

26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

page 5 of 7

FCC ID: F5GFP-6800

Part 15 Sub.part B Class B Digital Device

6. TESTED SYSTEM DETAILS

6.1 Peripherals and Others:

Description	Model Name	Serial No.	Manufacturer	FCC ID
Personal Computer	PCG-505TF	3415556	Sony Corp.	DOC
Port Replicator	PCGA-PR5	126219	Sony Corp.	DOC
Floppy Disk Drive	PCGA-FD5	1215376	Sony Corp.	DOC
CD-ROM Drive	PCGA-CD5	1 3101473	Sony Corp.	DOC
AC Adapter	PCGA-AC5	1 9906A0361473	Sony Corp.	N/A
Key Board	SKR-2233	8AAE001175	Sejiner Electron, Inc.	GJJSKR-223C9
Mouse	2.1A	02209569	Microsoft Corp.	C3KKMP3
PC Monitor	M2978	CY5430HF3CV	LG Electronics, Inc.	BEJCA500
Scanner	AS-1	0009	Fuji Photo Film Co., Ltd.	F5GAS-1
Digital Camera	MX-2900 zo	oom U000015	Fuji Photo Film Co., Ltd.	F5GMX-2900
AC Adapter (for abo	ve) AC-5VN	9914	Fuji Photo Film Co., Ltd.	N/A
AC Adaptor (for EU	T) AC-5VS	9003	Fuji Photo Film Co., Ltd.	N/A

(for AC Adapter of EUT and DX-9, Input: 120VAC, 60Hz / Output: 5VDC)

Note:

^{*}DOC: Declaration of Conformity by Manufacturer, Sony Corp.

^{*} N/A: Equipment required for the Verification.



26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

page 6 of 7

FCC ID: F5GFP-6800

Part 15 Sub.part B Class B Digital Device

6.2 List of Cables:

Description	Length	Type of shield	Ferrite Core
EUT / Personal Computer	1.5 m	Shielded	Add
Port Replicator / Personal Computer	0.2 m	Shielded	Provided
Scanner / Port Replicator	1.5 m	Shielded	Provided
Digital Camera / Port Replicator	2.0 m	Shielded	Provided
Personal Computer / CD-ROM	0.3 m	Shielded	Provided
Personal Computer / Floppy Drive	0.1 m	Shielded	Provided
Mouse / Personal Computer	1.9 m	Shielded	N/A
Key Board / Port Replicator	1.1 m	Shielded	N/A
PC Monitor / Port Replicator	1.65 m	Shielded	Provided
DC Power Cord (PC/AC adaptor)	2.2 m	Non-shielded	N/A
DC Power Cord (EUT/AC adaptor)	1.9 m	Non-shielded	Add
DC Power Cord (MX-2900/AC adapter)) 1.9 m	Non-shielded	Provided
AC Power Cord (PC Monitor)	1.7 m	Non-shielded	N/A
AC Power Cord (Scanner)	1.8 m	Non-shielded	N/A

Note:

^{*} Provided: The cable is an accessory for Personal Computer, Digital Camera, Scanner or PC Monitor which was attached a ferrite core.



26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

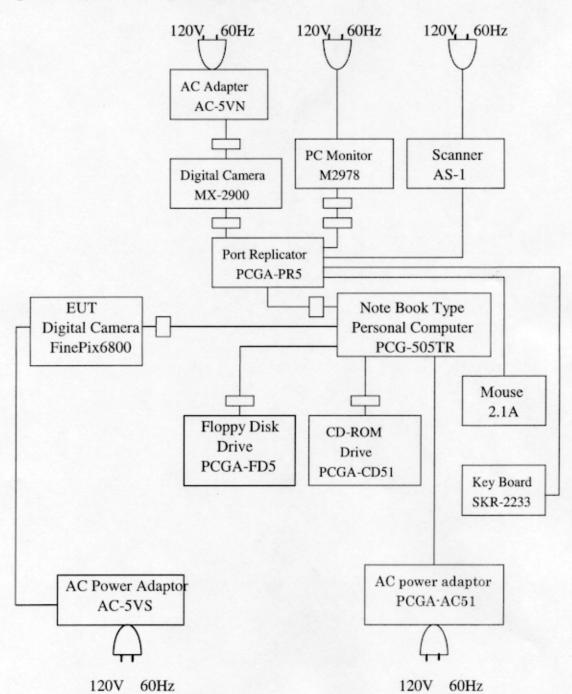
Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

page 7 of 7

FCC ID : F5GFP-6800

Part 15 Sub.part B Class B Digital Device

Figure 6-1 System Configuration Diagram:





26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN Telephone: (03) 3406-2934

Facsimile: (03) 3406-9967

FCC ID : F5GFP-6800 Part 15 Sub.part B Class B Digital Device

7. TEST RESULTS

7.1 Conducted Radio Noise Measurement

7.1.1 Measurement Instrumentation Used:

(Model / Serial No. / Manufacturer)

Test Receiver ----- (ESCS 30 / 825788-007 / Rohde & Schwarz)

L. I. S. N ----- (KNW-407 / 8-823-10 /Kyoritsu Electrical)

L. I. S. N ----- (KNW-407 / 8-680-7 /Kyoritsu Electrical)

Spectrum Analyzer System ----- (8568S / 2445A00924 / Hewlett Packard)

7.1.2 Measurement Procedure:

The power line conducted interference measurements were performed in a shield enclosure with peripherals placed on a table, 80cm high over a metal floor. It was located more than required distance away from the shielded enclosure wall. The EUT was plugged into the L.I.S.N. and the frequency range of interest scanned.



26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

FCC ID: F5GFP-6800

Part 15 Sub.part B Class B Digital Device

7.1.3 Test Data

Table 7.1-1 Conducted Radio Noise Measurement Results:

Operating mode: USB Mode Date of measurement: December 12, 2000 Test Procedure: ANSI C63.4-1992 Temperature: 18 degree C

Humidity: 45 %

Frequency	Res	sults	Results	Limit	Margin
	Meter F	Reading.	Emission Level		
	VA.	VB.			
(MHz)	(dBu	V/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)
0.7100	41.7	41.1	41.7	47.9	6.2
0.8000	39.1	35.3	39.1	47.9	8.8
0.6000	41.0	42.3	42.3	47.9	5.6
0.5100	39.8	41.6	41.6	47.9	6.3
1.0000	30.5	24.3	30.5	47.9	17.4
0.9000	32.8	30.4	32.8	47.9	15.1
2.1100	20.8	21.2	21.2	47.9	26.7
9.0800	22.9	21.1	22.9	47.9	25.0
24.0700	23.6	24.3	24.3	47.9	23.6
28.0800	20.3	20.8	20.8	47.9	27.1

Note:

- 1) Emission Levels are higher levels of VA or VB of Meter Readings + Correction Factor.
- VA: Between one end of the power cable and the grounded.

VB: Between the other end of power cable and the grounded.

7.1.4 Conducted Radio Noise Calculation

The conducted radio noise is calculated by adding the calibration factor to the measured reading. The basic equation and a sample calculation are as follows:

CRN = TRM + CF

Margin = Limit - CRN

where CRN = Conducted Radio Noise (dBuV)

TRM = Test Receiver Reading (dBuV)

CF: Correction Factor (dB/m)

The Correction factor includes cable loss and LISN factor.



26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

FCC ID : F5GFP-6800

Part 15 Sub.part B Class B Digital Device

7.2 Radiated Radio Noise Measurement

7.2.1 Measurement Instrumentation Used:

(Model / Serial No. / Manufacturer)

Test Receiver ----- (ESCS 30 / 834115-020 / Rohde & Schwarz)

Bi-Conical Antenna ----- (BBA9106 / D-6901 No.2 / Schwarzbeck)

Log-Periodic Antenna ----- (UHALP9107 / 424-517 / Schwarzbeck)

Spectrum Analyzer System ----- (8568S / 2445A00924 / Hewlett Packard)

7.2.2 Measurement Procedure:

The EUT was placed in a 80cm high table along with the peripherals.

The turn table was separated from the antenna at a distance of 3 meter. Cables were placed in a position to produce maximum emission as determined by experimentation, and operation mode was selected for maximum.

The frequencies and amplitudes of maximum emission were measured at varying azimuths, antenna heights and antenna polarities.



26-30, NISHIAZABU 2-CHOME. MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

FCC ID: F5GFP-6800 Part 15 Sub.part B Class B Digital Device

7.2.3 Test Data

Table 7.2-1 Radiated Radio Noise Measurement Results:

Operating mode: USB Mode

Test Procedure: ANSI C63.4-1992

Date of measurement: December 12, 2000

Temperature: 15 degree C Humidity: 34 %

Frequency	Correction Factor	Results Meter Reading. (dBuV/m)		Results Emission Level (dBuV/m)	Limit (dBuV/m)	Margin	
(Mhz)	(dB)					(dBuV/m)	
		Hori.	Vert.				
30.060	19.8	-	34.0	34.0	40.0	6.0	
32.060	19.0	-	34.6	34.6	40.0	5.4	
70.070	7.8	-	23.6	23.6	40.0	16.4	
90.210	10.0	25.3	26.2	26.2	43.5	17.3	
120.020	14.9	-	21.9	21.9	43.5	21.6	
220.030	20.3	35.1	-	35.1	46.0	10.9	
240.040	20.7	35.9	28.3	35.9	46.0	10.1	
272.040	21.5	31.0	-	31.0	46.0	15.0	
320.050	20.0	38.5	-	38.5	46.0	7.5	
331.210	20.2	30.0	24.9	30.0	46.0	16.0	
340.060	20.4	37.6	34.4	37.6	46.0	8.4	
417.270	21.8	-	30.4	30.4	46.0	15.6	
528.090	24.2	-	32.6	32.6	46.0	13.4	
540.080	24.4	38.2	30.3	38.2	46.0	7.8	
558.410	24.8	38.7	-	38.7	46.0	7.3	
587.040	25.7	39.1	-	39.1	46.0	6.9	

Note: 1) Meter Readings are corrected by all Correction Factors.

²⁾ Emission Levels are higher levels of Hori. or Vert. of Meter Readings.

³⁾ Margin = Limit - Emission Level.



26-30, NISHIAZABU 2-CHOME, MINATO-KU, TOKYO 106, JAPAN

Telephone: (03) 3406-2934 Facsimile: (03) 3406-9967

FCC ID: F5GFP-6800 Part 15 Sub.part B Class B Digital Device

7.2.4 Radiated Radio Noise Calculation

The radiated radio noise is calculated by adding the correction factor to the measured reading. The basic equation and a sample of calculation are as follows;

RRN = TRM + CF Margin = Limit - RRN

where RRN = Radiated Radio Noise (dBuV)

TRM = Test Receiver Reading (dBuV)

CF: Correction Factor (dB/m), The correction factor includes pre-amplifier

gain, cable loss and antenna factor.