



HWA-HSING Test Report No.: 220823EL10-SE-US-01



RF Exposure Report

FCC ID: 2AGA7MH40W2

Applicant: New Audio LLC

Address: 132 W. 31st 7th Floor New York, 10001 United States

Manufacturer: New Audio LLC

Address: 132 W. 31st 7th Floor New York, 10001 United States

Product(s): Wireless headphone

Brand: MASTER & DYNAMIC

Test Model(s): MH40-W2

Series Model(s): N/A

Test Date: Aug. 23 2022~Oct. 19, 2022

Issued Date: Oct. 19, 2022

Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd.

Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China

Test Firm Registration No.: 915896

Standards: FCC Part 2 (Section 2.1093)
KDB447498 D01

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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Approved by :

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Release
Ver. 1.4



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Release control record

Issue No.	Reason for change	Date issued
220823EL10-RF-US-01	Original Release	Oct. 19, 2022



1 General Information

1.1 General Description of EUT

Product	Wireless headphone
Sample No.	HS220824-03-08/05
Test Model(s)	MH40-W2
Series Model(s)	N/A
Status of EUT	Engineering Prototype
Power Supply Rating	DC3.7V from battery
Modulation Type	GFSK, $\pi/4$ DQPSK, 8DPSK for FHSS GFSK for DTS
Transfer Rate	1Mbps, 2Mbps, 3Mbps
Operating Frequency	2402 ~ 2480MHz
Number of Channel	79
Output Power (Average)	6.520dBm for FHSS 1.640dBm for DTS
Antenna Type	FPC Antenna
Antenna Gain	-0.68dBi
Antenna Connector	I-PEX
Accessory Device	3.5mm audio adapter; Type-C-USB-A adapter
Cable Supplied	Type-C Line: Unshielded, Detachable 1.0m; Aux In Line: Unshielded, Detachable 1.0m;

Note:

1. Please refer to the EUT photo document (Reference No.: :220823EL10-01&-02) for detailed product photo.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



2 RF exposure limit

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, the distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:

- a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
- b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.

- a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
- b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
- c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

3 Calculation

The antenna of this product, under normal use condition, is at less than 5mm away from the body of the user.



4 Calculation SAR test exclusion thresholds

The measured of Maximum RF Conduted Power

Mode	Frequency (MHz)	Maximum RF Power (dBm)
FHSS	2402-2480	6.520
DTS	2402-2480	1.640

The tuned Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
FHSS	2402-2480	5	±2	3	7
DTS	2402-2480	1	±2	-1	3

SAR Test Exclusion Thresholds

Mode	Maximum source-based time averaged conducted output power(dBm)	Minimum separation distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
FHSS	7	5	1.58	3.0	7.5	Exempt from SAR
DTS	3	5	0.63	3.0	7.5	

Conclusion: Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.



Appendix – Information on the Testing Laboratories

We, [Hwa-Hsing \(Dongguan\) Co., Ltd.](#), A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values “HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT”, commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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