

ILLUCO



Dermatoscope  
**IDS-1100**

INSTRUCTION  
MANUAL



Quality made by ILLUCO  
[WWW.ILLUCO.CO.KR](http://WWW.ILLUCO.CO.KR)

## Table of Contents

Introduction .....	03
Intended Applications .....	03
Safety Precautions .....	04
Environmental Safety Considerations .....	05
Symbols Key .....	05
Technical Specifications .....	06
Parts Description .....	07
Directions for Use .....	08
Smartphone Adapter .....	08
Non-Contact Examination (Removing the Protect Glass) .....	09
Battery and Charging .....	09
Sleep Mode .....	10
Maintenance .....	10
Troubleshooting Guide .....	11
IDS-SERIES LIMITED WARRANTY .....	12
EC DECLARATION OF CONFORMITY .....	13
Appendix .....	14



## Introduction

The ILLUCO Dermatoscope IDS-1100 is a hand-held LED dermatoscope with polarized light illumination. The IDS-1100 is designed exclusively for external examination of skin.

The outstanding feature of IDS-1100 like

- 10x-magnification
- 25mm large field of view
- 10mm scale for measurement
- Cross-polarized light illumination
- 3 levels of brightness control
- Comfortable ergonomic hand grip with functional buttons and easy focusing dial
- Magnetic smartphone connection kit for digital dermoscopy

Will help the users for more effective and comfortable work in skin examination.



### For U.S. only

Federal Law restricts this device to sale by (or on) the order of a physician or practitioner.

## Intended Applications

The IDS-1100 has numerous applications:

- ① Early detection of melanoma
- ② Diagnosis of skin tumors
- ③ scabies and pubic louse
- ④ warts
- ⑤ fungal infections
- ⑥ hair and scalp diseases

## Safety Precautions

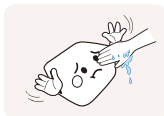


Before using the IDS-1100 for the first time, read the manual completely. The manufacturer and distributors are not liable for mechanical troubles, property damage, or personal injury caused by the user(s) unfamiliarity with the manual's instructions.

The IDS-1100 is designed for external examination only.

- ⚠ Do not look directly at LED light.
- ⚠ Patients must close their eyes during facial examinations.
- ⚠ Handle softly and do not put too much pressure when adjusting focus dial.
- ⚠ The IDS-1100 is a magnetic embedded device. Do not use the IDS-1100 near magnetic susceptible devices.
- ⚠ The IDS-1100 has a Lithium-ion Battery embedded. Handle the IDS-1100 carefully to prevent damage from an external shock. Also do not use and store the IDS-1100 in abnormally hot or cold climates.
- ⚠ When quick heating the room, the IDS-1100 can be vaped on the lens inside. Do not use the IDS-1100 before the vapor is naturally eliminated.
- ⚠ The device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  1. Reorient or relocate the device
  2. Increase the separation between devices

## Environmental Safety Considerations



Wet and moisture environments:  
(Do not operate the IDS-1100 with wet hands)



Harsh shock and vibration environments



High temperature variations:  
(Operating temperature / humidity:  
10°C ~ 35°C / 30% ~ 75%)



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



Near heating devices:  
(Do not place the IDS-1100 near  
a heating device)



Do not open or dismantle the IDS-1100.  
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



Focus adjustment dial forwards



Non & cross polarization mode button



Focus adjustment dial backwards



Brightness control button



Caution

## Technical Specifications

### Dermatoscope IDS-1100

Polarization	Cross& Parallel
Aperture	25mm
Coating	BBAR (Broad Band Anti Reflection) Coating
Magnification	10 x
Brightness Control	3 Levels
Adapter for Smartphone	Available
LED	32 EA
Function buttons	Polarization/Non-polarization Brightness Control On/Off
Contact & Non-Contact Examination	Yes (a detachable protect glass)
Battery	Rechargeable lithium ion 1150mAh/3.7v
Charging time	3 Hours
Continuous duty time	2 Hours (Automatic shut down after 5 min. idle run)
Charging terminal	USB Micro 5 pin
Net Dimensions / Weight	138×65×33(mm) / 190g
Package Dimensions / Weight	190×190×85(mm) / 520g

## Parts Description



01. PG : Protect Glass (detachable)  
 02. Scale : Measuring scale in mm  
 03. PMB : Polarization Mode Button  
 04. PMI : Polarization Mode Indicator  
 05. PB : Power On/Off Button  
 06. BCB : Brightness Control Button  
 07. FD : Focus Dial  
 08. BW : FD back wards  
 09. FW : FD forwards

10. ML : Magnifying lens (10x)  
 11. MR : Magnetic Ring  
 12. CSI : Charging Status Indicator  
 13. CP : Charging Port  
 14. BC : Battery Cover  
 15. CC : USB Charging Cable  
 16. Smartphone Connection Kit  
 17. Battery

## Directions for Use

- ① Hold the IDS-1100 with magnifying lens (ML) side up
- ② Push the power button (PB) to power on the LEDs
- ③ Place the protect glass (PG) on the lesion to be examined.

You can also open the protect glass (PG) for non-contact examination and avoid contacting the affected part.

- ④ Adjust your eye close to the magnifying lens (ML).
- ⑤ Turn the focus dial (FD) forwards or backwards to obtain the desired image focus.
- ⑥ In order to change the polarization mode, push the polarization mode button (PMB).  
(PMI : In polarization mode, the polarization mode indicator light goes on)
- ⑦ To brighten up or down the LED lamps, push the brightness control button (BCB).
- ⑧ Examine the skin lesion.
- ⑨ When necessary, measure the size of the lesion using the scale on the lens.
- ⑩ When the examination has been finished, push the power button to power off the LEDs.
- ⑪ Clean the Magnifying lens (ML) and the protect glass (PG). The exterior of the IDS-1100 may be cleaned or sterilized with isopropyl alcohol (70% vol.) and/or with a lens cleaning cloth.
- ⑫ Store the IDS-1100 in a safe place.



This device may only be used together with accessories supplied by ILLUCO Co., Ltd.

If the customer makes use of other accessories, use them only if their safe usability under technical aspect has been proved and confirmed by ILLUCO Co., Ltd.

## Smartphone Adapter

- ① Fit the suitable smartphone adapter on your smartphone and put your IDS-1100 on it..
- ② Open a camera application on your smartphone
- ③ Follow the instruction ⑤ ⑥ ⑦ (direction for use) and then check the lesion direct from your smartphone.
- ④ You can enlarge the lesion for most detailed view and capture its images.

## Non-Contact Examination (Removing the Protect Glass)

You can remove the Protect Glass for non-contact examination.

The magnetically coupled Protect Glass(PG) is easily to take off with your finger nail.

- ⚠ • Do not look directly at LED light, Patients must close their eyes during facial examinations.
- ⚠ • Before and after examination, clean the protect glass with the lens cloth.

## Battery and Charging

### Note

IDS-1100 uses a lithium ion battery designed solely for ILLUCO IDS-1100. It is to be purchased from ILLUCO or from an authorized ILLUCO dealer. Using a battery other than the one designed for the IDS-1100, can cause damage to the unit.

### A Charging Indicator

There are three indicators that showing the IDS-1100's charging status.

Orange : The battery is almost empty and charging is required.

Red : The unit is now in charging status.

Blackout (No signal) : Charging completed.

### B Charging Method

- Prepare the USB charging cable supplied with the IDS-1100.
- Insert the micro 5 pin USB plug into the charging port of the IDS-1100 and the USB plug into any USB port on such as a smartphone charger or a PC.
- The charging time is ca. 3 hours. When the unit is fully charged, the continuous duty time is ca. 2 hours.
- Do not use the IDS-1100 during battery charging.

### Note

After ca. 6 months of proper use, the battery capacity will be decreased to the point where it may be more convenient to replace the battery.

## Sleep Mode

In order to save on electrical consumption, the IDS-1100 is designed to shut down the power automatically after 5 min. idle run.

## Maintenance

### Note

The lenses and polarization filters installed on the IDS-1100 must be treated as high quality optical parts. Use only standard lens cleaning equipment for cleaning and protect them from harmful chemicals.

### ① Exterior Cleaning

The exterior of the IDS-1100 may be cleaned or sterilized with isopropyl alcohol (70% vol.).

Do not use any kind of disinfectants, acetone or chemicals other than isopropyl alcohol.

### ② Lens Cleaning

Cleaning your IDS-1100 lenses should be a regular (although not too regular) part of any IDS-1100 owner's maintenance. The lenses on the IDS-1100 are hard multicoated. Wipe the lenses with using alcohol or water. Use the lens cleaning cloth exclusively made for the IDS-1100 or other normal lens cleaning clothes.

#### Lens Cleaning Fluid:

You may find alcohol based lens cleaning fluid which is well worth having. It will help you to lift off fingerprints and other smudges without leaving streaks on your lens.

Keep in mind that you don't need too much of this fluid at a time-usually just a drop or two wiped in a gentle circular motion with a cleaning tissue will remove most marks on a lens or filter.

Always apply the fluid to a cloth or tissue rather than the lens itself. Otherwise it can easily leave mark on.

Good approach is to start with breath and then use the fluids for difficult marks to remove.

### ③ Protect Glass Cleaning (Disinfection)

The scale on the protect glass is chrome plated. So you can clean it with alcohol with no concern about being wiped off.

Dermatoscope is classified as non-critical instrument. Therefore, low level disinfection methods are requested. Use 70% Ethanol or Isopropanol for disinfection. Principally non-contact examination is requested when scoping damaged or infected skin. Even so, regular exhaustive disinfection is necessary and E.O.(Ethylene oxide) Gas sterilization method is recommended for deep disinfection.



#### ④ Inside Cleaning

##### Note

When cleaning internal part, never touch the LED & Polarization filter.

Clean the magnifying lens in the middle if only it has been contaminated. Use a lens cleaning cloth or a blower to remove the contaminants.

Polarization filters are coated to protect itself against foreign particles and dusts as the filter itself easily attracts them like a magnetic field. If you clean polarization filter with alcohol or any other fluids, or wipe it even only with cleaning cloth or tissue, it will peel off the coat. So do not wipe it. If necessary, blow off the foreign particles and dusts with blower or air spray.

#### ⑤ Storage

During work, always close the protect glass and keep the device with protect glass side up.

When storing, put IDS-1100 in the pouch and store it in a safe place.

If you store IDS-1100 for a long time and the climate should be very humid, use silica gel for sure. In that case, do not use leather pouch as leather generally absorbs moisture in the air and causes mold. Do not store IDS-1100 in a room with a temperature higher than 45°C.

## Troubleshooting Guide

##### Note

The IDS-1100 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 instructions of the manual.

#### 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 Charging not working

Change the charging cable.

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.

#### ③ Single LED does not light up

The LEDs embedded on IDS-1100 are designed to last over 100,000 hours. If any of the LEDs fails, there can be cracks on soldering.

In that case, contact the ILLUCO A/S Center or your local distributor and report the problem.

#### ④ Mechanical malfunction

If there are issues with functional buttons and/or focusing wheel, please contact the ILLUCO A/S center or your local distributor. IDS-1100 is designed to prevent disassembling by an unskilled person. If you attempt to disassemble it, there is a high probability of breakage on connections and joints.

## 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](mailto: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.

## 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 : 102-304 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



DermoScan GmbH  
Ohmstr. 1  
93055 Regensburg, Germany

Signature

  
**DermoScan GmbH**  
 Ohmstraße  
 DE-93055 Regensburg  
 T: +49 941 599 525-0  
 F: +49 941 599 525-99

Date & Place of Issue: 15 November 2017, Seoul

Signature: **ILLUCO CO., LTD**

*ip Hong*  
 PRESIDENT / ILPYO, HONG

## Appendix

### Guidance and manufacturer's declaration-electromagnetic emissions


This device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that the device is used in such an environment.

Emission test	Compliance	Electromagnetic environment-guidance
Electromagnetic environment-guidance	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Not applicable	Not applicable
Voltage Fluctuations/Flicker Emissions IEC 61000-3-3	Not applicable	Not applicable

Dermatoscope  
IDS-1100

## Guidance and manufacturer's declaration-electromagnetic immunity

This device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that the device is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - Guideline
Electrostatic discharge (ESD) Acc. To IEC 61000-4-2	±6kV contact discharge ±8kV air discharge	±6kV contact discharge ±8kV air discharge	Floors should be wood, concrete or covered with ceramic tiles. If floors are covered with synthetic material, the relative humidity should be at least 30%
Electrical fast transient/burst IEC 61000-4-4	not applicable	not applicable	not applicable
Surge IEC 61000-4-5	not applicable	not applicable	not applicable
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	not applicable	not applicable	not applicable
Power frequency (50/60 Hz) Magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	not applicable	not applicable	not applicable
Radiated HF IEC 61000-4-3	3 V/m 80MHz to 2,5GHz	3 V/m	<p>Recommended separation distance:  <math>d=3,5/3 \cdot \sqrt{P/W}</math> 80 MHz to 800 MHz  <math>d=7/3 \cdot \sqrt{P/W}</math> 800 MHz to 2,5 GHz            where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in metres (m).            Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,<sup>a</sup> should be less than the compliance level in each frequency range.<sup>b</sup>            Interference may occur in the vicinity of equipment marked with the following symbol:</p> 

**A** Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.

**B** Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

### Note

- Ut is the AC mains voltage prior to application of the test level.
- At 80 MHz and 800 MHz, the higher frequency range applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.



Published by ILLUCO Corporation Ltd.  
Copyright © 2020 by ILLUCO Corporation Ltd.  
102-304 SK Ventium, #166 Gosan-ro, Gunpo-si  
15850 Gyeonggi-do, Republic of Korea

Tel : +82-31-429-8825  
Int'l : +82-70-4922-7441  
Fax : +82-31-429-8826  
Website : <http://www.illuco.co.kr>  
E-mail : [info@illuco.co.kr](mailto:info@illuco.co.kr)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of ILLUCO Corporation Ltd.

Printed in Republic of Korea