

# **Professional Breathalyzer**

#### AT8100 Professional Breathalyzer





#### FEATURES

- Fuel cell sensor-accuracy and reliance
- Passive and active test
- Adjustable alarming threshold
- · Anti-backflow mouthpiece for health and safety
- Colorful LCD indication and keyboard input
- Real temperature and time indication
- Switchable result units(mg/l, g/l, %BAC, ‰BAC)and temperature scale(°C, °F)

#### APPLICATION

Police station, traffic management, factory, workshop, office, car, hotel, mine, etc.

#### SPECIFICATIONS

- Testing records (maximum 2000) review
- Password management
- Portable thermal printer and data uploading



Sensor Type	Fuel cell	Display	1.44-inch LCD
Detection Dense 0.00	Detection Range      0.00 - 0.40%BAC, 0.00-4.00%BAC        0.00 - 2.00mg/L; 0.00 - 4.00g/L	Power	2* AA batteries
Detection Mange		Working Environment	0°C - 50°C, ≤95% RH, No dews
Accuracy	± 0.005 at 0.05%BAC	Working Time	>2000 blowing times (full charge)
Pre-set Level	0.05%BAC; 0.50‰BAC; 0.25mg/L; 0.50g/L	Dimensions	AT8100: 122mm*67mm*31mm @120g AT8800: 122mm*67mm*31mm @120g
Warm-up Time	<10 seconds	Records	2,000
Testing Time	< 5 Sec	Option	Bluetooth printer

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# AT8801 Breath Alcohol Tester

## **Operation Manual**

**Read Carefully Before Use** 

Version: HW190118188

### Notification

- To ensure the real test result of alcohol concentration of human blood and avoid sensor damaging, please wait 15 minutes to take test after drinking.
- Recommend to calibrate the sensor once the tester indicates CAL "0 Days Left".
- The sensor may be damaged if the cigarettes smoke is blew into the tester directly.
- Avoid to use the tester when environment temperature exceeds its specified range.
- > Avoid any fall or strong shock.

#### Instructions icon

Please know the icons before using this product.

- > 🗥 Warning—May cause danger to user or others.
- Caution—May cause damage to tester.
- > 🔛 Remarks—Notes or instructions for additional information.
- > [] button on the alcohol tester. Such as [U] shows power on/off.
- > <> button on the touch screen. Such as <testing>.

### Terms and Definitions

#### 1、 Breath alcohol analyzers

Under specified temperature, humidity and pressure, instrument which to analyze and measure the ethanol concentration in exhaled deep lung gases.

#### 2 Breath alcohol concentration

The ethanol content in the breath of each liter, for short, BrAC. The measuring unit is: mg/L.

#### 3、 Blood alcohol concentration

The ethanol content in every 100 milliliters of blood, for short, BAC. The measuring unit is mg/100mL.

#### 4、 Gas from deep lung

The gas which breath from deep lung of human.

#### 5、Shift

The degree variation of the measured value of alcohol tester to a given concentration of ethanol gas over a period of time.

### C QUICK GUIDE

#### Switch on/off: long press [ ]

#### Steps of testing alcohol content:

- **1.** Install the mouthpiece (see picture).
- 2. Long press [ ] for power on.
- **3.** Click the <test> icon in the touch screen.
- 4. Preparing of testing, take a deep breath now.
- 5. When screen and voice indicate "Please blow", then please blow into mouthpiece regularly and consecutively. When blowing, a continuous "dip" sound will be issued. Please keep blowing until "dip" sound ended.
- When breathalyzer Analyzing the alcohol content, then do not blow, or else the result will be affected.



- 7. Result be shown and stored automatically. Click <Enter> to next step, or click <Cancel> to step 11, that will skip the step of Driver name, Vehicle No. and Driver license No. input.
- Input the driver name: input it by virtual keyboard and click <Enter> for confirmation.
- Input the vehicle No: input it by virtual keyboard and click <Enter> for confirmation.

- Input the Driver license No. input it by virtual keyboard and click
  Enter>for confirmation.
- Screen display print interface, which show all testing information. Click <Print>, Indicates print or not, if connect with printer, then click <Enter> to print the testing results.

Please read the manual carefully for functions and operation information.

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#### 1. Summary

AT8801 is an advanced portable Breath Alcohol Tester with up-to-date design in the international field at present. The core component adopts Changeable Electrochemical Sensor module and the tester is in more accuracy, high sensitivity, strong anti-jamming ability and easy calibration. Adopting advanced technology, AT8801 could do self-regulation of signal gain, ensure the successful calibration. And users no need to disassemble the product. The design of multicolor LCD, simply keyboard, and touch screen make the tester more concise and suitable for outside use. The build-in Bluetooth module expand the choices of printer types. And compatible with funnel blower, it is convenient for rapid screening and passive testing.

The product is applicable to driving in drunk or alcohol detecting before busywork, so that it can help us avoid the accident, protect human life and property safe. The delicate appearance and comfortable handle are the best choice for alcohol testing.

#### 1.1Main functions and features:

Using fuel cell smart module, high accuracy and reliability

1

- Adopting advanced technology, AT8801 could do self-regulation of signal gain, ensure the successful calibration. Simplified the calibration process.
- 2.8 Inch Touch color display, beautiful and clear.
- Multi modes of testing: active testing, passive testing and rapid screen.
- Simple keyword, touch screen operation.
- Testing records uploading function.
- Built in wireless module to realize wireless printing.
- Providing time and temperature display function.
- Build in large capacity rechargeable lithium battery.
- Auto shut off when undervoltage.
- Having blowing interrupt hint function.
- Switchable measuring unit, adjustable alarming point.
- More than 20000 test records can be stored.
- Password management function, main operations need password verification.
- Short preheating time, fast response and quick recovery.
- Compatible with disposable anti reflux nozzle and funnel type nozzle, healthy and safe for people.

- Large range of temperature design, to meet user's requirement to the greatest extend.
- It has the function of automatic and intelligent management of test information (instrument number, time, tester, test result, etc.).

#### 2. Accessories

- Alcohol tester
- DC5.5V 1.0A power cords
- Date wire
- Mouthpiece
- User manual

Please use accessories and software under Hanwei approved, otherwise the instrument may be damaged or malfunction, the manufacturer will not guarantee it.



Could buy accessories from local distributor or manufacturer.

The accessories should provide good support to the alcohol tester.

Other non-original accessories may not be compatible with the alcohol tester.

#### 3. Structures



1	Air inlet
2	Light
3	Charge lamp
4	Display/touch screen
5	Function key <sup>1</sup>
6	On/off /light key
7	Function key <sup>®</sup>
8	Charging/communication
	jack cover

Note: Function key will carry the

functions which indicated in left/right down side of screen.

#### 4. Power on/off

1. Long press [  $^{\textcircled{0}}$  ] to power on or off the tester

2. Under standby mode, if no operation within 180 seconds

continuously, the tester will give out sound to remind user to turn off.

If you do not want to turn off, please dot the screen or press any

keys, otherwise it will turn off automatically.

3. If the battery was exhausted, the tester will turn off automatically, please recharge in time.

4. Short press [ 🕐 ] under standby mode, it could turn on or off the light of tester, and it is invalid under other operation interface.

#### 5. Touch screen usage

Using finger or other tools to dot the screen to choose the item or use its functions.

Don't use sharp tools to avoid scratching the touch screen No other electronics devices contact with the touch screen, Electrostatic discharge can cause malfunction of touch screen No water, it will cause malfunction of touch screen in humidity environment or in contact with water.

#### 6. Preparation before usage

#### **Recharging batteries**

Using the charger which provided by manufacturer. Other inapposite charger will cause explosion or damage tester

#### Low battery indication

When the tester is with low battery, it will:

- Send out alarming;
- Show short of battery;
- Empty battery icon twinkle.

If the battery was too low, the tester will turn off automatically, please recharge it in time.

#### Recharge the tester by adaptor

Use DC 5.5V adaptor and date line to recharge alcohol tester.

- 1. Open the charging/communication jack cover at the side.
- 2. Insert the small terminal of adaptor into recharging jack.
- Insert the big terminal pin of adaptor into power socket, then the red indication light of tester will be lighted.
- 4. If the red light of screen off, and green light is on, it means the finish of recharging. Please pull out the adaptor.

#### Mouthpiece installation

This tester is equipped with disposable anti-return mouthpiece which meet hygienic conditions. Before each active blow test, the disposable anti-return mouthpiece should be replaced. For rapid screening and passive test, funnel type mouthpiece is available.



#### **Printer Connecting**

Modular thermal printers or independent Bluetooth dot-matrix printers optional.

#### Technical data of Bluetooth Thermal Printer:

Paper type: thermal printing paper;

Paper width: 57mm;

Paper roll diameter: ≤25mm.

#### Technical data of Bluetooth Pin Printer:

Paper type: Pin type printing paper; Paper width: 57mm; Paper roll diameter: ≤40mm.

The effective communication distance between tester and Bluetooth printer is less than 5 m. Please ensure the usage within the effective distance. The first connection to the printer may take a long time to search for communication, please wait patiently.

#### **User Setup**

Before carrying out test, please read "Part 8 Menu operation" carefully and set Measure unit, alarming point, Police ID input and Time and date etc.

#### 7. Alcohol Content Testing

#### Active Testing

#### Breath continuity and minimum expiratory volume

Alcohol tester starts to collect a breath sample when the breath sample greater than 1L. The sample collection will last for more than 3s. The "blowing interrupt" will be displayed when blowing is interrupted.

#### Waiting time for blowing

When the screen displays "Please blow", please use the mouthpiece to blow continuously & evenly; if no blowing after 30s, result is displayed and automatically saved, with buzzer beeping at

the same time. If tested persons are unable to blow, click <Cancel> to active print interface with result saved; Click <Enter> to active driver name input interface with result saved.

Active Testing Steps

- 1. Insert disposable anti-return mouthpiece.
- 2. Press [ 🙂 ] to power on.
- 3. Click [Test].
- 4. The test person shall take a deep breath during warming up.
- When screen showing "Please blow", the test person must blow into the device continuously and evenly until the buzzer "drops" stop.
- 6. No blow allowed during analyzing, otherwise, it will distort the results.
- The screen shows the testing result and be saved automatically. Click<Enter> to next step; click <Cancel> to step of print directly, skipping the Driver's name, Vehicle No. and Driver License No. input interface.
- Input the driver's name: From the virtual keyboard to find the characters which you need, click on them to the input, click< NEXT >to find other characters in next page, click <</li>
   > to delete the characters. When finish the input, click <Enter> to move next step; or click <Cancel> to return standby interface.
- 9. Input of vehicle No: From the virtual keyboard to find the characters, and click <Enter>.
- 10. Input of driver license No.: From the virtual keyboard to find the characters, and click <Enter>.
- 11. The screen displays <Print?>, if the tester connected with printer, please click <Print>, the result will be printed.

#### Passive Testing

When the tested person can't take the initiative to detect the normal breath alcohol content, the alcohol detector can collect the breath of the tested person through passive test to complete the test, and give the qualitative judgment results. Install funnel mouthpiece. When the screen prompts "Please blow", point the mouthpiece at the mouth or nostril of the subject. Click the < Passive > button at the bottom right of the screen. After active sampling and analysis, the screen displays the passive test results.

#### **Passive Testing Steps**

1. Insert disposable funnel type mouthpiece.

- 2. Press [ 🕁 ] to power on.
- 3. Click <Test> to next step.

4. Click <Passive>, then the product would take some air sample from person being tested and active analyzed with result saved.

5. The screen shows the testing result and be saved automatically. Click<Enter> to next step; click <Cancel> to step of print directly, skipping the Driver's name, Vehicle No. and Driver License No. input interface.

6. Input the driver's name: From the virtual keyboard to find the characters which you need, click on them to the input, click<br/>NEXT>to find other characters in next page, click <  $\boxtimes$  > to delete the characters. When finish the input, click <Enter> to move next step; or click <Cancel> to return standby interface.

7. Input of vehicle No: From the virtual keyboard to find the characters, and click <Enter>.

8. Input of driver license No.: From the virtual keyboard to find the characters, and click <Enter>.

9. The screen displays <Print?>, if the tester connected with printer, please click <Print>, the result will be printed.

#### Rapid screening

In the standby interface, click <Screening> at the left of the screen to enter the Quick Check Test Interface. Install funnel mouthpiece or without mouthpiece, when the screen prompts < Please blow >, aim the nozzle or air inlet hole at the tested person, start blowing within 3 cm of the distance between the nozzle and the tested person. The blowing time is about 0.5 seconds. Stop blowing after hearing a "snap" sound of electromagnetic absorption. The instrument analyses and displays the test results. Click<Cancel> to standby interface; click <Enter> to step of print directly.

#### 8. Menu Operation



#### Menu Icon

In the standby interface shown on the left, click on the menu icon on the display screen to enter the corresponding menu items. Some menu requires password validation. The initial password is: 000000.

#### Function Icon -Display left/right function icon



### **Delete Records**

This operation will clear all test records.

The tester could save up to 20000 records and upload records to Computer for Back-up management. Make sure you want to clear all test records before executing this operation.

Empty records

- 1. Click i under standby interface.
- 2. Input password, click <Enter>.
- Click <Delete> to clear all test records; Click <Cancel> to give up erase operation.



#### **Unit Setup**

Setup the measuring unit of testing result.

Setup method:

- 1. Click 💽 under standby interface.
- 2. Dot the touch screen to choose units.
- 3. Click <Enter> to store the setup; or click <Cancel> to drop the

operation.

Five optional measuring units:

- a、(BrAC)mg/L
- b、(BAC)mg/100mL

c、g/L

d、‰BAC

e、%BAC

After the unit is changed, the critical value in the alarm setting is automatically updated according to the conversion relationship between the old and the new units



mg/L and mg/100mL are Chinese standard "GB/T 21254-2017" requested measurement results, Conversion relation: BAC=BrAC×2200.



#### **Password Changing**

In order to ensure information security and prevent misoperation by

others, please change the password in time after purchasing this machine.

Change the password and remember the new password you set. If

you forget your password, please contact the dealer or system .

Password changing:

- 1. Click 📡 under standby interface.
- 2. Input original password, click <Enter>.
- 3. From virtual keyboard to input the new password, click ⊠ icon to delete characters.
- 4. Click <Enter> to save new password, new password is taking effect; click <Cancel> to drop this operation.

## Police No. Setup

Input of Police No. .

Method:

1. Click 💼 under standby interface.

- 2. From virtual keyboard to input the police No., Click 🖾 icon to delete characters.
- Click <Enter> to store the setup, click <Cancel> to drop this operation.



This operation sets the alarm threshold value, when the test results are less than the set alarm threshold value, only the value of the test results is displayed; when the test results are greater than or equal to the set alarm threshold value, in addition to displaying the test results, the instrument will issue buzzer alarm sound prompt and accompanied by vibration warning.

Method:

- 1. Click 🦊 under standby interface.
- 2. Click ⊠ to delete the previous alarming points, and then input the new alarming point value.
- Click <Enter> to store the setup, click <Cancel> to drop this operation.



Set up print copies for testing result or records.

Method:

- 1. Click A under standby interface.
- 2. Input the print copies though the virtual Keyboard, from 1 to 3 copies. The default number of printed copies of the instrument is 2 copies.

3. Click <Store> to store the setup, click <Cancel> to drop this operation.



### Records

- Click *main click* under standby interface to check historical records.
- Click <Last>, <Next>, <Go to> to review certain record under records display interface.
- 3. Click <Print> to print records under records display interface.
- 4. Click <Cancel> to exit.



1.

### **Next Calibration**

After a certain period of using, it needs to recalibrate the tester to avoid inaccuracy. You can check the left days for next calibration.

Method:

- 1. Click and under standby interface to check the calibration remaining days.
- 2. Click <Enter> to calibrate it or <Cancel> to exit.

When display shows "Next calibration" (i.e. 0 days left for next calibration). Please contact with manufacturer or distributor for calibration.



### Time and Date Setup

Setup the time included "year, month, day, hour and minute".

Method:

1



Click 12 under standby interface.

2. Input the time through the virtual keyboard. Set in sequence "year, month, day, hour and minutes, the current revision bits

3. with blue color. If wrong input, please click  $\overleftarrow{\times}$  to delete then input again.

#### 9. Data Uploading

The back-up management on computer requires cooperation of software. Uploading steps:

- 1. Open the cover of charging or communication socket on the right-side, then, connect computer and apparatus by data communication line. Run software.
- 2. Power on breathalyzer and operate software under standby interface. Please note: No operation during data uploading, otherwise it will cause fault.
- 3. Confirm data transmission and power off.

Trouble	Possible cause	Solution
Unable to	Low voltage	Charge timely
power on	Circuit fault	Contact Manufacturer/Distributor
Inaccuracy	Expired sensor	Contact manufacturer /Distributor
		to change sensor
	Beyond normal	Do test in allowed working
	working Tem.	condition
	Long-term	Calibrate sensor timely
	non-calibration	
Can't	Communication	Place the printer within 5m
connect	between printers	distance from the instrument and
with printer	and instruments	reconnect. If the failure still
	was unsuccessful	exists, contact the distributor or
		manufacturer for maintenance

#### **10. Troubleshooting Guides**

#### 11. Main Technique Parameter

Model	AT8801
Sensor Type	Fuel-Cell (Electrochemical) Sensor
Detecting Scope	0~2.000mg/L
Warm-up Time	< 20s
Alarming Point Value	0.250 mg/L
Accuracy	±0.02mg/l (0-0.400mg/l)
	± 8% (0.400-1.000mg/l)
	±20% (1.000-2.000mg/l)
Battery	3.7V Lithium Battery
	Rated capacity 2200mAH
Charging Time	4 hours
Continuous Operating	>12 hour normally
Dimension	158mm×73mm×33mm
Weight	About 225g

#### Professional Police Breathalyzer Manufacturer

- High-tech enterprise with R&D, production, sales capacities and own national brand.
- Import and Export rights, passed ISO9001:2000 quality management system certification.
- Our products cover Professional police application, commercial application and gift application.



# **Professional Breathalyzer**



#### AT8900 Professional Breathalyzer

#### FEATURES

- Fuel cell sensor-accuracy and reliance
- Pre-calibrated sensor module-easy for maintenance
- · Passive and active test
- · Adjustable alarming threshold
- Anti-backflow mouthpiece for health and safety
- Colorful OLED indication and touch screen keyboard input
- 7.4V/2500 mAh Lithium battery

#### APPLICATION:

Police station, traffic management, factory, workshop, office, car, hotel, mine, etc.

#### MENU OPERATION

In the standby interface shown as below, click the menu icon on the screen to enter the corresponding menu item.Partial menu operation requires password authentication.



Battery Power

Menu Icons

#### RECORD UPLOAD The back-up management on

The back-up management on computer requires cooperation of software.

Real temperature and time indication

Switchable result units(mg/l, g/l, %BAC,

Testing records (maximum 20000) review

%BAC)and temperature scale(°C, °F)

Built-in printer and data uploading

Password management



Function keys instructions area Show the current function assigned to left/right function keys

#### SPECIFICATIONS

Sensor Type	Fuel cell	Display	2.8-inch touch screen
Detection Denne	Detection Range      0.00 - 0.40%BAC, 0.00-4.00%BAC        0.00 - 2.00mg/L; 0.00 - 4.00g/L	Power	7.4V/2500mAh Lithium batteries
Detection Mange		Working Environment	0°C - 50°C, ≤95% RH, No dews
Accuracy	± 0.005 at 0.05%BAC	Working Time	>20 hours non-stop (full charge)
Dro pot Loval	Pre-set Level      0.05%BAC; 0.50‰BAC; 0.25mg/L; 0.50g/L	Charging Time	Four hours
TTE-Set Level		Dimensions	185mm*76mm*38mm @350g
Warm-up Time	<10 seconds	Records	20,000
Testing Time	< 5 Sec	Option	Built-in bluetooth thermal printer

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# AT9000 Breath Alcohol Tester

### **Operation Manual**



#### **Read Carefully Before Use**

#### **Summary**

AT9000 is a portable professional law enforcement breathalyzer with fuel cell technology, which features superb accuracy, sensitivity and repeatability, Android based operation system, 4 inch OLED touchable screen, pre-calibrated fuel cell sensor module that is easy for maintenance, both passive and active test, adjustable alarming threshold, real temperature and time indication, switchable units conversion among mg/l, mg/100ml, %BAC, % BAC, g/l, testing records review,

password management, built-in thermal printer, data uploading to computer, 8 Mega pixel rear camera and 5 Mega pixel side camera, GPS locating geographic longitude and latitude.

### **Main Functions and Features**

- 4-core processor and Android 6.0 operating system, has advantages of fast running speed, processing and network communication ability.
- Superb accuracy and sensitive fuel cell sensor, has professional grade reliability and accurate consistency.
- Full color 4 inch touch display, human-computer interaction is more concise and convenient.
- Simplified keyboard with touch screen operation, which is simple and convenient for information input.
- Supporting high-definition photography and recording function during blowing process.
- Testing records can be stored automatically and maximum records capacity can be 20,000.
- Both Built-in printer and standalone external Bluetooth printer can be adapted and switched.

- Testing records can be uploaded to computer through USB interface in PC software.
- TF card storage expansion function is optional, making sure mass storage.
- Password safety management function; user needs to sign in to make test, and easy to search the testing records.
- Disposable anti-return, anti-blocking and anti-blowout design of mouthpiece.
- > It has under-voltage alarm and low power standby mode.
- > 7.4V, 2500mAh rechargeable lithium battery
- It has many positioning functions such as satellite, A-GPS and SBAS, and has the function of 4G/3G/2G data transmission. It can realize the remote monitoring and viewing with background server.
- Measurement mode: clearly indicated mode in which the breath alcohol analyzer can make measurements at the rate normally expected in service.
- Maintenance mode: mode in which the breath alcohol analyzer can be adjusted and is subject to metro-logical control
- Stand by mode: mode of the breath alcohol analyzer whereby only certain circuits are energized in order to

conserve power and/or prolong component life, and to attain the measuring mode more rapidly than would be possible if starting from the un-powered state.

#### **Main Technical Parameters**

Model	AT9000
Sensor Type	Advanced Fuel Cell Sensor
Detecting Scope	0-2.5mg/l; 0-0.5%BAC; 0-5‰BAC; 0-5g/l; 0-500mg/100ml
Warm-up Time	<20s
Alarming Point Value	0.05%BAC(could be customized)
Accuracy	±0.005%BAC (0-0.1%BAC)
	± 5% (0.1-0.2%BAC)
	±20% (0.2%BAC-0.5%BAC)
Battery	7.4V Lithium Battery

	Rated Capacity 2500mAh
Charging Time	4 hours
Continuous Operating	>10 hours
Working Temperature	-1050°C
Dimension	206mm×78mm×36mm
Weight	About 380g

### **Open Box**

- DC9.2V 1.2A main charger
- DC9.2V 1.2A car charger
- USB line for data upload
- Mouthpiece
- Paper roll for print
- Hand Strap
- Operation manual

### **Structures**



### **Power on and Account Registration**

Press power key as illustrated above to start device, you will see warming up animation, until it stops at account registration interface below in left. The deivce needs to register an account when it's used at the first time. Click <Please log in> to enter the registration, which requires to fill Police No. which can be regarded as account number, and password, etc. After registration, back to the interface and sign in with registered Police No., and password.

After sign in, it goes to menu which includes two main topics, Alcohol Measurement, and Account.



### **Menu--Alcohol Measurement**

Measurement Mode: It can take breath alcohol test both active

and passive mode, which you can see the details below. Other options included like records review that you can refer to previous testing historical data, calibration remind is to inform you when it's next re-calibration due, printer setup that you can have selection of print copies, map locating position, and flashlight to be used as a torch.

### **Active Test**

- **1.** Install a mouthpiece.
- 2. Long press the right side button [U] to power on and go through preheat process.
- **3.** After preheat ends, click 'Alcohol Measurement' and press 'Test'
- 4. The subject shall take a deep breath and then blow into the mouthpiece via air intake hole continuously for 4 seconds until the device gives out one beep sound that is the sign to stop blowing, and the breath sample has been collected for analyzing, result will be coming out shortly.
- **5.** Click 'Next' to an interface that needs fill information like License No, etc.
- **6.** Once all information is filled. It's optional to take on-site photo. Then, click 'Confirm' entering result summary page, print it if necessary.

#### **Passive Test**

When subject is not able to take the initiative to conduct normal breath alcohol detection, the device allows to collect the breath of the subject through passively to complete the test, and give the qualitative judgment results.

**Passive 1**: If the subject can only blow very short with insufficient blowing pressure and volume, they can be tested under passive 1. When the screen prompts "Please blow", click <Passive 1> and let the subject blow. The device will collect the limited sample and analyze resut.

**Passive 2.**: If the subject is too drunk to be able to complete test, it has only be adopting passive 2 approaching device to subject's mouthpiece, and press <Passive 2>, the device will collect the ambient sample and analyze result.

**Maintenance Mode:** It's mainly for metro-logical control and adjustment, which includes device calibration, records clearance, camera setup, calibration point customization, K constant value adjustment, alarm threshold set, and unit

selection.

System Setup: It allows general setup, like WiFi, SIM card, Bluetooth, etc.

**Standby Mode:** It enables device powering on, but working in low battery consumption mode of the breath alcohol analyzer whereby only certain circuits are energized in order to conserve power and/or prolong component life, and to attain the measuring mode more rapidly than would be possible if starting from power off state.

Attendance: This function requires the device to be networked, and bound to the network management platform. Go into the menu, it will automatically locate position, then you can take a photo to prove it if necessary, also you can leave some notes. Then, you can click bottom right 'CLOCK' to upload all previous information to management platform to realize the function of law enforcement and attendance at the scene.

Hardware Check: It checks if camera, sensor, printer are working normally.

### Menu--Account

User info.: It can edit user's profile.

Change Password: It allows to set new password.

About Software: It indicates current software version.

**Software Upgrade:** It enables software update remotely if there's new version released and network connected.

Logout: Exit from current login.

### **Data Upload**

- 1. Install computer software and driver.
- 2. Open the cover of charging socket on the right-side, and connect device and computer via USB cable.
- 3. Make sure the device is powering on.

- 4. Run the software on computer.
- 5. Input password 888888, choose correspondent com port and protocol AT9000, press start uploading.
- 6. Extract file if necessary.

Please note: No any operation is allowed during data uploading, otherwise it will cause fault.

### **Cautions**

- To have accurate indication of blood alcohol concentration, please test at least 15 minutes later after drinking.
- To keep accuracy of alcohol tester, it's highly recommended to be recalibrated in every 6 months. Please calibrate the sensor once the tester indicates CAL "0 Days Left".
- Do not put smoke into the tube, which can damage the sensor.
- > Do not clean surface by Ethanol. Please use soft wet cloth

and neutral detergent.

- Do not use inappropriate charger, otherwise it may cause AT9000 damaged or malfunction.
- > Do not use it beyond  $-10^{\circ}C-50^{\circ}C$ .
- Avoid any fall or strong shock.