



**BUREAU
VERITAS**

TEST REPORT No: (5213)037-0657

TEST REPORT

| | | | |
|---------------|----------------------------------------------------------------------|----------|----|
| To: | MAISON JOSEPH BATTAT LTD. | To: | - |
| Attn: | Joseph Batta | Attn: | - |
| Address: | 8440 Darnley, Montreal, QC Canada H4T 1M4 | Address: | - |
| Fax: | 514-738-8560 | Fax: | - |
| E-mail: | joe.battat@battatco.com | E-mail: | - |
| Folder No.: | | | -- |
| Factory name: | | | -- |
| Location: | | | -- |
| Product: | SYMPHONEY IN B. Model No.: BX1120 | | |



| | |
|-----------------|--------------------|
| Sample No: | (5213)037-0657 |
| Test Date(s): | February 18, 2013 |
| Test Requested: | FCC Part 15 – 2011 |
| Test Method: | ANSI C63.4 – 2009 |
| FCC ID: | SLURF1356BX1120A |

The results given in this report are related to the tested specimen of the described electrical apparatus.

CONCLUSION: The submitted sample was found to **COMPLY** with requirement of FCC Part 15 Subpart C.

Authorized Signature:

| | |
|--------------------------|---------------------------|
| | |
| Reviewed by: Keith Yeung | Approved by: Steven Tsang |
| Date: March 27, 2013 | Date: March 27, 2013 |

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This report is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. Our report is limited to the test samples identified herein. The results set forth in this report are not necessarily indicative or representative of the statistical quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof. You shall have thirty days from receipt of this report to request additional testing of the samples or to notify us of any errors or omissions relating to our report, provided, however, such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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Test Result Summary

| EMISSION TEST | | | |
|-----------------------------------------|-------------|-------------------------------------|--------------------------|
| Test requirement: FCC Part 15 - 2011 | | | |
| Test Condition | Test Method | Test Result | |
| | | Pass | Failed |
| Radiated Emission Test, 9kHz to 1GHz | ANSI C63.4 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Report Revision & Sample Re-submit History:

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Location of the test laboratory

Radiated and Conducted emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2009. An Open Area Test Site and Full Anechoic Chamber (FCC Listed Site, Registration No. 642151) are set up for investigation and located at:

BUREAU VERITAS HONG KONG LIMITED, EMC CENTRE

No. 2106-2107, 21/F., Westin Centre,
26 Hung To Road,
Kwun Tong, Kowloon,
Hong Kong

List of measuring equipment

Radiated Emission

| EQUIPMENT | MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATION DUE |
|---------------------|--------------|-----------|--------------|-----------------|
| EMI TEST RECEIVER | R&S | ESCI | 100379 | 28-JAN-2014 |
| LOOP ANTENNA | ETS-LINDGREN | 6502 | 00102266 | 13-AUG-2013 |
| BILOG ANTENNA | SCHAFFNER | CBL6112D | 25229 | 12-SEP-2013 |
| OPEN AREA TEST SITE | BVCPS | N/A | N/A | 09-JUL-2013 |
| ANECHOIC CHAMBER | ALBATROSS | M-CDC | 80374004499B | 05-FEB-2014 |
| COAXIAL CABLE | SUHNER | N/A | N/A | 24-SEP-2013 |

Frequency error and Frequency drift, Modulation bandwidth, Frequency stability

| EQUIPMENT | MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATION DUE |
|-------------------|-----------------|-----------|------------|-----------------|
| EMI TEST RECEIVER | ROHDE & SCHWARZ | ESCI | 100379 | 28-JAN-2014 |
| CLIMATIC CHAMBER | EMV | TH-22P2S | N/A | 18-MAY-2013 |

Remarks:-

N/A : Not Applicable or Not Available

The measurement instrumentation uncertainty would be taking into consideration on each of the test result

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Equipment Under Test [EUT]

Description of Sample:

Model Name: SYMPHONEY IN B.
Model Number: BX1120
Additional Model: BX1120JPN, BX1120Z
Additional Model Information: Declare the Circuit, PCB layout, Electrical parts of the products are identical to the basic model. Except outlook.
Rating: 9Vd.c. ("AA" size battery x 6)

Description of EUT Operation:

The Equipment Under Test (EUT) is a MAISON JOSEPH BATTAT LTD. of RFID toy. The transceiver with 13 Tags (Instruments) is operating at 13.564MHz. The EUT continues to transmit when power is turn to ON, Modulation by IC, and type is pulse modulation.

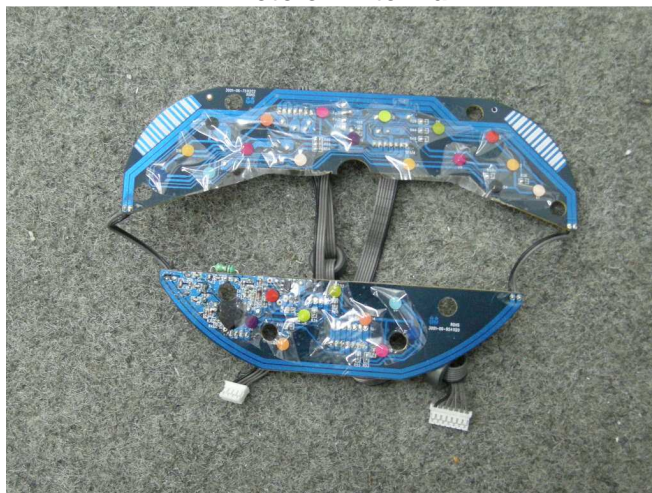
The transceiver has different control:

1. MELODY / ACCOMPANIMENT – identify which instrument play melody and accompaniment
2. ORCHSTRA SECTIONS – teach the sections of the orchestra
3. TEMPO CONTROL – control the tempo
4. VOLUME CONTROL – control the volume
5. STOP SONG CONTROL – stop the song
6. PLAY SONG CONTROL – play the next song
7. DEMO – play a loop of songs
8. ON/OFF switch – control power on/off

Antenna Requirement (Section 15.203)

The EUT is use of a permanently antenna. It is soldered on the PCB. The antenna is not replaceable or user serviceable. There are no deviations or exceptions to the specifications. The requirement of S15.203 are met. There are no deviations or exceptions to the specifications.

Photo of Antenna



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Test Results

Radiated Emissions (Fundamental)

Test Requirement: FCC Part 15 Section 15.227
 Test Method: ANSI C63.4
 Test Date(s): 2013-02-14
 Temperature: 20.0 °C
 Humidity: 67.0 %
 Atmospheric Pressure: 101.6 kPa
 Mode of Operation: Transmission mode
 Tested Voltage: 9Vd.c. ("AA" size battery x 6)

Test Procedure:

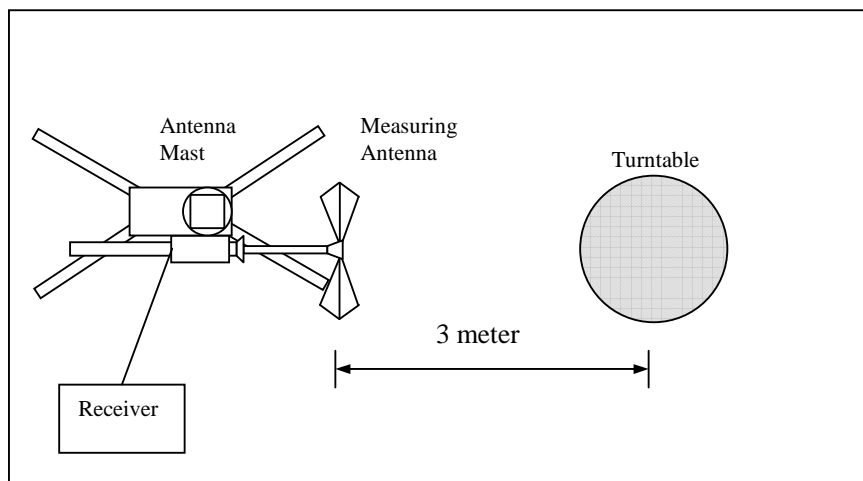
Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2009.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 1m and 0.8m high above the ground. 3m from the EUT, a broadband antenna mounting on the mast received the signal strength. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using new battery. The turntable was rotated to maximize the emission level. The antenna was then moving along the mast from 1m up to 4m until no more higher value was found. Both horizontal and vertical polarization of the antenna were placed and investigated.

For below 30MHz, a loop antenna with its vertical plane is place 3m from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. And the centre of the loop shall be 1m above the ground.

Location: The Roof, Westin Centre, 26 Hung To Road, Kwun Tong, Kowloon, Hong Kong

Test Setup: Open Area Test Site





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Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.225]:

| Frequency Range of Fundamental [MHz] | Field Strength of Fundamental Emission at 3m |
|-----------------------------------------|----------------------------------------------|
| 13.553-13.567 | 124 dB μ V/m |

Measurement Data

Test Result of (Transmission mode): PASS

Detection mode: Quasi-Peak

| Frequency (MHz) | Polarity (H/V) and degree | Antenna Factor and Cable Loss (dB/m) | Field Strength at 3m (dB μ V/m) | Limit at 3m (dB μ V/m) | Margin (dB) |
|-----------------|---------------------------|--------------------------------------|-------------------------------------|----------------------------|-------------|
| 13.563 | V/0° | 12.7 | 61.3 | 124.0 | -62.7 |

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 100KHz
VBW = 300KHz



TEST REPORT No: (5213)037-0657

Radiated Emissions (9kHz – 1GHz)

Test Requirement: FCC Part 15 Section 15.209

Test Method: ANSI C63.4

Test Date(s): 2013-02-14

Temperature: 20.0 °C

Humidity: 67.0 %

Atmospheric Pressure: 101.6 kPa

Mode of Operation: Transmission mode

Tested Voltage: 9Vd.c. ("AA" size battery x 6)

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

| Frequency Range [MHz] | Quasi-Peak Limits [μ V/m] |
|--------------------------|-----------------------------------|
| 1.705-30 | 300 |
| 30-88 | 100 |
| 88-216 | 150 |
| 216-960 | 200 |
| Above960 | 500 |



TEST REPORT No: (5213)037-0657

Measurement Data

Test Result of (Transmission mode): PASS

Detection mode: Quasi-Peak

| Frequency (MHz) | Polarity (H/V) | Antenna Factor and Cable Loss (dB/m) | Field Strength at 3m (dBμV/m) | Limit at 3m (dBμV/m) | Margin (dB) |
|-----------------|----------------|--------------------------------------|-------------------------------|----------------------|-------------|
| 40.689 | H | 14.5 | 33.7 | 40.0 | -6.3 |
| 149.193 | H | 10.9 | 26.2 | 43.5 | -17.3 |
| 284.823 | H | 13.6 | 32.3 | 46.0 | -13.7 |
| 352.638 | H | 15.7 | 40.7 | 46.0 | -5.3 |
| 366.201 | H | 16.4 | 41.3 | 46.0 | -4.7 |
| 379.764 | H | 16.6 | 39.2 | 46.0 | -6.8 |
| 393.327 | H | 17.3 | 43.2 | 46.0 | -2.8 |
| 406.890 | H | 17.9 | 39.8 | 46.0 | -6.2 |
| 420.453 | H | 17.7 | 42.5 | 46.0 | -3.5 |
| 447.579 | H | 17.7 | 33.0 | 46.0 | -13.0 |
| 474.705 | H | 18.6 | 34.9 | 46.0 | -11.1 |

| Frequency (MHz) | Polarity (H/V) | Antenna Factor and Cable Loss (dB/m) | Field Strength at 3m (dBμV/m) | Limit at 3m (dBμV/m) | Margin (dB) |
|-----------------|----------------|--------------------------------------|-------------------------------|----------------------|-------------|
| 40.689 | V | 14.5 | 32.8 | 40.0 | -7.2 |
| 149.193 | V | 10.9 | 29.1 | 43.5 | -14.4 |
| 284.823 | V | 13.6 | 29.4 | 46.0 | -16.6 |
| 352.638 | V | 15.7 | 28.6 | 46.0 | -17.4 |
| 366.201 | V | 16.4 | 32.7 | 46.0 | -13.3 |
| 379.764 | V | 16.6 | 30.5 | 46.0 | -15.5 |
| 393.327 | V | 17.3 | 36.7 | 46.0 | -9.3 |
| 406.890 | V | 17.9 | 31.6 | 46.0 | -14.4 |
| 420.453 | V | 17.7 | 38.3 | 46.0 | -7.7 |
| 447.579 | V | 17.7 | 38.2 | 46.0 | -7.8 |
| 474.705 | V | 18.6 | 36.8 | 46.0 | -9.2 |

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 120KHz
VBW = 120KHz



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26dB Bandwidth of Fundamental Emission

Test Requirement: FCC 47 CFR 15.225
 Test Method: ANSI C63.4
 Test Date(s): 2013-02-18
 Temperature: 22.0 °C
 Humidity: 47.0 %
 Atmospheric Pressure: 101.5 kPa
 Mode of Operation: Transmission mode
 Tested Voltage: 9Vd.c. ("AA" size battery x 6)

Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

Limits for 26dB Bandwidth of Fundamental Emission:

| Frequency [MHz] | 26dB Bandwidth [KHz] | Limits [MHz] |
|--------------------|-------------------------|------------------------|
| 13.563 | 95.0 | within 13.553 – 13.567 |



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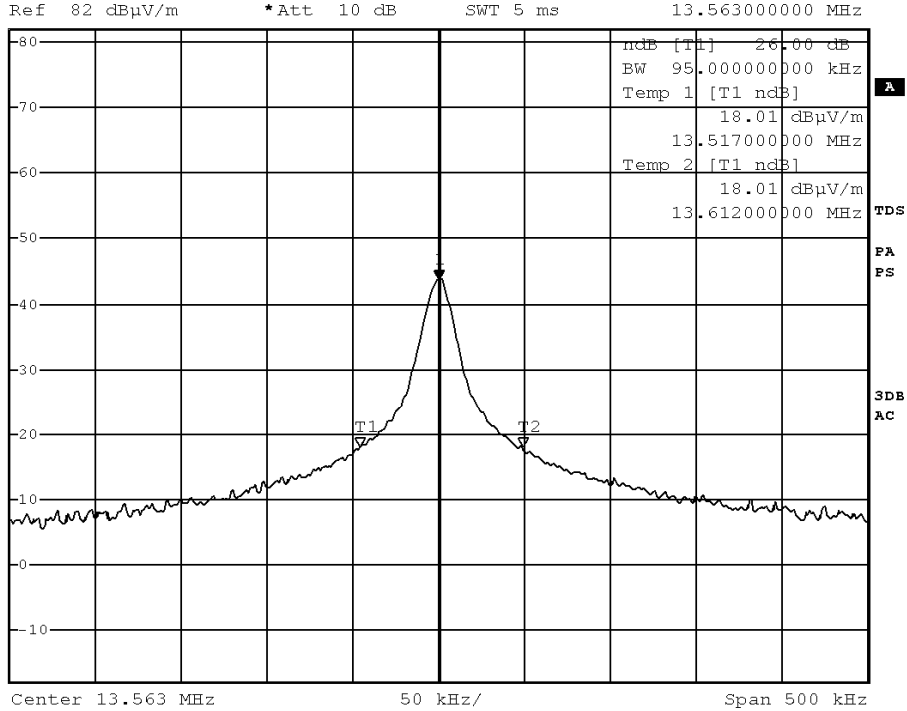
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Measurement Data :

Test Result of 26dB Bandwidth of Fundamental Emission: PASS



RBW 10 kHz Marker 1 [T1]
VBW 30 kHz 43.90 dBuV/m
SWT 5 ms 13.563000000 MHz





TEST REPORT No: (5213)037-0657

Frequency Drift

Test Requirement: FCC Part 15 Section 15.225
 Test Method: ANSI C63.4
 Test Date(s): 2013-02-18
 Temperature: 22.0 °C
 Humidity: 47.0 %
 Atmospheric Pressure: 101.5 kPa
 Mode of Operation: Transmission mode
 Tested Voltage: 9Vd.c. ("AA" size battery 6)

Test Setup:

The EUT was placed at a site with temperature control and supplied with power for extreme voltage testing. Antenna with suitable frequency range was used during the test.

The test was performed in accordance with ANSI C63.4.

Location: Anechoic Chamber, No. 2106-2107, 21/F., Westin Centre, 26 Hung To Road, Kwun Tong, Kowloon, Hong Kong

Limit for Frequency Tolerance:

Maintained within +/- 0.01% of the operating frequency

Test Result of (Transmission mode): PASS

| Test Condition | | Nominal Transmit Frequency: 13.563MHz | | | | |
|--------------------------|--------------------------|---------------------------------------|-------------------|--------------------|-------------------|-------------------------|
| | | Time | | | | |
| | | Start up | Two minutes after | Five minutes after | Ten minutes after | Frequency tolerance (%) |
| T _{nom} : 20°C | V _{nom} : 9.00V | 13.56350 | 13.56350 | 13.56350 | 13.56350 | N/A |
| T _{min} : -20°C | V _{nom} : 9.00V | 13.56350 | 13.56350 | 13.56350 | 13.56350 | 0.00000 |
| T _{max} : 50°C | V _{nom} : 9.00V | 13.56350 | 13.56350 | 13.56350 | 13.56350 | 0.00000 |

Remarks:-

N/A: Not Applicable or Not Available



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Photographs of EUT

Front View of the product



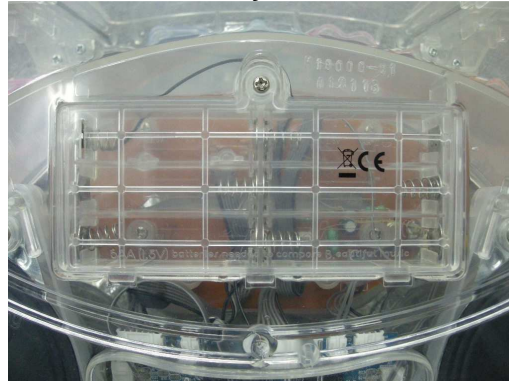
Rear View of the product



Battery compartment



Battery Cover



Internal View of the product





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Internal View of the product



Internal View of the product



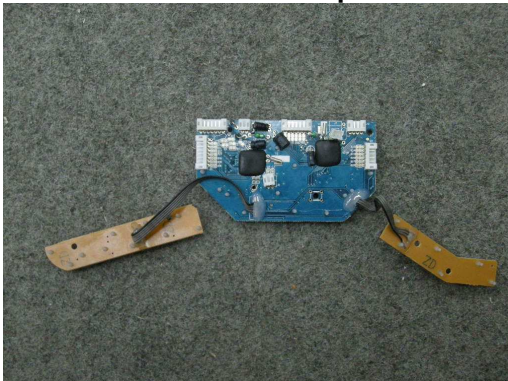
Internal View of the product



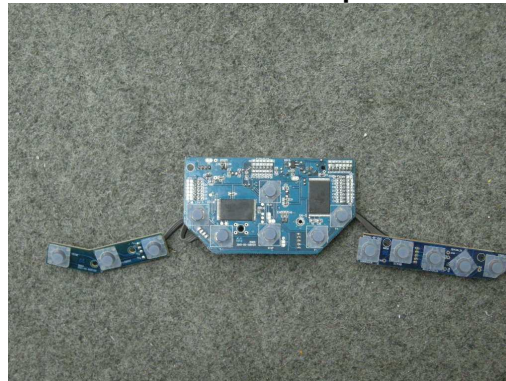
Internal View of the product



Internal View of the product

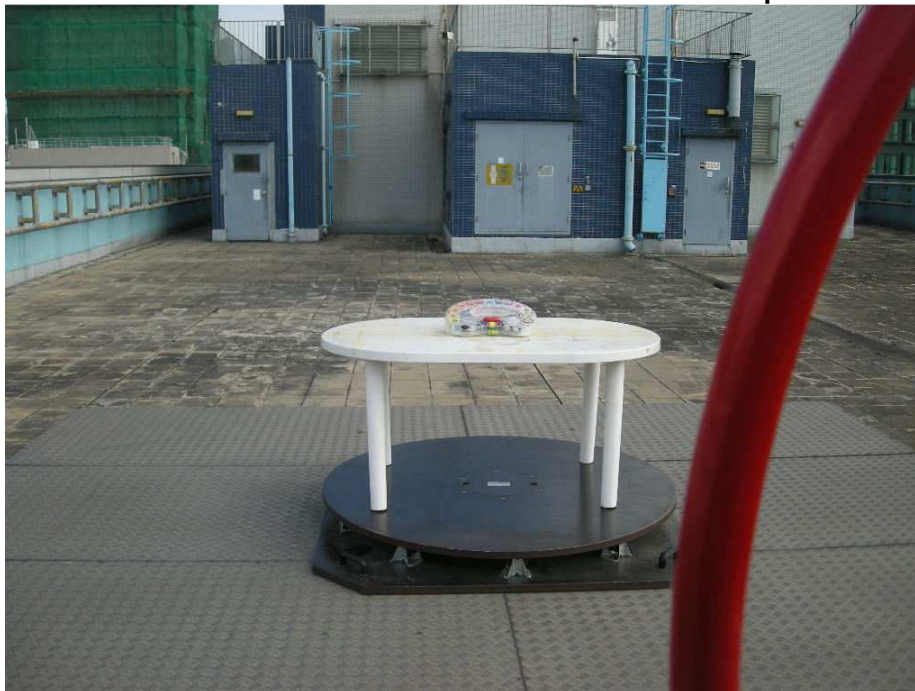


Internal View of the product



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Measurement of Radiated Emission Test Set Up



******* End of Report *******