This page is copyright by mike@butkus.org M. Butkus, N.J.

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

I have no connection with any camera company

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 too 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. These donations allow me to continue to buy new manuals and maintain these pages. It'll make you feel better, won't it?

If you use Pay Pal, use the link below. Use the above address for a check, M.O. or cash. Use the E-mail of butkusmi@ptd.net for PayPal.



back to my "Orphancameras" manuals /flash and light meter site

Only one "donation" needed per manual, not per multiple section of a manual!

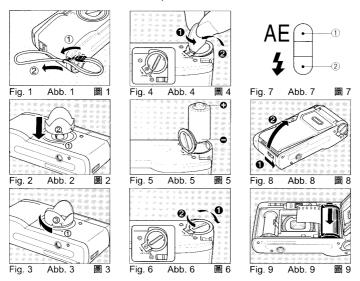
The large manuals are split only for easy download size.

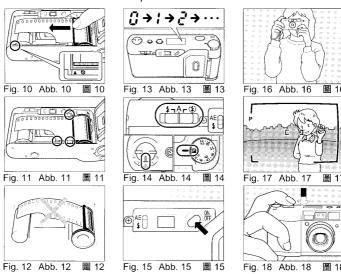
RIGOH

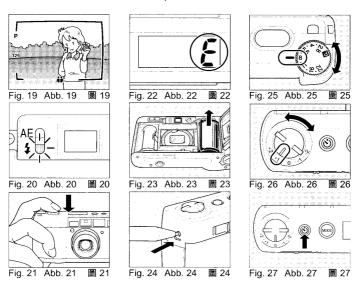
# GR1s

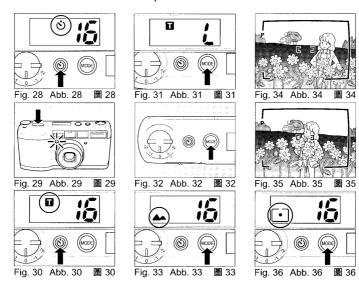
Owner's Manual Manual de instrucciones Mode d'emploi Bedienungsanleitung 中文使用説明書

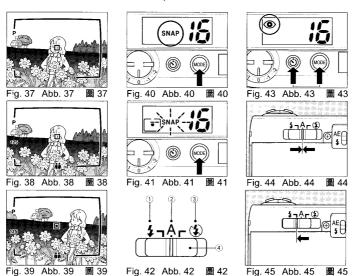
# www.orphancameras.com 10 (<u>6</u>)----В 17) (18) 14 19











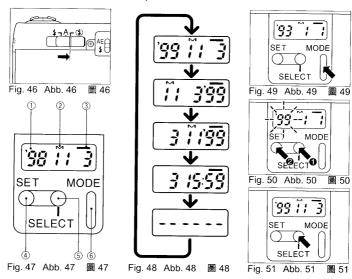






Fig. 58 Abb. 58 圖 58

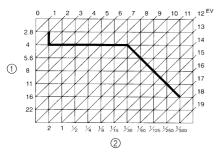


Fig. 59 Abb. 59 圖 59

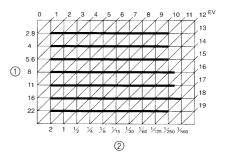


Fig. 60 Abb. 60 圖 60

ENGLISH (Page 12~34)

ESPAÑOL (Página 35~57)

FRANÇAIS (Pages 58~80)

DEUTSCH (Seite 81~103)

中 文(104頁~126頁)

# **CONTENTS**

Main Features	13
General Guide	13
Attaching the Strap	13
Attaching the Hood	14
Inserting the Battery	14
LCD Panel Indicators	
Indicator Lamps	16
AE Warning Lamp (Yellow)	16
Flash Monitor Lamp (Red)	16
Viewfinder Indicators	17
Distance Symbols	18
Auto-Focus Marks	18
Loading Film	19
Taking Pictures	20
Auto Power Off	
Removing Exposed Film	22
Aperture Priority AE	22
Exposure Compensation	22
Self-Timer/Time Exposure Modes	
Self-Timer Mode	23

Time Exposure Mode	24
Focus Modes	24
Infinity Mode	25
Single Auto-Focus Mode	25
Snap Mode	
Fixed Focus Mode	26
Flash Photography	26
Red Eye Reduction Mode	27
Auto Flash Mode	27
Flash-On Mode	28
Flash-Off Mode	28
DATE Imprinting (GR1s DATE Only)	29
DATE Display and Controls	29
Selecting the Imprint Data Format	29
Setting the Current Date and Time	30
Proper Care of Your Camera	30
Battery Precautions	3
Film Precautions	
Major Specifications	32

#### MAIN FEATURES

- High-resolution GR lens 28mm f/2.8
- Ultra-slim, 26.5mm body for unlimited portability and easy operation
- Aperture priority AE and programmed AE
- Built-in exposure compensation
- The display lights up during operation for visibility in the dark
- Standard hood attachment to filter out unwanted light

# Important!

- This camera contains high-voltage circuitry. Never try to take it apart. Doing so creates the danger of serious electrical shock.
- Be sure to test the camera and learn how it works before using it to take important, irreplaceable pictures (at weddings, on trips abroad, etc.)

#### About this Manual

This manual covers operation of the RICOH GR1s and GR1s DATE. All explanations apply to both models except for date and time imprinting, which can be performed by the GR1s DATE only.

# **GENERAL GUIDE**

- Viewfinder Window
- 2 LCD Panel
- ③ Auto-Focus Window
- Shutter Release Button
- ⑤ Aperture Dial
  - GR1s DATE Only (page 29)
    - A. Date display panelB. SET Button
    - C. SELECT Button
      D. MODE Button
  - Strap Eyelet
- 8 Focus Mode Button
- Self-Timer/Time Exposure Mode Button
- Exposure Compensation Dial
- 11 Built-in Flash
- Bright Frame Window

- Photocell
- (4) Lens Cover
- ① Lens
  - Self-Timer/AF Auxiliary Light Window
  - Flash Monitor Lamp AE Warning Lamp
  - (19) Flash Mode Switch
  - Manual Film Rewind Button
  - ② Back Cover Latch
  - ② Tripod Socket
    ② Viewfinder
  - Power Switch
  - Film Loaded Window
  - Battery Compartment Cover
  - ② Back Cover

ATTACHING THE STRAP (FIG. 1)

#### ATTACHING THE HOOD

- While the power to the camera is turned off (with the lens retracted), take the hood by its base. Install the hood onto the camera being sure to align the ● mark located on the lower right of the lens (Fig. 2 ①) with the ● mark on the hood (Fig. 2 ②).
- Turn the hood clockwise until the mark located on the lower right of the Lens (Fig. 3 ①) and the LOCK mark on the hood (Fig. 3 ③) are aligned. Do not turn the hood too far or try to force it.

#### Important!

- Be sure to install or remove the hood only when the lens is in the retracted position. Failure to do this could damage the camera.
- Do not touch the inside of the hood because it is easily scratched.
- When carrying the camera with Hood attached, make sure not to bump the camera and Hood into anything.

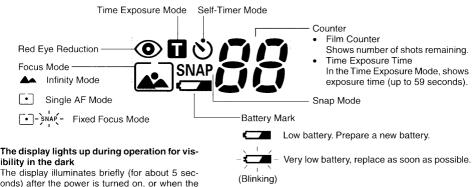
#### INSERTING THE BATTERY

The camera is powered by a CR-2 (3V) battery.

- 2. Insert the battery. (Fig. 5)
  - ★ Make sure the positive (+) end is facing up (so you can see it).
- 3. Close the battery compartment cover, lock it by rotating it in the direction opposite that indicated by the arrow marked OPEN (Fig. 6)
- ★ If you leave the camera without a battery installed for a few minutes, its date setting will revert to the default of January 1, 1993. Use the procedure on page 30 to set the correct date.
- ★ We recommend that you always carry extra batteries with you when travelling. This is especially true when travelling overseas, where you may not be able to purchase the type of battery you need.

#### LCD PANEL INDICATORS

Though the example display shows all the indicators, normally indicators appear only when applicable.



The display lights up during operation for visibility in the dark

onds) after the power is turned on, or when the mode or shutter release button is pressed to confirm operating status in dark conditions.

# **INDICATOR LAMPS**

The indicator lamps operate to alert you to certain conditions when you press the shutter release button part way down. (Fig. 7)

It does not light when the camera is in the Program Mode and exposure is within normal limits.

#### ① AE WARNING LAMP (YELLOW)

This lamp flashes to indicate over or underexposure only.

AE Warning Lamp Status	Shutter Speed Indication in Viewfinder	Meaning
Flashing	Flashing "500"	Overexposure Shutter release is still enabled.
i lastillig	Flashing "30"	Underexposure Shutter release is still enabled.

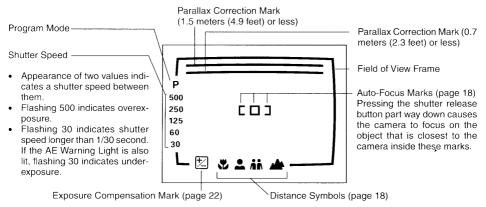
# ② FLASH MONITOR LAMP (RED)

Flash Monitor Lamp Status	Meaning
On	Flash will operate
Flashing Slowly	Flash is charging, and shutter re- lease is <b>disable</b> . This indicator flashes during recharging regradless of whether or not the shutter release button is pressed down part way.
Flashing Quickly	Flash is too far from subject, and shutter release is <b>enabled</b> . The warning is calculated based on the condition that reversal film is being used. See "Flash Photography" on page 26 for details on negative film flash ranges.

### VIEWFINDER INDICATORS

#### Note

• Certain lighting conditions and subject can cause the contents of the viewfinder to become difficult to see.



#### DISTANCE SYMBOLS

Sýmbol	Meaning	
	0.35 to 0.7 meters (1.1 to 2.3 feet)	
*	With [ ] or ☐ Auto-Focus Mark flashing Closer than 0.35 meters (1.1 feet). Shutter is disabled while this indicator is flashing.	
<b>.</b>	0.7 to 1.5 meters (2.3 to 4.9 feet)	
	1.5 to 5 meters (4.9 to 16.5 feet)	
åħ	With [ ] or ☐ Auto-Focus Mark flashing Subject is out of focus or extremely close. Shutter is enabled, with the camera focus- ing for a distance of 2.5 meters (8.2 feet). See "When the subject is difficult to focus on" on page 21 for details on hard-to-focus subjects.	
<b>A</b>	5 meters (16.5 feet) or more	

#### **AUTO-FOCUS MARKS**

Auto-Focus Marks	Status	Meaning	
   <sub> </sub>	On	Initial configuration of the Auto-Focus marks when camera is turned on.	
		Infinity Mode	
		Snap Mode	
	Flashing	Cannot focus	
	On	Center point focus	
		Single AF Mode	
		Fixed Focus Mode	
	Flashing	Cannot focus	
C On Left side focus		Left side focus	
]	On	Right side focus	

#### LOADING FILM

When using DX-coded films, setting the film speed is not necessary. Your camera automatically sets the correct film speed. When using a film without a DX code, your camera will automatically set the film speed to ISO 100. Be sure to perform the following procedure in a shady area away from direct sunlight.

- 1. Slide the back cover latch down ① to open the back cover ②. (Fig. 8)
- Load a film cassette into the camera's film chamber. (Fig. 9)
- 3. Pull the film leader so it reaches the ▲ mark inside the camera. (Fig. 10)

# Important!

- Make sure that the film is positioned between the upper and lower film guides and not on top of them. (Fig. 11)
- Do not let the film bend upwards and make sure that the outlet of the film cassette is not pointing upwards. (Fig. 12)

Close the back cover and press down on it until it locks in place. (Fig. 13)

The Pre-wind System automatically winds the film from the cassette onto the spool on the other side. If the film is loaded correctly, the Counter digits on the LCD panel count the number of exposures available (for example, "36" for 36-frame film).

★ The number of exposures indicated on the LCD panel for a roll of film may be more than the number of exposures marked on the film package.

#### Important!

Zero (""")") will flash on the LCD panel if the film cannot be wound because it is not loaded correctly. If this happens, open the back cover of the camera and correct the problem (Applicable for DX Films only.).

#### About the Pre-wind System

The Pre-wind System automatically winds the film from the cassette to the film take-up spool.

Each time to shoot a frame, the film winds into the cassette. If you accidently open the back cover of the camera while film is loaded, close it immediately. When you do this, the film will be automatically rewound into the cassette, and the Film Counter will display  $\boldsymbol{\xi}$ . Remove the film cassette and have it developed. All your shots that were wound into the cassette before the back cover was opened are not lost.

# **TAKING PICTURES**

This section describes how to take pictures in the Program AE Mode.

- Camera Setup (Fig. 14)
  - Aperture Dial: P (Program AE) Exposure Compensation Dial: 0 See page 26 for details on using flash.
- Press the power switch to turn on the camera. (Fig. 15)
   The lens extends, the lens cover opens, and indicators appear on the LCD panel and in the viewfinder.

- Aim the camera. (Fig. 16)
   Always use both hands to steady the camera.
   when holding the camera vertically, always position
  - it with the flash at the top.
    ★ Be careful not to place your fingers over the lens, flash, or focusing windows.
- 3. Compose the picture in the viewfinder. (Fig. 17)
  - ★ Shutter release is disabled when the subject being focused on is closer than 0.35 meters (1.1 feet).
- Press the shutter release button part way down. (Fig. 18)

This performs light metering and auto focus operations, and causes the Auto-Focus Marks, the shutter speed, and a Distance Symbol to appear in the viewfinder (page 17). (Fig. 19)

- ★ The Auto-Focus Marks flash if the camera cannot focus correctly (page 18).
- ★ When the subject you wish to focus on is not in the Auto-Focus Marks in the viewfinder, or when there in another subject in front of the main subject you wish to focus on in the Auto-Focus Marks, you should use Single AF Mode shooting (page 25).

- ★ We suggest that you use a tripod whenever the shutter speed "30" is flashing in the viewfinder.
- ★ The Flash Monitor Lamp lights to indicate that the flash will fire (page 16). (Fig. 20)
- 5. Release the shutter by pressing the shutter release button all the way down. (Fig. 21)

#### Note

- When shooting through glass, position the camera as close as possible to the glass.
- To avoid accidently releasing the shutter and wasting film, always turn the camera off when you are not using it.

#### When the subject is difficult to focus on

The Auto-Focus Marks inside the viewfinder flash to indicate that focusing is not possible under current conditions. You may experience problems when trying to focus the following types of subjects.

- Subjects with little or no contrast (sky, white walls, automobile hoods, etc.)
- Subjects with a smooth surface and horizontal lines only

- · Fast-moving subjects
- Verv dark colors
  - Repeating patterns
- Subjects emitting or reflecting strong light

In these cases, it is best to use the Pre-Focus technique to "lock" the focus on a more "normal" subject at the same distance. While holding the focus, turn your camera back to the original subject and shoot. (See "Single Auto Focus Mode" (page 25) for more details.)

#### **AUTO POWER OFF**

Camera power turns off automatically if you do not perform any operation for about five minutes. Lightly press the shutter release button part way down to turn power back on.

#### REMOVING EXPOSED FILM

The film automatically rewinds into the cassette when it reaches the end, and  $\xi$  appears on the LCD panel. (Fig. 22)

- Open the Back Cover of the camera and remove the film cassette. (Fig. 23)
- ★ If you wish to rewind the film before reaching the end of the film, push the Manual Film Rewind Button with a pen, etc. (If the Film Rewind Button @44 is pressed with a pen whilst it is rewinding, the film leader will not be wound into the film cassette and will remain outside.) (Fig. 24)

#### Note

A film rewind operation cannot be stopped once it starts.

# APERTURE PRIORITY AE

The camera employs aperture-priority auto exposure that automatically selects a shutter speed to match the setting you make with the aperture dial.

The aperture can be set in a range of f/2.8 to f/22 in 1/2 steps.

- Rotate the aperture dial until the value you want is aligned with the pointer mark. (Fig. 25)
  - ★ In the case of flash photography, a smaller aperture setting lets you shorten the distance between the subject and the camera.
  - A flashing AE Warning Lamp (along with 500 or 30 flashing in the viewfinder) indicates that proper exposure cannot be achieved under current conditions

#### EXPOSURE COMPENSATION

You can set an exposure compensation value within the range of ±2EV in increments of 1/2EV. the indicator is visible in the viewfinder whenever the exposure compensation dial is set to anything besides "0".

 Rotate the exposure compensation dial until the pointer mark is aligned with the setting you want. (Fig. 26) ★ If the AE warning Lamp starts to blink (with 500 or 30 blinking in the viewfinder) when you press the Shutter Release Button part way down after making an exposure compensation setting, it means that the compensation setting is beyond the camera's exposure coupling range and the specified exposure value cannot be attained.

# **SELF-TIMER/TIME EXPOSURE MODES**

Each press of the Self-Timer/Time Exposure Mode button changes modes in sequence shown nearby. (Fig. 27)

(No indicator)  $\longrightarrow$   $\longrightarrow$   $\longrightarrow$   $\longrightarrow$  Normal Self-Timer Mode Time Exposure Mode photography (page 23) (page 24)

#### Note

 The Self-Timer and Time Exposure Modes are exited automatically whenever the shutter is released.  The camera automatically also exits the Self-Timer Mode or Time Exposure Mode whenever power is turned off, whenever Auto Power Off operates.

#### SELF-TIMER MODE

Mount the camera on a tripod whenever using the Self-Timer Mode

- After composing the picture, use the Self-Timer/Time Exposure Mode Button to display the indicator on the LCD panel. (Fig. 28)
- Press the shutter release button. (Fig. 29)
   The Self-Timer LED on the front of the camera stays on for about eight seconds. Next, it flashes for about two seconds. The shutter releases a total of about 10 seconds after you press the shutter release button.
  - ★ Press the Self-Timer/Time Exposure Mode Button to cancel a Self-Timer operation before the shutter releases.
  - Pressing the shutter release button any time while the Self-Timer LED is lit or flashing releases the shutter.

#### TIME EXPOSURE MODE

The camera's Time Exposure Mode makes it possible to keep the camera's shutter open for virtually as long as you want. Be sure to put the camera onto a tripod before using the Time Exposure Mode.

- Use the Self-Timer/Time Exposure Mode Button top display the Time Exposure Mode indicator on the LCD panel. (Fig. 30)
- 2. Press the shutter release button

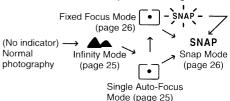
The shutter opens and a count indicating the time in seconds that the shutter has been opened appears on the LCD panel.

- ★ When the count on the LCD panel reaches 60, the LCD panel clears, but the shutter stays open. Pressing the Focus Mode Button or Shutter release button part way down displays the indicator along with an "i "indicator to let you know that a time exposure operation is in progress. (Fig. 31)
- Press the shutter release button again to close the shutter.
- ★ The shutter will close whenever the Power Switch is turned off or the Self-Timer/Time Exposure Mode Button is pressed.

# **FOCUS MODES**

Each press of the Mode button changes modes in sequence shown nearby. **(Fig. 32)** The lens extends when the mode is set.

★ Do not touch the body of the lens when the lens is extended, becouse it may affect focusing.



#### Note

 The focus mode does not change if camera power is turned off, except that the Fixed Focus Mode changes to the Single Auto Focus Mode.

#### INFINITY MODE

This mode lets you obtain sharply focused pictures of

distant images.1. Use the Focus Mode Button to display the indicator on the LCD panel. (Fig. 33)

#### Note

- In the Infinity Mode, focus is fixed at infinity so the Auto-Focus Marks in the viewfinder does not change no matter where your subject is located.
- Operation of the flash in the Infinity Mode can result in underexposure. In dim light, set the Flash-off Mode and mount the camera on a tripod to prevent movement while the picture is being taken.

#### SINGLE AUTO-FOCUS MODE

Use the Single Auto Focus Mode to lock the focus in the following situations.

 When the object you want to focus on is not located within the Auto-Focus Marks. (Fig. 34)

- When there are objects within the Auto-Focus Marks between the camera and the object you want to focus on. (Fig. 35)
- 1. Use the Focus Mode Button to display the indicator on the LCD panel. (Fig. 36)
- Look through the viewfinder and aim the camera so the object you want to focus is inside the Auto-Focus Marks. (Fig. 37)
- Press the shutter release button part way down. When the Distance Symbol appears without flashing the Auto-Focus Marks, the focus is locked. (Fig. 38)
- 4. Keeping the shutter release button pressed part way down, re-aim the camera so the picture is composed the way you want it, and press the shutter release button all the way down to take the picture. (Fig. 39)

#### Note

 At EV6 and above, center-weighted light metering is used. Below EV6, average light metering is used.

#### SNAP MODE

The Snap Mode fixes focus at a distance of about two meters.

 Use the Focus Mode Button to display the SNAP indicator on the LCD panel. (Fig. 40)

#### FIXED FOCUS MODE

This mode lets you fix the focus for a specific distance.

- Use the Focus Mode Button to enter the Single Auto Focus Mode (page 25). (Fig. 36)
- 2. Perform steps 1 through 3 of the procedure on page 25 to lock the focus on the object you want.
- Keeping the shutter release button pressed part way down, hold down the Focus Mode Button for about one second until the SNAP indicator starts to flash on the LCD panel. (Fig. 41)

The SNAP indicator means that focus is fixed

# **Exiting the Fixed Focus Mode**

 Press the Focus Mode Button until the SNAP indicator disappears from the LCD panel.

### FLASH PHOTOGRAPHY

The built-in flash of this camera provides additional light when it is needed. A red eye reduction setting is also provided.

#### Flash Mode Switch (Fig. 42)

1 Flash On Mode

② Auto Flash Mode

③ Flash Off Mode

(4) Flash Mode Switch

#### Note

The slowest shutter speed when using program AE is 1/30 second.

The Flash Monitor Lamp lights to indicate that the flash will fire when you press the shutter release button part way down.

#### Recommended Flash Ranges

Film Speed	Reversal Film	Negative Film
ISO100	0.35 to 2.5 meters (1.1 to 8.2 feet)	0.35 to 3.5 meters (1.1 to 11.5 feet)
ISO400	0.35 to 5.0 meters (1.1 to 16.5 feet)	0.35 to 7.0 meters (1.1 to 23.1 feet)

#### RED EYE REDUCTION MODE

Selecting this mode makes it possible to minimize the red-eye effect that sometimes occurs when taking portrait photographs with flash. Now it's easy for anyone to take superior shots of people.

- ★ The flash operates only in the Flash-On Mode or the Auto Flash Mode. Even if the ⑥ indicator is on the LCD panel, the flash does not operate in the Flash-Off Mode or when the camera judges that available light is sufficient without a flash in the Auto Flash Mode.
- 1. Slide the Flash Mode Switch to the "A" or \$ setting.
- Hold down both the Self-Timer/Time Mode button and the Focus Mode Button for about one second until the indicator appears on the LCD panel. (Fig. 43)
- Press the Shutter Release Button. The flash system will begin its Pre-Flash Cycle. After a brief delay, the Main Flash will then fire.
- ★ You should advise your subjects that you are using Red Eye Reduction flash and they should wait for a second

#### Exiting the Red Eye Reduction Mode

- Hold down both the Self-Timer/Time Mode button and the Focus Mode Button for about one second until the indicator disappears from the LCD panel.
- The camera does not exit the Red Eye Reduction Mode when you turn it off.

#### AUTO FLASH MODE

The Auto Flash Mode fires the flash automatically when available light is low or when you shoot a backlit subject (within 3 meters). When the subject is near, the intensity of the flash is adjusted automatically to provide a softer light for natural colors.

# Important!

 Using higher speed films for photographing nearby subjects can result in overexposure.

Slide the Flash Mode Switch to the "A" setting. (Fig. 44)

The red Flash Monitor Lamp lights when you press the shutter release button part way down to indicate that the flash will fire. (Fig. 20)

#### Note

 When taking pictures of backlit subjects, the Flash fires automatically. Thus, with backlit subjects, natural looking pictures can be taken easily and automatically.

#### FLASH-ON MODE

Use this mode when you want the flash to fire every time you press the shutter release button.

1. Slide the Flash Mode Switch to the \$ setting. (Fig. 45)

#### Important!

 When the Flash-On Mode is selected and aperture priority AE is used for photographing in a dimly lit area, the camera's shutter speed will be automatically reduced up to 2 sec. To prevent a blurry picture, mount the camera on a tripod and press the Shutter Release Button gently.

#### FLASH-OFF MODE

This mode forcibly prevents automatic firing of the flash, thus allowing available light photography in museums, churches, etc. where flash photography is prohibited.

Slide the Flash Mode Switch to the Checkling (Fig.

- 1. Slide the Flash Mode Switch to the 🗘 setting. (Fig. 46)
- ★ In dim light, the camera's shutter speed will be automatically reduced up to 2 sec. To prevent a blurry picture, hold the camera steadily or use the tripod, and press the Shutter Release Button gently.

# DATE IMPRINTING (GR1s DATE ONLY)

The data imprinting feature of the GR1s DATE camera lets you imprint the current date or time on your photographs.

### DATE DISPLAY AND CONTROLS (Fig. 47)

- Date Display Panel
- ② Month Mark

This mark appears above the digits that indicate the month setting. This mark is not imprinted on the photograph.

③ Imprint Mark

This mark indicates that the date or time will be imprinted when a picture is taken. It flashes for about two or three seconds after you press the shutter release button to indicate when an imprint operation is being performed. This mark is not imprinted on the photograph.

- 4 SET Button
- ⑤ SELECT Button
- MODE Button

#### SELECTING THE IMPRINT DATA FORMAT

Each press of the MODE Button changes the format of the imprint data on the Date Display Panel as shown nearby. **(Fig. 48)** 

- Year/Month/Day
- ② Month/Day/Year
  ③ Day/Month/Year
- Day/Hour/Minutes
- ⑤ Imprint Off

#### Important!

 Imprint data may not be visible if the area behind it is colored white or orange.

#### SETTING THE CURRENT DATE AND TIME

Use the following procedure to set the current date and time after replacing the battery, etc.

- Use the MODE Button to select the imprint data format whose settings you want to change. (Fig. 49)
  - ★ Select one of the date formats to change the date setting, or the Day/Hour/Minutes setting to change the time setting. Note that you cannot change the day setting with the Day/Hour/Minutes format.
- Press the SELECT Button and the currently set digits on the Date Display Panel flash, because they are selected. (Fig. 50)
- 3. Use the SET Button to change the currently selected (flashing) digits.
  - Each press of the SET Button increments the selected digits by one. Holding down the SET Button increments the setting at high speed.
- Press the SELECT Button to select the digits of the next setting.

- Pressing the SELECT Button while the digits for the last setting are selected causes the Imprint Mark to appear on the Date Display Panel. (Fig. 51)
- ★ Repeat steps 3 and 4 as many times as necessary to set all of the digits on the display.

#### Note

- Use a ball-point pen or other similar object to press the buttons
- Date imprinting will not operate while any setting is flashing on the Date Display Panel. Make sure you press the SELECT Button until the Imprint Mark appears after you make the settings you want.

# PROPER CARE OF YOUR CAMERA

 Never attempt to wipe dust or dirt from the camera's lens or windows with your fingers. Always use a blower to blow the dust away, or wipe the surface gently with camera lens tissue or a soft cloth. (Fig. 52)

- Impact, high humidity, salt, and other abnormal conditions can cause the camera to malfunction. Carefully wipe off the camera after using it at the beach or areas subjected to salt spray, high humidity, or chemicals. (Fig. 53, 54)
- ★ Take care not to expose the camera to sudden changes in temperature, which can cause condensation to form on the lens, on the film, inside the camera body, or on other surfaces. (Fig. 55)
- ★ Do not leave the camera for long periods in your car, in direct sunlight or in any other area subjected to extremely high temperatures. Doing so can ruin your film and even cause the camera to malfunction. (Fig. 56)
- ★ When using a tripod, the screw length should be less than 5.7mm (1/4 inch). Never try to force a longer screw into the mounting hole. (Fig. 57)
- ★ Do not leave the camera near a TV, radio, or any other device that generates strong magnetic fields. (Fig. 58)

#### **BATTERY PRECAUTIONS**

- ★ Use only the specified battery type.
- ★ Never expose batteries to direct heat or allow them to become shorted. Never try to take batteries apart and do not charge batteries. Doing so creates the danger of batteries bursting, fire, personal injury, and acid damage.
- ★ Extreme cold (below 0°C) can cause battery performance to deteriorate, and the battery mark to flash on the LCD panel. Under such conditions, warm the battery in your pocket or alternate multiple batteries, keeping one warm when it is not loaded in the camera. A cold battery will recover its performance once it is returned to normal temperature.

#### FILM PRECAUTIONS

- ★ Use up all the film in a roll and have it processed within a reasonable amount of time. Leaving film in the camera for a long time can cause discoloration.
- ★ Even placed inside a camera, the film will not be x-ray protected. Therefore, notify the inspector at the airport that there is film in the camera and avoid exposing the camera to x-ray.

# **MAJOR SPECIFICATIONS**

35mm Autofocus Lens Shutter Camera	
GR Lens 28mm f/2.8 (7 elements, 4 groups) multi-coating aspherical glass lenses	
Passive type multi-autofocus (with focus lock) automatic auxiliary AF light under low lighting Distance measuring range: 0.35m (1.1 ft.) to ∞ (infinity) Single AF Mode, Fixed Focus Mode	
Programmed electronic shutter	
Program Mode: Approx. 2 to 1/500 second	
Approx. 2 to 1/250 second, 1/500 (at f/16), Time Mode	
Reverse Galilean type with LCD bright frame In-finder illumination under low lighting	
Vertically: 81%, Horizontally: 83%	
0.43	
-1dpt	
Programmed AE (page 20), Aperture-priority AE (page 22) Dual SPD photocell	

EV2 to 17 (ISO100), automatic flash for backlit subjects up to 3.0 meters.	
-2 to +2EV (1/2EV steps)	
ISO25 to 3200, compatible with DX Code System ISO100 for non-DX films	
Ricoh Auto-Load System, film prewinds to the last frame number when back cover is closed.	
Ricoh Auto Prewind System, automatic winding, automatic rewinding, automatic rewinding of partial roll, film window	
Counts down number of exposures left.	
Electronic flash that automatically adjusts flash amount to available light levels Auto Flash for low light and back-lit subjects; Slow Synchro	
7 (ISO100)	
ISO 100 reversal film: 0.35 to 2.5 meters (1.1 to 8.2 feet) ISO 400 reversal film: 0.35 to 5.0 meters (1.1 to 16.5 feet) ISO 100 negative film: 0.35 to 3.5 meters (1.1 to11.5 feet) ISO 400 negative film: 0.35 to 7.0 meters (1.1 to 23.1 feet)	
Approx. 5 seconds	
Approx. 300 shots (50% with flash, according to Ricoh test conditions) Low battery indicated by battery mark	

Modes:	Self-Timer Mode; Time Mode	
	Infinity Mode; Single Auto-Focus Mode; Snap Mode; Fixed Focus Mode Flash-On Mode; Auto Flash Mode; Flash-Off Mode; Red Eye Reduction Mode	
Self-Timer:	Built-in 10-second digital timer; operation indicated by LED	
Auto Power Off:	Approx. 5 minutes after last operation	
Power Supply:	One 3V CR-2 lithium battery	
Data Imprinting Power Supply:	Main power supply (GR1s DATE only)	
Date Imprint Formats:	Year/Month/Day; Month/Day/Year; Day/Hour/Minutes (GR1s DATE only)	
Date Display Formats:	Year/Month/Day; Month/Day/Year; Day/Hour/Minutes; Data Imprint Off (GR1s DATE only)	
Dimensions:	117 (W) x 61 (H) x 26.5 (D) mm, 4.6 (W) x 2.4 (H) x 1.0 (D) inch (not including grip)	
Weight:	GR1s: 178g (6.1 oz) without battery GR1s DATE: 180g (6.2 oz) without battery	
Optional Accessories:	Hood	

# **EXPOSURE CONTROL DIAGRAMS**

Program AE (Fig. 59) Aperture Priority AÉ (Fig. 60)

① Aperture (F)
② Shutter Speed (seconds)