

MICHAEL TODD[®]
BEAUTY



USER GUIDE

FDA
CLEARED

Lumos

Permanent Hair
Removal System

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1 Recommendation of Use

Please read the complete instruction manual before you use the IPL Hair Removal (Model: SL-B287). It will give you a better understanding of how the product works, and you'll be able to enjoy the best results.

1.1 Warnings

1. This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, unless they have been given supervision or instruction concerning use of the device by a person responsible for their safety.
2. Children should be supervised to ensure that they do not play with the device.
3. Always check the device before you use it. Do not use the device or adapter if it is damaged. Please use original parts to replace damaged parts.
4. Do not use the device if the UV filter of the light exit window and/ or attachment is broken.
5. Do not modify or cut off any part of the adapter or the cord, as this causes a hazardous situation.
6. Do not use any pencil or pen to mark the areas to be treated. This may cause burns on your skin.
7. If you experience discomfort or have a concern about its use, stop use immediately and contact your doctor.
8. Do not place the irradiation port near items that are easy to demagnetize, and do not use it when the vent is blocked.
9. Do not use this product in the following environments: near inflammable and explosive objects, ambient temperature over 40°C or below 0°C.
10. Do not use the equipment if you notice a change in operating system performance, the system is damaged, or any of its components are worn or frayed.
11. Do not use it on the head, ears, nipples, genitals or anus.
12. Do not use this product on areas of compromised skin integrity (e.g. burns, blisters, cuts, wounds, active skin disease or infection).
13. Do not subject the main unit and package to impact, such as dropping it onto the floor.
14. Do not use the device if it is damaged or its accessory, such as the Cord or plug, appears damaged. Please return it to your closest sales or service area for inspection and repair.
15. If the built-in fan does not run (you can't hear the buzzing sound) after turning on the power, please do not use it to avoid failures such as smoke and fire.
16. Do not put metal objects into the heat dissipation holes, there is a danger of electric shock.
17. Store the device in a ventilated and dry environment. Please do not use the device while taking a shower and keep it away from the place that is prone to contact with water.
18. Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
19. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the IPL Hair Removal device or system, including cables specified by the manufacturer. Degradation of the performance of this equipment could result.
20. Use of accessories, transducers and cables other than those specified or provided by the

Shenzhen Semlamp Intelligent Technology Co., Ltd of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

21. Magnetic and electric fields may interfere with the performance of the device or system. Make sure that all peripheral components operated in the vicinity of the device comply with the relevant EMC requirements. X-ray equipment, MRI devices, radio systems (cellular phones) and so forth, are possible sources of interference because they may emit higher levels of electromagnetic radiation. Verify the performance of the system before use.

1.2 Contraindications

1. Do not use the device if you are under the age of 18.
2. Do not use the device if you have the Fitzpatrick Skin in Type V and Type VI.
3. Do not use the device if you are golden/gules/grey/white hair.
4. Do not use this device if you are photosensitive, during menstruation, or keloid scarring.
5. Do not use this product for women during pregnancy, preparation or lactation.
6. Do not use the device if you have heart disease, hypertension, malignant tumor, infectious skin disease, burn skin disease and hypercoagulability disorders.
7. Do not use the device if you have skin problems such as psoriasis, eczema, herpes, wound or rash etc.
8. Patients with vascular diseases, such as varicose veins and vasodilation in the irradiation site.
9. Skin sunburned or burnt are not allowed to use until fully recovered.
10. Suppression of immune response diseases (including HIV infection, lupus erythematosus, porphyria, etc.) is prohibited.
11. This product is prohibited for those who have injected fillers and toxins recently.
12. People who use chemical hair removal within 30days, or who have used shin whitening products in a short time, or who have used vitamin A ingredients should use this product with caution.
13. Do not use If the skin treatment area has tattoos, dark brown or black spots (such as dark freckles, birthmarks, moles or warts).
14. Do not use the device if you have any active implants such as a pacemaker, neurostimulator, insulin pump etc.
15. Do not use the device if you take any of the medications below:
 - You are taking photosensitizing agents or medications.
 - Your skin is currently being treated with or has recently been treated in the past week with Alpha-Hydroxy Acids (AHAs), Beta- Hydroxy Acids (BHAs), topical isotretinoin and azelaic acid.
 - You have taken any form of isotretinoin Accutane or Roaccutane in the last six months
 - You have taken anticoagulation medications, including heavy use of aspirin in the last a week.

1.3 Adverse Reactions

1. This product has no side effects, but if you are sensitive to light, please stop using

immediately.

2. If you experience any discomfort, skin discoloration, skin damage, or any other concerns develop, stop using immediately and consult your physician.

1.4 Precautions

1. Do not look directly at the light source and wear goggles.
2. Do not block the heat dissipation holes, so as not to affect the use and the life of the device.
3. Before operation, you need to clean the operation part, and do not apply any cosmetics and skin care products, so as not to affect the effect of the device.
4. Do not use perfume, facial mask and cosmetics containing frosted beads after hair removal.
5. Do not apply antiperspirant immediately after irradiating the underarms.
6. Do not use the product on pets. Do not irradiate clothes, hair or other items.
7. Please avoid UV exposure within 24 hours after depilation. If necessary, please apply sun cream.
8. If you need plastic surgery after depilation (only the depilated area), please consult your doctor in detail.
9. It is recommended to use pure plant moisturizing and repairing products.
10. Do not use this product for a long time or repeatedly on the same surface of the skin. Please turn it off for 10 minutes after one-hour using.
11. If the casing of the equipment is damaged or the instrument accidentally enters the water, please send it back to the manufacturer for repair, and do not repair the equipment without authorization. If the product is fed with electricity, please unplug it before touching the instrument.
12. Do not disassemble the device by yourself.
13. If the operating environment temperature difference reaches more than 20 degrees (from a low-temperature environment to a high-temperature environment, or vice versa), please turn it off and wait for about 2 hours before using it again.
14. When the device fails to operate normally, please send the equipment and related accessories back to the manufacturer, and the professional maintenance personnel of our company will overhaul them.
15. Adapter, light exit window and the filter of the attachments can become hot after usage. Do not touch the adapter, inner part of the light exits window and the filter or the inner part of the attachments without having these cool down.
16. If you experience discomfort, reduce the light intensity setting and consult your doctor.

2 Intended Use & Indications for Use

The IPL Hair Removal is an over the-counter device intended for removal of unwanted body and/or facial hair.

3 Product Description

The IPL Hair Removal is a personal, light-based, hair reduction device intended to be sold over-the-counter directly to the end user. The device provides hair reduction using Intense

Pulsed Light (IPL) technology. It works below the skin's surface and does not involve any cutting or pulling, reducing hair growth with minimal pain. The device is only powered by the external power adapter and its IPL emission activation is by finger switch. The device mainly contains a Xenon lamp and a skin sensor to detect appropriate skin contact. If the device is not properly applied to the treatment area (in full contact with the skin), the device cannot emit the treatment light pulses. The device is for single-person use only.

For model SL-B287, they consist of IPL beauty device main body and power adapter (12V3A) two parts, and one non-removable lamp head (light-emitting treatment window) located in the main body which is the source of optical radiation, namely a Xenon flashlamp. In addition, the device is equipped with a manual shaver and sunglass.

The user can control the device effectively by the buttons on the main unit. There are 3 operation buttons: Power button (turning on/off the device, select light intensity level), Flash button (to start flashing) and Ice Cooling button (to select ice cooling mode and switch manual / auto flash mode).


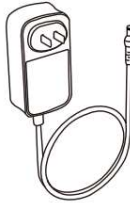


Specification

Specification	
Produce name	IPL Hair Removal
Model	SL-B287
Power source	Adapter: Input: AC100-240V~50/60Hz, 36W Output: DC12V 3A
Dimensions	174mm x 125mm x 82mm
Weight	310g
Wavelength	470-1200nm
Energy medium	Xenon Arc Flashlamp
Pulse duration	9-12 milliseconds
Energy density	2.2-5.3J/cm ²
Spot size (size of treatment window)	3.6 cm ²
Delivery device	Direct illumination to tissue
Pulsing control	Finger switch
Location for use	OTC
Safety and EMC	IEC 60601-1 IEC 60601-1-2 IEC 60601-1-11 IEC 60601-2-57 IEC 62471
Biocompatibility	ISO 10993-5 ISO 10993-10

Operating Environment	Temperature: 0~40℃ Humidity: <80%RH Atmospheric pressure: 800-1040hPa
Storage Environment	Temperature: -10~60℃ Humidity: <80%RH Atmospheric pressure: 800-1040hPa

3.1 Accessories List

Components and Accessories List for all package is as below.

Name	Quantity	Appearances	Function
IPL Hair Removal	1 pc		Main unit, use for removing the hair.
User Manual	1 pc	/	Instruct the user to operate the product correctly.
Adapter	1 pc		The adapter is used to power the device.
Goggles	1 pc	 Cleared in K221246.	Protect eyes.
Manual shaver	1 pc	 Cleared in K221246.	Remove the hair.

3.2 Main Device

3.3.1 Buttons



Figure 3-1. Main unit of model SL-B287

Item	Description	Function
①	Power button	<ul style="list-style-type: none"> ● Press to turn on the device. ● Long press power button to turn off the device. ● After turning on the device, short press the power button to select the intensity levels.
②	Ice cooling button	<ul style="list-style-type: none"> ● Short press the ice cooling button can enter to ice mode, and the display screen will show “❄️” icon. ● Long press the ice cooling button can switch the manual flash mode and auto flash mode. When selecting auto flash mode, the display screen will show “AUTO” icon. (The default startup is manual flash mode.)
③	Display screen	Display the output intensity, ice cool mode, current operating status of the device.
④	Flash button	<ul style="list-style-type: none"> ● When selecting the manual flash mode, press the manual flash button, the device can only flash once every time the manual flash button is pressed. ● When selecting the auto flash mode, press the flash button, the device automatically flashes at a certain frequency.
⑤	Power indicator light	Light up when the device is powering.
⑥	Power socket	Power socket, connecting adapter to provide power to the device.
⑦	Light-emitting	The light is emitted from the treatment window.

	treatment window	
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3.3.2 LED screen

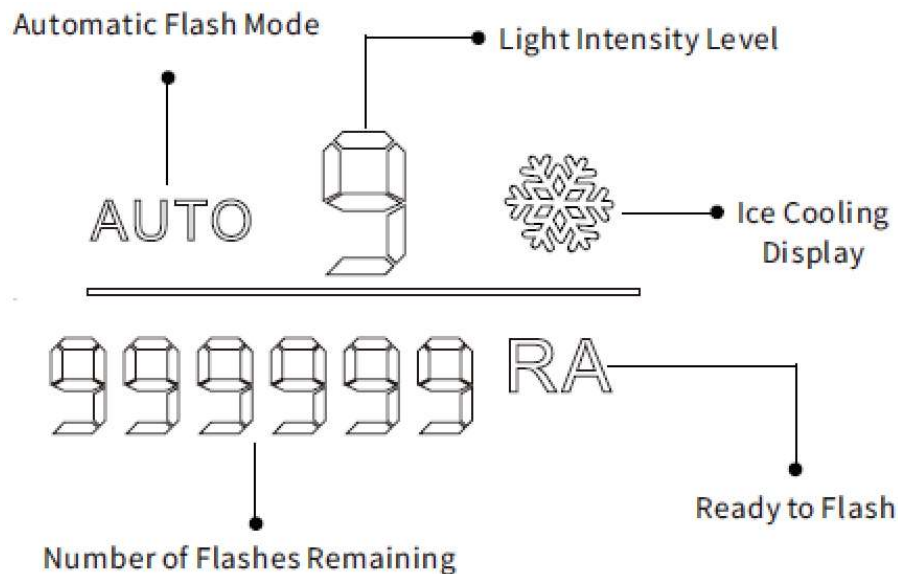


Figure 3-2. LED Screen

Explanation:

- Number of flashes remaining:
 - The number of flashes remaining will decrease accordingly with the number of uses.































































The initial value is 999999, and the display screen displays the "999999" icon.
- Automatic flash mode:
 - When the automatic flash mode is selected, there will be displayed "AUTO" icon on the display screen, otherwise it is the manual flash mode.
- Light intensity level:
 - The working mode have 9 levels, short press the power button to adjust the levels from 1st-9th, and the display screen will display the light intensity level accordingly.



For example, when the 9th level is selected, it will display the "9" icon.
- Ice cooling display:
 - When the device enters into the ice cooling model, there will be displayed "❄️" icon on the display screen.
- Ready to flash:
 - When the display screen shows the "RA" icon, it means the lamp head is in full contact with the skin and the device is ready to flash; if the "RA" icon is not displayed, it means the contact is poor, please adjust the contact surface of the skin.

4 Using Instructions

4.1 Check for these situations before use

- 1) Please distinguish your skin & hair types according to the table below before use, it will provide more effective instructions for your choice.

		HAIR COLOR								
										
SKIN TONE										
										
										
										
										
										

 = SUITABLE
 = NOT SUITABLE

4.2 Skin sensitivity test

Before your first treatment on each new body area, we recommend testing your skin for potential reactions on a small area. Wait 24 hours following the test, to ensure your skin is suitable for IPL treatment.

4.3 Energy selection

Please always start with the lowest light intensity level and choose one of the nine light intensities in accordance with your comfort level. For the first time, please start from the first gear to get used to it. Reduce the light intensity if you experience any pain or discomfort. Persons with darker skin run a higher risk of skin irritation due to increased light absorption by their skin. Skin on type V and type VI people should NOT use IPL treatment at all.

Note:

- 1) For people with darker skin color who are prone to skin irritation, it is recommended that a lower energy level be used.
- 2) For people with thick hair, a higher setting is recommended. For people with thin hair, a lower setting is recommended, depending on the person.
- 3) If you feel pain or discomfort when using the device without activating the ice pack function, lower the energy level. It is normal to feel warmth or slight burning without pain.

4.4 Usage Instructions For operation

4.4.1 Using Mode introduction

- Auto mode (applicable to arms, legs and other large areas):

Press the power button → Press the ice cooling button to select the auto flash mode → Place the light-emitting area of the device on the treatment skin area and fully touched to the skin → Press the flash button → The device flashing automatically → Move the device slowly along the skin of the treatment area after each flash → The above operation can be done back and forth twice.

It is suggested that the skin movement speed can be adjusted according to the flash speed, so as to make the coverage more uniform. The flash rate is faster in the first gear, slightly slower in the second gear, and the higher the gear, the slower the light speed.

- Manual flash mode (suitable for small areas such as fingers, lip etc.):

Press the power button → Selecting the manual flash mode → Place the light-emitting area of the device on the treatment skin area and fully touched to the skin → Press the flash button → Flashing once → Each time the device is moved and the flash button is pressed, the device will flash once → The above operation can be carried out three to four times.

4.4.2 Operation step

1. Clean your skin

- Shave off the hair on the needed skin area (It's better to shave hair 2 hours before machine operation).

2. Connect the power adapter

- One end connects to the socket, one connects to the power socket. After the power adapter is connected, the power indicator light is on.


3. Wear goggles

- Wear the goggles.

4. Turn the device on

- Press the power button to turn on the device, the default startup is the 1st level and manual flash mode.


5. Soothe the skin (if applicable)

- Press the ice cooling button to enter the ice cooling mode. The icon “” will be shown on the display screen.
- Keep the device close to the skin and start to soothe the skin without pressing the flash button when using the ice cooling mode alone.

6. Select manual or automatic flash mode

- The default startup is manual flash mode, long press the ice cooling button to switch to auto flash mode, at this time, the display screen will show a "AUTO" icon.

7. Select intensity level

- The device has 9 levels. Short press the power button to select a suitable intensity level. When the corresponding level is selected, the corresponding number will be displayed, such as “” icon.

8. Treatment

- Place the light-emitting treatment window of the device to the skin, when the screen show “RA”, press the flash button, and start the treatment.

Note:

- When the mode is auto flash mode: Press the flash button, the device will flash automatically when each full skin contact.
- When the mode is manual mode: The device will flash when press the flash button once.

9. Turn the device off

- Long press the power button to turn off the device.
- Or it will automatically shut down for safety if the device without any operation 10 minutes.

10. Disconnect the adapter

- Remove the adapter from the Power socket and power socket.

11. Take off the goggles

- Take off the goggles.

12. Clean the device and goggles

- Please refer to chapter 5.1.

13. Store the device

- Put the device and accessories in the box for next use, and store in a dry and dust-free environment at -10~60°C.

Note:

- 1) *Do not flash the same spot twice in a row.*
- 2) *There are sensors inside the device that only flash when the device is in close contact with the skin and the display screen will show the “RA” icon*
- 3) *When select the intensity level, it is recommended to start with the first level. Finally, select the suitable level.*
- 4) *It is a normal phenomenon that water droplets appear on the cooling area of the lamp under ice cooling mode. Wipe it off with a dry cloth.*
- 5) *Device has ice cooling care technology, it is recommended to use the ice lamp head to ice compress the treated area for about 30s after hair removal, and then proceed hair removal operation to the next area.*
- 6) *Mild reddening of skin after operation is a normal phenomenon.*
- 7) *It is recommended to avoid touching water within 6 hours after depilation, and then moisturizing water can be used to moisturize the irradiated parts after 15 minutes.*
- 8) *Hair Removal Cycle Standard*
 1. *Weeks 1-3: 3 times a week*
 2. *Weeks 4-6: 2 times a week*
 3. *After the 6th week, once every two weeks or a month, depending on the specific situation.*

5 Maintenance

To ensure the best effect and longest service life, please clean the product before and after each depilation to avoid long-term accumulation of hair and dust. If you do not clean normally, the product will not get the effect it should have.

- Before starting cleaning, the machine must be turned off and unplugged power to allow the machine to cool down.
- Wipe and clean the flash light glass with soft, clean and dry cloth.
- Store the equipment in a dry and dust-free environment at -10 to 60°C.

5.1 Cleaning

- Wipe and clean the flash light glass and goggles with soft, clean and dry cloth.
- After cleaning, visually inspect the device and goggles for any dirt. If there is any, please repeat the above cleaning. If there is no dirt, please store the device.

Note:

1. Do not wash this product and accessories in faucets and dishwashers.
2. Do not use steel balls, abrasive cleaners (toothpaste, etc.) or corrosive liquids (gasoline, engine oil, acetone, etc.) to clean the product.
3. If the water does not clean well, you can use a few drops of high concentration alcohol (not more than 95%) to clean the above parts.

5.2 Environment protection

When discarding the product, please do not throw it together with the general waste, and need to give it to the designated recycling center, which is conducive to environmental protection.

6 TROUBLE SHOOTING

FAQ		
Problem	Possible reason	Solution
Can not turn on	The power is not connected	Check if the power is plugged in
Unable to flash	Whether the temperature of the lamp or device is too high Whether the lamp head of the device is fully touched the skin	Wait for the machine to cool down before use it. put the device close to the skin area, and wait for the RA icon display on screen
The display screen does not show	Possible impact of other electronic devices nearby.	Check if the power supply is working properly. Reboot, repair or replace the product.

7 Guarantee

7.1 Warranty Period

- 1) Warranty term: There is one-year limited warranty for whole machine from the date of purchase.
- 2) Division of warranty liability:
Any quality problems during warranty term be free to repair if it's caused by non-human

factors, other malfunctions caused by abnormal use or force majeure are not covered by the warranty.

3) Warranty specification:

when the user applies for free warranty service during the warranty period, he/she shall present a valid purchase certificate (e.g. warranty sheet)

7.2 Outside Warranty Period

If it belongs to the following points, our company will not be responsible for it, and it is not covered by the warranty.

- 4) For fire, earthquake, third party's behavior, customer's intentional, negligent or misuse, use under other abnormal conditions, unpredictable events, etc.
- 5) Incidental damage to the function or use of the goods (loss of business interests, interruption of business, including loss of use of instruments, cost of replacing any equipment, device or service, or claims of your customers)
- 6) Damage caused by using methods other than those in this manual.
- 7) Circumstances beyond our company control situation: when a problem occurs with accessories, or substitutes that are not sold by our company, the services and parts needed to solve the problem; and problems arising from accepting unauthorized modifications or services. Misuse, abuse, operation, maintenance, or illegal complaints against the instrument not in accordance with the company's instructions.
- 8) Failure or damage caused by using in the working environment not specified by the product, including overload.
- 9) Failure caused by improper storage by users (such as rodent damage, liquid infiltration, etc.)

8 Essential Performance

The essential performance of the system may be lost or degraded because of electromagnetic disturbances. For expected degradations and instructions of the basic safety and essential performance maintenance in the case of electromagnetic disturbances, see the table below:

Essential Performance	Degradation Caused by Electromagnetic Disturbances	Essential Performance Maintenance
Produce Protection	No degradation	Not Applicable
Produce Function	No degradation	Not Applicable
Note: Essential Performance: The device can emit 470-1200 nm intense pulsed light, and its main functions, such as button function and LED screen display, can operate normally.		

9 ELECTROMAGNETIC COMPATIBILITY

The IPL Hair Removal (Model: SL-B287) also complies with Medical EMC Standard (IEC 60601-1-2).

Guidance and manufacturer's declaration – electromagnetic emissions
This equipment is intended for use in the electromagnetic environments specified below, and

the purchasers or users shall ensure that it is used in these electromagnetic environments.	
Emissions	Compliance
RF emissions (Radiated) CISPR 11	Group 1 Class B
RF emissions (Conducted) CISPR 11	Group 1 Class B
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations/flicker emissions IEC 61000-3-3	Not Applicable

Guidance and manufacturer's declaration – electromagnetic immunity			
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	Environments
Electrostatic discharge (ESD) IEC 61000-4-2	±4 kV, ±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	HOME environment
Electrical fast transient/burst (EFT) IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines	HOME environment
Surge IEC 61000-4-5	± 0.5kV, ± 1 kV, ± 2 kV line(s) to earth	± 0.5kV, ± 1 kV, ± 2 kV line(s) to earth	HOME 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 at 0° 70% UT, 25 / 30 cycle at 0° 70% UT, 25 / 30 cycle 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 at 0° 70% UT, 25 / 30 cycle at 0° 70% UT, 25 / 30 cycle at 0° 0% UT, 250 / 300 cycle	HOME environment
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	HOME environment
Conducted RF IEC 61000-4-6	3 Vrms 0.15 MHz to 80MHz 6 Vrms in ISM bands between 0.15 MHz	3 Vrms 0.15 MHz to 80MHz 6 Vrms in ISM bands between 0.15 MHz	HOME environment

	and 80MHz	and 80MHz	
Radiated RF IEC 61000-4-3	3 Vrms 80 MHz to 2.7GHz 80% AM at 1KHz	3 Vrms 80 MHz to 2.7GHz 80% AM at 1KHz	HOME environment
Proximity magnetic fields IEC 61000-4-39	30 kHz / CW / 8A/m 134.2 kHz / Pulse modulation 2.1KHz / 65A/m 13.56MHz / Pulse modulation 50 kHz / 7.5A/m	Not Applicable	HOME environment

NOTE












1. UT is the a.c. mains voltage prior to application of the test level; 25 / 30 and 250 / 300 cycle means 25 / 250 for 50 Hz system and 30 / 300 for 60Hz system.
2. The ISM (industrial, scientific and medical) bands between 0,15 MHz and 80 MHz are 6,765 MHz to 6,795 MHz; 13,553 MHz to 13,567 MHz; 26,957 MHz to 27,283 MHz; and 40,66 MHz to 40,70 MHz. The amateur radio bands between 0,15 MHz and 80 MHz are 1,8 MHz to 2,0 MHz, 3,5 MHz to 4,0 MHz, 5,3 MHz to 5,4 MHz, 7 MHz to 7,3 MHz, 10,1 MHz to 10,15 MHz, 14 MHz to 14,2 MHz, 18,07 MHz to 18,17 MHz, 21,0 MHz to 21,4 MHz, 24,89 MHz to 24,99 MHz, 28,0 MHz to 29,7 MHz and 50,0 MHz to 54,0 MHz.
3. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radio, AM and FM radio broadcast, and TV broadcast cannot, theoretically, be predicted with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, consider conducting an electromagnetic site survey. If the measured field strength in the location the system is used exceeds the applicable RF compliance level listed in this table, observe the system to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the system.
4. At 80 MHz and 800 MHz, the higher frequency range applies.
5. These guidelines may not apply in all situations. Electromagnetic propagation is affected by the reflection from structures, objects, and people.
6. 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.
7. This test is applicable only to ME EQUIPMENT and ME SYSTEM intended for use in the HOME ENVIRONMENT.
8. The carrier shall be modulated using a 50% duty cycle square wave signal.
9. r.m.s., before modulation is applied.

Test specifications for ENCLOSURE PORT IMMUNITY to RF wireless communications equipment

Test frequency (MHz)	Band a) (MHz)	Service a)	Modulation b)	Maximum power (W)	Distance (m)	IMMUNITY TEST LEVEL
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						(V/m)
385	380-390	TETRA 400	Pulse modulation b) 18Hz	1.8	0.3	27
450	430-470	GMRS 460, FRS 460	FM c) ±5 kHz deviation 1 kHz sine	2	0.3	28
710	704-787	LTE Band 13,17	Pulse modulation b) 217Hz	0.2	0.3	9
745						
780						
810	800-960	GSM 800/900, TETRA 800, iDEN 820, CDMA 850, LTE Band 5	Pulse modulation b) 18Hz	2	0.3	28
870						
930						
1 720	1 700-1 900	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	Pulse modulation b) 217Hz	2	0.3	28
1 845						
1 970						
2 450	2 400-2 570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation b) 217Hz	2	0.3	28
5 240	5 100-5 800	WLAN 802.11a/n	Pulse modulation b) 217Hz	0.2	0.3	9
5 500						
5 785						
NOTE: If necessary to achieve the IMMUNITY TEST LEVEL, the distance between the transmitting antenna and the ME EQUIPMENT or ME SYSTEM may be reduced to 1 m. The 1 m test distance is permitted by IEC 61000-4-3.						
a) For some services, only the uplink frequencies are included.						
b) The carrier shall be modulated using a 50% pulse duty cycle square wave signal.						
c) As an alternative to FM modulation, 50% pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.						

10 The symbols and Description

No.	Symbols	Description
1		Manufacturer
2		The symbol indicates that the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling.
3		CONSULT INSTRUCTIONS FOR USE.
4		The date of manufacture
5		indicates that caution is necessary when operating the device or control close to where the symbol is placed, or that the current situation needs operator awareness or operator action in order to avoid undesirable consequence.
6		Type BF Applied Part
7		Batch code
8		Symbol for "SERIAL NUMBER". This symbol shall be accompanied by the manufacturer's serial number.
9		Indicates the date after which the medical device is not to be use
10		Medical device. Indicates the item is a medical device
11		Unique device identifier

11 Manufacturer Information



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