



FT-1000

Peristaltic Pump Filler Operation Manual



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1 SAFETY INSTRUCTION

This manual is designed for operators who are not acquainted with the machine, so please follow the instructions to operate and adjust the machine step by step. If you cannot thoroughly understand some of the instructions, please ask experienced technicians for help or contact us. Thank you!

Note: Please read this user manual in detail before taking any action to operate the machine!



- This machine is driven by 110 or 220 VAC. The voltage should fit for the power standard of the machine and should always stay within the security limit.



- Only engineering technicians are allowed to make adjustment of the machine, but any adjustment is forbidden while the machine is running. Failure to follow this warning may expose the operator to danger.

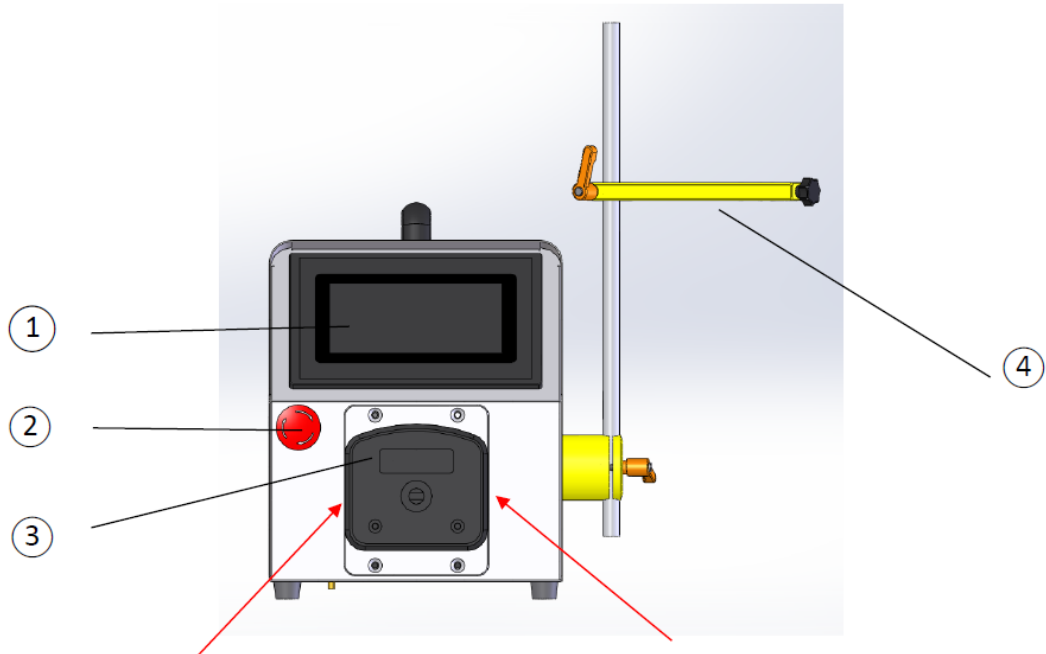


- Do not place the machine near high temperature or inflammables. The places where are not stable or where the machine will be crashed easily are also not suitable to place the machine.
- To prevent from getting electric shocks, the machine cannot be placed in a humid environment.
- Do not attempt to remove/replace parts or to use the machine for any other purpose other than what is recommended by us.
- Do not randomly apply lubricants to any part of the machine.



2 PRODUCT DESCRIPTION

2.1 COMPONENTS



liquid inlet side

liquid outlet side

① Control Panel

③ Pump

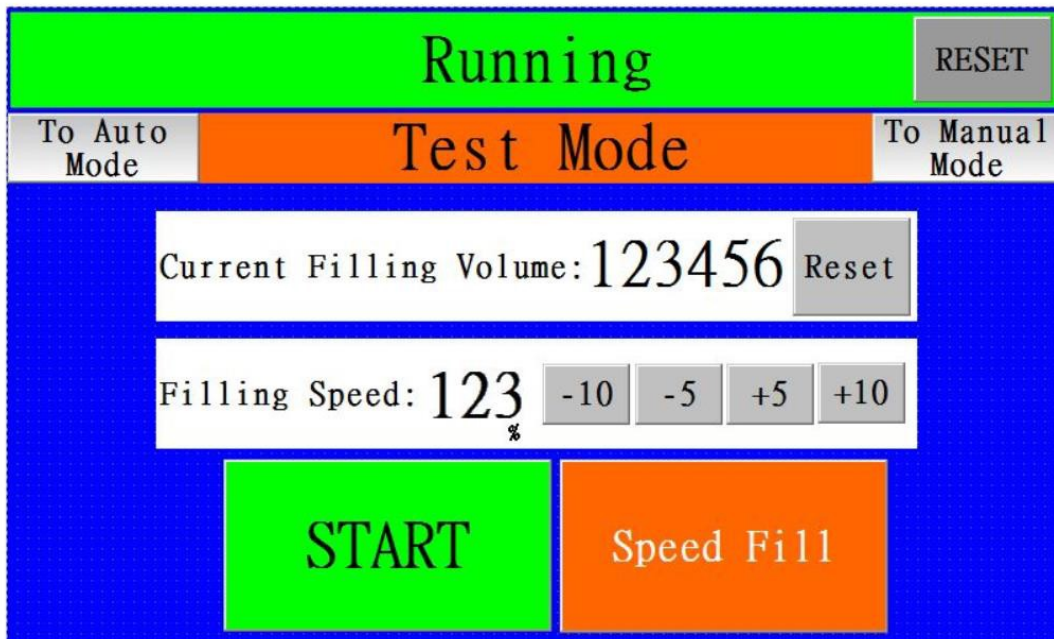
② E.M. Stop

④ Nozzle Bracket



2.2 CONTROL PANEL

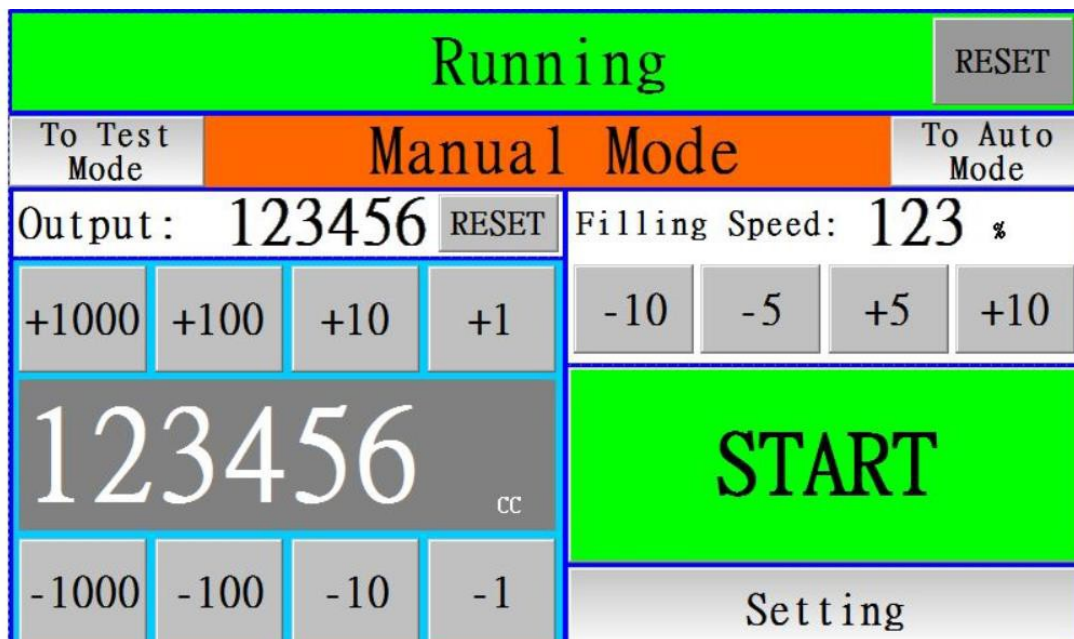
2.2.1 Test Mode



Reset	Reset the machine condition.
To Auto Mode	Enter auto mode.
To Manual Mode	Enter manual mode.
Current Filling Volume	The test result of filling volume.
Filling Speed	To set up the filling speed in test mode.
Start	Press start to test the filling volume.
Speed Fill	To fill in high speed to exclude the air in outlet tube.



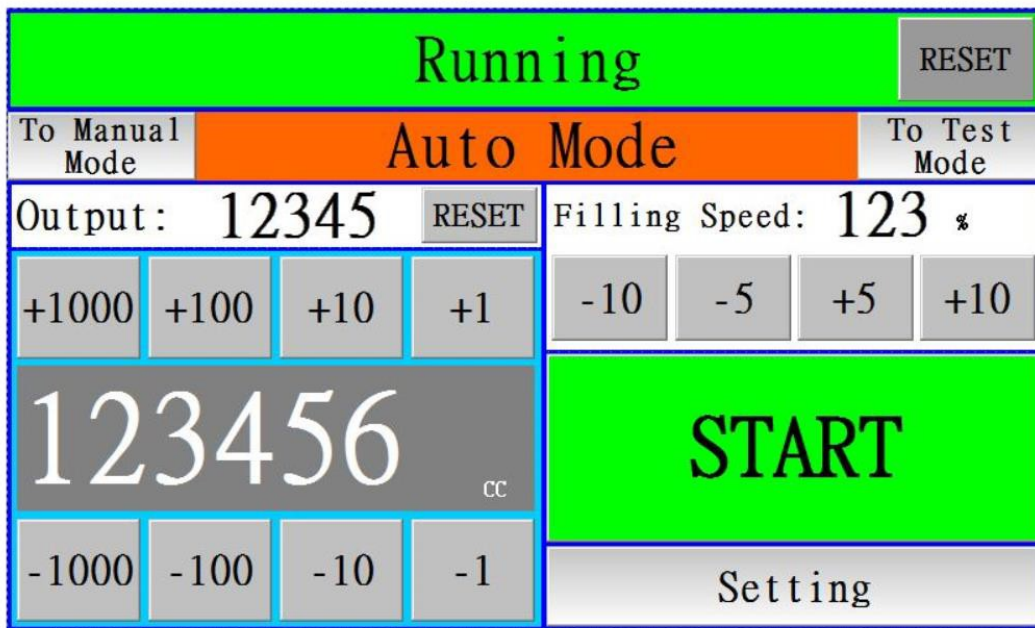
2.2.2 Manual Mode



Reset	Reset the machine condition.
To Test Mode	Enter test mode.
To Auto Mode	Enter auto mode.
Filling Speed	To set up the filling speed in manual mode.
Output	The number of filled bottles. (Press RESET for one second, it will re-zero)
Start	Press start button to fill.
Setting	Enter setting page.
Filling Volume	Press the number button to adjust the volume or press CC to key in directly.



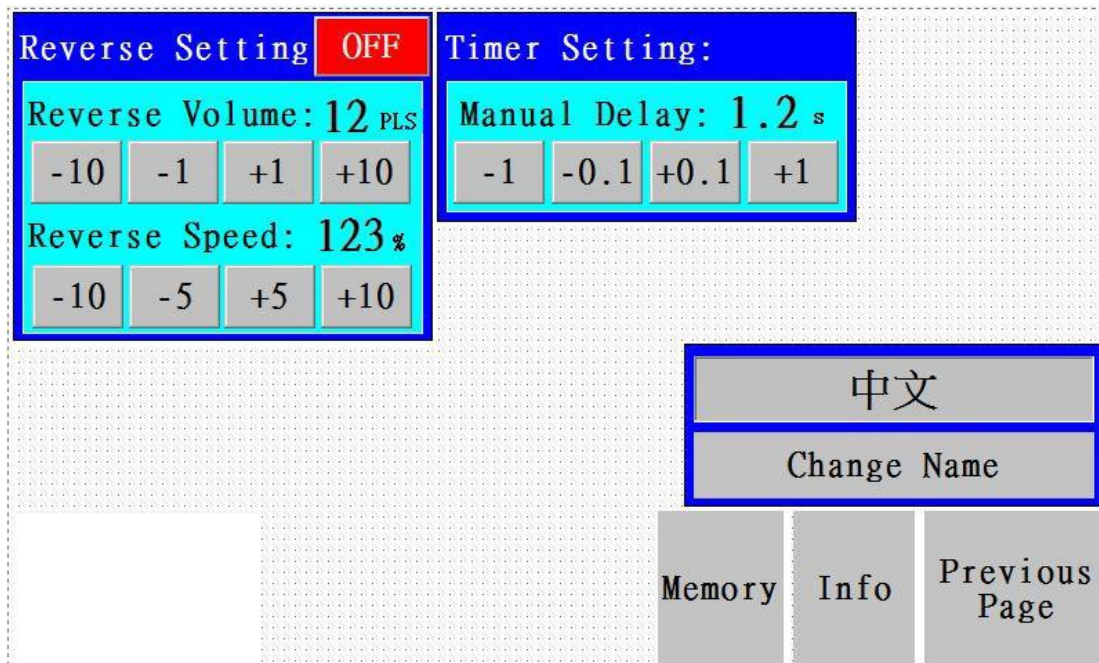
2.2.3 Auto Mode



Reset	Reset the machine condition.
To Manual Mode	Enter manual mode.
To Test Mode	Enter test mode.
Filling Speed	To set up the filling speed in auto mode.
Output	The number of filled bottles. (Press RESET for one second, it will re-zero)
Start	Press start button to fill.
Setting	Enter setting page.
Filling Volume	Press the number button to adjust the volume or press CC to key in directly.



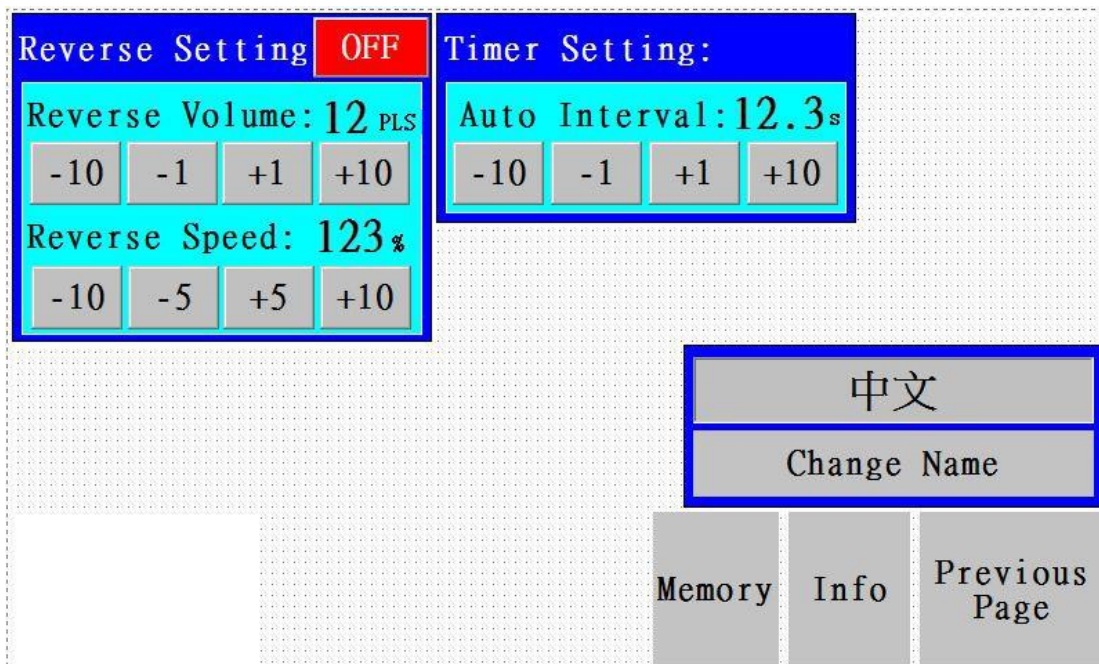
2.2.4.1 Setting Page (Manual mode)



Reverse Setting OFF	Turn on/off reverse filling mode. This mode is to prevent liquid from dripping.
Reverse Volume	Set up the volume for reverse filling. It depends on dripping condition.
Reverse Speed	Set up the filling speed for reverse filling. It does not have to be high speed. You could set up the speed, as long as the liquid would not drip anymore.
Timer Setting	To set up the waiting time before filling 1 bottle in manual mode.
Memory	Enter memory page.
Info	Enter info page.
Previous Page	Back to previous page.
Change Name	To set up or change the recipe name



2.2.4.2 Setting Page (Auto mode)



Reverse Setting OFF	Turn on/off reverse filling mode. This mode is to prevent liquid from dripping.
Reverse Volume	Set up the volume for reverse filling. It depends on dripping condition.
Reverse Speed	Set up the filling speed for reverse filling. It does not have to be high speed. You could set up the speed, as long as the liquid would not drip anymore.
Timer Setting	To set up the waiting time before filling 1 bottle in auto mode.
Memory	Enter memory page.
Info	Enter info page.
Previous Page	Back to previous page.
Change Name	To set up or change the recipe name



2.2.5 Memory Page

Recipe Code	12	Present Value	Recipe
Product Name		中文	中文
Manual Filling Delay		1.2	1.2
Auto Filling Interval		12.3	12.3
Current Filling Volume		123456	123456
Filling Speed-Test		1234	1234
Filling Speed-Manual/Auto		1234	1234
Reverse Filling Speed-Manual/Auto		1234	1234
Reverse PULSE Value		12	12
Diving Time		1.2	1.2

Previous Page	Recipe +1	Recipe -1	Test	Manual	Auto
	SAVE	LOAD			

- Product Name Please name your recipe in this column.
- Current The present value in setting page.
- RECIPE The parameter value of selected recipe.
- Pervious Page Enter recipe list page.
- Recipe+1 / Recipe-1 To select saved recipe.
- SAVE To save Present Value as recipe.
- READ To load RECIPE value.
- Test Enter test mode page.
- Manual Enter manual mode page.
- Auto Enter auto mode page.



2.2.6 Recipe List Page

Recipe List 1/2

Recipe1	<input type="text"/>	Select	Recipe6	<input type="text"/>	Select
Recipe2	<input type="text"/>	Select	Recipe7	<input type="text"/>	Select
Recipe3	<input type="text"/>	Select	Recipe8	<input type="text"/>	Select
Recipe4	<input type="text"/>	Select	Recipe9	<input type="text"/>	Select
Recipe5	<input type="text"/>	Select	Recipe10	<input type="text"/>	Select

Next Page Test Manual Auto

Recipe List 2/2

Recipe11	<input type="text"/>	Select	Recipe16	<input type="text"/>	Select
Recipe12	<input type="text"/>	Select	Recipe17	<input type="text"/>	Select
Recipe13	<input type="text"/>	Select	Recipe18	<input type="text"/>	Select
Recipe14	<input type="text"/>	Select	Recipe19	<input type="text"/>	Select
Recipe15	<input type="text"/>	Select	Recipe20	<input type="text"/>	Select

Previous Page Test Manual Auto

- | | |
|-----------------|--|
| Select | To select the recipe as filling parameter. |
| Next Page | To next page of recipe list. |
| (Previous Page) | (To previous page of recipe list.) |
| Test | Enter test mode page. |
| Manual | Enter manual mode page. |
| Auto | Enter auto mode page. |



3 BEFORE OPERATION

3.1 CONNECTIONS

<p>Step1 Open the pump.</p>	
<p>Step2 Take out the fixer.</p>	
<p>Step3 Install the fixer with the tube. P.S. The fixer has two different sides. Please make sure the fixers look like " / " \ ".</p>	



Step4 Install the tube into the pump.



Step5 Close the pump.





3.2 DRIVEN PUMP AND DISPENSING AIR

3.2.1 Switch the filling mode to the Test Mode.

3.2.2 Adjust the filling speed over than 400RPM.

3.2.3 Aim the opening of the nozzle to the tank or other container and **push** the start button **continuously**.
When the pump starts operating, the liquid will be sucked and filled into the filling tubes.

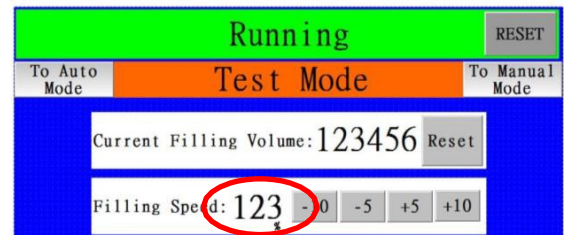
3.2.4 Please **push** the start button **continuously** until there is no more air in the filling hose.

3.2.5 Fix the filling nozzle onto the bracket, and then the preliminary operation is done.

TIP 01: While testing, please adjust to HIGH filling speed to help the air to eliminate from the filling hoses. (This action can prevent from influencing the filling process afterward.)

TIP 02: The liquid in the hoses has to flow out smoothly without air so that it will not affect the filling accuracy.

TIP 03: The best way to fill is to let the surface of the filling liquid in the tank higher than the pump.





4 OPERATION

4.1 OPERATION STEPS

4.1.1

Switch on the power.



4.1.2

Turn the emergency stop button clockwise to activate the function.





<p>4.1.3</p> <p>Place the bottle (or container), which you want to fill, under the filling nozzle and adjust the machine with proper filling speed. (The larger the scale is, the faster the filling speed will be. However, too fast or too slow will both affect the filling accuracy.)</p>	
<p>4.1.4</p> <p>Switch the to Test Mode, push the start button continuously until the required filling volume, and then note down the parameter shown on the screen.</p> <p>★ Please push continuously, or the parameter will not be accurate for the filling volume.</p>	
<p>4.1.5</p> <p>Switch to <u>Manual Mode</u>, and get into the parameter setting to enter the parameter you noted down from the previous step.</p>	
<p>4.1.6</p> <p>Press start button to fill. If the volume still has some discrepancy, please adjust the volume on manual mode directly.</p>	



4.1.7

While filling, the screen will show the output of the bottles being filled to assist the operator to measure the production.

Running								RESET	
To Test Mode	Manual Mode						To Auto Mode		
Output: 123456				RESET	Filling Speed: 123				%
+1000	+100	+10	+1	-10	-5	+5	+10		
123456					START				
-1000	-100	-10	-1					Setting	



5. MAINTENANCE

- 1 Be sure to dry the hands before operating the machine for setting and adjusting to prevent from getting electric shocks or causing short circuit.
- 2 Avoid filling materials that is higher than 80°C because liquids with higher
- 3 temperature will cause resistance overloading of the control components and then affect the life span of the machine.
- 4 After filling, please be sure to clean the hoses and the pump to keep the machine clean.
- 5 If you need to fill liquids with “granule”, please filter before filling in case the granule may block the filler and shorten the life span of the machine.
- 6 Please be cautious while filling acid or alkaline liquids to prevent from splashing to hurt the operator(s) and the machine.



6 TROUBLESHOOTING

Trouble(s)	Possible Causes & Solutions
Out of Power	<ol style="list-style-type: none"> 1. Check if the power switch is ON. (switch to “ — ”) 2. Check if the emergency button is ON. 3. Check if the power supply cable is loose or broken. 4. Check if the safety fuse blows.
No Reaction	<ol style="list-style-type: none"> 1. Check if the operation mode is Auto Mode. 2. Check if the filling speed is too low. 3. Check if the filling volume is too small. 4. Check if the machine status is stand by. 5. Repeat the setting and filling processes. 6. Check if using a foot pedal or any manual operation assisting devices. Once using those devices, the filler will adopt the signal from them in priority.
Bubbles Appear in Tubes	<ol style="list-style-type: none"> 1. Be sure to eliminate air from the hose before filling. 2. Check if the inlet hose is immersed in the tank. 3. Check if the hose is fastened. 4. Check if the hose is broken.
Strange Noise/ Not Filling Smoothly	<ol style="list-style-type: none"> 1. Check if anything blocks up the pump.

- In case there is any problem or malfunction that you cannot solve, please contact us immediately.



7 CONTACT INFORMATION

If you have any questions or you need to order some spare parts, please contact us through the contact information below:

Tel: 866-888-6327
Fax: 800-475-8915
E-mail: sales@clevelandequipment.com
Website: www.clevelandequipment.com