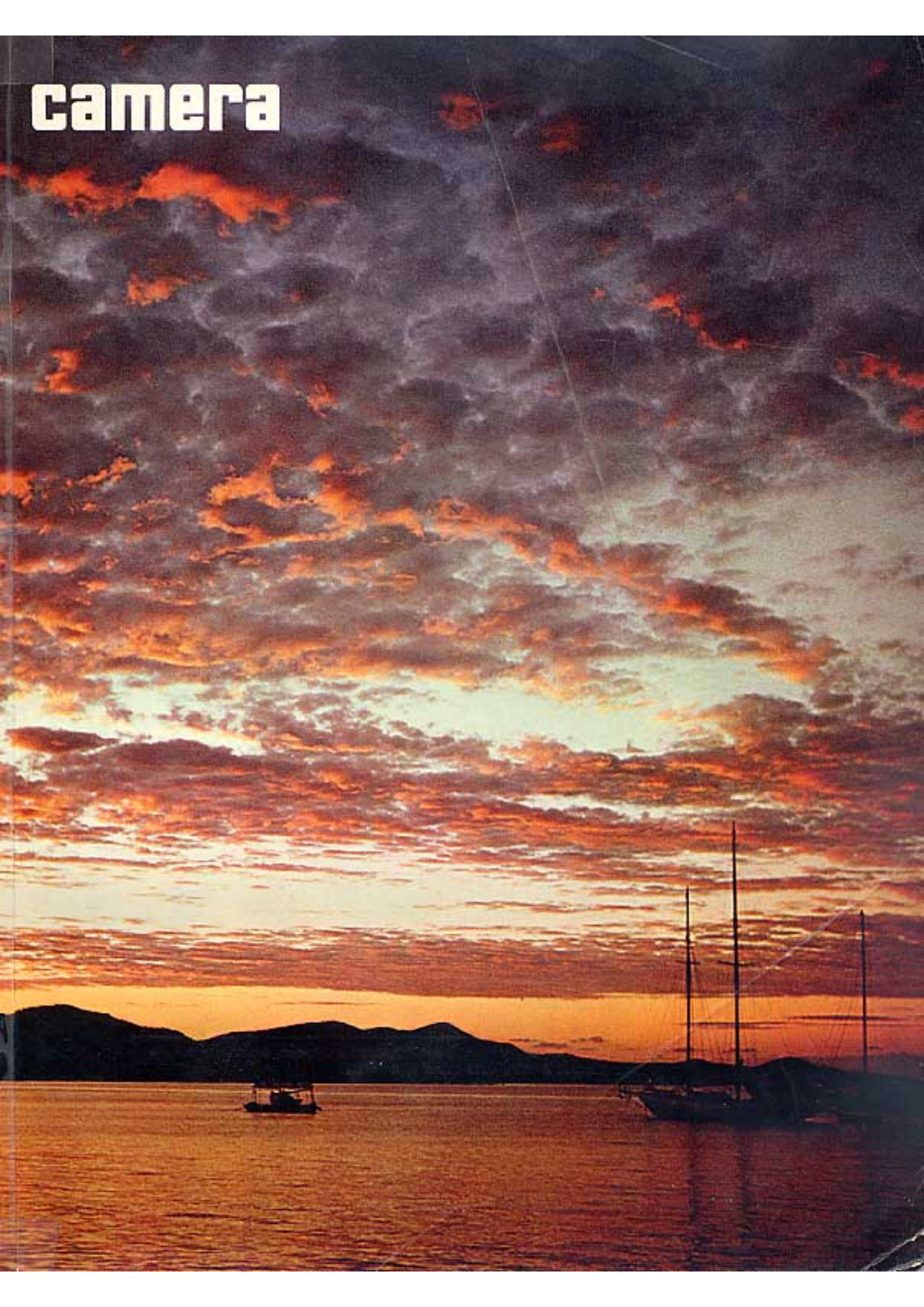
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ACME No.9

\$ 1.50



camera



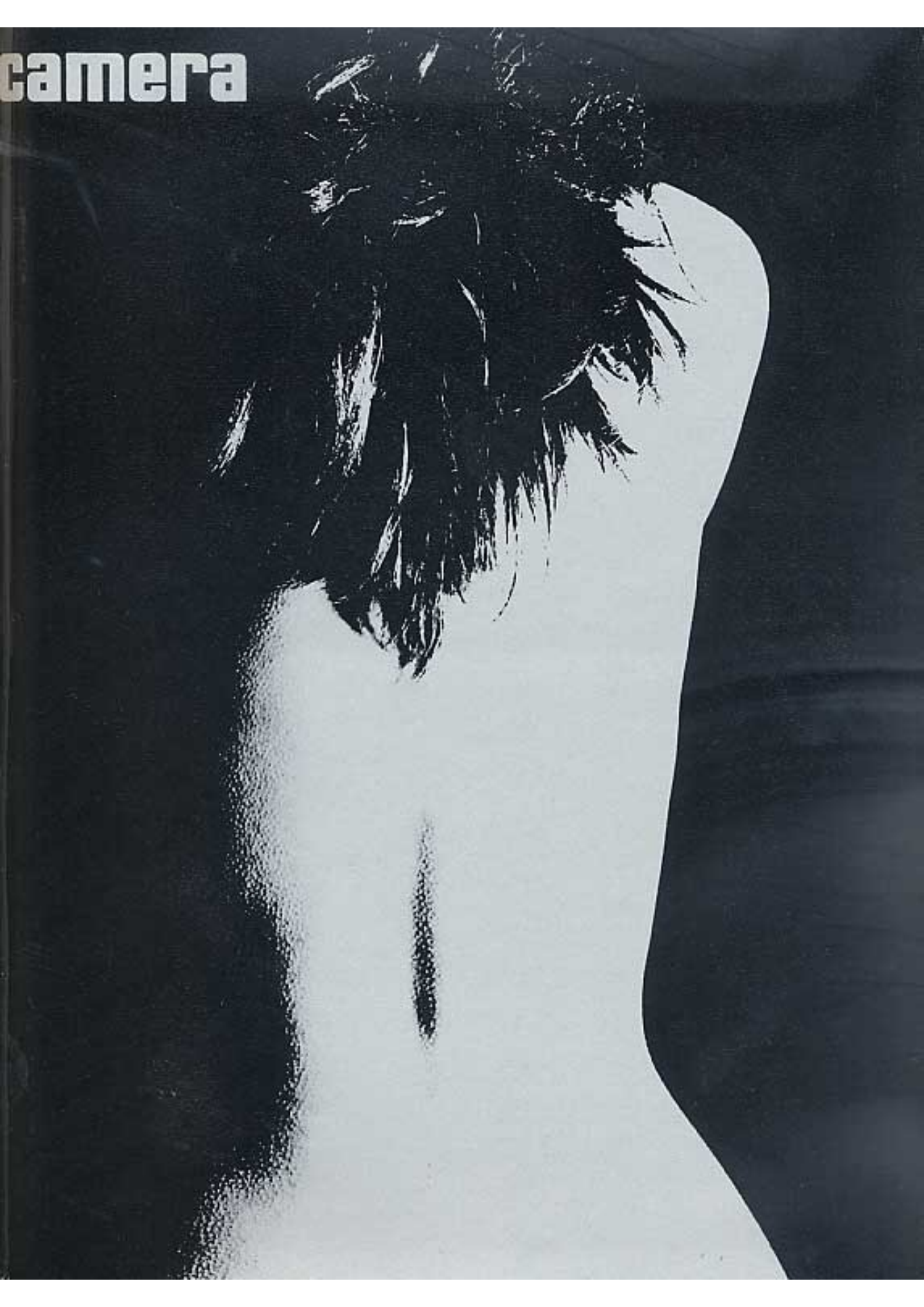
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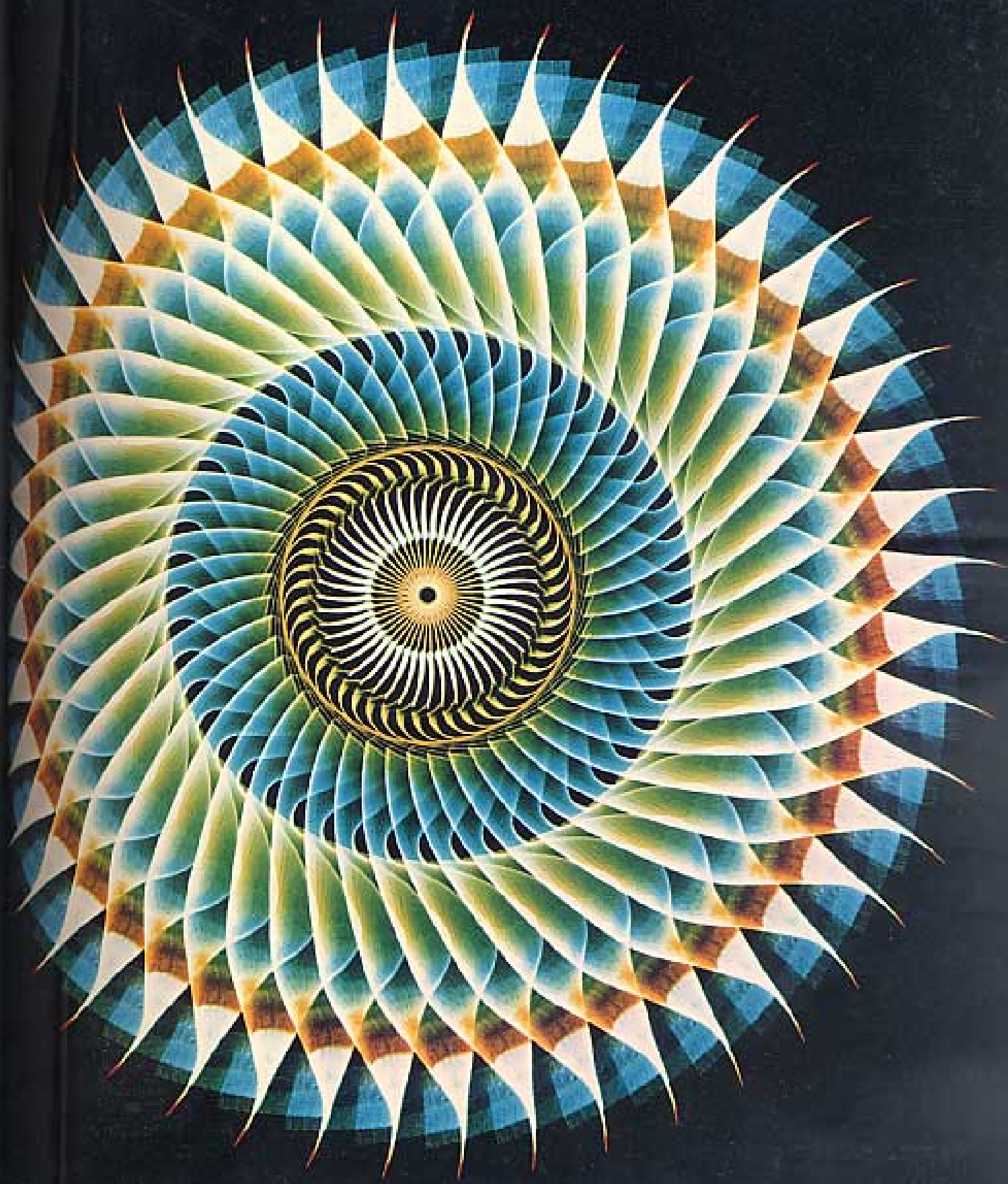
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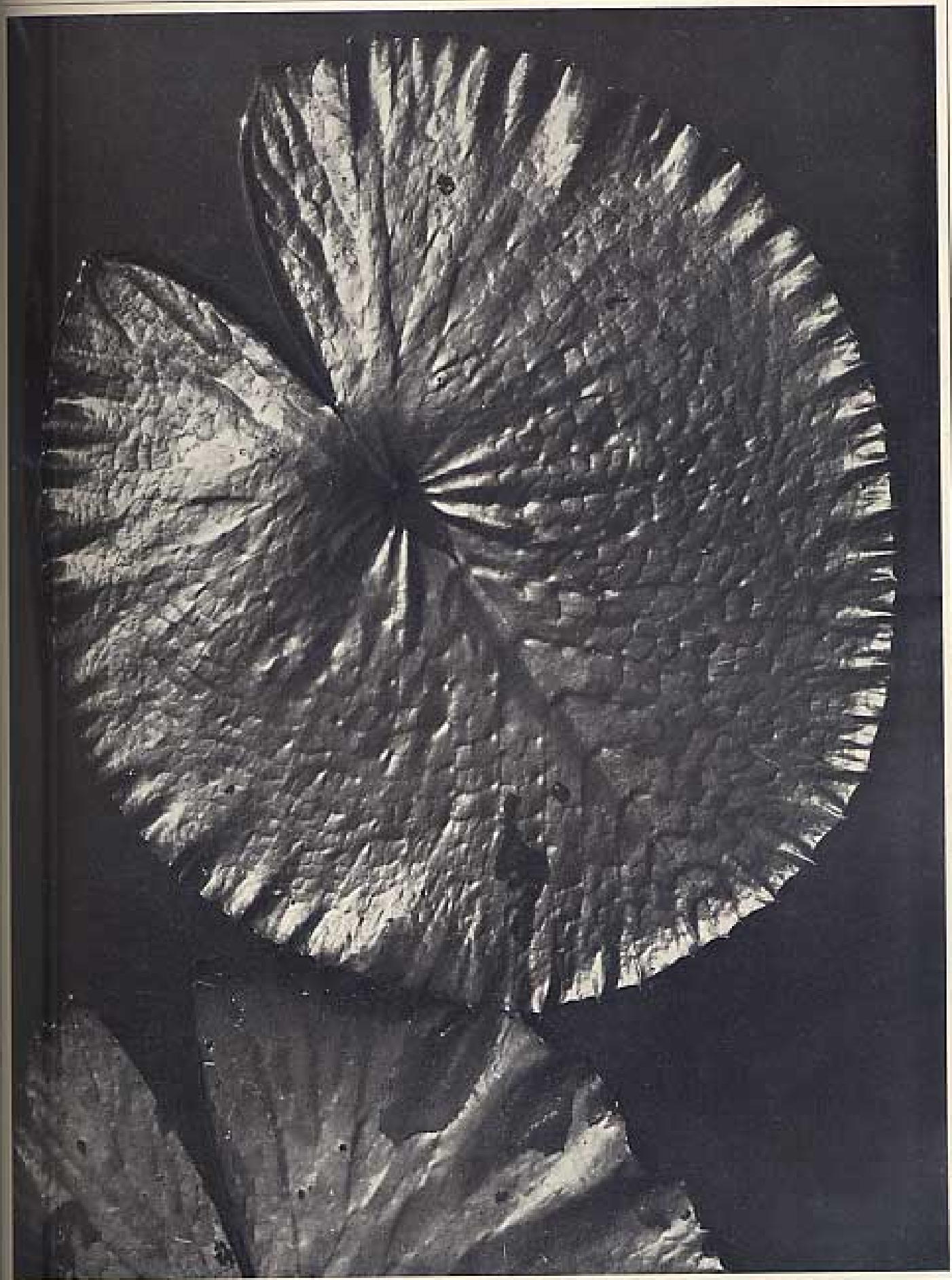
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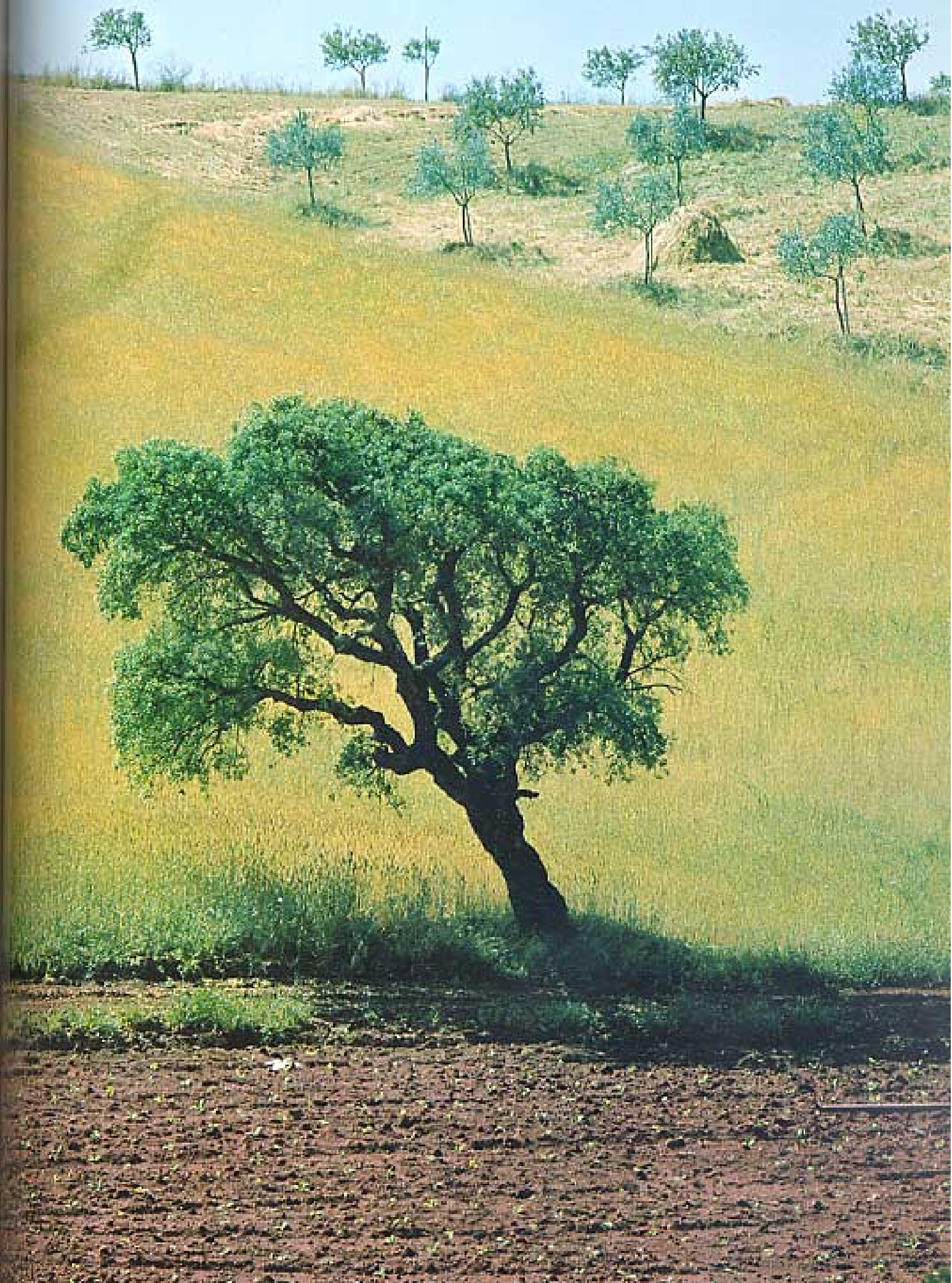
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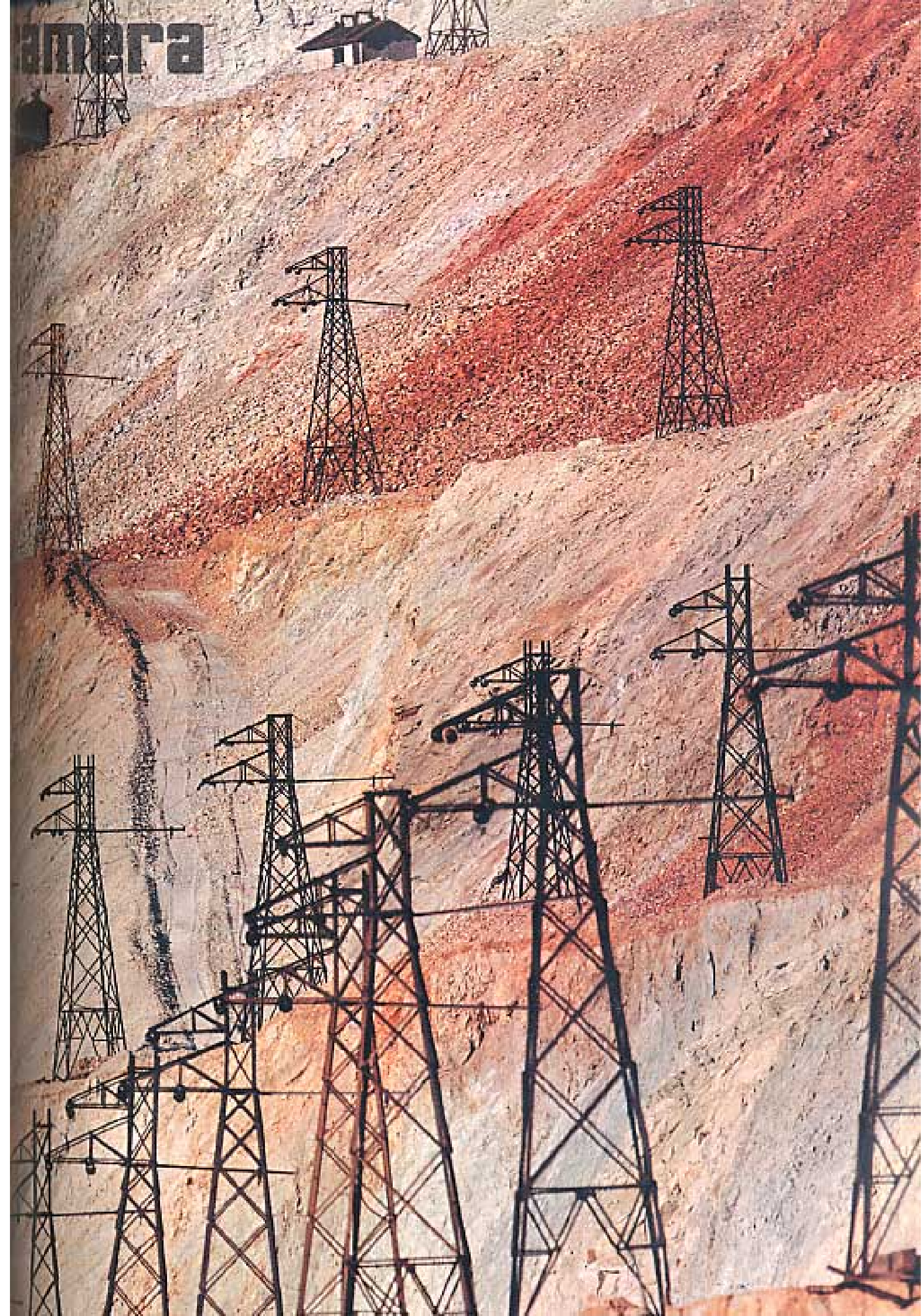
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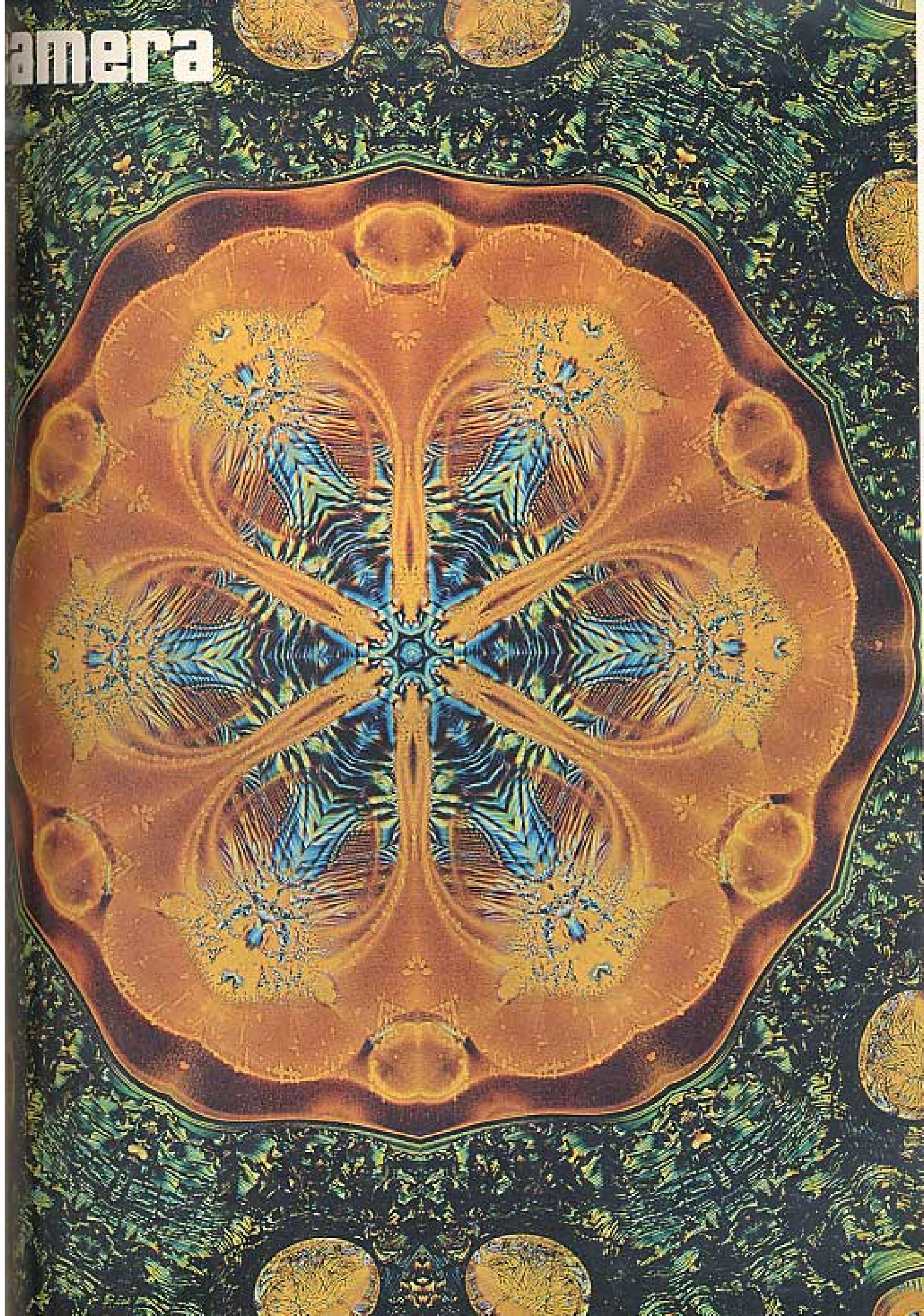
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P S T NO BILLS

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amera



camera



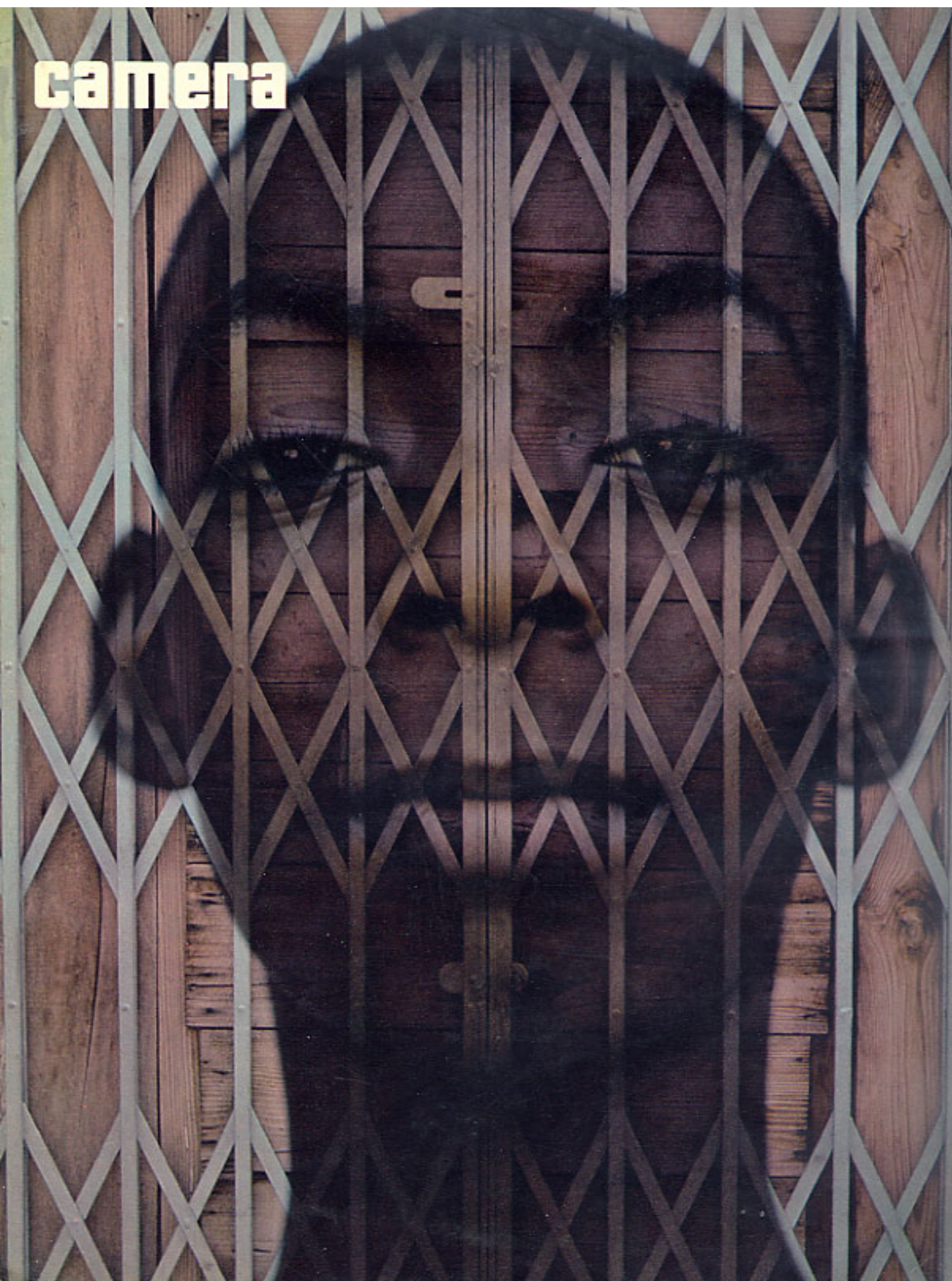
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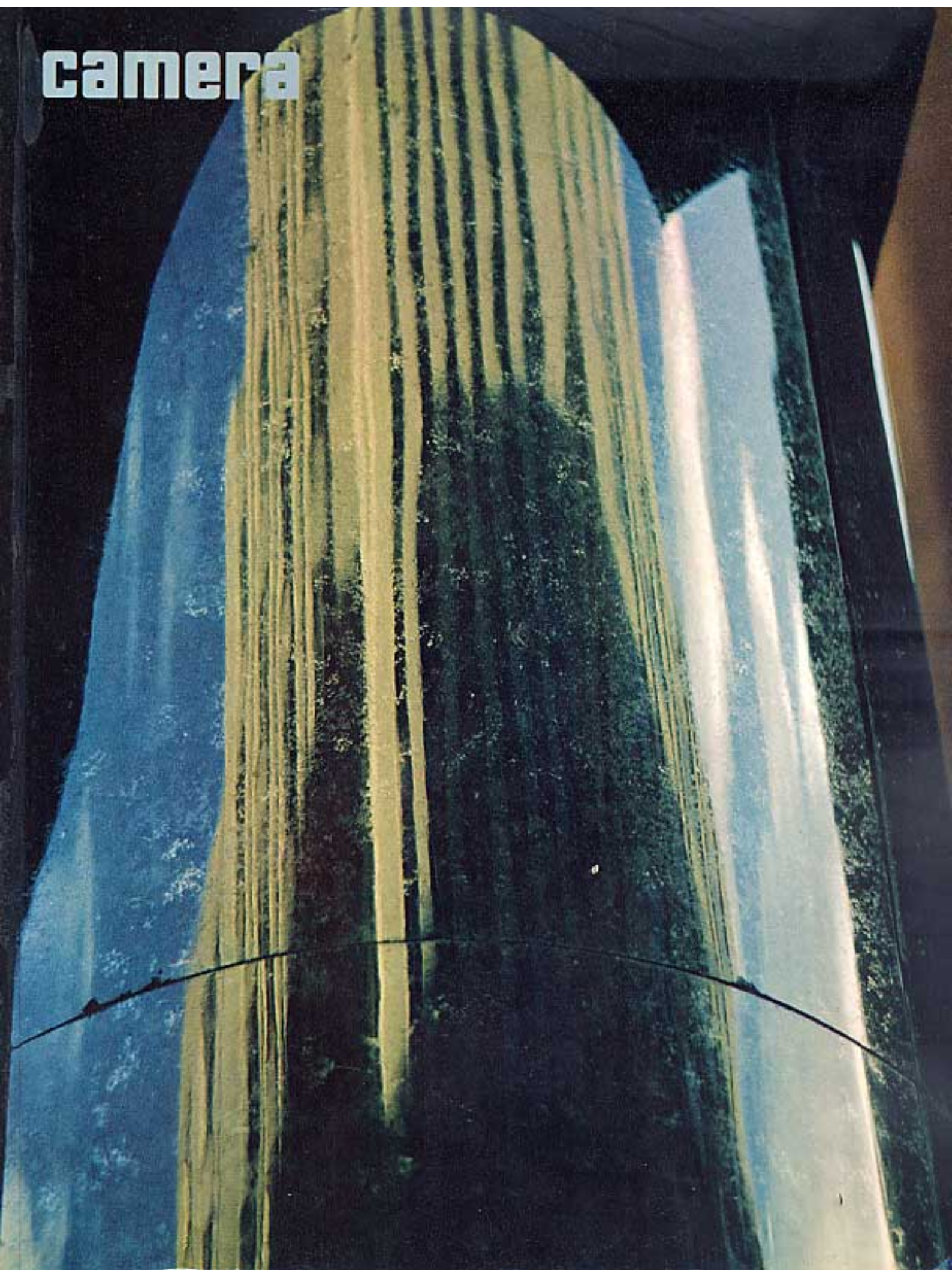
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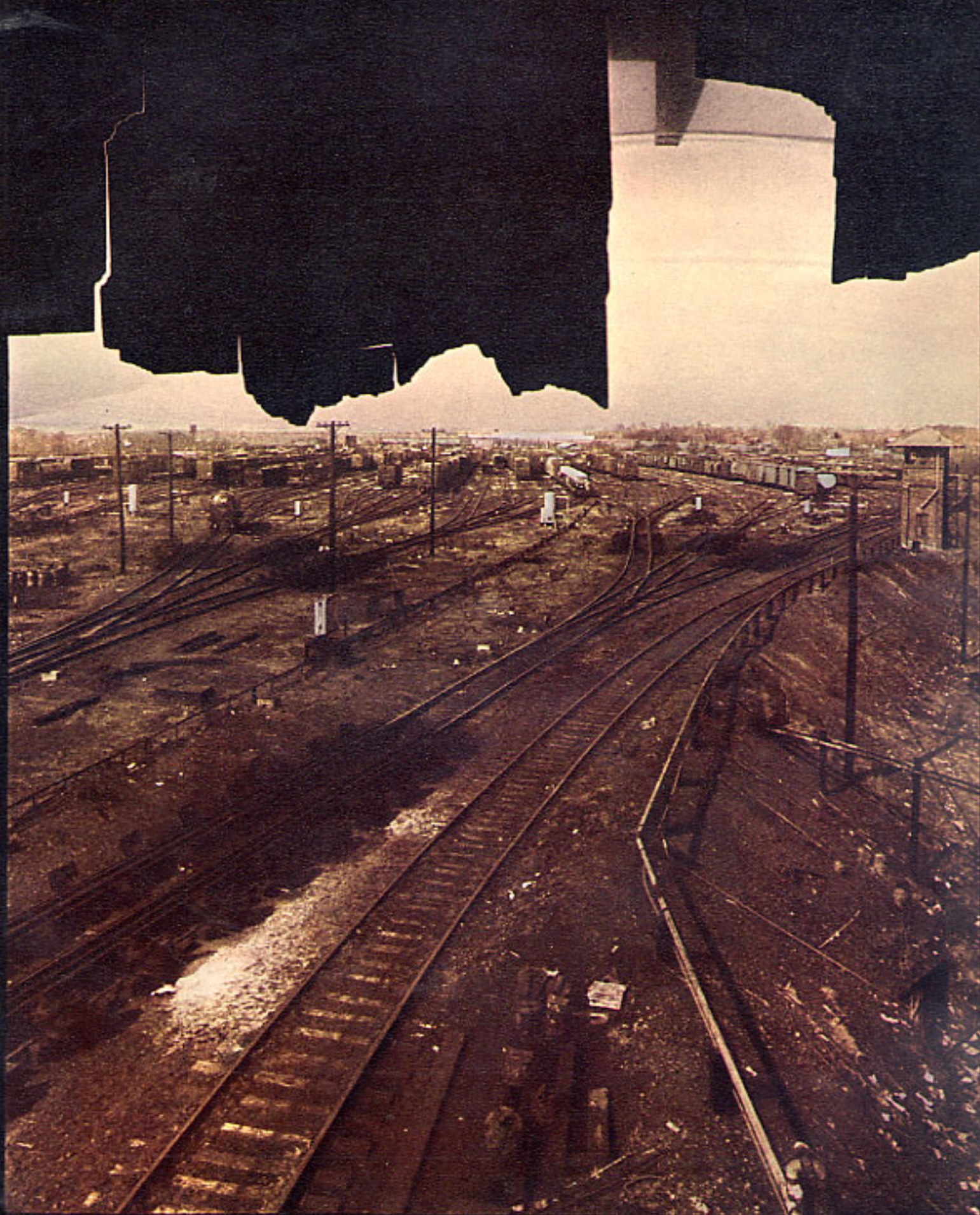
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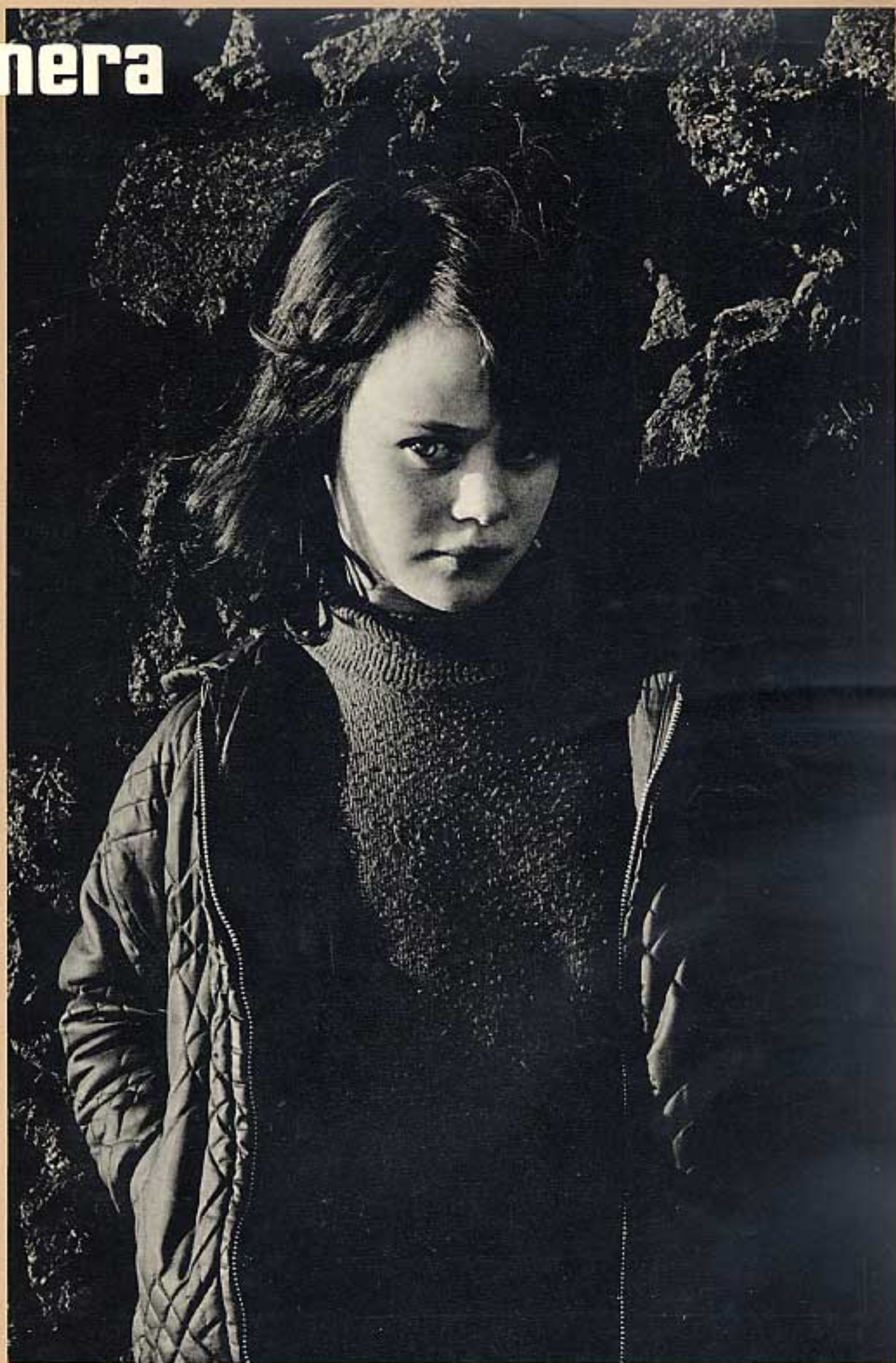
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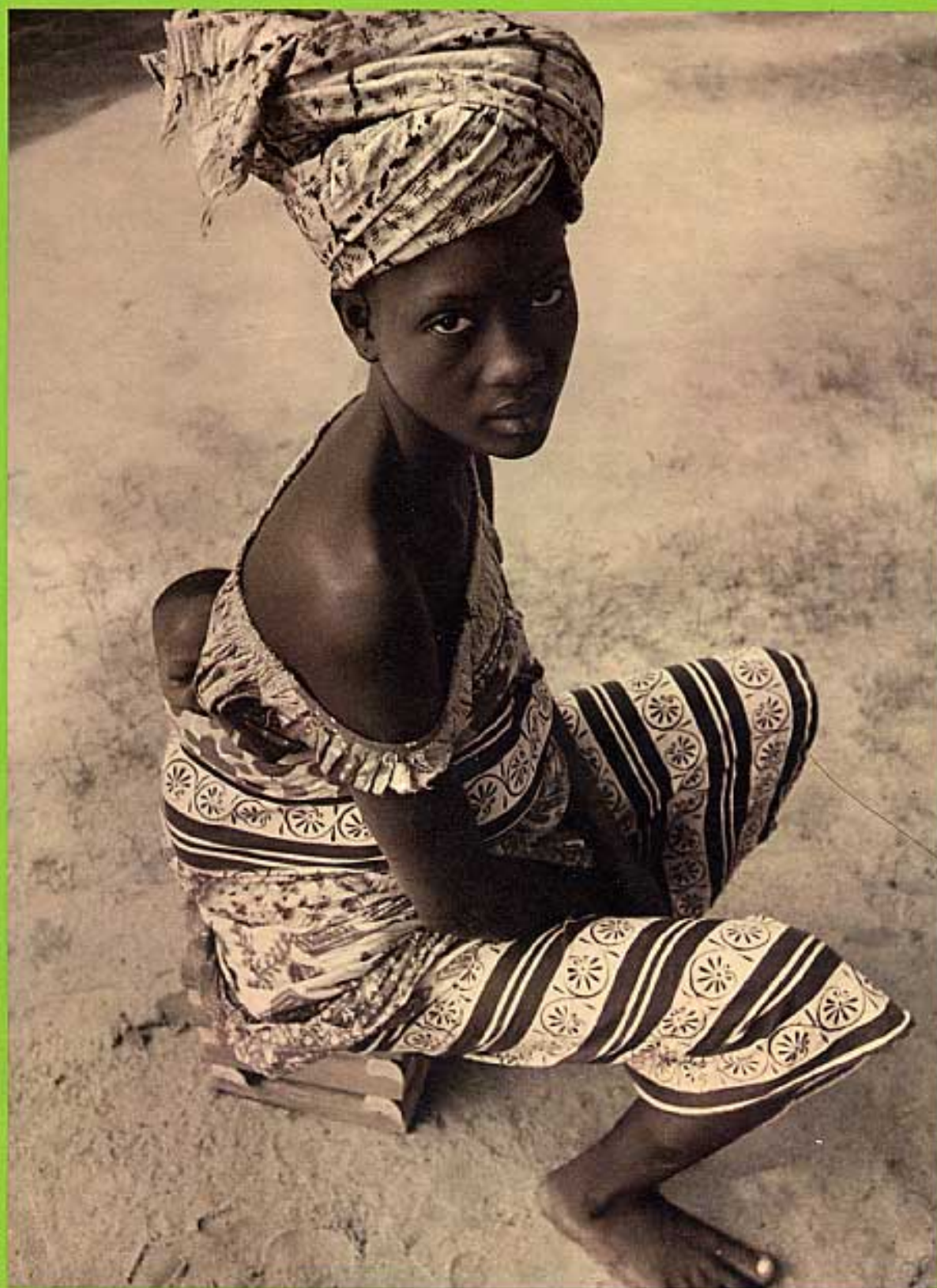
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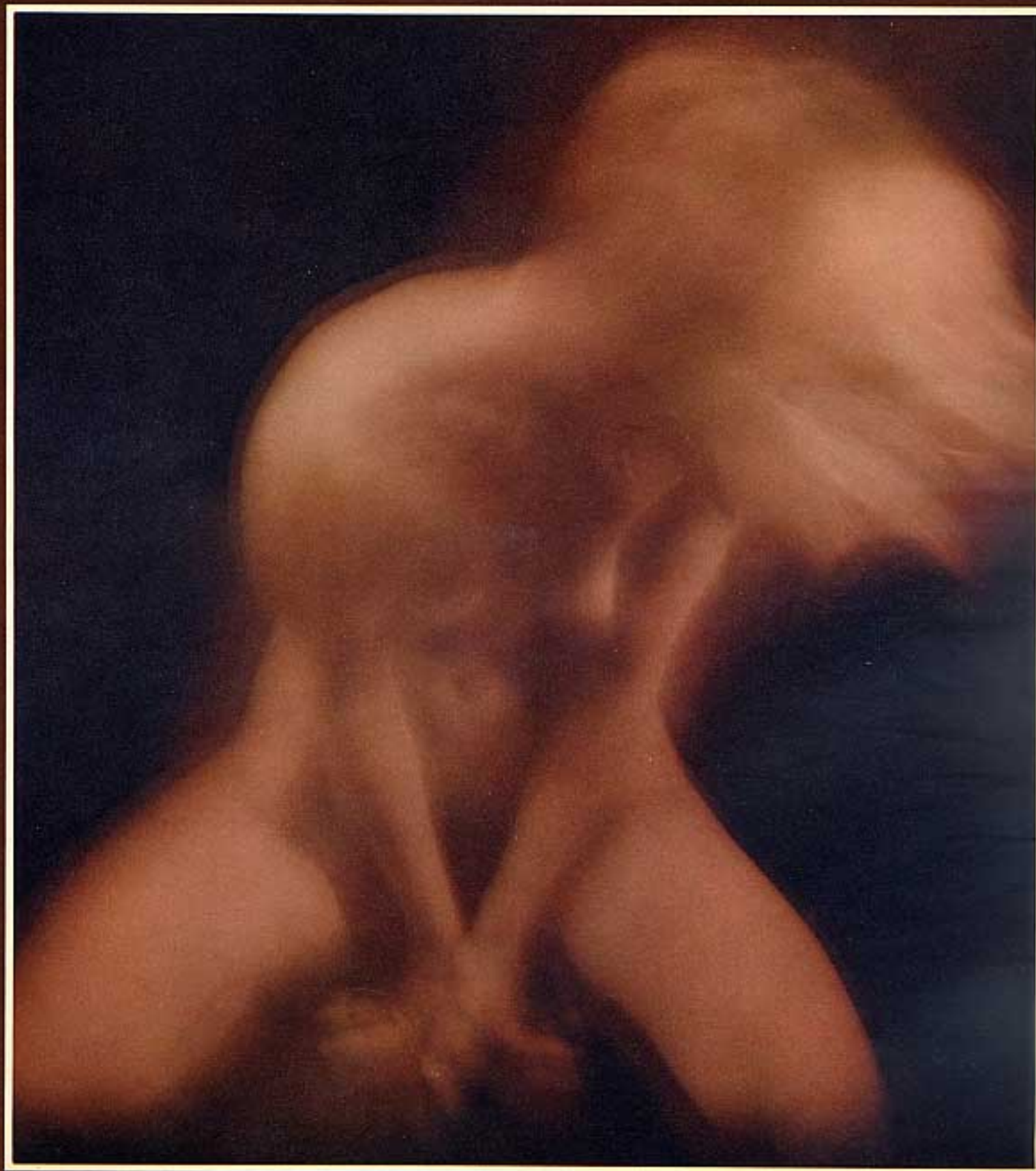
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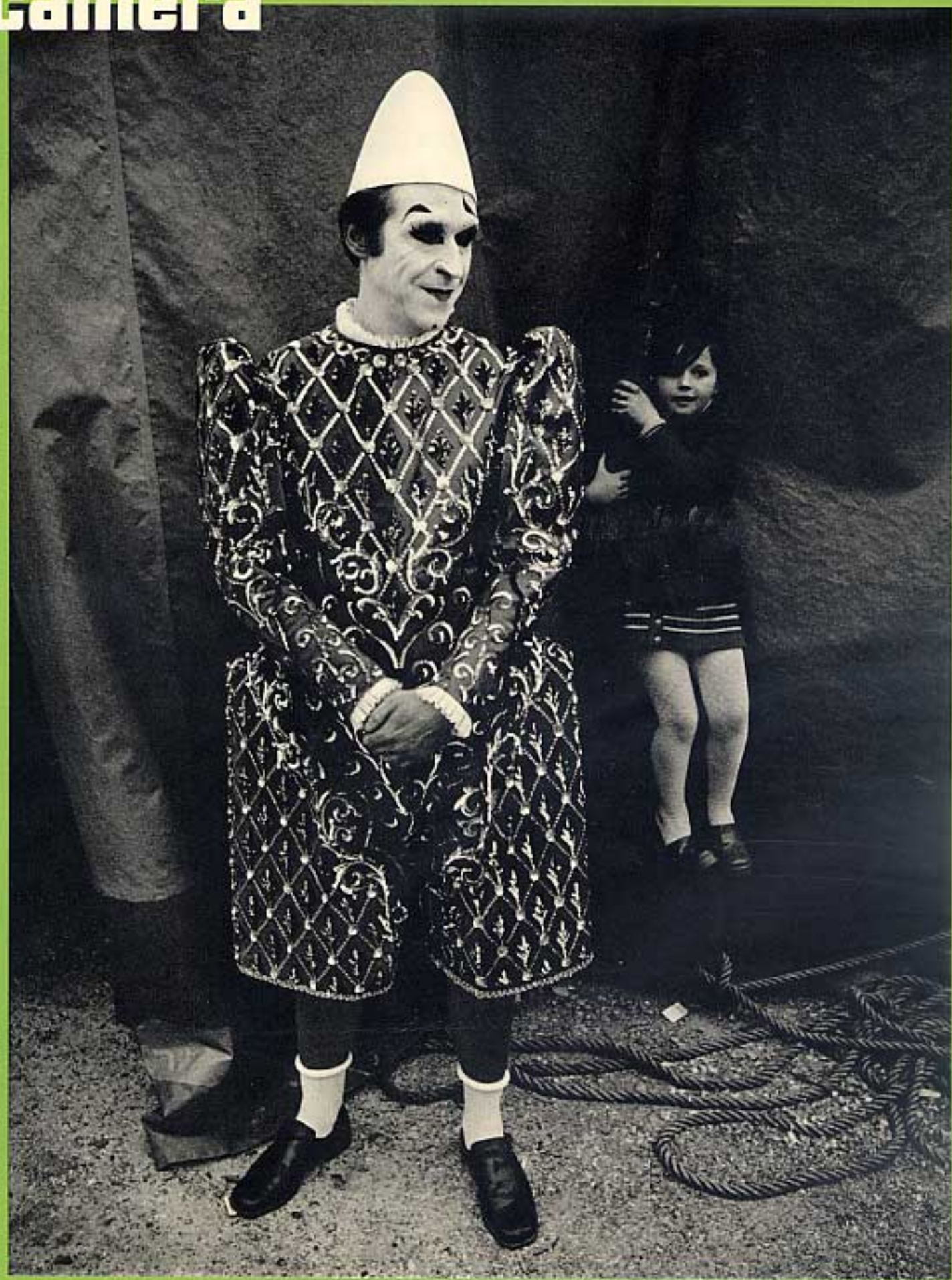
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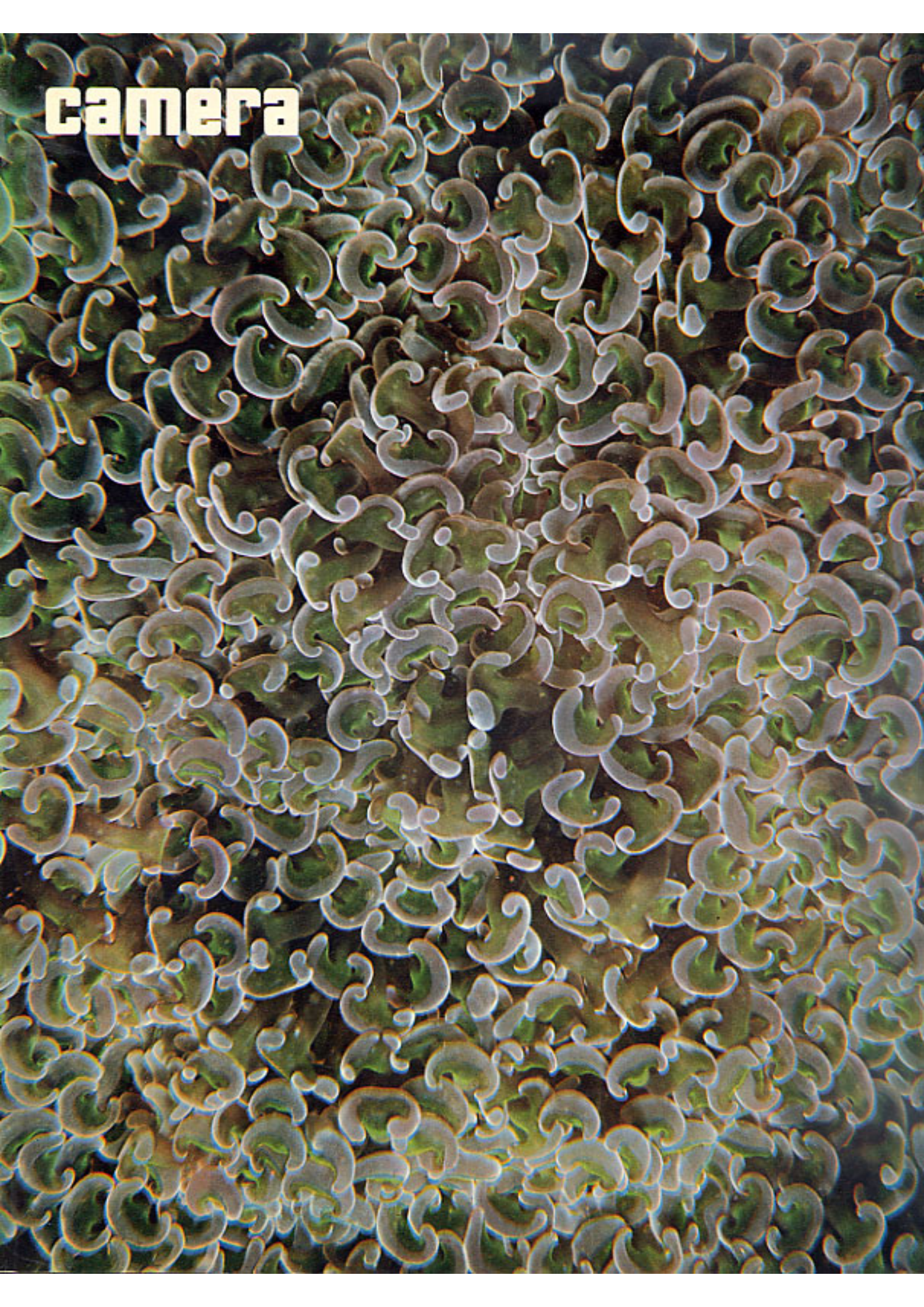
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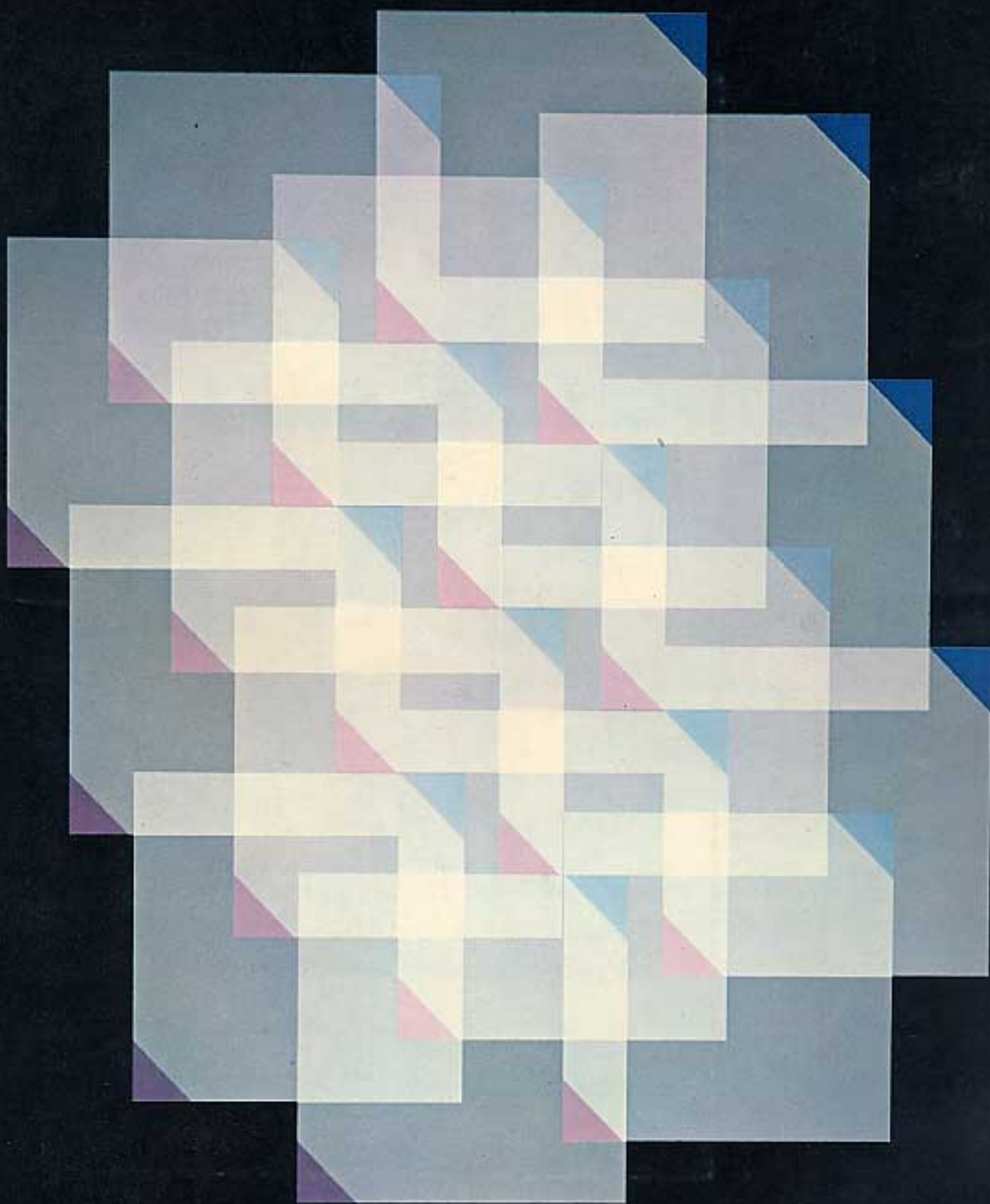
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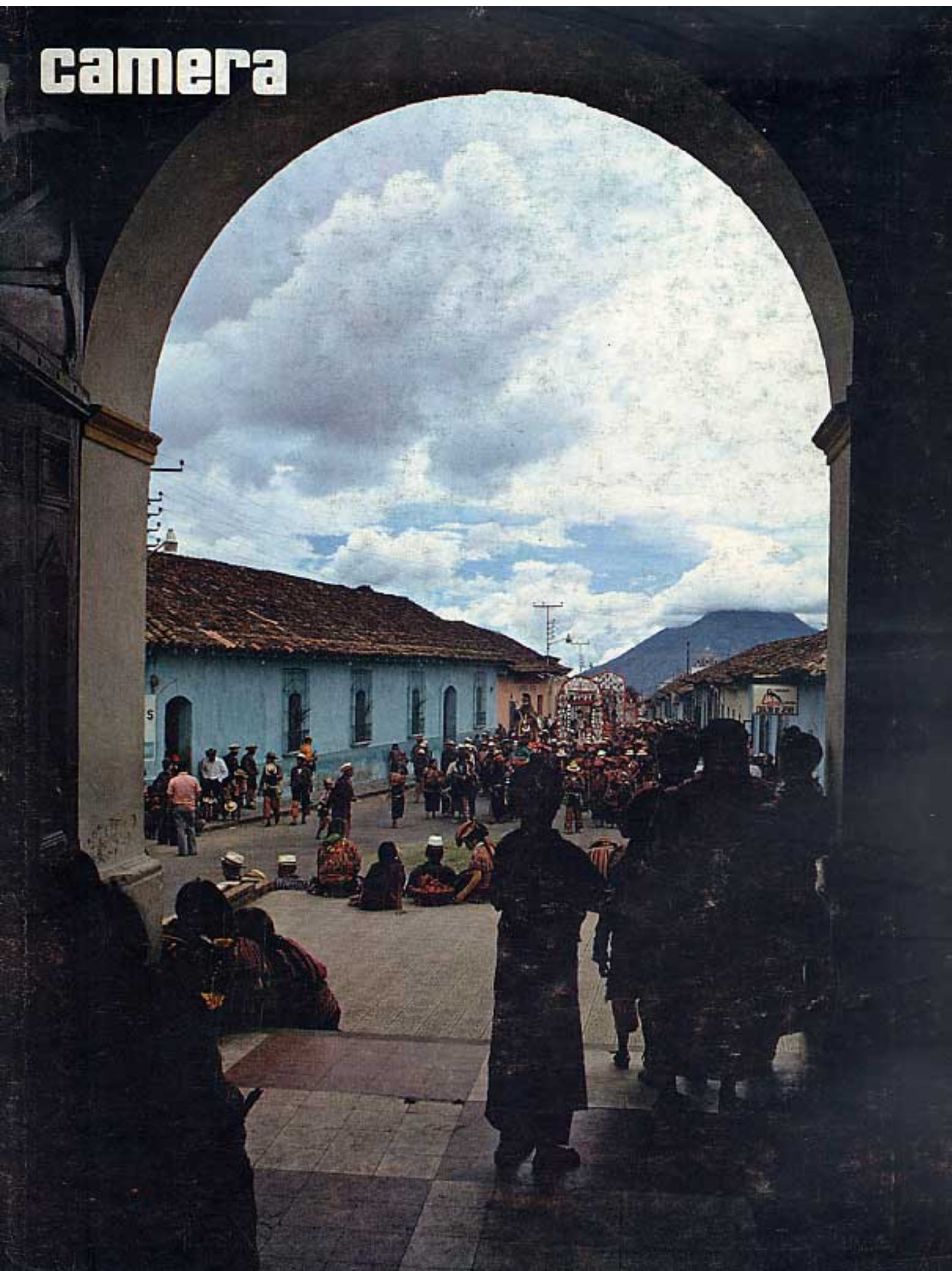
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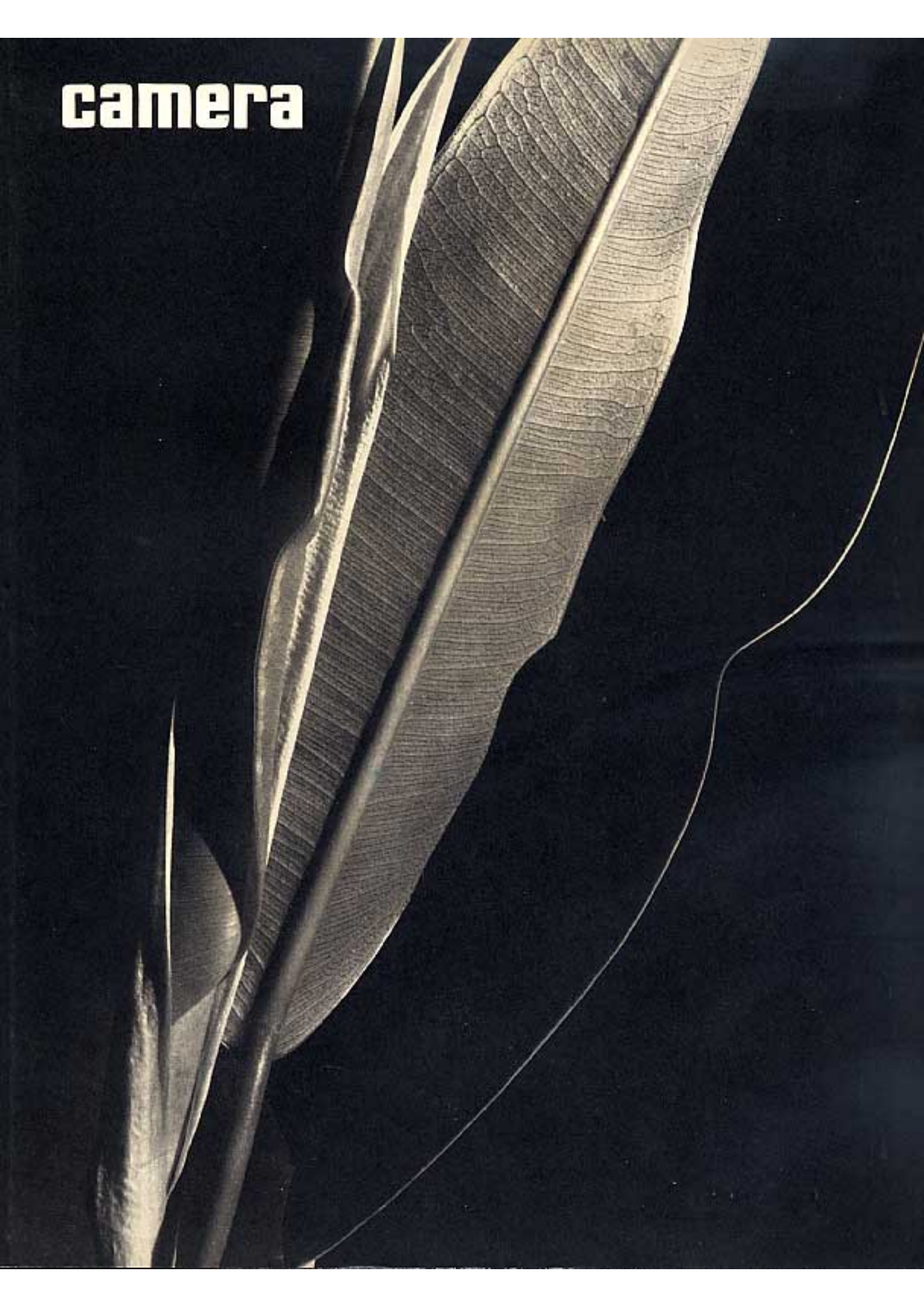
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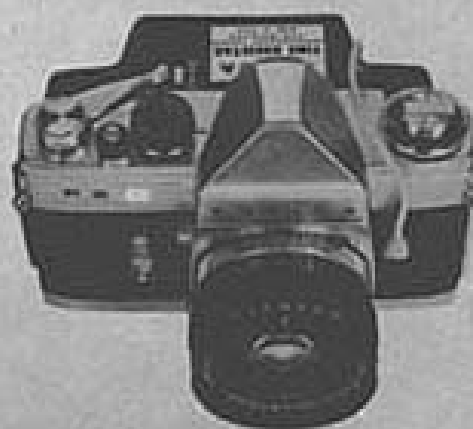


時をきざむカメラ

コニカのスケールを拡げる特殊カメラ



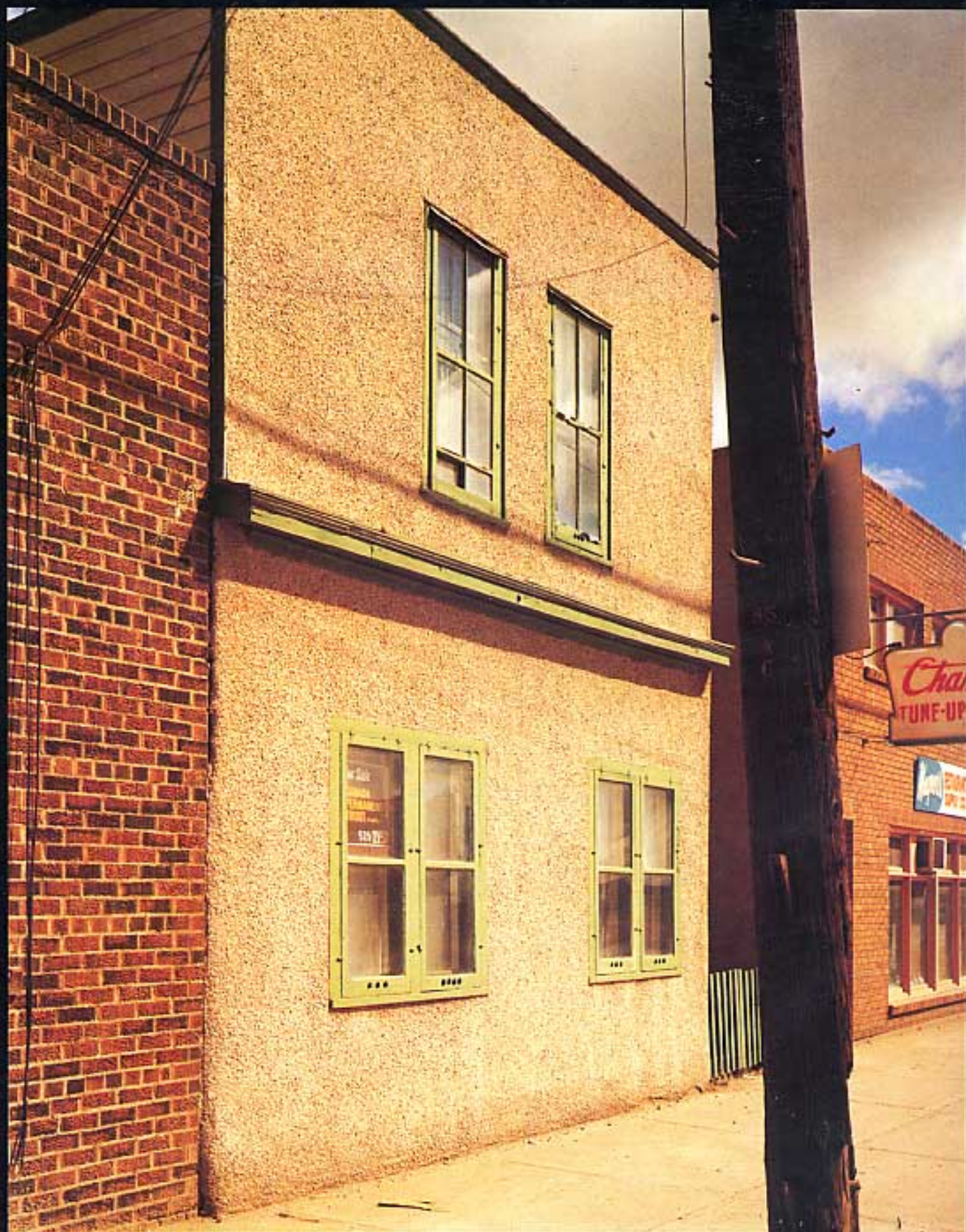
何日？何時何分？一秒も記録します。
決定的瞬間を、時間といっしょにのこします。画面の右上に時計の文字盤を写しこみます。小西六の技術がつくりあげた特殊カメラ。警察で用いられ、犯罪現場の記録に重要な役割をはたしています。その他、秒数を争うレース写真、時間的整理が必要な記録など広い範囲に大活躍、普通の一級レフカメラとしても使えます。



●コニカFS ¥34,800 / コニカタイムレスタ- ¥43,400 / キャリングバッグ ¥5,300 / アングルファインダー ¥4,200

コニカ FSW

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camera



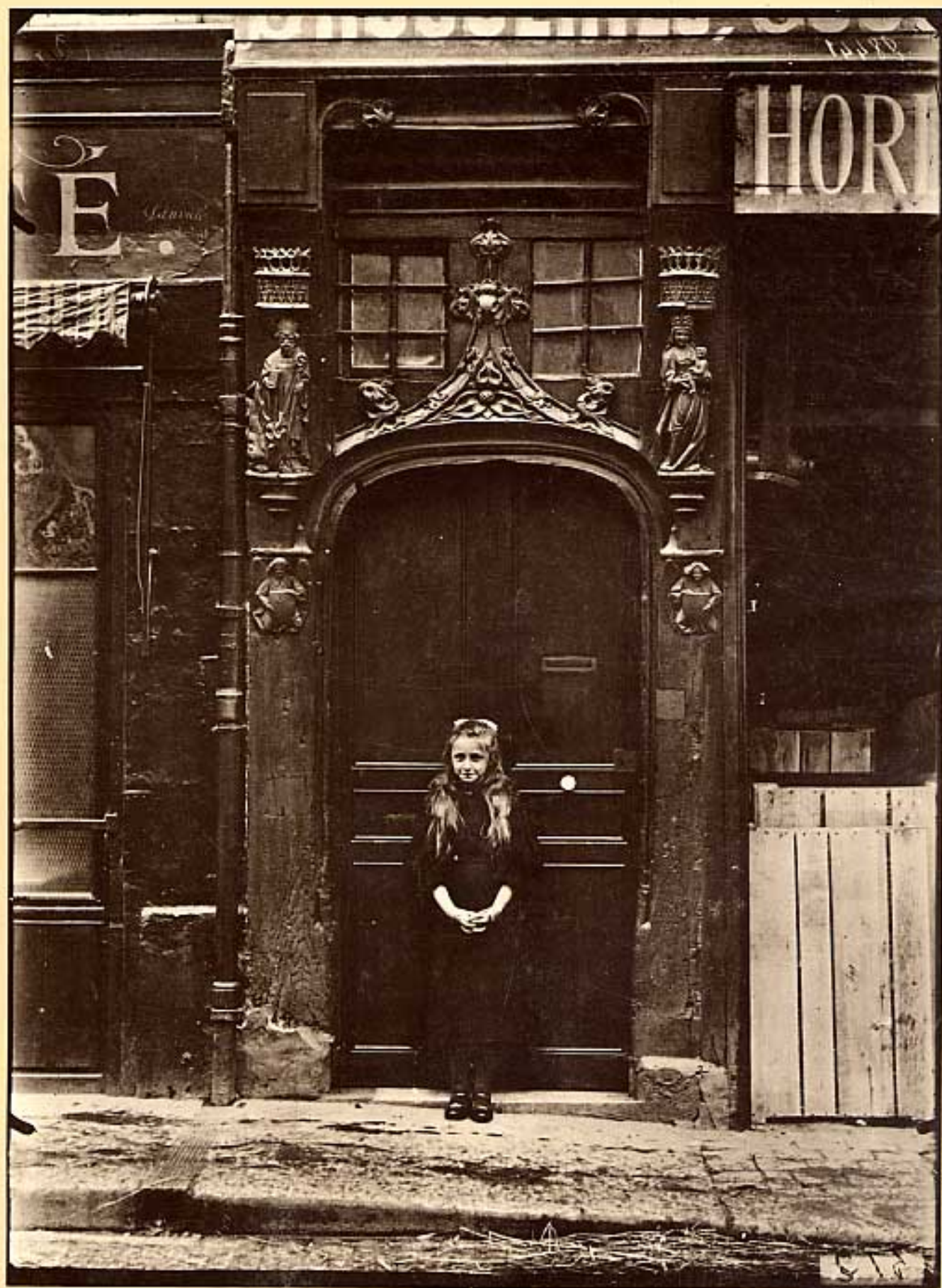
camera



camera



camera



camera



camera



Contents

Nomenclature	4
Mercury Battery	10
Battery Check	10
Cocking, Lever and Film Counter	11
Film Loading	12
EE Photography	16
Correct Exposure Range and Warning Signals	20
Changes in Picture Size	22
Focusing and Viewfinder	24
Film Rewind	26
Selftimer Operation	27
Interchanging of Lenses	28
When Electric Eye Is Not in Use	30
Override Button	31
Synchroflash Photography	32
Bulb (B) Exposure	34
Use of Filters	35
Depth of Focus	36
Manual Aperture	37
Hexanon Interchangeable Lenses for Konica Auto-Reflex	38
Accessories to Konica Auto-Reflex	41
Specifications for Konica Auto-Reflex	43

Inhaltsverzeichnis

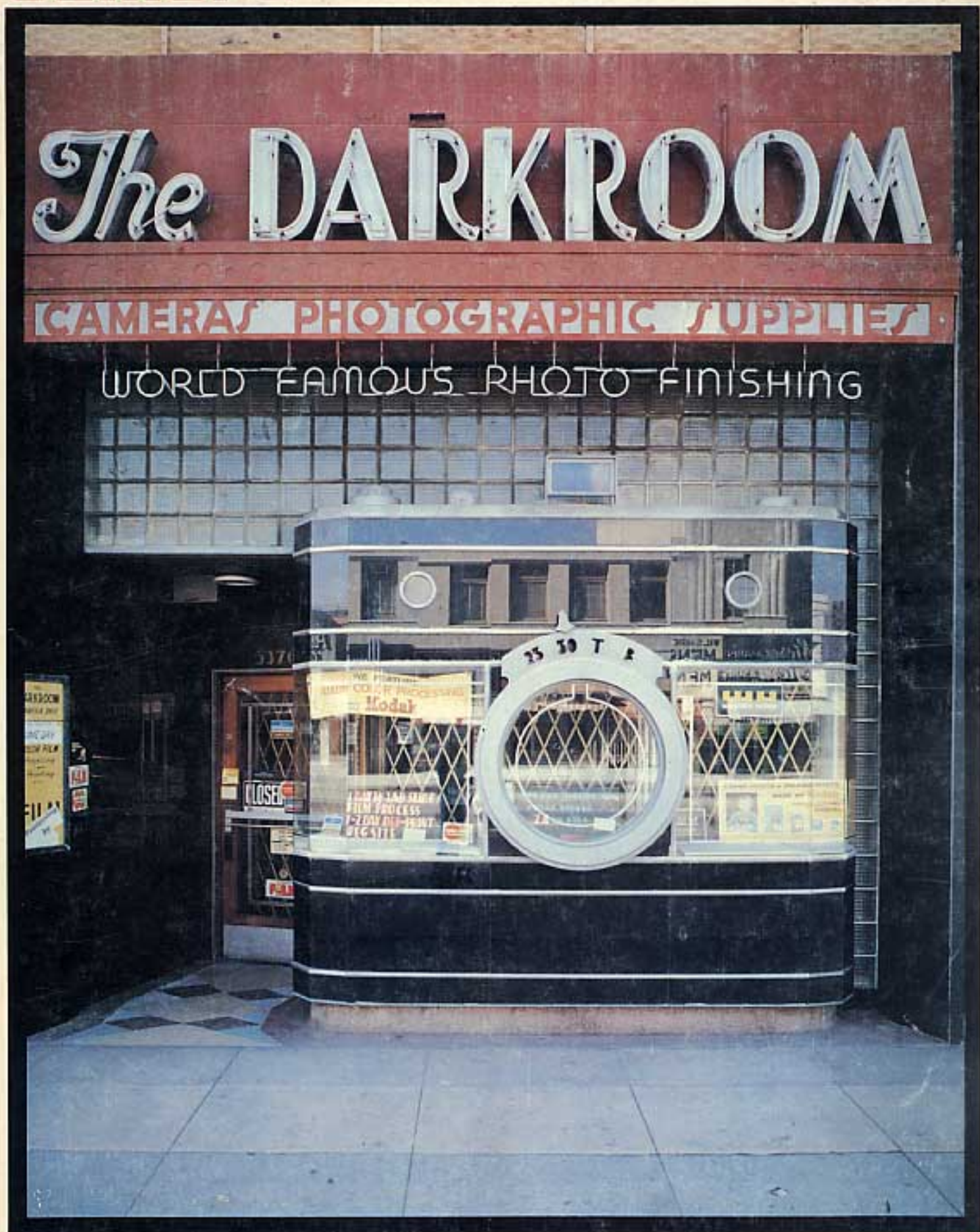
Bezeichnung der Einzelteile	5
Quecksilberbatterie	10
Batterieprüfung	10
Filmaufzughebel und Bildzählwerk	11
Filmeinlegen	12
EE-Aufnahmen	18
Bereich der richtigen Belichtung und Warnsignale	20
Änderung des Bildformats	23
Scharfeinstellung und Sucher	25
Filmrücktransport	26
Selbstausslöser	27
Objektivwechsel	29
Wenn das "Elektrische Auge" nicht benutzt wird	30
Handbedienungsknopf (Override-Knopf)	31
Synchroblitzlichtaufnahmen	33
B-Aufnahmen	34
Filter	35
Tiefenschärfe	36
Handbetätigte Blendeneinstellung	37

camera

The DARKROOM

CAMERAS PHOTOGRAPHIC SUPPLIES

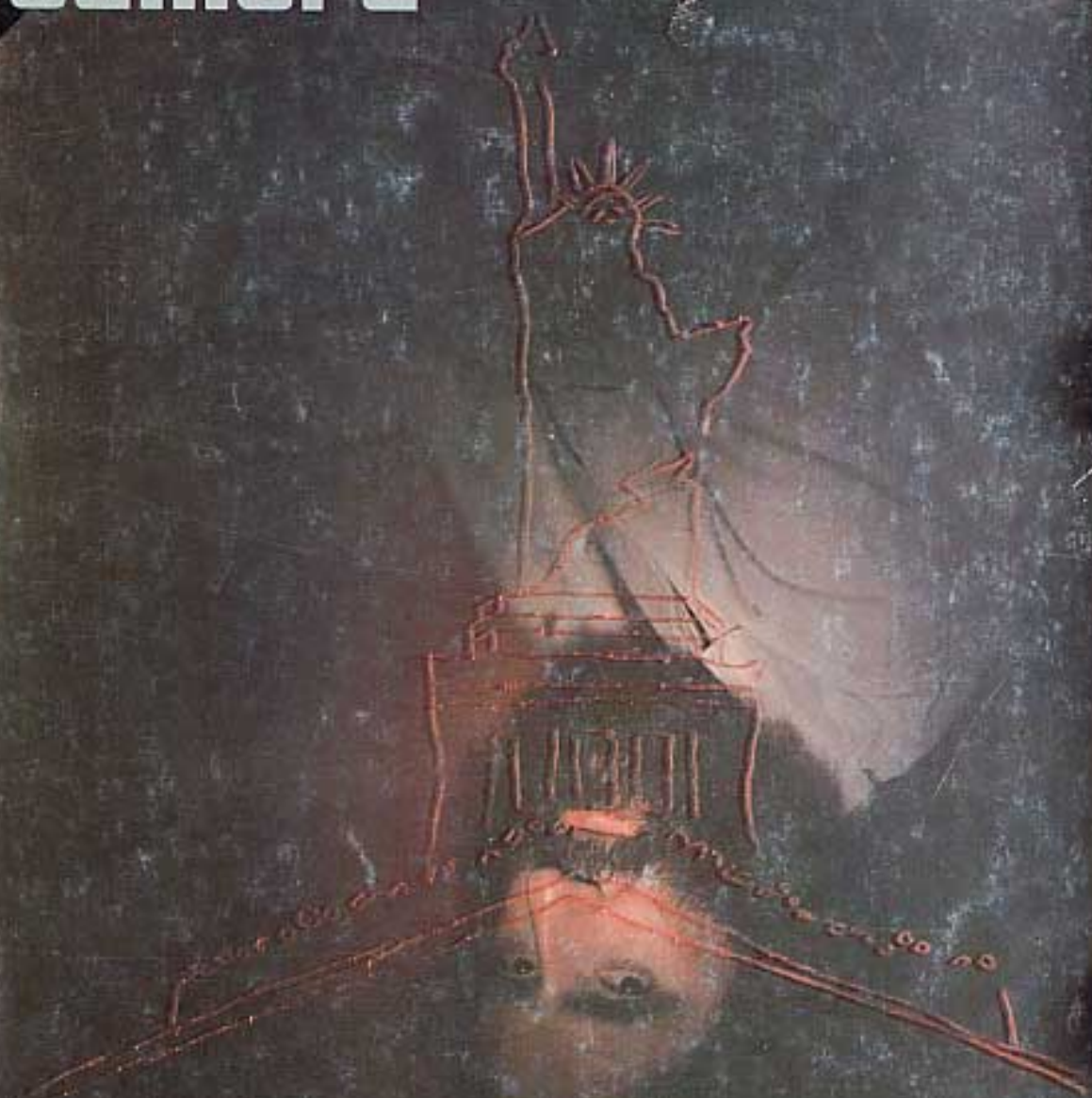
WORLD FAMOUS PHOTO FINISHING



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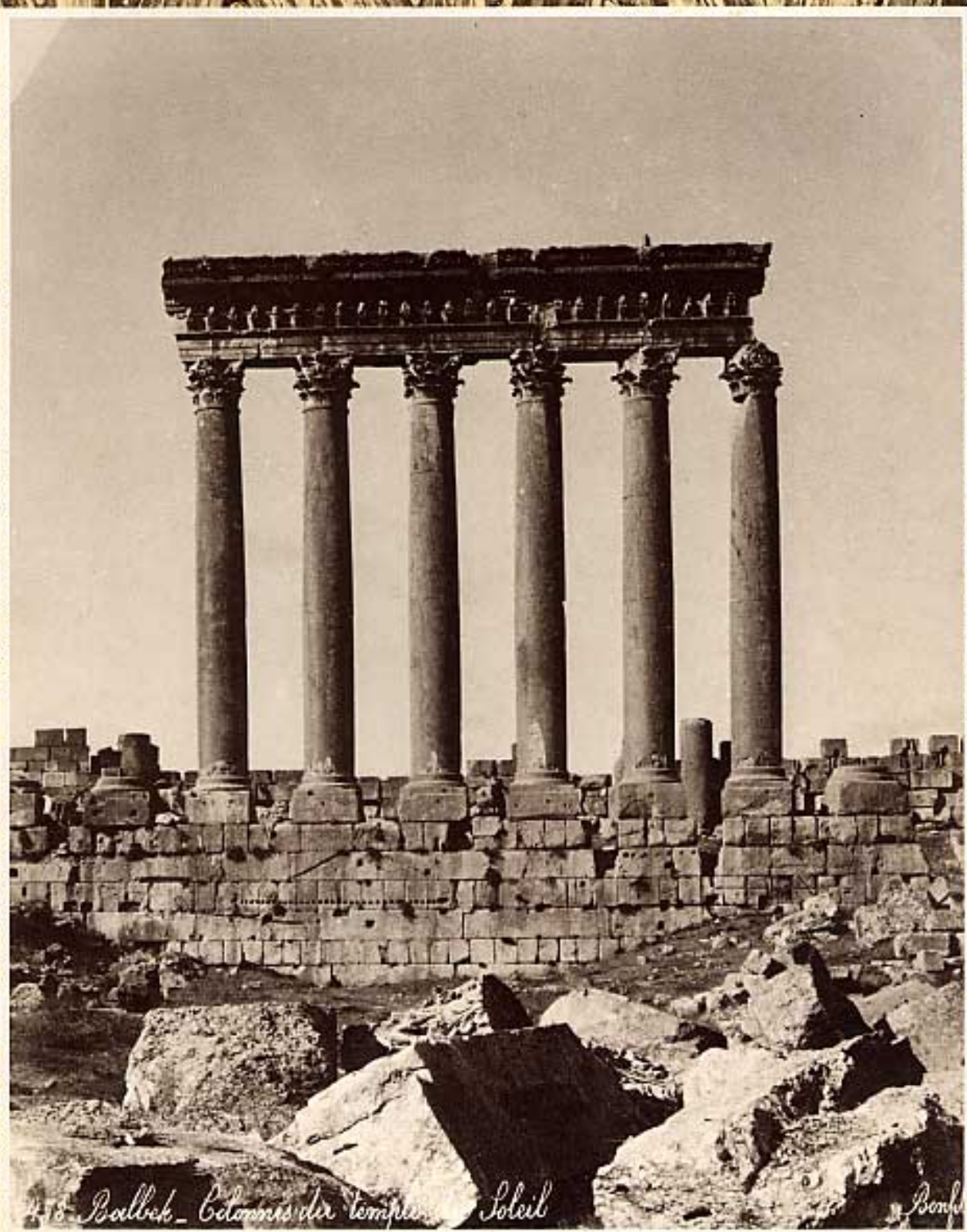
camera



ALBERTA



COMBES



418. Palmyra - Columns der Tempels des Soleil

Bonf.

KONICA KONISHIROKU PHOTO IND. CO., LTD. TOKYO, JAPAN.

camera



camera

ПРО ЭТО

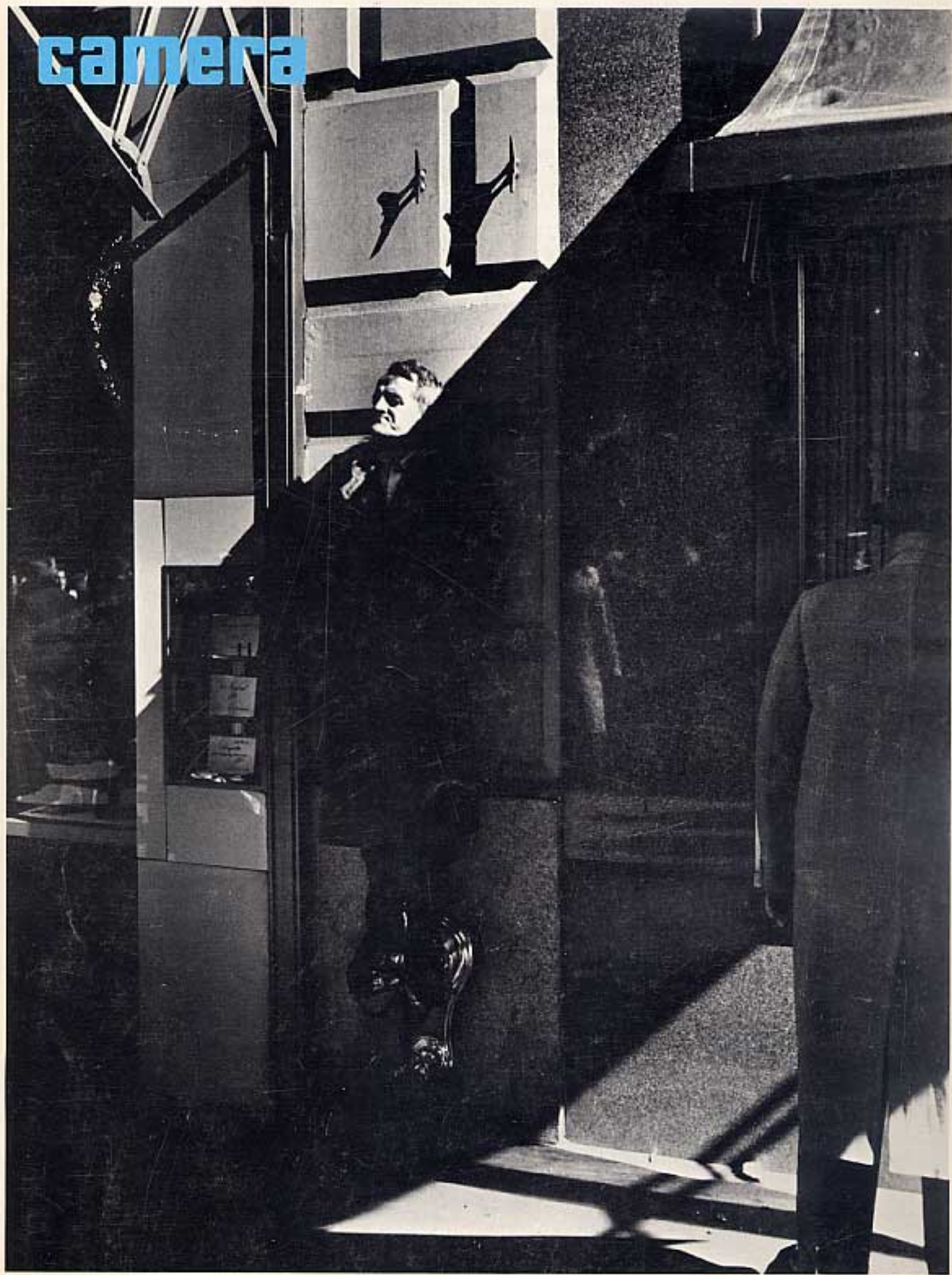


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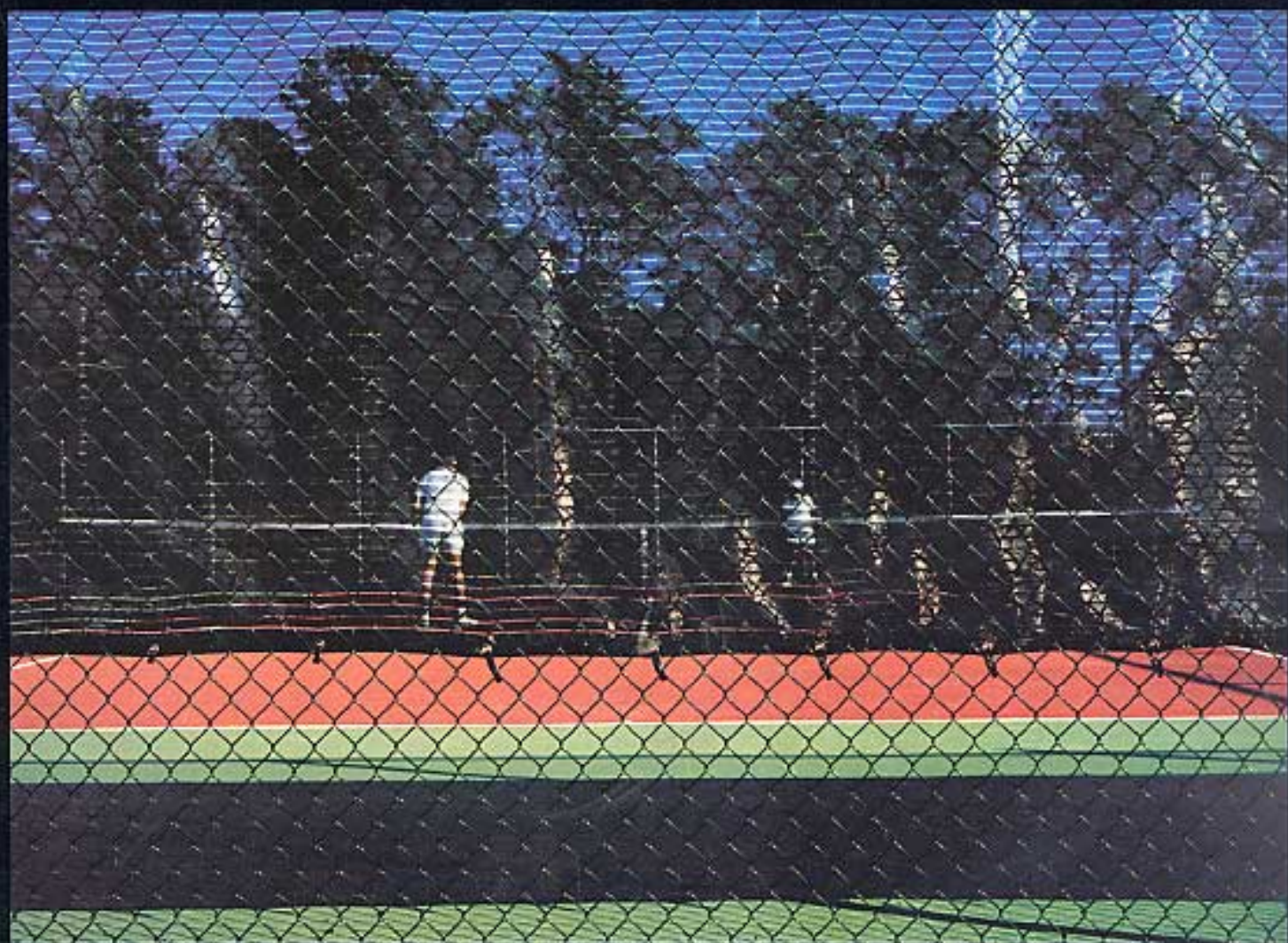




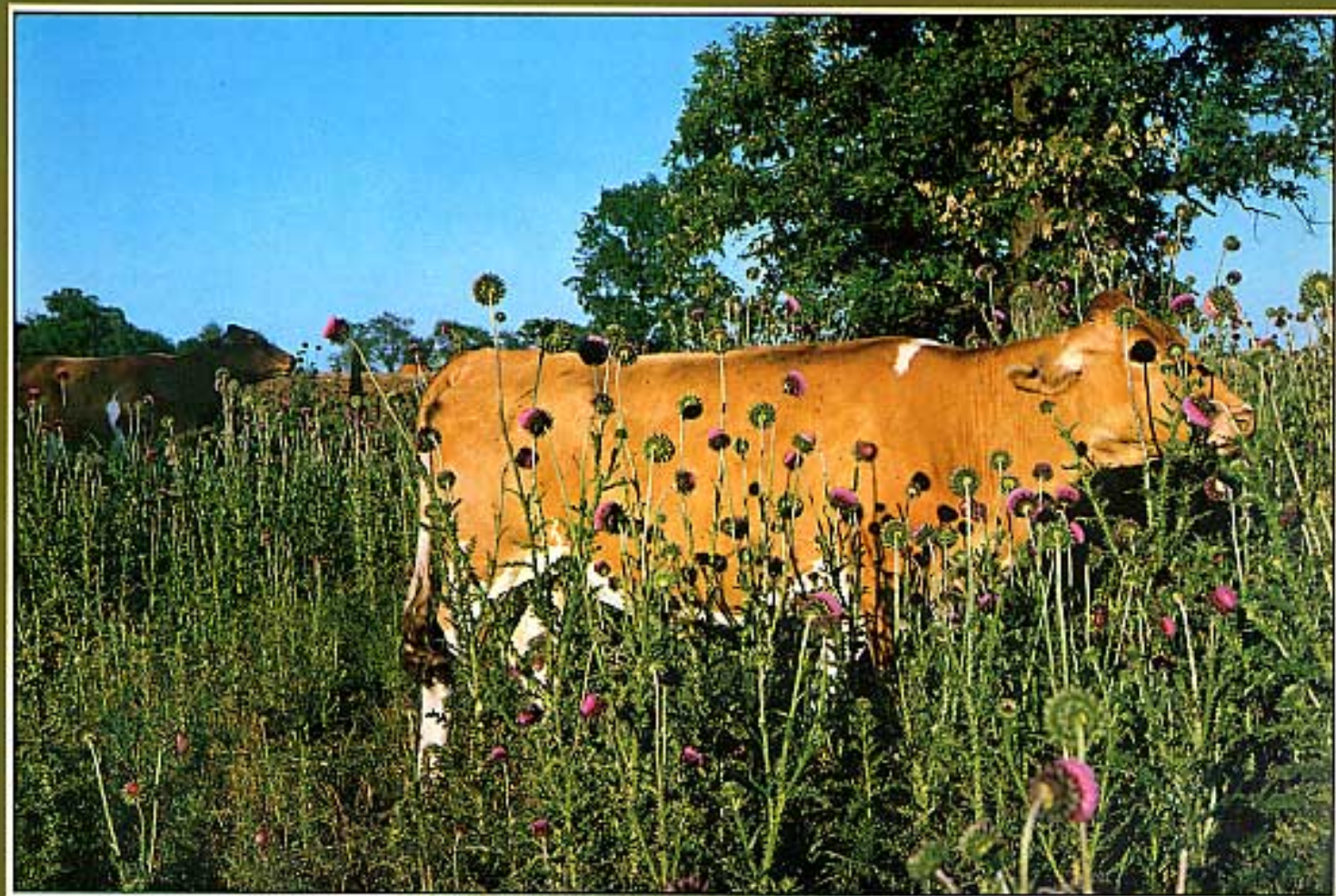
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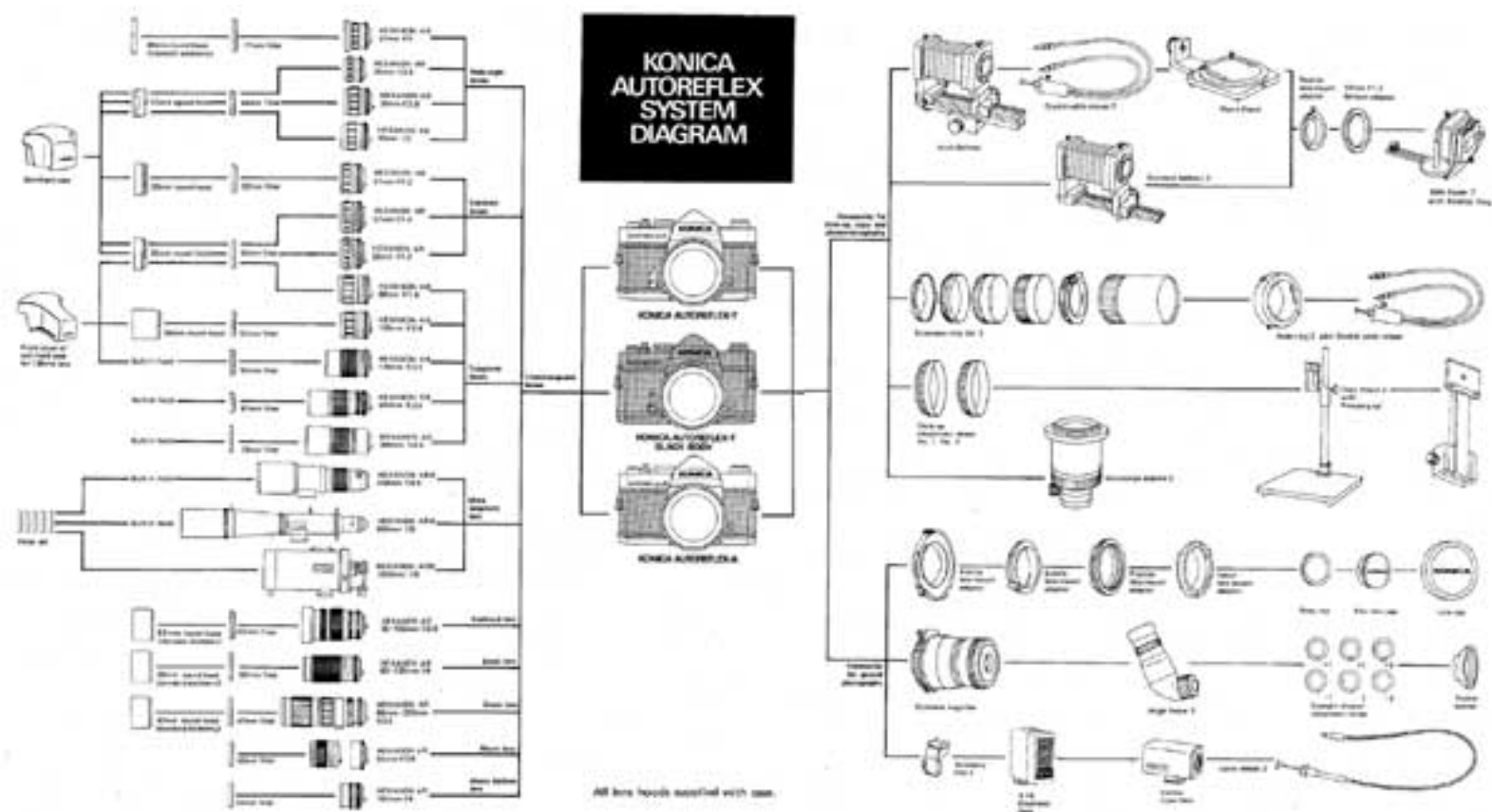


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AUTO-REFLEX

INSTRUCTION BOOKLET









KONICA HEXANON AR 35mm F2

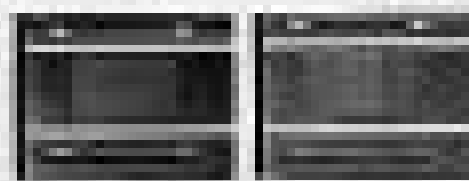
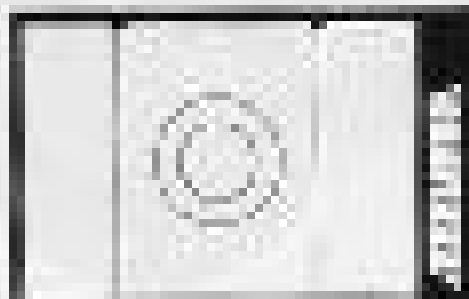
1 4 5 7 10 20 ∞
12 15 2 3 7 ∞
ft
m
11 5.6 2.8 2.8 5.6 11 15

2 4 8 11 16 AE



Was unterscheidet die Konica Auto-Reflex von den gut 50 anderen 35-mm-SLR-Kameras auf dem Markt?

Die Konica der 1970er Jahre revolutionierte die SLR-Kameraszene durch die ersten SLR-Spiegelkameras mit einer elektronischen Auslösung. Konica war die erste, die eine elektronische Auslösung in einer SLR-Kamera einführte. Die Konica Auto-Reflex war die erste SLR-Kamera, die eine elektronische Auslösung in einer SLR-Kamera einführte. Die Konica Auto-Reflex war die erste SLR-Kamera, die eine elektronische Auslösung in einer SLR-Kamera einführte.



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KONICA

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YOUR choice of the KONICA F, the most advanced of all miniature cameras, is much appreciated by its creator, KONISHIROKU PHOTO IND. CO., Ltd.

CAUTIONS

- When mounting lens, do not touch manual aperture control.
- Do not operate cocking lever while shutter mechanism is in action at "B" or slow shutter speeds.
- Never touch focal plane shutter and quick-return mirror. These parts are delicate, and have been carefully adjusted. Use soft haired brush if dust must be removed.
- The sprocket release lever when set at "R" for film rewind cannot be moved back by hand. Automatic re-set is effected by operating the cocking lever.

—Table of Contents—

General Description	4
Nomenclature —1	6
—2	7
—3	8
—4	9
—5	10
Cocking Lever Operation	11
Film Loading	12
Picture-Taking Sequence	18
Camera Grip	20
Sighting and Focusing	22
Shutterspeed and Aperture	24
Coupled Exposure Meter	28
Self-Timer	34
Synchroflash Photography	36
Depth of Field	38
Change of Viewers	41
Changing Lenses	42
Film Rewind	44
Depth of Field Table	47

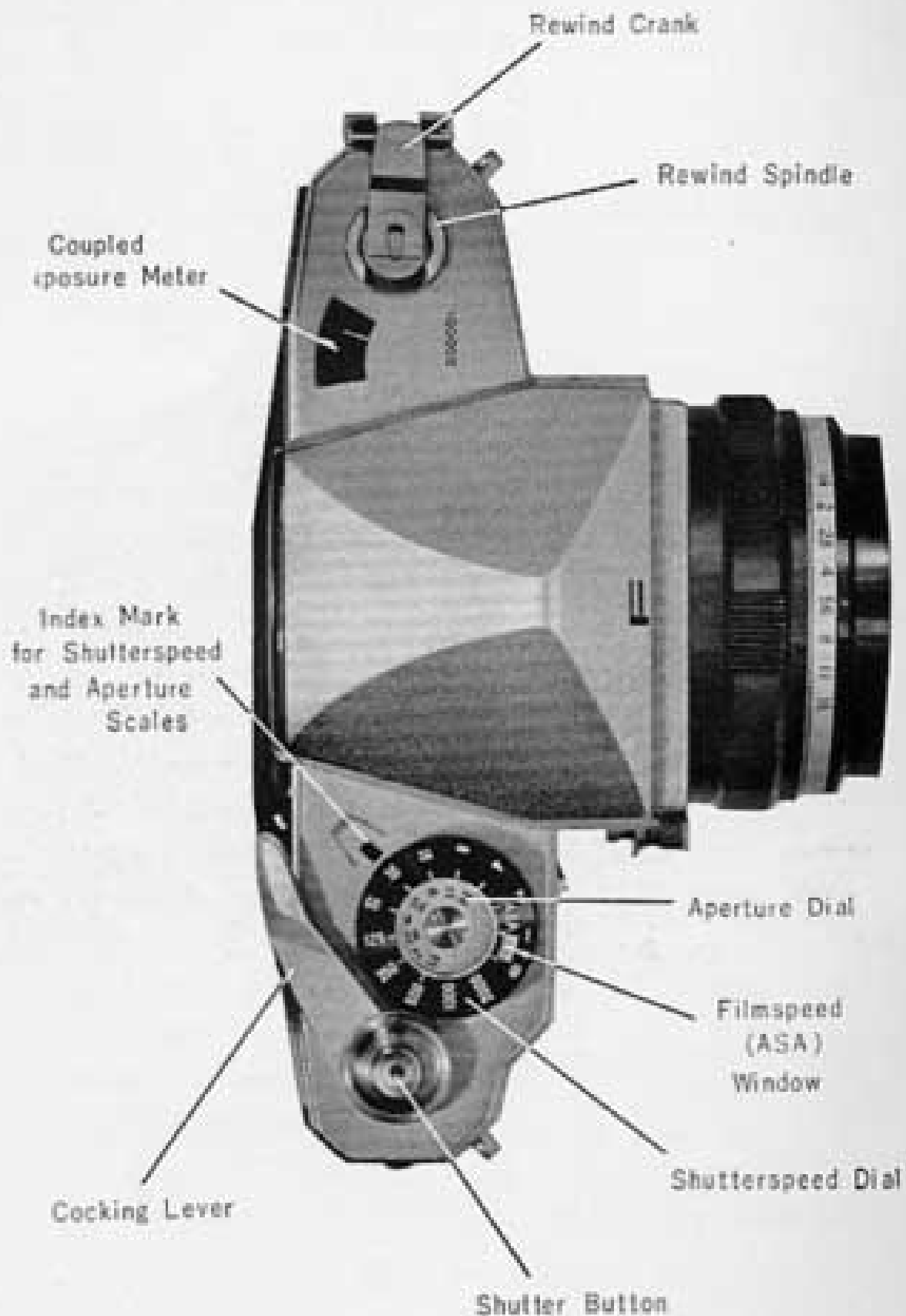
GENERAL DESCRIPTION, KONICA F

Picture Size:	24×36 millimeters
Film:	Standard 35—millimeter miniature camera film in safety cartridge
Standard Lens:	HEXANON f/1.4, f = 52mm, improved ambercoated anastigmat with 7 elements in 5 groups. Focuses down to 0.6 meter.
Lens Mount:	KONICA F bayonet mount (40mm diameter, flange diameter 40.5mm)
Aperture Mechanism:	Full automatic stop-down to pre-set value. Manual control for visual check of depth of field.
Viewfinder:	Full picture-size and true image through pentaprism Eye-or waist-level sighting by interchangeable viewers.
Mirror:	Automatic quick-return type with forward edge straight-line motion.
Focusing :	Split-image focusing spot, with mat focusing of surrounding field.
Shutter :	Metal vane focal plane shutter. Control mechanism graduated in multiple series, and set by non-revolving dial scaled in equidistant steps. Co-axial aperture scale. Shutter button at center of cocking lever hub. Shutter speeds: B — 1 — 2 — 4 — 8 — 15 — 30 — 60 — 125 — 250 — 500 — 1000 — 2000.

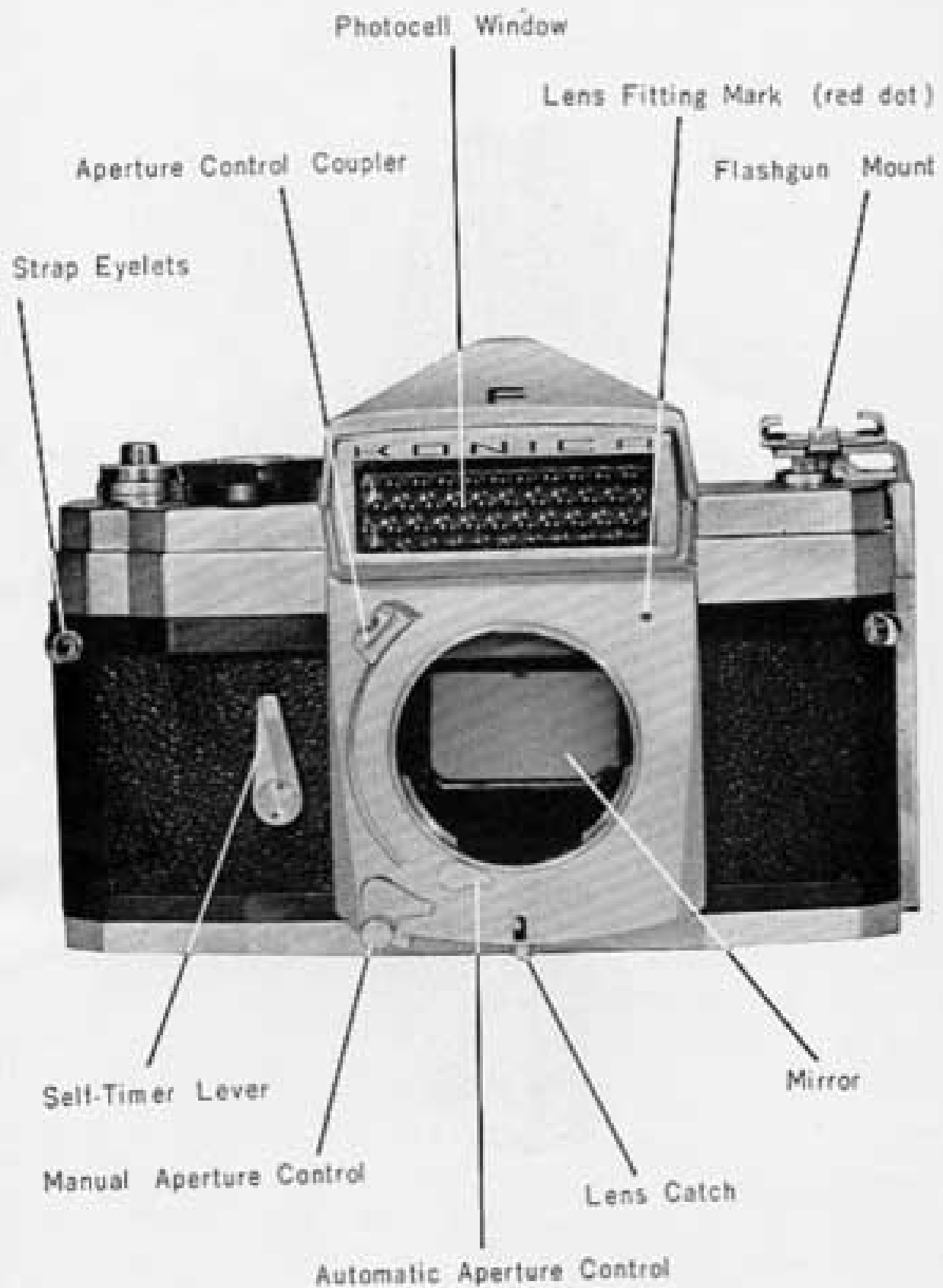
Coupled Exposure Meter: Built-in exposure meter fully cross-

	coupled to filmspeed, shutterspeed and aperture for automatic selection of exposure settings by zero-in of meter needle.
Self.Timer;	Built into camera body. Maximum delay 10 seconds.
Flash Synchronization;	"M" and "X" terminals provided for full flash synchronization at all shutterspeeds for class M flashbulbs (automatic adjustment of lag time) and up to 1/125 second for electronic flash. Sockets, JIS type B.
Cocking Mechanism:	Single-stroke cocking lever for simultaneous cocking of shutter mechanism and advancing of film (partial film advance possible). Double exposures positively prevented.
Pressure Plate;	Pressure plate automatically retracts during film advance and rewind, to reduce friction and film scratches.
Other Features:	Automatic self-resetting exposure counter. Crank rewind. Self-resetting sprocket release
Lens Hood;	Special KONICA F lens hood, slip-on type, 51mm diameter.
Filters;	Filters of all types in special screw-in mounts for the KONICA F, 49mm diameter, 0.75mm pitch.
Dimensions and Weight:	150.5X105.5X91 millimeters, 1,100 grams.

NOMENCLATURE—I



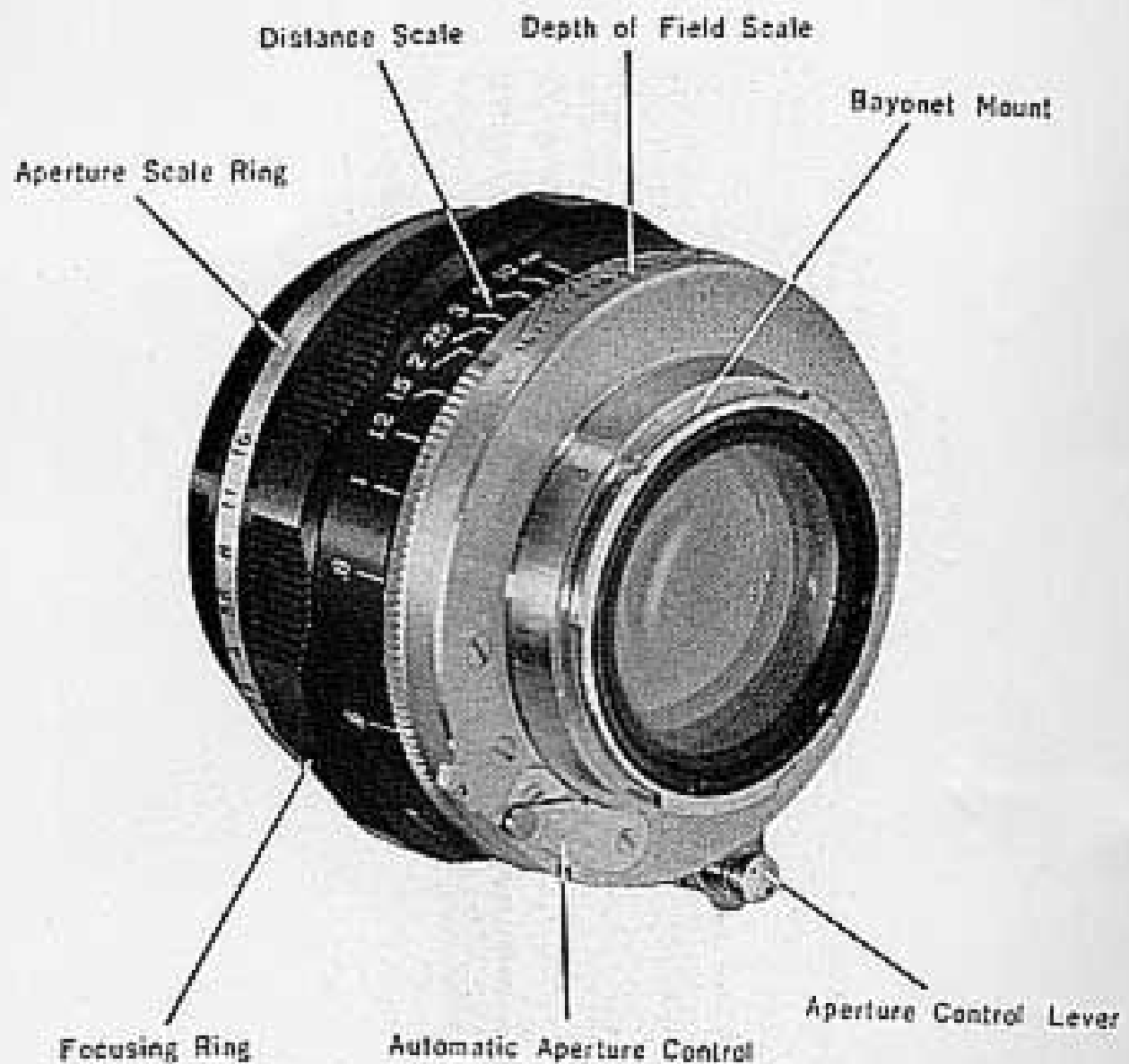
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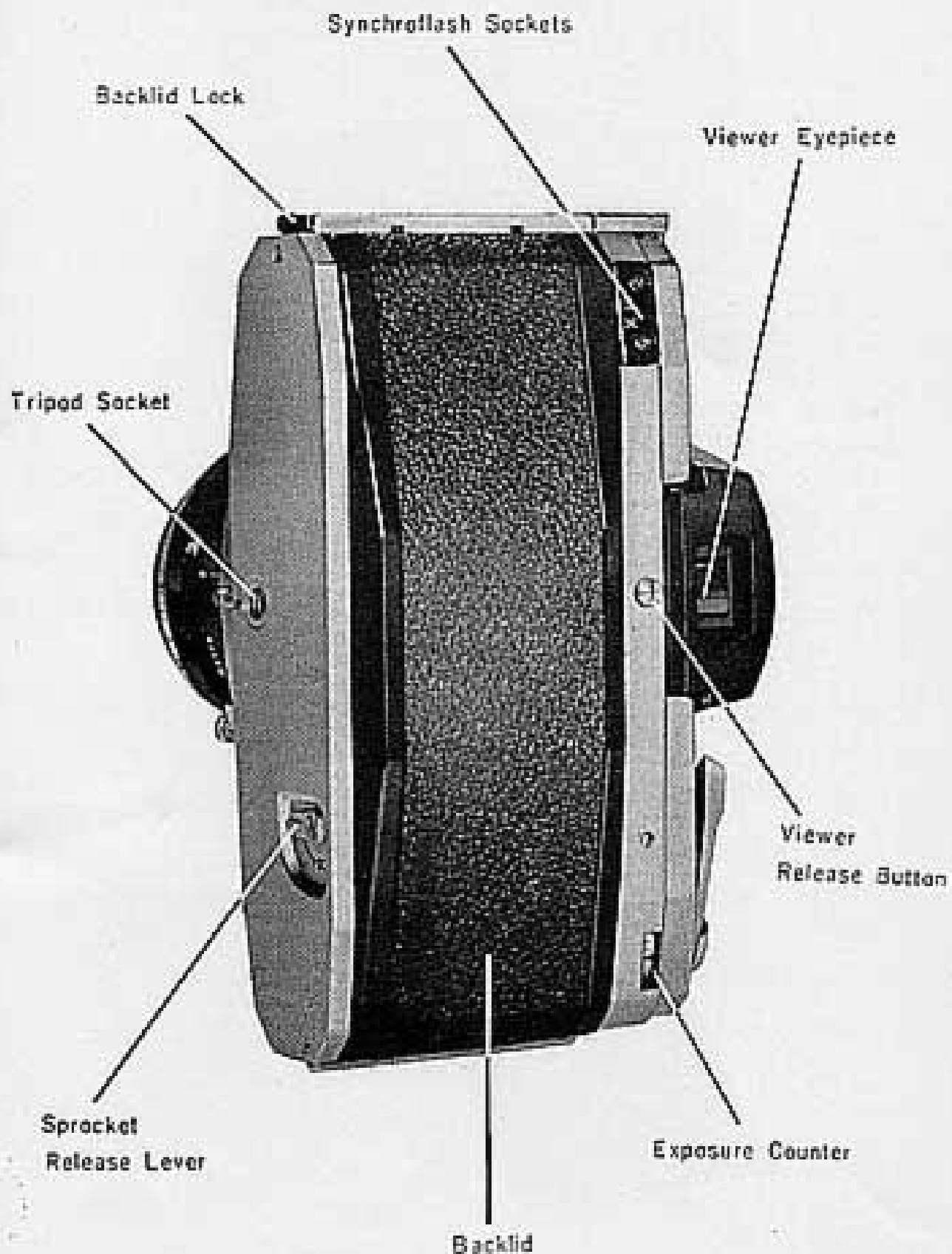
camera



NOMENCLATURE—3



NOMENCLATURE—4



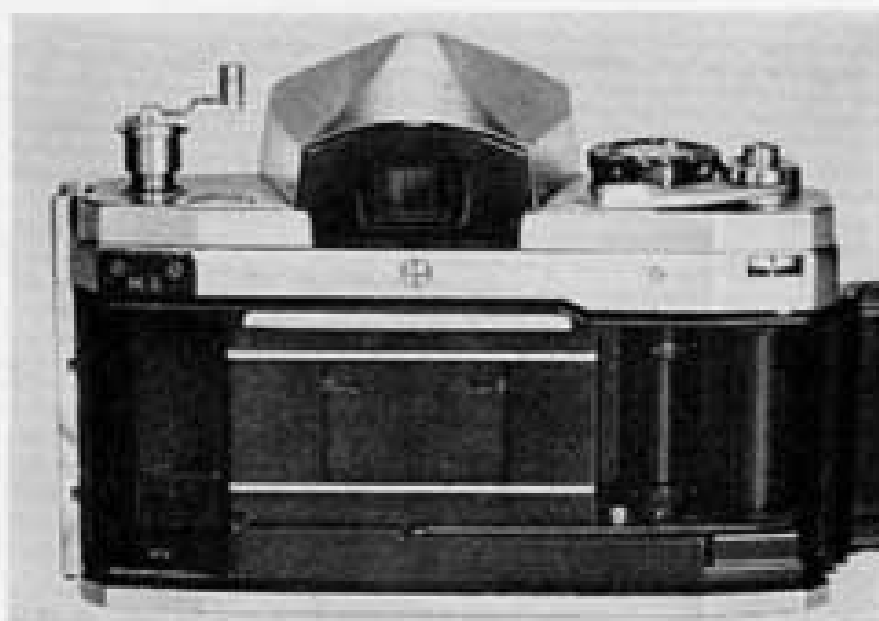
COCKING LEVER OPERATION



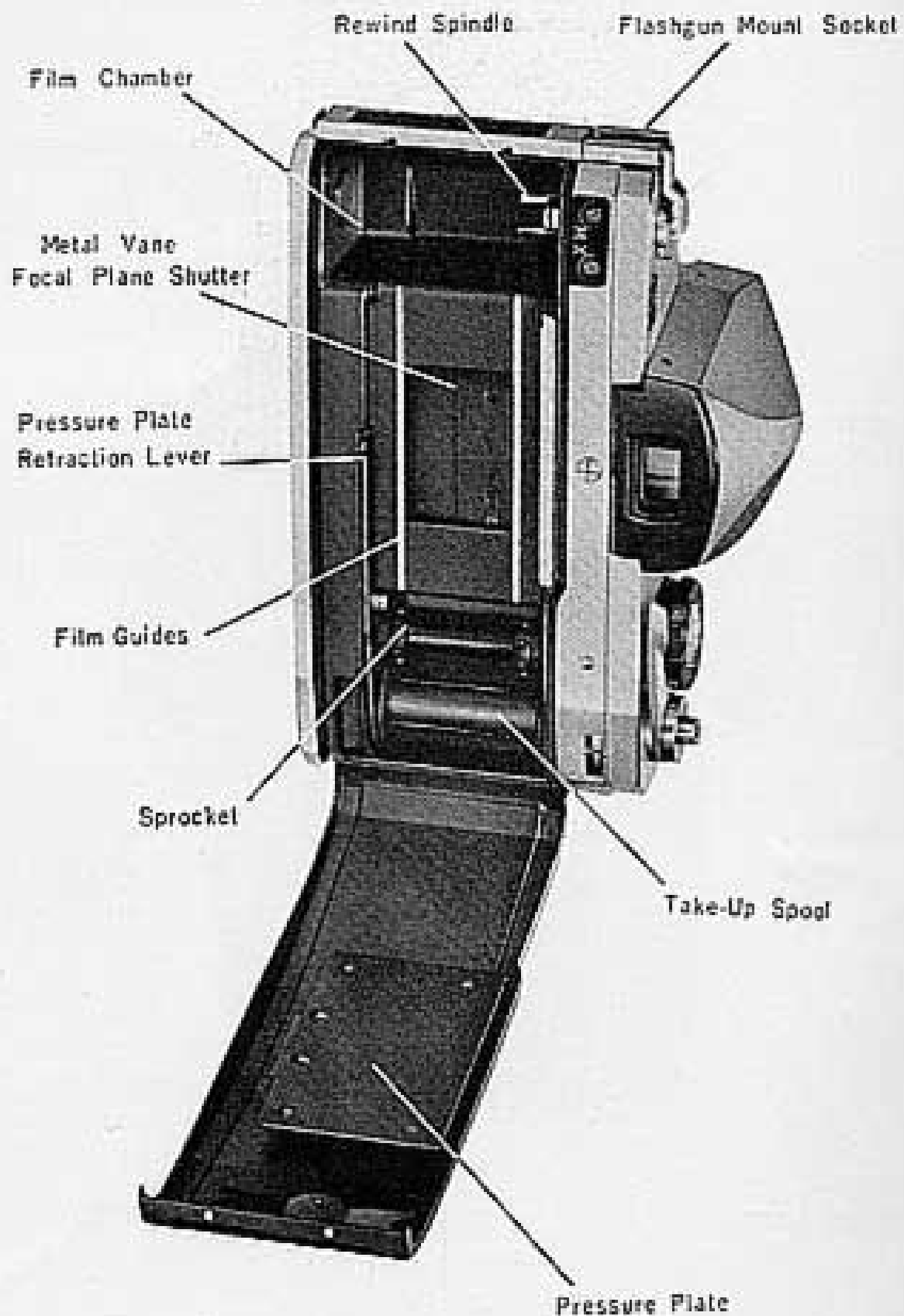
- Single stroke of thumb-operated cocking lever advances film one frame, and simultaneously cocks the shutter. Partial take-up of film is also possible.
- Upon completion of cocking lever action, the exposure counter moves one step, and is released after the 36th exposure is indicated. When after rewind of exposed film the backlid is opened, the exposure counter returns automatically to starting position (inverted triangle mark).
- Cultivate the habit of cocking just before picture-taking. Keeping the shutter mechanism cocked for long may cause strains, while inadvertent pressing of the shutter button results in waste of film.
- Shutterspeed adjustment may be done before or after cocking.

FILM LOADING

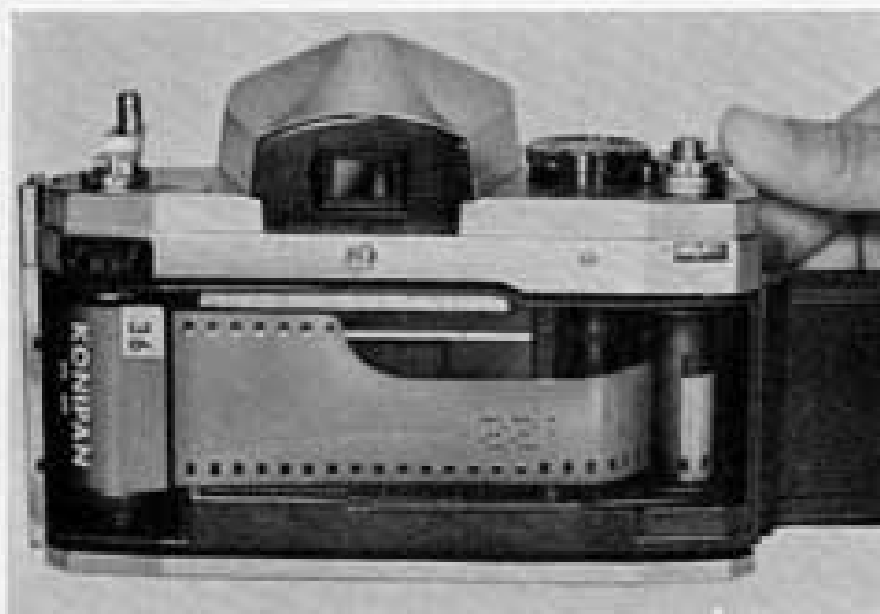
- The KOICA F uses 35-millimeter film preloaded in safety cartridges.
 - When loading and unloading, always work in subdued light. Use own body to shield film and camera when no other shade is available.
 - Flashgun mount can be removed by pulling out upwards.
- [1] Open backlid by pulling backlid lock. Erect rewind crank and pull out rewind spindle as far as it will go.



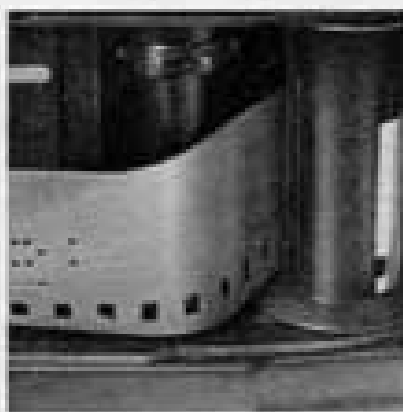
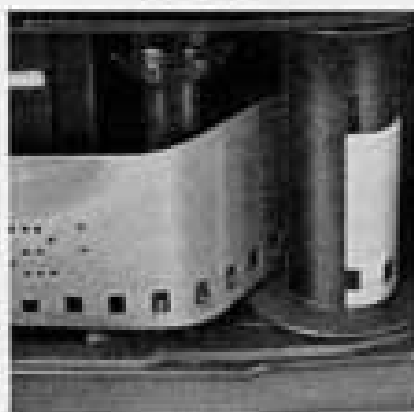
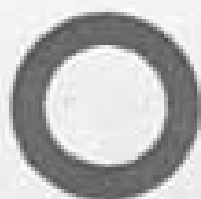
NOMENCLATURE—5



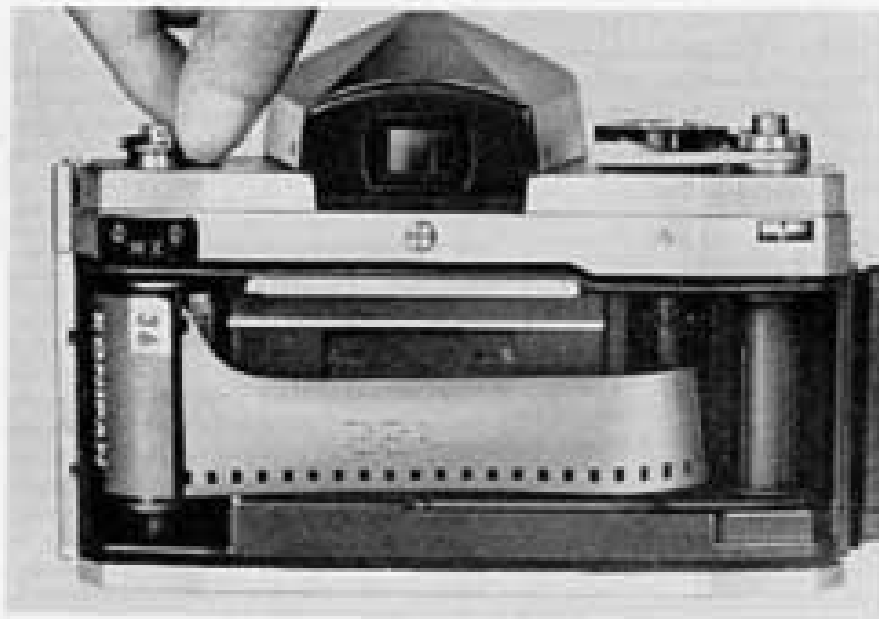
- ④ Fit film perforations on sprocket, then operate cocking lever to wind film onto take-up spool.



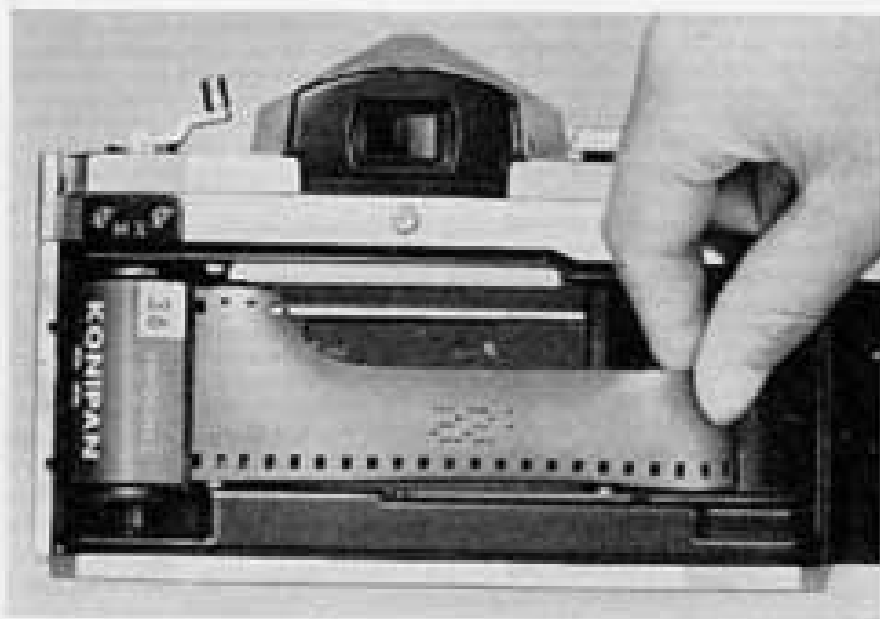
Fit film perforations on sprocket teeth.



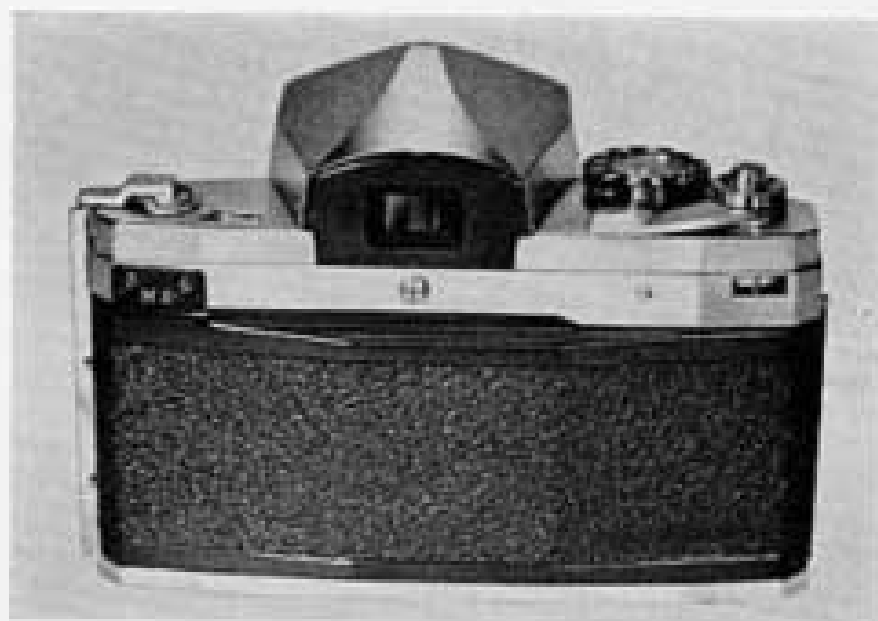
- [2] Place cartridge containing unexposed film in film chamber, and push back rewind spindle, turning it slightly in both directions, so that it catches in cartridge spool.



- [3] Pull out enough film to reach across the film gate and insert end in the slit of the take-up spool. Take-up spool can be turned to bring slit into convenient position for threading.



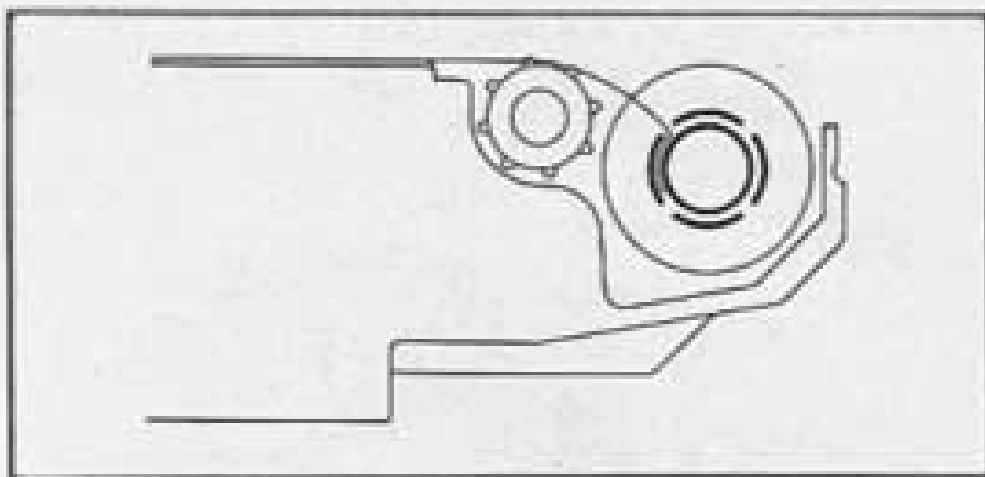
- 5 Close backlid. Press shutter button. Turn rewind crank in direction of arrow to take up all slack in the film. Fold down rewind crank.



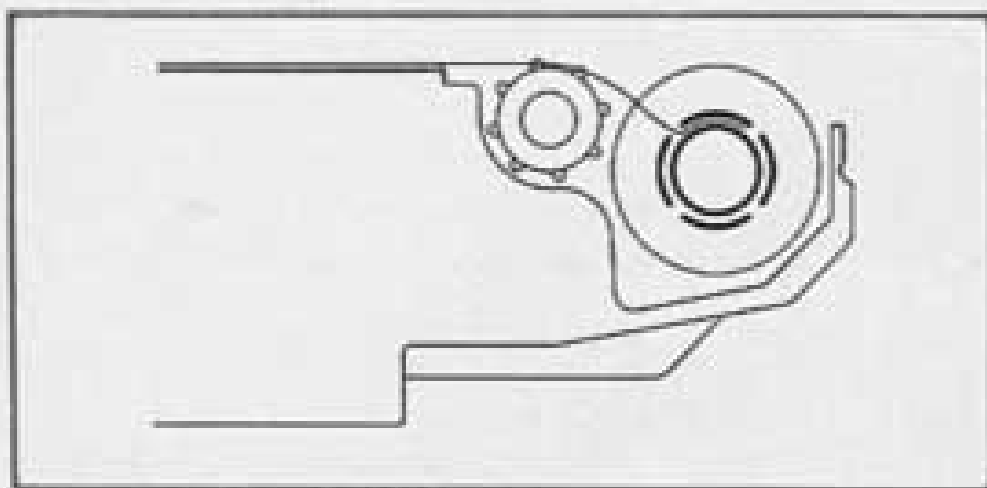
- 6 Operate cocking lever and press shutter button. Repeat these actions, then exposure counter will indicate block dot preceding numeral 1.



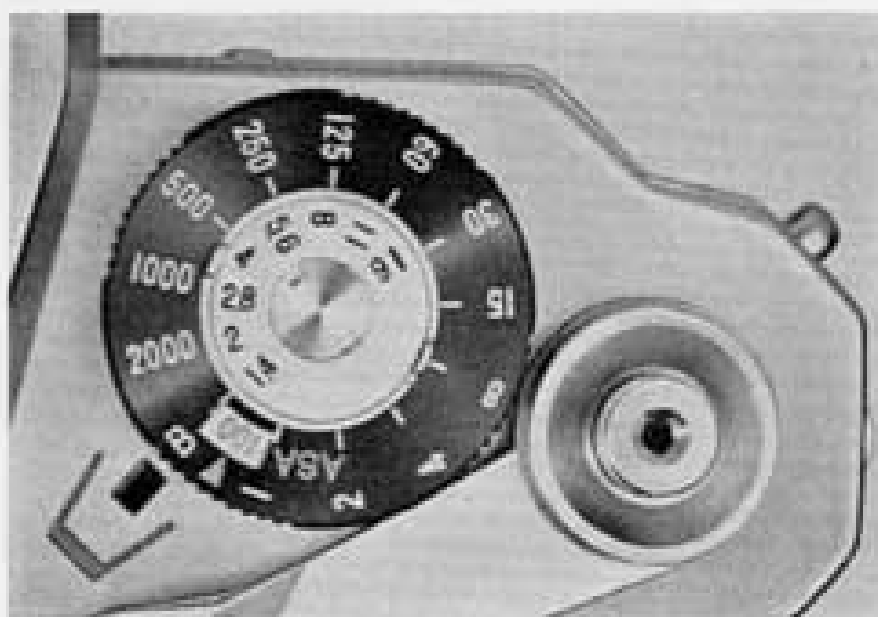
- If the film end is inserted in the take-up spool as shown in the illustration, exposed film will become detached easily at end of rewind operation. Always fix film in the manner shown.



- If film end is lodged in the take-up spool in this way, it may not slip out easily at end of rewind. In such cases, do not force rewind crank. Open backlid, and dislodge by hand.



- 7 Turn filmspeed knob so that ASA rating of the film in use appears in the filmspeed window.



Your KONICA F is now ready for picture-taking.

- If, when operating the cocking lever the rewind crank does not turn against the arrow, the film is not being taken up properly. Open backlid and repeat the loading procedure.



4

Operate cocking lever, pushing it as far as it will go.



5

Sight subject through viewer, adjust focus, then compose picture.



6

Press shutter button.

PICTURE-TAKING SEQUENCE



1

Remove lens cap.



2

Set shutter speed dial at desired setting.



3

Train camera on subject, and turn aperture control lever to bring exposure meter needle into alignment with meter index mark.

This is one way of holding the camera for vertical pictures. Any firm, comfortable grip will do.



Leaning against a tree trunk or wall will help obtain steadiness for hand-held slow shutter speed shots.

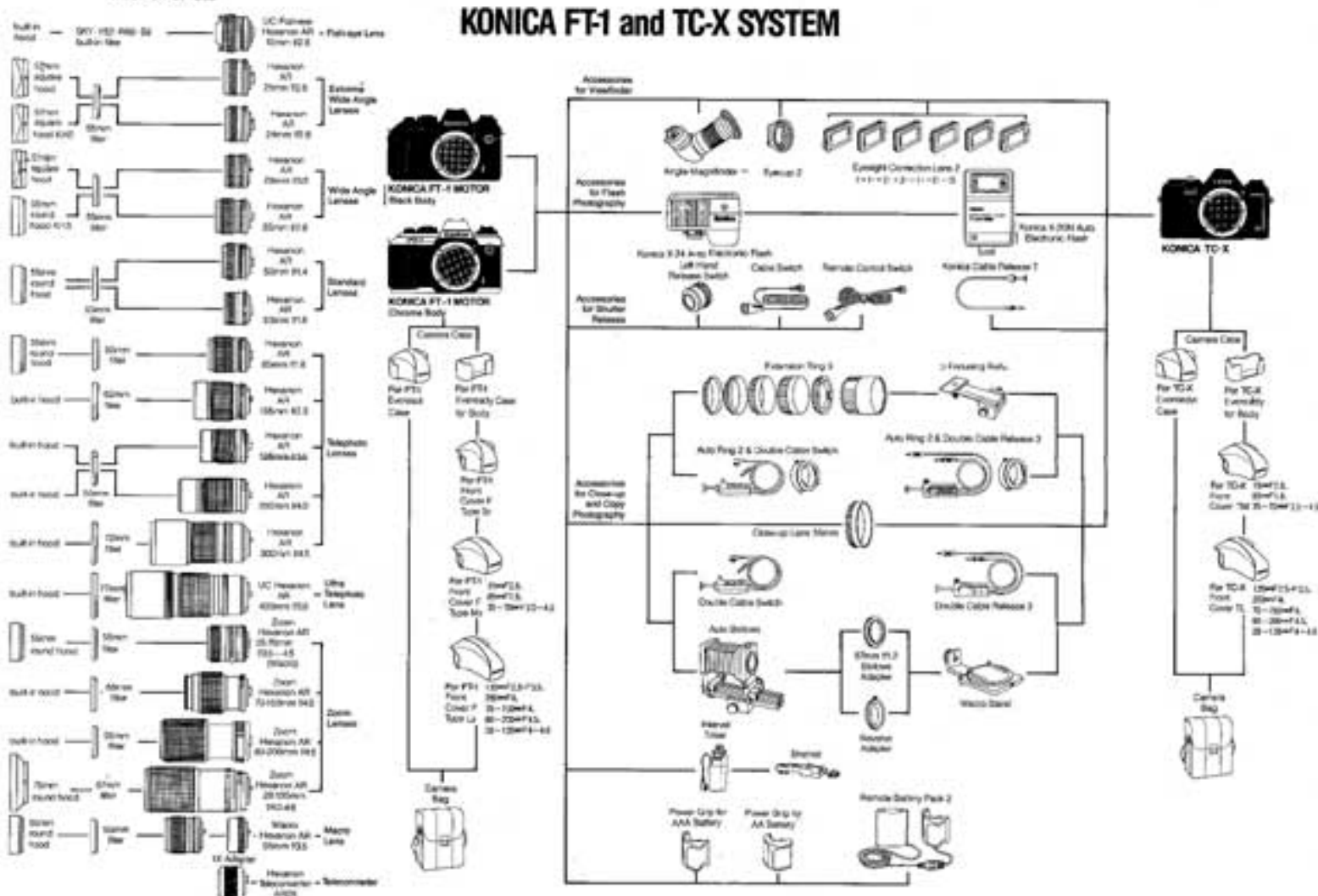


When using shutterspeeds slower than 1/15 second, secure camera on tripod or some other steady mount. Cable release can be screwed into hole in center of shutter button.



KONICA FT-1 and TC-X SYSTEM

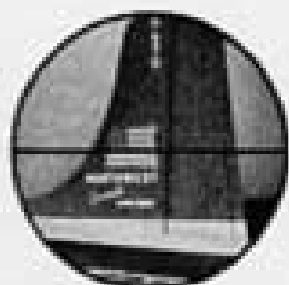
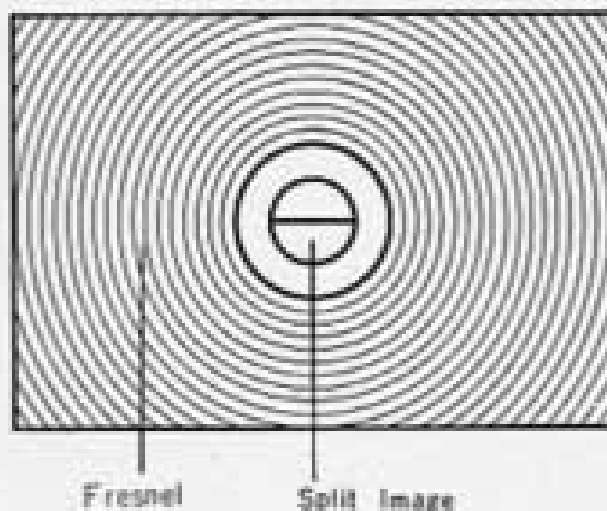
HAYKANTZ & PANDOLF



SIGHTING AND FOCUSING

(Use of the Viewfinder)

- Because there is no displacement of the mirror through action of the cocking lever, no error is introduced. Focusing and sighting can be accurately done either before or after cocking.



When subject is in focus



When subject is out of focus



CAMERA GRIP

In order to obtain sharp pictures without blurs, hold the camera firmly and steadily so that it cannot be jugged when pressing the shutter button. When pressing the shutter button, exert gentle steady pressure. Hold breath momentarily.



Steady camera by pressing it up against face.



Use a stable, comfortable stance. The grip too should be relaxed.

SHUTTERSPEED AND APERTURE

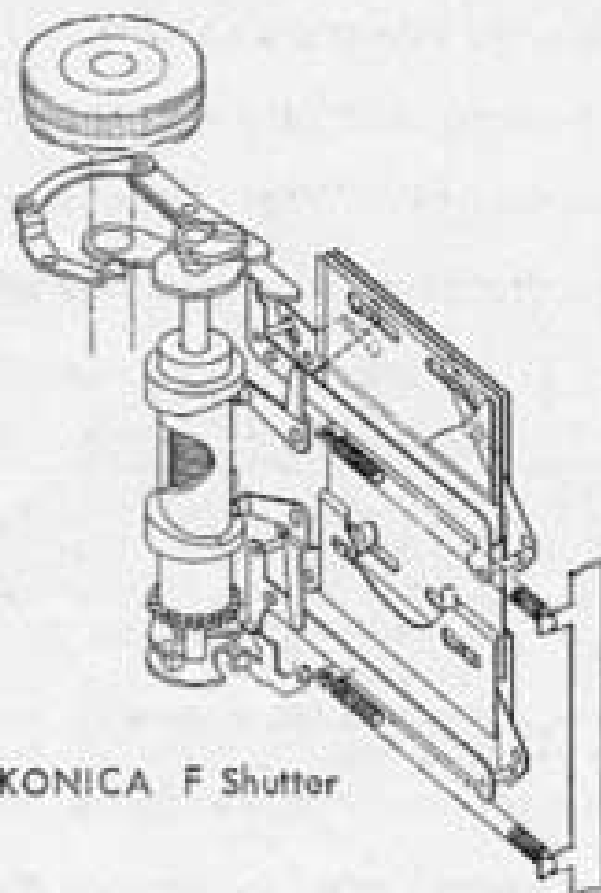


Diagram of KONICA F Shutter

Shutterspeed control is effected by means of the shutter-speed dial which turns easily by fingertip touch and click-stops at each of the settings from 8 (bulb - manual shutter-speed control) to 1/2000 second. Since the shutter-speed dial remains stationary during shutter action, finger pressure can be applied without fear of disturbing the automatic timing.

Function of Shutterspeed

① "Freezing" of objects in motion. Rapidly moving objects cannot be stopped in sharp, blur-free reproduction unless

To Focus the KONICA F While sighting the subject through the viewfinder, turn the focusing ring. One part of the split image in the focusing spot at the center of the viewfinder field will move laterally. When the two halves of the split image are made to coincide, the subject is in correct focus; at the same time, the rest of the view-field will show a sharply defined image of the subject. When taking pictures in horizontal position use vertical lines of the subject for split-image focusing; horizontal lines when using the camera in vertical position. The image seen in the viewfinder is projected through the lens and a special pentagonal prism so that it is true picture-size reproduction.

Quick-Return Mirror and Automatic Aperture operate so that when the shutter button is pressed, the aperture closes down from full open position to the pre-set value, the mirror springs up out the way, and the shutter mechanism is released. As soon as shutter action is completed, the mirror returns to viewing position, and the aperture opens up fully. All this takes place in such a short time that viewfinder blackout is scarcely noticeable. A bright image of the subject is kept visible before and after exposure.

shutter action is fast enough. The nearer the subject in action the faster must be the shutterspeed.

[2] Control of Amount of Light. The changes in duration of shutter opening results in changes in the amount of light permitted to impinge on the film. In conjunction with the aperture which controls the intensity of the light passing through the lens, the shutterspeed determines the amount of light available for causing photo-chemical action in the lightsensitive coating of the film. Both shutterspeed and aperture are crosscoupled to the exposure meter. For a given aperture setting, slowing the shutterspeed by one step results in doubling the exposure of the film.

KONICA F SHUTTERSPEEDS												
8	1	2	4	8	15	30	60	125	250	500	1000	2000

Construction of the KONICA F Shutter The focal plane shutter of the KONICA F is built of extremely thin but strong special steel. It comprises front and rear vanes moving in a vertical direction across the face of the film, with an open slit between the two to give the requisite exposure. The highest shutterspeed is 1/2000 second; with accurate synchronization possible with class M flashbulbs at all shutterspeeds.

and up to 1/125 second with electronic flash. Because the focal plane action is extremely fast, there is no image distortion as encountered in pictures taken with conventional focal plane shutters.

Aperture Scales are provided both on the lenses and on the shutter speed dial, the latter being applicable to all interchangeable lenses. All scales are equidistantly graduated, and the lens and body dials are mechanically coupled. Reduction of aperture size by one step results in halving of the intensity of the light available for exposure. At $f/2.8$, the strength of the light is one half that at $f/2$, and double that at $f/4$. Because aperture size changes without break, intermediate positions of the aperture scale can be used.

Automatic Aperture of the KONICA F closes down to the value set on the aperture scales only during shutter action. At other times the lens is fully open, except when closed down manually for depth of field checks, for maximum brightness in viewing and focusing.

Function of Aperture (iris diaphragm)

① **Control of Light Intensity.** In the same way that the iris of the human eye opens up in darkness and closes down

in bright light to control the intensity of the light striking the retina, the aperture of the camera lens is adjusted to regulate the light passing through the lens. When the aperture control is turned to "zero-in" the meter needle on the exposure meter index mark, a small lens opening is selected when the available light is bright, and the aperture is pre-set at a large value when the light is weak, thus regulating the intensity of the light reaching the film.

② Adjustment of Depth of Field (focusing tolerance)

When a camera is focused on a certain object, there is a specific depth in front of and behind that object inside which other objects will also register in sharp detail.

This range is known as depth of focus.

Smaller the aperture the greater the depth of field.

Also the greater the distance to the object, the greater the focusing tolerance. There is greater depth behind the object than in front.

The Manual Aperture Control permits actual visual checking of the depth of field by means of the sharpness of the viewing image.

KONICA F APERTURE SCALE								
f /	1.4	2	2.8	4	5.6	8	11	16

COUPLED EXPOSURE METER

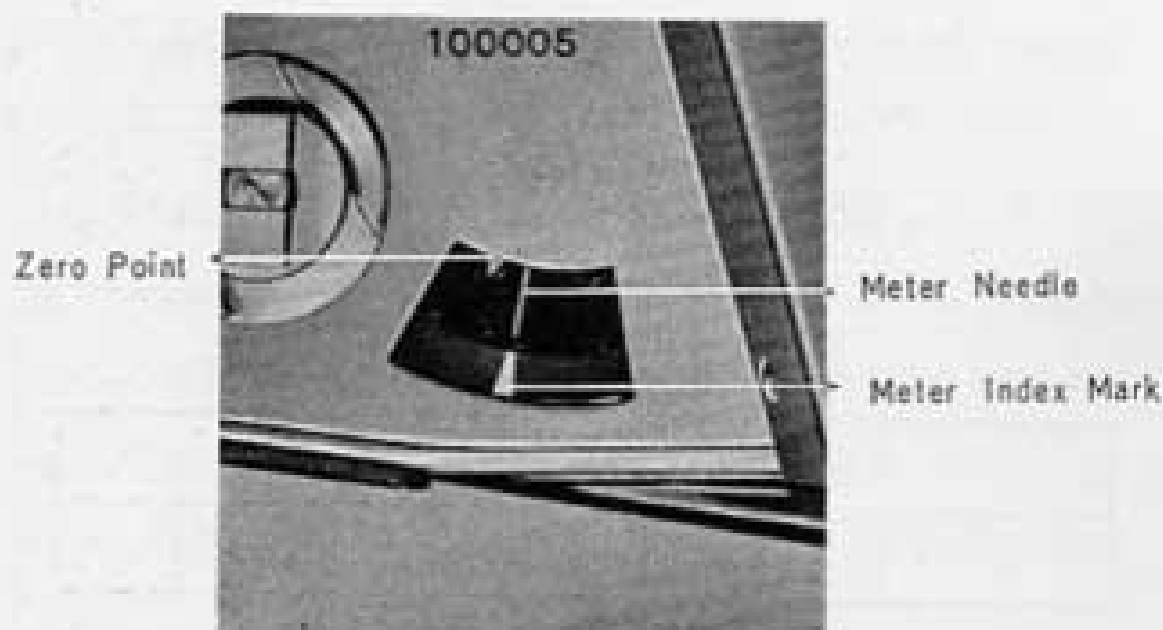
The built-in coupled exposure meter of the KONICA F is a full-range reflected light type instrument which is cross-coupled to the filmspeed adjustment, shutter speed control and the aperture control.

Coupling is accomplished by an electrical circuit used in conjunction with mechanical links.

A durable, high-performance photocell is incorporated.

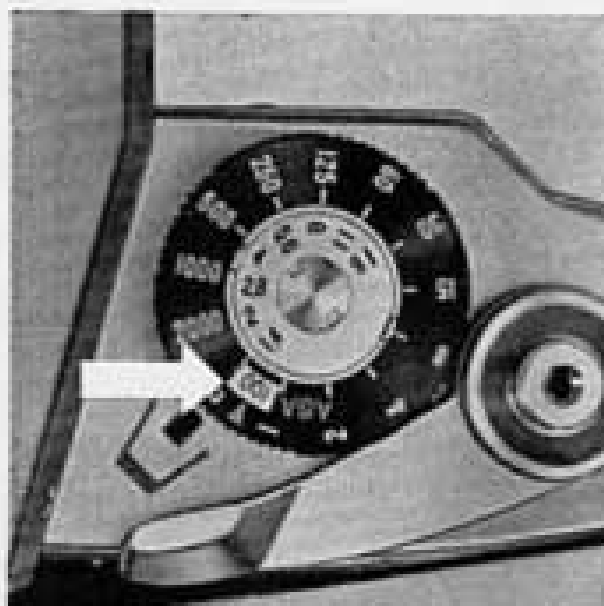
KONICA F FILMSPEED SETTINGS (ASA RATINGS)									
10	16	.	32	50	.	100	200	400	800

The points between ASA 16 and 32, and 50 and 100 are the correct settings respectively for ASA 25 and 80.



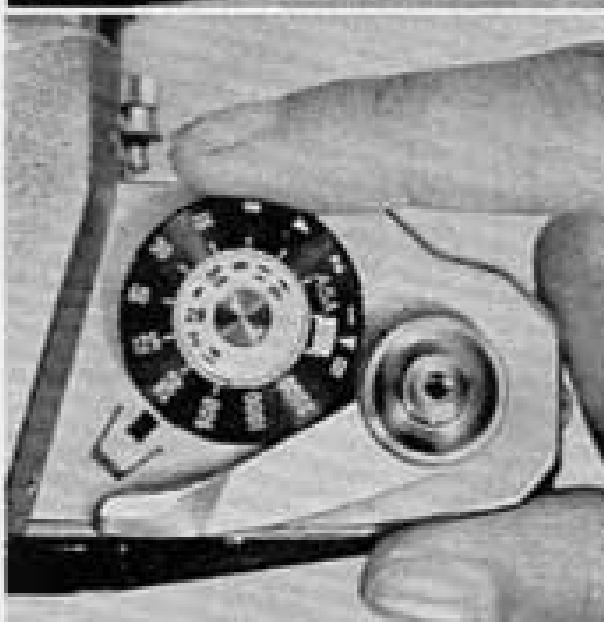
1

Adjust filmspeed knob so that the rating of the film in use is indicated in the filmspeed window.



2

Set shutterspeed dial to desired shutterspeed (intermediate positions cannot be used, always set at click-stop markings).



3

Train camera on subject, then move aperture control so that coupled exposure meter needle comes into alignment with meter index mark (triangle). When needle is correctly "zeroed in" the aperture setting is such that the film will be correctly exposed. Everything is automatic; there is no need for computation or transfer of scale readings.



■ When, because of depth of field requirements, the aperture setting is selected first, adjust meter needle adjustment by means of the shutter speed dial. Use closest click-stop, then make fine adjustment by means of aperture control.

■ When compensation must be made for filter, first proceed in normal manner, then correct for filter absorption by increasing aperture size by requisite amount. If filter is in constant use, compensate by means of filmspeed adjustment to eliminate bother of correction by aperture control.

Example: Using a film of ASA 100 rating, and a filter with an absorption factor of 4 (exposure factor $\times 4$), the filmspeed indication should be —

$$\frac{\text{ASA } 100}{4} = \text{ASA } 25$$

■ The red dot on the exposure meter scale indicates zero point, the position which the needle should indicate when no light is entering the photocell.

■ Accurate cross-coupling, with film of ASA 100 rating, is provided throughout a range of from light value 5 to light value 17.

When you do a search for a specific reference, you will find that the Internet has enhanced quality of information.

[illegible][illegible]

100

KONICA F EXPOSURE METER COUPLING RANGE (Film Rating, ASA 100)

F. NO. LV \	1.4	2	2.8	4	5.6	8	11	16
5	15	8	4	2	1			
6	30	15	8	4	2	1		
7	60	30	15	8	4	2	1	
8	125	60	30	15	8	4	2	1
9	250	125	60	30	15	8	4	2
10	500	250	125	60	30	15	8	4
11	1000	500	250	125	60	30	15	8
12	2000	1000	500	250	125	60	30	15
13		2000	1000	500	250	125	60	30
14			2000	1000	500	250	125	60
15				2000	1000	500	250	125
16	(SHUTTER SPEED)				2000	1000	500	250
17						2000	1000	500

KONIFILTER TYPES AND EXPOSURE FACTORS

The exposure factors of the KONIFILTERS for the KONICA F when used in conjunction with SAKURA KONIPAN SSS, SS and S film, are approximately as listed below:

JIS Number	Type	Color	Cut-Off Wavelength (mμ)	Exposure Factor	
				Daylight	Tungsten
SL 39	UV	nil	390	1.0	1.0
SY 48	Y 1	yellow	480	1.5	1.2
SY 52	Y 2	dark yellow	520	2.5	1.3
SO 56	R 1	orange red	560	4.0	2.0
- - -	P 1	green	- -	2.5	1.5

For exposure factor of 1.5, up aperture one-half step;
for x 2.5, increase one and one-half step; for x 4, increase two steps.

CORRECT USE OF EXPOSURE METER

- Remember that the built-in exposure meter of the KONICA F is designed for gauging reflected light coming from the subject-matter (not incident light, the illumination striking the subject) .

Also, it must be noted that in most cases light other than that reflected by the subject to be photographed is impinging on the photocell.

Consequently, in order to obtain the best results, the measurement of the intensity of light should be limited to that given off by the subject only.

Keep in mind the following points when using the KONICA F coupled exposure meter:

- ① When photographing people, measure the light coming of the subject by moving up close enough to exclude other extraneous light.

In this case see that shadows are not cast by yourself or the camera.

The best results will be obtained by using the average of the highlights and shadows of the subject-matter.

[2] When using color film, there is no basic difference.

The KONICA F exposure meter is designed to function equally well for monochrome or for color.

[3] When photographing scenery, avoid the strong light reflected by the sky and clouds by pointing your camera toward the foreground from six to ten feet away from camera position. When extremely wide vistas must be encompassed, use half the indicated exposure. When scenery does not include any sky, obtain exposure settings by aiming at center of scene.

[4] When working under reverse lighting conditions, if distinct reproduction is desired of subject in shade, adjust camera to darkest portion of subject by excluding light coming from behind.

If both background and subject must be reproduced, use mean of values obtained.

If only silhouette of the subject is desired, adjust camera to bright background.

The self-timer can be used in the following manner:

- ① All shutter speeds (1 to 1/2000 second) except 8
- ② Delay time can be reduced by adjusting starting position between 90 and 180 degrees of lever movement
- ③ Shutter button can be used quite independently of self-timer even after setting for delayed action
- ④ If self-timer is set prior to operation of cocking lever, it can be released without actuating shutter
- ⑤ Self-timer will not operate at half-cock position of cocking lever.

KONICA F INTERCHANGEABLE LENSES

HEXANON F/2, $f = 35$ mm (set includes lens hood, 4 filters, and hood case)

HEXANON F/1.8, $f = 85$ mm (with leather case)

HEXANON F/2.8, $f = 135$ mm (with leather case)

All these lenses cross-couple accurately with the built-in exposure meter. The 35 mm and 85 mm lenses are equipped with full automatic aperture.

Hood and Filters Set for 85 mm and 135 mm telephoto lenses. Lens hood and 4 filters comprise a set, usable with either size of lens.

SYNCHROFLASH PHOTOGRAPHY



Synchroflash photography is accomplished by some method whereby the flashbulb or electronic flash is set off at precisely the same instant as the opening of the shutter.



M Connection
Socket

X Connection
Socket

In the KONICA F, it is possible to synchronize shutter action with the instantaneous discharge of electronic flash at shutter speeds up to $1/125$ second because the metallic focal plane shutter sweeps across the film surface in only 6 milliseconds.

Full synchronization at all shutter speeds is possible with class M flashbulbs.

Moreover, automatic adjustment of shutter action delay is effected so that the full intensity of the flash is utilized without waste.

SELF-TIMER



Move self-timer lever 180 degrees to set, either after or before operating cocking lever.

When the self-timer button is moved to the left, the delayed action mechanism will start functioning, and the shutter will be released after approximately 10 seconds.

In addition to use for photographs in which the photographer wishes to be included, the self-timer is useful for close range, microscope and other work in which camera movement must be avoided to prevent blurring.

- With the flashgun mount in position, such collapsible, pocket flashguns as the KONIFLASH III and III M can be mounted on the KONICA F.
- When using class M flashbulbs (time to peak intensity about 20 milli-seconds) plug cord connector in "M" connection socket.
Full synchronization is possible up to and including $1/2000$ second.
- When using electronic flash, connect to "X" socket.
Synchronization possible up to and including $1/125$ second.

Flash Synchronization Table

Type of Flash	Connection	
	"M"	"X"
Class M Flashbulb	all shutter-speeds	up to $1/30$ Sec.
Class F Flashbulb	no Synch.	up to $1/60$ Sec.
Electronic Flash	no Synch.	up to $1/125$ Sec.

Class FP flashbulbs will give full synchronization at all shutter speeds, using connection "M"

DEPTH OF FIELD

Depth of field is the range of focusing tolerance available in front of and behind a subject in accurate focus. The nature of depth of field is as follows:

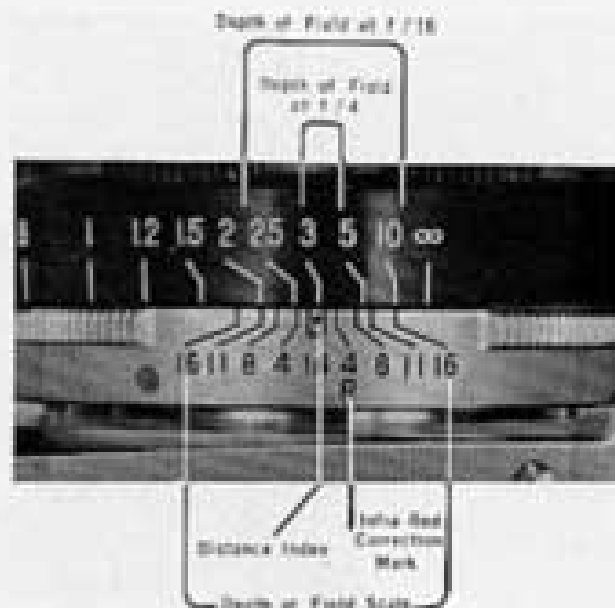
- At a given distance, the smaller the aperture the greater the depth of field.
- At a given aperture setting, the farther away the subject the greater the depth of field. Depth of field decreases as the distance becomes closer.
- More depth is available beyond the subject in exact focus than in front.
- If the distance and the aperture setting are the same, a lens of shorter focal length will have greater depth of field than a lens of long focal length.

With the KONICA F it is possible to check available depth of field in two ways:

- ① by visual observation through the viewfinder, using the manual aperture control.
- ② by consulting the depth of field scale, adjacent to the distance scale.



- ① Checking depth of field by manual aperture control.
Normally, the aperture of the KONICA F remains fully open regardless of the aperture control setting. However, by pressing the manual aperture control, it is possible to reduce the aperture to any desired setting previously selected. By actual visual observation of the image seen in the viewfinder, it is possible to ascertain the available depth of field. So long as the manual control is kept depressed, the lens will be stopped down to the pre-set aperture size.
- By turning the aperture control while the manual control is kept depressed, it is possible to adjust depth of field by actual sight.



- ② Checking depth of field by depth of field scale. The depth of field scale adjacent to the distance scale, is marked out in aperture values on both sides of the distance index mark. When the distance scale indicates that the subject focus is 3 meters from the camera, the depth of field scale will show that at aperture setting $f/4$ all objects lying within 2.5 meters and 4 meters will register sharply on the film. When the lens is stopped down to $f/11$, the range is increased to from 2 meters to 5 meters.

INFRA-RED CORRECTION MARK When using infra-red filters in conjunction with infra-red film for infra-red photography, focus first in normal way, read the distance indicated, then move focusing lever so that indicated distance is shifted to infra-red correction mark (R). Then focus will be correct for infra-red wavelengths.

CHANGING LENSES

Because the KONICA F has a bayonet type lens mount it is a simple matter of removing and fitting lenses by a 55 degree twist of the barrel.

To remove lens press lens catch and turn lens barrel counterclockwise until it will turn no further (red dots on lens and body are then in alignment). The lens will slip easily out of the mount.



To fit lens in mount, match the red dots on lens and camera body, insert lens base squarely into mount then twist lens barrel clockwise until lens catch engages properly.



■ When lens is securely mounted, the automatic aperture control levers of the lens and the body are interlocked. If they fail to couple, move aperture control to permit proper locking.

■ When fitting lens avoid pressing the manual aperture control.

FILM REWIND

- If more than the number of frames available on a roll of film is shot, the end of the roll will be reached, and the cocking lever may jam before it reaches the end of its stroke. In such cases, never force the lever. Move sprocket release lever and rewind film.
- Never open backlid without rewinding film into safety cartridge. If backlid is opened without rewinding, the exposed film will be ruined.

1

To rewind film into safety cartridge, move sprocket release lever to "R". Lever will stay in that position until cocking lever is next operated.



2

Erect rewind crank and turn in direction of arrow to wind film into safety cartridge.



3

Open backlid, pull out rewind spindle, and remove safety cartridge containing exposed film.

- When at end of rewind operation the film becomes dislodged from the take-up spool there will be encountered slight resistance. If leader at end of film is to be left protruding out of the safety cartridge, stop rewind as soon as separation of film end from spool is sensed.
- When opening camera to remove cartridge containing exposed film, avoid direct illumination as when loading.
- Sprocket release lever cannot be moved from "R" position. It will spring back automatically when the cocking lever is operated.

CHANGE OF VIEWERS

Press viewer release button, this will permit removal of eye-level or waist-level viewer. To attach, fit pins in guide grooves and lower truly vertically and press down. Viewer will be secured with a click.



With the waist level viewer, it is possible to sight and focus from above, while angle viewing is convenient when camera is mounted on copying attachment or stand.



DEPTH OF FIELD TABLE.

HEXANON F / 1.4, $f=52\text{mm}$

(circle of confusion = 3/100mm)

(in feet)

DISTANCE SCALE IN FEET DOWN PAGE	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	60
1.4	2' 00"	2' 06"	3' 00"	3' 05"	3' 11"	4' 11"	6' 09"	9' 06"	14' 00"	26' 01"	195' 01"
	2' 01"	2' 07"	3' 01"	3' 07"	4' 01"	5' 01"	7' 03"	10' 06"	16' 02"	35' 04"	190
2	2' 00"	2' 06"	2' 11"	3' 05"	3' 11"	4' 10"	6' 08"	9' 04"	13' 07"	24' 08"	136' 08"
	2' 01"	2' 07"	3' 01"	3' 07"	4' 01"	5' 02"	7' 04"	10' 09"	16' 09"	38' 03"	190
2.8	2' 00"	2' 05"	2' 11"	3' 05"	3' 10"	4' 09"	6' 07"	9' 01"	13' 04"	23' 01"	97' 08"
	2' 01"	2' 07"	3' 01"	3' 07"	4' 02"	5' 03"	7' 06"	11' 01"	17' 07"	43' 00"	190
4	2' 00"	2' 05"	2' 11"	3' 04"	3' 10"	4' 08"	6' 05"	8' 10"	12' 05"	21' 00"	88' 06"
	2' 01"	2' 07"	3' 01"	3' 08"	4' 03"	5' 04"	7' 09"	11' 07"	19' 00"	52' 11"	190
5.6	1' 11"	2' 05"	2' 19"	3' 04"	3' 09"	4' 07"	6' 02"	8' 05"	11' 07"	18' 09"	49' 00"
	2' 01"	2' 07"	3' 02"	3' 09"	4' 04"	5' 06"	8' 01"	12' 05"	21' 00"	76' 05"	190
8	1' 11"	2' 04"	2' 19"	3' 03"	3' 08"	4' 05"	5' 11"	7' 10"	10' 07"	16' 02"	34' 05"
	2' 01"	2' 08"	3' 03"	3' 10"	4' 05"	5' 09"	8' 08"	13' 10"	26' 01"	60	190
11	1' 11"	2' 04"	2' 09"	3' 02"	3' 08"	4' 03"	5' 07"	7' 03"	9' 06"	13' 10"	25' 01"
	2' 01"	2' 09"	3' 04"	4' 00"	4' 08"	6' 01"	9' 06"	16' 02"	36' 04"	190	190
16	1' 10"	2' 03"	2' 08"	3' 00"	3' 04"	4' 00"	5' 01"	6' 06"	8' 02"	11' 02"	17' 04"
	2' 02"	2' 10"	3' 06"	4' 03"	5' 00"	6' 09"	11' 04"	22' 09"	40' 06"	190	190

(in meters)

$\frac{\text{DISTANCE SCALE IN METERS}}{\text{DATA SPEED T-50}}$	0.6	0.8	1.0	1.2	1.5	2.0	2.5	3.0	5.0	10.0	∞
1.4	0.60 0.61	0.79 0.81	0.99 1.01	1.18 1.22	1.47 1.53	1.94 2.06	2.41 2.60	2.86 3.15	4.63 5.44	8.58 11.98	59.45 ∞
2	0.59 0.61	0.79 0.81	0.98 1.02	1.17 1.23	1.45 1.55	1.92 2.09	2.37 2.65	2.81 3.22	4.48 5.66	8.09 13.10	41.64 ∞
2.8	0.59 0.61	0.78 0.82	0.97 1.03	1.16 1.24	1.44 1.57	1.89 2.13	2.32 2.71	2.74 3.31	4.30 5.97	7.52 14.96	29.77 ∞
4	0.59 0.61	0.78 0.82	0.96 1.04	1.14 1.26	1.41 1.60	1.84 2.19	2.25 2.81	2.64 3.47	4.06 6.51	6.80 19.02	20.87 ∞
5.6	0.58 0.62	0.77 0.83	0.95 1.06	1.12 1.29	1.38 1.65	1.78 2.28	2.17 2.96	2.53 3.71	3.78 7.42	6.04 29.87	14.93 ∞
8	0.58 0.63	0.76 0.85	0.93 1.09	1.09 1.33	1.33 1.72	1.71 2.43	2.05 3.22	2.37 4.13	3.43 9.38	5.17 ∞	10.48 ∞
11	0.57 0.64	0.74 0.87	0.90 1.12	1.06 1.39	1.28 1.82	1.62 2.64	1.92 3.62	2.19 4.81	3.07 14.07	4.38 ∞	7.65 ∞
16	0.56 0.65	0.72 0.91	0.87 1.19	1.01 1.50	1.30 2.02	1.49 3.10	1.74 4.57	1.96 6.68	2.62 37.85	3.50 ∞	5.25 ∞

SPECIAL ACCESSORIES FOR THE KONICA F
(not furnished with camera)

Lens Hood Slip-Over Type, 51mm diameter
Filters Screw-in type, 49 mm diameter, 0.75mm pitch thread SL 39 (Ultraviolet) SY 48 (Yellow x 1) SY 52 (Yellow x 2) SO 56 (Red x 1) P 1 (Polarization) ND (Neutral Density x 4)
Waist Level Viewer Interchangeable with eyelevel eyepiece (with soft leather case)
Exacta Lens Adaptor
Microscope Adaptor
Copying Attachment For documentation and other close range work
Carrying Bag

M E M O	
LENS No.	
BODY No.	



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freedom from one of the most troublesome problems in photography—setting the exposure. The Canon SureShot T has a built-in Electronic Exposure System that automatically sets the lens aperture, there's no fiddling with light, no playing of a needle, no

adjusting its data as needed. It won't be in the "cloud" and it won't be a technician's playground. It's a technician's playground, in a manner of speaking, serving for single and multiuser networks. A system developer with the Windows desktop has it.

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Tomorrow's camera...
today.



1.72 f=57mm

Some time in the
future, within 50 years or thereabouts,
at least I would like to see the
fact that one professional, and that is
what the Commons is, will be T.

In the future, Cofresí has been said to want the fight available—no matter how sudden—in the gear—and not the equipment for his own support. And while

“A. I. VON, DO IT YOURSELF AND STOP! THE FINGER IS THERE! NO NEED FOR ME TO TELL YOU THAT! I’M JUST HERE TO HELP YOU MAKE SURE YOU DO IT.”

And you already know what's happening. Because the things looking out for this world in 1991, is a way, is clearly, in the world today.

Eventually, you may be able to purchase convenience and reliability from either company. For now, you must choose the one you like best.

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Your SLR is obsolete.

Sorry, we know how irritating that word is. But unless you own a Konica Autoreflex-T, we don't go around saying you'll have your SLR's words said.

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And it's here now. To take the place of your old-fashioned SLR.

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1. **QUESTION** 2. **ANSWER** 3. **QUESTION** 4. **ANSWER**
 5. **QUESTION** 6. **ANSWER** 7. **QUESTION** 8. **ANSWER**

The machine is sold in 100mm spacing (with a separate but identical 120mm model available should it be required). This also provides facilities for more spacing if needed, only when an 80mm connector is fitted, which would mean that if the connector comes off the 70, upon 80mm connector being used on the machine (although the connector would be replaced as an emergency) an 80mm spacer may be fitted. Although the 80mm type is fitted to machines with the standard machine, it is stated that the machine can be fitted with either a 100mm or 120mm connector.

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ingapore, and its construction has attracted considerable interest. Its development, says a Singaporean business official, is in line with an UN plan to build a new city in Southeast Asia. The UN plan calls for a new city in Southeast Asia, and Singapore is a natural choice. The UN plan calls for a new city in Southeast Asia, and Singapore is a natural choice. The UN plan calls for a new city in Southeast Asia, and Singapore is a natural choice.

various. Furthermore, the International Monetary Fund's view is far more realistic regarding the degree to which the US is engaged with the problem of monetary and credit management. Furthermore, the International Monetary Fund's view of the long-term prospects for the US is far more realistic regarding the degree to which the US is engaged with the problem of monetary and credit management. Furthermore, the International Monetary Fund's view of the long-term prospects for the US is far more realistic regarding the degree to which the US is engaged with the problem of monetary and credit management.

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the other, the more likely the opportunity will be. Consequently, although the opportunity to be successful will be just as high for the entrepreneur, there is greater variance. Thus, the less likely one is likely to succeed, and certain opportunities have negative consequences for us as well as being negative social opportunity. Thus, if someone's chance to be successful is small, it is also

Wolfsheimer, 79, his British passport set at naught as a supposed above-board spy-master, is now accused of the subterfuge of not only going outside Japan via Germany, he also through the Italian Embassy in Tokyo, after fleeing Moscow.

WILEY-INTERSCIENCE
JOHN WILEY & SONS

[illegible]

Abstract

the school for important cultural lessons in many national crises, Korea's top philosopher's example. Nam's thinking is widely disseminated in speeches and two volumes. The presidential order provides for granting his national recognition and the establishment of the Nam Joon thought has spread all of Korea. The concept, however, is unknown all the 3 generations.

Why Does the Desire to Own A Precision Camera Increase Along with Your Knowledge of the Mechanism?



KONICA T

Revised: 01/20/2010
 Date: 01/20/2010
 Time: 10:00 AM
 User: [REDACTED]

PHOTOKINA '70

Konica. The Focus of Shutterbug Conversation.

"The good thing is, I got a new camera.
It's exactly what I wanted. Nothing too
flashy. Just, you know, professional-looking, with 28K views,
about the size of a... uh...
Everything makes me understand why you made me feel like this.
This is just the thing for those unimpressed with others."

"Oh, look at this beautiful
thing. Why did you
just give it to me? It's so beautiful."

"This camera will make your work
I can't believe it's a professional.
My friend."

"I really like this camera. It's just what I needed. It's so beautiful.
Everything makes me feel like I'm a professional. It's just what I needed."

"I love it. It's so beautiful. It's just what I needed.
It's exactly what I wanted. Nothing too
flashy. Just, you know, professional-looking, with 28K views,
about the size of a... uh...
Everything makes me understand why you made me feel like this.
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Everything makes me understand why you made me feel like this.
This is just the thing for those unimpressed with others."



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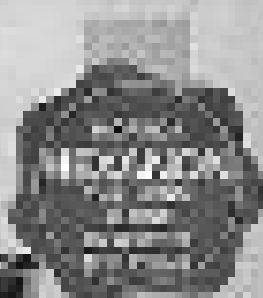
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There are wide intervals between interchangeable lenses from 28 to 1000 mm. from 350 mm. fully automatic.

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Shutter speeds 1/8, 1/16, 1/32, 1/64, 1/128, 1/256, 1/512, 1/1024, 1/2048, 1/4096, 1/8192, 1/16384, 1/32768, 1/65536, 1/131072, 1/262144, 1/524288, 1/1048576, 1/2097152, 1/4194304, 1/8388608, 1/16777216, 1/33554432, 1/67108864, 1/134217728, 1/268435456, 1/536870912, 1/1073741824, 1/2147483648, 1/4294967296, 1/8589934592, 1/17179869184, 1/34359738368, 1/68719476736, 1/137438953472, 1/274877906944, 1/549755813888, 1/1099511627776, 1/2199023255552, 1/4398046511104, 1/8796093022208, 1/17592186044416, 1/35184372088832, 1/70368744177664, 1/140737488355328, 1/281474976710656, 1/562949953421312, 1/1125899906842624, 1/2251799813685248, 1/4503599627370496, 1/9007199254740992, 1/18014398509481984, 1/36028797018963968, 1/72057594037927936, 1/144115188075855872, 1/288230376151711744, 1/576460752303423488, 1/1152921504606846976, 1/2305843009213693952, 1/4611686018427387904, 1/9223372036854775808, 1/18446744073709551616, 1/36893488147419103232, 1/73786976294838206464, 1/147573952589676412928, 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