



BUREAU
VERITAS

Test Report No.: FM2012WDG0362





RF EXPOSURE REPORT

| | |
|-----------|---|
| Applicant | Zound Industries International AB |
| Address | Centralplan 15 SE-111 20 Stockholm Sweden |

| | |
|-------------------------------------|---|
| Manufacturer or Supplier | Zound Industries International AB |
| Address | Centralplan 15 SE-111 20 Stockholm Sweden |
| Product | True Wireless Headphones |
| Brand Name | <i>Marshall</i> |
| Model | MOTIF A.N.C. |
| Additional Model & Model Difference | N/A |
| Date of tests | Apr. 27, 2021 ~ Jun. 28, 2021 |

- FCC Part 2 (Section 2.1093)
- KDB 447498 D01
- IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

| | |
|---|---|
| Tested by Lucas Chen Project Engineer/ EMC Department | Approved by Glyn He Assistant Manager / EMC Department |
|  |  Date: Jul. 19, 2021 |

This report is governed by, and incorporates by reference, CPS Conditions of Service as posted at the date of issuance of this report at <https://www.cps.bureauveritas.com/terms-conditions> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

No. 96, Guantai Road (Houjie Section), Houjie
Town, Dongguan City, Guangdong Province.
523942. People's Republic of China.

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@bureauveritas.com



TABLE OF CONTENTS

| | |
|--|---|
| RELEASE CONTROL RECORD | 3 |
| 1. CERTIFICATION..... | 4 |
| 2. RF EXPOSURE DEFINE | 5 |
| 3. CLASSIFICATION | 5 |
| 4. SAR TEST EXCLUSION THRESHOLDS | 6 |



**BUREAU
VERITAS**

Test Report No.: FM2012WDG0362

RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|------------------|--------------------------|--------------------|
| FM2012WDG0362 | Original release | Jul. 19, 2021 |

**Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch**

**No. 96, Guantai Road (Houjie Section), Houjie
Town, Dongguan City, Guangdong Province.
523942. People's Republic of China.**

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@bureauveritas.com



1. CERTIFICATION

| | |
|------------------------|-----------------------------------|
| FCC ID: | 2AAGF-MOTIFANC |
| PRODUCT: | True Wireless Headphones |
| BRAND NAME: | <i>Marshall</i> |
| MODEL NO.: | MOTIF A.N.C. |
| ADDITIONAL NO.: | N/A |
| APPLICANT: | Zound Industries International AB |
| STANDARDS: | FCC Part 2 (Section 2.1093) |
| | KDB 447498 D01 |
| | IEEE C95.1 |



2. RF EXPOSURE DEFINE

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, 16 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, a 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 100MHz 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. CLASSIFICATION

The antenna of this product, under normal use condition, is at less than 20cm away from the body of the user. So, this device is classified as **Portable Device**.



4. SAR TEST EXCLUSION THRESHOLDS

The tuned conducted Average Power (declared by client)

Left Earbud:

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|--------------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| GFSK | 2402-2480 | 3 | +1 | 2 | 4 |
| 8DPSK | 2402-2480 | 3 | +1 | 2 | 4 |
| BT-LE(1Mbps) | 2402-2480 | 3 | +1 | 2 | 4 |
| BT-LE(2Mbps) | 2402-2480 | 3 | +1 | 2 | 4 |

Right Earbud:

| Mode | Frequency (MHz) | Target Power (dBm) | Tolerance (dBm) | Lower Tolerance (dBm) | Upper Tolerance (dBm) |
|--------------|-----------------|--------------------|-----------------|-----------------------|-----------------------|
| GFSK | 2402-2480 | 3 | +1 | 2 | 4 |
| 8DPSK | 2402-2480 | 3 | +1 | 2 | 4 |
| BT-LE(1Mbps) | 2402-2480 | 3 | +1 | 2 | 4 |
| BT-LE(2Mbps) | 2402-2480 | 3 | +1 | 2 | 4 |

The measured conducted Average Power

Left Earbud:

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|--------------|-----------------|----------------------|
| GFSK | 2402 | 2.80 |
| 8DPSK | 2480 | 2.31 |
| BT-LE(1Mbps) | 2480 | 2.83 |
| BT-LE(2Mbps) | 2480 | 2.83 |

Right Earbud:

| Mode | Frequency (MHz) | Averaged Power (dBm) |
|--------------|-----------------|----------------------|
| GFSK | 2480 | 2.69 |
| 8DPSK | 2480 | 2.35 |
| BT-LE(1Mbps) | 2480 | 2.81 |
| BT-LE(2Mbps) | 2480 | 2.72 |



SAR Test Exclusion Thresholds

| Frequency (MHz) | Maximum source-based time averaged conducted output power (dBm) | Minimum separation distance (mm) | Result of Eq. 1 | Limit for 1-g SAR | Verdict |
|----------------------------|--|---|----------------------------|------------------------------|--------------------|
| 2402-2480 | 4 | 5 | 0.791 | 3.0 | Exempt from SAR |

Conclusion

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