2.6. Sound setting "beep"
Press [△] , [▽] to select, press"[SET]"to lock and then enter the next parameter "backlight" setting.
2.7. Backlight setting "B-L"
Press [△] , [▽] to select, press"[SET]"to lock, it will return to the standby interface automatically.

3. Evacuation and Pressure Maintaining Interface I
(Both evac target and Delayed target are not set to off)

3.1. After the vacuum pumping starts, the actual measured vacuum reading keeps getting smaller. When it reaches the “evac target” setting value, the value such as "XXX" keeps flashing. Press (any key) to turn off flashing and stop the prompt.
3.2. When the actual measured vacuum reading is less than the "evac target" value and rises to this reading, the pressure maintaining time starts to count from 0. Until exiting this interface or complete pressure maintaining. (if the vacuum is less than the evac target value, time will be paused until the collected number is greater than evac target. Then continue timing. Press [△] or [▽] to select evac target, delayed target, delayed time and rate.
3.3. When do decay testing, If the vacuum reading does not exceed the set value of delayed target. It displays "pass" until you press (any key) to stop flashing, exit the prompt and return to the main standby interface.
3.4. When do decay testing, if the vacuum reading gets larger, reaches and exceeds the set value of delayed target, the buzzer will alarm, and the word “FAIL” will flash until you press any key to stop flashing and exit the prompt, and return to the standby main interface.
3.5. If pressure holding time is set to “off”, alarm will start after the vacuum value exceeds decayed target.

4. Evacuation and Pressure Maintaining Interface II
(Evac target and Delayed target are set to off)

4.1. Evac target is set to off and delayed target is not set to off when the real-time vacuum reduces, the prompt of delayed target value will not be triggered. The prompt of "fail" and "alarm tone" will be triggered only when the vacuum value increases to the delayed target value.
4.2. Evac target is set to non off and delayed target is set to off when the target vacuum reduces, the "alarm tone" beep of evac target value will be triggered. When the vacuum value increases, the "fail" alarm will not be triggered.
4.3. Both evaluation target and delayed target are set to off all alarm prompts will not be triggered.

5. Zero setting calibration

Under the atmosphere, press and hold “[△] + [▽]”at same time for more than 2 seconds until the vacuum display area displays "-------", the full calibration is completed.

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WARNING

WARNING: Read all safety warning and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

1. Do not dismantle, open or shred rechargeable Li-polymer battery pack.
2. Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.
3. Do not short-circuit a battery pack.
4. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another, Shorting the battery terminals together may cause burns or a fire.
5. Do not subject battery pack to mechanical shock.
6. In the event of a battery leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
7. Seek medical advice immediately if a battery pack has been swallowed.
8. Do not use any battery pack which is not designed for use with the equipment.
9. Use only the battery pack in the application for which it was intended.
10. Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
11. Keep battery pack out of the reach of children.
12. Always purchase the correct battery for the equipment.
13. Keep battery pack clean and dry.
14. Wipe the battery pack terminals with a clean dry cloth if they become dirty.
15. Dispose of properly.
16. Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
17. Instructions regarding battery charging. information regarding ambient temperature range for battery use and storage, and the recommended ambient temperature range for charging system during charging.

Operating Temperature	Charge	0~45°C
	Discharge	-10~60°C
Storage Temperature	1 month	-20~60°C
	3 month	-20~45°C
	1 year	-20~25°C

18. Rechargeable battery pack need to be charged before use. Always refer to the equipment manual for proper charging instructions. Charge only with USB(Type C) not exceed 5V⎓2A.

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VMV1S
Premium Micron Vacuum Gauge
User Manual

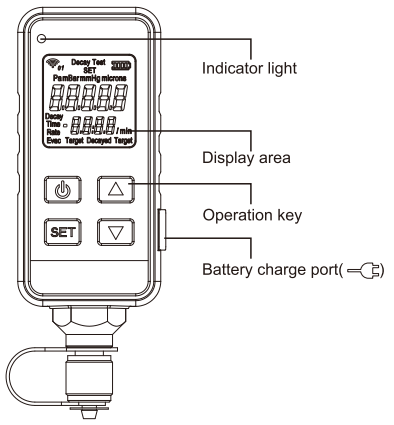
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CERTIFICATIONS

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INSTRUMENT OVERVIEW



FUNCTION INTRODUCTION

1. Operation Key

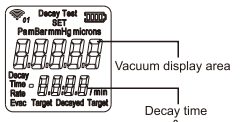
1.1. ⏻: Power on / off key. Press ⏻ 1 second to turn on, press ⏻ 2 seconds to turn off.

1.2. [▽] : Down key. In setting mode, adjust settings. In decay testing mode, set timer and leakage rate.

1.3. [△] : Up key. In setting mode, adjust settings. In decay testing mode, set timer and leakage rate..

1.4. [SET] : Parameter setting key. Interface display“ ⬭ ⬭ ⬭ ⬭ ⬭ ” press [SET] and hold for 2s to enter the parameter setting interface.

2. Screen Display



2.1. SET : Parameter setting mode.

2.2. : Power indicator.

2.3. 01 : Bluetooth connection indicator;
0 / 1 / indicates the number of Bluetooth connections.

2.4. Evac Target: minimum target vacuum;
(Vacuum value expected to be reached by the evacuation system)

2.5. Delayed target: the maximum target vacuum degree which should be greater than the target vacuum value;

2.6. Delay time: pressure maintaining time. (Triggered only when the minimum and maximum target vacuum are not setting to “off”);

2.7. Decay test: enter the decay testing procedure;

2.8. Rate: leakage rate, leakage rate unit: / min.

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TECHNICAL SPECIFICATIONS

Model	VMV1S
Maximum Overload Pressure	3.4 bar
Range	0~3333.3 Pa, 0~25000 microns, 0~33.3 mBar, 0~25 mmHg
Resolution	0.01Pa (<10 Pa), 0.01 micron (<10 microns), 0.001 mBar, 0.001 mmHg
Accuracy	±5%reading (6.7-133.3Pa) (50-1000microns) 20°C
Operating Temperature	0~40˚C
Battery	2000 mAh Li-polymer
Unit	Pa, mBar, mmHg, microns
Connections	7/16" UNF
Sensor	Pirani sensor
Weight	175 g

Indicator Light:

Status	Indicate	Priority
Red flashes	Low Battery	1
Yellow light flashes	Powered on, Bluetooth is not connected	2
Green light flashes	Bluetooth is connected	2

DISPLAY RANGE

Vacuum display range for vacuum pumping: 3333.3 Pa (0-25000 microns, 33.3 mbar, 25 mmHg). Over range display“⬭ ⬭ ⬭ ⬭ ⬭”.

AUTOMATIC SHUTDOWN

When the vacuum gauge has a reading displayed, the automatic shutdown program will not be triggered for 2 hours; The automatic shutdown program will be triggered only when the interface displays atmospheric pressure "----", and without any operation on the interface.

OPERATION

1. Start, Shut off

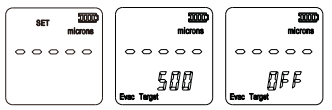
Press ⏻ 1 second to turn on, press ⏻ 2 seconds to turn off.

2. Parameter Setting Interface

2.1. The vacuum display area displays "----", long press"[SET]"2 seconds to enter the parameter etting interface.

2.2. Vacuum unit setting:
Press [△] , [▽] to select unit, press"[SET]"to lock and switch to next parameter setting.

2.3. "Evac target" setting: (minimum target vacuum)
Press [△] , [▽] to select the flashing value, then press"[SET]"to lock and stay on, then switch to the next "delayed target" setting.



2.4. Delayed target setting: (maximum target vacuum)
Press [△], [▽] to select, the value is higher than the value set by "evac target" or "off". If "off" is selected, the "delay time" pressure maintaining time will default to "off", and skip directly to enter the sound setting.

2.5. Pressure maintaining time setting (delay time)
After the "delayed target" setting is completed, if the values of 3&4 are not "off", press"[SET]" enter to the setting of "delayed time". Press [△], [▽] to select . Then press"[SET]" to lock and stay on, then switch to the next parameter setting.