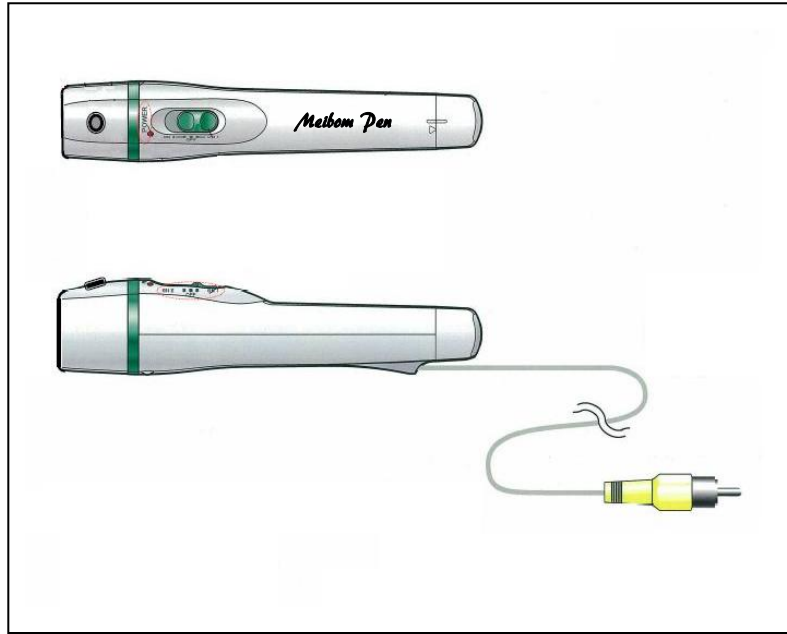


# Meibom Pen®

In collaboration with Dr. ARITA

[JAPAN FOCUS CO.,LTD.]

application for utility model registration



**■ Non contact observation**

Incorporating a CMOS camera and custom-built infra-red LED, **Meibom Pen** can provide the user with no contact and no invasive observation of meibomian glands.

**■ Compact, light and mobile design**

**Meibom Pen**, being as light as 120 gram complete with 2 batteries and as sleek as penlight size, attracts the user to carry everywhere - operating room, clean room and home; it also suites the user's purpose, either in sitting or lying position.

It is especially useful for the user to examine critical patients, elderly patients in a wheelchair and babies under 3.

**■ User-friendly**

Very simple and easy to use; the user can connect **Meibom Pen** with any TV monitor at examination room and inpatients' ward.

By using the video-capture kit, the user can also connect it to its own PC via USB port, observe and record either dynamic or static images.

**■ Power requirement**

**Meibom Pen** can work for 6.5 hours continuously with 2 pieces of AA batteries - single, nickel, hydrogen and dry.

(It takes the user about a minute on average to observe meibomian glands of both superior and inferior of two eyes.)



**Specifications**

- Main body : 29mmX176mmX34mm
- Size of image :  $\phi$  12 or more
- Valid pixel : About 250,000 pixels
- Signal system : 2:1 Interlace NTSC
- Image output : 3.5 $\phi$  composit
- LED Light :
  - Visible light, Fluorescein blue,
  - Infrared rays light

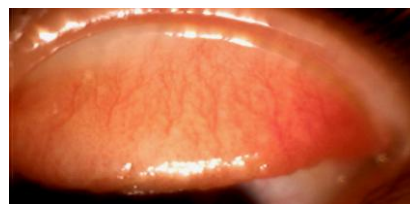
**Optional Kit :**

- USB connection video capture for PC
- USB connection foot switch for PC (include control software)

**Case 1:** In a 6 year old girl, meibomian glands run straight vertically.



**Case 2:** A 28 year old male is diagnosed allergic conjunctivitis complication associated with his long term contact lens (CL) wear.



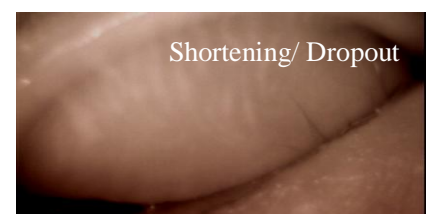
**Case 3:** A 85 year old male presents meibomian gland dysfunction (MGD).



Upper eyelid

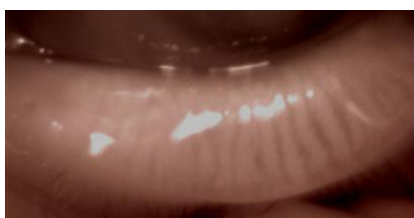


Winding

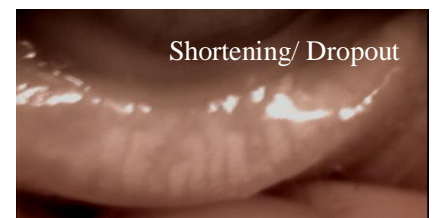


Shortening/ Dropout

Lower eyelid



Shortening



Shortening/ Dropout