

EMC-TRF-03 Rev 1.1 Report No.: GZCR230500047403

Page: 1 of 8 FCC ID: ESX-TMAX15

# RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2305000474AT

Applicant: Guangzhou Panyu Juda Car Audio Equipment Co., Ltd

Address of Applicant: NO.5 Building, No.139, Zhouxing Street, Dongchong Town, Nansha District,

Guangzhou City, Guangdong Province, China

Manufacturer: Guangzhou Panyu Juda Car Audio Equipment Co., Ltd

Address of Manufacturer: NO.5 Building, No.139, Zhouxing Street, Dongchong Town, Nansha District,

Guangzhou City, Guangdong Province, China

Factory: Guangzhou Panyu Juda Car Audio Equipment Co., Ltd

Address of Factory: NO.5 Building, No.139, Zhouxing Street, Dongchong Town, Nansha District,

Guangzhou City, Guangdong Province, China

**Equipment Under Test (EUT):** 

**EUT Name:** WIRELESS SPEAKER SYSTEM

Model No.: SC-TMAX15, VX927 ♣

Please refer to section 2 of this report which indicates which item was

actually tested and which were electrically identical.

Trade Mark: Panasonic VTREK

Standard(s): KDB447498D01 General RF Exposure Guidance v06

 Date of Receipt:
 2023-05-18

 Date of Evaluation:
 2023-05-30

 Date of Issue:
 2023-07-07

Evaluation Result: Pass\*





Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fulles extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

\*\*Attention: To check the authenticity of testing inspect four report & certificate, peaked careful to the sample of the such particity of testing inspect four report & certificate, peaked careful to a stellar peaked careful to the such peaked careful to a stellar peaked careful to the such peaked careful to a stellar peaked careful to a stellar peaked careful to the such peaked careful to a stellar peaked careful to the such peaked careful to a stellar peaked careful to the such peaked careful to a stellar peaked careful to the such peaked careful to the such peaked careful to the such

. No.188 Kezhu Road, Szientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国 - 广州 - 经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com

<sup>\*</sup> In the configuration evaluated, the EUT complied with the standards specified above.



EMC-TRF-03 Rev 1.1

Report No.: GZCR230500047403

Page: 2 of 8

Revision Record							
Version	Report No.	Date	Remark				
01	GZCR230500047403	2023-07-07	Original				

Authorized for issue by:			
	Jim Li		
	Jim Li/Project Engineer	-	
	vius cui		
	Vico Cui/Reviewer	-	



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the ine of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction focuments. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443,



EMC-TRF-03 Rev 1.1 Report No.: GZCR230500047403

Page: 3 of 8

# 2 Evaluation Summary

Item	Standard	Method	Requirement	Result
RF Exposure	KDB447498D01 General RF Exposure Guidance v06	KDB447498D01 General RF Exposure Guidance v06	KDB447498D01 General RF Exposure Guidance v06	Pass

#### Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

♣ Model No.: SC-TMAX15, VX927

Only the model SC-TMAX15 was evaluated.

According to the declaration from the applicant, the electrical circuit design, layout, components used and internal wiring were identical for all models, with only difference on the model name and Trade Mark.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

\*\*Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, \*\*Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, \*\*Termination of the company in the

of email: CN. <u>DocCheck (@363.com</u> Mr.198/fazh (Road, Scientech Park (Gaugndou Economic & Technology Development District, Guargabou, China 510663 t (86–20) 82155555 f (86–20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86–20) 82155555 f (86–20) 82075058 sgs.china@sgs.com



EMC-TRF-03 Rev 1.1

Report No.: GZCR230500047403

Page: 4 of 8

### 3 Contents

			Page
1	Cove	er Page	1
2	Eval	uation Summary	3
3	Conf	tents	4
4	Gen	eral Information	5
4	4 1	Details of E.U.T.	5
_	4.2	Evaluating Location	5
	4.3	Facility	6
4	4.4	Deviation from Standards	6
4	4.5	Abnormalities from Standard Conditions	6
5	Tech	nnical Requirements Specification	7
į	5.1	RF Exposure Evaluation	7
	5.1.1	Limit & Test Method	7
		2 Conclusion	
6	FUT	Constructional Details (EUT Photos)	8



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-a-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 83071443, or email: CND.Doccheck@cgs.com

SCD\_LLLI. No.138(kahu Noal, Sharuh Noal, S



Report No.: GZCR230500047403 EMC-TRF-03 Rev 1.1

> 5 of 8 Page:

#### **General Information** 4

#### 4.1 Details of E.U.T.

Power supply: AC 110-240V, 50/60Hz; 220-240V, 50/60Hz; 150W

Cable(s): AC mains (unshielded, Max 2.0m)

> USB ports: MIC IN ports; GUITAR IN ports; AUX in ports: AUDIO out ports; OPT IN ports.

Operation Frequency: 2402MHz to 2480MHz

Modulation Type: GFSK, pi/4DQPSK, 8DPSK

Number of Channels: 79 1MHz Channel Spacing:

Spectrum Spread

Frequency Hopping Spread Spectrum(FHSS) Technology:

Antenna Type: PCB Antenna Antenna Gain: 1.33 dBi

Antenna Number:

### 4.2 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory, 198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.





EMC-TRF-03 Rev 1.1 Report No.: GZCR230500047403

Page: 6 of 8

### 4.3 Facility

The facility is recognized, certified, or accredited by the following organizations:

#### ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

#### SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

#### FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

### • ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

#### VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

#### • CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

#### 4.4 Deviation from Standards

None

#### 4.5 Abnormalities from Standard Conditions

None



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

\*\*Attention: To check the authenticity of testing //respect //r



EMC-TRF-03 Rev 1.1 Report No.: GZCR230500047403

Page: 7 of 8

# 5 Technical Requirements Specification

#### 5.1 RF Exposure Evaluation

#### 5.1.1 Limit & Test Method

KDB447498D01 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 ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\sqrt{f(GHz)} \le 3.0$  for 1-g SAR and  $\le 7.5$  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<sup>17</sup>
- The result is rounded to one decimal place for comparison

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

#### 5.1.2 Conclusion

The Maximum Conducted Peak Output Power is				1.89 dBm in channel			2.402	GHz;	
1.89	dBm logarithmic terms convert to numeric result is nearly 1.545					mW			
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)]									
General RF Exposure = (		1.545	mW / 5 mm ) x $\sqrt{}$		2.402	GHz =	0.479	0	;
				SAR requirement:		S =	3.0	0	;
$\mathbb{I} \ \mathbb{I} \ < \mathbb{I} \ $ . $\mathbb{I} \ $ the SAR report is not required.									

Note: Refer to report No. GZCR230500047402 for EUT test Max Conducted Peak Output Power value.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issue defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falisification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

\*\*Attention: To check the authenticity of testing inspection report & certificate please contact us at telephone: (86-755) 8307 1443.

\*\*Attention: To check the authenticity of testing inspection report & certificate please contact us at telephone: (86-755) 8307 1443.

No.188Kezhu Noad, Sciented Park, Guargzhou Economic & Technology Development District, Guargzhou, Chira 510663 t (86-20) 82155555 f (86-20) 82075058 www.sgsgroup.com.cn 中国・广州・经济技术开发区科学城科珠路198号 邮编: 510663 t (86-20) 82155555 f (86-20) 82075058 sgs.china@sgs.com



EMC-TRF-03 Rev 1.1

Report No.: GZCR230500047403

Page: 8 of 8

# 6 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for GZCR2305000474AT

- End of the Report -



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

\*\*Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443.