

## Instruction Manual for Intelligent Toothbrush Disinfector



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## **Foreword**

Fully care of the health of you and the family. In our daily life, the wash room, where we put our toothbrushes and shavers and where is humid, has become a place for the bacteria to grow, thus causing harm to our health.

It is the best choice for you to choose the toothbrush and shaver which are disinfected by hi-tech means with combination of ultra violet radiation and air drying.

Outline design patent: 200430092588.5

Utility patent: 200420095597.4

## **1. Technical parameters**

Model: Quiet—K01A

Rated voltage: 220V 50HZ/110V 60HZ (either one )

Operation Voltage: 9VDC  $\pm$  10%

Average power consumption: 1W

Way of disinfection: Ultra violet radiation & air drying

Capacity: 5 toothbrushes, one shaver

Outline dimension: 247  $\times$  165  $\times$  65mm

N.W.: 0.5 kg

UV light tube life: 3000h

UV intensity: 80 $\mu$ w/cm<sup>2</sup>

Operation Display: LED Module

Unit Colour: White

Executed Standards : GB17988-2000 QB 2138.2-96

GB4706.1-1998 eqv IEC 335-1:1991

## **2. Technical characteristic**

Applicable to toothbrushes and shavers' disinfection.

It outlines unique and abstract, it is fashionable.

Reasonable installation – hanging type, spacing saving.

Magnet is used is in the case, airproof is good.

Disinfection with UV radiation, drying with fan, disinfection is done thoroughly.

MCU intelligent control, simple operation, safe and energy saving.

Multifunction- it has clock.

Simple color LED display, simple operation key.

Auto disinfection, fan dry function and moving display

### **3. Brief introduction**

#### **Cold cathode UV light tube disinfection**

This unit adopts cold cathode UV light tube which can radiate UV with wave length 253.7nm which is easy to be absorbed by the protein and nucleic acid of the germ and the virus, it can denaturalize the protein, and form thymine dimmer and destroy DNA structure of virus and germs. It can destroy virus and germs such as colibacillus, bacillus, mildew, staphylococcus, and so on.

#### **Fan drying**

Unique fan drying, it performs once every 3h for 20m; the drying is done while disinfecting, thus keeping the toothbrush dry to insure the germ could not survive.

#### **Outline**

Unique design, full of individuality, it has color LED display with moving LED icon and clock display, it is practical and beautiful.

#### **Micro computer control**

Micro computer control, it can set the disinfecting time, LED displays dynamic disinfecting status, real time display, etc. It is a perfect combination of modern hi-tech.

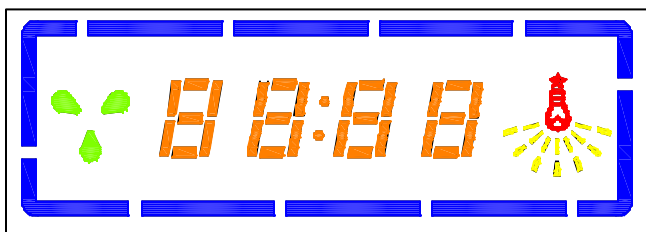
#### **Safety**

This unit adopts outer power adaptor to insure users' safety. MBS anti-UV material is used in the front case, the disinfection procedure stops when the front case opens, thus avoid harm to human body.

### **4. Panel**

**Construction :** See cover

## LED Display Module



When standby, it displays real time and moving outer frame (blue LED).

When in disinfection, it displays duration (timing count down), and it displays moving light rays.

When in fan mode, it displays moving air.

### Set Key

Enter into disinfection time setting

Press and hold, it enters into clock setting.

### Operating Key

When under setting, used as “+” key;

When under standby, it starts disinfection procedure.

When under disinfection, it cancels disinfection procedure.

### Case switch

Disinfection stops when the case opens.

## 5. Operation guide

5.1 Fitting the unit on the wall. Connect the adaptor to the power socket at the left side of the unit, power on, the buzzer beeps once, then the unit enters into standby, LED module lights, it displays initial clock time 12:00.

5.2 Press and hold set key, “hour” digit flashes, press “+” key (operating key) and hold 0.5S, the digit can go up, when reach 23, it returns to 0; Press again the set key, “minute” digit flashes. At the same time, press “+” key to adjust minute. Press “+” key (operating key) and hold 0.5S, the digit can go up, when reach 59, it returns to 0; Press set key again, or if there is no any press, the unit exits clock setting.

5.3 When under standby, open the case and close it, the system operates automatically

for one-time disinfecting, this unit default set time is 10 minutes. The fan is in operation when disinfecting, The LED Digit Display displays disinfecting duration—minute and second, 2 digits for each, in the way of counting down.

When the unit is under standby, the system runs the fan drying procedure every 3 hours automatically for 20 minutes, if there is disinfection procedure, then the auto-fan drying procedure timing is done renewedly.

5.4 When under standby, press set key, the system enters disinfection time setting, and it displays previous set time (default time is 10m, then the display is 10:00), press “+” key once adds 1m; press and hold for 0.5S adds continuously, when added to 30, it begins from 3. Press set key again or if there is no pressing at any key in 5s, the system exits. The clock display recovers when disinfection ends.

### **5.5 Protection**

UV radiation and fan stops when the front case opens, thus avoiding human body harmed by the UV radiation, at the same time, operation timing stops. It recovers disinfection procedure when the case closes.

## **6. Caution**

When the unit has not been used for long time, or when it is to be used for the first time, it could be powered on only after open and close the case for several times because of deposition of the gas ion inside the UV light.

It is normal that there could be black looking in the anode of UV light which is the optimized process of the cathode, it doesn't affect the disinfection.

Keep away from water.

Avoid acute shock or impact.