

COSINA®

ст-1

INSTRUCTION BOOKLET GEBRAUCHSANWEISUNG MODE D'EMPLOI LIBRETTO D'ISTRUZIONI FOLLETO DE INSTRUCCIONES

#### **ENGLISH**

Welcome to the exciting world of **COSINA**. Your new camera is one of a family of professional quality cameras designed with the serious photographer in mind. And the name **COSINA** is your assurance of superbly crafted optics and outstanding mechanical performance and reliability.

#### DEUTSCH

Wir begrüßen Sie in der aufregenden Welt der **COSINA**. Ihre neue Kamera gehört zur Familie der professionellen Qualitätskameras, die unter Berücksichtigung der Ansprüche ernsthafter Fotografen entwickelt wurde. Der Markenname **COSINA** ist Ihre Gewähr für überragende Optik, hervorragende Technik und Zuverlässigkeit.

#### FRANCAIS

Bienvenue dans le monde passionnant de **COSINA**. Votre nouvel appareil photographique est un modele de la familie des appareils de qualite professionelle, concu pour le photographe averti. Et le nom de **COSINA** est pour vous l'assurance d'une optique superbement travaillee, d'une performance mecanique remarquable, et d'une robustesse insurpassable.

#### ITALIANO

Benvenuti nel mondo eccitante della **COSINA**. La Vostra nuova macchina fotografica fa parte di una famiglia di macchine di qualita professionale studiate tenendo presente le esigenze del piu serio fotografo. Ed il nome **COSINA** e l'assicurazione di un'ottica superbamente costruita, e di prestazioni meccaniche eccezionali.

#### **ESPANOL**

Bienvenido al mundo emocionante de la Su nueva camara pertenece a una familia de camaras de calidad profesional que han sido disenadas pensando en el fotografo serio.

Y el nombre **COSINA** es su garantia de optica esplendidamente fabricada y de funcionamiento mecanico destacado y de precision.

#### **ENGLISH**

## **ESSENTIAL SPECIFICATIONS**

**Type:** 35mm TTL (Through-The-Lens) SLR (Single-Lens-Reflex) camera with electronically controlled automatic exposure and focal plane shutter.

Film:

Picture Size: 35mm, J135 24X36mm

Standard Lenses: K mount

Angle of View: 46°

**Shutter:** Metal focal plane shutter 1/1000 to 1 (seconds) and B. **Self-Timer:** Approx. 10 seconds built in, mechanical operation

Field of View: 93° vertical and 93° horizontal coverage of the actual picture area.

Magnification: 1:0.86 (with a standard 50mm lens.)

Focusing: Microprism type

Light Metering System: Open-aperture TTL metering system, zero method system by match

needle, center weighted average measurements with CdS

Coupled Range: EV3—18 (ASA 1 00)

Minimum Object Taking Distance Scale: 0.5m

ASA of Film: ASA25 to 1600

Synchronization Contact: X contact

Accessory Shoe: Hot Shoe

Film Advance Lever: Single lever stroke with 1 35° throw and 30° stand-off

Frame Counter: Additive type with automatical resets

Film Rewinding: Rewind crank type

Mirror: Quick-return mirror

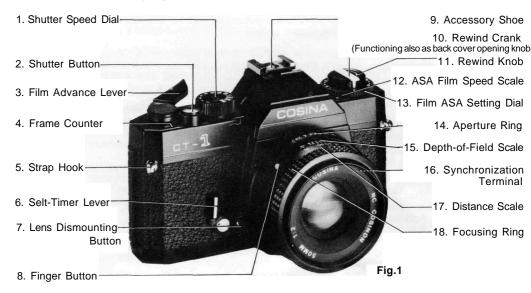
Back Cover Opening: Hinged by pulling the rewind knob up

Power Source: One H-C 1.35V

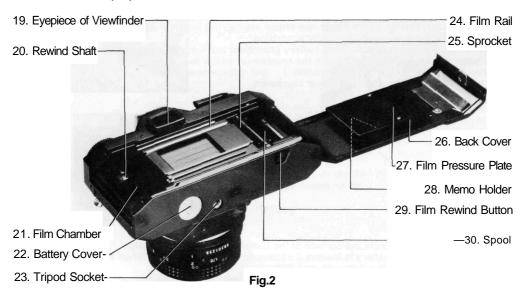
Size and Weight: 1 33X85X48mm, 450g (only body)

(Subject to change without notice.)

## 1 NAME OF PARTS (1)



## NAME OF PARTS (2)



## 2 Loading the Battery

An H-C 1.35V battery is employed for this camera.

1. The battery chamber cover can be opened by turning it counterclockwise with a coin-like article.

2. Load one silver oxide battery correctly according to the indication of the polarities in the battery chamber. ( If the battery is loaded incorrectly with the reverse polarities, the meter needle will not fluctuate. )

3. Turn tightly the battery chamber cover clockwise.



Fig.3



Fig.4

Be careful not to contaminate the surface of the battery with sweat or oil when loading the battery. If contaminated battery is loaded, it causes an improper contact. When the battery is contaminated, wipe off the dirts with dry cloth.

Unload the battery when the camera is not used for a long period.

The battery should last for approximately one year under normal use. When the camera has been used over one year, replace the old battery with new one.

## 3 Control Swtich

- In the state that the film is loaded into the camera, lightly pull the film advance lever from its stocked position. Then, the exposure meter of the camera will operate.
- 2. When the film advance lever is returned to its stocked position, the exposure meter will be turned OFF. Even if the shutter button is depressed in this state, the shutter is not released.

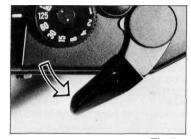


Fig.5

When not using the camera, return the film advance lever to its stocked position. (If the camera is left to stand for in ON state, the battery will consume earlier.)

## 4 Loading the film

The COSINA CT-1 uses color or black and white film in standard 35mm (J135 24mm x 36mm) film.

- 1. Pull up the rewind knob, and pull it up stronger. Then the back cover will open.
- 2. Put the film into the film chamber as indicated in the photograph, and press down the rewind shaft to the original position while rotating the rewind knob
- 3. Insert the film leader into the groove of the spool. and engage the perforations of the film in the teeth of the spool.
- 4. Turn the film advance lever and wind the film around the take-up spool making sure that the perforations of the film are engaged in the teeth of the sprocket.



Fig.6



Fig.7

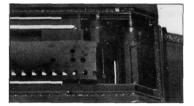


Fig.8

5. Close the back cover and press it strongly, and it will be automatically locked. Tilt up the film rewind crank, and gently turn it in the direction of the arrow until it stops to take up the film slack.

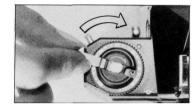


Fig.9

6. Advance the film a couple of times pressing the shutter button until the first exposure position (1) in the middle between 0 and 2 appears in the frame counter. The film is properly loaded if the film rewind knob rotates counterclockwise when the film advance lever is operated.

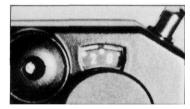


Fig.10

In case there is a film slack after the film is taken up on the spool, turn the film rewind crank in the direction of the arrow to obtain proper film tautness, and then close the back cover. Avoid direct sunlight when loading the film.

When pressing the shutter button, pull the film advance lever. If the film advance lever is pushed to its stocked position, the power source is turned OFF to lock the shutter button. Accordingly, the shutter is not operated in this state.

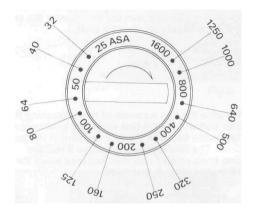
# 5 Setting the ASA Film Speed

After loading the film set the ASA film speed according to the ASA speed of the film in use. (The ASA rating recommended by the manufacturer is printed on the film box, e.g. ASA. . .) When using the film of ASA1 00, for example, set the position 100 of the film ASA setting dial to the ASA film speed scale.

The dial number of the film ASA is as indicated, and there are clicks corresponding to the respective numbers.



Fig.11



## 6 Setting the Shutter Speed

- 1. Pull off the film advance lever, and turn the shutter speed dial in either direction until the desired number clicks into place on the white line of the body.
- 2. Set the shutter speed so that the meter needle rests in the middle between + and in the viewfinder while turning the aperture ring.
- 3. Proper exposure can be obtained in the state that the meter needle rests in the middle between + and -

Accurate shutter speed cannot be obtained by the in-between setting of the shutter speed dial. Set the shutter speed so that the desired number clicks into place.

At the "B" setting, the exposure meter cannot be used.

#### **Determining Proper Exposure**

The shutter controls the length of time that light is allowed to reach the film Each shutter speed gradation is twice the preceding speed If the number is increased by one scale (60 to 1.25). the light reaching the film at 60 is half the light reaching it at 1.25. The numbers on the shutter speed scale represent the corresponding fraction of a second (1000 to 1.1/1000 to 1.1 second). At the "B" setting, the shutter remains open while the shutter button is deperessed. The shutter speed selectively depends upon the brightness and movements of the object, film in use, etc. You can use the below table as a general guide to help you select an appropriate shutter speed when using the film of the ASA1.00



Fig.13



Fig.14

Brightness	Shutter Speed (Seconds)		
General Indoors	1/30 to 1/60		
Fine Outdoors	1/125 to 1/250		
Mid-summer Beach Snow-covered Mountains Quickly moving Subject	1/250 to 1/500		

# 7 Setting the Aperture

1: Aperture	2	2.8	4	5.6	8	11	16
		0	0			@	
2: Light Amou Ra		1/2	1/4	1/8	1/16	1/32	1/64

Brightness	Aperture
Bright Indoors	2 to 4
Fine Outdoor	8 to 11
Mid-summer Beach Snow-covered Mountains	11 to 16

The aperture ring usually has gradations marked as above, taking F2 lens Fia.15

The aperture of the lens controls the amount of light passing through the lens to the film surface. If the scale of the aperture ring is increased by one(2.8 to 4), the amount of light is half (as indicated in the above table).

The aperture is determined in accordance with the brightness of the scene, the setting of the depth of the field, and the film in use

- 1. Turn the aperture ring so that the desired aperture number is aligned with the lens mark.
- 2. Set the aperture ring so that the meter needle rests between + and in the viewfinder while turning the shutter speed dial.
- 3. Appropriate exposure can be obtained when the meter needle rests between + and —.



When the meter needle rests in the side, turn the aperture ring to the left (bright aperture side). or turn the shutter dial to low speed side



Fig.17

When the meter needle rests in the + side, turn the aperture ring to the right (dark aperture side), or turn the shutter dial to high speed side.

# **8** Holding the camera

- 1. Rest the camera on your left palm so as to turn the lens focusing ring with fingers.
- 2. Hold the camera body lightly, with your right forefinger lightly on the shutter button.
- 3. Press your left elbow lightly against your body and look into the viewfinder steadying the camera against your face. The right arm should be relaxed while holding the camera.

Use the tripod when you use telephoto lenses or slow shutter speeds.



Fig.18



Fig.19

# 9 Focusing the Camera

Focusing is performed in the viewfinder. You can take a picture in the range viewing in the viewfinder. The focusing is carried out in the small round area in the center of the viewfinder while turning the distance ring of the lens. The image is in focus when it is most clearly viewed in the viewfinder. The image is not accurately in focus when it is deformed in shade in the small round area in the center of the viewfinder. It is also possible to focus with the mat screen in the entire viewfinder. The viewfinder presents a clear and steady image when in focus.



In focus

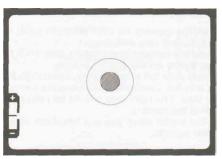


Fig.20



Not in focus

## 10 Releasing the Shutter

When you press the shutter button, the aperture is throttled and the shutter screen is opend to allow the film to be exposed.

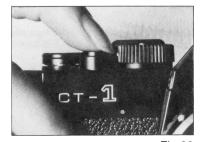


Fig.23

If the shutter speed is slower than 1/30 seconds, camera shake tends to occur. Hold securely the camera in this state, and press the shutter button slowly. It is recommended to use the tripod and the cable release when using a slow shutter speed. When using the tripod, never forcibly screw the long legs at the threaded portions. It will cause a trouble. (Use the tripod of the screw of 5.7mm long (5.5mm in the JIS)) Never move the shutter speed dial while depressing the shutter button and operating the shutter. It will affect the accurate shutter speed and the correct exposure of the film.

## 11 Rewinding the Film

Rewind the film when you took all the frames of the film.

- 1. Press the film rewind button, and it is locked in the depressed state.
- 2. Tilt up the rewind crank, and turn it in the direction of the arrow.
- 3. When the film is completely rewound, the rotation
- of the rewind crank abruptly becomes light to complete the rewinding.
- 4. Pull the rewind knob, and pull it further strongly to open the back cover.
- 5. Take out the film.
- 6. Press the rewind knob to the original position, and close the back cover.



Fig.24

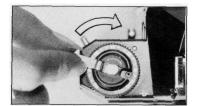


Fig.25

Avoid direct sunlight when unloading the film.

If the film advance lever is turned over predetermined number of the frames, it will stop on the midway, and the film rewind button will not remain depressed state. Then, rewind the film while pressing the rewind button.

Never open the back cover on the way the film is rewound.

## 12 The "B" (Bulb) Setting

At the "B" setting, the shutter remains open while the shutter button is depressed to expose the film. Use the "B" setting to take night scene, etc.

At the "B" (bulb) setting, use the tripod, cable release, etc.



Fig.26

# 13 Taking with the Self-Timer

## 13 Taking with the Self-Timer

The self-timer is used for selfportraits and allowing yourself to include in the photograph when desired.

- Push the film advance lever, and fully turn the selftimer lever counterclockwise as indicated on the picture.
- 2. When pressing the shutter button, the self-timer is operated, and the shutter will be released approx. 10 seconds later.

If you once set the self-timer, you cannot cancel the self-timer operation. Set the self-timer only when you desire the self-timer operation.

When the self-timer lever is fully turned, the shutter will be released approx. 10 seconds later.



Fig.27

## 14 Flash Photography

- 1. When using the cordless flash unit, you can use the flash only by inserting the flash into the accessory shoe.
- 2. Set the shutter speed dial at 1/1 25 or shorter.

When using a strobe with cord, insert the synchronization cord into the synchronization terminal.

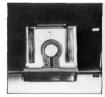




Fig.28

Fig.29

# 15 Depth-of-Field

When the camera is focused at certain distance, there are the ranges for taking the subjects clearly in the picture on both sides of the distance. This ranges are called the "depth-of-field"

## There are following relationships in the depth of field:

- 1. When the aperture is reduced (2 to 16), the depth of field is increased to increase the ranges for taking the scene clearly in the picture.
- 2. When taking farther scene, the depth of field is increased longer.
- 3. Wider angle lens of short focal length provides longer depth of field.
- 4. The rear range from the focused distance of the camera provides longer depth of field than the front range from the distance.

# 1.5 2 5 7 10 0 0 0 16 84 282

Fig.30

#### You can know the depth of field as below.

1. A depth-of-field scale is engraved on the respective lenses. When the camera is, for example, focused on a subject at the distance, e.g., 3m with the aperture set at f/8, the subjects located within 8 at both sides of the "I" mark (approx. 2m in the front range and approx. 5m in the rear range) are sharp and clear.

# 16 Infrared Photography

Infrared light rays focus on a plane slightly behind that of light rays in the visible spectrum. To compensate for this when using infrared film, focus normally on your subject and note the subject distance on the lens Distance Scale opposite the Distance Reference Mark

Turn the Focusing Ring until this distance setting is opposite the Infrared Index Mark.

**IMPORTANT:** Infrared radiation varies with the degree of infrared ray in the atmosphere. Use the infrared focus setting only as an approximation. For best results, use the smallest f-stop lighting will allow to provide sufficient depth of field to include all important elements of the picture in the zone of acceptable sharpness.



Fig.31



If it is difficult to focus the lens with the filter attached, focus the lens removing the filter from the camera.

As to the infrared color film, follow the instructions of the film. Determine the exposure according to the instructions of the film.

Fig.32

# 17 Mounting and Dismounting the Lens

#### Dismounting the Lens

Turn the lens counterclockwise until it stops while the lens removing button is depressed, and the lens is dismounted.

#### Mounting the Lens

Match the red point on the camera body with the red point on the lens barrel. Mount the lens at the body, and turn it clockwise until it pop stops.

#### **Bayonet Mounting**

This camera is equipped with the universal bayonet K mount.

Any wide-angle or telephoto interchangeable lens with K mount can be mounted on your **CT-1** camera.

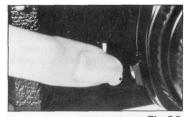


Fig.33



Fig.34

When mounting the lens, turn it until it pop locks. If the shutter is released when the lens is not locked, an accurate exposure cannot be obtained.

A finger button can also be mounted to align with the position of the lens mounting button. It is convenient to mount the lens even in the dark.

Check the following points when your camera cannot operate properly.

In case the film advance lever is pulled out and the meter does not work

- 1. Check the battery in the camera
- 2. Check whether the battery is consumed or not
- 3. Check whether the battery is correctly placed in the camera
- 4. Check whether the battery and the battery compartment are clean

In case the film cannot be rewound

 Check wether the release button is depressed or not

In case the release button cannot be depressed.

- 1. Check whether the film is correctly loaded or not
- 2. Check whether the film advance lever is pulled out from its stocked position or not.

## Caring for your camera

- 1. Never force any camera operation. Consult this instruction manual if any questions occur.
- 2. Remove batteries when storing camera. Batteries can leak as they age, causing damage to your camera. Always inspect the

batteries for signs of leakage before installing them in your camera.

- 3. Keep the lens cap on when not taking photographs. The cap protects your lens from dust or dirt particles.
- 4. Clean your camera's interior. Periodically remove any dust or film particles from the film chamber, rear lens element, take-up spool area or film pressure plate with an air blower. Inspect the film pressure plate for accumulated deposits from film backing, and clean with lens cleaner and tissue if required
- Keep your camera and film away from direct sunlight or heat. Never store your camera or film on the rear window deck, glove compartment or other hot areas in your car.
- 6. Protect your camera from moisture. Do not store your camera in a moisture-retaining enclosure or environment. In area of high humidity, extra care should be taken to insure that your camera is kept in a comparatively cool, dry location.
- 7. Do not touch the shutter curtain.



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