



@Pette Mini

To ensure proper operation and effective maintenance of the product, please use it as instructed in this manual to receive full service and support.

User Manual

Device Overview

@Pette Mini User Guide



Shuye@Pette Mini is a next-generation smart electronic pipette designed to transforming manual pipetting into an automated liquid handling experience. It is compact, lightweight, precise, and intelligent. It enhances liquid handling with greater ease, speed, and accuracy. With Shuye@Pette Mini, you can intelligently optimize your experimental workflow, improving both efficiency and result accuracy.

AI Voice Assistant

The built-in AI voice assistant allows for real-time voice-activated parameter adjustments at any time.

Automatic Self-Calibration

Self-calibrated every time the system is power on.

Dispensing

With one aspiration, pipette can dispense multiple equal-volume liquid, which largely increase pipetting efficiency.

Reverse Pipetting

The reverse pipetting mode is suitable for viscous liquids, high-protein liquids, and volatile substances. In this mode, a volume greater than the set amount is aspirated. The first dispensing step delivers the intended volume, while the second step releases the excess liquid as waste.

Getting Started

1 Power On

Press and hold the trigger button for 3 seconds; a beep followed by a constant screen light indicates that the device is powered on.



2 Select Language

This device supports both Chinese and English.



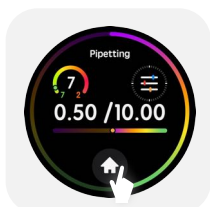
3 Activate Device

After the power-on animation, a QR code will appear. Scan the code with App (Android/iOS) or WeChat to activate the device and calibrate the time.

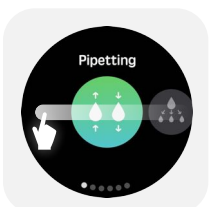


4 Mode Menu

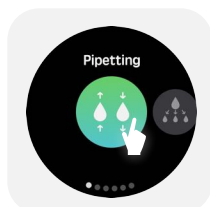
The mode menu includes pipetting, equal-volume dispensing, reverse pipetting, wireless connection, and settings. Swipe the screen to switch modes, and tap the icon in the centre of the screen to enter a mode.



Tap HOME



Swipe the edge of the screen



Tap to enter this mode

5

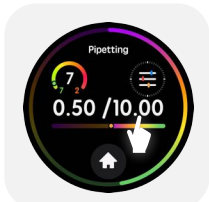
Parameter Adjustment

1. Tap anywhere on the main screen to enter the parameter menu.

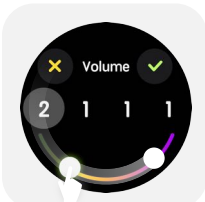
Taking volume settings as an example, slide the edge of the screen to adjust the value.

Tips

Tap any number in the parameter adjustment to adjust it individually.



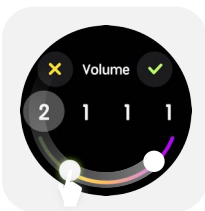
Pipetting
Mode



Slide the edge
of the screen.

2. Long press the '+' or '-' button to change volume.

Long press to bring up the quick volume adjustment interface and quickly execute number scrolling.

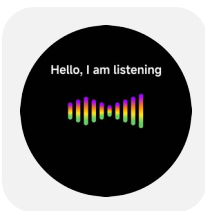


Slide the edge
of the screen.

3. AI Voice Command

Long press the [AI Button] to start speaking to the pipette. Release button after finish speaking.

You can try saying: "Set speed to 8" "Range 299.1 (two hundred and ninety-nine point one)"

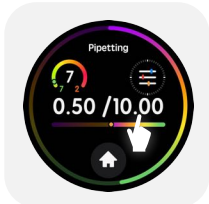


Smart Lab
Assistant

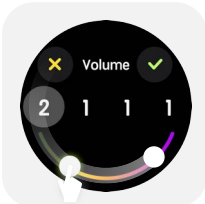
6

Quick Operations

Long press anywhere on the main screen to enter quick volume adjustment.



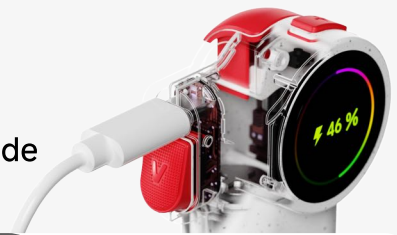
Pipetting
Mode



Slide the edge
of the screen.

Charging

@Pette Mini Device Charging Guide

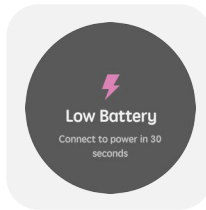


How to Charge the Device

The @Pette Mini can be charged by plugging in the charger in any state, using a power source, a power bank, or connecting via a Type-C interface to a computer. During charging, the display will pop up a charging page showing the battery percentage. Charging for 15 minutes can support the pipette for several hours of dispensing; the entire charging cycle takes about 60 minutes and can provide up to 3300 aspiration-dispensing cycles (the number decreases for high-capacity models).



Power Ring



Low Battery Prompt

Dispensing While Charging

The @Pette Mini can perform operations during charging; while in charging mode, lightly touch the charging interface to return to the previous page before charging. If you need to handle liquids while charging, we recommend using the original charging device to power the pipette.

Memory System, Power And Management Settings

All user input changes to the @Pette Mini settings and service mode data are stored in flash memory. Therefore, these contents will be preserved in case of battery failure or removal.

Contact Us

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WeChat Official Account



Xiaohongshu

Contact Us

Product Name: @Pette Mini

Email: service@vecverse.com

Contact Number: 4008283280

14th Floor, Green Square Innovation Building, No. 1,
Xiyuan 7th Road, Xihu District, Hangzhou, Zhejiang
Province

Basic Information on Product Warranty

Special Reminder

The above terms outline all responsibilities of Shuye regarding the product and replace all other express and implied guarantees and responsibilities. When the product does not work properly, Shuye's responsibility to the user is limited to repairing and replacing the product according to the above terms. Beyond this, there are no other guarantees. If applicable national laws provide otherwise, Shuye will comply with the law.

Regardless of the reason for the user's inability to use Shuye products normally, Shuye is only liable for the responsibilities required by applicable national laws. Under no circumstances shall Shuye be liable for losses caused by the user's product loss, damage to intangible assets such as data records, materials, and/or programs; or losses caused by third-party compensation claims against the user.

Product After-Sales Service Commitment Schedule

Product Type	Warranty Period
Pipette	24 months

Random accessories such as power supplies and power cords are not covered by the warranty.

About Warranty

Basic Information on Product Warranty

Thank you for purchasing a Shuye product. If you encounter any performance faults not caused by human damage during the use of the product, you are entitled to Shuye's worry-free after-sales service commitment. To protect your rights, please keep the purchase receipt and invoice safe after buying Shuye products. The warranty period for the product will start from the date you activate the product (hereinafter referred to as "activation"), and the warranty period is 24 months.

If the product malfunctions, please contact Shuye after-sales support directly.

Worry-Free After-Sales Service Content

1. Within 15 days from the date of activation, if the product has a performance fault without human damage, it can be replaced with a product of the same model and specifications.
2. During the warranty period, if the product cannot be used normally after two replacements, and after confirmation by Shuye, you may choose to repair or replace it with a product of the same model and specifications, provided you have a valid replacement record from the seller in your warranty certificate.

Situations Not Covered By Warranty

- The product is beyond the warranty period;
- The warranty certificate does not match the product model;
- Products without Shuye branding;
- The accessory was not purchased from Shuye or an authorized dealer;
- Product cleaning or normal maintenance;
- Unauthorized repairs, modifications, misuse, collisions, compression, or liquid ingress;
- Damage caused by accidents, abuse (including exceeding workload), or misuse;
- Damage caused by improper storage (such as rodent damage, liquid ingress, etc.);
- Damage caused by using self-compiled or non-publicly released software that prevents the product from functioning normally;
- Damage caused by force majeure such as floods, fires, or lightning;
- Defects caused by normal wear and tear or aging of the product;
- Shuye products not sold in mainland China.

Usage Recommendations

@Pette Mini Device Maintenance

Using the Pipette

The Use Of Pipettes Should Follow These Guidelines:

1. Set the pipette volume within the specified range and use compatible tips. To ensure accuracy, use high-quality, uncontaminated tips. Keep the immersion depth of the tip consistent or similar each time you aspirate. Maintain the pipette vertically or at an angle of no more than 20 degrees from vertical. Pre-wetting (1-3 times) the tip can improve pipetting accuracy. Never invert or lay the pipette flat when there is liquid in the tip. Always keep the instrument vertical and store it as vertically as possible. Liquid must not enter the areas that contact the piston or seal, as well as the electronic components including the display, trigger button, and eject button. Do not use corrosive solvents to clean the smart pipette. When cleaning, it is best to use a damp cloth (with diluted mild detergent) that is not cotton. Ensure that the display, trigger button, and eject button are dry.

Tips

The smart pipette is an advanced laboratory product that requires careful maintenance; please operate according to the guidelines.

Tip Immersion Depth

The immersion depth of the tip is critical. If it exceeds the recommended depth, the measured volume may be inaccurate and exceed standards. The angle of the tip is also important. The recommended insertion depths for each model of sample are as follows:

Volume Range	Volume Range	Immersion Depth
10 µl	0.5-10 µl	1-2 mm
100 µl	5-100 µl	1-2 mm
300 µl	30-300 µl	1-2 mm
1000 µl	50-1000 µl	1-2 mm

Grip

@Pette Mini does not restrict your grip position; you can choose any grip style you prefer for holding the pipette.






Possible Causes of Malfunction and Solutions

Issue	Possible Cause	Suggested Solution
Tip ejector does not reset after ejection	System failure or spring malfunction	Contact customer service for inspection; the tip ejector reset spring may need to be replaced if necessary.
Screen touch failure	System failure. Dropping or impact may cause the connector to come loose or the screen module to be damaged.	Please contact customer service for inspection; the screen module may need to be replaced if necessary.
Button failure	System failure. Forcefully pressing the aspirate/dispense button may cause the button to malfunction.	Contact customer service for inspection; the button or securing components may need to be replaced if necessary.

@Pette Mini Technical Parameters

Vecverse @Pette Mini Single-Channel, Variable Volume

National Standard Calibration Regulations
/JJG 646-2006

Picture	Order NO. / Color Code	Volume Range	Volume	Volume Error	Repeatability Error	Volume Error	Repeatability Error
	0120-0010	0.5µL-10µL	1 µL	±1.50%	≤2.00%	±12.0%	≤6.0%
			5 µL	±0.30%	≤0.6%	±8.0%	≤4.0%
			10 µL	±0.30%	≤0.2%	±8.0%	≤4.0%
	0120-0100	5µL-100µL	10 µL	±0.50%	≤0.50%	±8.0%	≤4.0%
			50 µL	±0.30%	≤0.40%	±3.0%	≤1.5%
			100 µL	±0.20%	≤0.20%	±2.0%	≤1.0%
	0120-0200	20µL-200µL	10 µL	±2.00%	≤0.80%	±4.0%	≤2.0%
			50 µL	±1.00%	≤0.50%	±2.0%	≤1.0%
			100 µL	±0.50%	≤0.30%	±1.5%	≤1.0%
	0120-0300	30µL-300µL	50 µL	±0.60%	≤0.40%	±3.0%	≤1.5%
			150 µL	±0.40%	≤0.15%	±2.0%	≤1.0%
			300 µL	±0.40%	≤0.15%	±1.5%	≤1.0%
	0120-1000	50µL-1000µL	100 µL	±0.50%	≤0.50%	±2.0%	≤1.0%
			500 µL	±0.15%	≤0.20%	±1.0%	≤0.5%
			1000 µL	±0.15%	≤0.20%	±1.0%	≤0.5%

"Reverse Pipetting" Mode

@Pette Mini Quick Start

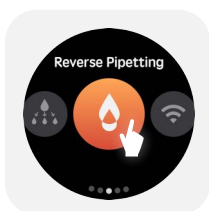


How to Use Reverse Pipetting Mode

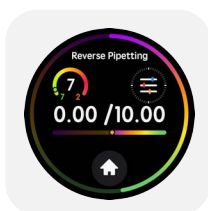
Reverse dispensing mode is suitable for viscous liquids, liquids with high protein content, volatile liquids, etc. This mode works by aspirating more than the set volume; the first dispensing is the set volume, and the second dispensing is waste liquid.

1 Enter Reverse Pipetting Mode

Select "Reverse Pipetting" mode under the home icon.



Menu

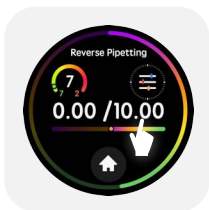


Reverse Pipetting Mode

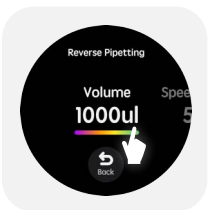
2 Parameter Adjustment

Tap anywhere on the main screen to enter the parameter menu.

By sliding or tapping the screen, you can adjust the aspiration and dispensing volume, aspiration and dispensing speed, mixing volume, mixing speed, and repeat dispensing.



Tap Anywhere Parameter Menu



3 Start Dispensing

After immersing the tip in the liquid, lightly press the trigger to start aspiration.

Press the trigger in sequence to perform [dispensing - emptying the tip].



Tips

To ensure each dispensing is more accurate, the intelligent pipette applies the reverse aspiration principle, where the device will aspirate an additional 10% of the set dispensing volume based on the already set dispensing volume. Therefore, after expelling a fixed volume, further expulsion of tail liquid is needed to truly empty it.

4 Blow Liquid

After completing the aspiration-dispensing cycle, double-click the trigger to blow liquid.



5 Mixing

When there is no liquid in the tip, press and hold the trigger button to mix.



6 Tip Ejection

Press down the tip ejection button to remove the tip.



"Dispensing" Mode

@Pette Mini Quick Start



How to Use Dispensing Mode

Dispensing mode allow user to perform multiple equal-volume liquid dispensing with a single aspiration.

1 Enter Dispensing Mode

Select "Dispensing" mode under the home icon.



Menu

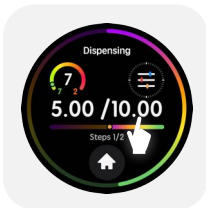


Dispensing Mode

2 Parameter Adjustment

Tap anywhere on the main screen to enter the parameter menu.

By sliding or tapping the screen, you can set the total volume or dispensing volume, number of dispenses, aspiration and dispensing speed, mixing volume, mixing speed, multiplication/division logic, and the on/off switch of the pre-dispensing and tail-dispensing liquid.



Dispensing Mode

Tips

In multiplication logic, you only need to set the dispensing volume and the number of dispenses; in division logic, you only need to set the total volume and the number of dispenses.

3 Start Dispensing

After immersing the tip in the liquid, lightly press the trigger to start aspiration;

Follow the on-screen prompts, pressing the trigger in sequence for pre-dispensing - dispensing - emptying the tail liquid.



Tips

You can disable pre-dispensing and tail liquid in the parameter settings. This operation may affect accuracy, so choose according to your actual needs.

4 Quickly Empty Liquid

Under dispensing mode, user can double click trigger button to empty all liquid.



5 Tip Ejection

Press down the tip ejection button to remove the tip.



6 Blow Liquid

After completing the aspiration-dispensing cycle, you can double-click the trigger to blow liquid.



7 Mixing

When there is no liquid in the tip, press and hold the trigger button to mix.



"Pipetting" Mode

@Pette Mini Quick Start



How to Use "Pipetting" Mode

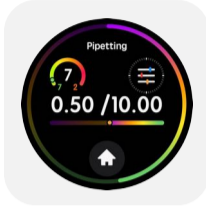
"Pipetting" mode can aspirate and dispense liquid at a variable volume.

1 Enter Pipetting Mode

Select "Pipetting" mode under the home icon.



Menu



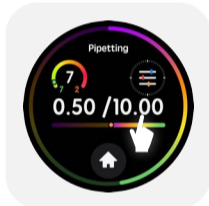
Pipetting Mode

2 Parameter Adjustment

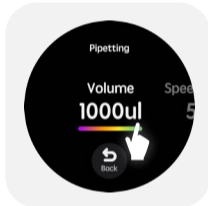
Tap anywhere on the main screen to enter the parameter menu.

By sliding or tapping the screen, you can adjust in the parameter menu:

aspiration and dispensing volume, aspiration and dispensing speed, mixing volume, mixing speed, auto blow-out (on/off).



Pipetting Mode



Parameter Menu

Once settings are complete, tap the "✓" on the screen or "Back" to confirm or return to the main page, or gently press the trigger button to confirm.

3 Start Pipetting

Gently press the trigger to start the aspiration/dispensing operation.



4 Mixing

When there is no liquid in the tip, press and hold the trigger button to mix.



5 Tip Ejection

Press down the tip ejection button to remove the tip.



General Operations

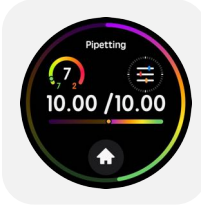
1 Install The Tip

Select a tip that matches the pipette's range, gently press, and insert the matching tip onto the nozzle.

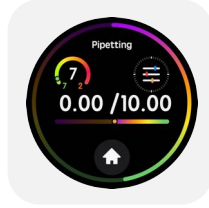


2 Aspirate/Dispense Liquid

Press the trigger gently to perform the aspiration/dispensing operation.



Aspirated



Dispensed

3 Quick Blow-Out Under Dispensing Mode

Under dispensing mode, user can double click trigger button to blow-out all remaining liquid in tip.



4 Tip-Ejection Button

While emptying the liquid, gently press the eject button to remove the tip.



5 Liquid Blow-Out

After completing the aspiration and dispensing cycle, double-click the trigger to blow out liquid.



6 Mixing

Long press trigger button to perform liquid mixing.

