GIMA

PROFESSIONAL MEDICAL PRODUCTS

# VIDEO LARYNGOSCOPE CMS-GS1




**All serious accidents concerning the medical device supplied by us must be reported to the manufacturer and competent authority of the member state where your registered office is located.**

## Gima 58120

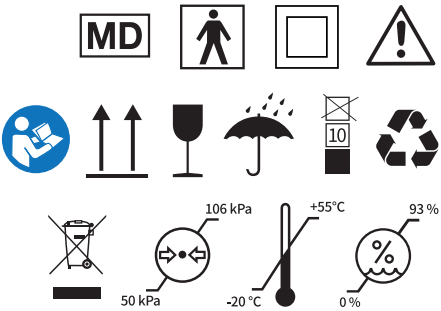
Contec Medical Systems Co., Ltd.
Address:No.112 Qinhuang West Street, Economic &Technical Development Zone, Qinhuangdao, Hebei Province, PEOPLE' S REPUBLIC OF CHINA
Tel: +86-335-8015430
Fax: +86-335-8015588
E-mail: cms@contecmed.com.cn
Website: http://www.contecmed.com

REF **GMS-GS1**

EU REP

Prolinx GmbH
Brehmstr. 56,40239 Duesseldorf
Germany
Tel: 0049 211 3105 4698
E-mail: med@eulinx.eu

Gima S.p.A.
Via Marconi, 1 - 20060 Gessate (MI) Italy
gima@gimaitaly.com - export@gimaitaly.com
www.gimaitaly.com
Made in Pakistan



**CMS-GS1**

# Video Laryngoscope

User Manual




CE

Contec Medical Systems Co.,Ltd.

## Explanation

Thank you for purchasing CMS-GS1 Video Laryngoscope.

Before using the product, please read the User Manual carefully. After reading, please keep it properly so that you can refer to it at any time when you need it.

This manual is suitable for reading by licensed physicians, professionally trained medical staff, and equipment maintenance personnel.

## Statement

Our company reserves the right of final interpretation to this manual.

Only when all the following conditions are met, our company is responsible for the safety, reliability and performance of the product:

1) Use it according to this manual;
2) Disassembly, replacement, testing, improvement and maintenance must be carried out by professional service personnel of the company;
3) All maintenance parts involved in replacement, supporting accessories and consumables are provided by our company;
4) The relevant electrical equipment meets the requirements of national standards and this manual.

## Note

This manual introduces the use, function and operation of the product in detail. Before using this product, please read and understand the contents of this manual carefully to ensure the correct use of this product, the safety of users and operators.

This manual introduces the product according to the most complete configuration, so some of the contents may not apply to the product you purchased. If you have any questions, please contact our company.

All illustrations provided in this manual are for reference only. The settings or data in the illustrations may not be exactly the same as the actual display you see on the product.

## Version

Under the premise of complying with relevant laws and regulations, this manual will be revised in a timely manner due to product improvements, regulatory updates or perfect descriptions. All revision records will be reflected in the new version of the description without prior notice.

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# CHAPTER 1 SAFETY

## 1.1 Safety information

This chapter lists the basic safety information that users should pay attention to and obey when using this product. The same, similar or other safety information related to specific operations will appear in each chapter.

### Warning

- This product is only allowed to be used by medical practitioners and professionally trained medical staff.
- Before using this product, the user should check and ensure that it can work normally and safely. If it is found to function abnormally, please stop using it and contact the after-sales unit, otherwise it may cause safety hazards.
- Do not modify this product without authorization of the manufacturer.
- Maintenance and replacement of all components should be completed by manufacturer. Any action about maintenance or replacement from operator and organization are not allowed. The operator just need make sure that the product is cleaned and disinfected before each use.
- The power adapter only configured by our company can be used to charge the host, otherwise the display may be damaged.
- Don't position the AC adapter plug to make it difficult to operate the disconnection, as it may cause unacceptable risk.
- If the fuse of the power adapter is damaged, please replace it together with the power adapter. The power adapter only authorized by our company can be replaced.
- In the process of charging the display with the power adapter, clinical operation is strictly prohibited. Please power off during charging.
- The user should install and use it according to the electromagnetic compatibility information provided in the accompanying documents.
- Portable and mobile RF communication equipment may affect the performance of this product. Avoid strong electromagnetic interference when using it, such as close to mobile phones, microwave ovens, etc.
- See the attachment for the guidelines and manufacturer's declaration.
- The signal output and input parts can only be connected to specified equipment.
- The adapter complies with the requirements of IEC60601-1: 2005+A1: 2012.
- Connect the host to the Laryngoscope blade, and the module has its own light source after it is turned on. When working near the upper limit of the operating temperature range specified by this product, the surface temperature of the single-use laryngoscope blade may exceed 41°C. Long-term direct contact of patient tissues with surfaces above 41°C may cause damage. Therefore, when using near the upper limit of the operating temperature range, the patient contact time should be as short as possible.
- Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

## 1.2 Explanation of marks or symbol

| | |
|---|---|
|  | Class II equipment |
|  | Type BF applied part |
|  | Caution, consult accompanying documents (this manual) |
|  | Recycling garbage |
|  | Manufacturer |
|  | Date of manufacture |
|  | Refer to instruction manual / booklet |
|  | This way up |
|  | Fragile, handle with care |
|  | Keep dry |
|  | Stack N layers |

| | |
|---|---|
|  | Atmospheric pressure limitation |
|  | Humidity limitation |
|  | Temperature limitation |
|  | Recyclable |
| SN | Serial number |
|  | Photo |
|  | Video |
|  | Menu |
|  | Photo/video |
|  | Medical record |
|  | Settings |
|  | Return |
| MD | Indicates the item is a medical device. |
| CE | This item is compliant with REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2017 on medical devices. |
| UDI | Unique Device Identification. |
| EU REP | Authorized European Representative Address. |
| REF | Product code |
|  | Imported by |

# CHAPTER 2 OVERVIEW

## 2.1 Scope of application

**2.1.1 Intended use**

It is used to expose the glottis by provoking the epiglottis of adult/child, guide the medical staff to accurately conduct airway intubation for anaesthesia or emergency use, and for intraoral diagnosis and treatment.

**2.1.2 Expected application environment**

Including but not limited to: hospital operating room, emergency room, intensive care unit and other departments.

**2.1.3 Patient population**

Adult and child

**2.1.4 Contraindications**

The contraindications of this product are equivalent to the contraindications of clinical tracheal intubation.

## 2.2 Operating principle

The device is composed of a lens, a lens handle and a liquid crystal visual window. The intubation technology is adopted. The elbow (at the front end of the handle) installed Laryngoscope blade is inserted into the patient's throat, and the image information is obtained through the camera. The structure of the throat and glottis can be displayed on the LCD intuitively and clearly.

## 2.3 Function description

This product includes the following main functions:

1) Photographing, video recording, browsing, playback, time setting and medical record functions;
2) Connect the power adapter to charge the display;
3) Connect the computer to realize the export operation of photos and video files.

## 2.4 Structure and composition

This product is mainly composed of a host unit, a laryngoscope blade, a power adapter and a data cable.

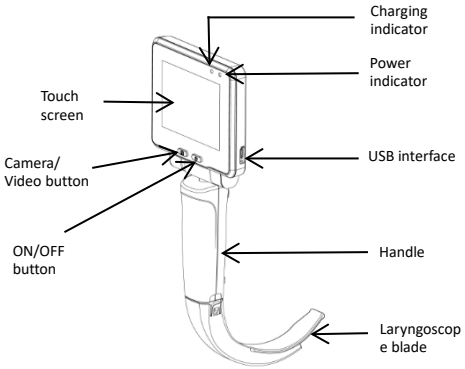



**Figure 2.1**

## 2.5 Model description

| Model / specification | Description | Standard / optional configuration |
|---|---|---|
| CMS-GS1 host unit | 3.5" touch screen + handle | Standard |
| G4 Laryngoscope blade | Adult, large | Standard |
| G3 Laryngoscope blade | Adult | Standard |
| G2 Laryngoscope blade | Child | Standard |
| Power adapter | Output 5 V 1 A | Standard |
| USB cable | *USB* | Standard |

## 2.6 Device connection diagram

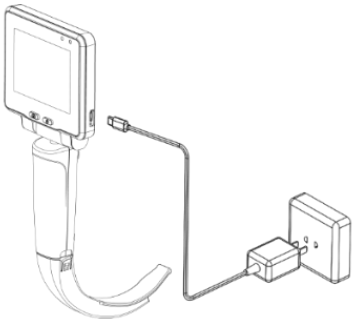


**Figure 2.2**

**CMS-GS1 host unit + laryngoscope blade (G4, G3, G2) + power adapter + USB *cable***

# CHAPTER 3 OVERVIEW OF COMPONENTS

This chapter introduces the main components, methods of use and cleaning and disinfection of the product.

## 3.1 Host unit

The host unit consists of the handle and the display. The handle connects the display to the laryngoscope blade, providing compatibility, secure attachment, portability, safety, durability, and ease of disinfection.

1. The display includes the following functions:

1) ON/OFF button

Press the "ON/OFF" button to power on the device; the power indicator will illuminate green, and it will automatically enter preview mode. While in the "ON" state, pressing the button again will bring up a shutdown prompt. Select "Yes" to power off, and the indicator will go dark.

2) Photo/video

In preview mode, click the camera icon or press “Camera/Video” button to realize the camera function, and the photos will be automatically saved according to date and time.

In preview mode,long press the button for two seconds and release the button to recording.Red recording appears in the lower left corner of the screen like the icon ,show the recording time ,click the “photo”button again,the recording is over .Achieve video recording function,video will be based on data and time are saved automatically or click the video icon to start recording .The red video icon appears in the lower left corner of the screen click the video icon again to stop recording .The video will be automatically saved according to the data and time.

3) Main menu

In preview mode, tap the menu icon to access the main menu, which includes options for photo/video, medical record, settings, and return, as illustrated in Figure 3.1.

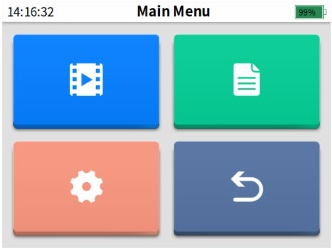



**Figure 3.1 Schematic diagram of main menu**

4) Photo / video

In the main menu, click the photo/video icon to enter the photo/video menu to browse and review photo/video files. Files are organized in folders by year and month, making them easy to locate as needed.

Long-press a photo or video file for 3 seconds to bring up a delete prompt; select "Yes" to delete the file.

5) Medical record

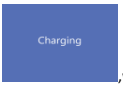
In the main menu, click the medical record icon to enter the medical record menu. The user can edit and save the patient ID. Photos or videos

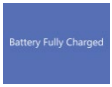
captured will be associated with the patient ID, enabling easy identification of images and videos along with the corresponding patient details..

6) System settings

In the main menu, click the settings icon to enter the system settings menu, where user can configure language, brightness, volume, time, and view system information.

7) Charging

When the battery power of the display is low, it should be charged in time. Connect the display to the power adapter, and the power adapter to the AC mains. The power indicator of the display turns blue,the display screen automatically lights up for 5 seconds with a charging prompt animation,indicating that the battery has started charging. It indicates that the battery has been fully charged when the power indicator turns green. The user can turn on the device to check whether the battery is fully charged according to the status of the battery icon, so as to prevent the battery from not being charged due to abnormal conditions. Charging operation is not supported when the device is turned on,if charging is performed while the device is running,the display screen will show that the battery is not full 

,when fully charged,the green light will turn on and the display screen will show. 


8) Data export

Connect the display and the computer through the USB cable to export photo and video files.

## 3.2 Laryngoscope blade

The applied part of this product is the laryngoscope blade. The handle can adapt to laryngoscope blades, the laryngoscope blade has different models and specifications for the operator to choose.

The parameters of the laryngoscope blades:

| Model of Laryngoscope blade | G2 | G3 | G4 |
|---|---|---|---|
| Expiry date | Two years | | |
| Use time | Repeated use of laryngoscope blade: use 10 times repeatedly | | |

**Laryngoscope blade**

The size of the blade is shown in the table below：

| Model | Blade Length(±1mm) | Blade Width (±0.5mm) | Blade Thickness (±0.5mm) | Blade Height(±1mm) | Working length(±1mm) |
|---|---|---|---|---|---|
| G2 | 128.3mm | 20.6mm | 24.6mm | 49.3mm | 132mm |
| G3 | 131.4mm | 21.4mm | 24.6mm | 54.3mm | 144mm |
| G4 | 138.2mm | 23.4mm | 24.6mm | 58.2mm | 156mm |

## 3.3 Instructions

Before installing and operating this product, carefully inspect its appearance for any irregularities. Verify that there are no rough surfaces, sharp edges, or protrusions on the insertion part of the laryngoscope blade that could pose safety risks. If any issues are detected, promptly contact the dealer or our company.

Prior to use, the operator should select a suitable laryngoscope blade according to the patient's requirements. The G4 and G3 blades are designed for adults, while the G2 blade is intended for pediatric patients..

To prepare the device: Remove the main unit and the laryngoscope blade from the packaging. Position the laryngoscope blade's open end onto the curved rod of the handle's insertion part, and push the blade until it securely attaches to the handle, achieving a fixed state. Once installation is complete, power on the display to ensure the image from the handle is transmitted to the main unit, thus concluding the preparation process.

**Warning**

**Before each use or after a change of viewing modes / settings, the operator should check to ensure the view observed through this product can provide a real-time image (rather than a stored one) and has the correct image orientation.**

The patient takes the supine position, the operator opens the patient's mouth with his right hand, and inserts the laryngoscope blade into the patient's mouth in the middle of the tongue with the left hand handle. Slowly slide the laryngoscope blade along the normal mouth and pharynx on the surface of the tongue into the pharynx. At this time, the base of the tongue, palatine and epiglottis can be seen in sequence on the display. Place the front end of the laryngoscope blade in the epiglottic valley and gently lift the laryngoscope to expose the glottis on the display; if the glottis is not well exposed, it is recommended to lift the mandible.

After the glottis is clearly exposed, insert a tracheal tube with a cannula core and a front end shaped approximately 60° into the patient's mouth from the right side of the laryngoscope blade; once the front end of the tracheal tube enters the field of view of the front end of the laryngoscope blade, the display clearly shows the relationship between the front end of the tracheal tube and the glottis. Align the front end of the tracheal tube with the glottis and slightly enter the subglottic area, remove the insert tube, and the operator will continue to push the tracheal tube downward under the monitor. After the catheter is inserted to a proper depth (the cuff enters about 1cm below the glottis), the operator fixes the tracheal tube with his right hand and removes the laryngoscope blade from the oral cavity with his left hand.

**Warning**

**If any failure occurs during the operation, please stop operating immediately and exit slowly.**

After using this product, turn off the display. One hand holds the handle and the other hand pushes the laryngoscope blade buckle outward to separate the handle and the laryngoscope blade. Store the host and laryngoscope blade in the packing box after disinfection.

### 3.4 Cleaning and disinfection

1. This product must be cleaned and disinfected after each use.
2. Use a gauze dipped in 75% medical alcohol to wipe the surface of the host and handle twice for 3 minutes.
3. The product should be cleaned and disinfected every week. The maintenance process is consistent with the description of cleaning and disinfection after use.
4. It is strictly prohibited to use boiling method and high pressure steam method for disinfection.

## CHAPTER 4 OTHER

### 4.1 Storage and transport

1) This product should be stored in a well-ventilated room with no harmful gas, no external biological damage.
2) This product should be stored in a dry, dust-free place, and avoid high temperature and chemical corrosion.
3) The product is a sealed device, not a water-proof one, and no liquid should enter the body.
4) The user should properly place the product to prevent it from falling from a height, subject to strong vibration or impact.
5) The product should be kept clean and pollution-free during transport, and avoid strong vibration or impact.
6) The product may be contaminated by microorganisms during transport and storage. If the packaging is damaged or the product is not used for a long time, it should be cleaned and disinfected in accordance with the methods recommended by the manufacturer before use.

### 4.2 Inspection

Preventive inspections should be carried out on this product every week. The inspection items include:

1) Operations such as photos, videos, browsing and review;
2) The battery power that is displayed in the form of figures, when the battery power is less than 10 %, the battery icon turns red, then it should be charged in time;
3) System time, if the error exceeds 1 minute, please reset the system time.

### 4.3 Battery

The display is equipped with a built-in, non-removable Li-polymer battery. To preserve battery lifespan, power off the device when not in use. If the battery charge is low, please recharge it using the supplied power adapter only; using any unauthorized adapter is strictly prohibited. For prolonged storage, fully charge the battery before storing and recharge it once a month to extend battery life.

The built-in battery is non-replaceable and should only be removed when the device is ready for disposal. Do not incinerate or discard used batteries indiscriminately; please recycle them through a professional environmental protection agency.

**Warning**

Incorrect replacement of the lithium battery will result in an unacceptable RISK.

The replacement of lithium batteries by inadequately trained personnel could result in a hazardous situation.

### 4.4 Scrapped

In order to avoid contamination or infection of others, the environment or other equipment, before discarding this product, please disinfect and purify it in accordance with relevant national regulations, or hand it over to a professional environmental protection department for recycling. For the blade, please follow the local hospital waste disposal regulations.

## CHAPTER 5 AFTER-SALES SERVICE

Free warranty for this product is one year after purchase. The warranty period starts from the installation date filled in the "Product Warranty Card". The "Product Warranty Card" is the only certificate for calculating the warranty period. In order to protect your interests, please fill in and save the "Product Warranty Card" carefully and give the copy to the installer.

The damage caused by the following conditions is not covered by the free warranty.

a. Failure caused by improper use, unauthorized modification or maintenance.
b. Machine collision or damage caused by improper operation during the handling after purchase.
c. Fault and damage caused by fire, salt damage, toxic gas, earthquake, wind disaster, flood, abnormal voltage and other natural causes.

In the event of damage or failure in the above cases, the company can provide repair, but a certain fee will be charged based on the repair cost.

Product name: Video Laryngoscope

Specification/Model: CMS-GS1

Date of manufacture: see the label

Life of this product: 10 years from the date of production. Laryngoscope blade: valid for 2 years.

# CHAPTER 6 TROUBLESHOOTING

This chapter provides guidance to help users diagnose and resolve issues that may arise during surgery. The following steps outline potential operational problems, their possible causes, and recommended solutions.

Note: If problems persist or are not addressed in this chapter, discontinue use of the product and contact the manufacturer for consultation and servicing.

## 6.1 It can not be turned on

| Cause | Solution |
|---|---|
| Low battery | Charge the battery |
| This product is charging with the adapter. | It cannot be used during charging, please unplug the charger. |

## 6.2 No image on the display

| Cause | Solution |
|---|---|
| Communication problem | Long press “ON/OFF” button to restart this product. |
| Damaged display or handle | Replace a new product |

## 6.3 Key function or display menu key function abnormality

| Cause | Solution |
|---|---|
| Video Laryngoscope | Long press “ON/OFF” button to restart this product. |
| This product is damaged. | Replace a new product |

# CHAPTER 7 PRODUCT PERFORMANCE

## 7.1 Display

| Parameter | Specification |
|---|---|
| Rotation angle | Front and back ≥ 120°, left and right ≥ 270° |
| Software function | Including photos, videos, browsing, playback, time setting and medical records, etc. |
| Data interface | Type-C |

## 7.2 Handle

| Parameter | Specification |
|---|---|
| Working distance | 30-80mm |
| Spatial resolution | ≥ 4.49 lp/mm |
| Visual angle | 70°±15% |
| Light source illuminance | ≥ 2500 LUX |
| Light source color temperature | ≥ 5000 K |
| Color reproduction level | ≥ 6 level (ie 6 points) |
| Image distortion | No obvious geometric distortion |

| | |
|---|---|
| Host Dimensions and Weight | 220g |
| Screen Size/Resolution | 3.5inch /640x480 |
| Battery Capacity | 1400mAh |
| Charging Time | ≤2h |
| Usage Time | ≤3h |
| Saved Image Format/Resolution | PNG /640*480 |
| Saved Video Format/Resolution | AVI /640*480 |
| Video Encoding Forma | MJPEG |
| Storage | 8G（Extensibility） |

# CHAPTER 8 PRODUCT SPECIFICATION

## 8.1 Safety specification

| Parameter | Specification |
|---|---|
| Type of protection against electric shock | Class II equipment, with internal electrical power source |
| Degree of protection against electric shock | Type BF applied part |
| Degree of protection against ingress of liquid | IPX2 |
| Degree of safety when used under flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide | It cannot be used with flammable anesthetic gas mixed with air, oxygen or nitrous oxide. |
| Operating mode | Continuous operation |

## 8.2 Environmental specification

| Parameter | | Specification |
|---|---|---|
| Working environment | Temperature | -10 ℃ ~ 40 ℃ |
| | Humidity | ≤ 80 %, non-condensing |
| | Atmospheric pressure | 70 kPa ~ 106 kPa |
| | Altitude | ≤3000m |
| Storage and transport environment | Temperature | - 20 ℃ ~ 55 ℃ |
| | Humidity | ≤ 93 %, non-condensing |
| | Atmospheric pressure | 50 kPa ~ 106 kPa |

## 8.3 Power specification

| Parameter | | | Specification |
|---|---|---|---|
| Display | Network power | Input voltage | AC100V —240 V |
| | | Input frequency | 50Hz/60 Hz |
| | | Input power | 100-240V~ 50/60Hz 0.15A |
| | External input | Input voltage | DC5 V |
| | | Input current | 1 A |
| | Internal power supply | Type | Li-polymer battery |
| | | Rated voltage | DC3.7V |
| | | Upper limit voltage | DC4.2V |

## 8.4 EMC specification

**Notice**

- This product complies with the relevant requirements of IEC60601-1-2: 2014 Electromagnetic compatibility.
- The user should install and use it according to the electromagnetic compatibility information provided by the accompanying documents.
- Portable and portable RF communications equipment may affect the performance of this product. Avoid strong electromagnetic interference when using it, such as close to mobile phones, microwave ovens, etc.
- See the attachment for the guidelines and manufacturer's declaration.

**Notice**

- Use of this product adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this product and the other equipment should be observed to verify that they are operating normally.
- Class A equipment is intended to be used in an industrial environment. Due to conduction disturbance and radiation disturbance of this product, it may be difficult to ensure electromagnetic compatibility in other environments.
- Use of accessories and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of this product as replacement parts for internal components, may results in increased emissions or decreased immunity of this product.

| No. | Name | Length of cable (m) | Whether to shield |
|---|---|---|---|
| 1 | Power adapter output cable | 1.0m | Yes |

**Table 1**

| **Guidance and manufacturer's declaration-electromagnetic emission** | | |
|---|---|---|
| The Video Laryngoscope is intended for use in the electromagnetic environment specified below. The purchaser or the user should assure that it is used in such an environment. | | |
| **Emission test** | **Compliance** | **Electromagnetic environment-guidance** |
| RF emissions<br>CISPR 11 | Group 1 | The Video Laryngoscope uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. |
| RF emissions<br>CISPR 11 | Class A | The Video Laryngoscope is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes. |
| Harmonic emissions<br>IEC 61000-3-2 | Not applicable | |
| Voltage fluctuations/<br>flicker emission<br>IEC 61000-3-3 | Not applicable | |

**Table 2**

| **Guidance and manufacturer's declaration-electromagnetic immunity** | | | |
|---|---|---|---|
| The Video Laryngoscope is intended for use in the electromagnetic environment specified below. The purchaser or the user should assure that it is used in such an environment. | | | |
| **Immunity test** | **IEC60601 test level** | **Compliance level** | **Electromagnetic environment-guidance** |
| Electrostatic discharge (ESD) | ±6 kV contact | ±6 kV contact | Floors should be wood, concrete or ceramic |

| | | | |
|---|---|---|---|
| IEC 61000-4-2 | ±8 kV air | ±8 kV air | tile. If floor are covered with synthetic material, the relative humidity should be at least 30 %. |
| Electrical fast transient/burst<br>IEC 61000-4-4 | Not applicable | Not applicable | Mains power quality should be that of a typical commercial or hospital environment. |
| Surge<br>IEC 61000-4-5 | Not applicable | Not applicable | Mains power quality should be that of a typical commercial or hospital environment. |
| Voltage dips, short interruptions and voltage vatiations on power supply input lines<br>IEC 61000-4-11 | Not applicable | Not applicable | Mains power quality should be that of a typical commercial or hospital environment. If the user of the Video Laryngoscope requires continued operation during power mains interruptions, it is recommended that the Video Laryngoscope be powered from an uninterruptible power supply or battery. |
| Power frequency (50 Hz) magnetic field<br>IEC 61000-4-8 | 3 A/m | 3 A/m | Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment. |
| NOTE: UT is the a.c. mains voltage prior to application of the test level. | | | |

**Table 3**

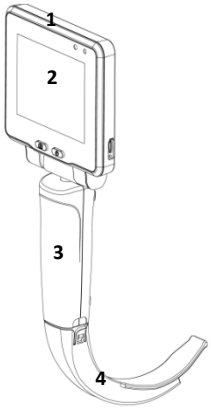
| **Guidance and manufacturer's declaration – electromagnetic immunity** | | | |
|---|---|---|---|
| The Video Laryngoscope is intended for use in the electromagnetic environment specified below. The purchaser or the user should assure that it is used in such an environment. | | | |
| **Immunity test** | **IEC 60601 test level** | **Compliance level** | **Electromagnetic environment - guidance** |
| Conducted RF<br>IEC61000-4-6<br><br>Radiated RF<br>IEC61000-4-3 | 3 V (effective value)<br>150 kHz ~ 80 MHz<br><br>3 V/m<br>80 MHz ~ 2.5 GHz | [ 3] V (effective value)<br><br>[ 3 ] V/m | Portable and mobile RF communication equipment should be used no closer to any part of the device including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.<br>Recommended separation distance:<br>$d = 1.2\sqrt{P}$<br>$d = 1.2\sqrt{P}$ 80 MHz～800 MHz<br>$d = 2.3\sqrt{P}$ 800 MHz～2.5GHz<br>Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).<br>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range b.<br>Interference may occur in the vicinity of equipment marked with the following symbol: |
| NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.<br>NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people. | | | |
| a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Video Laryngoscope is used exceeds the applicable RF compliance level above, the Video Laryngoscope should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Video Laryngoscope.<br>b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m. | | | |

**Table 4**

| Recommended separation distances between portable and mobile RF communications equipment and the Video Laryngoscope | |
|---|---|
| The device is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The purchaser or the user of the device can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the device as recommended below, according to the maximum output power of the communications equipment. | |
| Rated power of transmitter | Separation distance according to power of transmitter (m) |

| (W) | 150 kHz ~ 80 MHz<br>d = 1.2$\sqrt{P}$ | 80 MHz ~ 800MHz<br>d = 1.2$\sqrt{P}$ | 800 MHz ~ 2.5GHz<br>d =2.3$\sqrt{P}$ |
|---|---|---|---|
| 0.01 | 0.12 | 0.12 | 0.23 |
| 0.1 | 0.38 | 0.38 | 0.73 |
| 1 | 1.2 | 1.2 | 2.3 |
| 10 | 3.8 | 3.8 | 7.3 |
| 100 | 12 | 12 | 23 |
| For transmitters rated at a maximum output power not listed above, the recommended separation distanced in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.<br>NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.<br>NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people. | | | |

## ANNEX 1 ACCESSORIES LIST




| No. | Accessories | Quantity |
|---|---|---|
| 1 | Host | 1 |
| 2 | Power adapter | 1 |
| 3 | USB cable | 1 |
| 4 | User Manual | 1 |
| 5 | G2 Laryngoscope blade | 1 |
| 6 | G3 Laryngoscope blade | 1 |
| 7 | G4 Laryngoscope blade | 1 |

## ANNEX 2 MATERIAL TABLE OF VIDEO LARYNGOSCOPE

| No. | Component | Material |
|---|---|---|
| 1 | Display enclosure | ABS (acrylonitrile-butadiene-styrene) |
| 2 | Touch screen | Glass |
| 3 | Handle enclosure | ABS (acrylonitrile-butadiene-styrene) |
| 4 | Single- use laryngoscope blade | PC (polycarbonate) |

# CONTEC

**Contec Medical Systems Co., Ltd.**
Address:No.112 Qinhuang West Street, Economic & Technical Development Zone,
Qinhuangdao, Hebei Province, PEOPLE'S REPUBLIC OF CHINA
Tel: 0086-335-8015430
Fax: 0086-335-8015588
Technical support:0086-335-8015431
E-mail: cms@contecmed.com.cn
contec88@gmail.com
Website: http://www.contecmed.com

EC REP Prolinx GmbH
Brehmstr. 56,40239 Duesseldorf
Germany
Tel: 0049 211 3105 4698
E-mail: med@eulinx.eu

***Disposal:*** *The product must not be disposed of along with other domestic waste. The users must dispose of this equipment by bringing it to a specific recycling point for electric and electronic equipment.*

**GIMA WARRANTY TERMS**

The Gima 12-month standard B2B warranty applies