March 31, 2009

Maxwise Production Enterprise Limited
Unit 1501, At Tower, 180 Electric Road,
North Point, Hong Kong.

Dear Ken :

Enclosed you will find your file copy of a Part 15 Certification (FCC ID: Q2VMGP2P30811).

For your reference, TCB will normally take another 20 days for reviewing the report. Approval will then be granted when no query is sorted.

Please contact me if you have any questions regarding the enclosed material.

Sincerely,

Yannie Wang
Assistant Manager

Enclosure

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD Guangzhou, China
Tel / Fax: 86-20-8213 9688/86-20-3205 7538

TEST REPORT

Report No: GZ08110139-1

Applicant Name & Address	:	Maxwise Production Enterprise Limited Unit 1501, At Tower, 180 Electric Road, North Point, Hong Kong.
Sample Description		
Product	:	Wireless Guitar
Model No.	:	PSE3302
Additional Model No	:	PSE3304, RT3301, BHR1000, MWWG001, MWWG002, MWWG003
Electrical Rating	:	DC 3V
FCC ID	:	Q2VMGP2P30811
Date Received	:	5 November 2008
Date Test Conducted	:	5 November 2008 – 13 March 2009
Test standards	:	**FCC Part 15: 2007**
Test Result	:	Pass
Conclusion	:	The submitted samples complied with the above rules/standards.
Remark	:	None.

**********End of Page**********

Prepared By:

Ryan Liang
Engineer
Intertek Guangzhou

Checked By:

Signature
Carrie Chen
Project Engineer
Intertek Guangzhou
March 31, 2009 ***Date***

TRF no.: FCC 15C_TXa

LIST OF EXHIBITS

INTERTEK TESTING SERVICES

MEASUREMENT/TECHNICAL REPORT

Maxwise Production Enterprise Limited
Model No: PSE3302

FCC ID: Q2VMGP2P30811

March 31, 2009

This report concerns (check one :) Original Grant X Class II Change

Equipment Type: Low Power Transmitter (example: computer, printer, modem, etc.)

Deferred grant requested per 47 CFR 0.457(d) (1) (ii)? Yes No X

If yes, defer until: _____

date
Company Name agrees to notify the Commission by: _____

date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes No X

If no, assumed Part 15, Subpart C for intentional radiator - the new 47 CFR [9-20-07 Edition] provision.

Report prepared by:

Ryan Liang
Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch
Block E, No.7-2 Guang Dong Software
Science Park, Caipin Road, Guangzhou
Science City, GETDD Guangzhou, China.
Phone: (8620) 8213 9688
Fax: (8620) 3205 7538

Table of Contents

List of attached file

Exhibit type	File Description	filename
Test Report	Test Report	report.pdf
Operation Description	Technical Description	descri.pdf
Test Setup Photo	Radiated Emission	radiated photos.pdf
Test Report	Bandwidth Plot	bw.pdf
External Photo	External Photo	external photos.pdf
Internal Photo	Internal Photo	internal photos.pdf
Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
Cover Letter	Letter of Agency	letter.pdf
Agreement	Certification Agreement	agreement.pdf

EXHIBIT 1

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

This Equipment Under Test (EUT) is the 2.4GHz wireless guitar. This EUT is power by 3V (2×1.5VAA) Battery. The main function of the EUT is used to transmit the 2.4GHZ GFSK modulation signal to the dongle receiver that is sold together.

Antenna Type: PCB antenna

The model: PSE3304, RT3301, BHR1000, MWWG001, MWWG002, MWWG003 are the same as the test model PSE3302 in hardware and software aspect. The only differences are the appearance, trade name and model no for trading purpose.

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is an application for certification of a transmitter. The receiver, associated with this transmitter, has FCC ID: Q2VMGP2P30811R.

1.3 Test Methodology

Radiated emission measurements were performed according to the procedures in ANSI C63.4 (2003). All measurements were performed in Semi-Anechoic Chamber. For each scan, the procedure for maximizing emissions in Appendices D and E were followed. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the **"Justification Section"** of this Application.

1.4 Test Facility

The Semi-Anechoic Chamber facility and shielded room used to collect the radiated data is **Intertek Testing Services Shenzhen Ltd**. located at 6/F., Block D, HuaHan Building, Langshan Road, Nanshan District, Shenzhen, China. This test facility and site measurement data have been fully placed on file with the FCC.

Radiated Emission Test equipment:

Test equipment (26 MHz - 3 GHz)

Equipment No.	Equipment	Manufacturer	Model No.	Calibration date	Due Date
SZ062-04	RF Cable	RADIALL	RG 213U	10-Nov-08	10-Nov-09
SZ061-03	BiConiLog Antenna	ETS	3142C	6-May-08	12-May-09
SZ185-01	EMI Receiver	R&S	ESCI	17-Jun-08	17-Jun-09
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	25-Oct-08	25-Oct-09

Test equipment: (1 GHz - 18 GHz and 18 GHz - 26.5 GHz)

Equipment No.	Equipment	Manufacturer	Model No.	Calibration date	Due Date
SZ062-05	RF Cable	RADIALL	RG 213U	18-Aug-08	18-Aug-09
SZ061-08	Double - Ridged Waveguide Horn Antenna	ETS	3115	17-Jul-08	17-Jul-09
SZ061-07	Pyramidal Horn Antenna	ETS	3160-09	14-Mar-08	14-Mar-09
SZ181-04	Preamplifier	Agilent	8449B	09-Mar-08	09-Mar-09
SZ056-03	Spectrum Analyzer	R&S	FSP30	30-Apr-08	30-Apr-09
SZ188-01	Anechoic Chamber	ETS	RFD-F/A-100	25-Oct-08	25-Oct-09

EXHIBIT 2

SYSTEM TEST CONFIGURATION

2.0 System Test Configuration

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.4 (2003).

The EUT was powered from 3V (2×1.5VAA) Battery.

For maximizing emissions below 30 MHz, the EUT was rotated through 360°, the centre of the loop antenna was placed 1 meter above the ground, and the antenna polarization was changed. For maximizing emission at and above 30 MHz, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. This step by step procedure for maximizing emissions led to the data reported in Exhibit 3.0.

The unit was operated standalone and placed in the center of the turntable.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was placed on turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

When the unit is power on, the unit will transmit continuously.

2.2 EUT Exercising Software

There was no special software to exercise the device. Once the button is depressed, the unit transmits the typical signal.

2.3 Special Accessories

There are no special accessories necessary for compliance of this product.

2.4 Equipment Modification

Any modifications installed previous to testing by Maxwise Production Enterprise Limited will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services.

2.5 Measurement Uncertainty

When determining the test conclusion, the Measurement Uncertainty of test has been considered.

2.6 Support Equipment List and Description

This product was tested in a standalone configuration.

All the items listed under section 2.0 of this report are

Confirmed by:

Yannie Wang
Assistant Manager
Intertek Testing Services Shenzhen Ltd.
Guangzhou Branch

Agent for Maxwise Production Enterprise Limited

Signature

March 31, 2009 Date

EXHIBIT 3

EMISSION RESULTS

3.0 Emission Results

Data is included worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

3.1 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

Where FS = Field Strength in dBµV/m
RA = Receiver Amplitude (including preamplifier) in dBµV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB
AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD + AV

Assume a receiver reading of 62.0 dBµV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was -10 dB. The net field strength for comparison to the appropriate emission limit is 32 dBµV/m. This value in dBµV/m was converted to its corresponding level in µV/m.

RA = 62.0 dBµV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0 dB

AV = -10 dB

FS = 62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32 dBµV/m

Level in µV/m = Common Antilogarithm [(32 dBµV/m)/20] = 39.8 µV/m

3.2 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
at
4882.18 MHz

For electronic filing, the worst case radiated emission configuration photograph is saved with filename: radiated photos.doc.

3.3 Radiated Emission Data

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgement: Passed by 0.6 dB

TEST PERSONNEL:

Signature

Ryan Liang, Compliance Engineer
Typed/Printed Name

March 31, 2009
Date

Applicant: Maxwise Production Enterprise Limited Date of Test: December 02, 2008
Model No: PSE3302
Operation: EUT on,

We test the EUT on low channel, middle channel and high channel, the test result are in table 1, table 2 and table3.

Table 1

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (-dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	2402.140	95.1	36.7	28.5	--	86.9	94.0	-7.1
Horizontal	4804.280	55.4	36.2	33.7	--	52.9	54.0	-1.1
Vertical	2402.020	92.3	36.7	28.5	--	84.1	94.0	-9.9
Vertical	4804.040	54.4	36.2	32.9	--	51.1	54.0	-2.9
Vertical	7206.420	49.2	36.2	37.4	--	50.4	54.0	-3.7

Table 2

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (-dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	2441.080	94.6	36.7	28.5	--	86.4	94.0	-7.7
Horizontal	4884.160	52.9	36.2	33.7	--	50.4	54.0	-3.6
Horizontal	7323.240	44.7	36.2	37.4	--	45.9	54.0	-8.1
Vertical	2441.140	95.5	36.7	28.5	--	87.3	94.0	-6.7
Vertical	4882.180	55.9	36.2	33.7	--	53.4	54.0	-0.6
Vertical	7323.200	47.8	36.2	37.4	--	49.0	54.0	-5.1

Applicant: Maxwise Production Enterprise Limited Date of Test: December 02, 2008
Model No: PSE3302
Operation: EUT on

Table 3

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Average Factor (-dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
Horizontal	2481.220	94.6	36.7	28.5	--	86.4	94.0	-7.6
Horizontal	4962.140	50.3	36.2	33.7	--	47.8	54.0	-6.2
Horizontal	7443.300	42.7	36.2	37.4	--	43.9	54.0	-10.1
Vertical	2481.060	94.6	36.7	28.5	--	86.4	94.0	-7.6
Vertical	4962.180	52.7	36.2	33.7	--	50.2	54.0	-3.9
Vertical	7443.300	44.7	36.2	37.4	--	45.9	54.0	-8.1

Notes: 1. Peak Detector Data unless otherwise stated.

2. All measurements were made at 3 meter. Harmonic emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna is used for the emission over 1000MHz.

Test Engineer: Ryan Liang

EXHIBIT 4

EQUIPMENT PHOTOGRAPHS

4.0 **Equipment Photographs**

For electronic filing, the photographs of the tested EUT are saved with filename: external photos.pdf & internal photos.pdf.

EXHIBIT 5

PRODUCT LABELLING

5.0 **Product Labelling**

For electronic filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

EXHIBIT 6

TECHNICAL SPECIFICATIONS

6.0 Technical Specifications

For electronic filing, the block diagram and schematics of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

EXHIBIT 7

INSTRUCTION MANUAL

7.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

EXHIBIT 8

MISCELLANEOUS INFORMATION

8.0 **Miscellaneous Information**

This miscellaneous information includes details of the measured bandwidth, the test procedure.

8.1 Bandwidth Plot

Pursuant to FCC part 15 Section 15.215(c), the 20dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over excepted variations in temperature and supply voltage were considered.

8.2 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services in the measurements of transmitters operating under Part 15, Subpart C rules.

The test set-up and procedures described below are designed to meet the requirements of ANSI C63.4 - 2003.

The transmitting equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately one meter in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axes to obtain maximum emission levels. The antenna height and polarization are varied during the testing to search for maximum signal levels.

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower. For line conducted emissions, the range scanned is 150 kHz to 30 MHz.

8.2 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements are made as described in ANSI C63.4 - 2003.

The IF bandwidth used for measurement of radiated signal strength was 10 kHz for emission below 30 MHz and 120 KHz for emission from 30 MHz to 1000 MHz. Where transmissions of short enough pulse duration warrant, a greater bandwidth is selected according to the recommendations of Hewlett Packard Application Note 150-2. Above 1000 MHz, a resolution bandwidth of 1 MHz is used.

Transmitter measurements are normally conducted at a measurement distance of three meters. However, to assure low enough noise floor in the restricted bands and above 1 GHz, signals are acquired at a distance of one meter or less. All measurements are extrapolated to three meters using inverse scaling, but those measurements taken at a closer distance are so marked.

8.3 Discussion of Pulse Desensitization

The determination of pulse desensitivity was made in accordance with Hewlett Packard Application Note 150-2, *Spectrum Analysis ... Pulsed RF.*

The effective period (T_{eff}) was approximately 1618 µs, With a resolution bandwidth (3 dB) of 1 MHz, the pulse desensitivity factor was 0dB.