

This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.

This page may not be sold or distributed without the expressed permission of the producer

I have no connection with any camera company

On-line camera manual library

This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of \$3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you \$7.50 for a electronic copy or \$18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs.

It'll make you feel better, won't it?

**If you use Pay Pal or wish to use your credit card,
click on the secure site on my main page.**

<Difficult-to-Focus on Subjects>

Normal focusing may be difficult under the situations described below; in these cases, use the focus lock / AE lock function to lock focus on an object at the same distance from the camera as the subject; then compose the image frame as desired and take the picture:

- When sunlight or other bright lights are located in or around the focusing frame.
- When one part of the subject has intense highlights, such as light glinting off a car finish or the surface of water.
- Flames, smoke or other objects without physical substance.
- When photographing a person's hair or other objects which do not reflect well.
- Photographs taken through a glass window.
- Extremely small objects

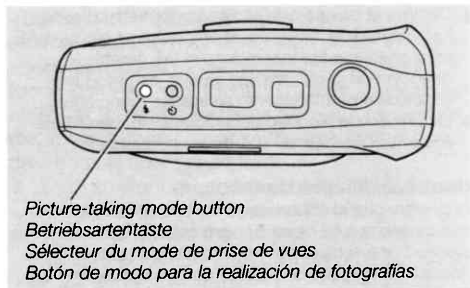


<Autofokus-Grenzfälle>

In den nachstehend geschilderten Fällen kann automatische Scharfeinstellung Schwierigkeiten bereiten. Fokussieren Sie dann auf ein Ersatzobjekt in gleicher Entfernung, und verfahren Sie wie unter "Schärfenspeicherung" beschrieben.

- Bei starken Lichtquellen (z.B. Sonne) im Bild.
- Bei starken Reflexen im Bild (z.B. auf Autolack oder Wasserflächen).
- Bei nicht körperlichen Motiven (Flammen, Rauch usw.).
- Bei Haaren oder anderen nur schwach reflektierenden Objekten.
- Bei Aufnahmen durch Glas.
- Bei extrem kleinen Aufnahmegegenständen.

2. Using the Picture-taking Mode Button



Each time the picture-taking mode button is pressed, the picture-taking mode changes in the following sequence:

Auto-flash mode (default mode, selected whenever camera power is turned on) →

Red-eye reduction auto-flash mode → **Flash-IN mode** → **Flash-OFF mode** → **Landscape mode**.

The selected mode appears in the display panel. Set the picture-taking mode as desired.

- The flash unit begins recharging as soon as a flash exposure is taken. While the flash is

recharging, the red LED beside the viewfinder will blink; when the light goes out, recharging is completed. When the camera is set to one of the flash modes, the shutter will not operate while the flash is recharging.



Blinking indicator
(recharging)
Blinkende LED
(Aufladung)
Indicateur clignotant
(charge)
Indicador intermitente
(recarga)

Indicator goes out
(recharging completed)
LED erlischt
(Blitz zündbereit)
Indicateur éteint
(flash prêt)
El indicador se apaga
(recarga finalizada)

- When using one of the flash modes take a picture with vertical composition (holding the camera sideways), hold the camera so that the flash unit is towards the top. Also, take care not to obstruct the flash with your fingers or other objects.

<1. Auto-flash Mode>

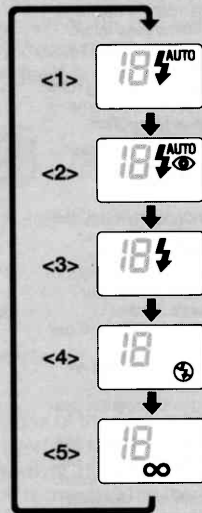
This mode is the default mode selected whenever camera power is first turned on.

When this mode is selected, the camera automatically switches to flash photography in dark situations, or in cases of extreme backlight.

- If the camera has activated the flash unit, the red LED will light inside the viewfinder when the shutter release button is depressed half way.

<2. Red-eye Reduction Auto-flash Mode>

When this mode is selected, the camera automatically switches to red-eye reduction flash mode in dark situations. When a human subject is in a dark environment, and a flash photograph is taken of the subject, the pupils of the subject's eyes will occasionally appear red in the photograph ("red-eye effect"); the red-eye reduction exposure mode has been designed to reduce the "red-eye" effect. In this mode, the flash fires twice at approximately one-second intervals, but the shutter trips only during the second flash. As a result, be careful not to move the camera and ensure that the subject does not move after the first flash fire.



- When the red-eye reduction flash mode has been selected, the red LED will light in the viewfinder when the shutter release button is depressed half way.

<3. Flash-IN Mode> ⚡

In this mode, the flash operates with every photograph, regardless of the ambient lighting conditions. This mode is convenient for compensating exposure when photographing subjects beside bright windows, to avoid underexposing the subject. It can also be used at evening or night to photograph human subjects against a background of night lights. The lights and scenery in the background will still appear, while the human subject will be properly exposed.

- When the shutter release button is depressed half way, the red LED appears to indicate the flash will operate.
- In dark locations, the shutter will be set to a slow speed. Use of a tripod is recommended under such conditions to avoid camera shake.

<4. Flash-OFF Mode> ☹

Select this mode when you wish to capture sunsets and indoor scenes with ambient lighting

only. In this mode, the electronic flash is turned off, regardless of lighting conditions. As a result, exposure is set in accordance with the available light on the subject, producing natural results.

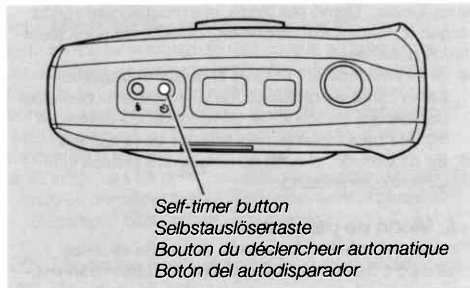
- If the red LED lights when the shutter release button is depressed half way, a slow shutter speed will be selected; use of a tripod is recommended to avoid camera shake.
- In this mode, the flash will not operate even if the red LED lights.

<5. Landscape Mode> ∞

Select this mode when shooting distant scenes, or photographing through a glass window. Sharper pictures will be obtained.

- If the red LED lights when the shutter release button is depressed half way, a slow shutter speed will be selected; use of a tripod is recommended to avoid camera shake.
- In this mode, the flash will not operate, even if the red LED lights.
- After each photography taken with this mode, the camera automatically returns to the default "auto-flash mode." To use the landscape mode again, press the picture-taking mode button and select the landscape mode.

3. Using the Self-Timer

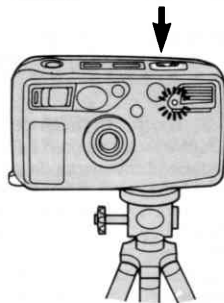


Use the self timer when you wish to include yourself in a photograph.

- ① **Mount the camera on a tripod and compose the desired scene in the viewfinder.**
- ② **With the focusing frame directed at the subject, press the self-timer button “☺”.**

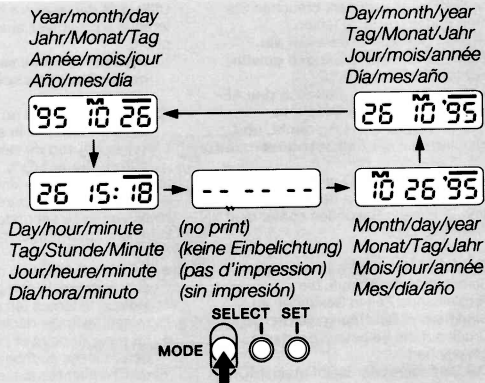
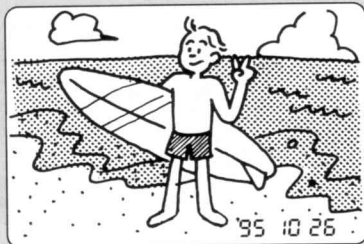
The self-timer LED on the front of the camera will begin blinking, and ten seconds later the shutter will automatically be triggered.

- During self-timer operation, the frame counter will change to display the remaining time (seconds) until shutter operation.



- Focus and exposure are set at the time the self-timer button is pressed.
- The self-timer function will not operate if the scene is out of focus, or if the flash is being recharged (during flash photography).
- To cancel self-timer operation mid-way through, press the self-timer button once again.
- Even while the self-timer function is operating, the shutter button will operate normally.

4. Printing the Date and Time



If your camera model has with a data back, you can include the date and time on your photographs.

First, set the camera to the correct current date and time.

- 1 Press the date mode button to select the desired data imprint.

Each time the button is pressed, the mode changes in the following order:

Year/month/day → Day/hour/minute →
--- -- (no data imprint) → Month/day/year →
Day/month/year.

Press the date mode button so that the desired date display appears.

② Press the shutter release button to take the picture normally.

- The “ — ” mark will blink for about 2 seconds in the display, indicating operation of the data print function.
- The “M” above certain numerals indicates “month”; the “M” itself is not printed on photographs.
- Data is printed on the lower right side of each photograph. The printed data may be hard to read if the lower right area of the scene is very bright or red in color. Also, data may not print well with some kinds of film.

② Zur Aufnahme drücken Sie den Auslöser wie gewohnt.

- Im LCD-Monitor blinkt “ — ” zwei Sekunden lang zur Anzeige der Einbelichtungsfunktion.
- Das “M” in der Anzeige steht für “Monat”; es wird nicht mit einbelichtet.
- Die Einbelichtung erfolgt in der rechten unteren Bildecke. Vor einem sehr hellen oder roten Hintergrund kann die Einbelichtung schwer lesbar sein. Auch bei gewissen Filmtypen kann die Lesbarkeit leiden.

<Setting the Date and Time>

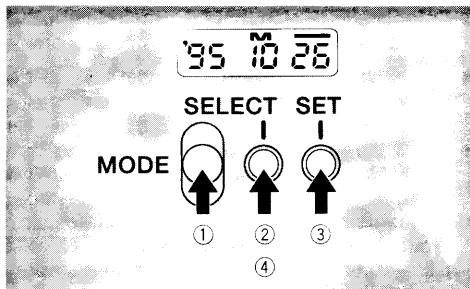
Follow these procedures to set the correct date and time.

- ① Press the date mode button to select the desired date display.
- ② Press the date select button so that the digit you wish to set blinkings.
- ③ Press the date set button to set the selected data item.

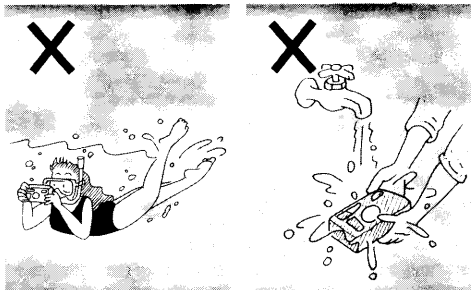
(The time mode's flashing colon ":" indicates seconds adjustment. The seconds counter begins from zero seconds when the set button is pressed, thus allowing optimum accuracy when setting the clock.)

- ④ When you have completed setting the date and time, press the date select button until the numerals stop blinking.

- The data back function operates from the same battery power supply as the camera main unit. Be sure to reset the date and time after replacing the battery.



Weather Proof



This camera has been designed to be weather proof under normal conditions of everyday use. As a result, the camera can be used on rainy days, at the beach, or on ski slopes without worry of water leakage. The camera has not been designed, however, for use underwater, and should never be submerged in water, or washed by being placed under a faucet.

- The camera's internal parts are not meant to be water resistant. As a result, when changing battery and film, do not allow water, dirt, or sand to enter the camera.
- The camera's construction may allow water droplets to enter the lens cover, but the water is not harmful, since the camera's construction prevents it from entering the internal mechanism.
- Water should not be allowed to remain on the body or lens, since it may adversely affect your photographs. If water gets on the lens, wipe it off gently with a soft cloth or lens tissue.
- When opening the camera back or battery compartment, do not allow water or sand to contact the rubber packing. If the packing become wet or soiled, clean them carefully, taking care not to damage them. If one of the rubber packing becomes damaged, consult your nearest service dealer.
- If the camera becomes soiled with sand or salt water, wipe it gently with a soft cloth dipped in fresh water. Then remove any water droplets by wiping with a soft dry cloth.

Camera Care

- Fingerprints and dirt on the lens and other areas can affect the accuracy of the camera. If the camera is soiled, wipe off gently clean the surfaces with a soft lens cleaning tissue moistened with lens-cleaning solution. Remove dust off by using with a blower brush.
- Use a soft cloth to clean the camera body. Never use organic solvents such as thinner or benzene.
- Wipe the camera clean after use at the seaside or in dusty areas.
Salt air will have a corrosive effect on the camera; sand and dust will be harmful to the camera mechanism.
- The lens may cloud if the camera is suddenly brought into a warm room from cold outdoor temperatures. Although this cloud will eventually disappear, avoid as much as possible exposing the equipment to sudden temperature changes.
- This camera includes dangerous high voltage circuits. In case of malfunction, never attempt to disassemble the camera by yourself.
- When using the camera for important occasions such as trips abroad or weddings, ensure operation beforehand or take test photographs to confirm proper operation. We also suggest bringing along a spare battery.

- This camera is a precision instrument. Do not drop it or expose it to intense shock.
- When using the camera in cold areas, store it inside clothing when not in use, remove it only to take pictures. Battery performance will be temporarily reduced when temperatures drop to near 0 degrees Centigrade to the point that the camera will not operate. The function of battery exposed to low temperature will be restored when the battery is returned to normal temperature.

When the camera does not function

A safety circuitry has been installed in this camera so as to protect the internal microcomputer. Due to the function of the safety circuitry, the camera very rarely come to function. In this case, turn off the main switch and remove the battery. Then reinsert the battery and press the shutter release button.

<Camera Storage>

- Keep the camera away from heat moisture and dust and store it in an airy place. Do not store it in a wardrobe drawer containing moth balls or in a laboratory handling chemicals.
- Do not leave the camera and film for a long time in a hot place (on an ocean beach in summer, in a closed car under direct sunlight, etc.) as the camera, film and battery may be adversely affected.

<Battery Precautions>

- Battery performance will be reduced temporarily in low temperatures. If you are shooting in cold weather, keep the camera warm inside your jacket and take it out only when needed. Battery performance reduced by cold temperature will return to normal under normal temperature conditions.
- Poor contact may result if battery poles are soiled with sweat or grease. Wipe both poles clean before loading the battery.
- Bring spare battery with you, if you are going on a long trip.
- Do not throw used battery into a fire and do not charge, short, disassemble or heat them because it is dangerous.
- The camera will not function if the battery is not properly loaded.

Kamerapflege

- Fingerabdrücke und Schmutz auf dem Objektiv oder dem Sucher der Kamera können die Funktion beeinträchtigen. Entfernen Sie Verschmutzungen vorsichtig mit einem Linsenreinigungstuch. Für Staub empfiehlt sich ein Puste-Pinsel.
- Reinigen Sie das Kameragehäuse mit einem weichen Tuch.
Benutzen Sie niemals organische Lösungsmittel wie Verdünnung oder Benzin.
- Säubern Sie die Kamera gründlich nach einem Aufenthalt in feuchter oder staubiger Umgebung, z.B. am Meer.
Feuchte und salzige Luft kann Korrosion bewirken, Sand und Staub die Funktion mechanischer Teile stören.
- Wenn die Kamera aus der Kälte in warme Umgebung gelangt, kann das Objektiv beschlagen. Diese Erscheinung verschwindet nach kurzer Zeit von selbst, doch vermeiden Sie abrupte Temperaturwechsel möglichst.
- Die Kamera enthält elektrische Schaltungen mit hoher Spannung. Versuchen Sie wegen der damit verbundenen Gefahr nie, die Kamera selbst zu öffnen.

Specifications

Type: 35mm lens shutter auto focus AE camera with built-in flash.

Picture size: 24x36mm

Lens: Carl Zeiss Tessar T* 35mm F3.5 (4 elements in 3 groups)

Shutter: Programmed electronic shutter

Exposure control: Programmed AE

Metering range: Auto-flash mode and red-eye reduction auto-flash mode:

EV 9.5 (F3.5, 1/60 sec) - EV 17 (F15.5, 1/700 sec);

Flash-IN mode, Flash-OFF mode, Landscape mode:

EV 3.5 (F3.5, 1 second) - EV 17 (F15.5, 1/700 sec).

Metering system: External metering system with dual SPD element and automatic backlight compensation.

Film speed: Automatic setting (DX method), Linked in range ISO 50 - ISO 3200 (for each step), Automatically set to ISO 100 with DX films outside ISO 50-3200 range, and non-DX films.

Focusing system: Infrared active multi-autofocus system (with focus lock mechanism)

Shooting distance: About 0.35 m - ∞

Viewfinder: Real-image viewfinder, with Super scope.

Viewfinder display: In viewfinder focusing frame, picture area frame, close-range picture area frame.

Eyepiece indicators: Focusing indicator (green LED), flash /camera shake indicator (red LED)

Super scope: Center set up marks

Display panel: Exposure counter/self-timer remaining time display; picture-taking mode marks (auto-flash mode, with red-eye reduction auto-flash mode; Flash-IN mode; Flash-OFF mode, Landscape mode); battery warning mark.

Film loading: Automatic loading mechanism (with automatic winding to frame "1" position).

Film advance: Auto-winding mechanism.

Film rewinding: Auto-return/auto-stop mechanism; also mid-roll rewinding possible.

Exposure counter: Incrementing type LCD with automatic reset.

Self-timer: Electronic timer function (ten seconds), with flashing LED indicator, and cancel function.

Flash: Built-in, flashmatic type.

Recharging time approximately 3.5 seconds (with new battery at room temperature, in accordance with our testing standards).

Shooting range: About 0.35 m - 3 m (ISO 100, color negative film), About 0.35 m - 6 m (ISO 400, color negative film)

Auto dating unit (for models with data back only): LCD display with built-in quartz clock and automatic calendar.

Dating modes: Year/Month/Day; Day/Hour/Minute; No-Display; Month/Day/Year; Day/Month/Year

Battery: One 3V Lithium battery (type CR123A or DL123A).

Battery capacity: In the case of 50% flash photography, about 20 rolls of 24 frame film, when a new battery is used under room temperature conditions (testing in accordance with our testing standards).

Other: Weather proof construction

Dimensions and Weight: 118 (W) x 64.5 (H) x 39.5 (D) mm, 190 g (without data back and battery).

118 (W) x 64.5 (H) x 42 (D) mm, 200 g (with data back, and without battery).

Specifications and design are subject to change without notice.

Technische Daten

Kameratyp: Kleinbild-Autofokus-Kamera mit Zentralverschluss, Belichtungsautomatik und eingebautem Blitzgerät.

Bildformat: 24 mm x 36 mm

Objektiv: Zeiss Tessar T* 1:3,5/35 mm (vier Linsen in drei Gliedern)

Verschluss: Elektronischer Programmverschluss

Belichtungsregelung: Programmautomatik

Arbeitsbereich: Blitzautomatik und Blitzautomatik mit Verringerung roter Augen: LW 9,5 (Blende 3,5 bei 1/60 s) - LW 17 (Blende 15,5 bei 1/700 s); Blitz bei jeder Aufnahme, Blitz abgeschaltet, Unendlich-Einstellung: LW 3,5 (Blende 3,5 bei 1 s) - LW 17 (Blende 15,5 bei 1/700 s)

Belichtungsmessung: Externes Meßsystem mit doppelter Silicium-Fotodiode und automatischer Gegenlichtkorrektur

Filmempfindlichkeit: Automatische Einstellung nach DX-Kode Einstellbereich ISO 50/18° - ISO 3200/36° (ganzstufig), Automatische Einstellung von ISO 100/21° bei DX-kodierten Filmen außerhalb des Einstellbereichs bzw. bei nicht DX-kodiertem Material.

Scharfeinstellung: Mit aktivem Infrarot-Autofokus-System (mit Schärfenspeicherung)

Einstellbereich: Ca. 0,35 m - ∞

Sucher: Realbildsucher und Super-Aufsichtssucher