

Hanchen 1-50ml Peristaltic Pump Weighing Filling Machine

Hanchen 1-50ml Peristaltic Pump Weighing Liquid Filling Machine Instruction Manual

Model: 1-50ml Peristaltic Pump Weighing Filling Machine

Brand: Hanchen

INTRODUCTION

This instruction manual provides detailed information on the setup, operation, and maintenance of the Hanchen 1-50ml Peristaltic Pump Weighing Liquid Filling Machine. Please read this manual thoroughly before operating the machine to ensure safe and efficient use.

This machine is designed for precise filling of low-viscosity (water-like) and non-corrosive liquids without solid particles. It is suitable for essential oils, oral liquids, solutions, perfumes, and spray bottles. It is not suitable for paste, honey, diesel oil, engine oil, kerosene, or gasoline.

SAFETY INFORMATION

- Always ensure the machine is placed on a stable, level surface before operation.
- Do not use the machine with highly corrosive or high-viscosity liquids as this may damage the peristaltic pump and affect accuracy.
- Regularly inspect the silicone tubing for wear and tear. Replace promptly if any damage is observed to prevent leaks and maintain hygiene.
- Ensure all connections are secure before operating the machine.
- Keep hands clear of moving parts during operation.
- Disconnect power before cleaning or performing any maintenance.

PRODUCT OVERVIEW AND COMPONENTS

The Hanchen 1-50ml Peristaltic Pump Weighing Liquid Filling Machine is a compact and efficient device designed for accurate liquid dispensing. Key components include:

- **Control Panel:** Digital display and keypad for setting filling parameters.

- **Weighing Pan:** Integrated scale for weight-based filling.
- **Peristaltic Pump:** Ensures hygienic and precise liquid transfer.
- **Filling Nozzle:** Adjustable height for various bottle sizes.
- **Inlet/Outlet Tubing:** Food-grade silicone tubing for liquid flow.
- **Support Rod & Bracket:** For adjusting nozzle height and stability.

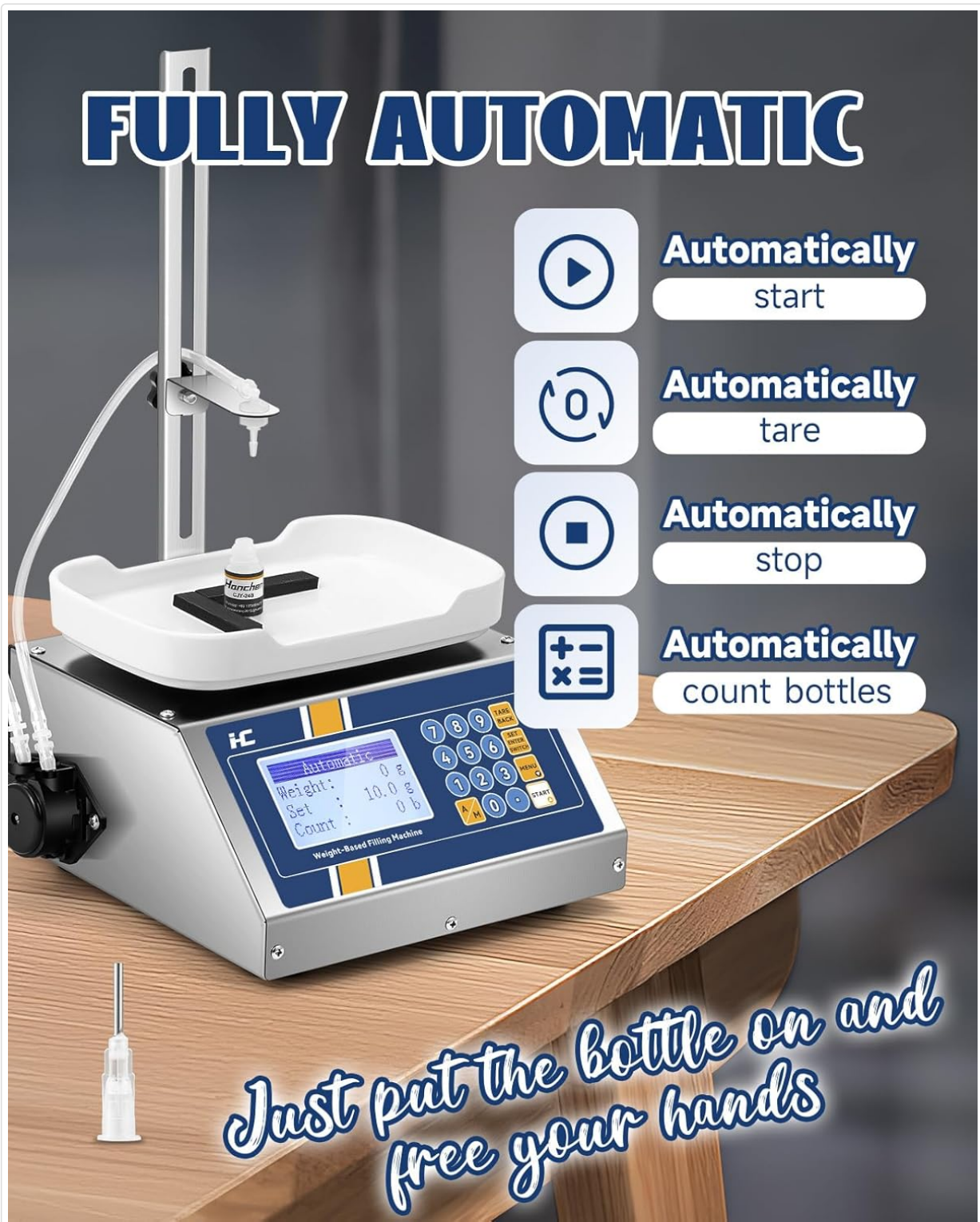
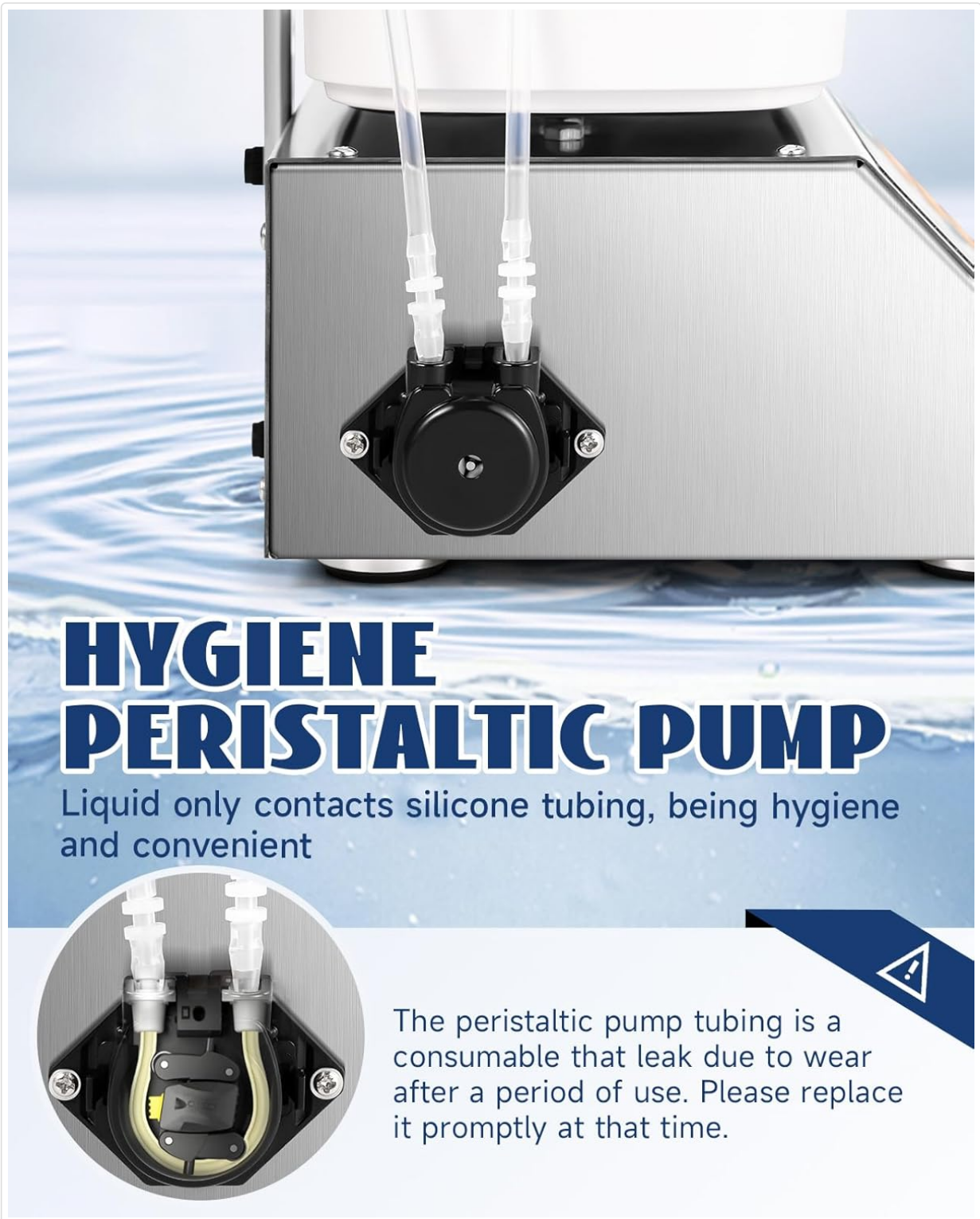


Figure 1: Main unit of the Hanchen 1-50ml Liquid Filling Machine. Shows the control panel, weighing pan, and filling nozzle assembly.



HYGIENE PERISTALTIC PUMP

Liquid only contacts silicone tubing, being hygiene and convenient



The peristaltic pump tubing is a consumable that leak due to wear after a period of use. Please replace it promptly at that time.

Figure 2: Close-up view of the hygienic peristaltic pump, highlighting the silicone tubing that contacts the liquid.

SETUP

Follow these steps to set up your Hanchen Liquid Filling Machine:

1. **Install the Support Rod:** Securely install the support rod into its designated slot on the machine base.
2. **Connect Tubing:**
 - Connect the inlet tubing (with filter) to the peristaltic pump's inlet port. Place the filter end into your liquid source container.
 - Connect the outlet tubing to the peristaltic pump's outlet port and attach it to the filling nozzle.

3. **Adjust Nozzle Height:** Use the slide rail bracket to adjust the height of the filling nozzle to match your bottle size. Ensure the nozzle is positioned correctly above the bottle opening.
4. **Position Bottle:** Place a bottle on the weighing pan. If desired, use the bottle positioning sticker for consistent placement.
5. **Power On:** Connect the machine to a power source (110V-220V) and turn it on.

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Video 1: Installation Guide for Hanchen 1-10g Liquid Filling Machine. This video demonstrates the step-by-step assembly process, including connecting tubing and adjusting components.

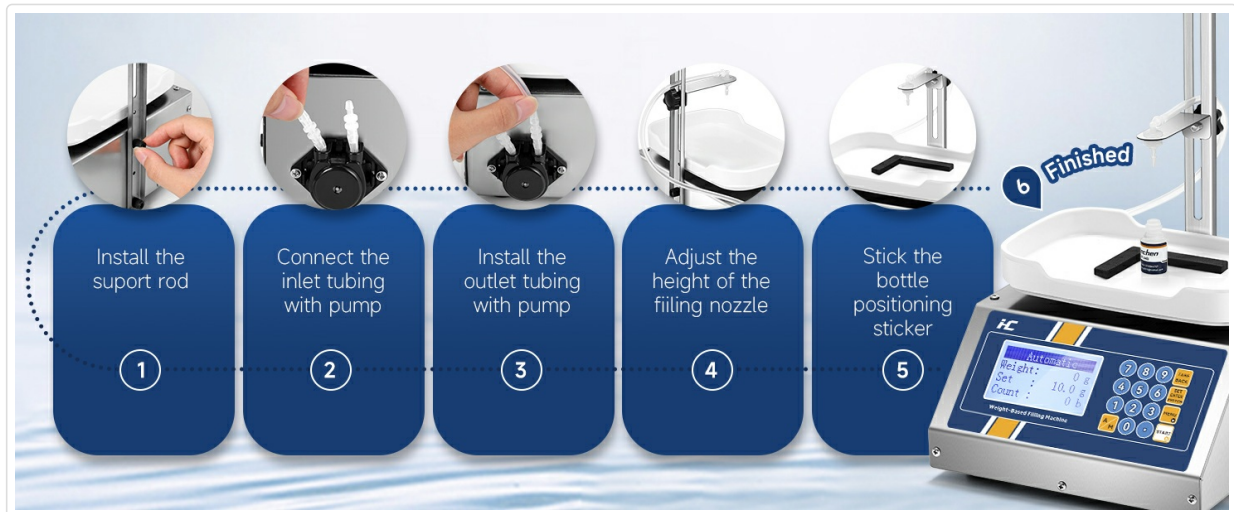


Figure 3: Visual guide illustrating the 6-step installation process, from support rod to bottle positioning.

OPERATING INSTRUCTIONS

The machine offers both automatic and manual operation modes, primarily using weight-based filling for high accuracy.

1. Setting Filling Capacity (Weight-Based)

1. **Power On:** Turn on the machine. The display will show the current weight, set weight, and count.
2. **Enter Target Weight:** Use the numeric keypad to enter your desired filling weight (e.g., 10g, 50g). Press "SET/ENTER" to confirm.
3. **Adjust Speed:** Use the speed control knob on the side to adjust the filling speed. A slower speed can improve accuracy for very small volumes or delicate liquids.

DIRECTLY ENTER WEIGHT

Game-changer of Amount Setting

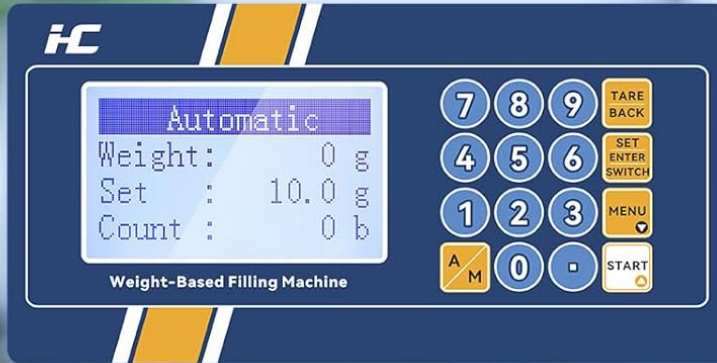


Figure 4: The control panel with numeric keypad for directly entering the target filling weight.



Figure 5: Close-up of the speed control knob, allowing adjustment of the liquid flow rate.

2. Automatic Filling Mode

This mode automates the filling process with minimal user interaction:

1. **Place Empty Bottle:** Place an empty bottle on the weighing pan. The machine will automatically tare (zero out) the weight of the empty bottle.
2. **Start Filling:** The machine will automatically start filling once the bottle is detected and tared.
3. **Slow Down & Stop:** As the filling approaches the set weight, the speed will automatically slow down for precision. Filling stops automatically once the target weight is reached.
4. **Automatic Reset:** Remove the filled bottle. The machine will automatically reset, ready for the next empty bottle.
5. **Bottle Count:** The machine automatically counts the number of bottles filled.

HIGH ACCURACY



Even can handle

0.5ml¹

bottle

Super high
accuracy up to

0.1ml

1 Limit theoretical value. There will be instability

Figure 6: Demonstrates the high accuracy of the machine, capable of handling small bottles with precision up to 0.1ml.

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Video 2: Hanchen 1-50ml Liquid Filling Machine in operation. Shows the automatic filling process for small bottles, highlighting its precision.

3. Manual Mode

For manual control, you can use the "START" button on the control panel or a foot pedal (if included) to initiate each fill cycle after placing an empty bottle.



Figure 7: The control panel displaying options for manual mode, functioning like a precise scale.

MAINTENANCE

Proper maintenance ensures the longevity and hygiene of your filling machine:

1. Cleaning:

- After each use, especially when changing liquids, disassemble the tubing and filling nozzle for thorough cleaning.
- All parts that come into contact with liquid are made of stainless steel or food-grade silicone, making them easy to wash.
- Ensure all components are completely dry before reassembly or storage to prevent rust or contamination.

2. **Tubing Replacement:** The peristaltic pump tubing is a consumable item. Replace it promptly if you notice any signs of wear, leakage, or degradation to maintain hygiene and accuracy.

3. **Storage:** Store the machine in a clean, dry environment when not in use.

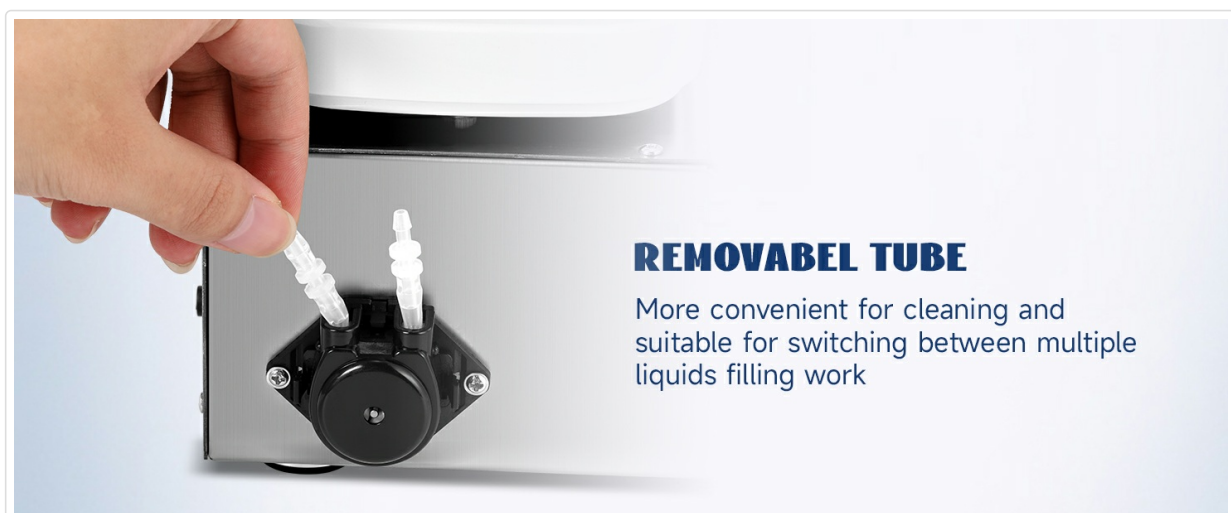


Figure 8: Illustration of the removable tubing, emphasizing ease of cleaning and suitability for switching between different liquids.



FOOD GRADE SILICONE TUBE

Being odorless, food grade, clear, wear-resistant, corrosion-resistant

Figure 9: Close-up of the food-grade silicone tube, highlighting its odorless, wear-resistant, and corrosion-resistant properties.

TROUBLESHOOTING

If you encounter issues, refer to the following common problems and solutions:

- **Inaccurate Filling:**
 - Check for air bubbles in the tubing. Prime the pump to remove air.
 - Ensure the weighing pan is stable and free from vibrations.
 - Verify the set weight on the control panel is correct.
 - Inspect peristaltic pump tubing for wear; replace if necessary.
- **No Liquid Dispensing:**
 - Check if the inlet tubing filter is clogged. Clean or replace if needed.
 - Ensure the liquid source container has sufficient liquid.
 - Verify all tubing connections are secure and not kinked.
 - Confirm the machine is powered on and in the correct operating mode.
- **Liquid Leakage:**
 - Tighten all tubing connections.
 - Inspect the peristaltic pump tubing for cracks or damage; replace if necessary.

SPECIFICATIONS

Feature	Detail
Filling Capacity	1-50ml (Max.) or 1-50g
Max. Filling Speed	90mL/min
Filling Accuracy	Error does not exceed 0.1ml / 0.1g
Voltage	110V-220V
Item Weight	4.4 pounds

Package Dimensions	13.7 x 9.72 x 7.76 inches
Manufacturer	Hanchen

WARRANTY AND SUPPORT

Hanchen provides a **ONE YEAR warranty** for this product. For any questions, technical support, or warranty claims, please contact Hanchen customer service. Our repair warehouse in the United States provides repair services.