

# **RHX-C02 Capping Machine User Manual**

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# **REHEART**

WENLY REHEART INDUSTRIAL LIMITED

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# 1 Product Introduction

## 1.1 Overview

The RHX-C02 capping machine is a capping device suitable for small cosmetic processing factories. It mainly consists of the following parts:

- Controller
- Capping head

## 1.2 Controller

- STM32 high-speed CPU
- 5-inch high-definition LCD screen
- 1 control knob

## 1.3 Capping Head

- Low-power stepper motor
- Up to 550rpm rotation speed
- Torque-sensing automatic stop

## 2 Packing Information

## 3 Hardware Installation Guide

### 3.1 Connecting Power and Air Supply

The RHX-C02 uses both electricity and air pressure to work.

For electricity, you can use either:

- AC110V (100V to 130V) or
- AC220V (220V to 240V)

For air pressure, use no more than 1Mpa (about 145 psi).



### 3.2 Installing the Foot Pedal

For models with a foot pedal, connect the foot pedal to the capping head.

## 4 Controller Menu Introduction

### 4.1 Understanding the Control Knob




Below the screen, there's a round control knob. You can use it in these ways:

- Click: Press and release quickly (like a left mouse click)
- Long press: Press for 2 seconds before releasing
- Turn left: Rotate to the left (like moving a mouse up or left)
- Turn right: Rotate to the right (like moving a mouse down or right)


### 4.2 Home Menu

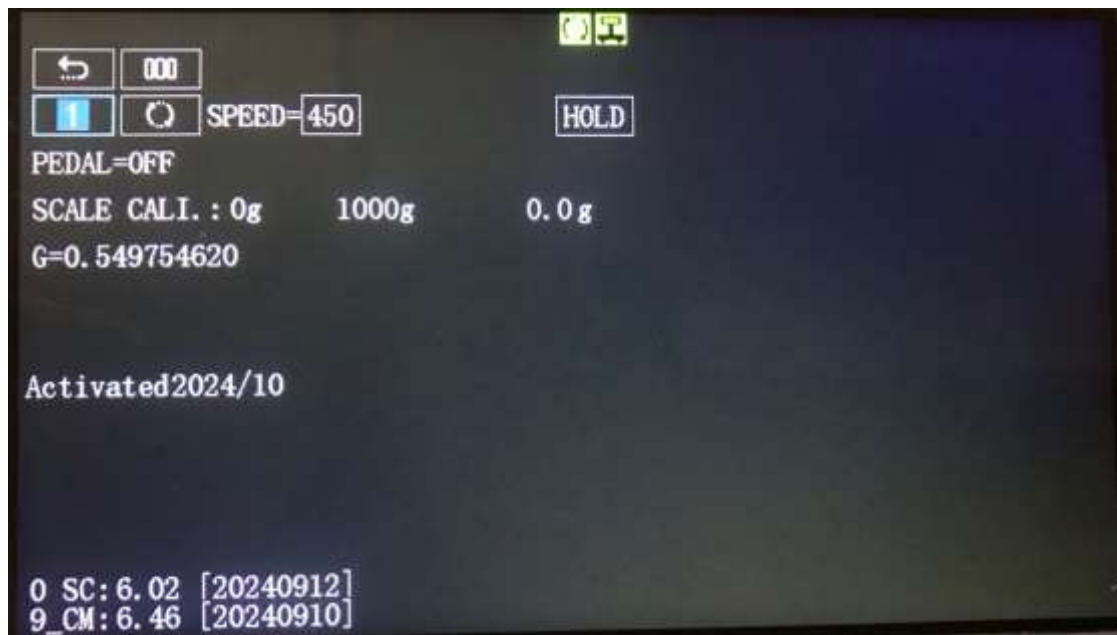


### 4.3 Home menu buttons



Button	What it does
	<b>Top Force Setting</b> Click this button to change its background to yellow, turn the knob left or right to adjust the top force value, click again to confirm and exit.
	<b>Mode Setting</b> Click to switch between "Capping" and "Uncapping" modes
	<b>Torque Setting</b> <b>Click</b> this button to change its background to yellow, turn the knob left or right to adjust the torque value, click again to confirm and exit.  <b>Long press</b> to enter the system settings menu.

### 4.4 System Settings


Move the cursor to , then long press the knob to enter the system settings menu.



### 4.5 System Settings Button Descriptions

Button	What it does
	<b>Return</b> Click to go back to the home menu
	<b>Reset Counter</b> Click: The background turns yellow.



	<p>Turn the knob: Exit without resetting.  Click again: Reset the counter. This sets both the power-on time and total bottle count to zero.</p>
1 2	<p><b>Capping Times</b>  1 : Cap once (for caps without brushes)  2 : Cap twice (for caps with brushes)</p>
	<p>Adjust the <b>initial angle of the capping head</b> (for square caps)  Click: The background turns yellow.  Turn the knob: Change the angle.  Click again: Confirm and exit</p>
SPEED	<p><b>Capping Speed</b> (1-555 rpm).  Click: The background turns yellow.  Turn the knob: Change the speed.  Click again: Confirm and exit.  The maximum speed is 555 rpm.</p>
HOLD/REL.	<p><b>Test cap clamping Action</b>  Use this to check if the machine can hold caps correctly</p>
SCALE CALI.	<p><b>Scale Calibration</b>  To calibrate, press and hold the knob for 2 seconds on either the [0g] or [1000g] option.</p>
PEDAL	<p><b>Foot Pedal Status</b>  Applicable to models with foot pedal.</p>

## 5 Operation Guide

### 5.1 Preparing for Capping

#### 5.1.1 Power On

Plug the machine's power cord into the power socket, then turn on the power switch.

#### 5.1.2 Check the Scale

1. Enter the system settings interface
2. Place a 1000g weight on the bottle clamp and check if the screen displays 1000g. If the weight is inaccurate, refer to "6.2 How to calibrate the scale?"

#### 5.1.3 Check the Capping Head Initial Angle

Check the initial angle of the capping head. If it's not suitable, refer to "6.3 How to adjust the capping head's initial angle?"

#### 5.1.4 Check the Cap Clamp Air Pressure

1. Enter the system settings interface

2. Cap clamping test

Click the [HOLD] button, the machine will clamp the bottle cap

Click the [REL.] button, the machine will release the bottle cap

3. Adjust the clamping force

Adjust the force for clamping the bottle cap, called "cap locking air pressure"

--Goal: The clamp should just be able to grip the bottle cap, neither too loose nor too tight.

--Note: Don't use too much force, or it may deform the bottle cap.

#### 5.1.5 Set Capping Times


Choose 2 when the bottle cap has a brush; otherwise, choose 1.

#### 5.1.6 Set Capping Speed

Recommended: 450rpm.

### 5.2 Start Capping

#### 5.2.1 Set Torque


On the main interface, click , turn left or right to set the torque, then click to confirm and exit.

### 5.2.2 Begin Capping

1. Firmly grip the bottle to be capped with one hand, and place it into the cap locking clamp from bottom to top
2. Two ways to start capping:  
For models with a foot pedal, step on the foot pedal  
For models without a foot pedal, while gripping the bottle, push up slightly against the clamp
3. After the cap is tightened, the motor will automatically stop rotating immediately
4. Check the tightness of the bottle cap, if not suitable, please adjust the torque

## 6 Questions and Answers

### 6.1 How to enter the system settings menu?


When there's no filling task, rotate the knob to move the cursor to , then press and hold this button for more than 2 seconds before releasing to enter the system settings menu.

### 6.2 How to calibrate the scale?

#### 6.2.1 Preparation




- Finish any current capping task (if any)
- Prepare a 1000g weight

#### 6.2.2 Calibration Steps

1. Enter the system settings interface
2. Rotate the knob to move the cursor to the "0g" position, don't place any weight, then press and hold this button for more than 2 seconds before releasing. The background of "0g" will turn yellow and display the current weight in real-time. Click again to complete the 0g calibration.
3. Rotate the knob to move the cursor to the "1000g" position, place the 1000g standard weight on the scale, then press and hold this button for more than 2 seconds before releasing. The background of "1000g" will turn yellow and display the current weight in real-time. Click again to complete the 1000g calibration.
4. Rotate the knob to move the cursor to , then click to return to the main menu

### 6.3 How to adjust the capping head's initial angle?

After system power-on or after each capping, the capping head will return to its initial angle. If this angle is not suitable, please follow these steps to adjust:

1. Enter the system settings interface
2. Click , the background of  will turn yellow
3. Turn the knob left or right, the capping head will rotate accordingly. When the angle is adjusted properly, click  to confirm and exit

### 6.4 How to check software and hardware versions?

Enter the toolbox and look at the bottom few lines of the screen. For example:

SC: 6.30 [20230726]



This means the main control unit software is version 6.30, and the hardware version is 20230726.

Note:

SC - Main control unit

CM - Capping head unit


## 6.5 What do the icons in the upper right corner of the screen mean?

Icon	Represents	Background Color Meaning
	Capping head	Green: Online Yellow: Running Blue: Foot pedal pressed Red: Offline
	Scale	Green: Online Red: Offline Pink: Sensor fault

## 6.6 Will the device go to sleep if not used for a long time?

Yes. If there's no motor action and no menu operation for 30 minutes, the device will enter power-saving sleep mode. An alert dialog will pop up to indicate this.

When the system is in sleep mode, all motors switch to low-power mode.

To exit sleep mode, click  on the screen. The system will immediately wake up.

## 6.7 Will the counter automatically reset to zero?

Yes. The system will reset the "Power-on Time" and "Accumulated Bottles" counters to zero when either of these conditions is met:

- Total Power-on Time  $\geq$  100 hours
- Total Accumulated Bottles > 99999

## 7 Technical Parameters

Rated Voltage	AC 110V or AC 220V (set at factory, not interchangeable)
Rated Power	
Dimensions (with packaging)	Width x Height x Depth mm
Dimensions (net size)	Width x Height x Depth mm
Total Weight (with packaging)	Xx kg
Total Weight (net weight)	Xx kg