ShenZhen Greenspower Electronic Co., LTD

M11 User Manual

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1. Electrical performance specifications

1.1 Battery Specifications: 250mAh

1.2 Charging specification: DC (voltage) 5V, charging current is about 110mA, charging time is about 2 hours.

1.3 play time: about 14h

1.4 talk time: around 14h

1.5 standby time: 180Day

1.6 playback current: 13mA-22mA

Bluetooth solution: CSR8635

Bluetooth version: V4.1

Version 4.1: Supports HSP, HFP, A2DP, AVRCP, AAC

Pairing name: M11 (can be burned according to customer's request name)

Passing the frequency: 2402-2480MHz

Effective distance: 10M

Receive sensitivity: 80Dbm at BER 0.1%.

Temperature range: 0-45 ° C

2. Operating instructions

Boot:

Short press the multi-function button for 2 seconds until the blue light is on. If there is already a device connected, the device will automatically connect back to the previous device. Otherwise, in the pairing mode, the red and blue lights flash alternately.

Shutdown:

When the device is turned on, press and hold the multi-function button for 4 seconds, the red light will be on for 1 second, and the Bluetooth headset will be turned off.

Automatic shut-down:

In the power-on mode, if there is no device connected, it will automatically shut down in about 5 minutes.

pair:

1. Turn on the Bluetooth to enter the connection and pairing state, first connect back to the last device that was turned off. If no device will enter

the pairing mode, the red and blue lights will flash alternately, and the pairing succeeds in slow blue flashing for 5 seconds.

Play:

When connected to the device, press the multi-function button to start playing music, and the blue flashes slowly for 5 seconds.

time out:

When playing music, short press the multi-function button to pause the music, and pause the blue light once every 5 seconds.

Increase the volume:

Short press the “+” button to increase the volume, and hear the tone when the volume is at its maximum.

Volume reduction:

Short press the “-” button to decrease the volume until you can't hear the sound.

next track:

Long press and hold the "+" button for > 1 second.

Previous song: Long press and hold the "-" button for > 1 second.

Redial number:

Double-click the "Play" button to dial the last call function, and the blue light flashes twice every 3 seconds.

Automatic connection: When the device and the headset are out of range, the device waits for the last lost connection for 5 minutes, the motor vibrates once every 15 seconds, and the blue light flashes 2 times for 3 seconds. If there is no device connection, after 5 minutes **Automatic shut-down.**

Standby: In pairing mode, if there is no device connected, enter standby mode and shut down after 5 minutes.

1.5.2 Operation of call mode: phone mode operation

Answer the call: When there is a call, press the “Play” button to answer the call. Press the “Play” button during the call to exchange the Bluetooth and Bluetooth status.

Reject the call: When there is a call, press and hold the “Play” button to reject the call. End the call and press the “Play” button to end the current call and return to the current state.

When the battery is low, there is a beep every 60 seconds, and it flashes 2 times with the red light.

When charging, the red light is always on, and it has a charging and shutdown function. When fully charged, the blue light is always on.

1.6 Acoustic specifications audio specifications:

1.6.1 Microphone microphone

Sensitivity sensitivity: -42dB

Operating voltage: 1.5-3.3V

Frequency Response Range Frequency Response Range: 300Hz-8KHz

Frequency Response curve: Frequency response curve: refer to appendix 1

Output impedance: 200Ω

1.6.2 Speaker Unit Speaker

Dimension: Size: Φ10mm

Impedance AC impedance: 32Ω

Sound Pressure Level (SPL) sound pressure level: 102db

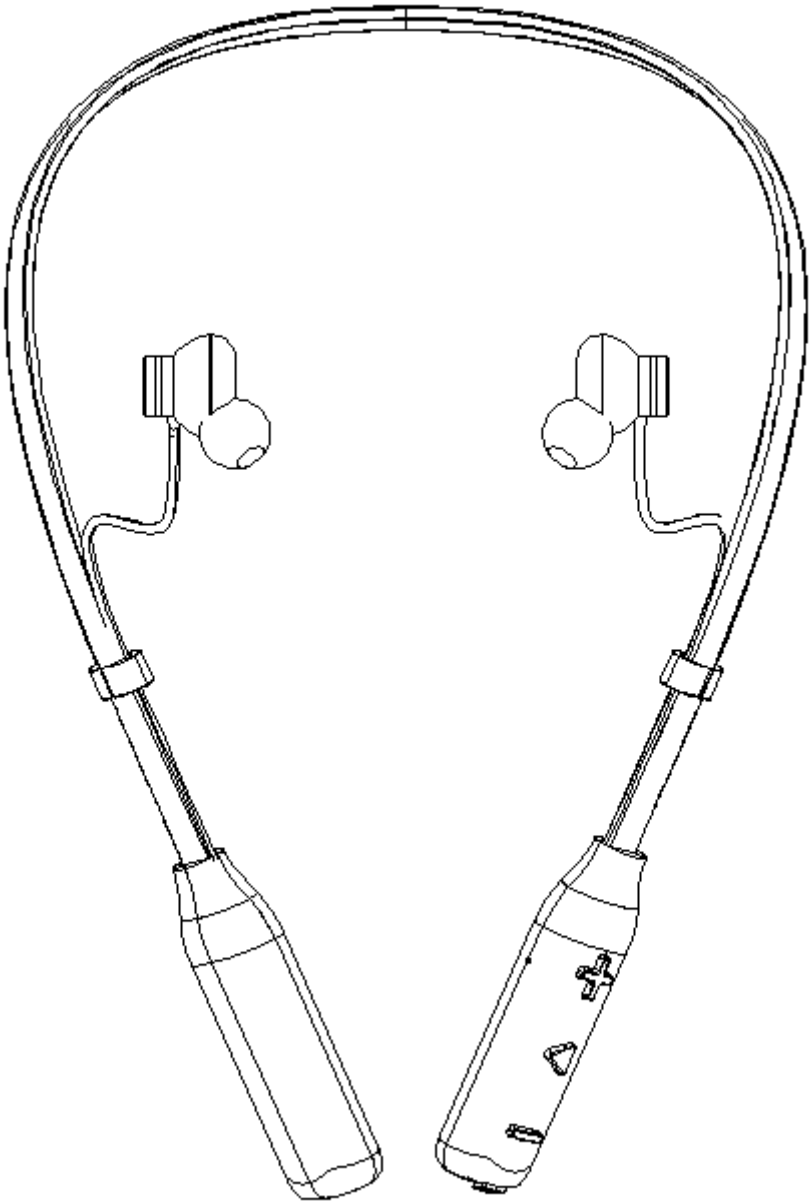
Frequency Response curve: refer to appendix 2

Frequency response rated power: 10mW

Power Maximum maximum power: 15mW

2. Product Drawing Product Drawing:

2.1 Product View finished six-view 2D map:



2.2 Outside View Appearance:

3. Reliability Test Standard Reliability Test

3.1 Reliability test standard

Item		Criteria	Judgment Criterion	Q’ty
Surface finishing test	Eroding Test with Alcohol for Coating	1. Concentration of alcohol:95% 2. Press force for rubbing: 300gf with cotton cloth 3. Test times:30cycles	Print without peeling off Specimen without change in gloss, smearing or blistering	3pcs
Environment test	aging test	BT connectinon play music 168hours under room temperature, input: 5V,1A	without function abnormally and distortion.	3pcs
	Humidity Test	Temperature +40+/-2℃ for 24 hours,humidity 90%-95%, recovery time 2 hours under room temperature	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	3pcs
	Low Temperature Storage Test	Temperature -25+/-3℃, duration 48 hours, recovery time 4 hours, unit to be tested in packaging.	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	2 boxes
	High Temperature Storage Test	Temperature 65+/-3℃, duration 48 hours, recovery time 4 hours, unit to be tested in packaging.	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	2 boxes

	Temperature Cycling Storage Test	High temperature 65+/-3°C for 1 hour, transition time 1 hour, to cold temperature -25+/-3°C for 3hours,transition time 1 hour to high temperature, this is a cycle. Duration 6 cycles. unit to be tested in packaging.	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	2 boxes
	High Temperature Operating Test	Temperature 45+/-3°C, relative humidity 80%, duration 8 hours, unit to be tested out of packaging, recovery time 2 hours under room temperature	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	
	Low Temperature Operating Test	Temperature -10+/-3°C, relative humidity 80%, duration 8 hours, unit to be tested out of packaging, recovery time 2 hours under room temperature	If the sample has no noticeable marks, abrasions, scratches, dents, dings, or other cosmetic issues that are a direct result of the test, and the acoustic measurement of the DUT shall comply with a +/-3dB range when compared to the pre-test data, the test result will be considered "PASS".	3pcs
Environment test	IPX7Test			
packaging test	Package Drop Test	Drop height 70cm, 3 edges and 6 surfaces of the package with product, drop on a concrete flat surface.	No sign of damaged, function shoud be normal.	1 box

	Stacking Test	Packed product is to be placed under a load for 7 consecutive days. Load=W*(H-h)/h W=The weight of one carton with products, H=maximum height of stack in storage or transport, usually using 2.7m,h=package height	The test result is considered "PASS" if the package does not change dimensionally more than 3% and the products in the package must not be damaged.	1 box
	Vibration Transportation Test	Frequency 10~50Hz sine wave with 1 minutes sweep time at 2-5mm full amplitude peak to peak, duration 1 hour per perpendicular axis(X,Y,Z),unit to be tested in packaging.	No sign of damaged, no part inside shifted and function should be normal.	1 box
mechanical test	Cable Pull Test	pull force：1kg time：1min	after test without cosmetic or function failure.	3PCS
	Wire Swing Test	Cables will be bended (+/-75° per cycle) with 200gf load for 3,000 cycles	The conductor should be conductive from one end to another without wire cover crack	3PCS
	Switch Life Test	Cycle : 5000 cycles Rate : 60 cycles / min	There should be not function failure of the button	3PCS
	Salt Spraying Test	Ratio 95% water /5% NaCl, testing chamber temperature : 35+/-2℃, duration: 8hrs	No corrosion on base metal, no more than 5% corrosion visible on coating	3PCS
	Product Drop Test	Product must withstand 10 drops from 1.2 meters onto hardwood floor with no loss of function or breakage	The unit should not be broken, and the functions should be normal.	3PCS
Electrical test	ESD(Electrostatics Discharge) Test	3rd party test	There should be not function failure of the unit	3PCS
	BT compatibility Test	Test IOS system/ Android system/ Windows system/ BlackBerry system/ Google system play and phone functions	play and phone functions are normally	3PCS

	BT reception distance test			30pcs
	battery charge/discharge test	battery charge/discharge test	charging time : abut 1H， 60% rate power playing ≥10H	
	battery life test	operation 500 cycles	capacity no less than 80% after 500 cycles	

4.Appendix 1

Microphone frequency response curve, microphone: -42db+/-3dB (1kHz)

Icon

5. **Appendix 2**

Aker Frequency Response curve Icon

FCC Note：

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. This equipment complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna(s) must not be co-located or conjunction with any other antenna or transmitter.