# **User Manual**

Breathalyzer EK921



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## Statement

The testing result from this product is only for reference, so the manufacturer and seller are not responsible for any behaviors that break the law.

## Important!









WAIT 20 MINUTES

EATING

NO DRINKING

NO SMOKING

Please start to test at least 20 minutes later after you drink, eat or smoke. Otherwise the testing result will not be accurate and damage the sensor.

### Note

This product has been presetted, so it can be used directly. If you want to change the testing unit or the alarm triggering value, you can refer to this user manual.

Default Setting Unit: %BAC (Ameican Unit) Warning Value (A value to trigger warning alarm): 0.02%BAC

Danger Value (A value to trigger danger alarm): 0.05%BAC

# Packing list

A: Breathalyzer x1
C: USB cable x1

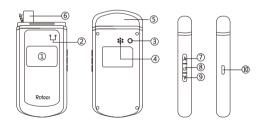
E: Storage bag x1

B: Mouthpieces x10

D: User manual x1



## **Product Structure**



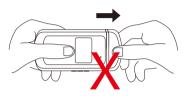
- ① LCD screen
- ③ Vent hole
- (5) Cap
- ⑦ ▲ button

- ② Charging indicator
- ④ Buzzer
- ⑥ Mouthpiece in
- Power button
- ① Charging port

# **How to Remove the Cap of the Product?**

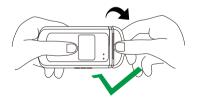
# Wrong method

Pull it directly along the direction of the product.



### **Correct method**

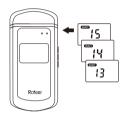
- 1. Hold the middle part of the product with your left hand and then hold its cap with right hand.
- 2. Break off the cap with your right hand, the same way as you break off a chocolate.



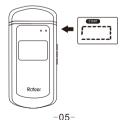
## **Operation**

## **Testing**

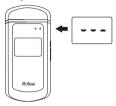
- Press power button for 1 second, the product will turn on after a "di" sound and enter the detection mode automatically.
- At this time, "wait" will show up on the screen with 15 seconds countdown because the product needs 15 seconds to preheat.



 After preheating, the user needs to keep blowing for 5 seconds within 10 seconds after the screen shows "START".



4. Wait for the product to analyse the detection result after blowing. The testing result will be on the LCD screen for 15 seconds. After 15 seconds, if there is no operation, it will turn off automatically.



#### Result A

If the testing value is lower than warning value, there is no sound to indicate safety.

### Result B

If the testing value is between the warning value and the danger value, the alarm will make sound as "di di".

### Result C

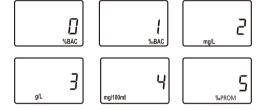
If the testing value is higher than danger value, the alarm will keep making sound as "di di di..." for about 15 seconds.

### NOTE

In order to get the most accurate testing results, it's suggested to test 3 times and take the average value from 3 tests as a reference. Please note that the interval time of each test should be kept for 2~3 min, because the machine needs some time to volatilize the residual gas inside it, otherwise it will cause inaccurate testing readings.

## **Testing Unit Setting**

- Press power button for 1 second to turn on and the product enters the detection mode automatically.
   The upper left of screen will show "WAIT" and will count down 15 seconds. During the 15 sec countdown, click ▲ button to enter the testing unit setting mode, then click ▲ button or ▼ button to change the unit
   (% BAC, ‰ BAC, mg / L, g / L, mg / 100ml, ‰ PROM).
- 2. After selecting the unit, click power button to complete the setting and exit the mode.



# Alarm Triggering Value (Warning/Danger Value) Setting

Users can customize the warning and danger value according to local standards of drunk driving.

 Press power button for 1 second to turn on and enter the detection mode automatically. The upper left of screen will show "WAIT" and will count down 15 seconds. 2. During the 15s countdown, click ▼ button to enter the alarm trigger value setting mode (Default to enter into warning value setting first).

In this mode, click ▲ button to increase the value and click ▼ button to decrease the value, click power button to

▼ button to decrease the value, click power button to change the warning value and danger value.

Keep pressing power button to complete the setting and exit the mode, it will return to the detection mode automatically.





# **Default Value of Triggering Alarm**

	BAC(Blood Alcohol Concentration)					BrAC(Brea th Alcohol Concentra tion)
	%BAC	‰BAC	‰PROM	g/L	mg/100ml	mg/L
safe	0~0.02	0~0.2	0~0.2	0~0.2	0~20	0~0.1
warning	0.02~0.05	0.2~0.5	0.2~0.5	0.2~0.5	20~50	0.1~0.25
dangerous	0.05≤	0.5≤	0.5≤	0.5≤	50≤	0.25≤

### **Retest Mode**

- 1. Click power button to re-enter the detection mode after displaying the test results.
- 2. For more accurate testing readings, it's suggested to keep the interval time of each test for 2~3 min.

## **Memory Mode**

- After turning on, the screen will show "WAIT" and will count down 15 seconds. During the 15 sec countdown, it will shift to the memory mode after clicking power button and then you can check the previous 64 detecting records.
- Click ▲ button to check previous detection records backward, click ▼ button to check previous detection records forward.
- 3. Click power button to exit from the memory mode.

### **About Power Off**

- 1. If there is no next operation 15 sec after the testing result shows on screen, the product will turn off automatically.
- 2. Keep pressing power button to power off.

## **Low Battery Indication**

- As shown in the figure, when the upper right corner of the screen displays "Lo" and flashes, which means the battery is low and needs to be charged.
- The charging indicator on the right displays red while charging, and the charging indicator on the left displays green while fully charged.

NOTE: The product will be turned off directly when charging in the power-on state.



## Specifications

## **Basic Specification**

Battery	3.7V 1000mAh Li-ion
Blowing Time	5s
Display	LCD display with backlight
Input	DC 5V, < 780mA
Charging Time	2 hours
Working Current	<30mA
Quiescent Current	50uA
Operating Temperature	32°F-104°F (0°C-40°C)
Size	About 120mm*55mm*18mm
Weight	About 80g
Default Warning Value	0.02% BAC (adjustable)

## **Testing Range & Deviation**

Testing Range	Deviation		
0~0.199 %BAC	±0.01 %BAC		
0~1.990 ‰BAC	±0.1 % BAC		
0~1.990 g/L	±0.01 g/L		
0~0.995 mg/L	±0.05 mg/L		
0~199 mg/100mL	±10 mg/100mL		
0~1.990‰ Prom	±0.1‰ Prom		

## **Testing Unit Meaning**

BAC: Blood Alcohol Concentration (The percent of alcohol in a person's blood stream)

% BAC --- How many grams of alcohol are present in 100ml of blood

%BAC --- How many grams of alcohol are present in 1000ml of blood

g/L --- How many grams of alcohol are present in one litre of blood

mg/100ml --- How many milligrams of alcohol are present in 100ml of blood

BrAC: Breathe Alcohol Concentration (The percent of alcohol in a person's breath)

mg/l --- How many milligrams of alcohol are present in one litre of blood

## **Comparison Chart of Alcohol Concentration**

%BAC-----USA

g/L-----European

mg/LBrAC-----Japan

mg/100ml-----China

% BAC-----Russina

%-PROM-----Poland

Check this chart according to your testing results, so as to get the concentration units that conform to local standards.

BAC (Blood Alcohol Concentration)			BrAC (Breath Alcohol Concentration)			
%BAC	‰PROM	‰BAC	g/L	mg/100 ml	mg/L	ppm
0.01	0.1	0.1	0.1	10	0.05	25
0.02	0.2	0.2	0.2	20	0.10	50
0.03	0.3	0.3	0.3	30	0.15	75
0.04	0.4	0.4	0.4	40	0.20	100
0.05	0.5	0.5	0.5	50	0.25	125
0.06	0.6	0.6	0.6	60	0.30	150
0.07	0.7	0.7	0.7	70	0.35	175
0.08	0.8	0.8	0.8	80	0.40	200
0.09	0.9	0.9	0.9	90	0.45	225
0.10	1.0	1.0	1.0	100	0.50	250
0.11	1.1	1.1	1.1	110	0.55	275
0.12	1.2	1.2	1.2	120	0.60	300
0.13	1.3	1.3	1.3	130	0.65	325
0.14	1.4	1.4	1.4	140	0.70	350
0.15	1.5	1.5	1.5	150	0.75	375
0.16	1.6	1.6	1.6	160	0.80	400
0.17	1.7	1.7	1.7	170	0.85	425
0.18	1.8	1.8	1.8	180	0.90	450
0.19	1.9	1.9	1.9	190	0.95	475
0.20	2.0	2.0	2.0	200	1.00	500

## Note2

- 1. If the deviations of 2 successive readings are both larger than 0.01%BAC, 0.1%BAC or 0.05mg/L, you need to test again.
- 2. Do not block the side air outlet when you're blowing.
- 3. There will be deviation between the testing value and true value if the product's battery is running low. It's suggested to use the product after replacing the battery.
- 4. The testing data can not be used as evidence in court.
- 5. Do not indulge in excessive drinking.

## Warning

- 1. Please do not use the product when the temperature is higher than 104°F or lower than 32°F.
- For better performance and longer battery life, please avoid using the product at too high/low temperature or in static environment, such as in hot weather or a sun-baking car, beside the fire, on surface of any hot items. in cold environment, etc.
- 3. Do not clean the product with any chemical detergents.
- 4. Do not personally reconstruct, repair or disassemble the product to avoid damage.
- Do not use this product to decide whether you can drive or do something dangerous.

## One Year Warranty

If you have any questions, please contact our service email: rofeer@hotmail.com with your order ID.

Thanks for your supporting!!!