

F C C TEST REPORT

REPORT NO.: 19234/9/400F

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FCC - Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 2 of 9

FCC listed testlab acc. to Section 2.948 of the FCC - Rules

in compliance with the requirements of ANSI C63.4 - 1992

Product : Remote Control Car -- 49 MHz

Receiver

Model : 60-2765 (49MHz)

Importer: ECHO TOYS LTD

Manufacturer: ECHO ELECTRONIC TOYS

FACTORY



FCC – Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 3 of 9

TABLE OF CONTENTS

- 1. Cover sheet
- 2. Introduction
- 3. Table of Contents
- 4. Laboratory Report
- 5. Summary of Testresults
- 6. Test Equipment List
- 7. Radiated Emission Testprocedure
- 8. Interference Radiation (Datasheet)
- 9. Notes for Radiation Measurement (acc. to ANSI C63.4 1992)



FCC - Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 4 of 9

LABORATORY - REPORT

APPLICANT: ECHO TOYS LTD

ADDRESS: 8 A&B, Block 1, Tai Ping Industrial Centre

57 Ting Kok Road

Taipo, NT HONG KONG

DATE OF SAMPLE RECEIVED: 1999-04-23

DATE OF TESTING: 1999-05-12

DESCRIPTION OF SAMPLE:

Product: Remote Control Car -- 49 MHz Receiver
Manufacturer: ECHO ELECTRONIC TOYS FACTORY

Model number: 60-2765 (49MHz)

Additional model number: --

Rating: DC 6V ('AA' Size Battery x 4)

Country of Origin: P.R. CHINA

INVESTIGATIONS Measurements to the relevant clauses of F.C.C. Rules and Regulations

REQUESTED: Part 15 Subpart B – 'Unintentional Radiators'

RESULTS: See the attached test sheets

CONCLUSIONS From the measurement data obtained, the tested sample was considered

to have COMPLIED with the requirements for the relevant clauses of Federal Communications Commission Rules as specified above.

____Signed in the original copy_____

Authorized Signature

Remark: Purpose of those tests in this report is to provide the applicant with the necessary test data of their device for the submission to FCC with application for Equipment Authorization under the FCC Equipment Authorization Program. The tests themselves are not Approval Tests



FCC – Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 5 of 9

Summary of Test Results

Interference Radiation:

Test result: O.K.

Test data: See attached data sheet

Interference Voltage:

Test result: N.A.
Test data: N.A.



FCC – Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 6 of 9

TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Serial No.	Remark	
Test Receiver	Rohde & Schwarz	ESH 3	863497/015	10KHz – 30MHz	
Test Receiver	Rohde & Schwarz	ESVP	860688/022	25MHz – 1,300 MHz	
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127		2 x 10A, 50Ω, 50μH 10KHz-30MHz	
Antenna System	Schwarzbeck	BBA 9106 / UHALP 9107		30MHz – 1000MHz	
Antenna Mast System	Schwarzbeck	AM9104		Max. 4 meters height	
Spectrum Analyzer with Q. Peak	Tektronix	2712	B023006	9KHz – 1.8GHz	
Interface for Spectrum 2712	Tektronix	TD3F14A			
Test Receiver	Rohde & Schwarz	ESH 3	892580/006	10KHz – 30MHz	
Test Receiver	Rohde & Schwarz	ESVP	863512/012	25MHz – 1,300 MHz	
Impulse Limiter	Rohde & Schwarz	ESH-3-Z2			
Artificial Mains Network (LISN)	Schwarzbeck	NSLK 8127		2 x 10A, 50Ω, 50μH 10KHz-30MHz	
Antenna System	Schwarzbeck	BBA 9106 / UHALP 9107		30MHz – 1000MHz	
Signal Generator	Rohde & Schwarz	SWS 2	879113/42	100KHz – 1040 MHz	
Digital Multimeter	Tektronix	DM2510G	DM- 2510GTW105 55	10KHz – 30MHz	
Turntable with Controller	Drehtisch	DT312		ф120 cm	



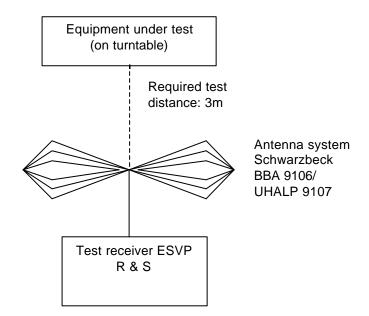
FCC – Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 7 of 9

Radiated Emission Testprocedure





FCC – Test Report

No. 19234/9/400F

Date: <u>1999-05-12</u>

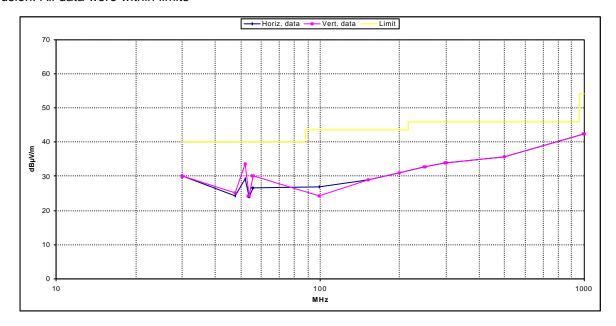
Page 8 of 9

Radiation Measurement Data

Ref: '19234' Power On

Freq	Horiz.	Vert.	Factor	H. Result	V. Result	Limit
MHz	$dB(\mu V)$	$dB(\mu V)$	dB	$\mu V/m$	$\mu V/m$	$\mu V/m$
30.0	<16	<16	14.0	<32	<32	100
47.68	16.5	17.5	7.7	16	18	100
51.92	22.5	27	6.7	29	48	100
53.68	17.5	18	6.4	16	17	100
55.5	20.5	24	6.1	21	32	100
99.0	18.5	16	8.4	22	17	150
152.0	<16	<16	13.1	<29	<29	150
199.4	<16	<16	15.1	<36	<36	150
249.02	<16	<16	16.7	<43	<43	200
299.16	<16	<16	18.0	< 50	< 50	200
300.0	<16	<16	18.0	< 50	< 50	200
500.0	<16	<16	19.7	<61	<61	200
1000.0	<16	<16	26.5	<133	<133	500

Conclusion: All data were within limits





FCC - Test Report

No. 19234/9/400F

Date: 1999-05-12

Page 9 of 9

Notes for Radiation Measurement

1. Measurement facility:

Measurement facility located at Fanling (Hong Kong), placed on file with the FCC Pursuant to Section 2.948 of the FCC Rules.

2. Distance between the EUT and measuring antenna:

3 meters.

3. Measuring instrumentations:

Rohde & Schwarz ESVP Test Receiver (20 - 1300 MHz) with a CISPR weighting QP detector, 6 dB bandwidth set at 120 KHz.

4. Measuring antenna:

Broad-band antenna for the frequency range 30 - 300 MHz and frequency range 300 - 1000 MHz, connected with 10 meters coaxial cable. Cable loss of the coaxial cable included in the Antenna Factor for measurement data. The antennas are capable of measuring both horizontal and vertical polarizations.

5. Frequency range scanned:

The frequency range 30 - 1000 MHz has been scanned. Readings of the highest emissions relating to the limit were reported as above.

6. Arrangement of EUT:

During the test, the sample was operated at rated supply voltage and arranged for maximum emissions.

7. Measuring Procedure:

In **accordance** with the relevant sections of the American National Standards Institute (ANSI) C63.4-1992 'Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9KHz to 40GHz'.