



# **MAXIMUM PERMISSIBLE EXPOSURE ADDENDUM REPORT TO 91250**

**FOR THE**

**MODEL NUMBER: BTM-160**

**FCC ID: ZDSBTM160**

**IC: 9583A-BTM160**

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**PREPARED FOR:**

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W.O. No.: 91250

<b>Report No.: 91250-18A</b>
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**Revision History / Purpose:**

Original: To demonstrate compliance with United States and Canada RF Exposure requirements for Mobile Equipment (devices used  $> 20\text{cm}$  from the body), where Maximum Permissible Exposure (MPE) Calculations apply.

Addendum A: This device does not fall under the Mobile Equipment category as originally stated and this report is to demonstrate compliance with United States and Canada RF Exposure exemption for Portable Equipment (devices used  $< 20\text{cm}$  from the body), where Specific Absorption Rate (SAR) Evaluations apply. Also the “Report Prepared For” section has changed from Echo Digital Audio Corporation to Gibson Guitar Corporation.

**United States Exemption in accordance with FCC document, KDB 447498***Thresholds for TCB SAR*

<i>Exposure category</i>	<i>low threshold</i>	<i>high threshold</i>
<i>general population</i>	<i>(60/fGHz) mW, <math>d &lt; 2.5\text{ cm}</math> (120/fGHz) mW, <math>d \geq 2.5\text{ cm}</math></i>	<i>(900/fGHz) mW, <math>d &lt; 20\text{ cm}</math></i>
<i>occupational</i>	<i>(375/fGHz) mW, <math>d &lt; 2.5\text{ cm}</math> l (900/fGHz) mW, <math>d \geq 2.5\text{ cm}</math></i>	<i>(2250/fGHz) mW, <math>d &lt; 20\text{ cm}</math></i>

## Canadian exemption in accordance with RSS-102 sub clause 2.5

### **2.5 Exemption from Routine Evaluation Limits**

*All transmitters are exempt from routine SAR and RF exposure evaluations provided that the output power complies with the power levels of sections 2.5.1 or 2.5.2. If the equipment under test (EUT) meets the requirements of sections 2.5.1 or 2.5.2, applicants are required to submit only a properly signed declaration of compliance. The information contained in the RF exposure technical brief may be limited to information that demonstrates how the output power of the transmitter was derived.*

*If the EUT does not meet the appropriate exemption limit, a complete SAR or RF exposure evaluation shall be performed.*

*It must be emphasized that the above exemption from routine evaluation is **not** an exemption from compliance.*

#### **2.5.1 Exemption from Routine Evaluation Limits – SAR Evaluation**

*SAR evaluation is required if the separation distance between the user and the device's radiating element is less than or equal to 20 cm, except when the device operates:*

*from 3 kHz up to 1 GHz inclusively and its output power (i.e. the higher of the conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power) is less than or equal to 200 mW for general public use and 1000 mW for controlled use;*

*above 1 GHz up to 2.2 GHz inclusively and its output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) is less than or equal to 100 mW for general public use and 500 mW for controlled use;*

*above 2.2 GHz up to 3 GHz inclusively and its output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) is less than or equal to 20 mW for general public use and 100 mW for controlled use;*

*above 3 GHz up to 6 GHz inclusively and its output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) is less than or equal to 10 mW for general public use and 50 mW for controlled use.*



*In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the output power of the device was derived.*

#### **2.5.2 Exemption from Routine Evaluation Limits – RF Exposure Evaluation**

*RF exposure evaluation is required if the separation distance between the user and the device's radiating element is greater than 20 cm, except when the device operates as follows:*

*below 1.5 GHz and its maximum e.i.r.p. is equal to or less than 2.5 W;*

*at or above 1.5 GHz and the maximum e.i.r.p. of the device is equal to or less than 5 W.*

*In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.*



**Equipment operational details:**

<i>Operating Frequency (MHz)</i>	<i>Measured Output Power (dBm)</i>	<i>Maximum Mobile Antenna Gain (dBi)</i>	<i>Maximum EIRP (dBm)</i>
<b>2402-2408</b>	<b>4.9</b>	<b>4.9</b>	<b>9.8</b>

Measurements based from EMC Test Report: 91250-12B.

***Device and Antenna Operating Configuration:***

Device operating at maximum output power with continuous transmission of modulated data. Power measured conducted at the antenna port Max antenna gain is 4.9 dBi ( 3.1 linear)

***Statement of Exemption:***

***At maximum measured conducted output power of 4.9 dBm (0.003W, 3mW), the device is exempted from routine SAR evaluation in accordance with the FCC's RF exposure regulations.***

***At maximum measured conducted output power of 4.9 dBm (0.003W, 3mW), the device is exempted from routine SAR evaluation in accordance with the Industry Canada's RF exposure regulations.***