

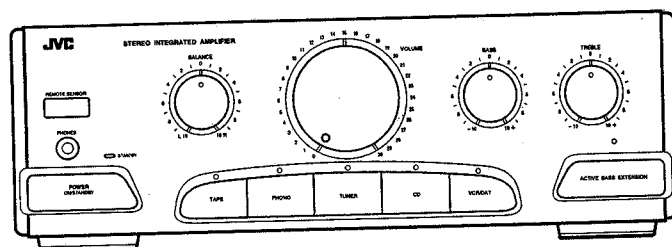
# JVC

## SERVICE MANUAL

### COMPACT COMPONENT SYSTEM

## DX-E78BK/DX-E79TN

(Unit No. AX-E78BK/AX-E79TN)



Note 1. This manual is for one part of the titled model consisting of the plural units as detailed.

| Unit No. Consisted  | Part of Model       | Manual No. |
|---------------------|---------------------|------------|
| AX-E78BK/AX-E79TN   | AMPLIFIER           | 20423      |
| XL-E78BK/XL-E79TN   | COMPACT DISC PLAYER | 20425      |
| TD-WE78BK/TD-WE79TN | CASSETTE DECK       | 20426      |
| FX-E78BK/FX-E79TN   | TUNER               | 20427      |

2. AX-E78BK or AX-E79TN is needed for the power supply when servicing the unit not provided with the power (mains) cord.

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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 ( $\Delta$ ) 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.).

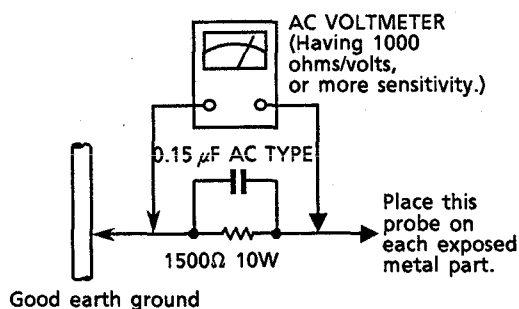
- Alternate check method

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 $\Omega$  10 W resistor paralleled by a 0.15  $\mu$ 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.

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This instruction manual is applicable to both DX-E78BK and DX-E79TN models. Their operations and functions are identical but as they have different frontpanel colour, they have been given different product names.

### About this Manual

The Engineers at JVC have made the system very easy to use, and if you are experienced using audio equipment, you can figure out how to use some of the system controls by yourself. However, we have built some new features into this model, which you can learn about easily from the manual.

If you are a new user or just want a review, this manual explains how to use the system and take advantage of its features for playing and recording music, as well as other sounds. One way to use this manual is to read it through now and refer back to it when you need to refresh your skills for some special operation. Of course you can just look up the topics, such as recording a CD, that you want to do, but remember that you may need to refer to other parts of the manual for some of the instructions; for instance, in explaining how to record a CD, we assume you already know how to load a CD. That's why we recommend that you read the manual through once before starting. We've made it short, and easy to follow.

However before you proceed, please read the **IMPORTANT CAUTIONS** and the set-up directions.

### How This Manual Is Organized

We have incorporated some special features:  
☐ Names of buttons, controls and function names that light up on the display panel are written in all Capital letters like this: **POWER**.  
☐ When we are talking about the Function, rather than the **BUTTON** or **DISPLAY**, then we just capitalize the first letter of the words.

The column on the left of the page is a special place to make it easier to find just what you want to know about, with little headlines announcing what each part of the page is about. Sometimes illustrations and helpful hints are placed here also.

Basically we use three kinds of information to help you understand and use the system:  
☐ Information about what you can do (such as record a CD or preset a radio station) and how the Unit is designed to make doing this activity easy.

- ☐ Procedures, usually numbered in the order you do the steps, to guide you in exactly what to do to accomplish something, such as tune a radio station or record a tape.
- ☐ Information you need to know to make decisions about which functions of the system to use for particular tasks (such as when to use Dolby NR to improve tape sound) and special hints to make your work go smoothly, like reminding you to set the sound effects before starting the CD or tape recording, since they cannot be changed once recording begins without starting completely over.

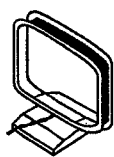
The manual has a table of contents to help you easily look up what you want to know. We've enjoyed making this manual for you, and hope you will use it to enjoy the sound and many features built into your system.

### IMPORTANT CAUTIONS

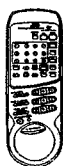
1. **Installation of the Unit**
  - Select a place which is level, dry and neither too hot nor too cold (Between 5°C and 35°C).
  - Leave sufficient distance between the Unit and your TV.
  - Do not use the Unit in a place subject to vibrations.
2. **Power cord**
  - Do not handle the power cord with wet hands!
  - The small amount of the power (15.5 watts) is always consumed as long as the power cord is connected to the wall outlet.
  - When unplugging from the wall outlet, always pull the plug, not the power cord.
3. **Malfunctions, etc.**
  - There are no user serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
  - Do not insert any metallic object into the Unit.

## Getting started

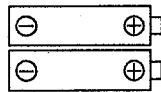
Check to be sure you have all of the following things, which are supplied with the system.



AM(MW/LW)  
Antenna



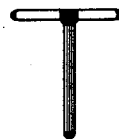
Remote Controller



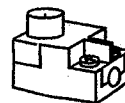
Batteries



FM Wire Antenna  
(only for Germany)



FM Feeder Antenna  
(except for Germany)

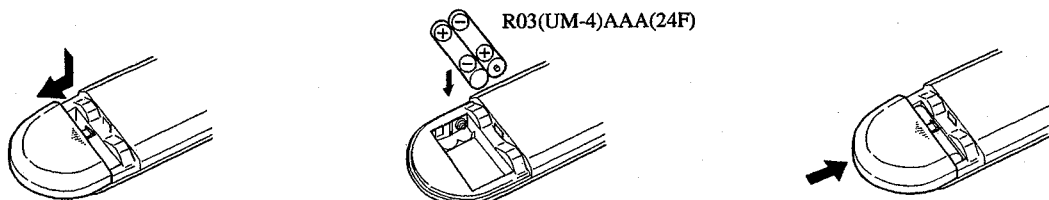


FM Antenna Adaptor  
(except for Germany)

If any are missing, contact your dealer immediately.

## How to Put Batteries in the Remote Controller

Match the polarity (+ and -) on the batteries with the + and - markings on the battery compartment.



**CAUTION:** Observe Proper Handling of Batteries.

To avoid battery leakage or explosion:

- Remove batteries when the Remote will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery together with a new one.
- Don't use different types of batteries together.

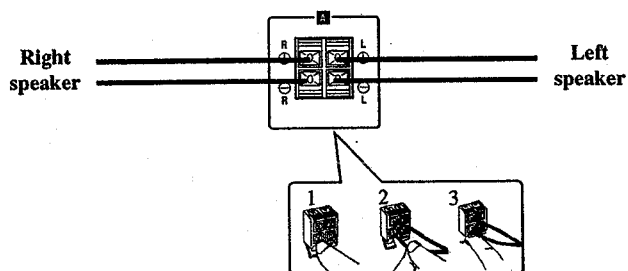
## Connecting the Speakers

### Main Speakers

Connect to SPEAKERS A

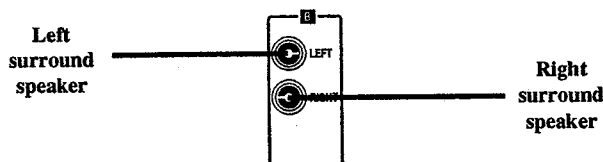
For each speaker connect one end of the speaker wire to the speaker terminals on the back of the amplifier and one end to the speaker. On the back panel:

1. Open each terminal.
2. Insert the end of the speaker wire as shown (be sure to remove the insulation at the end of each wire first).
3. Close the terminals to clamp the speaker wires firmly in place.
4. Connect the red (+) and black (-) terminals of the right side speaker to the red (+) and black (-) terminals marked R on the amplifier.  
Connect the red (+) and black (-) terminals of the left side speaker to the red (+) and black (-) terminals marked L on the amplifier.



### Surround Speakers

Connect to SPEAKERS B



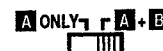
## Important Cautions

### SPEAKERS CONNECTION switch

If you are connecting the speakers only to the Main Speakers (SPEAKERS A) terminals, set the SPEAKERS CONNECTION switch to the **A ONLY** side.



If you are connecting the speakers to both Main Speakers (SPEAKERS A) and Surround Speakers (SPEAKERS B) terminals, set the SPEAKERS CONNECTION switch to the **A + B** side.



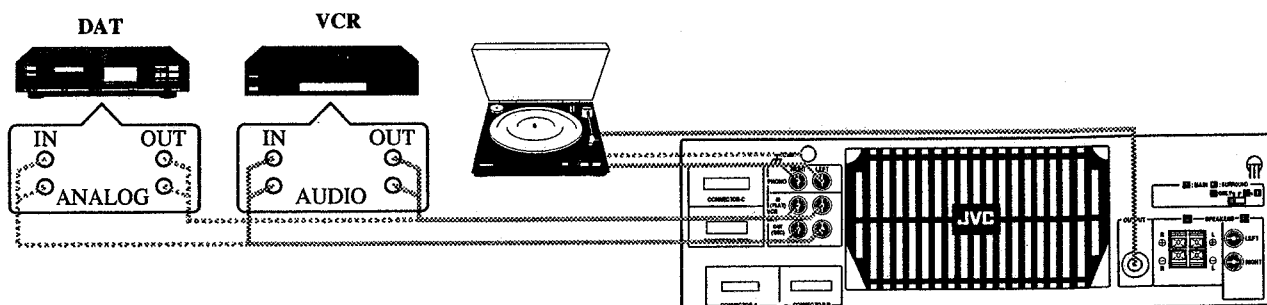
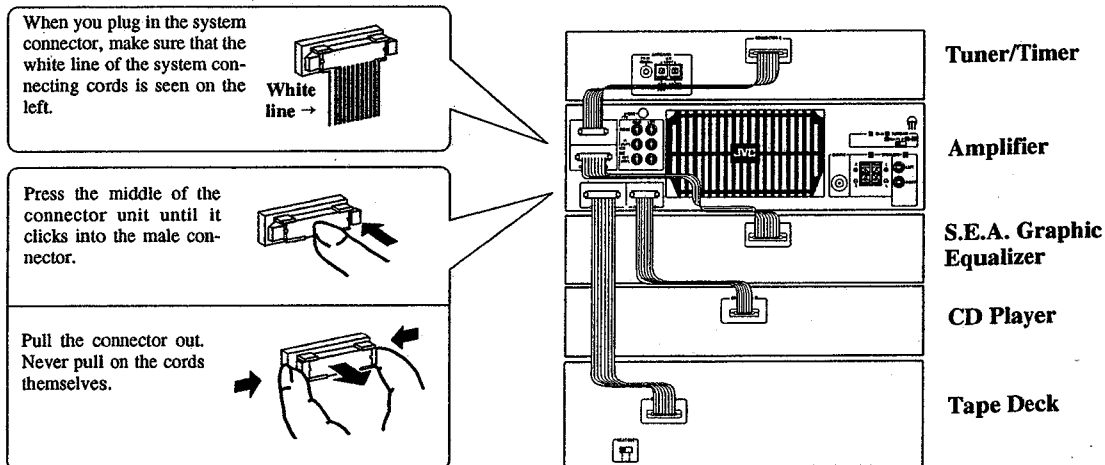
**IMPORTANT:** Use speakers with the correct impedance. The correct impedance is indicated on the rear panel.



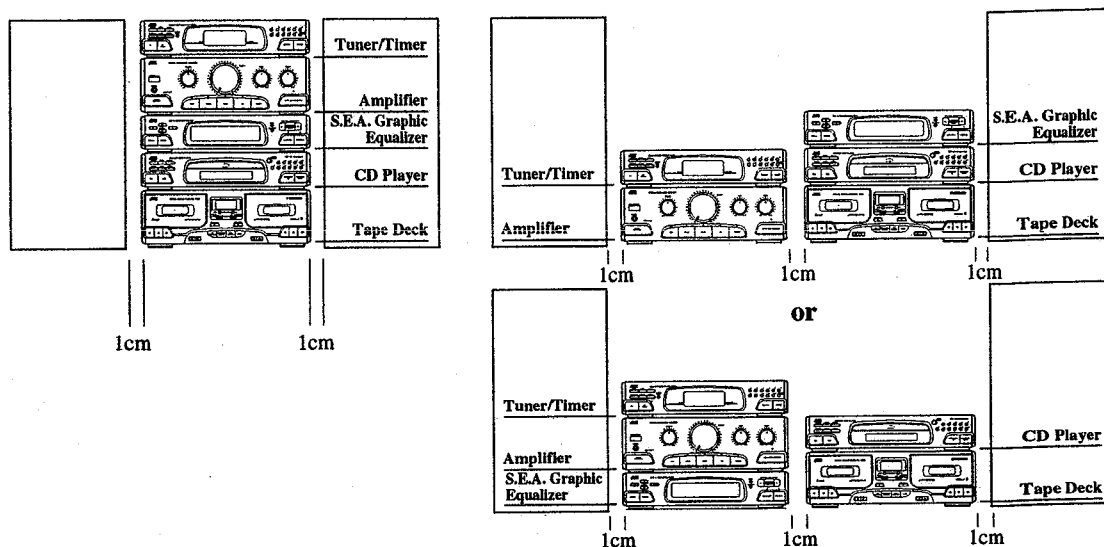
## Connecting the System Control Cards and Connecting Auxiliary Equipment

Connect the components exactly as illustration.

**CAUTION:** First make all connections before plugging the Unit into any AC power outlet.



### Laying Out the System

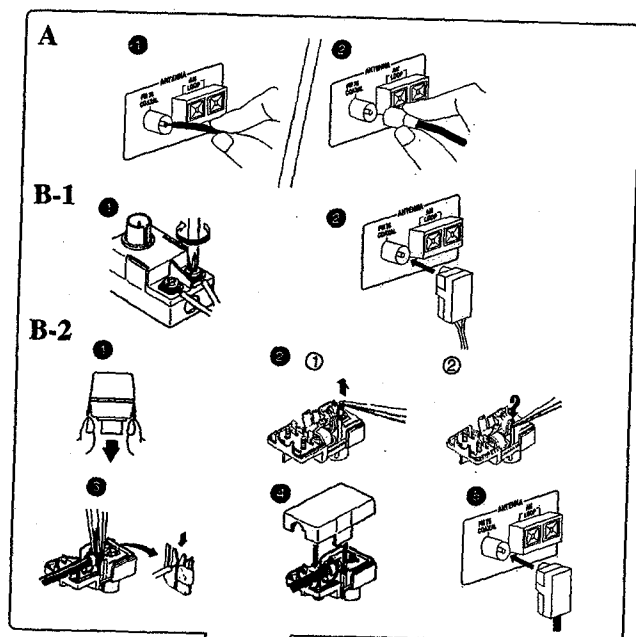


There are three ways to lay out the system as shown above:

- Leave a space of at least 1 cm on both sides of the amplifier and keep the back at least 10 cm from the wall for ventilation.
- If the system does not work well or needs repairing, please take all the components with you to the nearest agent.

## Connecting the FM and AM Antennas

### FM Antenna Connections



#### A. For Germany

- ① Using the supplied Wire Antenna  
The FM wire antenna provided can be connected to a FM 75-ohm COAXIAL as a temporary measure.
- ② Using the Coaxial Type Connector (Not Supplied)  
A 75-ohm antenna with coaxial type connector (DIN 45 332) should be connected to the FM 75-ohm COAXIAL terminal.

#### B. For Other Countries

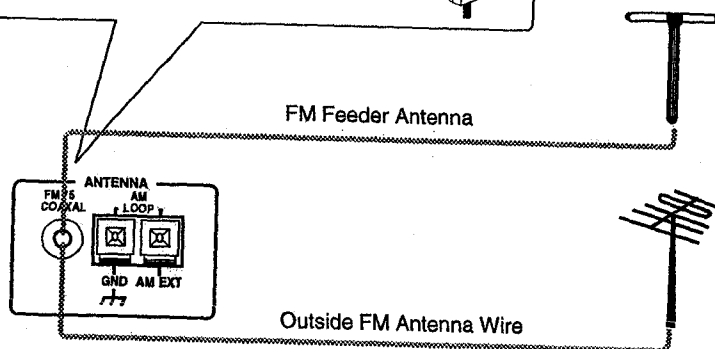
##### B-1. Using the Supplied Feeder Antenna

- ① Attach the feeder antenna to the FM connector as shown in the figure.
- ② Connect the FM connector to the FM 75-ohm COAXIAL terminal.

##### B-2. Using FM 75-ohm antenna Cable (Not Supplied)

- ① Open the claws at both sides and remove the cover.
- ② Move the conductor wire from ① to ② using tweezers or a similar instrument (only when using coaxial cable).
- ③ Fix the coaxial cable and its core.
- ④ Put on the cover.
- ⑤ Connect the FM connector on the FM 75-ohm COAXIAL terminal.

**Note:** Make sure the antenna conductors do not touch any other terminals, connecting cards and power card in the system.  
This could cause poor reception.



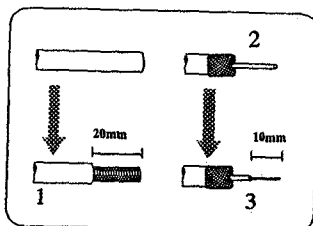
#### For Germany

Extend the supplied wire antenna horizontally.

#### For Other Countries

Unfold the loops of the supplied dipole FM feeder antenna and extend them as shown. Fasten them up in the position which gives you the best FM reception.

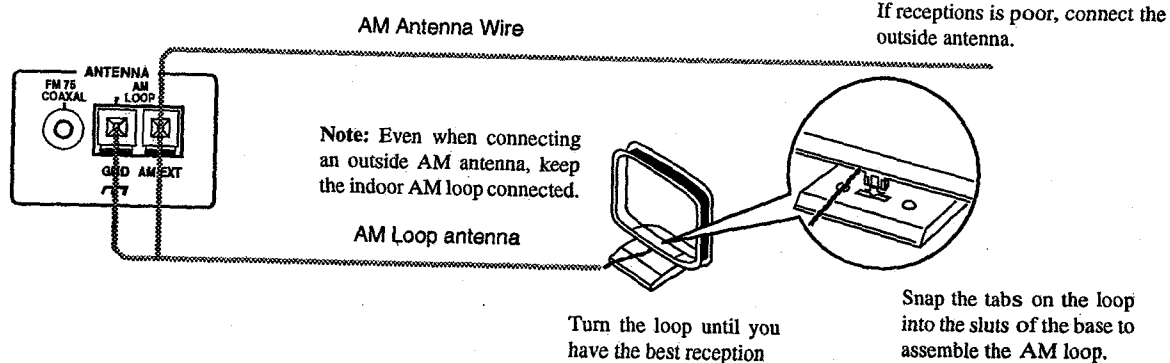
Before attaching a 75 ohm coaxial lead (the kind of round wire going to an outside antenna), disconnect the supplied dipole indoor antenna.  
If reception is poor, connect the outside antenna.



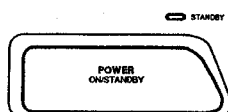
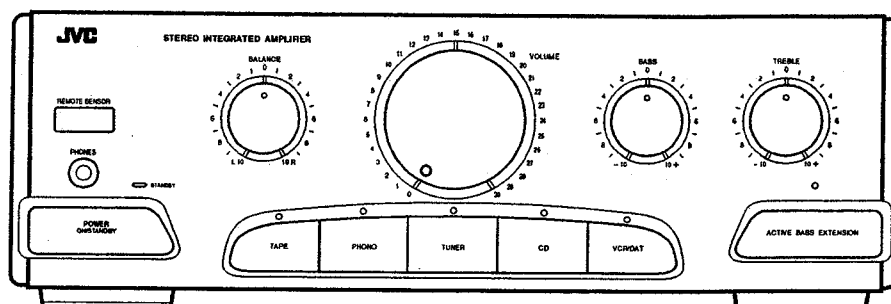
#### How to Strip the 75-ohm Coaxial Cable

1. Strip back the outside covering of the 75 ohm coaxial cable to expose the braided metallic mesh.
2. Pull the mesh back and twist into a single connector as shown.
3. Strip the insulation about 10 mm back from the central wire.
4. Attach to the supplied Antenna Adaptor, as shown in the diagram above.

### AM Antenna Connections



## Using the Amplifier



### Using the Power Switch

1. Press the **POWER** switch to turn on the stereo system.

When the **POWER** switch is not pressed and the power cord is plugged in, the stereo is in **STANDBY** mode and **STANDBY** indicator lights. In **STANDBY** mode, the stereo uses a small amount of power (15.5 watts) for the clock, memory contents, and any timers which are set.

2. To disconnect power completely, unplug the power cord.

### Adjusting the Volume controls

#### Volume Control

Turn the **VOLUME** knob to adjust the volume level of the speakers or headphones.

**Caution: Too LOUD!**

**CAUTION:** Always set the **VOLUME** control to 0 before turning on a connected source such as a VCR or Record Player, or starting any other of the sound sources such as the radio, tape, or CD player. Otherwise, if the **VOLUME** control is turned up the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

#### Balance Control

Turn the **BALANCE** knob to adjust the left-and-right sound balance in the speakers or headphones.

#### Bass Control

Turn the **BASS** knob to adjust the bass sound quality.

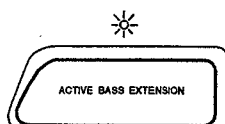
#### Treble Control

Turn the **TREBLE** knob to adjust the treble sound quality.

#### Active Bass Extension

This feature is designed and incorporated to reinforce the bass sound, depending on the volume level to maintain the richness and fullness of the bass. You cannot control it manually.

Press the **ACTIVE BASS EXTENSION** button to light the indicator if you want to use the Active Bass Extension function. To cancel this function, press the **ACTIVE BASS EXTENSION** button again. The indicator will go off.

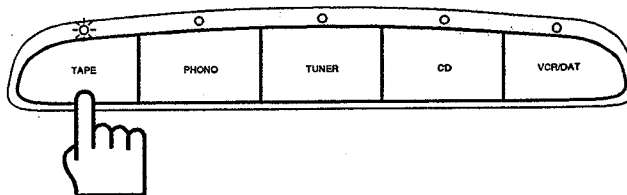


#### Listening with Headphones

A standard pair of headphones can be connected at the **PHONES** jack on the front panel. No sound can be heard from the speakers. Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.

## Selecting the Source

Press the Source Selector button to select the Source you want to listen to. The indicator for the selected source will light up.



### TAPE

Press to play a tape

- ☐ If tapes are already in the Tape Deck, the tape in deck B will be automatically played.

### PHONO

Press to play a record.

### TUNER

Press to listen to a radio.

### CD

Press to play a CD.

- ☐ If a CD is already in the CD tray, it will be automatically played back.

### VCR/DAT

Press to play the sound from sources connected to the VCR/DAT terminals on the rear panel.

- ☐ See page 4 for connections of record player, VCR, DAT, etc.
- ☐ Please make sure to turn on the power of the record player, VCR, DAT, etc., when you want to play back the sound from them.
- ☐ We recommend that you carefully read the instruction manual for the record player, VCR, DAT, etc., so that they are operated correctly.

REMOTE SENSOR



### Remote Sensor

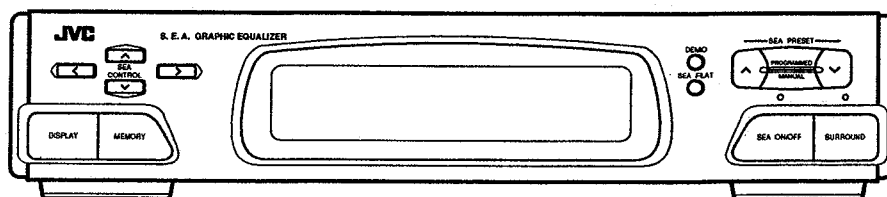
Receives the signal for the supplied Remote Controller.

## Surround

You can enjoy the Surround effect during playback when the speakers are connected to both the **SPEAKERS A** (Main Speakers) and the **SPEAKERS B** (Surround Speakers) terminals on the rear panel of the amplifier.

- ☐ In this case, please set the **SPEAKERS CONNECTION** switch to the A+B side.

## Using the S.E.A. Graphic Equalizer



S.E.A. (Sound Effect Amplifier) is a function which divides playback sound into 7 frequency ranges; 63Hz, 160Hz, 400Hz, 1 kHz, 2.5kHz, 6.3kHz and 16kHz; it then adjusts the sound quality by increasing and decreasing the level of each frequency range.

The S.E.A. Graphic Equalizer of this unit has Programmed S.E.A. mode and Manual S.E.A. mode.

The Programmed S.E.A. mode has 6 patterns - POPS, JAZZ, ROCK, MOVIE, CLASSIC and CAR. With the Manual S.E.A. mode, you can create up to 6 patterns of your preference, which can then be stored in the memory labelled as A to F.

|                |                                                                       |
|----------------|-----------------------------------------------------------------------|
| <b>POPS</b>    | Good for vocal music.                                                 |
| <b>JAZZ</b>    | Gives a feeling of a live atmosphere. Good for acoustic music.        |
| <b>ROCK</b>    | Boosted low and high frequencies.                                     |
| <b>MOVIE</b>   | Adds breadth to the sound so you feel like you're in a movie theater. |
| <b>CLASSIC</b> | Set for wide and dynamic sound stereo systems.                        |
| <b>CAR</b>     | When creating tapes for use in a car stereo.                          |

## SOUND EFFECT DEMONSTRATION



### DEMO

This will automatically play back all 6 patterns of the Programmed S.E.A. mode, each lasting for a few seconds. At the same time, each frequency curve will be shown on the Display.

DEMO playback will be repeated in the following order:

→ POPS → JAZZ → ROCK → MOVIE → CLASSIC → CAR →

Press the DEMO button while playing back a CD, a tape, etc.

- ☐ The indicator for the SEA ON/OFF button will light up, turning on the S.E.A. function automatically. "DEMO" will blink on the Display and the DEMO playback will start.

To cancel the DEMO playback, press the DEMO button again.

- ☐ "DEMO" on the Display and the indicator for the SEA ON/OFF button will both go off, and the S.E.A. function will be automatically cancelled.

### Using a Programmed S.E.A. pattern

1. Press the SEA ON/OFF button to turn on the S.E.A. function.

The indicator will light up.

Make sure that you see "PROGRAMMED" on the Display. If you see "MANUAL", press the PROGRAMMED button of SEA PRESET to change to the Programmed S.E.A. mode. "PROGRAMMED" will now come on the Display.

2. Select a S.E.A. pattern by pressing either the ^ or v button of SEA PRESET.

← ^  
↔ POPS/A ↔ JAZZ/B ↔ ROCK/C ↔ MOVIE/D ↔ CLASSIC/E ↔ CAR/F ↔  
v →

### Creating your own patterns using the Manual S.E.A. mode

1. Press the SEA ON/OFF button to turn on the S.E.A. function.

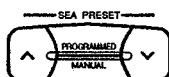
The indicator will light up.

2. Press the FLAT button. "MANUAL" will be shown on the Display and a flat line indicating the "0" frequency level will be seen.

3. Press one of the buttons of SEA CONTROL.

The range you have selected from between 63Hz (low) to 16kHz (high) will start blinking.

- ☐ If you press the SEA CONTROL button without first pressing the FLAT button, the range for the pattern which is currently being called up will start blinking and the MANUAL S.E.A. mode will be automatically set.





4. Using the SEA CONTROL button, you can now create your own frequency patterns.

: To increase the level of the frequency range which is blinking.

: To decrease the level of the frequency range which is blinking.

, : To select a frequency range.

- ☐ Every time you press the or button, the frequency range will change in the following order.

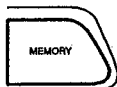
← ↔ 63Hz ↔ 160Hz ↔ 400Hz ↔ 1kHz ↔ 2.5kHz ↔ 6.3kHz ↔ 16kHz ↔ →

5. Storing frequency patterns you have created with POPS/A ~ CAR/F.

Press the MEMORY button. "MEMORY" will light up on the Display and the frequency pattern by you will blink for a few seconds. (If the pattern stops blinking and lights up instead, press the MEMORY button again.)

While the frequency pattern is blinking, press the or SEA PRESET button to select from POPS/A ~ CAR/F to store it with.

Press the MEMORY button again to memorize.

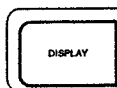


### Calling up a pattern you have created using the Manual S.E.A. mode

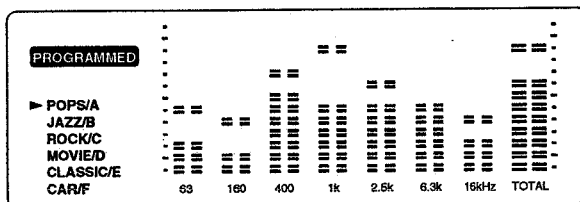
1. Press the SEA ON/OFF button to turn on the S.E.A. function.  
The indicator will light up.
2. Press the MANUAL button of the SEA PRESET button to select the Manual S.E.A. mode. "MANUAL" will light up on the Display.
3. Call up the pattern by selecting from POPS/A ~ CAR/F using the SEA PRESET or button.

### Changing the S.E.A. Display

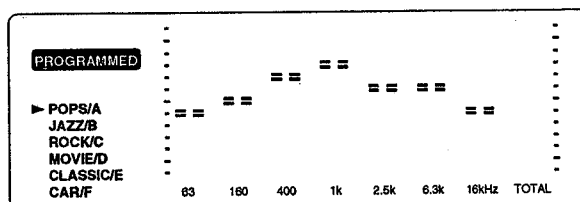
The Display mode has 2 types — PEAKHOLD and EQUALIZING PATTERN. Pressing the DISPLAY button will alternate the type.



#### PEAK HOLD



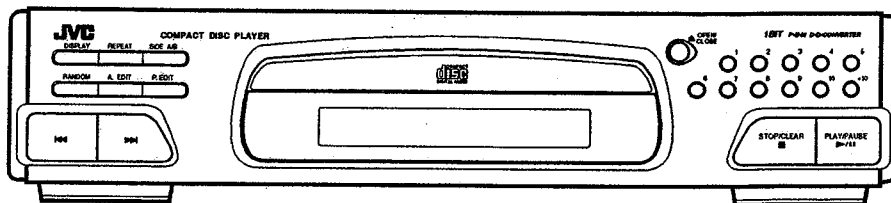
#### EQUALIZING PATTERN



### Surround button

You can get even more profound Surround effect by pressing this button when the speakers are connected to both SPEAKERS A and B terminals on the amplifier rear panel.

## Using the CD Player



### Basics of Using the CD Player

Here are the basic things you need to know to play a CD and locate the different selections on it. Each selection is called a track, so when we are talking about locating a track, we are also talking about how you find a certain song or performance.

#### To load, Play, and Stop a CD

1. Press the **▲ OPEN/CLOSE** button.
2. Put a CD, printed side up, onto the tray.
3. If you want to listen to the CD now, press **PLAY/PAUSE ►/||** button and adjust the volume.
  - ☐ The CD tray closes automatically.
  - ☐ The display shows the track being played and the length of time since it started.
4. To stop the CD, press the **STOP/CLEAR ■** button. When you start again, the CD begins with track 1.
5. To pause the play, press the **PLAY/PAUSE ►/||** button while the CD is playing so when you press the **PLAY/PAUSE ►/||** button again the CD starts just where you left off.
6. To remove a CD, press the **▲ OPEN/CLOSE** button, take the CD out, and press the **▲ OPEN/CLOSE** button again to close the tray. Keep the tray closed except during loading and unloading to protect the mechanism from dust and damage.

**Note:** When Tuner is selected as the source, Cd OFF is displayed, and only the **▲ OPEN/CLOSE** disc tray and **PLAY/PAUSE ►/||** buttons can be used. To use other buttons, press the CD button on the Amplifier or the **PLAY/PAUSE ►/||** button on the CD Player first.

#### How to Find the Track or Particular Point You Want

- ☐ Each time you press briefly and release the **◀◀** or **▶▶** button the track changes by one.
  - Press and release the **▶▶** button to go ahead one track at a time.
  - Press and release the **◀◀** button to go back one track at a time.
- ☐ Holding down the **◀◀** or **▶▶** button will fast forward or fast reverse the CD so you can quickly find the particular part of a track you want to listen to.
- ☐ Holding down the **◀◀** or **▶▶** button on the CD CONTROL section of the Remote allows you to change tracks continuously.

#### Locating a Track Directly

You can locate a track directly using the numerical keys on the CD player.

- Example: press 5 for track 5, + 10 then 5 for 15. For track 20, press +10, then 10.

The number of the track you have entered will be searched and playing will start.

#### Locating a Track with the Remote Directly

Using the numeric key on the Remote allows you to go directly to the beginning of any track.

1. Press the CD 10KEY button.
2. Enter the number of the track you want using the numeric key.
  - Example: for track 5, press 5. For track 15, press +10 then 5. For track 20, press +10, then 10.
3. The number of the track you have entered will be searched and playing will start.

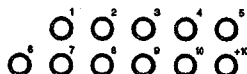
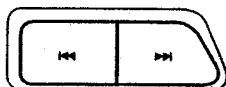
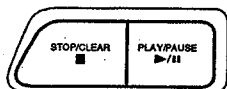
### Programming the Playing Order of the Tracks

In addition to the high quality sound which makes the CD such a good way to listen to music, you can change the order in which the tracks play.

#### Random Play

Before starting a CD, press the RANDOM button on the CD Player. "RANDOM" will light up on the Display.

- ☐ The tracks will play in no special order.
- ☐ When all of the tracks have been played, the CD shuts off.
- ☐ Press REPEAT before or During random play to instruct the CD player to continue with a different random track selection after the last selection is played.
- ☐ To cancel random play, press the **STOP/CLEAR ■** button.



Using the remote to find a track

With programming, you can play back tracks in any order



## Programmed Play

You can arrange the tracks to play in any order you like with the Program function. The Remote is very useful for this because you can select tracks by number with the key pad. You can also use the main Unit.

## How to program

To program the CD track order, follow this procedure:

1. Press the CD PRGM button on the Remote.  
"PRGM" will light up on the Display.
2. Input the track numbers in the order desired using the numeric keys. If you want to use the numeric keys on the Remote controller, first press the CD 10 KEY button.
  - Example: for track 5 press 5. For track 15, press +10 then 5.  
For track 20, press +10 twice. For track 25, press +10 twice then 5. For track 30, press +10 twice then 10. For track 32, press +10 three times then 2.
  - Your program can include up to 32 tracks, and you can repeat tracks if you wish.  
If the total time of all the programmed tracks is 100 minutes or more, the display will show "--:--" (since the highest time the display can show is "99:59".)
3. Press the PLAY/PAUSE ►/|| button (or Play ► button on the Remote) to start to play, followed by the next one you entered until all the selected tracks are played.
4. To stop the CD during Programmed Play, press the Stop ■ button. To cancel the program, press the CD PRGM button on the Remote. "PROGRAM" on the Display will go off.

## Programming Hints

### A Few Hints to Make Programming Easier

- ☐ To view the order of the tracks in your program when it's playing, press the Stop ■ button, then press ◀◀ or ▶▶ button to display the order of the tracks. Each time you press ▶▶ the next selection in your program is displayed. (Press ◀◀ for the previous selections.)
- ☐ To cancel the programmed tracks, press the Stop ■ button, then call up the track numbers you wish to cancel by pressing the ◀◀ or ▶▶ button. Press the CANCEL button on the Remote to remove the tracks you have called up from your program.
- ☐ To add a track to your program, just press the number you want to add.
- ☐ If you want to change the entire program, press the STOP/CLEAR ■ button twice (once to stop, twice to clear the program from memory) on the CD player, and then you can start over.

## Repeat a selection or the whole CD



## Repeating a Selection or the Entire Disc

You can have either the program or the individual selection currently playing repeat as many times as you like by pressing the REPEAT button. Each time you press the REPEAT button, it cycles for OFF, which turns the REPEAT indication out on the display, To REPEAT which will repeat all tracks in order or according to the program you have set, and REPEAT 1 which will repeat the currently playing track. To cancel Repeat, just press the REPEAT button until the REPEAT indication on the display goes off.



## Displaying the Elapsed and Remaining Playing Time

Using the DISPLAY button, you can display the total time the CD (or current track) has been playing, and the amount of time that remains. This is useful in situations such as recording, when you need to know how long the track or CD has been playing, or the amount of time that remains on the track or CD.

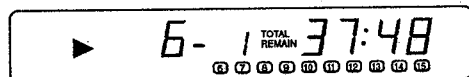
Press the DISPLAY button to show the time you want.

There are four display times:

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| <b>EACH</b>         | The total elapsed playing time since the beginning of playback of the current track |
| <b>EACH REMAIN</b>  | The time remaining until the end of the current track                               |
| <b>TOTAL</b>        | The total elapsed playing timer since the beginning of playback of the CD           |
| <b>TOTAL REMAIN</b> | The time remaining until the end of the CD                                          |

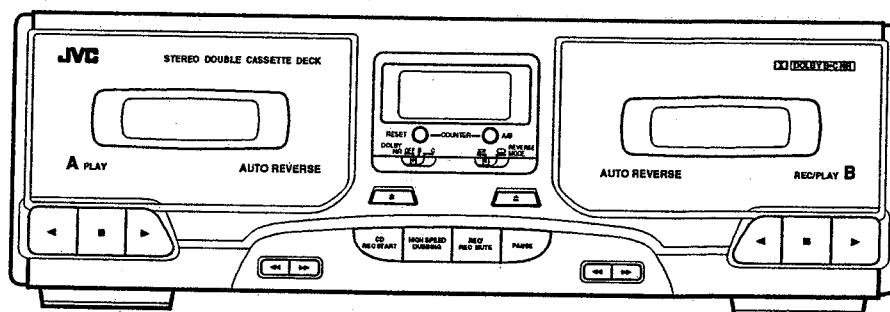
The display changes each time you press the DISPLAY button.

For example:

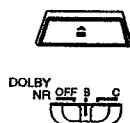


|                       |                       |
|-----------------------|-----------------------|
| Display mode:         | TOTAL REMAIN          |
| Current track:        | 6th                   |
| Total remaining time: | 37 minutes 48 seconds |





## Playback Procedure



## Playing a Tape

### Regular Play

1. Press the Eject  button to open the cassette holder.
2. Place a tape in the cassette holder and close it gently.
3. If the source was recorded with Dolby noise reduction, turn the Dolby NR switch on, so that you can listen to the playback in the same mode.
4. Press the  or  button.
  - ▶ button: the tape winds from left to right.
  - ◀ button: the tape winds from right to left.
5. To stop playing, press the Stop  button. To remove the tape, press the Eject  button.

**Note:** If the Unit is turned off while a tape is playing, you may not be able to eject tape. You will need to turn the Unit back on and press Eject  button to open the cassette holder.

## Stopping and Restarting Playback

Press the Pause button to stop the tape playing in deck B temporarily. "PAUSE" will be indicated on the Display.



To restart, press either the ◀ or ▶ button on deck B.

**Note:** The PAUSE button only applies to deck B.

## Changing the Playback Direction

1. To change the playback direction during playback, press the ◀ or ▶ button. The other side of the tape will now play.
2. To change the playback direction without starting playback, press the ◀ or ▶ button while also pressing the Stop ■ button. This allows you to set the tape direction for a timed recording.

## Fast Left and Fast Right

- ❑ While the tape is stopped, press the Fast Left ◀◀ button and the tape will wind rapidly onto the left side of the cassette without playing.
- ❑ While the tape is stopped, press the Fast Right ▶▶ button and the tape will wind rapidly onto the right side of the cassette without playing.



## Music Scan

The music scan function will detect the black segments between tracks. The blank should be about 4 seconds long for the music scan to be effective.

By pressing the Fast Left ◀◀ or Fast Right ▶▶ button during playback, you can quickly locate the beginning of the current track or of the next track.

### Searching for Beginning of the Current Track

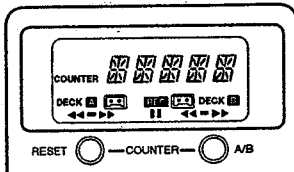
Press either the Fast Left ◀◀ or Fast Right ▶▶ button in the opposite direction from the tape direction indicated on the Display.

- ☐ The tape will fast reverse to the beginning of the current track and start playing it again.

## Finding the place you want:

## Music Scan

## Display



This is very useful. A quick glance can tell you the current Tape Deck functions.

**COUNTER section:** displays "PLAY", numbers on the counter and "STOP" for deck A or deck B and displays "PAUSE" and "CD REC" for deck B only. Counter number increases with the tape direction ► and decreases with ◄. "SEARCH" will be indicated while Music Scan function is in use.

DECK A [ ] , [ ] DECK B : indicates that there is a tape in the cassette holder.

◄◄►► : Slow blinking of ►► or ◄◄ indicates tape direction, fast blinking of ►► or ◄◄ indicates Music Scan, and blinking of ◄◄ or ►► indicates fast forwarding or rewinding.

REC : deck B is recording.

|| : deck B is on halt.

○<sub>AB</sub> : to change over the counter indication

RESET ○ : resets the current counter(s). If you wish to reset both A and B counters, use the A/B button.

## Searching for Beginning of Next Track

Press either the Fast Left ◄◄ or Fast Right ►► button in the same direction as the tape direction shown on the Display.

- ☐ The tape will fast forward to the next track and begin playing it.

The music scan function is not effective:

- ☐ When the track being scanned contains an area of low sound level.
- ☐ When the blank between tracks is short.
- ☐ When there is noise, for example, a hum between tracks.

**Note:** Music scan only works on one tape at a time. If you are recording on deck B, music scan will not work on deck A.

## Listening to Tape Continuously

Continuous playback of tapes in deck A and deck B is possible with the REVERSE MODE switch.



### Auto Reverse mode ( ⇄ )

In this mode, both sides of the currently playing tape will be automatically played, and then both sides of the tape in the other deck will be automatically played. This function will continue until you stop the playback.

- ☐ If only deck A or deck B contains a tape, both sides of this tape will be repeatedly played.



### Non Reverse mode ( ⇆ )

In the Non Reverse mode, the tape deck will automatically stop playing as soon as playback of the current side of the tape is finished.

**Note:** Please read the section on "Changing the Playback Direction" if you want to change the tape direction.

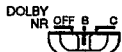
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

## Recording a Tape

### Recording Notes:

#### Copyright

#### Reduce Hiss—Dolby NR



#### Recording Level

- It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.
- Deck A is used for playback only, and deck B is used for both recording and playback.
- To reduce hiss, use the Dolby noise reduction system. Select type B (DOLBY B NR) or type C (DOLBY C NR) noise reduction with DOLBY NR switch.  
B (DOLBY B NR) : Popular noise reduction  
C (DOLBY C NR) : Highly effective noise reduction
- To record on both A and B sides of a tape continuously, set the REVERSE MODE switch to the Auto Reverse mode side.
- The recording level, which is the volume at which the new tape is being made, is automatically set correctly, so it is not affected by the VOLUME control on the system. Thus, you can adjust the sound you are actually listening to without changing the recording. If you don't want to listen to the sound, you can turn the VOLUME control all the way down, or press the FADE/MUTING button on the Remote.
- If the small tabs on cassette tapes to prevent accidental erasure have been removed, the contents of the tape cannot be recorded or erased over. To record or erase, cover the holes with adhesive tape. (The tab in the upper left corner is the tab for the side facing you, and the other tab is for the opposite side.)
- If you are recording an AM broadcast and you hear interference, move BEAT CUT switch on the back of the tape deck from Position 1 (the normal mode) to Position 2.
- To record using S.E.A. effect, turn on the S.E.A. Graphic Equalizer and select a pattern. Please do not change the S.E.A. settings during recording.  
If you are using the Dubbing function, you cannot record using S.E.A. effect.

## Recording from Various Sources

1. Insert a cassette for recording into deck B.
2. Select the source you are recording from.
3. Press the PAUSE button on the Tape Deck while simultaneously pressing the REC/REC MUTE button. This will set the deck B in the REC/PAUSE mode.
4. Start the source to be recorded.
5. Press the Play ◀ or ▶ button on the deck B to start recording.
6. To stop recording, press the Stop ■ button.
7. To stop recording temporarily, press the PAUSE button.  
To restart recording again, press the Play button ◀ or ▶.



## Direct Recording from the CD Player

Direct recording permits a tape deck to start recording automatically in synchronism with a CD Player.

1. Insert the cassette for recording into deck B.
2. Put a CD in the CD Player.
3. Press the CD REC START button on the Tape Deck. "CD REC" will be indicated on the Display.  
☐ The CD Player and the Tape Deck are activated, and recording begins with the first track of the CD.
4. To stop direct recording, press the Stop ■ button on deck B or the STOP/CLEAR ■ button on the CD Player.



#### Auto Edit

## Recording CD Tracks in Auto-Edit Mode

In Auto-Edit mode, tracks from the CD will automatically be selected to determine which tracks should go on side A of the tape and which should go on side B.

The selection is based on the lengths of the tracks and the length of the tape. This ensures a proper "fit" of the tracks recorded on the tape. It prevents a track from being cut off when the end of the tape is reached.

1. Insert the cassette for recording in deck B.
2. Put the CD in the CD Player.
3. Set the sound effects you want now, since the sound environment cannot be changed once recording starts.
4. Press the STOP/CLEAR ■ button on the CD Player.  
This cancels the previous edit or program setting.
5. Press the A. EDIT button on the CD Player to tell the system the length of the tape in the Tape Deck.  
☐ The tape length most suitable for CD recording is displayed first. Each time the A. EDIT button is pressed, the next standard tape length blinks, in this order:  
→ C46 → C54 → C60 → C74 → C90 → (back to the beginning)





- ☐ You can also enter a non-standard tape length using the numeric keys. If you want to use the numeric keys on the Remote controller, first press the CD 10KEY button.  
For example: To enter a tape length of 50 minutes, press the CD 10KEY button on the Remote, then press +10 key four times and the 10 key once.
- 6. Press the SIDE A/B button on the CD Player.
  - ☐ Each time you press the SIDE A/B button the display switches between A and B.
  - ☐ The CD Player calculates which tracks should be placed on side A and which should be placed on side B.
  - ☐ If you do not press the SIDE A/B button, the CD Player automatically decides which tracks should be placed on sides A and B about 4 seconds after the A. EDIT button is pressed.

**Note:** Up to 16 tracks can be allocated for each side of the cassette.

- 7. Press the CD REC START button on the Tape Deck.
  - ☐ The tape is automatically rewound to the beginning of side A, and then recording begins.
  - ☐ When the Tape Deck is set in the auto reverse mode, after the last track is recorded on side A, the Tape Deck high-speed-erases to the end of side A. Then it changes direction to side B and begins recording the remaining tracks.
- ☐ To stop recording, press the Stop ■ button on deck B, or press the STOP/CLEAR ■ button on the CD Player.

**Note:** During recording in the Auto-Edit mode, do not operate the CD Player.

### ***Recording CD Tracks in Programmed-Edit Mode***

In Programmed-Edit mode, you decide which tracks from the CD will be recorded, and in what order.

#### **Program Edit**



- 1. Insert the cassette for recording in deck B.
- 2. Put the CD in the CD Player.
- 3. Set the sound effects you want now, since the sound environment cannot be changed once recording start.
- 4. Press the STOP/CLEAR ■ button on the CD Player.  
This cancels the previous edit or program setting.
- 5. Press the P. EDIT button on the CD Player to tell the system the length of the tape in the Tape Deck.
  - ☐ The tape length most suitable for CD recording is displayed first. Each time the P. EDIT button is pressed, the next standard tape length blinks, in this order:  
→ C46 → C54 → C60 → C74 → C90 → (back to the beginning)
  - ☐ You can also enter a non-standard tape length using the numeric keys. If you want to use the numeric keys on the Remote controller, first press the CD 10KEY button.  
For example: To enter a tape length of 50 minutes, press the CD 10KEY button on the Remote, then press +10 key four times and the 10 key once.
- 6. Press the SIDE A/B button on the CD Player.
  - ☐ This tells the system that you will be choosing tracks to be recorded on side A of the tape.
  - ☐ The length of time for one side of the tape is displayed. This is half of the total tape length. The total time for the tracks you choose for each side cannot exceed this time.
  - ☐ Each time you press the SIDE A/B button the display switches between A and B.
  - ☐ If you do not press the SIDE A/B button, side A is automatically selected.
- 7. Enter the numbers of the tracks you want recorded on side A of the tape. When you have finished entering the numbers for side A, press the SIDE A/B button and enter the numbers of tracks you want recorded on side B.
  - ☐ Use either the numeric keys on the CD player or on the Remote controller to enter the order of the tracks to be recorded. If you are using the Remote controller, press the CD 10KEY button first before using the numeric keys.
  - ☐ Tracks on a CD assigned numbers 32 or greater cannot be entered in the program.
  - ☐ If the length of a track exceeds the remaining tape length, the time indication blinks on the display. Choose a different track number.
- 8. Press the CD REC START button on the Tape Deck.
  - ☐ The tape is automatically rewound to the beginning of side A, and then recording begins.
  - ☐ When the Tape Deck is set in the auto reverse mode, after the last track is recorded on side A, the Tape Deck high-speed-erases to the end of side A. Then it changes direction to side B and begins recording the remaining tracks.
- ☐ To stop recording, press the Stop ■ button on deck B, or press the STOP/CLEAR ■ button on the CD Player.
- ☐ The program cannot be edited during recording. To change the program, press the STOP/CLEAR ■ button on the CD Player and begin with step 5 of this procedure.

**Note:** During recording in the Programmed-Edit mode, do not operate the CD Player.

## Normal Dubbing, Step by Step

### Dubbing a Tape Normal speed Dubbing

1. Insert the cassette for playback into deck A and the cassette for recording into deck B.
    - ☐ The type of tape (Normal, CrO<sub>2</sub> or Metal) used for recording must be the same as that used for playback.
    - ☐ DOLBY NR is inactive in dubbing mode regardless of the setting of the NR switch. The dubbed tape automatically contains the same processing as the source tape.
  2. Press the PAUSE button while simultaneously pressing the REC/REC MUTE button.
  3. Press the Play button ◀ or ▶ (depending on which side of the tape you want to record from) on deck A.
  4. Press the Play button ◀ or ▶ (depending on which side of the tape you want to record onto) on deck B. The tape-to-tape recording starts.
- ☐ To stop normal speed dubbing before end of either the playback or record tape, press the Stop ■ buttons on decks A and B.

**Note:** During normal speed dubbing you can only listen to the source tape. If you don't want to hear it, turn down the VOLUME control or press the FADE/MUTING button on Remote. Only the sound you hear will be affected; the recording level is controlled automatically.

## High Speed Dubbing, Step by Step



### High Speed Dubbing

Although the quality of the dubbed tape is little less, high speed dubbing is a very convenient way to record from one tape to another.

1. Insert the cassette for playback into deck A and the Cassette for recording into deck B.
2. Press the HIGH SPEED DUBBING button on the Tape Deck.
  - ☐ Both decks start, deck A playing and deck B recording.
    - The sound you hear is strange because it is much faster than usual, and you may not want to listen to it. Turn it down with the VOLUME control, or press FADE/MUTING on the Remote.
    - When using high speed dubbing, you can also listen to another source such as the radio or the CD Player, just as if you weren't dubbing.
  - ☐ To stop high speed dubbing before reaching the end of either the playback or record tape, press the Stop ■ button on deck B.

**Note:** If nearby television is on during high speed dubbing, beeping noise may be recorded onto the record tape. Turn off the television or move it farther away.

### Recording selections from several different tapes

When you want to take selections from several different tapes and combine them on one tape during high speed dubbing, follow these steps:

1. Press the Stop ■ button on deck A.
  - ☐ This causes deck A to stop, so you can change tapes, and deck B makes a 4 second blank and pauses.
2. Change the tape in deck A.
3. Press the HIGH SPEED DUBBING button to start deck A playing and deck B recording again.

### Creating a Blank During Recording

Use the Record Muting function when you do not want to record a section of the source.



1. Press the PAUSE button on the Tape Deck while simultaneously pressing the REC/REC MUTE button. This will set the deck B in the REC PAUSE mode.
2. Press the REC/REC MUTE button.
  - ☐ A Blank of about 4 seconds is created on the cassette, and then the deck pauses.
  - ☐ When the source you are recording from is the CD Player and the CD REC START button is used, the REC/REC MUTE button will not function.

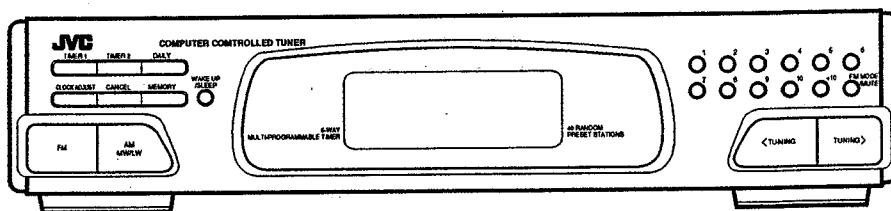
### Recording with the Timer

The Tape Deck can be set up to record a tape automatically. This is especially useful for recording broadcasts when you are not around, or late at night when you are asleep.

1. Insert a cassette for recording into deck B
2. Set the timer, by following the steps in "Setting the Timers".
3. Select one of the following sources:
 

|                 |                                                                    |
|-----------------|--------------------------------------------------------------------|
| TUNER TIMER REC | Records TUNER preset stations                                      |
| — — TIMER REC   | Records from the source selected before turning off the main Unit. |

## Using the Tuner



### Listening the Broadcasts

The Tuner can receive FM and AM (MW/LW) broadcasts. Stations can be turned in manually, automatically, or from preset memory storage.

#### Manual Tuning

1. Select the broadcast band you want to tune in by pressing the FM or AM (MW/LW) button on the Tuner.
2. Press the <TUNING or TUNING> button to tune in a station.
3. Hold down the <TUNING or TUNING> button to change the frequency rapidly, then tap the button to set the frequency precisely.

#### Automatic Tuning

1. Select the broadcast band you want to tune in by pressing the FM or AM (MW/LW) button on the Tuner.
2. Hold down the <TUNING or TUNING> button for a moment, and then release the button. When a station is tuned in, the TUNED indicator lights up.

**Note:** The Tuner will tune in the nearest strong station.

#### Tuning in Preset Stations

Call up the preset number of the station you want to listen to by pressing the numeric keys on the Tuner. The Display shows the preset number you have called up and the relevant frequency of the station. (This method is possible after presetting stations by yourself.)

You can also use the Remote to tune in stations and preset channels:

- To tune preselected stations with the Remote:
  1. Press the TUNER button so that you can receive the most recent station tuned in.
  2. Select the station by entering the preset number in the numeric key of the Remote.

### Presetting Stations in Memory

You can store up to 40 of your favorite radio stations (FM and AM (MW/LW)) in memory, giving you quick, easy access to the stations.

1. Select a band by pressing either the FM or AM (MW/LW) button on the Tuner.
2. Press the <TUNING or TUNING> button to tune in a station.
3. Press the MEMORY button on the Tuner. "MEMORY" will come on the Display for 5 seconds.
4. While "MEMORY" is shown on the Display, choose a preset number to register the station using the numeric keys.

#### Example:

To enter 7, press "7".

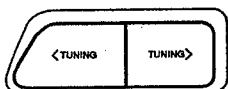
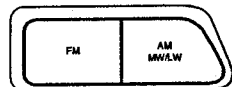
To enter 17, press "+10", then "7".

To enter 20, press "+10", then "10".

- ☐ If you are using the numeric keys on the Remote controller, press the TUNER button first before using the numeric keys.
- ☐ If "MEMORY" on the Display goes off, start again from step 3.
- ☐ If the preset number you choose already has a station assigned to it, the old station will be replaced by the new one.

5. Repeat steps 1 - 4 for each station you want to store in memory with a preset number.

**Caution!** If the main Unit is unplugged or if a power failure occurs, the preset stations stored in memory may be lost.



### Cancelling Preset Stations



1. Press the CANCEL button on the Tuner. "CANCEL" will blink on the Display for 5 seconds.
2. While "CANCEL" is blinking on the Display, call up the preset number you want to cancel.
  - ☐ If "CANCEL" on the Display goes off, start again from the beginning.
3. Press the CANCEL button again. The preset station will be cancelled.

### FM Reception Modes

There are two FM reception modes: AUTO and MONO.

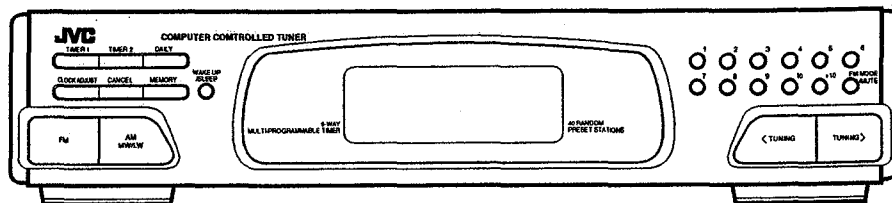


- |              |                                                                                                                                     |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>AUTO:</b> | Stations are tuned in with either stereo or monaural, depending on the FM signal.                                                   |
| <b>MONO:</b> | Stations are tuned in with monaural only. This will reduce interference noise of weak stations and make the reception sound better. |

Press the FM MODE/MUTE button on the Tuner to switch between the AUTO and MONO reception modes.

- ☐ If a stereo broadcast is received when the FM band is selected, the STEREO light will be displayed on the Tuner. If the FM reception mode is MONO, the STEREO light will not be displayed.

## Using the Timers



The timers let you control recording and playing functions automatically.

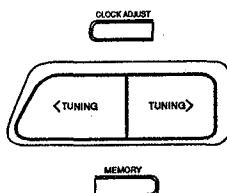
Four types of timers are available:

- ☐ Timer 1, Timer 2 — unattended recording of radio broadcasts.
- ☐ Daily — recording of a radio broadcast that occurs at the same time every day.
- ☐ Wake up Timer — Wake up to music from any source.
- ☐ Sleep Timer — Fall asleep and have your system turn off automatically after a certain length of time.

### Clock Setting

The timers depend on the clock: If the clock is right, the timers will work like you expect, but if the time is incorrect on the clock then the timers will also be incorrect.

**Special Notice:** The clock must be set, or the timers cannot be set!  
So, let's set the clock first.



1. Press the CLOCK ADJUST button.
2. Set the hour by pressing <TUNING or TUNING> button. Pressing the TUNING> button increase the hour, and pressing the <TUNING button decreases it.
3. Press the MEMORY button on the Tuner.
4. Set the minutes by pressing <TUNING or TUNING> button. Pressing the TUNING> button increase the minute, and pressing the <TUNING button decreases it.
5. Press the MEMORY button again and the clock is set and starts from zero second.

**Caution!** If there is a power failure, the clock loses its setting, the display shows "0:00", and it must be reset.

### Setting Timer 1, Timer 2, and the Daily Timers

With these timers you can make a tape of a radio broadcast (or other sound sources) automatically whether or not you are there to start the system. You can also play the sound source at the specified time without recording them. For the timer to work correctly, you need to make sure of two things in addition to setting the time for the sound source and tape recorder to come on:

- ☐ The tape you want to record onto must be in deck B when you want to record.
- ☐ The radio station whose program you want to tape must be the last one played before timer comes on.



**Follow this procedure to set Timer 1, Timer 2, and the Daily Timer:**

1. Press the TIMER 1, TIMER 2, or DAILY button to tell the system which timer you are going to set. The corresponding indication (TIMER 1, TIMER 2, or DAILY) flashes in the display. As long as it is flashing, you can continue with the setting process. If you wait too long, and it stops before you are done, just press the button twice and start over.
2. Set the time you want the sound source to come on and the tape in deck B to start recording.
  - ☐ Use the <TUNING or TUNING> button just like setting the clock.
3. Set the time you want the sound source to shut off and the tape in deck B to stop recording.
  - ☐ Use the <TUNING or TUNING> button just like setting the clock.
4. Select the sound source with the <TUNING or TUNING> button and press the MEMORY button to store it.
  - ☐ Each time you press the <TUNING or TUNING> button, the Unit gives you one of the following settings:

#### Display

-----  
TUNER  
TUNER TIMER REC  
CD  
TAPE  
---- TIMER REC

#### What it means

Plays from whichever source was used just before turning off the system.  
Plays an FM or AM (MW/LW) broadcast  
Records an FM or AM (MW/LW) broadcast  
Plays a CD  
Plays tape  
Records from whichever source was used just before turning off the system.



5. Set the volume level with the <TUNING or TUNING> button and press the MEMORY button to store it.
  - ☐ Each time you press the <TUNING or TUNING> button, the Unit gives you one of the following settings:

| Display  | What it means                                          |
|----------|--------------------------------------------------------|
| VOL ---  | Volume set to the level used before shut the power off |
| VOL -- 0 | Volume off                                             |
| VOL -- A | Volume barely on                                       |
| VOL -- B | Volume at about a 1/4 turn of the volume control       |
| VOL -- C | Volume at about a 3/8 turn of the volume control       |

These volume settings do not affect your recording because the recording level is automatically set by the system. So if you're not home at the designated time, be sure to set the volume level to minimum.

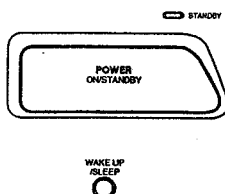
6. Press the TIMER 1, TIMER 2, or DAILY button again, and the system will memorize the setting. Now the system is set to turn on and record the last station set when the system was last turned off.
  - ☐ Notice that the TIMER 1, TIMER 2, or DAILY indicator is lighted up on the display whenever the Timer is set.
7. To cancel the Timer setting, press the TIMER 1, TIMER 2, or DAILY button again; the corresponding indicator on the display goes off.

**Note:** If the volume knob has already been turned half a turn or more when you set the volume level, you may not be able to set it to volume position 0, A, B, or C correctly.

*It is very easy, and can be very disappointing, to forget to put in a tape, or to accidentally leave a tape in deck B you don't want recorded over. Although this happens to almost everyone sometimes, we hope it won't happen to you!*

## Wake up Timer

With this timer you can wake up to music from a CD, tape or your favorite radio program.



1. Press the POWER button to shut the Unit off.
2. Press the WAKE UP/SLEEP—The WAKE UP display will light up the display screen.
3. Set the time you want the system to turn on.
  - ☐ Each time you press WAKE UP/SLEEP, the wake-up time lapse changes in the following order:  
→ 0:05 → 0:10 → 0:15 → 0:30 → 0:45 → 1:00 → 1:30 → 2:00 → 3:00 → (every hour)  
→ 12:00 → (back to the beginning)
  - ☐ The WAKE UP indicator remains lit on the display to let you know that Wake Time is set.
4. To cancel the WAKE UP TIMER setting, press the POWER button to turn on the system.
  - ☐ If you select FM or AM (MW/LW) as the source, the last played station is the one which comes on at the Wake Up time set.
  - ☐ The volume when the timer turns on the source is the volume last set when the system was turned off. This can be quite a surprise first thing in the morning, so you might want to reset it before going to sleep.
  - ☐ If the CD is the source, it starts playing from the first track.

## Sleep Timer

Use the sleep timer to turn the system off after a certain number of minutes when it is playing. Using this timer, you can fall asleep to music and know your system will turn off by itself rather than play all night.

- ☐ You can only set the Sleep Timer when the system is on and a source is playing.
- ☐ To cancel the Sleep Timer, press the POWER button to turn off the Unit.

### To set the Sleep Timer follow this procedure:

1. With the system on and a source playing, press the WAKE UP/SLEEP button. The SLEEP indicator on the display will start blanking.
2. Set the length of time you want the source to play before shutting off.
  - ☐ Each time you press the WAKE UP/SLEEP button while the SLEEP indication is blinking, it changes the number of minutes shown on the display in this sequence:  
→ 0:05 → 0:10 → 0:15 → 0:30 → 0:45 → 1:00 → 1:15 → 1:30 → 1:45 → 2:00 → (back to the beginning)
  - ☐ The actual time when the system will shut off shows in the right hand corner of the display where the clock time is usually displayed.
  - ☐ When the number of minutes you want shows on the display, just wait 5 seconds until the indicator stops blinking, but remains lighted.

The unit is now set to turn off after the number of minutes you set.



### Timer Priority

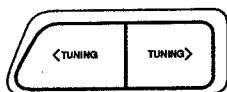
Since each timer can be set independently, you may have wondered what happens if the settings overlap. Here are the priorities for each timer.

- ☐ The Wake Up Timer has priority over TIMER 1, TIMER 2, or DAILY timer. This means that if the start -timer for one of the timers occurs before the wake-up time, the system will wait until the wake-up time to turn on.
- ☐ The Sleep Timer has priority over TIMER 1, TIMER 2, or DAILY timer. This means that if the stop-time for one of the timers occurs before the sleep time, the system will wait until the sleep time before turning itself off.

### Checking the Remaining Time

After setting the Wake Up or Sleep Timer, you can check the time remaining until the system turns on (Wake Up Timer) or shuts off (Sleep Timer).

- ☐ Pressing the WAKE UP/SLEEP button shows you the remaining time on the display for 5 seconds. Then the display returns to the clock time display (Wake Up Timer) or the radio frequency display (Sleep Timer).



### Adjusting the Brightness of the Display

In the stand-by mode, you can adjust the brightness of the clock display.

Pressing the TUNING> button makes the display brighter.

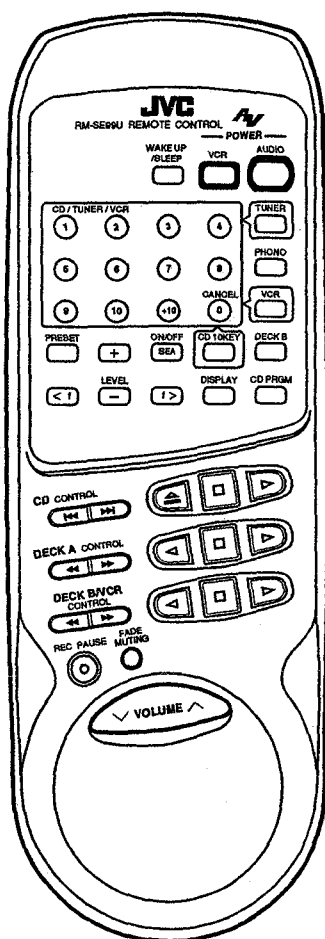
Pressing the <TUNING button makes the display dimmer.

# Using the Remote Controller

## Operating the Remote Controller

You can use the Remote Controller to operate the system without leaving your chair. You can use it up to distance of 23 feet. Point the Remote Controller at the remote sensor on the Amplifier.

**Note:** When the Tuner is selected as the source, and Cd off is displayed, only the Open/Close and Play buttons on the Remote Controller can be used. To use other buttons on the Remote Controller (for programming and other operations), press the CD button on the Amplifier or the CD Play button on the Remote Controller first.



Turn on the main unit



Turn on the VCR



Amplifier



Adjust volume level



Gradually reduce the volume

Set the Source Selector of the amplifier to TUNER



Set the Source Selector of the amplifier to PHONO



Set the Source Selector of the amplifier to VCR/DAT



S.E.A.\*

Turning S.E.A. function on or off



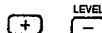
Using a S.E.A. pattern



SEA CONTROL < or >



Setting a S.E.A. level



Changing the S.E.A. display



CD Player

Open and close the disc tray



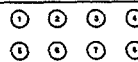
Play a CD



Stop playback of a CD



Place numeric keys in CD mode



Select track number



Scanning through the track number



Program play back order



Delete programmed tracks



Tape Deck

Applicable for both DECK A and DECK B

Play a tape in forward direction



Play a tape in reverse direction



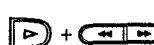
Stop playback



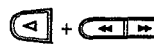
Fast Left or Fast Right



Search for beginning of the track while in forward direction



Search for beginning of the track while in reverse direction

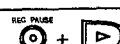


DECK B only

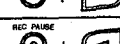
Set the DECK B/VCR CONTROL button to the DECK B mode



Recording in forward direction



Recording in reverse direction

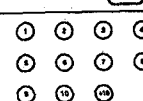


Stopping recording



Tuner

Selecting Tuner mode



Selecting a preset station



Timers

Setting the Wake up/Sleep timer



VCR

Set the DECK B/VCR CONTROL button and the numeric keys to the VCR mode.



Play a tape



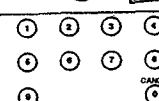
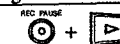
Stop playback



Fast forwarding or fast rewinding



Recording



Select a TV channel



• When using the remote controller to operate a VCR, point the controller at the VCR.

\* For optional "S.E.A. Graphics Equalizer", SE-E78BK/SE-E79TN only.

**Note:** Where "+" is indicated, press and hold the first button illustrated, then press the second.

## Care and Maintenance — General Notes

### Compact Discs

Handle your compact discs, cassette tapes, and tape deck carefully, and they will last a long time.



- Remove the CD from the case by holding it at the edges while pressing the center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.

- Place the CD into the open tray with the label facing up.



- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



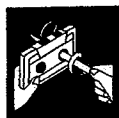
- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.

**CAUTION:** Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean a CD.

In general, you will have the best performance by keeping your tapes, CDs, and the mechanism clean.

- Store tapes and CDs in their cases, and keep them in cabinets or on shelves.
- Keep the tape deck tape carriers and CD tray closed when not in use.

### Cassette Tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose it may get stretched, cut, or caught in the cassette.



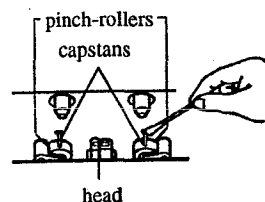
- Do not touch the tape surface.



- Do not store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - On a TV or speaker
  - Near a magnet

### Tape Deck

- If the heads, capstans, and pinch-rollers of the tape deck become dirty, the following will occur:
  - Impaired sound quality
  - Discontinuous sound
  - Fading
  - Incomplete erasure
  - Difficulty recording
- Clean the heads, capstans, and pinch-rollers using a cotton swab moistened with alcohol.



- If the heads become magnetized, they will produce noise or loose high frequencies.
- To demagnetize the heads, turn off the system, and use a head demagnetizer (available at electronics and record shops).

## Troubleshooting

- If you are having a problem with your system, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the Unit has been physically damaged, call a qualified person, such as your dealer, for service.

| Symptom                                        | Possible Cause                                                                                                                                       | ACTION                                                                                                                                                   |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| No sound is heard.                             | Connections are incorrect, or loose.                                                                                                                 | Check all connections and make corrections.                                                                                                              |
| Impossible to record.                          | Cassette record protect tabs are removed.                                                                                                            | Cover holes on back edge of cassette with tape.                                                                                                          |
| Hard to listen to broadcasts because of noise. | The antenna is disconnected.<br>The loop antenna is too close to the system.<br><br>The feeder/wire antenna is not properly extended and positioned. | Re-connect the antenna securely.<br>Change the position and direction of the loop antenna.<br>Extend feeder/wire antenna at the best reception position. |
| The CD sound is discontinuous.                 | The CD is scratched or dirty.                                                                                                                        | Clean or replace the CD.                                                                                                                                 |
| Unable to operate the Remote.                  | The path between the Remote and the sensor on the Unit is blocked.<br>The batteries are discharged.                                                  | Remove the obstruction.<br>Replace the batteries.                                                                                                        |
| The CD tray cannot be operated.                | The main AC power cord is not plugged in.                                                                                                            | Plug in the AC power plug.                                                                                                                               |
| The CD does not play.                          | The CD is upside down.                                                                                                                               | Put the CD in with the label side up.                                                                                                                    |
| Operations are disabled.                       | The built in microprocessor may malfunction due to external electrical interference.                                                                 | Unplug the system then plug it back in.                                                                                                                  |
| The cassette holder cannot be opened.          | The system was turned off because the timer was operated while the tape was running.                                                                 | Turn on the system.                                                                                                                                      |

## Specifications

### Amplifier

Output Power (IEC 268-3/DIN) : 50 watts per channel min. RMS, both channels driven, into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion.

Total harmonic distortion at half-rated power : 0.07%

Input sensitivity/impedance (1 kHz)

VCR/DAT : 300 mV/50 kΩ

PHONO : 3 mV/50 kΩ

Dimensions (W x H x D) : 14-3/16" x 4-7/8" x 13-15/16"  
(360 x 123 x 354)

Weight : 14.2 lbs (6.4 kg)

### S.E.A. Graphic Equalizer

Center frequencies : 63 Hz, 160 Hz, 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz

Control range : +12 dB ± 2 dB, -12 dB ± 2 dB

Dimensions (W x H x D) : 14-3/16" x 3-3/4" x 11-1/4"  
(360 x 80 x 284.4)

Weight : 4.9 lbs (2.2 kg)

### Compact Disc Player

Dynamic Range (1kHz) : 96 dB

Signal-to Noise Ratio : 102 dB

Wow and flutter : Unmeasurable

Dimensions (W x H x D) : 14-3/16" x 3-3/4" x 11-1/8"  
(360 x 80 x 283.5)

Weight : 5.6 lbs (2.5 kg)

### Tape Deck

Frequency Response

Metal : 30 - 17,000 Hz

CrO<sub>2</sub> : 30 - 16,000 Hz

Normal : 30 - 15,000 Hz

Wow and flutter (WRMS/DIN) : 0.09%/0.2%

Dimensions (W x H x D) : 14-3/16" x 4-7/8" x 11-7/16"  
(360 x 123 x 288.5)

Weight : 7.3 lbs (3.3 kg)

### Tuner

#### FM TUNER SECTION

Tuning range : 87.5 MHz - 108.0 MHz

Usable sensitivity : 0.95 μV/75 ohms (10.8 dBf)

26 dB Quieting sensitivity : 1.0 μV/75 ohms (DIN)

Signal to noise ratio : Mono 80 dB/72 dB

(IHF A-net/DIN) Stereo 73 dB/64 dB

#### AM TUNER SECTION

##### MW

Tuning range : 522 kHz - 1629 kHz

Sensitivity : 300 μV/m

##### LW

Tuning range : 144 kHz - 290 kHz

(only for Italy)

144 kHz - 353 kHz

(for other countries)

Sensitivity : 600 μV/m

Dimensions (W x H x D) : 14-3/16" x 3-3/16" x 11-13/16"  
(360 x 80 x 299.6)

Weight : 4.5 lbs (2.0 kg)

### GENERAL

Line Voltage & Frequency : AC 230 V ~, 50 Hz

Power Consumption : 146 watts

*Design and specifications subject to change without notice.*

# Description of ICs

## ■ UPD75104CW-290(IC801) : System controller

### 1. Terminal Layout

|              |    |    |              |
|--------------|----|----|--------------|
| DCS IN       | 1  | 64 | GND          |
| INH          | 2  | 63 |              |
| REMOCON IN   | 3  | 62 |              |
| PROTECT IN   | 4  | 61 |              |
|              | 5  | 60 |              |
|              | 6  | 59 |              |
|              | 7  | 58 |              |
|              | 8  | 57 |              |
|              | 9  | 56 |              |
|              | 10 | 55 |              |
| DCS OUT      | 11 | 54 |              |
| MAIN MUTE    | 12 | 53 |              |
| ABX MUTE     | 13 | 52 |              |
| SW STB       | 14 | 51 |              |
|              | 15 | 50 |              |
| SW DATA      | 16 | 49 |              |
| SW SCK       | 17 | 48 | ABX ON/OFF   |
|              | 18 | 47 | OSC1         |
| TAPE LED     | 19 | 46 | OSC2         |
| PHONO LED    | 20 | 45 | RESET IN     |
| TUNER LED    | 21 | 44 | VOL. UP      |
| CD LED       | 22 | 43 | VOL. DOWN    |
| VCR/DAT LED  | 23 | 42 | SPK RELAY    |
| ABX LED      | 24 | 41 | NC           |
| STAND-BY LED | 25 | 40 | AC CONTROL   |
| VOLUME LED   | 26 | 39 | POWER ON/OFF |
| KEY OUT3     | 27 | 38 | SEA INH      |
| KEY OUT2     | 28 | 37 | SEA RESET    |
| KEY OUT1     | 29 | 36 | SEA CONNECT  |
| KEY OUT0     | 30 | 35 |              |
|              | 31 | 34 | KEY IN0      |
| VDD          | 32 | 33 | KEY IN1      |

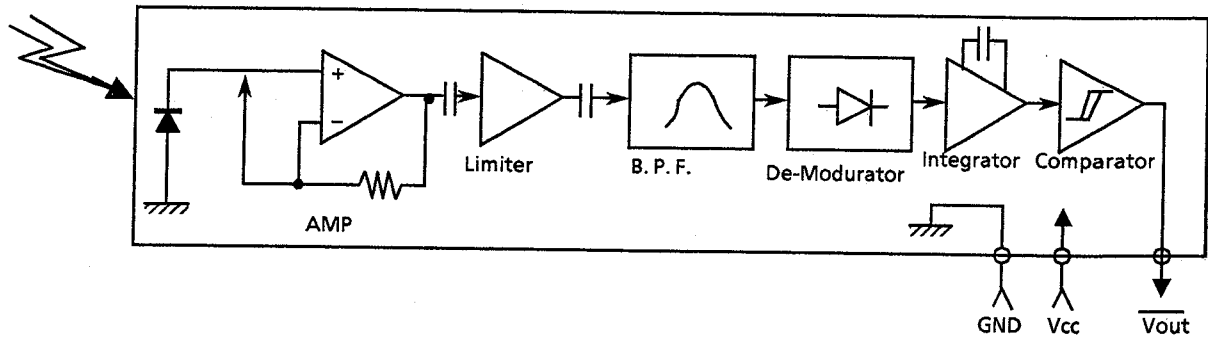
### 2. Key Matrix

|                      |                     |                             |
|----------------------|---------------------|-----------------------------|
|                      | KEY IN0<br>(PIN 34) | KEY IN1<br>(PIN 33)         |
| KEY OUT0<br>(PIN 30) | TAPE                | VCR/DAT                     |
| KEY OUT1<br>(PIN 29) | PHONO               | ACTIVE<br>BASS<br>EXTENSION |
| KEY OUT2<br>(PIN 28) | TUNER               | POWER                       |
| KEY OUT3<br>(PIN 27) | CD                  | —                           |

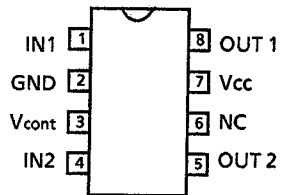
### 3. Terminal Description

| Pin No. | Symbol      | I/O | Function                                  | Pin No. | Symbol      | I/O | Function                             |
|---------|-------------|-----|-------------------------------------------|---------|-------------|-----|--------------------------------------|
| 1       | DCS IN      | I   | Compulink signal input                    | 33      | KEY IN0     | I   | Key matrix in                        |
| 2       | INH         | I   | Inhibit signal input                      | 34      | KEY IN1     | I   | Key matrix in                        |
| 3       | REMOCON IN  | I   | Remote control signal input               | 35      | —           | --  | Connected to GND                     |
| 4       | PROTECT IN  | I   | Protection                                | 36      | SEA CONNEC. | I   | Detection for connecting SE-E78/79   |
| 5       | —           | --  | Connected to GND                          | 37      | SEA RESET   | O   | Reset signal for SEA                 |
| 6       | —           | --  | Connected to GND                          | 38      | SEA INH     | O   | Inhibit signal for SEA               |
| 7       | —           | --  | Connected to GND                          | 39      | POW. ON/OFF | O   | Power control for cassette deck      |
| 8       | —           | --  | Connected to GND                          | 40      | AC CONT.    | O   | Power supply control signal          |
| 9       | —           | --  | Connected to GND                          | 41      | NC          | --  | Non connection                       |
| 10      | —           | --  | Connected to GND                          | 42      | SPK RELAY   | O   | Speaker relay control                |
| 11      | DCS OUT     | O   | Compulink signal output                   | 43      | VOL. DOWN   | O   | Volume control signal                |
| 12      | MAIN MUTE   | O   | Muting control signal                     | 44      | VOL. UP     | O   | Volume control signal                |
| 13      | ABX MUTE    | O   | Non connection                            | 45      | RESET IN    | I   | Reset signal input                   |
| 14      | SW STB      | O   | Strobe signal for input selector          | 46      | OSC2        | --  | Oscillation terminal                 |
| 15      | —           | --  | Connected to GND                          | 47      | OSC1        | --  | Oscillation terminal                 |
| 16      | SW DATA     | O   | Data for input selector                   | 48      | ABX ON/OFF  | O   | Active bass extension control signal |
| 17      | SW SCK      | O   | Clock for data transfer to input selector | 49      | —           | --  | Connected to GND                     |
| 18      | —           | --  | Connected to GND                          | 50      | —           | --  | Connected to GND                     |
| 19      | TAPE LED    | O   | Indication control for 'TAPE'             | 51      | —           | --  | Connected to GND                     |
| 20      | PHONO LED   | O   | Indication control for 'PHONO'            | 52      | —           | --  | Connected to GND                     |
| 21      | TUNER LED   | O   | Indication control for 'TUNER'            | 53      | —           | --  | Connected to GND                     |
| 22      | CD LED      | O   | Indication control for 'CD'               | 54      | —           | --  | Connected to GND                     |
| 23      | VCR/DAT LED | O   | Indication control for 'VCR/DAT'          | 55      | —           | --  | Connected to GND                     |
| 24      | ABX LED     | O   | Indication control for 'A.B.X.'           | 56      | —           | --  | Connected to GND                     |
| 25      | ST-BY LED   | O   | Indication control for 'STAND-BY'         | 57      | —           | --  | Connected to GND                     |
| 26      | VOLUME LED  | O   | Indication control for 'VOLUME'           | 58      | —           | --  | Connected to GND                     |
| 27      | KEY OUT3    | O   | Key matrix out                            | 59      | —           | --  | Connected to GND                     |
| 28      | KEY OUT2    | O   | Key matrix out                            | 60      | —           | --  | Connected to GND                     |
| 29      | KEY OUT1    | O   | Key matrix out                            | 61      | —           | --  | Connected to GND                     |
| 30      | KEY OUT0    | O   | Key matrix out                            | 62      | —           | --  | Connected to GND                     |
| 31      | —           | --  | Connected to power supply                 | 63      | —           | --  | Connected to GND                     |
| 32      | VDD         | --  | Power supply                              | 64      | GND         | --  | GND                                  |

■ SPS-420-1 (IC101) : Receiver for Remote Control



■ LB1639-CV (IC802) : 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           |

## Disassembly Procedures

### ■ Removing the metal cover

1. Remove the 6 screws (A) fastening the both sides and rear of the cover to remove the cover.

### ■ Removing the front panel assembly

1. Remove the metal cover.
2. Disconnect the connectors J102, J152, J153, J154, J911 and JA101. Cut the tie bands to make the wires free.
3. Remove the 5 screws (B) on the bottom of front panel to remove the assembly.

### ■ Removing the heat sink

1. Remove the 2 screws (D) fixing the heat sink cover to remove the cover.
2. Remove the 2 screws (C) to remove the bracket holding the power amplifier ic.
3. Remove the 4 screws (E) to remove the heat sink.

### ■ Removing the rear panel

1. Remove the heat sink.
2. Remove the 16 screws (D), (C) and (F). (The 2 screws (D) fixing voltage selector are for the versions except universal and Taiwan.)
3. Release the 2 hooks to remove the rear panel.

### ■ Removing the main circuit board

1. Remove the front panel assembly.
2. Remove the rear panel.
3. Remove the 4 screws (H) fixing the main circuit board to remove the circuit board.

### ■ Servicing the main circuit board

1. Remove the 4 screws (C) on the rear panel.
2. Remove the 4 screws (H) fixing the main circuit board and cut the tie bands.
3. Lift the back of the circuit board with the rear panel and heat sink as shown in figure 4.

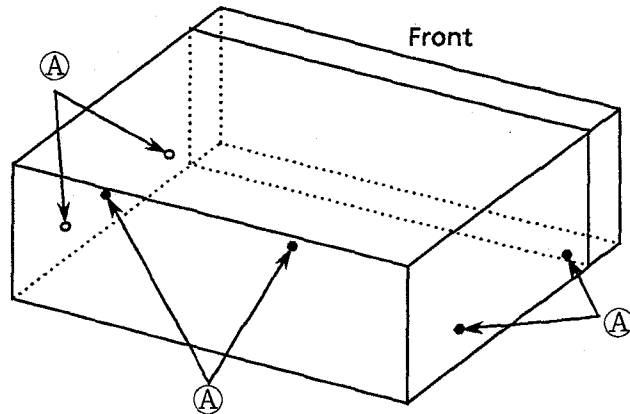


Figure 1

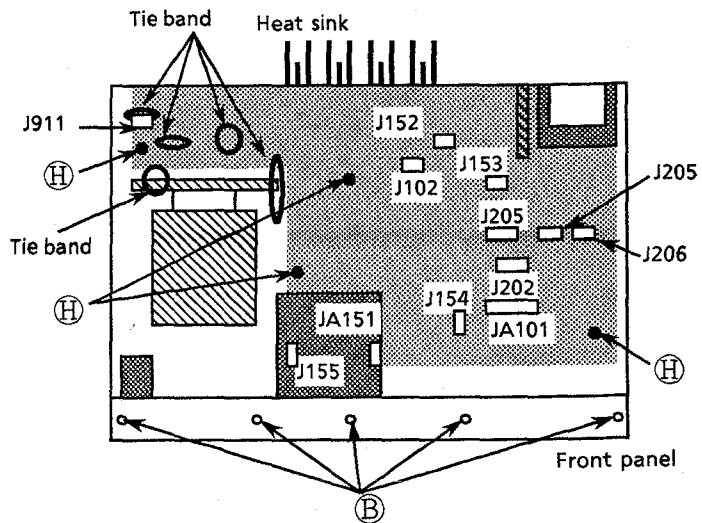


Figure 2 Top view

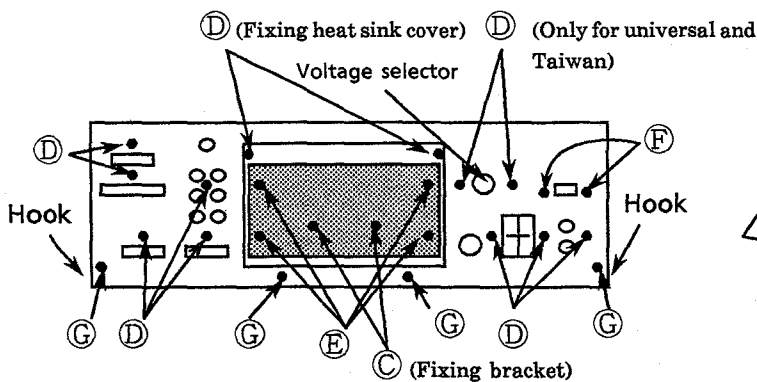


Figure 3 Rear view

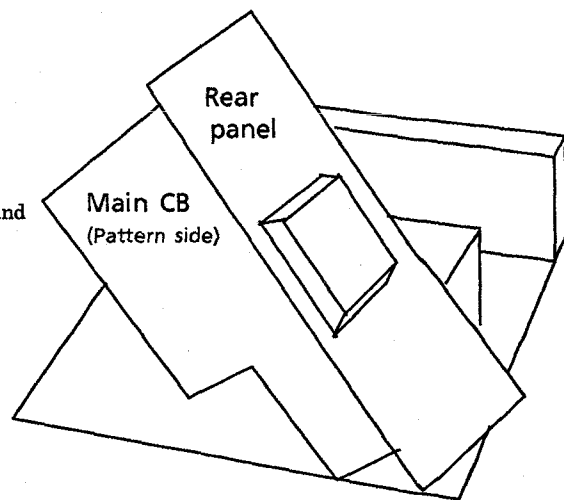


Figure 4

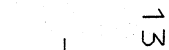


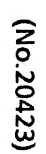
# MEMO

# MEMO

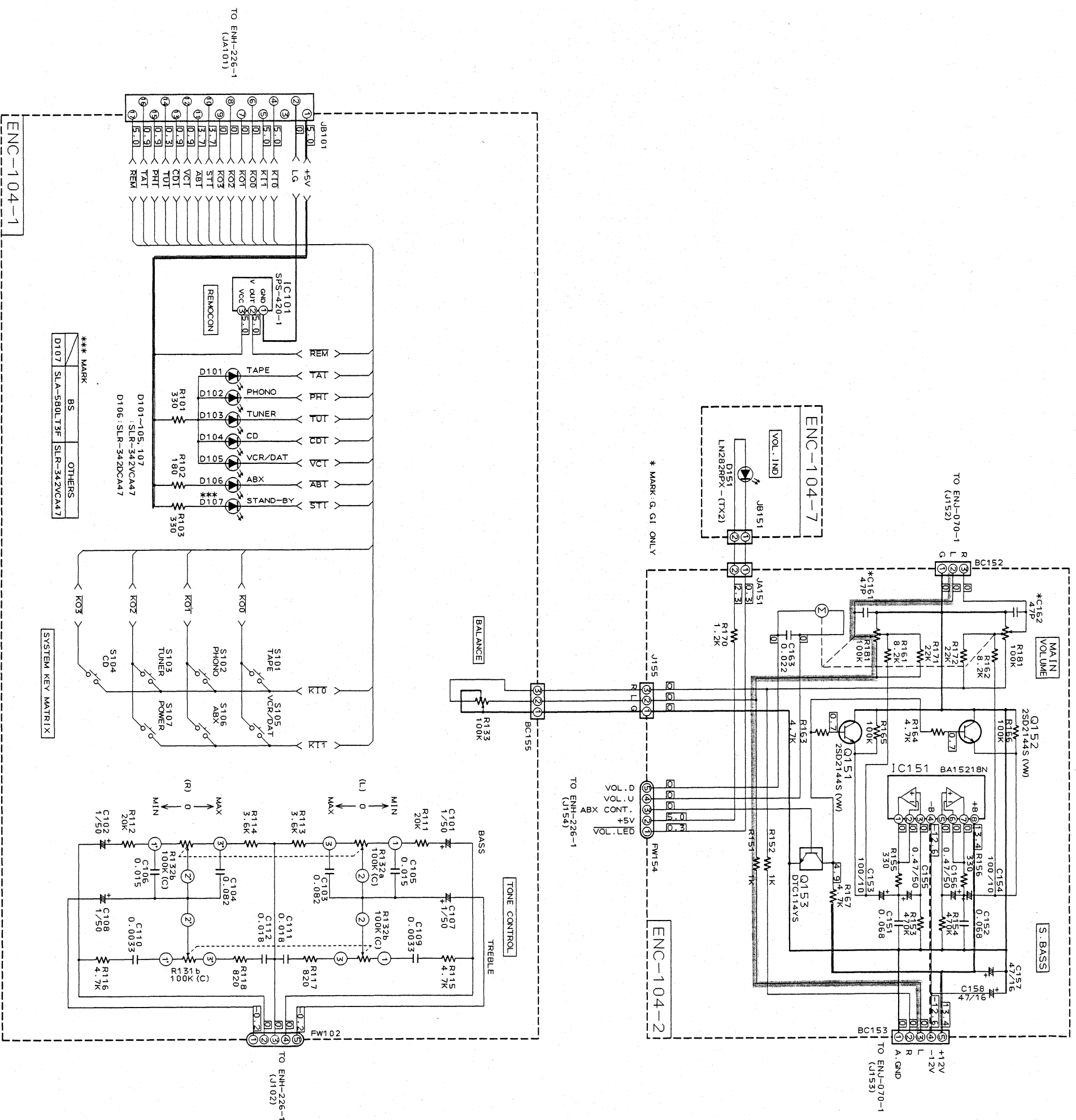
A -  
B -  
C -  
D -  
E -  
F -  
G -  
H -  
I -  
J -  
K -

TO ENC-104-2 TO ENC-104-1  
(BC152) (PM102)



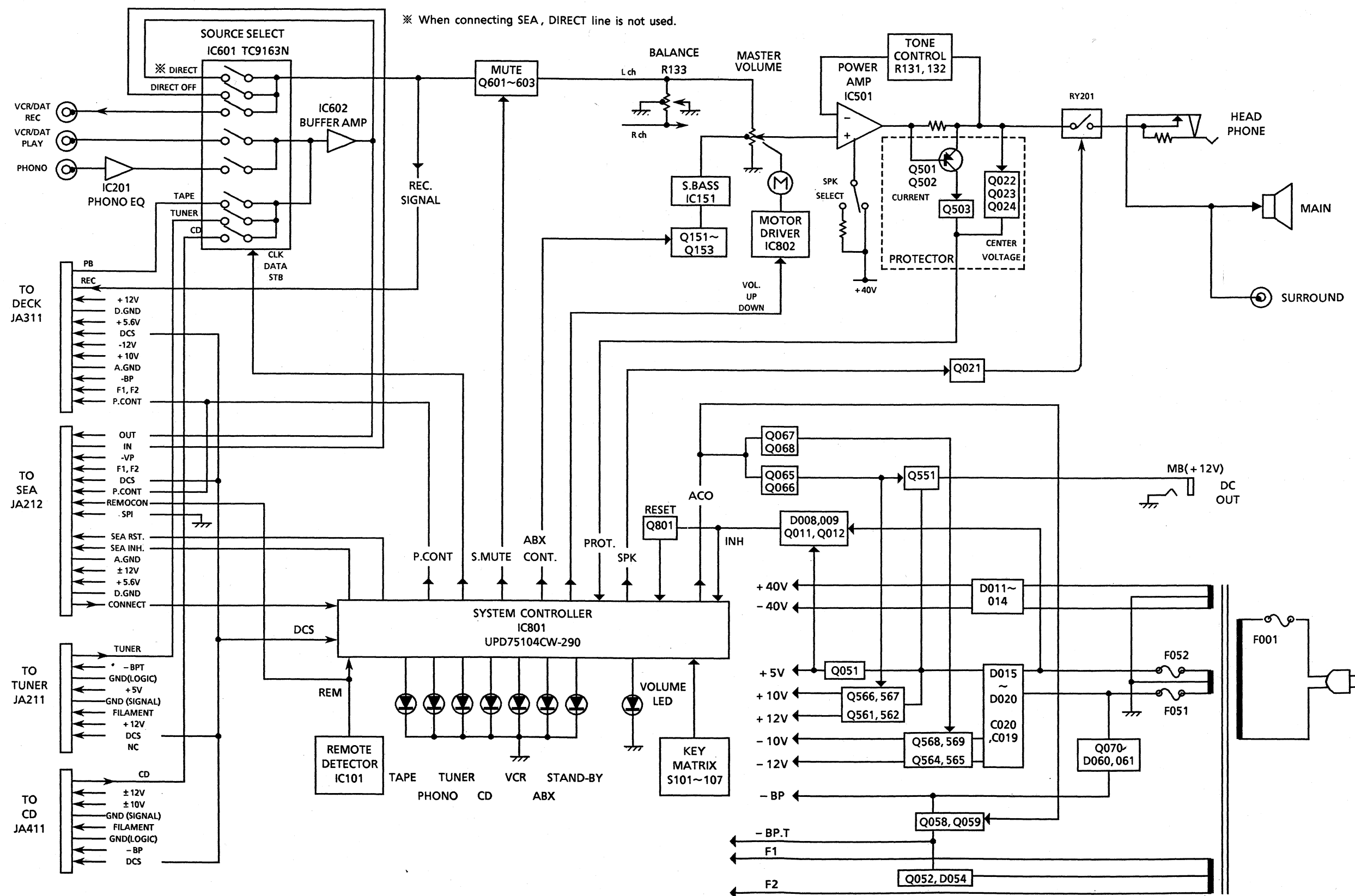


## ■ Front & Power Supply Section





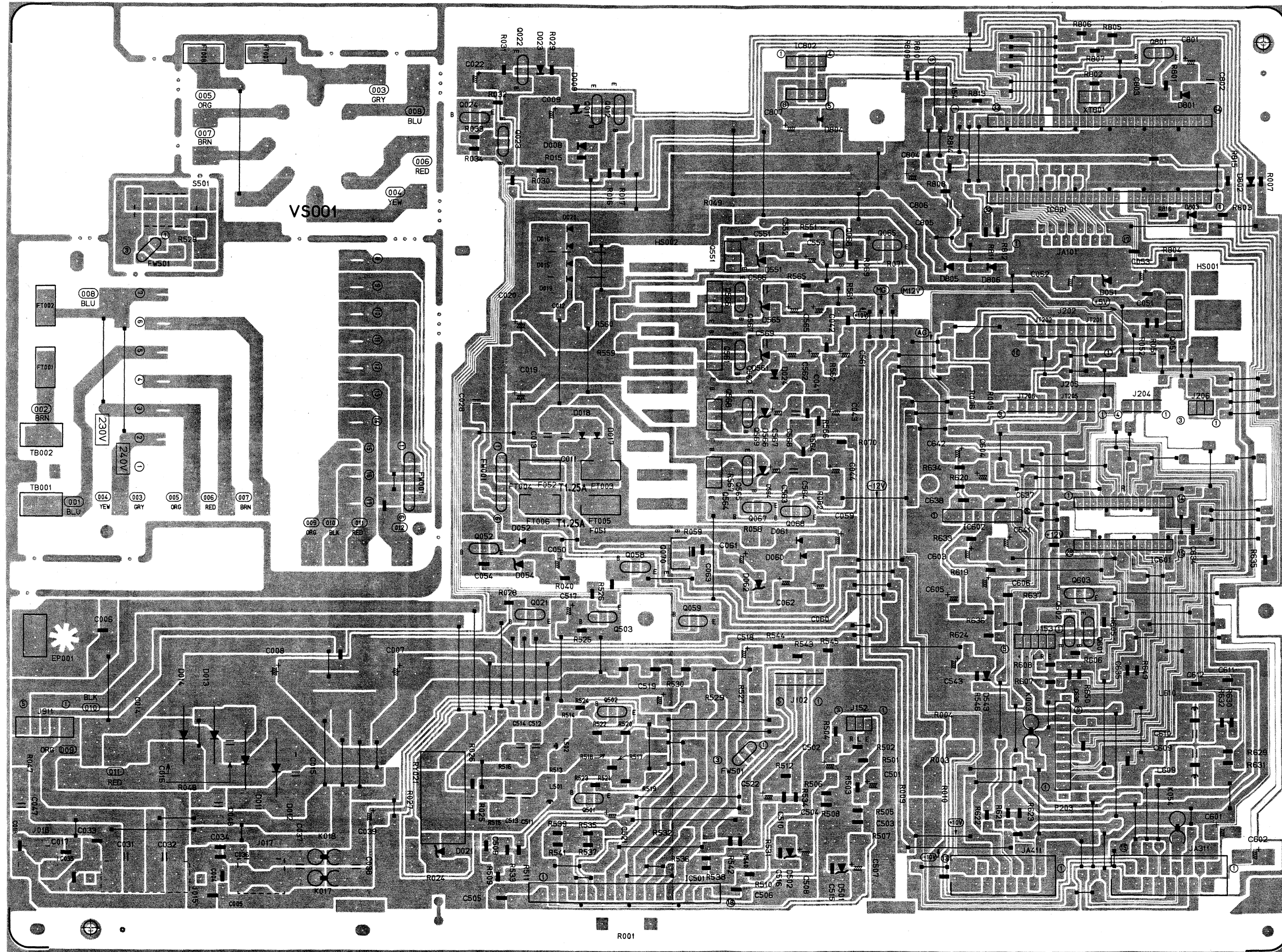
# Block Diagram





■ Main CB (ENH-226)

(No.20423)





This technical drawing illustrates the layout of a printed circuit board (PCB). The board is populated with numerous electronic components, including resistors (labeled R101 through R226), capacitors (labeled C101 through C226), and integrated circuits (labeled IC101). The layout is organized into several distinct sections, each containing a dense network of components and interconnecting traces. Key features include:

- Top Section:** Contains a large, complex circuit block with many components, including resistors R101 through R150, capacitors C101 through C150, and integrated circuits IC101 through IC150. It also features a large, irregularly shaped cutout.
- Bottom Section:** Contains a large, complex circuit block with many components, including resistors R151 through R226, capacitors C151 through C226, and integrated circuits IC151 through IC226. It also features a large, irregularly shaped cutout.
- Left Section:** Contains a large, complex circuit block with many components, including resistors R101 through R150, capacitors C101 through C150, and integrated circuits IC101 through IC150. It also features a large, irregularly shaped cutout.
- Right Section:** Contains a large, complex circuit block with many components, including resistors R151 through R226, capacitors C151 through C226, and integrated circuits IC151 through IC226. It also features a large, irregularly shaped cutout.
- Central Section:** Contains a large, complex circuit block with many components, including resistors R101 through R150, capacitors C101 through C150, and integrated circuits IC101 through IC150. It also features a large, irregularly shaped cutout.

The drawing includes detailed labels for each component, as well as various other markings such as "JA21", "FW202", "BC208", "R170", "JA151", "R191", "R181", "C172", "L172", "BC155", "C173", "C174", "R175", "R176", "R177", "R178", "R179", "R180", "R181", "R182", "R183", "R184", "R185", "R186", "R187", "R188", "R189", "R190", "R191", "R192", "R193", "R194", "R195", "R196", "R197", "R198", "R199", "R200", "R201", "R202", "R203", "R204", "R205", "R206", "R207", "R208", "R209", "R210", "R211", "R212", "R213", "R214", "R215", "R216", "R217", "R218", "R219", "R220", "R221", "R222", "R223", "R224", "R225", "R226".



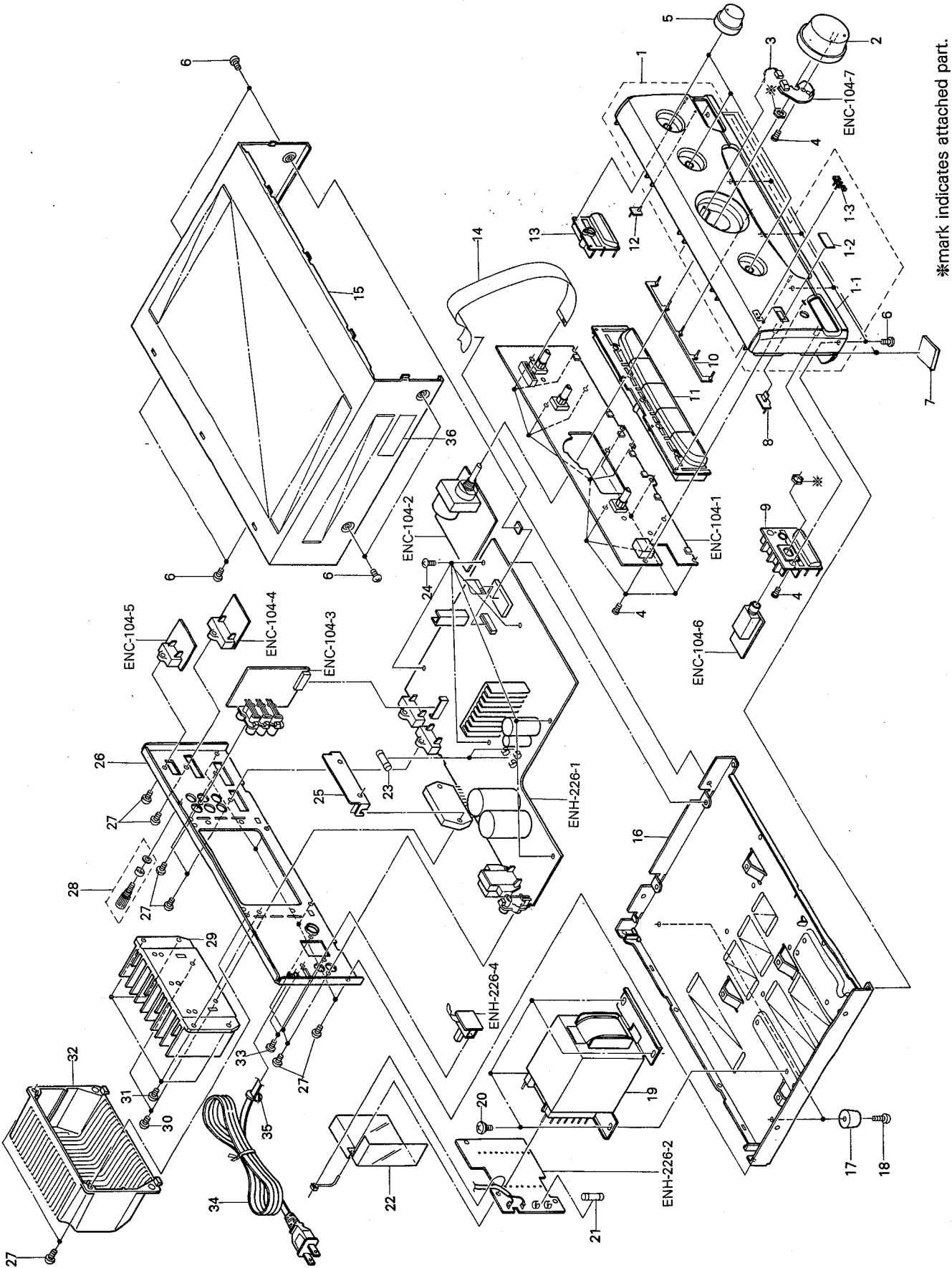
# PARTS LIST

**Note :** All printed circuit boards and its assemblies are not available as service parts.

## Contents

|                                                           |       |
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# General Exploded View and Parts List



## ■ Parts List

| △ | Item | Part Number      | Part Name         | Q'ty | Description              | Areas |
|---|------|------------------|-------------------|------|--------------------------|-------|
|   | 1    | EFP-AXE788KE (S) | FRONT PANEL ASSY  | 1    |                          | EN    |
|   | 1-1  | E102720-002SM    | FRONT PANEL       | 1    |                          |       |
|   | 1-2  | E407335-001SS    | REMOTE PLATE      | 1    |                          |       |
|   | 1-3  | E406971-221      | JVC MARK          | 1    |                          |       |
|   | 2    | E308266-002      | VOLUME KNOB       | 1    |                          |       |
|   | 3    | EWS142-002B      | SOCKET WIRE       | 1    | EW900                    |       |
|   | 4    | SDSF2608Z        | SCREW             | 12   |                          |       |
|   | 5    | E308550-002      | KNOB              | 3    |                          |       |
|   | 6    | SDSG3008M        | SCREW             | 11   |                          |       |
|   | 7    | E75896-001       | SPACER            | 2    | FRONT FOOT               |       |
|   | 8    | E407598-001      | INDICATOR         | 1    |                          |       |
|   | 9    | E308291-002SS    | PUSH BUTTON       | 1    | POWER                    |       |
|   | 10   | E308549-001      | INDICATOR         | 1    |                          |       |
|   | 11   | E207861-002SM    | PUSH BUTTON       | 1    | SOURCE                   |       |
|   | 12   | E407599-001      | INDICATOR         | 1    |                          |       |
|   | 13   | E308294-006SS    | PUSH BUTTON       | 1    | BASS EXT.                |       |
|   | 14   | EWR617K-18TTJ3   | FLAT WIRE         | 1    |                          |       |
|   | 15   | E207457-003      | METAL COVER       | 1    |                          |       |
|   | 16   | E102582-001SM    | CHASSIS BASE      | 1    |                          |       |
|   | 17   | E47227-030       | FOOT              | 2    | REAR                     |       |
| △ | 18   | SBSG3010Z        | SCREW             | 2    | FOR FOOT                 |       |
| △ | 19   | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                          | EF    |
| △ |      | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                          | EN    |
| △ |      | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                          | G     |
| △ |      | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                          | GI    |
| △ |      | ETP1150-52EAJBS  | POWER TRANSFORMER | 1    |                          | BS    |
| △ | 20   | E65389-004       | SPECIAL SCREW     | 4    |                          |       |
| △ | 21   | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A/250V)        | EF    |
| △ |      | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A/250V)        | EN    |
| △ |      | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A/250V)        | G     |
| △ |      | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A/250V)        | GI    |
| △ |      | QMF51E2-1R6J1BS  | FUSE              | 1    | F001 (T1.6A/250V)        | BS    |
| △ | 22   | E308251-001SM    | PROTECT COVER     | 1    |                          |       |
| △ | 23   | QMF51E2-1R25J1   | FUSE              | 2    | F051, F052 (T1.25A/250V) | EF    |
| △ |      | QMF51E2-1R25J1   | FUSE              | 2    | F051, F052 (T1.25A/250V) | EN    |
| △ |      | QMF51E2-1R25J1   | FUSE              | 2    | F051, F052 (T1.25A/250V) | G     |
| △ |      | QMF51E2-1R25J1   | FUSE              | 2    | F051, F052 (T1.25A/250V) | GI    |
| △ |      | QMF51E2-1R2J1BS  | FUSE              | 2    | F051, F052 (T1.25A/250V) | BS    |
| △ | 24   | SBSG3008CC       | SCREW             | 6    |                          |       |
| △ | 25   | E308062-001SM    | BRACKET           | 1    |                          |       |
|   | 26   | E207863-003SM    | REAR PANEL        | 1    |                          | EF    |
|   |      | E207863-003SM    | REAR PANEL        | 1    |                          | EN    |
|   |      | E207863-003SM    | REAR PANEL        | 1    |                          | G     |
|   |      | E207863-003SM    | REAR PANEL        | 1    |                          | GI    |
|   |      | E207863-004SM    | REAR PANEL        | 1    |                          | BS    |
|   | 27   | E73273-003       | SPECIAL SCREW     | 14   |                          |       |
|   | 28   | E70078-003       | GND TERMINAL      | 1    |                          |       |
|   | 29   | E308061-001SM    | HEAT SINK         | 1    |                          |       |
|   | 30   | SBSG3020Z        | SCREW             | 2    |                          |       |
|   | 31   | SBSG3010CC       | SCREW             | 4    |                          |       |
|   | 32   | E207466-001SM    | REAR COVER        | 1    |                          |       |
| △ | 33   | SDST2604M        | SCREW             | 2    |                          |       |
| △ | 34   | QMP3900-200      | POWER CORD        | 1    |                          | EF    |
| △ |      | QMP3900-200      | POWER CORD        | 1    |                          | EN    |
| △ |      | QMP39A0-200      | POWER CORD        | 1    |                          | G     |

| ⚠ | Item | Part Number    | Part Name      | Q'ty | Description | Areas |
|---|------|----------------|----------------|------|-------------|-------|
| ⚠ |      | QMP39A0-200    | POWER CORD     | 1    |             | GI    |
| ⚠ |      | QMP5530-0085BS | POWER CORD     | 1    |             | BS    |
| ⚠ | 35   | QHS3876-162    | CORD STOPPER   | 1    |             | EF    |
| ⚠ |      | QHS3876-162    | CORD STOPPER   | 1    |             | EN    |
| ⚠ |      | QHS3876-162    | CORD STOPPER   | 1    |             | G     |
| ⚠ |      | QHS3876-162    | CORD STOPPER   | 1    |             | GI    |
| ⚠ |      | QHS3876-162BS  | CORD STOPPER   | 1    |             | BS    |
| ⚠ | 36   | E67000-019     | CAUTION LABEL  | 1    |             |       |
| — |      | E61029-005     | NUMBER LABEL   | 1    |             |       |
| — |      | QZL1031-101    | SEV LABEL      | 1    |             | EF    |
| — |      | E70027-001     | APPROVAL LABEL | 1    |             | EN    |

⚠ SAFETY PARTS

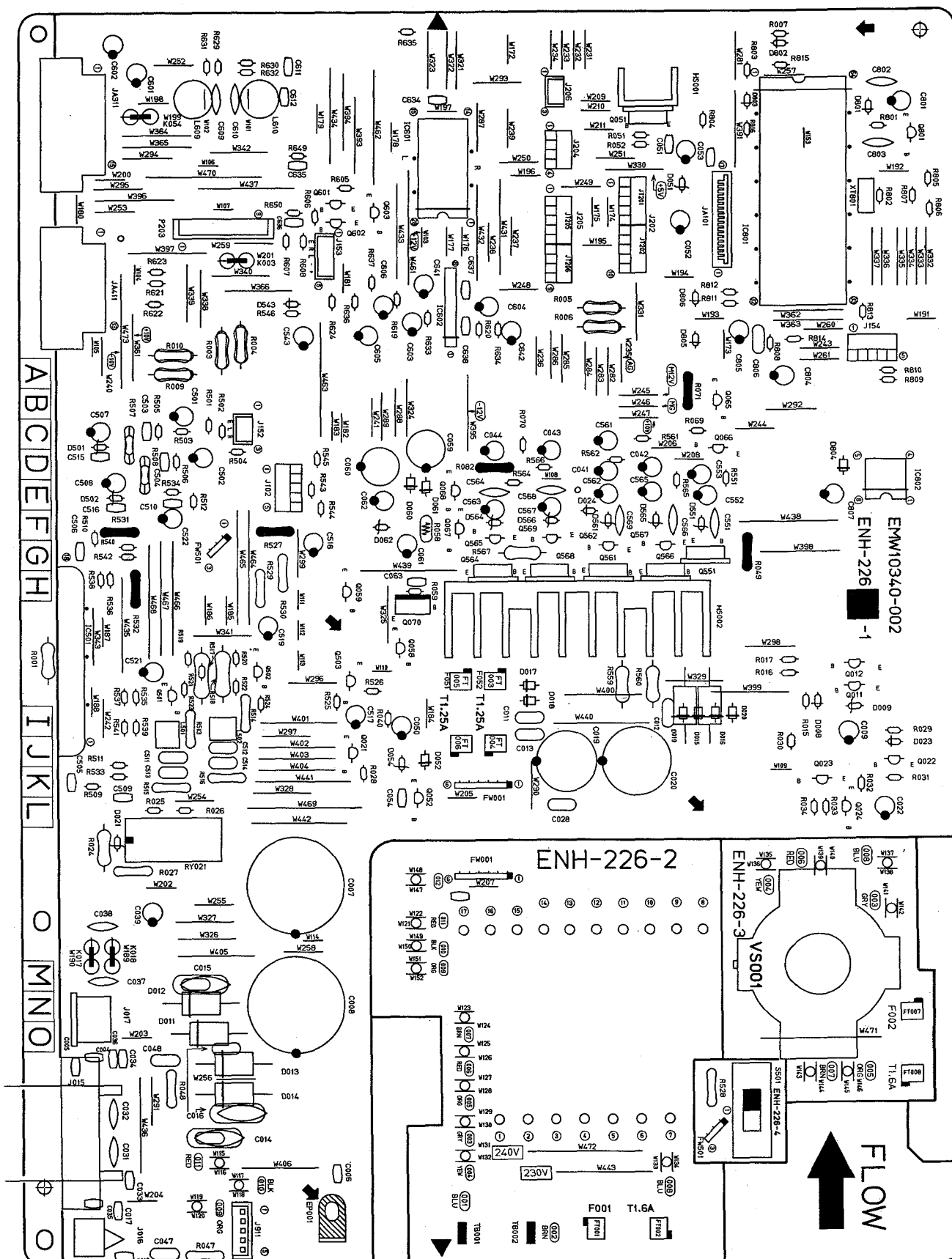
# The Marks for Designated Areas

EN .... Scandinavia    EF ..... Continental Europe    BS ..... the U.K.  
G ..... Germany    GI ..... Italy    No mark indicates all areas.

# Printed Circuit Board Ass'y and Parts List

## ■ ENH-226 □ Main PC Board Ass'y

Note: ENH-226 □ varies according to the areas employed. See note (1) when placing an order.





Note (1)

| PC Board Ass'y      | Version  | Designated Areas                  |
|---------------------|----------|-----------------------------------|
| ENH-226 <b>E</b> BS | BS       | the U.K.                          |
| ENH-226 <b>F</b>    | EN<br>EF | Scandinavia<br>Continental Europe |
| ENH-226 <b>G</b>    | G<br>GI  | Germany<br>Italy                  |

Transistors

| Δ | ITEM | PART NUMBER   | DESCRIPTION        | AREA |
|---|------|---------------|--------------------|------|
|   | Q011 | DTC114YS      | SILICON ROHM       |      |
|   | Q012 | DTC114YS      | SILICON ROHM       |      |
|   | Q021 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
|   | Q022 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
|   | Q023 | 2SA564A(R,S)  | SILICON            |      |
|   | Q024 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
|   | Q051 | 2SD1944(J,K)  | SILICON ROHM       |      |
|   | Q052 | 2SC1741A(Q,R) | SILICON ROHM       |      |
|   | Q058 | DTC114YS      | SILICON ROHM       |      |
|   | Q059 | DTC114YS      | SILICON ROHM       |      |
|   | Q065 | DTC144ES      | SILICON ROHM       |      |
|   | Q066 | DTA114YS      | SILICON ROHM       |      |
|   | Q067 | DTA144ES      | SILICON ROHM       |      |
|   | Q068 | DTC114YS      | SILICON ROHM       |      |
|   | Q070 | 2SB1357(E,F)  | SILICON ROHM       |      |
|   | Q501 | 2SA564A(R,S)  | SILICON            |      |
|   | Q502 | 2SA564A(R,S)  | SILICON            |      |
|   | Q503 | 2SC1685(Q,R)  | SILICON MATSUSHITA |      |
|   | Q551 | 2SD1944(J,K)  | SILICON ROHM       |      |
|   | Q561 | 2SD2061(E,F)  | SILICON ROHM       |      |
|   | Q562 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
|   | Q564 | 2SB1187(E,F)  | SILICON            |      |
|   | Q565 | 2SA564A(R,S)  | SILICON            |      |
|   | Q566 | 2SD2061(E,F)  | SILICON ROHM       |      |
|   | Q567 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
|   | Q568 | 2SB1187(E,F)  | SILICON            |      |
|   | Q569 | 2SA564A(R,S)  | SILICON            |      |
|   | Q601 | 2SD2144S(VW)  | SILICON ROHM       |      |
|   | Q602 | 2SD2144S(VW)  | SILICON ROHM       |      |
|   | Q603 | DTA144ES      | SILICON ROHM       |      |
|   | Q801 | DTC114YS      | SILICON ROHM       |      |

Δ SAFETY PARTS

I.C.s

| Δ | ITEM  | PART NUMBER    | DESCRIPTION  | AREA |
|---|-------|----------------|--------------|------|
|   | IC501 | STK4181MK5     | I.C. SANYO   |      |
|   | IC601 | TC9163N        | I.C. TOSHIBA |      |
|   | IC602 | BA15218N       | I.C. ROHM    |      |
|   | IC801 | UPD75104CW-290 | I.C. NEC     |      |
|   | IC802 | LB1639-CV      | I.C. SANYO   |      |

Δ SAFETY PARTS

Diodes

| Δ | ITEM | PART NUMBER | DESCRIPTION        | AREA |
|---|------|-------------|--------------------|------|
|   | D008 | 1SS119      | SILICON HITACHI    |      |
|   | D009 | MTZ5.1JC    | ZENER ROHM         |      |
|   | D011 | 30DL2FC     | SILICON NIDONINTER |      |
|   | D012 | 30DL2FC     | SILICON NIDONINTER |      |
|   | D013 | 30DL2FC     | SILICON NIDONINTER |      |
|   | D014 | 30DL2FC     | SILICON NIDONINTER |      |
|   | D015 | 1SR139-200  | SILICON ROHM       |      |
|   | D016 | 1SR139-200  | SILICON ROHM       |      |
|   | D017 | 1SR139-200  | SILICON ROHM       |      |
|   | D018 | 1SR139-200  | SILICON ROHM       |      |
|   | D019 | 1SR139-200  | SILICON ROHM       |      |
|   | D020 | 1SR139-200  | SILICON ROHM       |      |
|   | D021 | MTZ24JC     | ZENER ROHM         |      |
|   | D023 | 1SS119      | SILICON HITACHI    |      |
|   | D024 | 1SS119      | SILICON HITACHI    |      |
|   | D051 | MTZ6.2JC    | ZENER ROHM         |      |
|   | D052 | 1SR139-200  | SILICON ROHM       |      |
|   | D054 | MTZ7.5JC    | ZENER ROHM         |      |
|   | D060 | 1SR139-200  | SILICON ROHM       |      |
|   | D061 | 1SR139-200  | SILICON ROHM       |      |
|   | D062 | MTZ30JC     | ZENER ROHM         |      |
|   | D543 | 1SS119      | SILICON HITACHI    |      |
|   | D551 | RD13JSB3    | ZENER NEC          |      |
|   | D561 | RD13JSB3    | ZENER NEC          |      |
|   | D564 | RD13JSB3    | ZENER NEC          |      |

Δ SAFETY PARTS

Diodes

| Δ | ITEM | PART NUMBER | DESCRIPTION     | AREA |
|---|------|-------------|-----------------|------|
|   | D565 | MTZ11JC     | ZENER ROHM      |      |
|   | D566 | MTZ11JC     | ZENER ROHM      |      |
|   | D801 | 1SS119      | SILICON HITACHI |      |
|   | D802 | 1SS119      | SILICON HITACHI |      |
|   | D803 | 1SS119      | SILICON HITACHI |      |
|   | D804 | 1SR139-200  | SILICON ROHM    |      |
|   | D805 | 1SS119      | SILICON HITACHI |      |
|   | D806 | 1SS119      | SILICON HITACHI |      |

Δ SAFETY PARTS

Capacitors

| Δ | ITEM | PART NUMBER   | DESCRIPTION        | AREA |
|---|------|---------------|--------------------|------|
|   | C004 | QCVB1CM-103   | 0.01MF 16V CERAMIC | G    |
|   | C004 | QCVB1CM-103   | 0.01MF 16V CERAMIC | GI   |
|   | C005 | QCB1HK-331    | 330PF 50V CERAMIC  | G    |
|   | C005 | QCB1HK-331    | 330PF 50V CERAMIC  | GI   |
|   | C006 | QCB1HK-102    | 1000PF 50V CERAMIC | G    |
|   | C006 | QCB1HK-102    | 1000PF 50V CERAMIC | GI   |
|   | C007 | EEW5615-688J6 | 6800MF ELECTRO     |      |
|   | C008 | EEW5615-688J6 | 6800MF ELECTRO     |      |
|   | C009 | QETB1HM-225   | 2.2MF 50V ELECTRO  |      |
|   | C011 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | BS   |
|   | C011 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EF   |
|   | C011 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EN   |
|   | C011 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | G    |
|   | C011 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | GI   |
|   | C012 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | BS   |
|   | C012 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EF   |
|   | C012 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EN   |
|   | C012 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | G    |
|   | C012 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | GI   |
|   | C013 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | BS   |
|   | C013 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EF   |
|   | C013 | QFLB2AJ-103   | 0.01MF 100V MYLAR  | EN   |
|   | C013 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | G    |
|   | C013 | QFVB2AJ-104   | 0.1MF 100V T.FILM  | GI   |
|   | C014 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
|   | C015 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
|   | C016 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
|   | C017 | QCB1HK-331    | 330PF 50V CERAMIC  | G    |
|   | C017 | QCB1HK-331    | 330PF 50V CERAMIC  | GI   |
|   | C018 | QCB1HK-331    | 330PF 50V CERAMIC  | G    |
|   | C018 | QCB1HK-331    | 330PF 50V CERAMIC  | GI   |
|   | C019 | QETB1VM-228N  | 2200MF 35V ELECTRO |      |
|   | C020 | QETB1VM-338   | 3300MF 35V ELECTRO |      |
|   | C022 | QET41CM-476   | 47MF 16V ELECTRO   |      |
|   | C028 | QFLB1HJ-103   | 0.01MF 50V MYLAR   |      |
|   | C031 | QCF21HP-102   | 1000PF 50V CERAMIC | G    |
|   | C031 | QCF21HP-102   | 1000PF 50V CERAMIC | GI   |
|   | C032 | QCF21HP-102   | 1000PF 50V CERAMIC | G    |
|   | C032 | QCF21HP-102   | 1000PF 50V CERAMIC | GI   |
|   | C033 | QCVB1CM-103   | 0.01MF 16V CERAMIC | G    |
|   | C033 | QCVB1CM-103   | 0.01MF 16V CERAMIC | GI   |
|   | C034 | QCVB1CM-103   | 0.01MF 16V CERAMIC | G    |
|   | C034 | QCVB1CM-103   | 0.01MF 16V CERAMIC | GI   |
|   | C035 | QCB1HK-221    | 220PF 50V CERAMIC  | G    |
|   | C035 | QCB1HK-221    | 220PF 50V CERAMIC  | GI   |
|   | C036 | QCB1HK-221    | 220PF 50V CERAMIC  | G    |
|   | C036 | QCB1HK-221    | 220PF 50V CERAMIC  | GI   |
|   | C037 | QCS11HJ-470   | 47PF 50V CERAMIC   | G    |
|   | C037 | QCS11HJ-470   | 47PF 50V CERAMIC   | GI   |
|   | C038 | QCF11HP-103   | 0.01MF 50V CERAMIC | G    |
|   | C038 | QCF11HP-103   | 0.01MF 50V CERAMIC | GI   |
|   | C039 | QET41CM-107   | 100MF 16V ELECTRO  |      |
|   | C041 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
|   | C042 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
|   | C043 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
|   | C044 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
|   | C047 | QFLB1HJ-103   | 0.01MF 50V MYLAR   | G    |
|   | C047 | QFLB1HJ-103   | 0.01MF 50V MYLAR   | GI   |
|   | C048 | QFLB1HJ-103   | 0.01MF 50V MYLAR   | G    |
|   | C048 | QFLB1HJ-103   | 0.01MF 50V MYLAR   | GI   |
|   | C050 | QETB1HM-106   | 10MF 50V ELECTRO   |      |
|   | C051 | QCVB1CM-103   | 0.01MF 16V CERAMIC |      |
|   | C052 | QET41AM-107   | 100MF 10V ELECTRO  |      |
|   | C053 | QET41CM-226   | 22MF 16V ELECTRO   |      |
|   | C054 | QCVB1CM-103   | 0.01MF 16V CERAMIC |      |
|   | C059 | QETB1JM-227   | 220MF 63V ELECTRO  |      |
|   | C060 | QETB1JM-227   | 220MF 63V ELECTRO  |      |
|   | C061 | QET41HM-226   | 22MF 50V ELECTRO   |      |
|   | C062 | QET41HM-226   | 22MF 50V ELECTRO   |      |
|   | C063 | QCB1HK-102    | 1000PF 50V CERAMIC |      |
|   | C501 | EETB1HM-106E  | 10MF 50V ELECTRO   |      |
|   | C502 | EETB1HM-106E  | 10MF 50V ELECTRO   |      |
|   | C503 | QCB1HK-331    | 330PF 50V CERAMIC  |      |
|   | C504 | QCB1HK-331    | 330PF 50V CERAMIC  |      |
|   | C505 | QCB1HK-820    | 82PF 50V CERAMIC   |      |
|   | C506 | QCB1HK-820    | 82PF 50V CERAMIC   |      |
|   | C507 | EET2501-107E  | 100MF 50V ELECTRO  |      |
|   | C508 | EET2501-107E  | 100MF 50V ELECTRO  |      |
|   | C509 | QCSB1HK-4R7   | 4.7PF 50V CERAMIC  |      |
|   | C510 | QCSB1HK-4R7   | 4.7PF 50V CERAMIC  |      |

Δ SAFETY PARTS



## Capacitors

| Δ | ITEM | PART NUMBER  | DESCRIPTION        | AREA |
|---|------|--------------|--------------------|------|
|   | C511 | QFV81HJ-104  | 0.1MF 50V T.FILM   |      |
|   | C512 | QFV81HJ-104  | 0.1MF 50V T.FILM   |      |
|   | C513 | QFV81HJ-104  | 0.1MF 50V T.FILM   |      |
|   | C514 | QFV81HJ-104  | 0.1MF 50V T.FILM   |      |
|   | C515 | QCT30UJ-220  | 22PF 50V CERAMIC   |      |
|   | C516 | QCT30UJ-220  | 22PF 50V CERAMIC   |      |
|   | C517 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C518 | QETB1JM-476  | 47MF 63V ELECTRO   |      |
|   | C519 | QETB1HM-106  | 10MF 50V ELECTRO   |      |
|   | C521 | QET41HM-226  | 22MF 50V ELECTRO   |      |
|   | C522 | QET41HM-226  | 22MF 50V ELECTRO   |      |
|   | C543 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C551 | QCF21HP-102  | 1000PF 50V CERAMIC |      |
|   | C552 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C553 | QET41CM-476  | 47MF 16V ELECTRO   |      |
|   | C561 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C562 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C563 | QET41CM-226  | 22MF 16V ELECTRO   |      |
|   | C564 | QCF21HP-102  | 1000PF 50V CERAMIC |      |
|   | C565 | QET41EM-106  | 10MF 25V ELECTRO   |      |
|   | C566 | QCF21HP-102  | 1000PF 50V CERAMIC |      |
|   | C567 | QET41CM-226  | 22MF 16V ELECTRO   |      |
|   | C568 | QCF21HP-102  | 1000PF 50V CERAMIC |      |
|   | C569 | QCF21HP-102  | 1000PF 50V CERAMIC |      |
|   | C601 | QET41HM-475  | 4.7MF 50V ELECTRO  |      |
|   | C602 | QET41HM-475  | 4.7MF 50V ELECTRO  |      |
|   | C603 | QET41HM-475  | 4.7MF 50V ELECTRO  |      |
|   | C604 | QET41HM-475  | 4.7MF 50V ELECTRO  |      |
|   | C605 | QET41EM-476  | 47MF 25V ELECTRO   |      |
|   | C606 | QET41EM-476  | 47MF 25V ELECTRO   |      |
|   | C611 | QCB1HK-471   | 470PF 50V CERAMIC  |      |
|   | C612 | QCB1HK-471   | 470PF 50V CERAMIC  |      |
|   | C635 | QCB1HK-101   | 100PF 50V CERAMIC  | G    |
|   | C635 | QCB1HK-101   | 100PF 50V CERAMIC  | GI   |
|   | C636 | QCB1HK-101   | 100PF 50V CERAMIC  | G    |
|   | C636 | QCB1HK-101   | 100PF 50V CERAMIC  | GI   |
|   | C637 | QCB1HK-101   | 100PF 50V CERAMIC  | G    |
|   | C637 | QCB1HK-101   | 100PF 50V CERAMIC  | GI   |
|   | C638 | QCB1HK-101   | 100PF 50V CERAMIC  | G    |
|   | C638 | QCB1HK-101   | 100PF 50V CERAMIC  | GI   |
|   | C641 | QETB1HM-106  | 10MF 50V ELECTRO   |      |
|   | C642 | QETB1HM-106  | 10MF 50V ELECTRO   |      |
|   | C801 | QETB1HM-225  | 2.2MF 50V ELECTRO  |      |
|   | C802 | QCF11HP-103  | 0.01MF 50V CERAMIC |      |
|   | C803 | QCF11HP-103  | 0.01MF 50V CERAMIC |      |
|   | C804 | QET41AM-477  | 470MF 10V ELECTRO  |      |
|   | C805 | EETB1AM-107E | 100MF 10V ELECTRO  |      |
|   | C806 | QCO205-155   | 1.5MF 25V CERAMIC  |      |
|   | C807 | QET41AM-476  | 47MF 10V ELECTRO   |      |

Δ IS SAFETY PARTS

## Resistors

| Δ | ITEM | PART NUMBER    | DESCRIPTION      | AREA |
|---|------|----------------|------------------|------|
|   | R001 | QRX022J-R22A   | 0.22 2W M.FILM   |      |
|   | R003 | QRG012J-120A   | 12 1W O.M.FILM   |      |
|   | R004 | QRG012J-120A   | 12 1W O.M.FILM   |      |
|   | R005 | QRG012J-100AM  | 10 1W O.M.FILM   |      |
|   | R006 | QRG012J-100AM  | 10 1W O.M.FILM   |      |
|   | R007 | QRD167J-221    | 220 1/6W CARBON  |      |
|   | R009 | QRG012J-180A   | 18 1W O.M.FILM   |      |
|   | R010 | QRG012J-180A   | 18 1W O.M.FILM   |      |
|   | R015 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R016 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R017 | QRD167J-102    | 1K 1/6W CARBON   |      |
|   | R024 | QRG012J-821AM  | 820 1W O.M.FILM  |      |
|   | R025 | QRD167J-823    | 82K 1/6W CARBON  |      |
|   | R026 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R027 | QRD148J-680    | 68 1/4W CARBON   |      |
|   | R028 | QRD167J-152    | 1.5K 1/6W CARBON |      |
|   | R029 | QRD167J-222    | 2.2K 1/6W CARBON |      |
|   | R030 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R031 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R032 | QRD167J-473    | 47K 1/6W CARBON  |      |
|   | R033 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R034 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R040 | QRD167J-223    | 22K 1/6W CARBON  |      |
|   | R047 | QRD148J-100    | 10 1/4W CARBON   | G    |
|   | R047 | QRD148J-100    | 10 1/4W CARBON   | GI   |
|   | R048 | QRD148J-100    | 10 1/4W CARBON   | G    |
|   | R048 | QRD148J-100    | 10 1/4W CARBON   | GI   |
|   | R049 | QRZ0077-4R7    | 4.7 1/4W FUSIBLE |      |
|   | R051 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R052 | QRD167J-103    | 10K 1/6W CARBON  |      |
|   | R058 | PTH61G25AR4R7M | POSISTOR         |      |
|   | R059 | QRD167J-332    | 3.3K 1/6W CARBON |      |
|   | R069 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R070 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R071 | QRZ0077-4R7    | 4.7 1/4W FUSIBLE |      |

Δ IS SAFETY PARTS

## Resistors

| Δ | ITEM | PART NUMBER  | DESCRIPTION          | AREA |
|---|------|--------------|----------------------|------|
|   | R082 | QRZ0077-100  | 10 1/4W FUSIBLE      |      |
|   | R501 | QRD167J-474  | 470K 1/6W CARBON     |      |
|   | R502 | QRD167J-474  | 470K 1/6W CARBON     |      |
|   | R503 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R504 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R505 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R506 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R507 | QRD14CJ-751S | 750 1/4W UNF. CARBON |      |
|   | R508 | QRD14CJ-751S | 750 1/4W UNF. CARBON |      |
|   | R509 | QRD167J-561  | 560 1/6W CARBON      |      |
|   | R510 | QRD167J-561  | 560 1/6W CARBON      |      |
|   | R511 | QRD167J-823  | 82K 1/6W CARBON      |      |
|   | R512 | QRD167J-823  | 82K 1/6W CARBON      |      |
|   | R513 | QRD148J-100  | 10 1/4W CARBON       |      |
|   | R514 | QRD148J-100  | 10 1/4W CARBON       |      |
|   | R515 | QRD148J-100  | 10 1/4W CARBON       |      |
|   | R516 | QRD148J-100  | 10 1/4W CARBON       |      |
|   | R517 | QRX022J-R22A | 0.22 2W M.FILM       |      |
|   | R518 | QRX022J-R22A | 0.22 2W M.FILM       |      |
|   | R519 | QRD167J-393  | 39K 1/6W CARBON      |      |
|   | R520 | QRD167J-393  | 39K 1/6W CARBON      |      |
|   | R521 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R522 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R523 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R524 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R525 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R526 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R527 | QRZ0077-101  | 100 1/4W FUSIBLE     |      |
|   | R528 | QRD148J-561  | 560 1/4W CARBON      |      |
|   | R529 | QRD148J-272  | 2.7K 1/4W CARBON     |      |
|   | R530 | QRD148J-272  | 2.7K 1/4W CARBON     |      |
|   | R531 | QRZ0077-100  | 10 1/4W FUSIBLE      |      |
|   | R532 | QRZ0077-100  | 10 1/4W FUSIBLE      |      |
|   | R533 | QRD167J-163  | 16K 1/6W CARBON      |      |
|   | R534 | QRD167J-163  | 16K 1/6W CARBON      |      |
|   | R535 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R536 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R537 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R538 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R539 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R540 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R541 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R542 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R543 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R544 | QRD167J-154  | 150K 1/6W CARBON     |      |
|   | R545 | QRD167J-303  | 30K 1/6W CARBON      |      |
|   | R546 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R551 | QRD167J-152  | 1.5K 1/6W CARBON     |      |
|   | R559 | QRX012J-R68A | 0.68 1W M.FILM       |      |
|   | R560 | QRX012J-R68A | 0.68 1W M.FILM       |      |
|   | R561 | QRD167J-152  | 1.5K 1/6W CARBON     |      |
|   | R562 | QRD167J-471  | 470 1/6W CARBON      |      |
|   | R564 | QRD167J-222  | 2.2K 1/6W CARBON     |      |
|   | R565 | QRD167J-222  | 2.2K 1/6W CARBON     |      |
|   | R566 | QRD167J-222  | 2.2K 1/6W CARBON     |      |
|   | R567 | QRX012J-R56A | 0.56 1W M.FILM       |      |
|   | R605 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R606 | QRD167J-103  | 10K 1/6W CARBON      |      |
|   | R607 | QRD167J-222  | 2.2K 1/6W CARBON     |      |
|   | R608 | QRD167J-222  | 2.2K 1/6W CARBON     |      |
|   | R619 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R620 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R621 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R622 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R623 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R624 | QRD167J-562  | 5.6K 1/6W CARBON     |      |
|   | R629 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R630 | QRD167J-102  | 1K 1/6W CARBON       |      |
|   | R631 | QRD167J-752  | 7.5K 1/6W CARBON     |      |
|   | R632 | QRD167J-752  | 7.5K 1/6W CARBON     |      |
|   | R633 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R634 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R635 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R636 | QRD167J-331  | 330 1/6W CARBON      |      |
|   | R637 | QRD167J-331  | 330 1/6W CARBON      |      |
|   | R649 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R650 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R801 | QRD167J-104  | 100K 1/6W CARBON     |      |
|   | R802 | QRD167J-105  | 1M 1/6W CARBON       |      |
|   | R803 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R804 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R805 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R806 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R807 | QRD167J-221  | 220 1/6W CARBON      |      |
|   | R808 | QRD167J-101  | 100 1/6W CARBON      |      |
|   | R809 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R810 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R811 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R812 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R813 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R814 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R815 | QRD167J-223  | 22K 1/6W CARBON      |      |
|   | R816 | QRD167J-104  | 100K 1/6W CARBON     |      |

Δ IS SAFETY PARTS

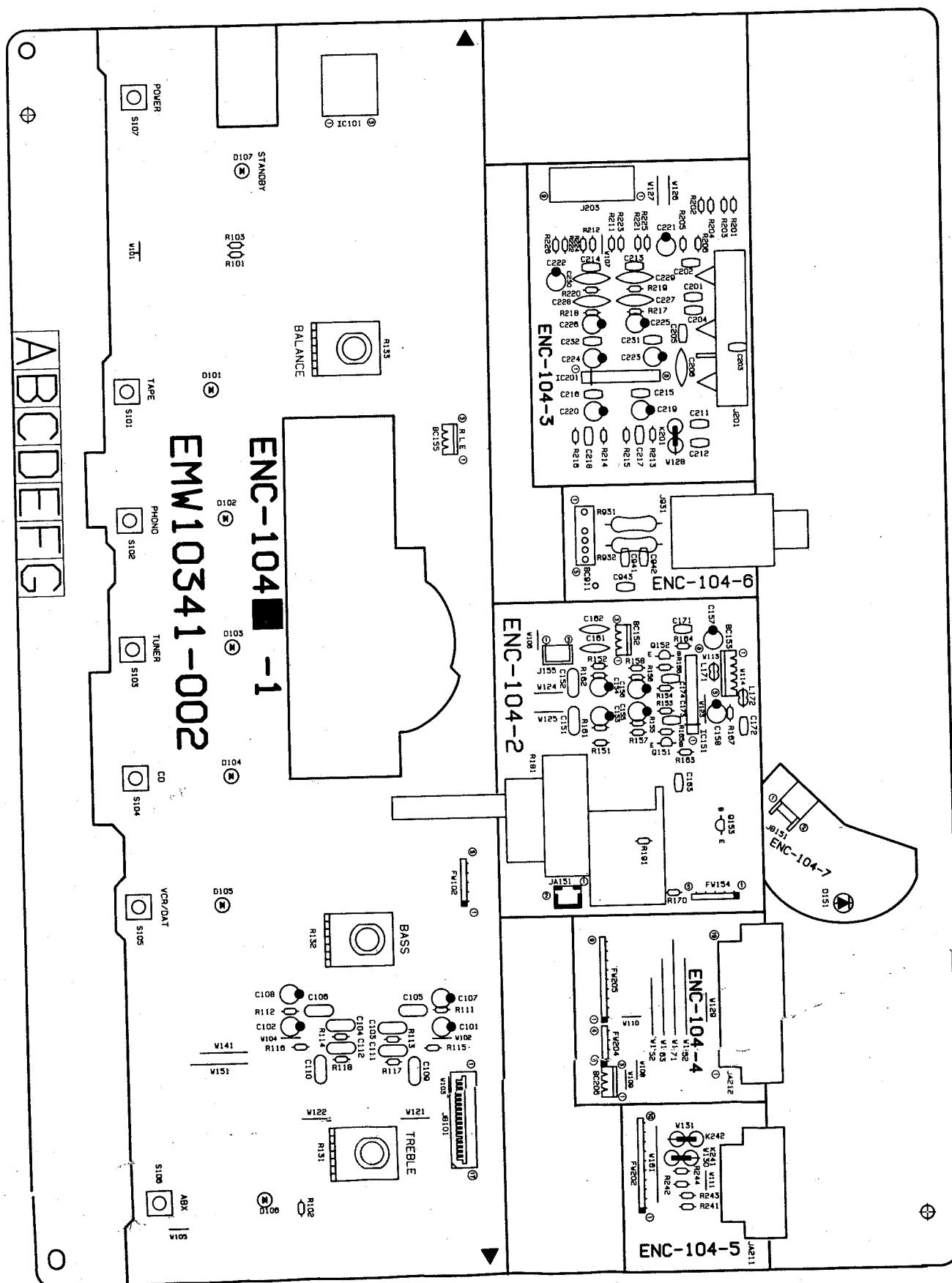
Others

| ITEM  | PART NUMBER    | DESCRIPTION      | AREA |
|-------|----------------|------------------|------|
| J015  | SBSG30087      | SCREW            |      |
| J015  | EMB90TV-401A   | SPEAKER TERMINAL | BS   |
| J015  | EMB90TV-401A   | SPEAKER TERMINAL | EF   |
| J015  | EMB90TV-401A   | SPEAKER TERMINAL | EN   |
| J015  | EMB90TV-402A   | SPEAKER TERMINAL | G    |
| J015  | EMB90TV-402A   | SPEAKER TERMINAL | GI   |
| J016  | EMN00TV-218AJ2 | 2P PIN JACK      |      |
| J017  | QMA1221-009    | DC JACK          |      |
| J102  | EMV7122-005    | CONNECTOR(5PIN)  |      |
| J152  | EMV5109-003A   | PLUG ASSY(3PIN)  |      |
| J153  | EMV5109-005A   | PLUG ASSY(5PIN)  |      |
| J154  | EMV7122-005    | CONNECTOR(5PIN)  |      |
| J204  | EMV7122-004    | CONNECTOR(4PIN)  |      |
| J206  | EMV5109-003A   | PLUG ASSY(3PIN)  |      |
| J911  | EMV5133-005K   | PLUG ASSY(5PIN)  |      |
| K003  | ENZ8101-007    | INDUCTOR         | G    |
| K003  | ENZ8101-007    | INDUCTOR         | GI   |
| K017  | ENZ8101-007    | INDUCTOR         | G    |
| K017  | ENZ8101-007    | INDUCTOR         | GI   |
| K018  | ENZ8101-007    | INDUCTOR         | G    |
| K018  | ENZ8101-007    | INDUCTOR         | GI   |
| K054  | ENZ8101-007    | INDUCTOR         | G    |
| K054  | ENZ8101-007    | INDUCTOR         | GI   |
| L501  | EQL0011-R45J1  | INDUCTOR         |      |
| L502  | EQL0011-R45J1  | INDUCTOR         |      |
| P203  | EMV5125-009    | PLUG ASSY(9PIN)  |      |
| S501  | QSS2201-005    | SLIDE SWITCH     |      |
| EP001 | EMZ4002-001    | IM EARTH PLATE   | G    |
| EP001 | EMZ4002-001    | IM EARTH PLATE   | GI   |
| FS801 | E3400-431      | SPACER           |      |
| FT001 | VMZ0087-001    | FUSE CLIP        |      |
| FT002 | VMZ0087-001    | FUSE CLIP        |      |
| FT003 | VMZ0087-001    | FUSE CLIP        |      |
| FT004 | VMZ0087-001    | FUSE CLIP        |      |
| FT005 | VMZ0087-001    | FUSE CLIP        |      |
| FT006 | VMZ0087-001    | FUSE CLIP        |      |
| FW001 | EWR36D-20SS    | FLAT WIRE(6PIN)  |      |
| FW501 | EWR33D-30SS    | FLAT WIRE(3PIN)  |      |
| HS001 | E70306-005     | HEAT SINK        |      |
| HS002 | E75085-001     | HEAT SINK        |      |
| JA101 | EMV7123-017    | CONNECTOR(17PIN) |      |
| JA311 | EMV7127-015    | CONNECTOR(15PIN) |      |
| JA411 | EMV7127-013    | CONNECTOR(13PIN) |      |
| JT201 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| JT202 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| JT205 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| JT206 | EMV7122-004    | CONNECTOR(4PIN)  |      |
| RY021 | ESK7D24-2120   | RELAY            |      |
| TB001 | EMZ4001-001    | TAB              |      |
| TB002 | EMZ4001-001    | TAB              |      |
| XT801 | ECX0004-194KM  | RESONATOR        |      |

△ IS SAFETY PARTS

**■ ENC-104** ☐ Front, Phono EQ & Volume PC Board Assy  
**Note:** ENC-104 ☐ varies according to the areas employed. See note (1) when placing an order.

**Note:** ENC-104 ☐ varies according to the areas employed. See note (1) when placing an order.



## Note (1)

| PC Board Ass'y   | Version  | Designated Areas                  |
|------------------|----------|-----------------------------------|
| ENC-104 <b>A</b> | EN<br>EF | Scandinavia<br>Continental Europe |
| ENC-104 <b>B</b> | G<br>GI  | Germany<br>Italy                  |
| ENC-104 <b>C</b> | BS       | the U.K.                          |

## Transistors

| ITEM | PART NUMBER  | DESCRIPTION  | AREA |
|------|--------------|--------------|------|
| Q151 | 2SD2144S(VW) | SILICON ROHM |      |
| Q152 | 2SD2144S(VW) | SILICON ROHM |      |
| Q153 | DTC114YS     | SILICON ROHM |      |

△ SAFETY PARTS

## I.C.s

| ITEM  | PART NUMBER | DESCRIPTION   | AREA |
|-------|-------------|---------------|------|
| IC101 | SPS-420-1   | I.C. SANYO    |      |
| IC151 | BA15218N    | I.C. ROHM     |      |
| IC201 | NJM4580LD   | I.C. DAINICHI |      |

△ SAFETY PARTS

## Diodes

| ITEM | PART NUMBER  | DESCRIPTION | AREA |
|------|--------------|-------------|------|
| D101 | SLR-342VC3F  | L.E.D. ROHM |      |
| D102 | SLR-342VC3F  | L.E.D. ROHM |      |
| D103 | SLR-342VC3F  | L.E.D. ROHM |      |
| D104 | SLR-342VC3F  | L.E.D. ROHM |      |
| D105 | SLR-342VC3F  | L.E.D. ROHM |      |
| D106 | SLR-342DCA47 | L.E.D. ROHM |      |
| D107 | SLA-580LT3F  | L.E.D. ROHM | BS   |
| D107 | SLR-342VC3F  | L.E.D. ROHM | EF   |
| D107 | SLR-342VC3F  | L.E.D. ROHM | EN   |
| D107 | SLR-342VC3F  | L.E.D. ROHM | G    |
| D107 | SLR-342VC3F  | L.E.D. ROHM | GI   |
| D151 | LN282RPX     | L.E.D.      |      |

△ SAFETY PARTS

## Capacitors

| ITEM | PART NUMBER | DESCRIPTION         | AREA |
|------|-------------|---------------------|------|
| C101 | QET41HM-105 | 1MF 50V ELECTRO     |      |
| C102 | QET41HM-105 | 1MF 50V ELECTRO     |      |
| C103 | QFLB1HJ-823 | 0.082MF 50V MYLAR   |      |
| C104 | QFLB1HJ-823 | 0.082MF 50V MYLAR   |      |
| C105 | QFLB1HJ-153 | 0.015MF 50V MYLAR   |      |
| C106 | QFLB1HJ-153 | 0.015MF 50V MYLAR   |      |
| C107 | QET41HM-105 | 1MF 50V ELECTRO     |      |
| C108 | QET41HM-105 | 1MF 50V ELECTRO     |      |
| C109 | QFLB1HJ-332 | 3300PF 50V MYLAR    |      |
| C110 | QFLB1HJ-332 | 3300PF 50V MYLAR    |      |
| C111 | QFLB1HJ-183 | 0.018MF 50V MYLAR   |      |
| C112 | QFLB1HJ-183 | 0.018MF 50V MYLAR   |      |
| C112 | QFLB1HJ-683 | 0.068MF 50V MYLAR   |      |
| C112 | QFLB1HJ-683 | 0.068MF 50V MYLAR   |      |
| C153 | QET41AM-107 | 100MF 10V ELECTRO   |      |
| C154 | QET41AM-107 | 100MF 10V ELECTRO   |      |
| C155 | QET41HM-474 | 0.47MF 50V ELECTRO  |      |
| C156 | QET41HM-474 | 0.47MF 50V ELECTRO  |      |
| C157 | QET41CM-476 | 47MF 16V ELECTRO    |      |
| C158 | QET41CM-476 | 47MF 16V ELECTRO    |      |
| C161 | QCS11HJ-470 | 47PF 50V CERAMIC    | G    |
| C161 | QCS11HJ-470 | 47PF 50V CERAMIC    | GI   |
| C162 | QCS11HJ-470 | 47PF 50V CERAMIC    | G    |
| C162 | QCS11HJ-470 | 47PF 50V CERAMIC    | GI   |
| C163 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |
| C201 | QCB1HK-331  | 330PF 50V CERAMIC   |      |
| C202 | QCB1HK-331  | 330PF 50V CERAMIC   |      |
| C206 | QCC21EM-473 | 0.047MF 25V CERAMIC |      |
| C211 | QCB1HK-331  | 330PF 50V CERAMIC   |      |
| C212 | QCB1HK-331  | 330PF 50V CERAMIC   |      |
| C213 | QCB1HK-101  | 100PF 50V CERAMIC   |      |
| C214 | QCB1HK-101  | 100PF 50V CERAMIC   |      |
| C215 | QCB1HK-101  | 100PF 50V CERAMIC   |      |
| C216 | QCB1HK-101  | 100PF 50V CERAMIC   |      |
| C217 | QCB1HK-101  | 100PF 50V CERAMIC   | BS   |

△ SAFETY PARTS

## Capacitors

| ITEM | PART NUMBER | DESCRIPTION         | AREA |
|------|-------------|---------------------|------|
| C217 | QCB1HK-101  | 100PF 50V CERAMIC   | EF   |
| C217 | QCB1HK-101  | 100PF 50V CERAMIC   | EN   |
| C217 | QCB1HK-221  | 220PF 50V CERAMIC   | G    |
| C217 | QCB1HK-221  | 220PF 50V CERAMIC   | GI   |
| C218 | QCB1HK-101  | 100PF 50V CERAMIC   | BS   |
| C218 | QCB1HK-101  | 100PF 50V CERAMIC   | EF   |
| C218 | QCB1HK-101  | 100PF 50V CERAMIC   | EN   |
| C218 | QCB1HK-221  | 220PF 50V CERAMIC   | G    |
| C218 | QCB1HK-221  | 220PF 50V CERAMIC   | GI   |
| C219 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
| C220 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
| C221 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
| C222 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
| C223 | QET41EM-476 | 47MF 25V ELECTRO    |      |
| C224 | QET41EM-476 | 47MF 25V ELECTRO    |      |
| C225 | QET41EM-107 | 100MF 25V ELECTRO   |      |
| C226 | QET41EM-107 | 100MF 25V ELECTRO   |      |
| C227 | QCY21HK-682 | 6800PF 50V CERAMIC  |      |
| C228 | QCY21HK-682 | 6800PF 50V CERAMIC  |      |
| C229 | QCY21HK-182 | 1800PF 50V CERAMIC  |      |
| C230 | QCY21HK-182 | 1800PF 50V CERAMIC  |      |
| C231 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |
| C232 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |
| C941 | QCB1HK-471  | 470PF 50V CERAMIC   | G    |
| C941 | QCB1HK-471  | 470PF 50V CERAMIC   | GI   |
| C942 | QCB1HK-471  | 470PF 50V CERAMIC   | G    |
| C942 | QCB1HK-471  | 470PF 50V CERAMIC   | GI   |
| C943 | QCG1HK-102  | 1000PF 50V CERAMIC  | G    |
| C943 | QCG1HK-102  | 1000PF 50V CERAMIC  | GI   |

△ SAFETY PARTS

## Resistors

| ITEM | PART NUMBER    | DESCRIPTION      | AREA |
|------|----------------|------------------|------|
| R101 | QRD167J-331    | 330 1/6W CARBON  |      |
| R102 | QRD167J-181    | 180 1/6W CARBON  |      |
| R103 | QRD167J-331    | 330 1/6W CARBON  |      |
| R111 | QRD167J-203    | 20K 1/6W CARBON  |      |
| R112 | QRD167J-203    | 20K 1/6W CARBON  |      |
| R113 | QRD167J-362    | 3.6K 1/6W CARBON |      |
| R114 | QRD167J-362    | 3.6K 1/6W CARBON |      |
| R115 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R116 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R117 | QRD167J-821    | 820 1/6W CARBON  |      |
| R118 | QRD167J-821    | 820 1/6W CARBON  |      |
| R131 | QVJB84C-E15BJ3 | 100K VARIABLE    |      |
| R132 | QVJB84C-E15BJ3 | 100K VARIABLE    |      |
| R133 | QVJA84W-E15CJ3 | 100K VARIABLE    |      |
| R151 | QRD167J-102    | 2.2K 1/6W CARBON |      |
| R152 | QRD167J-102    | 2.2K 1/6W CARBON |      |
| R153 | QRD167J-474    | 470K 1/6W CARBON |      |
| R154 | QRD167J-474    | 470K 1/6W CARBON |      |
| R155 | QRD167J-331    | 330 1/6W CARBON  |      |
| R156 | QRD167J-331    | 330 1/6W CARBON  |      |
| R157 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R158 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R161 | QRD167J-822    | 8.2K 1/6W CARBON |      |
| R162 | QRD167J-822    | 8.2K 1/6W CARBON |      |
| R163 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R164 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R165 | QRD167J-104    | 100K 1/6W CARBON |      |
| R166 | QRD167J-104    | 100K 1/6W CARBON |      |
| R167 | QRD167J-472    | 4.7K 1/6W CARBON |      |
| R170 | QRD167J-122    | 1.2K 1/6W CARBON |      |
| R171 | QRD167J-223    | 22K 1/6W CARBON  |      |
| R172 | QRD167J-223    | 22K 1/6W CARBON  |      |
| R181 | QVDB91B-E15F   | 100K VARIABLE    |      |
| R191 | QRD167J-104    | 100K 1/6W CARBON |      |
| R201 | QRD167J-183    | 18K 1/6W CARBON  |      |
| R202 | QRD167J-183    | 18K 1/6W CARBON  |      |
| R203 | QRD167J-823    | 82K 1/6W CARBON  |      |
| R204 | QRD167J-823    | 82K 1/6W CARBON  |      |
| R205 | QRD167J-102    | 1K 1/6W CARBON   |      |
| R206 | QRD167J-102    | 1K 1/6W CARBON   |      |
| R211 | QRD167J-562    | 5.6K 1/6W CARBON |      |
| R212 | QRD167J-562    | 5.6K 1/6W CARBON |      |
| R213 | QRD167J-222    | 2.2K 1/6W CARBON |      |
| R214 | QRD167J-222    | 2.2K 1/6W CARBON |      |
| R215 | QRD167J-473    | 47K 1/6W CARBON  |      |
| R216 | QRD167J-473    | 47K 1/6W CARBON  |      |
| R217 | QRD167J-474    | 470K 1/6W CARBON |      |
| R218 | QRD167J-474    | 470K 1/6W CARBON |      |
| R219 | QRD167J-393    | 39K 1/6W CARBON  |      |
| R220 | QRD167J-393    | 39K 1/6W CARBON  |      |
| R221 | QRD167J-621    | 620 1/6W CARBON  |      |
| R222 | QRD167J-621    | 620 1/6W CARBON  |      |
| R223 | QRD167J-122    | 1.2K 1/6W CARBON |      |
| R224 | QRD167J-122    | 1.2K 1/6W CARBON |      |
| R225 | QRD167J-331    | 330 1/6W CARBON  |      |
| R226 | QRD167J-271    | 270 1/6W CARBON  |      |
| R241 | QRD167J-222    | 2.2K 1/6W CARBON |      |

△ SAFETY PARTS

## Resistors

| △ | ITEM | PART NUMBER  | DESCRIPTION      | AREA |
|---|------|--------------|------------------|------|
|   | R242 | QRD167J-222  | 2.2K 1/6W CARBON |      |
|   | R243 | QRD167J-562  | 5.6K 1/6W CARBON |      |
|   | R244 | QRD167J-562  | 5.6K 1/6W CARBON |      |
| △ | R931 | QRG022J-331A | 330 2W O.M.FILM  |      |
| △ | R932 | QRG022J-331A | 330 2W O.M.FILM  |      |

△ SAFETY PARTS

## Others

| △ | ITEM | PART NUMBER  | DESCRIPTION     | AREA |
|---|------|--------------|-----------------|------|
|   | J155 | EMV5109-003A | PLUG ASSY(3PIN) |      |
|   | J201 | EMN00TV-608A | 6P PIN JACK     |      |
|   | J203 | EMV7125-009R | CONNECTOR(9PIN) |      |
|   | J931 | QMS6312-024  | HEADPHONE JACK  |      |
|   | K201 | ENZ8101-007  | INDUCTOR        | G    |
|   | K201 | ENZ8101-007  | INDUCTOR        | GI   |
|   | K241 | ENZ8101-007  | INDUCTOR        | G    |
|   | K241 | ENZ8101-007  | INDUCTOR        | GI   |
|   | K242 | ENZ8101-007  | INDUCTOR        | G    |
|   | K242 | ENZ8101-007  | INDUCTOR        | GI   |

△ SAFETY PARTS

## Others

| △ | ITEM  | PART NUMBER   | DESCRIPTION          | AREA |
|---|-------|---------------|----------------------|------|
|   | S101  | ESP0001-023J5 | TACT SWITCH(TAPE)    |      |
|   | S102  | ESP0001-023J5 | TACT SWITCH(PHONO)   |      |
|   | S103  | ESP0001-023J5 | TACT SWITCH(TUNER)   |      |
|   | S104  | ESP0001-023J5 | TACT SWITCH(CD)      |      |
|   | S105  | ESP0001-023J5 | TACT SWITCH(VCR/DAT) |      |
|   | S106  | ESP0001-023J5 | TACT SWITCH(ABX)     |      |
|   | S107  | ESP0001-023J5 | TACT SWITCH(POWER)   |      |
|   | BC152 | EWS293-0130   | SOCKET WIRE(3PIN)    |      |
|   | BC153 | EWS295-0730   | SOCKET WIRE(5PIN)    |      |
|   | BC155 | EWS293-0110   | SOCKET WIRE(3PIN)    |      |
|   | BC206 | EWS293-0112   | SOCKET WIRE(3PIN)    |      |
|   | BC911 | EWS245-011T   | SOCKET WIRE(5PIN)    |      |
|   | FW102 | EWR35D-30LS   | FLAT WIRE(5PIN)      |      |
|   | FW154 | EWR35D-13LS   | FLAT WIRE(5PIN)      |      |
|   | FW202 | EWR3AD-20LS   | FLAT WIRE(10PIN)     |      |
|   | FW204 | EWR3AD-13LS   | FLAT WIRE(4PIN)      |      |
|   | FW205 | EWR39D-16LS   | FLAT WIRE(9PIN)      |      |
|   | JA151 | EMV5103-002A  | PLUG ASSY(2PIN)      |      |
|   | JA211 | EMV7127-011   | CONNECTOR(11PIN)     |      |
|   | JA212 | EMV7127-019   | CONNECTOR(19PIN)     |      |
|   | JB101 | EMV7123-017   | CONNECTOR(17PIN)     |      |
|   | JB151 | EMV5103-002B  | PLUG ASSY(2PIN)      |      |

△ SAFETY PARTS

## Accessories List

| △ | Part Number    | Part Name         | Q'ty | Description | Areas |
|---|----------------|-------------------|------|-------------|-------|
|   | E30580-2008ABS | INSTRUCTION BOOK  | 1    |             | BS    |
|   | E30580-2009A   | INSTRUCTION BOOK  | 1    |             | EN    |
|   | E30580-2010A   | INSTRUCTION BOOK  | 1    |             | EF    |
|   | E30580-2010A   | INSTRUCTION BOOK  | 1    |             | G     |
|   | E30580-2010A   | INSTRUCTION BOOK  | 1    |             | GI    |
|   | BT-20134       | WARRANTY CARD     | 1    |             | G     |
|   | BT20060        | WARRANTY CARD     | 1    |             | BS    |
|   | BT-20066A      | EEC AGENCY        | 1    |             | BS    |
|   | E43486-340A    | SAFETY SHEET      | 1    |             | BS    |
|   | EWP502-005K    | BILT-IN ANTENNA   | 1    |             | BS    |
|   | EWP502-005K    | BILT-IN ANTENNA   | 1    |             | EF    |
|   | EWP502-005K    | BILT-IN ANTENNA   | 1    |             | EN    |
|   | EWP502-005K    | BILT-IN ANTENNA   | 1    |             | GI    |
|   | E67007-001     | ANTENNA WIRE      | 1    |             | G     |
|   | E35497-019     | CAUTION SHEET     | 1    | 220V        | BS    |
| △ | E04056         | SIEMENS PLUG      | 1    |             | BS    |
|   | EQB4001-015    | LOOP ANTENNA      | 1    |             |       |
|   | EMZ2001-014    | ADAPTOR           | 1    |             | BS    |
|   | EMZ2001-014    | ADAPTOR           | 1    |             | EF    |
|   | EMZ2001-014    | ADAPTOR           | 1    |             | EN    |
|   | EMZ2001-014    | ADAPTOR           | 1    |             | GI    |
|   | RM-SE99U       | REMOTE CONTROLLER | 1    |             |       |
|   | UM-4NJ-2PSA    | BATTERY           | 2    |             |       |
|   | E43486-519A    | CAUTION SHEET     | 1    |             |       |
|   | QPGA020-02505B | ENVELOPE          | 1    |             | BS    |
|   | QPGA025-03505  | ENVELOPE          | 1    |             | EF    |
|   | QPGA025-03505  | ENVELOPE          | 1    |             | EN    |
|   | QPGA025-03505  | ENVELOPE          | 1    |             | G     |
|   | QPGA025-03505  | ENVELOPE          | 1    |             | GI    |
|   | QPGA025-03505B | ENVELOPE          | 1    |             | BS    |

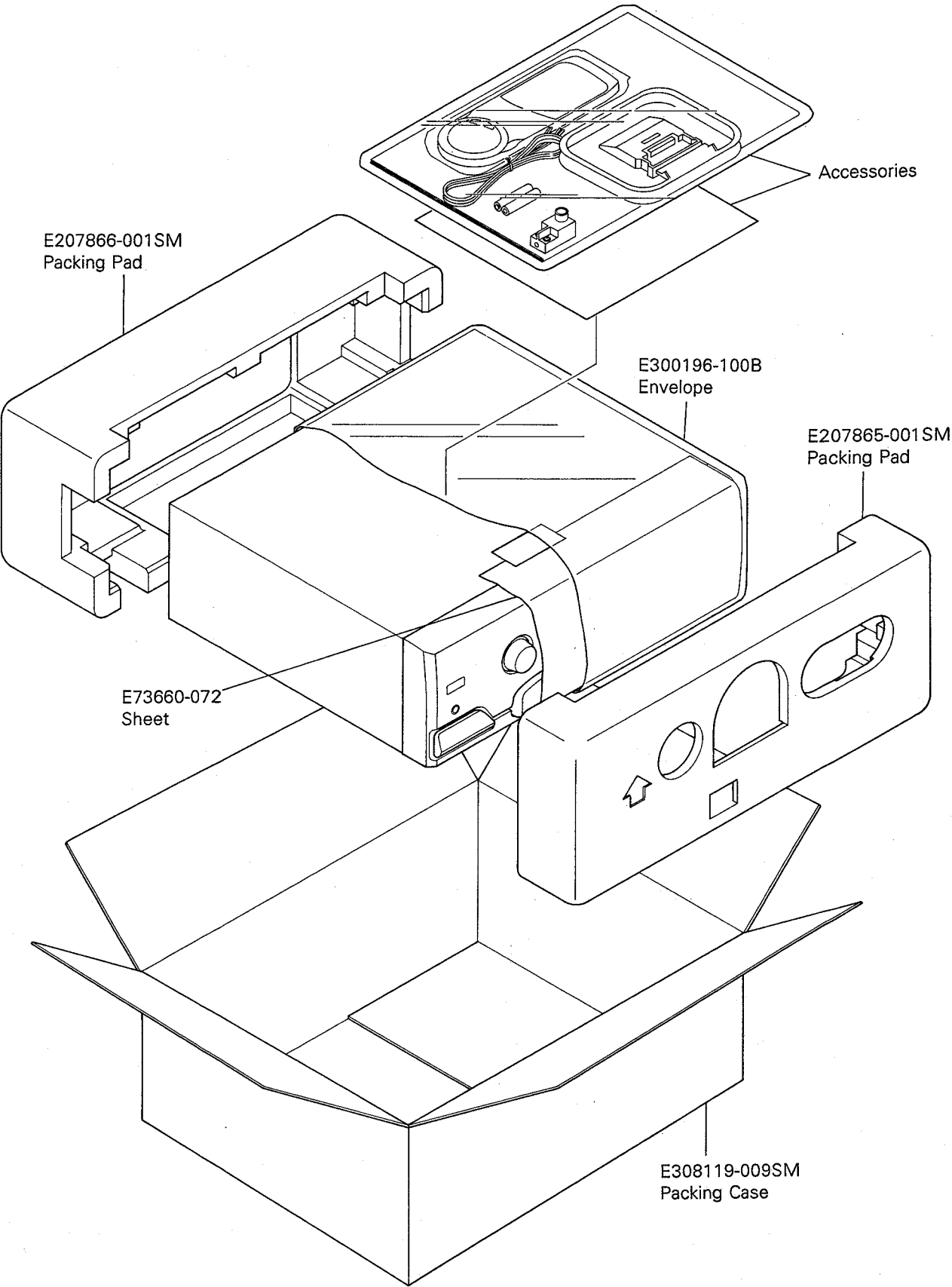
△ SAFETY PARTS

## The Marks for Designated Areas

EN .... Scandinavia    EF ..... Continental Europe  
G ..... Germany    GI ..... Italy

BS ..... the U.K.  
No mark indicates all areas.

Packing Materials and Part Numbers



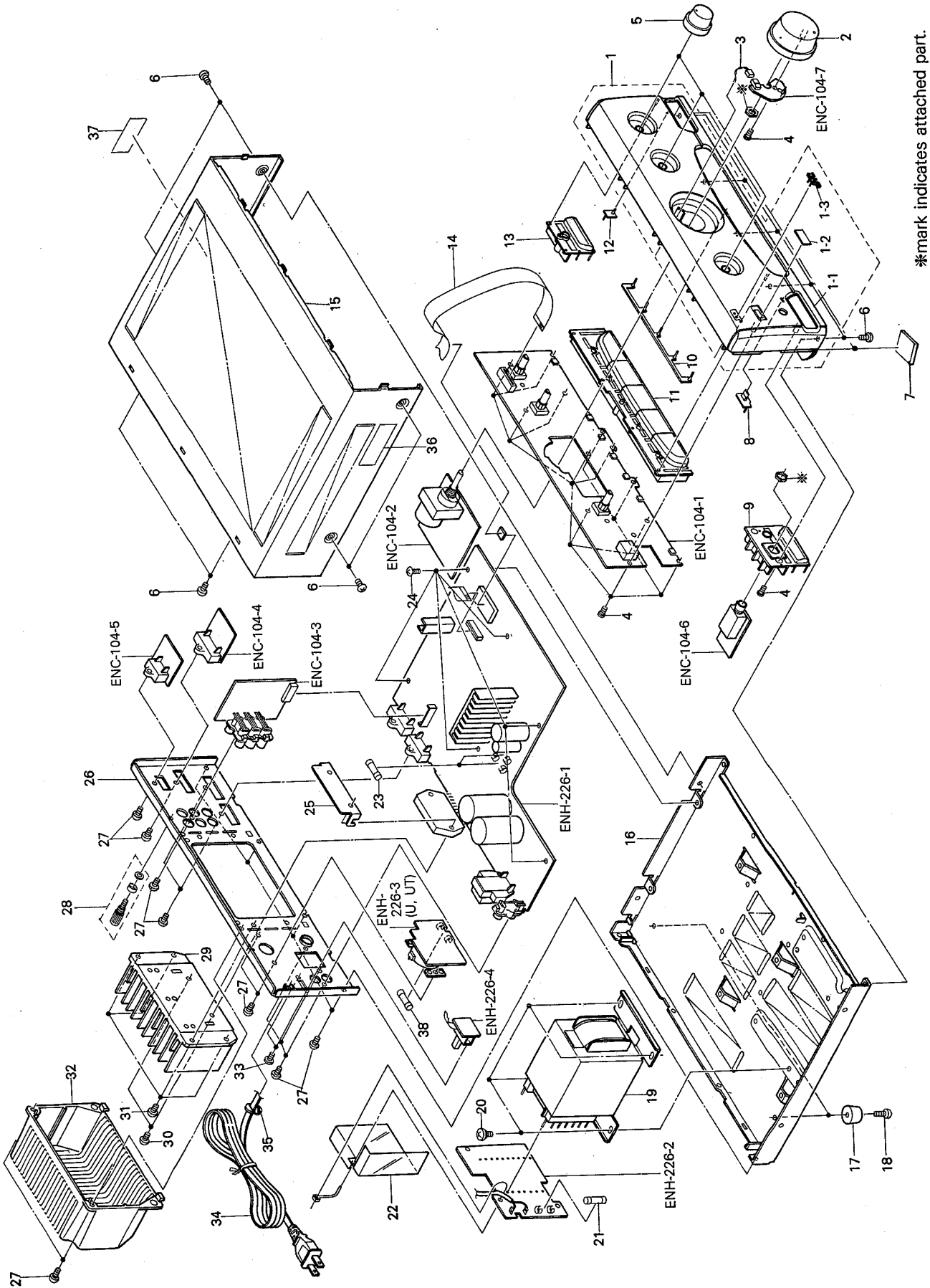
# PARTS LIST

Note : All printed circuit boards and its assemblies are not available as service parts.

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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-AXE79TNE (S) | FRONT PANEL ASSY  | 1    |                            |       |
|   | 1-1  | E102720-001SM    | FRONT PANEL       | 1    |                            |       |
|   | 1-2  | E407335-001SS    | REMOTE PLATE      | 1    |                            |       |
|   | 1-3  | E406971-221      | JVC MARK          | 1    |                            |       |
|   | 2    | E308266-004SM    | VOLUME KNOB       | 1    |                            |       |
|   | 3    | EWS142-002B      | SOCKET WIRE       | 1    | EW900                      |       |
|   | 4    | SDSF2608Z        | SCREW             | 12   |                            |       |
|   | 5    | E308550-001      | KNOB              | 3    |                            |       |
|   | 6    | SDSG3008M        | SCREW             | 11   |                            |       |
|   | 7    | E75896-001       | SPACER            | 2    | FRONT FOOT                 |       |
|   | 8    | E407598-001      | INDICATOR         | 1    |                            |       |
|   | 9    | E308291-001SS    | PUSH BUTTON       | 1    | POWER                      |       |
|   | 10   | E308549-001      | INDICATOR         | 1    |                            |       |
|   | 11   | E207861-001SM    | PUSH BUTTON       | 1    | SOURCE                     |       |
|   | 12   | E407599-001      | INDICATOR         | 1    |                            |       |
|   | 13   | E308294-005SM    | PUSH BUTTON       | 1    | BASS EXT.                  |       |
|   | 14   | EWR617K-18TTJ3   | FLAT WIRE         | 1    |                            |       |
|   | 15   | E207457-003      | METAL COVER       | 1    |                            |       |
|   | 16   | E102582-001SM    | CHASSIS BASE      | 1    |                            |       |
|   | 17   | E47227-030       | FOOT              | 2    | REAR                       |       |
|   | 18   | SBSG3010Z        | SCREW             | 2    | FOR FOOT                   |       |
| ⚠ | 19   | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                            | EF    |
| ⚠ |      | ETP1150-52EAJ    | POWER TRANSFORMER | 1    |                            | EN    |
| ⚠ |      | ETP1150-52FAJ    | POWER TRANSFORMER | 1    |                            | U     |
| ⚠ |      | ETP1150-52FAJ    | POWER TRANSFORMER | 1    |                            | UT    |
| ⚠ | 20   | E65389-004       | SPECIAL SCREW     | 4    |                            |       |
| ⚠ | 21   | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A / 250V)        | EF    |
| ⚠ |      | QMF51E2-1R6J1    | FUSE              | 1    | F001 (T1.6A / 250V)        | EN    |
| ⚠ |      | QMF51E2-3R15J1   | FUSE              | 1    | F001 (T3.15A / 250V)       | U     |
| ⚠ |      | QMF51E2-3R15J1   | FUSE              | 1    | F001 (T3.15A / 250V)       | UT    |
| ⚠ | 22   | E308251-001SM    | PROTECT COVER     | 1    |                            |       |
|   | 23   | QMF51E2-1R25J1   | FUSE              | 2    | F051, F052 (T1.25A / 250V) |       |
|   | 24   | SBSG3008CC       | SCREW             | 6    |                            |       |
|   | 25   | E308062-001SM    | BRACKET           | 1    |                            |       |
|   | 26   | E207863-001SM    | REAR PANEL        | 1    |                            | U     |
|   |      | E207863-001SM    | REAR PANEL        | 1    |                            | UT    |
|   |      | E207863-002SM    | REAR PANEL        | 1    |                            | EF    |
|   |      | E207863-002SM    | REAR PANEL        | 1    |                            | EN    |
|   | 27   | E73273-003       | SPECIAL SCREW     | 14   |                            |       |
|   |      | E73273-003       | SPECIAL SCREW     | 2    |                            | U     |
|   |      | E73273-003       | SPECIAL SCREW     | 2    |                            | UT    |
|   | 28   | E70078-003       | GND TERMINAL      | 1    |                            |       |
|   | 29   | E308061-001SM    | HEAT SINK         | 1    |                            |       |
|   | 30   | SBSG3020Z        | SCREW             | 2    |                            |       |
|   | 31   | SBSG3010CC       | SCREW             | 4    |                            |       |
|   | 32   | E207466-001SM    | REAR COVER        | 1    |                            |       |
| ⚠ | 33   | SDST2604M        | SCREW             | 2    |                            |       |
| ⚠ | 34   | QMP3900-200      | POWER CORD        | 1    |                            | EF    |
| ⚠ |      | QMP3900-200      | POWER CORD        | 1    |                            | EN    |
| ⚠ |      | QMP7520-200      | POWER CORD        | 1    |                            | U     |
| ⚠ |      | QMP7520-200      | POWER CORD        | 1    |                            | UT    |
| ⚠ | 35   | QHS3876-162      | CORD STOPPER      | 1    |                            |       |
|   | 36   | E67000-019       | CAUTION LABEL     | 1    |                            |       |
|   | 37   | E308522-033      | RATING LABEL      | 1    |                            | UT    |
| ⚠ | 38   | QMF51E2-1R6J1    | FUSE              | 1    | F002 (T1.6A / 250V)        | U     |

| ⚠ | Item | Part Number   | Part Name      | Q'ty | Description         | Areas |
|---|------|---------------|----------------|------|---------------------|-------|
| ⚠ |      | QMF51E2-1R6J1 | FUSE           | 1    | F002 (T1.6A / 250V) | UT    |
|   | —    | E61029-005    | NUMBER LABEL   | 1    |                     |       |
|   | —    | QZL1031-101   | SEV LABEL      | 1    |                     | EF    |
|   | —    | E70027-001    | APPROVAL LABEL | 1    |                     | EN    |
|   | —    | E67132-T3R15  | FUSE LABE      | 1    |                     | U     |
|   | —    | E67132-T3R15  | FUSE LABE      | 1    |                     | UT    |
|   | —    | E75139-003    | LABEL          | 1    | MADE IN MALAYSIA    | U     |

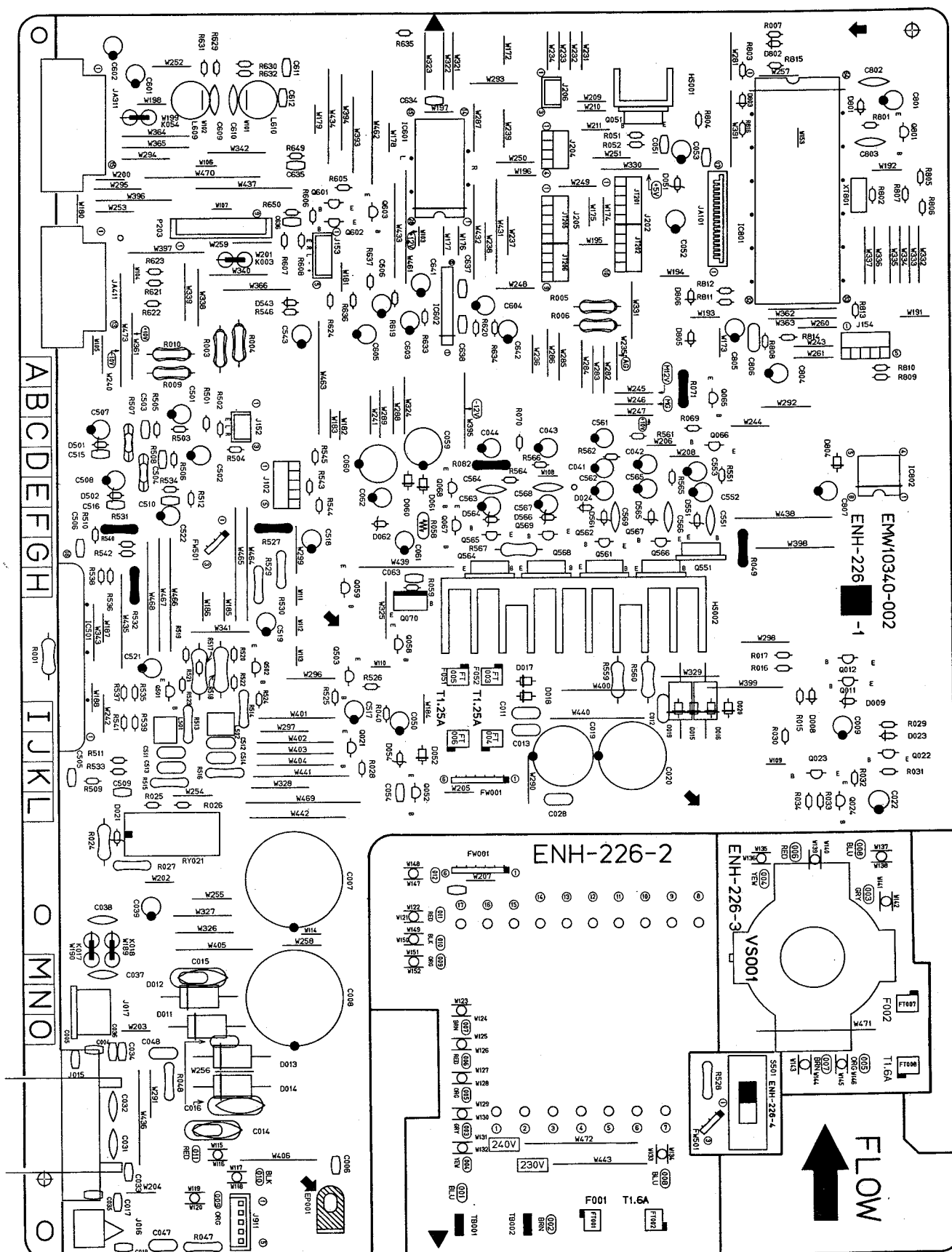
⚠ SAFETY PARTS

The Marks for Designated Areas  
EN ..... Scandinavia      EF ..... Continental Europe  
U ..... Universal Type      UT ..... Taiwan  
No mark indicates all areas.

## Printed Circuit Board Ass'y and Parts List

■ ENH-226 ☐ Main PC Board Ass'y

**Note :** ENH-226 ☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

| PC Board Ass'y   | Version  | Designated Areas                  |
|------------------|----------|-----------------------------------|
| ENH-226 <b>D</b> | U<br>UT  | Universal Type<br>Taiwan          |
| ENH-226 <b>F</b> | EN<br>EF | Scandinavia<br>Continental Europe |

Transistors

| ITEM | PART NUMBER   | DESCRIPTION        | AREA |
|------|---------------|--------------------|------|
| Q011 | DTC114YS      | SILICON ROHM       |      |
| Q012 | DTC114YS      | SILICON ROHM       |      |
| Q021 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
| Q022 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
| Q023 | 2SA564A(R,S)  | SILICON            |      |
| Q024 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
| Q051 | 2SD1944(J,K)  | SILICON ROHM       |      |
| Q052 | 2SC1741A(Q,R) | SILICON ROHM       |      |
| Q058 | DTC114YS      | SILICON ROHM       |      |
| Q059 | DTC114YS      | SILICON ROHM       |      |
| Q065 | DTA114ES      | SILICON ROHM       |      |
| Q066 | DTA114YS      | SILICON ROHM       |      |
| Q067 | DTA144ES      | SILICON ROHM       |      |
| Q068 | DTC114YS      | SILICON ROHM       |      |
| Q070 | 2SB1357(E,F)  | SILICON ROHM       |      |
| Q501 | 2SA564A(R,S)  | SILICON            |      |
| Q502 | 2SA564A(R,S)  | SILICON            |      |
| Q503 | 2SC1685(Q,R)  | SILICON MATSUSHITA |      |
| Q551 | 2SD1944(J,K)  | SILICON ROHM       |      |
| Q561 | 2SD2061(E,F)  | SILICON ROHM       |      |
| Q562 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
| Q564 | 2SB1187(E,F)  | SILICON            |      |
| Q565 | 2SA564A(R,S)  | SILICON            |      |
| Q566 | 2SD2061(E,F)  | SILICON ROHM       |      |
| Q567 | 2SC1685(R,S)  | SILICON MATSUSHITA |      |
| Q568 | 2SB1187(E,F)  | SILICON            |      |
| Q569 | 2SA564A(R,S)  | SILICON            |      |
| Q601 | 2SD2144S(VW)  | SILICON ROHM       |      |
| Q602 | 2SD2144S(VW)  | SILICON ROHM       |      |
| Q603 | DTA144ES      | SILICON ROHM       |      |
| Q801 | DTC114YS      | SILICON ROHM       |      |

△ SAFETY PARTS

I.C.s

| ITEM  | PART NUMBER    | DESCRIPTION  | AREA |
|-------|----------------|--------------|------|
| IC501 | STK4181MK5     | I.C. SANYO   |      |
| IC601 | TC9163N        | I.C. TOSHIBA |      |
| IC602 | BA15218N       | I.C. ROHM    |      |
| IC801 | UPD75104CW-290 | I.C. NEC     |      |
| IC802 | LB1639-CV      | I.C. SANYO   |      |

△ SAFETY PARTS

Diodes

| ITEM | PART NUMBER | DESCRIPTION         | AREA |
|------|-------------|---------------------|------|
| D008 | 1SS119      | SILICON HITACHI     |      |
| D009 | MTZ5.1JC    | ZENER ROHM          |      |
| D011 | 30DL2FC     | SILICON NICHONINTER |      |
| D012 | 30DL2FC     | SILICON NICHONINTER |      |
| D013 | 30DL2FC     | SILICON NICHONINTER |      |
| D014 | 30DL2FC     | SILICON NICHONINTER |      |
| D015 | 1SR139-200  | SILICON ROHM        |      |
| D016 | 1SR139-200  | SILICON ROHM        |      |
| D017 | 1SR139-200  | SILICON ROHM        |      |
| D018 | 1SR139-200  | SILICON ROHM        |      |
| D019 | 1SR139-200  | SILICON ROHM        |      |
| D020 | 1SR139-200  | SILICON ROHM        |      |
| D021 | MTZ24JC     | ZENER ROHM          |      |
| D023 | 1SS119      | SILICON HITACHI     |      |
| D024 | 1SS119      | SILICON HITACHI     |      |
| D051 | MTZ6.2JC    | ZENER ROHM          |      |
| D052 | 1SR139-200  | SILICON ROHM        |      |
| D054 | MTZ7.5JC    | ZENER ROHM          |      |
| D060 | 1SR139-200  | SILICON ROHM        |      |
| D061 | 1SR139-200  | SILICON ROHM        |      |
| D062 | MTZ30JC     | ZENER ROHM          |      |
| D543 | 1SS119      | SILICON HITACHI     |      |
| D551 | RD13JSB3    | ZENER NEC           |      |
| D561 | RD13JSB3    | ZENER NEC           |      |
| D564 | RD13JSB3    | ZENER NEC           |      |
| D565 | MTZ11JC     | ZENER ROHM          |      |
| D566 | MTZ11JC     | ZENER ROHM          |      |
| D801 | 1SS119      | SILICON HITACHI     |      |
| D802 | 1SS119      | SILICON HITACHI     |      |
| D803 | 1SS119      | SILICON HITACHI     |      |

△ SAFETY PARTS

Diodes

| ITEM | PART NUMBER | DESCRIPTION     | AREA |
|------|-------------|-----------------|------|
| D804 | 1SR139-200  | SILICON ROHM    |      |
| D805 | 1SS119      | SILICON HITACHI |      |
| D806 | 1SS119      | SILICON HITACHI |      |

△ SAFETY PARTS

Capacitors

| ITEM | PART NUMBER   | DESCRIPTION        | AREA |
|------|---------------|--------------------|------|
| C007 | EEW5615-688J6 | 6800MF ELECTRO     |      |
| C008 | EEW5615-688J6 | 6800MF ELECTRO     |      |
| C009 | QETB1HM-225   | 2.2MF 50V ELECTRO  |      |
| C011 | QFLB2AJ-103   | 0.01MF 100V MYLAR  |      |
| C012 | QFLB2AJ-103   | 0.01MF 100V MYLAR  |      |
| C013 | QFLB2AJ-103   | 0.01MF 100V MYLAR  |      |
| C014 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
| C015 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
| C016 | QFN82AJ-473   | 0.047MF 100V MYLAR |      |
| C019 | QETB1VM-228N  | 2200MF 35V ELECTRO |      |
| C020 | QETB1VM-338   | 3300MF 35V ELECTRO |      |
| C022 | QET41CM-476   | 47MF 16V ELECTRO   |      |
| C028 | QFLB1HJ-103   | 0.01MF 50V MYLAR   |      |
| C039 | QET41CM-107   | 100MF 16V ELECTRO  |      |
| C041 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
| C042 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
| C043 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
| C044 | EETB1CM-476E  | 47MF 16V ELECTRO   |      |
| C050 | QETB1HM-106   | 10MF 50V ELECTRO   |      |
| C051 | QCVB1CM-103   | 0.01MF 16V CERAMIC |      |
| C052 | QET41AM-107   | 100MF 10V ELECTRO  |      |
| C053 | QET41CM-226   | 22MF 16V ELECTRO   |      |
| C054 | QCVB1CM-103   | 0.01MF 16V CERAMIC |      |
| C059 | QETB1JM-227   | 220MF 63V ELECTRO  |      |
| C060 | QETB1JM-227   | 220MF 63V ELECTRO  |      |
| C061 | QET41HM-226   | 22MF 50V ELECTRO   |      |
| C062 | QET41HM-226   | 22MF 50V ELECTRO   |      |
| C063 | QCGB1HK-102   | 1000PF 50V CERAMIC |      |
| C501 | EETB1HM-106E  | 10MF 50V ELECTRO   |      |
| C502 | EETB1HM-106E  | 10MF 50V ELECTRO   |      |
| C503 | QCB81HK-331   | 330PF 50V CERAMIC  |      |
| C504 | QCB81HK-331   | 330PF 50V CERAMIC  |      |
| C505 | QCB81HK-820   | 82PF 50V CERAMIC   |      |
| C506 | QCB81HK-820   | 82PF 50V CERAMIC   |      |
| C507 | EET2501-107E  | 100MF 25V ELECTRO  |      |
| C508 | EET2501-107E  | 100MF 25V ELECTRO  |      |
| C509 | QCSB1HK-4R7   | 4.7PF 50V CERAMIC  |      |
| C510 | QCSB1HK-4R7   | 4.7PF 50V CERAMIC  |      |
| C511 | QFV81HJ-104   | 0.1MF 50V T.FILM   |      |
| C512 | QFV81HJ-104   | 0.1MF 50V T.FILM   |      |
| C513 | QFV81HJ-104   | 0.1MF 50V T.FILM   |      |
| C514 | QFV81HJ-104   | 0.1MF 50V T.FILM   |      |
| C515 | QCT30UJ-220   | 22PF 50V CERAMIC   |      |
| C516 | QCT30UJ-220   | 22PF 50V CERAMIC   |      |
| C517 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C518 | QETB1JM-476   | 47MF 63V ELECTRO   |      |
| C519 | QETB1HM-106   | 10MF 50V ELECTRO   |      |
| C521 | QET41HM-226   | 22MF 50V ELECTRO   |      |
| C522 | QET41HM-226   | 22MF 50V ELECTRO   |      |
| C543 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C551 | QCF21HP-102   | 1000PF 50V CERAMIC |      |
| C552 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C553 | QET41CM-476   | 47MF 16V ELECTRO   |      |
| C561 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C562 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C563 | QET41CM-226   | 22MF 16V ELECTRO   |      |
| C564 | QCF21HP-102   | 1000PF 50V CERAMIC |      |
| C565 | QET41EM-106   | 10MF 25V ELECTRO   |      |
| C566 | QCF21HP-102   | 1000PF 50V CERAMIC |      |
| C567 | QET41CM-226   | 22MF 16V ELECTRO   |      |
| C568 | QCF21HP-102   | 1000PF 50V CERAMIC |      |
| C569 | QCF21HP-102   | 1000PF 50V CERAMIC |      |
| C601 | QET41HM-475   | 4.7MF 50V ELECTRO  |      |
| C602 | QET41HM-475   | 4.7MF 50V ELECTRO  |      |
| C603 | QET41HM-475   | 4.7MF 50V ELECTRO  |      |
| C604 | QET41HM-475   | 4.7MF 50V ELECTRO  |      |
| C605 | QET41EM-476   | 47MF 25V ELECTRO   |      |
| C606 | QET41EM-476   | 47MF 25V ELECTRO   |      |
| C611 | QCB81HK-471   | 470PF 50V CERAMIC  |      |
| C612 | QCB81HK-471   | 470PF 50V CERAMIC  |      |
| C641 | QETB1HM-106   | 10MF 50V ELECTRO   |      |
| C642 | QETB1HM-106   | 10MF 50V ELECTRO   |      |
| C801 | QETB1HM-225   | 2.2MF 50V ELECTRO  |      |
| C802 | QCF11HP-103   | 0.01MF 50V CERAMIC |      |
| C803 | QCF11HP-103   | 0.01MF 50V CERAMIC |      |
| C804 | QET41AM-477   | 470MF 10V ELECTRO  |      |
| C805 | EETB1AM-107E  | 100MF 10V ELECTRO  |      |
| C806 | QCZ0205-155   | 1.5MF 25V CERAMIC  |      |
| C807 | QET41AM-476   | 47MF 10V ELECTRO   |      |

△ SAFETY PARTS

## Resistors

| Δ | ITEM | PART NUMBER   | DESCRIPTION          | AREA |
|---|------|---------------|----------------------|------|
| Δ | R001 | QRX022J-R22A  | 0.22 2W M.FILM       |      |
| Δ | R003 | QRG012J-120A  | 12 1W O.M.FILM       |      |
| Δ | R004 | QRG012J-120A  | 12 1W O.M.FILM       |      |
| Δ | R005 | QRG012J-100AM | 10 1W O.M.FILM       |      |
| Δ | R006 | QRG012J-100AM | 10 1W O.M.FILM       |      |
| Δ | R007 | QRD167J-221   | 220 1/6W CARBON      |      |
| Δ | R009 | QRG012J-180A  | 18 1W O.M.FILM       |      |
| Δ | R010 | QRG012J-180A  | 18 1W O.M.FILM       |      |
| Δ | R015 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R016 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R017 | QRD167J-102   | 1K 1/6W CARBON       |      |
| Δ | R024 | QRG012J-821AM | 820 1W O.M.FILM      |      |
| Δ | R025 | QRD167J-823   | 82K 1/6W CARBON      |      |
| Δ | R026 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R027 | QRD148J-680   | 68 1/4W CARBON       |      |
| Δ | R028 | QRD167J-152   | 1.5K 1/6W CARBON     |      |
| Δ | R029 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R030 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R031 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R032 | QRD167J-473   | 47K 1/6W CARBON      |      |
| Δ | R033 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R034 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R040 | QRD167J-223   | 22K 1/6W CARBON      |      |
| Δ | R049 | QRZ0077-4R7   | 4.7 1/4W FUSIBLE     |      |
| Δ | R051 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R052 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R058 | PTH61G25AR47M | POSISTOR             |      |
| Δ | R059 | QRD167J-332   | 3.3K 1/6W CARBON     |      |
| Δ | R069 | QRD167J-472   | 4.7K 1/6W CARBON     |      |
| Δ | R070 | QRD167J-472   | 4.7K 1/6W CARBON     |      |
| Δ | R071 | QRZ0077-4R7   | 4.7 1/4W FUSIBLE     |      |
| Δ | R082 | QRZ0077-100   | 10 1/4W FUSIBLE      |      |
| Δ | R501 | QRD167J-474   | 470K 1/6W CARBON     |      |
| Δ | R502 | QRD167J-474   | 470K 1/6W CARBON     |      |
| Δ | R503 | QRD167J-102   | 1K 1/6W CARBON       |      |
| Δ | R504 | QRD167J-102   | 1K 1/6W CARBON       |      |
| Δ | R505 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R506 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R507 | QRD14CJ-751S  | 750 1/4W UNF. CARBON |      |
| Δ | R508 | QRD14CJ-751S  | 750 1/4W UNF. CARBON |      |
| Δ | R509 | QRD167J-561   | 560 1/6W CARBON      |      |
| Δ | R510 | QRD167J-561   | 560 1/6W CARBON      |      |
| Δ | R511 | QRD167J-823   | 82K 1/6W CARBON      |      |
| Δ | R512 | QRD167J-823   | 82K 1/6W CARBON      |      |
| Δ | R513 | QRD148J-100   | 10 1/4W CARBON       |      |
| Δ | R514 | QRD148J-100   | 10 1/4W CARBON       |      |
| Δ | R515 | QRD148J-100   | 10 1/4W CARBON       |      |
| Δ | R516 | QRD148J-100   | 10 1/4W CARBON       |      |
| Δ | R517 | QRX022J-R22A  | 0.22 2W M.FILM       |      |
| Δ | R518 | QRX022J-R22A  | 0.22 2W M.FILM       |      |
| Δ | R519 | QRD167J-393   | 39K 1/6W CARBON      |      |
| Δ | R520 | QRD167J-393   | 39K 1/6W CARBON      |      |
| Δ | R521 | QRD167J-223   | 22K 1/6W CARBON      |      |
| Δ | R522 | QRD167J-223   | 22K 1/6W CARBON      |      |
| Δ | R523 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R524 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R525 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R526 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R527 | QRZ0077-101   | 100 1/4W FUSIBLE     |      |
| Δ | R528 | QRD148J-561   | 560 1/4W CARBON      |      |
| Δ | R529 | QRD148J-272   | 2.7K 1/4W CARBON     |      |
| Δ | R530 | QRD148J-272   | 2.7K 1/4W CARBON     |      |
| Δ | R531 | QRZ0077-100   | 10 1/4W FUSIBLE      |      |
| Δ | R532 | QRZ0077-100   | 10 1/4W FUSIBLE      |      |
| Δ | R533 | QRD167J-163   | 16K 1/6W CARBON      |      |
| Δ | R534 | QRD167J-163   | 16K 1/6W CARBON      |      |
| Δ | R535 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R536 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R537 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R538 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R539 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R540 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R541 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R542 | QRD167J-562   | 5.6K 1/6W CARBON     |      |
| Δ | R543 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R544 | QRD167J-154   | 150K 1/6W CARBON     |      |
| Δ | R545 | QRD167J-303   | 30K 1/6W CARBON      |      |
| Δ | R546 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R551 | QRD167J-152   | 1.5K 1/6W CARBON     |      |
| Δ | R559 | QRX012J-R68A  | 0.68 1W M.FILM       |      |
| Δ | R560 | QRX012J-R68A  | 0.68 1W M.FILM       |      |
| Δ | R561 | QRD167J-152   | 1.5K 1/6W CARBON     |      |
| Δ | R562 | QRD167J-471   | 470 1/6W CARBON      |      |
| Δ | R564 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R565 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R566 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R567 | QRX012J-R56A  | 0.56 1W M.FILM       |      |
| Δ | R605 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R606 | QRD167J-103   | 10K 1/6W CARBON      |      |
| Δ | R607 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R608 | QRD167J-222   | 2.2K 1/6W CARBON     |      |
| Δ | R619 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R620 | QRD167J-104   | 100K 1/6W CARBON     |      |
| Δ | R621 | QRD167J-102   | 1K 1/6W CARBON       |      |
| Δ | R622 | QRD167J-102   | 1K 1/6W CARBON       |      |

Δ (SAFETY) PARTS

## Resistors

| Δ | ITEM | PART NUMBER | DESCRIPTION      | AREA |
|---|------|-------------|------------------|------|
| Δ | R623 | QRD167J-562 | 5.6K 1/6W CARBON |      |
| Δ | R624 | QRD167J-562 | 5.6K 1/6W CARBON |      |
| Δ | R629 | QRD167J-102 | 1K 1/6W CARBON   |      |
| Δ | R630 | QRD167J-102 | 1K 1/6W CARBON   |      |
| Δ | R631 | QRD167J-752 | 7.5K 1/6W CARBON |      |
| Δ | R632 | QRD167J-752 | 7.5K 1/6W CARBON |      |
| Δ | R633 | QRD167J-104 | 100K 1/6W CARBON |      |
| Δ | R634 | QRD167J-104 | 100K 1/6W CARBON |      |
| Δ | R635 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R636 | QRD167J-331 | 330 1/6W CARBON  |      |
| Δ | R637 | QRD167J-331 | 330 1/6W CARBON  |      |
| Δ | R649 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R650 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R801 | QRD167J-104 | 100K 1/6W CARBON |      |
| Δ | R802 | QRD167J-105 | 1M 1/6W CARBON   |      |
| Δ | R803 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R804 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R805 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R806 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R807 | QRD167J-221 | 220 1/6W CARBON  |      |
| Δ | R808 | QRD167J-101 | 100 1/6W CARBON  |      |
| Δ | R809 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R810 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R811 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R812 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R813 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R814 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R815 | QRD167J-223 | 22K 1/6W CARBON  |      |
| Δ | R816 | QRD167J-104 | 100K 1/6W CARBON |      |

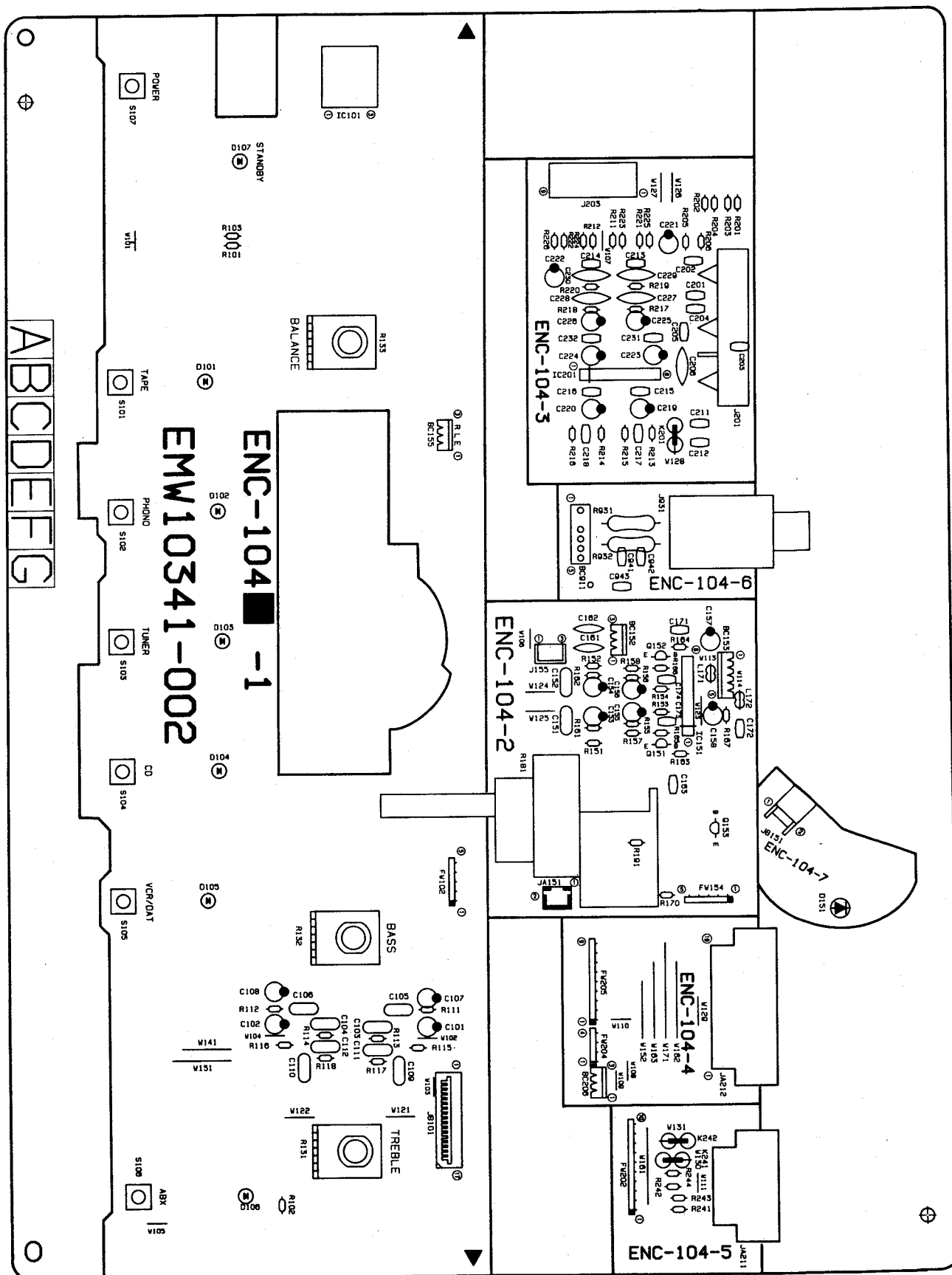
Δ (SAFETY) PARTS

## Others

| Δ | ITEM  | PART NUMBER    | DESCRIPTION      | AREA |
|---|-------|----------------|------------------|------|
| Δ | J015  | SBSG3008Z      | SCREW            |      |
| Δ | J016  | EMB90TV-401A   | SPEAKER TERMINAL |      |
| Δ | J017  | EMN00TV-218AJ2 | 2P PIN JACK      |      |
| Δ | J102  | QMA1221-009    | DC JACK          |      |
| Δ | J152  | EMV7122-005    | CONNECTOR(5PIN)  |      |
| Δ | J152  | EMV5109-003A   | PLUG ASSY(3PIN)  |      |
| Δ | J153  | EMV5109-005A   | PLUG ASSY(5PIN)  |      |
| Δ | J154  | EMV7122-005    | CONNECTOR(5PIN)  |      |
| Δ | J204  | EMV7122-004    | CONNECTOR(4PIN)  |      |
| Δ | J206  | EMV5109-003A   | PLUG ASSY(3PIN)  |      |
| Δ | J911  | EMV5133-005K   | PLUG ASSY(5PIN)  |      |
| Δ | L501  | EQL0011-R45J1  | INDUCTOR         |      |
| Δ | L502  | EQL0011-R45J1  | INDUCTOR         |      |
| Δ | P203  | EMV5125-009    | PLUG ASSY(9PIN)  |      |
| Δ | S501  | QSS2201-005    | SLIDE SWITCH     |      |
| Δ | FS801 | E3400-431      | SPACER           |      |
| Δ | FT001 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT002 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT003 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT004 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT005 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT006 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT007 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT007 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT008 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FT008 | VMZ0087-001    | FUSE CLIP        |      |
| Δ | FW001 | EWR36D-20SS    | FLAT WIRE(6PIN)  |      |
| Δ | FW501 | EWR33D-30SS    | FLAT WIRE(3PIN)  |      |
| Δ | HS001 | E70306-005     | HEAT SINK        |      |
| Δ | HS002 | E75085-001     | HEAT SINK        |      |
| Δ | JA101 | EMV7123-017    | CONNECTOR(17PIN) |      |
| Δ | JA311 | EMV7127-015    | CONNECTOR(15PIN) |      |
| Δ | JA411 | EMV7127-013    | CONNECTOR(13PIN) |      |
| Δ | JT201 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| Δ | JT202 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| Δ | JT205 | EMV7122-005    | CONNECTOR(5PIN)  |      |
| Δ | JT206 | EMV7122-004    | CONNECTOR(4PIN)  |      |
| Δ | RY021 | ESK7D24-2120   | RELAY            |      |
| Δ | TB001 | EMZ4001-001    | TAB              |      |
| Δ | TB002 | EMZ4001-001    | TAB              |      |
| Δ | VS001 | QSR0085-018    | VOLTAGE SELECTOR |      |
| Δ | VS001 | QSR0085-018    | VOLTAGE SELECTOR |      |
| Δ | XT801 | ECX0004-194KM  | RESONATOR        |      |

Δ (SAFETY) PARTS

■ENC-104 **A** Front, Phono EQ & Volume PC Board Ass'y



## Transistors

| Δ | ITEM | PART NUMBER  | DESCRIPTION  | AREA |
|---|------|--------------|--------------|------|
|   | Q151 | 2SD2144S(VW) | SILICON ROHM |      |
|   | Q152 | 2SD2144S(VW) | SILICON ROHM |      |
|   | Q153 | DTC114YS     | SILICON ROHM |      |

Δ (SAFETY) PARTS

## I.C.s

| Δ | ITEM  | PART NUMBER | DESCRIPTION   | AREA |
|---|-------|-------------|---------------|------|
|   | IC101 | SPS-420-1   | I.C. SANYO    |      |
|   | IC151 | BA15218N    | I.C. ROHM     |      |
|   | IC201 | NJM4580LD   | I.C. DAINICHI |      |

Δ (SAFETY) PARTS

## Diodes

| Δ | ITEM | PART NUMBER  | DESCRIPTION | AREA |
|---|------|--------------|-------------|------|
|   | D101 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D102 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D103 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D104 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D105 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D106 | SLR-342DCA47 | L.E.D. ROHM |      |
|   | D107 | SLR-342VC3F  | L.E.D. ROHM |      |
|   | D151 | LN282RPX     | L.E.D.      |      |

Δ (SAFETY) PARTS

## Capacitors

| Δ | ITEM | PART NUMBER | DESCRIPTION         | AREA |
|---|------|-------------|---------------------|------|
|   | C101 | QET41HM-105 | 1MF 50V ELECTRO     |      |
|   | C102 | QET41HM-105 | 1MF 50V ELECTRO     |      |
|   | C103 | QFLB1HJ-823 | 0.082MF 50V MYLAR   |      |
|   | C104 | QFLB1HJ-823 | 0.082MF 50V MYLAR   |      |
|   | C105 | QFLB1HJ-153 | 0.015MF 50V MYLAR   |      |
|   | C106 | QFLB1HJ-153 | 0.015MF 50V MYLAR   |      |
|   | C107 | QET41HM-105 | 1MF 50V ELECTRO     |      |
|   | C108 | QET41HM-105 | 1MF 50V ELECTRO     |      |
|   | C109 | QFLB1HJ-332 | 3300PF 50V MYLAR    |      |
|   | C110 | QFLB1HJ-332 | 3300PF 50V MYLAR    |      |
|   | C111 | QFLB1HJ-183 | 0.018MF 50V MYLAR   |      |
|   | C112 | QFLB1HJ-183 | 0.018MF 50V MYLAR   |      |
|   | C151 | QFLB1HJ-683 | 0.068MF 50V MYLAR   |      |
|   | C152 | QFLB1HJ-683 | 0.068MF 50V MYLAR   |      |
|   | C153 | QET41AM-107 | 100MF 10V ELECTRO   |      |
|   | C154 | QET41AM-107 | 100MF 10V ELECTRO   |      |
|   | C155 | QET41HM-474 | 0.47MF 50V ELECTRO  |      |
|   | C156 | QET41HM-474 | 0.47MF 50V ELECTRO  |      |
|   | C157 | QET41CM-476 | 47MF 16V ELECTRO    |      |
|   | C158 | QET41CM-476 | 47MF 16V ELECTRO    |      |
|   | C163 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |
|   | C201 | QCB81HK-331 | 330PF 50V CERAMIC   |      |
|   | C202 | QCB81HK-331 | 330PF 50V CERAMIC   |      |
|   | C206 | QCC21EM-473 | 0.047MF 25V CERAMIC |      |
|   | C211 | QCB81HK-331 | 330PF 50V CERAMIC   |      |
|   | C212 | QCB81HK-331 | 330PF 50V CERAMIC   |      |
|   | C213 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C214 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C215 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C216 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C217 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C218 | QCB81HK-101 | 100PF 50V CERAMIC   |      |
|   | C219 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
|   | C220 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
|   | C221 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
|   | C222 | QET41HM-475 | 4.7MF 50V ELECTRO   |      |
|   | C223 | QET41EM-476 | 47MF 25V ELECTRO    |      |
|   | C224 | QET41EM-476 | 47MF 25V ELECTRO    |      |
|   | C225 | QET41EM-107 | 100MF 25V ELECTRO   |      |
|   | C226 | QET41EM-107 | 100MF 25V ELECTRO   |      |
|   | C227 | QCY21HK-682 | 6800PF 50V CERAMIC  |      |
|   | C228 | QCY21HK-682 | 6800PF 50V CERAMIC  |      |
|   | C229 | QCY21HK-182 | 1800PF 50V CERAMIC  |      |
|   | C230 | QCY21HK-182 | 1800PF 50V CERAMIC  |      |
|   | C231 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |
|   | C232 | QCHB1EZ-223 | 0.022MF 25V CERAMIC |      |

Δ (SAFETY) PARTS

## Resistors

| Δ | ITEM | PART NUMBER    | DESCRIPTION      | AREA |
|---|------|----------------|------------------|------|
|   | R101 | QRD167J-331    | 330 1/6W CARBON  |      |
|   | R102 | QRD167J-181    | 180 1/6W CARBON  |      |
|   | R103 | QRD167J-331    | 330 1/6W CARBON  |      |
|   | R111 | QRD167J-203    | 20K 1/6W CARBON  |      |
|   | R112 | QRD167J-203    | 20K 1/6W CARBON  |      |
|   | R113 | QRD167J-362    | 3.6K 1/6W CARBON |      |
|   | R114 | QRD167J-362    | 3.6K 1/6W CARBON |      |
|   | R115 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R116 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R117 | QRD167J-821    | 820 1/6W CARBON  |      |
|   | R118 | QRD167J-821    | 820 1/6W CARBON  |      |
|   | R131 | QVJB84C-E15BJ3 | 100K VARIABLE    |      |
|   | R132 | QVJB84C-E15BJ3 | 100K VARIABLE    |      |
|   | R133 | QVJB84W-E15CJ3 | 100K VARIABLE    |      |
|   | R151 | QRD167J-102    | 2.2K 1/6W CARBON |      |
|   | R152 | QRD167J-102    | 2.2K 1/6W CARBON |      |
|   | R153 | QRD167J-474    | 470K 1/6W CARBON |      |
|   | R154 | QRD167J-474    | 470K 1/6W CARBON |      |
|   | R155 | QRD167J-331    | 330 1/6W CARBON  |      |
|   | R156 | QRD167J-331    | 330 1/6W CARBON  |      |
|   | R161 | QRD167J-822    | 8.2K 1/6W CARBON |      |
|   | R162 | QRD167J-822    | 8.2K 1/6W CARBON |      |
|   | R163 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R164 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R165 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R166 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R167 | QRD167J-472    | 4.7K 1/6W CARBON |      |
|   | R170 | QRD167J-122    | 1.2K 1/6W CARBON |      |
|   | R171 | QRD167J-223    | 22K 1/6W CARBON  |      |
|   | R172 | QRD167J-223    | 22K 1/6W CARBON  |      |
|   | R181 | QVDB91B-E15F   | 100K VARIABLE    |      |
|   | R191 | QRD167J-104    | 100K 1/6W CARBON |      |
|   | R201 | QRD167J-183    | 18K 1/6W CARBON  |      |
|   | R202 | QRD167J-183    | 18K 1/6W CARBON  |      |
|   | R203 | QRD167J-823    | 82K 1/6W CARBON  |      |
|   | R204 | QRD167J-823    | 82K 1/6W CARBON  |      |
|   | R205 | QRD167J-102    | 1K 1/6W CARBON   |      |
|   | R206 | QRD167J-102    | 1K 1/6W CARBON   |      |
|   | R211 | QRD167J-562    | 5.6K 1/6W CARBON |      |
|   | R212 | QRD167J-562    | 5.6K 1/6W CARBON |      |
|   | R213 | QRD167J-222    | 2.2K 1/6W CARBON |      |
|   | R214 | QRD167J-222    | 2.2K 1/6W CARBON |      |
|   | R215 | QRD167J-473    | 47K 1/6W CARBON  |      |
|   | R216 | QRD167J-473    | 47K 1/6W CARBON  |      |
|   | R217 | QRD167J-474    | 470K 1/6W CARBON |      |
|   | R218 | QRD167J-474    | 470K 1/6W CARBON |      |
|   | R219 | QRD167J-393    | 39K 1/6W CARBON  |      |
|   | R220 | QRD167J-393    | 39K 1/6W CARBON  |      |
|   | R221 | QRD167J-621    | 620 1/6W CARBON  |      |
|   | R222 | QRD167J-621    | 620 1/6W CARBON  |      |
|   | R223 | QRD167J-122    | 1.2K 1/6W CARBON |      |
|   | R224 | QRD167J-122    | 1.2K 1/6W CARBON |      |
|   | R225 | QRD167J-331    | 330 1/6W CARBON  |      |
|   | R226 | QRD167J-271    | 270 1/6W CARBON  |      |
|   | R241 | QRD167J-222    | 2.2K 1/6W CARBON |      |
|   | R242 | QRD167J-222    | 2.2K 1/6W CARBON |      |
|   | R243 | QRD167J-562    | 5.6K 1/6W CARBON |      |
|   | R244 | QRD167J-562    | 5.6K 1/6W CARBON |      |
| Δ | R931 | QRG022J-331A   | 330 2W O.M.FILM  |      |
| Δ | R932 | QRG022J-331A   | 330 2W O.M.FILM  |      |

Δ (SAFETY) PARTS

## Others

| Δ | ITEM  | PART NUMBER   | DESCRIPTION          | AREA |
|---|-------|---------------|----------------------|------|
|   | J155  | EMV5109-003A  | PLUG ASSY(3PIN)      |      |
|   | J201  | EMN00TV-608A  | 6P PIN JACK          |      |
|   | J203  | EMV7125-009R  | CONNECTOR(9PIN)      |      |
|   | J931  | QMS6312-024   | HEADPHONE JACK       |      |
|   | S101  | ESP0001-023J5 | TACT SWITCH(TAPE)    |      |
|   | S102  | ESP0001-023J5 | TACT SWITCH(PHONO)   |      |
|   | S103  | ESP0001-023J5 | TACT SWITCH(TUNER)   |      |
|   | S104  | ESP0001-023J5 | TACT SWITCH(CD)      |      |
|   | S105  | ESP0001-023J5 | TACT SWITCH(VCR/DAT) |      |
|   | S106  | ESP0001-023J5 | TACT SWITCH(ABX)     |      |
|   | S107  | ESP0001-023J5 | TACT SWITCH(POWER)   |      |
|   | BC152 | EMS293-0130   | SOCKET WIRE(3PIN)    |      |
|   | BC153 | EMS293-0730   | SOCKET WIRE(5PIN)    |      |
|   | BC155 | EMS293-0110   | SOCKET WIRE(3PIN)    |      |
|   | BC206 | EMS293-0112   | SOCKET WIRE(3PIN)    |      |
|   | BC911 | EMS245-011T   | SOCKET WIRE(5PIN)    |      |
|   | FW102 | EWR35D-30LS   | FLAT WIRE(5PIN)      |      |
|   | FW154 | EWR35D-13LS   | FLAT WIRE(5PIN)      |      |
|   | FW202 | EWR34D-20LS   | FLAT WIRE(10PIN)     |      |
|   | FW204 | EWR34D-13LS   | FLAT WIRE(4PIN)      |      |
|   | FW205 | EWR39D-16LS   | FLAT WIRE(9PIN)      |      |
|   | JA151 | EMV5103-002A  | PLUG ASSY(2PIN)      |      |
|   | JA211 | EMV7127-011   | CONNECTOR(11PIN)     |      |
|   | JA212 | EMV7127-019   | CONNECTOR(19PIN)     |      |
|   | JB101 | EMV7123-017   | CONNECTOR(17PIN)     |      |
|   | JB151 | EMV5103-002B  | PLUG ASSY(2PIN)      |      |

Δ (SAFETY) PARTS

## Accessories List

| ⚠ | Part Number   | Part Name         | Q'ty | Description | Areas |
|---|---------------|-------------------|------|-------------|-------|
|   | E30580-2009A  | INSTRUCTION BOOK  | 1    |             | EN    |
|   | E30580-2010A  | INSTRUCTION BOOK  | 1    |             | EF    |
|   | E30580-2011A  | INSTRUCTION BOOK  | 1    |             | U     |
|   | E30580-2011A  | INSTRUCTION BOOK  | 1    |             | UT    |
|   | EWP502-005K   | BILT-IN ANTENNA   | 1    |             |       |
|   | E35497-019    | CAUTION SHEET     | 1    | 220V        | U     |
|   | E35497-019    | CAUTION SHEET     | 1    | 220V        | UT    |
| ⚠ | E04056        | SIEMENS PLUG      | 1    |             | U     |
| ⚠ | E04056        | SIEMENS PLUG      | 1    |             | UT    |
|   | EQB4001-015   | LOOP ANTENNA      | 1    |             |       |
|   | EMZ2001-014   | ADAPTOR           | 1    |             |       |
|   | RM-SE99U      | REMOTE CONTROLLER | 1    |             |       |
|   | UM-4NJ-2PSA   | BATTERY           | 2    |             |       |
|   | E43486-519A   | CAUTION SHEET     | 1    |             |       |
|   | QPGA025-03505 | ENVELOPE          | 1    |             |       |

⚠ SAFETY PARTS

### The Marks for Designated Areas

EN ..... Scandinavia      EF ..... Continental Europe  
 U ..... Universal Type      UT ..... Taiwan  
 No mark indicates all areas.



# Packing Materials and Part Numbers

