

# Vantage Plus Digital

Ophthalmoscope

INSTRUCTIONS FOR USE



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The Keeler Vantage Plus Digital is designed and built in conformity with Directive 93/42/EEC, Regulation (EU) 2017/745 and ISO 13485 Medical Devices Quality Management Systems.

Classification: CE: Class I

FDA: Class II

The information contained within this manual must not be reproduced in whole or part without the manufacturer's prior written approval. As part of our policy for continued product development we the manufacturer reserve the right to make changes to specifications and other information contained in this document without prior notice.

This IFU is also available on the Keeler UK and Keeler USA websites.

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## 1. INTRODUCTION

The Keeler Vantage Plus Digital is an indirect ophthalmoscope that captures images as seen by the user, primarily for teaching purposes.



**Keeler does not recommend the use of the digital data for diagnostic purposes.**

## 2. SAFETY

### 2.1 WARNINGS AND CAUTIONS

Please note that the proper and safe functioning of our instruments is only guaranteed if both the instruments and their accessories are exclusively from Keeler Ltd. The use of other accessories may result in increased electromagnetic emissions or reduced electromagnetic immunity of the device and may lead to incorrect operation.

Observe the following prescriptions in order to ensure safe operation of the instrument.



- Do not modify the device.



- The camera should be connected to a PC compliant with Electrical Safety (Medical) EN/IEC 60601-1.

- NOTE: This instructions for use document must be read in conjunction with the instructions for use document (part number EP59-19017) for the Vantage Plus and Vantage Plus LED indirect ophthalmoscopes.

### 2.2 CONTRAINDICATION

Whilst BIO using a head mount can be performed through an undiluted pupil, the field of view and magnification can be greatly compromised; therefore, pupillary dilation using mydriatics is recommended in practice. Optometrists regularly perform pupil dilation to comprehensively examine the ocular fundus as part of a comprehensive eye health examination where clinically indicated. Furthermore, in order to gain a more peripheral view of the retina, scleral indentation is performed as an adjunct to BIO when using a head mount.

## 3. LIST OF CONTENTS

- Vantage Plus binocular indirect ophthalmoscope
- Vantage Plus instructions
- Software driver and application
- USB Cable (5m)

## 4. SET UP

Set up your Vantage Plus Digital as you would normally set up your indirect. The unit should be set up before starting examination procedures.

## 4.1 INSTALL THE SOFTWARE

Refer to Software Setup and Quick Start Guide - EP59-09871.

## 4.2 PLUG IN THE USB CABLE

When the software has been installed, plug in the cable to the mini USB port.

Plug in USB cable to your computer



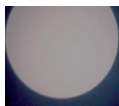
Cable to USB port

## 4.3 CORRECT POSITIONING

Position on your head and adjust as you would during a normal examination.

## 4.4 ADJUST THE CAMERA PATCH

Adjust the camera patch on the screen by rotating the spindle.



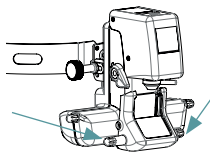
Too high  
on the screen



Too low  
on the screen



Central  
on the screen

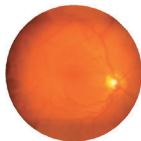
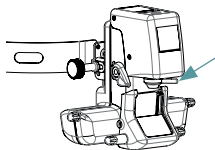


## 4.5 ADJUST THE FOCUS LENS

Adjust the focus of the lens by rotating the focus adjusting lever.

## 4.6 WORKING DISTANCE

The working distance is variable from 300-600mm from the front of the patient's eye to the front of the instrument with a 20D lens.



If the image on the screen is out of focus you need to move the optics forwards and or backwards until it becomes in focus.

Retinal image out of focus    Retinal image in focus

## 4.7 TURN OFF CAMERA

Unplug the USB cable to turn off the camera.

## 5. SPARE PARTS AND ACCESSORIES

Item	Part Number
Vantage Plus Digital Footswitch	1205-P-7001
Binocular Indirect Face Shield	1205-P-7034
Volk 20D Black Condensing Lens	2105-K-1159
Vantage Plus Digital Carry Case	EP79-43643 / EP19-43108

## 6. PACKAGING AND DISPOSAL INFORMATION

### Disposal of old electrical and electronic equipment



This symbol on the product or on its packaging and instructions indicates that this product shall not be treated as household waste.

To reduce the environmental impact of WEEE (Waste Electrical Electronic Equipment) and minimise the volume of WEEE entering landfills we encourage at product end of life that this equipment is recycled and reused.

**If you need more information on the collection reuse and recycling then please contact B2B Compliance on 01691 676124 (+44 1691 676124). (UK only).**

**Any serious incident that has occurred in relation to the device must be reported to the manufacturer and the competent authority of your Member State.**

## 7. WARRANTY

The Keeler Vantage Plus Digital is guaranteed for three years against faulty workmanship materials or factory assembly. Warranty is on a Return To Base (RTB) basis at the cost of the customer and may be void if the Slit Lamp has not been regularly serviced.

The manufacturer's warranty and terms and conditions are detailed on the Keeler UK website.

The mirror, main illumination lamp and general 'wear and tear' are excluded from our standard warranty.



**The manufacturer declines any and all responsibility and warranty coverage should the instrument be tampered with in any manner or should routine maintenance be omitted or performed in manners not in accordance with these manufacturer's instructions.**

**There are no user serviceable parts in this instrument. Any servicing or repairs should only be carried out by Keeler Ltd. or by suitably trained and authorised distributors. Service manuals will be available to authorised Keeler service centres and Keeler trained service personnel.**



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