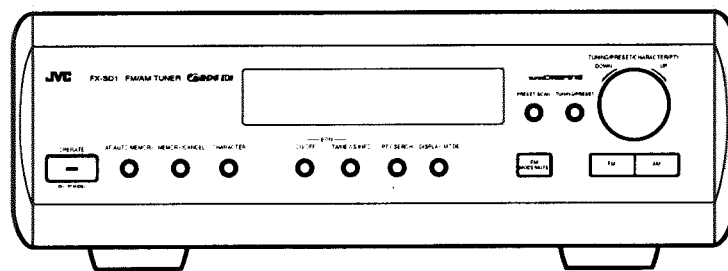


JVC

SERVICE MANUAL

FM/AM TUNER

FX-SD1GD



Area Suffix

BS the U.K.
EN ... Nordic Countries

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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 authorised in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits.
2. Any unauthorised design alterations or additions will void the manufacturer's guarantee ; furthermore the manufacturer cannot accept responsibility for personal injury or property damage resulting therefrom.
3. Essential safety critical components are identified by (\triangle) on the Parts List and by shading on the schematics ,and must never be replaced by parts other than those listed in the manual. Please note however that many electrical and mechanical parts in the product have special safety related characteristics . These characteristics are often not evident from visual inspection . Parts other than specified by the manufacturer may not have the same safety characteristics as the recommended replacement parts shown in the Parts List of the service manual and 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.

Warning

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

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Additional Information

Specifications

FM section	IHF	DIN
Tuning range	87.5 MHz to 108.0 MHz	
Usable sensitivity	10.8 dBf (0.95 μ V/75 ohms)	1.0 μ V / 75 ohms
26 dB quieting sensitivity		
50 dB quieting sensitivity	16.3 dBf (1.8 μ V/75 ohms)	
	38.3 dBf (22.5 μ V/75 ohms)	
S/N 46 dB stereo sensitivity		
Signal-to-noise ratio	80 dB (IHF-A)	23 μ V / 75 ohms
	73 dB (IHF-A)	72 dB (weighted)
Total Harmonic Distortion		64 dB (weighted)
(1 kHz)		0.06%
Stereo separation (1 kHz)	40 dB	0.08%
Capture ratio	1.5 dB	40 dB
Selectivity	60 dB: (\pm 400 kHz)	
IF response ratio	76 dB at 98 MHz	
Frequency response	25 Hz to 15 kHz: (+0.3 dB, -1.5 dB)	
AM suppression	60 dB	
Output level / impedance	560 mV/220 ohms	
Sub-carrier suppression	70 dB	
AM section	MW	LW
Tuning range	522 kHz to 1,629 kHz (9 kHz step)	144 kHz to 288 kHz (1 kHz step)
Usable sensitivity (LOOP AERIAL)	300 μ V/m (7.5 μ V)	600 μ V/m (15 μ V)
Signal-to-noise ratio	50 dB (100 mV/m)	50 dB (100 mV/m)
Selectivity	35 dB (\pm 9 kHz at 999 kHz)	35 dB (\pm 9 kHz)
Image response ratio	40 dB	
IF response ratio	64 dB	
General		
Power requirements	AC 230 V \pm 50 Hz	
Power Consumption	12 watts (OPERATE ON); 6.2 watts (OPERATE STANDBY)	
Dimensions	(WXHXD)	
Mass	360 x 129 x 327.3 mm (14-3/16 x 5-3/8 x 12-15/16 inches)	
	7.1 kg (15.7 lbs)	
Accessories		
FM wire antenna (for Germany) : 1		
FM feeder antenna (except for Germany) : 1		
Antenna adaptor (except for Germany) : 1		
AM loop antenna : 1		
Audio cord : 1		
COMPU LINK cord : 1		
AC power cord : 1		

Design and specifications subject to change without notice.

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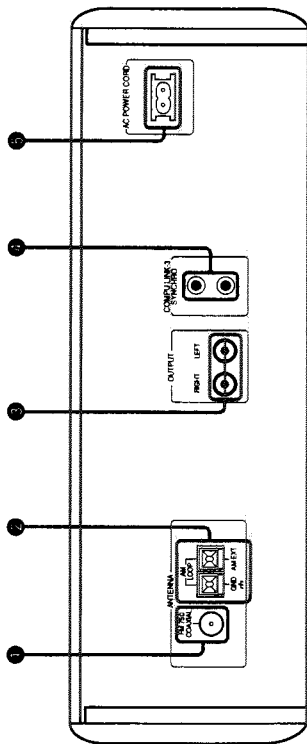
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Names of Parts

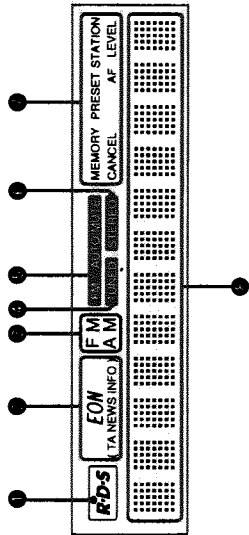
Tuner: Rear panel



- **ANTENNA: FM 75 ohm COAXIAL**
Input terminal for connecting an FM antenna (see pages 7 and 8).
- **ANTENNA: AM LOOP**
Input terminal for connecting an AM loop antenna (see page 6).
- **OUTPUT**
These terminals output line level audio signals. Connect to the line in terminals of an amplifier (see page 9).
- **COMPU LINK-3 SYNCCHRO**
Connect these terminals to other JVC components to take advantage of the COMPU LINK Remote Control System's automatic operation functions (see "COMPU LINK connections" on page 21).
- **AC POWER CORD**
Connect to a wall outlet using the supplied AC power cord (see page 9).

Names of Parts

Tuner: Display



- **RDS**
Lights up during reception of an RDS broadcast.
- **EON indicators**
Provide indications for use with RDS EON functions.
EON
Lights up during reception of an RDS EON broadcast.
[TA NEWS INFO]
Indicate the currently selected EON standby mode (see page 18).
- **Band indicators**
Indicate the currently selected band.
FM
Lights up when FM is selected.
AM
Lights up when AM is selected.
- **TUNED**
Lights up when a station's broadcast is received clearly (see page 10).
- **FM AUTO/MUTE**
Lights when stereo reception is set to on (see page 11).
- **STEREO**
Lights up during reception of an FM stereo broadcast.
- **Indicators**
These provide indications related to the type of operations being performed.
MEMORY
Lights up when the tuner is prepared to memorize a preset station. (see page 13).
CANCEL
Lights up when the tuner is prepared to cancel a preset station (see pages 13 and 15).
PRESET STATION
Lights up during preset tuning (see page 14).
AF LEVEL
Lights up when the reception level of the current station is displayed during AF automatic presetting. This occurs when an RDS station is found and the AF signal is read (see page 12).
- **Multi-display**
Provides a display of various information such as, the frequency or name of the current station, the preset number, PTY codes, clock time, etc.

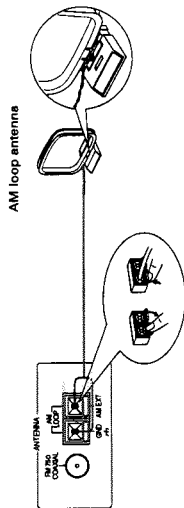
Connections

Before making any connections

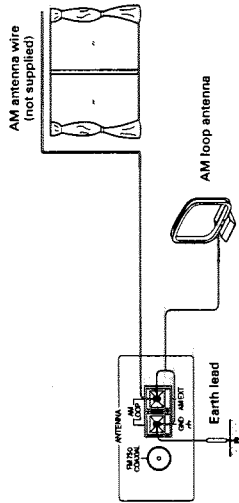
- Be sure to confirm the locations of the left and right, and IN and OUT terminals on each component and make connections correctly and firmly. Incorrect or incomplete connections may result in degradation of the stereo effect, or no sound at all. As a general rule, use the red plugs on the connecting cords to connect the right channels and the white plugs to connect the left channels.
- Since different components often have different terminal names, carefully read the instruction manual supplied with the component you are connecting.
- Do not connect the AC power cord until all other connections are complete.

AM antenna

Connect the supplied AM loop antenna as shown below. Assemble the antenna by snapping the loop into the slots on the base, then adjust the position of the antenna for best reception. You may find that different stations require slightly different positioning of the antenna.



If reception is not satisfactory with the supplied AM loop antenna, we recommend connecting a 3 to 5 meter length of AM antenna wire (not supplied) to the AM EXT terminal. Do not disconnect the supplied AM loop antenna. For best results, place the wire horizontally above a window, or outside, as high up as possible and connect an earth lead from the GND terminal to reduce noise.

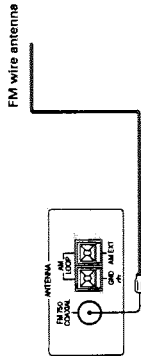


To avoid noise in the audio signal, keep antennas away from the rear panels, audio cords, power cords, and COMPU LINK cords.

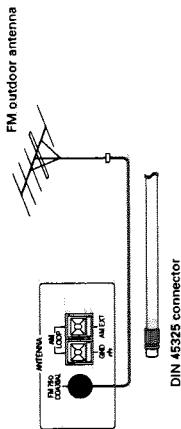
FM antenna

For Germany

Connect the supplied FM wire antenna as shown below. Extend the wire antenna horizontally as high up as possible.

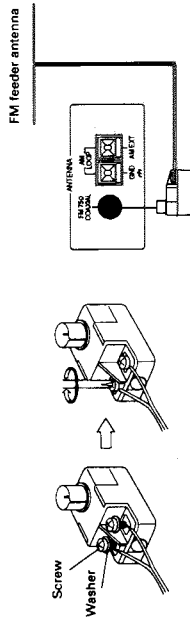


If reception is not satisfactory with the supplied FM antenna, we recommend connecting an external FM antenna by using a 75 ohm antenna cable with a coaxial type connector (IEC or DIN 45325) (not supplied) to the FM 75Ω COAXIAL terminal.

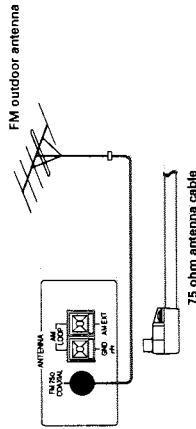


For other countries

Connect the supplied FM feeder antenna as shown below. Unfold the loops of the feeder antenna and extend horizontally.



If reception is not satisfactory with the supplied FM feeder antenna, we recommend connecting an external FM antenna by using a 75 ohm antenna cable (not supplied). Be sure to disconnect the FM feeder antenna from the supplied antenna adaptor before connecting the 75 ohm antenna cable as shown on page 8.

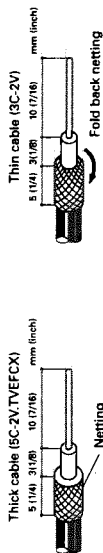


Connections

Connecting a 75 ohm antenna cable to the FM antenna adaptor

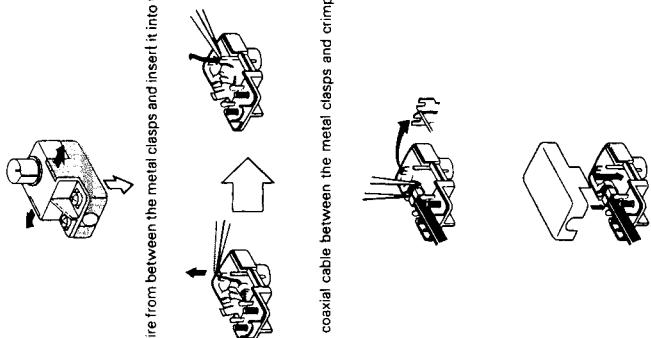
(Except for Germany) if reception is not satisfactory with the supplied FM antenna, we recommend connecting an external FM antenna by using a 75 ohm antenna cable (not supplied). After preparing the 75 ohm antenna cable, disconnect the FM feeder antenna from the supplied antenna adaptor, then connect a 75 ohm antenna cable as shown below.

Preparing the 75 ohm coaxial cable



Connecting the 75 ohm coaxial cable

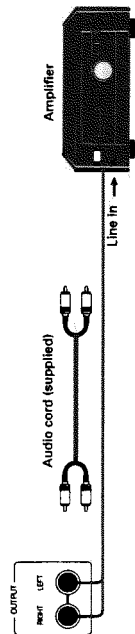
- ① Remove the lid.
- ② Remove the lead wire from between the metal clasps and insert it into the groove on the plastic pole.
- ③ Insert the exposed coaxial cable between the metal clasps and crimp the clasps closed with pliers.
- ④ Close the lid.



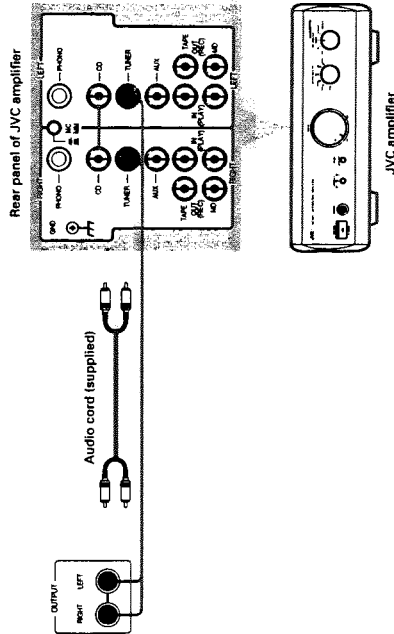
Connections

Audio connections

Use the OUTPUT terminals to connect the tuner to the line in terminals on an amplifier.



When connecting the tuner to a JVC amplifier, be sure to connect it to the TUNER terminals.



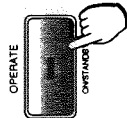
Tuner: Power connections

After completing all other connections, use the supplied AC power cord to connect the AC POWER CORD outlet on the rear panel of the tuner to a wall outlet.

Turning on the tuner

Press FM, AM or OPERATE to turn on the tuner. The indicator on the OPERATE button turns orange.

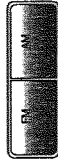
To put the tuner in standby mode
Press OPERATE, the indicator on the button turns red. A small amount of power (6.2 watts) is always consumed as long as the AC power cord is plugged into a wall outlet. If you are not going to use the unit for an extended period of time, such as during a vacation, set unplug the AC power cord to avoid unnecessary power consumption.



Manual tuning and automatic tuning

This section shows you how to tune in an FM or AM (MW/LW) broadcast.

- ① Press FM or AM to select the band you desire. The tuner turns on and the last station you listened to is tuned in automatically.
- ② Press TUNING/PRESET so that "PRESET STATION" does not appear in the display. Once you have stored stations in the tuner's preset memory, you can use the preset tuning feature (see pages 12 and 14).
- ③ Tune in the station you desire



- For manual tuning**
Turn the TUNING/PRESET/CHARACTER/PTY knob slowly toward either UP or DOWN until you find the frequency of the station you desire.
- For automatic tuning**
Turn the TUNING/PRESET/CHARACTER/PTY knob quickly toward either UP or DOWN. The frequency starts changing in the respective direction automatically. When a station is tuned in, "TUNED" appears in the display and the frequency stops changing. Repeat this procedure to tune in the station you desire.

Stereo and monaural reception

Switching to monaural reception is an effective way to reduce noise when receiving weak FM stereo broadcast.



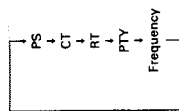
To switch to monaural reception
Press FM MODE/MUTE so that "FM AUTO/MUTE" does not appear in the display. In this mode, you will hear some noise when tuning.

To switch back to stereo reception
Press FM MODE/MUTE again to display "FM AUTO/MUTE". When a programme is broadcast in stereo the STEREO indicator lights up and you hear the stereo sound. When in monaural, the STEREO indicator goes off and you hear monaural sound. Furthermore, in this mode you won't hear noise when tuning.

Changing the display

You can display a variety of RDS information by pressing DISPLAY MODE. Each time you press the button, the display changes to show the following information:

DISPLAY MODE



- When receiving RDS broadcasts:
- Programme Service name (PS):**
Displays the name broadcast by the current station.
 - Clock Time (CT):**
Displays the current time. (Some stations may not provide accurate time indications.)
 - Radio Text (RT):**
Displays text messages sent by the current station.
 - Programme Type (PTY):**
Displays the type of programme being broadcast.
 - Frequency:**
Displays the current frequency.

"WAITING" (Service Name) is displayed while the RDS information is being read.
"NO RDS DATA" is displayed if you are tuned to a non-RDS FM station.
If you have manually input a name for the station (see page 14), that name is displayed instead of the PS.

When receiving non-RDS FM stations, the current frequency is displayed. If you have manually input a name for the station (see page 14), that name is displayed instead of the frequency. In this case, press DISPLAY MODE to switch between the frequency and the name you have input.

When receiving AM broadcasts, the current frequency is displayed. If you have manually input a name for the station (see page 14), that name is displayed instead of the frequency. In this case, press DISPLAY MODE to switch between the frequency and the name you have input. "NO ENTRY" appears if a name has not been input.

Presetting stations

Once stations are preset, they can be called up quickly with preset tuning. You can preset a total of 40 stations, either FM or AM. In order to use the special functions available for RDS broadcasts, you need to preset the RDS stations. Both PTY Search and EON functions (see page 17 and 18) are applicable only to preset stations.

AF Automatic presetting

This function lets you preset stations automatically in order of frequency.

- 1 Press FM or AM to select a band. Then tune to the lowest frequency on that band. If you start presetting from a frequency in the middle of the band, stations with frequencies lower than the starting frequency will not be preset.



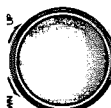
TUNING/PRESET/CHARACTER/PTY
DOWN UP



AF AUTO MEMORY



TUNING/PRESET/CHARACTER/PTY
DOWN UP



AF AUTO MEMORY



- 2 Press AF AUTO MEMORY. "— — —" is displayed for 5 seconds. Complete steps ③ and ④ during these 5 seconds.

- 3 Turn the TUNING/PRESET/CHARACTER/PTY knob to select a preset number for the first station found on the band. If two different stations are assigned to the same preset number, only the newer station will be memorized. Make sure the preset numbers for the different bands (FM and AM) do not overlap.

- 4 Press AF AUTO MEMORY again to start presetting. The tuner starts automatic tuning. When a station is received, a preset number blinks in the display for 5 seconds. When the blinking stops, the frequency has been stored at the displayed preset number. The tuner continues automatic tuning and assigns the next frequency to the next preset number, until the entire band has been searched.

If you don't want to memorize the received station
Press the AF AUTO MEMORY during the 5 seconds that the frequency and preset number are blinking. The tuner skips the station and continues searching.

What is "AF"?

The "AF" in AF AUTO MEMORY stands for the RDS AF (Alternative Frequencies) list. Automatic presetting takes advantage of this list when presetting RDS stations to check for other frequencies broadcasting the same programme and select the frequency with the best reception level (the reception level is shown in the display). Since the tuner presets only the strongest frequency, the same station will not be preset twice. In the case of non-RDS stations, the same station may be stored more than once if it is received on different frequencies.

Manual presetting

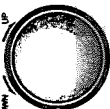
Manual presetting is a convenient way to store stations at specific preset numbers.

- 1 Tune in the station you want to preset.
- 2 Press MEMORY/CANCEL. MEMORY and "— — —" appear in the display for 5 seconds. Complete steps ③ and ④ during these 5 seconds.
- 3 Turn the TUNING/PRESET/CHARACTER/PTY knob to select a preset number.
- 4 Press MEMORY/CANCEL. The station is stored at the selected preset number.

MEMORY/CANCEL



TUNING/PRESET/CHARACTER/PTY
DOWN UP



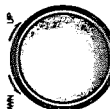
MEMORY/CANCEL



MEMORY/CANCEL



TUNING/PRESET/CHARACTER/PTY
DOWN UP



MEMORY/CANCEL



Cancelling preset numbers

This operation lets you cancel unused preset numbers and preset numbers containing stations you do not wish to listen to. Thus, only your favourite stations will be received as presets.

- 1 Hold down MEMORY/CANCEL for at least 3 seconds. CANCEL and "— — —" appear in the display for 5 seconds. Complete steps ② and ③ during these 5 seconds.
- 2 Turn the TUNING/PRESET/CHARACTER/PTY knob to select the preset number you want to cancel.
- 3 Press MEMORY/CANCEL. "CLEAR CH (preset number)" is displayed and the preset is erased.

Preset tuning

This section shows you two ways to receive the preset stations, by tuning or scanning.

Tuning preset stations

This operation lets you tune to a specific preset.

- 1 Press TUNING/PRESET so that "PRESET STATION" appears in the display



- 2 Turn the TUNING/PRESET/CHARACTER/PTY knob to select the preset you desire.



Scanning preset stations

This operation lets you scan through all the presets to hear the kinds of programmes currently being broadcast.

- 1 Press PRESET SCAN.

The current preset number starts blinking in the display. After a few seconds the tuner will switch to the next consecutive preset number. The tuner scans through all the presets once, then returns to the original station tuned in before the scan.

To stop scanning when the tuner reaches a preset you want to listen to

Press PRESET SCAN while the preset number is blinking.



Naming preset stations

You can use up to 8 characters to name any preset station (FM or AM) regardless of RDS service availability.

- 1 Select a station you would like to name from preset stations.
- 2 Press CHARACTER. If you press CHARACTER without calling up the preset station, "CALL PRESET 1" appears in the display.



- 3 Select a character by turning the TUNING/PRESET/CHARACTER/PTY knob.



- 4 Press CHARACTER again to move to the next character space.



- 5 Repeat steps 3 and 4 to enter up to 8 characters.

MEMORY/CANCEL



- 6 Press MEMORY/CANCEL to store the name in memory. The tuner memorizes the name, shows it in the display whenever you tune to that preset station.

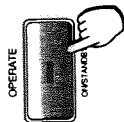
To switch between the name and frequency of the preset station, press DISPLAY MODE repeatedly.

- If you press buttons other than those indicated above while entering the characters, the naming procedure will be cancelled.
- If you wish to correct characters which have already been entered, move back to the character you wish to correct by pressing CHARACTER and re-enter the character.
- For a list of available characters, see the inside of the back cover.

Cancelling the entire preset memory

The frequencies and names stored at the respective presets will remain stored in the memory, even when the tuner is disconnected from the mains. If you wish to erase all of the information stored in the preset memory and reset the tuner to the original factory settings (87.50 MHz), use the following procedure:

- 1 Press OPERATE to put the tuner in STANDBY mode. The indicator on the OPERATE button should be red.



MEMORY/CANCEL



- 2 Hold down MEMORY/CANCEL for at least 3 seconds. "CANCEL MODE" appears in the display for 3 seconds.



PRESET SCAN

- 3 Press PRESET SCAN while "CANCEL MODE" is displayed. "Cancelling" appears in the display. The display changes to "ALL CANCELLED" when all presets have been erased. The tuner then returns to STANDBY mode.

RDS Functions

Introduction

RDS is a broadcasting service provided by a growing number of FM stations. It allows the FM stations to send additional, inaudible, information along with their regular audio programme. For example, the stations can send their station names as well as information about the type of programme they are broadcasting, such as sports or music, etc. When you receive an FM station providing RDS service, the RDS indicator lights up, the station frequency (and then the station name, if sent) are displayed. Not all FM stations provide RDS service, nor do all RDS stations provide the same services. If in doubt, check with local radio stations for details on RDS services in your area.

RDS may not operate correctly if the station to which you are tuned is not transmitting properly or if the signal strength is weak.

RDS services provided by this tuner

PS (Programme Service name)
Provides a display of the station name sent by the station.

AF (Alternative Frequencies)
This is a list of frequencies broadcasting the same programme as the current station.

TA (Traffic Announcement Identification)
Identifies that a traffic announcement is being broadcast.

CT (Clock Time)
Provides a display of the current time using the CT data sent by the station. Please note that some stations may not provide an accurate time indication.

RT (Radio Text)
Allows the RDS station to send text messages that appear in the display.

PTY (Programme Type)
Identifies the type of RDS programme, allowing you to locate a specific type of programme being broadcast. The programme types are as follows:

NEWS: News
INFO: Programmes on medical service, weather forecast, etc.
POP M: Pop music
ROCK M: Rock music
M.O.R. M: Middle-of-the-road music (usually called "easy listening")
LIGHT M: Light music
CLASSICS: Classics
OTHER M: Other music
AFFAIRS: Topical programme expanding on current news or affairs
SPORT: Sports events
EDUCATE: Educational programmes
DRAMA: Radio plays
CULTURE: Programmes on national or regional culture
SCIENCE: Programmes on natural sciences and technology
VARIED: Other programmes like comedies or ceremonies
NONE: Undefined

ALARM: Emergency broadcasts

EON (Enhanced Other Networks)
Provides information about RDS stations other than the one which is being received.

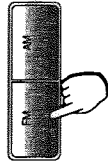
RDS Functions

PTY (Programme Type) search

One advantage of RDS service is that you can locate a particular kind of programme automatically by specifying the PTY code you desire.

The **PTY Search function is applicable to preset stations only.**

- 1 Set the tuner to receive FM frequencies.



PTY SEARCH



- 2 Press PTY SEARCH, "SELECT PTY" and then the current PTY will appear on the display.

- 3 Turn the TUNING/PRESET/CHARACTER/PTY knob to select the PTY you desire.

The programme types change in the following order:

NEWS ↔ INFO ↔ POP M ↔ ROCK M ↔ M.O.R. M ↔ LIGHT M ↔ CLASSICS ↔ OTHER M ↔ AFFAIRS ↔ SPORT ↔ EDUCATE ↔ DRAMA ↔ CULTURE ↔ SCIENCE ↔ VARIED ↔ NONE ↔ NEWS

TUNING/PRESET/CHARACTER/PTY



PTY SEARCH



- 4 Press PTY SEARCH to start the search. "SEARCHING" appears in the display and the preset numbers start changing. When the tuner locates a station broadcasting the selected PTY, searching stops, the preset number and station name (if sent) appear in the display and reception begins.

To resume searching for another station broadcasting the same PTY

The preset number blinks in the display for 10 seconds after a station is located. Press PTY SEARCH again during this period to resume searching for another station.

If the tuner cannot find any stations broadcasting the selected PTY

"NOT FOUND" appears in the display and the tuner returns to the station tuned in prior to starting the PTY Search.

To cancel PTY search

Press FM. If you press a button for any other operation during PTY Search, the PTY Search will be cancelled and the tuner will carry out the respective operation.

Using EON (Enhanced Other Networks)

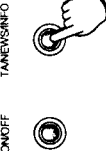
Another advantage of RDS service is that you can set the tuner to switch temporarily to other stations broadcasting traffic announcements, news, or informational programmes.

EON standby reception is applicable to preset stations only.



① Press EON ON/OFF so that [TA NEWS INFO] appears in the display.

② Press EON TA/NEWS/INFO to select the type of information you desire. Each time you press the button, the indicators change as follows:



[TA NEWS INFO] → [TA INFO] →
 [NEWS INFO] → [NEWS INFO] →
 [TA NEWS INFO] → [back to the beginning]

TA: Traffic Announcement

NEWS: News

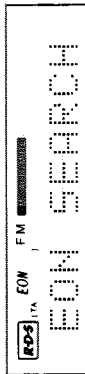
INFO: Programmes on medical service, weather forecast, etc.

To cancel EON standby

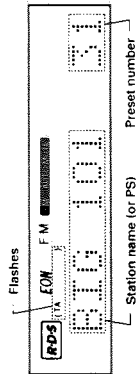
Pressing EON ON/OFF to turn off the [TA NEWS INFO] indicator.

When the desired information is received

"EON SEARCH" appears in the display and the tuner searches the preset stations while preparing to change to the broadcast of the desired information (sound is muted).



When the station broadcasting the desired information is located, the tuner tunes it in and the respective EON indicator (TA, NEWS, or INFO) flashes to indicate the start of EON reception. The display changes as follows during EON standby reception.



When the broadcast of the desired information is complete, "EON END" appears in the display, and the tuner automatically goes back to the original preset station.

Notes

- If the information you are waiting for is available from the current station, the respective EON indicator will blink but the tuner will remain tuned to the current station.
- If reception of the preset station broadcasting the desired information is not satisfactory, "SEARCH FAILED" appears in the display, the EON search is cancelled and the tuner automatically returns to the original preset station.
- The tuner will not change to other stations during EON reception, even if they are broadcasting the same type of information.
- If you cancel the EON function during EON reception by pressing either EON ON/OFF or TA/NEWS/INFO, the tuner automatically returns to the original preset station.
- If the EON function was initiated after selecting a station using manual tuning or automatic tuning, the tuner will not return to the original station when the broadcast of the desired information is complete (or when you cancel the EON function).
- If you operate the tuner while receiving information in the EON standby reception mode, the EON function will be cancelled and the tuner will carry out the operation you assigned.
- EON broadcasts from some stations may not be compatible with this tuner. In the case of incompatible EON broadcasts, "EON" will not appear on the display.

Alarm

"ALARM 1" blinks in the display when the current station sends out a broadcast accompanied by the PTY emergency ALARM code. This tuner does not switch to other stations broadcasting ALARM information.



Any EON standby modes will be cancelled if an alarm code is received.

COMPU LINK Remote Control System

COMPU LINK basics



Buying a separate CD player, cassette deck, MD recorder, amplifier, etc., is a good way to enjoy high-quality sound from the exact combination of components you want. However, since each component has to be operated individually, operation can be somewhat difficult. JVC's COMPU LINK Remote Control System allows you to enjoy the flexibility of single components with the ease of operation found in single unit component systems.

In the descriptions and instructions that follow, the COMPU LINK Remote Control System is referred to as 'COMPU LINK' for the sake of convenience.

Products that are compatible with COMPU LINK have terminals marked either COMPU LINK-1, COMPU LINK-2, or COMPU LINK-3 (referred to collectively as COMPU LINK terminals). Linking components by the COMPU LINK terminals, allows simplified collective operation, like that of a single unit component system.

COMPU LINK versions



- There are currently three versions of COMPU LINK available from JVC: COMPU LINK-1, COMPU LINK-2, and COMPU LINK-3. COMPU LINK-3 is the newest version, with the most functions.
- You can distinguish the COMPU LINK version by looking at the COMPU LINK terminals of the respective components.

COMPU LINK-3 components may be connected to components with earlier version components, but in this case the newest functions may not work.

COMPU LINK-3 functions

The following is a brief overview of the available functions:

One touch play

Lets you listen to a source component, such as a CD player, without operating the amplifier. All you have to do is start playing the source component (see page 22).

Synchro recording

Lets you start recording automatically when you start playing the source component (see the instructions provided with the recording or source component).

Total operation by one remote control

Lets you operate all the source components, such as the CD player, cassette deck, and tuner, from the amplifier's remote control (see the instructions provided with the amplifier).

MiniDisc recorder automatic input switching

When the MiniDisc recorder's input selector is set to digital input, digital signals are input only when the source selector on the amplifier is set to CD. When it is set to other sources, analog signals are input. This saves you the trouble of manually switching the input selector every time you change the source (see the instructions provided with the amplifier).

Timer Operation

Lets you use a component equipped with a timer function to start and stop recording or playback at the time(s) you specify (see the instructions provided with the respective component).

COMPU LINK Remote Control System

Automatic source switching upon reception of desired EON information

When a tuner equipped with RDS EON functions receives the information you desire, the source selector on the amplifier automatically switches to TUNER to allow you to hear the desired information. When the information is over, the amplifier switches back to the previous component (see page 22).

COMPU LINK connections

Use COMPU LINK cords for connecting cables with mono mini-plugs) to connect the COMPU LINK terminals of each component.

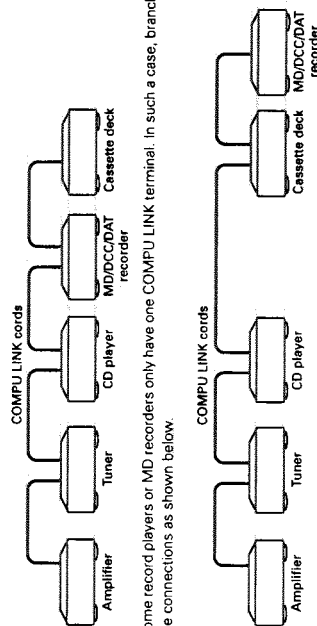
- When there is more than one COMPU LINK terminal, any terminal can be used.
- Be sure to plug the power cords of the component into UNSWITCHED outlets or a wall outlets. If components are plugged into SWITCHED outlets, the COMPU LINK functions will not work properly.
- When components have POWER switches on the rear panel (such as a CD player or tape deck), that switch must be set to ON in order for COMPU LINK to work properly.
- Some amplifiers may not have specially marked MD or DAT terminals. In such cases, you can connect a DAT deck to the MD terminals or a MiniDisc recorder to the DAT terminals. If the MiniDisc recorder or DAT deck is connected a different set of line input terminals, the COMPU LINK functions will not work properly.

Note

- You can not connect an MD recorder, DCC deck and DAT deck, into the COMPU LINK system at the same time. Select the component you use most, and connect only that component.
- If no amplifier is connected, only the "synchro recording" function will be operable.
- The COMPU LINK timer operation is possible only when a JVC tuner equipped COMPU LINK-3 SYNCHRO terminals and a timer function is connected into the COMPU LINK system.

COMPU LINK Connection example

The following is a basic example of COMPU LINK connections for JVC audio components. With these connections, all the functions are bridged, so there is no set order in which the components must be connected.



Some record players or MD recorders only have one COMPU LINK terminal. In such a case, branch the connections as shown below.

Additional Information

Troubleshooting

If you experience any difficulty with your tuner, check the following list for a possible solution before calling for service. If you cannot solve the problem from the hints given here, or the cassette deck has been physically damaged, call a qualified person, such as your dealer, for service.

SYMPTOM	POSSIBLE CAUSE	ACTION
Noisy reception	<ul style="list-style-type: none"> • Antenna is disconnected. • AM loop antenna too close to tuner. • FM feeder antenna is not properly extended. 	<ul style="list-style-type: none"> • Reconnect antenna securely. • Change position and/or direction of AM loop antenna. • Extend FM wire antenna for best reception.
No sound	<ul style="list-style-type: none"> • Connections are incorrect or incomplete. • FM AUTO/MUTE is turned on when receiving a weak FM broadcast. 	<ul style="list-style-type: none"> • Check to make sure the all equipment is connected correctly. • Press FM MODE/MUTE to turn off the FM AUTO/MUTE mode.
EON does not work	<ul style="list-style-type: none"> • No stations have been preset. • No EON broadcasts. 	<ul style="list-style-type: none"> • Preset FM RDS stations.
PTY search does not work	<ul style="list-style-type: none"> • No stations have been preset. 	<ul style="list-style-type: none"> • Preset FM RDS stations.
The tuning mode returns to manual tuning and automatic tuning even though you had set it to preset tuning.	<ul style="list-style-type: none"> • The power cord was unplugged. 	<ul style="list-style-type: none"> • The tuning mode will be reset to manual tuning and automatic tuning if the power is unplugged.

Operating this or other components when the COMPU LINK Remote Control System functions are operating may result in the following actions (these are not malfunctions):

- Preset number may flash longer than normal when the AF Automatic Presetting function is operating.
- Preset number may flash longer than normal when the PTY search function is operating.
- Preset number may flash longer than normal when the preset station scanning function is operating.
- Scrolling RDS RT displays may temporarily scroll faster than normal.

COMPU LINK Remote Control System

COMPU LINK operations

One touch play

The one touch play function lets you listen to a source simply by starting playback from the source component.

- 1 Press the play (▶) button on the source component.
(For the tuner, press the band selector (FM or AM) button.)
- The following operations are done automatically, all you need to do is enjoy!
- The source component and amplifier turn on.
 - The source selector on the amplifier switches to the respective source component.
 - The source component starts playing.

Selecting a source component with the amplifier's source selector will also start playback from the respective source. The previous source component stops playing. After the amplifiers turned on, it takes about 5 seconds before any sound is output. Since there will be no sound during this time, even if the source component start playing, the initial section may be left out when playback begins.

Note

If both the amplifier and source component are not COMPU LINK-3 compatible, the power will not turn on automatically. When using components with earlier versions of COMPU LINK, be sure to turn the amplifier and respective components on before operation.

Automatic source switching upon reception of desired EON information

This function lets you listen to other programme sources, such as a CD player, during EON standby mode.

- 1 Use EON ON/OFF to activate the EON standby mode (see page 18).
- 2 Switch the source selector (SOURCE SELECTOR) on the amplifier to start listening to a different source.

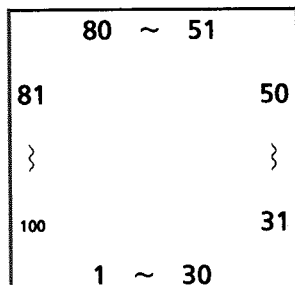
When an the desired information is received, the amplifier switches to the tuner, automatically so you can hear it. When the broadcast of the desired information is complete, the amplifier switches back to the source selected in step ②.

Automatic source switching will not activate during synchro recording (depending on the amplifier).

Description of Major LSIs

■ M38197MA-150FP (IC501) : SYSTEM CONTROLLER

1. Terminal Layout



2. Key Matrix

	KEY IN 0 (PIN97)(PIN44)	KEY IN 1 (PIN96)(PIN43)	KEY IN 2 (PIN95)(PIN42)	KEY IN 3 (PIN94)(PIN41)
KEY OUT 1 (PIN1)	DISPLAY	PTY SEARRCH	TA/NEWS INFO	EON ON/OFF
KEY OUT 2 (PIN2)	CHARACTER	MEMORY CANCEL	PTY SERCH	OPERATE
KEY OUT 3 (PIN26)	FM MODE			
KEY OUT 4 (PIN25)	FM			
KEY OUT 5 (PIN24)	AM			
KEY OUT 6 (PIN23)	P.SCAN	PRESET		

3. Description

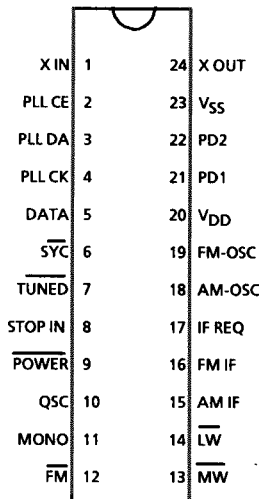
Pin No.	Symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	KO1	O	Key matrix output	50	8G	O	FL grid control
2	KO2	O	Key matrix output	51	7G	O	FL grid control
3	/POWER IND	O	POWER indication control	52	6G	O	FL grid control
4	/DCS IN	I	Compulink signal input	53	5G	O	FL grid control
5	/DCS OUT	O	Compulink signal output	54	4G	O	FL grid control
6	/TUNED IN	I	TUNED indication control	55	3G	O	FL grid control
7	/STEREO IN	I	STEREO indication control	56	2G	O	FL grid control
8	LEVEL IN	I	LEVEL indication control	57	1G	O	FL grid control
9	MUTE	O	Muting tuner sound	58	S35	O	FL segment control output
10				59	S34	O	FL segment control output
11,12		--	Non connection	60	S33	O	FL segment control output
13	SDA	O	Serial data output	61	S32	O	FL segment control output
14	SCL	O	Serial clock output	62	S31	O	FL segment control output
15	PLL CE	O	Chip enable signal for PLL synthesizer	63	S30	O	FL segment control output
16	PLL CK	O	Clock for PLL synthesizer	64	S29	O	FL segment control output
17	PLL DATA	O	Data for PLL synsesizer	65	S28	O	FL segment control output
18	IF DATA	I	Data signal from PLL synthesizer	66	S27	O	FL segment control output
19				67	S26	O	FL segment control output
20	RDS CK	I	Clock input from IC201	68	S25	O	FL segment control output
21		--	Non connection	69	S24	O	FL segment control output
22	RDS DATA	I	Data signal from IC201	70	S23	O	FL segment control output
23~26	KO3~KO6	O	Key matrix output	71	S22	O	FL segment control output
27	RDS RST	O	Reset signal for IC201	72	S21	O	FL segment control output
28	/RDS ERR	I	Error signal from IC201	73	S20	O	FL segment control output
29	RDS D.START	I	D.Start signal from IC201	74	S19	O	FL segment control output
30	ROS RECIEVE	I	Recieved mode signal from IC201	75	S18	O	FL segment control output
31	ROT IN A	I	Data signal from Rotary Encoder	76	S17	O	FL segment control output
32	RDT IN B	I	Data signal from Rotary Encoder	77	S16	O	FL segment control output
33				78	S15	O	FL segment control output
34	HOLD	I	inhibit signal input	79	S14	O	FL segment control output
35	/RESET	I	Reset signal input	80	S13	O	FL segment control output
36	TEST	I	Preset to TEST mode	81	S12	O	FL segment control output
37	E/U	I	LW Band select	82	S11	O	FL segment control output
38	XIN	I	Clock oscillation terminal	83	S10	O	FL segment control output
39	XOUT	O	Clock oscillation terminal	84~90	S9~S3	O	FL segment control output
40	VSS	--	Connected to GND	91	VCC	--	Power suply (+5V)
41~44	KI0~KI3	I	Key matrix input	92	S2	O	FL segment control output
45	13G	O	FL grid control	93	S1	O	FL segment control output
46	12G	O	FL grid control	94~97	KI0~KI3	O	Key matrix input
47	11G	O	FL grid control	98	VEE	--	Power suply for FL display
48	10G	O	FL grid control	99	AVSS	--	Connected to GND
49	9G	O	FL grid control	100	VREF	--	Reference voltage for D/A and A/D converter

■ LC7218 (IC102) : PLL Synthesizer

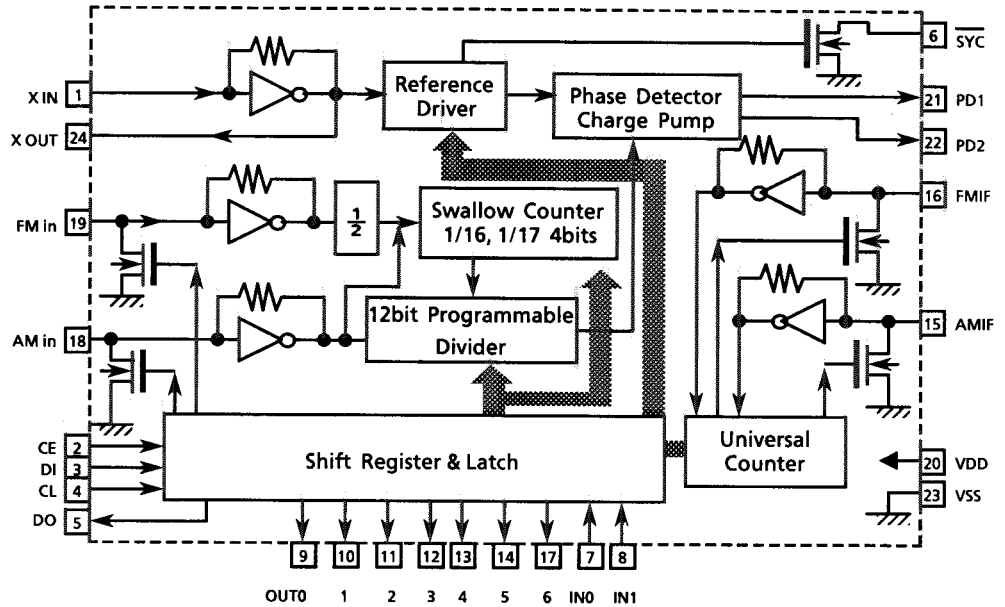
1. The main function descriptions

- (1) It makes the local oscillation frequency by the control data from IC501.
- (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 IC501.

2. Terminal Layout



3. Block Diagram



4. Pin Functions

Pin No.	Symbol	I/O	Functions
1,24	X in , X out	I/O	Crystal oscillator (7.2MHz).
2	PLL CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.
3	PLL DA	I	Receive the control data from the controller (IC501).
4	PLL CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.
5	IF DATA	O	Transmit the data from LC7218 to the controller which is synchronized with CL.
6	SYC	—	Not used.
7	/TUNED IN	I	Receive the tuned signal from IC103 (LA1266A).
8	STOP IN	—	Connected to GND
9	POWER	—	Not used.
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 IC103 (LA1266A).
16	FM-IF	I	Universal counter input for FM-IF from IC103 (LA1266A).
17	IF REQ	O	Output the "IF-signal request" to IC103 when the pin-7 (tuned in) goes to "H".
18	AM OSC	I	Input the local oscillator signal of AM.
19	FM OSC	I	Input the local oscillator signal of FM.
20	V _{DD}	—	This is a terminal of power supply.
21	PD1	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
22	PD2	—	Not used.
23	V _{SS}	—	Connected to GND
24	XOUT	—	Connected to GND

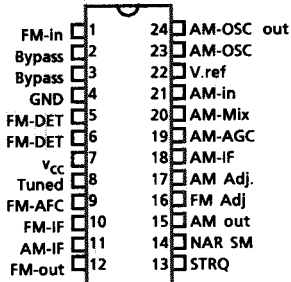
FX-SD1GD

■ LA1266A (IC103) : FM AM IF AMP & detector

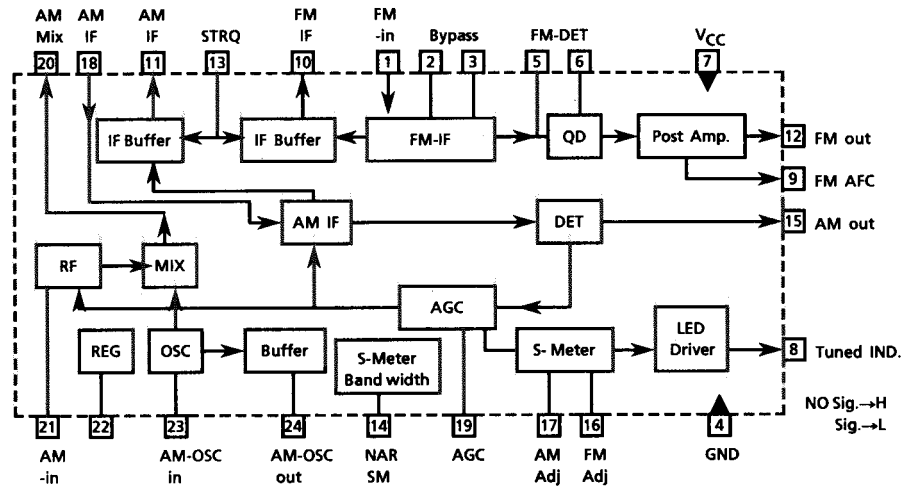
1. The main function descriptions

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

2. Top View



3. Block Diagram



4. Pin Function Description

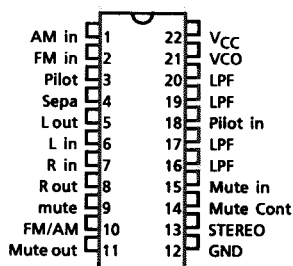
Pin No.	Symbol	I/O	Functions and Operations
1	FM in	I	This is an input terminal of FM IF Signal.
2, 3	Bypass	--	Bypass of FM IF Amp.
4	GND	--	This is the device ground terminal.
5, 6	FM DET	--	FM detect transformer.
7	V _{CC}	--	This is the power supply terminal.
8	/Tuned	O	When the set is tuning, this terminal become "L".
9	FM AFC	O	This is an output terminal of voltage for FM - AFC.
10	FM IF out	O	When the IF REQ signal of IC102(LC7218) applies to pin17, the signal of FM IF outputs.
11	AM IF out	O	When the IF REQ signal of IC102(LC7218) applies to pin17, the signal of AM IF outputs.
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 goes to "High".
14	NAR SM	--	Control the Band-width of AM 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	--	Control the Band-width of FM signal meter.
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

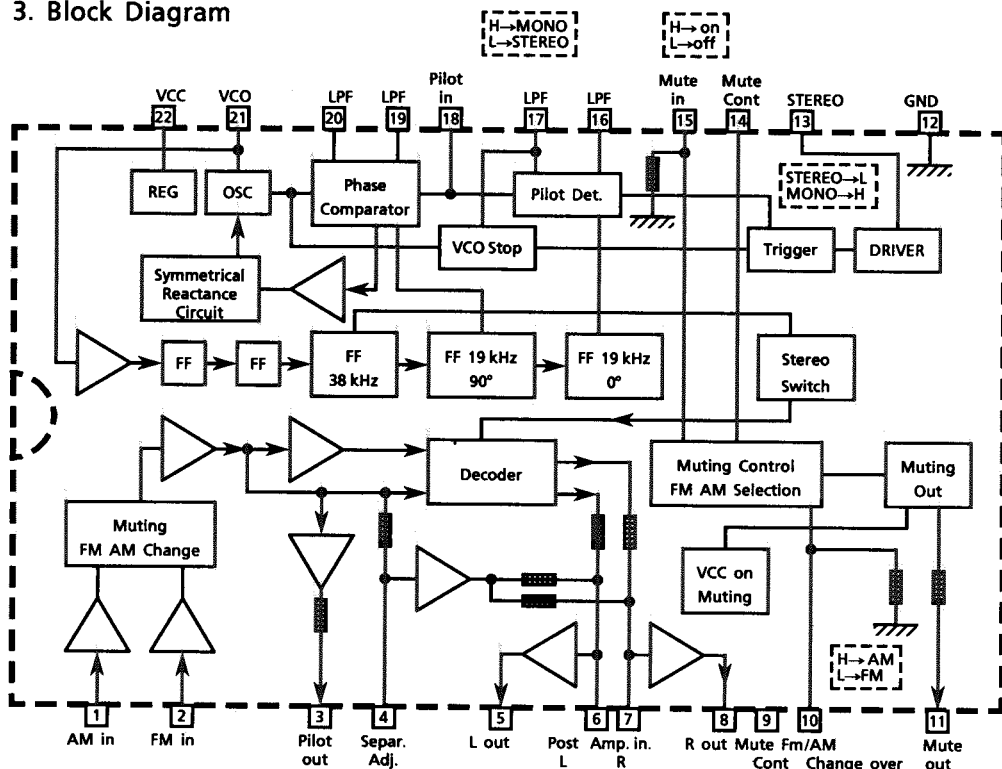
1. The main function descriptions

- (1) Detect the FM Multiplex Signal (Stereo signal).
- (2) When receiving FM Stereo Signal, it outputs the signal for indicator.
- (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	O	Reversal output of Pin5.
7	R	O	Reversal output of Pin8.
8	R out	O	Right channel signal output
9	Mute Cont	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	FM / AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	Mute out	--	Not use
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 input.
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V _{CC}	--	Power supply.

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■ SAA6579 (IC202) : Radio data system demodulator

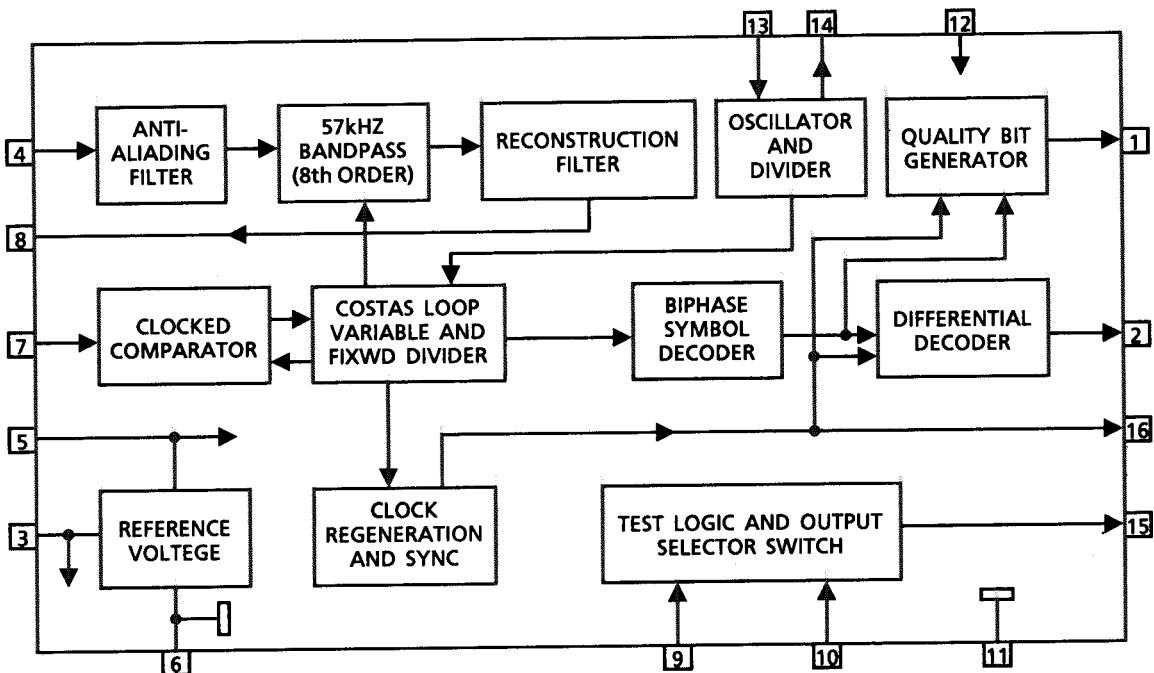
1. Terminal Layout

QUAL	1	16	RDCL
RDDA	2	15	T57
Vref	3	14	XO
MUX	4	13	XI
VDDA	5	12	VDD
GND	6	11	GND
CIN	7	10	GND
SCOUT	8	9	GND

2. Pin Function

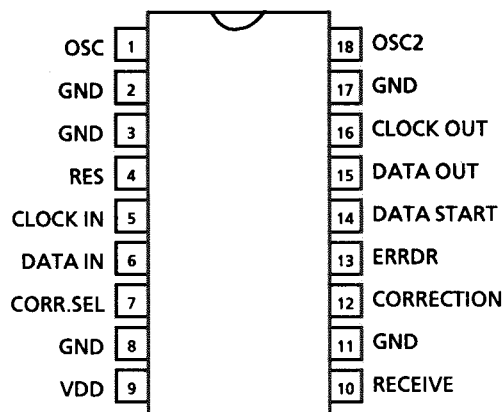
Pin No.	Symbol	I/O	Function
1	QUAL	—	Non connection
2	RDDA	O	RDS data output
3	Vref	O	Reference voltage output
4	MUX	I	Multiplex signal input
5	VDDA	—	+5V supply voltage for analog part
6	GND	—	Ground for analog part (0V)
7	CIN	I	Subcarrier input to comparator
8	SCOUT	O	Subcarrier output of reconstruction filter
9	GND	—	Ground for digital part (0V)
10	GND	—	Ground for digital part (0V)
11	GND	—	Ground for digital part (0V)
12	VDD	—	+5V supply voltage for digital part
13	XI	I	Oscillator input
14	XO	O	Oscillator output
15	T57	—	Non connection
16	RDCL	O	RDS clock output

3. Block Diagram

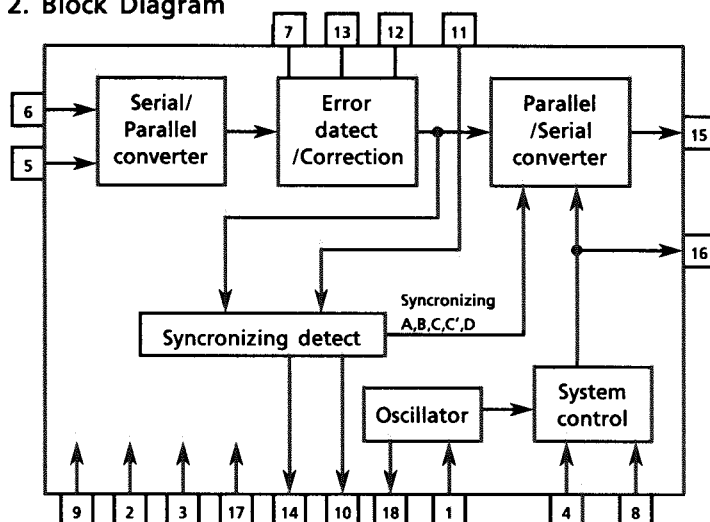


■ LC7073 (IC201) : Radio Data System

1. Terminal Layout



2. Block Diagram

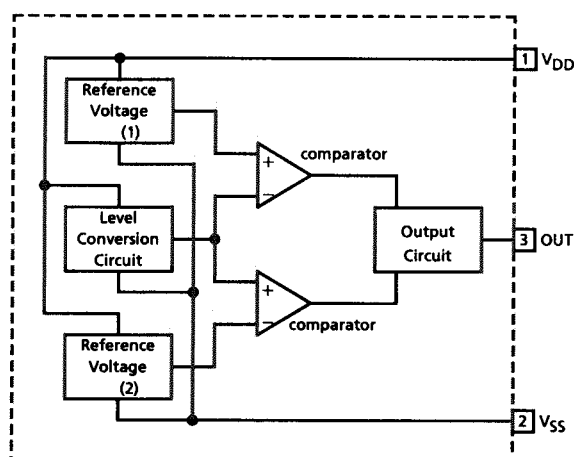


3. Pin Functions

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	OSC	I	Oscillation terminal	10	RECEIVE	O	RDS receive output
2	GND	—	GND	11	GND	—	
3	GND	—	GND	12	CORRECTION	—	Non connection
4	RES	I	RDS Reset input	13	/ERRDR	I	RDS ERROR input
5	CLOCK IN	I	RDS clock input	14	DATA START	O	Data start signal for block data to output serial data
6	DATA IN	I	RDS data input	15	DATA OUT	O	Serial data output
7	CORR.SEL	I	Non connection	16	CLOCK OUT	O	Data output of serial data output
8	GND	—	GND	17	GND	—	GND
9	VDD	—	Power supply	18	OSC2	O	Oscillation terminal

■ MN1281 : IC IC561 (Reset IC)

Block Diagram

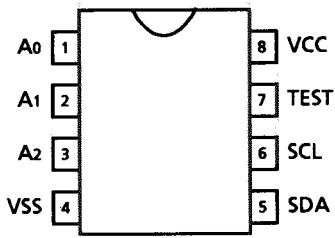


Pin No.	Pin Name	Functions
1	V _{DD}	Power supply
2	V _{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

FX-SD1GD

■ AT24C08-10PC (IC503) : Serial Eeprom

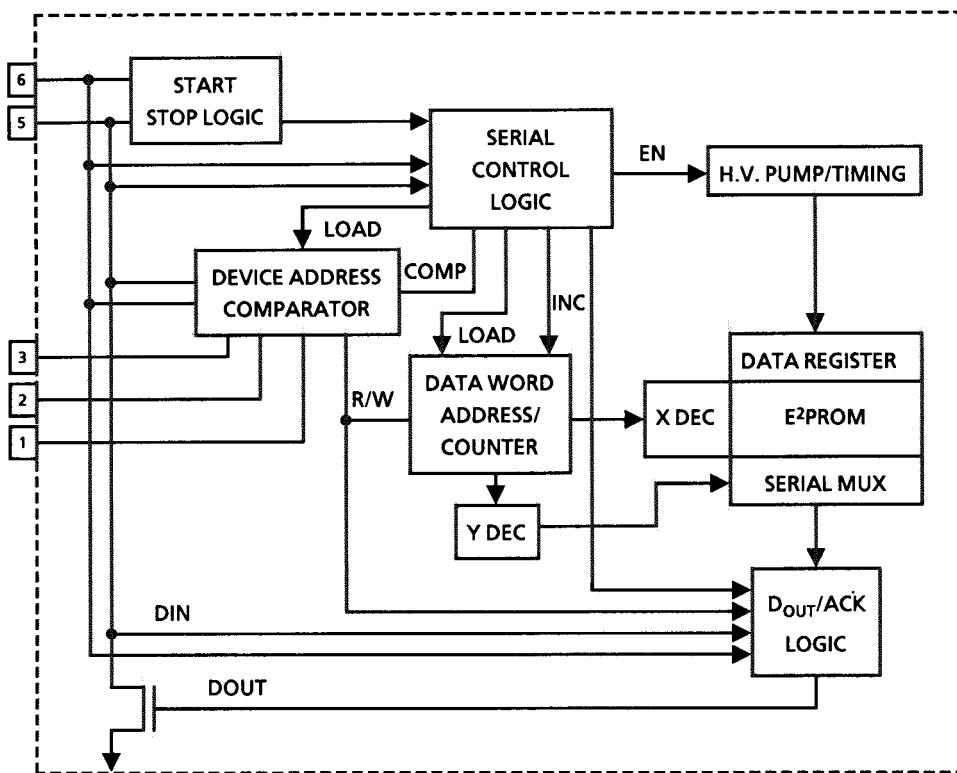
1. Terminal Layout



2. Terminal Functions

Pin No.	Symbol	Functions
1~3	A0~A2	ADDRESS INPUT (Connected to GND)
4	VSS	GND
5	SDA	SERIAL DATA
6	SCL	SERIAL CLOCK
7	TEST	TEST PIN (NOT USE)
8	VCC	POWER SUPPLY

3. Block Diagram

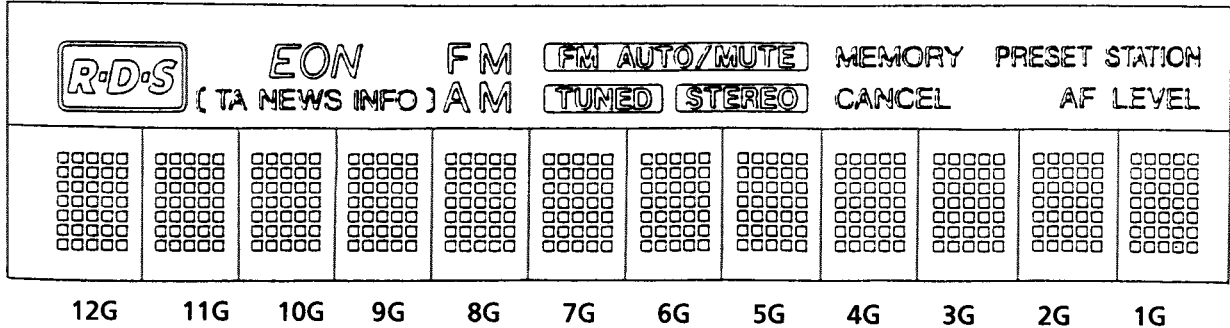


Internal Connections for the FL Display Tube

■ ELU0001-181:(DI501)

1. Grid Assignment

13G



2. Pin Connections

(UPPER)

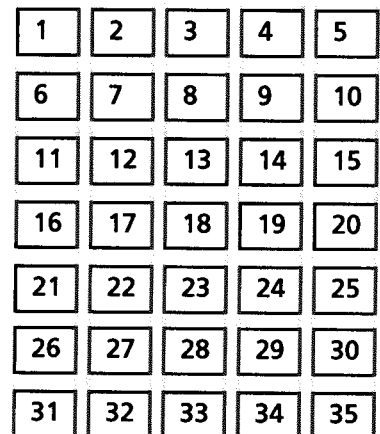
TERMINAL NO.	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61
ELECTRODE	F1	F1	F1	NP	P _{s1}	P _{s2}	P _{s3}	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
TERMINAL NO.	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
ELECTRODE	NP	NP	NP	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NP	F2	F2	F2

(LOWER)

TERMINAL NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
ELECTRODE	P _{s20}	P _{s21}	P _{s22}	P _{s23}	P _{s24}	P _{s25}	P _{s26}	P _{s27}	P _{s28}	P _{s29}	P _{s30}	P _{s31}	P _{s32}	P _{s33}	P _{s34}	P _{s35}	NP	F2	F2	F2
TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ELECTRODE	F1	F1	F1	NP	P _{s4}	P _{s5}	P _{s6}	P _{s7}	P _{s8}	P _{s9}	P _{s10}	P _{s11}	P _{s12}	P _{s13}	P _{s14}	P _{s15}	P _{s16}	P _{s17}	P _{s18}	P _{s19}

Notes F: Filament NP: No Pin
G: Grid
P: Anode

	1G~12G	13G		1G~12G
S1	1	RDS	S19	19
S2	2	EON	S20	20
S3	3	()	S21	21
S4	4	TA	S22	22
S5	5	NEWS	S23	23
S6	6	INFO	S24	24
S7	7	FM	S25	25
S8	8	AM	S26	26
S9	9	FM AUTO/MUTE	S27	27
S10	10	TUNED	S28	28
S11	11	STEREO	S29	29
S12	12	MEMORY	S30	30
S13	13	CANCEL	S31	31
S14	14	PRESET STATION	S32	32
S15	15	AF LEVEL	S33	33
S16	16		S34	34
S17	17		S35	35
S18	18			



Disassembly Procedures

(1) Side Panel removal

1. Remove 8 screws **(A)** fastening both the side panels, (The curved side shows front of the side panel.)
2. Disassemble the side panels.

(2) Side panel assembly

1. Set the edge of the side panel with the one for the front and position it lower to adjust the side panel's top with the one for the front .
2. Tighten screws for the bottom in advance .

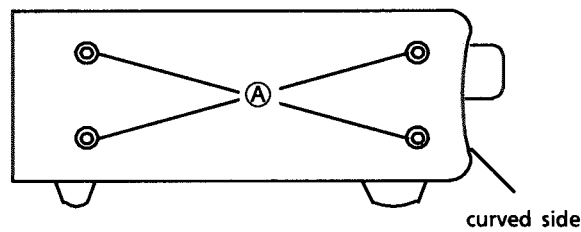


Fig-1. Side

Fig.1

(3) Front panel removal

1. Disassemble the side panel.
2. Remove the 4 screws **(B)** fastening both sides of the front panel .
3. Remove the 4 screws **(B)** fastening rear side .
4. Pull out the turning knob
5. Remove the 4 screws **(B)** fastening under the front panel.
6. Pull the front panel forward to disassemble it .

* Clearance between the turning knob and the cover is small . Cover the knob with paper ,etc. before the removal to prevent the knob from being scratched .

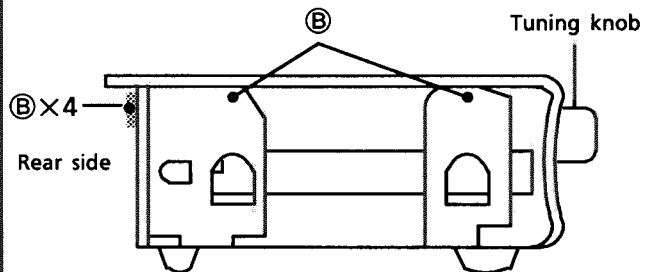


Fig-2. Left side (Without side panel)

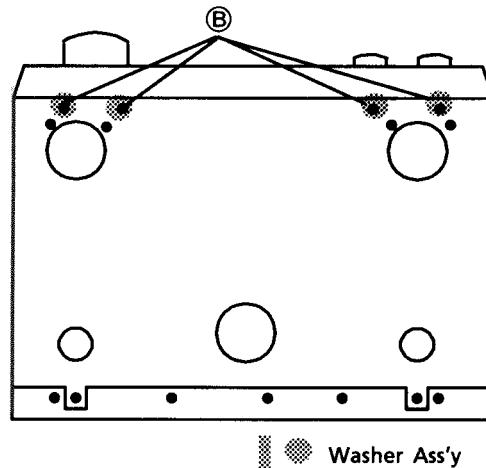


Fig-3. Bottom side

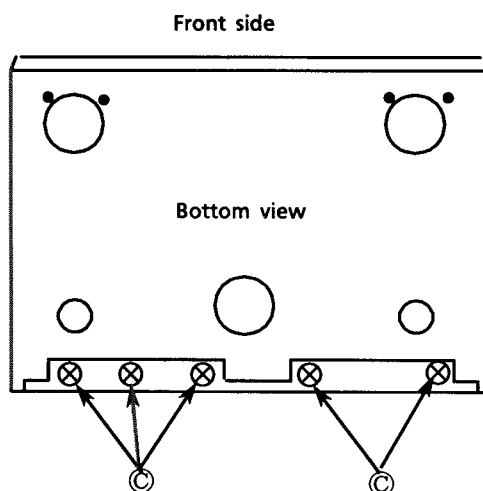
(4) Front Panel assembly

1. Also ,cover the knob not to be scratched .
2. Fasten screws for the side after fastening the ones for the bottom .

(A) E74274-003 . **(B)** ... GBSG3008CC

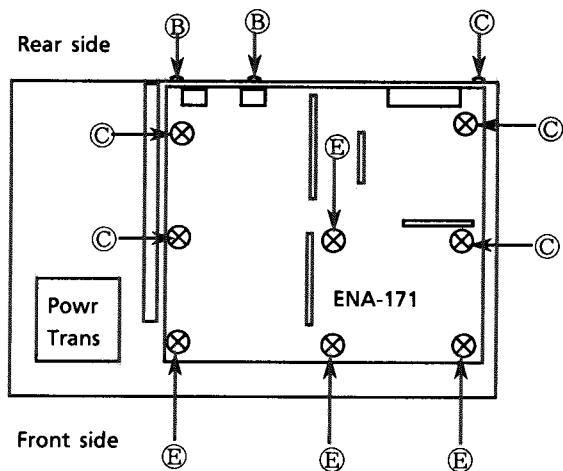
(5) Rear panel removal

1. Remove the side panel and Front panel .
2. Remove the 5 screws ③ from the bottom cover.
3. Remove the 5 screws ③ and 4 screws ② , screw ④ from the rear panel.
4. Remove the rear panel .



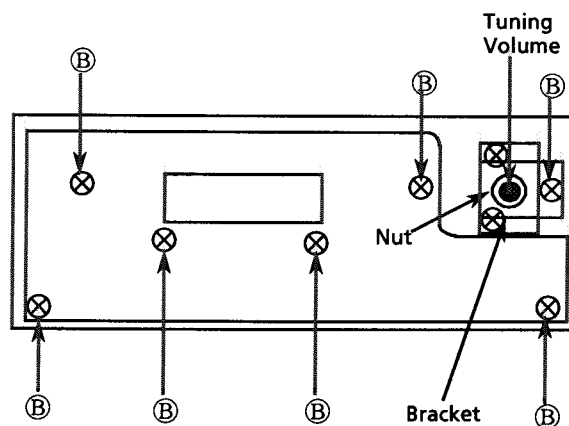
(6) Main PCB (ENA-171)removal

1. Remove the Front panel .
2. Remove the screw ③ and 3 screws ② of the rear side .
3. Disconnect the CN111, and CN506,CN001 .
3. Remove the 4 screws ③ and 4 screws ④ fastening the main PCB to remove it.

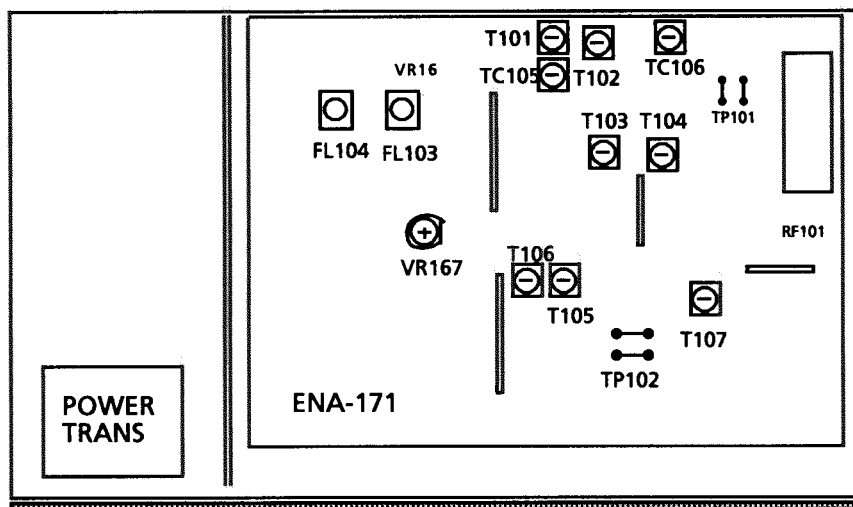


(7) Front PCB (ENB-228-1) removal

1. Remove the Front panel .
2. Disconnect the CN505,CN504 and CN503.
3. Remove the NUT fastening the tuning knob.
4. Remove the 9 screws ② fastening the Front PCB and Braket .
5. Remove the Front PCB with the tuning Volume.



Adjustment Procedures



Front side

1. FM section

■ FM oscillator

- (1) Set the frequency display to "108.0MHz" and the FM MODE switch to "MONO" position.
- (2) Confirm that the FM inter-station noise is received.
- (3) Confirm that the voltage of test point "TP101" is $8.0V \pm 2.0V$.
- (4) Set the frequency display to "87.5MHz" and confirm the voltage of test point "TP101" is $1.6V \pm 1.0V$.

■ FM detector coil : T105

- (1) Connect a digital voltmeter to test point "TP102", and receive to "100.1MHz" signal with SSG at 70dB.
- (2) Adjust T105 so that the digital voltmeter reads $0 \pm 1.5mV$.

■ Separation

- (1) Tune to a 98.1MHz stereo signal.
- (2) Adjust VR167 so that the channel separation becomes maximum.

2. LW section (Adjust the L.W section before adjusting the M.W section.)

■ LW oscillator : T104

- (1) Set the frequency display to 144kHz and adjust T104 so that the voltage of TP101 becomes $0.8V \pm 0.4V$.
- (2) Set the frequency display to 288kHz [290kHz] and confirm that the voltage of test point TP101 is $5.7V \pm 0.7V$.

■ LW antenna coil : T102

- (1) Connect a loop antenna to the "AM Loop" terminal on the rear panel.
- (2) Adjust T102 to obtain the best receiving sensitivity on 164kHz.

■ LW antenna trimmer : TC106

- (1) Adjust TC106 to obtain the best receiving sensitivity on 270kHz.

3. MW section

■ MW oscillator : T103

- (1) Set the frequency display to 522kHz and confirm that the voltage of test point TP101 is $0.9V \pm 0.2V$.
- (2) Set the frequency display to 1629kHz and confirm that the voltage of test point TP101 is $7.5V \pm 0.8V$.
- (3) If its voltage exceeds the allowance, adjust T103 to obtain the voltage.

■ MW antenna coil : T101

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

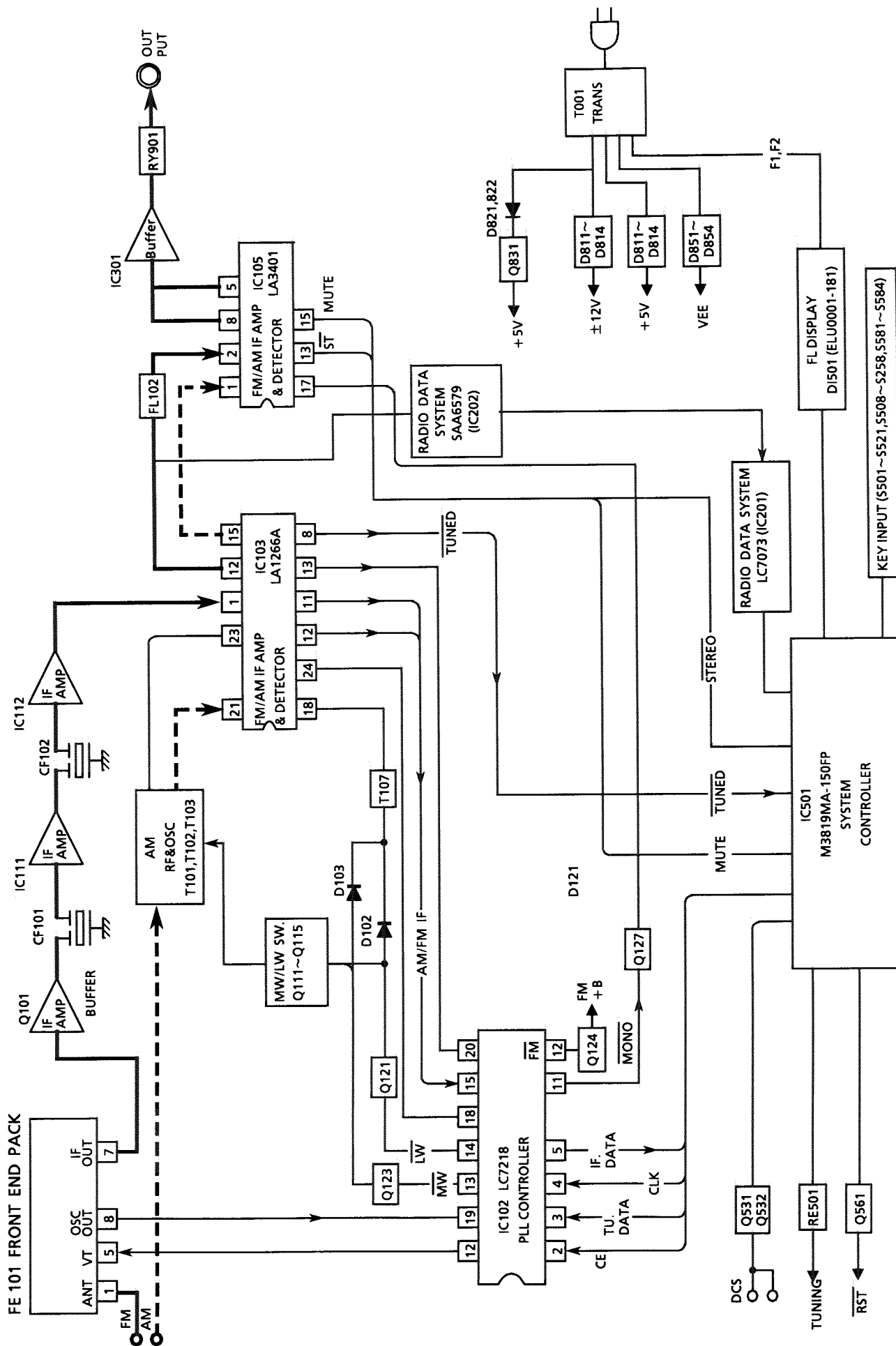
■ MW antenna trimmer : TC105

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

※ **Adjust T102 and TC106 so that each sensitivity becomes maximum alternately.**

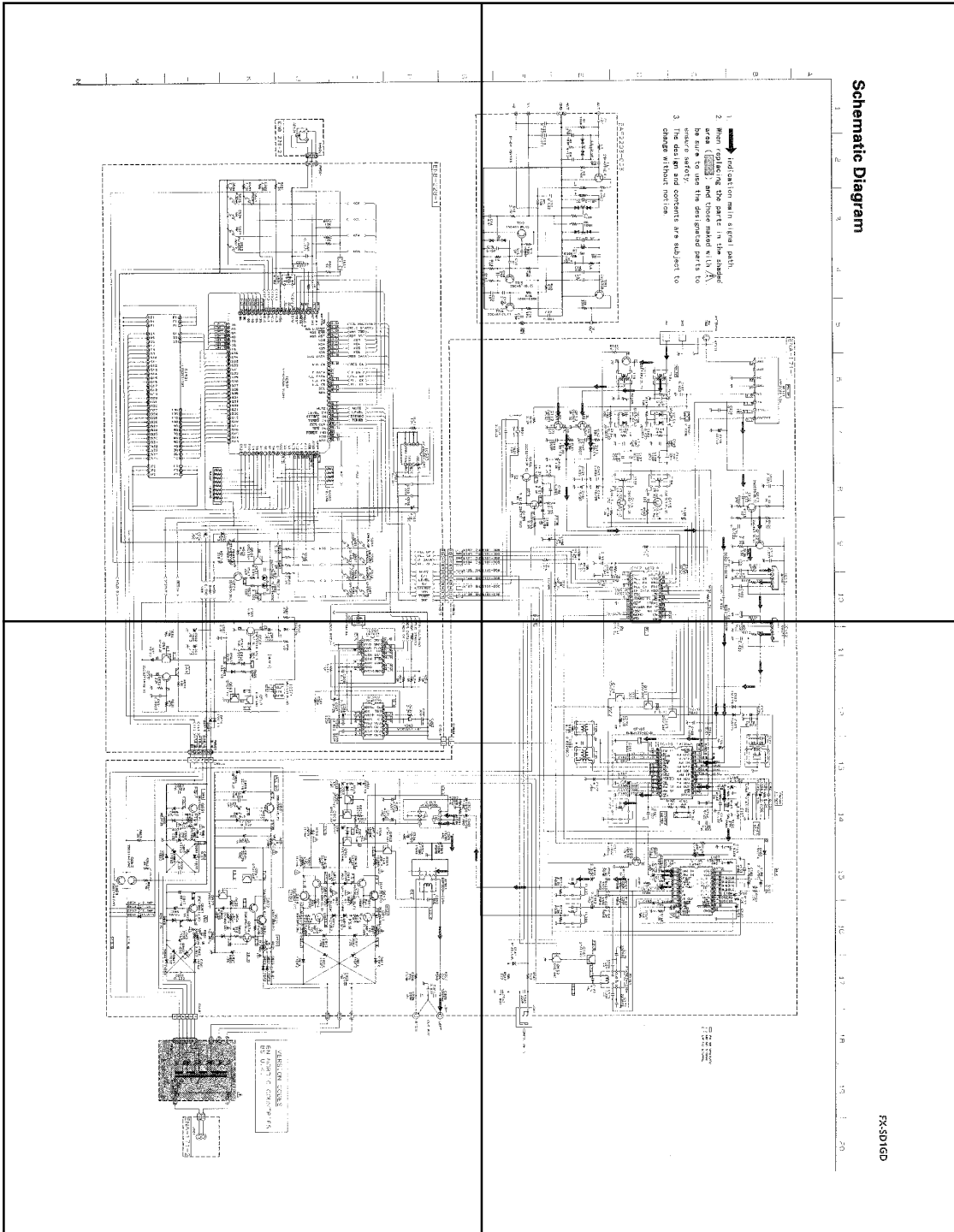
Adjust T101 and TC105 so that each sensitivity becomes maximum alternately.

Block Diagram



P-S.D-a

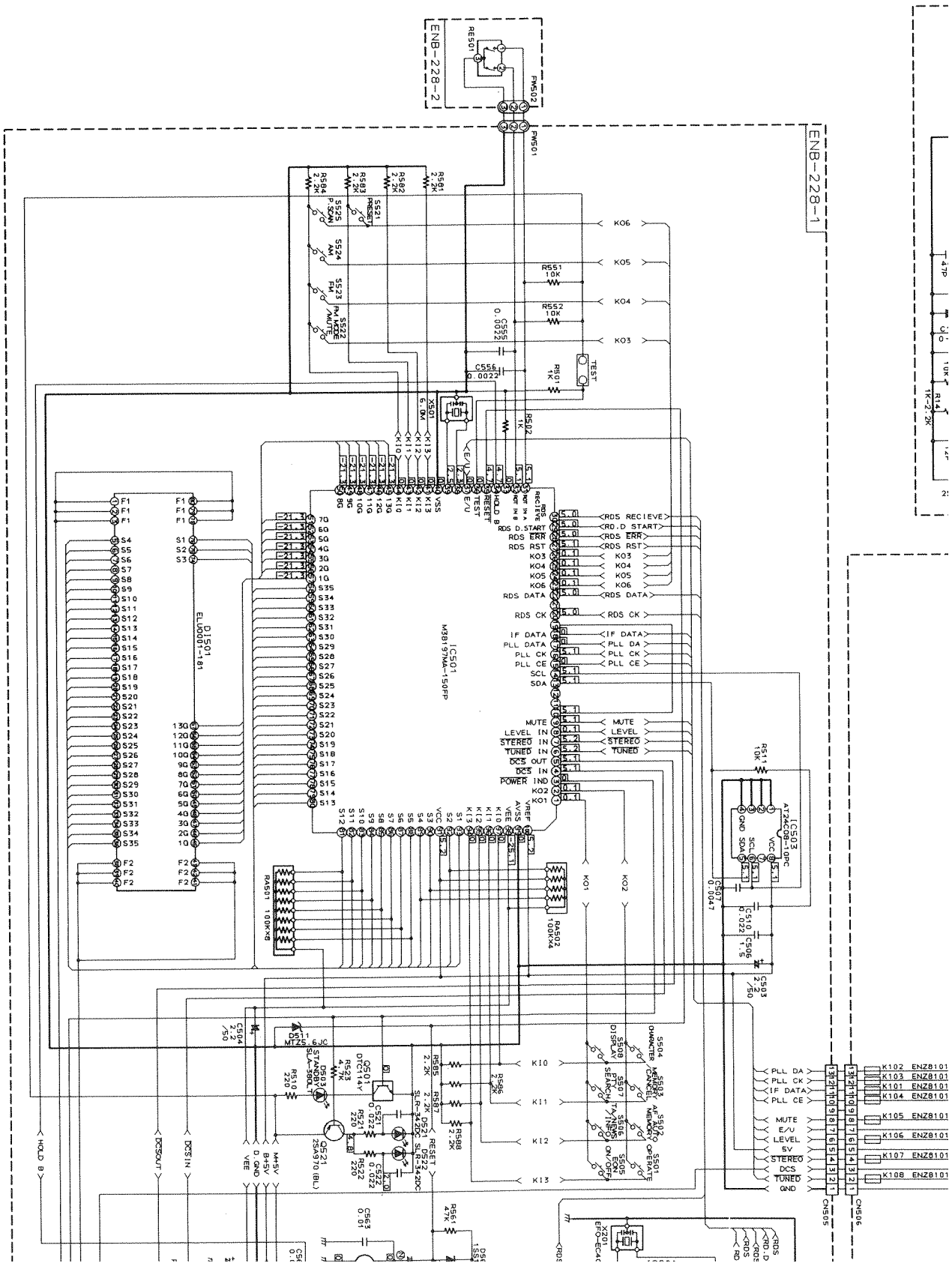
P-S.D-b



P-S.D-c




P-S.D-d

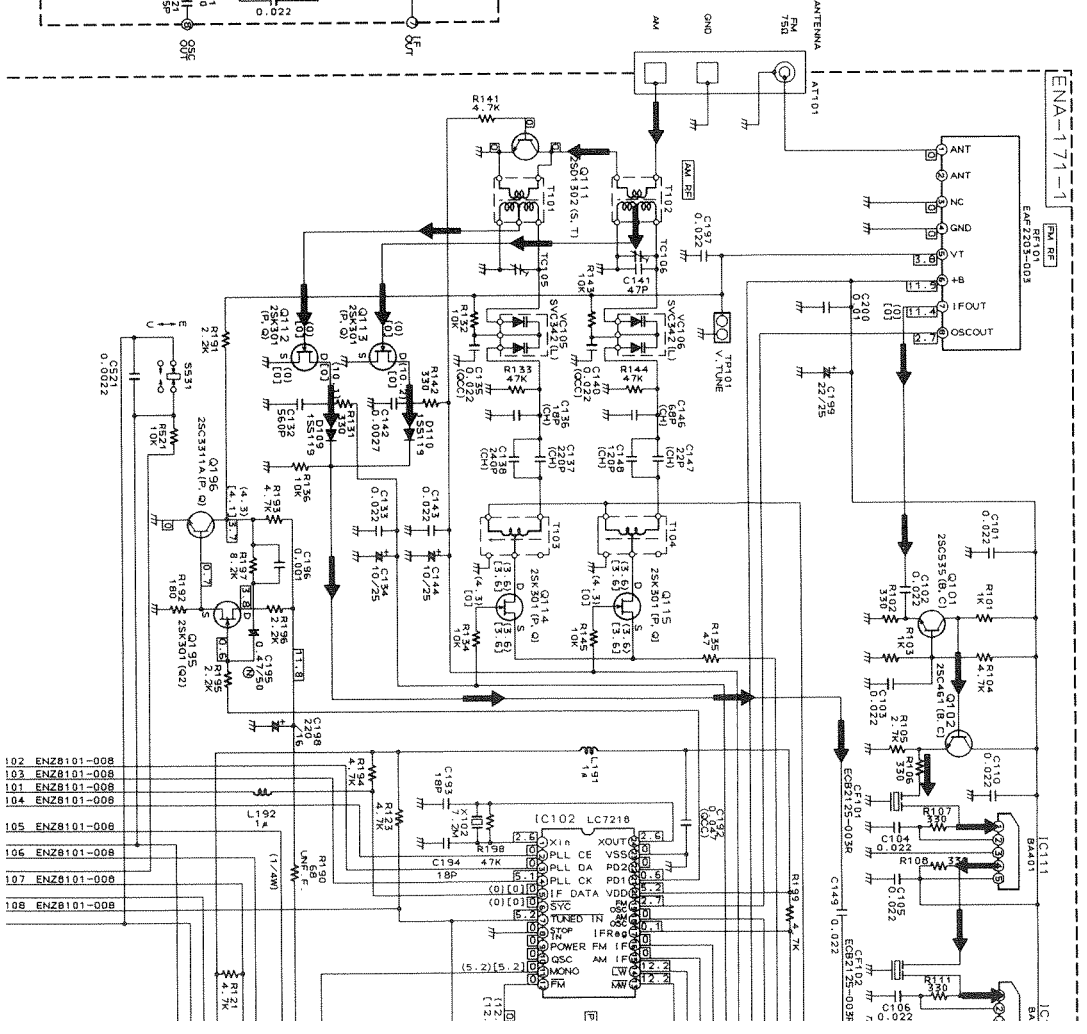
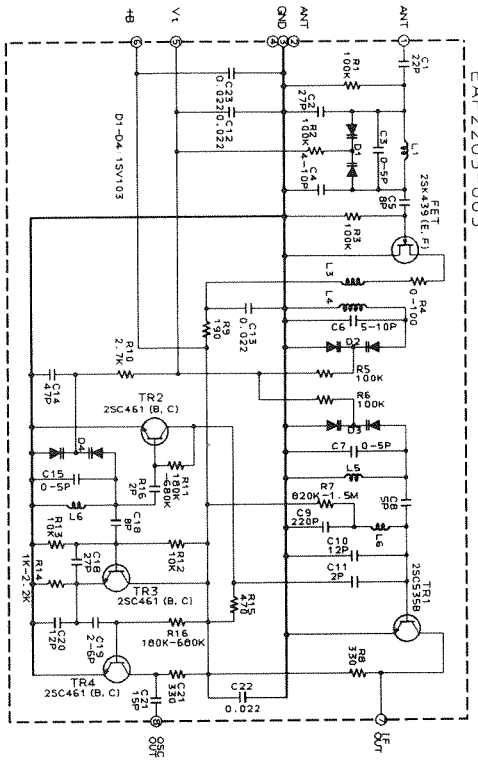
Z N L K J I I G



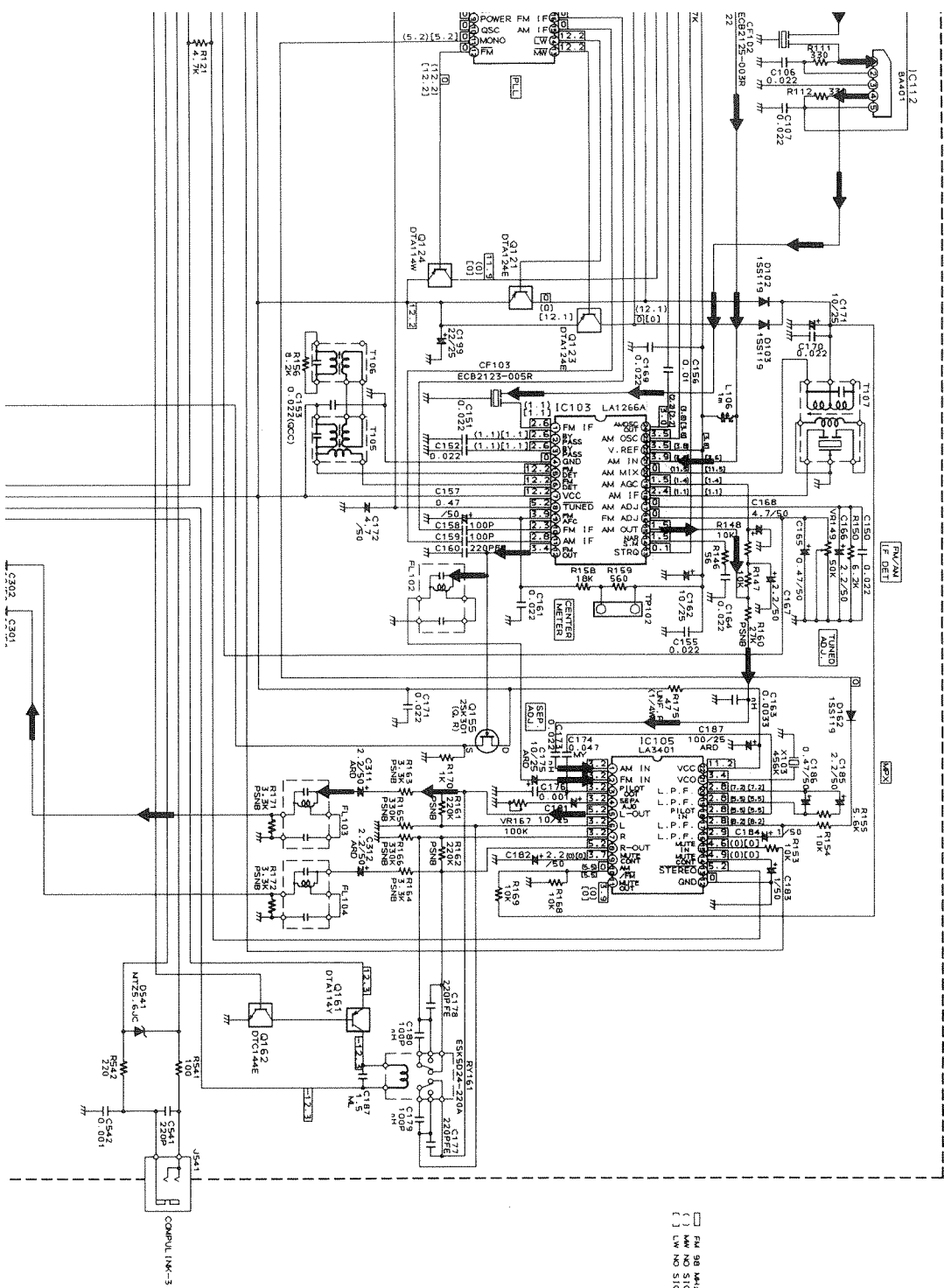
Schematic Diagram

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

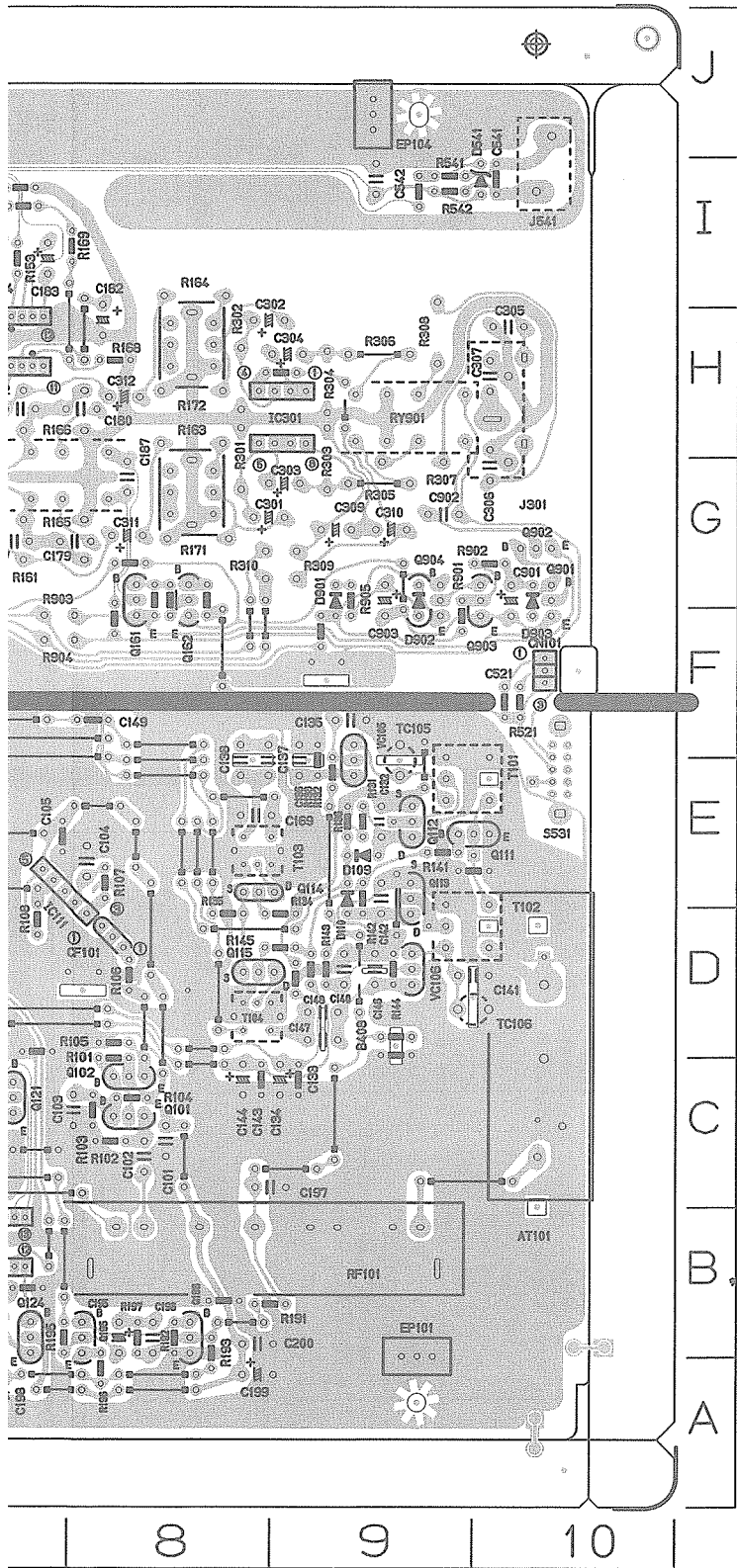
1.  indication main signal path.
2. When replacing the parts in the shaded area () and those maked with  , be sure to use the designated parts to ensure safety.
3. The design and contents are subject to change without notice.



11 12 13 14 15 16 17 18 19 20



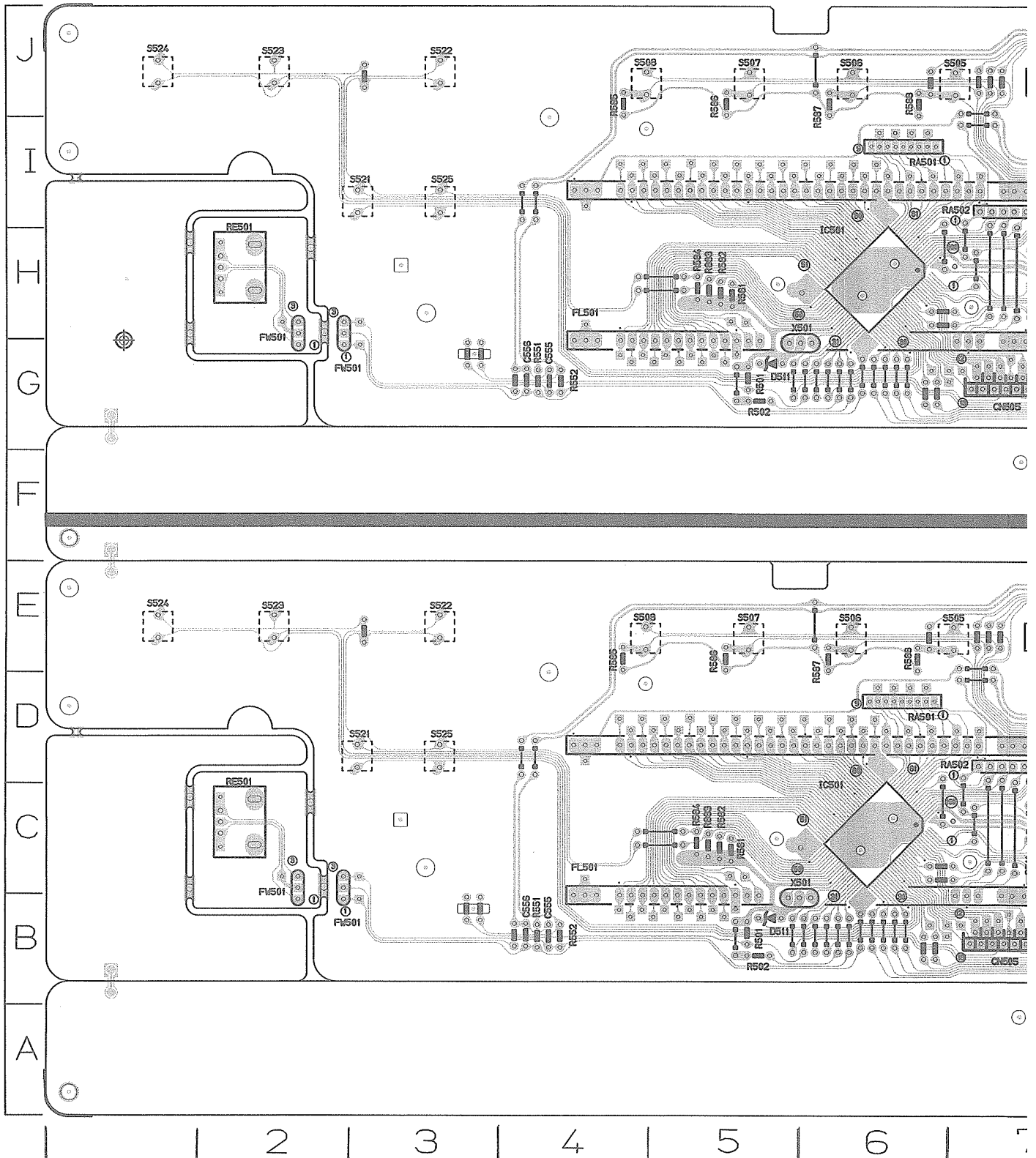
Location List (ENA-171)



Symbol	X	Y	Symbol	X	Y	Symbol	X	Y	Symbol	X	Y	Symbol	X	Y
C101	8	C	C198	7	A	D812	6	I	Q814	6	G	R193	8	A
C102	8	C	C199	8	A	D813	5	I	Q815	5	G	R194	5	B
C103	8	C	C200	8	B	D814	6	I	Q816	6	G	R195	7	B
C104	8	E	C301	8	G	D815	5	F	Q821	5	H	R196	8	B
C105	7	E	C302	8	H	D816	6	F	Q822	5	G	R197	8	B
C106	7	D	C303	8	G	D821	5	J	Q823	4	F	R198	7	B
C107	7	E	C304	8	H	D822	5	I	Q824	4	G	R199	7	C
C121	7	I	C305	10	H	D823	5	F	Q831	5	B	R301	8	G
C131	5	C	C306	10	G	D831	5	B	Q841	4	G	R302	8	H
C132	9	E	C307	10	H	D832	4	B	Q851	4	G	R303	9	G
C133	9	C	C309	9	G	D841	4	I	Q861	3	H	R304	9	H
C134	9	C	C310	9	G	D842	4	H	Q862	3	I	R305	9	G
C135	9	F	C311	8	G	D843	4	I	Q863	3	I	R306	9	H
C136	9	E	C312	8	H	D844	4	I	Q901	10	G	R307	9	G
C137	8	E	C521	10	F	D845	4	F	Q902	10	G	R308	9	H
C138	8	E	C541	10	I	D851	4	H	Q903	10	G	R309	8	G
C140	9	D	C542	9	I	D852	4	I	Q904	9	G	R310	8	G
C141	9	D	C811	5	H	D853	4	I	R101	8	C	R521	10	F
C142	9	D	C812	6	H	D854	4	I	R102	8	C	R541	9	I
C143	8	C	C813	5	F	D855	4	F	R103	8	C	R542	9	I
C144	8	C	C814	6	F	D861	3	G	R104	8	C	R811	5	G
C146	9	D	C815	5	G	D901	9	F	R105	8	D	R812	6	G
C147	9	D	C816	6	G	D902	9	F	R106	8	D	R813	5	F
C148	9	D	C821	4	I	D903	10	F	R107	8	E	R814	6	F
C149	8	F	C822	5	H	F811	6	J	R108	7	D	R815	5	G
C150	5	C	C823	5	G	F812	6	I	R111	7	E	R816	6	G
C151	6	E	C824	5	H	FL102	7	G	R112	6	D	R817	5	F
C152	6	E	C825	4	J	FL103	8	G	R121	4	B	R818	6	F
C153	6	E	C826	5	I	FL104	8	H	R123	5	B	R821	5	H
C155	6	D	C831	4	B	FW001	2	C	R131	9	E	R822	4	H
C156	6	D	C832	4	B	IC102	7	B	R132	9	E	R823	4	G
C157	5	D	C833	5	B	IC103	6	D	R133	9	E	R824	4	F
C158	4	E	C834	5	B	IC105	7	H	R134	8	D	R825	4	F
C159	4	E	C835	4	B	IC111	8	D	R135	8	D	R831	4	B
C160	7	G	C841	4	I	IC112	7	E	R136	9	E	R832	5	B
C161	5	D	C842	4	H	IC301	9	H	R141	9	E	R841	4	G
C162	6	D	C843	4	H	J001	3	I	R142	9	D	R842	4	G
C163	7	H	C845	4	F	J301	10	G	R143	9	D	R851	4	H
C164	5	D	C846	4	G	J541	10	J	R144	9	D	R852	4	G
C165	5	C	C847	4	G	K101	3	D	R145	9	D	R861	3	H
C166	5	C	C848	4	F	K102	3	D	R146	5	D	R862	3	H
C167	5	D	C851	4	I	K103	3	D	R147	5	D	R863	3	H
C168	5	D	C852	4	H	K104	4	D	R148	5	D	R864	3	G
C169	8	E	C853	4	H	K105	3	D	R150	5	C	R901	9	F
C170	6	C	C854	4	G	K106	3	D	R151	6	C	R902	9	G
C171	6	C	C855	4	F	K107	3	E	R152	5	C	R903	7	F
C172	4	E	C857	4	G	K108	3	E	R153	7	I	R904	7	F
C173	7	H	C861	4	I	L106	6	D	R154	7	I	R905	9	F
C174	7	H	C862	3	G	L191	6	C	R155	7	I	RF101	9	B
C175	7	G	C901	10	G	L192	5	A	R156	5	E	RY161	8	H
C176	6	H	C902	9	G	Q101	8	C	R158	4	D	RY901	9	H
C177	7	G	C903	9	G	Q102	8	C	R159	4	D	S531	10	E
C178	7	H	CF101	8	D	Q111	9	E	R160	6	G	T101	10	E
C179	7	G	CF102	7	E	Q112	9	E	R161	7	G	T102	10	D
C180	7	H	CF103	6	E	Q113	9	E	R162	7	H	T103	8	E
C181	7	H	CN001	4	I	Q114	8	E	R163	8	H	T104	8	D
C182	8	I	CN101	10	F	Q115	8	D	R164	8	I	T105	5	E
C183	7	I	CN111	4	E	Q121	7	C	R165	7	G	T106	6	E
C184	7	I	CN503	3	F	Q123	7	C	R166	7	H	T107	5	C
C185	7	I	CN504	4	E	Q124	7	B	R168	8	H	TC105	9	F
C186	7	I	CN506	3	E	Q155	4	E	R169	8	I	TC106	10	D
C187	8	G	D102	7	D	Q161	8	G	R170	4	E	X102	6	B
C192	7	C	D103	7	D	Q162	8	G	R171	8	G	X103	7	H
C193	6	B	D109	9	E	Q195	8	B	R172	8	H			
C194	6	B	D110	9	D	Q196	8	B	R175	6	H			
C195	8	B	D162	7	I	Q811	5	F	R190	7	A			
C196	8	B	D541	10	I	Q812	6	F	R191	8	B			
C197	8	C	D811	5	I	Q813	5	G	R192	8	B			

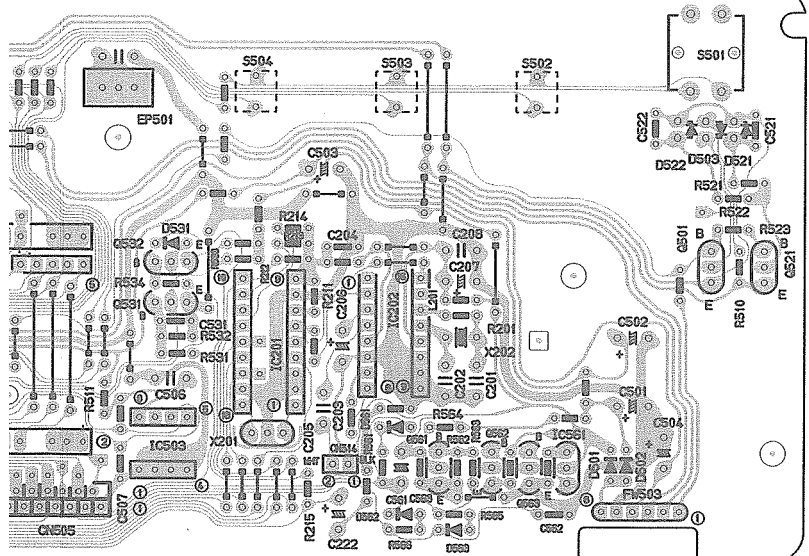
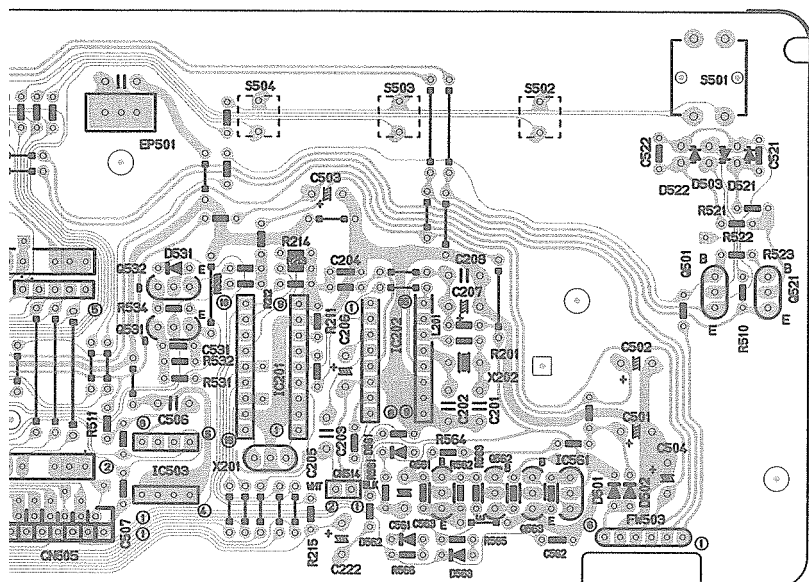
FX-SD1GD

■ Front PCB Section (ENB-228)



Location List (ENB-228)

Symbol	X	Y	Symbol	X	Y	Symbol	X	Y
C201	9	H	D563	9	G	R561	8	G
C201	9	C	D563	9	B	R561	8	B
C202	9	H	1C201	8	H	R562	9	G
C202	9	C	1C201	8	C	R562	9	B
C203	8	H	1C202	8	I	R563	9	G
C203	8	C	1C202	8	D	R563	9	B
C204	8	I	1C501	6	H	R564	9	H
C204	8	D	1C501	6	C	R564	9	C
C205	8	H	1C503	7	G	R565	9	G
C205	8	C	1C503	7	B	R565	9	B
C206	8	H	1C561	9	G	R566	8	G
C206	8	C	1C561	9	B	R566	8	B
C207	9	I	L201	9	H	R581	5	H
C207	9	D	L201	9	C	R581	5	C
C208	9	I	Q501	10	I	R582	5	H
C208	9	D	Q501	10	D	R582	5	C
C222	8	G	Q521	10	D	R584	5	H
C222	8	B	Q521	10	I	R584	5	C
C501	10	H	Q531	7	H	R585	4	J
C501	10	C	Q531	7	C	R585	4	E
C502	10	C	Q532	7	I	R586	5	J
C502	10	H	Q532	7	D	R586	5	E
C503	8	I	Q561	9	G	R587	6	J
C503	8	D	Q561	9	B	R587	6	E
C504	10	H	Q562	9	G	R588	6	J
C504	10	C	Q562	9	B	R588	6	E
C506	7	H	Q563	9	G	R883	5	H
C506	7	C	Q563	9	B	R883	5	C
C507	7	G	R201	9	H	RA501	6	I
C507	7	B	R201	9	C	RA501	6	D
C521	10	D	R211	8	H	RA502	7	I
C521	10	I	R211	8	C	RA502	7	D
C522	10	D	R212	8	I	RE501	2	H
C522	10	I	R212	8	D	RE501	2	C
C531	7	H	R213	8	I	S501	10	J
C531	7	C	R213	8	D	S501	10	E
C555	4	G	R214	8	I	S502	9	J
C555	4	B	R214	8	D	S502	9	E
C556	4	G	R215	8	G	S503	9	J
C556	4	B	R215	8	B	S503	9	E
C561	9	G	R501	5	G	S504	8	J
C561	9	B	R501	5	B	S504	8	E
C562	9	G	R502	5	B	S505	7	J
C562	9	B	R502	5	G	S505	7	E
C563	9	G	R510	10	I	S506	6	J
C563	9	B	R510	10	D	S506	6	E
CN505	7	G	R511	7	H	S507	5	J
CN505	7	B	R511	7	C	S507	5	E
D501	10	G	R521	10	D	S508	4	J
D501	10	B	R521	10	I	S508	4	E
D502	10	G	R522	10	D	S521	3	I
D502	10	B	R522	10	I	S521	3	D
D503	10	J	R523	10	D	S522	3	J
D503	10	E	R523	10	I	S522	3	E
D511	5	G	R531	7	H	S523	2	J
D511	5	B	R531	7	C	S523	2	E
D521	10	J	R532	7	H	S524	1	J
D521	10	E	R532	7	C	S524	1	E
D522	10	J	R533	8	I	S525	3	I
D522	10	E	R533	8	D	S525	3	D
D531	7	I	R534	7	I	X201	8	H
D531	7	D	R534	7	D	X201	8	C
D561	9	H	R551	4	G	X202	9	H
D561	9	C	R551	4	B	X202	9	C
D562	9	G	R552	4	G	X501	6	G
D562	9	B	R552	4	B	X501	6	B



7 | 8 | 9 | 10

PARTS LIST

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

The Marks for Designated Areas

BS - the U.K. EN - Scandinavia No marks indicates all areas.

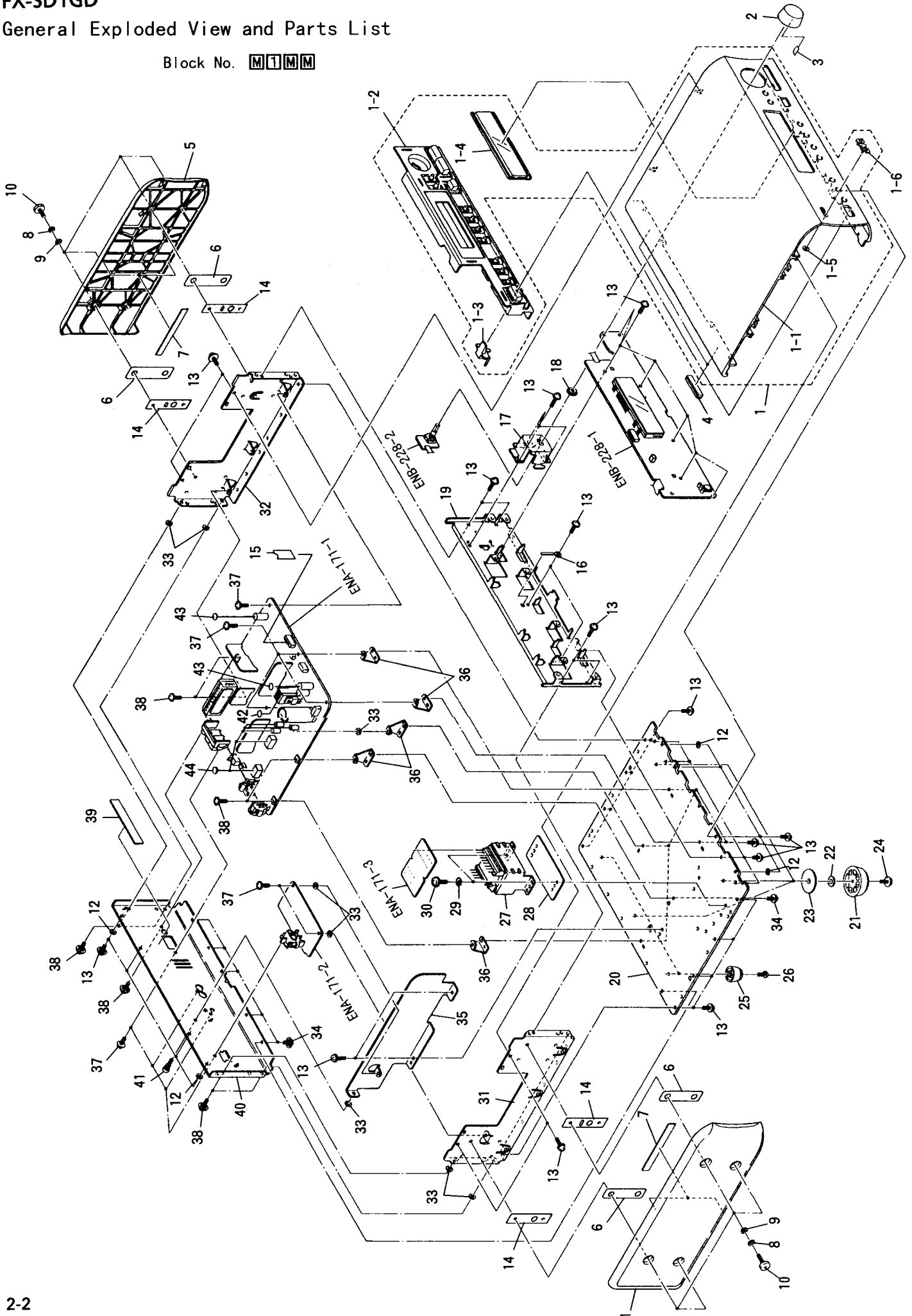
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General Exploded View and Parts List

Block No. **M1MM**



■ Parts List

Block No. **M1M1M**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	EFP-FXSD1GDE(S)	FRONT PANEL ASSY	1		
	1-1	E103128-001	FRONT PANEL	1		
	1-2	E103131-001	FRONT BASE	1		
	1-3	E408523-001	INDICATOR LENS	1		
	1-4	E309749-001	WINDOW SCREEN	1		
	1-5	E60912-003	SPEED NUT	1		
	1-6	E409213-002	JVC MARK	1		
	2	E309751-001	TUNING KNOB	1		
	3	E408294-001	SPACER	1		
	4	E306805-147	SPACER	4		
	5	E102981-019	SIDE PANEL	1		
	6	E409351-001	SPACER	4		
	7	E409366-001	SPACER	4		
	8	E409352-001	WASHER	8		
	9	E409352-002	WASHER	8		
	10	E74274-003	SPECIAL SCREW	8		
	11	E102981-020	SIDE PANEL	1		
	12	E73967-010	SPACER	4		
	13	GBSG3008CC	TAPPING SCREW	41		
	14	E408756-002	SPACER	4		
	15	VWF1213-25TTB	FLAT WIRE ASSY	1		
	16	E72018-002	WIRE CLAMP	2		
	17	E309752-002	KNOB BRACKET	1		
	18	E71862-001	VOLUME NUT	1		
	19	E103134-003	FRONT BRACKET	1		
	20	E103133-001	BOTTOM PLATE	1		
	21	E309292-002	FOOT ASSY	3		
	22	WSS5000CC	WASHER	3		
	23	E409508-001	SPACER	3		
	24	E65389-006	SPECIAL SCREW	3		
	25	E47227-008	FOOT	2		
	26	SBSG3010CC	TAPPING SCREW	2		
△	27	ETP1020-41EA	POWER TRANSFORMER	1		
	28	E409459-001	SHEET	1		
	29	WBS4000CC	WASHER	2		
	30	E61660-007	SPECIAL SCREW	2		
	31	E208780-003	SIDE BRACKET	1		
	32	E208780-004	SIDE BRACKET	1		
	33	E73967-016	SPACER	8		
	34	E408499-002	ASSY SCREW	6		
	35	E309753-001	SHIELD BRACKET	1		
	36	E68587-010	BRACKET	5		
	37	GBSG3006CC	SCREW	10		
	38	E408499-001	SCREW	9		
	39	E409516-002	ACETATE TAPE	1		
	40	E208778-002	REAR PANEL	1		
	41	E66052-006	SPECIAL SCREW	1		
	42	E75303-004	SHIELD TAPE	1		
	43	E75303-005	SPACER	2		
	44	E75303-003	SHIELD TAPE	5		
	-	E61029-005	NUMBER LABEL	1		

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■ Electrical Parts List (ENA-171)

Δ	Item	Parts Number	Description	Area
		I. C. S		
	IC102	LC7217	I. C (DIGI-MOS)	
	IC103	LA1266A	I. C (MONO-ANALOG)	
	IC105	LA3401	I. C (MONO-ANALOG)	
	IC111	BA401	I. C (MONO-ANALOG)	
	IC112	BA401	I. C (MONO-ANALOG)	
	IC301	VC4580DD	I. C (MONO-ANALOG)	
		DIODES		
	D102	1SS119	SI. DIODE	
	D103	1SS119	SI. DIODE	
	D109	1SS119	SI. DIODE	
	D110	1SS119	SI. DIODE	
	D162	1SS119	SI. DIODE	
	D541	MTZ6.2JC	ZENER DIODE	
	D811	11DF2-FA11	SI. DIODE	
	D812	11DF2-FA11	SI. DIODE	
	D813	11DF2-FA11	SI. DIODE	
	D814	11DF2-FA11	SI. DIODE	
	D815	HZ12C2-L	ZENER DIODE	
	D816	HZ12C2-L	ZENER DIODE	
	D821	11DF2-FA11	SI. DIODE	
	D822	11DF2-FA11	SI. DIODE	
	D823	HZ12B1LTD	ZENER DIODE	
	D831	RD5.6JSB3	ZENER DIODE	
	D832	RD7.5JSB3	ZENER DIODE	
	D841	11ES2	SI. DIODE	
	D842	11ES2	SI. DIODE	
	D843	11ES2	SI. DIODE	
	D844	11ES2	SI. DIODE	
	D845	RD6.2JSB3	ZENER DIODE	
	D851	11ES2	SI. DIODE	
	D852	11ES2	SI. DIODE	
	D853	11ES2	SI. DIODE	
	D854	11ES2	SI. DIODE	
	D855	RD24JSB3	ZENER DIODE	
	D861	1SS119	SI. DIODE	
	D901	1SS119	SI. DIODE	
	D902	1SS119	SI. DIODE	
	D903	MTZ2.7JB	ZENER DIODE	
	VC105	SVC342 (L)	VARI-CAPA DIODE	
	VC106	SVC342 (L)	VARI-CAPA DIODE	
		TRANSISTORS		
	Q101	2SC535	SI. TRANSISTOR	
	Q102	2SC461	SI. TRANSISTOR	
	Q111	2SD1302	SI. TRANSISTOR	
	Q112	2SK301 (P. Q)	F. E. T.	
	Q113	2SK301 (P. Q)	F. E. T.	
	Q114	2SK301 (P. Q)	F. E. T.	
	Q115	2SK301 (P. Q)	F. E. T.	
	Q121	DTA124ES	DIGITAL TRANSISTOR	
	Q123	DTA124ES	DIGITAL TRANSISTOR	
	Q124	DTA114WS	DIGITAL TRANSISTOR	
	Q155	2SK301 (P. Q)	F. E. T.	
	Q161	DTA114YS	DIGITAL TRANSISTOR	
	Q162	DTC114ES	DIGITAL TRANSISTOR	
	Q195	2SK301 (P. Q)	F. E. T.	
	Q196	2SC3311A (Q, R)	SI. TRANSISTOR	
	Q811	2SK246 (BL)	F. E. T.	
	Q812	2SK246 (BL)	F. E. T.	
	Q813	2SA135B	SI. TRANSISTOR	
	Q814	2SC3421	SI. TRANSISTOR	
	Q815	2SC2546 (D, E)	SI. TRANSISTOR	
	Q816	2SA1084 (D, E)	SI. TRANSISTOR	
	Q821	2SB941A (P, Q)	SI. TRANSISTOR	
	Q822	2SC2546 (D, E)	SI. TRANSISTOR	
	Q823	DTC143TS	DIGITAL TRANSISTOR	

Δ	Item	Parts Number	Description	Area
	Q824	2SK246 (BL)	F. E. T.	
Δ	Q831	2SD2394 (E, F)	SI. TRANSISTOR	
	Q841	2SD1944 (J, K)	SI. TRANSISTOR	
	Q851	2SB1565 (E, F)	SI. TRANSISTOR	
	Q861	DTA124ES	DIGITAL TRANSISTOR	
	Q862	2SD2144S (VW)	SI. TRANSISTOR	
	Q863	2SD2144S (VW)	SI. TRANSISTOR	
	Q901	DTC144ES	DIGITAL TRANSISTOR	
	Q902	DTA114YS	DIGITAL TRANSISTOR	
	Q903	DTC114YS	DIGITAL TRANSISTOR	
	Q904	DTA114YS	DIGITAL TRANSISTOR	
		CAPACITORS		
	C101	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C102	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C103	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C104	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C105	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C106	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C107	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C121	EET2508-107ZE	100MF 25V E. CAP.	
	C131	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C132	QCS31HJ-561Z	560PF 50V CER. CAP.	
	C133	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C134	EETB1EM-106E	10MF 25V E. CAP.	
	C135	QCC11EM-223V	0.022MF 25V CER. CAP.	
	C136	QCT25CH-180Z	18PF 50V CER. CAP.	
	C137	QCT26CH-221	220PF 50V CER. CAP.	
	C138	QCT26CH-241	240PF 50V CER. CAP.	
	C140	QCC11EM-223V	0.022MF 25V CER. CAP.	
	C141	QCS31HJ-470Z	47PF 50V CER. CAP.	
	C142	QCY31HK-272Z	2700PF 50V CER. CAP.	
	C143	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C144	EETB1EM-106E	10MF 25V E. CAP.	
	C146	QCT25CH-680ZA	68PF 50V CER. CAP.	
	C147	QCT25CH-220Z	22PF 50V CER. CAP.	
	C148	QCT25CH-121	120PF 50V CER. CAP.	
	C149	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C150	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C151	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C152	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C153	QCC11EM-223V	0.022MF 25V CER. CAP.	
	C155	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C156	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C157	EETB1HM-474E	0.47MF 50V E. CAP.	
	C158	QCB1HK-101Y	100PF 50V CER. CAP.	
	C159	QCB1HK-101Y	100PF 50V CER. CAP.	
	C160	EFF001J-221	220P 150V FILM MICA CAP.	
	C161	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C162	EETB1EM-106E	10MF 25V E. CAP.	
	C163	QFP81HJ-332	3300PF 50V POLYPROP. FILM	
	C164	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C165	EETB1HM-474E	0.47MF 50V E. CAP.	
	C166	EETB1HM-225E	2.2MF 50V E. CAP.	
	C167	EETB1HM-225E	2.2MF 50V E. CAP.	
	C168	EETB1HM-475E	4.7MF 50V E. CAP.	
	C169	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C170	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C171	EETB1EM-106E	10MF 25V E. CAP.	
	C172	EETB1HM-475E	4.7MF 50V E. CAP.	
	C173	EFZ0101-223S	0.022MF 100V POLYPROP. FILM	
	C174	QFN31HJ-473ZN	0.047MF 50V MYLAR CAP.	
	C175	QTE1V06-106Z	10MF 35V AL E. CAP.	
	C176	QCY31HK-102Z	1000PF 50V CER. CAP.	
	C177	EFF001J-221	220P 150V FILM MICA CAP.	
	C178	EFF001J-221	220P 150V FILM MICA CAP.	
	C179	EFF001J-101	100P 150V FILM MICA CAP.	

■ Electrical Parts List (ENA-171)

△	Item	Parts Number	Description	Area
	C180	EFF001J-101	100P 150V FILM MICA CAP.	
	C181	EETB1EM-106E	10MF 25V E. CAP.	
	C182	EETB1HM-225E	2.2MF 50V E. CAP.	
	C183	EETB1HM-105E	1MF 50V E. CAP.	
	C184	EETB1HM-105E	1MF 50V E. CAP.	
	C185	EETB1HM-225E	2.2MF 50V E. CAP.	
	C186	EETB1HM-474E	0.47MF 50V E. CAP.	
	C187	QCZ0205-155	1.5MF 25V C. CAP.	
	C192	QCC31EM-473ZV	0.047MF 25V CER. CAP.	
	C193	QCS21HJ-180A	18PF 50V CER. CAP.	
	C194	QCS21HJ-180A	18PF 50V CER. CAP.	
	C195	QENB1HM-474	0.47MF 50V NP E. CAP.	
	C196	QCY31HK-102Z	1000PF 50V CER. CAP.	
	C197	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C198	EETB1CM-227E	220MF 16V E. CAP.	
	C199	EETC1EM-226ZE	22MF 25V E. CAP.	
	C200	QCF31HP-103Z	0.01MF 50V CER. CAP.	
	C301	EET5010-106ZE	10MF 50V E. CAP.	
	C302	EET5010-106ZE	10MF 50V E. CAP.	
	C303	QTE1V06-106Z	10MF 35V AL E. CAP.	
	C304	QTE1V06-106Z	10MF 35V AL E. CAP.	
	C305	EFZ0101-331S	330PF 100V POLYPROP. FILM	
	C306	EFZ0101-331S	330PF 100V POLYPROP. FILM	
	C307	QFLC1HJ-223ZM	0.022MF 50V METAL. NYLAR	
	C309	EET2508-476ZE	47MF 25V E. CAP.	
	C310	EET2508-476ZE	47MF 25V E. CAP.	
	C311	EET5010-225ZE	2.2MF 50V E. CAP.	
	C312	EET5010-225ZE	2.2MF 50V E. CAP.	
	C521	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C541	QCBB1HK-221Y	220PF 50V CER. CAP.	
	C542	QFLC1HJ-102ZM	1000PF 50V NYLAR CAP.	
	C811	EEW3506-228	2200MF 35V E. CAP.	
	C812	EEW3506-228	2200MF 35V E. CAP.	
	C813	EET2508-476ZE	47MF 25V E. CAP.	
	C814	EET2508-476ZE	47MF 25V E. CAP.	
	C815	EET2508-226ZE	22MF 25V E. CAP.	
	C816	EET2508-226ZE	22MF 25V E. CAP.	
	C821	EEW3507-688	6800MF 35V E. CAP.	
	C823	EET2508-476ZE	47MF 25V E. CAP.	
	C824	EET2508-226ZE	22MF 25V E. CAP.	
	C825	QFN82AJ-103	0.01MF 100V NYLAR CAP.	
	C826	EFZ0096-103	0.01MF 630V METAL. NYLAR	
	C831	EETB1HM-227E	220MF 50V AL E. CAP.	
	C832	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C833	EETB1CM-226E	22MF 16V E. CAP.	
	C834	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C835	EETB1CM-226E	22MF 16V E. CAP.	
	C841	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C842	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C843	EETB1CM-228E	2200MF 16V E. CAP.	
	C845	EETB1EM-106E	10MF 25V E. CAP.	
	C847	EETB1CM-226E	22MF 16V E. CAP.	
	C851	QFN82AJ-103	0.01MF 100V NYLAR CAP.	
	C852	QFN82AJ-103	0.01MF 100V NYLAR CAP.	
	C853	EETB1HM-227E	220MF 50V AL E. CAP.	
	C854	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C855	EETB1HM-226E	22MF 50V E. CAP.	
	C857	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C861	QFV81HJ-104	0.1MF 50V THIN FILM CAP.	
	C862	QFV81HJ-104	0.1MF 50V THIN FILM CAP.	
	C901	EETB1AM-476E	47MF 10V E. CAP.	
	C902	QCZ0205-155	1.5MF 25V C. CAP.	
	C903	EETB1EM-227E	220MF 25V E. CAP.	
	TC105	ENZ1003-006	TRIMMER CAPA	
	TC106	ENZ1003-006	TRIMMER CAPA	
		RESISTORS		
△	R101	QRD161J-102	1K 1/6W CARBON RES.	
	R102	QRD161J-331	330 1/6W CARBON RES.	
	R103	QRD161J-102	1K 1/6W CARBON RES.	
	R104	QRD161J-472	4.7K 1/6W CARBON RES.	
	R105	QRD161J-272	2.7K 1/6W CARBON RES.	
	R106	QRD161J-331	330 1/6W CARBON RES.	
	R107	QRD161J-331	330 1/6W CARBON RES.	
	R108	QRD161J-331	330 1/6W CARBON RES.	
	R111	QRD161J-331	330 1/6W CARBON RES.	
	R112	QRD161J-331	330 1/6W CARBON RES.	
	R121	QRD161J-472	4.7K 1/6W CARBON RES.	
	R123	QRD161J-472	4.7K 1/6W CARBON RES.	
	R131	QRD161J-331	330 1/6W CARBON RES.	
	R132	QRD161J-103	10K 1/6W CARBON RES.	
	R133	QRD161J-473	47K 1/6W CARBON RES.	
	R134	QRD161J-103	10K 1/6W CARBON RES.	
	R135	QRD161J-470	47 1/6W CARBON RES.	
	R136	QRD161J-103	10K 1/6W CARBON RES.	
	R141	QRD161J-472	4.7K 1/6W CARBON RES.	
	R142	QRD161J-331	330 1/6W CARBON RES.	
	R143	QRD161J-103	10K 1/6W CARBON RES.	
	R144	QRD161J-473	47K 1/6W CARBON RES.	
	R145	QRD161J-103	10K 1/6W CARBON RES.	
	R146	QRD161J-560	56 1/6W CARBON RES.	
	R147	QRD161J-103	10K 1/6W CARBON RES.	
	R148	QRD161J-103	10K 1/6W CARBON RES.	
	R150	QRD161J-622	6.2K 1/6W CARBON RES.	
	R151	QRD161J-224	220K 1/6W CARBON RES.	
	R152	QRD161J-222	2.2K 1/6W CARBON RES.	
	R153	QRD161J-103	10K 1/6W CARBON RES.	
	R154	QRD161J-103	10K 1/6W CARBON RES.	
	R155	QRD161J-562	5.6K 1/6W CARBON RES.	
	R156	QRD161J-822	8.2K 1/6W CARBON RES.	
	R158	QRD161J-183	18K 1/6W CARBON RES.	
	R159	QRD161J-561	560 1/6W CARBON RES.	
	R160	QRD161J-273	27K 1/6W CARBON RES.	
	R161	ERD141J-224S	220K 1/4W CARBON RES.	
	R162	ERD141J-224S	220K 1/4W CARBON RES.	
	R163	QRD141J-332S	3.3K 1/4W CARBON RES.	
	R164	QRD141J-332S	3.3K 1/4W CARBON RES.	
	R165	QRD141J-334S	330K 1/4W CARBON RES.	
	R166	QRD141J-334S	330K 1/4W CARBON RES.	
	R168	QRD161J-103	10K 1/6W CARBON RES.	
	R169	QRD161J-103	10K 1/6W CARBON RES.	
	R170	QRD161J-102	1K 1/6W CARBON RES.	
	R171	QRD141J-332S	3.3K 1/4W CARBON RES.	
	R172	QRD141J-332S	3.3K 1/4W CARBON RES.	
△	R175	QRZ0077-470	47 1/4W FUSIBLE RES.	
△	R190	QRZ0077-680	68 1/4W FUSIBLE RES.	
	R191	QRD161J-222	2.2K 1/6W CARBON RES.	
	R192	QRD161J-181	180 1/6W CARBON RES.	
	R193	QRD161J-472	4.7K 1/6W CARBON RES.	
	R194	QRD161J-472	4.7K 1/6W CARBON RES.	
	R195	QRD161J-222	2.2K 1/6W CARBON RES.	
	R196	QRD161J-222	2.2K 1/6W CARBON RES.	
	R197	QRD161J-822	8.2K 1/6W CARBON RES.	
	R198	QRD161J-473	47K 1/6W CARBON RES.	
	R199	QRD161J-472	4.7K 1/6W CARBON RES.	
	R301	ERD141J-104SY	100K 1/4W CARBON RES.	
	R302	ERD141J-104SY	100K 1/4W CARBON RES.	
	R303	ERD141J-104SY	100K 1/4W CARBON RES.	
	R304	ERD141J-104SY	100K 1/4W CARBON RES.	
	R307	ERD141J-221S	220 1/4W CARBON RES.	
	R308	ERD141J-221S	220 1/4W CARBON RES.	
△	R309	QRZ0077-100	10 1/4W FUSIBLE RES.	
△	R310	QRZ0077-100	10 1/4W FUSIBLE RES.	

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■ Electrical Parts List (ENA-171)

△	Item	Parts Number	Description	Area
	R521	QRD161J-103	10K 1/6W CARBON RES.	
	R541	QRD161J-101	100 1/6W CARBON RES.	
	R542	QRD161J-221	220 1/6W CARBON RES.	
△	R811	QRZ0077-100	10 1/4W FUSIBLE RES.	
△	R812	QRZ0077-100	10 1/4W FUSIBLE RES.	
	R813	QRV144F-1001	1K 1/4W CONST.METAL	
	R814	QRV144F-1001	1K 1/4W CONST.METAL	
	R815	ERD141J-821S	820 1/4W CARBON RES.	
	R816	ERD141J-821S	820 1/4W CARBON RES.	
	R817	QRZ0110-470X	47 1/4W FUSIBLE RES.	
	R818	QRZ0110-470X	47 1/4W FUSIBLE RES.	
△	R821	QRZ0077-4R7	4.7 1/4W FUSE RESISTO	
	R822	ERD141J-821S	820 1/4W CARBON RES.	
△	R823	QRV144F-9100	910 1/4W M.F. RES.	
	R824	QRZ0110-470X	47 1/4W FUSIBLE RES.	
	R825	QRD161J-221	220 1/6W CARBON RES.	
△	R831	QRZ0077-100	10 1/4W FUSIBLE RES.	
	R832	QRD161J-222	2.2K 1/6W CARBON RES.	
	R841	QRZ0077-220X	22 1/4W FUSIBLE RES.	
	R842	QRD161J-102	1K 1/6W CARBON RES.	
△	R851	QRZ0077-100	10 1/4W FUSIBLE RES.	
	R852	QRD14CJ-102SX	1K 1/4W UNF. CARBON R	
	R861	QRD161J-123	12K 1/6W CARBON RES.	
	R862	QRD161J-123	12K 1/6W CARBON RES.	
	R863	QRD161J-122	1.2K 1/6W CARBON RES.	
	R864	QRD161J-122	1.2K 1/6W CARBON RES.	
	R901	QRD161J-224	220K 1/6W CARBON RES.	
	R902	QRD161J-221	220 1/6W CARBON RES.	
	R903	QRZ0077-121X	120 1/4W FUSIBLE RES.	
	R904	QRZ0077-121X	120 1/4W FUSIBLE RES.	
	R905	QRD161J-100	10 1/6W CARBON RES.	
	VR149	QVPA601-503A	50K TRIMMER RES.	
	VR167	QVPA601-104A	100K TRIMMER RES.	
		OTHERS		
		EMW10597-002	PRINTED BOARD	
		E3400-431	FELT SPACER	
		E409516-001	ACETATE TAPE	
		E409516-002	ACETATE TAPE	
		E70306-001	HEAT SINK	
		E70306-002	HEAT SINK	
		E70945-H35	HEAT SINK	
		QWE356-06BB	VINYL WIRE	
		SBSG3008CC	TAPPING SCREW	
△	J001	QMCB001-E02H	AC SOCKET	
	J301	EMN00YV-219A	PIN JACK	
	J541	QMS3501-020	PIN JACK	
	K101	ENZ8101-008	INDUCTOR	
	K102	ENZ8101-008	INDUCTOR	
	K103	ENZ8101-008	INDUCTOR	
	K104	ENZ8101-008	INDUCTOR	
	K105	ENZ8101-008	INDUCTOR	
	K106	ENZ8101-008	INDUCTOR	
	K107	ENZ8101-008	INDUCTOR	
	K108	ENZ8101-008	INDUCTOR	
	L106	EQL3001-102K	INDUCTOR	
	L191	EQL4007-1R0	INDUCTOR	
	L192	EQL4007-1R0	INDUCTOR	
	S531	QSS1001-E02A	SLIDE SWITCH	
	T101	EQR1111-014	RF COIL	
	T102	EQR1310-005	RF COIL	
	T103	EQR1207-015	RF COIL	
	T104	EQR1307-009	RF COIL	
	T105	EQT2140-012	I. F. TRANSFORMER	
	T106	EQT2140-013	I. F. TRANSFORMER	
	T107	ECB1560-012	CERAMIC FILTER	
	X102	ECX0007-200KC	CRYSTAL	

△	Item	Parts Number	Description	Area
	X103	ECX0000-456KR	CERAMIC RESONATOR	
	AT101	EMB41YV-301K	ANTENNA TERMINAL	
	CB001	EMV7145-003Z	SOCKET ASSY	
	CB503	EMV7145-003Z	SOCKET ASSY	
	CF101	ECB2125-003R	CERAMIC FILTER	
	CF102	ECB2125-003R	CERAMIC FILTER	
	CF103	ECB2123-005R	CERAMIC FILTER	
	CN101	EWS293-0130	SOCKET WIRE	
	CN111	EMV5109-003A	CONNECTOR	
	CN504	EMV5111-002	CONNECTOR	
	CN506	VMC0163-013	CONNECT TERMINAL	
	EP101	EMZ4002-001Z	EARTH PLATE	
	EP102	EMZ4002-001Z	EARTH PLATE	
	EP104	EMZ4002-001Z	EARTH PLATE	
	EP105	EMZ4002-001Z	EARTH PLATE	
	FL102	EQF0102-001	LOWPASS FILTER	
	FL103	EQF0101-011	LOWPASS FILTER	
	FL104	EQF0101-011	LOWPASS FILTER	
	FW001	EWR36B-15LST	FLAT WIRE ASSY	
	RF101	EAF2203-003	FM TUNER	
	RY161	ESK5D24-220A	RELAY	
	RY901	ESK5D24-220A	RELAY	
	WRO01	QWE881-20RR	VINYL WIRE	
	WRO02	QWE886-20RR	VINYL WIRE	
	WRO03	QWE884-28RR	VINYL WIRE	
	WRO04	QWE880-26RR	VINYL WIRE	
	WRO05	QWE882-28RR	VINYL WIRE	

FX-SD1GD

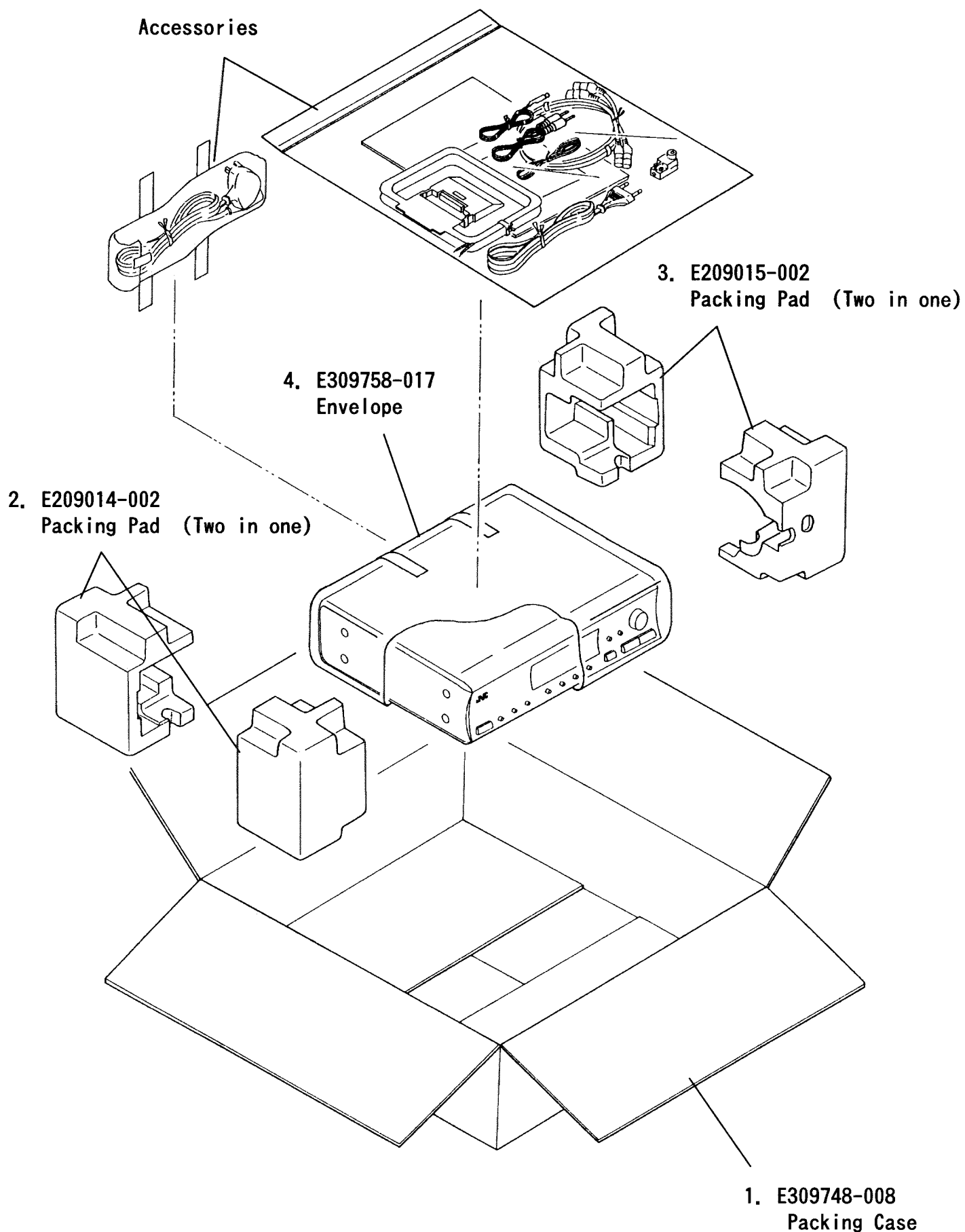
Accessories List

Block No. **M2MM**

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	E30580-2395A	INSTRUCTION BOOK	1		
	2	E309802-001	ENVELOPE	1		
△	3	QMP39F0-183E	POWER CORD	1		EN
△	3	QMP5520-1835BS	POWER CORD	1		BS
	4	E300196-172	ENVELOPE	1		BS
	5	EWP805-012	PLUG WIRE ASSY	1		
	6	EWP302-020	SIGNAL CORD	1		
	7	EQB4001-015	LOOP ANTENNA	1		
	8	E03614-004	FM FEEDER ANTENNA	1		
	9	EMZ2001-012	ADAPTOR PLUG	1		
	10	E43486-340A	SAFETY SHEET	1		BS
	11	BT-54003-1	WARRANTY CARD	1		BS
	12	BT-20066A	DISTRIBUTOR LIST	1		BS

Packing Materials and Part Numbers

Block No. **M3MM**



JVC

VICTOR COMPANY OF JAPAN, LIMITED

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

