

Spectra S1



user manual

speCtra[®]

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Welcome to your Spectra Breast Pump

Congratulations on becoming the owner of a Spectra S1 hospital grade double electric breast pump. Your Spectra S1 is designed to make life easier for you, with a host of features to ensure effective expressing. If you have any questions about using your Spectra S1, please check our website for more information or get in touch with our customer service team at any time.

Spectra Baby Australia

www.spectra-baby.com.au



Features

- **Double-Sided Pumping:** Your Spectra S1 comes with everything you need for double pumping. Expressing from both breasts at the same time saves you time and better supports milk supply.
- **Letdown Mode:** Switch with a touch to the letdown mode, which is a light, quick fluttering mode designed to speed the start of milkflow, just the way your baby does.

- **Fully Adjustable Cycle and Vacuum Settings:** Touch button controls allow you to easily adjust the cycle and vacuum levels until you find what works best for your body.
- **Night Light:** Choose from two different light levels on the Spectra S1's integrated nightlight, a feature you will love when pumping at night.
- **Stylish, Portable Design:** Spectra has endeavored to make the most portable and convenient hospital grade pump ever, with a rechargeable battery, integrated handle, and integrated bottle stand to make life a little easier.

Important Safeguards

Carefully read all the instructions prior to using the Spectra S1. Follow the safety guidelines below when using your pump. Failure to follow the below guidelines may result in damage to the machine and/or serious injury to yourself.

Hygiene

- The pump kits that come with this pump are for single use only and are not intended for multiple users. If this pump is shared by multiple users, every mum must have her own shield kit. Use by multiple users risks the spread of transmissible diseases.
- This breast pump is a closed system with the use of the backflow protector, preventing milk from entering the system tubing.
- Always follow the directions in this manual for cleaning and storage of your breast pump and parts.
- Failure to follow the guidelines provided or use of the Spectra S1 with attachments not recommended by the manufacturer may pose a health risk and will void the warranty.

Pain or Discomfort

You should not experience pain or discomfort when using your breast pump. Do not turn the suction level above your comfort level. Ensure that the breast shields are fitted correctly (see the *Breastshield Sizing* portion of this

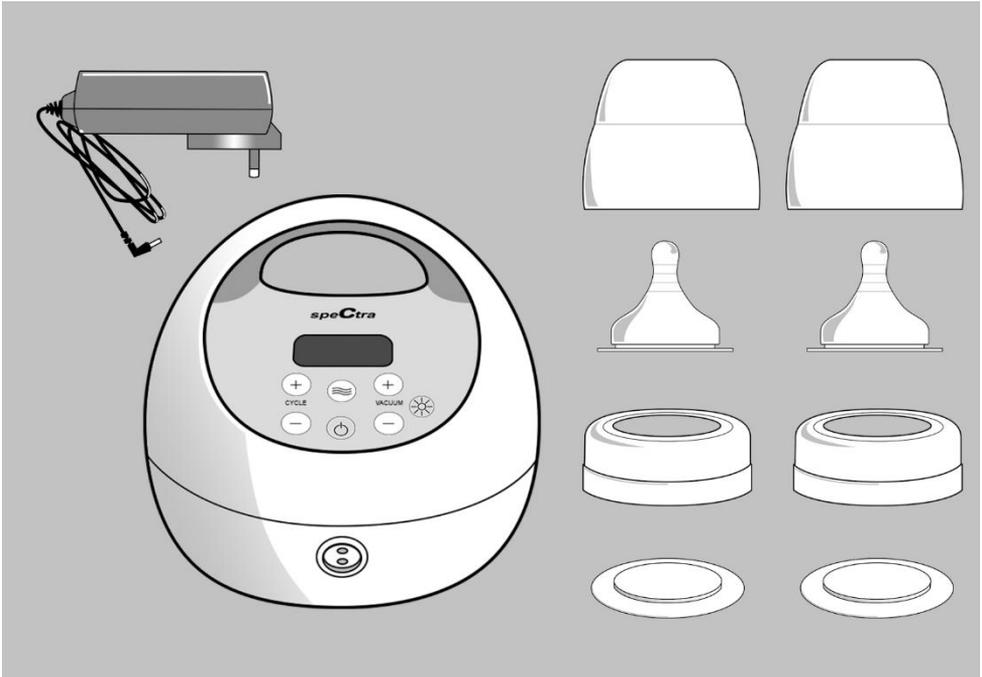
manual on page 14 for more information). If you experience pain or discomfort, stop using the breast pump and seek help from your care provider, a certified lactation consultant, or the Spectra customer service team, as appropriate.

General Safety Guidelines

- Close supervision is necessary when used near children.
- Use the product only for its intended use and with attachments recommended by the manufacturer.
- Handle the power cord, adapter and plug with care; do not leave on a heated surface, do not pull on or twist the power cord, do not wrap the cord around the adapter body.
- Do not use near water.
- Do not use in the presence of concentrated oxygen or pressurised gases.
- Unplug and store out of reach of children when not in use.

Package Contents

The Spectra S1 comes complete with a power adaptor, 2 milk collection kits, and 2 feeding kits (bottle caps, soft flow teats, bottle necks, and bottle sealing discs).



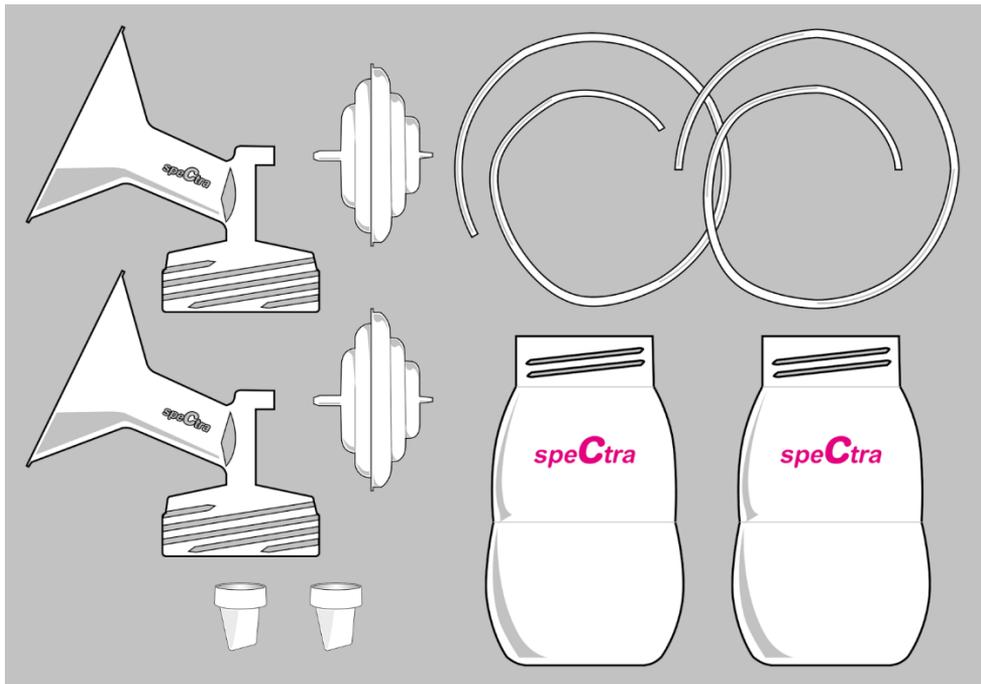
Replacement parts and additional breastshield sizes are available to purchase on the Spectra website.

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Pump Kit

The Spectra S1 comes with 2 milk collection kits. Included in each kit is a breastshield (size 24mm), backflow protector, collection bottle, duck valve, and tubing.

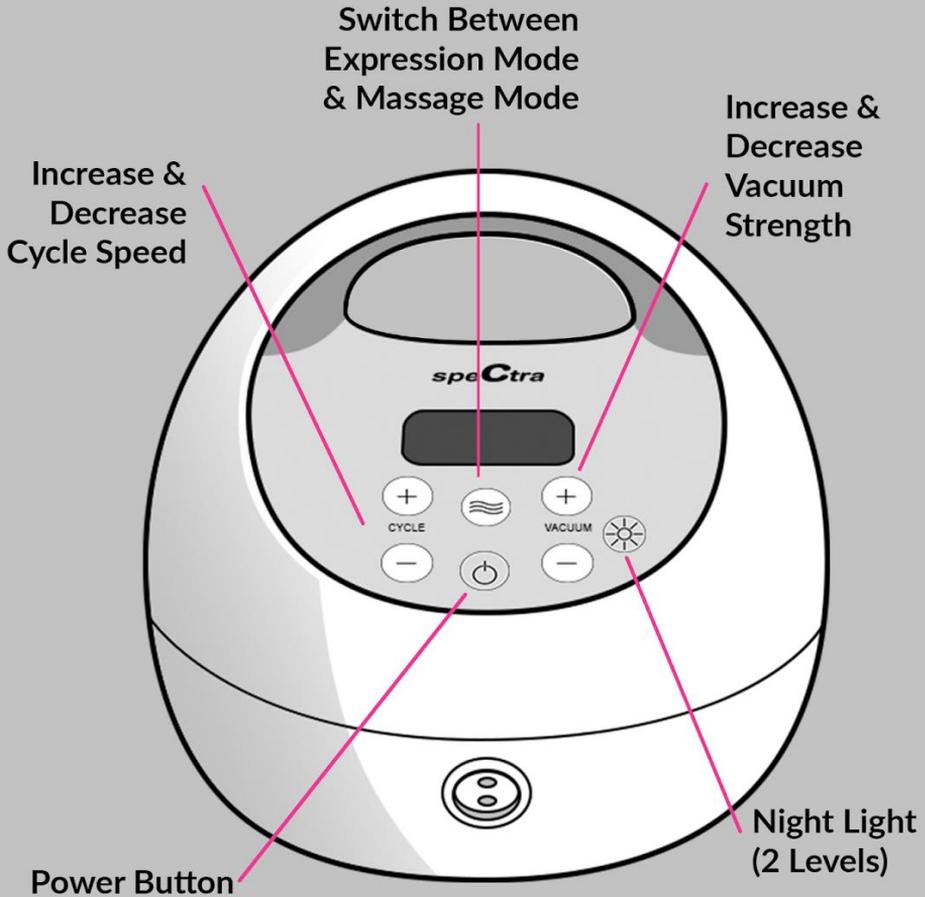


Replacement parts and additional breastshield sizes are available to purchase on the Spectra website.

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Get to Know Your Spectra S1



Expression Mode

5 Cycle Speeds Between 38rpm and 54rpm. 12 Vacuum Levels.

Massage Mode

Cycle Speed 70rpm. 5 Vacuum Levels.

Cleaning & Care

Note: These guidelines are for use with a healthy, full-term baby and assume that you have access to potable water. If your baby is premature or has health challenges your care provider may supply alternative advice. If you live in an area without potable water, you should always sterilise parts before use. Always follow the advice of your care provider.

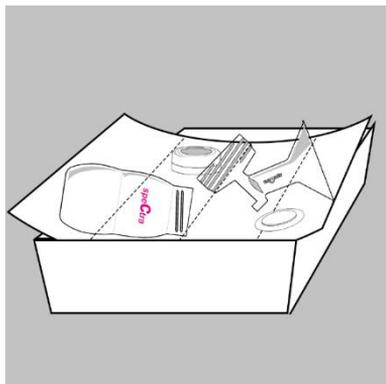
- Sterilise all parts (except the **pump motor** and **tubing**) before first use.
- You do **not** need to sterilise parts used with breastmilk after every use. Thorough washing with warm soapy water and air drying after each use is sufficient. You may wish to sterilise on occasion to ensure fat residue is removed.
- You **do** need to sterilise breast milk storage containers that will be used to store and freeze breast milk, such as bottles, before first use. Most milk storage bags come pre-sterilised; verify with the manufacturer prior to use.

Washing Breast Pump Parts

1. Wash your hands with warm soapy water.
2. Disassemble all parts and wash in warm, soapy water and then rinse thoroughly in hot water. The top rack of the dishwasher is fine for all parts except the duck valve and backflow protector membrane (i.e. the silicone parts). **Do not place silicone parts including valves and backflow protector diaphragms in the dishwasher.** You may wish to soak the parts in warm soapy water for several minutes prior to washing, as well.
3. Use a bottle brush to ensure that there is no milk residue anywhere in the parts. Try to be careful with the membranes and valves, as they are the most fragile part of the kit.
4. Do not wash the valves or membranes in the dishwasher. Flush the valve with hot soapy water and carefully remove any milk residue with a bottle brush.
5. Place parts on a clean dish drying rack or clean paper towel to air dry after washing. Do not use cloth to dry your breast pump parts as it

may harbour bacteria that can contaminate breast milk. Try not to touch the inside of any parts that will come into contact with breast milk.

6. Once dry, store parts in a clean, closed container (i.e. snaplock bag or clean plastic tub with a lid).
7. Never immerse your pump motor in water. Wipe clean with a damp cloth as needed.
8. Never wash or sterilise the tubing. When used correctly, the backflow protector stops milk from entering the tubing. If milk should somehow enter the tubing, we recommend replacing the tubing. If tubing should become wet, make sure it is completely dry before pumping as not to damage the motor.
9. The backflow protector does not need to be washed after each use. If you notice moisture in the backflow protector, disassemble and wash each of the three parts separately. Allow to air dry completely before reassembly.



Cleaning & Care Tips

Valves that are difficult to remove from the shield to wash, or slip off the shield during pumping, may need replacing, or may have a residue of fatty milk build-up. This can be helped by cleaning the shield and valves thoroughly, and washing them in a mix of 1 part vinegar 3 parts hot water to release the fatty residue. (This can be the case with bottles coming loose from shields too, and same solution).

Cleaning & Care Quick Reference Chart

	Sterilise Before First Use?	Wash After Each Use?	Dishwasher Safe?	Special Instructions
Pump Motor	No	No	No	Wipe down with a damp cloth as needed.
Tubing	No	No	No	Replace if dirt or moisture gets in.
Backflow Protector	Yes	No	No: do not place silicone diaphragm in dishwasher. Yes: plastic outer pieces only.	Wash only if moisture enter the component. Do not wash silicone diaphragm in dishwasher.
Breastshield	Yes	Yes	Yes	
Duck Valve	Yes	Yes	No	Do not wash in dishwasher
Collection Bottle	Yes	Yes	Yes	
Bottle Cap	Yes	Yes	Yes	
Sealing Disc	Yes	Yes	Yes	
Teat	Yes	Yes	No	Do not wash in dishwasher
Bottle Cap	Yes	Yes	Yes	

Sterilising Breast Pump Parts

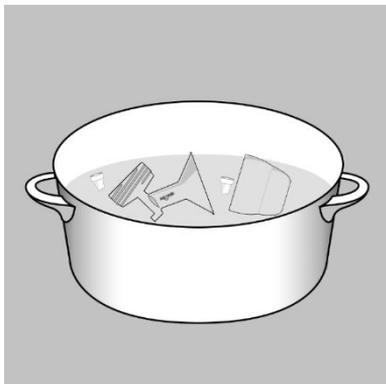
You can use any method you like to sterilise the parts of your Spectra pump. Please remember that you **must never** sterilise the tubing or pump motor. In most cases, you do not need to sterilise after every use of your breast pump; over-sterilising will cause your pump parts to wear and require replacement more quickly. Your care provider may have given you alternative sterilisation instructions if your baby was born prematurely or has an illness: ***always adhere to your care provider's instructions.***

You **do** need to sterilise all parts (except tubing and pump motor) before first use. All parts must be disassembled prior to sterilising. **Disassemble the backflow protectors and remove the duck valves from the breastshields prior to sterilising.**

Choose from any of the following instructions to sterilise pump parts:

Boiling

1. Place all the equipment in a large sauce pan and cover with tap water.
2. Check that there are no air bubbles inside bottles or other parts.
3. Place the lid on the saucepan and bring to a boil.
4. Boil for 5 minutes, making sure that the pot doesn't boil dry and melt the equipment.
5. Turn off the heat and allow to cool.
6. Remove parts with tongs and air dry on a clean dish rack or clean paper towel.



Steam Steriliser

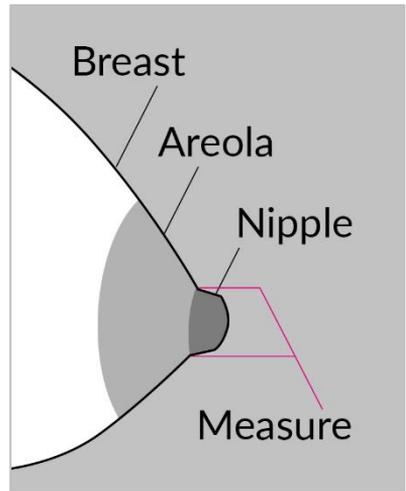
Follow the manufacturer's directions.

Tip: Frequent microwave sterilising of breast pump parts and bottles may cause discoloration. This does not affect usability or safety of the parts.

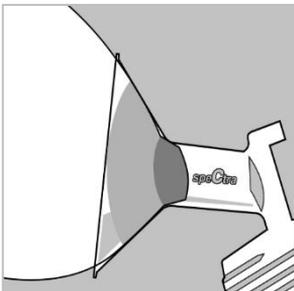
Breastshield Sizing

Measuring Your Nipple

The Spectra S1 comes with size 24mm breastshields. This is the most commonly fitted shield size; however, many women will fit better in other sizes. A properly sized breastshield is important to ensure the best performance of your pump. An improperly fitted breastshield can hinder milk output, cause discomfort, and in extreme cases cause injury. To determine the shield size you need, pump for 5 minutes using the provided shield(s). Your nipple(s) will expand while milk is being expressed so it's important to measure after it has swollen to ensure the size you select will provide adequate room. After you pump, measure the diameter of the nipple(s) at the base as illustrated in the image to the right. Select a shield size that is 2-3mm larger than this measurement. See below for fitting examples:

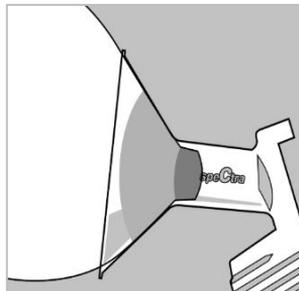


Shield is Too Small



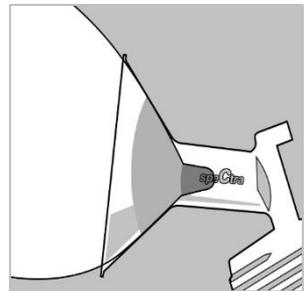
Nipple is not moving freely within the flange: there should be 2-3mm of space.

Ideal Fit



2-3mm of space around nipple; a small amount of areola may enter the flange.

Shield is Too Large



Excess areola is drawn into the flange, there is excess space around the nipple, and the nipple is being pulled toward the end of flange.

Note: The images presented in this section are a guide, not a rule, therefore fitting may appear differently for all women.

Signs Your Breastshield Is Too Small

- Painful rubbing of nipple in flange.
- Nipple not moving freely inside of flange.
- Redness of the nipple.
- Whiteness of the nipple and/or a white ring around the base of the nipple.
- Little milk is being expressed.
- General discomfort while pumping.

Signs Your Breastshield is Too Large

- Excess areola is drawn into the flange (a small amount of areola may enter the flange for some women; however, it should never be uncomfortable or painful).
- Sensation of pulling and/or pulling pain.
- Nipple is pulled to the end of the flange.
- Shield falls from the breast while pumping.
- Little milk is being expressed.
- General discomfort while pumping.

For Your Information

Although the above instructions provide a good indication of the size of breastshield you will need, there are few things to consider:

- Every woman's body responds differently to pumping. It is possible your measurements before pumping might change during pumping, therefore we suggest taking measurements of the swollen nipple 5 minutes after pumping.
- Your measurements might be different throughout the day. For example, you might be fuller in the morning after going a few hours without pumping and/or feeding at night, warranting a larger size. You might also be smaller in the evening after consistent pumping or feeding throughout the day.

- You might be larger at the beginning of a pumping session, and smaller after some milk has been expressed.
- Your measurements might change after your milk supply is well-established (about 10 weeks postpartum).
- One breast may perform better with a different sized breastshield than the other.

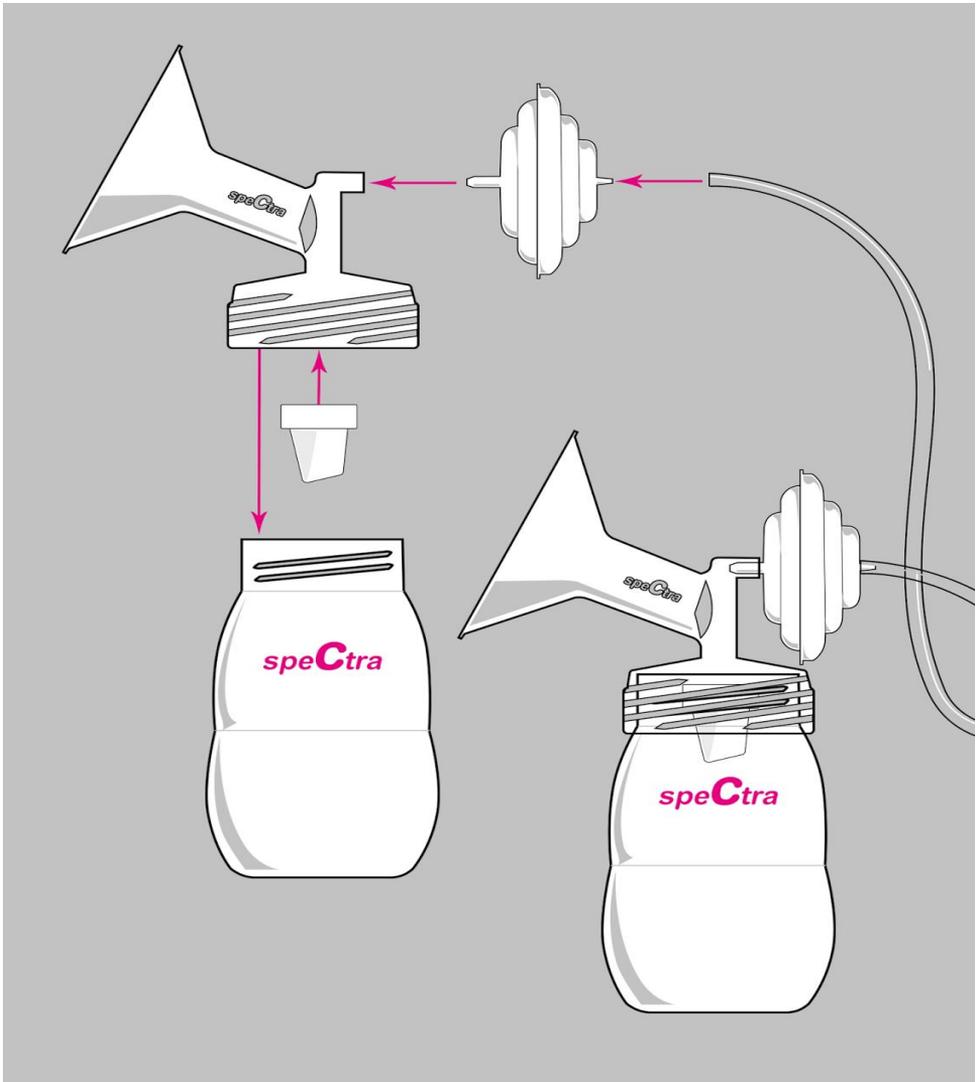
If you are experiencing friction, pain, or discomfort while pumping, contact us for help. Additional breastshield sizes are available on our website. If you need assistance selecting a shield size, please do not hesitate to contact our expert customer support team!

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Assembling the Spectra S1

Before using your Spectra S1 for the first time, you will need to sterilise all parts, except for the pump motor and tubing (sterilising the pump motor and tubing will cause irreparable damage and void the warranty). For more information on sterilising and washing the parts that come with your pump, please refer to the *Cleaning & Care* section of this manual (page 10).

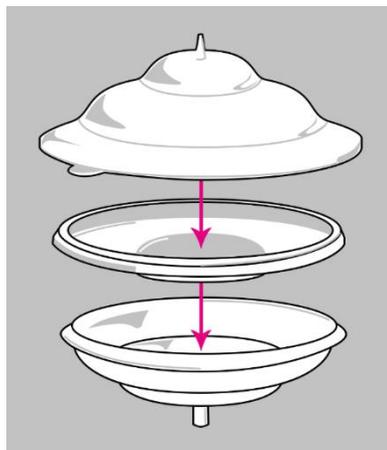


1. Attach the silicone duck valve to the underside of the breastshield.
2. Screw the milk collection bottle into the underside of the breastshield.
3. Assemble the backflow protector as illustrated below by inserting the membrane into the base, then inserting the top into the base and turning clockwise to secure.
4. Fit the backflow protector into the top of the breastshield. Use a screwing motion to attach and remove this part to avoid damaging it.
5. Connect the tubing to the backflow protector.
6. Connect the tubing to the Spectra S1. For double-pumping, remove the cap on the airport. For single-pumping, make sure this cap remains in place (see below, right).
7. Insert power adaptor, if necessary.

Backflow Protector Assembly

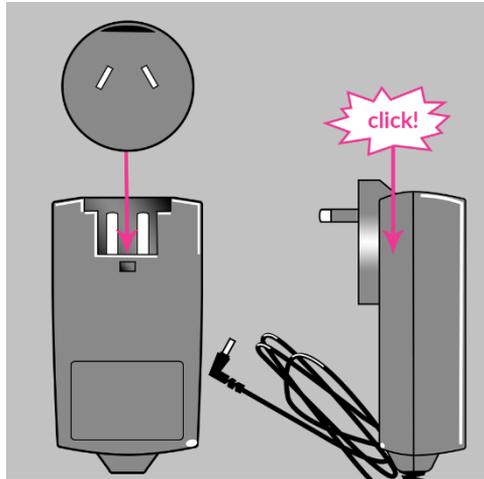
Ensure that the backflow protector has been sterilized and allowed to be **completely dry** on a clean paper towel prior to assembly. The backflow protector does not need to be cleaned or sterilized prior to each use - only if moisture should enter the component. Always inspect the backflow protector for moisture and damage prior to pumping. Membranes should be replaced regularly; see *Preparing to Pump* (Page 20) for more information.

1. Insert the membrane into the bottom piece (the piece that connects to the breastshield) as illustrated to the right. Ensure that it fits snugly into and curl the membrane lip around the rim of the bottom piece.
2. Fit the top piece (the piece that connects to the tubing) over the bottom piece and membrane by pressing the bottom snugly into the rim of the top piece.

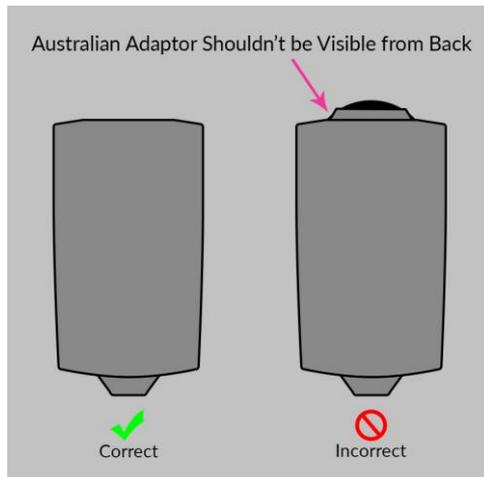


Adaptor Assembly

1. Connect the power charger and the Australian adaptor by pushing the two components together.
2. You will hear a loud click once they are fully assembled. When fully assembled, the Australian adaptor will be locked in place (not move freely) and require a significant amount of force to remove it.



Note: When assembled properly, the Australian adaptor will not be visible from the back side (see image below).



Preparing to Pump

Prior to pumping, make sure your pumping kit has been sterilised. Refer to the [Sterilising Breast Pump Parts](#) section of this manual (page 13) for information on proper sterilization of parts.

Wash your hands thoroughly in warm soapy water prior to handling parts that come in contact with the breast or breast milk.

Inspect parts for damage. Do not use parts if they are damaged. Do not use silicone parts such as membranes or duck valves if they are torn. To maintain suction and overall functionality of the pump, silicone parts need to be replaced regularly. Replacement parts are available on www.Spectra-Baby.com.au; contact us if you need assistance.

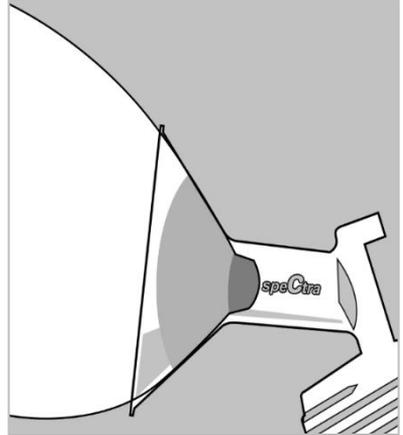
	Replacement Frequency: Pump Once Daily	Pump Twice or More Daily
Duck Valve	2-3 Months	4 weeks
Backflow Protector	6 months	3 months

Charging your S1

The S1 can operate on battery power or while plugged in and charging. To charge your S1, connect the power adaptor to the port on the back of the pump. Then, connect the adaptor into the power mains (for information on assembling your power adaptor, see *Adaptor Assembly* on page #). The S1 should be fully charged after 4 hours and should operate for 3 hours on a fully charged battery.

Pumping Instructions

1. Relax and stimulate your letdown reflex. Some women find that breast massage, looking at photos of their baby, listening to recordings of their baby, or smelling their baby's clothing items assists with letdown. Some women have success using just the massage mode of the Spectra pump to stimulate letdown as well.
2. Centre the breastshield on your breast so that the nipple is centred in the flange (see right).
3. Press the  button. The screen will light up and the pump will initiate.
4. Press the  button to enter Massage Mode, to stimulate letdown. Massage Mode is a fast method of pumping designed to initiate your letdown, the start of milk flow.
5. Once your milk starts flowing, press the  button again to enter Expression Mode. Expression mode mimics the slow, deep suckling of your baby once the milk has begun flowing.
6. Adjust the vacuum to comfort level. Start with the vacuum on low, and then gradually increase the vacuum setting to your comfort level. Never set the vacuum level higher than your comfort level.
7. Express milk until the breast is empty (this can take 15 minutes or longer). To maintain supply for an exclusively breastfed baby, we recommend pumping every 2-3 hours, or 7-8 times per day for long enough to completely drain the breast; then, an additional 5 minutes to signal the demand for the body to make more milk.
8. When you wish to stop expressing, press the power button then remove the milk collection kits from your breasts. Do not attempt to remove the collection kits without first breaking suction. Turning off the pump will break suction.



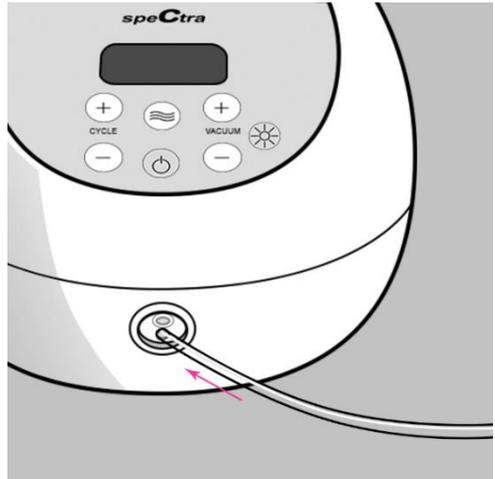
Note: When powered back on, the Spectra S1 will automatically start off at the most recently used settings in expression mode. We recommend taking caution,

and especially if you prefer to gradually increase vacuum intensity over a pumping session, to turn the pump down low prior to turning it off.

Single Pumping

1. Connect the tubing to the air nozzle on the front of the pump motor.
2. Ensure that the cap is secured over the unused air nozzle (see right).

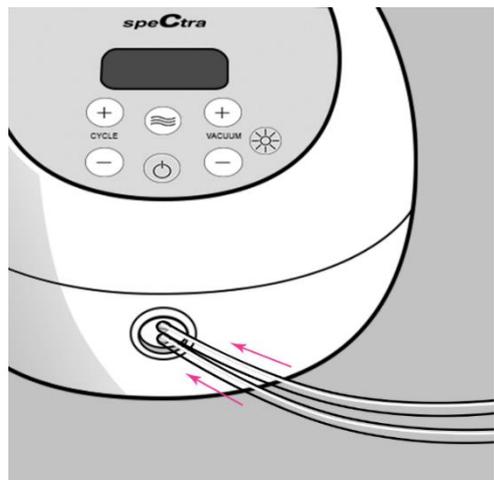
Tip: Make sure the cap is secured firmly enough over the unused air nozzle that no air can escape, but not so firmly that it is difficult to remove.



Double Pumping

1. Remove the cap from the second air nozzle.
2. Connect the tubing from each milk collection kit into an air nozzle (see below, right).

Tip: Double pumping is more effective for most women at building milk supply, and is a great way to save time. It is normal to notice that suction reduces when double pumping - just turn the vacuum settings higher to compensate.



Tip: Hold one breast shield to your breast with your forearm and the other with the hand of the same arm to keep one arm free while double pumping. If you are expressing frequently, you may consider investing in a hands free pumping bra.

Things to Remember

- Some women achieve success by swapping between Massage Mode and Expression Mode throughout a pumping session. For example, start in Massage Mode, and switch to Expression Mode when milk is flowing, and then when the milk flow slows, switch back into Massage Mode; and so on.
- After 30 minutes of operation, the Spectra S1 will automatically turn off. This safeguards against depletion of battery life should the unit be left on.
- The Spectra S1 automatically starts back up where you left off, therefore we recommend slowly decreasing vacuum intensity at the end of your pumping session (this eliminates any 'surprises' when you go to pump the next time).
- You may experience greater vacuum intensity when single pumping at the same level as while double pumping, so keep this in mind when starting your pumping session.

Tips for Expressing Breast Milk

- **Relax and stay hydrated:** Set yourself up with a glass of water and snacks, and minimise interruptions for the next 15-30 minutes as much as possible.
- **Set the stage:** Have a regular pumping location. Choose a seat that is comfortable and provides back support so you can relax while still sitting up straight. Keeping a small towel nearby will help you clean as needed.
- **Routine and ritual:** You can condition your body to express easily by pumping with the same setup each time. For example, try always using the bathroom first, then fix your favorite drink, grab your clean milk collection kits, sit down in your regular spot, have your drink, and then start pumping. Try always expressing after brushing your teeth, or playing the same game on your phone while you express. Your body will start to recognise what's going on.
- **Visualise success!** Just as ritual can help contribute to effective pumping, some creative visualisation can also help. Think of a gushing faucet, a flowing river, or simply visualise your milk coming out.

- **Remember who you are pumping for:** Some women find a picture of their baby, a baby item or item of clothing that smells like their baby can help trigger letdown. Some find that a recording of their baby's cry is a powerful letdown trigger.
- **Massage to start:** Stimulated your breasts before pumping can ease letdown. Rub in small circles all around the breast (don't forget in the armpit area) on both sides before you turn your pump on.
- **Massage to continue:** When you notice your milkflow starting to slow, massaging your breast while focussing on any areas that seem to still contain milk can sometimes restart milkflow or encourage another letdown.
- **Pump more often:** Increasing the frequency of your pumping sessions rather than the amount of time you pump is generally more effective at increasing the volume you can express.
- **Pump on schedule:** Pumping at the same time each day can help teach your breasts to be ready to let the milk flow. Some women find pumping in the morning brings about the biggest 'payoff' while other pump after their baby's bedtime, a much more relaxed time of day.
- **Free a hand:** With practice, you may be able to use a cushion or the crook of your arm to support one milk collection kit while you hold the other. This gives you a free hand to turn pages, scroll down screens, or use the remote. If you are serious about getting things done while pumping, a hands-free pumping bra will free up both your hands.
- **Pain should not be "pushed through":** If you are experiencing discomfort or pain while pumping, turn the suction down, try a little bit of lubricant such as coconut oil on the shield, and contact your care provider or Spectra Customer Support ASAP if the pain continues.

Note: When you express and how often will depend on your specific situation. We have provided some basic instructions here, but you may wish to ask your care provider for additional help. More information is also provided on our website and through customer support. Contact us if you need assistance.

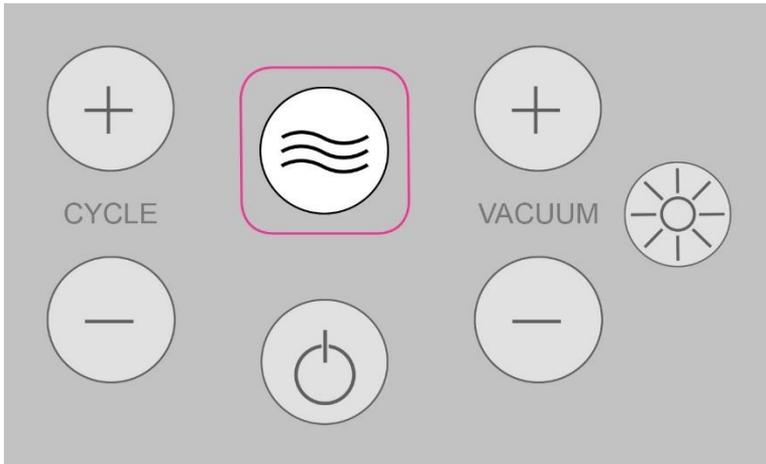
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Functions & Controls

Massage Mode & Expression Mode

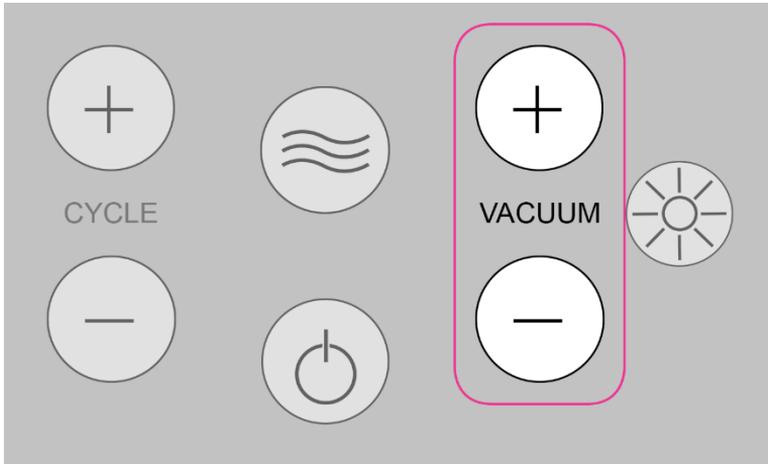
The Spectra S1 comes equipped with Massage Mode and Expression Mode to best mimic the patterns of your baby's suckling. The Massage Mode is a fast method of pumping designed to initiate your letdown, the start of milk flow. Expression Mode mimics the slow, deep suckling of your baby once the milk has begun flowing. To use these modes, follow the instructions below:



1. Press the  button to turn on your Spectra S1.
2. Press the  button to switch to Massage Mode. The screen will display the  icon.
3. Once your milk is flowing, press the  button again to enter the Expression Mode.
4. You may find good results switching between Massage Mode and Expression Mode multiple times throughout the pumping session.

Vacuum Intensity

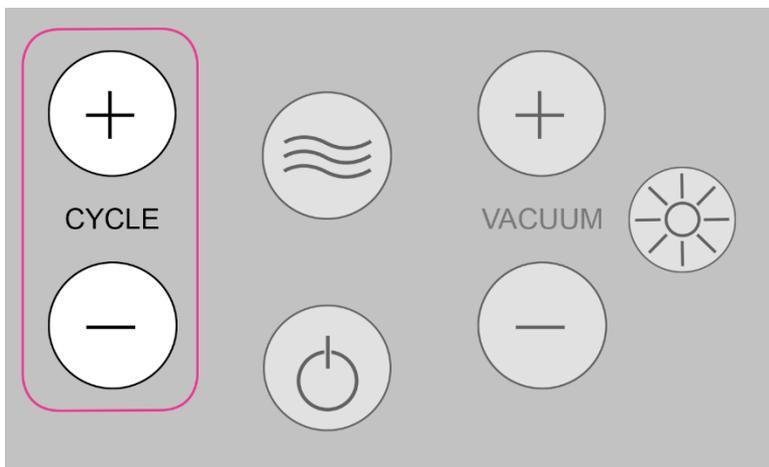
The vacuum level on your breast pump refers to the suction strength, or how strongly the pump will 'suck'. This is measured in mmHg. When you are using your Spectra S1, you will usually find that expressing is most effective on the highest vacuum level that you are comfortable with. However, it's important not to set vacuum level so high that it makes you uncomfortable, as the resulting pain will hinder your milk flow.



- Adjust the vacuum intensity by pressing the \oplus and \ominus buttons between levels 1 and 12. Start off with the vacuum on low, and then gradually increase the vacuum setting to your comfort level.
- To achieve best results, we recommend trying to pump with the vacuum set to your maximum comfort level. You may try switching between your maximum comfort level and a lower intensity to stimulate more milk let down as well. Be sure not to pump above your comfort level as that may hinder milk flow or cause injury.
- Since the Spectra S1 automatically starts back up where you left off, we recommend slowly decreasing vacuum intensity at the end of your pumping session (this eliminates any 'surprises' when you go to pump the next time).

Cycle Speed

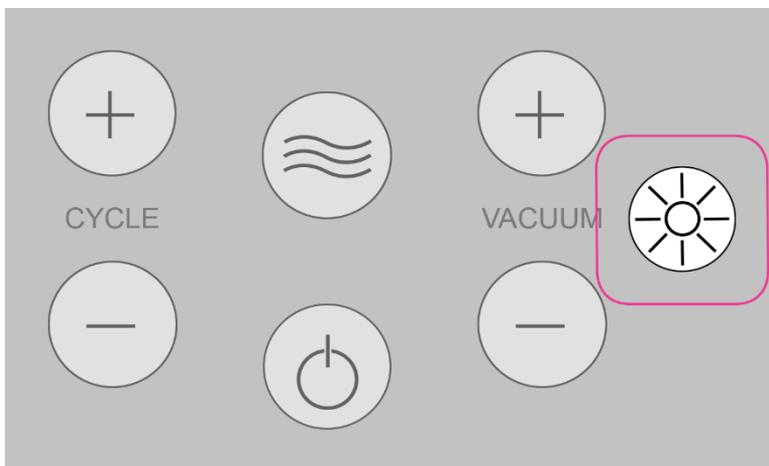
The cycle speed on your Spectra S1 refers to the how many times the pump 'sucks' and releases per minute; this is measured in cpm (cycles per minute). Your Spectra S1 has been designed with variable cycle settings so that you can find the setting that suits your body best. Changing the cycle speed can make a dramatic difference to successful expressing for some women. Every woman is different, so experiment to find what speed works best for you.



- In Expression Mode, adjust the vacuum intensity by pressing the  and  buttons between levels 38 and 54.
- In Massage Mode, the cpm is locked at 70.

Night Light

The Spectra S1 comes with a nightlight to make pumping at night and on dark days easier. The night light has two settings of brightness - simply press the  button to turn on the night light, and again to increase brightness. To turn off the light, press the  button again.



Battery Life

Battery Type: 1.11V 2000mAh Li-Polymer

The Spectra S1 comes with approximately 3 hours of battery life, enabling you to pump on the go. The pump performs best when the battery is fully charged. The S1 takes approximately 4 hours to charge. To prolong battery health, we recommend reaching a full charge prior to unplugging the S1. You can pump while the S1 is charging.

Milk Storage

The following chart describes how and where to safely store your expressed breast milk, based on current international recommendations. If your care provider has provided alternative instructions, always adhere to those.

	Preferred Storage Duration	Acceptable Storage Duration
Fresh Breast Milk		
At room temperature (up to 26°C / 78°F)	4 hours	8 hours
In the cooler bag with an ice pack (up to 15°C / 59°F)	12 hours	24 hours
In the back of the refrigerator (up to 4°C / 78°F)	3 days	8 days
Frozen Breast Milk Prior to Feeding		
At room temperature (up to 26°C / 78°F)	None - Should be thawed in the refrigerator	None - Should be thawed in the refrigerator
In the cooler bag with an ice pack (up to 15°C / 59°F)	Until Thawed	Until Thawed
In the back of the refrigerator (up to 4°C / 78°F)	24 hours	48 hours
Fresh Breastmilk after Feeding		
At room temperature (up to 26°C / 78°F)	1 hour	2 hours

In the cooler bag with an ice pack (up to 15°C / 59°F)	Up to 4 hours	Up to 4 hours
In the back of the refrigerator (up to 4°C / 78°F)	Up to 24 hours	Up to 24 hours
In the freezer (-18-20°C / -4-0°F)	None - Should not be frozen	None - Should not be frozen
Previously Refrigerated or Frozen Breastmilk after Feeding		
At room temperature (up to 26°C / 78°F)	1 hour	1 hour
In the cooler bag with an ice pack (up to 15°C / 59°F)	1 hour	2 hours
In the back of the refrigerator (up to 4°C / 78°F)	1 hour	2 hours
In the freezer (-18-20°C / 0-4°F)	None - Do not refreeze	None - Do not Refreeze
In the Freezer		
In the Freezer Compartment of a Refrigerator (-15°C / 5°F)	1 week	2 weeks
Conventional freeze (-18-20°C / -4-0°F)	3 months	6 months
Deep Freeze (-20°C / -4°F or lower)	6 months	1 year

Note: The bottles, sealing discs, and bottlenecks that come with your milk collection kit are safe for storage use in the refrigerator or freezer; they need

to be sterilised before first use. Spectra milk storage bags which come pre-sterilised are available to purchase on the Spectra Baby Australia website.

Important Safeguards

- Do not refreeze previously frozen breast milk once thawed.
- Do not overheat or microwave breast milk as much of its nutritive value will be lost and hot spots can occur and result in serious burns.
- Do not use bottle warmers to heat breast milk.

Thawing Frozen Breast Milk

There are three ways to thaw frozen breast milk safely. If your caregiver has given you alternative instructions, always adhere to those. Choose one the following methods:

- Move it to the back of the refrigerator 24 hours prior to feeding.
- Hold the bottle or bag under warm running water until the milk is thawed and reaches room temperature.
- Place in a bowl of very warm water and gently move around in the bowl until thawed, refreshing the warm water as it cools.

Note: Breast milk is still considered frozen as long as it contains any amount of ice particulates.

Feeding Breastmilk

We recommend waiting until breastfeeding is well established prior to feeding your baby expressed breastmilk. Always follow the advice of your care provider.

Warming Milk

Some babies prefer warm milk. To warm the milk, set bottle in a mug of hot tap water for several minutes. Gently shake the bottle periodically. Test the temperature on the inside of your wrist prior to feeding it to your baby.

- **Do not** heat milk in a microwave. Microwaving can cause severe burns from hot spots that develop in the milk during the heating process.
- **Do not** heat in boiling water or water that is too hot to touch.
- **Do not** reheat milk above body temperature as it can negatively impact the nutritional components of the milk.
- **Do not** reheat milk in a bottle warmer as it can negatively impact the nutritional components of the milk. Bottle warmers are typically designed for formula, which is not as susceptible to heat damage.

Safely Bottle-Feed

To ensure safe use of the bottles, adhere to the following guidelines:

- Always inspect the bottle, nipple and other feeding accessories for defects prior to feeding your baby. If the nipple appears cracked or torn, discontinue use and discard immediately.
- Always supervise infants when bottle feeding.
- Periodically test the nipple by tugging on it to prevent potential choking hazards.
- Do not modify the nipple or bottle components.
- Do not use nipple or bottle components for anything other than their intended purpose, i.e. as for pacifiers, teething surfaces, or toys.

Bottle Assembly

The following instructions describe how to prepare the Spectra bottles for feeding:

1. First wash your hands in warm soapy water before touching parts that come in contact with milk.
2. Then, insert the teat by firmly pressing it from the underside and up into the bottle neck (where the sealing disc would go).
3. Screw the neck firmly onto the collection bottle.
4. When not in use, place the bottle cap over the teat to keep it clean.



Tip: To avoid leaking, always transport and store the bottle in the upright position, and when possible store with the sealing disc in place instead of the teat.

Troubleshooting

The following section contains common issues and resolutions. Should your issue not be resolved by following the contents of the following section, please contact our customer support team.

POSSIBLE PROBLEM	SOLUTION
Pump will Not Turn On	
Out of battery power.	Insert power adapter.
Interchangeable parts on power adapter not connected properly.	Assemble adapter as per <i>instructions</i> on page 19.
Pump Will Not Turn on And a Loose Rattling Sound is Heard	
Internal circuit board has come loose.	Contact customer service.
No Suction	
Tubing has been disconnected.	Firmly attach tubing to both the backflow protector and the pump nozzle.
Backflow protectors are not assembled correctly.	Reassemble and reattach the backflow protectors.
Silicone valve is not attached correctly.	Reposition the valve and then reassemble.
Low Suction	
Vacuum setting has been accidentally changed.	Adjust vacuum settings.
Battery is low.	Insert power adapter.

POSSIBLE PROBLEM	SOLUTION
Low Suction (cont.)	
Silicone valve is not attached correctly.	Reposition the valve and then reassemble.
Backflow protectors are not assembled correctly.	Reassemble and reattach the backflow protectors.
Tubing is not fully attached.	Firmly attach tubing to both the backflow protector and the pump nozzle.
If single pumping, nozzle cover is loose.	Ensure the second pump nozzle is fully covered by the rubber cap.
Air is leaking out between breast and the breast shield.	Adjust breast. If persists, breast shield may be the wrong size.
Valves and backflow protector may need replacing.	Over time the elasticity of these parts degrade which impacts suction. Replace regularly.

Warranty

This product is warranted by the manufacturer and its authorised representatives to be free from defects in material and workmanship for a period of two years from date of purchase. This warranty does not cover damage caused by accident, misuse, abuse, improper maintenance, unauthorised modification, or connection to an improper power supply.

If you need assistance with correct usage, care or warranty when using this product please contact:

Spectra Baby Australia

www.spectra-baby.com.au

Disposal

Spectra Baby Australia encourages used pumps, including broken pumps, to be returned to us so we can prepare them for donation or repair them for use again. Please contact us for more information on this program.

The Spectra S1 must not be disposed of with your regular household waste. It must be taken to a designated electronics recycling location. For more information about where you can dispose of electronic waste, please contact your local authority.

Breastshields and the clear plastic pieces of the backflow protectors can be recycled in your normal household recycling service after proper sterilisation.



In order to comply with EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) please adhere to the following: 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.

Flying with the Spectra S1

The Spectra S1 is safe for use while travelling on commercial airlines. The Spectra S1 battery has 24Wh, and is categorized with cell phones and personal computers. You do not need to declare the S1 prior to flying. However, per **CASA** regulations the S1 must **not** be in checked luggage. When travelling by air, bring the S1 in your carry-on luggage. If you have more questions, contact your airline.

For More Information

If you need assistance with correct usage, care or warranty when using this product, please contact:

Spectra Baby Australia

www.spectra-baby.com.au

Instructional Videos

Spectra Baby Australia has produced a series of videos to assist with using your Spectra breast pump. Topics include assembly, cleaning & sterilising, warranty information and more. You can subscribe to our YouTube Channel and browse our range of videos here:

→ <https://www.youtube.com/spectrababyaustraliainfo>

Technical Specifications

Vacuum Strength: 320mmHg (12 steps in Expression Mode, 5 steps in Massage Mode)

Grade: Hospital Grade

Massage Mode: Yes

Cycle Speed (Expression Mode): 5 Speed Settings Between 38 and 54 rpm

Cycle Speed (Massage Mode): 70 rpm

Power: Mains or Battery

Battery Type: 1.11V 2000mAh Li-Polymer

Battery Life: 3 hours

Watt Hours: 24Wh

Time to Charge: 4 hours

Double Pump: Yes

Weight: 2kg

Warranty: 2 Years

Motor Life: 1500 Hours

Country of Origin: South Korea

Certifications: CE, FDA, ISO13485, ISO9001

Environmental Conditions

Operating Temperature: 5°C - 40°C

Operating Humidity: 15% - 93% non-condensing

Storage Temperature: -20°C - 60°C

Storage Humidity: 15% - 93% non-condensing

Performance Characteristics

Vacuum Strength												
Massage Mode	1	2	3	4	5							
Expression Mode	1	2	3	4	5	6	7	8	9	10	11	12

Cycle Speed (cycles per minute)						
Massage Mode	70					
Expression Mode		54	50	46	42	38

Electromagnetic Compatibility

Portable and mobile RF communications such (i.e. mobile phones, walkie talkies, wireless devices) can impact the functionality of the Spectra S1. We recommend keeping these devices 1 meter away from the Spectra S1 while in operation. Do not use adjacent or stacked with any other electronic equipment.

IEC 60601-1-2:2007

This Spectra S1 has been tested and found to comply with the limits for medical devices in IEC 60601-1-2:2007. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. This equipment generates, uses and can radiate radio frequency energy and may cause interference to other devices in the vicinity. Interference can be determined by turning the equipment on and back off again. Interference can be remedied by ensuring the Spectra S1 is at least 1 meter away from other radio emitting devices, by reorienting the pump, or by connecting the pump to an electrical outlet not shared by other devices.



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