
Coin-operated Breath Alcohol Tester

(Model: AT309)

Operation Manual

PANDA VENDING LIMITED

Table of Contents

1. DESCRIPTION.....	1
2. MAIN TECHNIC DATA	1
3. INSTALLATION MANUAL.....	1
4. SET UP THE TEST UNIT.....	2
5. SET UP THE COIN QUANTITY	2
6 . HOW TO INSTALL THE MODEL COIN	3
7. TEST PROCEDURE.....	4
8. NOTIFICATION.....	4
9. FAULTS AND SOLUTIONS.....	4

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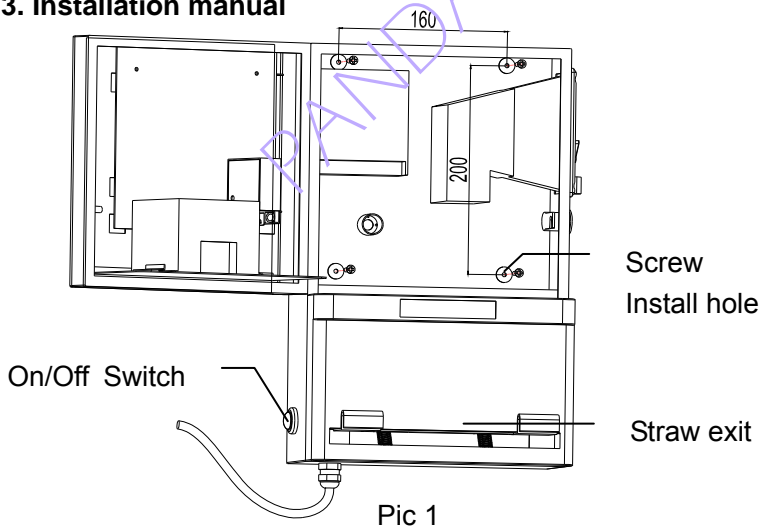
1. Description

AT309, coin-operated Breath Alcohol Tester, is designed to measure alcohol concentration in the human body. With advanced fuel cell alcohol sensor, this device has excellent sensitivity and reproducibility. Reasonable and easy testing process, complete function make it versatile in many occasions. When the alcohol content exceeds the preset alarming level, it will send out an alarm warning and show the result directly and clearly on the digital LCD display.

2. Main Technic Data

Model	AT309
Sensor type	Fuel cell sensor
Working Voltage	AC110V~AC220V, 50/60HZ
Working Current	≤15mA
Environment	Temperature: -10℃~50℃; Relative humidity: ≤95% No Dews
Response Time	< 8s
Test Range	0.000~2.000mg/L (0~440mg/100mL, 0.000~4.000g/L, 0.000~0.400%BAC, 0.000~2.000‰BAC)
Warning level	Warning level: 0.090mg/L; Danger level: 0.250mg/L
Accuracy	±10%
Warning method	Audio and light
Display	Four digits LCD display; Test process and result are showed by the red, green, and yellow indicator light
Dimension	l×b×h, mm: 250×105×400
Indication manner	mg/l, mg/100ml, g/l, %BAC, ‰BAC optional
Coin for single time	0 — 15 (For 0, the tester can be tested without coin)
Coin diameter	20mm – 28mm
Coin Thickness	1.2mm – 2.5mm
Coin capacity	200pcs
Straw capacity	200pcs (φ≤7mm)

3. Installation manual



Find a suitable place to install firstly, then, use the bolt along with the alcohol tester to fix the device on the wall according to the size in Pic 1.

4. Set up the test unit

●Note: Please cut off the power supply before operation

There are mg/l, mg/100ml, g/l, %BAC and ‰BAC optional; user can set the unit through Dial switch S2 which is inside of the device.

Make sure the set units is same with the units shown on its front panel.

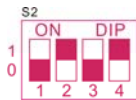
The test unit is set by the first to the third switch. It means 1 when the switch is on the top, 0 at the bottom. (Note: It is of no effect for the 4th switch)

For example, in Pic2, both the first and third switch are at the bottom (they mean 0 separately); the second switch is on the top (it means 1). So, according to the Table 1, current unit is g/l.

A	B	C	D	Unit
0	0	0	×	mg/L
0	0	1	×	mg/100mL
0	1	0	×	g/L
0	1	1	×	%BAC
1	0	0	×	‰BAC

“mg/l” is the default before the device leaves factory

Table 1



Pic2

5. Set up the coin quantity

●Note: Please cut off the power supply before operation

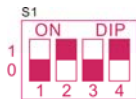
The coin quantity is set by Dial switch S1 inside of the device. It means 1 when the switch is on the top, 0 at the bottom.

Setting

range: 0-15pcs.

For example, in Pic3, both the first and third switch are at the bottom (they mean 0 separately); the second and fourth switch are on the top (they mean 1 separately). So, according to the Table 2, you will need 5pcs coin to go ahead to test alcohol concentration.

1pc coin is the default before the device leave factory.



Pic 3

Table 2

A	B	C	D	CoinQty
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	0	0	0	8
1	0	0	1	9
1	0	1	0	10
1	0	1	1	11
1	1	0	0	12
1	1	0	1	13
1	1	1	0	14
1	1	1	1	15

6 . How to install the model coin

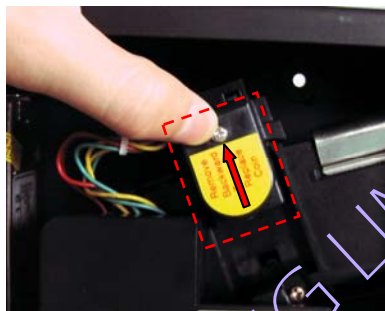
Below pictures are explaining how to install the model coin.

1, Open the front door, the coin machine is on the right side, as below picture shown.



Pic 4

2, Push backward of the parts(which show in the broken line) following the arrowhead direction.



Pic 5

3, Insert the coin into its coin slot.



Pic 6

4, The model coin installed machine is as below.



Pic 7

7. Test procedure

- 7.1. Fix the device well, connect the power cord, then press the switch button on the side.
- 7.2. Press On/Off switch at the side of tester, after the tester turns on normally, it begins to initialize firstly, when "Wait" indicator light twinkles, it begins to warm up but can't take test at this time. About 6 seconds later, the initialization finishes and test can begin, meantime, < Insert straw > indicator light illuminates, <Insert coin> light twinkles and prompt to throw coin and start to test.
- 7.3. Insert coin: The coin could be inserted when <INSERT COIN> LED flash, the coin quantity and value is up to the initial enactment. For more coins insert, the tester will send out "di" for each coin and show the necessary remanent quantity. When the coin reaches up to the quantity of initial setting, <Insert coin> light off, <Blow> twinkles and test can be started.
- 7.4. Take the straw from straw box, insert the straw, please have a deep breath, then blow to tester continuously and equally, don't stop until the prompt tone sounds. If the user stops blowing during the test, the device will send out "di---di" and remind "breath interrupt" . The user should blow again till the blowing finishes after the "di---di" stopped.
- 7.5. The result on the LCD screen shows the alcohol concentration in the user's body when the test finishes.
- ◆ If the result is lower than warning level, the soft "di-di di" sounds and "OK" indicator light twinkles.
 - ◆ If the result is equal or over than warning level, the "di-di di" sounds and "Warning" indicator lights twinkles.
 - ◆ If the result reaches danger level, the hurried "di-di di" sounds and "Danger" indicator light twinkles.
- 7.6. The result will be displayed on the screen for several seconds, then the LCD turns to normal wait state again, the user can take test for the next time.

8. Notification

- 8.1. Avoid any fall or strong shock.
- 8.2. If noise gas with high concentration existed, may the tester won't work normally.
- 8.3. To ensure the real test result of alcohol concentration, please wait 15 minutes to take test after drinking.
- 8.4. The result may be unreliable for your first test if long time storage, please try again for several times.
- 8.5. Do not keep the tester in the environment of Corrosive gas (Chlorine etc) for use or deposit.
- 8.6. The life of sensor is over 2 years under standard use in the normal environment.

9. Faults and Solutions

Fault	Possible reason	Solution
No display on LCD	Unstable power cord connecting	Plug in again
	Circuit fault	Contact distributor
No response to detection gas	Warm-up hasn't finished	Wait until Warm-up finish
	Circuit fault	Contact distributor