

Dongguan Togran Electronics Technology Co.,LTD

File Name: TH614U Gaming headset product spec

Department: R&D

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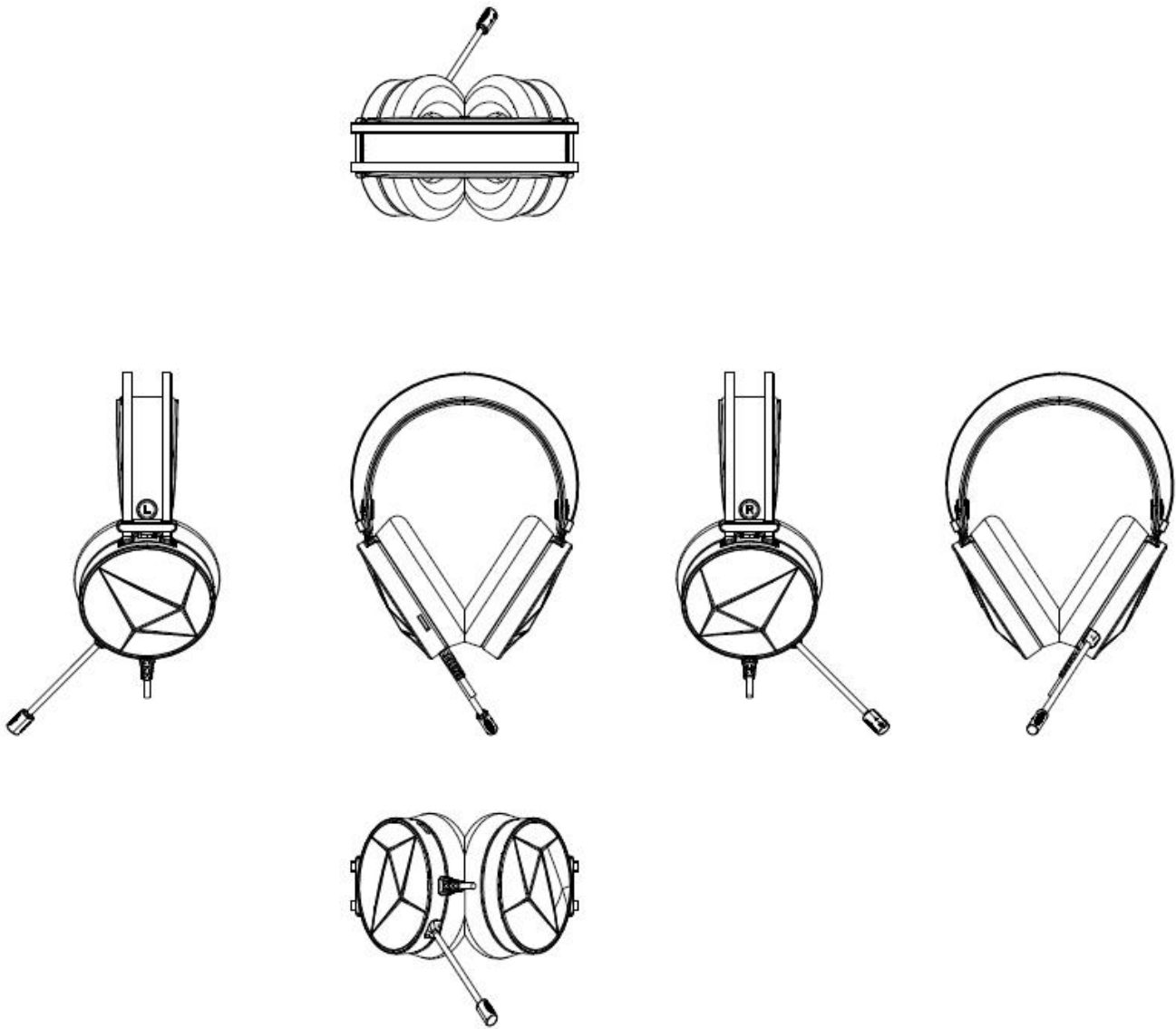
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1 Product Outline Photo:



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2 Structure chart:



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3 Product feature:

MECHANICAL SPEC:

1. Earpiece dimensions and toleran,Size: 212mm*168mm

Functional keys: VOL + , VOL -

Product type: A: ☒USB ☐3.5+USB ☐Bluetooth

2. Mechanical characteristics

Button life: ≥10000 next

3. product feature:

product type: Game audio headset

- ● Standard: USB PLUG
- ● Supported Profile: N/A
- ● RF Range: N/A
- ● Transmit Power: N/A
- ● Receiver Sensitivity: N/A
- ● Operating Distance: N/A
- ● Frequency Range: 20Hz-20KHz
- ● Operating Temperature: 0~45° C
- Cable: 2.0M
- Color: Black
- Product Weight: 350+/10g

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4 Speaker unit SPEC:

Speaker unit SPEC

ITEM	SPEC & TEST CONDITION
Electrical Characteristics	
1. Loading Impedance:	24±15% OHMS (f=1KHz)
2. Out Sound Pressure Lever (S.P.L)	116dB±3dB At 1KHz /1cm /1mW Measurement
3. Frequency Response:	20~20KHz (at 1KHz Output S.P.L ±10dB)
4. Total Harmonic Distortion:	≦ 5%
5. Drive Unit Dimensions:	Φ50mm * 10 mm(H)
6. Power Rating:	Normal: 10mW ; Maximum : 15mW
7. Buzz & Rating :	Sine Wave: 0.49V (Must Be Normal)
8. Load Test:	Normal 10mW 48Hours (White noise)
9. Magnet	N42 (NdFeB)
10. Polarity	Diaphragm Shall Move Forward While Apply a Positive DC Current To the “+” or “Marked” Terminal

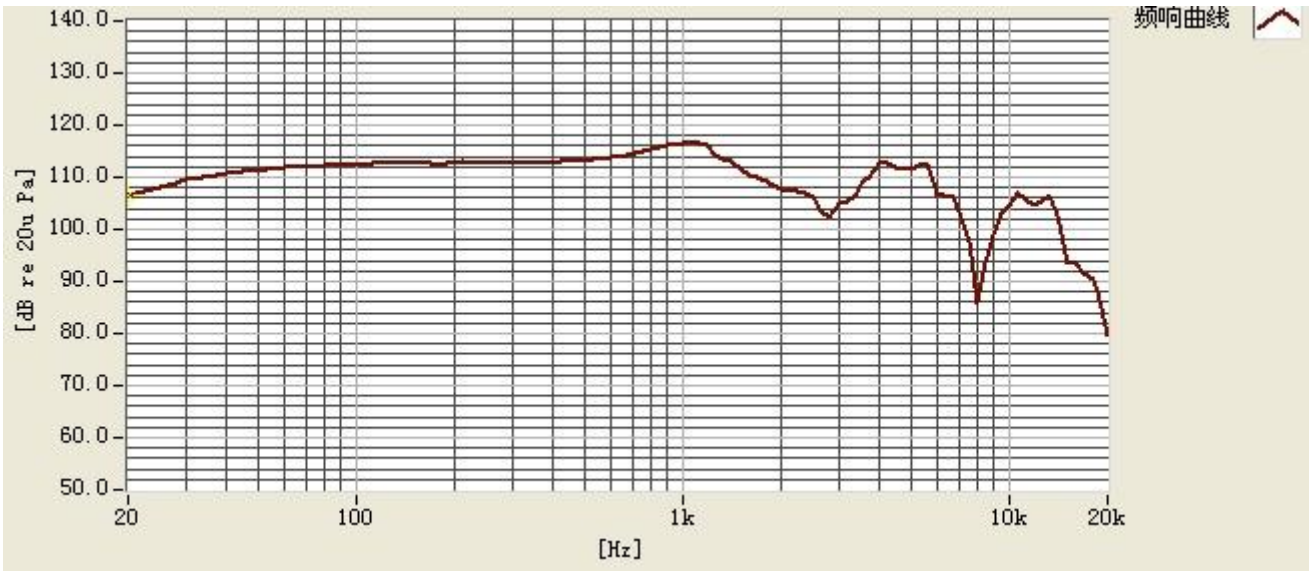
After Reliability Test Leave at room temperture for 1Hours. S.P.L Shall not Deviate by ±3dB From Pre-test Measurement. And meet Above SPEC.item 3. 4. 5. 6. 7. 8.

NOTE: Design and specifications subject to change without notice .

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5 Speaker unit frequency response curve:

- Electroacoustic test curve.



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6 Microphone unit SPEC:

Microphone unit SPEC

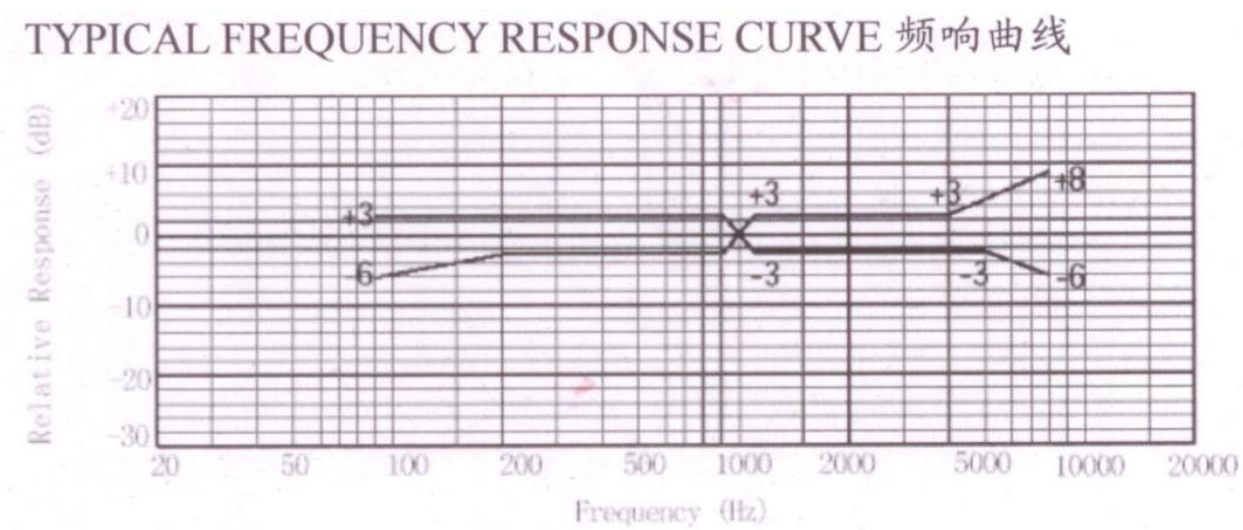
ITEM	SPEC & TEST CONDITION
Electrical Characteristics	
1. Drive Unit Dimensions:	φ 6mm * 2.7mm(H)
2. Sensitivity:	-42±3 dB (0dB=1V/Pa.1KHz)
3. Directivity:	Omni-direction
4. Output Impedance:	2.2KOHMS
5. Frequency Response:	100~10000Hz (at 1KHz ±3dB)
6. Total Harmonic Distortion:	≦ 5%
7. Operating Voltage :	DC 1.0V~10V
8. Standard Operating Voltage :	DC 2.0V
9. Current Consumption :	Max 0.5mA
10. S/N Ratio:	60dB or More
11. Maximum input S.P.L :	100dB

After Reliability test Leave at room temperture for 1Hours. Sensitivity Shall not Deviate by ±3dB From Pre-test Measurement. And meet Above SPEC.item 4. 5. 6.

NOTE: Design and specifications subject to change without notice .

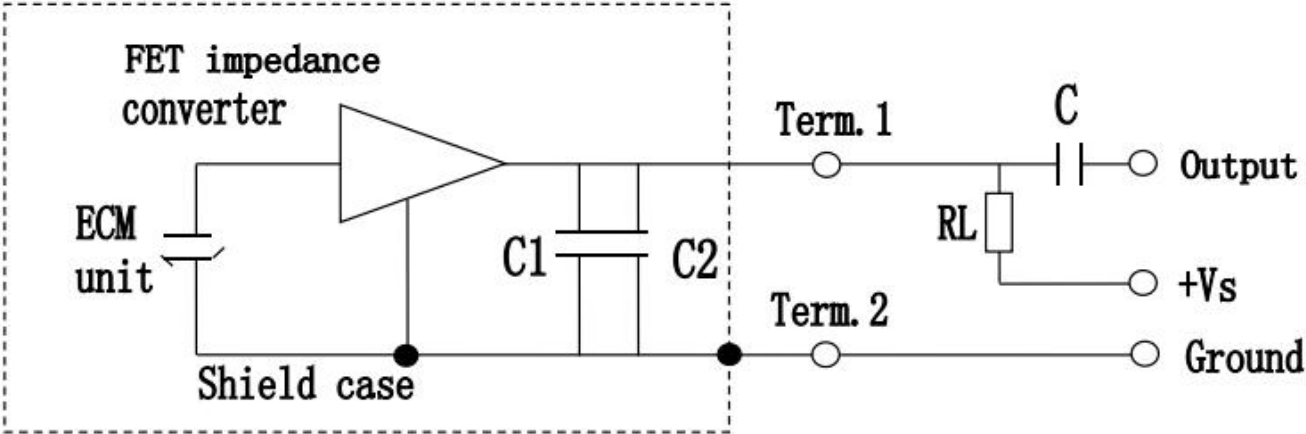
7 Microphone unit frequency response curve:

- The microphone frequency response curve



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8 Microphone schematic drawing:



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9 instructions for use:

- instructions for use:** 1.1 in the left side of the rear a headphone volume and subtract switch, push up for the volume, push for the volume reduction, down to the middle, switching lights change color and switch function.

1.2. Decorative LED function description: the ear cover on both sides have a manual fadein RGB trichromatic lamp dimming adornment, choose RGB LED patch type, when headphones have detected on the music player playing music, red, green, blue, purple, colorful, 5 kinds of color patterns can be obtained by manual switch switch to adjust the volume of key.

When the headset insert PC USB interface, the default color is red, when headphones have detected on the music player playing music, red start fadein dimming, a cycle speed about 10 seconds. When the first switch, to green, green lights began to fadein dimming, a cycle speed about 10 seconds. When the second switch into blue, blue light began to fadein dimming, a cycle speed about 10 seconds. When the third switch into purple, purple fadein dimming, a cycle speed about 10

seconds. When the fourth switch, three color light of light color mixture alternately into seven lights mode gradually faded. When the switch 5 times to close all leds. When switch 6 times, and back to the headset insert PC when the default red lights dim fade in state, switching cycle. When the player, light normally on the current mode.

- 2. The product is equipped with PC driver. By PC on headphones around channel and the volume of the microphone and sound (about headphones channel can be set to the virtual 7.1 channel sound effects and a variety of environmental sound), tone as the user preferences and listening habits such as character set.

10 Elec.Circuit:

