

SPECIFICATION FOR APPROVAL

CUSTOMER: _____

PRODUCT NAME: Charging box for wireless earphone

Wireless earphones

MODEL DETAIL: CHE-631 , KOJ-601

1、Application

The specification just applies to B098 wireless earphone that designed and manufactured by Longfuxiang

Product images:



2、Quoted standards

The below standards we contained is that quoted from standards as our standards. The versions is valid when the standards is issued, All standards will be revised and parties using this standard that should be explore the latest version of the following standard possibility

GB 31241-2014 Safety requirements for lithium-ion batteries and batteries for portable electronic products

GB 2828-2012 Batch inspection count on sampling procedure and sampling table (for continuous batch inspection)

3、Storage condition

Working temperature	-10℃--+45℃	Storage temperature	-20℃--+70℃
Working humidity	5%--95%	Storage humidity	5%--95%
Inspection temperature	25±10℃	atmospheric pressure	70—106MPa

4、Electrical characteristics

4.1 Speaker characteristics

4.1.1 Size:

Speaker size: $\Phi 6\text{mm} \pm 1\text{mm}$.

4.1.2 Frequency response range :

The working frequency is 20-20KHz within the rated operating voltage

4.1.3 Sound sensitivity :

The sound sensitivity is $91.5\text{dB} \pm 2\text{dB}$ within the rated operating voltage

4.1.4 Speaker impedance :

Speaker impedance: $16\Omega \pm 15\%\Omega$.

4.1.5 Microphone sensitivity:

Microphone sensitivity: -42dB

4.2 TWS products specification

4.2.1 Specification:



Charging case : length: 61 Width: 36 Height: 30 / **Earphone**
size: Length: 28 Width: 17 Height: 25

4.2.2 Material:

Material: Aluminum case + ABS inner case

4.2.3 Parameters:

Bluetooth version: Bluetooth V5.0		Bluetooth chip: Jieli 6976D
Bluetooth Receiving Distance: $\geq 10\text{M}$		Music play time: Around 3 hours
Charging time	$\leq 1.5\text{h}$ (earphone)	Phone call duration: around 3 hours
	$\leq 2\text{h}$ (charging case)	
Standby time: $\geq 100\text{day}$		Output power: 20mW
Speaker: F6True copper ring /16 Ω		Frequency range: 20-20000Hz
Battery: Earphone capacity :30mAh Charging capacity: 280mAh		MIC sensitivity: -42dB

5 Environmental adaptability test

5.1 High temperature testing

The experimental temperature is $65^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for duration testing 8 hours with the products is not packaged. After all recovery under the room temperature that

need do re-testing for the appearance and indication function and electrical performance. The appearance shall be flat and no scratches, burrs and other mechanical damages; Exposed metal parts shall not be corroded; and indicating function and electrical properties shall be normal working.

5.2 Low temperature test

The experimental temperature is $-20^{\circ}\text{C}\pm 3^{\circ}\text{C}$ for duration testing 8 hours with the products is not packaged. After all recovery under the room temperature that need do re-testing for the appearance and indication function and electrical performance. The appearance shall be flat and no scratches, burrs and other mechanical damages; Exposed metal parts shall not be corroded; and indicating function and electrical properties shall be normal working.

5.3 Constant damp heat test

The experimental temperature is $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$ for duration testing 48 hours with the products is not packaged. and the humidity as 90%~95% conditions, After finished the testing that need do re-testing for the appearance and indication function and electrical performance. The appearance shall be flat and no scratches, burrs and other mechanical damages; Exposed metal parts shall not be corroded; and indicating function and electrical properties shall be normal working.

6 Performance Impact Test

6.1 Vibration test

The frequency is 10-55 hz and the amplitude is 0.35 mm, and do the sweep frequency as 10 times each directions .After finished the testing that need do re-testing for the appearance and indication function and electrical performance. The appearance shall be flat and no scratches, burrs and other mechanical damages; Exposed metal parts shall not be corroded; and indicating function and electrical properties shall be normal working.

6.2 Drop testing

The height is 80 cm and the test bench of hard plank thickness is 20 mm ,then do the drop testing for 6 sides and do 1 time for each side .After finished the testing that need do re-testing for the appearance and indication function and electrical performance.The appearance shall be flat and no scratches, burrs and other mechanical damages; Exposed metal parts shall not be corroded; and indicating function and electrical properties shall be normal working.

7 mechanical properties

7.1 Appearance and Nameplate requirements

7.1.1 Appearance requirements

The shell of this product is black / white, the surface is flat and no scratches, no burrs, and no mechanical damage, the exposed metal parts should not be corroded. The plug and connection should be working reliable with no loosening and shedding phenomenon.

7.2 Weight

The net weight products without package as $54g \pm 2g$. (just for reference)

Products parameter

Testing item	Specification
Chip	6976D 5.0+EDR
Battery input voltage	DC3.2V-4.2V
Charging input voltage	DC5V+/-0.25V
Bluetooth distance	$\geq 10M$
Bluetooth frequency	2.4GHz-2.4835GHZ ISM BAND
Working temperature	-10°C-+50°C
Storage temperature	-20°C-+60°C
MIC Sensitivity	-42 $\pm$ 3db

MIC size	4*1.3MM
MIC Output impedance	2.2K
Directionality	All

Specification

Key function	Operation	Voice tip	LED indicator
Power ON	Long press the muti-function key around 3 seconds	power on	The red /blue LED will be flashing
Power off	Long press the muti-function key around 5 seconds	power off	The Red LED will be flashing 3 times
Successful pairing TWS	Long press two earphones muti-function key around 3 seconds at the same time or take the earphones from charging base, the RED/BLUE led will be flashing to enter in TWS paring mode (double click also can be in TWS paring mode)	Pairing	the RED/BLUE LED will be alternately flashing when two earphone awaiting for pairing. The RED /BLUE will be alternately flashing for master earphone if successful connected, while the blue LED will be flashing each 5 seconds for vice-earphone
Successful connect to your smart phone		connected	the master/vice earphone will be flashing BLue led each 5 seconds.
Disconnect with smart phone	/	disconnect	The red/blue LED will be alternately flashing
Phone calling	Phone calling	N/A / no phone number report, but keep ringtone sounds	N/A
Reset			Touch the L or R earphone 4 times under the power on without any connected situation, the red and LED will be light on at the same time. then the RED LED

			will be flashing 3 times to power off to finish the " reset" function.
ON/OFF / Play	short press to play	/	N/A
	Short press to pause	/	N/A
	Double click the right earphone's muti-function key to be next songs	/	N/A
	Double click the left earphone's muti-function key to previous songs .	/	N/A
	Long press the muti-function key around 2 seconds to reject the phone	/	N/A
	Short press the key to answer the phone	/	N/A
	Short press the key to hang up	/	N/A
	Click the right earphone key three times to volume up/Click the left earphone key three times to volume down	The max volume ,the voice tip as "didi "	N/A
	Long press the muti-function key around 2 seconds to active siri /voice assistant	"Du"	N/A
Low battery alarm	The Battery voltage is under 3.3V	Battery Low	The RED LED is flash slowly
Low battery power off	The earphone will be automatically off when the battery voltage is under 3.1V	power off	The red LED will be flashing 3 times
Power off automatically	The earphone will be automatically off if no any connect within 3 minutes	power off	The red LED will be flashing 3 times
Charge operation	Earphone charging	Put the earphone to charging base to charge automatically	The red led will be constant light on when charging for earphone, and the LED light will be flashing when charging for charging base, the blue LED will be off when fully charged.

FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.