Hi bebe *Plus*

Operation Manual



BT-100

Keep this manual for future reference

100-ENG-OPM-EUR-R09

CE 2460

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Indication for use

BT-100 electric breast pump is intended to be used by a lactating woman for expressing and collecting milk from their breasts, in order to relieve engorged breasts or pull out flat or inverted nipples.

Product description

The principle of electric breast pump is to artificially imitate the periodic vacuum pressure that occurs when a baby sucks the mother's milk using electrical components, which is used to express and collect breast milk from the breast.

The generation and flow of vacuum pressure are as follow.

An amount of vacuum pressure is generated by the main body, and transmitted to the diaphragm block through an air tube connected to the inlet of the main body. The diaphragm block consists of diaphragm, diaphragm top and diaphragm bottom. The diaphragm top and bottom are tightly coupled and spaced apart. The vacuum pressure delivered from the main body inflated the diaphragm upward. Then the vacuum pressure occurs on the diaphragm bottom side, and the incised lower part of the funnel cap is compressed by the vacuum pressure and the whole inside space of the funnel block is made into a sealed space. The vacuum pressure made of diaphragm movement is applied to the breast connected to the funnel, so that the breast milk in the breast is sucked through the nipple. When the sufficient pressure is generated, the main body converts the vacuum pressure into atmospheric pressure. The diaphragm, a type of elastomer which has the property of returning to its original shape, creates positive pressure inside the funnel block and pushes the gathered breast milk in the funnel block into the bottle.

The electric breast pump is used in the home environment, which has massage and expression mode and is capable of single and double pumping.

The operating life of this breast pump is expected to be approximately 150 minutes sessions per day, for one year.

Contraindications

There are no known contraindications for the breast pump.

1. Safety Information

Before using BT-100 breast pump, read this manual, understand and follow instructions and safety information to prevent injury.

Warning symbols

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

⚠**WARNING**	A hazard of serious injury or death.
⚠**CAUTION**	A hazard of minor injury or damage to the system.

The following symbols are placed on product, label, packing and this manual in order to stand for the information about:

Symbol	Standard/ Symbol Reference no.	Description of symbol
	ISO 7010 — Graphical symbols — Safety colours and safety signs — Registered safety signs / W001	Used to identify safety information for warning. Be well-known this information

		thoroughly before using the device.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.4.4	Used to identify safety information for caution. Be well-known this information thoroughly before using the device
IP21	IEC 60529 Degrees of protection provided by enclosures	Indicates the protection level against the ingress of solid object and liquid. IPX1 is protection against some falling water drops vertically. IP2X is protection against solid foreign object like a finger.
	ISO 7010 — Graphical symbols — Safety colours and safety signs — Registered safety signs / M002	Refer to operation manual. Read manual before placing the device.
	IEC 60417 — Graphical Symbols for Use on Equipment / 5032	This symbol indicates alternating current.
	IEC 60417 — Graphical Symbols for Use on Equipment / 5031	Indicates DC power supply.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.3	Indicates the production date.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.1	Indicates the manufacturer.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.7	Indicates the serial number of the device.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.2	Indicates the authorized representative in the European Community of manufacturer.
	ISO 15223-1, Medical Devices—Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.1.6	Indicates a reference number.
	IEC 60417 — Graphical Symbols for Use on Equipment / 5172	This symbol indicates that the power adapter is a class II device.
	IEC 60417 — Graphical Symbols for	Indicates the BF applied part.

	Use on Equipment / 5333	It is applicable to Funnel, Funnel block, Air tube, Diaphragm Top, Diaphragm bottom and Bottle.
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.4	Indicates to keep the device dry.
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.1	Indicates the medical device that can be broken or damaged if not handled carefully.
	ISO 7000 — Graphical symbols for use on equipment -- Registered symbols / 0623	Indicates to keep upright
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.2	Indicates to keep the device away from sunlight.
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.7	Indicates the temperature limitation for transport and storage.
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.8	Indicates the humidity limitation for transport and storage.
	ISO 15223-1, Medical Devices— Symbols to be used with medical device labels, labeling and information to be supplied – Part 1: General requirements / 5.3.9	Indicates the range of atmospheric pressure to which the medical device can be safely exposed for transport and storage.
	Universal Recycling symbol	Indicates the packing material is recyclable.
CE 2460	European Medical Directive 93/42/EEC	The product is in conformity with European Medical Directive 93/42/EEC. Notified body identification numbers with CE mark indicate that this has been verified by the notified body.
	This symbol indicates unique GS1 Global Trade Item Number (GTIN).	(01) Barcode (11) Date of manufacture (21) Serial No.

Symbols on the adaptor

Symbol	Standard/ Symbol Reference no.	Description of symbol
	IEC 60417 — Graphical Symbols for Use on Equipment / 5172	This symbol indicates that the power adapter is a class II device.
	IEC 60417 — Graphical Symbols for Use on Equipment / 5957	This symbol indicates that the power adapter is for indoor use only.
	UL Mark (200-195S 10M/8/98)	This symbol indicates compliance with both Canadian and U.S. component requirements. (Recognized Component Mark for Canada and the United States)

WARNING

- Do not touch or operate BT-100 with wet hands to avoid electric shock.
- Do not reach for the device if it has fallen into water. Unplug the power adapter immediately from wall socket outlet.
- Only use the BT-100 breast pump for its intended use as described in this manual.
- Never use while pregnant.
- The breast pump should be hygienic. Using second hand or rental product can cause cross contamination.
- Do not use the device while sleeping or overly drowsy.
- Keep away the main body from direct sunlight.
- BT-100 and accessories are not heat-resistant. Keep away from radiators, open frame and heated surface.
- BT-100 is a personal care device. Do not use the device by more than one person.
- Supervision is necessary when breast pump used in the vicinity of children or pets. And keep all components not in use out of the reach of them.
- Do not use the damaged components including power adapter.
- Do not use in the out of range for humidity, temperature and atmospheric pressure environment than indicated in this manual.
- The BT-100 electronic breast pump should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the BT-100 electric breast pump should be observed to verify normal operation in the configuration in which it will be used.
- 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 BT-100, including cables specified by the manufacturer. Otherwise, degradation of the

performance of this equipment could result.

- Do not use the device as a general suction device for other purposes except the expression of breast milk.
- Do not disassemble the device. Only the qualified service personnel who authorized by the manufacturer can open the battery compartment and replace the battery, and the battery of same model and specification should be replaced.
- The incorrect battery replacement could be caused danger such as excessive temperatures, fire or explosion.
- If the device is not used for long time, it should be stored that battery is removed. Charge the battery and store it at room temperature in low humidity.
- Use only AC/DC Adaptor supplied or appointed by Bistos Co., Ltd.

CAUTION

- If you are a mother who is infected like Hepatitis B, Hepatitis C or Human Immunodeficiency Virus (HIV), pumping breastmilk will not reduce or remove the risk of transmitting the virus to your baby through your breastmilk.
- 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.
- If you feel pain in your breast or nipple, turn the pump off or slide a finger between the funnel 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 or bleeding around the nipple appears, contact a healthcare professional or breastfeeding specialist immediately.
- For expressing breastmilk, make yourself comfortable and do not incline the bottle.
- For operating pump, connect diaphragm assay tightly to prevent the expressed milk flow into the main body.
- Clean and sanitize all compartments that come into contact with breast and milk according to this manual before and after every use.
- Disassemble and wash all parts that come in contact with the breast and breast milk immediately after use to avoid dry up of milk residue and to prevent the growth of bacteria.
- Only use drinking-quality water for washing.
- Keep dry the all components after clean and sanitize.
- Be sure that the expressed milk does not flow into the main body by checking air tube. If milk flow in reverse direction, turn the power off, remove the milk from air tube or diaphragm and replace or clean as instructed this user manual.
- Do not fill up the bottle to avoid backflow.
- Make sure that the air tubes not to get tangled while double pumping.
- When single pumping, don’t connect both bottle assembly to the main unit. Connect only

one bottle assembly and use basic tubing port after blocking the auxiliary tubing port with port plug.

- Remove the power adapter from breast pump immediately when charging finished.
- The fuel level displayed in LCD can differ from actual battery capacity. Use breast pump with full charged battery when possible.
- Charge the battery immediately when [*Lo Bt*] displayed.
- If breast pump remain unused for a longer period of time, make sure that the battery full charged before use.
- Only authorized service personnel shall repair or replace of BT-100
- Never use damaged device. Inspect all appropriate components before each use.
- Do not use outdoors, or operate where aerosol (spray) products are being used or where oxygen is being administered.
- If air tube becomes moldy, discontinue use and replace it.
- Mobile and portable radio frequency communications equipment can affect the operation of breast pump.
- Breast pump, plastic bottles and component parts may break when dropped.
- Do not pumping while bathing or showering.
- Do not thaw frozen breastmilk in a microwave or in a pan of boiling water (danger of burning because of too hot milk and microwave can also change the composition of breastmilk)
- Thaw breastmilk overnight in the refrigerator. Thawed breastmilk is safe in the refrigerator for 24 hours. Do not refreeze thawed breastmilk.
- Quickly thaw breastmilk by holding the bottle under warn running water.
- Place the sealed bottle in a bowl of warm water for 20 minutes to bring it to body temperature.
- If you are adding expressed breastmilk to a container of already frozen breastmilk, make sure to add a lesser amount than the already frozen amount.
- When disposing of the BT-100, adhere to all applicable laws regarding recycling.
- When handling package materials, abide by local waste disposal laws and regulations. Keep the packaging materials away from children.
- Properly dispose or recycle the depleted battery according to local regulations.
- Always use accessories supplied by Bistos Co., Ltd.

For your child’s safety and health

WARNING!

Always use this product with adult supervision.

Never use feeding nipples as a soother.

Continuous and prolonged sucking of fluids will cause tooth decay.

Always check food temperature before feeding.

2. Product configuration

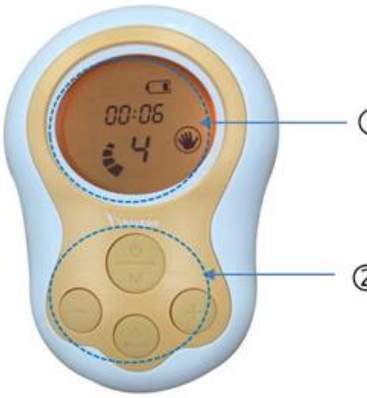
BT-100 Electric breast pump is utilizes the vacuum to express the breastmilk. It is classified as a medium vacuum and intermittent suction device.
When unpacking the box, check all the following components are enclosed. ***All components except main body and adapter are consumables***. The standard configuration is composed.

Name	User manual	Power adapter	Main Body	Nipple
Shape				
Qty.	1	1	1	1
Name	Diaphragm Top	Diaphragm	Diaphragm Bottom	Air tube connector
Shape				
Qty.	1	1	1	2
Name	Funnel	Funnel Block	Funnel cap	Air tube /80cm
Shape				
Qty.	1	1	1	1 1
Name	Bottle/160 ml	Bottle cap	Bottle cover	Bottle disc
Shape				
Qty.	1	1	1	1

- *The color of main body or components can be changed without notice but the performance characteristics are not influenced by these changes.*

⚠ CAUTION

- Use Bistos original accessories only.
- Check consumable set for wear or damage before use and replace if necessary. Especially, as for the nipple, inspect before each use and pull in all directions. Throw away at the first signs of damage or weakness.
- The period of use for consumables excluding battery is recommended 1 to 3 months, but it might be different for the use environment.
- Do not leave a nipple in direct sunlight or heat or disinfectant (“sterilizing solution”) for longer than recommended, as this may weaken the part.
- To help maintain optimum performance, it is recommended to replace the consumables periodically.

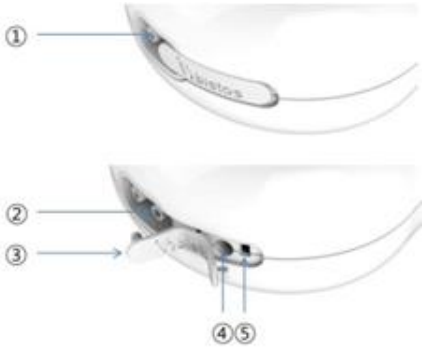


① LCD Display with protective film

② Buttons

⚠ CAUTION

- Remove the protective film from the LCD window before use.



① Basic tubing port:
Tubing port for single pumping

② Auxiliary tubing port:
Tubing port for double pumping

③ Port plug

④ Power adapter port

⑤ Port plug hole

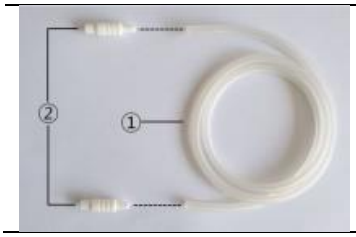
⚠ CAUTION

When double pumping, using only one bottle assembly result in lower suction vacuum pressure. Please ensure both bottle assembly are used simultaneously.

* Bottle assembly: It refers to a one set consisting of the Diaphragm Bottom, Diaphragm, Diaphragm Top, Funnel Block, Funnel, Funnel cap, Air tube, Bottle.

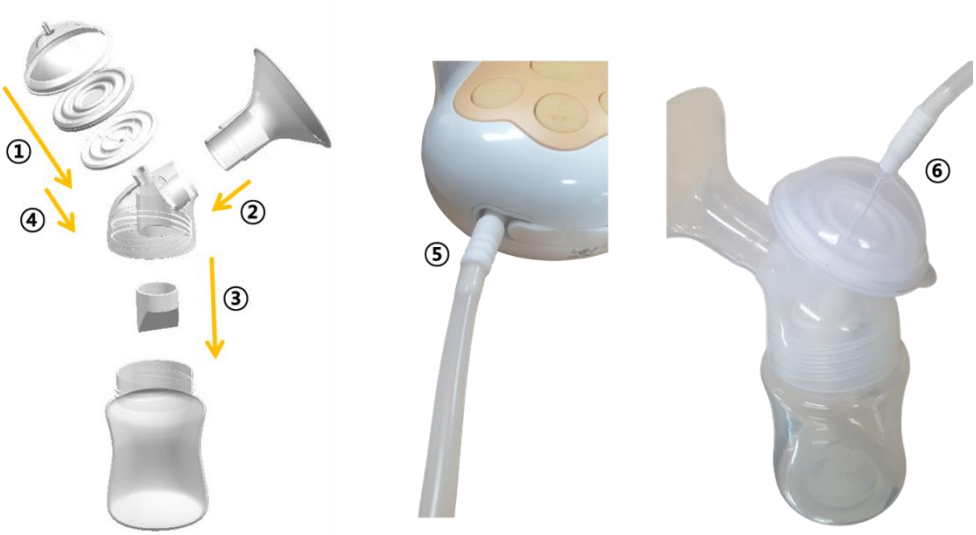
3. Prepare to use

3.1 Air tube and connector assembling



Insert the thin part of ②**air tube connector** into the end tip of ①**air tube** as shown picture left.

3.2 Assemble and disassemble



① Place the diaphragm in the diaphragm bottom in the direction that the cross lined surface facing to bottom. Cover the diaphragm top and turn it to lock.

② Put the funnel to the funnel block.

③ Put the funnel cap beneath the funnel block. Screw bottle into the funnel assembly.

④ Connect the air hole of diaphragm bottom to the funnel assembly.

⑤ Connects the air tube to basic tubing port on main body and diaphragm top

⑥ Connects the air tube to the bottle block as shown in the picture.

⑦ To clean or storing after use, disassemble the bottle assembly in the reverse order.

3.3 Display



No.	Name	Status	Description
①	Memory	Off	No stored operating sequence.
		Flashing	Storing operating sequence.
		On	There is stored operating sequence.
②	Expression mode	On	Operating in expression mode.
		Flashing	Operating in stored expression mode sequence.
③	Adapter connection	Off	Power adapter is not connected.
		On	Power adapter is connected.
④	Battery	Fuel level	Full charged 75 ~ 100 % 50 ~ 75 % 25 ~ 50 % 0 ~ 25 % Full discharge Flashing means charging needed. Shut down automatically when fully discharged.
⑤	Operating time	On	Operating time after power on. After 30 minutes, the main body will turned off automatically. When the battery needs to be charged, [***Lo bt***] will be displayed.
⑥	Speed/Vacuum level	On	Speed/vacuum level displayed in number
⑦	Massage mode	On	Operating in massage mode
		Flashing	Operating in stored massage mode sequence.
⑧	Speed/Vacuum level	On	Speed/vacuum level displayed in gradation.

3.4 Operating functions

BT-100 has two operating functions: basic massage/express function and memory function to save the operating sequence. Using memory function, comfortable and optimum massage/express mode, level of speed/vacuum strength, massage/express time can be saved and restored anytime.

(1) Buttons

Each button has three functions. Pressing shortly will make it perform basic functions, a press with a short hold will engage the frequency function and press longer more than 2 seconds will

make it perform memory functions.

Button	Basic function Short Press	Frequency function Press & Short Hold	Memory function Press & Long Hold
	Power On/Off button	-	Memory start/stop button
	Turn on and off the power.	-	Press and hold this button for more than two seconds after turn on the BT-100 to start the memory function of operating sequence. Operate the BT-100 as you want to save and press and hold again to save the whole sequence operated. When memory function activated, the memory icon will flashing in the LCD display. When the operating sequence saved the memory icon will be turned on. The saved operating sequence will not be erased upon power off.
	Speed/vacuum increase button	Frequency increase	Stop button
	Increase the speed/vacuum in the operating mode. (Level 1 ~ 10)	During expression mode, increase the frequency	Stop to operate as saved sequence. No response when not operating according to saved sequence.
	Speed/vacuum decrease button	Frequency decrease	Start button
	Decrease the speed/vacuum in the operating mode.	During expression mode, decrease the frequency	Start to operate as saved sequence. No response when no sequence saved.
	Mode change button	-	Delete button
	Toggle between massage and express mode.	-	Delete the saved sequence. Memory icon will be off. After deleting the saved sequence, the BT-100 will operate as your last set-up. No response when no sequence saved.

(2) How to use the memory function

You can save and restore the convenient and optimum massage/express mode, speed/vacuum level and operating time.

① Determine the operating sequence to save such as the massage/express mode sequence, speed/vacuum level and operating time.

② Turn on BT-100 by pressing the power on/off button and press and hold the power on/off button again until the memory icon flashing to start memory session.

③ Operate BT-100 as the sequence you want to save.

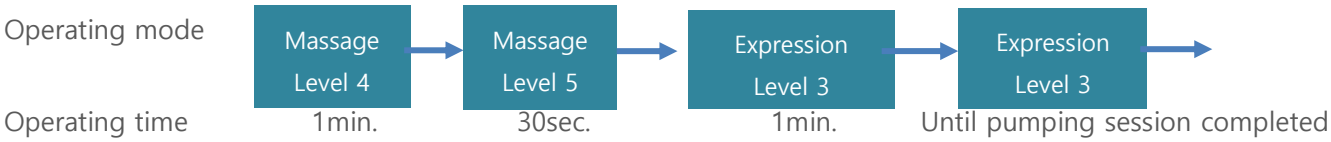
④ After finish to operate as the sequence you want to save, press and hold the power on/off

button for more than two seconds to save the sequence. When saved, the memory icon will turned on.

⑤ To start the saved operation sequence, press and hold the play button for more than 2 seconds while the device on. The massage mode icon or the express mode icon will be flashing.

⑥ To stop the saved operation sequence, press and hold the stop button for more than 2 seconds. The BT-100 will operate as your last set-up and the massage mode icon or the express mode icon will be on.

※ Example of programming pump memory



1. Check the LCD display to see if there is an existing saved operating sequence. The icon is show when there is a saved operating sequence.
2. If there is a saved sequence, delete it by pressing and holding button for 3 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 programming the memory, press and hold button for 3 seconds. The icon will begin to flash to indicate that the operation sequence is being saved.
6. Press button until Massage Mode icon is illuminated, and then adjust Speed/Vacuum to Level 4 by pressing or buttons. Watch Timer and let pump run for 1 minute.
7. Increase the Speed/Vacuum to Level 5 by pressing button, and let pump run for 30 seconds.
8. Change to Expression Mode by pressing button icon will be displayed. Adjust Speed/Vacuum to Level 3 by pressing or buttons. Watch Timer and run pump for 1 minute.
9. Press button to increase Speed/Vacuum to Level 4, and then press and hold button for 3 seconds, to save the operating sequence.
10. The last programmed step will operate until stopped by the user or the Timer reaches 30 minutes.
11. To run the saved operating sequence, press and hold button for 3 seconds.
12. To stop running the saved operating sequence, press and hold the button for 3 seconds. The pump will return to your last session settings.

(3) Frequency Function

This feature is accessible during Expression Mode, and does not affect Vacuum level.

① There are 3 Frequency levels (1-3), which are selectable during Expression Mode by pressing and holding either or buttons for 1 second.

② The LCD Display will show [CY: --], indicating the current set Frequency

③ Adjust the set Frequency by pressing either or buttons

④ The Frequency will be displayed for 4 seconds, and then the pump will automatically return

to normal operating mode.

⚠ CAUTION

Increasing the Frequency might be accompanied by an increase in noise and vibration.

3.5 Essential performance

The essential performance of BT-100 was to limit the vacuum pressure lower than 270 mmHg.

4. Pumping

⚠ CAUTION

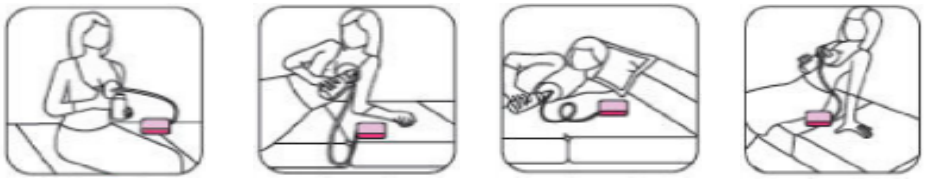
- If you are a mother who is infected with Hepatitis B, Hepatitis C or Human Immunodeficiency Virus (HIV), pumping breastmilk will not reduce or remove the risk of transmitting the virus to your baby through your breastmilk.
- Before each use visually inspect the individual components for cracks, chips, tears, discoloration or deterioration. In the event that damage to the device is observed, please discontinue use until the parts have been replaced.

4.1 Prepare to pump

(1) Wash hands thoroughly (at least one minute) with soap and water before touching the breast and pump parts.
(2) Check pump set components for wear or damage before use and replace if necessary.
(3) Make sure that the components that come into contact with breastmilk are cleaned and sanitized appropriately. Assemble the funnel, diaphragm and bottle according to this manual and connect to main body via air tube.
(4) Check the air tube connected tightly to prevent the vacuum leakage.
(5) Check the battery capacity and connect the power adapter necessary.
(6) Massage the breast for about 5 minutes with warm towel to promote expression.

4.2 Pumping

(1) To prevent the backflow, always pumping while seated.



(O) (X) (X) (X)

(2) Place the funnel on your breast so that your nipple is centered.
(3) Turn the breast pump on to pumping.
(4) Adjust the speed/vacuum to a comfortable level. Increase speed/vacuum level until pumping feels slightly uncomfortable (not painful), then decrease it slightly to find the comfortable level.
(5) Normal pumping times are from 15 minutes to 30 minutes but it can vary individually.
(6) When the pumping session is over, turn off the power and slide a finger between the funnel and your breast to separate the funnel from your breast.

5 Wash and Sanitize

(1) Clean all parts before using BT-100 for the first time. Especially, all parts that come in contact with breastmilk including the bottle set, before the first use, must be place in boiling water for 5 minutes following the '5.2 sanitize' instruction. This is to ensure hygiene.
(2) Clean the device (main body) after each use with clean and dry towel.

5.1 Wash

(1) Disassemble the bottle block for washing.
(2) Rinse all separated parts that came in contact with breast and breastmilk in cool water in order to remove breastmilk residue.
(3) Wash in sink, or
- Soak all separated parts in warm, soapy water for 5 minutes.
- Wash each part with a clean dish-cloth or soft brush.
- Rinse all separate parte with clear water.

(4) Wash in dishwasher
- Wash all separated parts on top rack of dishwasher.
- Allow all breast pump parts to air dry in a clean area.

(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.

	
Main body when dirty wipe with a clean dry towel after each pumping session	**Air tube** Do not clean tubing, replace damaged or dirty tubing with a new set

⚠ CAUTION

- Disassemble and wash all parts that come in contact with the breast and breastmilk immediately after use to avoid dry up of milk residue and to prevent the growth of bacteria.
- Only use drinking-quality water for washing.
- Do not use strong detergent to clean.

5.2 Sanitize



Boiling water

(1) Disassemble all parts that come in contact with breastmilk.
(2) Fill a pot with enough water to cover all parts.
(3) Boil the water for 5 minutes while 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 Storage of breastmilk

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

Store your breastmilk 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 breastmilk.

After each pumping

- Label the date on the storage container. Include your child's name if you are giving the milk to a child care provider.
- Gently swirl the container to mix the cream part of the breastmilk 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's valuable parts to break down.
- Refrigerate or chill milk right after it is expressed. You can put it in the refrigerator, place it is a cooler or insulated cooler pack, or freeze it in small (2 to 4 ounce/60 to 110 g) batches for later feeding.

Tips for freezing 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 because it will expand when freezing.
- Store milk in the back of the freezer, not on the shelf of the freezer door.

Tips for thawing and warming up milk

- Clearly label milk containers with the date the milk was expressed. Use the oldest stored milk first.
- Breastmilk does not need to be warmed. Some moms prefer to take the chill off and serve at room temperature. Some moms serve it cold.
- Thaw the bottle or bag of frozen milk (1) by putting it in the refrigerator overnight, (2) by holding it under warm running water, or (3) by setting it is a container of warm water.
- Never put a bottle or bag of breastmilk in the microwave. Microwaving creates hot spots that could burn your baby and damage the milk.
- Swirl the milk, and test the temperature by dropping some on your wrist. The milk should be comfortably warm, not hot.

- Use thawed breast milk within 24 hours. Do not refreeze thawed breastmilk.

Guide to storing fresh breastmilk for use with healthy full-term infants

Place	Temperature	How long	Things to Know
Countertop, table	Room temp (up to 77°F (25℃))	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. Cover the container with a clean cool towel may keep milk cooler. Throw out any leftover milk within 1 to 2 hours after the baby is finished feeding.
Refrigerator	39°F(4℃) 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. When at work, you can place your expressed milk in the refrigerator. Use a canvas or insulated bag that blends in with your coworkers' lunch bags, and place it at the back of refrigerator.
Freezer	0°F (-18℃) 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. Milk stored at 0°F or colder is safe for longer durations, but the quality of the milk might not be as high.
Deep freezer	-4°F(-20℃) 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°F or colder is safe for longer durations, but the quality of the milk might not be as high.

Guide to storing thawed breastmilk

	Room temperature (60°F to 85°F/16℃ to 29℃)	Refrigerator (39°F/4℃ or colder)	Any freezers
Thawed breastmilk	Up to 1 to 2 hours is best. Up to 3 to 4 hours is okay.	24 hours	Do not refreeze.

7 Trouble shooting

No or low expression	• Check the power button. • Ensure the funnel, diaphragm assembly and bottle assembled correctly. • Inspect all components for tear, cracks or bending.
Battery not charged	• Check the adapter connected correctly. • If you still have a problem with charging, replace the adapter with new one.
Does not power on	• Inspect the power on/off button and case for any foreign materials.
Main body becomes wet	• Unplug the power adapter from the socket. • Turn off the main body. • Wipe main body with dry cloth and store the main body in a warm, dry place more than 12 hours.
Breastmilk in tube	• Turn off the main body. • Disconnect the air tube from diaphragm top. • Remove the milk from tube and diaphragm.
Milk flow in reverse direction up to Main Body	• Stop using the product immediately. • Contact service center.

※ *If you have not resolved the problem with breast pump or you have further questions, please contact Bistos customer center.*

8 Manufacturer's declaration on EMC

The electric breast pump Hi bebe^{plus} BT-100 needs special precautions regarding EMC (Electromagnetic compatibility) and needs to be used according to the EMC information provided in this user manual.

The set pressure value and operating mode should be unchanged during EMC testing. It is the essential performance of BT-100 and checked during EMC testing.

8.1 Electromagnetic emissions

<table>
<tr><td colspan="3">The electric breast pump BT-100 is intended for use in the electromagnetic environment specified below. The customer or the user of the electric breast pump BT-100 should assure that it is used in such an environment.</td></tr>
<tr><td>Emissions test</td><td>Compliance</td><td>Electromagnetic environment-guidance</td></tr>
<tr><td>RF emissions
CISPR 11</td><td>Group 1</td><td>The electric breast pump BT-100 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.</td></tr>
<tr><td>RF emissions
CISPR 11</td><td>Class B</td><td rowspan="3">The electric breast pump BT-100 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.</td></tr>
<tr><td>Harmonic emission
IEC61000-3-2</td><td>Class A</td></tr>
<tr><td>Voltage fulctuations /flicker emissions
IEC61000-3-3</td><td>Complies</td></tr>
</table>

⚠ WARNING

- The electric breast pump BT-100 should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the BT-100 electric breast pump should be observed to verify normal operation in the configuration in which it will be used.
- Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect the electric breast pump and should be kept at least 1 m away from the equipment.
- Use of adapter other than those specified or provided by the manufacturer of this equipment could results in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

8.2 Recommended separation distances between portable and mobile RF communications equipment and the electric breast pump BT-100

The electric breast pump BT-100 is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the electric breast pump BT-100 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment and the electric breast pump BT-100 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 $d = 1.2\sqrt{P}$	80 MHz ~ 800 MHz $d = 1.2\sqrt{P}$	800 MHz ~ 2.5 GHz $d = 2.3\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters 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.

8.3 Electromagnetic immunity

The electric breast pump BT-100 is intended for use in the electromagnetic environment specified below. The customer or the user of the electric breast pump BT-100 should assure that it is used in such an environment.

Immunity test	Test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge(ESD) IEC 61000-4-2	contact discharge ±2kV, ±4kV, ±6kV, ±8kV air discharge: ±2kV, ±4kV, ±6kV, ±8kV, ±15kV	contact discharge ±2kV, ±4kV, ±6kV, ±8kV air discharge ±2kV, ±4kV, ±6kV, ±8kV, ±15kV	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 100 kHz repetition frequency	± 2 kV 100 kHz repetition frequency	Mains power quality should be that of a typical commercial or domestic environment.
Surge IEC61000-4-5	± 0,5 kV , ± 1 kV Line-to-line ± 0,5 kV, ± 1 kV, ±2 kV line(s) to earth	± 0,5 kV , ± 1 kV Line-to-line ± 0,5 kV, ± 1 kV, ±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	0 % UT ; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0% UT ; 1 cycle and 70% UT ; 25/30 cycles Single Phase; at 0° 0% UT ; 250/300 cycles	0 % UT ; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0% UT ; 1 cycle and 70% UT ; 25/30 cycles Single Phase; at 0° 0% UT ; 250/300 cycles	Mains power quality should be that of a typical commercial or domestic environment. If the user of the electric breast pump BT-100 requires continued operation during power mains interruptions, it is recommended that the electric breast pump BT-100 is powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC61000-4-8	30 A/m, 50 or 60 Hz	30 A/m, 50 or 60 Hz	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	
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 V 0,15 MHz – 80 MHz 6 V in ISM and amateur radio bands between 0,15MHz and 80 MHz 80% AM at 1 kHz	3 V 0,15 MHz – 80 MHz 6 V in ISM and amateur radio bands between 0,15MHz and 80 MHz 80% AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the electric breast pump BT-100, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1.2\sqrt{P}$

	10 V/m(minimum) 80 MHz – 2,7 GHz 80 % AM at 1 kHz	10 V/m(minimum) 80 MHz – 2,7 GHz 80 % AM at 1 kHz	$d = 1.2\sqrt{P}$ 80 MHz ~ 800 MHz $d = 2.3\sqrt{P}$ 800 MHz ~ 2.5 GHz 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 [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: 
Conducted RF FDA home use guidance	6 V_{rms} 150 kHz ~ 80 MHz	6 V_{rms}	
Radiated RF FDA home use guidance	10 V/m 80 MHz ~ 2.6 GHz	10 V/m	

NOTE: U_T is the a.c. mains voltage prior to application of the test level.

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 electric breast pump BT-100 is used exceeds the applicable RF compliance level above, the electric breast pump BT-100 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the electric breast pump BT-100.

[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 v/m.

9 Technical specifications

Functional Characteristics		
Type	Dual Electric Breast Pump	
Pumping pressure(Vacuum)	~ 270mmHg	
Display	Type	3” Mono LCD
	Pressure Level	Numeric & 10 levels
	Operating Time	Numeric Display (min:sec)
	Battery Level	3 levels
Function	Mode	Expression 10 levels
		Massage 10 levels
	Auto Shut Off	30 minutes
	Memory	~ 60 operations
	Backflow protection	

Power	
Adaptor	Input: AC 100 ~ 240V (50/60 Hz) Output: DC 12V/1.5A
Main body	Input: DC 12V / 1.0A
Rechargeable Battery	7.4 V Li-ion Polymer 900 mA
	Operating Time: 150 min
	Charging Time: 90 min (100%)
	Maximum charge-discharge cycles: 300 cycles

Standard Configuration	
Operation manual	1ea
Power Adaptor	1ea
Funnel & Bottle Set	1ea (default: 24mm)

Options	
Carrying Bag	1ea
Funnel	19mm/21 mm/24mm/27 mm/32mm
Funnel & Bottle Set (for Dual)	Default 24mm funnel

Physical Characteristics		
Dimension	Main Unit	95(W) x 49(D) x 133(H)mm
	Packing	238(W) x 156(D) x 181(H)mm
	Carton Box(10ea)	805(W) x 255(D) x 385(H)mm
Weight	Main Unit	210g
	Packing	0.8Kg

	Carton Box(10ea)	10Kg

Environmental Conditions	
Operating Temperature	5 to 40°C (41 ~ 104°F)
Operating Humidity	15 ~ 95% non-condensing
Storage Temperature	–25 to 70°C (–13 ~ 158°F)
Storage Humidity	15 ~ 95% non-condensing
Atmospheric pressure	70 ~ 106 kPa

Performance Characteristics	Suction cycle (cycles/min)	Vacuum level (mmHg)	
		Single pumping	Double pumping
Massage	Max. 71	Max. 144	Max. 78
Low expression (at level 1)	60	70	33
Medium expression (at level 5)	47	200	120
High expression (at level 10)	25	270	215

DISPOSAL



In order to comply with EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE): This product may contain material which 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	Electric Breast Pump
Brand name	Hi bebe *plus*
Model Name	BT-100
Serial No.	
Warranty Period	Main body and Adapter: 1 year from the date of manufacturing Battery: 6 months from the date of manufacturing (excluding batteries consumed over time)
Date of Purchase	
Customer	Name: Address: Telephone:
Sales Agency	
Manufacture	Bistos Co., Ltd.

※ Thank you for purchasing Hi bebe *plus* BT-100.

※ This product is manufactured and passed through strict quality control and inspection.

※ Compensation standard concerning repair, replacement, refund of the product complies with "**Framework Act on Consumers**" noticed by Fair Trade Commission of Republic of Korea.

Service Telephone and Fax. Numbers

Telephone: +82 31 750 0340
Fax.: +82 31 750 0344

Bistos Co., Ltd.
7th FL., A Bldg., Woolim Lions Valley 5-cha, 302,
Galmachi-ro, Jungwon-gu, Seongnam-si,
Gyeonggi-do 13201, Korea

www.bistos.co.kr
bistos@bistos.co.kr

EC REP ***Obelis s.a***
Bd. Général Wahis 53
1030 Brussels, BELGIUM
Telephone: + (32) 2. 732.59.54
Fax.: + (32) 2.732.60.03

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