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# Konica AUTOREFLEX T4


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## FOR SAFETY'S SAKE.....

*Your new Konica camera reflects the latest advances in photographic engineering and is designed to give you dependable, trouble-free use. Operation is probably somewhat different from cameras which you have previously owned. For this reason, it is strongly recommended that you shoot a "test" roll of film, have this roll processed, and examine the pictures before exposing additional rolls. The processed "test" roll will verify that you are using your new equipment correctly, and allow you to make any necessary changes in operating patterns; additionally, it will confirm that all camera functions are operating perfectly. In the event you are leaving on a trip (or some equally important event) shortly, your Konica dealer can recommend the fastest way of having your first roll processed ... so that you can be certain that all subsequent rolls will be as good – or better!*

## CONTENTS


## USING YOUR KONICA AUTOREFLEX T4: SEVEN BASIC STEPS

1. Insert the two 1.35 volt mercury photographic batteries supplied with your camera into the compartment at the bottom of the camera. (This supplies power to the CdS meter.)

2. Load camera. Konica's "Fast Load" take-up spool assures trouble-free operation.

3. Set ASA rating required for your film speed.

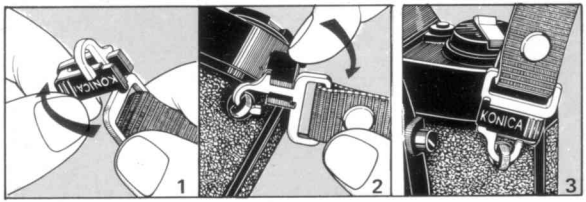
4. Move Aperture Control Ring to "AE" position ("EE" on some Lenses).

5. Select desired shutter speed. (For most shots, 1/125th is recommended.)

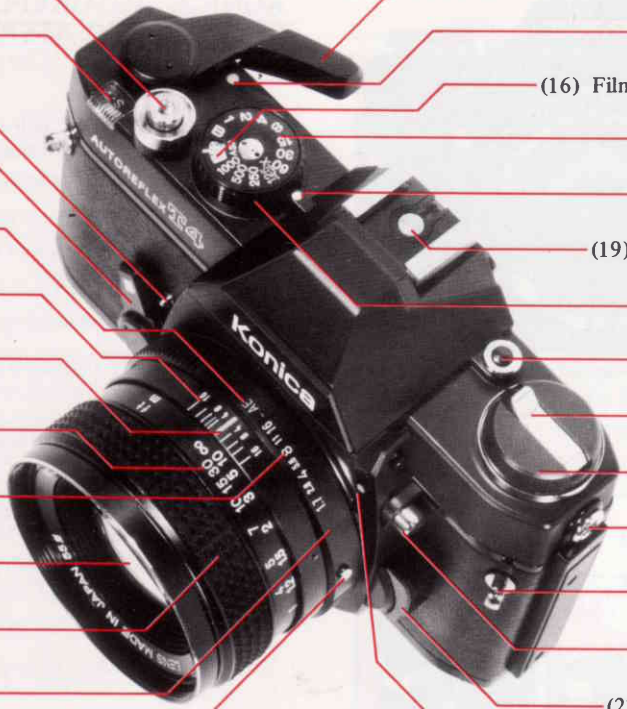
6. Focus and compose picture in viewfinder.

7. Shoot ... as long as the needle in the finder is in the "white" area, your pictures will be perfectly exposed automatically!

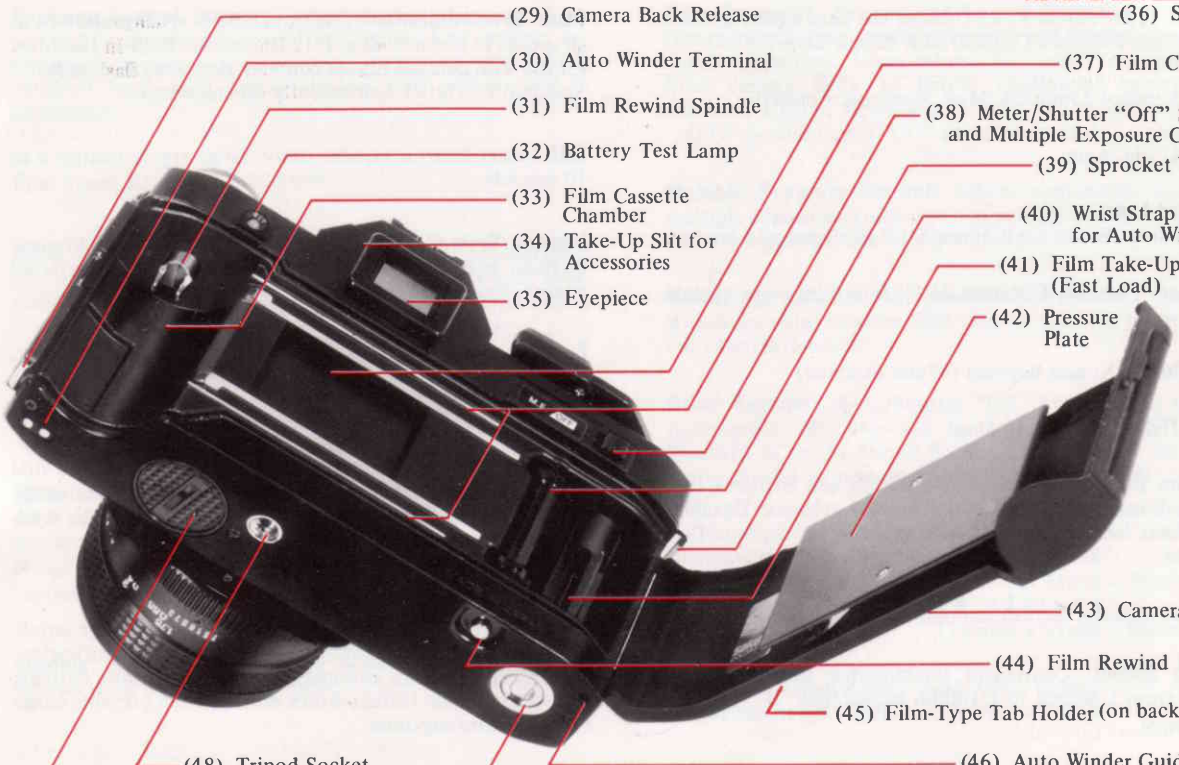
### How to Attach the Neckstrap



# OPERATING CONTROLS




(1) Shutter Release Button
(2) Film Counter
(3) Self-Timer Lock Pin
(4) Self-Timer Lever
(5) AE(EE) Position
(6) Depth-of-Field Scale
(7) Distance/Aperture Scale Index Mark
(8) Distance Scale
(9) Manual Aperture Selection Scale
(10) Konica Hexanon Lens
(11) Focusing Ring
(12) Aperture Control Ring
(13) AE Release Button
(14) Film Transport Lever
(15) Meter "On" Index Mark
(16) Film Speed Indicator Window (ASA)
(17) Shutter Speed Scale
(18) Shutter Speed Index Mark
(19) "X" Synchronization Hot Shoe
(20) Shutter Speed Dial
(21) Battery Check Button
(22) Film Rewind Crank
(23) Film Rewind Knob
(24) Flash Cord Terminal (X)
(25) Neckstrap Eyelet
(26) Lens Lock Release Button
(27) Depth-of-Field Preview Lever
(28) Lens Mounting Index Mark



# MAJOR SPECIFICATIONS OF KONICA AUTOREFLEX T4

**Camera Type:** 35mm TTL (Through-the-Lens metering) AEC (Automatic Exposure Control) SLR (Single-Lens-Reflex)

**Film:** Standard 35mm 20, 24 or 36-exposure cassettes

**Format:** 24x36mm

**Standard Lens:**
New Konica Hexanon AR 50mm f/1.7 (6 elements, 5 groups)

**Minimum Focusing Distance:** 21.7" from film plane (50mm f/1.7)

**Lens Mount:** Konica Bayonet (47mm diameter)

**Flange/Film Distance:** 40.5mm

**Aperture Control System:** Automatically sets correct f/stop (or fractional f/stop) with all Konica Automatic Hexanon and Hexar lenses. Equipped with a device for depth-of-field preview.

**Shutter:** Metallic, vertical-scanning Copal Square-FC

**Shutter Speeds:** Convenient top-mounted selector for all speeds from 1 second to 1/1000th second plus "B" (for time exposures)

**Flash Synchronization:** Electronic flash synchronization at all speeds to and including 1/125th second. Built-In Hot Shoe for use with cordless (direct contact) electronic flash units. Standard PC Outlet, conveniently side-mounted.

**Self-Timer:** Built-In variable delay, range approximately 4 to 10 seconds.

**Viewing System:** Parallax-free Single Lens Reflex System. Coated, eye-level pentaprism shows upright, unreversed image; apparent magnification 0.89X with 50mm lens.

**Focusing Screen:** Konica 3-way focusing system has split-image rangefinder *plus* microdiaprism and fine groundglass focusing.

**In-Finder Readouts:** "Control-Center" viewfinder shows vital data at a glance, exact lens aperture being set automatically; under/over-exposure ranges; match-needle indicator for semi-automatic operation.
Automatically signals when in manual exposure mode.

**Reflex Mirror:** Oversize, coated mirror prevents image cutoff in finder even with bellows extensions at 1:1 magnification. Mirror design permits automatic operation even with extreme wide-angle lenses. Instant-return mirror action prevents image blackout after exposure.

**Exposure Control System:** Fully Automatic Exposure Control (AEC) system selects and sets correct lens aperture (or fractional aperture) automatically, based on information obtained from dual through-the-lens CdS cells located in pentaprism.

**Film Speed Range:** ASA 25-1600

**Meter Power Source:** Two 1.35 Volt mercury photographic batteries, photographic type (Mallory PX-13, PX-625, Eveready EPX-625, or equivalent). Built-in battery test circuit.

**Exposure "Memory" Lock:** Memorizes and holds exposure reading to allow precise meter operation in backlit or spotlit situations; operates via shutter release.

**Meter Coupling (Sensitivity) Range:** With ASA 100 film and f/1.7 lens EV 1.5 (1 sec, at f/1.7) to EV 18 (1/1000th sec. at f/16).
Meter automatically turns off if shutter speed selected is beyond meter EV Range.

**Loading:** Konica Fast Loading system uses multislotted take-up spool to grip film securely.

**Film Transport:** Single-stroke lever automatically advances film, winds shutter, counts exposures, and prevents unwanted double exposures. Lever returns to "ready" position away from camera body to permit continuous operation at eye-level. Unique spring-loaded lever action keeps lever in "ready" position until "Off" switch is pressed.

**Multiple Exposure Control:** Allows convenient, foolproof multiple exposures; control switch permits winding of shutter without advancing film or exposure counter.

**Unloading:** Oversize rapid-rewind crank permits rewinding within seconds; cutaway film cassette chamber allows drop-out cassette removal.

**Other Features:** Meter/Shutter "Off" Switch locks shutter, turns meter off; unlocked by engaging Transport Lever. Standard ¼" x 20 Tripod Socket. Hot Shoe has automatic "off" control to prevent electrical shock when PC outlet is "live".

| | | |
|---|---|---|
| **Dimensions:** | Body Only | 5.4" x 3.6" x 1.8" (136mm x 91mm x 46mm) |
| | With 50mm f/1.7 Lens | 5.4" x 3.6" x 3.4" (136mm x 91mm x 86mm) |
| **Weights:** | Body Only | 18.7 oz. (530g) |
| | With 50mm f/1.7 Lens | 26.1 oz. (740g) |

## INSERTING BATTERIES

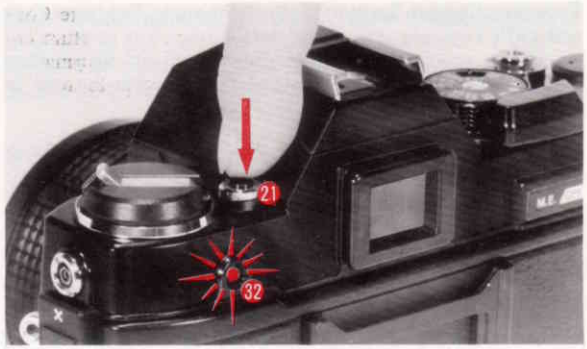


Open Battery Compartment (49) by turning the cover counter-clockwise as shown. Remove batteries from protective packing (handle them by the edges to keep the surfaces clean). If the batteries appear to have a thin deposit of dust on them, wipe clean with a dry cloth.

Insert the two batteries into the compartment, with "+" sides facing up. (For your convenience, + and – indicators are marked in the compartment.)

After the batteries are in the chamber, replace cover.

To obtain maximum battery performance, the Meter/Shutter "Off" Switch (38) when you have completed picture-taking. This turns the meter off, preventing battery depletion.




### Battery Check:

Depress the Battery Check Button (21). If the Battery Test Lamp (32) is lights, the batteries are useable. When the batteries have run down, the lamp will not light. In this situation, change the batteries.

The average life of PX-13 mercury batteries is approximately one year under normal operating conditions.

Prolonged heat and moisture may reduce battery life. Always keep your camera (and any spare batteries) in a cool, dry place. When obtaining new batteries, make certain they are photographic type 1.35 volt PX-13 (Mallory PX-13, PX-625. Everady EPX-13, or exact equivalent). Many other batteries are similar in appearance, but the differences in voltage and construction may cause incorrect exposures.


## To Mount the Lens on your Camera:

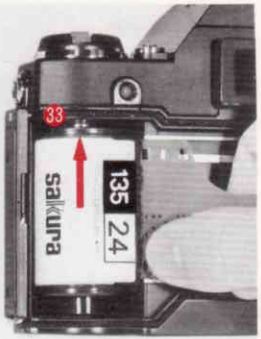
Line up the Red dot on the lens with the matching dot on the camera body; the lens will "seat" into the body easily. Now, grip the lens and turn it clockwise gently until it "clicks" into place. No further adjustments are required!

## To Remove the Lens from your Camera:

Grip lens securely in one hand. With the other hand, hold the camera body and press the Lens Lock Release Button (26). Holding this in, turn the lens counterclockwise until the two Red dots (one on the camera body, and one on the lens) line up. The lens may now be removed.

**Note:** Always protect your camera's interior by replacing the lens as quickly as possible, or by attaching the Konica Body Cap (supplied with your camera). ***Never*** touch any of the internal parts, or permit dust or dirt to enter the camera body, when the lens has been removed.

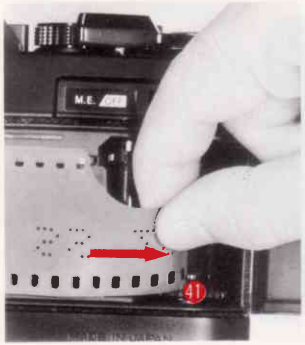
# FILM LOADING

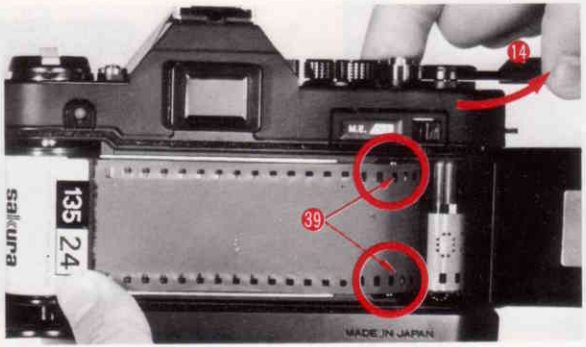



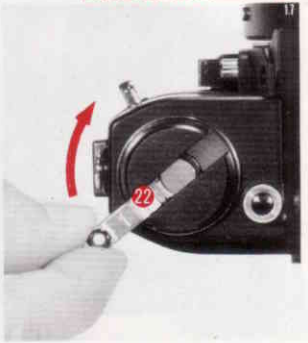

Loading your Konica Autoreflex T4 is exceptionally fast, accurate, and foolproof, because of Konica's Fast Loading take-up spool: Here's how:

1 Press down Camera Back Release (29), and swing the back open.

2 Slide the film cassette into the Cassette Chamber (33) as shown above.



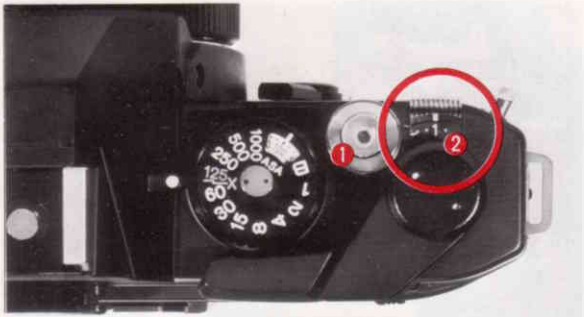




**3** Pull out enough film to reach the Take-Up Spool (41). Insert film end into any slot in the spool. The film will be gripped instantly.

**4** Advance the Film Transport Lever (14) one full stroke. Make sure that the sprocket holes in the film engage the Upper and Lower Sprockets (39) in your camera.

**5** Close the camera back. Gently, turn the Film Rewind Crank (22) until resistance is felt (this takes up the slack of the film within the cassette).





**6** Press the Shutter Release Button (1) and operate the transport lever until the Numeral 1 appears in the center of the Film Counter (2).


## To Check Film Advance

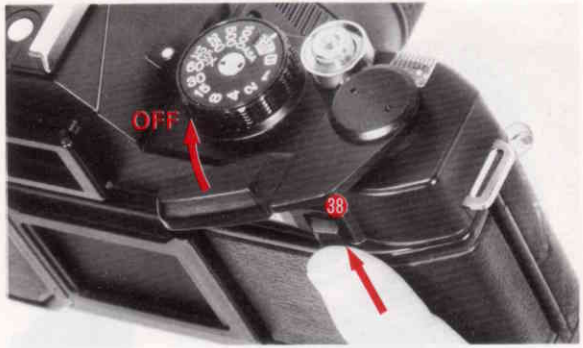
It's easy to make sure your camera is loaded correctly. While operating the transport lever, watch the Film Rewind Crank (22) to see if it rotates. If it does, you know that the film is feeding properly.

## Film-Type Tab Holder

After you've loaded your camera, tear off the end of the film carton and insert it here (45); after unloading, remove the tab. Result: you know at a glance if the camera is loaded... and what kind of film is inside.


## METER/SHUTTER "ON-OFF" CONTROL

When the Film Transport Lever (14) is at "ready" position (away from camera body), the exposure meter is turned on and the Shutter Release Button (1) may be operated.




After you have completed picture-taking, press the Meter/Shutter "Off" Switch (38). This will cause the Transport Lever to move flush with the camera body, while simultaneously turning the meter "Off" and preventing operation of the Shutter Release Button.

Next time you're ready to use your camera, simply move the Transport Lever to "Ready" position.

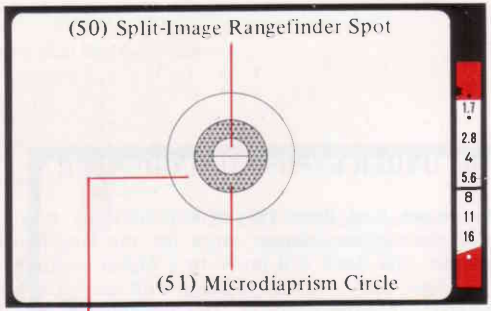
# HOLDING YOUR CAMERA



## • Hold the Camera securely and comfortably

One secret for getting ultra-sharp pictures is prevention of 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 T4 against the face. Gently squeeze the shutter release button to avoid camera motion during exposure.

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.




OUT OF FOCUS

IN FOCUS

Turn the Focusing Ring (11) of the lens until a sharp, clear image is seen in the viewfinder. The split-image "spot" in the center of the viewfinder shows your subject split into two parts when it is out of focus, then as a single, solid image when it is *in* focus.

The Microdiaprism Circle (51) will prove helpful when the subject lacks clear vertical lines – for example, as in a picture of a field covered with leaves.

The Fine Ground-Glass Ring (52) is most useful with ultratelephoto lenses and in close-up photography with bellows unit, macro lenses, or extension rings; under these conditions the other focusing aids may darken appreciably.

Your camera's viewing system is designed for clear, comfortable viewing and focusing for persons with normal vision. If you normally wear glasses for distant viewing, do so when picturetaking also. Should you prefer to operate your camera without glasses, use of a Konica diopter Correction Lens (available from your dealer) will provide a correction similar to that of your eyeglasses, and simplify operation for farsighted or nearsighted photographers.

# "CONTROL CENTER" VIEWFINDER

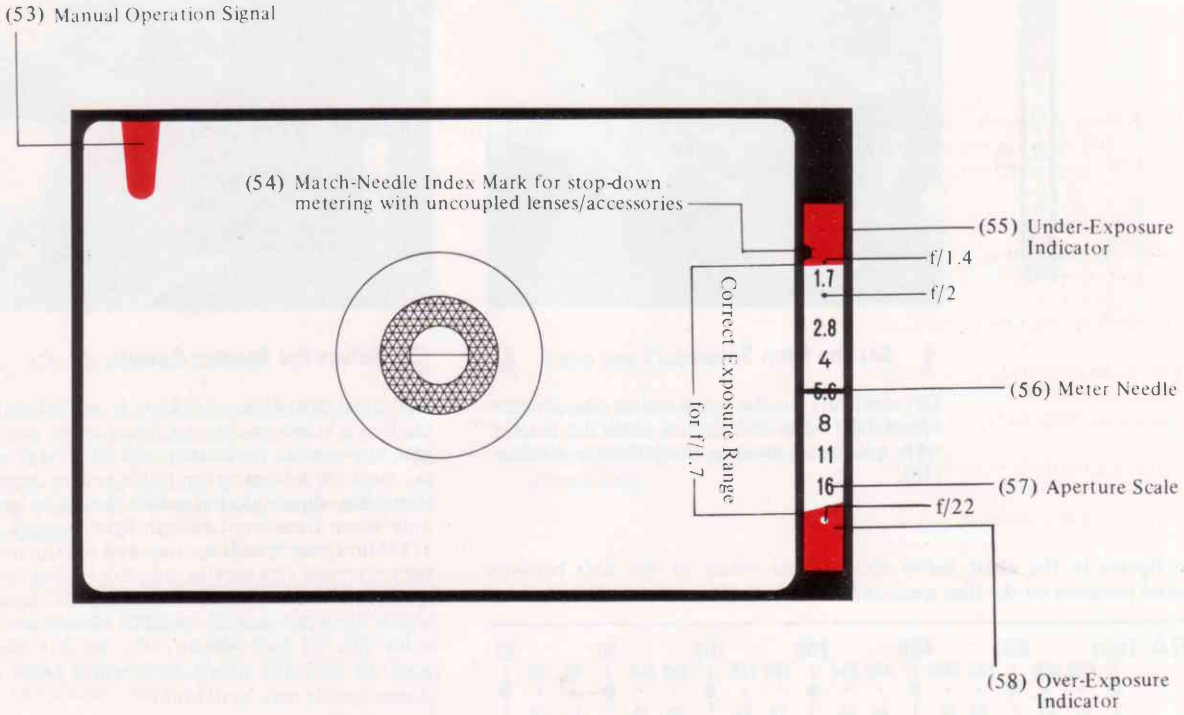
Your Konica Autoreflex T4 has a "Control Center" viewfinder which shows important picture-taking information at a glance! Without removing the camera from your eye, you see:

* Match-Needle Index Mark for use with uncoupled lenses or accessories (54);
* Under-Exposure Indicator (55);
* Meter Needle (56);
* Aperture Scale (57);
* Over-Exposure Indicator (58);
* Manual Operation Signal (53).

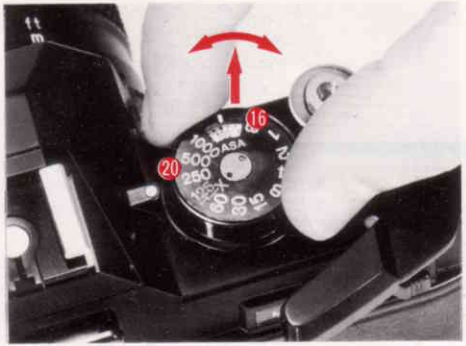
## THE UNDER-EXPOSURE INDICATOR

The upper Red Band (55) is automatically positioned to show the under-exposure range for the lens in use. (For example, the Band will move to a higher position with an f/1.7 lens, and a lower position with an f/2.8 lens.) For optimal exposure accuracy, the position of this band is calculated individually for each Konica lens according to its focal length and optical characteristics as well as the theoretical maximum f/stop. Thus, the lower edge of the Band (55) will not necessarily intersect the maximum aperture number of the lens shown in the viewfinder Aperture Scale (57).

So long as the exposure Meter Needle (56) is in the *white area* between the upper and lower Red Bands – shoot! Your photograph will be correctly exposed, automatically.



# USING AUTOMATIC EXPOSURE CONTROL (AEC)

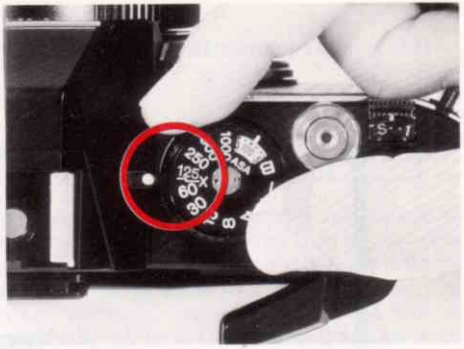



## 1 Set the Film Speed.

Lift the outer collar surrounding the Shutter Speed Dial (20) and turn it until the correct ASA number appears in the Indicator Window (16).

The figures in the chart below show actual values of the dots between marked numbers on the film speed indicator.

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ASA** | 1600 | | 1250 | 1000 | 800 | | 640 | 500 | 400 | | 320 | 250 | 200 | | 160 | 125 | 100 | | 80 | 64 | 50 | | 40 | 32 | 25 |
| | ● | • | • | ● | • | • | ● | • | • | ● | • | • | ● | • | • | ● | • | • | ● | • | • | ● | • | • | ● |
| **DIN** | 33 | | 32 | 31 | 30 | | 29 | 28 | 27 | | 26 | 25 | 24 | | 23 | 22 | 21 | | 20 | 19 | 18 | | 17 | 16 | 15 |




## 2 Select the Shutter Speed.

For most situations, 1/125th is an excellent choice; it's fast enough to freeze most action *and* stop camera movement, and lets you shoot in most situations with today's film types. Generally, slower shutter speeds should be used only when there's not enough light to work at 1/125th; faster speeds are required usually only for extremely fast-moving subjects (racing cars, sports) or when shooting with telephoto lenses which naturally magnify possible camera movement just as they magnify the subject. (See page 20 for other situations in which faster or slower speeds may be desired)


## 3 Check Aperture Ring.

Make certain the Aperture Control Ring (12) is at the AE (EE) position as shown. If lens is not on AE (EE) position, your picture will be exposed at the opening shown on the aperture ring irrespective of the f/stop indicated in the viewfinder.

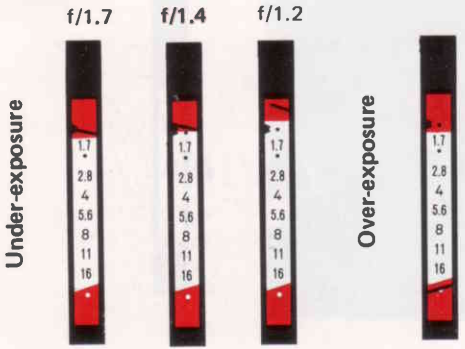
Should the Aperture Ring inadvertently be moved off "AE" position, a red Manual signal will appear at the left side of the viewfinder (see p.17).



## 4 Take the Picture!

Aim camera at subject, focus ... and shoot. As long as the Meter Indicator Needle (56) is in the white area, you'll get a perfectly exposed picture ... automatically!

## UNDER/OVER-EXPOSURE SAFEGUARDS




If the meter needle goes to the upper red band (shown above for the three standard Lenses), choose a slower shutter speed. If, at the slowest shutter speed, the needle's *still* in the red zone, there's not enough light to get a perfectly-exposed picture. (Naturally, when using speeds of 1/30 second or slower, use a tripod or brace the camera on a firm support if at all possible, and trip the shutter with a cable release.)

If the needle goes down to the lower red band (as shown in the fourth example above), there's too *much* light; choose a faster shutter speed.

## METER RANGE

All exposure meters are designed to operate over a certain *range* of film and shutter speeds. Your Konica Autoreflex T4's meter is actually sensitive enough to allow operation both in dimly-lit interiors *and* in outdoor situations where brightness is *more than 60,000 times* greater – from 1 sec. at f/1.7 to 1/1000th sec. at f/16, using ASA 100 film.

However, the exposure meter is not coupled to faster shutter speeds for film with a speed lower in sensitivity than ASA 64 and slower shutter speeds for film with a speed high than ASA 125. Here, your camera prevents exposure errors by automatically turning the exposure meter *off* if the shutter speed selected is too slow for AE operation. When this occurs, the Meter Needle (56) moves into the red Under-exposure band (55), to show that the shutter speed is beyond the meter's EV range. Solution: turn the Shutter Speed Dial (20) to a faster speed, until the Meter Needle moves into the white area in the viewfinder. (If Needle will not move into the White area at any speed, flash photography must be used – see p. 29–30.)

### EXPOSURE METERING RANGE OF KONICA T4

| ASA Film Speed | 1 | 1/2 | 1/4 | 1/8 | 1/15 | 1/30 | 1/60 | 1/125 | 1/250 | 1/500 | 1/1000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25...32 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | |
| 40...64 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| 80...100 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 125...200 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 250...400 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 500...800 | | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 1000...1600 | | | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

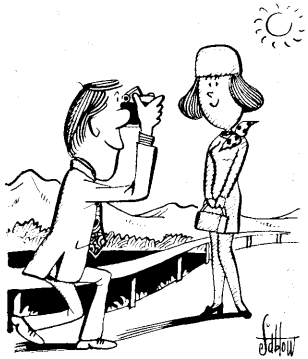
○ Within range  Out of range

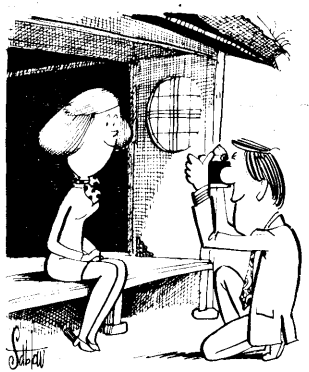
# HINTS FOR UNUSUAL EXPOSURE SITUATIONS



A unique and most valuable feature of your Konica Autoreflex T4 camera is the built-in *exposure "Memory" lock*... an easy-to-use control that "holds" a meter reading (and exposure setting) to insure correct exposure even in unusual lighting conditions.

**Backlit Subjects:** See how the sun is shining towards the camera in the illustration at the right? Chances are, the subject will have a much more natural expression than she would if she had to stare into the sun...but as a result, her face is much darker than the rest of the scene as seen by the camera. Solution: walk up to the subject, hold the camera close to the most important part (her face), press the shutter release *halfway* down...and you've "frozen" the meter needle at the correct position. Holding the release button in place, step back, focus, and shoot: the exposure is actually taken at the aperture indicated when you first depressed the release, as shown within your Konica's viewfinder.





**Extremely Dark Backgrounds:**
In the illustration at left, a relatively light subject is being photographed against a very dark background. Here again, taking a "close-up" reading, holding or locking that reading, then going back to the desired position and taking the picture, will automatically provide a professional close-up exposure reading and a perfectly-exposed picture. As soon as you release the shutter button, the meter resumes continuous operation...so there's nothing to set or re-set.

Sometimes, of course, it's not possible to approach your subject for a close-up reading as outlined above. A very practical alternative is to 'memorize' the exposure setting by *aiming the camera at your hand*, then raising the camera to your eye and taking the picture. As your hand almost certainly reflects a similar amount of light to the subject's face, your exposure will in almost all instances be excellent! Try this "professional" technique when it's impossible to come close to your subject for an exposure reading, and the subject is much brighter—or darker—than the rest of the scene.