HTDM177
User manual

HT

HTDM177

HT INSTRUMENTS

 CE

Test holes

LCD Display
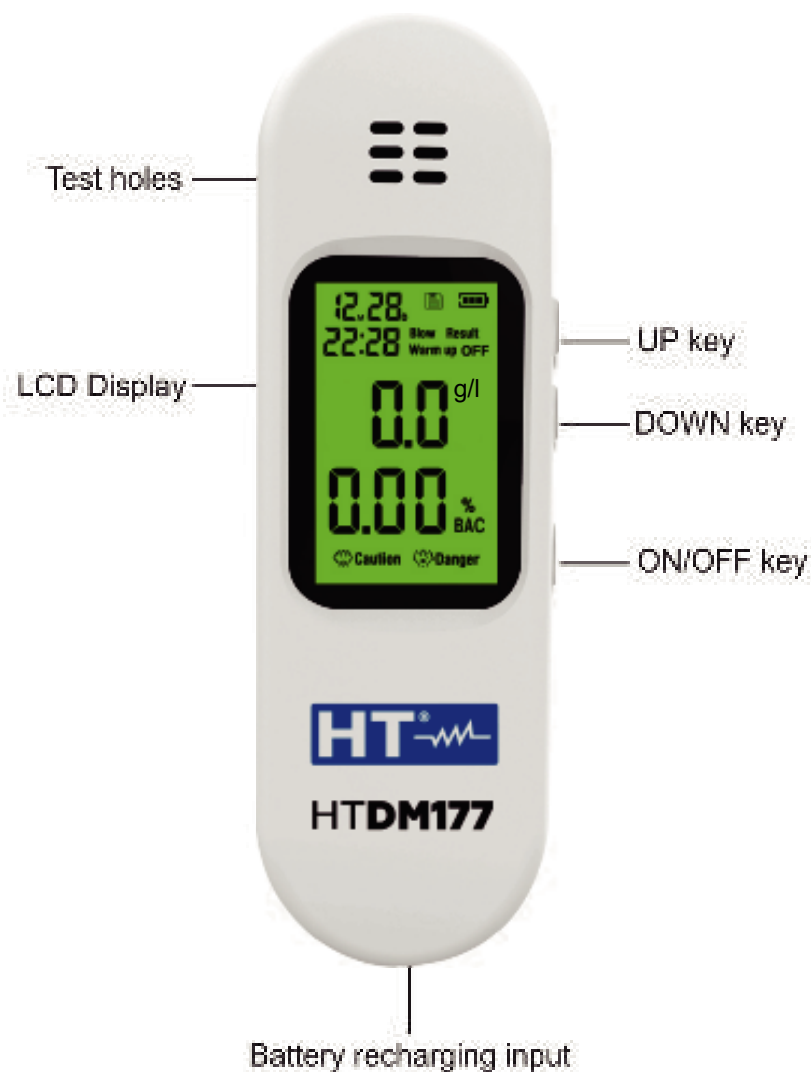
UP key

DOWN key

ON/OFF key
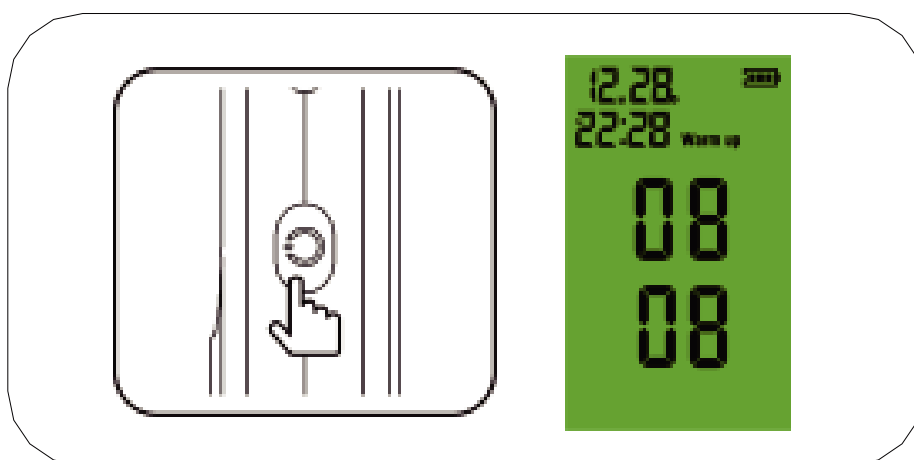
HT

HT**DM177**

Battery recharging input

IMPORTANT WARNINGS

- It is recommended to perform the test 20 minutes after drinking alcohol, as it takes this time for the alcohol to be absorbed by the digestive system and released into the blood. Testing performed immediately after drinking can only reflect the concentration of alcohol present in the mouth at that moment, not that in the blood.
- To obtain accurate results, two tests must be separated by more than 3 minutes
- The product will not work properly if it is in an environment with a high concentration of gas
- Do not clean the instrument with chemicals
- Do not pour liquids into the instrument
- Do not spray irritating gases such as paint or insecticides into the instrument
- If the detection is performed with a low battery, a certain deviation between the detected value and the actual value may occur
- The product is a blood alcohol meter with a semiconductor sensor and a measurement variation of ±30%
- **Each person reacts differently to alcohol, so the test results are for reference only and cannot be used as a criterion for determining the results, therefore, regardless of the use of the product, the manufacturer, distributor and seller ASSUME NO RESPONSIBILITY FOR ANY MEASUREMENT ERRORS OR FOR ANY VIOLATION OF THE LAW COMMITTED BY THE USER (for example: driving under the influence of alcohol) as a result of using the instrument. The user remains solely responsible**

OPERATING INSTRUCTIONS

<u>Instrument warm-up operation</u>

1. Press **ON/OFF** key to switch on the instrument
2. The "Warm up" message is shown on the display and a 10s countdown will start. At the end of the operation, the instrument is ready for use
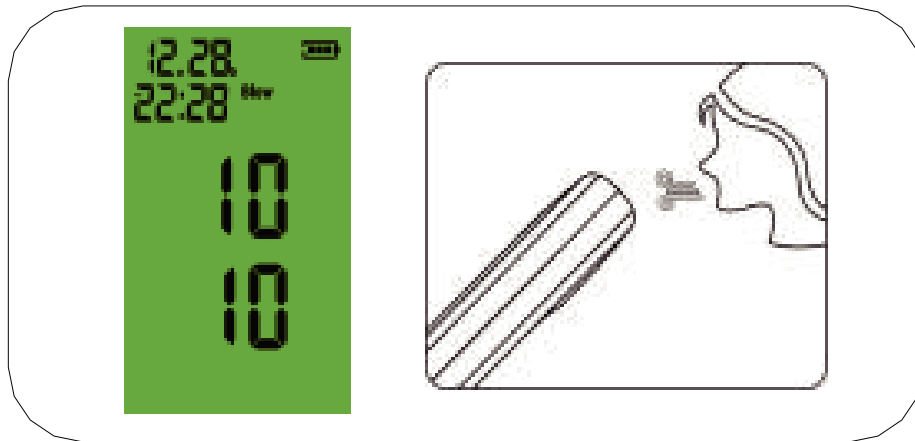
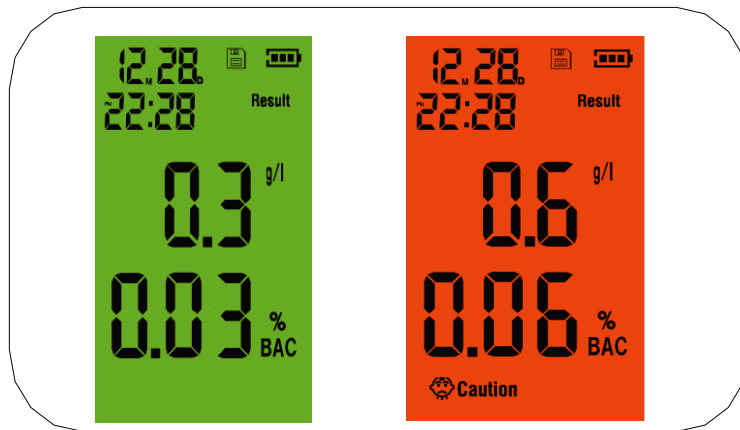

⚠	**CAUTION**
	When the instrument is used for the first time or if it is not used for a long time, there may be a lot of impurities on the surface of the sensor or residual gas. In this case, it is necessary to repeat the switch on and off more times and the warm-up operation to clean the sensor detector

Starting test

1. Once the warm-up is complete, the instrument beeps, the message "Blow" is shown on the display and the test mode with a 10s countdown is activated

2. Blow for 3-5 seconds staying about 5-10cm away from test holes

3. After a few seconds, the result is shown on the display expressed in **g/L** units.

4. When the test result is **<0.5g/L**, the background color of the display becomes "**green**" and the buzzer does not sound. When the test result is between **0.5g/L** and **0.8g/L**, the message "Warning" is displayed, the background color of the display becomes "**orange**" and the buzzer sounds a warning sound

5. If the result is **≥0.8g/L**, the message "Danger" is shown on the display, the background turns "**red**" and the buzzer emits a warning sound

6. When the instrument is turned on and the battery is low, it cannot perform a normal test and the display will automatically switch off after about 3s
7. During charging, the battery icon on the display flashes from left to right and turns red. When the charging is complete, the red light goes off
   NOTE: The instrument cannot perform tests while recharging is in progress

Switch off the instrument

1. Press **ON/OFF** key for few seconds to switch off the instrument
2. If no operation is performed within 10s from the end of the test, the instrument will automatically turn off.

⚠	CAUTION
	• If the instrument contains residual alcohol gas, the warm-up time will be longer, and the procedure will need to be repeated several times. To use the instrument more times in a short period, is recommended **to shake it** to accelerate the dispersion of the alcohol gas
	• If no "blow" has been made when the instrument is in test mode, the result on the display is 0.00

Date/Time setting

1. **Press ON/OFF key twice in quick succession**
2. The month indication will flash, use the **UP/DOWN** keys to set the month. Press **ON/OFF** key to confirm
3. The date indication will flash, use the **UP/DOWN** keys to set the date. Press **ON/OFF** key to confirm
4. The hour indication will flash, use the **UP/DOWN** keys to set the hour. Press **ON/OFF** key to confirm. The minute indication will flash, press the **UP/DOWN** keys to adjust the minute and press **ON/OFF** key to confirm and complete the setting

POSSIBLE PROBLEMS AND SOLUTIONS

Condition	Possible cause	Solution
Instrument does not switch on	Battery level too low	Recharging battery
	Internal error	Contact service
No indication after performing test	Insufficient warm-up operation	Repeat warm-up more times
	Internal error	Contact service
No results shown after run the test	Presence of residual internal gas	Repeat warm-up more times
	Test performed with duration different from the specified time	Run the test with "Blow" message on the display
No test performed but result shown on display	Presence of residual internal gas	Repeat warm-up more times
Results of different tests	Test performed immediately after drinking alcohol	Perform test 20 minutes after drinking alcohol
	Running tests at different times	Deeply breathe and blow for 5-8s

TECHNICAL SPECIFICATIONS

Item	Description
Product type	Portable alcohol detector
Dimensions(LxWxH)	102 x 32 x15mm
Sensor type	Semiconductor
Measuremenr range	0.0÷1.9g/L ; 0.00%÷0.19%BAC
Error indication	±0.01%BAC
Warm-up time	10s
Response time	3s÷10s
Working current	150mA
Power supply	Li-ION battery capacity 200mAh
Charging input	5V/1ADC through USB-C port
Working temperature	-5°C ÷ 45°C
Storage temperature	-20°C ÷ 50°C
Display	LCD
Sound indication	Buzzer

NOTES ABOUT MEASUREMENT UNITS

- Commonly units used in various countries:
- g/L (Europe); mg/L BrAC (Japan)
- mg/100mL (China); ％BAC (USA)
- 0.0％BAC means that every 100ml of blood contains 0.0g of alcohol

	BAC Blood Alcohol Concentration				BrAC Breath Alcohol Concentration	
	mg/100mL	％	％。	g/L	mg/L	PPM common
1	10	0.01	0.1	0.1	0.05	25
2	20	0.02	0.2	0.2	0.10	50
3	30	0.03	0.3	0.3	0.15	75
4	40	0.04	0.4	0.4	0.20	100
5	50	0.05	0.5	0.5	0.25	125
6	60	0.06	0.6	0.6	0.30	150
7	70	0.07	0.7	0.7	0.35	175
8	80	0.08	0.8	0.8	0.40	200
9	90	0.09	0.9	0.9	0.45	225
10	100	0.10	1.0	1.0	0.50	250
11	110	0.11	1.1	1.1	0.55	275
12	120	0.12	1.2	1.2	0.60	300
13	130	0.13	1.3	1.3	0.65	325
14	140	0.14	1.4	1.4	0.70	350
15	150	0.15	1.5	1.5	0.75	375
16	160	0.16	1.6	1.6	0.80	400
17	170	0.17	1.7	1.7	0.85	425
18	180	0.18	1.8	1.8	0.90	450
19	190	0.19	1.9	1.9	0.95	475
20	200	0.20	2.0	2.0	1.00	500