MANO

Voltage Setting Manual

2026

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<Purpose of Voltage Setting>

① This product is shipped with the voltage set at a height of 830 mm from the bottom of the boiler to the table.

Because the table height at the installation site is different, voltage setting is required.

② This product enables fine control of the water volume for various brewing styles**,** from dot drip to pour-over**.**

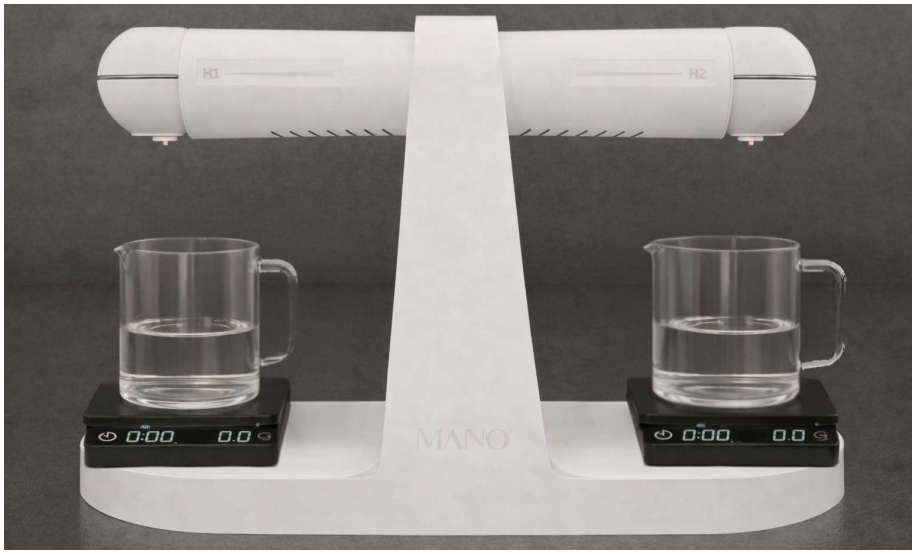
Therefore, verifying and adjusting the water volume in the installation site ensures more stable brewing results.

<Things to Checks Before Setting>

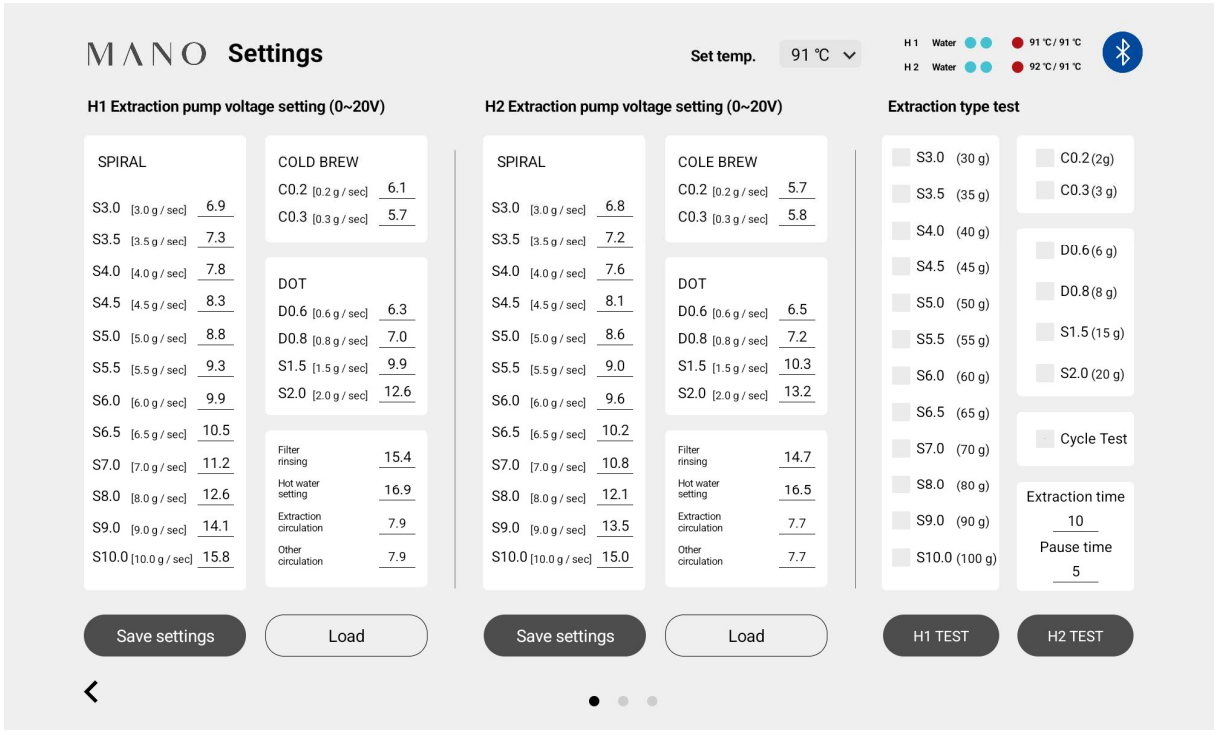
Before starting the setting process, check the following items.

① Run the app on the provided tablet PC and connect the machine via Bluetooth.

② Before running any operation, place a **scale and server** on each rotating plate.



③ All voltage settings must be done in the **Admin Page**.
Admin Page password**: 123456**



④ All voltage settings must be performed when **the** boiler temperature is **91°C**.
→ If you select TEST-1 or TEST-2 recipe from the recipe favorites, the temperature will be set to 91°C.

⑤ All setting procedures must be performed separately for **H1 and H2** in the same way.

<How to Adjust Voltage>

The water volume is adjusted by changing the voltage.

- Increasing the voltage increases the water volume.
- Decreasing the voltage reduces the water volume.
- When adjusting the voltage, enter the value in 0.1V units.

ⓘ This rule is applied to all setting steps.

1. Basic Settings

1.1. Filter Rinse Water Volume Setting

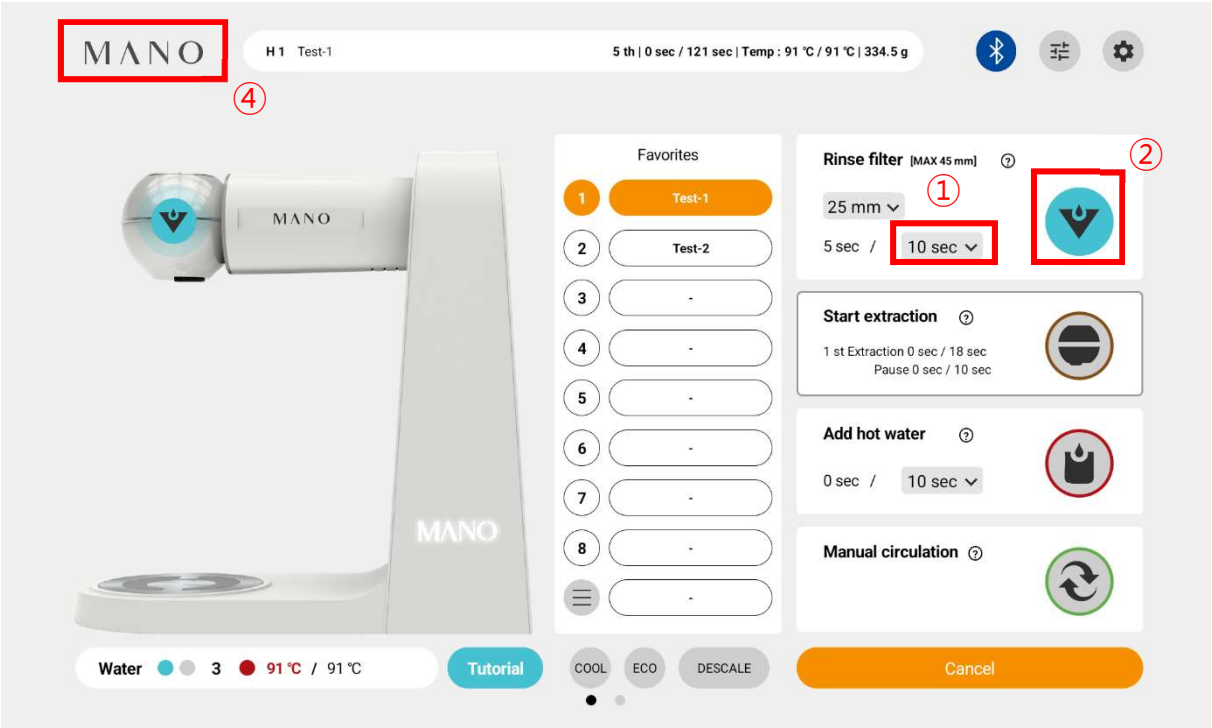
Set the water volume used during one filter rinse operation to **100-105 g**.

① Set the filter rinse time to 10 seconds.

② Run the filter rinse and measure the extracted water volume.

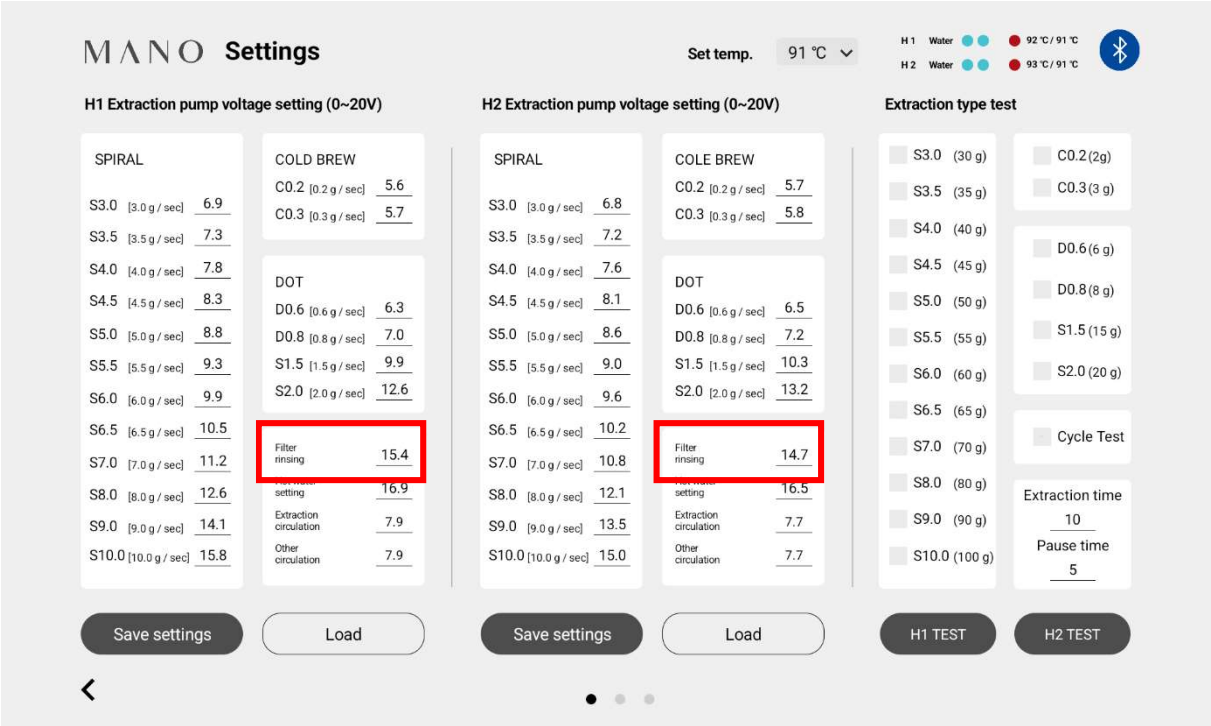
③ If the water volume is outside the range of **100–105 g**, adjust the voltage.

④ Tap the MANO logo at the top left of the main screen 3 times quickly to enter the Admin Page.



⑤ Adjust the Filter Rinse voltage in the Admin Page.

[i] Increasing the voltage increases the water volume, and decreasing the voltage reduces the water volume.



⑥ Return to the main screen and run the filter rinse again to measure the water volume.

⑦ Repeat the following until the water volume is within 100-105 g.

Voltage adjustment → Run filter rinse → Measure water volume

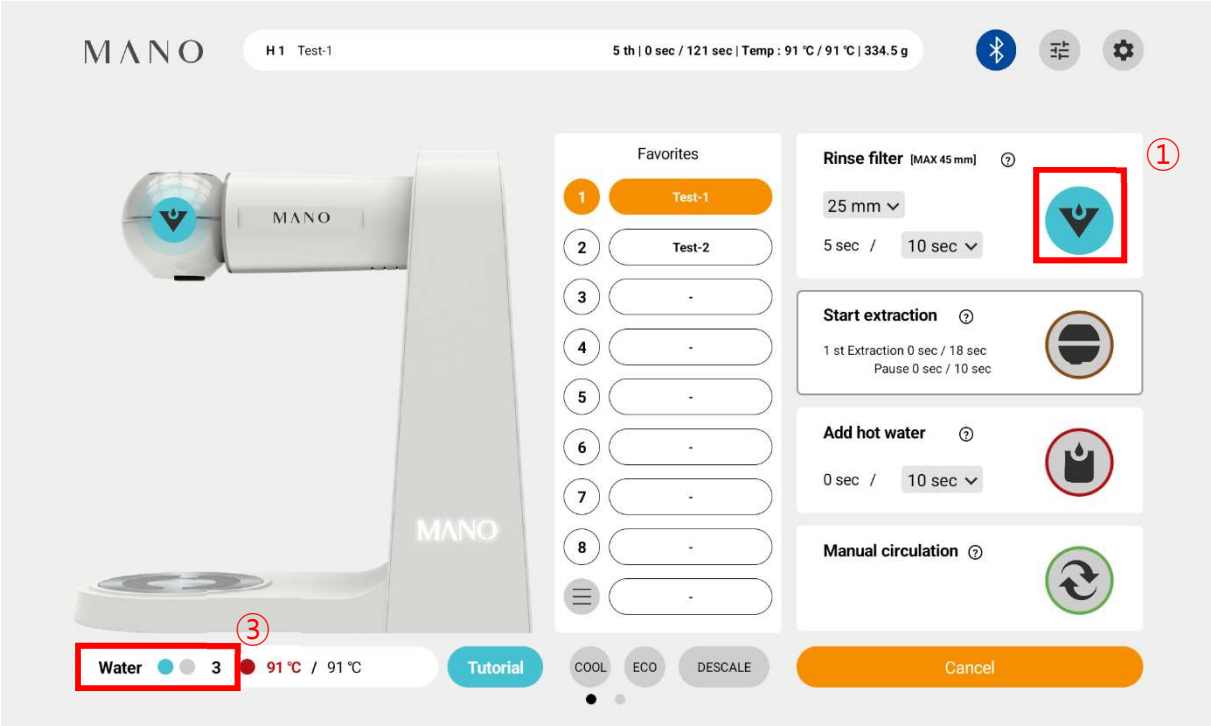
1.2. Water Fill Time Setting

Set the time for the water level to refill one level after a filter rinse to **15-20 seconds**.

① Run the filter rinse.

② Check that the water level decreases by one level during the filter rinse operation.

③ When the water level drops by one level, check the displayed number (seconds).



④ Adjust the speed controller valve located on the left side of the boiler.

⑤ Turn the valve to adjust the fill time.

- Turn clockwise (close) → increase fill time.
- Turn anti-clockwise (open) → decrease fill time.

⑥ Run the filter rinse again and check the fill time for one water level.

⑦ Repeat the following until the fill time is within **15-20 seconds**.

Valve adjustment → Run filter rinse → Check time.

[i] If the incoming water pressure is too strong, it may be difficult to adjust the fill time.
In this case, **close the main water valve about 50% and then perform the fill time setting again.**

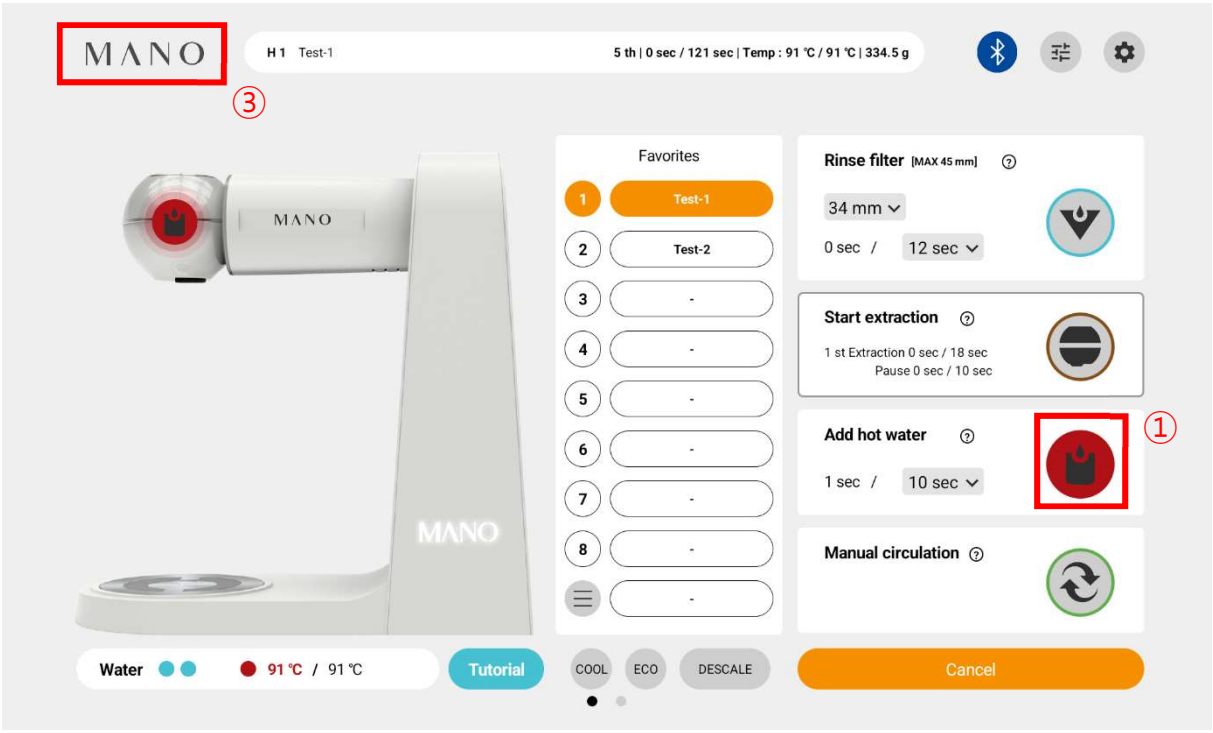
1.3. **Hot Water Volume Setting**

Set the water volume extracted during one 10 seconds Hot Water Add operation to **100–105 g**.

① Run the Hot Water Add function once and measure the water volume using the scale.

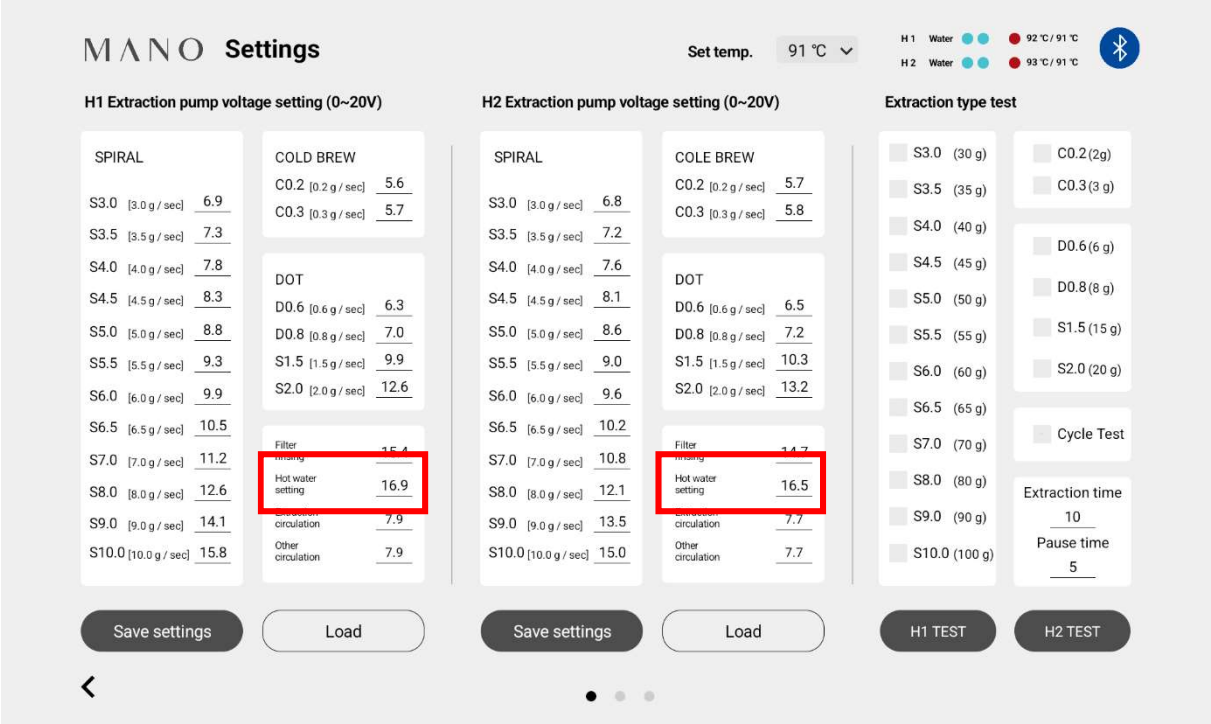
② If the water volume is outside **100–105 g**, adjust the voltage.

③ Tap the MANO loge at the top left of the main screen 3 times quickly to enter the Admin Page.



④ Adjust the Hot Water voltage in the Admin Page.

[i] Increasing the voltage increases the water volume, and decreasing the voltage reduces the water volume.



⑤ Return to the main screen and run Hot Water Add again to measure the water volume.

⑥ Repeat the following until the water volume is within **100–105 g**.

Voltage adjustment → Run Hot Water Add → Measure water volume.

※ After completing all settings above, proceed to the extraction water volume setting in the next step.

2. Extraction Water Volume (Voltage) Setting

Adjust the voltage according to the Water Volume Measurement Range for each extraction step.

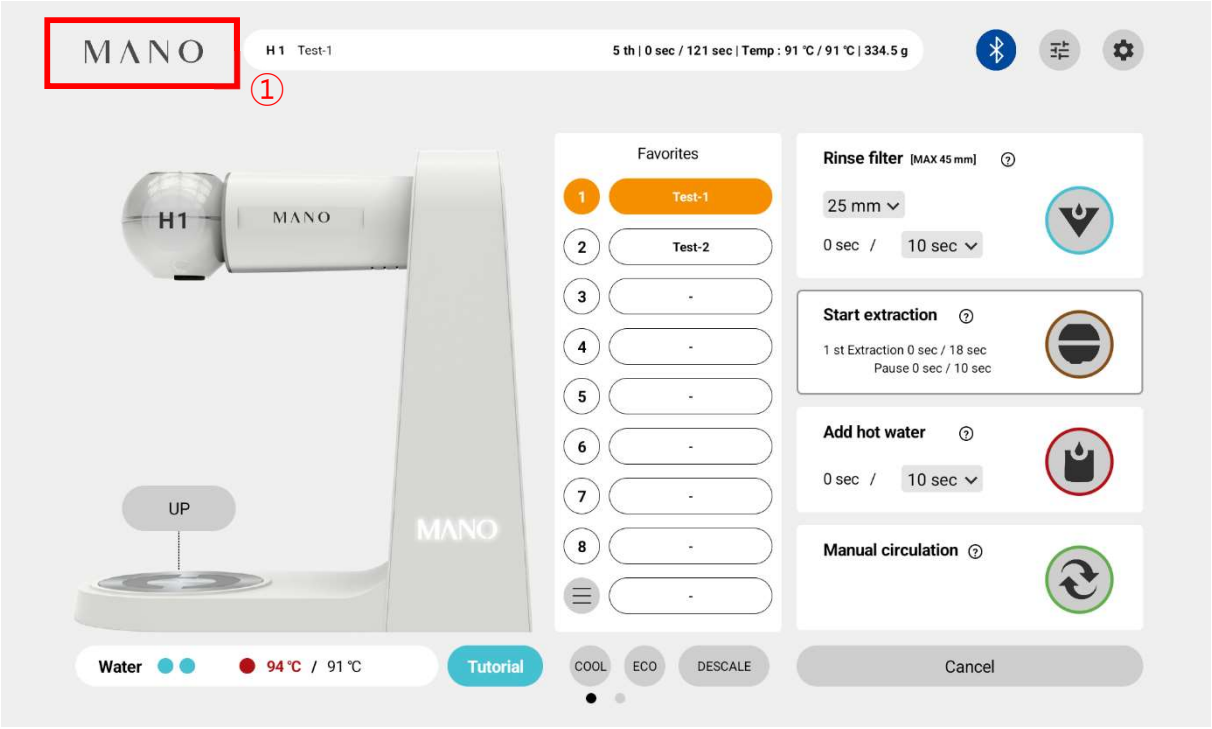
If the measured water volume is outside the Water Volume Measurement Range, adjust the voltage and run the test again until it is within the Water Volume Measurement Range.

ⓘ Increasing voltage increases the water volume, and decreasing voltage reduces the water volume.

2.1. How to Test

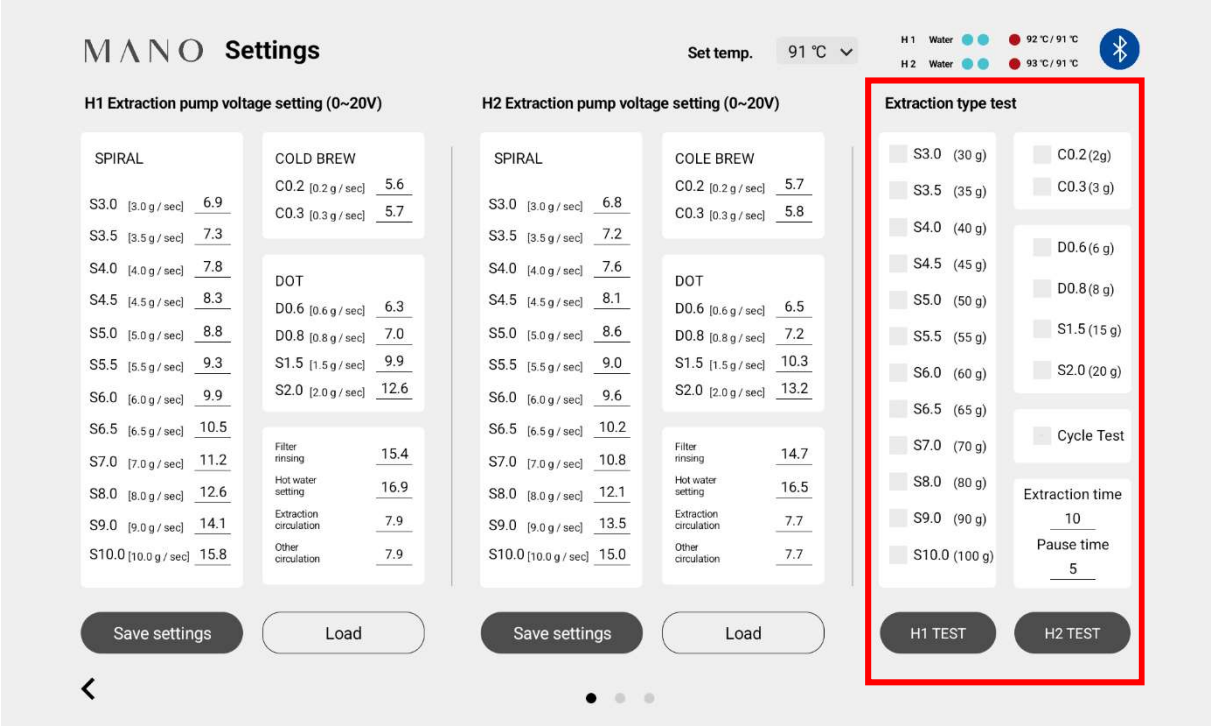
Extraction water volume setting is performed in “Extraction Type Test” in the Admin Page.

① Tap the MANO logo at the top left of the main screen 3 times quickly to enter the Admin Page.



② In the Admin Page → Extraction Type Test, select the extraction type you want to test.

③ Press **H1 Test** and **H2 Test** to start the test.



ⓘ Test cycle: 10 seconds extraction → 5 seconds pause, repeated continuously.

※ Perform the same test for H1 and H2.

2.2. How to Water Volume Measurement

① Check extracted water in server on scale.

② After 10 seconds extraction, zero the scale during 5 seconds pause.

③ Measure the water volume from the next extraction.

④ If the measured water volume is outside Water Volume Measurement Range, adjust the voltage.

⑤ Repeat the following until the water volume is within the Water Volume Measurement Range.

Voltage adjustment → Run test → Measure water volume

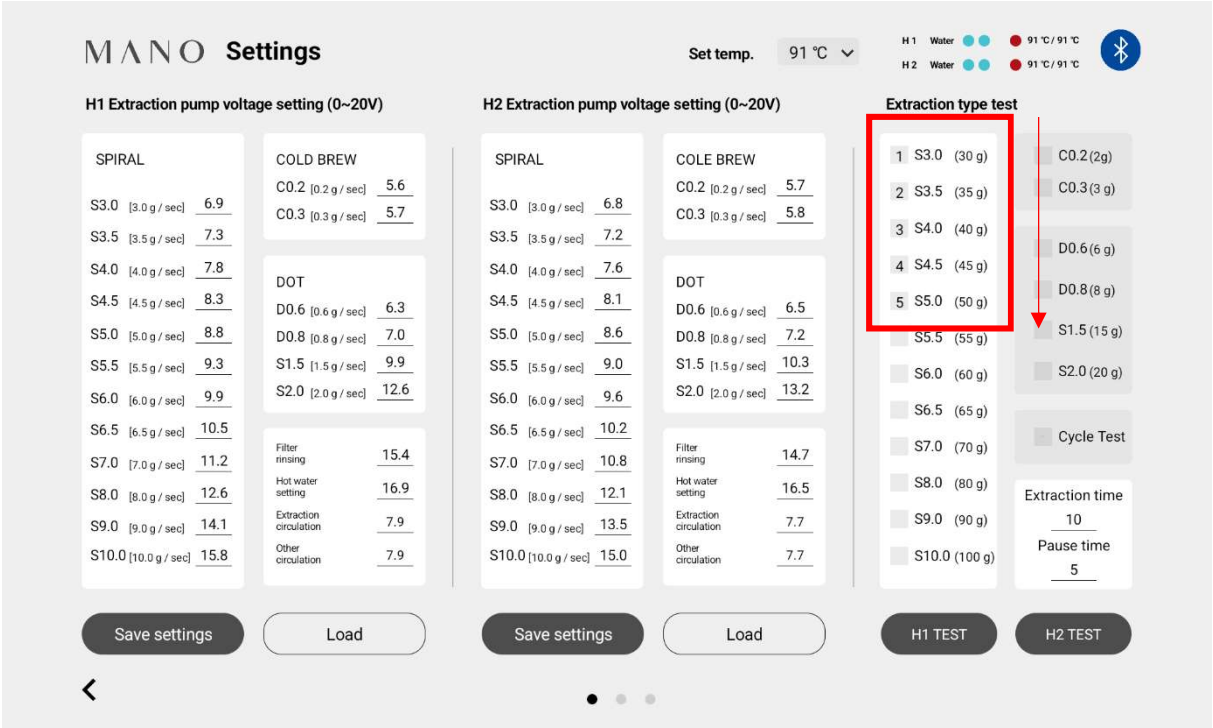
2.3. 1st Setting

The first setting adjusts the water volume in the SPIRAL (S) extraction range (S3.0–S10.0).

Select extraction types **in ascending order** and run tests.

2.3.1. S3.0-S5.0 Voltage Setting

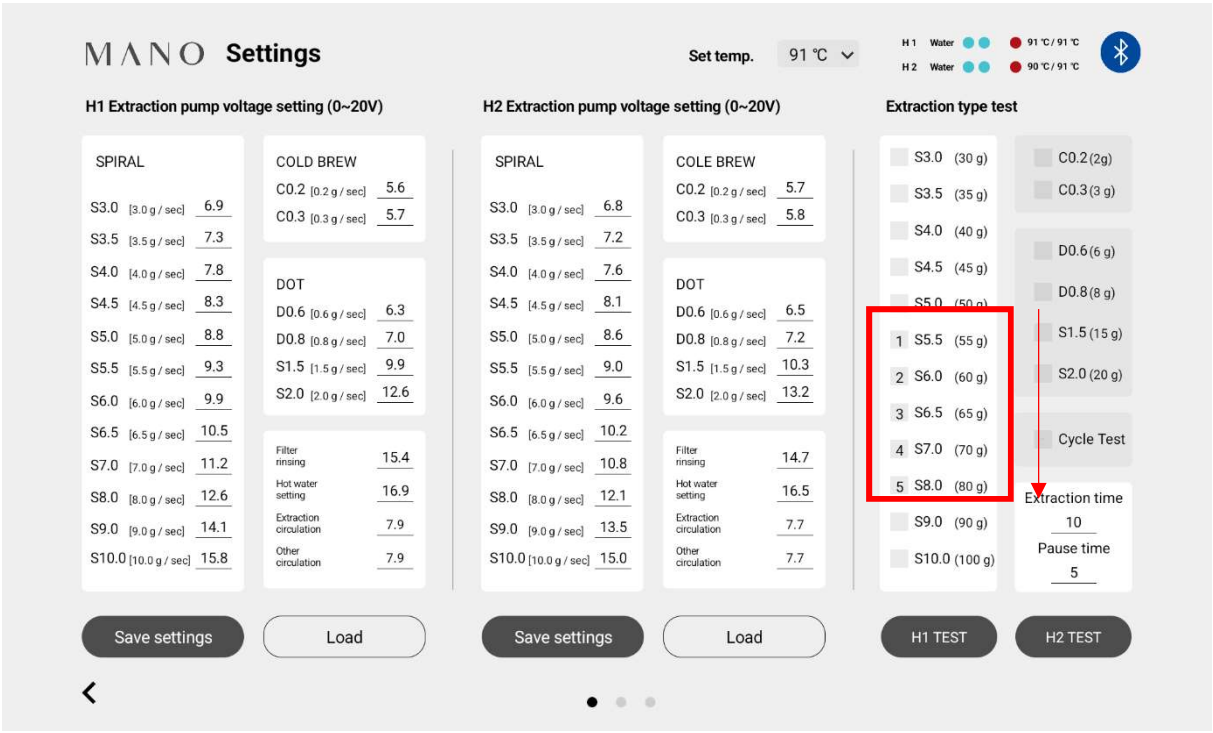
Select **S3.0–S5.0 sequentially** and adjust the voltage according to the Water Volume Measurement Range below.



Type	Water Volume Measurement Range(g)		
	Min.	Best	Max.
S3.0	29.2	29.4 ~ 30.0	30.3
S3.5	34.2	34.4 ~ 35.0	35.3
S4.0	39.2	39.4 ~ 40.0	40.3
S4.5	44.2	44.4 ~ 45.0	45.3
S5.0	49.2	49.4 ~ 50.0	50.3

2.3.2. S5.5-S8.0 Voltage Setting

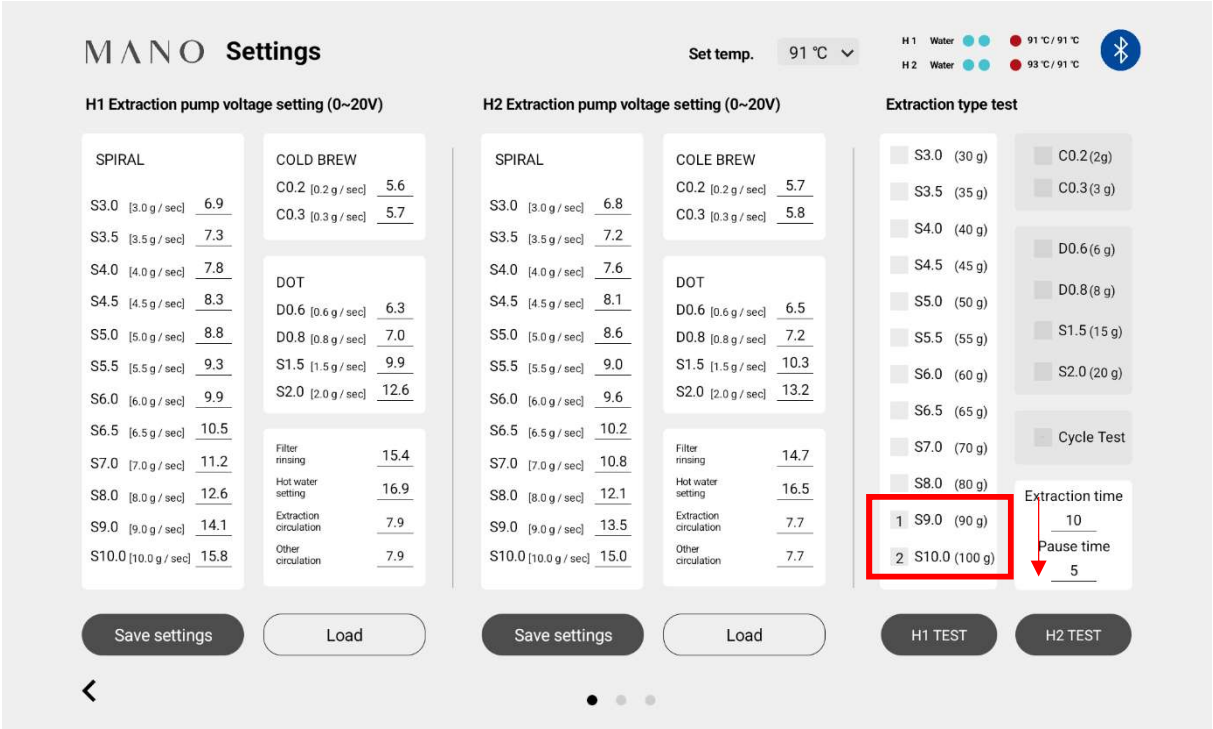
Deselect the previous extraction type, then select S5.5–S8.0 **sequentially** and adjust the voltage according to the Water Volume Measurement Range below.



Type	Water Volume Measurement Range(g)		
	Min.	Best	Max.
S5.5	54.0	54.1 ~ 54.9	55.0
S6.0	59.0	59.1 ~ 59.9	60.0
S6.5	64.0	64.1 ~ 64.9	65.0
S7.0	69.0	69.1 ~ 69.9	70.0
S8.0	79.0	79.1 ~ 79.9	80.0

2.3.3. S9.0-S10.0 Voltage Setting

Deselect the previous extraction type, then select **S9.0–S10.0 sequentially** and adjust the voltage according to the Water Volume Measurement Range below.



Type	Water Volume Measurement Range(g)		
	Min.	Best	Max.
S9.0	89.0	89.1 ~ 89.9	90.0
S10.0	99.0	99.1 ~ 99.9	100.0

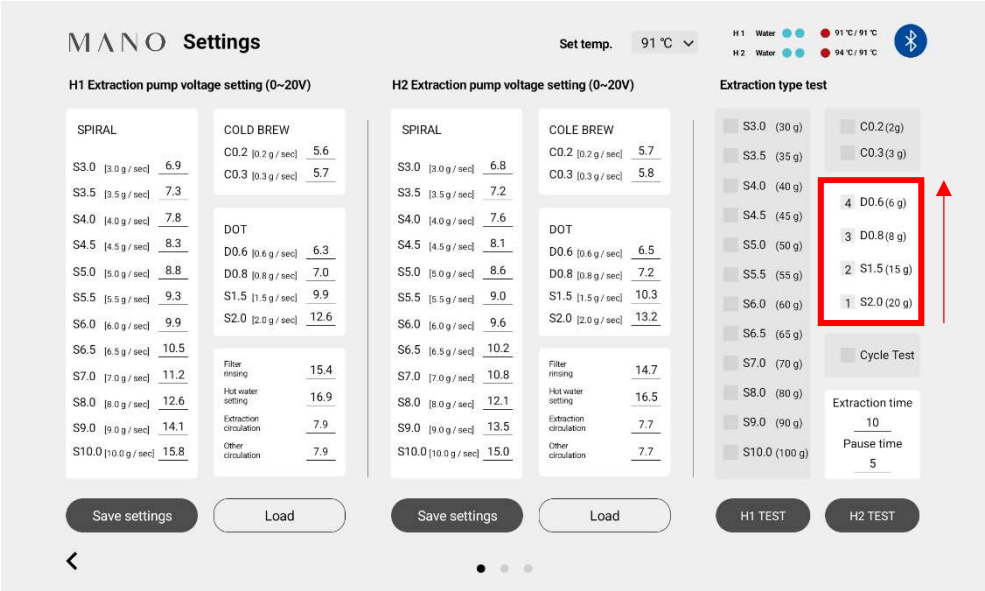
2.4. 2nd Setting

The seconds setting adjusts the low water volume range of SPIRAL (S) and DOT (D).

Select extraction types in **descending order** and run tests.

2.4.1. S2.0-D0.6 Voltage Setting

Deselect the previous extraction type, then select S2.0–D0.6 **in reverse order** and adjust the voltage according to the Water Volume Measurement Range below.



Type	Water Volume Measurement Range(g)		
	Min.	Best	Max.
S2.0	19.7	19.8 ~ 19.9	20.0
S1.5	14.7	14.8 ~ 14.9	15.0
D0.8	7.6	7.7 ~ 7.9	8.0
D0.6	5.6	5.7 ~ 5.9	6.0

3. Final Check

After all settings are completed, perform a final check using TEST recipes.

The final check must run both H1 and H2.

※ Place scale and server on rotating plate before extraction.

※ Do NOT reset the scale to zero.

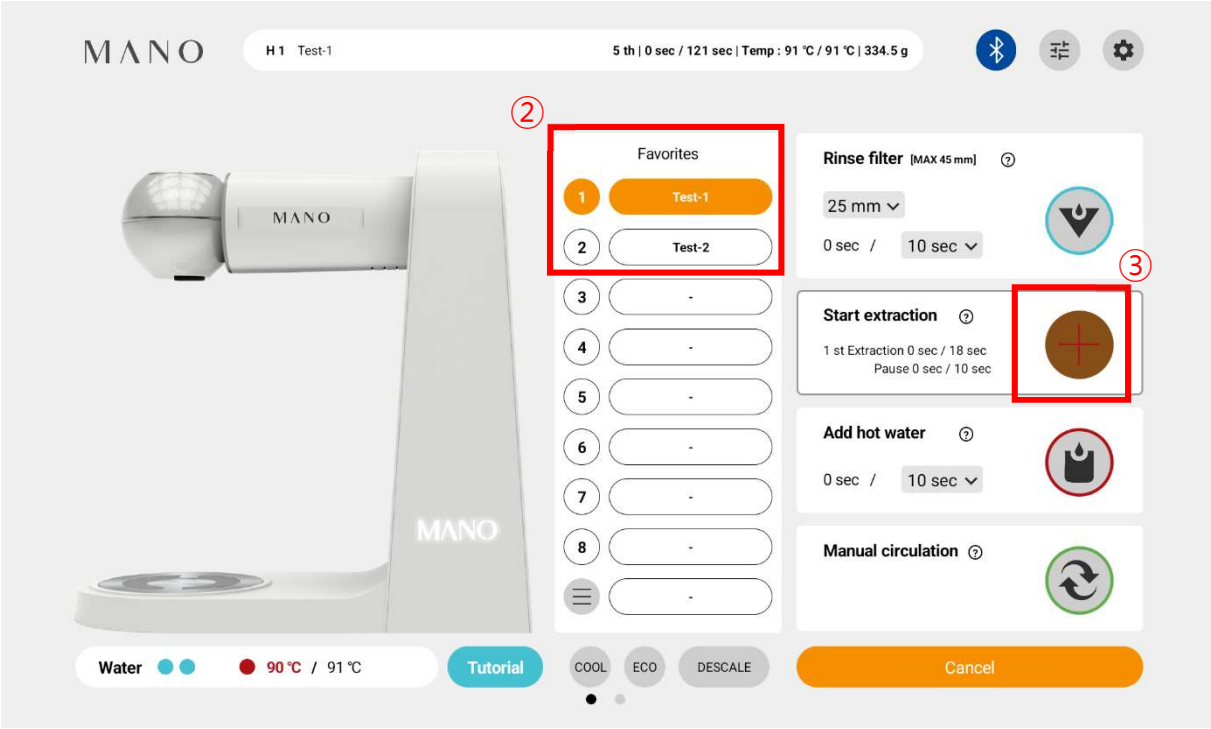
3.1. TEST-1 Recipe Extraction

① Move to the Main Screen.

② Select TEST-1 recipe for H1 and H2 from the favorites.

③ Press extraction buttons for both H1 and H2 to start extraction.

④ TEST-1 recipe consists of 5 extraction steps.



ⓘ Press the extraction button once to activate the **laser guide**, then press it again to start extraction.

※ During the final check, do NOT reset the scale to zero. Check the cumulative water volume.

※ The cumulative water volume for each step must be **within +1–2 g tolerance**, and the final cumulative volume must be **336.0–340.0 g.**

Step	Extraction Type	Cumulative Water (g)
1st	S3.0	54.0
2nd	S3.5	117.0
3rd	S4.0	177.0
4th	S5.0	252.0
5th	S5.5	334.5

3.2. **TEST-2 Recipe Extraction**

① After completing TEST-1 extraction, select **TEST-2 recipe** in the same way.

② Press extraction buttons for both H1 and H2 to start extraction.

③ Check the **cumulative water volume at each step**.

※ Each step must be **within +1–2 g tolerance**, and the final cumulative volume must be **115.5–118.0 g**.

Step	Extraction Type	Cumulative Water (g)
1st	S2.0	27.0
2nd	S1.5	63.0
3rd	S2.0	85.5
4th	S1.5	115.5

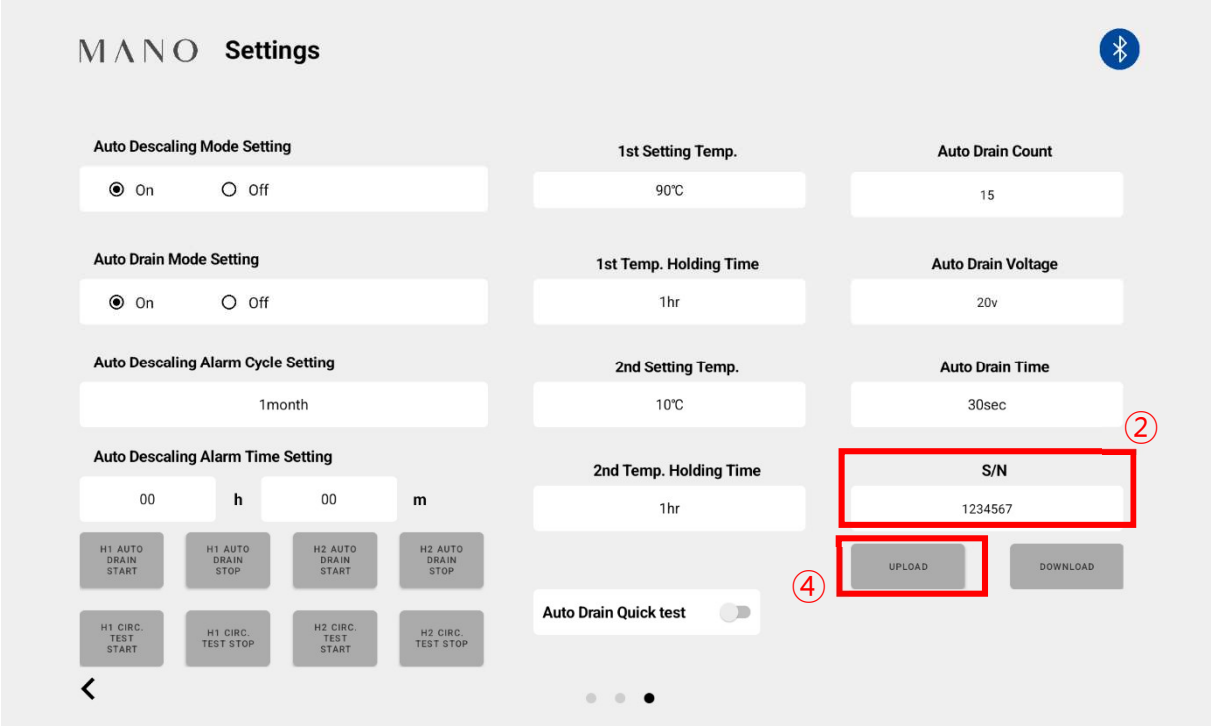
4. Save Setting Values

After the final check is completed, save the setting values to the server.

4.1. Upload Setting Values

① Tap the MANO logo at the top left of the main screen 3 times to enter the Admin Page and move to the **third page.**

② Check the **serial number** displayed on the screen.



③ Check that Wi-Fi is connected.

※ If Wi-Fi is not connected, the settings cannot be uploaded.

④ Press the Upload button to save the current settings to the server.

⑤ When the upload is completed, the extraction water volume setting process is finished.