DSC-P41/P43

SERVICE MANUAL

LEVEL 2

Ver 1.0 2004.04
Revision History

How to use
Acrobat Reader

Photo: DSC-P43

DSC-P41
US Model

DSC-P43
Hong Kong Model
Tourist Model
Japanese Model

DSC-P41/P43
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model
Korea Model
Argentine Model
Brazilian Model

Link

SPECIFICATIONS	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAM	REPAIR PARTS LIST
DISASSEMBLY	SCHEMATIC DIAGRAMS	

- For ADJUSTMENTS (SECTION 6), refer to SERVICE MANUAL, ADJ (987674351.pdf).
- For INSTRUCTION MANUAL, refer to SERVICE MANUAL, LEVEL 1 (987674341.pdf).
- Reference No. search on printed wiring boards is available.
- HELP: Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

On the CH-146 and SY-101 boards

This service manual procides the information that is premised the circuit board replacement service and not intended repair inside the CH-146 and SY-101 boards.
Therefore, schematic diagram, printed wiring board and electrical parts list of the CH-146 and SY-101 boards are not shown.
The following pages are not shown.

The above-described information is shown in service manual Level 3.

DIGITAL STILL CAMERA

SONY®

Self Diagnosis Supported model

Cyber-shot

MEMORY STICK ™

SPECIFICATIONS

■ Camera

[System]

Image device 6.85 mm (1/2.7 type) color CCD
Primary color filter

Total pixels number of camera
Approx. 4 231 000 pixels

Effective pixels number of camera
Approx. 4 065 000 pixels

Lens Fixed focal length lens
f=5.0 mm
(35 mm camera conversion: 33 mm)
F2.8

Exposure control
Automatic, Twilight, Twilight portrait, Candle, Landscape, Beach, Soft snap

White balance
Automatic, Daylight, Cloudy, Fluorescent, Incandescent

File format (DCF compliant)
Still images: Exif Ver. 2.2, JPEG compliant, DPOF compatible
Movies: MPEG1 compliant (Monaural)

Recording medium
"Memory Stick"

Flash Recommended distance (when ISO sensitivity is set to Auto)
0.2 to 3.5 m (7 $^{7}/_{8}$ inches to 11 feet 5 $^{7}/_{8}$ inches)

[Input and output connectors]

A/V OUT (MONO) jack (Monaural) (DSC-P43 only)
Minijack
Video: 1 Vp-p, 75 Ω, unbalanced, sync negative
Audio: 327 mV (at a 47 kΩ load)
Output impedance 2.2 kΩ

USB jack mini-B

USB communication
Hi-Speed USB (USB 2.0 compliant)

[LCD screen]

LCD panel used
3.8 cm (1.5 type) TFT drive

Total number of dots
67 200 (280×240) dots

[Power, general]

Power AA nickel hydride batteries (2)
2.4 V
AA alkaline batteries (2)
3.0 V
AC-LS5 AC Adaptor
(not supplied), 4.2 V

Power consumption (during shooting with LCD screen on)
1.3 W

Operating temperature range
0° to +40°C (32° to +104°F)
(When using alkaline batteries: 5° to +40°C (41° to +104°F))

Storage temperature range
–20° to +60°C (–4° to +140°F)

Dimensions $101.2 \times 53.7 \times 35.6$ mm
($4 \times 2\ ^{1}/_{8} \times 1\ ^{7}/_{16}$ inches)
(W/H/D, protruding portions not included)

Mass Approx. 195 g (0.4 lb 6.9 oz) (two batteries "Memory Stick," wrist strap, and so on included)

Microphone Electret condenser microphone

Speaker Dynamic speaker

Exif Print Compatible

PRINT Image Matching II Compatible

PictBridge Compatible

■ BC-CS2A/CS2B Ni-MH battery charger (supplied with the DSC-P43)

Power requirements
AC 100 to 240V 50/60Hz
3 W

Output voltage
AA : DC 1.4 V 400 mA × 2
AAA : DC 1.4 V 160 mA × 2

Operating temperature range
0° to +40°C (32° to +104°F)

Storage temperature range
–20° to +60°C (–4° to +140°F)

Dimensions $71 \times 30 \times 91$ mm
($2\ ^{7}/_{8} \times 1\ ^{3}/_{16} \times 3\ ^{5}/_{8}$ inches) (W/H/D)

Mass Approx. 90 g (3 oz)

■ AC-LS5 AC Adaptor (not supplied)

Input rating AC 100 to 240 V, 50/60 Hz
11 W, 0.16 to 0.09 A

Output rating DC 4.2 V, 1.5 A

Operating temperature range
0° to +40°C (32° to +104°F)

Storage temperature range
–20° to +60°C (–4° to +140°F)

Dimensions Approx. $48 \times 29 \times 81$ mm ($1\ ^{15}/_{16} \times 1\ ^{3}/_{16} \times 3\ ^{1}/_{4}$ inches) (W/H/D, protruding portions not included)

Mass Approx. 130 g (5 oz)

Accessories

- HR6 (size AA) Ni-MH batteries (2) (DSC-P43 only)
- R6 (size AA) alkaline batteries (2) (DSC-P41 only)
- Battery case (1)
- BC-CS2A/CS2B Ni-MH Battery charger (1) (DSC-P43 only)
- Power cord (mains lead) (1) (DSC-P43 only)
- USB cable (1)
- A/V connecting cable (1) (DSC-P43 only)
- Wrist strap (1)
- "Memory Stick" (16MB) (1)
- CD-ROM (USB driver: SPVD-012) (1)
- Operating Instructions (1)

See page 5-15.

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Keep the temperature of the soldering iron around 270˚C during repairing.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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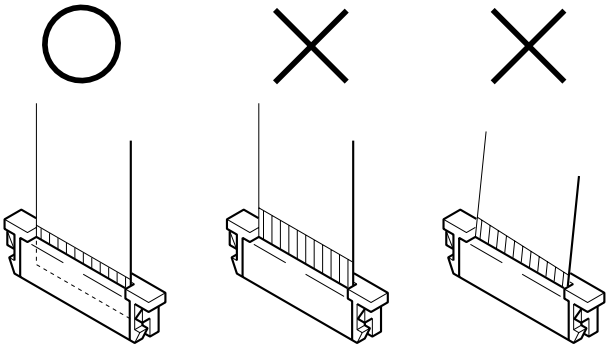
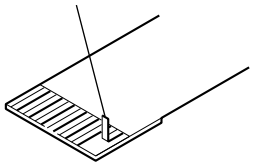
SECTION 1
SERVICE NOTE

1-1. NOTE FOR REPAIR

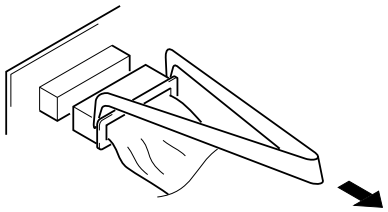
Make sure that the flat cable and flexible board are not cracked of bent at the terminal.
Do not insert the cable insufficiently nor crookedly.



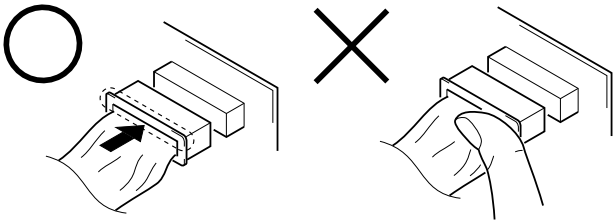
Cut and remove the part of gilt which comes off at the point.
(Be careful or some pieces of gilt may be left inside)



When remove a connector, don't pull at wire of connector.
It is possible that a wire is snapped.



When installing a connector, don't press down at wire of connector.
It is possible that a wire is snapped.

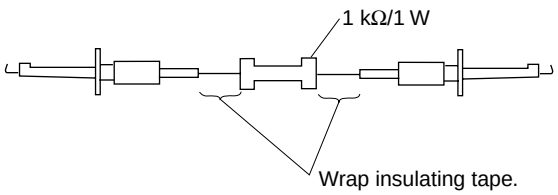


1-2. DISCHARGING OF THE ST-098 BOARD'S CHARGING CAPACITOR (C852)

The charging capacitor (C852) of the ST-098 board is charged up to the maximum 300 V potential.
There is a danger of electric shock by this high voltage when the capacitor is handled by hand. The electric shock is caused by the charged voltage which is kept without discharging when the main power of the unit is simply turned off. Therefore, the remaining voltage must be discharged as described below.

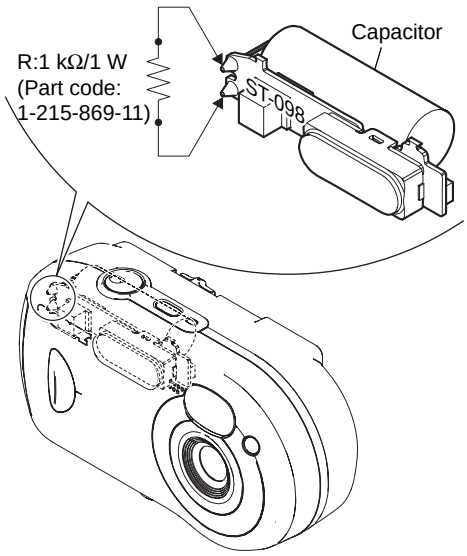
Preparing the Short Jig

To preparing the short jig, a small clip is attached to each end of a resistor of 1 kΩ /1 W (1-215-869-11).
Wrap insulating tape fully around the leads of the resistor to prevent electrical shock.



Discharging the Capacitor

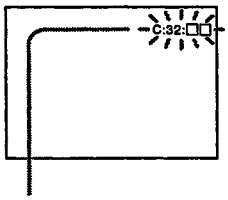
Short-circuit between the positive and the negative terminals of charged capacitor with the short jig about 10 seconds.



1-3. DESCRIPTION ON SELF-DIAGNOSIS DISPLAY

Self-diagnosis display

The camera has a self-diagnosis display. This function displays the camera condition with five-digits (a combination of a letter and figures) on the LCD screen. If this occurs check the following code chart. The five-digits display informs you of the camera's current condition. The last two digits (indicated by ☐☐) will differ depending on the state of the camera.



Self-diagnosis display

- C: ☐☐: ☐☐
  You can reverse the camera malfunction yourself. (However, contact your Sony dealer or local authorized Sony service facility when you cannot recover from the camera malfunction.)
- E: ☐☐: ☐☐
  Contact your Sony dealer or local authorized Sony service facility.

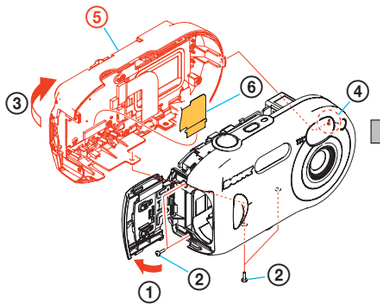
Display Code	Countermeasure	Cause	Caution Display During Error
C:32:☐☐	Turn the power off and on again.	Trouble with hardware.	SYSTEM ERROR
C:13:☐☐	Format the "Memory stick".	Unformatted memory stick is inserted.	FORMAT ERROR
	Insert a new "Memory Stick".	Memory stick is broken.	MEMORY STICK ERROR
E:61:☐☐	Checking of lens drive circuit.	When failed in the focus and zoom initialization.	—
E:91:☐☐	Checking of flash unit or replacement of flash unit.	Abnormality when flash is being charged.	
E:92:☐☐	Insert batteries correctly.	Batteries are not inserted correctly.	
	Turn the power off and on again.	Batteries were installed or removed when using the AC adaptor.	

HELP

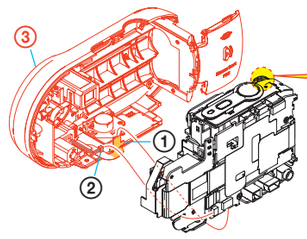
SECTION 2
DISASSEMBLY

2-1. FLOW CHART

The following flow chart shows the disassembly procedure.



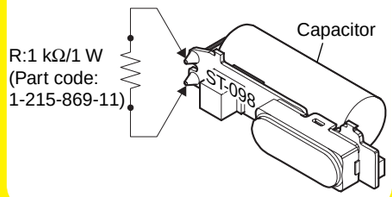
① Open the BT lid.
② Screw (M1.7) *x4*
③ Open rear cabinet in the direction of arrow.
④ Claw *x1*
⑤ Rear cabinet
Note: Flexible board is connected.
⑥ FP-859: CN201

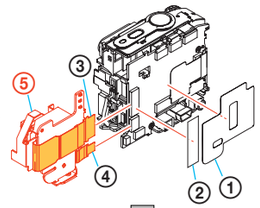


① Mic unit flexible: CN707
② DC motor harness: CN602
③ Front cabinet

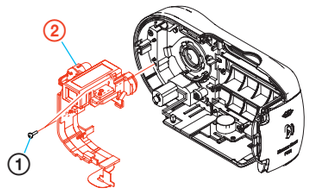
Note: High-voltage cautions

Discharging the Capacitor
Short-circuit between the two points with the short jig about 10 seconds.

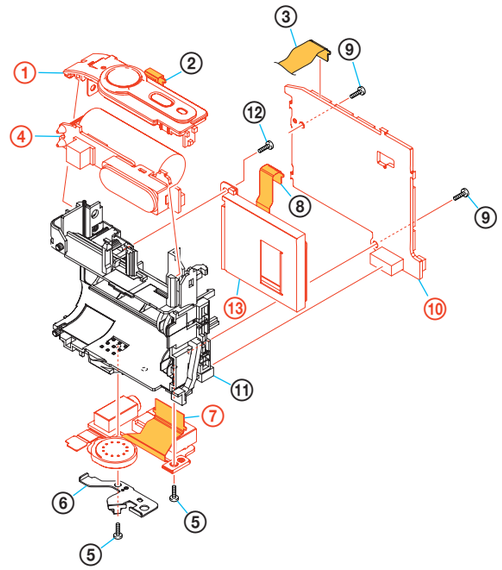




① Caution label
② Tape (A) HELP
③ FP-853: CN702
④ FP-856: CN601
⑤ Lens block



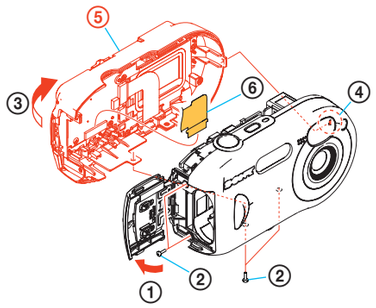
① Screw (M1.7) *x2*
② Microphone unit

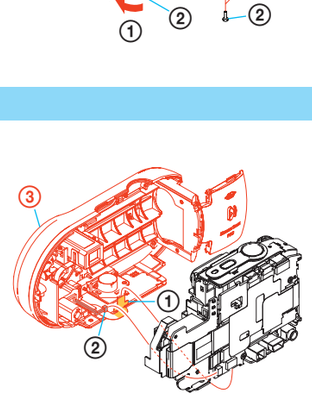


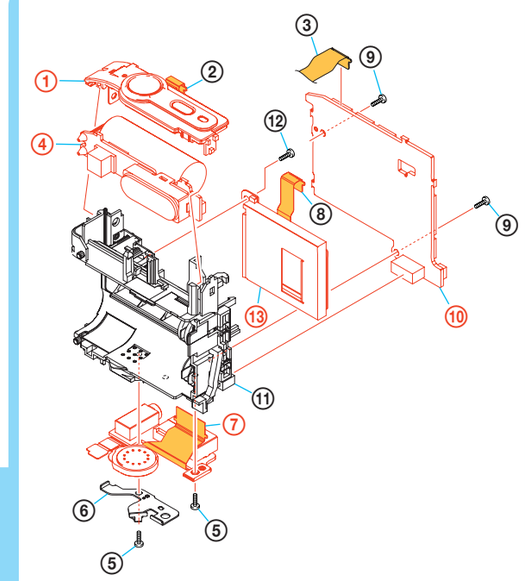
① Control switch block
② Control switch block flexible: CN706
③ FP-852: CN703
④ ST-098
⑤ Tapping screw *x2*
⑥ SP retainer plate
⑦ FP-860: CN751
⑧ FP-861: CN705
⑨ Tapping screw *x2*
⑩ SY-101
⑪ BT harness: CN001
⑫ Tapping screw *x1*
⑬ MS

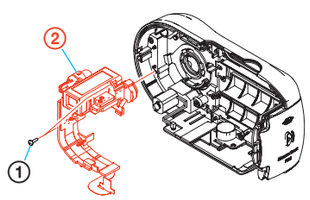
Refer to "5-1-3. BT HOLDER BLOCK SECTION" (Page 5-4) for details.

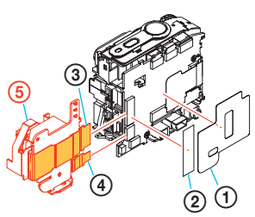
2-2. SY-101 BOARD SERVICE POSITION

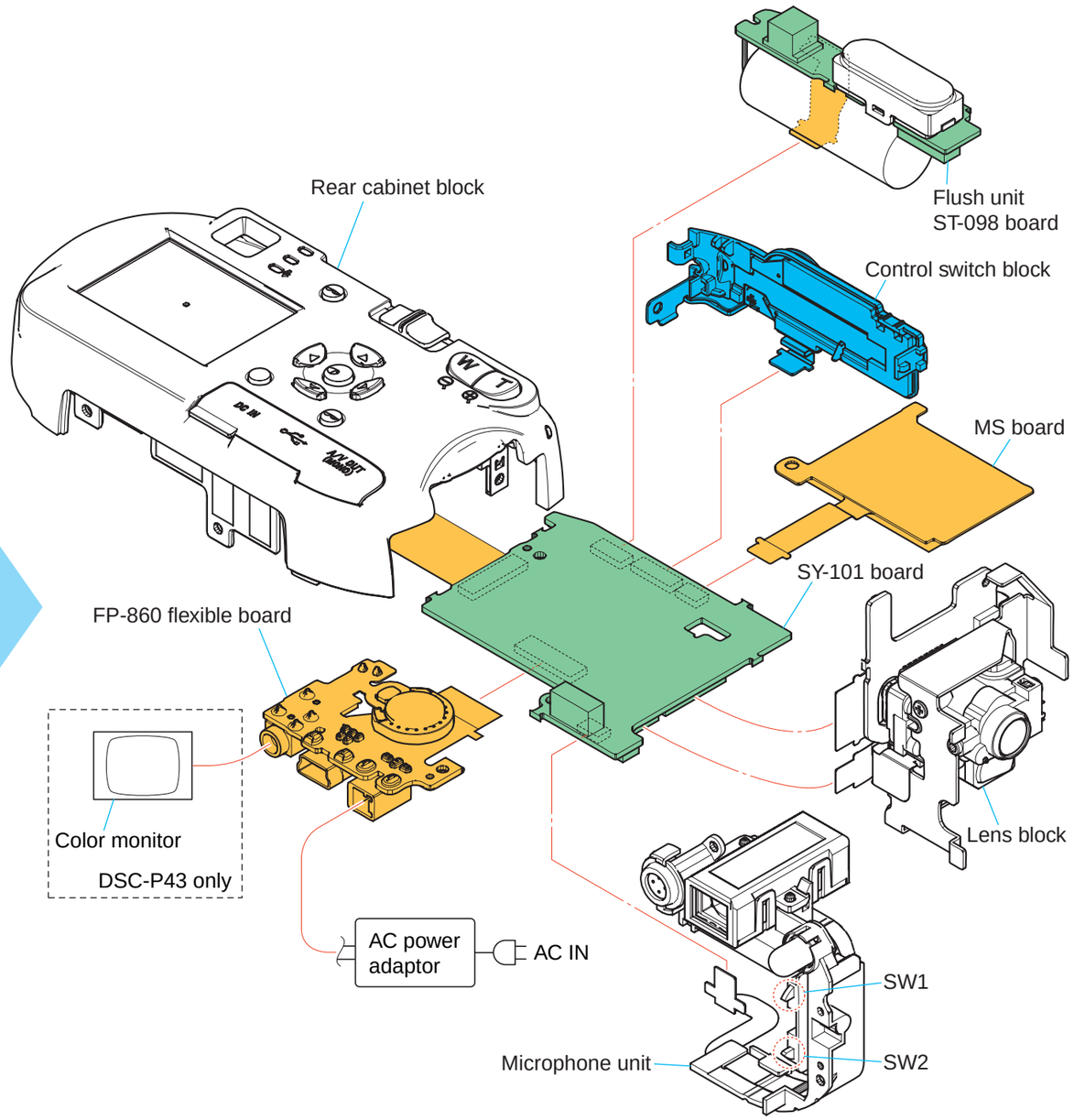












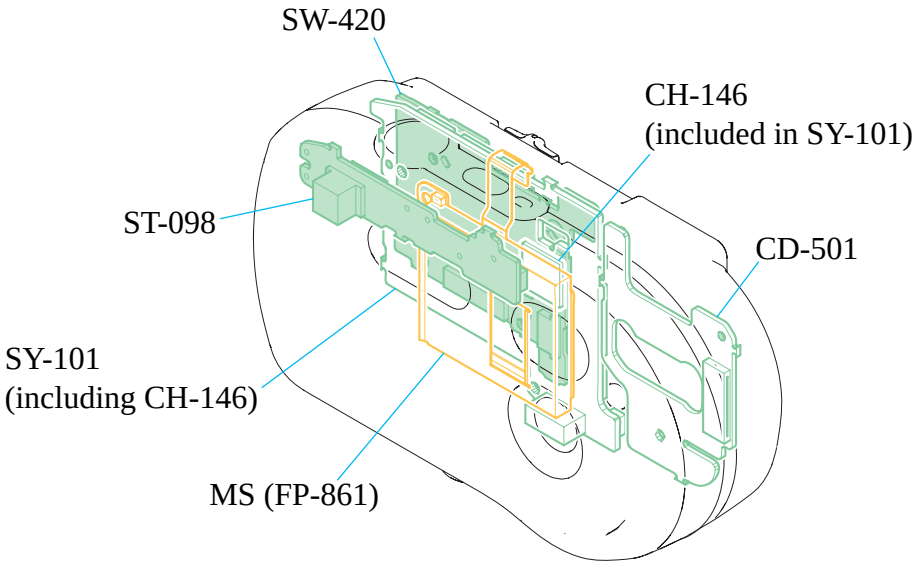
Setting the "STILL" or "MOVIE" mode

Before turn on the power, you have to keep a switch (SW1) pushed in order to maintain the "STILL" or "MOVIE" mode.

Setting the "VIEW" mode

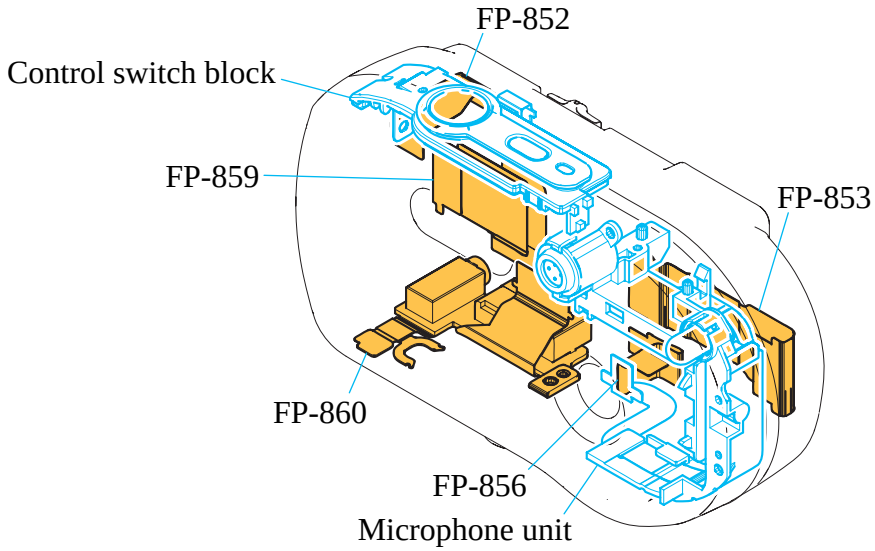
Before turn on the power, you have to keep a switch (SW2) pushed in order to maintain the "VIEW" mode.

2-3. CIRCUIT BOARDS LOCATION



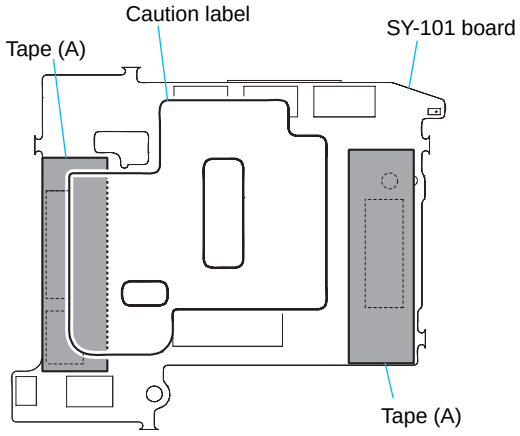
Board Name	Function
CD-501	CCD IMAGER
CH-146 (included in SY-101)	CCD SIGNAL PROCESS
MS (FP-861)	MEMORY STICK CONNECTOR
ST-098	FLASH DRIVE
SW-420	CONTROL SWITCH, LCD DRIVE
SY-101 (Including CH-146)	CAMERA MODULE, CAMERA DSP, LENS DRIVE, SH DSP, FRONT CONTROL, AUDIO, DC/DC CONVERTER

2-4. FLEXIBLE BOARDS LOCATION



HELP

Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.



3. BLOCK DIAGRAMS

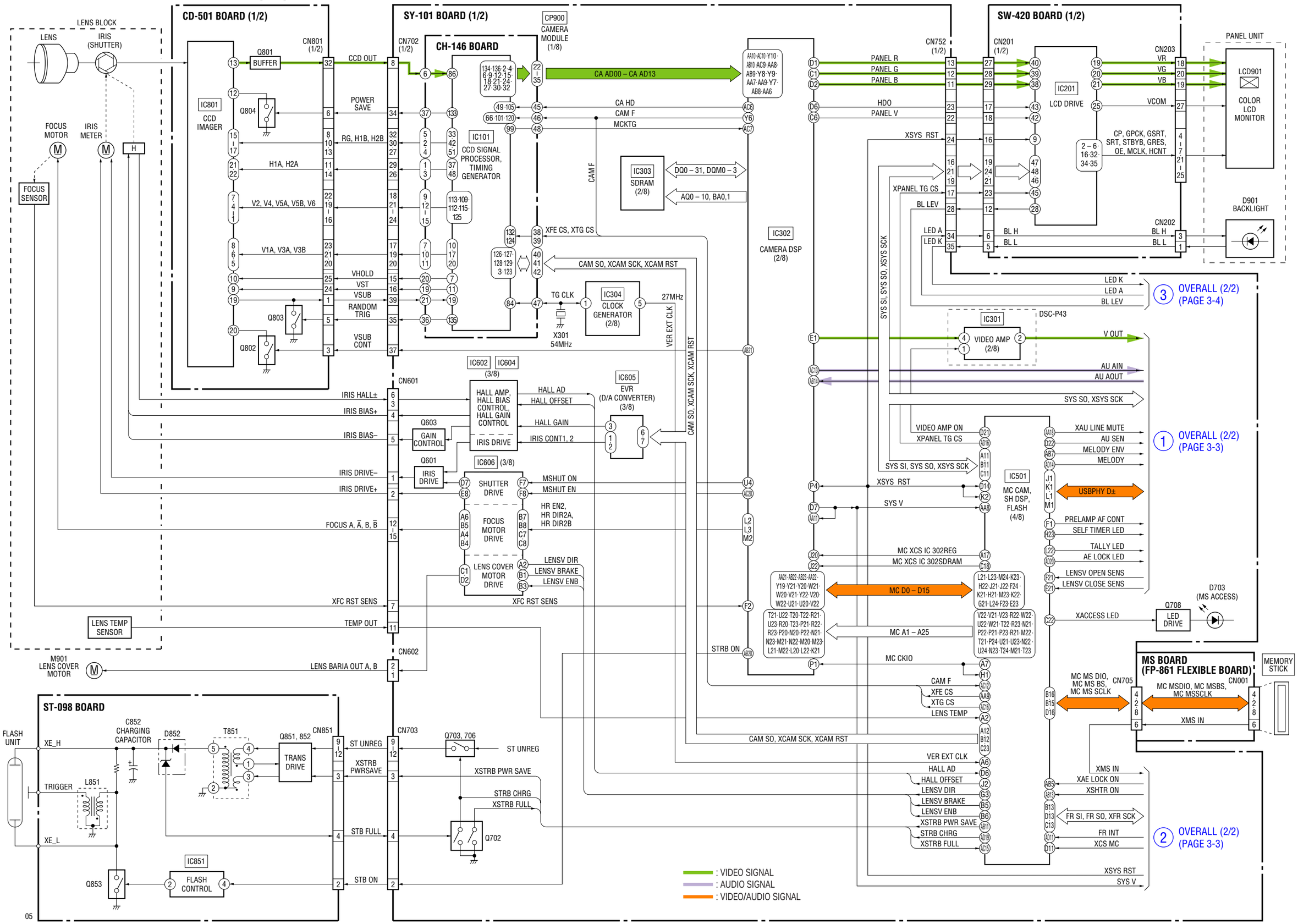
Link

- OVERALL BLOCK DIAGRAM (1/2)
- POWER BLOCK DIAGRAM (1/2)
- OVERALL BLOCK DIAGRAM (2/2)
- POWER BLOCK DIAGRAM (2/2)

SECTION 3
BLOCK DIAGRAMS

3-1. OVERALL BLOCK DIAGRAM (1/2)

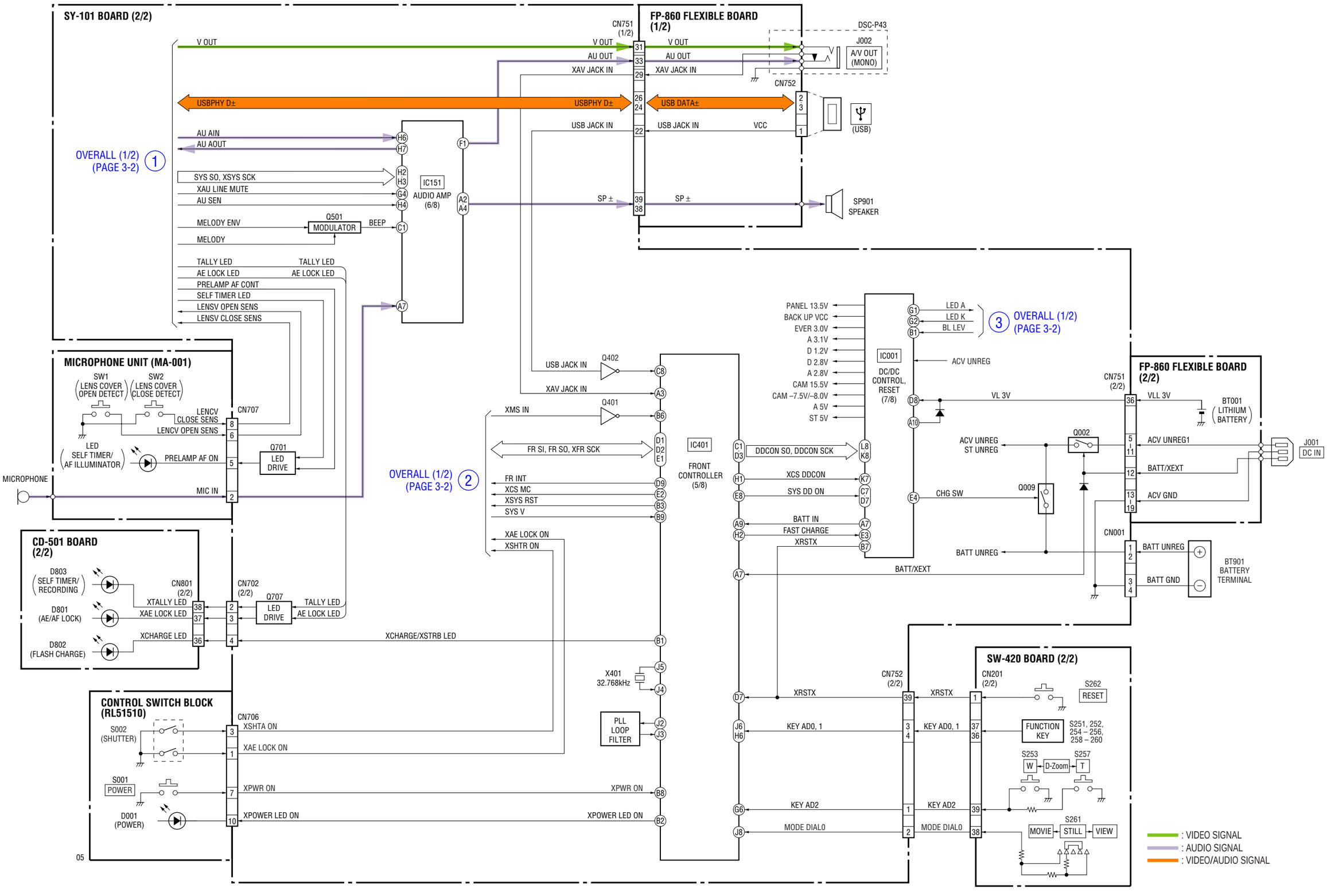
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-2. OVERALL BLOCK DIAGRAM (2/2)

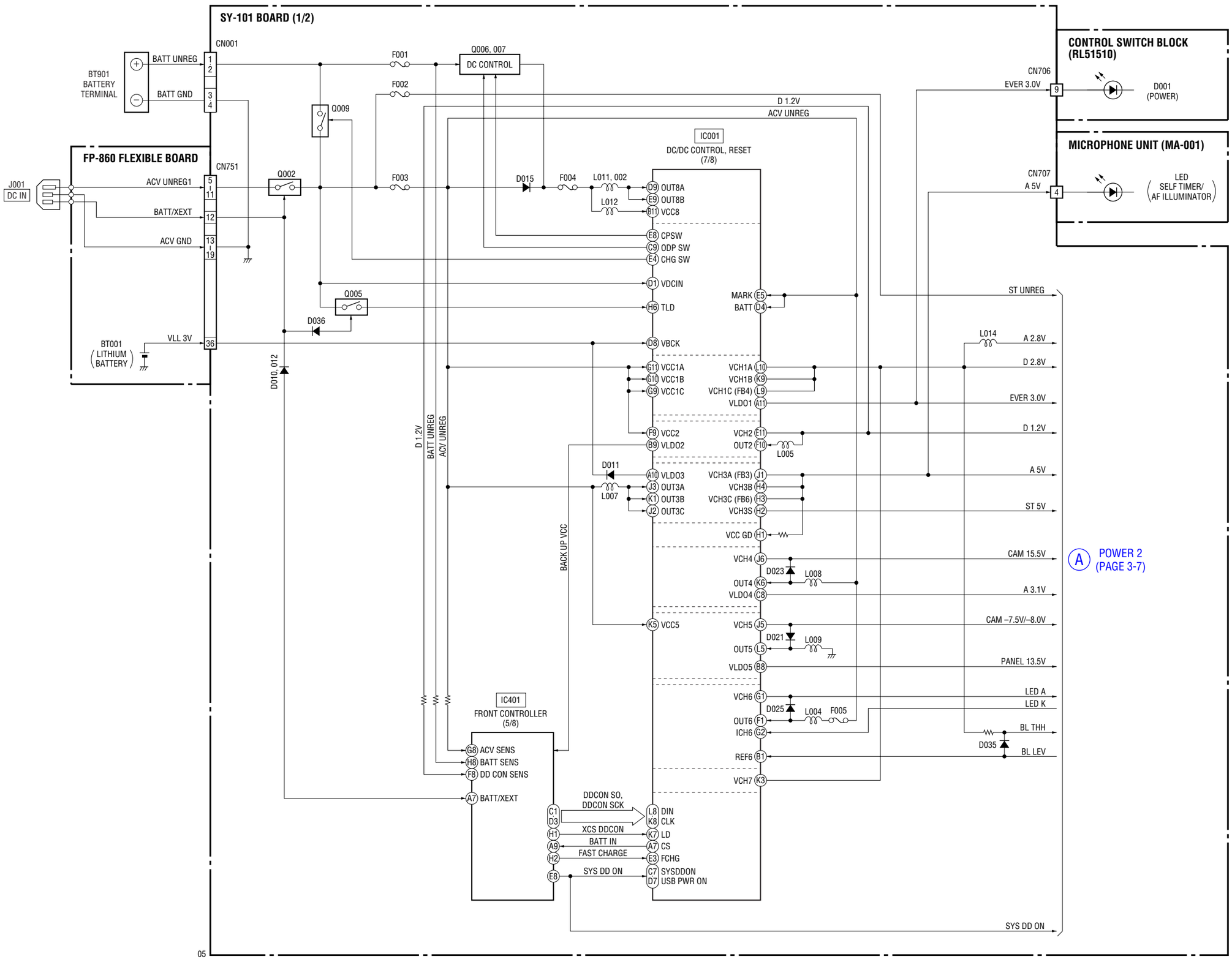
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

3-3. POWER BLOCK DIAGRAM (1/2)

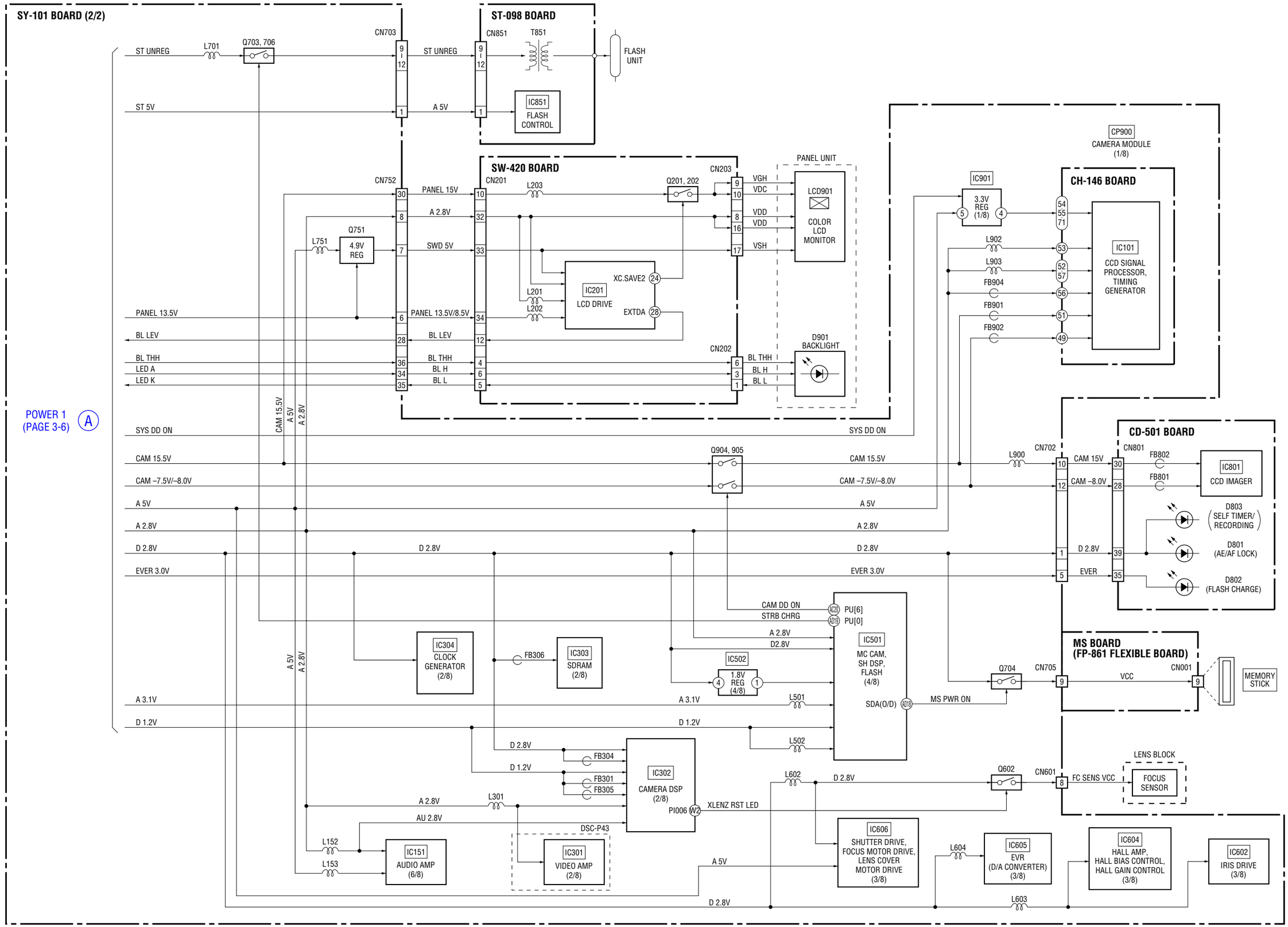
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3. BLOCK DIAGRAMS

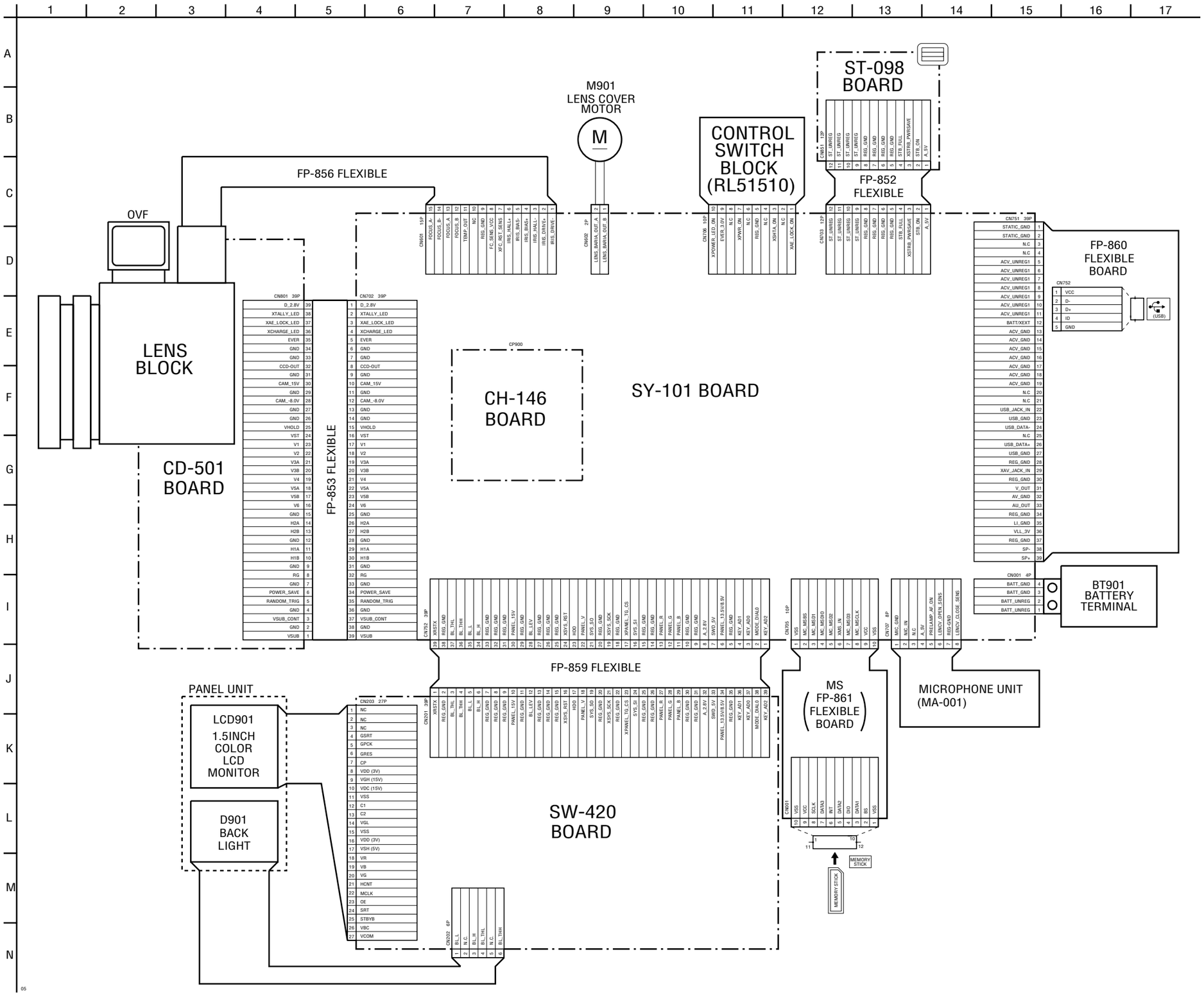
3-4. POWER BLOCK DIAGRAM (2/2)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



SECTION 4
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



4-2. SCHEMATIC DIAGRAMS

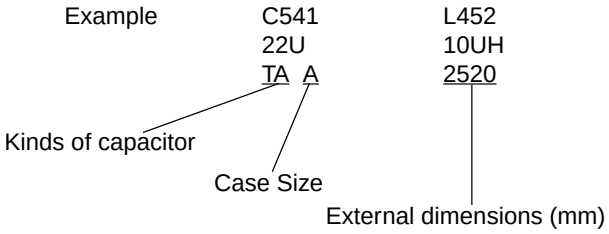
Link

4-2. SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in µF unless otherwise noted. pF : µµF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

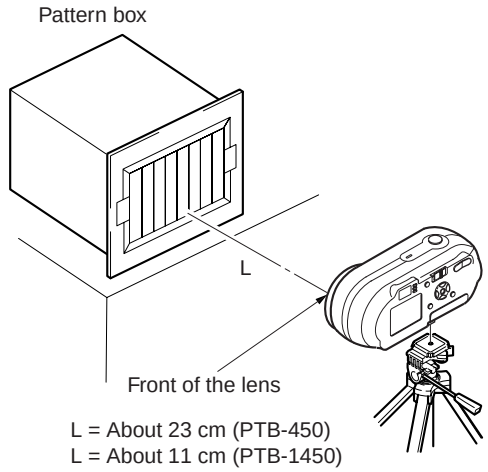


- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination.
  Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+,–) B LINE.
- : adjustment for repair.
- : VIDEO SIGNAL (ANALOG)
- : AUDIO SIGNAL (ANALOG)
- : VIDEO/AUDIO SIGNAL
- : VIDEO/AUDIO/SERVO SIGNAL
- : SERVO SIGNAL
- Circled numbers refer to waveforms.

(Measuring conditions voltage and waveform)

- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
  (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

1. Connection



2. Adjust the distance so that the display of Fig. a can be obtain.

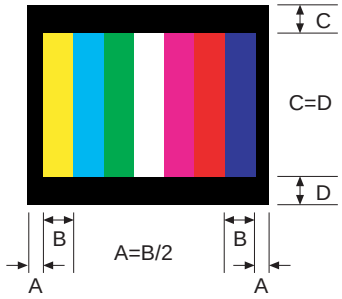


Fig.a (Picture on LCD display)
or
(Picture on under scan monitor TV)
: DSC-P43

When indicating parts by reference number, please include the board name.

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Note : Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifie.

For Schematic Diagram

• Refer to page 4-37 for printed wiring board.

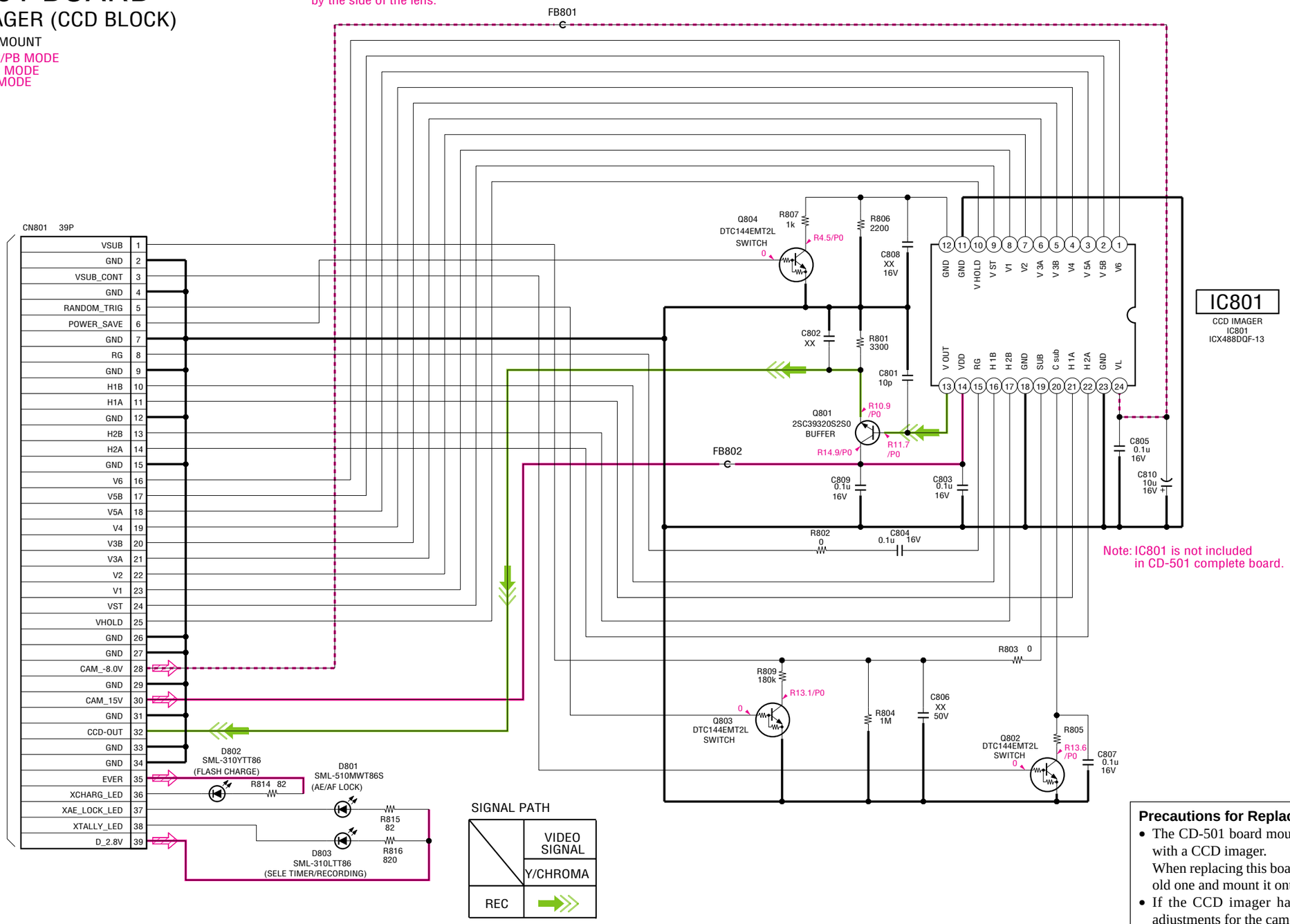
CD-501 BOARD

CCD IMAGER (CCD BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE
R:REC MODE
P:PB MODE

Note: Voltage and Waveform of mounted IC801 on CD-501 board can not be measured because this is mounted by the side of the lens.



Note: IC801 is not included in CD-501 complete board.

Precautions for Replacement of CCD Imager

- The CD-501 board mounted as a repair part is not equipped with a CCD imager.
  When replacing this board, remove the CCD imager from the old one and mount it onto the new one.
- If the CCD imager has been replaced, carry out all the adjustments for the camera section.
- As the CCD imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

Schematic diagrams of the CH-146 and SY-101 boards are not shown.
Pages from 4-9 to 4-26 are not shown.

For Schematic Diagram

• Refer to page 4-43 for printed wiring board.

SW-420 BOARD

CONTROL SWITCH, LCD DRIVE (PD BLOCK, SW BLOCK)

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

SY-101 (8/8) CN752 THROUGH THE FP-859 FLEXIBLE (PAGE 4-25 of LEVEL3)

CN201 39P

IC201 LCD DRIVE IC201 CM7103L43-T4

① IC201 ㊳ REC/PB 370 mVp-p H

② IC201 ㊴ REC/PB 400 mVp-p H

③ IC201 ㊵ REC/PB 480 mVp-p H

④ IC201 ㊷ REC/PB 2.9 Vp-p V

⑤ IC201 ㊸ REC/PB 2.9 Vp-p H

⑥ IC201 ⑱ REC/PB 3.0 Vp-p 2H

⑦ IC201 ⑳ REC/PB 3.0 Vp-p 2H

⑧ IC201 ㉑ REC/PB 3.3 Vp-p 2H

⑨ IC201 ㉕ REC/PB 5.8 Vp-p 2H

Q201 DTC144EMT2L SWITCH

Q202 SSM3J09FU(TE85L) SWITCH

CN203 27P

CN202 6P

PANEL UNIT

LCD901 1.5INCH COLOR LCD MONITOR

D901 BACKLIGHT

S261 (MODE SWITCH) MOVIE STILL VIEW

S262 RESET

S251 (FLASH)

S252 (REVIEW)

S253 W D-Zoom T

S254 (SET)

S255 (SELF TIMER)

S256 (SPOT METERING)

S257

S258 MENU

S259 LCD STATUS LCD ON/OFF

S260 IMAGE SIZE/ DELETE

D251 MAZW068H0LS0

D252 MAZW068H0LS0

D253 MA2S111-(K8).SD

D202 RB481YT2R

LND251 STATIC_GND

SIGNAL PATH

	VIDEO SIGNAL	CHROMA
REC	➡	
PB	⇨	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

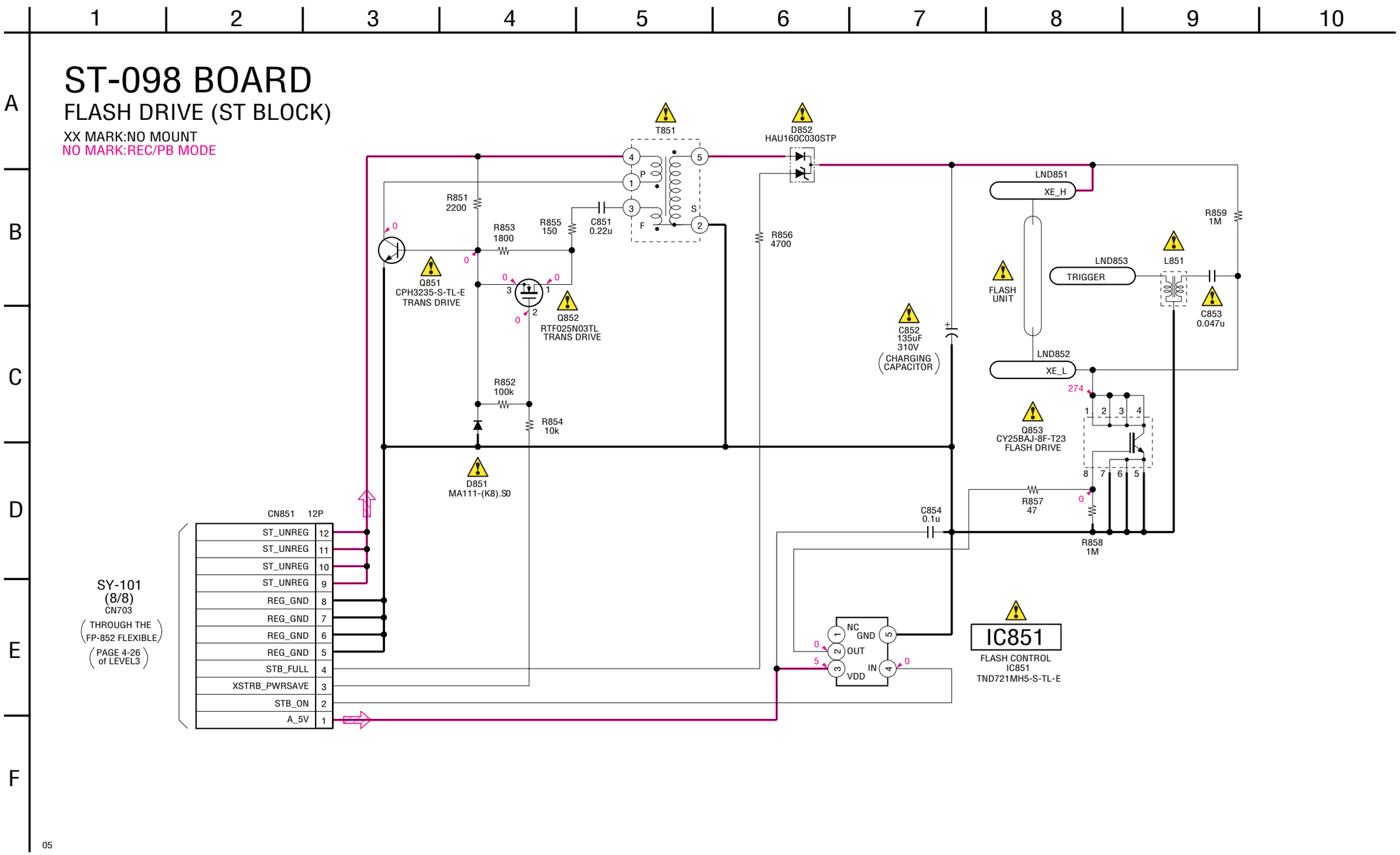
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

For Schematic Diagram
• Refer to page 4-45 for printed wiring board.

ST-098 BOARD

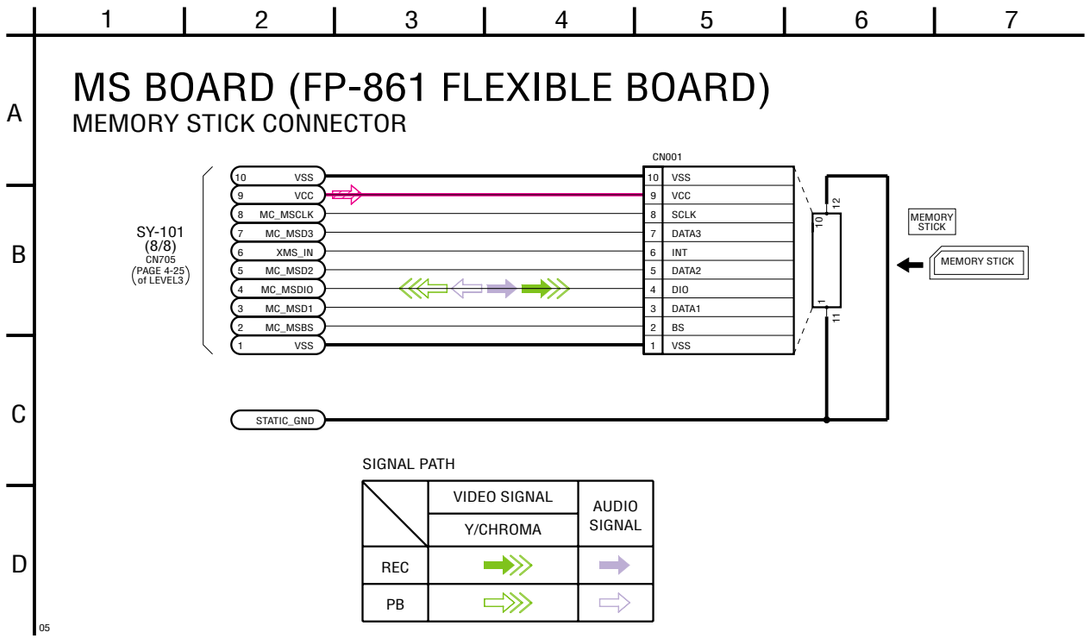
FLASH DRIVE (ST BLOCK)

XX MARK:NO MOUNT
NO MARK:REC/PB MODE

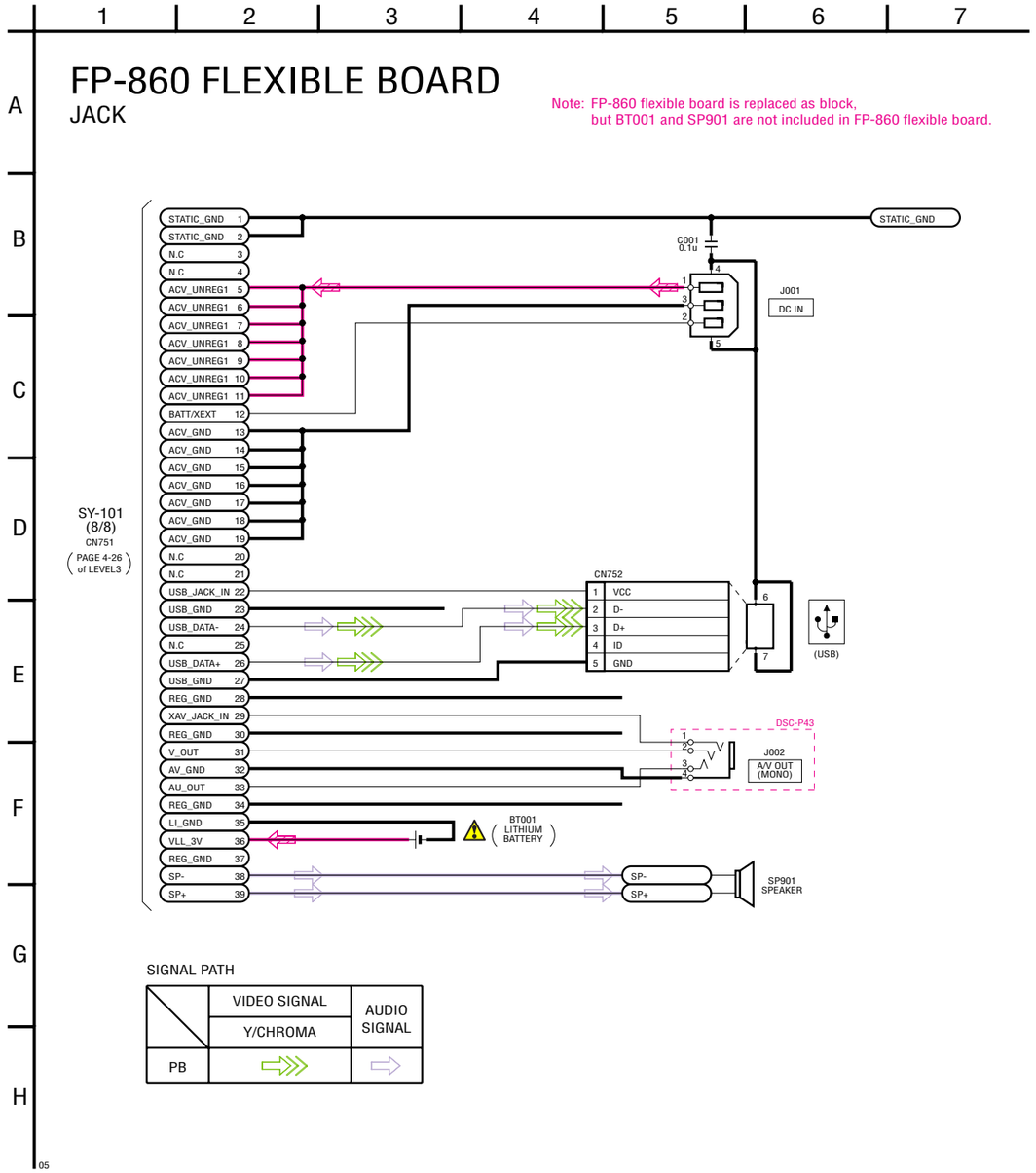


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

For Schematic Diagram
• Refer to page 4-47 for printed wiring board.



For Schematic Diagram
• Refer to page 4-48 for printed wiring board.

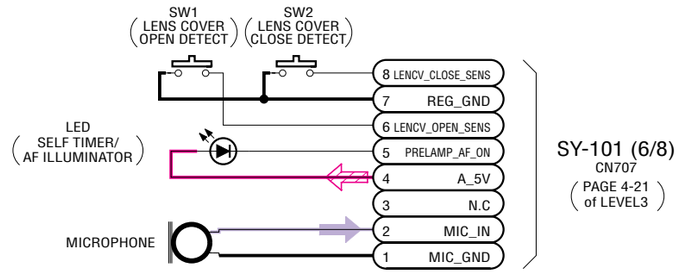


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

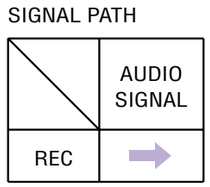
4-2. SCHEMATIC DIAGRAMS

MICROPHONE UNIT (MA-001)

(MICROPHONE UNIT (MA-001) is replaced as block, so that PRINTED WIRING BOARD is omitted.)

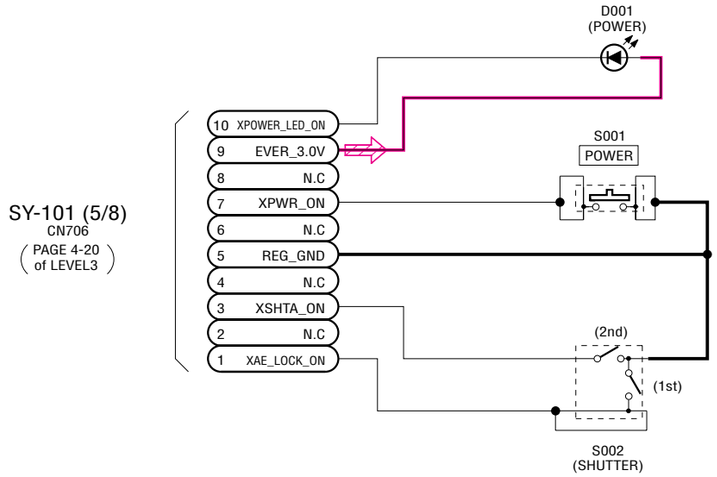


SIGNAL PATH



CONTROL SWITCH BLOCK (RL51510)

(CONTROL SWITCH BLOCK (RL51510) is replaced as block, so that PRINTED WIRING BOARD is omitted.)



4-3. PRINTED WIRING BOARDS

Link

- CD-501 BOARD
- MS BOARD (FP-861 FLEXIBLE BOARD)
- SW-420 BOARD
- FP-860 FLEXIBLE BOARD
- ST-098 BOARD
- COMMON NOTE FOR PRINTED WIRING BOARDS
- MOUNTED PARTS LOCATION
- CIRCUIT BOARDS LOCATION
- FLEXIBLE BOARDS LOCATION

Board Name	Function
CD-501	CCD IMAGER
SW-420	CONTROL SWITCH, LCD DRIVE
ST-098	FLASH DRIVE
MS (FP-861)	MEMORY STICK CONNECTOR

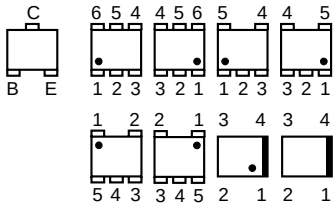
4-3. PRINTED WIRING BOARDS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

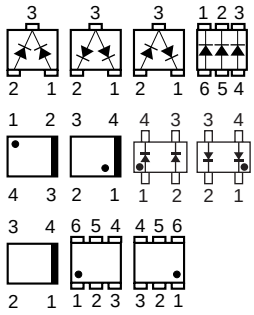
- : Uses unleaded solder.
- : Circuit board
  : Flexible board
  Pattern from the side which enables seeing.
  : pattern of the rear side
  (The other layers' patterns are not indicated)
- Through hole is omitted.
- Circled numbers refer to waveforms.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation

- Chip parts.

Transistor



Diode



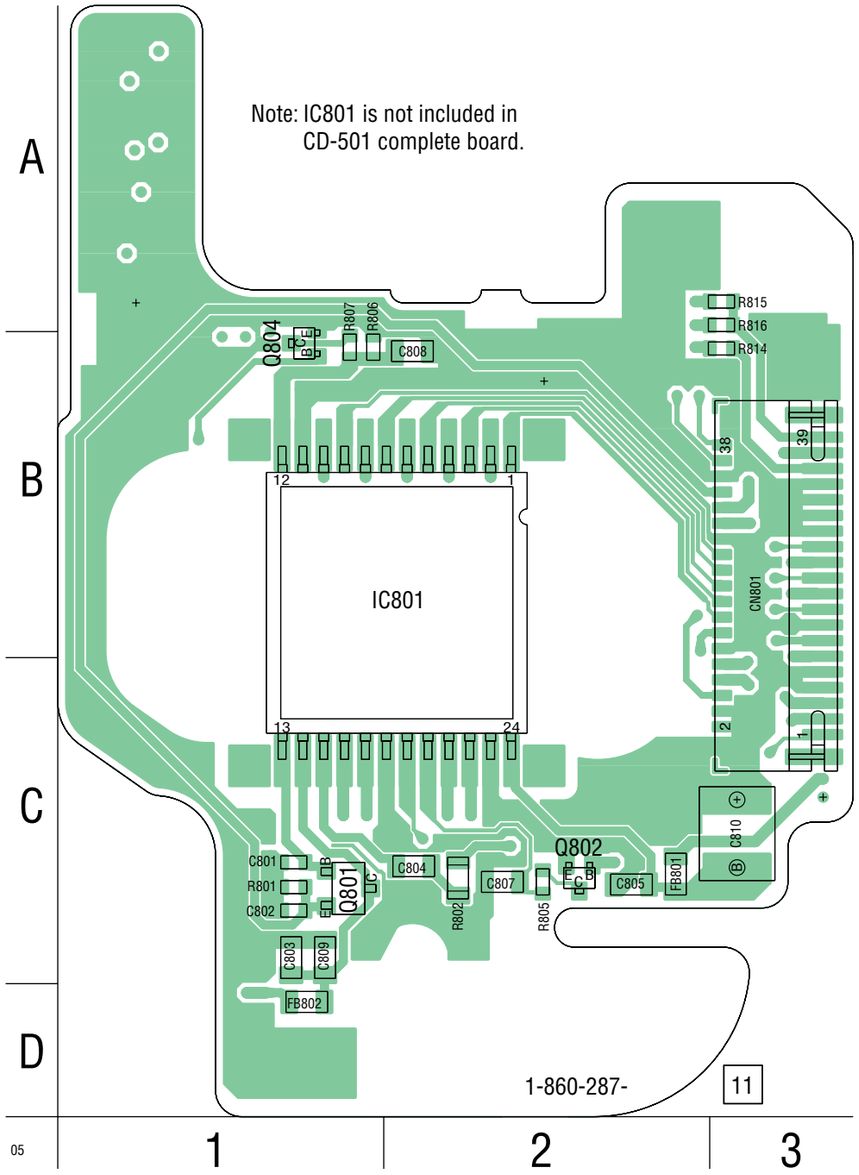
Board Name	Parts Location	Pattern	
		Total Number of Layers	Layers Not Indicated
CD-501	4-49	4 layers	2 and 3 layers
SW-420	4-52	4 layers	2 and 3 layers
ST-098	4-52	4 layers	2 and 3 layers
MS	–	1 layer	–

CD-501

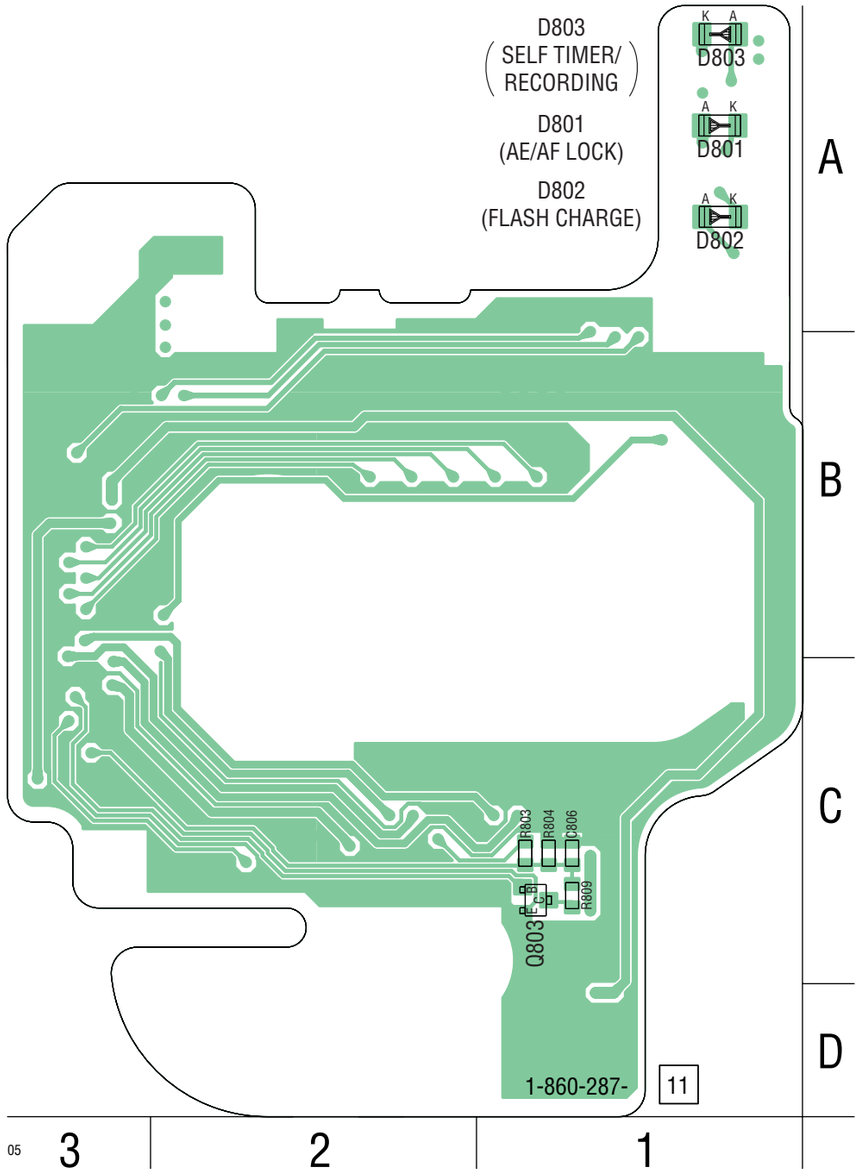
Note for Printed Wiring Board (See page 4-35).

: Uses unleaded solder.

CD-501 BOARD (SIDE A)



CD-501 BOARD (SIDE B)



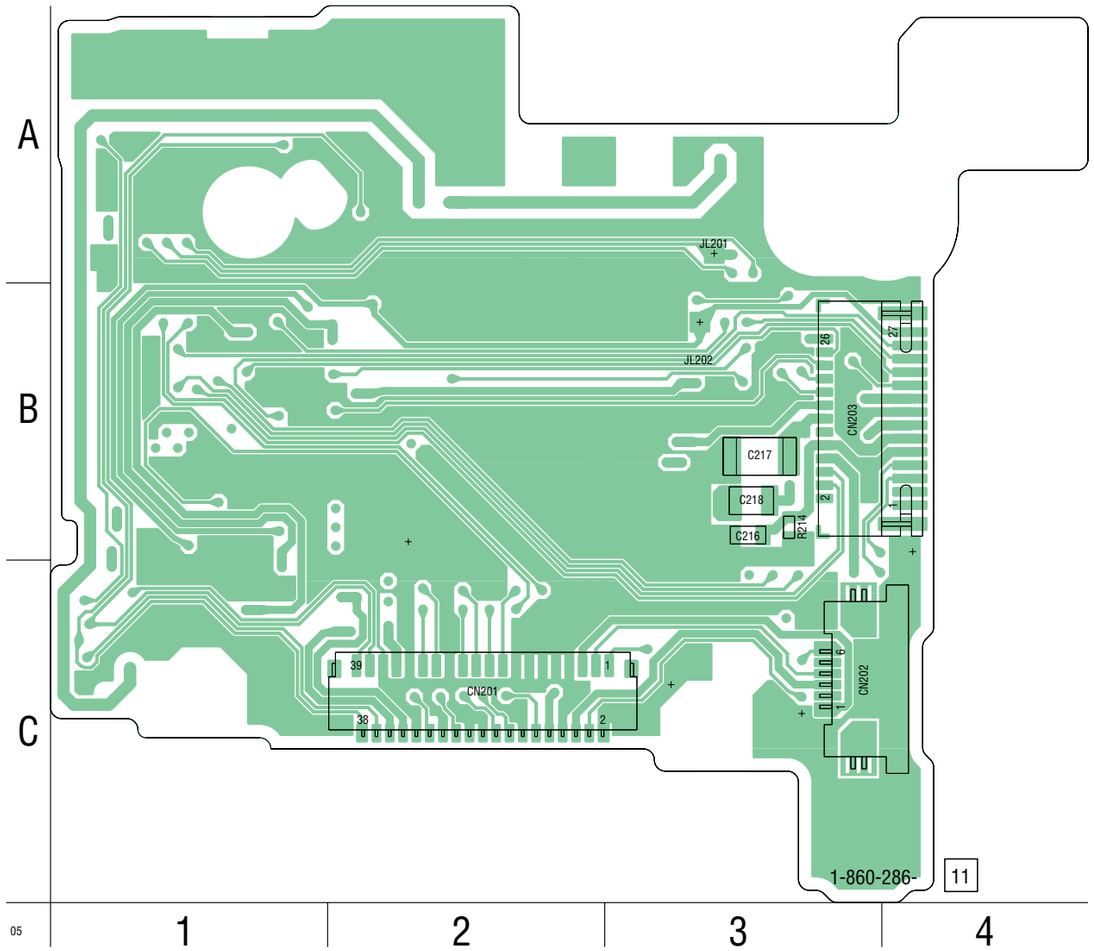
Printed wiring boards of the CH-146 and SY-101 boards are not shown.
Pages from 4-39 to 4-42 are not shown.

SW-420

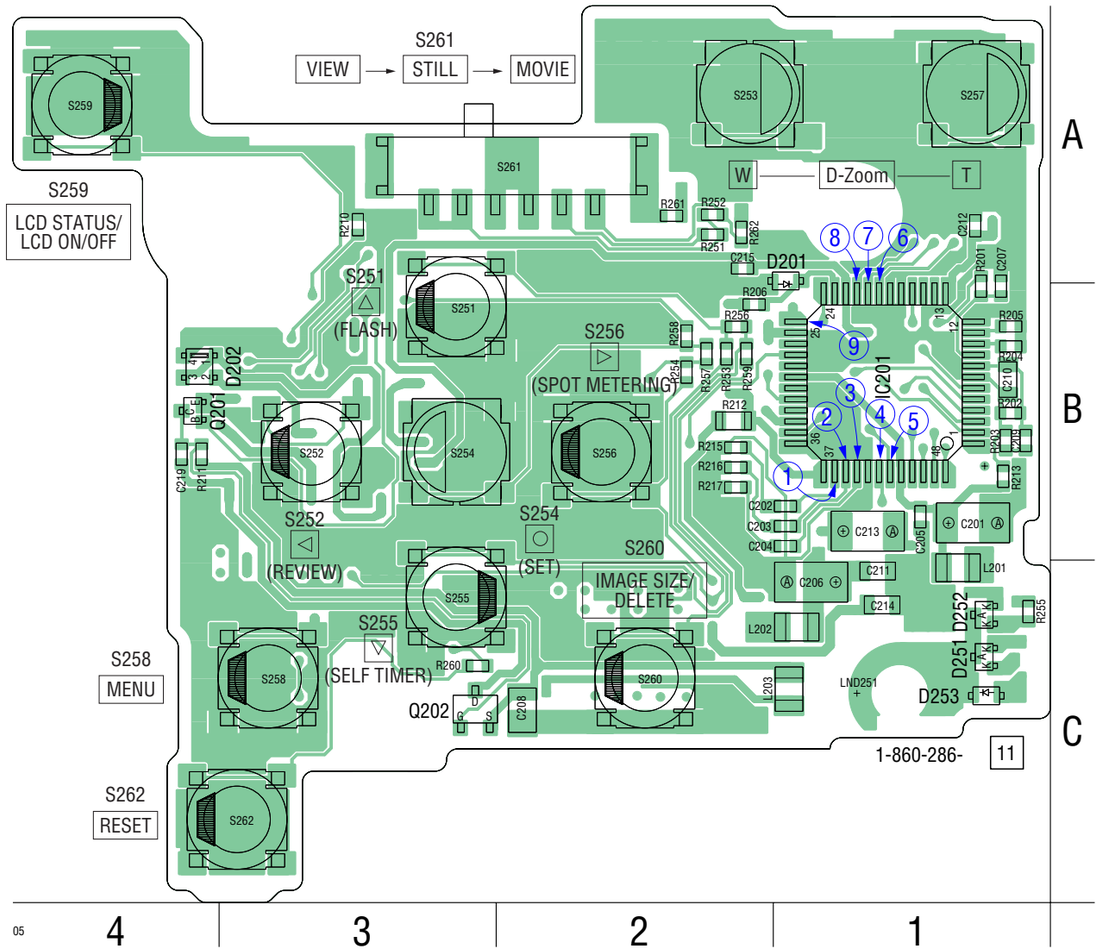
Note for Printed Wiring Board (See page 4-35).

: Uses unleaded solder.

SW-420 BOARD (SIDE A)



SW-420 BOARD (SIDE B)

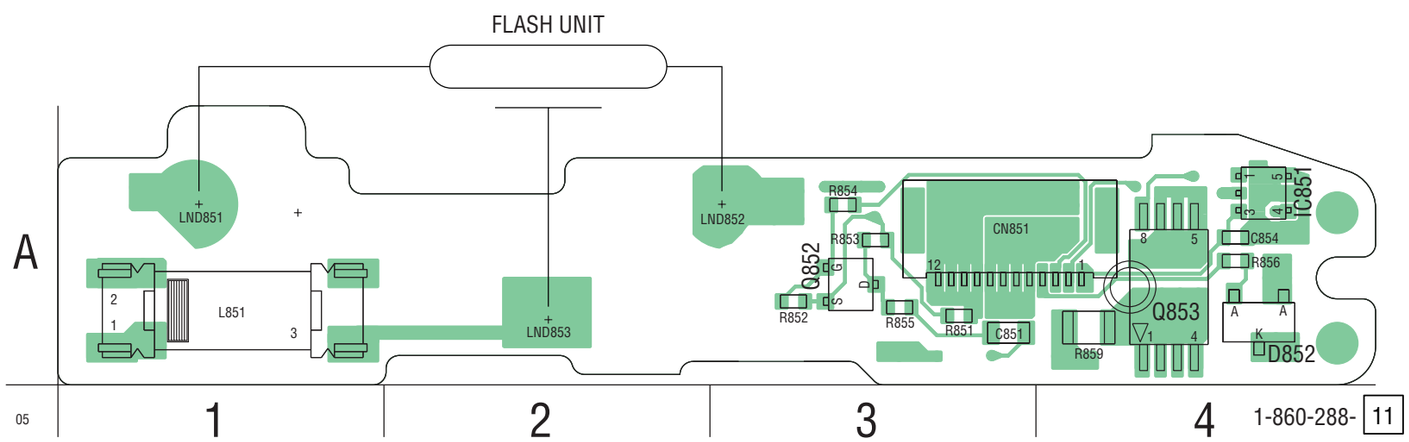


ST-098

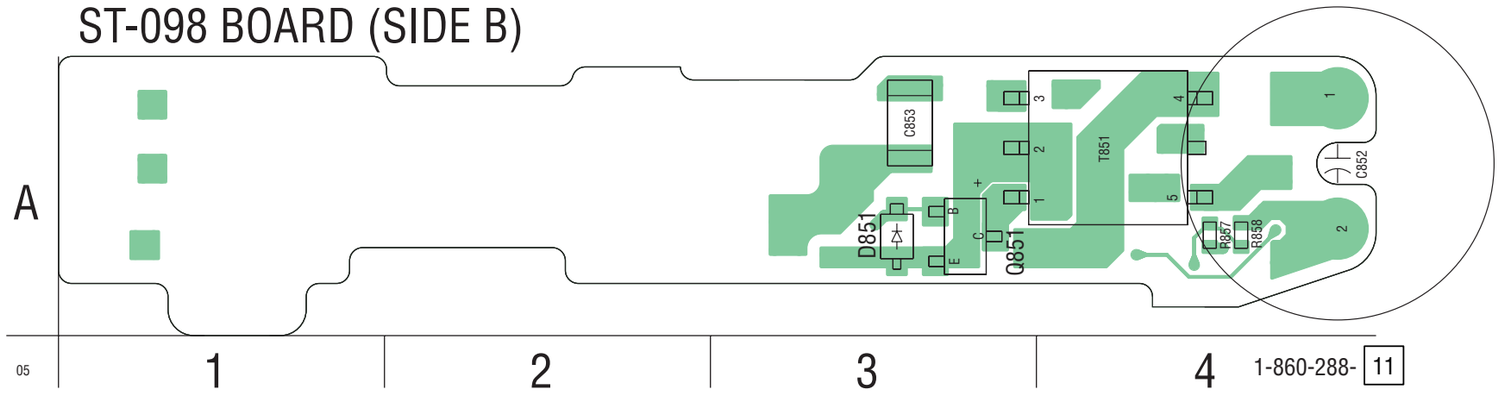
Note for Printed Wiring Board (See page 4-35).

: Uses unleaded solder.

ST-098 BOARD (SIDE A)



ST-098 BOARD (SIDE B)

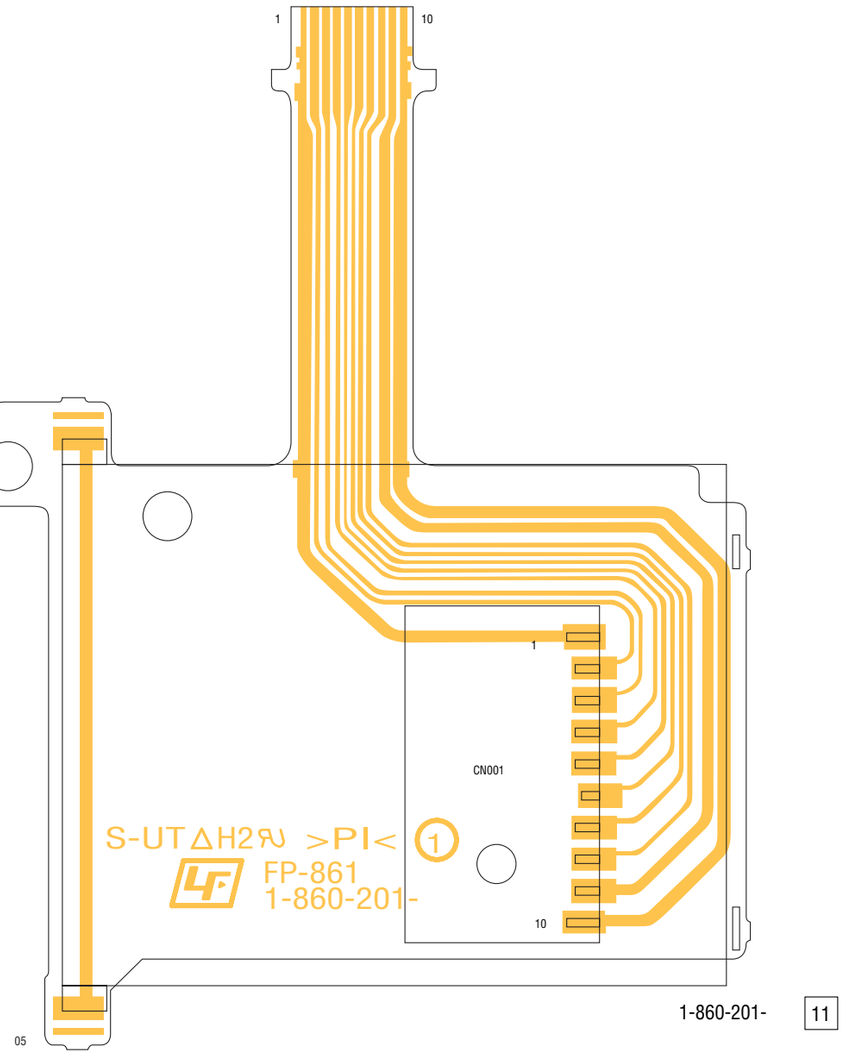


MS (FP-861 FLEXIBLE)

Note for Printed Wiring Board (See page 4-35).

: Uses unleaded solder.

MS BOARD
(FP-861 FLEXIBLE BOARD)

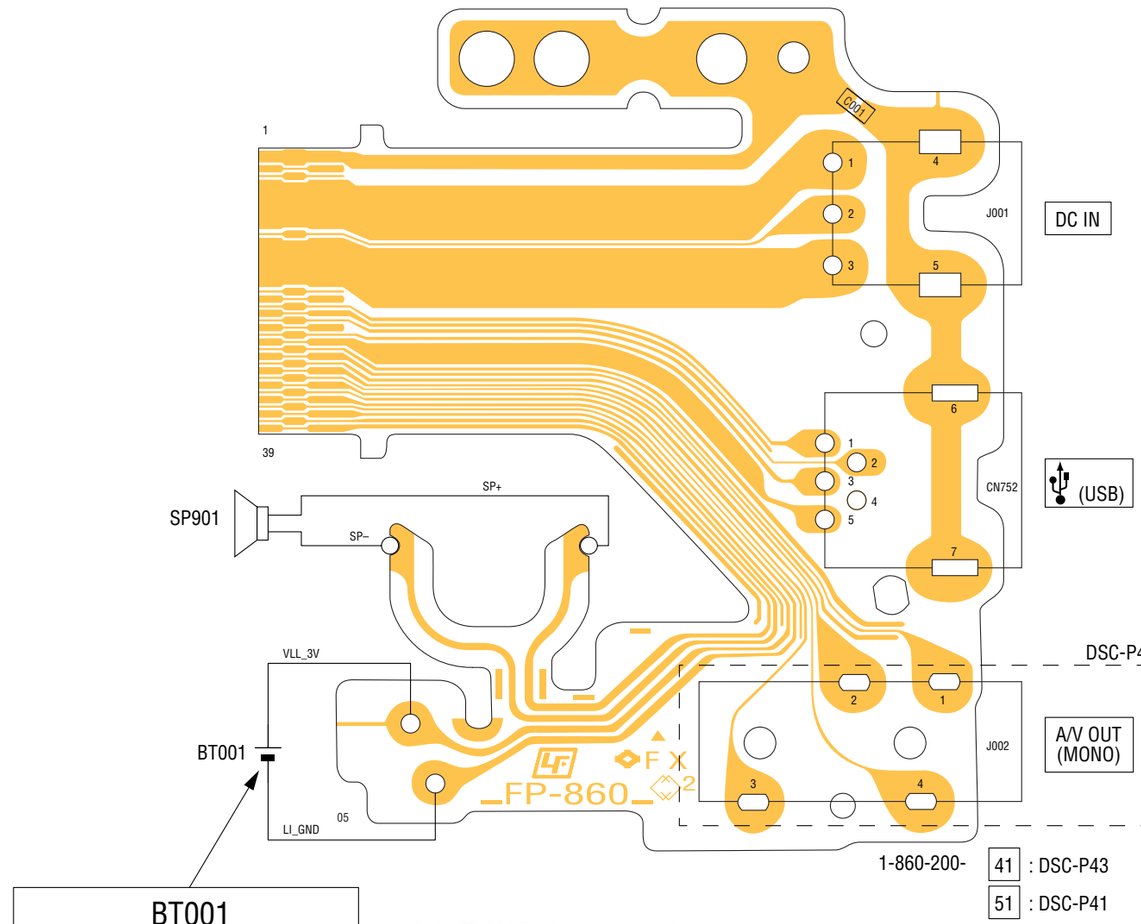


FP-860 FLEXIBLE

Note for Printed Wiring Board (See page 4-35).

: Uses unleaded solder.

FP-860 FLEXIBLE BOARD



Note: FP-860 flexible board is replaced as block,
but BT001 and SP901 are not included in FP-860 flexible board.

4-3. PRINTED WIRING BOARDS

4-4. MOUNTED PARTS LOCATION

no mark : side A
* mark : side B

CD-501 BOARD

	C801	C-1
	C803	C-1
	C804	C-2
	C805	C-2
	C807	C-2
	C809	C-1
	C810	C-3
	CN801	B-3
*	D801	A-1
*	D802	A-1
*	D803	A-1
	FB801	C-2
	FB802	D-1
	IC801	B-2
	Q801	C-1
	Q802	C-2
*	Q803	C-1
	Q804	B-1
	R801	C-1
	R802	C-2
*	R803	C-1
*	R804	C-1
	R805	C-2
	R806	A-1
	R807	A-1
*	R809	C-1
	R814	B-3
	R815	A-3
	R816	A-3

Mounted parts location of the CH-146 and SY-101 boards are not shown.
Pages 4-50 and 4-51 are not shown.

4-3. PRINTED WIRING BOARDS

no mark : side A
* mark : side B

SW-420 BOARD

*	C201	B-1
*	C202	B-2
*	C203	B-2
*	C204	B-2
*	C205	B-1
*	C206	C-1
*	C207	A-1
*	C208	C-2
*	C209	B-1
*	C210	B-1
*	C211	C-1
*	C212	A-1
*	C213	B-1
*	C214	C-1
	C216	B-3
	C217	B-3
	C218	B-3
	CN201	C-2
	CN202	C-3
	CN203	B-3
*	D202	B-3
*	D251	C-1
*	D252	C-1
*	D253	C-1
*	IC201	B-1
*	L201	C-1
*	L202	C-2
*	L203	C-2
*	Q201	B-4
*	Q202	C-3
*	R201	A-1
*	R203	B-1
*	R204	B-1
*	R205	B-1
*	R206	B-2
*	R210	A-3
*	R211	B-4
*	R212	B-2
	R214	B-3
*	R215	B-2
*	R216	B-2
*	R217	B-2
*	R251	A-2
*	R252	A-2
*	R253	B-2
*	R254	B-2
*	R255	C-1
*	R256	B-2
*	R257	B-2
*	R258	B-2
*	R259	B-2
*	R260	C-3
*	R262	A-2
*	S251	B-3
*	S252	B-3
*	S253	A-2
*	S254	B-3
*	S255	C-3
*	S256	B-2
*	S257	A-1
*	S258	C-3
*	S259	A-4
*	S260	C-2
*	S261	A-2
*	S262	C-3

ST-098 BOARD

	C851	A-3
*	C853	A-3
	C854	A-4
	CN851	A-3
*	D851	A-3
	D852	A-4
	IC851	A-4
	L851	A-1
*	Q851	A-3
	Q852	A-3
	Q853	A-4
	R851	A-3
	R852	A-3
	R853	A-3
	R854	A-3
	R855	A-3
	R856	A-4
*	R857	A-4
*	R858	A-4
	R859	A-4
*	T851	A-4

NOTE

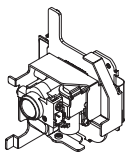
5. REPAIR PARTS LIST

NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

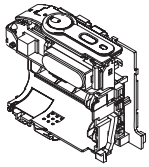
Link

EXPLODED VIEWS

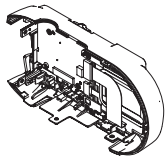
A FRONT CABINET BLOCK SECTION



B LENS BLOCK SECTION



C BT HOLDER BLOCK SECTION



D REAR CABINET BLOCK SECTION

Link

ELECTRICAL PARTS LIST

ACCESSORIES

CD-501 BOARD	B	ST-098 BOARD	C		
MS BOARD	C	SW-420 BOARD	D		

5. REPAIR PARTS LIST

SECTION 5
REPAIR PARTS LIST

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , µPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  AR : Argentine model
  AUS : Australian model
  BR : Brazilian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  JE : Tourist model
  KR : Korean model

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

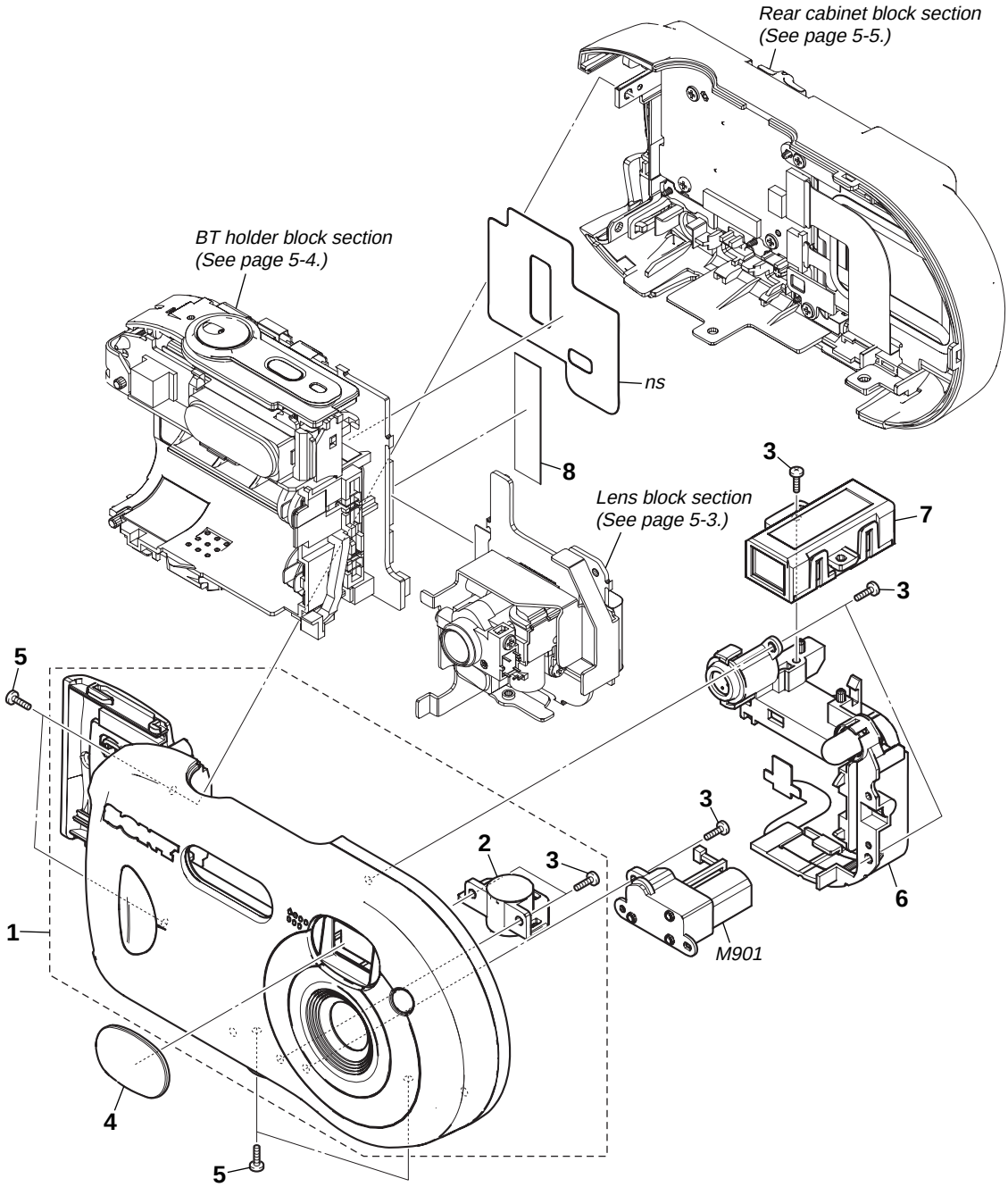
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

5-1-1. FRONT CABINET BLOCK SECTION

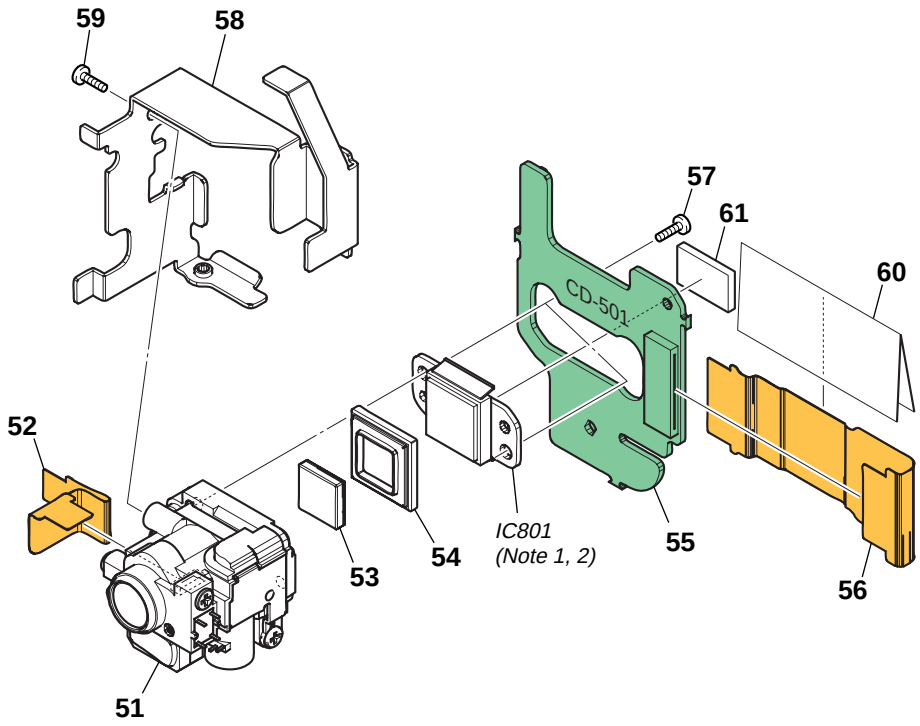
ns: not supplied



Ref. No.	Part No.	Description
1	X-2021-517-1	CABINET (FRONT) ASSY (450) (P41)
1	X-3954-373-1	CABINET (FRONT) ASSY (510) (P43)
2	3-080-977-01	TRIPOD
3	3-080-204-21	SCREW, TAPPING, P2
4	3-090-844-01	WINDOW (510), OVF
5	2-025-236-31	SCREW (M1.7)
6	1-478-387-11	MICROPHONE UNIT (MA-001)
7	1-758-897-11	FINDER, OPTICAL (LSV-860A)
8	3-941-343-21	TAPE (A)
M901	1-763-818-21	MOTOR, DC 8C-027G

5. REPAIR PARTS LIST

5-1-2. LENS BLOCK SECTION



(Note 1) IC801 is not included in CD-501 complete board.

(Note 2) Be sure to read “Precuations for Replacement of CCD Imager” on page 4-8 when changing the CCD imager.

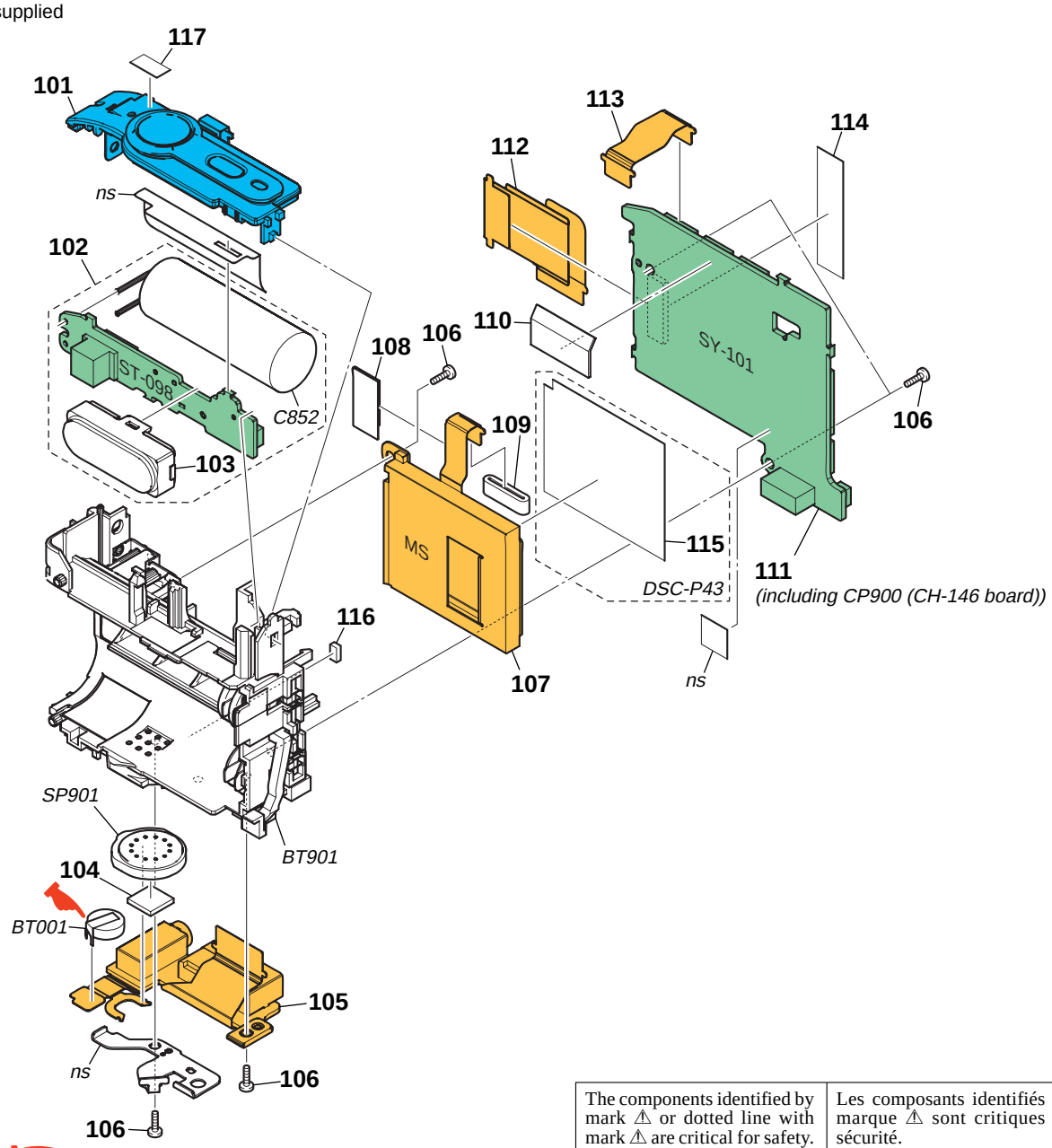
Ref. No.	Part No.	Description
51	8-848-757-01	LSV-780A
52	1-860-196-21	FP-856 FLEXIBLE BOARD
53	1-788-102-11	OPTICAL FILTER BLOCK
54	3-074-038-01	RUBBER (MM), CCD SEAL
55	A-7113-099-A	CD-501 BOARD, COMPLETE
56	1-860-193-21	FP-853 FLEXIBLE BOARD

Ref. No.	Part No.	Description
57	3-078-890-11	SCREW, TAPPING
58	3-090-843-01	FRAME (510), LENS
59	3-080-204-21	SCREW, TAPPING, P2
60	2-109-447-01	SHEET (510), CD
61	2-109-995-01	SHEET (510), LCD
IC801	A-7112-263-A	CCD BLOCK ASSY (CCD IMAGER) (Note 1, 2)

5. REPAIR PARTS LIST

5-1-3. BT HOLDER BLOCK SECTION

ns: not supplied



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

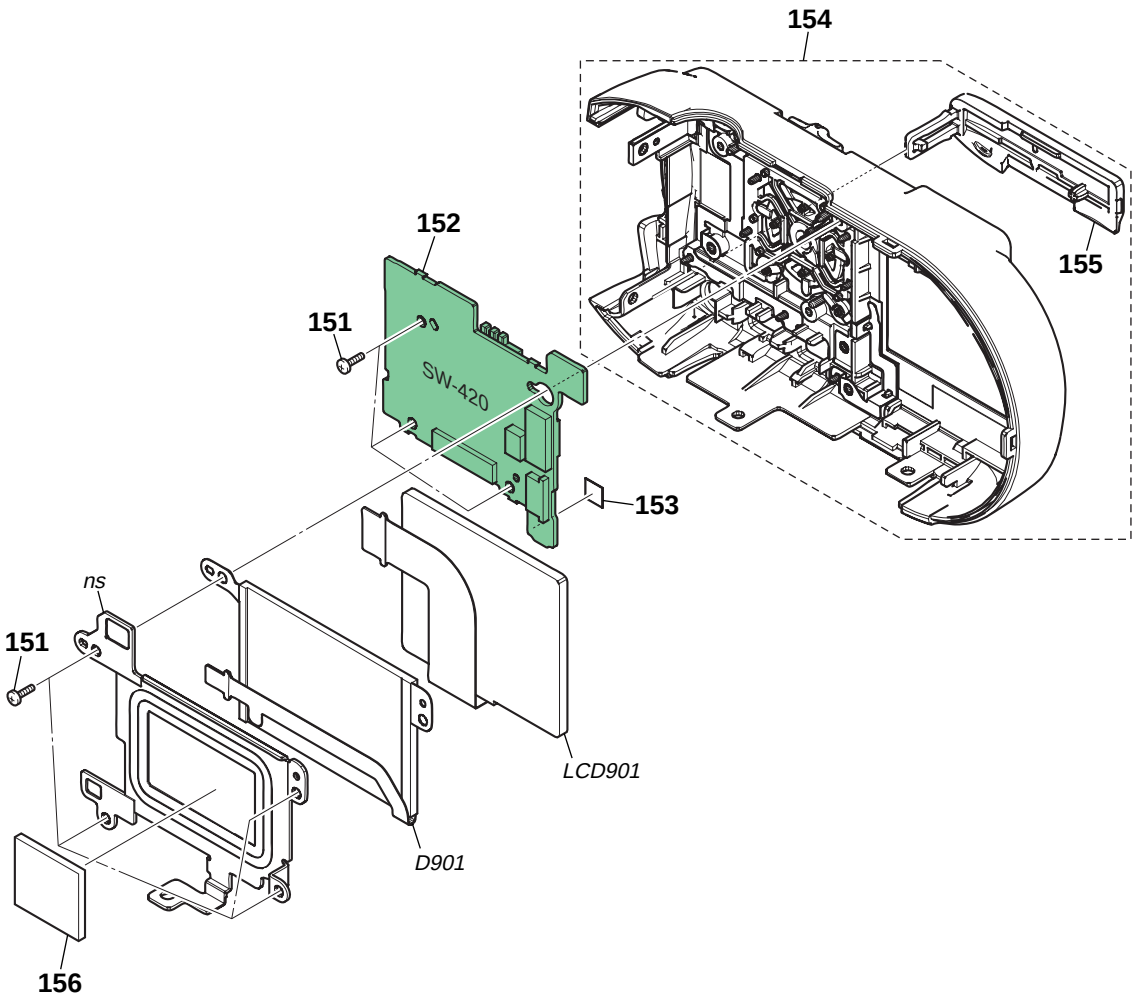
Ref. No.	Part No.	Description
101	1-478-302-11	SWITCH BLOCK, CONTROL
102	A-7113-098-A	ST-098 BOARD, COMPLETE
⚠103	1-478-348-11	FLASH UNIT
104	3-090-797-01	CUSHION, SP
105	1-860-200-41	FP-860 FLEXIBLE BOARD (P43)
105	1-860-200-51	FP-860 FLEXIBLE BOARD (P41)
106	3-080-204-21	SCREW, TAPPING, P2
107	A-7113-208-A	MS BOARD, COMPLETE
108	2-050-538-01	SHEET, MS RADIATION
109	1-400-770-11	FERRITE CORE
110	2-050-462-01	SHEET (530), RL ELECTROSTATIC
111	A-1059-807-A	SY-101 BOARD, COMPLETE (SERVICE) (including CP900 (CH-146 board)) (P43)

Ref. No.	Part No.	Description
111	A-1059-808-A	SY-101 BOARD, COMPLETE (SERVICE) (including CP900 (CH-146 board)) (P41)
112	1-860-199-11	FP-859 FLEXIBLE BOARD
113	1-860-192-11	FP-852 FLEXIBLE BOARD
114	3-941-343-21	TAPE (A)
115	2-067-931-01	SHEET, MS SHEET METAL (P43)
116	2-067-932-01	CUSHION, MS CONDUCTIVE
117	2-109-666-01	SHEET (510), RL COPPER LEAF
⚠BT001	1-528-999-51	BATTERY, LITHIUM SECONDARY
BT901	1-756-421-11	BATTERY HOLDER (WITH TERMINAL)
⚠C852	1-100-737-11	CAP, ELECT 135uF 310V
SP901	1-825-665-11	SPEAKER (1.3CM)

5. REPAIR PARTS LIST

5-1-4. REAR CABINET BLOCK SECTION

ns: not supplied



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description
151	3-078-890-11	SCREW, TAPPING
152	A-7113-097-A	SW-420 BOARD, COMPLETE
153	3-090-794-01	SHEET, RESET
154	X-2021-518-1	CABINET (REAR) ASSY (450) (P41)
154	X-3954-374-1	CABINET (REAR) ASSY (510) (P43)
155	3-090-789-21	COVER, JK (P41)
155	3-090-789-11	COVER, JK (P43)
156	2-022-234-01	SHEET (510), CCD RADIATION
⚠D901	1-478-465-21	BLOCK, LIGHT GUIDE PLATE (1.5) (P41)
⚠D901	1-478-465-11	BLOCK, LIGHT GUIDE PLATE (1.5) (P43)
LCD901	1-805-500-21	LCD MODULE (COD15T1506E)

CD-501

5-2. ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description			
	A-7113-099-A	CD-501 BOARD, COMPLETE			
		**********			
		(IC801 is not included in this complete board.)			
		< CAPACITOR >			
C801	1-164-850-11	CERAMIC CHIP	10PF	0.5PF	50V
C803	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C804	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C805	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C807	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C809	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C810	1-135-957-91	TANTAL. CHIP	10uF	20%	16V
		< CONNECTOR >			
CN801	1-816-057-11	CONNECTOR, FPC (ZIF) 39P			
		< DIODE >			
D801	8-719-075-29	DIODE	SML-510MWT86S (AE/AF LOCK)		
D802	8-719-077-34	DIODE	SML-310YTT86 (FLASH CHARGE)		
D803	8-719-064-07	DIODE	SML-310LTT86 (SELF TIMER/RECORDING)		
		< FERRITE BEAD >			
FB801	1-414-228-11	INDUCTOR, FERRITE BEAD			
FB802	1-414-228-11	INDUCTOR, FERRITE BEAD			
		< IC >			
IC801	A-7112-263-A	CCD BLOCK ASSY (CCD IMAGER) (Note)			
		< TRANSISTOR >			
Q801	6-550-885-01	TRANSISTOR	2SC39320S2S0		
Q802	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q803	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q804	6-550-119-01	TRANSISTOR	DTC144EMT2L		
		< RESISTOR >			
R801	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R802	1-216-864-11	SHORT CHIP	0		
R803	1-218-990-11	SHORT CHIP	0		
R804	1-218-989-11	RES-CHIP	1M	5%	1/16W
R805	1-220-184-11	RES-CHIP	1.3K	5%	1/16W
R806	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R807	1-218-953-11	RES-CHIP	1K	5%	1/16W
R809	1-218-980-11	RES-CHIP	180K	5%	1/16W
R814	1-218-940-11	RES-CHIP	82	5%	1/16W
R815	1-218-940-11	RES-CHIP	82	5%	1/16W
R816	1-218-952-11	RES-CHIP	820	5%	1/16W

Electrical parts list of the CH-146 board is not shown.
Pages 5-7 is not shown.

(Note) Be sure to read “Precautions for Replacement of CCD Imager” on page 4-8 when changing the CCD imager.

MS | **ST-098** | **SW-420**

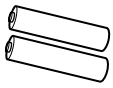
Ref. No.	Part No.	Description			
	A-7113-208-A	MS BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN001	1-815-572-61	CONNECTOR, MEMORY STICK			
	A-7113-098-A	ST-098 BOARD, COMPLETE			
		**********			
⚠	1-478-348-11	FLASH UNIT			
		< CAPACITOR >			
C851	1-127-715-91	CERAMIC CHIP	0.22uF	10%	16V
⚠C852	1-100-737-11	CAP, ELECT	135uF		310V
⚠C853	1-100-758-11	CERAMIC CHIP	0.047uF	10%	250V
C854	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
		< CONNECTOR >			
CN851	1-816-644-31	FFC/FPC CONNECTOR (LIF) 12P			
		< DIODE >			
⚠D851	8-719-073-01	DIODE MA111-(K8).S0			
⚠D852	6-500-962-01	DIODE HAU160C030STP			
		< IC >			
⚠IC851	6-703-635-01	IC TND721MH5-S-TL-E			
		< COIL >			
⚠L851	1-456-193-11	COIL, TRIGGER			
		< TRANSISTOR >			
⚠Q851	6-550-759-01	TRANSISTOR	CPH3235-S-TL-E		
⚠Q852	6-550-887-01	TRANSISTOR	RTF025N03TL		
⚠Q853	6-550-656-01	TRANSISTOR	CY25BAJ-8F-T23		
		< RESISTOR >			
R851	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R852	1-218-977-11	RES-CHIP	100K	5%	1/16W
R853	1-218-956-11	RES-CHIP	1.8K	5%	1/16W
R854	1-218-965-11	RES-CHIP	10K	5%	1/16W
R855	1-218-943-11	RES-CHIP	150	5%	1/16W
R856	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R857	1-218-937-11	RES-CHIP	47	5%	1/16W
R858	1-218-989-11	RES-CHIP	1M	5%	1/16W
R859	1-216-121-11	RES-CHIP	1M	5%	1/10W
		< TRANSFORMER >			
⚠T851	1-437-737-11	TRANSFORMER, DC-DC CONVERTER			
	A-7113-097-A	SW-420 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C201	1-100-539-91	TANTAL. CHIP	47uF	20%	6.3V
C202	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C203	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C204	1-164-943-11	CERAMIC CHIP	0.01uF	10%	16V
C205	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C206	1-113-986-11	TANTAL. CHIP	2.2uF	20%	25V
C207	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C208	1-100-670-11	CERAMIC CHIP	4.7uF	20%	16V
C209	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C210	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C211	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C212	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C213	1-113-994-11	TANTAL. CHIP	6.8uF	20%	16V
C214	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C216	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C217	1-127-861-11	CERAMIC CHIP	2.2uF	10%	16V
C218	1-127-573-11	CERAMIC CHIP	1uF	10%	16V
		< CONNECTOR >			
CN201	1-817-942-11	CONNECTOR, FPC (ZIF) 39P			
CN202	1-794-322-11	CONNECTOR, FFC/FPC (ZIF) 6P			
CN203	1-794-410-11	CONNECTOR, FPC (ZIF) 27P			
		< DIODE >			
D202	6-500-054-01	DIODE RB481YT2R			
D251	6-500-776-01	DIODE MAZW068H0LS0			
D252	6-500-776-01	DIODE MAZW068H0LS0			
D253	8-719-056-23	DIODE MA2S111-(K8).SO			
		< IC >			
IC201	6-705-547-01	IC CM7103L43-T4			
		< COIL >			
L201	1-469-846-11	INDUCTOR	47uH		
L202	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
L203	1-400-588-11	INDUCTOR, LAMINATE CHIP	10uH		
		< TRANSISTOR >			
Q201	6-550-119-01	TRANSISTOR	DTC144EMT2L		
Q202	6-550-150-01	TRANSISTOR	SSM3J09FU (TE85L)		
		< RESISTOR >			
R201	1-218-953-11	RES-CHIP	1K	5%	1/16W
R203	1-218-975-11	RES-CHIP	68K	5%	1/16W
R204	1-208-935-11	METAL CHIP	100K	0.5%	1/16W
R205	1-208-707-11	METAL CHIP	10K	0.5%	1/16W
R206	1-218-965-11	RES-CHIP	10K	5%	1/16W
R210	1-218-979-11	RES-CHIP	150K	5%	1/16W
R211	1-218-985-11	RES-CHIP	470K	5%	1/16W
R212	1-216-864-11	SHORT CHIP	0		
R214	1-218-985-11	RES-CHIP	470K	5%	1/16W
R215	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R216	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R217	1-208-677-11	METAL CHIP	560	0.5%	1/16W
R251	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R252	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R253	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R254	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R255	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
R256	1-218-955-11	RES-CHIP	1.5K	5%	1/16W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

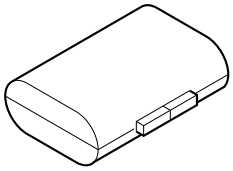
Ref. No.	Part No.	Description			
R257	1-218-955-11	RES-CHIP	1.5K	5%	1/16W
R258	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R259	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R260	1-218-953-11	RES-CHIP	1K	5%	1/16W
R262	1-218-954-11	RES-CHIP	1.2K	5%	1/16W
		< SWITCH >			
S251	1-771-138-82	SWITCH, KEY BOARD (▲ (FLASH))			
S252	1-771-138-82	SWITCH, KEY BOARD (◄ (REVIEW))			
S253	1-786-157-31	TACTILE SWITCH (D-Zoom (W))			
S254	1-786-157-31	TACTILE SWITCH (● (SET))			
S255	1-771-138-82	SWITCH, KEY BOARD (▼ (SELF TIMER))			
S256	1-771-138-82	SWITCH, KEY BOARD (► (SPOT METERING))			
S257	1-786-157-31	TACTILE SWITCH (D-Zoom (T))			
S258	1-771-138-82	SWITCH, KEY BOARD (MENU)			
S259	1-771-138-82	SWITCH, KEY BOARD (LCD STATUS / LCD ON/OFF)			
S260	1-771-138-82	SWITCH, KEY BOARD (IMAGE SIZE/DELETE)			
S261	1-771-487-21	SWITCH, SLIDE (VIEW/STILL/MOVIE (MODE SWITCH))			
S262	1-771-138-82	SWITCH, KEY BOARD (RESET)			

Electrical parts list of the SY-101 board is not shown.
Pages 5-10 to 5-14 are not shown.

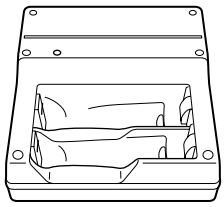
Checking supplied accessories.



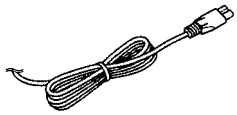
R6 (size AA) alkaline batteries (2)
(P41 only)
HR6 (size AA) Ni-MH batteries (2)
(P43 only)
(not supplied)



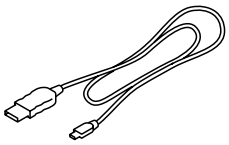
Battery case (1)
3-074-757-01



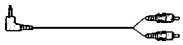
Battery charger (BC-CS2) (1)
(P43 only)
⚠ 1-477-814-11 (CND, JE, J)
⚠ 1-477-814-21
(AEP, UK, E, HK, AR, AUS)
⚠ 1-477-814-31 (CH, KR)



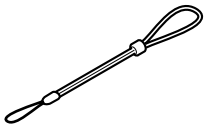
Power cord (1)
(P43 only)
⚠ 1-769-608-11 (AEP, E)
⚠ 1-776-985-11 (KR)
⚠ 1-782-476-13 (CH)
⚠ 1-783-374-11 (UK, HK)
⚠ 1-783-952-21 (AR)
⚠ 1-790-107-22 (CND)
⚠ 1-790-732-12 (JE, J)
⚠ 1-827-945-11 (AUS)



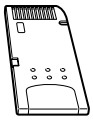
USB cable (1)
1-827-038-11



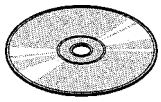
A/V connecting cable (1)
(P43 only)
1-824-111-11



Wrist strap (1)
3-089-555-01



"Memory Stick" (16MB) (1)
(not supplied)



CD-ROM
(SPVD-012 USB driver) (1)
3-091-338-01 (US, J)
3-091-339-01
(EXCEPT US, J)

Conversion Adaptor (1)
(P43 only)
⚠ 1-569-007-11 (E)
⚠ 1-573-856-12 (JE)

Other accessories

3-091-349-01 MANUAL, INSTRUCTION (for BASIC) (JAPANESE) (J)
3-091-349-11 MANUAL, INSTRUCTION (ENGLISH)
(US, CND, AEP, UK, E, HK, AUS, CH, JE)
3-091-349-21 MANUAL, INSTRUCTION (FRENCH, ITALIAN) (CND, AEP)
3-091-349-31 MANUAL, INSTRUCTION (SPANISH, PORTUGUESE)
(AEP, E, AR, JE)
3-091-349-41 MANUAL, INSTRUCTION (GERMAN, DUTCH) (AEP)

3-091-349-51 MANUAL, INSTRUCTION (TRADITIONAL CHINESE,
SIMPLIFIED CHINESE) (E, HK, CH, JE)
3-091-349-61 MANUAL, INSTRUCTION (RUSSIAN, SWEDISH) (AEP)
3-091-349-71 MANUAL, INSTRUCTION (ARABIC, PERSIAN) (E)
3-091-349-81 MANUAL, INSTRUCTION (KOREAN) (KR, JE)
3-091-349-91 MANUAL, INSTRUCTION (POLISH, CZECH) (AEP)

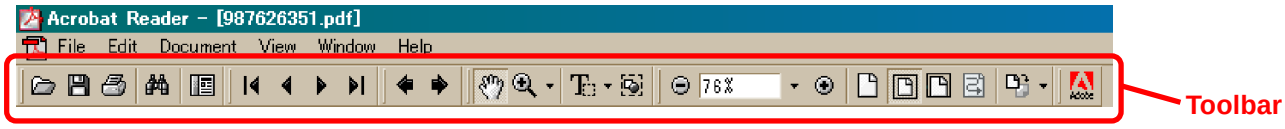
3-091-350-11 MANUAL, INSTRUCTION (HUNGARIAN, SLOVAK) (AEP)
3-091-351-01 MANUAL, INSTRUCTION (for APPLICATION) (J)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

2004D0500-1

Published by DI Technical Support Section

[Description of main button functions on toolbar of the Adobe Acrobat Reader Ver5.0 (for Windows)]



Printing a text

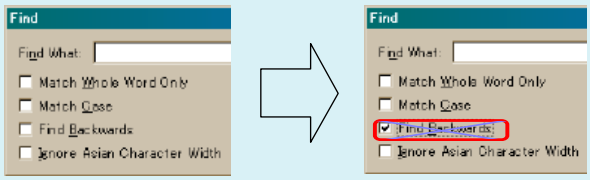
1. Click the Print button .
2. Specify a printer, print range, number of copies, and other options, and then click [OK].

Application of printing:
To set a range to be printed within a page, select the graphic selection tool and drag on the page to enclose a range to be printed, and then click the Print button.

Finding a text

1. Click the Find button .
2. Enter a character string to be found into a text box, and click the [Find]. (Specify the find options as necessary)

Application to the Service Manual:
To execute "find" from current page toward the previous pages, select the check box "Find Backward" and then click the "Find".



3. Open the find dialog box again, and click the [Find Again] and you can find the matched character strings displayed next. (Character strings entered previously are displayed as they are in the text box.)

Application to the Service Manual:
The parts on the drawing pages (block diagrams, circuit diagrams, printed circuit boards) and parts list pages in a text can be found using this find function. For example, find a Ref. No. of IC on the block diagram, and click the [Find Again] continuously, so that you can move to the Ref. No. of IC on the circuit diagram or printed circuit board diagram successively.
Note: The find function may not be applied to the Service Manual depending on the date of issue.

Switching a page

- To move to the first page, click the .
- To move to the last page, click the .
- To move to the previous page, click the .
- To move to the next page, click the .

Reversing the screens displayed once

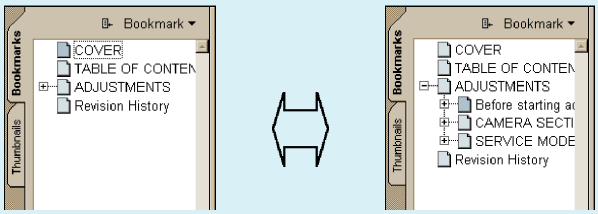
- To reverse the previous screens (operation) one by one, click the .
- To advance the reversed screens (operation) one by one, click the .

Application to the Service Manual:
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

Moving with link

1. Select either palm tool , zoom tool , text selection tool , or graphic selection tool .
2. Place the pointer in the position in a text where the link exists (such as a button on cover and the table of contents page, or blue characters on the removal flowchart page or drawing page), and the pointer will change to the forefinger form .
3. Then, click the link. (You will go to the link destination.)

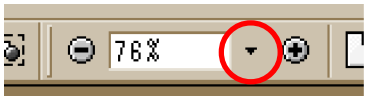
Moving with bookmark:
Click an item (text) on the bookmark pallet. and you can move to the link destination. Also, clicking can display the hidden items.
(To go back to original state, click)



Zooming or rotating the screen display

"Zoom in/out"

- Click the triangle button in the zoom control box to select the display magnification. Or, you may click or for zooming in or out.



"Rotate"

- Click rotate tool , and the page then rotates 90 degrees each.

Application to the Service Manual:
The printed circuit board diagram you see now can be changed to the same direction as the set.

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2004.04	Official Release	—	—