



Thank you for choosing the Motif
Luna Double Electric Breast Pump.

Motif Luna Operation Manual

Motif Medical
8 The Green, Suite #5601
Dover, DE 19901
Phone: (844)272-8390
Email: Info@MotifMedical.com
Web: www.MotifMedical.com



Motif Luna Operation Manual

Table of Contents

- 1. Introduction**
 - 1.1 Intended Use (Indications of use)
 - 1.2 Explanation of Symbols
- 2. For Your Safety**
- 3. Product Description**
 - 3.1 Components of Device
- 4. Start-up Procedure and Operations**
 - 4.1 Instructions on how to assemble
 - 4.2 Getting Started
 - 4.3 How to use the Dual Pump
 - 4.4 Cleaning Procedure
 - 4.5 How long can I store breast milk?
 - 4.6 How do I thaw and use stored breast milk?
 - 4.7 LCD Screen
 - 4.8 Button Control
 - 4.9 Night Light
- 5. Troubleshooting**
- 6. Maintenance and Service**
- 7. Disposal**
- 8. Technical Information**
- 9. Electromagnetic Compatibility**
- 10. Additional Information**
 - 10.1 Limited warranty
 - 10.2 Description of IP Classification

1.Introduction

Thank you for your purchase of this Motif Medical Luna. The Motif Luna Double Electric Breast Pump utilizes a vacuum to express breast milk.

Highlights

- **Double Pumping:** Expressing from both breasts at the same time saves time and supports milk supply.
- **Massage & Expression Modes:** Effortlessly switch from Massage to Expression mode, by pressing a single button
- **Full Control:** Easily adjust suction level and cycles for maximum comfort and an effective pumping session
- **Night Light:** Choose from three different light levels; great for pumping at night
- **Compact Elegance:** Innovated with Moms in mind, the Motif Luna is a powerful breast pump designed to blend in with a modern aesthetic

	Motif Medical, LLC 8 The Green Suite 5601 Dover, DE 19901	Phone: (844) 272-8390 Email: info@motifmedical.com
Manufactured For		

 Please read this document completely and follow the instructions exactly. To prevent personal injury and material damage, please observe the warning and safety information provided in this document. Identification of danger levels:

	WARNING	Potentially dangerous situation that could result in serious injury.
	CAUTION	A possibly dangerous situation that could result in slight bodily injury
	NOTICE	Useful information or information you need to know when using this product.

1.1 Intended Use (Indications of use)

CAUTION - Sharing a breast pump can cause health hazards and void manufacturers warranty

1.2 Explanation of Symbols

Symbol	Description
	Manufacturer
	Date of manufacture.
	Serial number.
	General prohibition sign.
	General warning sign.
	Caution
	Notice
	Refer to instruction manual.
	Type BF applied part.
	CLASS II equipment.
	DC
	Alternating current.
IP22	Degree of protection against harmful ingress of water or particulate matter. Please see 10.2 section for the detail information.
	Temperature limit.

	Humidity limitation.
	Atmospheric pressure limitation.
	Keep dry.
	Fragile, handle with care.
	This product should not be mixed with other commercial waste for disposal.
	Power
	Adjust the level of suction or cycle.
	Changes the operation mode.
	LED night light.

2. For Your Safety



PROHIBITION: To reduce the risk of electrocution.

- Do not modify this equipment without authorization of the manufacturer.
- Do not disassemble or modify the product. The device has no user-serviceable parts.



WARNING: To reduce the risk of electrocution.

- Always unplug immediately after use.
- Do not use while bathing.
- Do not place or store product where it can fall or be pulled into a tub or sink.
- Do not place or drop into water or other liquid.
- Do not reach for a product if it has fallen into water. Immediately unplug from electrical outlet.



WARNING: To avoid fire, electrocution, or serious burns.

- Do not leave the product unattended when plugged into an electrical outlet.
- Close supervision is necessary when this product is used near children or persons with disabilities.
- Place product out of reach of children.
- Use the product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
- Never operate this product if it has a damaged cord or plug if it is not working properly, or if it has been dropped or damaged, or dropped into water.
- Keep cord away from heated surface.
- Never use while sleeping or when drowsy.
- Never drop or insert any object into any opening or tubing.
- Do not use outdoors, or operate where aerosol (spray) products are being used where oxygen is being administered.
- Always inspect power adaptor and battery pack wires prior to use for damage or exposed wire. If damage is found, immediately discontinue use of power adaptor or battery pack and call Motif Medical Customer Service.
- The Motif Medical Luna should not be positioned so that it is difficult to operate the adaptor.



WARNING: To avoid health risk and reduce the risk of injury.

- If you are a mother who is infected with Hepatitis B, Hepatitis C or Human Immunodeficiency Virus (HIV), pumping breast milk will not reduce or remove the risk of transmitting the virus to your baby through your breast milk.
- Before each use visually inspect the individual components for cracks, chips, tears, discoloration or deterioration. In the event that damage to the device is observed, please discontinue use until the parts have been replaced.
- This product is the intended for use by a single user only and should not be shared between users.
- Do not drive while pumping.
- Never use while pregnant, as pumping can induce labor.
- Clean and sanitize all parts that come in contact with your breast and breast milk prior to first use.
- Wash all parts that come in contact with your breast and breast milk after every use.
- Inspect all appropriate pump components before each use.
- Do not continue pumping for more than 2 consecutive pumping sessions if no results are achieved.
- Do not thaw frozen breast milk in a microwave or in a pan of boiling water.
- If tube becomes moldy, discontinue use and replace tube.
- If breastmilk backup occurs you must clean tube before your next pumping session.

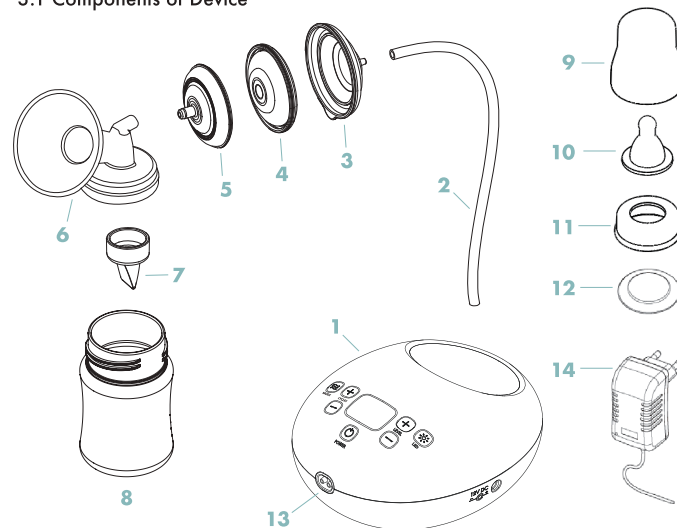


CAUTION: To avoid minor injury.

- Do not wrap cord around adapter body.
- Use only the power adaptor that comes with the powered breast pump.
- Pump only with the breast pump in an upright position.
- Do not shorten tubing.
- Make sure the voltage of the power adaptor is compatible with the power source.
- Plug the power adaptor into the breast pump first and then into the wall socket.
- Do not use antibacterial or abrasive cleaners/detergents when cleaning breast pump or breast pump parts.
- Never put breast pump motor unit in water or a sterilizer, as you can cause permanent damage to the breast pump.
- Do not attempt to remove the breast shield from your breast while pumping. Turn the breast pump off and break the seal between your breast and breast shield with your finger, then remove breast shield from your breast.
- If pumping is uncomfortable or causing pain, turn the unit off, break the seal between the breast and the breast shield with your finger and remove the breast shield from your breast.
- Plastic bottles and component parts become brittle when frozen and may break when dropped.
- Bottles and component parts may become damaged if mishandled, e.g. dropped, over-tightened or knocked over.
- Take appropriate care in handling bottles and components.
- Do not use the breast milk if bottles or components become damaged.

3. Product Description

3.1 Components of Device



Included Components

1 - Powered Breast Pump, Motif Medical Luna

2x Milk
Collection Kit

- 2 - Tubing
- 3 - Diaphragm Top
- 4 - Diaphragm
- 5 - Diaphragm Bottom
- 6 - 24mm Breast Shield
- 7 - Valve
- 8 - Bottle
- 9 - Bottle Cap
- 10 - Nipple
- 11 - Bottle Cover
- 12 - Bottle Disk
- 13 - Air Flow Port

14 - Adaptor - DC12V, 2A

Pumping Guide

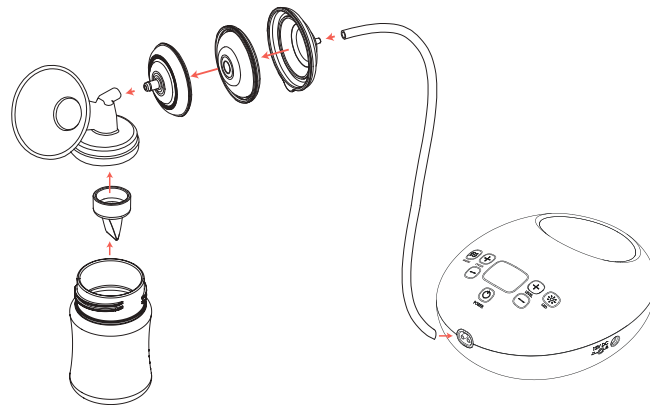
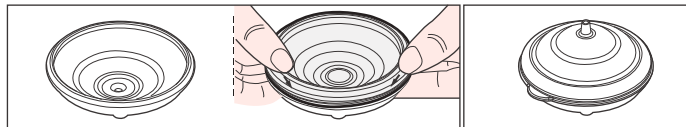
1. Gently massage your breasts or apply warm compresses from the breast toward the nipple before using.
2. Express milk from each breast for 10 - 15 minutes. It is recommended to pump frequently rather than pumping for a long duration. (Every 2 - 3 hours, 8 times a day)



Even when you are using the breast pump, it is recommended to breastfeed your baby whenever you can.

4. Start-up Procedure and Operations

1. Insert the Diaphragm into the Diaphragm Bottom (the component that connects to the breast shield). Ensure that it fits securely and that the Diaphragm edge fits around the rim of the Diaphragm Bottom.
2. Connect the Diaphragm Top (the component that connects to the tubing) over the Diaphragm Bottom, and Diaphragm, by snapping-on the Diaphragm Bottom into the rim of the Top Diaphragm.
3. Push the valve onto the underside of the Breast Shield.
4. Connect the Diaphragm Assembly to the top of the Breast Shield. Use a twisting motion to attach, and later remove, this assembly to avoid damaging it.
5. Screw the bottle onto the underside of the Breast Shield.
6. Connect the tubing to the Diaphragm Assembly, and connect the other end of the tubing to the Luna. (for single-pumping attach the cap on one of the air flow ports).
7. Attach power adapter to the Luna.
8. Plug power adapter into electrical outlet.



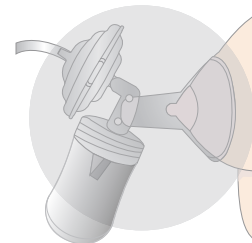
4.1 Getting Started

While using your Motif Luna maintain an upright position to prevent milk from back flowing



Center the breast shield on your breast so that the nipple is drawn into the flange.

It's important that the breast shield is positioned properly before pumping begins to avoid any pain that may be caused by rubbing or twisting of your nipple onto the side of the flange. If double pumping, place the second breast shield in place as well.



While some discomfort may be felt when first using a breast pump, using a breast pump should not cause pain. If you are unsure about breast shield sizing, please contact a healthcare professional or Motif Medical representative who can help you get a proper fit.

Press the Power button.

The device will power ON, indicated by the screen lighting up. The Luna will begin in Massage mode to help with faster Letdown.



Press the Mode button to change to Expression mode once your milk starts flowing.



Adjust suction to preferred comfort level.

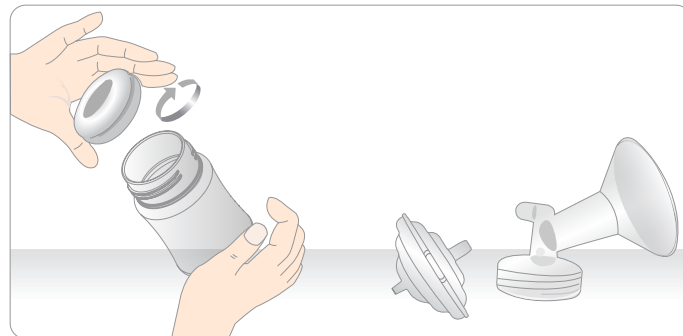


When you wish to stop expressing, first press the Power button, then remove milk collection kit from your breast.



Disconnect the diaphragm assembly from the breast shield.

Remove the breast shield from the milk collection bottle and close the bottle tightly with bottle cover and bottle disk, and store safely.



1) Using the Cycle and Suction Settings of your Motif Medical Luna



The Motif Medical Luna will remember your settings automatically for your next session. If you want to start pumping on different settings to those you finished with in your previous session, adjust the settings before you start expressing.

2) Suction Settings



The suction level on your breast pump refers to the suction strength; this is measured in mmHg. When you are using your Motif Medical Luna, you will usually find that expressing is most effective on the highest suction level that you are comfortable with.

However, it's important not to set suction level so high that it makes you uncomfortable, as the resulting pain will hinder your milk flow.

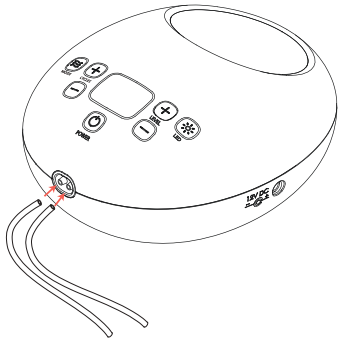
3) Massage and Expression Modes

Massage Mode: Suction pattern with fast cycles and low vacuum to help with Letdown and to start milk flowing.

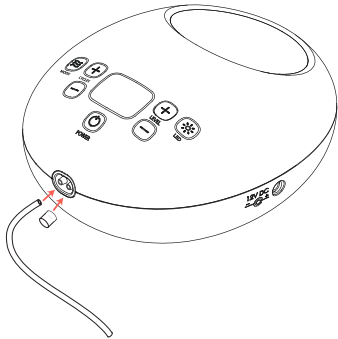
Expression Mode: Suction pattern with slower cycles and higher vacuum to Express milk gently and efficiently

4.2 How to Double Pump

To use in Double-Pump mode remove the plug from the air flow port, and connect the tube from the extra collection kit.



When changing back to Single-Pump mode make sure to cover the air flow port with the plug.



4.3 Cleaning Procedure

1) Clean and sanitize all Milk Collection Kit parts before using your pump for the first time, including:

- Breast Shield
- Bottle Disk
- Bottle Cover
- Bottle
- Nipple
- Valve

Follow the cleaning and sanitizing instructions.

1. Clean the Milk Collection Kit with a clean dish-cloth or soft brush in warm water.
2. Rinse the Milk Collection Kit with clear water.
3. Place the Milk Collection Kit in boiling water for 5 minutes.
4. Gently remove all parts from water with tongs.
5. Allow all parts to air dry in a clean area.

2) After every use

1. Thoroughly wash your hands before handling each breast pump component.
2. Disassemble each part that comes into contact with breast milk including the: valve, bottle, bottle nipple, breast shield, bottle disk, and bottle cover
3. Rinse each part in cool water to remove milk residue.
4. Separately wash each part in the sink with a soft brush or clean dishcloth; OR soak each part in warm soapy water for 5 minutes and thoroughly rinse them; OR separate each part and wash them on the top rack of your dishwasher.
5. Dry each part with clean towel and/or allow them to completely air dry on a sanitary surface.
6. Wipe the main body with a dry, clean towel after each use.
7. Store parts after they completely dry in a clean bag or container.
Do not store any damp parts.

4.4 How long can I store breast milk?

	Storage Locations and Temperatures		
Type of Breast Milk	Countertop 77°F or colder (25°C) (room temperature)	Refrigerator 40°F (4°C)	Freezer 0°F or colder (-18°C)
Freshly Expressed or Pumped	Up to 4 hours	Up to 4 days	Within 6 months is best Up to 12 months is acceptable
Thawed, Previously Frozen	1-2 hours	Up to 1 day (24 hours)	Never refreeze human milk after it has been thawed
Leftover from a Feeding (baby did not finish the bottle)	Use within 2 hours after the baby is finished feeding		Never refreeze human milk after it has been thawed

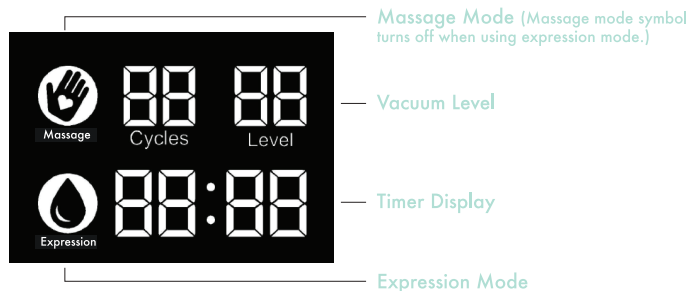
Source: CDC.GOV

4.5 How do I thaw and use stored breast milk?

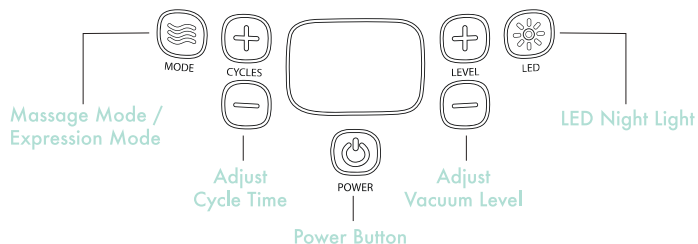
1. Always make sure to check the date on the milk’s container before using.
Do not use undated milk, or milk that has been stored too long.
2. Thaw frozen milk in the refrigerator or under cool, running water.
3. Heat the milk under warm, running water and gently swirl the container to mix the milk.
4. If warm water is not available, heat a pan of water in the stove. Once the water is warm, not boiling, remove the pan from the stove and place milk container in the pan. Never warm the milk container directly on the stove.
5. Never microwave breast milk because microwaves can cause dangerous hot spots that could burn you or your baby.

6. Always test the temperature of the milk on the inside of your wrist before feeding it to a baby. The milk should feel warm, not hot.
7. After thawing, milk should be stored in the refrigerator for no more than 24 hours.
8. Never refreeze thawed milk. Throw away previously frozen milk that is not used within 24 hours.

4.6 LCD Screen



4.7 Button Control



4.8 Night Light

-  - The LED light appears by pressing the button.
- Select one of three lighting levels.

5. Troubleshooting

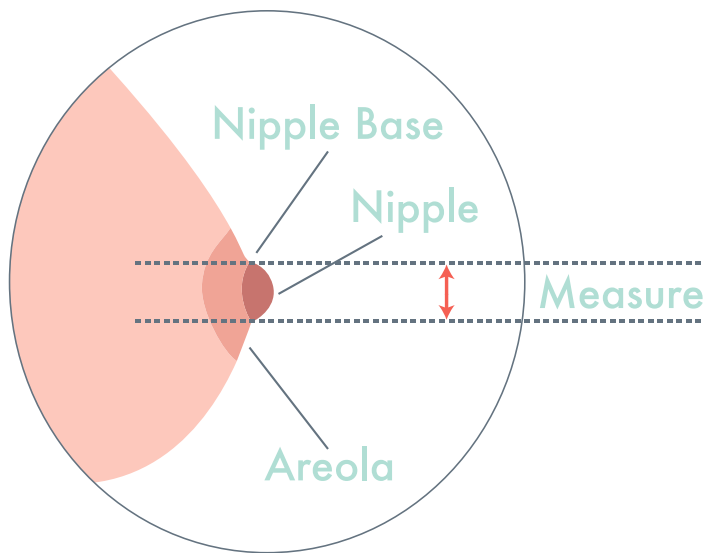
Condition	Possible Causes	Checks	Solutions
No power	Adapter	Check if the power cord is not connected or is damaged.	Plug into the outlet. If it has damage, contact Motif customer service at 844-272-8390 or where you purchased.
No suction	Tubing	Check the tubing is connected to the main body.	Connect the air tube to the main body.
	Valve	Check if they are connected to breast shield properly.	Disassemble and reassemble them properly.
	Air Flow Port Plug	Check if the air flow port plug is closed.	Close the air flow port plug.
Low suction	Suction Level	Check if there is a low vacuum level on the vacuum regulator valve or if there is an abnormal noise.	Contact Motif customer service at 844-272-8390
	Defective assembly kit	Check the connection of the kit.	Disassemble and reassemble them.
	Breast shield	Check if there is a problem with the breast shield.	Visit motifmedical.com
	Valve	Check if there is damage in valve head.	Replace the valve.
Pain	Suction too high	Check the suction level.	Set to the lowest suction level and consult your lactation consultant or physician.

6. Breast Shield Sizing

1. Understanding size

Pumping should not hurt. This guide is a starting point to help determine your optimal size based on your nipple diameter.

How to find the right size flange for you:



Step 1:

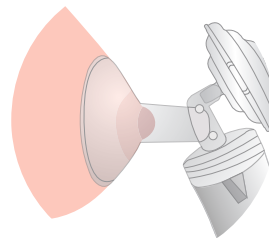
Using a ruler or measuring tape measure the diameter of your nipple at base (across middle) in millimeters (mm). * 1 cm = 10 mm. Do not include areola.

Step 2:

Take your measurement and add 4mm to determine your breastshield size.

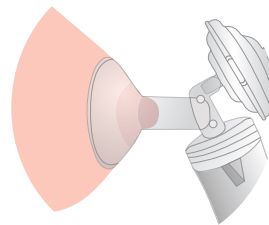
*Example: If your nipple size measures 26 mm in diameter, the recommended breastshield size is 30 mm.

2. Test your breastshield size



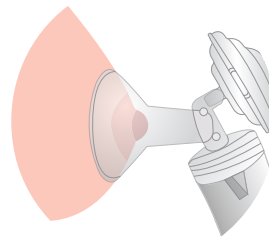
Good Fit

During pumping your nipple is able to move freely in the breast pump flange tunnel. You will have space around your nipple and not much of the areola is drawn into the tunnel with the nipple.



Too Small

During pumping some, or your entire nipple rubs against the sides of the breast pump flange tunnel.



Too Large

During pumping more of your areola is drawn into the breast pump flange with your nipple. You may experience your areola rubbing up against the side of the breast pump flange tunnel.

3. Should you try a new size?

Does your nipple rub sides of tunnel, to the point of causing discomfort? Do you see excessive areola being pulled into tunnel? Do you see any redness? Is your nipple or areola turning white? Do you feel unexpressed milk after pumping?

If you answered "YES" to any of these questions, consider trying a new size by following the measuring instructions above. If you are still unsure if you selected the correct size, see a lactation consultant, or breastfeeding specialist for assistance in choosing the right size breastshield.

7. Disposal



As electrical and electronic equipment, the device must be disposed of according to a specialized procedure for collection, pick-up and recycling or destruction in accordance with Directive 2012/19/EU of the European Council on Waste Electrical and Electronic Equipment [WEEE]. Please send components that are no longer used to Motif Medical or properly dispose of the device in accordance with local, state and federal regulations.

8. Technical Information

Contents	Description	
Rated voltage and frequency	Input: DC 12V, 2A	
Power consumption	0.6 A	
Protection on electronic shock	Class II,  TYPE BF Applied Part 	
Degree of protection against ingress of water	IP Classification: IP22	
Operation mode (Continuous operation)	Expression Mode, Massage Mode	
Suction levels	Expression Mode	1 - 12 Levels
	Massage Mode	1 - 5 Levels
Suction Cycles	Expression Mode	Adjustable (30-46)
	Massage Mode	Fixed (60)
Single/Double	Single/Double	
Timer Function	Automatic Off (30 min ± 1 min)	
Noise	Less than 45 dB	
Backflow Protection	Yes	
Cleaning Method for Accessories	Boiling water	
Operating conditions		
Ambient temperature	41 to 104 °F	  
Relative humidity	20 to 80 %	
Air pressure	700 to 1,060 hPa	
Transport and storage conditions		
Ambient temperature	-4 to 122 °F	  
Relative humidity	20 to 95 %	
Air pressure	500 to 1,060 hPa	

9. Electromagnetic Compatibility

Guidelines and manufacturer's declaration – electromagnetic emissions		
The Motif Medical Luna is intended for use in the electromagnetic environment specified in the table below. The customer or the user of the Motif Medical Luna should assure that it is used in such an environment.		
Emission test	Compliance	Electromagnetic environment—guidance
RF emission - CISPR 11	Group 1	The Motif Medical Luna 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 emission - CISPR 11	Class B	The Motif Medical Luna is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage 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	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
The Motif Medical Luna is intended for use in the electromagnetic environment specified below. The customer or the user of the Motif Medical Luna 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	$\pm$ 6 kV contact $\pm$ 8 kV air	$\pm$ 6 kV contact $\pm$ 8 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%.

Electrical fast transients IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/ output lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surges IEC 61000-4-5	± 1 kV differential mode ± 2 kV common mode	± 1 kV differential mode ± 2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations IEC 61000-4-11	< 5 % U_T (> 95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 6 cycles 70 % U_T (30 % dip in U_T) for 30 cycles < 5 % U_T (>95 % dip in U_T) for 5 s	< 5 % U_T (> 95 % dip in U_T) for 0.5 cycle 40 % U_T (60 % dip in U_T) for 6 cycles 70 % U_T (30 % dip in U_T) for 30 cycles < 5 % U_T (>95 % dip in U_T) for 5 s	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Motif Medical Luna requires continued operation during power as interruptions, it is recommended that the Motif Medical Luna be powered from an uninterruptible power supply.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	± 1 kV differential mode ± 2 kV common mode	± 1 kV differential mode ± 2 kV common mode	Power frequency magnetic fields should be measured in the intended installation location to assure that it is sufficiently low.
NOTE. U_T is the AC mains voltage prior to application of the test level.			

Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	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.
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	Recommended separation distance $d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2,3 \sqrt{P}$ 800 MHz to 2.5 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 meters (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^b. 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. 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 device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.
- b. Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Recommended separation distances between portable and mobile RF communications equipment and the Motif Medical Luna

The Motif Medical Luna is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of Motif Medical Luna can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Motif Medical Luna 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]		
	150kHz to 80MHz $d = 1,2 \sqrt{P}$	80MHz to 800MHz $d = 1,2 \sqrt{P}$	800MHz to 2.5GHz $d = 2,3 \sqrt{P}$
0.01	0.12 m	0.12 m	0.23 m
0.1	0.38 m	0.38 m	0.73 m
1	1.2 m	1.2 m	2.3 m
10	3.8 m	3.8 m	7.3 m
100	12 m	12 m	23 m

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

NOTE 1. At 80MHz and 800MHz, the separation distance for the higher frequency range applies.

NOTE 2. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

10 Additional information

10.1 Limited warranty

To register your pump, please visit motifmedical.com/product-registration

- The Motif Luna comes with a 12 month manufacturer's warranty for the main pump and a 90 day warranty for the components.
- The warranty does not cover defects caused by misuse, abuse, improper storage, or alteration of the product or components.
- The warranty does not cover misplacement or theft of the breast pump or supplies.
- The warranty does not cover failure to comply with the operating instructions of the device or components supplied with the product or normal wear and tear.
- The user of this product assumes all responsibilities and risks for use of this product.
- If you have a warranty question, call 844-272-8390.

10.2 Description of IP Classification

IPN ₁ N ₂	N ₁	0: Non-protected
		1: Protected against solid foreign objects of 50 mm Ø and greater
		2: Protected against solid foreign objects of 12,5 mm Ø and greater
		3: Protected against solid foreign objects of 2,5 mm Ø and greater
		4: Protected against solid foreign objects of 1,0 mm Ø and greater
		5: Dust-protected
		6: Dust-tight
		0: Non-protected
	N ₂	1: Protection against vertically falling water drops
		2: Protection against vertically falling water drops when enclosure tilted up to 15°
		3: Protected against spraying water
		4: Protected against splashing water
		5: Protected against water jets
		6: Protected against powerful water jets
		7: Protected against the effects of temporary immersion in water
		8: Protected against the effects of continuous immersion in water