COOPDECH
Video Laryngoscope Portable VLP-100
Welcome to the new COOPDECH Video Laryngoscope training course. It has been designed to offer our customers a comprehensive and useful reference guide to the products.

- A laryngoscope with a 3.5 inch color liquid crystal display (LCD) monitor and video camera, allows zoom display of the oral cavity and assists tracheal intubation.

- World first and only video laryngoscope with Miller, Macintosh and Bullard alike blade.

- All new J-shaped blade facilitates tracheal intubation even for high Cormack-lehane grades. No hyperextension of the neck required.
Laryngoscope

- Operational in seconds
- Easy to learn, use and teach
- Used in the same way as the standard laryngoscope with the maximized view of actual insertion and placement of the ET tube.
- Fiber Type Laryngoscope
  - AIRTRAQ
  - McGrath
  - Bullard
  - TruView

- Portable Type Video Laryngoscope
  - VLP-100
  - Glidescope (VERATHON)
  - Airway Scope (PENTAX)

- Video Laryngoscope Type
  - V-MAC (Karl Storz)
<table>
<thead>
<tr>
<th></th>
<th>VLP-100</th>
<th>McGrath</th>
<th>GlideScope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade</td>
<td>Reusable Autoclavable</td>
<td>Single use Disposable</td>
<td>Only disinfection</td>
</tr>
<tr>
<td>Blade variety</td>
<td>7 types</td>
<td>1 type</td>
<td>3 types</td>
</tr>
<tr>
<td></td>
<td>Miller 0,1, Macintosh 2, 3, 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Better view 3M- (Modified &amp; Curved 3), J-shaped blade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor</td>
<td>☐ (3.5 inch color LCD)</td>
<td>☐ (1.7 inch color LCD)</td>
<td>☐ (Color LCD)</td>
</tr>
<tr>
<td>Intubation without monitor</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Battery</td>
<td>Economical Rechargeable-Li-on or AC operated</td>
<td>AA battery</td>
<td>AC-Power operated</td>
</tr>
</tbody>
</table>

VLP-100 Comparison data
1. *Conventional design and light*

- Unlike the conventional video camera-mounted laryngoscope, VLP-100 can be used similarly as the ordinary laryngoscope and is a device for tracheal intubation, clinical training and emergency care.
- Allowing staff other than the operator to verify the tracheal intubation status without preparing a large video display.
- Emergency medical technician can use VLP-100 in live-saving, urgent care.
  
  - The weight (excluding the blade) is only 500g.
VLP-100

2. **A large 3.5 inch Monitor verification**
   - The operator can perform intubation while watching the LCD monitor and it enables quick, easy and accurate intubation
   - Tracheal intubation can be performed from various position such as cranial
   - Allowing the output of the image to the external medical monitor and a group of people can view the images

3. **Detachable and Autoclavable blade**
   - Various types of blades (from infant to adult) as options
   - New blade for difficult intubation is also available now.
Blade
- Stainless blade (Autoclave or EOG sterilization can be performed)
- Various types of blades as options, Miller #0, #1, Macintosh #2, #3, #3M, #4 and J-shape (Bullard alike)

Power supply
- Li-ion battery (Rechargeable)
- AC adaptor

Continuous operating time (on fully-charged battery)
- 60 minutes (Charging completed within 3 hours)

Weight
- Approx. 500 g (excluding the blade)
- Only 100g heavier than the ordinary laryngoscope
- **Accepted endotracheal tubes**
  - Any kinds of tubes such as for infant intubation tube and Double-lumen tube
- **Effective pixels of CCD**
  - 15.8Kpixels
- **LCD monitor size**
  - 3.5 inch color
- **View field angle**
  - Camera: Horizontal 39 degrees, Perpendicular 52 degrees
  - Monitor: Left 15 degrees, Right 30 degrees
- **External output**
  - NTSC and PAL composite video signal
ការជាមួយប្រការ

ដែលការប្រការដំបូងប្រការជាមួយប្រការប្រការនេះទៅកាន់ប្រការដេតូវដំបូងប្រការប្រការដំបូងប្រការនេះទៅកាន់ប្រការដេតូវដំបូងប្រការប្រការដំបូងប្រការ

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В УСИЛЕНИЕ ЗАЩИТЫ ТЕРРИТОРИИ СЕЙ ЧСМ И УСПЕШНОГО ВООРУЖЕННОГО СОСТОЯНИЯ РЕАГИРОВАТЬ НА НАТУРАЛЬНОУСТРОЙСТВО НЕРЕАЛИЗОВАНО

Так как в своей стране есть много мест, где можно использовать средства доступа

- МОДЕРНИЗАЦИЯ СИСТЕМ И УСТРОЙСТВ

- ИНФРАСТРУКТУРА НАУЧНО-ТРУДОВОЙ СФЕРЫ

- НАУЧНО-РЕАЛИЗАЦИОННАЯ СФЕРА
Rechargeable system

Output of external image

VLP allows the output of the image to the external monitor.

- Dedicated Battery Charger
- DC power input terminal when using AC power
- External image output terminal
Battery depletion warning lamp

- Illuminates in **green**
  - Charging completed

- Illuminates in **orange**
  - Charging

- Illuminates in **blue**
  - Battery/AC activation
  - (Charging is completed)

- Illuminates in **yellow**
  - About 10 minutes before the monitor turns off

- Illuminates in **red**
  - Monitor turned off
  - (The lamp on the tip of the Camera unit is on)
## Periodical replacement parts and Warranty

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<th>Time elapsed</th>
<th>Reason for replacement</th>
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<td>1.5-2 years</td>
<td>The [Remaining Battery] lamps blinks in red shortly after charging.</td>
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<td>Lens</td>
<td>2-3 years</td>
<td>The display has been deteriorated due to scratches on its surface.</td>
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- Useful lives of the above parts may vary depending on their frequency and environment of use. Consult our service personnel to find out whether the parts of your COOPDECH VLP-100 need replacement and to request parts replacement.

- The estimated useful life of COOPDECH VLP-100 is 5 years

- Only our authorized service personnel are allowed to open this product for maintenance.

- Warranty period of VLP-100 is one year from the date of purchase.
Accessories

- Dedicated charger
- AC power code
- DC connecting cord

Optional products

- Dedicated hard case
- Cup for edge cleaning
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Cleaning Method

Monitor, handle and charger

1. Turn off the power (Laryngoscope: remove the blade. Charger: remove the AC power cord).

2. Wipe the soil off with a well-wrung gauze, etc. after soaked in cold or lukewarm water.

3. Disinfect them.
   Examples of the disinfectants that can be used:
   Cidex
   0.2-0.5% benzalkonium chloride solution
   0.2-0.5% benzethonium chloride solution
   0.1-0.5% chlorhexidine solution

4. Wipe the disinfectant off with a lightly-wrung soft gauze, etc. after soaked in cold or lukewarm water, if used, and wipe off excess moisture with a clean and soft cloth, etc.
**Cleaning Method**

**Camera unit and camera cord**

Perform high-level disinfection.

Examples of the high-level disinfectants that can be used:
- Glutaral preparation (Sterihide, etc.)
- Peracetic acid preparation (Acecide, etc.)
- Phtharal preparation (Disopa, etc.)

**Caution**

Do not scrub down the tip of the camera unit with a brush, etc. [The lens may be damaged].

Do not perform autoclave or EOG sterilization on the body.

When using disinfectants and high-level disinfectants, follow the directions on the package insert of each disinfectant.

Wash away the disinfectant with running water, if used, and wipe off excess moisture with clean and soft cloth, etc.

When using running water, etc., avoid water splash onto the upper part of the handle and monitor [Solution seeped into the inside of this product may cause a short in the electronic circuit].
Blade

1. Remove it from the handle.
2. Wash properly by immersing or using an ultrasonic cleaner, washer disinfector, etc.
3. Perform disinfection, or autoclave or EOG sterilization.
Avoid solution seeping here

Disinfection with alcohol and high-level disinfection (immersing) can be performed

Avoid solution seeping here

Autoclave or EOG sterilization can be performed
Q. How to clean, disinfect and sterilize after use.

A. Monitor, handle and charger- Wipe the soil off with a well-wrung gauze, etc. after soaked in cold or lukewarm water and disinfect them. Examples of the disinfectants that can be used: 0.2-0.5% benzalkonium chloride solution (Osvan, etc.), 0.2-0.5% benzethonium chloride solution (Hyamine, etc.), 0.1-0.5% chlorhexidine solution (Hibitane, etc.)

Camera unit and camera cord- Disinfect with alcohol and high-level disinfection (immersing) can be performed. If the infection is suspected with blood stains, etc., perform high-level disinfection. Example of the high-level disinfections that can be used: Glutaral preparation (Sterihide, etc), Peracetic acid preparation (Acecide, etc.), Phtharal preparation (Disopa, etc.)

Blade- Perform disinfection, or autoclave or EOG sterilization
FAQ

Q. How long does VLP operate continuously?

A. Approx. 60 minutes. The economical Li-ion battery is rechargeable using the dedicated battery charger. Even if the monitor does not allow a display because of the battery depletion, the edge of the camera is still lighted for about 30 minutes, which allows to use as an ordinary laryngoscope.

Q. Has VLP been impact tested, can it be dropped from a certain height?

A. We’ve conducted impact test by dropping it from 1m height to a piece of wood (exclusive use for test, thickness: 50mm) and confirmed it functioned normally. However, we don’t guarantee it could be all right to drop it. Please follow our “Precautions for use” mentioned in “Instruction for use”.

Q. How about anti-fogging treatment?

A. VLP adopts anti-fog treatment lens and it prevents fogging on the lens and maintains a clear image than ordinary glass. However, the adhesion of saliva etc., or being performed under excessive humidity would make the lens unclear.
Q. Can VLP save the picture and animation?

A. VLP itself does not have such saving function. However, you can save them by connecting and outputting to the external monitor which has saving functions.
COOPDECH Video Laryngoscope Portable VLP-100 are produced by:

Daiken Medical Co., Ltd