

Service Manual

High Definition Video Camera

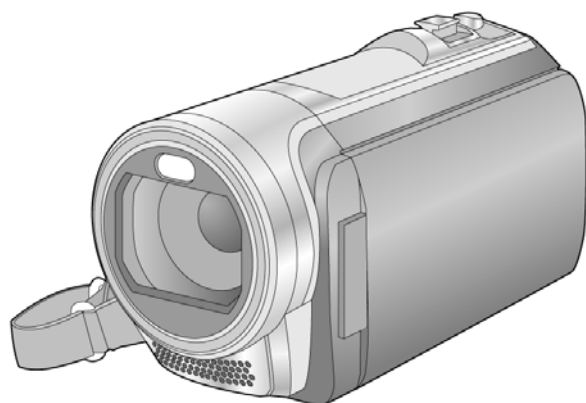
AVCHD™
Progressive

HDMI

SD
XC

VIERA Link™

DOLBY
DIGITAL
STEREO CREATOR



Model No. **HC-V500MP**

HC-V500MPC

HC-V500MPU

HC-V500MEB

HC-V500MEC

HC-V500MEE

HC-V500MEG

HC-V500MEP

HC-V500MGA

HC-V500MGC

HC-V500MGK

HC-V500MGN

HC-V500MGT

HC-V500P

HC-V500PC

HC-V500EB

HC-V500EC

HC-V500EE

HC-V500EF

HC-V500EG

HC-V500EP

HC-V500GA

HC-V500GC

HC-V500GK

HC-V500GN

Panasonic®

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HC-V500GT

Colour

[HC-V500]

(K).....Black Type

(S).....Silver Type (except P/PC/EC/EF/GK/GT)

(R).....Red Type (except P/PC/EB/EE/GN/GT)

[HC-V500M]

(K).....Black Type

(R).....Red Type (only GK)

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Safety Precautions

1.1. General Guidelines

1. IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by

⚠ in the Schematic Diagrams, Circuit Board Layout, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent X-RADIATION, shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

2. An Isolation Transformer should always be used during the servicing of AC Adaptor whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks. It will also protect AC Adaptor from being damaged by accidental shorting that may occur during servicing.
3. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
4. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
5. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.2. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1\text{ M}\Omega$ and $5.2\text{ M}\Omega$. When the exposed metal does not have a return path to the chassis, the reading must be infinity.

1.3. Leakage Current Hot Check (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5\text{ k}\Omega$, 10 W resistor, in parallel with a $0.15\text{ }\mu\text{F}$ capacitor, between each exposed metallic part on the set and a good earth ground, as shown in Figure 1.
3. Use an AC voltmeter, with $1\text{ k}\Omega/\text{V}$ or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 V RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed $1/2\text{ mA}$. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

Hot-Check Circuit

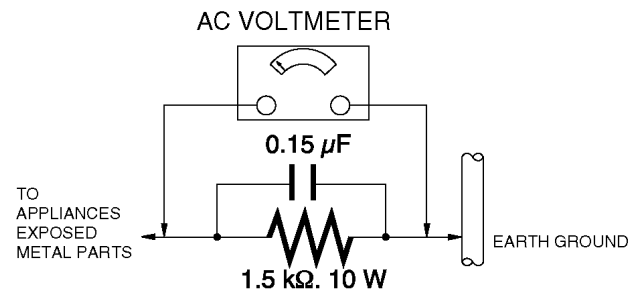


Figure. 1

2 Warning

2.1. Prevention of Electrostatic Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an antistatic solder removal device. Some solder removal devices not classified as "antistatic (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION :

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

2.2. How to Recycle the Lithium Ion Battery (U.S. Only)

ENGLISH



A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

FRANÇAIS



L'appareil que vous vous êtes procuré est alimenté par une batterie au lithium-ion/lithium-polymère. Pour des renseignements sur le recyclage de la batterie, veuillez composer le 1-800-8-BATTERY.

2.3. Caution for AC Cord (For EB/GC)

2.3.1. Information for Your Safety

IMPORTANT

Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

WARNING

To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

CAUTION

To reduce the risk of fire or shock hazard and annoying interference, use the recommended accessories only.

FOR YOUR SAFETY

DO NOT REMOVE THE OUTER COVER

To prevent electric shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

2.3.2. Caution for AC Mains Lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three-pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amperes and it is approved by ASTA or BSI to BS1362

Check for the ASTA mark or the BSI mark on the body of the fuse.



If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

If the fitted moulded plug is unsuitable for the socket outlet in your home then the fuse should be removed and the plug cut off and disposed of safely.

There is a danger of severe electrical shock if the cut off plug is inserted into any 13-ampere socket.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

2.3.2.1. Important

The wires in this mains lead are coloured in accordance with the following code:

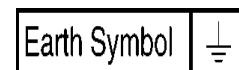
Blue	Neutral
Brown	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

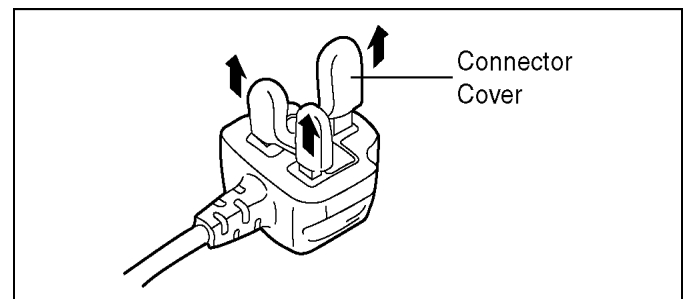
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol.



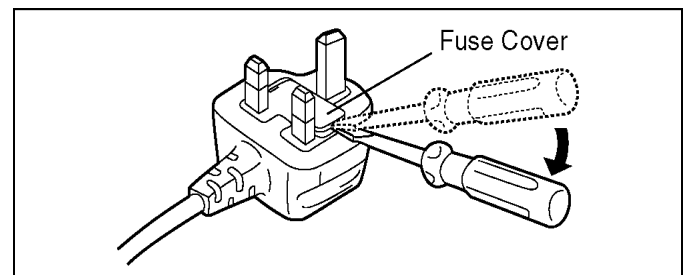
2.3.2.2. Before Use

Remove the Connector Cover as follows.

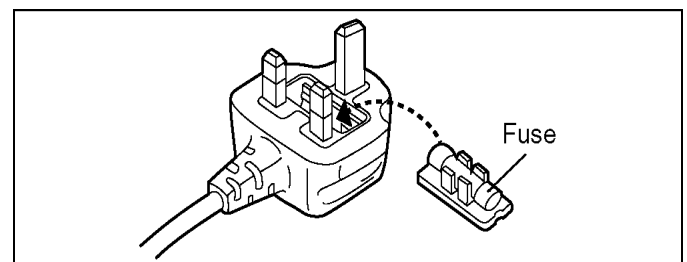


2.3.2.3. How to Replace the Fuse

1. Remove the Fuse Cover with a screwdriver.



2. Replace the fuse and attach the Fuse cover.



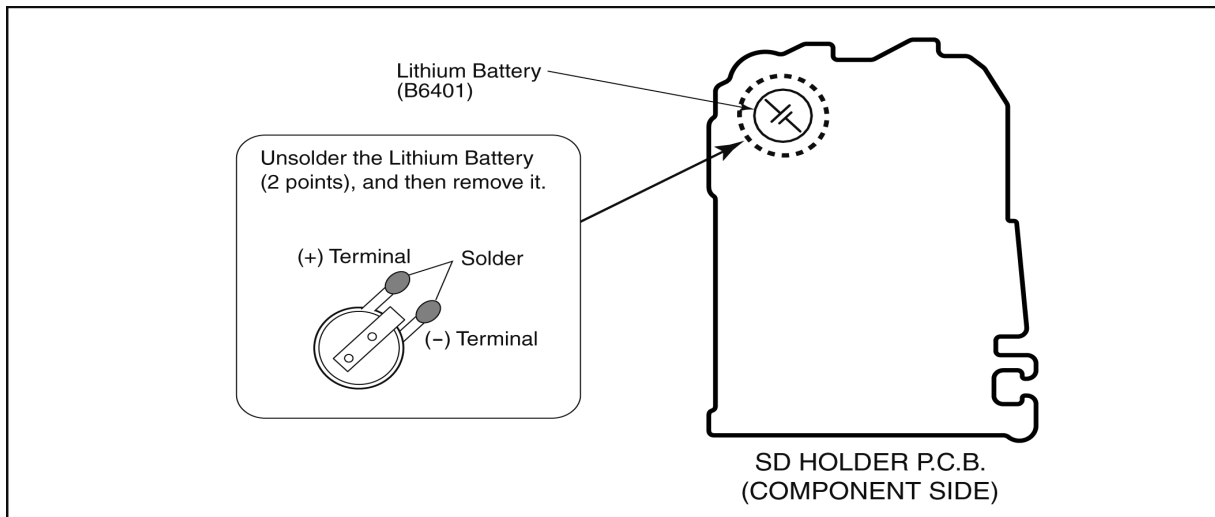
2.4. How to Replace the Lithium Battery

2.4.1. Replacement Procedure

1. Remove the SD HOLDER P.C.B.. (Refer to Disassembly Procedures.)
2. Unsolder the each soldering point of electric lead terminal for Lithium battery (Ref. No. "B6401" at component side of SD HOLDER P.C.B.) and remove the Lithium battery together with electric lead terminal. Then replace it into new one.

NOTE:

The Type No. ML-614S/DK includes electric lead terminals.



NOTE:

This Lithium battery is a critical component.

(Type No.: ML-614S/DN **Manufactured by Energy Company, Panasonic Corporation**)

It must never be subjected to excessive heat or discharge.

It must therefore only be fitted in requirement designed specifically for its use.

Replacement batteries must be of same type and manufacture.

They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.

Do not attempt to re-charge the old battery or re-use it for any other purpose.

It should be disposed of in waste products destined for burial rather than incineration.

(For English)

CAUTION

- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.

(For German)

ACHTUNG

- Explosionsgefahr bei falschem Anbringen der Batterie. Ersetzen Sie die Batterie nur durch den vom Hersteller empfohlenen Typ.
- Wenden Sie sich zur Entsorgung der Batterien an die lokalen Behörden oder erfragen Sie die richtige Vorgehensweise zur Entsorgung.

(For French)

ATTENTION

- Il y a un danger d'explosion si la batterie n'est pas remplacée correctement. Remplacez uniquement avec le type recommandé par le fabricant.
- Pour mettre au rebut les batteries, prenez contact avec les autorités locales ou le revendeur et renseignez-vous sur la méthode correcte de la mise au rebut.

NOTE:

Above caution is applicable for a battery pack which is for HC-V500/V500M series, as well.

1. Battery Pack for this model.

3 Service Navigation

3.1. Introduction

This service manual contains technical information, which allow service personnel's to understand and service this model.

Please place orders using the parts list and not the drawing reference numbers.

If the circuit is changed or modified, the information will be followed by service manual to be controlled with original service manual.

3.2. General Description About Lead Free Solder (PbF)

The lead free solder has been used in the mounting process of all electrical components on the printed circuit boards used for this equipment in considering the globally environmental conservation.

The normal solder is the alloy of tin (Sn) and lead (Pb). On the other hand, the lead free solder is the alloy mainly consists of tin (Sn), silver (Ag) and Copper (Cu), and the melting point of the lead free solder is higher approx.30°C (86°F) more than that of the normal solder.

Distinction of P.C.B. Lead Free Solder being used

The letter of "PbF" is printed either foil side or components side on the P.C.B. using the lead free solder.(See right figure)
--

PbF

Service caution for repair work using Lead Free Solder (PbF)

- The lead free solder has to be used when repairing the equipment for which the lead free solder is used.
(Definition: The letter of "PbF" is printed on the P.C.B. using the lead free solder.)
- To put lead free solder, it should be well molten and mixed with the original lead free solder.
- Remove the remaining lead free solder on the P.C.B. cleanly for soldering of the new IC.
- Since the melting point of the lead free solder is higher than that of the normal lead solder, it takes the longer time to melt the lead free solder.
- Use the soldering iron (more than 70W) equipped with the temperature control after setting the temperature at 350±30°C (662±86°F).

Recommended Lead Free Solder (Service Parts Route.)

- The following 3 types of lead free solder are available through the service parts route.
RFKZ03D01KS----- (0.3mm 100g Reel)
RFKZ06D01KS----- (0.6mm 100g Reel)
RFKZ10D01KS----- (1.0mm 100g Reel)

Note

- * Ingredient: tin (Sn) 96.5%, silver (Ag) 3.0%, Copper (Cu) 0.5%, Cobalt (Co) / Germanium (Ge) 0.1 to 0.3%

3.3. Important Notice 1:(Other than U.S.A. and Canadian Market)

1. The service manual does not contain the following information, because of the impossibility of servicing at component level without concerned equipment/facilities.
 - a. Schematic diagram, Block Diagram and P.C.B. layout of MAIN P.C.B..
 - b. Parts list for individual parts for MAIN P.C.B..When a part replacement is required for repairing MAIN P.C.B., replace as an assembled parts. (Main P.C.B.)
2. The following category is /are recycle module part. Please send it/them to Central Repair Center.
 - MAIN P.C.B. (VEP03J47A: HC-V500MP/PC/PU/EB/EC/EE/EG/EP/GA/GC/GK/GN/GT)
 - MAIN P.C.B. (VEP03J47C: HC-V500P/PC/EB/EC/EE/EF/EG/EP/GA/GC/GK/GN/GT)

3.4. How to Define the Model Suffix (NTSC or PAL model)

There are seven kinds of HC-V500/V500M.

- a) HC-V500P, V500MP
- b) HC-V500PC, V500MPC
- c) HC-V500EB/EC/EF/EG/EP/GN, V500MEB/EC/EG/EP/GN
- d) HC-V500EE, V500MEE
- e) HC-V500GK, V500MGK
- f) HC-V500GT, V500MGT
- g) HC-V500GA/GC, V500MPU/GA/GC

What is the difference is that the "INITIAL SETTING" data which is stored in Flash ROM mounted on Main P.C.B..

3.4.1. Defining methods:

To define the model suffix to be serviced, refer to the rating label and caution label which are putted on the Unit.

a) HC-V500P, V500MP

The nameplate for these models show the following Safety registration mark.



b) HC-V500PC, V500MPC

The nameplate for these models show the following Safety registration mark.



c) HC-V500EB/EC/EF/EG/EP/GN, V500MEB/EC/EG/EP/GN

The nameplate for these models show the following Safety registration mark.



d) HC-V500EE, V500MEE

The nameplate for these models show the following Safety registration mark.



e) HC-V500GK, V500MGK

The nameplate for these models show the following Safety registration mark.



f) HC-V500GT, V500MGT

The nameplate for these models show the following Safety registration mark.



h) HC-V500GA/GC, V500MPU/GA/GC

The nameplate for these models do not show any above Safety registration mark.

NOTE:

After replacing the MAIN P.C.B., be sure to achieve adjustment.

The adjustment instruction is available at "software download" on the "Support Information from NWBG/VDBG-AVC" web-site in "TSN system", together with Maintenance software.

3.5. Formatting

HC-V500

[FORMAT CARD]

Please be aware that if a medium is formatted, then all the data recorded on the medium will be erased and cannot be restored. Back up important data on a PC, DVD disc etc.

- When formatting is complete, touch [EXIT] to exit the message screen.
 - Perform a physical formatting of the SD card when the SD card is to be disposed/ transferred.
-
- Do not turn this unit off or remove the SD card, while formatting. Do not expose the unit to vibrations or shock.

Use this unit to format media.

Do not format an SD card using any other equipment such as a PC. The card may not be used on this unit.

HC-V500M

[FORMAT MEDIA]

Please be aware that if a medium is formatted, then all the data recorded on the medium will be erased and cannot be restored. Back up important data on a PC, DVD disc etc.

- 1 Touch [FORMAT MEDIA].
- 2 Touch [SD CARD] or [Built-inMemory].

- When formatting is complete, touch [EXIT] to exit the message screen.
 - Perform a physical formatting of the SD card when the SD card is to be disposed/ transferred.
 - Perform a physical formatting of the built-in memory when this unit is to be disposed/ transferred.
-
- Do not turn this unit off or remove the SD card, while formatting. Do not expose the unit to vibrations or shock.

Use this unit to format media.

Formatting built-in memory is only available with this unit.

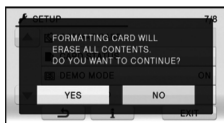
Do not format an SD card using any other equipment such as a PC. The card may not be used on this unit.

When disposing of or giving away the SD card, note that:

- Formatting and deletion of this unit or computer only changes the file management information and does not completely delete the data in the SD card.
- It is recommended that the SD card is physically destroyed or the SD card is physically formatted using this unit when disposing of or giving away the SD card.

HC-V500

To physically format the SD card, connect the unit via the AC adaptor, select [SETUP] → [FORMAT CARD] → [YES] from the menu, and then press and hold the recording start/stop button on the screen below for about 3 seconds. When the SD card data deletion screen appears, select [YES], and then follow the on-screen instructions.



HC-V500M

To physically format the SD card, connect the unit via the AC adaptor, select [SETUP] → [FORMAT MEDIA] → [SD CARD] from the menu, and then press and hold the recording start/stop button on the screen below for about 3 seconds. When the SD card data deletion screen appears, select [YES], and then follow the on-screen instructions.



- The customer is responsible for the management of the data in the SD card.

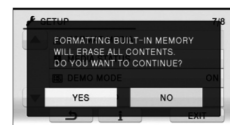
HC-V500M

When disposing of or giving away this unit, note that:

- Formatting and deletion simply change the file management information and cannot be used to completely erase the data in built-in memory of this unit. The data can be recovered using commercially available software or the like.

- We recommend that you physically format the built-in memory before disposing of or giving away this unit.

To physically format the built-in memory, connect the unit via the AC adaptor, select [SETUP] → [FORMAT MEDIA] → [Built-inMemory] from the menu, and then press and hold the recording start/stop button on the screen below for about 3 seconds. When the built-in memory data deletion screen appears, select [YES], and then follow the on-screen instructions.



- Please look after the data in your built-in memory carefully. Panasonic will not be held responsible in the unlikely case that private data is divulged.

4 Specifications

High Definition Video Camera

Information for your safety

Power source:	DC 5.0 V (When using AC adaptor)	
	DC 3.6 V (When using battery)	
Power consumption:	Recording;	Charging;
	5.7 W	7.7 W

Motion picture recording format:

[AVCHD]; AVCHD format version 2.0 compliant (AVCHD Progressive)

[iFrame]; MPEG-4 AVC file format compliant (.MP4)

Motion picture compression:

MPEG-4 AVC/H.264

Audio compression:

[AVCHD]; Dolby Digital/2 ch

[iFrame], [MP4]; AAC/2 ch

Recording mode and transfer rate:

[1080/60p] (NTSC areas) / [1080/50p] (PAL areas); Maximum 28 Mbps (VBR)

[HA]; Average 17 Mbps (VBR)

[HG]; Average 13 Mbps (VBR)

[HX]; Average 9 Mbps (VBR)

[HE]; Average 5 Mbps (VBR)

[iFrame]; Maximum 28 Mbps (VBR)

For picture size and recordable time of a motion picture, refer to "Recording modes/approximate recordable time".

Still picture recording format:

JPEG (Design rule for Camera File system, based on Exif 2.2 standard)

For picture size of a still picture, and for number of recordable pictures, refer to

"Approximate number of recordable pictures".

Recording media:

SD Memory Card (FAT12 and FAT16 system compliant)

SDHC Memory Card (FAT32 system compliant)

SDXC Memory Card (exFAT system compliant)

Refer to "Cards that you can use this unit" for details on SD cards usable in this unit.

HC-V500M

Built-in memory; 16 GB

Image sensor:

1/5.8" 1MOS image sensor

Total; 1500 K

Effective pixels;

Motion picture; 1300 K to 1120 K (16:9)

Still picture; 970 K (4:3), 1090 K (3:2), 1300 K to 1120 K (16:9)

Lens:

Auto Iris, 38× Optical Zoom, F1.8 to F4.2

Focal length;

2.35 mm to 89.3 mm

Macro (Full range AF)

35 mm equivalent;

Motion picture; 32.4 mm to 1345 mm (16:9)

Still picture; 40.7 mm to 1547 mm (4:3), 37.3 mm to 1419 mm (3:2),
32.4 mm to 1345 mm (16:9)

Minimum focus distance;

Normal; Approx. 3 cm (1.2") (Wide)/Approx. 1.6 m (5.3 feet) (Tele)

Tele Macro; Approx. 70 cm (28") (Tele)

Intelligent Auto Macro; Approx. 1 cm (0.4") (Wide)/Approx. 70 cm (28") (Tele)

Zoom:

i.Zoom OFF 42×, 50× i.Zoom, 100×/2500× Digital Zoom

(Using image sensor effective area)

Image stabilizer function:

Optical (Hybrid Optical Image Stabilizer, Active Mode (Rotation correction), Optical Image

Stabilizer Lock function)

Monitor:

3.0" wide LCD monitor (Approx. 230 K dots)

Microphone:

Stereo (with a Zoom Microphone Function)

Speaker:

1 round speaker, dynamic type

White balance adjustment:

Auto tracking white balance system

Standard illumination:

1,400 lx

Minimum required illumination:

Approx. 4 lx 1/30 (NTSC areas) / 1/25 (PAL areas) with Low Light Mode in the Scene Mode)

Approx. 1 lx with the Color Night Rec function (NTSC areas) /

the colour night view function (PAL areas)

AV multi connector video output level:

Component video output level;

Y; 1.0 Vp-p, 75 Ω

Pb; 0.7 Vp-p, 75 Ω

Pr; 0.7 Vp-p, 75 Ω

AV video output level;

1.0 Vp-p, 75 Ω, NTSC system

HDMI mini connector video output level:

HDMI™ (x.v.Color™) 1080p/1080i/480p (NTSC areas)/

HDMI™ (x.v.Colour™) 1080p/1080i/576p (PAL areas)

AV multi connector audio output level (Line):

316 mV, 600 Ω, 2 ch

HDMI mini connector audio output level:

[AVCHD]; Dolby Digital/Linear PCM

[iFrame], [MP4]; Linear PCM

USB:

Reader function

SD card; Read only (No copyright protection support)

HC-V500M

Built-in memory; Read only

Hi-Speed USB (USB 2.0), USB terminal Type Mini AB

USB host function (for DVD burner)

Battery charging function (Charges from USB terminal when the main unit is off)

Photo light:

Available range; Approx. 1.2 m (3.9 feet)

Dimensions:

52.5 mm (W)×65 mm (H)×119.5 mm (D)

[2.067 " (W)×2.559 " (H)×4.705 " (D)] (including projecting parts)

Mass (Weight):

HC-V500

Approx. 227 g (Approx. 0.500 lbs.)

[without battery (supplied) and an SD card (optional)]

HC-V500M

Approx. 228 g (Approx. 0.503 lbs.)

[without battery (supplied)]

Mass (Weight) in operation:

HC-V500

Approx. 271 g (Approx. 0.597 lbs.)

[with battery (supplied) and an SD card (optional)]

HC-V500M

Approx. 270 g (Approx. 0.595 lbs.)

[with battery (supplied)]

Operating temperature:

0 °C to 40 °C (32 °F to 104 °F)

Operating humidity:

10%RH to 80%RH

Battery operation time:

See "Charging and recording time".

AC adaptor

Information for your safety

VSK0780/VSK0781:

Power source:	AC 100 V to 240 V, 50/60 Hz (VSK0780)
	AC 110 V to 240 V, 50/60 Hz (VSK0781)
Power consumption:	12 W
DC output:	DC 5.0 V, 1.6 A

Dimensions:

49 mm (W)×24 mm (H)×79 mm (D) [1.93 " (W)×0.94 " (H)×3.11 " (D)]

Mass (Weight):

Approx. 91 g (Approx. 0.20 lbs.)

VSK0711/VSK0712:

Power source:	AC 110 V to 240 V, 50/60 Hz
Power consumption:	12 W
DC output:	DC 5.0 V, 1.6 A

Dimensions:

46 mm (W)×25 mm (H)×75.5 mm (D) [1.8 " (W)×1.0 " (H)×3.0 " (D)]

Mass (Weight):

Approx. 115 g (Approx. 0.25 lbs.)

Charging and recording time

■ Charging/Recording time

- Temperature: 25 °C (77 °F)/humidity: 60%RH
- Charging times in parentheses are when charging from the USB terminal.

NTSC areas				
Battery model number [Voltage/Capacity (minimum)]	Charging time	Recording mode	Maximum continuous recordable time	Actual recordable time
Supplied battery/ VW-VBK180 (optional) [3.6 V/1790 mAh]	2 h 25 min (5 h 45 min)	[1080/60p]	1 h 45 min	55 min
		[HA]	1 h 55 min	
		[HG],[HX], [HE]	1 h 55 min	1 h
		[iFrame]	2 h 5 min	
VW-VBK360 (optional) [3.6 V/3580 mAh]	4 h 20 min (10 h 40 min)	[1080/60p]	3 h 30 min	1 h 45 min
		[HA]	3 h 45 min	1 h 55 min
		[HG]	3 h 50 min	
		[HX],[HE]	3 h 50 min	2 h
		[iFrame]	4 h 10 min	

PAL areas				
Battery model number [Voltage/Capacity (minimum)]	Charging time	Recording mode	Maximum continuously recordable time	Actual recordable time
Supplied battery/ VW-VBK180 (optional) [3.6 V/1790 mAh]	2 h 25 min (5 h 45 min)	[1080/50p]	1 h 50 min	55 min
		[HA],[HG], [HX],[HE]	2 h	1 h
		[iFrame]	2 h 10 min	
		[1080/50p]	3 h 40 min	1 h 50 min
VW-VBK360 (optional) [3.6 V/3580 mAh]	4 h 20 min (10 h 40 min)	[HA],[HG], [HX],[HE]	4 h	2 h 5 min
		[iFrame]	4 h 20 min	
		[iFrame]	4 h 20 min	2 h 15 min

- These times are approximations.
- The indicated charging time is for when the battery has been discharged completely. Charging time and recordable time vary depending on the usage conditions such as high/low temperature.

Cards that you can use with this unit

Use SD cards conforming to Class 4 or higher of the SD Speed Class Rating* for motion picture recording.

Card type	Capacity
SD Memory Card	512 MB/1 GB/2 GB
SDHC Memory Card	4 GB/6 GB/8 GB/12 GB/16 GB/24 GB/32 GB
SDXC Memory Card	48 GB/64 GB

* SD Speed Class Rating is the speed standard regarding continuous writing. e.g.:



- Operation of the SD Memory Cards 256 MB or less is not guaranteed. Also, the SD Memory Card 32 MB or less cannot be used for the motion picture recording.
- 4 GB or more Memory Cards that do not have the SDHC logo or 48 GB or more Memory Cards that do not have the SDXC logo are not based on SD Memory Card Specifications.
- The operation of Memory Cards exceeding 64 GB cannot be guaranteed.

Recording modes/approximate recordable time

- SD cards are only mentioned with their main memory size. The stated times are the approximate recordable times for continuous recording.

		A ← → B				
Recording mode		[1080/60p] (NTSC areas) [1080/50p] (PAL areas)	[1080/60i] (NTSC areas) / [1080/50i] (NTSC areas)			
			[HA]	[HG]	[HX]	[HE]
Picture size/ frame rate		1920×1080/ 60p (NTSC areas) 50p (PAL areas)	1920×1080/ 60i (NTSC areas) 50i (PAL areas)	1920×1080/ 60i (NTSC areas) 50i (PAL areas)	1920×1080/ 60i (NTSC areas) 50i (PAL areas)	1920×1080/ 60i (NTSC areas) 50i (PAL areas)
SD card	4 GB	19 min	30 min	40 min	1 h	1 h 30 min
	16 GB	1 h 20 min	2 h	2 h 40 min	4 h 10 min	6 h 40 min
	64 GB	5 h 20 min	8 h 30 min	11 h	16 h 50 min	27 h 30 min
HC-V500M Built-in memory		16 GB	1 h 20 min	2 h	2 h 40 min	4 h 10 min
						6 h 40 min

- A Favors image quality
- B Favors Recording time

Recording mode		[iFrame]
Picture size/ frame rate		960×540/ 30p (NTSC areas) 25p (PAL areas)
SD card	4 GB	19 min
	16 GB	1 h 20 min
	64 GB	5 h 20 min
HC-V500M Built-in memory	16 GB	1 h 20 min

- If recording for long periods, prepare batteries for 3 or 4 times the period you wish to record for.
- The default setting is [HG] Mode.
- Maximum continuously recordable time for one scene: 6 hours
- The recording is paused once when the recording time for one scene exceeds 6 hours, and the recording will automatically resume after a few seconds.
- The recordable time may be reduced if recording with a lot of action is recorded or recording of short scene is repeated.
- Use time in the row of 4 GB in above table as a guideline for the time that can be copied onto one DVD disc (4.7 GB).

Approximate number of recordable pictures

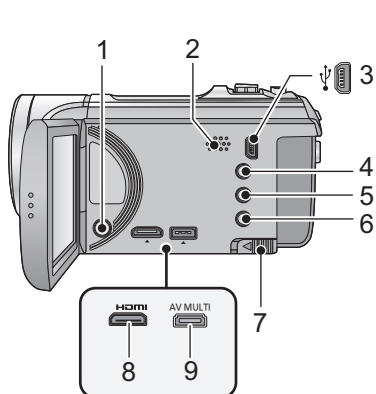
- SD cards are only mentioned with their main memory size. The stated number is the approximate number of recordable pictures.

Picture size		2.7M	3M	2.8M
Aspect ratio		1856×1392	640×480	2064×1376
SD card	4 GB	2500	28000	2300
	16 GB	10500	118000	9500
	64 GB	43000	475000	39000
HC-V500M Built-in memory		16 GB	10500	118000
				9500

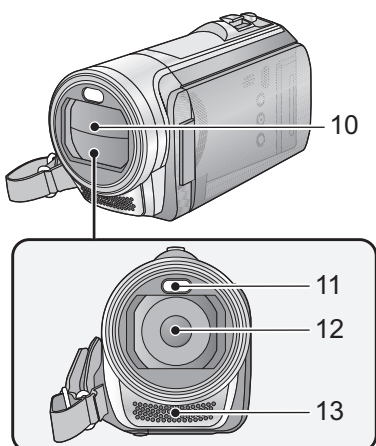
Picture size		3M	2.4M
Aspect ratio		2304×1296	1920×1080
SD card	4 GB	2300	3100
	16 GB	9500	13000
	64 GB	39000	52000
HC-V500M Built-in memory		16 GB	9500
			13000

- The number of recordable pictures depends on the subject being recorded.
- Maximum number of recordable pictures that can be displayed is 9999. If the number of recordable pictures exceeds 9999, R 9999+ is displayed. The number will not change when the picture is taken until the number of recordable pictures is 9999 or less.
- The memory capacity indicated on the label of an SD card is the total of the capacity for copyright protection and management and the capacity that can be used on the unit, a PC etc.

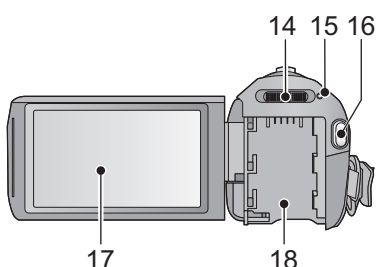
5 Location of Controls and Components



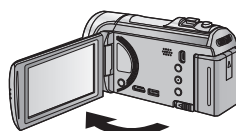
- 1 Power button [⏻/I]
 - 2 Speaker
 - 3 USB terminal [⏏]
 - 4 Intelligent auto/Manual button [iA/MANUAL]
 - 5 Optical image stabilizer button [((())) O.I.S.]
 - 6 1080/60p button [1080/60p] (NTSC areas)
1080/50p button [1080/50p] (PAL areas)
 - 7 Battery release lever [BATT]
 - 8 HDMI mini connector [HDMI]
 - 9 AV multi connector [AV MULTI]
- Use the AV multi cable (only the supplied cable).



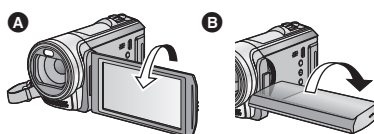
- 10 Lens cover
- The lens cover opens in Motion Picture Recording Mode or Still Picture Recording Mode.
- 11 LED light
- It can be used as a Video light or Photo light.
- 12 Lens
- 13 Internal stereo microphones



- 14 Mode switch
- 15 Status indicator
- 16 Recording start/stop button
- 17 LCD monitor (Touch screen)



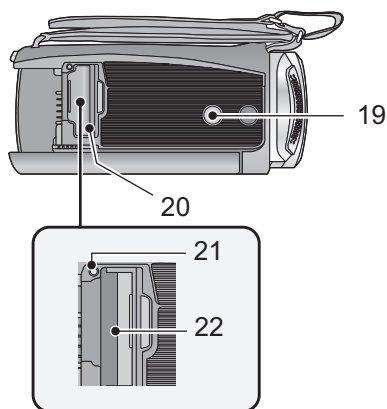
- It can open up to 90°.



- It can rotate up to 180° **A** towards the lens or 90° **B** towards the opposite direction.

Due to limitations in LCD production technology, there may be some tiny bright or dark spots on the LCD monitor screen. However, this is not a malfunction and does not affect the recorded picture.

- 18 Battery holder



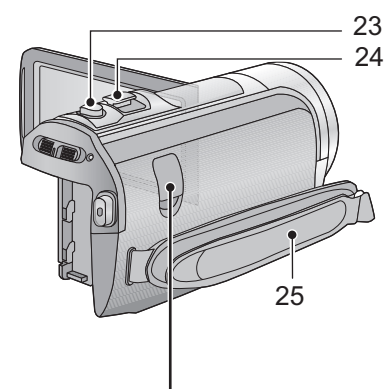
19 Tripod receptacle

- If you attach a tripod which has 5.5 mm (0.22 ") screw or larger, it may damage this unit.

20 SD card cover

21 Access lamp [ACCESS]

22 Card slot



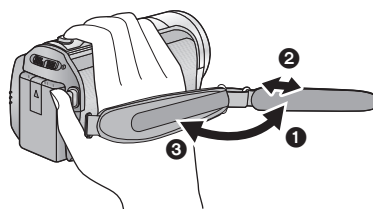
23 Photoshot button []

24 Zoom lever [W/T] (In Motion Picture Recording Mode or Still Picture Recording Mode)

Thumbnail display switch [ / ]/
Volume lever [—VOL+] (In Playback Mode)

25 Grip belt

Adjust the length of the grip belt so that it fits your hand.



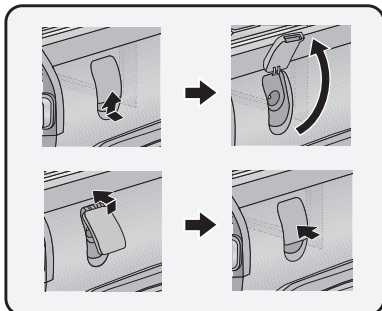
① Flip the belt.

② Adjust the length.

③ Replace the belt.

26 DC input terminal [DC IN]

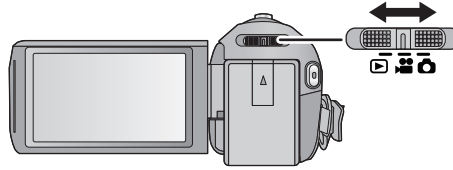
- Do not use any other AC adaptors except the supplied one.



Selecting a mode

Change the mode to recording or playback.

Operate the mode switch to change the mode to ,  or .



	Motion Picture Recording Mode
	Still Picture Recording Mode
	Playback Mode

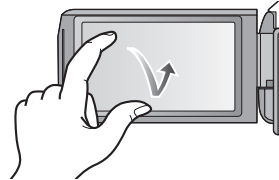
How to use the touch screen

You can operate by directly touching the LCD monitor (touch screen) with your finger.

■ Touch

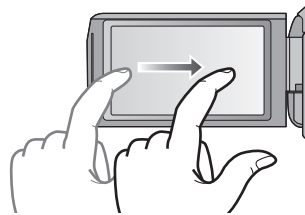
Touch and release the touch screen to select icon or picture.

- Touch the center of the icon.
- Touching the touch screen will not operate while you are touching another part of the touch screen.



■ Slide while touching

Move your finger while pressing on the touch screen.



■ About the operation icons

 /  /  / .

These icons are used to switch the menu and thumbnail display page, for item selection and setting etc.

 :

Touch to return to the previous screen such as when setting menus.

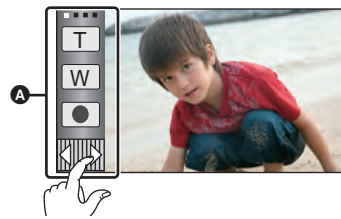


About the Touch Menu

Touch ◀ (left side)/▶ (right side) of  on the Touch Menu to switch the operation icons.

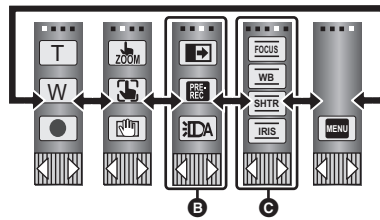
Touch ◀ (left side)/▶ (right side) of  on the Touch Menu.

- It is also possible to switch the operation icons by sliding the Touch Menu right or left while touching it.

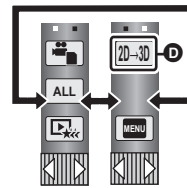


A Touch Menu

Recording Mode



Playback Mode



- B** You can change the operation icons to display.
- C** Displayed only during the Manual Mode.
- D** Displayed only when connected to a TV.

■ To display the Touch Menu



Display of the Touch Menu will disappear when no touch operation is performed for a specific period of time. To display it again, touch .

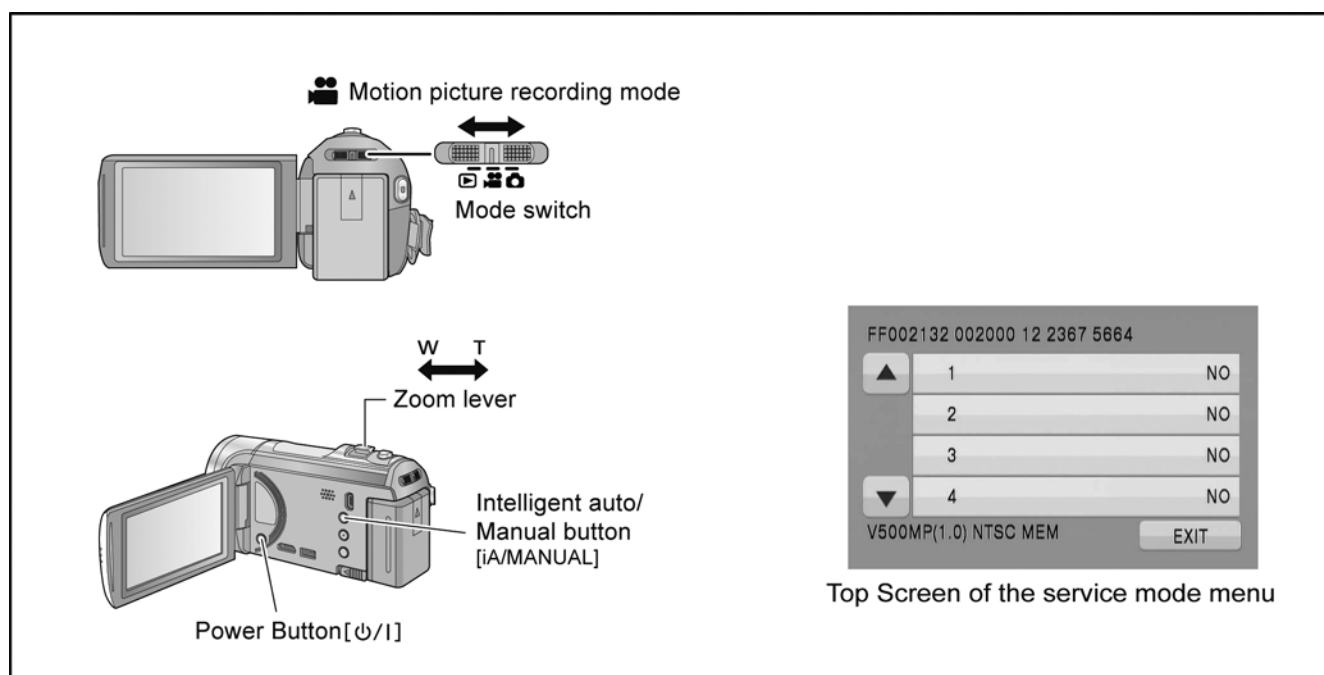
- Do not touch on the LCD monitor with hard pointed tips, such as ball point pens.

6 Service Mode

1. Indication method of the service menu

Set the mode switch "Motion Picture Recording" mode.

- While the power is turned OFF, keep pressing the "Power" button, "Zoom lever" to W side and "intelligent auto/Manual" button for more than 3 seconds until the top screen of the Service Mode Menu being displayed.



Service mode menu

Screen display	Contents	Function
1	Factory settings	Function to throw a product up in a factory shipment state (When recorded data in Built-in memory, "error display" is done)
3	Built-in memory self check execution (HC-V500M only)	Function to check self as for the state of Built-in memory
4	Lock search history indication	Display the camera system error cord for three histories saved in EEPROM
5	Power ON self check result display	Power ON self check (function to diagnose correct function of the device and interface between devices) result display
10	Erasing the lock histories	Erasing the error histories (working time is not erased)
12	Camera data indications while the video playback	Display the camera informations (Shutter speed, Iris value, White balance and focal length) while playing recorded video

NOTE:

Do not using service mode except above table of Service mode menu.

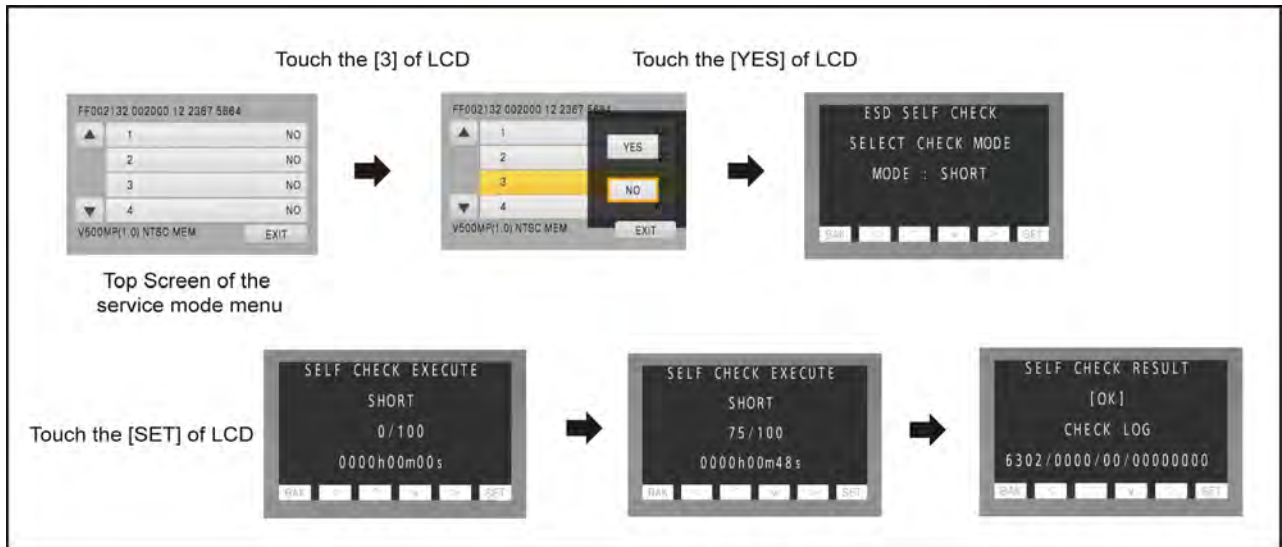
3. End method of the top screen of the service mode menu

Touch the [EXIT] of LCD to end the service mode, and then POWER OFF.

6.1. Built-in Memory Self Check Execution (HC-V500M only)

Touch the [3] of LCD, select Built-in memory self check execution.

Operation specifications



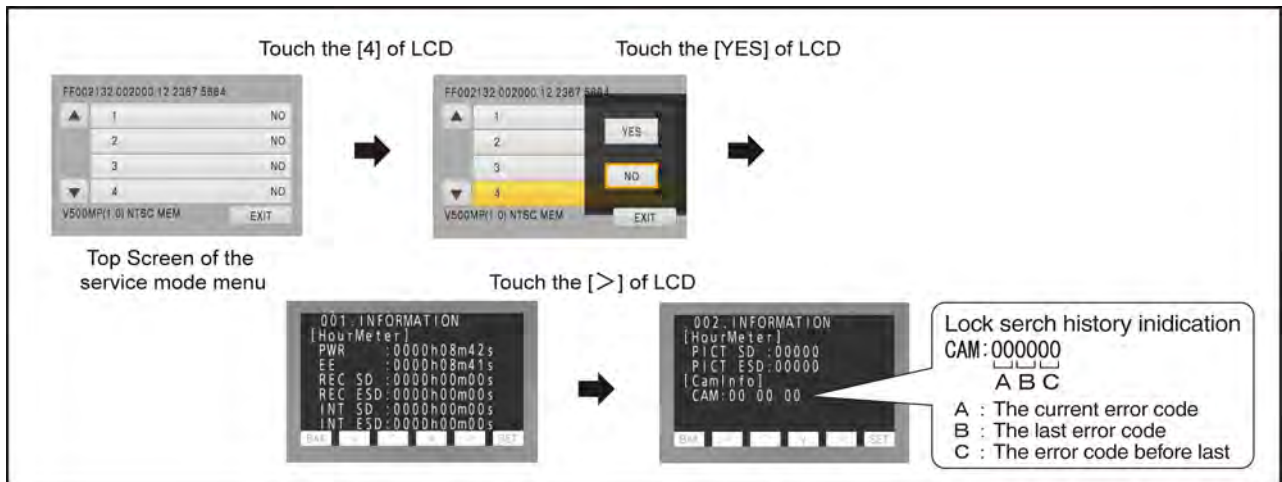
Indication contents

- Built-in memory self check result display
 - Display the Built-in memory self check execution.
 - Displays other than "OK" are abnormalities of Built-in memory.
 - Touch the [BAK] of LCD to end the service mode, and then POWER OFF.

6.2. Lock Search History Indication

Touch the [4] of LCD, select Lock search history indication.

Operation specifications



Indication contents

- Lock search history indication
 - Display the camera system error cord for three histories saved in EEPROM.
 - The error cord contents which are displayed

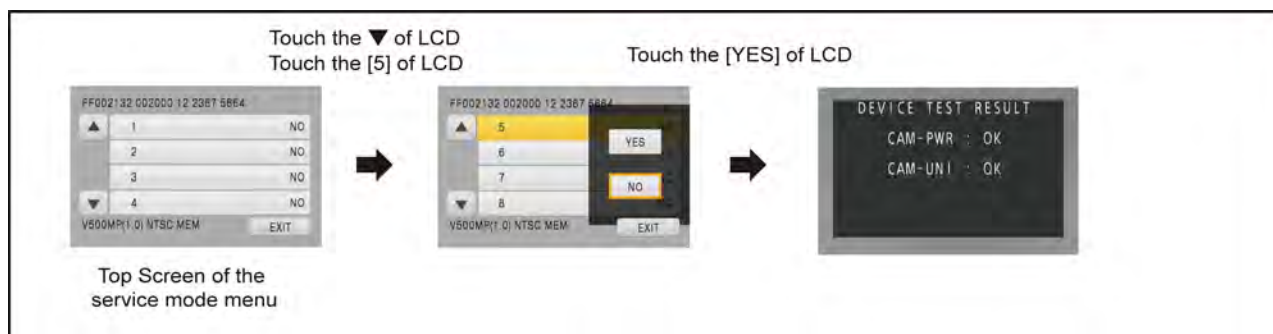
Error code	Function
51	Focus control is abnormal
52	Zoom control is abnormal
53	OIS lens control is abnormal
71	Lens cover open/close is abnormal
73	High temperature is abnormal

Touch the [BAK] of LCD to end the service mode, and then POWER OFF.

6.3. Power ON Self Check Result Display

Touch the [5] of LCD, select Power ON self check result display.

Operation specifications



Indication contents

- Power ON self check result display

Function to diagnose correct function of the device and interface between devices result display.

Display the following communication test result.

- CAM-PWR : communication test between IC3401 and IC1503
- CAM-UNI : Internal communication test of IC3401

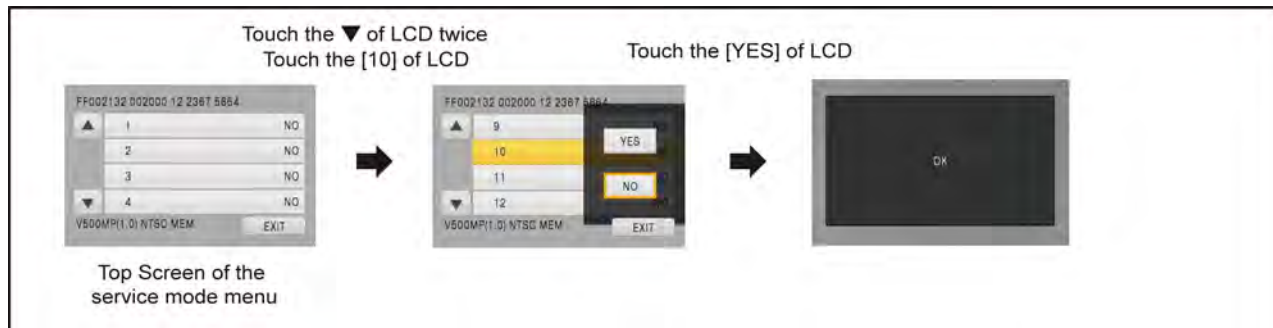
Display other than "OK" are abnormalities of each lines.

Cutting of battery connection or AC power supply connection to end the service mode.

6.4. Erasing the lock histories

Touch the [10] of LCD, select erasing the lock histories execution.

Operation specifications



Indication contents

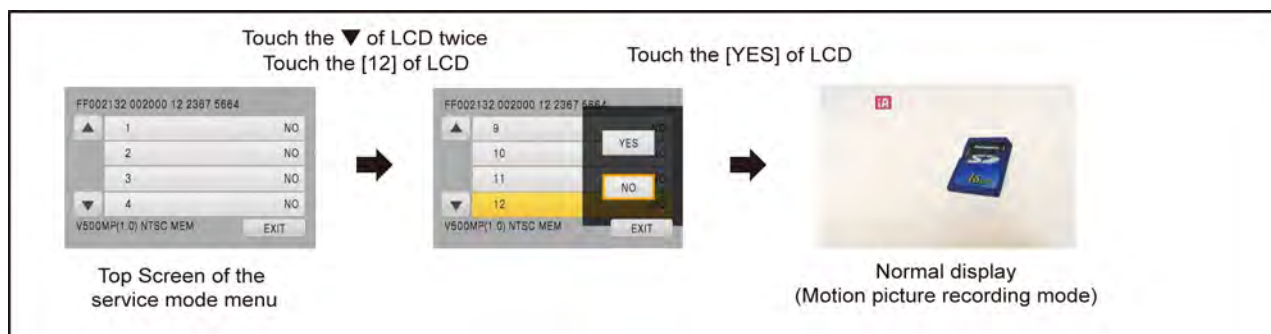
- Erasing the error histories stored in EEPROM. (working time is not erased)

Cutting of battery connection or AC power supply connection to end the service mode.

6.5. Camera data indications while the video playback

Touch the [12] of LCD, select indicating the camera informations while playing back the recorded video.

Operation specifications



Indication contents

- While playing back the recorded videos, the camera informations (Shutter speed, Iris value, White balance and focal length) are superimposed on the LCD screen.



Press the power button and turn off.

7 Service Fixture & Tools

7.1. When Replacing the Main P.C.B.

After replacing the MAIN P.C.B., be sure to achieve adjustment.

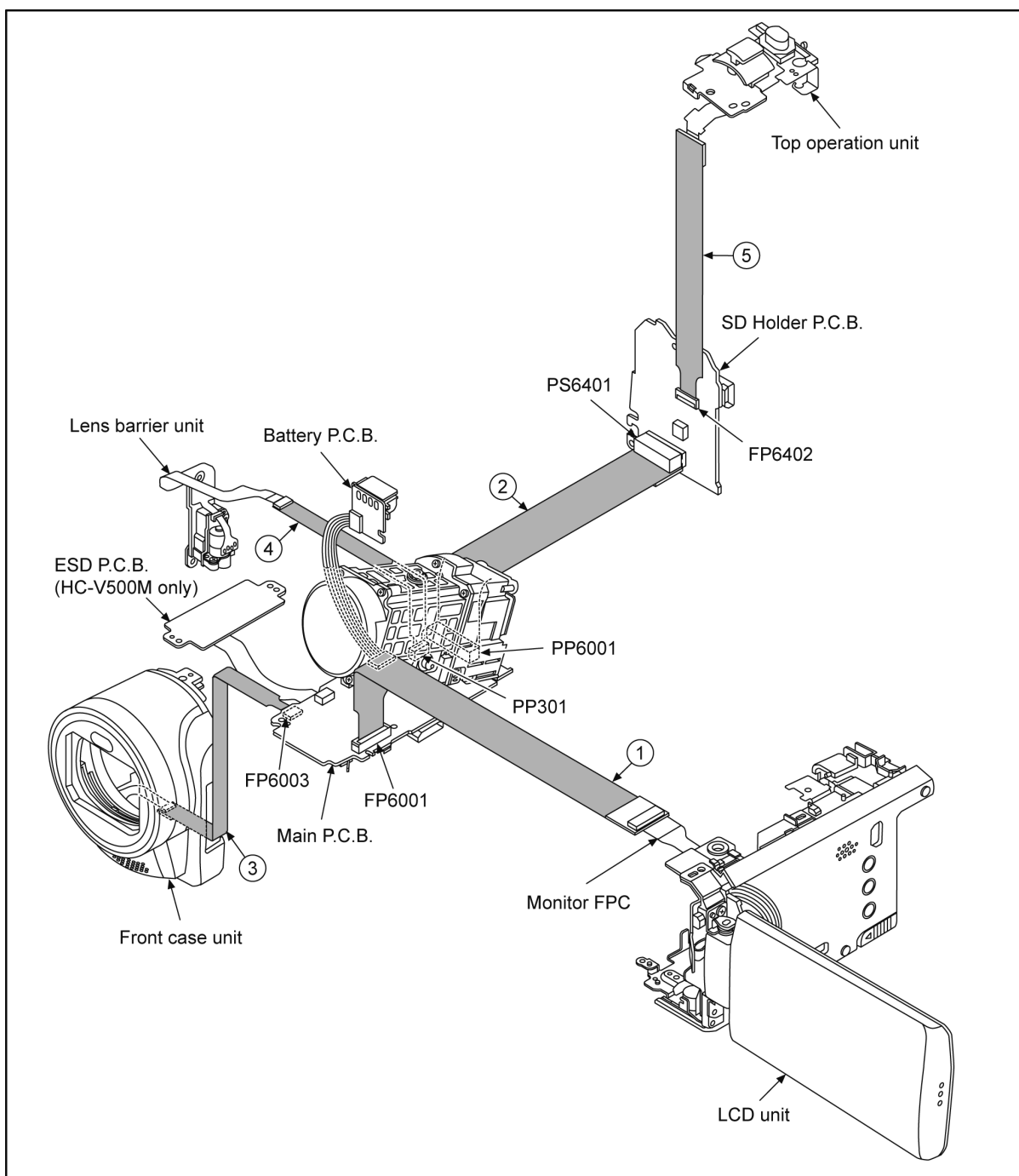
The adjustment instruction is available at "software download" on the "Support Information from NWBG/VDBG-AVC" web-site in "TSN system", together with Maintenance software.

7.2. Service Position

This Service Position is used for checking and replacing parts. Use the following Extension cables for servicing.

Table S1 Extension Cable List

No.	Parts No.	Connection	Form
1	RFKZ0448	FP6001(MAIN) - MONITOR FPC	33PIN 0.3 FFC
2	RFKZ0444	PP6001(MAIN) - PS6401(SD HOLDER)	50PIN 0.5 B to B
3	VFK1480	FP6003(MAIN) - ECM FPC(FRONT CASE UNIT)	6PIN 0.5 FFC
4	VFK1441	FP6004(MAIN) - LENS BARRIER UNIT	8PIN 0.5 FFC
5	VFK1440	FP6402(SD HOLDER) - OPERATION SW UNIT(TOP CASE UNIT)	10PIN 0.5 FFC

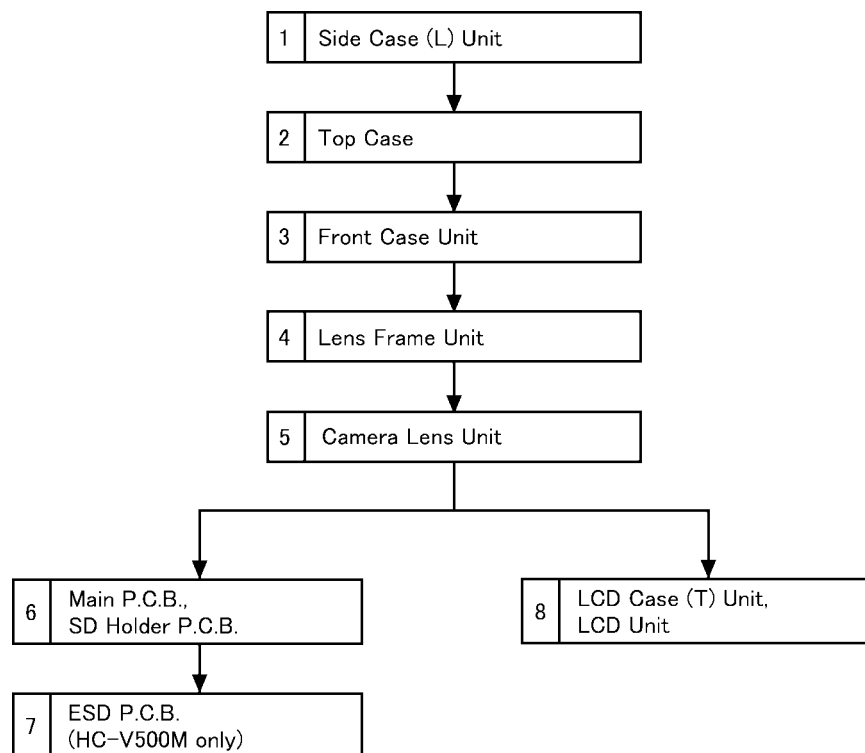


8 Disassembly and Assembly Instructions

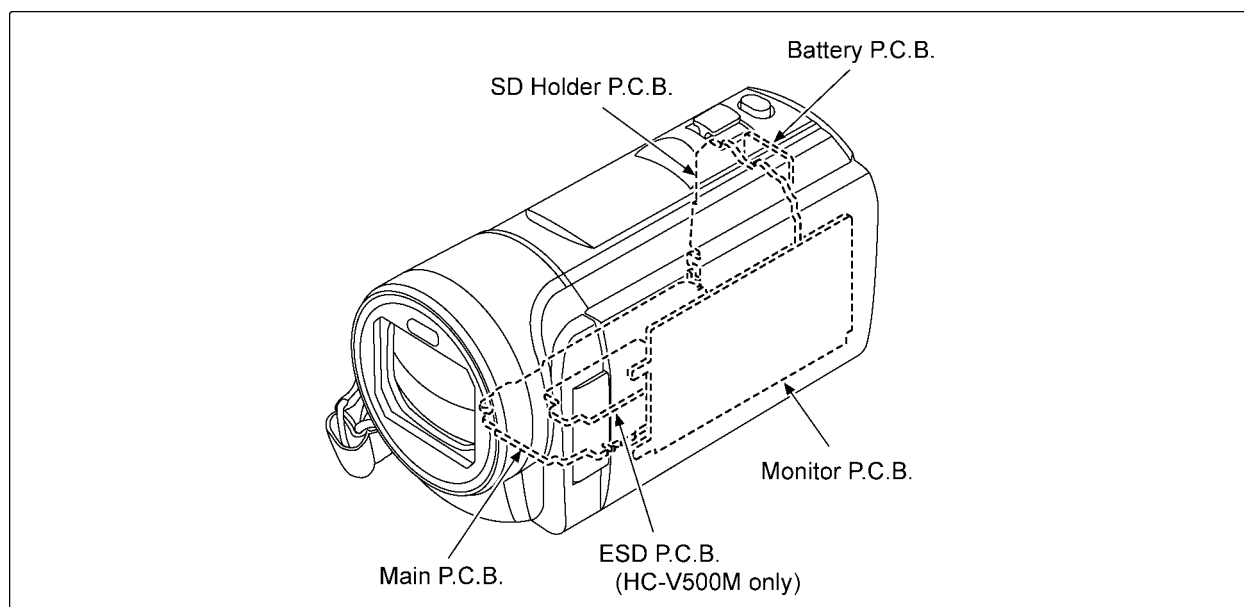
8.1. Disassembly Flow Chart for the Unit

This is a disassembling chart.

When assembling, perform this chart conversely.



8.2. PCB Location



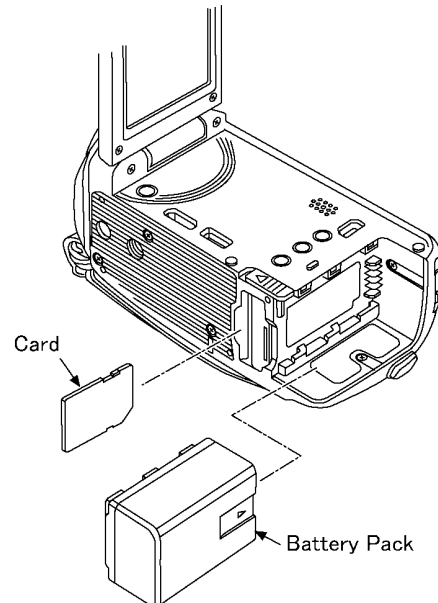
8.3. Disassembly Procedure for the Unit

No.	Item	Fig	Removal
1	Side Case (L) Unit	(Fig. D1)	1 Screw (A)
			2 Screws (B)
		(Fig. D2)	3 Screws (C)
			3 Locking tabs
			Side Case (L) Unit
2	Top Case	(Fig. D3)	1 Screw (D)
		(Fig. D4)	3 Locking tabs
			Top Case
3	Front Case Unit	(Fig. D5)	1 Screw (E)
			2 Screws (F)
		(Fig. D6)	1 Screw (G)
			P6002 (Connector)
			FP6003 (Flex)
			3 Ribs
			Front Case Unit
		(Fig. D7)	NOTE: (When Installing)
4	Lens Frame Unit	(Fig. D8)	2 Screws (H)
			3 Screws (I)
			2 Locking tabs
			1 Rib
			FP6004 (Flex)
			Lens Frame Unit
5	Camera Lens Unit	(Fig. D9)	FP6008 (Flex)
			3 Convexes
			PP301 (Connector)
			Camera Lens Unit
6	Main P.C.B. SD Holder P.C.B.	(Fig. D10)	P6003 (Connector)
			3 Screws (J)
			1 Screw (K)
		(Fig. D11)	Heat Radiation Frame Unit
			1 Projection part
			Rear Angle
			FP6001 (Flex)
			P6401 (Connector)
			FP6402 (Flex)
			2 Ribs
			1 Hooking part
			FP3201 (Flex) (HC-V500M only)
		(Fig. D12)	SD Holder P.C.B.
		(Fig. D13)	Main P.C.B.
			NOTE: (When Installing)
7	ESD P.C.B. (HC-V500M only)	(Fig. D14)	2 Screws (L)
			ESD P.C.B.
8	LCD Case (T) Unit LCD Unit	(Fig. D15)	2 Screws (M)
			2 Screws (N)
		(Fig. D16)	6 Locking tabs
			LCD Case (T) Unit
			FP901 (Flex)
			1 Screw (O)
			1 Hooking part
			LCD Unit

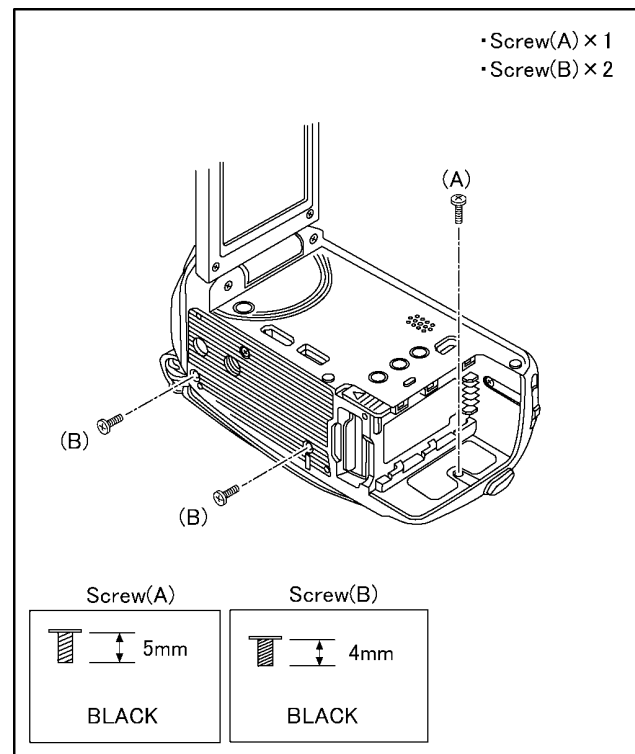
NOTE:

When servicing and reassembling, remove the card and battery pack from the unit.

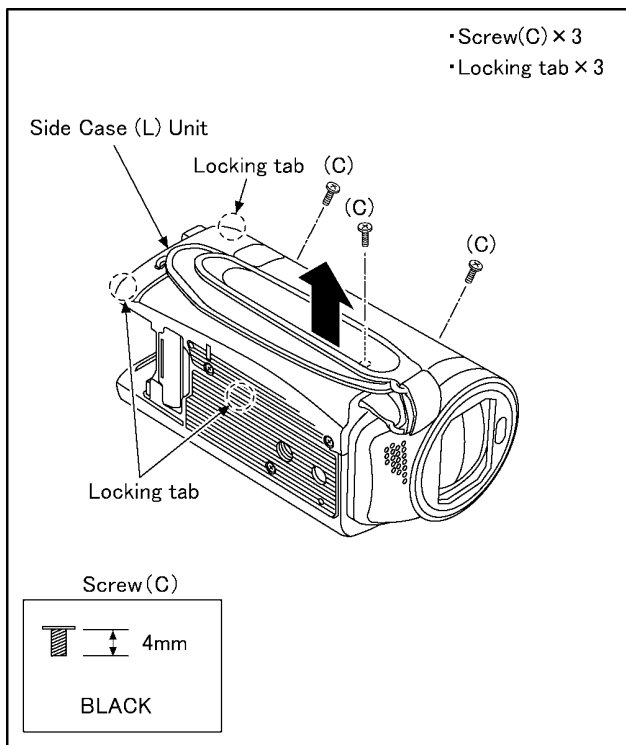
- Card
- Battery Pack



8.3.1. Removal of the Side Case (L) Unit

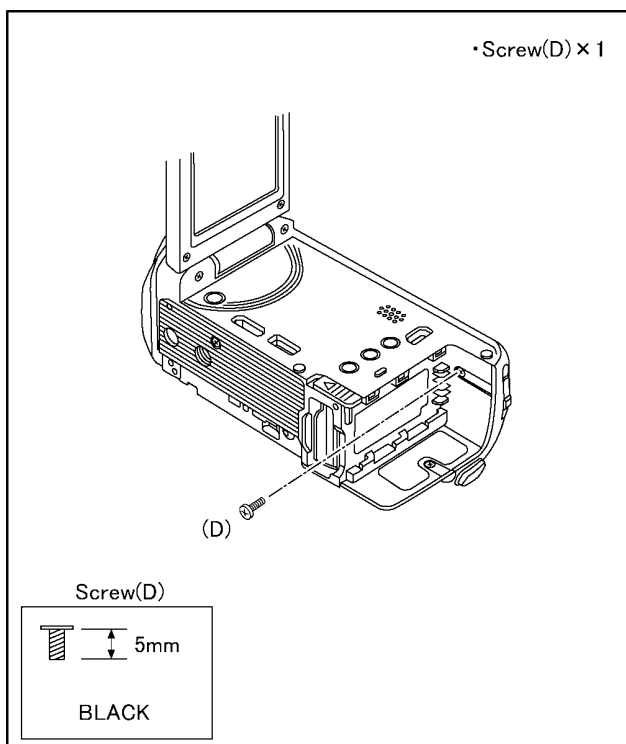


(Fig. D1)

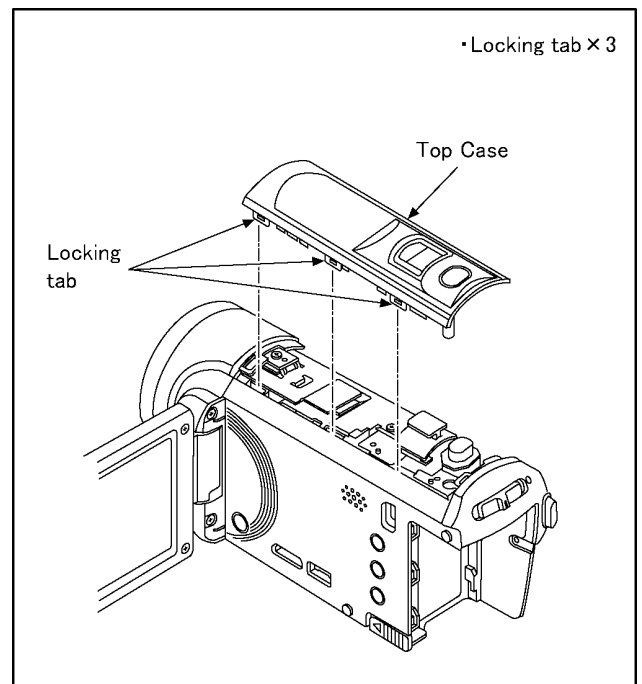


(Fig. D2)

8.3.2. Removal of the Top Case

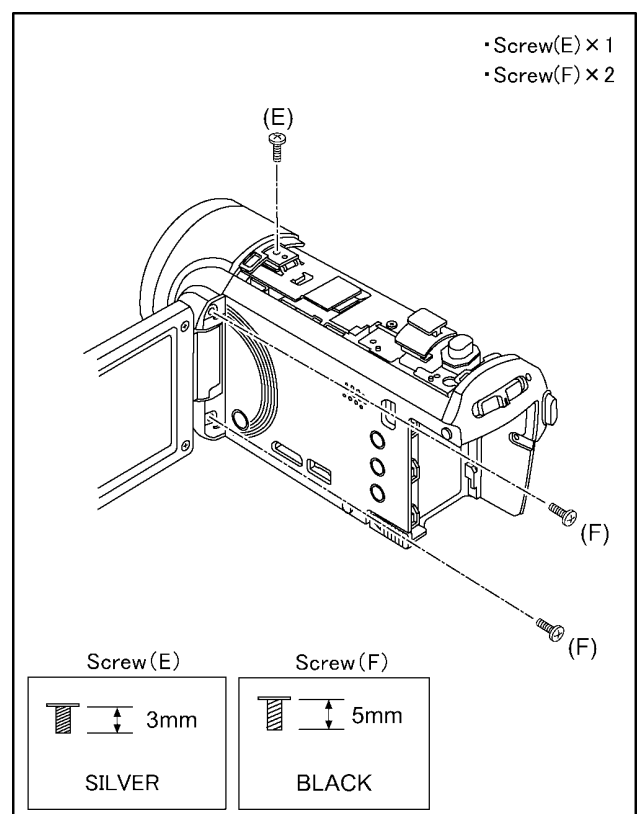


(Fig. D3)

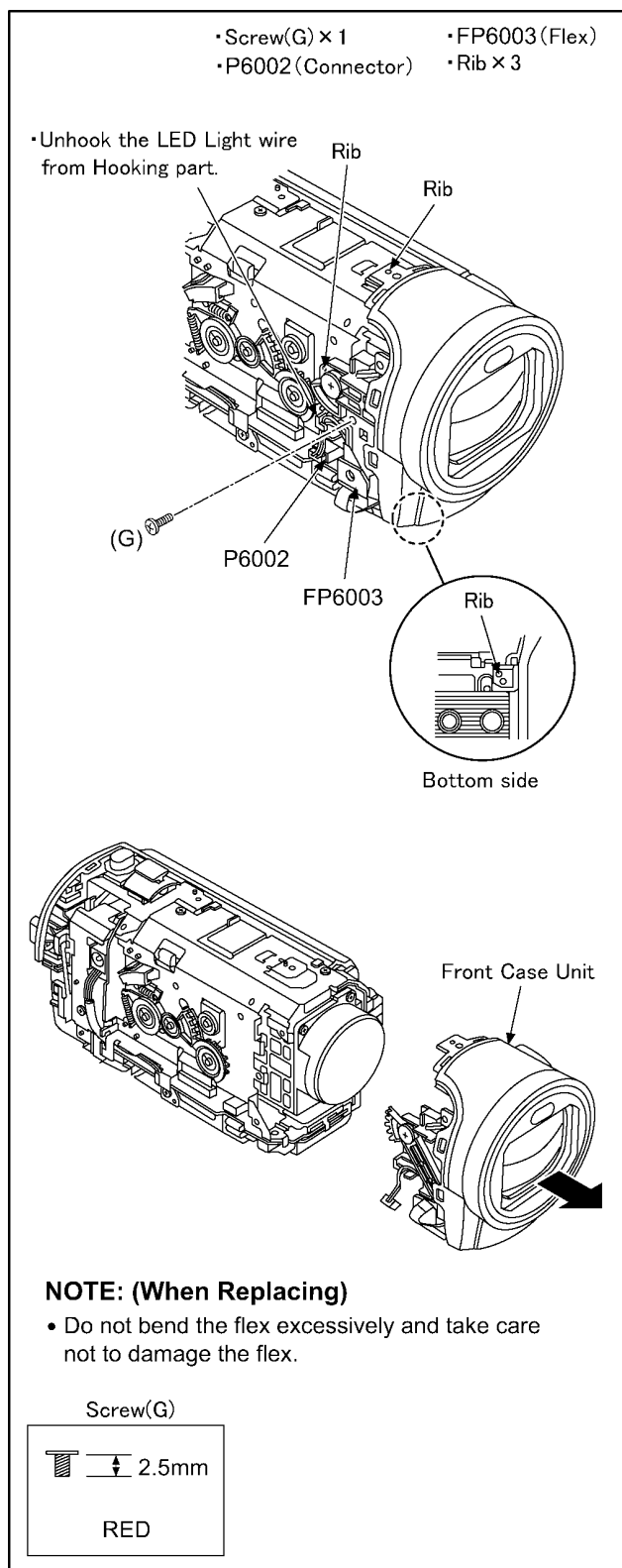


(Fig. D4)

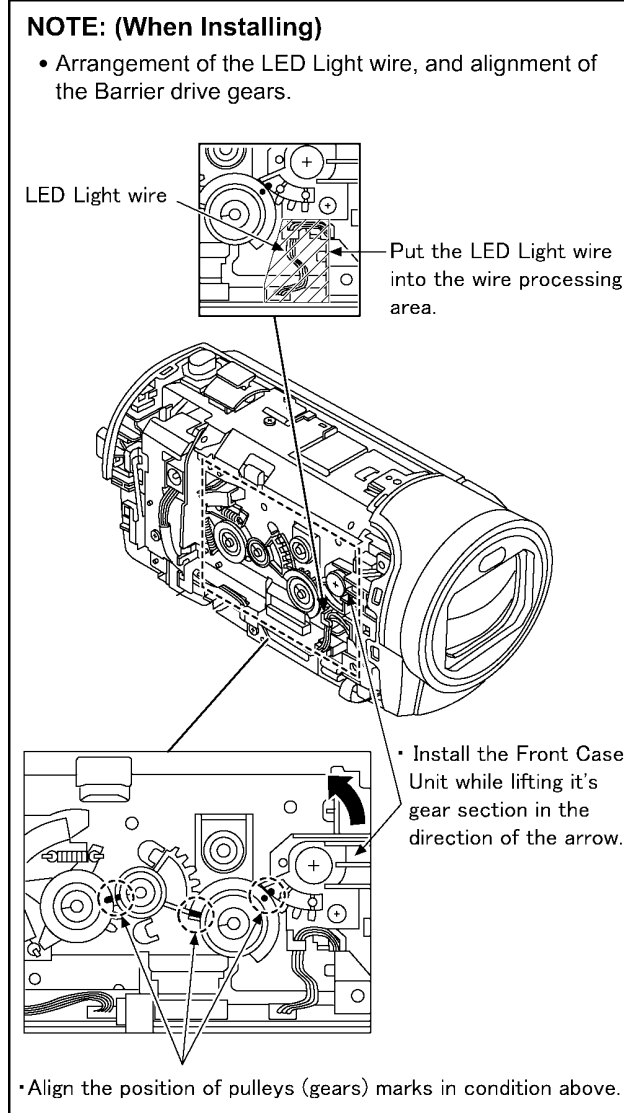
8.3.3. Removal of the Front Case Unit



(Fig. D5)

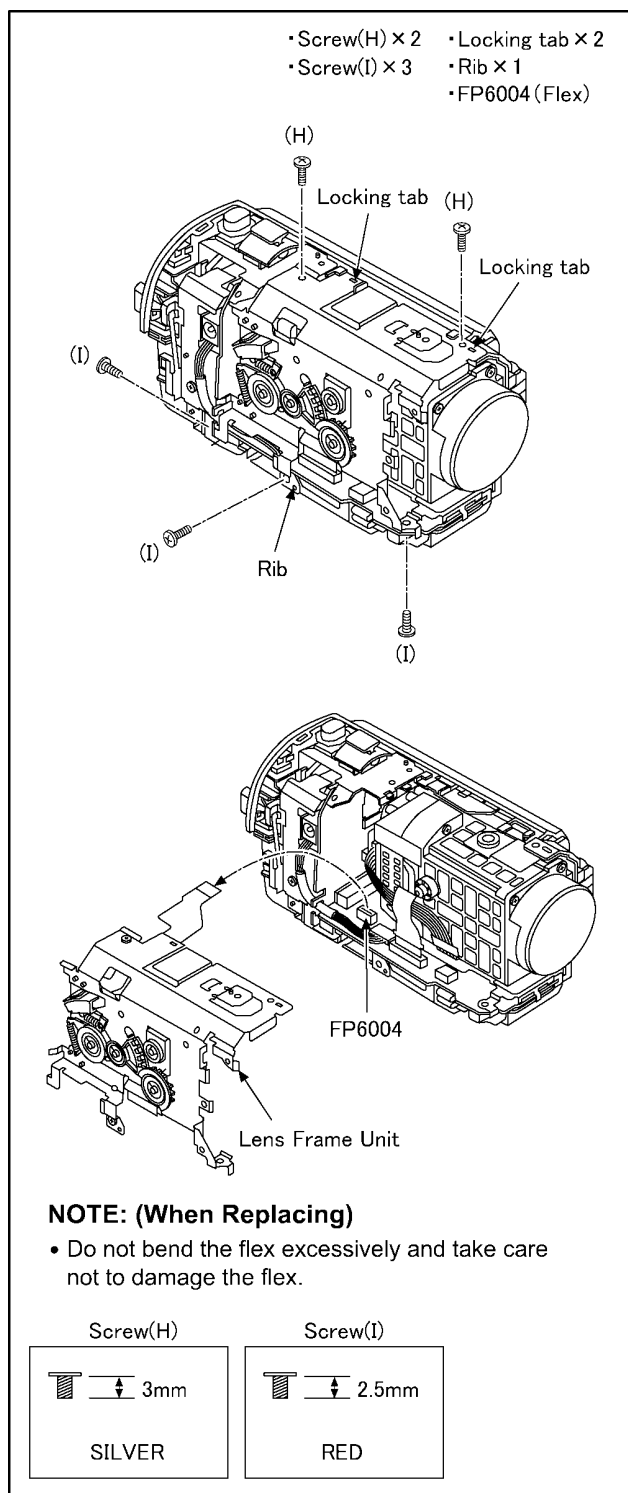


(Fig. D6)



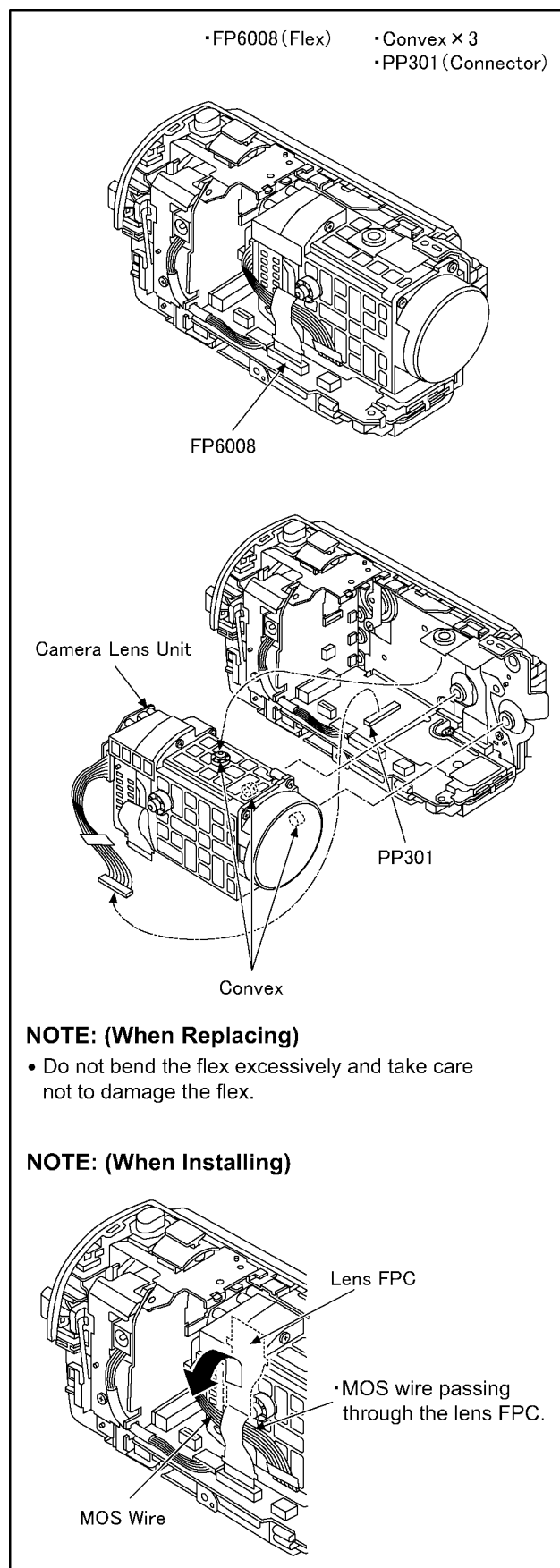
(Fig. D7)

8.3.4. Removal of the Lens Frame Unit



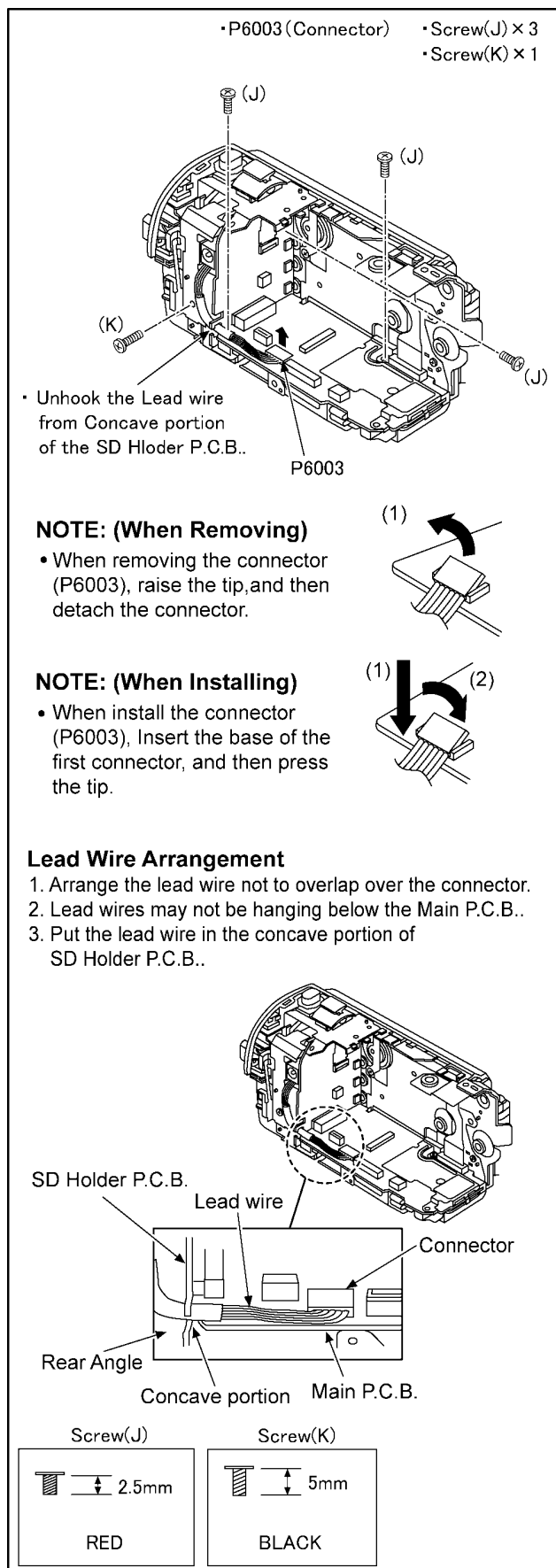
(Fig. D8)

8.3.5. Removal of the Camera Lens Unit

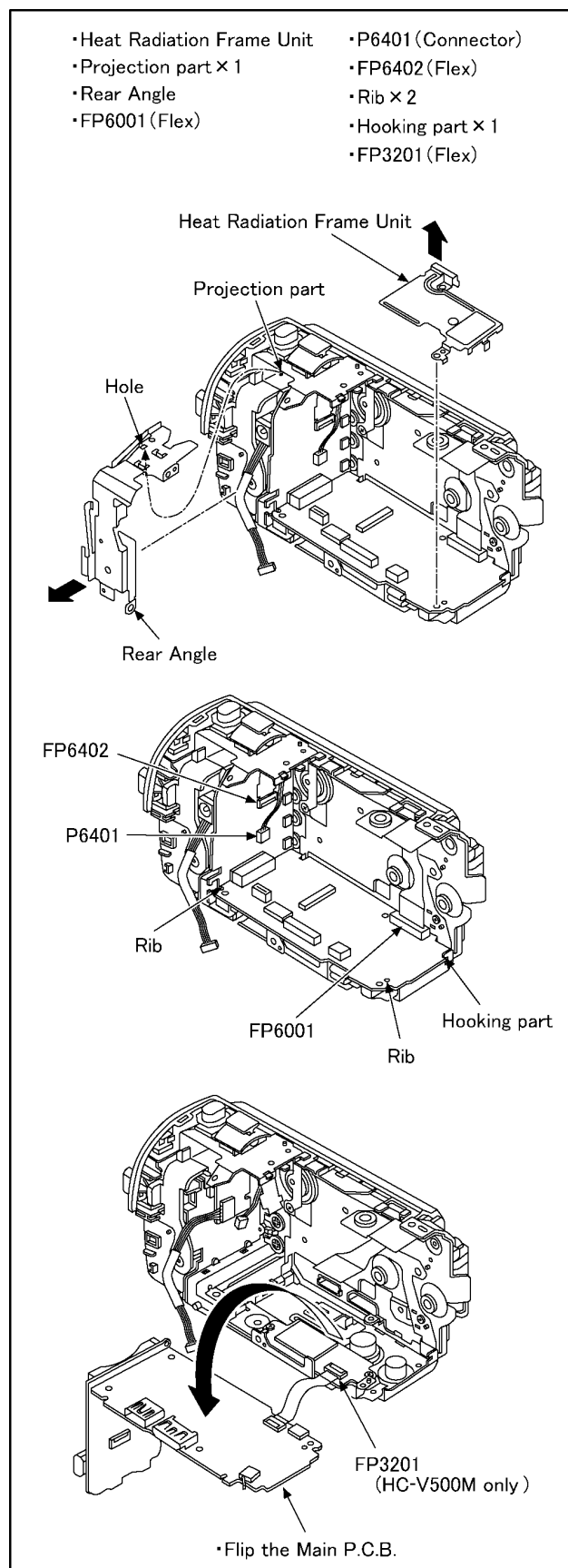


(Fig. D9)

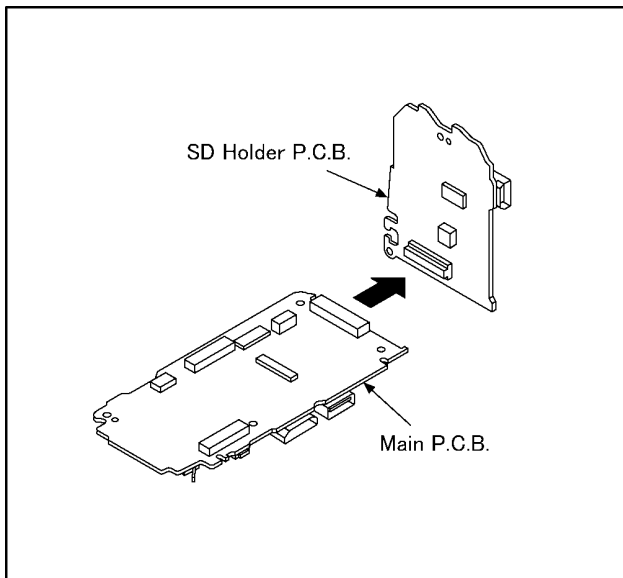
8.3.6. Removal of the Main P.C.B. and SD Holder P.C.B.



(Fig. D10)



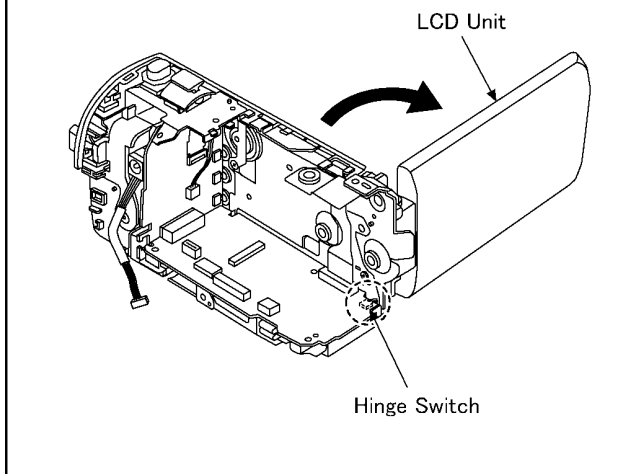
(Fig. D11)



(Fig. D12)

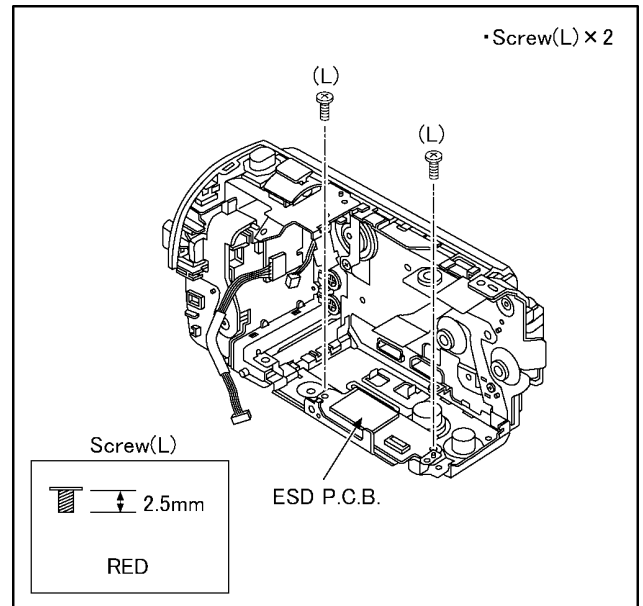
NOTE: (When Installing)

- When installing the Main P.C.B. & SD Holder P.C.B., LCD Unit keep it open.
(To prevent damage to the hinge switch.)



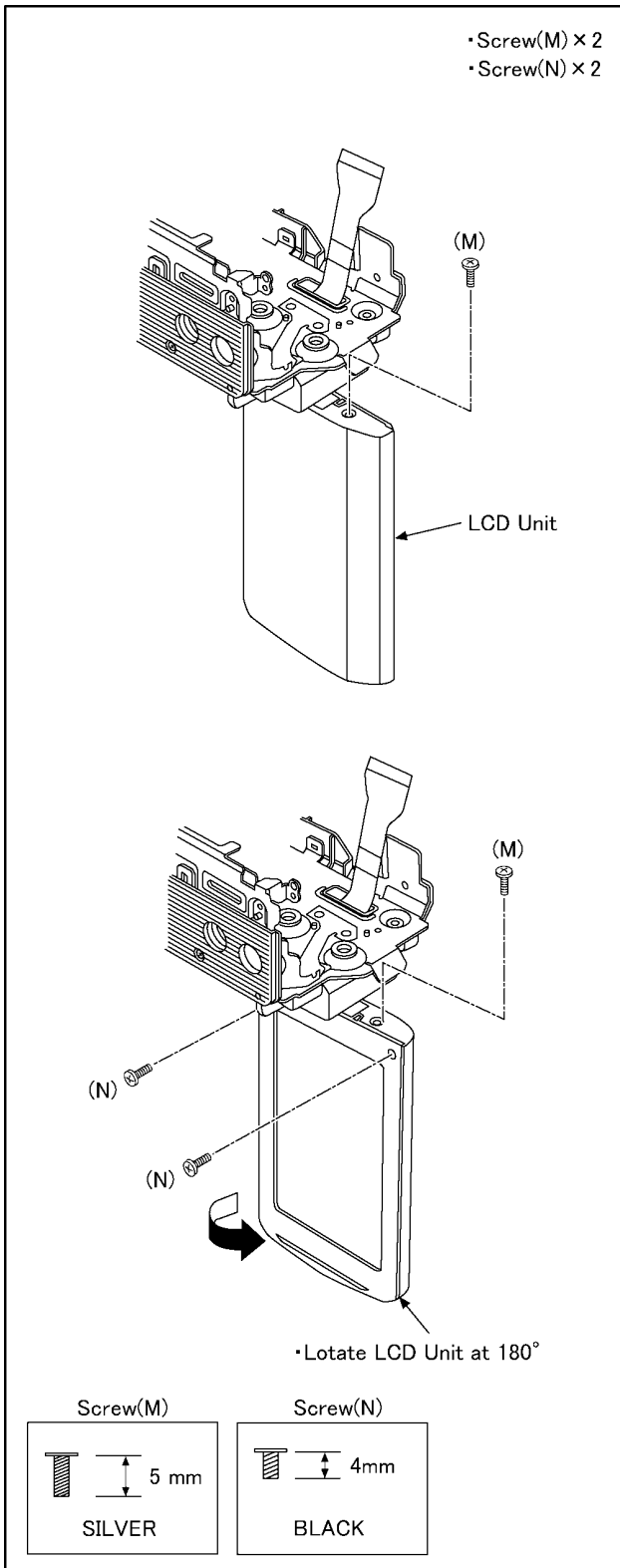
(Fig. D13)

8.3.7. Removal of the ESD P.C.B. (HC-V500M only)

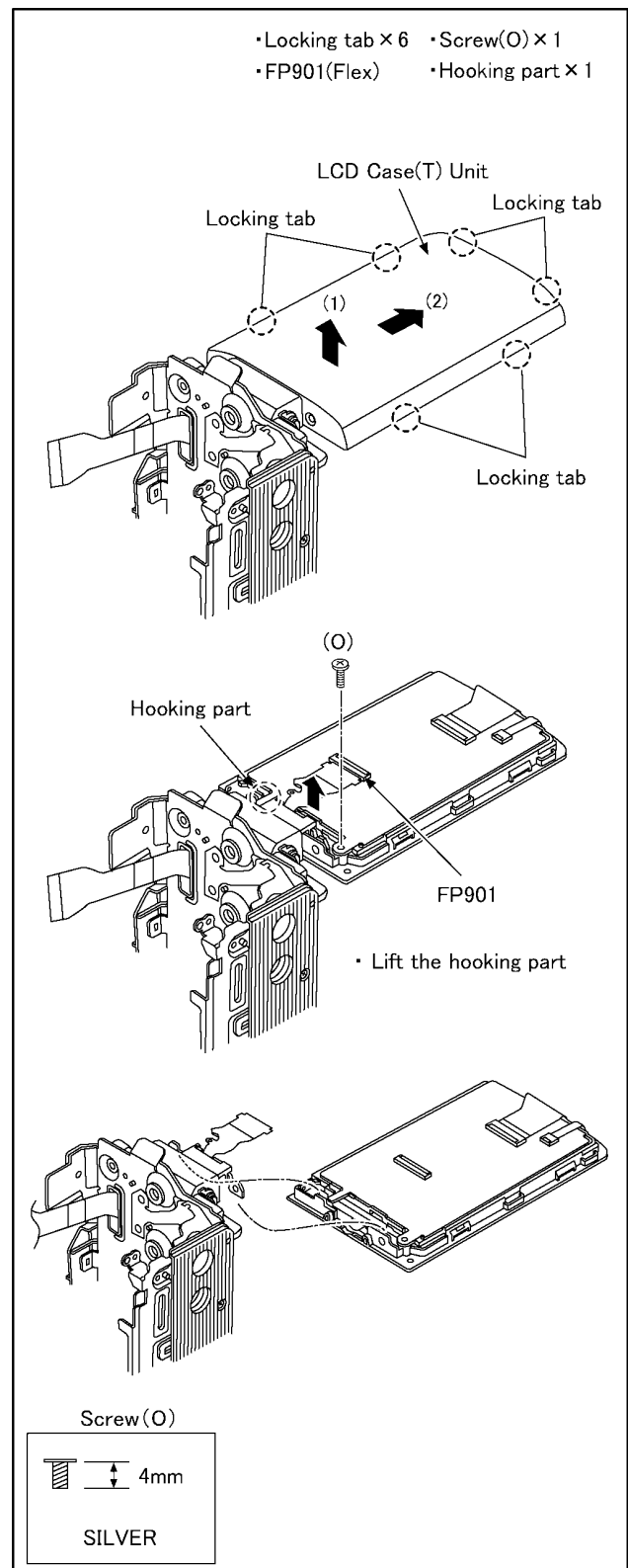


(Fig. D14)

8.3.8. Removal of the LCD Case (T) Unit and LCD Unit



(Fig. D15)



(Fig. D16)

9 Measurements and Adjustments

9.1. Electric Adjustment

- Adjustment method is different from a conventional High definition video camera.
- An exclusive jig and PC (including software for adjustment "Tatsujin") are necessary for electric adjustment.
- A USB driver for service is necessary to communication with PC.
- Connection method of the main unit and an exclusive adjustment jig as follows

9.1.1. Adjustment Procedure

- Connect the main unit to PC with USB.

The adjustment instruction is available at "Software download" on the "Support Information from NWBG/VDBG-AVC" web-site in "TSN System".

Figure of connection

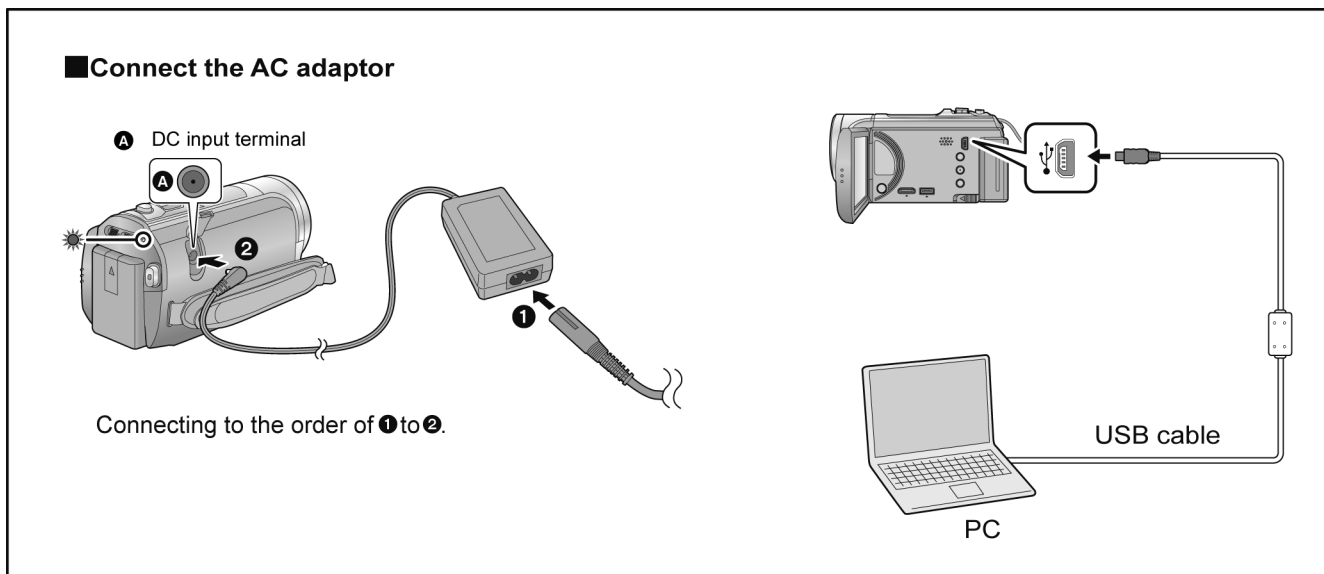
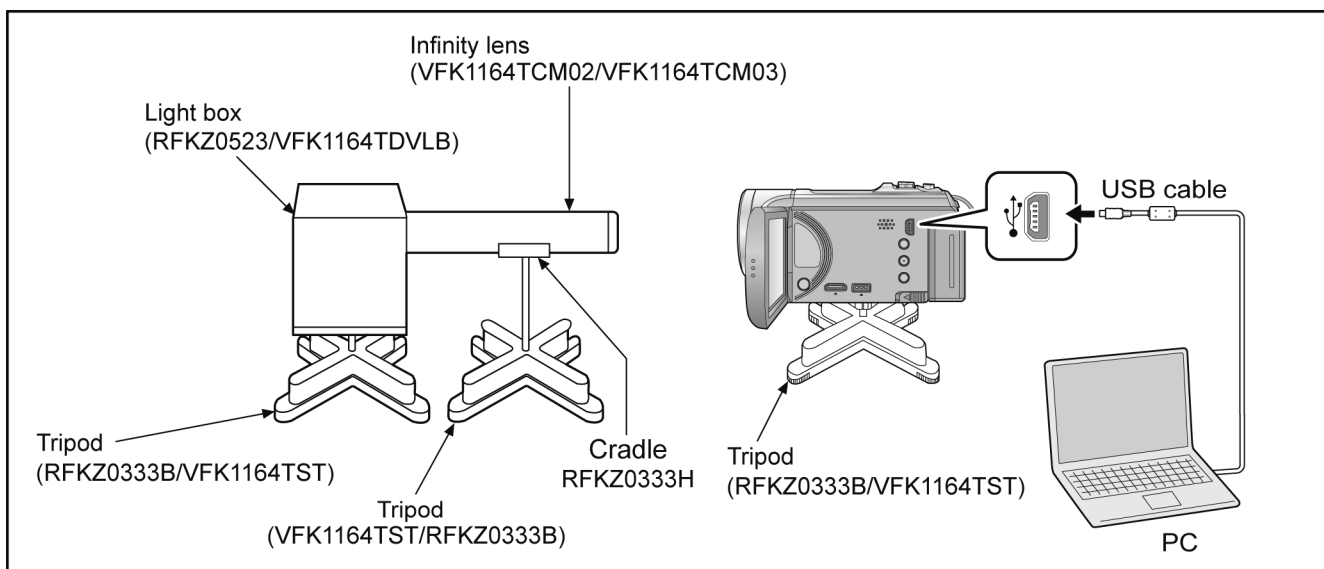


Figure of image when adjustment



Part Number of jig

- Only a necessary jig mentions it in setup of electric adjustment.

No.	Part Name	Part Number	Remarks
1	PC	-----	
2	AC Adaptor	-----	
3	USB Cable	-----	
4	Adjustment Software (Tatsujin)	-----	
5	C4 Filter	VFK1164LBB4	The same as C12 Filter (VFK1164LBB12).
6	C8 Filter	VFK1164LBB8	

Adjustment Items

- Adjustment item as follows.

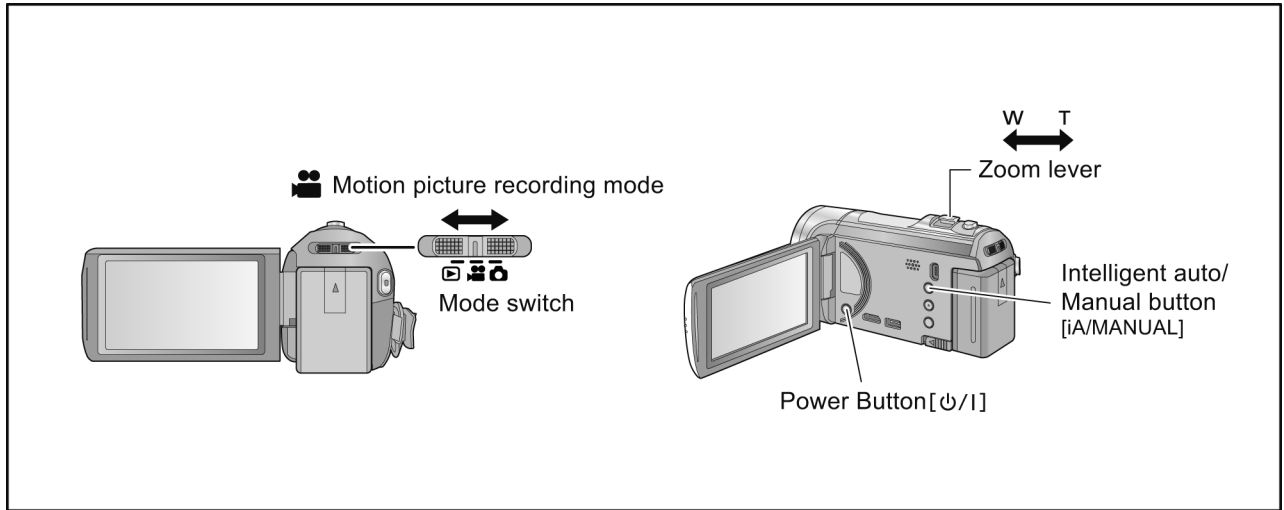
The adjustment instruction is available at "Software download" on the "Support Information from NWBG/VDBG-AVC" web-site in "TSN System".

	Replacement part Adjustment item	Main P.C.B.	IC3403 (FLASH ROM)	Lens Unit	MOS Unit	IC701	IC6401, IC751
Camera part	● CAM IRIS	☐	☐	☐	☐	☐	☐
	● CAM OIS G sensor	☐	☐	☐	☐	☐	☐
	● CAM Tracking & De-focus	☐	☐	☐	☐	☐	☐
	● CAM Flaw correction of MOS sensor	☐	☐	☐	☐	☐	☐
	● CAM AWB 3100	☐	☐	☐	☐	☐	☐
	● CAM AWB 5100	☐	☐	☐	☐	☐	☐
	● CAM Gain among Channels	☐	☐	☐	☐	☐	☐

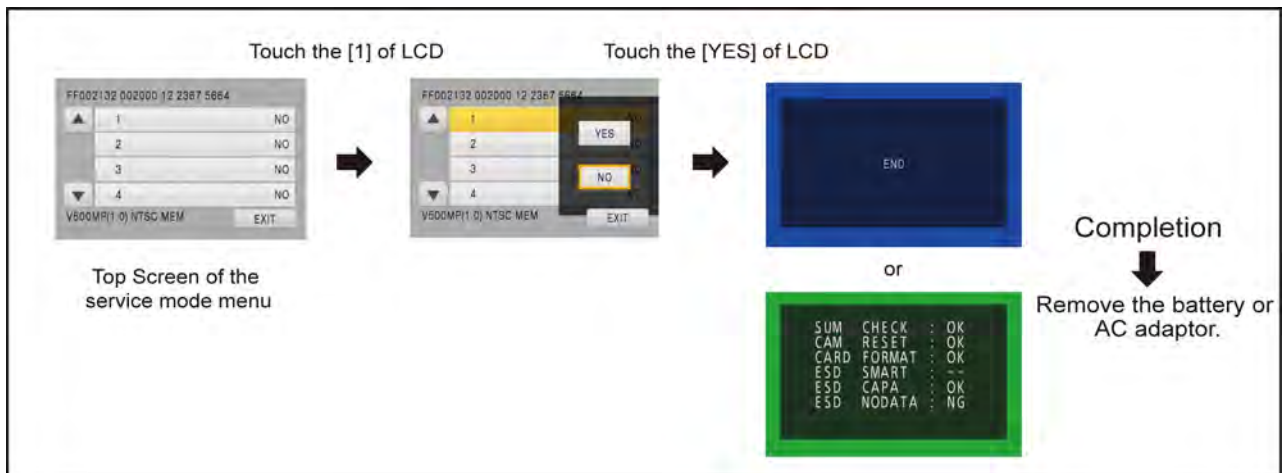
10 Factory Setting

10.1. How To Turn On The Factory Settings?

1. Set the mode switch "Motion Picture Recording" mode.
2. While the power is turned OFF, keep pressing the "Power" button, "Zoom lever" to W side and "intelligent auto/Manual" button for more than 3 seconds until the top screen of the Service Mode Menu being displayed.



3. Touch the [1] of LCD.
4. Touch the [YES] of LCD.
5. After few seconds "END" is displayed or "ESD NODATA" as "NG" is displayed on LCD monitor. Cutting of battery connection or AC power supply connection as a completion of the "FACTORY SETTINGS".
(After recording at least once, even if the physical format of the build-in memory will be performed, "ESD NODATA" as "NG" is indicated, but "FACTORY SETTINGS" is completed.)



10.2. What Is The Factory Settings?

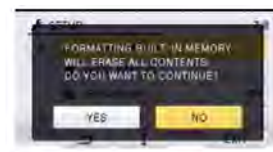
The factory settings clean up and/or refresh the following settings.

1. MENU, MODE, ADJUSTMENT VALUE.
2. SD card format.
3. Reset the folder number and file number of still pictures.
(Setting the folder number is 100, and file number is 0.)
4. Clear the mechanism lock information.
5. Clear the service mode information contents.
6. Close the lens cover
7. Initialize the VIERA Link Physical Address.

(HC-V500M)

If the "Factory Settings" is completed, physical format of the built-in memory is not performed, execute physical format according to the following procedure.

To physically format the built-in memory, connect the unit via the AC adaptor, select [SETUP] → [FORMAT MEDIA] → [Built-inMemory] from the menu, and then press and hold the recording start/stop button on the screen below for about 3 seconds. When the built-in memory data deletionscreen appears, select [YES], and then follow the on-screen instructions.



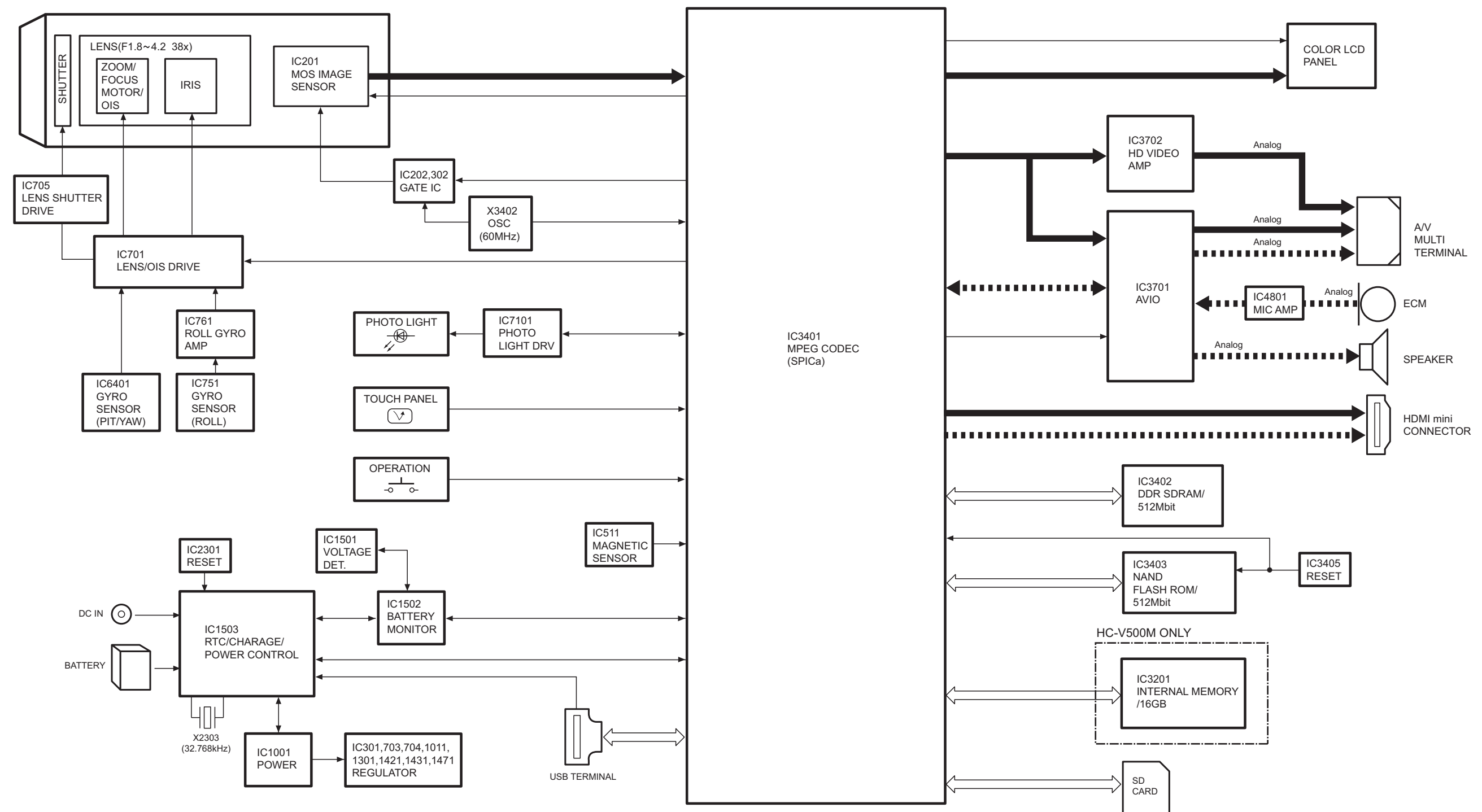
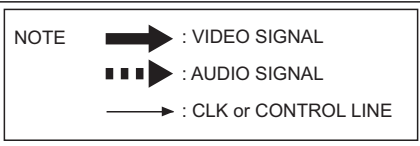
The setting position of factory settings:

Name	Setting position
Mode switch	Motion picture recording mode

10 Block Diagram

10.1. Overall Block Diagram

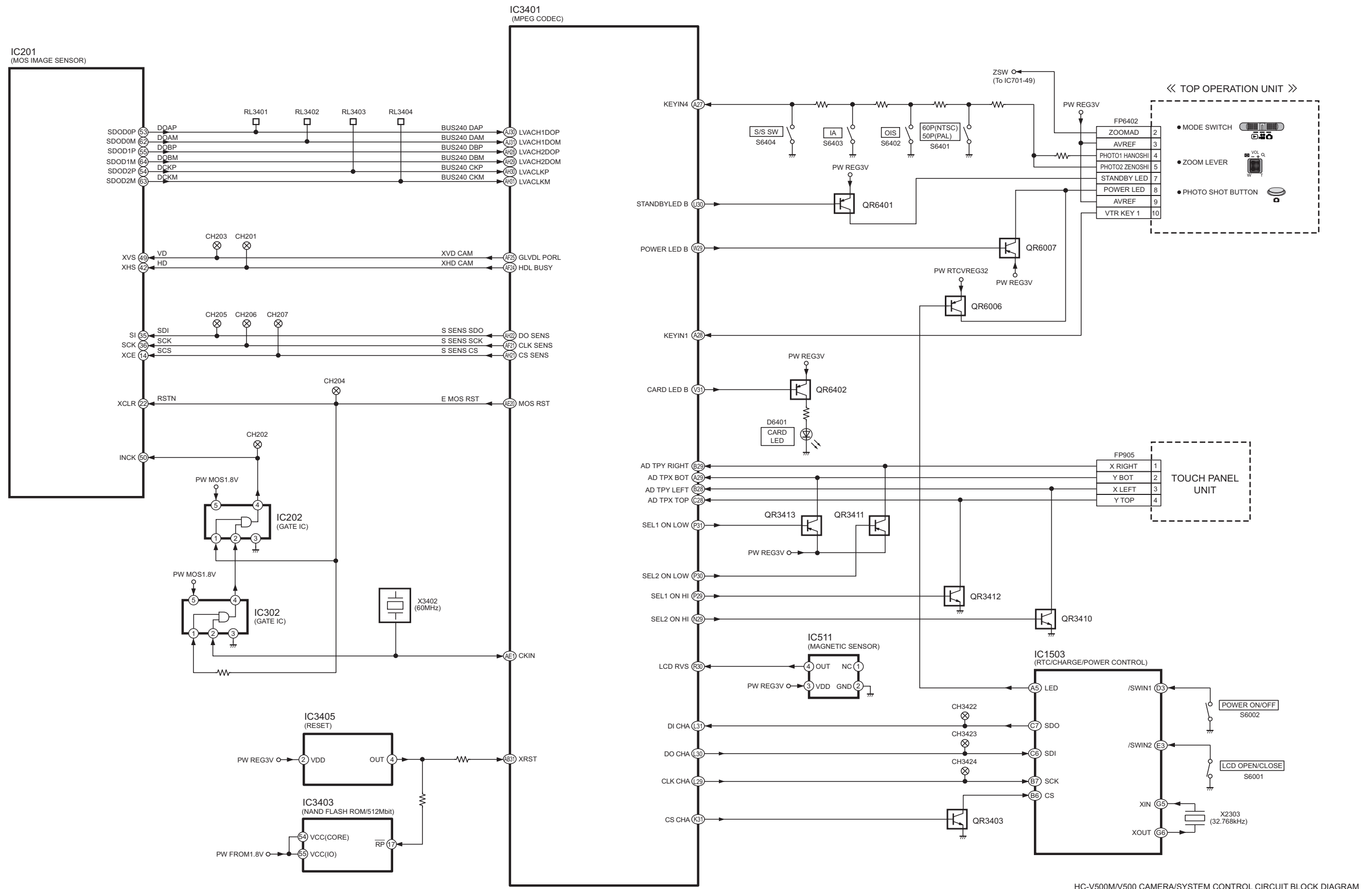
OVERALL BLOCK DIAGRAM



HC-V500M/V500 OVERALL BLOCK DIAGRAM

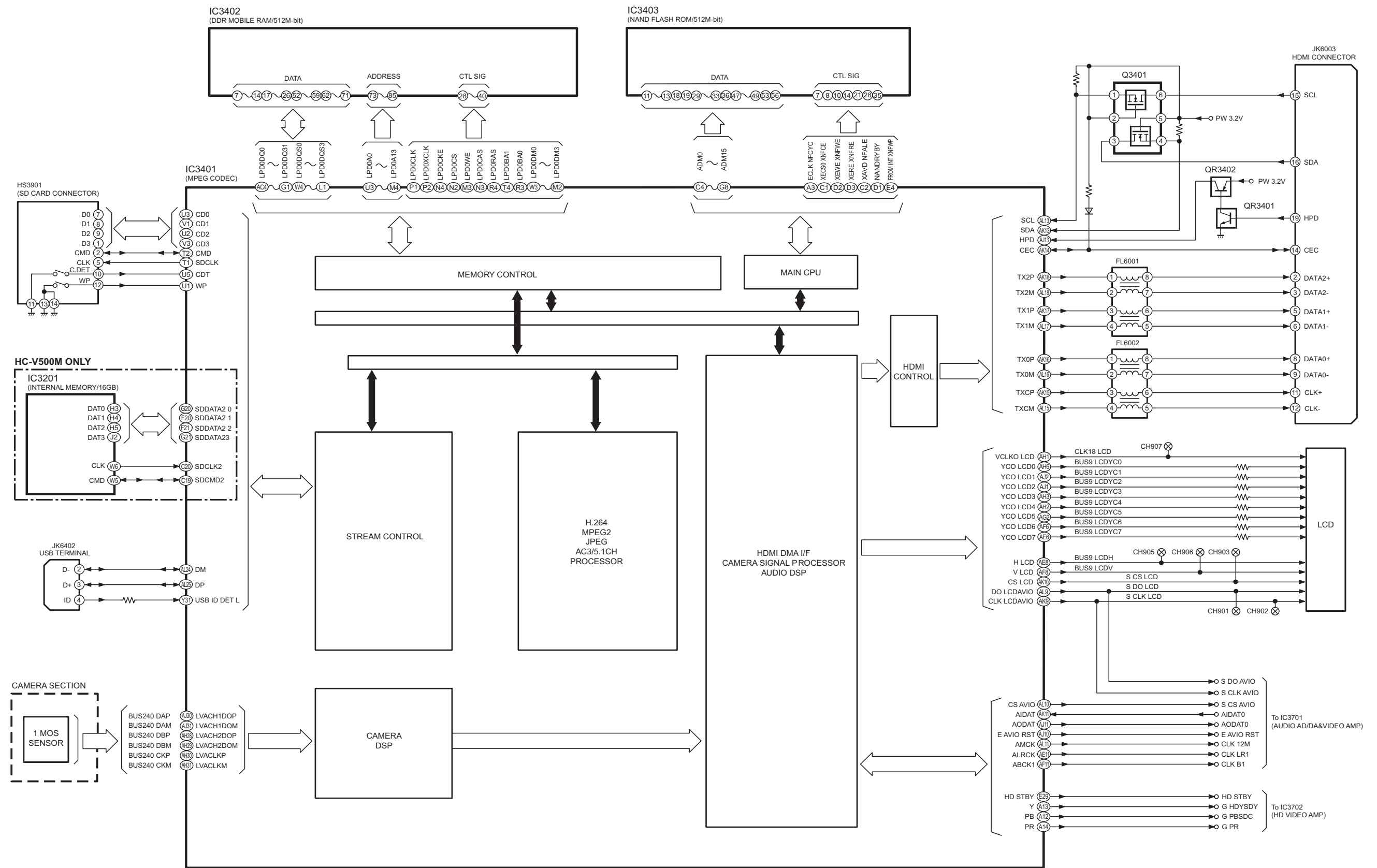
10.2. Camera/System Control Circuit Block Diagram

CAMERA/SYSTEM CONTROL CIRCUIT BLOCK DIAGRAM



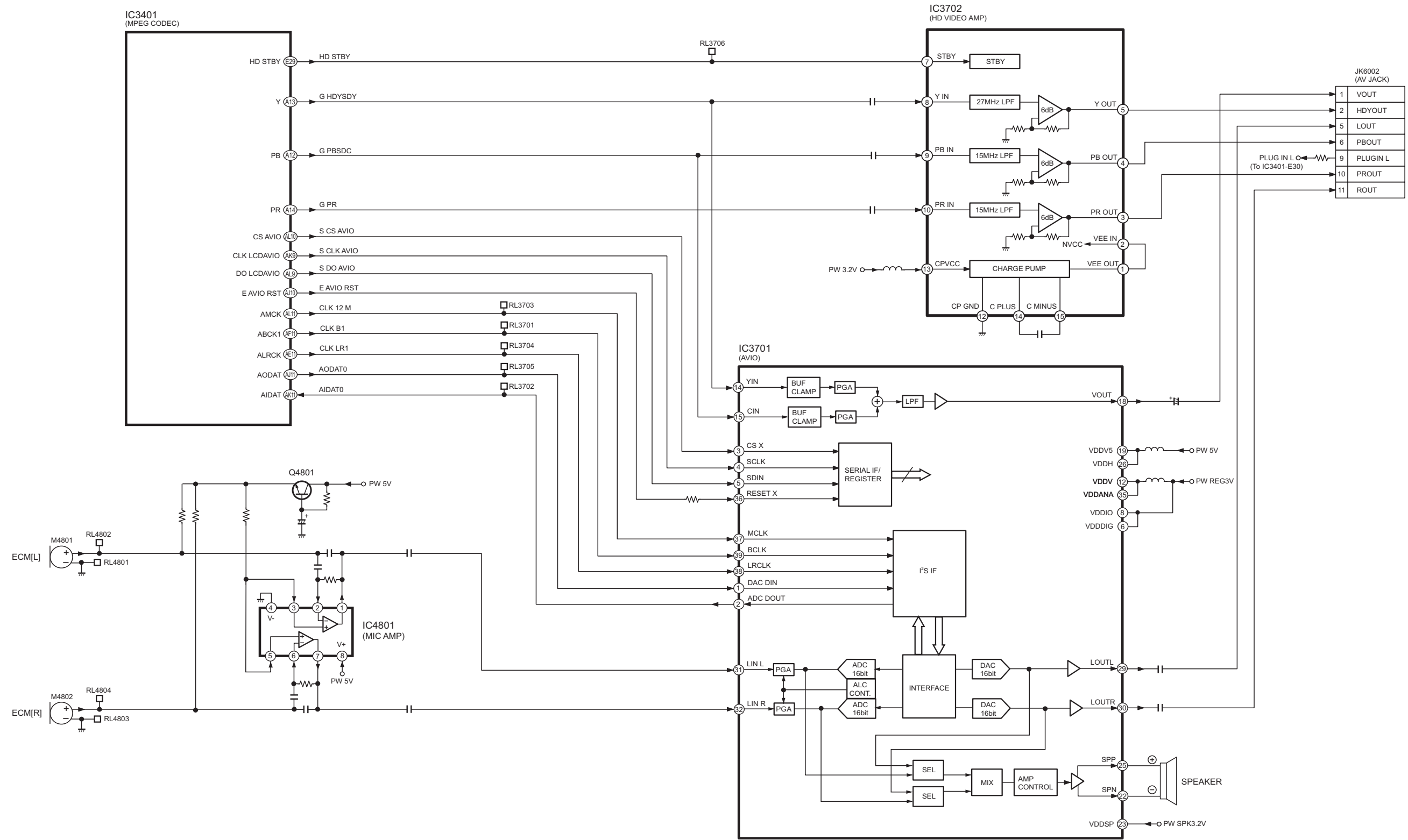
10.3. Video/Audio Signal Process(1) Circuit Block Diagram

VIDEO/AUDIO SIGNAL PROCESS(1) CIRCUIT BLOCK DIAGRAM



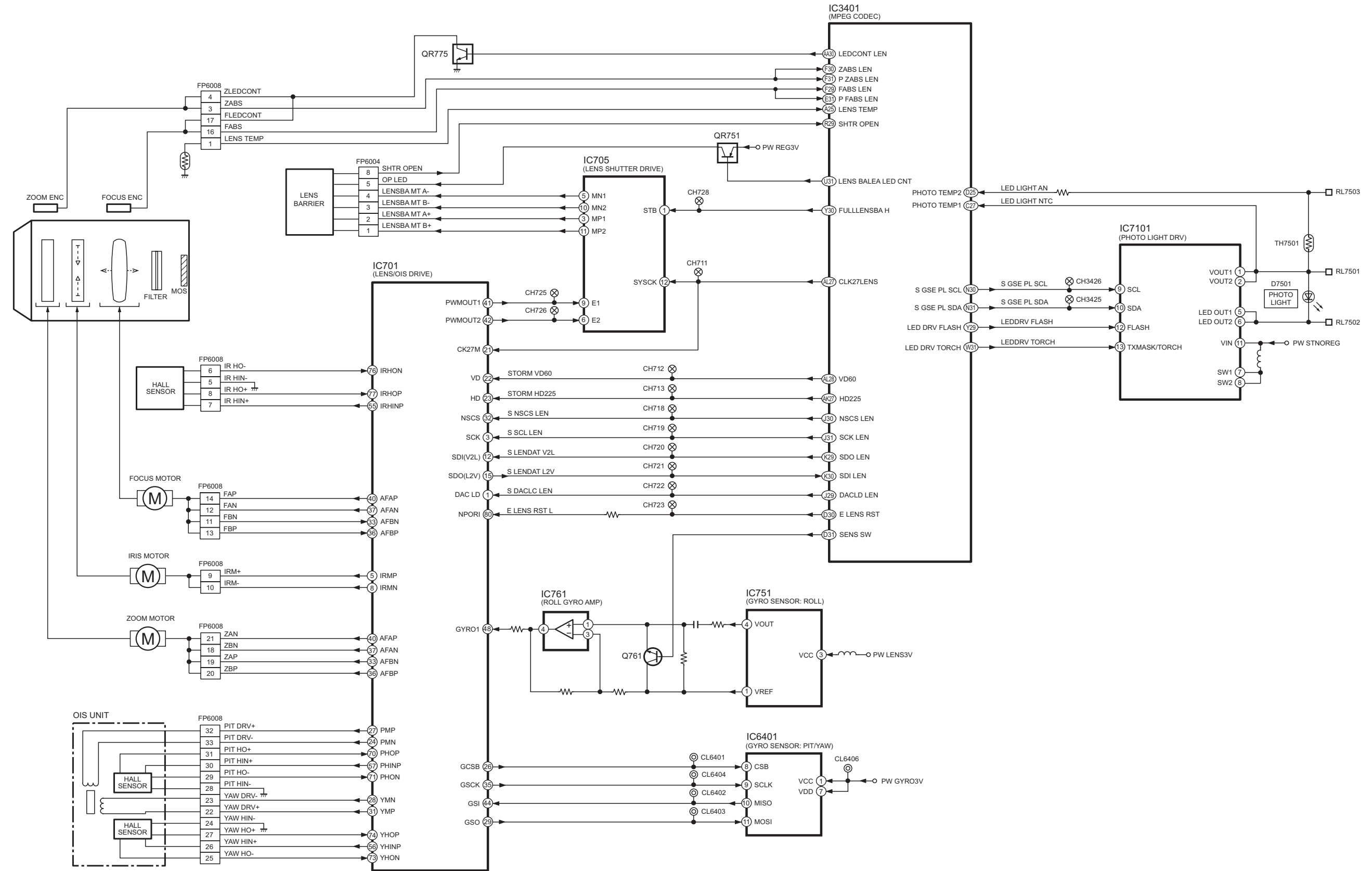
10.4. Video/Audio Signal Process(2) Circuit Block Diagram

VIDEO/AUDIO SIGNAL PROCESS(2) CIRCUIT BLOCK DIAGRAM



10.5. Lens Drive Circuit Block Diagram

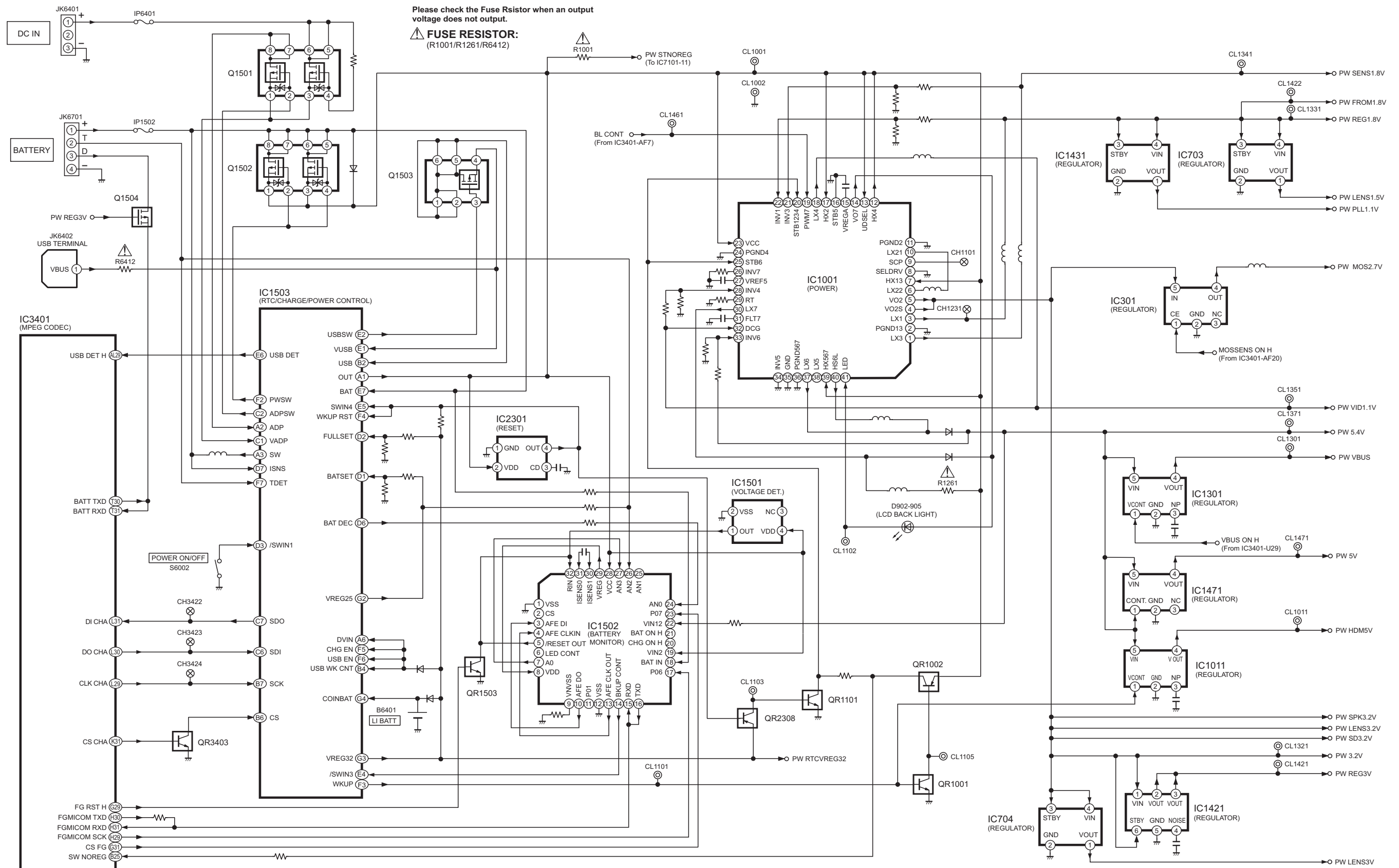
◆ LENS DRIVE CIRCUIT BLOCK DIAGRAM



HC-V500M/V500 LENS DRIVE CIRCUIT BLOCK DIAGRAM

10.6. Power Supply Circuit Block Diagram

◆ POWER SUPPLY CIRCUIT BLOCK DIAGRAM



HC-V500M/V500 POWER SUPPLY CIRCUIT BLOCK DIAGRAM

11.1. Interconnection Diagram

11.1. Interconnection Diagram

HC-V500M only

ESD P.C.B. (FOIL SIDE)

PHOTO LIGHT P.C.B. (FOIL SIDE)

BATTERY CATCHER P.C.B. (FOIL SIDE)

TOP OPERATION

SPEAKER

SD HOLDER P.C.B. (FOIL SIDE)

MAIN P.C.B. (FOIL SIDE)

MONITOR FPC

MONITOR P.C.B. (FOIL SIDE)

LCD UNIT

TOUCH PANEL

LENS UNIT

MOS UNIT

MIC

LENS BARRIER

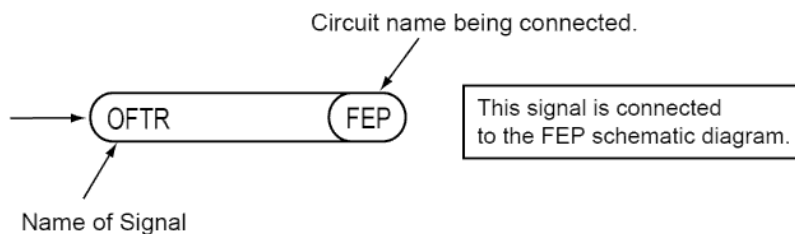
BATTERY

※ [Dashed Line] : (COMPONENT SIDE)

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS USE ONLY THE SAME TYPE.

- 1.Although reference number of the parts is indicated on the P.C.B. drawing and/or schematic diagrams, it is NOT mounted on the P.C.B. when it is displayed with "\$" mark.
- 2.It is only the "Test Round" and no terminal (Pin) is available on the P.C.B. when the TP (Test Point) indicated as "●" mark.
- 3.Use the parts number indicated on the Replacement Parts List .
- 4.Indication on Schematic diagrams:



5. It might be taking time for display and/or access of the Schematic Diagrams & P. C. B. having the heavy data volume.

Note: 1.* Be sure to make your orders of replacement parts according to this list.

2. IMPORTANT SAFETY NOTICE

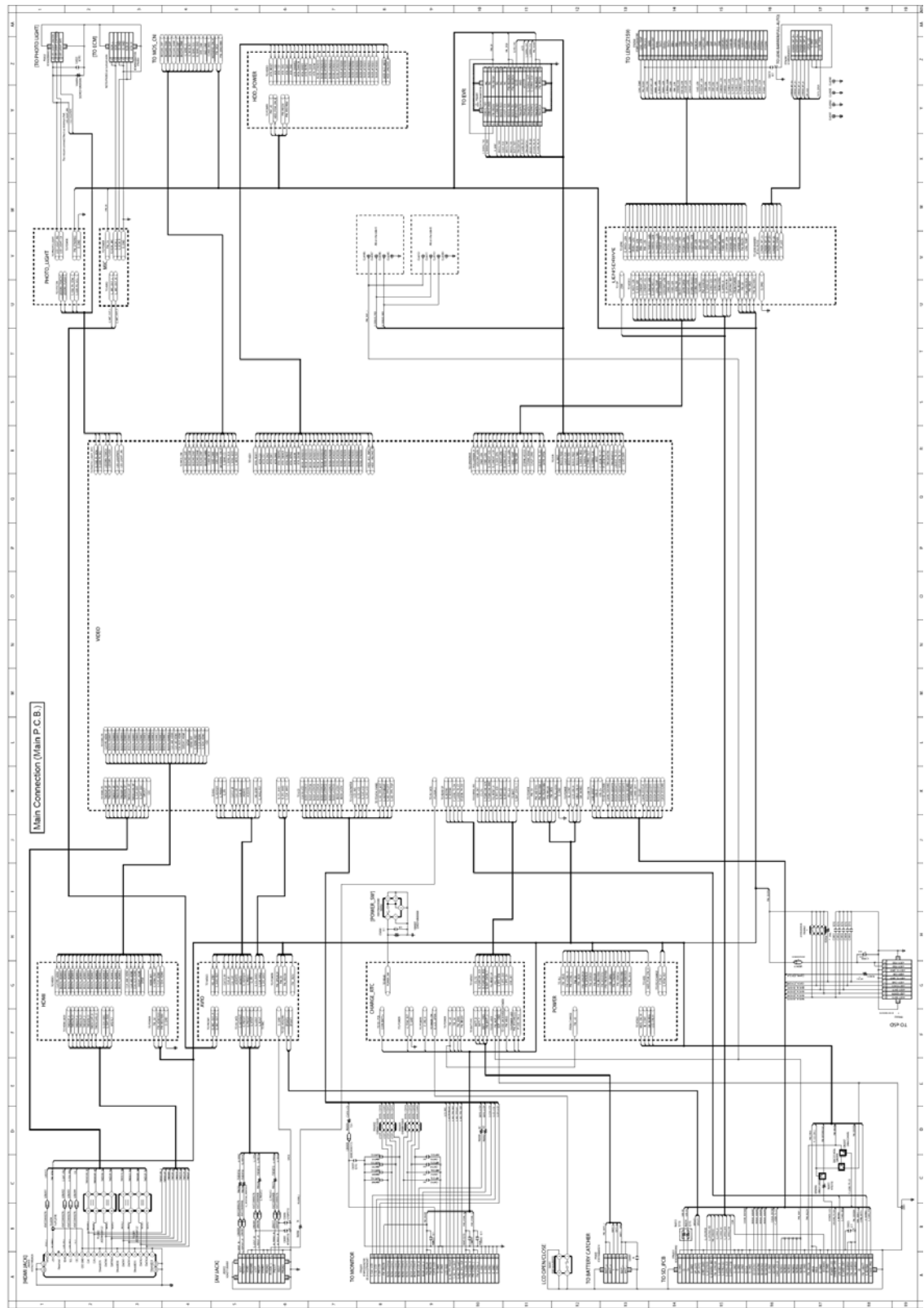
Components identified with the mark  have the special characteristics for safety.
When replacing any of these components, use only the same type.

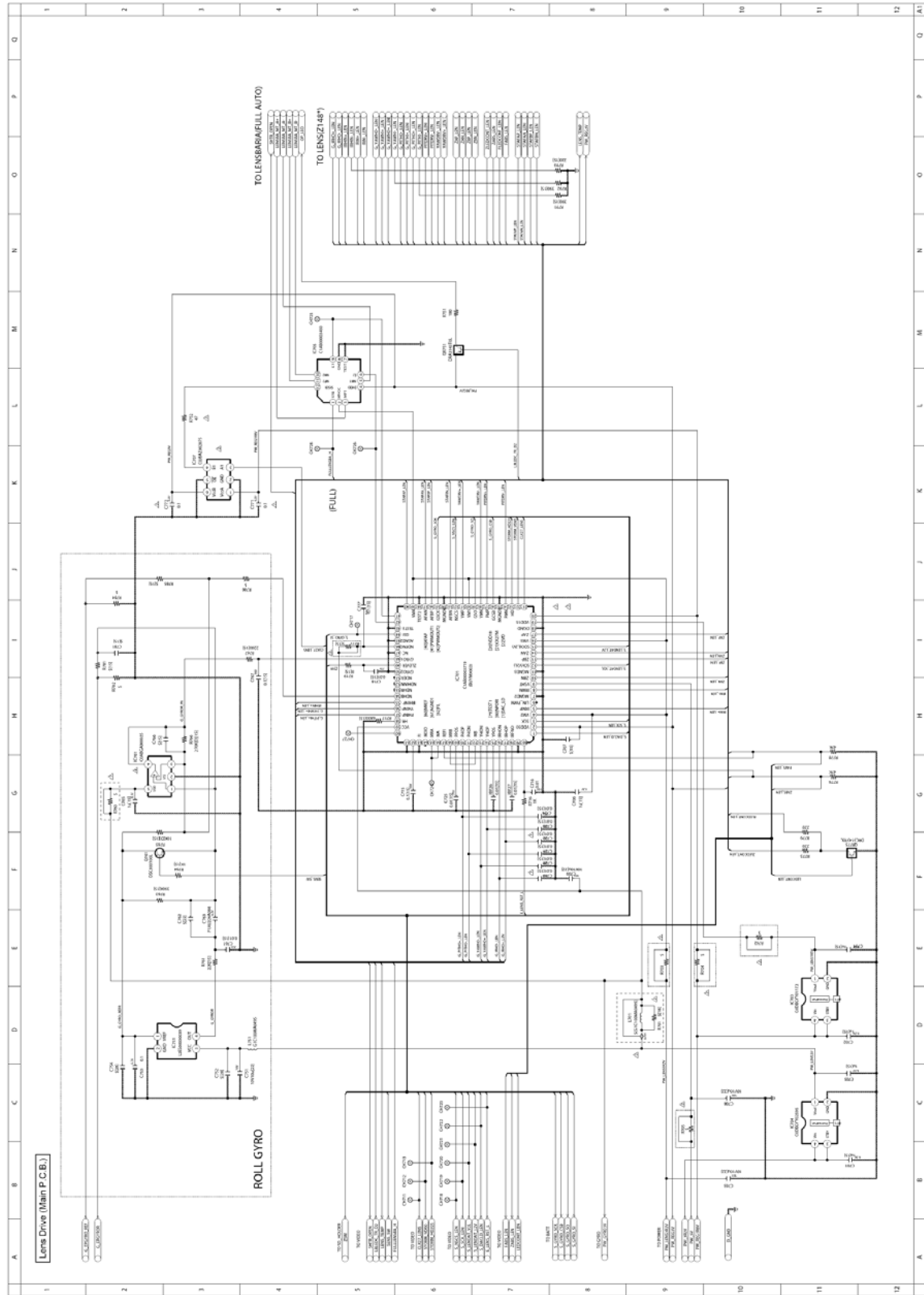
3. Unless otherwise specified,

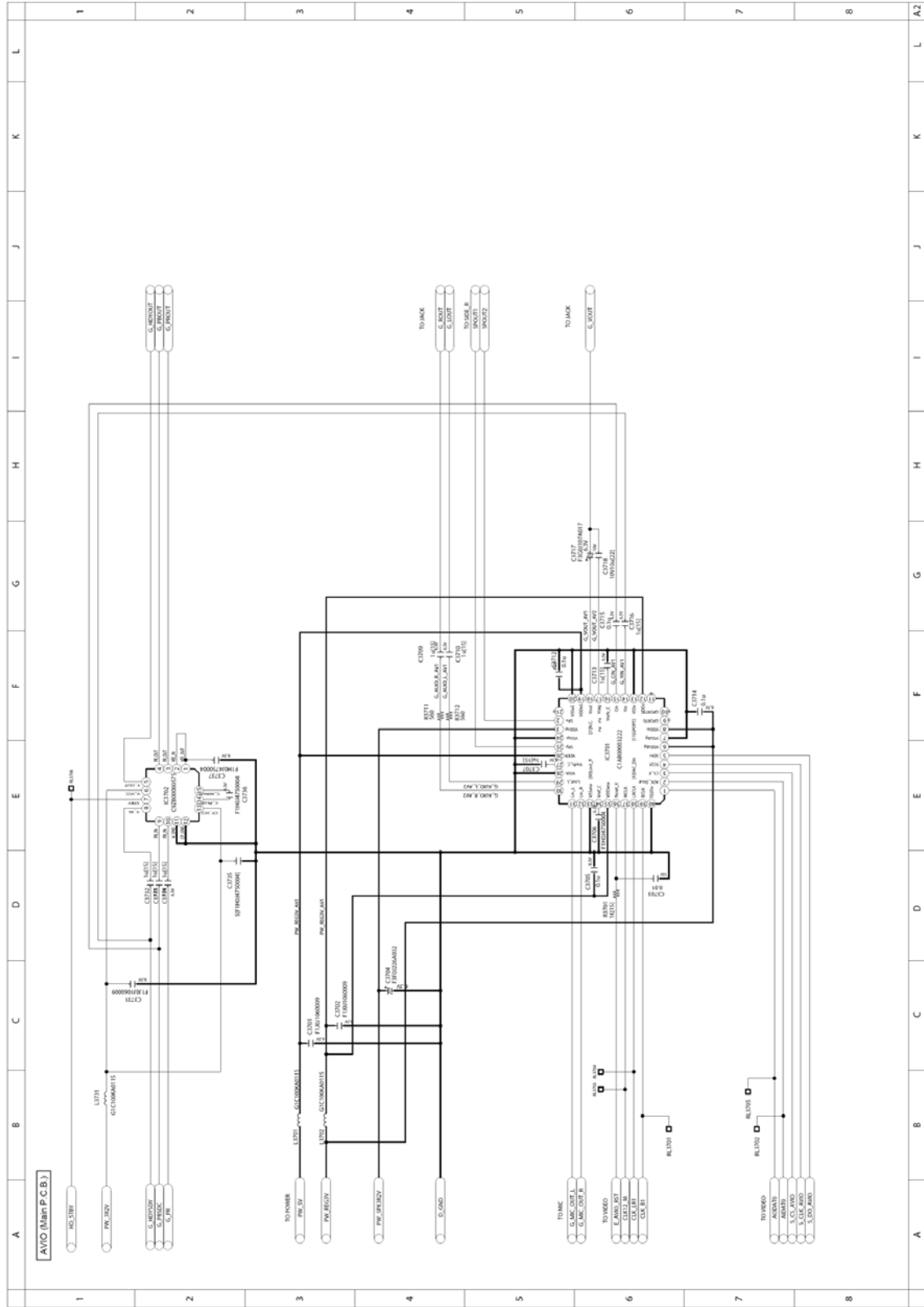
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICRO-FARADS (uf), P=uuF.

4. The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

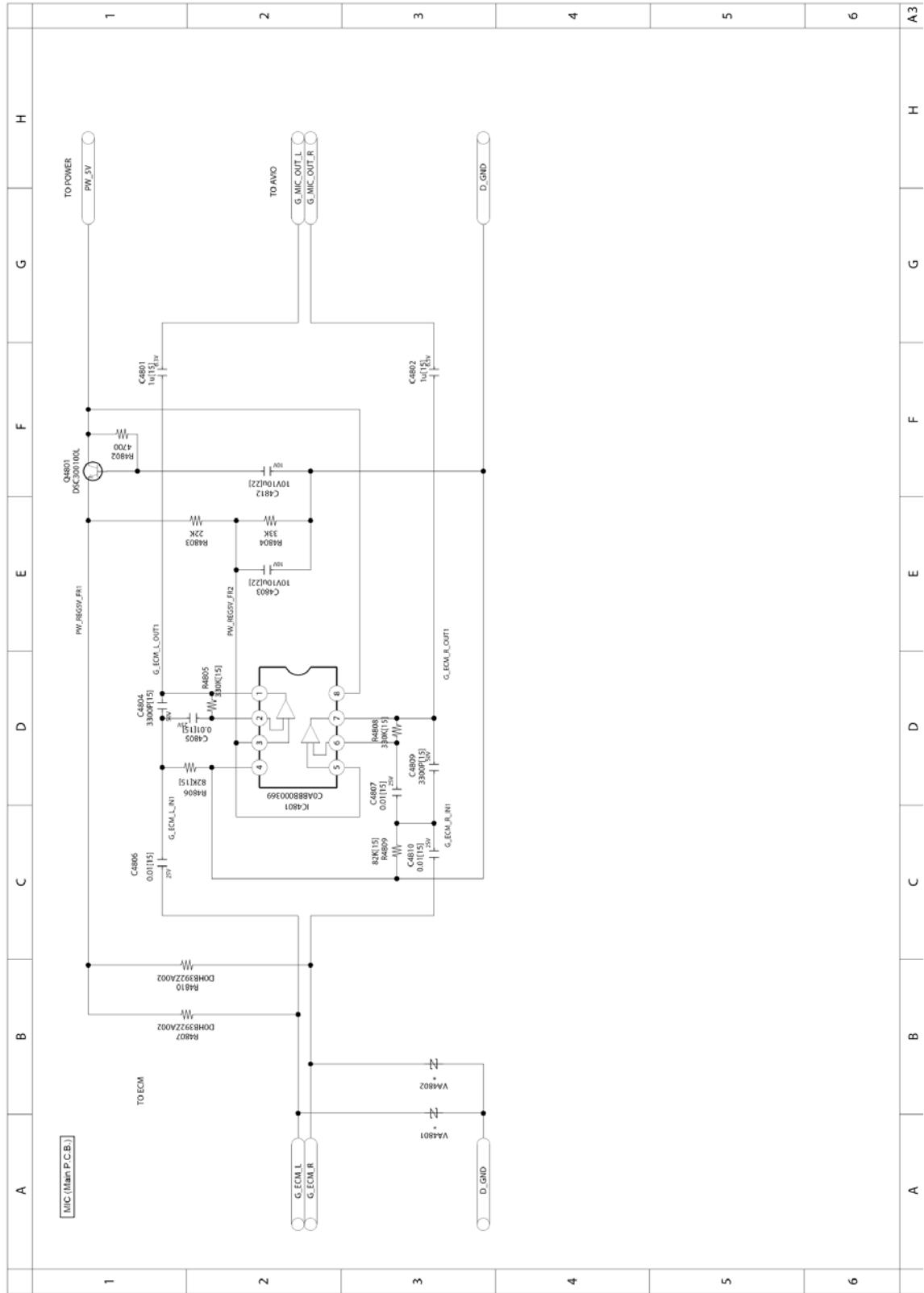
E.S.D. standards for Electrostatically Sensitive Devices, refer to “PREVENTION OF ELECTROSTATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES” section.

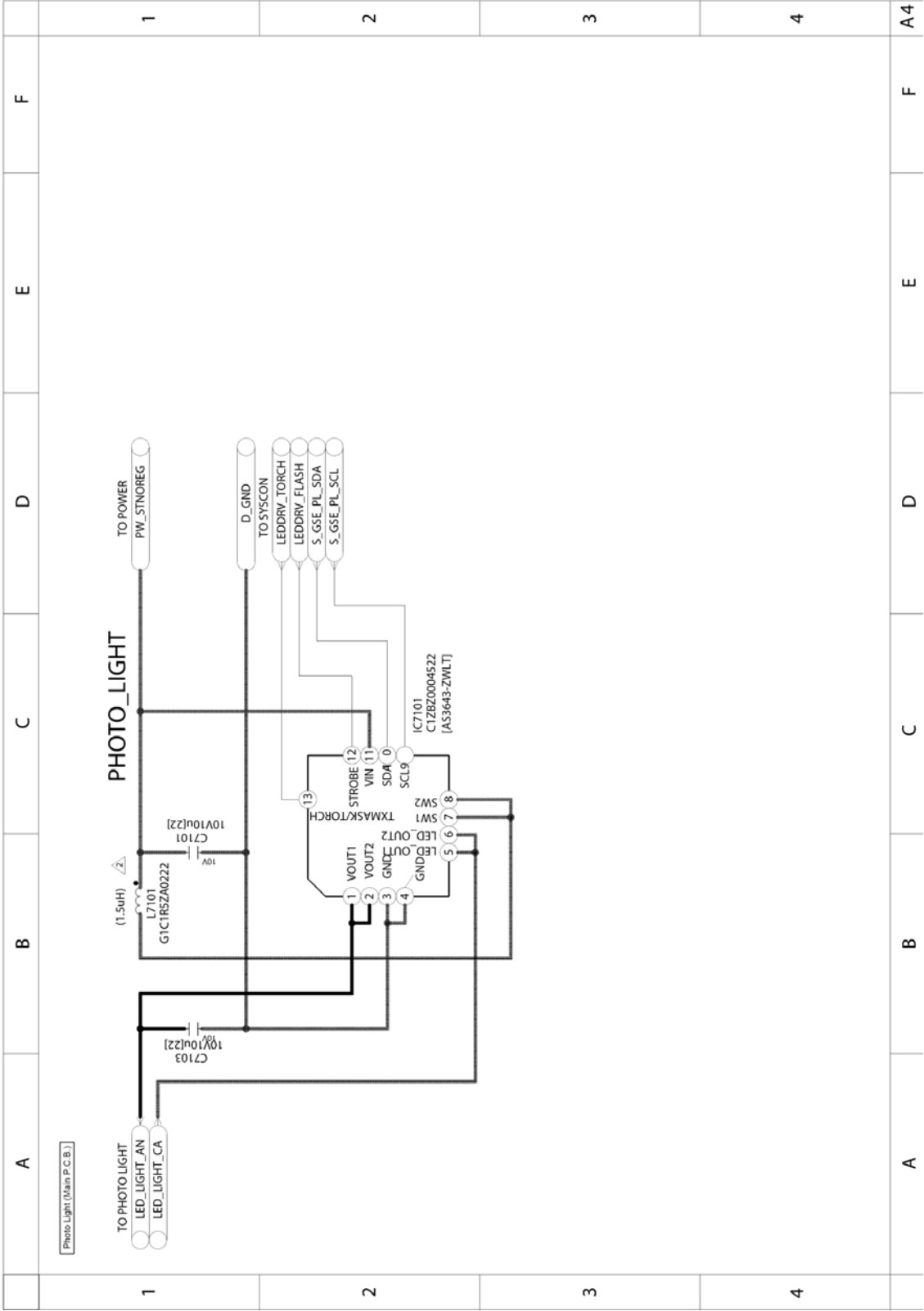






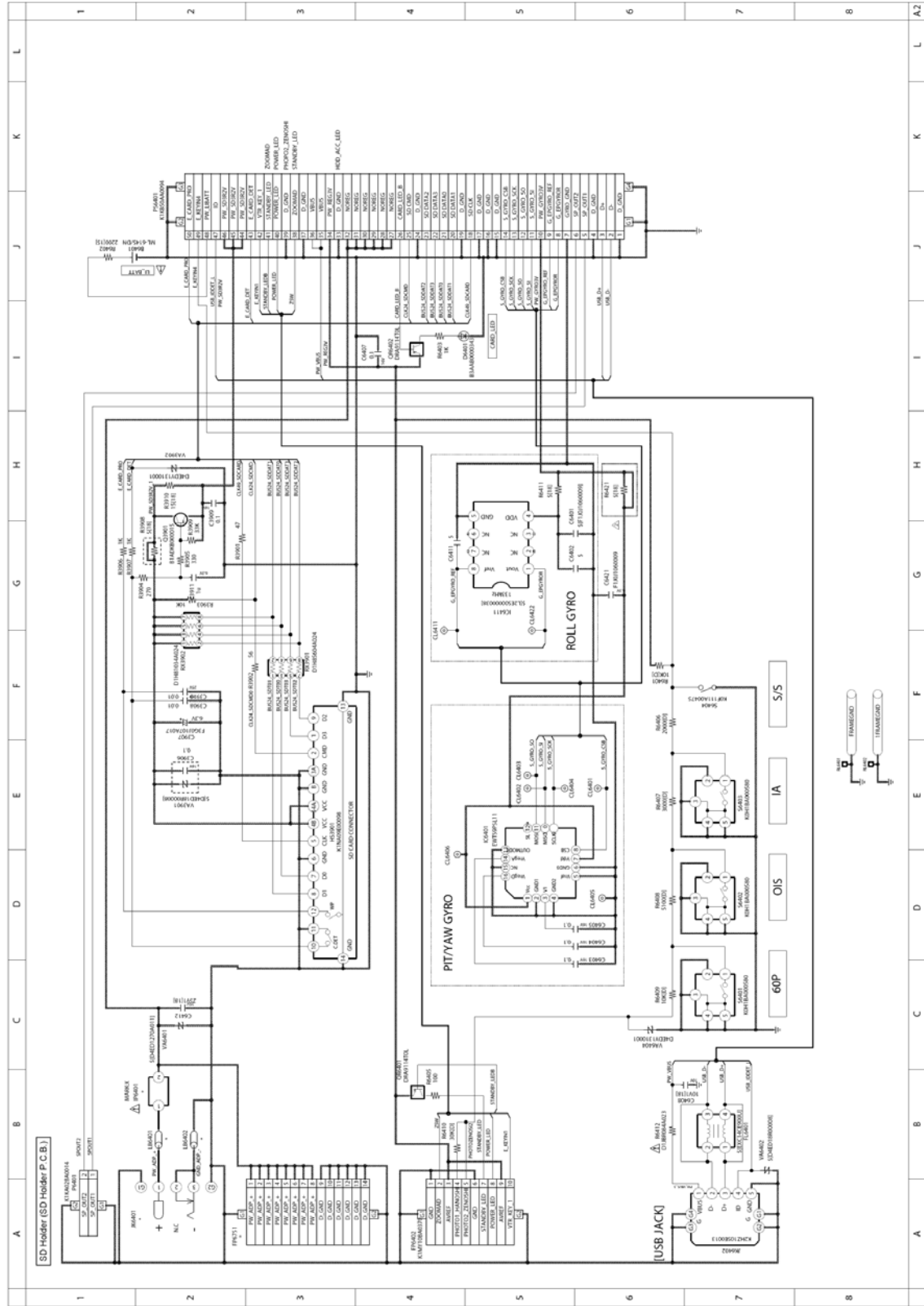
Model No. : HC-V500/V500M Charge/RTC (Main P.C.B.)

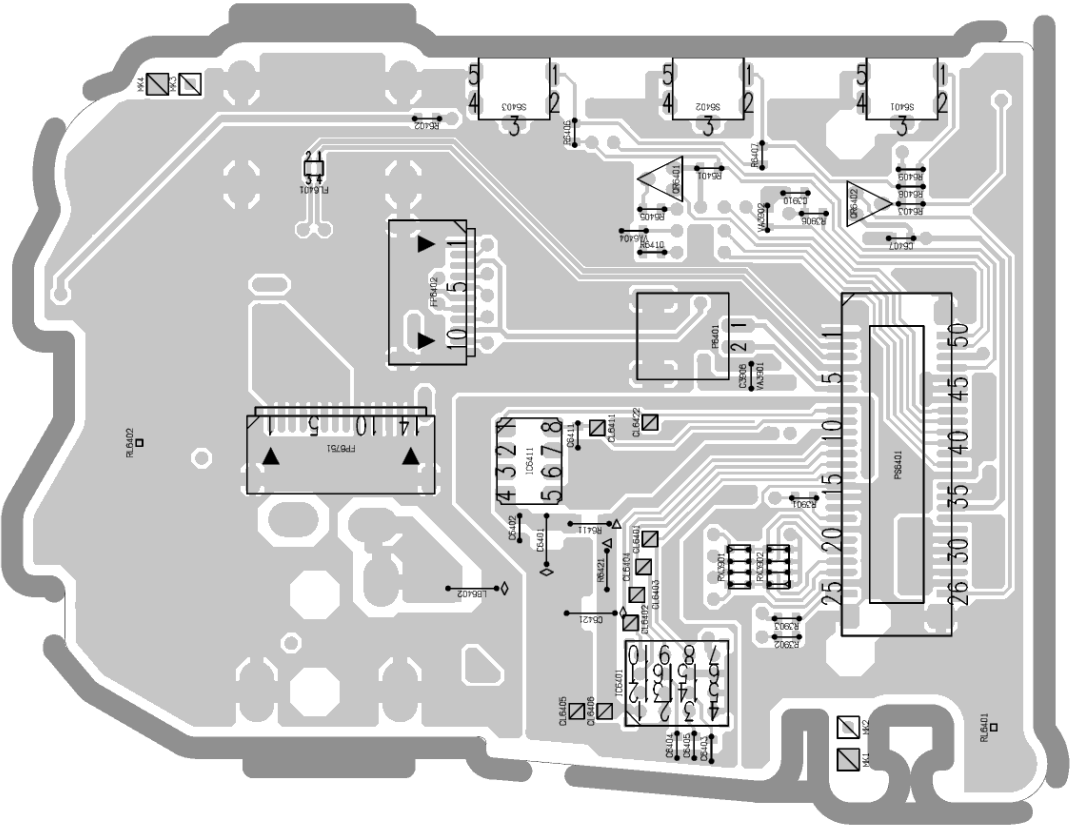




Model No. : HC-V500/V500M Power (Main P.C.B.)

Model No. : HC-V500/V500M MOS Connection (Main P.C.B.)





Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	B6401	ML-614S/DK	BATTERY	1	
	C302	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C303	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C304	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C305	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C309	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C701	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C702	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C703	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C704	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C705	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C706	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C708	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C709	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C715	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C716	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C718	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C719	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C720	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C721	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C722	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C723	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C724	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C725	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C726	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C727	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C751	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C753	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C761	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C763	F1J0J226A088	C.CAPACITOR CH 6.3V 22U	1	
	C765	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C767	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C771	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C772	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C777	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C1001	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1012	F1G1H102A640	C.CAPACITOR CH 50V 1000P	1	
	C1013	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1061	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C1101	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1102	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C1103	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1161	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1221	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1222	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1231	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1232	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1242	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1251	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1252	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1261	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
	C1271	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1272	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1273	F1G1H220A644	C.CAPACITOR CH 50V 22P	1	
	C1303	F1G1H102A640	C.CAPACITOR CH 50V 1000P	1	
	C1304	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1342	F3F0G4760004	E.CAPACITOR CH 4V 47U	1	
	C1356	F3F0G4760004	E.CAPACITOR CH 4V 47U	1	
	C1422	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1431	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C1471	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C1501	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C1502	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1503	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1506	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C1507	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1508	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1511	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1512	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
	C1515	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1516	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1518	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1519	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C1520	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C1521	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1522	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C1523	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C2301	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C2304	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C2305	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C2310	F1G1H8R0A642	CAPACITOR	1	
	C2311	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3401	F1H0J106A009	C.CAPACITOR CH 6.3V 10U	1	
	C3402	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3403	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C3406	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3407	F3G0J107A011	C.CAPACITOR CH 6.3V 100U	1	
	C3408	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3409	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3410	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3411	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3412	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3413	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3414	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3415	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3416	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3417	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3418	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3419	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3420	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3421	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3423	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3424	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3425	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3426	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3427	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3428	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3429	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3430	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3431	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3432	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3433	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3434	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3435	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3436	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3437	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3438	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3439	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3440	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3441	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3442	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3443	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3444	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3445	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C3446	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3447	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3449	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3450	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3451	F1G1H472A571	C.CAPACITOR CH 50V 4700P	1	
	C3452	F1H0J106A009	C.CAPACITOR CH 6.3V 10U	1	
	C3453	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3454	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3455	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3456	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3457	F1G1H102A640	C.CAPACITOR CH 50V 1000P	1	
	C3459	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3460	F1H0J106A009	C.CAPACITOR CH 6.3V 10U	1	
	C3461	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3462	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3464	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3465	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3466	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3468	F1H0J106A009	C.CAPACITOR CH 6.3V 10U	1	
	C3469	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3470	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3471	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3472	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3473	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3474	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3701	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3702	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3703	F1L1A103A016	C.CAPACITOR CH 10V 0.01U	1	
	C3704	F3F0J226A016	T.CAPACITOR CH 6.3V 22U	1	
	C3705	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3706	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C3707	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3709	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3710	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3712	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3713	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3714	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3715	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C3716	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3717	F3G0J107A011	C.CAPACITOR CH 6.3V 100U	1	
	C3718	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C3731	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C3732	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3733	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3734	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3736	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C3737	F1H0J4750004	C.CAPACITOR CH 6.3V 4.7U	1	
	C3906	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3907	F3G0J107A011	C.CAPACITOR CH 6.3V 100U	1	
	C3908	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C3909	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C3910	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C3911	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C3956	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	C4801	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C4802	F1G0J1050007	C.CAPACITOR CH 6.3V 1U	1	
	C4803	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C4804	F1G1H332A640	C.CAPACITOR CH 50V 3300P	1	
	C4805	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C4806	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C4807	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	C4809	F1G1H332A640	C.CAPACITOR CH 50V 3300P	1	
	C4810	F1G1E1030005	C.CAPACITOR CH 25V 0.01U	1	
	C4812	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C6003	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C6004	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C6005	F1G1H472A571	C.CAPACITOR CH 50V 4700P	1	
	C6006	F1G1H472A571	C.CAPACITOR CH 50V 4700P	1	
	C6008	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6009	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6010	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6011	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6012	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6013	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6014	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6015	F1G1H680A644	C.CAPACITOR CH 50V 68P	1	
	C6018	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C6022	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C6023	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C6030	F1L0J1040001	C.CAPACITOR CH 6.3V 0.1U	1	
	C6403	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C6404	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C6405	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C6407	F1G1C104A077	C.CAPACITOR CH 16V 0.1U	1	
	C6408	ECJ1VB1A105K	C.CAPACITOR CH 10V 1U	1	
	C6412	F1H1E105A116	C.CAPACITOR CH 25V 1U	1	
	C6421	F1J0J1060009	C.CAPACITOR CH 6.3V 10U	1	
	C7101	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	C7103	F1J1A106A043	C.CAPACITOR CH 10V 10U	1	
	D1261	B0JCMD000077	DIODE	1	E.S.D.
	D1271	B0JCGD000016	DIODE	1	E.S.D.
	D1503	B0JCMC000019	DIODE	1	E.S.D.
	D1505	DB2S31100L	DIODE	1	E.S.D.
	D2301	DB2S31100L	DIODE	1	E.S.D.
	D3401	DB2S31100L	DIODE	1	E.S.D.
	D3402	DB2S31100L	DIODE	1	E.S.D.
	D3403	DB2S31100L	DIODE	1	E.S.D.
	D6401	B3AAB0000343	LED	1	E.S.D.
	FL3401	F1H0J105A037	FILTER	1	
	FL6001	J0ZZB0000122	FILTER	1	
	FL6002	J0ZZB0000122	FILTER	1	
	FL6004	F1H0J105A037	FILTER	1	
	FP6001	K1MY33AA0199	CONNECTOR 33P	1	
	FP6002	K1MY10BA0370	CONNECTOR 10P	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	FP6004	K1MN08A00072	CONNECTOR 8P	1	
	FP6008	K1MY33AA0199	CONNECTOR 33P	1	
	FP6402	K1MY10BA0370	CONNECTOR 10P	1	
	HS3901	K1NA09E00098	SD CARD CONNECTOR	1	
	IC301	C0DBGYY02227	IC	1	E.S.D.
	IC302	C0JBAA000582	IC	1	E.S.D.
	IC701	C1AB00003719	IC	1	E.S.D.
	IC703	C0DBGYY01172	IC	1	E.S.D.
	IC704	C0DBGYY02595	IC	1	E.S.D.
	IC705	C1AB00003450	IC	1	E.S.D.
	IC707	C0JBAZ002875	IC	1	E.S.D.
	IC751	L2ES00000039	IC	1	E.S.D.
	IC761	C0ABGA000035	IC	1	E.S.D.
	IC1001	C1ZBZ0004347	IC	1	E.S.D.
	IC1011	C0CBCDC00073	IC	1	E.S.D.
	IC1301	C0CBCCC00157	IC	1	E.S.D.
	IC1421	C0CBCYY00078	IC	1	E.S.D.
	IC1431	C0DBGYY00534	IC	1	E.S.D.

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Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	IC1471	C0DBGHD00008	IC	1	E.S.D.
	IC1501	C0EBY0001291	IC	1	E.S.D.
	IC1502	C1ZBZ0004145	IC	1	E.S.D.
	IC1503	C0DBDY000042	IC	1	E.S.D.
	IC2301	C0EBY0000661	IC	1	E.S.D.
	IC3401	C1AB00003898	IC	1	E.S.D.
	IC3402	C3ABSY000096	IC	1	E.S.D.
	IC3403	TC58RYM9B12A	IC	1	E.S.D.
	IC3405	C0EBY0000906	IC	1	E.S.D.
	IC3701	VUEALLPT032	IC	1	E.S.D.
	IC3702	C9ZB00000575	IC	1	E.S.D.
	IC4801	C0ABBB000369	IC	1	E.S.D.
	IC6401	EWTS9PSL1A	IC	1	E.S.D.
	IC7101	C1ZBZ0004522	IC	1	E.S.D.
	IP1502	K5H402YA0080	IC PROTECTOR	1	
	IP6401	K5H402YA0080	IC PROTECTOR	1	
	JK6002	K2HZ112E0002	JACK, AV MULTI	1	
	JK6003	K1FA119E0020	JACK, HDMI	1	
	JK6401	K2EBYB000003	JACK, DC IN	1	
	JK6402	K2HZ105E0013	JACK, USB	1	
	L301	G1C100KA0115	CHIP INDUCTOR 10UH	1	
	L302	G1C100KA0115	CHIP INDUCTOR 10UH	1	
	L751	G1C100MA0495	CHIP INDUCTOR 10UH	1	
	L1221	G1C3R3MA0249	CHIP INDUCTOR 3.3UH	1	
	L1231	G1C100MA0249	CHIP INDUCTOR 10UH	1	
	L1241	G1C3R3MA0478	CHIP INDUCTOR 3.3UH	1	
	L1251	G1C4R7ZA0240	CHIP INDUCTOR 4.7UH	1	
	L1261	G1C6R8MA0061	CHIP INDUCTOR 6.8UH	1	
	L1271	G1C6R8MA0478	CHIP INDUCTOR 6.8UH	1	
	L1501	G1C4R7ZA0240	CHIP INDUCTOR 4.7UH	1	
	L3401	G1C100MA0495	CHIP INDUCTOR 10UH	1	
	L3402	G1C100MA0408	CHIP INDUCTOR 10UH	1	
	L3404	G1C100MA0495	CHIP INDUCTOR 10UH	1	
	L3405	G1C100MA0495	CHIP INDUCTOR 10UH	1	
	L3701	G1C100KA0115	CHIP INDUCTOR 10UH	1	
	L3702	G1C100KA0115	CHIP INDUCTOR 10UH	1	
	L3731	G1C100KA0115	CHIP INDUCTOR 10UH	1	
	L7101	G1C1R5ZA0222	CHIP INDUCTOR 1.5UH	1	
	LB301	J0JBC0000099	FILTER	1	
	LB3401	J0JBC0000099	FILTER	1	
	LB3402	J0JBC0000099	FILTER	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	LB3951	J0JGC0000059	FILTER	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	LB6001	J0JCC0000276	FILTER	1	
	LB6002	J0JCC0000276	FILTER	1	
	LB6003	J0JCC0000276	FILTER	1	
	LB6004	J0JCC0000276	FILTER	1	
	LB6005	J0JBC0000115	FILTER	1	
	LB6006	J0JCC0000408	FILTER	1	
	LB6007	J0JCC0000408	FILTER	1	
	LB6008	J0JCC0000276	FILTER	1	
	LB6009	J0JCC0000276	FILTER	1	
	LB6010	J0JCC0000276	FILTER	1	
	LB6011	J0JCC0000408	FILTER	1	
	LB6401	J0JJC0000015	FILTER	1	
	LB6402	J0JJC0000015	FILTER	1	
	P6002	K1KA03BA0014	CONNECTOR 3P	1	
	P6401	K1KA02BA0014	CONNECTOR 2P	1	
	PP301	K1KY20AA0805	CONNECTOR 20P	1	
	PP6001	K1KY50BA0082	CONNECTOR 50P	1	
	PS6401	K1KB50AA0094	CONNECTOR 50P	1	

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Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	Q761	DSC300100L	TRANSISTOR	1	E.S.D.
	Q1501	B1MBDDA00024	TRANSISTOR	1	E.S.D.
	Q1502	MTM684110LBF	TRANSISTOR	1	E.S.D.
	Q1503	B1CHQC000007	TRANSISTOR	1	E.S.D.
	Q1504	FK3303010L	TRANSISTOR	1	E.S.D.
	Q3401	B1CFGD000003	TRANSISTOR	1	E.S.D.
	Q3901	B1ADKB000015	TRANSISTOR	1	E.S.D.
	Q4801	DSC300100L	TRANSISTOR	1	E.S.D.
	QR751	DRA3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR775	DRC3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR1001	DRC3143E0L	TRANSISTOR	1	E.S.D.
	QR1002	DRA3124X0L	TRANSISTOR	1	E.S.D.
	QR1101	DRC3114E0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR1503	DRC3144E0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR2308	DRA3144E0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3401	DRC3144W0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3402	DRA3144E0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3403	DRC3114T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3410	DRC3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3411	DRA3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3412	DRC3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR3413	DRA3143T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR6006	DRA3124X0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR6007	DRA3124X0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR6008	DRC3114E0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR6401	DRA9114T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	QR6402	DRA9114T0L	TRANSISTOR-RESISTOR	1	E.S.D.
	R302	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R304	ERJ1GEJ272	M.RESISTOR CH 1/20W 2.7K	1	
	R305	ERJ2GEJ390	M.RESISTOR CH 1/16W 39	1	
	R716	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R717	ERJ2RHD682X	M.RESISTOR CH 1/10W 6.8K	1	
	R719	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R751	ERJ1GEJ181	M.RESISTOR CH 1/20W 180	1	
	R752	ERJ1GEJ470	M.RESISTOR CH 1/20W 47	1	
	R761	ERJ2GEJ223	M.RESISTOR CH 1/16W 22K	1	
	R763	ERJ2GEJ394	M.RESISTOR CH 1/16W 390K	1	
	R764	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R765	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
	R766	ERJ2RKD274	M.RESISTOR CH 1/16W 270K	1	
	R767	ERJ2GEJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R775	ERJ1GEJ221	M.RESISTOR CH 1/20W 220	1	
	R776	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R778	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R779	ERJ1GEJ221	M.RESISTOR CH 1/20W 220	1	
	R791	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
	R792	ERJ2GEJ391	M.RESISTOR CH 1/16W 390	1	
	R793	ERJ2GEJ221	M.RESISTOR CH 1/16W 220	1	
	R1001	D1JBR021A007	FUSE RESISTOR	1	
	R1101	ERJ2RKD124	M.RESISTOR CH 1/16W 120K	1	
	R1107	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R1161	ERJ2GEJ200	M.RESISTOR CH 1/10W 20	1	
	R1232	ERJ2RKD474X	M.RESISTOR CH 1/16W 470K	1	
	R1233	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
	R1234	ERJ2RKD394	M.RESISTOR CH 1/16W 390K	1	
	R1242	ERJ2RKD474X	M.RESISTOR CH 1/16W 470K	1	
	R1243	ERJ2RHD433	M.RESISTOR CH 1/16W 43K	1	
	R1244	ERJ2RKD394	M.RESISTOR CH 1/16W 390K	1	
	R1252	ERJ2RKD364	M.RESISTOR CH 1/16W 360K	1	
	R1253	ERJ2RHD363	M.RESISTOR CH 1/16W 36K	1	
	R1254	ERJ2RKD105	M.RESISTOR CH 1/16W 1M	1	
	R1261	D1JBR095A023	FUSE RESISTOR	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R1272	ERJ2RKD304	M.RESISTOR CH 1/16W 300K	1	
	R1273	ERJ2RHD182	M.RESISTOR CH 1/16W 1.8K	1	
	R1274	ERJ2RHD513	M.RESISTOR CH 1/16W 51K	1	
	R1275	ERJ2GEJ105	M.RESISTOR CH 1/10W 1M	1	
	R1276	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
	R1423	ERJ2GEJ472	M.RESISTOR CH 1/10W 4.7K	1	
	R1424	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
	R1434	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R1436	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R1501	D1BDR020A099	RESISTOR	1	
	R1502	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
	R1503	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
	R1507	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R1509	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R1510	ERJ1GEJ474	M.RESISTOR CH 1/20W 470K	1	
	R1511	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R1512	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R1513	ERJ2RKD154	M.RESISTOR CH 1/16W 150K	1	
	R1515	ERJ2RKD124	M.RESISTOR CH 1/16W 120K	1	
	R1516	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R1517	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R1518	ERJ1GEJ104	M.RESISTOR CH 1/20W 100K	1	
	R1522	ERJ2RKD124	M.RESISTOR CH 1/16W 120K	1	
	R1523	ERJ2RKD184	M.RESISTOR CH 1/16W 180K	1	
	R1524	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R1525	ERJ2RHD223	M.RESISTOR CH 1/16W 22K	1	
	R1526	D1BDR100A111	RESISTOR	1	
	R1529	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
	R1535	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R1601	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R1604	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R1608	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R2304	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R2312	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R3403	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R3407	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	
	R3408	ERJ1GE0R00C	M.RESISTOR CH 1/20W 0	1	
	R3416	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R3424	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
	R3426	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
	R3427	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3428	ERJ2RHD101	M.RESISTOR CH 1/16W 100	1	
	R3429	ERJ1GEJ273	M.RESISTOR CH 1/20W 27K	1	
	R3430	ERJ2RHD431	M.RESISTOR CH 1/16W 430	1	
	R3431	ERJ2RHD272	M.RESISTOR CH 1/16W 2.7K	1	
	R3432	ERJ2RHD512	M.RESISTOR CH 1/16W 5.1K	1	
	R3433	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R3434	ERJ2RHD243	M.RESISTOR CH 1/16W 24K	1	
	R3435	ERJ2RHD183	M.RESISTOR CH 1/16W 18K	1	
	R3436	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R3437	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	
	R3438	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	
	R3439	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3442	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
	R3443	ERJ2GEJ270	M.RESISTOR CH 1/10W 27	1	
	R3444	ERJ2RHD123X	M.RESISTOR CH 1/16W 12K	1	
	R3445	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	R3446	ERJ2GEJ560X	M.RESISTOR CH 1/10W 56	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	R3447	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R3449	ERJ1GEJ182	M.RESISTOR CH 1/20W 1.8K	1	

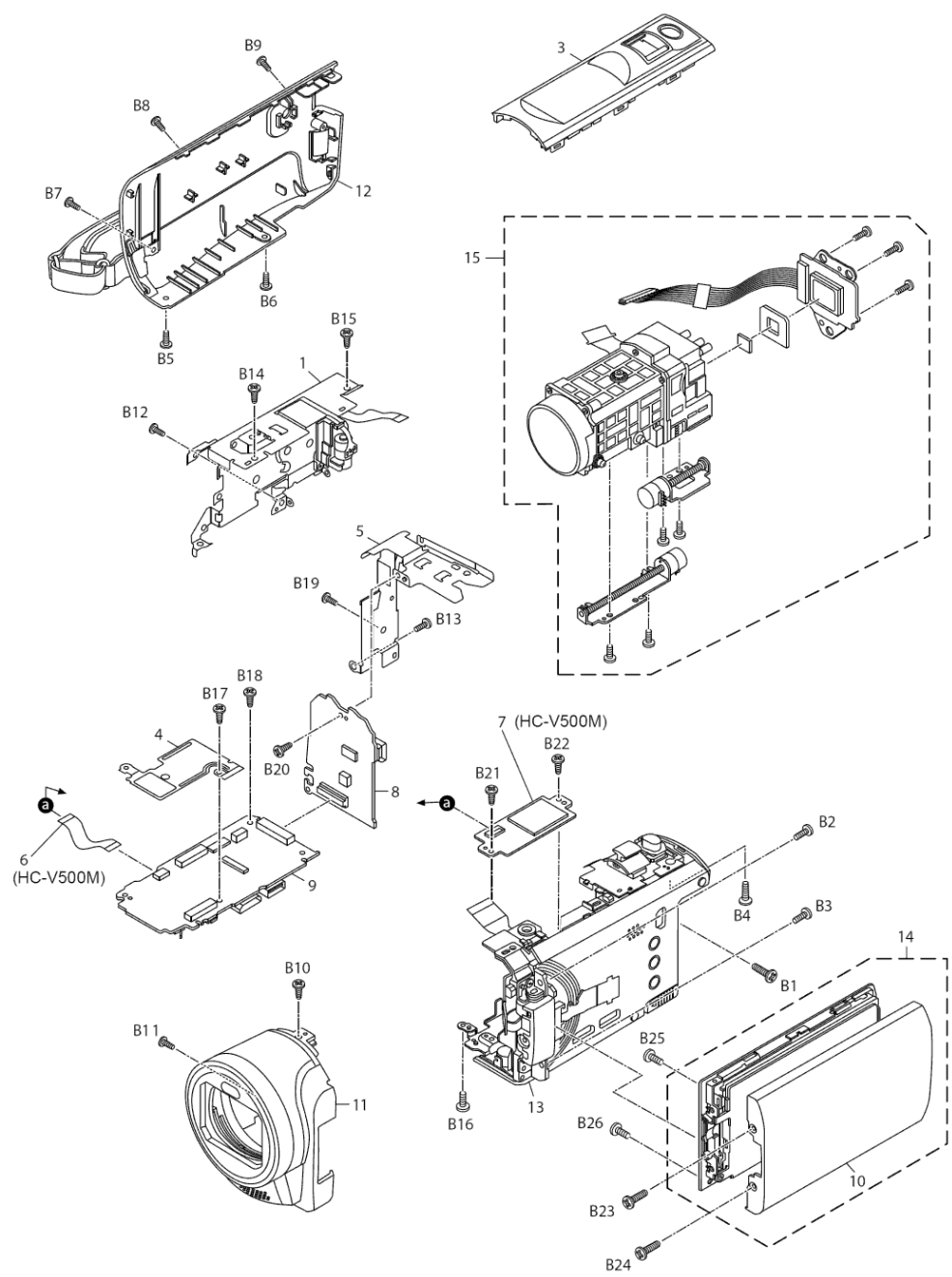
Model No. : HC-V500/V500M Parts List

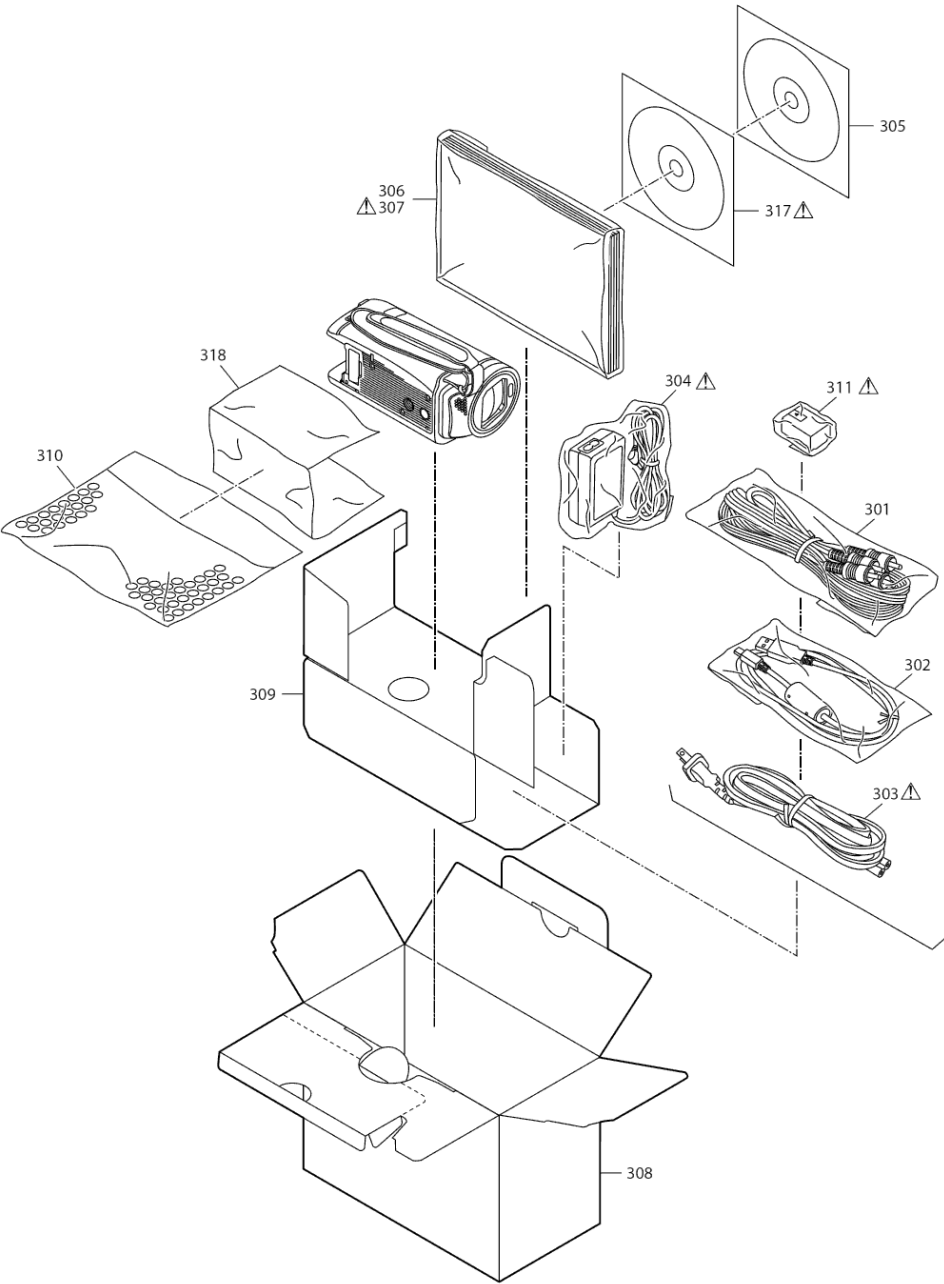
Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R3450	D0YAR0000007	M.RESISTOR CH 1/10W 0	1	
	R3452	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3453	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
	R3454	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3455	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3456	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R3457	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R3460	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3461	ERJ1GEJ104	M.RESISTOR CH 1/20W 100K	1	
	R3462	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3463	ERJ1GEJ104	M.RESISTOR CH 1/20W 100K	1	
	R3466	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3467	ERJ2RKD184	M.RESISTOR CH 1/16W 180K	1	
	R3468	ERJ2RKD184	M.RESISTOR CH 1/16W 180K	1	
	R3476	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R3477	ERJ2GEJ183	M.RESISTOR CH 1/10W 18K	1	
	R3478	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3479	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3480	ERJ1GEJ473	M.RESISTOR CH 1/20W 47K	1	
	R3481	ERJ1GEJ152	M.RESISTOR CH 1/20W 1.5K	1	
	R3482	ERJ1GEJ153	M.RESISTOR CH 1/20W 15K	1	
	R3483	ERJ1GEJ153	M.RESISTOR CH 1/20W 15K	1	
	R3484	ERJ1GEJ104	M.RESISTOR CH 1/20W 100K	1	
	R3485	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
	R3486	ERJ2GEJ473Y	M.RESISTOR CH 1/10W 47K	1	
	R3489	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
	R3490	ERJ1GEJ101	M.RESISTOR CH 1/20W 100	1	
	R3496	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R3499	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	
	R3701	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R3711	ERJ1GEJ561	M.RESISTOR CH 1/20W 560	1	
	R3712	ERJ1GEJ561	M.RESISTOR CH 1/20W 560	1	
	R3901	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	
	R3902	ERJ2GEJ560X	M.RESISTOR CH 1/10W 56	1	
	R3903	ERJ2GEJ103	M.RESISTOR CH 1/10W 10K	1	
	R3904	ERJ2GEJ271	M.RESISTOR CH 1/10W 270	1	
	R3905	ERJ2GEJ331	M.RESISTOR CH 1/16W 330	1	
	R3906	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R3907	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R3909	ERJ2GEJ333	M.RESISTOR CH 1/16W 33K	1	
	R3910	D0GB150JA057	M.RESISTOR CH 1/10W 15	1	
	R3951	ERJ2GEJ470	M.RESISTOR CH 1/16W 47	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	R3956	ERJ1GEJ103	M.RESISTOR CH 1/20W 10K	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	R4802	ERJ1GEJ472	M.RESISTOR CH 1/20W 4.7K	1	
	R4803	ERJ1GEJ223	M.RESISTOR CH 1/20W 22K	1	
	R4804	ERJ1GEJ333	M.RESISTOR CH 1/20W 33K	1	
	R4805	ERJ2GEJ334	M.RESISTOR CH 1/16W 330K	1	
	R4806	ERJ2GEJ823	M.RESISTOR CH 1/16W 82K	1	
	R4807	VRE0071E392	M.RESISTOR CH 1/10W 3.9K	1	
	R4808	ERJ2GEJ334	M.RESISTOR CH 1/16W 330K	1	
	R4809	ERJ2GEJ823	M.RESISTOR CH 1/16W 82K	1	
	R4810	VRE0071E392	M.RESISTOR CH 1/10W 3.9K	1	
	R6001	ERJ2GEJ471	M.RESISTOR CH 1/10W 470	1	
	R6002	ERJ1GEJ820	M.RESISTOR CH 1/20W 82	1	
	R6006	ERJ1GEJ102	M.RESISTOR CH 1/20W 1K	1	
	R6008	ERJ1GEJ820	M.RESISTOR CH 1/20W 82	1	
	R6009	ERJ1GEJ151	M.RESISTOR CH 1/20W 150	1	
	R6027	ERJ2RKD750	M.RESISTOR CH 1/16W 75	1	
	R6028	ERJ2RKD750	M.RESISTOR CH 1/16W 75	1	
	R6029	ERJ2RKD750	M.RESISTOR CH 1/16W 75	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	R6030	ERJ2RKD750	M.RESISTOR CH 1/16W 75	1	
	R6401	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
	R6402	ERJ2GEJ222	M.RESISTOR CH 1/10W 2.2K	1	
	R6403	ERJ2GEJ102Y	M.RESISTOR CH 1/10W 1K	1	
	R6405	ERJ2GEJ101	M.RESISTOR CH 1/10W 100	1	
	R6406	ERJ2RHD202	M.RESISTOR CH 1/16W 2K	1	
	R6407	ERJ2RHD302	M.RESISTOR CH 1/16W 3K	1	
	R6408	ERJ2RHD512	M.RESISTOR CH 1/16W 5.1K	1	
	R6409	ERJ2RHD103	M.RESISTOR CH 1/16W 10K	1	
	R6410	ERJ2RHD303	M.RESISTOR CH 1/16W 30K	1	
⚠	R6412	D1JBR084A023	FUSE RESISTOR	1	
	RX3401	D1H82704A024	RESISTOR NETWORKS	1	
	RX3402	D1H85604A024	RESISTOR NETWORKS	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	RX3403	D1H84724A024	RESISTOR NETWORKS	1	
	RX3404	D1H84734A024	RESISTOR NETWORKS	1	
	RX3405	EXB28V103JX	RESISTOR NETWORKS	1	
	RX3406	EXB28V103JX	RESISTOR NETWORKS	1	
	RX3410	EXB28V103JX	RESISTOR NETWORKS	1	
	RX3901	D1H85604A024	RESISTOR NETWORKS	1	
	RX3902	EXB28V103JX	RESISTOR NETWORKS	1	
	RX3951	D1H86834A024	RESISTOR NETWORKS	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	RX6001	EXBN8V100J	RESISTOR NETWORKS	1	
	RX6002	EXBN8V100J	RESISTOR NETWORKS	1	
	S6001	ESE18L62BXFD	SWITCH	1	
	S6002	K0H1BA000580	SWITCH	1	
	S6401	K0H1BA000580	SWITCH	1	
	S6402	K0H1BA000580	SWITCH	1	
	S6403	K0H1BA000580	SWITCH	1	
	S6404	K0F111A00475	SWITCH	1	
	VA301	D4ED16R80001	VARISTOR	1	
	VA1501	D4ED1270A011	VARISTOR	1	
	VA1502	D4ED1270A011	VARISTOR	1	
	VA1503	D4ED18R00008	VARISTOR	1	
	VA1504	D4ED18R00008	VARISTOR	1	
	VA3902	D4EDY1310001	VARISTOR	1	
	VA6001	D4ED18R00008	VARISTOR	1	
	VA6404	D4EDY1310001	VARISTOR	1	
	X2303	H0J327200085	CRYSTAL OSCILLATOR	1	
	X3402	H1A6005B0019	CRYSTAL OSCILLATOR	1	

Model No. : HC-V500/V500M Frame and Casing Section





Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	1	VXK1997	LENS FRAME UNIT	1	
	3	VKM9826	TOP CASE	1	(-K, -R)
	3	VKM9955	TOP CASE	1	(-S)
	4	VXK2002	HEAT RADIATION FRAME UNIT	1	
	5	VMP0C20	REAR ANGLE	1	
	6	VWJ2260	RELAY FFC	1	MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	7	VEP03J60E	ESD P.C.B. UNIT (16GB)	1	E.S.D. MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	8	VEP03J50A	SD HOLDER P.C.B. UNIT	1	(RTL) E.S.D.
	9	VEP03J47A	MAIN P.C.B. UNIT	1	(RTL) E.S.D. MP, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK
	9	VEP03J47C	MAIN P.C.B. UNIT	1	(RTL) E.S.D. PK, PCK, GTK, EG, EF, EC, EP, EB, GC, GA, EE, GN, GK
	10	VYK5J56	LCD CASE(T) UNIT	1	MPK, MPCK, MPUK, MGTK, MEGK, MECK, MEPK, MEBK, MGCK, MAGK, MEEK, MGNK, MGKK
	10	VYK5K71	LCD CASE(T) UNIT	1	MGKR
	10	VYK5K63	LCD CASE(T) UNIT	1	PK, PCK, GTK, EGK, EFK, ECK, EPK, EBK, GCK, GAK, EEK, GNK, GKK
	10	VYK5K68	LCD CASE(T) UNIT	1	(-S)
	10	VYK5K72	LCD CASE(T) UNIT	1	EGR, EFR, ECR, EPR, GCR, GAR, GKR
	11	VYK5J60	FRONT CASE UNIT	1	(-K)
	11	VYK5K75	FRONT CASE UNIT	1	(-S)
	11	VYK5K76	FRONT CASE UNIT	1	(-R)
	12	VYK5J64	SIDE CASE(L) UNIT	1	
	13	VYK5W47	SIDE CASE(R) UNIT	1	MPK, MPCK, MPUK, MGTK, PK, PCK, GTK
	13	VYK5W44	SIDE CASE(R) UNIT	1	MEGK, MECK, MEPK, MEBK, MGCK, MAGK, MEEK, MGNK, MGKK, EGK, EFK, ECK, EPK, EBK, GCK, GAK, EK, GNK, GKK
	13	VYK5W46	SIDE CASE(R) UNIT	1	(-S)
	13	VYK5W45	SIDE CASE(R) UNIT	1	(-R)
	14	VYK5V96	LCD UNIT	1	MPK, MPCK, MPUK, MGTK, MEGK, MECK, MEPK, MEBK, MGCK, MAGK, MEEK, MGNK, MGKK
	14	VYK5V97	LCD UNIT	1	MGKR
	14	VYK5V93	LCD UNIT	1	PK, PCK, GTK, EGK, EFK, ECK, EPK, EBK, GCK, GAK, EEK, GNK, GKK
	14	VYK5V95	LCD UNIT	1	(-S)
	14	VYK5V94	LCD UNIT	1	EGR, EFR, ECR, EPR, GCR, GAR, GKR
	15	VXW1350	CAMERA LENS UNIT	1	
	B1	XQN16+BJ5FJK	SCREW	1	
	B2	XQN16+BJ5FJK	SCREW	1	
	B3	XQN16+BJ5FJK	SCREW	1	
	B4	XQN16+BJ5FJK	SCREW	1	
	B5	XQN16+B4FJK	SCREW	1	
	B6	XQN16+B4FJK	SCREW	1	
	B7	XQN16+B4FJK	SCREW	1	
	B8	XQN16+B4FJK	SCREW	1	
	B9	XQN16+B4FJK	SCREW	1	
	B10	XQN16+B3FN	SCREW	1	
	B11	VHD1919	SCREW	1	
	B12	VHD1919	SCREW	1	
	B13	VHD1919	SCREW	1	
	B14	XQN16+B3FN	SCREW	1	
	B15	XQN16+B3FN	SCREW	1	
	B16	VHD1919	SCREW	1	
	B17	VHD1919	SCREW	1	
	B18	VHD1919	SCREW	1	
	B19	XQN16+BJ5FJK	SCREW	1	
	B20	VHD1919	SCREW	1	
	B21	VHD1919	SCREW	1	
	B22	VHD1919	SCREW	1	
	B23	VHD1688	SCREW	1	

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	B24	VHD1688	SCREW	1	
	B25	XQN16+BJ4FJK	SCREW	1	
	B26	XQN16+BJ4FJK	SCREW	1	
	301	K1HY12YY0016	MULTI D/RCA CABLE	1	
	302	K2KYYYY00201	USB CABLE	1	
	303	K2CA2CA00025	AC CORD W/PLUG	1	MP, MPC, MPU, P, PC
	303	K2CA2YY00129	AC CORD W/PLUG	1	MGT, GT
	303	K2CA2YY00130	AC CORD W/PLUG	1	MGK, GK
	303	K2CT3YY00034	AC CORD W/PLUG	1	MEB, MGC, MGA, EB, GC, GA
	303	K2CJ2YY00052	AC CORD W/PLUG	1	MGN, GN
	303	K2CQ2YY00082	AC CORD W/PLUG	1	MEG, MEC, MEP, MGC, MGA, MEE, EG, EF, EC, EP, GC, GA, EE
	304	VSK0780	AC ADAPTOR	1	MP, MPC, P, PC
	304	VSK0781	AC ADAPTOR	1	MPU, MEG, MEC, MEP, MEB, MGC, MGA, MEE, MGN, MGK, EG, EF, EC, EP, EB, GC, GA, EE, GN, GK
	304	VSK0714	AC ADAPTOR	1	MGT, GT
	305	VFF0890-S	CD-ROM	1	MP, MGC, MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGA, MEE, MGN, P, GC, PC, GT, EG, EF, EC, EP, EB, GA, EE, GN
	305	VFF0891-S	CD-ROM	1	MGK, GK
	306	VPF1294	BAG, POLYETHYLENE	1	
	307	VQT4D56	OPERATING INSTRUCTIONS (ENGLISH)	1	P
	307	VQT3W31	OPERATING INSTRUCTIONS (ENGLISH)	1	MPC, MPU, PC
	307	VQT3W32	OPERATING INSTRUCTIONS (CANADIAN FRENCH)	1	PC
	307	VQT3W33	OPERATING INSTRUCTIONS (SPANISH)	1	MPU
	307	VQT3W45	OPERATING INSTRUCTIONS (CHINESE(TRADITIONAL))	1	GT
	307	VQT3W34	OPERATING INSTRUCTIONS (GERMAN/TURKISH/ITALIAN/DUTCH)	1	EG
	307	VQT3W35	OPERATING INSTRUCTIONS (FRENCH)	1	EG, EF
	307	VQT3W36	OPERATING INSTRUCTIONS (SPANISH/PORTUGUESE/SWEDISH/ DANISH)	1	EC
	307	VQT3W37	OPERATING INSTRUCTIONS (ENGLISH/POLISH/CZECH/HUNGARIAN)	1	EP
	307	VQT3W38	OPERATING INSTRUCTIONS (ENGLISH)	1	EB
	307	VQT3W39	OPERATING INSTRUCTIONS (ENGLISH)	1	GC
	307	VQT3W40	OPERATING INSTRUCTIONS (ARABIC/PERSIAN)	1	GC
	307	VQT3W41	OPERATING INSTRUCTIONS (ENGLISH)	1	GA, GN
	307	VQT3W42	OPERATING INSTRUCTIONS (THAI/CHINESE(ADDITIONAL)/HINDI)	1	GA
	307	VQT3W43	OPERATING INSTRUCTIONS (RUSSIAN/UKRAINIAN)	1	EE
	307	VQT3W44	OPERATING INSTRUCTIONS (CHINESE(SIMPLIFIED))	1	GK
	308	VPG3B42	PACKING CASE	1	MPK
	308	VPG3B61	PACKING CASE	1	MPCK
	308	VYQ7870	PACKING CASE UNIT	1	MPUK
	308	VPG3B62	PACKING CASE	1	MGTK, MEGK, MECK, MEPK, MEBK, MGAk, MEEK, MGNK
	308	VPG3B43	PACKING CASE	1	MGCK
	308	VYQ7239	PACKING CASE UNIT	1	MGKK
	308	VYQ7737	PACKING CASE UNIT	1	MGKR
	308	VPG3B44	PACKING CASE	1	PK
	308	VPG3B64	PACKING CASE	1	PCK
	308	VPG3B65	PACKING CASE	1	GTK, EGK, EFK, ECK, EPK, EBK, GAK, EEK, GNK
	308	VYQ7245	PACKING CASE UNIT	1	EGS, EPS, EBS, GAS, EES, GNS
	308	VYQ7246	PACKING CASE UNIT	1	EGR, EFR, ECR, EPR, GAR
	308	VPG3B45	PACKING CASE	1	GCK
	308	VYQ7252	PACKING CASE UNIT	1	GCS
	308	VYQ7253	PACKING CASE UNIT	1	GCR
	308	VYQ7243	PACKING CASE UNIT	1	GKK
	308	VYQ7736	PACKING CASE UNIT	1	GKR

Model No. : HC-V500/V500M Parts List

Safety	Ref. No.	Part No.	Part Name & Description	Q'ty	Remarks
	309	VPN7349	PAD	1	
	310	VPF1447	PROTECT BAG	1	MP, MGC, P, GC
	310	VPF1388	PROTECT BAG	1	MPC, MPU, MGT, MEG, MEC, MEP, MEB, MGA, MEE, MG N, MGK, PC, GT, EG, EF, EC, EP, EB, GA, EE, GN, G K
	311	---	SMALL SECONDARY BATTERY	1	
	317	VFF0901	CD-ROM(O/I)	1	MEG, MEC, MEP, EG, EF, EC, EP
	317	VFF0996	CD-ROM(O/I)	1	MGC, GC
	317	VFF0902	CD-ROM(O/I)	1	MGA, MEE, MGN, GA, EE, GN
	318	LSMF0623	SHEET	1	EXCEPT MP, MGC, P, GC