



GIMA

PROFESSIONAL MEDICAL PRODUCTS

TIRALATTE ELETTRICO SINGOLO SINGLE ELECTRIC BREAST PUMP TIRE-LAIT ÉLECTRIQUE SIMPLE SACALECHES ELÉCTRICO INDIVIDUAL BOMBA TIRA-LEITE ELÉTRICA ÚNICA EINZELNE ELEKTRISCHE MUTTERMILCHPUMPE

REF 41701/LD - 202



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Product Description

Thank you for purchase and use LD-202 electric breast pump. The electric breast pump is electric powered suction device used to express and collect breast milk from lactating mother.

This product follows a baby's natural nursing rhythm. The unique design can help you to express breast milk quickly and comfortably. Please read this manual carefully before using stimulation and expression mode. Press the power button, the breast pump automatically starts up in stimulation mode. This is a single use product that should not be shared between moms.

Two mode technology of Stimulation and Expression

This product has stimulation and expression mode. Press the power button, the breast pump automatically starts up in stimulation mode.

If no action is taken during stimulation mode, after two minutes, the pump will automatically change to the expression mode.

Stimulation mode

Fast sucking/pumping rhythm to stimulate the milk ejection reflex and to start the milk flowing.

Expression mode

Slower sucking/pumping rhythm for gentle and efficient milk removal as quickly as possible.

Intended use

1. This breast pump is for household use only. As the pump is compact and discrete to use, you can take it with you anywhere, allowing you to express milk at your own convenience and maintain your milk supply.
2. If your breasts are engorged (painful or swollen), you can express a small amount of milk before or between feeds to ease the pain and to help your baby latch on more easily.
3. If you are separated from your baby and wish to continue to breastfeed when you are reunited, you should express your milk regularly to stimulate your milk supply.

Safety Notice



Caution

1. Use the product only for its intended use as described in this manual.
2. Please check that all the parts of breast pump is in before using.
3. Do not use attachments not recommended by the manufacturer.
4. Do not attempt to remove the breastshield from your breast while pumping. Turn the breastpump off and break the seal between your breast and breast- shield with your finger, then remove breastshield from your breast.
5. Never use the breast pump while you are pregnant, as pumping can induce labor.
6. Inspect all appropriate pump components before each use.
7. Clean and sanitize all parts that come in contact with your breast and breastmilk prior to first use.
8. Wash all parts that come in contact with your breast and breastmilk after every use.
9. For hygienic reasons, this product is intended for use by a single user.
10. Do not allow children or pets to play with the motor unit, the adapter or accessories.
11. Remove the batteries if they are not going to be used for an extended period of time.
12. Although the breast pump is compliant with applicable EMC directives, it may still be susceptible to excessive emissions and/or may interfere with other equipment. A consequence can be that the breast pump turns off or goes into error mode. To prevent interference, keep other electric equipment away from the breast pump during expressing.
13. Do not use the device in the MR environment.



Power adapter use attention points

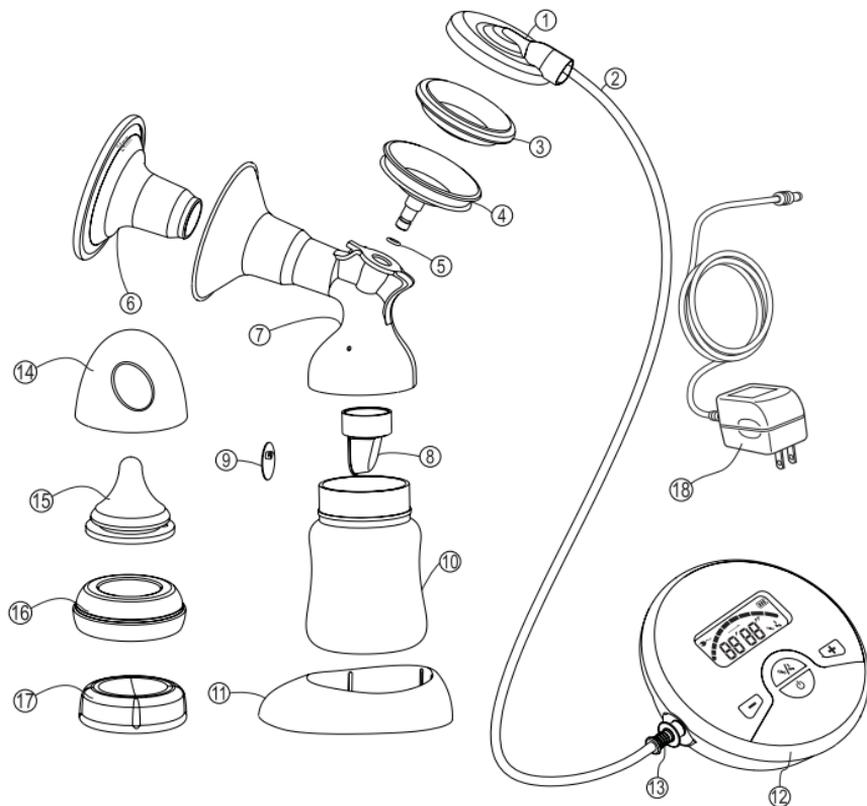
Use only the power adapter that comes with the product.

Make sure the voltage of the power adapter is compatible with the power source.

This product should never be left unattended when plugged into an electrical outlet.

Always unplug the breast pump immediately after use.

Unit Illustration



1. 1 × Seal cover

2. 1 × Connection tube

3. 1 × Elastic diaphragm

4. 1 × Seal seat

5. 4 × Seal hoops

6. 1 × Breastshield

7. 1 × Pump body

8. 2 × Valves

9. 4 × White membranes

10. 1 × Breastmilk bottles

11. 1 × Bottle stand

12. 1 × Motor unit

13. 2 × Plugs

14. 1 × Dome cap

15. 1 × Nipple

16. 1 × Screw ring

17. 2 × Lids

18. 1 × Power Adaptor
(recommended,
not provided)

Installation Instructions

Product Assembly

Note: Make sure you have cleaned and optionally disinfected the appropriate parts of the breast pump.

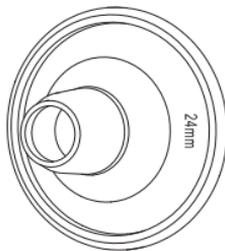
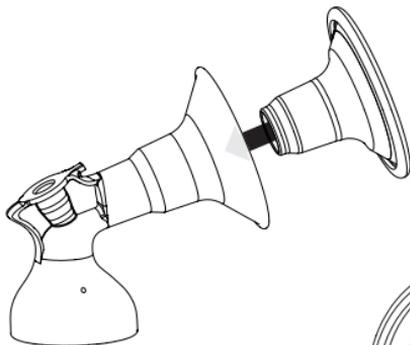
After cleaning, follow these steps to assemble your collection units:

Step 1:

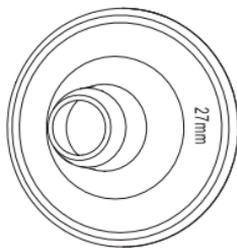
Insert the breastshield into the funnel-shaped section of the pump body.

Two breastshield sizes are available: 24mm and 27mm.

You can find the size on the breastshield itself.



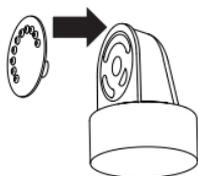
24mm



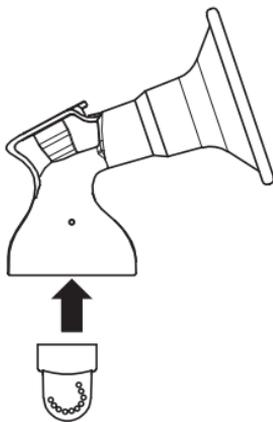
27mm

Step 2:

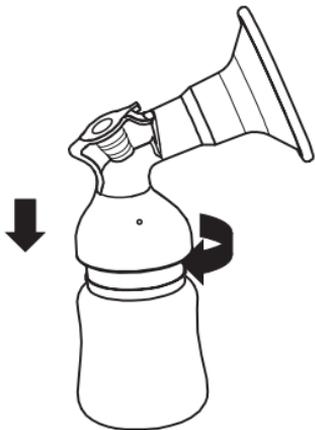
Please install the white membrane on valve smoothly. Make sure the white membrane won't curl up.

**Step 3:**

Insert the valve into the pump body from underneath. Push the valve in as far as possible.

**Step 4:**

Screw the pump body clockwise onto the bottle until it is securely fixed.



Step 5:

Put the Elastic diaphragm into the seal seat,make sure the diaphragm edge and seal seat edge close fitting. Then seal by the seal cover make it as a sealed isolation assembly. If there is no "O" - shaped sealing ring on the plug at the bottom of the sealing seat ,please set the seal hoop into the groove in the plug position.

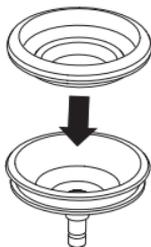


Figure 5-1



Figure 5-2

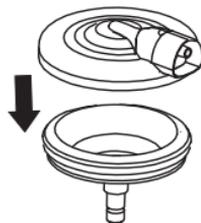


Figure 5-3



Figure 5-4

Step 6:

Make one side of connection tube without plug insert into seal cover and make another side of connection tube insert into motor unit. Then insert the whole isolation assembly into connector.



Figure 6-1

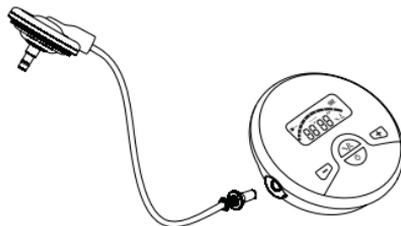


Figure 6-2

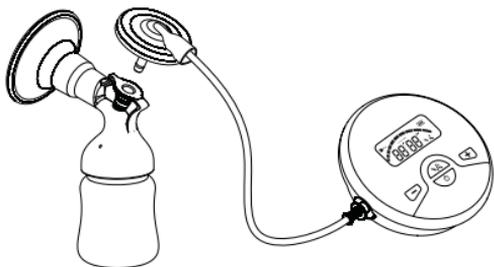


Figure 6-3

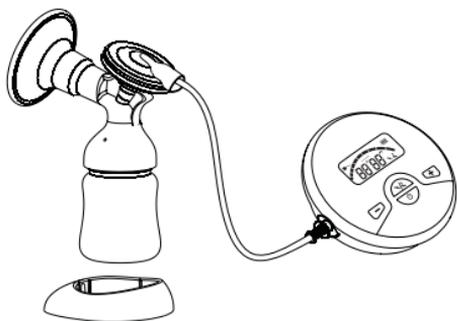
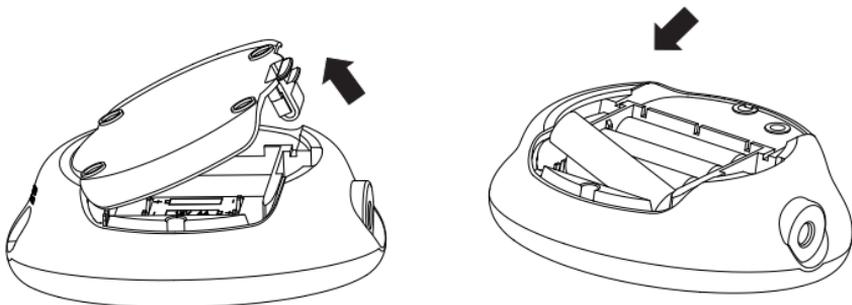


Figure 6-4

Battery Installation

This product can use 4 AA alkaline batteries as power supply. Please install the battery according to the direction of the battery polarity shown at the bottom of the unit.





Do not reverse polarity.

Do not mix old and new batteries.

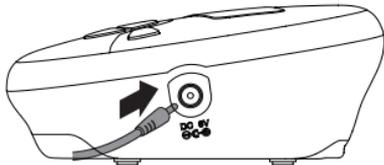
Do not mix alkaline, standard(carbon-zinc) or rechargeable batteries.

Each set of batteries will provide approximately 1.5 hours of pumping time. For battery operation ,the motor unit LCD will display the battery symbol .

If the battery symbol flashes, which means the battery remaining is not enough for breast bump normal work, please replace the batteries.

The Power Adapter

Although the design of the product can be used in the battery inside the unit power adapter, meanwhile, we recommend that remove the battery before use the power adapter. If you need to use power adapter when you using battery, please shut down the breast bump then access external power supply and turn on the product. When the external power supply is used, the battery symbol will not show on the screen. At the same time the external power symbol  will light up.

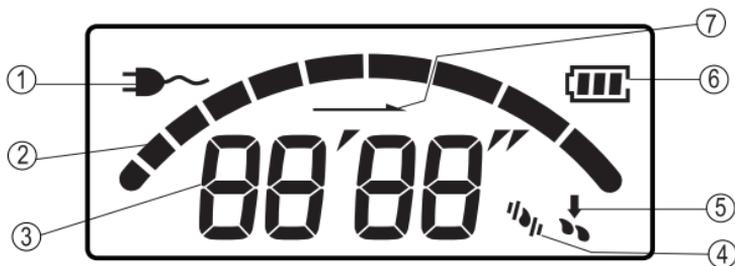


Please don't insert or pull out the power adapter with wet hand.

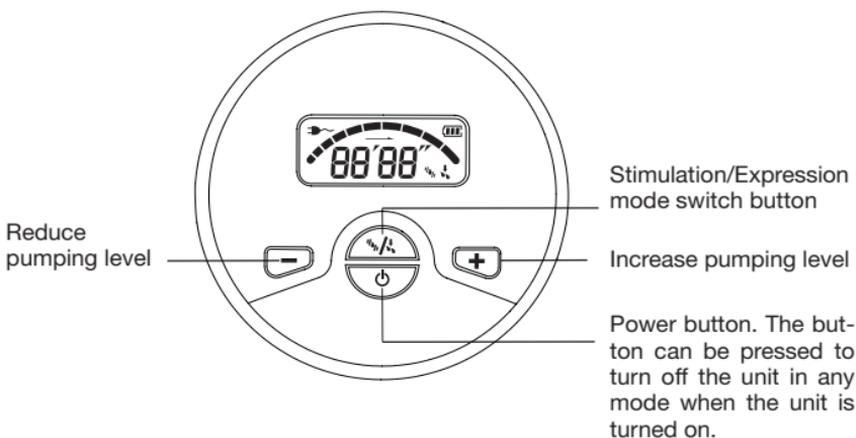
Please don't plug the power adapter with the power supply for a long time.

Using the breast bump

Display information and button function



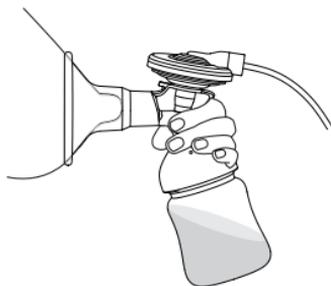
1. The external power supply indicator
2. Pumping level indicator
3. Continuity work time, "minute" in front, "second" behind
4. Stimulation mode
5. Expression mode
6. Battery indicator
7. Level increasing direction



Pumping

Relax in a comfortable chair (you may wish to use cushions to support your back).

- Press the assembled pump body against your breast. Make sure that your nipple is centered. Hold the breastshield onto your breast with your thumb and index finger. Support your breast with the palm of your hand.



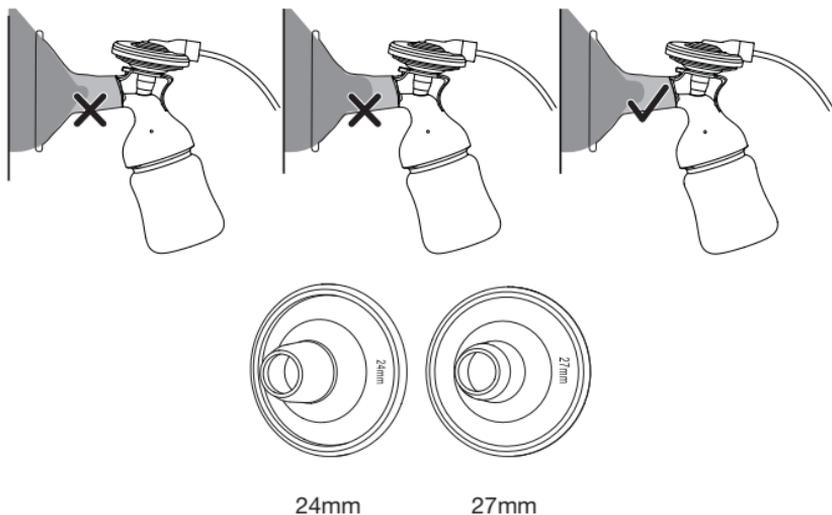
- Press the button,  the breast pump automatically starts up in stimulation mode as per preset level and the stimulation indicator lights up. If the breast pump used before without cut off power supply, the breast pump will express at last set suction level.
- Once your milk starts flowing, please press the “Stimulation/Expression” button to enter into expression mode. You can switch the stimulation mode and expression mode by press the “Stimulation/Expression” button as per your requirement. If no action is taken during stimulation mode, after two minutes, the pump will automatically change to the expression mode.
- Depending on your own personal comfort, you can press the “+” or “-” button to adjust the suction level. Long press the button can help you adjust the level quicker.
- Close the bottle with a lid after pumping. Turn off the breast pump.
Disassemble and clean the parts that contact breast and milk.



-  **Please keep the airway clear and unobstructed during sucking, prevent air path blocked. Use bottle holder to prevent the bottle from tipping over. Do not fill the bottle too full to or prevent overflowing and spillage. The unit can turn off the power itself about 30 minutes no operation.**

Size of Breastshield

Make sure that your nipple fits correctly in the breast shield. Not too tight, it is important that the nipple can move freely, while expressing breast milk. The breast shield should not be too large, because this can cause pain or less effective expression. Two breast shield sizes are available: 24mm and 27mm. There's one size breast shield come with the product.



 If there is any pain or discomfort during pumping, please consider to choose a larger or smaller size.

Cleaning

Caution

1. Clean and sanitize the parts below before using your pump for the first time.
2. Only use drinking-quality tap or bottled water for cleaning.
3. Take apart and wash all parts that come in contact with the breast and breastmilk immediately before and after use to avoid dry up of milk residues and to prevent growth of bacteria.
4. Please disassemble all parts which require clean to make sure cleaning thoroughly.
5. Please place parts on a clean environment to avoid being polluted.
6. Never put breastpump motor unit and AC adapter in water or a sterilizer, as you can cause permanent damage to the breastpump.

Cleaning before use

1. Take apart and wash/sanitize all parts that come in contact with the breast and breastmilk.
2. Put all separated parts into pot. Fill in the pot with enough drinking- quality tap or bottled water to cover all parts.
3. Bring the water to boil. Place parts in boiling water for 5 minutes.
4. Allow water to cool and gently remove the parts from the water.
Be careful and don't scald your skin.
5. Place the parts neatly on a clean paper towel or in a clean drying rack and allow them to air dry. Avoid using cloth towels to dry the parts because they can carry germs and bacteria that are harmful to your baby.

- Breastshiled
- Valves
- White membranes
- Nipple
- Breastmilk bottle and lid



Cleaning after use

1. Take apart and wash all parts that come in contact with the breast and breastmilk.
2. Rinse in cool water all separated parts that came in contact with breast and breastmilk in order to remove breastmilk residue.
3. Place the parts neatly on a clean paper towel or in a clean drying rack and allow them to air dry.

IMPORTANT

The flanges and milk storage containers can also be washed on upper rack of a standard, household dishwasher. DO NOT use solvents or abrasives. Allow to air dry on a clean surface. DO NOT put parts in Steam Bottle Sterilizers or Microwave Sterilizer Bags.

Trouble Shooting

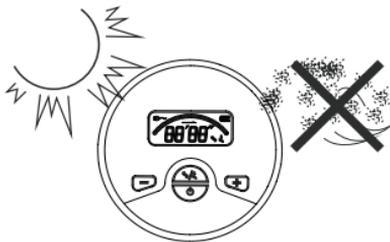
Abnormal phenomenon	Cause analysis	Solutions
Low or No Suction	Connection points is loose	Inspect all connection points to ensure attachment is secure
	The valve is chipped or cracked or there's holes or tears on membrane is	Replace valve and/or membrane prior to pumping
	Breastshield size is not fit	Replace a appropriate size breastshield
Shows "Err"	Power problems	Please replace batteries or power adapter.
Battery symbol flash	Voltage is too low	Please replace batteries

Maintenance

1. Avoid dropping, slamming, or throwing the unit.



2. Avoid extreme temperatures.
Do not expose unit directly under sunshine.



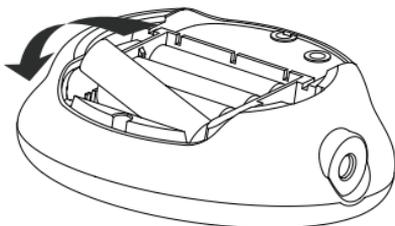
3. When cleaning the unit, use a soft fabric and lightly wipe with mild detergent.
Use a damp cloth to remove dirt and excess detergent.



4. Do not use petrol, thinners or similar solvents.



5. Remove batteries when not in operation for an extended period of time.



6. Do not disassemble product.



Specifications

Product Description	Electric Breast Pump	
Model	LD-202	
Intermittent Vacuum	Stimulate mode	Approx. -60~-130mmHg
	Expression mode	Approx. -60~-250mmHg
Vacuum Levels	Stimulate mode	10 Levels
	Expression mode	10 Levels
Cycles Per Minute	Stimulate mode	100 C.P.M.
	Expression mode	29~73 C.P.M.
Breastshield Sizes	24mm	
Power Source	4 AA batteries or Medical AC Adapter (DC6.0V, 1000mA) (recommended, not provided)	
Battery Life	Approximately 1.5 hours, different types of batteries may affect battery life	
Additional Function	Automatic Power-Off	
	Automatic storage of the last vacuum level settings	
Unit Weight	Approx. 265g (9.35oz) (excluding battery)	
Unit Dimensions	129 x 129 x 55mm (L x W x H)	
Operating Environment	Temperature	5°C~40°C (41°F~104°F)
	Humidity	15~93%RH
	Pressure	700hPa~1060hPa
Storage Environment	Temperature	-20°C~55°C (-4°F~131°F)
	Humidity	15~93%RH
Expected Service Life	Your appliance has been designed and developed with the greatest possible care and has an expected service life of 400 hours.	
Ingress Protection Rating	IP21	
Classification	Internal Powered Equipment, Type BF 	

Specifications are subject to change without notice.

This appliance conforms to the following standards:

EN 60601-1-11 Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment and complies with the requirements of

EN 60601-1-2 (EMC), IEC/EN60601-1 (Safety) standards. And the manufacturer is ISO 13485 certified.

Explanation of symbols

	Caution: read instructions (warnings) carefully		Authorized representative in the European community		Medical Device complies with Directive 93/42/EEC
	WEEE disposal		Keep away from sunlight		Serial number
	Product code		Lot number		Direct Current
	Manufacturer		Date of manufacture		Humidity limit
	Temperature limit		Follow instructions for use		Type BF applied part
IP21	Covering Protection rate				

Electromagnetic Compatibility Information

The device satisfies the EMC requirements of the international standard IEC 60601-1-2. The requirements are satisfied under the conditions described in the table below. The device is an electrical medical product and is subject to special precautionary measures with regard to EMC which must be published in the instructions for use. Portable and mobile HF communications equipment can affect the device. Use of the unit in conjunction with non-approved accessories can affect the device negatively and alter the electromagnetic compatibility. The device should not be used directly adjacent to or between other electrical equipment.

Table 1

Guidance and declaration of manufacturer-electromagnetic emissions		
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
Radiated emission CISPR 11	Group 1, class B.	The device uses RF energy only for its internal function. Therefore, its emissions are very low and are not likely to cause any interference in nearby electronic equipment.
Conducted emission CISPR 11	Group 1, class B.	The device 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 IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	

Table 2

Guidance and declaration of manufacturer-electromagnetic immunity (For home healthcare environment)			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment -guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	± 8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic transient/burst IEC 61000-4-4	± 2 kV , 100kHz, for AC power port	± 2 kV , 100kHz, for AC power port	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±0.5kV, ±1kV (differential mode)	±0.5kV, ±1kV (differential mode)	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	0% UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m; 50Hz or 60Hz	30 A/m; 50Hz or 60Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Table 3

Guidance and declaration of manufacturer-electromagnetic immunity (For home healthcare environment)			
The device is intended for use in the electromagnetic environment specified below. The customer or the user of the device should assure that it is used in such an environment.			
IMMUNITY test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3V for 0.15-80MHz; 6V in ISM and amateur radio bands be- tween 0.15-80MHz	3V for 0.15-80MHz; 6V in ISM and amateur radio bands be- tween 0.15-80MHz	Portable and mobile RF communications 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. Recommended separation distance $d = \left[\frac{3.5}{E^1} \right] \sqrt{P}$ 80 MHz to 800 MHz $d = \left[\frac{7}{E^1} \right] \sqrt{P}$ 800 MHz to 2.7 GHz 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 metres (m). 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. Interference may occur in the vicinity of equipment marked with the following symbol: 
	385MHz, 27V /m	385MHz, 27V /m	
	450MHz, 28V /m	450MHz, 28V /m	
	710MHz, 745MHz, 780MHz 9V/m	710MHz, 745 MHz, 780MHz 9V/m	
	810MHz, 870 MHz, 930MHz 28V/m	810MHz, 870 MHz, 930MHz 28V/m	
	1720MHz, 1845 MHz, 1970MHz 28V/m	1720MHz, 1845 MHz, 1970MHz 28V/m	
	2450MHz, 28V /m	2450MHz, 28V /m	
	5240MHz, 5500 MHz, 5785MHz 9V/m	5240MHz, 5500 MHz, 5785MHz 9V/m	

Table 4

Recommended separation distances between portable and mobile RF communications equipment and the device (For home healthcare environment)		
The device is intended for use in an electromagnetic environment in which radiated therefore disturbances are controlled. The customer 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 maximum output power of transmitter W	Separation distance according to frequency of transmitter m	
	80 MHz to 800 MHz $d = \left[\frac{3.5}{E^1} \right] \sqrt{P}$	800 MHz to 2.7 GHz $d = \left[\frac{7}{E^1} \right] \sqrt{P}$
0,01	0.12	0.23
0,1	0.38	0.73
1	1.2	2.3
10	3.8	7.3
100	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (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.

NOTE1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.



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.