



TEST REPORT

Report No. : AC009320-1
Applicant : Kid Galaxy

Date : 2003 June 03

Sample Description : One(1) submitted sample stated to be :

<u>Item Name</u>	<u>Model No.</u>
My First RC – Airplane	5500
My First RC – Racing Car	5501
My First RC – Dump Truck	5502
Rating : 1 x 9 V battery	
No. of sample(s) : Four(4) pieces	***

Date Received : 2002 June 13.
2003 May 02.

Test Period : 2003 May 02 – 2003 May 09.

Test Requested : FCC Part 15 Certification

Test Method : FCC Rules and Regulations Part 15 – May 2002
ANSI C63.4 – 1992

Test Result : See attached sheet(s) from page 2 to 10.

Conclusion : The submitted sample was found to comply with requirement of FCC Part 15 Subpart C.

Remark : All three models are the same in circuitry and components and construction, and therefore model 5500 was chosen to be the representative of the test sample.

For and on behalf of
CMA Testing and Certification Laboratories

Authorized Signature : _____

Danny Chui
EMC Engineer - EL. Division

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FCC ID : QEATX49

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1 General Information

1.1 General Description

The equipment under test (EUT) is a transmitter for My First RC – Airplane operating at 49.860 MHz which is controlled by a crystal. The EUT is powered 9 V battery. There are two buttons in the center of the EUT. When the Forward button is pressed once, it transmit a radio frequency for receiver going forward. When the Spin button is pressed, it transmit a radio frequency for receiver spin.

The brief circuit description is listed as follows :

- Q1, Q2 and associated circuit act as encoder
- X1, Q4 and associated circuit act as oscillator
- Q3 and associated circuit act as amplifier

The model(s) 5501 and 5502 are the same as model 5500 in hardware aspect. The difference in model numbers serves as marketing strategy.

1.2 Related Submittal Grants

This is a single application for certification of a transmitter.



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1.3 Location of the test site

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 1992. An Open Area Testing Site is set up for investigation and located at :

Top of the Roof, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
Fo Tan, Shatin,
New Territories,
Hong Kong.

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 – 1992. A double shielded room is located at :

Roof Floor, Yan Hing Centre,
9 – 13 Wong Chuk Yeung Street,
Fo Tan, Shatin,
New Territories,
Hong Kong.



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1.4 List of measuring equipment

Equipment	Manufacturer	Model No.	Serial No.	Calibration Certification No.
EMI Test Receiver	R&S	ESCS30	100001	S21141
Broadband Antenna	Schaffner	CBL6113B	2718	AC1753
Signal Generator	IFR	2023B	202302/938	Nil
LISN	R&S	ESH3-Z5	100038	S21142
Pulse Limiter	R&S	ESH3-Z2	100001	20-73194
Biconical Antenna	R&S	HK116	837414/004	4000.7752.02



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2 Description of the radiated emission test

2.1 Test Procedure

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 1992.

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. 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.

The device was rotated through three orthogonal axes to determine which attitude and configuration produce the highest emission during measurement.

2.2 Test Result

Peak Detector data was measured unless otherwise stated.

* Emissions appearing within the restricted bands shall follow the requirement of section 15.205.

It was found that the EUT meet the FCC requirement.



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2.3 Radiated Emission Measurement Data

Radiated emission
pursuant to
the requirement of FCC Part 15 subpart C

Frequency (MHz)	Polarity (H/V)	Reading at 3m (dB μ V/m)	Antenna and Cable factor (dB)	Field Strength (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
49.859	V	49.4	11.4	60.8	80.0	-19.2
99.719	H	17.2	10.0	27.2	43.5	-16.3
149.577	H	13.5	12.2	25.7	43.5	-17.8
199.442	H	12.9	10.5	23.4	43.5	-20.1
*249.302	H	15.5	10.7	26.2	46.0	-19.8
299.162	H	14.0	13.9	27.9	46.0	-18.1
349.023	H	13.4	15.3	28.7	46.0	-17.3
398.884	H	15.9	15.3	31.2	46.0	-14.8
448.746	H	13.7	18.6	32.3	46.0	-13.7
498.604	H	14.8	18.6	33.4	46.0	-12.6



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3 Description of the Line-conducted Test

3.1 Test Procedure

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 – 1992. The EUT was setup as described in the procedures, and both lines were measured.

3.2 Test Result

No measurement is required as the EUT is a battery-operated product.

3.3 Graph and Table of Conducted Emission Measurement Data

Not Applicable



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4 Photograph

4.1 Photographs of the Test Setup for Radiated Emission and Conduction Emission

For electronic filing, the photos are saved with filename TSup1.jpg to TSup2.jpg

4.2 Photographs of the External and Internal Configurations of the EUT

For electronic filing, the photos are saved with filename ExtPho1.jpg to ExtPho2.jpg and IntPho1.jpg to IntPho2.jpg.

5 Supplementary document

The following document were submitted by applicant, and for electronic filing, the document are saved with the following filenames:

Document	Filename
ID Label/Location	LabelSmpl.pdf
Block Diagram	BlkDia.pdf
Schematic Diagram	Schem.pdf
Users Manual	UserMan.pdf
Operational Description	OpDes.pdf

5.1 Bandwidth

The plot on saved in TestRpt1.pdf shows the fundamental emission is confined in the specified band. The field strength of any emission appearing between the band edges and up to 10 kHz above and below the band edges (49.81 and 49.91 MHz) is at least 26 dB below the carrier level. It meets the requirement of Section 15.235(b).



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6 Appendices

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A2.	Photos of External Configurations	1 page
A3.	Photos of Internal Configurations	1 page
A4.	ID Label/Location	1 page
A5.	Bandwidth Plot	1 page
A6.	Block Diagram	1 page
A7.	Schematics	1 page
A8.	User Manual	1 page
A9.	Operation Description	1 page

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