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May 31, 2002

Registration number: 282399



Report No.: **02.08.0960E-1**

Page: 1 of 10

FCC ID: CCT71644R

FCC TEST REPORT

Application No. : 02.08.0960E-1

Applicant : Fisher-Price Inc.

FCC ID : CCT71644R

Equipment under Test (EUT):

Name : Gentle Message Monitor 49MHz (Mother Unit)

Model No. : 71644

Standards : FCC PART 15, SUBPART C : 2002 for Transmit mode
FCC PART 15 SUBPART B CLASS B for Receive mode

Date of Receipt : 7 August 2002

Date of Test : 8 August 2002 to 9 August 2002

Date of Issue : 12 August 2002

Test Result :	PASS *
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* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation..



Kent Hsu
Laboratory Manager
SGS-CSTC Co., Ltd.

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the SGS PRODUCT CERTIFICATION MARK.. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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3 General Information

3.1 Client Information

Applicant:	Fisher-Price Inc.
Address of Applicant:	636 Girard Avenue, East Aurora, NY 14052-1885, USA.
Name:	Gentle Message Monitor 49MHz (Mother Unit)
Item No.:	71644

3.2 Details of E.U.T.

Power Supply:	120V AC/ 60Hz (for AC/DC adaptor) Or 9V DC (1 x '6F22' Batteries)
Model of adaptor:	DV-9200, 120V 60Hz-9VDC 200mA
Power Cord:	1.8m x 2 wires unscreened DC cable from adaptor.

3.3 Description of Support Units

The EUT was tested as an independent unit.

3.4 Test Location

All tests were performed at:-

SGS-CSTC Standards Technical Services Ltd., Guangzhou Safety & EMC Laboratory, 1/F, Building No. 1, Agriculture Machinery Materials Company Warehouse Ltd., Wushan Road Shipai, Tianhe District, Guangzhou, China. P.C. 510630.

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Federal Communications Commission laboratory division

Registration number: 282399

3.5 Other Information Requested by the Customer

None.

4 Test Results

4.1 Radiated Emissions

Test Requirement:	FCC Part 15 B for Receive mode FCC Part 15 C for Transmit mode
Test Method:	Based on FCC Part15
Test Date:	9 August 2002
Frequency Range:	30MHz to 1GHz
Measurement Distance:	3m (in Semi-Anechoic Chamber)
Class:	Class B
Limit of intentional emissions:	80.0 dB μ V (Average detector was applicable)
Limit of other emissions :	40.0 dB μ V/m between 30MHz & 88MHz 43.5 dB μ V/m between 88MHz & 216MHz 46.0 dB μ V/m between 216MHz & 960MHz 54.0 dB μ V/m above 960MHz (Quasi-Peak detector was applicable)
Detector:	Peak for pre-scan (120kHz resolution bandwidth) Average or Quasi-Peak if maximised peak within 20dB of limit

4.1.1 Test Instruments

Test Equipment	Manufacturer	Model	Asset No.	Cal. Date
Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC 0003	26-07-2002
3m Semi- Anechoic Chamber	Frankonia	N/A	EMC0501	21-01-2002
Biconical Antenna	ROHDE & SCHWARZ	HK116	EMC0502	14-12-2001
Log-Periodic Dipole Antenna	ROHDE & SCHWARZ	HL223	EMC0504	14-12-2001
EMI Test Receiver	ROHDE & SCHWARZ	ESCS30	EMC0506	27-11-2001
Spectrum Analyzer	ADVANTEST	R3261C+99	EMC0402	04-08-2002
Antenna Mask	HD-GmbH	MA240	EMC0508	N/A
Turntable	HD-GmbH	DT430	EMC0509	N/A
Turntable & Antenna Mask Controller	HD-GmbH	HD100	EMC0510	N/A
Coaxial cable	ROHDE & SCHWARZ	N/A	EMC0511	08-03-2002

4.1.2 Test Site

SGS-CSTC Ltd.
Guangzhou Safety & EMC Laboratory
SGS UK Certificate No.: L32
Federal Communications Commission laboratory division
Registration number: 282399

4.1.3 E.U.T. Operation

Power Supply: 120Vac /60Hz or 9VDC (1 x '6F22' battery)

Operating Environment:

Temperature: 24.0 °C
 Humidity: 66 % RH
 Atmospheric Pressure: 1004 mbar

EUT Operation:

Pretest in battery operated mode and adaptor supply mode, compliance test was performed in AC/DC adaptor supply mode (worst case).

Test the EUT in Transmit mode and Received mode with channel A and channel B.

Remark:

Connect the C, E conjunction of transistor Q8 when testing in Transmit mode in order to keep the EUT in transmit state.

4.1.4 Measurement Data

4.1.4.1 Transmit mode:

An initial pre-scan was performed with Peak detection mode. The EUT was measured for 2 orthogonal polarities. For the intentional emission, Average measurement was performed. For other emissions detected within 20dB below the limit line, Quasi-Peak was performed at those frequencies.

Please refer to the following Average and Quasi-Peak measurement result on Transmit mode:

Channel A Intentional emission

Frequency (MHz)	Antenna polarization	Average (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
49.89	Vertical	73.2	80.0	6.8
49.89	Horizontal	59.2	80.0	20.8

Channel A other emissions

Frequency (MHz)	Antenna polarization	Quasi-Peak (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
33.26	Vertical	26.3	40.0	13.7
66.52	Vertical	26.3	40.0	13.7
247.17	Vertical	22.6	46.0	23.4
346.04	Vertical	27.1	46.0	18.9
346.04	Horizontal	23.7	46.0	22.3

Channel B Intentional emission

Frequency (MHz)	Antenna polarization	Average (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
49.83	Vertical	76.2	80.0	3.8
49.83	Horizontal	62.9	80.0	17.1

Channel B other emissions

Frequency (MHz)	Antenna polarization	Quasi-Peak (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
33.22	Vertical	16.5	40.0	23.5
66.44	Vertical	21.3	40.0	18.7
346.62	Vertical	24.9	46.0	21.1
33.26	Horizontal	26.3	40.0	13.7
66.52	Horizontal	26.3	40.0	13.7
247.17	Horizontal	22.6	46.0	23.4
346.04	Horizontal	27.1	46.0	18.9

4.1.4.2 Receive mode

An initial pre-scan was performed with Peak detection mode. The EUT was measured for 2 orthogonal polarities. Quasi-Peak measurement was performed at those frequencies that Peak was detected within 20 dB below the limit line.

Please refer to the following Quasi-Peak measurement result on Receive mode:

Channel A

Frequency (MHz)	Antenna polarization	Quasi-Peak (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
49.435	Vertical	33.9	40.0	6.1
49.435	Horizontal	25.6	40.0	14.4
247.170	Horizontal	22.3	46.0	23.7
346.039	Horizontal	28.7	46.0	17.3

Channel B

Frequency (MHz)	Antenna polarization	Quasi-Peak (dBuV/m)	Limit (dBuV/m)	Margin (dBuV/m)
49.375	Vertical	25.8	40.0	14.2
246.865	Vertical	21.9	46.0	24.1
279.585	Vertical	23.4	46.0	22.6
346.612	Horizontal	31.0	46.0	15.0
296.240	Horizontal	24.6	46.0	21.4

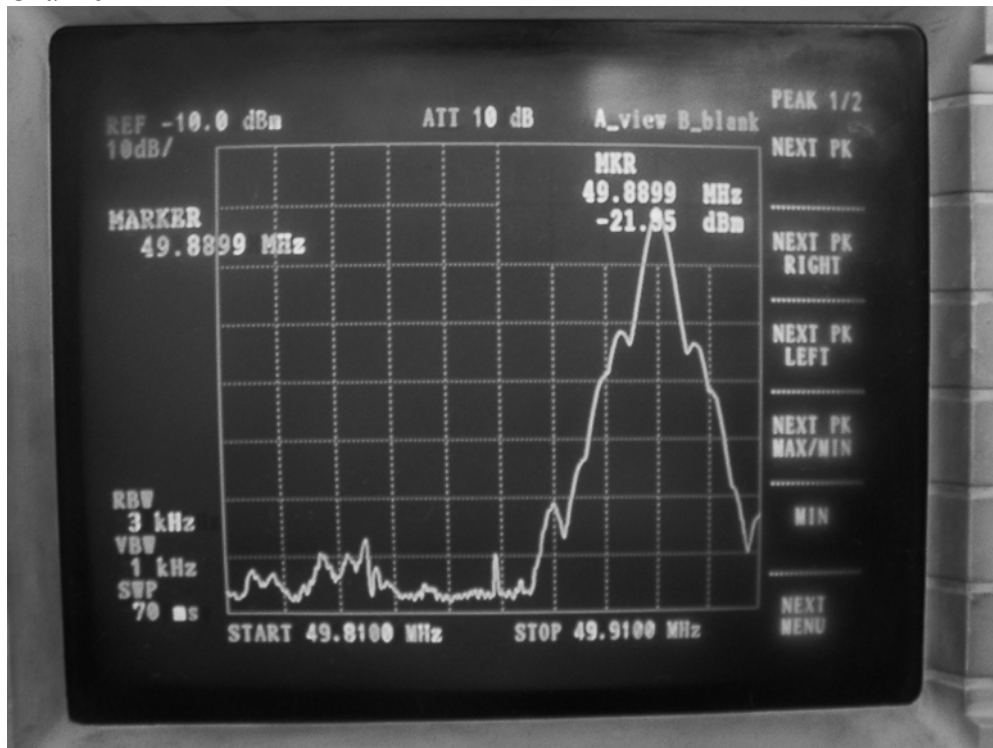
4.1.5 Occupied Bandwidth

Test Requirement: FCC Part15 C
 Test Method: Based on FCC Part15 C Section 15.235:
 Operation within the band 49.82 – 49.90MHz
 Test Date: 09 August 2002
 Requirements: The field strength of any emissions appearing between the band edges and up to 10KHz above and below the band edges shall be attenuated at least 26dB below the level of the unmodulated carrier or to the general limits in Section 15.209, whichever permits the higher emission levels. The field strength of any emissions removed by more than 10KHz from the band edges shall not exceed the general radiated emission limit in Section 15.209.

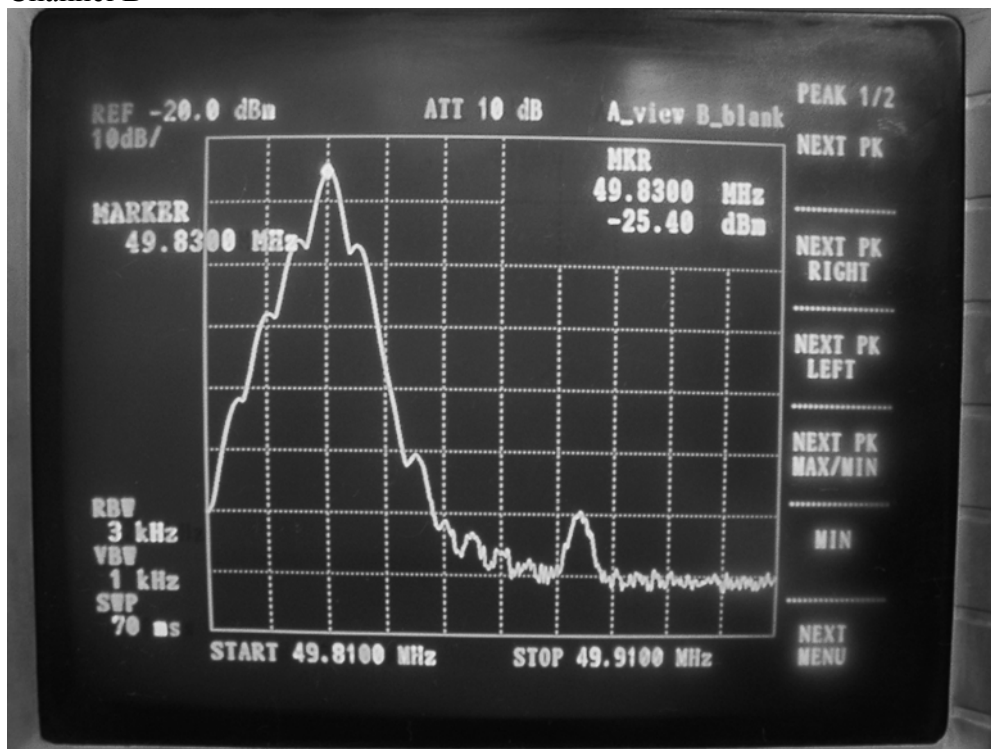
Method of measurement: A small sample of the transmitter output was fed into the Spectrum Analyzer and the attached plot was taken. The vertical is set to 10dB per division. The horizontal scale is set to 2KHz per division.

The graph as below, represents the emissions take for this device.

Channel A



Channel B



The results: The unit does meet the FCC requirements.

4.2 Conducted Emissions Mains Terminals, 150kHz to 30MHz

Test Requirement: FCC Part 15 B for Receive mode
 FCC Part 15 C for Transmit mode
 Test Method: Based on FCC Part 15
 Test Date: 9 August 2002
 Frequency Range: 150kHz to 30MHz
 Class / Severity: Class B
 Detector: Peak for pre-scan (9kHz Resolution Bandwidth)
 Quasi-Peak if maximised peak within 16dB of Quasi-Peak limit.

4.2.1 Test Instruments

Description	Manufacturer	Model No.	Asset No.	Cal. Date
DMM	FLUKE	73	EMC0003	04-08-2002
Temperature, Humidity & Barometer	Oregon Scientific	BA-888	EMC0006	26-07-2002
LISN	SCHAFFNER CHASE	MNZ050D11	EMC0102	10-09-2002
EMI Test Receiver	ROHDE & SCHWARZ	ESCS30	EMC0105	27-11-2001
EMI Test Software	ROHDE & SCHWARZ	ES-K1	EMC0112	N/A
Shielding Room	Frankonia	N/A	EMC0103	N/A
Variac	GZ Debao Factory	TS/DGC ₂ -5	EMC0101	Check Before Use
Coaxial Cable	SGS	N/A	EMC0107	06-06-2002

4.2.2 Test Site

SGS-CSTC Ltd.
 Guangzhou Safety & EMC Laboratory
 SGS UK Certificate No.: L32
 Federal Communications Commission laboratory division
 Registration number: 282399

4.2.3 E.U.T. Operation

Input voltage: 120V AC 60Hz

Operating Environment:

Temperature: 23.0 °C

Humidity: 68 % RH

Atmospheric Pressure: 1003 mbar

EUT Operation :

Test the EUT in Transmit mode and Receive mode with channel A and channel B.

4.2.4 Measurement Data

An initial pre-scan was performed on the live and neutral lines at 120V AC.

Quasi-peak and Average measurement was performed at the peak maximised frequencies.
Please refer to the following Quasi-Peak and Average measurement results:

Channel A Transmit mode:

Frequency (MHz)	Line	Quasi-Peak (dBuV)	Limit (dBuV)	Margin (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dBuV)
0.15	Live	20.3	66.0	45.7	10.3	56.0	45.7
0.15	Neutral	19.8	66.0	46.2	9.2	56.0	46.8
16.63	Live	16.2	60.0	43.8	16.1	50.0	33.9
16.63	Neutral	16.1	60.0	43.9	15.8	50.0	34.2

Channel B Transmit mode:

Frequency (MHz)	Line	Quasi-Peak (dBuV)	Limit (dBuV)	Margin (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dBuV)
0.15	Live	20.2	66.0	45.8	10.0	56.0	46.0
0.15	Neutral	19.7	66.0	46.3	9.0	56.0	47.0
16.61	Live	23.2	60.0	36.8	23.1	50.0	26.9
16.61	Neutral	23.1	60.0	36.9	22.8	50.0	27.2

Channel A Receive mode:

Frequency (MHz)	Line	Quasi-Peak (dBuV)	Limit (dBuV)	Margin (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dBuV)
0.15	Live	20.1	66.0	45.9	10.1	56.0	45.9
0.15	Neutral	19.6	66.0	46.4	8.7	56.0	47.3

Channel B Receive mode:

Frequency (MHz)	Line	Quasi-Peak (dBuV)	Limit (dBuV)	Margin (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dBuV)
0.15	Live	19.8	66.0	46.2	10.2	56.0	45.8
0.15	Neutral	19.4	66.0	46.6	9.6	56.0	46.4