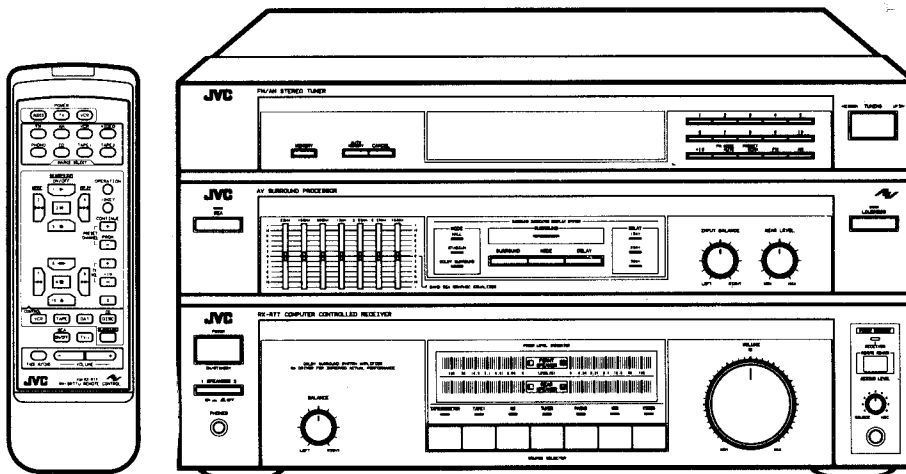


JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL NO. **RX-R77BK**



COMPU LINK
 Remote
 Control Component

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Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

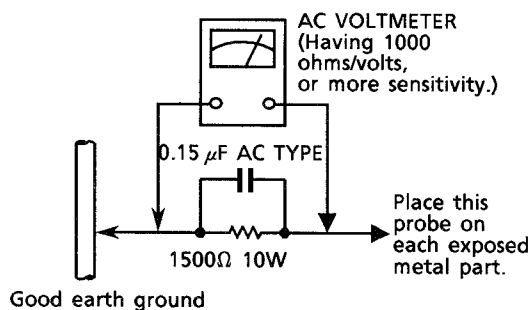
● Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor.

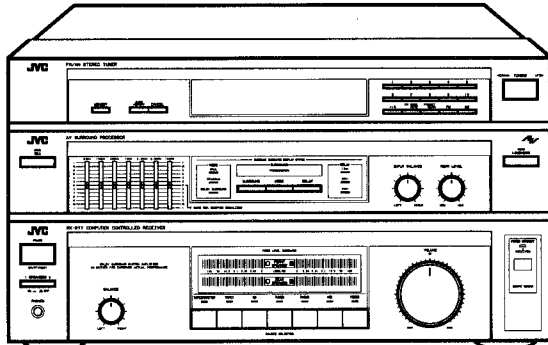
Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



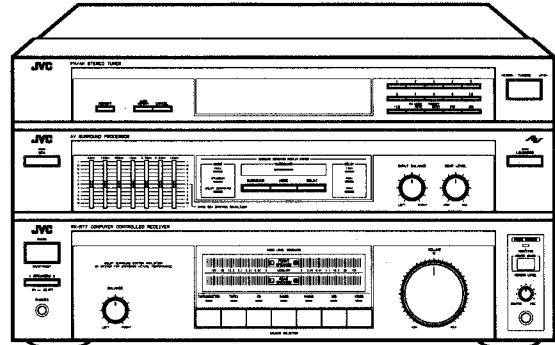
Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Introduction



For U.S.A. and Canada



Except for U.S.A. and Canada

Read This First

Thank you for purchasing this JVC RX-R77BK Receiver. We hope it will be a valued addition to your stereo system. Be sure to read these instructions carefully before operating the receiver. This manual gives you the basic information you need to set up and use your receiver. It explains everything you need to know from turning on the power switch to basic troubleshooting. Please consult your JVC dealer if you have any questions about the receiver.

Use this manual to help you with the following:

- Connect your other stereo components to the receiver.
- Learn the functions of the controls and indicators on the receiver.
- Preset radio stations into the receiver's memory.
- Operate the receiver.
- Troubleshoot, if there is a problem with the receiver.

Use the following guidelines to help you follow the instructions in this manual:

- Keys or buttons to be pressed are indicated with capital letters, like this: TUNING key.
- Connection points on the back of the receiver are indicated with all capital letters, like this: PHONO
- Names of indicators that light up on the receiver are indicated with all capital letters, like this: TUNED
- Steps that you need to follow to get the correct results, are labeled **Important!**
- Additional information that is helpful to know, is labeled **Note:**

Before Installing Your Receiver

Locating the Receiver

Install the receiver in a place that is level and protected from moisture.

The temperature around the receiver must be between 23° and 104° Fahrenheit (-5° and 40° Celsius).

Make sure there is good ventilation around the receiver. Poor ventilation could cause over-heating and damage the receiver.

The receiver could cause some interference with television reception. Locate the receiver away from your TV to prevent interference.

Making Power Connections

Do not handle the power cord with wet hands.

Do not pull on the power cord to unplug the receiver. Always pull the molded plug at the end of the cord instead.

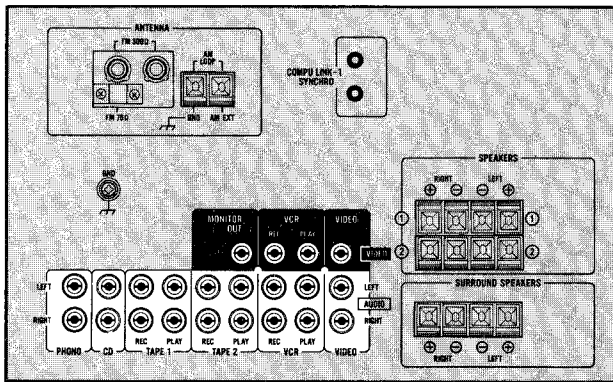
Handling the Receiver

Do not insert any metallic object into the receiver.

Caution: To reduce risks, such as electric shocks or fires:

1. Do not remove screws, covers, or cabinet.
2. Do not expose this appliance to rain or moisture.

Stereo Component Connections



You can connect the following stereo components to the back of your RX-R77BK receiver:

- Turntable
- Compact Disc Player
- Tape Deck(s)
- VCR, Video disk or TV

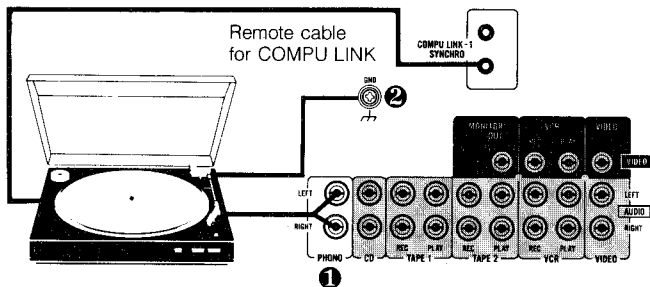
The following instructions will show you how to connect stereo components to the receiver.

Important! Make sure you connect the left channels of all stereo components to the left jacks on the receiver. Connect the right channels of all stereo components to the right jacks on the receiver. If you reverse the channels, the stereo sound will be affected.

Note: The top row of jacks on the back of the receiver are for the left channels of stereo components. The bottom row of jacks are for the right channels of stereo components.

Before Making Connections

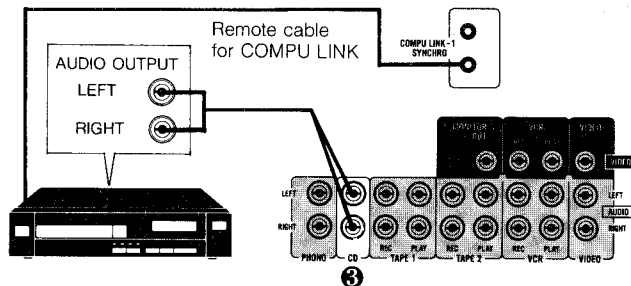
- Make sure your hands are dry.
- Turn the power off to all components.
- Read the installation instructions for all components you are going to connect.



Turntable

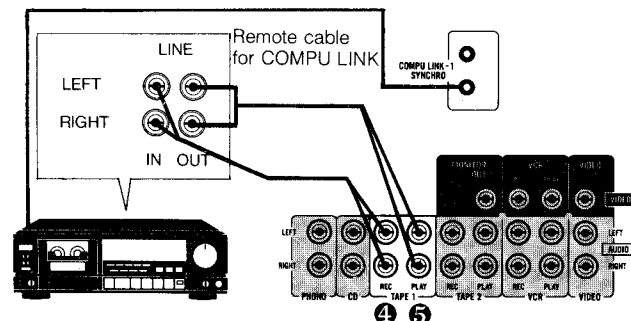
- 1 Connect the left and right channels on your turntable to the left and right jacks marked PHONO on the back of the receiver.
- 2 Read the instruction manual for your turntable to see if the turntable needs to be grounded. If it does, connect the turntable's ground wire to the terminal marked GND on the back of the receiver.

Important! Use the RX-R77BK receiver only with turntables that have a moving magnetic (MM) type cartridge.



Compact Disc Player

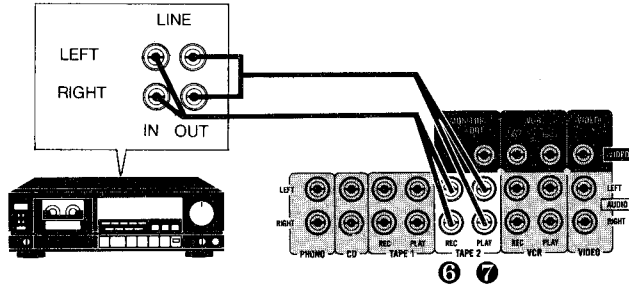
- 3 Connect the left and right channels on your compact disc player to the left and right jacks marked CD on the back of the receiver.
- Make sure that your compact disc player for COMPU LINK is connected through COMPU LINK terminals.



Tape Deck

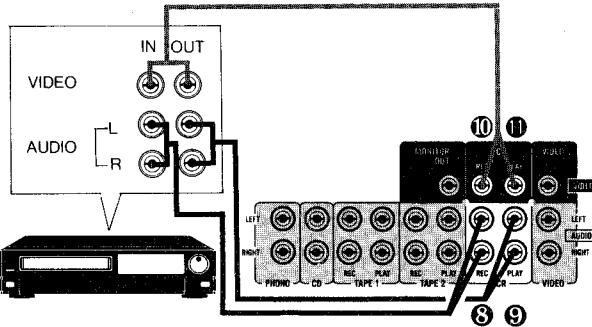
- 4 Connect the left and right "Line In" channels on your tape deck to the left and right TAPE 1 jacks marked REC on the back of the receiver.
 - 5 Connect the left and right "Line Out" channels on the tape deck to the left and right TAPE 1 jacks marked PLAY on the back of the receiver.
- Use the COMPU LINK terminal of the receiver, if there is one, for connection.

Stereo Component Connections



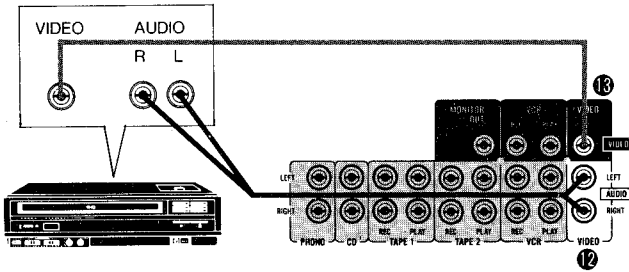
Second Tape Deck

- ⑥ Connect the left and right "Line In" channels on your second tape deck to the left and right TAPE 2 MONITOR jacks marked REC on the back of the receiver.
- ⑦ Connect the left and right "Line Out" channels of the tape deck to the left and right TAPE 2 MONITOR jacks marked PLAY on the back of the receiver.



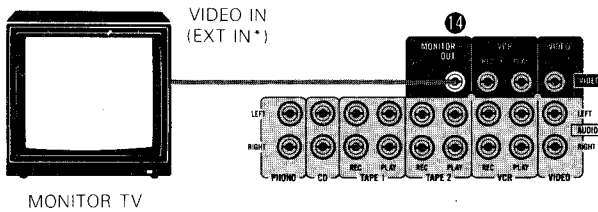
VCR

- ⑧ AUDIO: Connect the REC terminals of the receiver to the AUDIO IN terminals of the VCR.
- ⑨ AUDIO: Connect the PLAY terminals of this receiver to the AUDIO OUT terminals of the VCR.
- ⑩ VIDEO: Connect the REC terminal of this receiver to the VIDEO IN terminal of the VCR.
- ⑪ VIDEO: Connect the PLAY terminal of this receiver to the VIDEO OUT terminal of the VCR.



VIDEO

- ⑫ AUDIO: Connect the AUDIO terminals of this receiver to the AUDIO OUT terminals of the video disk player.
- ⑬ VIDEO: Connect the VIDEO terminal of this receiver to the VIDEO OUT terminal of the video disk player.



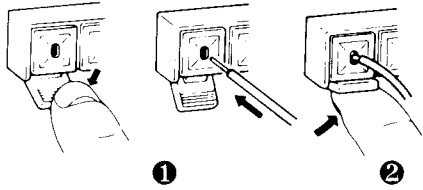
TV

- ⑭ Connect the MONITOR OUT terminal of this receiver to the VIDEO IN terminal of the monitor TV.

Note: Video cables must be used for VIDEO terminals of the VCR, video disk player, and TV.

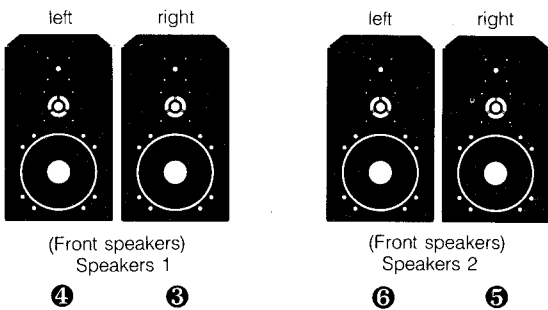
* In case the JVC's monitor TV has the multi-input function, connect to the "VIDEO 1" terminal.

Speaker Connections



Speaker Terminals

- 1 When connecting speakers, open each terminal and insert the end of the speaker wire as shown.
- 2 Close the terminals as shown to clamp the speaker wires in place.

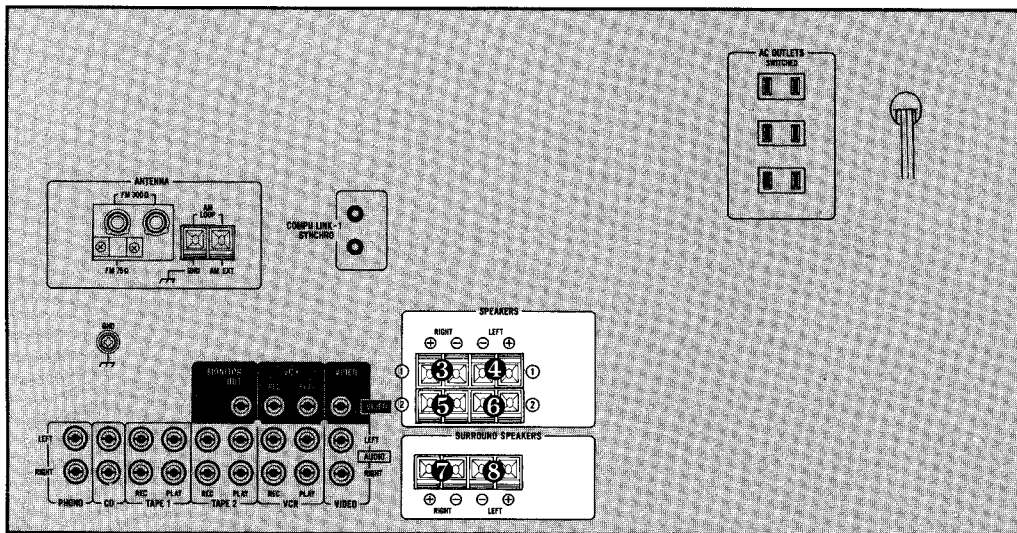


Speakers

- 3, 5, 7 Connect the (+) and (-) terminals of the right-side speaker to the top (+) and (-) terminals marked RIGHT on the receiver.
- 4, 6, 8 Connect the (+) and (-) terminals of the left-side speaker to the top (+) and (-) terminals marked LEFT on the receiver.

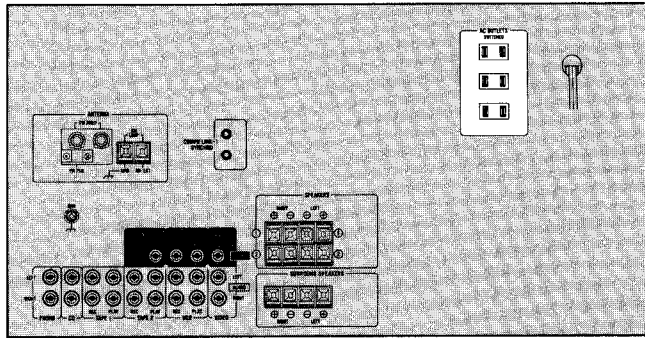
Important! Be sure to match the polarity of the speaker terminals with the polarity of the terminals on the receiver: (+) to (+) and (-) to (-).

This receiver is only for use with speakers having impedance of 8 to 16 ohms. Check your speaker specifications to make sure the speakers have the correct impedance.



(Rear speakers)
Surround speakers

AC Power Connections



Caution: To prevent electric shock, turn all stereo components off before you install or remove power cords.

Important! Before you plug the power cord into an outlet, make sure all stereo components are connected correctly.

Plug the power cord on the back of the receiver into a 120 volt, 60 Hz AC household electrical outlet.

You can connect the power cords of the other stereo components to the three AC outlets on the back of the receiver.

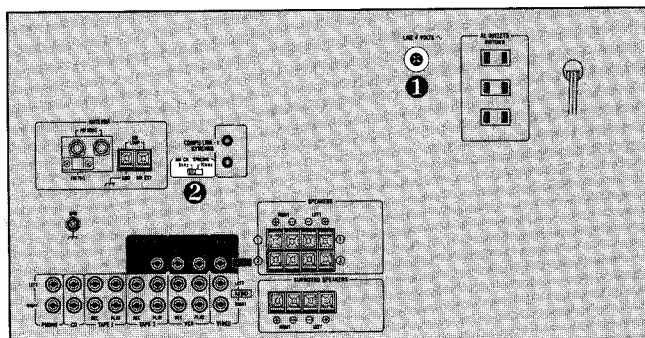
Do not connect stereo components requiring more than 150 watts (total) to the receiver.

The AC outlets are connected to the receiver's ON/STANDBY circuits.

- When the power switch is set to STANDBY, power will not be supplied.
- When the power on other components connected to the receiver is switched ON, you can turn these components ON/OFF from the receiver.

Note: This simplifies your job of switching on power buttons.

(Except U.S.A. and Canada)



1 Voltage selector

When this equipment is used in an area where the supply voltages is different from the preset voltage, reset the voltage selector to the correct position.

(Not provided for the U.S.A. and Canada)

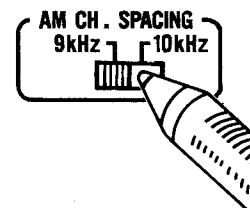
2 AM channel spacing

AM channel spacing switch is provided on the rear panel to select between 9 kHz or 10 kHz steps depending on the area in which the receiver is used.

(Not provided on units for U.S.A. and Canada)

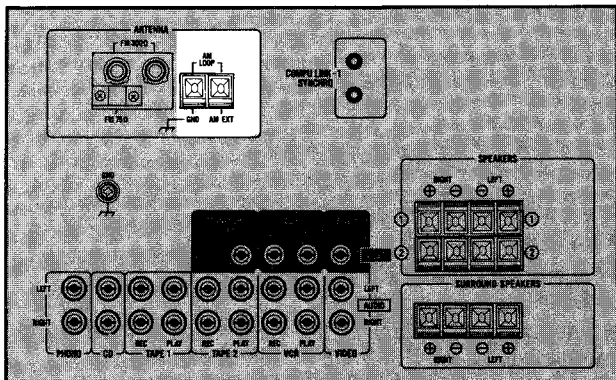
Area	Band	FM	AM
U.S.A. and Canada		100 kHz	10 kHz
Others area		50 kHz	9 kHz* or 10 kHz

Note: *Preset at the factory.
For reception of FM broadcast, switching of channel spacing is not required.



First, turn the power ON, then disconnect the power cord. Wait for a few seconds and switch over the AM channel spacing switch as shown in figure using the tip of a ballpoint pen.

AM Antenna Connections



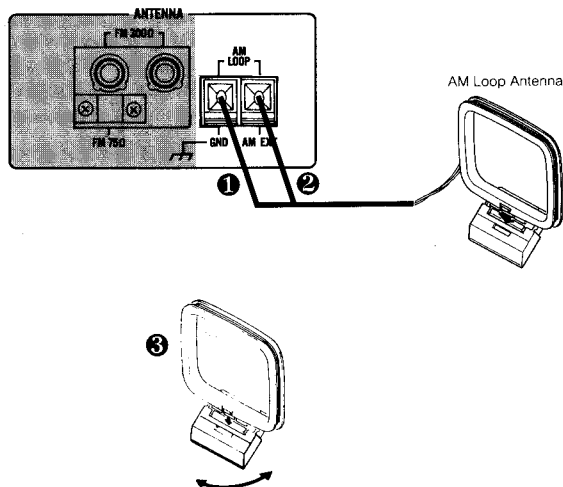
To receive AM radio broadcasts, you will have to connect an AM antenna to the receiver.

AM Loop Antenna

An AM loop antenna is included with your receiver. To use the antenna, fold out the loop from the antenna base. Place it near the receiver. Connect this antenna to the receiver as follows:

- ❶ Connect one antenna wire to one of the AM LOOP terminals on the receiver.
- ❷ Connect the remaining antenna wire to the other AM LOOP terminal.

Note: These two terminals open and close the same way as the speaker terminals.



- ❸ Adjust the loop antenna as needed to get the best reception.

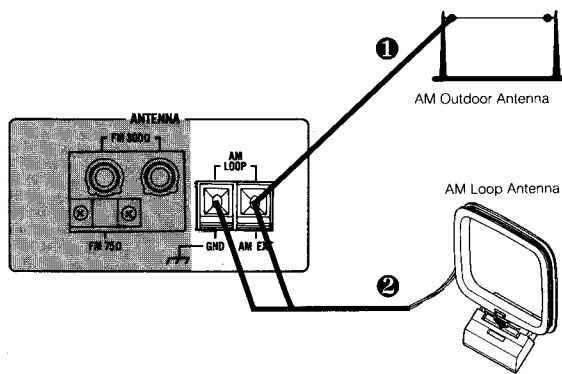
AM Outdoor Antenna

If your AM broadcast reception is unsatisfactory, you should connect an AM outdoor antenna in addition to the loop antenna.

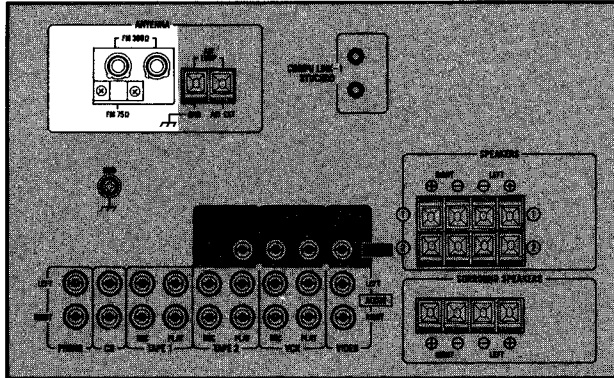
Important! The AM loop antenna must be installed to receive AM broadcasts. Do not disconnect the loop antenna when installing an outdoor antenna.

- ❶ Install a single vinyl-covered antenna wire outdoors. The antenna wire should be about 16 to 40 feet (5 to 12 meters) long.
- ❷ Connect one end of the antenna to the AM loop terminal marked AM EXT.

Note: Except for the connection, make sure no uninsulated antenna wire touches the rear panel of the receiver. Otherwise, the receiver might not pick up AM broadcasts.

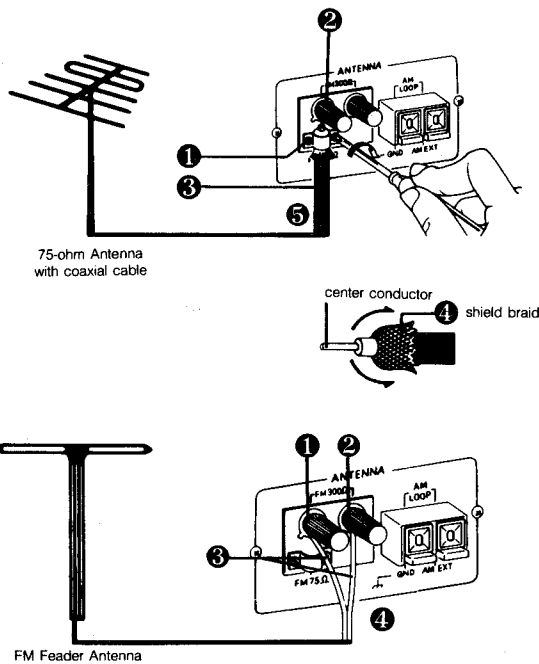


FM Antenna Connections



To receive FM radio broadcasts, you should connect an FM antenna to the receiver.

FM antennas use one of two cable types. They are the coaxial cable and the flat feeder cable.



FM 75-Ohm Antenna Cable

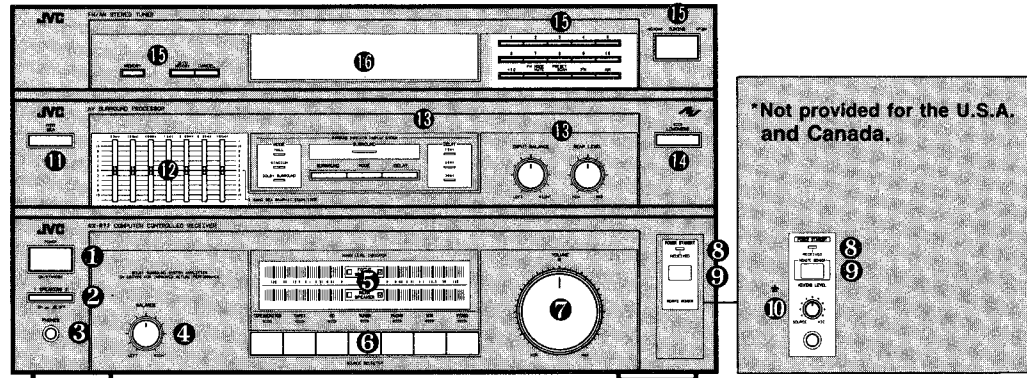
- ❶ Loosen the screws holding the bracket to the rear panel of the receiver.
- ❷ Loosen the cap of the 300/75-ohm terminal on the rear panel of the receiver.
- ❸ Insert the round antenna cable through the bracket from below.
- ❹ Make sure that the shield braid on the cable contacts the bracket, and that the center conductor of the cable contacts the 300/75-ohm terminal.
- ❺ Tighten the bracket screws and the cap on the 300/75-ohm terminal.

FM 300-Ohm Antenna Cable

- ❶ Loosen the cap on the 300/75-ohm terminal on the rear panel of the receiver.
- ❷ Loosen the cap on the 300-ohm terminal on the rear panel of the receiver.
- ❸ Connect the two conductors of the antenna cable to the 300/75-ohm terminal and the 300-ohm terminal.
- ❹ Tighten the caps on both terminals.

Note: Whether you use the 75-ohm or 300-ohm cable, make sure the antenna conductors do not touch any other terminals on the receiver. This could cause poor reception.

Front Panel Controls



① Power Switch

Press this switch to turn on power to the receiver. Press the switch again to turn off the power and activate STANDBY mode.

Note: The receiver uses a small amount of power (5 watts) in the STANDBY mode. To disconnect the power completely, unplug the power cord.

② Speakers 1, 2

Turns speakers 1 and 2 ON or OFF.

③ PHONES

Connect the stereo headphones here. When you connect the headphones, there will be no sound from the speakers.

④ Balance Control

Turn the BALANCE control left or right to adjust the balance of the left and right speakers.

⑤ Power Level Indicator

The Power Level indicator represents the level of output from the receiver.

⑥ Source Selector

Use these five buttons to choose the stereo source you want to listen to. Corresponding indicator lights show which source or sources have been selected.

- TAPE 2 MONITOR
- TAPE 1
- CD
- TUNER
- PHONO
- VCR
- VIDEO

⑦ Volume Control and Volume Indicator Light

Turn the volume control to adjust the volume. The VOLUME indicator lights up when the power is ON and flickers when the remote control is used for VOLUME and FADE.

⑧ RECEIVED and POWER STANDBY Indicator

This indicator lights up when signals are received from the remote control unit or when the receiver is in the STANDBY mode.

⑨ Remote Sensor

The Remote Sensor receives the signal sent by the remote control unit.

Note: It is important to keep the Remote Sensor clear of obstructions in order for it to receive signals from the remote control unit.

⑩ MIC Jack and MIXING LEVEL Control (Except U.S.A. and Canada)

Use the MIXING LEVEL control to mix the microphone sound with the source sound.

- When these sounds need not be mixed, set the MIXING LEVEL control to SOURCE.

⑪ S.E.A. Switch and S.E.A. Indicator

Set the S.E.A. switch to ON (OFF) to use (not to use) the S.E.A.

⑫ 7-Band S.E.A. Graphic Equalizer

To generate your desired sound, the 7-band S.E.A. controls the levels of seven tonal ranges: 63 Hz (Deep Bass), 1 kHz (Mean), 16 kHz (Treble), and so on.

⑬ SURROUND

Use these keys when you playback with a surround sound effect.

⑭ Loudness Switch

Use to boost the bass and treble. This switch compensates for hearing sensitivity to both high and low frequency levels.

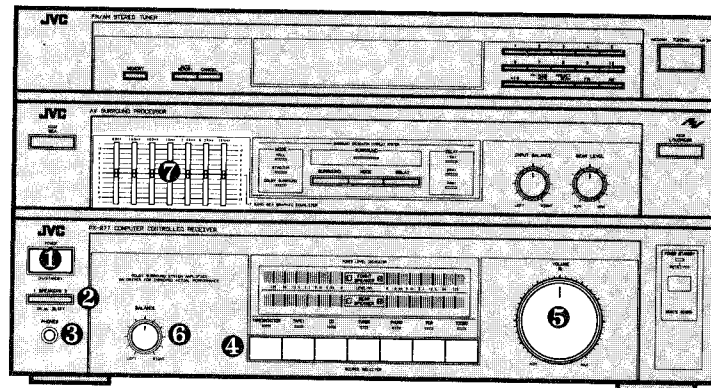
⑮ TUNER

Use the following keys to listen to AM or FM broadcasts:

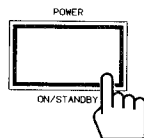
⑯ Tuner Display Window

The Tuner Display Window shows the AM or FM frequency and provides information on the quality of the broadcast reception. It is also used to set and recall preset radio stations.

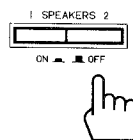
Basic Operation



- ❶ To turn on your receiver, press the POWER switch. The Tuner Display Window, Volume Indicator light and Power Level Indicator (one level) are illuminated, and a SOURCE SELECTOR indicator shows the last source that was played.



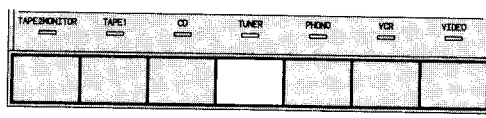
- ❷ Select a speaker system by pressing one of the SPEAKERS buttons.



Note: If speakers are not connected to both SPEAKERS 1 and 2 terminals, do not turn ON both speaker systems as that would suppress sound output.

- ❸ If you want to listen through headphones, plug them into the headphone jack.
- ❹ Press one of the SOURCE SELECTOR buttons to choose the stereo source you want to listen to.

The corresponding indicator light indicates which stereo source is being played.



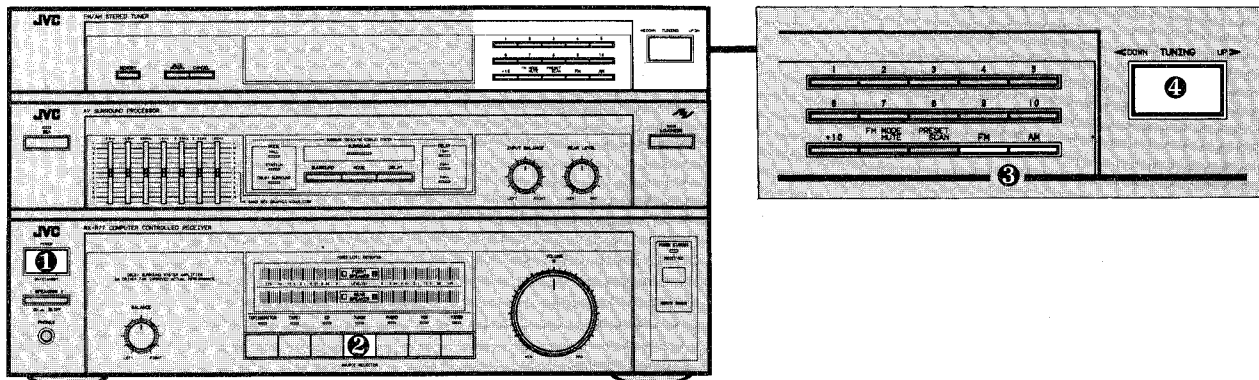
Note: To operate the various stereo sources (for example, CD, phono, tape deck), follow instructions in the appropriate equipment manual.

- ❺ The VOLUME control adjusts the sound volume.
- Turning the VOLUME control to the right increases the volume.
 - Turning it to the left decreases the volume.
- ❻ The BALANCE control is used to adjust the balance of the left and right speakers.
- When the BALANCE control is in the center position, the volume of the left and right speakers is equal.
- ❼ Use the 7-Band S.E.A. Graphic Equalizer to break the signal into seven ranges:

Deep Bass	: 63 Hz
}	: 160 Hz
	: 400 Hz
Mean	: 1 kHz
}	: 2.5 kHz
	: 6.3 kHz
Treble	: 16 kHz

Raising the slide control for a range boosts the volume of the range. Lowering the slide control for a range decreases the volume of the range.

Selecting a Radio Station



Selecting an AM Station

- ❶ Turn the receiver ON.
- ❷ Press the TUNER Source Selector button.
- ❸ Press the AM button.

AM and kHz appear in the Tuner Display Window. The receiver tunes in the last AM frequency that was played.



- ❹ Use the TUNING key to find the frequency of the radio station you want to listen to.
 - Press the right side of the key to find higher frequencies.
 - Press the left side of the key to find lower frequencies.

When you release the TUNING key, the receiver auto-tunes until it tunes a station in.

The TUNED Indicator lights when the receiver is tuned precisely to an AM station.



Note: Tap the TUNING key momentarily to change the frequency in steps of 10 kHz. Hold the TUNING key down to change the frequency faster. Then tap the key to set the frequency precisely.

Important! If the receiver is tuned to a station but the TUNED Indicator doesn't light, try adjusting the antenna for better reception.

Selecting an FM Station

- ❶ Turn the receiver ON.
- ❷ Press the TUNER Source Selector button.
- ❸ Press the FM button.

FM and MHz appear in the Tuner Display Window. The receiver tunes in the last FM frequency that was played.



- ❹ Use the TUNING key to find the frequency of the radio station you want to listen to.
 - Press the right side of the key to find higher frequencies.
 - Press the left side of the key to find lower frequencies.
- When you release the TUNING key, the receiver auto-tunes until it tunes a station in.

The TUNED indicator lights when the receiver is tuned precisely to an FM station.



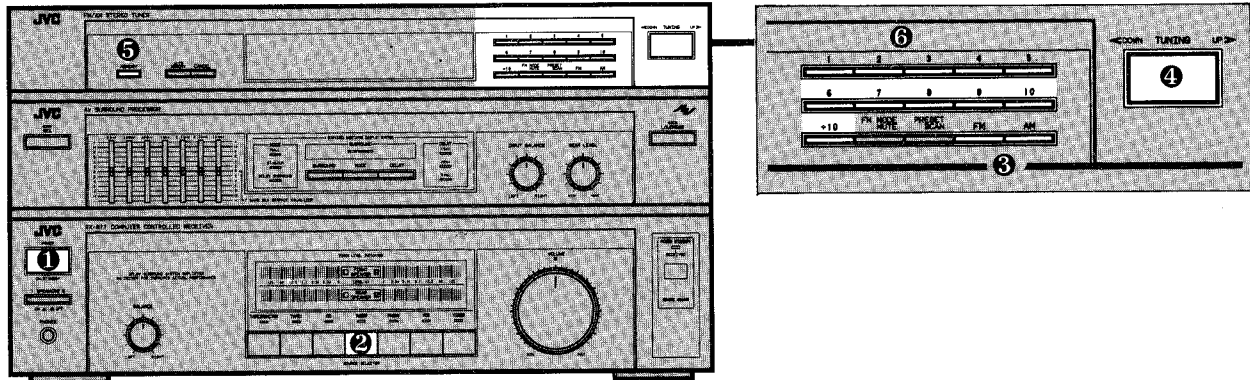
Note: Tap the TUNING key momentarily to change the frequency in steps of 0.1 MHz. Hold the TUNING key down to change the frequency faster. Then tap the key to set the frequency precisely.

Important! If the receiver is tuned to a station but the TUNED indicator doesn't light, try adjusting the antenna for better reception.

When you tune to an FM station, the receiver automatically plays in stereo, and the STEREO indicator lights up.

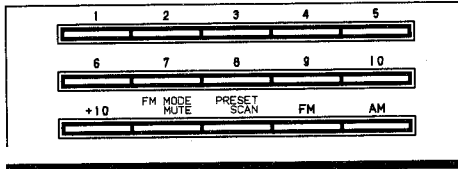


Presetting AM and FM Stations



Press the FM MODE/MUTE Button when listening to an FM station with a weak or noisy signal. Reception will be improved, although you will be listening to monaural (non-stereo) sound. The STEREO indicator and the FM MUTE/AUTO indicators disappear.

You can preset a total of 40 radio stations into the receiver's memory. You preset a station by assigning it a channel number (1 to 40). Once a station has been preset, you can tune to that station using the Numeric keys rather than the TUNING key.



Using Numeric Keys

Preset stations are set into the receiver's memory and recalled using the Numeric keys.

To indicate numbers 1 to 10, press the appropriate key. To indicate numbers 11 to 40, you need to use the +10 key and one other key. See the following examples:

To indicate **17**: press the **+10** key, then the **7** key.

To indicate **20**: press the **+10** key, then the **10** key.

To indicate **25**: press the **+10** key twice, then the **5** key.

To indicate **40**: press the **+10** key three times, then the **10** key.

Presetting Stations

- 1 Turn the receiver ON.
 - 2 Press the TUNER Source Selector button.
 - 3 Press the AM or the FM Source Selector button.
 - 4 Use the TUNING key to tune in the radio station you want to preset.
 - 5 Press the MEMORY button.
- The corresponding indicator lights for about five seconds.



- 6 Using the Numeric keys, enter the channel number (1 to 40) you want to assign to the station.
- The channel number appears in the Tuner Display Window.

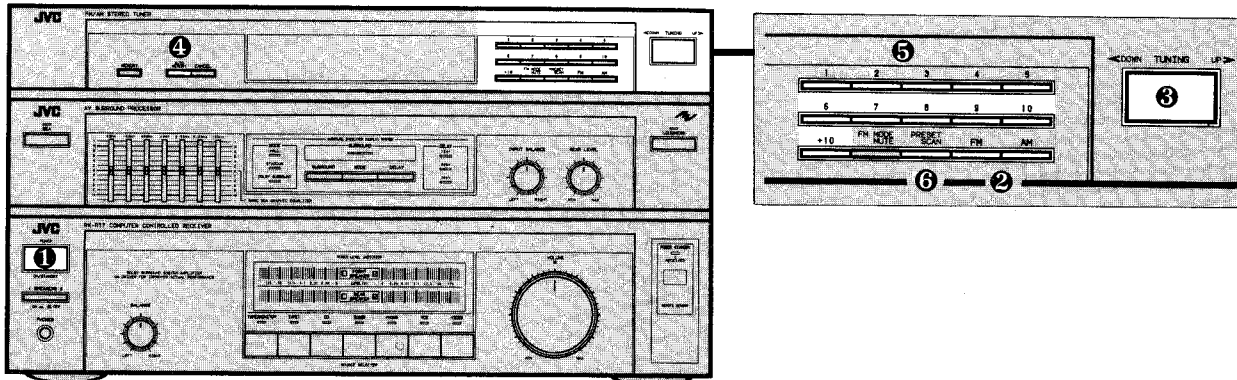


Important! You must enter the channel number while the MEMORY indicator is lighted. If the indicator turns off too soon, press the MEMORY button and start again.

Repeat the above process to preset additional radio stations.

Note: Preset stations are held in the receiver's memory as long as the receiver is plugged in. If the receiver is unplugged, or if a power failure occurs, the receiver will keep the presets for two or three days before erasing them.

Using Auto-Memory and Preset Scan



Auto-Memory

The Auto-Memory function lets you scan a series of radio stations, and preset the ones you want into the receiver's memory. The receiver will scan radio frequencies and preset the stations, as they are tuned, with ascending channel numbers.

- ❶ Turn the receiver on.
- ❷ Press the AM or the FM Source Selector button.
- ❸ Use the TUNING key to find the lowest frequency you want to start scanning from.
- ❹ Press the AUTO MEMORY button.

The AUTO MEMORY indicator lights for about five seconds.



- ❺ If you do not want to preset that station, press the AUTO MEMORY button while the channel number is blinking. The receiver will start scanning again.

When the station is preset, the MEMORY indicator lights and scanning starts again.



This process continues automatically until all 40 channels are filled or the upper frequency limit is reached.

- ❻ Using the numeric keys, enter the lowest channel number (1 to 40) you want to assign a preset.

Important! You must enter the channel number while the AUTO MEMORY indicator is lighted. If the indicator turns off too soon, press the AUTO MEMORY button and start again.

When a radio station is tuned in, scanning stops. The TUNED indicator lights, and the first preset channel number blinks on and off for about five seconds.



Preset Scan

The Preset Scan function lets you scan through your preset radio stations, stopping at any station you want.

- ❶ Turn the receiver on.
 - ❷ Press the AM or the FM Source Selector button.
- Note:** You can press either the AM or the FM Source Selector button. The receiver will scan both AM and FM presets.
- ❸ Press the PRESET SCAN button.

The receiver scans your preset stations, starting with the frequency being received, and moving upward.

Each preset station is received for about four seconds with the channel number blinking.



- ❹ If you want to listen to one of the preset stations, press the PRESET SCAN button again while the channel number is blinking.

If you do not stop at any station, the receiver will scan through the presets once, then return to the station tuned before scanning started.

Using Numeric Keys

Preset stations are set into the receiver's memory and recalled using the Numeric keys.

To indicate numbers 1 to 10, press the appropriate key. To indicate numbers 11 to 40, you need to use the +10 key and one other key. See the following examples:

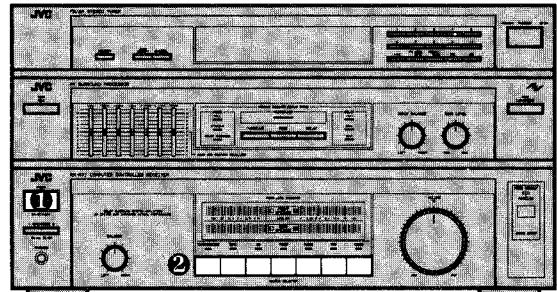
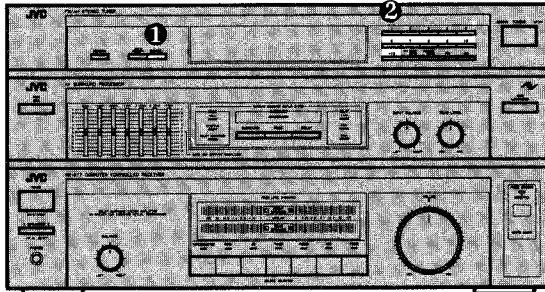
To indicate **17**: press the +10 key, then the 7 key.

To indicate **20**: press the +10 key, then the 10 key.

To indicate **25**: press the +10 key twice, then the 5 key.

To indicate **40**: press the +10 key three times, then the 10 key.

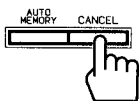
Recording Tapes



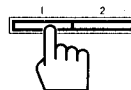
Canceling a Preset Channel

To cancel a preset channel, use the CANCEL button.

- 1 Press the CANCEL button.
 - The preset channel indicator blinks for 5 seconds.



- 2 While the preset channel indicator is blinking, select the preset channel to be canceled.



- A preset channel cannot be canceled if its button is pressed after the preset channel indicator stops blinking. Retry the preset channel cancellation procedure.

Note: If a previously canceled preset channel is called, only CANCEL is displayed for 0.5 second.

Note: The canceled channel can be preset again according to "Presetting Stations."

If you have a tape deck connected to the TAPE 1 or TAPE 2 MONITOR jacks of the receiver, you can record other stereo sources onto a tape.

- 1 Turn the receiver ON.
- 2 Press the SOURCE SELECTOR button for the source you want to record from.

Note: When recording from TAPE 2 to TAPE 1, press the TAPE 2 MONITOR button and another button other than TAPE 1.

- Use the tape deck to record the source as it is playing. Follow the instructions for your tape deck.

Note: Adjusting the VOLUME control of the receiver will not affect the recording level. Follow the instructions for your tape deck.

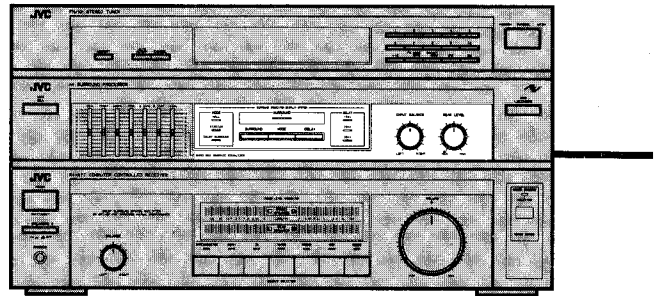
Note: On TAPE 1 the sound that passed through the S.E.A. is recorded. On TAPE 2 the sound that did not pass through the S.E.A. is recorded.


Three-Head Tape Decks

If you have a three-head tape deck, you can use it to monitor the sound being recorded. Connect the tape deck to the TAPE 2 MONITOR jacks of the receiver and proceed as follows:

- Start recording the source onto the TAPE 2 deck.
- When the TAPE 2 MONITOR Indicator Light is off, you hear the sound of the source playing through the speakers.
- Press the TAPE 2 MONITOR button. The TAPE 2 MONITOR Indicator Light will light. Now you hear the sound of the recording immediately as it is made on the tape.
- By pressing the TAPE 2 MONITOR button and off, you can compare the sound quality of the source with the quality of the tape recording being made.

Playing Back with a Surround-sound Effect



The soundtracks of the video software bearing  mark includes the same encoded surround information as found in the Dolby Stereo films. As the RX-R77BK incorporates a Dolby Surround decoder circuit, you can get the Dolby Stereo theatre's ambience and effect, when watching these video sources at home.


Surround Mode

There are three surround modes.

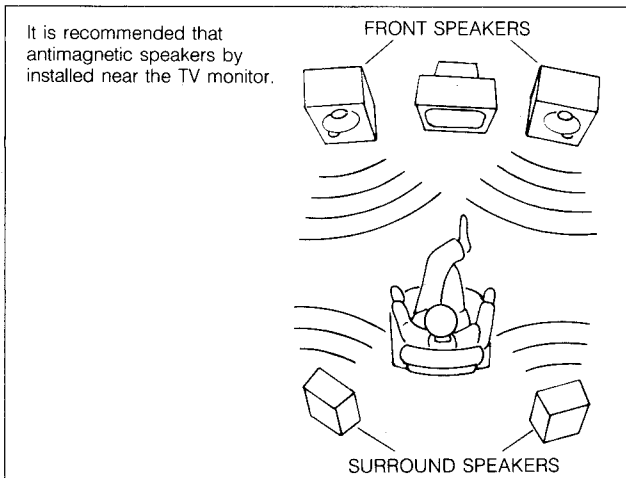
DOLBY SURROUND: This mode produces a live three-dimensional acoustic effect when playing back a program source encoded with Dolby Surround.

HALL: Produces the expanding surround sound effect such as you would experience in a music hall.

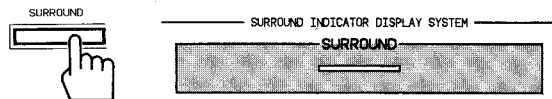
STADIUM: Provides the powerful dynamic surround sound effect of stadium music.

- Select DOLBY SURROUND when you use video software with the  [DOLBY SURROUND] mark. For ordinary stereo sources use HALL or STADIUM.

Speaker Layout Example



- 1 Set the SURROUND button to ON.



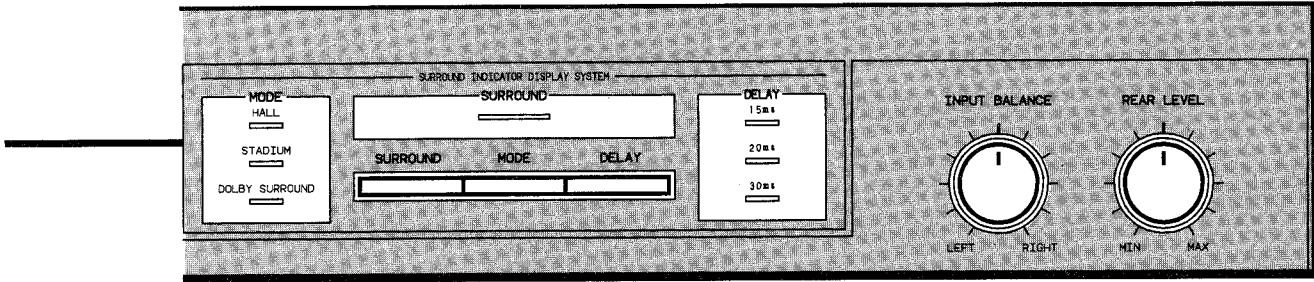
- 2 Select the Surround mode: DOLBY SURROUND, HALL, or STADIUM.

- Each time the MODE button is pressed, the MODE indicator displays the next mode (HALL → STADIUM → DOLBY SURROUND) cyclically.

< If you select "DOLBY SURROUND" >



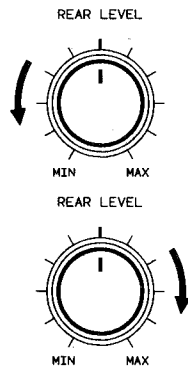
- 3 Play back the source.



Adjustment

Make the following adjustment to get maximum out of the surround sound effect:

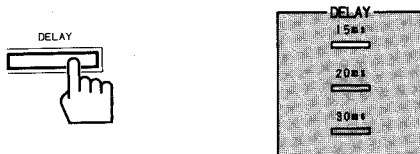
- 1 Set the output level of the rear speakers using the REAR LEVEL button.



- The REAR LEVEL helps balance the sound with respect to the front speakers. Select the setting you prefer as you listen to the source.

Note: The front and rear sound on Dolby Surround video software is already balanced for you. Therefore, to enjoy the most natural sound with the Dolby Surround Sound effect, do not raise the REAR LEVEL excessively.

- 2 Set the delay time for the rear speaker sound with respect to the front speaker sound using the DELAY button.



Each time you press the key, the delay time changes in the following order:

15 ms → 20 ms → 30 ms

Setting advice:

Compare the distances between the front speakers and the listener and the position of the rear speakers, compared to the front speakers is

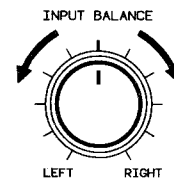
very far	15 ms
about the same	20 ms
very close	30 ms

Note: The DELAY TIME is stored in each mode until you make another change.

Input Balance:

Depending on the source, you may not be able to enjoy the full effects of DOLBY SURROUND. In this case you must adjust the input signal balance using the INPUT BALANCE knob.

- 1 Play back a video source (videotape, videodisc, TV broadcast) encoded with Dolby Surround.
- 2 Making sure that you are in the Dolby Surround mode, carefully adjust the INPUT BALANCE knob so that during monaural sections of the video source (dialog is good for this purpose) any sounds coming from the rear speakers are reduced to a minimum.

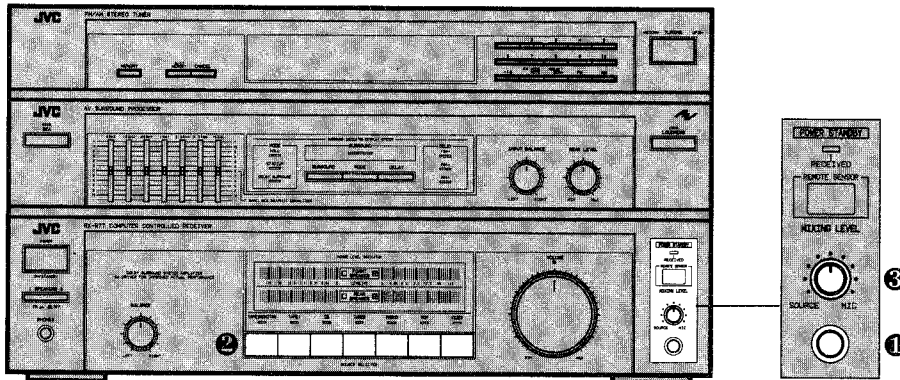


Note: You may opt to place the control in the center click stop position for a nominal setting for most program material.

Dolby Surround **DOLBY SURROUND**

- Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. Numbers 3,632,886, 3,746,792 and 3,959,590; Canadian Numbers 1,004,603 and 1,037,877. "DOLBY" and double D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Mixing the Microphone Sound (Not provided for the U.S.A. and Canada)



You can sing or narrate to the music with the optionally available microphone connected to the MIC jack.

- 1 Connect the microphone.
- Set the MIXING LEVEL control to SOURCE before connecting or disconnecting the microphone.

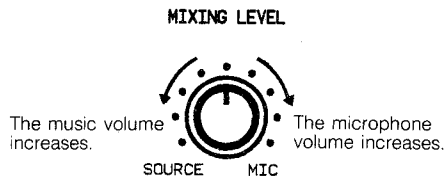
Note: Raising the mixing level too high may cause howling.

- 1 Do not hold the microphone toward the speaker or move it away from the speaker.
- 2 Lower the microphone level with the MIXING LEVEL control.
- 3 Lower the volume level with the VOLUME control.

Note: When the microphone is not in use, set the MIXING LEVEL control to SOURCE.



- 2 Play your desired source.
- Generate your desired sound with the S.E.A. and SURROUND controls.
- 3 Adjust the volume balance between the music and microphone.
- Use the MIXING LEVEL control.



Compu Link Remote Control System

COMPU LINK Remote Control System

JVC's exclusive "COMPU LINK" remote control system connects equipment with JVC COMPU LINK-1/SYNCHRO terminals to the remote control system. The equipment can be controlled from the remote control unit, or other functions (such as automatic source selection and synchronized recording) can be used.

Automatic source selection

Pressing SOURCE keys will automatically put the corresponding source equipment into the PLAY mode. When the PLAY key on source equipment is pressed, the corresponding SOURCE key is automatically set to that source. Other source equipment shuts down about 5 seconds later.

Note: Automatic source selection does not work on the Tape deck connected to the TAPE 2 terminals.

Synchronized recording

Synchronized recording permits a tape deck to start recording automatically in synchronism with a CD player, CD autochanger or turntable. Set the tape deck in the REC/PAUSE mode and press the PLAY key on the CD player, CD autochanger or turntable. The tape deck will enter the recording mode automatically, starting synchronized recording.

Synchronized recording stops automatically after the CD play, CD autochanger or turntable has stopped and the tape deck has entered the REC/MUTE mode for about 4 seconds.

Note: If the power for any connected equipment is shut off during synchronized recording, the system will not operate properly. In this case, you must start all over again.

Note: During synchronized recording the SOURCE key will lock in either the CD or PHONO position. This is to prevent you from accidentally stopping the recording or changing to any other source. To change to another source you must first stop synchronized recording.

Note: Do not connect the remote cable when the cassette deck is connected to the TAPE 2 terminals.

Note: If you program track numbers on a CD player or CD auto-changer and use synchronized recording, a blank space about 4 seconds long will be left between recordings. This permits music scanning.

Note: This is applicable only with components that are compatible with JVC's Compu Link Remote Control System.

Using the Remote Control

Batteries

The RM-SR77U Remote Control unit uses two (2) AAA size (1.5V) batteries.

The use of long-life dry cells is recommended.

Battery Replacement

If the range of the remote control seems shortened, the batteries may be old. Try replacing the old batteries.

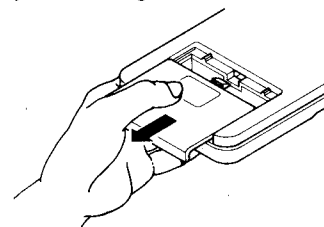
Important! Do not use a new battery with an old battery.

Use batteries of the same brand. Batteries can vary in voltage even though they look alike.

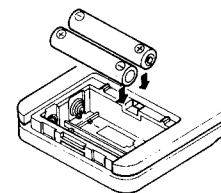
If you are not planning to use the remote control for an extended period of time, remove the batteries.

Caution: Do not heat batteries or attempt to dispose of them by burning.

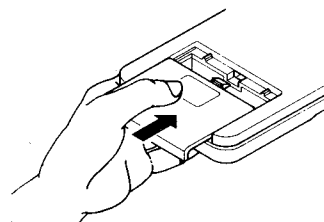
1. Remove the rear cover of the remote control unit by pressing down gently while sliding it out.



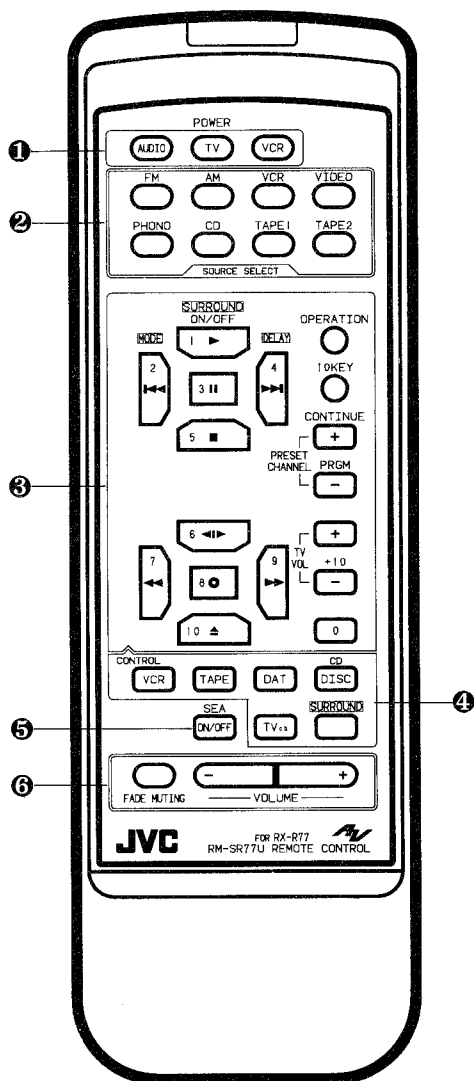
2. Insert the batteries, making sure that their position matches that of the diagram inside the remote control.



3. Replace the rear cover.



Operation with the Remote Control Unit



Aim the signals at the **REMOTE SENSOR** on the receiver.

- Aim the remote control unit at a video equipment to use (such as TV, VCR).
- The remote control unit provided control the receiver and JVC's audio visual gear from a remote place via the COMPU LINK Remote Control System.
- Direct the transmitter window of the remote control unit at target equipment within a distance of 7 meters. Take care to avoid obstacles between the transmitter and the target. Press keys slowly and positively, making sure the desired functions result.
- The key markings on the transmitter may not match those on the equipment. Check the markings.
The remote control unit cannot control equipment functions they do not support. Older equipment may not be receptive to their input.
- Check for connection of the COMPU LINK-1/SYNCHRO terminals on the remote equipment by a remote cable.
- The operation of each key on the remote control unit is clearly displayed on the receiver.
For specific procedures, refer to the instructions for the particular equipment.
- Switch on the power to all the equipment required before starting operation. The POWER key on the remote control unit can switch on the power to the AUDIO receiver, TV and VCR.

Name of Parts and Their Functions

① Power

- AUDIO:** Press to change the power for the receiver ON or STANDBY.
- TV:** Press to turn on or off the power to JVC's TV receiver.
- VCR:** Press to turn on or off the power to JVC's VCR.

② SOURCE SELECT

Press to change the source selected for input to the receiver. Different functions are assigned to the Selectable Function keys depending on the source.

③ Selectable Function Keys

These keys function in the mode selected with SOURCE SELECT keys or Function Mode Select keys.

④ Function Mode Select

Press to select the equipment you wish to operate. Different functions are assigned to the Selectable Function keys depending on the equipment. Pressing these buttons does not change the source selected for input to the receiver.

⑤ SEA ON/OFF

SEA ON/OFF: Turn the SEA ON or OFF.

⑥ Volume and Fade Muting

- To increase the volume, press the + key. To decrease the volume, press - key.
When using the remote control's VOLUME key, the VOLUME indicator light on the receiver will blink. The receiver's VOLUME control knob will rotate, registering the new volume level.
- To decrease the volume, press the FADE MUTING key. Each time you press the key, the volume is reduced slightly. When you use VOLUME + - and FADE MUTEING on the remote control, the Volume Indicator on the receiver blinks.

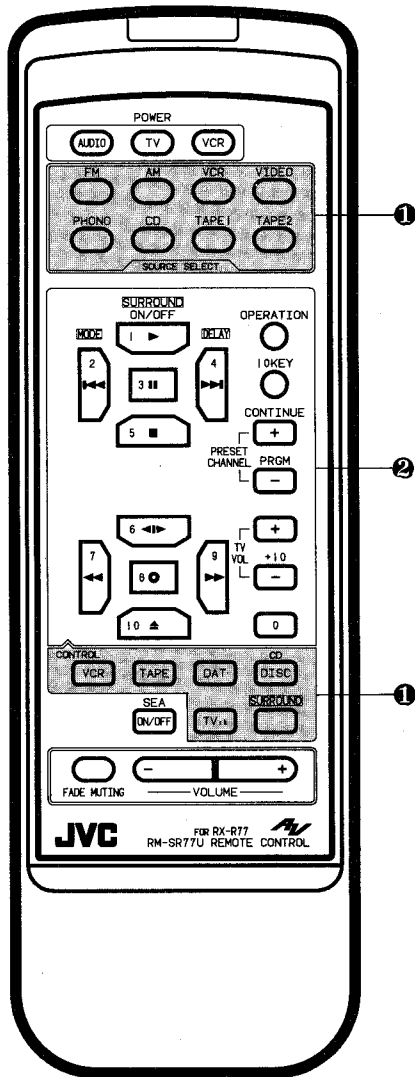
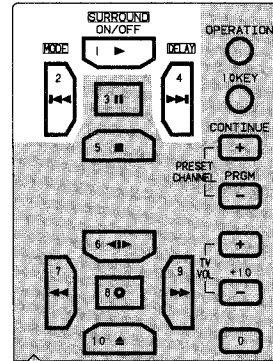
How to use the Selectable Function keys

Basic Operation

1. Select the function mode with the Function Mode Select keys or SOURCE SELECT keys.
 - SOURCE SELECT keys also change the source input to the receiver.
 - Use a Function Mode Select key (VCR or TAPE 1) to operate an equipment while you are listening to the sound of another source, for example, to have a tape deck standby while playing a CD.
2. Use the Function Mode select keys.

Operating the surround sound effect

- ① Press the SURROUND key of the function Mode Select keys.
- ② Use the Selectable Function keys.



- SURROUND
- MODE
- DELAY

ON/OFF : Turns the surround sound effect ON/OFF.
 : Selects the surround mode.
 : Sets the delay time for the surround channel.

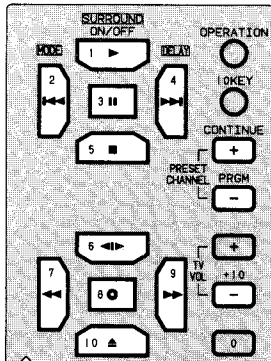
Operating the source unit

If the source has two modes (OPERATION mode and 10 KEY mode), use the OPERATION key and 10 KEY to switch the mode.

- The functions of the numeric keys (1 — 10, +10, 0) may vary according to the unit you operate.
Be sure to read the instructions for each unit.

FM/AM broadcast

- press the FM or AM key of the SOURCE SELECT keys.
- Use the Selectable Function keys.

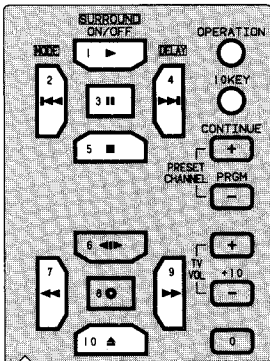


- 1 — 10, +10 : Select the preset channel.
PRESET CHANNEL
+ : Scans to higher preset channels.
- : Scans to lower preset channels.

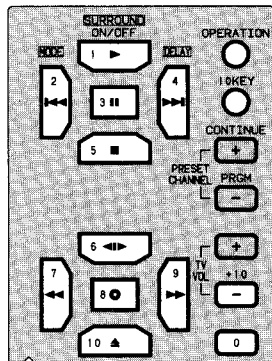
CD

- Press the CD key of the SOURCE SELECT keys.
- Use the Selectable Function keys.

< OPERATION mode >



< 10 KEY mode >



< OPERATION mode >

- ▶ : Starts play.
- : Stops operation.
- ⏮ : Skips to the beginning of the previous track.
- ⏭ : Skips to the beginning of the next track.
- ⏸ : Stops play temporarily. To release it, press ▶
- ⏪ : Moves backward quickly during play.
- ⏩ : Moves forward quickly during play.
- ▲ : Move the disc tray in and out.

< 10 KEY mode >

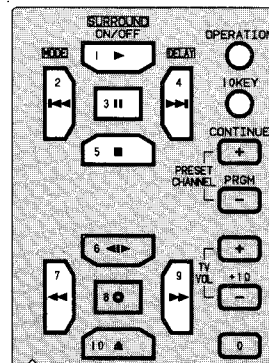
- 1 — 10, +10, 0 : Select the track number.

- When the source is switched, the OPERATION mode is selected first.

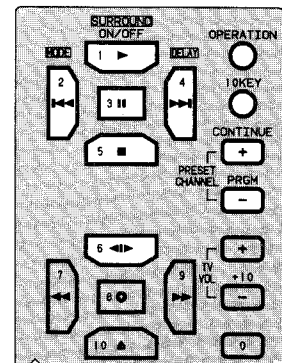
CD Auto-changer

- Press the CD DISC key of the Function Select keys.
- Use the Selectable Function keys.

< OPERATION mode >



< 10 KEY mode >



< 10 KEY mode >

- 1 — 6 : Select the disc number.
- CONTINUE : Use for continuous play.
- PRGM : Use for programmed play.

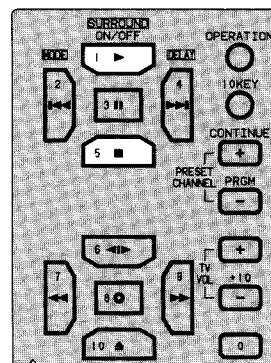
< OPERATION mode >

- ▶ : Starts play.
- : Stops operation.
- ⏮ : Skips to the beginning of the previous track.
- ⏭ : Skips to the beginning of the next track.
- ⏸ : Stops play temporarily. To release it press ▶
- ⏪ : Moves backward quickly during play.
- ⏩ : Moves forward quickly during play.

- When the function is switched, the 10 KEY mode is selected first.

Turntable

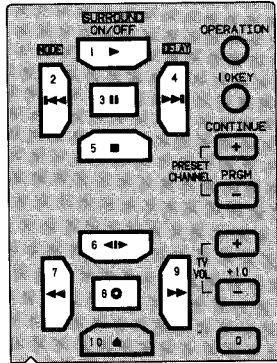
- Press the PHONO key of the SOURCE SELECT keys.
- Use the Selectable Function keys.



- ▶ : Starts play.
- : Stops play.

Cassette Deck (TAPE 1)

- ❶ Press the TAPE 1 key of the SOURCE SELECT or Function Select keys.
- ❷ Use the Selectable Function keys.

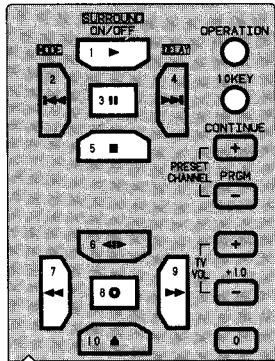


- ▶ : Starts playback.
- : Stops operation.
- ◀▶ : Skips to the beginning of the previous tune.
- ▶▶ : Skips to the beginning of the next tune.
- ▢ : Stops playback/recording temporarily. To release it, press ▶
- ◀◀ : Change the tape running direction.
- ◀◀ : Fast winds the tape from right to left.
- ▶▶ : Fast winds the tape from left to right.
- : Press together with ▶ to start recording. Press together with ▢ to enter record-pause mode.

VCR

- ❶ Press the VCR key of the SOURCE SELECT or Function Select keys.
- ❷ Use the Selectable Function keys.

< OPERATION mode >



< OPERATION mode

- ▶ : Starts playback.
- : Stops operation.
- ▢ : Stops playback/recording temporarily and enters the pause/still mode. To release it, press ▶
- ◀◀ : Rewinds video tape.
- ▶▶ : Fast-forwards video tape.
- : Press together with ▶ to start recording. Press together with ▢ to enter record-standby mode.

< 10 KEY mode >

- 1 — 9, 0 : Selects the VCR channel.
- + : Scans to higher channels.
- : Scans to lower channels.

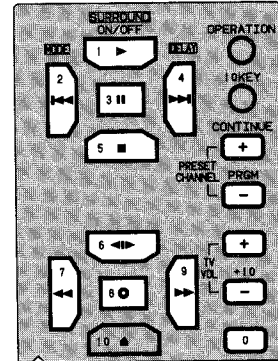
- When the source or the function is switched, OPERATION mode is selected first.

Cassette DECK (TAPE 2) or VIDEO

- ❶ Press the TAPE 2 or VIDEO key of the SOURCE SELECT keys.
- ❷ A cassette deck connected to the TAPE 2 terminal and a video disc player cannot be operated with the remote control unit. Use the switches or buttons on the apparatus.

Operating the TV

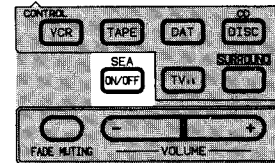
- ❶ Press the TV ch key of the Function Select keys.
- ❷ Use the Selectable Function keys.



- 1 — 9, 0 : Selects the TV channel.
- + : Scans to higher channels.
- : Scans to lower channels.
- TV VOL : Adjusts the sound volume of TV.

Operating the S.E.A. graphic equalizer

Press the SEA ON/OFF key.



SEA ON/OFF: Turn the S.E.A. ON or OFF.

Troubleshooting

Problem	Possible Cause	Solutions
Receiver does not play; Indicator does not light up.	Power cord not plugged in.	Plug power cord into an AC outlet.
No sound from the speakers.	Speaker wires not connected properly.	Check speaker wiring. Reconnect if needed.
	Speaker buttons not set correctly.	Press the speaker buttons in or out as desired.
Sound from one speaker only.	Speaker wires not connected properly.	Check speaker wiring. Reconnect if needed.
	BALANCE control may be set to one extreme.	Slide BALANCE control so both speakers have sound.
Continuous hiss or buzzing during FM reception.	Incoming signal may be too weak.	Adjust antenna. Station may be too far away to receive.
	Incorrect antenna used.	Check with your dealer to make sure you are using the correct type of antenna.
	Antenna not connected properly.	Make sure all antennas are properly connected.
	Ignition noise from automobiles.	Move the antenna further away from the street.
Loud hum during record playing.	Turntable not connected properly.	Check the turntable manual. Ground the turntable if required.
	Interference from other electrical appliances.	Try moving the power cord or plugging receiver into a different outlet.
Howling during record playing.	Turntable too close to a speaker.	Move speakers away from the turntable.

Specifications — RX-R77BK

Amplifier Section

Output Power:
(CD in Speakers out)
2-channel operation

Surround operation
Rear channel

Total Harmonic Distortion

Input Sensitivity/Impedance

PHONO
CD, TAPE 1, TAPE 2, VIDEO, VCR

Frequency Response

Signal-to-Noise Ratio ('66 IHF/78 IHF)
PHONO
CD, TAPE 1, TAPE 2, VIDEO, VCR

S.E.A. Graphic Equalizer:
Center Frequencies

Control Range

Loudness Control (Volume Control at
30 dB position)

PHONO RIAA deviation

U.S.A. and Canada

**125 watts per channel, min.
RMS, both channels driven into
8 ohms from 20 Hz to 20 kHz,
with no more than 0.08%
harmonic distortion.**

125 watts per channel, min. RMS, both
channels driven into 8 ohms at 1 kHz,
with no more than 0.01%** total
harmonic distortion.

20 watts per channel, min. RMS, into 8
ohms at 1 kHz, with no more than
0.7%** total harmonic distortion.

0.01%** at 125 watts (1 kHz, 8 ohms)

2.5 mV/47k ohms

200 mV/47k ohms

7 Hz to 60 kHz (+0, -3 dB)

76 dB/79 dB (REC OUT)
91 dB/78 dB (SPEAKER OUT)

63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz
6.3 kHz, 16 kHz
± 10 dB

+5 dB at 100 Hz

± 0.4 dB (20 Hz — 20 kHz)

Other Area

110 watts per channel, min. RMS, both
channels driven, into 8 ohms at 1 kHz
(DIN)

100 watts per channel, min. RMS, both
channels driven, into 8 ohms from 20
Hz to 20 kHz, with no more than
0.08% total harmonic distortion.

20 watts per channel, min. RMS, into 8
ohms at 1 kHz, with no more than
0.7%** total harmonic distortion.

0.01%** at 100 watts (1 kHz, 8 ohms)

2.5 mV/47k ohms

200 mV/47k ohms

7 Hz to 60 kHz (+0, -3 dB)

66 dB (DIN)
67 dB (DIN)

63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz
6.3 kHz, 16 kHz
± 10 dB

+5 dB at 100 Hz

± 0.4 dB (20 Hz — 20 kHz)

FM Tuner Section

Tuning Range

Usable Sensitivity

50 dB Quieting Sensitivity

Signal-to-Noise Ratio
(IHF-A net, 85 dBf)

Selectivity

Stereo Separation

87.5 MHz — 108.0 MHz

10.8 dBf (0.95 μ V/75 ohms)

Stereo: 38.3 dB (22.5 μ V/75 ohms)

Mono: 80 dB
Stereo: 73 dB

60 dB, \pm 400 kHz

35 dB (at 1 kHz)

87.5 MHz — 108.0 MHz

—

—

Mono: 72 dB
Stereo: 65 dB

55 dB, \pm 300 kHz

35 dB (at 1 kHz)

AM Tuner Section

Tuning Range

Usable Sensitivity

Signal-to-Noise Ratio

530 kHz — 1,710 kHz

300 μ V/m* (loop antenna)

50 dB* (100 mV/m)

531 kHz — 1.602 kHz

300 μ V/m* (loop antenna)

50 dB* (100 mV/m)

VIDEO SECTION

Output signal level
(VCR REC, MONITOR OUT)

Impedance

Synchronization

Signal-to-noise ratio

Crosstalk

1 Vp-p (at 1 Vp-p input)

75 ohms, unbalanced

Negative

45 dB

45 dB (3.58 MHz)

1 Vp-p (at 1 Vp-p input)

75 ohms, unbalanced

Negative

45 dB

45 dB (3.58 MHz)

General

Power Requirements

Power Consumption

Dimensions
(Width x Height x Depth)

Weight

AC 120 V \sim , 60 Hz

300 watts, 420 VA

17-3/16 x 9-1/4 x 9-5/16 inches
(435 x 234 x 235 mm)

24.3 lbs (11 kg)

AC 110/127/220/240 V \sim , selectable,
50/60 Hz

290 watts

435 x 234 x 235 mm

11 kg

* Measured at 1,000 kHz.

** Measured by JVC Audio Analysis System.

Note: Design and specifications subject to change without notice

Description of Major ICs

■ LC6514B-4131 (IC501) : Tuner Controller & FL Driver

1. Terminal Layout

KEY IN 12	1	LC6514B-4131	42	KEY IN 11
KEY IN 13	2		41	KEY IN 10
	3		40	VDD
COMPULINK IN 2	4		39	HOLD
NC	5		38	VPP
SI	6		37	TUNER MUTE
CK	7		36	D8
SD	8		35	D7
STB1	9		34	G1
COMPULINK OUT 2	10		33	G2 (KEY OUT 15)
TUNED	11		32	G3 (KEY OUT 14)
STEREO	12		31	G4 (KEY OUT 13)
	13		30	G5 (KEY OUT 12)
	14		29	G6 (KEY OUT 11)
S1	15		28	G7 (KEY OUT 10)
S2	16		27	S8
S3	17		26	S7
S4	18		25	S6
RESET	19		24	S5
	20		23	OSC2
Vss	21		22	OSC1

2. Key Matrix

	IN 10 (pin 41)	IN 11 (pin42)	IN 12 (pin1)	IN 13 (pin2)
OUT10 (pin28)	---	MEMORY	AUTO MEMORY	CANCEL
OUT11 (pin29)	FM	AM	---	FM MODE MUTE
OUT12 (pin30)	TUNING UP	TUNING DOWN	---	---
OUT13 (pin31)	1	2	3	4
OUT14 (pin32)	5	6	7	8
OUT15 (pin33)	9	10	+ 10	PRESET SCAN

3. Pin Function Description

Pin No.	Symbol	I/O	Function and Operation	Pin No.	Symbol	I/O	Function and Operation
1	KEY IN 12	I	Key matrix input	22	OSC1	-	Oscillation input
2	KEY IN 13	I	"	23	OSC2	-	Oscillation output
3		I	Pull up (+5V)	24	S5	O	FL segment output
4	COM. IN2	I	Compulink signal input	25	S6	O	"
5	NC	--	No connection	26	S7	O	"
6	SI	I	Data input (from IC102)	27	S8	O	"
7	CK	O	System clock output (to IC102)	28	G7 (K.O.10)	O	FL grid output (Key matrix output)
8	SD	O	Data output (to IC102)	29	G6 (K.O.11)	O	" (Key matrix output)
9	STB1	O	Chip enable (to IC102)	30	G5 (K.O.12)	O	" (Key matrix output)
10	COM. OUT2	O	Compulink signal output	31	G4 (K.O.13)	O	" (Key matrix output)
11	TUNED	I	"TUNED" signal input (from IC102)	32	G3 (K.O.14)	O	" (Key matrix output)
12	STEREO	I	"STEREO" signal input (from IC105)	33	G2 (K.O.15)	O	" (Key matrix output)
13		--	No connection	34	G1	O	"
14		--	No connection	35	D7	O	Version select signal
15	S1	O	FL segment output	36	D8	O	Version select signal
16	S2	O	"	37	TUN. MUTE	O	Tuner muting (Refer to page 27)
17	S3	O	"	38	VPP	-	FL display power supply
18	S4	O	"	39	HOLD	I	Input signal for backup
19	RESET	I	Reset signal input (Refer to page 27)	40	VDD	-	Power supply (+5V)
20		I	Pull down	41	KEY IN 10	I	Key matrix input
21	Vss	--	GND	42	KEY IN 11	I	"

■ μ PD75104CW-242(IC536) : System Controller

1. Terminal Layout

DCS IN	1	64	
INH IN	2	63	RELAY
REMOCON	3	62	TU RST
	4	61	TU HLD
KI3	5	60	TU MUT
KI2	6	59	DELAY1
KI1	7	58	DELAY2
KI0	8	57	DELAY3
	9	56	
	10	55	SEA
M MUTE	11	54	VIDEO
R MUTE	12	53	VCR
R RELAY	13	52	PHONO
STB	14	51	TUNER
	15	50	CD
DATA	16	49	TAPE1
CLK	17	48	TAPE2
	18	47	
KEY O3	19	46	
KEY O2	20	45	RESET
KEY O1	21	44	SEAON
KEY O0	22	43	
LOUD	23	42	VIDEO1
HALL	24	41	VIDEO2
STAD	25	40	MODE1
DOLBY	26	39	MODE2
SURR	27	38	VR UP
15mS	28	37	VR DN
20mS	29	36	LOUDNESS
30mS	30	35	VR IND
	31	34	STANDBY
	32	33	DCS OUT

2. Key Matrix

	KEY IN0 (pin8)	KEY IN1 (pin7)	KEY IN2 (pin6)	KEY IN3 (pin5)
KEY OUT 0 (pin22)	TAPE2 MONITOR	TAPE1	CD	TUNER
KEY OUT 1 (pin21)	PHONO	VCR	VIDEO	----
KEY OUT 2 (pin20)	----	----	----	LOUDNESS
KEY OUT 3 (pin19)	SURROUND	MODE	DELAY	----

3. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations	Pin No.	Symbol	I/O	Functions and Operations
1	DCS IN	I	DCS signal input	33	DCS OUT	O	DCS signal output
2	INH IN	I	INH signal input	34	STANDBY	O	STANDBY indicator control signal output
3	REMOCON	I	REMOCON signal input	35	VR IND	O	VOLUM indicator control signal output
4		--	No connection	36	LOUDNESS	O	LOUDNESS signal output
5	KI3	I	Key matrix input	37	VR DN	O	VOLUM down control signal output
6	KI2	I	Key matrix input	38	VR UP	O	VOLUM up control signal output
7	KI1	I	Key matrix input	39	MODE2	O	Changing the delay time for surround
8	KI0	I	Key matrix input	40	MODE1	O	Changing the delay time for surround
9		--	Connected to GND	41	VIDEO2	O	Video switch control signal
10		--	Connected to GND	42	VIDEO1	O	Video switch control signal
11	M MUTE	O	Main signal Mute output	43		--	No connection
12	R MUTE	O	Rear signal Mute output	44	SEAON	O	SEA ON/OFF signal output
13	R RELAY	O	Rear signal Relay output	45	RESET	O	RESET signal output
14	STB	O	Strobe signal output	46		--	A Crystal resonator is Connected
15		--	Connected to GND	47		--	A Crystal resonator is Connected
16	DATA	O	Data output	48	TAPE2	O	TAPE2 indicator control signal output
17	CLK	O	Clock output	49	TAPE1	O	TAPE1 indicator control signal output
18		--	Connected to GND	50	CD	O	CD indicator control signal output
19	KO3	O	Key matrix output	51	TUNER	O	TUNER indicator control signal output
20	KO2	O	Key matrix output	52	PHONO	O	PHONO indicator control signal output
21	KO1	O	Key matrix output	53	VCR	O	VCR indicator control signal output
22	KO0	O	Key matrix output	54	VIDEO	O	VIDEO indicator control signal output
23	LOUD	O	Loud indicator control signal output	55	SEA	O	SEA indicator control signal output
24	HALL	O	Hall indicator control signal output	56		--	No connection
25	STAD	O	Stadium indicator control signal output	57	DELAY3	O	Changing the delay time for surround
26	DOLBY	O	Dolby indicator control signal output	58	DELAY2	O	Changing the delay time for surround
27	SURR	O	Surround indicator control signal output	59	DELAY1	O	Changing the delay time for surround
28	15mS	O	15mS indicator control signal output	60	TU MUT	O	TUNER Mute signal output
29	20mS	O	20mS indicator control signal output	61	TU HLD	O	TUNER Hold signal output
30	30mS	O	30mS indicator control signal output	62	TU RST	O	TUNER Reset signal output
31		--	Connected to +5V	63	RELAY	O	RELAY control signal output
32		--	Connected to +5V	64		--	Connected to GND

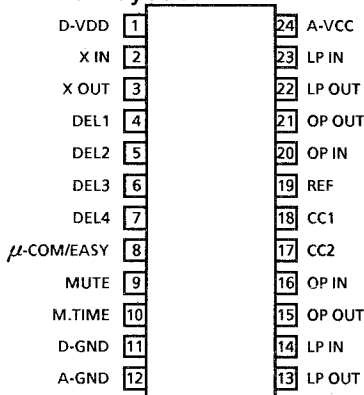
■ M50198P(IC602) : Digital Delay IC

1. Explanation of the operation

Audio signal is input to LPF1 to reduce the high frequency components. The output from LPF1 is coded to 1 bit signal by ADM modulator and comparator with inside .This digital signal is input to main control logic. And this signal obtain various effect,and is written in SRAM .At the same time main control logic read the data from SRAM ,and input it to ADM demodulator .The ADM demodulator converts 1bit signal to analog signal.The analog signal is input to LPF2 to reduce the suprius components,and output to Pin 13.

- LPF1 Reject the high frequency components which is contained the input signal and unnecessary.
- LPF2 Reject the suprius components which is generated by the ADM demodulation by using with comparator.
- OP1,CC1 For ADM modulator.
- OP2,CC2 For ADM demodulator.

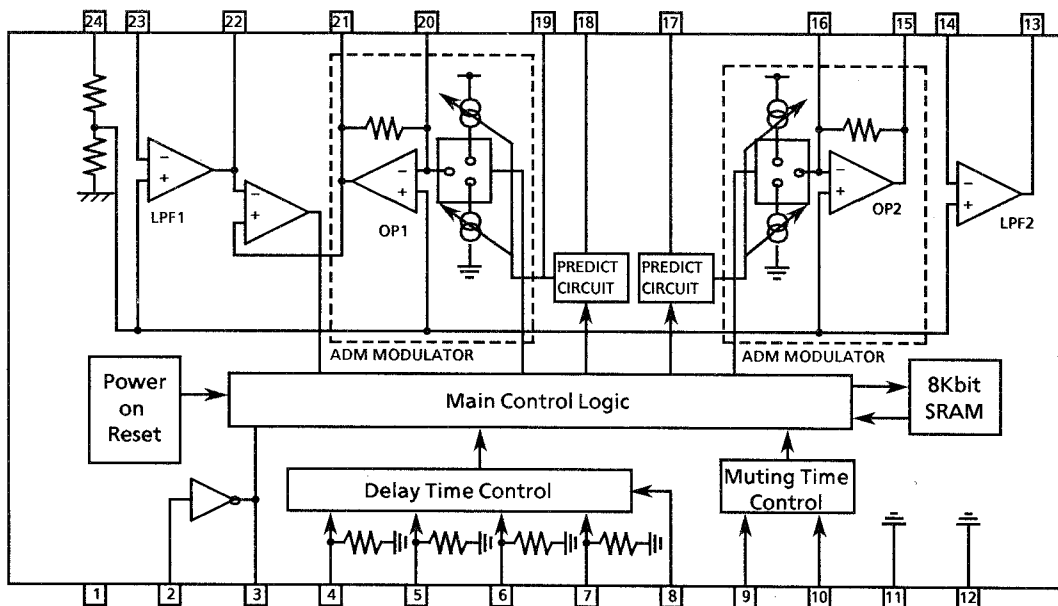
2. Terminal Layout



3.Pin function Description

Pin No	Symbol	Function	Pin No	Symbol	Function
1	D-VDD	Power Supply	13	LP OUT	Output of LPF
2	X IN	Oscillation Terminal	14	LP IN	Input of LPF
3	X OUT	Oscillation Terminal	15	OP OUT	Integrator output
4	DEL1	Delay time control	16	OP IN	Integrator input
5	DEL2	∕	17	CC2	Current control
6	DEL3	∕	18	CC1	∕
7	DEL4	Connected to GND	19	REF	1/2 Vcc
8	∕COM/EASY	∕	20	OP IN	Integrator input
9	MUTE	∕	21	OP OUT	Integrator output
10	M.TIME	∕	22	LP OUT	Output of LPF
11	D-GND	∕	23	LP IN	Input of LPF
12	A-GND	∕	24	A-VCC	Power supply

4. Block Diagram



LA1266A (IC104) : FM AM IF AMP & detector

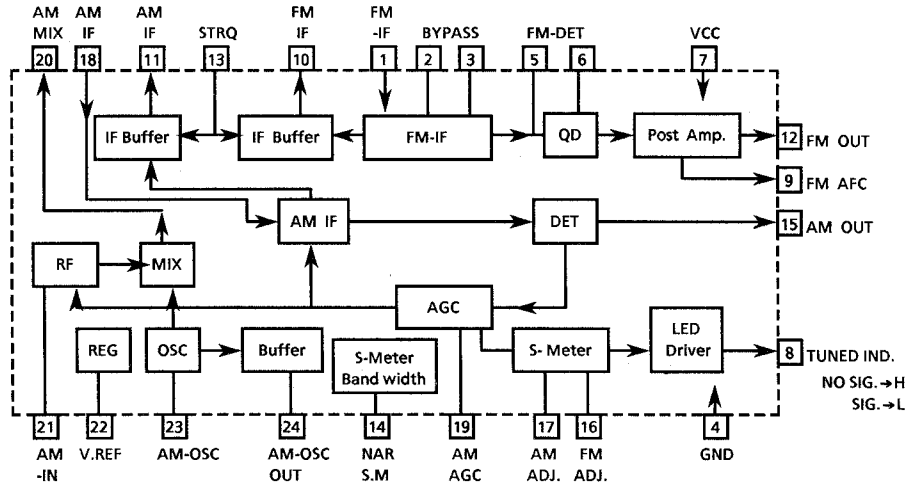
1. The main function descriptions

- (1) Amplify and detect of FM intermodulation frequencies.
- (2) It has local oscillator and mixer for AM, and amplify the AM-IF signal.

2. Terminal Layout

FM-IF	1	24	AM-OSC OUT
BYPASS	2	23	AM-OSC
BYPASS	3	22	V.REF
GND	4	21	AM-IN
FM-DET	5	20	AM-MIX
FM-DET	6	19	AM-AGC
V _{CC}	7	18	AM-IF
SIG	8	17	AM ADJ.
FM-AFC	9	16	FM ADJ.
FM-IF	10	15	AM OUT
AM-IF	11	14	NAR S.M
FM-OUT	12	13	STRQ

3. Block Diagram



4. Pin Function Description

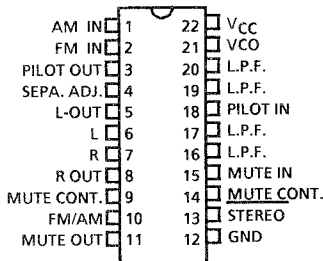
Pin No.	Symbol	I/O	Functions and Operations
1	FM IF	I	Input terminal of FM IF signal.
2,3	BYPASS	--	Bypass of FM IF Amp.
4	GND	--	Device ground terminal.
5,6	FM DET	--	FM detect transformer.
7	V _{CC}	--	Power supply terminal.
8	SIG	O	When the set is tuning, this terminal becomes "L".
9	FM AFC	O	Output terminal of voltage for FM-AFC.
10	FM IF	O	When the signal of IF REQ of IC102(LC7218) applied to pin17, the signal of FM IF does output.
11	AM IF	O	When the signal of IF REQ of IC102(LC7218) applied to pin17, the signal of AM IF does output.
12	FM OUT	O	FM detection output.
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal going to "High".
14	NAR S.M	--	Control the Band-width of signal meter.
15	AM OUT	O	AM detection output.
16	FM ADJ.	--	FM stop level (or mute level) adjust.
17	AM ADJ.	--	AM stop level (or mute level) adjust.
18	AM-IF	I	AM IF Signal input.
19	AM-AGC	I	AGC voltage Input terminal for AM.
20	AM-MIX	O	Output terminal for AM mixer.
21	AM-IN	I	Input terminal for AM RF Signal.
22	V.REF	--	Band-width control of FM signal meter.
23	AM-OSC	--	AM Local oscillation circuit.
24	AM-OSC OUT	O	AM Local Oscillation Signal output.

■ LA3401 (IC105) : FM MPX Detector

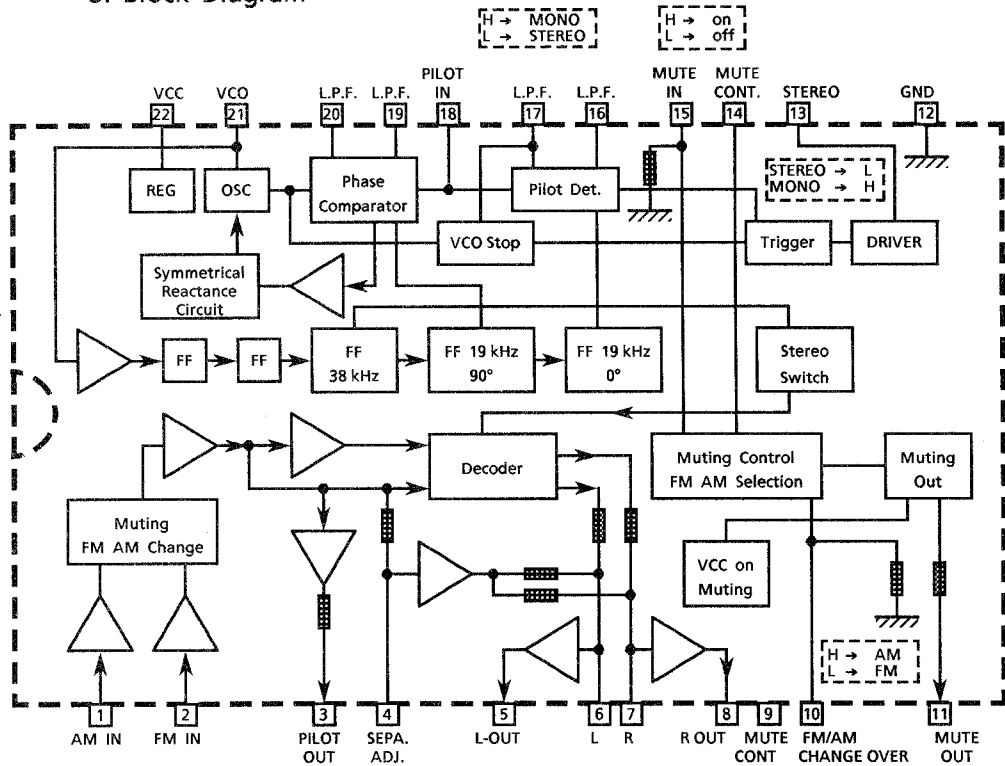
1. The main function descriptions

- (1) Detect the FM Multiplex Signal (Stereo signal).
- (2) When receiving FM Stereo Signal, it outputs the signal for indicator.
- (3) AM/FM Audio Amplifier.

2. Terminal Layout



3. Block Diagram



3. Pin Function Description

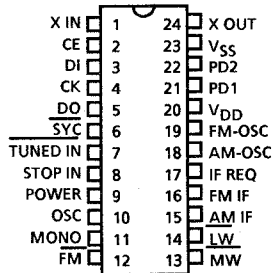
Pin No.	Symbol	I/O	Functions and Operations
1	AM IN	I	Input terminal for AM detection signal.
2	FM IN	I	Input terminal for FM detection signal.
3	PILOT OUT	O	Output of MPX pilot signal (Connect to Pin18).
4	SEPA. ADJ.	--	Separation adjustment.
5	L-OUT	O	Left channel signal output.
6	L	O	Reversal output of Pin5.
7	R	O	Reversal output of Pin8.
8	R-OUT	O	Right channel signal output
9	MUTE CONT.	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM/AM	I	Change over the FM/AM input. "H" : AM, "L" : FM
11	MUTE OUT	--	Not used
12	GND	--	Ground terminal.
13	STEREO	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	MUTE CONT.	--	The mute time is controlled by the connected capacitor when changing over the FM/AM .
15	MUTE IN	I	Mute signal input. "H" : Mute on, "L" : Mute off.
16	L.P.F.	--	Low pass filter of pilot detector.
17	L.P.F.	--	While this terminal goes to "H", the VCO stop.
18	PILOT IN	I	PLL input.
19	L.P.F.	--	Low-pass filter of PLL.
20	L.P.F.	--	Low-pass filter of PLL.
21	V _{CO}	I	Voltage controlled oscillator terminal.
22	V _{CC}	--	Power supply.

■ LC7218 (IC102) : PLL Synthesizer

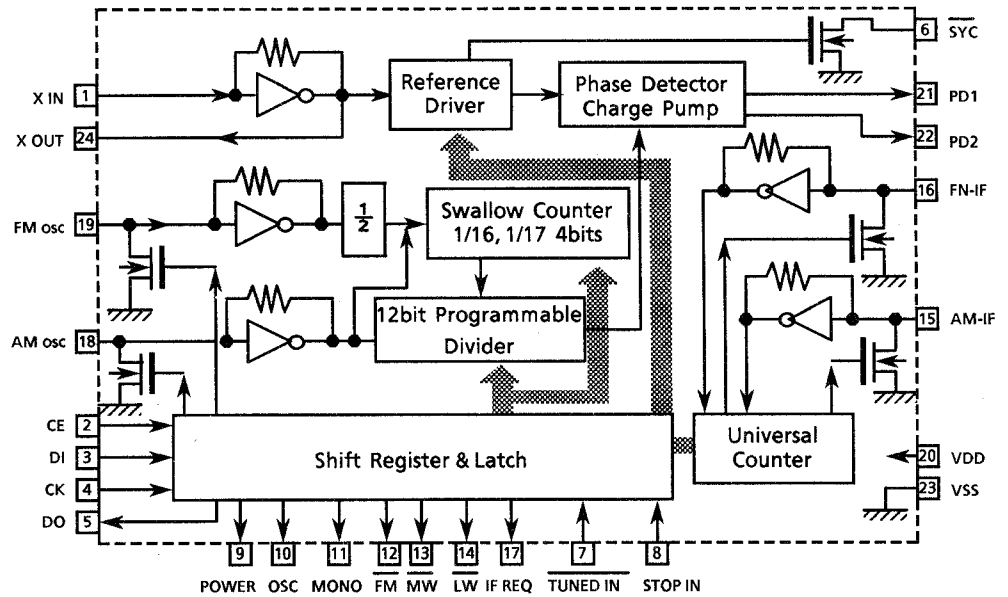
1. The main function descriptions

- (1) It makes the local oscillation frequency by the control data from IC .
- (2) Decode the control signal and transmit the signal for receiving conditions.
- (3) For the best tuning, count the internal-frequency and transmit the data to IC .

2. Terminal Layout



3. Block Diagram



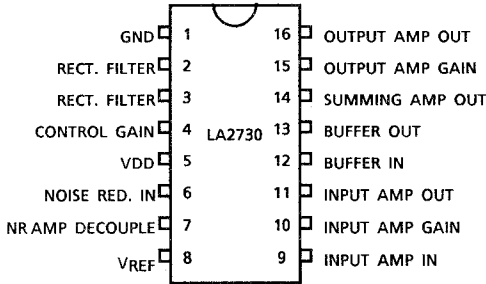
4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1, 24	X in, X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC501).
4	CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218 to the controller which is synchronized with CK.
6	SYC	---	Not used
7	TUNED IN	I	Receive the tuned signal from IC104 (LA1266A).
8	STOP IN	I	Not used
9	POWER	---	Not used
10	QSC	---	Not used
11	MONO	---	It is "H" on FM-monaural, "L" on FM-stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on AM mode.
14	LW	---	Not used
15	AM-IF	I	Universal counter input for AM-IF from IC104 (LA1266A).
16	FM-IF	I	Universal counter input for FM-IF from IC104(LA1266A).
17	IF REQ	O	Output the "IF-signal request" to IC104 when the pin-7 (tuned in) goes to "H".
18	AM osc	I	Input the local oscillator signal of AM.
19	FM osc	I	Input the local oscillator signal of FM.
20	V _{DD}	---	This is a terminal of power supply.
21	PD1	O	PLL charge pump output: When the local oscillator signal frequency is higher than the reference frequency, high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	O	Not used
23	V _{SS}	---	GND

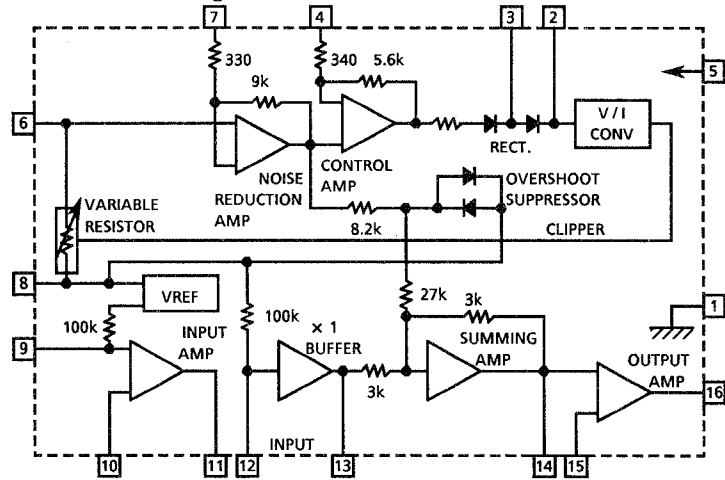
Internal Block Diagram of Other ICs

LA2730 (IC603) : Dolby "B" Noise Reduction

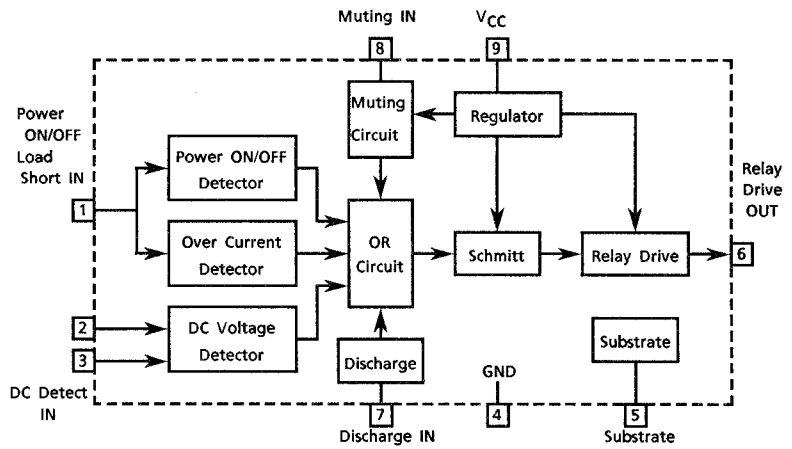
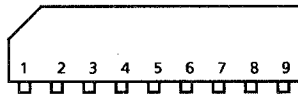
1. Terminal Layout



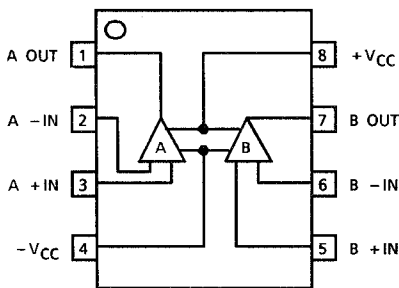
2. Block Diagram



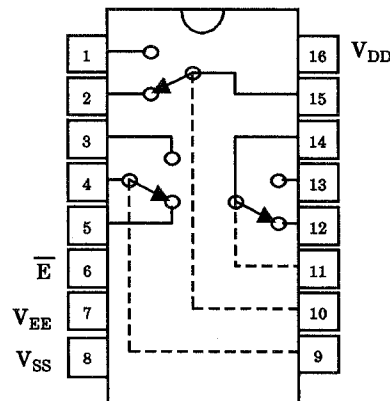
TA7317P (IC901) : Protector



NJM4560DD (IC701) : Dual OP amp.

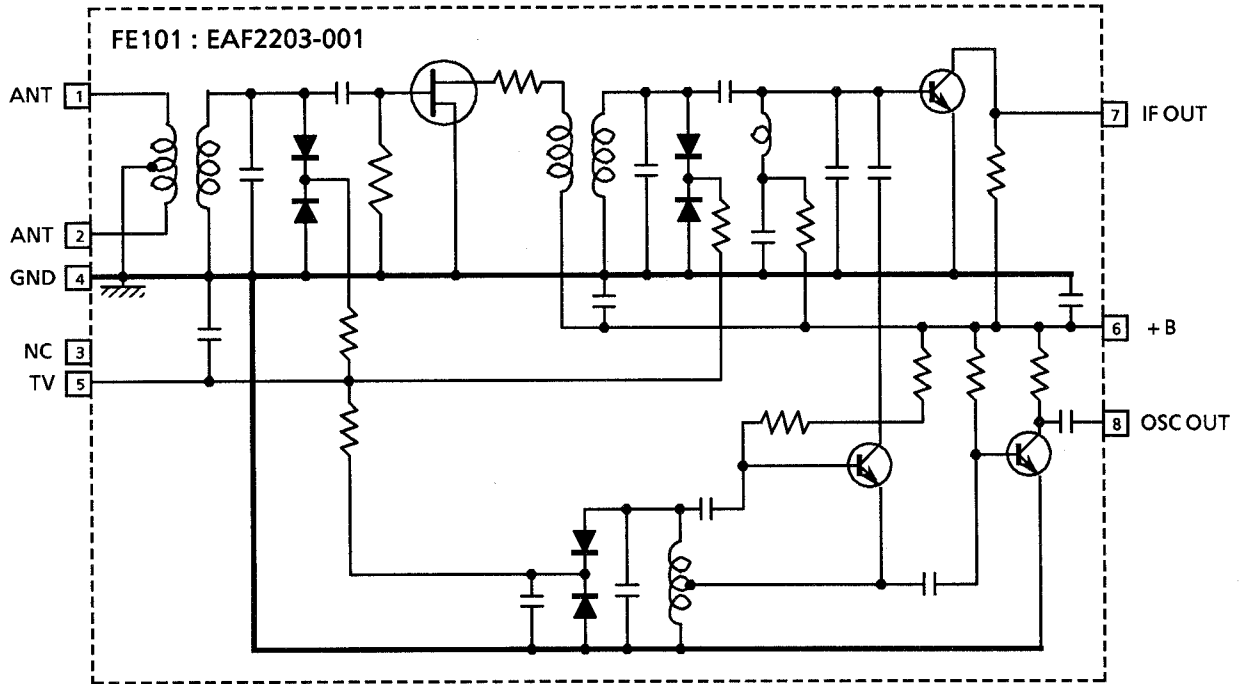


TC4053BP (IC571) : ANALOG SWITCH

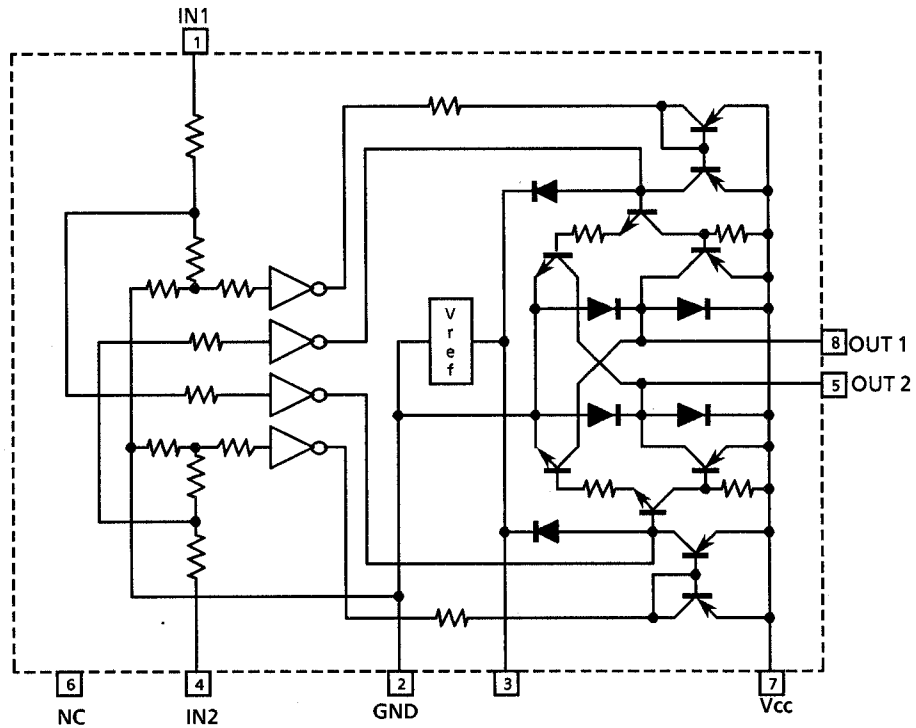


\bar{E}	Pin 9		Pin 10		Pin 11	
	L	H	L	H	L	H
L	4-5	4-3	15-2	15-1	14-12	14-13
H	All Off					

■ EAF2203-001 (FE101) : FM Front-End

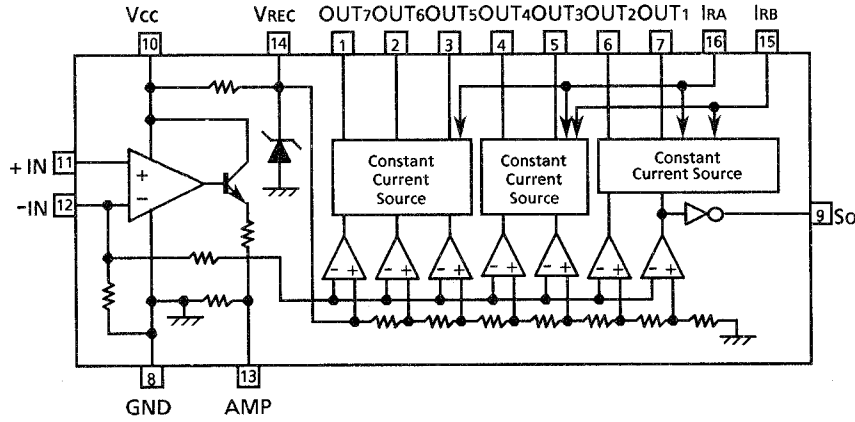


■ LB1639-CV (IC581) : Motor Driver



IN 1	IN 2	OUT 1	OUT 2	MOTOR
H	L	H	L	CLOCKWISE
L	H	L	H	COUNTER-CLOCKWISE
H	H	OFF	OFF	WAITING
L	L	OFF	OFF	WAITING

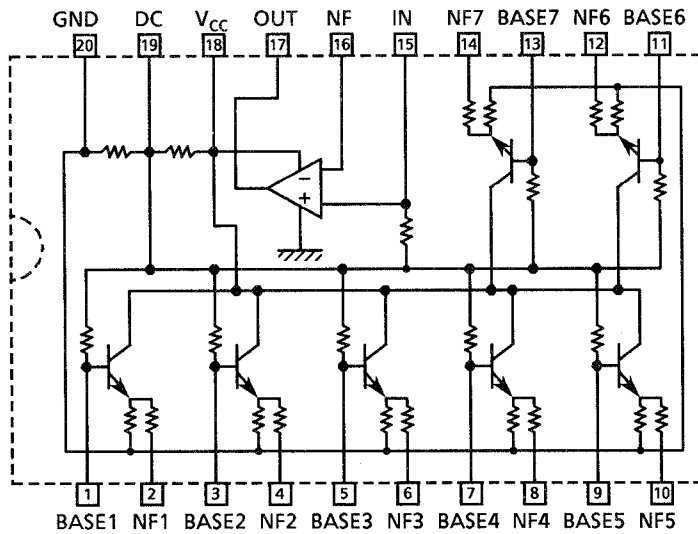
■ IR2E19(IC401,402,425,426): LED Driver.



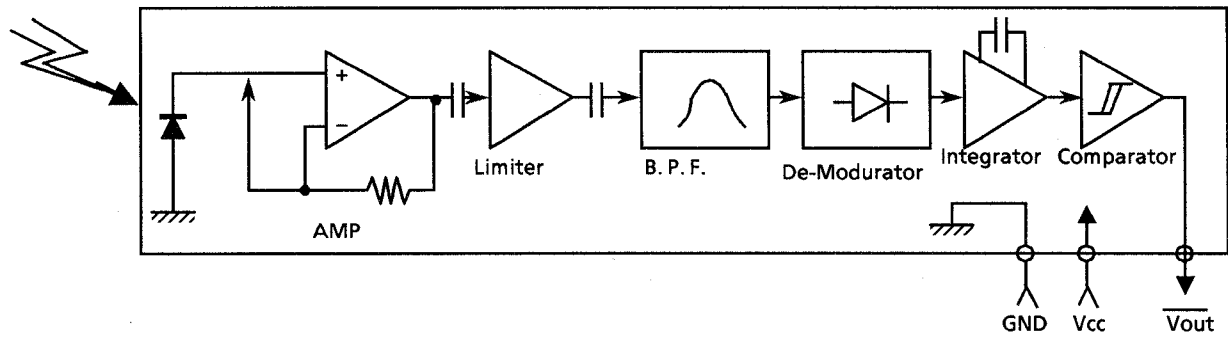
■ LA3607S (IC451,452) : S.E.A. GRAPHIC EQUALIZER

1. Functions

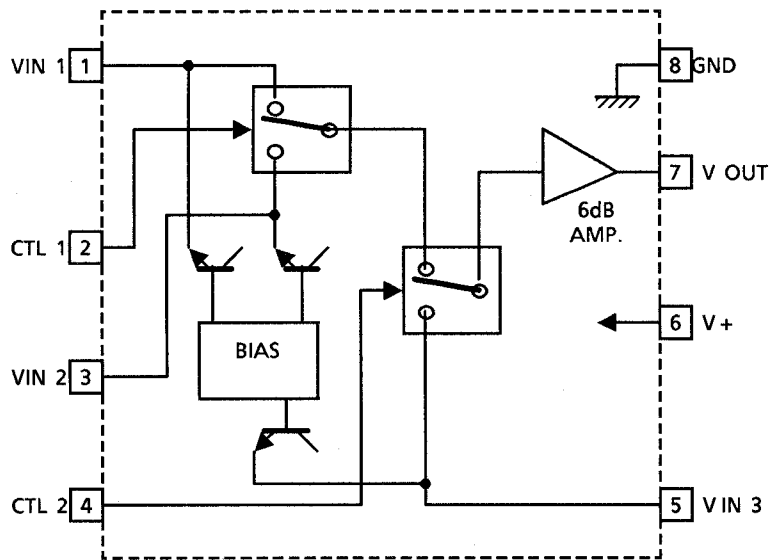
It makes inductive characteristic instead of coil.



■ SPS-420-1 (IC563) : Remocon Module IC



■ NJM2246D(IC201) : Video Switch

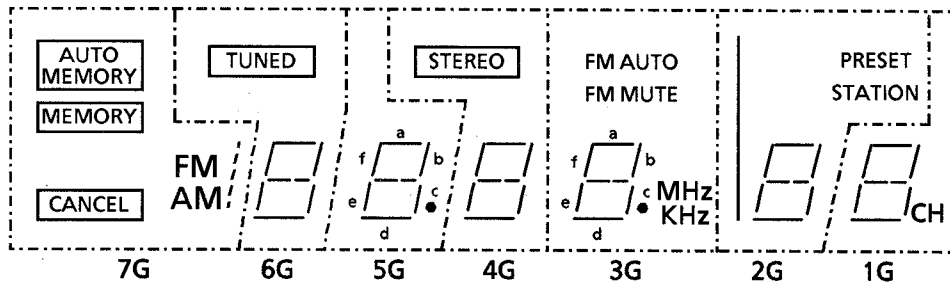


Control Signal – OutputSignal

CTL 1	CTL 2	Output
L	L	VIN 1
H	L	VIN 2
L/H	H	VIN 3

FL Display Tube Internal Connection(FL501:ELU0001-085)

Terminal Layout



Terminal Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
CONNECTION	F(+)	F(+)	NP	7G	P(S4)	P(S3)	7G	P(S2)	P(S1)	7G	P(S5)	6G	P(S6)	P(S7)	5G	P(S8)	NC	
PIN NO.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
CONNECTION	4G	NC	NC	3G	NC	NC	3G	NC	NC	2G	NC	NC	NC	1G	NC	NP	F(-)	F(-)

Notes ; F (Filament) , G (Grid) , P (Anode) , NC (No Connection) , NP (No Pin)

Anode Connection

	7G	6G	5G	4G	3G	2G	1G
S1	/	TUNED	•	STEREO	FM AUTO FM MUTE	PRESET STATION	CH
S2	AUTO MEMORY	a	a	a	/	a	a
S3	/	b	b	b	MHz	b	b
S4	MEMORY	c	c	c	KHz	c	c
S5	CANCEL	d	d	d	g	d	d
S6	FM	e	e	e	f,c	e	e
S7	AM	f	f	f	b,e	f	f
S8	/	g	g	g	a,d	g	g

Disassembly Procedures

■ Removing the Top Cover

1. Remove the 4 screws fastening both sides of the Top Cover, and the 2 screws fastening the rear side.
2. Remove the Top Cover.

■ Removing the Bottom Plate (Fig.3)

1. Remove the 15 screws ⑤.
2. Remove the screw ⑥. (Universal unit only)
3. Remove the Bottom Plate.

■ Removing the Front Panel (Fig.1,4)

1. Remove the 2 screws ① fastening both sides of the Front Panel, and the 4 screws ② fastening bottom of the Front Panel.
2. Remove the wires.
(J001,401,451,452,501,530,531,571,581,P101)
3. Remove the Front Panel.

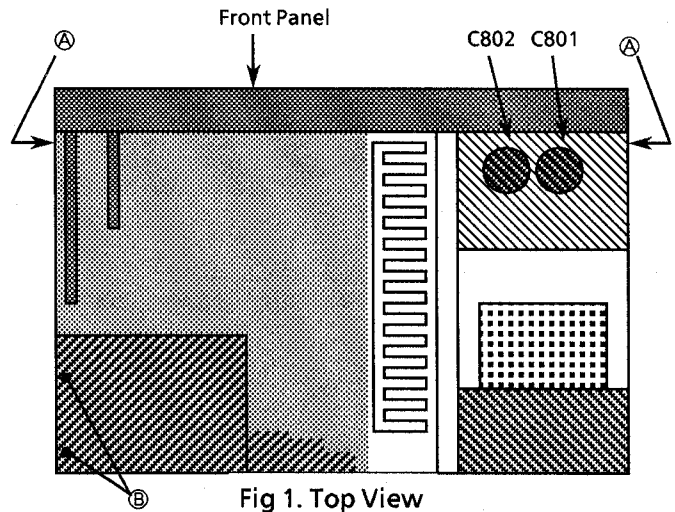


Fig 1. Top View

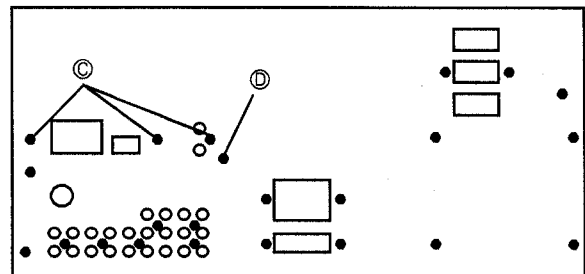


Fig 2. Rear View

■ Removing the Volume P.C. Board

1. Remove the Volume knob.
2. Remove the Nut fastening Volume.
3. Remove the Volume P.C. Board.

■ Removing the Front P.C. Board

1. Remove the Volume P.C. Board.
2. Remove the REAR LEVEL, INPUT BALANCE, BALANCE knob.
3. Remove the 18 screws fastening Front P.C. Board.
4. Remove the Front P.C. Board.

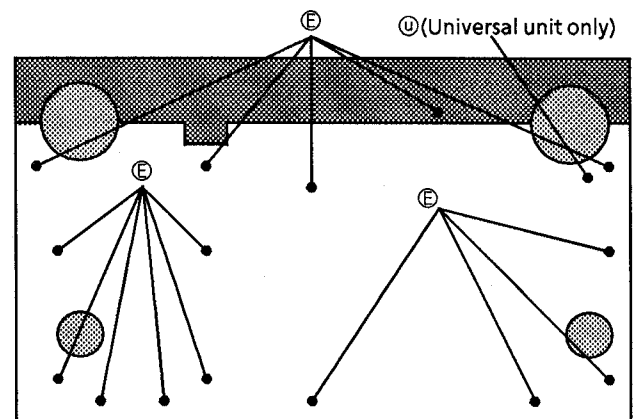


Fig 3. Bottom Cover

■ Removing the Tuner P.C. Board (Fig.1,2)

1. Remove the 6 screws ③, ④ and ⑤.
2. Take it out.

■ Removing the Power Transistor

1. Unsolder the broken transistor.
2. Remove the screw fastening it.
3. Remove it.

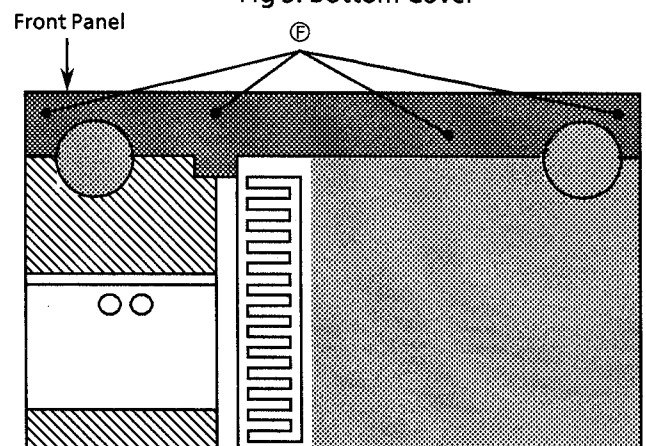
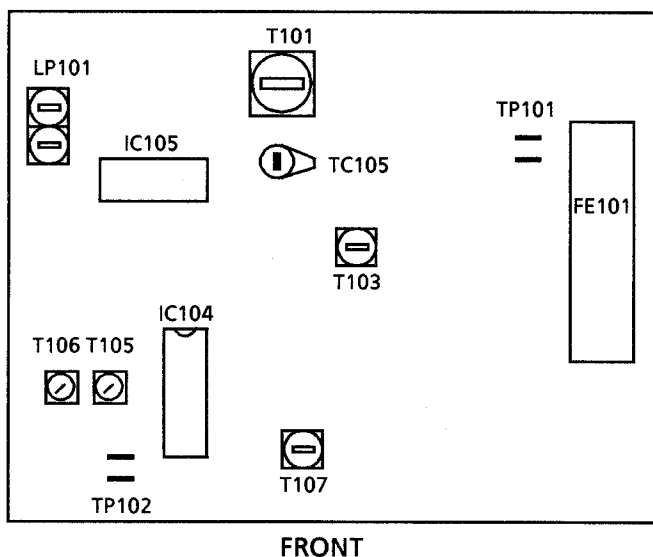


Fig 4. Bottom View

FM/AM Tuner Alignment Procedures



1. FM section

■ FM oscillator :

- (1) Set the frequency display to "108.0MHz".
- (2) Confirm the FM inter-station noise is received.
- (3) Confirm the voltage of test point "TP101" becomes $8.0V \pm 2.0V$.
- (4) Set the frequency display to "87.5MHz" and confirm the voltage of test point "TP101" becomes $0.6V \sim 2.6V$.

■ FM detector coil : T105, T106

- (1) Connect a digital voltmeter to test point "TP102", and receive to "100.1MHz" signal with SSG ATT 70dB.
- (2) Adjust T105 so that the digital voltmeter reads $0 \pm 1.5mV$.
- (3) At the same time, Adjust T106 so that the distortion of the output is minimised.

2. AM section

■ AM oscillator : T103

- (1) Set the frequency display to "530kHz" and confirm the voltage of test point "TP101" becomes $0.9V \pm 0.2V$.
- (2) Set the frequency display to "1600kHz" and confirm the voltage of test point "TP101" becomes $7.2 \pm 0.7V$.
- (3) If its voltage exceeds the allowance, adjust T103 to obtain the voltage.

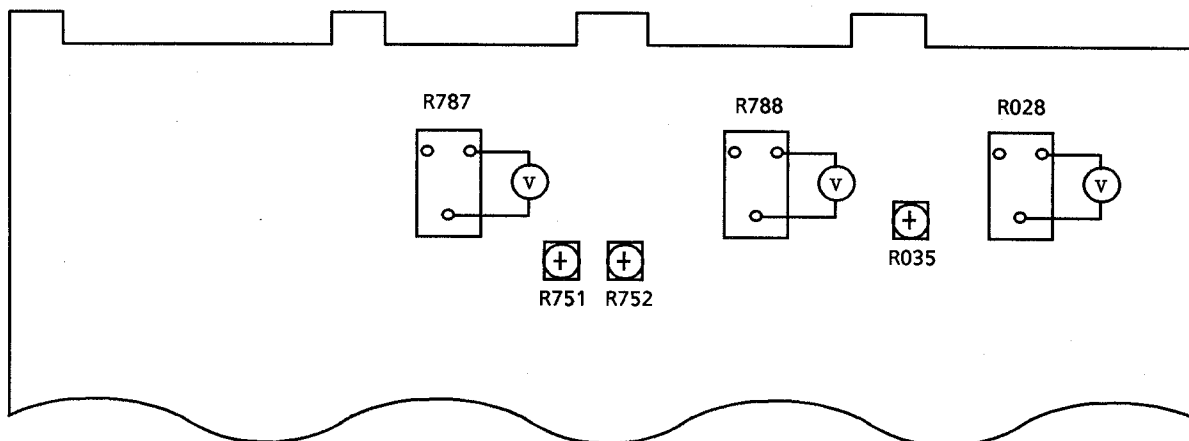
■ AM antenna coil : T101

- (1) Connect a loop antenna to the "AM Loop" terminal on the rear panel.
- (2) Adjust T101 to obtain the best receiving sensitivity on 600kHz or 603kHz.

■ AM antenna trimmer : TC105

- (1) Adjust TC105 to obtain the best receiving sensitivity on 1400kHz or 1404kHz.

Power Amplifier Adjustment Procedures

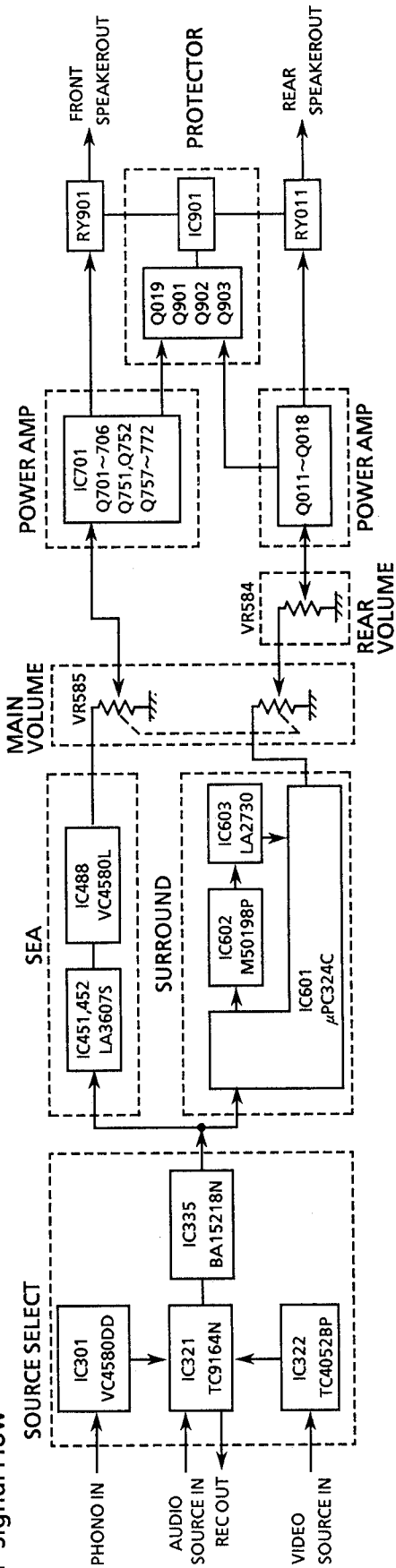


■ Idling Current

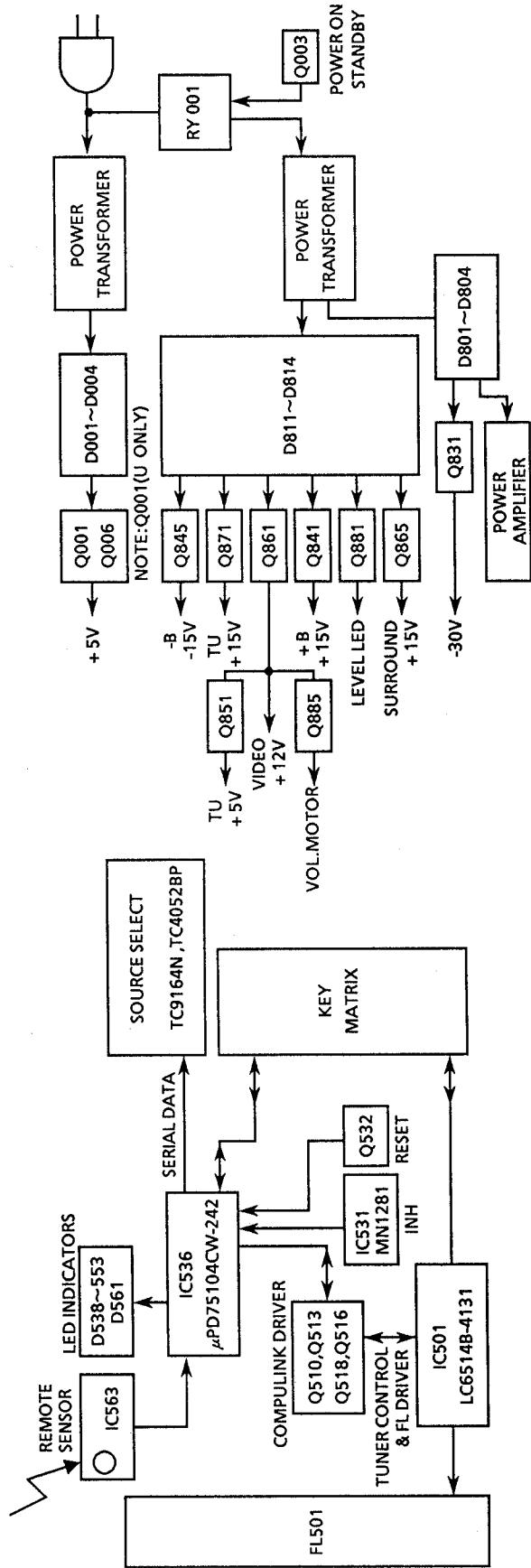
- (1) Set the volume control to minimum during this adjustment.
- (2) Turn R751 and R752, R035 fully counterclockwise before the power switch on.
- (3) Always start from cold, and allow 5 minutes to warm up before adjustment. If the heatsink is already warm from previous use the correct adjustment can not be made.
- (4) Connect a DC voltmeter to R787 resistor's leads for left channel, to R788 for right channel, or to R028 for Surround channel.
- (5) Adjust R751 for left channel, R752 for right channel, or R035 for Surround channel, so that the DC voltmeter becomes $2mV \sim 7mV$.

Block Diagram

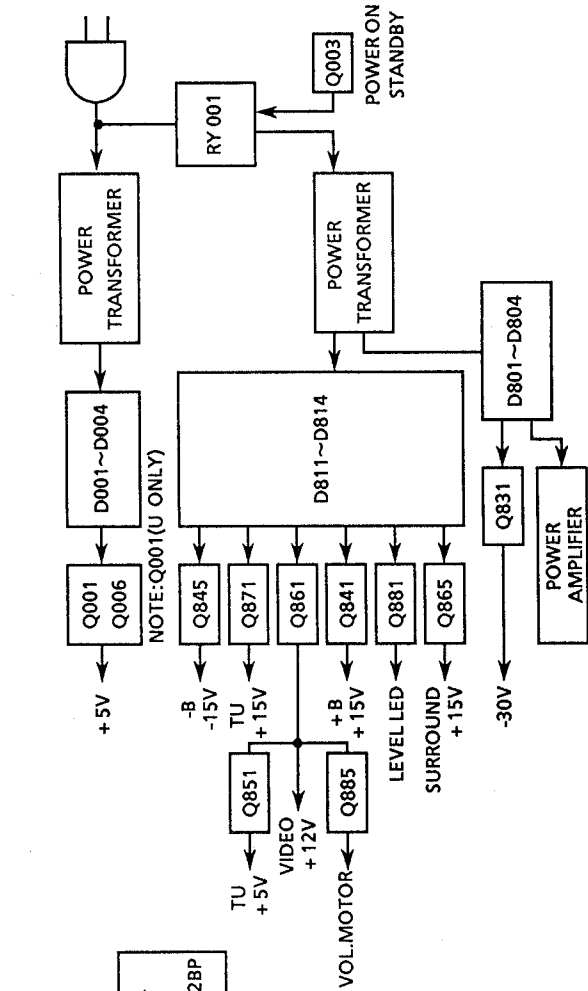
Signal Flow



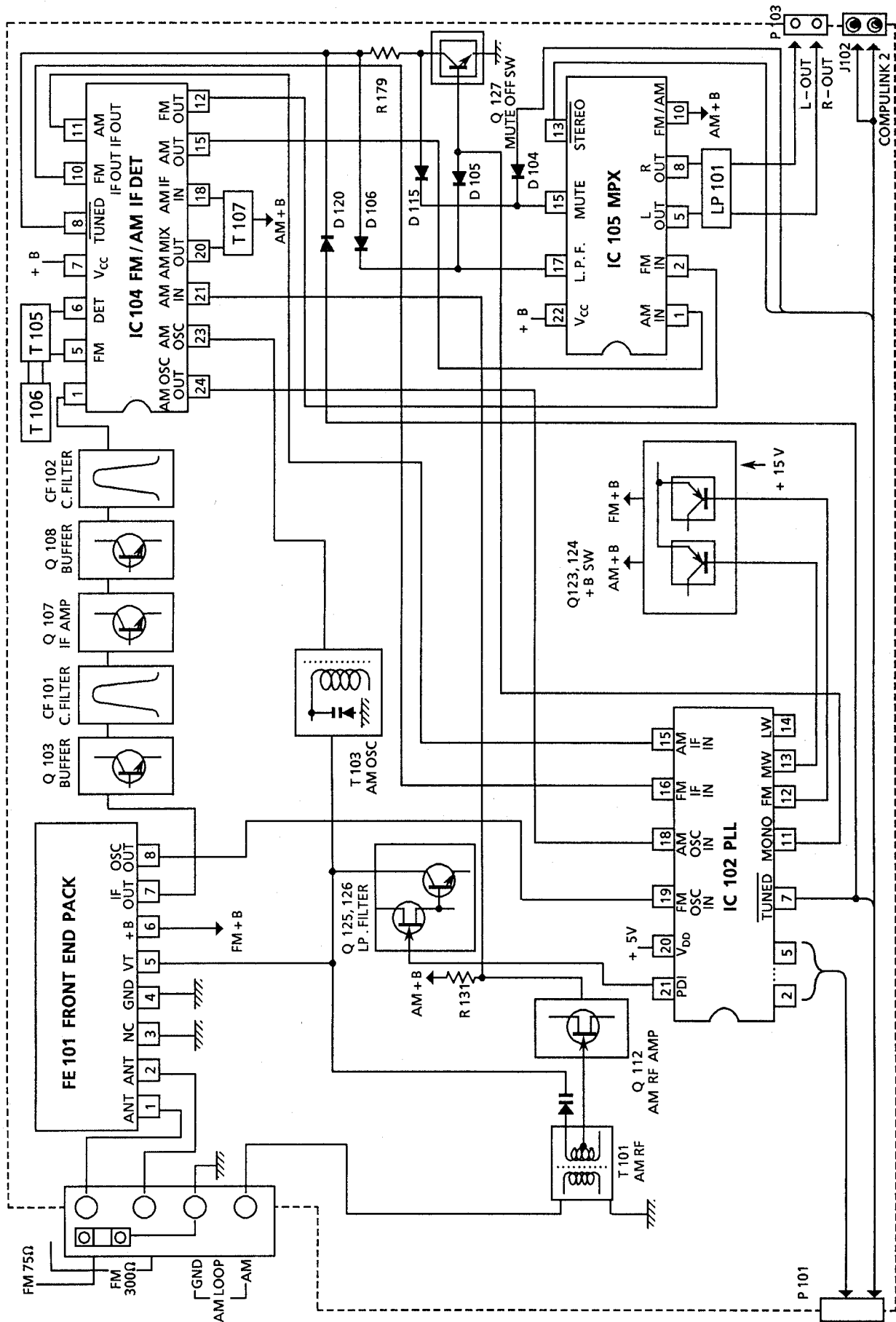
Control Section



Power Supply Section

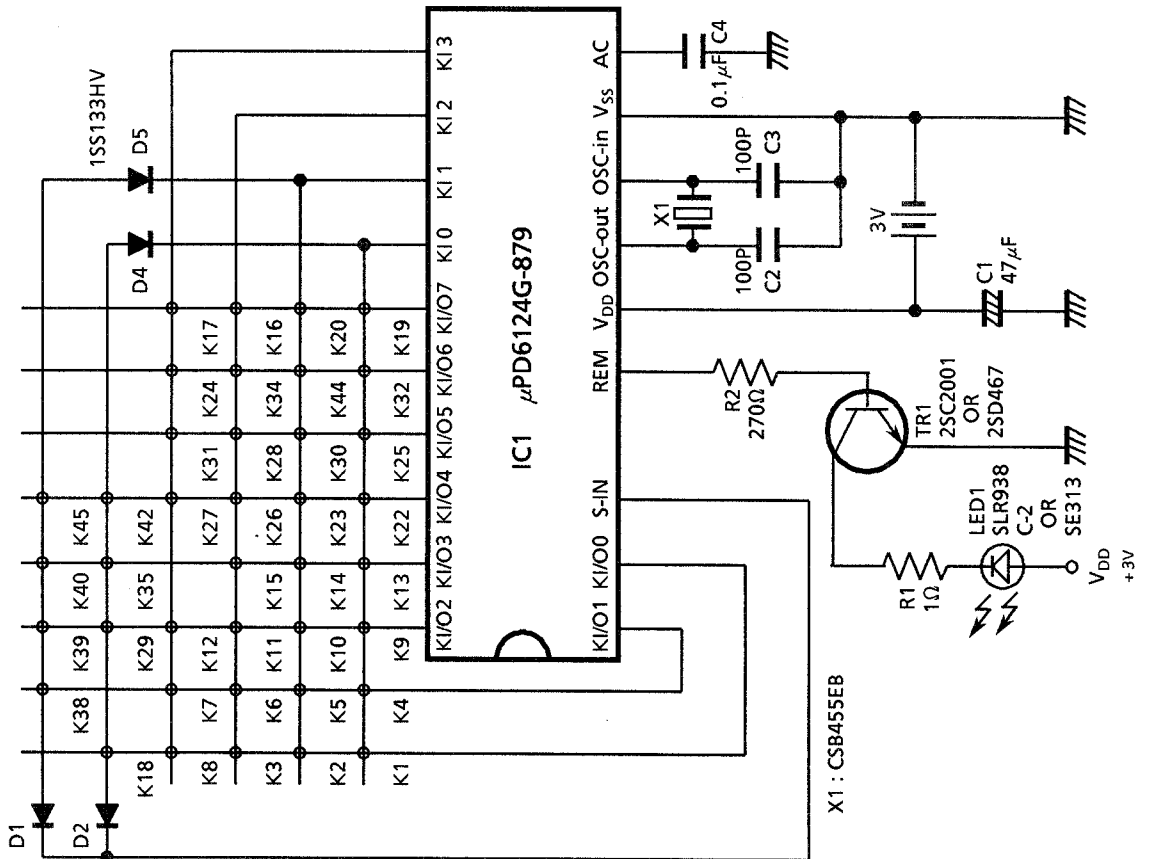


■ Tuner Section



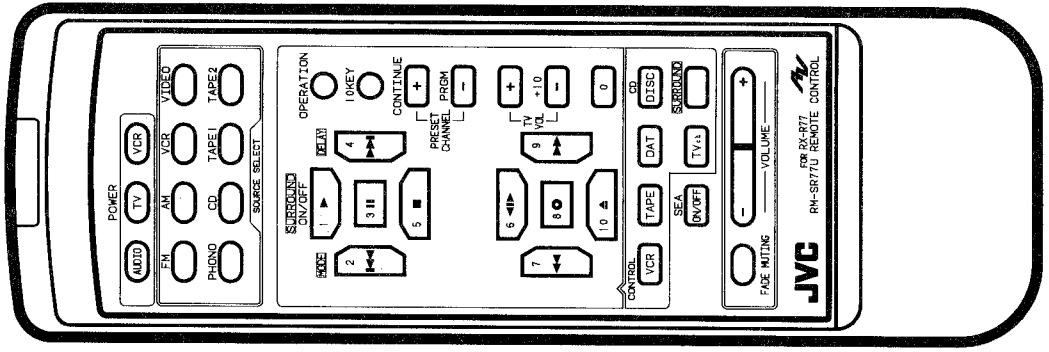
Remote Control Unit (RM-SR77U)

■ Schematic Diagram



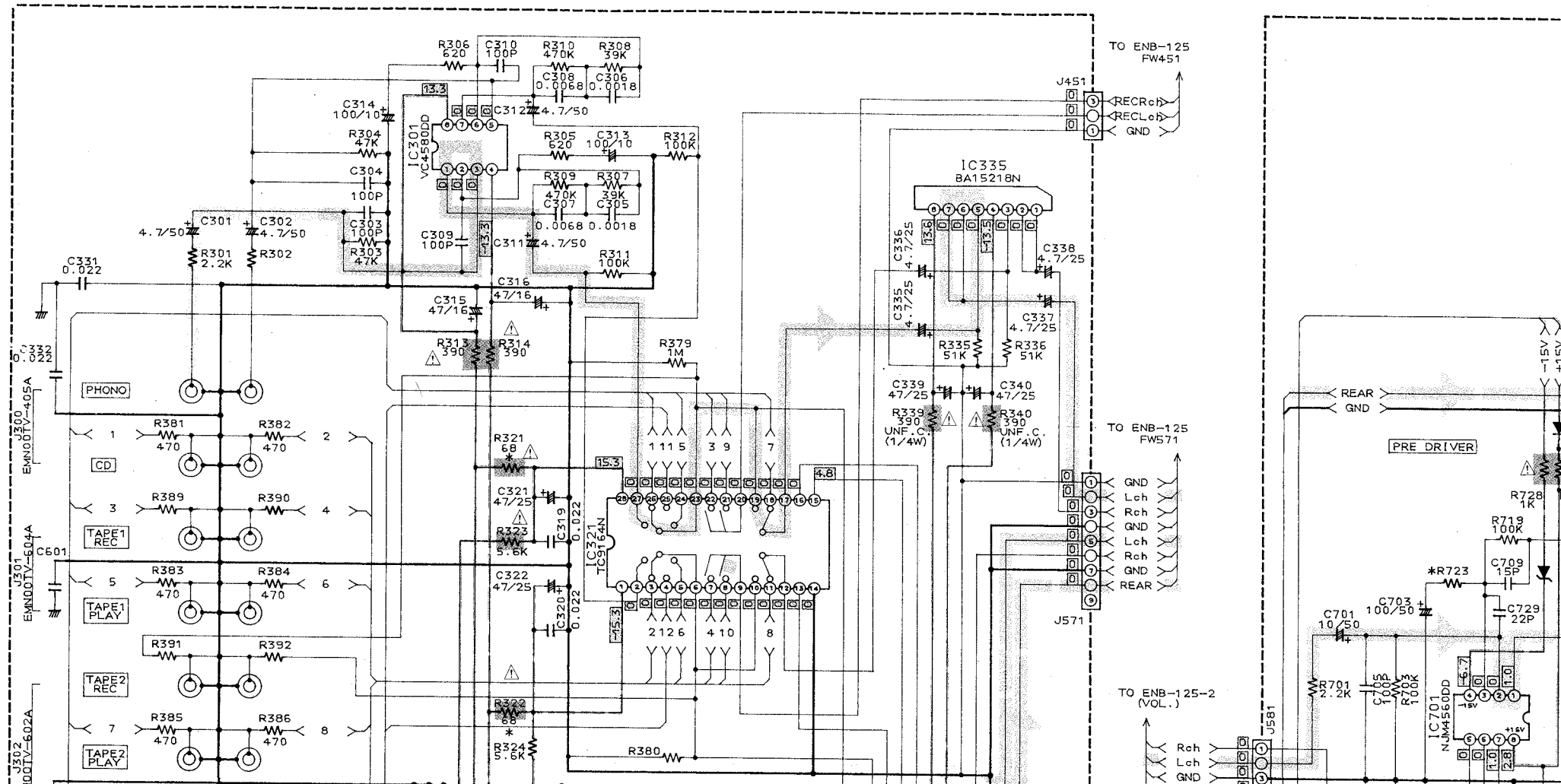
■ Key Layout

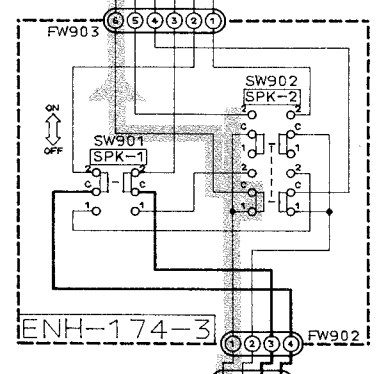
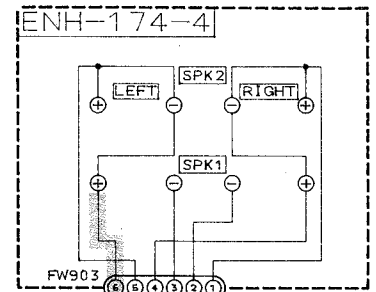
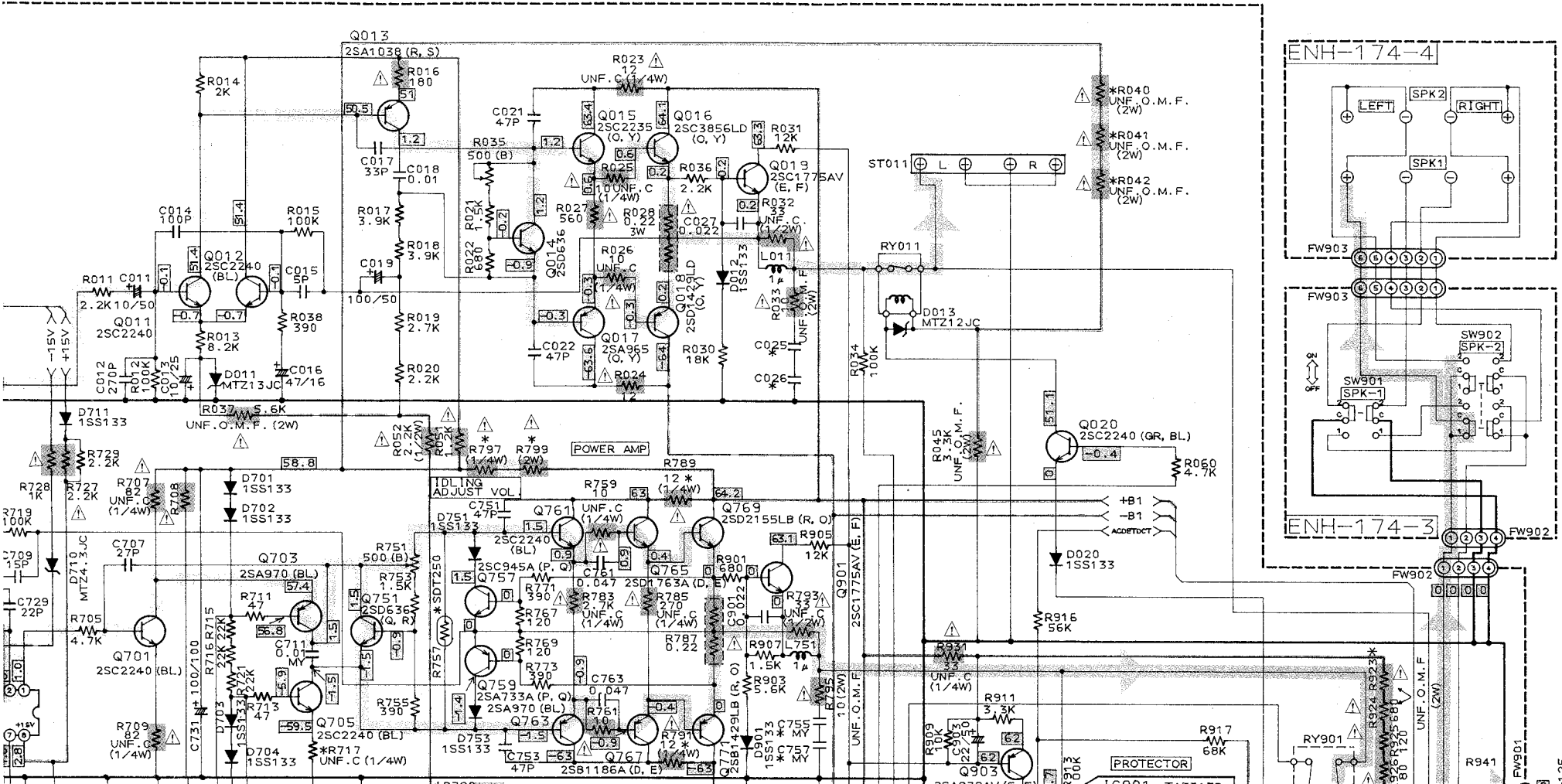
KEY NO.	KEY FUNCTION	KEY NO.	KEY FUNCTION
1	▶ 1 ON/OFF	14	+10 VOLUME(-)
2	◀ 2 MODE	15	0
3	⏸ 3	16	OPERATION
4	▶▶ 4 DELAY	17	10 Key
5	■ 5	18	AUDIO POWER
6	◀◀ 6	19	TV POWER
7	◀◀ 7	20	VCR POWER
8	○ 8	22	FM
9	▶▶ 9	23	AM
10	▲ 10	24	VCR
11	PRESET(+) CHANNEL(+) CONTINUE	25	VIDEO
12	PRESET(-) CHANNEL(-) PRGM	26	PHONO
13	VOLUME(+)	27	CD
		28	TAPE 1
		29	TAPE 2
		30	VCR CONTROL
		31	TAPE CONTROL
		32	CD DISC CONTROL
		34	SURROUND CONTROL
		35	TV ch
		38	FADE MUTING
		39	VOLUME(-)
		40	VOLUME(+)
		42	VIDEO 2
		44	DAT CONTROL
		45	SEA ON/OFF

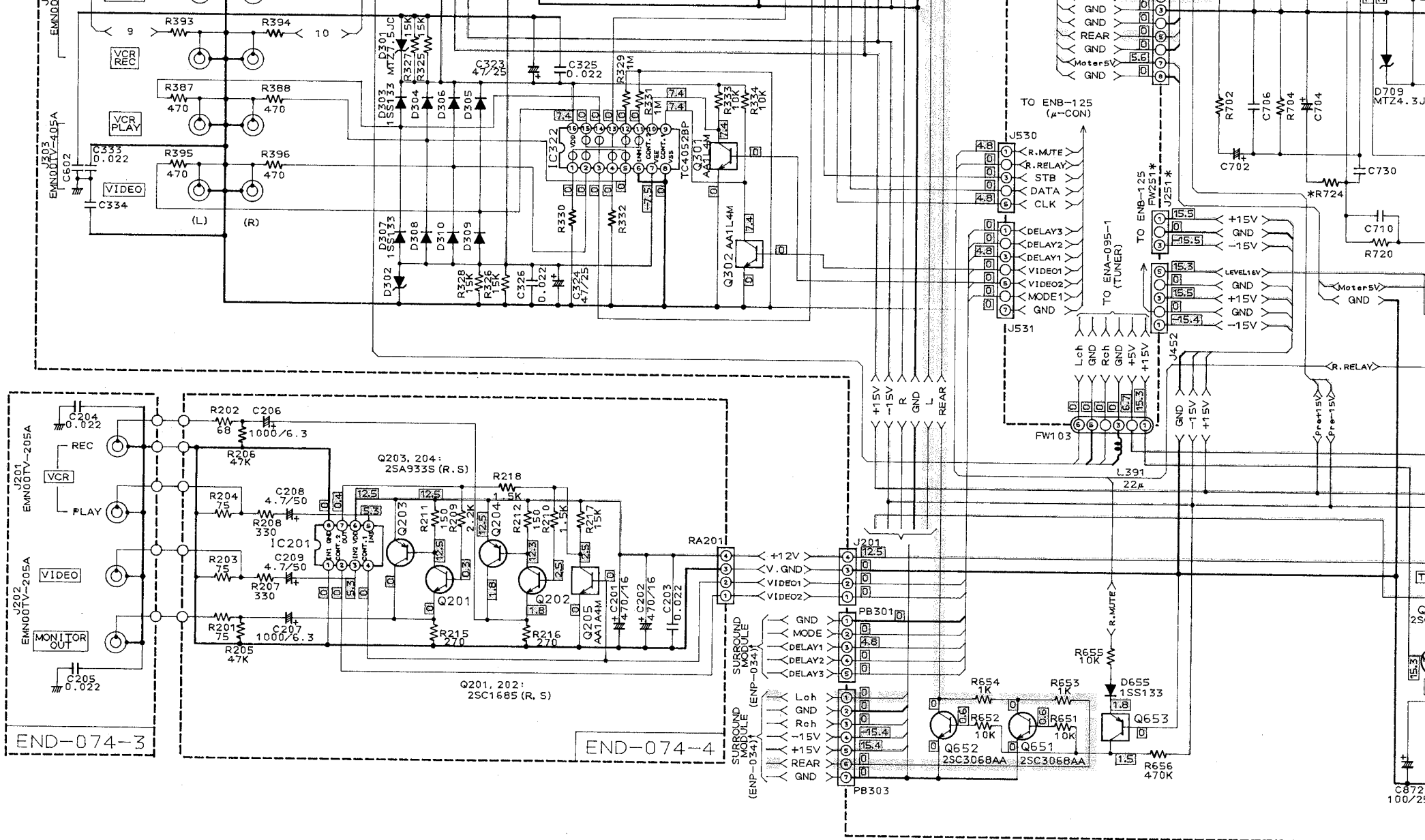


SCHEMATIC DIAGRAM

(1) Source Selector & Power Amplifier Section

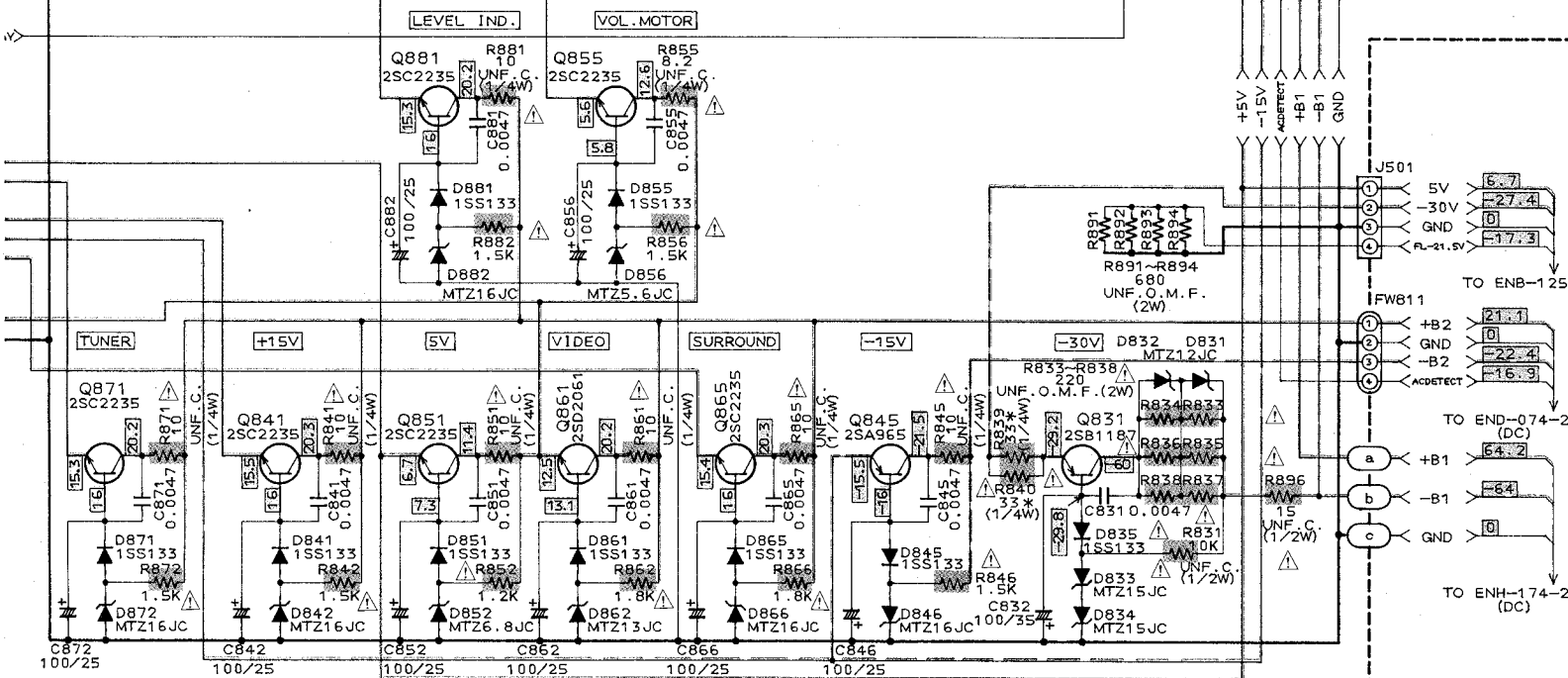
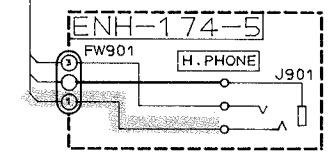
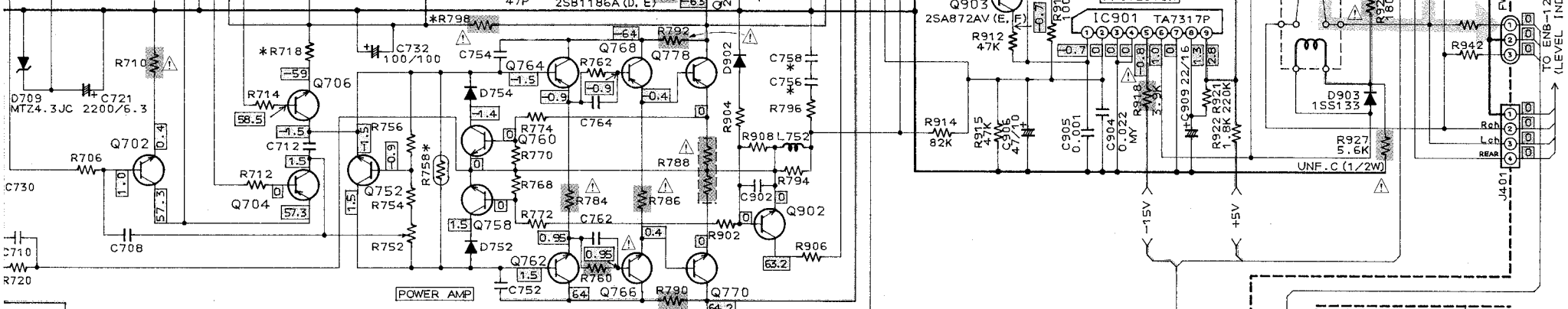






END-074-3

END-074-4

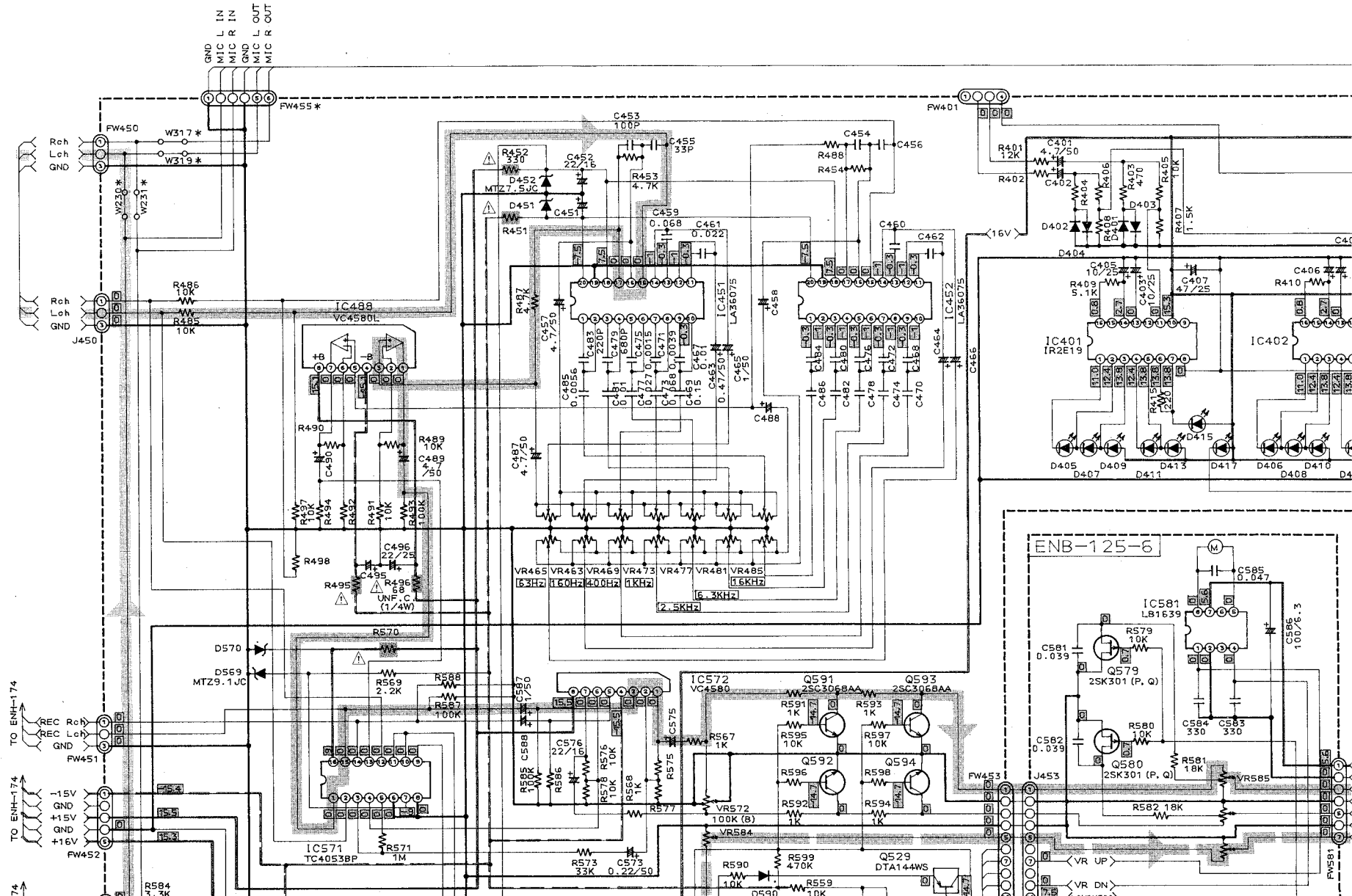


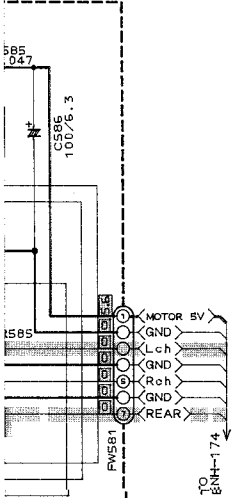
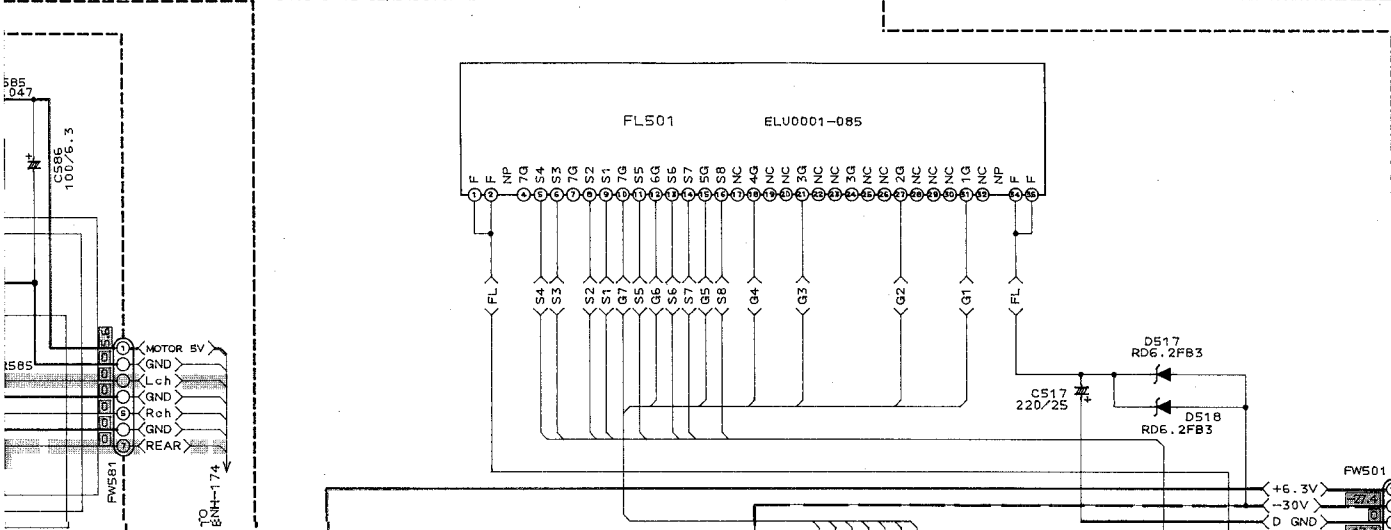
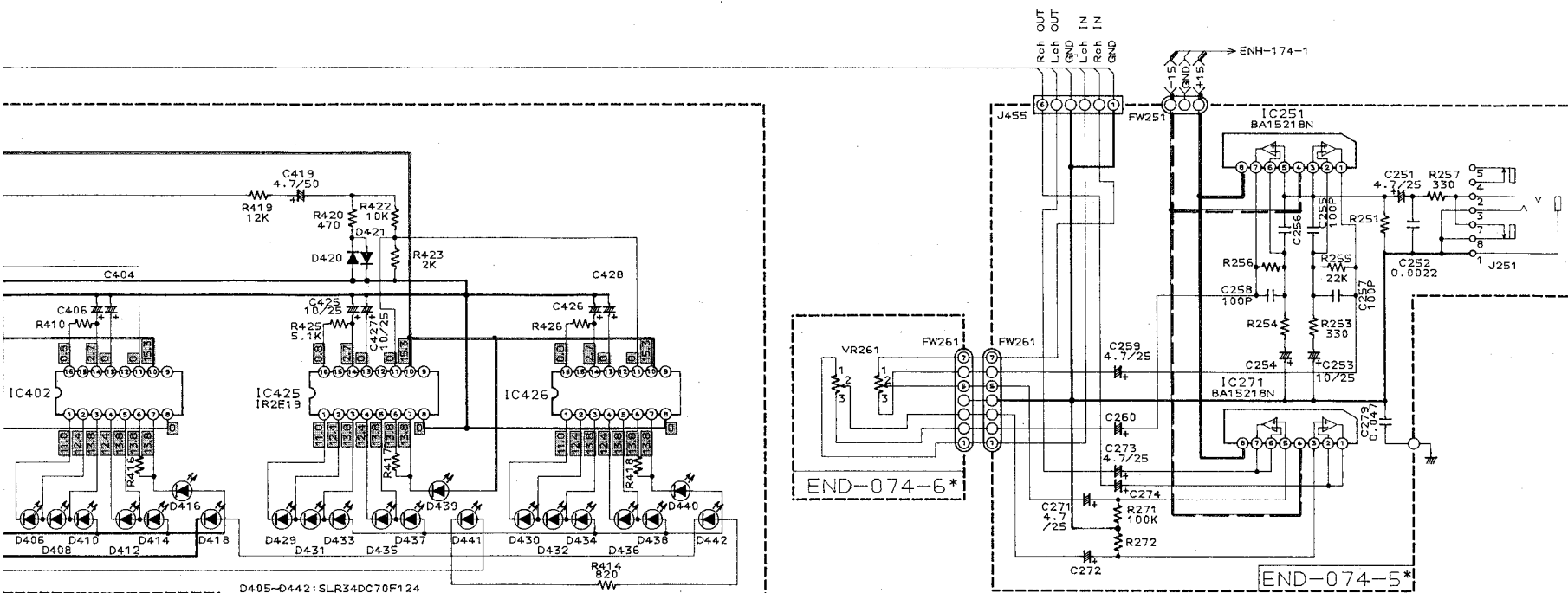
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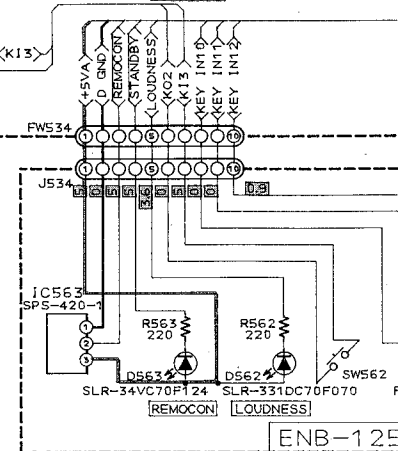
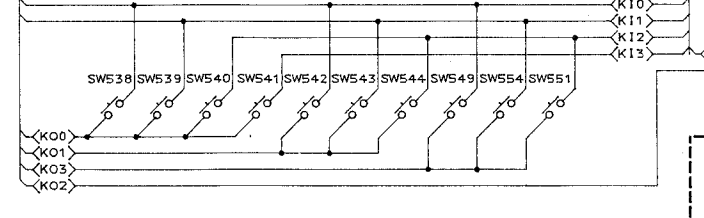
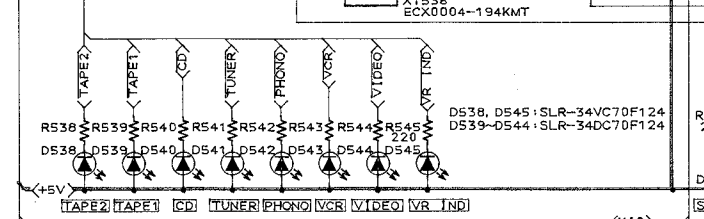
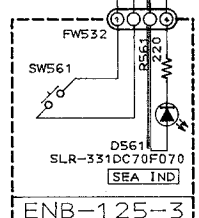
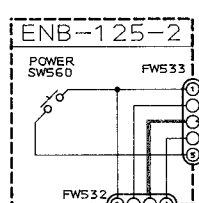
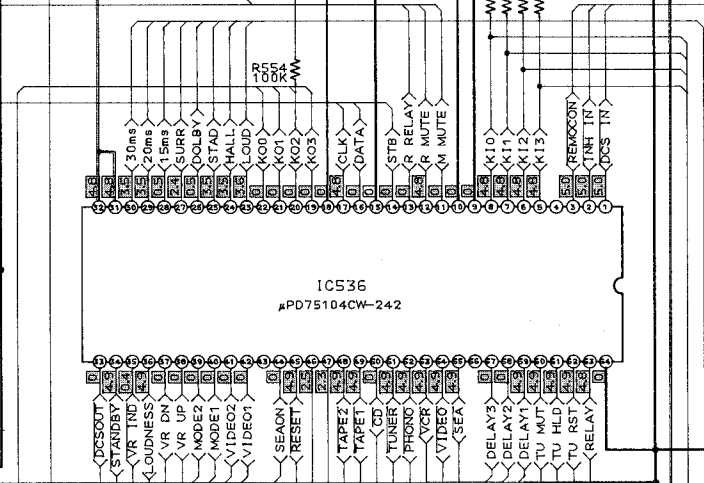
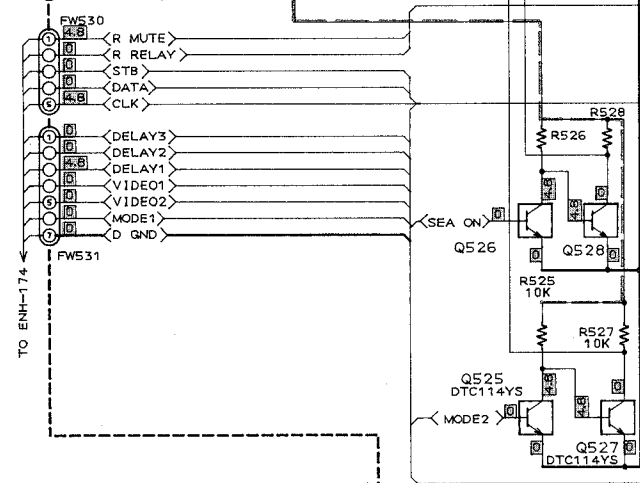
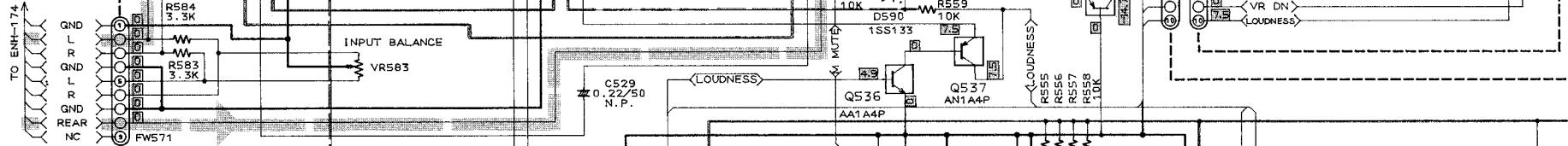
SYMBOL NO.	AREAS (J) US	(C) CANADA	(U) OTHER AREA
R040	120	120	180
R041	120	120	180
R042	120	120	180
R321, R322	68 UNF. C.	68 UNF. C.	68 UNF. F.
R717, R718	270	270	100
R723, R724	910	910	1K
R757, R758	NONE	NONE	USED
R789-R792	12 UNF. C.	12 UNF. C.	12 UNF. F.
R797	18	18	10
R798	220	220	33
R799	120	120	22
R839, R840	33 UNF. C.	33 UNF. C.	33 UNF. F.
R923	820	820	470
C025	0.022	0.047	0.047
C026	SHORT	0.047	0.047
C755, C756	0.022	0.047	0.047
C757, C758	SHORT	0.047	0.047

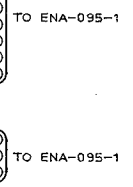
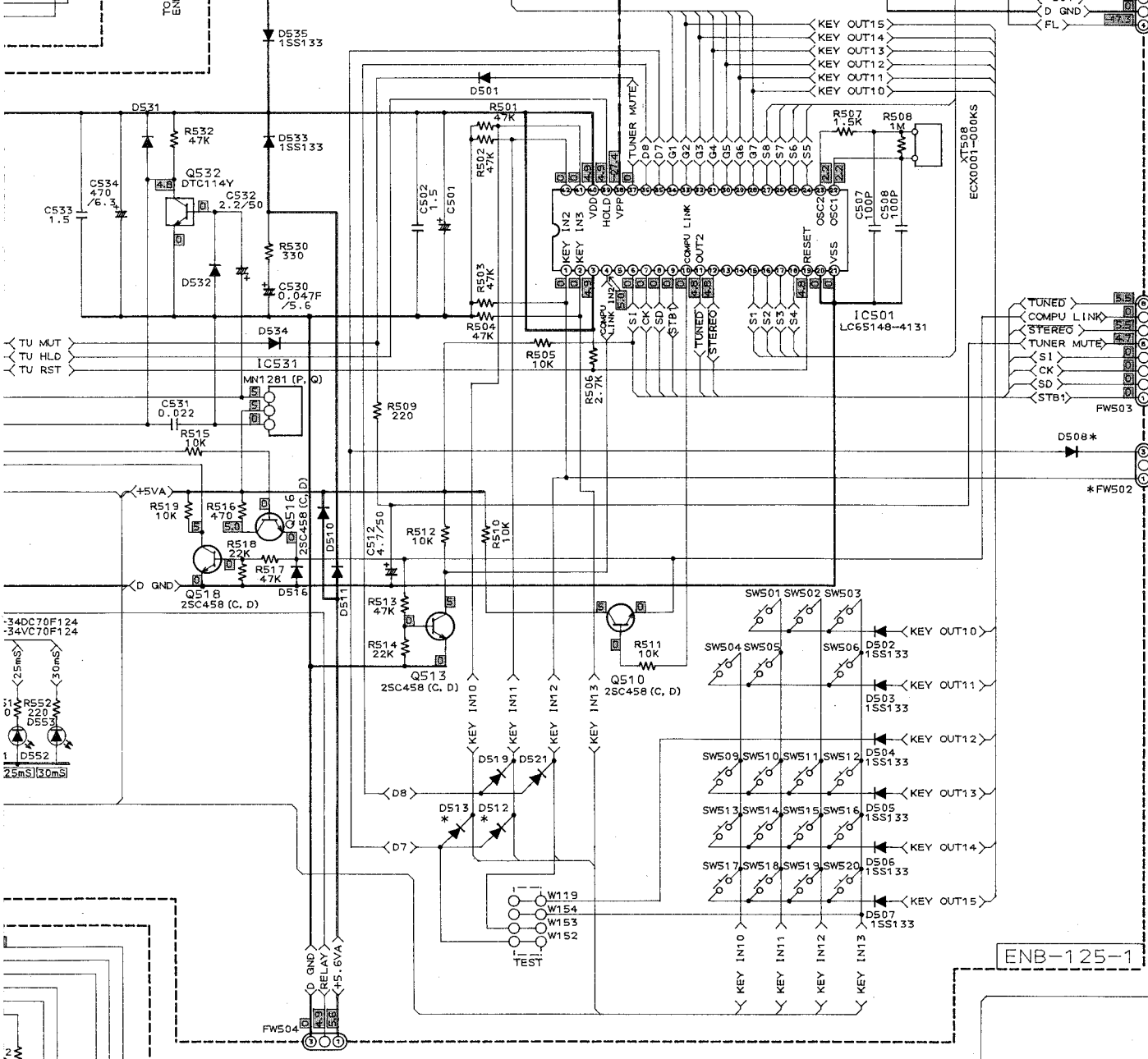
ENH-174-1

(2) SEA & Front Section





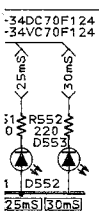
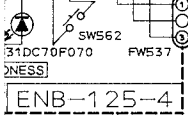
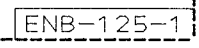
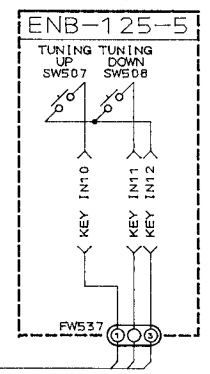




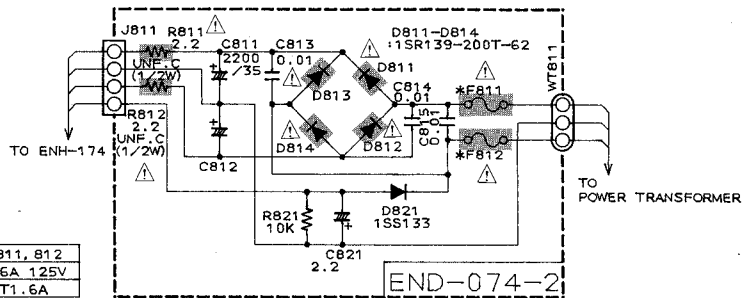
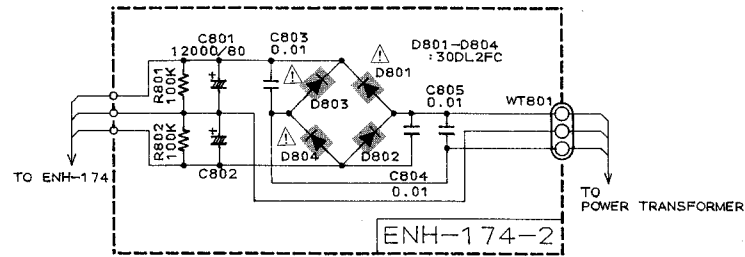
* MARK

	J, C	U
D513	NONE	USED
D512	USED	NONE
D514	NONE	NONE
D515	NONE	NONE
W230, 231	USED	NONE
W317, 319	NONE	USED
FW450	NONE	USED
D50B	NONE	USED
FW502	NONE	USED

1S5133

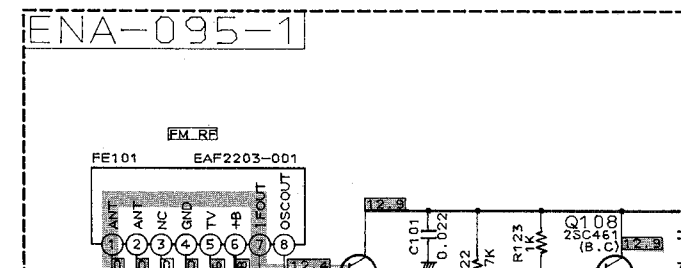
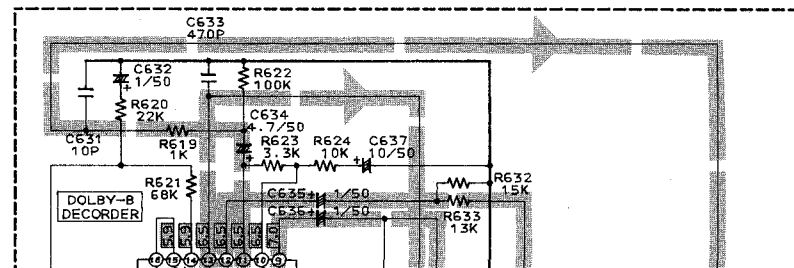
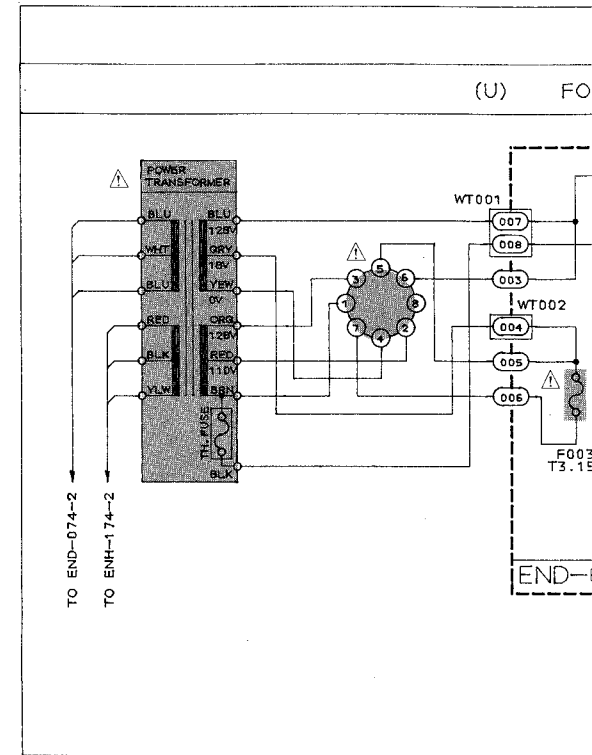


(3) Tuner Surround & Power Primary Section



* MARK

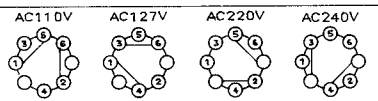
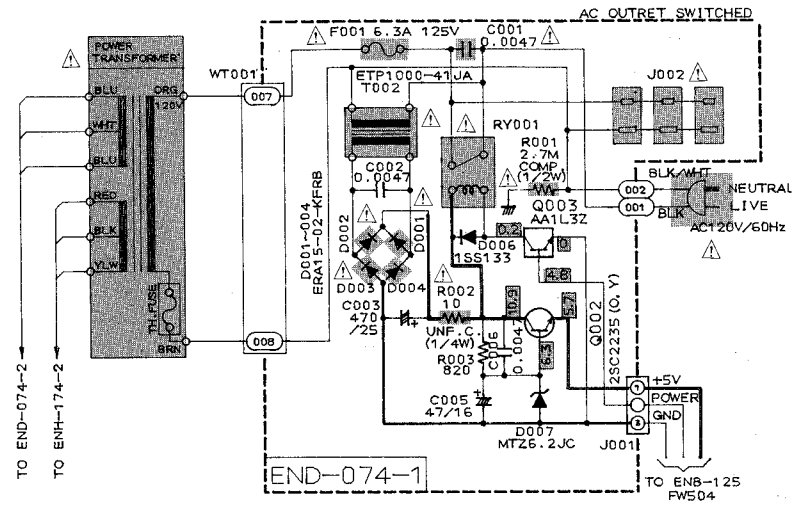
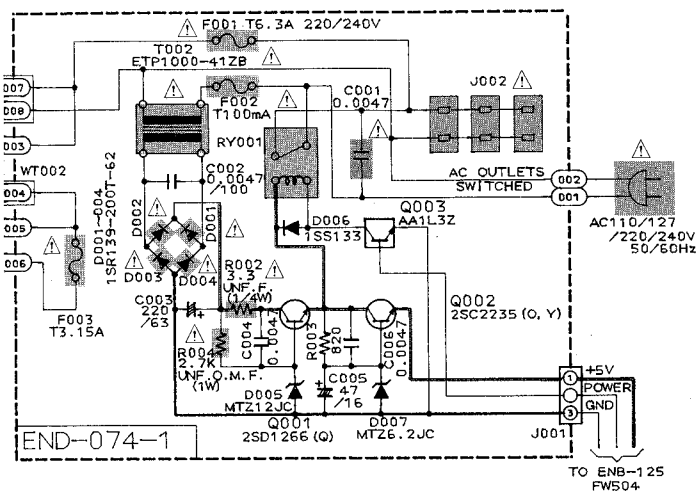
	F811, 812
J, C	1.6A 125V
U	T1.6A



POWER SUPPLY

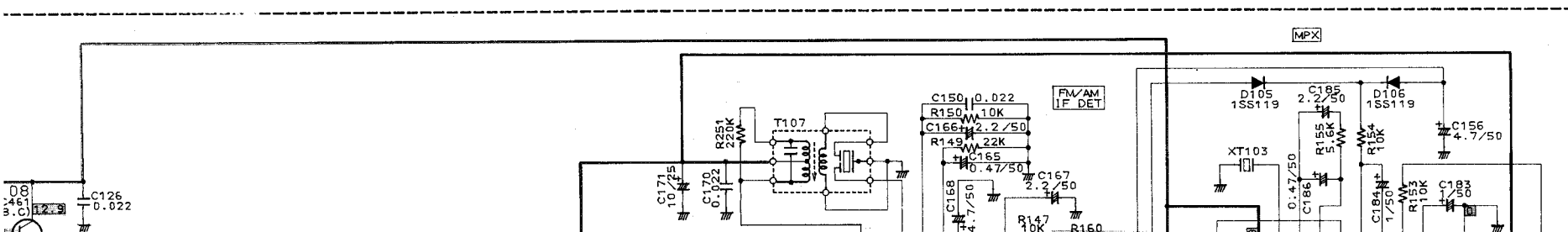
FOR OTHER COUNTRIES

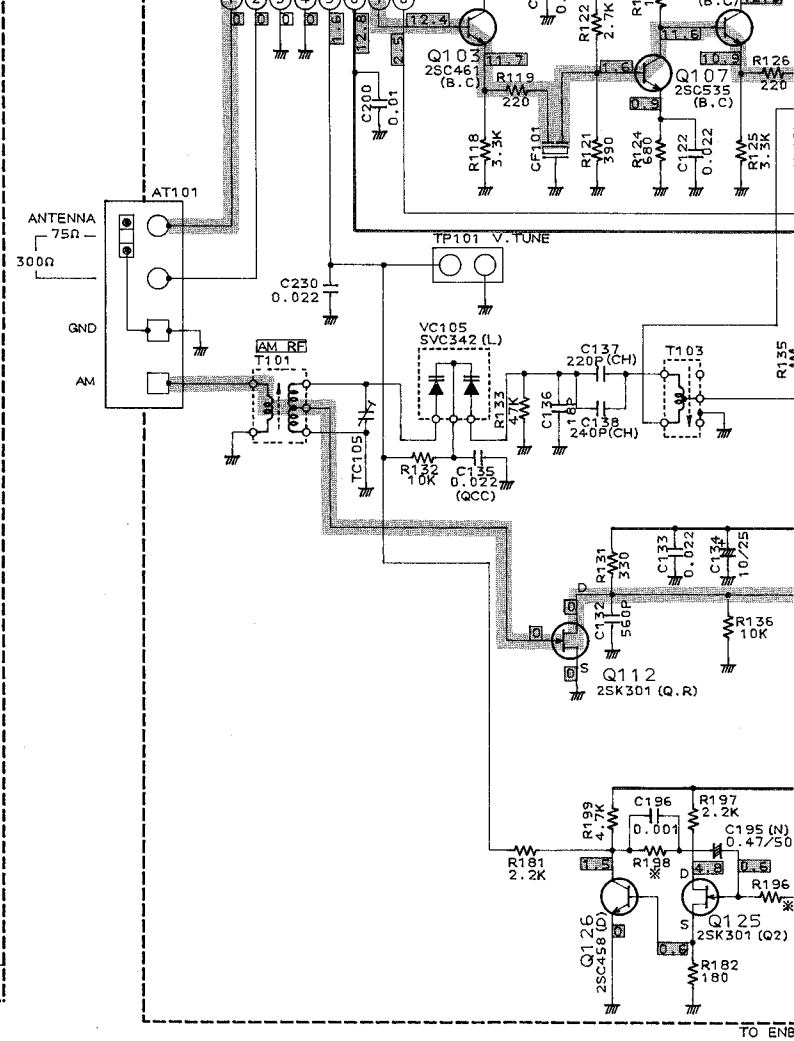
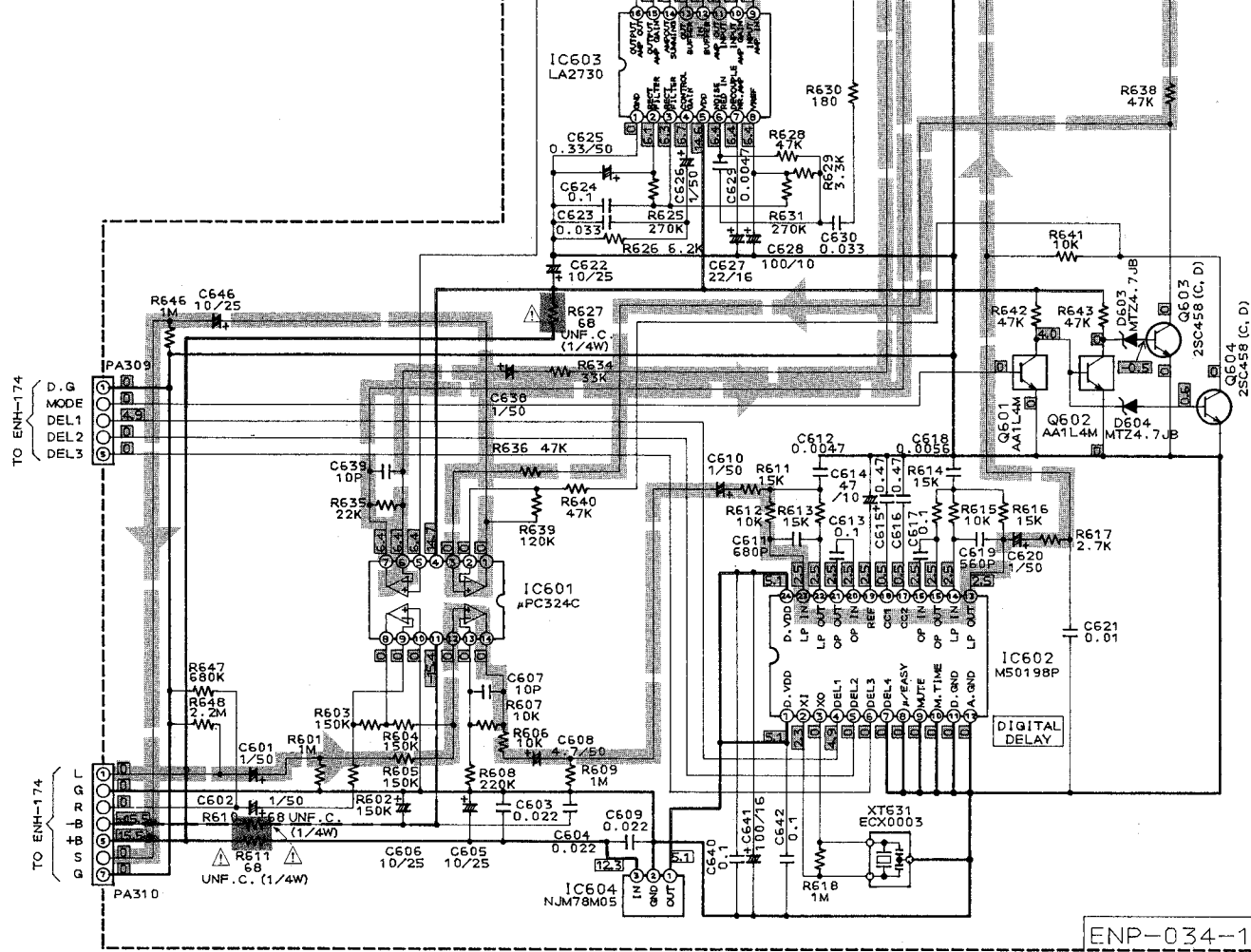
(J, C) FOR USA & CANADA AC120V 60Hz



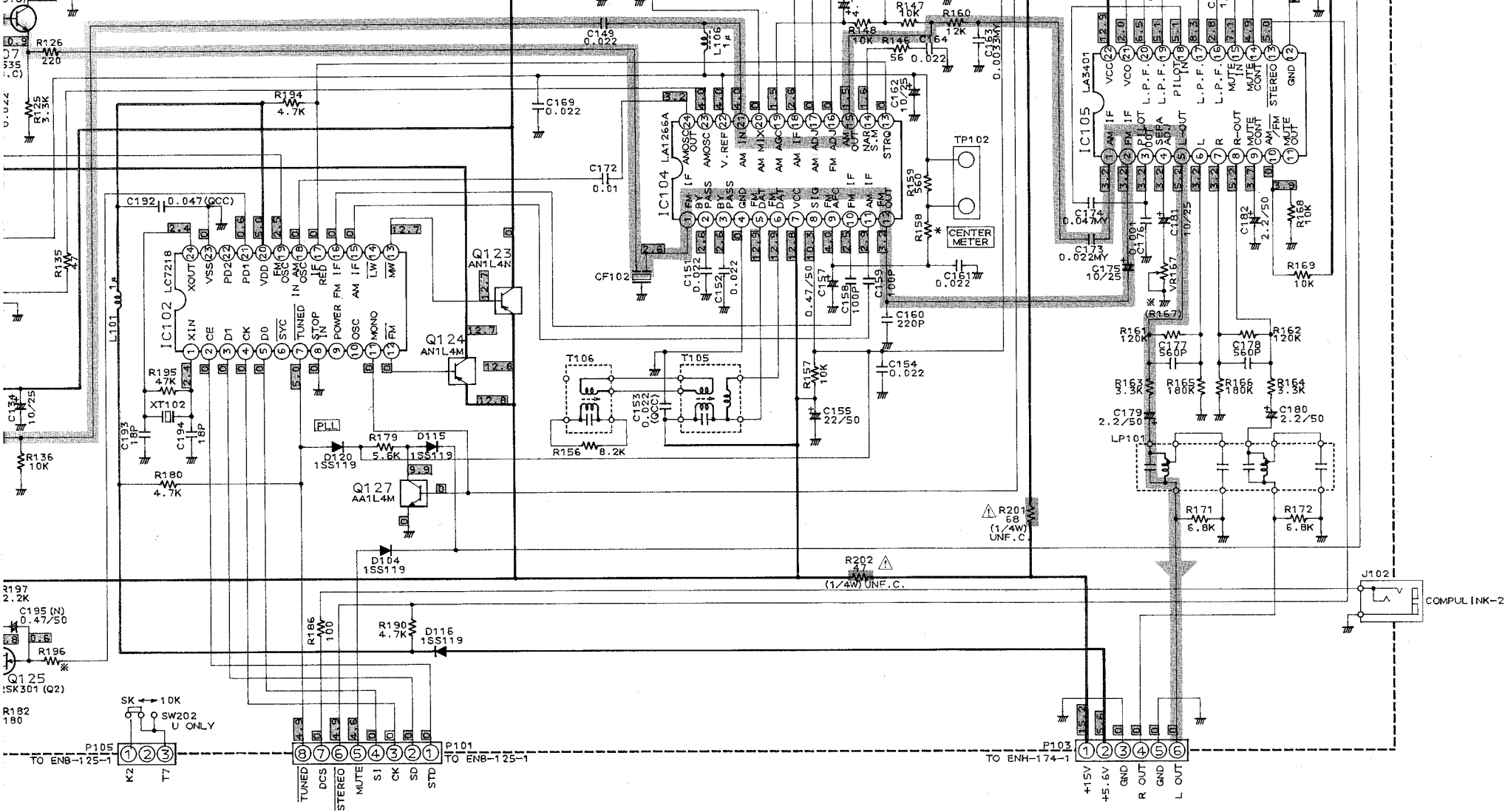
* MARK

	J	C	U
R158	18K	18K	27K





TO ENH

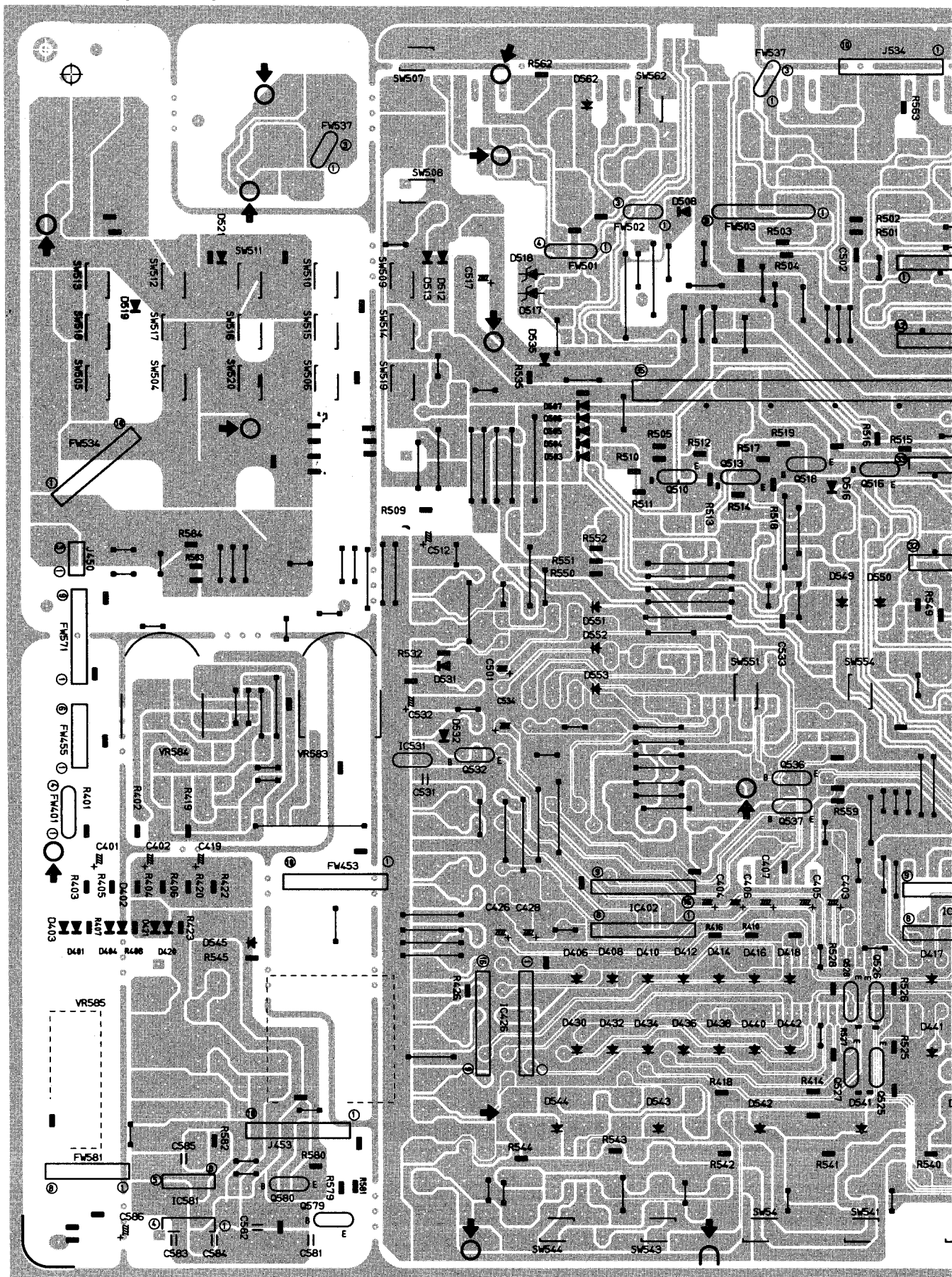


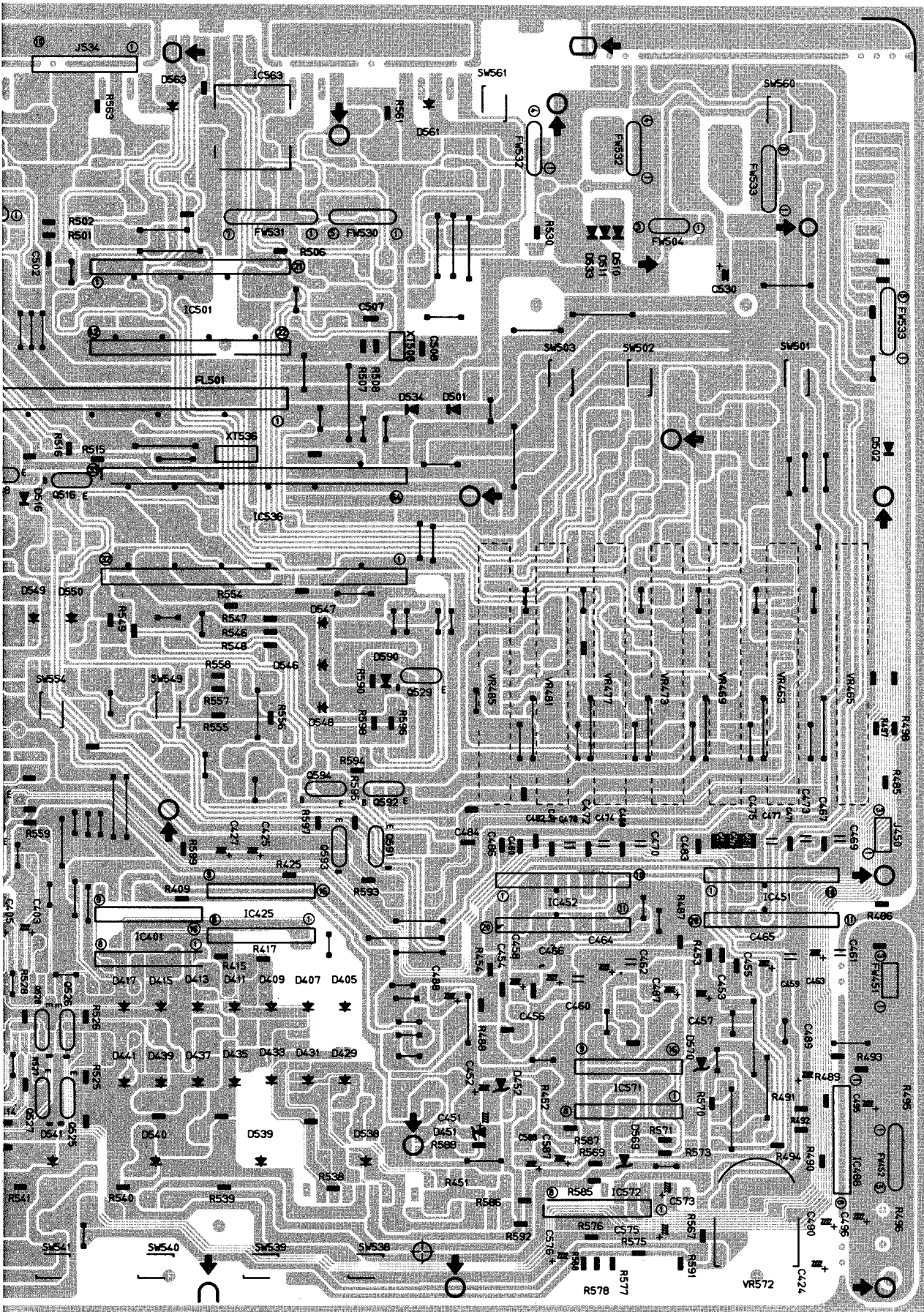
Notes:

1. — indicates +B power supply.
2. - - - - indicates -B power supply.
3. ■ indicates main signal path.
4. - - - - indicates surround signal path.
5. ■ Shows DC voltage to the chassis with no signal input.
6. When replacing the parts in the shaded area (■) and those marked with Δ, be sure to use the designated parts to ensure safety. This is the standard circuit diagram.
7. The design and contents are subject to change without notice.

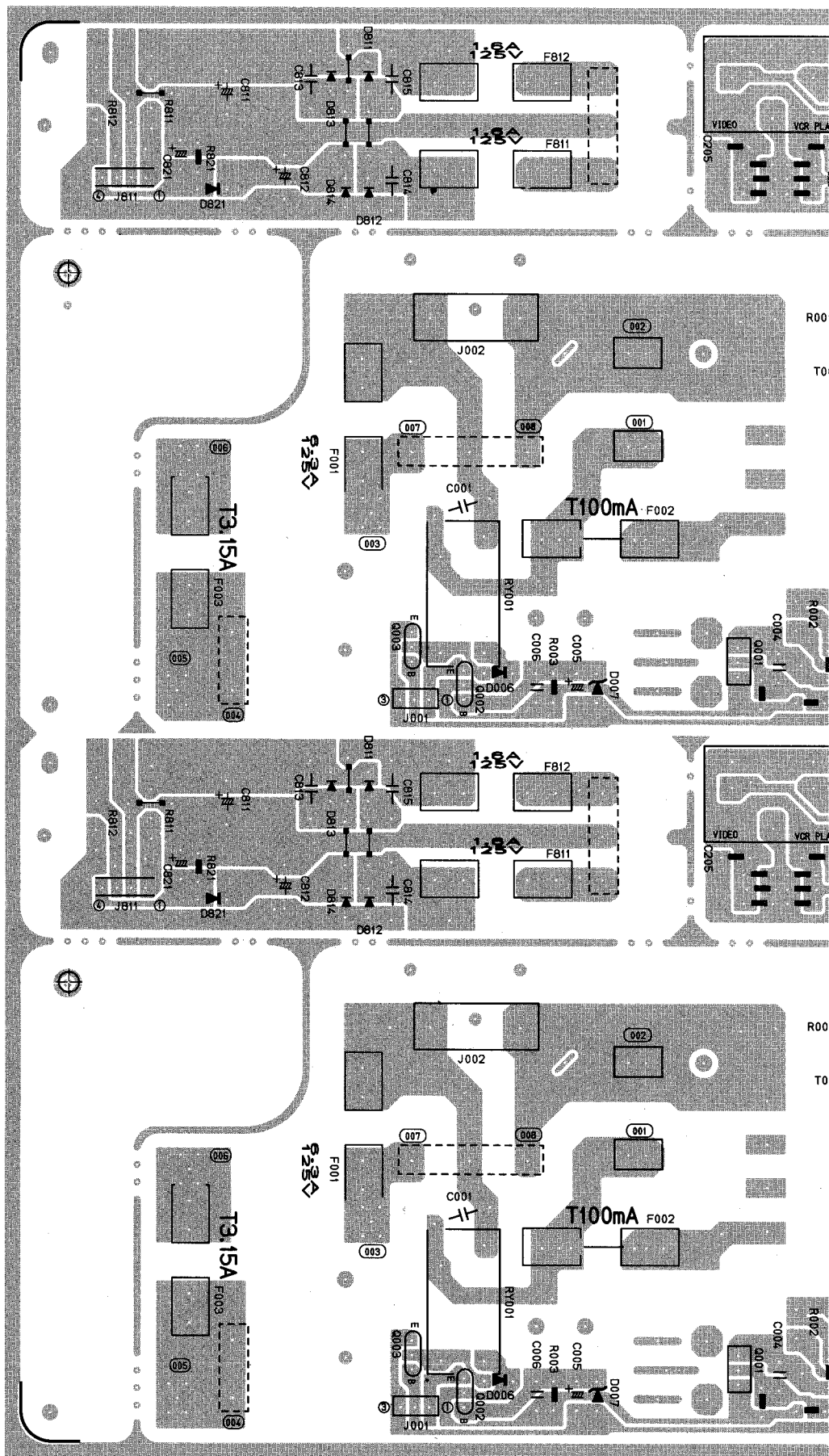
Printed Circuit Boards

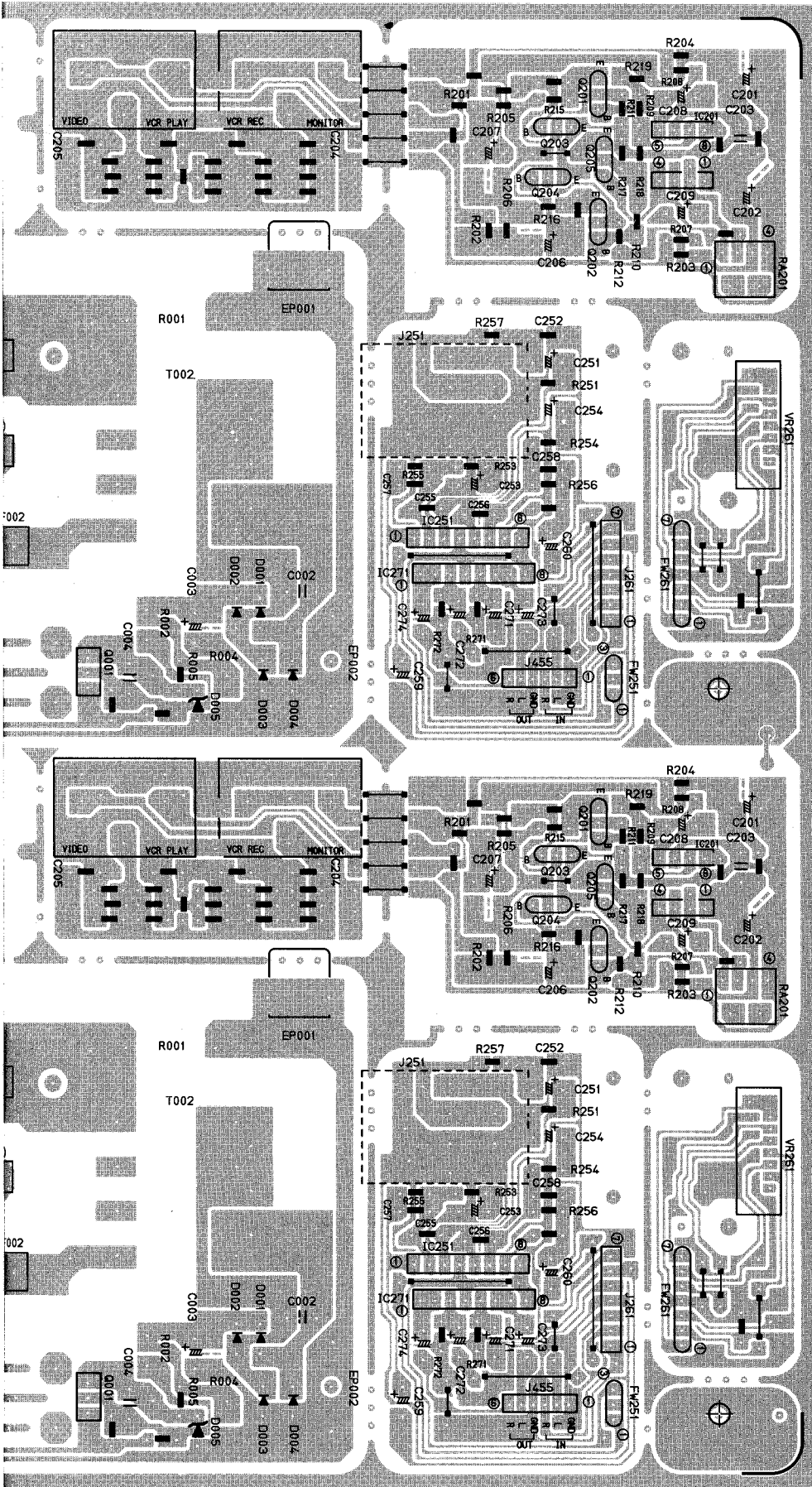
(1) Front & SEA PCB (ENB-125)



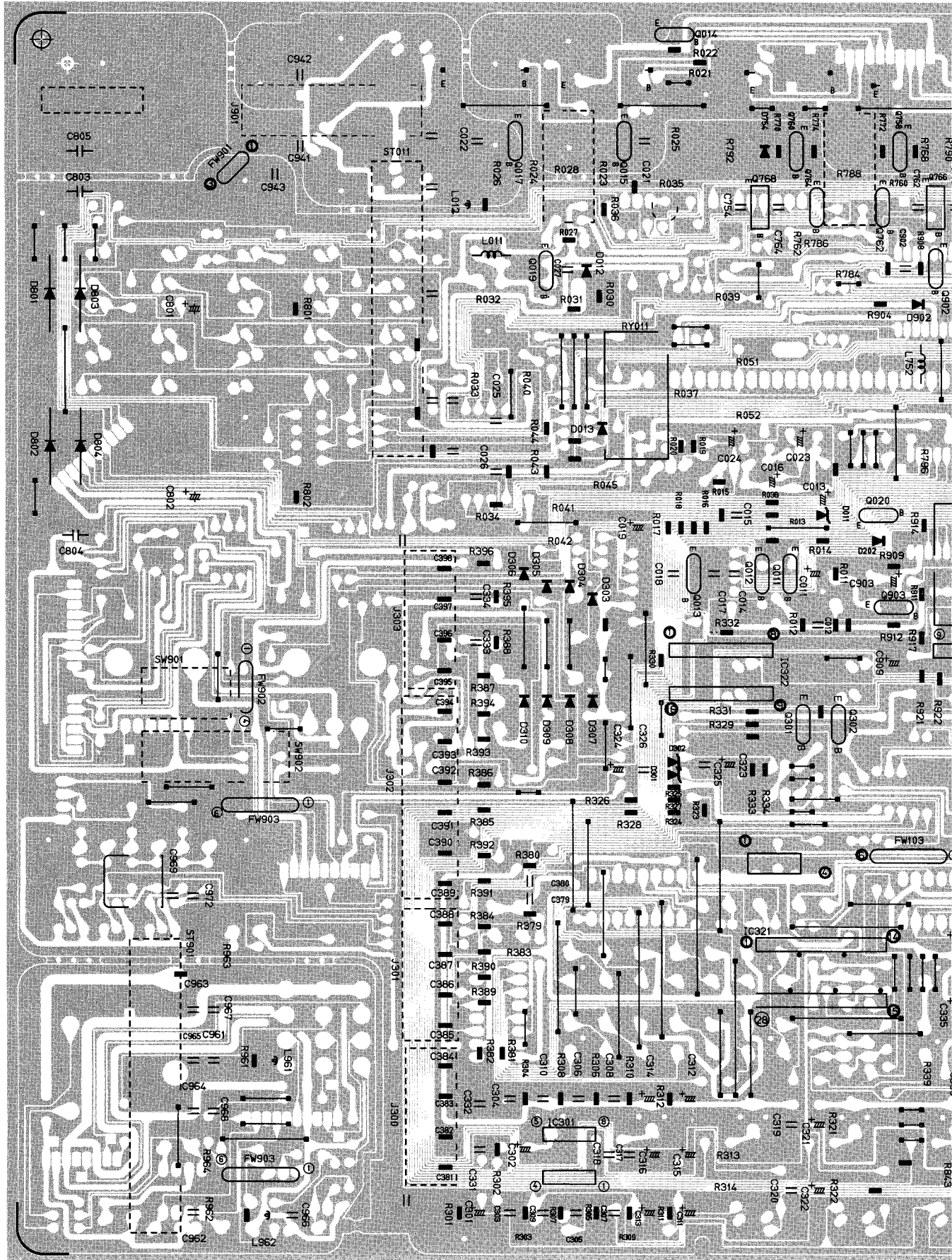


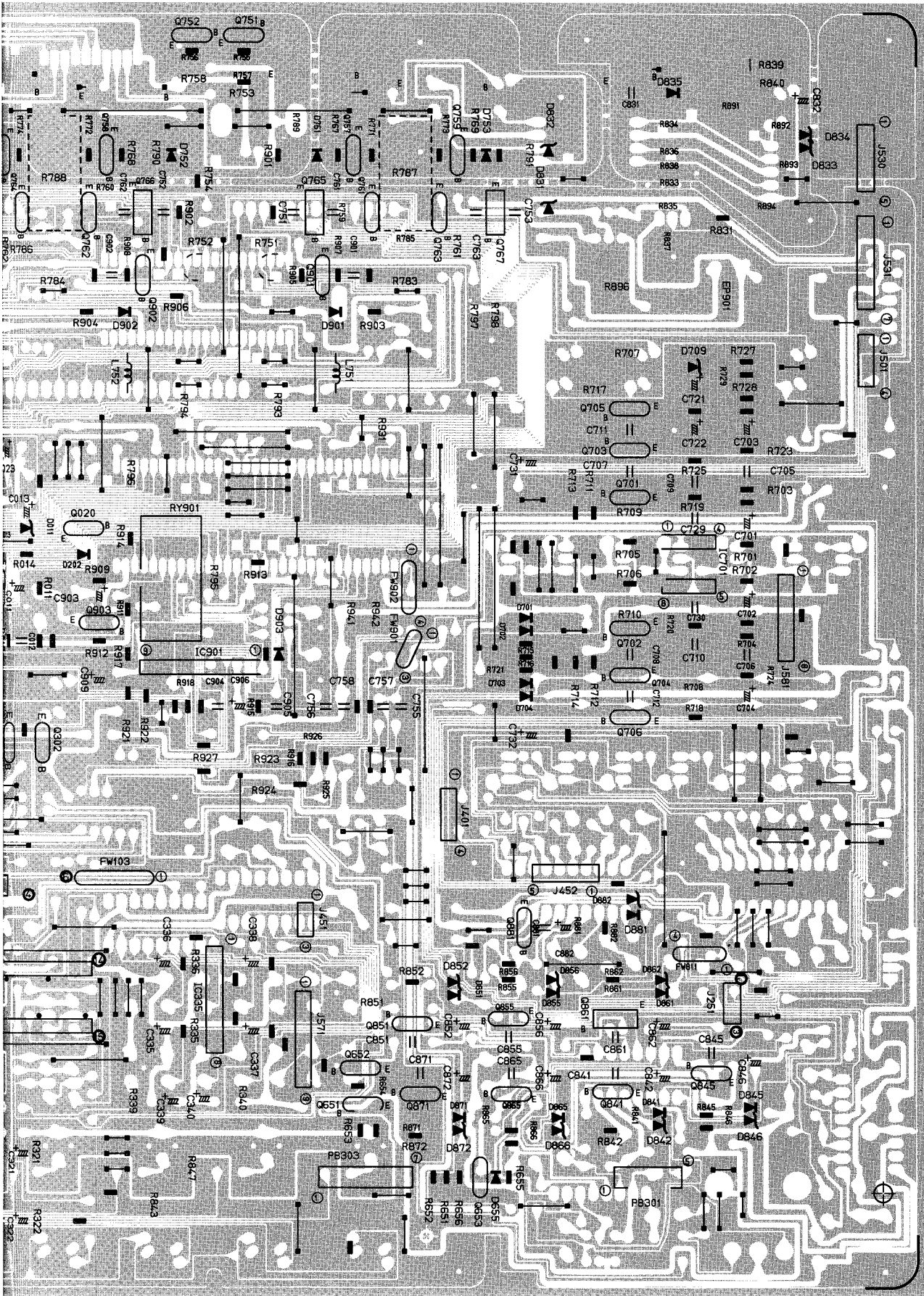
(2) Power Primary PCB (END-074)



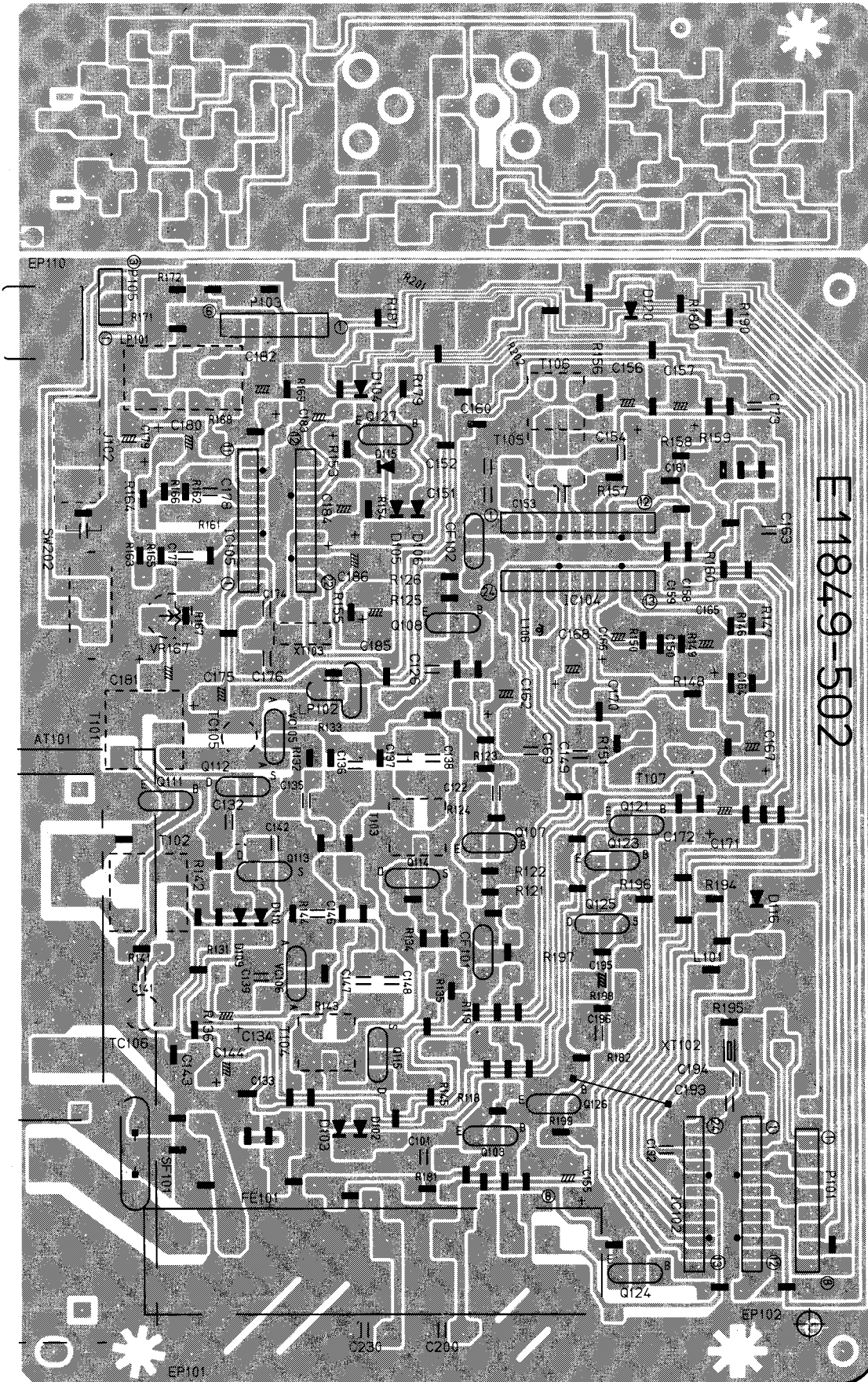


(3) Source Selector, Power Supply & Power Amplifier PCB (ENH-174)

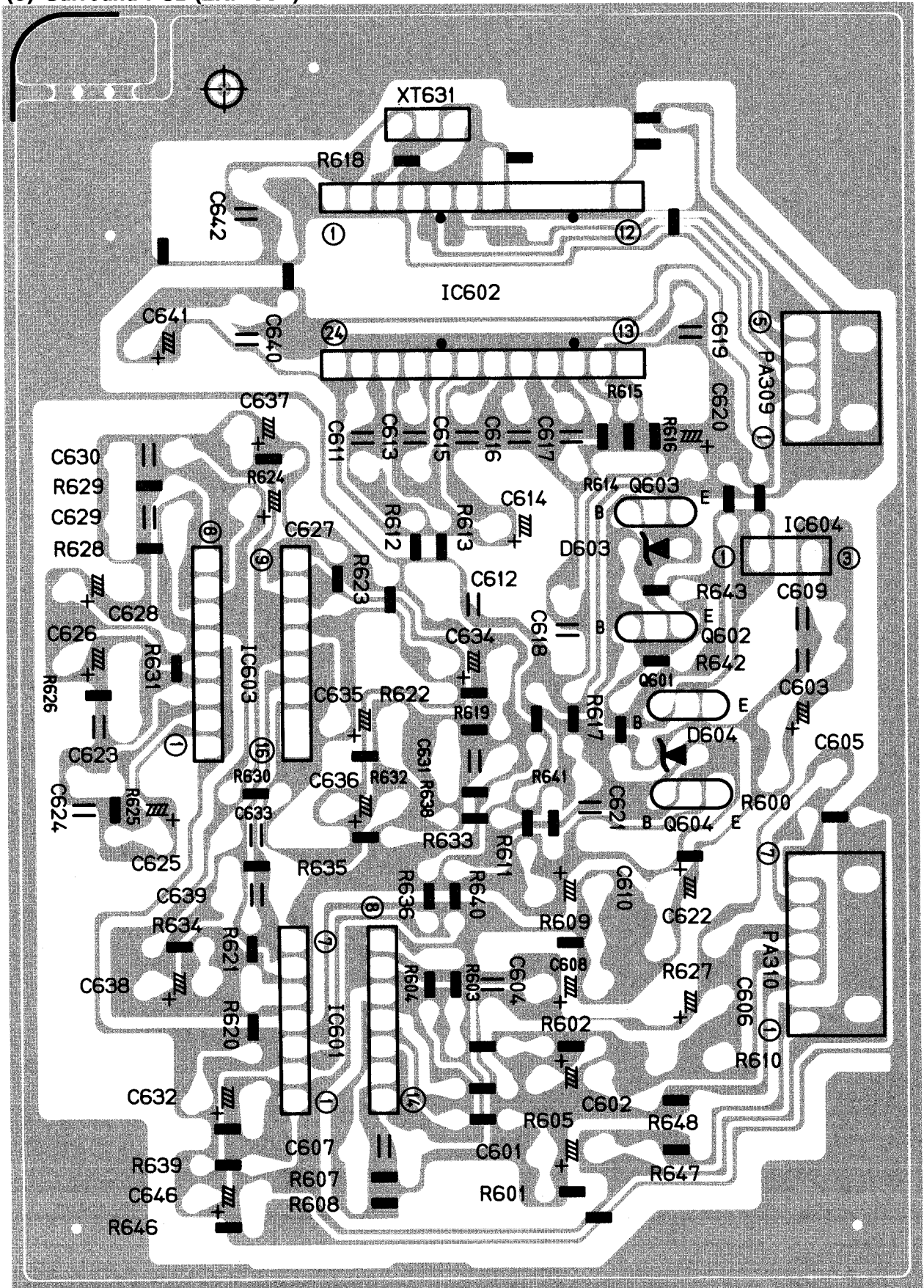




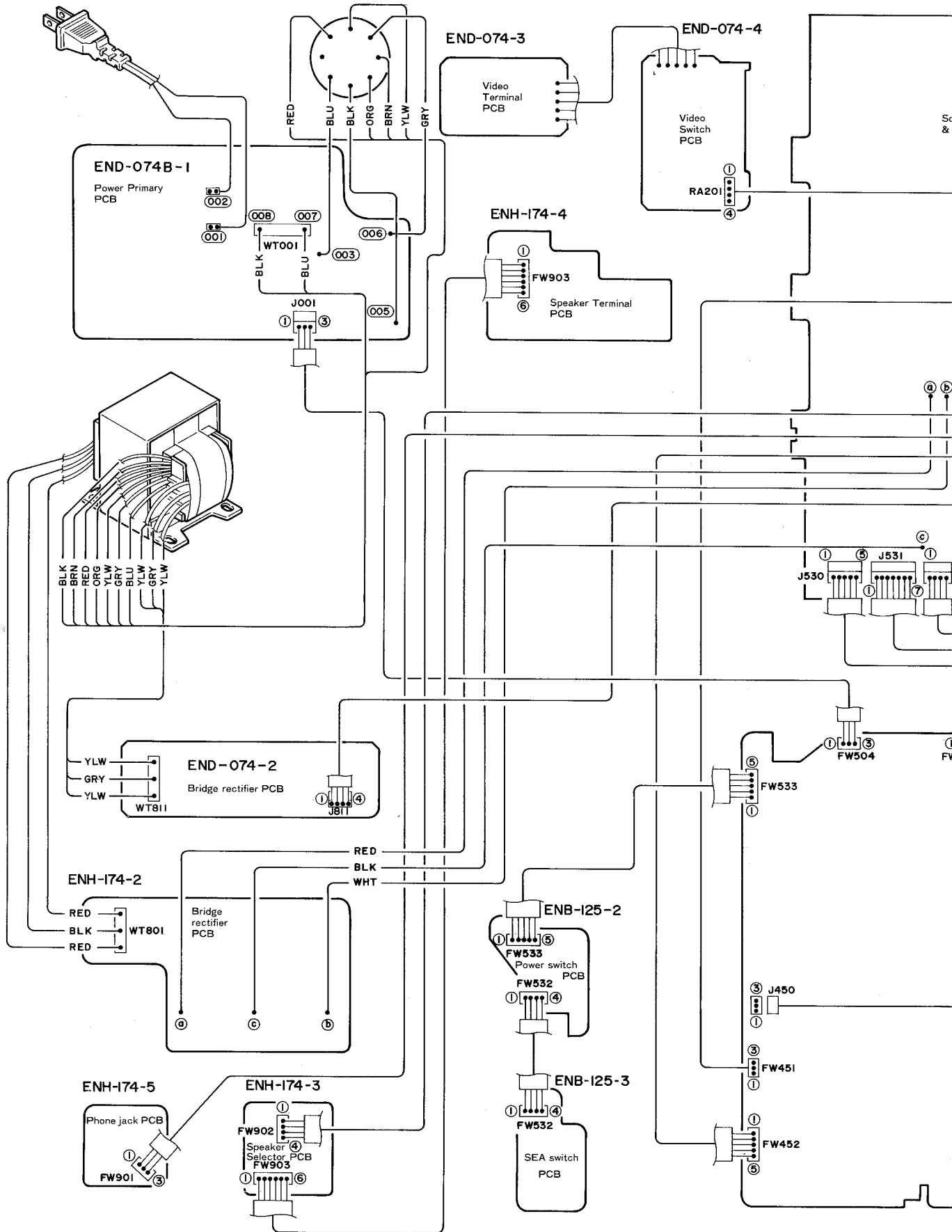
(4) Tuner PCB (ENA-095)

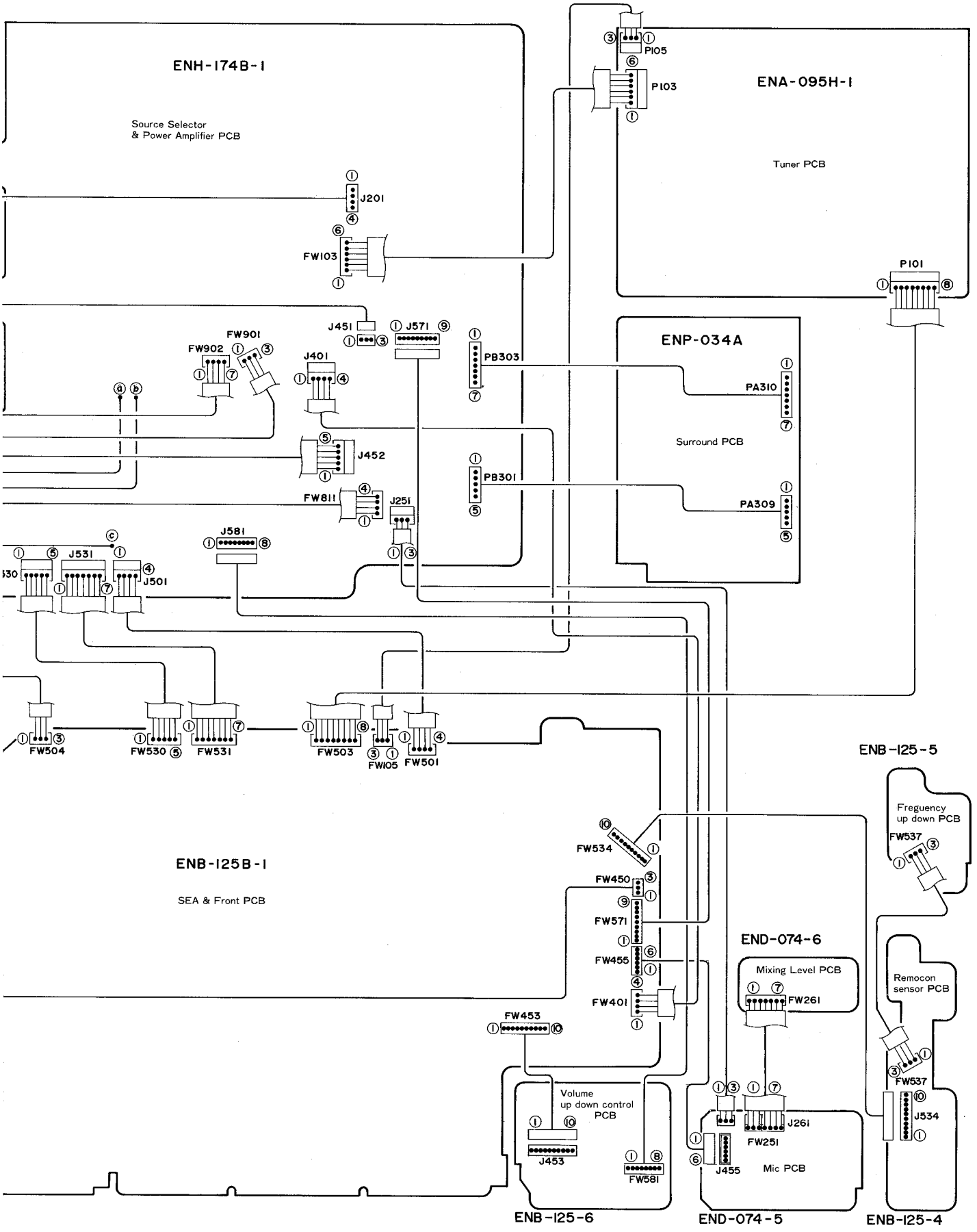


(5) Surround PCB (ENP-034)



Connection Diagram



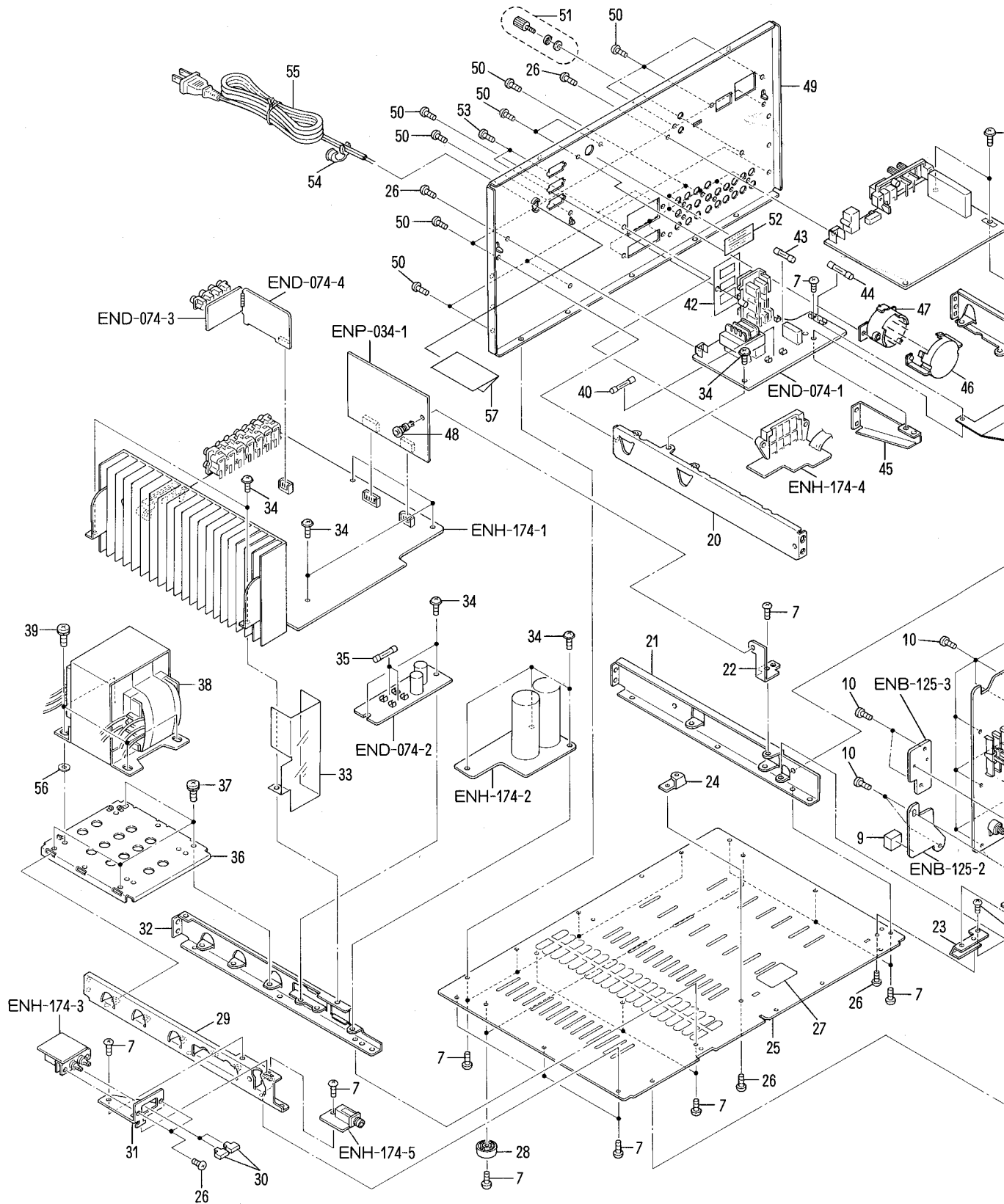


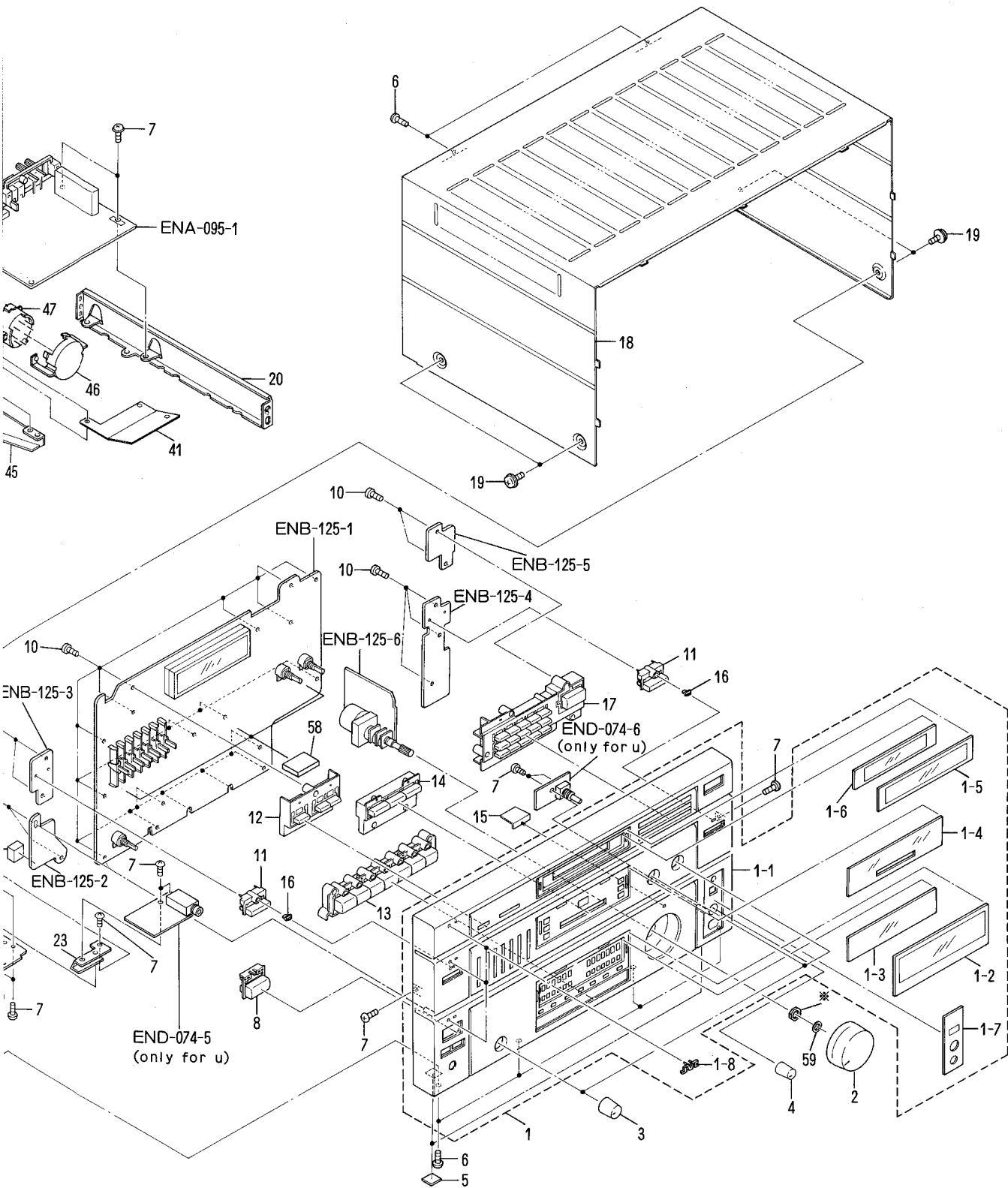
PARTS LIST

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General Exploded View and Parts List





* mark indicates attached part

■ Parts List

△	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RXR77BKJ(S)	Front Panel Ass'y	1		J, C
		EFP-RXR77BKU(S)	Front Panel Ass'y	1		U
	1-1	E102398-003SM	Front Panel	1		
	1-2	E406409-003SM	Window Screen	1	Amp	
	1-3	E406411-001SM	IND. Screen	1	Amp	
	1-4	E406413-001SM	Plate	1	Surround	
	1-5	E406415-001SM	Tuner Plate	1		
	1-6	E406417-001SM	FL Screen	1		
	1-7	E406419-001SM	Remocon Plate	1		J, C
		E406419-002SM	Remocon Plate	1		U
	1-8	E72968-001	JVC Mark	3		
	2	E307174-001SS	Volume Knob	1		
	3	E406302-001SM	Knob	3		
	4	E406312-002	Knob	1		U
	5	E75896-001	Spacer	2	for Front Foot	
	6	SBSG3008M	Screw	6		
	7	SBSG3008N	Screw	23		J, C
		SBSG3008N	Screw	28		U
	8	E307173-001SM	Power Button	1		
	9	E306805-020	Spacer	1		
	10	SDSF2608Z	Screw	27		
	11	E307340-001SS	Push Button	2		
	12	E307172-001SM	Push Button	1	Memory	
	13	E207041-001SS	Push Button	1	Amp 7Key	
	14	E307339-001SS	Push Button	1	Surround	
	15	E75753-001	Indicator	1		
	16	E75934-001	Indicator	2		
	17	E207040-001SS	Push Button	1	Preset	
	18	E207044-001	Metal Cover	1		
	19	E61660-004	Special Screw	4		
	20	E307344-001SM	Frame	2		
	21	E307342-001SM	Side Bracket	1	Right	
	22	E307347-001SM	Circuit Board Bracket	1		
	23	E406421-001SM	Circuit Board Bracket	1		U
	24	E68587-009	Bracket	1		
	25	E102400-001SM	Bottom Plate	1		
	26	SBST3006N	Screw	5		J, C
		SBST3006N	Screw	6		U
	27	E70281-001	Caution Label	1		J
		E70115-002	Caution Label	1		C
	28	E47227-020	Foot	2	Rear	
	29	E307341-001SM	Side Bracket	1	Left	
	30	E406334-002SS	Speaker Button	2		
	31	E307348-001SM	Bracket	1		
	32	E307343-001SM	Center Bracket	1		
	33	E307349-001	Protect Cover	1		
△	34	GBSG3008CC	Screw	11		
△	35	QMF51U1-1R6S	Fuse	2	F811, F812	J, C
		QMF51E2-1R6J1	Fuse	2	F811, F812	U
	36	E307346-001SM	Trans Bracket	1		
	37	E65389-004	Special Screw	4		
△	38	ETP1200-51JAJ	Power Transformer	1	T001	J, C
△		ETP1200-51FAJ	Power Transformer	1	T001	U
	39	E406423-001	Special Screw	4		
△	40	QMF51E2-R10J1	Fuse	1	F002	U
	41	E307350-001	Protect Cover	1		
	42	E69589-010	Spacer	1		J
△	43	QMF51U1-6R3S	Fuse	1	F001	J, C
△		QMF51E2-3R15J1	Fuse	1	F001	U
△	44	QMF51E2-6R3J1	Fuse	1	F003	U

△: Safety Parts

△	Item	Part Number	Part Name	Q'ty	Description	Areas
△	45	E306682-001SM	Circuit Board Bracket	1		
	46	E302764-001	Voltage Selector Cover	1		U
	47	QSR0085-018	Voltage Selector	1		U
	48	E48729-008	Plastic Rivet	1		
	49	E207042-003SM	Rear Panel	1		J, C
	—	E207042-004SM	Rear Panel	1		U
	—	E306019-102	Rating Label	1		
	50	E73273-007	Screw	19		J, C
	51	E73273-007	Screw	21		U
△	52	E67199-001	Caution Label	1		J
	—	E65507-001	Caution Label	1		C
	53	SDSG3008N	Screw	2		
	54	QHS3876-162	Cord Stopper	1		
△	55	QMP1D00-200J5	Power Cord	1		J, C
	56	QMP7520-200	Power Cord	1		U
	57	E73968-002	Spacer	4		J, C
	58	E406643-001	Protect Cover	1		
	58	E3400-431	Spacer	3		
	59	E406644-001	Ring	1		
	—	E61029-005	Number Label	1		
	—	QZL1001-001	UL Label	1		J
	—	E45858-002	CSA Label	1		C

△: Safety Parts

The Marks Designated Areas

J.....the U.S.A.

C.....Canada

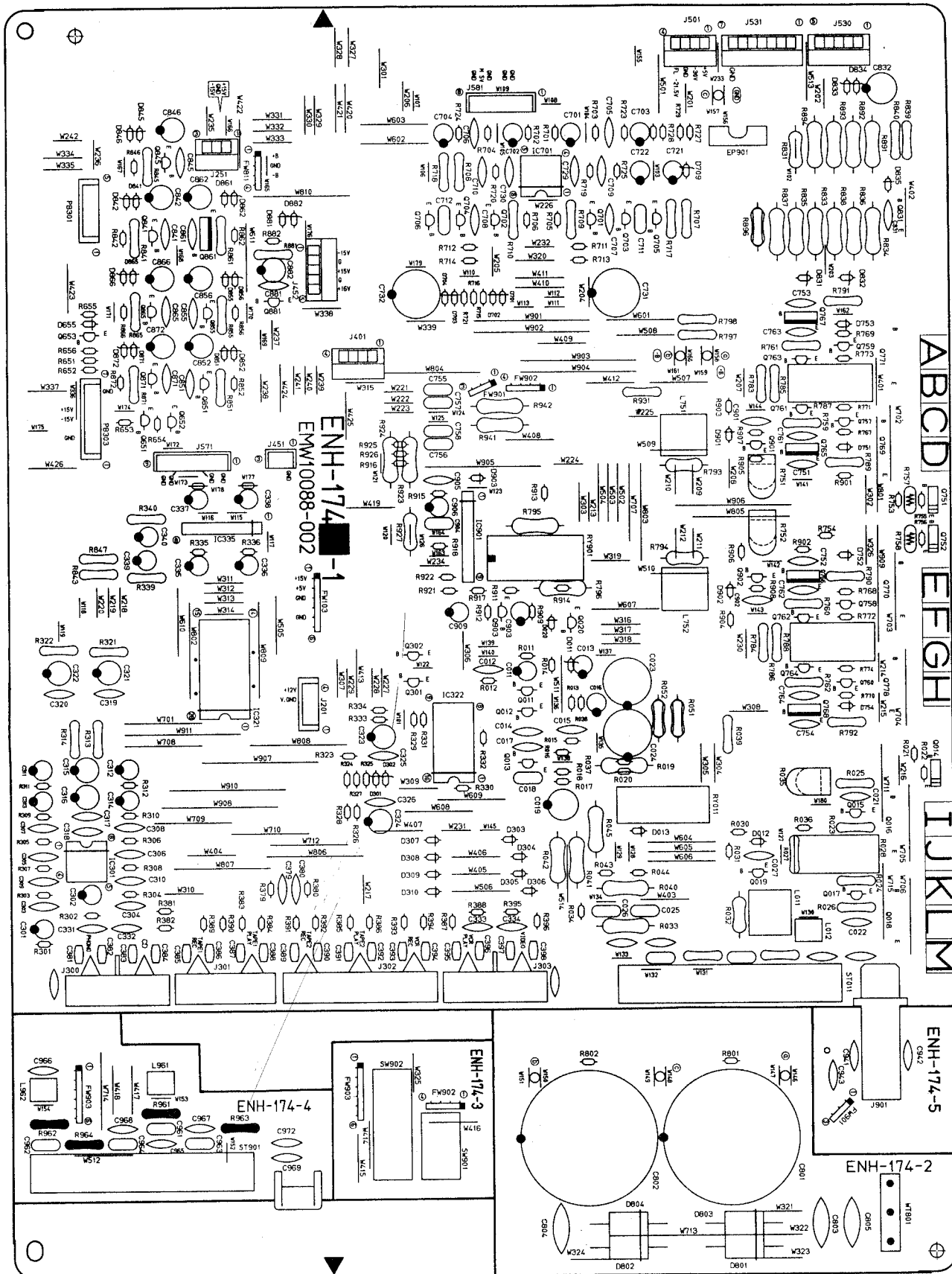
U.....Other Countries

No mark indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-174 □ Power Amplifier PC Board Ass'y

Note : ENH-174 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENH-174 A	the U.S.A.
ENH-174 B	Canada
ENH-174 C	Other Countries

Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
Q011	2SC2240(BL)	SILICON TOSHIBA	
Q012	2SC2240(BL)	SILICON TOSHIBA	
Q013	2SA1038(R,S)	SILICON ROHM	
Q014	2SD636(Q,R)	SILICON MATSUSHITA	
Q015	2SC2235(O,Y)	SILICON TOSHIBA	
Q016	2SC3856LD(O,Y)	SILICON SANKEN	
Q017	2SA965(O,Y)	SILICON TOSHIBA	
Q018	2SA1492LD(O,Y)	SILICON SANKEN	
Q019	2SC1775AV(E,F)	SILICON HITACHI	
Q020	2SC2240(GR,BL)	SILICON TOSHIBA	
Q301	AA1L4M	SILICON NEC	
Q302	AA1L4M	SILICON NEC	
Q651	2SC3068	SILICON SANYO	
Q652	2SC3068	SILICON SANYO	
Q653	DTA144WS	SILICON ROHM	
Q701	2SC2240(BL)	SILICON TOSHIBA	
Q702	2SC2240(BL)	SILICON TOSHIBA	
Q703	2SA970(BL)	SILICON TOSHIBA	
Q704	2SA970(BL)	SILICON TOSHIBA	
Q705	2SC2240(BL)	SILICON TOSHIBA	
Q706	2SC2240(BL)	SILICON TOSHIBA	
Q751	2SD636(Q,R)	SILICON MATSUSHITA	
Q752	2SD636(Q,R)	SILICON MATSUSHITA	
Q757	2SC945A(P,Q)	SILICON NEC	
Q758	2SC945A(P,Q)	SILICON NEC	
Q759	2SA733A(P,Q)	SILICON NEC	
Q760	2SA733A(P,Q)	SILICON NEC	
Q761	2SC2240(BL)	SILICON TOSHIBA	
Q762	2SC2240(BL)	SILICON TOSHIBA	
Q763	2SA970(BL)	SILICON TOSHIBA	
Q764	2SA970(BL)	SILICON TOSHIBA	
Q765	2SD1763A(DE)	SILICON ROHM	
Q766	2SD1763A(DE)	SILICON ROHM	
Q767	2SB1186A(DE)	SILICON ROHM	
Q768	2SB1186A(DE)	SILICON ROHM	
Q769	2SD2155LB(R,O)	SILICON TOSHIBA	
Q770	2SD2155LB(R,O)	SILICON TOSHIBA	
Q771	2SB1429LB(R,O)	SILICON TOSHIBA	
Q772	2SB1429LB(R,O)	SILICON TOSHIBA	
Q831	2SB1187F(E,F)	SILICON ROHM	
Q841	2SC2235(O,Y)	SILICON TOSHIBA	
Q845	2SA965(O,Y)	SILICON TOSHIBA	
Q851	2SC2235(O,Y)	SILICON TOSHIBA	
Q855	2SC2235(O,Y)	SILICON TOSHIBA	
Q861	2SD2061(E,F)	SILICON ROHM	
Q865	2SC2235(O,Y)	SILICON TOSHIBA	
Q871	2SC2235(O,Y)	SILICON TOSHIBA	
Q881	2SC2235(O,Y)	SILICON TOSHIBA	
Q901	2SC1775AV(E,F)	SILICON HITACHI	
Q902	2SC1775AV(E,F)	SILICON HITACHI	
Q903	2SA872AV(D,E)	SILICON HITACHI	

△ : SAFETY PARTS

I.C.s

ITEM	PART NUMBER	DESCRIPTION	AREA
IC301	VC4580DD	I.C. DAINICHI	
IC321	TC9164N	I.C. TOSHIBA	
IC322	TC4052BP	I.C. TOSHIBA	
IC335	BA15218N	I.C. ROHM	
IC701	NJM4560DD	I.C. DAINICHI	
IC901	TA7317P	I.C. TOSHIBA	

△ : SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D011	MTZ18JC	ZENER ROHM	
D012	1SS133	SILICON ROHM	
D013	MTZ12JC	ZENER ROHM	
D020	1SS133	SILICON ROHM	
D301	MTZ7.5JC	ZENER ROHM	

△ : SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D302	MTZ7.5JC	ZENER ROHM	
D303	1SS133	SILICON ROHM	
D304	1SS133	SILICON ROHM	
D305	1SS133	SILICON ROHM	
D306	1SS133	SILICON ROHM	
D307	1SS133	SILICON ROHM	
D308	1SS133	SILICON ROHM	
D309	1SS133	SILICON ROHM	
D310	1SS133	SILICON ROHM	
D655	1SS133	SILICON ROHM	
D701	1SS133	SILICON ROHM	
D702	1SS133	SILICON ROHM	
D703	1SS133	SILICON ROHM	
D704	1SS133	SILICON ROHM	
D709	MTZ4.3JC	ZENER ROHM	
D710	MTZ4.3JC	ZENER ROHM	
D711	1SS133	SILICON ROHM	
D751	1SS133	SILICON ROHM	
D752	1SS133	SILICON ROHM	
D753	1SS133	SILICON ROHM	
D754	1SS133	SILICON ROHM	
△ D801	30DL2FC	SILICON NIHONINTER	
△ D802	30DL2FC	SILICON NIHONINTER	
△ D803	30DL2FC	SILICON NIHONINTER	
△ D804	30DL2FC	SILICON NIHONINTER	
D831	MTZ12JC	ZENER ROHM	
D832	MTZ12JC	ZENER ROHM	
D833	MTZ15JC	ZENER ROHM	
D834	MTZ15JC	ZENER ROHM	
D835	1SS133	SILICON ROHM	
D841	1SS133	SILICON ROHM	
D842	MTZ16JC	ZENER ROHM	
D845	1SS133	SILICON ROHM	
D846	MTZ16JC	ZENER ROHM	
D851	1SS133	SILICON ROHM	
D852	MTZ6.8JC	ZENER ROHM	
D855	1SS133	SILICON ROHM	
D856	MTZ5.6JC	ZENER ROHM	
D861	1SS133	SILICON ROHM	
D862	MTZ13JC	ZENER ROHM	
D865	1SS133	SILICON ROHM	
D866	MTZ16JC	ZENER ROHM	
D871	1SS133	SILICON ROHM	
D872	MTZ16JC	ZENER ROHM	
D881	1SS133	SILICON ROHM	
D882	MTZ16JC	ZENER ROHM	
D901	1SS133	SILICON ROHM	
D902	1SS133	SILICON ROHM	
D903	1SS133	SILICON ROHM	

△ : SAFETY PARTS

Capacitors

ITEM	PART NUMBER	DESCRIPTION	AREA
C011	QETB1HM-106	10MF 50V ELECTRO	
C012	QCS21HJ-271	270PF 50V CERAMIC	
C013	QETB1EM-106	10MF 25V ELECTRO	
C014	QCS21HJ-101	100PF 50V CERAMIC	
C015	QCS21HJ-5R0	5PF 50V CERAMIC	
C016	QETB1CM-476	47MF 16V ELECTRO	
C017	QCS21HJ-330	33PF 50V CERAMIC	
C018	GFV81HJ-103	0.01MF 50V T.FILM	
C019	QETB1HM-107	100MF 50V ELECTRO	
C021	QCS22HJ-470A	47PF 500V CERAMIC	
C022	QCS22HJ-470A	47PF 500V CERAMIC	
C025	QFLB1HK-225	0.022MF 50V MYLAR	A
C025	QFLB1HK-473	0.047MF 50V MYLAR	B
C025	QFLB1HK-473	0.047MF 50V MYLAR	C
C026	QFLB1HK-473	0.047MF 50V MYLAR	B
C026	QFLB1HK-473	0.047MF 50V MYLAR	C
C027	QCF21HP-223	0.022MF 50V CERAMIC	
C301	QETB1HM-475	4.7MF 50V ELECTRO	
C302	QETB1HM-475	4.7MF 50V ELECTRO	
C303	QCS21HJ-101	100PF 50V CERAMIC	
C304	QCS21HJ-101	100PF 50V CERAMIC	
C305	QCY21HK-182	1800PF 50V CERAMIC	
C306	QCY21HK-182	1800PF 50V CERAMIC	
C307	QCY21HK-682	6800PF 50V CERAMIC	
C308	QCY21HK-682	6800PF 50V CERAMIC	
C309	QCS21HJ-101	100PF 50V CERAMIC	
C310	QCS21HJ-101	100PF 50V CERAMIC	
C311	QETB1HM-475	4.7MF 50V ELECTRO	
C312	QETB1HM-475	4.7MF 50V ELECTRO	
C313	QETB1AM-107	100MF 10V ELECTRO	
C314	QETB1AM-107	100MF 10V ELECTRO	
C315	QETB1CM-476	47MF 16V ELECTRO	
C316	QETB1CM-476	47MF 16V ELECTRO	
C319	QCF21HP-223	0.022MF 50V CERAMIC	
C320	QCF21HP-223	0.022MF 50V CERAMIC	
C321	QETB1EM-476	47MF 25V ELECTRO	
C322	QETB1EM-476	47MF 25V ELECTRO	
C323	QETB1EM-476	47MF 25V ELECTRO	
C324	QETB1EM-476	47MF 25V ELECTRO	
C325	QCF21HP-223	0.022MF 50V CERAMIC	

△ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C326	QCF21HP-223	0.022MF 50V CERAMIC	
	C331	QCF21HP-223	0.022MF 50V CERAMIC	
	C332	QCF21HP-223	0.022MF 50V CERAMIC	
	C333	QCF21HP-223	0.022MF 50V CERAMIC	
	C335	QEK51EM-475G	4.7MF 25V ELECTRO	
	C336	QEK51EM-475G	4.7MF 25V ELECTRO	
	C337	QEK51EM-475G	4.7MF 25V ELECTRO	
	C338	QEK51EM-475G	4.7MF 25V ELECTRO	
	C339	QETB1EM-476	47MF 25V ELECTRO	
	C340	QETB1EM-476	47MF 25V ELECTRO	
	C341	QETB1HM-225	2.2MF 50V ELECTRO	
	C342	QETB1HM-225	2.2MF 50V ELECTRO	
	C651	QETB1HM-475	4.7MF 50V ELECTRO	
	C701	QETB1HM-106	10MF 50V ELECTRO	
	C702	QETB1HM-106	10MF 50V ELECTRO	
	C703	QETB1AM-107	100MF 10V ELECTRO	
	C704	QETB1AM-107	100MF 10V ELECTRO	
	C705	QCS21HJ-101	100PF 50V CERAMIC	
	C706	QCS21HJ-101	100PF 50V CERAMIC	
	C707	QCS21HJ-270	27PF 50V CERAMIC	
	C708	QCS21HJ-270	27PF 50V CERAMIC	
	C709	QCS21HJ-150	15PF 50V CERAMIC	
	C710	QCS21HJ-150	15PF 50V CERAMIC	
	C711	QFLB1HK-103	0.01MF 50V MYLAR	
	C712	QFLB1HK-103	0.01MF 50V MYLAR	
	C721	EET0605-228ZT	2200MF ELECTRO	
	C729	QCS21HJ-220	22PF 50V CERAMIC	
	C730	QCS21HJ-220	22PF 50V CERAMIC	
	C731	QETB2AM-107	100MF 100V ELECTRO	
	C732	QETB2AM-107	100MF 100V ELECTRO	
	C751	QCS22HJ-470A	47PF 500V CERAMIC	
	C752	QCS22HJ-470A	47PF 500V CERAMIC	
	C753	QCS22HJ-470A	47PF 500V CERAMIC	
	C754	QCS22HJ-470A	47PF 500V CERAMIC	
	C755	QFLB1HK-223	0.022MF 50V MYLAR	A
	C755	QFLB1HK-473	0.047MF 50V MYLAR	B
	C755	QFLB1HK-473	0.047MF 50V MYLAR	C
	C756	QFLB1HK-223	0.022MF 50V MYLAR	A
	C756	QFLB1HK-473	0.047MF 50V MYLAR	B
	C756	QFLB1HK-473	0.047MF 50V MYLAR	C
	C757	QFLB1HK-473	0.047MF 50V MYLAR	B
	C757	QFLB1HK-473	0.047MF 50V MYLAR	C
	C758	QFLB1HK-473	0.047MF 50V MYLAR	B
	C758	QFLB1HK-473	0.047MF 50V MYLAR	C
	C761	QCF21HP-473	0.047MF 50V CERAMIC	
	C762	QCF21HP-473	0.047MF 50V CERAMIC	
	C763	QCF21HP-473	0.047MF 50V CERAMIC	
	C764	QCF21HP-473	0.047MF 50V CERAMIC	
	C801	EEW8001-129T	12000MF ELECTRO	
	C802	EEW8001-129T	12000MF ELECTRO	
	C803	QCE22HP-103	0.01MF 500V CERAMIC	
	C804	QCE22HP-103	0.01MF 500V CERAMIC	
	C805	QCE22HP-103	0.01MF 500V CERAMIC	
	C831	QCF21HP-472	4700PF 50V CERAMIC	
	C832	QETB1VM-107	100MF 35V ELECTRO	
	C841	QCF21HP-472	4700PF 50V CERAMIC	
	C842	QETB1EM-107	100MF 25V ELECTRO	
	C845	QCF21HP-472	4700PF 50V CERAMIC	
	C846	QETB1EM-107	100MF 25V ELECTRO	
	C851	QCF21HP-472	4700PF 50V CERAMIC	
	C852	QETB1EM-107	100MF 25V ELECTRO	
	C855	QCF21HP-472	4700PF 50V CERAMIC	
	C856	QETB1EM-107	100MF 25V ELECTRO	
	C861	QCF21HP-472	4700PF 50V CERAMIC	
	C862	QETB1CM-227	220MF 16V ELECTRO	
	C865	QCF21HP-472	4700PF 50V CERAMIC	
	C866	QETB1EM-107	100MF 25V ELECTRO	
	C871	QCF21HP-472	4700PF 50V CERAMIC	
	C872	QETB1EM-477	470MF 25V ELECTRO	
	C881	QCF21HP-472	4700PF 50V CERAMIC	
	C882	QETB1EM-107	100MF 25V ELECTRO	
	C891	QETB1HM-225	2.2MF 50V ELECTRO	
	C901	QCF21HP-223	0.022MF 50V CERAMIC	
	C902	QCF21HP-223	0.022MF 50V CERAMIC	
	C903	QETB1HM-226	22MF 50V ELECTRO	
	C904	QFLB1HK-223	0.022MF 50V MYLAR	
	C905	QCY21HK-102	1000PF 50V CERAMIC	
	C906	QETB1AM-476	47MF 10V ELECTRO	
	C909	QETB1CM-226	22MF 16V ELECTRO	

Δ (SAFETY) PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R011	QRD167J-222	2.2K 1/6W CARBON	
	R012	QRD167J-104	100K 1/6W CARBON	
	R013	QRD167J-822	8.2K 1/6W CARBON	
	R014	QRD167J-202	2K 1/6W CARBON	
	R015	QRD167J-104	100K 1/6W CARBON	

Δ (SAFETY) PARTS

Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R016	QRD167J-181	180 1/6W CARBON	
	R017	QRD167J-392	3.9K 1/6W CARBON	
	R018	QRD167J-392	3.9K 1/6W CARBON	
	R019	QRD167J-272	2.7K 1/6W CARBON	
	R020	QRD167J-222	2.2K 1/6W CARBON	
	R021	QRD167J-152	1.5K 1/6W CARBON	
	R022	QRD167J-681	680 1/6W CARBON	
	R023	QRD14CJ-120S	12 1/4W UNF. CARBON	
	R024	QRD14CJ-120S	12 1/4W UNF. CARBON	
	R025	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R026	QRD14CJ-100S	10 1/4W UNF. CARBON	
	R027	QRD14CJ-561S	560 1/4W UNF. CARBON	
	R028	ERF032K-R22	0.22 3W CEMENT	
	R030	QRD167J-183	18K 1/6W CARBON	
	R031	QRD167J-123	12K 1/6W CARBON	
	R032	QRD125J-330	33 1/2W UNF. CARBON	
	R033	QRG022J-100A	10 2W O.M. FILM	
	R034	QRD167J-104	100K 1/6W CARBON	
	R035	QVPE601-501	500 0.15W VARIABLE	
	R036	QRD167J-222	2.2K 1/6W CARBON	
	R037	QRG022J-562A	5.6K 2W O.M. FILM	
	R038	QRD167J-391	390 1/6W CARBON	
	R040	QRG022J-121A	120 2W O.M. FILM	A
	R040	QRG022J-121A	120 2W O.M. FILM	B
	R040	QRG022J-181A	180 2W O.M. FILM	C
	R041	QRG022J-121A	120 2W O.M. FILM	A
	R041	QRG022J-121A	120 2W O.M. FILM	B
	R041	QRG022J-181A	180 2W O.M. FILM	C
	R042	QRG022J-121A	120 2W O.M. FILM	A
	R042	QRG022J-121A	120 2W O.M. FILM	B
	R042	QRG022J-101A	100 2W O.M. FILM	C
	R045	QRG022J-332A	3.3K 2W O.M. FILM	
	R051	QRD167J-122	1.2K 1/6W CARBON	A
	R051	QRD167J-122	1.2K 1/6W CARBON	B
	R051	QRD167J-162	1.6K 1/6W CARBON	C
	R052	QRD12CJ-222S	2.2K 1/2W R-NETWORK	
	R060	QRD167J-472	4.7K 1/6W CARBON	
	R301	QRD167J-222	2.2K 1/6W CARBON	
	R302	QRD167J-222	2.2K 1/6W CARBON	
	R303	QRD167J-473	47K 1/6W CARBON	
	R304	QRD167J-473	47K 1/6W CARBON	
	R305	QRD167J-621	620 1/6W CARBON	
	R306	QRD167J-621	620 1/6W CARBON	
	R307	QRD167J-393	39K 1/6W CARBON	
	R308	QRD167J-393	39K 1/6W CARBON	
	R309	QRD167J-474	470K 1/6W CARBON	
	R310	QRD167J-474	470K 1/6W CARBON	
	R311	QRD167J-104	100K 1/6W CARBON	
	R312	QRD167J-104	100K 1/6W CARBON	
	R313	QRZ0077-391	390 1/4W FUSIBLE	
	R314	QRZ0077-391	390 1/4W FUSIBLE	
	R321	QRD14CJ-680S	68 1/4W UNF. CARBON	A
	R321	QRD14CJ-680S	68 1/4W UNF. CARBON	B
	R321	QRZ0077-680	68 1/4W FUSIBLE	C
	R322	QRD14CJ-680S	68 1/4W UNF. CARBON	A
	R322	QRD14CJ-680S	68 1/4W UNF. CARBON	B
	R322	QRZ0077-680	68 1/4W FUSIBLE	C
	R323	QRD167J-562	5.6K 1/6W CARBON	
	R324	QRD167J-562	5.6K 1/6W CARBON	
	R325	QRD167J-153	15K 1/6W CARBON	
	R326	QRD167J-153	15K 1/6W CARBON	
	R327	QRD167J-153	15K 1/6W CARBON	
	R328	QRD167J-153	15K 1/6W CARBON	
	R329	QRD167J-105	1M 1/6W CARBON	
	R330	QRD167J-105	1M 1/6W CARBON	
	R331	QRD167J-105	1M 1/6W CARBON	
	R332	QRD167J-105	1M 1/6W CARBON	
	R333	QRD167J-103	10K 1/6W CARBON	
	R334	QRD167J-103	10K 1/6W CARBON	
	R335	QRD167J-513	51K 1/6W CARBON	
	R336	QRD167J-513	51K 1/6W CARBON	
	R339	QRD14CJ-391S	390 1/4W UNF. CARBON	
	R340	QRD14CJ-391S	390 1/4W UNF. CARBON	
	R379	QRD167J-105	1M 1/6W CARBON	
	R380	QRD167J-105	1M 1/6W CARBON	
	R381	QRD167J-471	470 1/6W CARBON	
	R382	QRD167J-471	470 1/6W CARBON	
	R383	QRD167J-471	470 1/6W CARBON	
	R384	QRD167J-471	470 1/6W CARBON	
	R385	QRD167J-471	470 1/6W CARBON	
	R386	QRD167J-471	470 1/6W CARBON	
	R387	QRD167J-471	470 1/6W CARBON	
	R388	QRD167J-471	470 1/6W CARBON	
	R389	QRD167J-471	470 1/6W CARBON	
	R390	QRD167J-471	470 1/6W CARBON	
	R391	QRD167J-471	470 1/6W CARBON	
	R392	QRD167J-471	470 1/6W CARBON	
	R393	QRD167J-471	470 1/6W CARBON	
	R394	QRD167J-471	470 1/6W CARBON	
	R395	QRD167J-471	470 1/6W CARBON	
	R396	QRD167J-471	470 1/6W CARBON	
	R401	QRD167J-123	12K 1/6W CARBON	
	R402	QRD167J-123	12K 1/6W CARBON	
	R419	QRD167J-123	12K 1/6W CARBON	
	R651	QRD167J-103	10K 1/6W CARBON	

Δ (SAFETY) PARTS

Others

ITEM	PART NUMBER	DESCRIPTION	AREA
J530	VMC0107-005	CONNECTOR(5PIN)	
J531	VMC0107-007	CONNECTOR(7PIN)	
J571	EMV5109-009A	PLUG ASSY(9PIN)	
J581	EMV5109-008A	PLUG ASSY(8PIN)	
J901	QMS6302-131	HEADPHONE JACK	
L011	EQL0001-1R0	INDUCTOR	
L391	EQL4007-220	INDUCTOR	
L751	EQL0001-1R0	INDUCTOR	
L752	EQL0001-1R0	INDUCTOR	
S901	QST4231-E01J2	PUSH SWITCH(SPEAKER-1)	
S902	QST4231-E01J2	PUSH SWITCH(SPEAKER-2)	
EP901	E70859-001	EARTH PLATE	
FW103	EWR36B-25LST	FLAT WIRE(6PIN)	
FW811	EWR34B-50LST	FLAT WIRE(4PIN)	
FW901	EWR33B-45SST	FLAT WIRE(3PIN)	

△ SAFETY PARTS

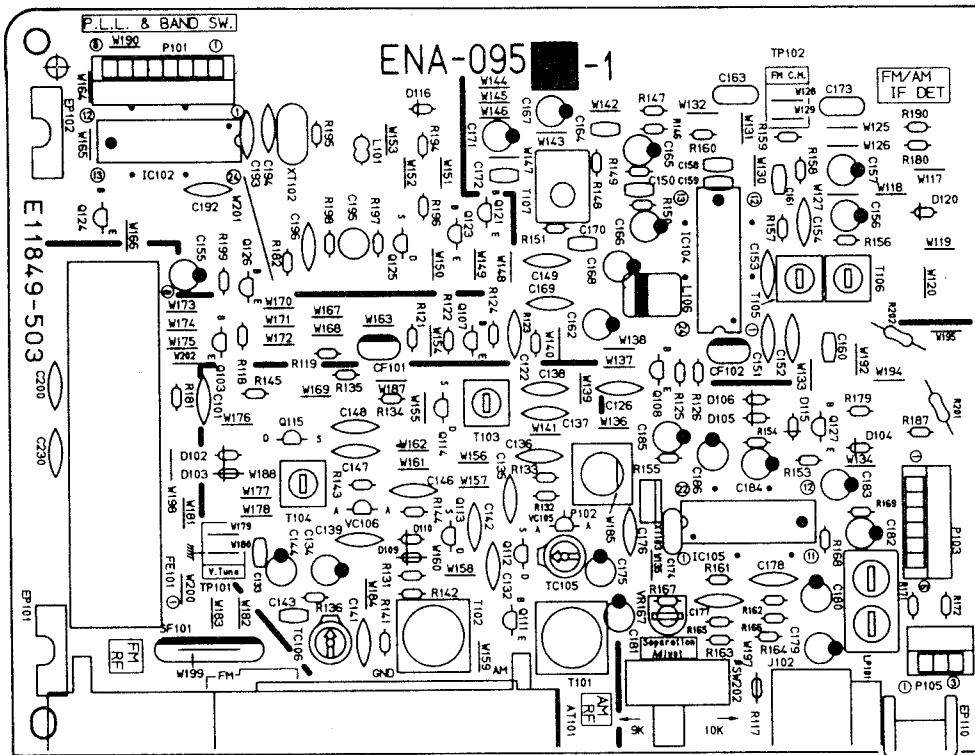
Others

ITEM	PART NUMBER	DESCRIPTION	AREA
FW902	EWR34B-45SST	FLAT WIRE(4PIN)	
FW903	EWR36B-50SST	FLAT WIRE(6PIN)	
PB301	EMV5125-005	PLUG ASSY(5PIN)	
PB303	EMV5125-007	PLUG ASSY(7PIN)	
RY011	ESK1D12-118J1	RELAY	
RY901	ESK7D24-2120	RELAY	
ST011	EMB90YV-401A	SPEAKER TERMINAL	
ST901	EMB90TV-801A	SPEAKER TERMINAL	
WT801	E67764-103	WRAPPING TERMINAL(3PIN)	

△ SAFETY PARTS

■ ENA-095 Tuner PC Board Ass'y

Note : ENA-095 varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENA-095 <input type="checkbox"/> H	the U.S.A. , Canada
ENA-095 <input type="checkbox"/> I	Other Countries

I.C.s

ITEM	PART NUMBER	DESCRIPTION	AREA
IC102	LC7218	I.C. SANYO	
IC104	LA1266A	I.C. SANYO	
IC105	LA3401	I.C. SANYO	

△ SAFETY PARTS

Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
Q103	2SC461(B,C)	SILICON HITACHI	
Q107	2SC535(B,C)	SILICON HITACHI	
Q108	2SC461(B,C)	SILICON HITACHI	
Q112	2SK301(Q,R)	F.E.T MATSUSHITA	
Q123	AN1A4P	SILICON NEC	
Q124	AN1A4P	SILICON NEC	
Q125	2SK301(Q2)	F.E.T MATSUSHITA	
Q126	2SC458(D)	SILICON HITACHI	
Q127	AA1L4M	SILICON NEC	

△ SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D104	1SS119	SILICON HITACHI	
D105	1SS119	SILICON HITACHI	
D106	1SS119	SILICON HITACHI	
D115	1SS119	SILICON HITACHI	
D116	1SS119	SILICON HITACHI	
D120	1SS119	SILICON HITACHI	
VC105	SVC342(L)	VARICAP SANYO	

△ SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCF21HP-223	0.022MF	50V	CERAMIC	
	C122	QCF21HP-223	0.022MF	50V	CERAMIC	
	C126	QCF21HP-223	0.022MF	50V	CERAMIC	
	C132	QCS21HJ-561	560PF	50V	CERAMIC	
	C133	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C134	QETB1EM-106	10MF	25V	ELECTRO	
	C135	QCC21EM-223	0.022MF	25V	CERAMIC	
	C136	QCT26CH-180	18PF	50V	CERAMIC	
	C137	QCT26CH-221	220PF	50V	CERAMIC	
	C138	QCT26CH-241	240PF	50V	CERAMIC	
	C149	QCF21HP-223	0.022MF	50V	CERAMIC	
	C150	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C151	QCF21HP-223	0.022MF	50V	CERAMIC	
	C152	QCF21HP-223	0.022MF	50V	CERAMIC	
	C153	QCC21EM-223	0.022MF	25V	CERAMIC	
	C154	QCF21HP-223	0.022MF	50V	CERAMIC	
	C155	QETB1CM-108	1000MF	16V	ELECTRO	
	C156	QETB1HM-475	4.7MF	50V	ELECTRO	
	C157	QETB1HM-474	0.47MF	50V	ELECTRO	
	C158	QCB1HK-101	100PF	50V	CERAMIC	
	C159	QCB1HK-101	100PF	50V	CERAMIC	
	C160	QCB1HK-221	220PF	50V	CERAMIC	
	C161	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C162	QETB1EM-106	10MF	25V	ELECTRO	
	C163	QFLB1HJ-332	3300PF	50V	MYLAR	
	C164	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C165	QETB1HM-474	0.47MF	50V	ELECTRO	
	C166	QETB1HM-225	2.2MF	50V	ELECTRO	
	C167	QETB1HM-225	2.2MF	50V	ELECTRO	
	C168	QETB1HM-475	4.7MF	50V	ELECTRO	
	C169	QCF21HP-223	0.022MF	50V	CERAMIC	
	C170	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C171	QETB1EM-106	10MF	25V	ELECTRO	
	C172	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C173	QFLB1HK-223	0.022MF	50V	MYLAR	
	C174	QFLB1HK-475	0.047MF	50V	MYLAR	
	C175	QETB1EM-106	10MF	25V	ELECTRO	
	C176	QCY21HK-102	1000PF	50V	CERAMIC	
	C177	QCS21HJ-561	560PF	50V	CERAMIC	
	C178	QCS21HJ-561	560PF	50V	CERAMIC	
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-225	2.2MF	50V	ELECTRO	
	C181	QETB1EM-106	10MF	25V	ELECTRO	
	C182	QETB1HM-225	2.2MF	50V	ELECTRO	
	C183	QETB1HM-105	1MF	50V	ELECTRO	
	C184	QETB1HM-105	1MF	50V	ELECTRO	
	C185	QETB1HM-225	2.2MF	50V	ELECTRO	
	C186	QETB1HM-474	0.47MF	50V	ELECTRO	
	C192	QCC21EM-473	0.047MF	25V	CERAMIC	
	C193	QCS21HJ-180	18PF	50V	CERAMIC	
	C194	QCS21HJ-180	18PF	50V	CERAMIC	
	C195	QEN51HM-474	0.47MF	50V	NON POLE	
	C196	QCY21HK-102	1000PF	50V	CERAMIC	
	C230	QCF21HP-103	0.01MF	50V	CERAMIC	

△ IS SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R117	QRD167J-100	10	1/6W	CARBON	
	R118	QRD167J-332	3.3K	1/6W	CARBON	
	R119	QRD167J-221	220	1/6W	CARBON	
	R121	QRD167J-391	390	1/6W	CARBON	
	R122	QRD167J-272	2.7K	1/6W	CARBON	
	R123	QRD167J-102	1K	1/6W	CARBON	
	R124	QRD167J-681	680	1/6W	CARBON	
	R125	QRD167J-332	3.3K	1/6W	CARBON	
	R126	QRD167J-221	220	1/6W	CARBON	
	R131	QRD167J-331	330	1/6W	CARBON	
	R132	QRD167J-103	10K	1/6W	CARBON	
	R133	QRD167J-473	47K	1/6W	CARBON	
	R135	QRD167J-470	47	1/6W	CARBON	
	R136	QRD167J-103	10K	1/6W	CARBON	
	R146	QRD167J-560	56	1/6W	CARBON	
	R147	QRD167J-103	10K	1/6W	CARBON	
	R148	QRD167J-103	10K	1/6W	CARBON	
	R149	QRD167J-223	22K	1/6W	CARBON	
	R150	QRD167J-103	10K	1/6W	CARBON	
	R151	QRD167J-224	220K	1/6W	CARBON	
	R153	QRD167J-103	10K	1/6W	CARBON	
	R154	QRD167J-103	10K	1/6W	CARBON	
	R155	QRD167J-562	5.6K	1/6W	CARBON	
	R156	QRD167J-822	8.2K	1/6W	CARBON	
	R157	QRD167J-103	10K	1/6W	CARBON	
	R158	QRD167J-183	18K	1/6W	CARBON	H
	R158	QRD167J-333	33K	1/6W	CARBON	I
	R159	QRD167J-561	560	1/6W	CARBON	
	R160	QRD167J-123	12K	1/6W	CARBON	
	R161	QRD167J-124	120K	1/6W	CARBON	

△ IS SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	R162	QRD167J-124	120K	1/6W	CARBON	
	R163	QRD167J-332	3.3K	1/6W	CARBON	
	R164	QRD167J-332	3.3K	1/6W	CARBON	
	R165	QRD167J-184	180K	1/6W	CARBON	
	R166	QRD167J-184	180K	1/6W	CARBON	
	R167	QRD167J-393	39K	1/6W	CARBON	
	R168	QRD167J-103	10K	1/6W	CARBON	
	R169	QRD167J-103	10K	1/6W	CARBON	
	R171	QRD167J-682	6.8K	1/6W	CARBON	
	R172	QRD167J-682	6.8K	1/6W	CARBON	
	R179	QRD167J-562	5.6K	1/6W	CARBON	
	R180	QRD167J-472	4.7K	1/6W	CARBON	
	R181	QRD167J-222	2.2K	1/6W	CARBON	
	R182	QRD167J-181	180	1/6W	CARBON	
	R187	QRD167J-101	100	1/6W	CARBON	
	R190	QRD167J-472	4.7K	1/6W	CARBON	
	R194	QRD167J-472	4.7K	1/6W	CARBON	
	R195	QRD167J-473	47K	1/6W	CARBON	
	R196	QRD167J-103	10K	1/6W	CARBON	
	R197	QRD167J-222	2.2K	1/6W	CARBON	
	R198	QRD167J-332	3.3K	1/6W	CARBON	
	R199	QRD167J-472	4.7K	1/6W	CARBON	
△	R201	QRD145J-680S	68	1/4W	UNF. CARBON	H
△	R201	QR20062-680	68	1/4W	FUSIBLE	I
△	R202	QRD145J-470S	47	1/4W	UNF. CARBON	H
△	R202	QR20062-470	47	1/4W	FUSIBLE	I

△ IS SAFETY PARTS

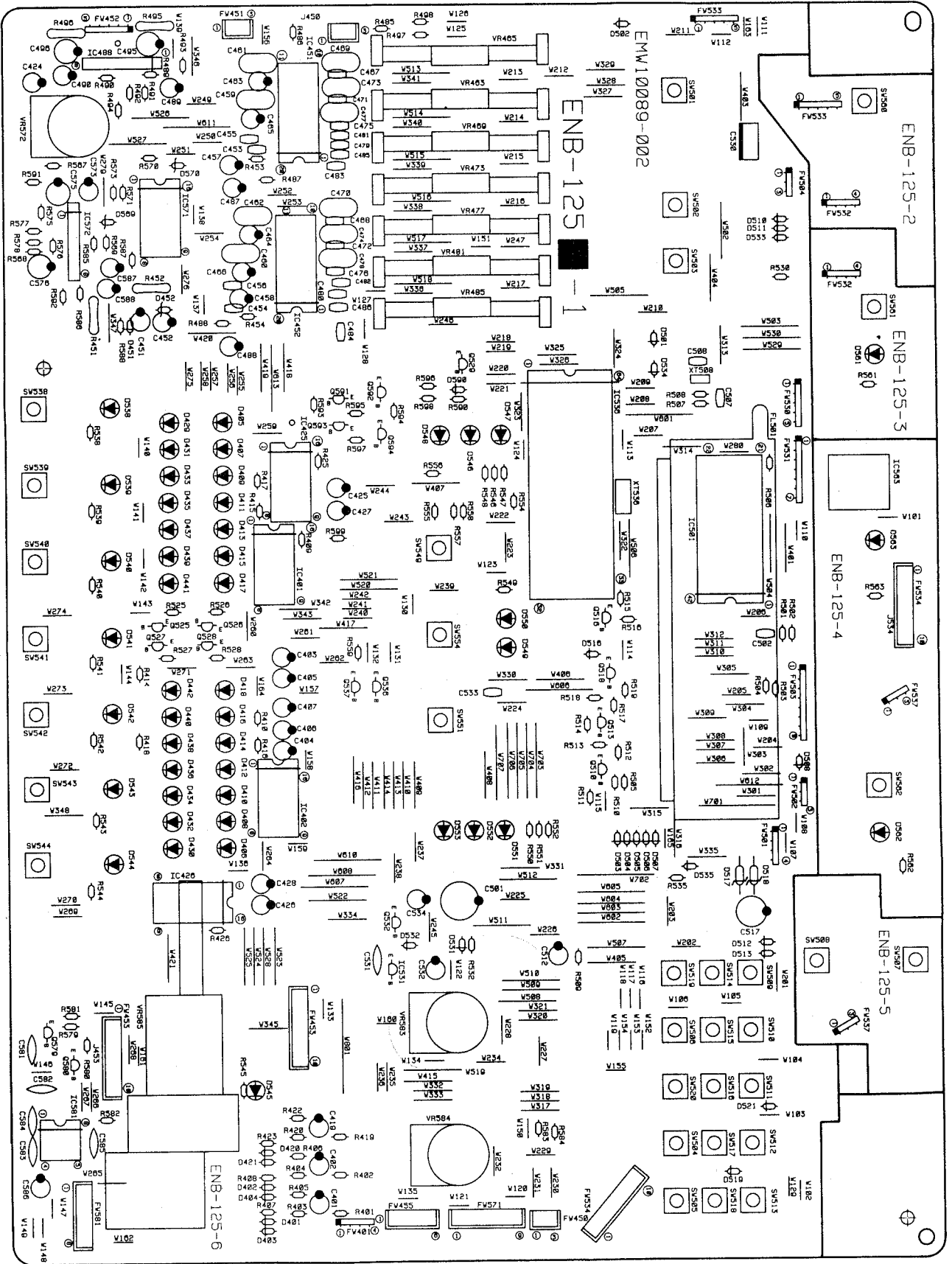
Others

△	ITEM	PART NUMBER	DESCRIPTION			AREA
	J102	E11849-502(S)	PRINTED BOARD			
	L101	QMS3501-021	MINI JACK			
	L106	EQL4004-1R0	INDUCTOR			
	L106	EQL3001-102K	INDUCTOR			
	P101	EMV7112-008	CONNECTOR(8PIN)			
	P103	EMV7112-006	CONNECTOR(6PIN)			
	P105	EMV7112-003	CONNECTOR(3PIN)			I
	T101	EQR1111-014	AM RF COIL			
	T103	EQR1207-015	MW OSC COIL			
	T105	EQT2140-012	I.F. TRANSFORMER			
	T106	EQT2140-013	I.F. TRANSFORMER			
	T107	ECB1560-006	CERAMIC FILTER			
	AT101	EMB41YV-401K	ANTENNA TERMINAL			
	CF101	ECB2123-006R	CERAMIC FILTER			
	CF102	ECB2123-006R	CERAMIC FILTER			
	EP101	E70859-001	EARTH PLATE			
	EP102	E70859-001	EARTH PLATE			
	EP110	E70225-001	EARTH PLATE			
	FE101	EAF2203-001	FRONT END			
	LP101	EQF0101-002	LOW PASS FILTER			
	SW202	QSS1201-039	SLIDE SWITCH			I
	TC105	ENZ1003-006	TRIMMER			
	XT102	ECX0007-200KC	RESONATOR			
	XT103	ECX0000-456KR	RESONATOR			

△ IS SAFETY PARTS

■ ENB-125 □ Front PC Board Ass'y

Note : ENB-125 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENB-125 A	the U.S.A.
ENB-125 B	Canada
ENB-125 C	Other Countries

Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q510	2SC458(D)	SILICON HITACHI	
	Q513	2SC458(D)	SILICON HITACHI	
	Q516	2SC458(D)	SILICON HITACHI	
	Q518	2SC458(D)	SILICON HITACHI	
	Q525	DTC114YS	SILICON ROHM	
	Q526	DTC114YS	SILICON ROHM	
	Q527	DTC114YS	SILICON ROHM	
	Q528	DTC114YS	SILICON ROHM	
	Q529	DTA144WS	SILICON ROHM	
	Q532	AA1A4P	SILICON	
	Q536	AA1L4M	SILICON NEC	
	Q537	AN1L4M	SILICON NEC	
	Q579	2SK301(P,Q)	F.E.T MATSUSHITA	
	Q580	2SK301(P,Q)	F.E.T MATSUSHITA	
	Q591	2SC3068	SILICON SANYO	
	Q592	2SC3068	SILICON SANYO	
	Q593	2SC3068	SILICON SANYO	
	Q594	2SC3068	SILICON SANYO	

Δ : SAFETY PARTS

I.C.s

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC401	IR2E19	I.C. SHARP	
	IC402	IR2E19	I.C. SHARP	
	IC425	IR2E19	I.C. SHARP	
	IC426	IR2E19	I.C. SHARP	
	IC451	LA3607S	I.C. SANYO	
	IC452	LA3607S	I.C. SANYO	
	IC488	VC4580L	I.C. DAINICHI	
	IC501	LC6514B-4245	I.C. SANYO	
	IC531	MN1281(P,Q)	I.C. MATSUSHITA	
	IC536	UPD75104CW-242	I.C. NEC	
	IC563	SPS-420-1	I.C. SANYO	
	IC571	TC4053BP	I.C. TOSHIBA	
	IC572	VC4580L	I.C. DAINICHI	
	IC581	LB1639-CV	I.C. SANYO	

Δ : SAFETY PARTS

Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D401	1SS133	SILICON ROHM	
	D402	1SS133	SILICON ROHM	
	D403	1SS133	SILICON ROHM	
	D404	1SS133	SILICON ROHM	
	D405	1SS133	SILICON ROHM	
	D406	SLR-54DC50F130	L.E.D. ROHM	
	D407	SLR-54DC50F130	L.E.D. ROHM	
	D408	SLR-54DC50F130	L.E.D. ROHM	
	D409	SLR-54DC50F130	L.E.D. ROHM	
	D410	SLR-54DC50F130	L.E.D. ROHM	
	D411	SLR-54DC50F130	L.E.D. ROHM	
	D412	SLR-54DC50F130	L.E.D. ROHM	
	D413	SLR-54DC50F130	L.E.D. ROHM	
	D414	SLR-54DC50F130	L.E.D. ROHM	
	D415	SLR-54DC50F130	L.E.D. ROHM	
	D416	SLR-54DC50F130	L.E.D. ROHM	
	D417	SLR-54DC50F130	L.E.D. ROHM	
	D418	SLR-54DC50F130	L.E.D. ROHM	
	D420	1SS133	SILICON ROHM	
	D421	1SS133	SILICON ROHM	
	D429	SLR-54DC50F130	L.E.D. ROHM	
	D430	SLR-54DC50F130	L.E.D. ROHM	
	D431	SLR-54DC50F130	L.E.D. ROHM	
	D432	SLR-54DC50F130	L.E.D. ROHM	
	D433	SLR-54DC50F130	L.E.D. ROHM	
	D434	SLR-54DC50F130	L.E.D. ROHM	
	D435	SLR-54DC50F130	L.E.D. ROHM	
	D436	SLR-54DC50F130	L.E.D. ROHM	
	D437	SLR-54DC50F130	L.E.D. ROHM	
	D438	SLR-54DC50F130	L.E.D. ROHM	
	D439	SLR-54DC50F130	L.E.D. ROHM	
	D440	SLR-54DC50F130	L.E.D. ROHM	
	D441	SLR-54DC50F130	L.E.D. ROHM	
	D442	SLR-54DC50F130	L.E.D. ROHM	
	D451	MTZ7.5JC	ZENER ROHM	

Δ : SAFETY PARTS

Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D452	MTZ7.5JC	ZENER ROHM	
	D501	1SS133	SILICON ROHM	
	D502	1SS133	SILICON ROHM	
	D503	1SS133	SILICON ROHM	
	D504	1SS133	SILICON ROHM	
	D505	1SS133	SILICON ROHM	
	D506	1SS133	SILICON ROHM	
	D507	1SS133	SILICON ROHM	
	D508	1SS133	SILICON ROHM	
	D510	1SS133	SILICON ROHM	C
	D511	1SS133	SILICON ROHM	
	D512	1SS133	SILICON ROHM	A
	D512	1SS133	SILICON ROHM	B
	D513	1SS133	SILICON ROHM	C
	D516	1SS133	SILICON ROHM	
	D517	RD6.2FB3	ZENER NEC	
	D518	RD6.2FB3	ZENER NEC	
	D519	1SS133	SILICON ROHM	
	D521	1SS133	SILICON ROHM	
	D531	1SS133	SILICON ROHM	
	D532	1SS133	SILICON ROHM	
	D533	1SS133	SILICON ROHM	
	D534	1SS133	SILICON ROHM	
	D535	1SS133	SILICON ROHM	
	D538	SLR-34VC50F124	L.E.D. ROHM	
	D539	SLR-34DC50F124	L.E.D. ROHM	
	D540	SLR-34DC50F124	L.E.D. ROHM	
	D541	SLR-34DC50F124	L.E.D. ROHM	
	D542	SLR-34DC50F124	L.E.D. ROHM	
	D543	SLR-34DC50F124	L.E.D. ROHM	
	D544	SLR-34DC50F124	L.E.D. ROHM	
	D545	SLR-34VC50F124	L.E.D. ROHM	
	D546	SLR-54DC50F130	L.E.D. ROHM	
	D547	SLR-54DC50F130	L.E.D. ROHM	
	D548	SLR-54DC50F130	L.E.D. ROHM	
	D549	SLR-54VC3F	L.E.D. ROHM	
	D550	SLR-54VC3F	L.E.D. ROHM	
	D551	SLR-54DC50F130	L.E.D. ROHM	
	D552	SLR-54DC50F130	L.E.D. ROHM	
	D553	SLR-54DC50F130	L.E.D. ROHM	
	D561	SLR-331DC50F070	L.E.D. ROHM	
	D562	SLR-331DC50F070	L.E.D. ROHM	
	D563	SLR-34VC50F124	L.E.D. ROHM	
	D569	MTZ9.1JC	ZENER ROHM	
	D570	MTZ9.1JC	ZENER ROHM	
	D590	1SS133	SILICON ROHM	

Δ : SAFETY PARTS

Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C401	QEK51HM-475	4.7MF 50V ELECTRO	
	C402	QEK51HM-475	4.7MF 50V ELECTRO	
	C403	QER51EM-106	10MF 25V ELECTRO	
	C404	QER51EM-106	10MF 25V ELECTRO	
	C405	QER51EM-106	10MF 25V ELECTRO	
	C406	QER51EM-106	10MF 25V ELECTRO	
	C407	QEK51EM-476	47MF 25V ELECTRO	
	C419	QEK51HM-475	4.7MF 50V ELECTRO	
	C425	QER51EM-106	10MF 25V ELECTRO	
	C426	QER51EM-106	10MF 25V ELECTRO	
	C427	QER51EM-106	10MF 25V ELECTRO	
	C428	QER51EM-106	10MF 25V ELECTRO	
	C451	QETB1CM-226	22MF 16V ELECTRO	
	C452	QETB1CM-226	22MF 16V ELECTRO	
	C453	QCB1HK-101	100PF 50V CERAMIC	
	C454	QCB1HK-101	100PF 50V CERAMIC	
	C455	QCSB1HJ-330	33PF 50V CERAMIC	
	C456	QCSB1HJ-330	33PF 50V CERAMIC	
	C457	QETB1HM-475	4.7MF 50V ELECTRO	
	C458	QETB1HM-475	4.7MF 50V ELECTRO	
	C459	QFN81HJ-683	0.068MF 50V MYLAR	
	C460	QFN81HJ-683	0.068MF 50V MYLAR	
	C461	QFN81HK-223	0.022MF 50V MYLAR	
	C462	QFN81HK-223	0.022MF 50V MYLAR	
	C463	QEK51HM-474G	0.47MF 50V ELECTRO	
	C464	QEK51HM-474G	0.47MF 50V ELECTRO	
	C465	QEK51HM-105G	1MF 50V ELECTRO	
	C466	QEK51HM-105G	1MF 50V ELECTRO	
	C467	QCVB1CM-103	0.01MF 16V CERAMIC	
	C468	QCVB1CM-103	0.01MF 16V CERAMIC	
	C469	QFV81HJ-154	0.15MF 50V T.FILM	
	C470	QFV81HJ-154	0.15MF 50V T.FILM	
	C471	QCXB1CM-392	3900PF 16V CERAMIC	
	C472	QCXB1CM-392	3900PF 16V CERAMIC	
	C473	QFN81HK-683	0.068MF 50V MYLAR	

Δ : SAFETY PARTS

Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10089-002	PRINTED BOARD	
		E306667-001SM	PANEL HOLDER	
		E3400-431	SPACER	
		E3400-439	SPACER	
		QWE351-09DD	WIRE	
		QWE352-07BB	WIRE KIT	
		QWE353-11DD	VINYL WIRE	
		QWE354-05BB	VINYL WIRE	
	J450	EMV5109-003A	PLUG ASSY(3PIN)	
	J453	EMV5109-010A	PLUG ASSY(10PIN)	
	J534	EMV5109-010A	PLUG ASSY(10PIN)	
	FL501	ELU0001-085	FL TUBE	
	FW401	EWR34B-25LST	FLAT WIRE(4PIN)	
	FW450	EWS293-0145	SOCKET WIRE(3PIN)	
	FW451	EWS293-0155	SOCKET WIRE(3PIN)	
	FW452	EWR35B-45LST	FLAT WIRE(5PIN)	
	FW453	EWS25A-A102	SOCKET WIRE(10PIN)	
	FW455	EWS296-0120	SOCKET WIRE(6PIN)	C
	FW501	EWR34B-30LST	FLAT WIRE(4PIN)	
	FW502	EWR33B-35LST	FLAT WIRE(3PIN)	C
	FW503	EWR38B-40LST	FLAT WIRE(8PIN)	
	FW504	EWR33B-35LST	FLAT WIRE(3PIN)	
	FW530	EWR35B-30LST	FLAT WIRE(5PIN)	
	FW531	EWR37B-30LST	FLAT WIRE(7PIN)	
	FW532	EWR34B-08SSST	FLAT WIRE(4PIN)	
	FW533	EWR35B-25SSST	FLAT WIRE(5PIN)	
	FW534	EWS25A-A102	SOCKET WIRE(10PIN)	
	FW537	EWR33B-16SSST	FLAT WIRE(3PIN)	
	FW571	EWS299-0125	SOCKET WIRE(9PIN)	
	FW581	EWS298-1313	SOCKET WIRE(7PIN)	
	SW501	ESP0001-018	TACT SWITCH(MEMORY)	
	SW502	ESP0001-018	TACT SWITCH(AUTO MEMORY)	
	SW503	ESP0001-018	TACT SWITCH(CANCEL)	
	SW504	ESP0001-018	TACT SWITCH(FM)	
	SW505	ESP0001-018	TACT SWITCH(AM)	

Δ : SAFETY PARTS

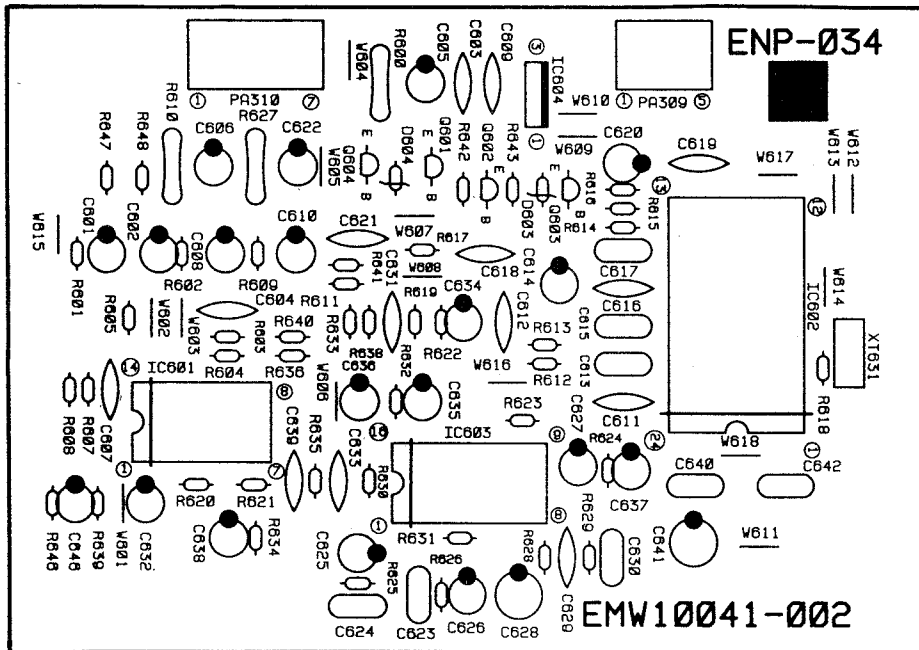
Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	SW506	ESP0001-018	TACT SWITCH(FM MODE MUTE)	
	SW507	ESP0001-018	TACT SWITCH(TUNING UP)	
	SW508	ESP0001-018	TACT SWITCH(TUNING DOWN)	
	SW509	ESP0001-018	TACT SWITCH(1)	
	SW510	ESP0001-018	TACT SWITCH(2)	
	SW511	ESP0001-018	TACT SWITCH(3)	
	SW512	ESP0001-018	TACT SWITCH(4)	
	SW513	ESP0001-018	TACT SWITCH(5)	
	SW514	ESP0001-018	TACT SWITCH(6)	
	SW515	ESP0001-018	TACT SWITCH(7)	
	SW516	ESP0001-018	TACT SWITCH(8)	
	SW517	ESP0001-018	TACT SWITCH(9)	
	SW518	ESP0001-018	TACT SWITCH(10)	
	SW519	ESP0001-018	TACT SWITCH(+10)	
	SW520	ESP0001-018	TACT SWITCH(PRESET SCAN)	
	SW538	ESP0001-018	TACT SWITCH(TAPE 2 MONITOR)	
	SW539	ESP0001-018	TACT SWITCH(TAPE 1)	
	SW540	ESP0001-018	TACT SWITCH(CD)	
	SW541	ESP0001-018	TACT SWITCH(TUNER)	
	SW542	ESP0001-018	TACT SWITCH(PHONO)	
	SW543	ESP0001-018	TACT SWITCH(VCR)	
	SW544	ESP0001-018	TACT SWITCH(VIDEO)	
	SW549	ESP0001-018	TACT SWITCH(SURROUND)	
	SW551	ESP0001-018	TACT SWITCH(DELAY)	
	SW554	ESP0001-018	TACT SWITCH(MODE)	
	SW560	ESP0001-018	TACT SWITCH(POWER)	
	SW561	ESP0001-018	TACT SWITCH(SEA)	
	SW562	ESP0001-018	TACT SWITCH(LOUDNESS)	
	XT508	ECX0001-000KS	RESONATOR	
	XT536	ECX0004-194KM	RESONATOR	

Δ : SAFETY PARTS

■ ENP-034 □ Surround PC Board Ass'y

Note : ENP-034 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENP-034 A	the U.S.A. , Canada
ENP-034 B	Other Countries

Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q601	AA1L4M	SILICON NEC	
	Q602	AA1L4M	SILICON NEC	
	Q603	2SC458(C,D)	SILICON HITACHI	
	Q604	2SC458(C,D)	SILICON HITACHI	

Δ : SAFETY PARTS

I.C.s

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC601	UPC324C	I.C. NEC	
	IC602	MS0198P	I.C. MITSUBISHI	
	IC603	LA2730	I.C. SANYO	
	IC604	NJM78M05FD	I.C.	

△ SAFETY PARTS

Diodes

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	D603	MTZ4.7JB	ZENER ROHM	
	D604	MTZ4.7JB	ZENER ROHM	

△ SAFETY PARTS

Capacitors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	C601	QETB1HM-105	1MF 50V ELECTRO	
	C602	QETB1HM-105	1MF 50V ELECTRO	
	C604	QCF21HP-223	0.022MF 50V CERAMIC	
	C605	QETB1EM-106	10MF 25V ELECTRO	
	C606	QETB1EM-106	10MF 25V ELECTRO	
	C607	QCS21HJ-100	10PF 50V CERAMIC	
	C608	QETB1HM-475	4.7MF 50V ELECTRO	
	C609	QCF21HP-223	0.022MF 50V CERAMIC	
	C610	QEB51EM-475	4.7MF 25V LLC ELECTRO	
	C611	QCS21HJ-681	680PF 50V CERAMIC	
	C612	QCY21HK-472	4700PF 50V CERAMIC	
	C613	QFLB1HK-104	0.1MF 50V MYLAR	
	C614	QETB1AM-476	47MF 10V ELECTRO	
	C615	QFV81HJ-474	0.47MF 50V T.FILM	
	C616	QFV81HJ-474	0.47MF 50V T.FILM	
	C617	QFLB1HK-104	0.1MF 50V MYLAR	
	C618	QCY21HK-562	5600PF 50V CERAMIC	
	C619	QCS21HJ-561	560PF 50V CERAMIC	
	C620	QEB51EM-475	4.7MF 25V LLC ELECTRO	
	C621	QCF21HP-103	0.01MF 50V CERAMIC	
	C622	QETB1EM-106	10MF 25V ELECTRO	
	C623	QFLB1HK-333	0.033MF 50V MYLAR	
	C624	QFLB1HK-104	0.1MF 50V MYLAR	
	C625	QEB51HM-334	0.33MF 50V LLC ELECTRO	
	C626	QETB1HM-105	1MF 50V ELECTRO	
	C627	QETB1CM-226	22MF 16V ELECTRO	
	C628	QETB1AM-107	100MF 10V ELECTRO	
	C629	QCF21HP-472	4700PF 50V CERAMIC	
	C630	QFLB1HK-333	0.033MF 50V MYLAR	
	C631	QCS21HJ-100	10PF 50V CERAMIC	
	C632	QETB1HM-105	1MF 50V ELECTRO	
	C633	QCS21HJ-471	470PF 50V CERAMIC	
	C634	QETB1HM-475	4.7MF 50V ELECTRO	
	C635	QETB1HM-105	1MF 50V ELECTRO	
	C636	QETB1HM-105	1MF 50V ELECTRO	
	C637	QETB1HM-106	10MF 50V ELECTRO	
	C638	QETB1HM-105	1MF 50V ELECTRO	
	C639	QCS21HJ-100	10PF 50V CERAMIC	
	C640	QFLB1HK-104	0.1MF 50V MYLAR	
	C641	QETB1CM-107	100MF 16V ELECTRO	
	C642	QFLB1HK-104	0.1MF 50V MYLAR	
	C646	QETB1EM-106	10MF 25V ELECTRO	

△ SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	R600	QRZ0077-680	68 1/4W FUSIBLE	
	R601	QRD167J-224	220K 1/6W CARBON	
	R602	QRD167J-154	150K 1/6W CARBON	
	R603	QRD167J-154	150K 1/6W CARBON	
	R604	QRD167J-334	330K 1/6W CARBON	
	R605	QRD167J-334	330K 1/6W CARBON	
	R606	QRD167J-332	3.3K 1/6W CARBON	
	R607	QRD167J-103	10K 1/6W CARBON	
	R608	QRD167J-224	220K 1/6W CARBON	
	R609	QRD167J-105	1M 1/6W CARBON	
	R610	QRZ0077-680	68 1/4W FUSIBLE	
	R611	QRD167J-153	15K 1/6W CARBON	
	R612	QRD167J-103	10K 1/6W CARBON	
	R613	QRD167J-153	15K 1/6W CARBON	
	R614	QRD167J-153	15K 1/6W CARBON	
	R615	QRD167J-103	10K 1/6W CARBON	
	R616	QRD167J-153	15K 1/6W CARBON	
	R617	QRD167J-272	2.7K 1/6W CARBON	
	R618	QRD167J-105	1M 1/6W CARBON	
	R619	QRD167J-102	1K 1/6W CARBON	
	R620	QRD167J-223	22K 1/6W CARBON	
	R621	QRD167J-683	68K 1/6W CARBON	
	R622	QRD167J-333	33K 1/6W CARBON	
	R623	QRD167J-332	3.3K 1/6W CARBON	
	R624	QRD167J-103	10K 1/6W CARBON	
	R625	QRD167J-274	270K 1/6W CARBON	
	R626	QRD167J-622	6.2K 1/6W CARBON	
	R627	QRZ0077-680	68 1/4W FUSIBLE	
	R628	QRD167J-473	47K 1/6W CARBON	
	R629	QRD167J-332	3.3K 1/6W CARBON	
	R630	QRD167J-181	180 1/6W CARBON	
	R631	QRD167J-274	270K 1/6W CARBON	
	R632	QRD167J-153	15K 1/6W CARBON	
	R633	QRD167J-153	15K 1/6W CARBON	
	R634	QRD167J-333	33K 1/6W CARBON	
	R635	QRD167J-223	22K 1/6W CARBON	
	R636	QRD167J-473	47K 1/6W CARBON	
	R638	QRD167J-473	47K 1/6W CARBON	
	R639	QRD167J-124	120K 1/6W CARBON	
	R640	QRD167J-473	47K 1/6W CARBON	
	R641	QRD167J-103	10K 1/6W CARBON	
	R642	QRD167J-473	47K 1/6W CARBON	
	R643	QRD167J-473	47K 1/6W CARBON	
	R646	QRD167J-105	1M 1/6W CARBON	
	R647	QRD167J-684	680K 1/6W CARBON	
	R648	QRD167J-225	2.2M 1/6W CARBON	

△ SAFETY PARTS

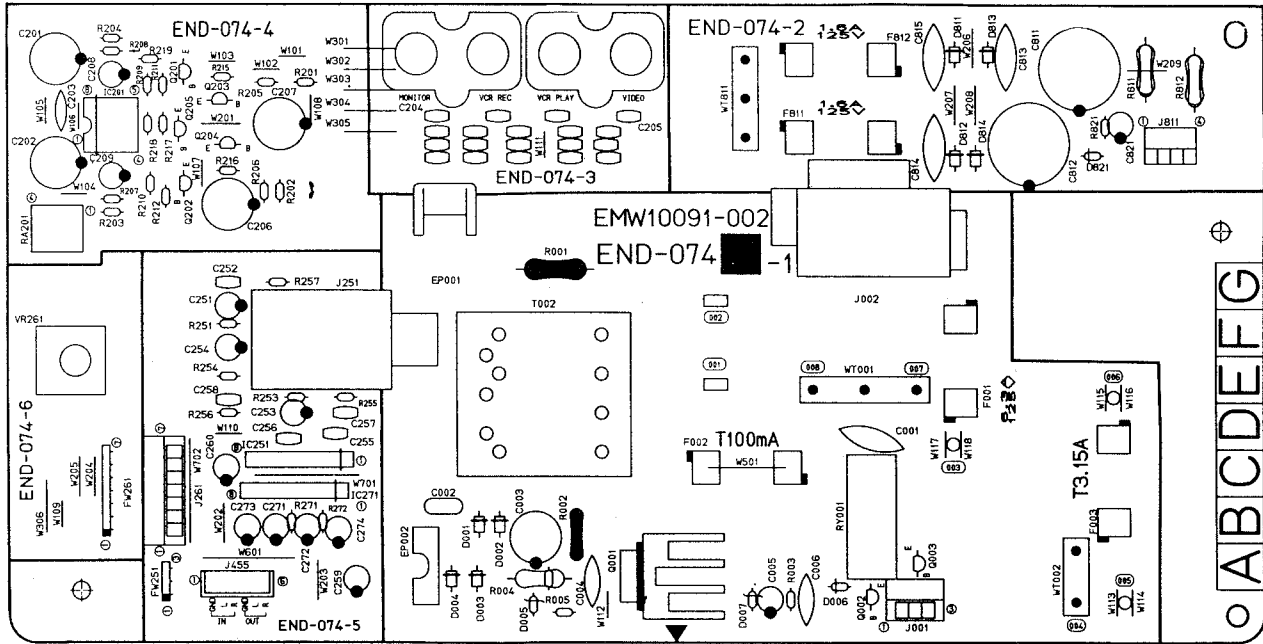
Others

△	ITEM	PART NUMBER	DESCRIPTION	AREA
	PA309	EMW10041-002(S)	PRINTED BOARD	
	PA310	EMV7125-005R	CONNECTOR(5PIN)	
	XT631	EMV7125-007R	CONNECTOR(7PIN)	
		ECX0003-270KM	RESONATOR	

△ SAFETY PARTS

■ END-074 □ Power Supply PC Board Ass'y

Note : END-074 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
END-074 A	the U.S.A.
END-074 B	Canada
END-074 C	Other Countries

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D814	1SR139-200	SILICON ROHM	
D821	1SS133	SILICON ROHM	

△ : SAFETY PARTS

Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
Q001	2SD1266(Q)	SILICON MATSUSHITA	C
Q002	2SC2235(O,Y)	SILICON TOSHIBA	
Q003	AA1L3Z	SILICON NEC	
Q201	2SC1685(R,S)	SILICON MATSUSHITA	
Q202	2SC1685(R,S)	SILICON MATSUSHITA	
Q203	2SA933S(R,S)	SILICON ROHM	
Q204	2SA933S(R,S)	SILICON ROHM	
Q205	AA1A4M	SILICON NEC	

△ : SAFETY PARTS

I.C.s

ITEM	PART NUMBER	DESCRIPTION	AREA
IC201	NJM2246D	I.C. DAINICHI	
IC251	BA15218N	I.C. ROHM	C
IC271	BA15218N	I.C. ROHM	C

△ : SAFETY PARTS

Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D001	1SR139-200	SILICON ROHM	
D002	1SR139-200	SILICON ROHM	
D003	1SR139-200	SILICON ROHM	
D004	1SR139-200	SILICON ROHM	
D005	MTZ12JC	ZENER ROHM	C
D006	1SS133	SILICON ROHM	
D007	MTZ6.2JC	ZENER ROHM	
D811	1SR139-200	SILICON ROHM	
D812	1SR139-200	SILICON ROHM	
D813	1SR139-200	SILICON ROHM	

△ : SAFETY PARTS

Capacitors

ITEM	PART NUMBER	DESCRIPTION	AREA
C001	QC29019-472	4700PF CERAMIC	
C002	QFN32AK-472	4700PF 100V MYLAR	
C003	QETB1EM-477	470MF 25V ELECTRO	A
C003	QETB1EM-477	470MF 25V ELECTRO	B
C003	QETB1JM-227	220MF 63V ELECTRO	
C004	QCF21HP-472	4700PF 50V CERAMIC	C
C005	QETB1CM-476	47MF 16V ELECTRO	
C006	QCF21HP-472	4700PF 50V CERAMIC	
C201	QETB1CM-477	470MF 16V ELECTRO	
C202	QETB1CM-477	470MF 16V ELECTRO	
C203	QCF21HP-223	0.022MF 50V CERAMIC	
C204	QCHB1EZ-223	0.022MF 25V CERAMIC	
C205	QCHB1EZ-223	0.022MF 25V CERAMIC	
C206	EEZ0601-108	1000MF ELECTRO	
C207	EEZ0601-108	1000MF ELECTRO	
C208	QETB1HM-475	4.7MF 50V ELECTRO	
C209	QETB1HM-475	4.7MF 50V ELECTRO	
C251	QEK51EM-475G	4.7MF 25V ELECTRO	C
C252	QCXB1CM-222	2200PF 16V CERAMIC	C
C253	QEK51CM-106G	10MF 16V ELECTRO	C
C254	QEK51CM-106G	10MF 16V ELECTRO	C
C255	QCB1HK-101	100PF 50V CERAMIC	C
C256	QCB1HK-101	100PF 50V CERAMIC	C
C257	QCXB1CM-152	1500PF 16V CERAMIC	C
C258	QCXB1CM-152	1500PF 16V CERAMIC	C
C259	QEK51EM-475G	4.7MF 25V ELECTRO	C
C260	QEK51EM-475G	4.7MF 25V ELECTRO	C
C271	QEK51EM-475G	4.7MF 25V ELECTRO	C
C272	QEK51EM-475G	4.7MF 25V ELECTRO	C
C273	QEK51EM-475G	4.7MF 25V ELECTRO	C
C274	QEK51EM-475G	4.7MF 25V ELECTRO	C
C279	QCF21HP-473	0.047MF 50V CERAMIC	C
C811	QETB1VM-228N	2200MF 35V ELECTRO	
C812	QETB1VM-228N	2200MF 35V ELECTRO	
C813	QCE22HP-103	0.01MF 500V CERAMIC	
C814	QCE22HP-103	0.01MF 500V CERAMIC	
C815	QCE22HP-103	0.01MF 500V CERAMIC	
C821	QETB1HM-225	2.2MF 50V ELECTRO	

△ : SAFETY PARTS

Resistors

△	ITEM	PART NUMBER	DESCRIPTION			AREA
△	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	A
△	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	B
△	R002	QRD14CJ-100S	10	1/4W	UNF. CARBON	A
△	R002	QRD14CJ-100S	10	1/4W	UNF. CARBON	B
△	R002	QRZ0076-3R3	3.3	1/4W	FUSIBLE	C
△	R003	QRD167J-821	820	1/6W	CARBON	
△	R004	QRG012J-272A	2.7K	1W	Q.M. FILM	C
	R201	QRD167J-750	75	1/6W	CARBON	
	R202	QRD167J-680	68	1/6W	CARBON	
	R203	QRD167J-750	75	1/6W	CARBON	
	R204	QRD167J-750	75	1/6W	CARBON	
	R205	QRD167J-473	47K	1/6W	CARBON	
	R206	QRD167J-473	47K	1/6W	CARBON	
	R207	QRD167J-331	330	1/6W	CARBON	
	R208	QRD167J-331	330	1/6W	CARBON	
	R209	QRD167J-222	2.2K	1/6W	CARBON	
	R210	QRD167J-152	1.5K	1/6W	CARBON	
	R211	QRD167J-151	150	1/6W	CARBON	
	R212	QRD167J-151	150	1/6W	CARBON	
	R215	QRD167J-271	270	1/6W	CARBON	
	R216	QRD167J-271	270	1/6W	CARBON	
	R217	QRD167J-153	15K	1/6W	CARBON	
	R218	QRD167J-152	1.5K	1/6W	CARBON	
	R251	QRD167J-103	10K	1/6W	CARBON	C
	R253	QRD167J-331	330	1/6W	CARBON	C
	R254	QRD167J-331	330	1/6W	CARBON	C
	R255	QRD167J-223	22K	1/6W	CARBON	C
	R256	QRD167J-223	22K	1/6W	CARBON	C
	R257	QRD167J-331	330	1/6W	CARBON	C
	R271	QRD167J-104	100K	1/6W	CARBON	C
	R272	QRD167J-104	100K	1/6W	CARBON	C
	R811	QRD12CJ-2R2S	2.2	1/2W	R.NETWORK	
	R812	QRD12CJ-2R2S	2.2	1/2W	R.NETWORK	
	R821	QRD167J-103	10K	1/6W	CARBON	
	RA201	EMV7125-004R	O.MF		CONNECT TE RM	
	VR261	QVJB81W-E54C	50K		VARIABLE	C

△ : SAFETY PARTS

Others

△	ITEM	PART NUMBER	DESCRIPTION		AREA
		EMW10091-002(S)	PRINTED BOARD		
		E65508-002	TAB		
		E70225-001	EARTH PLATE		
		E70859-001	EARTH PLATE		
		VMZ0087-001	FUSE CLIP		
		VMZ0087-001	FUSE CLIP		A
		VMZ0087-001	FUSE CLIP		B
		E70945-H40B	HEAT SINK		C
		SBSG3010CC	SCREW		C
		VMZ0087-001	FUSE CLIP		C
	J001	VMC0107-003	CONNECTOR(3PIN)		
	J002	QMCA003-E02S	AC OUTLET		A
	J002	QMCA003-E02S	AC OUTLET		B
	J002	QMCA003-E01S	AC OUTLET		C
△	J201	EMN00YP-207A	2P PIN JACK		
	J202	EMN00YP-207A	2P PIN JACK		
	J251	QMS6312-024	HEADPHONE JACK		C
	J261	VMC0107-007	CONNECTOR(7PIN)		C
	J455	EMV5109-006A	PLUG ASSY(6PIN)		C
	J811	VMC0107-004	CONNECTOR(4PIN)		
△	T002	ETP1000-41JA	POWER TRANSFORMER		A
△	T002	ETP1000-41JA	POWER TRANSFORMER		B
△	T002	ETP1000-41ZB	POWER TRANSFORMER		C
	FW251	EWR33B-10LST	FLAT WIRE(3PIN)		C
	FW261	EWR37B-10LST	FLAT WIRE(7PIN)		C
	RY001	ESK1012-118J1	RELAY		
	WT001	E67764-203	WRAPPING TERMINAL(3PIN)		
	WT002	E67764-202	WRAPPING TERMINAL(2PIN)		C
	WT811	E67764-103	WRAPPING TERMINAL(3PIN)		

△ : SAFETY PARTS

Accessories List

△	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1710A	Instruction Book	1		
	BT-20025K	Warranty Card	1		C
	BT20071A	Service Center List	1		C
	BT-20044G	Safety Instruction Sheet	1		J
	E66416-003	Envelope	1	for Warranty Card	J
	BT-20048D	Warranty Card	1		J
	BT-20108A	Service Information	1		J
	EQB4001-015	AM Loop Antenna	1		
	EWP502-001	Built in Antenna	1		
	RM-SR77U	Remote Controller	1		
△	UM-4NJ-2PSA	Battery	1		
	E04056	Siemens Plug	1	220V	U
	E35497-015	Caution Sheet	1		U
	QPGA025-03505	Envelope	1		

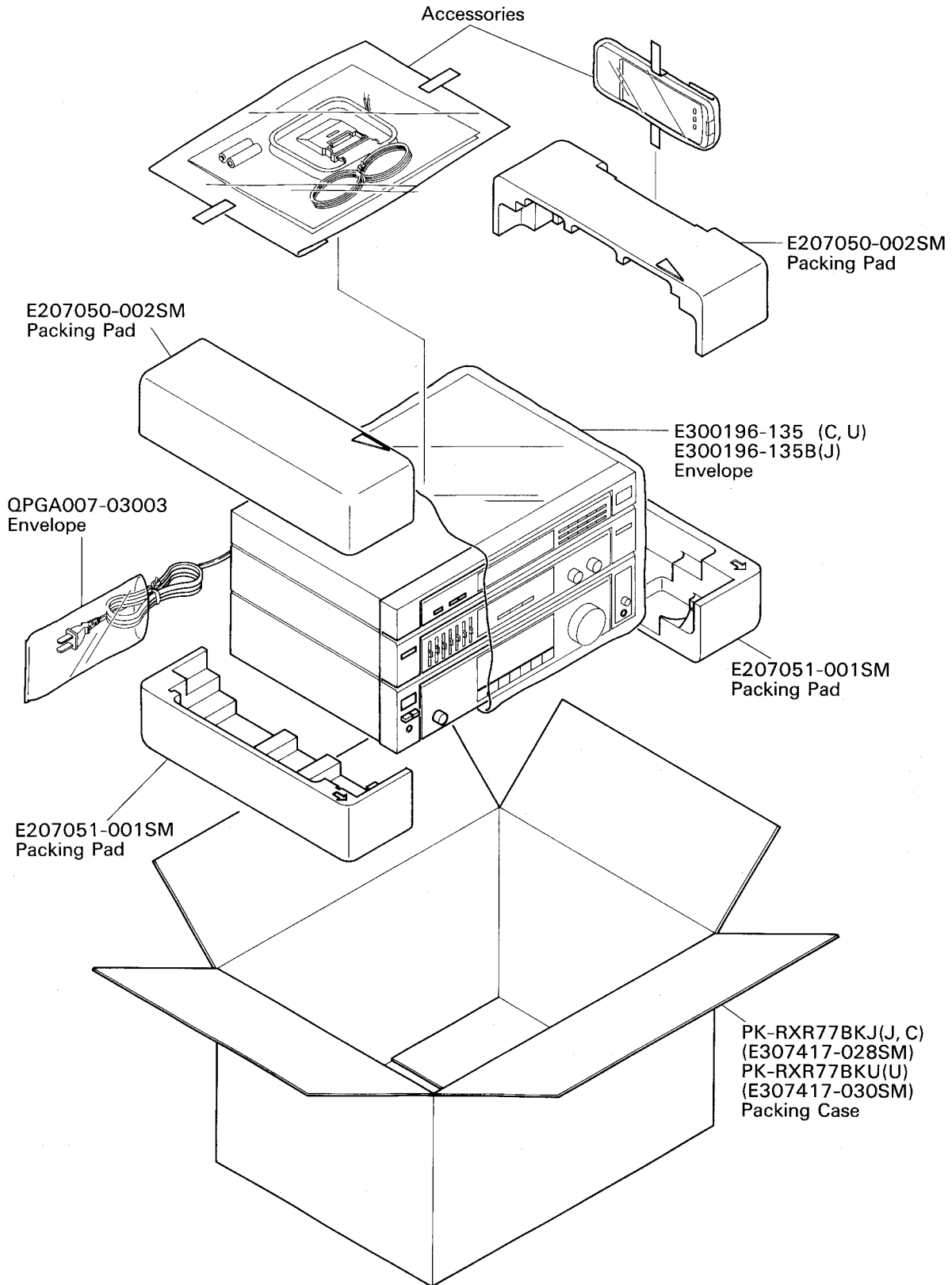
△ : Safety Parts

The Marks Designated Areas

J.....the U.S.A.
C.....Canada

U.....Other Countries
No mark indicates all areas.

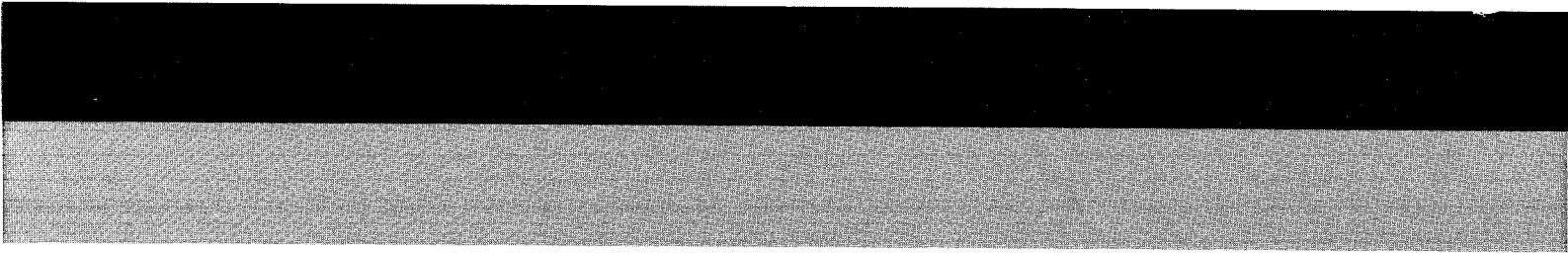
Packing Materials and Part Numbers



The Marks Designated Areas

J.....the U.S.A.
C.....Canada

U.....Other Countries
No mark indicates all areas.



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JVC

VICTOR COMPANY OF JAPAN, LIMITED

AUDIO PRODUCTS DIVISION, YAMATO PLANT, 1644, SIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

