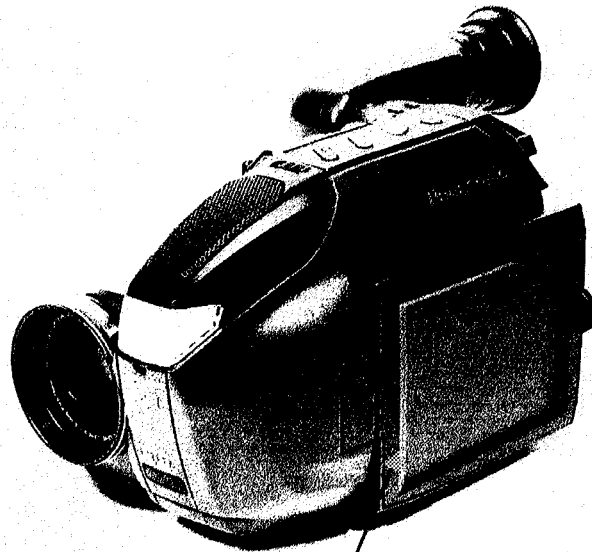
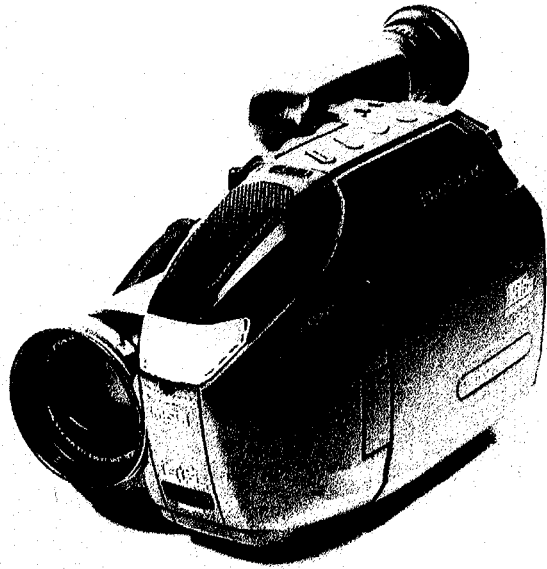


EXHIBIT # \_\_\_\_\_  
FCC ID : ACJ927126L  
MODEL No. : PV-L650D  
OUR REF. : MKES99-F017



Color LCD electronic view finder  
(Part of video camera)

Description of Application Models

FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

Application models are as below.

FCC ID : ACJ927126L  
Trade Name : Panasonic  
Model No. of  
Video Camera : PV-L650D  
Name of Device : Color LCD Electronic View Finder, part of Video Camera  
Grantee Name : Matsushita Electric Industrial Co., Ltd.  
Manufacturer : Matsushita-Kotobuki Electronics Ind. Ltd.  
Cabinet Material : Plastics

Sample of FCC Identifier

EXHIBIT # : 1  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

↙  

FCC ID : ACJ927126L
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EXHIBIT # : 2  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D



FCC Identifier

**MATSUSHITA-KOTOBUKI  
ELECTRONICS INDUSTRIES LTD.**

SAIJO DIVISION DEVELOPMENT ADMINISTRATION DEPT.  
ADDRESS: 〒793 247 FUKUTAKE, SAIJO, EHIME, JAPAN  
TELEPHONE: 0897-56-1111 FAX: 0897-56-8142

Date : Sept. 8, 1999

**REPORT OF MEASUREMENTS-(Part I)**

REQUIRED IN ( ) SUBPART H (TV INTERFACE DEVICE)  
( X ) Part 18 (ISM EQUIPMENT )

EXHIBIT # : 3  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

Sheet 1 of 5 Sheets

Name of Manufacturer: Matsushita-Kotobuki Electronics Industries Ltd.

Address of Manufacturer: 247 Fukutake, Saijo, Ehime, Japan

**Device Under Measurement**

FCC ID : ACJ927126L  
Model No. : PV-L650D  
Trade Name : Panasonic  
Applicant : Matsushita Electric Ind. Co., Ltd.

This device is a representative model of KC-2000LCD chassis group.

**Data Also Applied To**

FCC ID \_\_\_\_\_ Model No. (Trade Name) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Device Description**

Name of Device : ( ) Video Cassette Recorder, ( ) Tuner Adaptor  
( X ) Color LCD Electronic View Finder (Part of Video Camera)  
Frequency : 78 kHz ± 10 kHz  
Accessories : AC Adaptor (PV-A17), Earphone  
RF Adaptor (PV-RF16), RF out cable (1.3 meter)

**Certification**

On the basis of the measurement data contained in Part II, all devices bearing the aforementioned FCC ID (model No., chassis No. and trade names) are stated by the undersigned to be capable of complying with the applicable sections of Part 18 of the FCC rules governing restricted radiation devices at the time of manufacture and may be expected to continue to comply under normal conditions and with usual maintenance. The undersigned also states that the device measured was an engineering prototype, pre production, or production unit. If changes are applied to future units and such changes adversely alter spurious radiation, an amended report of measurements will be supplied to the FCC.



K. Ishikawa  
Sr. Engineer

Part 18, (ISM EQUIPMENT) - Part II

EXHIBIT # \_\_\_\_\_  
FCC ID : ACJ927126L  
MODEL No. : PV-L650D  
OUR REF. : MKES99-F017  
Sheet 2 of 5 Sheets

Name of Device : Color LCD Electronic View Finder  
FCC ID : ACJ927126L  
Nominal Operating Frequency : 78 kHz  $\pm$  10 kHz  
Rated Power Consumption : DC 6V / 8.5 W, (With Video Camera)  
Maximum RF Energy : 2.5 W  
Illumination : 1.7 W Fluorescent Lamp  
Intended Use : Illumination, Consumer Equipment  
Measurement Site : MKS Site  
Measurement Procedure : FCC OST MP-5

Note:

(1) Detailed report: Refer to attached sheets.

I HEREBY STATE THAT: The measurements shown in Part II of this form were made in accordance with the procedures indicated and the energy emitted by this equipment was found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements and vouch for the qualifications of all persons taking them.

I FURTHER STATE THAT: On the basis of the measurements made, the device tested is capable of operation in compliance with the requirements of Part 18 of the FCC Rules under normal use and maintenance.



T. Watanabe  
Engineer

EXHIBIT # \_\_\_\_\_  
 FCC ID : ACI927126L  
 MODEL No. : PV-L650D  
 OUR REF. : MKES99-F017

Sheet 3 of 5 Sheets

5) 18.307 Power Line Conducted Interference

Freq. (MHz)	1-end & Gro.	The other-end & Gro.	Factor (dB)	Pad Loss (dB)	1-end & Gro.	The other-end & Gro.	Limits (dBuV)
0.45	31.8	30.2	0.1	6.2	38.1	36.5	48.0
0.53	25.4	24.9	0.1	6.2	31.7	31.2	48.0
0.62	21.2	20.2	0.1	6.2	27.5	26.5	48.0
0.73	22.9	18.3	0.1	6.2	29.2	24.6	48.0
0.83	20.6	13.9	0.1	6.2	26.9	20.2	48.0
1.02	18.5	8.7	0.1	6.2	24.8	15.0	48.0

Note:

1. Sample calculation at 1-end & Gro. 0.45 MHz; 31.8 + 0.1 + 6.2 = 38.1 (dBuV)

2. Measuring Instruments:

a) Field strength meter - Kyoritsu Electric Work Co., Model KNM-402C

(1) Detector function: CISPR Q-Peak

(2) IF band width : 9kHz

(3) Input impedance : 75 ohms

b) Line impedance stabilized net work (LISN)

- Kyoritsu Electric Work Co., Model KNW-406

50 ohms / 50 uH net work

c) Matching pad - Kyoritsu Electric Work Co., Model KPD-401

3. The spectrum was checked from 0.45MHz to 30MHz and the six highest emissions relative to the appropriate limit were measured and reported.

EXHIBIT # \_\_\_\_\_  
FCC ID : ACJ927126L  
MODEL No. : PV-L650D  
OUR REF. : MKES99-F017

Sheet 4 of 5 Sheets

### 18.307 POWER LINE CONDUCTED INTERFERENCE

- CONFIGURATION OF THE EQUIPMENT UNDER TEST -

( Arrangement of accessories on the test table )

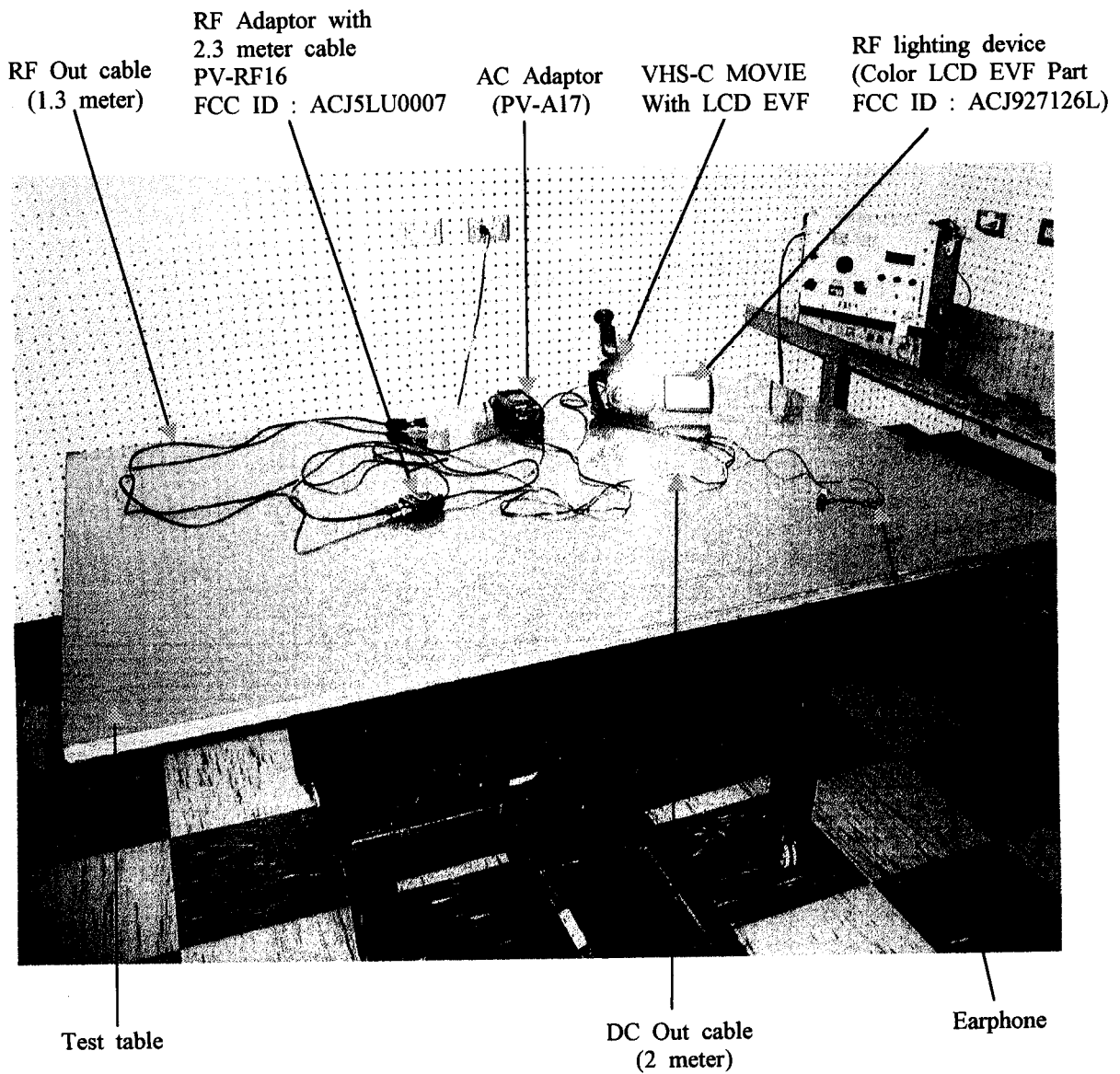
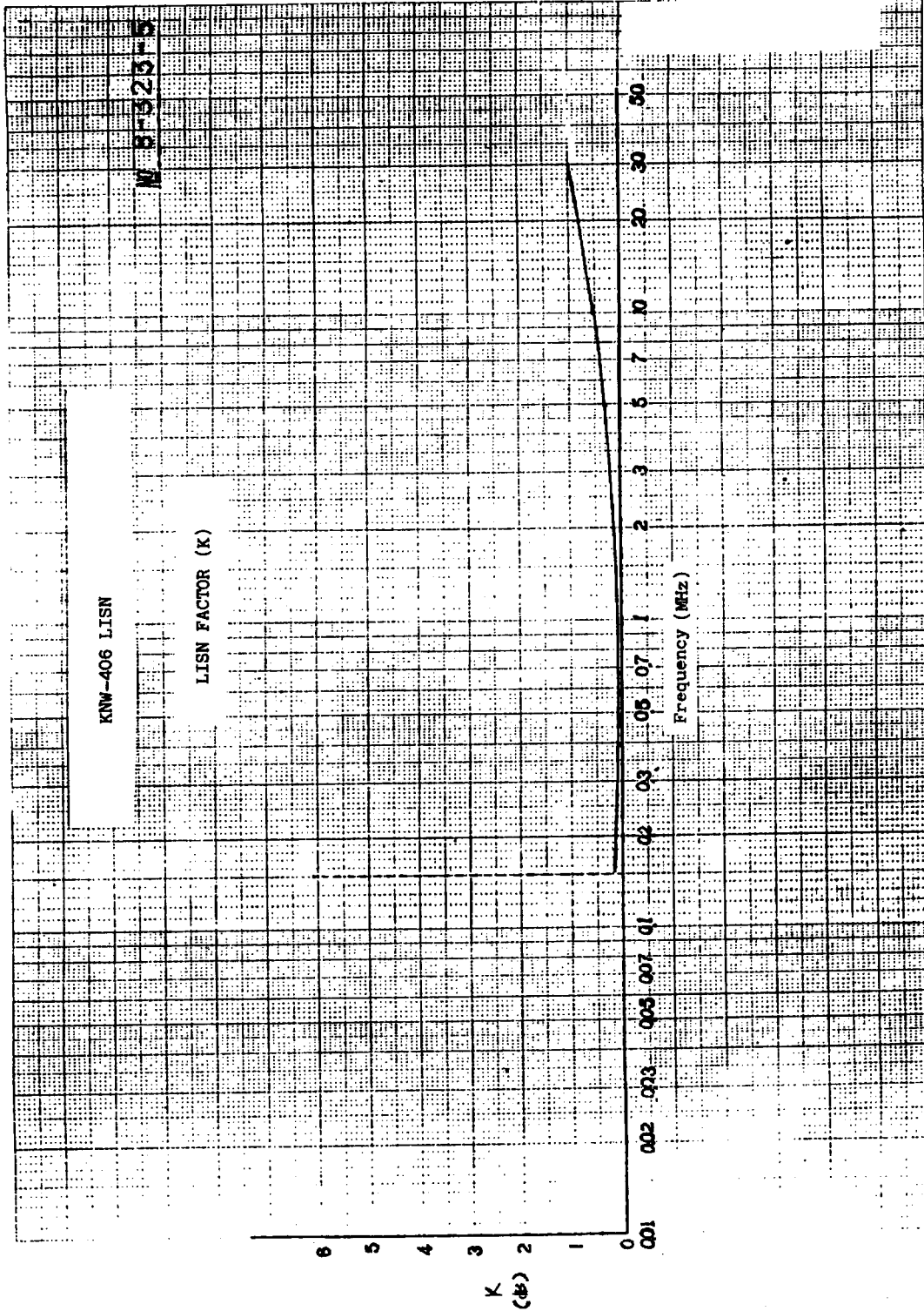


EXHIBIT # \_\_\_\_\_  
 FCC ID : ACJ927126L  
 MODEL No. : PV-L650D  
 OUR REF. : MKES99-F017  
 Sheet 5 of 5 Sheets

JIS A4 180 x 250mm



Technical Specification

EXHIBIT # : 4-1  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO.: PV-L650D

Color LCD Electronic View Finder (Part of Video Camera)

Power Source : Supplied from Video Camera  
Power Consumption : 8.5 W (With Video Camera)  
Television System : EIA Standard (525 lines, 60 fields) NTSC  
Video Horizontal Resolution : More than 250 lines  
Illumination : Built-in 1.4 W fluorescent lamp  
Dimensions : Approx. 15 mm(W) × 110 mm(D) × 84 mm(H)  
Weight : Approx. 200 g  
Color : Black  
Operating Humidity : 10 % - 75 %  
Operating Temperature : 32 °F - 104 °F ( 0 °C - 40 °C )

Description of RF Lighting Device

EXHIBIT # : 4-2  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

Page 1/3

1) Type(s) of emission

Not applicable

2) Frequency range

78 kHz  $\pm$  10 kHz

3) Range of operating power and description of means provided for variation of operating power

Not applicable

4) Maximum power rating as defined in the applicable rules

Not applicable

5) The voltage applied to and currents into the several elements of the final radio frequency amplifying device for normal operation over the power range. Indicate whether these voltages and currents are DC or AC.

Input Voltage (circuit diagram Point No. 2) = 4.5 V (DC)

Input Current (circuit diagram Point No. 2) = 380 mA (DC)

6) Function of each electron tube, semiconductor or other active circuit device.

a. Switching transistor

Q9101, Q9102 : 2SD1119  $\times$  2 or 2SD2150  $\times$  2

b. Pulse transformer

T9101 : LSLT0030

Input Voltage : 4.5 V DC

Output Voltage : 870 V AC (at no load)

c. Choke coil

L9101 : SLF6028T680M

Inductance : 68  $\mu$ H

d. Fluorescent lamp

PL9101 : VLLW0021 or LSLL0016 or LSLL0017

Tube voltage : 350 V AC

Power consumption : 1.4 W

EXHIBIT # : 4-2  
FCC ID : ACI927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

Page 2/3

7) Brock diagram

See EXHIBIT # 5

8) Operating Instruction manual. If the operating instruction manuals are not available when the application is filed a set of draft instructions should be provided and complete instruction manuals should be submitted as soon as available.

9) Tune up procedure over the power range or at specific operating power levels.

Not applicable

10) A description of all circuitry and devices provided for deterring and stabilizing frequency.

Oscillator circuit : Blocking oscillator DC-AC inverter

Pulse transformer : LSLT0030

Switching Transistor : Q9101, Q9102(2SD1119 × 2 or 2SD2150 × 2)

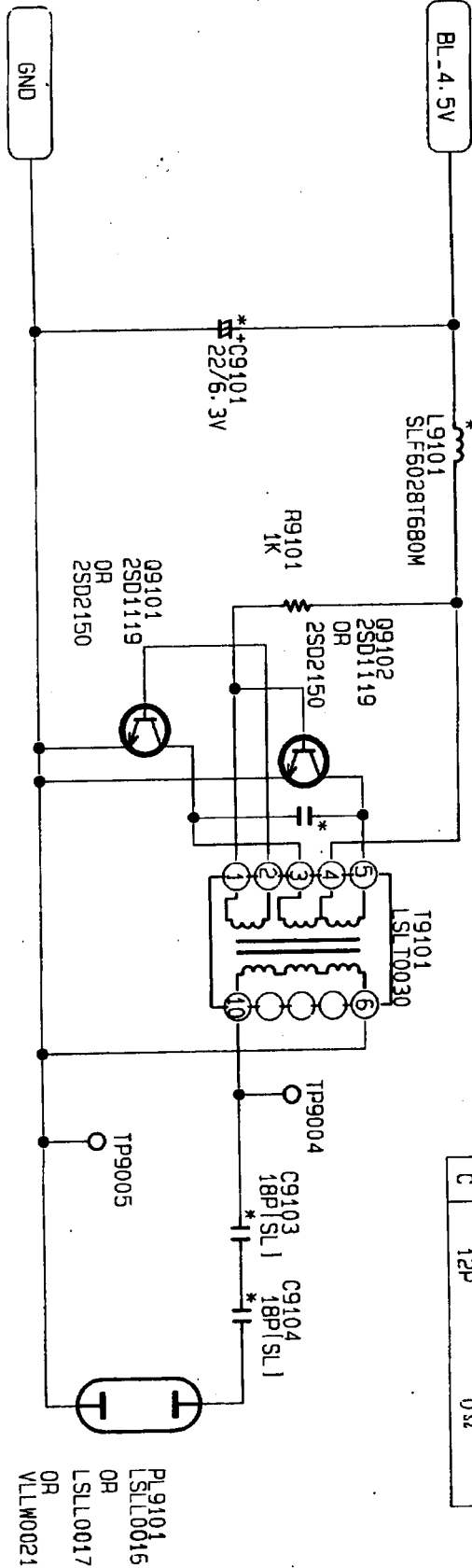
11) A description of any circuits for devices employed for suppression of spurious radiation, for limiting modulation, and for limiting the operating power.

Not applicable

12) A photograph or drawing of the equipment identification label, silk-screened or molding showing the information to be placed there on.

See EXHIBIT # 1 and # 2.

POINT\_NO2



C9102

- 39000P
- OR
- 33000P
- OR
- 47000P

	C9103	C9104
A	18P	18P
B	10P	0Ω
C	12P	0Ω

PL9101  
 LSLL0015  
 OR  
 LSLL0017  
 OR  
 VLLW0021

EXHIBIT # : 4-3  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

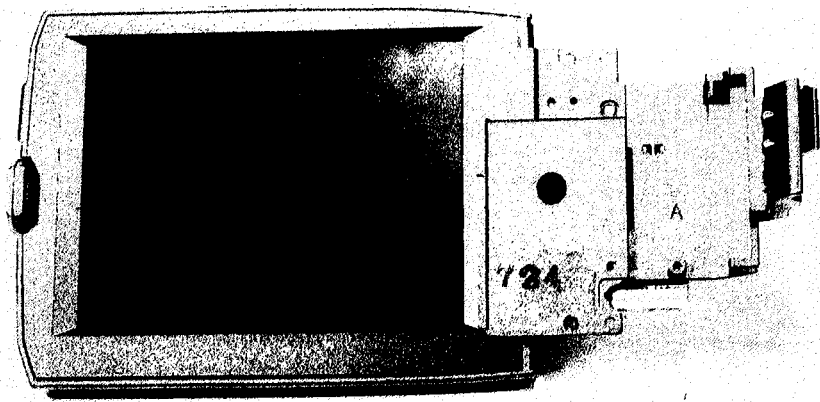
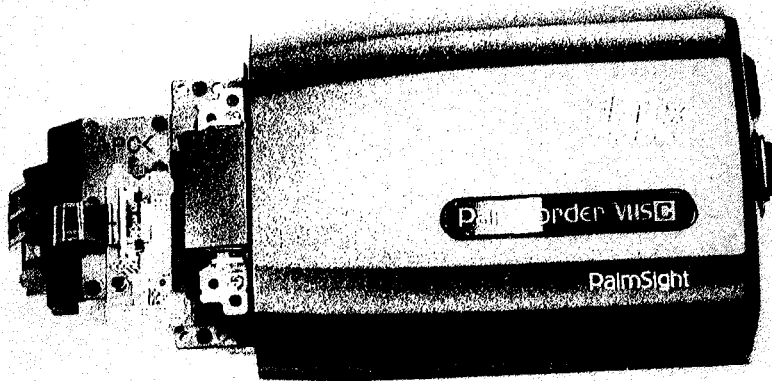


EXHIBIT # : 4-3  
FCC ID : ACI927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

LCD Power PCB  
(Top view)

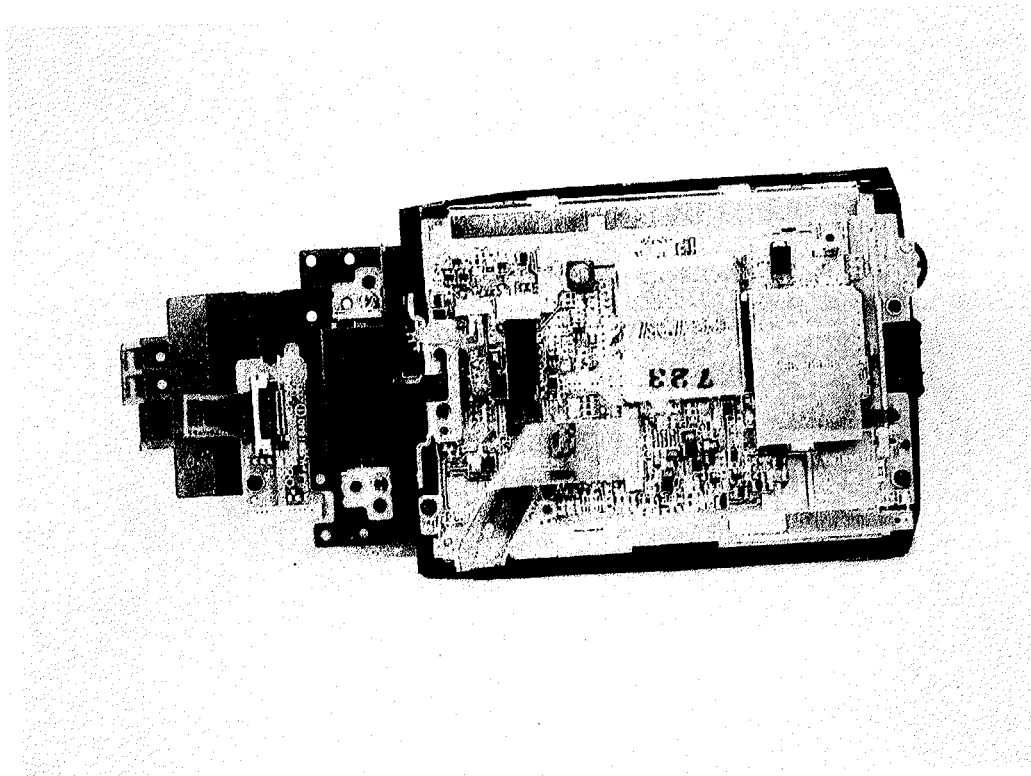
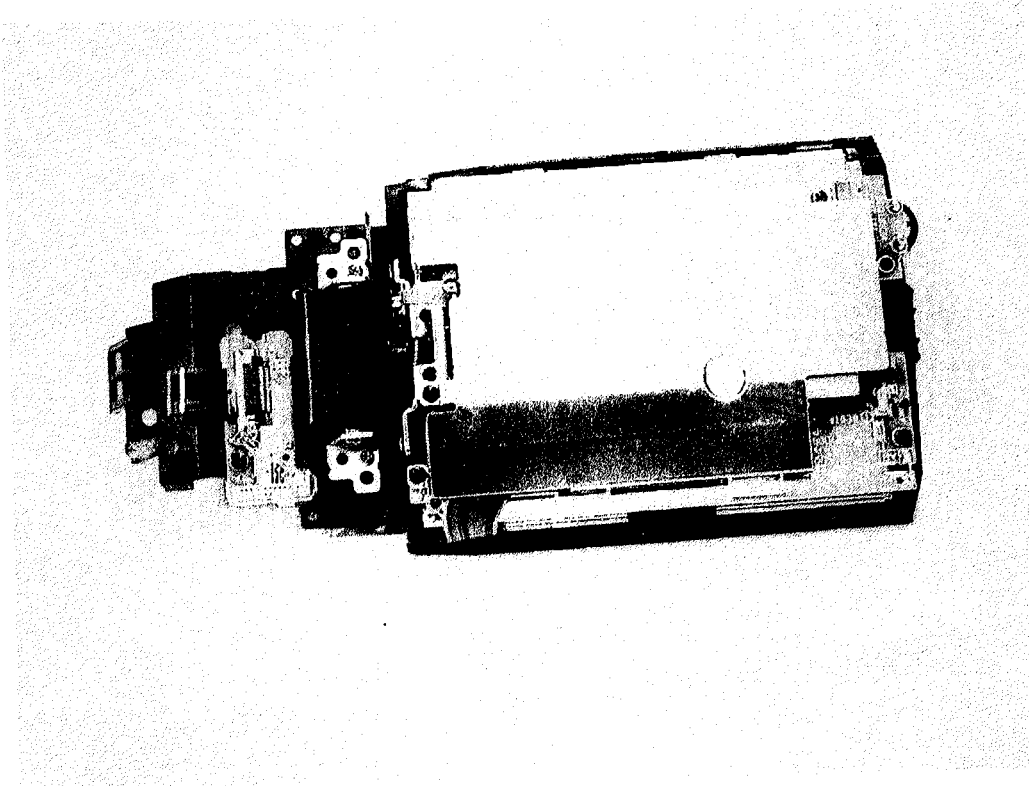
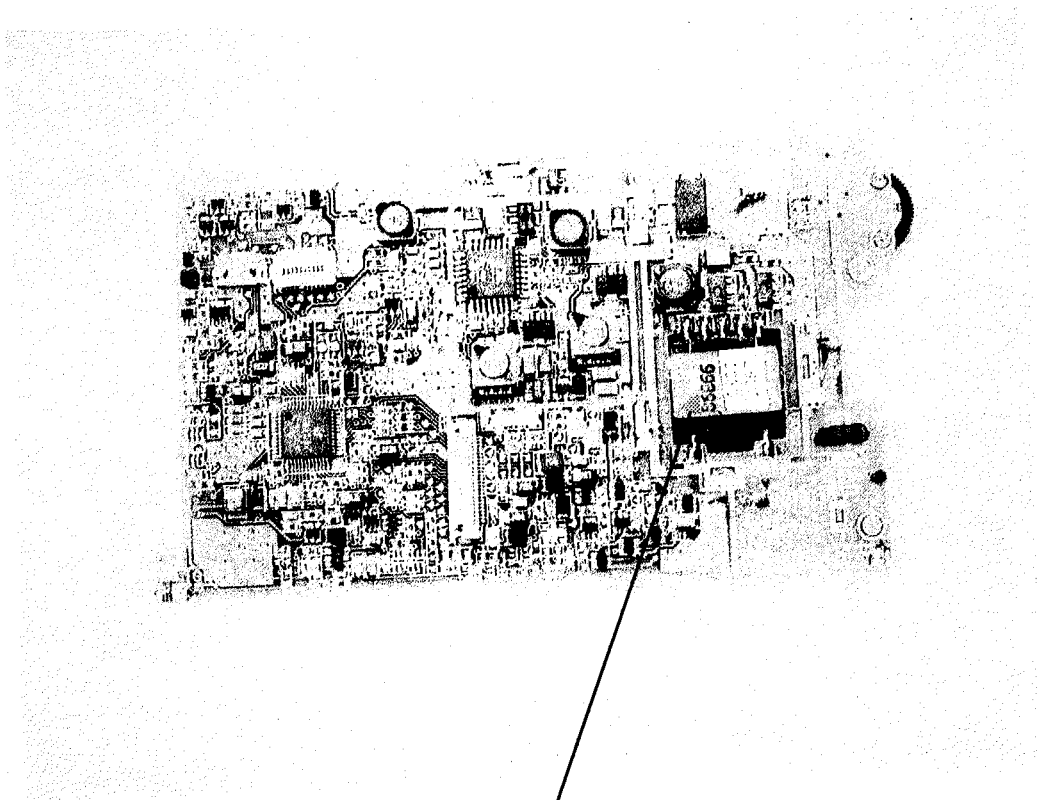


EXHIBIT # : 4-3  
FCC ID : ACI927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

LCD Power PCB  
(Top view)



Oscillator circuit

EXHIBIT # : 4-3  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

LCD Power PCB  
(Bottom view)

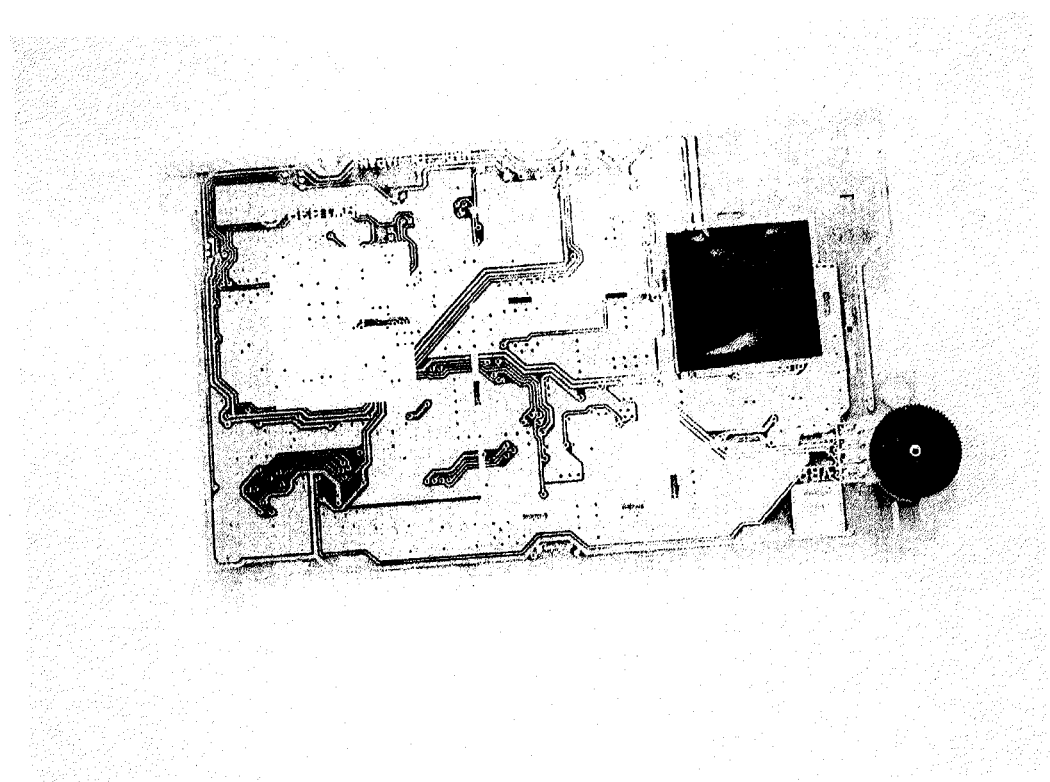
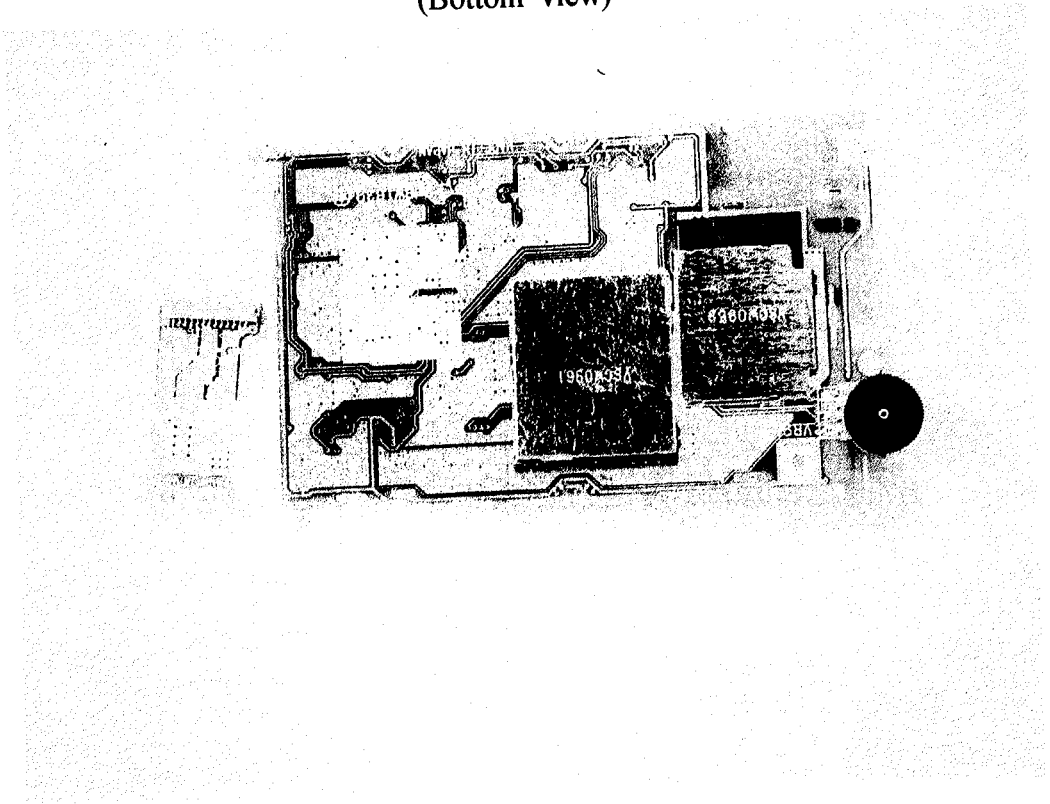
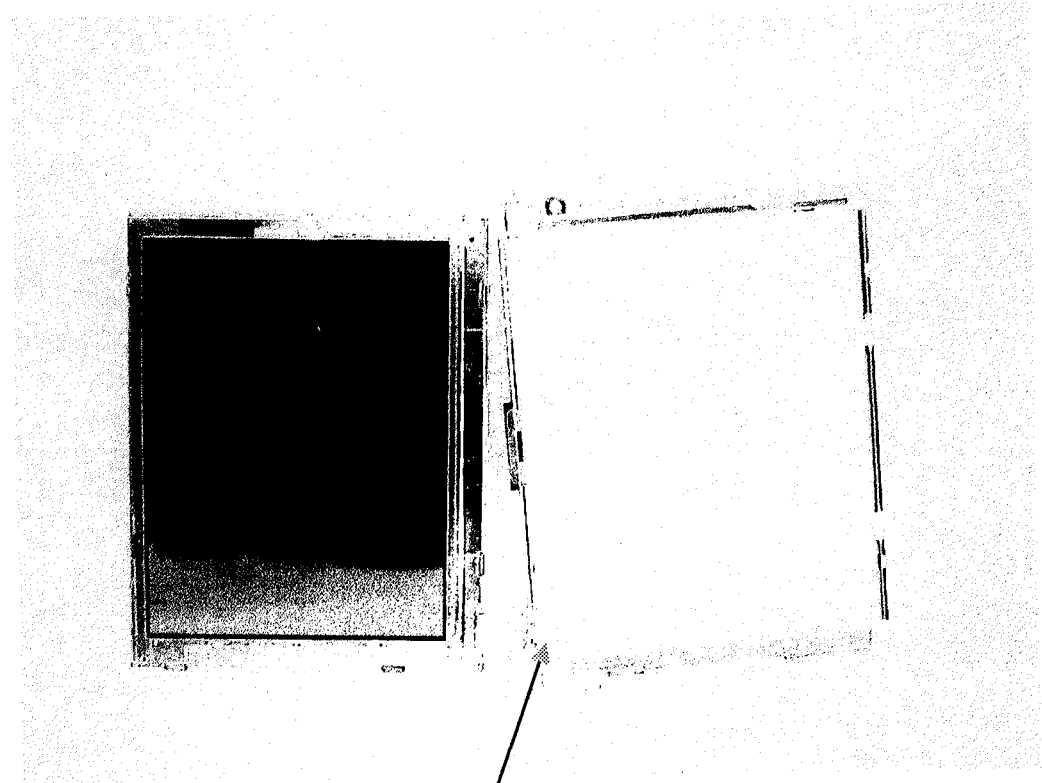
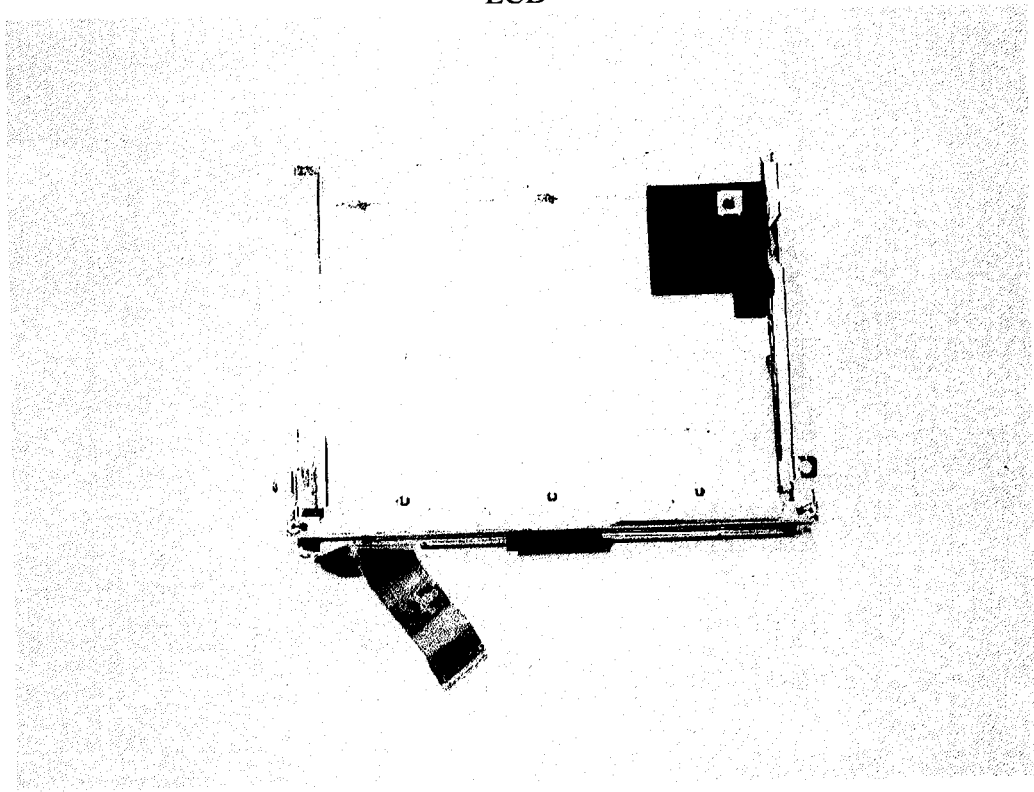


EXHIBIT # : 4-3  
FCC ID : ACJ927126L  
OUR REF. : MKES99-F017  
MODEL NO. : PV-L650D

LCD



RF Lighting device  
(Fluorescent lamp)

Block Diagram

EXHIBIT # : 5  
 FCC ID : ACJ927126L  
 OUR REF. : MKES99-F017  
 MODEL NO. : PV-L650D

**MOVIE BLOCK DIAGRAM**

