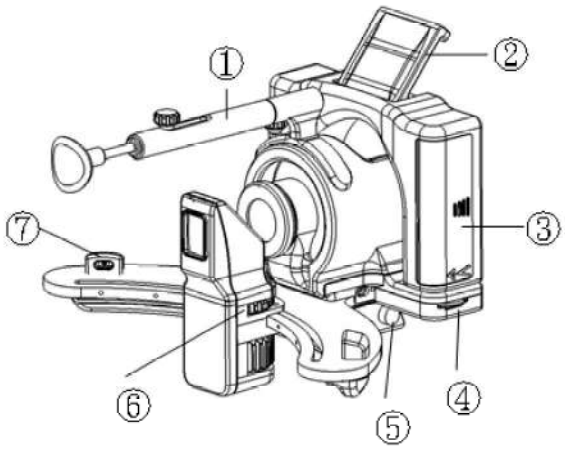
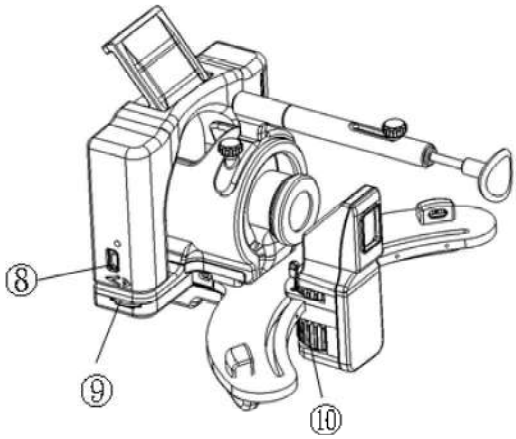
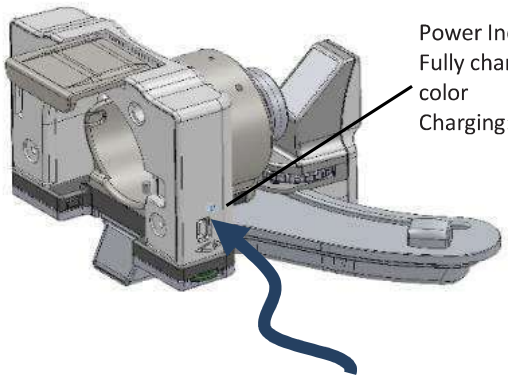
Illumination Light Source for DEA 100 (Eye anterior illumination system)

Structure

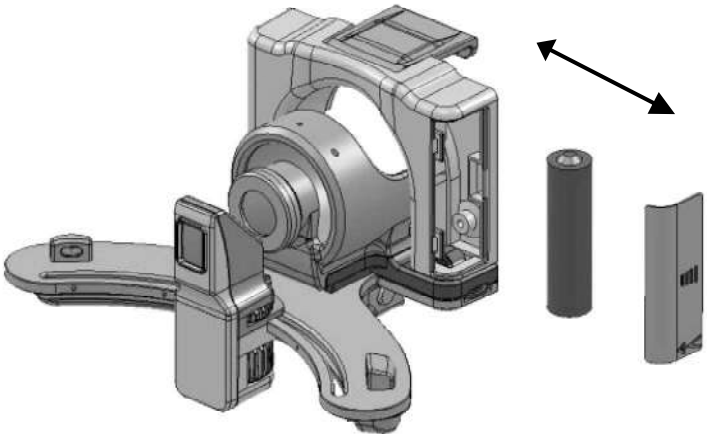
① Forehead stopper
② Locking structure
③ Battery groove
④ Slit light control knob
⑤ Auxiliary light position switch
⑥ Filter wheel
⑦ Auxiliary lighting
⑧ Charge port
⑨ Auxiliary light control knob
⑩ Silt wheel







Power Indicator
Fully charged: Green color
Charging: Orange color



NOTE

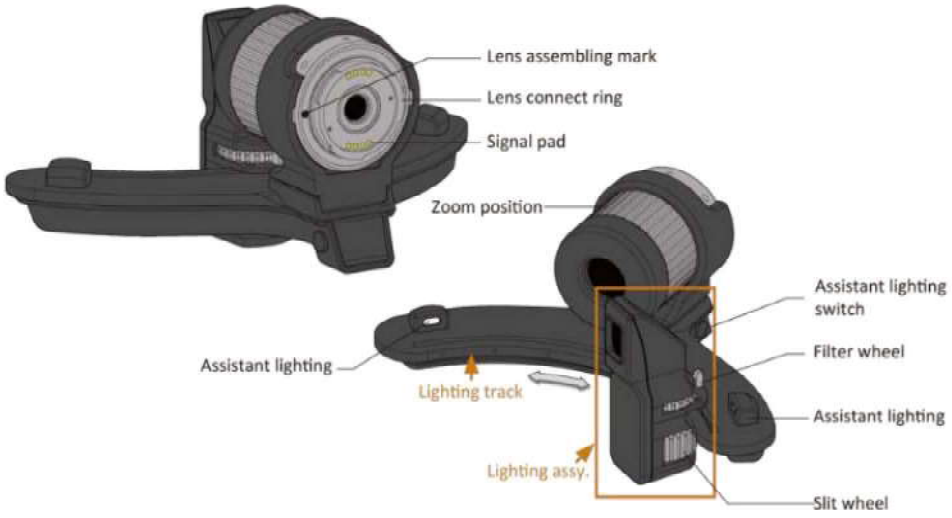
If you connect the USB cable of ILS 100 with a computer, please connect two USBs. If you use the power adapter to charge, just use one USB.

Technical Description

View Area	25.02 mm (typ. ±5%)
Working distance	80mm
Illumination Angle (degrees)	± 45 degree (± 5%)
Slit Length(mm)	10 mm (± 10%)
Min Slit Width (mm)	<0.2 mm
Max Slit Width (mm)	Equal to slit length. (10mm)
Slit Width Selection	<0.2, 0.2, 0.5, 2, 5, ϕ10 mm
Filter	Transparent, Cobalt Blue, Red-free (Green)
Light	Conform to Group II of ISO 15004-2:2007(E)
Weight	345g (typ. , include Forehead stopper)
Dimension	178mm x 160mm x 107mm
Power source	Rechargeable Li-ion Battery 3.7V/800mAh (2.96Wh)
Operation time	90 minutes for continuously use

MiiS Horus Scope DEA 200P (Digital Anterior Scope)

Structure



Technical Description

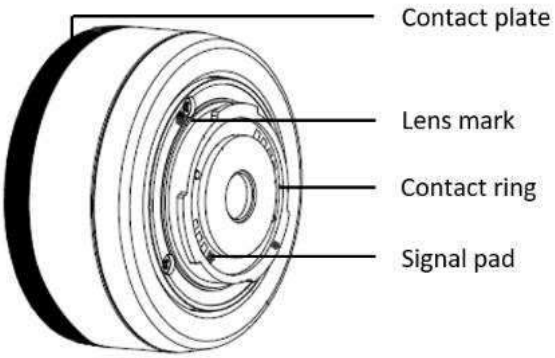
View Area	Wind End (H) 23.88*(V) 17.71 mm (typ. ±5%) Tele End (H) 11.88*(V) 8.91 mm (typ. ±5%)
Working distance	80mm (Typical)
Illumination Angle (degrees)	± 45 degree (± 5%)
Slit Length	10mm (typ. ±10%)

Slit Width Selection	<0.2, 0.2, 0.5, 2.0, ϕ10 mm
Filter	Transparent, Cobalt blue, Red-free (Green)
Light	Conform to group II of ISO 15004-2:2007
Weight	580 Grams (Typical)

MiiS Horus Scope DDC 200/ DDC 100 (Digital Dermatoscope)

DDC 200

Structure

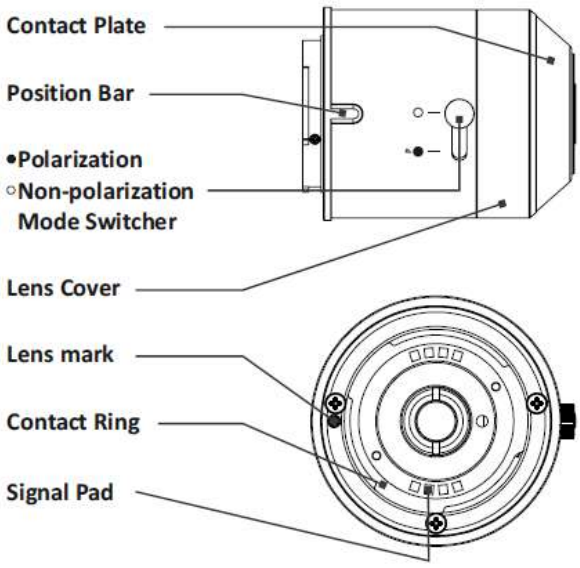


Technical Description

View Angle	20 mm diameters (Diagonal) (Typical)
Dimension	5.5 X 5.5 X 3.45 cm (Typical)
Weight	65 Grams (Typical)
Camera / video light source	Natural White Light Emitting Diode (LED)
Polarization function	Polarized light changed by the icon on screen

DDC 100

Structure

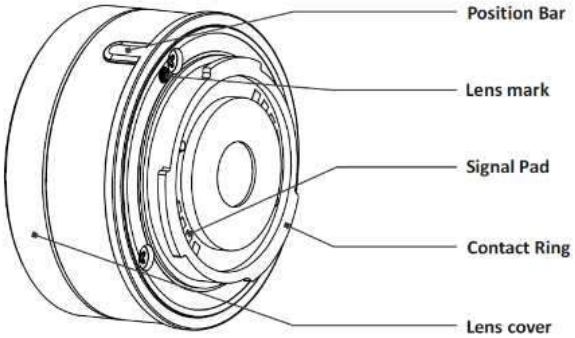


Technical Description

View Angle	10 mm diameters (Diagonal) (Typical)
Dimension	4.5 X 4.5 X 5.6 cm (Typical)
Weight	114 Grams (Typical)
Camera / video light source	Natural White Light Emitting Diode (LED)
Polarization function	Polarized light changed by the switch on lens

MiiS Horus Scope DGC 100 (Digital Speculum)

Structure

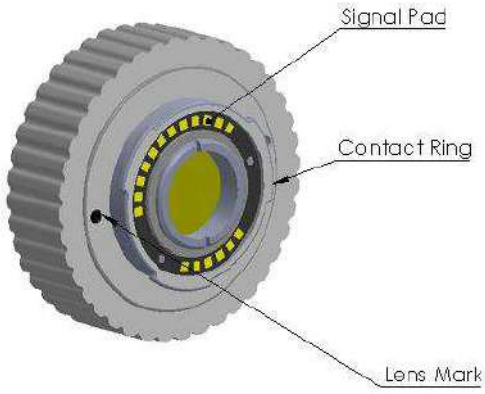


Technical Description

View Angle	88 Degree (Diagonal) (Typical)
Dimension	4.3 X 4.3 X 2.4 cm (Typical)
Weight	48 Grams (Typical)
Camera / video light source	Natural White Light Emitting Diode (LED)

MiiS Horus Scope Adapter 300 (Endoscope Adapter)

Structure



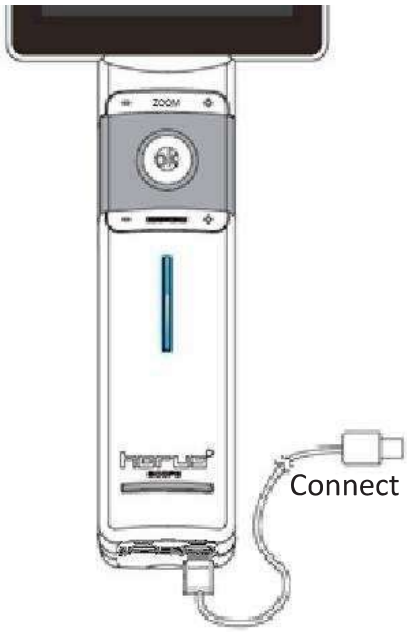
Technical Description

View Angle	88 Degree (Diagonal) (Typical)
Dimension	4.3 X 4.3 X 2.4 cm (Typical)
Weight	48 Grams (Typical)
Camera / video light source	Natural White Light Emitting Diode (LED)

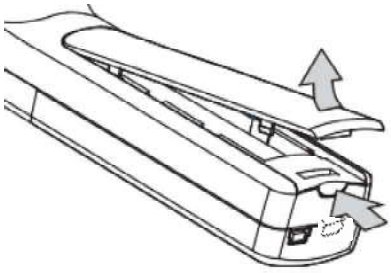
Charging the battery

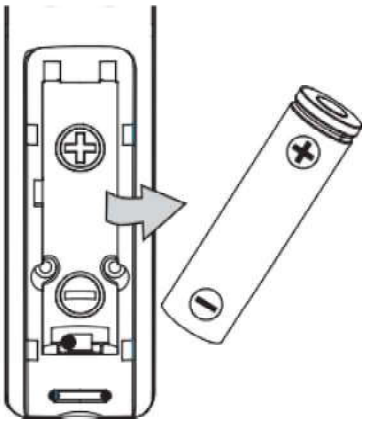
Always charge before first use

Prior to first use, insert the battery into the control unit and close the battery cover referred to the below section. Connect USB connector to the power adapter. Let the battery be charged for at least five hours.



Battery replacement

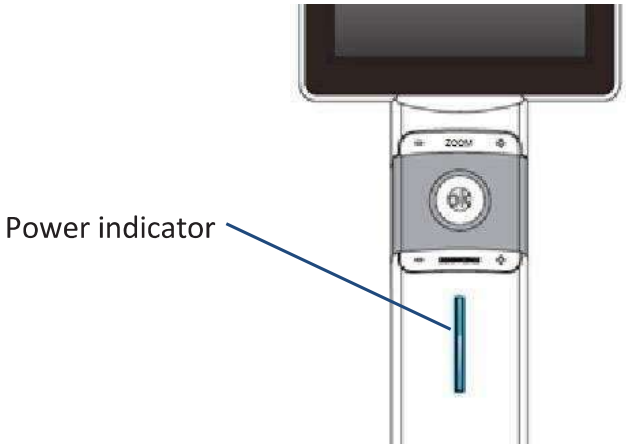




Open the battery cover by digging out the gap in the bottom of battery cover with a finger or something pointed.

- Tilt the battery cover and remove the battery cover by lifting it up.
- Remove the original battery and replace a new battery along the correct direction.
- Place the battery cover and secure it in place.

Power indicator



System Status	Power off			Power on		
Light color	No Light	Blinking blue Light	Orange Light	Blue Light	Blinking blue Light	Mixed blue and orange Light
						
Information	System off	Power less than 25%	Charging	Normal operation	Power less than 25%	Connect to PC via USB cable or enable USB live video

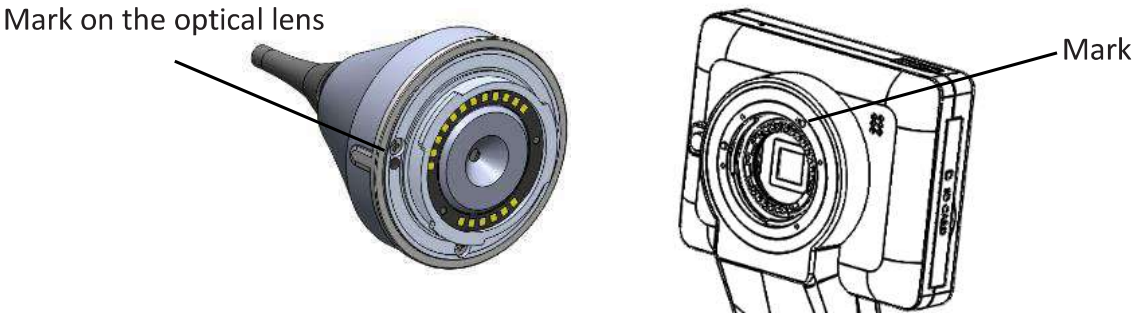
Assembling

Optical lens & control unit

(Take digital otoscope as an example.)

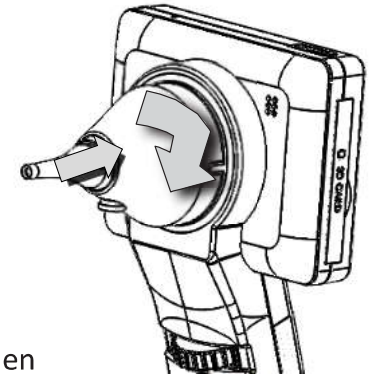
Step 1. ↘

Align the marks of the optical lens and control unit.



Step 2. →

Hold the optical lens and attach it to the control unit. Rotate and fasten the optical lens in a clockwise direction. You will hear a click when the lens locks into the control unit.

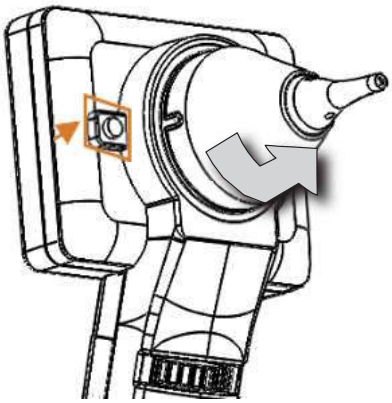


Step 3. ←

Turn on the power (→ 9). When optical lens and control unit are assembled correctly, the information icons will appear on the top of LCD touch panel. The screen will turn on, and then the blue light of the power indicator (→ 20) will also turn on.

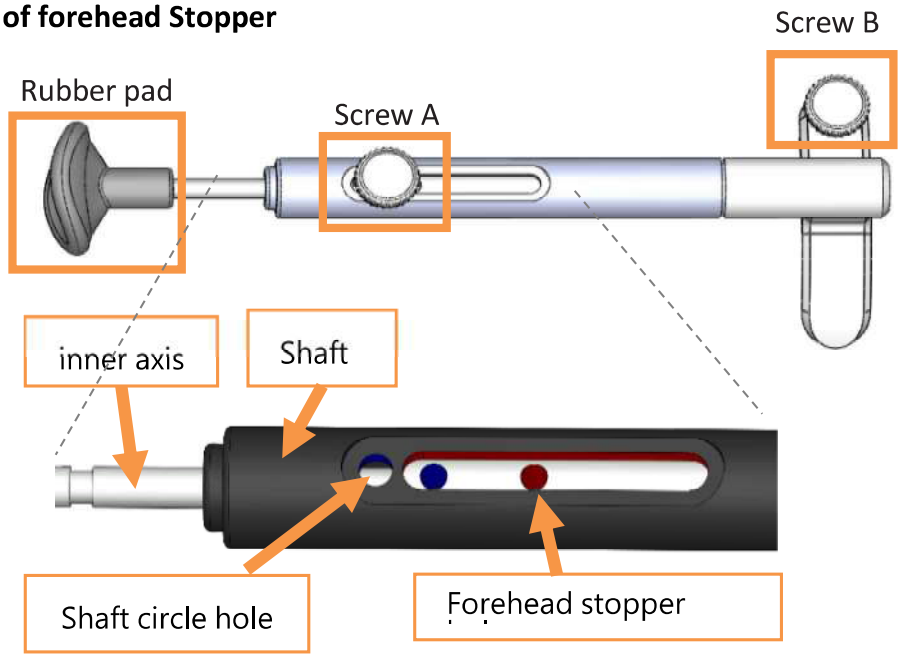
Step 4. →

To unlock the optical lens, press the lens lock and then rotate the optical lens in a counterclockwise direction. Then the optical lens will be unfastened.

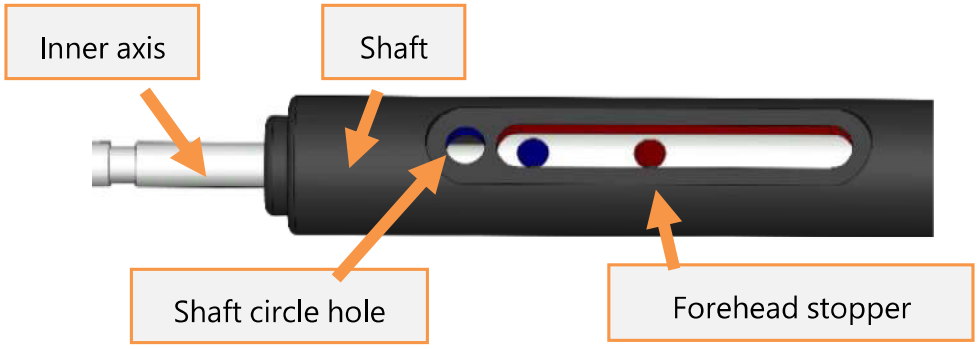


DEA200P Forehead stopper assembly

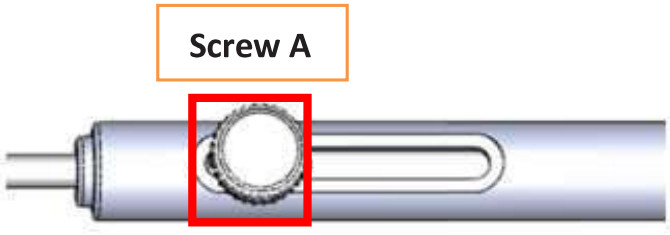
Structure of forehead Stopper



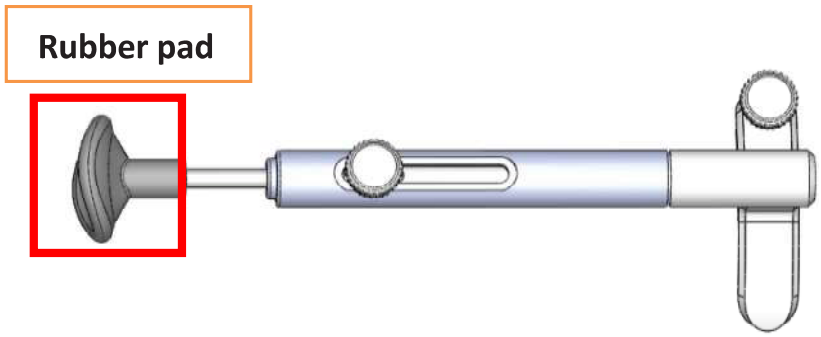
Step 1: Rolling the **inner axis** and the **shaft** to find out **forehead stopper hole**.



Step 2: Tighten **screw A** in clockwise direction to **forehead stopper hole.**

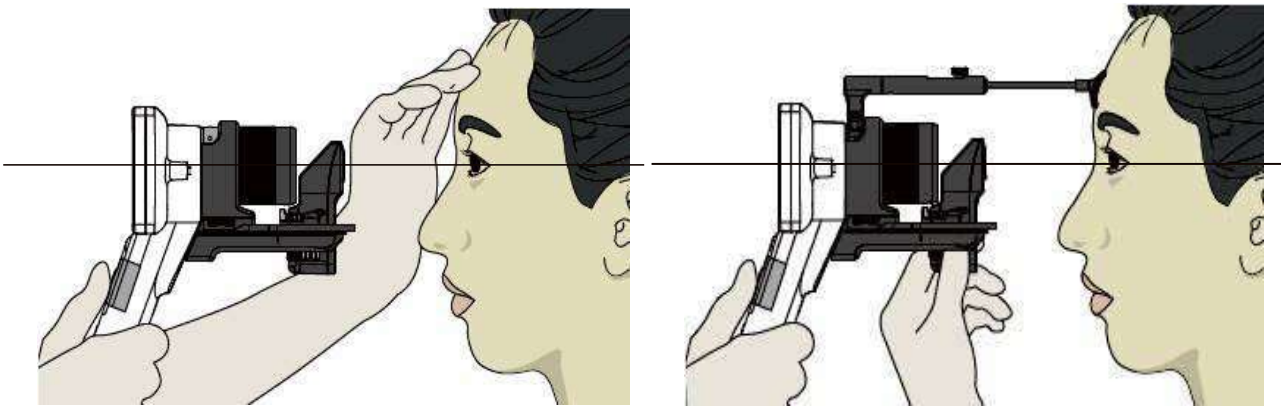


Step 3: Assemble **rubber pad** to the front end of **inner axis**.



Holding position

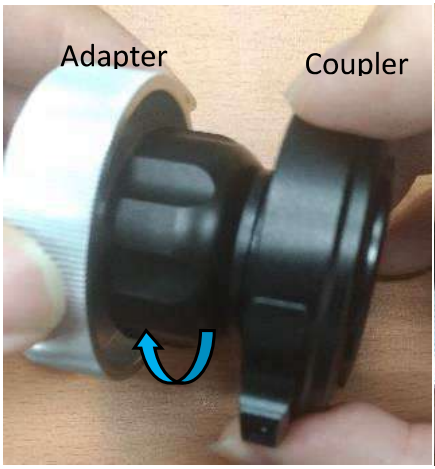
Hold the control unit with one hand and use the other hand to hold the lighting track. Maintain the lens at the same height of the eye being examined. To stabilize the lens, rest the track on the part of the hand between the thumb and index finger and put your middle and index fingers on the examinee's forehead, as showed in the left image. Besides, using the accessory of forehead holder can replace the support on the examinee's forehead, as the below right image.



View the examined eye keeping the lens horizontal to the examined eye. Then move forward slowly until you can see the full exterior of eye in the controller screen. (For sanitary reasons, make sure the controller lens does not touch the patient's eyes or nose.)

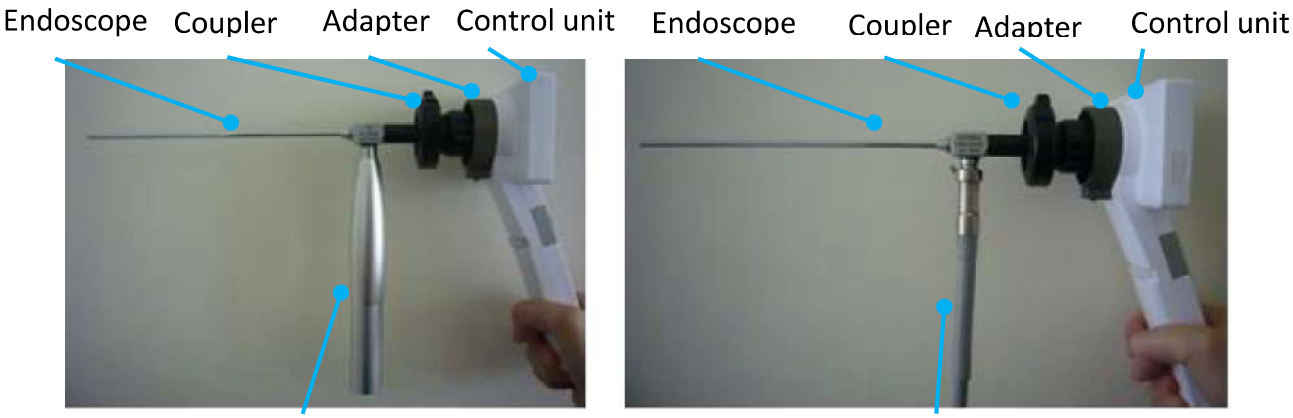
Assembly of Horus Scope Adapter

Step 1: Rotate the Coupler in clockwise direction to connect the "Horus Scope Adapter" and "Coupler" , then connect the Endoscope and Coupler.



Step 2: Follow the Assemble in P.19 to fasten the Horus Scope Adapter to the Control Unit.

Step 3: Connect light source with endoscope. Horus Scope Control unit & Adapter & Existing endoscope, coupler and light source in the market.



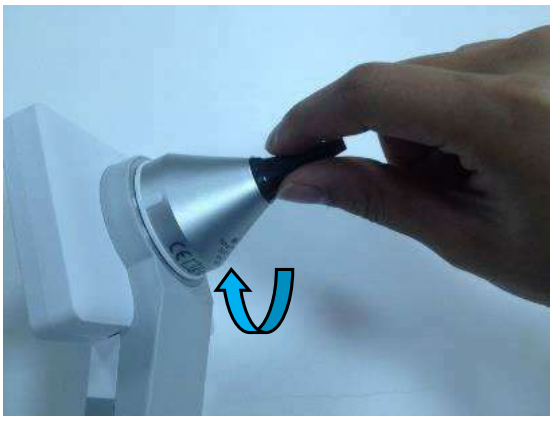
Portable Light Source

Desktop Light Source

DOC 100S/300S Specula Installation and Removal

Step 1: Put the specula on the tip of otoscope lens.

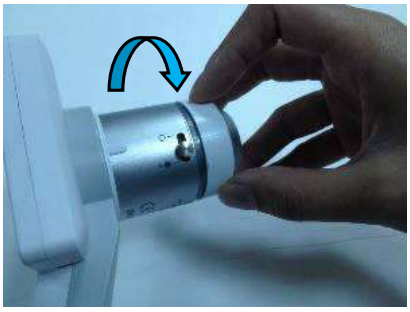
Step 2: Rotate the specula tightly to otoscope lens in clockwise direction.



Step 3: To remove the specula, rotate in counter-clockwise direction.

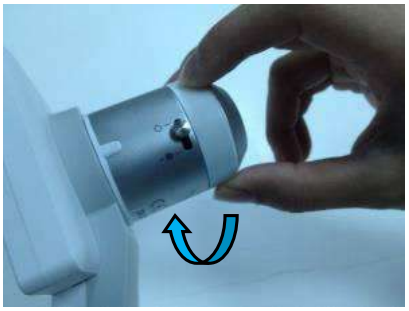
DDC 100 Contact Plate Replacement

Step 1: Hold the white portion of DDC 100 lens, and rotate to loosen the contact plate module in counter-clockwise direction.



Step 2: Separate the white plastic parts, and use new one for replacement.

Step 3: Put contact plate module in front of DDC 100 lens, rotate tightly in clockwise direction.

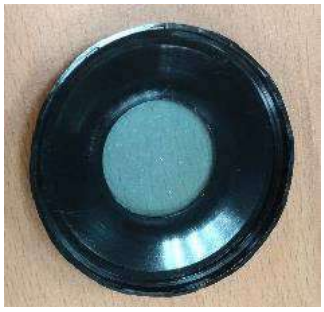


NOTE: Before replacement the contact plate, check the glass is clean. User can wipe clean with alcohol and dust-free paper whenever the glass is dirty or particle on it.

DDC 200 Contact Plate Replacement

Step 1: Hold the black portion of DDC 200 lens, and rotate to loosen the contact plate module in counter-clockwise direction.

Step 2: Separate the black plastic parts, and use new one for replacement.



Step 3: Put contact plate module in front of DDC 200 lens, rotate tightly in clockwise direction.

NOTE: Before replacement the contact plate, check the glass is clean. User can wipe clean with alcohol and dust-free paper whenever the glass is dirty or particle on it.

Using the setup mode

Turn on the power

To turn on the system, press the power button (→ 9) to turn on the control unit.
Approximately one to two seconds later, the boot screen will appear on the LCD panel.

Once the LCD panel shows the live image, it takes few seconds for the on-screen display (OSD) to be superimposed.

Note:
When below conditions occur, user needs to turn off the power and reassemble the optical lens and control unit.

1. Optical lens isn't correctly assembled to the control unit.
→ When turning on the device, the device stays at boot screen and can't enter to control interface.
2. The black screen appears on the LCD panel during operation. Please check the optical lens is
→ well-assembled to the control unit.

A. Digital Otoscope (DOC 300S/ DOC 100S), Digital speculum (DGC 100), Digital Anterior Scope (DEA 100 and DEA 100 with ILS 100), Endoscope adapter (Adapter 300)

Enter the Setup mode

Using the [Setup] menu

It is recommended that all setting items are set according to user's requirements for first time use.

Bring up the [Setup] menu

Touch the photo icon and then touch the setup icon.

Exit the [Setup] menu

Once a setting adjustment is made, the new value affects the system immediately. Use the

upper back button < or the OK button to exit the screen.

Settings

[ILS mode]

NOTE

ILS mode only can be used when the device is assembled with ILS 100.

User can touch ILS icon to change to ILS mode when the device is assembled with ILS 100.

[AWB]

NOTE

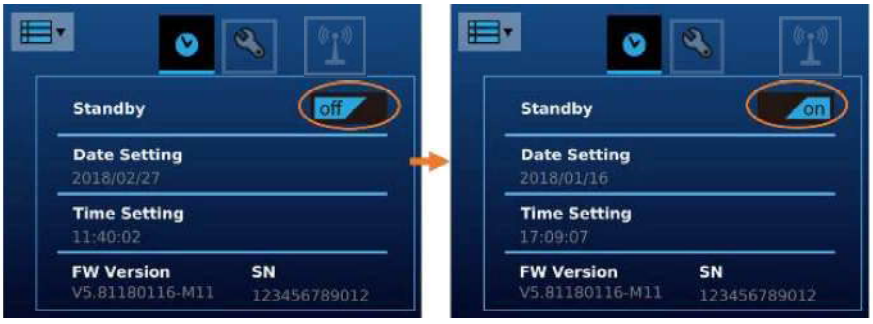
AWB only can be used when the device is assembled with Adapter 300.

Using the AWB function to remove unrealistic color casts.

Aiming the endoscope lens at a white paper, the distance between lens and white paper is 3 to 5cm, and then press “AWB” and choose “Yes”. The screen will show “calibrating” for 3 seconds, and then the auto white balance is completed.

[Standby]

User can set standby mode to be on or off. Once the mode is on, the LCD panel will be turned off if the system is idle for three minutes. Tap on the item to toggle the setting.

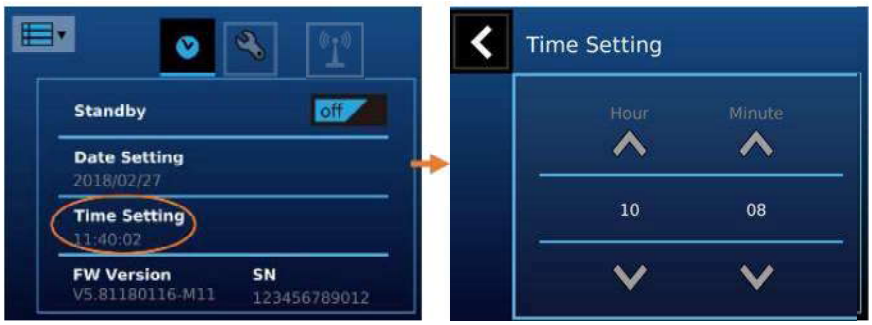


[Date Setting]

User can change the current date setting from the screen.

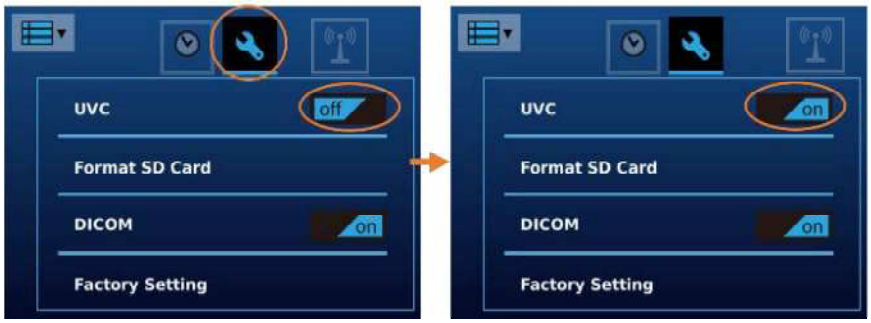
[Time Setting]

User can change the current time setting from the screen.



[UVC]

While connecting the device to a computer via USB cable, the product works as a USB storage device. If UVC mode is on, pictures can be shown both on the LCD panel of the product and the screen of the computer. To display image on the computer, please install webcam application prior to enabling UVC mode. A freeware webcam application (e.g., Horus UVC view, AMCap) is a software that can receive UVC signal on the computer. User can search for relevant information over the Internet.

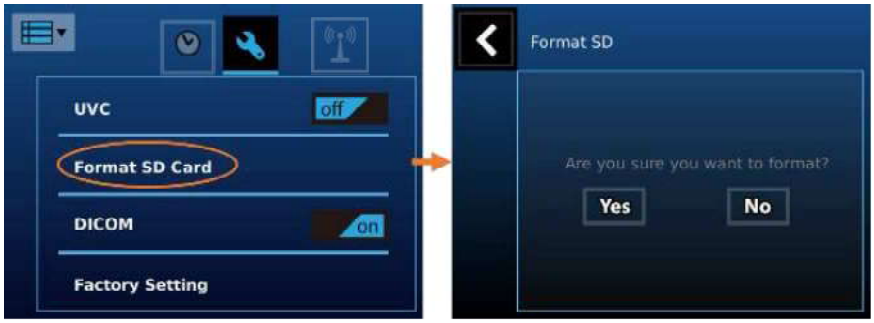


Horus UVC View

Free UVC viewer is available in any search engine.

[Format SD Card]

User can format the SD card.

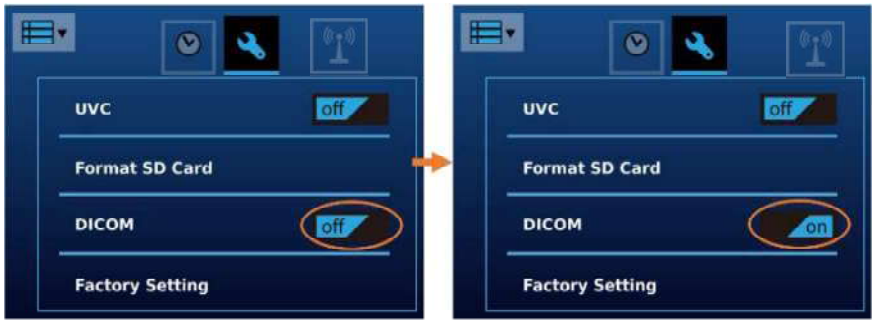


NOTE

All information will be deleted after SD card is formatted.

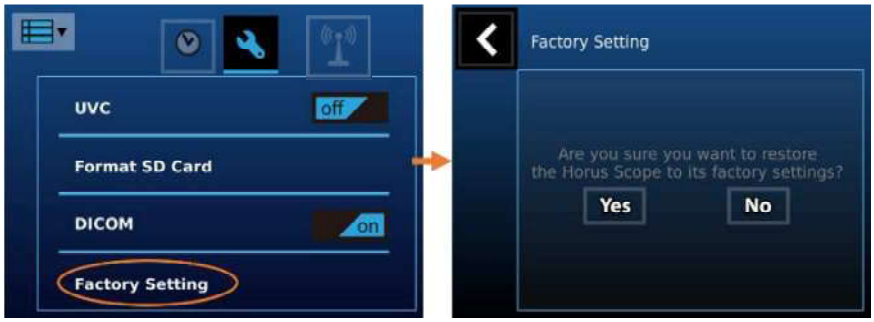
[DICOM]

Export image with or without DICOM format.



[Factory Setting]

User can recover the device to its factory settings.



Wireless connection

[Wi-Fi/Bluetooth]

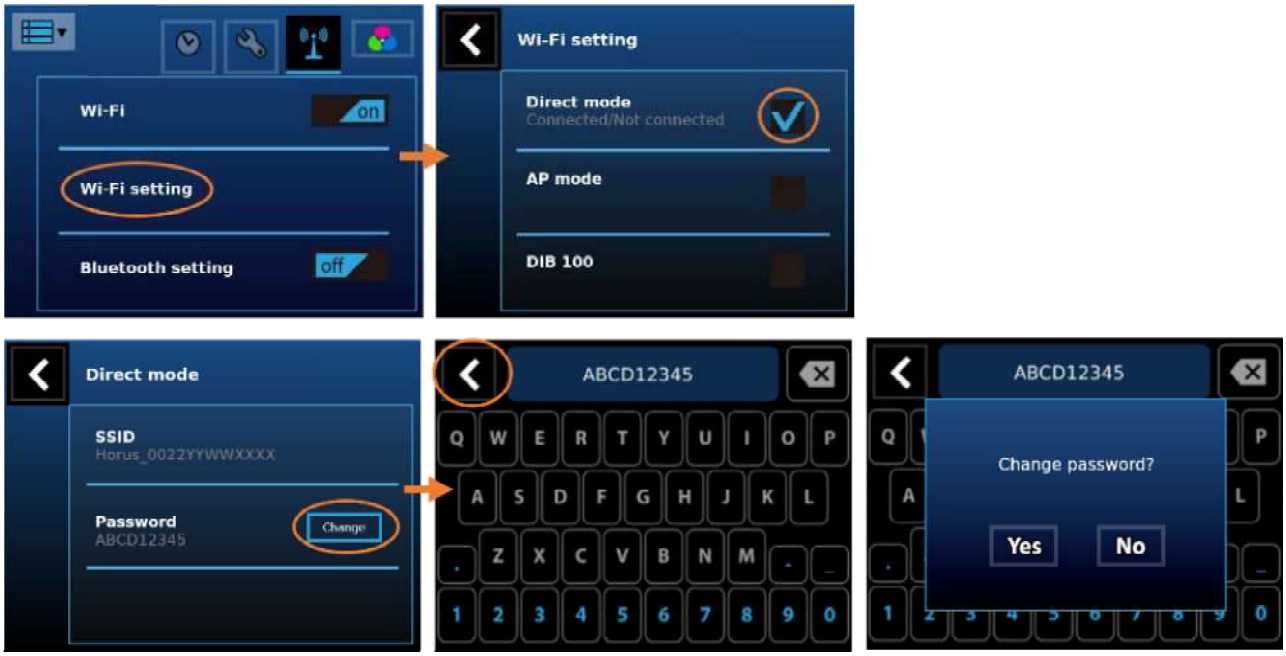
User can turn on/off the Wi-Fi/Bluetooth.

Note

Wi-Fi and Bluetooth function cannot be on at the same time.

[Wi-Fi setting – Direct Mode]

User can select “Direct mode” to connect DSC 300P with PC directly.



Note

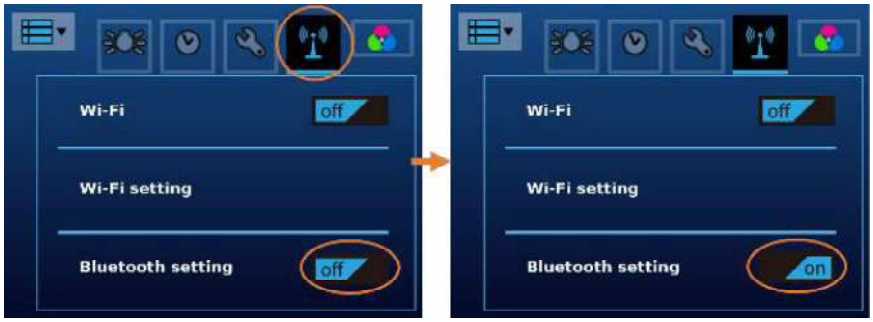
Password shall be 8+ letters & numbers.

[Wi-Fi setting – AP Mode]

User can select “AP mode” to connect to internet through an AP.

[Bluetooth setting]

User can turn on the Bluetooth function and collect the data from specific vital sign devices.



When the Bluetooth is on, the vital sign collection icon will be shown on menu. Click it to enter the collection page.

B. DEC 100/ EEC 100 (Digital Eye Fundus Camera)

Enter the Setup mode

Using the [Setup] menu

It is recommended that all setting items are set according to user's requirements for first time use.

Bring up the [Setup] menu

Touch the photo icon and then touch the setup icon.

Exit the [Setup] menu

Once a setting adjustment is made, the new value affects the system immediately. Use the upper back button ‹ or the OK button to exit the screen.

Settings

[Aiming Light/Capture Light]

The default setting of [Aiming Light/Capture Light] is [IR/White LED]. In the setting, DEC 100 employs IR illumination for alignment and focusing to assure patient comfort. With IR, the user observes fundus images monochromatically. At the moment of pressing the shutter button, the system will turn on the white LED instantly. Static images and motion pictures will be captured in full color.

If the setting is [White LED/White LED], then the user observes images in full color and capture static images and motion pictures in full color.

[IR brightness]

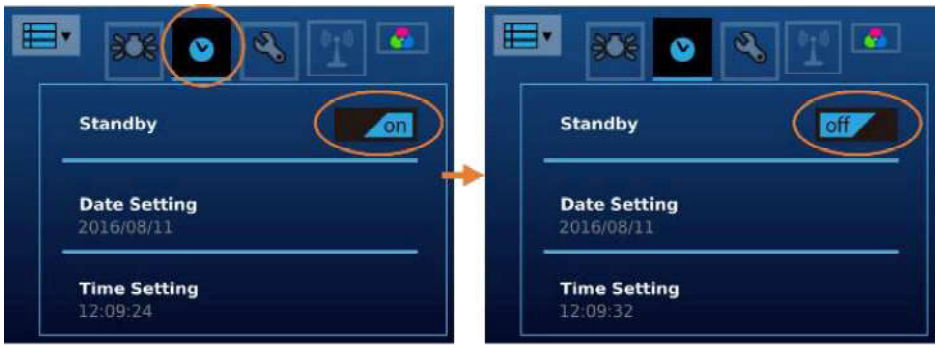
The IR brightness has 5 levels; the default setting is level 3. The range is from 1 to 5.

[WHT brightness]

The WHT brightness has 16 levels; the default setting is level 10. The range is from 0 to 15.

[Standby]

User can set standby mode to be on or off. Once the mode is on, the LCD panel will be turned off if the system is idle for three minutes. Tap on the item to toggle the setting.

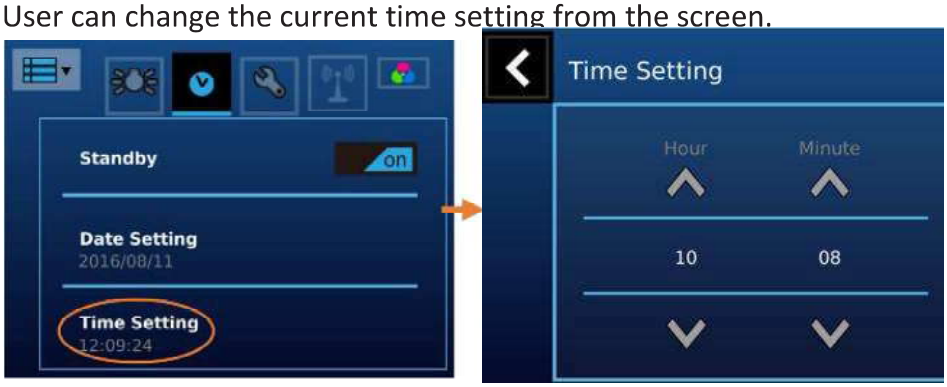


[Date Setting]

User can change the current date setting from the screen.

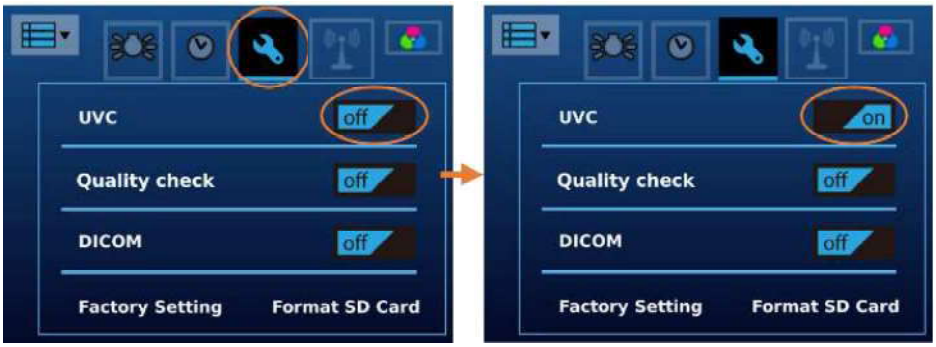
[Time Setting]

User can change the current time setting from the screen.



[UVC]

While connecting the device to a computer via USB cable, the product works as a USB storage device. If UVC mode is on, pictures can be shown both on the LCD panel of the product and the screen of the computer. To display image on the computer, please install webcam application prior to enabling UVC mode. A freeware webcam application (e.g., Horus UVC view, Amcap) is a software that can receive UVC signal on the computer. User can search for relevant information over the Internet.

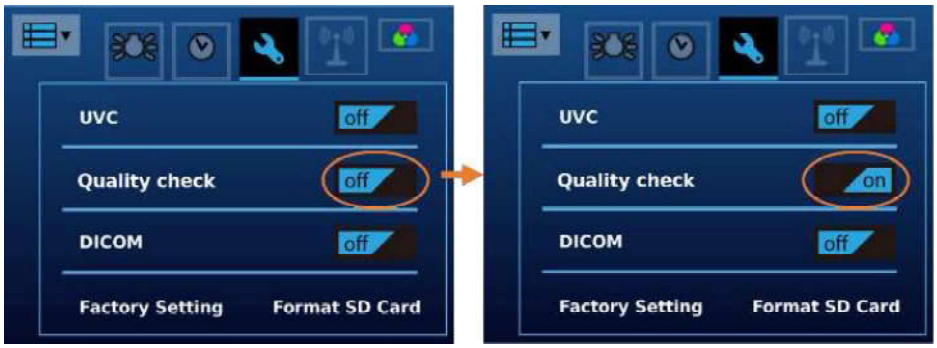


Horus UVC View

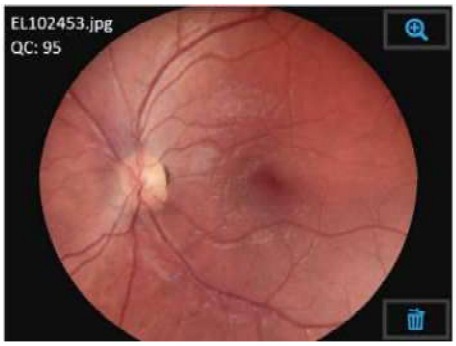
Free UVC viewer is available in any search engine.

[Quality check]

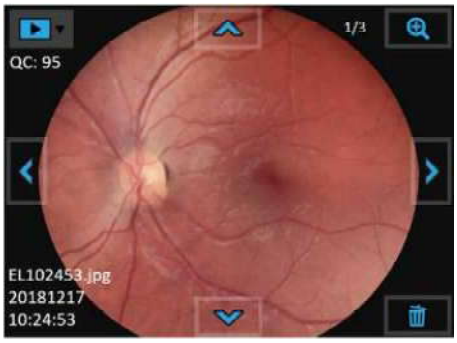
User can turn on or turn off quality check function. If quality check function is on, after taking picture (preview) and in display mode, quality score will show on the screen.



Preview

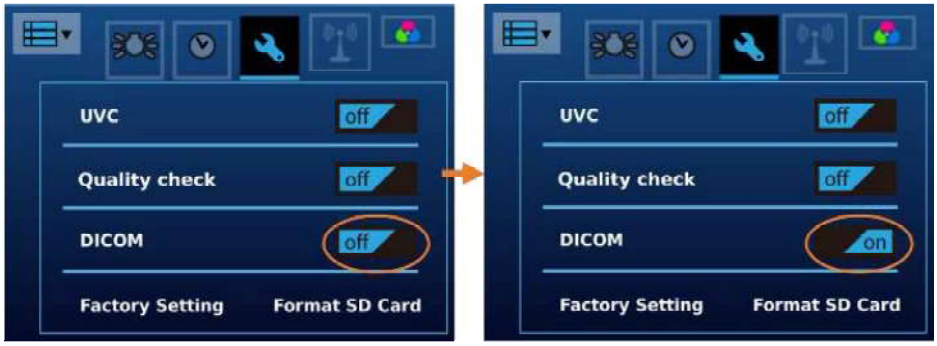


Display mode



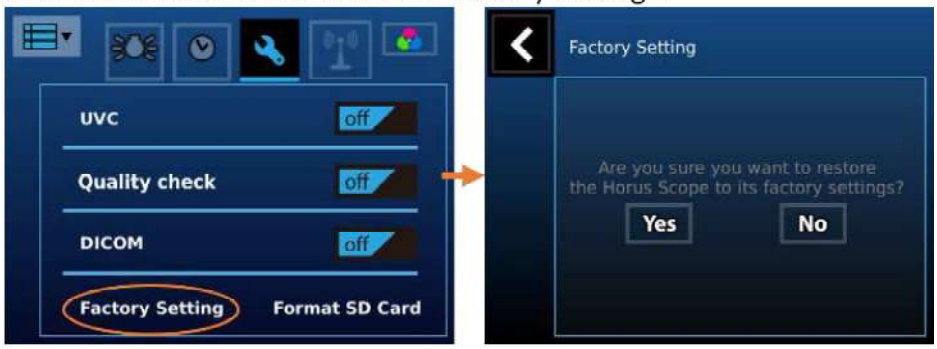
[DICOM]

Export image with or without DICOM format.



[Factory Setting]

User can recover the device to its factory settings.



[Format SD Card]

User *can format the SD card.*