ORDER NO. AD9612220C3

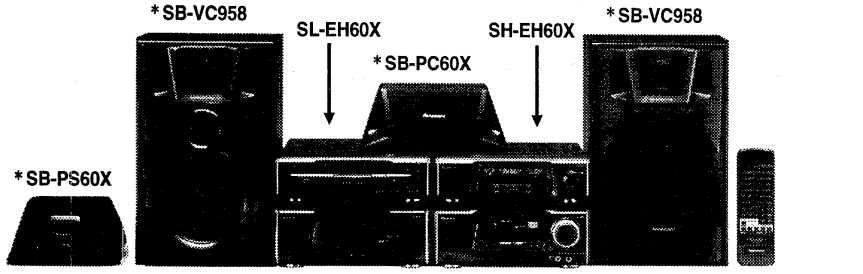
Service Manual

Sound Processor

Sound Processor

SH-EH60X

System: SC-VC958



Colour
(K) ..... Black

Area
(GK) ..... China

DOLBY SURROUND PRO • LOGIC

Specifications

■ EQ/SFP Section

MANUAL GEQ:
Center frequency: 100 Hz, 315 Hz, 1 kHz, 3.15 kHz, 10 kHz
Level control: ± 3, 6, 9 dB
EQ SPACE mode (3 modes): HALL, CLEAR, HEAVY
Acoustic Image Selector: 36 pattern

■ Pre-amplifier Section

Input sensitivity/impedance:
VCR: 250 mV/15 kohm
VDP: 250 mV/15 kohm
Output level:
VCR RECOUT: 150 mV/1.5 kohm
VIDEO OUTPUT:
MONITOR OUT: 1 V/75 ohm
VCR REC OUT: 1 V/75 ohm

■ DOLBY PRO LOGIC Section

PRO LOGIC mode: SURROUND, 3 STEREO
CENTER mode: NORMAL, WIDE, PHANTOM
DELAY TIME: 20 ms (Fixed)

■ Spectrum analyzer Section

Display mode: NORMAL, PEAKHOLD, AUROLA

■ General

Dimensions: 287 (W)/89 (H)/237.5 (D) mm
Weight: 1.1 kg

Note: Specifications are subject to change without notice.
Weight and dimensions are approximate.

System/SC-VC958:
Sound processor: SH-EH60X, Tuner/Amplifier: SA-EH60X, Compact disc changer: SL-EH60X, Cassette deck: RS-EH60,
Front speakers: * SB-VC958, Center speaker: * SB-PC60X, Surround speakers: * SB-PS60X

Notes: * ..... Made in MESA

⚠ WARNING

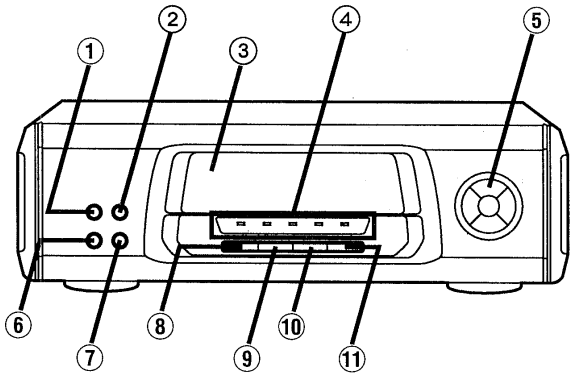
This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should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

Panasonic®

■ Contents

NOTE:
Refer to the service manual for Model No. SA-EH60X (ORDER No. AD9612217C3) for information on "Accessories", "Stacking the Components", "Connections" and "Packaging".

■ Location of Controls



① EQ SPACE on/flat button (EQ SPACE ON/FLAT)
② Display mode select/demonstration button (DISP MODE/-DEMO)
③ Display
④ DOLBY PRO LOGIC indicators (SURROUND, 3 STEREO, NORMAL, WIDE, PHANTOM)
⑤ Multi control buttons (MULTI CONTROL, ►, ▲, ◄, ▼)
⑥ Acoustic image EQ button (ACOUSTIC IMAGE EQ)
⑦ EQ SPACE preset/manual select button (PRESET/MANUAL)
⑧ DOLBY PRO LOGIC on/off button (DOLBY PRO LOGIC, OFF/ON)
⑨ DOLBY PRO LOGIC mode select button (MODE)
⑩ DOLBY PRO LOGIC test signal button (TEST)
⑪ DOLBY PRO LOGIC center mode button (CENTER MODE)

■ Changing the tone

使用外部音質時 A

按PRESET/MANUAL(預約/手動)鈕,選擇需要的方式。

每次按PRESET/MANUAL鈕,EQ和SPACE方式將如下進行切換:

HEAVY → CLEAR → HALL → MANUAL

1 HEAVY(加強): 用於加強搖滾樂和其它音樂的"節奏感"。ⓐ
2 CLEAR(清晰): 用於澄清爵士樂等的高音域。ⓑ
3 HALL(音樂廳): 用於增強低音和寬廣的音域,使您感覺仿佛在大型音樂廳裏一樣。ⓒ
4 MANUAL(手動): 請參看第 4 頁上的"更精細的音質改變"一節。

取消EQ SPACE效果時

按EQ SPACE ON/FLAT鈕, 選擇"FLAT"。

注意

- 在HALL、CLEAR、HEAVY或MANUAL方式下進行錄音。
- 在音質操作使用中進行錄音時,將使"HALL"、"CLEAR"、"HEAVY"和"MANUAL"指示燈消失, 而在錄音結束後會重新亮起。

聲像EQ(均衡)的使用

該功能可讓您簡單地製作更加接近自己所想像的聲音。
圖中所示爲調整比普通聲音高2級的HEAVY(加強)、3級SHARP(鮮明)的例子。

1 按ACOUSTIC IMAGE EQ(聲像均衡)鈕。

2 按▲▼◀▶鈕, 使游標移到需要的音像位置。

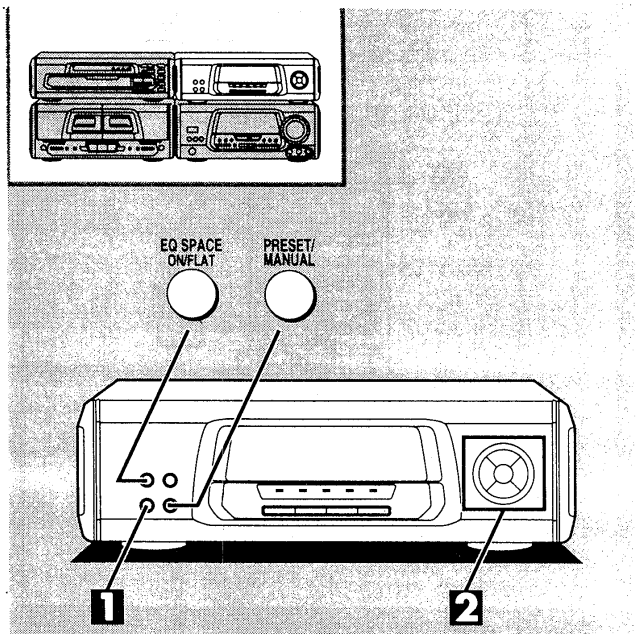
HEAVY(▲): 當需要更強烈的音響時
LIGHT(▼): 當需要更輕快的音響時
SOFT(◀): 當需要更柔和的音響時
SHARP(▶): 當需要更鮮明的音響時

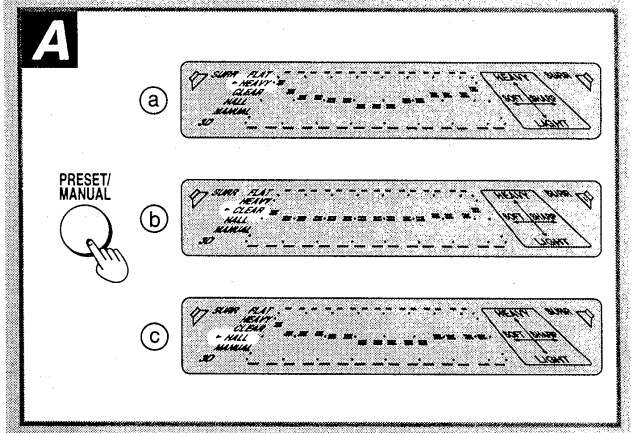
取消ACOUSTIC IMAGE EQ效果時

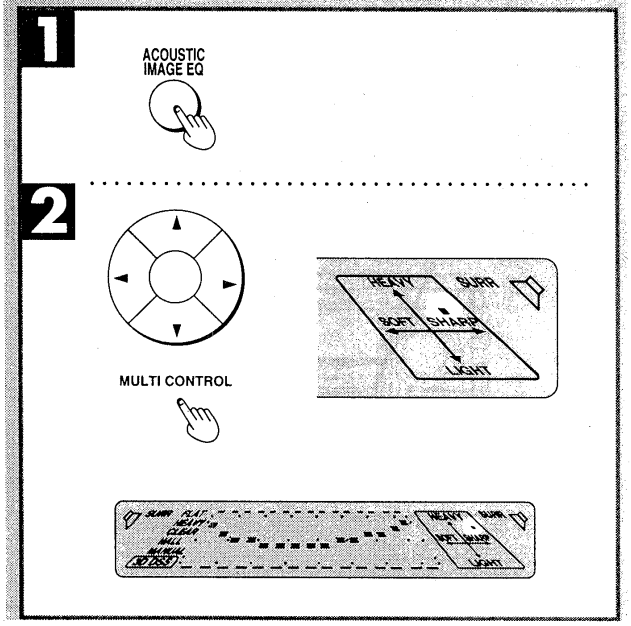
按EQ SPACE ON/FLAT鈕,選擇"FLAT"。

注意

- 可以將聲音配合製作總共36種形象。
- 調整結果將被自動儲存在記憶中。當您再次按ACOUSTIC IMAGE EQ鈕, 選擇了FLAT時, 會自動選擇最後所選擇的形象。







■ Concerning the display

更精細的音質改變

選擇MANUAL(手動)可製作更加精細的音響。

1 按PRESET/MANUAL(預約/手動)鈕，選擇MANUAL。

2 按◀▶鈕，選擇需要的寄存器。
- ◀：上部寄存器
- ▶：下部寄存器

3 按▲▼鈕，調節寄存器電平。
- ▲：增強寄存器
- ▼：減弱寄存器

僅供參考：

上部寄存器：包括管樂、弦樂、鈸和三角鐵
- ●增強上部寄存器時：圓潤的管樂和弦樂柔和，增加精細和光彩
- ●減弱上部寄存器時：安靜的音樂，其"力度"得到擺脫音樂中部

中部寄存器：歌聲(嗓音)
- ●增強中部寄存器時：給予音樂以力量和節奏，使歌聲明快、嘹亮
- ●減弱中部寄存器時：安靜的音樂，使歌聲深沉，緩和音響的緊張感

下部寄存器：包括低音和鼓樂
- ●增強下部寄存器時：使強音、低音變得穩重，使低音得到擴展
- ●減弱下部寄存器時：減少低音音響的雜訊，降低音響的壓抑感

調整結果將被自動儲存在記憶中。當您再次按MANUAL鈕，選擇了FLAT時，會自動播放最後所選擇的音質。

顯示須知

音響處理器可用下述3種類型的顯示，表示各個音域的電平。A

輕按DISP MODE/－DEMO(顯示方式/示範)鈕。

頻譜顯示將如下改變：

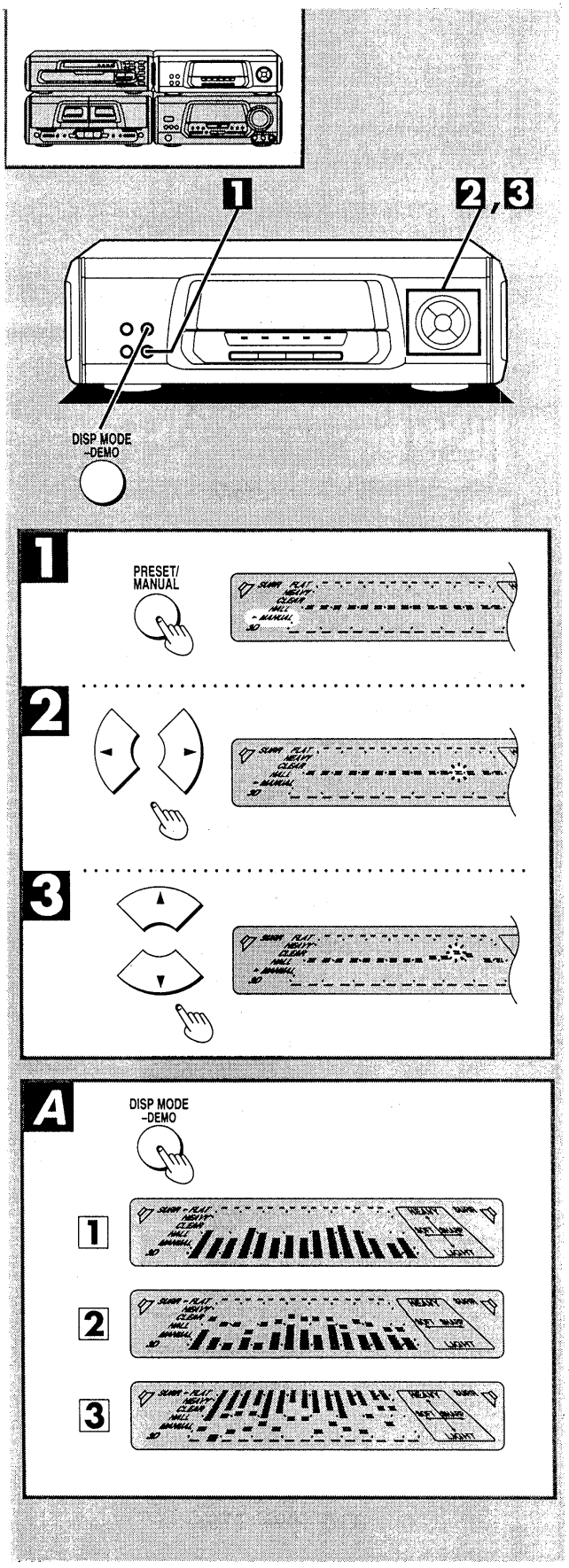
1 **普通顯示**
該顯示可表明各個音域中音響的強度。

2 **峰值保持顯示**
各個音域的峰值音響將在顯示中出現後逗留約1秒鐘。

3 **極光顯示**
各個音域的峰值音響將以倒立形式顯示。

僅供參考：

按住DISP MODE/-DEMO鈕時，將開始示範功能。



■ Enjoying sound with DOLBY PRO LOGIC

將前、中心和環場聲揚聲器結合起來，便可欣賞生動眞實的SURROUND方式，或方向感強的3 STEREO方式。

SURROUND(環場聲) A

由於可再生深沉、動感的音響，使杜比環場聲錄製的影像軟片或激光片可以爲觀衆提供置身於電影院中的感覺。
欣賞SURROUND(環場聲)時，必須連接環場聲揚聲器。

3 STEREO(三維立體聲) B

欣賞音頻/影像信號源時，可以使聲音更加清晰、更加眞實和方向感更好。3 STEREO可用於非DOLBY SURROUND（杜比環場聲）錄製的信號源。

欣賞3 STEREO 時，必須連接中心揚聲器。

經杜比實驗證明公司授權製造。
杜比，DOLBY，雙D標章 及PRO LOGIC爲杜比實驗證明公司之商標。

設定中心方式和揚聲器輸出電平時 C

用於杜比前邏輯系統時，爲了有效地播放低音，必須設定在中心方式。
請根據中心揚聲器的尺寸，設定中心方式。
爲了使聲音產生移動感和清晰的方向感，調節各個揚聲器的輸出電平是很重要的。請在欣賞測試信號中，將輸出調節到正確的電平。

1 **打開電源。**

2 **按DOLBY PRO LOGIC OFF/ON(杜比前邏輯開/關)鈕，選擇"ON"。**

3 **按MODE(方式)鈕，選擇"SURROUND"或"3 STEREO"。**

每次按該鈕，顯示將如下改變：
SURROUND → 3 STEREO
↑_____↓

4 **按CENTER MODE(中心方式)鈕，選擇"NORMAL"方式。**

每次按該鈕，顯示將如下改變：
NORMAL → WIDE → PHANTOM
↑_____↓

注意
當您在步驟3中選擇了"3 STEREO"時，"PHANTOM"將不會顯示出來。

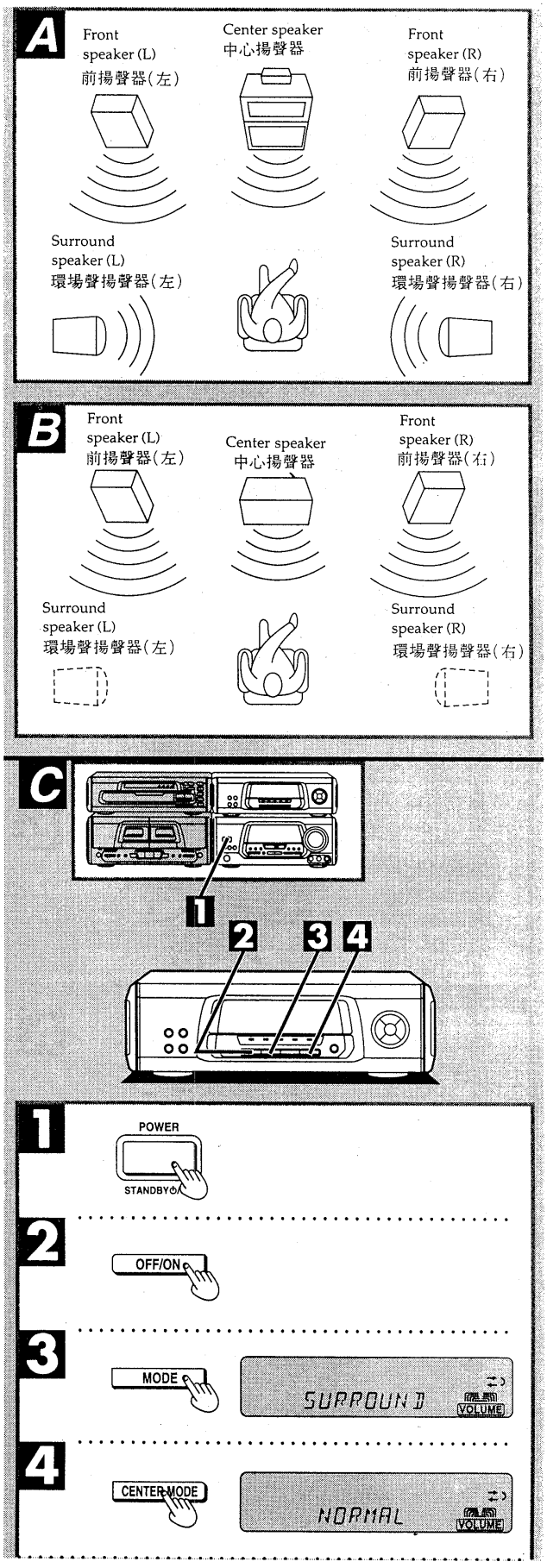
NORMAL(普通)：
當中心揚聲器小於前揚聲器時

WIDE(寬廣)：
當中心揚聲器等於或大於前揚聲器時

PHANTOM(幻想)： 僅用於SURROUND
當未連接中心揚聲器時

注意
在PHANTOM方式中，應該傳送給中心揚聲器的聲音將被均等地分給左右兩個前揚聲器。

(繼續至下頁)



■ Enjoying with SURROUND and 3 STEREO

5 **按TEST(測試)鈕，輸出測試信號。**

測試信號會依下列順序發送：

用於SURROUND(環場聲)方式時

→ 前揚聲器(左) ——→ 中心揚聲器 ——→
環場聲揚聲器(左、右) ← 前揚聲器(右) ←

注意

當中心方式處於PHANTOM(幻想)時，中心揚聲器不會發出測試信號。

用於3 STEREO(三維立體聲)方式時

→ 前揚聲器(左) → 中心揚聲器 → 前揚聲器(右)

6 **旋轉VOLUME(音量)鈕，設置在平常欣賞信號源的音量。**

7 **按遙控器上的CENTER(－)或(＋)鈕，或SURROUND(－)或(＋)鈕，調節輸出電平的平衡。**

站在欣賞位置，調節各個揚聲器的電平，直至其都很容易分辨。把前揚聲器的輸出電平作爲零點計算時，輸出電平可以在±12分貝的範圍內改變。

注意

- 只有您正在調節的揚聲器才會輸出測試信號，直至調節完成爲止，請不要重復順序。
- 請記住，如果您在步驟3中選擇了3 STEREO(三維立體聲)時，將無法調節環場聲揚聲器的輸出電平。

停止播放測試信號時：

按TEST(測試)鈕。

用SURROUND(環場聲)和3 STEREO(3維立體聲)進行欣賞時

A

進行任何操作之前，已經設定好中心方式，並調整好揚聲器輸出電平？

觀看影像時，請打開電視機的電源，並將電視機設定在影像方式。

1 **按INPUT SELECTOR(輸入選擇)鈕，選擇需要的外部信號源。**

每次按該鈕，信號源將如下切換：

SC-VC958	SC-VC858
TUNER → CD → TAPE	TUNER → CD → TAPE
↑ ↓	↑ ↓
PHONO ← VDP ← VCR ← EXT	VDP(AUX) ← VCR(EXT)

上述指示對應於調諧器/音響處理器後板上的端子連接。請將顯示內容切換至您打算使用的信號源。

注意

在調諧器方式下，將無法欣賞SURROUND或3 STEREO。

2 **按DOLBY PRO LOGIC OFF/ON(杜比前邏輯開/關)鈕，選擇"ON"。**

3 **按MODE(方式)鈕，選擇"SURROUND(環場聲)"或"3 STEREO(3維立體聲)"。**

4 **開始播放需要的信號源。**

操作外部信號源時，請參看指定機件附帶的使用說明書。

注意

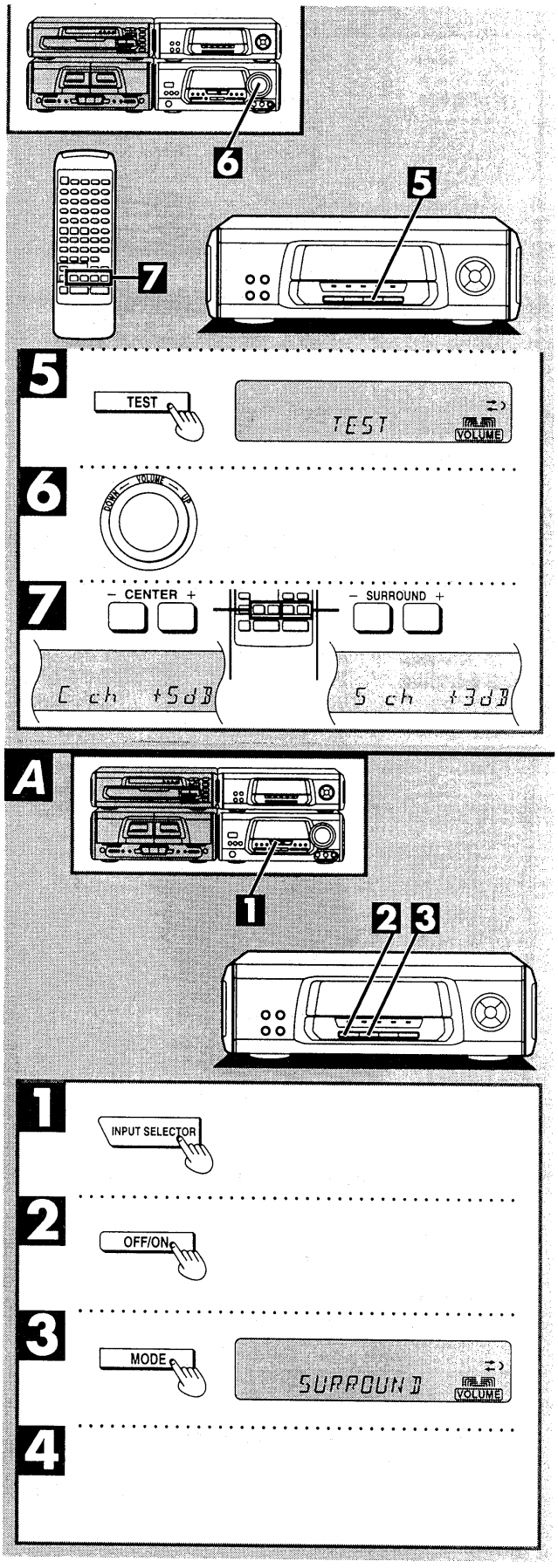
當採用SURROUND時，請使用杜比環場聲錄製的軟片。

關閉DOLBY PRO LOGIC(杜比前邏輯)系統時：

按DOLBY PRO LOGIC OFF/ON鈕，選擇"OFF"。

注意

不能錄製SURROUND和3 STEREO方式所產生的聲音效果。

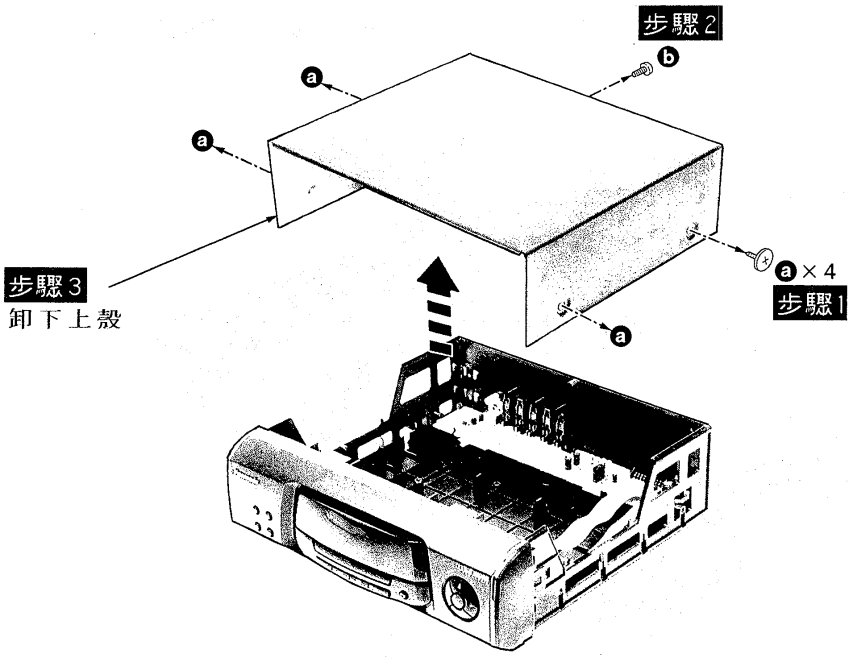


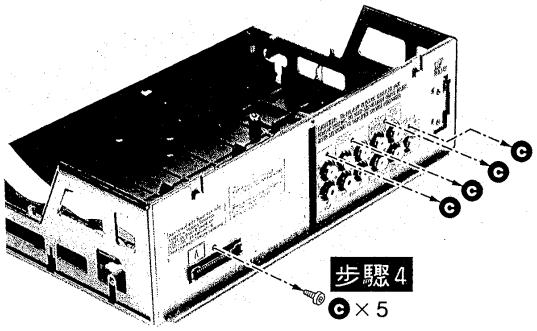
■ Operation Check and Main Component Replacement Procedures

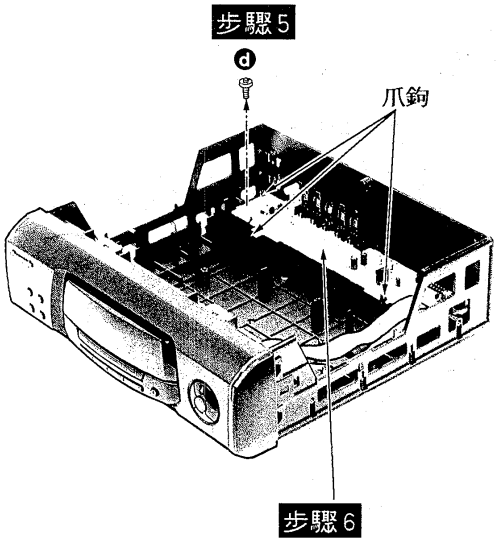
附註： 1. 此部份是說明主要印刷電路板的操作檢查程序及主要部品的更換程序。

2. 操作檢查及更換部品完成後，要重新安裝時，請依各個程序的相反步驟操作。
至於特殊安裝程序將於必要時另作說明。

1. 檢查輸入／輸出端子印刷電路板

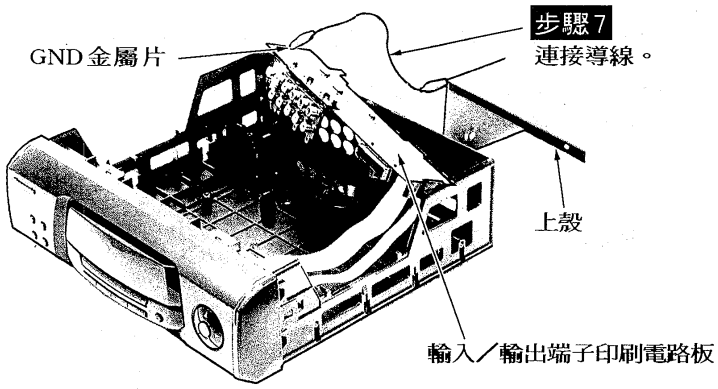






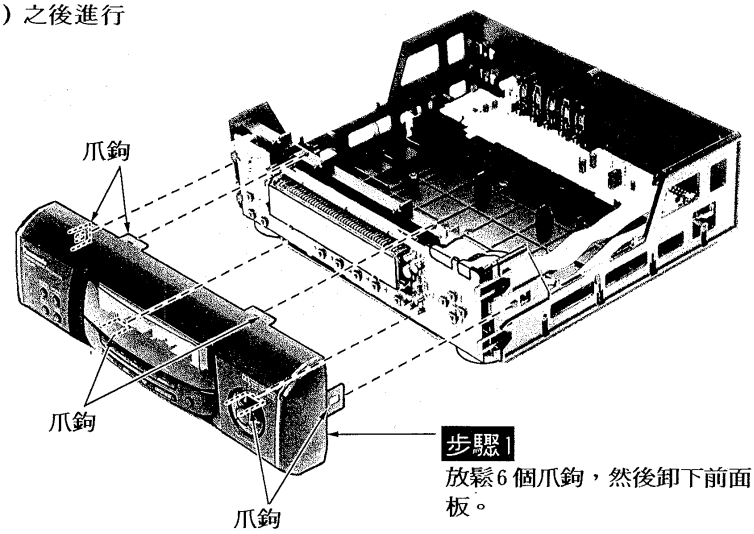
放鬆3個爪鉤，然後即可卸下
輸入／輸出端子印刷電路板

• 檢查輸入／輸出端子印刷電路板，如下圖所示。



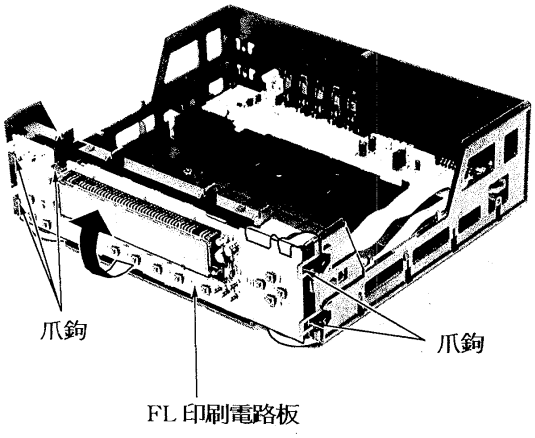
2. 檢查FL印刷電路板

• 請依照第7頁各印刷電路板檢查程序第1項
（ 步驟1 ~ 步驟3 ）之後進行

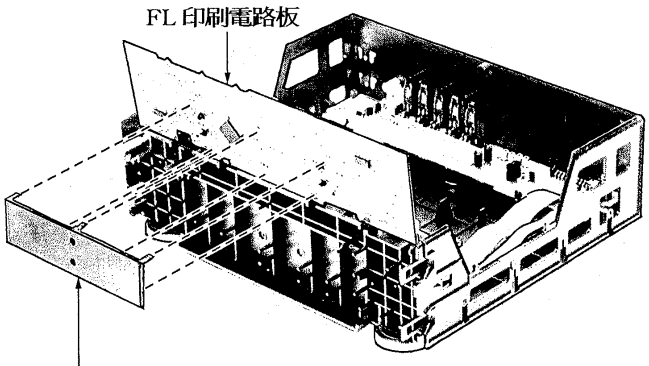


步驟1
放鬆6個爪鉤，然後卸下前面板。

步驟2
放鬆5個爪鉤，然後卸下FL



• 檢查FL印刷電路板，如下圖所示。



步驟3
焊開隔離片之接腳(6個接點)

■ To Supply Power Source

本機SH-EH60X電源供給被設計從調諧器／放大器SA-EH60X來操作的。
當測試或維修時，要單獨操作本機SH-EH60X，而沒有電源從調諧器／放大器SA-EH60X來供給，所以要使用下列方法來得到電源。

電源供應到影像選擇電路

1. 將J124及R753短路起來。
2. 將J306、J307、J305及J302全部短路起來。(A點)
3. 將J126及連接器J101的第⑰腳短路起來。(B點)
4. 將J125及J101短路起來。(C點)
5. 供應+5V直流電源到J125及C104銅箔面的正極(+)部份。
6. 如下所示，連接直流電源供應器。

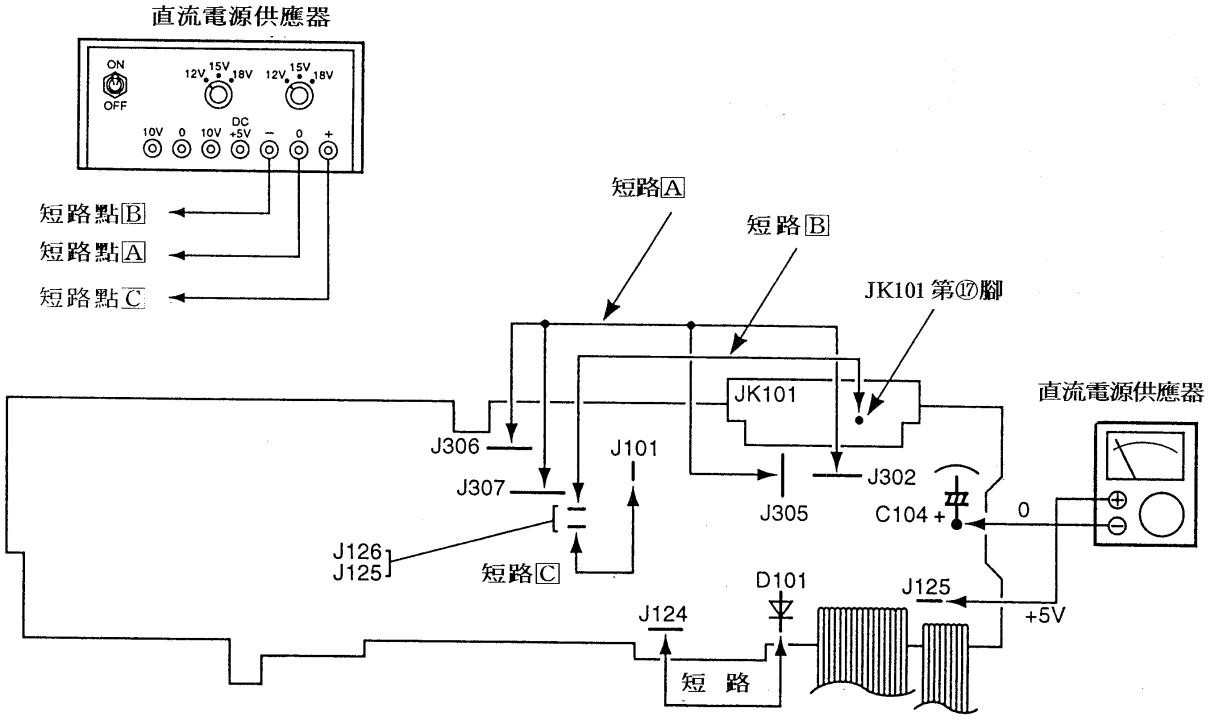
- 直流電源供應器的+12V端子連接到C點。
- 直流電源供應器的GND端子連接到A點。
- 直流電源供應器的-12V端子連接到B點。

檢查信號

1. 輸入聲音信號而且確定有從端子輸。

	輸　入	輸　出
左聲道	VCR-左聲道端子	VCR-左聲道端子
右聲道	VCR-右聲道端子	VCR-右聲道端子

附註：
當檢查卡拉OK功能時，必須要連接到調諧器／放大器SA-EH60X。



■Schematic Diagram

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

- **S301**: EQ SPACE on/off switch (EQ SPACE ON/FLAT)
- **S302**: Acoustic image EQ switch (ACOUSTIC IMAGE EQ)
- **S303**: EQ SPACE preset/manual select switch (PRESET/MANUAL)
- **S304**: Display mode select/demonstration switch (DISP MODE/–DEMO)
- **S305**: DOLBY PRO LOGIC on/off switch (DOLBY PRO LOGIC, OFF/ON)
- **S306**: DOLBY PRO LOGIC mode select switch (MODE)
- **S307**: DOLBY PRO LOGIC test signal switch (TEST)
- **S308**: DOLBY PRO LOGIC center mode select switch (CENTER MODE)
- **S310 ~ S313** : Multi control switch

  (MULTI CONTROL , S310 : ▼, S311 : ◄, S312 : ▲, S313 : ►)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

- Voltage values and waveforms are measured as indicated in the schematic diagram when test points between **AG** and **VG**, and between **DG** and **CT-G** , and between **AG** and **DG** are shorted.

- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

- **Voltage and signal line**

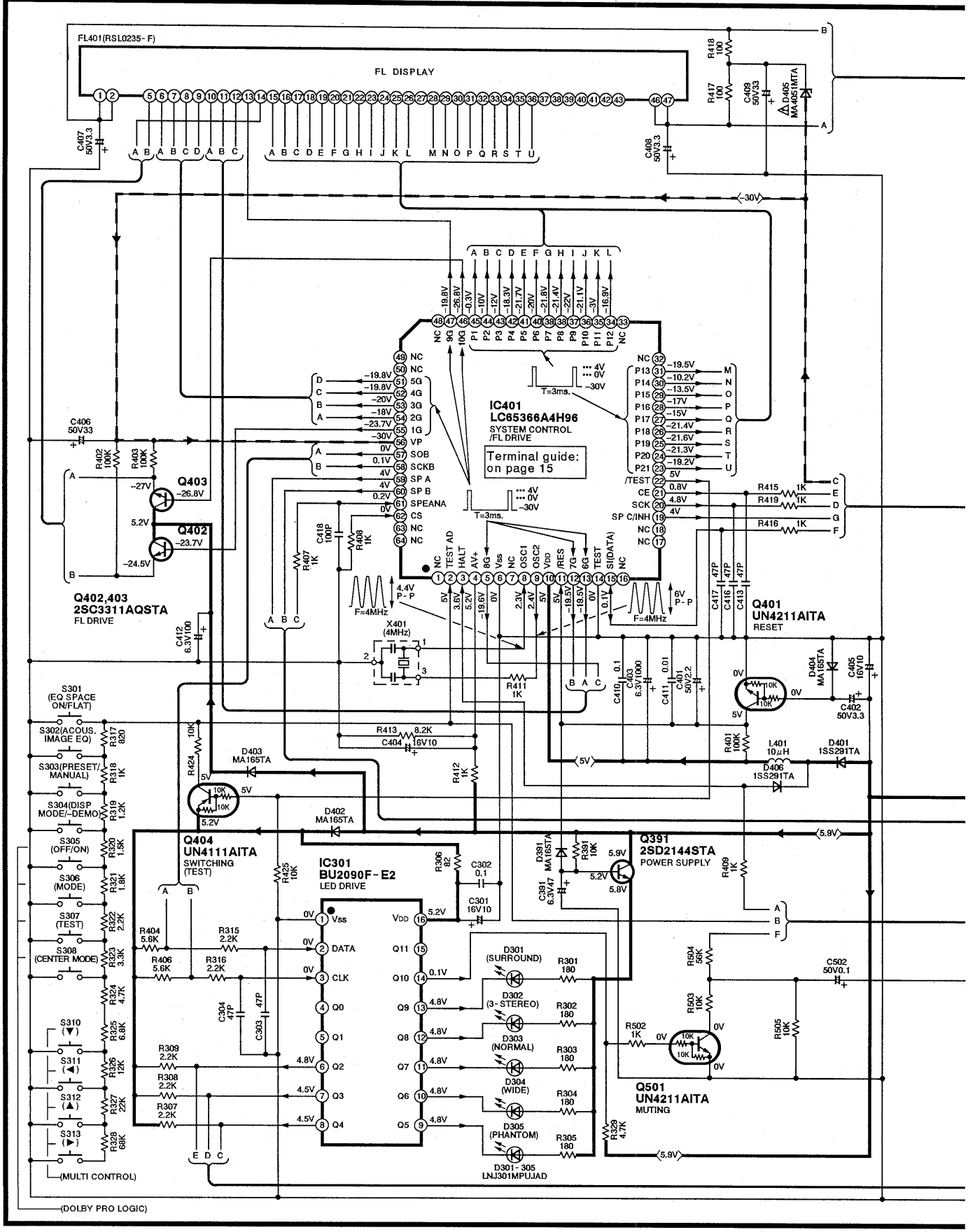
  ——►—— : Positive voltage line

  ▪▪▪►▪▪▪ : Negative voltage line

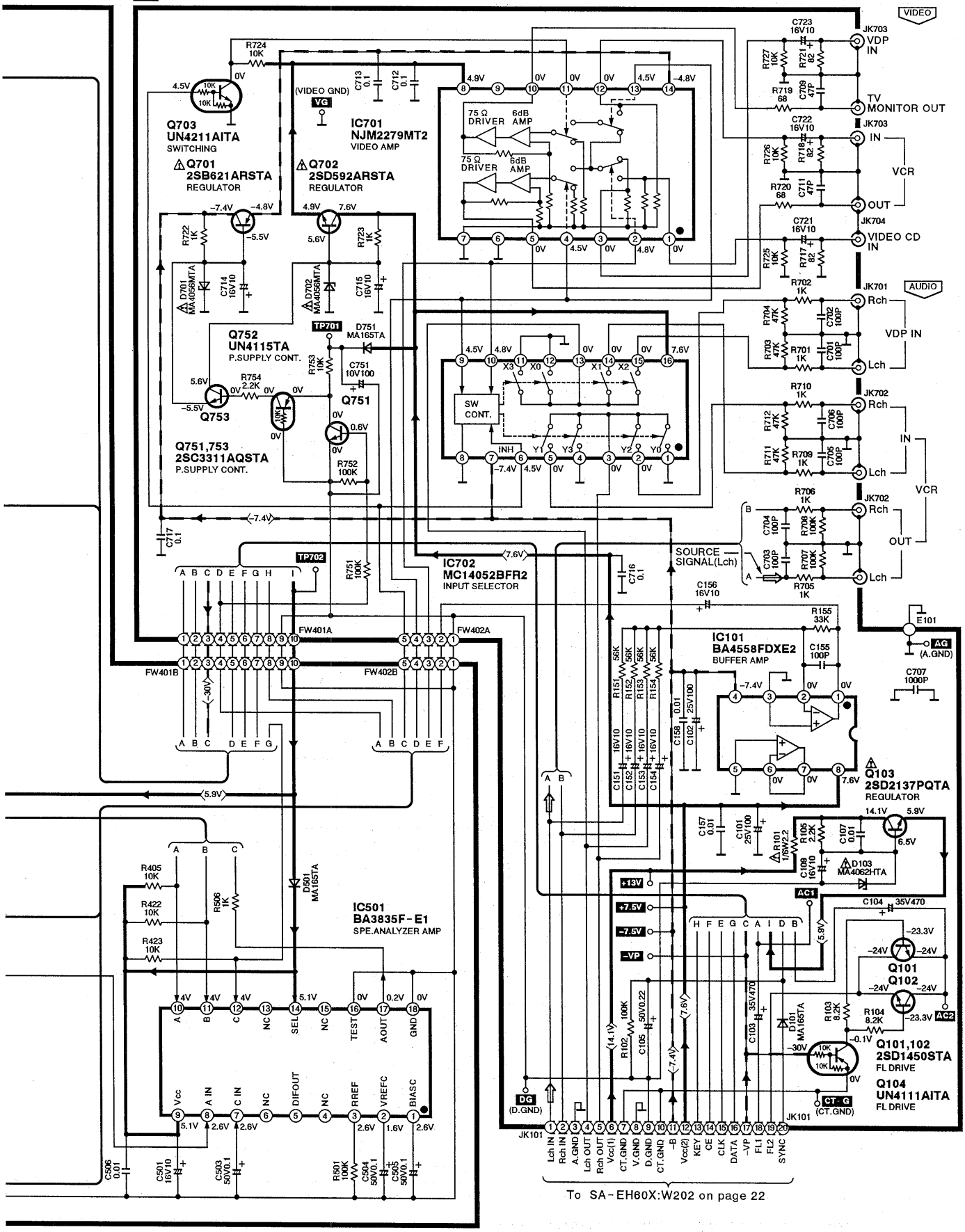
  ⇨ : Source signal line (L-ch)

A FL CIRCUIT (P.C.Board:on page 13)

: Positive voltage line
: Negative voltage line
: Source signal line (L-ch)



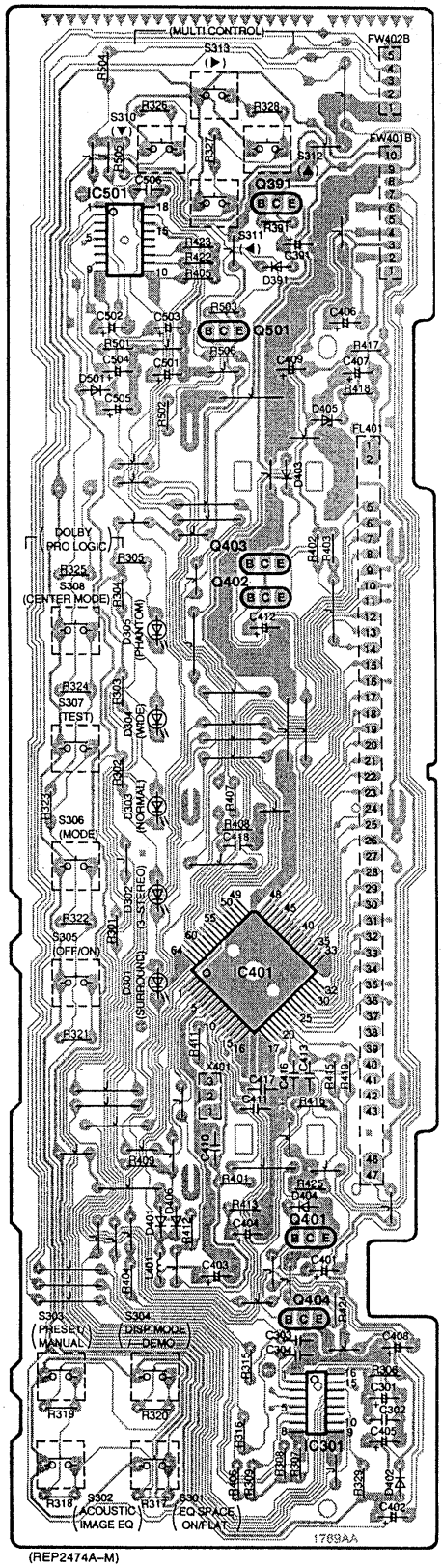
B IN/OUT TERMINAL CIRCUIT (P.C.Board:on page 13)



■ Printed Circuit Board Diagram

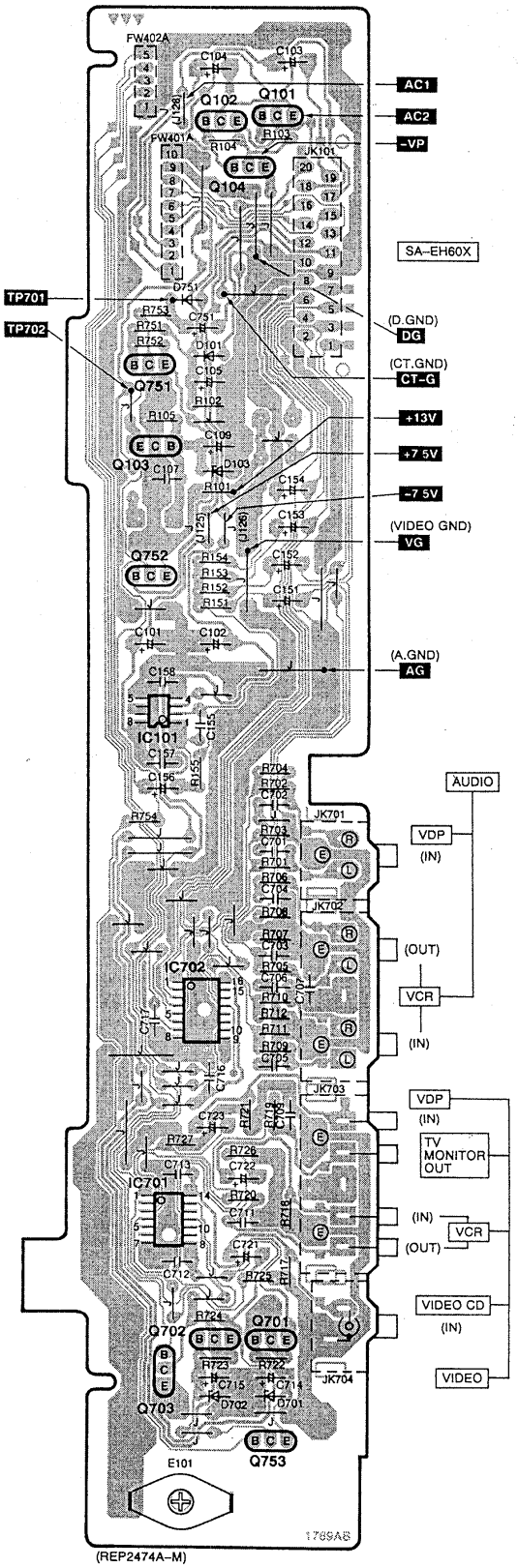
● This circuit board diagram may be modified at any time with the development of new technology.

A FL P.C.B.



(REP2474A-M)

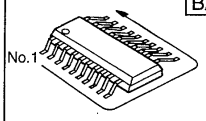
B IN/OUT TERMINAL P.C.B.



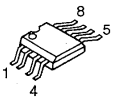
(REP2474A-M)

■ Type Illustration of IC's, Transistors and Diodes

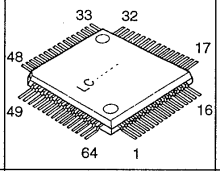
NJM2279MT2	14PIN	
BU2090F-E2	16PIN	
MC14052BFR2	16PIN	
BA3835F-E1	18PIN	



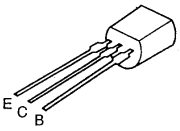
BA4558FDXE2



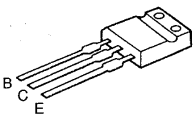
LC65366A4H96

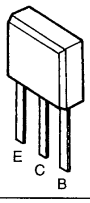


2SB621ARSTA
2SD592ARSTA



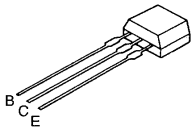
2SD2137PQTA



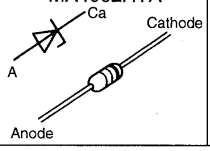


2SC3311AQSTA
2SD1450STA
UN4111AITA
UN4115TA
UN4211AITA

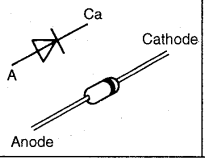
2SD2144STA



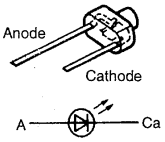
MA4051MTA
MA4056MTA
MA4062HTA



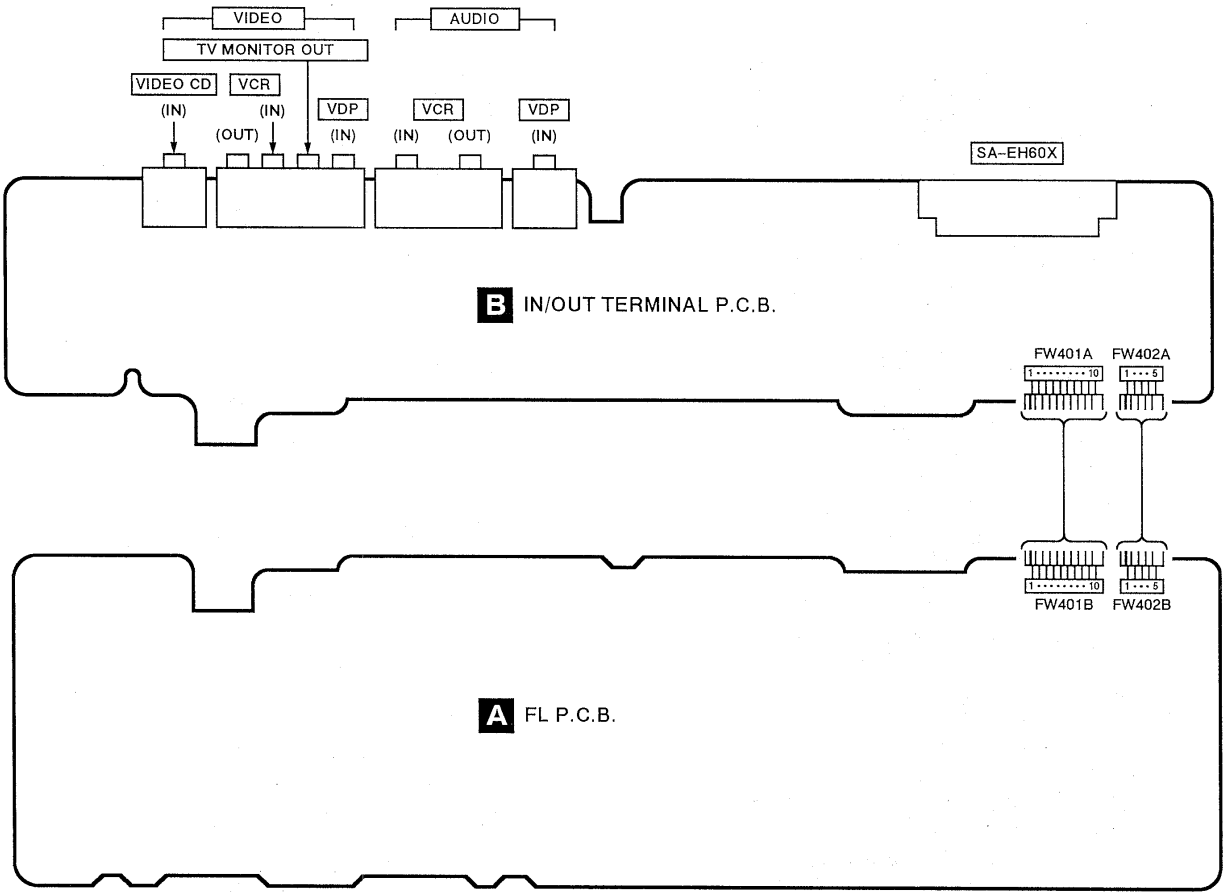
1SS291TA
MA165TA



LNJ301MPUJAD



■ Wiring Connection Diagram

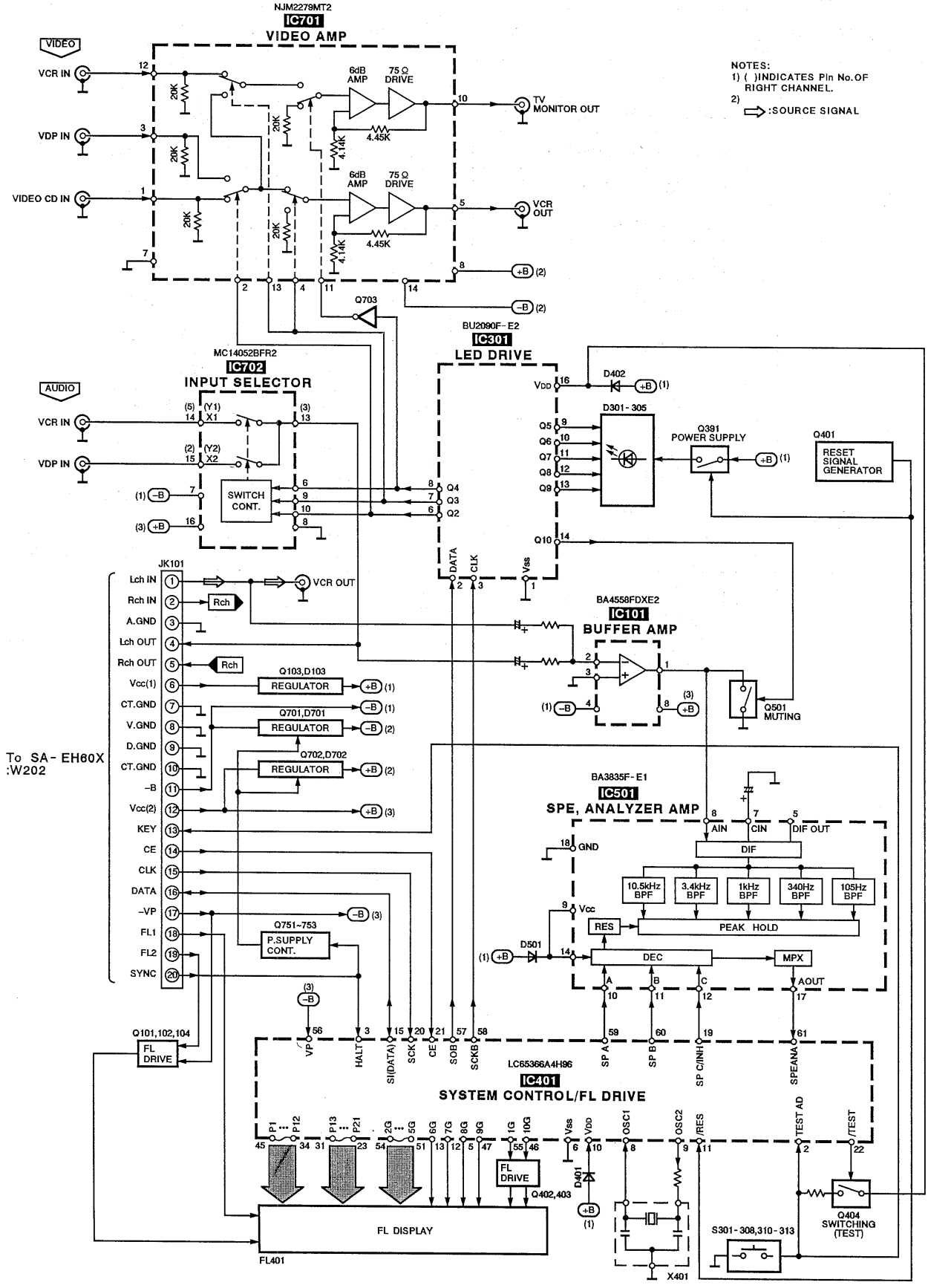


■ Terminal Function of IC's

●IC401 (LC65366A4H96)

接腳號碼	接腳名稱	I/O區分	功能說明
1	NC	–	不使用，開路
2	TEST-AD	I	測試模式按鍵信號輸入端
3	HALT	I	電源不良檢知信號輸入端
4	AV+	–	類比電路(+5V)的電源供應端
5	8G	O	格子點信號輸出端
6	VSS	–	接地端
7	NC	–	不使用，開路
8	OSC1	I	振盪器連接端(4 MHz)
9	OSC2	O	
10	VDD	–	電源供應端
11	/RES	I	重置信號輸入端
12~13	7G~6G	O	格子點信號輸出端
14	TEST	–	不使用，開路
15	SI	I/O	從SA-EH60X傳送來的通訊資料信號端
16~18	NC	–	不使用，開路
19	SP-C/INH	O	光譜分析IC輸出的選擇端
20	SCK	O	從SA-EH60X傳送來的通訊信號端(時脈信號輸入)
21	CE	O	從SA-EH60X傳送來的通訊信號端(晶片致能信號輸入)
22	/TEST	O	測試端
23~31	P21~P13	O	區段信號輸出端
32~33	NC	–	不使用，開路
34~45	P12~P1	O	區段信號輸出端
46~47	10G~9G	O	格子點信號輸出端
48~50	NC	–	不使用，開路
51~55	5G~1G	O	格子點信號輸出端
56	VP	–	負電壓供應端
57	SOB	O	串列資料信號輸出端
58	SCKB	O	串列時脈信號輸出端
59	SP-A	O	光譜分析IC輸出的選擇端
60	SP-B	O	
61	SPEANA	I	光譜分析IC的類比信號輸入端
62	CS	I	晶片選擇輸入端
63~64	NC	–	不使用，開路

■ Block Diagram



■ Replacement Parts List (Electrical)

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
* [M] Indicates in Remarks columns parts that are supplied by MESA.
*The "(SF)" mark denotes the standard part.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	BA4558FDXE2	IC	[M]
IC301	BU2090F-E2	IC	[M]
IC401	LC65366A4H96	IC	[M]
IC501	BA3835F-E1	IC	[M]
IC701	NJM2279MT2	IC	[M]
IC702	MC14052BFR2	IC	[M]
		TRANSISTOR(S)	
Q101, 102	2SD1450RTA	TRANSISTOR	[M]
Q103⚠	2SD2137PQTA	TRANSISTOR	[M]
Q104	UN4111	TRANSISTOR	[M]
Q391	2SD2144S	TRANSISTOR	[M]
Q401	UN4211	TRANSISTOR	[M]
Q402, 403	2SC3311A-Q	TRANSISTOR	[M]
Q404	UN4111	TRANSISTOR	[M]
Q501	UN4211	TRANSISTOR	[M]
Q701⚠	2SB621A-R	TRANSISTOR	[M]
Q702⚠	2SD592ARSTA	TRANSISTOR	[M]
Q703	UN4211	TRANSISTOR	[M]
Q751	2SC3311A-Q	TRANSISTOR	[M]
Q752	UN4115	TRANSISTOR	[M]
Q753	2SC3311A-Q	TRANSISTOR	[M]
		DIODE(S)	
D101	MA165	DIODE	[M]
D103⚠	MA4062-H	DIODE	[M]
D301-305	LNJ301MPUJAD	DIODE	[M]
D391	MA165	DIODE	[M]
D401	1SS291TA	DIODE	[M]
D402-404	MA165	DIODE	[M]
D405⚠	MA4051MTA	DIODE	[M]
D406	1SS291TA	DIODE	[M]
D501	MA165	DIODE	[M]
D701, 702⚠	MA4056MTA	DIODE	[M]
D751	MA165	DIODE	[M]
		COIL(S)	
L401	RLQA100JT-Y	COIL	[M]
		OSCILLATOR(S)	

Ref. No.	Part No.	Part Name & Description	Remarks
X401	EF0EC4004T4	OSCILLATOR	[M]
		DISPLAY TUBE	
FL401	RSL0235-F	DISPLAY TUBE	[M]
		SWITCH(ES)	
S301-308	EVQ21405R	SW	[M]
S310-313	EVQ21405R	SW	[M]
		EARTH TERMINAL(S)	
E101	SNE1004-2	EARTH TERMINAL	[M]
		JACK(S)	
JK101	RJT065K20	SYSTEM	[M]
JK701	SJF3068-7N	VDP IN	[M]
JK702	SJF3069N	VCR IN/OUT	[M]
JK703	SJF3069-3N	VDP/VCR IN/OUT	[M]
JK704	SJFD7-5	VCD IN	[M]

■ Resistors and Capacitors

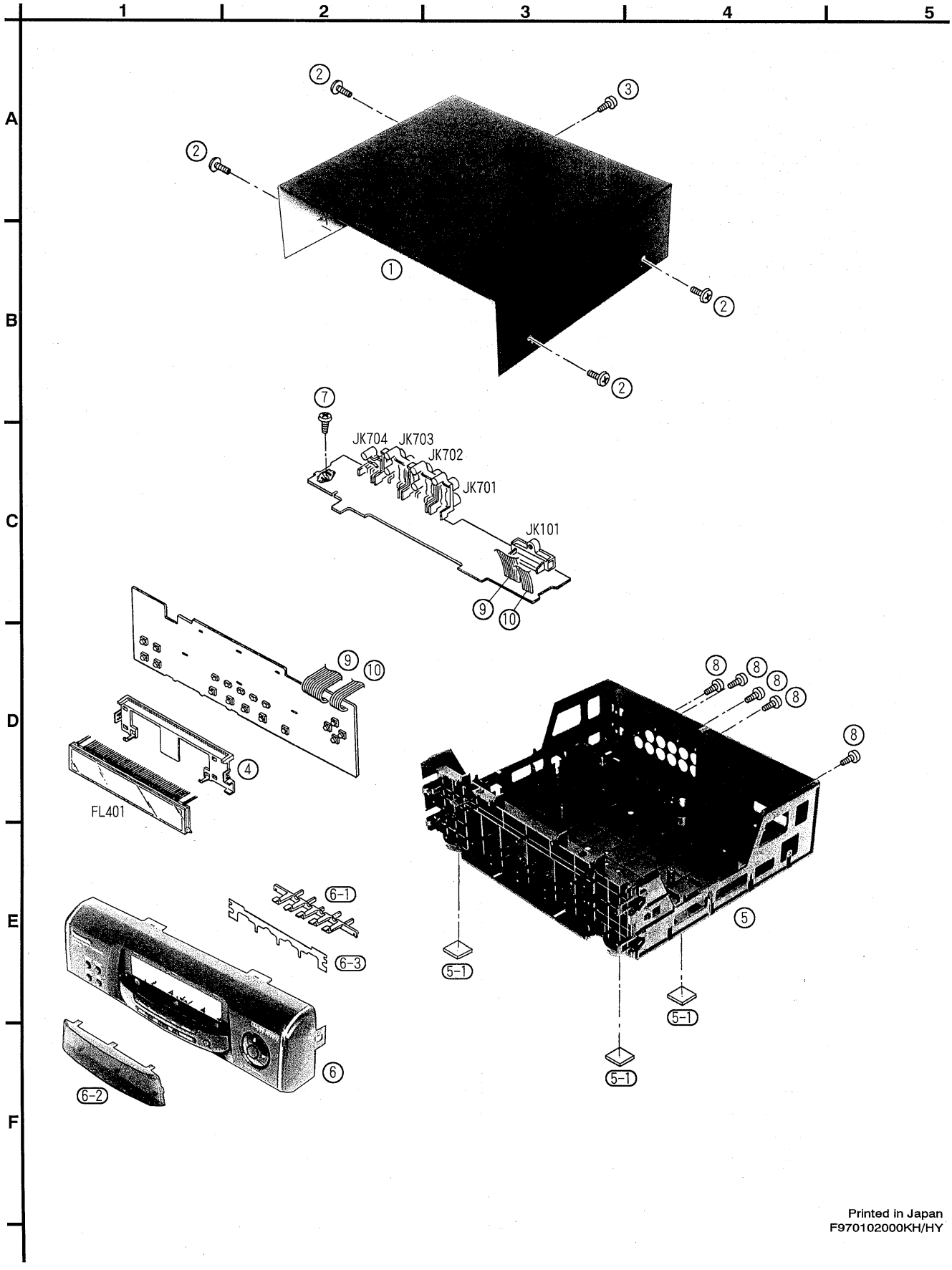
Notes: * Capacity values are in microfarads (uF) unless specified otherwise, P = Pico-farads (pF) F = Farads (F)
* Resistance values are in ohms, unless specified otherwise, 1K = 1,000 (OHM), 1M = 1,000 k (OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101⚠	ERQ16NKW2R2E	1/6W 2.2 [M]
R102	ERDS2TJ104	1/4W 100K [M]
R103, 104	ERDS2TJ822	1/4W 8.2K [M]
R105	ERDS2TJ222	1/4W 2.2K [M]
R151-154	ERDS2TJ563	1/4W 56K [M]
R155	ERDS2TJ333	1/4W 33K [M]
R301-305	ERDS2TJ181T	1/4W 180 [M]
R306	ERDS2TJ820	1/4W 82 [M]
R307-309	ERDS2TJ222	1/4W 2.2K [M]
R315, 316	ERDS2TJ222	1/4W 2.2K [M]
R317	ERDS2TJ821	1/4W 820 [M]
R318	ERDS2TJ102	1/4W 1K [M]
R319	ERDS2TJ122	1/4W 1.2K [M]
R320	ERDS2TJ152	1/4W 1.5K [M]
R321	ERDS2TJ182	1/4W 1.8K [M]
R322	ERDS2TJ222	1/4W 2.2K [M]
R323	ERDS2TJ332	1/4W 3.3K [M]
R324	ERDS2TJ472	1/4W 4.7K [M]
R325	ERDS2TJ682T	1/4W 6.8K [M]
R326	ERDS2TJ123	1/4W 12K [M]
R327	ERDS2TJ223	1/4W 22K [M]
R328	ERDS2TJ683	1/4W 68K [M]
R329	ERDS2TJ472	1/4W 4.7K [M]
R391	ERDS2TJ103	1/4W 10K [M]
R401-403	ERDS2TJ104	1/4W 100K [M]
R404	ERDS2TJ562	1/4W 5.6K [M]
R405	ERDS2TJ103	1/4W 10K [M]
R406	ERDS2TJ562	1/4W 5.6K [M]
R407-409	ERDS2TJ102	1/4W 1K [M]
R411, 412	ERDS2TJ102	1/4W 1K [M]
R413	ERDS2TJ822	1/4W 8.2K [M]
R415, 416	ERDS2TJ102	1/4W 1K [M]
R417, 418	ERDS2TJ101	1/4W 100 [M]
R419	ERDS2TJ102	1/4W 1K [M]
R422-425	ERDS2TJ103	1/4W 10K [M]
R501	ERDS2TJ104	1/4W 100K [M]
R502	ERDS2TJ102	1/4W 1K [M]
R503	ERDS2TJ103	1/4W 10K [M]
R504	ERDS2TJ563	1/4W 56K [M]
R505	ERDS2TJ103	1/4W 10K [M]
R506	ERDS2TJ102	1/4W 1K [M]
R701, 702	ERDS2TJ102	1/4W 1K [M]
R703, 704	ERDS2TJ473	1/4W 47K [M]
R705, 706	ERDS2TJ102	1/4W 1K [M]
R707, 708	ERDS2TJ104	1/4W 100K [M]
R709, 710	ERDS2TJ102	1/4W 1K [M]
R711, 712	ERDS2TJ473	1/4W 47K [M]
R717, 718	ERDS2TJ820	1/4W 82 [M]
R719, 720	ERDS2TJ680T	1/4W 68 [M]
R721	ERDS2TJ820	1/4W 82 [M]
R722, 723	ERDS2TJ102	1/4W 1K [M]
R724-727	ERDS2TJ103	1/4W 10K [M]
R751, 752	ERDS2TJ104	1/4W 100K [M]
R753	ERDS2TJ103	1/4W 10K [M]
R754	ERDS2TJ222	1/4W 2.2K [M]
		CAPACITORS
C101, 102	ECA1EM101B	25V 100U [M]
C103, 104	RCE1VM471BV	35V 470U [M]
C105	ECEA1HKAR22B	50V 0.22U [M]
C107	ECBT1E103ZF	25V 0.01U [M]
C109	RCE1CKA100BG	16V 10U [M]
C151-154	RCE1CKA100BG	16V 10U [M]
C155	ECBT1H101KB5	50V 100P [M]
C156	RCE1CKA100BG	16V 10U [M]
C157, 158	ECBT1E103ZF	25V 0.01U [M]
C301	RCE1CKA100BG	16V 10U [M]
C302	ECBT1H104ZF5	50V 0.1U [M]
C303, 304	ECBT1H470J5	50V 47P [M]
C391	RCE0JKA470BG	6.3V 47U [M]
C401	ECEA1HKA2R2B	50V 2.2U [M]
C402	RCE1HKA3R3BG	50V 3.3U [M]
C403	RCE0JU102BV	6.3V 1000U [M]
C404, 405	RCE1CKA100BG	16V 10U [M]
C406	ECEA1HKA330B	50V 33U [M]
C407, 408	RCE1HKA3R3BG	50V 3.3U [M]
C409	ECEA1HKA330B	50V 33U [M]
C410	ECBT1H104ZF5	50V 0.1U [M]
C411	ECBT1E103ZF	25V 0.01U [M]
C412	ECEA0JKS101B	6.3V 100U [M]
C413	ECBT1H470J5	50V 47P [M]
C416, 417	ECBT1H470J5	50V 47P [M]
C418	ECBT1H101KB5	50V 100P [M]
C501	RCE1CKA100BG	16V 10U [M]
C502-505	ECEA1HKA0R1B	50V 0.1U [M]
C506	ECBT1E103ZF	25V 0.01U [M]
C701-706	ECBT1H101KB5	50V 100P [M]
C707	ECBT1H102KB5	50V 1000P [M]
C709	ECBT1H470J5	50V 47P [M]
C711	ECBT1H470J5	50V 47P [M]
C712, 713	ECBT1H104ZF5	50V 0.1U [M]
C714, 715	RCE1CKA100BG	16V 10U [M]
C716, 717	ECBT1H104ZF5	50V 0.1U [M]
C721-723	RCE1CKA100BG	16V 10U [M]
C751	RCE1AKA101BG	10V 100U [M]

■ Replacement Parts List (Cabinet)

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0302-K	CABINET	[M]
2	RHD30007-K1	SCREW	[M]
3	XTB3+8JFZ	SCREW	[M]
4	RMN0424	FL HOLDER	[M]
5	RYK0700A-K1	BOTTOM CABINET ASS'Y	[M]
5-1	SHG1654	RUBBER	[M]
6	RYP0733A-K	FRONT PANEL ASS'Y	[M]
6-1	RGL0358-Q	LENS	[M]
6-2	RKW0504-V	FL PANEL	[M]
6-3	RMZ0423	SHEET	[M]
7	XTBS3+8JFZ1	SCREW	[M]
8	XTB3+8JFZ	SCREW	[M]
9	RWJ5710240KK	FLAT CABLE (FW401/10P)	[M]
10	RWJ5705240KK	FLAT CABLE (FW402/5P)	[M]

■ Cabinet Parts Location



Printed in Japan
F970102000KH/HY