

## I Precautions for vacuum work I

The vacuum sensor built into this device may malfunction if it is frequently exposed to oil and foreign substances. When working, please pay attention to the following points.

- ❶ Lock the vacuum lock valve located on the right side of the product and operate the vacuum pump.
- ❷ Remove any foreign substances from the pipe while locking the vacuum lock valve for 1/3 or 1/2 of the average vacuum pump operation time, and open the vacuum lock valve to check the vacuum level.
- ❸ When the target value is reached, start the vacuum test.
- ❹ Lock the vacuum locking valve on the right side of the instrument after completing the vacuum operation.  
(Prevent foreign substances from entering the vacuum sensor)
- ❺ Power off the vacuum pump.

## I Recommendation I

- ❶ The gauge can be used vertically using the hook on the back.  
(Do not use the device on the floor.)
- ❷ We recommend a vacuum pump with a backflow prevention function.
- ❸ The oil in the vacuum pump is changed periodically.
- ❹ Keep the refrigerant hose clean and check frequently to see if the joints of the hose are loose.

## ※ Emergency measures when the vacuum sensor is contaminated with oil ※

- ❶ Open the black vacuum lock valve located on the right side of the instrument.
- ❷ Connect the vacuum pump to the left (or right) of the t-type connector.
- ❸ Run the vacuum pump for about 2~3 minutes to remove the oil inside.
- ❹ If the oil does not drain sufficiently, increase the time for step 3 and repeat.
- ❺ Check if the vacuum value of the device is displayed properly.

## I How to use Bluetooth I

### Connection to the smartphone

This equipment can be connected to the smartphone which makes the measured value checked, saved and sent to the outside. For this, you need to install an application (the app) on your smartphone. (Android smartphone: Google Play Store, Apple iPhone: App Store)

#### ❶ Installation of smartphone application (app)

Install the **MICRODAM MDi** app on Google Play Store of the Android phone and App Store of Apple iPhone  
(Store search term : **MICRODAM MDi**)



#### ❷ Connection of manifold gauge to the smartphone

Prepare for the Bluetooth connection by pressing the button on the manifold gauge.

1. If you press the  button for about 3 seconds, the Bluetooth mark on the top of the LCD blinks, making the equipment ready to be connected to the smartphone.
2. When the equipment is connected to a smartphone, the Bluetooth mark stops blinking.

Display	Description	Button
[Bluetooth mark] blinking	Ready for getting connected to the smartphone	[Link] button (Bluetooth function ON/OFF)
[Bluetooth mark] ON	Connected to the smartphone	
[Bluetooth mark] OFF	Connection to the smartphone ended	[Link] button (Bluetooth function ON/OFF)

#### ❸ Turn on the Bluetooth function of the smartphone.

#### ❹ Implement the **MICRODAM MDi** app on your smartphone.

#### ❺ Connecting the manifold gauge to the smartphone.

1. When you implement the app, the list of manifold gauges that can be connected automatically is displayed on the screen in green.
2. Touch the manifold gauge marked in green on the device list, and then the manifold gauge will be connected to the app.



**MICRODAM**

CE FC  
ISO 9001:2015

## DIGITAL VACUUM GAUGE **MDV600 Prime** USER GUIDE

※ Please read the instructions before using this product



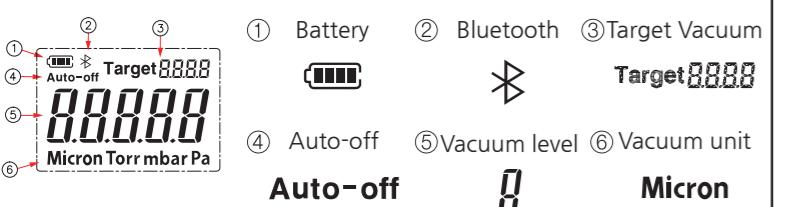
**SUNGSHIN**  
HASCO

**I Special features |**



- ① A compact size
- ② Vac-Lock valve to protect vacuum sensor
- ③ Bluetooth connection with smartphone
- ④ Target vacuum and alarm
- ⑤ Unit of measure: Micron/Torr/mbar/Pa
- ⑥ Back-light display
- ⑦ Power supply: AAA battery x 2

**I Display |**



**I Control Buttons |**

- : Power : LCD backlight on/off & bluetooth
- : Set Target Vacuum
- : Unit of measure & Auto-off

**I Specification |**

Item	Descriptions
Unit of measure	Micron / Torr / mbar / Pa
Sensor	• Vacuum : Vacuum sensor x 1
Measuring range	0~25 Torr
Ambient conditions	• Ambient temperature : -20~60°C • Operating temperature : -20~60°C
Power supply	• 1.5V AAA batteries x 4 units • Battery life: about 30 hours (without display light)

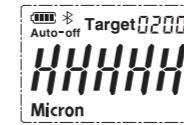
**I Button configuration |**

**① Power**

- ① Press for 2 seconds

② All signs on

③ Measurement standby screen

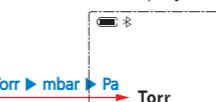
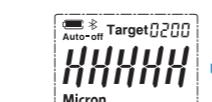


**② TARGET Unit of measurement & auto-off setting**

- ① Measurement standby screen

- ② Press for 3 seconds

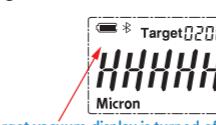
- ③ Short press



- ④ Press for 3 seconds

- ⑤ Short press

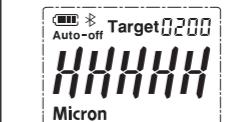
- ⑥ Press for 3 seconds



**③ TARGET Set target vacuum**

- ① Measurement standby screen

\* When target off, target vacuum display is turned off  
\* Target vacuum value according to vacuum unit



- 1. **Micron** : OFF -0200 - 0300 - 0400 - 0500 - 0750 - 1000

- 2. **Torr** : OFF - 0.200 - 0.300 - 0.400 - 0.500 - 0.750 - 1.000

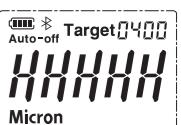
- 3. **mbar** : OFF - 0.270 - 0.400 - 0.530 - 0.670 - 1.000 - 1.330

- 4. **Pa** : OFF - 27.0 - 40.0 - 53.0 - 67.0 - 100.0 - 133.0

- ② Press for 3 seconds

③ Short press  
Target vacuum display blinks

④ Press for 3 seconds  
Change the target vacuum value



**④ TARGET Backlight & Bluetooth**

\* Backlight : Short press on/off

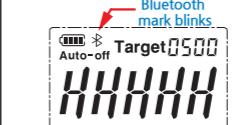
(When the power is turned on, the Bluetooth connection standby status is automatically maintained for about 3 minutes.)

\* Bluetooth : Press and hold (about 3 seconds) on/off

- ① Measurement standby screen

- ② Bluetooth connection

- ③ Bluetooth off if not connected for 3 minutes



**FCC STATEMENT :**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

**RF warning statement:**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.