

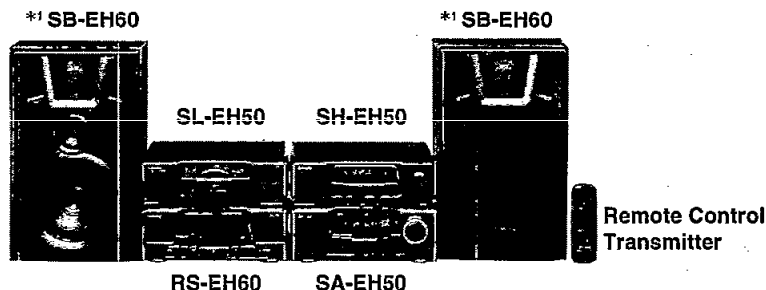
Service Manual

System: SC-EH50

Sound Processor

Sound Processor
SH-EH50

For (E) / (EP) areas



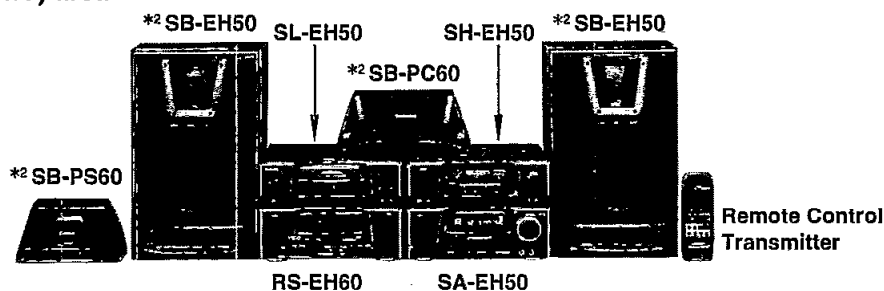
Colour

(K) Black

Area

(E)/(EP) ... Europe, Russia.
(GC) Asia, Latin America,
Middle East and
Africa.

For (GC) area



[For (GC) area only]



Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Specifications

EQ/SFP Section

MANUAL GEQ :

Center frequency ; 100 Hz, 315 Hz, 1 kHz, 3.15 kHz, 10 kHz

Level control ; $\pm 3, 6, 9$ dB

EQ SPACE mode (3 modes) : HALL, CLEAR, HEAVY

Acoustic Image Selector : 36 pattern

DOLBY PRO LOGIC Section [For (GC) area only]

PRO LOGIC mode : SURROUND, 3 STEREO

CENTER mode : NORMAL, WIDE, PHANTOM

DELAY TIME : 20 ms (Fixed)

System/SC-EH50:

For (E)/(EP) area

Sound processor: SH-EH50,

Front speakers: *1 SB-EH60

For (GC) area

Sound processor: SH-EH50,

Front speakers: *2 SB-EH50,

Tuner/Amplifier: SA-EH50,

Tuner/Amplifier: SA-EH50,

Center speaker: *2 SB-PC60,

Compact disc player: SL-EH50,

Compact disc player: SL-EH50,

Surround speakers: *2 SB-PS60

Cassette deck: RS-EH60,

Cassette deck: RS-EH60,

Notes: *1 ...Made in PAES

*2 ...Made in MESA

Spectrum analyzer Section

Display mode :

NORMAL, PEAKHOLD, AURORA

General

Dimensions :

287 (W)/89 (H)/273.5 (D) mm

Weight :

1.1 kg

Note: Specifications are subject to change without notice.

Weight and dimensions are approximate.

⚠ 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.

Technics®

© 1997 Matsushita Electric Industrial Co., Ltd.
All rights reserved. Unauthorized copying
and distribution is a violation of law.

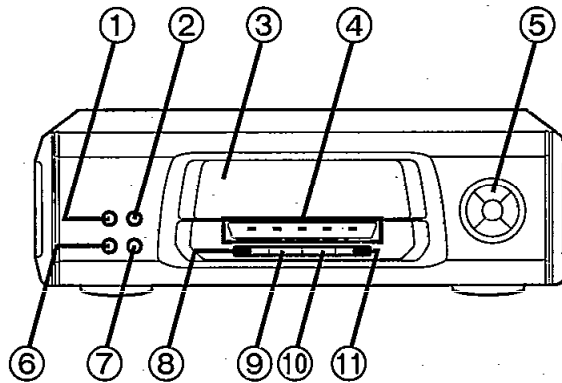
■ Contents

	Page		Page
Location of Controls	2	Printed Circuit Board Diagram	14
Changing the tone	3, 4	Type Illustration of IC's, Transistors and Capacitors	15
Enjoying sound with DOLBY PRO LOGIC [For (GC) area only]	5, 6	Wiring Connection Diagram	15
Enjoying with SURROUND or 3 STEREO [For (GC) area only]	7	Terminal Function of IC's	16
Operation Checks and		Block Diagram	17
Main Component Replacement Procedures	8, 9	Replacement Parts List (Electrical and Cabinet)	18
To Supply Power Source	10	Resistors and Capacitors	19
Schematic Diagram	11 ~ 13	Cabinet Parts Location	20

NOTE:

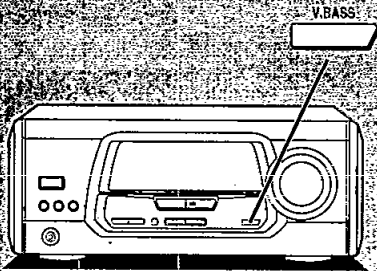
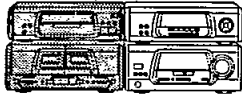
Refer to the service manual for Model No. SA-EH50 (ORDER No. AD9703053C8) for information on "Accessories", "Connections", "Installation" and "Packaging".

■ 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) (GC) area only
- 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) (GC) area only
- ⑨ DOLBY PRO LOGIC mode select button (MODE) (GC) area only
- ⑩ DOLBY PRO LOGIC test signal button (TEST) (GC) area only
- ⑪ DOLBY PRO LOGIC center mode button (CENTER MODE) (GC) area only

■ Changing the Tone



To listen with augmented bass (V. BASS) ^A

Press V. BASS.

To cancel, press V. BASS once again.

Note

You cannot record with the V. BASS effect. "V. BASS" is only effective on sounds which can be heard through the speakers or headphones.

Using the internal sound quality ^B

Press PRESET/MANUAL to select the desired mode.

Each time you press PRESET/MANUAL, EQ and SPACE modes will be switched as follows.

HEAVY → CLEAR → HALL → MANUAL

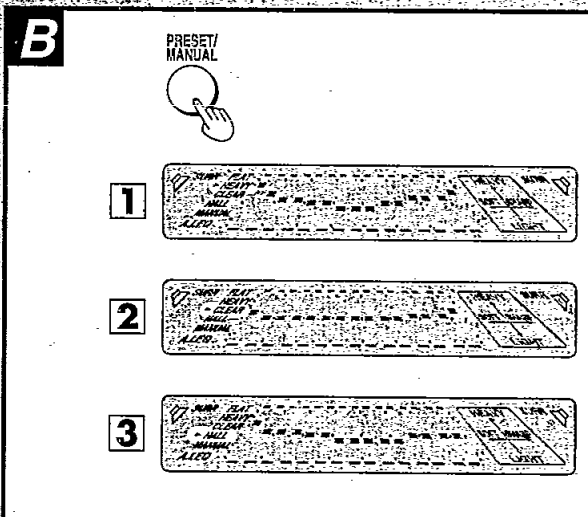
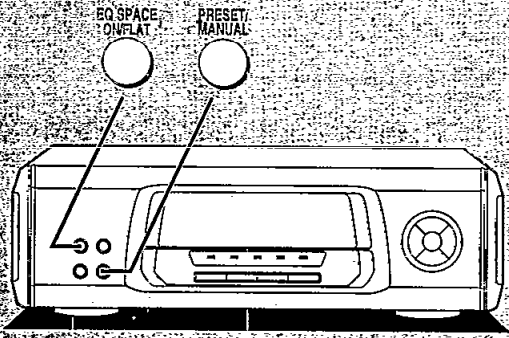
- 1 **HEAVY:** Use to add "punch" to rock and other music.
- 2 **CLEAR:** Use to clarify the treble range of jazz, etc.
- 3 **HALL:** Use to impart a deep bass and spread which will make you feel as if you were in a large concert hall.
- 4 **MANUAL:** Refer to the "Finer sound quality changes" section on Page 4.

To cancel the EQ SPACE effect

Press EQ SPACE ON/FLAT to select "FLAT".

Notes

- Recordings cannot be made in the HALL, CLEAR, HEAVY or MANUAL modes.
- Recording during use of sound quality operation will cause the "HALL", "CLEAR", "HEAVY" and "MANUAL" indicators to disappear and light again when recording is completed.



Using the acoustic image EQ

This function allows easy creation of sounds closer to what you imagine. The figure shows an example where the sound quality has been adjusted to HEAVY level 2 and SHARP level 3.

1 Press ACOUSTIC IMAGE EQ.

2 Press the ▲ ▼ ◀ ▶ buttons to move the cursor to the desired music image.

- HEAVY (▲): When a heavier sound is desired
- LIGHT (▼): When a lighter sound is desired
- SOFT (◀): When a softer sound is desired
- SHARP (▶): When a sharper sound is desired

To cancel the ACOUSTIC IMAGE EQ effect
Press EQ SPACE ON/FLAT to select "FLAT".

Notes

- Sounds can be made to fit a total of 36 images.
- The resulting adjustment is automatically stored in memory. When the ACOUSTIC IMAGE EQ is pressed again, the image last selected is automatically selected.

Finer sound quality changes

Finer sounds can be created by selecting MANUAL.

1 Press PRESET/MANUAL to select MANUAL.

2 Press ◀ ▶ to select the desired register.

- ◀: Upper register
- ▶: Lower register

3 Press ▲ ▼ to adjust the register level.

- ▲: Increasing the register level
- ▼: Decreasing the register level

For your reference:

Upper register: includes pipes, strings, cymbals and triangles

- Increasing the upper register: mellows pipes and strings, adds precision and glitter
- Decreasing the upper register: quiets music, rids music of its "stretch"

Middle register: vocals (voice)

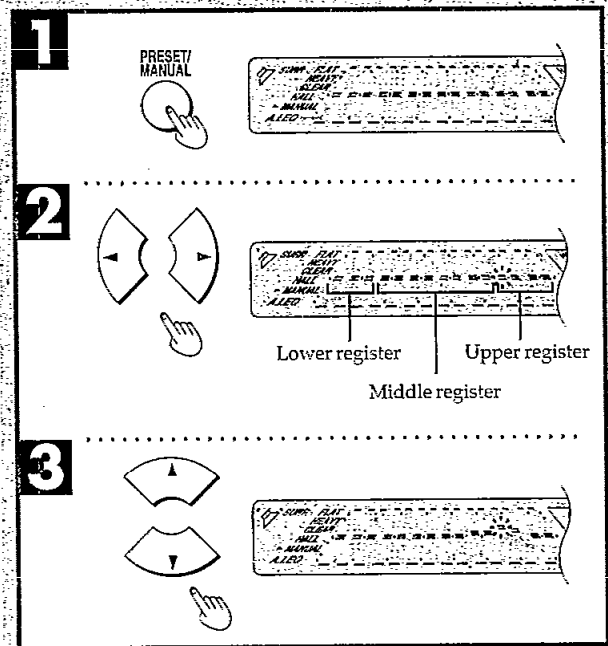
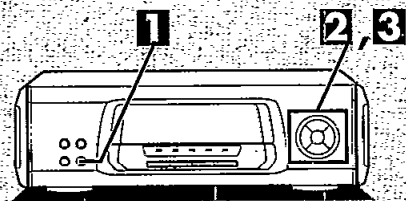
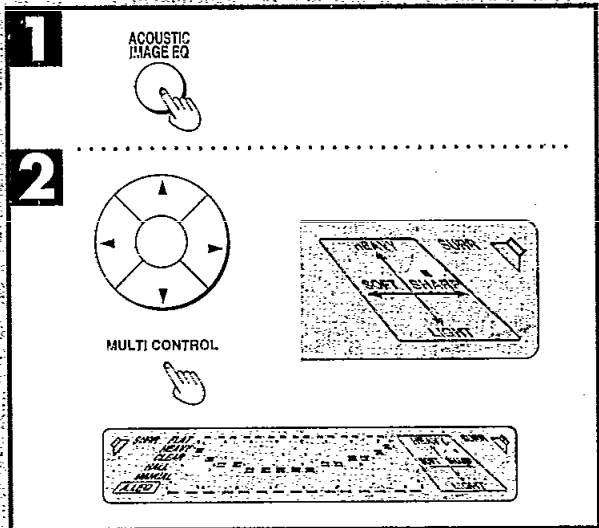
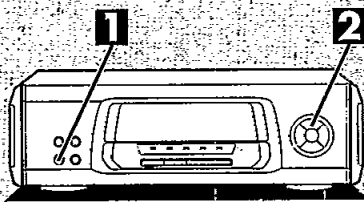
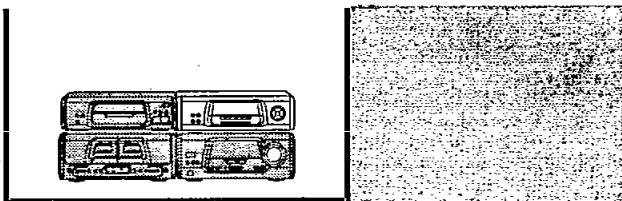
- Increasing the middle register: gives strength and punch to music brings voices forward, brightens sound
- Decreasing the middle register: quiets music, pulls voices back, softens intense sounds

Lower register: includes bass and drums

- Increasing the lower register: stabilizes heavy and low sounds, swells low sounds
- Decreasing the lower register: decreases noise in lower sounds, reduces muffled sounds

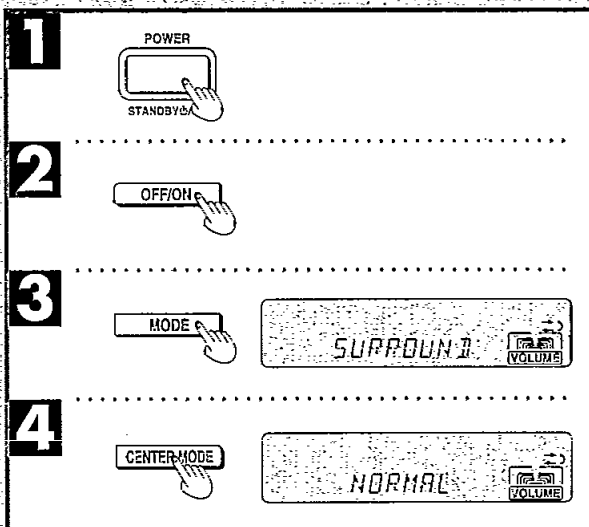
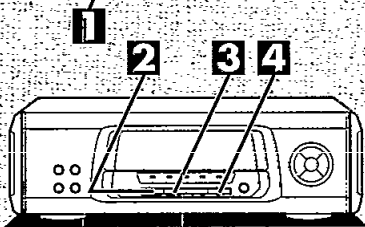
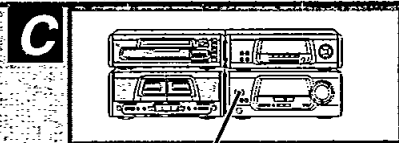
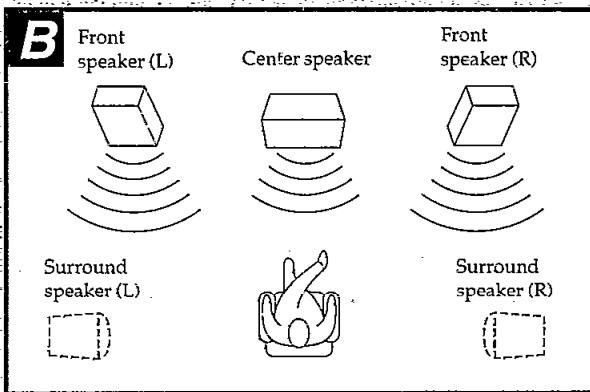
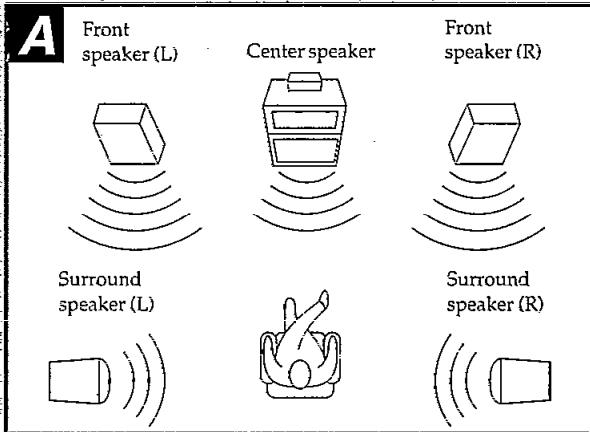
Notes

- The resulting adjustment is automatically stored in memory. When the MANUAL mode is selected again, the sound quality last selected is automatically played back.
- The register can be manually adjusted at 5 individual points along the 100 Hz~10 kHz frequency range.



■ Enjoying Sound with DOLBY PRO LOGIC [For (GC) area only]

By combining front, center and surround speakers, you can enjoy the SURROUND mode which conveys a feeling of presence or the 3 STEREO mode which conveys a feeling of orientation.



SURROUND


By reproducing the feeling of depth and movement of sound, video software or compact discs recorded with Dolby Surround provide the listener with the sensations of a movie theater.

To enjoy SURROUND, be sure to connect the surround speakers.

3 STEREO

You can enjoy audio/video sources with clear sound, more presence and enhanced orientation. 3 STEREO can be used with sources not recorded in DOLBY SURROUND.

To enjoy 3 STEREO, be sure to connect the center speaker.

Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

Setting the center mode

For Dolby Pro Logic systems, center mode setting is necessary to play back bass sounds effectively. Set the center mode in accordance with the size of your center speaker.

1 Switch on the power.

2 Press DOLBY PRO LOGIC OFF/ON to select ON.

3 Press MODE to select "SURROUND" or "3 STEREO".

Each time you press the button, the display will change as follows:

SURROUND → 3 STEREO

4 Press CENTER MODE to select "NORMAL" mode.

Each time you press the button, the display will change as follows:

NORMAL → WIDE → PHANTOM

Note

"PHANTOM" will not be displayed when you select "3 STEREO" in step 3.

NORMAL:

When the center speaker is smaller than the front speakers

WIDE:

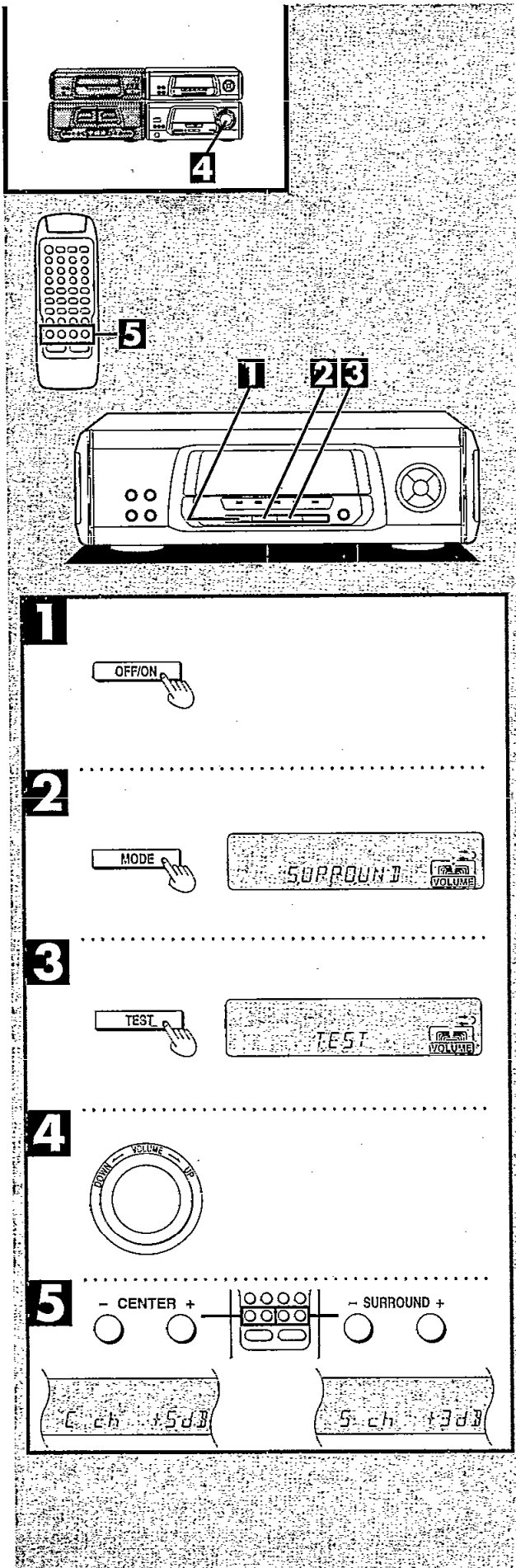
When the center speaker is the same size or larger than the front speakers

PHANTOM: **SURROUND only**

When no center speaker is connected

Note

In the PHANTOM mode, the sound which would have been sent to the center speaker will be divided equally between both the left and right front speakers.



Adjusting speaker output level

In order to reproduce the movement of the sound and its clear orientation, it is important to adjust the output level of each speaker. Adjust output to the correct levels while listening to the test signal.

1 Press DOLBY PRO LOGIC OFF/ON to select ON.

2 Press MODE to select "SURROUND" or "3 STEREO".

Each time you press the button, the display will change as follows:

SURROUND → 3 STEREO

3 Press TEST to output a test signal.

The test signal is emitted in the following order:

For SURROUND mode

Front speaker (left) → Center speaker

Surround speakers (left, right) ← Front speaker (right)

Note

The test signal is not emitted from the center speaker when the center mode is on PHANTOM.

For 3 STEREO mode

Front speaker (left) → Center speaker → Front speaker (right)

4 Turn VOLUME to set the volume level normally used for enjoying the source.

5 Press CENTER (-) or (+) or SURROUND (-) or (+) on the remote control to adjust the output level balance.

Adjust the output level of each speaker from the listening position until they are all identical.

Output levels can be varied within a range of ±12 dB with front speaker output level serving as the zero point.

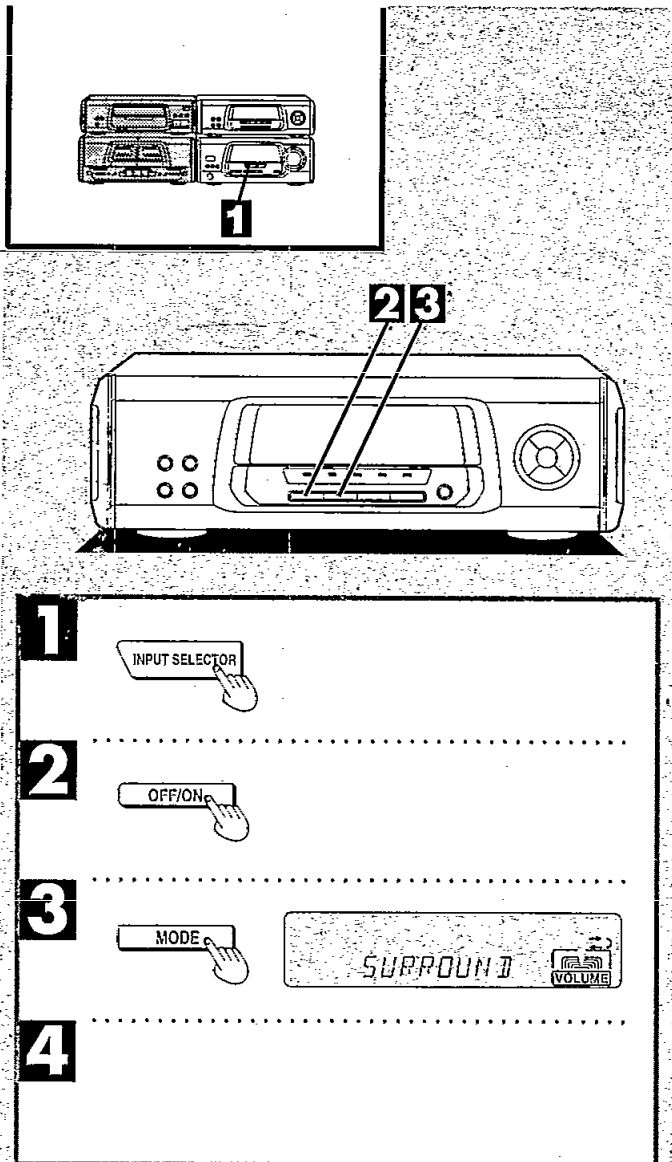
Notes

- The test signal is output only by the speaker you are now adjusting and does not repeat the sequence until adjustments are complete.
- Remember you cannot adjust the output level of the surround speakers if you selected the 3 STEREO mode in step 2

To stop the test signal:

Press TEST.

■ Enjoying with SURROUND or 3 STEREO [For (GC) area only]



Enjoying with SURROUND or 3 STEREO

Before trying anything, have you set the center mode and adjusted speaker output level?
When viewing a video, turn on the power supply for the TV and set the TV to video mode.

1 Press INPUT SELECTOR to select the desired external source.

Each time you press this button, sound sources will be switched as follows.

TUNER → CD → TAPE

↑ ↓
VDP(AUX) ← VCR(EXT)

These indications correspond to terminals on the rear panel of the sound processor or tuner/amplifier. Switch the displayed indication to the source you want to use.

2 Press DOLBY PRO LOGIC OFF/ON to select ON.

3 Press MODE to select "SURROUND" or "3 STEREO".

4 Start the desired source.

To operate external sources, refer to the operating instructions provided with the specific unit.

Note

When using SURROUND, use software recorded in Dolby Surround.

To turn off the DOLBY PRO LOGIC systems:

Press DOLBY PRO LOGIC OFF/ON to select "OFF".

Note

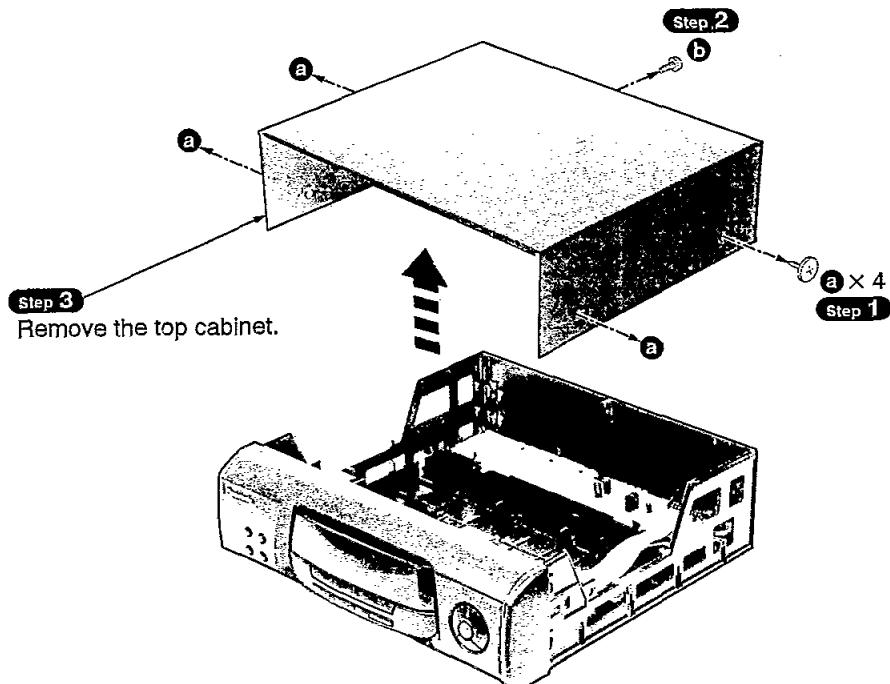
You cannot record acoustical effects produced in the SURROUND and 3 STEREO modes.

■ Operation Checks and Main Component Replacement Procedures

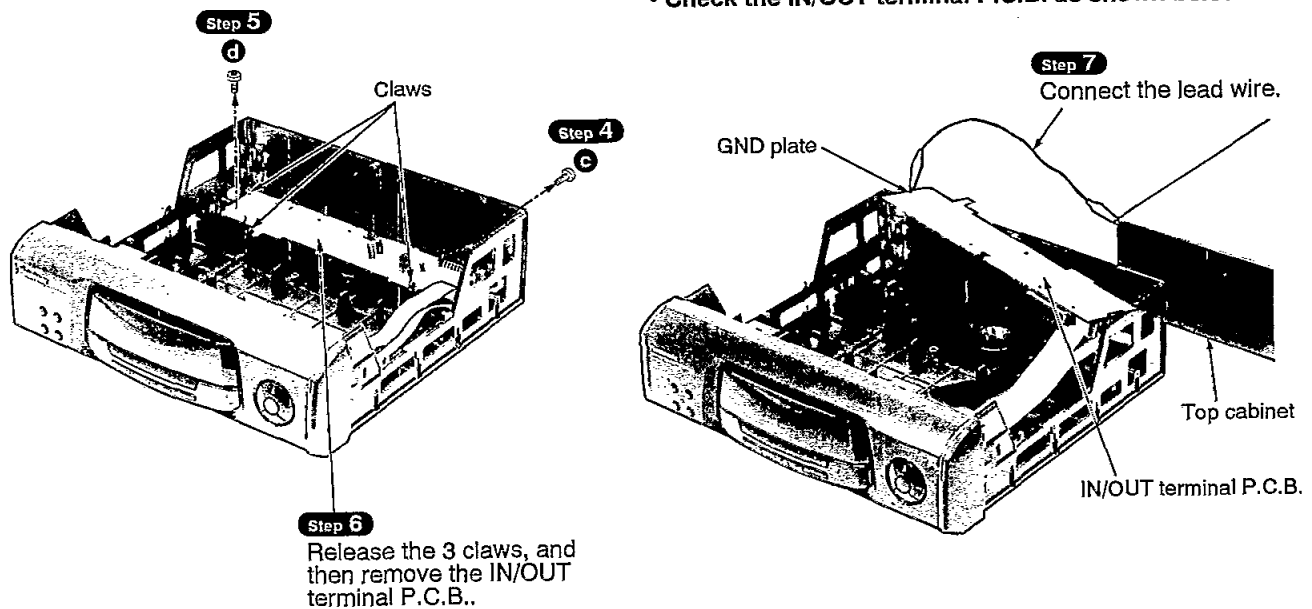
NOTE

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

1. Checking for the IN/OUT terminal P.C.B.

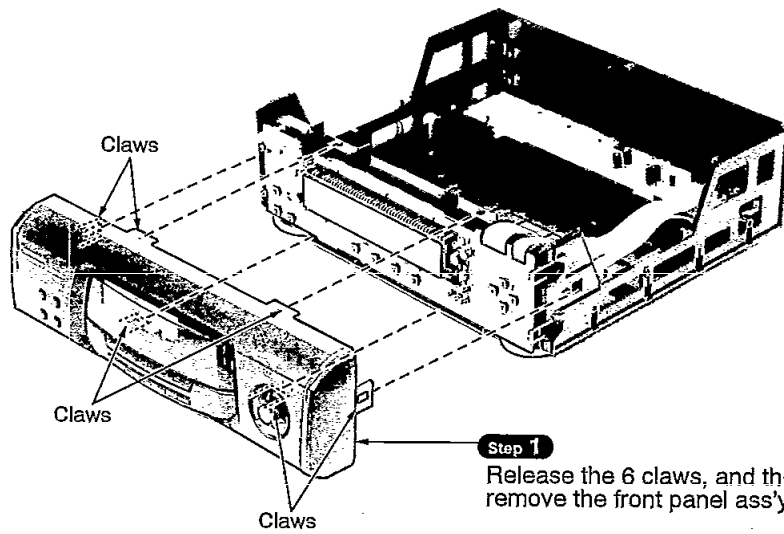


• Check the IN/OUT terminal P.C.B. as shown below.



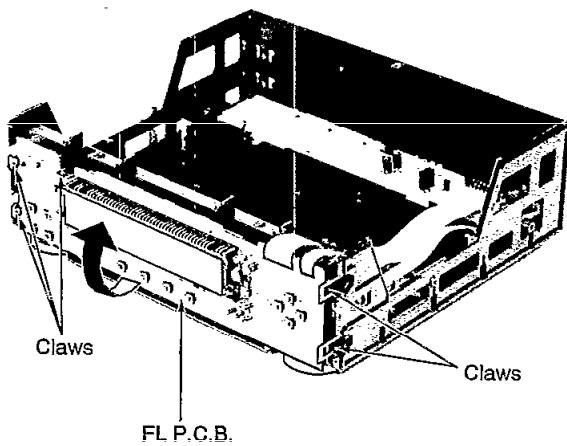
2. Checking for the FL P.C.B.

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 8.

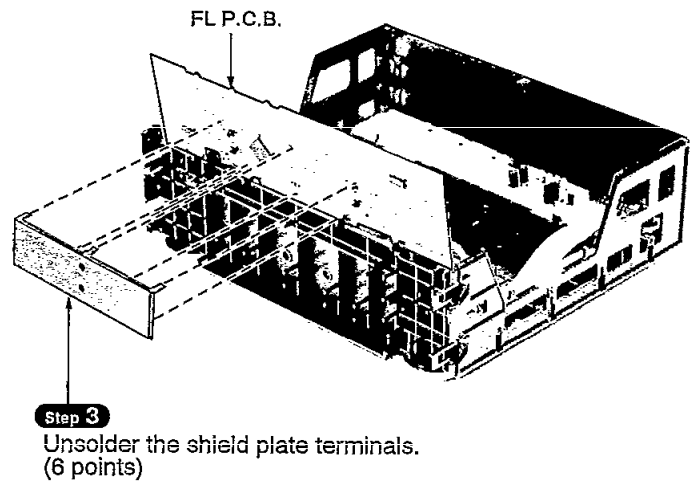


Step 2

Release the 5 claws, and then remove the FL P.C.B..



- Check the FL P.C.B. as shown below.



■ To Supply Power Source

This unit SH-EH50 is designed to operate on power supplied from the Tuner/Amplifier SA-EH50.

When operating the unit SH-EH50 alone for testing and servicing, without having power supplied from the Tuner/Amplifier SA-EH50, use the following method.

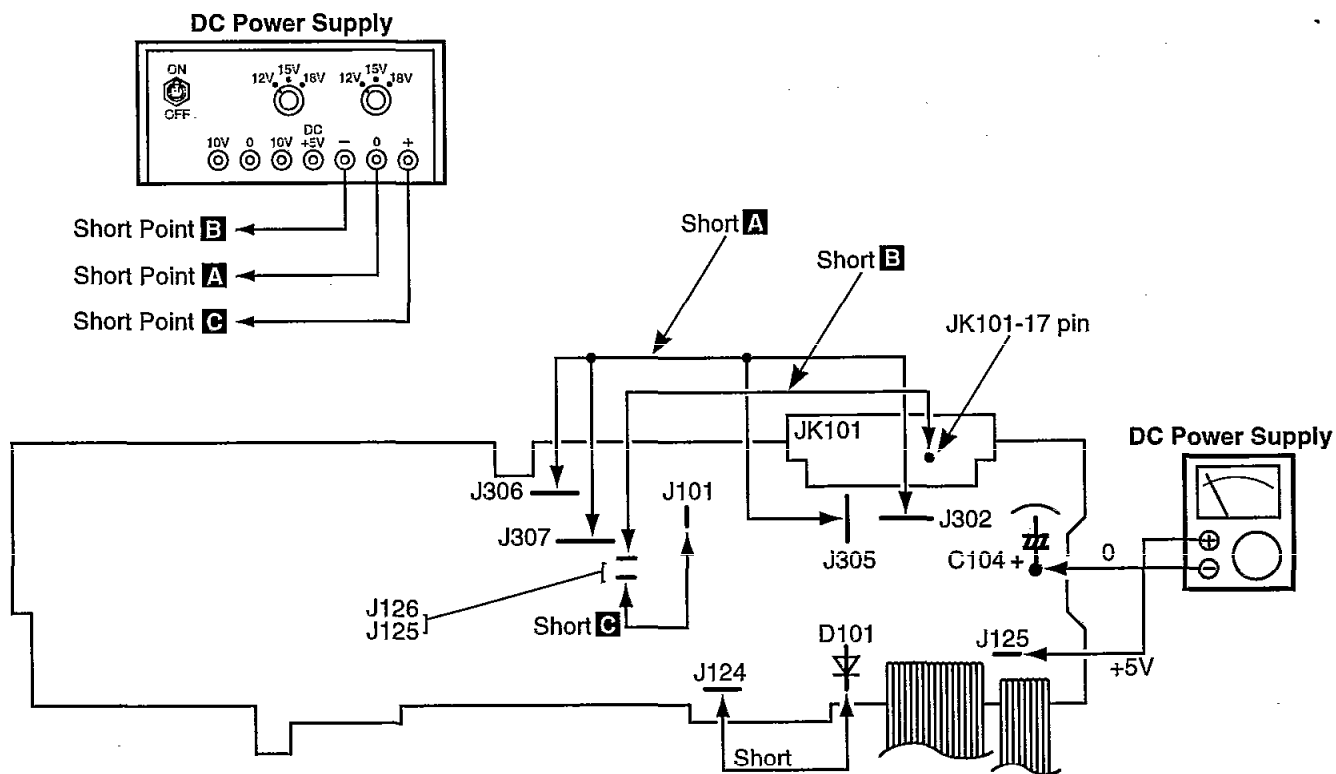
Power Supply to Video Selector Circuit

1. Short the section between J124 and R753.
2. Short the section J306, J307, J305 and J302 with each other. (Point **A**)
3. Short the section between J126 and 17 pin of the connector JK101. (Point **B**)
4. Short the section between J125 and J101. (Point **C**)
5. Apply +5 V DC power to the section between J125 and (+) foil side of C104.
6. Connect the DC power supply as shown below.
 - +12 V terminal of the DC Power Supply connect to Point **C**.
 - GND terminal of the DC Power Supply connect to Point **A**.
 - -12 V terminal of the DC Power Supply connect to Point **B**.

To Check Signal

1. Input the audio signal and confirm in to be outputted from the terminal.

	INPUT	OUTPUT
L-ch	VCR-Lch terminal	VCR-Lch terminal
R-ch	VCR-Rch terminal	VCR-Rch terminal



■ Schematic Diagram

Page

A FL CIRCUIT	12, 13
B IN/OUT TERMINAL CIRCUIT	13

- 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) [For (GC) area only]
- **S306**: DOLBY PRO LOGIC mode select switch (MODE) [For (GC) area only]
- **S307**: DOLBY PRO LOGIC test signal switch (TEST) [For (GC) area only]
- **S308**: DOLBY PRO LOGIC center mode select switch (CENTER MODE) [For (GC) area only]
- **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.

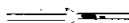
Cover the parts boxes made of plastics with aluminum foil.

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.

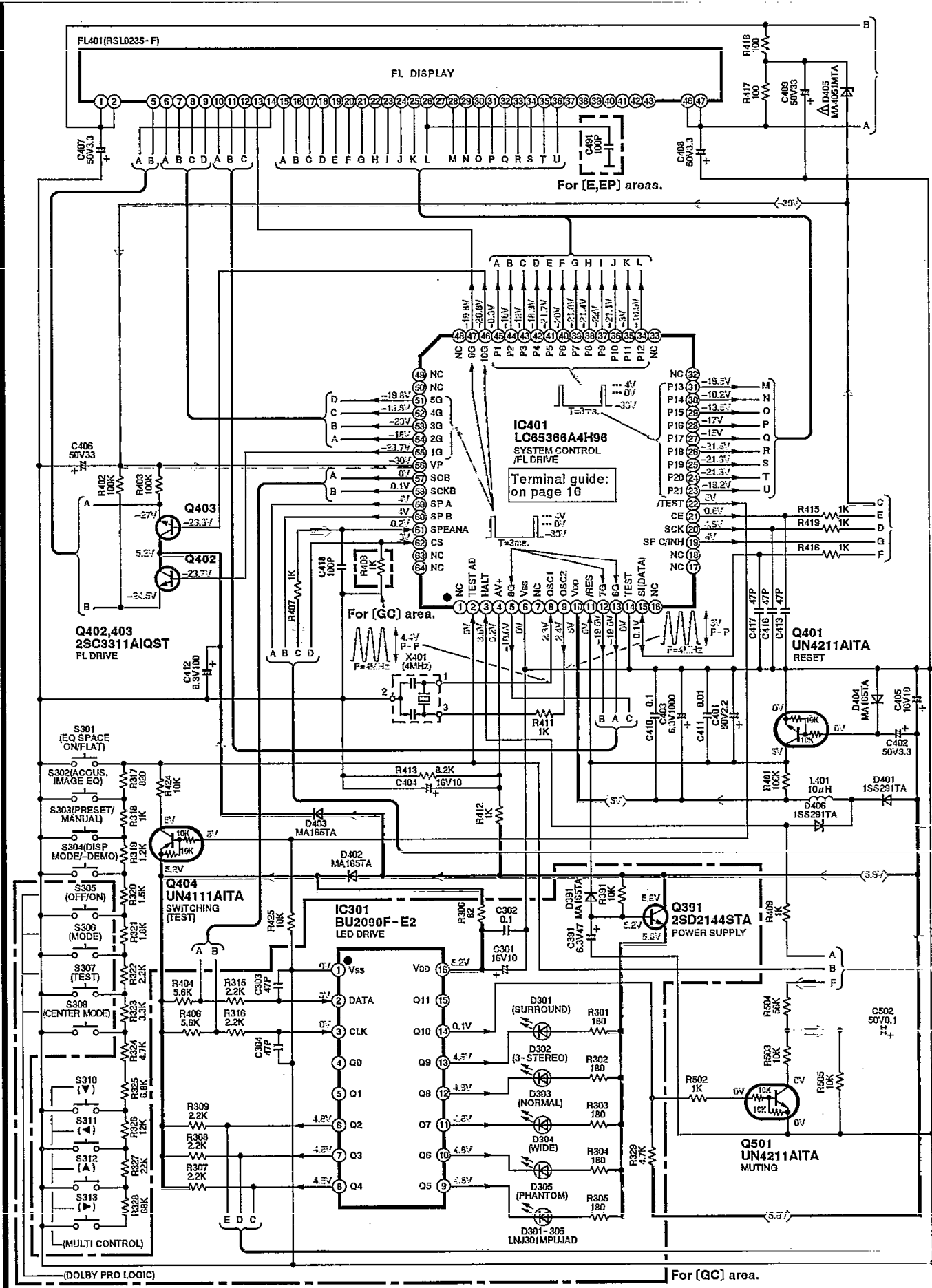
• Voltage and signal line

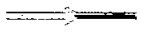
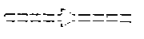

 : Positive voltage line

 : Negative voltage line

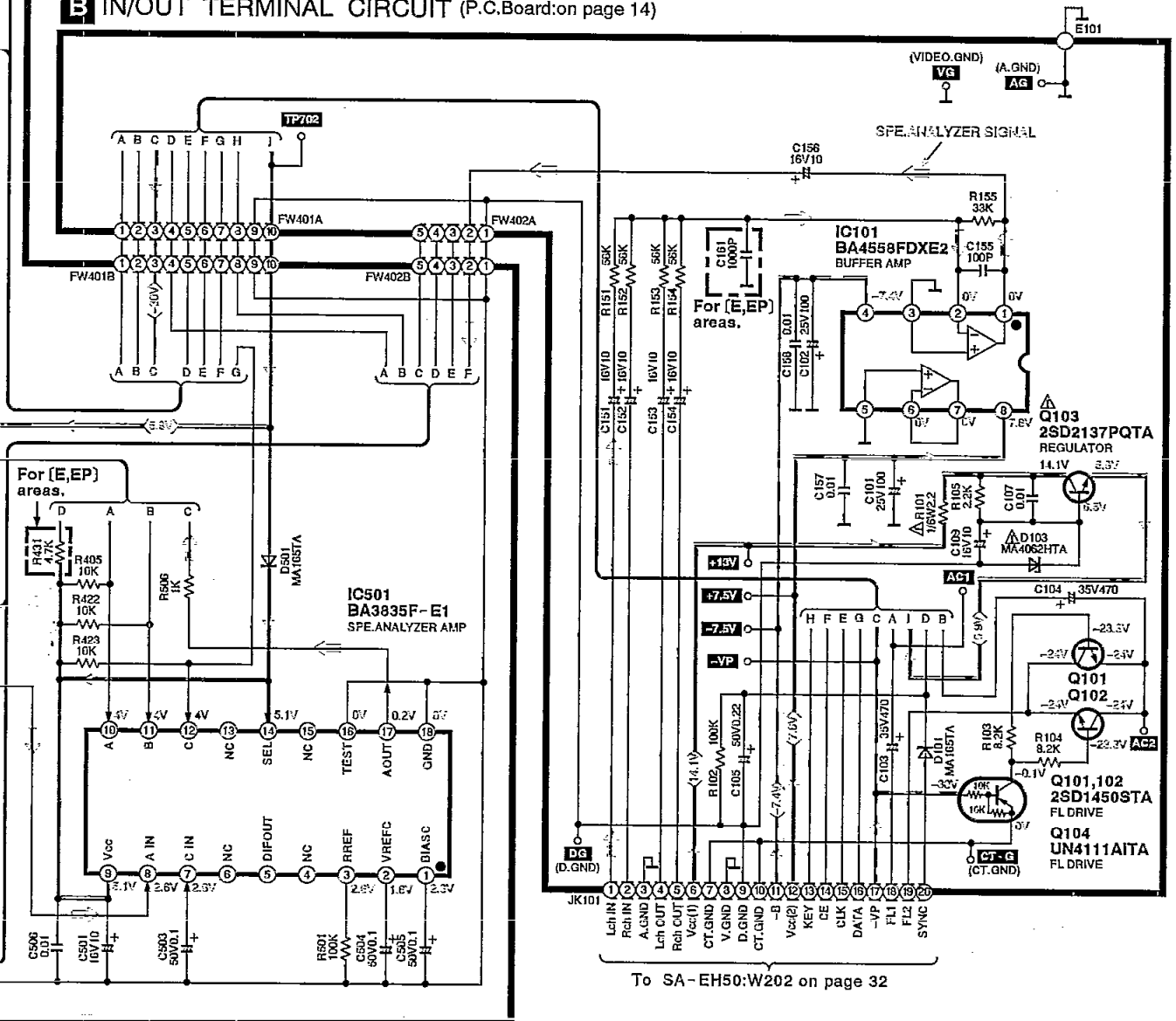
 : Spectrum analyzer signal line

A FL CIRCUIT (P.C.Board: on page 14)



 : Positive voltage line
  : Negative voltage line
  : Spectrum analyzer signal line

B IN/OUT TERMINAL CIRCUIT (P.C.Board: on page 14)

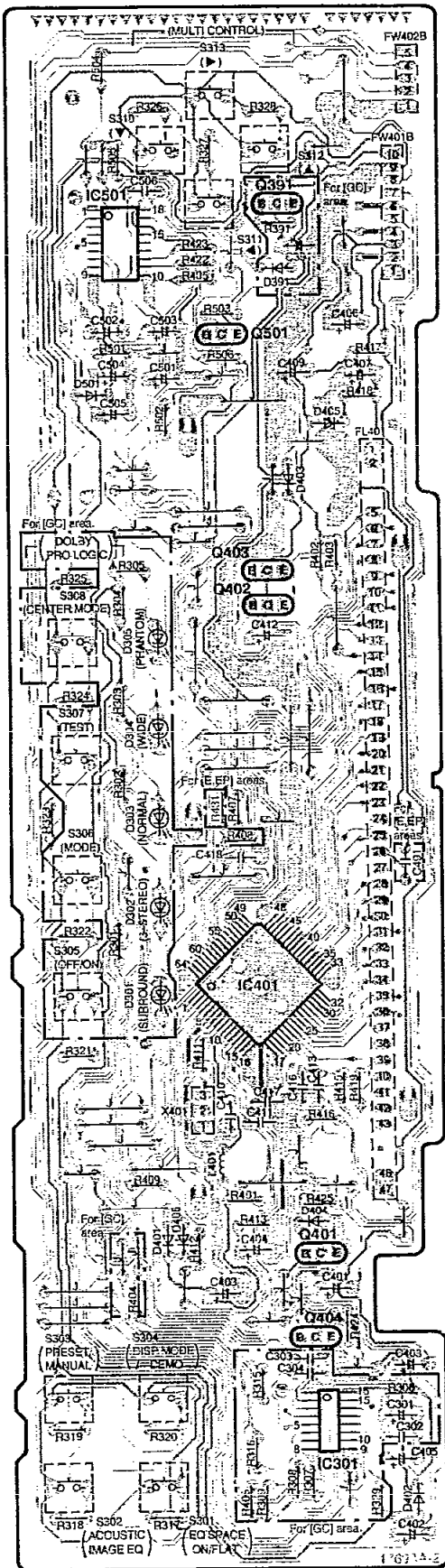


To SA-EH50:W202 on page 32

Printed Circuit Board Diagram

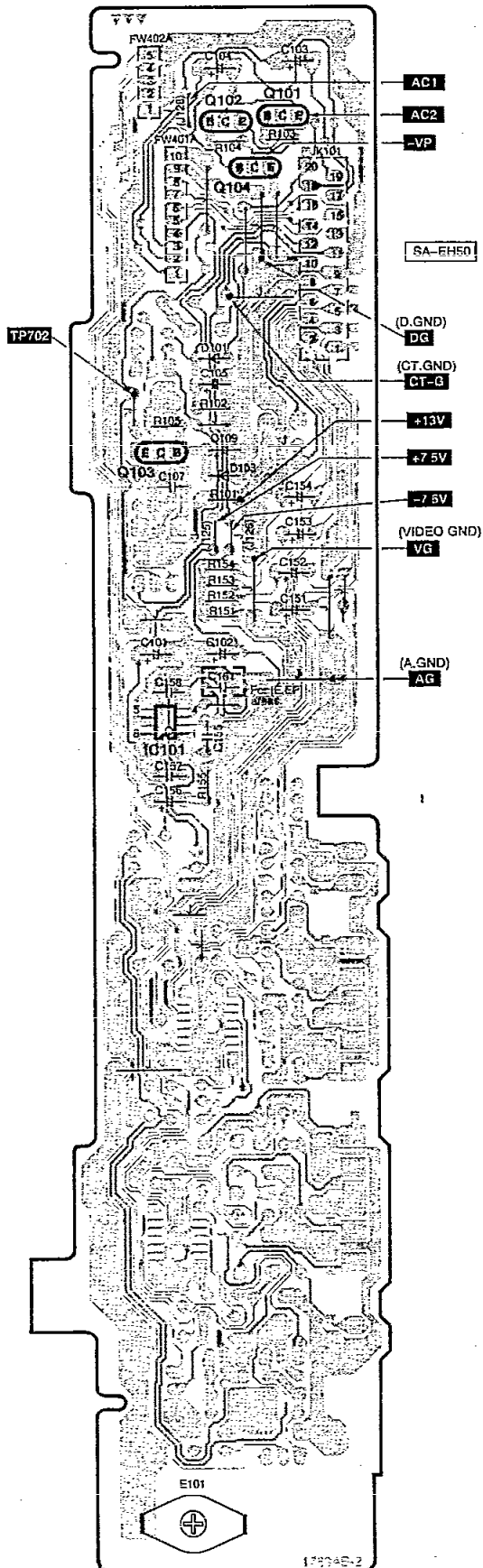
This circuit board diagram may be modified at any time with the development of new technology.

A FL P.C.B.



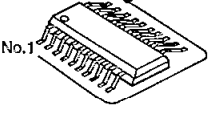
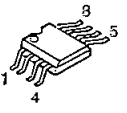
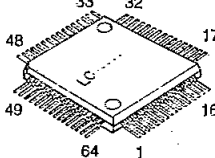
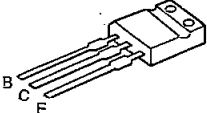
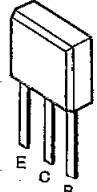
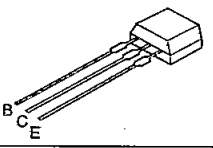
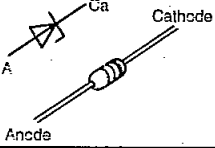
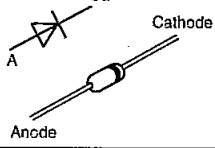
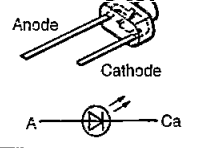
(REP2474D-M...[GC])
(REP2474E-M...[E.EP])

B IN/OUT TERMINAL P.C.B.

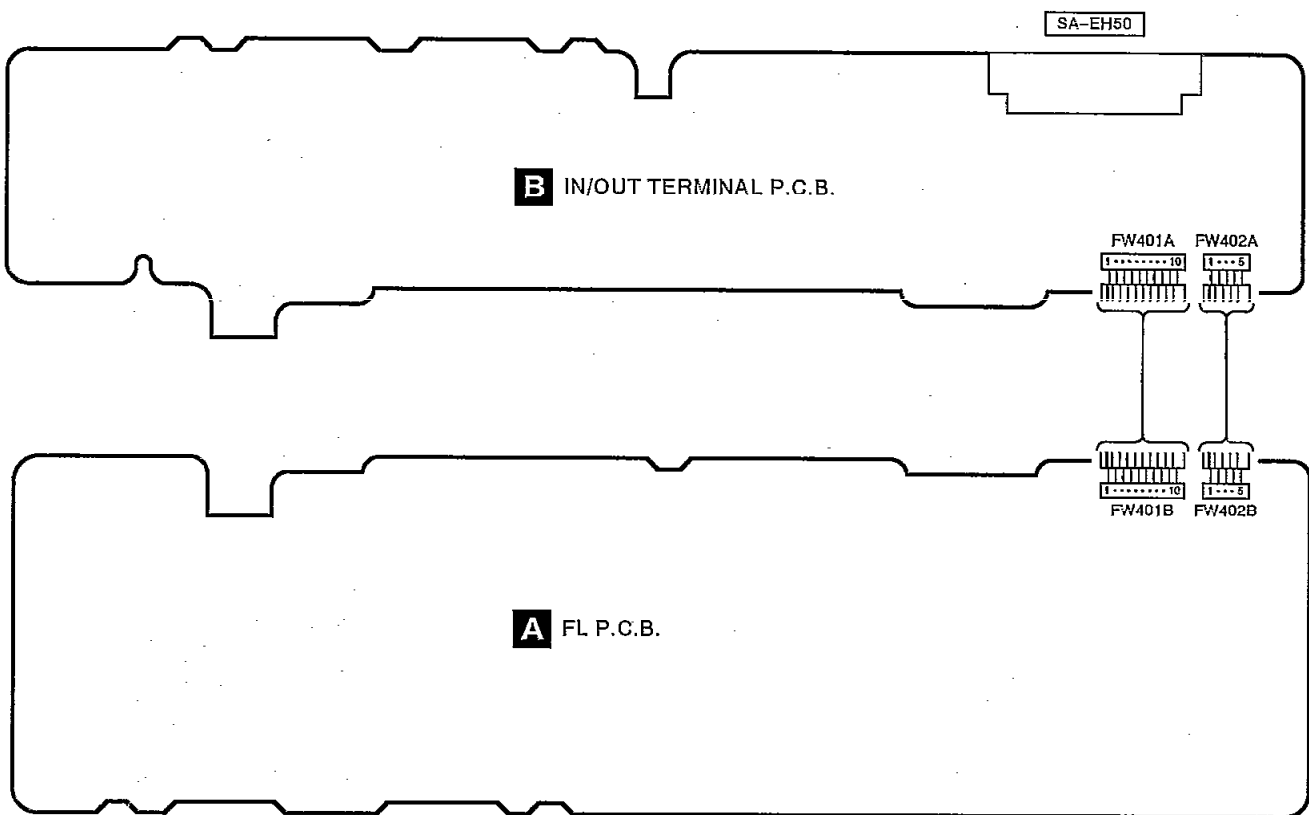


(REP2474D-M...[GC])
(REP2474E-M...[E.EP])

■ Type Illustration of IC's, Transistors and Diodes

<p>BU2090F-E2 16PIN BA3835F-E1 18PIN</p>  <p>No.1</p>	<p>BA4558FDXE2</p> 	<p>LC65366A4H96</p> 	<p>2SD2137PQTA</p> 	 <p>2SC3311AIQST 2SD1450STA UN4111AITA UN4211AITA</p>
<p>2SD2144STA</p> 	<p>MA4051MTA MA4062HTA</p> 	<p>1SS291TA MA165TA</p> 	<p>LNJ301MPUJAD</p> 	

■ Wiring Connection Diagram



■ Terminal Function of IC's

● IC401 (LC65366A4H96)

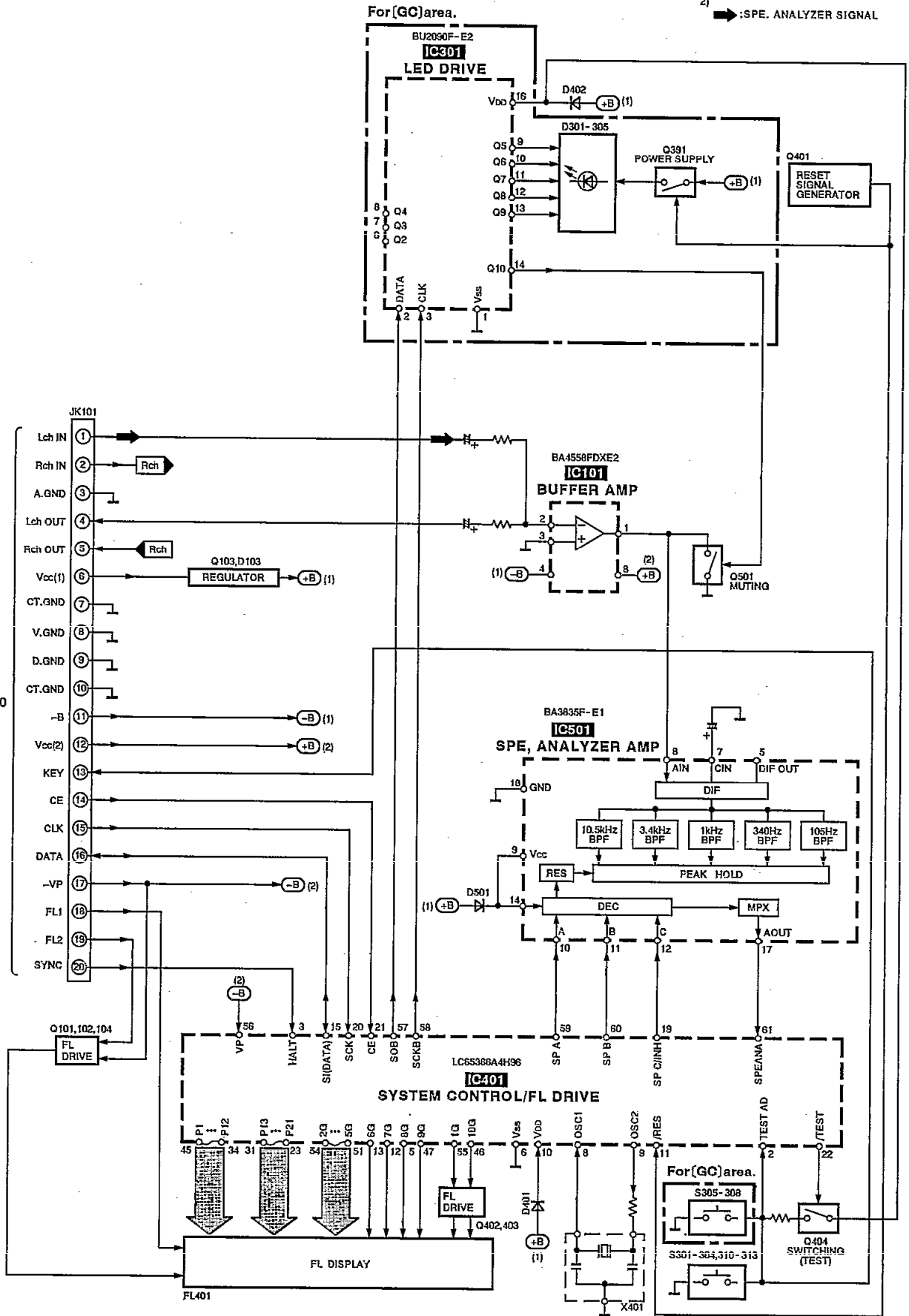
Pin No.	Terminal Name	I/O	Function
1	NC	—	No used, open
2	TEST AD	I	TEST mode key signal input.
3	HALT	I	Power failure detect signal input
4	AV+	—	Power supply for analog circuit (+5 V)
5	8G	O	Grid signal output
6	VSS	—	GND terminal
7	NC	—	No used, open
8	OSC1	I	Oscillator connected terminal (4 MHz)
9	OSC2	O	
10	VDD	—	Power supply
11	/RES	I	Reset signal input
12, 13	7G, 6G	O	Grid signal output
14	TEST	—	No used, open
15	SI	I/O	Communication data signal input from SA-EH60
16-18	NC	—	No used, open
19	SP C/INH	O	Select terminal for Spectrum analyzer IC output
20	SCK	O	Serial communication signal from SA-EH60 (Clock signal input)

Pin No.	Terminal Name	I/O	Function
21	CE	O	Serial communication signal from SA-EH60 (Chip enable signal input)
22	/TEST	O	Test signal terminal
23-31	P21~P13	O	Segment signal output
32, 33	NC	—	No used, open
34-45	P12~P1	O	Segment signal output
46, 47	10G, 9G	O	Grid signal output
48-50	NC	—	No used, open
51-55	5G~1G	O	Grid signal output
56	VP	—	Negative power supply
57	SOB	O	Serial data signal output
58	SCKB	O	Serial clock signal output
59	SP A	O	Select terminal for Spectrum analyzer IC output
60	SP B	O	
61	SPEANA	I	Analog signal input for spectrum analyzer IC
62	CS	I	Chip select signal input terminal
63, 64	NC	—	No used, open

Block Diagram

NOTES:
 1) () INDICATES Pin No. OF RIGHT CHANNEL
 2) → :SPE. ANALYZER SIGNAL

To SA-EH50
 W202



■ Replacement Parts List (Electrical and Cabinet)

Notes: *Important safety notice:

Components identified by Δ 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.

*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	Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT (S)		S305-308	EVQ21405R	SW	[M] (GC)
				S310-313	EVQ21405R	SW	[M]
						EARTH TERMINAL (S)	
IC101	BA4558FDXE2	IC	[M]				
IC401	LC65366A4H96	IC	[M]				
IC301	BU2090F-E2	IC	[M] (GC)	E101	SNE1004-2	EARTH TERMINAL	[M]
IC501	BA3835F-E1	IC	[M]			JACK(S)	
		TRANSISTOR(S)					
Q101, 102	2SD1450RTA	TRANSISTOR	[M]				
Q103Δ	2SD2137PQTA	TRANSISTOR	[M]				
Q104	UN4111	TRANSISTOR	[M]				
Q391	2SD2144STA	TRANSISTOR	[M] (GC)				
Q401	UN4211	TRANSISTOR	[M]				
Q402, 403	2SC3311AIRTA	TRANSISTOR	[M]				
Q404	UN4111	TRANSISTOR	[M]				
Q501	UN4211	TRANSISTOR	[M]				
		DIODE (S)					
D101	MA165	DIODE	[M]				
D103Δ	MA4062-H	DIODE	[M]				
D301-305	LNJ301MPUJAD	L. E. D.	[M] (GC)				
D391	MA165TA	DIODE	[M] (GC)				
D401	1SS291TA	DIODE	[M]				
D402-404	MA165	DIODE	[M]				
D405Δ	MA4051MTA	DIODE	[M]				
D406	1SS291TA	DIODE	[M]				
D501	MA165	DIODE	[M]				
		COIL (S)					
LA01	RLQA100JT-Y	COIL	[M]				
		OSCILLATOR(S)					
X401	EFOEC4004T4	OSCILLATOR	[M]				
		DISPLAY TUBE					
FL401	RSL0235-F	DISPLAY TUBE	[M]				
		SWITCH(ES)					
S301-304	EVQ21405R	SW	[M]				

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKMD302-K	CABINET	[M]
2	RHD30007-K1	SCREW	[M]
3	XTB3+8JFZ	SCREW	[M]
4	FMND424	FL HOLDER	[M]
5	RYKD700C-K	BOTTOM CABINET ASS'Y	[M] (E, EP)
5	RYKD700F-K	BOTTOM CABINET ASS'Y	[M] (GC)
5-1	SHG1654	RUBBER	[M]
6	RYP0733B-K	FRONT PANEL ASS'Y	[M] (E, EP)
6	RYP0733C-K	FRONT PANEL ASS'Y	[M] (GC)
6-1	RKW0504-V	FL PANEL	[M]
6-2	RGL0358-Q	LENS	[M] (GC)
6-3	FMZD423	SHEET	[M] (GC)
7	XTBS3+8JFZ1	SCREW	[M]
8	XTB3+8JFZ	SCREW	[M]
9	RWJ5710240KK	FLAT CABLE (FW401/10P)	[M]
10	RWJ5705240KK	FLAT CABLE (FW402/5P)	[M]

Resistors and Capacitors

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

Ref. No.	Part No.	Values & Remarks	Ref. No.	Part No.	Values & Remarks
		RESISTORS			
R101 Δ	ERQ16NKW2R2E	1/6W 2.2 [M]	C101, 102	ECA1EM101B	25V 100U [M]
R102	ERDS2TJ104	1/4W 100K [M]	C103, 104	RCE1VM471BV	35V 470U [M]
R103, 104	ERDS2TJ822	1/4W 8.2K [M]	C105	ECEA1HKAR22B	50V 0.22U [M]
R105	ERDS2TJ222	1/4W 2.2K [M]	C107	ECBT1E103ZF	25V 0.01U [M]
R151-154	ERDS2TJ563	1/4W 56K [M]	C109	RCE1CKA100BG	16V 10U [M]
R155	ERDS2TJ333	1/4W 33K [M]	C151-154	RCE1CKA100BG	16V 10U [M]
R301-305	ERDS2TJ181T	1/4W 180 [M] (GC)	C155	ECBT1H101KB5	50V 100P [M]
R306	ERDS2TJ820T	1/4W 82 [M] (GC)	C156	RCE1CKA100BG	16V 10U [M]
R307-309	ERDS2TJ222T	1/4W 2.2K [M] (GC)	C157, 158	ECBT1E103ZF	25V 0.01U [M]
R315, 316	ERDS2TJ222T	1/4W 2.2K [M] (GC)	C161	ECBT1H102KB5	50V 1000P [M] (E, EP)
R317	ERDS2TJ821	1/4W 820 [M]	C301	RCE1CKA100BG	16V 10U [M] (GC)
R318	ERDS2TJ102	1/4W 1K [M]	C302	ECBT1H104ZF5	50V 0.1U [M] (GC)
R319	ERDS2TJ122	1/4W 1.2K [M]	C303	ECBT1H470J5	50V 47P [M] (GC)
R320	ERDS2TJ152	1/4W 1.5K [M]	C304	ECBT1H470J5	50V 47P [M] (GC)
R321	ERDS2TJ182	1/4W 1.8K [M]	C391	RCE0JKA470BG	6.3V 47U [M] (GC)
R322	ERDS2TJ222	1/4W 2.2K [M]	C401	ECEA1HKA2R2B	50V 2.2U [M]
R323	ERDS2TJ332	1/4W 3.3K [M]	C402	RCE1HKA3R3BG	50V 3.3U [M]
R324	ERDS2TJ472	1/4W 4.7K [M]	C403	RCE0JU102BV	6.3V 1000U [M]
R325	ERDS2TJ682T	1/4W 6.8K [M]	C404, 405	RCE1CKA100BG	16V 10U [M]
R326	ERDS2TJ123	1/4W 12K [M]	C406	ECEA1HKA330B	50V 33U [M]
R327	ERDS2TJ223	1/4W 22K [M]	C407, 408	RCE1HKA3R3BG	50V 3.3U [M]
R328	ERDS2TJ683	1/4W 68K [M]	C409	ECEA1HKA330B	50V 33U [M]
R329	ERDS2TJ472T	1/4W 4.7K [M] (GC)	C410	ECBT1H104ZF5	50V 0.1U [M]
R391	ERDS2TJ103T	1/4W 10K [M] (GC)	C411	ECBT1E103ZF	25V 0.01U [M]
R401-403	ERDS2TJ104	1/4W 100K [M]	C412	ECEA0JKS101B	6.3V 100U [M]
R404	ERDS2TJ562T	1/4W 5.6K [M] (GC)	C413	ECBT1H470J5	50V 47P [M]
R405	ERDS2TJ103	1/4W 10K [M]	C416, 417	ECBT1H470J5	50V 47P [M]
R406	ERDS2TJ562T	1/4W 5.6K [M] (GC)	C418	ECBT1H101KB5	50V 100P [M]
R407	ERDS2TJ102	1/4W 1K [M]	C491	ECBT1H101KB5	50V 100P [M] (E, EP)
R408	ERDS2TJ102T	1/4W 1K [M] (GC)	C501	RCE1CKA100BG	16V 10U [M]
R409	ERDS2TJ102	1/4W 1K [M]	C502-505	ECEA1HKAOR1B	50V 0.1U [M]
R411, 412	ERDS2TJ102	1/4W 1K [M]	C506	ECBT1E103ZF	25V 0.01U [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]			
R431	ERDS2TJ472	1/4W 4.7K [M] (E, EP)			
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]			
		CAPACITORS			

■ Cabinet Parts Location

