

## Precautions for use

- The customer's purchase date (shipment date) is registered at our company. Clinic name, Please let us know your name and we will respond.
- Basically, failures will occur due to normal use of the camera body and system. We guarantee it for one year. Repairs for damage to the LCD glass of your smartphone due to a drop are generally not covered under warranty.

**Note: Please do not upgrade Android. If you do, the dedicated app may not work properly. Modifications will be charged.**

### ◇ HD—2 system specification

- 1) Smartphone: Motorola G13  
Number of camera pixels: 50 million pixels
- 2) Size: 171.5. x 86.1 x 42.5mm (with silicon adapter)  
162.7 x 74.7 x 8.2 mm (Smartphone only)
- 3) Weight: 224g (184g : smartphone only)
- 4) Memory: RAM 4GB / ROM 128GB  
micro SD: maximum 512GB
- 5) Battery: 4500mAh

### Derma Medical Inc.

11-26, 2-chome, Nagataminami, minami-ku  
Yokohama, Kanagawa, 232-0073 Japan  
TEL: 045-731-2584 FAX: 045-714-3763  
E-mail : gawjv440@ybb.ne.jp  
URL : <http://dermamedical.jp/>



Instruction manual

For dermatology

**Handy Dermo**

Model : HD-2



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

Handy Dermo HD-1 designed for dermatology.  
Please avoid using for any other purpose.

## Confirmations of set contents

The following items are included in the HD-2.

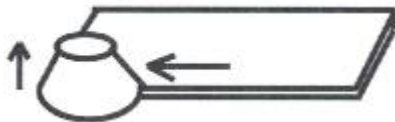
- Camera body set (Motorola G13)  
USB cable, and SIM pin for micro SD
  - Handy Dermo (close-up photography adapter set)  
Polarizing filter on/off
  - Silicon adapter (with glass for gel or oil)  
Fit the camera's silicon adapter into the silicon mount.  
The focus will be just right.
  - Light Guide LG-2  
Use in tight spaces such as between your fingers or near your nose.
  - SIM Pin: Motorola G13
- Note 1) The smartphone is already charged and loaded.  
Note 2) If you set the switch knob to the upward, it will be the polarizing filter mode and at the downward, you can set the glass to silicon adapter, it will be in gel or oil mode.

## Attach the silicon adapter to the camera

**1** Fit the silicon adapter into the silicon mount.

**2** To remove the silicon adapter, push the lower part up and lift the protruding part to remove it.

Press the bottom of the silicon adapter



Push it up to remove

## The settings of Motorola G13 is as follows;

- 1) Language English section USA. SIM card None. Google account None, MI account None. Fingerprint None. WiFi setting None. Water proof and dustproof. IP52: Life waterproofing..It will be out if submerged in the bath.
- 2) Only use the camera. The camera frame is 3: 4.
- 3) Operation buttons

Volume control

Power button

Press and hold the power button Reboot

Smartphone right switch



SIM/micro SD

- 4) Display Brightness Adj : Manually 90%~100%.

## Shooting mode

Usually, shoot with a silicon adapter (without glass).

1. Polarizing filter mode Use the polarizing filter switch on the orange knob to move it to the back.
2. Normal mode (or gel or oil mode with a glass)  
Turn it outside with the polarizing filter switch on the orange knob. If you insert the attached glass into the groove on the top of the silicon adapter, you will be in gel or oil mode.
3. Reflection of lighting when glass is attached to the silicon adapter  
The image is shown, but the image is 10x (electronic zoom ratio 3.0). Then it will disappear from the image.
4. Normally an image is taken an electronic zoom of above 3.0 and it is magnified and observed during playback. The resolution will be better than when magnifying the image.
5. Including silicon adapter and optional glass. Sterilization is possible with an autoclave.
6. Take the silicon adapter and take a picture of the patient name in the medical record. After that, it is possible to take an image of the patient.

## Convenient option for clinical and narrow area skin imaging

Remove the silicon adapter and insert the clinical adapter and light guide in the center. The tip of the light in the focus point. It is easy to use near the nose of the face, in the ear and between fingers, etc. Insert the clinical imaging adapter in the same way. Adjust with zoom, and take focus images. Light guide LG-2 is a standard accessory.



upward/  
downward

Polarized filter switch

LG-2



Light guide

CP-1



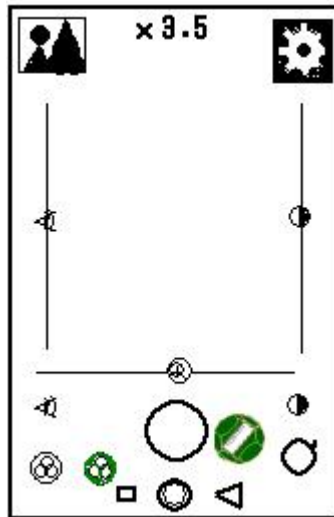
Clinical adapter

## Connection with a computer and the images

Connect to your computer with the included USB cable and transfer the captured images to your computer for saving. Smartphone when connecting a computer and a USB cable. If you give permission to transfer images to, it will be transferred. There are images in Handy Dermo in DC-IM in the file in the memory of the smartphone. There are pictures. You can delete the pictures and also transfer the pictures to the computer.

## 2

## Dedicated application operation



Focus

Press the button below to autofocus. If you press it again, a vertical bar will appear for manual focus. Adjust it up and down.



EV(exposure value)

Press the button below to set the standard settings. Press it again to manually adjust with the vertical bar. Adjust up and down.



Electronic zoom

Adjust left and right,

**x 10 : Actually 28 times**

**x 3.0 : Actually 10 times**

**x 2.1 : Actually 7 times**



Video characteristics 1 standard for strong contrast  
The one to set is green around



Video characteristics 2  
Weaken the setting contrast



Touch to playback mode.  
HDR mode will be available.



Reset button: Return to default settings Focus / EV / Zoom



Shutter button: After adjust focus and capture



Zoom ratio initial setting can be changed



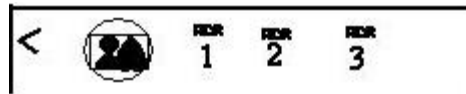
Image selection button during playback



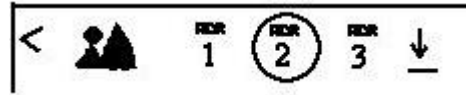
Electronic scale

## How to display images with a dedicated app

1. Press and hold the power switch until the letter M appears and say "Hallow Moto" audibly. Slide it by hand to unlock it.
2. Camera button (Handy Dermo) at the bottom of the center of the screen. Touching will launch the dedicated app.
3. Once started, each setting and how to change it
  - 1) Digital zoom is set to x3.0. If you want to change, press this button on the top right and when you touch the number, a number plate will appear and you can enter that number. Select whether to maintain or reset the settings when the power is turned off. Retain: OFF Do not retain: ON If you touch the black screen, [SAVE] and [RESET] will appear. Touch "SAVE" below and "Return to camera" to return. Once you return to the imaging screen, press the reset button to set will end.
  - 2) Exposure is set to best.
  - 3) Focus is set to autofocus. Touch the area you want to focus on. Touch tone and focus. For magnified observation, adjust the focus manually.
  - 4) The video characteristics are set to a high contrast mode. If it is difficult to see the dark parts of the image, use a weak contrast mode. The background of the button lights up green.
  - 5) If the actual image appears and fine adjustments are required, Touch the button below to manually adjust the exposure can. A vertical bar will appear, so slide it up and down, Adjust.
  - 6) Electronic scale ON/OFF (green lights around when ON) Always displayed at the edge of the screen regardless of the enlargement ratio (scale unit is mm)
4. When the power is turned off and then turned on again, the previous settings will be maintained. If not needed, press the reset button to return to the initial settings.
5. Image playback
  - 1) Touch the Google Photos mark and set it to playback image mode. Press Photo, then touch Camera. All images by date are displayed will be shown.
6. How to check captured images and delete images
  - 1) Open Google Photos, select the image, and touch Delete at the bottom of the screen, and then touch Move to Trash.
7. How to use HDR mode
  - 1) Touch the mark to enter playback mode. The following figure will appear.  
Set to HDR mode to increase the contrast of the captured image.



You can obtain the original image and three types of contrast images. When you touch HDR1, HDR2, and HDR3, an arrow mark will appear on the right edge for HDR2. The circles keep spinning until you get a result. After the result, if you want to save it, touch the arrow and it will be saved. When displaying an image in playback image mode, if there is an HDR image, its text will be displayed. Additional HDR is possible.



## About warranty

### "Warranty Policy"

1. Repairs after the one-year free repair period will be charged.
2. If the cause of the failure is as follows, it will not be covered by compensation and you will be charged a fee.
  - 1) Failure or damage due to careless handling or misuse
  - 2) Failure or damage caused by repair, modification, disassembly, etc. by a party other than our company
  - 3) Malfunctions caused by mud, sand, water, falling, impact, etc. and damage
  - 4) Fires, earthquakes, floods, lightning strikes, other natural disasters, pollution, and abnormal electricity. Failure and damage due to pressure
  - 5) Damage due to improper storage or care
3. Consumable supplies are not covered by this warranty.
4. The customer is responsible for paying the freight and charges for repaired items.
5. Incidental damages due to the failure of this product (various expenses required for shooting and We cannot compensate for loss of profits that should have been obtained from the above.