

# DSC-G1

## SERVICE MANUAL

LEVEL 2

Ver. 1.0 2007.03

Revision History

How to use  
Acrobat Reader

Internal memory  
ON BOARD



US Model  
Canadian Model  
AEP Model  
UK Model  
E Model  
Hong Kong Model  
Chinese Model  
Korea Model  
Japanese Model

### Link

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<a href="#">SERVICE NOTE</a>	<a href="#">FRAME SCHEMATIC DIAGRAM</a>	<a href="#">REPAIR PARTS LIST</a>
<a href="#">DISASSEMBLY</a>	<a href="#">SCHEMATIC DIAGRAMS</a>	

#### • PRECAUTIONS AFTER SY-153 BOARD AND WIRELESS LAN MODULE (CP801) WERE REPLACED

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

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

DIGITAL STILL CAMERA

SONY®



Cyber-shot



## SPECIFICATIONS

### Camera

#### [System]

Image device: 7.18 mm (1/2.5 type) color CCD,  
Primary color filter  
Total pixel number of camera:  
Approx. 6 183 000 pixels  
Effective pixel number of camera:  
Approx. 6 003 000 pixels  
Lens: Carl Zeiss Vario-Tessar 3 $\phi$  zoom lens f =  
6.33 – 19.0 mm (38 – 114 mm when  
converted to a 35 mm still camera) F3.5 – 4.3  
Exposure control: Automatic exposure, Scene  
Selection (10 modes)  
White balance: Automatic, Daylight, Cloudy,  
Fluorescent, Incandescent, Flash  
File format (DCF compliant):  
Still images: Exif Ver. 2.21 JPEG compliant,  
DPOF compatible  
Movies: MPEG-4 compliant (Stereo)  
Recording media: Internal Memory (approx.  
2 GB), "Memory Stick Duo"  
Flash range (ISO (Recommended exposure index)  
set to Auto): approx. 0.1 to 2.8 m (4 inches to  
9 feet 2 1/2 inches) (W)/approx. 0.25 to 2.2 m  
(9 7/8 inches to 7 feet 2 7/8 inches) (T)

#### [Input and Output connectors]

Multi connector  
USB communication: Hi-Speed USB (USB 2.0  
compliant)  
Ⓜ (Headphones) jack: Stereo minijack

#### [LCD screen]

LCD panel: 8.8 cm (3.5 type) TFT drive  
Total number of dots: 921 000 (1 920×480) dots

#### [Power, general]

Power: Rechargeable battery pack NP-FR1, 3.6 V  
AC-LS5 AC Adaptor, 4.2 V  
Power consumption (during shooting): 1.7 W  
Operating temperature: 0 to 40°C (32 to 104°F)  
Storage temperature: –20 to +60°C (–4 to +140°F)  
Dimensions:

During shooting  
113.8×71.7×25.3 mm (4 1/2×2 7/8×1 inches)  
(W/H/D, excluding protrusions)

During viewing  
93.3×71.7×25.3 mm (3 3/4×2 7/8×1 inches)  
(W/H/D, excluding protrusions)

Mass: Approx. 238 g (8.4 oz) (including NP-FR1  
battery pack and wrist strap, etc.)

Microphone: Stereo  
Speaker: Monaural (Headphones (not supplied):  
Stereo)

Exif Print: Compatible  
PRINT Image Matching III: Compatible  
PictBridge: Compatible

### Cyber-shot Station UC-GA

#### [Input and Output connectors]

A/V OUT (STEREO) jack (Stereo): Minijack  
Video out, audio out (stereo)  
USB jack: mini-B  
USB connection: Hi-Speed USB (USB 2.0 Hi-  
Speed compatible)  
DC IN jack  
Camera connector

#### Rechargeable battery pack NP-FR1

Used battery: Lithium-ion battery  
Maximum voltage: DC 4.2 V  
Nominal voltage: DC 3.6 V  
Capacity: 4.4 Wh (1 220 mAh)

Design and specifications are subject to change  
without notice.

**CAUTION**

Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type.

**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  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 IDENTIFIÉS PAR UNE MARQUE  $\triangle$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS 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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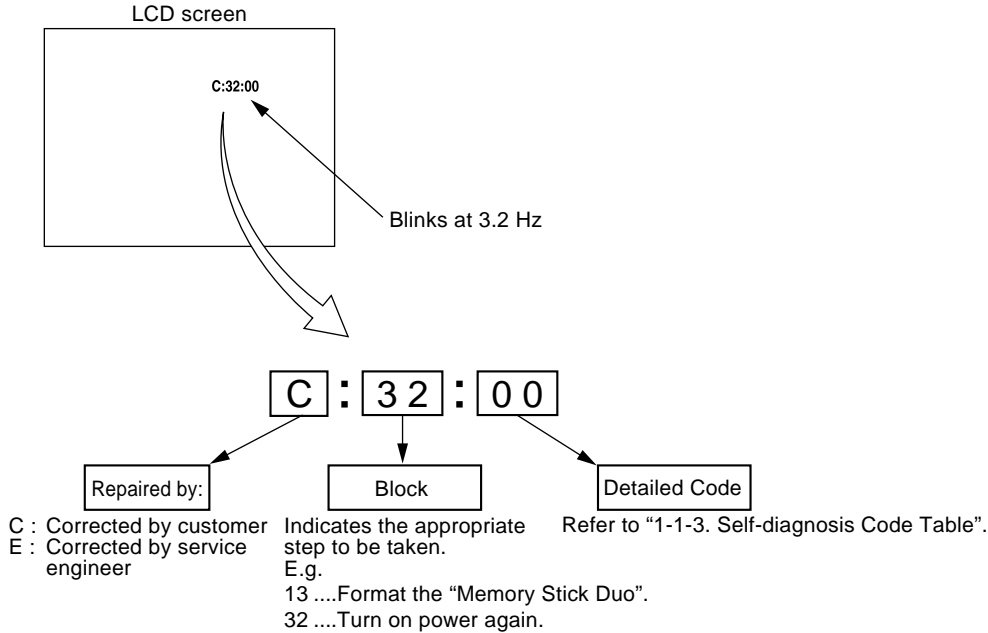
1-1. SELF-DIAGNOSIS FUNCTION

1-1-1. Self-diagnosis Function

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the LCD screen what to do.  
 Details of the self-diagnosis functions are provided in the Instruction manual.

1-1-2. Self-diagnosis Display

When problems occur while the unit is operating, the LCD screen shows a 4-digit display consisting of an alphabet and numbers, which blinks at 3.2 Hz. This 5-character display indicates the “repaired by:”, “block” in which the problem occurred, and “detailed code” of the problem.



1-1-3. Self-diagnosis Code Table

Self-diagnosis Code			Message	Symptom/State	Correction
Repaired by:	Block Function	Detailed Code			
C	1 3	0 1	Memory Stick formatting error	Detected the case that cannot create a folder which was necessary for a root directory of "Memory Stick Duo".	Format the "Memory Stick Duo" or change to new one.
			Memory Stick formatting error	Detected the formatting error of "Memory Stick Duo".	
			Reinsert the Memory Stick	Detected the overflow of fault block.	
			Reinsert the Memory Stick	Detected the error "Memory Stick Duo".	
			Internal memory formatting error	When detected the case that cannot create a folder which was necessary for a root directory of internal memory.	Format the internal memory.
			Internal memory formatting error	Detected the formatting error of internal memory.	
			Memory Stick type error	Detected the noncompliant "Memory Stick Duo".	
C	3 2	0 1	System error	Detected the HW trouble. Detected the software error.	Turn the power off and then on again.

Self-diagnosis Code			Message	Symptom/State	Correction
Repaired by:	Block Function	Detailed Code			
E	6 1	0 0	-	Detected the focus initialize error.	Retry turn the power on by the power switch. If it does not recover, check the focus sensor signal (pin ③① of CN301 on the SY-153 board) and check the focus drive signal (pin ⑱ to ㉑ of CN301 on the SY-153 board) of lens block. If the focus drive signal is abnormality, check or replace the zoom/focus motor drive IC (IC301 on the SY-153 board). If the focus sensor signal is abnormality, replace the lens block.
E	6 1	1 0	-	Detected the zoom initialize error.	Retry turn the power on by the power switch. If it does not recover, check the zoom sensor signal (pin ㉒ of CN301 on the SY-153 board) and check the zoom drive signal (pin ㉓ to ㉕ of CN301 on the SY-153 board) of lens block. If the zoom drive signal is abnormality, check or replace the zoom/focus motor drive IC (IC301 on the SY-153 board). If the zoom sensor signal is abnormality, replace the lens block.
E	6 2	0 2	-	Abnormality of IC for steadyshot.	Check or replace the IC for steadyshot (IC603 on the SY-153 board).
E	6 2	1 0	-	Abnormality of IC for steadyshot. (Lens initializing failure)	Perform checking of the item E: 62: 11 and E: 62: 12, then check or replace the IC for steadyshot (IC603 on the SY-153 board).
E	6 2	1 1	-	Lens overheating (PITCH).	Check the HALL element signal (PITCH)(pin ①, ② of CN301 on the SY-153 board) and drive signal (PITCH) (pin ⑨ to ⑰ of CN301 on the SY-153 board) of optical image stabilizer, or replace the lens block. If they are OK, check PITCH angular velocity sensor (SE601 on the SY-153 board) peripheral circuits.
E	6 2	1 2	-	Lens overheating (YAW).	Check the HALL element signal (YAW)(pin ⑥, ⑦ of CN301 on the SY-153 board) and drive signal (YAW) (pin ⑱, ⑲ of CN301 on the SY-153 board) of optical image stabilizer, or replace the lens block. If they are OK, check YAW angular velocity sensor (SE602 on the SY-153 board) peripheral circuits.
E	6 2	2 0	-	Abnormality of thermistor.	Check the OIS temp sensor of optical image stabilizer (pin ⑤ of CN301 on the SY-153 board).
E	9 1	0 1	(The flash icon blinks at 3.2 Hz)	Abnormality when flash is being charged.	Check or replace the flash unit.

## 1-2. METHOD FOR COPYING OR ERASING THE DATA IN INTERNAL MEMORY (INTERNAL MEMORY/MUSIC)

The data can be copied/erased by the operations on the Setup screen. (When erasing the data, execute formatting the internal memory.)



**Note 1:** When replacing the SY-153 board, erase the data in internal memory of the board before replacement.

**Note 2:** When replacing the SY-153 board or the IC502 on the SY-153 board, execute formatting and initialize the internal memory after replacement.

### Method for Copying the Data in Internal Memory



#### Import/Export

Copies the images stored in the “Memory Stick Duo” to an album (Import) and copies the Album Images to the “Memory Stick Duo” (Export).

 (Import: Multiple Images)	Selects images and copies the images from the “Memory Stick Duo” to the internal memory.
<input checked="" type="checkbox"/> (Import: This Image)	Copies the image that is currently selected from the “Memory Stick Duo” to the internal memory.
 (Export: Multiple Images)	Selects images and copies the images from the internal memory to the “Memory Stick Duo”.
<input checked="" type="checkbox"/> (Export: This Image)	Copies the image that is currently selected from the internal memory to the “Memory Stick Duo”

- If its image size is over 6 M, you cannot view the image on the camera, which was copied to the camera. You can resize images using the “Album Editor”.
- When an Original Image is stored, the Original Image is exported, and when not stored, its Album Image is exported.

#### To select and copy images

- ① Select [] (Import: Multiple Images) or [] (Export: Multiple Images) with the control button, then press **●**.
- ② Select the images.
- ③ Press MENU to display the menu.
- ④ Select [OK], then press **●**.  
The selected images are copied.

#### To copy an image

- ① Select the image.
- ② Select [] (Import: This Image) or [] (Export: This Image) with the control button, then press **●**.  
The image is copied.

### Method for Formatting the Internal Memory

#### Fully Format

Erases (initializes) all the data in the internal memory completely. [Format] may not erase the data in the internal memory. [Fully Format] is recommended when you discard or transfer the camera.

- Use a fully charged battery pack or the AC Adaptor with the camera installed on the Cyber-shot Station.
  - Note that formatting irrevocably erases all data in the internal memory, including even protected images.
- ① Select [Fully Format] with the control button, then press **●**.  
The message “All data in internal memory will be erased” appears.
  - ② Select [OK], then press **●**.  
The format is complete.

#### To cancel the formatting

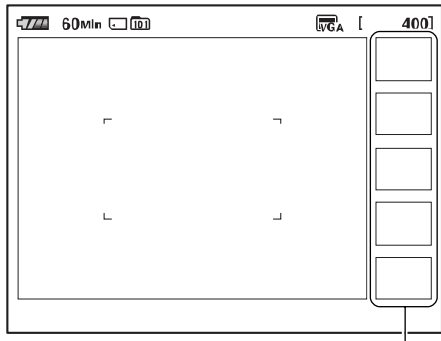
Select [Cancel] in step ②, then press **●**.

- It may take several minutes to do this operation.

### 1-3. ERASING THE LATEST RECORDING HISTORY

The recording history of the images shot with this set is not erased even if the internal memory is fully formatted. When returning the set to the customer, perform following operation.

1. Shoot five black images by covering the lens to erase the recording history.
2. Delete they five images from the internal memory.



Latest recording history

### 1-4. PRECAUTIONS AFTER SY-153 BOARD AND WIRELESS LAN MODULE (CP801) WERE REPLACED

1. Set the country code by referring to the Adjustment section.
2. Make communication between DSC-G1 sets when checking the operation of wireless LAN.
3. If the SY-153 board or wireless LAN module is replaced, the MAC address is changed, and thus the re-setting is required. Accordingly, after the replacement and repair, print out the flyer given at the end of the manual and attach it to the set when returning the set to the customer.

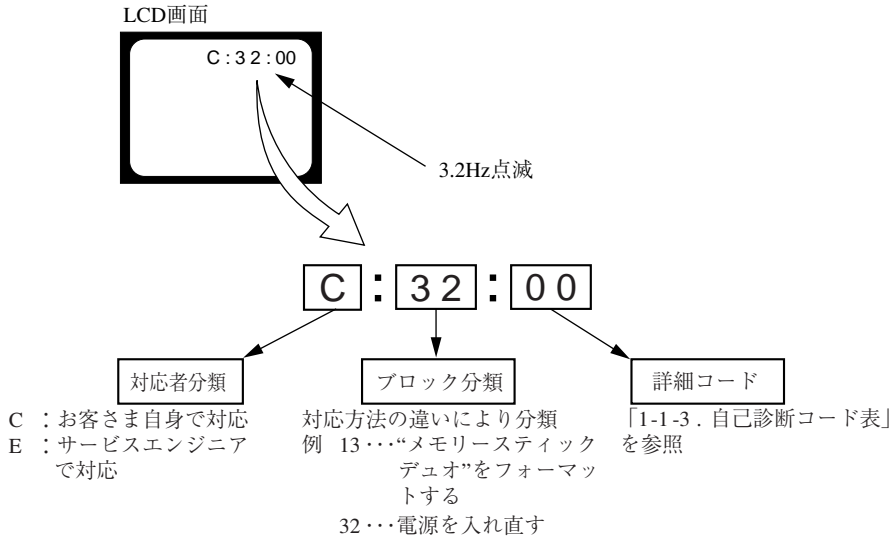
1-1. 自己診断機能

1-1-1. 自己診断機能について

本機の動作に不具合が生じたとき、自己診断機能が働き、LCD画面に、どう処置したらよいか判断できる表示を行います。自己診断機能については取扱説明書にも掲載されています。

1-1-2. 自己診断表示

本機の動作に不具合が生じたとき、LCD画面にアルファベットと4桁の数字が表示され、3.2Hzで点滅します。この5文字の表示によって対応者分類および不具合の生じたブロックの分類、不具合の詳細コードを示します。



1-1-3. 自己診断コード表

自己診断コード			メッセージ	エラー内容	対応方法
対応者	ブロック機能	詳細コード			
C	13	01	メモリスティックフォーマットエラー	メモリスティックのROOTディレクトリに必要なフォルダを作成できない状況を検出した時	“メモリスティックデュオ”をフォーマットする。または新品に交換する。
			メモリスティックフォーマットエラー	フォーマットエラーメモリスティックを検出した時	
			メモリスティックを入れ直してください	不良ブロック数超過を検出した時	
			メモリスティックを入れ直してください	エラーメモリスティックを検出した時	
		内蔵メモリフォーマットエラー	内蔵メモリのROOTディレクトリに必要なフォルダを作成できない状況を検出した時	内蔵メモリをフォーマットする。	
		内蔵メモリフォーマットエラー	内蔵メモリのフォーマットエラーを検出した時		
		非対応のメモリスティックです	非対応メモリスティックを検出した時		
C	32	01	システムエラー	HWトラブルを検出した時 ソフトウェアエラーを検出した時	電源を入れ直す。

自己診断コード			メッセージ	エラー内容	対応方法
対応者	ブロック機能	詳細コード			
E	6 1	0 0	-	フォーカスイニシャライズエラーを検出した時	操作スイッチの電源を入れ直す。 復帰しない場合は、レンズブロックのフォーカスセンサ出力（SY-153基板CN301 ㉑ピン）およびフォーカスドライブ信号（SY-153基板CN301 ㉒～㉓ピン）を点検する。 フォーカスドライブ信号に異常がある場合は、ズーム・フォーカスマータ駆動IC（SY-153基板IC301）を点検または交換する。 フォーカスセンサ出力に異常がある場合はレンズ交換する。
E	6 1	1 0	-	ズームイニシャライズエラーを検出した時	操作スイッチの電源を入れ直す。 復帰しない場合は、レンズブロックのズームセンサ出力（SY-153基板CN301 ㉔ピン）およびズームドライブ信号（SY-153基板CN301 ㉕～㉖ピン）を点検する。 ズームドライブ信号に異常がある場合は、ズーム・フォーカスマータ駆動IC（SY-153基板IC301）を点検または交換する。ズームセンサ出力に異常がある場合はレンズ交換する。
E	6 2	0 2	-	手ぶれマイコン（SY-153基板IC603）異常を検出した時	手ぶれマイコン（SY-153基板IC603）を点検または交換する。
E	6 2	1 0	-	手ぶれマイコン（SY-153基板IC603）異常を検出した時（レンズイニシャライズエラー）	E:62:11およびE:62:12の対応を実施したのち、手ぶれマイコン（SY-153基板IC603）を点検または交換する。
E	6 2	1 1	-	手ぶれマイコン（SY-153基板IC603）異常を検出した時（レンズオーバーヒート（PITCH））	手ぶれ防止機構のホール出力（PITCH）（SY-153基板CN301 ㉗、㉘ピン）およびドライブ信号（PITCH）（SY-153基板CN301 ㉙～㉚ピン）を点検またはレンズ交換する。 異常なければPITCH角速度センサ（SY-153基板SE601）周辺回路を点検または交換する。
E	6 2	1 2	-	手ぶれマイコン（SY-153基板IC603）異常を検出した時（レンズオーバーヒート（YAW））	手ぶれ防止機構のホール出力（YAW）（SY-153基板CN301 ㉛、㉜ピン）およびドライブ信号（YAW）（SY-153基板CN301 ㉝、㉞ピン）を点検またはレンズ交換する。 異常なければYAW角速度センサ（SY-153基板SE602）周辺回路を点検または交換する。
E	6 2	2 0	-	手ぶれマイコン（SY-153基板IC603）異常を検出した時	手ぶれ防止機構の温度センサ出力（SY-153基板CN301 ㉟ピン）を点検する。
E	9 1	0 1	（フラッシュアイコン3.2Hz点滅）	フラッシュ充電タイムアウト（フラッシュ異常）を検出した時	フラッシュユニットの点検または交換をする。

## 1-2. 内蔵メモリのデータコピーおよび消去方法

内蔵メモリのデータコピーまたは消去はホーム画面の操作から実行可能です。（消去する場合は内蔵メモリの初期化を行います。）

**Note1**：SY-153基板交換の際は、基板交換前に内蔵メモリのデータを消去して下さい。

**Note2**：SY-153基板交換の際は、基板交換後に内蔵メモリのフォーマットおよび初期化を実行して下さい。

### 内蔵メモリのコピー方法

#### ☰ インポート/☰ エクスポート

“メモリースティック デュオ”の画像をアルバムにコピー（インポート）したり、アルバム画像を“メモリースティック デュオ”にコピー（エクスポート）したりできます。

<input type="checkbox"/> (インポート：画像選択)	画像を選んで、“メモリースティック デュオ”から内蔵メモリーにコピーします。
<input checked="" type="checkbox"/> (インポート：この画像)	選択している画像を、“メモリースティック デュオ”から内蔵メモリーにコピーします。
<input type="checkbox"/> (エクスポート：画像選択)	画像を選んで、内蔵メモリーから“メモリースティック デュオ”にコピーします。
<input checked="" type="checkbox"/> (エクスポート：この画像)	選択している画像を、内蔵メモリーから“メモリースティック デュオ”にコピーします。

画像サイズが6Mよりも大きい画像をコピーしても本機では再生できません。

「Album Editor」を使うと、6Mにリサイズされます。

オリジナル画像が存在しているときはオリジナル画像がエクスポートされ、存在していないときはアルバム画像がエクスポートされます。

#### 画像を選択してコピーするには

- ① コントロールボタンで  (インポート：画像選択) または  (エクスポート：画像選択) を選び、中央を押す。
- ② 画像を選ぶ。
- ③ MENU ボタンを押し、メニューを表示する。
- ④ [実行] を選び、中央を押す。  
画像がコピーされる。

#### 画像を1枚コピーするには

- ① 画像を選ぶ。
- ② コントロールボタンで  (インポート：この画像) または  (エクスポート：この画像) を選び、中央を押す。  
画像がコピーされる。

### 内蔵メモリのフォーマット方法

#### フルフォーマット

内蔵メモリーのデータを完全に消去/初期化します。

[フォーマット] では内蔵メモリーのデータは完全には消去されないことがあります。

本機を廃棄/譲渡するときは、フルフォーマットすることをおすすめします。

- 十分に充電したバッテリーまたはサイバershootステーションに設置してACアダプターでご使用ください。
- フルフォーマットすると、プロテクトしてある画像も含めて、すべてのデータが消去され、元に戻せません。

- ① コントロールボタンで [フルフォーマット] を選び、中央を押す。  
「内蔵メモリーのデータが全て消去されます」というメッセージが表示される。
- ② [実行] を選び、中央を押す。  
フルフォーマットが実行される。

#### フルフォーマットを中止するには

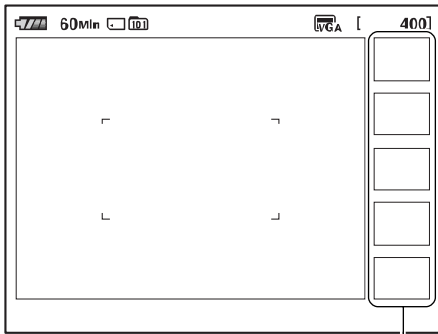
手順②で、[キャンセル] を選び、中央を押す。

- フルフォーマットは、数分かかる場合があります。

### 1-3. 最新の履歴画像の消去

本機で撮影した画像の履歴は内蔵メモリのフルフォーマットを行っても消去されません。セットをお客様に返却する際は、下記の操作を行って下さい。

1. レンズ部を覆うなどして全黒の画像を5枚撮影し、履歴画像を消去する。
2. 撮影した全黒画像5枚を内蔵メモリから削除する。



最新の撮影履歴

### 1-4. SY-153基板交換およびワイヤレスLANモジュール（CP801）交換後の注意

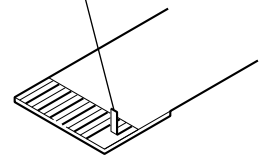
1. 調整編を参照してカントリーコードの設定を行って下さい。
2. ワイヤレスLANの動作チェックはDSC-G1同士で通信確認を行って下さい。
3. SY-153基板交換またはワイヤレスLANモジュールを交換するとMACアドレスが変更されてしまうため、再設定が必要となります。このため交換修理後は巻末の投げ込みをプリント出力してセットに添付して返却して下さい。

## 2. DISASSEMBLY

### NOTE FOR REPAIR

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

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

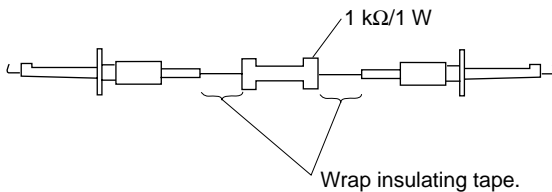


### DISCHARGING OF THE ST-147 FLEXIBLE BOARD'S CHARGING CAPACITOR (C9001)

The charging capacitor (C9001) of the ST-147 flexible board is charged up to the maximum 330 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.

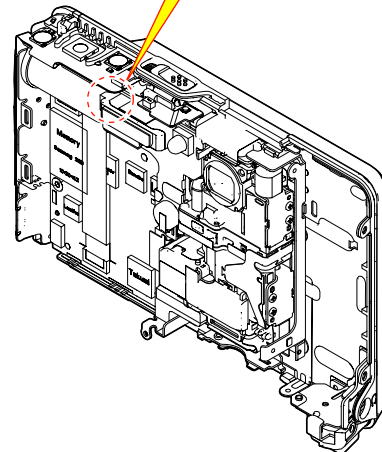
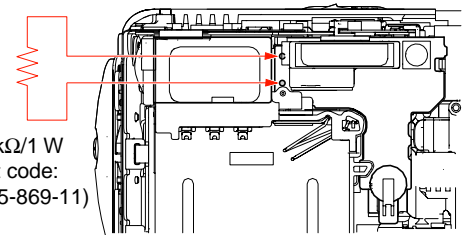
#### Preparing the Short Jig

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



**Note: High-voltage cautions**

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



**2-1. DISASSEMBLY**

**EXPLODED VIEW**

**HARDWARE LIST**

**2-1-1. CABINET SECTION**

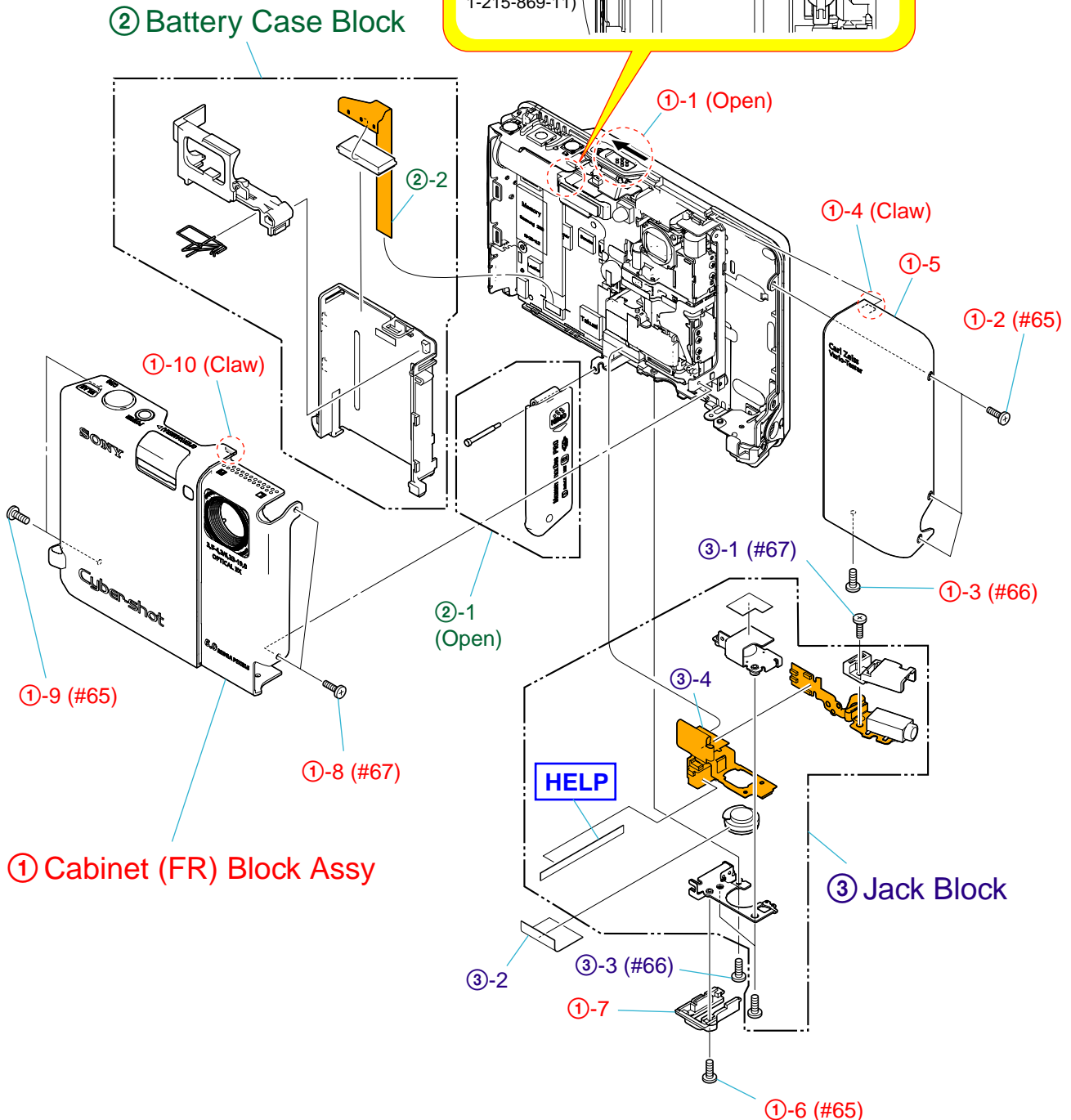
Follow the disassembly in the numerical order given.

- ① Cabinet (FR) Block Assy (①-1 to ①-10)
- ② Battery Case Block (②-1 to ②-2)
- ③ Jack Block (③-1 to ③-4)

**Note: High-voltage cautions**

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

R:1 kΩ/1 W  
(Part code: 1-215-869-11)



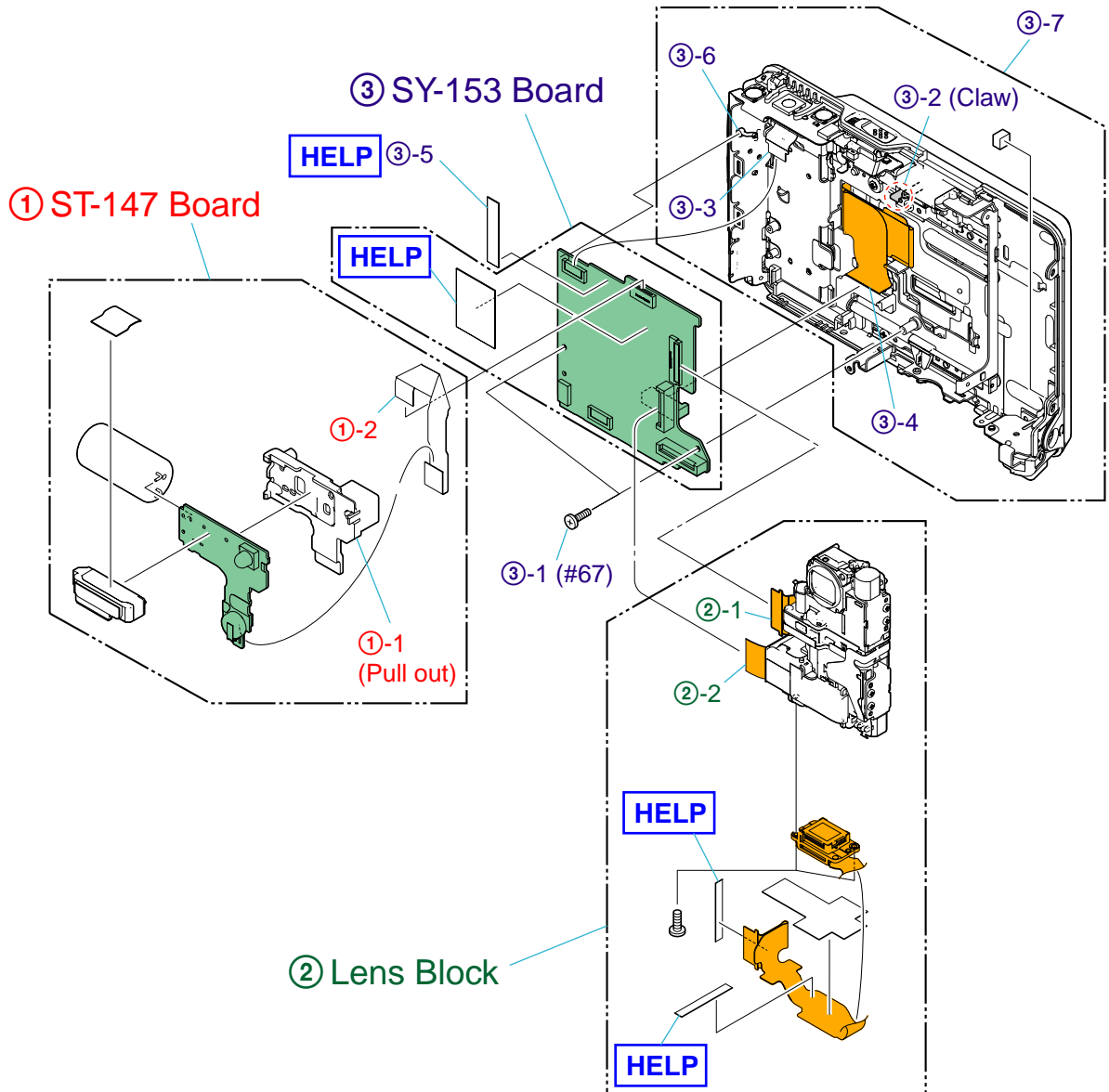
### 2-1-2. LENS BLOCK

Follow the disassembly in the numerical order given.

- ① ST-147 Board (①-1 to ①-2)
- ② Lens Block (②-1 to ②-2)
- ③ SY-153 Board (③-1 to ③-7)

EXPLODED VIEW

HARDWARE LIST





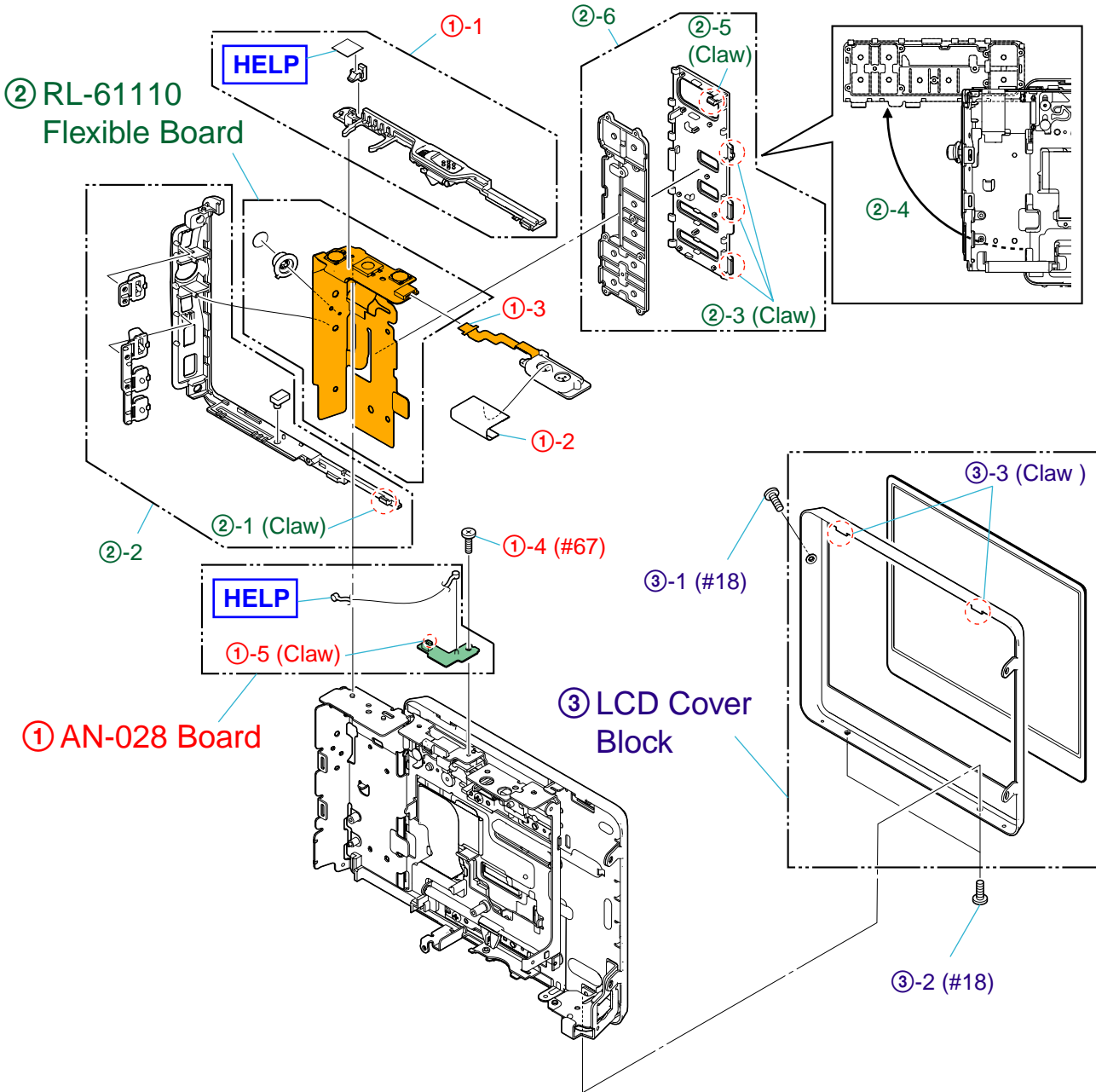
### 2-1-3. SWITCH BLOCK

Follow the disassembly in the numerical order given.

- ① AN-028 Board (①-1 to ①-5)
- ② RL-61110 Flexible Board (②-1 to ②-6)
- ③ LCD Cover Block (③-1 to ③-3)

EXPLODED VIEW

HARDWARE LIST





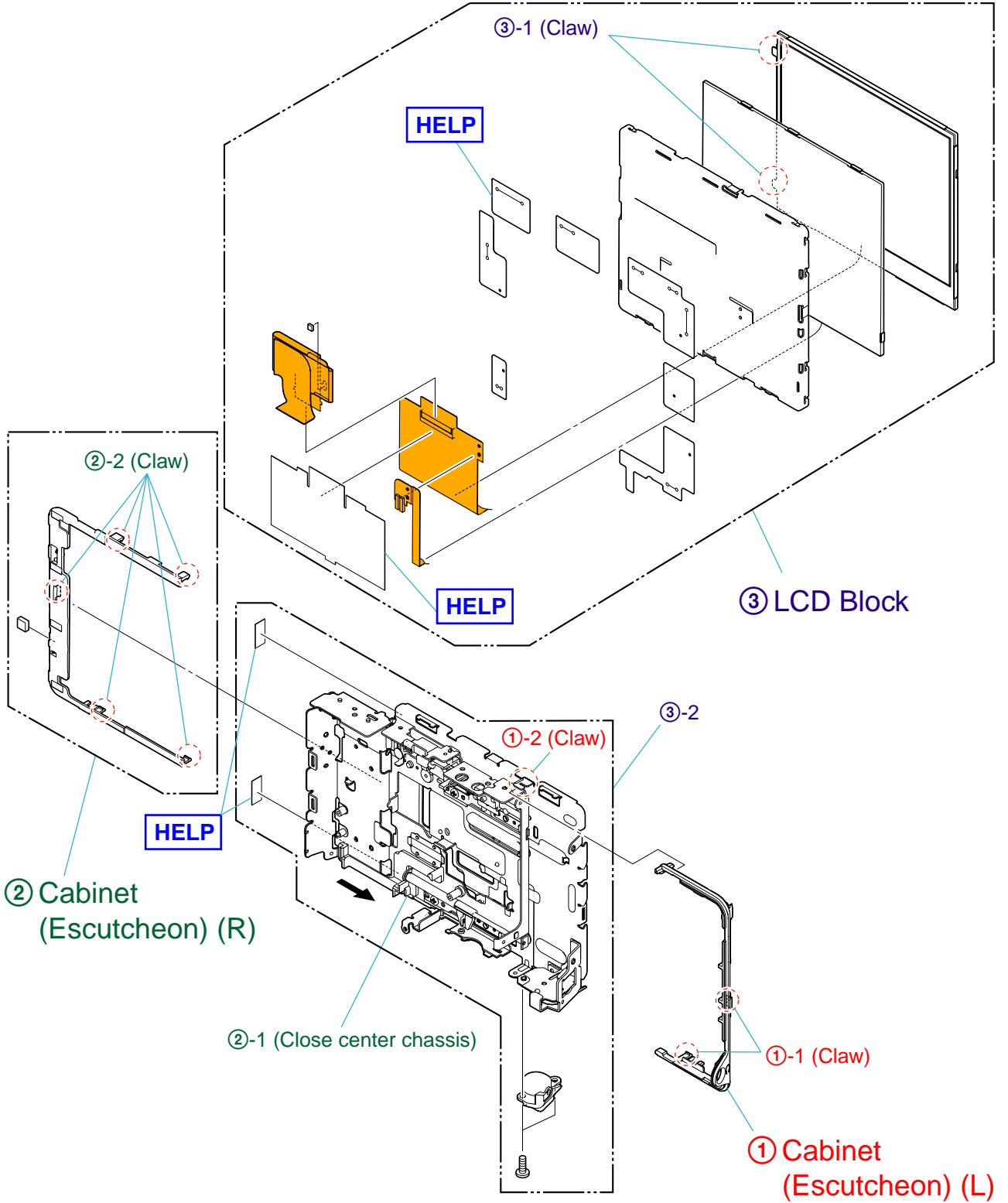
### 2-1-4. CABINET (LCD) BLOCK

Follow the disassembly in the numerical order given.

- ① Cabinet (Escutcheon) (L) (①-1 to ①-2)
- ② Cabinet (Escutcheon) (R) (②-1 to ②-2)
- ③ LCD Block (③-1 to ③-2)

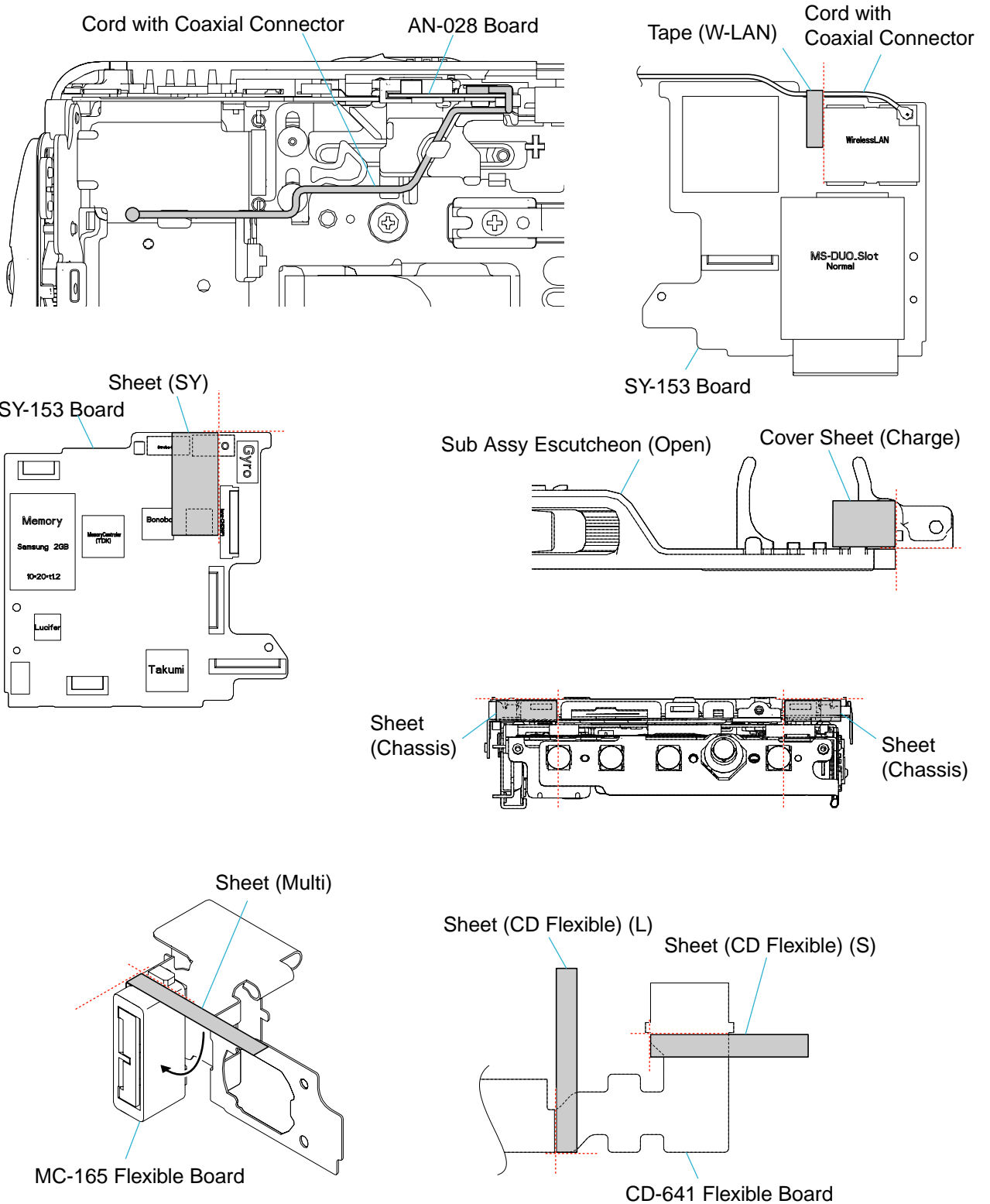
EXPLODED VIEW

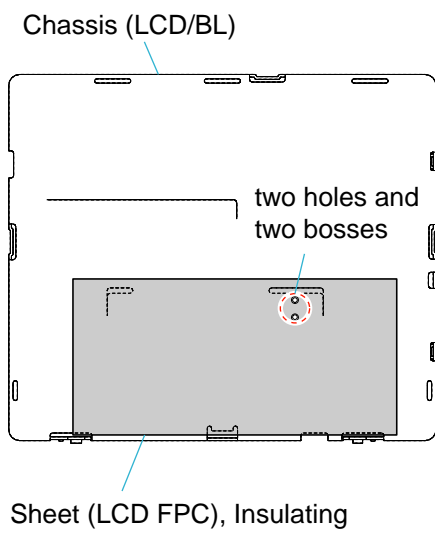
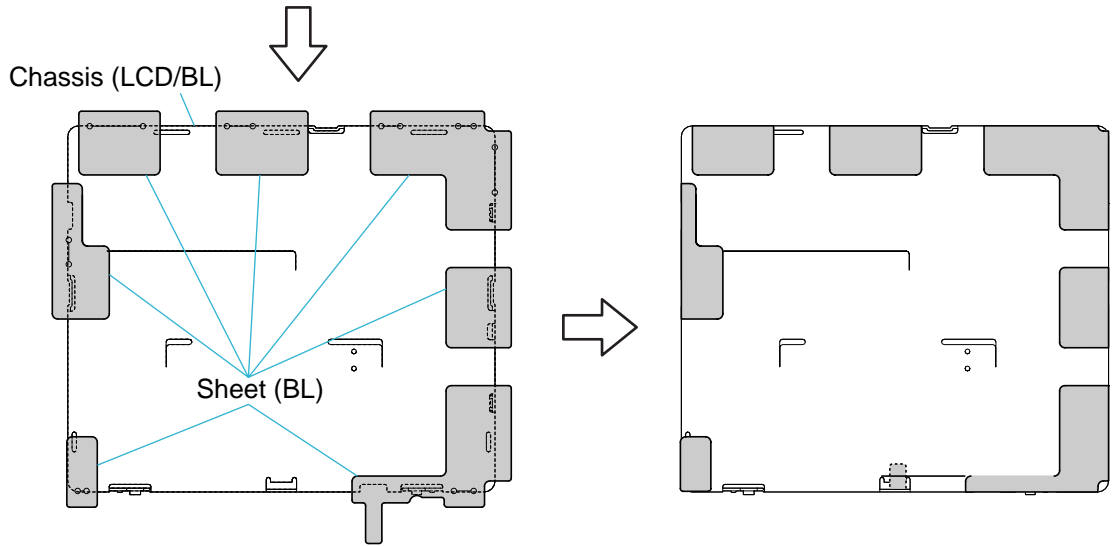
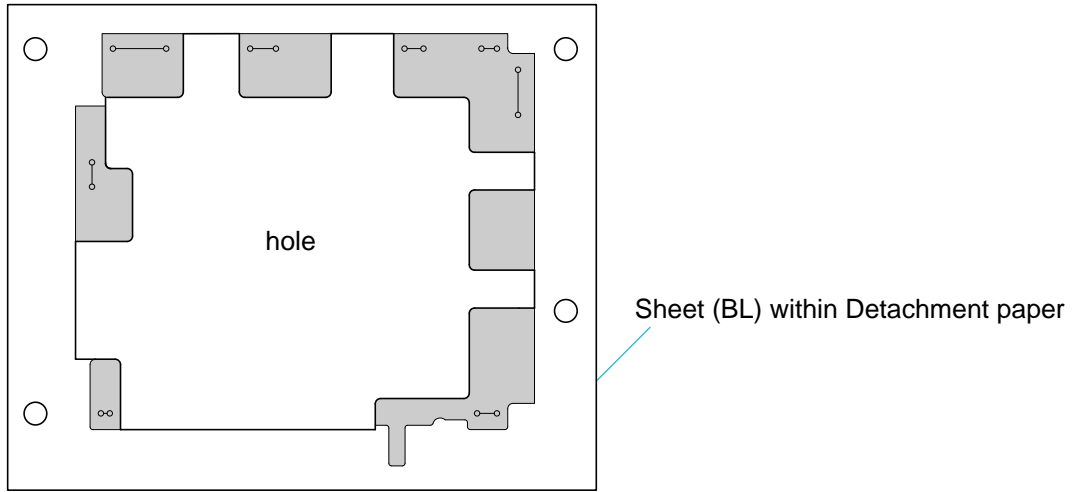
HARDWARE LIST



# HELP

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





### 3. BLOCK DIAGRAMS

#### Link

• [OVERALL BLOCK DIAGRAM \(1/3\)](#)

• [POWER BLOCK DIAGRAM \(1/2\)](#)

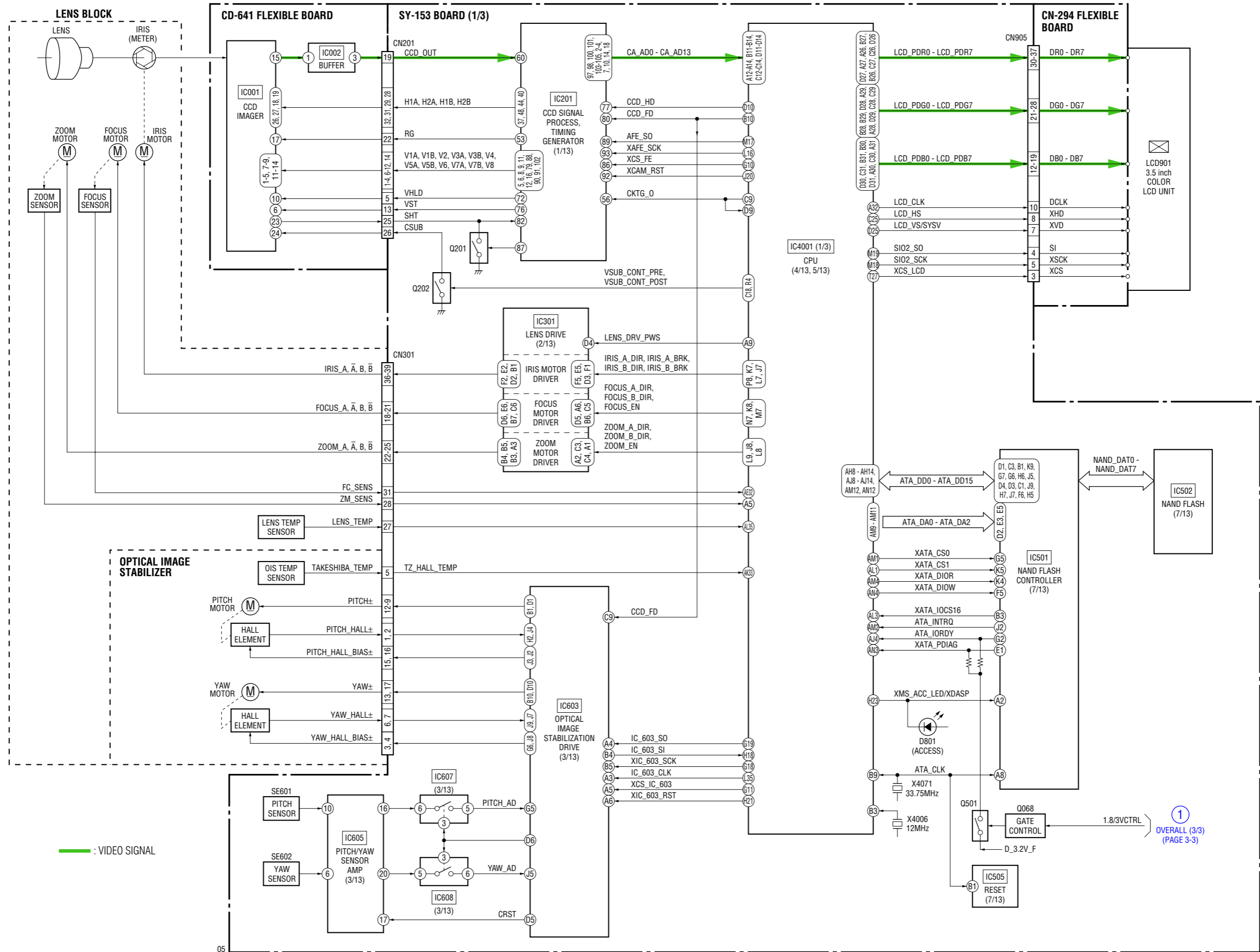
• [OVERALL BLOCK DIAGRAM \(2/3\)](#)

• [POWER BLOCK DIAGRAM \(2/2\)](#)

• [OVERALL BLOCK DIAGRAM \(3/3\)](#)

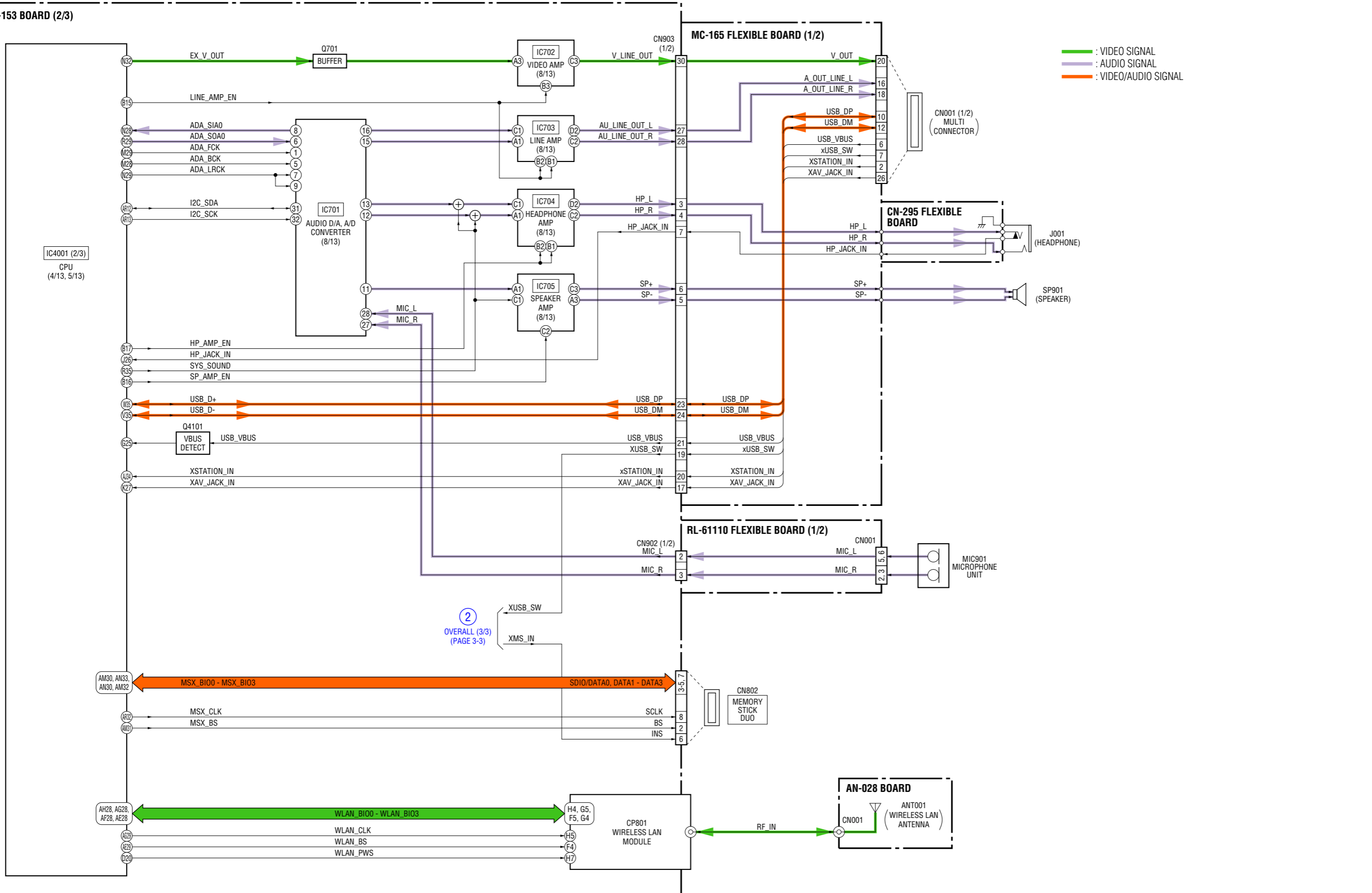
### 3. BLOCK DIAGRAMS

3-1. OVERALL BLOCK DIAGRAM (1/3) ( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3-2. OVERALL BLOCK DIAGRAM (2/3) ( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.

SY-153 BOARD (2/3)

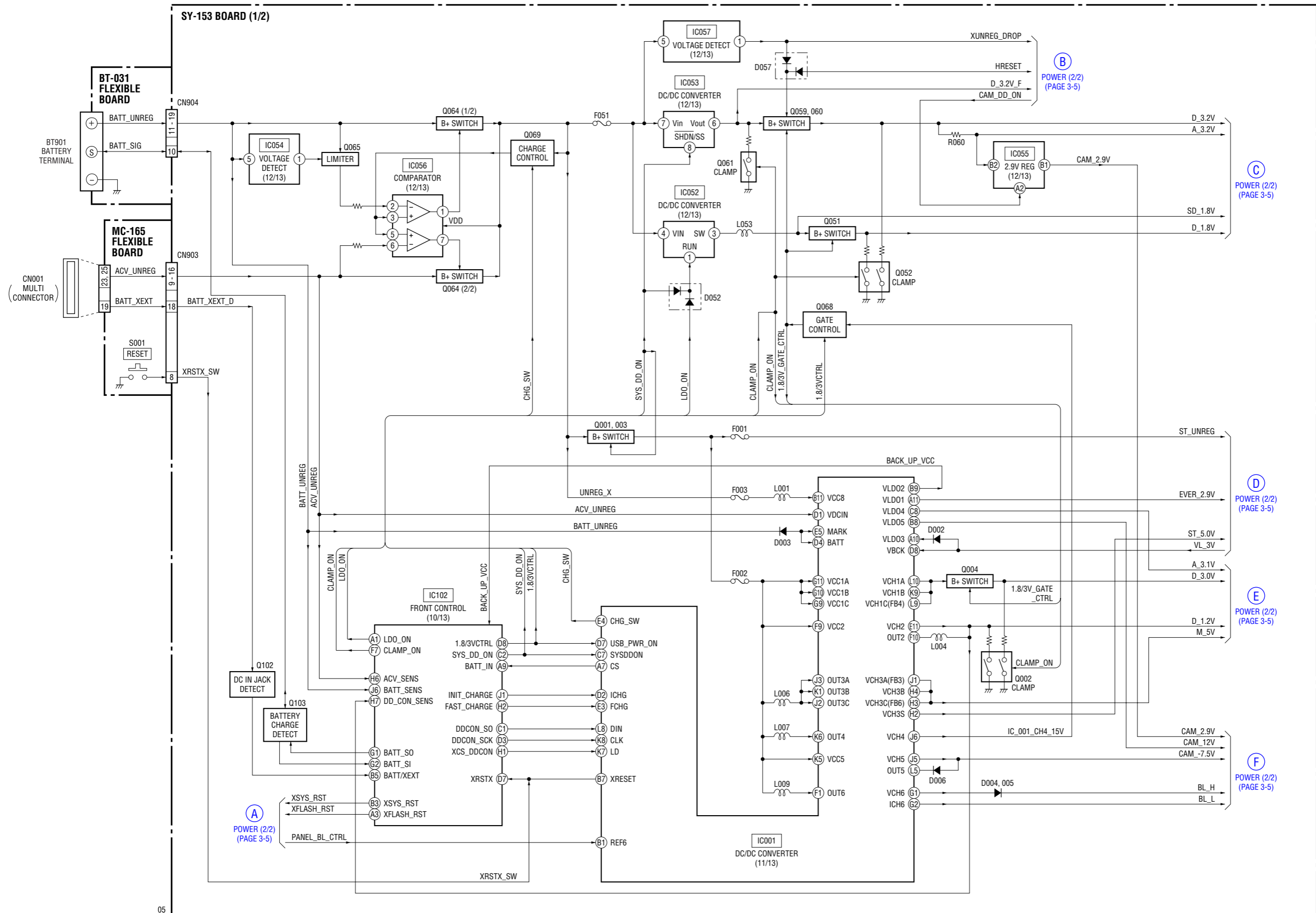


05



3-4. POWER BLOCK DIAGRAM (1/2)

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

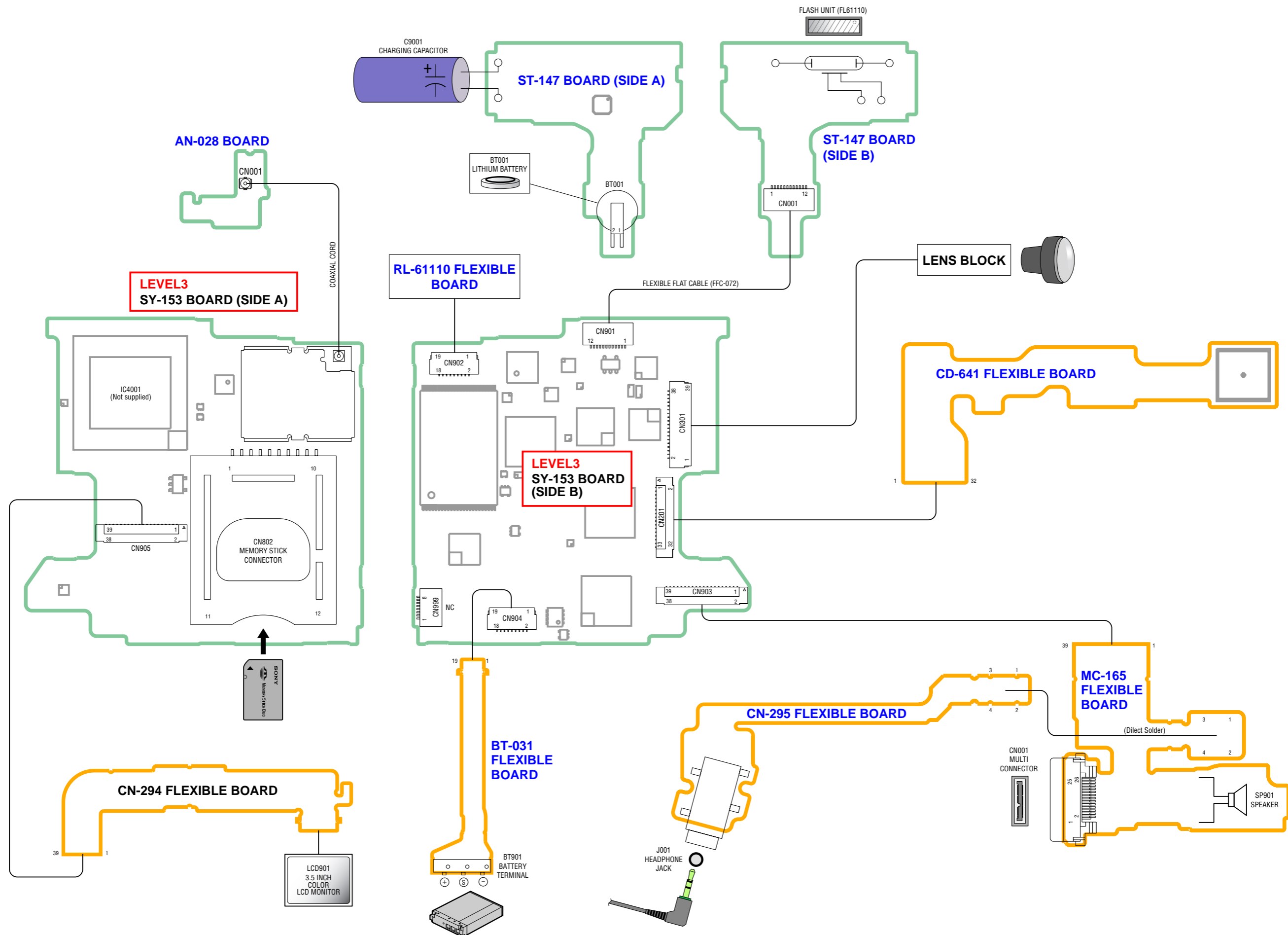


05



# 4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

## 4-1. FRAME SCHEMATIC DIAGRAM



## 4-2. SCHEMATIC DIAGRAMS

### Link

<ul style="list-style-type: none"><li>• CD-641 FLEXIBLE BOARD (CCD IMAGER)</li></ul>	<ul style="list-style-type: none"><li>• CN-295 FLEXIBLE BOARD (HEADPHONE JACK)</li></ul>
<ul style="list-style-type: none"><li>• ST-147 BOARD (FLASH DRIVE)</li></ul>	<ul style="list-style-type: none"><li>• BT-031 FLEXBLE BOARD (BATTERY IN)</li></ul>
<ul style="list-style-type: none"><li>• MC-165 FLEXIBLE BOARD (MULTI CONNECTOR)</li></ul>	<ul style="list-style-type: none"><li>• RL-61110 FLEXIBLE BOARD (CONTROL SWITCH)</li></ul>
<ul style="list-style-type: none"><li>• AN-028 BOARD (WLAN ANTENNA)</li></ul>	

<ul style="list-style-type: none"><li>• COMMON NOTE FOR SCHEMATIC DIAGRAMS</li></ul>
--

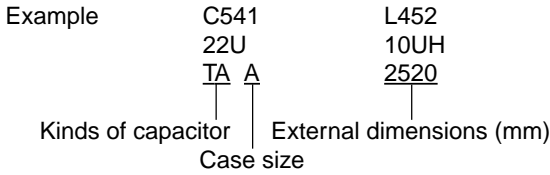
## 4-2. SCHEMATIC DIAGRAMS

### 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  $\mu\text{F}$  unless otherwise noted. pF :  $\mu\text{F}$ . 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted.  $k\Omega=1000 \Omega$ ,  $M\Omega=1000 k\Omega$ .
- 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 →  $\overline{\text{PB/REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B- Line
- : IN/OUT direction of (+,-) B LINE.
- : adjustment for repair.
- : not use circuit

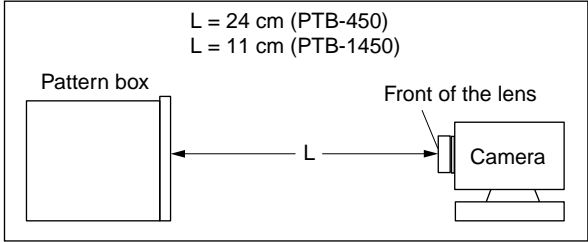
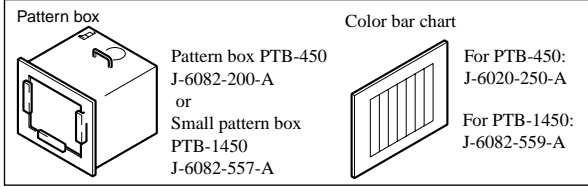
**(Measuring conditions voltage and waveform)**

- 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 M $\Omega$  input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

**Precautions for Replacement of Imager**

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the 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.

**1. Connection**



2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

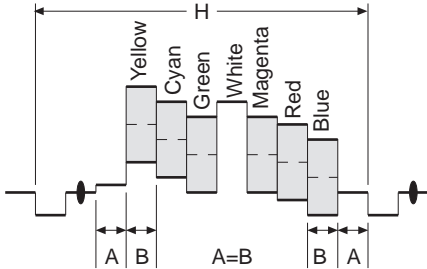


Fig. a (Video output terminal output waveform)

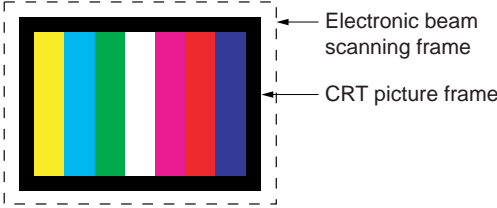


Fig.b (Picture on monitor TV)

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

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

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

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

# CD-641 FLEXIBLE BOARD

## CCD IMAGER

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

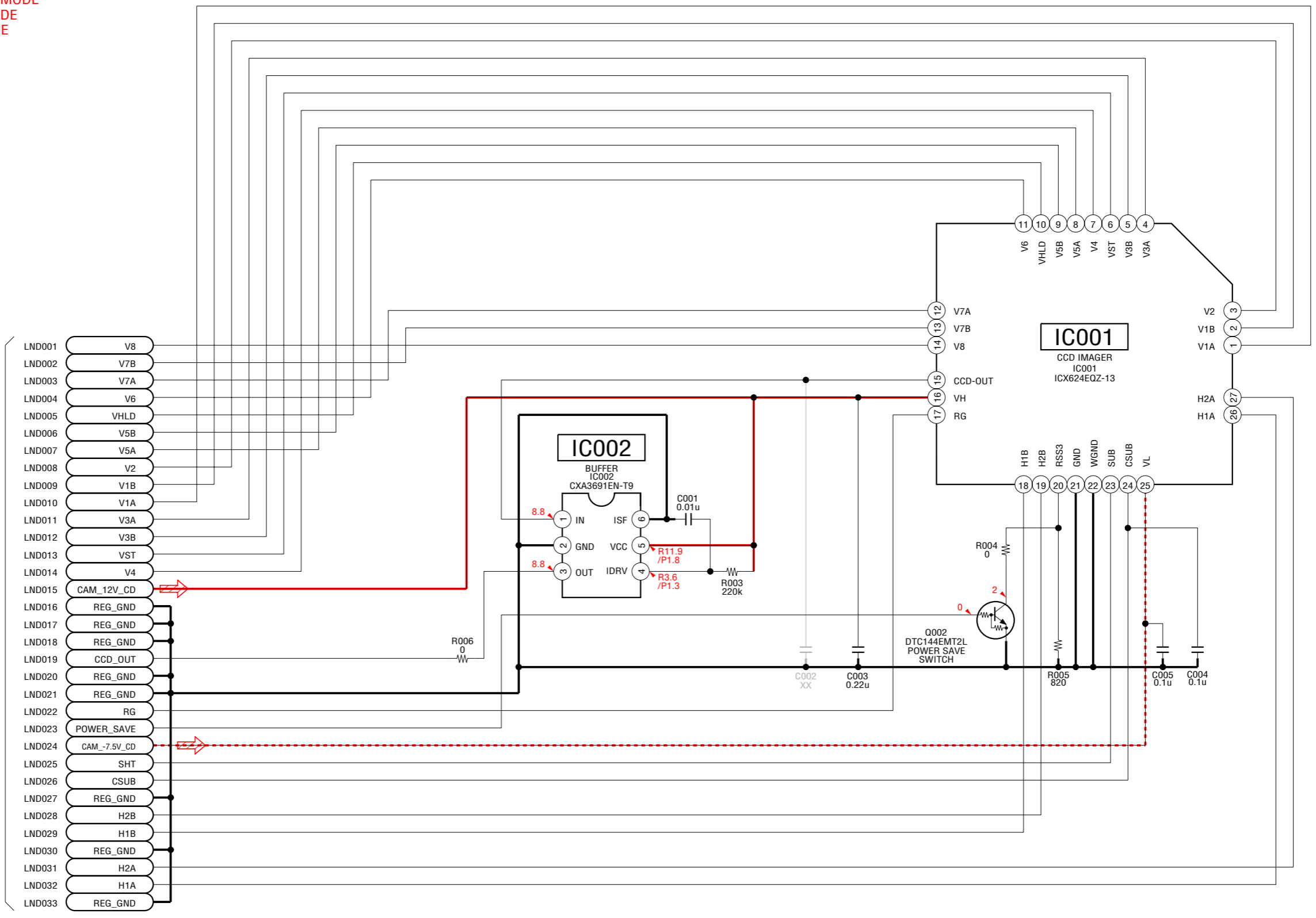
R:REC MODE

P:PB MODE

Note:CD-641 flexible complete board and IC001 are not supplied,  
but they are included in CCD block assy.

Note:Voltage of IC001 can not be measured,  
because this is mounted by the side of the lens.

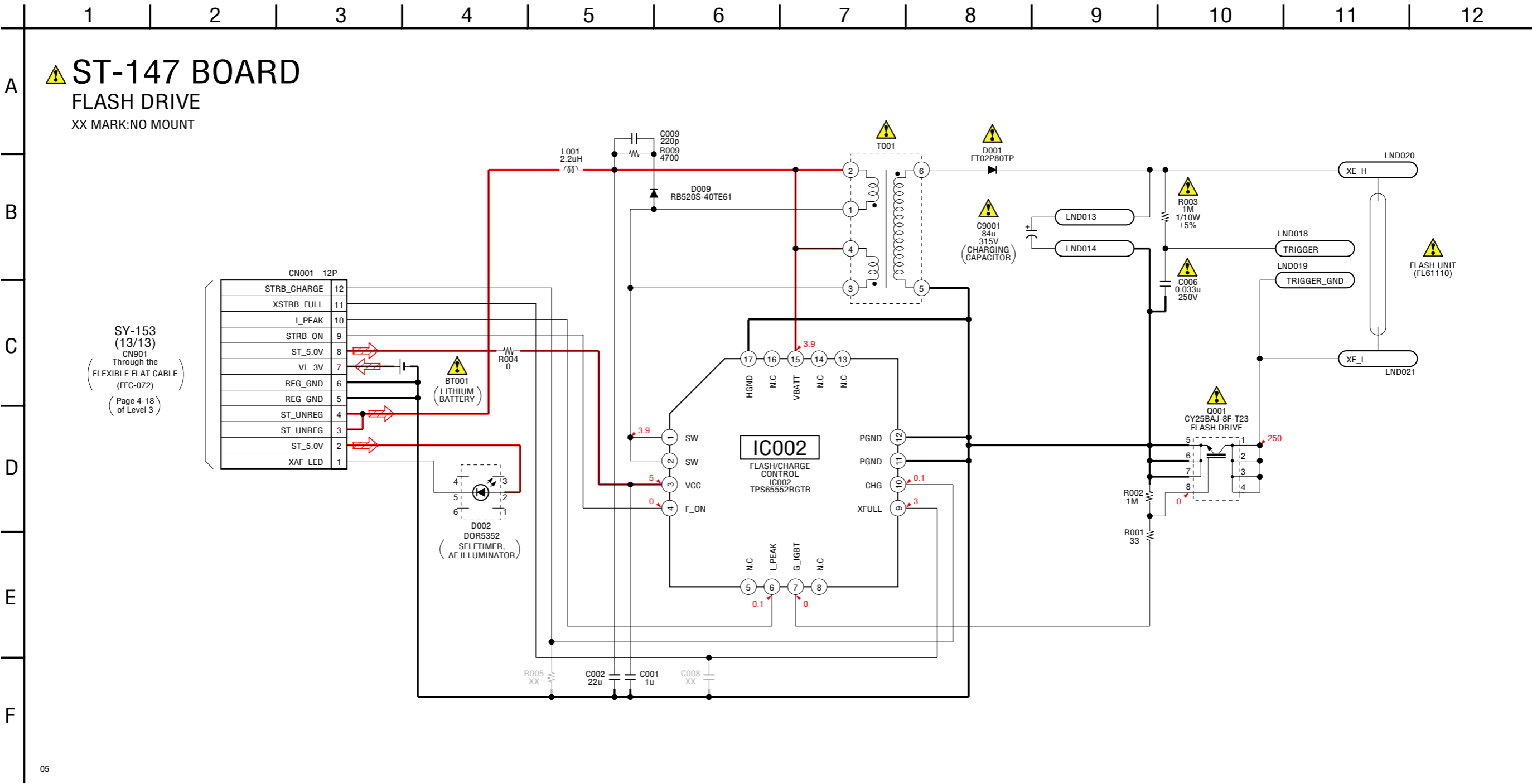
A  
B  
C  
D  
E  
F  
G  
H



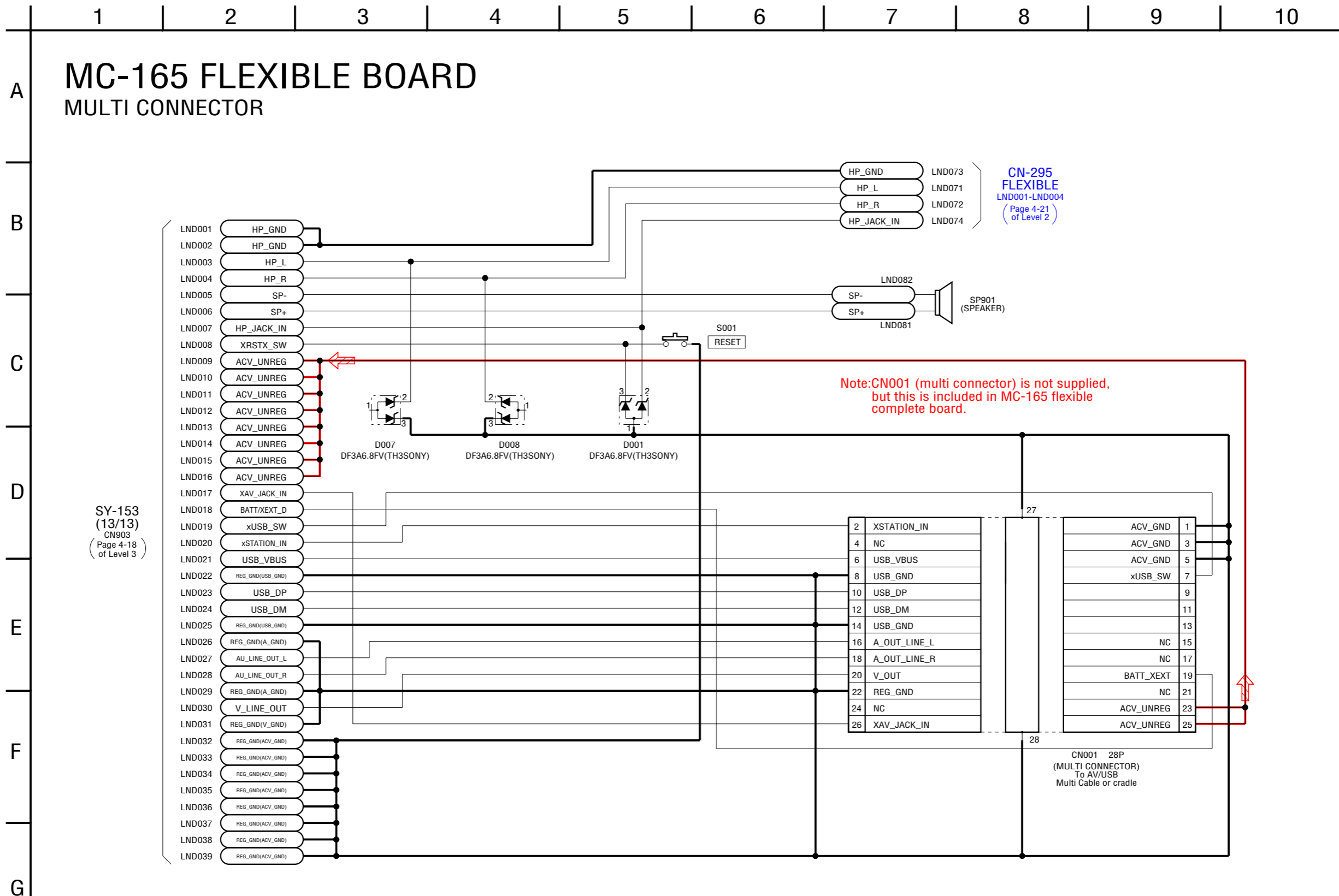
SY-153  
(1/13)  
CN102  
Page 4-6  
of Level 3

05

Schematic diagrams of the SY-153 board are not shown.  
Pages from 4-6 to 4-18 are not shown.



# MC-165 FLEXIBLE BOARD MULTI CONNECTOR



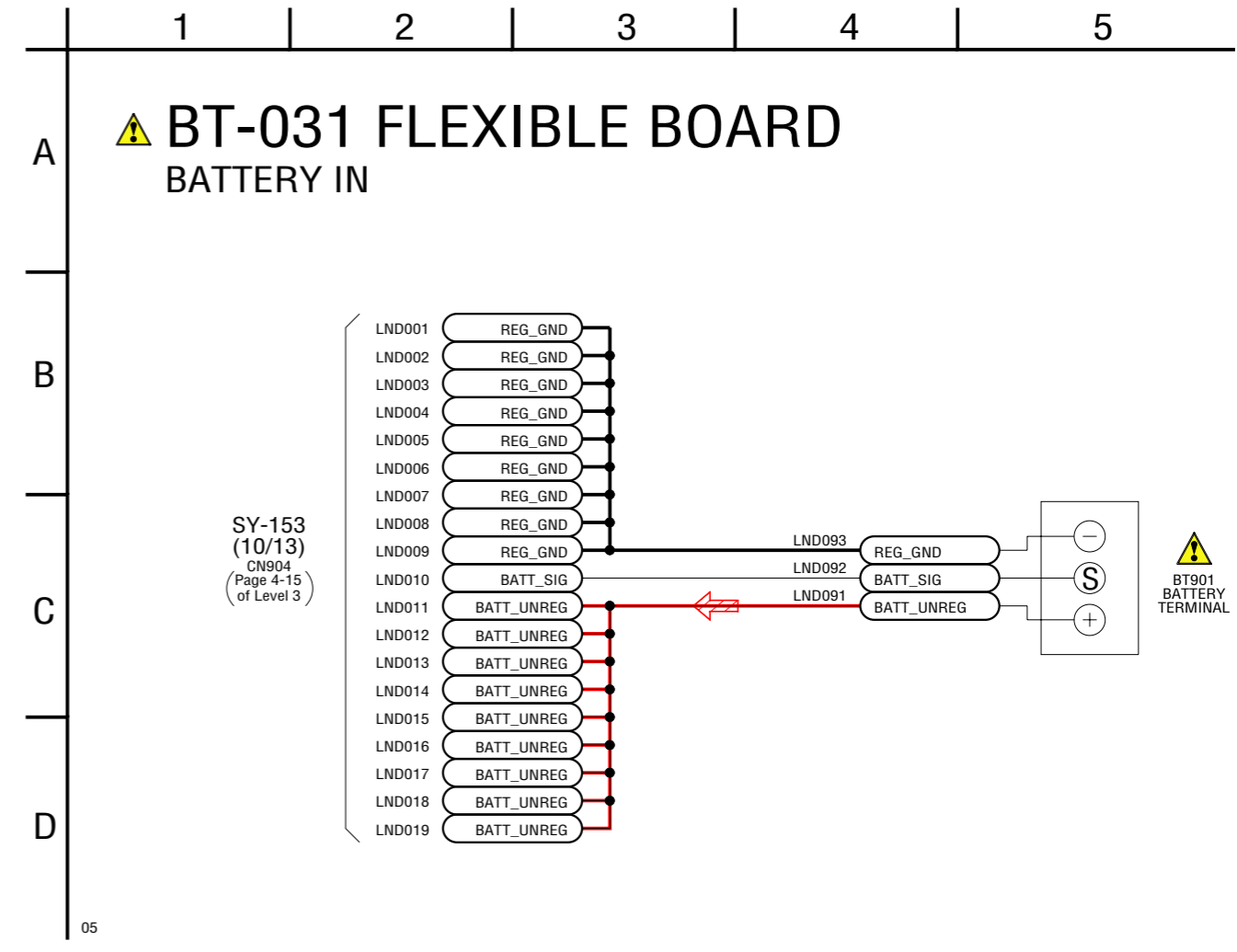
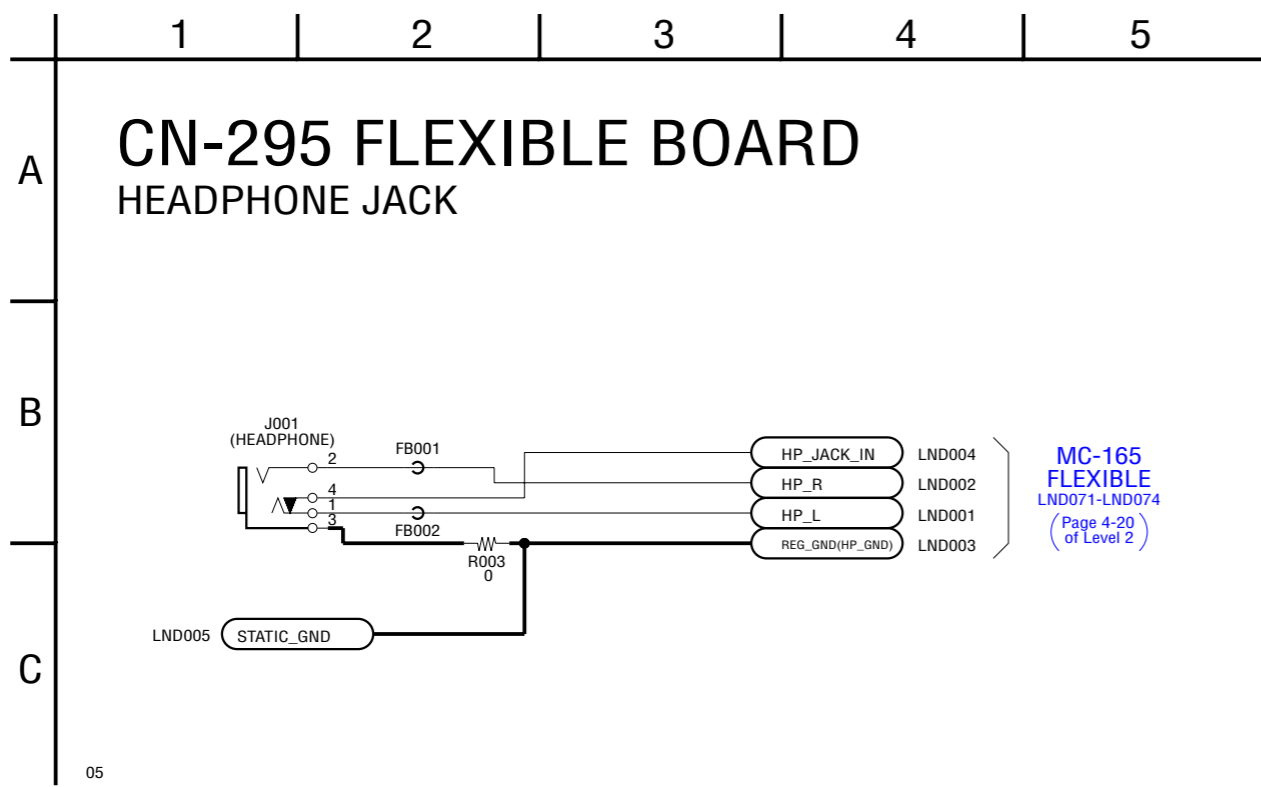
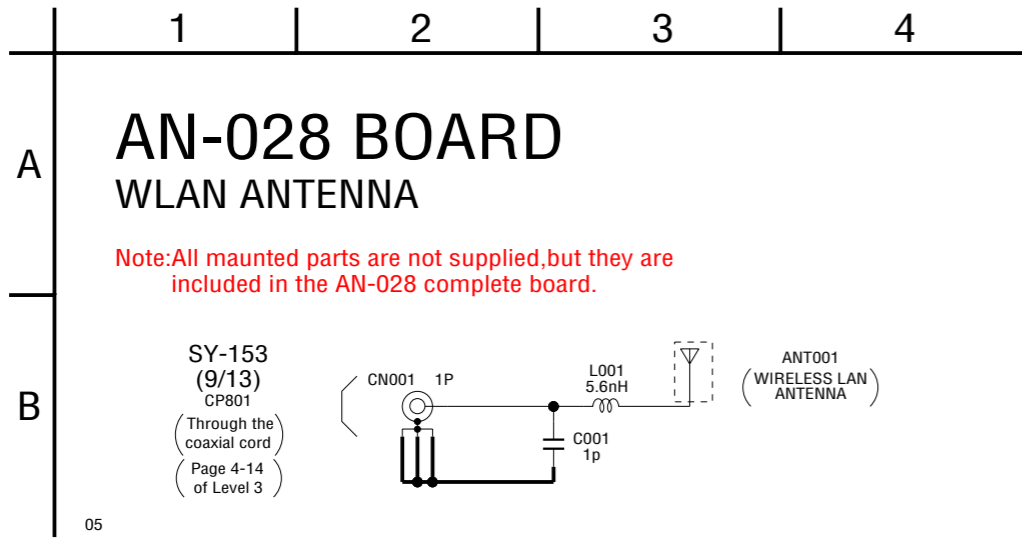
CN-295  
FLEXIBLE  
LND001-LND004  
(Page 4-21  
of Level 2)

Note: CN001 (multi connector) is not supplied,  
but this is included in MC-165 flexible  
complete board.

SY-153  
(13/13)  
CN903  
(Page 4-18  
of Level 3)

2	XSTATION_IN	27	ACV_GND	1
4	NC		ACV_GND	3
6	USB_VBUS		ACV_GND	5
8	USB_GND		xUSB_SW	7
10	USB_DP			9
12	USB_DM			11
14	USB_GND			13
16	A_OUT_LINE_L		NC	15
18	A_OUT_LINE_R		NC	17
20	V_OUT		BATT_XEXT	19
22	REG_GND		NC	21
24	NC		ACV_UNREG	23
26	XAV_JACK_IN		ACV_UNREG	25

CN001 28P  
(MULTI CONNECTOR)  
To AV/USB  
Multi Cable or cradle

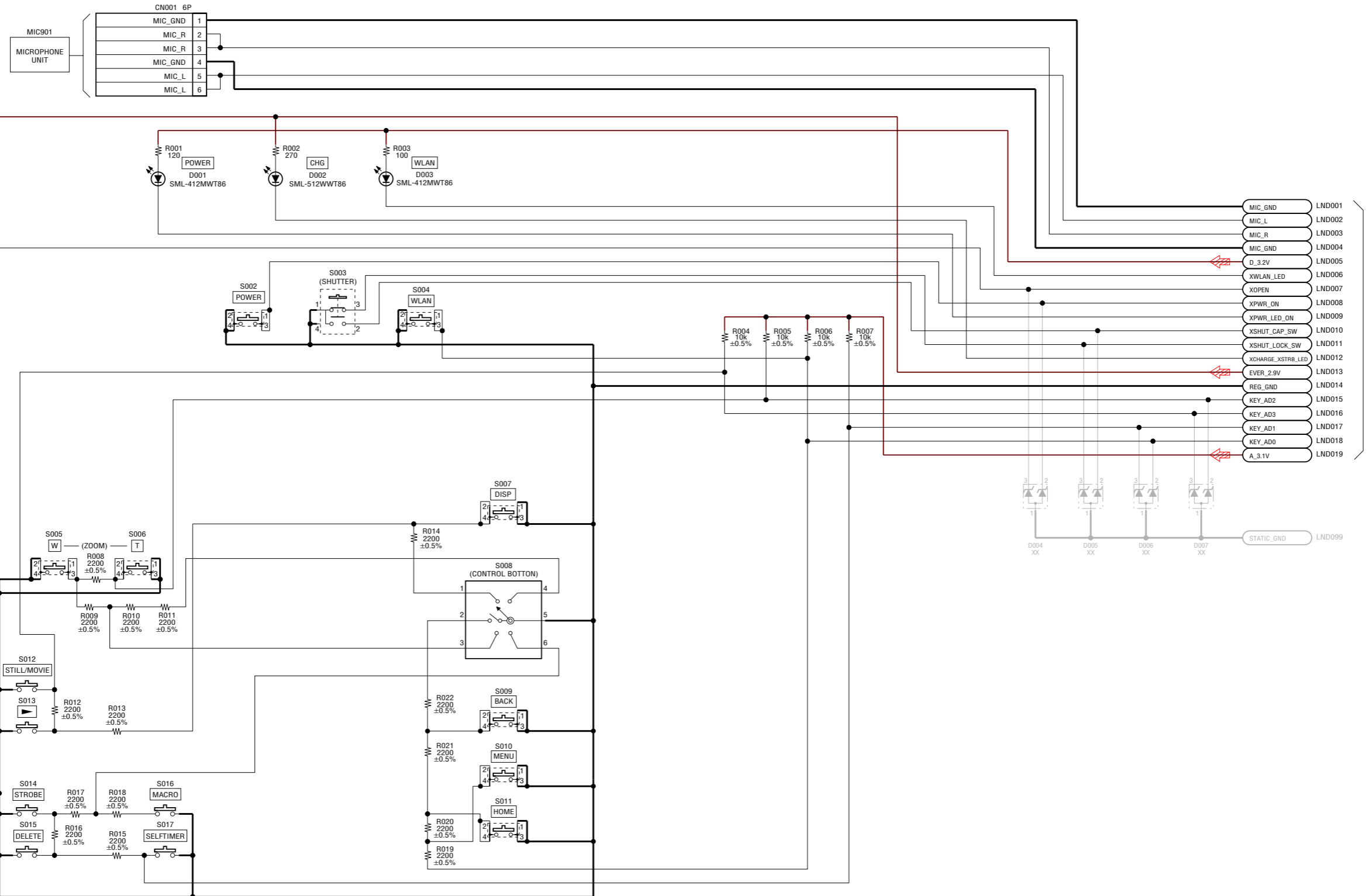


# RL-61110 FLEXIBLE BOARD

(RL-61110 FLEXIBLE BOARD is replaced as block,  
so that PRINTED WIRING BOARD is omitted.)

## CONTROL SWITCH

XX MARK:NO MOUNT



SY-153  
(13/13)  
CN902  
(Page 4-18  
of Level 3)

## 4-3. PRINTED WIRING BOARDS

### Link

<a href="#">• CD-641 FLEXIBLE BOARD</a>	<a href="#">• MC-165 FLEXIBLE BOARD</a>
<a href="#">• ST-147 BOARD</a>	<a href="#">• CN-295 FLEXIBLE BOARD</a>
<a href="#">• AN-028 BOARD</a>	<a href="#">• BT-031 FLEXIBLE BOARD</a>
<a href="#">• COMMON NOTE FOR PRINTED WIRING BOARDS</a>	<a href="#">• MOUNTED PARTS LOCATION</a>

# 4-3. PRINTED WIRING BOARDS

## 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

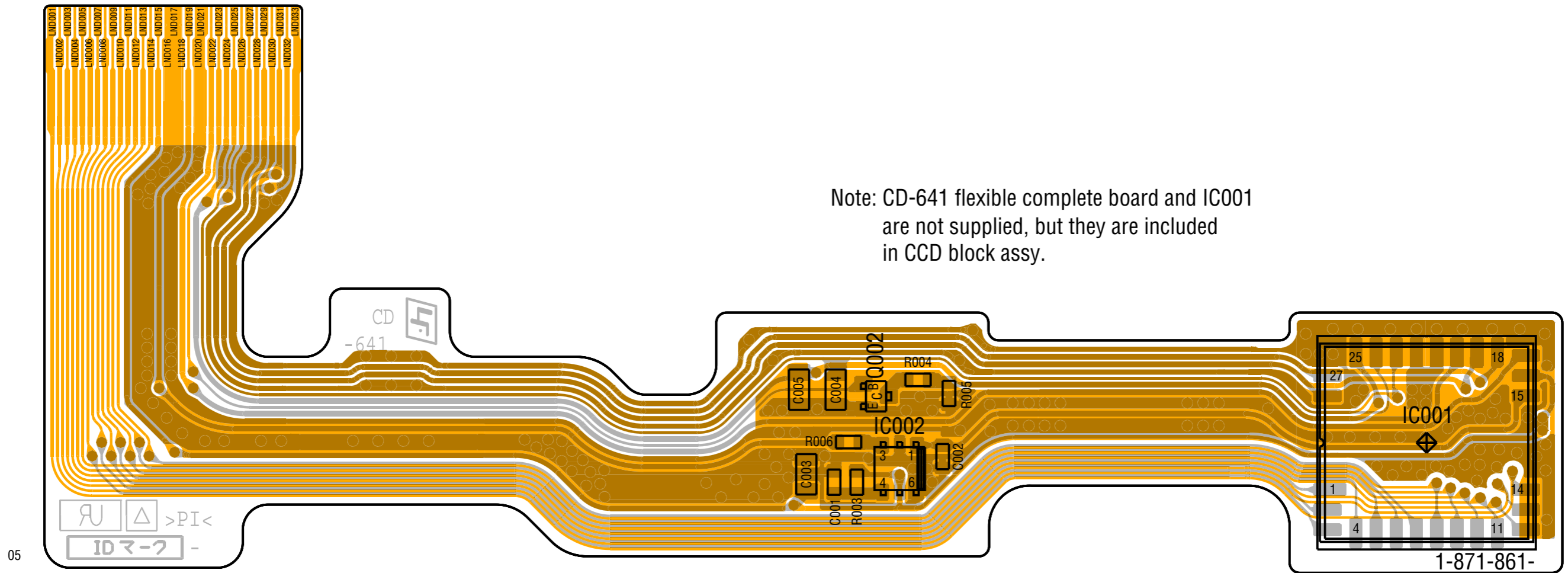
- Chip parts.

**Transistor**

**Diode**

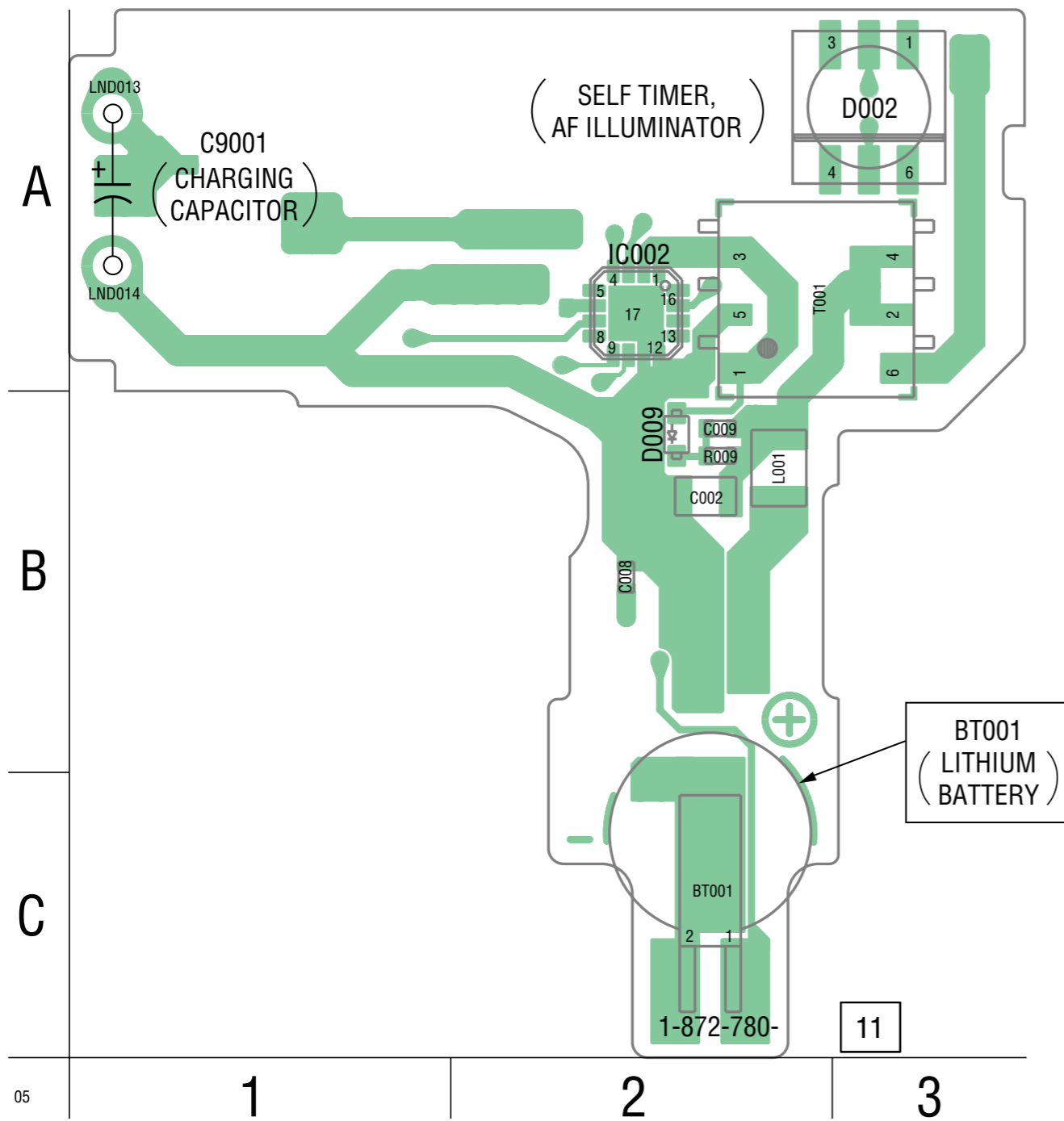
# CD-641 FLEXIBLE BOARD

Note: CD-641 flexible complete board and IC001 are not supplied, but they are included in CCD block assy.

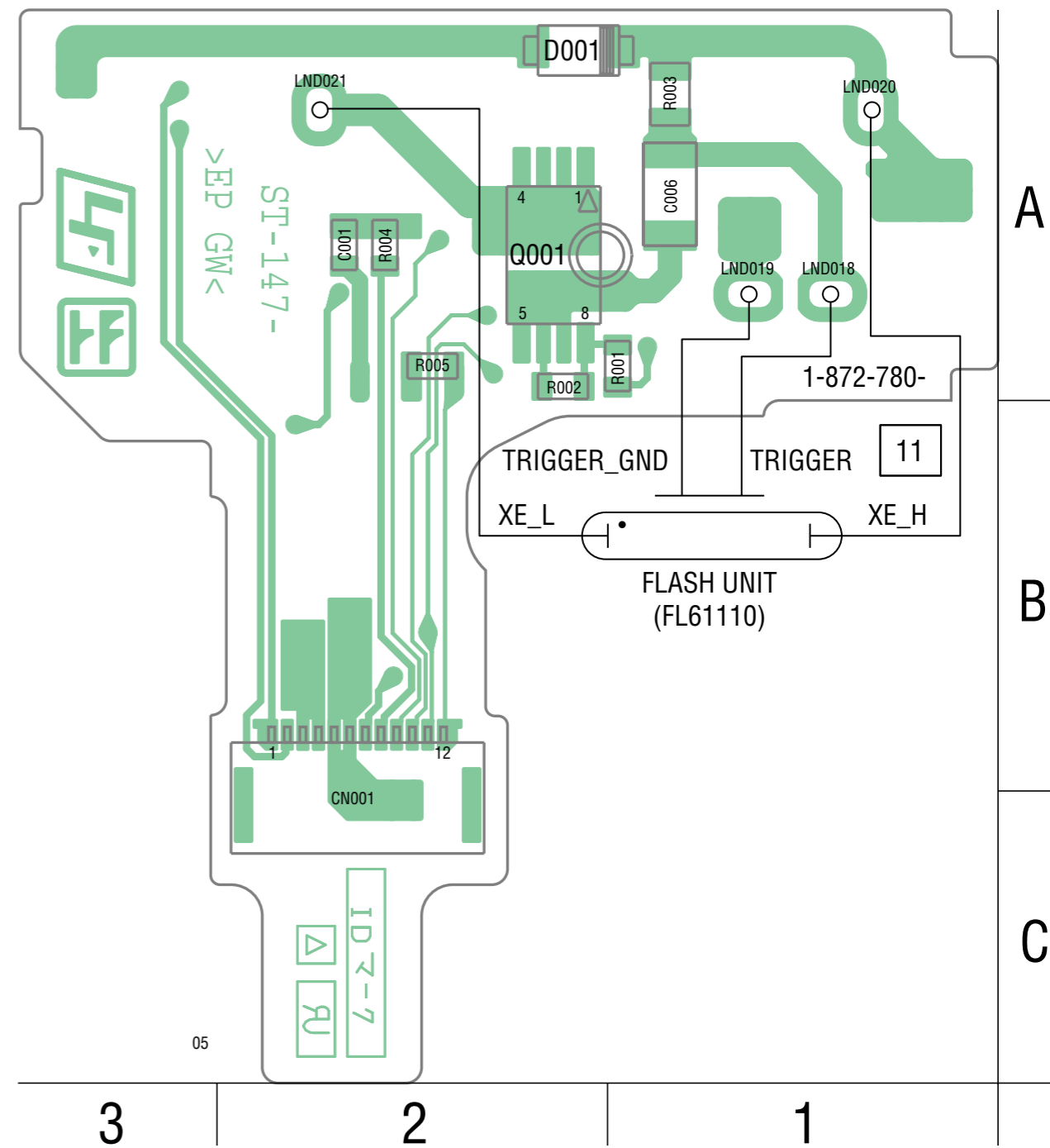


Printed wiring board of the SY-153 board is not shown.  
Pages 4-26 is not shown.

# ST-147 BOARD (SIDE A)



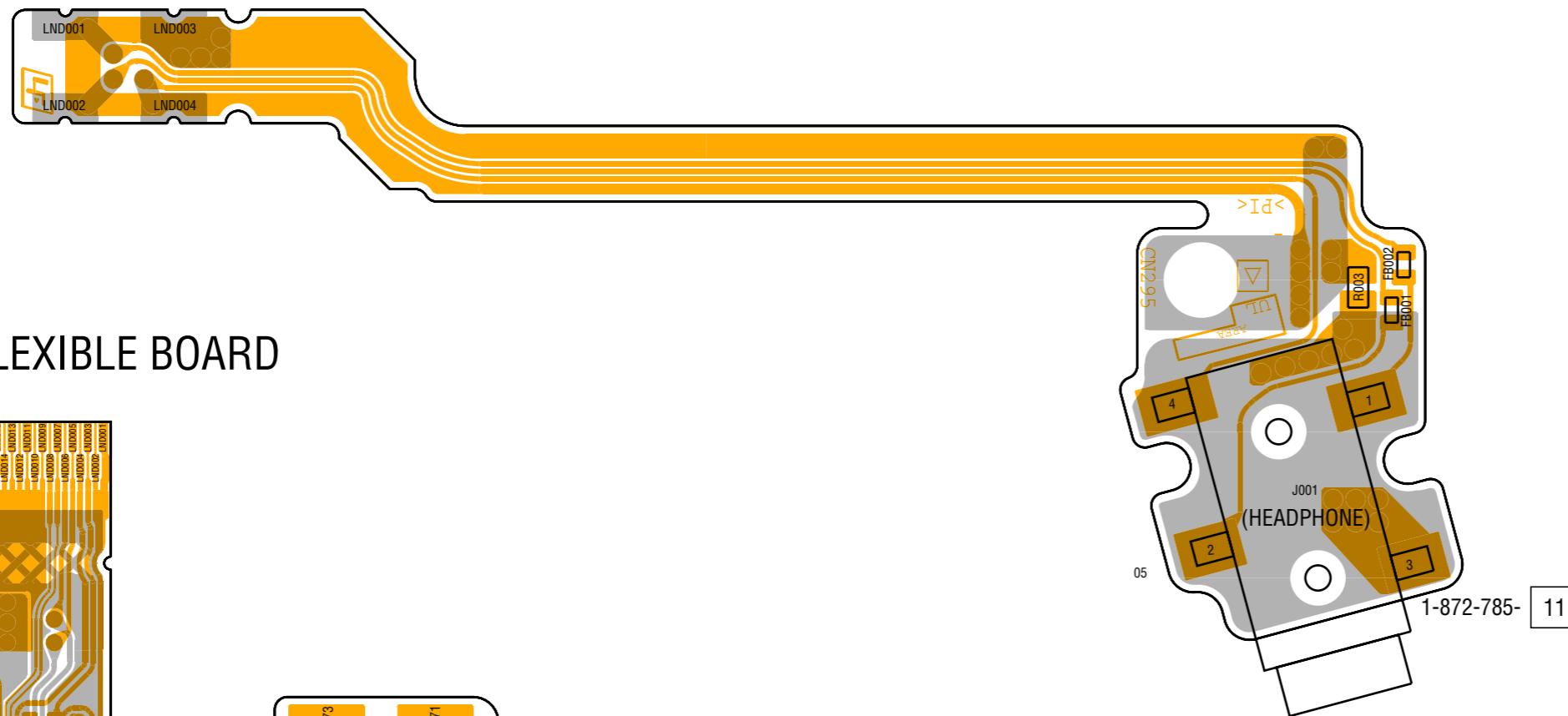
# ST-147 BOARD (SIDE B)



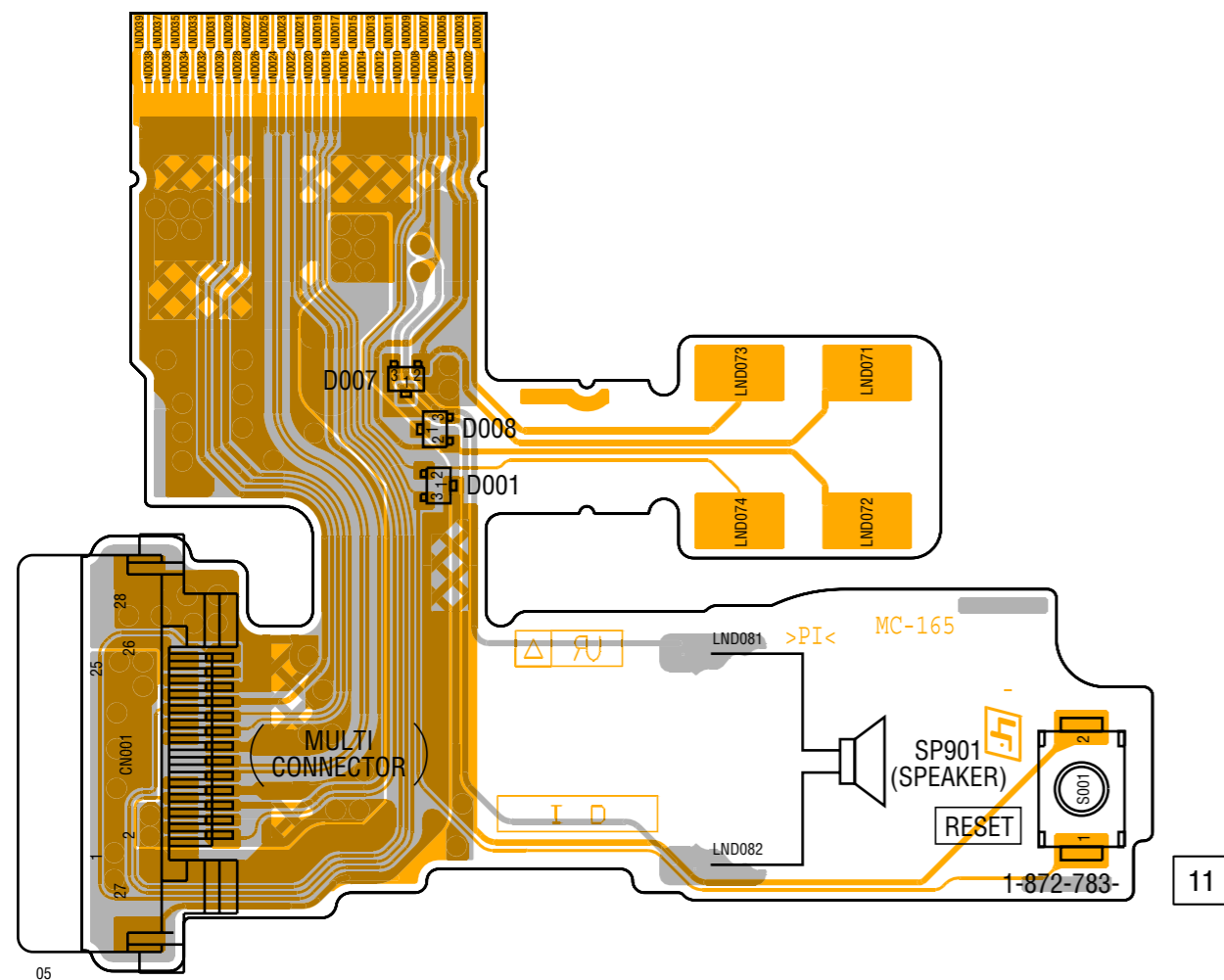
**CAUTION**  
 Danger of explosion if battery is incorrectly replaced.  
 Replace only with the same or equivalent type.

 : Uses unleaded solder.

## CN-295 FLEXIBLE BOARD

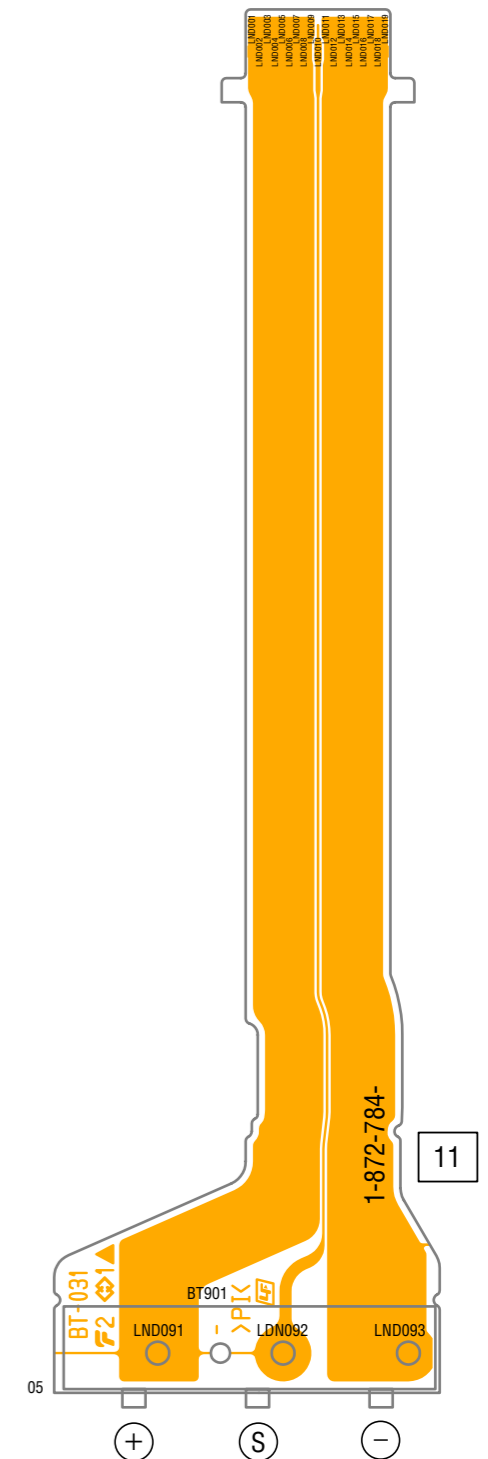


## MC-165 FLEXIBLE BOARD



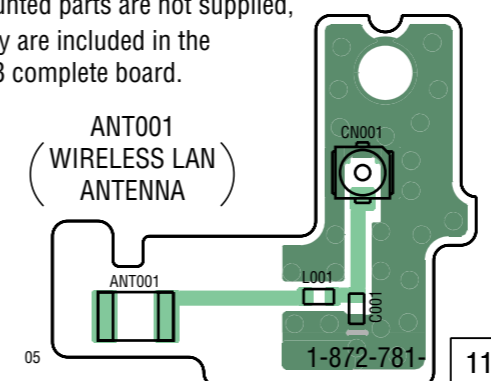
Note: CN001 (multi connector) is not supplied, but this is included in the MC-165 flexible complete board.

## BT-031 FLEXIBLE BOARD



## AN-028 BOARD

Note: All mounted parts are not supplied, but they are included in the AN-028 complete board.



## 4-3. PRINTED WIRING BOARDS

### 4-4. MOUNTED PARTS LOCATION

no mark : side A  
\* mark : side B

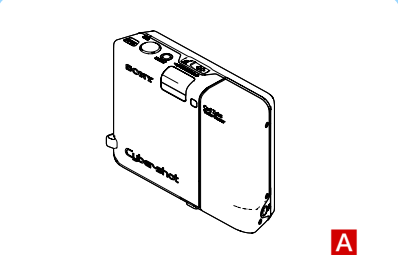
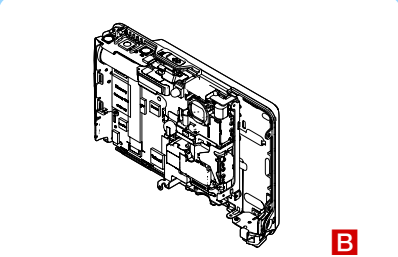
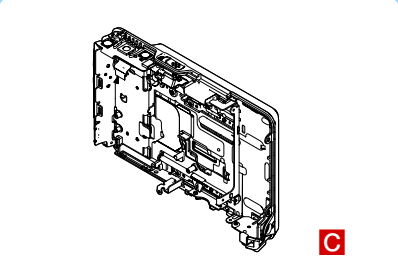
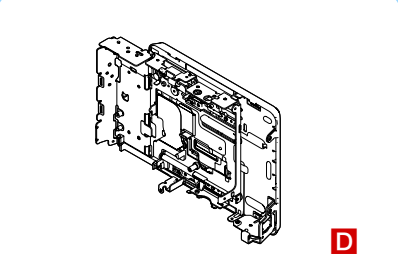
#### ST-147 BOARD

- BT001 C-2
- \* C001 A-2
- C002 B-2
- \* C006 A-1
- C009 B-2
- C9001 A-1
- \* CN001 C-2
- \* D001 A-2
- D002 A-3
- D009 B-2
- IC002 A-2
- L001 B-2
- \* Q001 A-2
- \* R001 A-1
- \* R002 A-2
- \* R003 A-1
- \* R004 A-2
- R009 B-2
- T001 A-2

Mounted parts location of the SY-153 board is not shown.  
Page 4-30 to 4-31 are not shown.

# 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		
 <b>A</b>	 <b>B</b>	 <b>C</b>	
<b>CABINET SECTION</b>	<b>LENS BLOCK</b>	<b>SWITCH BLOCK</b>	
 <b>D</b>			
<b>CABINET (LCD) BLOCK</b>			

Link	ELECTRICAL PARTS LIST			ACCESSORIES
<a href="#">AN-028 BOARD</a> <b>C</b>	<a href="#">CD-641 FLEXIBLE BOARD</a> <b>B</b>	<a href="#">MC-165 FLEXIBLE BOARD</a> <b>A</b>		
<a href="#">BT-031 FLEXIBLE BOARD</a> <b>A</b>	<a href="#">CN-295 FLEXIBLE BOARD</a> <b>A</b>	<a href="#">ST-147 BOARD</a> <b>B</b>		

## 5. REPAIR PARTS LIST

### 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:  $\mu$ F
- COILS  
uH:  $\mu$ H
- RESISTORS  
All resistors are in ohms.  
METAL: metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F: nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA...:  $\mu$ A... , uPA... ,  $\mu$ PA... ,  
uPB... ,  $\mu$ PB... ,  $\mu$ PC... ,  $\mu$ PC... ,  
uPD... ,  $\mu$ PD...
- Abbreviation  
AR : Argentine model  
AUS : Australian model  
BR : Brazilian model  
CH : Chinese model  
CND : Canadian model  
EE : East European model  
HK : Hong Kong model  
J : Japanese model  
JE : Tourist model  
KR : Korea model  
NE : North European model  
TW : Taiwan model

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

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

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

- Color Indication of Appearance Parts  
Example:  
(SILVER) : Cabinet's Color  
(Silver) : Parts Color

# 5. REPAIR PARTS LIST

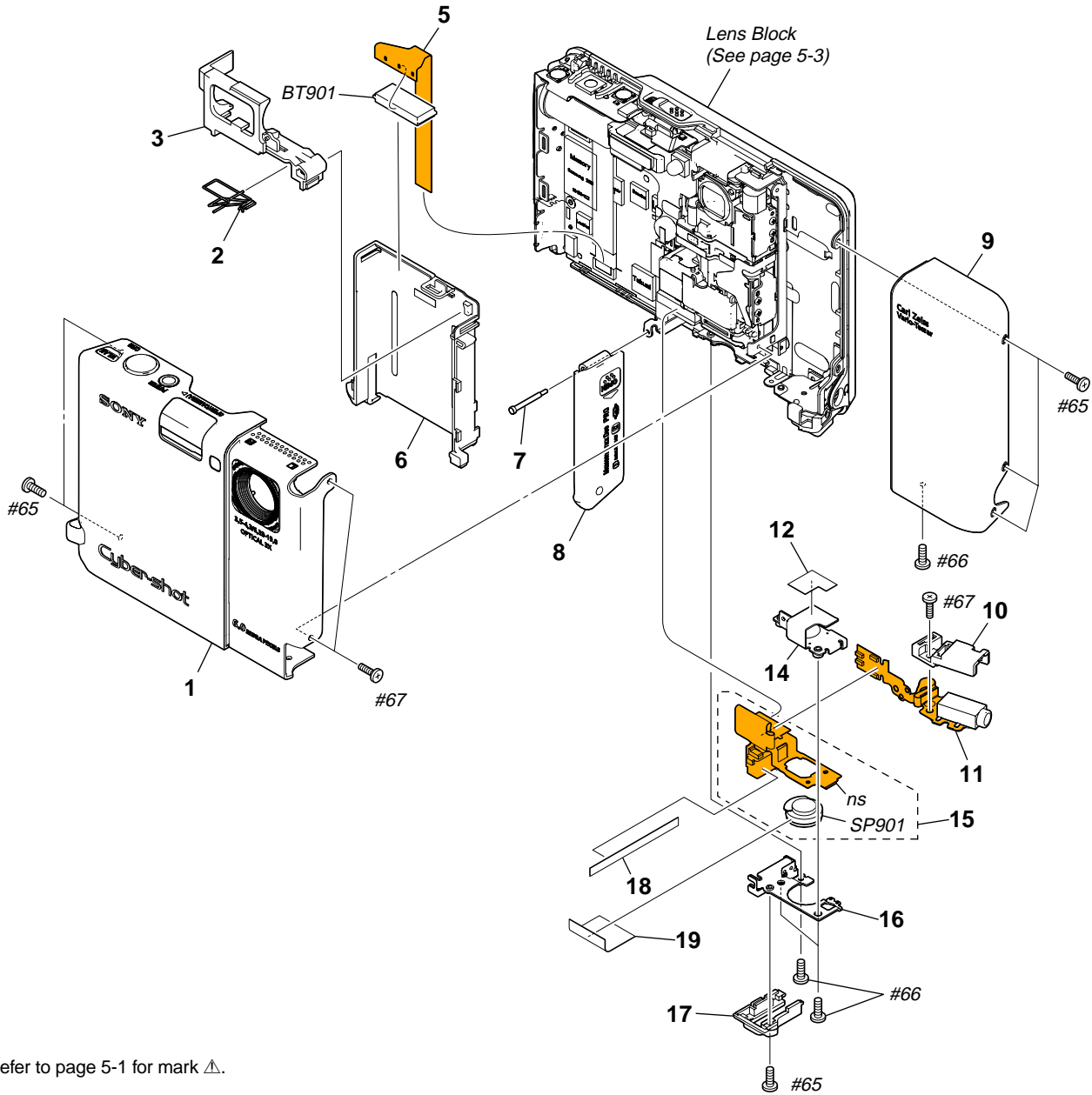
## DISASSEMBLY

## HARDWARE LIST

### 5-1. EXPLODED VIEWS

#### 5-1-1. CABINET SECTION

ns: not supplied



• Refer to page 5-1 for mark △.

Ref. No.	Part No.	Description
1	A-1172-406-A	CABINET (FR) BLOCK ASSY
* 2	2-657-907-01	SPRING, BT DISCHARGE
3	2-657-502-02	CABINET (BATT-CN)
△ 5	1-872-784-11	BT-031 FLEXIBLE BOARD
6	X-2109-267-1	SUB ASSY CASE (BT)
* 7	2-657-486-01	SHAFT (BT HINGE)
8	X-2149-588-2	SUB ASSY BT LID
9	A-1172-407-A	COVER (LENS) BLOCK ASSY
* 10	2-666-629-01	COVER (HP)
11	A-1172-395-A	CN-295 FLEXIBLE BOARD, COMPLETE
* 12	2-672-872-01	SHEET (COVER HP), INSULATING

Ref. No.	Part No.	Description
14	X-2109-188-1	SUB ASSY PLATE (SP)
15	A-1172-394-A	MC-165 FLEXIBLE BOARD, COMPLETE
16	X-2109-189-1	SUB ASSY PLATE (MULTI)
17	2-657-493-01	CABINET (MULTI)
* 18	3-106-665-01	SHEET (MULTI)
* 19	3-099-849-01	COVER (SPEAKER)
△ BT901	1-780-141-21	BATTERY TERMINAL BOARD
SP901	1-826-403-11	LOUD SPEAKER (1.0CM)
#65	2-635-591-01	SCREW (M1.4), NEW TRUSTAR P2 (Silver)
#66	2-635-591-41	SCREW (M1.4), NEW TRUSTAR P2 (Silver)
#67	3-389-523-16	SCREW (LOCK ACE) (Silver)

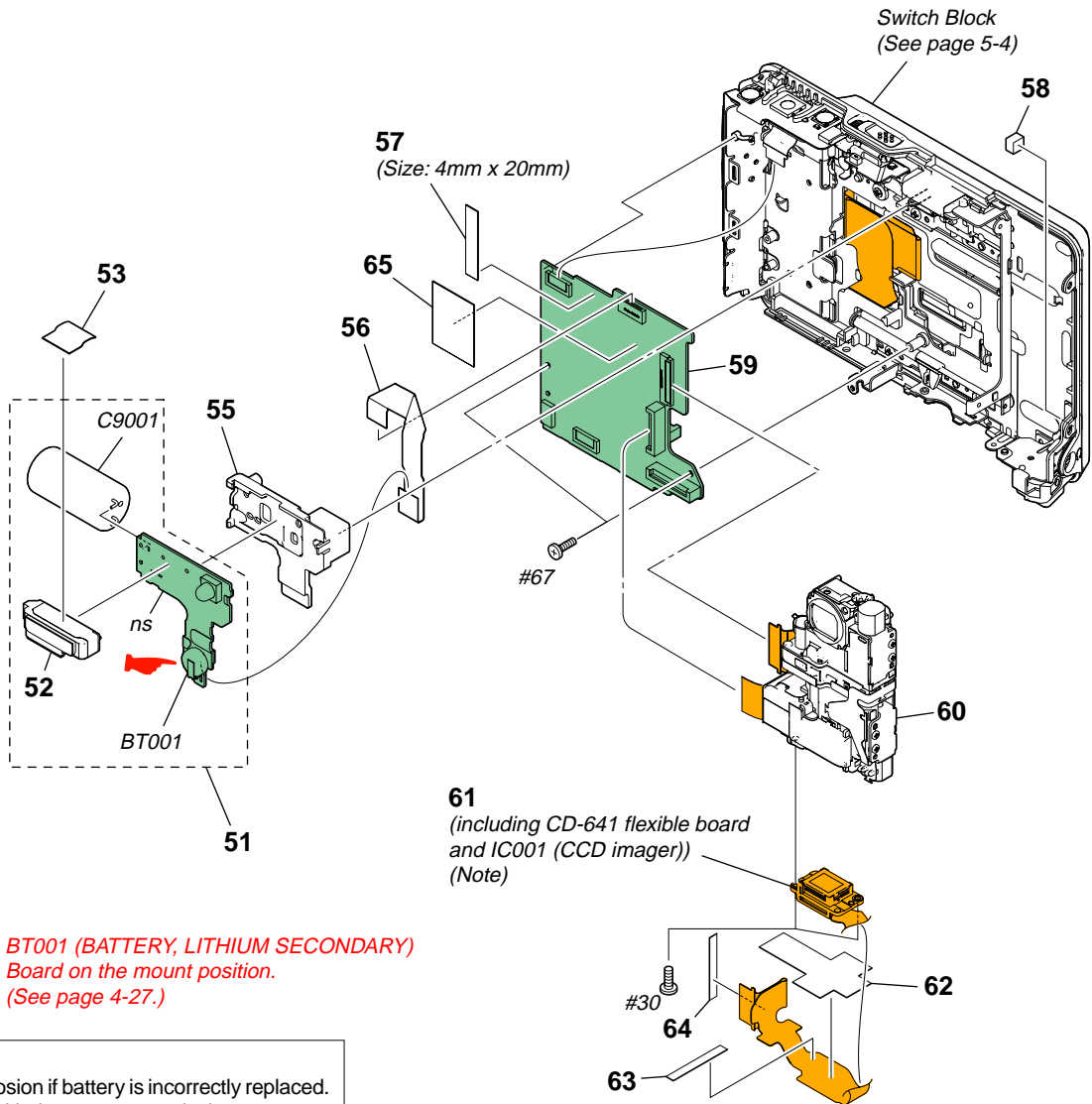
# 5. REPAIR PARTS LIST

## DISASSEMBLY

## HARDWARE LIST

### 5-1-2. LENS BLOCK

ns: not supplied



: BT001 (BATTERY, LITHIUM SECONDARY)  
Board on the mount position.  
(See page 4-27.)

**CAUTION 1:**  
Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type.

**CAUTION 2:**  
For the part of 57: TAPE (W-LAN) (2-672-780-01),  
cut WOVEN (T0.25), FABRIC NON (3-076-631-01)  
into the desired length and use it.

Note: Be sure to read "Precautions for Replacement of Imager" on page 4-3 when changing the imager.

• Refer to page 5-1 for mark  $\triangle$ .

Ref. No.	Part No.	Description
$\triangle$ 51	A-1229-537-A	ST-147 BOARD, COMPLETE
$\triangle$ 52	1-479-818-11	FLASH UNIT (FL61110)
* 53	2-662-830-01	SHEET (STROBE)
* 55	2-657-501-01	CABINET (CENTER STROBE)
56	1-833-805-11	FLEXIBLE FLAT CABLE (FFC-072)
57	CAUTION 2	TAPE (W-LAN)
* 58	2-699-377-01	CUSHION (LCD SLIDE)
59	A-1228-919-A	SY-153 BOARD, COMPLETE (SERVICE)
60	A-1167-020-B	LSV-1110A (SERVICE USE)
61	A-1172-411-A	CCD BLOCK ASSY (including CD-641 flexible board and IC001 (CCD imager)) (Note)

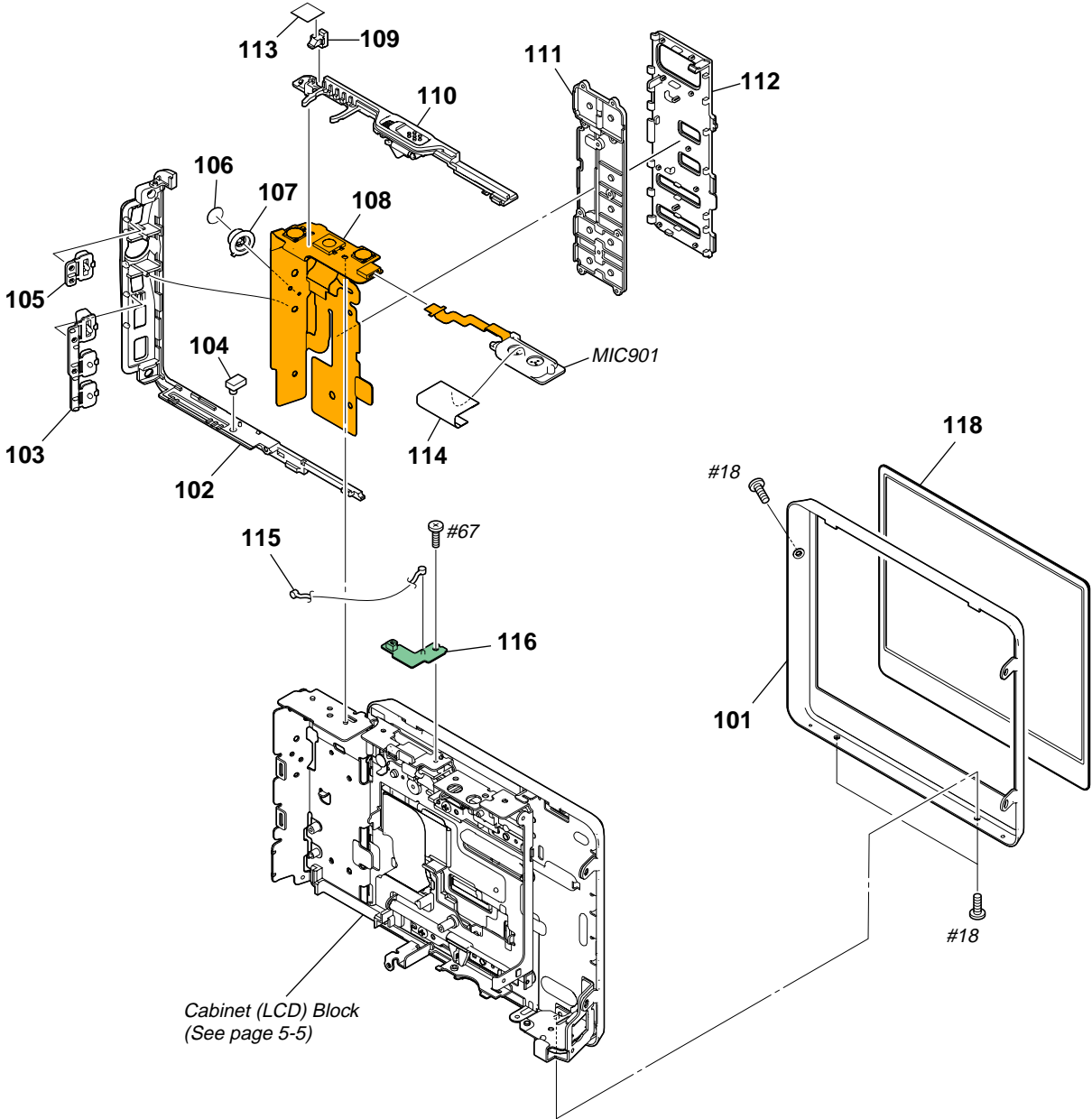
Ref. No.	Part No.	Description
* 62	2-672-782-01	LEAF (CCD), COPPER
* 63	2-319-282-01	SHEET (CD FLEXIBLE) (L)
* 64	2-319-283-01	SHEET (CD FLEXIBLE) (S)
* 65	3-095-510-01	SHEET (SY)
$\triangle$ BT001	1-528-999-61	BATTERY, LITHIUM SECONDARY
$\triangle$ C9001	1-114-179-11	CAP, ELECT 84uF 315V
#30	3-086-156-11	SCREW B1.2 (White)
#67	3-389-523-16	SCREW (LOCK ACE) (Silver)

# 5. REPAIR PARTS LIST

## DISASSEMBLY

## HARDWARE LIST

### 5-1-3. SWITCH BLOCK



Ref. No.	Part No.	Description
101	X-2109-063-1	LCD CABINET SUB ASSY
102	2-657-385-01	ESCUTCHEON (UI)
* 103	2-678-096-01	BUTTON (DISPLAY)
104	2-657-490-01	LENS (ACCESS)
105	2-657-479-01	BUTTON (SIDE UI)
106	2-887-079-01	CUSHION (5WAY)
107	2-657-393-01	BUTTON (5WAY)
108	1-871-609-11	RL-61110 FLEXIBLE BOARD
109	2-657-483-01	LENS (CHARGE)
110	X-2109-198-1	SUB ASSY ESCUTCHEON (OPEN)

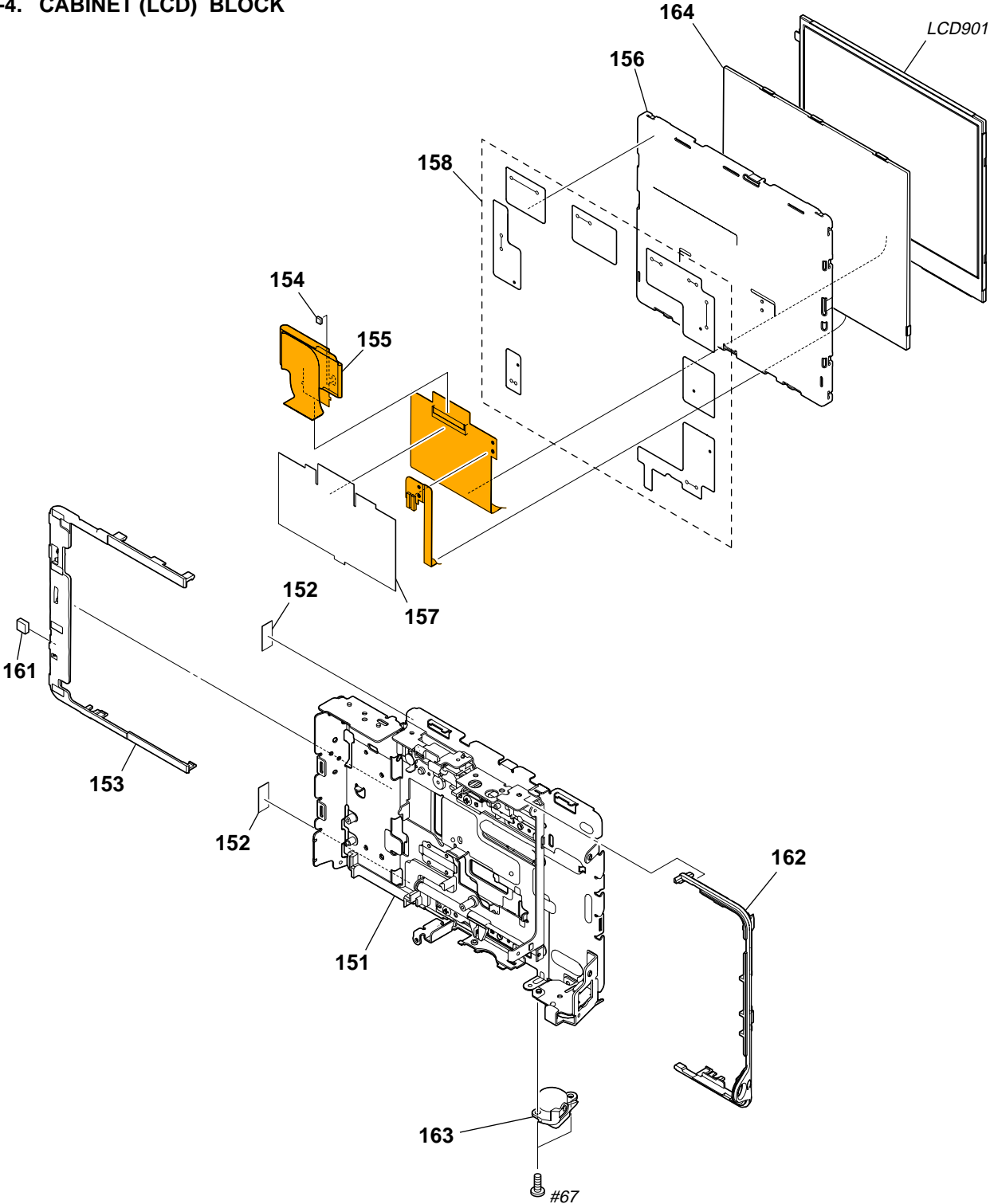
Ref. No.	Part No.	Description
* 111	2-678-271-01	RUBBER KEY
112	2-657-380-01	PANEL (CAM UI)
* 113	2-890-312-01	COVER SHEET (CHARGE)
* 114	2-697-525-01	MIC COVER
115	1-833-012-11	CORD WITH COAXIAL CONNECTOR
116	A-1172-396-A	AN-028 BOARD, COMPLETE
118	2-657-375-01	COVER (LCD)
MIC901	1-542-702-01	MICROPHONE UNIT
#18	2-635-591-21	SCREW (M1.4), NEW TRUSTAR P2 (Silver)
#67	3-389-523-16	SCREW (LOCK ACE) (Silver)

# 5. REPAIR PARTS LIST

## DISASSEMBLY

## HARDWARE LIST

### 5-1-4. CABINET (LCD) BLOCK



Ref. No.	Part No.	Description
151	X-2108-854-1	SUB ASSY CENTER CHASSIS
* 152	2-891-335-01	SHEET (CHASSIS)
* 153	2-678-092-01	CABINET (ESCUTCHEON) (R)
* 154	2-686-638-01	CUSHION CN294
155	1-872-788-11	CN-294 FLEXIBLE BOARD
* 156	2-657-377-01	CHASSIS (LCD/BL)
* 157	2-666-628-01	SHEET (LCD FPC), INSULATING

Ref. No.	Part No.	Description
* 158	2-891-331-01	SHEET (BL)
* 161	1-471-423-11	MAGNET
* 162	2-661-947-01	CABINET (ESCUSHION) L
* 163	2-657-379-01	SCREW, TRYPD
164	1-479-695-11	BLOCK LIGHT GUIDE PLATE (3.5)
LCD901	8-753-253-87	ACX353AK-1
#67	3-389-523-16	SCREW (LOCK ACE) (Silver)

**5-2. ELECTRICAL PARTS LIST**

Ref. No.	Part No.	Description
	A-1172-396-A	AN-028 BOARD, COMPLETE *****
		(All mounted parts are not supplied, but they are included in the AN-028 complete board.)
		< ANTENNA >
ANT001	(Not supplied)	HELICAL ANTENNA
		< CAPACITOR >
C001	(Not supplied)	CERAMIC CHIP 1PF 0.25PF 50V
		< CONNECTOR >
CN001	(Not supplied)	CONNECTOR, COAXIAL (SMT TYPE)
		< COIL >
L001	(Not supplied)	INDUCTOR 5.6nH
<hr/>		
△	1-872-784-11	BT-031 FLEXIBLE BOARD ***** (BT901 is not included in BT-031 flexible board.)
		< BATTERY TERMINAL >
△ BT901	1-780-141-21	BATTERY TERMINAL BOARD
<hr/>		
	A-1172-411-A	CCD BLOCK ASSY (Not supplied) CD-641 FLEXIBLE BOARD, COMPLETE *****
		(CD-641 flexible complete board and IC001 are not supplied, but they are included in CCD block assy.)
		< CAPACITOR >
C001	1-164-943-81	CERAMIC CHIP 0.01uF 10% 16V
C003	1-127-715-91	CERAMIC CHIP 0.22uF 10% 16V
C004	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
C005	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V
		< IC >
IC001	(Not supplied)	ICX624EQZ-13 (Note)
IC002	8-753-230-85	IC CXA3691EN-T9
		< TRANSISTOR >
Q002	6-550-119-01	TRANSISTOR DTC144EMT2L
		< RESISTOR >
R003	1-218-981-11	RES-CHIP 220K 5% 1/16W
R004	1-218-990-81	SHORT CHIP 0
R005	1-218-952-11	RES-CHIP 820 5% 1/16W
R006	1-218-990-81	SHORT CHIP 0
<hr/>		
	A-1172-395-A	CN-295 FLEXIBLE BOARD, COMPLETE *****
		< FERRITE BEAD >
FB001	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)

Ref. No.	Part No.	Description
FB002	1-469-082-21	INDUCTOR, FERRITE BEAD (1005)
		< JACK >
J001	1-784-943-91	JACK (SMALL TYPE) (HEADPHONE)
		< RESISTOR >
R003	1-216-864-11	SHORT CHIP 0
<hr/>		
	A-1172-394-A	MC-165 FLEXIBLE BOARD, COMPLETE *****
		(CN001 (multi connector) is not supplied, but this is included in the MC-165 flexible complete board.)
		< CONNECTOR >
CN001	(Not supplied)	CONNECTOR, MULTIPLE (SOCKET)
		< DIODE >
D001	6-500-776-01	DIODE MAZW068H0LS0
D007	6-500-776-01	DIODE MAZW068H0LS0
D008	6-500-776-01	DIODE MAZW068H0LS0
		< SWITCH >
S001	1-786-675-11	TACTILE SWITCH (RESET)
		< SPEAKER >
SP901	1-826-403-11	LOUDSPEAKER (1.0CM)
<hr/>		
△	A-1229-537-A	ST-147 BOARD, COMPLETE *****
△	1-479-818-11	FLASH UNIT (FL61110)
		< LITHIUM BATTERY >
△ BT001	1-528-999-61	BATTERY, LITHIUM SECONDARY
		< CAPACITOR >
C001	1-165-908-11	CERAMIC CHIP 1uF 10% 10V
C002	1-100-611-91	CERAMIC CHIP 22uF 20% 6.3V
△*C006	1-112-832-21	CERAMIC CHIP 0.033uF 10% 250V
C009	1-164-933-11	CERAMIC CHIP 220PF 10% 50V
△ C9001	1-114-179-11	CAP, ELECT 84uF 315V
		< CONNECTOR >
* CN001	1-816-644-51	FFC/FPC CONNECTOR (LIF) 12P
		< DIODE >
△ D001	6-501-141-01	DIODE FT02P80TP
* D002	6-501-364-01	DIODE DOR5352 (SELF TIMER, AF ILLUMINATOR)
D009	6-500-619-01	DIODE RB520S-40TE61

• Refer to page 5-1 for mark △.

**CAUTION**  
Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type.

Note: Be sure to read "Precautions for Replacement of Imager" on page 4-3 when changing the imager.

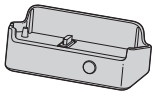
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>			
		< IC >			
IC002	6-707-555-01	IC TPS65552RGTR			
		< COIL >			
* L001	1-400-820-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
△*Q001	6-551-675-01	TRANSISTOR	CY25BAJ-8F-T13-F10		
		< RESISTOR >			
R001	1-216-803-11	METAL CHIP	33	5%	1/10W
R002	1-216-857-11	METAL CHIP	1M	5%	1/10W
△R003	1-216-121-11	RES-CHIP	1M	5%	1/10W
R004	1-216-864-11	SHORT CHIP	0		
R009	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
		< TRANSFORMER >			
△T001	1-443-880-11	TRANSFORMER, D.C.-D.C.CONVERTER			

Electrical parts list of the SY-153 board is not shown.  
Pages 5-8 to 5-13 are not shown.

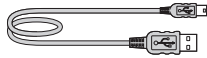
• Refer to page 5-1 for mark △.

## Checking supplied accessories.

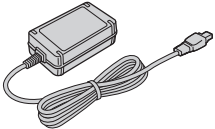
Note 1: This item is supplied with the unit as an accessory, but is not prepared as a service part.



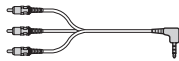
Cyber-Shot Station  
A-1187-344-A



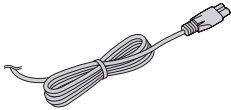
USB Cable  
1-829-579-41



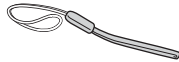
AC Adaptor  
AC-LS5  
△ 1-479-284-51



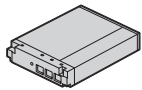
AV Cable  
1-765-080-61



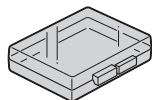
Power Cord  
△ 1-782-476-71 (CH)  
△ 1-783-374-22 (HK)  
△ 1-828-050-31 (J)  
△ 1-823-945-41 (US, CND)  
△ 1-823-947-71 (KR)  
△ 1-832-169-31 (UK)  
△ 1-827-826-41 (AEP, E)  
△ 1-830-518-41 (TW)



Wrist Strap  
2-050-981-01



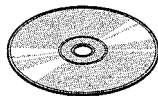
Rechargeable Battery Pack  
NP-FR1  
(Note 1)



Battery Case  
(Note 1)



Conversion (2P) Adaptor  
△ 1-569-008-11 (E)



CD-ROM  
(Cyber-shot Application Software/  
"Cyber-shot Handbook")  
2-896-067-01 (EXCEPT US)  
3-099-832-02 (US)

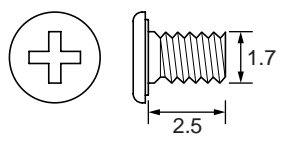
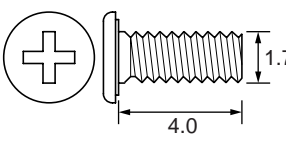
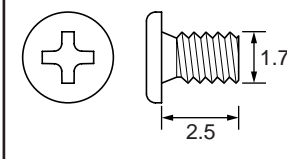
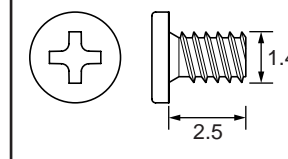
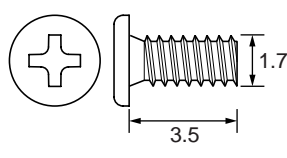
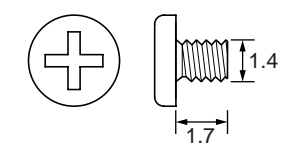
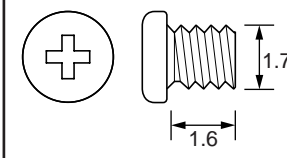
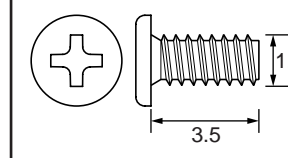
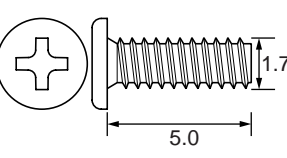
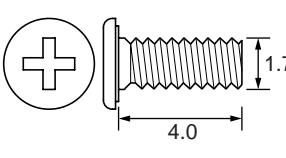
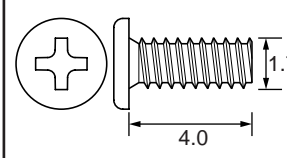
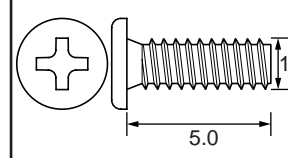
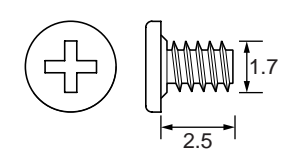
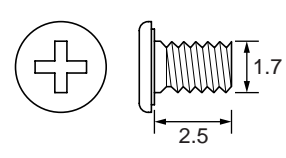
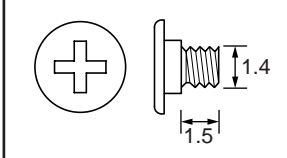
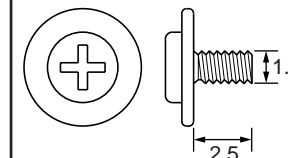
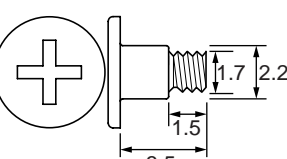
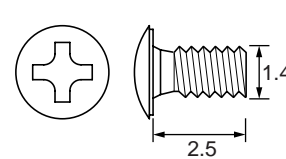
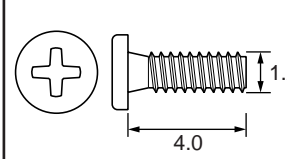
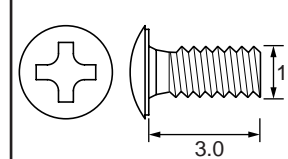
## Other accessories

- 2-898-081-01 HANDBOOK (PDF) (JAPANESE) (Note 2)
- 2-898-081-11 HANDBOOK (PDF) (ENGLISH) (Note 2)
- 2-898-081-21 HANDBOOK (PDF) (FRENCH) (Note 2)
- 2-898-081-31 HANDBOOK (PDF) (ITALIAN) (Note 2)
- 2-898-081-41 HANDBOOK (PDF) (SPANISH) (Note 2)
  
- 2-898-081-51 HANDBOOK (PDF) (PORTUGUESE) (Note 2)
- 2-898-081-61 HANDBOOK (PDF) (GERMAN) (Note 2)
- 2-898-081-71 HANDBOOK (PDF) (DUTCH) (Note 2)
- 2-898-081-81 HANDBOOK (PDF) (TRADITIONAL CHINESE) (Note 2)
- 2-898-081-91 HANDBOOK (PDF) (SIMPLIFIED CHINESE) (Note 2)
  
- 2-898-082-11 HANDBOOK (PDF) (RUSSIAN) (Note 2)
- 2-898-082-21 HANDBOOK (PDF) (KOREAN) (Note 2)
- 2-898-083-02 MANUAL, INSTRUCTION (JAPANESE) (J)
- 2-898-083-12 MANUAL, INSTRUCTION (ENGLISH)  
(CND, AEP, UK, E, HK, J)
- 2-898-083-22 MANUAL, INSTRUCTION (FRENCH, ITALIAN) (CND, AEP)
  
- 2-898-083-32 MANUAL, INSTRUCTION (SPANISH, PORTUGUESE)  
(AEP)
- 2-898-083-42 MANUAL, INSTRUCTION (GERMAN, DUTCH) (AEP)
- 2-898-083-53 MANUAL, INSTRUCTION  
(TRADITIONAL CHINESE, SIMPLIFIED CHINESE)  
(E, HK, CH)
  
- 2-898-083-62 MANUAL, INSTRUCTION (RUSSIAN) (AEP)
- 2-898-083-72 MANUAL, INSTRUCTION (KOREAN) (KR)
  
- 2-898-083-83 MANUAL, INSTRUCTION (ENGLISH, SPANISH) (US)

Note 2: Handbooks (PDF) of each language are included in CD-ROM (Cyber-shot Application Software).

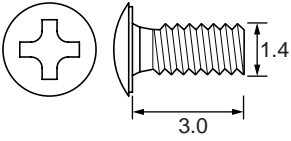
• Refer to the page 5-1 for mark △.

## HARDWARE LIST (1/4)

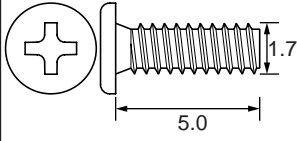
<p>#1: M1.7 X 2.5 (Black) 2-635-562-11</p> 	<p>#2: M1.7 X 4.0 (Black) 2-635-562-31</p> 	<p>#3: M1.7 X 2.5 (Red) 2-660-401-01</p> 	<p>#4: M1.4 X 2.5 (Tapping) (Dark Silver) 3-348-998-81</p> 
<p>#5: M1.7 X 3.5 (Tapping) (Black) 3-080-204-01</p> 	<p>#6: M1.4 X 1.7 (Silver) 2-598-474-01</p> 	<p>#7: M1.7 X 1.6 (Black) 7-627-552-18</p> 	<p>#8: M1.7 X 3.5 (Tapping) (Silver) 3-078-890-01</p> 
<p>#9: M1.7 X 5.0 (Tapping) (Silver) 3-078-890-21</p> 	<p>#10: M1.7 X 4.0 (Silver) 2-599-475-31</p> 	<p>#11: M1.7 X 4.0 (Tapping) (Silver) 3-078-890-11</p> 	<p>#12: M1.7 X 5.0 (Tapping) (Black) 3-080-204-21</p> 
<p>#13: M1.7 X 2.5 (Tapping) (Silver) 3-085-397-01</p> 	<p>#14: M1.7 X 2.5 (Silver) 2-599-475-11</p> 	<p>#15: M1.4 X 1.5 (Silver) 3-062-214-01</p> 	<p>#16: M1.4 X 2.5 (Silver) 2-586-337-01</p> 
<p>#17: M1.7 X 1.5 (Silver) 2-586-389-01</p> 	<p>#18: M1.4 X 2.5 (Silver) 2-635-591-21</p> 	<p>#19: M1.2 X 4.0 (Tapping) (Red) 3-086-156-21</p> 	<p>#20: M1.4 X 3.0 (Silver) 2-635-591-31</p> 

## HARDWARE LIST (2/4)

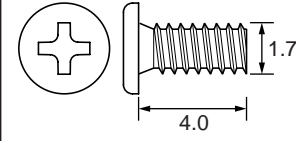
#21: M1.4 X 3.0  
(Black)  
2-662-396-21



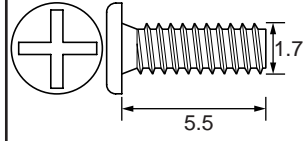
#22: M1.7 X 5.0 (Tapping)  
(Silver)  
3-083-261-01



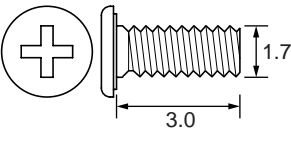
#23: M1.7 X 4.0 (Tapping)  
(Black)  
3-080-204-11



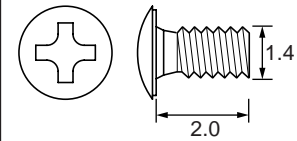
#24: B1.7 X 5.5 (Tapping)  
(Black)  
4-679-805-11



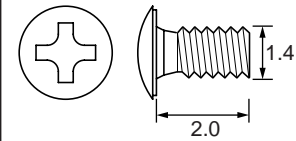
#25: M1.7 X 3.0  
(Black)  
2-635-562-21



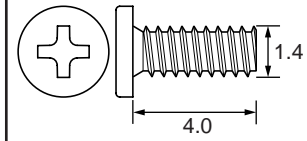
#26: M1.4 X 2.0  
(Silver)  
2-635-591-11



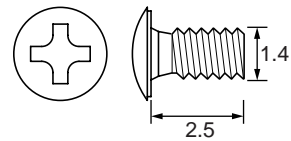
#27: M1.4 X 2.0  
(Black)  
2-662-396-11



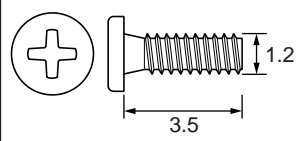
#28: M1.4 X 4.0 (Tapping)  
(Dark Silver)  
3-348-998-61



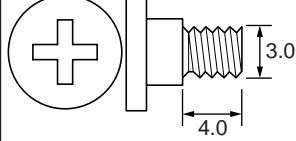
#29: M1.4 X 2.5  
(Black)  
2-662-396-01



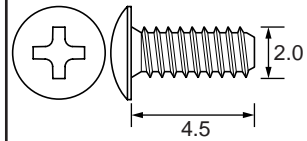
#30: M1.2 X 4.0 (Tapping)  
(White)  
3-086-156-11



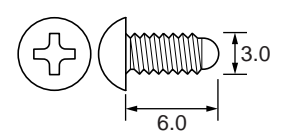
#31: M3.0 X 4.0  
(Silver)  
2-102-434-01



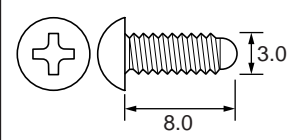
#32: M2.0 X 4.5 (Tapping)  
(Silver)  
2-102-498-01



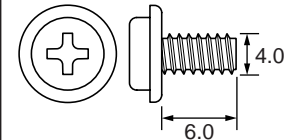
#33: M3.0 X 6.0  
(Silver)  
3-077-331-21



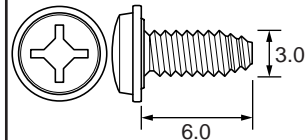
#34: M3.0 X 8.0  
(Black)  
3-077-331-41



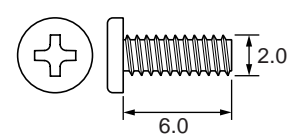
#35: M4.0 X 6.0 (Tapping)  
(Silver)  
3-975-291-02



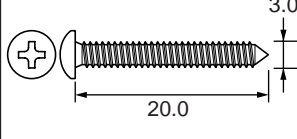
#36: M3.0 X 6.0  
(Silver)  
4-886-821-11



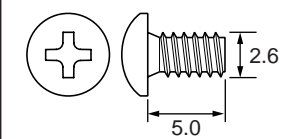
#37: M2.0 X 6.0 (Tapping)  
(Black)  
3-080-206-31



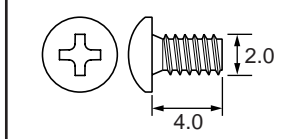
#38: M3.0 X 20.0 (Tapping)  
(Silver)  
7-685-651-79



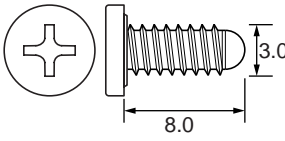
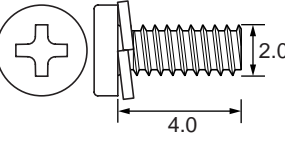
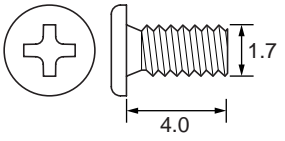
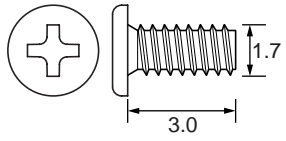
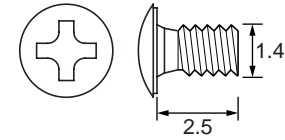
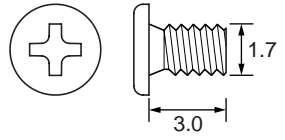
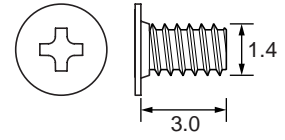
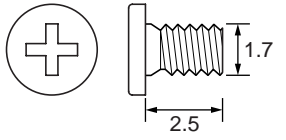
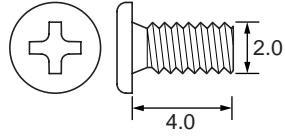
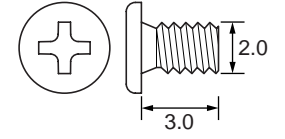
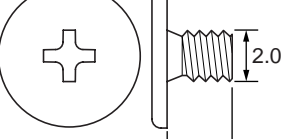
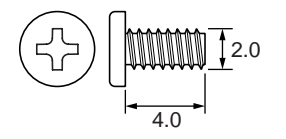
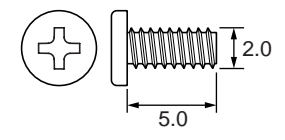
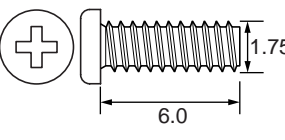
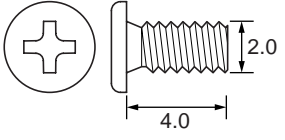
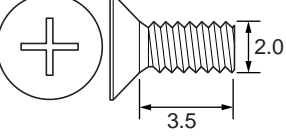
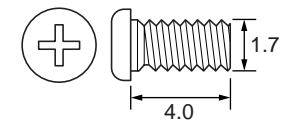
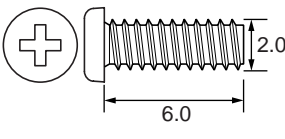
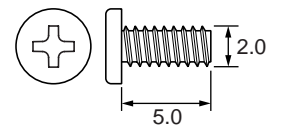
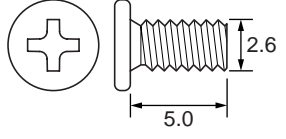
#39: M2.6 X 5.0 (Tapping)  
(Black)  
7-685-791-09



#40: M2.0 X 4.0 (Tapping)  
(Silver)  
7-685-851-04

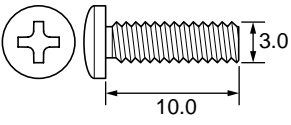


## HARDWARE LIST (3/4)

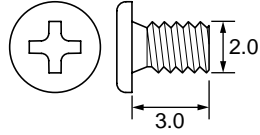
<p>#41: M3.0 X 8.0 (Tapping) (Silver) 3-065-748-01</p> 	<p>#42: M2.0 X 4.0 (Tapping) (Silver) 7-628-253-00</p> 	<p>#43: M1.7 X 4.0 (Red) 2-660-401-31</p> 	<p>#44: M1.7 X 3.0 (Tapping) (Silver) 3-078-890-61</p> 
<p>#45: M1.4 X 2.5 (Silver) 2-587-151-01</p> 	<p>#46: M1.7 X 3.0 (Red) 2-660-401-11</p> 	<p>#47: M1.4 X 3.0 (Tapping) (Silver) 2-665-774-01</p> 	<p>#48: M1.7 X 2.5 (Silver) 3-973-497-91</p> 
<p>#49: M2.0 X 4.0 (Black) 2-630-005-21</p> 	<p>#50: M2.0 X 3.0 (Red) 2-891-494-11</p> 	<p>#51: M2.0 X 2.5 (Silver) 3-073-686-01</p> 	<p>#52: M2.0 X 4.0 (Tapping) (Black) 3-080-206-11</p> 
<p>#53: M2.0 X 5.0 (Tapping) (Black) 3-080-206-21</p> 	<p>#54: M1.75 X 6.0 (Tapping) (Black) 3-318-203-11</p> 	<p>#55: M2.0 X 4.0 (Silver) 2-655-582-11</p> 	<p>#56: M2.0 X 3.5 (Silver) 3-067-187-11</p> 
<p>#57: M1.7 X 4.0 (Black) 7-627-852-18</p> 	<p>#58: M2.0 X 6.0 (Tapping) (Silver) 3-719-408-11</p> 	<p>#59: M2.0 X 5.0 (Tapping) (Silver) 3-080-205-21</p> 	<p>#60: M2.6 X 5.0 (Black) 3-061-062-11</p> 

# HARDWARE LIST (4/4)

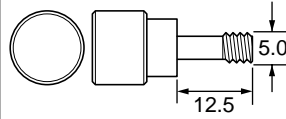
#61: M3.0 X 10.0  
(Black)  
7-682-549-09



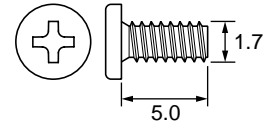
#62: M2.0 X 3.0  
(Silver)  
3-080-202-21



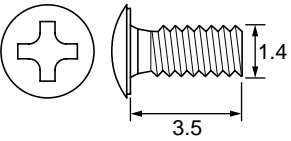
#63: M5.0 X 12.5  
(Black)  
3-060-811-21



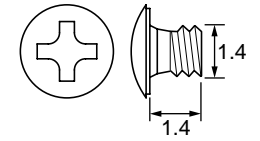
#64: M1.7 X 5.0 (Tapping)  
(Silver)  
2-666-551-21



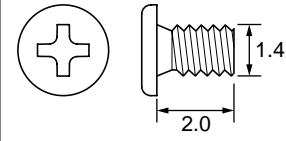
#65: M1.4 X 3.5  
(Silver)  
2-635-591-01



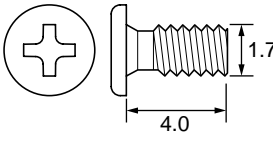
#66: M1.4 X 1.4  
(Silver)  
2-635-591-41



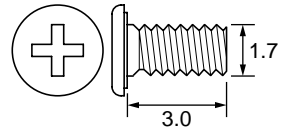
#67: M1.4 X 2.0  
(Silver)  
3-389-523-16



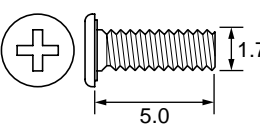
#68: M1.7 X 4.0  
(Silver)  
2-655-581-01



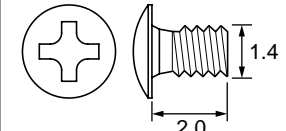
#69: M1.7 X 3.0  
(Silver)  
2-599-475-21



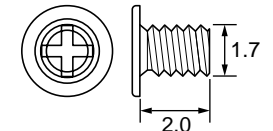
#70: M1.7 X 5.0  
(Silver)  
2-599-475-41



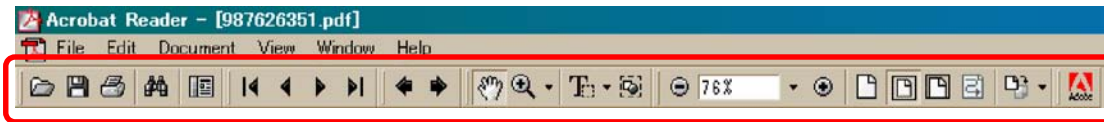
#71: M1.4 X 2.0  
(Red)  
3-208-537-01



#72: M1.7 X 2.0  
(Silver)  
4-663-621-41




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




Toolbar



**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.


**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:**

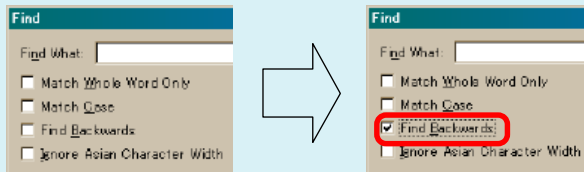
This function allows you to go and back between circuit diagram and printed circuit board diagram, and accordingly it will be convenient for the voltage check.

**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.

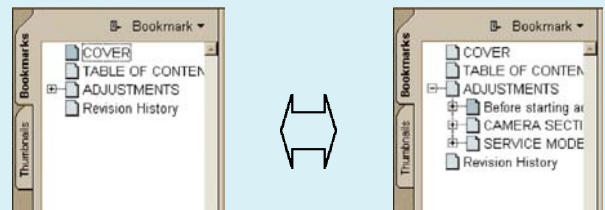
**Moving with link**

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.

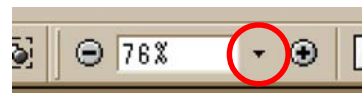
(To go back to original state, click )




**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.

**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 .

**Application to the Service Manual:**

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

## ご注意

今回の修理に伴い、ワイヤレスLANのMACアドレス変更が生じています。

必要に応じて、接続機器との設定を再度行ってください。

設定の方法については、「サイバーショットハンドブック」をご覧ください。

## NOTE

The MAC address of the Wireless LAN has changed due to repair.

Make sure that you make the initial settings again for any communication devices.

For details on making settings, refer to the "Cyber-shot Handbook."

## Français

### REMARQUE

L'adresse MAC du LAN sans fil a changé du fait de réparations.

Veillez à effectuer de nouveau le paramétrage initial pour tous les dispositifs de communication.

Pour plus d'informations sur le paramétrage, voir le « Guide pratique de Cyber-shot ».

## Italiano

### NOTA

L'indirizzo MAC della LAN senza fili è stato cambiato per motivi di riparazione.

Accertarsi di eseguire di nuovo le impostazioni iniziali per qualsiasi dispositivo di comunicazione.

Per i dettagli sull'esecuzione delle impostazioni, consultare la "Guida all'uso Cyber-shot".

## **Español**

### **NOTA**

La dirección MAC de la LAN inalámbrica ha cambiado debido a reparaciones.

Asegúrese de hacer los ajustes iniciales de nuevo para cualquier dispositivo de comunicación.

Para más detalles sobre cómo hacer los ajustes, consulte la "Guía práctica de Cyber-shot".

## **Português**

### **NOTA**

O endereço MAC do LAN sem fios mudou devido a reparação.

Certifique-se de que efectua novamente as definições iniciais para quaisquer dispositivos de comunicação.

Para detalhes sobre a forma de efectuar as definições, consulte o "Manual da Cyber-shot".

## **Deutsch**

### **HINWEIS**

Die MAC-Adresse des drahtlosen LAN hat sich wegen einer Reparatur geändert. Führen Sie die Anfangseinstellungen für jedes Kommunikationsgerät erneut durch. Einzelheiten zur Durchführung der Einstellungen finden Sie im „Cyber-shot Handbuch“.

## **Nederlands**

### **OPMERKING**

Het MAC-adres van de draadloze LAN is veranderd als gevolg van reparatie. Zorg ervoor dat u de uitgangsinstellingen opnieuw maakt voor ieder communicatieapparaat. Voor informatie over het maken van deze instellingen, raadpleegt u het “Cyber-shot-handboek”.

## 中文（繁體字）

### 注意

無線LAN的MAC位址因為修理而改變。  
請務必要再度為所有通訊裝置進行起始設定。  
關於進行設定的詳細資訊，請參考  
“Cyber-shot手冊”。

## 中文（简体字）

### 注意

由于修理原因，无线局域网的MAC地址已经变更。  
请务必对所有通信设备重新进行初始设定。  
有关设定方法的详细内容，请参阅  
“Cyber-shot手冊”。

## ПРИМЕЧАНИЕ

MAC-адрес беспроводной локальной сети был изменен при восстановлении.

Убедитесь в том, что Вы выполнили вновь первоначальные установки для любых устройств связи.

Подробности по выполнению установок приведены в "Руководстве по Cyber-shot".

## 주의

수리로 인해 무선 LAN의 MAC 어드레스가 변경되었습니다.

반드시 모든 통신 장치에 대해 초기 설정을 다시 수행하여 주십시오.

설정에 관한 자세한 사항은 "Cyber-shot 핸드북"을 참조하여 주십시오.

# Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2007.03	Official Release	—	—