

# RF Exposure Evaluation Declaration

Product Name : Audio mixer

Model No. : XRs

FCC ID : I4S-XRS

IC : 3642B-XRS

Applicant : Peavey Electronics Corp.

Address : 5022 Hartley Peavey Drive, Meridian, MS, 39305,  
USA

Date of Receipt : Mar. 30, 2015

Issued Date : May. 15, 2015

Report No. : 1540054R-RF-US-P20V01

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement any agency of the government.

The test report shall not be reproduced without the written approval of QuieTek Corporation.

## Test Report Certification

Issued Date : May. 15, 2015  
Report No. : 1540054R-RF-US-P20V01



Product Name : Audio mixer  
Applicant : Peavey Electronics Corp.  
Address : 5022 Hartley Peavey Drive, Meridian, MS, 39305, USA  
Model No. : XRs  
FCC ID : I4S-XRS  
IC : 3642B-XRS  
EUT Voltage : AC 120V / 60Hz  
Brand Name : Peavey  
Applicable Standard : KDB 447498D01V05V02  
FCC Part1.1310(b)  
RSS-102: Issue 5 March, 2015  
Test Result : Complied  
Performed Location : Suzhou EMC Laboratory  
No.99 Hongye Rd., Suzhou Industrial Park Loufeng  
Hi-Tech Development Zone., Suzhou, China  
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098  
FCC Registration Number: 800392; IC Lab Code: 4075B

Documented By : Alice Li

Reviewed By : Henry Mao

Approved By : Dream Cao

## Laboratory Information

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC
Germany	:	TUV Rheinland
Norway	:	Nemko, DNV
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>  
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site :  
<http://www.quietek.com/>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

## **HsinChu Testing Laboratory :**

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**History of This Test Report**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
1540054R-RF-US-P20V01	V1.0	Initial Issued Report	May. 15, 2015

## 1. RF Exposure Evaluation

### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
<b>(A) Limits for Occupational/ Control Exposures</b>				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
<b>(B) Limits for General Population/ Uncontrolled Exposures</b>				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

## 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	:	Audio mixer
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

- Antenna Gain:

Antenna Gain: The maximum Gain measured in fully anechoic chamber is -1dBi or 0.79 in logarithm scale.

- Output Power into Antenna & RF Exposure Evaluation Distance:

Frequency Band (MHz)	Maximum Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )
2402- 2480 MHz	1.9454	0.000307

Note:

The power density Pd (3<sup>rd</sup> column) at a distance of 20 cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm<sup>2</sup>.

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The End

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