# APPLICATION OF CERTIFICATION For

#### BEHRINGER MACAO COMMERCIAL OFFSHORE LIMITED

#### **XENYX Mixer**

Model Number: X2442USB; 1204USB; X1204USB; X1222USB;

X1622USB; X1832USB; X2222USB

FCC ID: XJVF09130

Prepared for: BEHRINGER MACAO COMMERCIAL OFFSHORE

LIMITED

Rua de Pequim, No 202-A Macau Finance Centre 9/J,

**MACAU** 

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park,

Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496 Fax: (0755) 26632877

Report Number : ACS-F09130

Date of Test : Jun.17~Jul.02, 2009

Date of Report : Jul.28, 2009

# TABLE OF CONTENTS

| <u>De</u> | script | cion   | Page |
|-----------|--------|--|------|
| 1.        | CTIN   | MMARY OF STANDARDS AND RESULTS                         | 1 1  |
| 1.        |        |  |      |
|           | 1.1.   | Description of Standards and Results                   |      |
| 2.        | GEN    | NERAL INFORMATION                                      |      |
|           | 2.1.   | Description of Device (EUT)                            |      |
|           | 2.2.   | Tested Supporting System Details                       |      |
|           | 2.3.   | Test Facility  |      |
|           | 2.4.   | Measurement Uncertainty (95% confidence levels, k=2)   |      |
| <b>3.</b> | POV    | WER LINE CONDUCTED EMISSION TEST                       | 3-1  |
|           | 3.1.   | Test Equipment   | 3-1  |
|           | 3.2.   | Block Diagram of Test Setup                            | 3-1  |
|           | 3.3.   | Power Line Conducted Emission Test Limits              |      |
|           | 3.4.   | Configuration of EUT on Test                           |      |
|           | 3.5.   | Operating Condition of EUT                             |      |
|           | 3.6.   | Test Procedure   |      |
|           | 3.7.   | Conducted Disturbance at Mains Terminals Test Results  |      |
| 4.        | RAI    | DIATED EMISSION TEST                                   | 4-1  |
|           | 4.1.   | Test Equipment   | 4-1  |
|           | 4.2.   | Block Diagram of Test Setup                            |      |
|           | 4.3.   | Radiated Emission Limit                                |      |
|           | 4.4.   | EUT Configuration on Test                              |      |
|           | 4.5.   | Operating Condition of EUT                             |      |
|           | 4.6.   | Test Procedure   |      |
|           | 4.7.   | Radiated Disturbance Test Results                      |      |
| 5.        | DEV    | VIATION TO TEST SPECIFICATIONS                         | 5-1  |
| 6.        | PHO    | OTOGRAPH   | 6-1  |
|           | 6.1.   | Photos of Power Line Conducted Emission Test           | 6-1  |
|           | 6.2.   | Photos of Radiated Emission Test (In Anechoic Chamber) | 6-2  |
| 7.        | PHO    | OTOS OF THE EUT  | 7-1  |

#### TEST REPORT CERTIFICATION

Applicant

BEHRINGER MACAO COMMERCIAL OFFSHORE LIMITED

Manufacturer

Zhongshan Eurotec Electronics Ltd

**EUT Description** 

**XENYX Mixer** 

FCC ID

XJVF09130

(A) MODEL NO.

X2442USB; 1204USB; X1204USB;

X1222USB; X1622USB; X1832USB;

X2222USB

(B) SERIAL NO.

: N/A

(C) TEST VOLTAGE : AC 120V/60Hz

Measurement Standard Used: ;

FCC Rules and Regulations Part 15 Subpart B Class B 2008, ANSI C63.4-2003 CISPR 22: 1997

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits for radiated and conducted emissions. The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test:

Jun. 17~ Jul. 02, 2009

Prepared by:

Reviewer:

Richzhy Zhong / Assistant Manager

**AUDI** 

信筝科技(深圳)有限公司

Audix Technology (Shenzhen) Co., Ltd.

EMC部門報告專用章

Stamp only for EMC Dept. Report

Signature:

Ken Lu / Manager

Approved & Authorized Signer:

# 1. SUMMARY OF STANDARDS AND RESULTS

# 1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

| EMISSION                           |                   |         |         |  |  |
|------------------------------------|-------------------|---------|---------|--|--|
| Description of Test Item           | Standard          | Limits  | Results |  |  |
|                                    | FCC Part 15: 2008 |         |         |  |  |
| Power Line Conducted Emission Test | ANSI C63.4: 2003  | Class B | PASS    |  |  |
|                                    | CISPR 22: 1997    |         |         |  |  |
|                                    | FCC Part 15: 2008 |         |         |  |  |
| Radiated Emission Test             | ANSI C63.4: 2003  | Class B | PASS    |  |  |
|                                    | CISPR 22: 1997    |         |         |  |  |

#### 2. GENERAL INFORMATION

#### 2.1.Description of Device (EUT)

Description : XENYX Mixer

Model Number : X2442USB; 1204USB; X1204USB; X1222USB; X1622USB;

X1832USB; X2222USB

The model name and construction dimension are different

Test model : X2442USB; 1204USB; X1204USB; X1222USB; X1622USB;

X1832USB; X2222USB

FCC ID : XJVF09130

Applicant : BEHRINGER MACAO COMMERCIAL OFFSHORE LIMITED

Rua de Pequim, No 202-A Macau Finance Centre 9/J, MACAU

Manufacturer : Zhongshan Eurotec Electronics Ltd

Eurotec Industrial Park, #1 Junjing Road, Min Zhong Town,

Zhongshan, Guangdong, China

Power Cord : Unshielded, Detachable, 1.7m

Date of Test : Jun.17~Jul.02, 2009

Date of Receipt : Jun.16, 2009

Sample Type : Prototype production

## 2.2.Tested Supporting System Details

#### 2.2.1.PC

EMC CODE : Test PC O

M/N : Studio 540

S/N : H14XK2X

Manufacturer : DELL

Power cord : Unshielded, Detachabled, 1.8m

FCC ID : By DoC
BSMI ID : R33002
Display Card : HD3650

(Display port+DVI+HDMI)

#### 2.2.2. Monitor

EMC CODE : ACS-EMC-LM03R

M/N : 1907FPt

S/N : CN-009759-71618-6AP-ACPP

Manufacturer : DELL

Data Cable (VGA)
Data Cable (DVI)
Shielded, Detachabled, 2.0m
Power Cord
Unshielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : R3A002

#### 2.2.3. USB Keyboard

EMC CODE : ACS-EMC-K03R

M/N : SK-2865

S/N : B3C770GCPNY010

Manufacturer : COMPAQ

Data Cable : Shielded, Undetachabled, 1.8m

FCC ID : By DoC BSMI ID : 3892A092

#### **2.2.4. PRINTER**

EMC CODE : ACS-EMC-PT04

M/N : C9079A

Manufacturer : HP

USB Cable : Shielded, Detachabled, 1.8m

Power Cord : Unshielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : R33001

Power Adaptor : Manufacturer: HP

M/N: 0957-2119 BSMI ID: R33030

DC Cable: Unshielded, Detachabled, 1.5m

#### **2.2.5. USB MOUSE**

EMC CODE : ACS-EMC-M03R

M/N : M056UO S/N : 512023253

Manufacturer : Dell

Data Cable : Shielded, Undetachabled, 1.8m

FCC ID : By DoC BSMI ID : R41108

#### 2.2.6. HDD

EMC CODE : ACS-EMC-HDD03

M/N: F12-UF

S/N : A0100215-5390031

Manufacturer : Terasys

Data Cable : Shielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : 4912A022

#### 2.2.7. HEADPHONE #1

EMC CODE : ACS-EMC-EP01

M/N : OV880V Manufacturer : OVANN

#### 2.2.8. HEADPHONE #2

EMC CODE : ACS-EMC-EP02

M/N : OV880V Manufacturer : OVANN

#### 2.2.9. Cable Tester

M/N : CT100

Manufacturer : BEHRINGER

#### 2.2.10.Cables

USB Cable : Shielded, Detachable, 1.9m

(With one core)

Input-Line In : Shielded, Detachable, 1.0m

(Dummy Load  $40 \Omega$ )

Input-Aux Returns : Shielded, Detachable, 1.0m

(Dummy Load  $40\,\Omega$  )

Output-Phone : Shielded, Detachable, 1.0m
Output-Mains Outputs : Shielded, Detachable, 1.0m

(Dummy Load  $10k \Omega$ )

Output-Aux Sends : Shielded, Detachable, 1.0m

(Dummy Load  $10k \Omega$ )

Output-CTRL Out, Fx : Shielded, Detachable, 1.0m

Out, Sub Outputs (Dummy Load  $10k \Omega$ )

#### 2.3.Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen

Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

3m Anechoic Chamber : Mar. 31, 2009 File on Federal

Communication Commission Registration Number: 90454

3m & 10m Anechoic Chamber : Jan. 31, 2007 File on Federal

Communication Commission Registration Number: 794232

EMC Lab. : Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb. 02, 2009

Accredited by NVLAP, USA NVLAP Code: 200372-0

Apr. 01, 2009

#### 2.4. Measurement Uncertainty (95% confidence levels, k=2)

| Test Item  | Uncertainty                         |
|--|-------------------------------------|
| Uncertainty for Conduction emission test in No. 1 Conduction | 2.40dB                              |
| Uncertainty for Radiation Emission test                      | 4.04 dB (Distance: 10m Polarize: V) |
| in 10m chamber   | 4.02 dB (Distance: 10m Polarize: H) |
| Uncertainty for test site temperature and                    | 0.6℃                                |
| humidity   | 3%                                  |

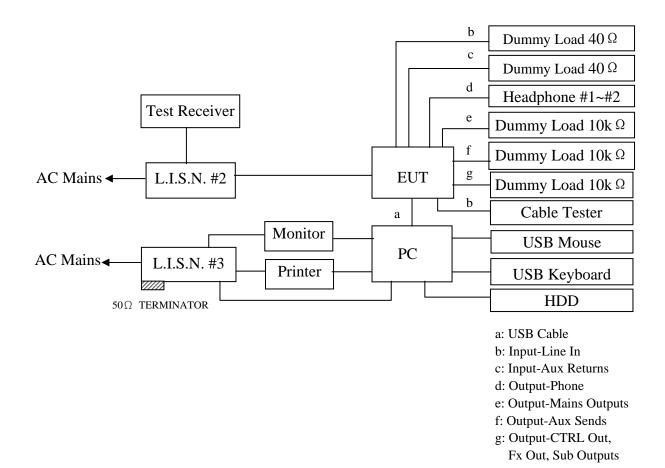
#### 3. POWER LINE CONDUCTED EMISSION TEST

## 3.1.Test Equipment

| Item | Equipment      | Manufacturer    | Model No. | Serial No.    | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|---------------|------------|---------------|
| 1.   | Test Receiver  | Rohde & Schwarz | ESHS10    | 838693/001    | Jan.10, 09 | 1 Year        |
| 2.   | L.I.S.N.#2     | Kyoritsu        | KNW-407   | 8-1636-1      | May.08, 09 | 1 Year        |
| 3.   | L.I.S.N.#3     | Kyoritsu        | KNW-242C  | 8-1920-1      | May.08, 09 | 1 Year        |
| 4.   | Terminator     | Hubersuhner     | 50Ω       | No. 1         | May.08, 09 | 1 Year        |
| 5.   | RF Cable       | Fujikura        | 3D-2W     | LISN Cable 1# | May.08, 09 | 1Year         |
| 6.   | Coaxial Switch | Anritsu         | MP59B     | M55367        | May.08, 09 | 1 Year        |
| 7.   | Pulse Limiter  | Rohde & Schwarz | ESH3-Z2   | 100341        | May.08, 09 | 1 Year        |

## 3.2.Block Diagram of Test Setup

#### 3.2.1. Block diagram of connection between the EUT and simulators



(EUT: XENYX Mixer)

#### 3.3. Power Line Conducted Emission Test Limits

|                 | Maximum RF Line Voltage |               |  |  |
|-----------------|-------------------------|---------------|--|--|
| Frequency       | Quasi-Peak Level        | Average Level |  |  |
|                 | $dB(\mu V)$             | $dB(\mu V)$   |  |  |
| 150kHz ~ 500kHz | 66 ~ 56*                | 56 ~ 46*      |  |  |
| 500kHz ~ 5MHz   | 56                      | 46            |  |  |
| 5MHz ~ 30MHz    | 60                      | 50            |  |  |

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

#### 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4.1. XENYX Mixer (EUT)

Model Number : X2442USB; 1204USB

Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Detail, in Section 2.2.

#### 3.5. Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipment.
- 3.5.3.Let the EUT work in test mode (1kHz Signal Input and Recording) and measure it.

#### 3.6.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 2#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on conducted Emission test.

The bandwidth of test receiver (R&S TEST RECEIVER ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 3.7.

#### 3.7. Conducted Disturbance at Mains Terminals Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes were tested and selected (mode 1~2) to read Q.P values and Average values, all the test results are listed in next pages.

EUT: XENYX Mixer Model No. : X2442USB; 1204USB

Test Date: Jun.17~29, 2009 Temperature: 23°C Humidity: 54%

#### The details of test modes are as follows:

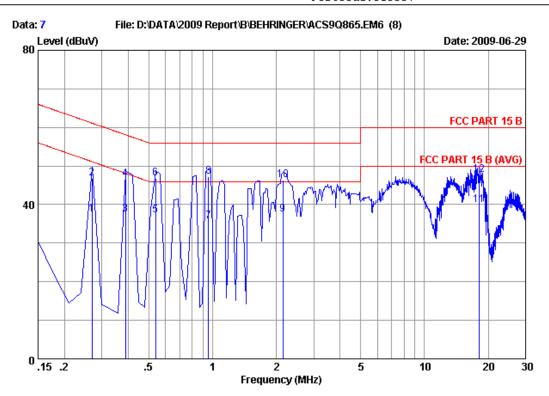
| NO   | M/N      | Test Mode             | Reference T | est Data No. |
|------|----------|-----------------------|-------------|--------------|
| NO.  | IVI/IN   | Test Mode             | VA          | VB           |
| 1.   | X2442USB | 1kHz Signal Input and | #7          | #8           |
| 2. 💥 | 1204USB  | Recording             | #6          | #5           |

(\* Worst test mode)



Tel:+86-755-26639495 Fax:+86-755-26632877 Postcode:518057

Engineer :Jolly\_Xu



Site no :Audix No.1 Conduction Data no :7

Dis./Ant. :\*\* 2009 KNW407 VA

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54%

EUT :XENYX Mixer M/N:X2442USB

Power Rating :AC 120V/60Hz

Test Mode :1kHz Signal Input And Recording

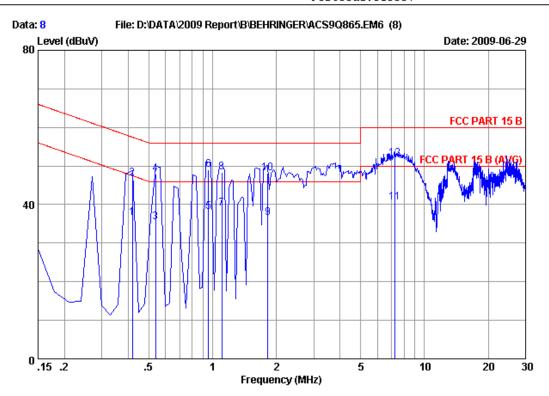
| 1 0.26940 0.40 9.88 27.11 37.39 51.14 13.75 Average 2 0.26940 0.40 9.88 36.45 46.73 61.14 14.41 QP 3 0.38880 0.35 9.89 27.20 37.44 48.09 10.65 Average 4 0.38880 0.35 9.89 36.38 46.62 58.09 11.47 QP 5 0.53805 0.34 9.89 26.90 37.13 46.00 8.87 Average 6 0.53805 0.34 9.89 36.62 46.85 56.00 9.15 QP 7 0.95595 0.33 9.89 25.40 35.62 46.00 10.38 Average 8 0.95595 0.33 9.89 37.09 47.31 56.00 8.69 QP 9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average  |   |
|--|---|
| 2 0.26940 0.40 9.88 36.45 46.73 61.14 14.41 QP 3 0.38880 0.35 9.89 27.20 37.44 48.09 10.65 Average 4 0.38880 0.35 9.89 36.38 46.62 58.09 11.47 QP 5 0.53805 0.34 9.89 26.90 37.13 46.00 8.87 Average 6 0.53805 0.34 9.89 36.62 46.85 56.00 9.15 QP 7 0.95595 0.33 9.89 25.40 35.62 46.00 10.38 Average 8 0.95595 0.33 9.89 37.09 47.31 56.00 8.69 QP 9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average  | - |
| 4       0.38880       0.35       9.89       36.38       46.62       58.09       11.47       QP         5       0.53805       0.34       9.89       26.90       37.13       46.00       8.87       Average         6       0.53805       0.34       9.89       36.62       46.85       56.00       9.15       QP         7       0.95595       0.33       9.89       25.40       35.62       46.00       10.38       Average         8       0.95595       0.33       9.89       37.09       47.31       56.00       8.69       QP         9       2.150       0.36       9.90       27.10       37.36       46.00       8.64       Average | - |
| 5       0.53805       0.34       9.89       26.90       37.13       46.00       8.87       Average         6       0.53805       0.34       9.89       36.62       46.85       56.00       9.15       QP         7       0.95595       0.33       9.89       25.40       35.62       46.00       10.38       Average         8       0.95595       0.33       9.89       37.09       47.31       56.00       8.69       QP         9       2.150       0.36       9.90       27.10       37.36       46.00       8.64       Average  | 2 |
| 6 0.53805 0.34 9.89 36.62 46.85 56.00 9.15 QP 7 0.95595 0.33 9.89 25.40 35.62 46.00 10.38 Average 8 0.95595 0.33 9.89 37.09 47.31 56.00 8.69 QP 9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average   |   |
| 7 0.95595 0.33 9.89 25.40 35.62 46.00 10.38 Average<br>8 0.95595 0.33 9.89 37.09 47.31 56.00 8.69 QP<br>9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average   | 2 |
| 8 0.95595 0.33 9.89 37.09 47.31 56.00 8.69 QP<br>9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average  |   |
| 9 2.150 0.36 9.90 27.10 37.36 46.00 8.64 Average   | 2 |
|  |   |
|  | 2 |
| 10 2.150 0.36 9.90 36.01 46.27 56.00 9.73 QP   |   |
| 11 18.150 0.56 10.00 29.30 39.86 50.00 10.14 Average   | 2 |
| 12 18.150 0.56 10.00 37.13 47.69 60.00 12.31 QP  |   |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading 2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Tel:+86-755-26639495 Fax:+86-755-26632877 Postcode:518057

Engineer :Jolly\_Xu



Site no : Audix No.1 Conduction Data no :8

Dis./Ant. :\*\* 2009 KNW407 VB

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54%

EUT :XENYX Mixer M/N:X2442USB

Power Rating : AC 120V/60Hz

Test Mode :1kHz Signal Input And Recording

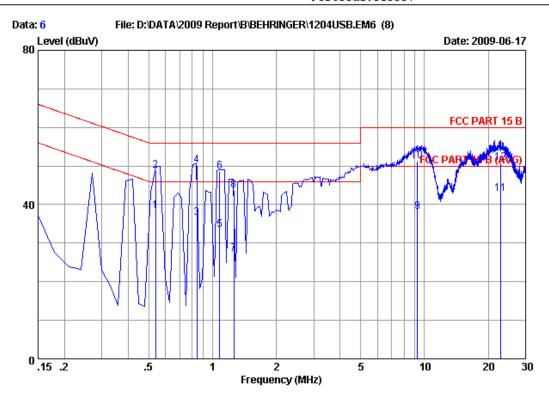
| No | Freq<br>(MHz) | LISN<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV) | Limits<br>(dBuV) | Margin<br>(dB) | Remark  |
|----|---------------|------------------------|-----------------------|-------------------|-----------------------------|------------------|----------------|---------|
| 1  | 0.41865       | 0.36                   | 9.89                  | 26.30             | 36.55                       | 47.47            | 10.92          | Average |
| 2  | 0.41865       | 0.36                   | 9.89                  | 36.63             | 46.88                       | 57.47            | 10.59          | QP      |
| 3  | 0.53805       | 0.35                   | 9.89                  | 25.20             | 35.44                       | 46.00            | 10.56          | Average |
| 4  | 0.53805       | 0.35                   | 9.89                  | 37.57             | 47.81                       | 56.00            | 8.19           | QP      |
| 5  | 0.95595       | 0.35                   | 9.89                  | 27.90             | 38.14                       | 46.00            | 7.86           | Average |
| 6  | 0.95595       | 0.35                   | 9.89                  | 38.89             | 49.13                       | 56.00            | 6.87           | QP      |
| 7  | 1.105         | 0.35                   | 9.89                  | 28.70             | 38.94                       | 46.00            | 7.06           | Average |
| 8  | 1.105         | 0.35                   | 9.89                  | 38.16             | 48.40                       | 56.00            | 7.60           | QP      |
| 9  | 1.822         | 0.36                   | 9.89                  | 26.40             | 36.65                       | 46.00            | 9.35           | Average |
| 10 | 1.822         | 0.36                   | 9.89                  | 37.80             | 48.05                       | 56.00            | 7.95           | QP      |
| 11 | 7.224         | 0.41                   | 9.93                  | 30.20             | 40.54                       | 50.00            | 9.46           | Average |
| 12 | 7.224         | 0.41                   | 9.93                  | 41.48             | 51.82                       | 60.00            | 8.18           | QP      |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading 2.If the average limit is met when useing a quasi-peak detector.

the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Tel:+86-755-26639495 Fax:+86-755-26632877 Postcode:518057



Site no : Audix No.1 Conduction Data no :6

Dis./Ant. :\*\* 2009 KNW407 VA

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54% Engineer :Jolly\_Xu

EUT :XENYX Mixer M/N:1204USB

Power Rating :AC 120V/60Hz

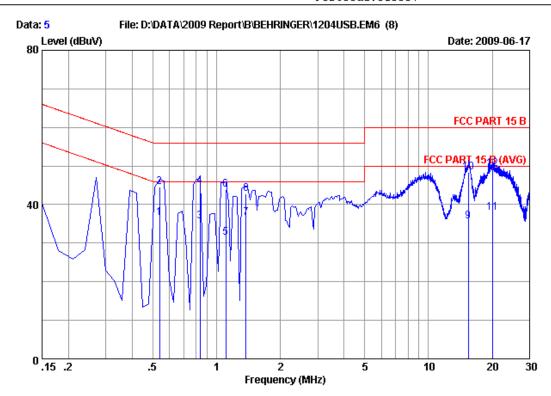
Test Mode :1kHz Signal Input And Recording

| No | Freq<br>(MHz) | LISN<br>Factor<br>(dB) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV) | n<br>Limits<br>(dBuV) | Margin<br>(dB) | Remark  |
|----|---------------|------------------------|-----------------------|-------------------|-----------------------------|-----------------------|----------------|---------|
| 1  | 0.53805       | 0.34                   | 9.89                  | 28.18             | 38.41                       | 46.00                 | 7.59           | Average |
| 2  | 0.53805       | 0.34                   | 9.89                  | 38.55             | 48.78                       | 56.00                 | 7.22           | QP      |
| 3  | 0.84163       | 0.34                   | 9.89                  | 26.32             | 36.55                       | 46.00                 | 9.45           | Average |
| 4  | 0.84163       | 0.34                   | 9.89                  | 39.98             | 50.21                       | 56.00                 | 5.79           | QP      |
| 5  | 1.080         | 0.33                   | 9.89                  | 23.12             | 33.34                       | 46.00                 | 12.66          | Average |
| 6  | 1.080         | 0.33                   | 9.89                  | 38.40             | 48.62                       | 56.00                 | 7.38           | QP      |
| 7  | 1.260         | 0.34                   | 9.89                  | 16.93             | 27.16                       | 46.00                 | 18.84          | Average |
| 8  | 1.260         | 0.34                   | 9.89                  | 33.36             | 43.59                       | 56.00                 | 12.41          | QP      |
| 9  | 9.276         | 0.42                   | 9.94                  | 27.80             | 38.16                       | 50.00                 | 11.84          | Average |
| 10 | 9.276         | 0.42                   | 9.94                  | 40.99             | 51.35                       | 60.00                 | 8.65           | QP      |
| 11 | 22.960        | 0.61                   | 10.04                 | 32.23             | 42.88                       | 50.00                 | 7.12           | Average |
| 12 | 22.960        | 0.61                   | 10.04                 | 40.23             | 50.88                       | 60.00                 | 9.12           | QP      |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading 2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



Fax:+86-755-26632877 Postcode:518057



Site no :Audix No.1 Conduction Data no :

Dis./Ant. :\*\* 2009 KNW407 VB

Limit :FCC PART 15 B

Env./Ins. :Temp:23'C Humi:54% Engineer :Jolly\_Xu EUT :XENYX Mixer M/N:1204USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input And Recording

|    |         | LISN   | Cable |         | Emission | n      |        |         |
|----|---------|--------|-------|---------|----------|--------|--------|---------|
| No | Freq    | Factor | Loss  | Reading | Level    | Limits | Margin | Remark  |
|    | (MHz)   | (dB)   | (dB)  | (dBuV)  | (dBuV)   | (dBuV) | (dB)   |         |
|    |         |        |       |         |          |        |        |         |
| 1  | 0.53805 | 0.35   | 9.89  | 26.30   | 36.54    | 46.00  | 9.46   | Average |
| 2  | 0.53805 | 0.35   | 9.89  | 34.33   | 44.57    | 56.00  | 11.43  | QP      |
| 3  | 0.83655 | 0.35   | 9.89  | 25.40   | 35.64    | 46.00  | 10.36  | Average |
| 4  | 0.83655 | 0.35   | 9.89  | 34.55   | 44.79    | 56.00  | 11.21  | QP      |
| 5  | 1.105   | 0.35   | 9.89  | 21.10   | 31.34    | 46.00  | 14.66  | Average |
| 6  | 1.105   | 0.35   | 9.89  | 33.67   | 43.91    | 56.00  | 12.09  | QP      |
| 7  | 1.374   | 0.35   | 9.89  | 26.41   | 36.65    | 46.00  | 9.35   | Average |
| 8  | 1.374   | 0.35   | 9.89  | 32.45   | 42.69    | 56.00  | 13.31  | QP      |
| 9  | 15.433  | 0.49   | 9.97  | 25.20   | 35.66    | 50.00  | 14.34  | Average |
| 10 | 15.433  | 0.49   | 9.97  | 37.95   | 48.41    | 60.00  | 11.59  | QP      |
| 11 | 20.090  | 0.57   | 10.01 | 27.30   | 37.88    | 50.00  | 12.12  | Average |
| 12 | 20.090  | 0.57   | 10.01 | 38.77   | 49.35    | 60.00  | 10.65  | QP      |
|    |         |        |       |         |          |        |        |         |

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading

2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

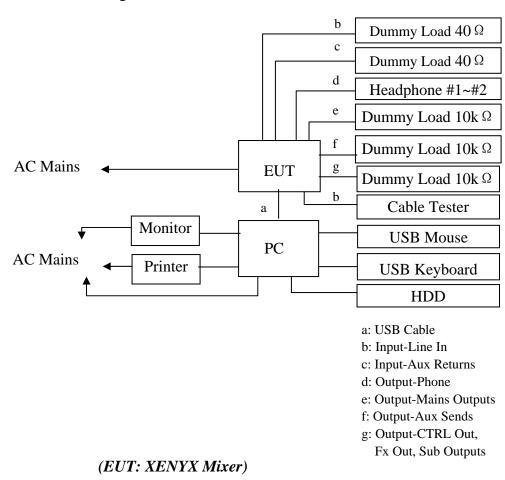
#### 4. RADIATED EMISSION TEST

# 4.1.Test Equipment

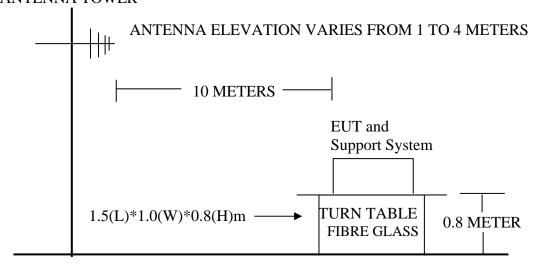
| Item | Equipment      | Manufacturer    | Model No. | Serial No.       | Last Cal.  | Cal. Interval |
|------|----------------|-----------------|-----------|------------------|------------|---------------|
| 1    | 10m Chamber    | AUDIX           | N/A       | N/A              | Dec.05,08  | 1 Year        |
| 2    | EMC Analyzer   | Agilent         | E7405A    | MY42000131       | May.08, 09 | 1 Year        |
| 3    | EMC Analyzer   | Agilent         | E7405A    | MY45116588       | Oct.24,08  | 1 Year        |
| 4    | Test Receiver  | Rohde & Schwarz | ESCI      | 100842           | Oct 24, 08 | 1 Year        |
| 5    | Amplifier      | Agilent         | 8447D     | 2944A10684       | May.08, 09 | 1Year         |
| 6    | Amplifier      | Agilent         | 8447D     | 2944A07794       | May.08, 09 | 1 Year        |
| 7    | Bilog Antenna  | Schaffner       | CBL6112D  | 25238            | Feb.12, 09 | 1 Year        |
| 8    | Bilog Antenna  | Schaffner       | CBL6112D  | 25237            | Feb.12, 09 | 1 Year        |
| 9    | RF Cable       | MIYAZAKI        | 8D-FB     | 10m Chamber No.1 | May.08, 09 | 1 Year        |
| 10   | RF Cable       | MIYAZAKI        | 8D-FB     | 10m Chamber No.2 | May.08, 09 | 1 Year        |
| 11   | Coaxial Switch | Anritsu         | MP59B     | 6200766906       | May.08, 09 | 1 Year        |
| 12   | Coaxial Switch | Anritsu         | MP59B     | 6200766907       | May.08, 09 | 1 Year        |
| 13   | Coaxial Switch | Anritsu         | MP59B     | M74389           | May.08, 09 | 1 Year        |

#### 4.2.Block Diagram of Test Setup

#### 4.2.1. Block diagram of connection between the EUT and simulators



# 4.2.2. In Anechoic (10m) Chamber Test Setup Diagram for 30MHz~1000MHz ANTENNA TOWER



**GROUND PLANE** 

#### 4.3. Radiated Emission Limit

| FREQUENCY  | DISTANCE | FIELD STRENGTHS LIMITS |
|------------|----------|------------------------|
| (MHz)      | (Meters) | (dBµV/m)               |
| 30 ~ 230   | 10       | 30                     |
| 230 ~ 1000 | 10       | 37                     |

Remark : (1) Emission level  $dB\mu V = 20 \log Emission level \mu V/m$ 

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system

#### 4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner that tends to maximize its emission characteristics in normal application.

#### 4.4.1. XENYX Mixer (EUT)

Model Number : X2442USB; 1204USB; X1204USB; X1222USB;

X1622USB; X1832USB; X2222USB

Serial Number : N/A

#### 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT as shown in Section 4.2.
- 4.5.2. Turn on the power of all equipment.
- 4.5.3. Let the EUT work in test mode (1kHz Signal Input and Recording) and test it.

#### 4.6.Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 10m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4-2003 on Radiated Emission test.

The bandwidth setting on the test receiver (R&S TEST RECEIVER ESCI) is 120 kHz.

The frequency range from 30MHz to 1000MHz is checked. The test results are reported on Section 4.7.

#### 4.7. Radiated Disturbance Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)

The EUT with the following test modes were tested and selected (mode 1~7) to read Q.P values, all the test results are listed in next pages.

**EUT: XENYX Mixer** 

Model No.: X2442USB; 1204USB; X1204USB; X1222USB; X1622USB;

X1832USB; X2222USB

Test Date: Jul.02, 2009 Temperature: 24°C Humidity: 56%

The details of test modes are as follows:

| NO.  | M/N      | Test Mode                          | Reference Test Data No. |          |  |
|------|----------|------------------------------------|-------------------------|----------|--|
| NO.  | IVI/1N   | Test Mode                          | Horizontal              | Vertical |  |
| 1.   | X2442USB |                                    | #4                      | #3       |  |
| 2.   | 1204USB  |                                    | #26                     | #25      |  |
| 3.   | X1204USB |                                    | #24                     | #23      |  |
| 4.   | X1222USB | 1kHz Signal Input and<br>Recording | #18                     | #17      |  |
| 5.   | X1622USB | 110001umg                          | #16                     | #15      |  |
| 6.   | X1832USB |                                    | #10                     | #9       |  |
| 7. ※ | X2222USB |                                    | #8                      | #7       |  |

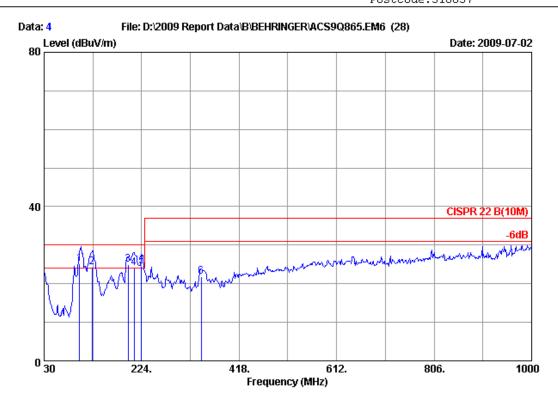
(\* Worst test mode)

For above 1GHz frequency

Due to the EUT's highest frequency generated and the highest frequency below 108MHz, therefore the above 1GHz frequency is no need to measurement.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 4

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X2442USB

Power Rating : AC 120V/60Hz

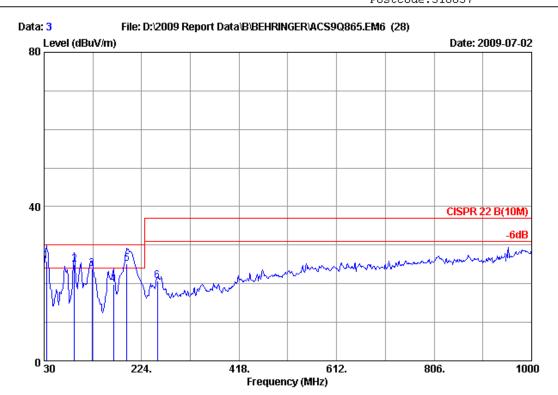
Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |  |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|--|
| 1 | 100.810        | 10.38                    | 1.10                  | 13.75             | 25.23                         | 30.00              | 4.77          | QP     |  |
| 2 | 125.060        | 12.07                    | 1.22                  | 11.03             | 24.32                         | 30.00              | 5.68          | QP     |  |
| 3 | 196.840        | 8.75                     | 1.59                  | 14.65             | 24.99                         | 30.00              | 5.01          | QP     |  |
| 4 | 209.450        | 8.66                     | 1.65                  | 13.80             | 24.11                         | 30.00              | 5.89          | QP     |  |
| 5 | 224.000        | 8.86                     | 1.73                  | 13.96             | 24.55                         | 30.00              | 5.45          | QP     |  |
| 6 | 342.340        | 13.36                    | 2.36                  | 6.20              | 21.92                         | 37.00              | 15.08         | QP     |  |
|   |                |                          |                       |                   |                               |                    |               |        |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 3

Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X2442USB

Power Rating : AC 120V/60Hz

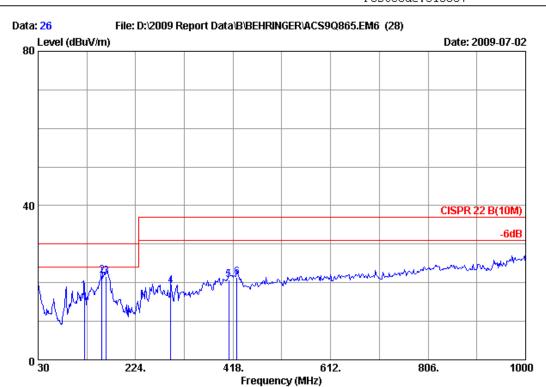
Test Mode : 1kHz Signal Input and Recording

|   |         | Ant.   | Cable |         | Emission |          |       |        |
|---|---------|--------|-------|---------|----------|----------|-------|--------|
|   | Freq.   | Factor | Loss  | Reading | Level    | Limits   | Magin | Remark |
|   | (MHz)   | (dB/m) | (dB)  | (dBuV)  | (dBuV/m) | (dBuV/m) | (dB)  |        |
|   |         |        |       |         |          |          |       |        |
| 1 | 34.850  | 16.55  | 0.84  | 8.43    | 25.82    | 30.00    | 4.18  | QP     |
| 2 | 90.140  | 8.92   | 1.40  | 14.69   | 25.01    | 30.00    | 4.99  | QP     |
| 3 | 125.060 | 12.07  | 1.66  | 10.20   | 23.93    | 30.00    | 6.07  | QP     |
| 4 | 167.740 | 9.55   | 1.97  | 8.36    | 19.88    | 30.00    | 10.12 | QP     |
| 5 | 194.900 | 8.56   | 2.18  | 14.43   | 25.17    | 30.00    | 4.83  | QP     |
| 6 | 255.040 | 12.56  | 2.51  | 5.72    | 20.79    | 37.00    | 16.21 | QP     |
|   |         |        |       |         |          |          |       |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 26

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N: 1204USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 122.150        | 11.96                    | 1.64                  | 4.13              | 17.73                         | 30.00              | 12.27         | QP     |
| 2 | 157.070        | 9.35                     | 1.89                  | 10.58             | 21.82                         | 30.00              | 8.18          | QP     |
| 3 | 165.800        | 9.40                     | 1.96                  | 10.21             | 21.57                         | 30.00              | 8.43          | QP     |
| 4 | 293.840        | 12.37                    | 2.75                  | 4.03              | 19.15                         | 37.00              | 17.85         | QP     |
| 5 | 409.270        | 15.79                    | 3.38                  | 1.52              | 20.69                         | 37.00              | 16.31         | QP     |
| 6 | 425.760        | 16.26                    | 3.47                  | 1.64              | 21.37                         | 37.00              | 15.63         | QP     |
|   |                |                          |                       |                   |                               |                    |               |        |

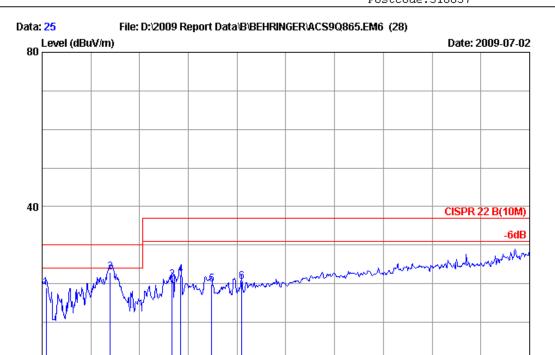
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057

806.

1000



Frequency (MHz)

612.

Site no. : 10m Chamber Test Site Data no. : 25 Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

418.

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N: 1204USB

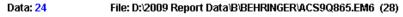
Power Rating : AC 120V/60Hz

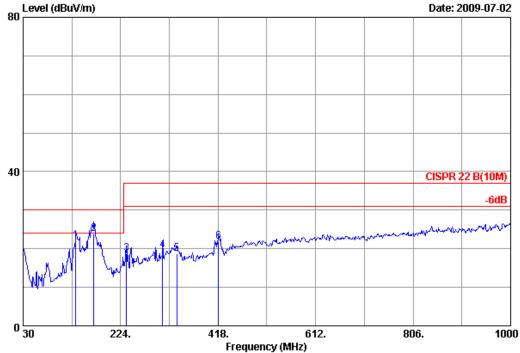
Test Mode : 1kHz Signal Input and Recording

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057





Site no. : 10m Chamber Test Site Data no. : 24

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1204USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

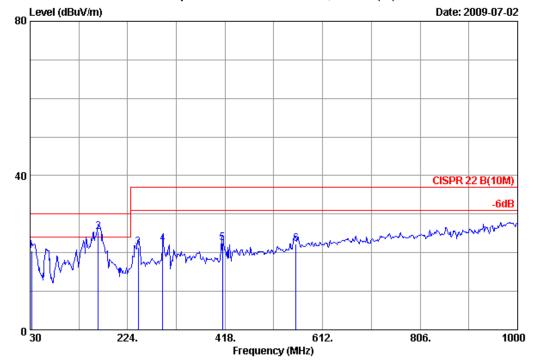
|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 134.760        | 11.49                    | 1.73                  | 8.93              | 22.15                         | 30.00              | 7.85          | QP     |
| 2 | 170.650        | 9.57                     | 2.00                  | 12.35             | 23.92                         | 30.00              | 6.08          | QP     |
| 3 | 235.640        | 10.17                    | 2.40                  | 6.06              | 18.63                         | 37.00              | 18.37         | QP     |
| 4 | 307.420        | 13.18                    | 2.83                  | 3.51              | 19.52                         | 37.00              | 17.48         | QP     |
| 5 | 335.550        | 13.42                    | 2.99                  | 2.27              | 18.68                         | 37.00              | 18.32         | QP     |
| 6 | 418.970        | 16.22                    | 3.43                  | 2.16              | 21.81                         | 37.00              | 15.19         | QP     |
|   |                |                          |                       |                   |                               |                    |               |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057

#### Data: 23 File: D:\2009 Report Data\B\BEHRINGER\ACS9Q865.EM6 (28)



Site no. : 10m Chamber Test Site Data no. : 23 Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1204USB

Power Rating : AC 120V/60Hz

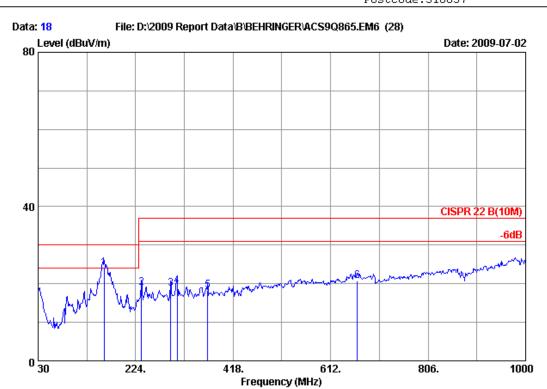
Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 32.910         | 17.53                    | 0.80                  | 2.19              | 20.52                         | 30.00              | 9.48          | QP     |
| 2 | 165.800        | 9.40                     | 1.96                  | 13.97             | 25.33                         | 30.00              | 4.67          | QP     |
| 3 | 245.340        | 11.20                    | 2.45                  | 7.70              | 21.35                         | 37.00              | 15.65         | QP     |
| 4 | 293.840        | 12.37                    | 2.75                  | 7.26              | 22.38                         | 37.00              | 14.62         | QP     |
| 5 | 413.150        | 16.03                    | 3.40                  | 3.03              | 22.46                         | 37.00              | 14.54         | QP     |
| 6 | 558.650        | 18.15                    | 4.11                  | 0.00              | 22.26                         | 37.00              | 14.74         | QP     |
|   |                |                          |                       |                   |                               |                    |               |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 18

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1222USB

Power Rating : AC 120V/60Hz

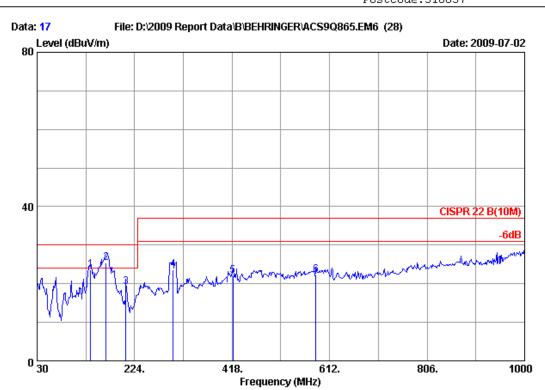
Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 160.950        | 9.46                     | 1.92                  | 12.73             | 24.11                         | 30.00              | 5.89          | QP     |
| 2 | 235.640        | 10.17                    | 2.40                  | 6.44              | 19.01                         | 37.00              | 17.99         | QP     |
| 3 | 293.840        | 12.37                    | 2.75                  | 3.55              | 18.67                         | 37.00              | 18.33         | QP     |
| 4 | 306.450        | 13.15                    | 2.83                  | 3.43              | 19.41                         | 37.00              | 17.59         | QP     |
| 5 | 367.560        | 14.06                    | 3.16                  | 1.01              | 18.23                         | 37.00              | 18.77         | QP     |
| 6 | 665.350        | 18.44                    | 4.64                  | -2.43             | 20.65                         | 37.00              | 16.35         | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 17
Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1222USB

Power Rating : AC 120V/60Hz

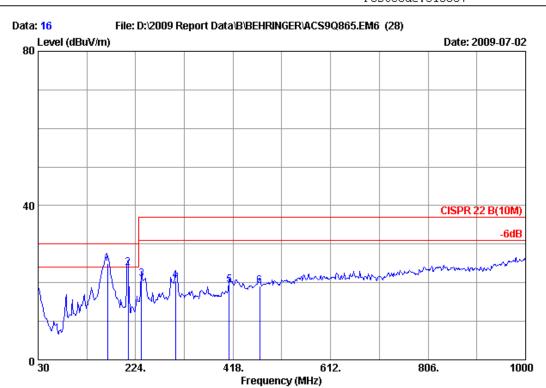
Test Mode : 1kHz Signal Input and Recording

|   | Freq.   | Ant.<br>Factor | Cable<br>Loss | Reading | Emission<br>Level | Limits   | Magin | Remark |
|---|---------|----------------|---------------|---------|-------------------|----------|-------|--------|
|   | (MHz)   | (dB/m)         | (dB)          | (dBuV)  | (dBuV/m)          | (dBuV/m) | (dB)  |        |
| 1 | 136.700 | 11.20          | 1.74          | 10.79   | 23.73             | 30.00    | 6.27  | QP     |
| 2 | 167.100 | 9.48           | 1.97          | 13.87   | 25.32             | 30.00    | 4.68  | QP     |
| 3 | 206.540 | 8.84           | 2.25          | 8.00    | 19.09             | 30.00    | 10.91 | QP     |
| 4 | 300.630 | 12.94          | 2.79          | 7.87    | 23.60             | 37.00    | 13.40 | QP     |
| 5 | 419.940 | 16.25          | 3.43          | 2.30    | 21.98             | 37.00    | 15.02 | QP     |
| 6 | 584.840 | 18.01          | 4.24          | 0.12    | 22.37             | 37.00    | 14.63 | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 16

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1622USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

|   | Freq.   | Ant.<br>Factor | Cable<br>Loss | Reading | Emission<br>Level | Limits   | Magin | Remark |
|---|---------|----------------|---------------|---------|-------------------|----------|-------|--------|
|   | (MHz)   | (dB/m)         | (dB)          | (dBuV)  | (dBuV/m)          | (dBuV/m) | (dB)  |        |
| 1 | 168.010 | 9.55           | 1.98          | 13.43   | 24.96             | 30.00    | 5.04  | QP     |
| 2 | 209.450 | 8.66           | 2.27          | 13.01   | 23.94             | 30.00    | 6.06  | QP     |
| 3 | 235.640 | 10.17          | 2.40          | 8.35    | 20.92             | 37.00    | 16.08 | QP     |
| 4 | 303.540 | 13.04          | 2.81          | 4.70    | 20.55             | 37.00    | 16.45 | QP     |
| 5 | 410.240 | 15.93          | 3.39          | 0.01    | 19.33             | 37.00    | 17.67 | QP     |
| 6 | 471.350 | 16.97          | 3.69          | -1.55   | 19.11             | 37.00    | 17.89 | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057

# 

Frequency (MHz)

Site no. : 10m Chamber Test Site Data no. : 15 Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1622USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
|   |                |                          |                       |                   |                               |                    |               |        |
| 1 | 61.040         | 6.16                     | 1.16                  | 14.90             | 22.22                         | 30.00              | 7.78          | QP     |
| 2 | 136.700        | 11.20                    | 1.74                  | 12.78             | 25.72                         | 30.00              | 4.28          | QP     |
| 3 | 167.200        | 9.48                     | 1.97                  | 13.92             | 25.37                         | 30.00              | 4.63          | QP     |
| 4 | 209.450        | 8.66                     | 2.27                  | 10.92             | 21.85                         | 30.00              | 8.15          | QP     |
| 5 | 306.450        | 13.15                    | 2.83                  | 8.89              | 24.87                         | 37.00              | 12.13         | QP     |
| 6 | 425.760        | 16.26                    | 3.47                  | 2.96              | 22.69                         | 37.00              | 14.31         | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057

# Data: 10 File: D:\2009 Report Data\B\BEHR\INGER\ACS\9\Q865.EM6\(28\) Date: 2009-07-02 CISPR 22 B(10M) -6dB -30 224, 418, 612, 806, 1000

Frequency (MHz)

Site no. : 10m Chamber Test Site Data no. : 10

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1832USB

Power Rating : AC 120V/60Hz

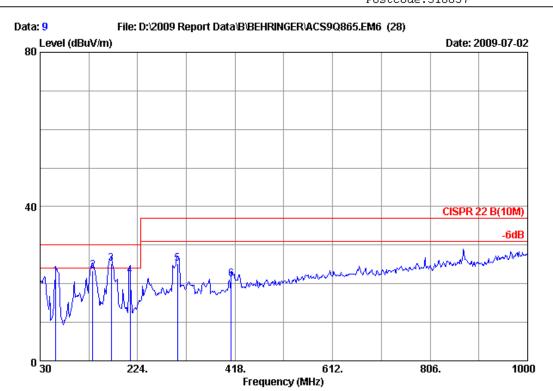
Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 165.800        | 9.40                     | 1.96                  | 11.53             | 22.89                         | 30.00              | 7.11          | QP     |
| 2 | 209.450        | 8.66                     | 2.27                  | 8.72              | 19.65                         | 30.00              | 10.35         | QP     |
| 3 | 293.840        | 12.37                    | 2.75                  | 3.36              | 18.48                         | 37.00              | 18.52         | QP     |
| 4 | 447.100        | 16.26                    | 3.57                  | -1.67             | 18.16                         | 37.00              | 18.84         | QP     |
| 5 | 500.450        | 17.26                    | 3.83                  | -1.26             | 19.83                         | 37.00              | 17.17         | QP     |
| 6 | 587.750        | 17.99                    | 4.25                  | -1.36             | 20.88                         | 37.00              | 16.12         | QP     |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 9

Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X1832USB

Power Rating : AC 120V/60Hz

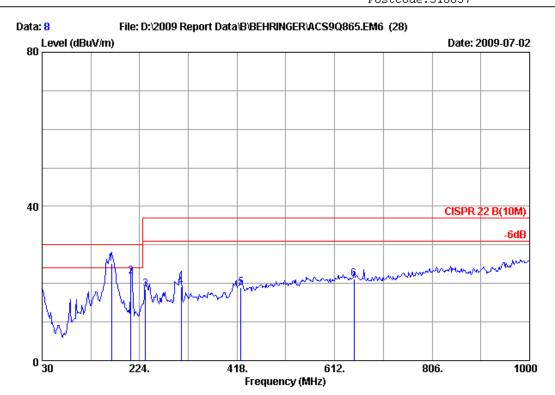
Test Mode : 1kHz Signal Input and Recording

|   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
| 1 | 61.040         | 6.16                     | 1.16                  | 14.60             | 21.92                         | 30.00              | 8.08          | QP     |
| 2 | 134.760        | 11.49                    | 1.73                  | 10.08             | 23.30                         | 30.00              | 6.70          | QP     |
| 3 | 171.620        | 9.44                     | 2.00                  | 13.64             | 25.08                         | 30.00              | 4.92          | QP     |
| 4 | 209.450        | 8.66                     | 2.27                  | 11.09             | 22.02                         | 30.00              | 7.98          | QP     |
| 5 | 303.540        | 13.04                    | 2.81                  | 9.23              | 25.08                         | 37.00              | 11.92         | QP     |
| 6 | 410.240        | 15.93                    | 3.39                  | 1.89              | 21.21                         | 37.00              | 15.79         | QP     |
|   |                |                          |                       |                   |                               |                    |               |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 8

Dis. / Ant. : 10m 2009 CBL6112D 25237 Ant. pol. : HORIZONTAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X2222USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

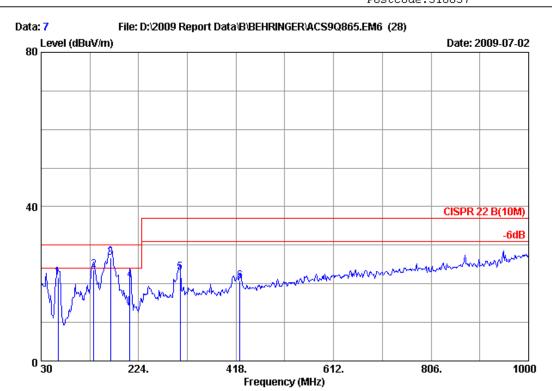
|   |   | Freq.<br>(MHz) | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |
|---|---|----------------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|
|   | 1 | 167.740        | 9.55                     | 1.97                  | 13.62             | 25.14                         | 30.00              | 4.86          | QP     |
|   | 2 | 206.540        | 8.84                     | 2.25                  | 10.80             | 21.89                         | 30.00              | 8.11          | QP     |
| 1 | 3 | 235.640        | 10.17                    | 2.40                  | 5.87              | 18.44                         | 37.00              | 18.56         | QP     |
|   | 4 | 306.450        | 13.15                    | 2.83                  | 3.24              | 19.22                         | 37.00              | 17.78         | QP     |
| ļ | 5 | 425.760        | 16.26                    | 3.47                  | -0.72             | 19.01                         | 37.00              | 17.99         | QP     |
| - | 6 | 650.800        | 18.32                    | 4.57                  | -1.83             | 21.06                         | 37.00              | 15.94         | QP     |
|   |   |                |                          |                       |                   |                               |                    |               |        |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

- 2. The emission levels that are 20dB below the official limit are not reported.
- 3. The worst emission was detected at 167.74MHz with corrected signal level of 25.14dB $\mu$ V/m (Limit is 30.00dB $\mu$ V/m) when the antenna was at horizontal polarization and at 2.0m high and the turn table was at 145°.
- 4. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.



Fax:+86-755-26632877 Postcode:518057



Site no. : 10m Chamber Test Site Data no. : 7

Dis. / Ant. : 10m 2009 CBL6112D 25238 Ant. pol. : VERTICAL

Limit : CISPR 22 B(10M)

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : XENYX Mixer M/N:X2222USB

Power Rating : AC 120V/60Hz

Test Mode : 1kHz Signal Input and Recording

|   | Freq.   | Ant.<br>Factor<br>(dB/m) | Cable<br>Loss<br>(dB) | Reading<br>(dBuV) | Emission<br>Level<br>(dBuV/m) | Limits<br>(dBuV/m) | Magin<br>(dB) | Remark |  |
|---|---------|--------------------------|-----------------------|-------------------|-------------------------------|--------------------|---------------|--------|--|
| 1 | 63.950  | 5.90                     | 1.18                  | 14.62             | 21.70                         | 30.00              | 8.30          | QP     |  |
| 2 | 134.760 | 11.49                    | 1.73                  | 10.38             | 23.60                         | 30.00              | 6.40          | QP     |  |
| 3 | 167.740 | 9.55                     | 1.97                  | 15.13             | 26.65                         | 30.00              | 3.35          | QP     |  |
| 4 | 206.540 | 8.84                     | 2.25                  | 9.77              | 20.86                         | 30.00              | 9.14          | QP     |  |
| 5 | 306.450 | 13.15                    | 2.83                  | 6.90              | 22.88                         | 37.00              | 14.12         | QP     |  |
| 6 | 425.760 | 16.26                    | 3.47                  | 0.97              | 20.70                         | 37.00              | 16.30         | QP     |  |
|   |         |                          |                       |                   |                               |                    |               |        |  |

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

- The emission levels that are 20dB below the official limit are not reported.
- 3. The worst emission was detected at 167.74MHz with corrected signal level of 26.65dB $\mu$ V/m (Limit is 30.00dB $\mu$ V/m) when the antenna was at vertical polarization and at 1.0m high and the turn table was at 310°.
- 4.0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.

# 5. DEVIATION TO TEST SPECIFICATIONS

[NONE]

# 6. PHOTOGRAPH

6.1. Photos of Power Line Conducted Emission Test





# 6.2. Photos of Radiated Emission Test (In Anechoic Chamber)









## 7. PHOTOS OF THE EUT

M/N: X2442USB

Figure 1



Figure 2 General Appearance of the EUT







**Figure 4** General Appearance of the EUT



Figure 5
Inside of the EUT



Figure 6
Inside of the EUT



Figure 7
Inside of the EUT

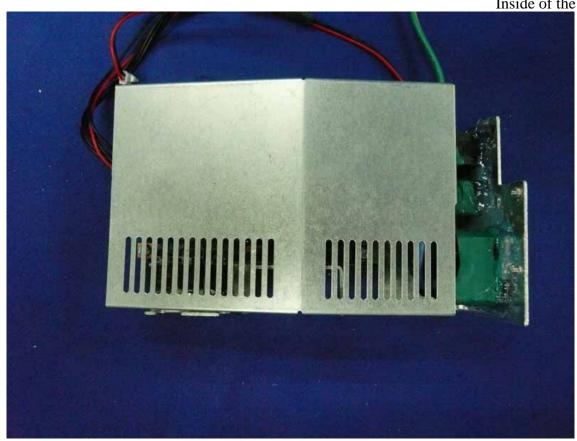
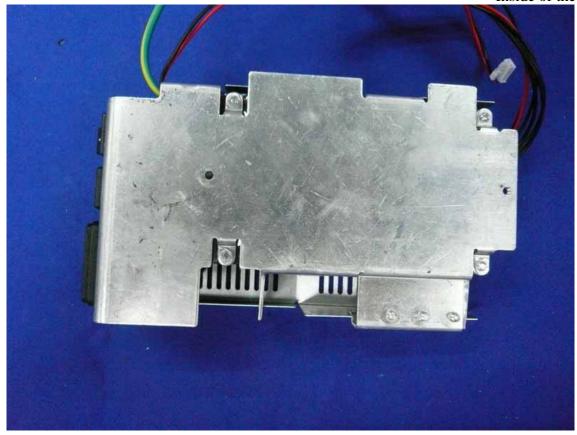


Figure 8 Inside of the EUT



**Figure 9** Inside of the EUT

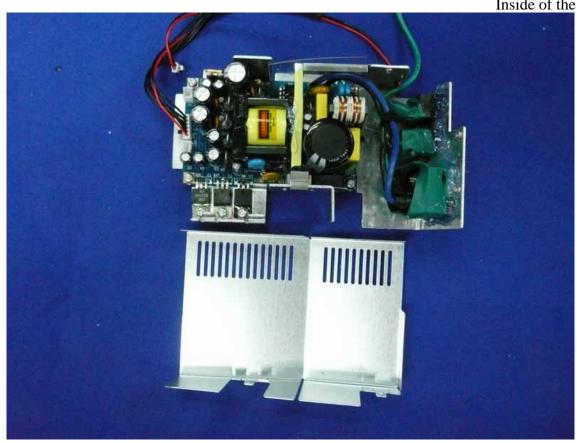


Figure 10 Inside of the EUT

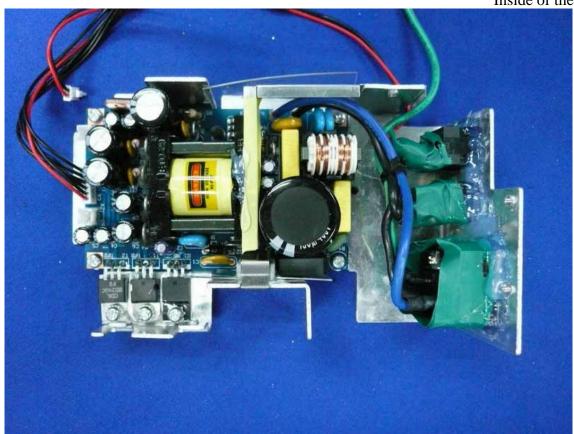


Figure 11
Component Side of the PCB

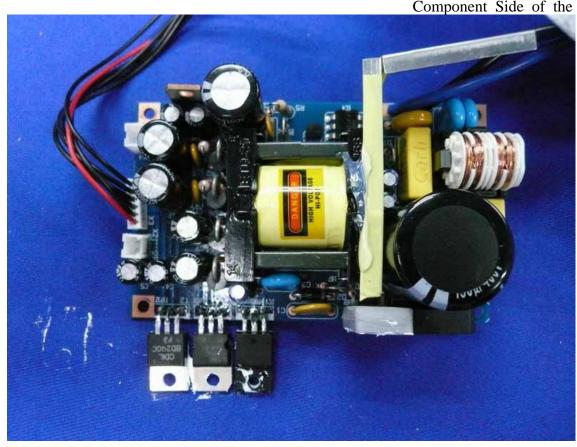


Figure 12
Component Side of the PCB



Figure 13 Component Side of the PCB

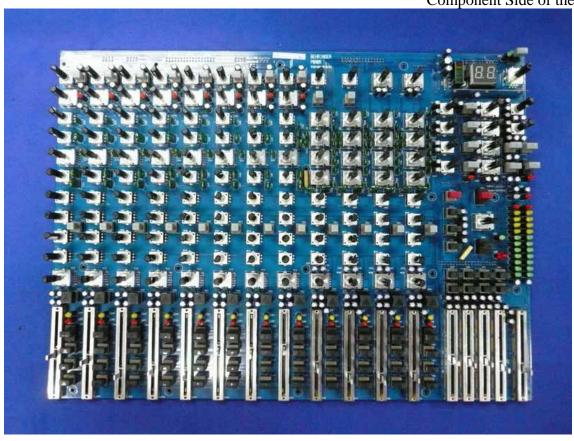


Figure 14
Component Side of the PCB

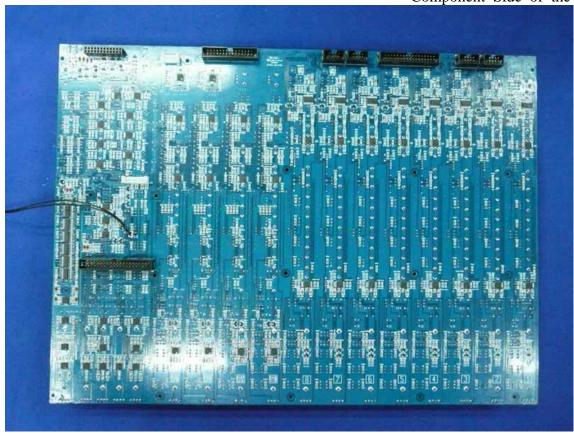


Figure 15 Component Side of the PCB



Figure 16
Component Side of the PCB

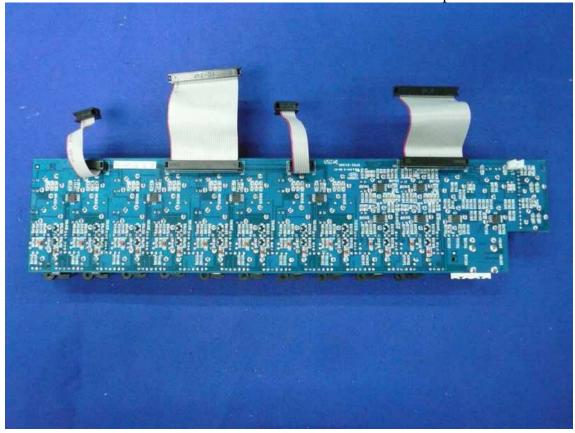


Figure 17 Component Side of the PCB



Figure 18 Component Side of the PCB

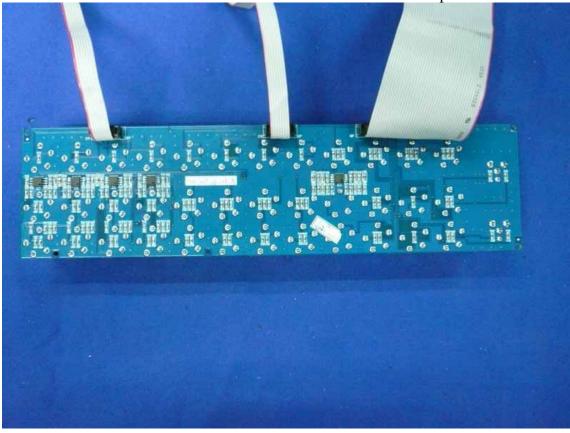


Figure 19
Component Side of the PCB



Figure 20 Component Side of the PCB

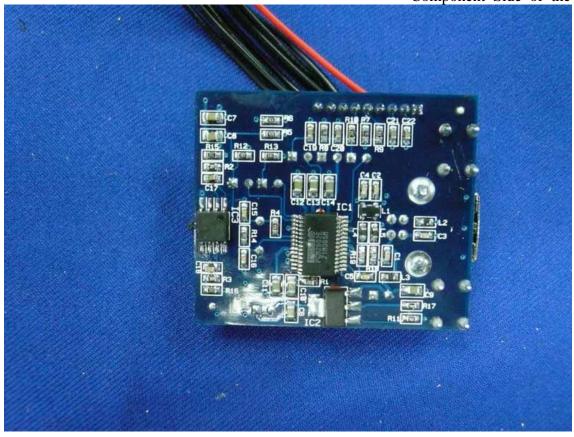


Figure 21 Component Side of the PCB

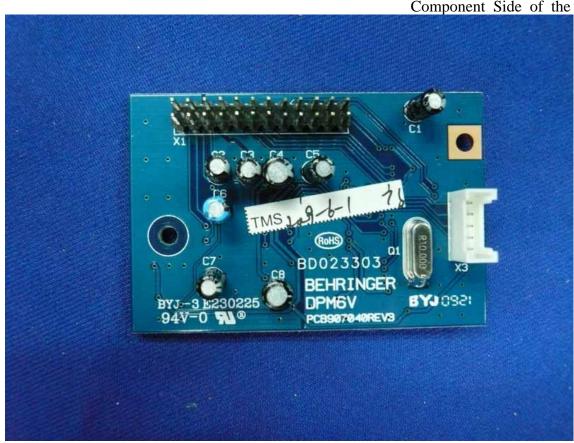
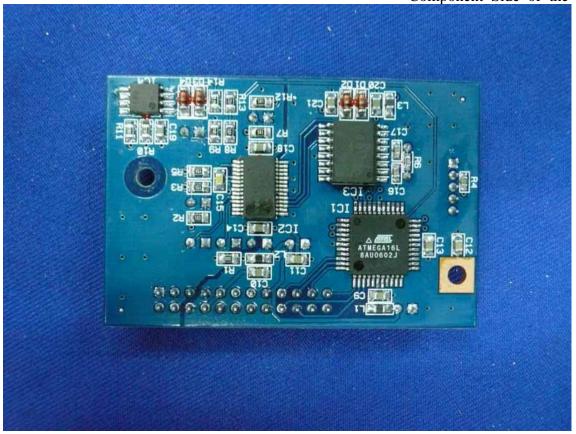
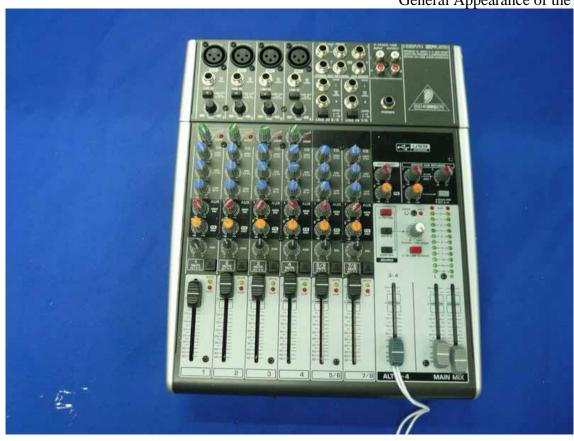


Figure 22 Component Side of the PCB



M/N: 1204USB Figure 23



**Figure 24**General Appearance of the EUT



Figure 25
General Appearance of the EUT



Figure 26
General Appearance of the EUT



M/N: X1204USB Figure 27



Figure 28
General Appearance of the EUT



Figure 29
General Appearance of the EUT



Figure 30 General Appearance of the EUT



M/N: X1222USB Figure 31



Figure 32
General Appearance of the EUT



Figure 33
General Appearance of the EUT



**Figure 34** General Appearance of the EUT



M/N: X1622USB Figure 35



Figure 36
General Appearance of the EUT



Figure 37
General Appearance of the EUT



**Figure 38** General Appearance of the EUT



M/N: X1832USB Figure 39



**Figure 40** General Appearance of the EUT



**Figure 41**General Appearance of the EUT



Figure 42
General Appearance of the EUT



M/N: X2222USB Figure 43



Figure 44
General Appearance of the EUT



**Figure 45** General Appearance of the EUT



Figure 46
General Appearance of the EUT

