



## User's Manual Dermatoscope

Dear buyer! Thank you for choosing a KaWe product. Our products are known for high quality and durability. This KaWe device complies with the provisions of Directive EU 2017/745 (European Directive on Medical Devices), whereby it is classified as a medical product of class 1.

**Please carefully consider this instruction and read all the provisions prior to use. Follow the maintenance recommendations.**



Prior to use, please carefully consider the maintenance procedure.

**Application:** Only qualified medical professionals can use the dermatoscope.

**Group of patients with indications for use:** People of any age, male and female, requiring an examination of skin surface structures.

**Purpose:** KaWe dermatoscope is designed for visual examination of body surface. It zooms skin surface structures almost ten-fold, and with a halogen lamp lights the area in question. The mechanism is analogous to microscopic examination in reflected light (epiluminescence microscopy). Dermatoscopy is aimed at precise examination of skin pigment changes in everyday practice, specifically, within early detection of malignant melanoma. Skin reflexes are suppressed by a special dermatoscopic moisturizing gel (KaWe Derma-Gel), skin color changes are localized and detected more efficiently. Contact lens scale allows establishing the sizes of changes.

**The device is designed only for skin surface examination.**

### Dermatoscope:

- **KaWe EUROLIGHT** D30 2.5 V dermatoscope
- **KaWe PICCOLIGHT** D 2.5 V dermatoscope
- **KaWe EUROLIGHT** D30 LED 3.5 V dermatoscope

### Maintenance of KaWe EUROLIGHT D30 2.5 V and 3.5 V dermatoscopes:

For proper functioning, use standard KaWe 2.5 V handles with two KaWe 2.5 V or 3.5 V "C" or Baby 1.5 V rechargeable batteries. Put them on and fix the device's head. To switch the device on, press and turn to the left a white plastic button on the rotary switch. Variable resistor allows quick brightness regulation (0=off, 1=max. brightness). To switch the device off, turn the button the other way back to reference position (switching off movement). To replace the battery or rechargeable battery, open the lower cover. To charge handles with rechargeable batteries, take off the plastic cover and connect with KaWe Med-Charge 4000 charging device.

To charge KaWe EUROLIGHT D30 LED 3.5 V, unscrew two connecting parts of the handle and put the lower part of the handle with the mains plug into the socket. (ATTENTION: 3.5 V version is compatible with KaWe 3.5 V rechargeable batteries only).

Remove the investigation head by lowering the throw-on insert.



**⚠ ATTENTION:** Follow additional maintenance recommendations to make the service life of the rechargeable batteries longer.

**Maintenance of KaWe PICCOLIGHT:** Proper functioning is provided by KaWe PICCOLIGHT handles with 2 batteries ("AA"-Mignon 1.5 V). To switch the device on/off, use a sliding switch. To switch the device on using a sliding switch, move it towards the dermatoscope's head. To switch the device off, move the sliding switch in reverse direction, to reference position. To replace the battery and lamp, unscrew the head of KaWe PICCOLIGHT.

**Time of application:** The devices are designed for periodic use, maximum operation time totals 1 minute. There shall be 10-minute pauses between the applications.

**Lamp replacement of KaWe PICCOLIGHT:** For proper light functioning and quality, use only original KaWe lamps. Unscrew the head of the dermatoscope from the handle and remove the lamp. Clean the glass bulb of the new lamp with alcohol-containing cloth. The glass bulb shall be clean and free from fingerprints (grease spots). Put the lamp all the way into its groove in the side pin. Then screw the investigation head back to the handle.

**Lamp replacement of KaWe EUROLIGHT:** For proper light functioning and quality, use only original KaWe lamps. Unlatch the head of the dermatoscope from the handle and remove the lamp. Now repeat the steps above in the section on replacing KaWe PICCOLIGHT lamp. The glass bulb shall be clean and free from fingerprints (grease spots). Put the lamp all the way in.

**Handling:** Put special moisturizing KaWe Derma-Gel dermatoscope gel on the skin area of interest. Turn the light on and set the contact lens on skin without excessive pressing. Even lighting will cover the skin area with large examination diameter (25 mm). Place the examined area in the center of the contact lens, if possible. Bring the eyepiece as close to the eye as possible. With a free hand, turn the focus ring until the image of the area of interest becomes sharp. Try looking through the eyepiece without pressure on eye muscles (not accommodating them for sharper view). Scales contact lens is designed to control the pigmented skin changes. To examine raised or palpable skin areas (damages), dermatoscope can be used without the contact lens. For a sharper view you can raise the dermatoscope over the area of interest but not further than 5 mm.

**Technical characteristics:**

- Magnifier glass with 10x magnification
- Contact lens diameter: 25 mm
- Focusing / sharpness adjustment: -6...+3.5 diopter
- Halogen lamp aperture: 2.5 V (KaWe EUROLIGHT D30)
- Vacuum lamp aperture: 2.5 V (KaWe PICCOLIGHT D)
- LED lamp aperture: 3.5 V (KaWe EUROLIGHT D30 LED)

**Additional directions, maintenance and storage:** The device will serve for years with proper handling and storage.



**Warranty:** The warranty for the device totals two years from the date of purchase with proper handling and following the operation manual (the warranty does not cover lamps / rechargeable batteries). LED lamps are subject to five years of guarantee from the date of purchase. If any issues arise or repair is necessary, please contact your dealer.



**Warnings:** An error may cause extensive heat posing a threat of burn injury. If the device heats excessively, immediately turn the handle off.



**Warnings:** Do not put the dermatoscope in fluid and keep fluid off the handle! The dermatoscope is not designed for surgery, so it is sufficient to clean or disinfect it with surface alcohol-containing disinfectants. Do not use abrasive cleaning agents! The dermatoscope shall not be sterilized.

**Secondary treatment limitations:** Secondary treatment has a minor effect on these devices. The service life of the product is usually defined based on the degree of wear and use-related damage.

#### **Directives**

**Working area:** Clean the surface with a disposable/paper cloth.

#### **Environment conditions:**

	TEMPERATURE	RELATIVE AIR HUMIDITY
OPERATION	+10°C to +35°C	max. 80 %
STORAGE	-25°C to +70°C	max. 95 %
TRANSPORT	-25°C to +70°C	max. 95 %

**Transportation and storage:** Store and transport dermatoscopes protecting them from dust, moisture and dirt.

**Preparation for cleaning:** No special requirements.

**Manual cleaning:** Clean the dermatoscope external surface with a damp, soft and lint-free cloth. Do not put the dermatoscope in fluid and keep body off the handle! The dermatoscope is not designed for surgery, so it is sufficient to clean it with surface alcohol-containing detergent. Do not use abrasive cleaning agents! The device shall not be sterilized. Clean the magnifying glass with a glass detergent only.

**Automatic cleaning:** Automatic cleaning is impossible/unnecessary.

**Disinfection:** Clean the dermatoscope with surface alcohol-containing disinfectants. Use a slightly damp cloth.

**Sterilization:** Scaled lens shall be sterilized in autoclave at 134 °C for at least 3 minutes.

**Additional information:** When sterilizing several devices in autoclave, do not exceed the maximum load indicated by the sterilizer manufacturer.