

# RF EXPOSURE REPORT

## FOR

|                             |   |  |
|-----------------------------|---|--|
| <b>Applicant</b>            | : | ASA Electronics Shenzhen Limited   |
| <b>Address</b>              | : | Room 503, 5/F., Unit A, Skyworth Building, Gaoxin Avenue.1.S., Nanshan District, Shen Zhen |
| <b>Equipment under Test</b> | : | Heavy Duty Car Audio   |
| <b>Model No.</b>            | : | JCV1640BT  |
| <b>Trade Mark</b>           | : | JENSEN   |
| <b>FCC ID</b>               | : | 2AHU2JCV1640BT   |
| <b>Manufacturer</b>         | : | ASA Electronics, LLC.  |
| <b>Address</b>              | : | 2602 Marina Drive, Elkhart, IN 46514 USA   |

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

**Add.:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park,  
Dongguan City, Guangdong Province, China, 523808

**Tel.:** +86-0769-38826678, **E-mail:** ddt@dgddt.com, <http://www.dgddt.com>

# REPORT

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## Test Report Declare

|                             |   |   |
|-----------------------------|---|---|
| <b>Applicant</b>            | : | ASA Electronics Shenzhen Limited  |
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**Standard Used:** KDB447498 D01 General RF Exposure Guidance v06

**We Declare:**

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

**After evaluation, our opinion is that the equipment In Accordance with above standard.**

|                         |                    |                      |                               |
|-------------------------|--------------------|----------------------|-------------------------------|
| <b>Report No:</b>       | DDT-R21091321-2E02 |                      |                               |
| <b>Date of Receipt:</b> | Dec. 27, 2021      | <b>Date of Test:</b> | Dec. 27, 2021 ~ Apr. 02, 2022 |

**Prepared By:**

*Sam Li*  
 \_\_\_\_\_  
**Sam Li/Engineer**

**Approved By:**



\_\_\_\_\_ **Damon Hu/EMC Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

## Revision History

| Rev. | Revisions     | Issue Date    | Revised By |
|------|---------------|---------------|------------|
| ---  | Initial issue | Apr. 06, 2022 |            |
|      |               |               |            |

## 1. General Information

### 1.1. Description of equipment

|                          |   |
|--------------------------|---|
| EUT* Name                | : Heavy Duty Car Audio                        |
| Model Number             | : JCV1640BT                                   |
| EUT function description | : Please reference user manual of this device |
| Power Supply             | : DC 12V                                      |
| Radio Specification      | : Bluetooth V4.0                              |
| Operation Frequency      | : 2402 MHz - 2480 MHz                         |
| Modulation               | : GFSK, $\pi/4$ -DQPSK, 8DPSK                 |
| Data Rate                | : 1 Mbps, 2 Mbps, 3 Mbps                      |
| Antenna Gain             | : 3 dBi                                       |
| Sample Type              | : Series production                           |
| Serial Number            | : N/A   |

Note: EUT is the abbreviation of equipment under test.

### 1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com).

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, G-20118

## 2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  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  $\leq 7.5$  for 10-g extremity SAR, where:

f(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

**BT Manufacturing Tolerance**

| GFSK (Peak)     |           |            |            |
|-----------------|-----------|------------|------------|
| Channel         | Channel 0 | Channel 39 | Channel 78 |
| Target (dBm)    | 2         | 3          | 4          |
| Tolerance ±(dB) | 1         | 1          | 1          |
| π/4DQPSK (Peak) |           |            |            |
| Channel         | Channel 0 | Channel 39 | Channel 78 |
| Target (dBm)    | 0         | 1          | 1          |
| Tolerance ±(dB) | 1         | 1          | 1          |
| 8DPSK (Peak)    |           |            |            |
| Channel         | Channel 0 | Channel 39 | Channel 78 |
| Target (dBm)    | 0         | 1          | 2          |
| Tolerance ±(dB) | 1         | 1          | 1          |

**Estimation Result**

Worse case is as below: [2480 MHz, 5 dBm, 3.16 mW) output power]  
 $(3.16/5) \cdot [\sqrt{2.480(\text{GHz})}] = 1.00 < 3.0$  for 1-g SAR

Then SAR evaluation is not required

**END OF REPORT**