

unimom

OPERA / OPERA eco

Double Electric Breast Pump



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USAGE INDICATIONS

The OPERA and OPERA eco are multi-user, electric powered breast pumps intended to express and collect breast milk.

USAGE ENVIRONMENT

Use Environment: Home or health care settings.

WARNINGS

IMPORTANT SAFEGUARDSWARNING: To reduce the risk of burns, electrocution, fire, or injury to persons:

- For Opera eco, always unplug this device immediately after use. For Opera, unplug the device immediately after use, if it is plugged in during use.
- Separation from the power outlet is only assured through the disconnection of the plug and socket connection.
- Do not use while bathing.
- Make sure the voltage of the device is compatible with the power source.
- Do not reach for a device that has fallen into water. If this occurs, unplug the device immediately.
- This device should never be left unattended when plugged in.
- Close supervision is necessary if operating this device near infants or children.
- Only use certified AC 14V DC, 2A adapter and cables provided by the manufacturer.
- Only use the device accessories as outlined in the manual.
- Only use this device for its indication for use as described in the manual.
- Never operate an electrical device if it has a damaged cord or adapter, if it is not working properly, if it has been dropped or damaged, or if it has been dropped into water.
- Do not place in or drop motor unit into water or other liquid.
- Keep the device away from heated surfaces.
- Never use while sleeping or drowsy.
- Do not try to disassemble or modify this device.
- This equipment is not suitable for use in the presence of a flammable anesthetic mixture.
- Replacing the battery by user is not permitted. please contact your local distributor or manufacturer if you need to change the battery.
- Keep the tubes out of the reach of children.
- 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.



Caution : When using electrical products, always read all instructions and follow basic safety precautions.

CAUTIONS

- Do not expose the breast pump to direct sunlight.
- If you feel pain in your breast or nipple, turn the pump off or slide a finger between the flange and your breast to immediately break the suction.
- Contact a healthcare professional or breastfeeding specialist if you experience problems or pain.
- Portable and mobile radio frequency communications equipment can affect the Opera breast pump.
- Wash hands thoroughly with soap and water before touching breast pump, kit and breasts and avoid touching the inside of containers or lids.
- Separate and wash all parts that come in contact with breast milk immediately after use to avoid dry up of breast milk residue and prevent growth of bacteria. Always inspect breast shields, connectors, valves, membranes and tubing prior to use for cleanlines
- Do not store wet or damp parts as mold may develop.
- If tubing becomes moldy, discontinue use and replace tubing. Contact the manufacturer or authorized distributor.
- While some discomfort may be felt when first using a breast pump, using a breast pump should not cause pain.

PUMPING TIPS

- Eat lactation-friendly foods to increase your milk production.
- Stay hydrated and avoid coffee and alcohol.
- Set yourself up for success by making things easy on yourself. Stress can inhibit let-down and milk production.
- Use warm compresses and massage your breasts while pumping. Not only will this keep ducts from becoming clogged, but it will also ensure every last drop of milk is removed from your breasts, helping to increase your milk production.
- Make sure you're pumping long enough to stimulate multiple let-downs.
- For maximum milk expression, we recommend that you pump more frequently but in short increments. (10-15 minutes per breast, every 2-3 hours, 7-8 times a day.)
- If pain occurs, consult your lactation consultant or physician.

OPERATING GUIDE

- Clean your hands and sanitize the kit before using the breast pump.
- Make sure you have the proper breast shield size for you.
- Press the power button gently for 1-2 seconds to turn the pump on.
- Position the nipple in the center of the breast shield.
- Start on massage mode to stimulate your let-down reflex. After 2 - 3 minutes, switch to expression mode to effectively collect breast milk.
- Increase or decrease vacuum level and cycles until you find the most comfortable setting for you.
- Turn the unit off after use.

* Memory feature : When you turn on the pump, Opera will automatically will start on the last setting used.



Caution : Do not twist or bend the air tube. Do not overfill the collection bottle.

TRANSPORTATION & STORAGE

Recommended transportation and storage conditions



















- Temperature range: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- Relative humidity range: Under 93%, non-condensing

Recommended operating conditions

- Temperature range: $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- Relative humidity range: 15% ~ 90%, non-condensing
- Atmospheric pressure range: 80 kPa ~ 106 kPa

*If the device has been stored at temperature outside the recommended range, it's necessary for the device to stay at room temperature for approximately 1 hour before operating.

LABELS & SYMBOLS

No.	Graphic of the symbol	Referenced Standard	Reference number	Title	Description
1		ISO 7000	ISO 7000-1641	Protection against electric shock	Class II
2		ISO 60417	ISO 60417-5333	Applied part	Type BF
3		ISO 7010	ISO 7010-M002	Instructions for Use	Refer to IFU
4		ISO 7000	ISO 7000-3082	Manufacturer	Name/Address of the Manufacturer
5	IP22	IEC 60529	IEC 60529	Protection against solid foreign objects and water	Protection against solid foreign objects and water
6		ISO 7000	ISO 7000-2493	Catalogue Number	Indicates the manufacturer's catalogue number
7		ISO 7000	ISO 7000-0632	Temperature limit	Temperature range
8		ISO 7000	ISO 7000-0632	Temperature limit	Temperature range
9		ISO 7000	ISO 7000-0626	Keep dry	Protect from moisture
10		ISO 7000	ISO 7000-0624	Avoid Sunlight	Protect from direct sunlight
11		ISO 7000	ISO 7000-2620	Fragile, handle with care	Handle carefully
12		ISO 7000	ISO 7000-2620	Humidity Limit	Humidity range
13		ISO 7000	ISO 7000-2498	Humidity Limit	Humidity range
14		ISO 7000	ISO 7000-2498	Serial Number	Serial Number
15		ISO 7000	ISO 7000-0434A	Caution	Caution
16		ISO 7000	ISO 7000-2497	Date of manufacture	Indicates the date when product was manufactured
17		ISO 60417	ISO 60417-5009	Stand-by	On/Off Button
18		ISO 60417	ISO 60417-2621	Atmospheric Limit	Atmospheric pressure range
19		EN 50419	EN 50419		WEEE SYMBOL

CLEANING INSTRUCTIONS

The Opera breastpump may be cleaned with wipes or a non-abrasive detergent for general cleaning. However, the Opera should be disinfected between use by different mothers. Please follow the steps to clean or disinfect your Opera Breastpump.



Separate and wash all parts that come in contact with breast milk immediately after use to remove breast milk residue and prevent growth of bacteria. Only use drinking-quality tap or bottled water for cleaning.

Wash before first use and after each use.

- Rinse all separated parts that come in contact with the breast and breast milk in cool water to remove breast milk residue.
- Soak with warm soapy water in sink for 5 minutes with clear water, then wash and rinse.
- Place parts on a clean surface and/or towel. Allow parts to air dry.
- Store dry parts in a cool place when not in use.
- Do not store wet or damp parts.

Dishwasher cleaning.

- Wash all separated parts by using the top rack of your dishwasher.
- Place parts on a clean surface and/or towel. Allow parts to air dry.
- Store dry parts in a cool place when not in use.
- Do not store wet or damp parts.

Sanitize before first use and once per day.

- Fill pot with water to cover all parts and bring to a boil.
- Place parts in boiling water for 10 minutes.
- Place parts on a clean surface and/or towel.
- Allow parts to air dry.
- Store dry parts in a cool place when not in use.
- Do not store wet or damp parts.



Caution : Never submerge the pump body in water or any liquid.

DISPOSAL

- Please dispose of this product according to your local collection requirements. Improper disposal could result in harmful effects on the environment.

PUMPING MODES

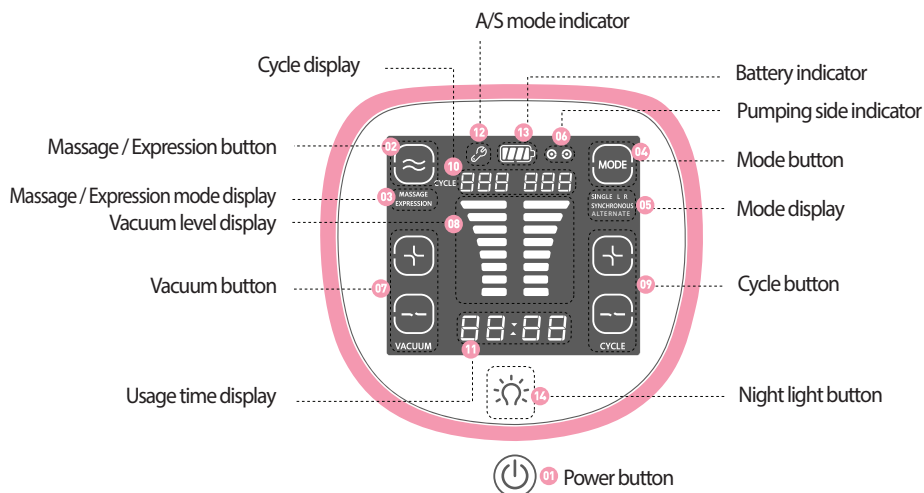
Opera and Opera Eco have Massage and Expression Modes.

- Massage mode features a fast sucking/pumping rhythm to stimulate milk flow.
- Expression mode features a slower sucking/pumping rhythm for gentle and efficient milk removal after milk has started flowing.

Opera also allows you to operate 4 different pumping styles: Single left, single right, synchronous, and alternate.

Mode		Description					
Single Mode	Left	One side pumping (left side)					
	Right	One side pumping (right side)					
Synchronous Mode		Double pumping for both sides at the same time					
Alternate Mode		During the Alternate Mode, each side will be pumped every 1 minute as shown below.					
		Massage Mode	60 Cycle	70 Cycle	80 Cycle	90 Cycle	100 Cycle
		#of Pumping for each side	30 times	35 times	40 times	45 times	50 Cycle
		Expression Mode	42 Cycle	38 Cycle	34 Cycle	30 Cycle	26 Cycle
		#of Pumping for each side	21 times	19 times	17 times	15 times	13 times

FUNCTIONS



[01] Power button: Turn on/off the device.

*Memory function: The last mode setting used before turning off the device will be automatically stored when turning back on the device.)

[02] Message / Expression button: Select Message or Expression mode.

[03] Message / Expression mode display: Current mode will appear on the screen.

[04] Mode button: Mode setting of Single Left Single Right, Synchronous, or Alternate mode.

[05] Mode display: When pressing the mode button [04], the selected mode will appear on the screen.

- Single Left Mode [SINGLE L].
- Single Right Mode [SINGLE R].
- Synchronous Modes [SYNCHRONOUS].
- Alternate Mode [ALTERNATE].

[06] Pumping side indicator: Pumping side indicator will blink showing current side used.

[07] Vacuum button: Press the [+] button to increase the vacuum level and the [-] button to decrease the vacuum level.

[08] Vacuum level display: Press the vacuum button [7] to display the current level on the screen.

- Massage mode up to 5 levels.
- Expression mode up to 8 levels.

[09] Cycle button: The number of cycles per minute will increase by pressing the [+] button and will decrease by pressing the [-] button.

- Massage mode cycle/min : 60 ~ 100.
- Expression mode cycle/min: 26 ~ 42.

[10] Cycle display: Press cycle button [8] to display cycle/min on the screen.

- When using [SINGLE L], numbers will be displayed on the left.
- When using [SINGLE R], numbers will be displayed on the right.
- When using [SYNCHRONOUS] or [ALTERNATE] modes, numbers will be displayed on both sides.

[11] Usage time display: Usage time will be displayed.

[12] A/S mode: Contact manufacturer if A / S mode is displayed on the screen.

[13] Battery indicator: Remaining battery life will be displayed.

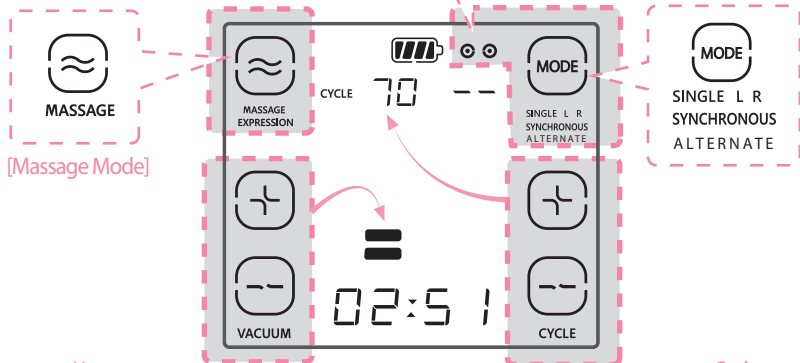
[14] Night light button: Adjustable 3 levels of night light functions.

Massage Mode

Pumping indicator
will blink as per current side usage

- Single Left Mode [SINGLE L]
- Single Right Mode [SINGLE R]
- Synchronous Mode [SYNCHRONOUS]
- Alternate Mode [ALTERNATE]

[Pumping Mode Change]

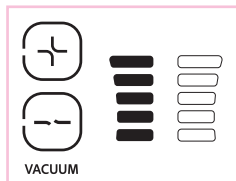


[Massage Mode]

Vacuum control button
(5 levels)

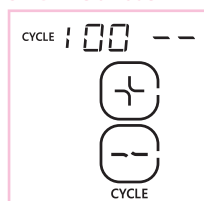
Cycle control button
(60~100 cycles/min)

SINGLE Left Mode



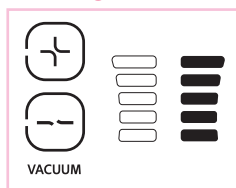
Left display
+ Increase
- Decrease

SINGLE Left Mode



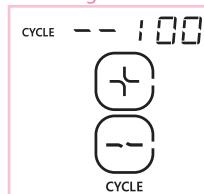
Left number
+ Increase
- Decrease

SINGLE Right Mode



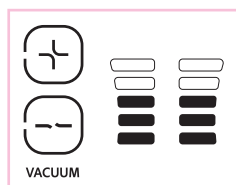
Right display
+ Increase
- Decrease

SINGLE Right Mode



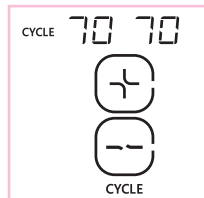
Right number
+ Increase
- Decrease

SYNCHRONOUS / ALTERNATE Mode



Simultaneous display
+ Increase
- Decrease

SYNCHRONOUS / ALTERNATE Mode



Simultaneous number
+ Increase
- Decrease

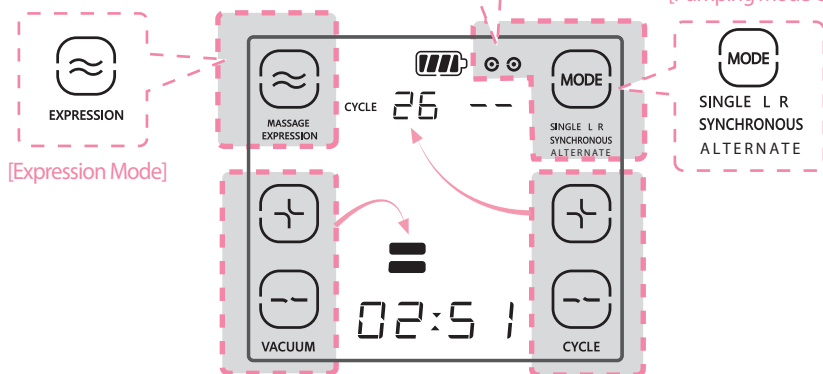
Expression Mode

Pumping indicator
will blink as per current mode



- Single Left Mode [SINGLE L]
- Single Right Mode [SINGLE R]
- Synchronous Mode [SYNCHRONOUS]
- Alternate Mode [ALTERNATE]

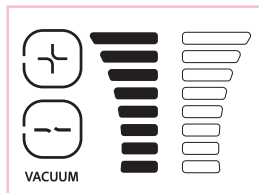
[Pumping Mode Change]



Vacuum control button
(8 levels)

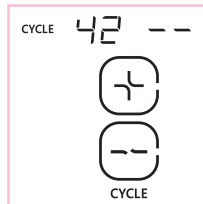
Cycle control button
(26~42 cycles/min)

SINGLE Left Mode



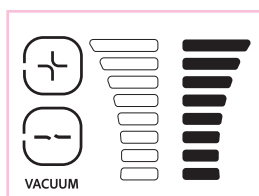
Left display
+ Increase ↑
- Decrease ↓

SINGLE Left Mode



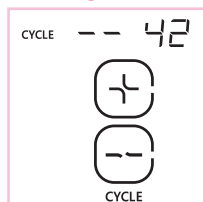
Left number
+ Increase ↑
- Decrease ↓

SINGLE Right Mode



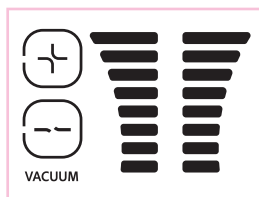
Right display
+ Increase ↑
- Decrease ↓

SINGLE Right Mode



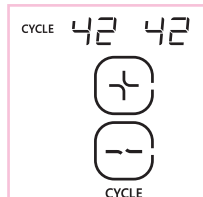
Right number
+ Increase ↑
- Decrease ↓

SYNCHRONOUS / ALTERNATE Mode



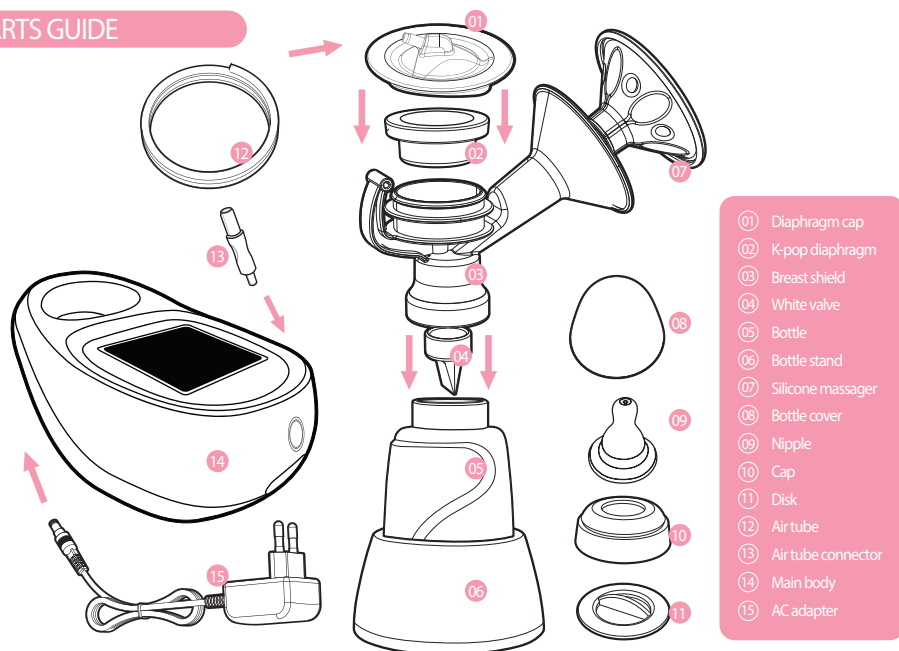
Simultaneous display
+ Increase ↑
- Decrease ↓

SYNCHRONOUS / ALTERNATE Mode



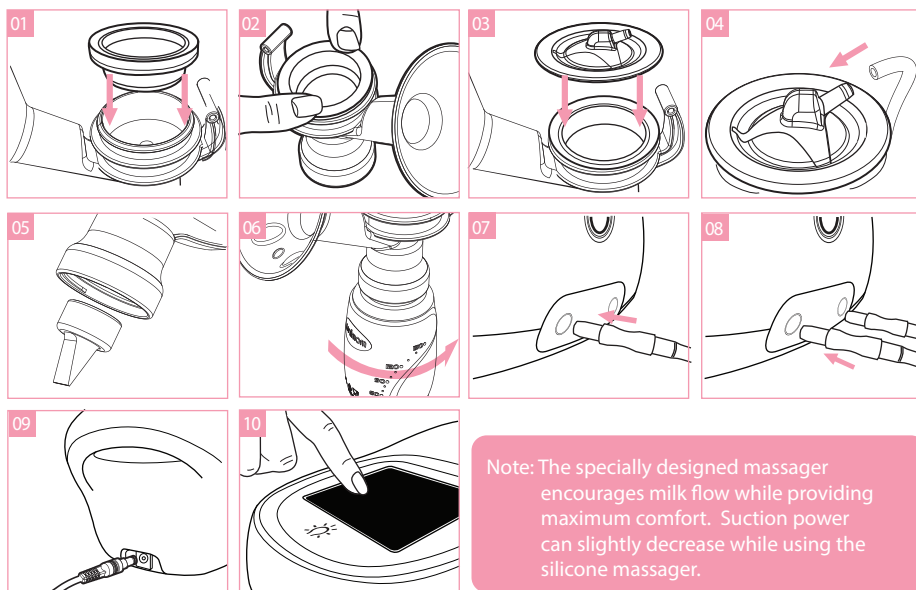
Simultaneous number
+ Increase ↑
- Decrease ↓

PARTS GUIDE



* All components are available to be purchased from the manufacturer or your local distributor.

ASSEMBLY INSTRUCTIONS



THAWING & WARMING TIPS

- Thaw the oldest breast milk first.
- Breast milk does not need to be warmed. Some moms prefer to serve it at room temperature.
- Thaw the bottle or bag of frozen milk by putting it in the refrigerator overnight.
- If you decide to warm the breastmilk:
 - Keep the container sealed while warming.
 - Hold it under warm running water, or set it in a container of water that is warm, not hot.
 - Never put a bottle or bag of breast milk in the microwave, as it creates hot spots that could burn your baby and damage the milk.
- Test the temperature before feeding it to your baby by dropping some on your wrist. The milk should feel warm, not hot.
- Swirl the milk to mix the fat, which may have separated. Do not shake the bottle.
- Use breast milk within 24 hours of thawing it in the refrigerator. This means 24 hours from when the breast milk is no longer frozen, not from when you remove it from the freezer.
- Once breast milk is thawed to room temperature, use it within 2 hours. If you have any leftover milk after the baby is finished feeding, be sure to throw it out after 2 hours of usage.
- Do not refreeze breast milk after it has been thawed.

BREAST MILK STORAGE

After each pumping session, you can:

- Keep breast milk at room temperature. Breast milk is ok for up to 4 hours after pumping at room temperature (up to 77°F).
- Refrigerate the breast milk. Breast milk is ok in the refrigerator for up to 4 days.
- Place breast milk in the freezer. If you're not going to use refrigerated breast milk within 4 days, freeze it right after pumping.
- Use cooler packs. You can put the breast milk in a cooler or insulated container with frozen ice packs for up to 24 hours after pumping. After 24 hours in a cooler the breast milk should be refrigerated or frozen.
- Breast milk can be stored in the freezer (0 °F or colder) for 3 to 6 months.
- When storing breast milk, use breast milk storage bags, which are made for freezing human milk. You can also use a clean glass container or BPA-free plastic bottles with tight-fitting lids. Do not use containers with the recycle number 7, which may contain BPA. Do not use disposable bottle liners or other plastic bags to store breast milk.
- Storage bottles or bags to refrigerate or freeze your breast milk also qualify as tax-deductible. Most insurance plans must cover breastfeeding supplies, such as storage bags, in addition to breast pumps. Call your insurance company to learn more.

Storage: Tips for freezing breast milk:

- Clearly label breast milk containers with the expression date. Include your child's name if you are giving the milk to a child care provider.
 - Freeze in small amounts (2 to 4 ounces, or ¼ to ½ cups) for later feedings.
 - Leave an inch or so from the top of the breast milk container, as it will expand when freezing.
 - Wait to tighten bottle caps or lids until the milk is completely frozen.
 - Store breast milk in the back of the freezer, not by the shelf of the freezer door, to avoid thawing out.
- Reference: <https://www.cdc.gov/healthywater/pdf/hygiene/breast-pump-fact-sheet.pdf>

The Essential Performances of the OPERA & OPERA eco are as follows:

Performance Reference		Description
Pressure	Expression Mode (During charging / operating mode)	set pressure \pm 10% mmHg, Max 280 mmHg
	Massage Mode (During charging / operating mode)	set pressure \pm 10% mmHg
Backflow Protection (During charging / operating mode)		No Backflow occurs

BATTERY, CYCLE AND VACUUM INFORMATION

* The difference between OPERA and OPERA eco is that the OPERA has a rechargeable battery while the OPERA eco doesn't. The following battery information is only applicable to the OPERA model.

BATTERY STATUS	4 BAR (FULLY CHARGED)	3 BAR	2 BAR	1 BAR	NO BAR
Operating time remaining (approx.)	2 hours	1.5 hours	1 hour	20 minutes	Less than 5 Minutes

Charging Time (approx.)

3 hours

Massage - Single L mode (suction in mmHg)

Cycle/min Level	60	70	80	90	100
1	45	45	45	45	45
2	60	60	60	60	60
3	90	90	90	90	90
4	120	120	120	120	120
5	150	150	150	150	150

Massage - Single R mode (suction in mmHg)

Cycle/min Level	60	70	80	90	100
1	45	45	45	45	45
2	60	60	60	60	60
3	90	90	90	90	90
4	120	120	120	120	120
5	150	150	150	150	150

Massage - Synchronous mode (suction in mmHg)

Cycle/min Level	60	70	80	90	100
1	(45,45)	(45,45)	(45,45)	(45,45)	(45,45)
2	(60,60)	(60,60)	(60,60)	(60,60)	(60,60)
3	(90,90)	(90,90)	(90,90)	(90,90)	(90,90)
4	(120,120)	(120,120)	(120,120)	(120,120)	(120,120)
5	(150,150)	(150,150)	(150,150)	(150,150)	(150,150)

Massage - Alternate mode (suction in mmHg)

Cycle/min Level	60	70	80	90	100
1	(45,45)	(45,45)	(45,45)	(45,45)	(45,45)
2	(60,60)	(60,60)	(60,60)	(60,60)	(60,60)
3	(90,90)	(90,90)	(90,90)	(90,90)	(90,90)
4	(120,120)	(120,120)	(120,120)	(120,120)	(120,120)
5	(150,150)	(150,150)	(150,150)	(150,150)	(150,150)

Expression - Single L mode (suction in mmHg)

Cycle/min Level	26	30	34	38	42
1	90	90	90	90	90
2	140	140	140	140	140
3	170	170	170	170	170
4	200	200	200	200	200
5	230	230	230	230	230
6	250	250	250	250	250
7	270	270	270	270	270
8	280	280	280	280	280

Expression - Single R mode (suction in mmHg)

Cycle/min Level	26	30	34	38	42
1	90	90	90	90	90
2	140	140	140	140	140
3	170	170	170	170	170
4	200	200	200	200	200
5	230	230	230	230	230
6	250	250	250	250	250
7	270	270	270	270	270
8	280	280	280	280	280

Expression - Synchronous mode (suction in mmHg)

Cycle/min Level	26	30	34	38	42
1	(90,90)	(90,90)	(90,90)	(90,90)	(90,90)
2	(140,140)	(140,140)	(140,140)	(140,140)	(140,140)
3	(170,170)	(170,170)	(170,170)	(170,170)	(170,170)
4	(200,200)	(200,200)	(200,200)	(200,200)	(200,200)
5	(230,230)	(230,230)	(230,230)	(230,230)	(230,230)
6	(250,250)	(250,250)	(250,250)	(250,250)	(250,250)
7	(270,270)	(270,270)	(270,270)	(270,270)	(270,270)
8	(280,280)	(280,280)	(280,280)	(280,280)	(280,280)

Expression - Alternate mode (suction in mmHg)

Cycle/min Level	26	30	34	38	42
1	(90,90)	(90,90)	(90,90)	(90,90)	(90,90)
2	(140,140)	(140,140)	(140,140)	(140,140)	(140,140)
3	(170,170)	(170,170)	(170,170)	(170,170)	(170,170)
4	(200,200)	(200,200)	(200,200)	(200,200)	(200,200)
5	(230,230)	(230,230)	(230,230)	(230,230)	(230,230)
6	(250,250)	(250,250)	(250,250)	(250,250)	(250,250)
7	(270,270)	(270,270)	(270,270)	(270,270)	(270,270)
8	(280,280)	(280,280)	(280,280)	(280,280)	(280,280)

TROUBLESHOOTING

Condition	Possible Causes	Checks	Solutions
Malfunction	Rapid control	Check if the malfunction occurs when operating the controls.	Unplugged the AC adapter and turn off the device. Then plug the AC adapter back into the device.
Low or no suction	Power	Check if the power is turned on.	If the pump does not function when the power is turned on, please contact the location where you purchased the product or the manufacturer.
	LCD screen	Check if LCD screen is displayed or not.	Please contact the location where you purchased the product or the manufacturer.
	AC adapter	Check if the AC adapter is connected.	Plug the AC adapter to a power outlet.
	Defective assembly	Check if all accessories are properly installed.	disassemble and reassemble all accessories.
	valve	Check the valve for damages.	Purchase replacement
	Battery [OPERA Only]	Check if the device is able to turn on.	If the device is not turning on, connect it to the AC adapter to charge the battery.
Pain	Too high suction	Check suction level.	Adjust the suction level as needed. If you still experience pain or discomfort, please contact a lactation consultant or physician.

Lost or broken parts : Spare parts are available from the location where you purchased the product or the manufacturer.

Electromagnetic Emissions - Table 201 according to EN 60601-1-2 Guidance and manufacturer's declaration - electromagnetic emissions

The OPERA /OPERA eco Electric Breast Pump is intended for use in the electromagnetic environment specified below. The customer or the user of the OPERA /OPERA eco Electric Breast Pump should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment – guidance
RF emissions CISPR 11	Group 1	The OPERA /OPERA eco Electric Breast Pump 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 emissions CISPR 11	Class B	The OPERA /OPERA eco Electric Breast Pump is suitable for use in all establishments, including domestic establishments and those directly connected to the public low voltage power supply network that supply buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Electromagnetic Immunity (all devices) - Table 202 according to EN 60601-1-2 Guidance and manufacturer's declaration - electromagnetic immunity

The OPERA /OPERA eco Electric Breast Pump is intended for use the electromagnetic environment specified below. The customer or the user of the OPERA /OPERA eco Electric Breast Pump 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	± 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%.
Electrical fast transient/burst IEC 61000-4-4	± 2 kV for power supply lines ± 1kV for input/output lines	± 2 kV for power supply lines ± 1kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2kV line(s) to earth	± 1 kV line(s) to line(s) ± 2kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	< 5 % UT (0,5 cycle) 40 % UT (5 cycles) 70 % UT (25 cycles) < 5 % UT for 5s	< 5 % UT (0,5 cycle) 40 % UT (5 cycles) 70 % UT (25 cycles) < 5 % UT for 5s	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

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

Recommended separation distances between portable and mobile RF Communications Equipment and the OPERA Electric Breast Pump - Table 206 according to EN 60601-1-2
Recommended separation distances

Recommended separation distances between portable and mobile RF communications and the OPERA Electric Breast Pump

The OPERA Electric Breast Pump is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the OPERA Electric Breast Pump can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the OPERA Electric Breast Pump 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 to 80 MHz $d = \left[\frac{3,5}{V_i} \right] \sqrt{P}$	80 MHz to 800 MHz $d = \left[\frac{3,5}{E_i} \right] \sqrt{P}$	800 MHz to 2.5 GHz $d = \left[\frac{7}{E_i} \right] \sqrt{P}$
0.01	11,7cm	3,5cm	7cm
0.1	36,9cm	11cm	22cm
1	1,2m	35cm	70cm
10	3,7m	1,1m	2,2m
100	11,7m	3,5m	7m
For Transmitters rated at a maximum output power not listed above, the recommended separation distance d in metres (m) can be estimated using the equation applicable to the frequency of the transmitter. Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. NOTE 1 At 80 MHz and 800 Mhz, 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.			

*The National Deviation of the US, which is UNITED STATES NATIONAL DIFFERENCES (National standard ANSI / AAMI ES60601-1"2005) , is applied.



Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment should be observed to verify that they are operating normally.
Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30cm (12 inches) to any part of the OPERA and OPERA eco, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

SPECIFICATIONS

AC Adaptor 14V DC, 2.0A Vacuum range: Max=280mmHg

Certified AC adapter can be purchased separately.

Firmware Version: OPR_1.0 Rev-1.0

Expected Service Life Time Battery or device : 2 year

Adapter input : AC100~240V, 50/60Hz, 0.8A

Battery : 11.1V DC, 2200mAh (OPERA Only)

LIMITED WARRANTY

For a period of 2 year from the date of original purchase, Unimom warrants this product (excluding accessories) against defects in material or workmanship. At Unimom's option, Unimom may repair or replace the item that is determined to be defective by Unimom and determined to be covered by this warranty.

For warranty service, please return the product, along with dated sales receipt or other proof of the purchase date, to Unimom or Local distributor.

This warranty does not cover damage caused by accident, misuse, abuse, improper maintenance, unauthorized modification, or connection to an improper power supply. A charge will be made for repair of such damage.

This warranty excludes all incidental or consequential damages and any liability other than what is stated above. Unimom makes no other warranties regarding this product either express or implied.

WARRANTY CARD

OPERA / OPERA eco

Origin : Republic of Korea



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OPERA / OPERA eco Double Electric Breast pump

Name	
Telephone	
Mobile Phone	
Address	