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### **Intended Use**

The Motif Duo Double Electric Breast Pump is intended for use by lactating women to express and collect breast milk. The Duo can be used as a single or double pump and is intended for personal use only — sharing a breast pump can present a health hazard.

### **Product Description**

The Motif Duo is a single user, double electric breast pump that includes customizable massage and expression modes and is capable of single and double pumping.

## **Contraindications**



There are no known contraindications for this breast pump.


## **1. Safety Information**

Take a moment to read through this manual and the included safety precautions before using your breast pump.

### **Warning Symbols**

The following symbols are important for user safety. Failure to follow these instructions can lead to personal injury or damage to the breast pump. When used in conjunction with the following words, the symbols indicate:

 <b>WARNING</b>	A hazard of serious injury or death.
 <b>CAUTION</b>	A hazard of minor injury or damage to the system.

	<b>WARNING</b>
	<ul style="list-style-type: none"><li>• Avoid electric shock — do not touch or operate the Motif Duo with wet hands.</li><li>• Do not handle device if it falls into water. Unplug the power adapter immediately.</li><li>• Only use the Motif Duo breast pump for its intended use as described in this manual.</li><li>• Never use a breast pump while pregnant.</li><li>• The breast pump is for personal use only. Using secondhand or rental pumps can cause cross contamination and can result in health problems.</li><li>• Do not use the device while sleeping or if you are overly drowsy.</li><li>• Keep the breast pump away from direct sunlight.</li><li>• The Motif Duo and its accessories are not heat-resistant. Keep away from radiators, open flames, and heated surfaces.</li><li>• Supervision is necessary when breast pump is in the vicinity of children.</li><li>• Do not use a damaged power adapter.</li><li>• Do not use this product in a high humidity environment — damage may occur.</li><li>• The Motif Duo electric breast pump should not be used adjacent to or with other equipment.</li><li>• Use only AC/DC Adaptors supplied by Motif Medical.</li></ul>

### **Caution:**

- If you have been diagnosed 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 of your breast pump 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.

















- If you feel pain in your breast or nipple, turn the pump off or slide a finger between the breastshield and your breast to break the suction.
- You might experience some discomfort in the early stages of pumping. If discomfort is persistent or injury or bleeding around the nipple occurs, contact a healthcare professional or Lactation Consultant immediately.
- While expressing breast milk, make yourself comfortable and do not incline the bottle.
- While operating the breast pump, firmly connect the diaphragm to prevent milk flow into the main body of the pump or the tubing.
- Clean and sanitize all components that come into contact with breast milk before first use and after every use. Air-dry all pump components after cleaning.
- Be sure that expressed milk does not flow into the main body by checking the tubing during and after each use. If milk flows into the tubing, turn the power off, remove the milk from air tube or diaphragm, and replace or clean the tubing as instructed in this manual.
- Do not fill the bottle past the recommended capacity.
- Make sure that the tubing does not get tangled while double pumping.
- When single pumping, cover the auxiliary tubing port with the port cover to prevent airflow into the breast pump.
- Unplug the power adapter from the breast pump immediately after you are finished charging your device.
- The battery charge level displayed on the LCD screen can differ from the actual battery capacity. Use your breast pump with a fully charged battery whenever possible.
- Charge the battery immediately when [**Lo Bt**] is displayed on the LCD screen.
- If the breast pump remains unused for a long period of time, make sure that the battery is fully charged before use.
- Only authorized service personnel should repair or replace this device.
- Never use a damaged device. Inspect all appropriate components before each use.
- Do not use this pump outdoors, anywhere that aerosol products are being used, or where oxygen is being administered.
- If pump tubing becomes moldy, discontinue use and replace the tubing before resuming pumping sessions.
- Mobile and portable radio frequency communication equipment can affect the operation of this breast pump.
- The breast pump, plastic bottles, and component parts may break when dropped. Use caution when transporting your device.
- Do not pump while bathing or showering.
- Do not thaw frozen breast milk in a microwave or in a pan of boiling water (this can burn the breast milk or change its composition)
- Thaw breast milk overnight in the refrigerator. Thawed breast milk is safe in the refrigerator for 24 hours. Do not refreeze thawed breast milk.
- Quickly thaw breast milk by holding the bottle under warm running water, or place the sealed bottle in a bowl of warm water for 20 minutes to bring it to a warmer temperature.

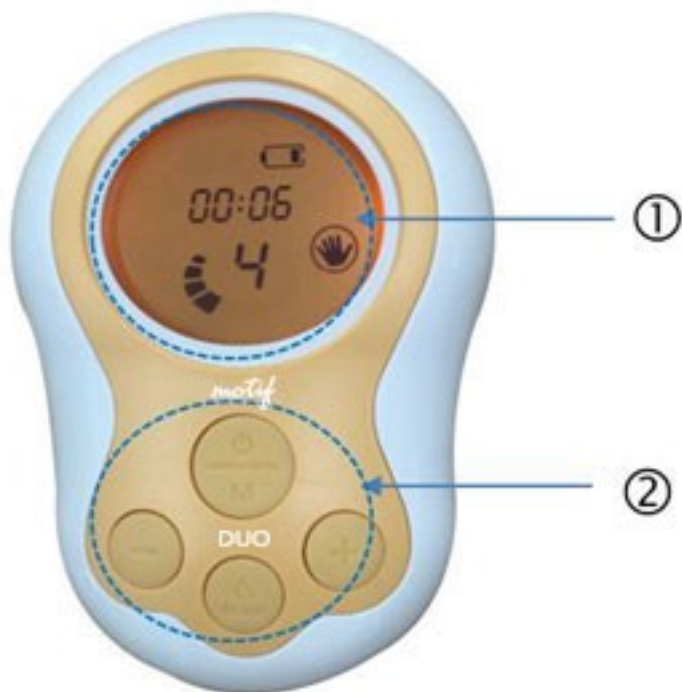
- Always use accessories supplied by Motif Medical.

## **2. Product Configuration**

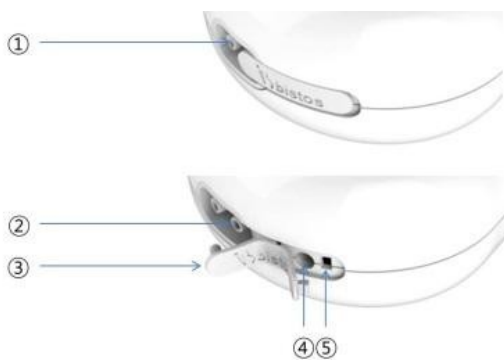
The Motif Duo double electric breast pump utilizes a vacuum to express breast milk. The motor is classified as a medium vacuum with an intermittent suction device.

*When unpacking the box, ensure that all of the following components are enclosed.*

<b>Name</b>	User manual	Power adapter	Main Body	Nipple
<b>Shape</b>				
<b>Qty.</b>	1	1	1	2
<b>Name</b>	Diaphragm Top	Diaphragm	Diaphragm Bottom	Tubing Connector
<b>Shape</b>				
<b>Qty.</b>	2	2	2	2
<b>Name</b>	Breastshield	Breastshield Connector	Valve	Tubing
<b>Shape</b>				
<b>Qty.</b>	2	2	2	2
<b>Name</b>	Bottle/180 ml	Bottle cap	Bottle cover	Bottle disc
<b>Shape</b>				
<b>Qty.</b>	2	2	2	2



1. LCD Display 2. Buttons



- 1. Basic tubing port: Tubing port for single pumping
- 2. Auxiliary tubing port: tubing port for double pumping
- 3. Port cover
- 4. Power adapter port
- 5. Port cover stabilizer

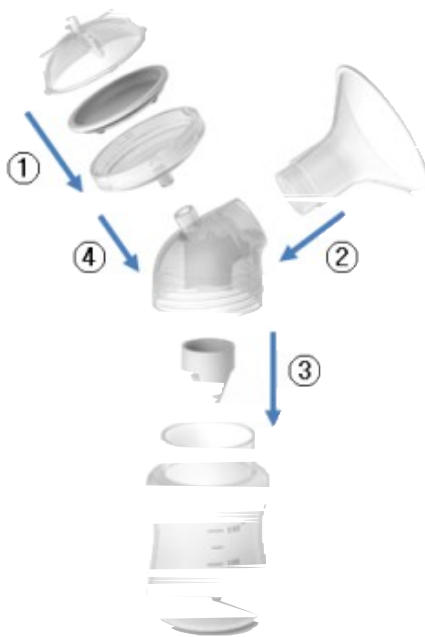
### **3. Preparing the Pump & Parts**

#### **3.1 Assembling the Tubing and Connector**



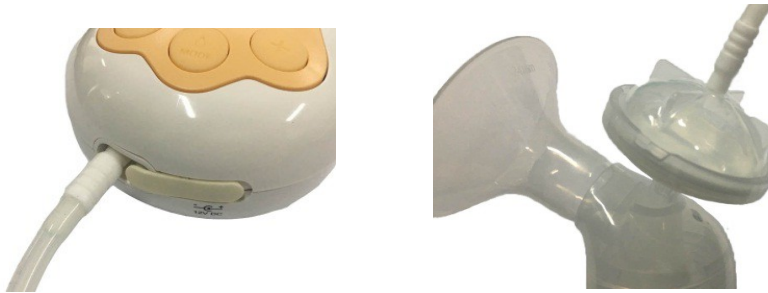
Insert the metal part of the tubing connector into the end of tubing as shown.

#### **3.2 Assembling Pump Parts**



1. Place the diaphragm so the cross-lined surface faces the bottom. Cover the diaphragm top and turn it to lock.
2. Place the breastshield into the breastshield connector.

3. Place the valve on the bottom of the breastshield connector. Screw the bottle into the breastshield connector.
4. Connect the diaphragm bottom to the breastshield connector.
5. Connect the tubing to the port on main body of the pump.
6. Connect the tubing to the bottle block as shown in the picture.
7. To clean or store after use, disassemble the bottle in the reverse order.




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**⚠ CAUTION**

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- When operating the pump, connect diaphragm tightly to prevent the expressed milk flow from entering the main body.
  - When single pumping, cover the auxiliary tubing port with port cover to prevent airflow into the breast pump.
- 

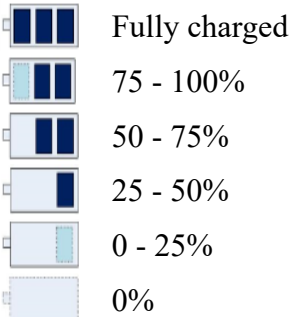
### 3.3 LCD Display










No.	Name	Status	Description
⊖	Memory	Off	No stored operating sequence.



Motif Duo Operation Manual

		Flashing	Storing operating sequence.
		On	There is a stored operating sequence.
⊖	Expression mode	On	Operating in expression mode.
		Flashing	Operating in stored expression mode sequence.
⊗	Adapter connection	Off	Power adapter is not connected.
		On	Power adapter is connected.
④	Battery	Percent Charge	 <p>Fully charged 75 - 100% 50 - 75% 25 - 50% 0 - 25% 0%</p> <p>Charge battery when symbol is flashing. The device will shut down automatically when battery dies.</p>
⑤	Operating time	On	Indicates operating time since device has been powered on. After 30 minutes, the main body will turn off automatically. When the battery needs to be charged, [ <i>Lo bt</i> ] will be displayed.
⑥	Speed/Vacuum level	On	Speed/vacuum level display
⑦	Message mode	On	Operating in message mode
		Flashing	Operating in stored message mode sequence.
⑧	Speed/ Vacuum level	On	Speed/vacuum level displayed in gradation.

Button	Basic function	Frequency function	Memory function
Application method	Press for less than 0.5 seconds.	Press from 0.5 to 1.5 seconds.	Press longer than 2 seconds until the function begins to operate.
	Power On/Off button	-	Memory start/stop button
	Turns power on and off.	-	<p>Press and hold this button for more than two seconds after turning the pump on to start the memory function operating sequence.</p> <p>Operate the pump as you want to save and press and hold again to save the whole sequence operated.</p> <p>When the memory function is activated, the memory icon  will flash in the LCD display. When the operating sequence is saved, the memory icon  will be turned on.</p> <p>The saved operating sequence will not be erased upon power off.</p>
	Speed/vacuum increase button	Frequency up	Stop button
	Increase the speed/vacuum in the operation mode. Speed/vacuum can be changed from 1 to 10.	Increase the frequency one step.	Stop to operate on saved sequence.  No response when not operating according to saved sequence.
	Speed/vacuum decrease button	Frequency down	Start button

	Decrease the speed/vacuum in the operating mode.	Decrease the frequency one step.	Start to operate on saved sequence. No response when no sequence saved.
	Mode change button  Toggle between massage and expression modes.	-  -	Delete button  Delete the saved sequence.  Memory icon  will be off.  After deleting the saved sequence, the pump will operate at your last set-up.  No response when no sequence saved.

### 3.4 Operating Functions


The Motif Duo has three operating functions: basic massage/express function, frequency change function within the massage level and memory function to save the operating sequence. The memory function, massage/expression mode, level of speed/vacuum strength, and massage/expression time can be saved and restored at any time.









#### Buttons

Each button has three functions. Pressing the button for less than 0.5 seconds will perform basic functions, pressing for a moderate duration of time (from 0.5 to 1.5 seconds) will perform the frequency function in expression mode, and pressing the button for longer than 2 seconds will perform memory functions.

#### Using the Memory Function

You can save and restore your personal settings for massage/expression modes, speed/vacuum levels as well as your optimal pumping session time.









1. Determine the operating sequence that you want to save (massage/expression sequence, speed/vacuum level, operating time)
2. Turn on the pump by pressing the power on/off button  then press and hold for memory session.
3. Operate the pump at the sequence you want to save.




4. After selecting the sequence that you want to save, press and hold the power on/off button  for more than two seconds to save the sequence. When saved, the memory icon  will turn on.
5. To start the saved operation sequence, press and hold the play button  for more than 2 seconds while the device is on. The massage mode icon  or the expression mode icon  will be flashing.
6. To stop the saved operation sequence, press and hold the stop button  for more than 2 seconds. The pump will operate on your last session setting and the massage mode icon  or the expression mode icon  will be on.

### Example of Memory Function

If you want to store the operation sequence of the following:



Operating Mode				
Operating time	1 minute	30 seconds	1 minute	Until pumping session completed

1. Check the LCD display to see if there is an existing stored operating sequence.  Icon is highlighted when there is a stored operating sequence.
2. If there is a stored sequence, delete it by pressing  button more than 2 seconds. The  icon will disappear.
3. Set the massage mode on level 4 and expression mode on level 3.
4. Change the operating mode to massage mode level 4.
5. To start the memory function, press the  button for more than 2 seconds. The  icon will begin to flash to indicate that the memory function has stored the operation sequence.
6. Operate the pump for 1 minute at massage mode level 4. Switch to level 5 by pressing  button shortly and operating for another 30 seconds.
7. Change to expression mode level 3 by pressing the  button shortly.
8. Operate the pump for 1 minute at level 3 and press  button shortly to change to level 4.







9. Press the  button to save the operating sequence or turn off the breast pump. The pump will store the operating sequence. If you turn on the breast pump, the  will appear, which indicates that the operating sequence is stored. The operating mode stored last will operate until terminated by user or the operating time reaches 30 minutes.
10. To check the stored sequence, press the  button until the operation starts. The pump should start with the stored massage level.

## Frequency Function

This function operates in the expression mode.

- On this setting, the frequency settings can be changed without altering the pressure level.
- With the frequency function you can change the mode (expression or massage) by pressing the mode button. Then press the + or – buttons to adjust frequency. The display will show [CY: --] to indicate that you are in frequency mode.
- 3 frequency levels can be changed for each expression level. Select the level that you want by pressing  or  for 0.5 to 1.5 seconds in the expression mode. The selected frequency value will be displayed by 1, 2 or 3 for 4 seconds and will then return to the operating time display.
- Note that increasing the frequency might be accompanied by increased noise and vibration.

## Using the Frequency Function

1. Turn on the pump by pressing the power on/off button .
2. Press the  mode button, then  will be displayed to indicate that you are in expression mode. Set your preferred level.
3. Press the  mode button once again to get to frequency. The time indicator will be changed to [CY: --]. This indicates that you are in frequency mode.
4. There are 3 different frequencies for each level of expression. You can change the frequency level by pressing  or .

## 3.5 Essential Performance Functions

The essential performance of the Motif Duo limits its vacuum pressure lower than 250 mmHg.



### WARNING

- Only use the Motif Duo for its intended use as described in this manual.
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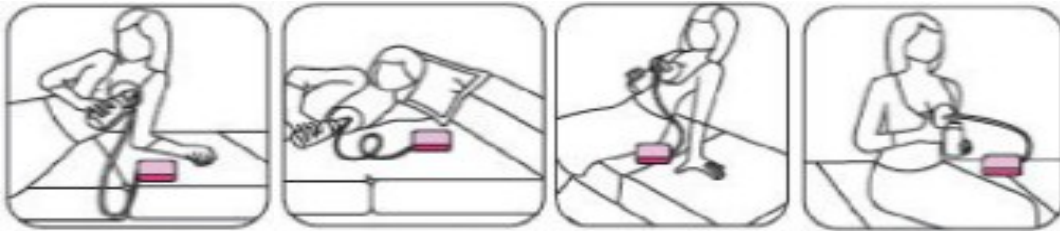
## 4. Pumping

### 4.1 Preparing to Pump

1. Wash hands thoroughly with soap and water before touching the breast and pump parts.
2. Check pump components for wear or damage before use and replace parts when/if necessary.
3. Make sure that all components that come into contact with breast milk are cleaned and sanitized appropriately. Assemble the breastshield, diaphragm and bottle according to this manual and connect to the pump body via the tubing.
4. Ensure tubing is connected tightly to prevent air leakage.
5. Check battery capacity before use to ensure the device is fully charged.
6. Massage the breast for about 5 minutes with a warm towel to promote expression.

### 4.2 Pumping

To prevent backflow in tubing, always use the breast pump while seated.



1. Place the breastshield on your breast so that your nipple is centered within breastshield.
2. Turn the breast pump on to begin pumping.
3. Adjust the speed/vacuum settings to a comfortable level.
4. Normal pumping time ranges from 15 minutes to 30 minutes; this can vary based on the individual.
5. When your pumping session is over, turn off the power and slide a finger between the breastshield and your breast to separate the breastshield from your breast.

	<b>CAUTION</b>
<ul style="list-style-type: none"><li>• Never use while pregnant.</li><li>• A breast pump is a single user device. Use by more than one person may present a health risk.</li><li>• If you have been diagnosed 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.</li><li>• Before each use visually inspect the individual components for cracks, chips, tears,</li></ul>	

discoloration, or deterioration. In the event that damage to the device is observed, please discontinue use until the parts have been replaced.

- If you feel pain in your breast or nipple, turn the pump off or slide a finger between the breastshield and your breast to break the suction.
- You can experience some inconvenience in the early stage of usage. If the inconvenience is persistent or injury/ bleeding around the nipple appears, contact a healthcare professional immediately.

## **5. Cleaning the Pump**

Before using the pump, wash the breast pump and all parts thoroughly. Clean the main body of the pump with a clean, dry towel after each use.

### **5.1 Washing Pump & Parts**

1. Disassemble the bottle and parts.
2. Rinse all parts that came in contact with the breast and breast milk in cool water to remove breast milk residue.
3. Wash parts separately in sink or soak all parts in warm, soapy water for 5 minutes. Wash each part with a clean dishcloth or a soft brush.
4. Dishwasher — wash all separated parts on top rack of dishwasher only.
  1. Place parts on a clean surface and/or towel and allow all parts to air dry.
  2. Store dry parts in a clean, cool place when not in use. Do not store wet or damp parts.

### **CAUTION**

- Disassemble and wash all parts that come in contact with the breast and breast milk immediately after use to avoid milk residue and to prevent the growth of bacteria.
- Only use drinking-quality water for washing pump parts.



#### **Main body**

Wipe with a clean, dry towel after each pumping session.



### **Tubing**

Do not clean tubing: replace damaged or dirty tubing with a new set. **5.2 Sanitation**

1. Clean

all parts before using the pump for the first time.

2. Clean the device (main body) after each use with a dry towel.

### **Sanitizing Pump Parts**

1. Disassemble all parts that come in contact with breast milk.
2. Fill a pot with enough water to cover all parts.
3. Boil the water for 5 minutes with parts in the water.
4. Allow water to cool and gently remove parts from water with tongs.
5. Place parts on a clean surface and/or towel.
6. Allow all parts to air dry.
7. Store dry parts in a clean, cool place when not in use. Do not store wet or damp parts.

## **6. Storing Breast Milk**

The information below is referenced from the Office of Women's Health.

*Store your breast milk in clean glass or hard BPA-free plastic bottles with tight-fitting lids. You can also use milk storage bags, which are made for freezing human milk. Do not use disposable bottle liners or other plastic bags to store breast milk.*

### **After Each Pumping Session**

- Label the date on the milk storage container. Include your child's name if you are giving the milk to a childcare provider.
- Gently swirl the containers to mix the cream part of the breast milk that may rise to the top back into the rest of the milk. Do not shake the milk. This can cause some of the milk nutrients to break down.
- Refrigerate or chill breast milk immediately after expression. You can refrigerate breast milk in a cooler or insulated cooler pack, or freeze the milk in small (2 to 4 ounce/60 to 110 g) batches for later feeding.

### **Freezing Breast Milk**



- Wait to tighten bottle caps or lids until milk is completely frozen.
- Try to leave an inch or so from the milk to the top of the container, as it will expand when freezing.
- Store milk in the back of the freezer, away from freezer door.

### Thawing and Warming Milk

- Clearly label milk containers with the date the milk was expressed. Use oldest stored milk first.
- Thaw the bottle or bag of frozen milk by putting it in the refrigerator overnight, holding it under warm running water, or by placing it in a container of warm water for several minutes.
- Never put a bottle or bag of breast milk in the microwave. Microwaving the milk creates hot spots that could burn or damage the milk.
- Swirl the milk, and test the temperature by dropping some on your wrist. Milk should be comfortably warm — not hot.
- Use thawed breast milk within 24 hours. Do not refreeze thawed breast milk.

### Storing Fresh Breast Milk

Storage Method	Temperature	Longevity	Tips
Countertop or table	Room temperature Up to 77°F (25°C)	Up to 3 to 4 hours is best. Up to 6 to 8 hours is okay for very clean expressed milk.	Containers should be covered and kept as cool as possible. Discard leftover milk within 1 to 2 hours after baby is finished feeding.
Refrigerator	39°F (4°C) or colder	Up to 3 days is best. Up to 5 days is okay for very clean expressed milk.	Store milk in the back of the main body of the refrigerator. While at work, you can place your expressed milk in the refrigerator. Use an insulated bag and place the milk at the back of refrigerator.

Freezer	0°F (-18°C) or colder	Up to 3-6 months is best. Up to 9 months is okay for very clean expressed milk.	Store milk toward the back of the freezer where the temperature is most constant.
Deep freezer	-4°F (-20°C) or colder	Up to 6 months. Up to 12 months is okay for very clean expressed milk.	Store milk toward the back of the freezer where the temperature is most constant. Milk stored at 0 degrees or colder is safe for longer durations but the milk quality might not be as high as when first expressed.

### Storing Thawed Breast Milk

	Room temperature (60°F to 85°F/16°C to 29°C)	Refrigerator (39°F/4°C or colder)	Freeze Options
Thawed breast milk	1 to 2 hours is best. Up to 4 hours is okay.	24 hours	Do not refreeze.

## 7. Troubleshooting

No or low expression	<ul style="list-style-type: none"> <li>○ Check the power button.</li> <li>○ Ensure the breastshield, diaphragm assembly, and bottles are assembled correctly.</li> <li>• Inspect all components for tears, cracks, or bending.</li> </ul>
Battery not charged	<ul style="list-style-type: none"> <li>• Ensure that the power adapter is connected correctly.</li> <li>• If your pump will not hold a charge, replace the adapter with new one.</li> </ul>
Does not power on	<ul style="list-style-type: none"> <li>• Inspect the power on/off button and exterior of pump for any foreign materials.</li> </ul>
Main body becomes wet	<ul style="list-style-type: none"> <li>• Unplug the power adapter from the socket.</li> <li>• Turn off the main body.</li> <li>• Wipe main body with dry cloth and store the main body in a warm, dry place for more than 12 hours.</li> </ul>














Breast milk in tubing	<ul style="list-style-type: none"> <li>• Turn off the main body.</li> <li>• Disconnect the tubing from diaphragm top.</li> <li>• Remove the milk from tubing and diaphragm.</li> </ul>
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*If you are having trouble with your breast pump or have further questions, please contact the Motif Medical customer center.*

## **8. Meaning of Symbols**

The following symbols are placed on the product, label, packaging and this manual for ease of use.

Symbols on product label and packaging:

	Manufacturer
	Date of manufacture
	Serial number of the device
	Refer to user manual
	Type BF applied part
	Keep the device dry
	Device is fragile
	Temperature limitation for operation, transport and storage
	Humidity limitation for operation, transport and storage
	Atmospheric pressure limitation for operation, transport and storage
	Keep the device away from sunlight
IP21	Degree of protection against ingress of water or solid particles
	Do not dispose the device together with unsorted municipal waste (for EU only). The solid bar symbol indicates that the mains adapter was put on the market after 13 August 2005.
	This symbol indicates unique GS1 Global Trade Item Number (GTIN). (01) Barcode (11) Date of manufacture (21) Serial No.

	This symbol indicates the compliance with the essential requirements and provisions of the Medical Device Directive 93/42/EEC as amended by 2007/47/EEC.
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Symbols on the adaptor:



- Power adaptor is a class II device.
- Power adaptor is for indoor use only.
- This symbol indicates direct current.
- This symbol indicates alternating current.
- This symbol indicates compliance with Canadian and U.S. component requirements.  
(Recognized Component Mark for Canada and the United States)

## **9. Manufacturer’s Declaration on EMC**


The Motif Duo requires special precautions regarding EMC (Electromagnetic compatibility) and should be used in accordance with the EMC information provided in this user manual. Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, and walkie-talkies can affect the functionality of the device. Wireless equipment of this type should be kept at least 1 m away from the equipment.

The set pressure value and operating mode should be unchanged during EMC testing. It is the essential performance of the pump and is checked during EMC testing.

### **Electromagnetic Emissions**

The Motif Duo is intended for use in the electromagnetic environment specified below.		
Emissions test	Compliance	Electromagnetic environment-guidance
RF emissions CISPR 11	Group 1	This electric breast pump uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The electric breast pump is suitable for use in all establishments, including domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emission IEC61000-3-2	Class A	

Voltage fluctuations /flicker emissions IEC61000-3-3	Complies	
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	<b>WARNING</b>
<p>The Motif Duo breast pump should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the breast pump should be observed to verify normal operation in the configuration where it will be used.</p>	

**Recommended separation distances between portable and mobile RF communications equipment and the electric breast pump**

The Motif Duo is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The user can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment 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]		
	150 kHz ~ 80 MHz $d = 1.2\sqrt{p}\sqrt{f}$	80 MHz ~ 800 MHz $d = 1.2\sqrt{p}\sqrt{f}$	800 MHz ~ 2.5 GHz $d = 2.3\sqrt{p}\sqrt{f}$
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 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 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.

**Electromagnetic Immunity**

<p>The electric breast pump is intended for use in the electromagnetic environment specified below. The user of the electric breast pump should ensure that it is used in such an environment.</p>			
Immunity test	Test level	Compliance level	Electromagnetic Environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV Contact ±8 kV air	±6 kV Contact ±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%.
Electrostatic discharge (ESD) FDA home use guidance	±8 kV Contact ±15 kV air	±8 kV Contact ±15 kV air	
Electrical fast transient/burst IEC61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or domestic environment.
Surge IEC61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Mains power quality should be that of a typical commercial or domestic environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	<5% $U_T$ (>95% dip in $U_T$ ) for 0.5 cycle	<5% $U_T$ (>95% dip in $U_T$ ) for 0.5 cycle	Mains power quality should be that of a typical commercial or domestic environment. If the user of the electric breast pump requires continued operation during power mains interruptions, it is recommended that the electric breast pump be powered from an uninterruptible power supply or a battery.
	40% $U_T$ (60% dip in $U_T$ ) for 5 cycle, 6 cycle	40% $U_T$ (60% dip in $U_T$ ) for 5 cycle, 6 cycle	
	70% $U_T$ (30% dip in $U_T$ ) for 25 cycle, 30 cycle	70% $U_T$ (30% dip in $U_T$ ) for 25 cycle, 30 cycle	
	<5% $U_T$ (<95% dip in $U_T$ ) for 5s	<5% $U_T$ (<95% dip in $U_T$ ) for 5s	

Power frequency (50/60 Hz) magnetic field IEC61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical commercial or domestic environment.
Power frequency (50/60 Hz) magnetic field FDA home use guidance	30 A/m	30 A/m	
$U_T$ is the a.c. mains voltage prior to application of the test level.			

Immunity Test	Test Level	Compliance Level	Electromagnetic environment-guidance
Conducted RF IEC 61000-4-6	3 V <sub>rms</sub> 150 kHz ~ 80 MHz	3 V <sub>rms</sub>	Portable and mobile RF communications equipment, including cables, should be used no closer to any part of the electric breast pump than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  Recommended separation distance: d = 1.2  d = 1.2 80 MHz ~ 800 MHz d = 2.3 800 MHz ~ 2.5 GHz
Radiated RF IEC 61000-4-3	3 V/m 80 MHz ~ 2.5 GHz	3 V/m	
Conducted RF FDA home use guidance	6 V <sub>rms</sub> 150 kHz ~ 80 MHz	6 V <sub>rms</sub>	Where p is the maximum output power rating of the transmitter (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 <sup>a</sup> , should be less than the compliance level in each frequency range <sup>b</sup> . Interference may occur in the vicinity of equipment marked with the following symbol:
Radiated RF FDA home use guidance	10 V/m 80 MHz ~ 2.6 GHz	10 V/m	

			
<p>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.</p>			
<p><sup>a</sup> 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 electric breast pump is used exceeds the applicable RF compliance level above, the electric breast pump should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the pump.</p>			
<p><sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 v/m.</p>			

## **10. Technical Specifications**

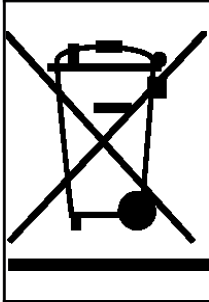
<b>Functional Characteristics</b>	
Type	Pumping Pressure
Electric Breast Pump	Vacuum                      32 - 250 mmHg
Display	Function



## Motif Duo Operation Manual

Type	3" Mono LCD	Mode	Expression 10 levels
Pressure Level	Numeric & 10 levels		Massage 10 levels
Operating Time	Numeric Display (min:sec)	Auto Shut Off	30 min
Battery Level indication	3 levels	Memory	- 60 operations
Backflow Prevention			
<b>Power</b>			
Adaptor	Input: 100-240Vac, 50-60Hz, 0.5A Output: DC +12V, 1.5A (MAX)	Rechargeable Battery	7.4V Li-ion Polymer, 900mAh  Operating Time: 150min  Charging Time: 90min
<b>Standard Configuration</b>			
Operation Manual	1ea	Breastshield & Bottle	1 set
Power Adaptor	1ea		(Standard breastshield 24mm)
<b>Options</b>			
Carrying bag		Breastshield & Bottle Set	
Breastshield	21mm / 27mm		(for double pumping)
<b>Warranty</b>			
Main Unit	1 year		
<b>Physical Characteristics</b>			
Dimension		Weight	
Main Unit	95(W)x49(D)x132(H)mm	Main Unit	260g
Packing	250(W)x 55(D)x180(H)mm	Packing	0.9Kg
Carton Box (10ea)	795(W)x270(D)x400(H)mm	Carton Box (10ea)	10Kg
<b>Environmental Conditions</b>			
Operating Temperature	5 to 40°C (41-104°F)	Storage Temperature	-25 to 70°C (-13-158°F)
Operating Humidity	15-95% non-condensing	Storage Humidity	15-95% non-condensing
<b>Certificates</b>			
Certificates Standard	CE0434 EN60601-1, EN60601-1-2	Classifications	Class II, Type BF
		Waterproof	IP21

### Disposing of the Pump



In order to comply with EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE): This product may contain material that could be hazardous to human health and the environment. DO NOT DISPOSE of this product as unsorted municipal waste. This product needs to be RECYCLED in accordance with local regulations, contact your local authorities for more information. This product may be returnable to your distributor for recycling - contact the distributor for details.

### **Product Warranty**

Product Name	Motif Duo Double Electric Breast Pump
Brand name	Motif Medical
Model Name	Duo
Serial No.	
Warranty Period	1 Year limited
Date of Purchase	
Manufacturer	Motif Medical

Thank you for purchasing the Motif Duo Double Electric Breast Pump. This product has been passed through strict quality control and inspection.

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