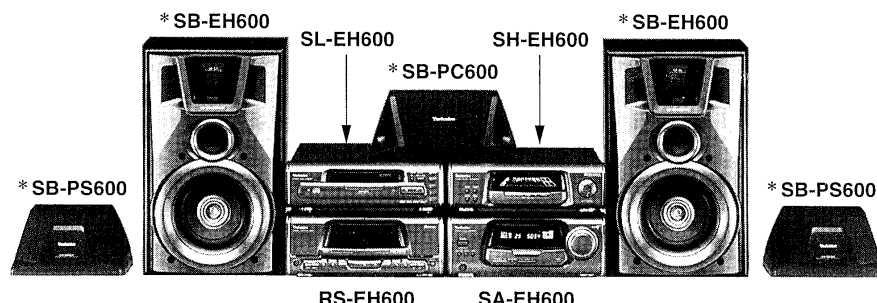


Service Manual

Tuner/Amplifier

SA-EH600



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

Colour

(H) Gray Type

Areas

(E) Europe
(EB) Great Britain.
(EG) Germany and Italy.
(EP) Russia.

System	SC-EH600
Sound Processor	SH-EH600
Tuner / Amplifier	SA-EH600
CD Changer	SL-EH600
Cassette Deck	RS-EH600
Front Speakers*	SB-EH600
Center Speaker*	SB-PC600
Surround Speakers*	SB-PS600

* : Made in PAES

Specifications

Amplifier Section

Power output (at HIGH terminal) :

DIN 1 kHz, THD 1%, both channels driven ; $2 \times 70 \text{ W}(6 \Omega)$
RMS 1 kHz, THD 10%, both channels driven ; $2 \times 100 \text{ W}(6 \Omega)$

PRO LOGIC mode (at HIGH terminal) :

DIN 1 kHz, THD 1%
MAIN (both channels driven) ; $2 \times 50 \text{ W}(6 \Omega)$
SURROUND ; $50 \text{ W}(4 \Omega + 4 \Omega)$
CENTER ; $50 \text{ W}(8 \Omega)$

RMS 1 kHz, THD 10%

MAIN (both channels driven) ; $2 \times 70 \text{ W}(6 \Omega)$
SURROUND ; $70 \text{ W}(4 \Omega + 4 \Omega)$
CENTER ; $70 \text{ W}(8 \Omega)$

Total harmonic distortion :

Rated power at 1 kHz ; 1 % (6 Ω)
Half power at 1 kHz ; 0.09 % (6 Ω)

Load impedance :

MAIN (HIGH/LOW) ; total impedance 6 Ω
SURROUND ; 4 – 8 Ω
CENTER ; 8 Ω

Input sensitivity/impedance:

PHONO ; 2.5 mV/47 k Ω
EXTERNAL ; 250 mV/15 k Ω

Output level:

EXTERNAL RECOUT ; 250 mV/1.5 k Ω

S.WOOFER :

Center frequency ; 70 Hz
LEVEL (VOL -20 dB) MID +8 dB
MAX +12 dB

FM Tuner Section

Frequency range ; 87.50 – 108.00 MHz (0.05 MHz steps)

Sensitivity ; 1.8 μV (IHF usable)
S/N 26 dB ; 1.5 μV

S/N:

MONO ; 70 dB (75 dB, IHF)

Antenna terminal(s) ; 75 Ω (unbalanced)

AM Tuner Section

Frequency range: 522 – 1611 kHz (9 kHz steps)

530 – 1620 kHz (10 kHz steps)

Sensitivity (S/N 20 dB) ; 500 $\mu\text{V/m}$

Timer Section

Clock : Quartz-lock type

Functions : Play timer (1 time), Rec timer (1 time),

Sleep (120 min, 30 min intervals)

Setting : 1 minute – 23 hours 59 minutes
(1 min intervals)

General

Power supply :

For (E), (EG), (EP) areas ; AC 230V, 50 Hz

For (EB) area ; AC 230–240 V, 50 Hz

Power consumption : 205 W

Dimensions : 287 (W) \times 118.5 (H) \times 343.5 (D) mm

Weight : 5.0 kg

Notes: 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®

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■ Before Repair

- (1) Turn off the power supply. Using a 10 Ω , 10 W resistor, connect both ends of power supply capacitors (C701, C702, C703 and C704) in order to discharge the voltage.
- (2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230 V or 240 V.

Power supply voltage	AC 230 V	AC 240 V
Consumed current 50 Hz	140 ~ 400 mA	140 ~ 400 mA

■ Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- * No sound is heard when the power is switched ON.
- * Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedure outlined below:

1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

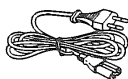
Note:

When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

■ Accessories

● AC power supply cord

For (E), (EG), (EP) areas (RJA0019-X) ... 1 pc.



For (EB) area (RJA0053-1X) 1 pc.



● Remote control transmitter

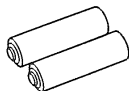
(RAK-CH219WH) 1 pc.



● Batteries

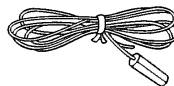
(UM-4, "AAA", R03) 2 pcs.

Note: These are available on sales route.



● FM indoor antenna

(RSA0007) 1 pc.



● AM loop antenna

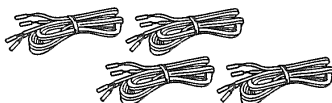
(RSA0022-J) 1pc.



● Speaker cords

(REE0393) 2 pcs.

(REE0853) 2 pcs.



● Antenna plug adaptor (SJP9009)

For (EB) only (SJP9009) 1 pc.



■ Caution for AC Main Lead

("EB" area code model only)

For your safety, please read the following text carefully.

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

A 5-ampere fuse is fitted in this plug.

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

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

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

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

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

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

If in any doubt please consult a qualified electrician.

IMPORTANT


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

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

Before use

Remove the connector cover.

How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

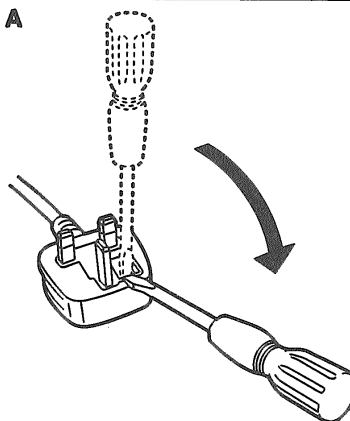
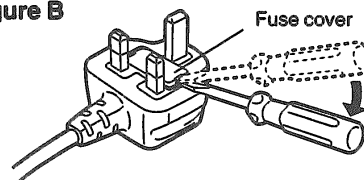


Figure B



2. Replace the fuse and close or attach the fuse cover.

Figure A

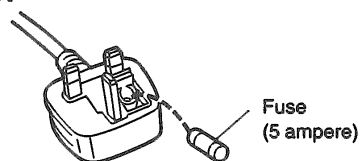
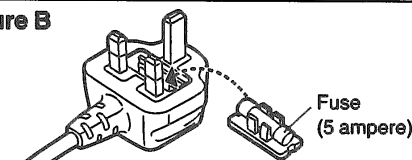
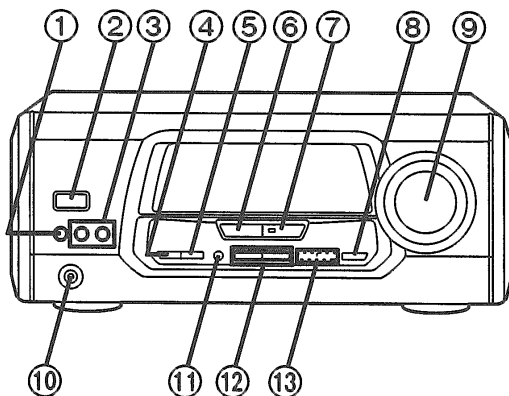


Figure B



■ Location of Controls

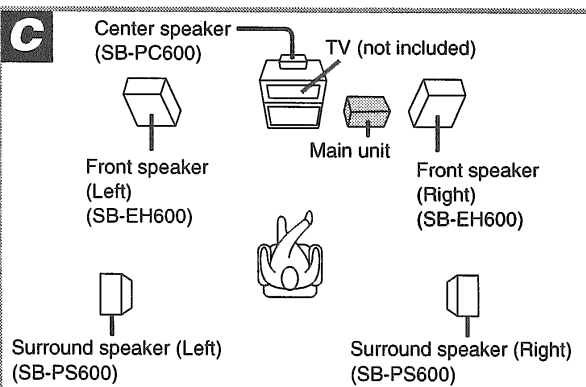
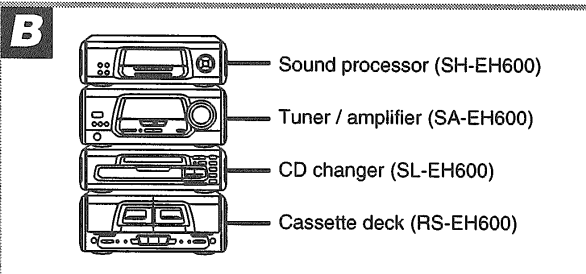
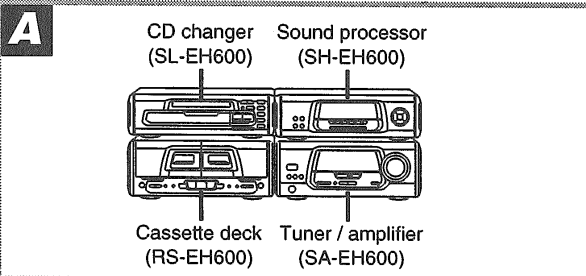


- ① Clock/timer button (CLOCK/TIMER)
- ② Power "STANDBY ⏻/ON" switch (POWER, STANDBY ⏻/ON)
- ③ Timer on/off buttons (⏻ PLAY, ⏻ REC)
- ④ Tuning mode select button (TUNING MODE)
- ⑤ Set button (SET)
- ⑥ Source input select button (INPUT SELECTOR)
- ⑦ Tuner/band select button and indicator (TUNER/BAND)
- ⑧ Super woofer button (S. WOOFER)
- ⑨ Volume control (VOLUME)
- ⑩ Headphones jack (PHONES)
- ⑪ FM mode select button (FM AUTO/MONO)
- ⑫ Tuning buttons (TUNING, V, Δ)

For (EG) and (EP) areas

- ⑬ RDS display mode select buttons (RDS PS-DISP MODE-PTY)

■ Installation



Locating the components

Side-by-side set-up **A**

Stacking **B**

Placement of speakers

As well as enjoying normal stereo reproduction with the left and right front speakers, a center speaker and surround speakers can also be connected to the unit in order to enjoy the sound performance of DOLBY PRO LOGIC Systems.

We recommend that surround speakers be placed on the side of or slightly behind the listener, and about one meter higher than ear level.

However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.

Note for front/center speakers

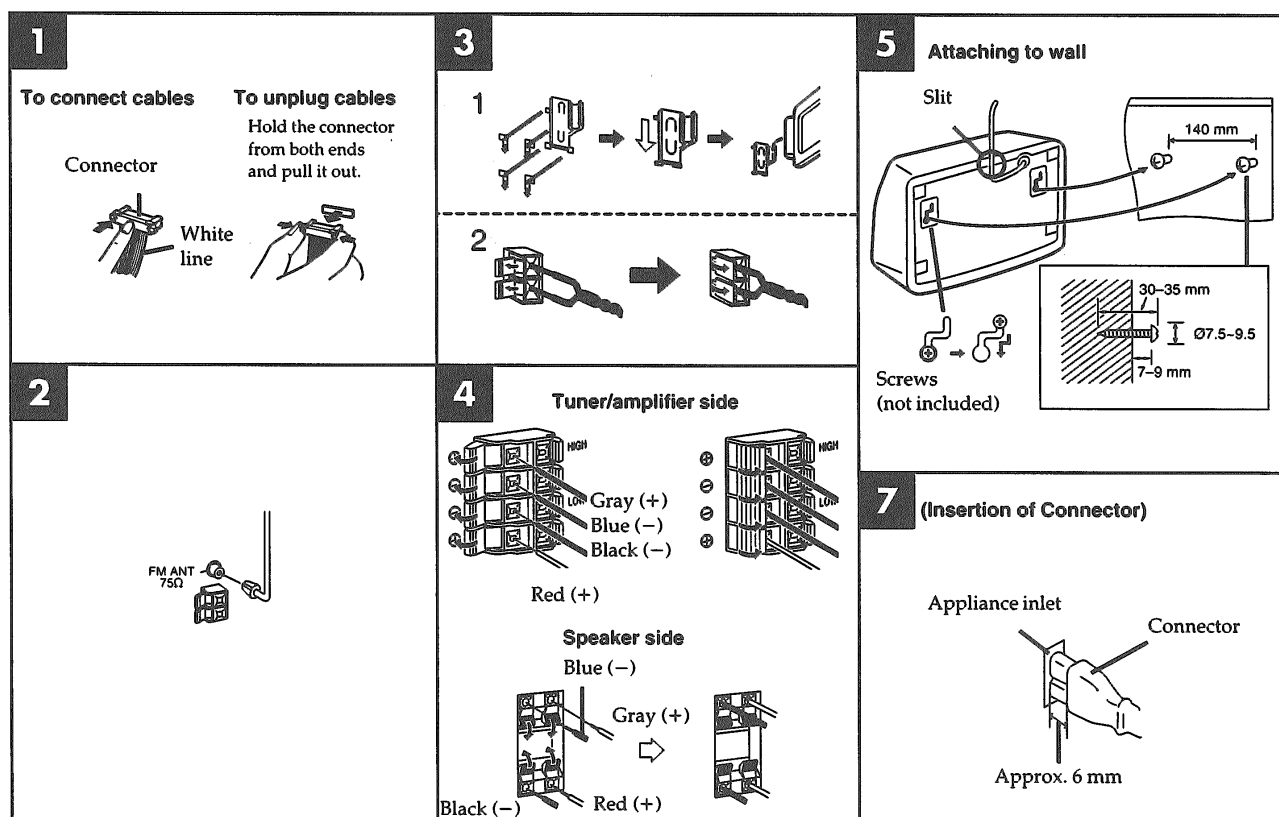
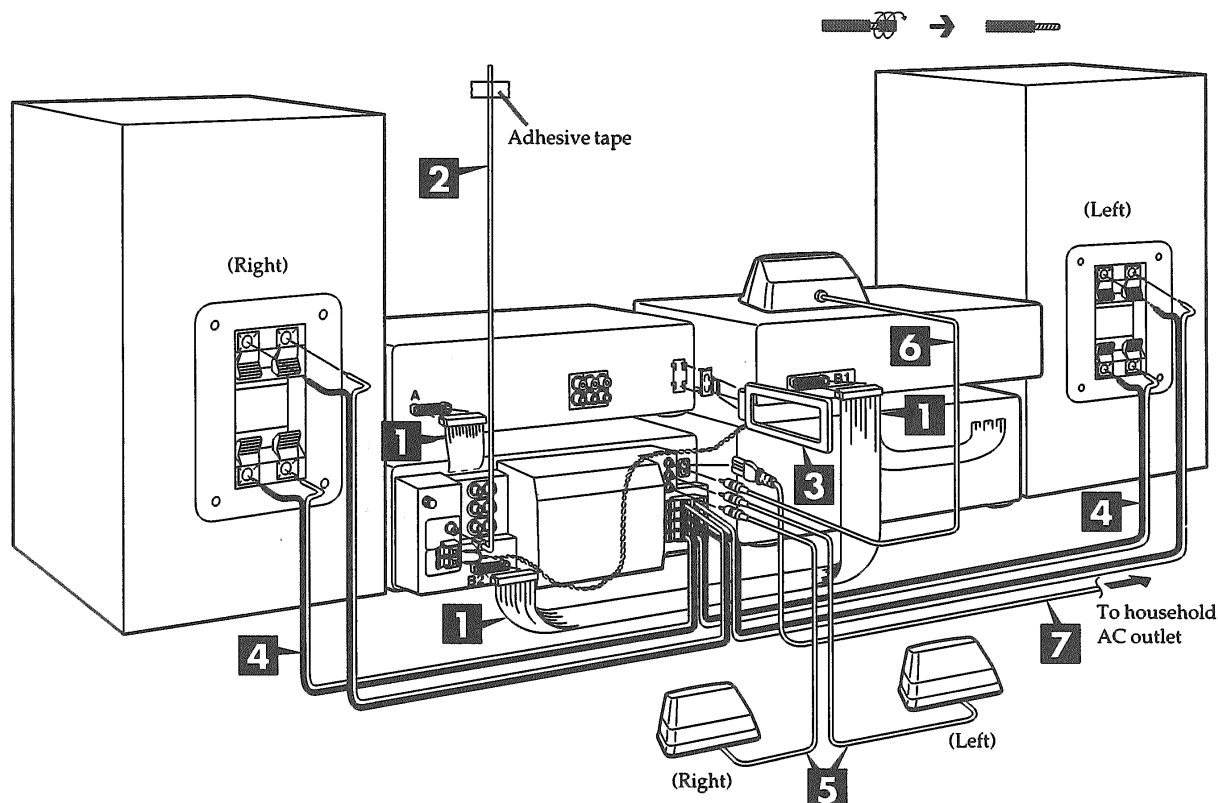
These speakers are made so as to be able to be used in close proximity to the TV, but irregular coloring may result due to how the system is placed. If such distortion occurs, turn off the TV for sometime between 15 and 30 minutes. The demagnetizing function of the TV will eliminate the distortion. If the irregular coloring is still visible, then move the speaker further away from the TV.

Please note that if there is a magnetic object near the TV, irregular coloring may result due to the interaction between the TV and the speakers.

Connections

Connect the AC power supply cord after you have connected all other cables.

To prepare the AM loop antenna wire, FM indoor antenna and speaker cords, twist the vinyl cover tip and pull off.



1 Connect the flat cables.

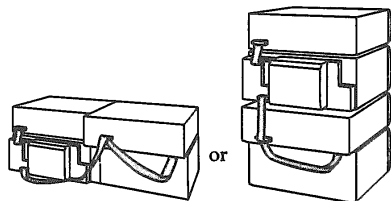
1. Connect the shorter flat cable from the tuner/amplifier to terminal A on the sound processor.
2. Connect the longer flat cable from the cassette deck to terminals B1 and B2.

Note

Do not try connecting or disconnecting the flat cables while the power is switched to ON.

After connection:

Keep cables as flat against the back of the unit as possible.

**2 Connect the FM indoor antenna.**

Tape the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

Note

When you cannot get good reception with this FM indoor antenna, we recommend you install an FM outdoor antenna (not included).

3 Connect the AM loop antenna.

1. Attach the antenna holder to the rear panel of the sound processor.
Then clamp the antenna into the antenna holder.
2. Connect the antenna terminal to the rear panel of the tuner/amplifier.

Note

To minimize noise pickup, bundle the loop antenna cord using tape or the like to keep the flat cables away from the AM loop antenna cord.

4 Connect the right (R) and left (L) front speaker cables.

Connect each end of the speaker cables to the terminal lever of the same color.

Note

- To prevent damage to circuitry, never short-circuit positive (+) and negative (-) speaker wires.
- Be sure to connect only positive (red or gray) wires to positive (+) terminals and negative (black or blue) wires to negative (-) terminals.
- Left and right front speakers are exactly the same.

5 Connect the surround speaker cables.

Check the L (Left) or R (Right) channels indication on the underside of the speakers for correct placement. Place the speakers with the Technics logo facing forward the listening position.

Attaching to wall

- Set speaker onto screws and slide through bracket kink to lock into position.
- The wall or pillar on which the speaker systems are to be attached should be capable of supporting a weight of 5 kilograms.
- Feed wire through slit to fix from center-top of speaker.

6**Connect the center speaker cables.****7****Connect the AC mains lead.**

(United Kingdom only)

BE SURE TO READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 BEFORE PROCEEDING TO STEP 7.

Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

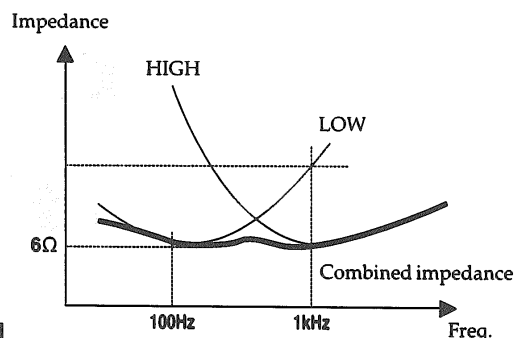
However there is no problem using the unit.

Speaker Caution

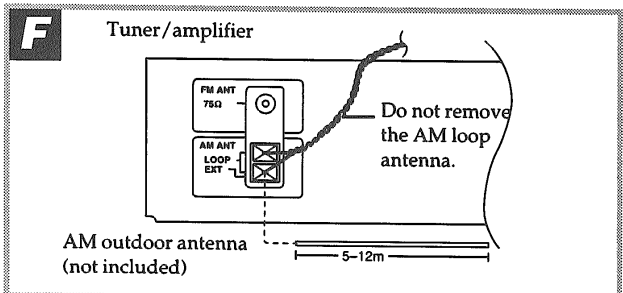
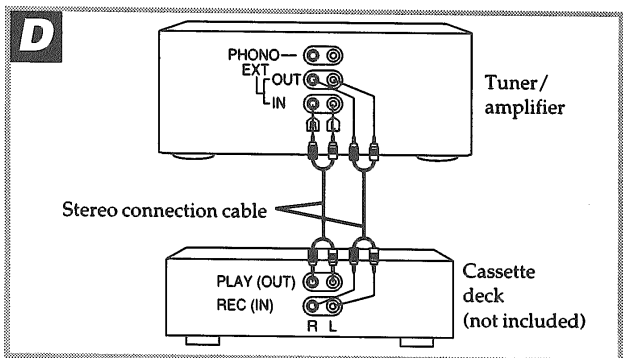
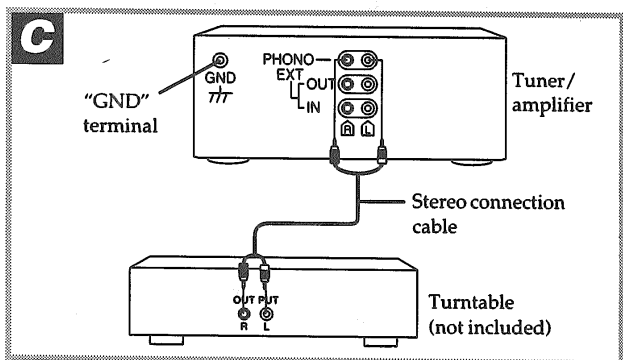
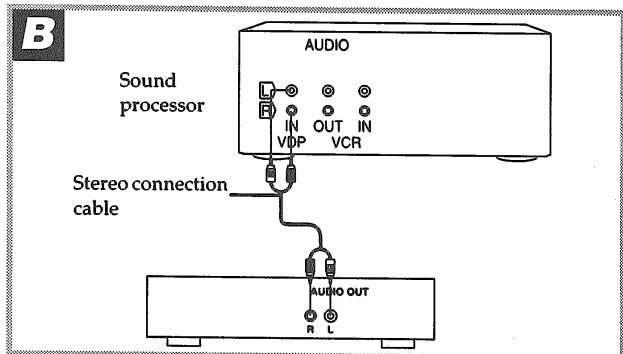
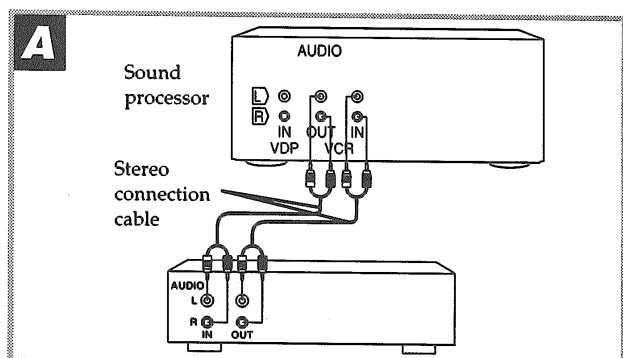
Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speaker, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.

When speakers are connected to the LOW and HIGH terminals on the back of the main unit

They are designed to have a combined impedance of 6Ω.

**Note**

Never use speakers other than those supplied. (SB-EH600) For instance, if you connect speakers with an impedance of 6Ω each and plug them into the LOW and HIGH terminals, you will only have a combined impedance of 3Ω



External unit connections

- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the units which are to be connected.
- All peripheral components and cables sold separately.

Stereo connection cable

White (L)
Red (R)



A Video Cassette recorder

B Laser disc player

C Turntable

"GND" terminal:

This terminal is for a ground wire.

D Cassette deck

Optional antenna connections

You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

FM outdoor antenna (not included) E

Note

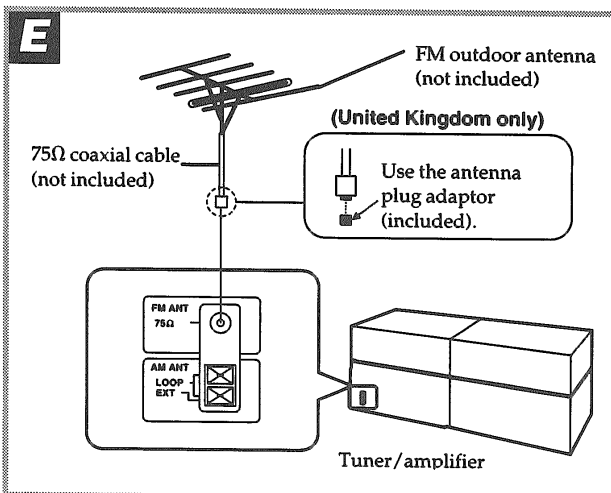
An outdoor antenna should be installed by a qualified technician only.

AM outdoor antenna (not included) F

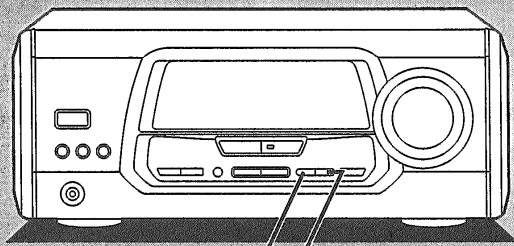
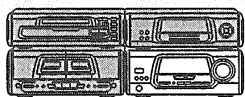
Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

Note

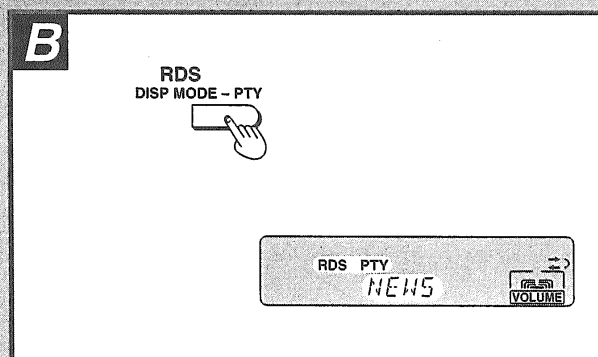
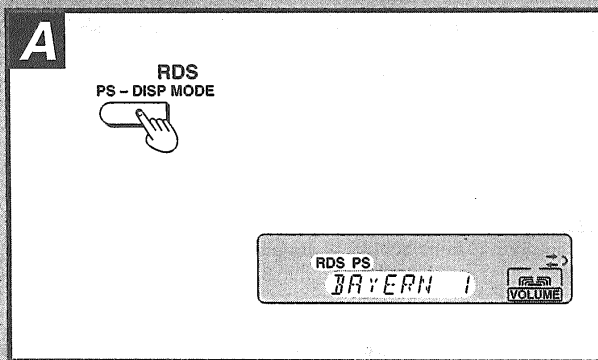
When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.



■ Enjoying RDS Broadcasts [For (EG) and (EP) areas]



RDS
PS - DISP MODE - PTY



This unit lets you take advantage of the Radio Data System (RDS) in areas where RDS broadcast services are received. This advanced system provides useful information, utilizing a 57 kHz subcarrier above the audible range, in addition to the main FM signal.

Types of RDS and functions

To display the name of a broadcast station (PS display):

When this system receives a PS signal in an RDS broadcast, the name of the broadcast station is shown on the display.

To display the type of a program (PTY display):

While the PTY signal is being received, the name of the type of program currently being broadcast can be shown on the display.

Notes

- Even if an FM broadcast station is transmitting RDS signals, the functions of this system may not be able to utilize these signals if the signal quality is too poor.
- "PTY" may not be available in some areas. (Future function)

To display the name of a broadcasting station A

(When the FM station is received)

Press PS-DISP MODE.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the name of the broadcast station and "PS" indicator will be shown on the display of this system.

Each time you press the button, frequency display and PS display will appear alternately.

To display the type of a program B

(When the FM station is received)

Press DISP MODE-PTY.

If the FM broadcast being received provides the RDS service ("RDS" indicator will light), the type of the program and "PTY" indicator will be shown on the display of this system.

Each time you press the button, frequency display and PTY display will appear alternately.

Note

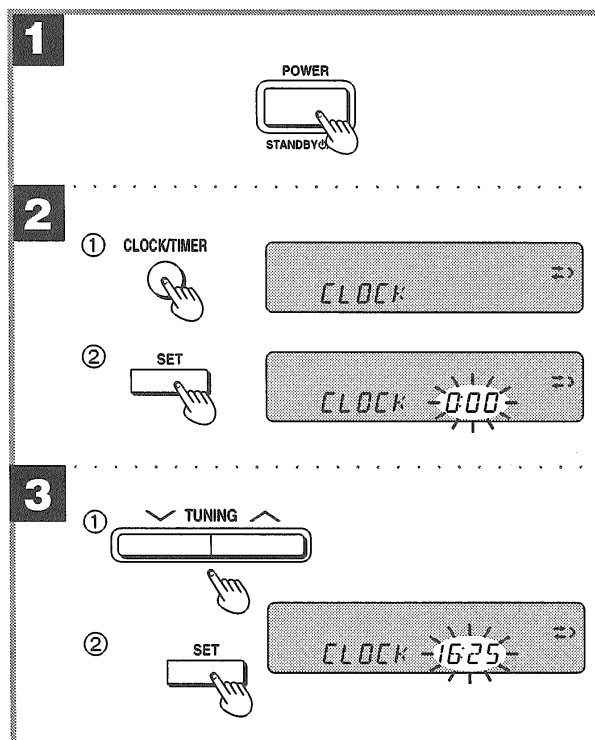
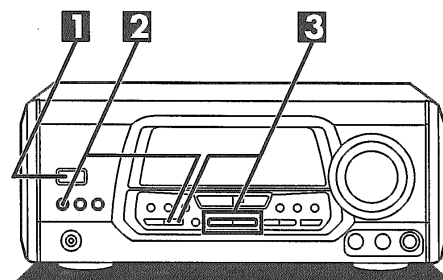
When receiving a broadcast station, in PTY mode, which does not transmit PTY, the display will not show "NO PTY" automatically.

About the PTY display

There are a total of 15 PTY displays on this unit. The table gives an explanation of each display.

Display	Explanation
NEWS	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS	Topical program expanding or enlarging upon the news, generally in different presentation style or concept, including documentary debate, or analysis.
INFO	Program whose purpose is to impart advice in the widest sense, including meteorological reports and forecasts, consumer affairs, medical help, etc.
SPORT	Program concerned with any aspect of sport.
EDUCATE	Program intended primarily to educate.
DRAMA	All radio plays and serials.
CULTURE	Programs concerned with any aspect of national or regional culture, including religious affairs, philosophy, social science, language, theatre, etc.
SCIENCE	Programs about the natural sciences and technology.
VARIED	Used for mainly speech-based programs, usually of a light-entertainment nature not covered by above categories. Examples are: quizzes, panel games, personality interviews, comedy and satire.
POP M	Commercial music which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M	Contemporary modern music, usually written and performed by young musicians.
M.O.R.M	(Middle of the Road Music). Common term to describe music considered to be "easy-listening", as opposed to Pop, Rock or Classical. Music in this category is often, but not always, vocal, and usually of short duration (<5 min.).
LIGHT M	Classical Musical for general, rather than specialist, appreciation. Examples of music in this category are instrumental music and vocal or choral works.
CLASSICS	Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.
OTHER M	Musical styles not fitting into any of the above categories. Particularly used for specialist music, of which Jazz, Rhythm & Blues, Folk, Country, and Reggae are examples.

Setting the time



The tuner/amplifier displays the time, frequency and other information on CDs and tapes.

This is a 24-hour display clock.

The figure shows how to set the time for 16:25.

1 Switch on the power.

2 ① Press CLOCK/TIMER to show "CLOCK".

Every time you press the button, the indication changes in the order of CLOCK→⊕ PLAY→⊕ REC→Original display.

Within 5 seconds:

② Press SET.

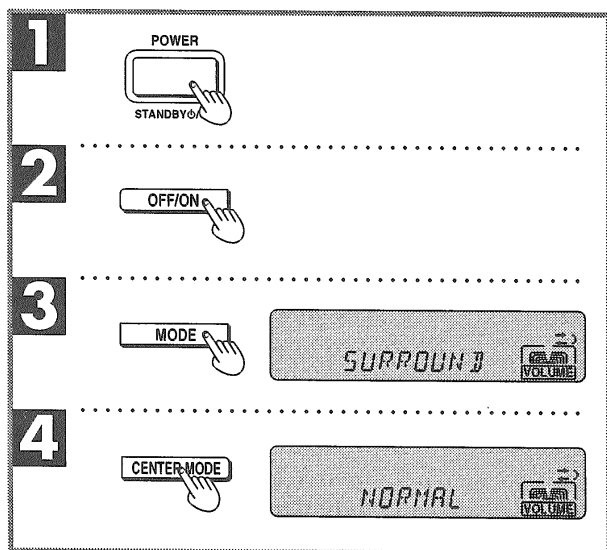
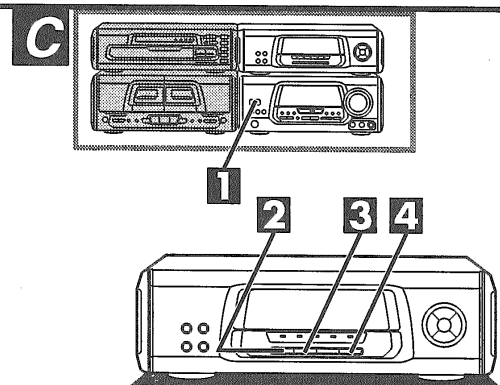
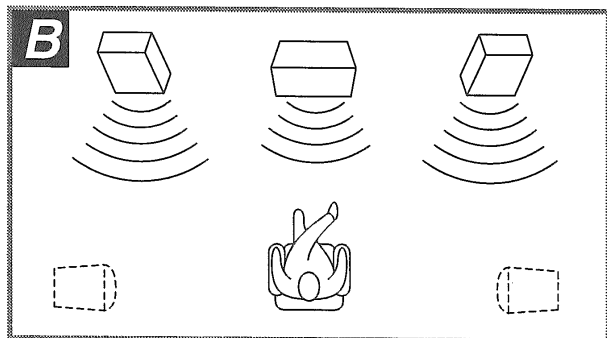
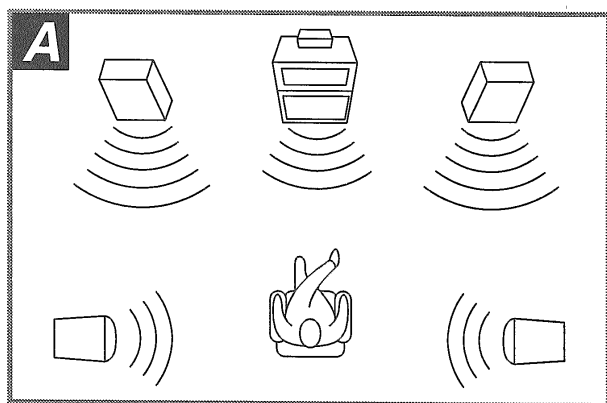
3 ① Press TUNING (∨ or ∧) to set the present time on the display.

The time display can be changed in one minute units by tapping the buttons, and quickly by holding down the buttons.

② Press SET.

The display will return to the previous display after about 3 seconds.

■ Enjoying Sound with DOLBY PRO LOGIC



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 A

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 B

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 C

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
The selected mode's indicator lights.
- 4 Press CENTER MODE to select "NORMAL" mode.**
Each time you press the button, the display will change as follows:
NORMAL → WIDE → PHANTOM
The selected mode's indicator lights.

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:

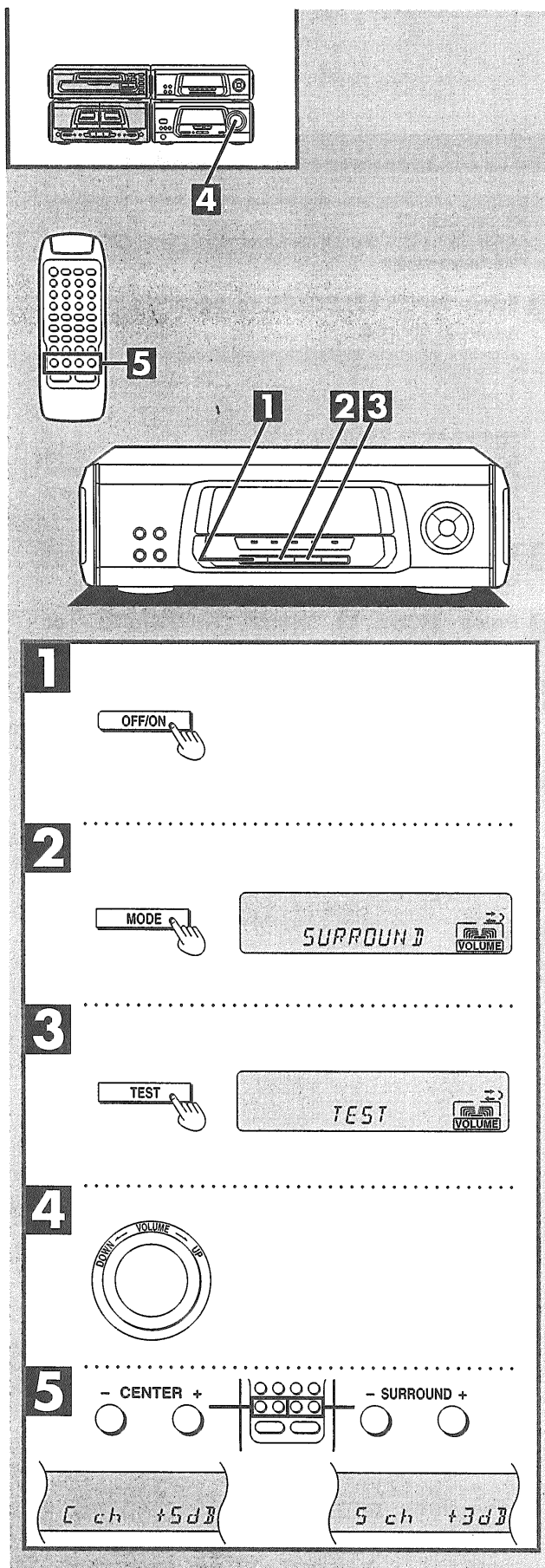
When the center speaker is the same size or larger than the front speakers

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.

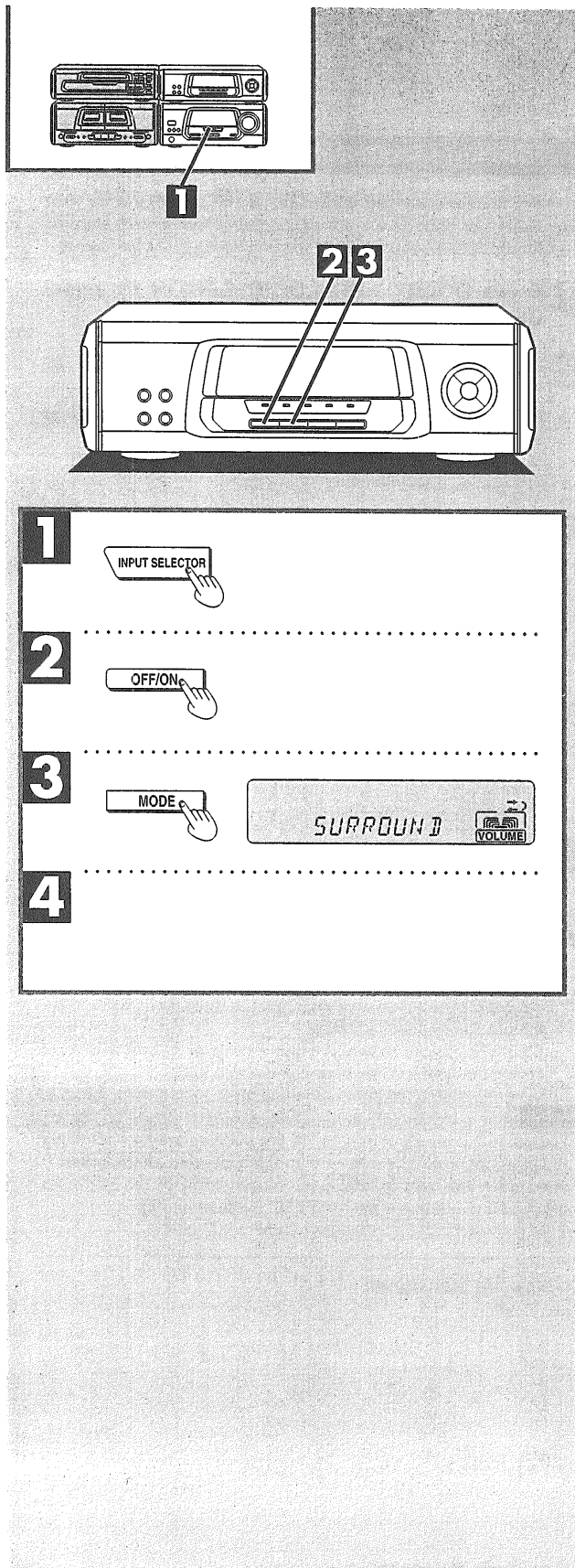
Output levels can be varied within a range of ± 12 dB with front speaker output level serving as the zero point.

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 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
 ↑ ↓
 PHONO ← VDP ← 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.
3. Select items from the following index when checks or replacement are required.
4. Refer the parts No. on the page of "Main Component Replacement Procedures", if necessary.

● Contents

■ Checking Procedure for each P.C.B.

	Page.
1. Checking for the tuner P.C.B., dolby prologic P.C.B. and power supply P.C.B.	13.
2. Checking for the operation P.C.B.	14.
3. Checking for the main P.C.B.	14,15.

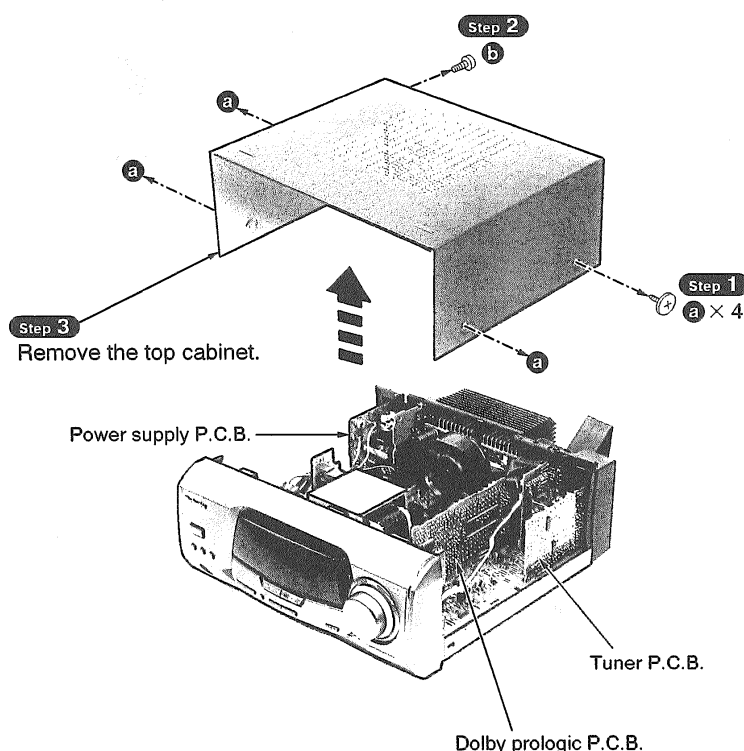
■ Main Component Replacement Procedures

1. Replacement for the power IC and regulator transistor.	16.
--	-----

■ Checking Procedure for each P.C.B.

1. Checking for the tuner P.C.B., dolby prologic P.C.B. and power supply P.C.B.

• Check the tuner P.C.B., dolby prologic P.C.B. and power supply P.C.B. as shown below.

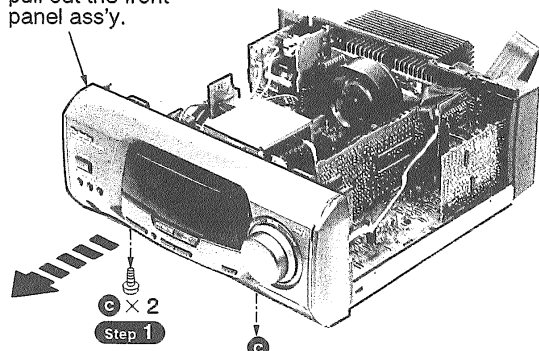


2. Checking for the operation P.C.B.

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 13.

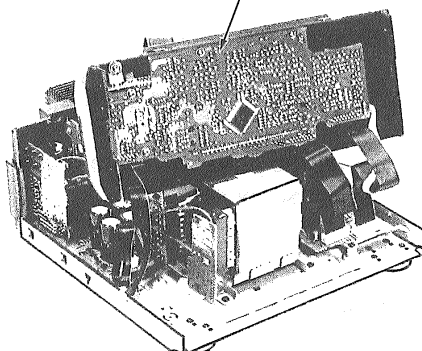
Step 2

pull out the front panel ass'y.



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

Operation P.C.B.

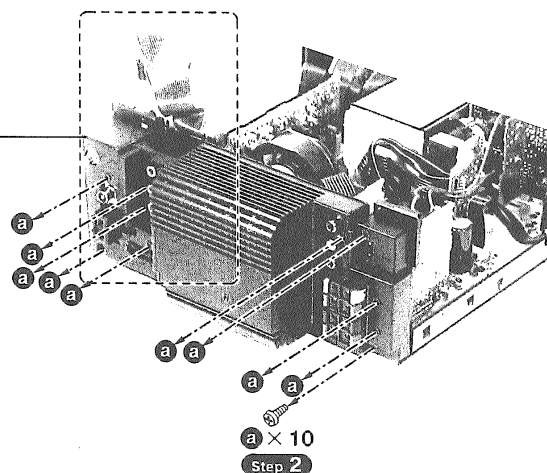
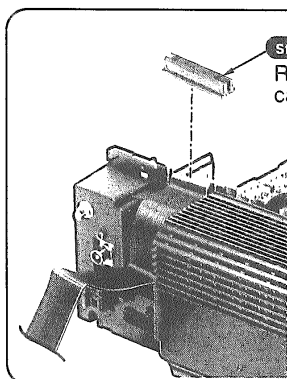


3. Checking for the main P.C.B.

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 13.

Step 1

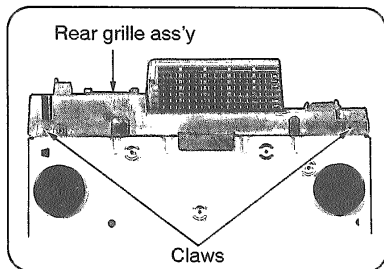
Remove the cable holder.



Step 3

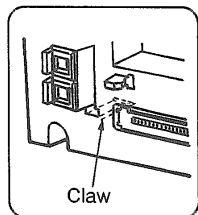
Release the 3 claws, and then remove the rear grille ass'y.

Rear grille ass'y

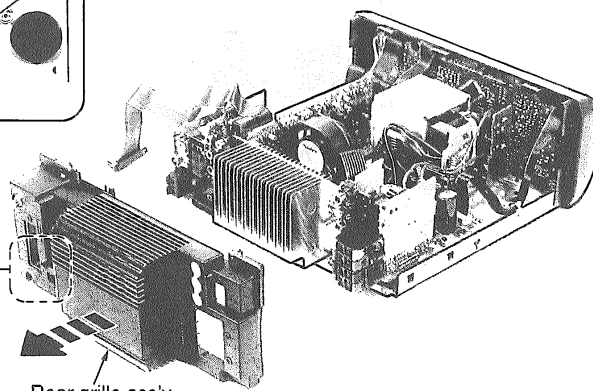


(Bottom)

Claw

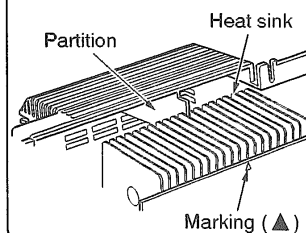


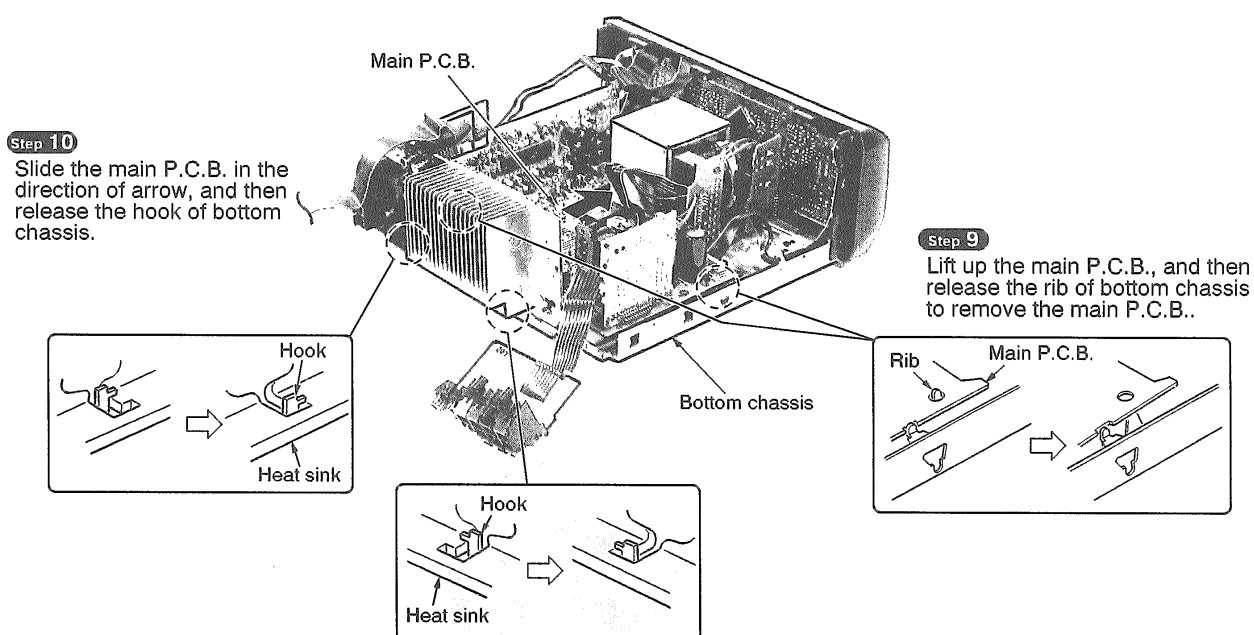
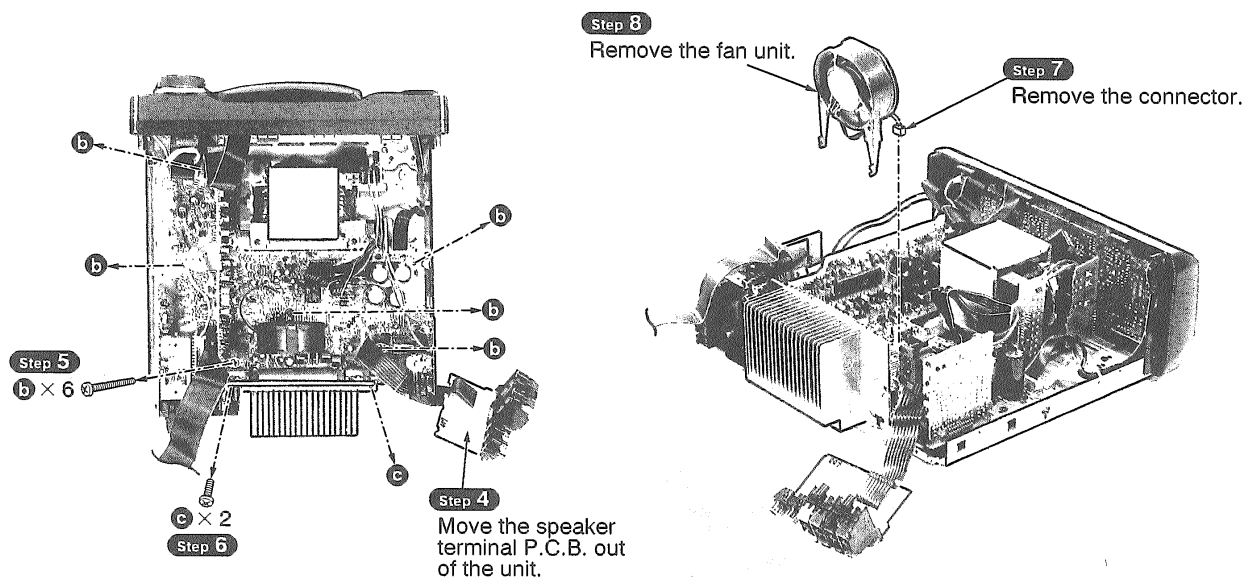
Rear grille ass'y



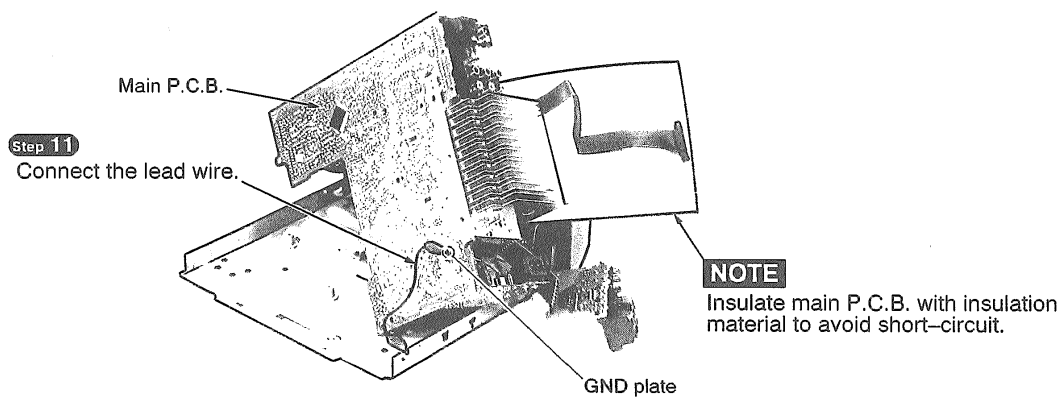
Notice for installation of rear grille ass'y

Align the partition of rear grille ass'y with the marking (▲) on the heat sink.





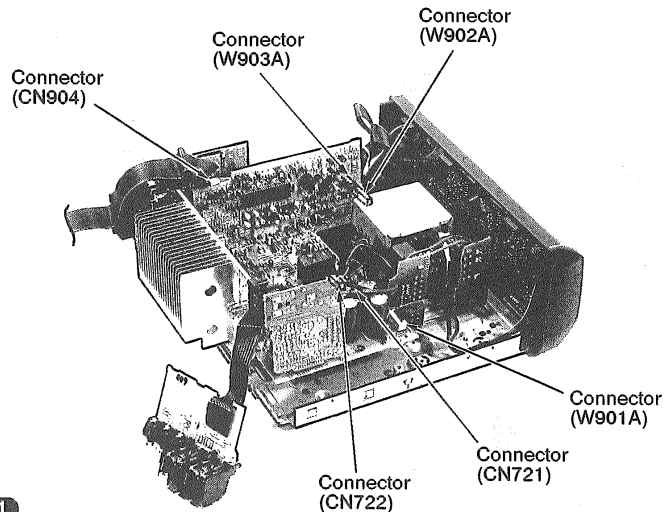
• Check the main P.C.B. as shown below.



■ Main Component Replacement procedures

1. Replacement for the power IC and regulator transistor

- Follow the **Step 1** ~ **Step 3** of the item 1 in checking procedure for each P.C.B. on page 13.
- Follow the **Step 1** ~ **Step 10** of the item 3 in checking procedure for each P.C.B. on pages 14 and 15.

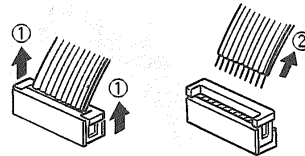


Step 1

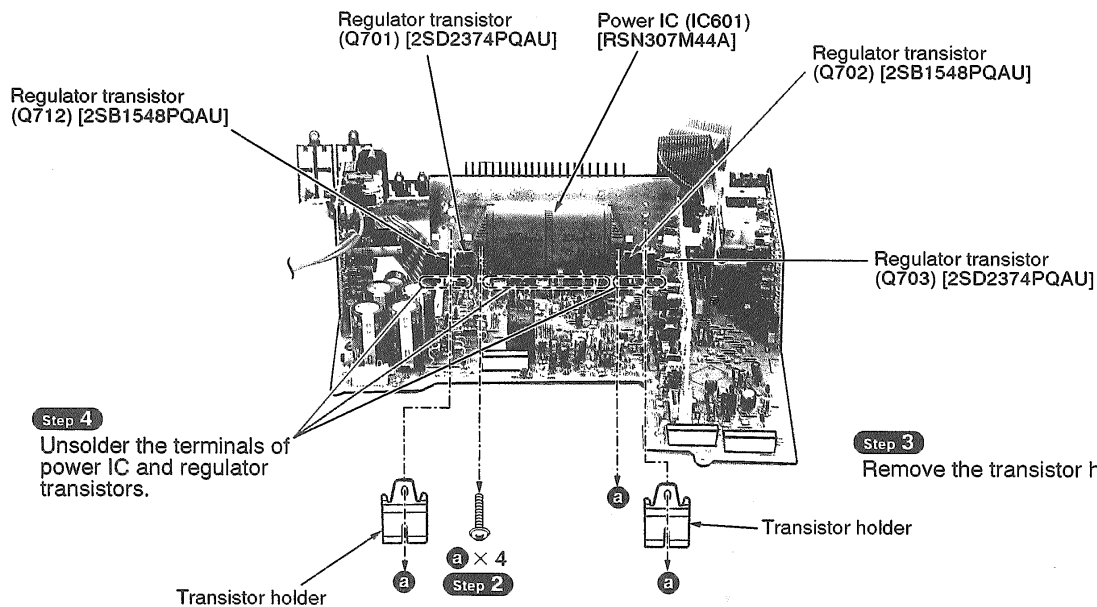
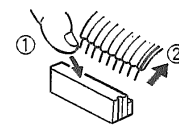
Remove the flat cables from connectors.

■ Removal of the connector

- Connectors (W901A, W902A, W903A)



- Connectors (CN721, CN722, CN904)



Step 4

Unsolder the terminals of power IC and regulator transistors.

Step 3

Remove the transistor holder.

NOTE

When mounting the power IC or regulator transistor apply silicone compound (RFKX0002) to the rear side of power IC or regulator transistors.

■ To Supply Power Source

This unit SA-EH600 is designed to operate on power supplied from the system connected. (For system connection, refer to Fig.1)

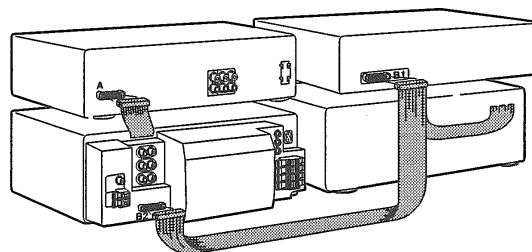
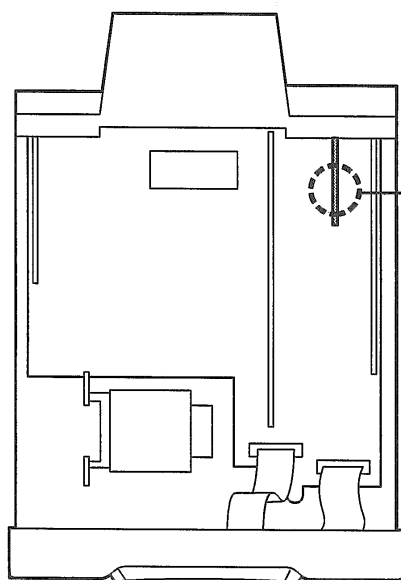


Fig. 1

When you have to test and service the unit SA-EH600 alone, use the following method to supply power source and operate the unit:

1. Short the section between 7 pin and 10 pin of the connector W202 in Fig. 2.
2. Connect this unit to an AC Power Cord.
(This unit come to stand-by mode.)
3. Turn the unit ON.



Short-circuit the section W202-7 pin and W202-10 pin.

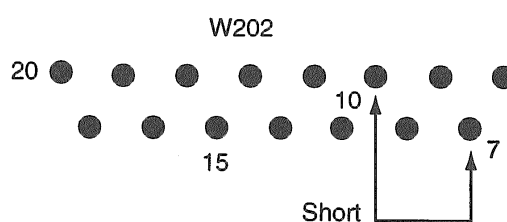


Fig. 2

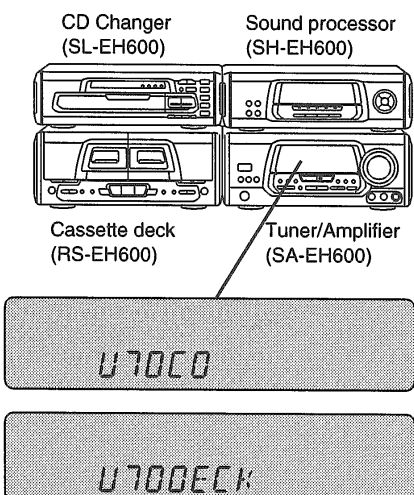
■ To Check Operation

1. Set this unit to Power.ON mode.
2. Input a signal and confirm it to be outputted from the speaker terminal.

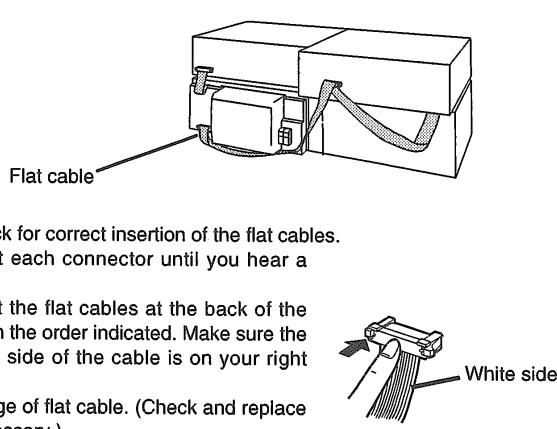
	INPUT	OUTPUT
L-ch	EXT IN	L-ch speaker terminal
R-ch	EXT IN	L-ch speaker terminal
Surround	EXT IN	Surround speaker terminal
Center	EXT IN	Center speaker terminal

■ About the Self-Diagnostic Mode

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction. Use this self-diagnostic function when servicing the unit.

Display method	Display location
<p>To display the malfunction code</p> <p>U-70 CD: U-70 DECK: Automatically displays on the tuner/sound processor when a malfunction occurs.</p> <p>F-61 Automatically displays on the tuner/sound processor when a malfunction occurs.</p> <p>To return to the normal display</p> <p>1. For U-70 CD/U-70 DECK:</p> <ul style="list-style-type: none"> ● Press any operation button on the tuner/amplifier. ● To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again. <p>2. For F-61:</p> <ul style="list-style-type: none"> ● If "F-61" is displayed, the power will automatically be switched off and the standby indicator will light up. ● "F-61" will be displayed for 3 seconds, and then the clock will be displayed. ● To re-display the code, switch the power on. "F-61" will be re-displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off. 	

Display contents

Display code	Problem or condition	Correction procedure
<p>U-70 CD U-70 DECK (displayed automatically)</p>	<p>A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating.</p> <p>1. If "U-70" is displayed on the tuner/amplifier, the tape deck or CD Changer cannot be operated by remote control.</p>	 <p>1. To check for correct insertion of the flat cables.</p> <ol style="list-style-type: none"> ① Insert each connector until you hear a click. ② Insert the flat cables at the back of the unit in the order indicated. Make sure the white side of the cable is on your right side. <p>2. Breakage of flat cable. (Check and replace as necessary.)</p> <p>3. If the problem is not corrected by items (1.) and (2.) above, this indicates a faulty IC.</p> <p>SA-EH600: IC901 (M38199MF105K)</p> <p>SL-EH600: IC401 (LC66538A4K17)</p> <p>RS-EH600: IC701 (M37471M4679F)</p> <p>Check these IC's and replace as necessary.</p>
F-61	When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.	<ul style="list-style-type: none"> ● Faulty Tuner/Amplifier (SA-EH600) output IC (IC601). (When a DC voltage is applied to the speaker terminals.)

Schematic Diagram

	Page		Page
A TUNER CIRCUIT	20, 21	F POWER SUPPLY CIRCUIT	33, 34
B OPERATION CIRCUIT	22 – 24	G SPEAKER TERMINAL CIRCUIT	34
C DOLBY PRO LOGIC CIRCUIT	25 – 27	H POWER TRANSFORMER (A) CIRCUIT	34
D IN/OUT TERMINAL CIRCUIT	28	I POWER TRANSFORMER (B) CIRCUIT	34
E MAIN CIRCUIT	28 – 33		

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

Notes:

- **S901** : Power "STANDBY ϕ /ON" switch (POWER STANDBY ϕ /ON)
- **S902** : Clock/timer switch (CLOCK/TIMER)
- **S903** : Record timer switch (Ⓜ REC)
- **S904** : Play timer switch (Ⓜ PLAY)
- **S905** : Tuning mode select switch (TUNING MODE)
- **S906** : Set switch (SET)
- **S907** : FM mode select switch (FM AUTO/MONO)
- **S908** : Source input select switch (INPUT SELECTOR)
- **S909** : Tuning down switch (TUNING \vee)
- **S910** : Tuning up switch (TUNING \wedge)
- **S911** : Tuner/band select switch (TUNER/BAND)
- **S912** : Super woofer switch (S.WOOFER)
- **S913** : RDS display mode select switch (PS-DISP MODE)
- **S914** : RDS display mode select switch (DISP MODE-PTY) } For (EG) and (EP) areas
- **VR901** : Volume control (VOLUME)

- 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.
No mark: FM () : AM

Important safety notice:

Components identified by \triangle 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


 : AM signal Line

 : AM OSC signal line

 : FM signal line

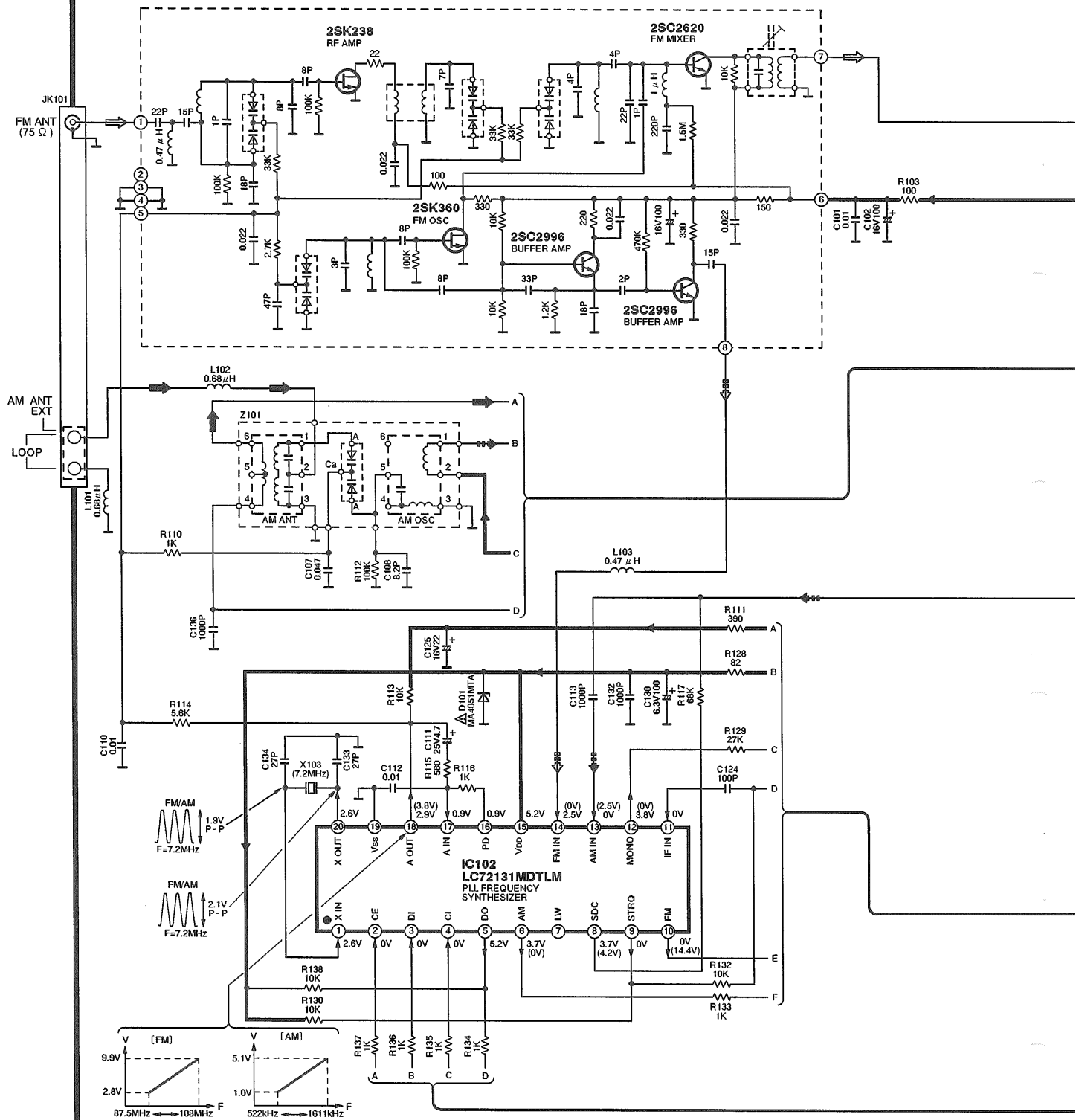
 : FM OSC signal line

 : Negative voltage line

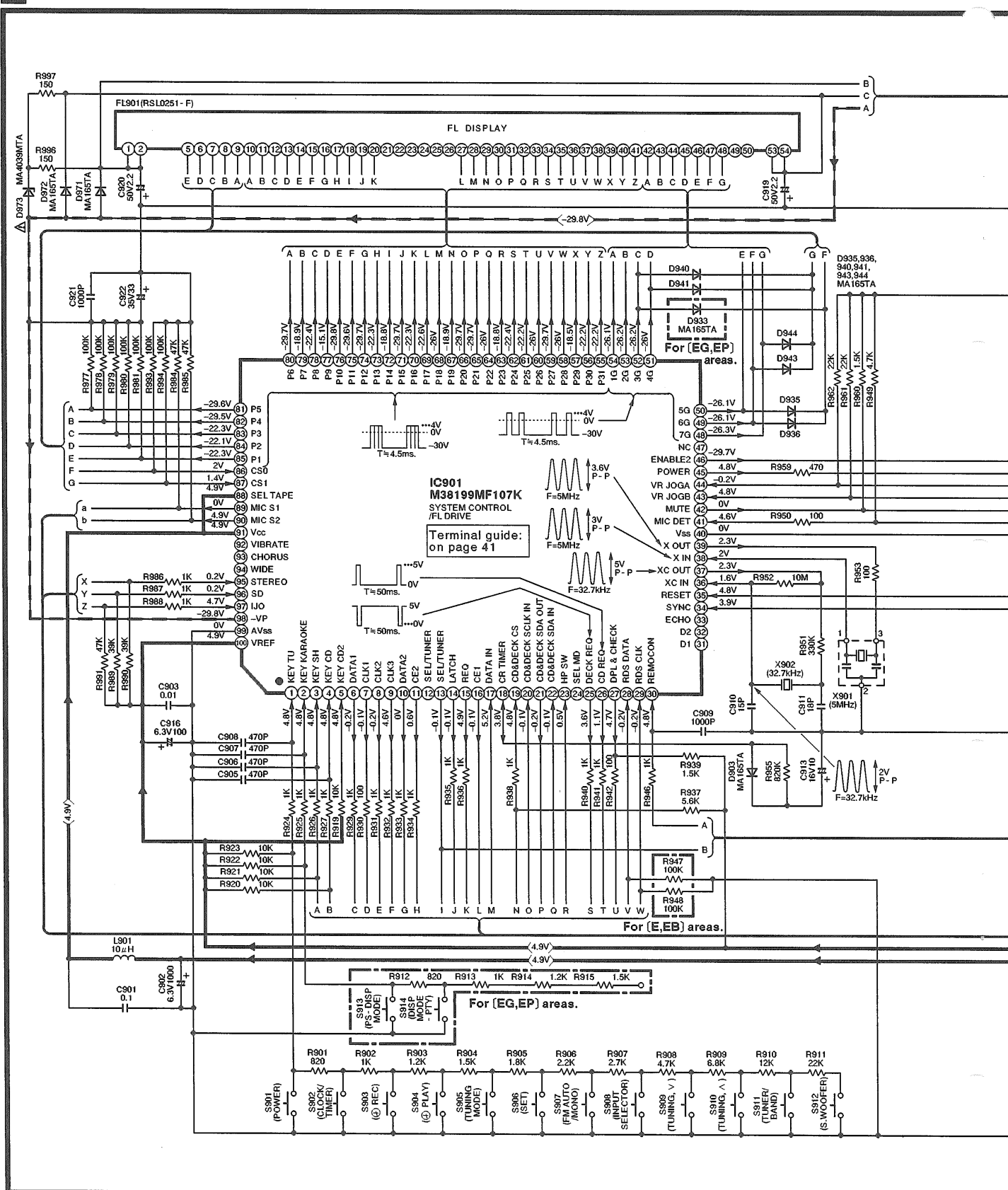
 : Surround Speaker Drive signal line

 : Center Speaker Drive signal line

A TUNER CIRCUIT (P.C.Board: on page 35)





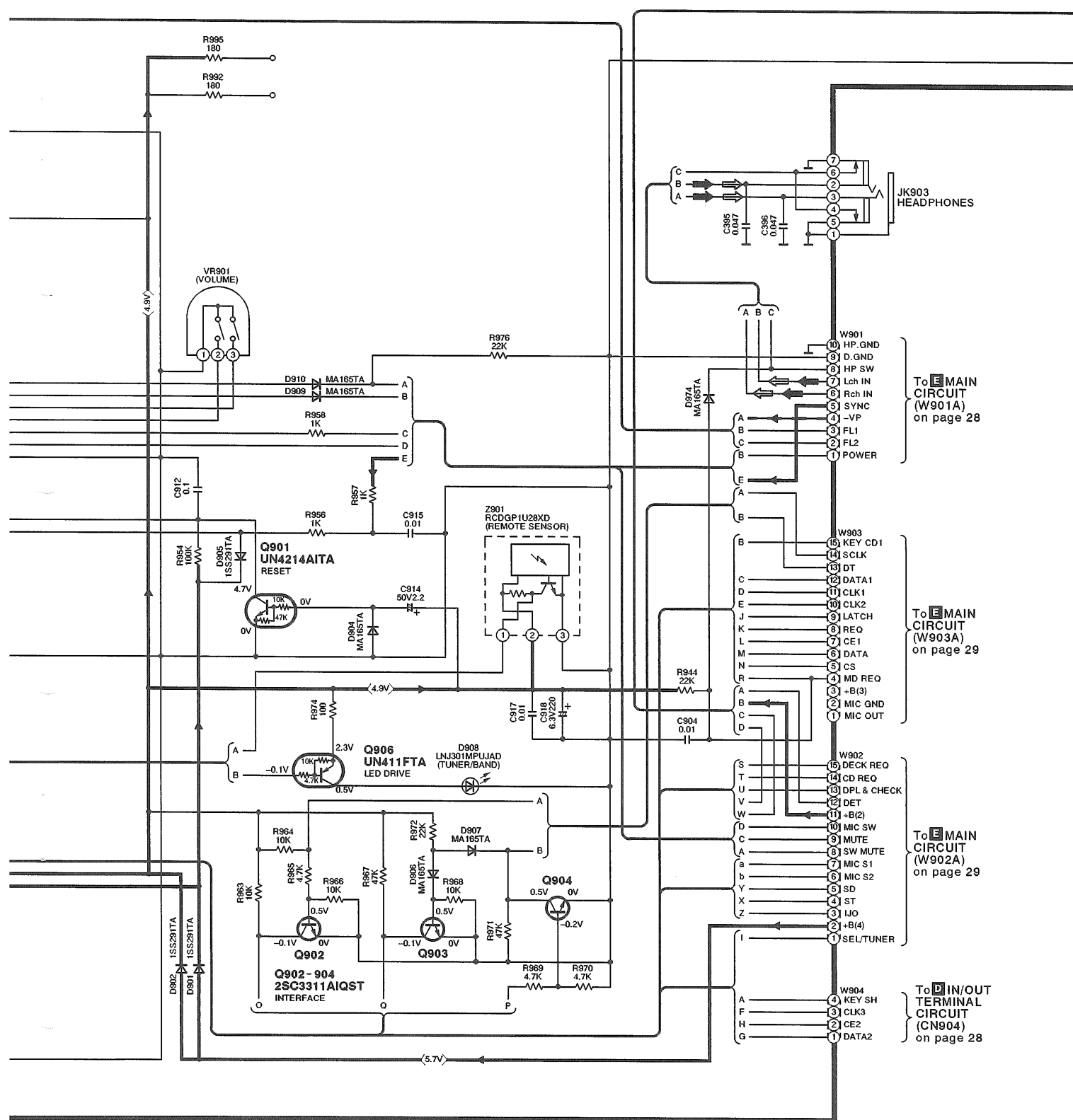
B OPERATION CIRCUIT (P.C.Board: on page 35)

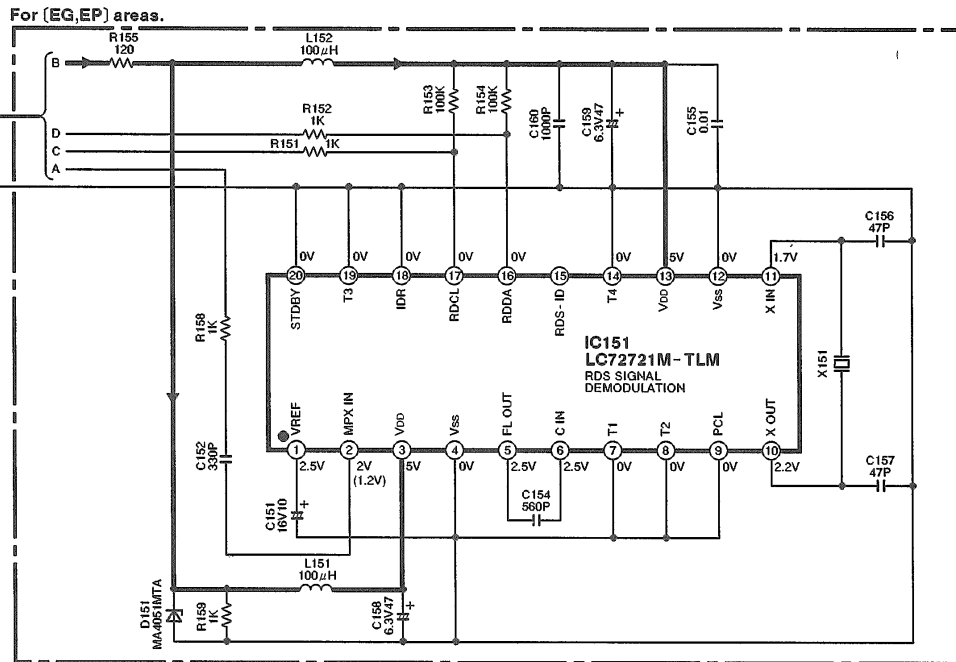
➡ : Positive voltage line

⬅ : Negative voltage line

➡ : AM signal Line

➡ : FM signal line



B OPERATION CIRCUIT (P.C.Board: on page 35)

→ : Positive voltage line

→ : AM signal Line

→ : AM OSC signal line

→ : FM signal line

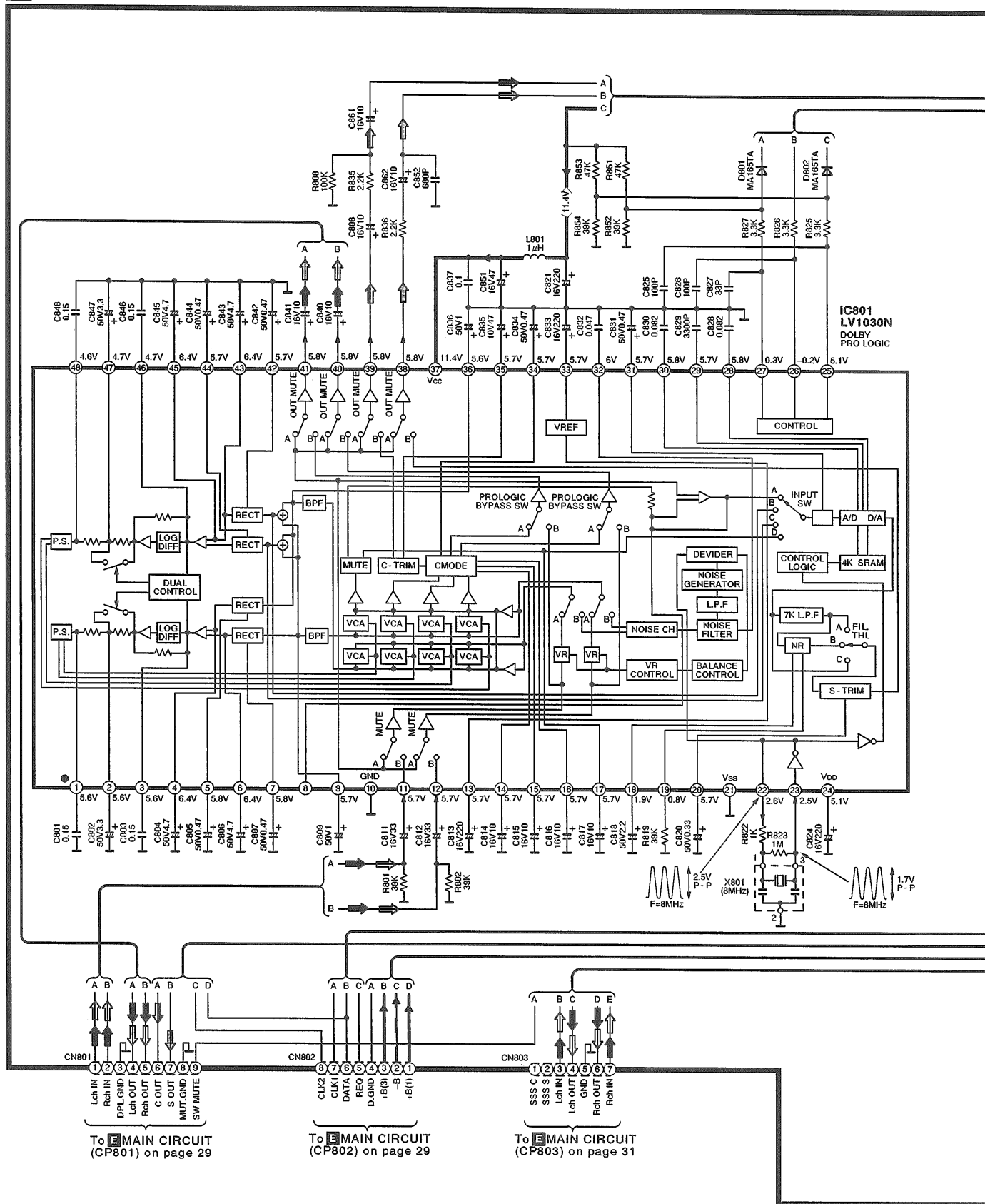
→ : FM OSC signal line

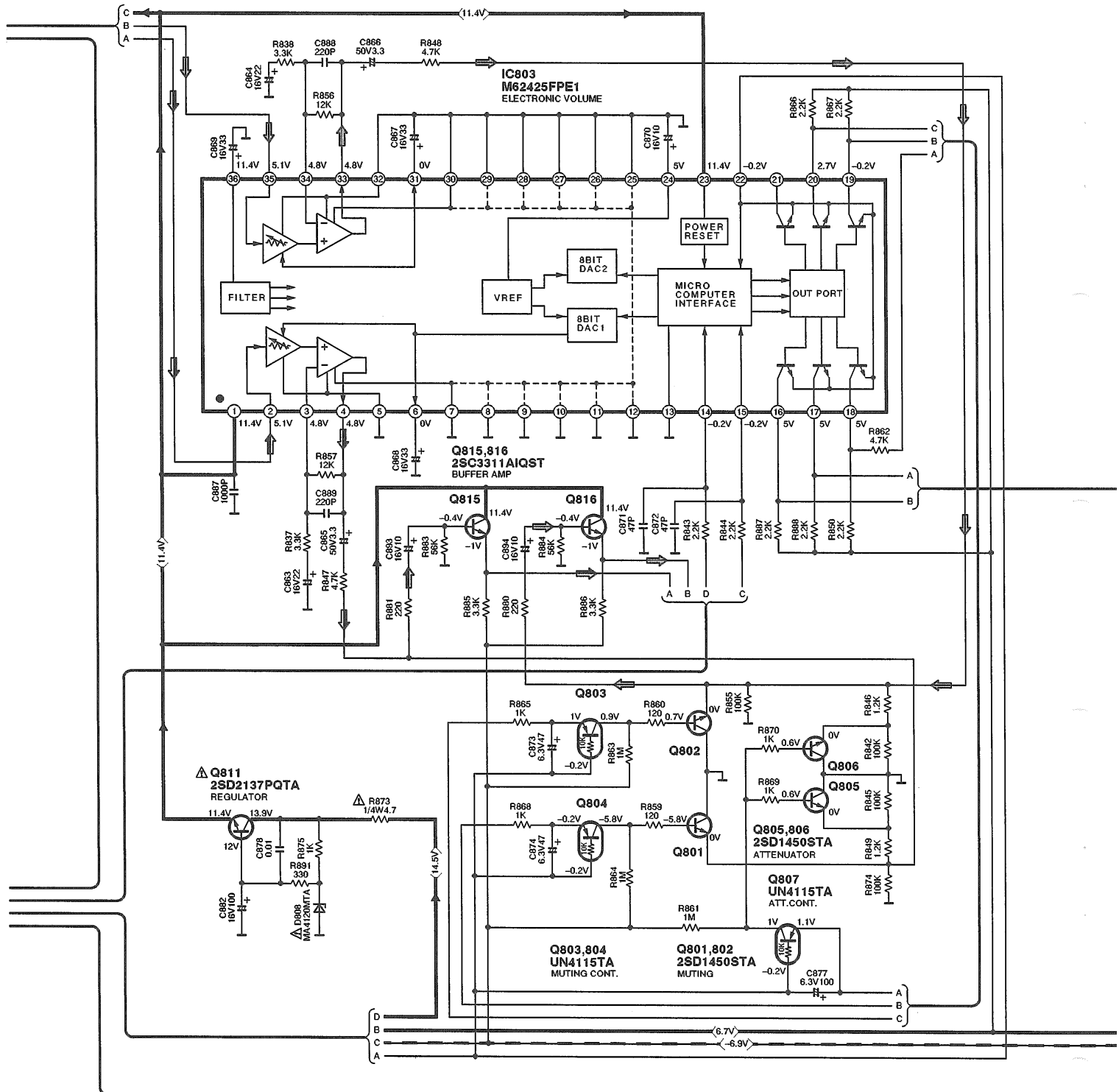
→ : Negative voltage line







→ : Surround Speaker Drive signal line

→ : Center Speaker Drive signal line

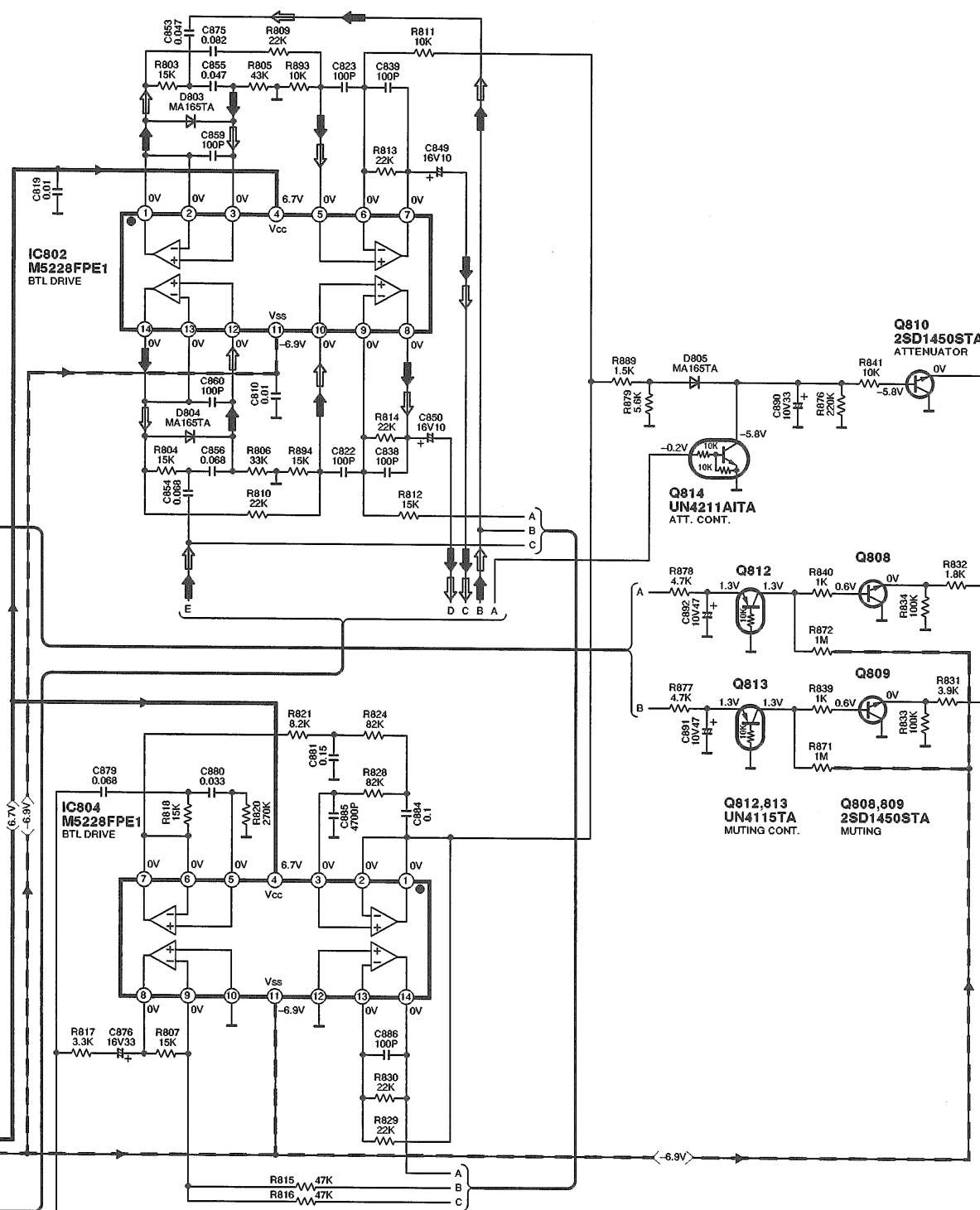
C DOLBY PROLOGIC CIRCUIT (P.C.Board: on page 37)





 : AM signal Line
  : FM signal line
  : Surround Speaker Drive signal line
 : Center Speaker Drive signal line
  : Positive voltage line
  : Negative voltage line

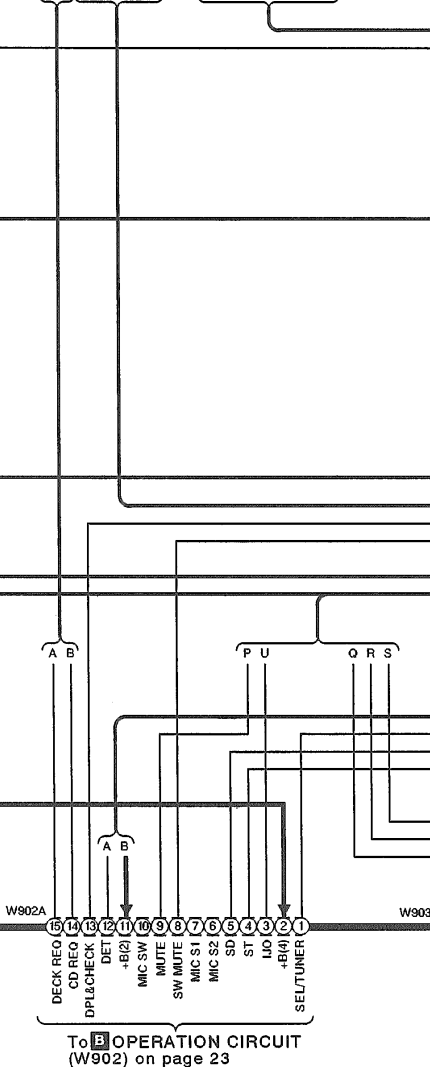
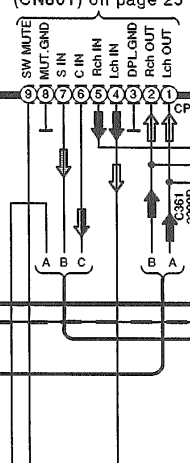
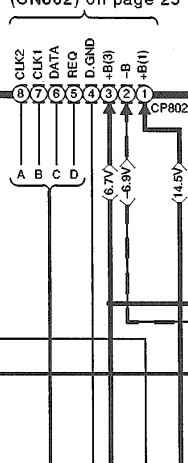
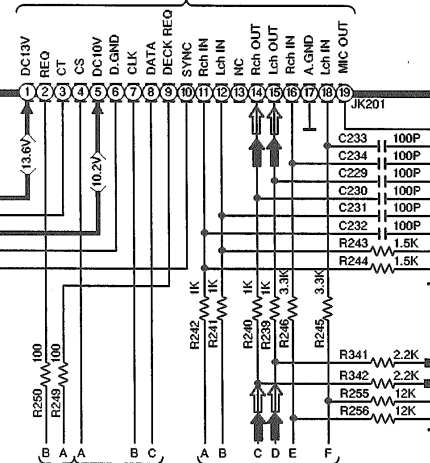
C DOLBY PROLOGIC CIRCUIT (P.C.Board:on page 37)



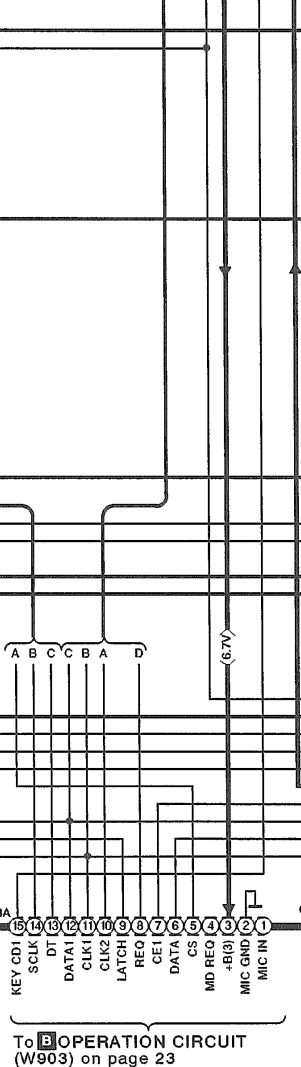
To CASSETTE DECK POWER SUPPLY CIRCUIT
To CD CHANGER MAIN CIRCUIT

To DOLBY
PROLOGIC CIRCUIT
(CN802) on page 25

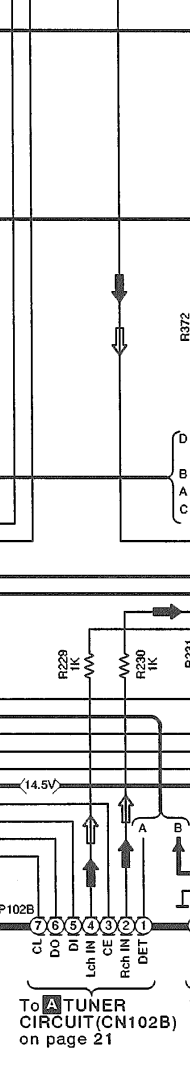
To DOLBY
PROLOGIC CIRCUIT
(CN801) on page 25



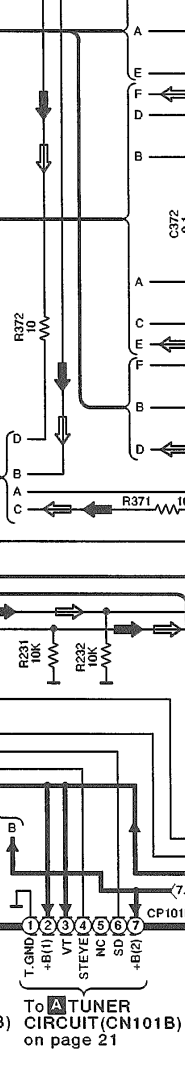
To OPERATION CIRCUIT
(W902) on page 23



To OPERATION CIRCUIT
(W903) on page 23

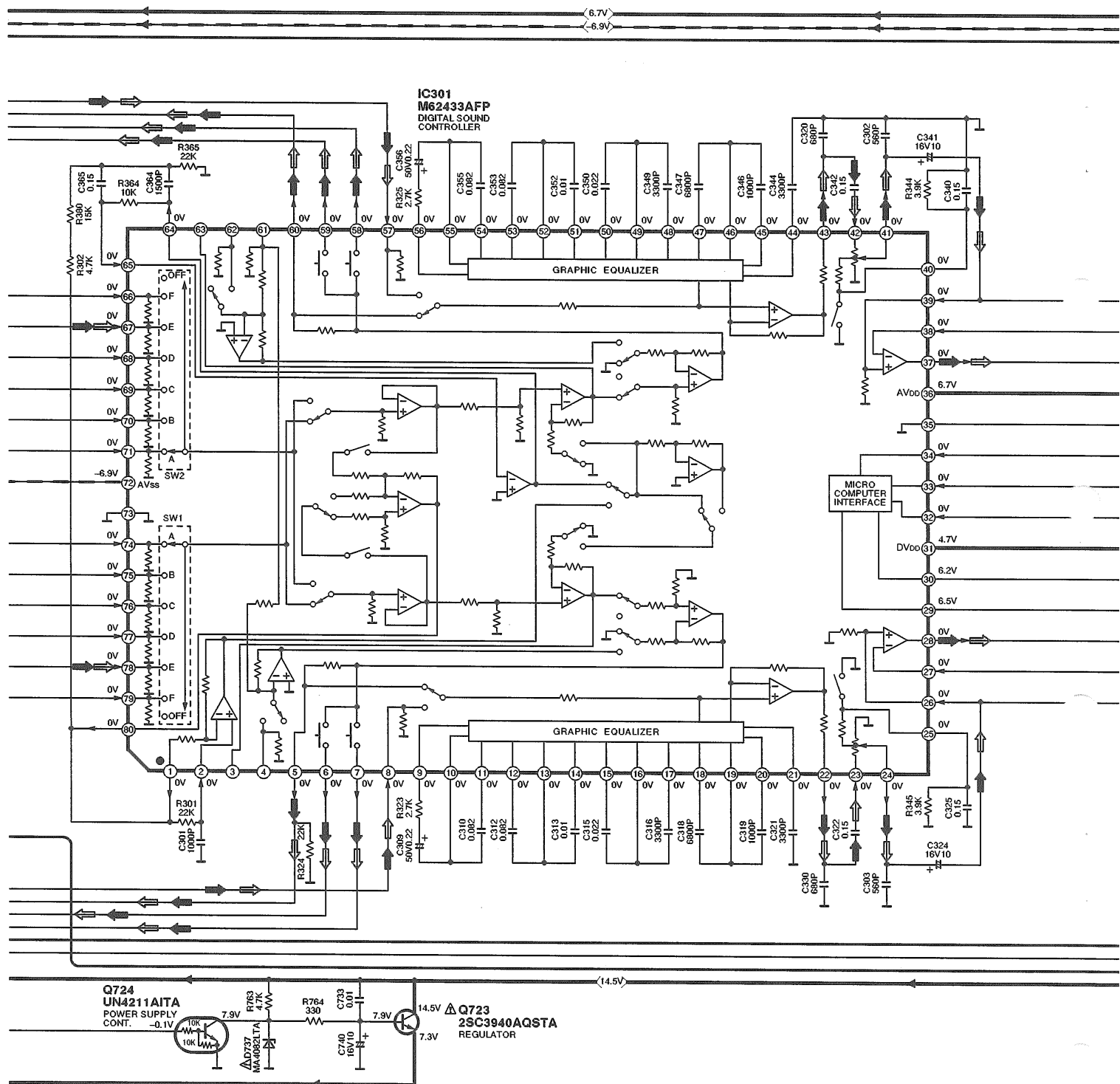


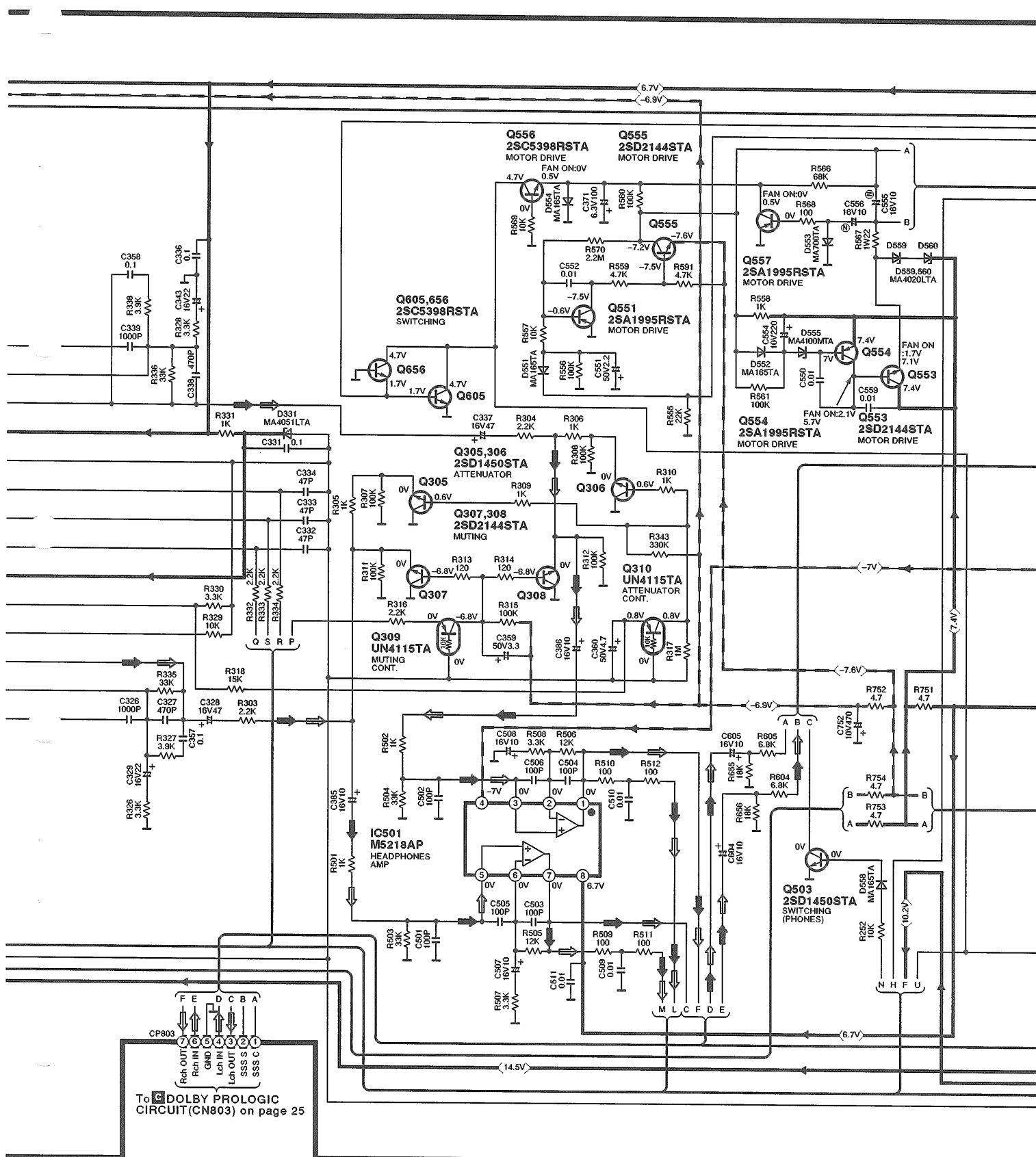
To TUNER
CIRCUIT (CN102B)
on page 21



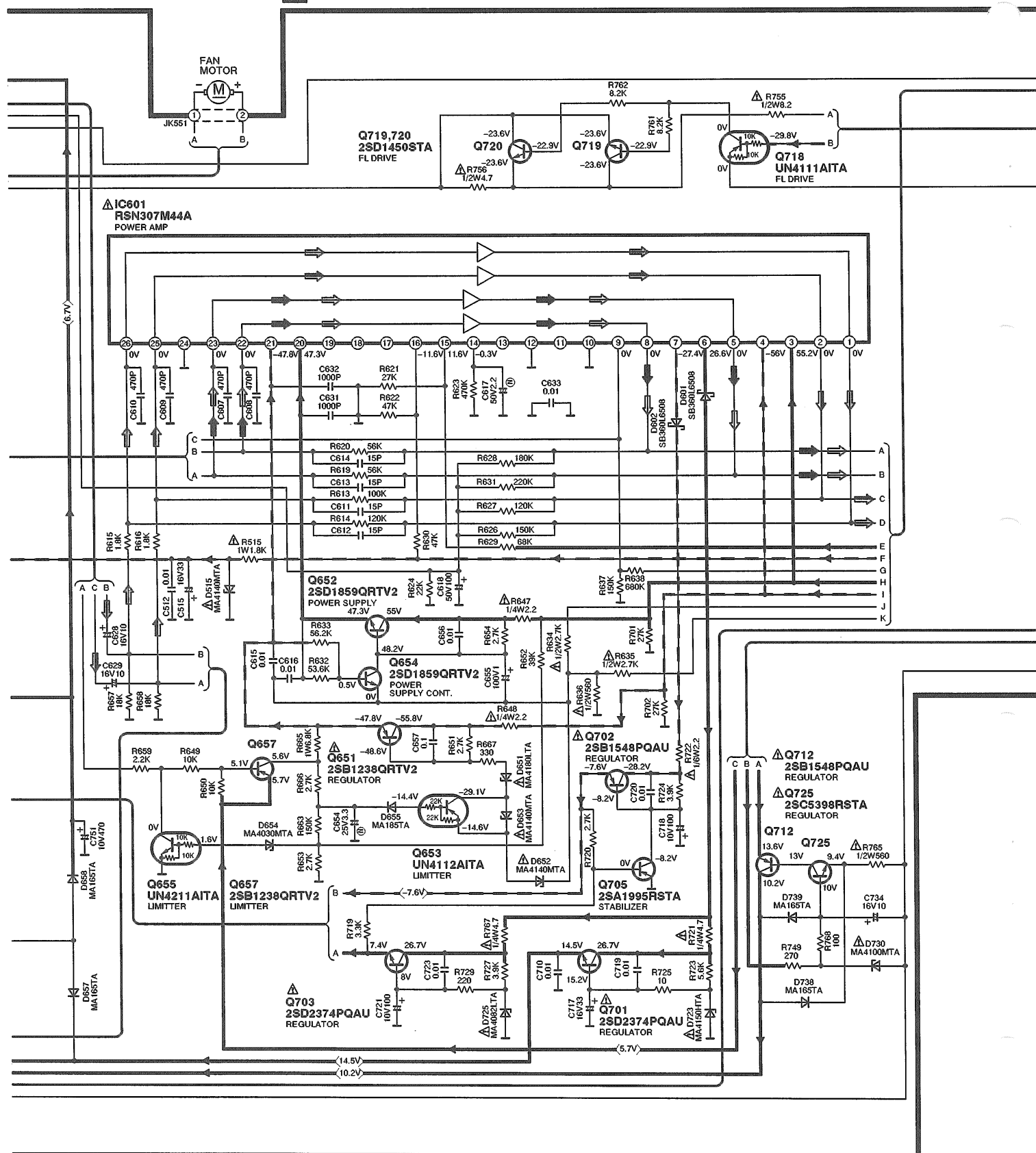
To TUNER
CIRCUIT (CN101B)
on page 21

E MAIN CIRCUIT (P.C.Board: on pages 36,37)





E MAIN CIRCUIT (P.C.Board: on pages 36, 37)



—▶— : Positive voltage line

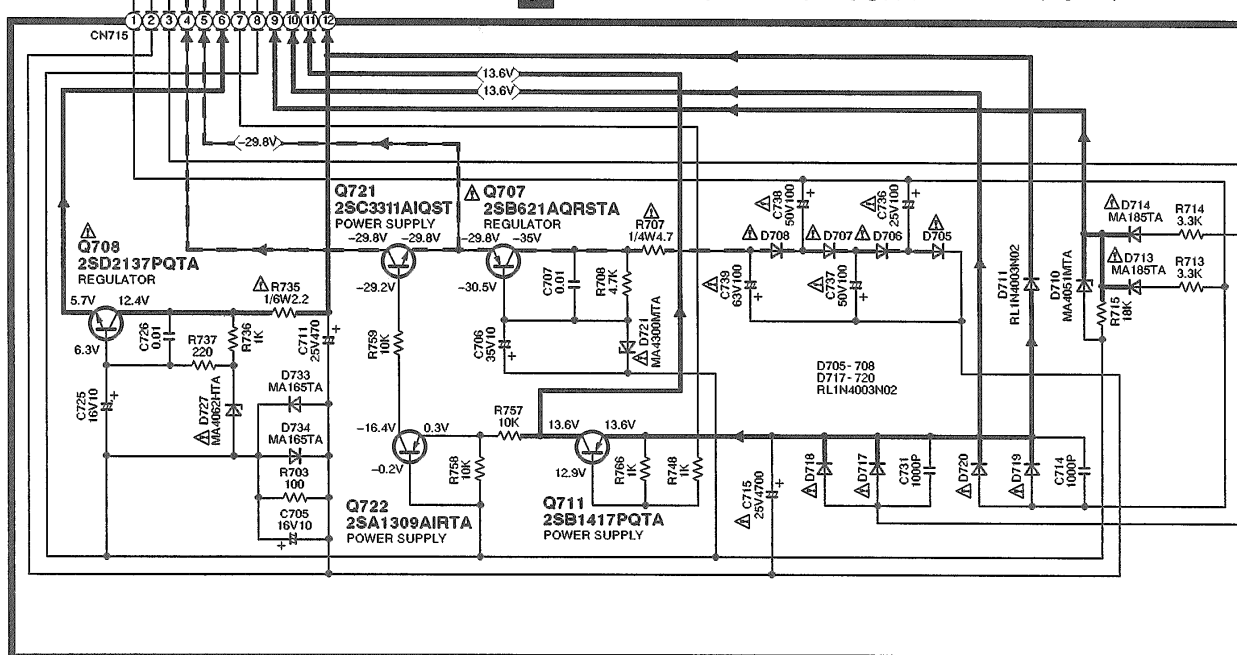
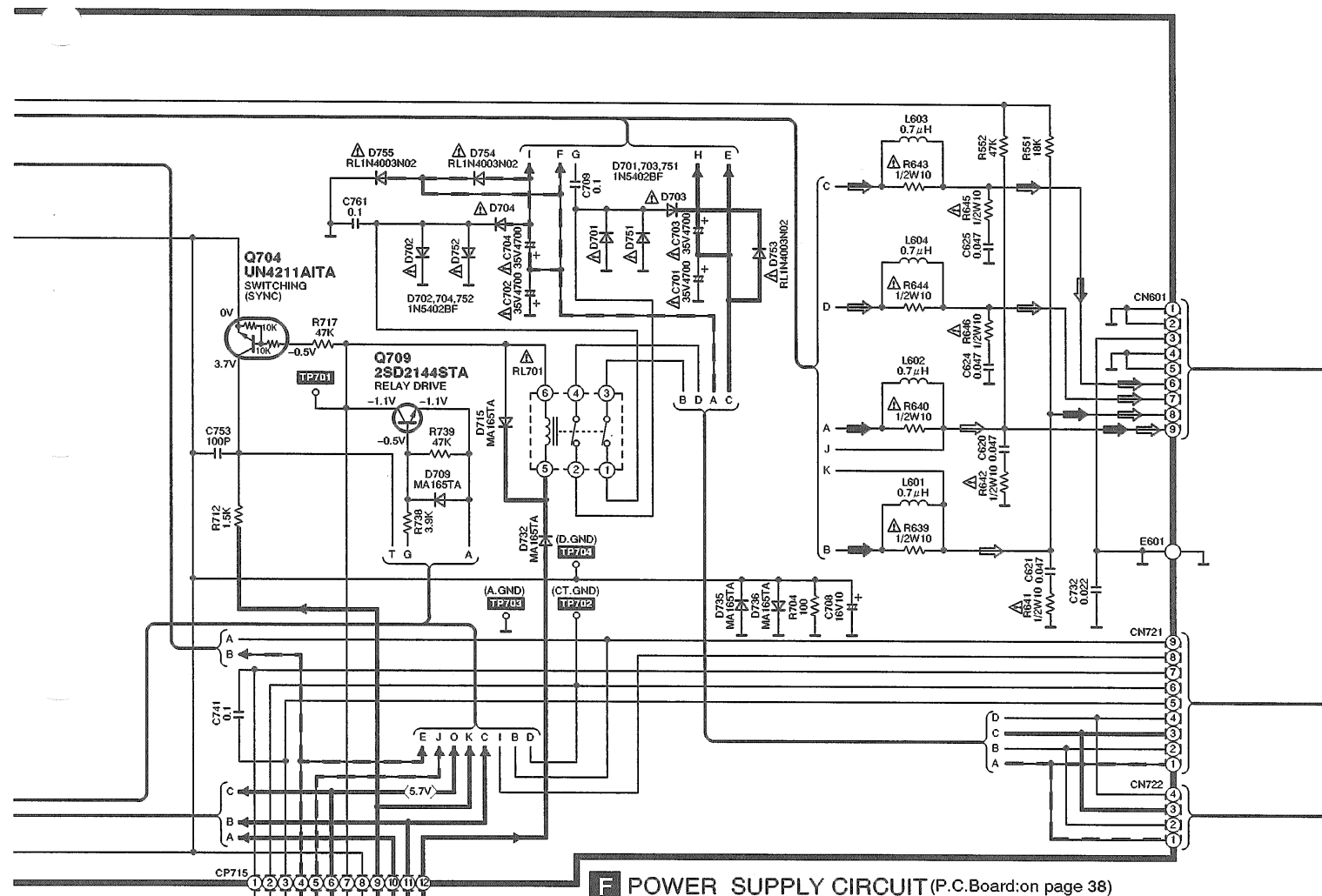
▶ : AM signal Line

▨▶ : Surround Speaker Drive signal line

---▶--- : Negative voltage line

▶ : FM signal line

▨▶ : Center Speaker Drive signal line



→ : Positive voltage line

---→ : Negative voltage line

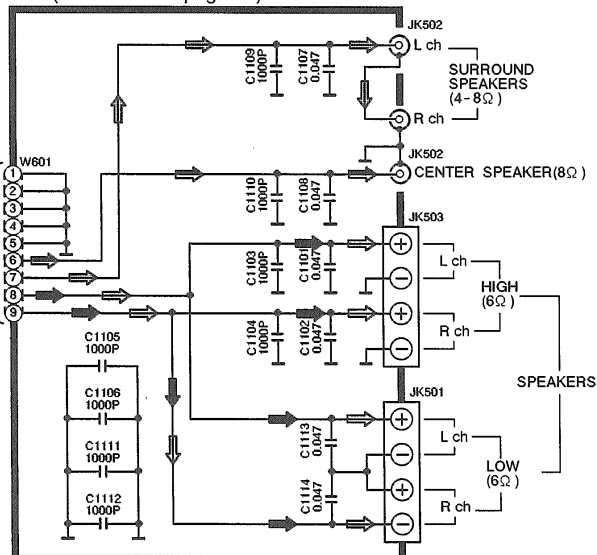
→ : AM signal Line

→ : FM signal line

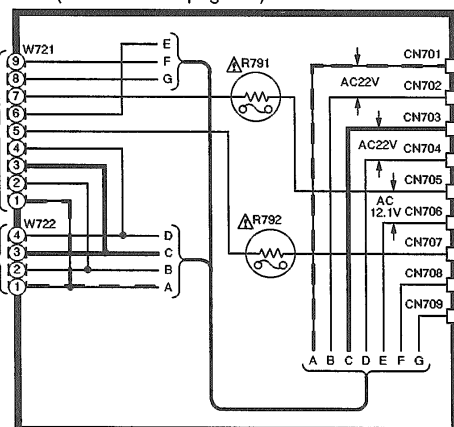
→ : Surround Speaker Drive signal line

→ : Center Speaker Drive signal line

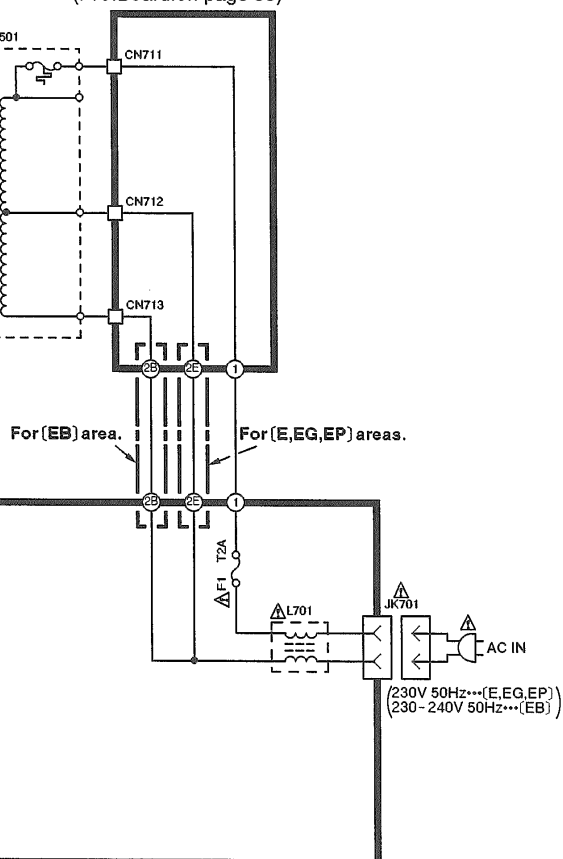
G SPEAKER TERMINAL CIRCUIT (P.C.Board: on page 38)



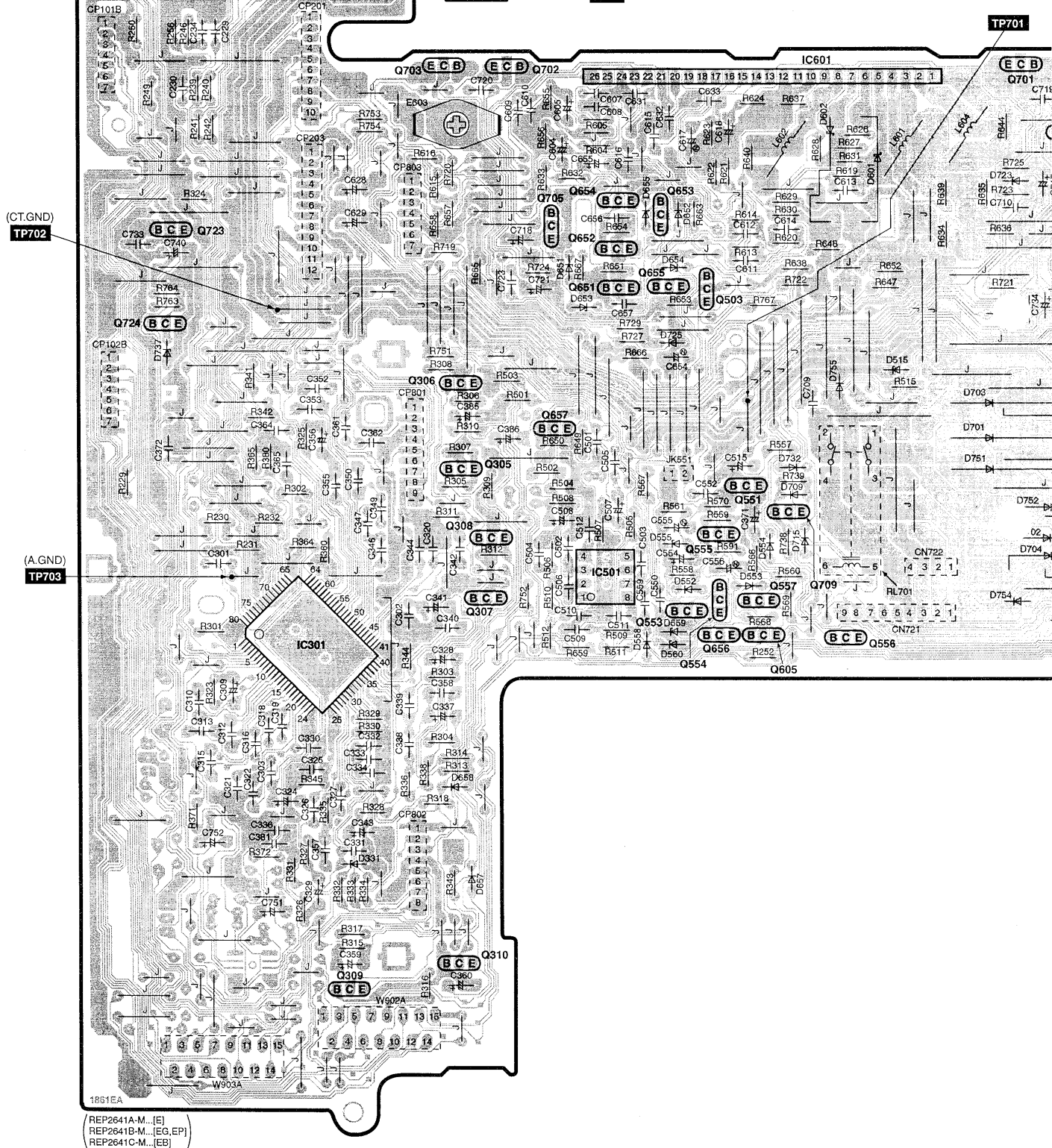
H POWER TRANSFORMER (A) CIRCUIT (P.C.Board: on page 38)

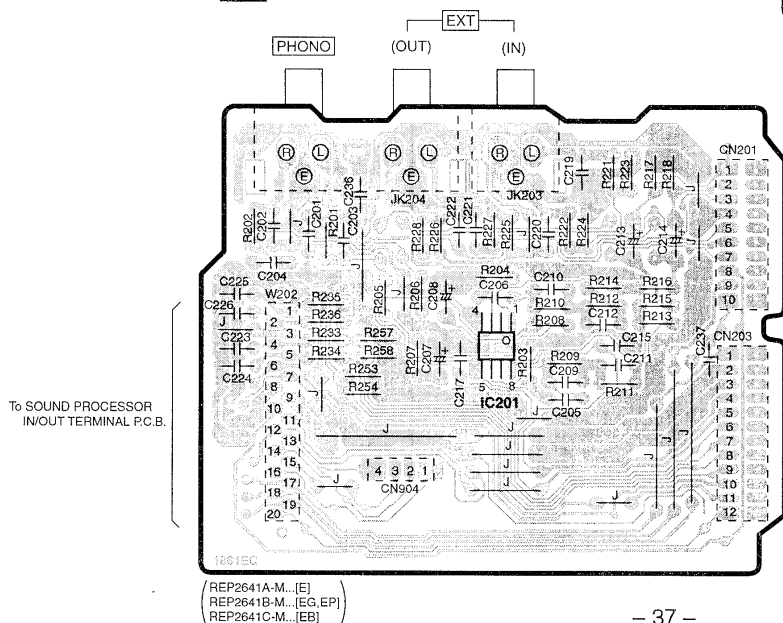
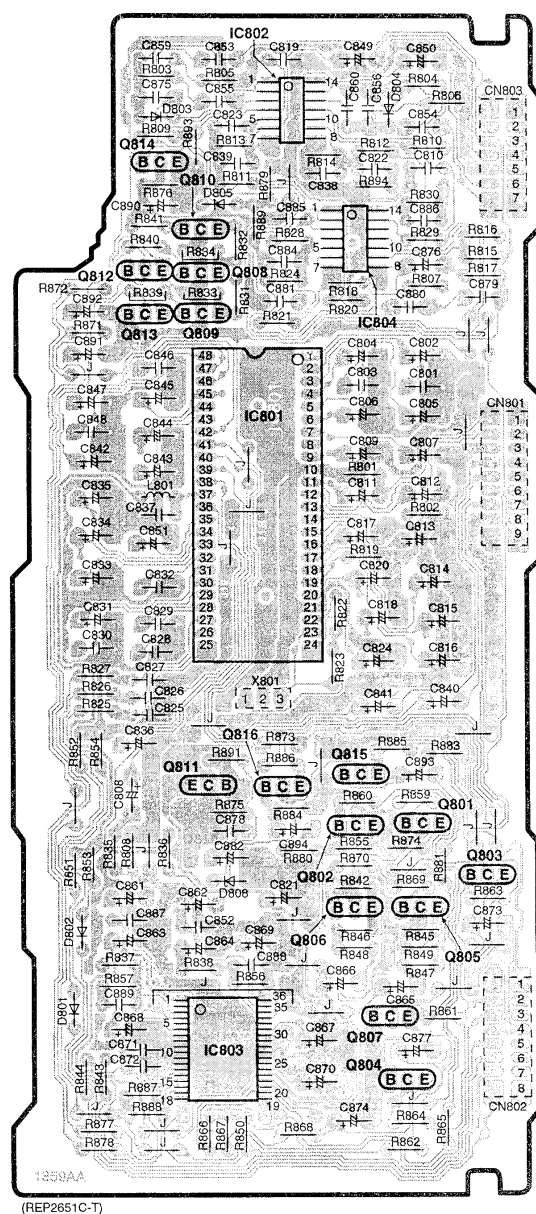


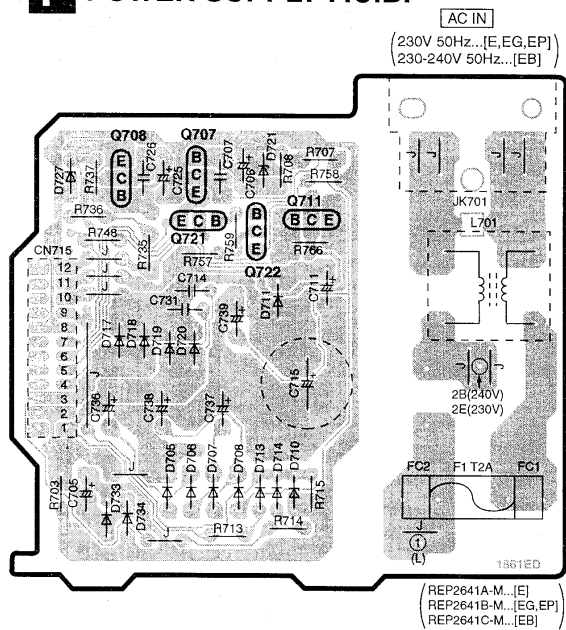
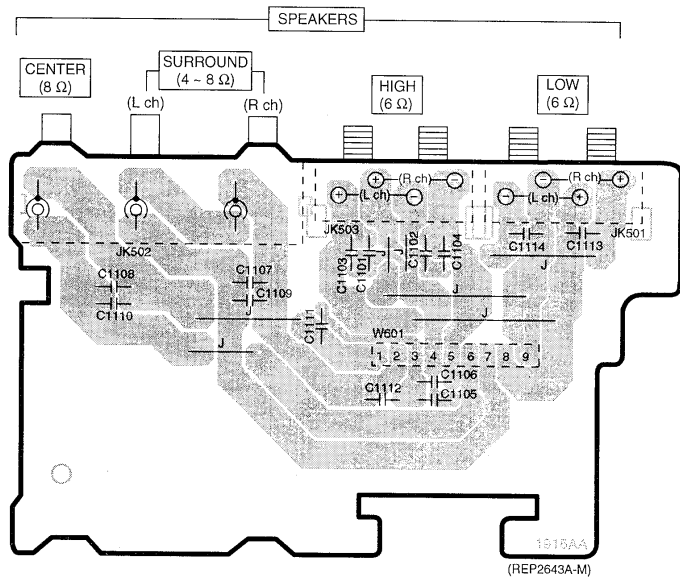
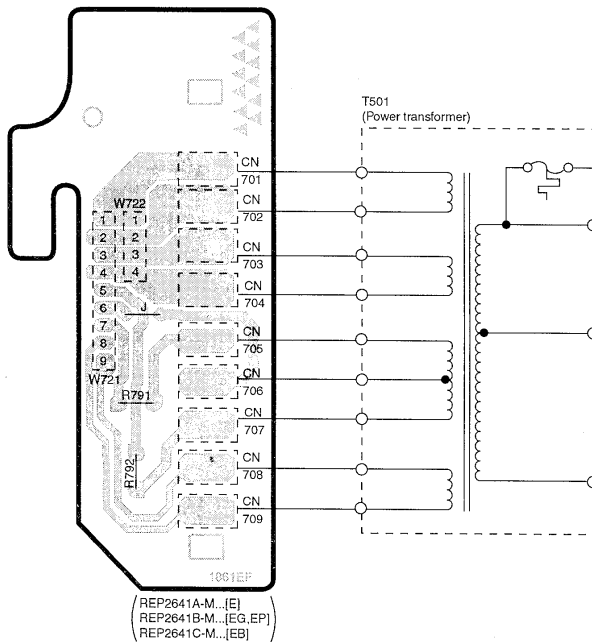
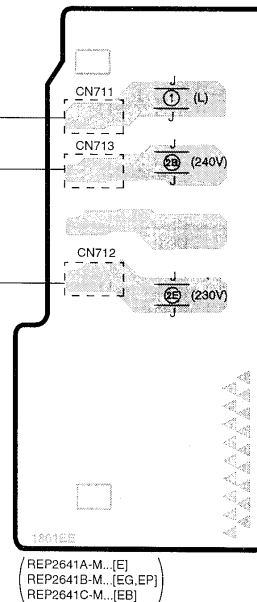
I POWER TRANSFORMER (B) CIRCUIT (P.C.Board: on page 38)



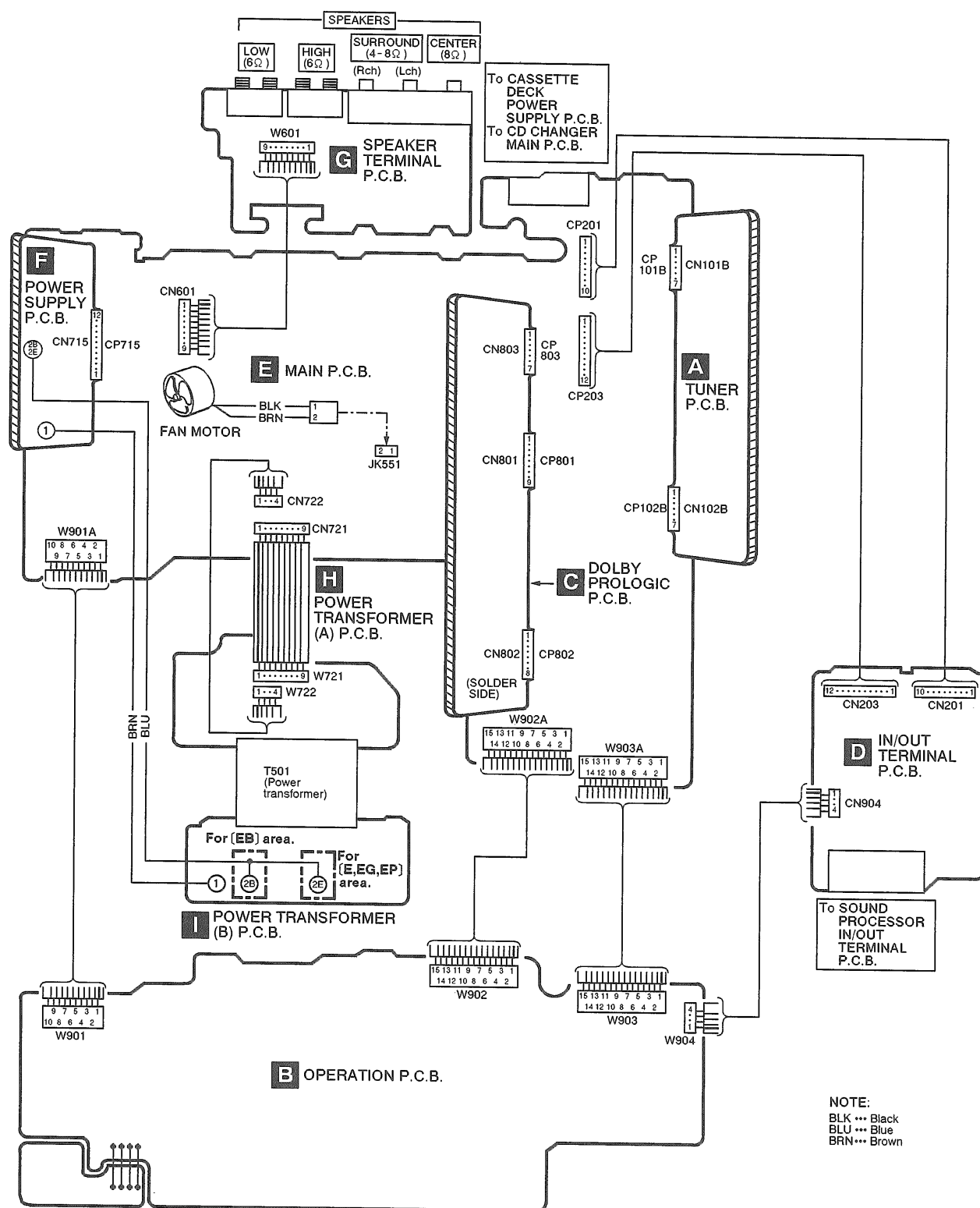
To CASSETTE DECK POWER SUPPLY P.C.B.
To CD CHANGER MAIN P.C.B.

E MAIN P.C.B.

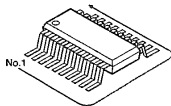
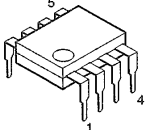
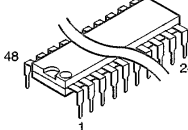
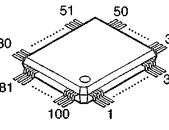
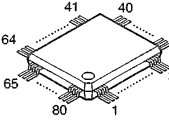
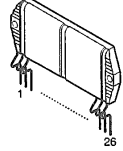

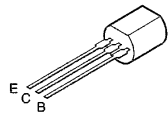
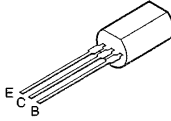
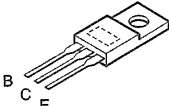
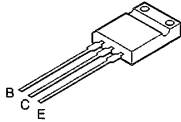
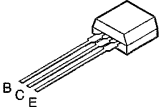
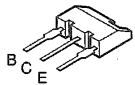
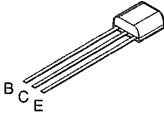
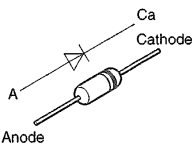
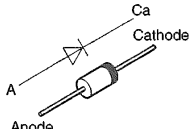
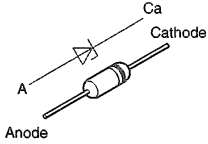
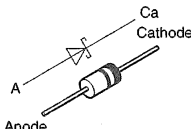
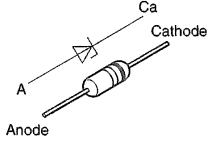
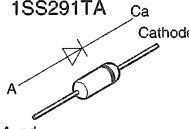
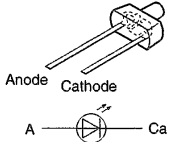


F POWER SUPPLY P.C.B.**G** SPEAKER TERMINAL P.C.B.**H** POWER TRANSFORMER (A) P.C.B.**I** POWER TRANSFORMER (B) P.C.B.

Wiring Connection Diagram



■ Type Illustration of IC's, Transistors and Diodes

 <p>No. 1</p>	<table><tr><td>AN6558SFE2</td><td>8PIN</td></tr><tr><td>LA1833MN-TLM</td><td>24PIN</td></tr><tr><td>LC72131MDTLM</td><td>20PIN</td></tr><tr><td>M5228FPE1</td><td>14PIN</td></tr><tr><td>M62425FPE1</td><td>36PIN</td></tr></table>	AN6558SFE2	8PIN	LA1833MN-TLM	24PIN	LC72131MDTLM	20PIN	M5228FPE1	14PIN	M62425FPE1	36PIN	 <p>5 8 4 1</p>	 <p>25 48 24 1</p>	 <p>51 50 31 80 81 100 1 30</p>	 <p>41 40 25 64 65 80 1 24</p>			
AN6558SFE2	8PIN																	
LA1833MN-TLM	24PIN																	
LC72131MDTLM	20PIN																	
M5228FPE1	14PIN																	
M62425FPE1	36PIN																	
 <p>1 26</p>	 <p>E C B</p> <table><tr><td>2SA1309AIRTA</td><td>UN4111AITA</td></tr><tr><td>2SC2787LTA</td><td>UN4112AITA</td></tr><tr><td>2SC3311AIQST</td><td>UN4115TA</td></tr><tr><td>2SC3311ARSTA</td><td>UN4211AITA</td></tr><tr><td>2SD1450STA</td><td>UN4214AITA</td></tr><tr><td>UN411FTA</td><td></td></tr></table>	2SA1309AIRTA	UN4111AITA	2SC2787LTA	UN4112AITA	2SC3311AIQST	UN4115TA	2SC3311ARSTA	UN4211AITA	2SD1450STA	UN4214AITA	UN411FTA		 <p>E C B</p>	 <p>E C B</p>	 <p>B C E</p>		
2SA1309AIRTA	UN4111AITA																	
2SC2787LTA	UN4112AITA																	
2SC3311AIQST	UN4115TA																	
2SC3311ARSTA	UN4211AITA																	
2SD1450STA	UN4214AITA																	
UN411FTA																		
 <p>B C E</p>	 <p>B C E</p>	 <p>B C E</p>	 <p>B C E</p>	 <p>A Ca Cathode Anode</p>	 <p>A Ca Cathode Anode</p>													
 <p>A Ca Cathode Anode</p>	<table><tr><td>MA4100MTA</td></tr><tr><td>MA4120MTA</td></tr><tr><td>MA4140MTA</td></tr><tr><td>MA4150HTA</td></tr><tr><td>MA4180LTA</td></tr><tr><td>MA4300MTA</td></tr></table>	MA4100MTA	MA4120MTA	MA4140MTA	MA4150HTA	MA4180LTA	MA4300MTA	 <p>A Ca Cathode Anode</p>	 <p>A Ca Cathode Anode</p>	<table><tr><td>MA4020LTA</td></tr><tr><td>MA4030MTA</td></tr><tr><td>MA4039MTA</td></tr><tr><td>MA4051LTA</td></tr><tr><td>MA4051MTA</td></tr><tr><td>MA4062HTA</td></tr><tr><td>MA4082LTA</td></tr></table>	MA4020LTA	MA4030MTA	MA4039MTA	MA4051LTA	MA4051MTA	MA4062HTA	MA4082LTA	 <p>A Ca Cathode Anode</p>
MA4100MTA																		
MA4120MTA																		
MA4140MTA																		
MA4150HTA																		
MA4180LTA																		
MA4300MTA																		
MA4020LTA																		
MA4030MTA																		
MA4039MTA																		
MA4051LTA																		
MA4051MTA																		
MA4062HTA																		
MA4082LTA																		
 <p>A Ca Cathode</p>																		

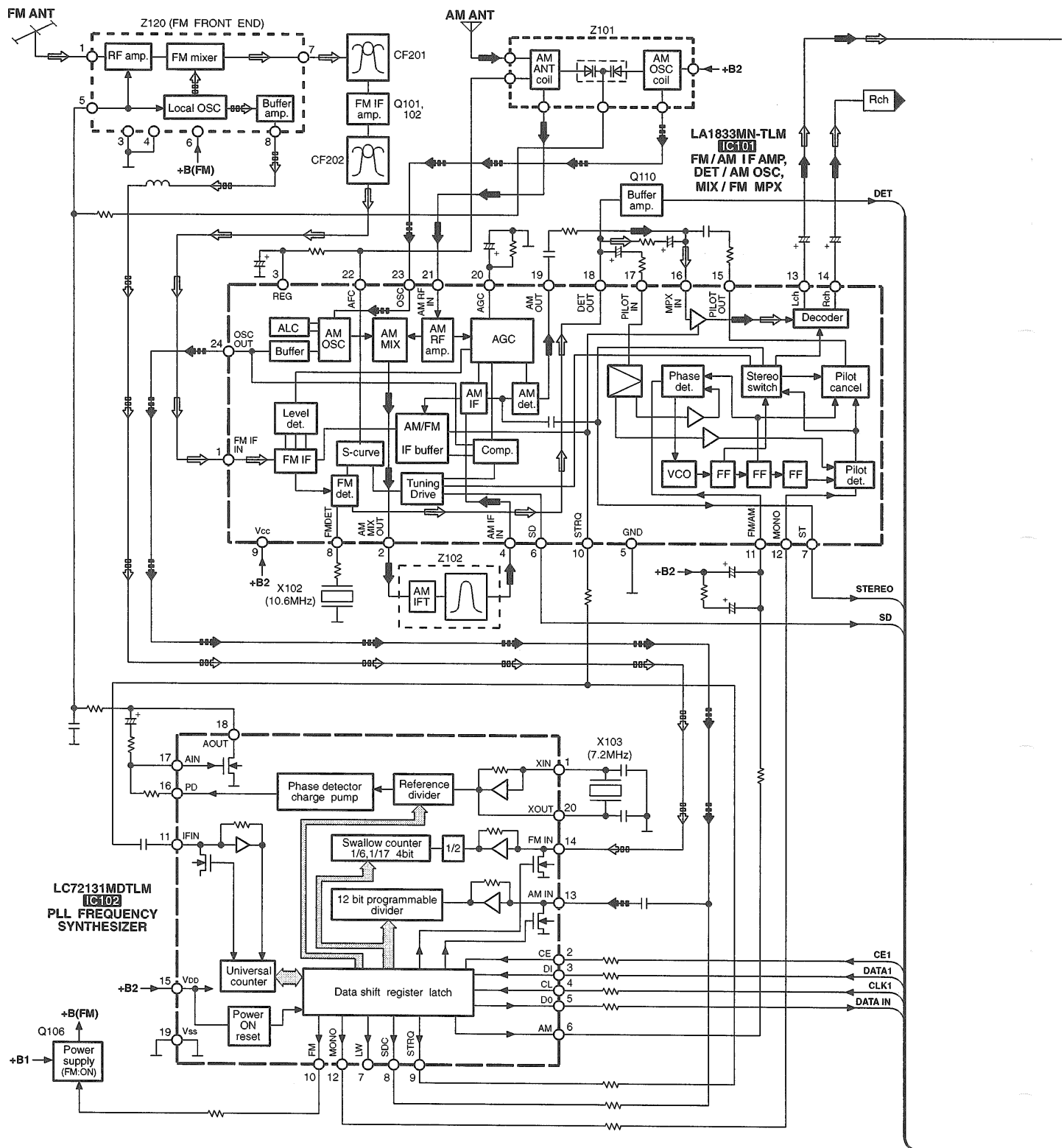
■ Terminal Function of IC's

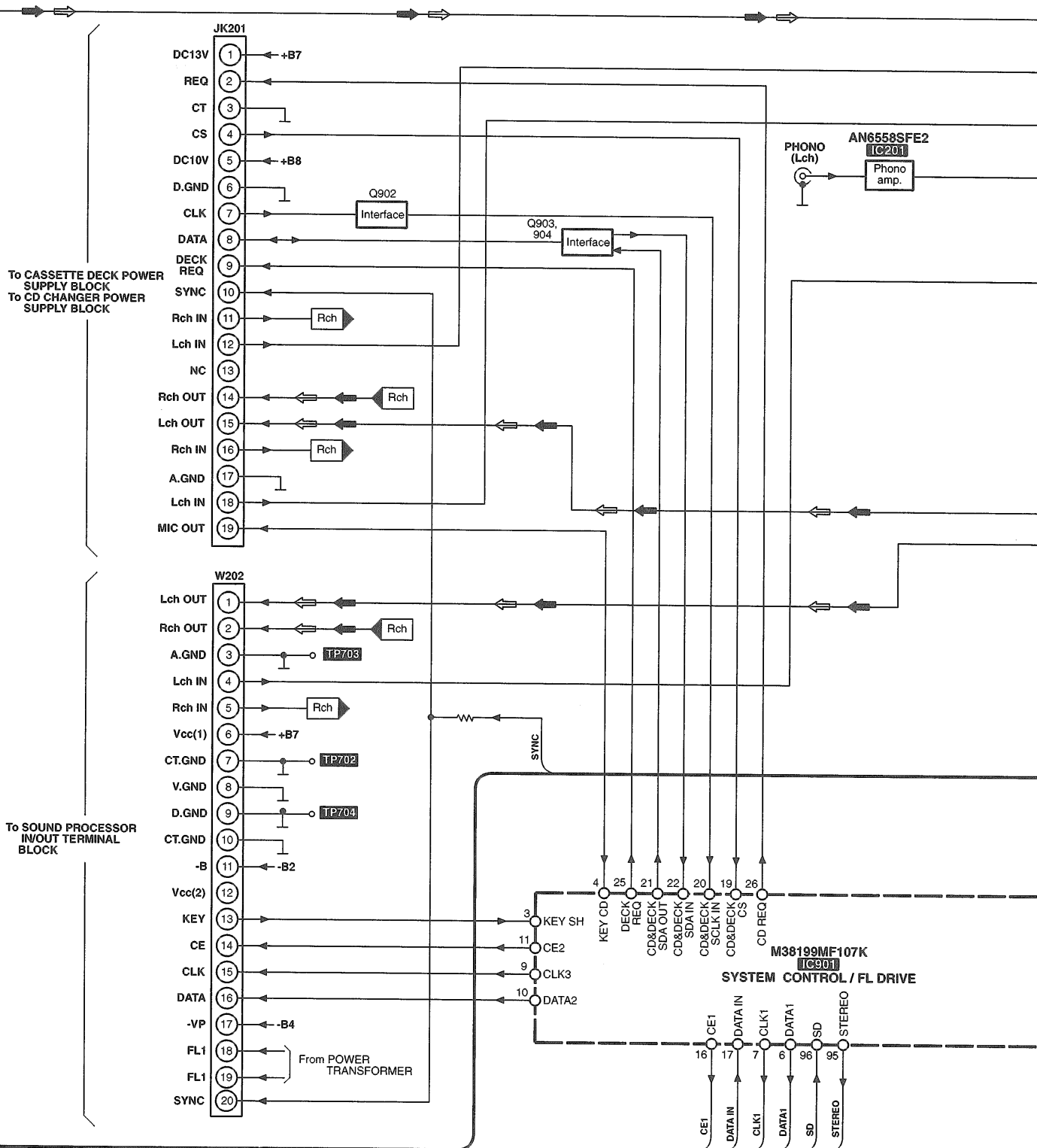
● IC901 (M38199MF107K): System Control / FL Drive

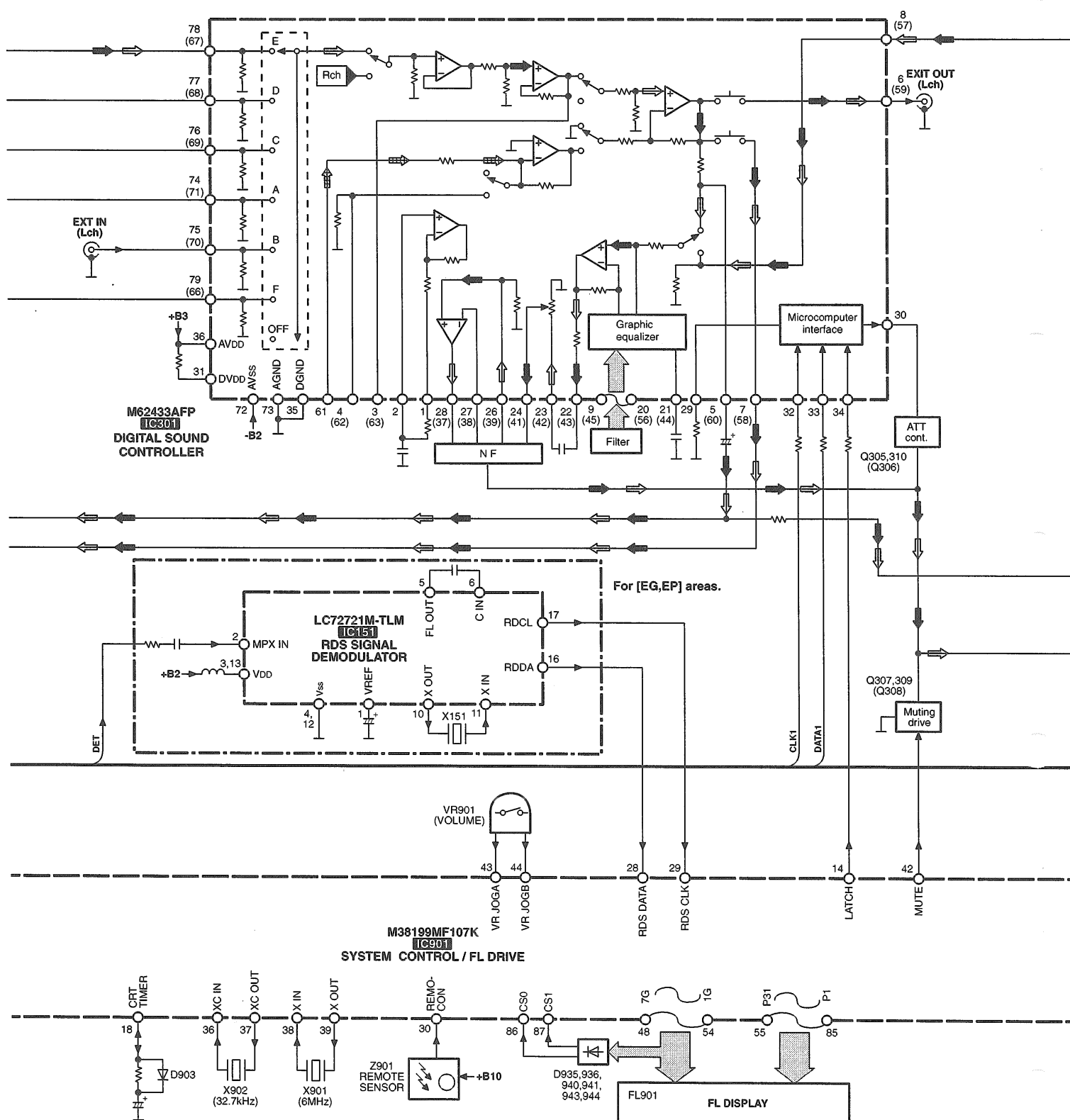
Pin No.	Terminal Name	I/O	Function
1	KEY TU	I	Operation switch signal input (TUNER, TIMER, AMP. section)
2	KEY KRAOKE	I	Operation switch signal input (RDS section)
3	KEY SH	I	Sound processor operation switch signal input
4	KEY CD	I	CD changer operation switch signal input
5	KEY CD2	I	Connected to VREF
6	DATA1	O	Data signal output for M62433, M62425, LC72131 and LV1030
7	CLK1	O	Clock signal output for M62433, M62425, LC72131 and LV1030
8	CLK2	O	Clock signal output for M62425 (center and surround volume of dolby pro logic)
9	CLK3	O	Serial communication signal to sound processor (Clock signal output)
10	DATA2	O	Serial communication signal to sound processor (Data signal output)
11	CE2	O	Serial communication signal to sound processor (Chip enable signal output)
12	SEL/TUNER	O	Not used
13	SEL/TUNER	O	Tuner circuit power control signal output
14	LATCH	O	Latch signal output to M62433
15	REQ	O	Request signal output to LV1030
16	CE1	O	Chip enable signal output to LC72131
17	DATA IN	I	Data signal input from LC72131
18	CR TIMER	I/O	TIME CONSTANT terminal
19	CD & DECK CS	I	Serial data communication starting signal input (CD and DECK mechanism)
20	CD & DECK SCLK IN	I	Serial clock input (CD and DECK mechanism)
21	CD & DECK SDA OUT	O	Serial data output (CD and DECK mechanism)
22	CD & DECK SDA IN	I	Serial data input (CD and DECK mechanism)
23	HP SW	O	Headphones connecting detect signal input
24	SEL MD	O	Not used
25	DECK REQ	O	Cassette deck request signal output
26	CD REQ	O	CD changer request signal output
27	DPL & CHECK	O	Limiter control signal output
28	RDS DATA	I	Not used
29	RDS CLK	I	
30	REMOCON	I	Remote control signal input
31, 32	D1, D2	O	Not used
33	ECHO	O	

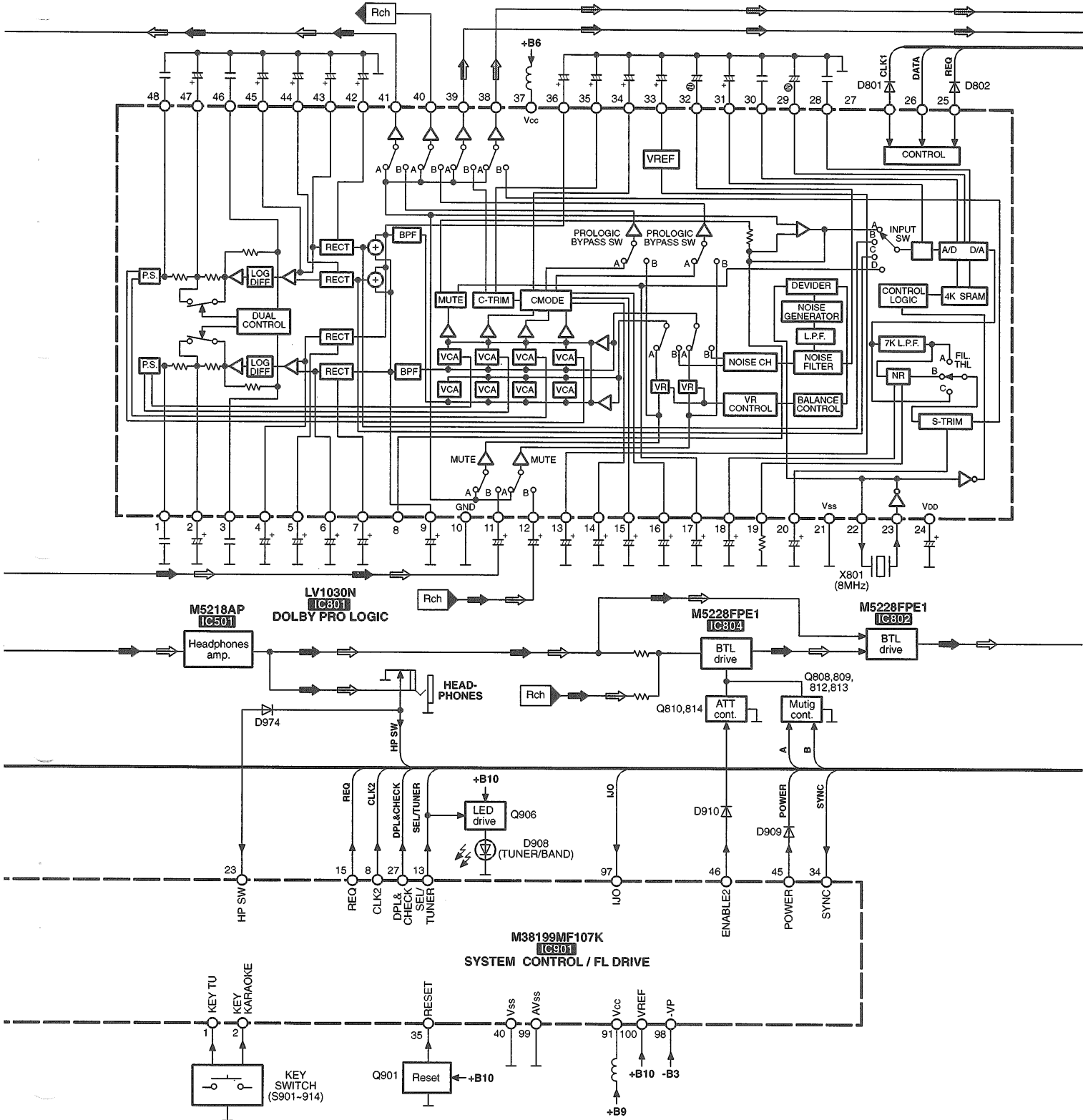
Pin No.	Terminal Name	I/O	Function
34	SYNC	I	AC power source input terminal
35	RESET	I	Reset signal input
36	XC IN	I	Oscillator connected terminal (f = 32.7 kHz)
37	XC OUT	O	
38	X IN	I	Oscillator connected terminal (f = 5 MHz)
39	X OUT	O	
40	Vss	—	GND terminal
41	MIC DET	I	Microphone connecting detect signal input
42	MUTE	O	Muting signal output
43	VR JOGB	I	Volume control signal input
44	VR JOGA	I	
45	POWER	O	Power control signal output
46	ENABLE2	O	Attenuator control signal output
47	NC	—	No used
48~54	7G~1G	O	Grid signal and chip select scan signal output
55~85	P31~P1	O	Segment signal output
86, 87	CS0, CS1	I	Chip select signal input
88	SEL TAPE	O	Connected to VCC
89	MIC S1	O	Microphone signal output (Not used)
90	MIC S2	O	Microphone through signal output (Not used)
91	VCC	—	Power supply
92	VIBRATE	O	Not used, open
93	CHORUS	O	Not used, open
94	WIDE	O	Not used, open
95	STEREO	I	STEREO signal input for tuner circuit
96	SD	I	Station detector signal input for tuner circuit
97	IJO	I	Unusual condition detect terminal ("L": unusual)
98	-VP	—	Reference voltage input (negative)
99	AVSS	—	Connect to GND
100	VREF	—	Reference voltage input (positive)

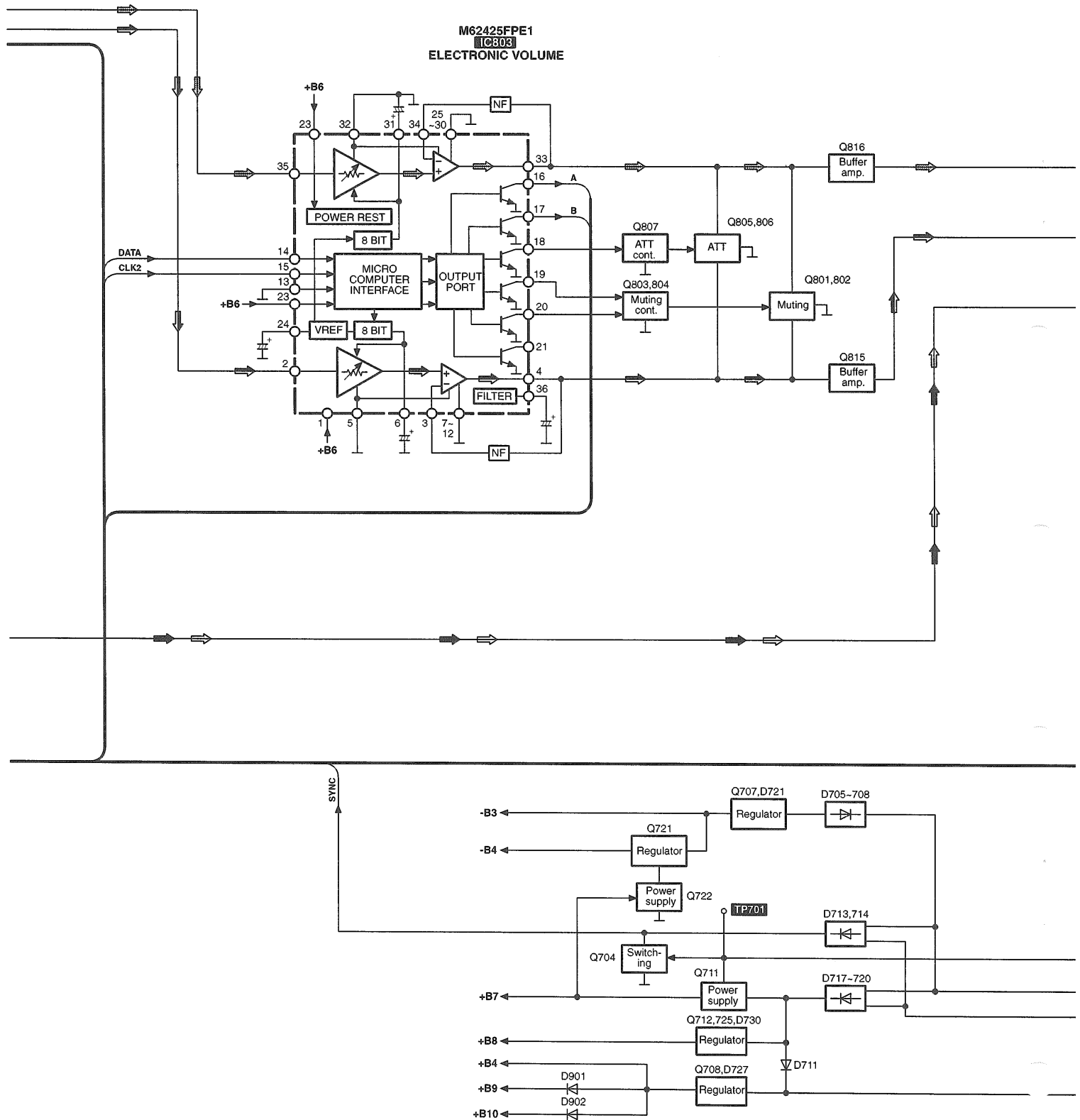
Block Diagram

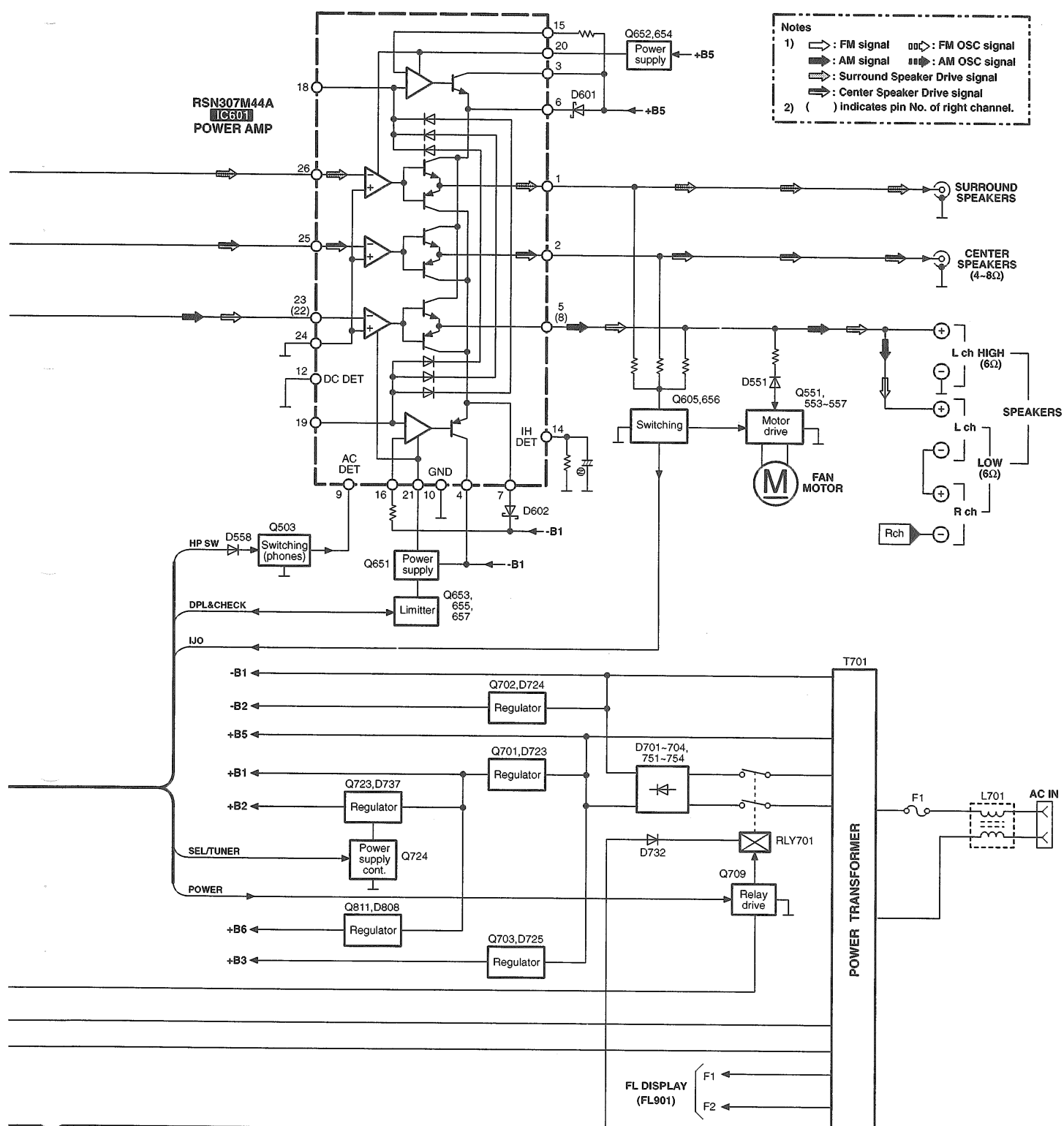












Replacement Parts List

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 manufacture's specified parts shown in the parts list.

*All parts are supplied by MESA.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0202F-H	CABINET	1		C127	ECEA1CKA220B	16V 22U	1	
2	RHD30007-K1	SCREW	4		C129, 30	ECEA0JKA101B	6.3V 100U	2	
3	XTBS3+10JFZ1	SCREW	1		C131	ECBT1H101KB5	50V 100P	1	
4	RGW0183-H	KNOB, VOLUME	1		C132	ECBT1H102KB5	50V 1000P	1	
5	RKA0011-3	FOOT	4		C133, 34	ECBT1H270JU5	50V 27P	2	
5-1	SHG1645	RUBBER	4		C136	ECBT1H102KB5	50V 1000P	1	
6	RKQ0089-2	PCB SPACER	6		C137	ECFR1E472KR	25V 4700P	1	
7	RMND0203	PCB HOLDER 1	1		C138	ECBT1C103KS5	16V 0.01U	1	
8	RMND0427	CABLE HOLDER	1		C139	ECFR1E472KR	25V 4700P	1	
9	RHD30070	SCREW	1		C141, 42	ECEA1HKA010B	50V 1U	2	
10	XTW3+15T	SCREW	4		C143, 44	ECBT1C472KR5	16V 4700P	2	
11	RMND0426	FL HOLDER	1		C147	ECBT1H102KB5	50V 1000P	1	
12	RMND0429	PCB HOLDER 2	1		C148	ECBT1C103NS5	16V 0.01U	1	
13	RMND0437	PCB HOLDER 3	1		C149	ECBT1H104ZF5	50V 0.1U	1	
14	REZ1088	FLAT CABLE (W901-04)	1		C151	RCE1CKA100BG	16V 10U	1	(EG, EP)
15	XTBS3+8JFZ1	SCREW	2		C152	ECBT1H331KB5	50V 330P	1	(EG, EP)
16	REZ1076	WIRE ASS'Y (W601)	1		C154	ECBT1H561KB5	50V 560P	1	(EG, EP)
17	RFKGAEH600EH	FRONT PANEL ASS'Y	1	(E, EB)	C155	ECBT1H102KB5	50V 1000P	1	(EG, EP)
17	RFKGAEH600EG	FRONT PANEL ASS'Y	1	(EG, EP)	C156, 57	ECBT1H470J5	50V 47P	2	(EG, EP)
18	REX0852	WIRE ASS'Y	1		C158, 59	ECEA0JKA470B	6.3V 47U	2	(EG, EP)
19	RGK0894-N	ORNAMENT	1		C160	ECBT1H102KB5	50V 1000P	1	(EG, EP)
20	REM0057	FAN UNIT	1		C201, 02	ECBT1H100J5	50V 18P	2	
21	RLBT4001-D	FERRITE CORE	1		C203, 04	ECBT1H151KB5	50V 150P	2	
22	RHD26016	SCREW	1		C205, 06	ECBT1H102KB5	50V 1000P	2	
23	RHN90001	NUT	1		C207, 08	RCE1AKA330BG	10V 33U	2	
24	RKW0506B-Q	FL PANEL	1		C209, 10	ECBT0J223MS5	16V 0.022U	2	
25	RWJ1809150KQ	FLAT CABLE (W721/9P)	1		C211, 12	ECBT1C682KR5	16V 6800P	2	
26	RWJ1804150KQ	FLAT CABLE (W722/4P)	1		C213, 14	RCE1CKA100BG	16V 10U	2	
27	XTBS26+8J	SCREW	5		C215	ECBT1E103ZF5	25V 0.01U	1	
28	XTB3+10JFZ	SCREW	10		C217	ECBT1E103ZF5	25V 0.01U	1	
29	XTB3+20JFZ	SCREW	6		C219-26	ECBT1H101KB5	50V 100P	8	
30	XTB3+8JFZ	SCREW	6		C229-34	ECBT1H101KB5	50V 100P	6	
					C235	ECBT1H104ZF5	50V 0.1U	1	
A1	RAK-CH219WH	REMOTE CONTROL TRANSMITTER	1		C236, 37	ECBT1H102KB5	50V 1000P	2	
A1-1	RKK0057-K	BATTERY COVER	1		C301	ECBT1H102KB5	50V 1000P	1	
A2	REE0393	SPEAKER CORD	2		C302, 03	ECBT1H561KB5	50V 560P	2	
A3	REE0853	SPEAKER CORD	2		C309	ECEA1HKA22B	50V 0.22U	1	
Δ A4	RJA0019-X	AC POWER SUPPLY CORD	1	(E, EG, EP)	C310	ECFR1C823MR	16V 0.082U	1	
Δ A4	RJA0053-1X	AC POWER SUPPLY CORD	1	(EB)	C312	ECFR1C823MR	16V 0.082U	1	
A5	RQA0117	GUARRANTY CARD	1	(E, EB, EG)	C313	ECFR1C103KR	16V 0.01U	1	
A6	RQT4299-E	OPERATION INSTRUCTIONS	1	(E)	C315	ECFR1C223KR	16V 0.022U	1	
A6	RQT4300-D	OPERATION INSTRUCTIONS	1	(EG)	C316	ECBT1C332KR5	16V 3300P	1	
A6	RQT4301-H	OPERATION INSTRUCTIONS	1	(EG)	C318	ECBT1C682KR5	16V 6800P	1	
A6	RQT4302-B	OPERATION INSTRUCTIONS	1	(EB, EP)	C319	ECBT1H102KB5	50V 1000P	1	
A6	RQT4303-R	OPERATION INSTRUCTIONS	1	(EP)	C320	ECBT1H681KB5	50V 680P	1	
A7	RSA0007	FM INDOOR ANTENNA	1		C321	ECBT1C332KR5	16V 3300P	1	
A8	RSA0022-J	AM LOOP ANTENNA	1		C322	ECQV1H154JM3	50V 0.15U	1	
A9	RQCB0169	SERVICE CENTER LIST	1	(E, EB, EG)	C324	RCE1CKA100BG	16V 10U	1	
A10	RQCA0598	QUICK REFERENCE GUIDE	1	(EB)	C325	ECQV1H154JM3	50V 0.15U	1	
Δ A11	SJP9009	PLUG ADAPTOR	1	(EB)	C326	ECBT1H102KB5	50V 1000P	1	
					C327	ECBT1H471KB5	50V 470P	1	
C101	ECBT1C103NS5	16V 0.01U	1		C328	RCE1CKA470BG	16V 47U	1	
C102	ECEA1CKA101B	16V 100U	1		C329	ECEA1CKA220B	16V 22U	1	
C103	ECBT1C103NS5	16V 0.01U	1		C330	ECBT1H681KB5	50V 680P	1	
C104, 05	ECBT1H102KB5	50V 1000P	2		C331	ECBT1H104ZF5	50V 0.1U	1	
C106	ECBT1C103NS5	16V 0.01U	1		C332-34	ECBT1H470J5	50V 47P	3	
C107	ECBT1H473ZF5	50V 0.047U	1		C336	ECBT1H104ZF5	50V 0.1U	1	
C108	ECBT1H8R2KC5	50V 8.2P	1		C337	RCE1CKA470BG	16V 47U	1	
C109	ECBT1H102KB5	50V 1000P	1		C338	ECBT1H471KB5	50V 470P	1	
C110	ECBT1C103NS5	16V 0.01U	1		C339	ECBT1H102KB5	50V 1000P	1	
C111	ECEA1EKA4R7B	25V 4.7U	1		C340	ECQV1H154JM3	50V 0.15U	1	
C112	ECBT1C103NS5	16V 0.01U	1		C341	RCE1CKA100BG	16V 10U	1	
C113	ECBT1H102KB5	50V 1000P	1		C342	ECQV1H154JM3	50V 0.15U	1	
C114	RCE1HKA3R3BG	50V 3.3U	1		C343	ECEA1CKA220B	16V 22U	1	
C115	ECEA1EKA4R7B	25V 4.7U	1		C344	ECBT1C332KR5	16V 3300P	1	
C116	ECFR1C333KR	16V 0.033U	1		C346	ECBT1H102KB5	50V 1000P	1	
C117, 18	ECFR1C183KR	16V 0.0018U	2		C347	ECBT1C682KR5	16V 6800P	1	
C119	ECQP1391JZ3	100V 390P	1		C349	ECBT1C332KR5	16V 3300P	1	
C120	RCE1CKA100BG	16V 10U	1		C350	ECFR1C223KR	16V 0.022U	1	
C121	RCE1HKA47BG	50V 0.47U	1		C352	ECFR1C103KR	16V 0.01U	1	
C122, 23	ECEA1HKA010B	50V 1U	2		C353	ECFR1C823MR	16V 0.082U	1	
C124	ECBT1H101KB5	50V 100P	1		C355	ECFR1C823MR	16V 0.082U	1	
C125	ECEA1CKA220B	16V 22U	1		C356	ECEA1HKA22B	50V 0.22U	1	
C126	ECBT1H473ZF5	50V 0.047U	1		C357, 58	ECQV1H104JM3	50V 0.1U	2	
					C359	RCE1HKA3R3BG	50V 3.3U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C360	RCE1HKA4R7BG	50V 4.7U	1		C814-17	RCE1CKA100BG	16V 10U	4	
C361, 62	ECBTIC222KR5	16V 2200P	2		C818	ECEA1HKA2R2B	50V 2.2U	1	
C364	ECBTIC152KR5	16V 1500P	1		C819	ECBTIE103ZF5	25V 0.01U	1	
C365	ECQV1H154JM3	50V 0.15U	1		C820	ECEA1HKA33B	50V 0.33UF	1	
C371	ECEA0JKA101B	6.3V 100U	1		C821	ECA1CM221B	16V 220U	1	
C372	ECBT1H104ZF5	50V 0.1U	1		C822, 23	ECBT1H101KB5	50V 100P	2	
C381	ECBTIE103ZF5	25V 0.01U	1		C824	ECA1CM221B	16V 220U	1	
C385, 86	RCE1CKA100BG	16V 10U	2		C825, 26	ECBT1H101KB5	50V 100P	2	
C395, 96	ECBT1H473ZF5	50V 0.047U	2		C827	ECBT1H330J5	50V 33P	1	
C501-06	ECBT1H101KB5	50V 100P	6		C828	ECFR1C823MR	16V 0.082U	1	
C507, 08	RCE1CKA100BG	16V 10U	2		C829	ECFR1E332KR	25V 3300P	1	
C509-12	ECBTIE103ZF5	25V 0.01U	4		C830	ECFR1C823MR	16V 0.082U	1	
C515	ECEA1CKA330B	16V 33U	1		C831	RCE1HKA47BG	50V 0.47U	1	
C550	ECBTIE103ZF5	25V 0.01U	1		C832	ECQV1H473JM3	50V 0.047U	1	
C551	ECEA1HKA2R2B	50V 2.2U	1		C833	ECA1CM221B	16V 220U	1	
C552	ECBTIE103ZF5	25V 0.01U	1		C834	RCE1HKA47BG	50V 0.47U	1	
C554	ECA1AM221B	10V 220U	1		C835	RCE1AKA470BG	10V 47U	1	
C555, 56	ECEA1CKN100B	16V 10U	2		C836	ECEA1HKA010B	50V 1U	1	
C559	ECBTIE103ZF5	25V 0.01U	1		C837	ECBT1H104ZF5	50V 0.1U	1	
C604, 05	RCE1CKA100BG	16V 10U	2		C838, 39	ECBT1H101KB5	50V 100P	2	
C607-10	ECBT1H471KB5	50V 470P	4		C840, 41	RCE1CKA100BG	16V 10U	2	
C611-14	ECBT1H150JC5	50V 15P	4		C842	RCE1HKA47BG	50V 0.47U	1	
C615, 16	ECKR2H103ZU	500V 0.01U	2		C843	RCE1HKA47BG	50V 4.7U	1	
C617	ECEA1H2R2SB	50V 2.2U	1		C844	RCE1HKA47BG	50V 0.47U	1	
C618	ECA1HM101B	50V 100U	1		C845	RCE1HKA47BG	50V 4.7U	1	
C620, 21	ECQV1H473JM3	50V 0.047U	2		C846	ECQV1H154JM3	50V 0.15U	1	
C624, 25	ECQV1H473JM3	50V 0.047U	2		C847	RCE1HKA33BG	50V 3.3U	1	
C628, 29	RCE1CKA100BG	16V 10U	2		C848	ECQV1H154JM3	50V 0.15U	1	
C631, 32	ECBT1H102KB5	50V 1000P	2		C849, 50	RCE1CKA100BG	16V 10U	2	
C633	ECBTIE103ZF5	25V 0.01U	1		C851	RCE1CKA470BG	16V 47U	1	
C654	ECEA1EKN3R3B	25V 3.3U	1		C852	ECBT1H681KB5	50V 680P	1	
C655	ECA2AM010B	100V 1U	1		C853	ECQV1H473JM3	50V 0.047U	1	
C656	ECBTIE103ZF5	25V 0.01U	1		C854	ECQV1H683JM3	50V 0.068U	1	
C657	ECBT1H104ZF5	50V 0.1U	1		C855	ECQV1H473JM3	50V 0.047U	1	
△ C701-04	ECA1VM472E	35V 4700U	4		C856	ECQV1H683JM3	50V 0.068U	1	
C705	RCE1CKA100BG	16V 10U	1		C859, 60	ECBT1H101KB5	50V 100P	2	
C706	RCE1VKA100BG	35V 10U	1		C861, 62	RCE1CKA100BG	16V 10U	2	
C707	ECBTIE103ZF5	25V 0.01U	1		C863, 64	ECEA1CKA220B	16V 22U	2	
C708	RCE1CKA100BG	16V 10U	1		C865, 66	RCE1HKA33BG	50V 3.3U	2	
C709	ECBT1H104ZF5	50V 0.1U	1		C867-69	ECEA1CKA330B	16V 33U	3	
C710	ECBTIE103ZF5	25V 0.01U	1		C870	RCE1CKA100BG	16V 10U	1	
C711	RCE1EM471BV	25V 470U	1		C871, 72	ECBT1H470J5	50V 47P	2	
C714	ECBT1H102KB5	50V 1000P	1		C873, 74	ECEA0JKA470B	6.3V 47U	2	
△ C715	ECA1EM472E	25V 4700U	1		C875	ECQV1H823JM3	50V 0.082U	1	
C717	ECEA1CKA330B	16V 33U	1		C876	ECEA1CKA330B	16V 33U	1	
C718	RCE1AKA101BG	10V 100U	1		C877	ECEA0JKA101B	6.3V 100U	1	
C719, 20	ECBTIE103ZF5	25V 0.01U	2		C878	ECBTIE103ZF5	25V 0.01U	1	
C721	RCE1AKA101BG	10V 100U	1		C879	ECFR1C683KR	16V 0.068U	1	
C723	ECBTIE103ZF5	25V 0.01U	1		C880	ECFR1C333KR	16V 0.033U	1	
C725	RCE1CKA100BG	16V 10U	1		C881	ECQV1H154JM3	50V 0.15U	1	
C726	ECBTIE103ZF5	25V 0.01U	1		C882	ECEA1CKA101B	16V 100U	1	
C731	ECBT1H102KB5	50V 1000P	1		C884	ECQV1H104JM3	50V 0.1U	1	
C732	ECBTIE223ZF5	25V 0.022U	1		C885	ECBTIC472KR5	16V 4700P	1	
C733	ECBTIE103ZF5	25V 0.01U	1		C886	ECBT1H101KB5	50V 100P	1	
C734	RCE1CKA100BG	16V 10U	1		C887	ECBT1H102KB5	50V 1000P	1	
△ C736	ECA1EM101B	16V 220UF	1		C888, 89	ECBT1H221KB5	50V 220P	2	
△ C737, 38	ECA1HM101B	50V 100U	2		C890	RCE1AKA330BG	10V 33U	1	
△ C739	ECA1JM101B	63V 100U	1		C891, 92	RCE1AKA470BG	10V 47U	2	
C740	RCE1CKA100BG	16V 10U	1		C893, 94	RCE1CKA100BG	16V 10U	2	
C741	ECBT1H104ZF5	50V 0.1U	1		C901	ECBT1H104ZF5	50V 0.1U	1	
C751, 52	ECA1AM471B	10V 470U	2		C902	ECA0JM102B	6.3V 1000U	1	
C753	ECBT1H101KB5	50V 100P	1		C903, 04	ECBTIE103ZF5	25V 0.01U	2	
C761	ECQE1104KF3	100V 0.1U	1		C905-08	ECBT1H471KB5	50V 470P	4	
C801	ECQV1H154JM3	50V 0.15U	1		C909	ECBT1H102KB5	50V 1000P	1	
C802	RCE1HKA33BG	50V 3.3U	1		C910	ECBT1H150JC5	50V 15P	1	
C803	ECQV1H154JM3	50V 0.15U	1		C911	ECBT1H180JC5	50V 18P	1	
C804	RCE1HKA47BG	50V 4.7U	1		C912	ECBT1H104ZF5	50V 0.1U	1	
C805	RCE1HKA47BG	50V 0.47U	1		C913	RCE1CKA100BG	16V 10U	1	
C806	RCE1HKA47BG	50V 4.7U	1		C914	ECEA1HKA2R2B	50V 2.2U	1	
C807	RCE1HKA47BG	50V 0.47U	1		C915	ECBTIE103ZF5	25V 0.01U	1	
C808	RCE1CKA100BG	16V 10U	1		C916	ECA0JKF101B	6.3V 100U	1	
C809	ECEA1HKA010B	50V 1U	1		C917	ECBTIE103ZF5	25V 0.01U	1	
C810	ECBTIE103ZF5	25V 0.01U	1		C918	ECEA0JKA221B	6.3V 220U	1	
C811, 12	ECEA1CKA330B	16V 33U	2		C919, 20	ECEA1HKS2R2B	50V 2.2U	2	
C813	ECA1CM221B	16V 220U	1		C921	ECBT1H102KB5	50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C922	ECEA1VKA330B	35V 33U	1		D935, 36	MA165	DIODE	2	
C1101, 02	ECBT1H473ZF5	50V 0.047U	2		D940, 41	MA165	DIODE	2	
C1103-06	ECBT1H102KB5	50V 1000P	4		D943, 44	MA165	DIODE	2	
C1107, 08	ECBT1H473ZF5	50V 0.047U	2		D971, 72	MA165	DIODE	2	
C1109-12	ECBT1H102KB5	50V 1000P	4		△ D973	MA4039MTA	DIODE	1	
C1113, 14	ECBT1H473ZF5	50V 0.047U	2		D974	MA165	DIODE	1	
CF201	RLFFETMGD01L	CERAMIC FILTER	1		E601	SNE1004-2	EARTH TERMINAL	1	
CF202	RLFFETMGD01L	CERAMIC FILTER	1		E603	SNE1004-2	EARTH TERMINAL	1	
CN101B, 2B	RJU100W07	CONNECTOR (7P)	2		△ F1	XBA2C20TB0	FUSE	1	
CN201	RJU057W010	CONNECTOR (10P)	1		FC1, C2	EYF52BC	FUSE HOLDER	2	
CN203	RJU057W012	CONNECTOR (12P)	1		FL901	RSL0251-F	DISPLAY TUBE	1	
CN601	SJT30943-V	CONNECTOR (9P)	1		IC101	LA1833MN-TLM	IC	1	
CN701-09	RJS1A1101T1	CONNECTOR (1P)	9		IC102	LC72131MDTLM	IC	1	
CN711-13	RJS1A1101T1	CONNECTOR (1P)	3		IC151	LC72721M-TLM	IC	1	(EG, EP)
CN715	RJU057W012	CONNECTOR (12P)	1		IC201	AN6558SFE2	IC	1	
CN721	SJT30943-V	CONNECTOR (9P)	1		IC301	M62433AFP	IC	1	
CN722	SJT30443-V	CONNECTOR (4P)	1		IC501	M5218AP	IC	1	
CN801	RJU057W009	CONNECTOR (9P)	1		△ IC601	RSN307M44A	IC	1	
CN802	RJU057W008	CONNECTOR (8P)	1		IC801	LV1030M	IC	1	
CN803	RJU057W007	CONNECTOR (7P)	1		IC802	M5228FPE1	IC	1	
CN904	RJS4T7ZA	CONNECTOR (4P)	1		IC803	M62425FPE1	IC	1	
CP101B, 2B	RJT100W07	CONNECTOR (7P)	2		IC804	M5228FPE1	IC	1	
CP201	RJT057W010-1	CONNECTOR (10P)	1		IC901	M38199MF107K	IC	1	
CP203	RJT057W012-1	CONNECTOR (12P)	1		JK101	RJH5210M	ANTENNA	1	
CP715	RJT057W012-1	CONNECTOR (12P)	1		JK201	RJT065K19	SYSTEM	1	
CP801	RJT057W009-1	CONNECTOR (9P)	1		JK203	SJF3068-7N	EXT IN	1	
CP802	RJT057W008-1	CONNECTOR (8P)	1		JK204	SJF3069-5N	EXT OUT, PHONO	1	
CP803	RJT057W007-1	CONNECTOR (7P)	1		JK501	RJR0054B	SPEAKER	1	
△ D101	MA4051MTA	DIODE	1		JK502	RJH3301-J	SURROUND/CENTER SPEAKER	1	
D151	MA4051MTA	DIODE	1	(EG, EP)	JK503	RJR0054C	SPEAKER	1	
D331	MA4051LTA	DIODE	1		JK551	SJT3213	FAN MOTOR	1	
△ D515	MA4140MTA	DIODE	1		JK701	SJS9236	AC INLET	1	
D551, 52	MA165	DIODE	2		JK903	RJJ37TN01-C	HEADPHONES	1	
D553	MA700TA	DIODE	1		L101, 02	ELESNR68MA	COIL	2	
D554	MA165	DIODE	1		L103	ELEXT47MA9	COIL	1	
D555	MA4100MTA	DIODE	1		L151, 52	ELEXT101KA9	COIL	2	(EG, EP)
D558	MA165	DIODE	1		L601-04	RLQYR73MW1-0	COIL	4	
D559, 60	MA4020LTA	DIODE	2		△ L701	RLQ2271M-K	COIL	1	
D601, 02	SB360L6508	DIODE	2		L801	ELEXT1ROKA9	COIL	1	
△ D651	MA4180LTA	DIODE	1		L901	RLQA100JT-Y	COIL	1	
△ D652, 53	MA4140MTA	DIODE	2		P1	RPF0139	POLYETHYLENE COVER	1	
D654	MA4030MTA	DIODE	1		P2	RP33514	PACKING CASE (SH-EH600)	1	
D655	MA185TA	DIODE	1		P2	RP33515	PACKING CASE (RS-EH600)	1	
D657, 58	MA165	DIODE	2		P2	RP33516	PACKING CASE (SL-EH600)	1	
△ D701-04	1N5402BF	DIODE	4		P2	RP33517	PACKING CASE (SA-EH600)	1	
△ D705-08	RL1N4003N02	DIODE	4		P3	RP33863	PACKING CASE (SYSTEM)	1	(E)
D709	MA165	DIODE	1		P3	RP33864	PACKING CASE (SYSTEM)	1	(EP)
D710	MA4051MTA	DIODE	1		P3	RP33943	PACKING CASE (SYSTEM)	1	(EG)
D711	RL1N4003N02	DIODE	1		P3	RP33944	PACKING CASE (SYSTEM)	1	(EB)
△ D713, 14	MA185TA	DIODE	2		P4	RPN1037	PAD (RS-EH600)	1	
D715	MA165	DIODE	1		P4	RPN1038	PAD (SH-EH600)	1	
△ D717-20	RL1N4003N02	DIODE	4		P4	RPN1039-1	PAD (SL-EH600)	1	
△ D721	MA4300MTA	DIODE	1		P4	RPN1117	PAD (SA-EH500)	1	
△ D723	MA4150M	DIODE	1		P5	RPQ0769	SPACER	1	
△ D725	MA4082LTA	DIODE	1		P6	SPP740	SHEET	1	
△ D727	MA4062-H	DIODE	1		Q101, 02	2SC2787L	TRANSISTOR	2	
△ D730	MA4100MTA	DIODE	1		Q106	UN4111	TRANSISTOR	1	
D732-36	MA165	DIODE	5		Q110	2SC3311AR	TRANSISTOR	1	
△ D737	MA4082LTA	DIODE	1		Q305, 06	2SD1450STA	TRANSISTOR	2	
D738, 39	MA165	DIODE	2		Q307, 08	2SD2144STA	TRANSISTOR	2	
△ D751, 52	1N5402BF	DIODE	2		Q309, 10	UN4115TA	TRANSISTOR	2	
△ D753-55	RL1N4003N02	DIODE	3		Q503	2SD1450STA	TRANSISTOR	1	
D801-05	MA165	DIODE	5		Q551	2SA1995RSTA	TRANSISTOR	1	
△ D808	MA4120MTA	DIODE	1		Q553	2SD2144STA	TRANSISTOR	1	
D901, 02	1SS291TA	DIODE	2		Q554	2SA1995RSTA	TRANSISTOR	1	
D903, 04	MA165	DIODE	2		Q555	2SD2144STA	TRANSISTOR	1	
D905	1SS291TA	DIODE	1						
D906, 07	MA165	DIODE	2						
D908	LNJ301MPUJAD	LED	1						
D909, 10	MA165	DIODE	2						
D933	MA165	DIODE	1	(EG, EP)					

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q556	2SC5398RSTA	TRANSISTOR	1		R143	ERDS2TJ223T	1/4W 22K	1	
Q557	2SA1995RSTA	TRANSISTOR	1		R145, 46	ERDS2FJ104	1/4W 100K	2	
Q605	2SC5398RSTA	TRANSISTOR	1		R151, 52	ERDS2TJ102T	1/4W 1K	2	(EG, EP)
Q651	2SB1238QRTV2	TRANSISTOR	1		R153, 54	ERDS2TJ104T	1/4W 100K	2	(EG, EP)
Q652	2SD1859QRTV2	TRANSISTOR	1		R155	ERDS2TJ121T	1/4W 120	1	(EG, EP)
Q653	UN4112A1TA	TRANSISTOR	1		R158, 59	ERDS2TJ102T	1/4W 1K	2	(EG, EP)
Q654	2SD1859QRTV2	TRANSISTOR	1		R201, 02	ERDS2FJ102	1/4W 1K	2	
Q655	UN4211TA	TRANSISTOR	1		R203, 04	ERDS2TJ473T	1/4W 47K	2	
Q656	2SC5398RSTA	TRANSISTOR	1		R205, 06	ERDS2TJ331T	1/4W 330	2	
Q657	2SB1238QRTV2	TRANSISTOR	1		R207, 08	ERDS2TJ271T	1/4W 270	2	
Q701	2SD2374PQAU	TRANSISTOR	1		R209, 10	ERDS2FJ184	1/4W 180K	2	
Q702	2SB1548PQAU	TRANSISTOR	1		R211, 12	ERDS2TJ123T	1/4W 12K	2	
Q703	2SD2374PQAU	TRANSISTOR	1		R213, 14	ERDS2FJ680	1/4W 68	2	
Q704	UN4211TA	TRANSISTOR	1		R215, 16	ERDS2FJ272	1/4W 2.7K	2	
Q705	2SA1995RSTA	TRANSISTOR	1		R217, 18	ERDS2FJ392	1/4W 3.9K	2	
Q707	2SB621AQRSTA	TRANSISTOR	1		R221, 22	ERDS2FJ52	1/4W 7.5K	2	
Q708	2SD2137PQTA	TRANSISTOR	1		R223, 24	ERDS2TJ562	1/4W 5.6K	2	
Q709	2SD2144STA	TRANSISTOR	1		R225, 26	ERDS2FJ104	1/4W 100K	2	
Q711	2SB1417PQTA	TRANSISTOR	1		R227, 28	ERDS2FJ222	1/4W 2.2K	2	
Q712	2SB1548PQAU	TRANSISTOR	1		R229, 30	ERDS2FJ102	1/4W 1K	2	
Q718	UN4111	TRANSISTOR	1		R231, 32	ERDS2FJ103	1/4W 10K	2	
Q719, 20	2SD1450STA	TRANSISTOR	2		R233, 34	ERDS2FJ682	1/4W 6.8K	2	
Q721	2SC3311AIQST	TRANSISTOR	1		R235, 36	ERDS2FJ102	1/4W 1K	2	
Q722	2SA1309AIRTA	TRANSISTOR	1		R239-42	ERDS2FJ102	1/4W 1K	4	
Q723	2SC3940AQSTA	TRANSISTOR	1		R243, 44	ERDS2TJ152T	1/4W 1.5K	2	
Q724	UN4211TA	TRANSISTOR	1		R245, 46	ERDS2TJ332T	1/4W 3.3K	2	
Q725	2SC5398RSTA	TRANSISTOR	1		R249, 50	ERDS2FJ101	1/4W 100	2	
Q801, 02	2SD1450STA	TRANSISTOR	2		R251	ERDS2FJ222	1/4W 2.2K	1	
Q803, 04	UN4115TA	TRANSISTOR	2		R252	ERDS2FJ103	1/4W 10K	1	
Q805, 06	2SD1450STA	TRANSISTOR	2		R253, 54	ERDS2FJ104	1/4W 100K	2	
Q807	UN4115TA	TRANSISTOR	1		R255, 56	ERDS2TJ123T	1/4W 12K	2	
Q808-10	2SD1450STA	TRANSISTOR	3		R257, 58	ERDS2TJ562	1/4W 5.6K	2	
Q811	2SD2137PQTA	TRANSISTOR	1		R301	ERDS2TJ223T	1/4W 22K	1	
Q812, 13	UN4115TA	TRANSISTOR	2		R302	ERDS2FJ472	1/4W 4.7K	1	
Q814	UN4211TA	TRANSISTOR	1		R303, 04	ERDS2FJ222	1/4W 2.2K	2	
Q815, 16	2SC3311AIQST	TRANSISTOR	2		R305, 06	ERDS2FJ102	1/4W 1K	2	
Q901	UN4214TA	TRANSISTOR	1		R307, 08	ERDS2FJ104	1/4W 100K	2	
Q902-04	2SC3311AIQST	TRANSISTOR	3		R309, 10	ERDS2FJ102	1/4W 1K	2	
Q906	UN411FTA	TRANSISTOR	1		R311, 12	ERDS2FJ104	1/4W 100K	2	
R102	ERDS2FJ472	1/4W 4.7K	1		R313, 14	ERDS2TJ121T	1/4W 120	2	
R103	ERDS2FJ101	1/4W 100	1		R315	ERDS2FJ104	1/4W 100K	1	
R104	ERDS2FJ103	1/4W 10K	1		R316	ERDS2FJ222	1/4W 2.2K	1	
R105	ERDS2TJ471T	1/4W 470	1		R317	ERDS2FJ105	1/4W 1M	1	
R106	ERDS2FJ474	1/4W 470K	1		R318	ERDS2TJ153T	1/4W 15K	1	
R107	ERDS2TJ331T	1/4W 330	1		R323	ERDS2FJ272	1/4W 2.7K	1	
R108	ERDS2FJ474	1/4W 470K	1		R324	ERDS2TJ223T	1/4W 22K	1	
R109	ERDS2TJ331T	1/4W 330	1		R325	ERDS2FJ272	1/4W 2.7K	1	
R110	ERDS2FJ102	1/4W 1K	1		R326	ERDS2TJ332T	1/4W 3.3K	1	
R111	ERDS2TJ391T	1/4W 390	1		R327	ERDS2FJ392	1/4W 3.9K	1	
R112	ERDS2FJ104	1/4W 100K	1		R328	ERDS2TJ332T	1/4W 3.3K	1	
R113	ERDS2FJ103	1/4W 10K	1		R329	ERDS2FJ103	1/4W 10K	1	
R114	ERDS2TJ562	1/4W 5.6K	1		R330	ERDS2TJ332T	1/4W 3.3K	1	
R115	ERDS2TJ561T	1/4W 560	1		R331	ERDS2FJ102	1/4W 1K	1	
R116	ERDS2FJ102	1/4W 1K	1		R332-34	ERDS2FJ222	1/4W 2.2K	3	
R117	ERDS2TJ683T	1/4W 68K	1		R335, 36	ERDS2TJ333T	1/4W 33K	2	
R118	ERDS2FJ472	1/4W 4.7K	1		R338	ERDS2FJ392	1/4W 3.9K	1	
R119	ERDS2TJ103T	1/4W 10K	1		R341, 42	ERDS2FJ222	1/4W 2.2K	2	
R120	ERDS2TJ473T	1/4W 47K	1		R343	ERDS2TJ334T	1/4W 330K	1	
R121	ERDS2TJ223T	1/4W 22K	1		R344, 45	ERDS2FJ392	1/4W 3.9K	2	
R122	ERDS2FJ272	1/4W 2.7K	1		R360	ERDS2TJ223T	1/4W 22K	1	
R123	ERDS2TJ683T	1/4W 68K	1		R364	ERDS2FJ103	1/4W 10K	1	
R124	ERDS2TJ271T	1/4W 270	1		R365	ERDS2TJ223T	1/4W 22K	1	
R125, 26	ERDS2TJ152T	1/4W 1.5K	2		R371, 72	ERDS2TJ100T	1/4W 10	2	
R127	ERDS2TJ471T	1/4W 470	1		R380	ERDS2TJ153T	1/4W 15K	1	
R128	ERDS2TJ820T	1/4W 82	1		R501, 02	ERDS2FJ102	1/4W 1K	2	
R129	ERDS2TJ273T	1/4W 27K	1		R503, 04	ERDS2TJ333T	1/4W 33K	2	
R130	ERDS2FJ103	1/4W 10K	1		R505, 06	ERDS2TJ123T	1/4W 12K	2	
R131	ERDS2FJ680	1/4W 68	1		R507, 08	ERDS2TJ332T	1/4W 3.3K	2	
R132	ERDS2FJ103	1/4W 10K	1		R509-12	ERDS2FJ101	1/4W 100	4	
R133-37	ERDS2FJ102	1/4W 1K	5		△ R515	ERG1SJ182	1W 1.8K	1	
R138	ERDS2FJ103	1/4W 10K	1		R551	ERDS2FJ183	1/4W 18K	1	
R139	ERDS2TJ332T	1/4W 3.3K	1		R552	ERDS2TJ473T	1/4W 47K	1	
R140	ERDS2FJ472	1/4W 4.7K	1		R555	ERDS2TJ223T	1/4W 22K	1	
R141, 42	ERDS2FJ102	1/4W 1K	2		R556	ERDS2FJ104	1/4W 100K	1	
					R557	ERDS2FJ103	1/4W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R558	ERDS2FJ102	1/4W 1K	1		△ R767	ERDS2FJ4R7	1/4W 4.7	1	
R559	ERDS2FJ472	1/4W 4.7K	1		R768	ERDS2FJ101	1/4W 100	1	
R560, 61	ERDS2FJ104	1/4W 100K	2		△ R791, 92	RSFMB30KT-L	PROTECTOR	2	
R566	ERDS2TJ683T	1/4W 68K	1		R801, 02	ERDS2FJ393	1/4W 39K	2	
R567	ERG1SJ220	1W 22	1		R803, 04	ERDS2TJ153T	1/4W 15K	2	
R568	ERDS2FJ101	1/4W 100	1		R805	ERDS2TJ433T	1/4W 43K	1	
R569	ERDS2FJ103	1/4W 10K	1		R806	ERDS2TJ333T	1/4W 33K	1	
R570	ERDS2TJ225T	1/4W 2.2M	1		R807	ERDS2TJ153T	1/4W 15K	1	
R591	ERDS2FJ472	1/4W 4.7K	1		R808	ERDS2FJ104	1/4W 100K	1	
R604, 05	ERDS2FJ682	1/4W 6.8K	2		R809, 10	ERDS2TJ223T	1/4W 22K	2	
R613	ERDS2FJ104	1/4W 100K	1		R811	ERDS2FJ103	1/4W 10K	1	
R614	ERDS2FJ124	1/4W 120K	1		R812	ERDS2TJ153T	1/4W 15K	1	
R615, 16	ERDS2TJ182T	1/4W 1.8K	2		R813, 14	ERDS2TJ223T	1/4W 22K	2	
R619, 20	ERDS2TJ563T	1/4W 56K	2		R815, 16	ERDS2TJ473T	1/4W 47K	2	
R621	ERDS2TJ273T	1/4W 27K	1		R817	ERDS2TJ332T	1/4W 3.3K	1	
R622	ERDS2TJ473T	1/4W 47K	1		R818	ERDS2TJ153T	1/4W 15K	1	
R623	ERDS2FJ474	1/4W 470K	1		R819	ERDS2FJ393	1/4W 39K	1	
R624	ERDS2TJ223T	1/4W 22K	1		R820	ERDS2TJ274T	1/4W 270K	1	
R626	ERDS2TJ154T	1/4W 150K	1		R821	ERDS2TJ822T	1/4W 8.2K	1	
R627	ERDS2FJ124	1/4W 120K	1		R822	ERDS2FJ102	1/4W 1K	1	
R628	ERDS2FJ184	1/4W 180K	1		R823	ERDS2FJ105	1/4W 1M	1	
R629	ERDS2TJ683T	1/4W 68K	1		R824	ERDS2FJ823	1/4W 82K	1	
R630	ERDS2TJ473T	1/4W 47K	1		R825-27	ERDS2TJ332T	1/4W 3.3K	3	
R631	ERDS2FJ224	1/4W 220K	1		R828	ERDS2FJ823	1/4W 82K	1	
R632	ERDS2TKF5362	1/4W 53.6K	1		R829, 30	ERDS2TJ223T	1/4W 22K	2	
R633	ERDS2TKG5622	1/4W 56.2K	1		R831	ERDS2FJ392	1/4W 3.9K	1	
△ R634, 35	ERDS1FJ272	1/2W 2.7K	2		R832	ERDS2TJ182T	1/4W 1.8K	1	
△ R636	ERDS1FJ561	1/2W 560	1		R833, 34	ERDS2FJ104	1/4W 100K	2	
R637	ERDS2TJ154T	1/4W 150K	1		R835, 36	ERDS2FJ222	1/4W 2.2K	2	
R638	ERDS2TJ684T	1/4W 680K	1		R837, 38	ERDS2TJ332T	1/4W 3.3K	2	
△ R639-46	ERDS1FJ100	1/2W 10	8		R839, 40	ERDS2FJ102	1/4W 1K	2	
△ R647, 48	ERDS2FVJ2R2T	1/4W 2.2	2		R841	ERDS2FJ103	1/4W 10K	1	
R649, 50	ERDS2FJ103	1/4W 10K	2		R842	ERDS2FJ104	1/4W 100K	1	
R651	ERDS2FJ272	1/4W 2.7K	1		R843, 44	ERDS2FJ222	1/4W 2.2K	2	
R652	ERDS2FJ393	1/4W 39K	1		R845	ERDS2FJ104	1/4W 100K	1	
R653, 54	ERDS2FJ272	1/4W 2.7K	2		R846	ERDS2TJ122T	1/4W 1.2K	1	
R655-58	ERDS2FJ183	1/4W 18K	4		R847, 48	ERDS2FJ472	1/4W 4.7K	2	
R659	ERDS2FJ222	1/4W 2.2K	1		R849	ERDS2TJ122T	1/4W 1.2K	1	
R663	ERDS2TJ154T	1/4W 150K	1		R850	ERDS2FJ222	1/4W 2.2K	1	
R665	ERG1SJ682E	1W 6.8K	1		R851	ERDS2TJ473T	1/4W 47K	1	
R666	ERDS2FJ272	1/4W 2.7K	1		R852	ERDS2FJ393	1/4W 39K	1	
R667	ERDS2TJ331T	1/4W 330	1		R853	ERDS2TJ473T	1/4W 47K	1	
R701, 02	ERDS2TJ273T	1/4W 27K	2		R854	ERDS2FJ393	1/4W 39K	1	
R703, 04	ERDS2FJ101	1/4W 100	2		R855	ERDS2FJ104	1/4W 100K	1	
△ R707	ERDS2FJ4R7	1/4W 4.7	1		R856, 57	ERDS2TJ123T	1/4W 12K	2	
R708	ERDS2FJ472	1/4W 4.7K	1		R859, 60	ERDS2TJ121T	1/4W 120	2	
R712	ERDS2TJ152T	1/4W 1.5K	1		R861	ERDS2FJ105	1/4W 1M	1	
R713, 14	ERDS2TJ332T	1/4W 3.3K	2		R862	ERDS2FJ472	1/4W 4.7K	1	
R715	ERDS2FJ183	1/4W 18K	1		R863, 64	ERDS2FJ105	1/4W 1M	2	
R717	ERDS2TJ473T	1/4W 47K	1		R865	ERDS2FJ102	1/4W 1K	1	
R719	ERDS2TJ332T	1/4W 3.3K	1		R866, 67	ERDS2FJ222	1/4W 2.2K	2	
R720	ERDS2FJ272	1/4W 2.7K	1		R868-70	ERDS2FJ102	1/4W 1K	3	
△ R721	ERDS2FCJ4R7	1/4W 4.7	1		R871, 72	ERDS2FJ105	1/4W 1M	2	
△ R722	ERQ16NKKW2R2E	1/6W 2.2	1		△ R873	ERDS2FCJ4R7	1/4W 4.7	1	
R723	ERDS2TJ562	1/4W 5.6K	1		R874	ERDS2FJ104	1/4W 100K	1	
R724	ERDS2FJ392	1/4W 3.9K	1		R875	ERDS2FJ102	1/4W 1K	1	
R725	ERDS2TJ100T	1/4W 10	1		R876	ERDS2FJ224	1/4W 220K	1	
R727	ERDS2FJ392	1/4W 3.9K	1		R877, 78	ERDS2FJ472	1/4W 4.7K	2	
R729	ERDS2TJ221T	1/4W 220	1		R879	ERDS2TJ562	1/4W 5.6K	1	
△ R735	ERQ16NKKW2R2E	1/6W 2.2	1		R880, 81	ERDS2TJ221T	1/4W 220	2	
R736	ERDS2FJ102	1/4W 1K	1		R883, 84	ERDS2TJ563T	1/4W 56K	2	
R737	ERDS2TJ221T	1/4W 220	1		R885, 86	ERDS2TJ332T	1/4W 3.3K	2	
R738	ERDS2FJ392	1/4W 3.9K	1		R887, 88	ERDS2FJ222	1/4W 2.2K	2	
R739	ERDS2TJ473T	1/4W 47K	1		R889	ERDS2TJ152T	1/4W 1.5K	1	
R748	ERDS2FJ102	1/4W 1K	1		R891	ERDS2TJ331T	1/4W 330	1	
R749	ERDS2TJ271T	1/4W 270	1		R893	ERDS2FJ103	1/4W 10K	1	
R751-54	ERDS2FJ4R7	1/4W 4.7	4		R894	ERDS2TJ153T	1/4W 15K	1	
△ R755	ERDS1FJ8R2	1/2W 8.2	1		R901	ERDS2TJ821T	1/4W 820	1	
△ R756	ERDS1FJ4R7	1/2W 4.7	1		R902	ERDS2FJ102	1/4W 1K	1	
R757-59	ERDS2FJ103	1/4W 10K	3		R903	ERDS2TJ122T	1/4W 1.2K	1	
R761, 62	ERDS2TJ822T	1/4W 8.2K	2		R904	ERDS2TJ152T	1/4W 1.5K	1	
R763	ERDS2FJ472	1/4W 4.7K	1		R905	ERDS2TJ182T	1/4W 1.8K	1	
R764	ERDS2TJ331T	1/4W 330	1		R906	ERDS2FJ222	1/4W 2.2K	1	
△ R765	ERDS1FJ561	1/2W 560	1		R907	ERDS2FJ272	1/4W 2.7K	1	
R766	ERDS2FJ102	1/4W 1K	1		R908	ERDS2FJ472	1/4W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R909	ERDS2FJ682	1/4W 6.8K	1	
R910	ERDS2TJ123T	1/4W 12K	1	
R911	ERDS2TJ223T	1/4W 22K	1	
R912	ERDS2TJ821T	1/4W 820	1	(EG, EP)
R913	ERDS2TJ102T	1/4W 1K	1	(EG, EP)
R914	ERDS2TJ122T	1/4W 1.2K	1	(EG, EP)
R915	ERDS2TJ152T	1/4W 1.5K	1	(EG, EP)
R919-23	ERDS2FJ103	1/4W 10K	5	
R924-27	ERDS2FJ102	1/4W 1K	4	
R929	ERDS2FJ102	1/4W 1K	1	
R930	ERDS2FJ101	1/4W 100	1	
R931-36	ERDS2FJ102	1/4W 1K	6	
R937	ERDS2TJ562	1/4W 5.6K	1	
R938	ERDS2FJ102	1/4W 1K	1	
R939	ERDS2TJ152T	1/4W 1.5K	1	
R940, 41	ERDS2FJ102	1/4W 1K	2	
R942	ERDS2FJ101	1/4W 100	1	
R944	ERDS2TJ223T	1/4W 22K	1	
R946	ERDS2FJ102	1/4W 1K	1	
R947, 48	ERDS2FJ104	1/4W 100K	2	(E, EB)
R949	ERDS2FJ472	1/4W 4.7K	1	
R950	ERDS2FJ101	1/4W 100	1	
R951	ERDS2TJ334T	1/4W 330K	1	
R952	ERDS2TJ106T	1/4W 10M	1	
R953	ERDS2FJ101	1/4W 100	1	
R954	ERDS2FJ104	1/4W 100K	1	
R955	ERDS2TJ824T	1/4W 820K	1	
R956-58	ERDS2FJ102	1/4W 1K	3	
R959	ERDS2TJ471T	1/4W 470	1	
R960	ERDS2TJ152T	1/4W 1.5K	1	
R961, 62	ERDS2TJ223T	1/4W 22K	2	
R963, 64	ERDS2FJ103	1/4W 10K	2	
R965	ERDS2FJ472	1/4W 4.7K	1	
R966	ERDS2FJ103	1/4W 10K	1	
R967	ERDS2TJ473T	1/4W 47K	1	
R968	ERDS2FJ103	1/4W 10K	1	
R969, 70	ERDS2FJ472	1/4W 4.7K	2	
R971	ERDS2TJ473T	1/4W 47K	1	
R972	ERDS2TJ223T	1/4W 22K	1	
R974	ERDS2FJ101	1/4W 100	1	
R976	ERDS2TJ223T	1/4W 22K	1	
R977-81	ERDS2FJ104	1/4W 100K	5	
R984, 85	ERDS2TJ473T	1/4W 47K	2	
R986-88	ERDS2FJ102	1/4W 1K	3	
R989, 90	ERDS2FJ393	1/4W 39K	2	
R991	ERDS2TJ473T	1/4W 47K	1	
R992	ERDS2FJ181	1/4W 180	1	
R993, 94	ERDS2FJ104	1/4W 100K	2	
R995	ERDS2FJ181	1/4W 180	1	
R996, 97	ERDS2TJ151T	1/4W 150	2	
△ RL701	RSY0030-C	RELAY	1	
S901-12	EVQPTD05Q	SW	12	
S913, 14	EVQ21405R	SW	2	(EG, EP)
△ T501	RTP2N5B010	POWER TRANSFORMER	1	
VR901	EVQVBXFK124B	V. R.	1	
X102	RLFDF113DD	OSCILLATOR	1	
X103	RSXC7M20S05T	OSCILLATOR	1	
X151	RSXC4M33S02T	OSCILLATOR	1	(EG, EP)
X801	RSXY8M00M06T	OSCILLATOR	1	
X901	EF0EC6004T4	OSCILLATOR	1	
X902	RSXD32K7S02	OSCILLATOR	1	
Z101	RLA22003M-T	COMPONENT COMBINATION	1	
Z102	RL12Z006M-T	COMPONENT COMBINATION	1	
Z120	RAL0035	FM FRONT END	1	
Z901	RCDGP1U28XD	REMOTE SENSOR	1	



■ Packaging

