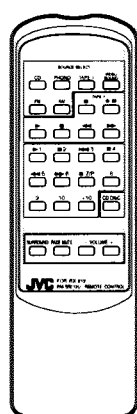


# JVC

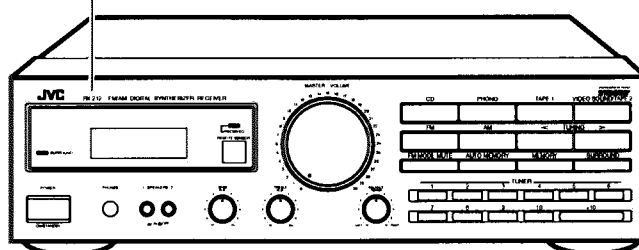
## SERVICE MANUAL

### DIGITAL SYNTHESIZER RECEIVER

# RX-218BK



MODEL NO.



**COMPU LINK**  
 Remote  
 Control Component

## Contents

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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 (△) 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

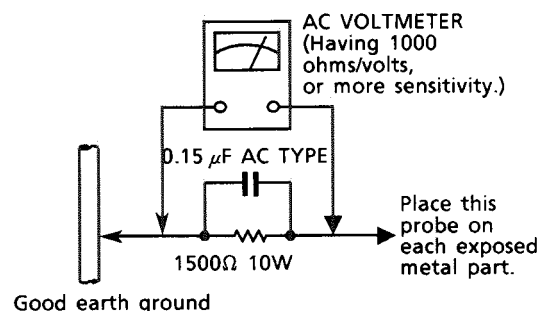
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.

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.

Before Starting

Connecting Stereo Equipment

Before connecting the receiver, read the following paragraphs carefully.

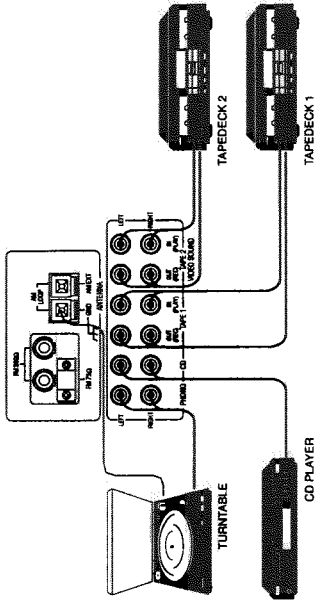
**IMPORTANT!** The left channel of any audio component must be connected to the left-channel jack of the receiver, and the right channel to the right-channel jack. If they are reversed, the stereophonic image will not be correct.

**NOTE:** To ensure correct connections, insert the red plug into the right channel.

Connect stereo component to the amplifier using cables with RCA PIN plugs. Connect the output jacks on a tape deck to the jacks marked IN (PLAY) on the amplifier, and the input jacks to those marked OUT (REC).

**NOTE:** Any turntables incorporating a small-output cartridge such as an MC (moving-coil type) must be connected to this amplifier through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.

Basic Connections



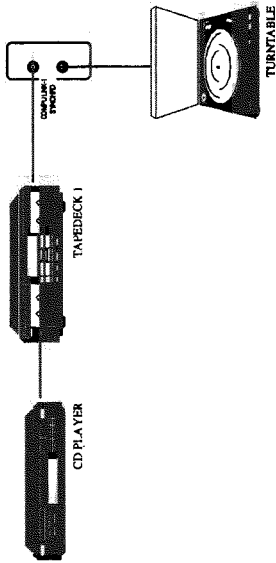
**NOTE:** If a ground cable is fitted to your turntable, connect the ground cable to the AM LOOP terminal marked GND. In this case, do not disconnect the AM LOOP wire from the GND terminal.

COMPU LINK-3 Connections

COMPU LINK-1 SYNCHRO jacks on the back of the receiver connect the COMPU LINK remote control system. This system connects other JVC audio components with the receiver to make listening and recording more convenient. To use this system, attach the cables provided with your JVC component to the COMPU LINK-1 or 3 SYNCHRO jacks on the rear panel of each component. Then connect the cables to the receiver.

NOTES:

- COMPU LINK-3 is an upgraded version of COMPU LINK-1. If your equipment provides COMPU LINK-3 jacks, you can still connect your equipment, but slight imperfections may result.
- Refer to page 18 for details about the COMPU LINK remote control system.

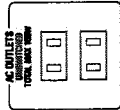


⚠ **CAUTION!** Do not connect Tape Deck 2 to the COMPU LINK jacks. It may cause the COMPU LINK system to malfunction.

Other Audio Connections

Use the socket on the back of the receiver to connect the power supply of any audio components.

⚠ **CAUTION!** Do not connect any components that consume more power than the capacity of the AC outlet. This capacity is indicated near the socket on the back of the receiver.



NOTE:

- Provided except for European countries.

Connecting Speakers

Up to four speakers (two sets) can be connected to the receiver. Connecting four speakers will allow you to use the built-in Surround feature.

Connect speakers to the SPEAKERS terminals on the back of the receiver. Use the wire supplied with the speakers.

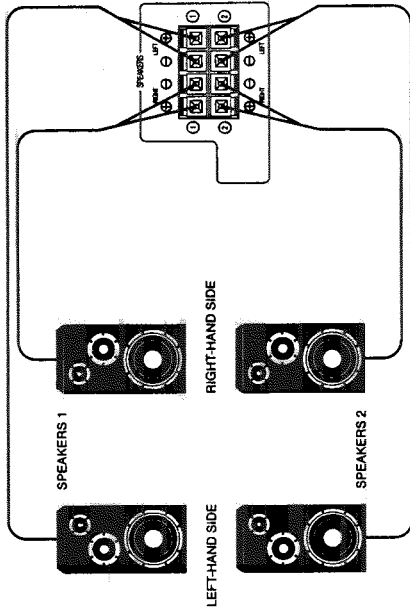
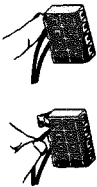
To connect each speaker, follow these steps:

- Step 1 Open each terminal on the back of the receiver and insert the end of the speaker wire, as shown.
- Step 2 Close the terminals to clamp the speaker wires in place, as shown.

⚠ CAUTION! Use speakers which have an impedance within the range indicated near the terminal.

Before Starting

Connecting Speakers



Connecting an AM Antenna

One AM loop antenna is supplied with your receiver.

To connect the AM loop antenna to the AM LOOP terminals, follow these steps:

- Step 1 Open each terminal and insert one of the two ends of the AM antenna wire.
- Step 2 Close the terminals to clamp the antenna wires in place.
- Step 3 Stand the AM loop antenna on its own base, as shown. Set it on any flat surface.



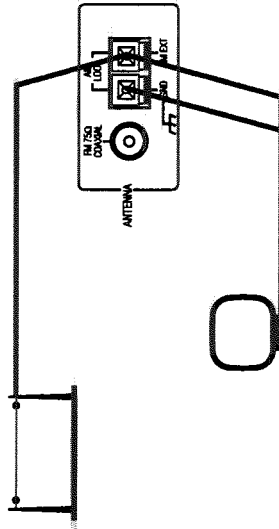
AM Outdoor Antenna

If your AM broadcast reception is unsatisfactory, you should connect an AM outdoor antenna in addition to the loop antenna. The antenna wire should be 16 to 40 feet (5 to 13 meters) long.

Connect one end of the outdoor single vinyl-covered antenna wire to the AM LOOP terminal marked AM EXT.

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

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





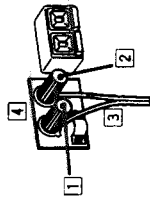
For Countries Outside Europe

For countries outside Europe, there are two connection types:

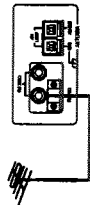
To connect a 300-ohm antenna, follow these steps:



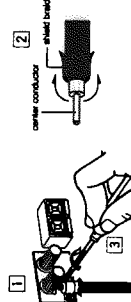
- Step 1 Loosen the cap on the 300/75-ohm terminal on the back of the receiver.
- Step 2 Loosen the cap on the 300-ohm terminal on the back of the receiver.
- Step 3 Connect the antenna by inserting one wire behind each cap.
- Step 4 Tighten the caps on both terminals.



To connect a 75-ohm antenna, follow these steps:



- Step 1 Unscrew the cap and bracket screw on the 300/75-ohm terminal. Insert the round antenna cable from below.
- Step 2 Make sure the shield braid on the cable contacts the bracket, and the center conductor of the cable contacts the 300/75-ohm terminal.
- Step 3 Tighten the bracket screw and the cap on the 300/75-ohm terminal.

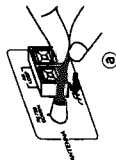
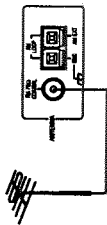


Connecting an FM Antenna

The type of terminal provided for connecting an FM antenna depends on your geographic area. Read the section below which corresponds to your area.

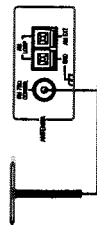
**IMPORTANT!** Make sure the antenna conductors do not touch any other terminals on the receiver. This could cause poor reception.

You have two options for connecting an FM antenna. Connect the included wire antenna as shown in option ①, or purchase antenna and cable with connector DIN 45332 and attach as shown in option ②.



For Other European Countries

Connect the antenna cable to the FM 75Ω COAXIAL terminal using the Antenna Adaptor. You have two options — a 300-ohm feeder cable, or a 75-ohm coaxial cable.

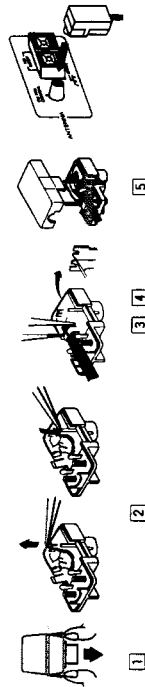
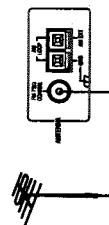


To attach the Antenna Adaptor to the 300-ohm feeder cable, secure the two conductors to the screws of the Antenna Adaptor, as shown at the left.



To attach the Antenna Adaptor to the 75-ohm coaxial cable, follow these steps:

- Step 1 Remove the cover of the Antenna Adaptor by lifting the tabs on both sides.
- Step 2 Remove the jumper wire in the Antenna Adaptor with a tweezer.
- Step 3 Insert the center conductor of the coaxial cable into the notch located in the center of the fitting at the end of the Antenna Adaptor.
- Step 4 Using a pair of pliers, secure the fitting in the center of the Antenna Adaptor so that the shield braid of the coaxial cable is held tightly in the fitting.
- Step 5 Snap the cover back onto the Antenna Adaptor.



Before Starting

For Germany

# Operation Outline

## Connecting the Power

### Before Starting



### Connecting the Power Supply

In countries outside Europe, you will find voltage selector and AM channel spacing selector switches on the back of the receiver. If your receiver has these switches, follow the instructions below to set them before connecting the power.

**Voltage Selector:** Using a Philips screwdriver, adjust the voltage selector to the correct supply voltage for your area.

**AM Channel Spacing Selector:** Using the tip of a ballpoint pen, adjust the AM channel spacing for your area.

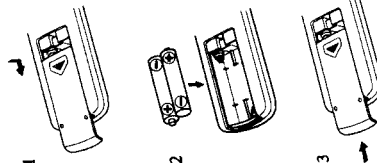
After checking all connections, insert the power cord plug into an outlet.

### CAUTION!

- Do not handle the power cord with wet hands.
- Do not pull on the power cord to unplug the receiver. Always grasp the plug directly so as not to damage the cord.
- Do not plug the power cord into a socket until all components are connected correctly.

**IMPORTANT!** If the power cord is disconnected or a power failure occurs, the receiver settings in memory are retained for 2 or 3 days.

### Inserting Batteries into the Remote Control



The remote control requires two batteries (supplied). To insert batteries, follow these steps:

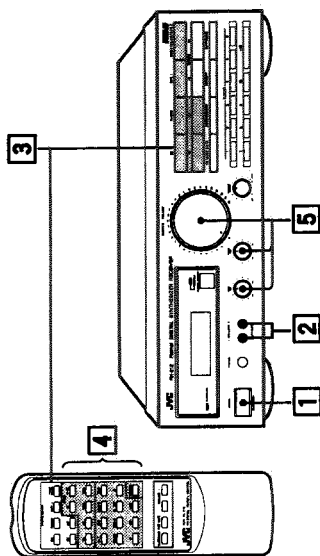
- Step 1** On the back side of the remote control, press down on the battery cover and slide it out.
- Step 2** Insert batteries. Make sure to observe the proper polarity: (+) to (+) and (-) to (-).
- Step 3** Slide the cover in.

If the range or effectiveness of the remote control decreases, replace the batteries. Use two (2) dry-cell batteries of the AA/R6/UM-3 type.

### CAUTION! Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity indicated (+) to (+) and (-) to (-).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

## Basic Operation Reference



### 1 Turn on the power

Push the POWER switch to turn on the receiver. The display lights.



### NOTE:

Pushing the POWER switch again turns off the power. A small amount of power (7 watts) is consumed in the standby mode. To turn the power off completely, disconnect the power cord from the wall outlet.

### 2 Select speakers (See page 16)

Use the SPEAKERS switch to choose between the two sets of speakers. To use your headphones, insert the headphone plug into the PHONES jack on the receiver.

### 3 Choose an audio source (See page 12)

To choose an audio source, press one of the SOURCE/SELECT buttons on the receiver or select one of the components on the remote control.



### 4 Operate the audio source (See pages 18-20)

Refer to the manual provided with each component. If your JVC components are connected to the COMPU LINK jack of the receiver, you can operate them using the remote control.

### 5 Adjust volume and tone (See pages 16-17)

Rotate the MASTER VOLUME control on the receiver or press the VOLUME button on the remote control to adjust volume. See page 16 for other ways to change the volume or tone.

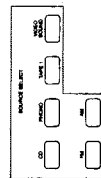
## Selecting the Audio Source

The receiver can receive input from compact discs, cassette tapes, turntables, or any audio source that you connect. You can select a source for either listening or recording.

### Listening

Press one of the SOURCE SELECT buttons on the receiver or the remote control.

- CD\* Listen to the CD player.
- PHONO\* Listen to a record.
- TAPE 1\* Listen to the tape deck connected to the TAPE 1 jacks.
- VIDEO SOUND/ Listen to the tape deck connected to the TAPE 2 jacks.
- TAPE 2 Listen to an FM broadcast.
- FM\* Listen to an FM broadcast.
- AM\* Listen to an AM broadcast.



**IMPORTANT!** The VIDEO SOUND/TAPE 2 button has a different function from other source selector buttons, because it allows you to monitor the quality of the recording. For more details, see Monitoring below.

### Recording

The source being played is automatically selected as the source to be recorded. While recording, you can listen to the selected source at any desired volume and tone settings.

**NOTE:** Volume and Tone adjustments and the surround sound effect do not affect recording.

**IMPORTANT!** When recording from TAPE 2 to TAPE 1, press the VIDEO SOUND/TAPE 2 button and another button other than TAPE 1.

Using the Monitor feature, you can compare the sound quality of the source to the sound quality of the recording being made.

To use the Monitor feature while recording onto a cassette deck connected to the TAPE 2 jacks, follow these steps:

**Step 1** Press the VIDEO SOUND/TAPE 2 button.

The "TAPE 2 MONITOR" light appears and you can listen to the sound of the cassette deck connected to the TAPE 2 jacks. You are now hearing the quality of the recording, not the quality of the source.

**Step 2** Press the VIDEO SOUND/TAPE 2 button again.

This turns off the "TAPE 2 MONITOR" light, and the speakers play the previously selected source.

**NOTE:** If the cassette deck has three heads, you can hear the sound of the recording at the same time as it records on the tape.

## Receiving an AM/FM Broadcast

To receive an AM/FM broadcast, select either AM or FM using the AM button or FM button. Then tune to the precise frequency using the TUNING buttons.

### Tuning

Tune to the frequency of a desired station using the TUNING buttons. Pressing the right button increases the frequency, and pressing the left button decreases the frequency. Tapping the TUNING button once changes the frequency in steps.

On the model that can receive LW (Long-Wave) broadcasts, AM tuning will skip to the lower limit of the MW (Middle-Wave) frequencies when it reaches the upper limit of the LW frequencies, and vice versa.

**NOTE:** LW is not provided for countries outside Europe.

There are two tuning modes: Manual and Automatic.

If you know the frequency of a desired station, hold down the TUNING button to start the frequency changing quickly. Release the TUNING button near the desired station and tap it repeatedly until you arrive at the correct frequency.

If you want to scan frequencies for a desired station, hold down the TUNING button to start the frequency changing quickly. When you release the TUNING button, the frequency continues to change until it reaches a station.

When a station is correctly tuned, the "TUNED" light appears on the display window.

Once a tuned frequency is preset, it can be directly recalled using the TUNER buttons. For details, see page 14.

**NOTE:** When you use automatic tuning, weak stations are ignored. To pick up weak stations, use manual tuning.

**IMPORTANT!** If the receiver is tuned to a station but the "TUNED" light does not appear, try rotating the antenna for better reception.

### Selecting an FM Reception Mode

Pressing the FM MODE/MUTE switch switches between these modes.

The "MUTE-AUTO" light appears in the display window. You hear either stereo sound or monaural sound, depending on the broadcast. If it is a stereo broadcast, the "STEREO" light appears. This mode is also useful for suppressing static "noise" between stations.

The "MUTE-AUTO" light disappears. You hear monaural sound even if a broadcast is in stereo. This mode is also useful when a stereo broadcast is noisy because of a weak signal.

**NOTE:** Using the Automatic Tuning mode, the sound of a broadcast with a weak signal may be muted. In this case, select the monaural mode.

Presetting Tuned Frequencies

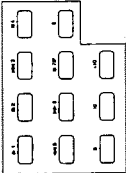
You can preset up to total 40 FM/AM radio stations by assigning channel numbers (1 through 40) to them. Once a station is preset, you can listen to it by entering the preset number using the TUNER buttons on the receiver, or the PRESET buttons of the remote. There are two ways to preset: manual or automatic.

Assigning Channel Numbers



To choose numbers from 1 through 10, press the appropriate TUNER buttons. To choose numbers from 11 through 40, press the +10 key and one other button. For example:

- To choose 17 Press +10, then 7.
- To choose 20 Press +10, then 10.
- To choose 25 Press +10 twice, then 5.
- To choose 40 Press +10 three times, then 10.



**NOTE:** You can also tune using the remote control. First press the AM or FM button on the remote, then enter the channel number using the numeric buttons on the remote.

Manual Presetting



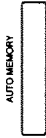
To use manual presetting to assign channel numbers to your favorite stations, follow these steps:

- Step 1** Tune to a station. If necessary, follow the procedure on page 13.
- Step 2** Press the MEMORY button.  
The "MEMORY" light appears in the display window.
- Step 3** Using the TUNER buttons enter a number (1 through 40). This number is the channel number you are assigning to the station.

**IMPORTANT!** You must enter the channel number while the "MEMORY" light is on. You have about 5 seconds to do this. If the light disappears before you enter the channel number, press the MEMORY button again.

- Step 4** When the MEMORY light disappears and the channel number is displayed, presetting is completed.

Automatic Presetting



To use automatic presetting to preset up to 40 stations automatically, follow these steps:

- Step 1** Press the SOURCE selector button to select AM or FM.
- Step 2** Using the TUNING buttons, move to the lowest frequency on the dial.
- Step 3** Press the AUTO MEMORY button.  
The "MEMORY" light flashes in the display window.
- Step 4** Using the TUNER buttons, enter a channel number (1 through 40) to the first tuned station. From that point, scanning starts and stations are assigned channel numbers in ascending order.

**IMPORTANT!** You must enter the channel number while the "MEMORY" light flashes. If this light disappears before you enter the channel number, press the AUTO MEMORY button again.

Excluding a Station From Automatic Presetting

Frequencies are scanned in ascending order. When a station is tuned in, scanning stops and the "TUNED" light appears. The station is preset about 4 seconds later and the "MEMORY" light flashes again. If you do not want to preset this station, press the AUTO MEMORY button within 4 seconds. Scanning restarts without presetting that station.

When the "MEMORY" light flashes again, scanning continues until one of the following occurs:

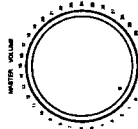
- Another station is tuned in
- The upper limit of the tuning range is reached
- All 40 channel numbers have been assigned

When Auto Presetting is completed, the last preset station is received.

**NOTE:** To stop scanning at any time, press either TUNING button once.

# Adjusting the Volume and Tone

## Using the MASTER VOLUME Control



Use the MASTER VOLUME control to adjust the volume from the left and right speakers. Rotating the dial to the right increases the volume. The volume from the speakers and the headphones increases simultaneously.

*NOTE: Volume can also be adjusted using the remote control. Press the VOLUME button marked + to increase the volume, or the VOLUME button marked - to decrease the volume.*

⚠ **CAUTION!** Listening to extremely loud sound may damage your hearing. Be especially careful when using headphones.

## Muting the Sound



Press the FADE MUTE button on the remote control to decrease the volume easily when you receive a phone call or a visitor.

**IMPORTANT!** If you are listening at very high volume, you may need to press FADE MUTE a second or third time to reduce volume completely.

## Selecting the Speakers



Pushing in SPEAKER button 1 or 2 activates that pair of speakers. Pressing either button again deactivates that pair of speakers. When the button is in, that pair is activated. You can listen to both pairs, pair 1, pair 2, or neither pair.

**IMPORTANT!** If only one set of speakers is connected, pressing "in" both speaker buttons will produce no sound.

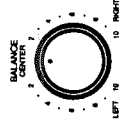
## Listening to Headphones



Insert the headphone plug into the PHONES jack. To limit sound to the headphones (no sound from the speakers), press SPEAKER buttons 1 and 2 to deactivate all speakers.

⚠ **CAUTION!** To avoid hearing damage, turn the volume down before plugging in the headphones, then gradually increase the volume.

## Adjusting the Left-Right Balance



Use the BALANCE control to adjust the balance between the left and right channels. Rotating the dial to the right increases the right-channel volume, and rotating it to the left increases the left-channel volume. The BALANCE control affects both sets of speakers and the headphones.

## Adjusting the Tone

Use the BASS control to adjust low pitches and the TREBLE control to adjust high pitches. Turn either control to the right for intensified pitch. Set both controls at the FLAT position for normal listening.

## Adjusting Bass and Treble



## Enjoying the Surround Sound Effect



When you are using four speakers, you can put them in different corners of the room and use the Surround feature. Press the SURROUND button to create this movie-theater effect. The SURROUND indicator lights on the display window. Press the SURROUND button again to deactivate the surround feature. The SURROUND indicator turns off.

**IMPORTANT!** The Surround feature has no effect on monaural (non-stereo) sources.

*NOTE: Two sets of speakers are recommended to produce an ideal surround effect, but you can use the feature with only one set of speakers connected.*

Operating Audio Components

COMPU LINK Remote Control System



The COMPU LINK remote control system lets you operate the receiver and JVC components from the remote supplied with this receiver. Control signals for JVC audio components are preset in the receiver's remote control.

Connecting the COMPU LINK-1 SYNCHRO jacks on the back of the receiver will allow you to use the four functions below.

Equipment Remote Control

You can control all equipment via the REMOTE SENSOR on the receiver using the receiver's remote control. For details, see page 19.

**IMPORTANT!** Point the remote control directly at the REMOTE SENSOR on the receiver.

Automatic Source Selection

When you press play on a component or the remote, the component begins playing immediately. On the other hand, if you select a new source on the receiver or the remote, the component begins playing immediately, but the previously selected source continues playing without sound for a few seconds.

Synchronized Recording

Synchronized recording means the tape deck starts recording as soon as a CD or record begins playing.

To use synchronized recording, follow these steps:

- Step 1** Put a tape in the deck, and a disc in the CD player or on the turntable.
- Step 2** Press the REC and PAUSE button on the tape deck at the same time. This puts the tape deck in the REC/PAUSE state.

**IMPORTANT!** If you do not press the REC button and PAUSE button together, the synchronized recording feature will not operate.

- Step 3** Press the PLAY button on the CD player or turntable.
- As soon as the disc starts playing, the tape deck starts recording. When the disc ends, the tape deck switches back to the REC/PAUSE mode, and stops 4 seconds later.

NOTES:

- During synchronized recording, the CD or PHONO button is activated. Other SOURCE buttons are disabled to prevent recording failure.
- If your CD player is operated in the PROGRAM mode, a 4-second mute is recorded between tracks to enable the music scan feature of your tape deck to work.
- If the power of any component is shut off during synchronized recording, the system will not operate properly. In this case, you must start again with step 1.

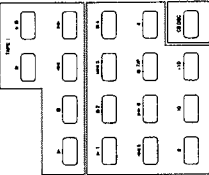
Using the Remote Control

By connecting the COMPU LINK jack to this receiver, you can operate the audio stereo component with this receiver's remote control. In addition, if your VCR is a JVC product, you can operate it with this receiver's remote control.

**NOTE:** The VCR does not work with the COMPU LINK remote control system. When you operate the VCR, you must aim the remote control at the VCR instead of the receiver.

Operating the Component Already Selected

Select a source with the SOURCE SELECT buttons on the remote control. Operate that source using the buttons below the SOURCE SELECT buttons.



**IMPORTANT!** If you choose a source on the receiver directly, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using the remote control.

**IMPORTANT!** When you select CD or TAPE 1 on the remote control, the component will turn on and start playing automatically.

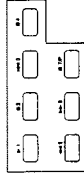
Turntable



After pressing the PHONO button, you can perform the following operations on the remote:

- Starts playing
- Stops playing

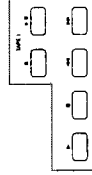
CD Player



After pressing the CD button, you can perform the following operations on the remote:

- Starts playing
- Skips to the beginning of the previous track
- Skips to the beginning of the next track
- Stops playing
- Stops playing temporarily. To release it, press
- Moves backward quickly during play
- Moves forward quickly during play

Cassette Deck



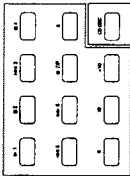
After pressing the TAPE 1 button, you can perform the following operations on the remote:

- Starts playback
- Stops operation
- Stops playback or recording temporarily. To release it, press
- Fast wind the tape from right to left
- Fast wind the tape from left to right
- Press to enter record-standby mode

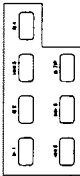


Troubleshooting

Operating the Component  
Not Currently Selected



CD Player-Changer



When you want to operate one component while listening to another component (e.g., recording from a CD), use the buttons in the CONTROL section of the remote control. The CONTROL buttons allow you to use the operation buttons for the new component without affecting the component already playing.

After pressing the CD DISC button in the CONTROL section of the remote, you can perform the following operations on the remote:

- 1-6, P Select the number of the disk installed in the CD player-changer. Then continue to operate the CD player as shown on page 19.

Use this chart to help you solve everyday operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Display window does not light up	Power cord not plugged in	Plug power cord into AC socket
No sound from speakers	Speaker wires not connected	Check speaker wiring and reconnect if necessary
	SPEAKERS buttons not set correctly	Push the SPEAKERS buttons in or out as desired
	Incorrect SOURCE SELECT button was pressed	Select the correct audio source
Sound from one speaker only	Speaker wires not connected properly	Check speaker wiring and reconnect if necessary
	Balance control is set to one extreme	Adjust BALANCE control so that both speakers have sound
Continuous hiss or buzzing during FM reception	Incoming signal is too weak	Adjust antenna
	Station is too far away	Select a new station
	Incorrect antenna used	Check with your dealer to be sure you have the correct antenna
	Antenna not connected properly	Check connections
Occasional cracking noise during FM reception	Ignition noise from automobiles	Move the antenna further from automobile traffic
Howling during record playing	Turntable too close to speaker	Move speakers away from turntable
Remote control does not work	There is an obstruction in front of the REMOTE SENSOR on the receiver	Remove the obstruction
	Batteries are weak	Replace batteries

Specifications

Amplifier

Output Power

UK and Continental Europe

50 watts per channel, min. RMS, both channels driven into 4 ohms at 1 kHz with no more than 0.9% total harmonic distortion. (IEC 268-3/DIN)

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

40 watts, 8 ohms, 40 Hz to 20 kHz with 0.8% total harmonic distortion.

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

Other Countries

Total Harmonic Distortion (8 ohms, 1 kHz)  
UK and Continental Europe  
Other Countries

0.08%\* at 30 watts output  
0.08%\*\* at 50 watts output

Frequency Response (8 ohms)  
PHONO  
CD / TAPE 1 / TAPE 2

20 Hz to 20 kHz (±1 dB)  
20 Hz to 20 kHz (±1 dB)

Signal-to-Noise Ratio (\*66 IHF / DIN)  
PHONO  
CD / TAPE 1 / TAPE 2

70 dB / 66 dB  
91 dB / 67 dB

RIAA Phono Equalization

± 1 dB (20 Hz to 20 kHz)

Input Sensitivity / Impedance (1 kHz)  
PHONO  
CD / TAPE 1 / TAPE 2

2.5 mV / 47 k ohms  
200 mV / 47 k ohms

Tone Control Range

BASS (at 100 Hz) ±8 dB  
TREBLE (at 10 kHz) ±8 dB

FM Tuner (IHF)

Tuning Range

87.5 MHz to 108.0 MHz

Usable Sensitivity

10.8 dBf (0.95 µV / 75 ohms)

50 dB Quieting Sensitivity  
Monaural  
Stereo

16.3 dBf (1.8 µV / 75 ohms)  
38.3 dBf (22.5 µV / 75 ohms)

Signal-to-Noise Ratio (IHF-A weighted/DIN)  
Monaural  
Stereo

80 dB at 85 dBf / 73 dB at 85 dBf  
73 dB at 85 dBf / 64 dB at 85 dBf

Total Harmonic Distortion (IHF/DIN) Monaural Stereo	0.15% at 1 kHz / 0.1% at 1 kHz 0.2% at 1 kHz / 0.3% at 1 kHz
Stereo Separation at REC OUT	40 dB at 1 kHz
Capture Ratio (IHF)	1.5 dB (10 mV / 300 ohms)
Alternate Channel Selectivity (IHF/DIN)	60 dB (±400 kHz) / 55 dB (±300 kHz)
Frequency Response	30 Hz to 15 kHz (+0.5 dB, -3 dB)
Tuning Range U.K. and Continental Europe Other Countries	522 kHz to 1,629 kHz (MW) 144 kHz to 353 kHz (LW) 531 kHz to 1,602 kHz / 530 kHz to 1,600 kHz (selectable)
Usable Sensitivity (MW/LW) Loop antenna External antenna	300 µV/m / 600 µV/m ** 30 µV / 100 µV **
Signal-to-Noise Ratio (MW/LW)	50 dB ** (100 mV / m)
Power Requirements Continental Europe U.K. Other Countries	AC 230V ~, 50 Hz AC 240V ~, 50 Hz AC 110V/127V/220V/240V ~, 50/60 Hz
Power Consumption Europe (except U.K.) U.K. Other Countries	180 watts 470 watts 160 watts
Dimensions (W x H x D)	17 <sup>3</sup> / <sub>16</sub> x 5 x 13 <sup>7</sup> / <sub>16</sub> inches 435 x 126 x 341 mm
Weight	14.4 lbs 6.5 kg

\* Measured by JVC Audio Analysis System.  
\*\* Measured at 1000 kHz or 999 kHz (MW), at 245 kHz (LW)

Designs and specifications subject to change without notice.

# Description of Major ICs

## ■ MN71202JPY1 (IC401) : System Controller

### 1. Terminal Layout

VDD	1	64	OSC
KIN 0	2	63	OSC
KIN 1	3	62	GND
KIN 2	4	61	NC
KIN 3	5	60	GND
KOUT 0	6	59	T.MUTE
KOUT 1	7	58	S.MUTE
KOUT 2	8	57	AC
KOUT 3	9	56	SURR.
KOUT 4	10	55	BAND1
KOUT 5	11	54	BAND0
KOUT 6	12	53	LW,9k/10k
D1	13	52	TEST
D2	14	51	VOL.UP
D3	15	50	VOL.DOWN
D4	16	49	C.LINK OUT
D5	17	48	C.LINK IN
VPP	18	47	TUNED
S1	19	46	STEREO
S2	20	45	INH
S3	21	44	REM
S4	22	43	RESET
S5	23	42	DO
S6	24	41	DI
S7	25	40	CK
S8	26	39	CE
S9	27	38	DATA
S10	28	37	STB
S11	29	36	CLK
S12	30	35	GND
VOL IND	31	34	GND
STANDBY/RECEIVED	32	33	SURROUND

### 2. Key matrix

	KEY IN 0 (pin2)	KEY IN 1 (pin3)	KEY IN 2 (pin4)	KEY IN 3 (pin5)
KEY OUT 0 (pin6)	TAPE 1	TAPE2 MONITOR	F.UP	F.DOWN
KEY OUT 1 (pin7)	MEMORY	SURROUND	4	5
KEY OUT 2 (pin8)	6	10	+ 10	—
KEY OUT 3 (pin9)	CD	PHONO	FM	AM
KEY OUT 4 (pin10)	FM MODE	AUTO MEMORY	1	2
KEY OUT 5 (pin11)	3	7	8	9

### 3. Pin Function Description

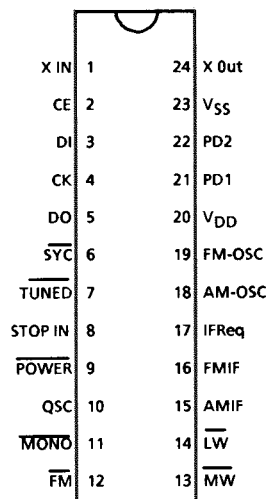
Pin NO.	symbol	I/O	Function and Operations	Pin NO.	symbol	I/O	Function and Operations
1	VDD	--	Power supply	33	SURROUND	O	Surround indication output
2	KIN 0	I	Key matrix input	34	GND	--	Connected to GND
3	KIN 1	I	Key matrix input	35			
4	KIN 2	I	Key matrix input	36	CLK	O	Clock to the source selector(IC321)
5	KIN 3	I	Key matrix input	37	STB	O	Strobe signal for DATA
6	KOUT 0	O	Key matrix output	38	DATA	O	Selector control data output
7	KOUT 1	O	Key matrix output	39	CE	O	Chip select signal
8	KOUT 2	O	Key matrix output	40	CK	O	Clock to transmit data for PLL Synthesizer
9	KOUT 3	O	Key matrix output	41	DI	I	Data from PLL synthesizer
10	KOUT 4	O	Key matrix output	42	DO	O	Data to PLL synthesizer
11	KOUT 5	O	Key matrix output	43	RESET	I	Reset signal input
12	KOUT 6	O	Key matrix output	44	REM	I	Remote signal input
13	D1	O	FL grid control output	45	INH	I	Inhibit input
14	D2	O	FL grid control output	46	STEREO	I	Detect the signal for 'STEREO' indication
15	D3	O	FL grid control output	47	TUNED	I	Detect the signal for 'TUNED' indication
16	D4	O	FL grid control output	48	C.LINK IN	I	DCS signal input
17	D5	O	FL grid control output	49	C.LINK OUT	O	DCS signal output
18	VPP	--	Power supply for FL display	50	VOL.DOWN	O	Volume control signal
19	S1	O	FL segment output	51	VOL.UP	O	Volume control signal
20	S2	O	FL segment output	52	TEST	--	For TEST
21	S3	O	FL segment output	53	LW,9k/10k	--	9k/10k controller
22	S4	O	FL segment output	54	BAND 0	--	BAND 0
23	S5	O	FL segment output	55	BAND 1	--	BAND 1
24	S6	O	FL segment output	56	SURR.	O	Surround control signal
25	S7	O	FL segment output	57	AC	--	Non connection
26	S8	O	FL segment output	58	S.MUTE	O	Source mute control signal
27	S9	O	FL segment output	59	T.MUTE	O	Tuner muting signal
28	S10	O	FL segment output	60	GND	--	Connected to GND
29	S11	O	FL segment output	61	NC	--	Non connection
30	S12	O	FL segment output	62	GND	--	GND
31	VOL.IND	O	Volume indication signal output	63	OSC	--	Oscillation terminal
32	STA./RECEI.	O	STANDBY/RECEIVED indication output	64	OSC	--	Oscillation terminal

## ■ LC7210 (IC102) : PLL Synthesizer

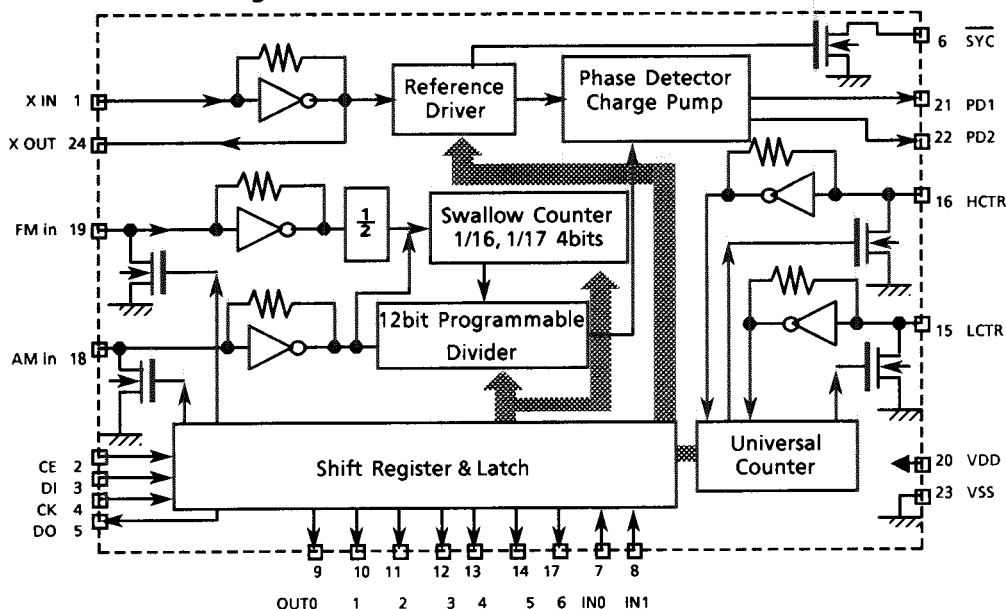
### 1. The main function descriptions

- (1) It makes the local oscillation frequency by the control data from IC401.
- (2) Decode the control signal and transmit the signal for receiving conditions.
- (3) For the best tuning, count the internal-frequency and transmit the data to IC401.

### 2. Terminal Layout



### 3. Block Diagram



### 4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	DI	I	Receive the control data from the controller (IC401).
4	CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	DO	O	Transmit the data from LC7218 to the controller which is synchronized with CL.
6	SYNC	—	Not used.
7	Tuned	I	Receive the tuned signal from IC104 (LA1266A).
8	Stop in	—	Connect to GND.
9	POWER	—	Connect to GND.
10	QSC	—	Not used.
11	MONO	O	It is "H" on FM-monaural, "L" on FM-Stereo.
12	FM	O	It is "L" on FM mode.
13	MW	O	It is "L" on MW mode.
14	LW	O	It is "L" on LW mode.
15	AM-IF	I	Universal counter input for AM-IF from IC104 (LA1266A).
16	FM-IF	I	Universal counter input for FM-IF from IC104(LA1266A).
17	IF REQ	O	Output the "IF-signal request" to IC104 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V <sub>DD</sub>	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output: When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	V <sub>SS</sub>	—	Connect to GND.

## ■ LA1266A (IC104) : FM AM IF AMP & detector

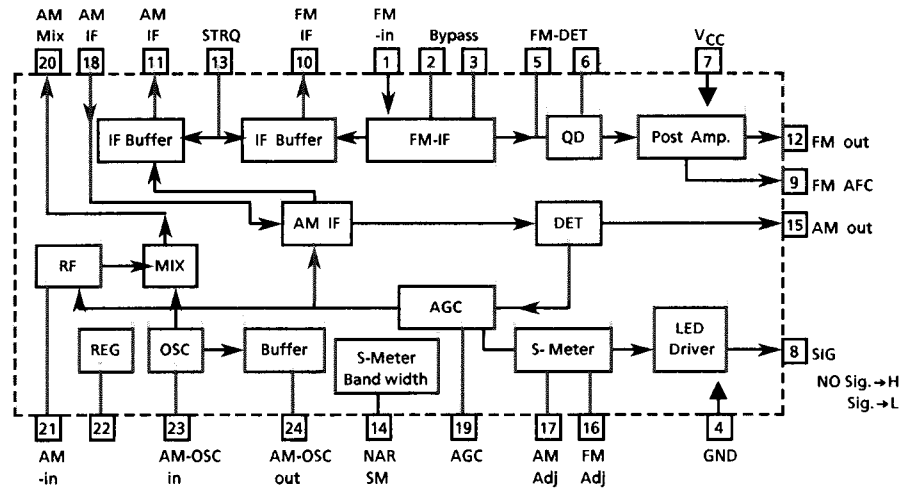
### 1. The main function descriptions

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

### 2. Terminal Layout

FM-in	1	24	AM-OSC out
Bypass	2	23	AM-OSC
Bypass	3	22	V.ref
GND	4	21	AM-in
FM-DET	5	20	AM-Mix
FM-DET	6	19	AM-AGC
V <sub>CC</sub>	7	18	AM-IF
SIG	8	17	AM Adj.
FM-AFC	9	16	FM Adj.
FM-IF	10	15	AM out
AM-IF	11	14	NAR SM
FM-out	12	13	STRQ

### 3. Block Diagram



### 4. Pin Function Description

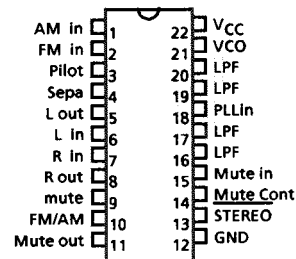
Pin No.	Symbol	I/O	Functions and Operations
1	FM in	I	This is an input terminal of FM IF Signal.
2,3	Bypass	--	Bypass of FM IF Amp.
4	GND	--	This is the device ground terminal.
5,6	FM DET	--	FM detect transformer.
7	V <sub>CC</sub>	--	This is the power supply terminal.
8	SIG	O	When the set is tuning, this terminal becomes "L".
9	FM AFC	O	This is an output terminal of voltage for FM - AFC.
10	FM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of FM IF output.
11	AM IF	O	When the signal of IF REQ of IC102(LC7218) appear, the signal of AM IF output.
12	FM out	O	FM detection output.
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal going to "High".
14	NAR SM	--	Control the Band-width of signal meter.
15	AM out	O	AM detection output.
16	FM Adj	--	For adjust the stop level (or mute level) of FM.
17	AM Adj	--	For adjust the stop level (or mute level) of AM.
18	AM-IF	I	Input of AM IF Signal.
19	AM-AGC	I	This is an AGC voltage Input terminal for AM.
20	AM-MIX	O	This is an output terminal for AM mixer.
21	AM-IN	I	This is an input terminal for AM RF Signal.
22	V.REF	--	Register value between pin9 and pin22 decides the frequency width of the input signal.
23	AM-OSC	--	This is a terminal of AM Local oscillation circuit.
24	AM-OSC out	O	AM Local Oscillation Signal output.

## ■ LA3401 (IC105) : FM MPX Detector

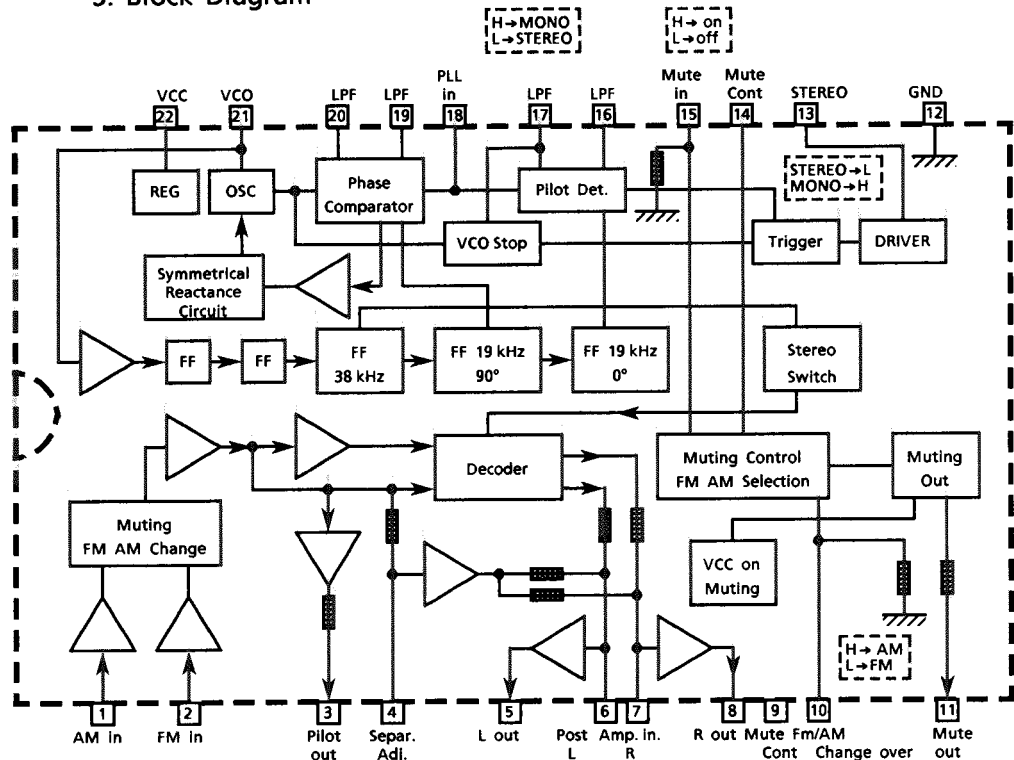
### 1. The main function descriptions

- (1) Detect the FM multiplex signal (Stereo signal).
- (2) When receiving FM stereo signal, it outputs the signal for indication.
- (3) AM/FM audio amplifier.

### 2. Terminal Layout



### 3. Block Diagram



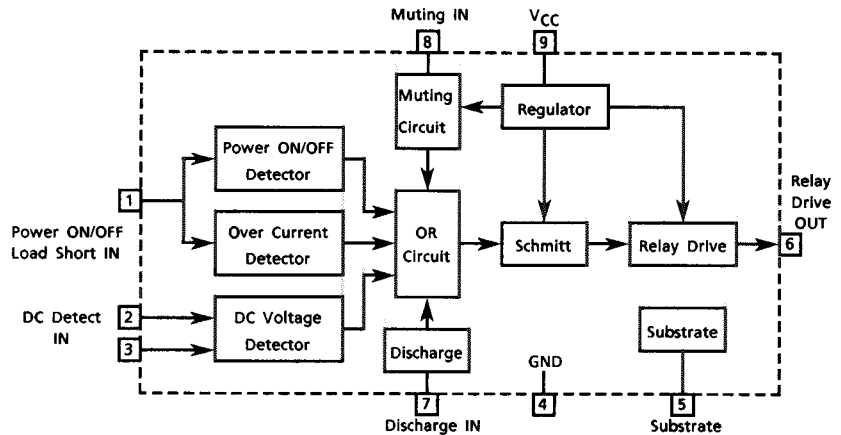
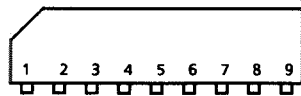
### 4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1	AM in	I	This is an input terminal for AM detection signal.
2	FM in	I	This is an input terminal for FM detection signal.
3	Pilot out	O	Output of MPX pilot signal (Connect to Pin18).
4	Sepa. Adj.	--	Separation adjustment.
5	L. out	O	Left channel signal output.
6	L	I	Input terminal of the left channel post-amplifier
7	R	I	Input terminal of the right channel post-amplifier
8	R out	O	Right channel signal output
9	Mute Cont	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM / AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	Mute out	--	Not used
12	GND	--	Ground terminal.
13	Stereo	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	Mute Cont	--	The mute time is controlled by the connected capacitor when changing over the FM / AM .
15	Mute in	I	Mute signal input. "H" : Mute on, "L" : Mute off.
16	LPF	--	Low pass filter of pilot detector.
17	LPF	--	While this terminal goes to "H", the VCO stop.
18	Pilot in	I	Pilot signal input
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V <sub>CC</sub>	--	Power supply.

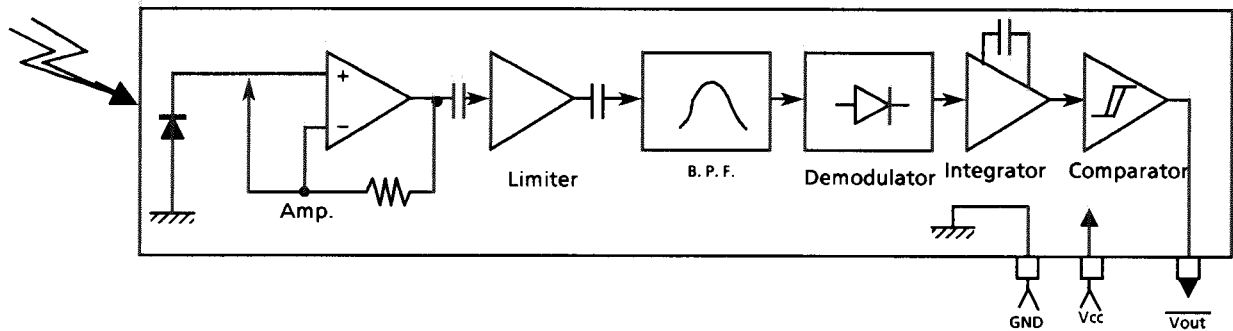


# Internal Block Diagram of Other ICs

## ■ TA7317P (IC901) : Protector

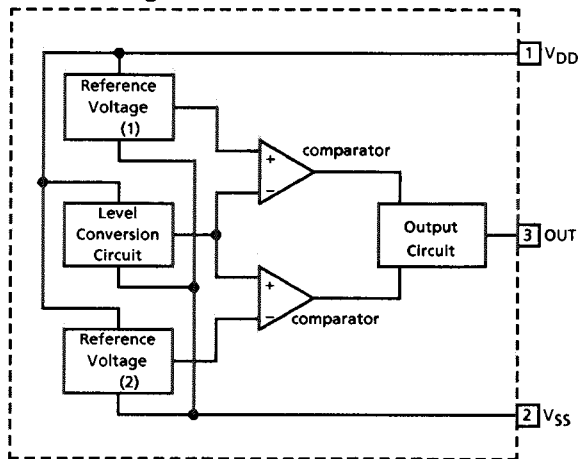


## ■ SPS-420-1 (IC402) : Receiver for remote controller



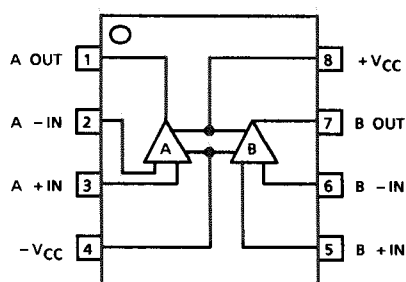
## ■ MN1280(P.Q) (IC491) : Reset IC

### Block Diagram

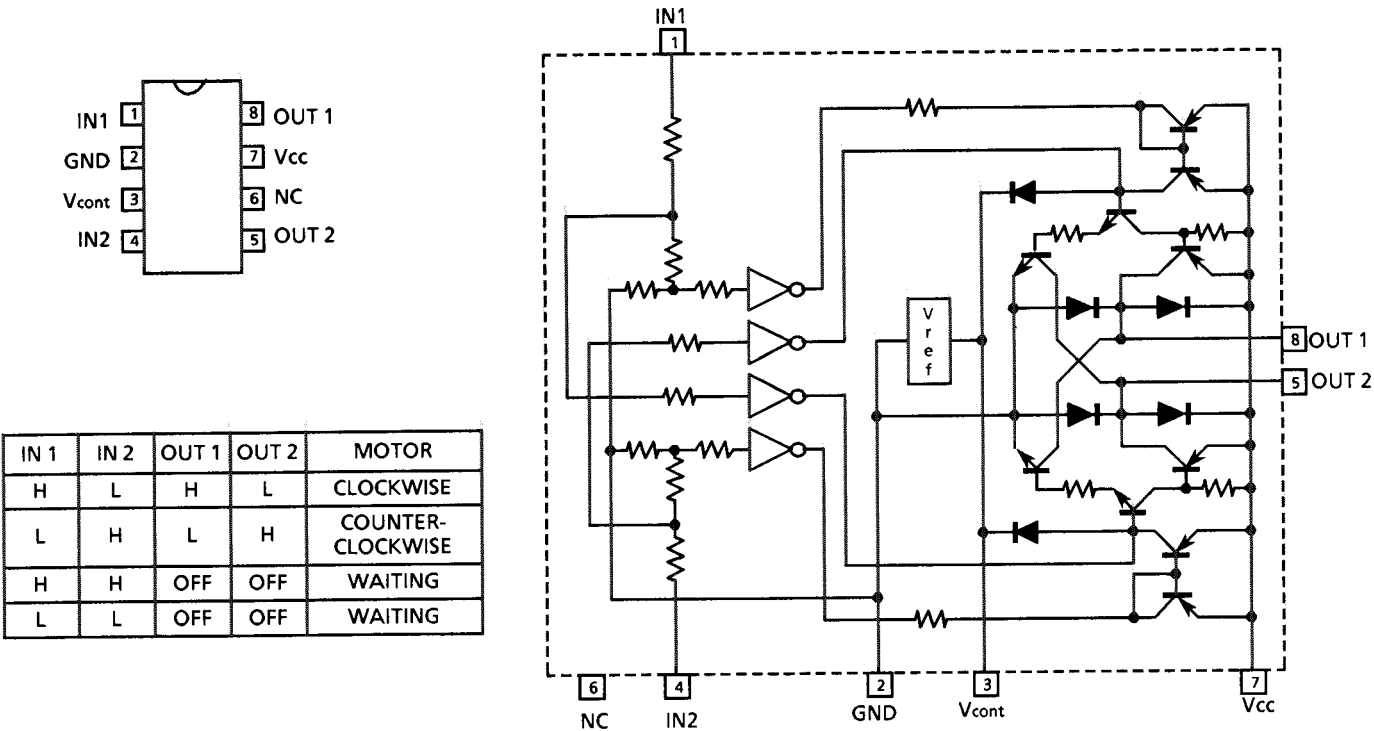


Pin No.	Pin Name	Functions
1	V <sub>DD</sub>	Power supply
2	V <sub>SS</sub>	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

## ■ NJM4560DD(IC701): Dual OP amp.

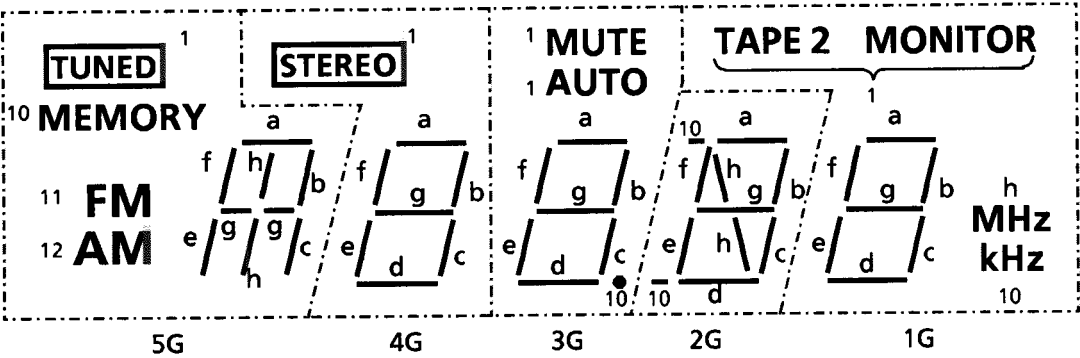


■ LB1639-CV (IC361) : Motor Driver



Internal Connections of the FL Display

■ ELU0001-143 : FL401



Pin Connection

PIN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
ELECTRODE	F1	F1	NP	P12	P11	P10	Ph	Pg	Pf	Pe	Pd	Pc	Pb	Pa						
PIN NUMBER							15	16	17	18	19	20	21	22	23	24	25	26	27	28
ELECTRODE							P1	NP	NP	NP	NP	NP	5G	4G	3G	2G	1G	NP	F2	F2

Note F : Filament, G : Grid, P : Element, NP : No Pin,

# Disassembly Procedures

## ■ Removing the top cover

1. Remove the 4 screws fastening both sides of the top cover, and the 2 screws fastening the rear sides.
2. Remove the top cover.

## ■ Removing the bottom cover

1. Remove the 17 screws (F), (G) .
2. Remove the bottom cover.

## ■ Removing the front panel assembly

1. Remove the top cover.
2. Remove the 6 screws (A), (H) fastening top and bottom of the front panel.
3. Disconnect the connectors P101, P702, P807, P806 and P805.
4. Remove the master volume knob and its connectors.
5. Remove the front panel assembly.

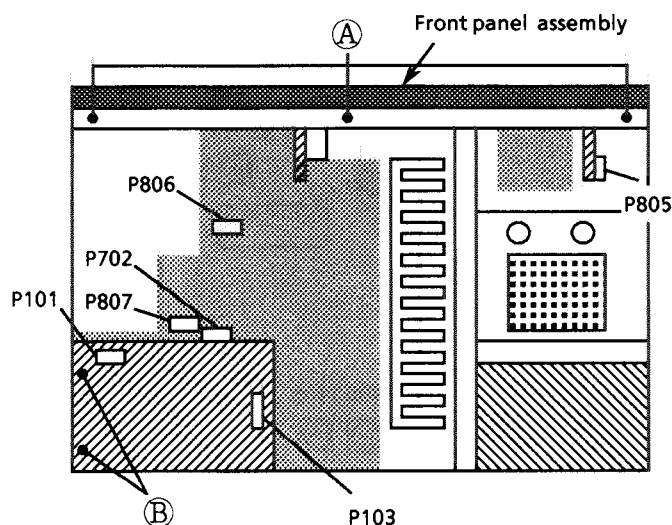


Fig 1. Top View

## ■ Removing the tuner p.c. board

1. Remove the top cover.
2. Disconnect the connectors P101 and P103.
3. Remove the 2 screws (B).
4. Remove the 4 screws (C) (Fig 2).

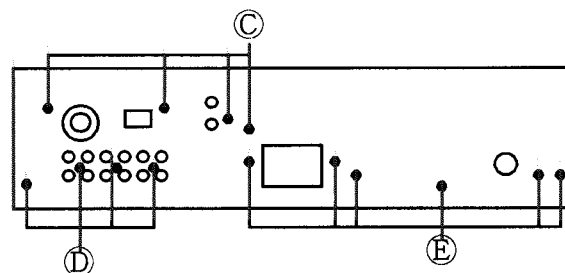


Fig 2. Rear View

## ■ Removing the power transistor

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

## ■ Removing the rear panel

1. Remove the top cover.
2. Remove the screws (G) (Fig 3).
3. Remove the screws (C), (D) and (E) (Fig 2).

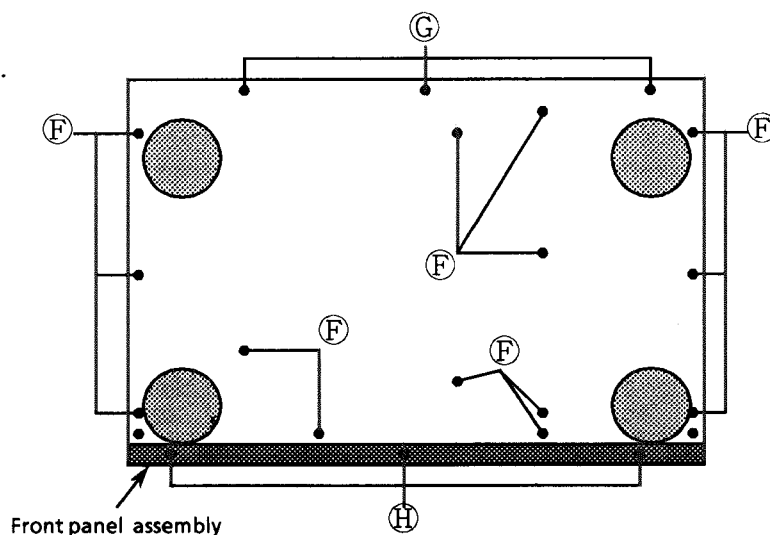
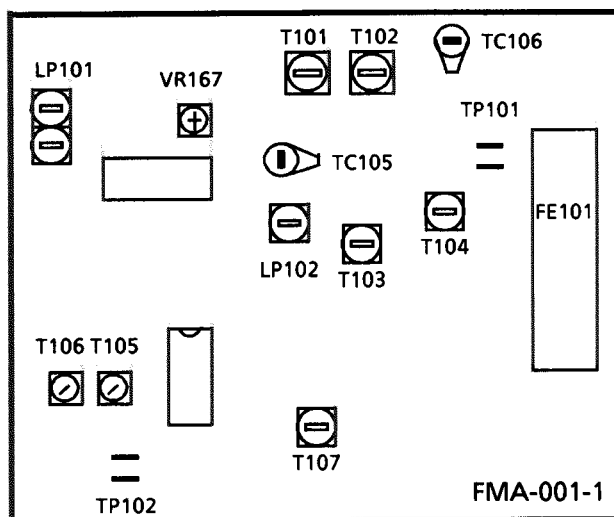


Fig 3. Bottom Cover

# Adjustment Procedures

## ■ Tuner section



FRONT

### Tuning range

Area	Range		
	LW (kHz)	MW (kHz)	FM (MHz)
East Europe	144~353	522~1629	87.5MHz~108MHz
Continental Europe, the U.K			
Australia	—	—	
Universal type (AM Channel space 9kHz)	—	531~1602	
Universal type (AM Channel space 10kHz)	—	530~1600	

### (1) Tuning voltage

Confirm the voltages in the table below at TP101.

If the voltages are not satisfied, replace T103 for MW or T104 for LW or FE101 for FM.

#### FM Tuning voltage (Unit : V)

Area	Frequency			
	64.0MHz	74.0MHz	87.5MHz	108MHz
East Europe	—	—	—	—
the U.K. , Continental Europe, Australia, Universal	—	—	1.6 ± 1.0 (V)	8.0 ± 1.0 (V)

#### AM Tuning voltage (Unit : V)

Area	Frequency (MW)						Frequency (LW)		
	522KHz	530KHz	531KHz	1600KHz	1602KHz	1629KHz	144kHz	290kHz	353kHz
East Europe	—	—	—	—	—	—	—	—	—
the U.K. , Continental Europe	0.9 ± 0.2	—	—	—	—	7.5 ± 0.8	0.8 ± 0.2	—	7.7 ± 0.6
Australia	0.9 ± 0.2	—	—	—	—	7.5 ± 0.8	—	—	—
Universal (Chanel space 9kHz)	—	—	0.9 ± 0.2	—	7.2 ± 0.7	—	—	—	—
Universal (Chanel space 10kHz)	—	0.9 ± 0.2	—	7.2 ± 0.7	—	—	—	—	—

**(2) FM center meter**

Receive a broadcast by using the function of 'AUTO STOP'.

Adjust T105 (detector coil) so that the voltage at TP102 becomes  $0 \pm 1.5\text{mV}$ .

(T106 is used to minimize the distortion of output on the production line.)

**(3) FM separation**

Receive a stereo signal.

Adjust VR 167 so that channel separation becomes maximum.

**(4) MW Tracking**

Adjust T101 (antenna coil) to obtain the best receiving sensitivity on 603kHz.

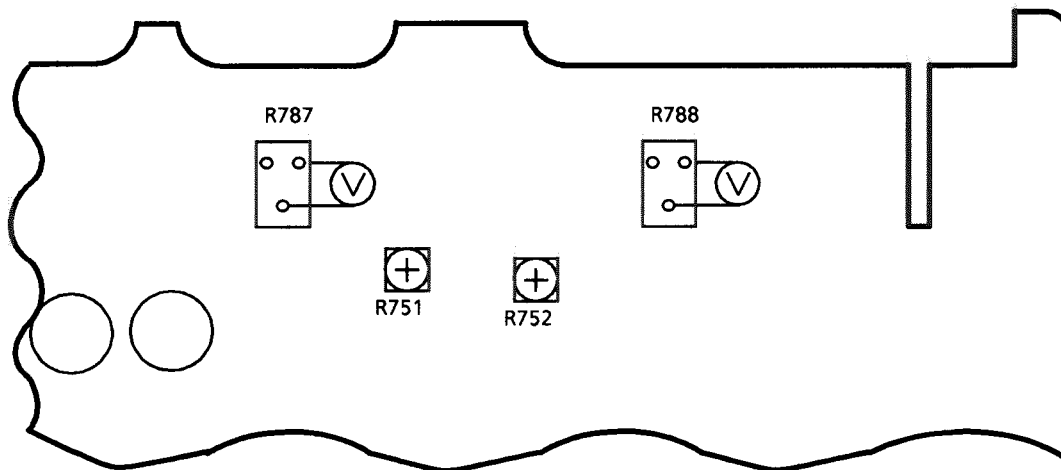
Adjust TC105 (antenna trimmer) to obtain the best receiving sensitivity on 1404kHz.

**(5) LW Tracking**

Adjust T102 (antenna coil) to obtain the best receiving sensitivity on 164kHz.

Adjust TC106 (antenna trimmer) to obtain the best receiving sensitivity on 353kHz.

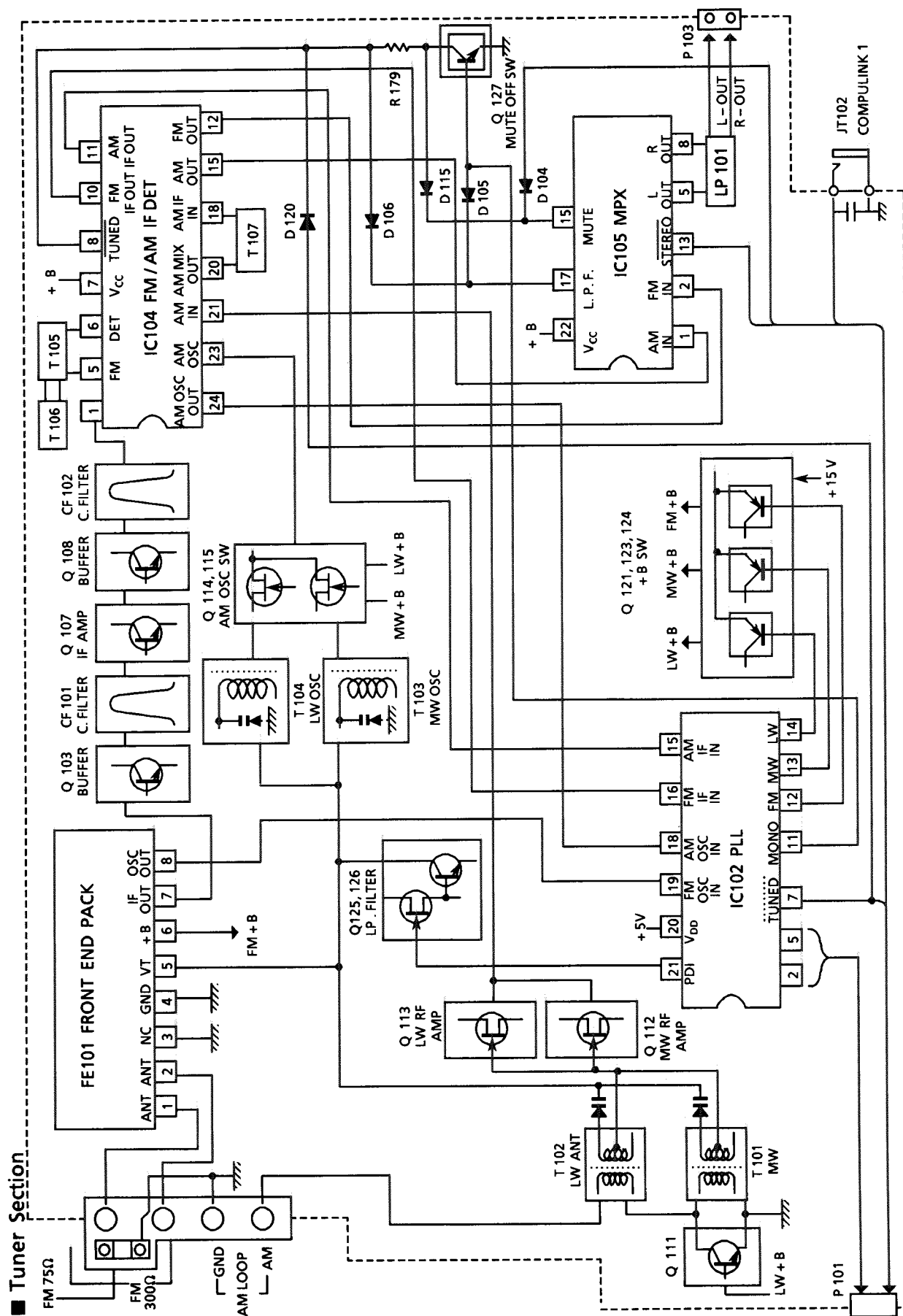
## Power Amplifier Adjustment Procedures



### ■ Idling Current

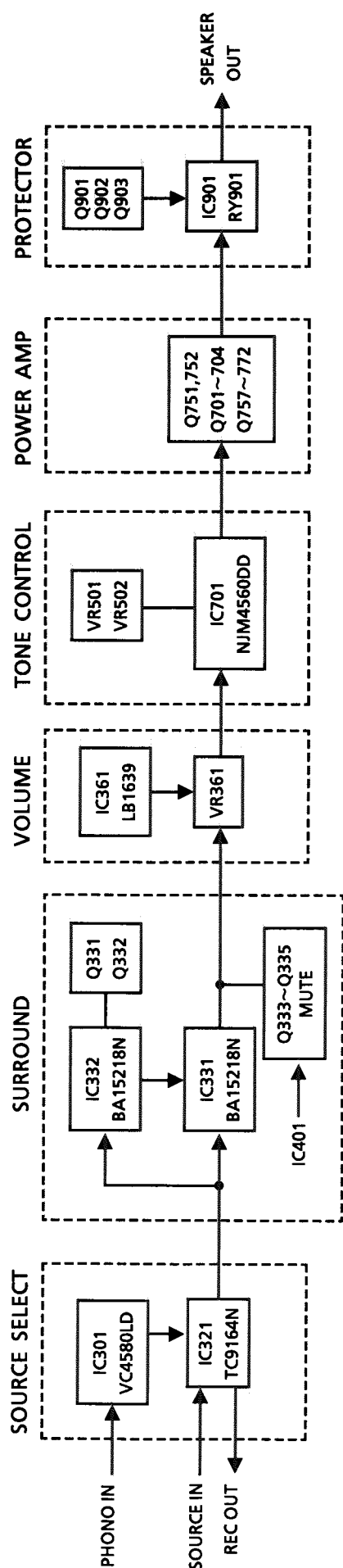
- (1) Set the volume control to minimum during this adjustment.
- (2) Turn R751 and R752 fully counterclockwise before the power switch on.
- (3) Always start from cold, and allow 10 minutes to warm up before adjustment.  
If the heatsink is already warm from previous use, the correct adjustment can not be made.
- (4) Connect a DC voltmeter to R787 resistor's leads for left channel,  
or to R788 for right channel.
- (5) Adjust R751 for left channel, or R752 for right channel,  
so that the DC voltmeter becomes  $2\text{mV} \sim 7\text{mV}$ .

# Block Diagram

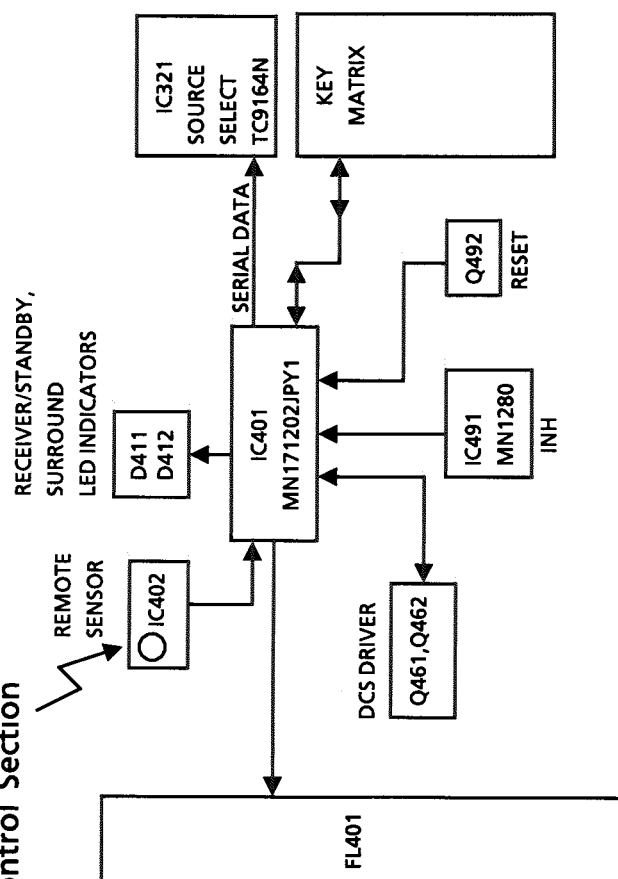




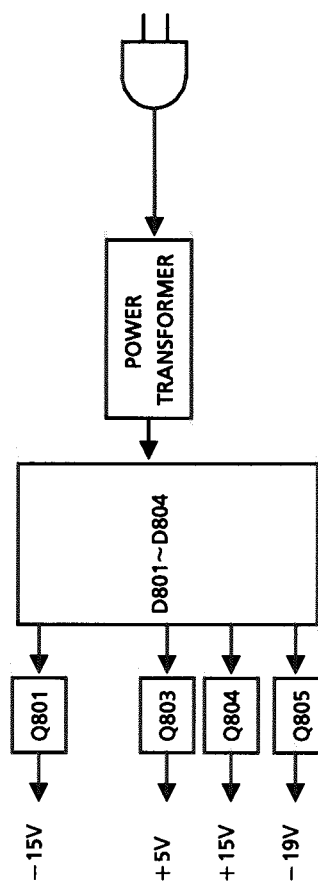
## ■ Signal Flow



## ■ Control Section

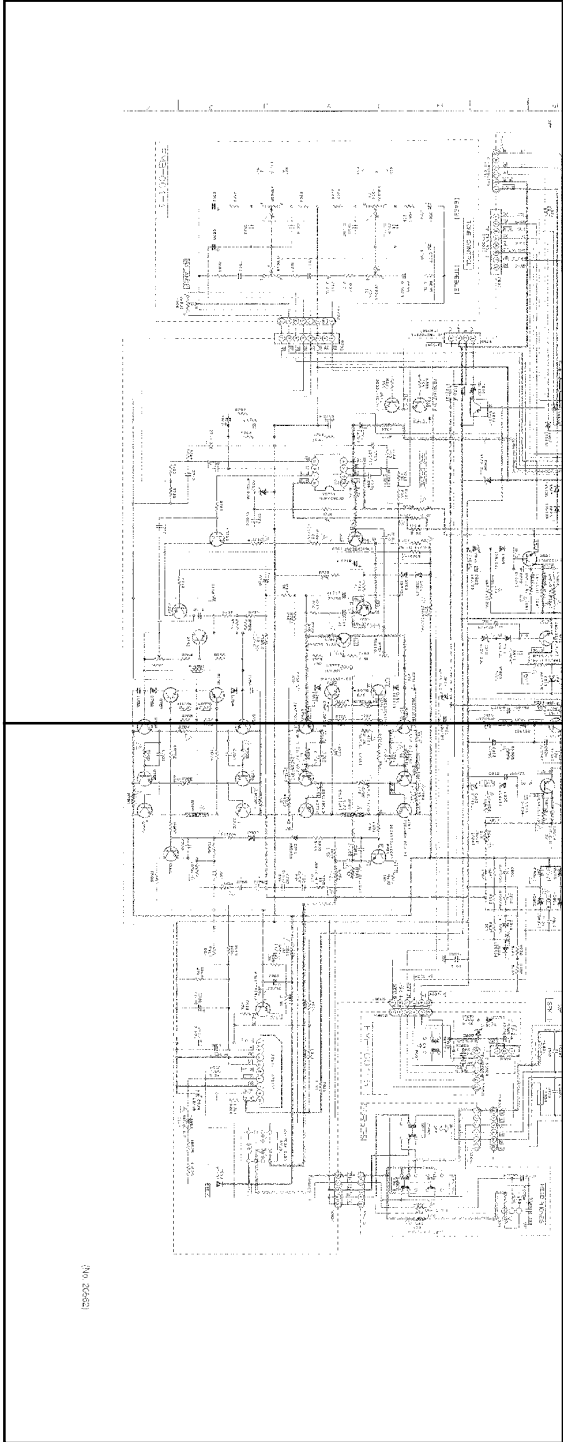


## ■ Power Supply Section



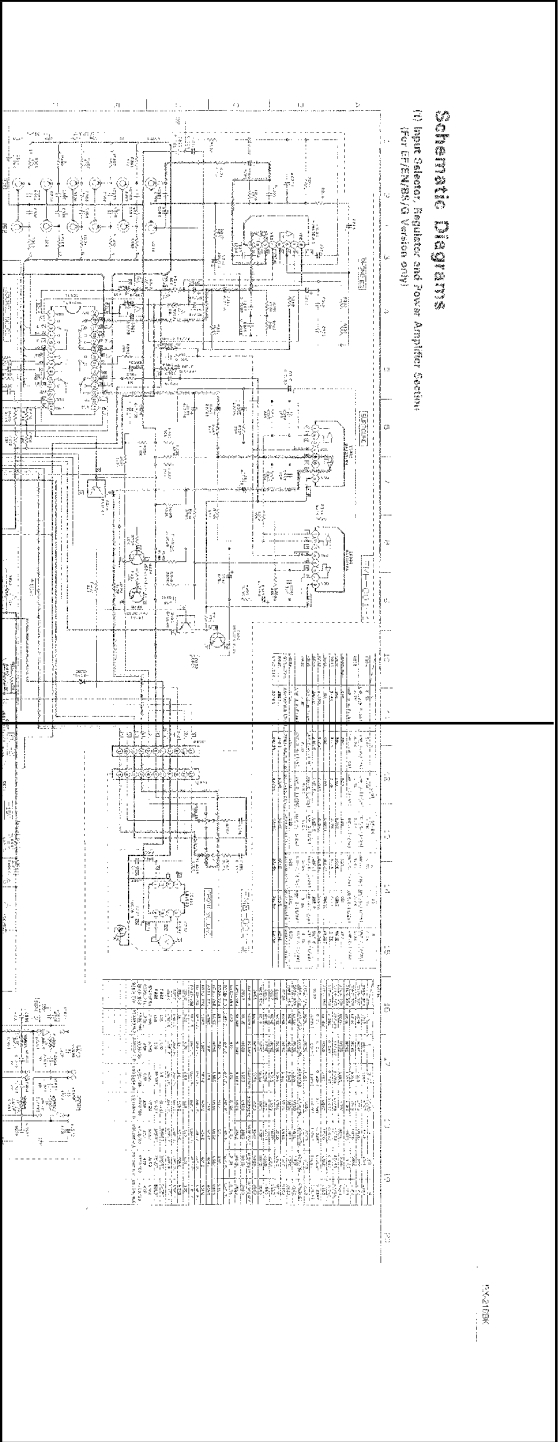


P-S.D(1)-a



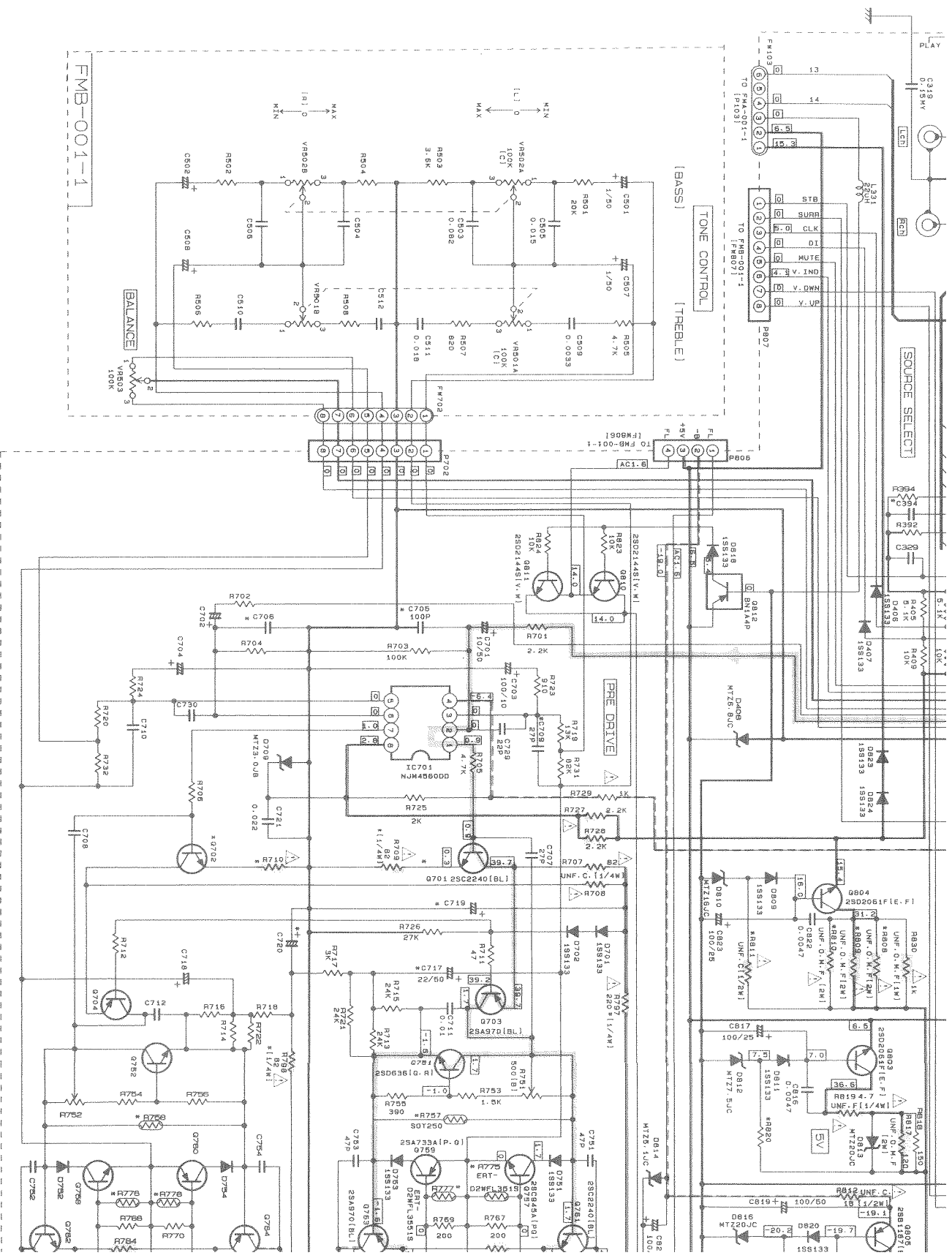
P-S.D(1)-c

P-S.D(1)-b



P-S.D(1)-d

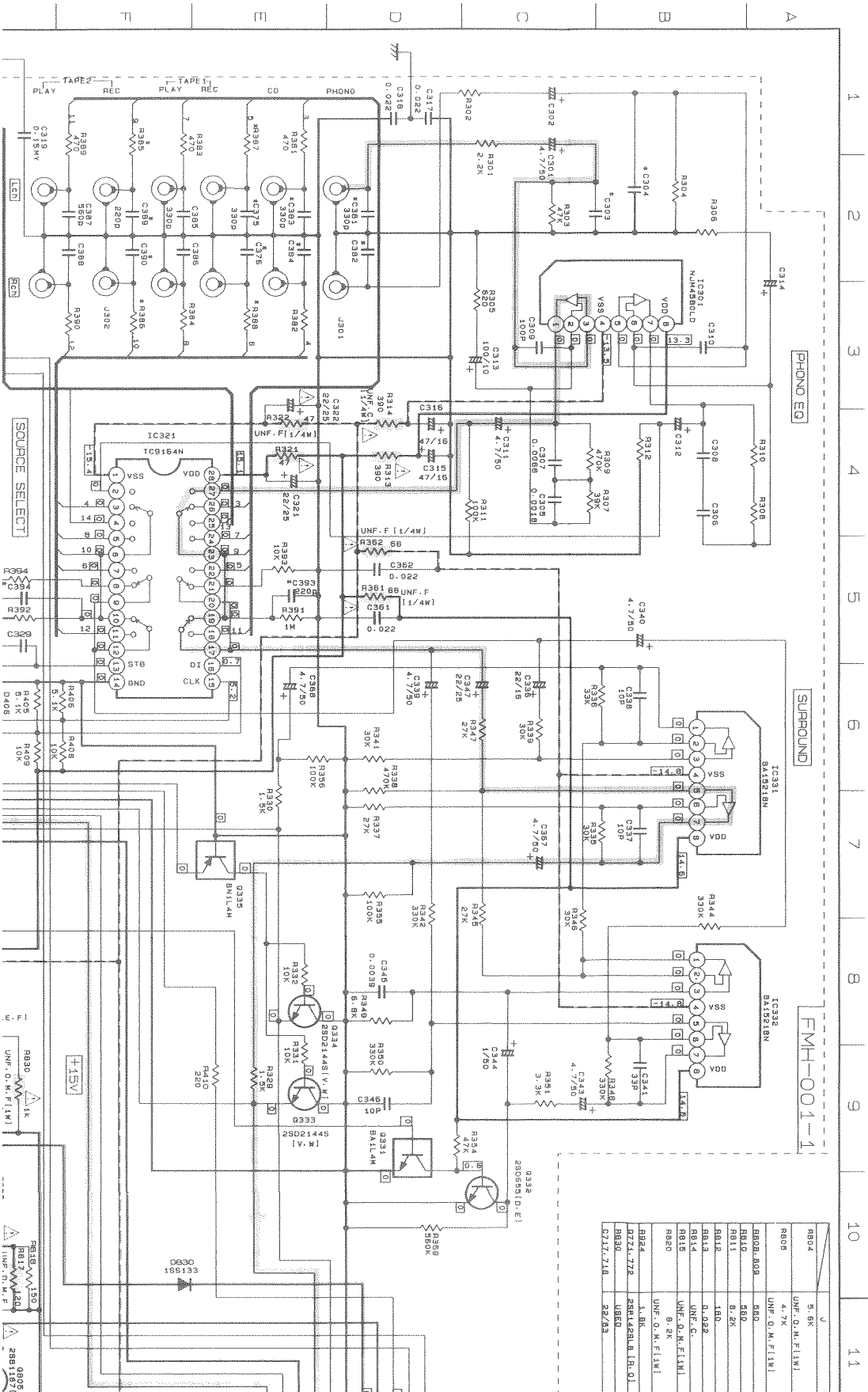
G I H J K L M N



P-S.D(1)-a

# Schematic Diagrams

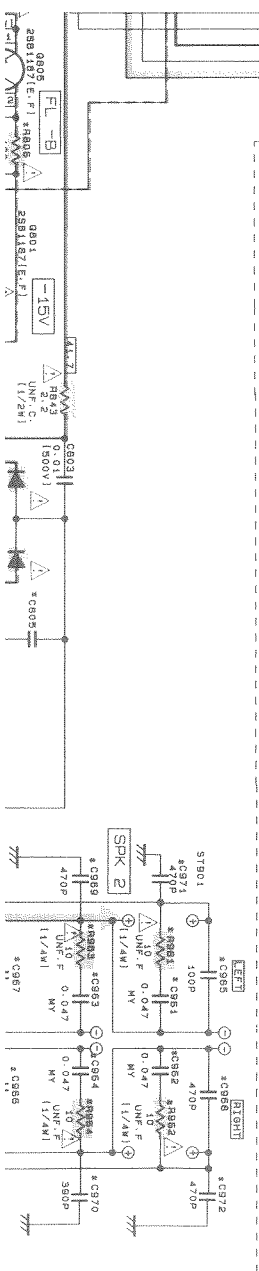
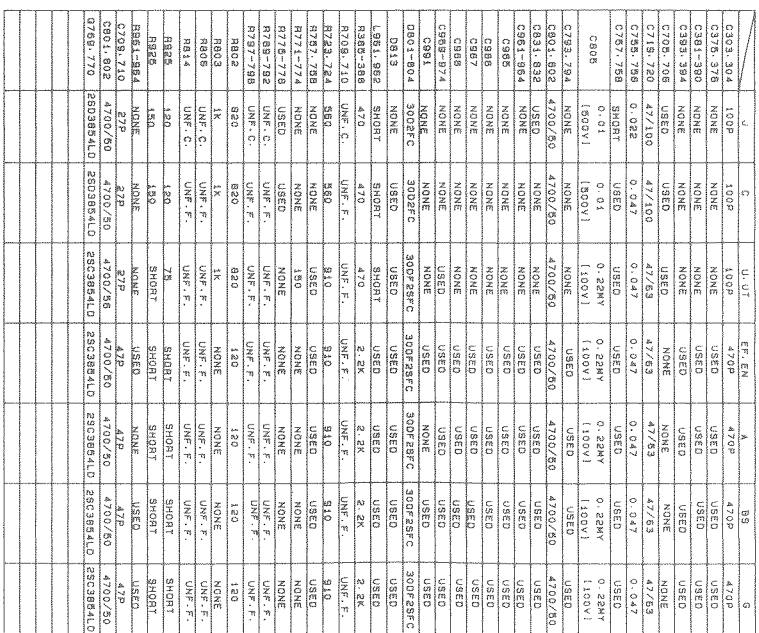
(1) Input Selector, Regulator and Power Amplifier Section  
(For EF/EN/BS/G Version only)





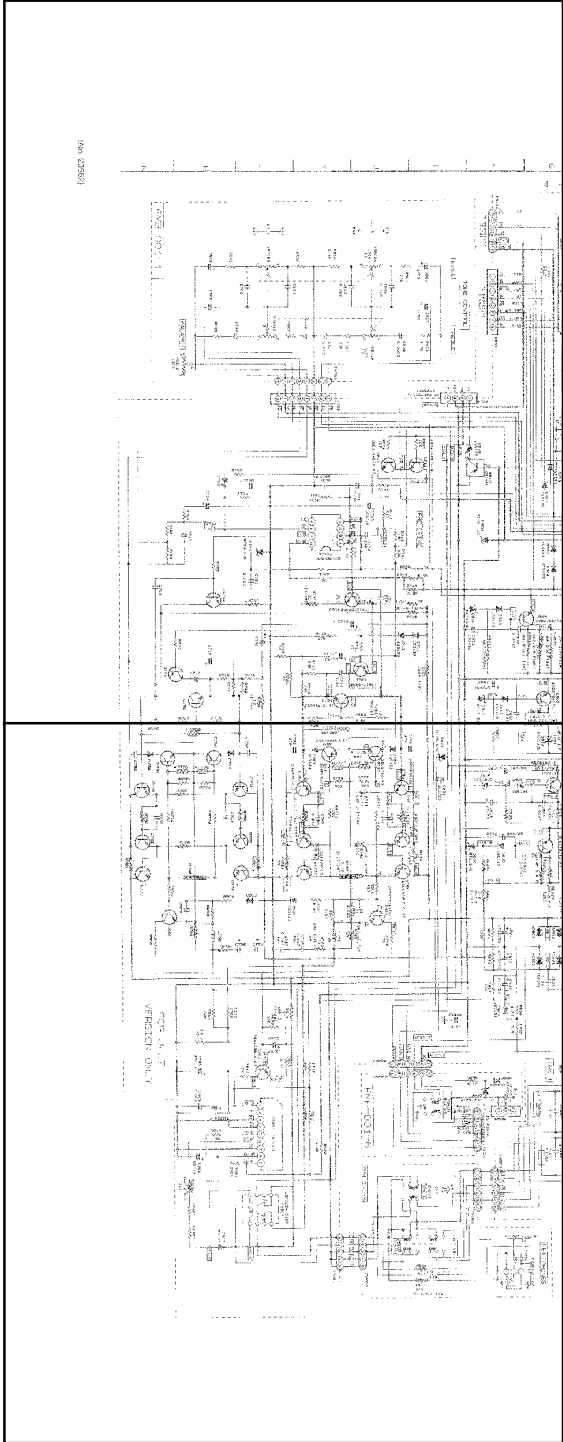


SHARK									
		J	C	U-T	EP, EN	A	B3	G	
C33, 304	100P	100P	100P	100P	470P	470P	470P	470P	
C37B, 37B	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C331-380	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C33, 354	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C73B, 705	USED	USED	USED	NONE	NONE	NONE	NONE	NONE	
C73B, 750	47/100	47/100	47/53	47/53	47/53	47/53	47/53	47/53	
C73B, 765	0.022	0.047	0.047	0.047	0.047	0.047	0.047	0.047	
C73B, 769	SHORT	USED	USED	USED	USED	USED	USED	USED	
C73B, 769	[160V]	[160V]	[160V]	[160V]	[160V]	[160V]	[160V]	[160V]	
C605	0.1	0.1	0.224V	0.224V	0.224V	0.224V	0.224V	0.224V	
C73B, 764	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C631-50	470P/50	470P/50	470P/50	470P/50	470P/50	470P/50	470P/50	470P/50	
C631-532	USED	NONE	NONE	NONE	USED	USED	USED	USED	
C631-532	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C636	USED	NONE	NONE	NONE	USED	USED	USED	USED	
C636	NONE	NONE	NONE	NONE	USED	USED	USED	USED	
C687	NONE	NONE	NONE	NONE	USED	USED	USED	USED	

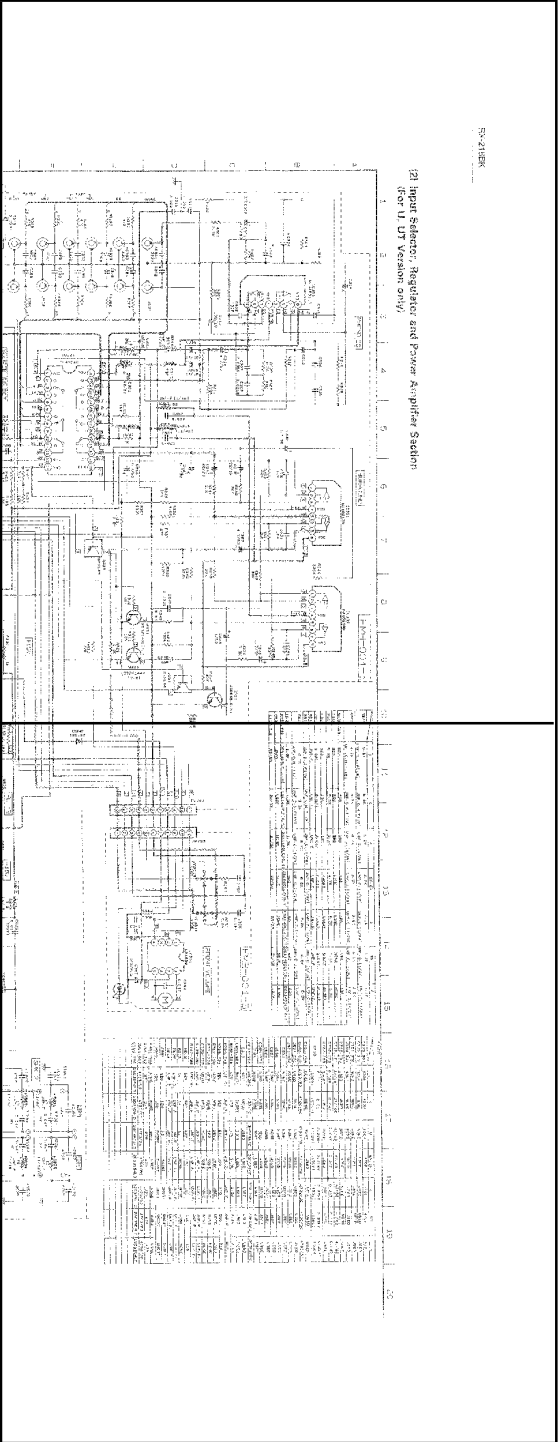




P-S.D(2)-a



P-S.D(2)-b

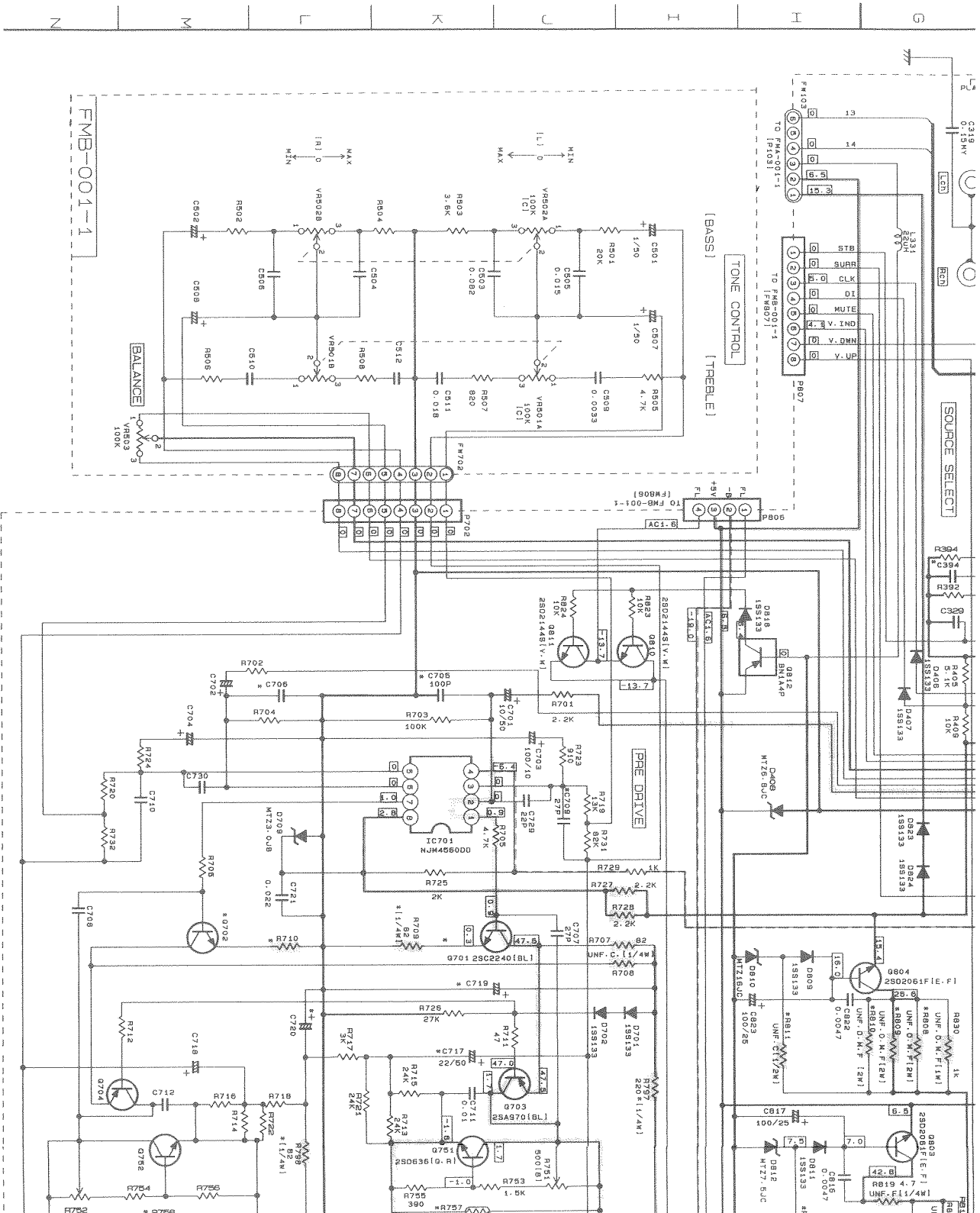


P-S.D(2)-c

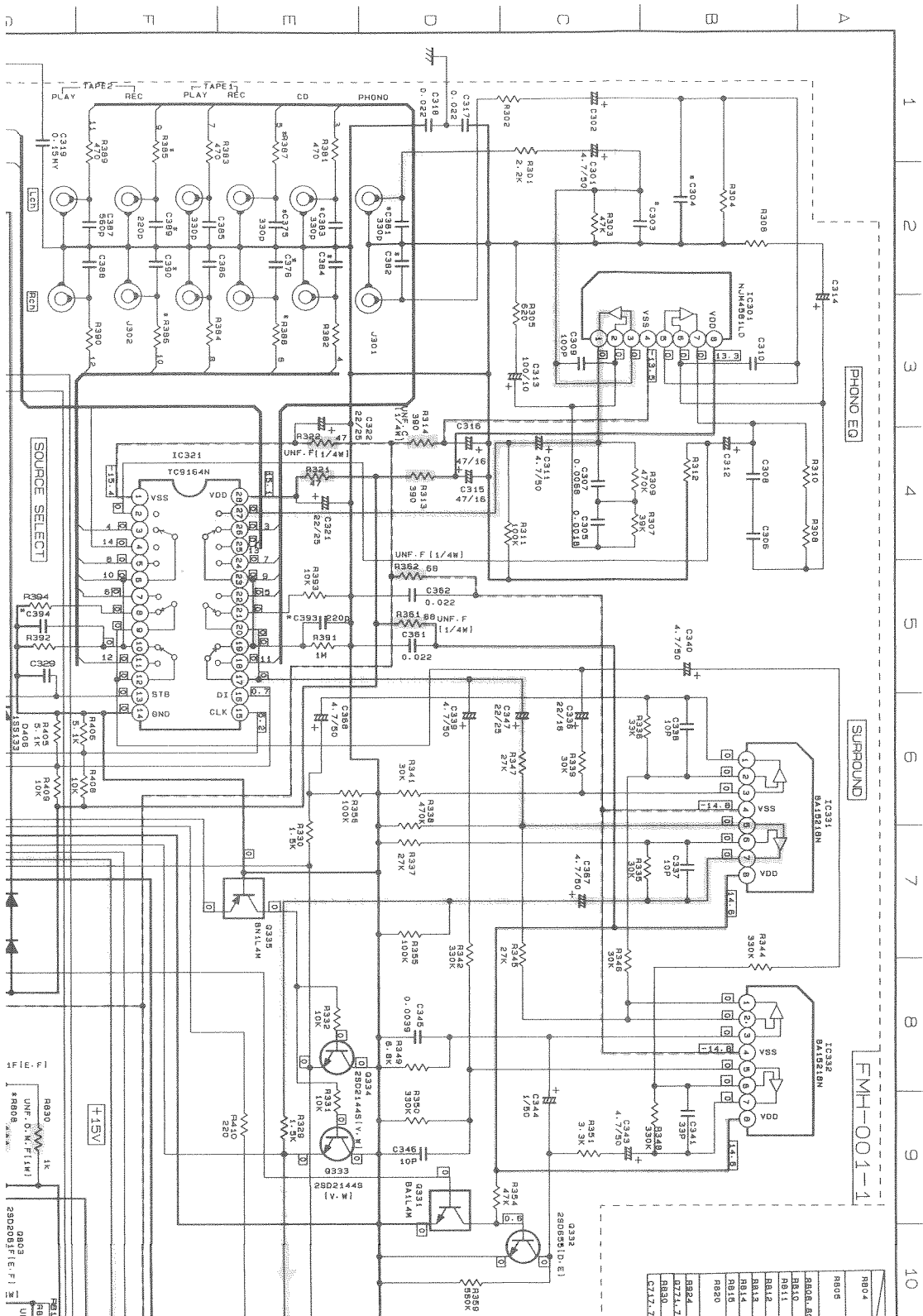


P-S.D(2)-d





## (2) Input Selector, Regulator and Power Amplifier Section (For U, UT Version only)











[illegible]

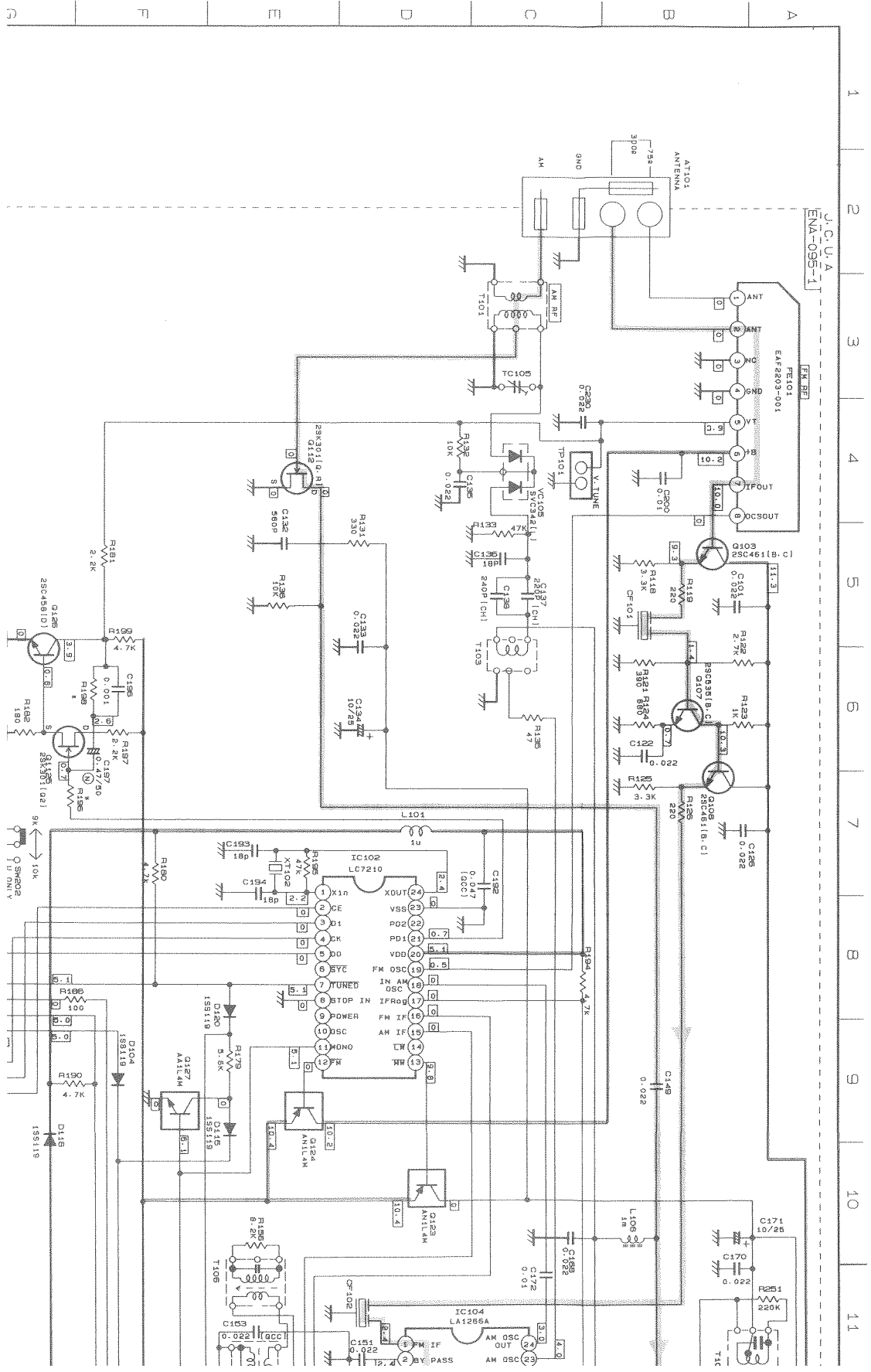
2710WRF Section

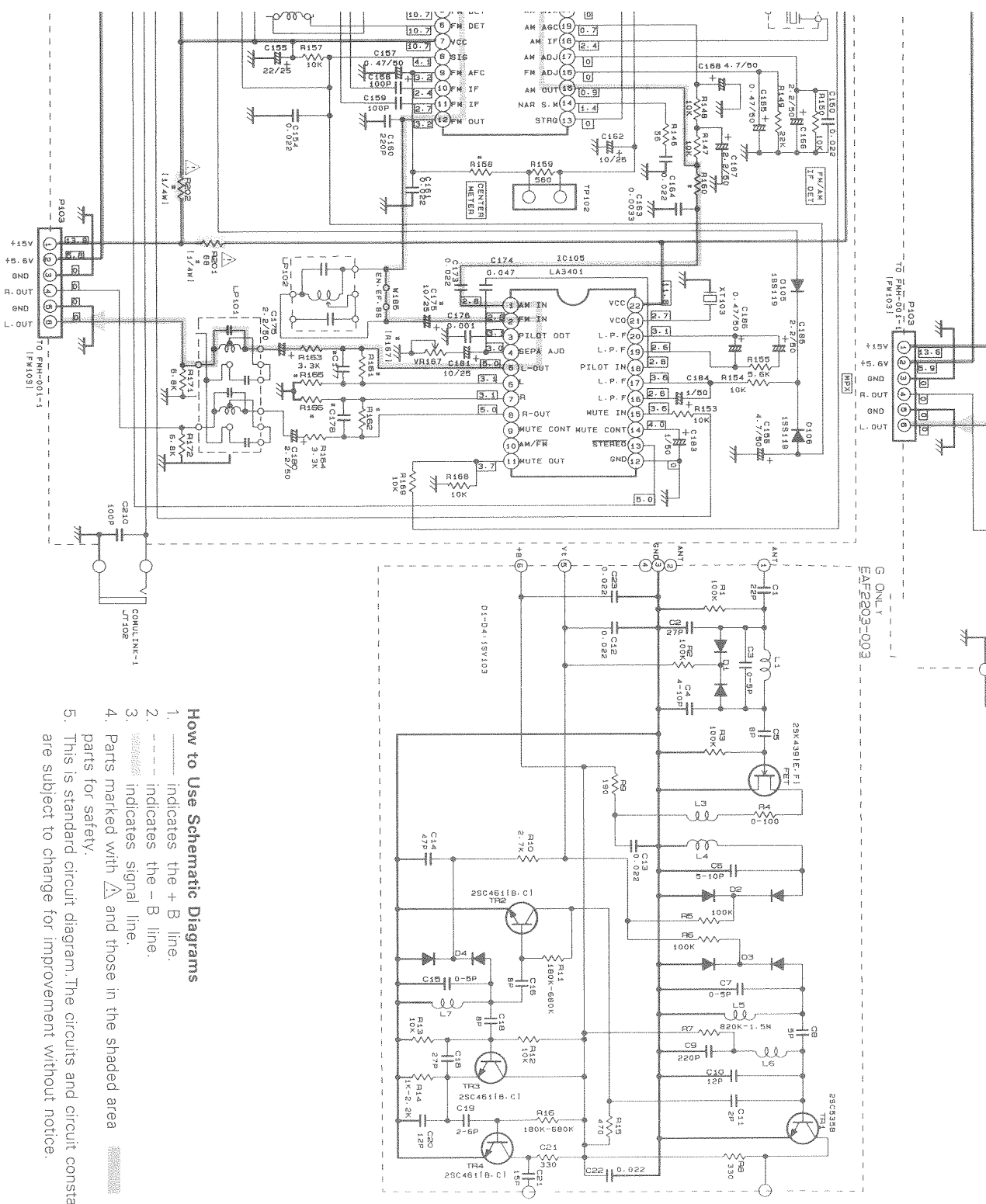
Diagram showing the internal circuitry of the 2710WRF Section, including various electronic components and their connections. The diagram is divided into sections labeled A through H.

Component	Value	Notes
R1	100K	
R2	100K	
R3	100K	
R4	100K	
R5	100K	
R6	100K	
R7	100K	
R8	100K	
R9	100K	
R10	100K	
R11	100K	
R12	100K	
R13	100K	
R14	100K	
R15	100K	
R16	100K	
R17	100K	
R18	100K	
R19	100K	
R20	100K	
R21	100K	
R22	100K	
R23	100K	
R24	100K	
R25	100K	
R26	100K	
R27	100K	
R28	100K	
R29	100K	
R30	100K	
R31	100K	
R32	100K	
R33	100K	
R34	100K	
R35	100K	
R36	100K	
R37	100K	
R38	100K	
R39	100K	
R40	100K	
R41	100K	
R42	100K	
R43	100K	
R44	100K	
R45	100K	
R46	100K	
R47	100K	
R48	100K	
R49	100K	
R50	100K	
R51	100K	
R52	100K	
R53	100K	
R54	100K	
R55	100K	
R56	100K	
R57	100K	
R58	100K	
R59	100K	
R60	100K	
R61	100K	
R62	100K	
R63	100K	
R64	100K	
R65	100K	
R66	100K	
R67	100K	
R68	100K	
R69	100K	
R70	100K	
R71	100K	
R72	100K	
R73	100K	
R74	100K	
R75	100K	
R76	100K	
R77	100K	
R78	100K	
R79	100K	
R80	100K	
R81	100K	
R82	100K	
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R84	100K	
R85	100K	
R86	100K	
R87	100K	
R88	100K	
R89	100K	
R90	100K	
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R92	100K	
R93	100K	
R94	100K	
R95	100K	
R96	100K	
R97	100K	
R98	100K	
R99	100K	
R100	100K	
R101	100K	
R102	100K	
R103	100K	
R104	100K	
R105	100K	
R106	100K	
R107	100K	
R108	100K	
R109	100K	
R110	100K	
R111	100K	
R112	100K	
R113	100K	
R114	100K	
R115	100K	
R116	100K	
R117	100K	
R118	100K	
R119	100K	
R120	100K	
R121	100K	
R122	100K	
R123	100K	
R124	100K	
R125	100K	
R126	100K	
R127	100K	
R128	100K	
R129	100K	
R130	100K	
R131		

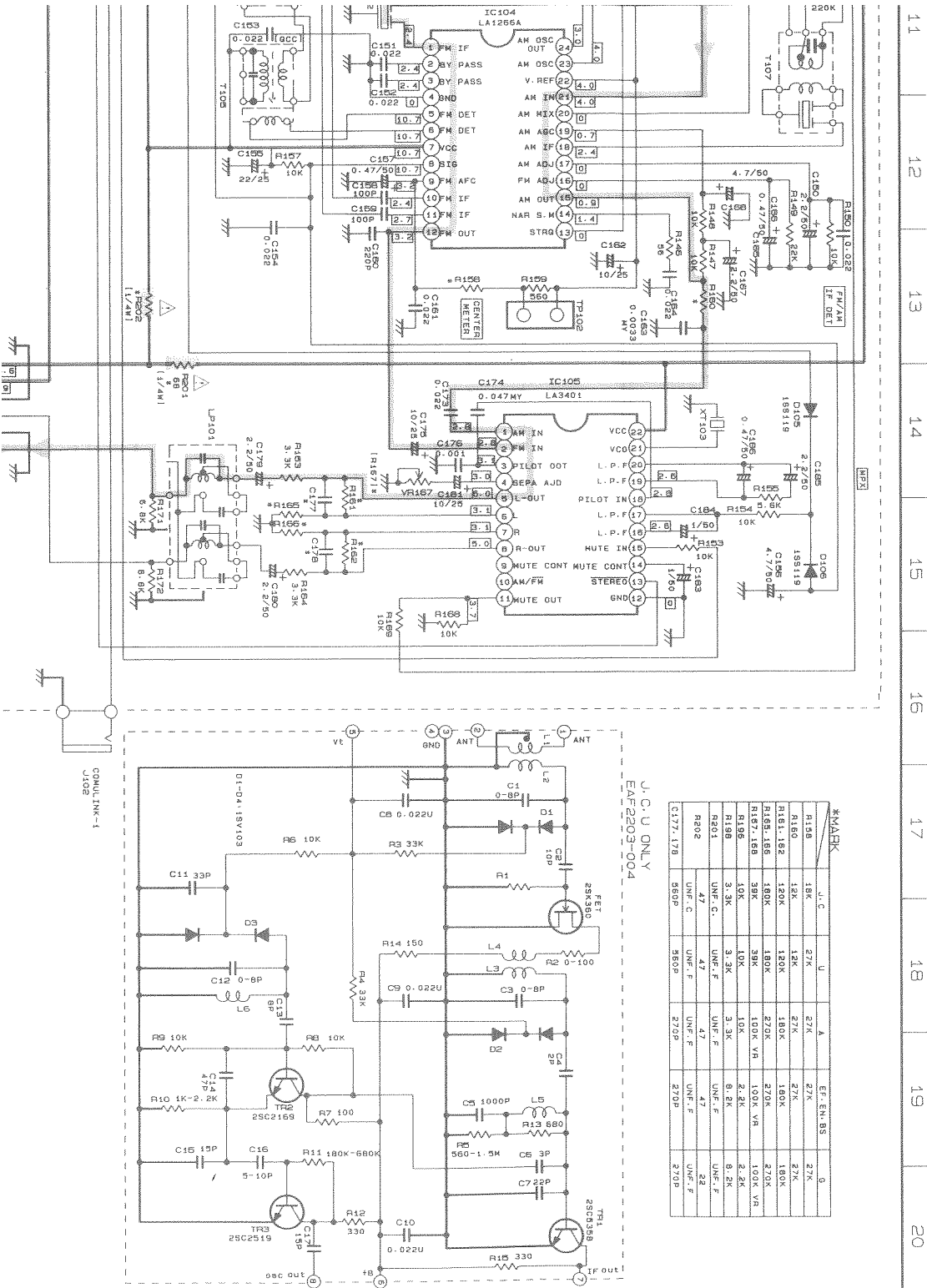


### (3) Tuner Section





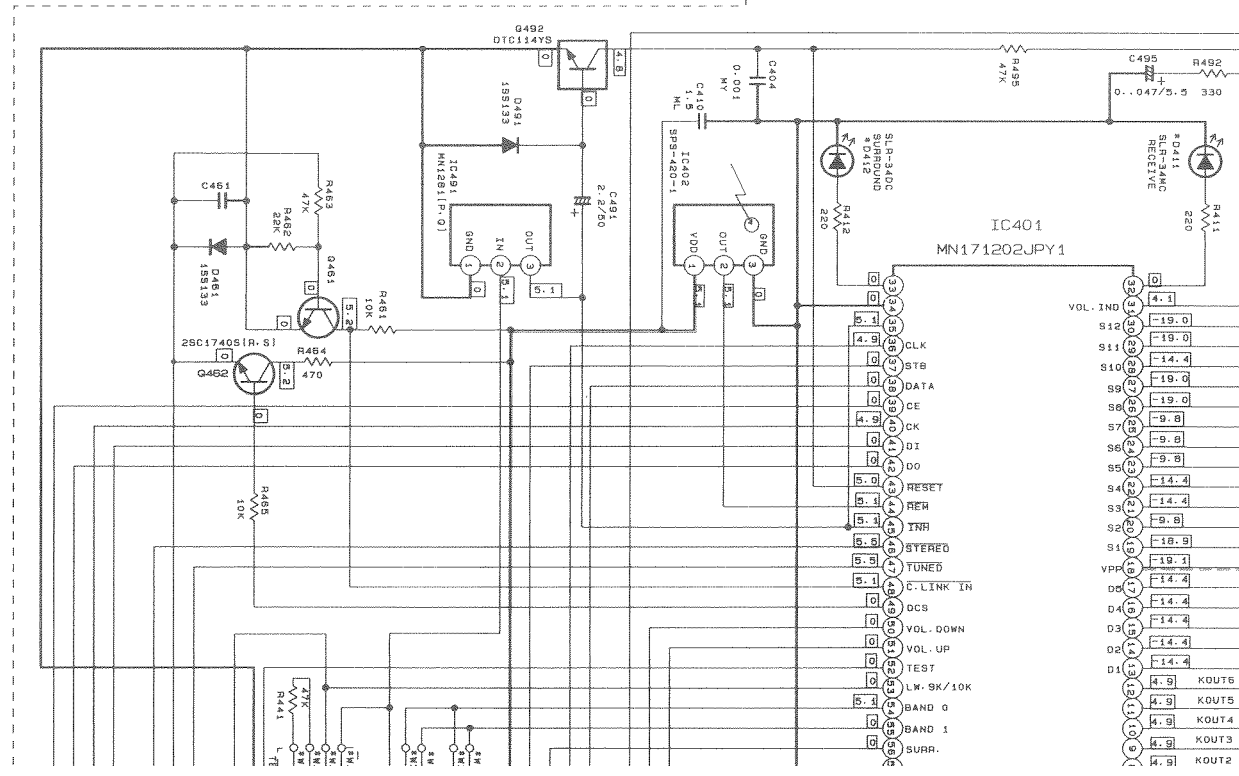
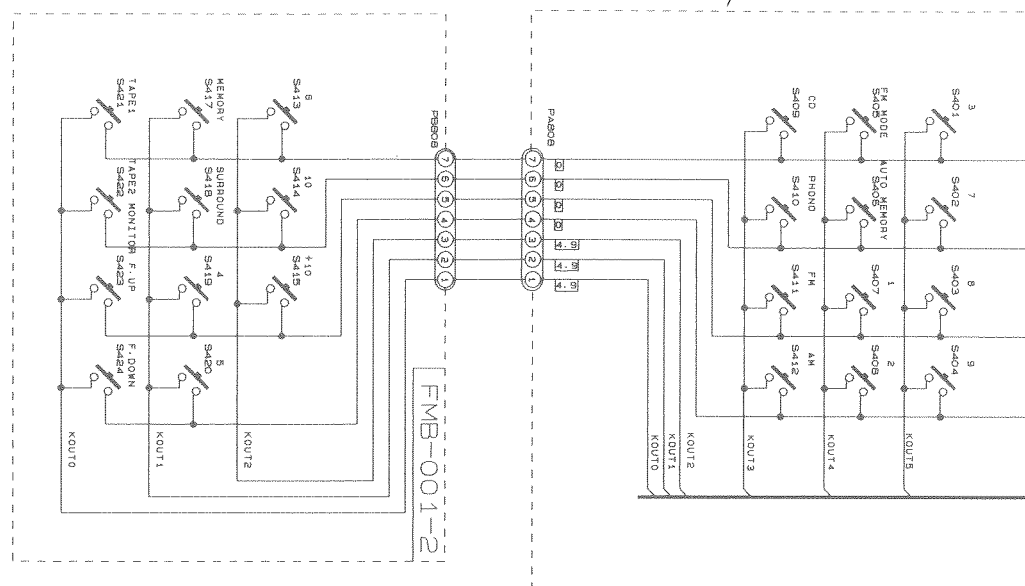
- ### How to Use Schematic Diagrams
1. — indicates the + B line.
  2. - - - indicates the - B line.
  3. indicates signal line.
  4. Parts marked with and those in the shaded area are subject to change for improvement without notice.
  5. This is standard circuit diagram. The circuits and circuit constants are subject to change for improvement without notice.





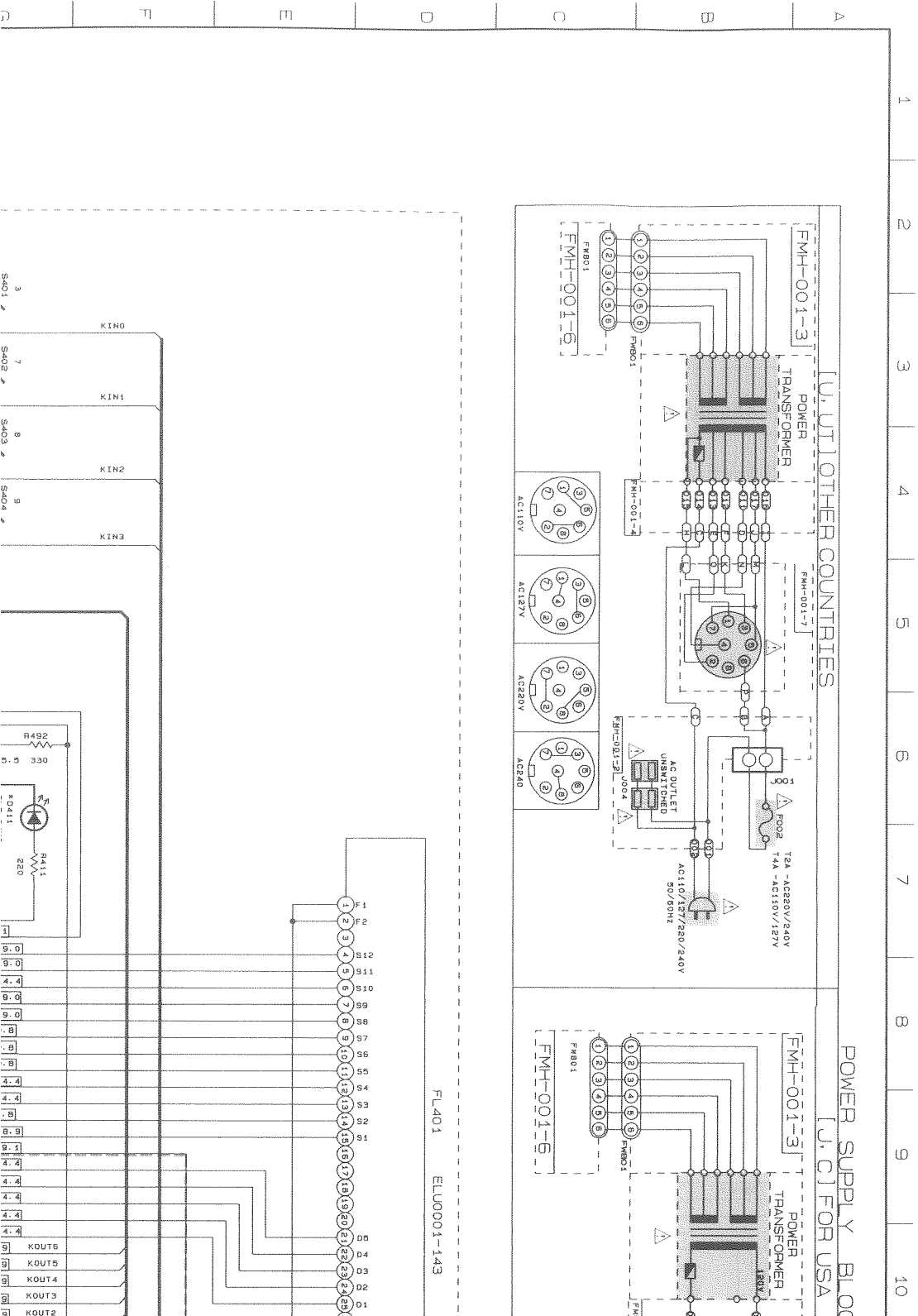
[illegible]

G I H C X L M Z



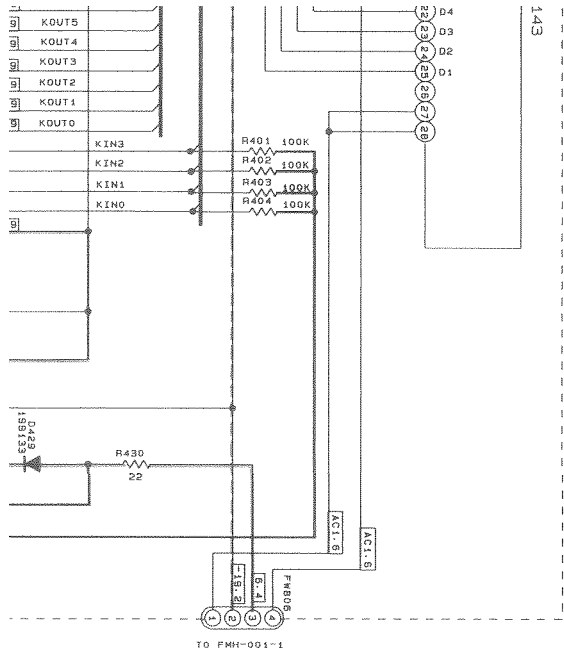
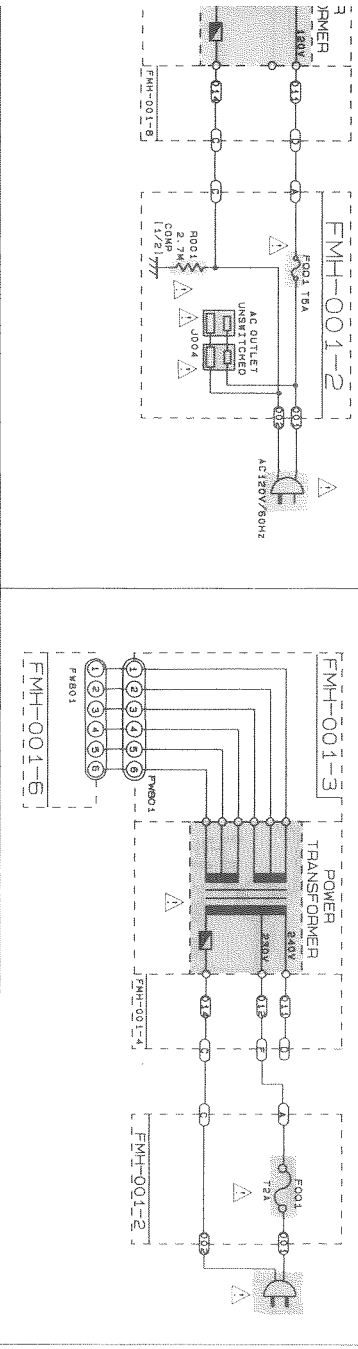


(4) System Control & Power Primary Section

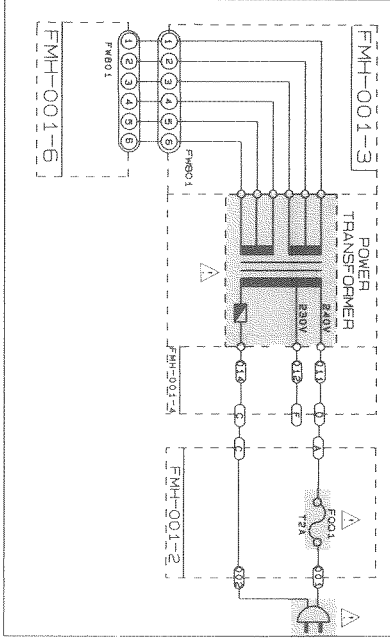




**BLOCK**  
**USA & CANADA** AC120V/60HZ **EN, EF, G** (EN) FOR SCANDINAVIA (EF) FOR CONTINENTAL EUROPE (G) FOR GERMANY **AC230V/50HZ**

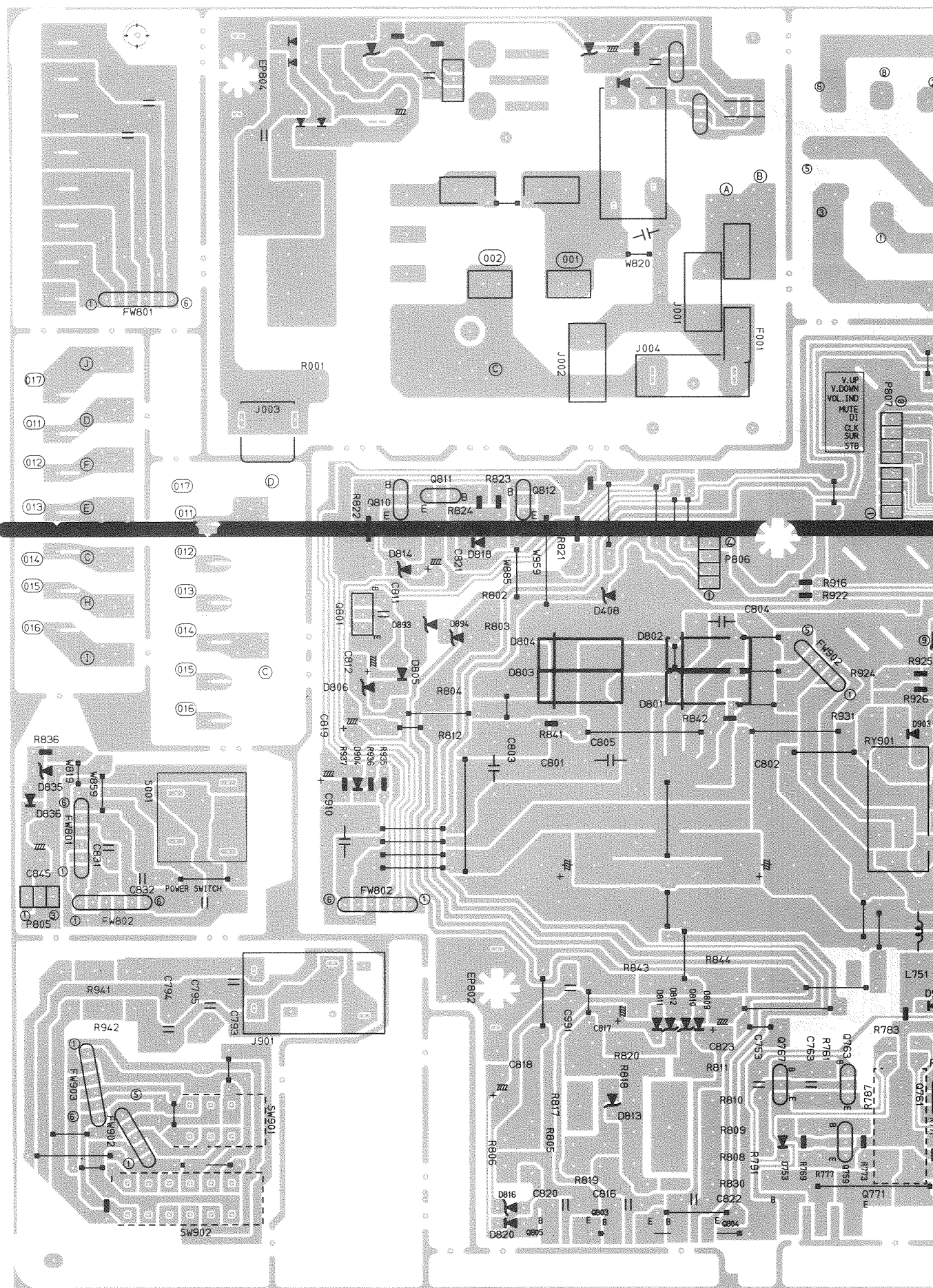


**[A, BS] (BS) FOR U.K** **AC 240V/50HZ**

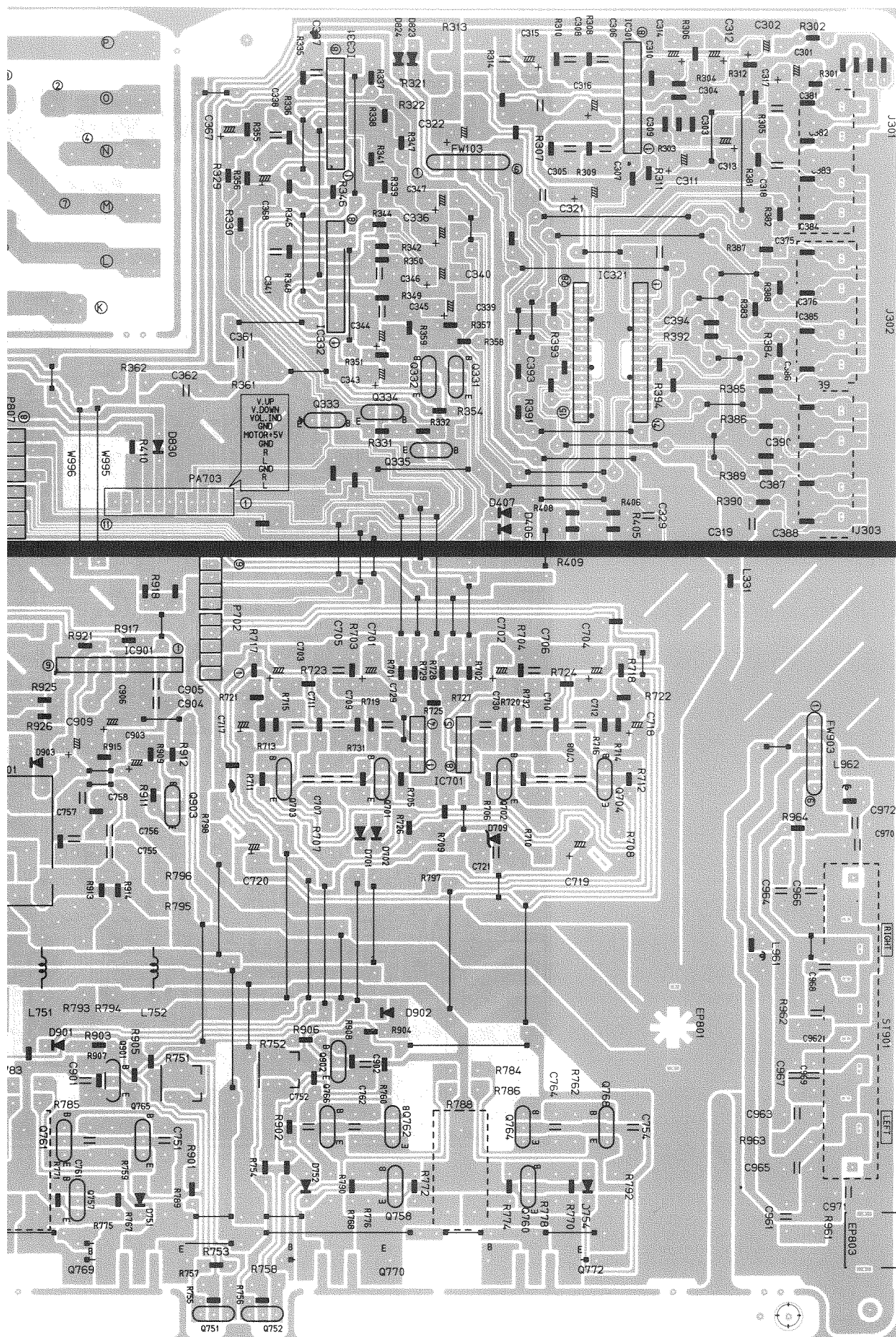


## Printed Circuit Boards

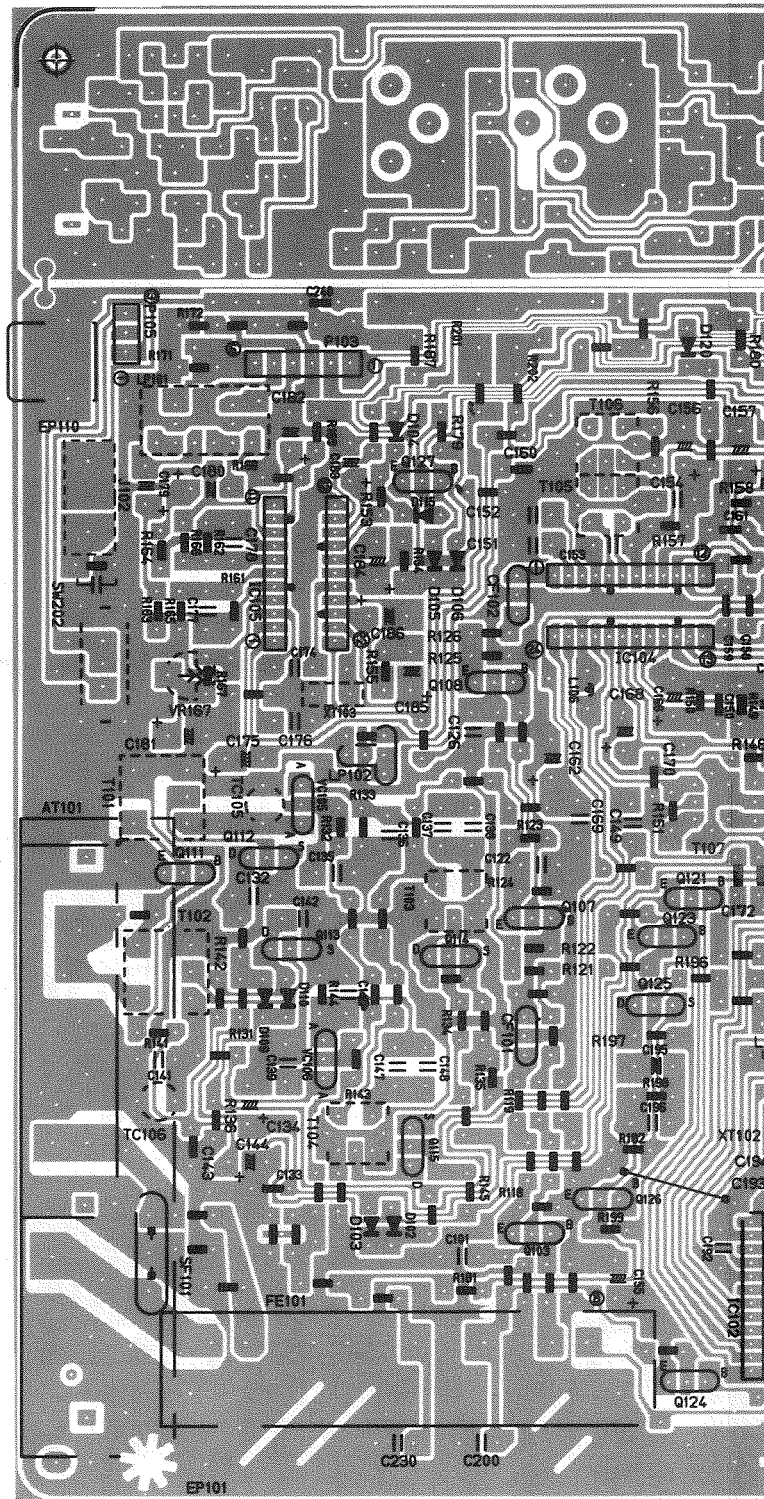
**(1) Power Supply Amplifier & Selector P.C. Board (FMH-0**

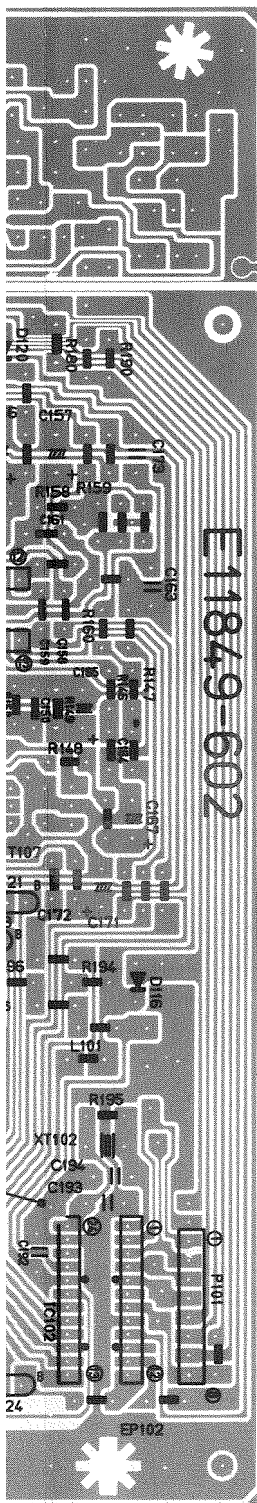






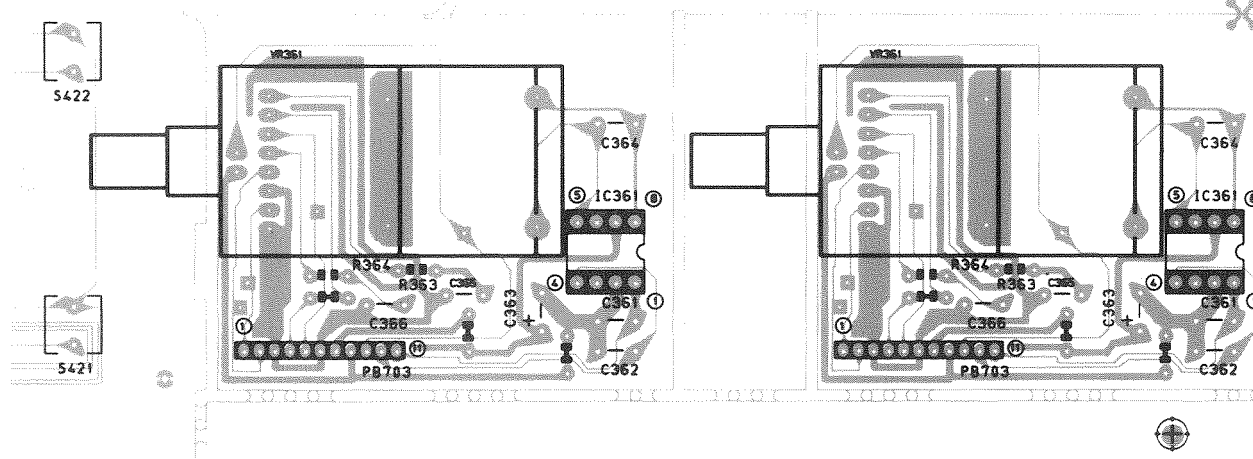
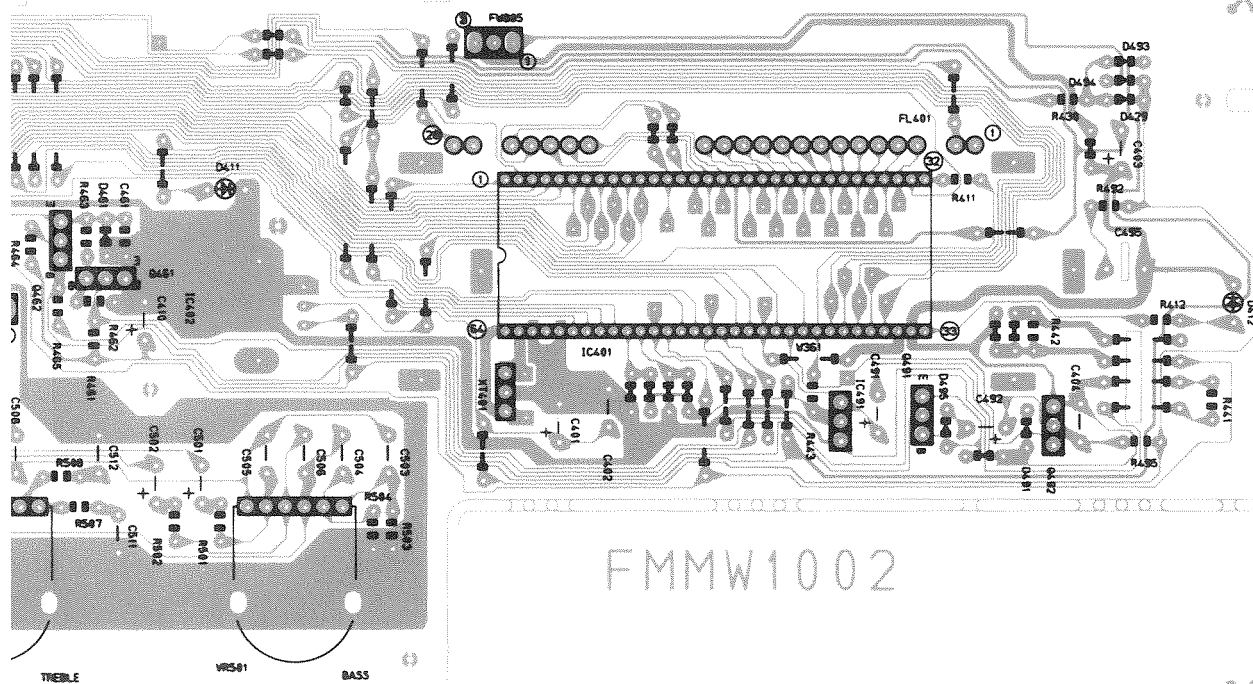
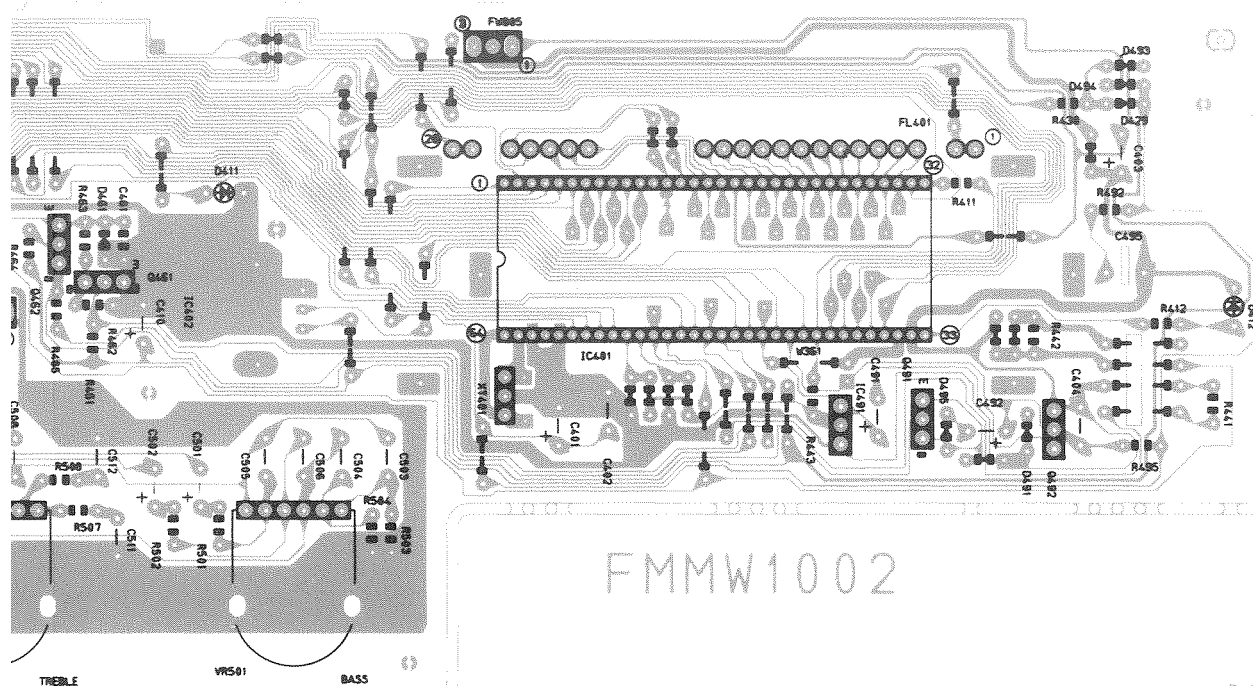
## (2) Tuner P.C. Board (FMA-001)













# PARTS LIST

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

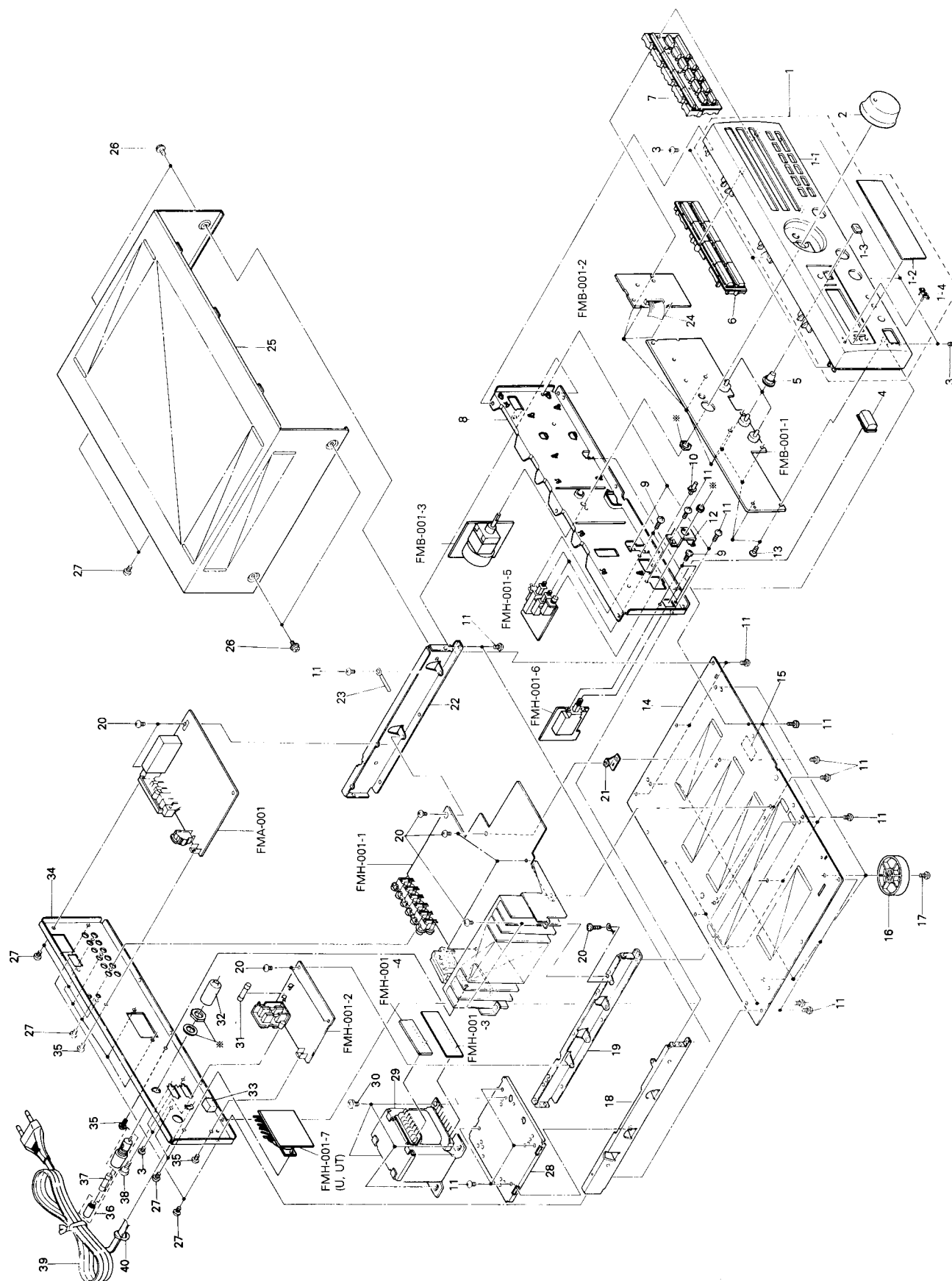
## Contents

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■ FMH-001 <input type="checkbox"/> Power Supply , Amplifier & Selector PC Board Ass'y .....	2 - 5
■ FMB-001 <input type="checkbox"/> Front , Tone Control & Volume PC Board Ass'y .....	2 - 10
■ FMA-001 <input type="checkbox"/> Tuner PC Board Ass'y .....	2 - 12
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## General Exploded View and Parts List

BLOCK No. 

M	1	M	M
---	---	---	---



※ mark indicates attached part.

## ■ Parst List

BLOCK No. 

M	1	M	M
---	---	---	---

⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	FFP-RX218BKC(S)	FRONT PANEL ASSY	1		
	1-1	E102647-023SM	FRONT PANEL	1		
	1-2	E308268-020SM	WINDOW SCREEN	1		
	1-4	VJD5429-001	JVC MARK	1		
	2	E308842-002SM	VOLUME KNOB ASSY	1		
	3	SBSG3008M	TAPPING SCREW	6		
	4	FMXP4001-001	POWER BUTTON	1		
	5	E308267-002SM	TONE KNOB	3		
	6	E207677-002SM	PUSH BUTTON	1		
	7	E207678-004SM	PUSH BUTTON	1		
	8	E102649-004SM	FRONT BRACKET	1		
	9	SBST3006Z	SCREW	5		
	10	E407321-002SM	SPEAKER BUTTON	2		
	11	SBSG3008Z	SCREW	30		
	12	E407323-002SM	HEADPHONE BRACKET	1		
	13	SDSF2608Z	SCREW	9		
	14	E102371-005SM	BOTTOM BASE	1		
	15	E70115-002	CAUTION LABEL	19		
	16	E406379-008SS	FOOT	2	FRONT	
		E47227-036	FOOT	2	REAR	
	17	SBST3010Z	SCREW	4	FOR FOOT	
	18	E206956-002SM	SIDE BRACKET	1	LEFT	
	19	E206958-004SM	CENTER BRACKET	1		
	20	SBSG3008CC	SCREW	6		
	21	E68587-222SM	BRACKET PLATE	1		
	22	E206957-001SM	SIDE BRACKET	1	RIGHT	
	23	VKZ4001-111S	WIRE CLAMP	2		
	24	FMWH0001-001	CARD WIRE	1		
	25	E206967-002SM	METAL COVER	1		
	26	E61660-004	SPECIAL SCREW	4		
	27	SBSG3008M	SCREW	12		
	28	E206959-002SM	TRANS BRACKET	1		
⚠	29	FMTP1070-01JA	POWER TRANSFORMER	1		
	30	E65389-002	SPECIAL SCREW	4		
⚠	31	QMF0007-3R0J1	FUSE	1	F001(T1.25A/250V)	
⚠	32	E69291-001	FUSE COVER	1		
	33	E306805-023	SPACER	1		
	34	E207332-056SM	REAR PANEL	1		
	35	SBST3006M	SCREW	3		
⚠	36	QMG0301-003	FUSE HOLDER	1		
⚠	37	QMF0007-3R0J1	FUSE	1	F002(T1.25A/250V)	
	38	E73562-003	SPECIAL SCREW	1		
⚠	39	QMP1480-200E	POWER CORD	1		
⚠	40	QHS3876-162	CORD STOPPER	1		
	41	EWS282-001	SOCKET WIRE	1		
		E67199-001	C.LABEL	1		
		E65507-001	CAUTION LABEL	1		
		E70115-002	CAUTION LABEL	1		

⚠ : Safety Parts

**—MEMO—**



## Note (1)

PC Board Ass'y	Version	Designated Areas
FMH-001 <b>C</b>	U UT	Universal Type Taiwan
FMH-001 <b>D</b>	EN EF	Scandinavia Continental Europe
FMH-001 <b>F</b> BS	BS	the U.K.
FMH-001 <b>G</b>	G	Germany

## Transistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q331	BA1L4M-T	D.T.R.I.M	
	Q332	2SD655(D,E)	SI. TRANSIST	
	Q333	2SD2144S(VW)	SI. TRANSISTROHM	
	Q334	2SD2144S(VW)	SI. TRANSISTROHM	
	Q335	BN1L4M	DIGITAL TRA	
	Q701	2SC2910(T)	SI. TRANSISTANYO	
	Q702	2SC2910(T)	SI. TRANSISTANYO	
	Q703	2SA970(GR)	SI. TRANSIST	
	Q704	2SA970(GR)	SI. TRANSIST	
	Q751	2SD636(Q,R)	SI. TRANSIST	
	Q752	2SD636(Q,R)	SI. TRANSIST	
	Q757	2SC945A	SI. TRANSISTNEC	
	Q758	2SC945A	SI. TRANSISTNEC	
	Q759	2SA733A(P,K)	SI. TRANSIST	
	Q760	2SA733A(P,K)	SI. TRANSIST	
	Q761	2SC2240(BL)	SI. TRANSIST	
	Q762	2SC2240(BL)	SI. TRANSIST	
	Q763	2SA970(GR)	SI. TRANSIST	
	Q764	2SA970(GR)	SI. TRANSIST	
	Q765	2SC2235(O,Y)	SI. TRANSISTTOSHIBA	
	Q766	2SC2235(O,Y)	SI. TRANSISTTOSHIBA	
	Q767	2SA965(Y)	SI. TRANSIST	
	Q768	2SA965(Y)	SI. TRANSIST	
	Q801	2SB1187(E,F)	SI. TRANSIST	
	Q803	2SD2061F(E,F)	SI. TRANSISTROHM	
	Q804	2SD2061F(E,F)	SI. TRANSISTROHM	
	Q805	2SB1187F(E,F)	SI. TRANSISTROHM	
	Q810	2SD2144S(VW)	SI. TRANSISTROHM	
	Q811	2SD2144S(VW)	SI. TRANSISTROHM	
	Q812	BN1A4P	DIGITAL TRANEC	
	Q901	2SC1775AV(F1)	SI. TRANSISTHITACHI	
	Q902	2SC1775AV(F1)	SI. TRANSISTHITACHI	
	Q903	2SA1038(S,E)	SILICON	

Δ (SAFETY) PARTS

## I.C.s

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	NJM4580LD	I.C(MONO-ANDAINICHI	
	IC321	TC9164N	I.C(DIGI-MOTOSHIBA	
	IC331	BA15218N	I.C(MONO-ANROHM	
	IC332	BA15218N	I.C(MONO-ANROHM	
	IC701	NJM4560DD	I.C(MONO-ANDAINICHI	
	IC901	TA7317P	I.C(MONO-ANTOSHIBA	

Δ (SAFETY) PARTS

## Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D406	1SS133	SI.DIODE ROHM	
	D407	1SS133	SI.DIODE ROHM	
	D408	MTZ6.8JC	ZENER DIODEROHM	
	D701	1SS133	SI.DIODE ROHM	
	D702	1SS133	SI.DIODE ROHM	
	D709	MTZ3.0JB	ZENER DIODEROHM	
	D751	1SS133	SI.DIODE ROHM	
	D752	1SS133	SI.DIODE ROHM	
	D753	1SS133	SI.DIODE ROHM	
	D754	1SS133	SI.DIODE ROHM	
	D801	30DF2SFC	SI.DIODE NIHONINTER	
	D802	30DF2SFC	SI.DIODE NIHONINTER	
	D803	30DF2SFC	SI.DIODE NIHONINTER	
	D804	30DF2SFC	SI.DIODE NIHONINTER	
	D805	1SS133	SI.DIODE ROHM	
	D806	MTZ16JC	ZENER DIODEROHM	
	D809	1SS133	SI.DIODE ROHM	
	D810	MTZ16JC	ZENER DIODEROHM	
	D811	1SS133	SI.DIODE ROHM	
	D812	MTZ7.5JC	ZENER DIODEROHM	

Δ (SAFETY) PARTS

## Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D813	MTZ20JC	ZENER DIODEROHM	
	D814	MTZ5.1JC	ZENER DIODEROHM	
	D816	MTZ20JC	ZENER DIODEROHM	
	D818	1SS133	SI.DIODE ROHM	
	D820	1SS133	SI.DIODE ROHM	
	D830	1SS133	SI.DIODE ROHM	
	D835	MTZ5.6JC	ZENER DIODEROHM	
	D836	1SS133	SI.DIODE ROHM	
	D901	1SS133	SI.DIODE ROHM	
	D902	1SS133	SI.DIODE ROHM	
	D903	1SS133	SI.DIODE ROHM	
	D904	1SS133	SI.DIODE ROHM	

Δ (SAFETY) PARTS

## Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C301	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C302	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C303	QCB81HK-471Y	470PF 50V CER.CAPACI	TO BS
	C303	QCB81HK-471Y	470PF 50V CER.CAPACI	TO EF
	C303	QCB81HK-471Y	470PF 50V CER.CAPACI	TO EN
	C303	QCB81HK-471Y	470PF 50V CER.CAPACI	TO G
	C303	QCB81HK-101Y	100PF 50V CER.CAPACI	TO U
	C303	QCB81HK-101Y	100PF 50V CER.CAPACI	TO UT
	C304	QCB81HK-471Y	470PF 50V CER.CAPACI	TO BS
	C304	QCB81HK-471Y	470PF 50V CER.CAPACI	TO EF
	C304	QCB81HK-471Y	470PF 50V CER.CAPACI	TO EN
	C304	QCB81HK-471Y	470PF 50V CER.CAPACI	TO G
	C304	QCB81HK-101Y	100PF 50V CER.CAPACI	TO U
	C304	QCB81HK-101Y	100PF 50V CER.CAPACI	TO UT
	C305	QCY31HK-182Z	1800PF 50V CER.CAPACI	TO
	C306	QCY31HK-182Z	1800PF 50V CER.CAPACI	TO
	C307	QCY31HK-682Z	6800PF 50V CER.CAPACI	TO
	C308	QCY31HK-682Z	6800PF 50V CER.CAPACI	TO
	C309	QCB81HK-101Y	100PF 50V CER.CAPACI	TO
	C310	QCB81HK-101Y	100PF 50V CER.CAPACI	TO
	C311	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C312	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C313	QETB1AM-107	100MF 10V AL E.CAPAC	IT
	C314	QETB1AM-107	100MF 10V AL E.CAPAC	IT
	C315	QETB1CM-476	47MF 16V AL E.CAPAC	IT
	C316	QETB1CM-476	47MF 16V AL E.CAPAC	IT
	C317	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C318	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C319	QFV81HJ-154	0.15MF 50V THIN FILM	CA
	C321	QETB1EM-226	22MF 25V E.CAPACITO	R
	C322	QETB1EM-226	22MF 25V E.CAPACITO	R
	C329	QCS21HJ-331	330PF 50V CER.CAPACI	TO
	C336	QETB1CM-226	22MF 16V E.CAPACITO	R
	C337	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C338	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C339	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C340	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C341	QCS21HJ-330	33PF 50V CER.CAPACI	TO
	C343	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C344	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C345	QFLB1HJ-392	3900PF 50V MYLAR CAPA	CI
	C346	QCS21HJ-100	10PF 50V CER.CAPACI	TO
	C347	QETB1EM-226	22MF 25V E.CAPACITO	R
	C361	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C362	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C367	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C368	QETB1HM-475	4.7MF 50V AL E.CAPAC	IT
	C375	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C375	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C375	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C375	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C376	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C376	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C376	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C376	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C381	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C381	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C381	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C381	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C382	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C382	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C382	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C382	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C383	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C383	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C383	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C383	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C384	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C384	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C384	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C384	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G
	C385	QCB81HK-331Y	330PF 50V CER.CAPACI	TO BS
	C385	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EF
	C385	QCB81HK-331Y	330PF 50V CER.CAPACI	TO EN
	C385	QCB81HK-331Y	330PF 50V CER.CAPACI	TO G

Δ (SAFETY) PARTS



## Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION			AREA
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO BS
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO EF
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO EN
	C386	QCBB1HK-331Y	330PF	50V	CER.CAPACI	TO G
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO BS
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EF
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EN
	C387	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO G
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO BS
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EF
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO EN
	C388	QCBB1HK-561Y	560PF	50V	CER.CAPACI	TO G
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C389	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C390	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C393	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO BS
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EF
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO EN
	C394	QCBB1HK-221Y	220PF	50V	CER.CAPACI	TO G
	C701	QETB1HM-106	10MF	50V	E.CAPACITO	R
	C702	QETB1HM-106	10MF	50V	E.CAPACITO	R
	C703	QETB1AM-107	100MF	10V	AL E.CAPAC	IT
	C704	QETB1AM-107	100MF	10V	AL E.CAPAC	IT
	C705	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO U
	C705	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO UT
	C706	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO U
	C706	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO UT
	C707	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C708	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C709	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C710	QCS21HJ-270	27PF	50V	CER.CAPACI	TO
	C711	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA	CI
	C712	QFLB1HJ-103	0.01MF	50V	MYLAR CAPA	CI
	C717	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C718	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C719	QETB1JM-476	47MF	63V	AL E.CAPAC	IT
	C720	QETB1JM-476	47MF	63V	AL E.CAPAC	IT
	C721	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C729	QCS21HJ-220	22PF	50V	CER.CAPACI	TO
	C730	QCS21HJ-220	22PF	50V	CER.CAPACI	TO
	C751	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C752	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C753	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C754	QCS22HJ-470A	47PF	500V	CER.CAPACI	TO
	C755	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C756	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C757	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C758	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI
	C761	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C762	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C763	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C764	QCF21HP-473A	0.047MF	50V	CER.CAPACI	TO
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO BS
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EF
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EN
	C793	QCS21HJ-221	220PF	50V	CER.CAPACI	TO G
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO BS
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EF
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO EN
	C794	QCS21HJ-221	220PF	50V	CER.CAPACI	TO G
	C795	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C801	FMEW5001-478			E.CAPA	BS
	C801	FMEW5001-478			E.CAPA	EF
	C801	FMEW5001-478			E.CAPA	EN
	C801	FMEW5001-478			E.CAPA	G
	C801	FMEW5001-478			E.CAPA	U
	C801	FMEW5001-478			E.CAPA	UT
	C802	FMEW5001-478			E.CAPA	BS
	C802	FMEW5001-478			E.CAPA	EF
	C802	FMEW5001-478			E.CAPA	EN
	C802	FMEW5001-478			E.CAPA	G
	C802	FMEW5001-478			E.CAPA	U
	C802	FMEW5001-478			E.CAPA	UT
	C803	QCE22HP-103	0.01MF	500V	CERAMIC	
	C804	QCE22HP-103	0.01MF	500V	CERAMIC	
	C805	QFN82CJ-224	0.22MF	160V	MYLAR CAPA	CI
	C811	QCF21HP-472	4700PF	50V	CER.CAPACI	IT
	C812	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C816	QCF21HP-472	4700PF	50V	CER.CAPACI	IT
	C817	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C818	QETB1HM-476	47MF	50V	E.CAPACITO	R
	C819	QETB1HM-107	100MF	50V	E.CAPACITO	R
	C820	QCF21HP-472	4700PF	50V	CER.CAPACI	IT
	C821	QETB1EM-107	100MF	25V	AL E.CAPAC	IT
	C822	QCF21HP-472	4700PF	50V	CER.CAPACI	IT
	C823	QETB1EM-107	100MF	25V	AL E.CAPAC	IT

Δ IS A SAFETY PARTS.

## Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION			AREA
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI BS
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EF
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EN
	C831	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI G
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI BS
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EF
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI EN
	C832	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI G
	C845	QETB1EM-476	47MF	25V	AL E.CAPAC	IT
	C901	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C902	QCF21HP-223A	0.022MF	50V	CER.CAPACI	TO
	C903	QETB1HM-226	22MF	50V	AL E.CAPAC	IT
	C904	QFLB1HJ-223	0.022MF	50V	MYLAR CAPA	CI
	C905	QCY21HK-102	1000PF	50V	CER.CAPACI	TO
	C906	QETB1AM-476	47MF	10V	E.CAPACITO	R
	C909	QETB1CM-226	22MF	16V	E.CAPACITO	R
	C910	QETB1HM-225	2.2MF	50V	E.CAPACITO	R
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C961	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C962	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C963	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI BS
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EF
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI EN
	C964	QFLB1HJ-473	0.047MF	50V	MYLAR CAPA	CI G
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO BS
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO EF
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO EN
	C965	QCS21HJ-101A	100PF	50V	CER.CAPACI	TO G
	C966	QCS21HJ-471	470PF	50V	CERAMIC	BS
	C966	QCS21HJ-471	470PF	50V	CERAMIC	EF
	C966	QCS21HJ-471	470PF	50V	CERAMIC	EN
	C966	QCS21HJ-471	470PF	50V	CERAMIC	G
	C967	QCS21HJ-151	150PF	50V	CERAMIC	BS
	C967	QCS21HJ-151	150PF	50V	CERAMIC	EF
	C967	QCS21HJ-151	150PF	50V	CERAMIC	EN
	C967	QCS21HJ-151	150PF	50V	CERAMIC	G
	C968	QCS21HJ-471	470PF	50V	CERAMIC	BS
	C968	QCS21HJ-471	470PF	50V	CERAMIC	EF
	C968	QCS21HJ-471	470PF	50V	CERAMIC	EN
	C968	QCS21HJ-471	470PF	50V	CERAMIC	G
	C969	QCS21HJ-471	470PF	50V	CERAMIC	
	C970	QCS21HJ-391	390PF	50V	CERAMIC	
	C971	QCS21HJ-471	470PF	50V	CERAMIC	
	C972	QCS21HJ-471	470PF	50V	CERAMIC	
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO BS
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO EF
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO EN
	C991	QCF21HP-103A	0.01MF	50V	CER.CAPACI	TO G

Δ IS A SAFETY PARTS.

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R302	QRD167J-222	2.2K	1/6W	CARBON RES	IS
	R303	QRD167J-473	47K	1/6W	CARBON RES	IS
	R304	QRD167J-473	47K	1/6W	CARBON RES	IS
	R305	QRD161J-621	620	1/6W	CARBON RES	IS
	R306	QRD161J-621	620	1/6W	CARBON RES	IS
	R307	QRD167J-393	39K	1/6W	CARBON RES	IS
	R308	QRD167J-393	39K	1/6W	CARBON RES	IS
	R309	QRD167J-474	470K	1/6W	CARBON RES	IS
	R310	QRD167J-474	470K	1/6W	CARBON RES	IS
	R311	QRD167J-104	100K	1/6W	CARBON RES	IS
	R312	QRD167J-104	100K	1/6W	CARBON RES	IS
	R313	QRD14CJ-391S	390	1/4W	UNF. CARBON	R
	R314	QRD14CJ-391S	390	1/4W	UNF. CARBON	R
	R321	QR20077-470	47	1/4W	FUSIBLE RE	SI
	R322	QR20077-470	47	1/4W	FUSIBLE RE	SI
	R329	QRD167J-152	1.5K	1/6W	CARBON RES	IS
	R330	QRD167J-152	1.5K	1/6W	CARBON RES	IS
	R331	QRD167J-103	10K	1/6W	CARBON RES	IS
	R332	QRD167J-103	10K	1/6W	CARBON RES	IS
	R335	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R336	QRD161J-333	33K	1/6W	CARBON RES	IS
	R337	QRD161J-273	27K	1/6W	CARBON RES	IS
	R338	QRD167J-474	470K	1/6W	CARBON RES	IS
	R339	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R341	QRD161J-303Y	30K	1/6W	CARBON RES	IS
	R342	QRD167J-334	330K	1/6W	CARBON RES	IS
	R344	QRD167J-334	330K	1/6W	CARBON RES	IS
	R345	QRD161J-273	27K	1/6W	CARBON RES	IS
	R346	QRD161J-303Y	30K	1/6W	CARBON RES	IS

Δ IS A SAFETY PARTS.

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R347	QRD161J-273	27K 1/6W CARBON RES IS	
	R348	QRD167J-334	330K 1/6W CARBON RES IS	
	R349	QRD167J-682	6.8K 1/6W CARBON RES IS	
	R350	QRD167J-334	330K 1/6W CARBON RES IS	
	R351	QRD167J-332	3.3K 1/6W CARBON RES IS	
	R354	QRD167J-473	47K 1/6W CARBON RES IS	
	R355	QRD167J-104	100K 1/6W CARBON RES IS	
	R356	QRD167J-104	100K 1/6W CARBON RES IS	
	R359	QRD167J-564	560K 1/6W CARBON RES IS	
Δ	R361	QRZ0077-680	68 1/4W FUSIBLE RE SI	
Δ	R362	QRZ0077-680	68 1/4W FUSIBLE RE SI	
	R381	QRD167J-471	470 1/6W CARBON RES IS	
	R382	QRD167J-471	470 1/6W CARBON RES IS	
	R383	QRD167J-471	470 1/6W CARBON RES IS	
	R384	QRD167J-471	470 1/6W CARBON RES IS	
	R385	QRD167J-222	2.2K 1/6W CARBON RES IS BS	
	R385	QRD167J-222	2.2K 1/6W CARBON RES IS EF	
	R385	QRD167J-222	2.2K 1/6W CARBON RES IS EN	
	R385	QRD167J-222	2.2K 1/6W CARBON RES IS G	
	R385	QRD167J-471	470 1/6W CARBON RES IS U	
	R385	QRD167J-471	470 1/6W CARBON RES IS UT	
	R386	QRD167J-222	2.2K 1/6W CARBON RES IS BS	
	R386	QRD167J-222	2.2K 1/6W CARBON RES IS EF	
	R386	QRD167J-222	2.2K 1/6W CARBON RES IS EN	
	R386	QRD167J-222	2.2K 1/6W CARBON RES IS G	
	R386	QRD167J-471	470 1/6W CARBON RES IS U	
	R386	QRD167J-471	470 1/6W CARBON RES IS UT	
	R387	QRD167J-222	2.2K 1/6W CARBON RES IS BS	
	R387	QRD167J-222	2.2K 1/6W CARBON RES IS EF	
	R387	QRD167J-222	2.2K 1/6W CARBON RES IS EN	
	R387	QRD167J-222	2.2K 1/6W CARBON RES IS G	
	R387	QRD167J-471	470 1/6W CARBON RES IS U	
	R387	QRD167J-471	470 1/6W CARBON RES IS UT	
	R388	QRD167J-222	2.2K 1/6W CARBON RES IS BS	
	R388	QRD167J-222	2.2K 1/6W CARBON RES IS EF	
	R388	QRD167J-222	2.2K 1/6W CARBON RES IS EN	
	R388	QRD167J-222	2.2K 1/6W CARBON RES IS G	
	R388	QRD167J-471	470 1/6W CARBON RES IS U	
	R388	QRD167J-471	470 1/6W CARBON RES IS UT	
	R389	QRD167J-471	470 1/6W CARBON RES IS U	
	R390	QRD167J-471	470 1/6W CARBON RES IS	
	R391	QRD161J-105	1M 1/6W CARBON RES IS	
	R392	QRD161J-105	1M 1/6W CARBON RES IS	
	R393	QRD167J-103	10K 1/6W CARBON RES IS	
	R394	QRD167J-103	10K 1/6W CARBON RES IS	
	R405	QRD161J-512	5.1K 1/6W CARBON RES IS	
	R406	QRD161J-512	5.1K 1/6W CARBON RES IS	
	R408	QRD167J-103	10K 1/6W CARBON RES IS	
	R409	QRD167J-103	10K 1/6W CARBON RES IS	
	R410	QRD161J-221	220 1/6W CARBON RES IS	
	R701	QRD167J-222	2.2K 1/6W CARBON RES IS	
	R702	QRD167J-222	2.2K 1/6W CARBON RES IS	
	R703	QRD167J-104	100K 1/6W CARBON RES IS	
	R704	QRD167J-104	100K 1/6W CARBON RES IS	
	R705	QRD167J-472	4.7K 1/6W CARBON RES IS	
Δ	R706	QRD167J-472	4.7K 1/6W CARBON RES IS	
Δ	R707	QRD14CJ-820S	82 1/4W UNF. CARBON R	
Δ	R708	QRD14CJ-820S	82 1/4W UNF. CARBON R	
Δ	R709	QRZ0077-820	82 1/4W FUSIBLE RE SI	
Δ	R710	QRZ0077-820	82 1/4W FUSIBLE RE SI	
	R711	QRD167J-470	47 1/6W CARBON RES IS	
	R712	QRD167J-470	47 1/6W CARBON RES IS	
	R713	QRD167J-243	24K 1/6W CARBON RES IS	
	R714	QRD167J-243	24K 1/6W CARBON RES IS	
	R715	QRD167J-243	24K 1/6W CARBON RES IS	
	R716	QRD167J-243	24K 1/6W CARBON RES IS	
	R717	QRD161J-302	3K 1/6W CARBON RES IS	
	R718	QRD161J-302	3K 1/6W CARBON RES IS	
	R719	QRD167J-133	13K 1/6W CARBON RES IS	
	R720	QRD167J-133	13K 1/6W CARBON RES IS	
	R721	QRD167J-243	24K 1/6W CARBON RES IS	
	R722	QRD167J-243	24K 1/6W CARBON RES IS	
	R723	QRD167J-751	750 1/6W CARBON RES IS BS	
	R723	QRD167J-751	750 1/6W CARBON RES IS EF	
	R723	QRD167J-751	750 1/6W CARBON RES IS G	
	R723	QRD167J-751	750 1/6W CARBON RES IS U	
	R723	QRD161J-681	680 1/6W CARBON RES IS U	
	R723	QRD161J-681	680 1/6W CARBON RES IS UT	
	R724	QRD167J-751	750 1/6W CARBON RES IS BS	
	R724	QRD167J-751	750 1/6W CARBON RES IS EF	
	R724	QRD167J-751	750 1/6W CARBON RES IS EN	
	R724	QRD167J-751	750 1/6W CARBON RES IS G	
	R724	QRD161J-681	680 1/6W CARBON RES IS U	
	R724	QRD161J-681	680 1/6W CARBON RES IS UT	
	R725	QRD161J-202	2K 1/6W CARBON RES IS	
	R726	QRD161J-273	27K 1/6W CARBON RES IS	
	R727	QRD167J-222	2.2K 1/6W CARBON RES IS	
	R728	QRD167J-222	2.2K 1/6W CARBON RES IS	
	R729	QRD167J-102	1K 1/6W CARBON RES IS	
	R731	QRD167J-823	82K 1/6W CARBON RES IS	
	R732	QRD167J-823	82K 1/6W CARBON RES IS	
	R751	QVPA601-501A	500 TRIMMER RE SI	
	R752	QVPA601-501A	500 TRIMMER RE SI	
	R753	QRD167J-152	1.5K 1/6W CARBON RES IS	
	R754	QRD167J-152	1.5K 1/6W CARBON RES IS	

Δ: SAFETY PARTS

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R755	QRD167J-391	390 1/6W CARBON RES IS	
	R756	QRD167J-391	390 1/6W CARBON RES IS	
Δ	R759	QRD14CJ-100S	10 1/4W UNF. CARBON R	
Δ	R760	QRD14CJ-100S	10 1/4W UNF. CARBON R	
Δ	R761	QRD14CJ-100S	10 1/4W UNF. CARBON R	
Δ	R762	QRD14CJ-100S	10 1/4W UNF. CARBON R	
	R767	QRD161J-820	82 1/6W CARBON RES IS	
	R768	QRD161J-820	82 1/6W CARBON RES IS	
	R769	QRD161J-820	82 1/6W CARBON RES IS	
	R770	QRD161J-820	82 1/6W CARBON RES IS	
	R771	QRD167J-151	150 1/6W CARBON RES IS U	
	R771	QRD167J-151	150 1/6W CARBON RES IS UT	
	R772	QRD167J-151	150 1/6W CARBON RES IS U	
	R772	QRD167J-151	150 1/6W CARBON RES IS UT	
	R773	QRD167J-151	150 1/6W CARBON RES IS U	
	R773	QRD167J-151	150 1/6W CARBON RES IS UT	
	R774	QRD167J-151	150 1/6W CARBON RES IS U	
	R774	QRD167J-151	150 1/6W CARBON RES IS UT	
Δ	R783	QRD14CJ-272S	2.7K 1/4W UNF. CARBON R	
Δ	R784	QRD14CJ-272S	2.7K 1/4W UNF. CARBON R	
Δ	R785	QRD14CJ-271S	270 1/4W UNF. CARBON R	
Δ	R786	QRD14CJ-271S	270 1/4W UNF. CARBON R	
Δ	R787	ERF032K-R22	0.22 3W CEM. RESIST OR	
Δ	R788	ERF032K-R22	0.22 3W CEM. RESIST OR	
Δ	R789	QRZ0077-100	10 1/4W FUSIBLE RE SI	
Δ	R790	QRZ0077-100	10 1/4W FUSIBLE RE SI	
Δ	R791	QRZ0077-100	10 1/4W FUSIBLE RE SI	
Δ	R792	QRZ0077-100	10 1/4W FUSIBLE RE SI	
	R793	QRD129J-330S	33 1/2W UNF. CARBON	
	R794	QRD129J-330S	33 1/2W UNF. CARBON	
	R795	QRG022J-100GJ7	10 2W OXIDE META L	
	R796	QRG022J-100GJ7	10 2W OXIDE META L	
Δ	R797	QRZ0077-221	220 1/4W FUSIBLE RE SI	
Δ	R798	QRZ0077-820	82 1/4W FUSIBLE RE SI	
	R802	QRG022J-121GJ7	120 2W O.M. FILM BS	
	R802	QRG022J-121GJ7	120 2W O.M. FILM EF	
	R802	QRG022J-121GJ7	120 2W O.M. FILM EN	
	R802	QRG022J-121GJ7	120 2W O.M. FILM G	
	R802	QRG022J-821GJ7	820 2W OXIDE META L U	
	R802	QRG022J-821GJ7	820 2W OXIDE META L UT	
	R803	QRG022J-102GJ7	1K 2W OXIDE META L U	
	R803	QRG022J-102GJ7	1K 2W OXIDE META L UT	
	R804	QRD129J-472S	4.7K 1/2W UNF. CARBON BS	
	R804	QRD129J-472S	4.7K 1/2W UNF. CARBON EF	
	R804	QRD129J-472S	4.7K 1/2W UNF. CARBON EN	
	R804	QRD129J-472S	4.7K 1/2W UNF. CARBON G	
	R804	QRD129J-562S	5.6K 1/2W UNF. CARBON U	
	R804	QRD129J-562S	5.6K 1/2W UNF. CARBON UT	
	R805	QRD129J-392S	3.9K 1/2W UNF. CARBON BS	
	R805	QRD129J-392S	3.9K 1/2W UNF. CARBON EF	
	R805	QRD129J-392S	3.9K 1/2W UNF. CARBON EN	
	R805	QRD129J-392S	3.9K 1/2W UNF. CARBON G	
	R805	QRD129J-472S	4.7K 1/2W UNF. CARBON U	
	R805	QRD129J-472S	4.7K 1/2W UNF. CARBON UT	
Δ	R806	QRZ0077-121	120 1/4W FUSIBLE RE SI	
	R808	QRG022J-181GJ7	180 2W OXIDE META L BS	
	R808	QRG022J-181GJ7	180 2W OXIDE META L EF	
	R808	QRG022J-181GJ7	180 2W OXIDE META L EN	
	R808	QRG022J-181GJ7	180 2W OXIDE META L G	
	R808	QRG022J-561GJ7	560 2W OXIDE META L U	
	R808	QRG022J-561GJ7	560 2W OXIDE META L UT	
	R809	QRG022J-181GJ7	180 2W OXIDE META L BS	
	R809	QRG022J-181GJ7	180 2W OXIDE META L EF	
	R809	QRG022J-181GJ7	180 2W OXIDE META L EN	
	R809	QRG022J-181GJ7	180 2W OXIDE META L G	
	R809	QRG022J-561GJ7	560 2W OXIDE META L U	
	R809	QRG022J-561GJ7	560 2W OXIDE META L UT	
	R810	QRG022J-561GJ7	560 2W OXIDE META L U	
	R810	QRG022J-561GJ7	560 2W OXIDE META L UT	
	R811	QRD12CJ-472SX	4.7K 1/2W R.NETWORK DS	
	R811	QRD12CJ-472SX	4.7K 1/2W R.NETWORK EF	
	R811	QRD12CJ-472SX	4.7K 1/2W R.NETWORK EN	
	R811	QRD12CJ-472SX	4.7K 1/2W R.NETWORK G	
Δ	R811	QRD12CJ-822S	8.2K 1/2W NETWORK RE SI U	
Δ	R811	QRD12CJ-822S	8.2K 1/2W NETWORK RE SI UT	
Δ	R812	QRD129J-180S	18 1/2W UNF. CARBON U	
Δ	R812	QRD129J-180S	18 1/2W UNF. CARBON UT	
	R817	QRG022J-121GJ7	120 2W O.M. FILM	
	R818	QRG022J-151GJ7	150 2W O.M. FILM	
Δ	R819	QRZ0077-4R7	4.7 1/4W FUSE RESIS TO	
Δ	R820	QRD12CJ-682SX	6.8K 1/2W RESISTOR A RR BS	
Δ	R820	QRD12CJ-682SX	6.8K 1/2W RESISTOR A RR CF	
Δ	R820	QRD12CJ-682SX	6.8K 1/2W RESISTOR A RR EN	
Δ	R820	QRD12CJ-682SX	6.8K 1/2W RESISTOR A RR G	
Δ	R820	QRD12CJ-822S	8.2K 1/2W NETWORK RE SI U	
Δ	R820	QRD12CJ-822S	8.2K 1/2W NETWORK RE SI UT	
	R823	QRD167J-103	10K 1/6W CARBON RES IS	
	R824	QRD167J-103	10K 1/6W CARBON RES IS	
	R836	QRD167J-912	9.1K 1/6W CARBON	
	R841	QRD167J-104	100K 1/6W CARBON RES IS	
	R842	QRD167J-104	100K 1/6W CARBON RES IS	
	R843	QRD12CJ-2R2S	2.2 1/2W R.NETWORK	
	R844	QRD12CJ-2R2S	2.2 1/2W R.NETWORK	
	R901	QRD161J-681	680 1/6W CARBON RES IS	
	R902	QRD161J-681	680 1/6W CARBON RES IS	

Δ: SAFETY PARTS

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R903	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R904	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R905	QRD167J-123	12K 1/6W CARBON RES	IS
	R906	QRD167J-123	12K 1/6W CARBON RES	IS
	R907	QRD167J-152	1.5K 1/6W CARBON RES	IS
	R908	QRD167J-152	1.5K 1/6W CARBON RES	IS
	R909	QRD167J-103	10K 1/6W CARBON RES	IS
	R911	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R912	QRD167J-473	47K 1/6W CARBON RES	IS
	R913	QRD167J-104	100K 1/6W CARBON RES	IS
	R914	QRD167J-823	82K 1/6W CARBON RES	IS
	R915	QRD167J-473	47K 1/6W CARBON RES	IS
	R916	QRD167J-563	56K 1/6W CARBON RES	IS
	R917	QRD167J-683	68K 1/6W CARBON RES	IS
	R918	QRD167J-392	3.9K 1/6W CARBON RES	IS
	R921	QRD167J-224	220K 1/6W CARBON RES	IS
	R922	QRD167J-182	1.8K 1/6W CARBON RES	IS
	R924	QRG022J-821GJ7	820 2W OXIDE META	L BS
	R924	QRG022J-821GJ7	820 2W OXIDE META	L EF
	R924	QRG022J-821GJ7	820 2W OXIDE META	L EN
	R924	QRG022J-821GJ7	820 2W OXIDE META	L G
	R924	QRG022J-122GJ7	1.2K 2W O.M.FILM	U
	R924	QRG022J-122GJ7	1.2K 2W O.M.FILM	UT
	R925	QRD167J-750	75 1/6W CARBON RES	IS U
	R925	QRD167J-750	75 1/6W CARBON RES	IS UT
Δ	R931	QRD14CJ-330S	33 1/4W UNF. CARBON R	
	R935	QRD167J-562	5.6K 1/6W CARBON RES	IS
	R936	QRD167J-822	8.2K 1/6W CARBON RES	IS
	R937	QRD167J-103	10K 1/6W CARBON RES	IS
	R941	QRG012J-471J7	470 1W O.M.FILM	
	R942	QRG012J-471J7	470 1W O.M.FILM	
Δ	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
Δ	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
Δ	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
Δ	R961	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
Δ	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
Δ	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
Δ	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
Δ	R962	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
Δ	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
Δ	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
Δ	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
Δ	R963	QRZ0077-100	10 1/4W FUSIBLE RE	SI G
Δ	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI BS
Δ	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI EF
Δ	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI EN
Δ	R964	QRZ0077-100	10 1/4W FUSIBLE RE	SI G

Δ : SAFETY PARTS

## Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	EP802	E65396-003	EARTH PLATE	BS
	EP802	E65396-003	EARTH PLATE	EF
	EP802	E65396-003	EARTH PLATE	EN
	EP802	E65396-003	EARTH PLATE	G
	EP803	E70225-001	EARTH PLATE	
	FW103	EWR360-25KS	FLAT WIRE(6PIN)	
	FW801	EWR360-20SS	FLAT WIRE(6PIN)	
	FW802	EWR360-30SS	FLAT WIRE(6PIN)	
	FW902	EWR35D-40SS	FLAT WIRE(6PIN)	
	FW903	EWR360-55SS	FLAT WIRE(6PIN)	
	JT001	EMV7122-004	CONNECT TERMINAL(4PIN)	
	JT002	EMV7122-005	MALE CONNECTOR(9PIN)	
	JT003	EMV7122-004	CONNECT TERMINAL(4PIN)	
	JT004	EMV7122-004	CONNECT TERMINAL(4PIN)	
	PA703	EMV5109-011A	MALE CONNECTOR(11PIN)	
	RY901	ESK7024-2120	RELAY	
	ST901	EM990TV-801A	SPEAKER TERMINAL	
	SW901	QST4241-E05J2	PUSH SWITCH(SPK-1)	
	SW902	QST4241-E05J2	PUSH SWITCH(SPK-2)	

Δ : SAFETY PARTS

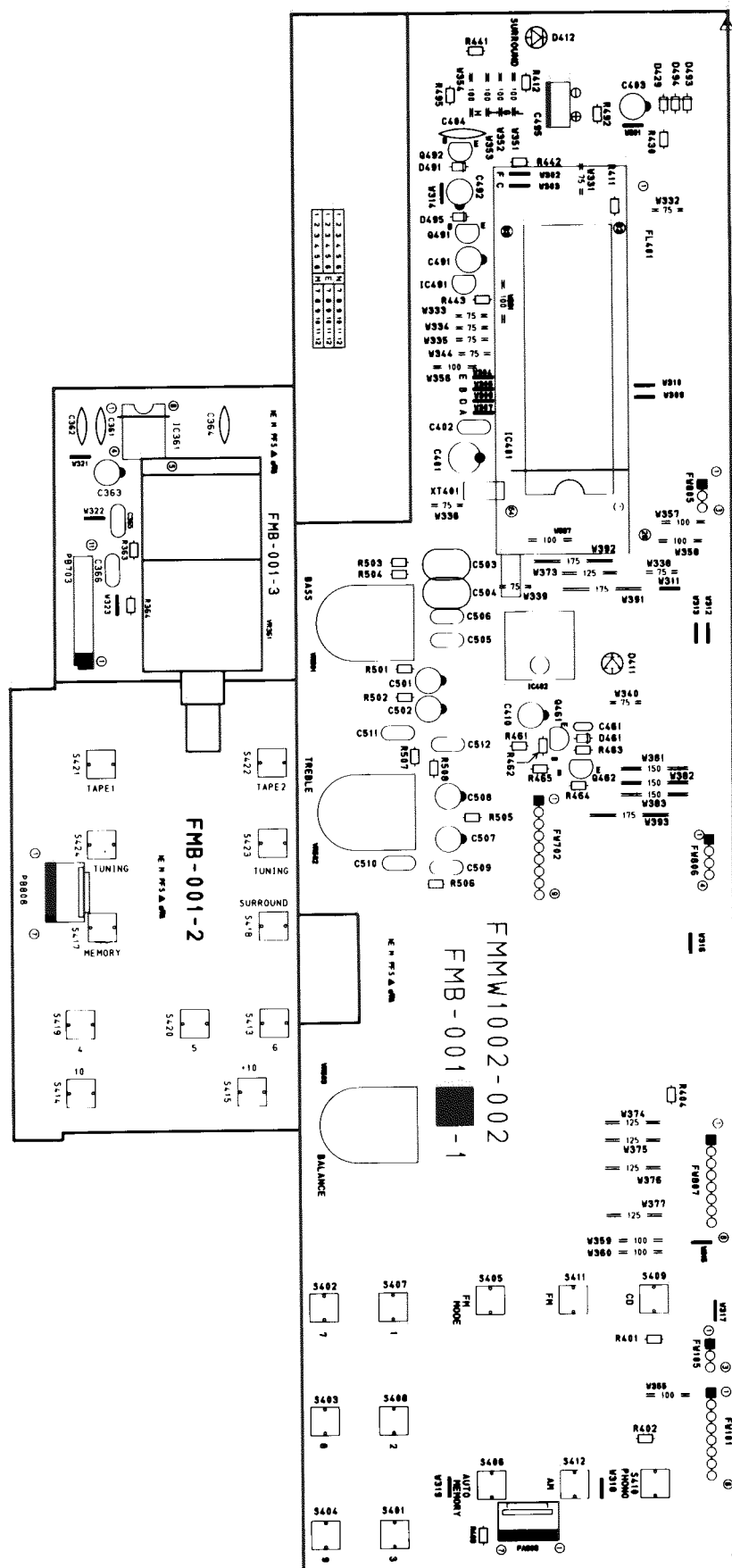
## Others

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
		E308271-004	HEAT SINK	
		E73525-003	SCREW	
		E307874-001SM	HEAT SINK BRACKET	
		E307874-002SM	HEAT SINK BRACKET	
		SBSG3008CC	TAPPING SCREW	
		E65508-002	TAB	
Δ		EW0111-076	TERMINAL WIRE ASSY	
		QSR0085-018	SELECT SWITCH	U
		QSR0085-018	SELECT SWITCH	UT
	F001	VMZ0087-001	FUSE CLIP	BS
	F001	VMZ0087-001	FUSE CLIP	EF
	F001	VMZ0087-001	FUSE CLIP	EN
	F001	VMZ0087-001	FUSE CLIP	G
	J001	EMV5137-002	CONNECT TERMINAL	U
	J001	EMV5137-002	CONNECT TERMINAL	UT
	J003	E70225-001	EARTH PLATE	BS
	J003	E70225-001	EARTH PLATE	EF
	J003	E70225-001	EARTH PLATE	EN
	J003	E70225-001	EARTH PLATE	G
	J004	QMCAC002-E01S	AC OUTLET	U
	J004	QMCAC002-E01S	AC OUTLET	UT
	J301	EMN00TV-423AJ2	PIN JACK	
	J302	EMN00TV-421AJ2	4P PIN JACK	
	J303	EMN00TV-421AJ2	4P PIN JACK	
	J901	QMS6022-V01	MICROPHONE JACK	
	L331	EQL4007-220	INDUCTOR	
	L751	EQL0121-1R2J1	INDUCTOR	
	L752	EQL0121-1R2J1	INDUCTOR	
	L961	EQL0011-R45J1	INDUCTOR	BS
	L961	EQL0011-R45J1	INDUCTOR	EF
	L961	EQL0011-R45J1	INDUCTOR	EN
	L961	EQL0011-R45J1	INDUCTOR	G
	L962	EQL0011-R45J1	INDUCTOR	BS
	L962	EQL0011-R45J1	INDUCTOR	EF
	L962	EQL0011-R45J1	INDUCTOR	EN
	L962	EQL0011-R45J1	INDUCTOR	G
	P805	EMV7122-103	CONNECT TERMINAL(3PIN)	
	P806	EMV7122-004	CONNECT TERMINAL(4PIN)	
	S001	QSP2J21-E02	PUSH SWITCH(POWER SWITCH)	
	EP801	E65396-003	EARTH PLATE	

Δ : SAFETY PARTS

■FMB-001□ Front , Tone Control & Volume PC Board Ass'y

**Note :** FMB-001 ☐ varies according to the areas employed. See note (1) when placing an order.



## Note (1)

PC Board Ass'y	Version	Designated Areas
FMB-001 <b>B</b>	U UT	Universal Type Taiwan
FMB-001 <b>C</b>	EN EF	Scandinavia Continental Europe
FMB-001 <b>E</b>	BS	the U.K.
FMB-001 <b>F</b>	G	Germany

## Transistors

ITEM	PART NUMBER	DESCRIPTION	AREA
Q461	2SC1740S(R,S)	SI-TRANSISTORHM	
Q462	2SC1740S(R,S)	SI-TRANSISTORHM	
Q492	DTC114YS	DIGITAL TRORHM	

△ : SAFETY PARTS

## I.C.s

ITEM	PART NUMBER	DESCRIPTION	AREA
IC361	LB1639-CV	I.C.(DIGI-OTSANYO	
IC401	MN171202JPY1	I.C.(MICRO-CMATSUSHITA	
IC402	SPS-420-1	INFRARED DESANYO	
IC491	MN1281(P,Q)	I.C.(DIGI-MOMATSUSHITA	

△ : SAFETY PARTS

## Diodes

ITEM	PART NUMBER	DESCRIPTION	AREA
D411	SLR-54VC50F124	L.E.D. ROHM	BS
D411	SLR-54VC50F124	L.E.D. ROHM	EF
D411	SLR-54VC50F124	L.E.D. ROHM	EN
D411	SLR-54VC50F124	L.E.D. ROHM	G
D411	SLR-54VC50F124	L.E.D. ROHM	U
D411	SLR-54VC50F124	L.E.D. ROHM	UT
D412	SLR-34DC50F124	L.E.D.	
D429	1SS133	SI-DIODE ROHM	
D461	1SS133	SI-DIODE ROHM	
D491	1SS133	SI-DIODE ROHM	
D493	1SS133	SI-DIODE ROHM	
D494	1SS133	SI-DIODE ROHM	

△ : SAFETY PARTS

## Capacitors

ITEM	PART NUMBER	DESCRIPTION	AREA
C361	QCY21HK-331	330PF 50V CER.CAPACI	TO
C362	QCY21HK-331	330PF 50V CER.CAPACI	TO
C363	QETB0JM-107	100MF 6.3V AL E.CAPAC	IT
C364	QCF21HP-473A	0.047MF 50V CER.CAPACI	TO
C401	QEK61AM-227ZM	220MF 10V AL E.CAPAC	IT
C402	QC20202-155	1.5MF 25V CER.RESIST	OR
C403	QEK51HM-475	4.7MF 50V AL E.CAPAC	IT
C404	QCY21HK-102	1000PF 50V CER.CAPACI	TO
C410	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
C491	QEK51HM-225G	2.2MF 50V AL E.CAPAC	IT
C495	QEAD0H2-4792B	47000MF E.CAPACIT	R
C501	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
C502	QEK51HM-105G	1MF 50V AL E.CAPAC	IT
C503	QFLB1HJ-823	0.082MF 50V MYLAR CAPA	CI
C504	QFLB1HJ-823	0.082MF 50V MYLAR CAPA	CI
C505	QFLB1HJ-153	0.015MF 50V MYLAR CAPA	CI
C506	QFLB1HJ-153	0.015MF 50V MYLAR CAPA	CI
C507	QETB1HM-105	1MF 50V AL E.CAPAC	IT
C508	QETB1HM-105	1MF 50V AL E.CAPAC	IT
C509	QFLB1HJ-332	3300PF 50V MYLAR CAPA	CI
C510	QFLB1HJ-332	3300PF 50V MYLAR CAPA	CI
C511	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	CI
C512	QFLB1HJ-183	0.018MF 50V MYLAR CAPA	CI

△ : SAFETY PARTS

## Resistors

ITEM	PART NUMBER	DESCRIPTION	AREA
R363	QRD167J-682	6.8K 1/6W CARBON RES	IS
R364	QRD167J-682	6.8K 1/6W CARBON RES	IS
R401	QRD167J-104	100K 1/6W CARBON RES	IS
R402	QRD167J-104	100K 1/6W CARBON RES	IS
R403	QRD167J-104	100K 1/6W CARBON RES	IS
R404	QRD167J-104	100K 1/6W CARBON RES	IS
R411	QRD161J-221	220 1/6W CARBON RES	IS
R412	QRD161J-221	220 1/6W CARBON RES	IS
R430	QRD161J-220	22 1/6W CARBON RES	IS
R441	QRD167J-473	47K 1/6W CARBON RES	IS
R442	QRD167J-473	47K 1/6W CARBON RES	IS U
R442	QRD167J-473	47K 1/6W CARBON RES	IS UT
R443	QRD167J-473	47K 1/6W CARBON RES	IS
R461	QRD167J-103	10K 1/6W CARBON RES	IS
R462	QRD167J-223	22K 1/6W CARBON RES	IS
R463	QRD167J-473	47K 1/6W CARBON RES	IS
R464	QRD167J-471	470 1/6W CARBON RES	IS
R465	QRD167J-103	10K 1/6W CARBON RES	IS
R492	QRD161J-331	330 1/6W CARBON RES	IS
R495	QRD167J-473	47K 1/6W CARBON RES	IS
R501	QRD161J-203	20K 1/6W CARBON RES	IS
R502	QRD161J-203	20K 1/6W CARBON RES	IS
R503	QRD161J-362	3.6K 1/6W CARBON RES	IS
R504	QRD161J-362	3.6K 1/6W CARBON RES	IS
R505	QRD167J-472	4.7K 1/6W CARBON RES	IS
R506	QRD167J-472	4.7K 1/6W CARBON RES	IS
R507	QRD161J-821	820 1/6W CARBON RES	IS
R508	QRD161J-821	820 1/6W CARBON RES	IS
VR361	QVDB71B-E15BJ3	100K VARIABLE R	ES
VR501	QVDB92C-E15CJ3	100K VARIABLE R	ES
VR502	QVDB92C-E15CJ3	100K VARIABLE R	ES
VR503	QVDA92W-E15EJ3	100K VARIABLE R	ES

△ : SAFETY PARTS

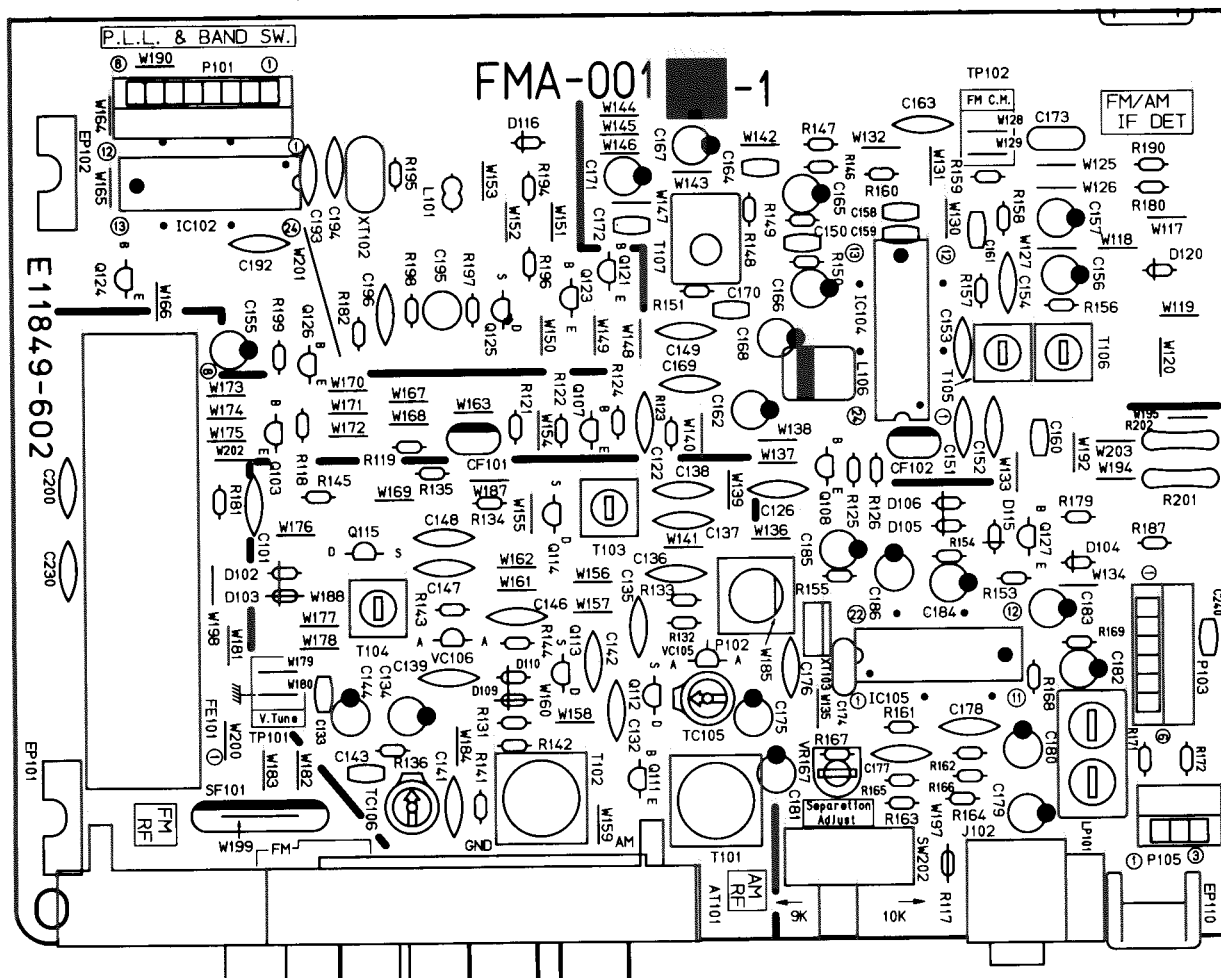
## Others

ITEM	PART NUMBER	DESCRIPTION	AREA
	E308270-001	FL HOLDER	
	E3400-444	FELT SPACER	
S401	ESP0001-023ZJ5	TACT SWITCH(3)	
S402	ESP0001-023ZJ5	TACT SWITCH(7)	
S403	ESP0001-023ZJ5	TACT SWITCH(8)	
S404	ESP0001-023ZJ5	TACT SWITCH(9)	
S405	ESP0001-023ZJ5	TACT SWITCH(FM MODE)	
S406	ESP0001-023ZJ5	TACT SWITCH(AUTO MEMORY)	
S407	ESP0001-023ZJ5	TACT SWITCH(1)	
S408	ESP0001-023ZJ5	TACT SWITCH(2)	
S409	ESP0001-023ZJ5	TACT SWITCH(CD)	
S410	ESP0001-023ZJ5	TACT SWITCH(PHONO)	
S411	ESP0001-023ZJ5	TACT SWITCH(FM)	
S412	ESP0001-023ZJ5	TACT SWITCH(AM)	
S413	ESP0001-023ZJ5	TACT SWITCH(6)	
S414	ESP0001-023ZJ5	TACT SWITCH(10)	
S415	ESP0001-023ZJ5	TACT SWITCH(+10)	
S417	ESP0001-023ZJ5	TACT SWITCH(MEMORY)	
S418	ESP0001-023ZJ5	TACT SWITCH(SURROUND)	
S419	ESP0001-023ZJ5	TACT SWITCH(4)	
S420	ESP0001-023ZJ5	TACT SWITCH(5)	
S421	ESP0001-023ZJ5	TACT SWITCH(TAPE 1)	
S422	ESP0001-023ZJ5	TACT SWITCH(TAPE 2)	
S423	ESP0001-023ZJ5	TACT SWITCH(FUP)	
S424	ESP0001-023ZJ5	TACT SWITCH(FDOWN)	
FL401	ELU0001-143	FLUORESCENT DISPLAY TUBE	
FW101	EWR380-35KS	FLAT WIRE(8PIN)	
FW105	EWR330-35KS	FLAT WIRE(3PIN)	
FW105	EWR330-35KS	FLAT WIRE(3PIN)	U
FW702	EWR390-35LS	CORD(8PIN)	UT
FW805	EWR330-20LS	FLAT WIRE(3PIN)	
FW806	EWR340-25LS	FLAT WIRE ASSY(4PIN)	
FW807	EWR380-25LS	FLAT WIRE(8PIN)	
PA808	EMV7153-007R	CONNECTOR(7PIN)	
PB703	EWS29B-1734	SOCKET WIRE(11PIN)	
PB808	EMV7153-007R	CONNECTOR(7PIN)	
XT401	ECX0060-000EM	CERAMIC RESONATOR	

△ : SAFETY PARTS

# **FMA-001 Tuner PC Board Ass'y**

**Note :** FMA-001 varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Version	Designated Areas
FMA-001 <b>I</b>	U UT	Universal Type Taiwan
FMA-001 <b>K</b>	BS EN EF	the U.K. Scandinavia Continental Europe
FMA-001 <b>N</b>	G	Germany

## **Transistors**

ITEM	PART NUMBER	DESCRIPTION	AREA
Q121	BN1A4P	DIGITAL TRANEC	BS EF EN G
Q121	BN1A4P	DIGITAL TRANEC	
Q121	BN1A4P	DIGITAL TRANEC	
Q121	BN1A4P	DIGITAL TRANEC	
Q123	BN1A4P	DIGITAL TRANEC	
Q124	BN1A4P	DIGITAL TRANEC	
Q125	2SK301(Q2)	F.E.T.	
Q126	2SC458(D)	SI. TRANSIST	
Q127	BA1L4M-T	D.T.R.I.M	

△ SAFETY PARTS

## **Transistors**

ITEM	PART NUMBER	DESCRIPTION	AREA
Q103	2SC461(B,C)	SI. TRANSISTHITACHI	BS EF EN G
Q107	2SC535(B,C)	SI. TRANSIST	
Q108	2SC461(B,C)	SI. TRANSISTHITACHI	
Q111	2SD1302(S,T)	SI. TRANSIST	
Q111	2SD1302(S,T)	SI. TRANSIST	
Q111	2SD1302(S,T)	SI. TRANSIST	
Q111	2SD1302(S,T)	SI. TRANSIST	
Q112	2SK301(Q,R)	F.E.T.	BS EF EN G
Q113	2SK301(Q,R)	F.E.T.	
Q113	2SK301(Q,R)	F.E.T.	
Q113	2SK301(Q,R)	F.E.T.	BS EF EN G
Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	
Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	
Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	BS EF EN G
Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	
Q114	2SK301(P,Q)	F.E.T. MATSUSHITA	
Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	BS EF EN G
Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	
Q115	2SK301(P,Q)	F.E.T. MATSUSHITA	

△ SAFETY PARTS

## **I.C.s**

ITEM	PART NUMBER	DESCRIPTION	AREA
IC102	LC7218	I.C(DIGI-MO)	
IC104	LA1266A	I.C(MONO-ANSANYO)	
IC105	LA3401	I.C(MONO-ANSANYO)	

△ SAFETY PARTS

## Diodes

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	D102	1SS133	SI.DIODE ROHM	BS
	D102	1SS133	SI.DIODE ROHM	EF
	D102	1SS133	SI.DIODE ROHM	EN
	D102	1SS133	SI.DIODE ROHM	G
	D103	1SS133	SI.DIODE ROHM	BS
	D103	1SS133	SI.DIODE ROHM	EF
	D103	1SS133	SI.DIODE ROHM	EN
	D103	1SS133	SI.DIODE ROHM	G
	D104	1SS133	SI.DIODE ROHM	
	D105	1SS133	SI.DIODE ROHM	
	D106	1SS133	SI.DIODE ROHM	
	D109	1SS133	SI.DIODE ROHM	BS
	D109	1SS133	SI.DIODE ROHM	EF
	D109	1SS133	SI.DIODE ROHM	EN
	D109	1SS133	SI.DIODE ROHM	G
	D110	1SS133	SI.DIODE ROHM	BS
	D110	1SS133	SI.DIODE ROHM	EF
	D110	1SS133	SI.DIODE ROHM	EN
	D110	1SS133	SI.DIODE ROHM	G
	D115	1SS133	SI.DIODE ROHM	
	D116	1SS133	SI.DIODE ROHM	
	D120	1SS133	SI.DIODE ROHM	
	VC105	SVC342(L)	VARI-CAPA DSANYO	
	VC106	SVC342(L)	VARI-CAPA DSANYO	BS
	VC106	SVC342(L)	VARI-CAPA DSANYO	EF
	VC106	SVC342(L)	VARI-CAPA DSANYO	EN
	VC106	SVC342(L)	VARI-CAPA DSANYO	G

Δ : SAFETY PARTS

## Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C122	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C126	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C132	QCS21HJ-561	560PF 50V CER.CAPACI	TO
	C133	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C134	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C135	QCC21EM-223	0.022MF 25V CER.CAPACI	TO
	C136	QCT26CH-180	18PF 50V CER.CAPACI	TO
	C137	QCT26CH-221	220PF 50V CER.CAPACI	TO
	C138	QCT26CH-241	240PF 50V CER.CAPACI	TO
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO BS
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO EF
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO EN
	C139	QCC21EM-223	0.022MF 25V CER.CAPACI	TO G
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO BS
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO EF
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO EN
	C141	QCS21HJ-270	27PF 50V CER.CAPACI	TO G
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO BS
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO EF
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO EN
	C142	QCY21HK-272	2700PF 50V CER.CAPACI	TO G
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO BS
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO EF
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO EN
	C143	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO G
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT BS
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT EF
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT EN
	C144	QETB1EM-106	10MF 25V AL E.CAPAC	IT G
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO BS
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO EF
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO EN
	C146	QCT26CH-680	68PF 50V CER.CAPACI	TO G
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO BS
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO EF
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO EN
	C147	QCT26CH-220	22PF 50V CER.CAPACI	TO G
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO BS
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO EF
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO EN
	C148	QCT26CH-121	120PF 50V CER.CAPACI	TO G
	C149	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C150	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C151	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C152	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C153	QCC21EM-223	0.022MF 25V CER.CAPACI	TO
	C154	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C155	QETB1EM-226	22MF 25V E.CAPACITO	R
	C157	QETB1HM-474	0.47MF 50V ELECTRO	
	C158	QCB1HK-101Y	100PF 50V CER.CAPACI	TO
	C159	QCB1HK-101Y	100PF 50V CER.CAPACI	TO
	C160	QCB1HK-101Y	100PF 50V CER.CAPACI	TO BS
	C160	QCB1HK-101Y	100PF 50V CER.CAPACI	TO EF
	C160	QCB1HK-101Y	100PF 50V CER.CAPACI	TO EN
	C160	QCB1HK-101Y	100PF 50V CER.CAPACI	TO G
	C160	QCB1HK-221Y	220PF 50V CER.CAPACI	TO U
	C160	QCB1HK-221Y	220PF 50V CER.CAPACI	TO U
	C160	QCB1HK-221Y	220PF 50V CER.CAPACI	TO U
	C161	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C162	QETB1EM-106	10MF 25V AL E.CAPAC	IT

Δ : SAFETY PARTS

## Capacitors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	C163	QCY31HK-332Z	3300PF 50V CER.CAPACI	TO
	C164	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C165	QETB1HM-474	0.47MF 50V ELECTRO	
	C166	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C167	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C168	QETB1HM-475	0.47MF 50V AL E.CAPAC	IT
	C169	QCF21HP-223A	0.022MF 50V CER.CAPACI	TO
	C170	QCHB1EZ-223	0.022MF 25V CER.CAPACI	TO
	C171	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C172	QCVB1CM-103Y	0.01MF 16V CER.CAPACI	TO
	C173	QFLB1HK-223	0.022MF 50V MYLAR CAPA	CI
	C174	QFLB1HK-473	0.047MF 50V MYLAR CAPA	CI
	C175	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C176	QCY21HK-102	1000PF 50V CER.CAPACI	TO
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO BS
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EF
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EN
	C177	QCS21HJ-271A	270PF 50V CER.CAPACI	TO G
	C177	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C177	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO BS
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EF
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO EN
	C178	QCS21HJ-271A	270PF 50V CER.CAPACI	TO G
	C178	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C178	QCS21HJ-561	560PF 50V CER.CAPACI	TO U
	C179	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C180	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C181	QETB1EM-106	10MF 25V AL E.CAPAC	IT
	C183	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C184	QETB1HM-105	1MF 50V AL E.CAPAC	IT
	C185	QETB1HM-225	2.2MF 50V E.CAPACITO	R
	C186	QETB1HM-474	0.47MF 50V ELECTRO	
	C192	QCC21EM-473	0.047MF 25V CER.CAPACI	TO
	C193	QCS21HJ-180A	18PF 50V CER.CAPACI	TO
	C194	QCS21HJ-180A	18PF 50V CER.CAPACI	TO
	C195	QEN51HM-474	0.47MF 50V NP E.CAPAC	IT
	C196	QCY21HK-102	1000PF 50V CER.CAPACI	TO
	C230	QCF21HP-103A	0.01MF 50V CER.CAPACI	TO
	C240	QCB1HK-101Y	100PF 50V CER.CAPACI	TO BS
	C240	QCB1HK-101Y	100PF 50V CER.CAPACI	TO EF
	C240	QCB1HK-101Y	100PF 50V CER.CAPACI	TO EN
	C240	QCB1HK-101Y	100PF 50V CER.CAPACI	TO G

Δ : SAFETY PARTS

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION	AREA
	R117	QRD167J-100	10 1/6W CARBON	
	R118	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R119	QRD161J-221	220 1/6W CARBON RES	IS
	R121	QRD167J-391	390 1/6W CARBON RES	IS
	R122	QRD167J-272	2.7K 1/6W CARBON RES	IS
	R123	QRD167J-102	1K 1/6W CARBON RES	IS
	R124	QRD161J-681	680 1/6W CARBON RES	IS
	R125	QRD167J-332	3.3K 1/6W CARBON RES	IS
	R126	QRD161J-221	220 1/6W CARBON RES	IS
	R131	QRD161J-331	330 1/6W CARBON RES	IS
	R132	QRD167J-103	10K 1/6W CARBON RES	IS
	R133	QRD167J-473	47K 1/6W CARBON RES	IS
	R134	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R134	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R134	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R134	QRD167J-103	10K 1/6W CARBON RES	IS G
	R135	QRD167J-470	47 1/6W CARBON RES	IS
	R136	QRD167J-103	10K 1/6W CARBON RES	IS
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS BS
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS EF
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS EN
	R141	QRD167J-472	4.7K 1/6W CARBON RES	IS G
	R142	QRD161J-331	330 1/6W CARBON RES	IS BS
	R142	QRD161J-331	330 1/6W CARBON RES	IS EF
	R142	QRD161J-331	330 1/6W CARBON RES	IS EN
	R142	QRD161J-331	330 1/6W CARBON RES	IS G
	R143	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R143	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R143	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R143	QRD167J-103	10K 1/6W CARBON RES	IS G
	R144	QRD167J-473	47K 1/6W CARBON RES	IS BS
	R144	QRD167J-473	47K 1/6W CARBON RES	IS EF
	R144	QRD167J-473	47K 1/6W CARBON RES	IS EN
	R144	QRD167J-473	47K 1/6W CARBON RES	IS G
	R145	QRD167J-103	10K 1/6W CARBON RES	IS BS
	R145	QRD167J-103	10K 1/6W CARBON RES	IS EF
	R145	QRD167J-103	10K 1/6W CARBON RES	IS EN
	R145	QRD167J-103	10K 1/6W CARBON RES	IS G
	R146	QRD167J-560	56 1/6W CARBON RES	IS
	R147	QRD167J-103	10K 1/6W CARBON RES	IS
	R148	QRD167J-103	10K 1/6W CARBON RES	IS
	R149	QRD161J-273	27K 1/6W CARBON RES	IS
	R150	QRD167J-103	10K 1/6W CARBON RES	IS
	R151	QRD167J-224	220K 1/6W CARBON RES	IS
	R153	QRD167J-103	10K 1/6W CARBON RES	IS

Δ : SAFETY PARTS

## Resistors

Δ	ITEM	PART NUMBER	DESCRIPTION				AREA
	R154	QRD167J-103	10K	1/6W	CARBON RES	IS	
	R155	QRD167J-562	5.6K	1/6W	CARBON RES	IS	
	R156	QRD167J-822	8.2K	1/6W	CARBON RES	IS	
	R157	QRD167J-103	10K	1/6W	CARBON RES	IS	
	R158	QRD161J-333	33K	1/6W	CARBON RES	IS	
	R159	QRD161J-561	560	1/6W	CARBON RES	IS	
	R160	QRD161J-273	27K	1/6W	CARBON RES	IS BS	
	R160	QRD161J-273	27K	1/6W	CARBON RES	IS EF	
	R160	QRD161J-273	27K	1/6W	CARBON RES	IS EN	
	R160	QRD161J-273	27K	1/6W	CARBON RES	IS G	
	R160	QRD167J-123	12K	1/6W	CARBON RES	IS U	
	R160	QRD167J-123	12K	1/6W	CARBON RES	IS UT	
	R161	QRD161J-184	180K	1/6W	CARBON RES	IS BS	
	R161	QRD161J-184	180K	1/6W	CARBON RES	IS EF	
	R161	QRD161J-184	180K	1/6W	CARBON RES	IS EN	
	R161	QRD161J-184	180K	1/6W	CARBON RES	IS G	
	R161	QRD167J-124	120K	1/6W	CARBON	U	
	R161	QRD167J-124	120K	1/6W	CARBON	UT	
	R162	QRD161J-184	180K	1/6W	CARBON RES	IS BS	
	R162	QRD161J-184	180K	1/6W	CARBON RES	IS EF	
	R162	QRD161J-184	180K	1/6W	CARBON RES	IS EN	
	R162	QRD161J-184	180K	1/6W	CARBON RES	IS G	
	R162	QRD167J-124	120K	1/6W	CARBON	U	
	R162	QRD167J-124	120K	1/6W	CARBON	UT	
	R163	QRD167J-332	3.3K	1/6W	CARBON RES	IS	
	R164	QRD167J-332	3.3K	1/6W	CARBON RES	IS	
	R165	QRD161J-274	270K	1/6W	CARBON RES	IS BS	
	R165	QRD161J-274	270K	1/6W	CARBON RES	IS EF	
	R165	QRD161J-274	270K	1/6W	CARBON RES	IS EN	
	R165	QRD161J-274	270K	1/6W	CARBON RES	IS G	
	R165	QRD161J-184	180K	1/6W	CARBON RES	IS U	
	R165	QRD161J-184	180K	1/6W	CARBON RES	IS UT	
	R166	QRD161J-274	270K	1/6W	CARBON RES	IS BS	
	R166	QRD161J-274	270K	1/6W	CARBON RES	IS EF	
	R166	QRD161J-274	270K	1/6W	CARBON RES	IS EN	
	R166	QRD161J-274	270K	1/6W	CARBON RES	IS G	
	R166	QRD161J-184	180K	1/6W	CARBON RES	IS U	
	R166	QRD161J-184	180K	1/6W	CARBON RES	IS UT	
	R167	QRD167J-473	4.7K	1/6W	CARBON RES	IS U	
	R167	QRD167J-473	4.7K	1/6W	CARBON RES	IS UT	
	R168	QRD167J-103	10K	1/6W	CARBON RES	IS	
	R169	QRD167J-103	10K	1/6W	CARBON RES	IS	
	R171	QRD167J-682	6.8K	1/6W	CARBON RES	IS	
	R172	QRD167J-682	6.8K	1/6W	CARBON RES	IS	
	R179	QRD167J-562	5.6K	1/6W	CARBON RES	IS	
	R180	QRD167J-472	4.7K	1/6W	CARBON RES	IS	
	R181	QRD167J-222	2.2K	1/6W	CARBON RES	IS	
	R182	QRD161J-181	180	1/6W	CARBON RES	IS	
	R187	QRD161J-101	100	1/6W	CARBON RES	IS	
	R190	QRD167J-472	4.7K	1/6W	CARBON RES	IS	
	R194	QRD167J-472	4.7K	1/6W	CARBON RES	IS	
	R195	QRD167J-473	4.7K	1/6W	CARBON RES	IS	
	R196	QRD167J-222	2.2K	1/6W	CARBON RES	IS BS	
	R196	QRD167J-222	2.2K	1/6W	CARBON RES	IS EF	
	R196	QRD167J-222	2.2K	1/6W	CARBON RES	IS EN	
	R196	QRD167J-222	2.2K	1/6W	CARBON RES	IS G	
	R196	QRD167J-103	10K	1/6W	CARBON RES	IS U	
	R196	QRD167J-103	10K	1/6W	CARBON RES	IS UT	
	R197	QRD167J-222	2.2K	1/6W	CARBON RES	IS	
	R198	QRD167J-822	8.2K	1/6W	CARBON RES	IS BS	
	R198	QRD167J-822	8.2K	1/6W	CARBON RES	IS EF	
	R198	QRD167J-822	8.2K	1/6W	CARBON RES	IS EN	
	R198	QRD167J-822	8.2K	1/6W	CARBON RES	IS G	
	R198	QRD167J-332	3.3K	1/6W	CARBON RES	IS U	
	R198	QRD167J-332	3.3K	1/6W	CARBON RES	IS UT	
	R199	QRD167J-472	4.7K	1/6W	CARBON RES	IS	
Δ	R201	QRZ0077-680	68	1/4W	FUSIBLE RE	SI	
Δ	R202	QRZ0077-470	47	1/4W	FUSIBLE RE	SI BS	
Δ	R202	QRZ0077-470	47	1/4W	FUSIBLE RE	SI EF	
Δ	R202	QRZ0077-470	47	1/4W	FUSIBLE RE	SI EN	
Δ	R202	QRZ0077-220	22	1/4W	FUSIBLE RE	SI G	
Δ	R202	QRZ0077-470	47	1/4W	FUSIBLE RE	SI U	
Δ	R202	QRZ0077-470	47	1/4W	FUSIBLE RE	SI UT	
	VR167	QVPE601-104	100K	0.15W	TRIMMER RE	SI BS	
	VR167	QVPE601-104	100K	0.15W	TRIMMER RE	SI EF	
	VR167	QVPE601-104	100K	0.15W	TRIMMER RE	SI EN	
	VR167	QVPE601-104	100K	0.15W	TRIMMER RE	SI G	

Δ : SAFETY PARTS

## Others

Δ	ITEM	PART NUMBER	DESCRIPTION				AREA
	J102	QMS3501-021	PIN JACK				
	L101	EQL4007-1R0T	INDUCTOR				
	L106	EQL3001-102K	INDUCTOR				
	P101	VMC0107-008	CONNECT TERMINAL(8PIN)				
	P103	VMC0107-006	CONNECT TERMINAL(6PIN)				U
	P105	VMC0107-003	CONNECT TERMINAL(3PIN)				UT
	P105	VMC0107-003	CONNECT TERMINAL(3PIN)				
	T101	EQR1111-014	RF COIL				BS
	T102	EQR1111-005	RF COIL				EF
	T102	EQR1111-005	RF COIL				EN
	T102	EQR1111-005	RF COIL				G
	T103	EQR1207-015	RF COIL				
	T104	EQR1307-009	RF COIL				BS
	T104	EQR1307-009	RF COIL				EF
	T104	EQR1307-009	RF COIL				EN
	T104	EQR1307-009	RF COIL				G
	T105	EQT2140-012	I.F. TRANSFORMER				
	T106	EQT2140-013	I.F. TRANSFORMER				
	T107	ECB1560-006	CERAMIC FILTER				
	AT101	EMB41YV-301K	ANTENNA TERMINAL				BS
	AT101	EMB41YV-301K	ANTENNA TERMINAL				EF
	AT101	EMB41YV-301K	ANTENNA TERMINAL				EN
	AT101	EMB41YV-301K	ANTENNA TERMINAL				G
	AT101	EMB41YV-401K	ANTENNA TERMINAL				U
	AT101	EMB41YV-401K	ANTENNA TERMINAL				UT
	CF101	ECB2118-007R	CERAMIC FILTER				BS
	CF101	ECB2118-007R	CERAMIC FILTER				EF
	CF101	ECB2118-007R	CERAMIC FILTER				EN
	CF101	ECB2118-007R	CERAMIC FILTER				G
	CF101	ECB2123-006R	CERAMIC FILTER				U
	CF101	ECB2123-006R	CERAMIC FILTER				UT
	CF102	ECB2118-007R	CERAMIC FILTER				BS
	CF102	ECB2118-007R	CERAMIC FILTER				EF
	CF102	ECB2118-007R	CERAMIC FILTER				EN
	CF102	ECB2118-007R	CERAMIC FILTER				G
	CF102	ECB2123-006R	CERAMIC FILTER				U
	CF102	ECB2123-006R	CERAMIC FILTER				UT
	EP101	E65396-003	EARTH PLATE				
	EP102	E65396-003	EARTH PLATE				
	EP110	E70225-001	EARTH PLATE				
	FE101	EAF2203-005	FRONT END				BS
	FE101	EAF2203-005	FRONT END				EF
	FE101	EAF2203-005	FRONT END				EN
	FE101	EAF2203-005	FRONT END				G
	FE101	EAF2203-004	FRONT END				U
	FE101	EAF2203-004	FRONT END				UT
	LP101	EQF0101-002LS	LOW PASS FILTER				BS
	LP102	EQF0102-001	LOWPASS FILTER				EF
	LP102	EQF0102-001	LOWPASS FILTER				EN
	LP102	EQF0102-001	LOWPASS FILTER				G
	LP102	EQF0102-001	LOWPASS FILTER				U
	SW202	QSS1201-039	SLIDE SWITCH				UT
	SW202	QSS1201-039	SLIDE SWITCH				
	TC105	ENZ1003-006	TRIMMER CAPACITOR				
	TC106	ENZ1003-006	TRIMMER CAPACITOR				BS
	TC106	ENZ1003-006	TRIMMER CAPACITOR				EF
	TC106	ENZ1003-006	TRIMMER CAPACITOR				EN
	TC106	ENZ1003-006	TRIMMER CAPACITOR				G
	XT102	ECX0007-200KC	CRYSTAL				
	XT103	ECX0000-456KR	CERAMIC RESONATOR				

Δ : SAFETY PARTS



## ■ Accessories List

BLOCK No. 

M	2	M	M
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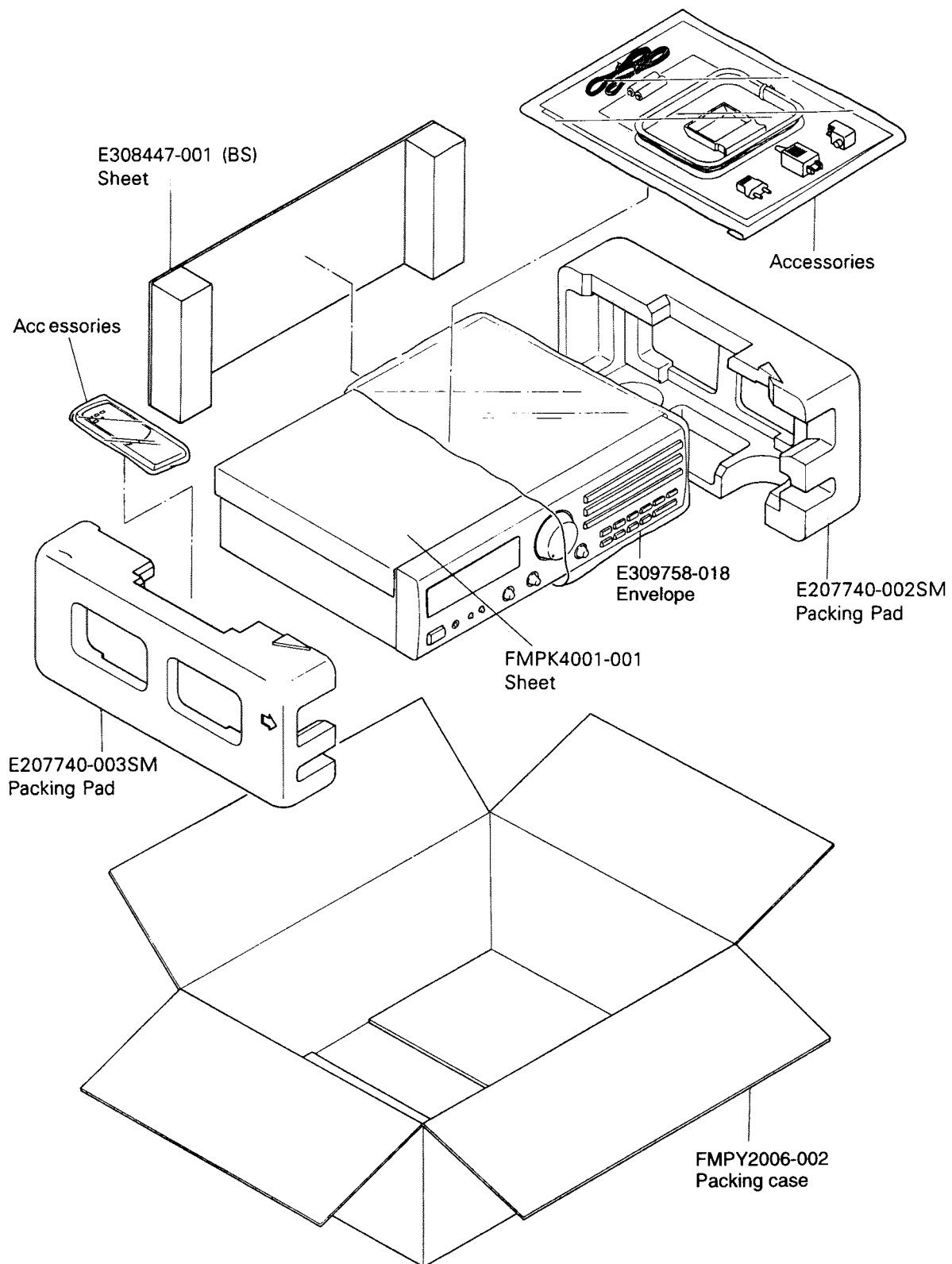
⚠	Item	Part Number	Part Name	Q'ty	Description	Area
	1	E30580-2418A	INSTRUCTION BOOK	1		
	2	BT-52002-1	WARRANTY CARD	1		
	3	BT-20044G	SAFTY CARD	1		
	4	BT-51006-1	REGISTER CARD	1		
	5	BT20071B	SERVICE SENTER LIST	1		
	6	E03614-004	BILT-IN ATENNA	1		
	7	EQB4001-015	AM LOOP ANTENNA	1		
	8	UM-3(DJ)-2PSA	BATTERY	1		
	9	RM-SR218U	REMOCON	5		
	10	E309758-002	ENVELOPE	2		

⚠ SAFETY PARTS

# Packing Materials and Part Numbers

BLOCK No. 

M	3	M	M
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**JVC**

**VICTOR COMPANY OF JAPAN, LIMITED**

**AUDIO PRODUCT DIVISION, , 1644, SHIMOTSURUMA, YAMATO - SHI, KANAGAWA - KEN, 242, JAPAN**

