

# **Auto Focus Camera Tronic AF-3590 USER'S MANUAL**

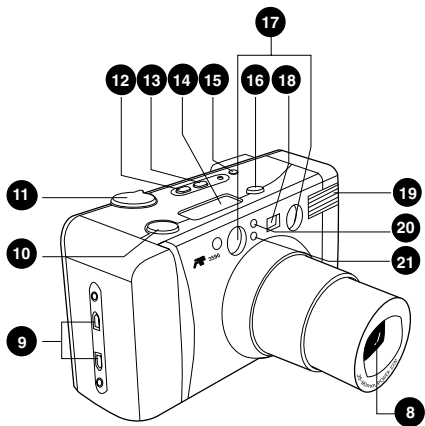
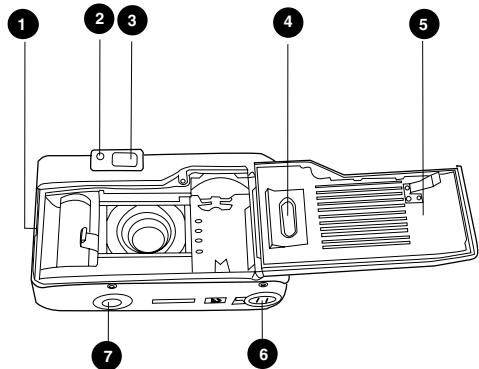


Fig. 1



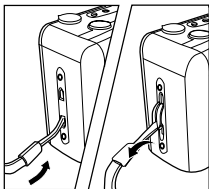


Fig. 1

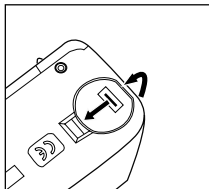


Fig. 2

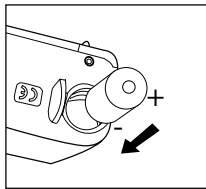


Fig. 3



Fig. 4

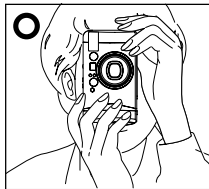


Fig. 5

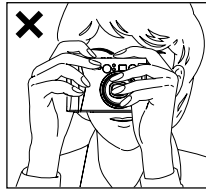


Fig. 6

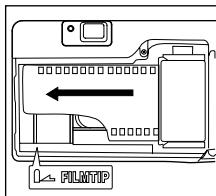


Fig. 1

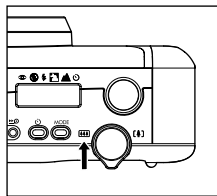


Fig. 2

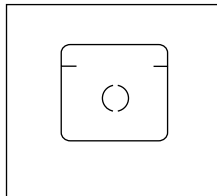


Fig. 3

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## SAFETY GUIDE

This product is intended to be used for photography. Please do not use it for any other purpose.

Every precaution has been taken to ensure the safety of this product. Please use this product correctly following the information given below.

## WARNING

- ⊘ Never disassemble the camera. There are high voltage wires inside the camera that can cause an electric shock.
- ⊘ Do not expose the battery to heat or fire. Do not attempt to short circuit, disassemble or recharge the battery. Batteries can explode and cause severe injury.
- ⊘ Put the battery in a place where young children cannot reach it. Accidental swallowing of the battery can be fatal.
- ⊘ Do not use the camera to look directly at the sun. This can cause injury to the eyes.
- ⊘ Keep the camera in a place where young children cannot reach it. Children can choke if the strap becomes wrapped around their neck.
- ⊘ If the camera has been left at low or high temperatures, do not touch it with your bare hands. Injury may be sustained due to burning.
- ⊘ If you become aware of something abnormal happening to the camera during operation (for example, it makes a strange sound or you notice it getting hot or smoking, or you smell burning, etc.), immediately remove the battery from the camera, taking care not to burn your hands.

Return it to the store where you bought it or one of our agents for repair. If you continue to use the camera in an abnormal state, it may cause burns or a fire.


- ⊘ If the inside of the camera is exposed after having been dropped or damaged, do not touch any of the exposed parts to avoid the danger of receiving an electric shock, burns or other injury. If damage occurs, immediately remove the battery carefully from the camera, taking care not to get an electric shock, burns or injury, and ask the store you bought it from or one of our agents to repair it.
- ⊘ Never use the camera near inflammable gases or other substances (such as petrol, benzene, thinners, etc) to avoid the danger of explosion, fire, burns, etc.
- ⊘ If the camera is dropped in snow or water, or the internal parts get wet, immediately remove the battery from the camera and ask the store that

you bought it from or one of our agents to repair it. If you continue to use the camera whilst wet, it may cause a fire or electric shock.



## CAUTION



- ⚠ Do not discharge the flash close to people's eyes (especially young children). This can cause injury to the eyes.
- ⚠ Do not use the battery for purposes other than those recommended, as there is the danger of explosion and fire.
- ⚠ Before taking important pictures (for business, weddings, travel etc.), please take a test film to check that the camera is working correctly. We cannot compensate you for the loss of pictures or for costs, such as for developing the photos.

Also, in some places, especially abroad, it may be difficult to buy a battery. We recommend that you always carry a spare new battery with you when you are going to take important pictures.

 Films may be exposed during the X-ray scanning of luggage at airports. We recommend that you carry your films in your hand luggage and request inspection by hand.

## **FOR BETTER QUALITY PICTURES**

-  Because the shutter speed is slow in the evening or during night photography, use a steady surface or tripod to prevent camera movement and blurred photos.
-  Do not scratch the lens or viewfinder window. Avoid touching them with fingers, etc.

-  If the flash is used to take pictures whilst its surface is soiled or covered by something such as a glove, the flash may deteriorate or discolour due to its high temperature. Before taking a picture with the flash, be sure to wipe it clean and avoid covering or touching it.
-  Films with higher sensitivity (ie. greater ISO value) are suitable for worse lighting conditions. As these are characterized by a more grainy picture and lower resolution, their use is not recommended under good lighting conditions.



## FOR TROUBLE-FREE OPERATION

- ⊘ Do not leave the camera in hot or humid places, such as on a car seat in direct sunlight or in the boot, or on the beach in the sun or sand.
  - ⊘ Do not use this camera in the rain. If exposed to rain, sea air or sand, wipe with a dry cloth immediately. Salt is particularly damaging to the camera.
  - ⊘ Do not leave the camera near electrical appliances such as a television or refrigerator.
  - ⊘ Keep the camera away from formalin (used in new cabinets and drawers) and from insecticides that contain naphthalene. This will affect the quality of the film colour.
  - ⊘ Avoid exposure to dirt or sand. These can cause serious damage to the moving parts of the camera. In some cases, the camera may be damaged so badly that repair is impossible.
- ⊘ Do not use organic solvents such as alcohol or paint thinner to clean the camera.
  - ⊘ If the camera is brought from a cold environment into a warm one, the sudden change in temperature may cause the lens to become clouded with condensation. Allow the camera to stand for a while before using it.
  - ⊘ A camera is a precision instrument. Do not drop or knock it, or use excessive force when handling it.

## DISPOSAL OF OLD EQUIPMENT

The European Directive 2002/96/EC applies to this product.

All electric and electronic devices must be disposed of separately from household waste at established bodies.

Avoid hazards to the environment and dangers to your personal health by disposing of the device properly. For further information about proper disposal, contact your local government, disposal bodies or the shop where you bought the device.

## CAUTION!



Batteries containing heavy metals must not be thrown into the domestic waste. You can return them to your dealer, manufacturer or a representative for correct recycling or disposal free of charge.

## PREPARATION










Thank you for purchasing this camera. Below we will guide you through the whole picture taking process. Please read this User's Manual carefully and keep it in a safe place for future reference.

1. Back cover latch
2. Ready LED
3. Viewfinder
4. Film check window
5. Back cover
6. Battery cover
7. Tripod socket
8. Lens/lens cover
9. Strap eyelet
10. Shutter button
11. Zoom button

## NAMES OF PARTS

12. Mode button
13. Self-timer button
14. Status LCD
15. Manual rewind button
16. Power button
17. Auto-focus sensor windows
18. Viewfinder window
19. Built-in flash
20. AE metering sensor window
21. Red-eye reduction/self-timer LED

## STATUS LCD

	Film counter
	Film indicator
	Battery level indicator
AUTO	Auto-flash mode indicator
	Red-eye reduction mode indicator
	Fill-in flash mode indicator
	Self-timer mode indicator
	Night view portrait mode indicator
	Flash-off mode indicator
	Landscape mode indicator

## STANDARD MODE OPERATION

### ATTACHING THE STRAP (P. 2, FIG. 1)

1. Insert the small loop at the end of the strap into the strap eyelet.
2. Insert the other end of the strap through the loop and pull to tighten.

## LOADING THE BATTERY (P. 2, FIG. 2+3)





Use a single CR123A or DL 123A Lithium battery (3V).


1. Push the battery cover latch and open the cover.
  2. Insert a new battery into the battery compartment with the polarity as shown in the diagram.
  3. Close the battery cover until it clicks.
- \* Only use a new battery of the same battery type.
  - \* Do not remove the battery from the camera unless you are going to replace it.

## BATTERY LIFE INDICATOR

Located on the status LCD, the battery life indicator is active while the camera is on. It shows you the power level of the battery.

The number of pictures that can be taken varies according to the performance and usage conditions of the battery.

1. The full battery symbol  is displayed when the battery is in good condition.
  2. The half battery symbol  is displayed when the battery is nearly exhausted. When  shows, there is still sufficient power remaining to finish at least one complete roll of film (24 exp.).
- \* When you see the  symbol, we recommend that you replace the old battery with a new one when you reach the end of the film.

3. The blank battery symbol  is displayed when the battery power is too low to take an acceptable picture. In this condition, all camera functions are locked. This means that the camera cannot take pictures with such low battery power. The battery needs to be replaced with a new one.

## TURNING THE CAMERA POWER ON/OFF

1. Press the power button down to turn the camera power on. The lens will extend forward and stop at the wide position. It is now ready to take photos.
2. Press the power button down once again to turn the camera power off. The lens will retract back to the off position no matter what the previous position was.


## AUTO POWER OFF SYSTEM

If the camera is at power on and not used for more than 5 minutes, the system will turn off the camera power and retract the lens to the “off” position. Press the power button to resume camera operation.

## LOADING THE FILM (P. 3, FIG. 1)

The camera uses standard rolls of 35 mm 135 size film with DX coding. The film speed is set automatically when the film is loaded.

1. Push the back cover latch downward toward the OPEN mark to open the back cover.
  - \* Be careful not to touch the lens inside the camera.
  - \* Check to see whether the camera is loaded with a film or not by looking through the film check window or at the film counter.
2. Place a new roll of film in the film chamber. Pull out the start of the film, holding the roll in place.
3. Pull out the start of the roll to the FILM TIP mark inside the camera.
4. Close the back cover firmly.



5. When you close the back cover, the film is automatically advanced to the first frame position.
  - \* If the film is not properly loaded, the camera will try to load it automatically, but “” instead of “1” will blink on the Status LCD. If this happens, open the back cover and try to load the film into the camera once again.
  - \* Automatic film loading can be done regardless of whether the power is on or off.

## HOLDING THE CAMERA (P. 2, FIG. 4-6)

1. Keep your elbows down and hold the camera steady.
2. For both vertical and horizontal photography, hold the camera with both hands and brace your elbows lightly against your body.
3. If the flash is used with the camera held vertically, the flash unit should be at the top of the camera.
  - \* If the flash is used with the camera held vertically but with the flash unit at the lower end of the camera, the picture (especially portraits) will appear unnatural.
4. Be careful that fingers, hair and the camera strap are not in the way of the lens, the auto-focus window or the flash.
5. Hold the camera firmly with both hands in a stable posture and press the shutter button with your fingertip.

## ZOOMING THE LENS (P. 3, FIG. 2)

With power ON:

1. Slide the zoom button towards the  symbol to zoom into the subject. The lens will move forwards to the telephoto position for as long as you keep sliding the button.
2. Slide the zoom button towards the  symbol to zoom out from the subject. The lens will move backwards to the wide-angle position for as long as you keep sliding the button.

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## AUTO-FOCUS

A multi-step active infrared auto-focus system is installed in this camera. The camera measures the distance of the subject from the camera and automatically adjusts the focus when shooting.

1. Fix the subject in the viewfinder and press the shutter button halfway down for the system to measure the distance. Then press the shutter button fully down to take the picture. The AF system will automatically focus the lens according to the distance measured before the shutter is released. This permits users to take sharp pictures every time by means of the AF system.

2. The focus lock can also be used to take a photo. Press the shutter button halfway down to focus on the subject. Keep the shutter button held halfway down to compose your picture, then press it all the way down to release the shutter. If the button is released before shooting, the focus lock will be cancelled.

## FOCUS LOCK (P. 3, FIG. 3)

In general, a photo is taken by aiming at the subject using the entire viewfinder area. To focus, position the subject within the auto-focus frame located in the centre of the viewfinder. If the subject is not in the centre of the viewfinder, position the subject so that



it falls within the focus frame and gently press the shutter button halfway down. Whilst continuing to hold the shutter button halfway down, reposition the subject for the desired composition and gently press the shutter button down completely to take the photo.

- \* Automatic exposure (AE) is locked at the same time as focus lock.
- \* Do not change the shooting distance.
- \* If you remove your finger from the shutter button before taking the picture, the focus lock will be released.
- \* The auto-focus may not operate properly with dark or grey objects, reflective objects or ones that emit light, very small objects or when there are obstructions such as rain, mist or smoke. In such cases, set the focus lock by aiming the camera at another object of similar brightness at about the same distance.

- \* When taking pictures through a glass window, the auto-focus mechanism may not focus properly because of reflections. For landscape photos through a window, use landscape mode.

## **TAKING PICTURES**

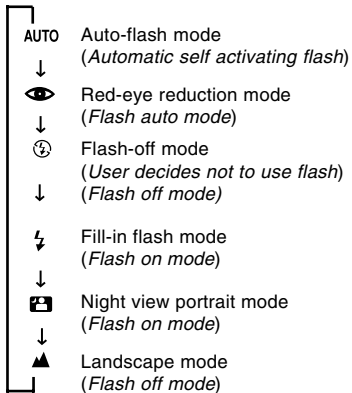
1. Turn the camera on by pressing the power button. The lens moves outwards to the shooting position (wide-angle position of 35 mm focal length). At this moment, the status LCD panel is activated.
- \* If the front surface of the lens is soiled or dusty, lightly wipe with a clean, dry cloth.


2. While looking through the viewfinder eyepiece, press the zoom button.
  - \* If the zoom button is moved to the  symbol, the zoom lens is shifted to the telephoto position (f=90mm). If the zoom button is moved to the  symbol, the lens is shifted to the wide-angle position (f=35mm). Stop sliding the zoom button when you are satisfied with the way the picture is composed.
3. Point the camera so that the subject you want to focus on is in the centre of the viewfinder (auto-focus frame).
4. Press the shutter button halfway down until the ready LED lights (green light). The focus is automatically set.
5. Press the shutter button all the way down to take the picture. The film counter will advance one frame.
6. When you have finished taking photos, turn off the camera power by pressing the power button and the lens will retract into the camera body and close.
  - \* If the camera is left on, the power will turn off automatically approximately five minutes after the last operation. The lens retracts into the camera body.

## ADVANCED INSTRUCTIONS USING THE MODE BUTTON

Each time the MODE button is pressed, the ▲ symbol cycles in turn through each shooting mode on the status LCD panel.

- \* The camera remains in the selected shooting mode until another shooting mode is selected.
- \* If the camera power is turned off and on again, the shooting mode is set to the AUTO mode except for the Red-eye reduction mode.



- \* The flash can be fired when it is fully charged and in one of the auto-flash/red-eye/flash-in/night view/self-timer modes. Press the shutter button halfway down when the flash is fully charged, then press the shutter button all the way down to take the picture.
- \* When the flash is charging (not fully charged), the ▲ symbol points to “” and the ▲ symbol blinks. During this time, the shutter button is locked to avoid shooting without the flash.

## AUTO-FLASH MODE AUTO

When recording in a dark place or with backlit conditions, the camera will automatically determine whether the flash is necessary.

- \* Light is measured through the auto-exposure sensor.
- \* Under low light conditions, the shutter speed reduces. Hold the camera steady to avoid blurred shots.
- \* While the battery for the flash is being charged, the shutter button is locked to avoid taking a photo without the flash.

## RED-EYE REDUCTION MODE

A pre-flash is emitted before the main flash to reduce «red-eye». This is an effect caused when light is reflected from the retina. Use in low-light conditions when photographing people or animals. The pre-flashes contract the pupils of the subject's eyes.

- \* The red-eye reduction may have little effect if the subject is not directly facing the pre-flash or main flash, or when there is some distance between the camera and the subject.

## FLASH-OFF MODE

Used when taking photos in a place where flash photography is prohibited, or when taking distant subjects that are beyond the range of the flash. The flash will always be off even under poor light.

- \* Under low light conditions, the shutter speed reduces. Since this may result in the image becoming blurred, the use of a tripod is recommended.

## FILL-IN MODE

Used to soften dark shadows on the face of the subject due to back light, strong direct light or sunlight, such as, for example, under a tree, or when taking pictures on cloudy days. The flash will always be used regardless of the surrounding brightness.

## NIGHT VIEW PORTRAIT MODE

Used when taking photos of people at night. The flash fires in synchronization with a slow shutter speed. For this reason, it is important that the subject does not move after the pre-flash as the shutter will remain open to correct the exposure conditions.

- \* The AE operates normally in flash mode, so it is possible to take correctly exposed photographs at dawn and dusk, on cloudy days, at close range and against dark backgrounds.
- \* The use of a tripod is recommended to prevent the camera from moving accidentally.

## LANDSCAPE MODE ▲

Use this mode to take photos of distant landscapes and when shooting scenery or landscapes through a glass window.



- \* For photography in the dark, such as in the evening and at night, the shutter speed reduces. The use of a tripod is recommended to prevent the camera from moving accidentally.

## SELF-TIMER MODE ⌚

This mode automatically releases the shutter after a delay so that the person taking the picture can be included in the image.

1. Press the self-timer button and the ▲ symbol points to ⌚.
  2. After 10 seconds, an image is captured and the timer will turn itself off.
- \* The self-timer LED on the front of the camera will blink red for 10 seconds. During the first 7 seconds, the LED blinks at a relatively slow rate; it will then blink faster for 1.5 seconds and then light solidly for the final 1.5 seconds.
  - \* If you want to cancel the operation while the self-timer is in operation, turn the power button or self-timer button to «off».

## AUTO FILM REWINDING

1. When a loaded film reaches the end, it will automatically rewind. The  icon on the Status LCD will blink during the rewinding process.
  2. Rewinding will automatically stop once the film is completely rewound. The film counter will display "0" and the  icon will blink on the Status LCD. Finally, the LCD panel will turn itself off.
  3. After checking that the LCD panel is turned off, open the back cover and take the film out of the camera.
- \* If the film counter does not display "0" on the status LCD after rewinding, press the manual rewind button.

## MANUAL REWINDING

The film may be rewound by pressing the manual rewind button before the roll is finished.

## STORING AND CARE OF FILMS

Exposed films should be stored in a cool, dry and dust-free place. Have exposed films developed as soon as possible to avoid loss of quality.



## SPECIFICATIONS

Type	35 mm - 90 mm auto-focus zoom camera
Film format	35 mm, 12, 24 or 36 photos
Film speed	DX, ISO 100-400
Lens	5 groups 5 elements optical lens 35 mm F4.4; 90 mm F10.7
Focusing	Active infrared multi-zone AF system
Shooting distance	Wide: 0.9 m to infinity Tele: 0.8 m to infinity
Viewfinder	Real image type Frame coverage: 85% at 3 m Magnification: 0.37x/WIDE, 0.89x/TELE
Shutter	Programmed auto-exposure system
Flash	Built-in flash with red-eye reduction

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Photograph mode	Auto-flash/red-eye reduction/flash-off/fill-in flash/night view portrait/landscape/self-timer
Film transportation	Auto loading, auto rewinding and mid-roll rewinding
LCD panel	Battery level check, film counter indicator, photograph mode indicator
Self-timer	10-second delay
Power source	3V Lithium battery x 1 (CR123A or DL123A)
Charging time	New battery: 8 sec. (max.)
Dimension	Approx. 4.5" (113.5mm) x 2.5" (66mm) x 1.5" (39.5mm) (without lens)
Weight	Approx. 6.8oz (193.7g)

Specifications and design are subject to change without notice.

Version 1.2

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Manufacturer:  
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Germany



51739-450-TRO