

# USER MANUAL

LACTEA Smart

LACTEA Smart Lite

LACTEA Smart Plus

LACTEA Smart Pro

**LACTEA**<sup>o</sup>  
—professional—



[www.lactea.ru](http://www.lactea.ru)

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By buying the LACTEA Smart™ breast pump you made the right choice! Nothing can be better than mother's milk and breastfeeding your child is one of the greatest gifts you could give. LACTEA Smart™ will prove indispensable for this process making your breastfeeding experience comfortable for as long as you wish to continue.

#### **WHEN DO YOU NEED A BREAST PUMP**

- Relieving breast engorgement
- Storing expressed breast milk
- Excess lactation
- Inadequate milk supply
- Flat or retracted nipples
- Temporary separation of the mother from the baby
- Certain maternal medical conditions
- The mother's need to skip a feeding
- The inability of the baby to latch
- Weakened baby unable to nurse effectively

The **LACTEA Smart™**, **Smart Lite** and **Smart Plus** are designed specifically for individual home use. **LACTEA Smart™ Pro** is designed for hospital use. All of them are perfect for both occasional and regular pumping.

**IMPORTANT!** Read this manual carefully before using the device.



## ADVANTAGES OF LACTEA Smart™ BREASTPUMPS

The unique adaptive Intelligent Vacuum Control ® technology allows the LACTEA Smart™ breast pump to simulate the natural suckling process thus making milk expression highly effective and comfortable at the same time. The LACTEA Smart™ breast pump is a two-phase device that offers 3 different modes of expression. LACTEA Smart™ can be used as a single or a double pump.

### TWO-PHASE PRINCIPLE

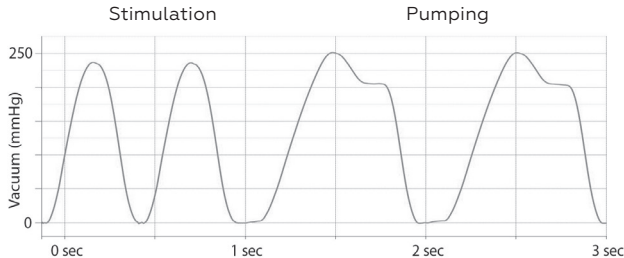
Healthy infants are naturally great at suckling. They instinctively understand how to express milk as fast and as effectively as possible by adjusting the way they nurse during the feeding. The research has demonstrated that babies begin feeding with quick jerky movements to stimulate the letdown. Once the milk starts coming, babies slow down and continue at their own pace.

First, there is **the stimulation phase** (fig.1) - a fast-paced rhythm, about 120 cycles per minute, which stimulates the letdown. Next, comes the expression **phase-a slower rhythm**, about 60 cycles per minute, that ensures a gentle and effective milk expression.

## THE ADVANTAGES OF TWO-PHASE PUMPING

- Mimics natural nursing rhythm
- More milk in a shorter time
- Rapid letdown stimulation

Figure 1



## THREE MODES OF EXPRESSION

### 1. Physiological mode (fig.2)

The natural one. The highest efficacy with the least vacuum. Most mothers report it to be the most comfortable mode. This mechanism is used in the latest clinical (professional) breast pumps.

### 2. Classic mode (fig.3)

Helps express more milk in the first minutes of pumping. Applies a little more vacuum. This mechanism is used in conventional clinical (professional) breast pumps.

### 3. Gentle mode (fig.4)

Perfect for special occasions. A slow rise and fall of the vacuum is indispensable for highly sensitive breasts or damaged nipples



LACTEA Smart™ gives you a chance to choose just the perfect mode for you. Try all three of them and see which one is the right fit.

Figure 2. Physiological mode.

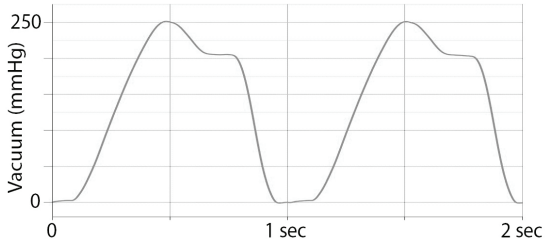


Figure 3. Classic mode.

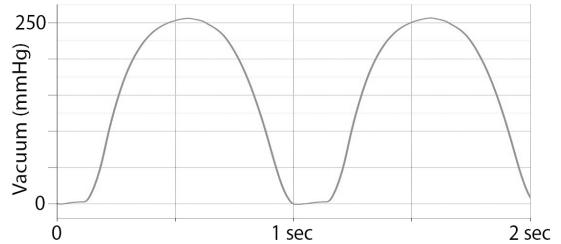
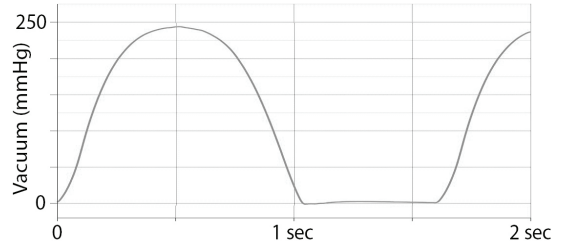


Figure 4. Gentle mode.





### **DOUBLE PUMPING\*** (simultaneous expression from both breasts)

Double pumping allows you to save time while simultaneously increasing milk production: it stimulates additional letdown, expresses more milk, and increases the nutritional value of milk.

### **BENEFITS OF DOUBLE PUMPING**

**Up to 8,3 %** more calories (fats) in milk \*\*

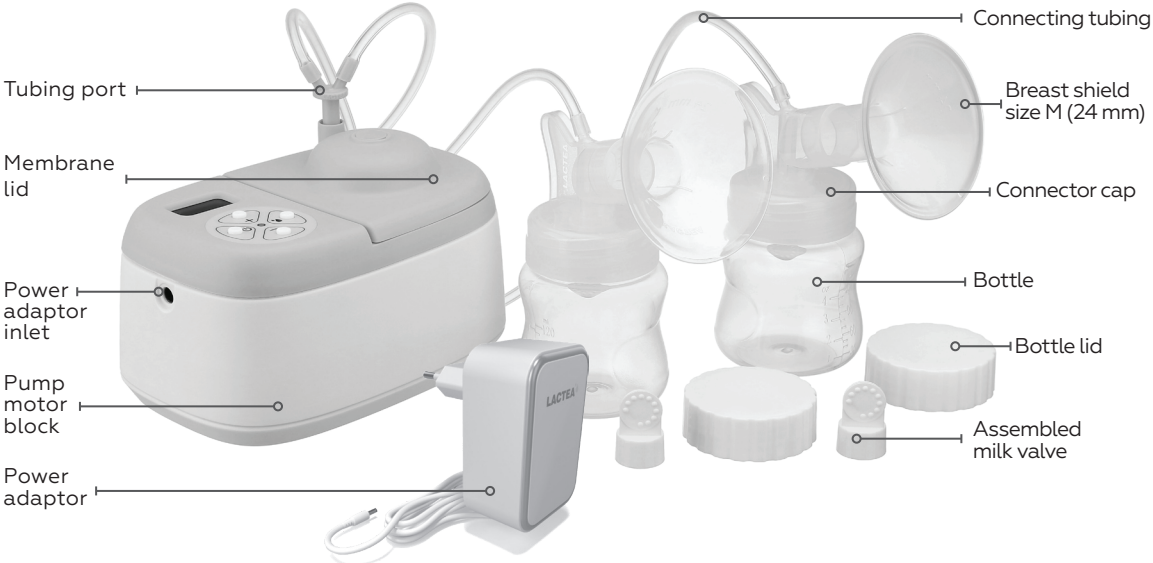
**Up to 18%** more milk expressed from each breast

**Up to 2 hours** less time spent pumping daily

\*requires an additional suction kit

\*\*a higher milk fat content is beneficial for infants with failure to thrive

# PRODUCT DESCRIPTION AND CONTROLS






Display (LACTEA Smart™ Plus/Pro models)



LED indicator

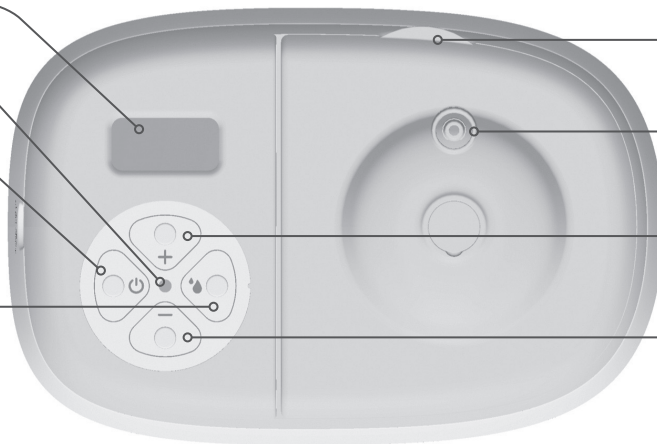
START/STOP

One touch letdown and expression mode switch 

Membrane lid removal tag

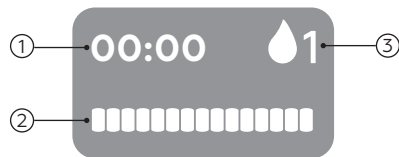
Vacuum outlet

Vacuum level increase/decrease  



## LACTEA Smart™ Plus/Pro DISPLAY ICONS

1. Timer - duration of an expression session
2. Vacuum indicator
3. Phase/mode indicator



Stimulation phase



Expression phase:  
physiological mode



Expression phase:  
classic mode



Expression phase:  
gentle mode

## ADDITIONAL PARTS

1. Extra suction kit
2. Silicone shield
3. 8 AA battery block
4. 120 ml bottles



1



2

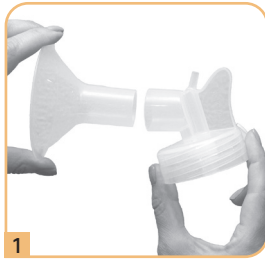


3



4

## ASSEMBLING YOUR BREAST PUMP SUCTION KIT



### ASSEMBLING/DISASSEMBLING THE MILK VALVE FOR CLEANING AND SANITATION PURPOSES

Carefully peel the membrane leaflet off the milk valve. In order to assemble the valve lightly press the white membrane onto the valve until you hear a soft click.

Disassembling is performed in reverse order

# CLEANING AND SANITIZING

## PRIOR TO THE FIRST USE AND ONCE DAILY

1. Completely disassemble the breast pump. If the tubing was exposed to milk, remove the membrane lid as well (p.13)
2. Place parts of the pump in boiling water for 5 minutes. Make sure the parts are submerged in the water at all times.
3. Boiling may be substituted by microwaveable steam bags/boxes.
4. Dry the parts with a cloth or let parts air dry on a clean towel.
5. Wipe the pump with a clean damp cloth.

When disinfection and/or sterilization is carried out, the Suction Kit parts must not be heated above 121 °C (250 °F). After the first heating, the bottle may shrink up to 6%

**Attention!** Only use clean drinking water. Separate and wash all parts that are exposed to breast milk immediately after use. This will help to remove breast milk residue

**Important!** Do not immerse the breast pump in water; do not run water over the breast pump.

## AFTER EACH USE

1. Completely disassemble the breast pump (p.11)
2. Rinse all the parts with clean warm water.
3. Soak in warm soapy water
4. Rinse all the parts with clean warm water once again
5. Dry the parts with a cloth or let parts air dry on a clean towel.



### **CLEANING AND SANITIZING THE MEMBRANE, MEMBRANE LID, AND TUBING**

Pull the tag to remove the membrane lid. In order to attach the membrane lid, press it onto the connector body until it snaps closed.

Remove the membrane lid. Wash it with soapy water. Next, rinse it with running water. Dry the lid with a cloth or let it air dry completely on a clean towel. Gently wipe the silicone membrane found under the lid with a damp cloth. Make sure the membrane and the lid are completely dry. Put the lid in place.

Rinse the tubing thoroughly to remove all milk residue. Next, wash the tubing with soapy water. Rinse the tubing with rubbing water again. Put the tubing on a clean towel to air dry.

# OPERATING THE PUMP

## 1. Powering the pump

### POWER ADAPTOR

Plug the power adaptor into the 110-240V power source. Plug the LACTEA power cord into the power inlet of the motor block (p.8). Only use the LACTEA power adaptor.

### ATTENTION!

Never use power sources unapproved by the manufacturer.








### BATTERY BLOCK (sold separately)

Open the battery block lid and insert 8 AA batteries in the correct positions. Insert the battery block cord into the power inlet of the motor block . Turn the battery block on by pressing the ON switch. Don't forget to turn the switch OFF after the pumping session. If the battery block isn't going to be in use for some time, it is better to remove the batteries.

**2. Assemble the breast pump kit(s)** (p.11). Connect the tubing to the outlet on the membrane lid (p.9). If you're double pumping, use the tubing port from the extra suction kit. Attach the tubing port to the outlet and the tubing to the tubing port.

### 3. Pumping

#### SINGLE PUMPING

- Hold the breast shield onto your breast. Make sure the nipple is in the center of the shield.
- Press the power button  (short press). The breast pump will begin in the Stimulation phase. The yellow indicator will be blinking.
- Use  and  buttons to find the most comfortable level of vacuum.
- Stimulation phase will last for 2 minutes, after 2 minutes up it pump will automatically transition to the Expression phase. During the Expression phase, the green indicator will blink.
- If the milk letdown begins before the Stimulation phase is over, shortly press the phase/mode switch button  to transition to the Expression phase.
- If the milk letdown did not begin in 2 minutes, press the button  to return to the Stimulation phase after the initiation of the Expression phase.
- Use  and  the buttons to adjust the level of vacuum during the Expression phase. .  
**Tip:** gradually increase the vacuum level until you feel slight discomfort. Go down one point afterward and continue pumping. This is the most effective level of vacuum for you.
- Use additional function controls if necessary (p.16)




#### DOUBLE PUMPING (requires extra Suction Kit)

Use the tubing port (see p.8, included in the extra kit) to connect the breast pump to both suction kits. Express in the same way as described for “single pumping”.

4. **Disconnect the breast pump** from the power source and sanitize it (pp. 12-13)

## ADDITIONAL FUNCTION CONTROLS

### SWITCHING BETWEEN EXPRESSION MODES



Pressing and holding a  button (for longer than 2 sec) during the "Expression" phase results in cyclical mode changes: "Physiological"; "Classic"; "Gentle".

**Green flashing light** indicated Physiological mode



**Blue flashing light** indicate Classic mode

**White flashing light** indicate Gentle mode


### SAVING THE SETTINGS

You can save your individual pumping settings on the device. Press and hold  and  buttons longer than 2 seconds when breast pump is started until you hear a long signal. When the breast pump is turned on next time, it will automatically start performing in the chosen mode (given that the breast pump was disconnected from the power source and was in the snooze mode).

### RESET THE SETTINGS

Press and hold  and  buttons longer than 2 seconds when breast pump is stopped.








### DISABLING BUTTON SOUNDS

You can turn the button sounds on and off. To toggle the sounds on/off, press and hold the  button longer than 2 seconds while the breast pump is started.

**Warning!** It is only possible to disable the short button press sounds. The sounds of the long press cannot be disabled.



# FUNCTION CONTROLS AND LED SIGNAL DESCRIPTION

BREASTPUMP BUTTONS		
	short press	Device START/STOP
	hold (> 2 sec) when started	Save user-adjusted vacuum levels
	hold (> 2 sec) when stopped	Factory reset
	short press	Toggle Stimulation/ Expression phase
	hold (> 2 sec)	Select expression mode: PHYSIOLOGICAL, CLASSIC, GENTLE
	short press	Increase vacuum level
	hold (> 2 sec)	Toggle display brightness high/low
	short press	Decrease vacuum level
	hold (> 2 sec)	Toggle beeper on/off
	hold (> 2 sec)	Toggle display colour black/white

LED INDICATOR		
red	blinking	General breastpump failure
yellow	blinking	STIMULATION phase
green	blinking	PHYSIOLOGICAL mode of expression phase
blue	blinking	CLASSIC mode of expression phase
white	blinking	GENTLE mode of expression phase
orange	lights up when breastpump is stopped	The motor block is almost exhausted

# TROUBLESHOOTING

## A BREAST PUMP IS NOT FUNCTIONING

### **The indicator is off.**

Make sure the breast pump is plugged into the energy source.

### **The red indicator is rapidly flashing.**

Software error. Unplug the motor from the power adaptor or the battery block and plug in again. If the error persists contact the service center.

### **2 sound alarms go off when the power adaptor is plugged in. In the "off" mode the Orange light is on.**

The motor block is almost exhausted. You can still use your breast pump, but keep in mind that soon it may stop working. Contact a service center for motor block replacement.

### **3 sound alarms go off when the power adaptor is plugged in. The red light is on.**

The motor block is exhausted. Contact a manufacturer service center for motor block replacement.

## BREAST PUMP IS FUNCTIONING BUT IS NOT CREATING SUFFICIENT VACUUM

Make sure that:

- The shield fits snugly to your breast
- all of the breast pump parts are connected securely and attached to the motor block correctly
- The surface of the white milk valve membrane leaflet and the corresponding device body part is clean, without milk residue or any foreign particles
- The white valve membrane leaflet fits snugly into the valve body
- The breast pump membrane surface and the corresponding device body part is clean, without milk residue or any foreign particles
- The membrane lid fits snugly to the breast pump body

## TECHNICAL DATA

**750 g**

Device weight (without the expression kit)

**12VDC  
2A**

Pump motor block input voltage



Device size  
177x118x123 mm

**110-240V  
50-60 Hz**

Max power adaptor voltage (max 0.6 A)



Operating temperature (given the relative humidity is under 80%)

**24W**

Max power consumption (from 220v supply)

**IP21**

The degree of protection against the entrance of solid foreign objects and harmful effects due to the entrance of water.

**250 mmHg**

Max vacuum

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## STORAGE AND TRANSPORTATION

The LACTEA Smart™ breast pump may be stored in enclosed non-heated spaces at the ambient temperature of -20°C to +50°C and the relative humidity under 98% (at 25°C) in the absence of acidic or alkaline fumes or other aggressive substances in the air. It is advised to treat the device as fragile during storage and transportation.

## SAFETY MEASURES

- Don't use the breast pump in high humidity. Avoid getting the breast pump body wet with water or other liquids.
- Keep the breast pump away from the radiators and direct sunlight.
- Warm up to room temperature before use if the breast pump was stored in the cold
- Don't use a damaged breast pump
- Don't use a breast pump if the power cord or the power unit is damaged
- Do not try to repair the device yourself
- Do not leave a plugged-in breast pump unattended
- Do not use a breast pump in the bath or shower

## WARRANTY

This product is warranted by the manufacturer to meet the technical requirements under the use, storage, and transportation regulations for the period of 24 months but no more than 900 operation hours (60 months but no more than 5000 operation hours for LACTEA Smart™ Pro model).

The warranty is effective from the date of purchase or the device manufacture date. The manufacture date can be found in the device information label on the bottom of the motor block and acts as a valid warranty certificate.

In the event of a defect, the manufacturer will repair this product, without charge for such replacement, parts or labor. This warranty does not apply to any product used commercially or which has been subjected to misuse, abuse or alteration.

LACTEA LLC , 108818, poseleniye Desenovskoye, kv-l 61, 3, blg 3, TC "Sokol", Moscow, Russia

e-mail: [info@lactea.ru](mailto:info@lactea.ru) tel: +7 800 775-90-30