

EXHIBIT # : 3-1
FCC ID : ACJ927149AHV
OUR REF. : MKES04-F005
MODEL NO. : PV-D4745S

TEST REPORT

Test Report Prepared By : Matsushita Kotobuki Electronics Ind., Ltd. MKM Site.
(FCC Registration No.: 90793)

Test Report Ref. No. : MKM04F-S01

Tested in accordance with FCC / ANSI C63.4-2003
To show compliance with : FCC Part 15 Limit

TEST REPORT

REPORT NUMBER : MKM04F-S01

APPLICANT : Matsushita Kotobuki
Electronics Industries, Ltd.

MODEL NUMBER : PV-V4745S

FCC ID : ACJ927149AHV

Regulation : FCC Part15B Class B

Radiated Emission Test

Matsushita Kotobuki Electronics Ind., Ltd.
Storage Products Business Unit

TABLE OF CONTENTS

	Page
SECTION 1. <u>TEST CERTIFICATION</u>	3
SECTION 2. <u>EQUIPMENT UNDER TEST</u>	5
SECTION 3. <u>CABLE(S) USED</u>	5
SECTION 4. <u>CONSTRUCTION OF EQUIPMENT</u>	6
SECTION 5. <u>OPERATING CONDITIONS</u>	7
SECTION 6. <u>TEST PROCEDURE(S)</u>	7
SECTION 7. <u>EVALUATION OF TEST RESULTS</u>	8
SECTION 8. <u>PHOTOGRAPHS OF TEST SET-UP</u>	12
SECTION 9. <u>INSTRUMENTS USED FOR TEST</u>	13
SECTION 10. <u>PRECISION</u>	14
SECTION 11. <u>VALIDITY OF TEST REPORT</u>	14

SECTION 1. TEST CERTIFICATION

APPLICANT INFORMATION

Company : Matsushita Kotobuki Electronics Industries, Ltd.
Address : 247 Fukutake, Saijo-shi, Ehime-ken, 793-8510 Japan

GRANTEE INFORMATION

Division : Visual Products Business Unit
Address : 247 Fukutake, Saijo-shi, Ehime-ken, 793-8510 Japan
Telephone number : +81 897 56 1216
Fax number : +81 897 56 6720

DESCRIPTION OF TEST ITEM

Kind of equipment : TV Interface Device
(Video Cassette Recorder with DVD Player)
Trademark : Panasonic
FCC ID : ACJ927149AH
Model number : PV-D4745S
Tuner type / Serial number : ENG56D06G1 / J4IA20007
Tuner type / Serial number : TMZH2-035A / J4IA20008
Tuner type / Serial number : 115-V-HA35AK / J4IA20009

TEST PERFORMED	
FCC Registration No.	: 90793
Test started	: November 8, 2004
Test completed	: November 8, 2004
Regulation	: FCC Part 15B Class B
Test setup	: ANSI C63.4 -2003

Report file number : MKM04F-S01

Report issue date : November 10, 2004

Test engineer : Shinji Yamauchi *S. Yamauchi*

Report approved by : Hisayuki Honda *H. Honda*
[Manager]

This equipment complies with above standard or regulation under the test condition or test configuration shown on this test report.

SECTION 2. EQUIPMENT UNDER TEST

The equipment under test (EUT) consists of the following equipment.

Indication in the following left side column corresponds to section 4.

Symbol	Item	Model No.	Tuner type	Serial No.	FCC ID	Manufacturer
A)	VCR with DVD Player	PV-D4745S	ENG56D06G1 TMZH2-035A 115-V-HA35AK	J4IA20007 J4IA20008 J4IA20009	ACJ927149AHV	Panasonic

Power ratings of EUT : AC 120V 60Hz, 22W

SECTION 3. CABLE(S) USED

The following cable(s) was used for testing. Indication number in the following left side column corresponds to section 4.

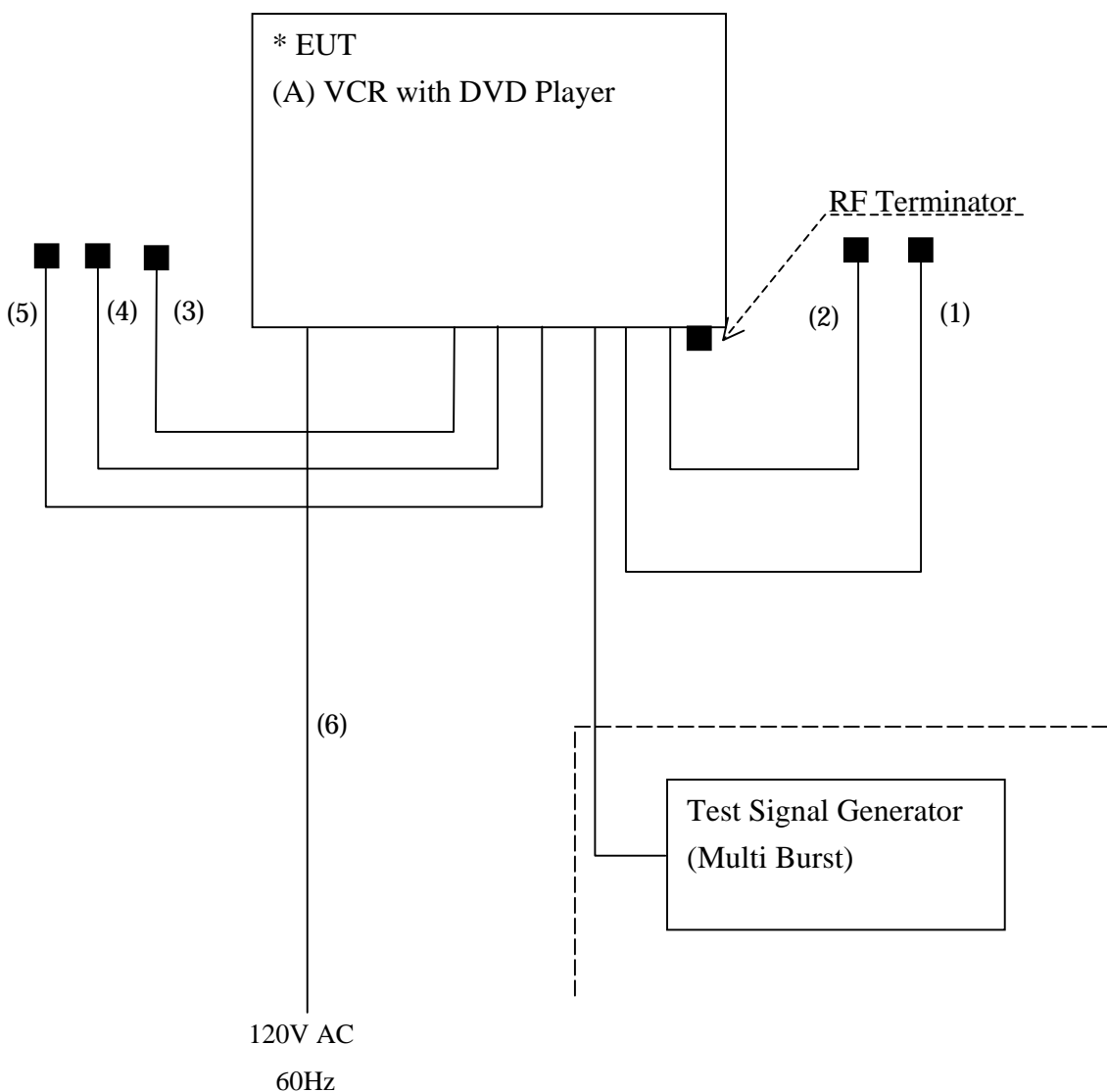
Number	Name	Length	Shield
1)	RF cable	0.9 m	Yes
2)	A/V cable	1.5 m	Yes
3)	Audio cable	1.5 m	Yes
4)	S-Video cable	1.5 m	Yes
5)	Component Video cable	1.5 m	Yes
6)	Power cord for EUT	1.5 m	None

SECTION 4. CONSTRUCTION OF EQUIPMENT

The construction of EUT during testing is as follows.

System configuration

■ = Terminator



Symbol or numbers assigned to equipment or cables on this diagram are corresponded to the symbols or numbers assigned to equipment or cables on tables in Sections 2 to 3.

SECTION 5. OPERATING CONDITIONS

The EUT has been operated under the following conditions during the tests.

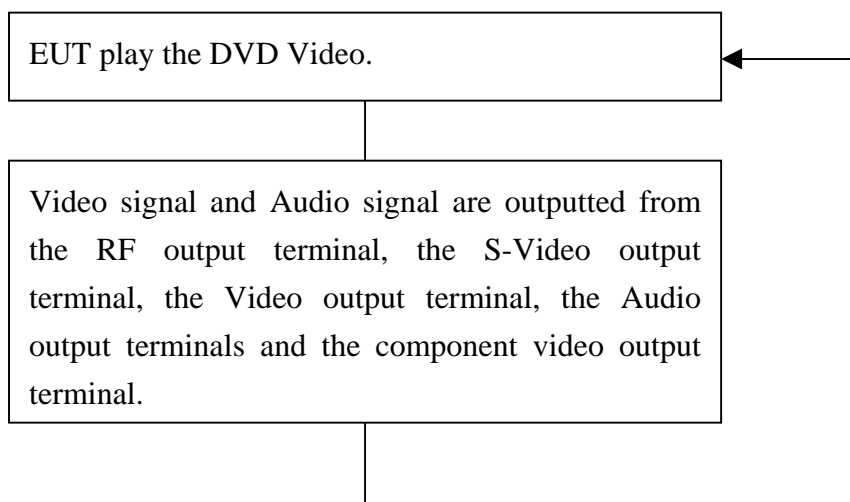
5.1 Operating condition

The tests have been carried out under Multi Burst (1Vp-p) input mode, Multi Burst (5Vp-p) input mode, Internal Signal (DVD Play) mode and RF/CATV Signal input mode.

We reported the greatest measurement mode. (Internal Signal (DVD Play) mode)

5.2 Operation flow

Performed following operations continuously.



SECTION 6. TEST PROCEDURE(S)

Tests have been carried out with the test procedure(s) drawn up by our laboratory which is in accordance with the following test procedure(s).

Test item	Test procedure used	Scanned Frequency Range
Radiated Emission	ANSI C63.4-2003	30 - 2000 MHz

SECTION 7. EVALUATION OF TEST RESULTS

7.1 Radiated Emission Test

Product Name	:	Video Cassette Recorder with DVD Player
Model No.	:	PV-D4745S
Tuner Type	:	ENG56D06G1
Serial No.	:	J4IA20007
Power Supply	:	120V / 60Hz
Test Mode	:	Internal Signal (DVD Play) mode
Temp / Humi / Pres	:	23 C / 53% / 1024hPa
Operator	:	S. Yamauchi

[Quasi Peak mode]

No.	Freq. [MHz]	Reading Level		Factor [dB]	Emission Level		Limit [dBuV/m]	Margin	
		Hor. [dBuV]	Ver. [dBuV]		Hor. [dBuV/m]	Ver. [dBuV/m]		Hor. [dB]	Ver. [dB]
1	184.32	17.1	14.5	18.3	35.4	32.8	43.5	8.1	10.7
2	194.70	10.8	7.9	19.0	29.8	26.9	43.5	13.7	16.6
3	307.25	19.3	18.1	18.9	38.2	37.0	46.0	7.8	9.0
4	331.80	9.2	7.3	19.2	28.4	26.5	46.0	17.6	19.5
5	364.50	13.1	15.5	19.9	33.0	35.4	46.0	13.0	10.6
6	479.23	14.3	18.2	23.0	37.3	41.2	46.0	8.7	4.8
7	626.71	7.2	14.0	26.0	33.2	40.0	46.0	12.8	6.0
8	700.39	7.3	12.5	27.4	34.7	39.9	46.0	11.3	6.1

7.2 Radiated Emission Test

Product Name	: Video Cassette Recorder with DVD Player
Model No.	: PV-D4745S
Tuner Type	: TMZH2-035A
Serial No.	: J4IA20008
Power Supply	: 120V / 60Hz
Test Mode	: Internal Signal (DVD Play) mode
Temp / Humi / Pres	: 23 C / 53% / 1024hPa
Operator	: S. Yamauchi

[Quasi Peak mode]

No.	Freq. [MHz]	Reading Level		Factor [dB]	Emission Level		Limit [dBuV/m]	Margin	
		Hor. [dBuV]	Ver. [dBuV]		Hor. [dBuV/m]	Ver. [dBuV/m]		Hor. [dB]	Ver. [dB]
1	184.32	17.7	15.2	18.3	36.0	33.5	43.5	7.5	10.0
2	307.25	19.8	18.5	18.9	38.7	37.4	46.0	7.3	8.6
3	479.23	14.8	17.8	23.0	37.8	40.8	46.0	8.2	5.2
4	626.71	8.6	13.7	26.0	34.6	39.7	46.0	11.4	6.3
5	473.00	4.7	12.9	22.8	27.5	35.7	46.0	18.5	10.3
6	479.00	4.8	13.6	22.9	27.7	36.5	46.0	18.3	9.5
7	485.00	4.2	12.7	23.3	27.5	36.0	46.0	18.5	10.0
8	700.39	7.9	12.0	27.4	35.3	39.4	46.0	10.7	6.6

7.3 Radiated Emission Test

Product Name	: Video Cassette Recorder with DVD Player
Model No.	: PV-D4745S
Tuner Type	: 115-V-HA35AK
Serial No.	: J4IA20009
Power Supply	: 120V / 60Hz
Test Mode	: Internal Signal (DVD Play) mode
Temp / Humi / Pres	: 23 C / 53% / 1024hPa
Operator	: S. Yamauchi

[Quasi Peak mode]

No.	Freq. [MHz]	Reading Level		Factor [dB]	Emission Level		Limit [dBuV/m]	Margin	
		Hor. [dBuV]	Ver. [dBuV]		Hor. [dBuV/m]	Ver. [dBuV/m]		Hor. [dB]	Ver. [dB]
1	184.32	16.4	14.6	18.3	34.7	32.9	43.5	8.8	10.6
2	307.25	18.8	18.5	18.8	37.6	37.3	46.0	8.4	8.7
3	479.23	14.4	17.5	23.0	37.4	40.5	46.0	8.6	5.5
4	626.71	8.7	14.1	26.0	34.7	40.1	46.0	11.3	5.9
5	700.39	8.1	11.8	27.4	35.5	39.2	46.0	10.5	6.8
6	749.00	6.3	-0.2	28.5	34.8	28.3	46.0	11.2	17.7
7	755.00	7.7	0.5	28.3	36.0	28.8	46.0	10.0	17.2
8	761.00	7.4	-0.5	28.2	35.6	27.7	46.0	10.4	18.3

SECTION 8. PHOTOGRAPHS OF TEST SET-UP

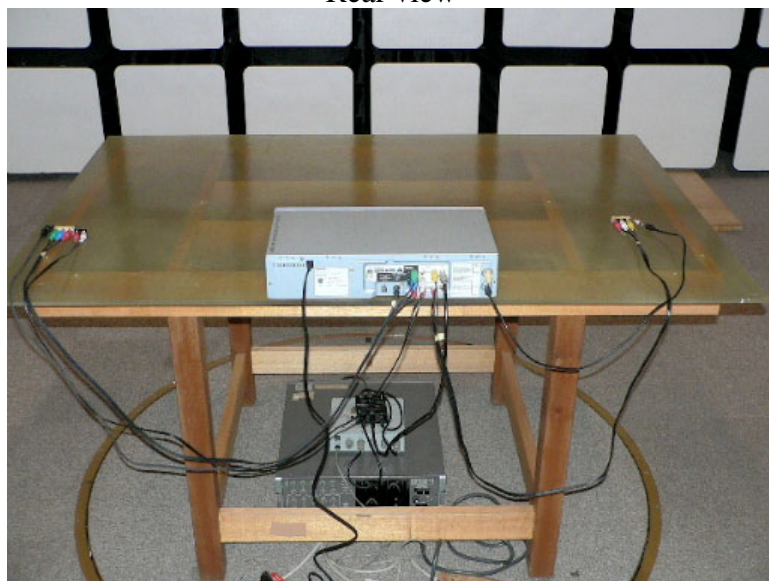
Test setup in accordance with ANSI C63.4-2003

Radiated Emission Test

Front View



Rear view



SECTION 9. INSTRUMENTS USED FOR TEST

Instrument	Model No.	Serial No.	Manufacturer	Last cal.	Period
EMI Test Receiver	85462A	3520A00241	Hewlett Packard	8/2004	1 Year
RF Filter Section	85460A	3448A00210	Hewlett Packard	8/2004	1 Year
PREAMPLIFIER	8449B	3008A01744	Agilent Technologies	1/2004	1 Year
Biconical Antenna	BBA9106	92131214	Schwarzbeck	3/2004	1 Year
Logperiodic Antenna	UHALP9107	1622	Schwarzbeck	3/2004	1 Year
Double Ridged Antenna	3115	9702-5139	EMCO	9/2004	1 Year
Test Signal Generator (Multi Burst)	TG-5E 2U2	M-09428039	Shibasoku	9/2004	1 Year

SECTION 10. PRECISION

Tolerances of the measuring instruments are shown on below.

- | | |
|----------------------|--------------|
| 1. Antenna factor | ± 2.0 dB |
| 2. Cable loss | ± 1.0 dB |
| 3. EMI test receiver | ± 2.0 dB |
| 4. Site Attenuation | ± 4.0 dB |

Repeatability and reproducibility about maximum emission setup are not specified herein.

SECTION 11. VALIDITY TEST REPORT

- 11.1 The test result of this report is effective for equipment under test itself and under the test configuration described on the report.
- 11.2 This test report does not assure that whether the test result taken in other testing laboratory is compatible or reproducible to the test result on this report or not.
- 11.3 Copying of this report without permission is prohibited.