

KONICA T3

AUTOREFLEX



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**IMPORTANT**

Use only MALLORY PX-675 or
 EVEREADY EPX-675.
 Other batteries of identical size will
 fit but will not give correct exposures.

BATTERY CHARGE

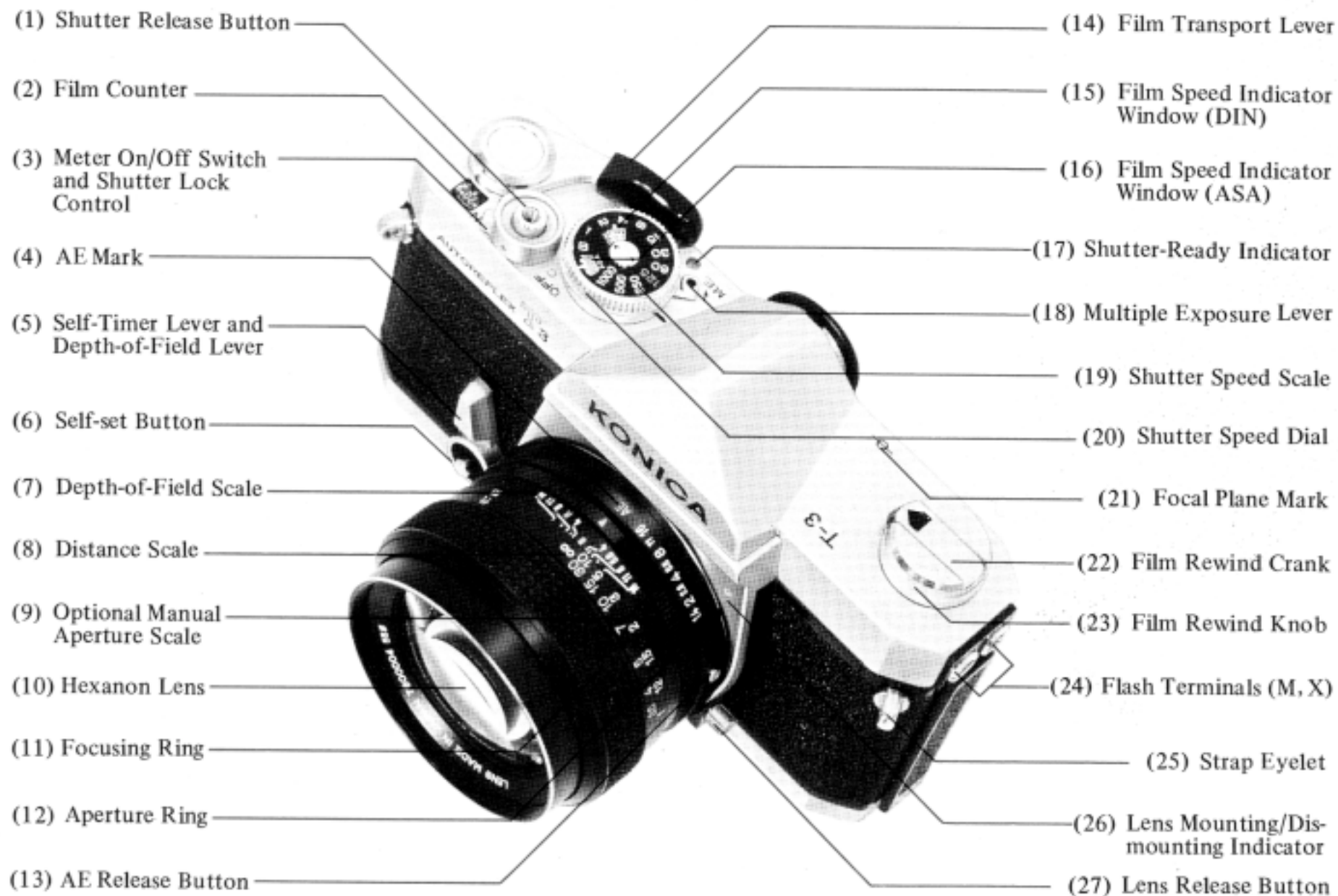
- ① remove lens
- ② set ASA 100
- ③ set 1/125
- ④ check battery

SEVEN BASIC STEPS TO PLEASURABLE AEC* SHOOTING

1. Insert the two 1.35 Volt mercury batteries supplied with your camera into chamber at bottom of camera to power the CdS meter. Turn switch to "On" position when shooting pictures.
2. Load camera. Here "Insta-Grip" take-up spool makes for sure, fumble-free operation.
3. Set ASA rating of your film in window on the top of the shutter speed dial, by lifting and turning outer ring.
4. Make certain that lens is set at "AE" for effortless, correct shooting, when automatic exposure is desired.
5. Select desired shutter speed. For most outdoor shots, 1/125 is recommended.
6. Focus and compose picture in finder. The bright image is easy to focus, especially in the Microdiaprism or Split-Image area, where images snap in and out of focus smartly.
7. Shoot pictures, as long as the needle in the right margin of the finder is in a white area.

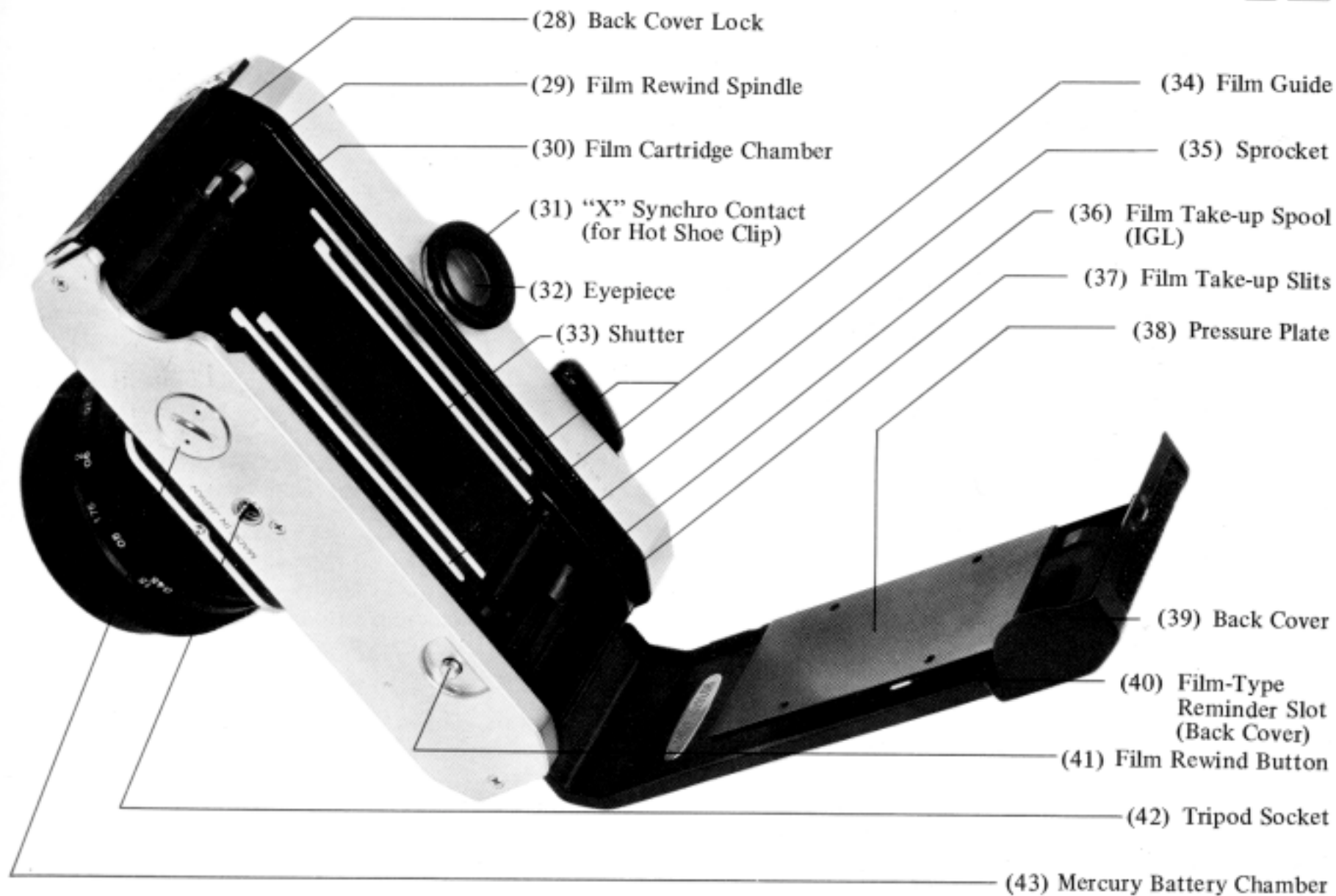
*AEC describes the optional total Automatic Exposure Control of the KONICA AUTOREFLEX-T3 which permits (1) Full use of wide open automatic aperture lenses, (2) automatically selects and sets proper aperture at instant of exposure, (3) automatically reopens aperture, and (4) provides Instant Return Mirror action.

OPERATING CONTROLS



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OPERATING CONTROLS



MAJOR SPECIFICATIONS OF KONICA AUTOREFLEX-T3

Type: 35mm TTL/AEC SLR (Through-The-Lens Metering, Automatic Exposure Control Single-Lens Reflex)

Film: Standard 35mm 20 or 36-exposure cartridges

Format: 24×36mm

Standard Lenses:

Hexanon AR 50mm f/1.7 (6 elements, 5 groups)

Hexanon AR 50mm f/1.4 (7 elements, 6 groups)

Hexanon AR 57mm f/1.2 (7 elements, 6 groups)

Minimum Focusing Distance: 18" with f/1.7, f/1.4 and f/1.2.

All Standard Lenses Incorporate AE-Lock, Color-Dynamic Lens Coating.

Lens Mount: Konica Bayonet type with positive lock, 47mm diameter.

Flange/Film Distance: 40.5mm

Aperture Control System: Fully Automatic exposure control (AEC) system (f/1.2 to f/16) with all Hexanon AR lenses. Integral Depth-of-Field Preview Control.

Shutter: Metallic-Foil vertical-scanning Copal Square-S with extended flash synchronization capability.

Shutter Speeds: B, 1 to 1/1000th second in standard geometrical progression; Time exposures possible without separate accessories. Non-Rotating (during exposure) shutter speed dial.

Flash Synchronization: Optional "hot" accessory shoe provides "X" synchronization with cordless flash units, permits use of electronic flash at 1/125th second (or flashcubes to

1/30th second). Separate, built-in PC outlets for cord-type flash units permit "X" synchronization to 1/125th second, all "M"-type bulbs (including flashcubes) at all speeds. Safety interlock prevents electrical shock at PC outlets even if 'hot shoe' flash is engaged.

Self-Timer: Variable-delay to 10 seconds. Locking mechanism prevents accidental use. Timer locks up mirror, stop down lens diaphragm at beginning of cycle to eliminate potential vibration at time of exposure.

Viewing System: Single-Lens Reflex type shows exact image recorded on film. Coated eye-level pentaprism shows upright, unreversed image. Image magnification 0.78x with 50mm lens. Image seen corresponds to 92% of actual field, to insure that entire image within finder is recorded even with mounted 2×2" transparencies.

Focusing Screens: Standard Konica Microdiaphragm screen, optional Konica Split-Image Rangefinder type.

In-Finder Readouts: "Control-Center" viewfinder shows mode of operation (auto or manual), exact shutter speed in use, exact lens aperture in use, maximum aperture of lens in use, under/over-exposure zones, match-needle alignment mark, exposure indicator needle, battery-test indicator, meter sensitivity-range indicators.

Reflex Mirror: Coated first-surface type. Oversize design prevents image cutoff within finder even with bellows extensions at 1:1 magnification. Mirror automatically retracts as it lifts, thus permits use of extreme wide-angle lenses with unrestricted reflex viewing. Instant-return prevents image blackout after exposure.

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Exposure Control System: Fully Automatic Exposure Control (AEC) system incorporating variable-angle thru-the-lens metering by twin CdS cells housed within pentaprism. System permits:

- ★ Full-Aperture Metering and Automatic Exposure Control with all Hexanon AR lenses,
- ★ Stopped-down Aperture (Match-Needle) Metering with all manual, pre-set, or non-AE lenses.

Shutter-speed preference system insures professional control.

Meter Power Source: Two 1.35V mercury energy cells (Mallory Type PX-675 Photographic); built-in battery-test circuit. Integrated Meter On-Off/Shutter Lock switch conserves battery energy when camera not in use.

Meter Sensitivity Range: 98,304:1 (EV1.5–EV18 with f/1.2 lens and ASA 100 film). Meter coupling range automatically indicated by red markers within viewfinder, appearing if coupling range is exceeded in extremely dim or bright light.

Film Speed Capability: ASA 12 to 3200 (DIN 12 to 36).

Exposure 'Memory' (hold) Device: slight pressure on shutter release (or activation of self timer) memorizes exposure reading.

Loading: Konica Insta-Grip Loading (IGL) system incorporating multislot, self-locking take-up spool.

Film Transport: Single-stroke lever automatically advances film, cocks shutter, activates exposure counter, prevents unwanted double exposures in fast 162° travel. Transport lever returns to "ready" position 30° away from camera body to enable continuous eye-level shooting. Oversized plastic tip provides extra comfort, prevents thumb from slipping away from lever.

Multiple Exposure Capability: Spring-loaded multiple exposure switch permits use of transport lever to re-cock shutter without advancing film or exposure counter, for creative specialeffects work. System also permits infinite number of intermediate-speed "Time" exposures (1¼ second, 1½ second 2 seconds, 2¼ seconds, etc.) by exposing frame two or more times at one-second (or one-second plus any other speed).

Shutter-Ready Indicator: Signals Green when shutter has been cocked, red when uncocked.

Exposure Counter: Indicated number of frames exposed, automatically resets to "Zero" when film is changed.

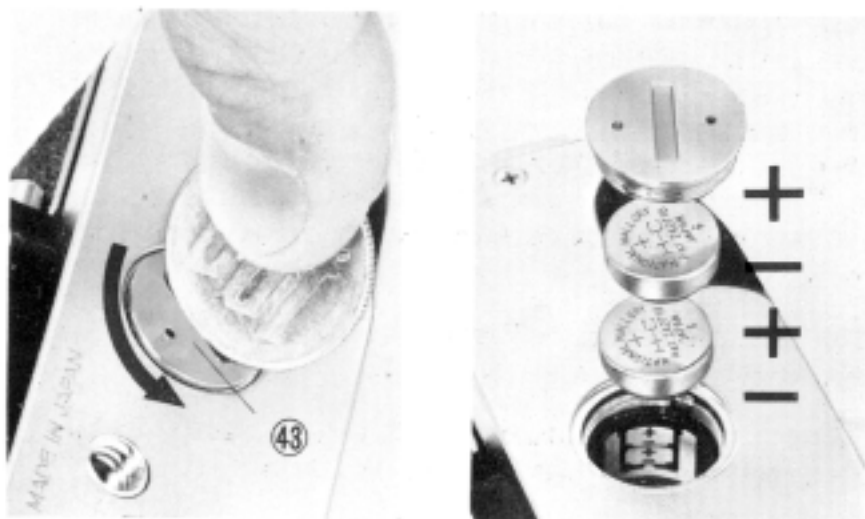
Unloading: Oversize rapid-rewind crank permits rewinding in seconds; self-locking rewind release button, automatically returns to correct position for film transport when transport lever is activated. Cutaway film cartridge chamber allows cartridge removal without raising rewind crank.

Dimensions: With standard lens, 6"(wide) × 3-3/4"(high) × 3-3/4"(deep); Without lens, 6"(wide) × 3-3/4"(high) × 1-3/4"(deep).

Weight:

Body only, 26 ozs.	With f/1.7 lens, 35 ozs.
	With f/1.4 lens, 36 ozs.
	With f/1.2 lens, 42 ozs.

INSERTING BATTERIES, AND METER ON/OFF SWITCH



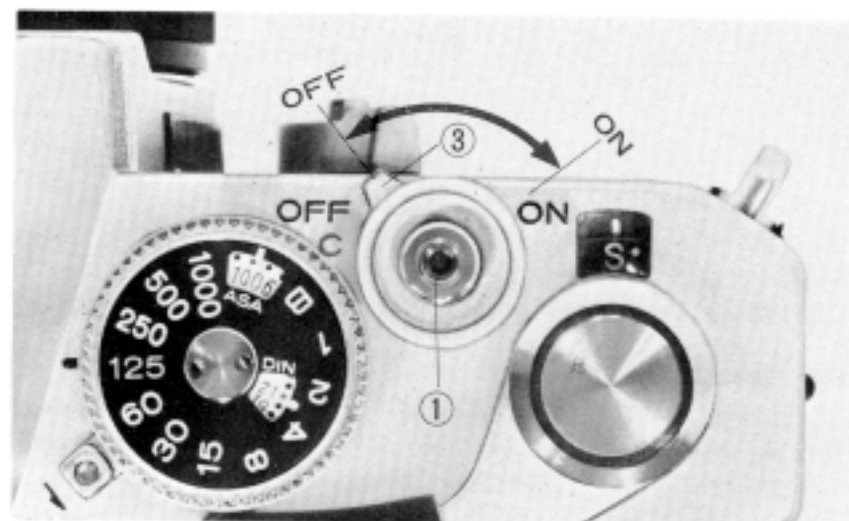
INSERTING BATTERIES

The compound CdS meter of the KONICA Autoreflex-T3 operates on two Mallory No. PX-675 or Eveready EPX-675 or equivalent 1.35V mercury batteries. Handle batteries by edges to keep current conducting surfaces clean. If soiled, wipe clean with soft, dry cloth.

Turn the cover of the Mercury Battery Chamber (43) counterclockwise with a coin and detach it from the chamber.

Insert the two cells into the Mercury Battery Chamber, the "+" side up, according to the figure printed on the seal, inside the chamber.

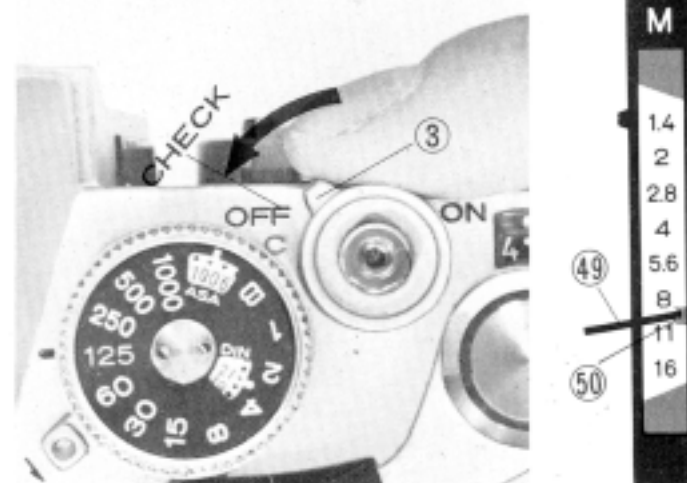
After the cells have been put into position, put the cover on the chamber and screw it tightly.



METER ON/OFF SWITCH AND SHUTTER LOCK CONTROL

When not using your camera, conserve battery energy by turning the Meter On/Off Switch (3) counterclockwise until it clicks into the "Off" position. Simultaneously, this prevents accidental exposures by preventing operation of the Shutter Release Button (1).

When you're ready to take your next picture, turn this switch clockwise to the "On" position: now, the meter circuit will again operate, and the shutter release is unlocked. (If you turned the meter off without advancing film you won't have to turn the switch back to the "On" position: it returns to "On" automatically when you advance the film transport lever).



BATTERY CHECK

- The meter uses two 1.35V. Mallory PX-675 or Eveready EPX-675 Mercury battery cells. Be certain not to use similar looking batteries of different voltages.
- When not using the camera for a length of time, remove the battery cells and store them in a cool, dry place.
- The service life of a mercury battery is generally over one year of normal use. Therefore it is not necessary to check battery strength frequently.

If the meter needle fails to swing when switch is "On" and camera aimed at light, (ASA 400, shutter 1/125th) make battery check as follows:

Remove lens, set shutter speed dial to 1/125th second, and film speed selector to ASA 100. While holding the camera to your eye, press the Meter On/Off Switch (3) past the "Off" position so that the switch is pointing to the engraved "C" on the camera top. If the Meter Needle (49) moves alongside the Battery Check Mark (50), your batteries are all right. (If not, replace them as soon as possible with a fresh set.) For extra convenience in battery-testing, all controls involved are engraved in *red*: red 1/125th-second indicator on shutter speed dial, red ASA 100 indicator on film speed window, red "C" (Check) on camera body, and red indicator in viewfinder.

CHANGING LENSES



To Remove the Lens from the Camera:

Depress the Lens Release Button (27), grip of the lens barrel, turn lens barrel counterclockwise until the two red dots (one on the camera body (26) and the other on the lens barrel) align. The lens will then come off the camera.

NOTES:

When the lens is removed, do not touch any part of the interior of the camera.

- If the lens is to be left off the camera for any length of time, protect the camera interior from dust and moisture by use of a KONICA Body Cap. Where this is not available, keep the camera in a case or dustproof container.



To Mount your Lens on the Camera:

To mount a KONICA lens on the Autoreflex-T3, line up the red dot on the lens barrel with the red dot on the camera body. The lens will "seat" into the camera body easily. Then grip of the lens barrel and turn the lens clockwise until it clicks into place.

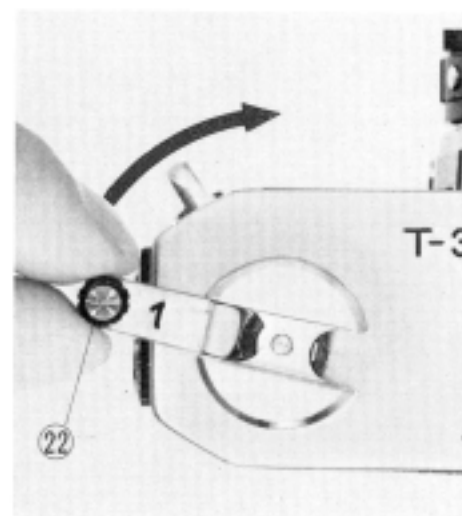
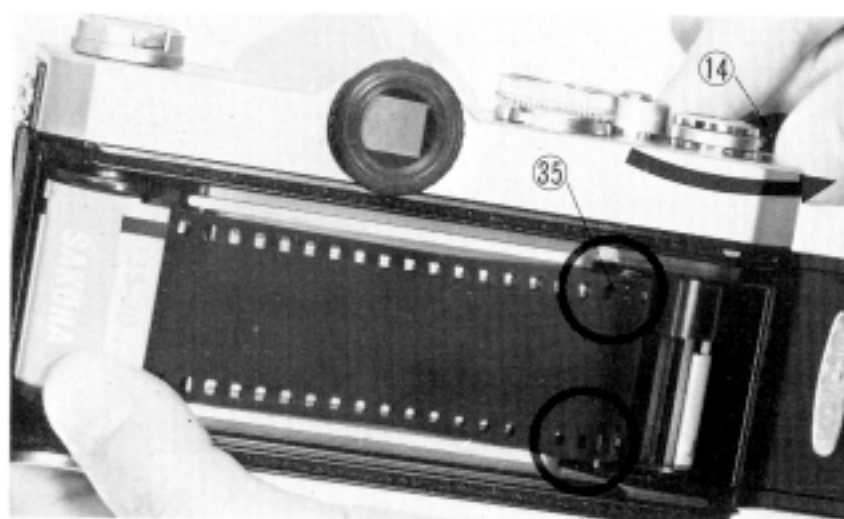
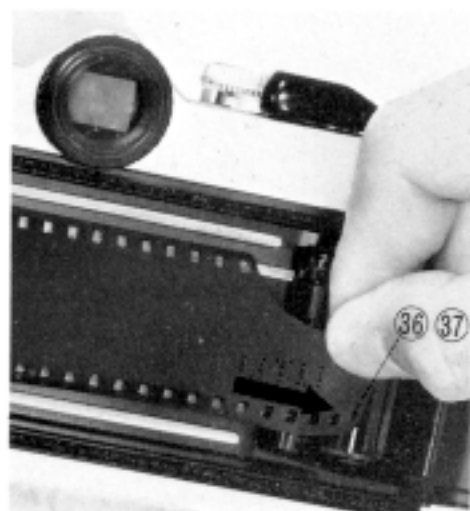
FILM LOADING

The KONICA Autoreflex-T3 takes standard 35mm film cartridges.

When loading avoid direct sunlight. Try to load camera in the shade. If no shade is available, use your own body to shade the camera.



- 1** Pull the Back Cover Lock (28) and open the Back Cover (39) of the camera.
- 2** Place the film cartridge in Film Cartridge Chamber (30) as shown in illustration (above, right).



- 3** Draw film leader across film gate and insert tip into any Slit (37) in the Film Take-up Spool (IGL-Insta-Grip Loading) (36). The film will be gripped instantly as you . . .
- 4** Wind one turn of film onto the Take-up Spool by turning the Film Transport Lever (14) Make sure that the Sprocket Holes in the film engage the Sprockets (35) in the camera before closing the camera back.

- 5** After closing the camera, turn the Film Rewind Crank (22) gently clockwise to take up the slack of the film in the cartridge.



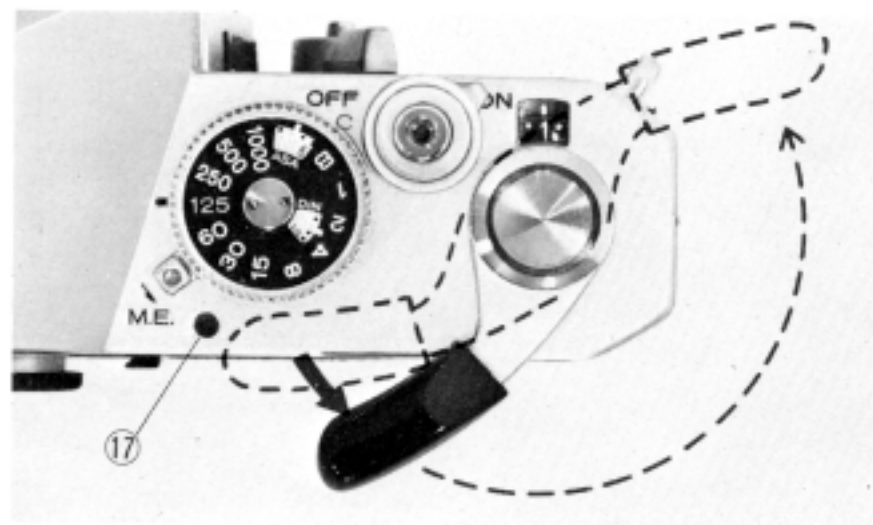
- 6** To wind off the exposed film leader, operate the Film Transport Lever (14) several times, alternately depressing the Shutter Release Button (1) until No. 1 appears opposite the mark in the Film Counter Window (2).

A single stroke of the Film Transport Lever moves the film one frame forward, cocks the shutter, and advances the film counter. The latter indicates the number of pictures that have been taken. At the end of shooting, after the film has been rewound, opening the camera back automatically returns the film counter "S" (Start) position.



TO CHECK FILM ADVANCE

Movement of the Film Rewind Knob (23) may be observed to check if film is moving through the camera. First the slack must be taken out of the film, as described on page 12. If film is moving through the camera, the Film Rewind Knob will rotate counterclockwise.



SHUTTER-READY INDICATOR

As you operate the Film Transport Lever, the Shutter-Ready Indicator (17) will change from red (not ready) to green (ready). When you have not used your camera for some time, it's difficult to remember whether or not you had transported film for the next exposure... and with this easily-seen indicator, you won't *have* to remember: if it's red, you didn't. If it's green, you did... and you're ready to shoot.



FILM-TYPE REMINDER SLOT

As a constant reminder that your camera is loaded, and of what type (and speed) of film it's loaded with, a Film-Type Reminder Slot (40) has been provided at the back of your camera. After loading, tear off the end flap of the film carton and insert it into this slot; after unloading, remove and discard the flap. Result: you know at a glance whether or not the camera's loaded...and what kind of film is inside.

SHUTTER AND APERTURE



The KONICA Autoreflex-T3 is equipped with an all-metal, Hi-Synchro Copal Square-S focal plane shutter. It controls the length of time that light is permitted to enter the camera and expose the film. A unique feature of the Copal Square-S shutter mounted in the KONICA Autoreflex-T3 is that the Shutter Speed Dial (20) is located on top of the camera, where shutter speeds are changed with the camera at eye level for more convenient operation. The Copal Square-S shutter is noted for extreme split second accuracy. Shutter speeds are linearly proportional as follows: 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, and 1/1000th second, plus "B" (Bulb), used for exposures of more than 1 second duration.

The Copal Square-S shutter is synchronized for electronic flash speeds up to 1/125th second. This figure is marked in red on the shutter speed dial. Expendable flashbulbs of "M" and "FP" types may be used at all speeds up to and including 1/1000th second.

The "B"(Bulb) is used to make exposures longer than 1 second. A tripod or other support should be used for "B" and for all shutter speeds slower than 1/30th second.

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F-number 1.2 1.4 1.7 2 2.8 4 5.6 8 11 16



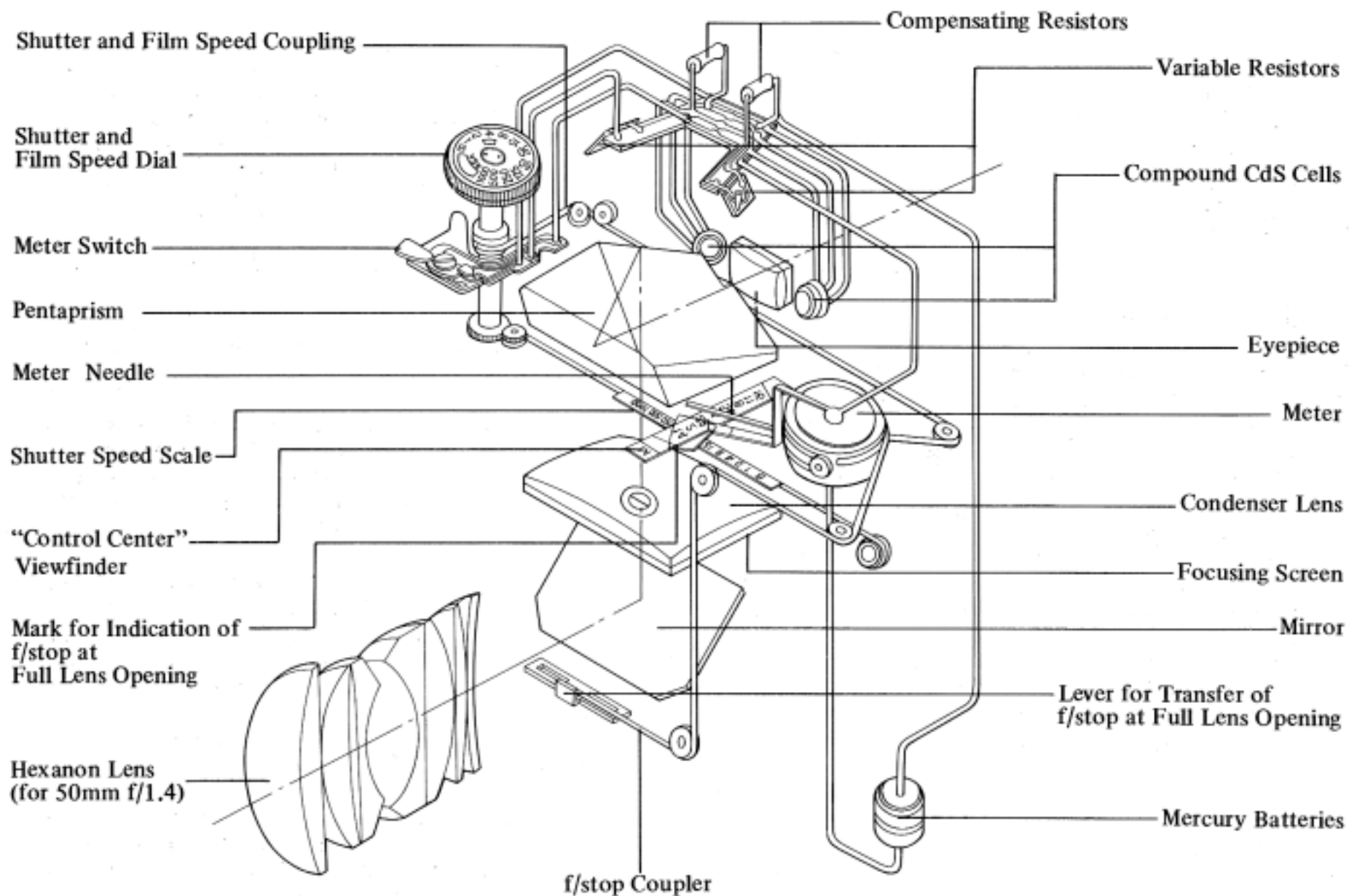
Amount-of-
Light Ratio 2 1 $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{8}$ $\frac{1}{16}$ $\frac{1}{32}$ $\frac{1}{64}$

Intermediate speeds cannot be set on the Copal Square-S shutter. However, speeds may be changed before or after cocking the shutter.

The amount of light that is allowed to enter the camera and strike the film is controlled by the iris diaphragm. The relative size of the opening or aperture is usually indicated by the use of f/stops. The larger the f/stop number the less light admitted. Thus f/16 admits less light than f/4.

When a KONICA Hexanon AR (AE) lens is mounted on the Autoreflex-T3 the aperture is automatically closed to the correct f/stop after the shutter release is pressed. The needle in the window indicates the f/stop to which the aperture will close at the moment of exposure by the AEC (Automatic Exposure Control), through-the-lens exposure meter system. It is not necessary to match the needle to a mark when the AE lenses are used.

Preset and manual diaphragm lenses may also be used with the AEC metering system. With these, the diaphragm is stopped down manually until the meter needle is opposite the mark near the f/1.4 setting in the finder.



AEC (AUTOMATIC EXPOSURE CONTROL) METERING AND NON-AUTOMATIC CONTROLS

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The Autoreflex-T3 is the world's first professional Through-The-Lens metering 35mm Single-Lens Reflex camera to have fully automatic AEC exposure control. The AEC meter system establishes contact to all KONICA Hexanon AR lenses by means of a meter-actuated coupling lever. When the shutter release is depressed, the spring loaded aperture in the lens is tripped to close to the limit determined by this coupling lever. This limit is the precise aperture required for a perfect exposure at that instant when you press the button.

With a KONICA Hexanon AR lens installed in your Autoreflex-T3 there is no need to waste time before shooting to match the needle to a mark. You only need to focus and compose, then press the shutter release – remaining assured all the time that correct exposure is being taken care of. Full concentration can thus be made on the spontaneous or esthetic needs of your photography. *In actuality, the KONICA Autoreflex-T3 offers not one but three optional methods of arriving at the correct of desired exposure.*

AEC Metering:

at which f/stop the fully automatic metering system will make the picture for you. Shutter and diaphragm are cross-coupled. Thus if you choose a high shutter speed to stop action, the diaphragm will be set for a wider opening automatically. On the other hand, should you need a smaller stop for greater Depth-of-Field, simply turn the Shutter Speed Dial (20) to a slower speed. The needle in the information center of the Viewfinder will keep you informed. At the same time, you can read the shutter speed setting below the viewing area (see page 19).

Stopped-Down Exposure Metering: With KONICA and other lenses having manual or preset diaphragm (not AE), as well as with extension rings and bellows, the Stopped-Down method is used. Here the exposure is read at the actual aperture used to make the picture. The needle in the Control Center is then simply brought to the Index Mark opposite the f/1.4 figure. This can also be done by changing the shutter speed setting. Literally thousands of lenses can be used with this system. In addition to KONICA Auto-Reflex lenses, lenses in mounts for KONICA FP, Pentax/Praktica, Exakta/Topcon and Nikon/Nikkormat can be used for the Stopped-Down metering with the Autoreflex-T3 via their respective KONICA Lens Adapters.

Manual Exposure Settings: Should you have some special exposure idea in mind, you need only move the diaphragm ring of your KONICA Hexanon AR lens from the AE setting to any f/stop desired. Thus, with this and the other metering systems just discussed, exposure with the KONICA Autoreflex-T3 becomes a versatile tool which gives you freedom to exploit its automation or to choose other exposure methods. (See page 23).

NOTE: With extremely fast films, the electric eye of the Autoreflex-T3 will not couple to the wider apertures of the lens diaphragm at very slow shutter speeds. This is automatically indicated in the viewfinder which shows the maximum apertures at which the meter is coupled under those conditions.

"CONTROL CENTER" VIEWFINDER

CORRECT EXPOSURE RANGE FOR f/1.2 HEXANON LENSES: With a Hexanon AR f/1.2 lens mounted on the KONICA Autoreflex-T3, correct exposure will be obtained so long as the needle is opposite or between f/numbers in the white portion of the scale. Underexposure will result when the needle swings into the upper red area (44). Overexposure will result when the needle swings into the lower red area (52).

CORRECT EXPOSURE RANGE FOR LENSES SLOWER THAN f/1.2: When a KONICA Autoreflex-T3 lens, slower than f/1.2 is installed on the camera, a red Maximum Aperture Indicator Band (48) will drop into place (i.e. In the diagram at the right, the maximum aperture indicator shows that the maximum aperture available is f/1.7). With lenses slower than f/1.2, the needle must be in a white area below the maximum aperture indicator.

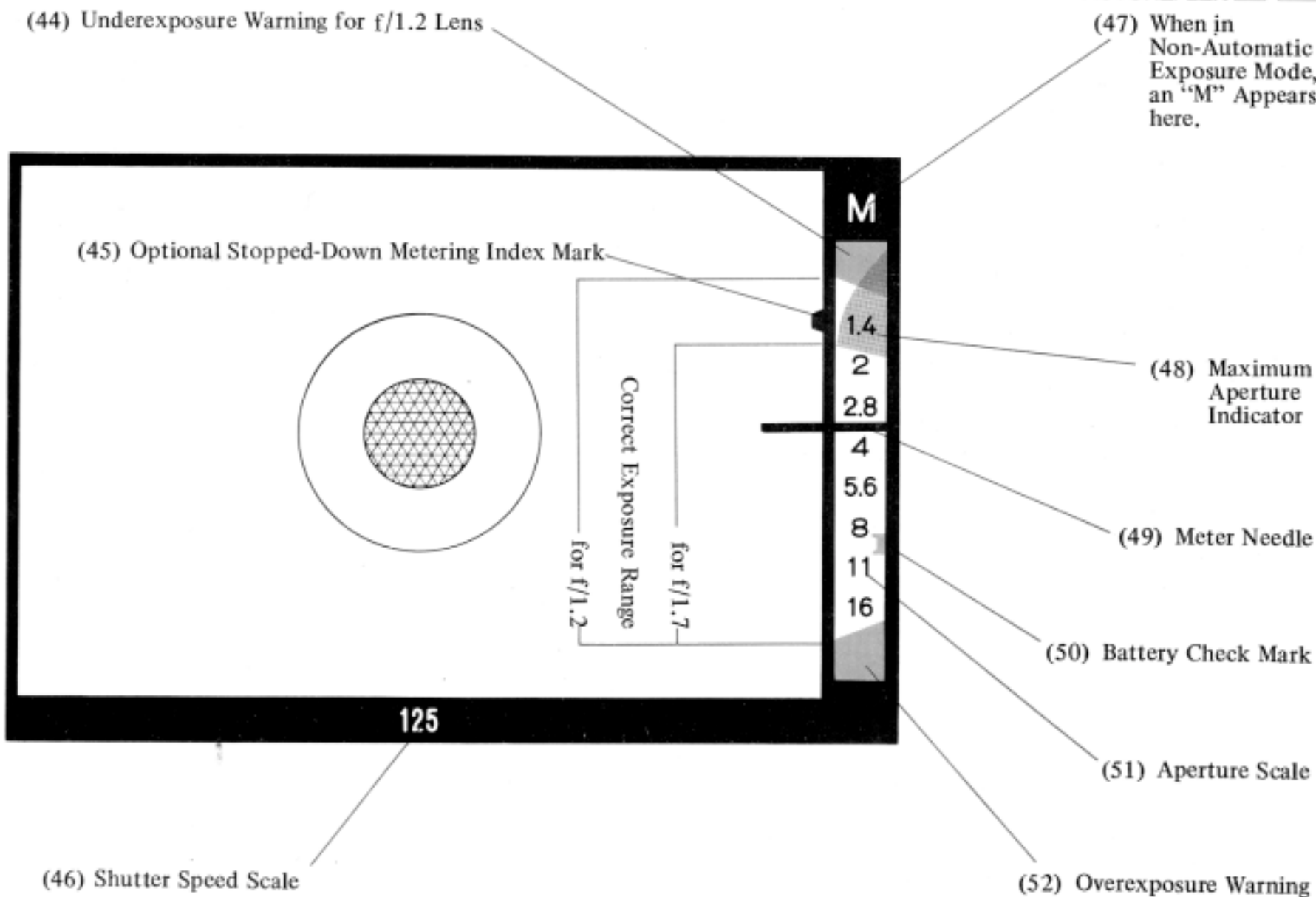
BATTERY CHECK MARK: The Battery Check Mark (50) is located between f/8 and f/11. See instructions for checking battery strength on page 9.

INDEX POINT FOR STOP-DOWN READINGS: This is used when Non-Automatic-Exposure (AE) lenses are mounted on the Autoreflex-T3. In this case the lens is set for manual operation and the diaphragm ring turned until the meter needle is opposite the Index Point for Stopped-Down Lens Aperture (45). If it is desired to work at a fixed f/stop, the needle can be brought into place by changing the shutter speed.

MANUAL APERTURE INDICATOR: When a Non-Automatic-Exposure (AE), manual or preset diaphragm lens is mounted on the KONICA Autoreflex-T3, or extension rings and bellows are used, a white letter "M" (47) appears at the top of the scale. When the "M" is visible, the Stopped-Down method of exposure determination must be used as described above.

NOTE: Hexanon AR (AE) lenses for previous KONICA Auto-Reflex cameras may be modified to work properly with the Autoreflex-T3 AEC exposure automation. Your dealer can give you full information and service, or you can contact our service centers.

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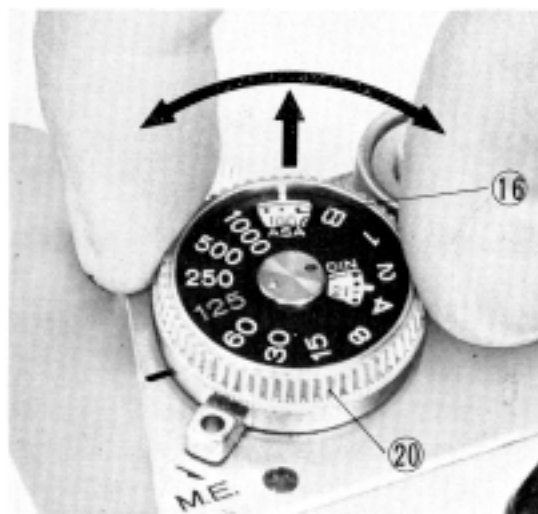
AEC: AUTOMATIC EXPOSURE CONTROL

Full-Aperture, AEC Metering:

The focusing screen of the KONICA Auto-reflex-T3 is always at maximum brightness when a KONICA Hexanon AR (AE) lens is used since exposure determination is made with the lens at its widest or maximum aperture.

The correct ASA or DIN film speed setting must be set in the Film Speed Indicator Window (16) on top of the Shutter Speed Dial (20), before taking pictures in order to obtain correct exposure. ASA and DIN ratings for the film you use will be found on the carton, or on instruction sheet packed with the film of your choice.

The figures in brackets in the chart at right are intermediate values for film speeds indicated only by dots on the film speed scale.



1 Set the film speed (ASA or DIN)

Lite the outer collar surrounding the Shutter Speed Dial (20) and turn it to the left or right until the correct ASA or DIN value shows in the respective Film Speed Indicator Window (16) on top of the Shutter Speed Dial. When aligned properly, the collar will drop into place.

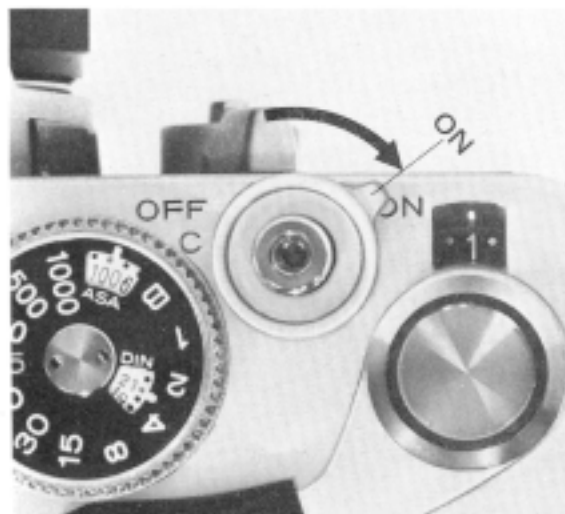
2 Determine the shutter speed

Select the proper shutter speed. Outdoors, 1/125th is a good choice, 1/30th for indoors. The higher the shutter speed, the better the action-stopping power. Use of a slower shutter speed results in a smaller aperture and greater Depth-of-Field.

	<2500><2000><1250><1000><640><500><320><250><160><125><80><50><32><20><16>														
ASA	3200	• •	1600	• •	800	• •	400	• •	200	• •	100	• 64	• 40	• 25	• • 12
DIN	36	• •	33	• •	30	• •	27	• •	24	• •	21	• 19	• 17	• 15	• • 12
	<35><34><32><31><29><28><26><25><23><22><20><18><16><14><13>														



- 3** Make certain the Aperture Ring (12) is set at "AE" (Automatic-Exposure). If set incorrectly the letter "M" will automatically appear above the Meter Scale.



- 4** If the needle fails to swing, you've forgotten to place the Meter Switch at "On" position.

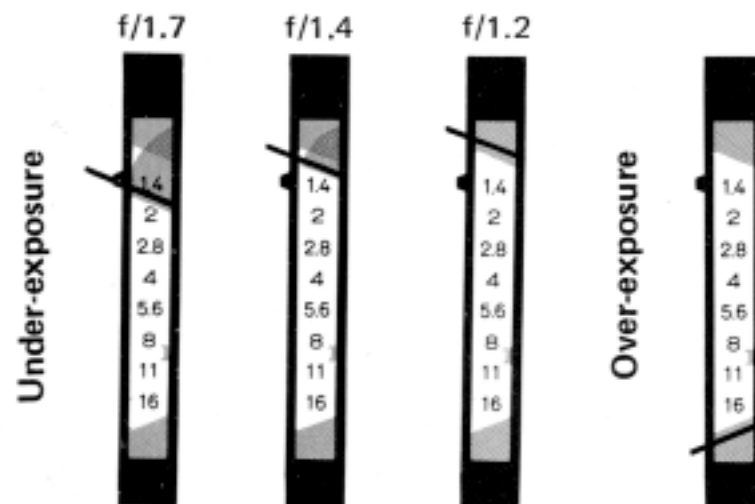
When the camera is not in use, make sure that the meter switch is set of "Off".



- 5** Aim the camera at your subject and look through the Viewfinder. The meter needle in the information center band at the right will point to the f/stop at which the aperture will set itself at the instant of exposure.

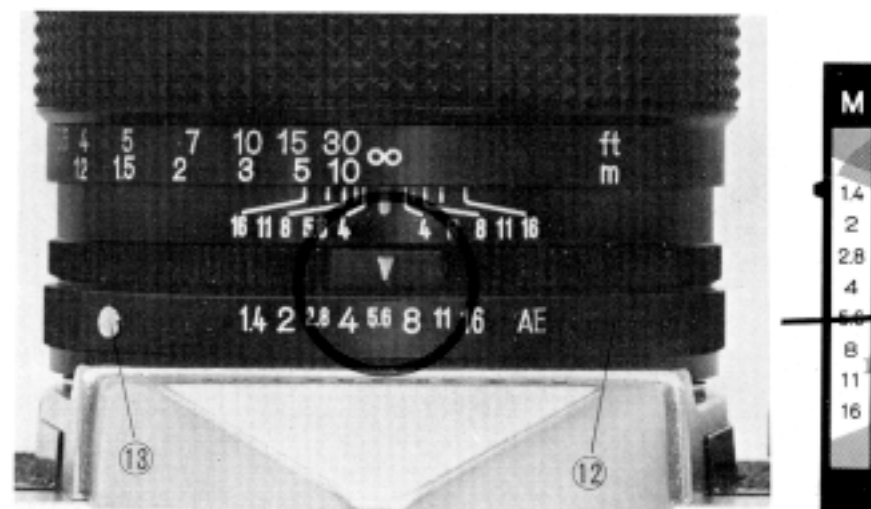
If the Meter Needle (49) is in the correct exposure range (see page 19) you're ready to shoot a correctly exposed picture.

SAFETY INDICATORS IN VIEWFINDER



When the meter needle indicates an underexposure, choose a slower shutter speed. When it indicates an overexposure, select a faster shutter speed. This can be done without removing the camera from your eye. You simply rotate the Shutter Speed Dial (20) watching the Shutter Speed (46) in the viewfinder. Pictures may be taken under the AEC (AE) system, as long as the needle is visible somewhere within the correct exposure range. If a full turn of the Shutter Speed Dial does not drive the meter needle to come within the correct exposure range, pictures cannot be taken under the AEC (AE) system. However, pictures may sometimes be taken by setting the camera in non-automatic mode.

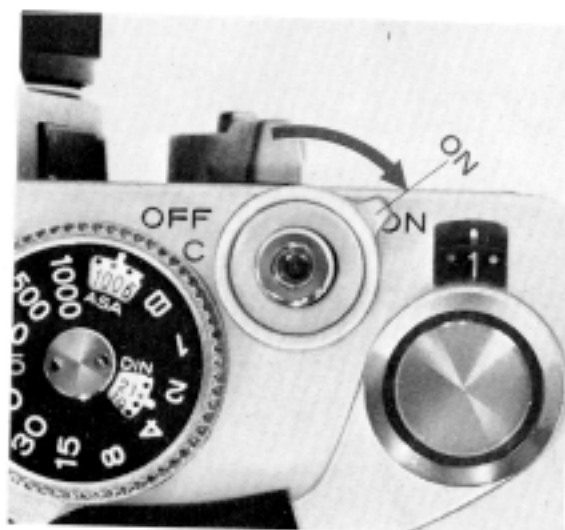
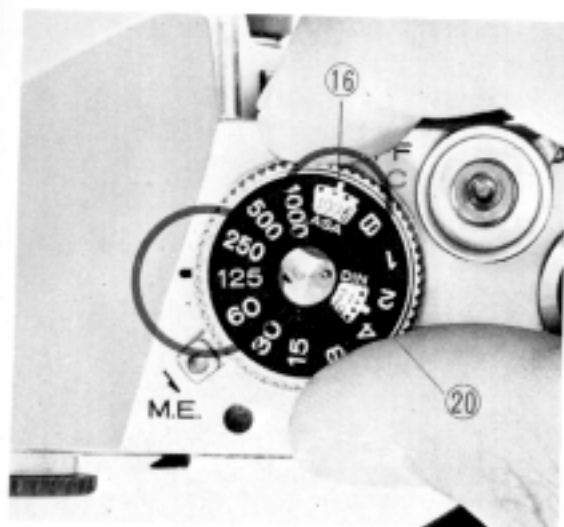
If you wish to use a specific lens aperture, for example, a small aperture for greater Depth-of-Field or a large aperture to throw backgrounds out of focus, turn the shutter speed dial until the needle is opposite the desired aperture. Make sure that the shutter speed dial clicks into place at the desired shutter speed. When shooting for Depth-of-Field, make sure to use a tripod if you are shooting at slower than $1/30$ th second to prevent blur caused by camera movement.



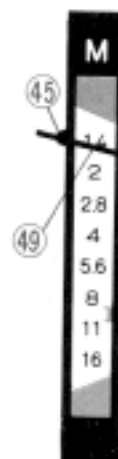
When the Electric-Eye is not used...

To set the diaphragm manually, simply rotate the Aperture Ring (12) to the right, while depressing the AE Release Button (13) on the aperture ring until the desired f/stop is opposite the index mark. Manual diaphragm setting is helpful when a deliberate under- or overexposure is desired for some special effect. During manual operation the letter "M" will appear above the f/stop scale. For normal AEC (AE) operation, remember to return the aperture ring to "AE", where it will lock in place automatically.

OPTIONAL STOPPED-DOWN APERTURE METERING



KONICA T3
AUTOREFLEX



When preset or manually operated KONICA Hexanon lenses are used, or when KONICA FP*, Pentax/Praktica, Exakta, or Nikon lenses are used via KONICA adapters, the stopped-down method of determining correct exposure is used. This method is also used when extension rings or bellows are employed in close-up photography.

1 SET THE FILM SPEED (ASA or DIN)

Lift and turn the outer collar around the Shutter Speed Dial (20), until the appropriate ASA or DIN rating is in the Film Speed Indicator Window (16).

2 CHOOSE A SHUTTER SPEED

3 MAKE SURE THE METER SWITCH IS IN "ON" POSITION.

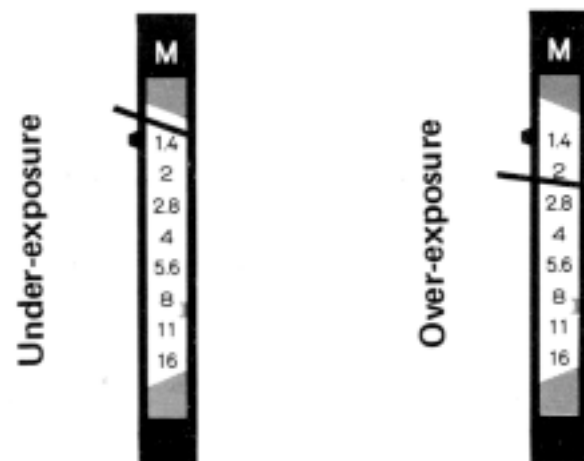
4 DETERMINE THE EXPOSURE

Turn the Aperture Ring on your lens to the left or right until the Meter Needle (49) lines up with the Index Mark (45) opposite f/1.4 in the Viewfinder.

If you wish to work at a fixed aperture, set the aperture ring and then turn the Shutter Speed Dial (20) until the Meter Needle is opposite the index mark. The shutter speed is visible in the viewfinder.

* FP-FM-FS-F series of KONICA SLR cameras

USING PRESET OR MANUAL LENSES

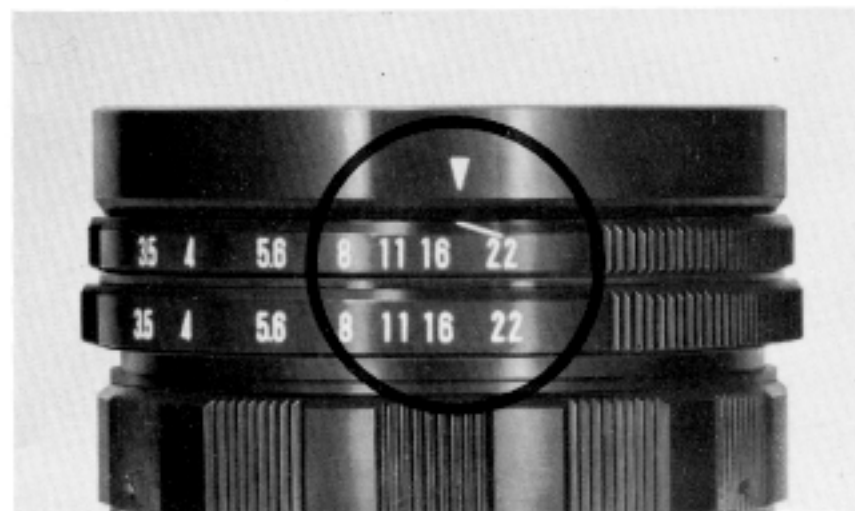


The f/stop settings in the Viewfinder are not used when the stopped-down method of exposure determination is employed. Occasionally the Meter Needle will not come to rest opposite the Stopped-Down Index Mark (45) no matter in which direction the Aperture Ring (12) is turned. In this case adjust the Shutter Speed Dial (20) until the needle lines up with the Index Mark.

In photomicrography the Meter Needle is brought to the Index Mark by adjusting the light and the shutter speed.

When using Hexanon reflex mirror optics lenses, the Meter Needle is brought to the index by bringing the appropriate neutral density filter into place, or by adjusting the shutter speed. These lenses do not have an iris diaphragm.

When stopping a lens down for close-ups, keep your eye against the Viewfinder eyepiece to protect the latter from the entry of strong light.



When a manual preset lens is to be used...

For convenience with preset diaphragm lenses, set the preset selector ring to the smallest aperture. This will then allow the diaphragm setting ring to ride free to any desired setting in the lens range.

HINTS FOR UNUSUAL EXPOSURE SITUATIONS

KONICA T3
AUTOREFLEX

The compound dual CdS metering system in the Autoreflex-T3 is very selective, and is generally not unduly affected by subject matter outside its primary exposure reading range. It is programmed to obtain its primary exposure data from the main subject area. This is deemed to be the lower center third of the total area. The peripheral upper and marginal two thirds contributes in a lesser degree to the compound exposure data. There are however a number of unusual situations that require special handling.

Against-the-Light Shots: In such situations the light can shine directly into the camera and adversely affect readings for the main portion of the subject. In most cases *temporarily* changing the film speed setting to a value one-half ($1/2$) that of the actual film speed will give an extra stop exposure to correct the situation. In extreme cases, use the regular film speed but move the camera in close to read the important subject areas. After taking a reading, depress the Shutter Release Button partially, which will lock the meter needle at the close-up reading; move back, and then depress the Shutter Release Button the rest of the way to make the exposure.

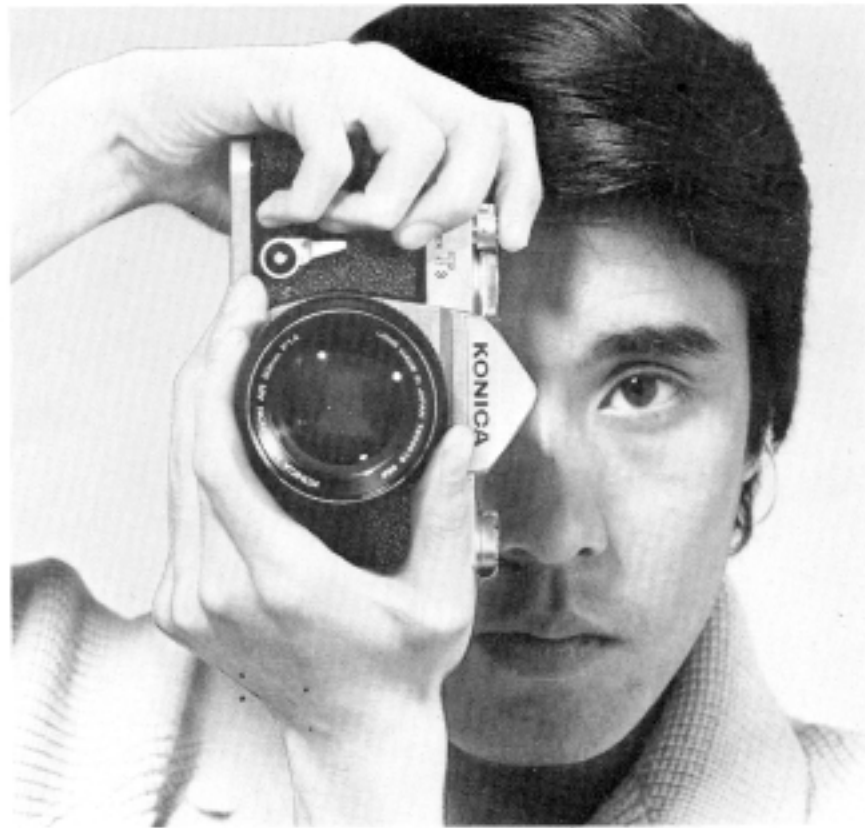
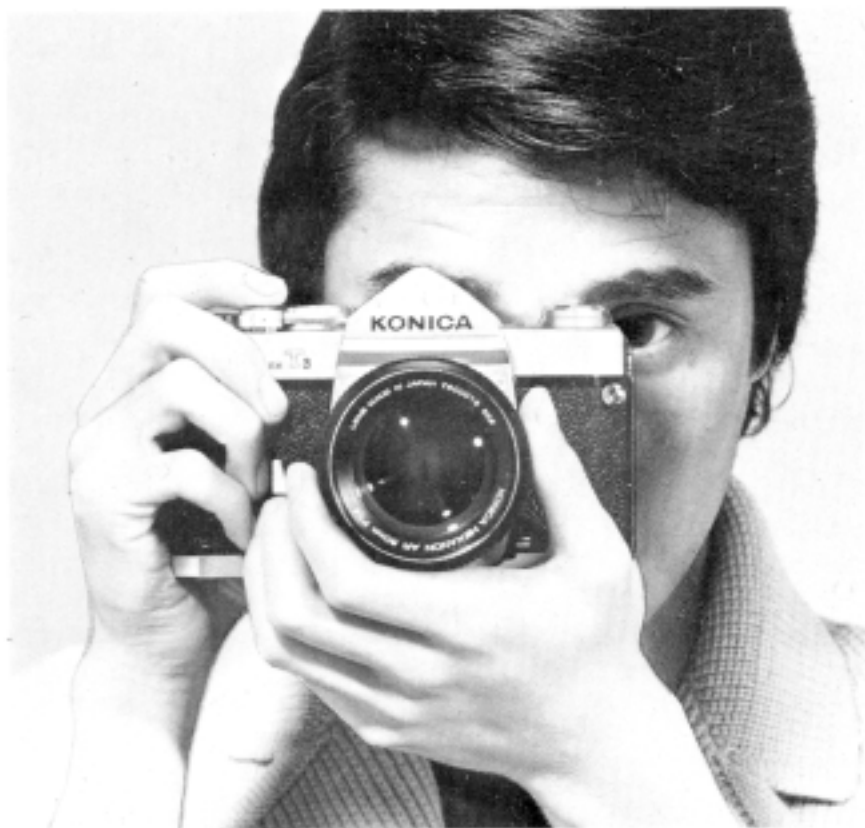


Very Light or Dark Backgrounds:

When a small light subject is against a large dark background, the meter may read the entire area as a dark subject and overexpose the main subject. Conversely, with a small dark subject against a large light background, the meter may read the entire area as a light subject and underexpose the main subject. In this case, a close-up reading as described under "Against-the-Light Shots" can be found helpful.

NOTE: Should you temporarily change the ASA setting to get more exposure in backlighted situations, do not forget to reset your meter to the normal rating for regular shots.

HOLDING YOUR CAMERA



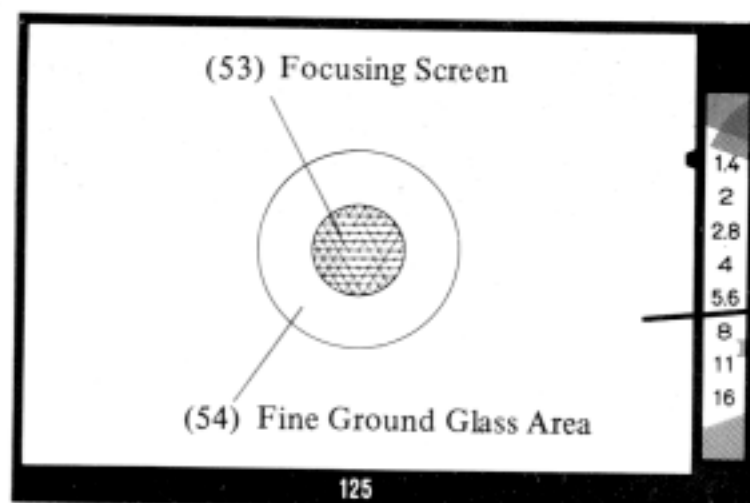
- Hold the Camera securely – comfortably for your hand

One secret for getting ultra-sharp pictures is to prevent accidental camera movement. To do this it is suggested that you hold the camera firmly, as shown in the picture above, cradling the body of the Autoreflex-T3 against the face. Depress the shutter release button firmly but gently. Do not punch the shutter release button but squeeze the exposure off smoothly for "jar-free" operation.

Vertical shots add variety to a series of pictures. They are especially desirable when making head and shoulder portraits and architectural shots. Hold the camera as shown above. This position prevents accidentally pushing the lens release button.

FOCUSING

Two alternative types of Focusing Screens (53) are available for KONICA Autoreflex-T3 cameras. While their characteristics of course differ, actual operation is virtually identical.



WITH MICRODIAPHRISM FOCUSING SCREEN: Turn the Focusing Ring (11) of the lens until the image within the center of the viewfinder is sharpest and clearest. (When you're out of focus, this central area — composed of hundreds of microscopic prisms — appears quite hazy and unsharp.)

WITH SPLIT-IMAGE RANGEFINDER FOCUSING SCREEN: Turn Focusing Ring (11) until top and bottom of your subject are seen as a single image in the central viewfinder area. (When out of focus, the upper and lower halves of the subject will be distinctly separated from each other.)

Under normal conditions, either focusing aid works easily and accurately. However, under certain conditions problems can crop up. Here's what they are...and how to overcome them:

Microdiapism

Split-Image



out of focus



correct in focus



With Microdiapism...when using 28mm (or shorter) wide-angle lenses, any lenses slower than $f/4.5$, or any lens used with substantial bellows extension, the grid-like pattern in the center of the viewfinder will remain visible regardless of focusing-ring adjustment. (This phenomenon is caused by the angles at which light rays enter the focusing screen, and does not indicate any defect in your camera or lens.) Solution: focus by concentrating on the circular doughnut-shaped Fine Ground Glass Area (54) around the Microdiapism. (Most people find this easiest to do by starting out with the lens deliberately thrown out of focus, then turning the focusing ring very swiftly until the point of greatest apparent sharpness is reached. If you turn the focusing ring very slowly, your eye will find it more difficult to determine the point of greatest sharpness.)

With Split-Image Rangefinder...with lenses longer than 300mm, slower than $f/4.5$, or any lenses used with extension rings or bellows, the light rays again enter the focusing screen at extreme angles — and the upper (or lower) half of the rangefinder image appears to "black out". Solution: use the surrounding fine groundglass "doughnut" (54) with such lenses or extension devices. (Here also, starting with a deliberately out-of-focus image and then twisting the focusing ring as rapidly as possible will benefit most workers.)

KONICA
AUTOREFLEX T3

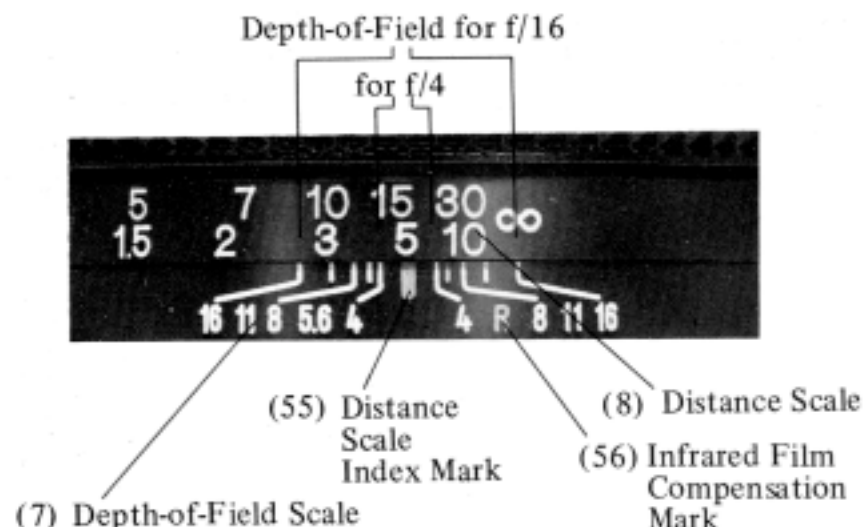
TAKE ADVANTAGE OF DEPTH-OF-FIELD

Depth-of-Field is the distance between the nearest and farthest objects in the scene that will be sharp in the finished picture. In practical terms this means that when you bring an object into sharp focus, objects behind and in front of this will be rendered more or less sharp too, depending on a series of factors. For more Depth-of-Field, use a small f/stop (larger f/number) and *make the image of the main object smaller* by: (a) moving the camera further away or (b) switching to a shorter focal length lens without changing camera distance. For less Depth-of-Field, use a larger f/stop (smaller f/number) and *make the image of the main object larger* by: (a) moving the camera closer or (b) switching to a longer focal length lens without changing camera distance.

Using Depth-of-Field Scale on Lens:

On the Depth-of-Field Scale, f/stop markings identical to those on the Manual Aperture Scale (9), are repeated to the right and left of the Distance Scale Index Mark (55). The Depth-of-Field for any focused distance will be found between any two identical f/stop markings on the Depth-of-Field Scale. Thus, if the lens is focused at 15 feet and the picture is to be made at f/16, referring to f/16 on both sides of the scale tells us that the Depth-of-Field extends from Infinity to about 8 feet. For maximum Depth-of-Field, including Infinity, set the Infinity mark at the f/stop in use, on the right hand side of the scale.

FOCAL PLANE MARK: For certain highly specialized applications, it is sometimes desirable to place your subject at a specific distance from the focal (film) plane. Should you wish to do this, measure the distance from the center-of-interest of the subject (the part you'll focus on) to the Focal Plane Mark "⊖" (21) atop the camera body.



INFRARED FILM COMPENSATION MARK: Infrared rays come to a different focus than visible light rays. When shooting infrared film with the appropriate filter, focus as usual. Then bring the distance figure opposite the Distance Scale Index Mark (55) into line with the Infrared Compensation Mark (56).

VISUAL DEPTH-OF-FIELD PREVIEW

In normal operation, all Hexanon AR lenses remain at maximum aperture until the instant of exposure; after exposure, they return to the "wide open" position. This greatly simplifies viewing and precise focusing, since the image seen in the viewfinder always appears at its most brilliant. However, it is sometimes desirable to "preview" your picture as it will actually appear at the taking aperture (f/4, f/8, or whatever aperture is indicated within the finder).

DEPTH-OF-FIELD, AND SELF-TIMER



To do this, press the Self-Timer Lever (5) *inwards* (towards the lens). This will cause the lens diaphragm to “stop down” to the actual shooting aperture as determined by your camera’s EE mechanism, and you can easily tell whether or not the background will be sharp, whether a branch in the foreground will be visible, and so on. As soon as you release the Self-Timer Lever, it returns to its normal position and the lens re-opens to its widest aperture.

WARNING: Do NOT depress the small button in the center of the Self-Timer control when using the Depth-of-Field Preview facility. This button is used only for the self-timer function, and may damage the timing mechanism if it is depressed when the depth-of-field preview feature is employed. Use this button *only* in conjunction with pictures taken with the self-timer – *never* for previewing depth of field.



KONICA T3 AUTOREFLEX SELF-TIMER OPERATION

After transporting film, depress the small button (6) in the center of the Self-Timer Lever (5); while holding it in, push the lever outwards (away from the lens) until resistance is felt. When you press the shutter release, the timer will delay exposure for some fifteen seconds, during which a soft “whirring” noise is heard. (The Timer may be set for shorter delays simply by pushing the lever down a lesser distance.)

Traditionally, the self-timer lets you get into your own pictures: however, it has several other applications specifically oriented to SLR photography. Shooting extreme close-ups, for example, it’s desirable to minimize vibration during the exposure as fully as is possible. Here, using the self-timer will not only release the shutter without jar or shake, it will raise the mirror, and close down the lens aperture, at the beginning of the cycle – several seconds before the actual moment of exposure. You’ll find it a highly versatile aid to better photography.

NOTE: Remember to shield the viewfinder eyepiece from outside light when you press the shutter release to activate the self-timer. The camera “memorizes” the exposure when the shutter release is depressed, and if stray light happens to enter the eyepiece at this instant, it could adversely affect the meter reading. Just cover the eyepiece (by looking through it, or by holding your hand or a card over it) at the instant the release is pressed, and you’re safe.

DEPTH-OF-FIELD TABLES

Depth-of-Field Table (50mm f/1.7 · 50mm f/1.4)

Permissible Aberrated Circle Diameter
3/100mm (Unit: Feet)

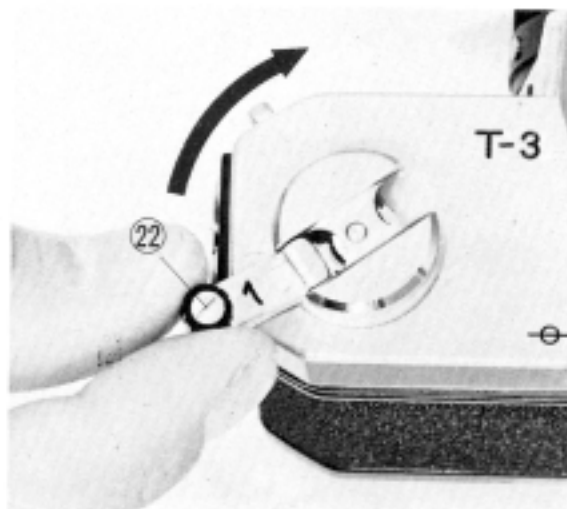
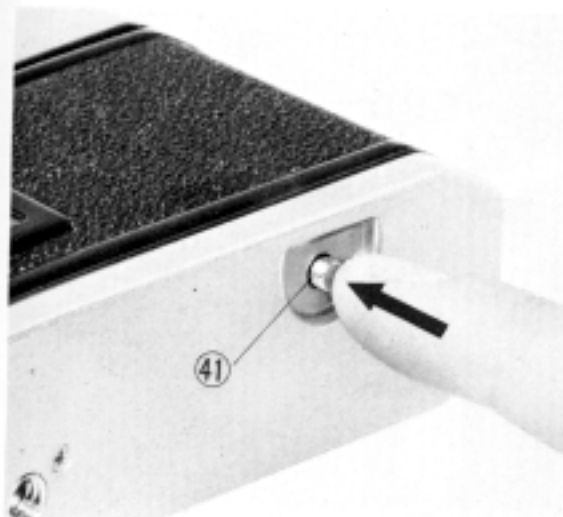
Distance Aperture	1.5	1.7	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	∞
F1.4	1.49 1.51	1.73 1.76	1.98 2.02	2.47 2.53	2.96 3.04	3.44 3.56	3.92 4.08	4.88 5.12	6.76 7.25	9.50 10.53	13.89 16.25	25.68 35.30	185.00 ∞
F1.7	1.49 1.51	1.73 1.76	1.98 2.02	2.46 2.53	2.95 3.05	3.43 3.57	3.91 4.09	4.85 5.15	6.71 7.31	9.41 10.65	13.69 16.56	25.09 37.10	152.18 ∞
F 2	1.49 1.51	1.73 1.77	1.97 2.02	2.46 2.54	2.94 3.06	3.42 3.58	3.90 4.11	4.84 5.17	6.67 7.35	9.33 10.75	13.52 16.81	24.53 38.42	133.20 ∞
F2.8	1.48 1.52	1.72 1.77	1.97 2.03	2.45 2.55	2.92 3.08	3.39 3.61	3.86 4.15	4.77 5.24	6.56 7.51	9.09 11.09	13.02 17.67	22.88 43.36	95.23 ∞
F 4	1.48 1.52	1.72 1.78	1.95 2.04	2.43 2.57	2.89 3.11	3.35 3.66	3.80 4.21	4.69 5.36	6.38 7.75	8.76 11.64	12.33 19.15	20.79 53.75	66.75 ∞
F5.6	1.47 1.53	1.70 1.79	1.94 2.06	2.40 2.61	2.85 3.16	3.30 3.73	3.73 4.31	4.57 5.51	6.17 8.10	8.35 12.47	11.52 21.56	18.54 79.10	47.77 ∞
F 8	1.46 1.54	1.69 1.81	1.92 2.09	2.36 2.65	2.80 3.24	3.22 3.84	3.63 4.46	4.42 5.77	5.87 8.69	7.80 13.97	10.49 26.61	15.96 273.36	33.53 ∞
F11	1.44 1.56	1.67 1.84	1.89 2.13	2.32 2.72	2.73 3.34	3.12 3.98	3.51 4.66	4.23 6.13	5.55 9.56	7.22 16.46	9.44 37.71	13.61 ∞	24.47 ∞
F16	1.42 1.59	1.63 1.88	1.84 2.19	2.24 2.83	2.62 3.52	2.98 4.25	3.33 5.05	3.96 6.84	5.08 11.51	6.42 23.52	8.10 126.48	10.95 ∞	16.92 ∞

Depth-of-Field Table (57mm f/1.2)

Permissible Aberrated Circle Diameter
3/100mm (Unit: Feet)

Distance Aperture	1.5	1.75	2.0	2.5	3.0	3.5	4.0	5.0	7.0	10.0	15.0	30.0	∞
F1.2	1.49 1.51	1.74 1.75	1.99 2.00	2.48 2.51	2.97 3.03	3.46 3.54	3.95 4.05	4.92 5.08	6.84 7.16	9.67 10.34	14.23 15.76	27.07 33.35	282.03 ∞
F1.4	1.49 1.51	1.74 1.75	1.98 2.01	2.48 2.51	2.97 3.03	3.45 3.54	3.94 4.06	4.91 5.09	6.82 7.19	9.62 10.40	14.12 15.90	26.66 34.01	241.79 ∞
F 2	1.49 1.51	1.73 1.76	1.98 2.01	2.47 2.52	2.95 3.04	3.44 3.56	3.92 4.08	4.87 5.13	6.74 7.27	9.47 10.59	13.79 16.34	25.48 36.15	169.35 ∞
F2.8	1.48 1.51	1.73 1.76	1.97 2.02	2.46 2.53	2.94 3.06	3.41 3.59	3.89 4.11	4.82 5.19	6.65 7.39	9.28 10.84	13.37 16.97	24.07 39.46	121.06 ∞
F 4	1.48 1.52	1.72 1.77	1.96 2.03	2.44 2.55	2.91 3.09	3.38 3.62	3.84 4.17	4.75 5.27	6.51 7.57	9.00 11.25	12.80 18.02	22.22 45.77	84.84 ∞
F5.6	1.47 1.52	1.71 1.78	1.95 2.04	2.42 2.58	2.88 3.12	3.34 3.67	3.79 4.24	4.66 5.39	6.33 7.83	8.66 11.84	12.10 19.63	20.17 58.22	60.69 ∞
F 8	1.47 1.53	1.70 1.79	1.93 2.06	2.39 2.61	2.84 3.18	3.28 3.76	3.70 4.35	4.53 5.58	6.09 8.25	8.20 12.86	11.19 22.70	17.72 98.62	42.58 ∞
F11	1.45 1.54	1.68 1.81	1.91 2.09	2.35 2.66	2.78 3.25	3.20 3.86	3.61 4.49	4.38 5.83	5.81 8.84	7.68 14.43	10.24 28.23	15.39 ∞	31.06 ∞
F16	1.44 1.57	1.66 1.84	1.87 2.14	2.29 2.74	2.70 3.38	3.09 4.06	3.46 4.77	4.15 6.32	5.40 10.07	6.96 18.15	8.97 47.83	17.65 ∞	21.45 ∞

FILM REWIND



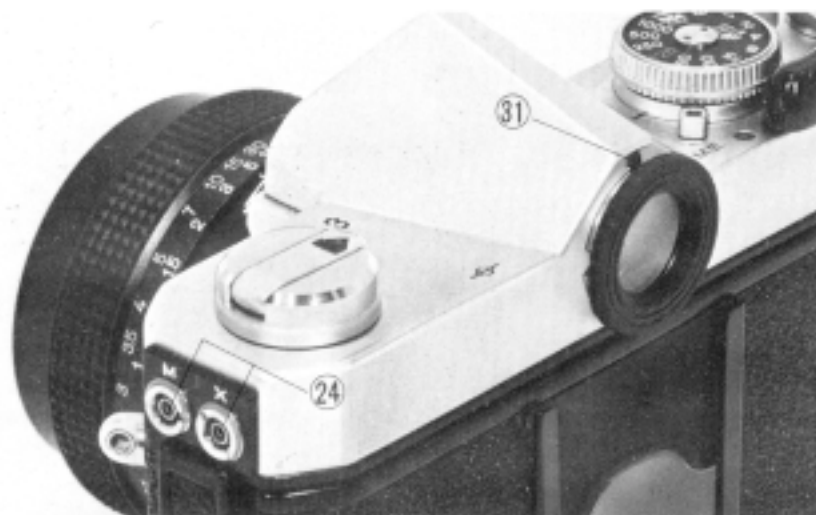
After all the pictures on the roll have been taken, the film must be rewound into the cartridge before opening the camera back. Otherwise the film will be completely exposed and useless.

An occasional look at the Film Counter (2) will help keep you posted as to when you are coming to the end of the roll and prevent your accidentally tearing the film out of the cartridge. If you should come to the end of the film while the camera is at your eye in shooting position, the Film Transport Lever (14) will tighten and refuse to advance even if the shutter has been released. If this happens *do not force it!* Instead, depress the Film Rewind Button (41) and at the same time move the Film Transport Lever as far as it will go. It will then snap back into its normal position.

- 1** Depress the Film Rewind Button (41). Once it is depressed, the button remains in place.
- 2** Raise the Film Rewind Crank (22) and turn it in the direction inscribed on it, turning not too rapidly and in one continuous motion.
- 3** When tension on the Film Rewind Crank eases, the film has been fully rewound. You can now open the camera back and effortlessly remove the cartridge by tipping it towards yourself and letting it drop out of the bottom opening.

The Film Rewind Button returns to its original position once the Film Transport Lever is again actuated.

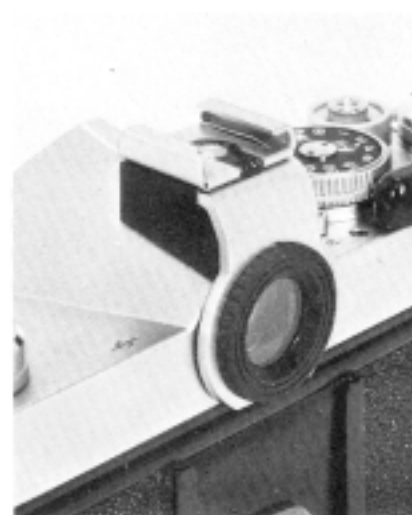
FLASH PHOTOGRAPHY



With your KONA Autoreflex-T3 camera, superb flash photography is more convenient than ever before. Either conventional flashbulbs (and flashcubes) or electronic flash units may be used, whether they are of cordless or plug-in design; and KONA's Copal Square-S shutter enables precise synchronization with electronic flash at substantially faster speeds (to 1/125th second) than many other cameras.

Using Cordless Flash Units:

The KONA viewfinder eyepiece contains an "X" Synchronization Contact (31). When the KONA "Hot" Accessory Shoe is mounted, the KONA X-20 or X-14 electronic flash units will automatically make contact through the accessory shoe, and no PC cord is needed. To mount the Hot Shoe, unscrew the eyepiece cover, position the Hot Shoe Clip atop the camera, fit the eyepiece cover to the Hot Shoe, and re-attach the eye-piece cover by screwing it on (clockwise). As a special safety feature, electrical current passes through



the accessory shoe only when a flash is inserted; thus, the Hot Shoe need *not* be removed for non-flash (or plug-in flash) operation.

When using cordless flash units in the Hot Shoe, use the 1/125th second shutter speed. (Slower speeds are of course possible, but their use could create the possibility of unwanted "ghost" or double images (caused by the existing light being recorded by the film). If the KONA Cube Flash attachment is used in the Hot Shoe, your shutter speed should not exceed 1/30th second.

Using Plug-In Flash Units:

Your camera is also equipped with Flash Terminals (24) accepting standard PC-type flash cords. Mount such flash units either atop the camera with the KONA Accessory Clip 3 (installed in the same way as the Hot Shoe described above), or with the mounting bracket supplied with the flash.

Flash Synchronization for KONICA Autoreflex-T3

Contact	Shutter speed	B	1	2	4	8	15	30	60	125	250	500	1000
	Bulb												
M	Class M	○	○	○	○	○	○	○	○	○	○	○	○
	Class FP	○	○	○	○	○	○	○	○	○	○	○	○
	Class MF (flash cube)	○	○	○	○	○	○	○	○	○	○	○	○
X	Class MF (flash cube)	○	○	○	○	○	○	○	X	X	X	X	X
	Electronic Flash	○	○	○	○	○	○	○	○	○	X	X	X

○ – Synchronized X – Not synchronized

For electronic flash, plug the cord into the terminal marked "X", and shoot at a shutter speed of 1/125th second. If the flash is designed for bulbs or flashcubes, plug the cord into the "M" terminal; here, any shutter speed is usable with any flashbulb or flashcube type.

Determining Exposure:

Since the short burst of light from a flashgun is too brief for your camera's mechanism to measure, flash exposures are controlled manually (with the lens off the "EE" position). Virtually all electronic and conventional flash units contain calculator dials or wheels which indicate the correct exposure at different distances; consult these aids (or the instructions printed on the flashbulb or flashcube carton) for exact exposure information.

TIME EXPOSURES

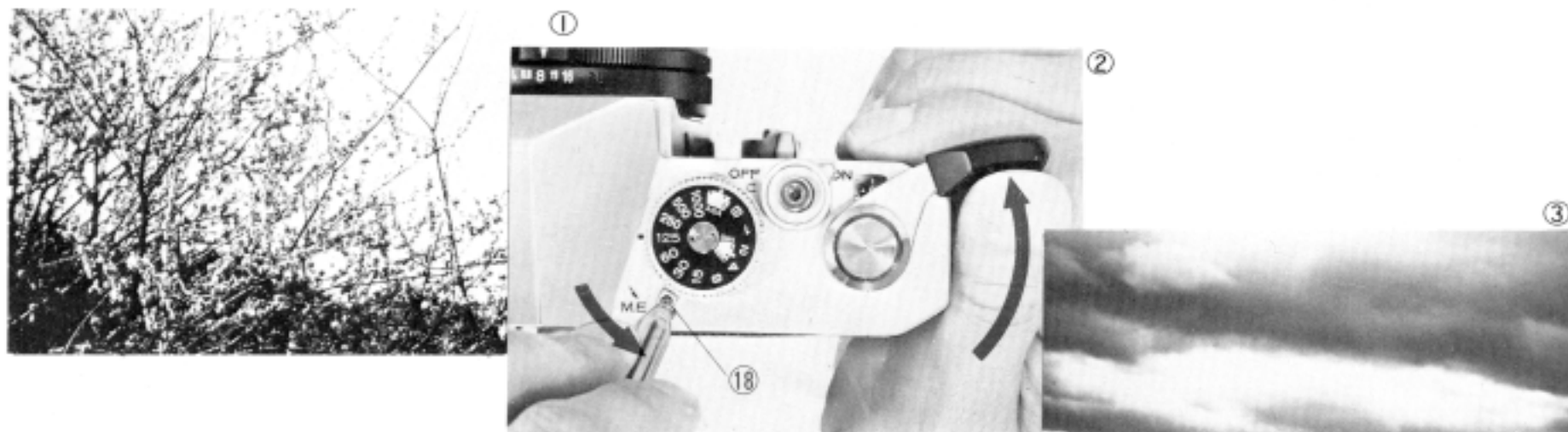
KONICA T3
AUTOREFLEX

When the shutter speed dial is set at "B", the shutter will remain open as long as the shutter release is held down. As a result, exposures longer than one second – as long, in fact, as several *hours* – may be taken at night, or in dimly-lit places where there is no moving subject. If an exposure of more than several seconds is desired, open the shutter by pressing the release button and, while holding the release button down, turn the Meter On/Off Switch (3) counterclockwise to the "Off" position: the shutter release button will then be locked down, and you may remove your finger from the release – the shutter will remain open until the On/Off Switch is returned to "On".

In time exposures, the AE system cannot be used, and exposures are estimated (often doubling successive exposures, as in 2, 4, 8, and 16-second exposure times – almost invariably, bracketing exposures in this manner will insure that at least one of the photographs comes out perfectly).

Time exposures of intermediate length (1½ seconds, 3¼ seconds, etc.) may also be taken in conjunction with the Multiple Exposure Control, as described next page.

MULTIPLE EXPOSURE CAPABILITY



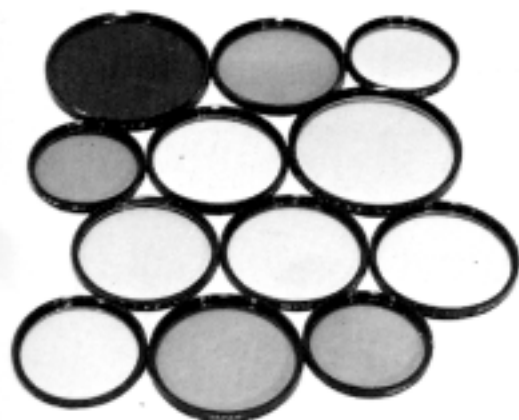
Creative special-effects photography requires the ability to make intentional multiple exposures when desired. Your KONICA Auto-reflex-T3 camera incorporates a Multiple Exposure Lever (18) under the shutter speed dial which enables an infinite number of different exposures to be made on a single frame of film. After shooting the first exposure, press this lever down (counterclockwise) in the direction indicated by the arrow above the letters "M.E." (Multiple Exposure). While holding this lever in position, move the film transport lever completely through its cycle; you're now ready to shoot *again* on the same frame of film. This process may be repeated any desired number of times. Beyond this, the Multiple Exposure control offers the capability of precisely-times intermediate exposures: to get an exposure time of $1\frac{1}{2}$ seconds, for example, take the initial exposure at one second; re-set the shutter speed dial to $\frac{1}{2}$ second; press the Multiple Exposure Lever to permit shutter cocking without advancing film, and re-expose the film frame for $\frac{1}{2}$ second. (Naturally, be very careful not to jar or move the camera between exposures, or the two images will not register perfectly.) For extra convenience, the Multiple Exposure control lever may be moved by inserting the tip of a ball-point pen into the recess at the center of the lever.



ACCESSORIES

• KONICA Filters

KONICA Filters help make more natural looking pictures in black and white or color. They may also be used to create special effects. They are made with the same precision as are Hexanon lenses. Since exposure is read through the lens in the Autoreflex-T3, the filter factor for KONICA Filters is taken care of automatically.



KONICA T3
AUTOREFLEX

COLOR	NAME	EFFECTS
Colorless*	UV (L39)	Absorbs ultra-violet. Prevents excess bluishness with color film. No change in the overall color rendition. Also used for atmospheric haze.
Light Yellow Yellow Dark Yellow	Y1 (Y44) Y2 (Y48) Y3 (Y52)	Absorbs blue, violet and ultra-violet. Gives natural rendition in outdoor black and white shooting. Makes white clouds stand out against a blue sky. For use with B/W films only.
Orange	O1 (O56)	Absorbs blue very strongly, also some green. Makes blue skies dark and dramatic in black and white. For extra contrast in architectural work. For use with B/W films only.
Red	R1 (R60)	Absorbs blue and green. Blue skies rendered almost black. Use for pseudo night shots. Use only for black and white film, or for infrared film.
Yellowish Green	PO 0	In black and white photography, renders greens better than yellow filter. Also prevents washed-out flesh tones when head is against sky which is to be darkened. For use with B/W films only.
Light Gray Gray Dark Gray	ND 2 ND 4 ND 8	No effect on rendition in either black and white or color work. Used to reduce light intensity, where highest shutter speed or smallest f/stop used will still not prevent overexposure. In very bright light permits large opening for selective focus effect.
Light Pink*	SKYLIGHT	For color and B/W film. Absorbs ultra-violet and prevents excess bluishness in color shots of distance scenes. Can also be used with B/W film.
Light Amber	A 2	Reduces color temperature. Adds warmth to shadows in snow, beach scenes. Prevents bluishness on cloudy days, in open shade.
Light Blue	B 2	Raises color temperature. Suppresses excess redishness in scenes made by reddish early morning or late afternoon sunshine.
Blue	B 8	For use with clear (white) flash bulbs and daylight type color film. Prevents excessively reddish rendition.
Dark Blue	B 12	For use with 3200K studio flood lamps and daylight type color film. Prevents reddish rendition.

*Filters most commonly used in color photography are marked with an asterisk * above.

ACCESSORIES

• Lens Hoods

Prevent stray light from striking lens surfaces and causing unwanted reflections. Each KONICA Lens Hood is specifically calculated and shaped to give maximum protection to the lens on which it is used.



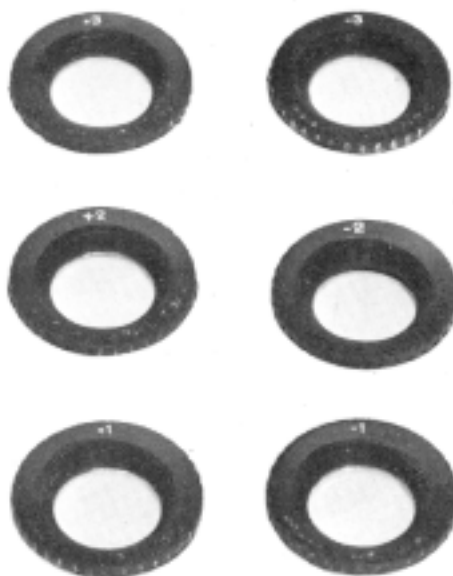
• Eyecup

Large, soft rubber eyecup shields meter, eye from extraneous light, aids concentration. Prevents metal-to-skin contact in cold weather. Eyecup folds down for eyeglass wearers.



• Eyesight Correction Lenses

Corrects viewfinder optics to prescription requirements; vastly aids viewing/focusing comfort, accuracy. +1, +2, and +3 diopter lenses for farsighted persons; -1, -2, and -3 for nearsighted persons. Include Soft Rubber Eyecup for added comfort, protection.



• Magnifier

Precision magnifier attaches to standard eyepiece, provides full 2x magnification of central finder area. Flips up when not in use. Focusing optics provide individual diopter correction. Doubles focusing accuracy.



KONICA T3
 AUTOREFLEX

• Angle Finder 3

Attaches to viewfinder eyepiece, enables convenient 45° viewing angle. Shows entire finder image including aperture scale. Swivels 360° for viewing from any angle. Individual diopter adjustment.



• Close-Up Lens Number 1(55mm)

Achromatic 2-element formula. Requires no exposure compensation; all camera controls remain automatic. Permits focusing from 25" – 12" from film frame with subjects from 9 × 13½" to 3½ × 5¼".



• Close-Up Lens Number 2(55mm)

Achromatic 2-element formula, range from 14" – 10" from film plane. Fills frame with area from 4½" × 6½" to 2½ × 3¾". combined with Number 1 close-up lens, focuses from 12" – 8½", covers area from 3" × 4½" to 2" × 3" (0.5× – one-half actual size).



• Extension Ring Set 3

Six-piece set allows 14 different extensions from 10mm – 88mm; magnifications to 1.88x (almost twice actual size) with standard lens. Supplied with 5mm camera and body mounting rings, 8mm, 16mm, and 24mm screw-in extension rings, and 30mm reverse adapter for 55mm – thread lenses. Manual diaphragm control; stopdown (match-needle) metering. Converts to automatic diaphragm control with accessory Auto-Ring 2 and double cable release. Does not accept Macrostand or Slide Copier 2.



ACCESSORIES

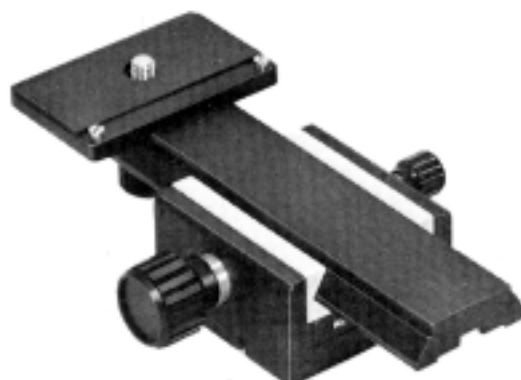
• Auto Helicoid

Automatic, continuously-variable focusing mount enables 105mm f/4 Auto Macro Hexanon AR lens to focus from Infinity to 32". Retains full AE and automatic diaphragm coupling. May also be used with 105mm lens and KONICA Auto Bellows for semi-automatic operation with magnifications greater than 1.4x.



• Focusing Rail

Supplied as standard equipment with KONICA Auto Bellows and KONICA Copy stand 2, this precision accessory permits camera movement over a 114mm range. Geared focusing knob with positive lock to prevent slippage. Particularly valuable in close-up work with tripod-mounted camera, where it is inconvenient (or impossible) to move camera or subject directly.



• Hot Shoe Accessory Clip

Provides internal, cordless synchronization with KONICA X-14 and X-20 electronic flash or KONICA Cube Flash. May be left on camera at all times.



• Accessory Clip 3

Identical to Hot Shoe Clip except does not incorporate cordless flash terminal. For use with cord-type flash-guns.



KONICA T3
AUTOREFLEX

- X-20 Electronic Flash

Exceptionally compact electronic flash permits cordless or cord-type operation. Guide Number 64 with ASA 80/125 film permits shooting distances to 40 feet with f/1.7 lens. Up to 400 flashes with standard AA Alkaline batteries.



- X-14 Electronic Flash

Extremely small cordless electronic flash, Guide Number 45 with ASA 80/125 film. Permits shooting distances to 28' with f/1.7 lens. Approximately 200 flashes with standard AA Alkaline batteries.



- Cube Flash

With PC cord and hot shoe contact. Built-in test circuit with indicator light that shows when cube is ready to fire. With exposure guide table and case.



ACCESSORIES

• Auto Bellows with Double Cable Release

Maintains automatic diaphragm operation. Extension Range 47mm – 170mm, magnifications from 0.9x – 3.5x with standard lens. Entire front standard reverses without accessories, retains automatic diaphragm coupling in reversed position. Geared front and rear focusing controls with positive locks. Main focusing rail permits moving entire assembly over 114mm range for focusing at predetermined magnification ratios. Focusing rail may be used laterally, for sideways movement of entire assembly over 114mm range. Locking depth-of-field preview control. European and American-style tripod sockets. Cable release supplied simultaneously activates lens diaphragm, body shutter release. Used with stopdown (match-needle) metering. Accepts accessory Macro Stand, Slide Copier 2.



• Macro Stand

For use with KONICA Auto Bellows: positions subject absolutely parallel with camera and lens. Rotating (75mm diameter) specimen "stage" has hold-down spring clamps to secure subject in desired position. Stage has 18% grey reflectance factor for correct exposure readings irrespective of subject size, coloration (exposure readings taken directly from stage.) Permits magnifications from 0.9x – 2.3x with standard lens. Superb tool for photography of stamps, coins, insects, any small, easily-moved subject.



• Slide Copier 2 with Reversal Ring

Attaches to Auto Bellows or Standard Bellows 3, allows same-size or cropped duplicates of standard 24 x 36mm or smaller transparencies. Accepts mounted slides or uncut strips, rolls. 18mm horizontal, 12mm vertical shift enables reversed lens to fit frame of Slide Copier; auxiliary Reversal Ring required to reverse-mount lens on bellows.



KONICA T3
 AUTOREFLEX

• Lens Reversal Ring (55mm)

Permits reversing all 55mm-thread lenses without reversing front standard of Auto Bellows and Standard Bellows 3. Required for reverse mounting of lens with Slide Copier 2, 5mm depth.



• 57mm f/1.2 Bellows Adapter

For 57mm f/1.2 Hexanon lens only; converts oversize (62mm) barrel to 55mm front diameter, permits lens reversal with Auto Bellows and Standard Bellows 3. Used in conjunction with Lens Reversal Ring to reverse lens with Slide Copier 2.



• Slide Copier Adapter

This adapter is required for reverse photography with the slide copier and used together with a reversal adapter. The Slide Copier Adapter is usable at the magnification ratios of 1.4x to 4x with a standard lens (50mm f/1.7).



• Standard Bellows 3

Precision extension bellows with geared front focusing, extension range 47mm – 170mm (0.9x – 3.5x magnification with standard lens). Front standard reverses without accessories for optimum resolution at 1:1 and greater ratios. Rear standard with lock permits manual movement. Manual diaphragm control and stopdown (match-needle) metering; converts to automatic diaphragm control with accessory Auto Ring 2 and double cable release. May be used with Slide Copier 2; does not accept Macro Stand.



ACCESSORIES

- **Auto Ring 2 with Double Cable Release 2**

Provides automatic diaphragm control with Standard Bellows 2 or Extension Ring Set 3 (also retains automatic diaphragm operation when lens is reverse mounted on Slide Copier 2 with Auto Bellows). Gives additional 14mm extension for greater magnifications. Cable release has lock for time exposures.



KONICA LENS MOUNT ADAPTERS

- **Exakta Adapter 2**

Permits use of Exakta lenses with "match-needle" exposure automation.



- **Praktica Adapter 2**

Permits use of Pentax/Praktica lenses with "match-needle" exposure automation.



- **Nikon Adapter**

Permits use of Nikon lenses with "match-needle" exposure automation.



- **Cable Release 3**

Precision 18" cable release with lock for time exposures. Vinyl clad for extra durability.



KONICA T3
AUTOREFLEX

• Microscope Adapter 2

Uses optical system of microscope in place of camera lens; unlimited magnification capability. May be used with or without microscope ocular. Mounting clamp fits standard 25mm-diameter microscope ocular tubes. Bayonet locking allows fast, positive camera attachment, removal.



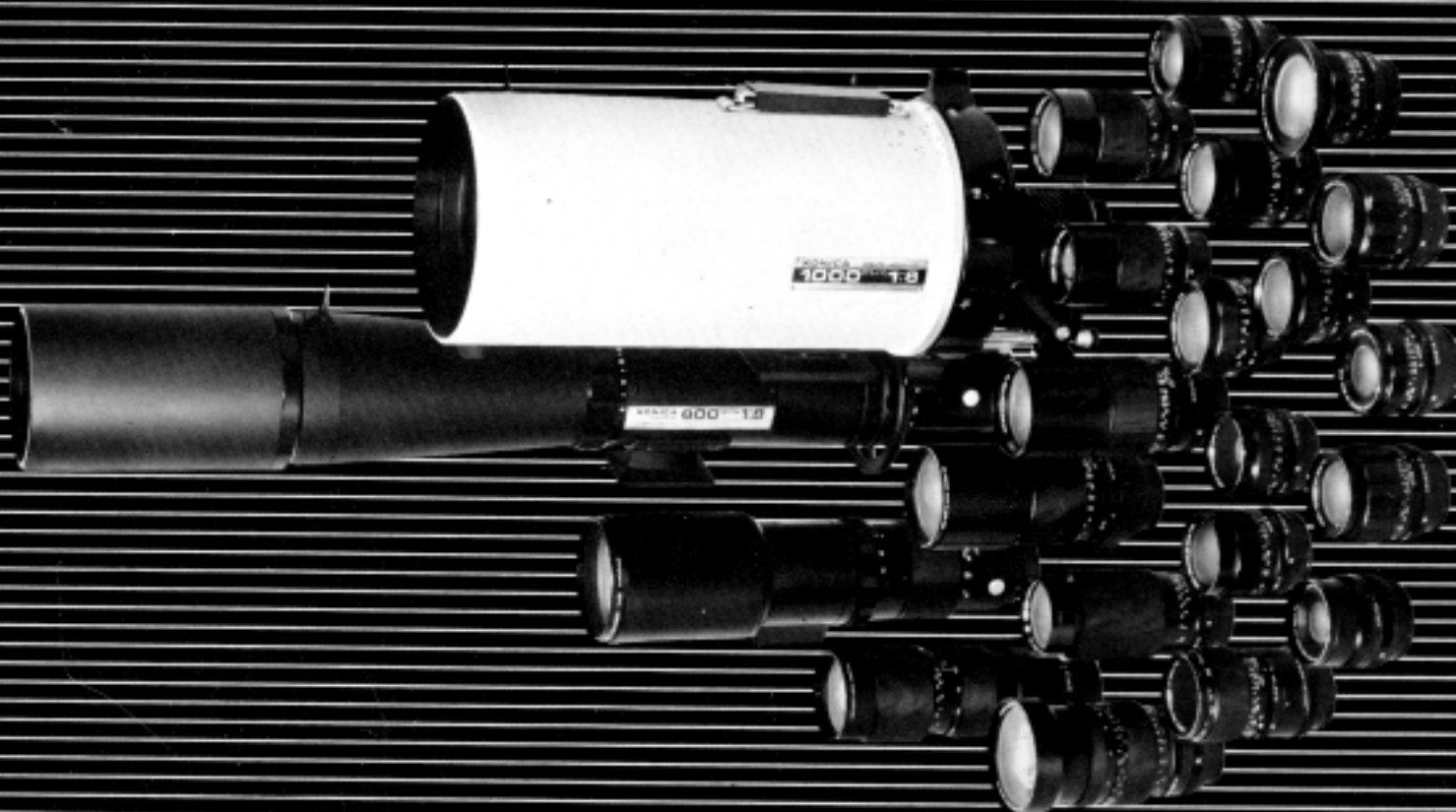
• Copy Stand 2 with Focusing Rail

Oversize 18½ × 19½" baseboard; reversible camera arm permits positioning camera from 31" above baseboard to directly atop, for unlimited magnification capability. Gearing focusing rail with lock allows precise camera movement over 114mm range; focusing rail swivels for copying wall-mounted material. Baseboard finished in 18% grey reflectance material, permits exposure readings to be taken from baseboard irrespective of subject size or coloration.



For a more detailed description of lenses and accessories see your KONICA dealer or write for booklet on lenses and accessories. Specifications subject to change without notice.

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