# 5.6 Cleaning

## 5.6.1 Cleaning the cover

When the cover of the device becomes dirty, clean it with a soft cloth. For persistent stains, soak the cloth in a neutral detergent, wring well, and wipe. Finally dry with a soft, dry cloth.

⚠ **CAUTION**

- **Never use an organic solvent such as paint thinner.**
  The surface of the device may be damaged.
- **Never use a sponge or cloth soaked in water.**
  The water may leak into the inside of the device and cause device failure.

## 5.6.2 Cleaning the printer

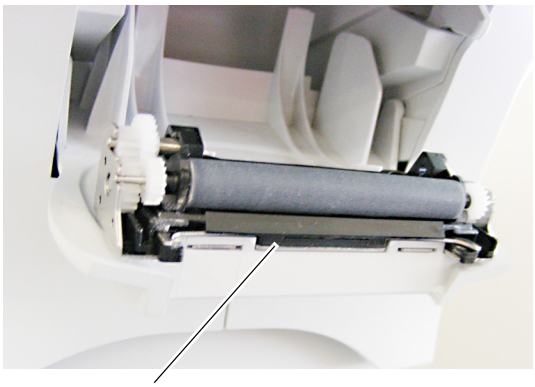
After repeated use, paper residue accumulates in the paper slot of the printer auto cutter and may cause malfunction of the auto cutter. Periodically clean the cutter.

***1*** Open the printer cover and remove the printer paper roll.

See “5.3 Replacing Printer Paper” (page 212).

***2*** Apply the nozzle of a vacuum cleaner to the auto cutter to remove paper residue.

Never blow off paper residue with a blower. If residue settles on the internal working structure, malfunction may result.




***3*** Supply the printer paper as it was.

## 5.6.3 Cleaning the LCD touch screen

If the LCD touch screen is soiled, wipe it with a soft, dry cloth or a cloth dampened with a small amount of rubbing alcohol. If rubbing alcohol is used, dry the LCD touch screen with a soft, dry cloth so that streaks or specks do not remain.

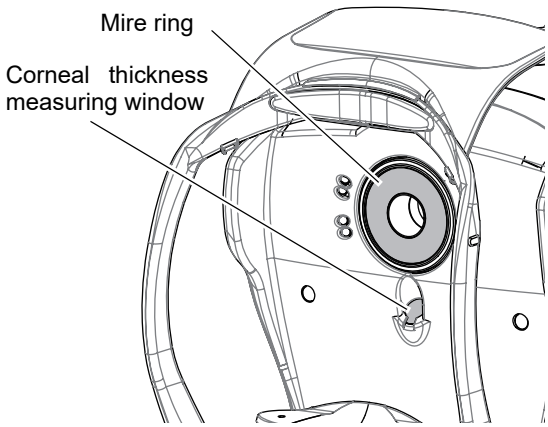
⚠ **CAUTION**

- **Never wipe the LCD touch screen using a cloth dampened with a lot of rubbing alcohol.**
  Rubbing alcohol may enter between the body and the screen, or into the screen and cause the LCD touch screen to fail.
- **Never use liquid other than rubbing alcohol to wipe the LCD touch screen.**

## 5.6.4 Cleaning the mire ring and corneal thickness measuring window

If the mire ring and corneal thickness measuring window are smeared with fingerprints and dust, reliability of the measurement is substantially reduced. Before using the device, check the mire ring and corneal thickness measuring window. If they are dirty, clean them.

***1*** Look at the mire ring and corneal thickness measuring window (glass part) at an angle to check whether they are dirty.




***2*** Blow off dust and extraneous matter with a blower.

***3*** Gently wipe the glass part of the mire ring with a gauze dampened with a small amount of methanol or absolute alcohol.

⚠ **CAUTION** • **Be sure to wipe gently. Never rub the mire ring forcefully or wipe with dust or extraneous matter on it.**
The glass part may be scratched.

***4*** Gently wipe the corneal thickness measuring window with a cotton swab dampened with a small amount of methanol or absolute alcohol.

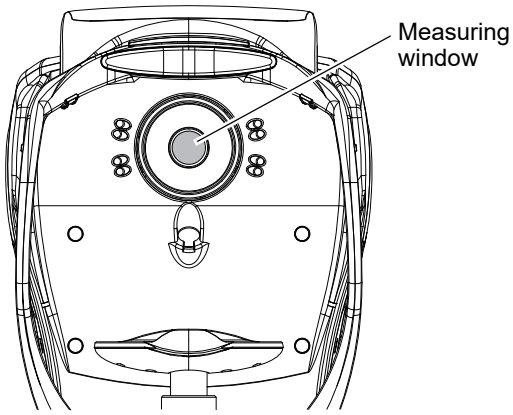
⚠ **CAUTION** • **Be sure to wipe gently. Never rub the corneal thickness measuring window forcefully or wipe with dust or extraneous matter on it.**
The glass part may be scratched.

***5*** Check the mire ring and corneal thickness measuring window again to check whether they are dirty.

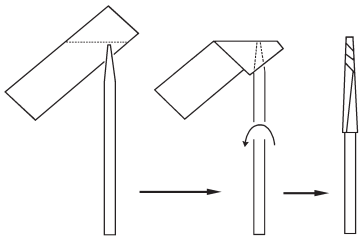
## 5.6.5 Cleaning the measuring window

When the measuring window gets fingerprints or dust on it, the reliability of the measurement is substantially reduced. Before using the device, check the measuring window. If it is soiled, clean it.
The measuring window lens does not usually get soiled through normal use because it is recessed.

***1*** Blow off dust on the measuring window with a blower.




***2*** Wrap lens cleaning paper around a thin stick such as a chopstick (or cotton swab) and wipe the lens of the measuring window with a material moistened with alcohol.



Wrap cleaning paper around the tip.

Note

- Use a thin stick which does not damage glass lenses.
- Wipe lightly from the center of the measuring window to the outside in a circular motion.

***3*** Check if the window is cleaned using a penlight. If not, clean it again with new cleaning paper.

Apply light with a penlight and change the view angle to check the clearness.

# 5.7 Maintenance of Ultrasound Probe

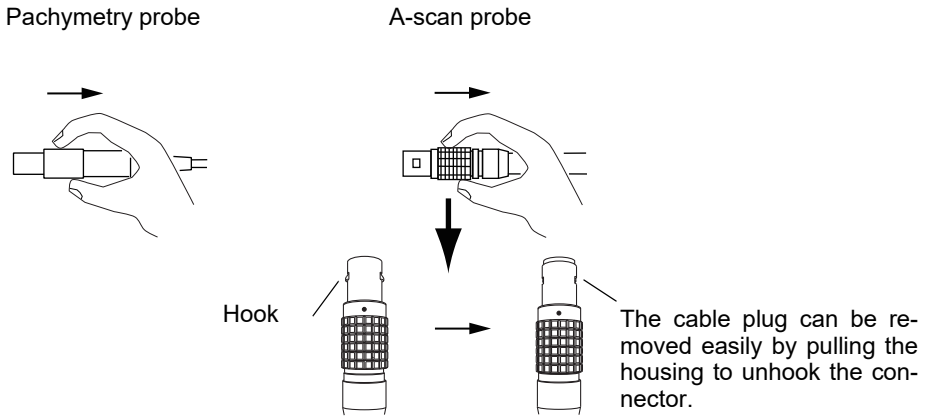
## 5.7.1 Cleaning ultrasound probe

Parts to be cleaned
• Tip of the A-scan probe
• Tip of the pachymetry probe

Time to perform cleaning
• Before disinfection and high level disinfection

***1*** If foreign object is attached to the tip of the probe, wash the probe for five minutes in running sterile purified water or wipe off the tip with a soft cloth soaked in disinfectant alcohol to remove foreign objects from the probe for effective disinfection.

⚠ **CAUTION** • **Always hold the housing of the cable plug, not the cable, when connecting or disconnecting the probe.**




- **Do not clean the ultrasound probe with water of 45°C (113°F) or hotter.**
  The ultrasound probe may become damaged.
- **Perform cleaning before the body fluid or chemical solution on the probe becomes dry.**
  The body fluid and chemical solution may become difficult to remove.

## 5.7.2 Disinfecting ultrasound probe (intermediate level disinfection)

Parts to be disinfected
• Tip of the A-scan probe
• Tip of the pachymetry probe

Time to perform disinfection
• Before and after use of the device

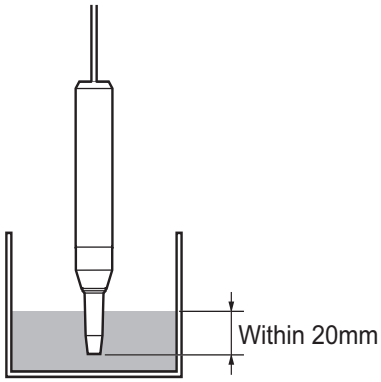
***1*** Clean the tip of the probe.

See “5.7.1 Cleaning ultrasound probe” (page 219).

***2*** Soak the tip (less than 20 mm) of the probe in disinfectant solution.

See the instruction of the disinfectant for the duration to soak the tip.

Example—Disinfectant alcohol




Example—A-scan probe

⚠ **CAUTION** • **See the instruction of the disinfectant for its use.**

***3*** Wipe the disinfectant solution on the tip of the probe with a sterilized absorbent cotton soaked in ethanol for disinfection.

***4*** Leave the probe sit until the tip of it becomes dry.

## 5.7.3 High level disinfection of ultrasound probe

Parts to be disinfected
• Tip of the A-scan probe
• Tip of the pachymetry probe

Time to perform disinfection
• After using the probe for an infected patient

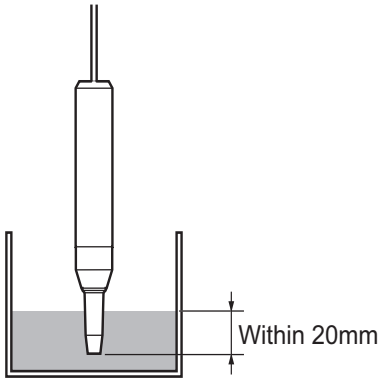
To prevent infection, perform high level disinfection for the ultrasound probe for each eye of infected patients.

***1*** Clean the tip of the probe.

See “5.7.1 Cleaning ultrasound probe” (page 219).

***2*** Soak the tip (less than 20 mm) of the probe in the glutaraldehyde solution (ex. - Cidexplus 28 day solution[*1]) for at least 30 minutes.

This is only an example of cleaning the probe tip. For details, see the instruction of the glutaraldehyde solution to be used.




Example—A-scan probe

**⚠ CAUTION • See the instruction of the glutaraldehyde solution for its use.**

***3*** Wash the tip of the probe that was soaked in the glutaraldehyde solution for at least 30 seconds in running sterile purified water.

***4*** Wipe the water on the tip of the probe with a sterilized absorbent cotton.

***5*** Leave the probe sit until the tip of it becomes dry.

***6*** Put the protective cap on the probe and store it in the special case.

***1. Cidexplus is a registered trademark of Johnson & Johnson.**

## 5.7.4 Effectiveness of disinfectants

| | General bacteria | Pseudomonas aeruginosa | Tubercle bacillus | Fungus | Spore | Hepatitis B virus | Foreign object |
|---|---|---|---|---|---|---|---|
| **High level disinfection** | O | O | O | O | O | O | - |
| **Intermediate level disinfection** | O | O | O | O | - | O | - |
| **Cleaning** | - | - | - | - | - | - | O |

O: Effective
- : Not effective

* For details, see the instruction for each disinfectant.
* To prevent infection, perform high level disinfection for the ultrasound probe for each eye of infected patients.