Instruction manual



For dermatology **Digital Dermo** Model : Derma9500S-GR



Thank you for using our product Please read the instruction manual and fully understand it before use. Thank you.

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Derma1000-GR Digital dermo desighned for dermatology. Please avoid using for any other purpose

## **Confirmation of set contents**

The following items are included in the Derma9500S-GR

- A set of camera body (Ricoh WG-6) For detailso of Ricoh camera, please see the instruction manual for the main unit.
- Close-up photography adapter set Gel / polarizing filter integrated module
- Note 1) The dedicated battery is already charged and loaded.

Note 2)Derma9500S-GR

If you push it to the red mark next to the switch, it will be in the polarizing filter mode. The other side will be in gel mode.

## Attach the adapter to the camera

Attach the close-up shooting adapter to the camera body

Align the top of the camera mount adapter with the back of the module.

"●" mark on the camera mount and "●" mark on the back of the module (adapter), align and fit, and rotate in the direction of the arrow until it hits the stopper.

Please note that the lock will be released if you turn it in the original direction because it is fixed with a magnet.





## About repair

When sending to us for repair, etc., disassemble the camera body and close-up unit, and disassemble. Please pack it with cushioning material and send it.

Our company automatically registers your purchase date (shipment date). We will respond if you contact us with the name of the clinic and your name.
The warranty period is one year after purchase except for the camera
Basically, the camera body is "guaranteed by Ricoh Co., Ltd." The warranty coverage of our close-up section is the same.

[Warranty provisions]

- 1. Repairs after the one-year free repair period will be charged
- 2. If the cause of the failure is as follows, it will be out of the coverage and will be charged.
  - 1) Failure or damage due to careless handling or misuse
  - 2) Failure or damage due to repair, modification, disassembly, etc. other than our company
  - 3) Failure or damage caused by mud, sand, water fog, drop, impact, etc.
  - 4) Failure or damage due to fire, earthquake, flood, lightning strike, other natural disasters, pollution or abnormal voltage
- 5) Damage due to improper storage or care
- 3. Consumables are not covered by this warranty.
- 4. Customers are responsible for the freight charges and charges for repaired products.
- Incidental damage due to failure of this product (costs required for shooting and should be obtained by shooting. We cannot compensate for lost profits, etc.).

### Precautions for use

- 1. When not in normal use, set the power switch for lighting to "off".
- 2. If the lighting becomes defective during use, replace the battery
- For cleaning, wipe the close-up unit with a soft cloth. Do not use benzene / alcohol highly volatile solutions. Be sure to clean the filter glass, etc. with alcohol cotton, etc. after each inspection.
- 4. Since it has an illumination light source, please avoid using it for people who are sensitive to light.
- 5. A magnet is used for the lock mechanism

### About connection with a personal computer

- 1. Connect the attached USB cable to your computer and transfer the captured images to your computer to save.
- 2. Import images from the SD card using a card reader (USB connection).
- 3. With an SD card with WiFi function, you can transfer to a PC with WiFi.

## Play on TV

 You can watch it in high resolution on a high-definition TV.By connecting to a high-definition TV using an HDMI cable or HDMI micro cable as an optional cable, you can see the image being captured and the image that has already been captured. (Refer to page 68 of the Camera User Guide)

### Battery case battery and battery replacement

If you do not use it for a long time, please remove the battery.<sub>o</sub> Prevents battery leakage. Also, check for battery leaks from time to time even when using for a long period of 6 months or more.Leakage of the battery will ruin the battery case.

If the lighting becomes dimmed or does not turn on, replace the battery.

- 1. Slide the lid of the battery case down to remove it.
- 2. Replace with a new battery. (Enter the polarity correctly)
- 3. Slide the lid up and make sure it is locked.



### About initial settings

This product has been carefully set and adjusted optimally for dermatological dermoscopy and stored in user mode. When using, just set the shooting mode dial to [U1] [U2] for optimal shooting.

**Important: Please be careful not to change the mode memory of user mode.** The settings for user modes U1 and U2 of WG-6 are as follows.

- U1: Imaged in autofocus mode
- U2: Imaged in manual focus mode

Main settings::

Autofocus = Good for pigmentation of different depths Manual focus = optimized when the tip glass is pressed against the skin White balance = optimization of skin color reproduction Angle of view (zoom) = Optimizing shooting range

Normally, turning the power to "OFF" and then turning the power to "ON" will restore the factory settings. If the settings change for some reason, please send them to us and we will reset them for a fee.

If you want to reset it yourself, please refer to the following procedure.

#### MENU. Button setting

•Manual white setting: Turn on the LED lighting and set the standard color subject.

•Pixel setting: WG-6 : [5184 x 3456]

It is set to.

#### Imaging / playback menu

- Focus adjustment / F value setting): Bring the tip glass into contact with a deep subject such as a carpet..Adjust the manual focus and adjust to the optimum position while checking the shooting so that the subject surface and depth are in focus.
- Image quality / size: Size L3: 2
- Focus: Standard

Image quality settings: Sharpness: Hard, Saturation: Standard, Contrast: Strong
 Exposure compensation: -0.3

- Camera shake correction: ON
- •White balance: Manual setting
- [P]: Ring lighting setting

#### Other menu factory settings

[P] Setting: Autofocus: standard, Flash: No flash White balance: Auto WB

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#### Imaging mode [U1] or [U2] Normally set to [U1]. [U1]: Press halfway in autofocus mode, and press after the focus frame turns green and is in focus. [U2]: Imaging in manual mode (preset adjusted)

Please take a picture with [U1] for reference.Use the up and down buttons to adjust the focus of [U2].Also, do not touch the button with the green mark at the bottom right. If you touch it, it will return to its original state by turning the power on and off.

Every time the power is turned on, the image is zoomed 5 times.Keep it as it is, or press the telephoto button of the zoom and set the zoom ratio to about 6.0-6.4.Please adjust diligently with T and W.

The image size to be captured is、x 5.0「18mmx13mm」 x6.0「16.5mmx11mm」 x6.5「15mmx10.5mm」

The number of images taken is 8GB: about 1890.

### 3 Gel mode switching

Wipe the tip glass surface with alcohol and apply gel to the glass surface.Press the glass surface against the affected area from the front and spread the gel so that the bubbles escape to the other side.

<Hint> By filling the minute gap between the cadre and the glass with gel, you can take a beautiful image without extra reflected light.Support the tip of the module with one hand to increase the pressing force on the skin, and adjust it to weaken it for optimal shooting.

## Polarization filter mode switching

Note: For ulcers and bleeding lesions, use gel, saran wrap, gel between the skin and the dermoscope to avoid direct contact. Infection can be prevented as well by using a silicon adapter. Prepare by wiping the tip glass surface with alcohol. When the skin is dry, such as in winter, wipe the skin surface with alcohol before taking an image.

Non-contact imaging is possible. It is possible to take an image with autofocus at a distance of about 7-10 mm. It can be used in places where it is difficult to make contact, such as between the toes.Turn 0n the slide switch and take a picture of the exhibition part while lighting.

Be sure to cut it after use. If you forget it, there is a protection circuit that automatically turns off after about 30 minutes.

### Medical record photography / wide area clinical photography

Not only the affected area but also a wide area including the circumference of the trunk can be easily imaged and a wide area image to show the position of the trunk can be easily performed.

•Remove the dermoscope module from the camera body.

- •Set the shooting mode dial to <sup>[P]</sup>.Autofocus mod.The LED ring lighting works, but when it is better not to have the lighting, use the imaging mode dial to set to [AUTO].
- •Adjust the zoom according to the angle of view.

-Shoot at a distance where the medical record just fills the screen.

### Silicon adapter convenient for skin photography

It is possible to perform both imaging with pressure on the blood vessel by conventional close contact imaging on the clinical part and imaging with less pressure on the blood vessel with the silicon adapter.

- 1. The gel type can fill the gap between the skin and the glass.
- 2. The polarizing filter type produces images that are almost non-contact.
- 3. The silicon adapter can be sterilized by autoclave.

It is important to attach the silicon adapter to the module.Hold the head and push it downwards to bring it into close contactIf you attach water to the adapter and the module and make them adhere in the same way, they will adhere more firmly.If the adhesive strength becomes weak, wash it with soap to remove oil.

### Light guide

An adapter that is convenient for capturing images in narrow spaces such as between the toes, the nose, and the inside of the ear. It can be sterilized in an autoclave.For how to use, refer to the instruction manual of the light guide.



### When in trouble

Do not touch the adjustment in the camera settings (P mode and U1, U2). If the settings change for some reason, turn off the power and then turn it on again to restore all factory settings.