# General Product Specification

Project Code:	IID-V6
Product Description:	Mini wireless keyboard with Touchpad
Product Name:	
Release Version:	2.0

# Riitek Document Release Approval

	Name	Signature	Date
MD Engineering	Long		
Project Engineering	LV		
Principal Engineer	Simon		

## 1. Introduction(综述)

This is a wonderful combo, 2.4GHz Mini Wireless QWERTY keyboard ,TouchPad combo, with USB interface Adapter

For the lectuer, sales manager, presenter, from within a 30' radius make a presentation and operate PC wirelessly. Change slides and screen options, write on the screen, emphasize words and objects just by using this wireless Mini Keyboard and Mouse with Touch Pad.

For people who want to watch internet TV play on their standard TV, via broadband and a PC, like NBC, ABC,FOX and IPTV, if use this wireless mini combo, who can sit in comfortable chair and select viewing pleasures without walking to computer to change channels or scroll through options.

# 2. Product Appearance(产品外观)

#### Keyboard Remote Control DESIGN



The Product Cosmetic Specification will define the exact materials, appearance and finishes. All plastic and/or metal parts must be free from flashing, scuffs, nicks, ejector pin marks, bloom marks, burns and weld lines unless waived with signed Riitek Concession form.

### 3. Feature Description

- Touchpad DPI Adjustable functions
- Ergonomic design, Perfect shape
- Scroll wheel function
- Comparable to the real notebook touchpad
- 72 kevs
- Build-in removable rechargable li-ion battery
- Dual power supply mode can be selected

## 5: Size & Weight (重量和尺寸)

- Product Dimension: 155 \* 109 \* 23mm (L\*W\*H)
- Product Net Weight: 145g
- Unit packing size: xxxx \*xxxx \* xxxx mm
- Unit packing Gross Weight: 0.25KG
- Carton Box size xx\* xx \* xx cm (L\*W\*H)
- Unit Carton box Gross Weight:xxxxxxKG/CTN

# 6: Package & accessories (包装和配件)

- 2.1: Package: PU Pouch (or) gift box
- 2.2:Product Packing List

Mini Wireless Keyboard Combo
 Wireless Receiver Adapter
 USB-A to Mini-B Charge only Cable
 User Manual
 1Unit
 1Unit

# 7:General Specifications for Quality Assurance Test Standard(通用测试规格)

# 3.1:Function Check(功能测试)

Check Method: Visible part(indicators,etc), operation, function and internal set must be checked.

Standard:

A:Quality Assurance Test Standard must be satisfied.

B:There must not be possibility of defect which is caused by parts touch, etc.

# 3.2:Legibility(丝印&外观)

Check Method: A person with an eyesight of 0.8 observe a set at a 30 degree angle surface, with the indication illuminated by 500lx.

#### Standard:

A:indications need to check for spread, offset, contamination, clarity.

B:External function indications must be legible at a distance of 50cm

C:Function and explanation indication internal cover must be legible at a distance of 30cm.

# 3.3: Key Top's Operation(关键开关按钮测试)

Key switch operating parameters should comply with those listed below.

The force /displacement curve should not exhibit any significant step of plateau from P2 to the

end of full travel. Linear measure are in mm and the valuse represent the force and displacement of a key switch after it has been preloaded by 10 to 20 grams.

#### Check Point:

- A: Operating feeling: No definite stickiness or other abnormality shall be allowed. When force is applied with a finger on the key top center at the rate of three times a second.
- B: Key top pulling strength: A key top should come off after applying a force of 0.5kg to 8kg range in the vertical direction.

### 3.4: Low Temperature Test(低温测试)

Check Method: Leave for 96 hours under -25 ℃

Standard: The keyboard operates normally after the test.

### 3.5: High Temperature Test(高温测试)

Check Method: Leave for 96 hours under +55°C

Standard: The keyboard operates normally after the test.

### 3.6: Humidity test(湿度测试)

Standard: Measurement after the test wth following conditions and lefts in chamber(normal temp, normal humidity) for 24hours.

- Temperature:  $+50^{\circ}$ C +/-  $2^{\circ}$ C

- Relative humidity: 90 to 95%

- Time: 72hours

- Dew condensation shall be removed

# 3.7: Heat Cycle Test(高低温测试)

Check method: By the condition shown in the figure below, repeat heat cycle test for 5 times:

- Temperature (2°C): 25 55 55 -20 -20 25
- Humidity( %RH): 50 90 90 0 0 50
- Time(HR) : 0 1 2 1.5 2 1

# 3.8: Drop Test(跌落测试)

Check Method: The package carton, on the condition of 75cm height, after 1 corner, edges, and 6 faces dropping, electrical and mechanical characters will be in normal conditions.

Standard: When the test is finished, followings must be satisfied.

A: All functions operate normally.

B: There is no serious cosmetic damage.

# 3.9: Vibration Test(振动测试)

#### Check Method:

A: Frequency:  $10 \sim 50$ HZ

B: Amplitude: 0.5mm

C: Duration: 2 hours in each direction of X,Y,Z axis

Standard

When the test is finished, all functions must operates normally.

# 3.10: Rubber eraser(耐磨度测试)

Standard:

Material: lion#510 or HINODEWASHI #502

Speed: 30 times/min

Stroke: 12mm Force: 1000gf

Judgment: character shall be legible and have no crack on 200 rounds.

### 3.11: Key switch(DOME) life(按键寿命):

Check Method:

A: 10,000,000cycles

B: Keyboard is qualified using Hasco pneumatic life tester using soft cushion actuator with a 4 cycles/second actuation speed  $120 \sim 150 \text{gf}$  air pressure.

Standard:

When test is finished, there must be no problem in opration.

### 8: Electrical specification(电子规格)

The mini wireless keyboard conists of thress major parts: a MCU, a RFIC for international available 2.4GHZ band applications, and a low power UC-Controlled, includes RF antenna supporting circuitry.

- Range in meters: 10 meters(MAX), without signal disturbance and no direction limit.

- Frequency range: 2.403GHZ ~ 2.480GHZ

- Operational voltage: 3.3V

- Charge Voltage:  $4.4V \sim 5.25V$ 

Modulation: GFSKChannel: 78channels

TX Power: less than +5dBm
Transmission rate: 1M bit/sec
Frequency tolerance: +/-30ppm

- Power consumption:

A: Operation modes: 55mA(max) B: sleep modes: about 1mA

Notice: After 3 minutes without any operating will into sleep mode, press any key about 1s to

wake up.