

MAGNUM+

IDS-3100

4 in 1 Skin Examination
Magnifier



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Introduction

Magnum UV⁺ (IDS-3100) is a 4 in 1 Skin Examination Magnifier with UV & Polarized light illumination. The main functions of IDS-3100 are largely defined as follows.

1. UV Light Skin Examination
2. Polarization Light Skin Examination

These two main functions are again divided into four functions.

1. 365nm UV Light
2. 395nm UV Light
3. Polarized Light
4. Non-Polarized Light

Primarily, IDS-3100 is a new concept of UV skin screening magnifier that perfectly compensates for the inconvenience of conventional UV Wood's lamps. Moreover, IDS-3100 has completely resolved the weakness of the existing UV LED Magnifiers and shows perfectly reflected light fluorescence. The IDS-3100 is simple to use, but its performance is stronger than any existing wood's lamps.

Secondarily, IDS-3100 is equipped with polarized & non-polarized light modes, allowing simple examinations of pigmented skin lesions prior to precise analysis using a dermatoscope.

In conclusion, IDS-3100 is an all-round skin examination magnifier for

- ✓ Simple skin magnifying examination with high power LED light
- ✓ Skin analysis with high power UV LED for auto fluorescence diagnostics (wood's lamp examination)
- ✓ Analysis of skin lesions with polarized light illumination

IDS-3100 is designed for external examination only.

Important information & Safety precautions



Before using IDS-3100 for the first time, read the manual completely. The manufacturer and distributors are not liable for mechanical troubles, property damage, or personal injury caused by the user(s) unfamiliarity with the manual's instructions.



Do not look directly at LED light



Patients must close their eyes during facial examinations.



IDS-3100 has a Lithium-ion battery embedded. Handle it carefully to prevent damage from an external shock. Also do not use and store IDS-3100 in abnormally hot or cold climates.



Do not look at the sun through the objective lens as it will cause blindness



Avoid direct sun ray passing through the lens. The lens can potentially focus sunlight to a density and leads to combustion



This product emits UV light-radiation which is potentially hazardous. Avoid looking directly at light

Environmental Safety Considerations



Wet and moisture environments:
(Do not operate the device with wet hands)



Harsh shock and vibration environments



High temperature variations:
(Operating temperature / humidity:
5°C ~ 35°C / 10% ~ 90%)



Dry and dusty environments:
(Dust particles can enter into the device. Clean the device frequently.)



Near heating devices:
(Do not place the device near a heating device)



Do not open or dismantle
The manufacturer will not be responsible for any errors or damage whatsoever caused by opening or dismantling the device.

Symbols Key



Do not look directly at LED light



Power on/off button



Charging Status



Brightness Control Button



Cross & parallel polarized light mode on/change button



Optical Radiation Warning



365nm & 395nm UV light mode on/change button



Caution

Specifications: Magnum UV+ (IDS-3100)

Polarization Mode	<ol style="list-style-type: none"> 1. Cross polarization light 2. Parallel polarization light
UV Mode	<ol style="list-style-type: none"> 3. 365nm (4 LEDs) 4. 395nm (2 LEDs)
Brightness Control	3 Levels
Optics Composition	Ø100 2.5x
Lens	Aspherical Lens (guarantees min. distortion, lightweight, high precision)
Distortion	3%
Field of view	100mm (large field of view)
Working distance Bet. Eye ↔ Lens	90 ~ 150mm (wide range of effective distance)
EFL (Effective Focal length) Bet. Lens ↔ Skin	65 ~ 140mm (wide range of effective distance)
Resolution	23 LP
Color Correction	Anti-reflection coating (Wide BBAR) (specially designed coating for enhanced lens protection and UV transmittance)
Intensity of Illumination	High SMD Type 3500 ~ 4000 Lux
LED	64 White LED 6 UV LED
LED Life	100,000 Hours
Battery	Rechargeable Lithium-ion 3400mAh/3.7V (Protection Circuit Module embedded)
Continuous duty time	White LED 2.5 ~ 4 Hours UV LED 2.5 ~ 3 Hours (Automatic shut down after 5 min. idle run)
Charging time	3.5 Hours
Charging Method	USB charging outlet or Charging cradle
Net Dimensions / Weight	140.99 * 288.49 * 34.49(mm) / 335 g

Parts Description



1. Objective Lens
2. Polarization & UV Mode indicator / Charging status indicator
3. Power button
4. UV mode button
5. Polarized mode button
6. Brightness Control button
7. Charging port
8. Battery Cover
9. LED part
10. Charging cradle (optional part)

Directions for Use

- ① Hold the IDS-3100.
- ② Push the power button (🔌) to power on the LEDs
- ③ Place the magnifying glass above the skin part to be examined.
- ④ Light mode setting
 - A. Default setting
 - Power on: Polarized light mode goes on with max. brightness
 - P to UV change: 365nm UV mode goes on with max. brightness
 - UV to P change: Polarized light mode goes on with max. brightness
 - Standard order of Brightness: Max (initial) >> Low >> Middle >> Max
 - B. Polarized / Non-polarized Light Examination ("P"): Indication light >> White
 - Push the "P" button with intention of polarized(PL) or non-polarized light (NPL) examination.
 - In order to change the polarization mode (PL ↔ NPL), push the "P" button one more time.
 - C. 365nm / 395nm UV Light Examination ("UV"): Indication light >> Blue
 - Push the "UV" button with intention of UV light examination.
 - In order to change the UV mode (365nm UV ↔ 395nm UV), push the "UV" button one more time.
- ⑤ Adjust your eyes to the objective lens.
IDS-3100 is designed for using both eyes for observation. It means, you don't need to close one eye to take a closer look at the lesion.
- ⑥ To brighten up or down the LED lamps, push the "D" button. Brightness is dimmable in 3 levels.
- ⑦ Examine the skin lesion.
- ⑧ When the examination has been finished, push the power button to power off the LEDs.
- ⑨ Store the IDS-3100 in a safe place.

- ⚠ **Do not look directly at LED light. Patients must close their eyes during facial examinations!**
- ⚠ **Do not look at the sun through the lens as it will cause blindness**
- ⚠ **Avoid direct sun ray passing through the lens. The lens can potentially focus sunlight to a density and leads to combustion.**






Battery and Charging

Note!

IDS-3100 uses a lithium ion battery designed solely for the device. It is to be purchased from ILLUCO or from an authorized ILLUCO dealer. Using a battery other than the one designed for the IDS-3100, can cause damage to the unit.

A. Charging Indicator

There are three indicators that showing the charging status of IDS-3100.

- | | |
|---|---|
|  Red blinking: | Low battery: The battery is almost empty and charging requested. |
|  Green: | Device is connected for charging (USB cable or Charging Cradle) |
|  Red: | The device is in charging status.
(in normal condition, green & red both should be on) |
|  Red & Green | The device is connected for charging and is in charging status. |
|  Green: | Charging completed. |

B. Charging via USB charging outlet

Prepare the USB charging outlet supplied with IDS-3100.

Insert the USB charging outlet into the charging port of the device and the USB plug into an **USB-charging-outlet**.

Note!

Using a USB-port of a PC is not recommended as it will take over 10 hours until the unit is fully charged.

C. Charging via Charging cradle

Connect the charging cradle to an outlet. Then, insert IDS-3100 to the charging cradle.

The charging time is ca. 3.5 hours.

When the unit is fully charged, the continuous duty time is ca. 2.5 ~ 4 hours.

Note!

IDS-3100 is programed not to work when the device is in charging status.

D. Battery replacement

- ① Prepare a new battery.
- ② Pull down the battery cover and open the unit.
- ③ Remove the existing battery and replace with new one.
- ④ To close the unit, push up the battery cover.

Automatic shut down

In order to save on electrical consumption, IDS-3100 is designed to shut down the power automatically after 5 min. idle run.

Maintenance

Note!

The objective lens, LEDs and polarization filters of IDS-3100 must be treated as high quality optical parts. Use only standard lens cleaning equipment for cleaning and protect them from harmful chemicals.

Cleaning and sterilization

The exterior of the IDS-3100 may be cleaned or sterilized with isopropyl alcohol (70% vol.). Do not use any kind of disinfectants, acetone or chemicals other than isopropyl alcohol.

Note!

- ☞ *Always apply the fluid to a cloth or tissue rather than the lens itself.*
- ☞ *Good approach is to start with breath and then use the fluids for difficult marks to remove.*
- ☞ *Alcohol and Acetone are different. Don't be confused and never use acetone for device cleaning incl. objective lens.*

Troubleshooting Guide

Note!

IDS-3100 is reliable and designed for trouble-free operation. Never attempt to open or dismantle the device for any reason other than battery replacement. The manufacturer and distributors are not liable for mechanical troubles, property damage, or personal injury caused by the user(s) unfamiliarity with the manual's instructions.

① **No Power Supply**

Recharge the battery and power on again.

If the problem persists, replace the battery with a new one.

When the both tries ended up with failure, contact the ILLUCO A/S Center or your local distributor and report the problem.

② **LED fails**

The LEDs embedded on the IDS-3100 are designed to last 100,000 hours. If any of the LEDs fails, contact the ILLUCO A/S center or your local distributor.

③ **Mechanical malfunction**

Please contact the ILLUCO A/S center or your local distributor.

EC DECLARATION OF CONFORMITY

Certificate Number: IEC-16071100

We, the
ILLUCO Corporation Ltd.
Declare under our sole responsibility that the Product

Description: Medical Microscope
Product Name: IDS-Series Class I Non-sterile Non-measurement
Manufacturer: ILLUCO Corporation Ltd.
Address: 104-505 SK Ventium, #166 Gosan-ro
Gunpo-si, Gyeonggi-do 15850 Rep. of Korea

fulfills the essential requirements of the Medical Device Directive (93/42/EEC, amended by 2007/47/EC) and is registered in Class I according to Appendix IX. Conformity is assured according to the guidelines set out in Appendix VII.

The Product is produced in accordance with harmonized standards and Conformity is assured according to the guidelines set out in Appendix VII.

The product carries the CE Mark:



European (EEA/EU/EC) Authorized Representative



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93055 Regensburg, Germany

Signature



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Date & Place of Issue: 15 November 2017, Seoul

Signature: **ILLUCO CO., LTD**

 PRESIDENT / JINHYEOK, HONG

IDS-SERIES LIMITED WARRANTY

ILLUCO Corporation Ltd. Hereby warrants that new IDS-Series purchased directly from ILLUCO Corporation Ltd., headquartered in Gunpo, South Korea, will be free from factory defects in material and workmanship for the period of time stated below, subject to certain limitations.

OUR WARRANTY POLICY

This warranty is not transferable and covers replacement parts only. This warranty does not cover any consequential damages or business loss.

THE PERIOD OF WARRANTY

The warranty on your IDS-Series is seven (7) years from the date of purchase by the original owner against defects in material and workmanship.

GENERAL EXCLUSIONS

General exclusions from this warranty shall include any failures caused by:

- a. Installation of parts, attachments or accessories that are not original to the unit or genuine IDS-Series parts. (i.e. aftermarket attachments such as battery, LEDs etc.)
- b. Abnormal strain, neglect, or abuse.
- c. Lack of proper maintenance.
- d. Accident or collision damage.
- e. Changing or altering factory settings without consulting with an authorized technician.
- f. Damage or malfunctions resulting from natural calamity, freezing, theft, accident, vandalism, abuse due to misapplication and/or improper site conditions.

SPECIFIC EXCLUSIONS

Items not covered under warranty include:

- a. Parts replaced due to normal wear or routine maintenance including, but not limited to battery, LEDs, protect glass, etc.
- b. Consumable or wearing items requiring replacement as part of normal operation including, but not limited to battery and protect glass.
- c. Any transportation or travel costs.
- d. Reimbursement for rental units while repairing warranty items.

CUSTOMER'S RESPONSIBILITY

Under this warranty, the customer's responsibility shall be to:

- a. Operate and maintain the device as specified in the instructions manual.
- b. Give notice to authorized IDS-Series dealer or ILLUCO Corporation Ltd. of apparent defects within seven (7) days after discovery.
- c. Provide proof of purchase, purchase date, and serial number of the warranty item(s).
- d. Make the unit available for inspection and repairs at dealer's place or service center. If shipped, transit costs should be prepaid.

For warranty service request, please e-mail info@illuco.co.kr or call +82 70 4922 7441.

ILLUCO Corporation Ltd. recommends that you read the User Manual, and in particular the troubleshooting section.

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