

**HEINE** QUALITY  
MADE IN GERMANY

• HEINE DELTA 20®  
HEINE Photo adaptor



**CE** 93/42/EWG/CEE/EEC



## Allgemeine Gewährleistung

Anstelle der gesetzlichen Gewährleistungsfrist von 2 Jahren übernehmen wir für dieses Gerät (ausgenommen Verbrauchsmaterialien wie z.B. Lampen, Tips und Batterien) eine Garantie von 5 Jahren ab Warenauslieferung ab Werk. Diese Garantie gilt für einwandfreies Arbeiten bei bestimmungsgemäßer Verwendung und Beachtung der Gebrauchsanweisung. Während der Dauer der Gewährleistung und Garantie werden auftretende Fehler und Mängel am Gerät kostenlos beseitigt, soweit sie nachweislich auf Material-, Verarbeitungs- und/oder Konstruktionsfehlern beruhen. Rügt ein Besteller während der Gewährleistung einen Sachmangel, so trägt er stets die Beweislast dafür, dass das Produkt bereits bei Erhalt der Ware mangelhaft war. Diese gesetzliche Gewährleistung und die Garantie beziehen sich nicht auf solche Schäden, die durch Abnutzung, fahrlässigen Gebrauch, Verwendung von nicht original HEINE Teilen / Ersatzteilen (insbesondere Lampen, da diese speziell für HEINE Instrumente nach folgenden Kriterien entwickelt wurden: Farbtemperatur, Lebensdauer, Sicherheit, optische Qualität und Leistung), durch Eingriffe nicht von HEINE autorisierten Personen entstehen oder wenn Vorschriften in der Gebrauchsanweisung vom Kunden nicht eingehalten werden. Jegliche Modifikation der HEINE Geräte mit Teilen oder zusätzlich angebrachten Teilen, die nicht der HEINE Originalspezifikation entsprechen, führt zu einer Erlösung der Gewährleistung auf die einwandfreie Funktion der Geräte und damit der Garantieanspruch wegen Mängel, soweit dies auf die Veränderung oder Ergänzung zurückzuführen ist. Weitere Ansprüche, insbesondere Ansprüche auf Ersatz von Schäden, die nicht am HEINE Produkt selbst entstanden sind, sind ausgeschlossen.

Bei Reparaturen wenden Sie sich bitte an Ihren Fachhändler, der das Gerät an uns oder unsere zuständige Vertretung weiterleitet.

## Warranty

Instead of the usual 2-year guarantee, we guarantee this device for 5 years from the date of delivery from our factory (this excludes consumables such as bulbs, tips and batteries). We guarantee the proper function of the unit provided it is used as intended by the manufacturer and according to the instructions for use. Any faults or defects which occur during the guarantee period will be repaired free of charge provided they are caused by faults in material, design or workmanship. In the case of a complaint of a defect in the product during the guarantee period, the buyer must prove that any such defect was present at the time the product was delivered. The usual legal guarantee and warranty do not apply to incorrect use, the use of non-original HEINE parts or accessories. (Especially bulbs, as these are designed with emphasis on the following criteria: Color temperature, life expectancy, safety, optical quality and performance.) Also excluded are repairs or modifications made by persons not authorised by HEINE or cases where the customer does not follow the instructions supplied with the product. Any modification of a HEINE product with parts or additional parts which do not conform to the original HEINE specification will invalidate the warranty for the correct function of the product and further invalidate any warranty claims which result from such a change or modification. Further claims, in particular claims for damage not directly related to the HEINE product, are excluded.

For repairs, please contact your supplier, who will return the goods to us or our authorized agent.

Gekauft bei / Bought from / Acheté chez / Comprado a

am / date / le / el

## Garantie

A la place du délai de garantie légal de 2 ans, nous garantissons cet appareil (à l'exception des consommables comme par ex. les ampoules, les pointes et les piles) pendant cinq ans à compter de la livraison des marchandises départ usine. Nous garantissons le bon fonctionnement de l'instrument fourni, sous réserve qu'il soit utilisé selon les normes prescrites par le fabricant dans le respect du mode d'emploi. Tous les dysfonctionnements ou les pannes intervenant pendant la période de garantie légale et de garantie de l'entreprise seront réparés gratuitement, à condition qu'ils résultent d'un défaut des composants, de la conception ou de la fabrication. En cas de réclamation pour un défaut pendant la période de garantie légale, l'acheteur devra apporter la preuve que ce défaut existait au moment de la livraison. Cette garantie légale et la garantie de l'entreprise ne s'appliquent pas aux dommages résultant d'une usure normale, d'une utilisation incorrecte, de l'utilisation de pièces / pièces de rechange non d'origine HEINE (en particulier les ampoules, qui sont conçues spécialement pour HEINE selon les critères suivants : couleur de température, longévité, sécurité, qualité optique et performances). Sont également exclues toutes les réparations ou modifications effectuées par des personnes non autorisées par HEINE, ainsi que dans les cas où le client ne respecte pas les instructions du mode d'emploi. Toute modification des instruments HEINE avec des pièces ajoutées ou modifiées qui ne correspondent pas à la version originale des instruments entraîne une annulation immédiate de la garantie de bon fonctionnement et ainsi du droit à la garantie. Toutes réclamations ultérieures, en particulier pour le remplacement de dommages non directement liés au produit HEINE sont exclues.

Pour les réparations, contactez votre fournisseur, qui nous retournera les marchandises ou les adressera à notre agent agréé.

## Garantía

En lugar del plazo de garantía legal de 2 años asumimos para este aparato (a excepción de materiales fungibles como p. ej. lámparas, espátulas y pilas) una garantía de cinco años a partir de la fecha de la salida de la mercancía desde fábrica. Esta garantía se basa en un funcionamiento de acuerdo con la finalidad del aparato y cumpliendo las instrucciones de manejo. Durante el período de la garantía legal y adicional se reparan los fallos o deficiencias que pueda sufrir el aparato de forma gratuita, siempre que sea demostrable que éstos tienen su origen en una manipulación, fabricación o material deficientes. En caso de reclamación de un producto defectuoso durante el período de garantía, el comprador debe demostrar que el producto ya era defectuoso en el momento de su recepción. Esta garantía legal y adicional no son aplicables para deterioros que surjan por desgaste, negligencia, incorporación de repuestos no originales de HEINE/recambios (sobre todo lámparas, ya que éstas se desarrollaron especialmente para instrumentos HEINE según los siguientes criterios: color de temperatura, duración, seguridad, calidad y rendimiento óptico), intervenciones de personal no autorizado por HEINE o en caso de que el cliente no respete las instrucciones del manual de usuario. Cualquier modificación de los aparatos HEINE con piezas o recambios que no corresponden a las especificaciones originales de HEINE, conducirán a la anulación de la garantía legal sobre el buen funcionamiento del aparato y, en consecuencia, al derecho de garantía por deficiencias, siempre y cuando éstos sean atribuibles a la manipulación del aparato. Otras reclamaciones como p. ej. sustitución por daños que no se hayan originado directamente en el producto de HEINE quedan excluidos.

En caso de reparaciones dirigirse a su proveedor que remitirá el aparato a fábrica o al taller oficial correspondiente.

# Instructions for Use

## HEINE DELTA 20® Dermatoscope



Read these instructions carefully before using the HEINE DELTA 20® and keep them in a safe place for future reference.



In accordance with local regulations this product should be disposed of as an electronic device separately.

### Safety Instructions

**Range of Applications:** The HEINE dermatoscope is designed solely for the clinical examination of the surface of the skin. HEINE photo adaptor, and digital camera are specifically designed and optimized for the quick and systematic documentation of pigmented lesions and do not replace the diagnosis of the examiner.

**General Safety:** For documentation with a digital camera use only the HEINE photo adaptor, and our recommended adaptor from the digital camera adaptor range. Do not look directly into the light source to avoid dazzle from the intense, white, light emitting diodes (LED's). The HEINE DELTA 20® Dermatoscope is not suitable for Eye Examinations. If you use a digital camera, store your pictures first on the removable flash card and transfer the photographic images by connecting the flash card to the PC. A electrical conducting connection between camera, PC and a mains power source is not permissible.

**Safety in use:** Use only power sources which are designed for medical applications. Electrical and mechanical compatibility of the HEINE DELTA 20® dermatoscope can be assured only when used in conjunction with 2.5V and 3.5V HEINE battery or rechargeable handles with HEINE AV or TL-connectors.

### Operation without a camera

Connect the HEINE DELTA 20® Dermatoscope to the handle. Increased mobility and ease of handling can be achieved by using the connection cable (see accessories) which connects the instrument to the handle. Prepare the skin by moistening with Dermatoscopy-oil (use a cotton swab) or disinfectant spray.

- Turn the Dermatoscope on, and place it gently so that the lesion is in the center of the contact plate (1a).
- The examiner's eye should be as close to the eye-piece (3) as possible. Adjust the focus ring until a crisp, clearly-focused image is obtained.

- For dermatoscopy, use the instrument only with the HEINE contact plate (1a, 1b) correctly-fitted.
- For general dermatological examinations, you can use the Dermatoscope without the contact plate as an illuminated loupe.
- **Tip:** Once crisp, clear focus has been achieved by adjusting the Focus ring, make a note of the position of the Focus ring (3) in relation to the linear mark (4) or edge of the instrument housing. This will help you to find your "personal" position and facilitate quicker focusing the next time you use the Dermatoscope.

### Operation for digital photography

- Attach the SLR photo adaptor to the digital camera. If necessary, take a clinical photo of the lesion and general area.
- Now Adjust the Focus ring (3), aligning its lower edge with the linear mark (4). This will position the camera for the highest contrast images. The distance ring supplied with the instrument simplifies this procedure.
- To mount the photo adaptor (6) to the HEINE DELTA 20® Dermatoscope: Slide the Connector Ring (7) of the photo adaptor with one hand in the direction of the camera and hold in this position. Now guide the Dermatoscope into the photo-adaptor with the free hand until it clicks into the notch of the Dermatoscope body (5). You can now release the Connector Ring (7), it will automatically provide a tight connection between the camera and the Dermatoscope.
- Make sure that the Dermatoscope is securely connected and that it can be easily rotated inside the photo adaptor. You are now ready to start producing digital images.
- To detach the Dermatoscope from the photo adaptor slide the Connector Ring (7) on the photo adaptor in direction of the camera and pull the Dermatoscope out and away from the camera.
- **Tip:** We can only guarantee the performance of the HEINE DELTA® Dermatoscope with HEINE Photo adaptor when used with one of the following SLR digital cameras:  
[www.heine.com](http://www.heine.com) → DELTA 20 → Camera for DELTA 20.  
 We recommend a normal visual examination of the skin before documentation with a digital camera.  
 Please read the "Compendium of Dermatoscopy of pigmented skin lesions" supplied with the DELTA 20, which provides important information on the basic procedure.
- The resolution of a PC monitor is not high enough to display all the pixels of a modern digital camera. To get the highest resolution dermatoscopic image possible, you should increase the image size.



- The size of the field of view depends on the size of the image sensor in the camera. The field of view can vary from one digital camera to another. ([www.heine.com](http://www.heine.com) → DELTA 20 → Camera for DELTA 20)

## Brightness Control

- The voltage-regulating electronics of the HEINE DELTA 20® Dermatoscope guarantee constant brightness.
- Pressing one of the two buttons on the instrument (2) will reduce the brightness by 50% and will turn off 3 of the 6 LED's resulting in lateral illumination for improved contrast when viewing the pigmented structure.
- If the image is not bright enough, select a sensitivity of ISO 400 on the camera.

## Contact Plates

- The contact plate (1a) is attached by a bayonet connection. To remove the contact plate turn it counterclockwise and pull it away from the Dermatoscope. To attach, reverse the procedure.
- For examination of hard to reach lesions use the small contact plate (1b) in place of the standard contact plate (1a). (See accessories)
- Both the standard contact plate (1a) and the small contact plate (1b) can be used for direct visualization and digital photography.

## Cleaning /disinfection and sterilization

The plastics used in the instrument do not react with the dermatoscopy oil. If skin disinfectants are used, the risk of changes to the plastic, such as discolouration, cannot be completely ruled out. It is recommended that residues of this disinfectant be removed from the instrument immediately after examination in order to minimize the contact time.

## Manual cleaning

- Wipe down the DELTA 20 and the photo adapter with a damp cloth (soaked in plain water, no added agents).  
It must not be rinsed in running water or immersed in water.
- Clean the lens with a lens cleaning cloth.

## Cleaning and disinfecting

- Disinfectants must have been approved for use with medical equipment made of plastic in order to prevent material changes.
- Wipe down the surfaces of the DELTA 20 and photo adapter with disinfectant.
- If you have used a spray device to disinfect the instrument, remove any excess agent from the surface in order to prevent the liquid from entering the instrument. Spray-type disinfection is only permitted with the contact plate in place.
- The internal light guide must not be treated with solutions containing alcohol.

- The contact plate can be immersed in disinfectant following removal from the instrument.

**Important:** The instrument must not be immersed in disinfectant.

## Sterilization

Sterilize the contact plate once it has been removed from the instrument (steam sterilization: 134 °C/ 5 min.)

## Technical Specifications

|                                 |  |
|---------------------------------|--|
| Magnification:                  | 10x  |
| Focal Range (correction):       | ca. +/- 6dpt   |
| Approved Operating Temperature: | +10 °C to 40 °C  |
| Light Source:                   | High-intensity, white Light Emitting Diodes (LED), Class 1 (according to 60825-1). Due to the extreme long life of LED's they should not need replacement. |

Standard and Small Contact Plates are manufactured from multi-coated Silica Glass.

## Applicable Standards:

**EN 60825-1  
EN ISO 10993-1**

# **HEINE**

HEINE Optotechnik GmbH & Co. KG  
Kientalstr. 7 · 82211 Herrsching · Germany  
Tel. +49(0)8152/38-0 · Fax +49(0)8152/38-202  
E-mail: info@heine.com · [www.heine.com](http://www.heine.com)

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