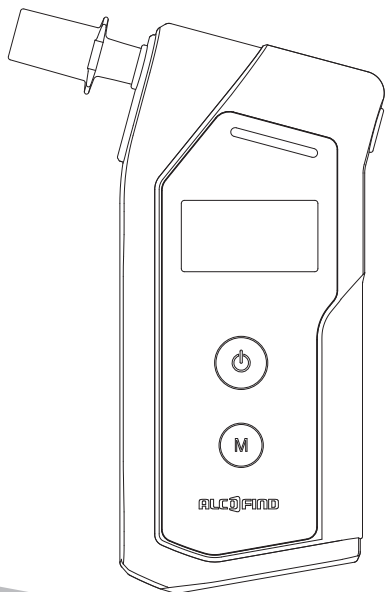


# ALCO FIND

## Digital Breathalyzer AF-50 / AF-50AD Instruction Manual



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# 1. Introduction

Thank you for purchasing our high-reliability professional alcohol tester. Your device is suitable for use in law enforcement, hospitals, schools, and various industrial fields. It measures estimated Blood Alcohol Content (BAC) in human breath using a premium fuel cell sensor, ensuring durability and accurate results.

Your device features the enhanced reliability especially with the **extended operating temperature range**, along with innovative 2-way quick mode change system including the following features:

- **Extended Operating Temperature** ensures reliable measurements from -5°C to 50°C, making it more suitable for extreme weather than peer products.
- **2-way quick mode change system** enables users to quickly and easily switch between Mouthpiece Mode and Funnel Mode. In Mouthpiece Mode you can select three sub-modes (Normal Mode, Mouth Alcohol Detection Mode, and EoB Mode) based on the different blow types, allowing users to best fit their testing purposes.

■ **Mouthpiece Modes:** measure precise alcohol concentration using mouthpiece

Normal Mode	provides precise alcohol concentration measurements using fixed volume of breath samples.
Mouth Alcohol Detection Mode	detects the presence of mouth alcohol, distinguishing it from actual lung breath alcohol, preventing false readings that could occur due to residual alcohol in the mouth. (recommended for use at temperatures of 15 °C or above)
End-of-Breath (EOB) Mode	analyzes the last portion of exhalation during breath testing. This portion of breath most closely reflects alveolar air, focusing more on lung breath while minimizing external interferences, known to have a higher correlation to BAC for some testing standards

■ **Funnel Mode:** enables non-contact passive measurement with PASS or FAIL results.

For accurate and safe use, as well as to fully utilize all features of this device, we highly recommend that you read and follow the product manual. The manual contains important information on proper operation of the device, maintenance procedures.

## 2. Essential Safety Guidelines

- **Read Before Use:** Carefully read the entire instruction manual before using the alcohol tester.
- **Calibration Recommendation:** It is recommended to have the device calibrated by experts every 12 months or after 1000 tests. Failure to perform periodic calibration may result in inaccurate results.
- **Pre-Test Waiting Period:** Wait at least 30 minutes after eating, drinking, or smoking before performing a test. Failure to do so may lead to inaccurate or invalid results.
- **Residual Alcohol:** Residual alcohol in the mouth can distort the measurement. Ensure your mouth is free of any residual alcohol.
- **Water Exposure:** Do not immerse the device in water or any liquid.
- **Interference from Substances:** Aromatic drinks or mouth sprays containing alcohol can interfere with measurements. Wait 30 minutes or rinse your mouth with pure water before testing.
- **Cigarette Smoke:** Do not blow cigarette smoke into the tester as it may damage the sensor.
- **Legal Responsibility:** This device should not be used to make decisions about driving or any other activities after consuming alcohol. Neither the manufacturer nor the sellers can be held legally responsible for any actions taken based on test results.
- **Battery Removal for Storage:** When not in use for an extended period, remove the batteries from the device. Prolonged disuse with batteries installed can lead to less accurate initial test results.
- **Battery Replacement:** Replace the batteries when the battery indicator shows empty to maintain accuracy.
- **Re-Test Interval:** If the test result exceeds 0.1 %BAC (1.0 g/L) and you retest immediately, the warm-up time may be longer.
- **Operating Temperature:** Perform tests within the operating temperature range specified in the instruction manual.
- **Blowing Technique:** Avoid blowing hard to prevent saliva from entering and damaging sensor.
- **Storage Conditions:** Store the device in a place with moderate temperature and humidity. Room temperature storage is recommended.
- **Air Inhalation:** Do not inhale air during the test.
- **Mouthpiece Usage:** Use a clean mouthpiece for each test to ensure accurate measurements.

- **Child Safety:** Keep the device and mouthpieces out of reach of children under 12 years of age.
- **Authorized Parts and Modifications:** Use only parts and accessories specified by authorized manufacturer or seller. Do not attempt to disassemble or modify the device.

## 3. Contents

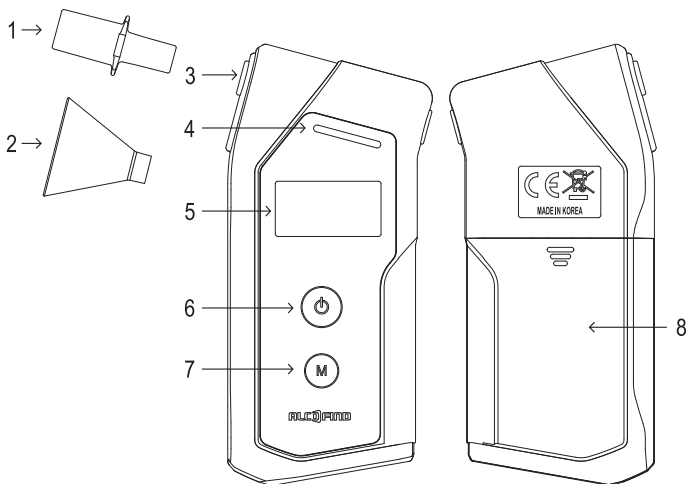
### 3-1. AF-50 / AF-50AD

- AF-50 / AF-50AD Digital Breathalyzer
- Two AA Alkaline Batteries
- Six Mouthpieces (for Mouthpiece Mode)
- Three Funnel Mouthpieces (for Funnel Mode)
- Carrying Case
- Instruction Manual
- PC Software (download) \* AF-50AD only
- ALCOFIND Mobile Application (iOS & Android download) \* AF-50AD only

### 3-2. AF-50AD - Professional Kit

- Twenty Mouthpieces (for Mouthpiece Mode)
- Five Funnel Mouthpieces (for Funnel Mode)
- Hard Protective Carrying Case
- Dedicated Bluetooth Printer

## 4. Name of Each Part



1. Mouthpiece
2. Funnel Mouthpiece
3. Mouthpiece Slot
4. Status LED
5. High-Quality OLED Display
6. Power Button
7. Menu Button
8. Battery Cover





## 5. Quick Guide



### 5.1 Supported Test Modes



- 2-way mode change: Mouthpiece Modes and Funnel Mode
- Features: Normal testing, Mouth alcohol detection, End-of-Breath Testing, Manual Sampling
- (AF-50AD only) Wireless Connection: Smartphone Application, Bluetooth Printer, PC Program

### 5.2 Test Mode

You can change the test modes as follows by pressing the Power Button on the "READY TO BLOW" screen. The device offers three Mouthpiece Modes (Normal Mode, Mouth Alcohol Detection Mode, and EoB Mode) and one Funnel Mode, allowing you to quickly select the most suitable mode for your testing needs.

Mouthpiece Modes			Funnel Mode
			
Normal Mode	Mouth Alcohol Detection Mode	EoB Mode	Funnel Mode

Modes	Guides
 <b>Normal Mode</b>	<ul style="list-style-type: none"><li>• When a sufficient amount of breath is collected, it samples and determines the alcohol concentration.</li><li>• The results can be viewed again in the "TEST RESULT" section of the menu.</li><li>• During the blow, you can manually sample by pressing the Menu Button.</li><li>• You can change the amount of breath in the "BREATH VOLUME" menu, among 1.2L, 1.5L, and 1.8L.</li></ul>
 <b>Mouth Alcohol Detection Mode</b>	<ul style="list-style-type: none"><li>• It enables the user to detect the presence of mouth alcohol, distinguishing it from actual lung breath alcohol.</li><li>• When mouth alcohol is detected, it is displayed on the screen along with the alcohol concentration as "Mouth Alcohol Det (detected)" or "Mouth Alcohol Susp (suspected)" depending on the interference level. If no mouth alcohol is detected, it is displayed as "No Mouth Alcohol".</li><li>• Mouth Alcohol Detection Mode is recommended to be used in the temperature of 15 °C or above.</li></ul>

Modes	Guides
 <p data-bbox="129 302 243 331"><b>EoB Mode</b></p>	<ul style="list-style-type: none"> <li>• After a sufficient amount of breath is collected, it samples the last portion of a person's exhalation(End-of-Breath) and determines the alcohol concentration. The results can be viewed again in the "TEST RESULT" section of the menu.</li> <li>• During the blow, you can manually sample by pressing the Menu Button.</li> <li>• You can change the amount of breath in the BREATH VOLUME menu, among 1.2L, 1.5L, and 1.8L.</li> <li>• Do not suddenly stop exhaling during the test. Continue blowing until you run out of breath.</li> </ul>
 <p data-bbox="116 662 259 691"><b>Funnel Mode</b></p>	<ul style="list-style-type: none"> <li>• Detects the presence of alcohol through non-contact breath. The results can be viewed again in the "TEST RESULT-F" section of the menu. You can switch to the other modes by pressing the Power Button.</li> <li>• You can manually sample by pressing the Menu Button, regardless of whether there's a blow or not.</li> <li>• If residual alcohol is detected inside the breathalyzer, inaccurate results could be displayed in Funnel Mode. For optimal results, use Funnel Mode after getting a zero BAC reading in the other modes - this will ensure accurate measurements when returning to Funnel Mode</li> </ul>

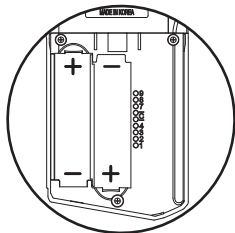
### 5.3 Menu

- You can enter the menu screen by pressing and holding the Menu Button.
- You can move up and down using the Power Button and the Menu Button. Press and hold the Power Button to enter a submenu, and press and hold the Menu Button to return to the upper menu. To save, press and hold the Power Button and Menu Button simultaneously.
- In the menu, you can change settings such as test mode, unit, brightness, sound, breath volume, alarm limit, and time.

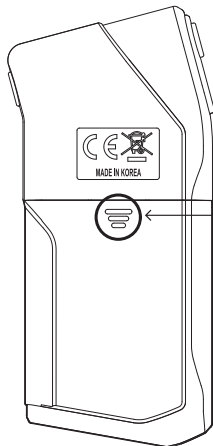


## 6. Basic Operation

### 6.1 Preparation



Insert two AA batteries  
(1.5V Alkaline)



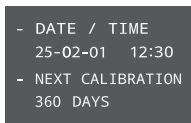
Press and push down  
the cover  
to open

- **Battery Installation:** Insert two AA batteries into battery compartment, ensuring correct polarity.
- **Mouthpiece Insertion:** Insert a mouthpiece into the slot on the side of the alcohol tester and ensure it fits securely.
- **Sanitary Precaution:** Use a new mouthpiece for each person being tested for sanitary purposes.

## 6.2 Operation

### Step 1. Power On

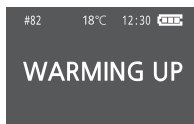
- Press and hold the Power Button for 2 seconds to turn on the device. The alarm limit, date(yy-mm-dd) and time set in the device will be displayed.



**Note:** During use, the device will automatically power off after 3 minutes of inactivity.

### Step 2. Warm-up

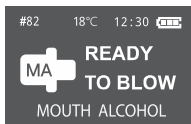
- The warm-up process will start automatically.



### Step 3. Ready to Blow



Normal Mode



Mouth Alcohol Detection Mode



EoB Mode



Funnel Mode

- When warm-up is complete, the device will be set to the last used test mode (Normal Mode, Mouth Alcohol Detection Mode, EoB Mode or Funnel Mode) and display the corresponding screen as shown above.
- Test Mode (Normal Mode / Mouth Alcohol Detection Mode / EoB Mode / Funnel Mode)  
: Press the Power Button to choose the detection mode.
- Manual Sampling  
: In Normal Mode and EoB Mode, press the Menu Button for Manual Sampling during the blow.  
: In Mouth Alcohol Detection Mode, the Manual Sampling function is disabled.  
: In Funnel Mode, press the Menu Button for Manual Sampling regardless of the blow.

#### Step 4. Measurement

- Blow through the mouthpiece or funnel until the device beeps twice. Blowing time may vary depending on the test mode and the intensity of blowing.



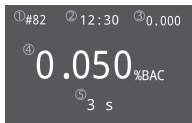
#### Step 5. Analyzing

- When breath is sampled correctly, the analysis process initiates automatically.

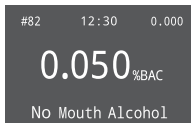


#### Step 6. Test Result

- Normal Mode, Mouth Alcohol Detection Mode, EoB Mode
  - After a few seconds (depending on the measurement condition), the measured BAC will be displayed for 4 seconds. During this time, the Power and Menu Buttons will be deactivated.



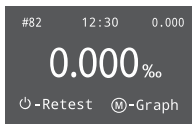
Normal Mode / EoB Mode



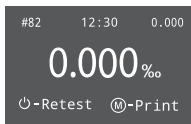
Mouth Alcohol Detection Mode

- ① Test Number
- ② Test Time
- ③ Previous Result
- ④ Current Result
- ⑤ Display Time

- In Mouth Alcohol Detection Mode, the following indicators will appear at the bottom of the display:
  - No Mouth Alcohol : No mouth alcohol is detected
  - Mouth Alcohol Susp : Mouth alcohol is suspected
  - Mouth Alcohol Det : Mouth alcohol is detected
- After displaying the test result for 4 seconds, the display will change to enable the following functions:



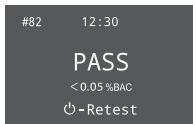
Result display of AF-50



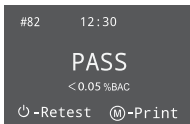
Result display of AF-50AD  
(with printer connection)

- 1) Retest: Press the Power Button briefly to test again.
- 2) Print: (AF-50AD) Press the Menu Button briefly to print the result data.
- 3) Power off: Press and hold the Power Button for 2 seconds to turn off the device.

## - Funnel Mode



Result display of AF-50



Result display of AF-50AD  
(with printer connection)

- The result is displayed as PASS or FAIL based on the alarm limit.
- The following describes the button functions on the result screen:
  - 1) Retest: Press the Power Button briefly to test again.
  - 2) Print: (AF-50AD) Press the Menu Button briefly to print the result data.
  - 3) Power off: Press and hold the Power Button for 2 seconds to turn off the device.

## Notes

- The red LED flashes if the test result exceeds the alarm limit.
- The green LED flashes if the test result is at or below the alarm limit.

## 6.3 Symbols & Troubleshooting

### - Status Display



- ① Total number of tests performed
- ② Current temperature
  - \* AF-50AD: Icons display on connection
  - Printer : printer connected
  - Bluetooth : mobile app connected
- ③ Current time
- ④ Remaining battery power

- Troubleshooting Guide

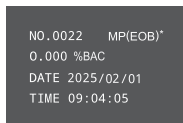
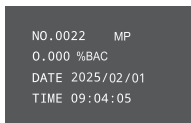
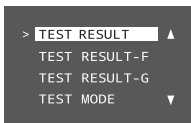
Message	Description	Solution
No CAL DATA Contact the service center.	<b>No Calibration Data:</b> The device is not identifying calibration data.	<b>Calibration Service:</b> Contact your local seller or customer service center for proper calibration service.
OUT OF TEMP RANGE Try again in operating temp range.	<b>Operating Temperature Error:</b> Device is outside of its specified temperature range.	<b>Operate Within Specified Temperature Range:</b> Use the device only when it is within its specified operating temperature range.
CALIBRATION EXPIRED Contact the service center.	<b>Calibration Overdue:</b> Device has exceeded its recommended calibration interval.	<b>Recalibration Service:</b> Contact your local seller or customer service center for proper recalibration service.
TEST LIMIT EXCEEDED Contact the service center.	<b>Test Limit Exceeded:</b> Device has exceeded its recommended number of tests.	
LOW BATTERY Install new batteries.	<b>Low Battery:</b> Battery level is too low for testing.	<b>Replace Batteries:</b> Install new batteries.

Message	Description	Solution
<p><b>BLOW ERROR</b> Repeat the test and blow until the beep stops.</p>	<p><b>Blowing Too Short:</b> Detected breath is insufficient to achieve the accurate result.</p>	
<p><b>BLOW ERROR</b> Repeat the test and blow a little weaker.</p>	<p><b>Blowing Too Strong:</b> Detected breath pressure is too strong. It may damage the alcohol sensor.</p>	<p><b>Perform Re-test:</b> Conduct another test, following all instructions carefully.</p>
<p><b>BLOW ERROR</b> Repeat the test without inhaling.</p>	<p><b>Inhaling:</b> Inhaling is detected during the blowing process.</p>	
<p><b>EXCESSIVE SALIVA DETECTED</b> Repeat the test after 20 mins.</p>	<p><b>Blow Sample with Excessive Saliva:</b> Saliva is detected during the blowing process.</p>	
<p><b>SAMPLING ERROR</b> Contact the service center</p>	<p><b>Error of Sampling System:</b> Testing cannot be performed due to an issue in the sampling system.</p>	<p><b>Service center:</b> If sampling errors persist, please contact your local seller or customer service center.</p>

## 7. Basic Menu Options

- Entering Menu Options
- During the Warm-up process (Step 2), press the Menu Button for 2 seconds to enter the menu.
- Navigating and Selecting Menu Options
- To move the cursor upwards, briefly press the Power Button.
- To move the cursor downwards, briefly press the Menu Button.
- To select an option, press and hold the Power Button for 2 seconds.
- To return to the Warm-up process, press and hold the Menu Button for 2 seconds.
- Saving Selected Settings
- Press and hold the Power Button and the Menu Button simultaneously for 2 seconds until you hear a beep sound to save the selected setting.

### 7.1 TEST RESULT



The screen displays the results from previous Mouthpiece Modes (Normal Mode, Mouth Alcohol Detection Mode and EoB Mode) tests including test number, measurement result, test date (yyyy/mm/dd) and time and the use of Manual Sampling. The blow modes used are indicated as follows:

- MP : Normal Mode
- MP\* : Normal Mode with Manual Sampling
- NO MA : No mouth alcohol is detected in Mouth Alcohol Detection Mode
- MA SUSP : Mouth alcohol is suspected in Mouth Alcohol Detection Mode
- MA DET : Mouth alcohol is detected in Mouth Alcohol Detection Mode
- MP(EOB) : EoB Mode
- MP(EOB)\* : EoB Mode with Manual Sampling

AF-50AD can print the test result by pressing Power Button and Menu Button simultaneously.

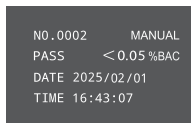
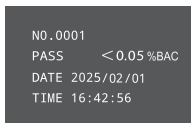
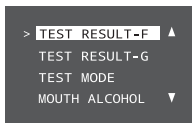
- To view previous results, briefly press the Power Button.
- To view the next result, briefly press the Menu Button.
- To return to the menu list, press and hold the Menu Button for 2 seconds.

#### Notes

- The most recent test result will appear first.
- The oldest test result will be automatically deleted if the memory is full.
- The device can store up to 2,000 test results for Normal Mode, Mouth Alcohol Detection Mode and EoB Mode combined.



## 7.2 TEST RESULT - F



The screen displays the results from previous Funnel Mode tests including test number, PASS or FAIL results with the alarm limit threshold used, test date(yyyy/mm/dd) and time, and the use of manual sampling. When Manual Sampling is used, MANUAL appears in the upper right side of the display.

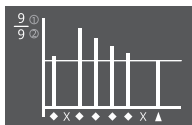
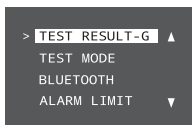
AF-50AD can print the test result by pressing Power Button and Menu Button simultaneously.

- To view previous results, briefly press the Power Button.
- To view the next result, briefly press the Menu Button.
- To return to the menu list, press and hold the Menu Button for 2 seconds.

### Notes

- The most recent test result will appear first.
- The oldest test result will be automatically deleted if the memory is full.
- The device can store up to 10,000 Funnel Mode test results.

## 7.3 TEST RESULT - G



View the visualized result history of measurements taken in Normal Mode, Mouth Alcohol Detection Mode and EoB Mode tests.

▲ : The most recent test result

◆ : The test result with a valid breath sample

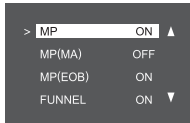
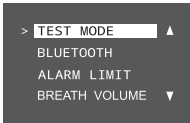
X : The test result with an invalid breath sample

① : Current page number

② : Total number of the pages

- To view the previous page, briefly press the Power Button.
- To view the next page, briefly press the Menu Button.
- To return to the menu list, press and hold the Menu Button for 2 seconds.

## 7.4 TEST MODE



Customize your device by selecting which modes to activate.

Each test mode can be activated or deactivated by pressing and holding the Power Button for 2 seconds. The device will start in your last used test mode upon next activations.

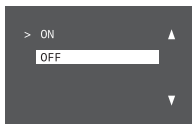
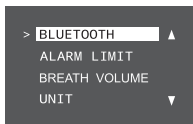
Mouthpiece Modes (MP - Normal Mode, Mouth Alcohol Detection Mode and EoB Mode) output precise alcohol concentration values with a mouthpiece attached, while Funnel Mode provides non-contact measurement with results displayed as PASS or FAIL. Normal Mode, EoB Mode and Funnel Mode support Manual Sampling by pressing the Menu button (for Manual Sampling, please refer to “Step 3. Ready to Blow”). You can change the test mode by pressing the Power Button on the “READY TO BLOW” screen.

- Available Modes: MP, MP(MA), MP(EOB), FUNNEL
- Default setting is all modes ON
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

### Notes

- Mouth Alcohol Detection Mode is recommended to be used in the temperature of 15°C or above.
- If residual alcohol is detected inside the breathalyzer, inaccurate results could be displayed in Funnel Mode. For optimal results, use Funnel Mode after getting a zero BAC reading in the other modes - this will ensure accurate measurements when returning to Funnel Mode.

## 7.5 BLUETOOTH (AF-50AD only)



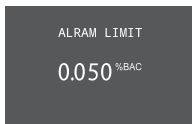
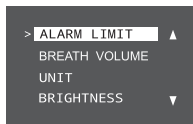
Switch on/off Bluetooth. AF-50AD supports Bluetooth 5.0 and communicates with smartphone application and dedicated printer. You can test through "ALCOFIND (UNIVERSAL)" app which can be downloaded free from App store (iOS) or Google Play Store (Android). The AF-50AD is not compatible with any tablet devices. The minimum requirements of smartphone are as follows:

- iOS 9.0 or above
- Android 7.0 (Nougat) or above

The settable options include:

- ON and OFF
- Default setting is OFF
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

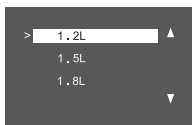
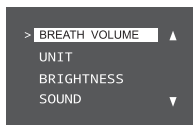
## 7.6 ALARM LIMIT



Set the alarm limit for BAC. Available settings are as follows:

- OFF or 0.020 to 0.100 %BAC (in 0.01%BAC increments (0.20 to 1.00 %) in 0.10% increments)
- In Funnel Mode, 0.02 %BAC will be applied when OFF
- Default setting is 0.05 %BAC
- To increase the alarm limit, briefly press the Power Button.
- To decrease the alarm limit, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

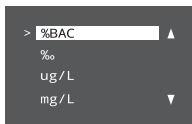
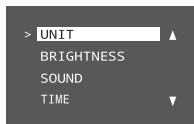
## 7.7 BREATH VOLUME



Adjust the amount of breath sampling for Mouthpiece Modes (Normal Mode, Mouth Alcohol Detection Mode and EoB Mode). The available settings include:

- 1.2L, 1.5L, and 1.8L
- Default setting is 1.2L
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

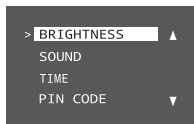
## 7.8 UNIT



Set the measurement unit for BAC. The available settings include:

- %BAC, mg/100mL, ug/L, mg/L, ‰, and g/210L
- Default setting is %BAC
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

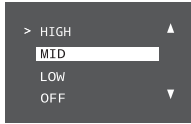
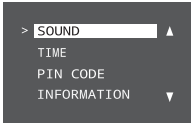
## 7.9 BRIGHTNESS



Adjust the display brightness. The available settings include:

- HIGH, MID, and LOW
- Default setting is MID
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

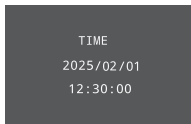
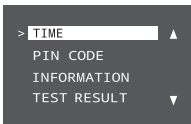
## 7.10 SOUND



Adjust the sound settings. The available settings include:

- HIGH, MID, LOW, and OFF
- Default setting is MID
- To move the cursor up, briefly press the Power Button.
- To move the cursor down, briefly press the Menu Button.
- To save and return to the menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list without saving, press and hold the Menu Button for 2 seconds.

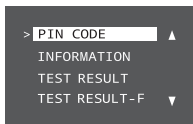
## 7.11 TIME



Adjust the device time.

- Device time is displayed as yyyy/mm/dd.
- To change digits of time and date, press and hold the Power Button for 2 seconds.
- To increase the time and date, briefly press the Power Button.
- To decrease the time and date, briefly press the Menu Button.
- To save and return to the advanced menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the advanced menu list without saving, press and hold the Menu Button for 2 seconds.

## 7.12 PIN CODE

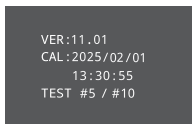
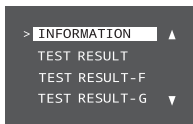


Enter the correct PIN code to access advanced menu options.

Default PIN code is 0000, adjustable from 0000 to 9999 in advanced menu. For more information, please refer to the explanation in "8.3 CHANGE PIN".

- To change digits of PIN code, press the Power Button for 2 seconds.
- To increase the number of PIN code, briefly press the Power Button.
- To decrease the number of PIN code, briefly press the Menu Button.
- To enter advanced menu options, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the menu list, press and hold the Menu Button for 2 seconds.

## 7.13 INFORMATION



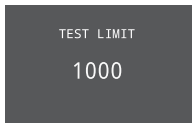
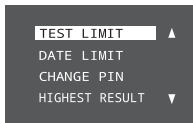
View device information including firmware version, calibration date, and total number of tests performed.

- VER : Current firmware version
- CAL : Latest calibration date (yyyy/mm/dd) and time
- TEST : # Mouthpiece Modes test counts / # Funnel Mode test counts
- To return to the menu list, press and hold the Menu Button for 2 seconds.

## 8. Advanced Menu Options

If you want to enter the advanced menu, enter PIN code in PIN CODE menu. For more information, please refer to the explanation in “7.12 PIN CODE”.

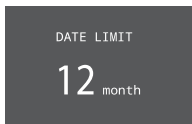
### 8.1 TEST LIMIT



Set the maximum number of tests allowed. The allowable range of settings:

- 50 to 2,000 tests and OFF
- Default setting is 1,000
- To increase the test limit, briefly press the Power Button.
- To decrease the test limit, briefly press the Menu Button.
- To save and return to the advanced menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the advanced menu list without saving, press and hold the Menu Button for 2 seconds.

### 8.2 DATE LIMIT

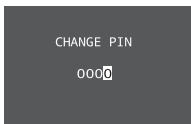
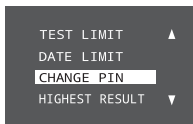


Set the date for the next calibration. The allowable range of settings:

- 1 to 24 months
- Default setting is 12 months
- To increase the date limit, briefly press the Power Button.
- To decrease the date limit, briefly press the Menu Button.
- To save and return to the advanced menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the advanced menu list without saving, press the Menu Button for 2 seconds.



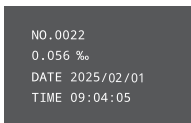
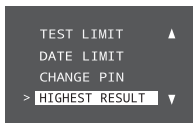
## 8.3 CHANGE PIN



Set the PIN code. The allowable range of settings:

- 0000 to 9999.
- Default setting is 0000
- To change digits of PIN code, press and hold the Power Button for 2 seconds.
- To increase the number of PIN code, briefly press the Power Button.
- To decrease the number of PIN code, briefly press the Menu Button.
- To save and return to the advanced menu list, press and hold the Power and Menu Buttons simultaneously for 2 seconds.
- To return to the advanced menu list without saving, press the Menu Button for 2 seconds.

## 8.4 HIGHEST RESULT



You can check the highest measured value. The highest result is reset after each calibration of the device. The screen displays the results from previous Normal Mode, Mouth Alcohol Detection Mode and EoB Mode tests including measurement result, test date(yyyy/mm/dd) and time.

- To return to the menu list, press and hold the Menu button for 2 seconds.

## 9. Specifications

Measurement range	0.000 to 0.500 %BAC 0.00 to 5.00 ‰ 0.00 to 2.50 mg/L
Accuracy	±0.005 %BAC (at 0.100 %BAC and 25 °C) ±0.05 ‰ (at 1.00 ‰ and 25 °C) ±0.025 mg/L (at 0.50 mg/L and 25 °C)
Warm-up time	Within 5 seconds at 0.050 %BAC * Warm-up time may vary depending on the measurement condition.
Test Time / Test Cycle (Funnel Mode)	Test Time : ~ 3 seconds @0.00%BAC Test Cycle : ~20 tests/min @0.00%BAC
Sensor type	Premium fuel cell
Power supply	Two AA size alkaline batteries
Test mode	Mouthpiece Mode ① Normal Mode ② Mouth Alcohol Detection Mode ③ EoB Mode Funnel Mode
Memory capacity	Mouthpiece Modes : 2,000 test results Funnel Mode : 10,000 test results * Total 12,000 test results in all modes
Measurement units	%BAC, mg/100mL, ug/L, mg/L, ‰, and g/210L
Battery life	Approximately 1,500 tests
Display	OLED (128 x 64 pixel)
Dimension (W x H x D)	60 x 128 x 24 mm
Weight	130g including batteries
Calibration period	Every 12-months or after 1,000 tests
Operating temperature	-5 to 50 °C
Wireless Communication	Bluetooth 5.0 *AF-50AD only

## 10. Contact Information

For any questions, after-sales service, product calibration or to purchase additional mouthpieces, please contact the distributor or seller below at your convenience.

<b>Local distributor</b>	
<b>Manufacturer</b>	<b>DA Tech Co., Ltd</b> 13, Seounsandan-ro 4-gil, Gyeong-gu, Incheon, Korea (21072) Web: www.alcofind.com Tel: +82-32-868-0844 / Fax: +82-32-868-0846

## 11. CE Declaration of Conformity

Category	AF-50	AF-50AD
EMC	EN 55011:2016 +A1:2017 +A2:2021 EN IEC 61326-1:2021 EN IEC 61326-2-2:2021 EN IEC 61326-2-3:2021 EN 61000-4-2:2009 EN 61000-4-3:2006 +A1:2008 +A2:2010 EN 61000-4-8:2010	
LVD	EN 62479: 2010	EN 61010-1:2010/A1
RF	Art 3.1(a) Art 3.1(b) Art 3.2 EN 300 328 V2.1.1 EN 303 413 V1.1.0	Art 3.1(a) Art 3.1(b) Art 3.2 EN 300 328 V2.2.2 (2019-07)
ROHS	EN 62321-1 : 2013 EN 62321-2 : 2014 EN 62321-3-1 : 2014 EN 62321-4 : 2014 EN 62321-5 : 2014 EN 62321-6 : 2015 EN 62321-7- 1 : 2015 EN 62321-7-2 : 2017 EN 62321-8 : 2017	
	Report No.: CTK0010-RS-0019	Report No.: CTK0010-RS-0018
	Report No.: CTK0010-RS-001901	Report No.: CTK0010-RS-001801

