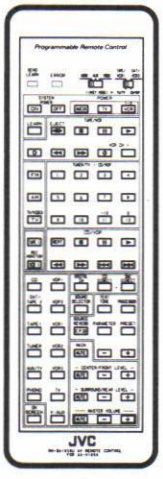
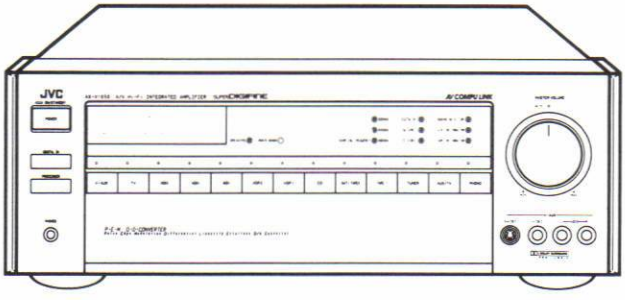
JVC

SERVICE MANUAL

STEREO AMPLIFIER

AX-V1050TN
AX-V1050PTN





AV COMPU LINK

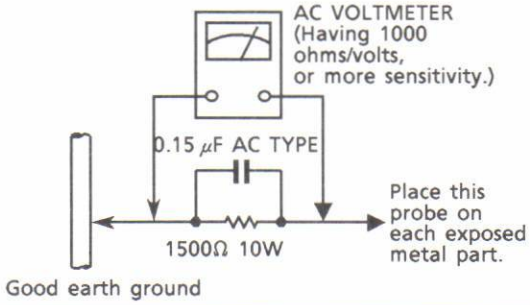
COMPU LINK
Remote
Control Component

Contents

No.20276
Sep. 1991

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 repalcement 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 currnet 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, contorl 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 meausre 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.).

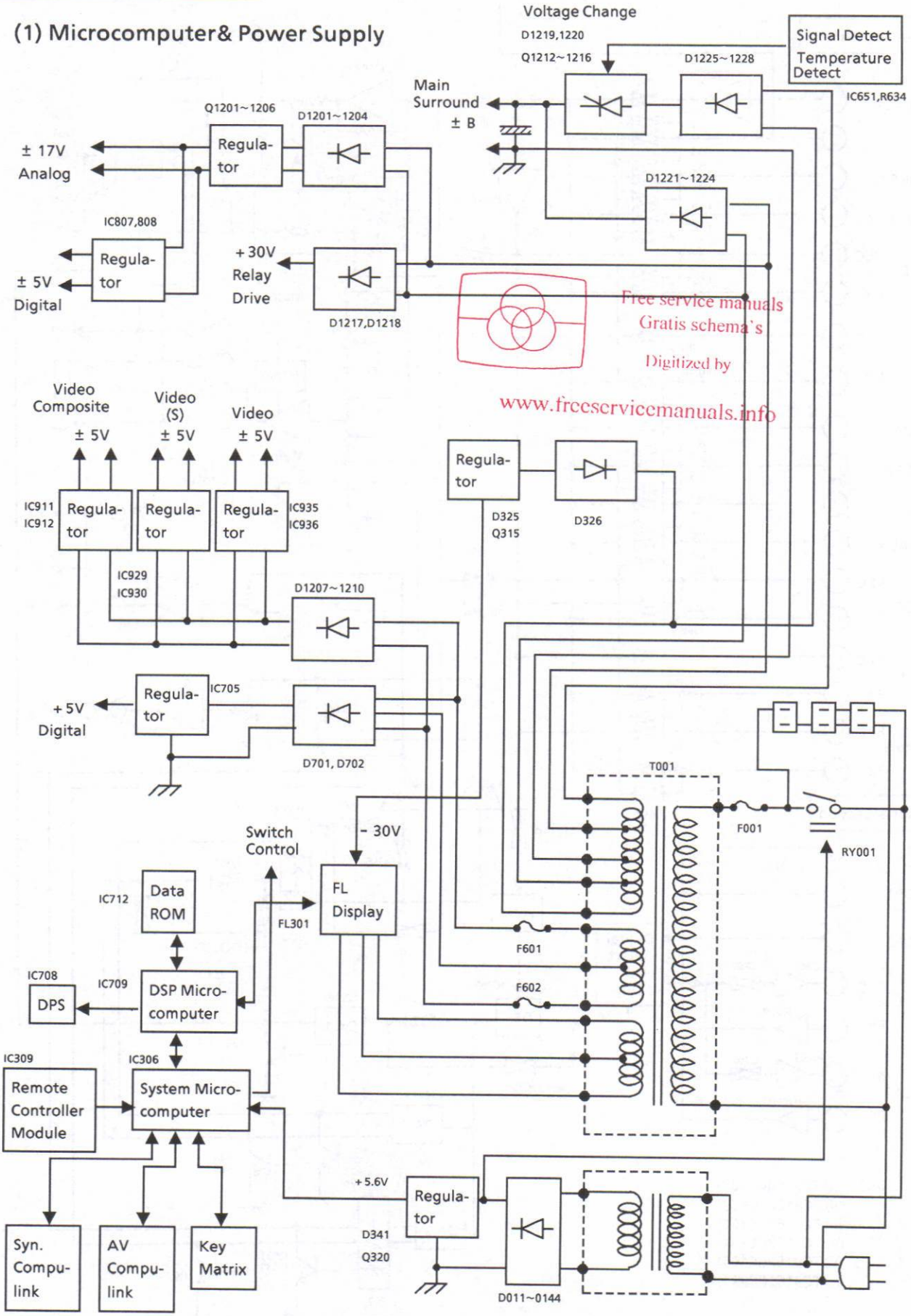


Warning

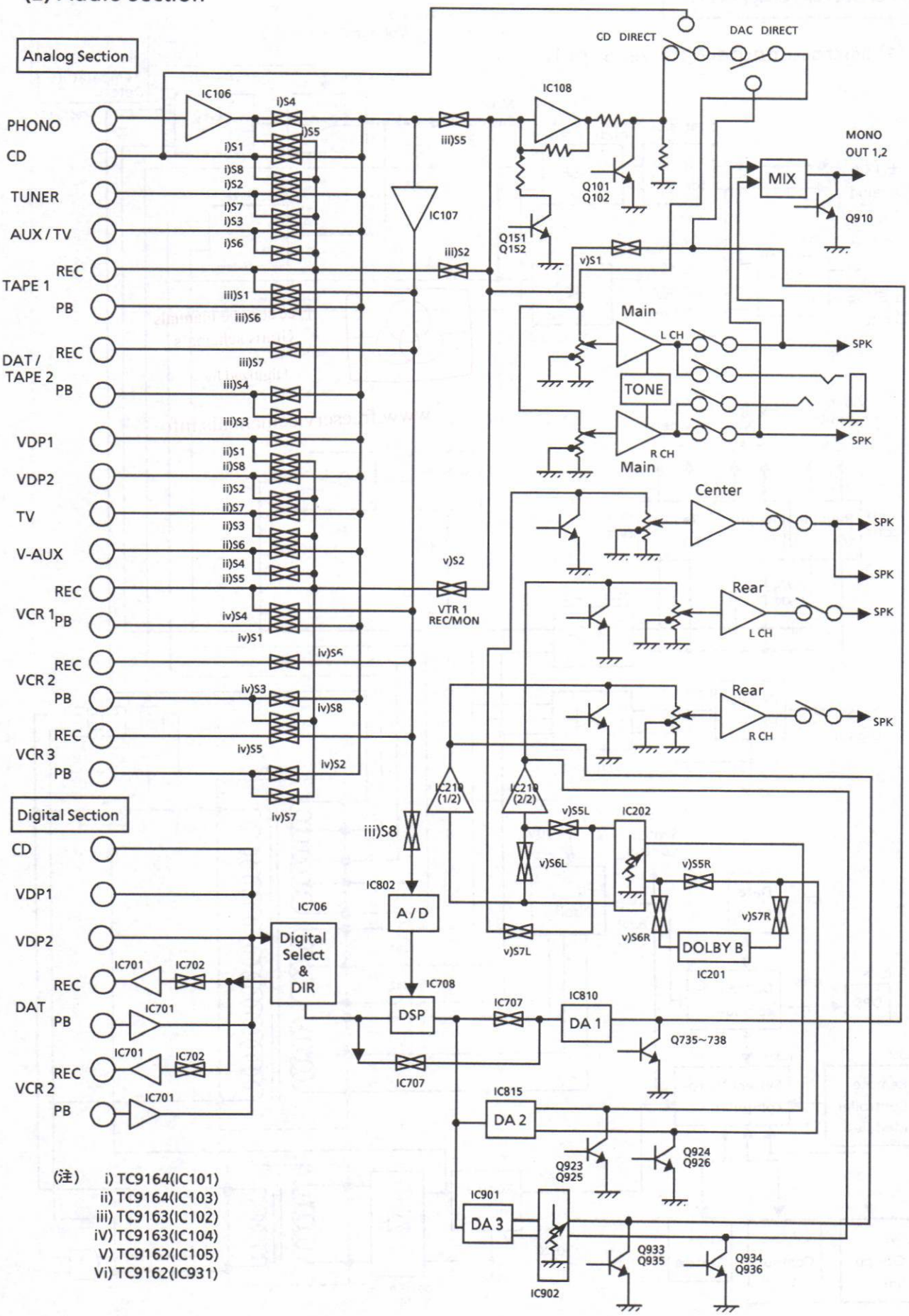
1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety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

Block Diagrams

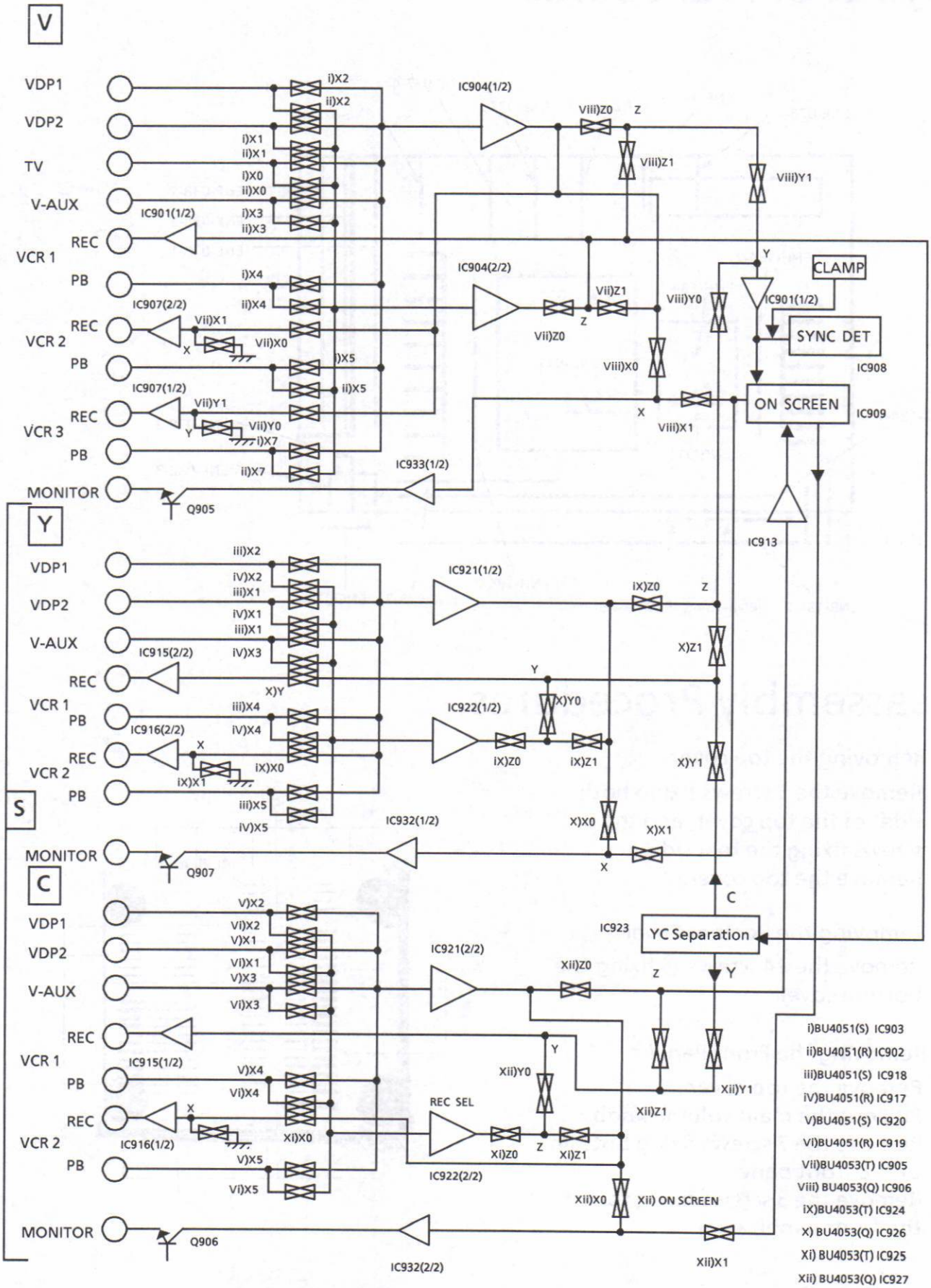
(1) Microcomputer& Power Supply



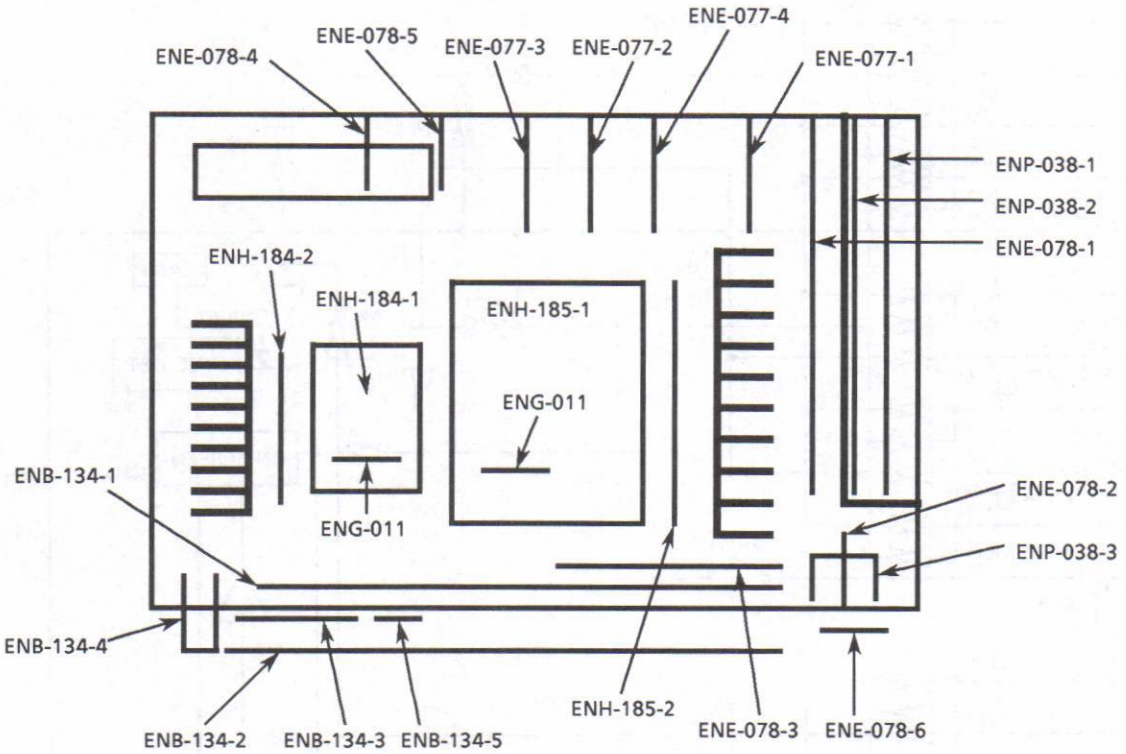
(2) Audio Section



(3) Video Section



Layout of P.C. Boards



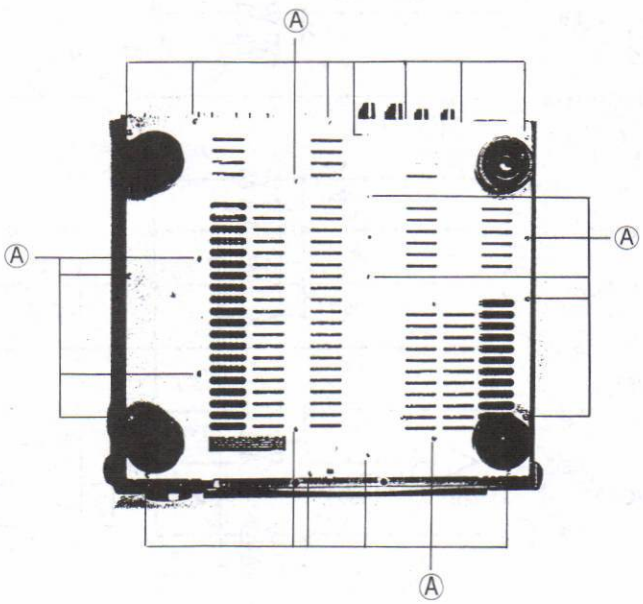
Disassembly Procedures

(1) Removing the top cover

1. Remove the 3 screws fixing both sides of the top cover, and the 3 screws fixing the rear side.
2. Remove the top cover.

(2) Removing the Bottom Cover

1. Remove the 24 screws Ⓐ fixing the bottom cover.

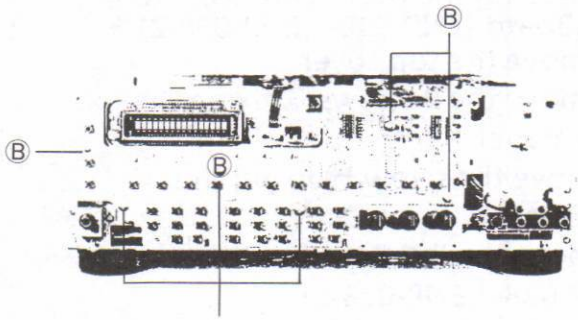


(3) Removing the Front Panel

1. Remove the top cover .
2. Pull out the main volume knob.
3. Remove the 7 screws fixing bottom of the front panel.
4. Remove the 3 screws fixing top of the front panel.

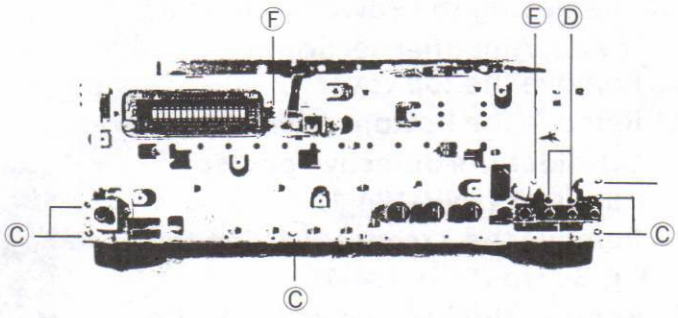
(4) Removing the Key Input P.C.Board. (ENB-134-2)

1. Remove the top cover .
2. Remove the front panel.
3. Remove the 6 screws Ⓑ fixing the P.C.Board(ENB-134-2).



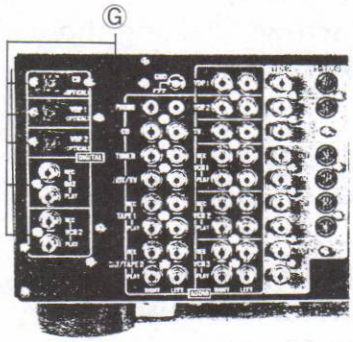
(5) Removing the System Control P.C. Board.(ENB-134-1)

1. Remove the top cover .
2. Remove the front panel.
3. Remove the 3 plastic rivet fixing the P.C.Board(ENB-134-1).



(6) Removing the Tone & Balance P.C. Board.(ENE-078-3)

1. Remove the top cover .
2. Remove the front panel.
3. Remove the bottom cover.
4. Remove the key input P.C. Board. (ENB-134-2)
5. Remove the tone&balance volume knob.
6. Remove the 3 nut fixing the tone& balance volume.
7. Remove the 5 screws Ⓒ fixing the front bracket.

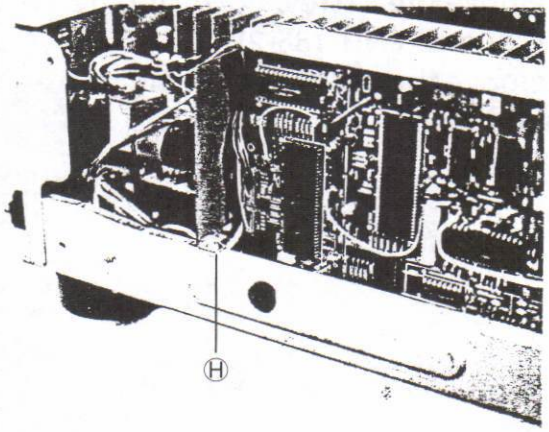


(7) Removing the Front Input P.C.Board.

1. Remove the top cover .
2. Remove the front panel.
3. Remove the 2 screws Ⓓ fixing the P.C.Board.(ENP-038-3)
4. Remove the 2 screws Ⓔ fixing the earth wire.

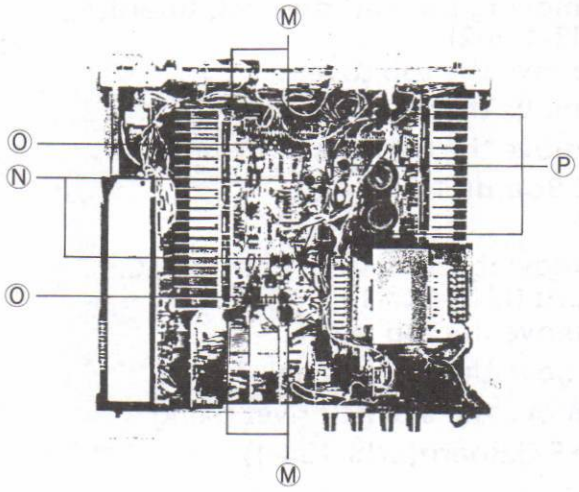
(8) Removing the FL P.C. Board.

1. Remove the top cover .
2. Remove the front panel.
3. Remove the 3 plastic rivet fixing the P.C.Board.(ENB-134-1)
4. Remove the 2 plastic rivet Ⓕ fixing the P.C.Board.(ENB-134-3)



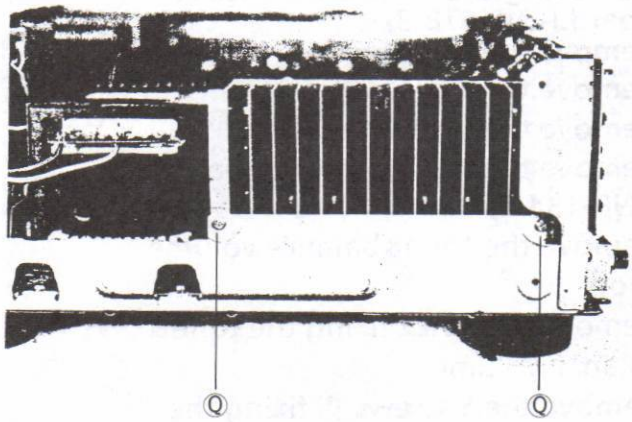
(9) Removing the Digital Input&DAC P.C.Board.(ENP-038-1,ENP-038-2)

1. Remove the top cover .
2. Remove the 9 screws Ⓖ fixing the rear panel.
3. Remove the screw Ⓗ fixing the bracket .
4. Remove the P.C.Board. (ENP-038-1,ENP-038-2)



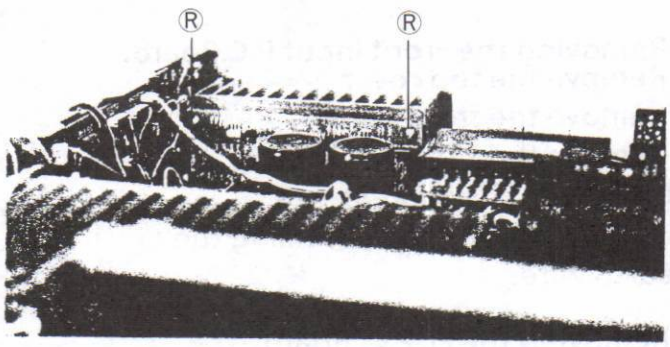
(10) Removing the Power Transistor. (Main Amplifier Section)

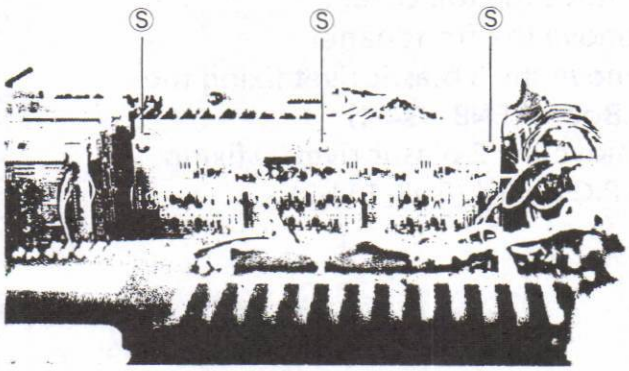
1. Remove the top cover .
2. Remove the bottom cover.
3. Unsolder the defective power transistor.(ENH-184-1)
4. Remove the 3 screws Ⓟ fixing the P.C.Board.(ENH-184-1)
5. Remove the 2 screws Ⓡ fixing the P.C.Board.(ENH-184-2)
6. Remove the 2 screws Ⓠ fixing the heat sink bracket.



(11) Removing the Power Transistor. (Rear & Center Amplifier Section)

1. Remove the top cover .
2. Remove the bottom cover.
3. Unsolder the defective power transistor.(ENH-185-1)
4. Remove the 4 screws Ⓝ,Ⓞ fixing the P.C.Board.(ENH-185-1)
5. Remove the 3 screws Ⓢ fixing the P.C.Board.(ENH-185-2)
6. Remove the 4 screws Ⓜ fixing the heat sink bracket.



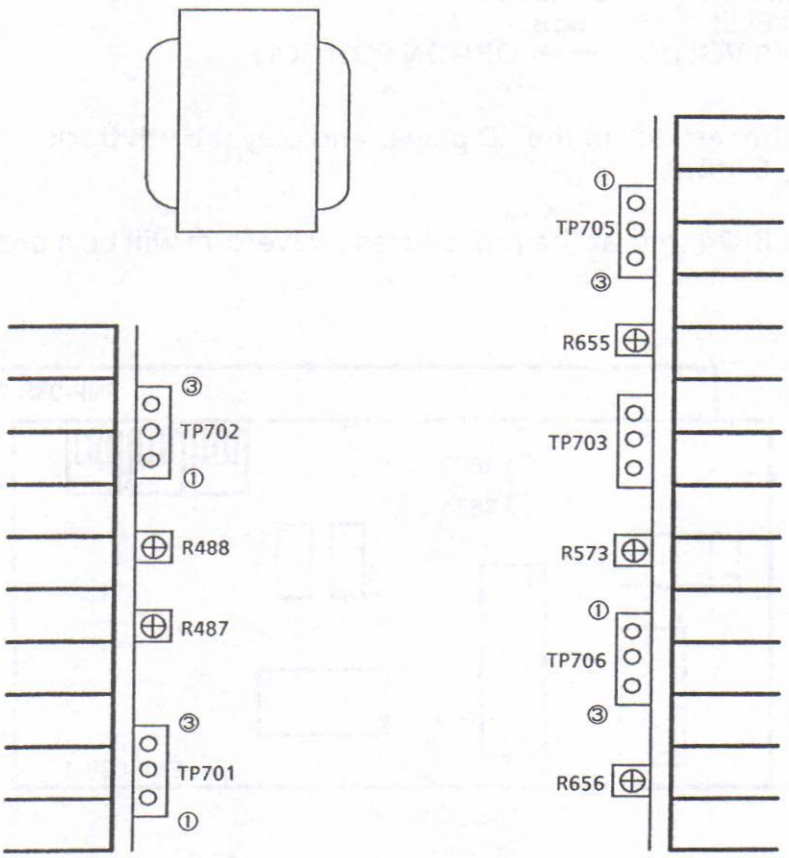


Idling Adjustment

1. Main Amplifier Section
1) Rotate idling VRs (R487,R488)fully counterclockwise.
2) Adjust R487(L-channel)and R488(R-channel)until the voltage between pins ①and ② of TP701(for the L-channel) and pins ①and ② of TP702 (for the R-channel)is 10mV when stabilized(after 10 minutes).

2. Center Amplifier Section
1) Rotate idling VRs (R573)fully counterclockwise.
2) Adjust R573 until the voltage between pins ①and ② of TP703 is 10mV when atabilized(after 10 minutes).

3. Rear Amplifier Section
1) Rotate idling VRs (R655,R656)fully counterclockwise.
2) Adjust R655(L-channel)and R656(R-channel)until the voltage between pins ①and ② of TP705(for the L-channel) and pins ①and ② of TP706 (for the R-channel)is 10mV when stabilized(after 10 minutes).



D/A Converter Adjustment

(MSB Adjustment)

1. Connect the digital output of a CD player (such as the XL-Z1050TN) to the digital input jack of this unit,and also connect the oscilloscope to the "speaker terminal 1" jacks.

2. Set the function of amplifier device.
1) DIGITAL IN
2) PROCESSOR → DOLBY PRO LOGIC
3) CENTER LELEL → +6dB
4) MASTER VOLUME → OPTION POSITION

3. Load the test disc in the CD player,and play the 9th track (1KHz,-60dB)

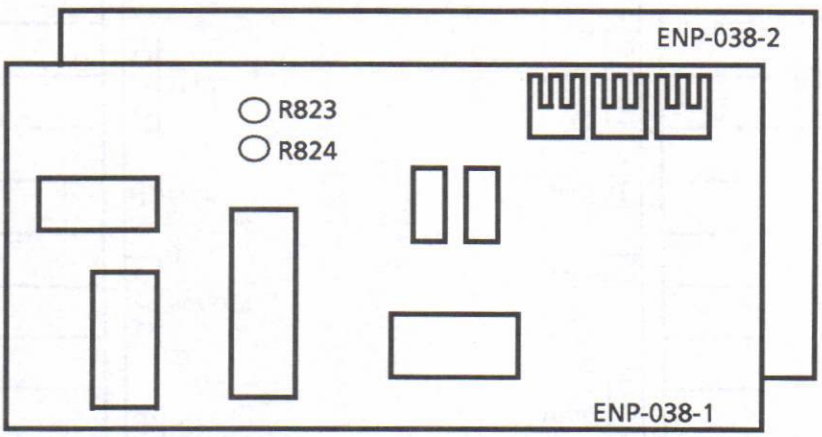
4. Adjust R823 so that the reproduced ,waveform will be a proper sine wave.

5. Connect the oscilloscope to the R-channel of rear speaker terminal.

6. Set the function of amplifier device.
1) DIGITAL IN
2) PROCESSOR → STADIUM
3) REAR LELEL → +6dB
4) MASTER VOLUME → OPTION POSITION

7. Load the test disc in the CD player,and play the 9th track (1KHz,-60dB)

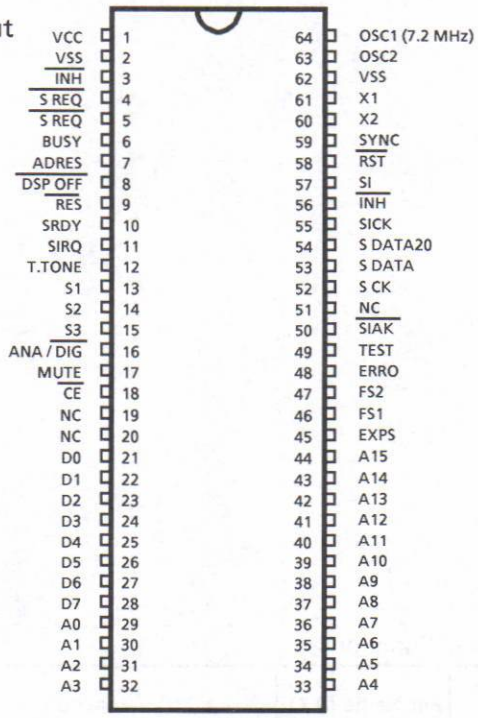
8. Adjust R824 so that the reproduced ,waveform will be a proper sine wave.



Description of Major ICs

■ MN17581JNO (IC 709)
:DSP Control Microcomputer

(1)Terminal Layout



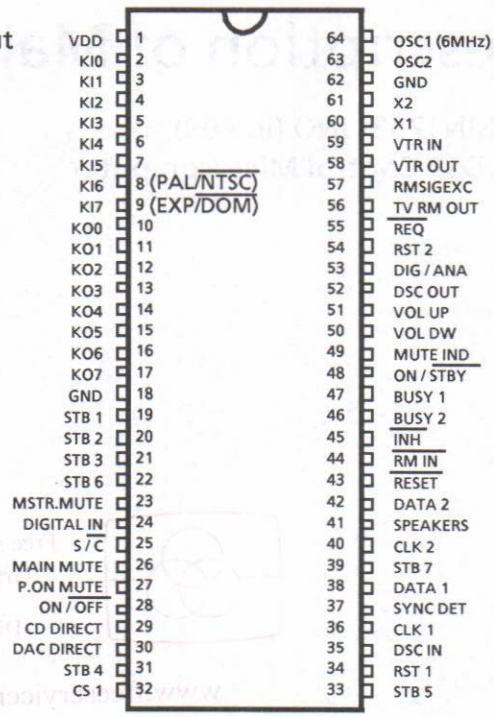
(2) Pin Functions

Pin No.	Pin Name	I/O	Function
1	VCC	—	Power supply voltage(5V)
2	VSS	—	GND
3	INH	I	INH signal input.
4,5	S REQ	I	System request signal input.
6	BUSY	O	System busy signal output.
7	ADRES	O	ANA/DIG reset output.
8	DSP OFF	O	DSP OFF signal output.
9	RES	O	DSP reset signal output.
10	SRDY	O	SRDY signal output.
11	SIRQ	O	Request signal output.
12	T.TONE	O	Not used.
13~15	S1~S3	I	Signal input.
16	ANA/DIG	I	ANA/DIG change signal input.
17	MUTE	O	Mute signal output.
18	CE	O	Chip select signal output.
19	DAP	O	"H" with DAP.
20	NC	—	Not used.
21~28	D0~D7	I	EP ROM data input.
29~43	A0~A14	O	EP ROM address output.
44	A15	O	Not used.
45	EXPS	I	Pull up.

Pin No.	Pin Name	I/O	Function
46	FS1	I	Sampling input.
47	FS2	I	Sampling input.
48	ERRO	I	Sampling error signal input.
49	TEST	I	GND.
50	SIAK	I	SIAK signal input.
51	EMPH	I	Emphasis signal input.
52	SCK	I	Clock signal input.
53	S DATA	I	Data signal input.
54	S DATA 20	I	Not used.
55	SICK	O	Serial clock output.
56	INH	I	INH signal input.
57	SI	O	Serial data output.
58	RST	I	Reset signal input.
59	SYNC		Not used.
60	X2	O	Not used.
61	X1	I	Not used,
62	VSS	—	GND
63	OSC2		7.2MHz clock oscillator.
64	OSC1		7.2MHz clock oscillator.

■ MN171602JPE (IC 306)
:System Control Microcomputer

(1)Terminal Layout



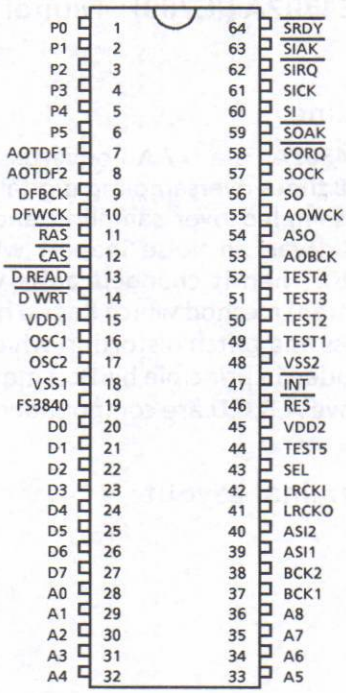
(2) Pin Functions

Pin No.	Pin Name	I/O	Function
1	V_{DD}	—	Power supply voltage(5V)
2~9	KI0~KI7	I	Key matrix input.
10~17	KO0~KO7	O	Key matrix output.
18	GND	—	GND
19	STB 1	O	Strobe signal to IC102,IC105.
20	STB 2	O	Strobe signal to IC103,IC104.
21	STB 3	O	Strobe signal output.
22	STB 6	O	Strobe signal to IC202.
23	MASTER MUTE	O	Master mute signal output.
24	DIGITAL IN	O	Indicator signal output.
25	S/C	O	ON SCREEN signal change output.
26	MAIN MUTE	O	Main mute signal output.
27	P.ON MUTE	O	Power on mute signal output.
28	ON /OFF	O	Power on/off signal output.
29	CD DIRECT	O	Indicator signal output.
30	DAC DIRECT	O	Indicator signal output.
31	STB 4	O	Strobe signal to IC302,IC303.
32	CS1	O	Chip select signal to IC308.
33	STB 5	O	Strobe signal to IC909.
34	RST1	O	Reset signal output.
35	DCS IN	I	DCS signal input.
36	CLK1	O	Clock signal output.
37	SYNC DET	I	Sync signal detect input.
38	DATA1	O	Data signal output.
39	STB7	O	Strobe signal to IC902.
40	CLK2	O	Clock signal output.

Pin No.	Pin Name	I/O	Function
41	SPEAKERS	O	Indicator signal output.
42	DATA2	O	Data signal output.
43	RESET	I	Reset signal input.
44	RM IN	I	RM signal input.
45	INH	I	INH signal input.
46	BUSY2	O	Busy signal to IC909.
47	BUSY1	O	Busy signal to IC709.
48	ON /STBY	O	Indicator signal output.
49	MUTE IND	O	Indicator signal output.
50	VOL DW	O	Volume down signal output.
51	VOL UP	O	Volume up signal output.
52	DCS OUT	O	DCS signal output.
53	DIG/ANA	O	DIG/ANA change signal output.
54	RST2	O	Reset signal output.
55	REQ	O	REQ signal output.
56	TVRM OUT	O	TVRM signal output.
57	RMSIG EXC	O	RM signal exchange output.
58	VCR OUT	O	AV compulink output.
59	VCR IN	I	AV compulink input.
60	X1	I	Not used.
61	X2	O	Pull up.
62	GND	—	GND
63	OSC2		6MHz clock oscillator.
64	OSC1		6MHz clock oscillator.

■ LC8301A (IC708)
: DSP (Digital Signal Processor)

(1)Terminal layout



(2) Pin functions

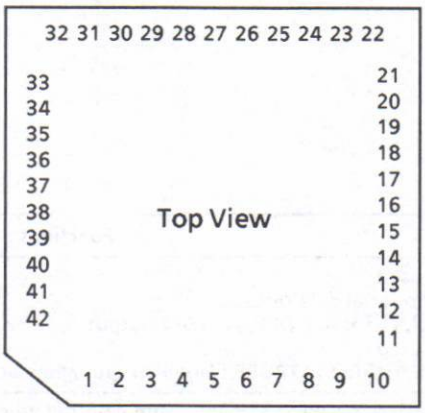
Pin No.	Symbol	I/O	Functions
1~6	P0~P5	I/O	Not used
7,8	AOTDF1 / AOTDF2	O	Audio serial data output.
9	DFBCK	O	Bit clock for AOTDF1 / AOTDF2 output.
10	DFWCK	O	Not used
11	RAS	O	ROW ADDRESS STROBE : Signal output when accessing external D-RAM.
12	CAS	O	COLUMN ADDRESS STROBE : Signal output when accessing external D-RAM.
13	D READ	O	Data read signal output when accessing external D-RAM.
14	D WRT	O	Data write signal output when accessing external D-RAM.
15,45	VDD	---	Power supply (+5V)
16	OSC1	I	External clock input. (384fs)
17	OSC2	O	Not used
18,48	VSS	---	Ground
19	FS384O	O	384fs output
20~27	DO~D7	I/O	Data input / output between external D-RAM and these pins.
28~36	A0~A8	O	Address output for external D-RAM.
37	BCK1	I	Bit clock for ASI 1 input.
38	BCK2	I/O	Bit clock for ASI 2 input.
39	ASI 1	I	Audio data input
40	ASI 2	I	Audio data input
41	LRCKO	O	L/R channel selectable signal output.(L:R-ch , H:L-ch)
42	LRCKI	I	L/R channel selectable signal input.(L:R-ch , H:L-ch)
43	SEL	I	Oscillator selectable signal input. (L:external , H:internal)
44	TEST 5	O	Output for TEST.
46	RES	I	Reset input
47	INT	I	Interrupt request signal input.
49~52	TEST1~TEST4	I	Input for test. Connect to ground.
53	AOBCK	O	Bit clock for ASO output
54	ASO	O	Audio data output
55	AOWCK	O	Not used
56	SO	O	Not used
57	SOCK	I	Not used
58	SORQ	I	Request signal input for output
59	SOAK	O	Not used
60	SI	I	Serial data input from control micro computer.
61	SICK	I	Serial clock input for SI input.
62	SIRQ	I	Request signal input for serial input.
63	SIAK	O	Signal output which indicates that the serial input is on the execution.
64	SRDY	I	Ready signal input which indicates that the serial data input from control micro computer is an end.

■ JCE4302A (IC703): Digital filter and D / A Converter

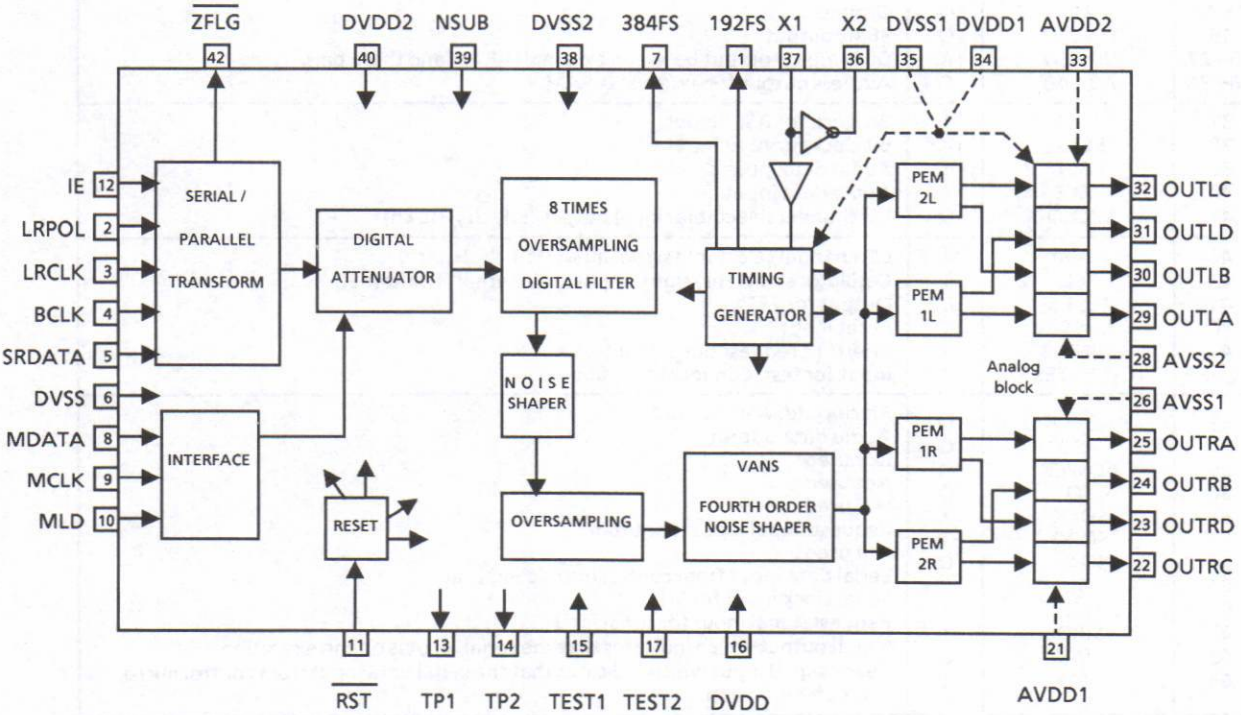
1. Outline

The JCE4302A is a D / A Converter IC with good linearity and high resolution more than 20 bits , and built-in 8 times oversampling digital filter and noise shaping DAC.High resolution data from digital filter is once sampled over sampling and compressed by unsturated fourth order noise shaper for VANS (Victor Adcvanced Noise Shaper) ,while repress quantization noise of audio range at non problem level (– 120dB). Then it changed pulse wave (A,B,C,D) at changing for crystal clock by PEM(Pulse Edge Moduration) method which has no high frequency distortion, and directly transform to analog signal.
Zero cross and glitch distortion which were generated at rather type DAC are bad for quality; and they are excluded in principle by 1 bit movement of pulse wave so that correct linearity is obtainable.
Pulse wave A,B,C,D are compounded at external, and become analog signals which is faithful to input.

2. Terminal Layout



3. Internal Block Diagram



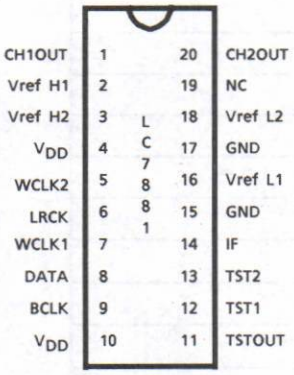
4. Terminal Function

Pin No.	Symbol	I/O	Active	Function
1	192FS	O		192fs output pin.
2	LRPOL	I	H	Lch / Rch switching pin.(H: When LRCLK is H, SRDATA is L-ch)
3	LRCLK	I		L / R switching signal of SRDATA.
4	BCLK	I		Bit transfer instruction input. (bit transfer at rise)
5	SRDATA	I		Serial data input.
6	DVSS	—		Digital system ground pin.
7	384FS	O	—	384fs output pin.(Not used)
8	MDATA	I	L	Microprocessor command input pin. (Connect to GND)
9	MCLK	I	H	Microprocessor clock input pin. (bit transfer at rise)
10	MLD	I	H	Latch signal of MDATA.
11	$\overline{\text{RST}}$	I	L	Reset signal input pin.
12	IE	I	L	Changing the format of SRDATA. (Connect to GND)
13	TP1	O	—	Digital filter test outpit pin 1. (Not used)
14	TP2	O	—	Digital filter test outpit pin 2. (Not used)
15	TEST1	I	L	Digital filter test input pin 1. (Connect to GND)
16	DVDD	—	H	Digital system power supply pin. (common fixed electrical potential pin)
17	TEST2	I	L	Digital filter test signal input pin 2.(Connect to GND)
18	NC		—	(Not used)
19	NC		—	(Not used)
20	NC		—	(Not used)
21	AVDD1	—		Analog system power supply pin.(Rch)
22	OUT RC	O		Rch output C.
23	OUT RD	O		Rch output D.
24	OUT RB	O		Rch output B.
25	OUT RA	O		Rch output A.
26	AVSS1	—		Analog system ground. (Rch)
27	NC		—	(Not used)
28	AVSS2	—		Analog system ground. (Lch)
29	OUT LA	O		Lch output A.
30	OUT LB	O		Lch output B.
31	OUT LD	O		Lch output D.
32	OUT LC	O		Lch output C.
33	AVDD2	—		Analog system power supply pin.(Lch)
34	DVDD1	—		Digital system power supply pin.(timming generator section)
35	DVSS1	—		Digital system ground.(timming generator section)
36	X2	O	—	X'tal oscillator pin.(Not used)
37	X1	I		X'tal oscillator pin. (384fs = 16.9344MHz)
38	DVSS2	—		Digital system ground.
39	NSUB	—	H	Connects to D-Vdd.(silicon substrate fixed electrical potential pin)
40	DVDD2	—		Digital system power supply pin.
41	NC		—	(Not used)
42	$\overline{\text{ZFLG}}$	O		Detect the input data "0". (When input data is "0", ZFLG is L.)

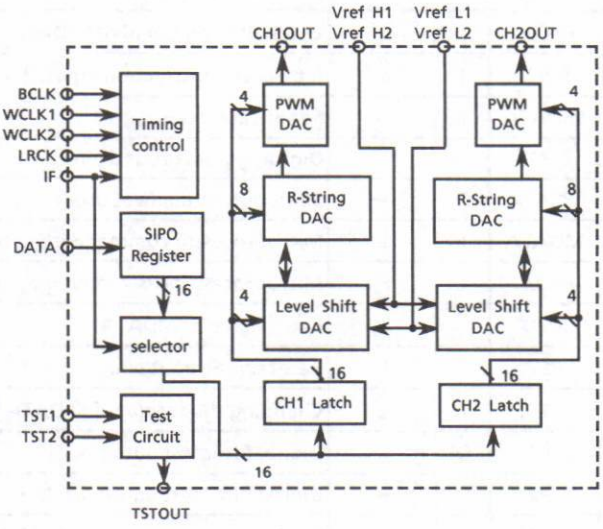
("—" is open)

■ LC7881-C (IC901): D/A converter

1. Terminal Layout



2. Block Diagram



3. Pin Functions

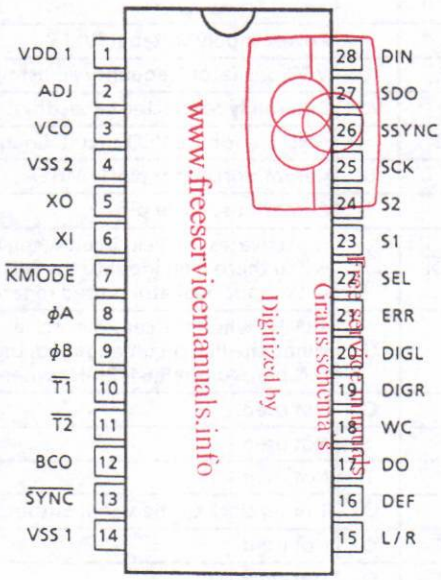
Pin No	Symbol	I/O	Functions and Operations
1	CH1 OUT	O	Channel 1 Output pin.
2	Vref H1	I	Reference voltage "H" input pin1.
3	Vref H2	I	Not used.
4	V_{DD}	—	Power supply, +5V.
5	WCLK2	I	Word clock 2 input pin. When IF pin is at high level, WCLK2 pin should be set at low level. When IF pin is at low level, this generates the internal signal used to latch the CH1 data of the digital audio signal, using the falling edge of WCLK2.
6	LRCK	I	LR clock input pin. This shows the CH1 and CH2 of the input digital audio data. When LRCK is at high level, it corresponds to CH1 data. When LRCK is at low level, it corresponds to CH2 data.
7	WCLK1	I	Word clock 1 input pin. When IF pin is at high level, this pin generates the internal signal used to latch both the CH1 and CH2 data, using the falling edge of WCLK1. When IF pin is at low level, it generates the internal signal used to latch the CH2 data.
8	DATA	I	Digital audio data input pin. When IF pin is at high level, the data signal is input by each bit serially from the MSB. When IF pin is at low level, the data signal is input by each bit serially from the LSB.
9	BCLK	I	Bit clock pin. This clock signal is used when reading the digital audio data by each bit serially, and also used for PWM D/A converter.
10	V_{DD}	—	Power supply, +5V.
11	TST OUT	O	Test signal output pin. Normally leave this pin open.
12 13	TST1 TST2	I	Test signal input pin. Normally connect to GND terminal.
14	IF	I	Interface select pin. When IF pin is at high level, the digital audio data is input from the MSB first. When IF pin is at low level, the digital audio data is input from the LSB first.
15	GND	—	Ground.
16	Vref L1	I	Reference voltage "L" input pin1.
17	GND	—	Ground.
18	Vref L2	I	Reference voltage "L" input pin2.
19	NC	—	No connection.
20	CH2 OUT	O	Channel 2 output pin.

■YM3623B(IC706)·····Digital Audio Interface Receiver

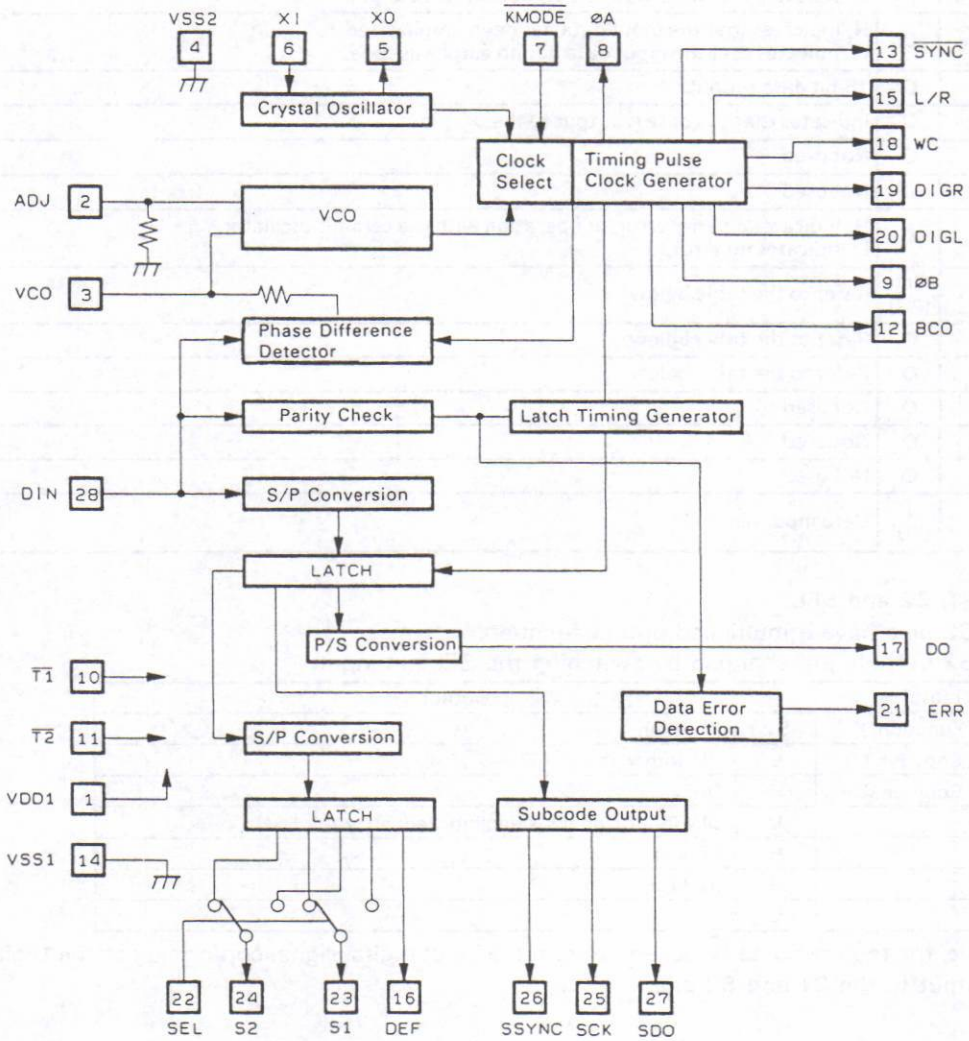
(1) Function

1) A PLL circuit is incorporated to synchronize with a digital signal (conforming to the Digital Audio Interface Format) which is transmitted from the outside. Therefore, the sampling frequency is followed up automatically.
2) This outputs the audio signal with its MSB (most significant bit) first. In synchronism with it, this outputs the timing clock for sampling and holding the D/A output, L-channel and R-channel signals.
3) Since it provides the pins used for outputting the subcode signals, only the subcode data can be picked up.
4) It can output the sampling frequency, as well as signals indicating the presence/absence of copy enable, emphasis and error in the audio signal transmitted.
5) When an error is detected in a digital signal conforming to the Digital Audio Interface Format, the previous audio data is output again.

(2) Appearance



(3) Block Diagram



(4) Terminal Functions

Pins accompanied with (PU) are pulled up internally.

Pin No.	Pin Name	I/O	Function
1	V_{DD}		Power supply voltage(5V).
2	ADJ	I	VCO oscillator frequency adjustment pin. No connection.
3	VCO	I/O	Externally connected capacitor pin for the VCO circuit.
4	VSS2		GND pin for the VCO circuit. Connected in common with VSS1. They are not common inside of the LSI.
5	XO	O	Ceramic oscillator pin(18MHz).
6	XI	I	Ceramic oscillator pin.
7	$\overline{\text{KMODE}}$	I (PU)	H; Activates the PLL circuit when a signal is input to the DIN pin. Operates using the ceramic oscillator when there is no input to the DIN pin. L; Ceramic oscillator is used regardless of the state of the DIN pin.
8	ϕA	O	18MHz when the ceramic oscillator is used. When the PLL circuit engaged, the frequency varies according to the data rate of the signal input to the DIN pin. (About 5.6448MHz when fs = 44.1KHz)
9	ϕB	O	Not used.
10	$\overline{\text{T1}}$	I	Not used.
11	$\overline{\text{T2}}$	I	Not used.
12	BCO	O	Timing clock of the signal output from the DO pin.
13	$\overline{\text{SYNC}}$	O	Not used.
14	VSS1	O	System GND
15	L/R	O	H; Indicates L-channel data is output from the DO pin. L; Indicates R-channel data is output from the DO pin.
16	DEF	O	H; Indicates that the input data has been emphasized. L; Indicates that the input data has no emphasis code.
17	DO	O	16-bit data output.
18	WC	O	Indicates that the data is output to the DO pin.
19	DIGR	O	Not used.
20	DIGL	O	Not used.
21	ERR	O	H; Indicates a parity error, or operation with the ceramic oscillator. L; Indicates no error.
22	SEL	I (PU)	Refer to the table below.
23	S1	O	Refer to the table below.
24	S2	O	Refer to the table below.
25	SCK	O	Not used.
26	SSYNC	O	Not used.
27	SDO	O	Not used.
28	DIN	I (PU)	Data input pin.

***Concerning S1, S2 and SEL:**

The S1 and S2 pins have a multiplied output function.

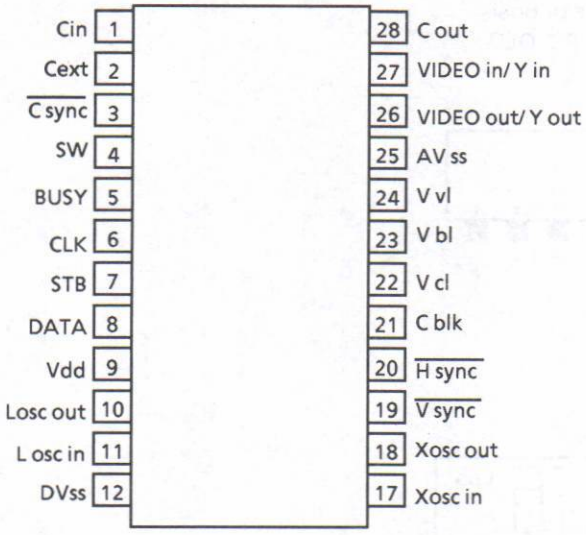
The S1 and S2 outputs are changed by switching the SEL pin input.

Input	Output		Output	
SEL	S1	Function	S2	Function
L	L	Copy inhibit	L	CD (other than DAT)
	H	Copy enable	H	DAT
H	L		L	DIN input signal's sampling frequency 44.1 kHz
	L		H	48 kHz
	H		H	32 kHz
	H		L	—

As shown above, the required data is picked up from the input digital signal conforming to the Digital Audio Interface Format and output to the S1 and S2 pins.

■ μPD6452CS(IC909)·····ON SCREEN Display Drive IC for S Output

(1) Terminal Layout



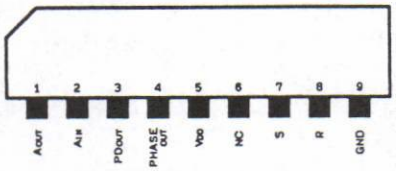
2. Pin Functions

Pin No.	Pin Name	Functions
1	C in	Input terminal of component chrominance signal.
2	C ext	Terminal of external capacitance to prevent crossing of colors.
3	C sync	Composite synchronous signal is output with synchronism negative from this terminal when internal synchronous signal is generated.
4	SW	If high level signal is input,device is set for component signal,and if low level signal is input,device is set for composite signal.
5	BUSY	Input terminal to notify micro computer of possibility of inputting of strobe after strial data have been input. Strobe can be input when low level.
6	CLK	Input terminal of clock for reading data. Data applied to DATA terminal are read at rise of clock.
7	STB	Strobe input terminal used after serial data have been input. 8-bit data are read at rise of pulse applied to STB terminal.
8	DATA	Input terminal of control data. Data are read msynchronized with clock applied to CLK terminal.
9	V dd	Terminal to supply power(+ 5V).
10 11	L osc out L osc in	Terminal to connect coil and capacitor of oscillator to generate dots and clock.
12	G ss	Connected to GND of system.
13 14	X osc in X osc out	Crystal oscillator terminal of oscillator to generate internal synchronous signal.
15	V sync	Input terminal of vertical synchronous signal. Input with active low.
16	H sync	Input terminal of horizontal synchronous signal. Oscillation starts when H-sync is at high level and is synchronized with rise of H-sync. Input with active low.
17	C blk	Output terminal of blanking signal to cut video and chrominance signals when external component is input. Output with active high.
18	V cl	Input terminal for adjustment of level of character signal (white level).
19	V bl	Input terminal for adjustment of level of background signal (black level).
20	V vl	Input terminal for adjustment of level of video /Y signal (sink tip level) made when internal synchronous signal is generated.
21	G ss	Connected to GND of system.
22	Video out / Y out	Output terminal of mixture of Vin/Yin signals and character signal made when external is input,and mixture of composite video signal and character signal when internal synchronous signal is generated and SW = 0 and mixture of component brightness signal and character signal when SW = 1.
23	Video in / Y in	Input terminal of composite video signal or component brightness signal. Input with synchronization negative and video positive.
24	C out	Output terminal of component chrominance signal. This signal opens output when external composite video signal is input and opens output synchronizing with the character and background signal output when external component signal is input. It also opens output when internal synchronous signal is generated and composite video signal ic applied,and its output level is fixed by Vv1 synchronizing with character and background signals when component signal is applied.

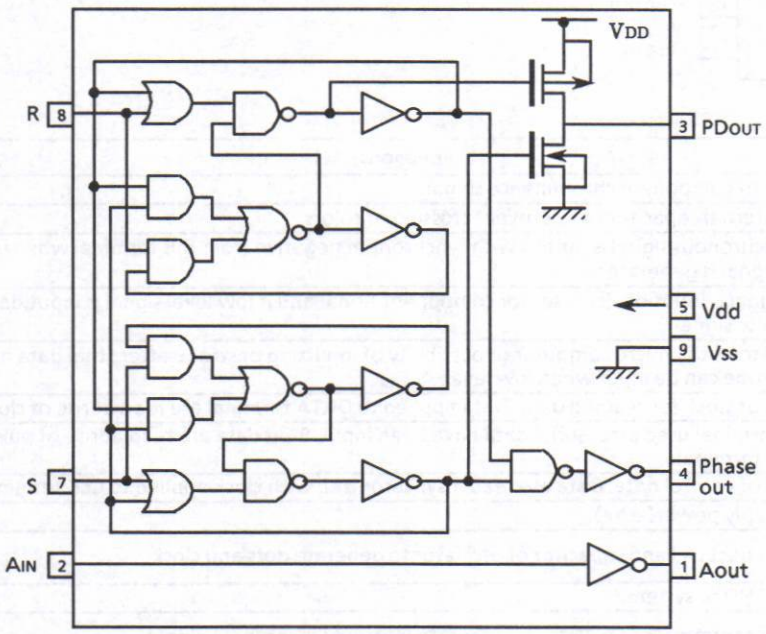
■TC5081AP(IC803)·····Phase Detecter for PLL Frequency Synthesizer Phase

The phase comparator detects the difference in phase between two input pulses and outputs a negative or positive pulse proportional to this detection to the PD OUT pin.

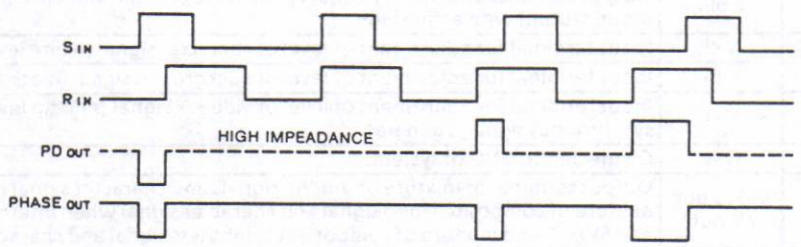
(1) Pin Connections



(2) Logic Diagram



(3) Phase Comparator Timing Chart



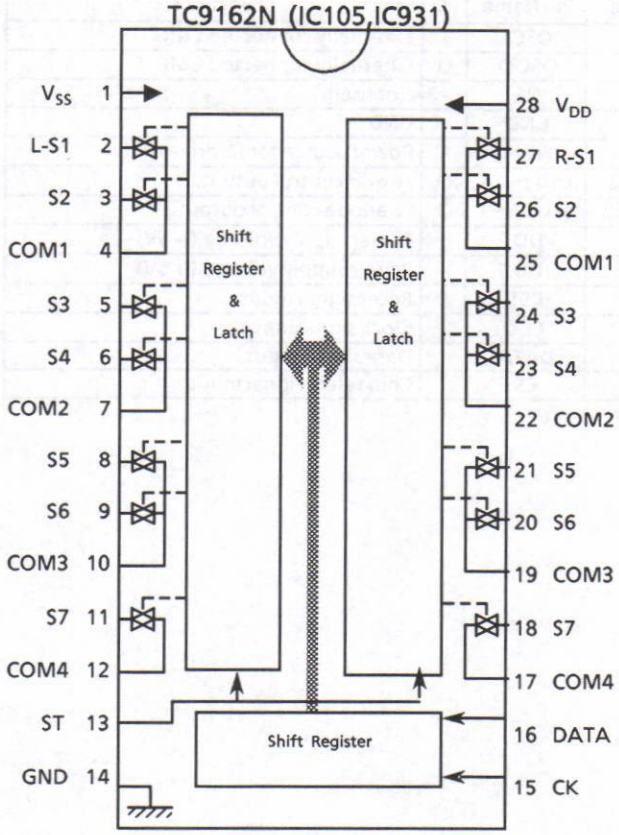
■TC9162N,TC9163N, TC9164N : Analog Switch

1.Functions

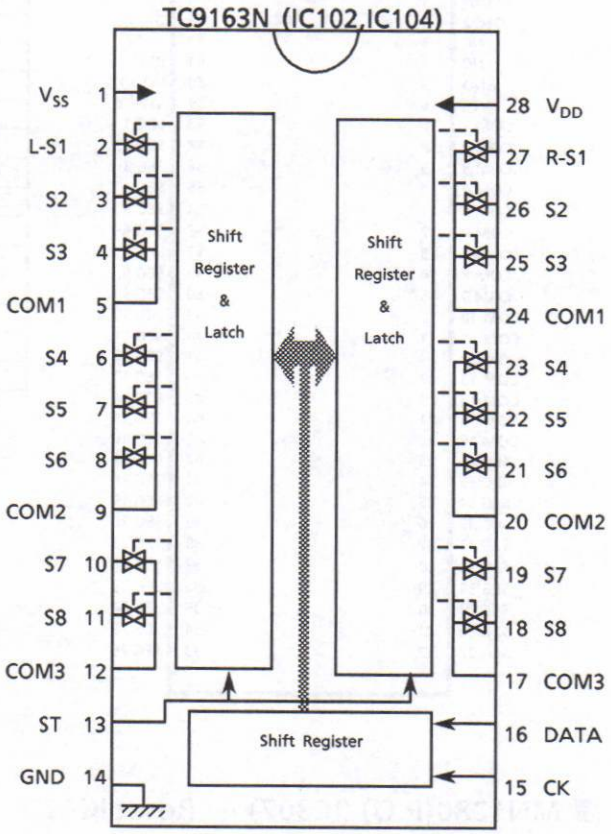
These analog switches are controlled by 14 bit serial date from computer for selecting the source.

2.Terminal Layout & Block diagram

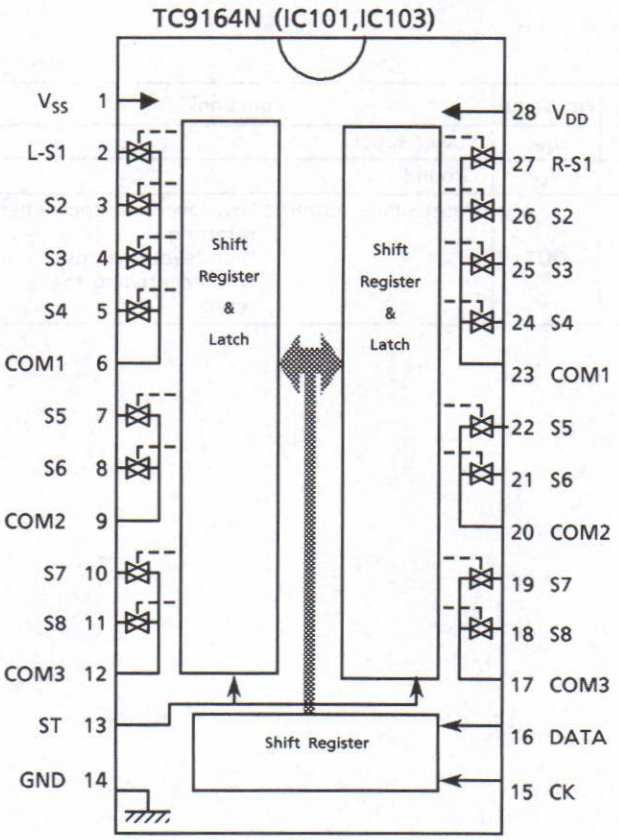
TC9162N (IC105,IC931)



TC9163N (IC102,IC104)



TC9164N (IC101,IC103)

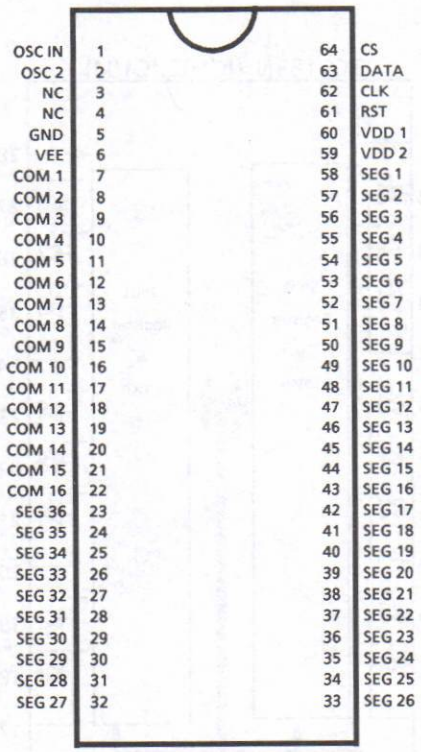


3. First 10bits are used to source select. Last 4bits are chip select. The switches (S1~S8) are connected to common terminals (COM1~COM3) according to the DATA from computer.

	Chip Select Bit			
	S11	S12	S13	S14
TC9162N	0	0	0	0
TC9163N	1	0	0	0
TC9164N	0	1	0	0

■ MSC7128-02SS (IC308)·····FL Drive IC

(1) Terminal Layout

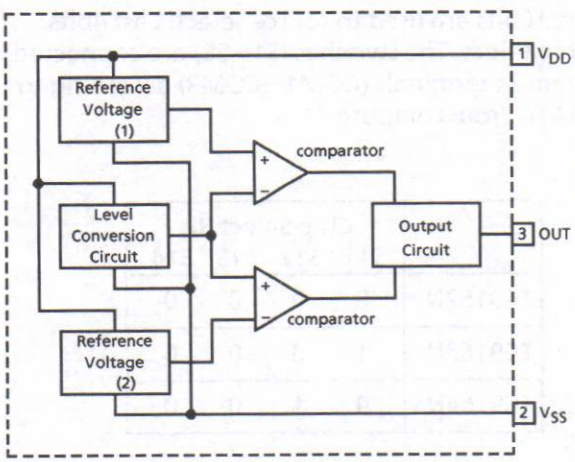


2. Pin Functions

Pin No.	Pin Name	I/O	Functions
1	OSC I	I	Externally connected C&R.
2	OSC O	O	Externally connected C&R.
3,4	NC	-	Not used.
5	GND	-	GND
6	VEE	-	Power source for FL drive circuit.
7~22	COM 1~16	O	FL grid control output.
23~58	SEG 36~1	O	FL anode control output.
59	VDD 2	-	Power supply voltage.(+5V)
60	VDD 1	-	Power supply voltage.(+5V)
61	RST	I	Reset signal input.
62	CLK	I	Clock signal input .
63	DATA	I	Data signal input .
64	CS	I	Chip select signal input .

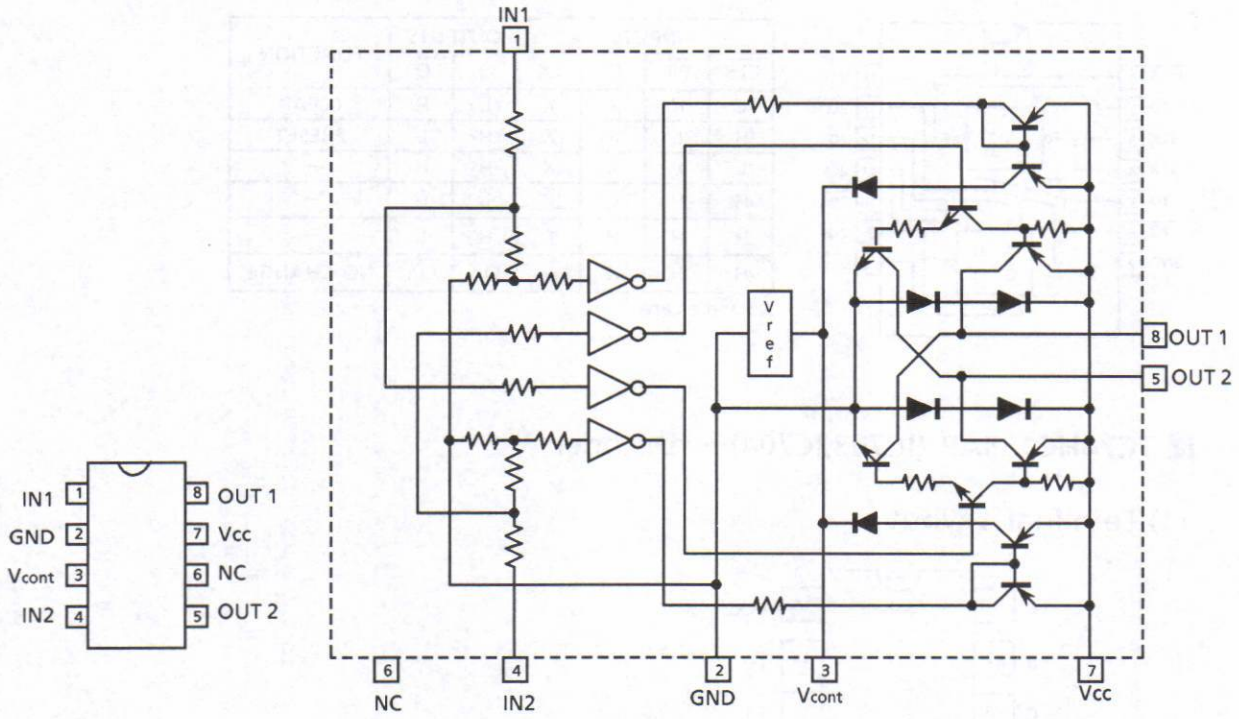
■ MN1280(P.Q) (IC307)····· Reset IC

Block Diagram



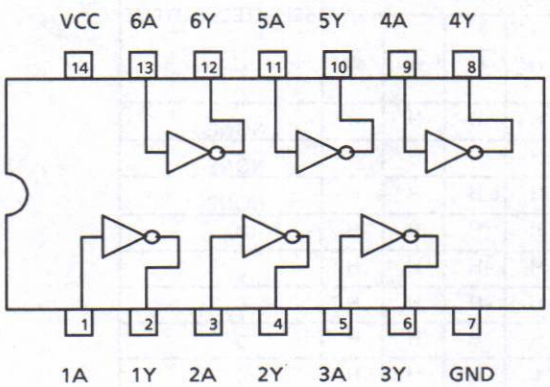
Pin No.	Pin Name	Functions
1	V_{DD}	Power supply
2	V_{SS}	Ground
3	OUT	Reset signal output : Low level is output when resetting : High level is output when cancelling the reset.

■ LB1639-CV (IC301) ····· Motor Driver



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

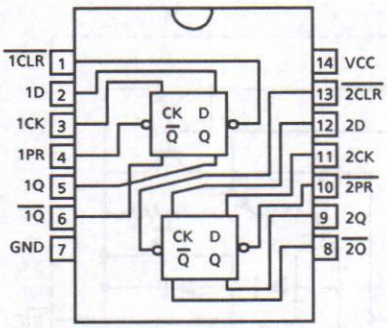
■ TC74HCU04AP (IC701)·····Inverter
TC74HC04AP(IC809)



Truth Table

Input A	Output B
H	L
L	H

■TC74HC74AP(IC713)·····DUAL D FLIP FLOP WITH PRESET AND CLEAR

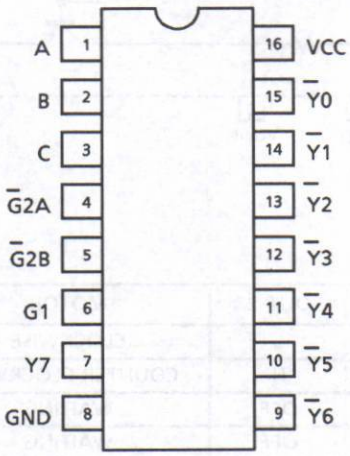


INPUTS				OUTPUTS		FUNCTION
$\overline{CLR}$	$\overline{PR}$	D	CK	Q	$\overline{Q}$	
L	H	X	X	L	H	CLEAR
H	L	X	X	H	L	PRESET
L	L	X	X	H	H	—
H	H	L	↑	L	H	—
H	H	H	↑	H	L	—
H	H	X	↓	Qn	$\overline{Qn}$	NO CHANGE

X :Don't care

■ TC74HC138AP (IC703,IC704)····· Decoder

(1) Terminal Layout



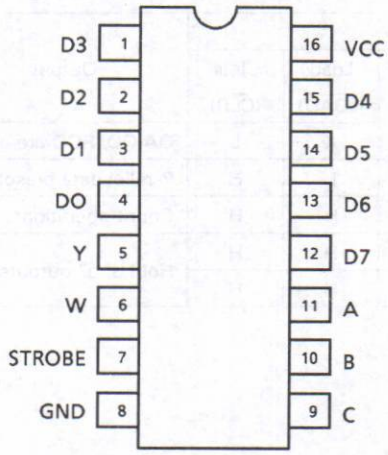
(2) Truth Table

X : DON'T CARE

ENABLE			SELECT			OUTPUTS								SELECTED OUTPUT
G1	G2A	G2B	C	B	A	$\overline{Y0}$	$\overline{Y1}$	$\overline{Y2}$	$\overline{Y3}$	$\overline{Y4}$	$\overline{Y5}$	$\overline{Y6}$	$\overline{Y7}$	
L	X	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	H	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	X	H	X	X	X	H	H	H	H	H	H	H	H	NONE
H	L	L	L	L	L	L	H	H	H	H	H	H	H	$\overline{Y0}$
H	L	L	L	L	H	H	L	H	H	H	H	H	H	$\overline{Y1}$
H	L	L	L	H	L	H	H	L	H	H	H	H	H	$\overline{Y2}$
H	L	L	L	H	H	H	H	H	L	H	H	H	H	$\overline{Y3}$
H	L	L	L	L	L	H	H	H	H	L	H	H	H	$\overline{Y4}$
H	L	L	H	L	H	H	H	H	H	H	L	H	H	$\overline{Y5}$
H	L	L	H	H	L	H	H	H	H	H	H	L	H	$\overline{Y6}$
H	L	L	H	H	H	H	H	H	H	H	H	H	L	$\overline{Y7}$

■ TC74HC151AP(IC702)·····8-Channel Multiplexer

(1) Terminal Layout



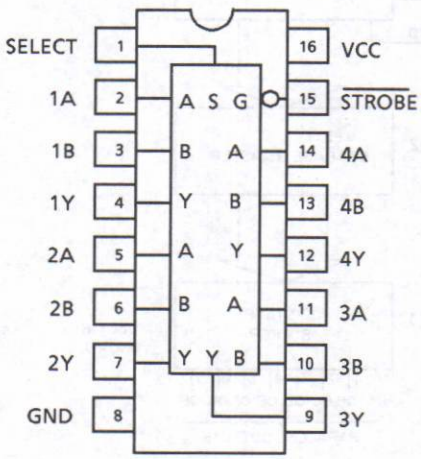
(2) Truth Table

INPUTS				OUTPUTS	
SELECT			STROBE		
C	B	A	S	Y	W
X	X	X	H	L	H
L	L	L	L	DO	$\overline{DO}$
L	L	H	L	D1	$\overline{D1}$
L	H	L	L	D2	$\overline{D2}$
L	H	H	L	D3	$\overline{D3}$
H	L	L	L	D4	$\overline{D4}$
H	L	H	L	D5	$\overline{D5}$
H	H	L	L	D6	$\overline{D6}$
H	H	H	L	D7	$\overline{D7}$

X : DON'T CARE

■ TC74HC157AP(IC707)·····2-Channel Multiplexer

(1) Terminal Layout



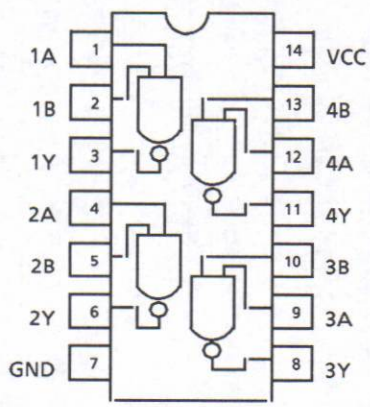
(2) Truth Table

X : DON'T CARE

INPUTS				OUTPUT
STROBE	SELECT	A	B	Y
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

■ TC74HC00AP(IC301)·····2-Input Nand Gate

(1) Terminal Layout

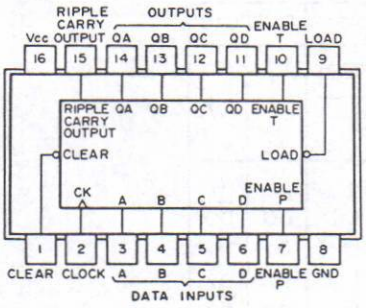


(2) Truth Table

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

■TC74HC163AP(IC804,IC805)·····Synchronous High-Speed Counter

(1) Internal connections chart

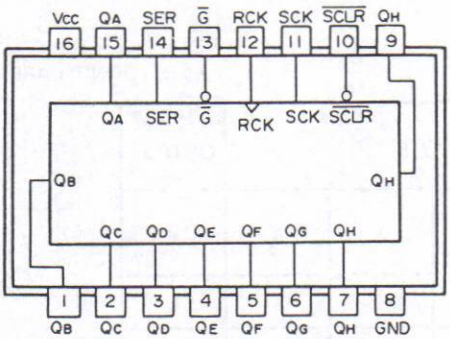


(2) Truth value table

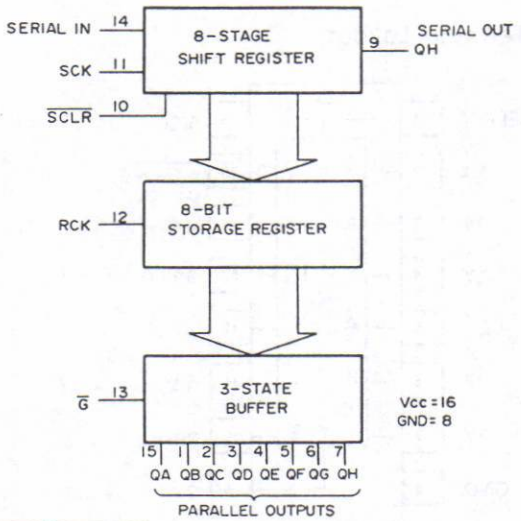
Input					Output
CLK	Enable P	Enable T	Load	Clear	
2	(ENP)	(ENT)	(LOAD)	(CLR)	
↑	X	X	X	L	QA-QD, RCO are all "L"
↑	X	X	L	H	Parallel data preset
↑	H	H	H	H	Count operations.
X	H	L	H	H	Hold of all outputs.
X	L	H	H	H	

■TC74HC595AP(IC302,IC303)·····8 Bit Shift Register

(1) Internal connections chart



(2) Internal Block Diagram



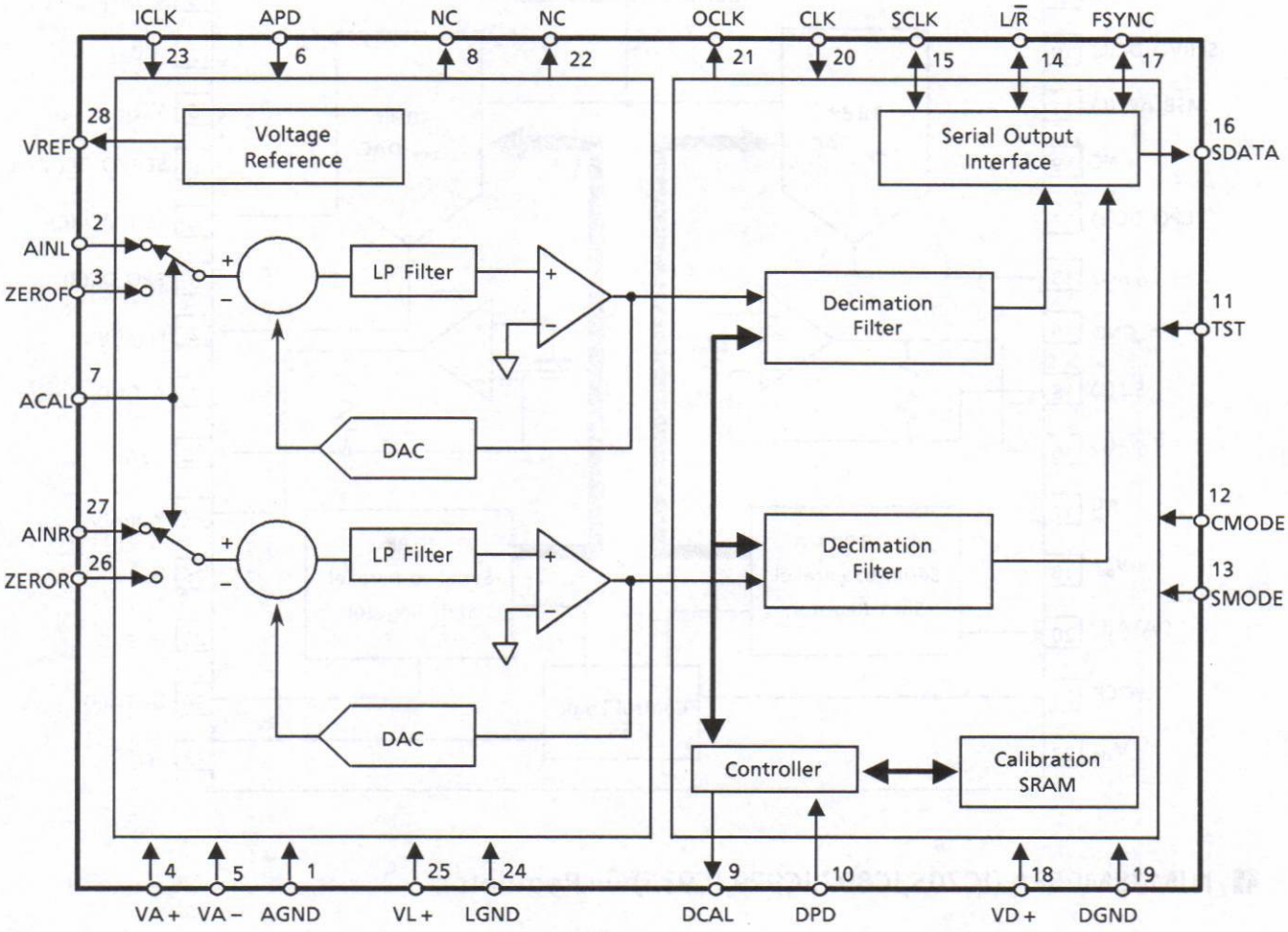
(3) Truth value table

Inputs					Function
B1	SCK	SCLR	RCK	G	
X	X	X	X	H	Output (QA-QH) disable.
X	X	X	X	L	Output (QA-QH) enable.
X	X	L	X	X	Shift register is cleared.
L	↑	H	X	X	Condition of shift register in initial sage is "L". In the other stages, data from the former stage is stored.
H	↑	H	X	X	Condition of shift register in initial stage is "H". In the other stages, data from the former stage is stored.
X	↓	H	X	X	Shift register does not change.
X	X	X	↑	X	Shift register data is stored in the storage register.
X	X	X	↓	X	Storage register does not change.

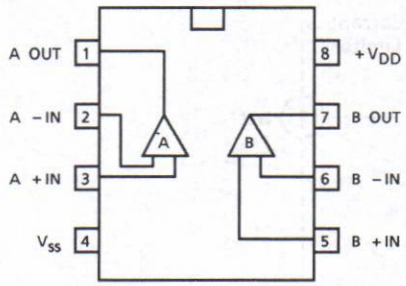
X: Don't care

Internal Block Diagram of Other ICs

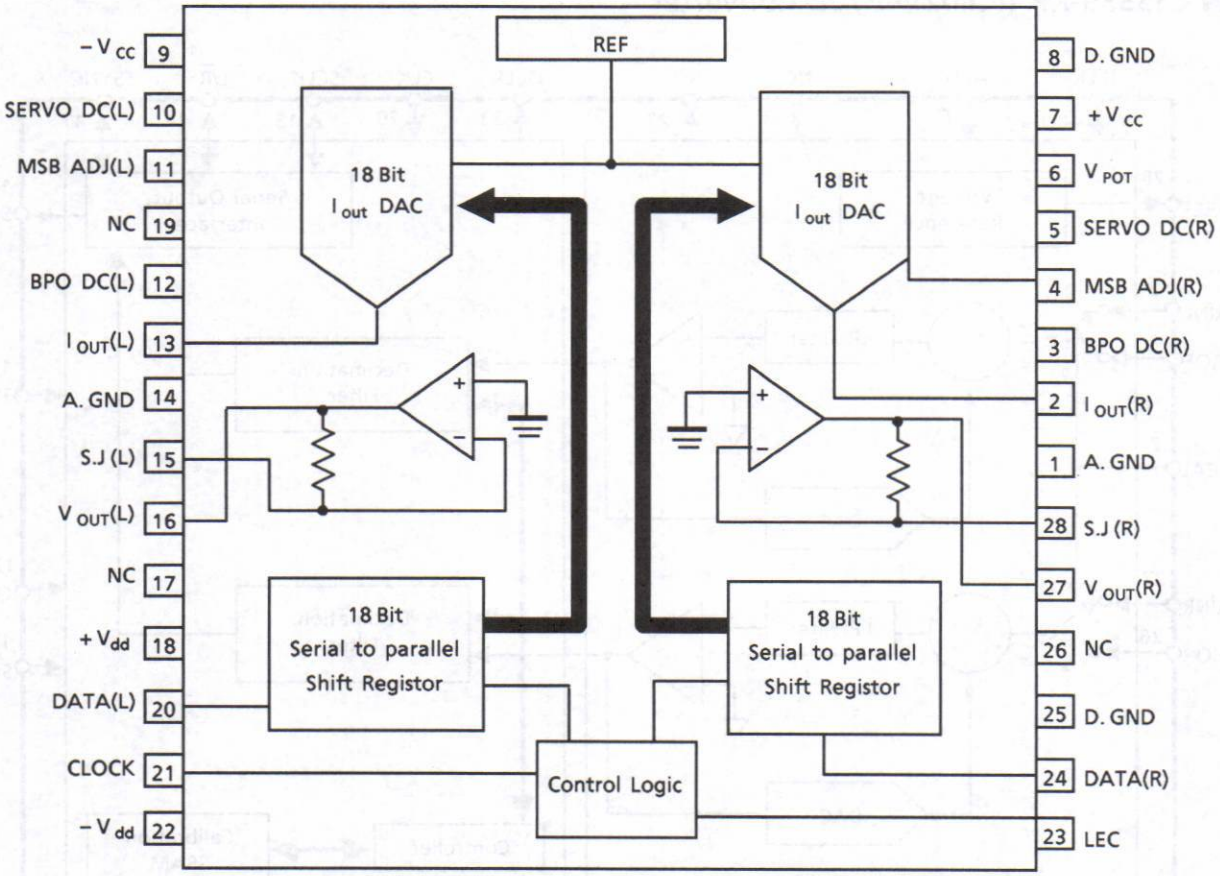
■ CS5339-KP (IC802)····· A/D Converter



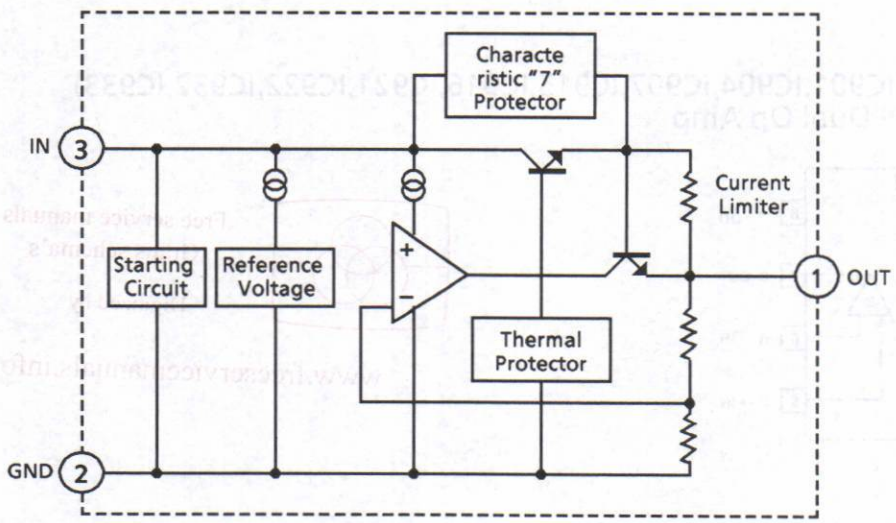
■ MC14577AP (IC901,IC904,IC907,IC915,IC916,IC921,IC922,IC932,IC933) ····· Dual Op Amp



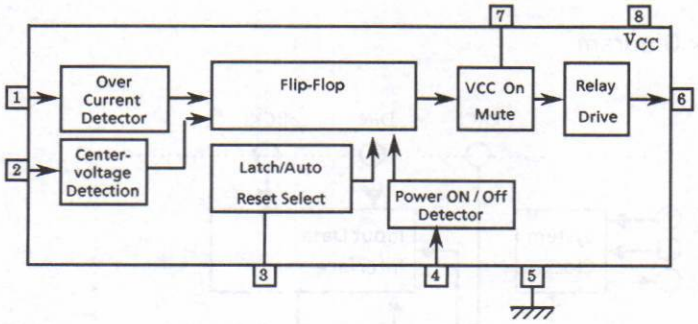
■ PCM1700U-J (IC815)····· A/D Converter



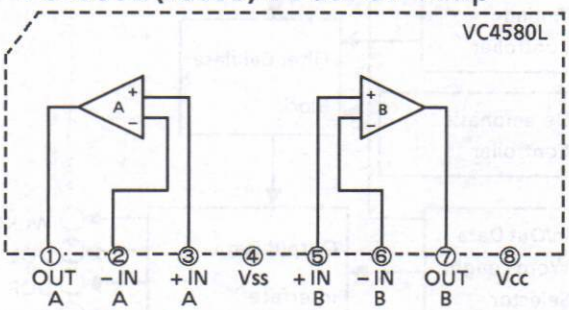
■ NJM78M05FA (IC705,IC807,IC929,IC935)····· Regulator



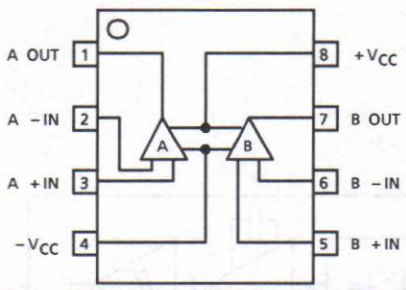
■ IC601: μPC1237HA (Protector, Relay Driver)



■ VC4580L (IC806) : Dual OP Amp

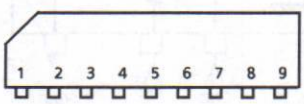


■ VC4580LD(IC903,IC905)
VC4580DD(IC106,IC107,IC108,IC204,IC205,IC210,IC230 IC801,IC811,IC812,IC616,IC817,IC904)

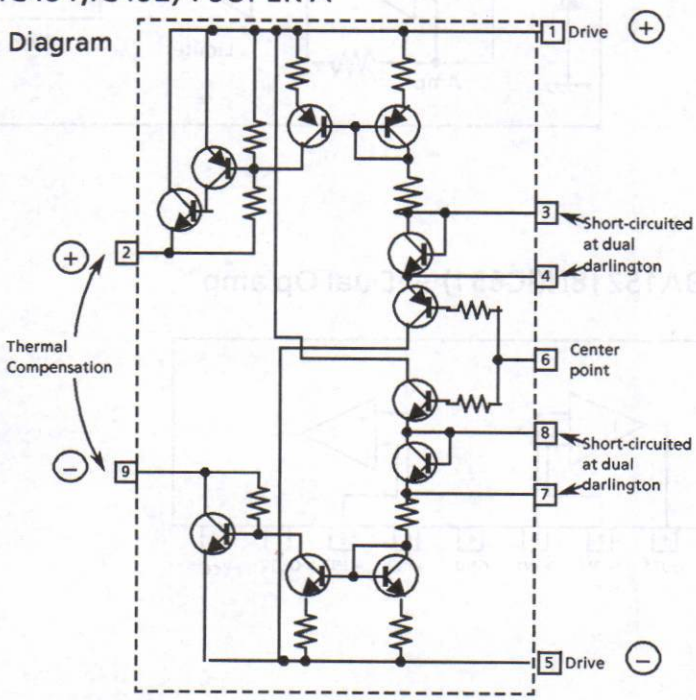


■ VC5022(X,Y) (IC501,IC551,IC552,IC451,IC452) : SUPER A

(1) Terminal Layout

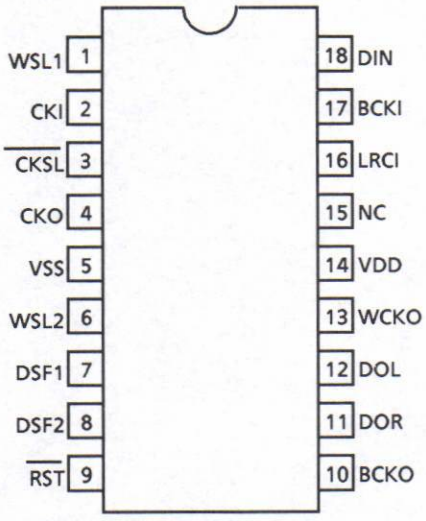


(2) Block Diagram

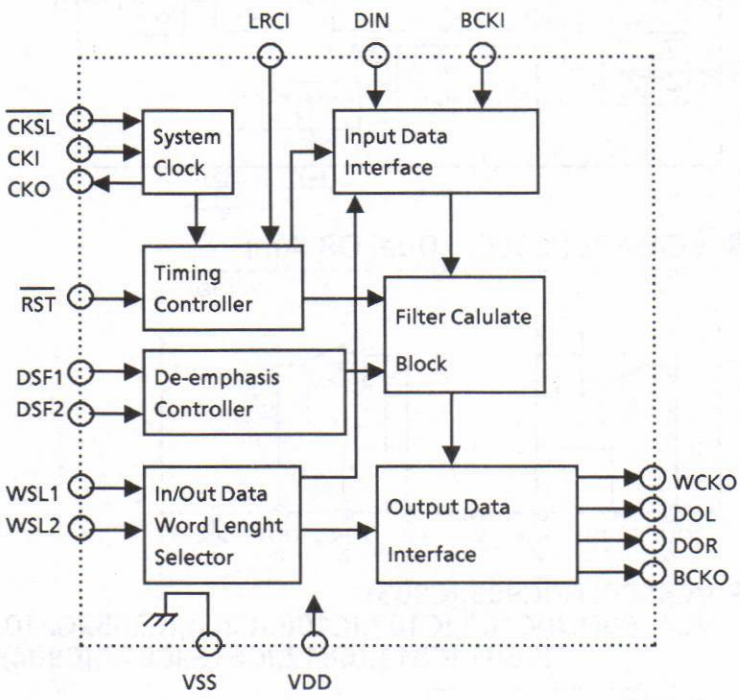


■ SM5840EP(IC814)·····Digital Filter

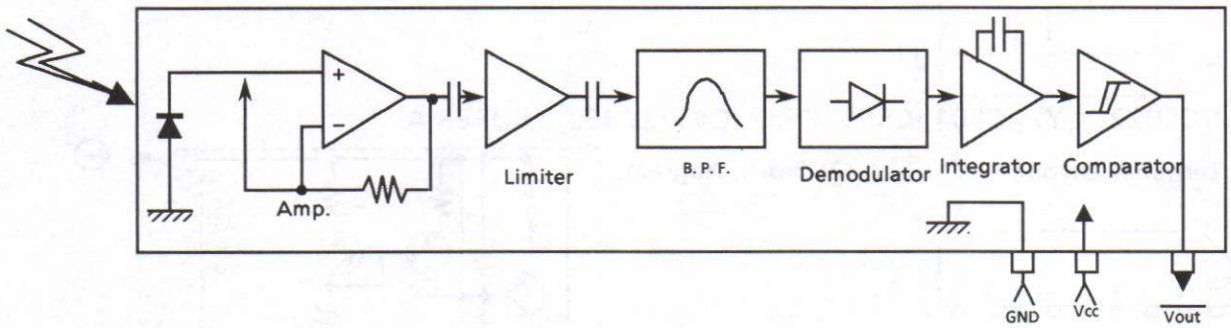
(1) Terminal Layout



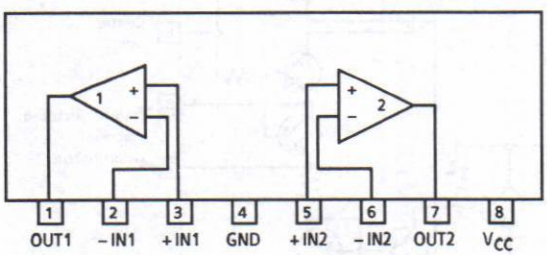
(2) Block Diagram



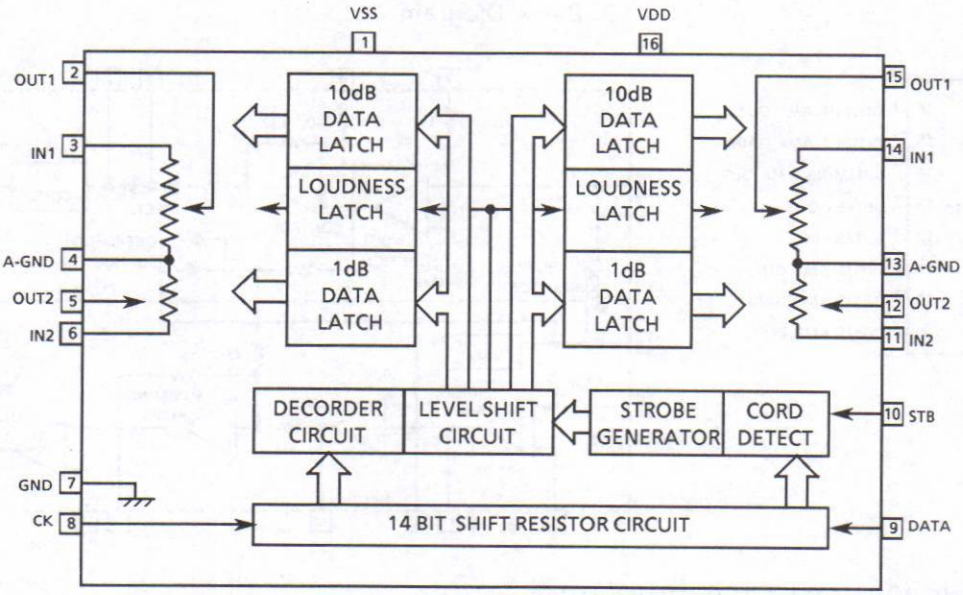
■ GP1U501X (IC309)·····Receiver for remote controller



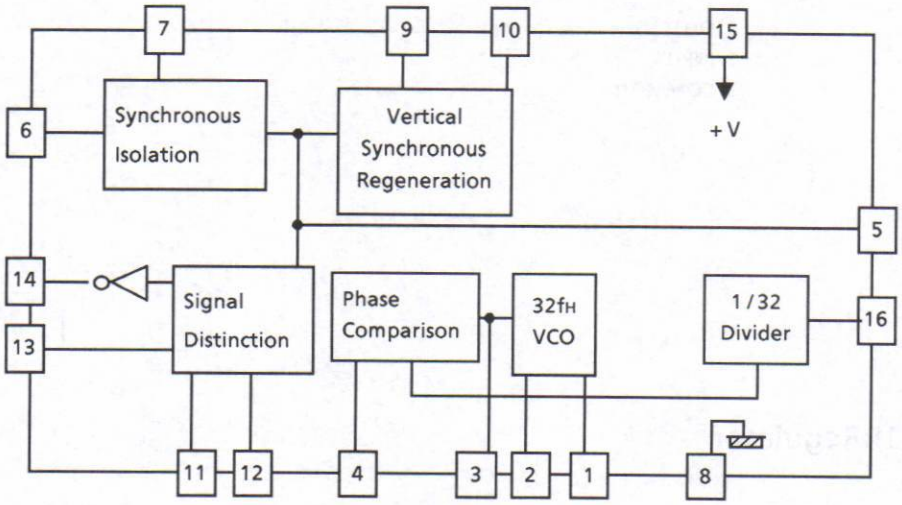
■ BA15218N(IC651)·····Dual Op amp



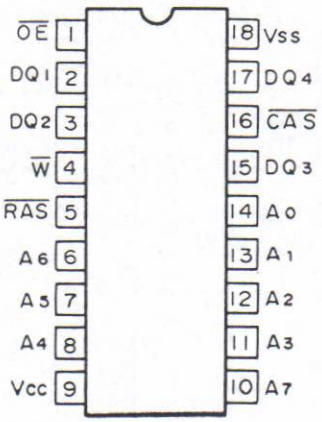
■TC9213P(IC202,IC902)·····Electric Volume

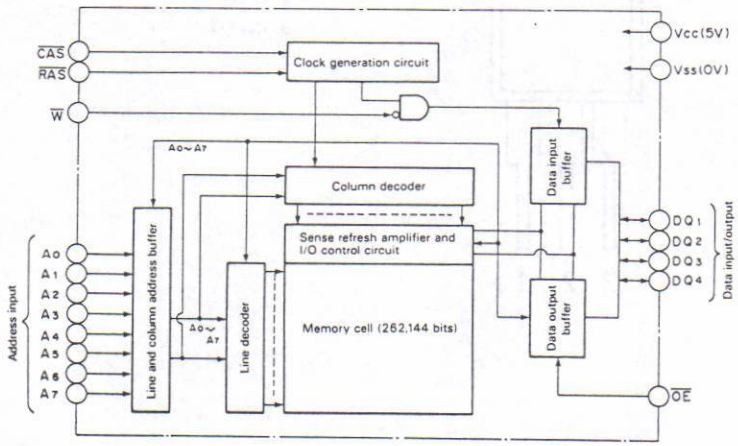


■ NJM2229S (IC908) ····· Video ON SCREEN Display Drive



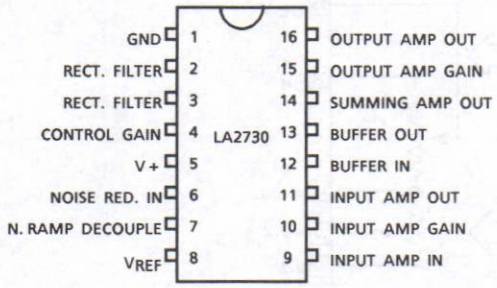
■ MSM41464-12RS (IC710,IC711)·····Dynamic Ram



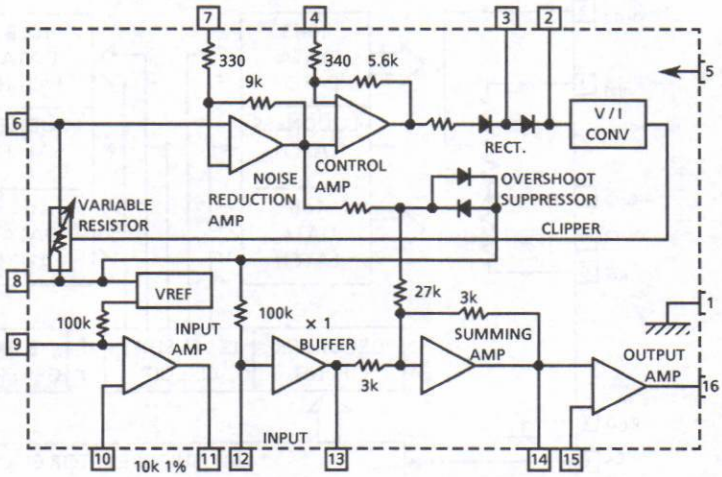


■ LA2730 (IC201) : Dolby "B" Noise Reduction

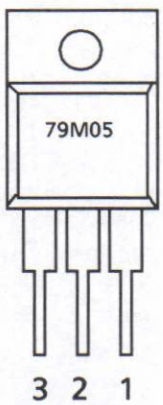
1. Terminal Layout



2. Block Diagram

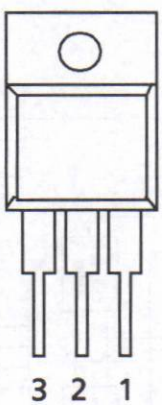


■ NJM79M05FA(IC808, IC912, IC930):Regulator



1. OUTPUT
2. INPUT
3. COMMON

■ LM2940CT-5.0(IC911):Regulator

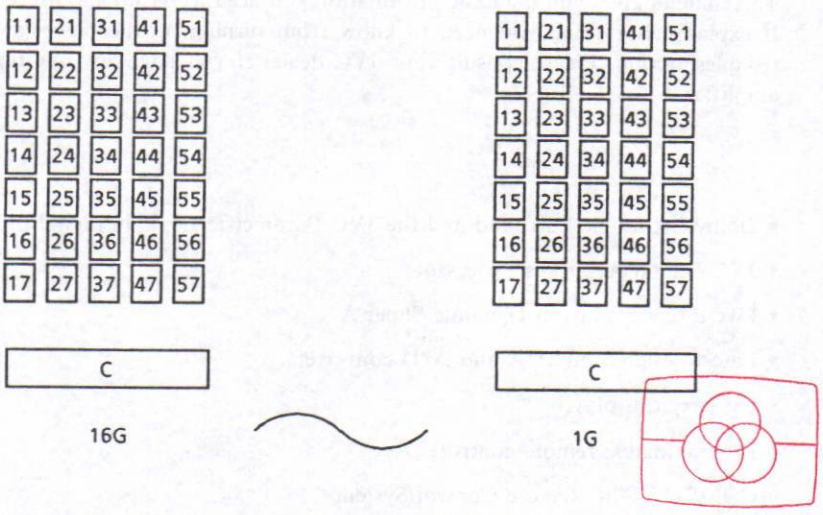


1. OUTPUT
2. GND
3. INPUT

Internal Connections for the FL Display Tube

■ ELU0001-074(FL301)

(1)Grid Layout



(2)Pin Connections

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Electrode	NP	NP	NP	NP	NP	16G	15G	14G	13G	12G	11G	10G

Pin No.	13	14	15	16	17	18	19	20	21	22	23	24
Electrode	9G	8G	7G	6G	5G	4G	3G	2G	1G	PC	P57	P47

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36
Electrode	P37	P27	P17	P56	P46	P36	P26	NP	NP	NP	NP	NP

Pin No.	37	38	39	40	41	42	43	44	45	46	47	48
Electrode	F1	F1	NP	NP	NP	P16	P55	P45	P35	P25	P15	P54

Pin No.	49	50	51	52	53	54	55	56	57	58	59	60
Electrode	P44	P34	P24	P14	P53	P43	P33	P23	P13	P52	P42	P32

Pin No.	61	62	63	64	65	66	67	68	69	70	71	72
Electrode	P22	P12	P51	P41	P31	P21	P11	NP	NP	NP	F2	F2

Introduction

Thank you for purchasing this JVC AX-V1050TN Amplifier. We hope it will be a valued addition to your audio/video system. Be sure to read these instructions carefully before operating the amplifier.
This manual gives you the basic information you need to set up and use your amplifier. It explains everything you need to know from turning on the power switch to basic troubleshooting. Please consult your JVC dealer if you have any questions about the amplifier.

Features

- Dolby Pro-Logic Surround and the JVC Parametric Logic in digital processing.
- JVC Digital Acoustics Processor.
- Five discrete amps in Dynamic Super-A.
- Latest-design 1-bit D/A and A/D converters.
- On-screen display.
- Programmable remote control.
- COMPU LINK Remote Control System
  COMPU LINK is a computer-linked system by which indiviidual JVC audio components are controlled via a computer. For further details, see page 44.
- AV COMPU LINK System.
  AV COMPU LINK is a computer-linked system by which individual JVC audio and/or video components are controlled via a computer.
  Connecting the AV COMPU LINK terminals on the rear panel to a JVC video components for AV COMPU LINK will enable one-touch control of the integrated audio/video system.

About this manual

This manual is organized as follows:

The first part of this manual, "Installation", tells you how to connect your other audio and video components to the amplifier and where to place the components for best results from the amplifier.

The second part, "Operation Outline", introduces you to the controls and indicators on the amplifier and the remote controller. It gives you the basic knowledge needed to make use of the amplifier's range of functions.

The third part, "Basic Functions", tells you how to use the basic functions of the amplifier, including how to select an audio/video source and how to control the volume and tone of the sound.

The fourth part, "Processor", describes the functions of the built-in signal processor.

The fifth part, "Operating Audio and Video Sources", tells you how to operate your audio and video sources (compact disc player, VCR, etc.) using the amplifier's remote controller.

The sixth part, "Others", includes a troubleshooting guide, a glossary, and the specifications of the amplifier.

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

- Keys or buttons to be pressed are indicated with all capital letters, like this: POWER button.
- Steps that you need to follow to get the correct results are labeled ***Important!***
- Additional information that is helpful to know, is labeled **Note:**

Precautions in use

- The Temperature around the amplifier must be between 23° and 104° Fahrenheit (−5° and 40° Celsius).
- Do not insert any metallic object into the amplifier.

CAUTION:

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

(No.20276)1-35

Contents

Installation

This part of the manual tells you how to connect your other audio and video components to the amplifier, and how to place the connected components for best results from the amplifier.

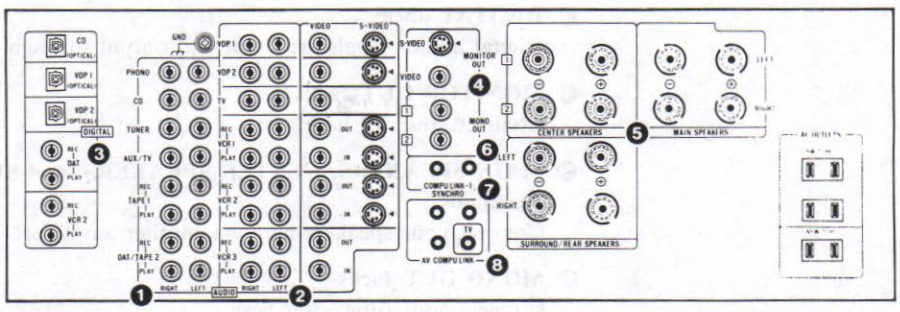
Caution

Before starting installation

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

Locating the Amplifier

- Install the amplifier in a place that is level and protected from moisture.
- Make sure there is good ventilation around the amplifier. Poor ventilation could cause over-heating and damage the amplifier.



Connections

Terminals

❶ AUDIO Jacks
Connect your audio components here.
Analog audio signals are input and output through these jacks.

❷ AUDIO, VIDEO, and S-VIDEO Jacks
Connect your video components here.
- AUDIO Jacks: Analog audio signals are input and output through these jacks.
- VIDEO Jacks: Video signals (composite) are input and output through these jacks.
- S-VIDEO Jacks: Video signals (S-video) are input and output through these jacks. Video signals are transmitted in the form of separated luminance and chrominance signals to offer a more perfect picture.

❸ DIGITAL Jacks
Digital audio signals are input and output through these terminals.

❹ MONITOR OUT Jacks
Connect your TV here.

❺ MAIN SPEAKERS, CENTER SPEAKERS, and SURROUND/REAR SPEAKERS Terminals
Connect your speakers here via another amplifier.

❻ MONO OUT Jacks
Connect your subwoofer here.
Identical mono signals are output from the MONO OUT 1 and 2 jacks.

❼ COMPU LINK-1 SYNCHRO Jacks
Connect your JVC audio components for use with COMPU LINK REMOTE CONTROL SYSTEM here.

❽ AV COMPU LINK Jacks
Connect your JVC video components for use with AV COMPU LINK here.

Important! *Ensure that the connections are not reversed. Connect the REC jack on the amplifier to the input jack on a source component, and the PLAY jack on the amplifier to the output jack on a source component. Otherwise, no sound will be produced or the stereo image will be affected.*

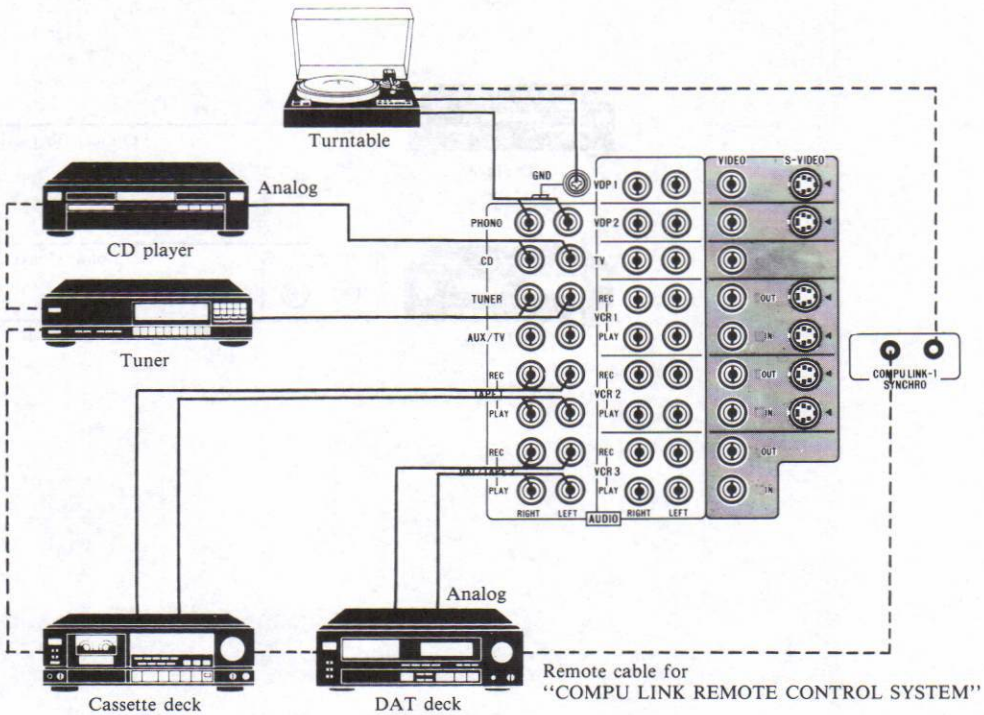
Audio Component Connections

Basic Connections

Connect the input/output jacks of your audio components to the AUDIO jacks of the amplifier.

Note:

- A turntable fitted with a cartridge giving an output as small as 0.5 mV (an MC type, for example) cannot be connected directly to the AUDIO jacks marked PHONO. Connect such a turntable through a commercial head amplifier or step-up transformer.
- Use the AUDIO jacks marked AUX/TV to connect a TV receiver with audio output jacks or an audio component other than those detailed below. (Do not connect a turntable to the AUX/TV jacks.)

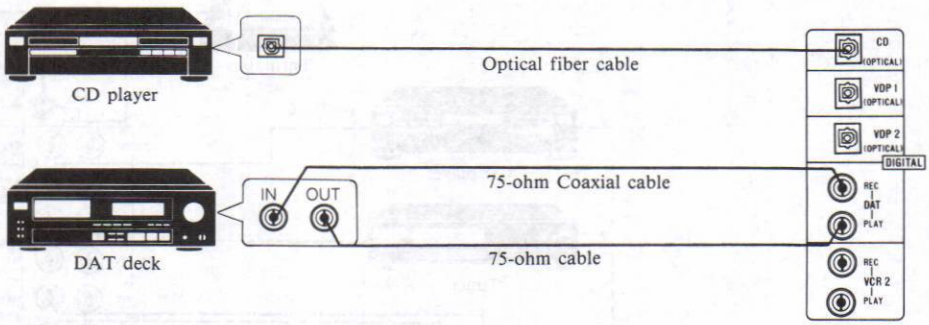


Audio Components with Digital Signal Jacks

Digital signal jacks, if fitted to your compact disc player or DAT deck, can be connected to the DIGITAL jacks of the amplifier.

Connect an optical fiber cable to the jacks marked OPTICAL. Use a 75-ohm coaxial cable terminated with an RCA PIN plug for connections to other jacks.
Jacks marked OPTICAL are fitted with a protective cap in the factory. Remove the cap before making a connection.

Important! *Even if the digital signal jacks of an audio/video component are connected to the DIGITAL jacks of the amplifier, retain the connection to the AUDIO jacks, too. The amplifier does not convert a digital input signal into an analog signal for output through the AUDIO jacks. You cannot make a recording on an analog component such as a cassette deck if connections are made only to the DIGITAL jacks of the amplifier.*

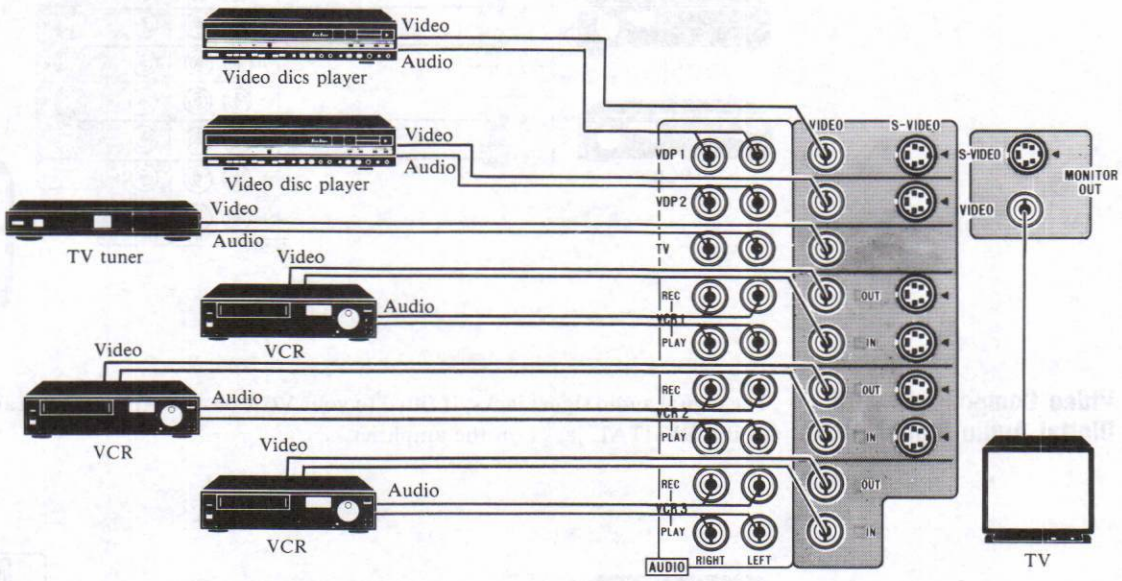


Basic Connections

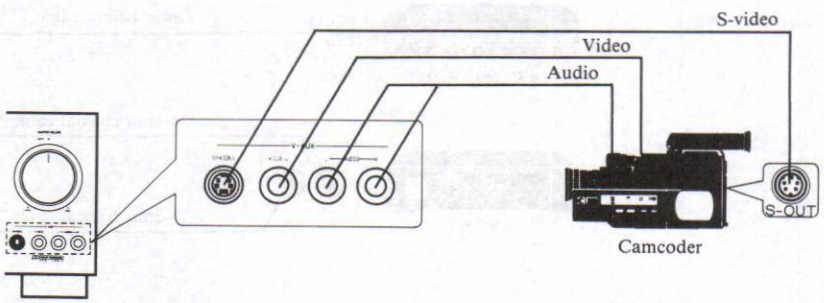
Video Component Connections

Connect the audio signal jacks of your video components to the AUDIO jacks of the amplifier. Connect the video signal (composite) jacks to the VIDEO jacks.

Note: Keep the connecting cables for your tuner, TV, VCR, and antenna away from the power cord leading from the back of the amplifier. The power cord may cause noise or screen interference. It is recommended that coaxial cable is used for connection to the antenna, since it is well shielded against interference.

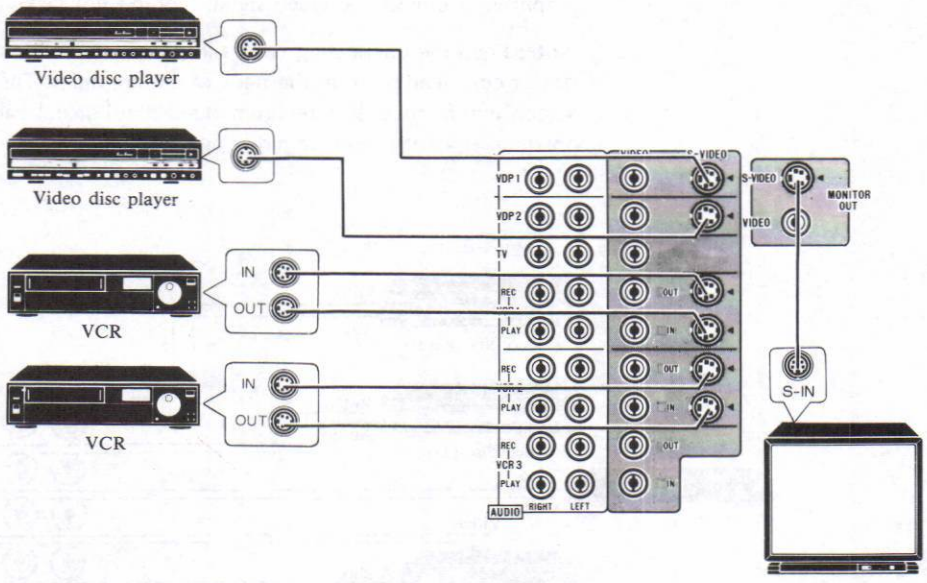


Use the V-AUX jacks on the front of the amplifier to connect a camcoder, since a camera is often connected and disconnected.



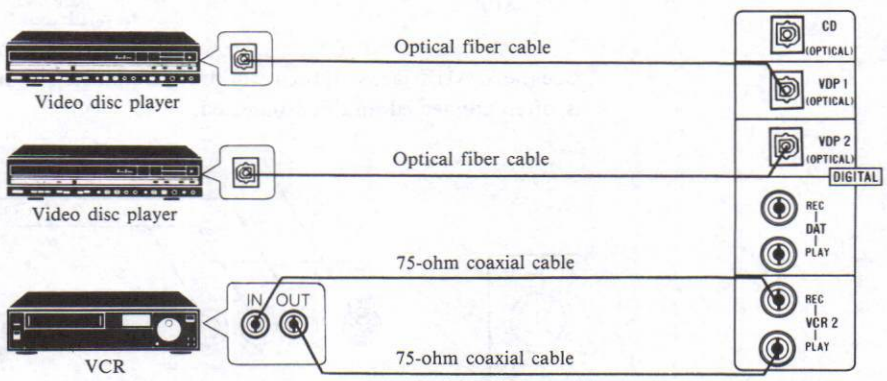
Video Components with S-video Signal Jacks

The S-video signal jacks, if fitted to your VCR or video disc player, can be connected to the S-VIDEO jack on the amplifier. Use a 75-ohm coaxial cable with an S-video plug for connection to the S-VIDEO jack.



Video Components with Digital Audio Signal Jacks

The digital audio signal jacks, if fitted to your VCR or video disc player, can be connected to the DIGITAL jacks on the amplifier.



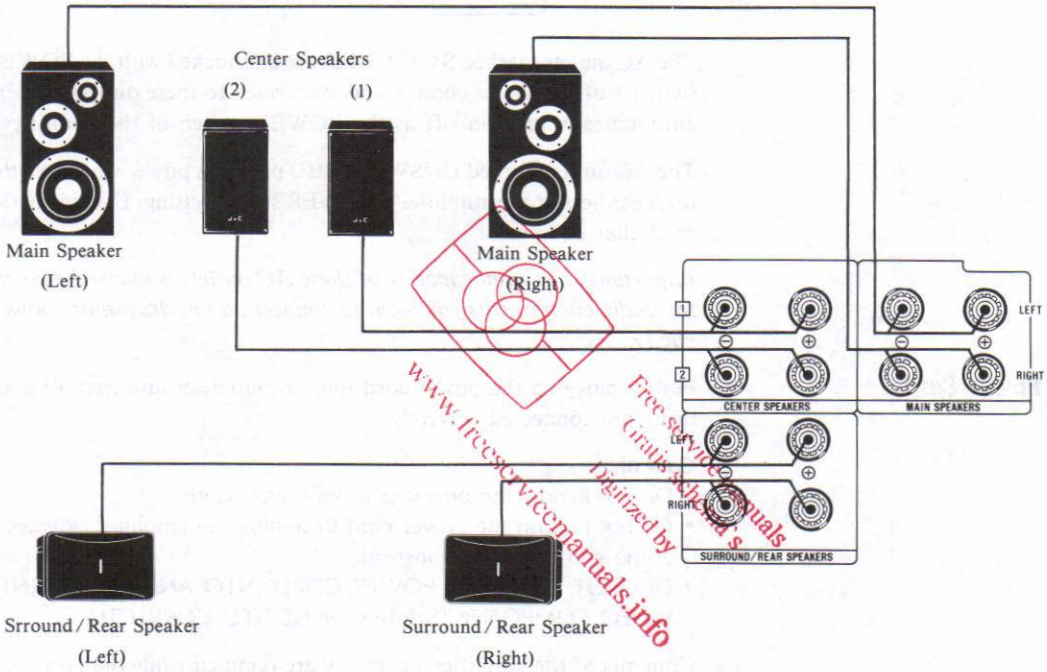
Speaker Connections

Basic Connections

You can connect up to three pairs of speakers (six speakers in total) to the amplifier.

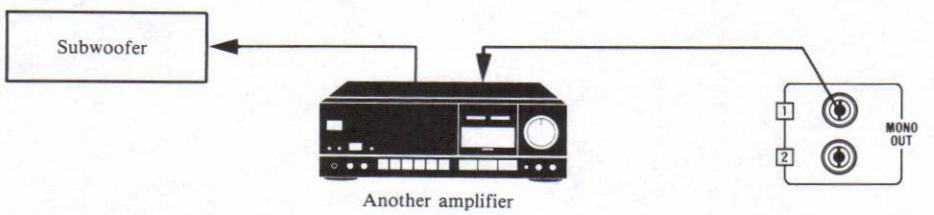
Note:

- If only one center speaker is to be used, connect it to the CENTER SPEAKERS terminals marked 1 or 2.
- Check that your speakers are of the impedance marked near the terminals.



Enhancing Lower Frequencies

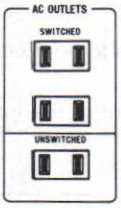
You can connect a subwoofer to MONO OUT jacks 1 or 2 on the amplifier via another amplifier.



AC Power Connections

AC OUTLETS

You can plug the power cords of other audio components into the AC OUTLETS on the rear of the amplifier.



The AC outlets marked SWITCHED are interlocked with the POWER switch. If the power switches of any audio components connected to these outlets are left on, the components automatically turn on/off as the POWER switch of the amplifier is turned on/off.

The AC outlet marked UNSWITCHED provides power whenever the amplifier is plugged in, regardless of the amplifier's POWER switch setting. Use this outlet to power your timer or similar equipment.

***Important!** The total capacity of these AC outlets is marked near the outlets. Check that the audio components you want to connect do not draw more power than the marked capacity.*

Power Cord

Before plugging the power cord into an outlet, ensure that all audio and video components are connected correctly.

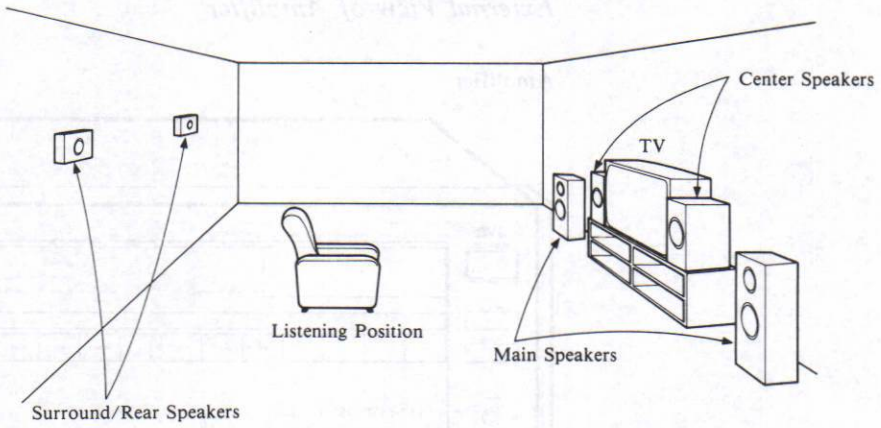
Caution:

- Do not handle the power cord with wet hands.
- Do not pull on the power cord to unplug the amplifier. Always pull the molded plug at the end of the cord instead.
- DO NOT PLUG THE POWER CORD INTO AN OUTLET UNTIL ALL AUDIO AND VIDEO COMPONENTS ARE CONNECTED CORRECTLY.

Contents of the amplifier's memory are retained while the power cord is plugged into an outlet. If the power cord is disconnected or a power failure occurs, contents are retained for 1 or 2 days.

Layout

Example of Speaker and TV Layout



Use of Two Center Speakers

In surround-sound reproduction, the center speakers play the important role of reproducing the words of people appearing on the screen. In movie theaters, there is a center speaker behind the screen which gives the effect of voices coming from speakers on the screen. But if a speaker is placed behind a TV for surround-sound reproduction at home, the TV blocks the sound. If the center speaker is placed next to the TV, the effect of voices coming from the TV screen is poor.
This amplifier allows you to connect two center speakers. Place one speaker on each side of your TV, or above and below your TV. The sound image will then come from the TV screen, so people on the screen will seem to be actually speaking.

Use of Subwoofer

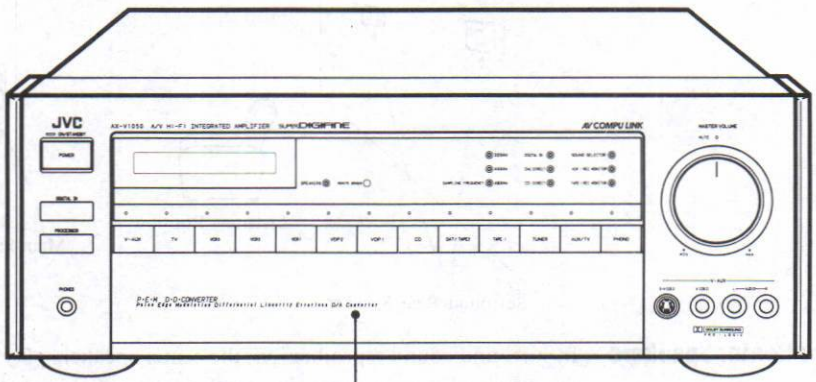
The subwoofer is a speaker added to speaker systems to enhance the reproduction of lower audio frequencies.
Recent SFX movies even have special effects applied to sound. Reproduction of the lower audio frequencies is essential to enjoy such special effects using household audio/video systems.
Good reproduction of these lower frequencies requires a large speaker. A large speaker, however, detracts from the reproduced comfortable audio-visual mood.
Even when combined with compact main speakers, a subwoofer may reproduce the lower frequencies well enough to maximize the surround-sound effect.

Operation Outline

This part of the manual introduces you to the controls and indicators on the amplifier and on the remote controller. It gives you the basic knowledge needed to make full use of the amplifier's range of functions.

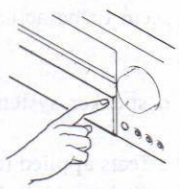
External View of Amplifier

Amplifier



Swing-Down Panel

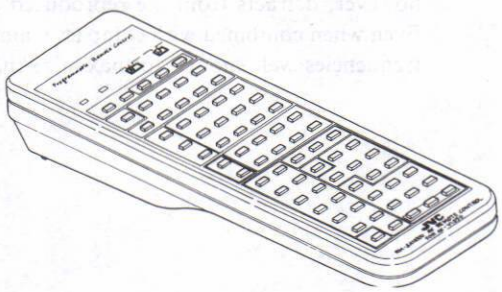
Processor control buttons and other controls are placed behind a swing-down panel. Press the swing-down panel at the position shown to open it. To close the panel, click it back into place.



Press here to open the swing-down panel.

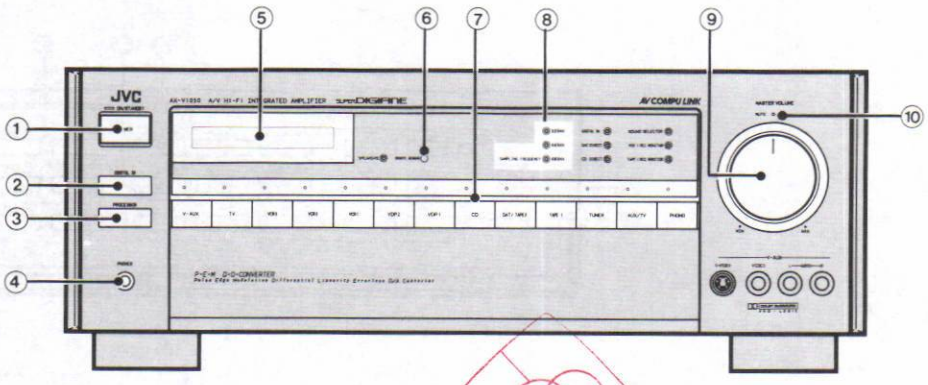
Remote Controller

The remote controller is packed with your amplifier.



Switches, Controls, and Indicators

Front Panel



① **POWER Switch**
Press this switch to turn on the power to the amplifier. Press the switch again to turn off the power and activate STANDBY mode.

Note: The amplifier uses a small amount of power (1 watt) in the STANDBY mode. To disconnect power completely, unplug the power cord.

② **DIGITAL IN Button**
Press the DIGITAL IN button to change the input mode of an audio signal: digital or analog.

③ **PROCESSOR Switch**
Press the PROCESSOR switch to turn the built-in processor on or off.

④ **PHONES Jack**
Insert the stereo headphone plug here.

⑤ **Display Window**

⑥ **REMOTE SENSOR**
This sensor picks up infrared signals from the remote controller.

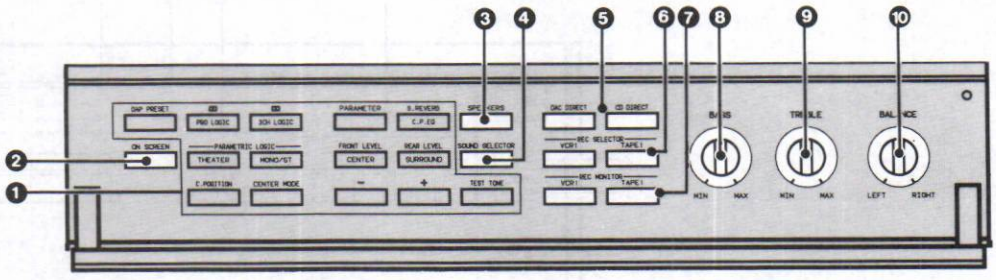
⑦ **Input Selector Buttons**
Use these buttons to select the audio/video source.

⑧ **SAMPLING FREQUENCY Indicators**
These SAMPLING FREQUENCY indicators display the sampling frequencies of the built-in D/A converter.

⑨ **MASTER VOLUME Control**
The MASTER VOLUME control adjusts the output level to the speakers and headphones.

⑩ **MUTE Indicator**
The MUTE indicator lights up or blinks according to the operation of the MUTE button on the remote controller.

Controls behind the Swing-Down Panel



❶ **Processor Control Buttons**
Use these buttons to set up and control the built-in signal processor.

❷ **ON SCREEN Button**
Press the ON SCREEN button to display the amplifier's function settings on a monitor connected to the MONITOR OUT jack of the amplifier.

❸ **SPEAKERS Switch**
Press the SPEAKERS switch to turn the output from all the SPEAKERS terminals on or off.

❹ **SOUND SELECTOR Button**
Use the SOUND SELECTOR button to choose between different audio/video sources for picture and sound.

❺ **DAC DIRECT and CD DIRECT Buttons**
Use these buttons to reproduce sound of higher quality.

❻ **REC SELECTOR Buttons**
Use these buttons to choose the audio/video source for output through REC (OUT) jacks.

❼ **REC MONITOR Buttons**
Use these buttons to monitor the audio/video source selected for output through the REC (OUT) jacks.

❽ **BASS Control**
The BASS control adjusts the lower frequencies of the signal output through the MAIN SPEAKERS terminals.

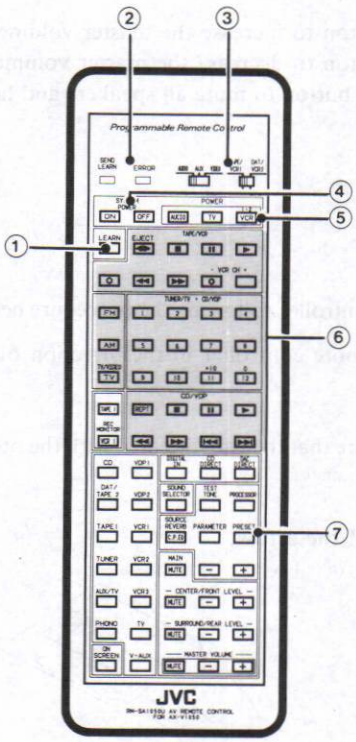
❾ **TREBLE Control**
The TREBLE control adjusts the higher frequencies of the signal output through the MAIN SPEAKERS terminals.

❿ **BALANCE Control**
This controls the volume balance between the left and right MAIN SPEAKERS terminals.

Remote Controller

The remote controller can be used to control not only the amplifier but also other JVC audio and video components. You can also control other manufacturers' audio and video components with this remote controller after storing their signals in the remote controller.

Common Controls



① **LEARN button**
Use the LEARN button to store the control signals from other remote controllers.

② **SEND/LEARN Indicator and ERROR Indicator**
These indicators light up or blink to indicate whether you are operating the remote controller correctly.

③ **Mode Selector Switch**
The mode selector switch chooses the operation mode for operation using the audio/video component control buttons.

④ **SYSTEM POWER ON and OFF Switches**
Press the ON switch to turn on power to the integrated AV COMPU LINK system (TV and VCR connected to the AV COMPU LINK jacks of the amplifier). Press the OFF switch to turn off the power and put it into STANDBY mode.

⑤ **POWER Switches**
AUDIO switch: Press this switch to turn on power to the amplifier. Press again to turn off the power and put the amplifier in STANDBY mode.
TV switch: Press this switch to turn on power to your TV. Press again to turn off the power and put the TV in STANDBY mode.
VCR 1, 2 switch: Press this switch to turn on power to your VCRs. Press again to turn off the power and put them in STANDBY mode.

⑥ **Audio/Video Component Control Buttons**
You can operate your compact disc player, cassette deck, VCR, and any other video and audio components which are connected to the amplifier using these control buttons. You can assign control signals from other remote controllers to these buttons.

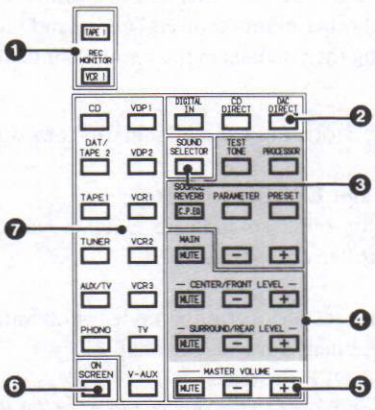
⑦ **Amplifier Control Buttons**
You can operate the amplifier using these control buttons. You can not assign control signals from other remote controllers to these buttons.

Audio/Video Component Control Buttons

See page 42 for details.

Amplifier Control Buttons

Buttons without descriptions function in the same way as those on the amplifier.



❶ REC MONITOR

❷ DIGITAL IN, CD DIRECT, DAC DIRECT

❸ SOUND SELECTOR

❹ Processor Control buttons

- PRESET: Press this button to select a program of the built-in signal processor.

❺ MASTER VOLUME

- + button: Press this button to increase the master volume.
- − button: Press this button to decrease the master volume.
- MUTE button: Press this button to mute all speakers and headphones.

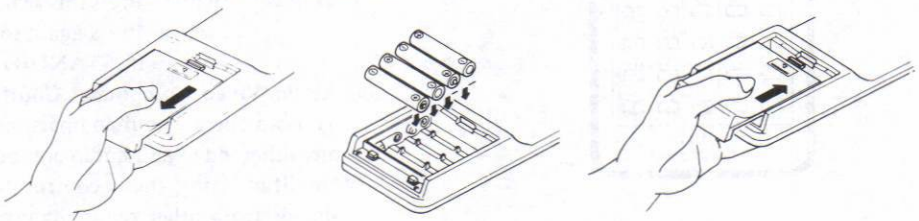
❻ ON SCREEN

❼ Input Selector buttons

Inserting Batteries

Insert the four batteries supplied into the remote controller following the procedure below.

1. Slide the battery cover on the back of the remote controller in the direction of the arrow while pressing it.
2. Insert batteries in the remote controller. Make sure that they are oriented with the proper polarity; (+) to (+) and (−) to (−).
3. Slide the battery cover back in the direction of the arrow.



Replacing the Batteries

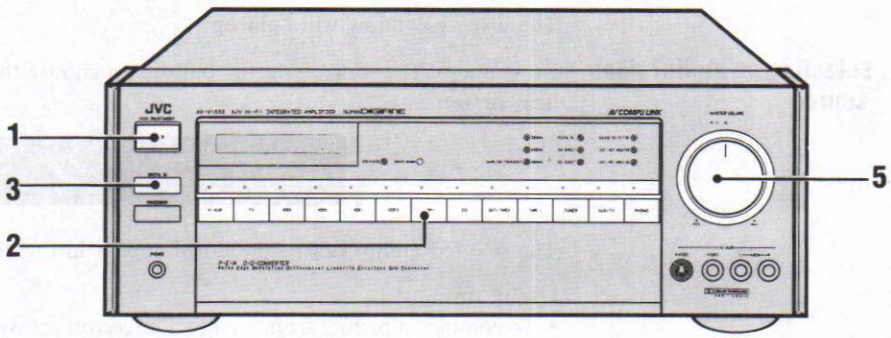
If the range of the remote controller decreases, it is time to replace the batteries. Use 1.5 V R6P (AA) long life dry cells.

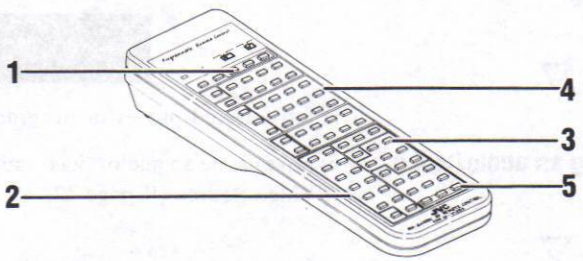
Notes: Follow the precautions below to avoid leaking or cracking cells.

- Orient batteries with proper polarity; (+) to (+) and (−) to (−).
- Use the correct type of batteries. (Batteries which look similar may differ in voltage.)
- Do not allow more than 3 minutes for battery replacement to preserve stored data.
- Replace all four batteries.
- Do not attempt to heat or burn the batteries.
- If your remote controller is to be left unused for a long time, remove the batteries.

Basic Operation

You can carry out basic operations without opening the swing-down panel on the front of the amplifier.





Notes:

- Point the remote controller towards the REMOTE SENSOR on the amplifier for operation.
- Commands from the remote controller are displayed in the window for about five seconds. When no operation has been performed, the display priority for the display window is as follows.
  1. Any audio/video source selected using a REC SELECTOR button
  2. A selected processor program or the message "PROCESSOR OFF"

1. Turning on the power

Press the POWER switch.

The display window will light up.

2. Selecting an audio/video source

Press one of the source selector buttons to choose the audio/video source you want to hear or see.

The selected audio/video source will appear in the display window.

Useful tips:

- To combine a picture from a video source you are watching with sound from a different source:
  — See "SOUND SELECTOR", page 24.
- To record from a different audio/video source to the one you are listening to or watching:
  — See "REC SELECTOR", page 25.

3. Using the built-in processor

Press the PROCESSOR switch to use the built-in signal processor.

The last-selected processor program will be displayed.

4. Operating an audio/video source

You can operate an audio/video source using your remote controller. See "Operating Audio and Video Sources," page 42.

5. Controlling the volume

Turn the MASTER VOLUME control to adjust the level of sound.

On-Screen Display

The on-screen display feature shows a list of current operating conditions on the screen of the TV connected to the amplifier's MONITOR OUT jack.
This feature allows you to see what the amplifier is doing — which sound source is playing through the speakers, which sound source is being recorded, what mode the processor is in, and so on.

Selecting the Display Mode

On-Screen Modes

The following two on-screen modes are available:

- "ON SCREEN ON" mode: The on-screen display is always active.
- "ON SCREEN 5sec" mode: An operation you make is displayed for 5 seconds in the lower righthand corner of the TV.

Each time you press the ON SCREEN button, the on-screen mode changes as follows:

"ON SCREEN ON" ▷ "ON SCREEN 5sec" ▷ "ON SCREEN OFF" (On-Screen display goes off) ▷ Back to the beginning

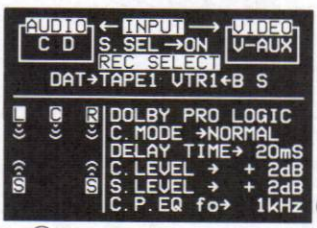
Note: In the "ON SCREEN 5sec" mode, the display on TV goes off after 5 seconds. However, the "ON SCREEN 5sec" mode itself remains active. (If you press the ON SCREEN button, "ON SCREEN 5sec" will be displayed on TV.)

If a video source is being shown on the monitor screen, the on-screen display is superimposed over the image. If not, the on-screen display appears on a blue background.

Important! *If the TV is not connected to the MONITOR OUT jack marked VIDEO, the on-screen display does not appear when an audio source is selected.*

Display

In the ON SCREEN ON mode, the screen at left appears on the TV.



Block ①: Source selection
← INPUT → : Input Selector Buttons
The display changes to DIGITAL, CD DIRECT, or DAC DIRECT according to the signal input status.
S. SEL → : SOUND SELECTOR button
REC SELECT : REC SELECTOR buttons

Block ②: Parameter settings of the built-in signal processor.

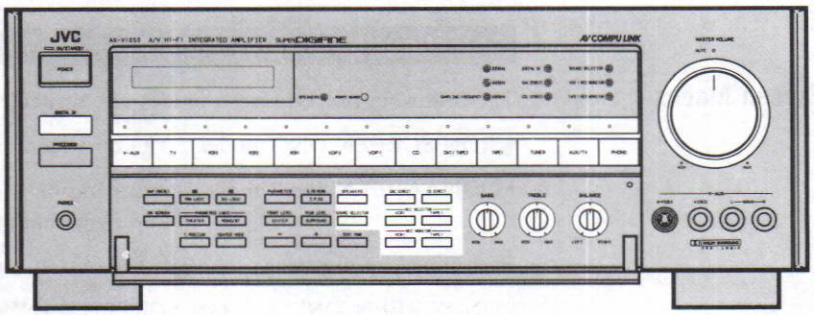
Block ③: Active speakers are marked with ᯤ .

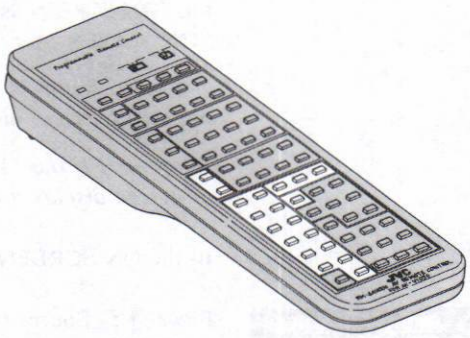
- When the surround sound effect is activated:
  L.R : Main Speakers (Left, Right)
  C : Center Speakers
  S : Surround/Rear Speakers
- When the digital acoustics processor is used:
  M : Main Speakers (Left, Right)
  R : Surround/Rear Speakers

Basic Functions

This part of the manual tells you how to use the basic functions of the amplifier including how to select an audio/video source and how to control the volume and tone of sound.

Controls Used





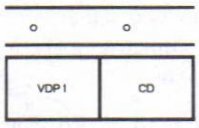
Selecting an Audio/Video Source

The amplifier handles two types of sources, audio sources (compact disc, cassette tape, etc.) that output sound only and video sources (video cassette, video disc, etc.) that output pictures and sound. You can select which source you want to watch, listen to, or record from.

Selecting an Audio/Video Source to Watch or Listen To

Use the following three types of buttons to select a source to watch or listen to.

Input Selector Buttons:



Press one of the input selector buttons to select the audio/video source you want to watch or listen to.
The input selector buttons are divided into the following two groups:

- Video sources are assigned to the seven buttons on the left beginning with the central VDP 1 button. If you press one, both pictures and sound are activated and the orange indicator above the selected source lights up.
- Audio sources are assigned to the six righthand buttons beginning with the central CD button. If you press one, only sound is activated and the yellow indicator above the selected source lights up.

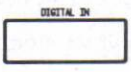
SOUND SELECTOR Button:

Use the SOUND SELECTOR button to choose different audio/video sources for picture and sound as follows.

1. Press one of the input selector buttons to choose the desired video source.
2. Press the SOUND SELECTOR button. The SOUND SELECTOR indicator will light up.
3. Press one of the input selector buttons to choose the audio source you want to hear sound from.
   The pictures (orange indicator) will be combined with sound from the newly selected audio source (yellow indicator).

Note: If you press the SOUND SELECTOR button again, the SOUND SELECTOR indicator will go out, but sound will continue to come from the audio source.
To switch back to the video sound, select the same video source again by pressing the appropriate input selector button.

DIGITAL IN Button:



Use the DIGITAL IN button to change the input mode of an audio signal.

Some input selector buttons are marked in brown. This brown marking denotes that the audio/video source assigned to the button provide both digital and analog audio signals. Each time the DIGITAL IN button is pressed, input alternates between the digital and analog modes. The built-in D/A converter converts a digital input into an analog signal. The input mode, digital or analog, can be set for each of the input selector buttons. Once one input mode is set, the same mode is automatically activated whenever you select that source by pressing one of the input selector buttons.

Note: The sampling frequency of the built-in D/A converter is automatically adjusted to suit the digital input signal. The SAMPLING FREQUENCY indicators light up when:

- A digital input signal is being processed.
- The PROCESSOR switch is on.

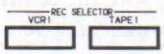
Selecting an Audio/Video Source to Record From

The source being played is automatically selected as the source to record from. Whatever source is being played, the REC SELECTOR button marked with TAPE 1 or VCR 1 allows you to select another source to record from.

Notes:

- An audio/video component connected to the DAT/TAPE 2, VCR 2, or VCR 3 jacks can record only from the source being played.
- An analog input is output as an analog signal, and a digital input as a digital signal.
- If the amplifier receives both an S-video signal and a composite video signal from the source being recorded from, only the S-video signal is output. Recording cannot be made on a VCR connected to the amplifier through the VIDEO jack only.

REC SELECTOR Buttons:



Use the REC SELECTOR buttons to choose an audio/video source to record from. There are two REC SELECTOR buttons, TAPE 1 and VCR 1.

***Important!** You cannot use the REC SELECTOR buttons to choose a digital audio input for recording.*

TAPE 1

Every time you press the REC SELECTOR button marked TAPE 1, the audio source to be recorded from changes in the following order:

INPUT ▷ CD ▷ DAT (DAT/TAPE 2) ▷ TUNER ▷ AUX (AUX/TV) ▷ PHONO ▷ Back to the beginning

"INPUT" denotes the audio/video source currently selected by an input selector button.

Note: The source to be recorded is selected from among the audio sources. If you want to record sound from a video source, choose "INPUT" using the REC SELECTOR button marked TAPE 1, and record from the desired video source while playing the video source.

VCR 1

Every time you press the REC SELECTOR button marked VCR 1, the video source to be recorded from changes in the following order:

INPUT ▷ VDP 1 ▷ VDP 2 ▷ VCR 2 ▷ VCR3 ▷ TV ▷ V-AUX ▷ Back to the beginning

"INPUT" denotes the audio/video source currently selected by an input selector button.

Note: The source to be recorded is selected from among the video sources. If you want to record sound from an audio source, choose "INPUT" using the REC SELECTOR button marked VCR 1, and record from the desired audio source while playing the audio source.

Checking the Source Now Being Recorded

REC MONITOR Buttons

Press the REC MONITOR button marked TAPE 1 or VCR 1 to monitor the audio/video source which is being recorded through the TAPE 1 or VCR 1 jack. Use this feature to temporarily check the audio/video source being recorded when you are playing another source.

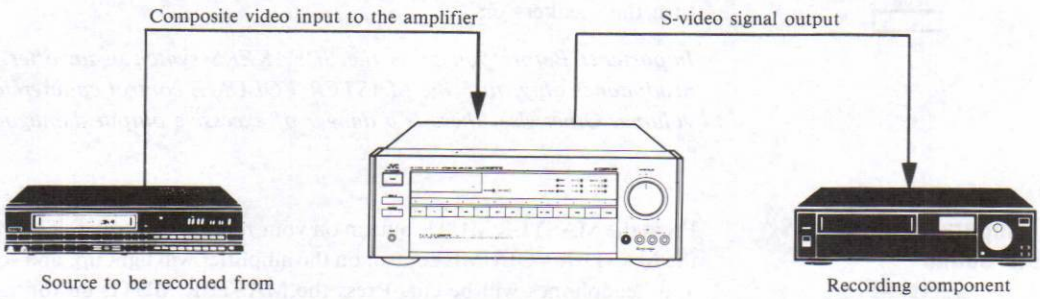
- To check the sound being recorded through the TAPE 1 jacks
  — Press the REC MONITOR button marked TAPE 1.
- To check the picture and sound being recorded through the VCR 1 jack
  — Press the REC MONITOR button marked VCR 1.

Recording on a VCR Fitted with S-video signal jack

Y/C Separation Circuit

The VCR 1 S-VIDEO jack marked OUT has a Y/C separation circuit which converts a composite video signal into an S-video signal. A VCR connected to the VCR1 S-VIDEO jack marked OUT can record from another VCR which outputs composite video signals only. The composite video signal is converted into an S-video signal at the VCR 1 S-VIDEO jack marked OUT and passed on to the VCR fitted with an S-video signal jack.

Note: The audio channels should be connected to the AUDIO jacks.



Controlling Volume and Tone

You can adjust the volume and tone produced by the speakers. The CD DIRECT and DAC DIRECT features offer higher sound quality.

Volume Control

MASTER VOLUME Control

The MASTER VOLUME control adjusts the level of sound from the main, center, and surround/rear speakers and headphones. Turn the control clockwise to increase the volume. When you use the remote controller, press the + button to increase the volume and the − button to decrease the volume.

BALANCE Control

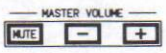
This controls the sound balance between the main left and right speakers and between the left and right sides of the headphones. Turn the BALANCE control clockwise to increase the output from the right speaker. Turn the BALANCE control counterclockwise to increase the output from the left speaker.

Listening Through Headphones Only

If you want to listen through the headphones only (with the speakers muted), press the SPEAKERS switch to turn the speakers off. The SPEAKERS indicator will go out, and no sound will be heard from any of the speakers. Press the SPEAKERS switch again to turn the speakers on.

***Important!** Before you press the SPEAKERS switch again after listening through the headphones only, turn the MASTER VOLUME control counterclockwise to reduce the volume. Otherwise, there is a danger of excessive output damaging the speakers.*

Temporarily Muting the Sound



Press the MASTER MUTE button on your remote controller. The MUTE indicator above the MASTER VOLUME control on the amplifier will light up, and sound from all speakers and headphones will be cut. Press the MASTER MUTE button again to return output to the speakers and headphones; the MUTE indicator will go out.

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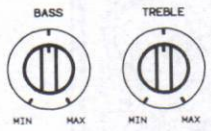
Tone Control

BASS and TREBLE Controls



The BASS and TREBLE controls adjust the tone of the output to the main speakers and headphones.

- The BASS control adjusts the bass level. Turn the control clockwise to accentuate bass sounds, and counterclockwise to weaken bass sounds.
- The TREBLE control adjusts the treble level. Turn the control clockwise to accentuate treble sounds, and counterclockwise to weaken treble sounds.

Note: This feature affects the sound you are listening to and not the sound being recorded.

CD DIRECT and DAC DIRECT Buttons

The CD DIRECT and DAC DIRECT features shorten the signal path and therefore reproduce sound of higher quality.
Press the CD DIRECT button to activate the CD DIRECT feature when listening to a compact disc through the analog input. Press the DAC DIRECT button to activate the DAC DIRECT feature when listening to a digital input. Every time the CD DIRECT or DAC DIRECT button is pressed, the features are alternately turned on and off.

- CD DIRECT: An analog input signal from a compact disc bypasses the input selector circuit, BALANCE circuit, and PROCESSOR circuit, going directly to the MASTER VOLUME circuit.
- DAC DIRECT: A digital audio input is converted to analog by the built-in D/A converter and the analog signal bypasses the BALANCE circuit and PROCESSOR circuit, going directly to the MASTER VOLUME circuit.

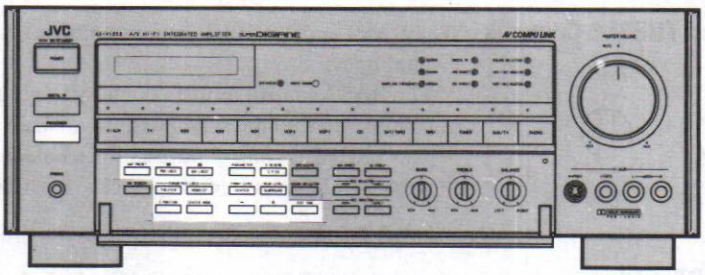
Notes:

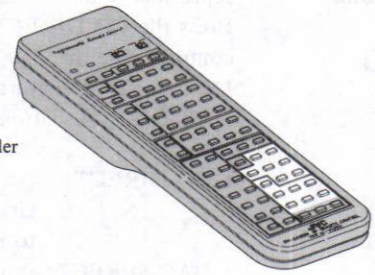
- Turning CD DIRECT or DAC DIRECT on causes the PROCESSOR button to go off and the BALANCE control and the MUTE buttons on the remote controller to become inactive.
- Turning CD DIRECT on causes the current source selected by an input selector button to switch to CD.
- Turning DAC DIRECT on causes the DIGITAL IN button to activate.

Processor

The built-in signal processor enables you to enjoy the 3-dimensional effect experienced in movie theaters and the acoustics of concert halls in your own home.

Controls Used





Remote controller

Programs

The processor provides two groups of programs for a total of 11 sound effects.

Surround sound effects group:
The programs in this group replicate the sound experienced in a movie theater. The main speakers, center speakers, and surround/rear speakers are used to produce this effect.

Digital Acoustics Processor (DAP) group:
The programs in this group reproduce the acoustics of a concert venue. The main speakers and surround/rear speakers are used to produce this acoustic effect.

These groups of programs are described in detail beginning on the next page.

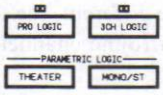
Surround Sound Effects

The programs in the surround sound effects group replicate the sound experienced in movie theaters when video movies are played.

Selecting a Program

Each program in the surround sound effects group has two or four center channel modes. When you select a program, you must also select a center channel mode.

Selecting a Program



Press the desired program button.

DOLBY PRO LOGIC: Select this program when you play a source marked DOLBY SURROUND.

DOLBY 3CH LOGIC: Select this program when you play a source marked DOLBY SURROUND and surround/rear speakers are not available.

THEATER: Select this program to modify the surround sound effect offered by the DOLBY PRO-LOGIC program according to your room conditions and taste.

STEREO LOGIC: Select this program for stereo sources.

MONO LOGIC: Select this program for mono sources.

Note: Each time the MONO/STEREO button is pressed, the STEREO LOGIC program alternates with the MONO LOGIC program.

CENTER MODE Button

Set the center channel mode for each program using the CENTER MODE button. The following center channel modes are available:

NORMAL: Use this mode when the center speakers are smaller than the main speakers. The bass frequencies in the center channel signal are reproduced through the main speakers.

WIDE: Use this mode when the center speakers are as large as the main speakers. The whole of the center channel signal is reproduced through the center speakers.

PHANTOM: Use this mode when no center speakers are used. The whole of the center channel signal is reproduced through the main speakers.

OFF: Use this mode to turn the center channel signal off.

Each time you press the CENTER MODE button, the center channel mode changes as follows.

NORMAL ▷ WIDE ▷ PHANTOM ▷ OFF ▷ Back to the beginning

Notes:

- The "NORMAL" and "OFF" center channel mode is not available with the STEREO LOGIC and MONO LOGIC programs. When center speakers are used, use the "WIDE" mode regardless of their size.
- When the DOLBY 3CH LOGIC program is selected, use the center speakers and a center channel mode other than PHANTOM. Otherwise, the desired sound effect may not be produced.

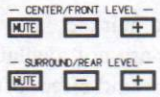
Adjustment

To obtain the optimum surround sound effect, adjust the parameters described below.

Notes:

- Make adjustments for each program in the surround sound effect group. Once adjusted, no further changes are needed until the speaker layout is changed.
- You need not make adjustments for the MONO LOGIC or STEREO LOGIC programs.

Center Channel Level and Surround Channel Level



Adjusting the volume balance between speakers.

If the main speakers, center speakers, and surround/rear speakers are different, the sound level may differ among them. Adjust the center channel level and surround channel level to achieve the ideal volume balance.

Center Position

Correction of the center speaker positioning.

Ideally, the main speakers and center speakers should be placed equidistant from the listening position. If they are not, you can adjust the sound image using the C.POSITION (center position) button.

Center Parametric Equalizer

Adjusting the center spearkers' tone.

The center speakers are primarily used to reproduce the human voice, as in movies. You can improve the clarity of the human voice using the C.P.EQ (center parametric equalizer) button.

Delay Time

Correction of the surround/rear speaker positioning.

The delay time is preset for an arrangement in which the main speakers and surround/rear speakers are equidistant from the listening position. If the distance of the surround/rear speakers from the listening position differs from that of the main speakers, adjust the delay time for the best sound spread.

Auto Input Balance

No balance adjustment is needed for the right and left audio signals.

An audio/video source marked DOLBY SURROUND with generates an audio signal that contains surround sound information. For collect interpretation of the information leading to a good surround sound effect, properly balanced right and left audio signals need to be input into the signal processor. The amplifier's auto input balance function automatically maintains the balance between the right and left audio input signals, so no further balance adjustment is needed.

The auto input balance function can be turned on or off.
To turn on or off the function, select the "AUTO BALANCE" parameter using the PARAMETER button and press the + or – button.

Adjustment procedure

Adjusting Center Channel Level Surround Channel Level

Make adjustments from the listening position using the remote controller.

1. Press the TEST TONE button.
   The test tone will be heard moving clockwise from speaker to speaker.

2. Adjust the center channel level using the CENTER/FRONT LEVEL buttons marked − and +.
   Adjust until the main speakers and the center speakers produce the test tone with the same volume.
   - If the center channel mode is PHANTOM, the CENTER/FRONT LEVEL button is disabled.

3. Adjust the surround channel level using the SURROUND/REAR LEVEL buttons marked − and +.
   Adjust until the main speakers and the surround/rear speakers produce the test tone with the same volume.
   - If the DOLBY 3CH LOGIC program is selected from the surround sound effect group, the SURROUND/REAR LEVEL button is disabled.

4. Press the TEST TONE button.
   The test tone will cease.

Notes: No test tone is produced in the following situations:
- The PROCESSOR switch is in the off state.
- A program in the DAP group is selected.
- The DIGITAL IN button is in the DIGITAL IN state, but no digital source is connected to the DIGITAL jack(s).

Adjusting the Center Position

1. Press the C.POSITION button.

2. Adjust the center position using the − and + buttons.
   If the sound from the center speakers seems more distant than that from the main speakers, press the + button. If it appears closer, press the − button.

Adjusting the Center Parametric Equalizer

1. Press the C.P.EQ button.
   The center frequency (f_0) of the center parametric equalizer appears in the display window.

2. Adjust the center frequency using the − and + buttons.
3. Press the C.P.EQ button again.
   The gain of the center parametric equalizer appears in the display window.

4. Adjust the gain using the − and + buttons.

Note: If the on-screen display feature is activated, the gain curve of the center parametric equalizer appears on the monitor.

Adjusting the Delay Time

1. Press the PARAMERER button to display "DELAY TIME" in the window.

2. Adjust the delay time using the − and + buttons as follows.
   - Set the delaly to about 15 ms if the sound from the surround speakers appears more distant than that from the main speakers.
   - Set it to about 20 ms if the sound from the surround speakers and the main speakers seems equidistant.
   - Set it to about 25 ms if the sound from the surround speakers seems closer than that from the main speakers.

Parameter Setting Units and Range

Parameter	Range	Unit
CENTER LEVEL SURROUND LEVEL	−∞, −18 dB ~ +6 dB	1 dB
C.P.EQ	63, 100, 160, 250, 320, 400, 500, 640, 800,	
(f_0)	1k, 1.3k, 1.6k, 2.5k, 4.0k, 6.3k (Hz)	
(Gain)	−6 dB ~ +6 dB	1 dB
C.POSITION	−1 m ~ +1 m	5 cm
Delay Time		
(Use of DOLBY PRO LOGIC program)	15 ms. ~ 30 ms	1 ms.
(Use of THEATER program)	0 ms. ~ 30 ms	2 ms.

Modifying the Surround Sound Effect

Three of the parametric-logic programs, THEATER, STEREO LOGIC, and MONO LOGIC, have adjustable parameters which enable you to modify the preset surround sound effect to your liking. The surround sound effect can be modified to suit your room conditions and the materials you play.

Press the PARAMETER button to choose the parameter you want to change. Adjust the selected parameter using the − and + buttons.

Adjustable Parameters

The parameters which can be changed depend on the program.

THEATER Program

S.SPREAD: (Surround Spread) — Change the S.SPREAD parameter to modify the sound spread in the right-left direction behind you. The parameter must be an integer value between 0 and 3. The higher the parameter value, the more the sound appears to spread out.

S.STEERING: (Surround Steering) — Change the S.STEERING parameter to modify sound mobility in the front-back direction. The parameter can be set between zero and one in increments of 0.1. The higher the parameter value, the greater the sound mobility.

NR (Noise Reduction): — The NR parameter enables you to turn the noise reduction circuits acting on the surround signal on and off.

L.P.F. (Low-Pass Filter): — The L.P.F. parameter enables you to turn the low-pass filter acting on the surround signal on and off.

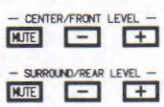
Each time you press the PARAMETER button, the parameters change as follows.

DELAY TIME ▷ AUTO BALANCE ▷ S.SPREAD ▷ S.STEERING ▷ NR ▷ L.P.F. ▷ Back to the beginning

MONO LOGIC and STEREO LOGIC Programs

EFF LEVEL: (Effect Level) — Change the EFF LEVEL parameter to modify the sound spread. You can set the parameter to from zero to one in increments of 0.1. The higher the parameter value, the greater the sound spread.

Checking the Surround Sound Effect



Turn the center and surround channels on and off using the MUTE buttons on the remote controller and compare the sound. This enables you to check the surround sound effect. This test is useful when you are modifying the surround sound effect.

Dolby Pro • Logic Surround

The sound tracks of the video software bearing DOLBY SURROUND mark includes the same encoded surround information as found in the Dolby Stereo films.
Dolby Pro Logic Surround is a consumer version of the decoding process used in professional Dolby Stereo equipment, and it recreates the Dolby Stereo theatre's ambience and effects when watching the video sources at home.

Dolby Pro Logic Surround decoder provides:

- Four primary sound channels — LEFT, RIGHT, SURROUND, and additional CENTER channel.
- Adaptive Matrix to actively derive each channel.

The result is that Dolby Pro Logic Surround has the effect of widening the useful listening area and enhancing directional effects, while at the same time locking center channel information on-screen for the home audience.

Parametric Logic

The following three programs will help you get greater enjoyment from audio and video sources at home.

1. **THEATER Program**
   The THEATER program is based on Dolby Pro Logic Surround and includes unique JVC parameters. These parameters enable you to modify the sound effect according to your room conditions, bringing the 3-dimensional effect experienced in a movie theater to your home. The THEATER program also gives a natural surround sound effect with less rearward sound mobility for music-dominant sources.

2. **MONO LOGIC and STEREO LOGIC Programs**
   The MONO LOGIC and STEREO LOGIC programs produce sound through five speakers by digital signal processing. This add a surround sound effect to mono, and old films and to video materials not bearing the DOLBY SURROUND mark.

Digital Acoustics Processor

The programs in the digital acoustics processor (DAP) group bring you the effect of a live performance, as in a concert hall, when for example, listening to audio sources.

Selecting a Program

Choose the type of a concert venue you want to simulate.

Selecting a Program

Press the DAP PRESET button on the amplifier to select one of the six programs. Each time you press the button, the program changes as follows.
Symphony Hall ▷ Recital Hall ▷ Stadium ▷ Church ▷ Jazz Club ▷ Pavilion ▷ Back to the beginning

Features of the Programs

The programs in the DAP group simulate the acoustics of concert venues based on actually measured acoustic data. The venues which can be simulated are as follows.

Symphony Hall:
A shoe-box type hall accommodating an audience of 2,200 in the Netherlands. This type of hall features fine acoustics.

Recital Hall:
A small, oval hall in the Netherlands. This type of hall is used for recitals of classical music.

Stadium:
A stadium accommodating about 30,000 people. Such stadiums are used for football and ball games as well as rock concerts.

Church:
A cathedral with a 40-meter-high ceiling in Germany. This cathedral has the special acoustics peculiar to stone buildings.

Jazz Club:
A club for live music with a low ceiling in Japan. Such clubs are often used for jazz performances.

Pavilion:
An octagonal pavilion with a high ceiling in Japan.

(No.20276)1-67

Adjustment

For improved acoustics, adjust the following parameters.

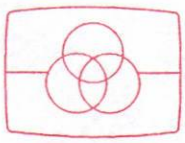
Source Reverberation

Adjust the source reverberation parameter for improved reverberation allowing for source reverberation included in the recordings.

Press the S.REVERB button. "SOURCE REV → 0.0s" will appear in the display window. Set the parameter value using the − and + buttons.

Range: 0.0 to 1.0 sec in increments of 0.2 sec, 1.6 sec, and 2.0 sec

Adjustment guide:
Sources recorded in small halls (with little reverberation)
— Set source reverberation at 0.6 to 1.0 sec.
Sources recorded in large halls (with greater reverberation)
— Set source reverberation at 1.0 to 2.0 sec.



Modifying Acoustics

The programs in the DAP group have adjustable parameters, enabling you to modify the preset acoustics as desired.
Use the PARAMETER, FRONT LEVEL, and REAR LEVEL buttons to select the parameter you want to change. Set the selected parameter using the – and + buttons.

PARAMETER Button

The following four parameters can be chosen using the PARAMETER button:

ROOM SIZE:
Change the room size parameter to modify the size of the venue being simulated.
The size increases with parameter value.

LIVENESS:
Change the setting of the liveness parameter to modify an acoustic depth.
As the parameter value increases, an acoustic depth increases and sounds die away more slowly.

REV LEVEL (Reverberation Level):
Change the setting of the reverberation level parameter to modify the intensity of reverberation.
As the parameter value is increased, the reverberation becomes greater.

L.P.F. (Low-pass Filter):
Change the setting of the low-pass filter parameter to simulate changes to the hardness of the venue's walls.
As the parameter value is increased, the effect of harder walls is produced.

Each time you press the PARAMETER button, the parameters change as follows:
ROOM SIZE ▷ LIVENESS ▷ REV LEVEL ▷ L.P.F. ▷ Back to the beginning

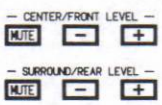
FRONT LEVEL and REAR LEVEL Buttons

Front level and rear level refer to the level of the sound effect produced by the DAP.
Press the FRONT LEVEL button to choose the front level parameter, and the REAR LEVEL button to choose the rear level parameter. Set the selected parameter using the – and + buttons.

Front Level:
The setting of the front level parameter modifies the effect the DAP has on sound from the main speakers.

Rear Level:
The setting of the rear level parameter modifies the volume from the rear speakers.

Checking the Effect of the DAP



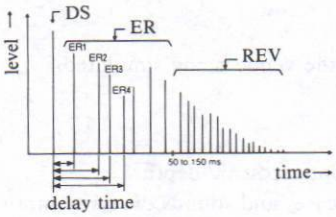
Turn the sound from the front and rear channels on and off using the MUTE buttons on the remote conttroller and compare the sound This enables you to check the effect of the DAP.

Note: To mute all sound from the main speakers, press both the MAIN MUTE and CENTER/FRONT MUTE buttons. If you press the MAIN MUTE button only, the DAP-processed sound from the front channels remains unsuppressed.

Digital Acoustics Processor (DAP)

JVC measured and analyzed famous concert venues around the world using the Company's advanced measurement system (the symmetrical 6-point sound-field analysis method). Six sets of this acoustic data are stored in the amplifier's DAP, enabling you to easily reproduce the acoustics of specific venues in your own home.

The sound we heard at a concert can be classified into the following three components:



1. Sound directly reaching the ears from the source. — Direct Sound (DS)
2. Sound reaching the ears after several reflections from walls and the ceiling. — Early Reflections (ER)
3. Sound reaching the ears after many reflections. — Reverberations (REV)

Direct sound reaches us from the sound source without being reflected, and it corresponds to the sound which the DAP bases its simulation on. Since the source sound already includes some reflections and reverberation, the source reverb parameter needs to be adjusted so that the reflections/reverberation added by the DAP allows for those already included in the source.

Early reflections reach us after diffusing from the sound source and being reflected several times by the walls and ceiling. Because of these detours, early reflections are heard a certain time after the direct sound, which comes straight to our ears. Since the time taken to reach our ears depends on the reflection path, early reflections consist of various sounds with different delay times. As the venue size increases, the reflection paths become longer — and as a result, the delay time increases. The DAP simulates the relationship between reflection path and delay time according to the setting of the room size parameter.

Reverberations reach our ears from every direction after many reflections. They have various delay times. Hence, reverberations are heard as a mass of reflections that decay continuously.

The time taken for reflections and reverberations to decay while being repeatedly reflected (reverberation time) depends on the structure of the hall, the wall materials, and the sound frequency.
The DAP simulates decay time characteristics according to settings of the liveness and low-pass filter parameters.

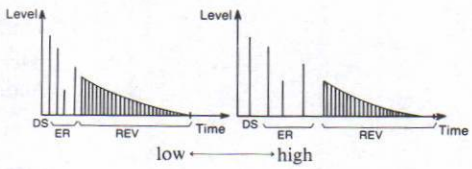
A combination of direct sound, early reflections, and reverberations give each individual concert venue unique acoustic characteristics.
The DAP adds early reflections and reverberations to the source sound to simulate the acoustics of a specific venue.

Appendix Technical Information on Parameters

Room Size

The Room Size parameter modifies the interval between early reflections.

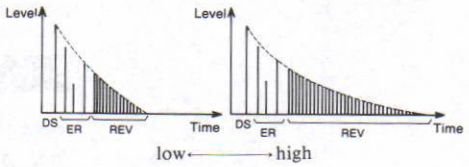
Setting range : 0.6 to 2.0
Setting increment : 0.2
Present value : 1.0



Liveness

The liveness parameter modifies the reverberation time.

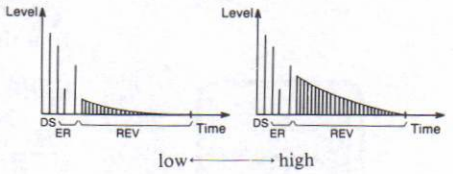
Setting range : 0.6 to 2.0
Setting icrement : 0.2
Present value : 1.0



Reverb Level

The reverb level parameter modifies the level of reverberations.

Setting range : 0.0 to 1.2 and 1.6
Setting increment : 0.2
Present value : 1.0

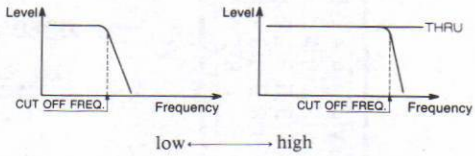


Low-pass Filter

The low-pass filter parameter modifies the cut-off frequency of a low-pass filter for early reflections and reverberations.

Setting range : 2 kHz to 12 kHz, 16 kHz, and THRU
Setting increment : 2 kHz
Present value
Symphony Hall : 8 kHz
Recital Hall : 8 kHz
Stadium : 8 kHz
Church : 6 kHz
Jazz Club : 8 kHz
Pavilion : 6 kHz

• "THRU" denotes that all signals pass the low-pass filter as they are.



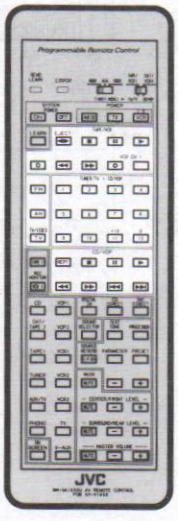
Operating Audio and Video Sources

The remote controller supplied with this amplifier enables you to control the audio and video sources connected to the amplifier as well as the amplifier itself.

- Operating JVC audio/video components
  Control signals for JVC audio/video components are preset in the remote controller.
- Operating other manufacturers' audio/video components
  The remote controller can be taught the control signals for other manufacturers' audio/video components.

Controls Used

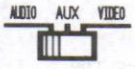
See the figure at left for the locations of controls used.



Selecting the Operation Mode

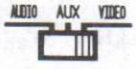
Select the operation mode according to the audio/video component you want to control. There are two selector switches (selector switch 1 on the left and selector switch 2 on the right) in the upper right corner of the remote controller. Use selector switch 1 to choose from the following three operation modes:

AUDIO mode:



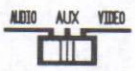
Set selector switch 1 to the AUDIO position for this mode.
Use the AUDIO mode to control audio components such as CD players.

VIDEO mode:



Set selector switch 1 to the VIDEO position for this mode.
Use the VIDEO mode to control video components such as VCRs.

AUX mode:



Set selector switch 1 to the AUX position for this mode.
Use this mode for audio/video components for which control signals are not preset in the remote controller. Teach the remote controller the control signals for your audio/video components.

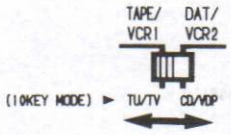
Operating JVC Audio/Video Components

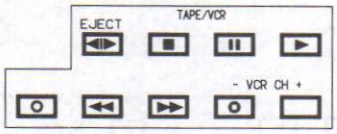
You can control JVC audio/video components with the remote controller using the preset signals.

Operating Audio Components

With selector switch 1 in the AUDIO position, audio components such as a CD player can be controlled. Use selector switch 2 to select TUNER or CD (which use the numeric buttons), or TAPE (cassette deck) or DAT.

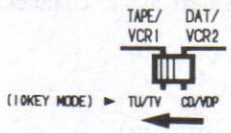
Tape Deck

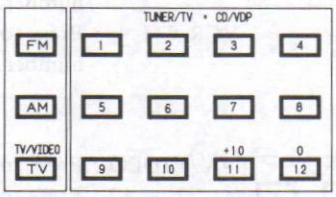




EJECT: Press to eject a cassette. (DAT)
: Press to change the direction of play. (cassette deck)
: STOP
: PAUSE
: PLAY
: REC
: Rewind (right to left)
: Fast forward (left to right)
: MUTE

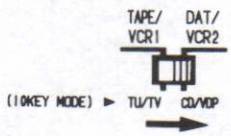
Tuner

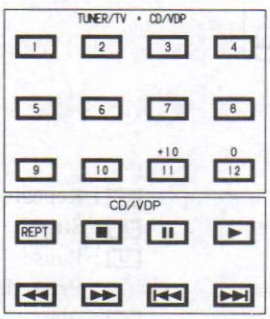




FM: Press to listen to FM broadcasts.
AM: Press to listen to AM broadcasts.
TV: Press to listen to TV sound.
1 ~ 10, +10, 0: Press one of these buttons to choose a preset channel.

CD Player





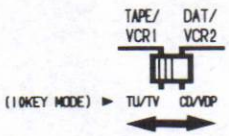
REPT: Press for repeated play.
: STOP
: PAUSE
: PLAY
: Fast backward (MANUAL SEARCH)
: Fast forward (MANUAL SEARCH)
: Backward search (AUTO SEARCH)
: Forward search (AUTO SEARCH)
1 ~ 10, +10, 0: Press one of these buttons to choose a selection.

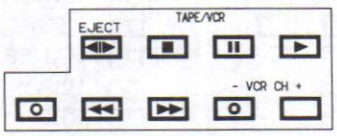
Operating Video Components

With selector switch 1 in the VIDEO position, video components such as a VCR can be controlled. Use selector switch 2 to select TV or VDP (video disc player) (which use the numeric buttons), or VCR1 or VCR2.

Note: Some JVC VCRs have two types of remote control codes for switching. "VCR1" corresponds to remote control code "A" with such VCRs, and "VCR2" corresponds to remote control code "B". If the VCRs connected to the VCR1 and VCR2 jacks are set for operation using different codes, they can be controlled separately using the remote controller.

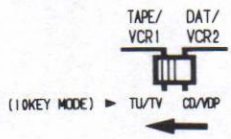
VCR

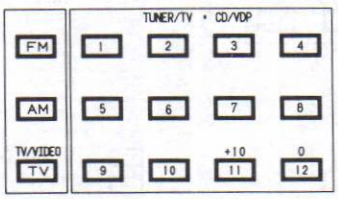




EJECT: Press to eject a cassette.
■ : Stop
II : Pause/still
▶ : Play/double speed
● : Record
◀◀ : Rewind
▶▶ : Fast-Forward
– VCR CH : Press to choose the next lower channel number.
VCR CH + : Press to choose the next higher channel number.

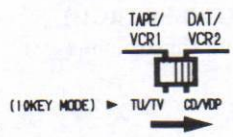
TV

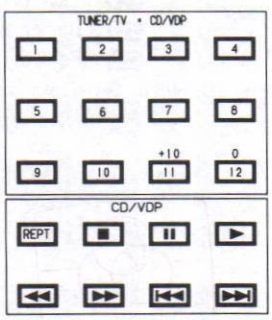




TV/VIDEO : Press to select TV or VIDEO.
1 ~ 12 : Press to select a TV channel.

Video Disc Player





REPT : Repeated play
■ : Stop
II : Pause
Press the ▶ button to resume playing.
▶ : Play
◀◀ : Fast backward
▶▶ : Fast forward
|◀◀ : Reverse chapter feed
▶▶| : Forward chapter feed
1 ~ 9, 0 : Press to choose a chapter number.

COMPU LINK Remote Control System

The COMPU LINK Remote Control System automatically interlocks your audio components for simple operation. Connecting the COMPU LINK SYNCHRO-1 jacks on the back of the amplifier to the audio components will enable you to use the three functions below.

Note: Your CD player should be connected to both the DIGITAL jack on the back of the amplifier and also the AUDIO (analog) jacks.

Equipment Remote Control

Even if a component has no remote control signal sensor, you can control it via the REMOTE SENSOR on the amplifier using the amplifier's remote controller. For details, see pages 42 and 43.

Note: Direct the remote controller at the REMOTE SENSOR on the amplifier.

Automatic Source Selection

When a component is put in the play state, the corresponding input selector button on the amplifier is automatically activated. On the contrary, when one of the input selector buttons is pressed, the corresponding component automatically begins to play. The component previously playing stops after 5 seconds.

Note: If a cassette deck rather than a DAT deck is connected to the DAT/TAPE 2 jacks on the back of the amplifier, the input selector button "DAT/TAPE 2" is excluded from the automatic source selection feature.

Synchronized Recording

As soon as a compact disc or record is set to play, the tape deck starts recording. To use this feature, follow the procedure below.

1. Put a tape in the deck and a disc in the CD player or turntable.
2. Simultaneously press the REC and PAUSE buttons on the tape deck to put it the REC-PAUSE state.
   - Press the REC button and PAUSE button together, or the synchronized recording feature will not operate.
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 from the REC/PLAY mode to the REC/PAUSE mode,and stops four seconds later.

Notes:

- While synchronized recording is active, the functions described below become inactive to prevent recording failure.
  When recording on a tape deck connected to the TAPE 1 jacks:
  — The REC SELECTOR button marked TAPE 1 is set to CD and cannot be changed.
  When recording on a tape deck connected to the DAT jack:
  — The input selector button "DAT" is activated; other input selector buttons are disabled.
- 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.

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AV COMPU LINK System

The AV COMPU LINK system automatically interlocks the amplifier with video components to enable simpler operation. Connecting the AV COMPU LINK jacks on the rear of the amplifier to your video components will enable you to do the following:

- Play a video cassette with a one-touch operation
- Turn on power to the amplifier, VCRs, and TV, on or off and put them into the STANDBY mode
- Automatically select the TV input mode
- Automatically select the VCR input mode

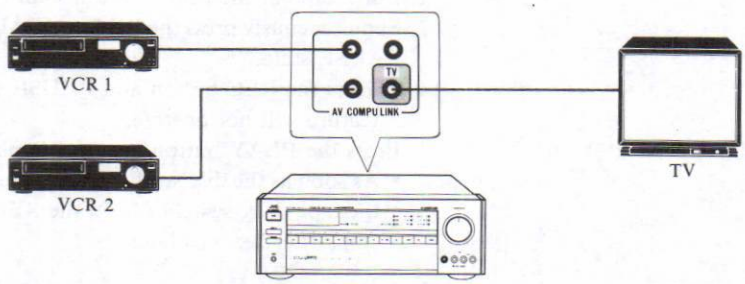
See the following pages for the details of these functions.

Connections

For connection, use the shielded audio cable with monaural mini plug (3.5 mo) equivalent to the remote cable for COMPU LINK Remote Control System.

There are four AV COMPU LINK jacks. Connect your TV to the AV COMPU LINK jack marked "TV". VCR 1 and VCR 2 can be connected to any of the AV COMPU LINK jacks except the one marked TV.

After connecting your VCRs to the AV COMPU LINK jacks, set their remote control codes (A/B) before trying to operate them. Set the VCR connected to the VCR 1 jacks to remote control code "A" and a VCR connected to the VCR 2 jacks to "B". Refer to the VCR user's manual for details of how to set the remote control code.



Connection Notes

- *The AV COMPU LINK jacks output control signals for the VCR and TV only. The VCRs and TV must also be connected to the AUDIO, VIDEO, and a VIDEO jacks, through which picture and sound signals are transmitted.*
- *Make connections to the AV COMPU LINK jacks, not the COMPU LINK-1 SYNCHRO jacks.*
- *Some VCRs use the same jack for both AV COMPU LINK and SWAP editing. However, the jack cannot be used for both purposes simultaneousl. Use it either for AV COMPU LINK or SWAP editing.*
- *The AV COMPU LINK system does not work with a VCR connected to the VCR 3 jacks.*

Notes on Operation from Remote Controller

When operating the TV by remote control, point the remote control unit at the REMOTE SENSOR of the the amplifier. When a remote cable is connected to the AV COMPU LINK jack of the TV, The Remote Control Sensor of the TV is disabled.

When operating the VCR by remote control, point the remote control unit directly at the VCR.

One-touch Video Play

When a video cassette with its safety tab removed is loaded into the VCR, the following actions take place automatically and playing starts.

- The amplifier, VCR, and TV are powered up.
- The TV/VIDEO input selector switch is set to VIDEO.
- The corresponding input selector button is activated.
- The VCR starts playing.

Note: If the video cassette still has its safety tab, you must press the PLAY button on the VCR to start operation after the power comes on.

Amplifier, VCR, and TV power on and off, and use of the STANDBY mode

Pressing the SYSTEM POWER button marked ON on the remote controller turns on power to the amplifier, VCRs, and TV simultaneously. Pressing the SYSTEM POWER button marked OFF turns off the power and leaves them in the the STANDBY mode.

Important! *Pressing the POWER button on the amplifier or the POWER button marked AUDIO on the remote controller has a different function from pressing the SYSTEM POWER buttons marked ON and OFF. The differences are the following:*

- *Only the video source selected by the input selector button on the amplifier and the TV are powered up.*

  Example: If the input selector button VCR is pressed, the amplifier, VCR, and TV are switched on. If the input selector button AUX/TV is pressed, the amplifier and TV are powered up.
- *When the power is turned off, power to a VCR which is recording remains on.*

Automatic Setting of the TV Input Mode

When a source is selected, the appropriate TV input mode (TV or VIDEO 1/2) is chosen.
If the input selector button AUX/TV is pressed, the TV input mode becomes TV.
If a video source is selected by pressing the corresponding input selector button, the TV input mode for TV becomes VIDEO 1/2.
If an audio source is selected by pressing the corresponding input selector button, the TV input mode becomes VIDEO 2. This enables the on-screen display feature of the amplifier. To watch TV while listening to an audio source, select the TV mode using the TV/VIDEO button on the remote controller.

Note:
If the selected source is connected through the S-VIDEO jack, the TV input mode is set to VIDEO 1. If the selected source is connected through the VIDEO jack only, the TV input mode is set to VIDEO 2. If the REC MONITOR button is on, the TV input mode is chosen according to the source selected with the REC SELECTOR button.

Automatic Setting of the VCR Input Mode

When a source is selected, the appropriate VCR input mode (S-VIDEO or composite) is chosen to prepare for recording.

If the selected source is connected through the S-VIDEO jack, the S-VIDEO VCR input mode is chosen.
If the selected source is connected through the VIDEO jack only, the composite VCR input mode is chosen.
Note: When recording on VCR 1 deck or recording after using the Y/C separation circuit to convert a composite signal into an S-VIDEO signal, disconnect the remote control cable from VCR 1 and reset the VCR input mode.

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Operating Other Manufacturers' Audio/Video Components

You can assign the remote control signals of other manufacturers' audio/video components to buttons in the audio/video component control area of the remote controller and to the POWER buttons marked TV and POWER-VCR 1, 2 (this is the learning operation). This feature enables you to control other manufacturers' audio/video components in the same manner as JVC audio/video components using the remote controller.

Preparation for Learning

Before starting learning, make the following preparations:

Setting the Operation Mode

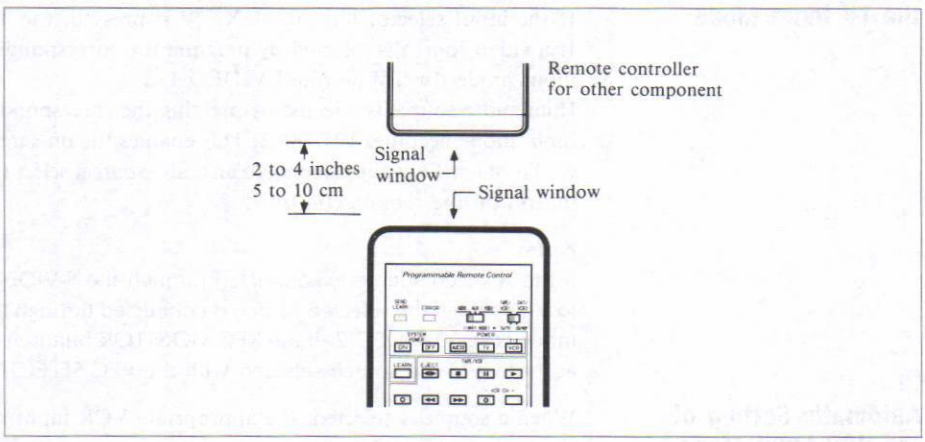
Set the operation mode selector switch 1 to the desired operation mode. See page 41.

- In the AUDIO and VIDEO modes, pressing the buttons issues preset remote control signals to JVC audio/video components. These preset remote control signals can be overwritten by remote control signals for other manufacturers' audio/video components. When the new signals are canceled, the preset signals are restored.

Preparing the Remote Controller to Learn Control Signals

Place the remote controller for the other component and the amplifier's remote controller on a level surface with the signal windows facing each other.
Separate the two remote controllers by 2 inches to 4 inches (5 cm to 10 cm).
If this spacing is too great or small, learning may not be carried out properly.

Note: Before starting learning, test the remote control operation using the other component's remote controller to make sure it is ready.



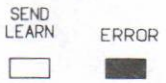
Learning

Learning

1. Press the button to which a signal is to be assigned while holding down the LEARN button.

   The SEND/LEARN indicator starts blinking.

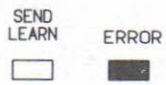
   • If the ERROR indicator lights up, the control signal is already assigned to the chosen button.
   To assign a new control signal to the chosen button, go to the next step.
   To retain the preset control signal, wait until the indicators go off, and start from the beginning.



2. Press the button on the other component's remote controller which you want to assign.

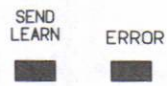
   • Press while the SEND/LEARN indicator is blinking.

   The SEND/LEARN indicator lights up.



   Important! *Keep pressing the button while the SEND/LEARN indicator remains lit.*

3. End of learning



   • If the ERROR indicator lights up, learning has failed.Start again from the beginning.

   Important! *If the ERRORindicator blinks three times during learning, it means that further learning is inhibited.*

Notes:

- Learning may fail for the following reason:
  — The signal to be learned is very long or of a special nature. This may be the case if learning fails even after three or four attempts.
- Learning succeeds, but the remote control does not work.
  — Try learning again.
  (Some audio/video components will not accept control signals which deviate even slightly from the specifications.) Control signals which transmit a large volume of information, such as programming for unattended recording of radio or TV programs, may not work properly.

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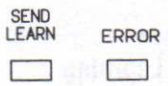
Canceling

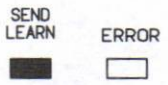
1. Press the button whose assigned control signal you wish to cancel while holding down the LEARN button.

   The SEND/LEARN indicator blinks while the ERROR indicator lights up.



2. Release the LEARN button while holding down the button whose assigned control signal you wish to cancel.

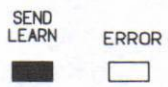
   The SEND/LEARN indicator goes off and the ERROR indicator starts blinking.



***Important!** Keep pressing the button while the ERROR indicator is blinking.*

3. Successful cancellation

   The ERROR indicator lights up.



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Others

Troubleshooting

Problem	Possible Cause	Solutions
Amplifier does not play; Display window does not light up.	Power cord not plugged in.	Plug Power cord into AC outlet.
No sound from any speakers.	The SPEAKERS switch is off.	Turn the SPEAKERS switch on.
	The wrong input selector button has been selected.	Press the correct input selector button.
Sound from one speaker only.	Speaker wires not connected properly.	Check speaker wiring. Reconnect if needed.
	Balance control may be set to one extreme.	Adjust Balance control so both speakers have sound.
Howling during record playing.	Turntable too close to a speaker.	Move speakers away from the turntable.
No picture appears.	TV not connected properly.	Check TV connections. Reconnect if needed.
Recording (sound/picture) does not work.	The REC SELECTOR button has been set incorrectly.	Set the REC SELECTOR button to the desired source.
	Analog recording is attempted from a digital source.	Connect the source to the analog input jacks.
The Remote Controller cannot be operated.	There is an obstruction blocking the REMOTE SENSOR on the amplifier.	Remove the obstruction.
	The batteries of the Remote Controller are weak.	Replace the batteries.

POWER SPECIFICATIONS

Area	Line Voltage & Frequency	Power Consumption
Canada	AC 120V~, 60Hz	490 watts, 530VA
Continental Europe	AC 230V~, 50Hz	390 watts
U.K.	AC240V~, 50Hz	995 watts
Australia		
Other Area	AC 110/127/220/240V~, selectable, 50/60Hz	390 watts

(No.20276)1-81

Glossary

Audio Source: A source that provides only sound, such as a compact disc player or a cassette player.

Composite Video Signal: A signal consisting of a luminance signal, which transmits brightness information, and a chrominance signals, which transmits color information. Composite video signals are input to and output from the VIDEO jacks on the rear of the amplifier.

Cut-off Frequency: See Low-pass Filter

D/A Converter: A circuit that converts digital signal into analog. The amplifier contains two types of D/A converter. One is called the P.E.M. D.D. (Pulse Edge Modulation Differential-linearity-errorless D/A) converter, and it converts digital input signals into analog form for output to the main speaker channels. The other D/A converter converts digital signals generated by the processor into analog signals for output to the center and surround/rear speaker channels.

Dynamic Super-A: Dynamic Super-A is a refinement of JVC's original Super-A technology. With Super-A, a certain amount of bias, or idling current, is constantly applied to the power transistors to prevent them from switching off. The smooth, sinusoidal waveforms it provides are proof of the reduced harmonic distortion. Because Super-A does not generate switching distortion, it lets you enjoy low-distortion while improving the amp's overall response.

f_o: The center frequency of the frequency band modified by a parametric equalizer. In this amplifier, f_o can be selected from the table on page 33.

Learning Operation: The remote controller supplied with the amplifier can learn the infrared signals emitted by other remote controllers and reproduce the same signals. The process of storing these signals in the remote controller is called the learning operation.

Low-pass Filter: A circuit which allows all frequencies below a specified frequency to pass, but cuts off higher frequencies. The specified frequency is called the cut-off frequency. In the Dolby Pro Logic Surround decoder, the surround signal is delayed by a delay circuit, and frequencies of 7 kHz and above are cut off signal by a low-pass filter. The parametric logic program "Theater" enables the user to turn this low-pass filter on and off.

NR: An abbreviation for noise reduction. In the Dolby Pro Logic Surround decoder, the surround signal passes through the low-pass filter and is then processed by a noise reduction circuit (a modified B-type decoder). The parametric logic program "Theater" enables the user to turn this noise reduction circuit on and off.

Parametric Equalizer: A circuit which alters a frequency characteristics in order to correct the tonal balance is called an equalizer. A parametric equalizer is one in which the center frequency of the frequency band being corrected is variable.

Remote Control Code: The rules by which infrared signals received from a remote controller are interpreted. JVC offers two remote control codes (A and B) for the control of VCRs. The remote controller and VCR must be set to the same code. The remote controller supplied with the amplifier has the selector switch 2. With the selector switch in the VCR 1 position, the controller emits signals following the A code, and with the switch set to VCR 2, following the B code. Some VCRs can be switched from the A code to the B code, and so can accept control signals sent using both the A and B codes.

Reverberation Time: The time taken for the sound energy filling an enclosure to decay by 60 dB - that is, to fall to one-millionth of its initial intensity - after the source stops emitting sound. The reverberation time represents the degree of reverberation.

S-Video Signal: A video signal consisting of a discrete luminance and chrominance signals. S-video signals are input to and output from the S-VIDEO jack on the rear of the amplifier. When connected to the S-VIDEO jack, a video signal is transmitted with separated luminance and chrominance signals, and consequently the two signals are less likely to interfere with each other.

Sampling Frequency: When an analog signal is converted into digital form, measurements are taken at certain intervals. This periodic measurement is called sampling. The number of samples measured every second is called the sampling frequency.

Standby Mode: To allow the user to turn the amplifier on from the remote controller and to retain the contents of the amplifier's memory, power to the microcomputer remains on.

Video Source: A source that provides both sound and picture, such as a VCR or a video disc player.

Y/C Separation Circuit: "Y" represents the luminance signal, which transmits information about a picture is brightness, and "C" is the chrominance signal, which contains color information. The Y/C separation circuit separates the Y and C components of a composite video signal.

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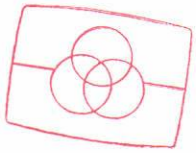


Specifications

AUDIO SECTION

Amplifier

Output Power
- Main Speakers Channel : **100 watts per channel, min. RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.009% total harmonic distortion.**
- Center Speakers Channel : 80 watts, min. RMS, into 8 ohms at 1 kHz, with no more than 0.08% total harmonic distortion.
- Rear Speakers Channel : 60 watts per channel, min. RMS, both channels driven into 8 ohms at 1 kHz, with no more than 0.08% total harmonic distortion.

Total Harmonic Distortion
- CD IN (DIRECT), MAIN SP OUT : 0.003% at 65 watts (8 ohms, 1 kHz) 0.009%* at 60 watts (8 ohms, from 20 Hz to 20 kHz)
- PHONO IN, MAIN SP OUT : 0.05% at 60 watts (8 ohms, from 20 Hz to 20 kHz, −30 dB volume)

Intermodulation Distortion (60 Hz: 7 kHz = 4:1) : 0.009% at 60 watts (8 ohms)

Switching Distortion : 0

Transient Intermodulation Distortion : 0 (LPF fc = 100 kHz)

Power Bandwidth : from 5 Hz to 50 kHz (IHF, both channels driven into 8 ohms, with no more than 0.05% total harmonic distortion)

Frequency Response (8 ohms)
- CD, TUNER, AUX/TV, TAPE 1, DAT/TAPE 2, VDP 1, VDP 2, TV, VCR 1, VCR 2, VCR 3, V-AUX : from 5 Hz to 70 kHz (+0 dB, −3 dB)

Signal-to-Noise Ratio ('66 IHF/'78 IHF)
- PHONO : 73 dB/67 dB (REC OUT)
- CD, TUNER, AUX/TV, TAPE 1, DAT/TAPE 2, VDP 1, VDP 2, TV, VCR 1, VCR 2, VCR 3, V-AUX : 100 dB/80 dB

Tone control Range
- BASS : ±8 dB at 100 Hz
- TREBLE : ±8 dB at 10 kHz

Damping Factor : 100 (1 kHz, 8 ohms)

Analog I/O terminals

Input Sensitivity/impedance (1 kHz):
- PHONO : 2.3 mV/50k ohms
- CD, TUNER, AUX/TV, TAPE 1, DAT/TAPE 2, VDP 1, VDP 2, TV, VCR 1, VCR 2, VCR 3, V-AUX : 200 mV/54k ohms

Recording Output Level/impedance : 200 mV/600 ohms

Digital I/O terminals

Input Sensitivity/impedance
- Optical : from −23 to −14 dBm
- Coaxial : 0.5 Vp-p/75 ohms

Recording Output Level/impedance : 0.5 Vp-p/75 ohms

Digital to Analog Converter

Sampling Frequencies : 32 kHz/44.1 kHz/48 kHz
Total Harmonic Distortion : 0.004% (1 kHz)
Dynamic Range : 96 dB (1 kHz)
Signal-to-Noise Ratio : 105 dB

Phono Equalizer

RIAA Phono Equalization : ±0.5 dB (from 20 Hz to 20 kHz)

VIDEO SECTION

Signal System

Format : NTSC type color signal and separated Y/C signals conforming to NTSC.

I/O terminals

Input Sensitivity/impedance:
- VIDEO (Composite) : 1 Vp-p/75 ohms
- S-VIDEO
  - Y (Luminance) : 1 Vp-p/75 ohms
  - C (Chrominance, Burst) : 0.286 Vp-p/75 ohms

Recording Output Level/impedance:
- VIDEO (Composite) : 1 Vp-p/75 ohms
- S-VIDEO
  - Y (Luminance) : 1 Vp-p/75 ohms
  - C (Chrominance, Burst) : 0.286 Vp-p/75 ohms

GENERAL

Power Requirements : AC 120 V ∿, 60 Hz
Power Consumption : 490 watts, 530 VA
Dimensions (W × H × D) : 17-13/16 × 6 − 13/16 × 17 − 7/16 inches 452 × 173 × 442 mm
Weight : 35.1 lbs 15.9 kg

*Measured by JVC Audio Analysis System.

Disign and Specifications subject to change without notice.

JVC
VICTOR COMPANY OF JAPAN, LIMITED

Printed in Japan
9109[N]

JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO PRODUCTS DIVISION, YAMATO PLANT, 1644, SHIMOTSURUMA, YAMATO-SHI, KANAGAWA-KEN, 242, JAPAN

(No.20276)

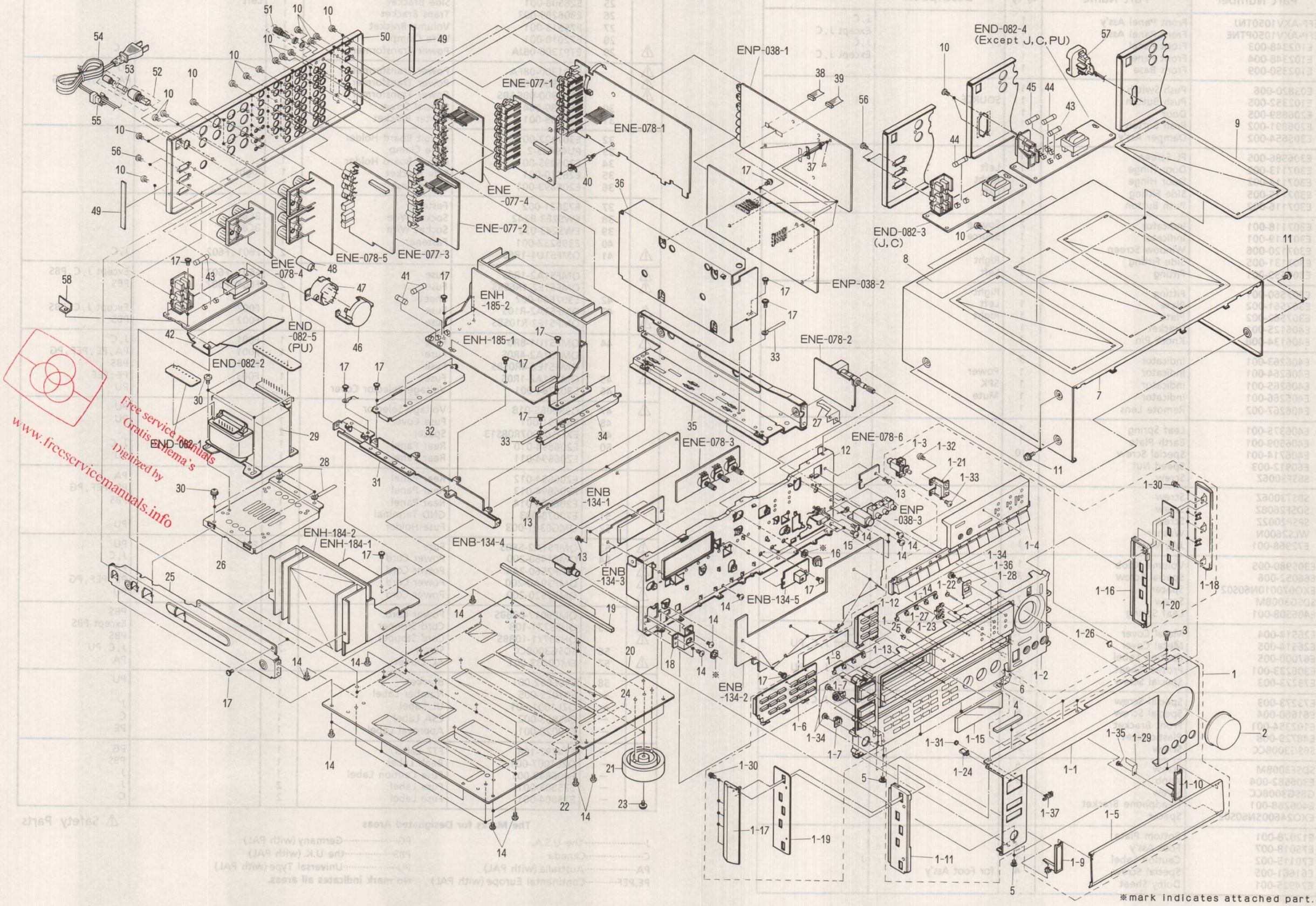
Printed in
9108[N]

PARTS LIST

Contents

AX-V1050TN AX-V1050PTN	AX-V1050TN AX-V1050PTN

General Exploded View and Parts List



※mark indicates attached part.

■ Parts List

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-AXV1050TNJ	Front Panel Ass'y	1		J,C
		EFP-AXV1050PTNE	Front Panel Ass'y	1		Except J,C
	1-1	E102348-003	Front Panel	1		J,C
		E102348-004	Front Panel	1		Except J,C
	1-2	E102350-009	Front Base	1		
	1-3	E03820-006	Push Switch	1		
	1-4	E102352-005	Push Button	1	SOURCE	
	1-5	E206889-005	Door	1		
	1-6	E206891-002	Push Button	1		
	1-7	E305654-002	Damper Ass'y	2		
	1-8	E306586-005	FL Screen	1		
	1-9	E307113-002	Door Hinge	1	Left	
	1-10	E307114-002	Door Hinge	1	Right	
	1-11	E307115-005	Side Fitting	1	Left	
	1-12	E307116-002	Push Button	1		
	1-13	E307118-001	Indicator	2	Source	
	1-14	E307119-001	Indicator	1	Source	
	1-15	E307120-006	Window Screen	1		
	1-16	E307131-005	Side Fitting	1	Right	
	1-17	E307559-001	Fitting	1	Left	
	1-18	E307560-001	Fitting	1	Right	
	1-19	E307561-002	Plate	1	Left	
	1-20	E307562-002	Plate	1	Right	
	1-21	E406125-001	Bracket	1		
	1-22	E406134-008	Knock Pin	1		
	1-23	E406263-001	Indicator	3		
	1-24	E406264-001	Indicator	1	Power	
	1-25	E406265-001	Indicator	1	SPK	
	1-26	E406266-001	Indicator	1	Mute	
	1-27	E406267-002	Remote Lens	1		
	1-28	E406375-001	Leaf Spring	1		
	1-29	E406509-001	Earth Plate	1		
	1-30	E406714-001	Special Screw	10		
	1-31	E60912-003	Speed Nut	1		
	1-32	SBSF3006Z	Screw	1		
	1-33	SBST3006Z	Screw	2		
	1-34	SDSF2608Z	Screw	3		
	1-35	SPSP2002Z	Screw	1		
	1-36	WLS2600N	Washer	1		
	1-37	E72968-001	JVC Mark	1		
	2	E305980-005	Volume Knob	1		
	3	E66052-006	Special Screw	3		
	4	EXO070010N60S02	Spacer	3		
	5	SDSG3008M	Screw	7		
	6	E406508-001	Leaf Spring	1		
	7	E26514-004	Metal Cover	1		J,C,PU
		E26514-005	Metal Cover	1		Except J,C,PU
	8	E67000-005	Caution Label	1		
	9	E306233-001	Protect Sheet	2		Except J,C,PU
	10	E73273-003	Special Screw	51		J,C,PA
		E73273-003	Special Screw	53		Except J,C,PA
	11	E61660-004	Special Screw	6		
	12	E102354-001	Front Bracket	1		
	13	E48729-008	Plastic Rivet	6		
	14	SBSG3008CC	Screw	34		
	15	SDSF3008M	Screw	2		
	16	E306582-004	Knob	3		
	17	GBSG3008CC	Screw	31		
	18	E406268-001	Headphone Bracket	1		
	19	EXO246005N60S02	Spacer	1		
	20	E12078-001	Bottom Plate	1		
	21	E75018-007	Foot Ass'y	4		
	22	E70115-002	Caution Label	1		J
	23	E61661-005	Special Screw	4	for Foot Ass'y	
	24	E74925-001	Dolby Sheet	1		

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	25	E26508-001	Side Bracket	1	Left	
	26	E306289-003	Trans Bracket	1		
	27	E75513-001	Volume Bracket	1		
	28	E72018-001	Wire Clamp	2		
⚠	29	ETP1300-08JA	Power Transformer	1		J,C
⚠		ETP1300-08FA	Power Transformer	1		PU
⚠		ETP1300-08EA	Power Transformer	1		PA,PE,PEF,PG
⚠		ETP1300-08EABS	Power Transformer	1		PBS
	30	E65389-004	Special Screw	8		
	31	E26509-001	Center Bracket	1		
	32	E307122-001	Circuit Board Holder	1		
	33	PU49485-2	Wire Clamp	2		
	34	E306295-001	Circuit Board Holder	1		
	35	E26510-001	Side Bracket	1	Right	
	36	E206893-001	Shield Case	1		
	37	E72631-002	Fastener	3		
	38	EWS263-B242	Socket Wire	1	BC801	
	39	EWS243-032	Socket Wire	1	BC802	
	40	E306232-001	Fastener	1		
⚠	41	QMF51U1-1R6S	Fuse	2	F601,F602	J,C
⚠		QMF51A2-1R6S	Fuse	2	F601,F602	Except J,C,PBS
⚠		QMF51E2-1R6SBS	Fuse	2	F601,F602	PBS
	42	E307664-002	Sheet	1		
⚠	43	QMF51A2-R10S	Fuse	1	F002	Except J,C,PBS
⚠		QMF51E2-R10SBS	Fuse	1	F002	PBS
⚠	44	QMF51U1-8R0	Fuse	1	F001	J,C
⚠		QMF51A2-4R0S	Fuse	1	F001	PA,PE,PEF,PG
⚠		QMF51E2-4R0SBS	Fuse	1	F001	PBS
⚠	45	QMF51A2-1R0S	Fuse	1	F003	PE,PEF
	46	E302764-001	Voltage Selector Cover	1		PU
⚠	47	QSR0085-018	Voltage Selector	1		PU
	48	E69291-001	Fuse Cover	1		PU
	49	EXO100007R08S13	Spacer	2		
	50	E206894-010	Rear Panel	1		J,C
		E206894-011	Rear Panel	1		PU
		E206894-012	Rear Panel	1		PA
		E206894-013	Rear Panel	1		PE,PEF,PG
		E206894-014	Rear Panel	1		PBS
	51	E70078-003	GND Terminal	1		
	52	QMG0301-003	Fuse Holder	1		PU
⚠	53	QMF51A2-5R0S	Fuse	1	F001	PU
⚠	54	QMP1480-200	Power Cord	1		J,C
⚠		QMP2560-244	Power Cord	1		PA
⚠		QMP39A0-200	Power Cord	1		PE,PEF,PG
⚠		QMP7520-200	Power Cord	1		PU
⚠		QMP9017-008BS	Power Cord	1		PBS
⚠	55	QHS3771-108	Cord Stopper	1		Except PBS
⚠		QHS3771-108BS	Cord Stopper	1		PBS
	56	SDSG3008CC	Screw	2		J,C,PU
⚠	57	EMC0233-001	AC Outlet	1		PA
	58	E406852-001	Bracket	1		PU
	–	E61029-005	Number Label	1		
	–	QZL1001-001	UL Label	1		J
	–	E45858-002	CSA Label	1		C
	–	E70028-001	Approval Label	1		PE
	–	E74792-108	FTZ Label	1		PG
	–	QZL1007-001	Beab Label	1		PBS
	–	E406849-001	Fuse Caution Label	1		J
	–	E75803-001	Fuse Label	2		J
	–	E75804-001	Fuse Label	2		C

The Marks for Designated Areas

J.....the U.S.A.
C.....Canada
PA.....Australia (with PAL)
PE,PEF.....Continental Europe (with PAL)
PG.....Germany (with PAL)
PBS.....the U.K. (with PAL)
PU.....Universal Type (with PAL)
No mark indicates all areas.

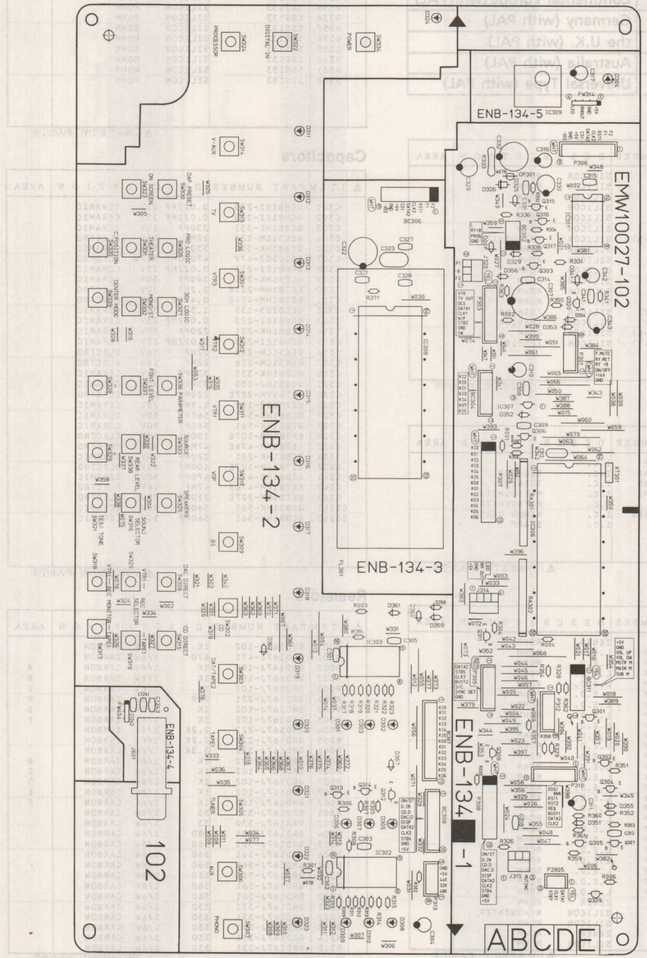
⚠ Safety Parts

AX-V1050TN
AX-V1050PTN

Printed Circuit Board Ass'y and Parts List

■ENB-134☐ Display / System Microcomputer PC Board Ass'y

Note : ENB-134 ☐ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENB-134 [A]	the U.S.A., Canada
ENB-134 [B]	Continental Europe (with PAL)
ENB-134 [C]	Germany (with PAL)
ENB-134 [D]	the U.K. (with PAL)
ENB-134 [E]	Australia (with PAL)
ENB-134 [F]	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q301	DTA114YS	SILICON ROHM	
	Q302	DTA114YS	SILICON ROHM	
	Q303	DTC114YS	SILICON ROHM	
	Q304	DTA114YS	SILICON ROHM	
	Q305	DTC114YS	SILICON ROHM	
	Q306	DTC114YS	SILICON ROHM	
	Q307	2SC1685(R,S)	SILICON MATSUSHITA	
	Q308	DTA144ES	SILICON ROHM	
	Q309	DTA114YS	SILICON ROHM	
	Q311	DTC114YS	SILICON ROHM	
	Q312	DTC114YS	SILICON ROHM	
	Q313	DTC114YS	SILICON ROHM	
	Q314	DTC114YS	SILICON ROHM	
	Q315	2SA965(O,Y)	SILICON TOSHIBA	
	Q316	2SA965(O,Y)	SILICON TOSHIBA	
	Q317	2SC2389(S,E)	SILICON ROHM	
	Q320	2SC2235(O,Y)	SILICON TOSHIBA	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC301	TC74HC00AP	I.C.	
	IC302	TC74HC595AP	I.C. TOSHIBA	
	IC303	TC74HC595AP	I.C. TOSHIBA	
	IC306	MN171602JPE	I.C. MATSUSHITA	
	IC307	MN1281(Q)	I.C. MATSUSHITA	
	IC308	MSC7128-02SS	I.C. NIHON DENSO	
	IC309	GP1U501X	I.C. SHARP	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D001	MTZ6.2JC	ZENER ROHM	
	D301	SLR-34YC3F	L.E.D. ROHM	
	D302	SLR-34YC3F	L.E.D. ROHM	
	D303	SLR-34YC3F	L.E.D. ROHM	
	D304	SLR-34VC3F	L.E.D. ROHM	
	D305	SLR-34VC3F	L.E.D. ROHM	
	D306	SLR-34VC3F	L.E.D. ROHM	
	D307	SLR-34VC3F	L.E.D. ROHM	
	D308	SLR-34VC3F	L.E.D. ROHM	
	D309	SLR-34VC3F	L.E.D. ROHM	
	D310	SLR-34VC3F	L.E.D. ROHM	
	D311	SLR-34DC3F	L.E.D. ROHM	
	D312	SLR-34DC3F	L.E.D. ROHM	
	D313	SLR-34DC3F	L.E.D. ROHM	
	D314	SLR-34DC3F	L.E.D. ROHM	
	D315	SLR-34DC3F	L.E.D. ROHM	
	D316	SLR-34DC3F	L.E.D. ROHM	
	D317	SLR-34DC3F	L.E.D. ROHM	
	D318	SLR-34YC3F	L.E.D. ROHM	
	D319	SLR-34YC3F	L.E.D. ROHM	
	D320	SLR-34YC3F	L.E.D. ROHM	
	D321	SLR-34YC3F	L.E.D. ROHM	
	D322	SLR-34YC3F	L.E.D. ROHM	
	D323	SLR-34YC3F	L.E.D. ROHM	
	D324	SLR-34VC3F	L.E.D. ROHM	
	D325	MTZ33JC	ZENER ROHM	
	D326	11ES2	SILICON NIHONINTER	
	D329	1SS133	SILICON ROHM	
	D341	MTZ6.2JC	ZENER ROHM	
	D351	1SS133	SILICON ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D352	1SS133	SILICON ROHM	
	D353	1SS133	SILICON ROHM	
	D354	1SS133	SILICON ROHM	
	D355	1SS133	SILICON ROHM	
	D356	1SS133	SILICON ROHM	
	D357	1SS133	SILICON ROHM	
	D358	1SS133	SILICON ROHM	
	D359	1SS133	SILICON ROHM	
	D360	1SS133	SILICON ROHM	
	D361	1SS133	SILICON ROHM	
	D362	1SS133	SILICON ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C301	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C302	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C303	QCBB1HK-331	330PF 50V CERAMIC	
	C304	QEK51CM-226	22MF 16V ELECTRO	
	C305	QCBB1HK-331	330PF 50V CERAMIC	
	C307	EEZ0502-479	47000MF 5.5V ELECTRO	
	C308	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C309	QCBB1HK-391	390PF 50V CERAMIC	
	C310	EETB1HM-225E	2.2MF 50V ELECTRO	
	C311	EETB1HM-474E	0.47MF 50V ELECTRO	
	C312	QCZ0205-155	1.5MF 25V CERAMIC	
	C313	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C314	QCBB1HK-221	220PF 50V CERAMIC	
	C315	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C316	QEK51CM-226	22MF 16V ELECTRO	
	C317	QEK51CM-226	22MF 16V ELECTRO	
	C318	QCBB1HK-331	330PF 50V CERAMIC	
	C321	QCSB1HJ-330	33PF 50V CERAMIC	
	C322	EETB1VM-227E	220MF 35V ELECTRO	
	C323	QCZ0202-155	1.5MF 25V CERAMIC	
	C327	QCBB1HK-561	560PF 50V CERAMIC	
	C328	QCBB1HK-561	560PF 50V CERAMIC	
	C329	EETB1HM-107E	100MF 50V ELECTRO	
	C330	EETB1HM-476E	47MF 50V ELECTRO	
	C331	QCBB1HK-221	220PF 50V CERAMIC	
	C332	EETB1JM-107E	100MF 63V ELECTRO	
	C341	QCBB1HK-471	470PF 50V CERAMIC	
	C342	EETB1CM-476E	47MF 16V ELECTRO	
	C343	EETB1EM-227E	220MF 25V ELECTRO	
	C1241	QCBB1HK-561	560PF 50V CERAMIC	
	C1242	QCBB1HK-561	560PF 50V CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R001	QRD167J-102	1K 1/6W CARBON	
	R002	QRD167J-471	470 1/6W CARBON	
	R003	QRD167J-102	1K 1/6W CARBON	A
	R003	QRD167J-102	1K 1/6W CARBON	B
	R003	QRD167J-102	1K 1/6W CARBON	C
	R003	QRD167J-221	220 1/6W CARBON	D
	R003	QRD167J-102	1K 1/6W CARBON	E
	R003	QRD167J-102	1K 1/6W CARBON	F
	R004	QRD167J-222	2.2K 1/6W CARBON	
	R005	QRD167J-222	2.2K 1/6W CARBON	
	R006	QRD167J-332	3.3K 1/6W CARBON	
	R007	QRD167J-102	1K 1/6W CARBON	B
	R007	QRD167J-102	1K 1/6W CARBON	C
	R007	QRD167J-102	1K 1/6W CARBON	D
	R007	QRD167J-102	1K 1/6W CARBON	E
	R007	QRD167J-102	1K 1/6W CARBON	F
	R301	QRD167J-330	33 1/6W CARBON	
	R302	QRD167J-330	33 1/6W CARBON	
	R304	QRD167J-681	680 1/6W CARBON	
	R305	QRD167J-561	560 1/6W CARBON	
	R306	QRD167J-561	560 1/6W CARBON	
	R307	QRD167J-561	560 1/6W CARBON	
	R308	QRD167J-561	560 1/6W CARBON	
	R309	QRD167J-561	560 1/6W CARBON	
	R310	QRD167J-561	560 1/6W CARBON	
	R311	QRD167J-331	330 1/6W CARBON	
	R312	QRD167J-331	330 1/6W CARBON	
	R313	QRD167J-331	330 1/6W CARBON	
	R314	QRD167J-331	330 1/6W CARBON	
	R315	QRD167J-331	330 1/6W CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R316	QRD167J-331	330 1/6W CARBON	
	R317	QRD167J-331	330 1/6W CARBON	
	R318	QRD167J-151	150 1/6W CARBON	
	R319	QRD167J-151	150 1/6W CARBON	
	R320	QRD167J-151	150 1/6W CARBON	
	R321	QRD167J-151	150 1/6W CARBON	
	R322	QRD167J-151	150 1/6W CARBON	
	R323	QRD167J-151	150 1/6W CARBON	
	R326	QRD167J-271	270 1/6W CARBON	
	R328	QRD167J-221	220 1/6W CARBON	
	R329	QRD167J-221	220 1/6W CARBON	
	R331	QRD167J-331	330 1/6W CARBON	
	R332	QRD167J-103	10K 1/6W CARBON	
⚠	R333	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
	R334	QRD167J-102	1K 1/6W CARBON	
	R335	QRD167J-103	10K 1/6W CARBON	
	R336	QRD167J-104	100K 1/6W CARBON	
	R341	QRD167J-152	1.5K 1/6W CARBON	
	R351	QRD167J-103	10K 1/6W CARBON	
	R352	QRD167J-473	47K 1/6W CARBON	
	R353	QRD167J-333	33K 1/6W CARBON	
	R354	QRD167J-471	470 1/6W CARBON	
	R355	QRD167J-330	33 1/6W CARBON	
	R356	QRD167J-103	10K 1/6W CARBON	
	R357	QRD167J-152	1.5K 1/6W CARBON	
	R358	QRD167J-152	1.5K 1/6W CARBON	
	R359	QRD167J-103	10K 1/6W CARBON	
	R360	QRD167J-473	47K 1/6W CARBON	
	R361	QRD167J-152	1.5K 1/6W CARBON	
	R362	QRD167J-103	10K 1/6W CARBON	
	R363	QRD167J-103	10K 1/6W CARBON	
	R371	QRD167J-473	47K 1/6W CARBON	
	RA301	QRB169J-103	10K 1/10W R.NETWORK	
	RA302	QRB149J-103	10K 1/10W R.NETWORK	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10027-102	CIRCUIT BOARD	
	J314	EMV7122-004	CONNECTOR (4PIN)	
	J315	EMV7122-103	CONNECTOR (3PIN)	
	J320	EMV5111-003	PLUG ASSY (3PIN)	
	J601	QMS6A40-021	HEADPHONE JACK	
	P301	EMV5109-006A	PLUG ASSY (6PIN)	
	P303	EMV5109-009A	PLUG ASSY (9PIN)	
	P304	EMV5109-007A	PLUG ASSY (7PIN)	
	P305	EMV5109-007A	PLUG ASSY (7PIN)	
	P306	EMV5109-009A	PLUG ASSY (9PIN)	
	P307	EMV5109-013A	PLUG ASSY (13PIN)	
	P308	EMV5109-010A	PLUG ASSY (10PIN)	
	P310	EMV5109-007A	PLUG ASSY (7PIN)	
	P312	EMV5109-006A	PLUG ASSY (6PIN)	
	P313	EMV5109-005B	PLUG ASSY (5PIN)	
	BC302	EWS264-A930	SOCKET WIRE (4PIN)	
	BC306	EWS269-F913	SOCKET WIRE (9PIN)	
	BC307	EWS26D-A916	SOCKET WIRE (13PIN)	
	BC308	EWS26A-A908	SOCKET WIRE (10PIN)	
	BC311	EWS267-A420	SOCKET WIRE (7PIN)	
⚠	CP301	ICP-N5	I.C. PROTECTOR	A
	FL301	ELU0001-074	FL TUBE	
	FW314	EWR34B-16LST	FLAT WIRE (4PIN)	
	FW454	EWR33B-30LST	FLAT WIRE (3PIN)	
	P2805	EMV5109-003A	PLUG ASSY	
	SW301	ESP0001-018	TACT SWITCH (VCR3)	
	SW302	ESP0001-018	TACT SWITCH (CD)	
	SW303	ESP0001-018	TACT SWITCH (DAT/TAPE2)	
	SW304	ESP0001-018	TACT SWITCH (TAPE1)	
	SW305	ESP0001-018	TACT SWITCH (TUNER)	
	SW306	ESP0001-018	TACT SWITCH (AUX/TV)	
	SW307	ESP0001-018	TACT SWITCH (PHONO)	
	SW308	ESP0001-018	TACT SWITCH (DAC DIRECT)	
	SW309	ESP0001-018	TACT SWITCH (VDP1)	
	SW310	ESP0001-018	TACT SWITCH (VDP2)	
	SW311	ESP0001-018	TACT SWITCH (VCR1)	
	SW312	ESP0001-018	TACT SWITCH (VCR2)	
	SW313	ESP0001-018	TACT SWITCH (TV)	
	SW314	ESP0001-018	TACT SWITCH (V-AUX)	
	SW315	ESP0001-018	TACT SWITCH (CD DIRECT)	
	SW316	ESP0001-018	TACT SWITCH (SOUND SELECTOR)	
	SW317	ESP0001-018	TACT SWITCH (REC MONITOR TAPE1)	
	SW318	ESP0001-018	TACT SWITCH (REC MONITOR VCR1)	
	SW319	ESP0001-018	TACT SWITCH (REC SELECTOR TAPE1)	
	SW320	ESP0001-018	TACT SWITCH (REC SELECTOR VCR1)	
	SW321	ESP0001-018	TACT SWITCH (TEST TONE)	
	SW322	ESP0001-018	TACT SWITCH (DIGITAL IN)	
	SW323	ESP0001-018	TACT SWITCH (ON SCREEN)	
	SW324	ESP0001-018	TACT SWITCH (DIGITAL PROCESSOR)	
	SW325	ESP0001-018	TACT SWITCH (SPEAKERS)	
	SW326	ESP0001-018	TACT SWITCH (PRO LOGIC)	
	SW327	ESP0001-018	TACT SWITCH (3CH LOGIC)	
	SW328	ESP0001-018	TACT SWITCH (-) DOWN	
	SW329	ESP0001-018	TACT SWITCH (+) UP	
	SW330	ESP0001-018	TACT SWITCH (DAP PRESET)	

⚠ : SAFETY PARTS

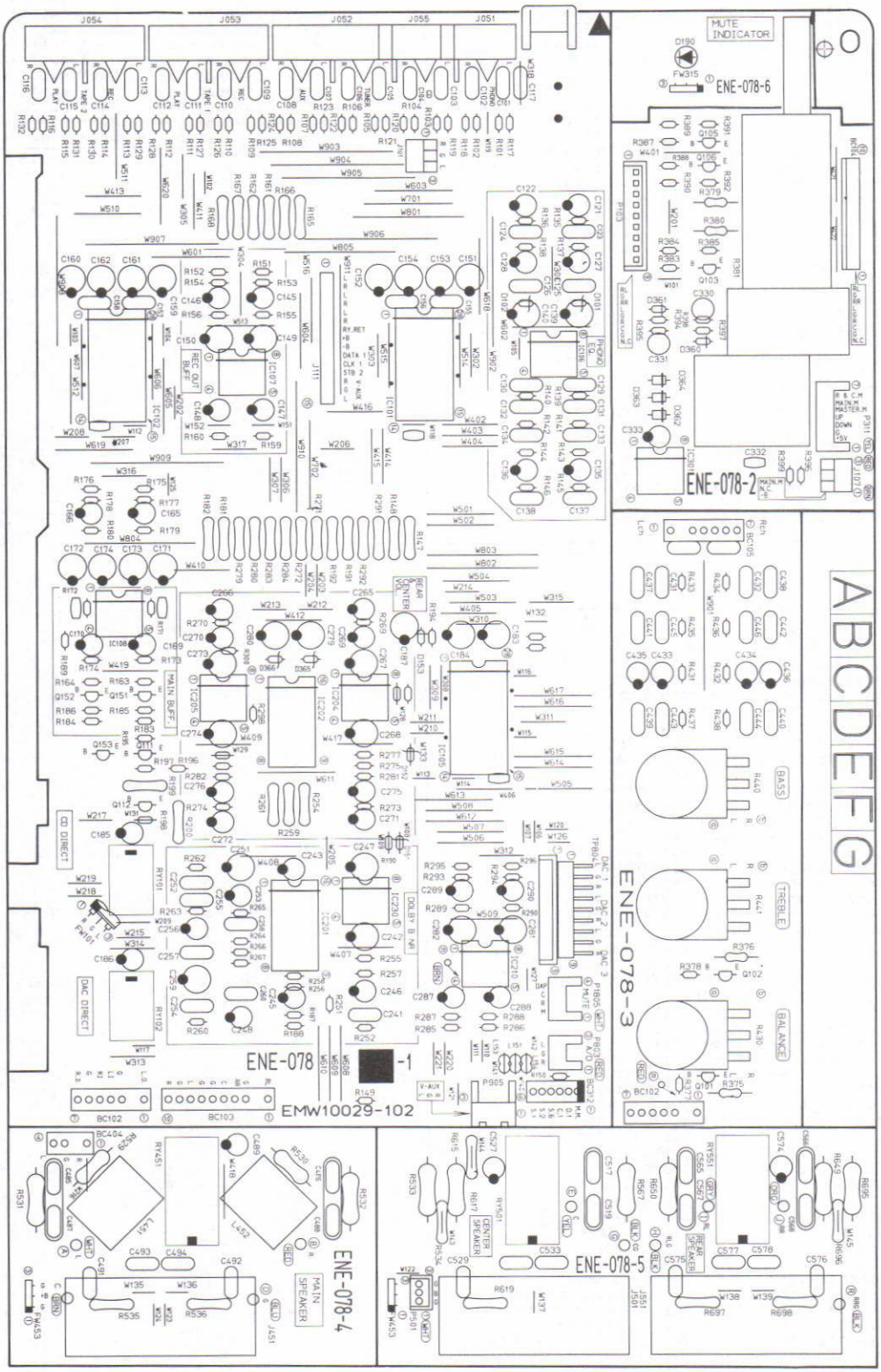
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	SW331	ESP0001-018	TACT SWITCH (THEATER)	
	SW332	ESP0001-018	TACT SWITCH (MONO ST)	
	SW333	ESP0001-018	TACT SWITCH (SOURCE)	
	SW334	ESP0001-018	TACT SWITCH (POWER)	
	SW335	ESP0001-018	TACT SWITCH (CENTER POSITION)	
	SW336	ESP0001-018	TACT SWITCH (PARAMETER)	
	SW337	ESP0001-018	TACT SWITCH (FRONT LEVEL)	
	SW338	ESP0001-018	TACT SWITCH (REAR LEVEL)	
	SW339	ESP0001-018	TACT SWITCH (CENTER MODE)	
	XT301	ECX0060-000EM	RESONATOR	

⚠ : SAFETY PARTS

■ENE-078☐ Audio Selector PC Board Ass'y

Note : ENE-078 ☐ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENE-078 [A]	the U.S.A., Canada
ENE-078 [B]	Continental Europe (with PAL)
ENE-078 [C]	Germany (with PAL)
ENE-078 [D]	the U.K. (with PAL)
ENE-078 [E]	Australia (with PAL)
ENE-078 [F]	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q101	2SC2878(A/B)	SILICON TOSHIBA	
	Q102	2SC2878(A/B)	SILICON TOSHIBA	
	Q103	2SC2878(A/B)	SILICON TOSHIBA	
	Q105	2SC2878(A/B)	SILICON TOSHIBA	
	Q106	2SC2878(A/B)	SILICON TOSHIBA	
	Q111	2SC2389(S/E)	SILICON ROHM	
	Q112	2SC2389(S/E)	SILICON ROHM	
	Q151	2SC2878(A/B)	SILICON TOSHIBA	
	Q152	2SC2878(A/B)	SILICON TOSHIBA	
	Q153	DTA114YS	SILICON ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC101	TC9164N	I.C. TOSHIBA	
	IC102	TC9163N	I.C. TOSHIBA	
	IC105	TC9162N	I.C. TOSHIBA	
	IC106	VC4580DD	I.C. DAINICHI	
	IC107	VC4580D	I.C. DAINICHI	
	IC108	VC4580D	I.C. DAINICHI	
	IC201	LA2730	I.C. SANYO	
	IC202	TC9213P	I.C. TOSHIBA	
	IC204	VC4580D	I.C. DAINICHI	
	IC205	VC4580D	I.C. DAINICHI	
	IC210	VC4580D	I.C. DAINICHI	
	IC230	VC4580D	I.C. DAINICHI	
	IC301	LB1639-CV	I.C. SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D101	MTZ13JC	ZENER ROHM	
	D102	MTZ13JC	ZENER ROHM	
	D153	MA700	ZENER MATSUSHITA	
	D190	SLR-331VR50F070	L.E.D. ROHM	
	D360	1SS133	SILICON ROHM	
	D361	1SS133	SILICON ROHM	
	D362	11ES2	SILICON NIHONINTER	
	D363	11ES2	SILICON NIHONINTER	
	D364	11ES2	SILICON NIHONINTER	
	D365	MTZ13JC	ZENER ROHM	
	D366	MTZ13JC	ZENER ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C101	QFLB1HK-221	220PF 50V MYLAR	
	C102	QFLB1HK-221	220PF 50V MYLAR	
	C103	QFLB1HK-221	220PF 50V MYLAR	
	C104	QFLB1HK-221	220PF 50V MYLAR	
	C105	QFLB1HK-221	220PF 50V MYLAR	
	C106	QFLB1HK-221	220PF 50V MYLAR	
	C107	QFLB1HK-221	220PF 50V MYLAR	
	C108	QFLB1HK-221	220PF 50V MYLAR	
	C109	QFLB1HK-221	220PF 50V MYLAR	
	C110	QFLB1HK-221	220PF 50V MYLAR	
	C111	QFLB1HK-221	220PF 50V MYLAR	
	C112	QFLB1HK-221	220PF 50V MYLAR	
	C113	QCBB1HK-221	220PF 50V CERAMIC	
	C114	QCBB1HK-221	220PF 50V CERAMIC	
	C115	QFLB1HK-221	220PF 50V MYLAR	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C116	QFLB1HK-221	220PF 50V MYLAR	
	C117	QFV81HJ-223	0.022MF 50V T.FILM	
	C121	EETB1HM-106E	10MF 50V ELECTRO	
	C122	EETB1HM-106E	10MF 50V ELECTRO	
	C123	QFLB1HK-101	100PF 50V MYLAR	
	C124	QFLB1HK-101	100PF 50V MYLAR	
	C125	QFLB1HK-101	100PF 50V MYLAR	
	C126	QFLB1HK-101	100PF 50V MYLAR	
	C127	EETB1AM-476E	47MF 10V ELECTRO	
	C128	EETB1AM-476E	47MF 10V ELECTRO	
	C129	QFN81HJ-152	1500PF 50V MYLAR	
	C130	QFN81HJ-152	1500PF 50V MYLAR	
	C131	QFLB1HK-391	390PF 50V MYLAR	
	C132	QFLB1HK-391	390PF 50V MYLAR	
	C133	QFP81HG-682	6800PF 50V POLY	
	C134	QFP81HG-682	6800PF 50V POLY	
	C135	EETB1HM-106E	10MF 50V ELECTRO	
	C136	EETB1HM-106E	10MF 50V ELECTRO	
	C137	QFN81HJ-222	2200PF 50V MYLAR	
	C138	QFN81HJ-222	2200PF 50V MYLAR	
	C139	EETB1CM-107E	100MF 16V ELECTRO	
	C140	EETB1CM-107E	100MF 16V ELECTRO	
	C145	EETB1HM-106E	10MF 50V ELECTRO	
	C146	EETB1HM-106E	10MF 50V ELECTRO	
	C147	EETB1HM-106E	10MF 50V ELECTRO	
	C148	EETB1HM-106E	10MF 50V ELECTRO	
	C149	EETB1CM-107E	100MF 16V ELECTRO	
	C150	EETB1CM-107E	100MF 16V ELECTRO	
	C152	EETB1CM-107E	100MF 16V ELECTRO	
	C153	EETB1CM-107E	100MF 16V ELECTRO	
	C160	EETB1CM-107E	100MF 16V ELECTRO	
	C161	EETB1CM-107E	100MF 16V ELECTRO	
	C165	EETB1HM-106E	10MF 50V ELECTRO	
	C166	EETB1HM-106E	10MF 50V ELECTRO	
	C169	EETB1HM-106E	10MF 50V ELECTRO	
	C170	EETB1HM-106E	10MF 50V ELECTRO	
	C171	EETB1CM-107E	100MF 16V ELECTRO	
	C172	EETB1CM-107E	100MF 16V ELECTRO	
	C173	EETB1CM-107E	100MF 16V ELECTRO	
	C174	EETB1CM-107E	100MF 16V ELECTRO	
	C183	EETB1CM-107E	100MF 16V ELECTRO	
	C184	EETB1CM-107E	100MF 16V ELECTRO	
	C185	EETB1HM-105E	1MF 50V ELECTRO	
	C186	EETB1HM-105E	1MF 50V ELECTRO	
	C187	EETB1CM-107E	100MF 16V ELECTRO	
	C241	QFLB1HK-221	220PF 50V MYLAR	
	C242	EETB1CM-107E	100MF 16V ELECTRO	
	C243	EETB1HM-106E	10MF 50V ELECTRO	
	C245	EETB1HM-105E	1MF 50V ELECTRO	
	C246	EETB1HM-105E	1MF 50V ELECTRO	
	C247	EETB1CM-107E	100MF 16V ELECTRO	
	C248	EETB1HM-106E	10MF 50V ELECTRO	
	C251	EETB1CM-107E	100MF 16V ELECTRO	
	C252	QFV81HJ-334	0.33MF 50V T.FILM	
	C253	EETB1HM-105E	1MF 50V ELECTRO	
	C254	QFV81HJ-104	0.1MF 50V T.FILM	
	C255	QFV81HJ-333	0.033MF 50V T.FILM	
	C256	EETB1EM-226E	22MF 25V ELECTRO	
	C257	QFN81HJ-273	0.027MF 50V MYLAR	
	C258	QFN81HJ-472	4700PF 50V MYLAR	
	C259	EETB1CM-107E	100MF 16V ELECTRO	
	C260	QFN81HJ-562	5600PF 50V MYLAR	
	C265	EETB1HM-106E	10MF 50V ELECTRO	
	C266	EETB1HM-106E	10MF 50V ELECTRO	
	C267	EETB1CM-107E	100MF 16V ELECTRO	
	C268	EETB1CM-107E	100MF 16V ELECTRO	
	C269	EETB1HM-106E	10MF 50V ELECTRO	
	C270	EETB1HM-106E	10MF 50V ELECTRO	
	C271	EETB1HM-106E	10MF 50V ELECTRO	
	C272	EETB1HM-106E	10MF 50V ELECTRO	
	C273	EETB1CM-107E	100MF 16V ELECTRO	
	C274	EETB1CM-107E	100MF 16V ELECTRO	
	C275	EETB1HM-106E	10MF 50V ELECTRO	
	C276	EETB1HM-106E	10MF 50V ELECTRO	
	C279	EETB1CM-107E	100MF 16V ELECTRO	
	C280	EETB1CM-107E	100MF 16V ELECTRO	
	C281	EETB1CM-107E	100MF 16V ELECTRO	
	C282	EETB1CM-107E	100MF 16V ELECTRO	
	C287	EETB1HM-106E	10MF 50V ELECTRO	
	C288	EETB1HM-106E	10MF 50V ELECTRO	
	C289	EETB1HM-106E	10MF 50V ELECTRO	
	C290	EETB1HM-106E	10MF 50V ELECTRO	
	C330	QEN51HM-105	1MF 50V NON POLE	
	C331	QEN51HM-105	1MF 50V NON POLE	
	C332	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C333	EETB0JM-107E	100MF 6.3V ELECTRO	
	C431	QFN81HJ-332	3300PF 50V MYLAR	
	C432	QFN81HJ-332	3300PF 50V MYLAR	
	C433	QEK51EM-106	10MF 25V ELECTRO	
	C434	QEK51EM-106	10MF 25V ELECTRO	
	C435	QEK51EM-106	10MF 25V ELECTRO	
	C436	QEK51EM-106	10MF 25V ELECTRO	
	C437	QFLB1HK-221	220PF 50V MYLAR	
	C438	QFLB1HK-221	220PF 50V MYLAR	
	C439	QFV81HJ-153	0.015MF 50V T.FILM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C440	QFV81HJ-153	0.015MF 50V T.FILM	
	C441	QFN81HJ-122	1200PF 50V MYLAR	
	C442	QFN81HJ-122	1200PF 50V MYLAR	
	C443	QFV81HJ-823	0.082MF 50V T.FILM	
	C444	QFV81HJ-823	0.082MF 50V T.FILM	
	C445	QFV81HJ-183	0.018MF 50V T.FILM	
	C446	QFV81HJ-183	0.018MF 50V T.FILM	
	C485	QFV81HJ-104	0.1MF 50V T.FILM	
	C486	QFV81HJ-104	0.1MF 50V T.FILM	
	C487	QFV81HJ-104	0.1MF 50V T.FILM	
	C488	QFV81HJ-104	0.1MF 50V T.FILM	
	C489	EETB1HM-105E	1MF 50V ELECTRO	
	C493	QFN81HJ-223	0.022MF 50V MYLAR	
	C494	QFN81HJ-223	0.022MF 50V MYLAR	
	C517	QFV81HJ-104	0.1MF 50V T.FILM	
	C519	QFV81HJ-104	0.1MF 50V T.FILM	
	C527	EETB1HM-105E	1MF 50V ELECTRO	
	C533	QFN81HJ-223	0.022MF 50V MYLAR	
	C565	QFV81HJ-104	0.1MF 50V T.FILM	
	C566	QFV81HJ-104	0.1MF 50V T.FILM	
	C567	QFV81HJ-104	0.1MF 50V T.FILM	
	C568	QFV81HJ-104	0.1MF 50V T.FILM	
	C574	EETB1HM-105E	1MF 50V ELECTRO	
	C577	QFN81HJ-223	0.022MF 50V MYLAR	
	C578	QFN81HJ-223	0.022MF 50V MYLAR	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R101	QRD167J-222	2.2K 1/6W CARBON	
	R102	QRD167J-222	2.2K 1/6W CARBON	
	R103	QRD167J-221	220 1/6W CARBON	
	R104	QRD167J-221	220 1/6W CARBON	
	R105	QRD167J-221	220 1/6W CARBON	
	R106	QRD167J-221	220 1/6W CARBON	
	R107	QRD167J-221	220 1/6W CARBON	
	R108	QRD167J-221	220 1/6W CARBON	
	R109	QRD167J-221	220 1/6W CARBON	
	R110	QRD167J-221	220 1/6W CARBON	
	R111	QRD167J-221	220 1/6W CARBON	
	R112	QRD167J-221	220 1/6W CARBON	
	R113	QRD167J-221	220 1/6W CARBON	
	R114	QRD167J-221	220 1/6W CARBON	
	R115	QRD167J-221	220 1/6W CARBON	
	R116	QRD167J-221	220 1/6W CARBON	
	R117	QRD167J-474	470K 1/6W CARBON	
	R118	QRD167J-474	470K 1/6W CARBON	
	R119	QRD167J-224	220K 1/6W CARBON	
	R120	QRD167J-224	220K 1/6W CARBON	
	R121	QRD167J-224	220K 1/6W CARBON	
	R122	QRD167J-224	220K 1/6W CARBON	
	R123	QRD167J-224	220K 1/6W CARBON	
	R124	QRD167J-224	220K 1/6W CARBON	
	R125	QRD167J-224	220K 1/6W CARBON	
	R126	QRD167J-224	220K 1/6W CARBON	
	R127	QRD167J-224	220K 1/6W CARBON	
	R128	QRD167J-224	220K 1/6W CARBON	
	R129	QRD167J-224	220K 1/6W CARBON	
	R130	QRD167J-224	220K 1/6W CARBON	
	R131	QRD167J-224	220K 1/6W CARBON	
	R132	QRD167J-224	220K 1/6W CARBON	
	R135	QRD167J-563	56K 1/6W CARBON	
	R136	QRD167J-563	56K 1/6W CARBON	
⚠	R137	QRV144F-6200A	1/4W M.FILM	
⚠	R138	QRV144F-6200A	1/4W M.FILM	
⚠	R139	QRV144F-3902A	39K 1/4W M.FILM	
⚠	R140	QRV144F-3902A	39K 1/4W M.FILM	
⚠	R141	QRV144F-4703	470K 1/4W M.FILM	
⚠	R142	QRV144F-4703	470K 1/4W M.FILM	
	R143	QRD167J-221	220 1/6W CARBON	
	R144	QRD167J-221	220 1/6W CARBON	
	R145	QRD167J-104	100K 1/6W CARBON	
	R146	QRD167J-104	100K 1/6W CARBON	
⚠	R147	QRD14CJ-271S	270 1/4W UNF.CARBON	
⚠	R148	QRD14CJ-271S	270 1/4W UNF.CARBON	
	R149	QRD167J-101	100 1/6W CARBON	
	R150	QRD167J-101	100 1/6W CARBON	
	R151	QRD167J-474	470K 1/6W CARBON	
	R152	QRD167J-474	470K 1/6W CARBON	
	R153	QRD167J-101	100 1/6W CARBON	
	R154	QRD167J-101	100 1/6W CARBON	
	R155	QRD167J-474	470K 1/6W CARBON	
	R156	QRD167J-474	470K 1/6W CARBON	
	R159	QRD167J-104	100K 1/6W CARBON	
	R160	QRD167J-104	100K 1/6W CARBON	
⚠	R161	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R162	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R163	QRD167J-472	4.7K 1/6W CARBON	
	R164	QRD167J-472	4.7K 1/6W CARBON	
⚠	R165	QRD14CJ-331S	330 1/4W UNF.CARBON	
⚠	R166	QRD14CJ-331S	330 1/4W UNF.CARBON	
⚠	R167	QRD14CJ-331S	330 1/4W UNF.CARBON	
⚠	R168	QRD14CJ-331S	330 1/4W UNF.CARBON	
	R171	QRD167J-472	4.7K 1/6W CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R172	QRD167J-472	4.7K 1/6W CARBON	
	R173	QRD167J-472	4.7K 1/6W CARBON	
	R174	QRD167J-472	4.7K 1/6W CARBON	
	R175	QRD167J-474	470K 1/6W CARBON	
	R176	QRD167J-474	470K 1/6W CARBON	
	R177	QRD167J-101	100 1/6W CARBON	
	R178	QRD167J-101	100 1/6W CARBON	
	R179	QRD167J-474	470K 1/6W CARBON	
	R180	QRD167J-474	470K 1/6W CARBON	
⚠	R181	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R182	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R183	QRD167J-101	100 1/6W CARBON	
	R184	QRD167J-101	100 1/6W CARBON	
	R185	QRD167J-104	100K 1/6W CARBON	
	R186	QRD167J-104	100K 1/6W CARBON	
	R187	QRD167J-302	3K 1/6W CARBON	
	R188	QRD167J-332	3.3K 1/6W CARBON	
	R189	QRD167J-224	220K 1/6W CARBON	
	R190	QRD167J-103	10K 1/6W CARBON	
⚠	R191	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R192	QRD14CJ-331S	330 1/4W UNF.CARBON	
	R194	QRD167J-223	22K 1/6W CARBON	
	R195	QRD167J-103	10K 1/6W CARBON	
	R196	QRD167J-103	10K 1/6W CARBON	
	R197	QRD167J-103	10K 1/6W CARBON	
⚠	R199	QRD14CJ-391S	390 1/4W UNF.CARBON	
⚠	R200	QRD14CJ-391S	390 1/4W UNF.CARBON	
	R251	QRD167J-433	43K 1/6W CARBON	
	R252	QRD167J-203	20K 1/6W CARBON	
⚠	R254	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R255	QRD167J-223	22K 1/6W CARBON	
	R256	QRD167J-273	27K 1/6W CARBON	
	R257	QRD167J-183	18K 1/6W CARBON	
	R258	QRD167J-104	100K 1/6W CARBON	
⚠	R259	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R261	QRD14CJ-331S	330 1/4W UNF.CARBON	
	R262	QRD167J-274	270K 1/6W CARBON	
	R263	QRD167J-622	6.2K 1/6W CARBON	
	R264	QRD167J-332	3.3K 1/6W CARBON	
	R265	QRD167J-473	47K 1/6W CARBON	
	R266	QRD167J-274	270K 1/6W CARBON	
	R267	QRD167J-181	180 1/6W CARBON	
	R269	QRD167J-474	470K 1/6W CARBON	
	R270	QRD167J-474	470K 1/6W CARBON	
⚠	R271	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R272	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R273	QRD167J-474	470K 1/6W CARBON	
	R274	QRD167J-474	470K 1/6W CARBON	
⚠	R275	QRV144F-1002	10K 1/4W M.FILM	
	R277	QRD167J-303	30K 1/6W CARBON	
⚠	R279	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R280	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R281	QRD167J-101	100 1/6W CARBON	
	R282	QRD167J-101	100 1/6W CARBON	
⚠	R283	QRD14CJ-471S	470 1/4W UNF.CARBON	
⚠	R284	QRD14CJ-471S	470 1/4W UNF.CARBON	
	R285	QRD167J-104	100K 1/6W CARBON	
	R286	QRD167J-104	100K 1/6W CARBON	
	R287	QRD167J-332	3.3K 1/6W CARBON	
	R288	QRD167J-332	3.3K 1/6W CARBON	
	R289	QRD167J-474	470K 1/6W CARBON	
	R290	QRD167J-474	470K 1/6W CARBON	
⚠	R291	QRD14CJ-101S	100 1/4W UNF.CARBON	
⚠	R292	QRD14CJ-101S	100 1/4W UNF.CARBON	
	R293	QRD167J-101	100 1/6W CARBON	
	R294	QRD167J-101	100 1/6W CARBON	
	R295	QRD167J-474	470K 1/6W CARBON	
	R296	QRD167J-474	470K 1/6W CARBON	
	R298	QRD167J-103	10K 1/6W CARBON	
	R300	QRD167J-303	30K 1/6W CARBON	
	R375	ERD003J-102	1K R.NETWORK	
	R376	ERD003J-102	1K R.NETWORK	
	R377	QRD167J-472	4.7K 1/6W CARBON	
	R378	QRD167J-472	4.7K 1/6W CARBON	
	R379	ERD003J-103	10K R.NETWORK	
	R380	ERD003J-103	10K R.NETWORK	
	R381	QVDC94B-E15C	100K VARIABLE	
	R383	QRD167J-102	1K 1/6W CARBON	
	R384	QRD167J-472	4.7K 1/6W CARBON	
	R385	QRD167J-103	10K 1/6W CARBON	
	R387	QRD167J-102	1K 1/6W CARBON	
	R388	QRD167J-102	1K 1/6W CARBON	
	R389	QRD167J-472	4.7K 1/6W CARBON	
	R390	QRD167J-472	4.7K 1/6W CARBON	
	R391	QRD167J-103	10K 1/6W CARBON	
	R392	QRD167J-103	10K 1/6W CARBON	
	R394	QRD167J-332	3.3K 1/6W CARBON	
	R395	QRD167J-105	1M 1/6W CARBON	
	R396	QRD167J-394	390K 1/6W CARBON	
	R397	QRD167J-332	3.3K 1/6W CARBON	
	R398	QRD167J-105	1M 1/6W CARBON	
	R399	QRD167J-394	390K 1/6W CARBON	
	R430	QVDB87M-EF5E	250K VARIABLE	
	R431	QRD167J-203	20K 1/6W CARBON	
	R432	QRD167J-203	20K 1/6W CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R433	QRD167J-472	4.7K 1/6W CARBON	
	R434	QRD167J-472	4.7K 1/6W CARBON	
	R435	QRD167J-821	820 1/6W CARBON	
	R436	QRD167J-821	820 1/6W CARBON	
	R437	QRD167J-362	3.6K 1/6W CARBON	
	R438	QRD167J-362	3.6K 1/6W CARBON	
	R440	QVDB87C-E15D	100K VARIABLE	
	R441	QVDB87C-E15D	100K VARIABLE	
⚠	R529	QRD125J-100	10 1/2W UNF.CARBON	
⚠	R530	QRD125J-100	10 1/2W UNF.CARBON	
⚠	R531	QRG022J-100A	10 2W O.M.FILM	
⚠	R532	QRG022J-100A	10 2W O.M.FILM	
⚠	R533	QRG022J-181A	180 2W O.M.FILM	A
⚠	R533	QRG022J-151A	150 2W O.M.FILM	B
⚠	R533	QRG022J-151A	150 2W O.M.FILM	C
⚠	R533	QRG022J-151A	150 2W O.M.FILM	D
⚠	R533	QRG022J-151A	150 2W O.M.FILM	E
⚠	R533	QRG022J-151A	150 2W O.M.FILM	F
⚠	R567	QRG022J-100A	10 2W O.M.FILM	
⚠	R615	QRG022J-181A	180 2W O.M.FILM	A
⚠	R615	QRG022J-151A	150 2W O.M.FILM	B
⚠	R615	QRG022J-151A	150 2W O.M.FILM	C
⚠	R615	QRG022J-151A	150 2W O.M.FILM	D
⚠	R615	QRG022J-151A	150 2W O.M.FILM	E
⚠	R615	QRG022J-151A	150 2W O.M.FILM	F
⚠	R649	QRG022J-100A	10 2W O.M.FILM	
⚠	R650	QRG022J-100A	10 2W O.M.FILM	
⚠	R695	QRG022J-181A	180 2W O.M.FILM	A
⚠	R695	QRG022J-151A	150 2W O.M.FILM	B
⚠	R695	QRG022J-151A	150 2W O.M.FILM	C
⚠	R695	QRG022J-151A	150 2W O.M.FILM	D
⚠	R695	QRG022J-151A	150 2W O.M.FILM	E
⚠	R695	QRG022J-151A	150 2W O.M.FILM	F

⚠ : SAFETY PARTS

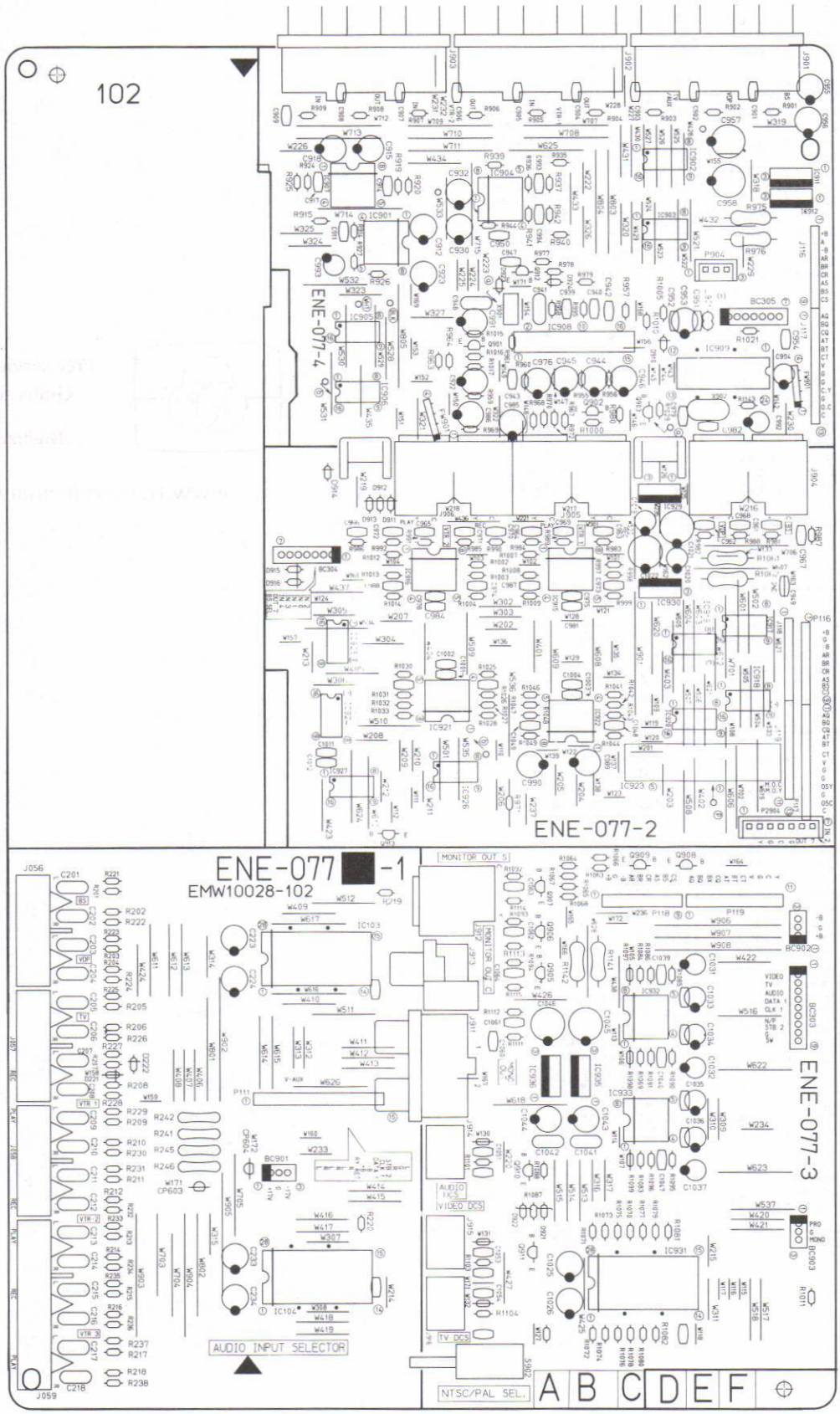
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10029-102	CIRCUIT BOARD	
		E70225-002	EARTH PLATE	
	J051	EMN00TV-210A	2P PIN JACK	
	J052	EMN00TV-411A	4P PIN JACK	
	J053	EMN00TV-411A	4P PIN JACK	
	J054	EMN00TV-411A	4P PIN JACK	
	J055	EMN00TV-216A	2P PIN JACK	
	J101	EMV7122-103	CONNECTOR (3PIN)	
	J107	EMV7122-103	CONNECTOR (3PIN)	
	J111	EMV5123-F380	PLUG ASSY (15PIN)	
	J451	EMB00TV-402B	SPEAKER TERMINAL	
	J501	EMB00TV-402B	SPEAKER TERMINAL	
	J551	EMB00TV-402B	SPEAKER TERMINAL	
	L153	EQL4004-100	INDUCTOR	
	L154	EQL4004-100	INDUCTOR	
	L451	EQL0003-1R0	INDUCTOR	
	L452	EQL0003-1R0	INDUCTOR	
	P103	EMV5111-009	PLUG ASSY (9PIN)	
	P311	EMV5109-007B	PLUG ASSY (7PIN)	
	P501	EMV5109-003A	PLUG ASSY (3PIN)	
	P803	EMV5109-003B	PLUG ASSY (3PIN)	
	P804	EMV5111-009	PLUG ASSY (9PIN)	
	P905	EMV5111-003B	PLUG ASSY (3PIN)	
	BC102	EWS207-008	SOCKET WIRE (7PIN)	
	BC103	EWS249-006	SOCKET WIRE (10PIN)	
	BC104	EWS246-019	SOCKET WIRE (10PIN)	
	BC105	EWS243-036	SOCKET WIRE (7PIN)	
	BC312	EWS266-A922	SOCKET WIRE (6PIN)	
	BC404	EWS204-020	SOCKET WIRE (4PIN)	
	FW101	EWR23C-30LN	FLAT WIRE (3PIN)	
	FW315	EWR33B-13LST	FLAT WIRE (3PIN)	
	FW453	EWR33B-16SST	FLAT WIRE (3PIN)	
	P1805	EMV5109-004B	PLUG ASSY (4PIN)	
	RY101	ESK5D12-214	RELAY	
	RY102	ESK5D12-214	RELAY	
	RY451	ESK7D24-2120	RELAY	
	RY501	ESK7D24-2120	RELAY	
	RY551	ESK7D24-2120	RELAY	
	TP804	EMV5101-009B	PLUG ASSY	

⚠ : SAFETY PARTS

■ENE-077□ Video Source Selector PC Board Ass'y

Note : ENE-077 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENE-077 A	the U.S.A., Canada
ENE-077 B	Continental Europe (with PAL)
ENE-077 C	Germany (with PAL)
ENE-077 D	the U.K. (with PAL)
ENE-077 E	Australia (with PAL)
ENE-077 F	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q901	2SC458(C,D)	SILICON HITACHI	
	Q902	2SC458(C,D)	SILICON HITACHI	
	Q903	2SC458(C,D)	SILICON HITACHI	
	Q905	2SC2878(A,B)	SILICON TOSHIBA	
	Q906	2SC2878(A,B)	SILICON TOSHIBA	
	Q907	2SC2878(A,B)	SILICON TOSHIBA	
	Q908	DTA144ES	SILICON ROHM	
	Q909	DTA144ES	SILICON ROHM	
	Q910	2SC2878(A,B)	SILICON TOSHIBA	
	Q911	DTA114YS	SILICON ROHM	
	Q912	2SC458(C,D)	SILICON HITACHI	
	Q913	2SC458(C,D)	SILICON HITACHI	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	IC103	TC9164N	I.C. TOSHIBA	
	IC104	TC9163N	I.C. TOSHIBA	
	IC901	MC14577AP	I.C. NIHON MOTORORR	
	IC902	BU4051BF	I.C. ROHM	
	IC903	BU4051BF	I.C. ROHM	
	IC904	MC14577AP	I.C. NIHON MOTORORR	
	IC905	BU4053BF	I.C. ROHM	
	IC906	BU4053BF	I.C. ROHM	
	IC907	MC14577AP	I.C. NIHON MOTORORR	
	IC908	NJM2229S	I.C. DAINICHI	
	IC909	UPD6452CS-505	I.C. NEC	
	IC911	LM2940CT-5.0	I.C. ASAHIGARASU	
	IC912	NJM79M05FA	I.C. DAINICHI	
	IC915	MC14577AP	I.C. NIHON MOTORORR	
	IC916	MC14577AP	I.C. NIHON MOTORORR	
	IC917	BU4051BF	I.C. ROHM	
	IC918	BU4051BF	I.C. ROHM	
	IC919	BU4051BF	I.C. ROHM	
	IC920	BU4051BF	I.C. ROHM	
	IC921	MC14577AP	I.C. NIHON MOTORORR	
	IC922	MC14577AP	I.C. NIHON MOTORORR	
	IC923	HCF0210	I.C. T.D.K.	A
	IC924	BU4053BF	I.C. ROHM	
	IC925	BU4053BF	I.C. ROHM	
	IC926	BU4053BF	I.C. ROHM	
	IC927	BU4053BF	I.C. ROHM	
	IC929	NJM78M05FA	I.C. DAINICHI	
	IC930	NJM79M05FA	I.C. DAINICHI	
	IC931	TC9162N	I.C. TOSHIBA	
	IC932	MC14577AP	I.C. NIHON MOTORORR	
	IC933	MC14577AP	I.C. NIHON MOTORORR	
	IC935	NJM78M05FA	I.C. DAINICHI	
	IC936	NJM79M05FA	I.C. DAINICHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D221	1SS133	SILICON ROHM	
	D222	1SS133	SILICON ROHM	
	D910	1SS133	SILICON ROHM	
	D911	1SS133	SILICON ROHM	
	D912	1SS133	SILICON ROHM	
	D913	1SS133	SILICON ROHM	
	D914	1SS133	SILICON ROHM	
	D915	1SS133	SILICON ROHM	
	D916	1SS133	SILICON ROHM	
	D921	MTZ7.5JC	ZENER ROHM	
	D922	MTZ5.6JC	ZENER ROHM	
	D923	1SS133	SILICON ROHM	
	D924	1SS133	SILICON ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C201	QFLB1HK-221	220PF 50V MYLAR	
	C202	QFLB1HK-221	220PF 50V MYLAR	
	C203	QFLB1HK-221	220PF 50V MYLAR	
	C204	QFLB1HK-221	220PF 50V MYLAR	
	C205	QFLB1HK-221	220PF 50V MYLAR	
	C206	QFLB1HK-221	220PF 50V MYLAR	
	C207	QFLB1HK-221	220PF 50V MYLAR	
	C208	QFLB1HK-221	220PF 50V MYLAR	
	C209	QFLB1HK-221	220PF 50V MYLAR	
	C210	QFLB1HK-221	220PF 50V MYLAR	
	C211	QCBB1HK-221	220PF 50V CERAMIC	
	C212	QCBB1HK-221	220PF 50V CERAMIC	
	C213	QFLB1HK-221	220PF 50V MYLAR	
	C214	QFLB1HK-221	220PF 50V MYLAR	
	C215	QCBB1HK-221	220PF 50V CERAMIC	
	C216	QCBB1HK-221	220PF 50V CERAMIC	
	C217	QFLB1HK-221	220PF 50V MYLAR	
	C218	QFLB1HK-221	220PF 50V MYLAR	
	C223	EETB1CM-107E	100MF 16V ELECTRO	
	C224	EETB1CM-107E	100MF 16V ELECTRO	
	C233	EETB1CM-107E	100MF 16V ELECTRO	
	C234	EETB1CM-107E	100MF 16V ELECTRO	
	C904	QCBB1HK-101	100PF 50V CERAMIC	
	C906	QCBB1HK-101	100PF 50V CERAMIC	
	C908	QCBB1HK-101	100PF 50V CERAMIC	
	C912	EETB1AM-107E	100MF 10V ELECTRO	
	C915	EETB1AM-107E	100MF 10V ELECTRO	
	C918	EETB1AM-107E	100MF 10V ELECTRO	
	C922	EETB1CM-106E	10MF 16V ELECTRO	
	C923	EETB1AM-107E	100MF 10V ELECTRO	
	C930	EETB1AM-107E	100MF 10V ELECTRO	
	C932	EETB1AM-107E	100MF 10V ELECTRO	
	C939	QCBB1HK-101	100PF 50V CERAMIC	
	C940	QCGB1HK-102	1000PF 50V CERAMIC	
	C941	QFV81HJ-683	0.068MF 50V T.FILM	
	C942	QCGB1HK-102	1000PF 50V CERAMIC	
	C943	QCXB1CM-392	3900PF 16V CERAMIC	
	C944	EETB1HM-475E	4.7MF 50V ELECTRO	
	C945	EETB1HM-105E	1MF 50V ELECTRO	
	C946	EETB1AM-107E	100MF 10V ELECTRO	
	C947	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C948	QFV81HJ-104	0.1MF 50V T.FILM	
	C950	QCSB1HJ-330	33PF 50V CERAMIC	
	C951	QCSB1HJ-220	22PF 50V CERAMIC	A
	C951	QCSB1HJ-270	27PF 50V CERAMIC	B
	C951	QCSB1HJ-270	27PF 50V CERAMIC	C
	C951	QCSB1HJ-270	27PF 50V CERAMIC	D
	C951	QCSB1HJ-270	27PF 50V CERAMIC	E
	C951	QCSB1HJ-270	27PF 50V CERAMIC	F
	C952	QCSB1HJ-220	22PF 50V CERAMIC	A
	C952	QCSB1HJ-270	27PF 50V CERAMIC	B
	C952	QCSB1HJ-270	27PF 50V CERAMIC	C
	C952	QCSB1HJ-270	27PF 50V CERAMIC	D
	C952	QCSB1HJ-270	27PF 50V CERAMIC	E
	C952	QCSB1HJ-270	27PF 50V CERAMIC	F
	C953	EETB1AM-107E	100MF 10V ELECTRO	
	C954	QCBB1HK-471	470PF 50V CERAMIC	
	C955	EETBOJM-227E	220MF 6.3V ELECTRO	
	C956	EETBOJM-227E	220MF 6.3V ELECTRO	
	C957	EET1607-108E	1000MF 16V ELECTRO	
	C958	EETB1CM-227E	220MF 16V ELECTRO	
	C963	QCBB1HK-101	100PF 50V CERAMIC	
	C965	QCBB1HK-101	100PF 50V CERAMIC	
	C969	QCBB1HK-101	100PF 50V CERAMIC	
	C971	QCBB1HK-101	100PF 50V CERAMIC	
	C975	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C976	EETB1HM-105E	1MF 50V ELECTRO	
	C978	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C979	QCSB1HJ-220	22PF 50V CERAMIC	A
	C979	QCSB1HJ-100	10PF 50V CERAMIC	B
	C979	QCSB1HJ-100	10PF 50V CERAMIC	C
	C979	QCSB1HJ-100	10PF 50V CERAMIC	D
	C979	QCSB1HJ-100	10PF 50V CERAMIC	E
	C979	QCSB1HJ-100	10PF 50V CERAMIC	F
	C981	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C982	QCSB1HJ-220	22PF 50V CERAMIC	A
	C982	QCSB1HJ-100	10PF 50V CERAMIC	B
	C982	QCSB1HJ-100	10PF 50V CERAMIC	C
	C982	QCSB1HJ-100	10PF 50V CERAMIC	D
	C982	QCSB1HJ-100	10PF 50V CERAMIC	E
	C982	QCSB1HJ-100	10PF 50V CERAMIC	F
	C984	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C985	EETB1AM-107E	100MF 10V ELECTRO	
	C986	EETB1AM-107E	100MF 10V ELECTRO	
	C989	EETB1AM-107E	100MF 10V ELECTRO	
	C990	EETB1AM-107E	100MF 10V ELECTRO	
	C991	EETB1AM-107E	100MF 10V ELECTRO	
	C992	EETB1AM-107E	100MF 10V ELECTRO	
	C993	EETB1AM-107E	100MF 10V ELECTRO	
	C994	EETB1HM-106E	10MF 50V ELECTRO	
	C1001	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C1002	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C1003	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C1004	QCHB1EZ-223	0.022MF 25V CERAMIC	
	C1011	QCHB1EZ-223	0.022MF 25V CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C1012	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C1019	QEHB1AM-107E	100MF	10V	ELECTRO	
	C1020	QEHB1AM-107E	100MF	10V	ELECTRO	
	C1021	QEHB1CM-227E	220MF	16V	ELECTRO	
	C1022	QEHB1CM-227E	220MF	16V	ELECTRO	
	C1031	EETB1AM-107E	100MF	10V	ELECTRO	
	C1032	EETB1AM-107E	100MF	10V	ELECTRO	
	C1033	EETB1AM-107E	100MF	10V	ELECTRO	
	C1034	EETB1AM-107E	100MF	10V	ELECTRO	
	C1035	EETB1AM-107E	100MF	10V	ELECTRO	
	C1036	EETB1AM-107E	100MF	10V	ELECTRO	
	C1037	EETB1AM-107E	100MF	10V	ELECTRO	
	C1041	QFN81HJ-223	0.022MF	50V	MYLAR	
	C1042	QFN81HJ-223	0.022MF	50V	MYLAR	
	C1043	EETB1AM-107E	100MF	10V	ELECTRO	
	C1044	EETB1AM-107E	100MF	10V	ELECTRO	
	C1045	EETB1CM-227E	220MF	16V	ELECTRO	
	C1046	EETB1CM-227E	220MF	16V	ELECTRO	
	C1048	QCSB1HJ-330	33PF	50V	CERAMIC	
	C1049	QCSB1HJ-330	33PF	50V	CERAMIC	
	C1051	QCBB1HK-471	470PF	50V	CERAMIC	
	C1053	QCBB1HK-221	220PF	50V	CERAMIC	
	C1054	QCBB1HK-101	100PF	50V	CERAMIC	
	C1060	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C1061	QCBB1HK-101	100PF	50V	CERAMIC	
	C1062	QCBB1HK-101	100PF	50V	CERAMIC	
	C1063	QCBB1HK-101	100PF	50V	CERAMIC	
	C1064	QCBB1HK-101	100PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R201	QRD167J-221	220	1/6W	CARBON	
	R202	QRD167J-221	220	1/6W	CARBON	
	R203	QRD167J-221	220	1/6W	CARBON	
	R204	QRD167J-221	220	1/6W	CARBON	
	R205	QRD167J-221	220	1/6W	CARBON	
	R206	QRD167J-221	220	1/6W	CARBON	
	R207	QRD167J-221	220	1/6W	CARBON	
	R208	QRD167J-221	220	1/6W	CARBON	
	R209	QRD167J-221	220	1/6W	CARBON	
	R210	QRD167J-221	220	1/6W	CARBON	
	R211	QRD167J-221	220	1/6W	CARBON	
	R212	QRD167J-221	220	1/6W	CARBON	
	R213	QRD167J-221	220	1/6W	CARBON	
	R214	QRD167J-221	220	1/6W	CARBON	
	R215	QRD167J-221	220	1/6W	CARBON	
	R216	QRD167J-221	220	1/6W	CARBON	
	R217	QRD167J-221	220	1/6W	CARBON	
	R218	QRD167J-221	220	1/6W	CARBON	
	R219	QRD167J-101	100	1/6W	CARBON	
	R220	QRD167J-101	100	1/6W	CARBON	
	R221	QRD167J-224	220K	1/6W	CARBON	
	R222	QRD167J-224	220K	1/6W	CARBON	
	R223	QRD167J-224	220K	1/6W	CARBON	
	R224	QRD167J-224	220K	1/6W	CARBON	
	R225	QRD167J-224	220K	1/6W	CARBON	
	R226	QRD167J-224	220K	1/6W	CARBON	
	R227	QRD167J-224	220K	1/6W	CARBON	
	R228	QRD167J-224	220K	1/6W	CARBON	
	R229	QRD167J-224	220K	1/6W	CARBON	
	R230	QRD167J-224	220K	1/6W	CARBON	
	R231	QRD167J-224	220K	1/6W	CARBON	
	R232	QRD167J-224	220K	1/6W	CARBON	
	R233	QRD167J-224	220K	1/6W	CARBON	
	R234	QRD167J-224	220K	1/6W	CARBON	
	R235	QRD167J-224	220K	1/6W	CARBON	
	R236	QRD167J-224	220K	1/6W	CARBON	
	R237	QRD167J-224	220K	1/6W	CARBON	
	R238	QRD167J-224	220K	1/6W	CARBON	
⚠	R241	QRD14CJ-331S	330	1/4W	UNF.CARBON	
⚠	R242	QRD14CJ-331S	330	1/4W	UNF.CARBON	
⚠	R245	QRD14CJ-331S	330	1/4W	UNF.CARBON	
⚠	R246	QRD14CJ-331S	330	1/4W	UNF.CARBON	
	R901	QRD167J-750	75	1/6W	CARBON	
	R902	QRD167J-750	75	1/6W	CARBON	
	R903	QRD167J-750	75	1/6W	CARBON	
	R904	QRD167J-750	75	1/6W	CARBON	
	R905	QRD167J-750	75	1/6W	CARBON	
	R906	QRD167J-750	75	1/6W	CARBON	
	R907	QRD167J-750	75	1/6W	CARBON	
	R908	QRD167J-750	75	1/6W	CARBON	
	R909	QRD167J-750	75	1/6W	CARBON	
	R914	QRD167J-103	10K	1/6W	CARBON	
	R915	QRD167J-100	10	1/6W	CARBON	
	R919	QRD167J-103	10K	1/6W	CARBON	
	R920	QRD167J-100	10	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R924	QRD167J-103	10K	1/6W	CARBON	
	R925	QRD167J-100	10	1/6W	CARBON	
	R926	QRD167J-100	10	1/6W	CARBON	
	R927	QRD167J-103	10K	1/6W	CARBON	
	R935	QRD167J-100	10	1/6W	CARBON	
	R936	QRD167J-103	10K	1/6W	CARBON	
	R937	QRD167J-511	510	1/6W	CARBON	A
	R937	QRD167J-391	390	1/6W	CARBON	B
	R937	QRD167J-391	390	1/6W	CARBON	C
	R937	QRD167J-391	390	1/6W	CARBON	D
	R937	QRD167J-391	390	1/6W	CARBON	E
	R937	QRD167J-391	390	1/6W	CARBON	F
	R939	QRD167J-561	560	1/6W	CARBON	
	R940	QRD167J-100	10	1/6W	CARBON	
	R941	QRD167J-103	10K	1/6W	CARBON	
	R942	QRD167J-511	510	1/6W	CARBON	
	R944	QRD167J-561	560	1/6W	CARBON	
	R955	QRD167J-103	10K	1/6W	CARBON	
	R956	QRD167J-303	30K	1/6W	CARBON	
	R957	QRD167J-332	3.3K	1/6W	CARBON	
	R958	QRD167J-103	10K	1/6W	CARBON	
	R959	QRD167J-104	100K	1/6W	CARBON	
	R960	QRD167J-152	1.5K	1/6W	CARBON	
	R961	QRD167J-391	390	1/6W	CARBON	
	R963	QRD167J-221	220	1/6W	CARBON	
	R967	QRD167J-123	12K	1/6W	CARBON	
	R968	QRD167J-220	22	1/6W	CARBON	
	R969	QRD167J-332	3.3K	1/6W	CARBON	
	R970	QRD167J-392	3.9K	1/6W	CARBON	
	R971	QRD167J-561	560	1/6W	CARBON	
	R972	QRD167J-202	2K	1/6W	CARBON	
⚠	R975	QRD125J-100	10	1/2W	UNF.CARBON	A
⚠	R975	QRD125J-100	10	1/2W	UNF.CARBON	B
⚠	R975	QRD125J-100	10	1/2W	UNF.CARBON	C
⚠	R975	QRD125J-100	10	1/2W	UNF.CARBON	D
⚠	R975	QRD125J-100	10	1/2W	UNF.CARBON	E
⚠	R975	QRD125J-150	15	1/2W	UNF.CARBON	F
⚠	R976	QRD125J-4R7	4.7	1/2W	UNF.CARBON	A
⚠	R976	QRD125J-4R7	4.7	1/2W	UNF.CARBON	B
⚠	R976	QRD125J-4R7	4.7	1/2W	UNF.CARBON	C
⚠	R976	QRD125J-4R7	4.7	1/2W	UNF.CARBON	D
⚠	R976	QRD125J-4R7	4.7	1/2W	UNF.CARBON	E
⚠	R976	QRD125J-150	15	1/2W	UNF.CARBON	F
	R977	QRD167J-473	47K	1/6W	CARBON	
	R978	QRD167J-223	22K	1/6W	CARBON	
	R979	QRD167J-470	47	1/6W	CARBON	
	R980	QRD167J-472	4.7K	1/6W	CARBON	
	R981	QRD167J-750	75	1/6W	CARBON	
	R982	QRD167J-750	75	1/6W	CARBON	
	R983	QRD167J-750	75	1/6W	CARBON	
	R984	QRD167J-750	75	1/6W	CARBON	
	R985	QRD167J-750	75	1/6W	CARBON	
	R986	QRD167J-750	75	1/6W	CARBON	
	R987	QRD167J-750	75	1/6W	CARBON	
	R988	QRD167J-750	75	1/6W	CARBON	
	R989	QRD167J-750	75	1/6W	CARBON	
	R990	QRD167J-750	75	1/6W	CARBON	
	R991	QRD167J-750	75	1/6W	CARBON	
	R992	QRD167J-750	75	1/6W	CARBON	
	R995	QRD167J-473	47K	1/6W	CARBON	
	R998	QRD167J-103	10K	1/6W	CARBON	
	R999	QRD167J-100	10	1/6W	CARBON	
	R1000	QRD167J-222	2.2K	1/6W	CARBON	
	R1003	QRD167J-103	10K	1/6W	CARBON	
	R1004	QRD167J-100	10	1/6W	CARBON	
	R1005	QRD167J-472	4.7K	1/6W	CARBON	
	R1008	QRD167J-103	10K	1/6W	CARBON	
	R1009	QRD167J-100	10	1/6W	CARBON	
	R1010	QRD167J-332	3.3K	1/6W	CARBON	
	R1011	QRD167J-101	100	1/6W	CARBON	
	R1013	QRD167J-103	10K	1/6W	CARBON	
	R1014	QRD167J-100	10	1/6W	CARBON	
	R1015	QRD167J-472	4.7K	1/6W	CARBON	
	R1016	QRD167J-182	1.8K	1/6W	CARBON	
	R1017	QRD167J-152	1.5K	1/6W	CARBON	
	R1021	QRD167J-101	100	1/6W	CARBON	
	R1025	QRD167J-100	10	1/6W	CARBON	
	R1026	QRD167J-103	10K	1/6W	CARBON	
	R1027	QRD167J-511	510	1/6W	CARBON	
	R1028	QRD167J-561	560	1/6W	CARBON	
	R1029	QRD167J-222	2.2K	1/6W	CARBON	
	R1030	QRD167J-100	10	1/6W	CARBON	
	R1031	QRD167J-103	10K	1/6W	CARBON	
	R1032	QRD167J-511	510	1/6W	CARBON	
	R1033	QRD167J-561	560	1/6W	CARBON	
	R1041	QRD167J-100	10	1/6W	CARBON	
	R1042	QRD167J-103	10K	1/6W	CARBON	
	R1043	QRD167J-511	510	1/6W	CARBON	
	R1044	QRD167J-561	560	1/6W	CARBON	
	R1046	QRD167J-100	10	1/6W	CARBON	
	R1047	QRD167J-103	10K	1/6W	CARBON	
	R1048	QRD167J-511	510	1/6W	CARBON	
	R1049	QRD167J-561	560	1/6W	CARBON	
⚠	R1061	QRD125J-4R7	4.7	1/2W	UNF.CARBON	A
⚠	R1061	QRD125J-4R7	4.7	1/2W	UNF.CARBON	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R1061	QRD125J-4R7	4.7 1/2W UNF.CARBON	C
⚠	R1061	QRD125J-4R7	4.7 1/2W UNF.CARBON	D
⚠	R1061	QRD125J-4R7	4.7 1/2W UNF.CARBON	E
⚠	R1061	QRD125J-150	15 1/2W UNF.CARBON	F
⚠	R1062	QRD125J-100	10 1/2W UNF.CARBON	A
⚠	R1062	QRD125J-100	10 1/2W UNF.CARBON	B
⚠	R1062	QRD125J-100	10 1/2W UNF.CARBON	C
⚠	R1062	QRD125J-100	10 1/2W UNF.CARBON	D
⚠	R1062	QRD125J-100	10 1/2W UNF.CARBON	E
⚠	R1062	QRD125J-150	15 1/2W UNF.CARBON	F
	R1063	QRD167J-472	4.7K 1/6W CARBON	
	R1064	QRD167J-472	4.7K 1/6W CARBON	
	R1065	QRD167J-472	4.7K 1/6W CARBON	
	R1066	QRD167J-104	100K 1/6W CARBON	
	R1067	QRD167J-104	100K 1/6W CARBON	
	R1068	QRD167J-104	100K 1/6W CARBON	
	R1070	QRD167J-103	10K 1/6W CARBON	
	R1071	QRD167J-103	10K 1/6W CARBON	
	R1072	QRD167J-103	10K 1/6W CARBON	
	R1073	QRD167J-103	10K 1/6W CARBON	
	R1074	QRD167J-103	10K 1/6W CARBON	
	R1075	QRD167J-103	10K 1/6W CARBON	
	R1076	QRD167J-103	10K 1/6W CARBON	
	R1077	QRD167J-103	10K 1/6W CARBON	
	R1078	QRD167J-103	10K 1/6W CARBON	
	R1079	QRD167J-103	10K 1/6W CARBON	
	R1080	QRD167J-103	10K 1/6W CARBON	
	R1081	QRD167J-103	10K 1/6W CARBON	
	R1082	QRD167J-103	10K 1/6W CARBON	
	R1085	QRD167J-100	10 1/6W CARBON	
	R1086	QRD167J-103	10K 1/6W CARBON	
	R1087	QRD167J-153	15K 1/6W CARBON	
	R1088	QRD167J-223	22K 1/6W CARBON	
	R1090	QRD167J-100	10 1/6W CARBON	
	R1091	QRD167J-103	10K 1/6W CARBON	
	R1092	QRD167J-103	10K 1/6W CARBON	
	R1093	QRD167J-103	10K 1/6W CARBON	
	R1094	QRD167J-103	10K 1/6W CARBON	
	R1095	QRD167J-100	10 1/6W CARBON	
	R1096	QRD167J-103	10K 1/6W CARBON	
	R1101	QRD167J-221	220 1/6W CARBON	
	R1103	QRD167J-221	220 1/6W CARBON	
	R1104	QRD167J-221	220 1/6W CARBON	
	R1111	QRD167J-221	220 1/6W CARBON	
	R1112	QRD167J-104	100K 1/6W CARBON	
	R1113	QRD167J-750	75 1/6W CARBON	
	R1114	QRD167J-750	75 1/6W CARBON	
	R1115	QRD167J-750	75 1/6W CARBON	
⚠	R1141	QRD125J-4R7	4.7 1/2W UNF.CARBON	
⚠	R1142	QRD125J-4R7	4.7 1/2W UNF.CARBON	
	R1143	QRD167J-473	47K 1/6W CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10028-102	CIRCUIT BOARD	
		E33754-001	TIE BAND	
		E70225-002	EARTH PLATE	
	J056	EMN00TV-411A	4P PIN JACK	
	J057	EMN00TV-411A	4P PIN JACK	
	J058	EMN00TV-411A	4P PIN JACK	
	J059	EMN00TV-610A	6P PIN JACK	
	J116	EMV5123-9225	PLUG ASSY (9PIN)	
	J117	EMV5123-D225	PLUG ASSY (13PIN)	
	J118	EMV5123-9305	PLUG ASSY (9PIN)	
	J119	EMV5123-B305	PLUG ASSY (11PIN)	
	J901	EMN00YV-311A	3P PIN JACK	
	J902	EMN00YV-311A	3P PIN JACK	
	J903	EMN00YV-311A	3P PIN JACK	
	J904	EMD0489-009	JACK BOARD ASSY	
	J905	EMD0489-009	JACK BOARD ASSY	
	J906	EMD0489-009	JACK BOARD ASSY	
	J911	EMN00YV-206A	2P PIN JACK	
	J912	EMD0489-007	JACK BOARD ASSY	
	J913	EMN00TV-110A	1P PIN JACK	
	J914	QMS3533-001	MINI JACK (AUDIO)	
	J915	QMS3533-001	MINI JACK (TV)	
	J916	QMS3533-001	MINI JACK (VCR)	
	L901	EQL4004-330	INDUCTOR	A
	L901	EQL4004-270	INDUCTOR	B
	L901	EQL4004-270	INDUCTOR	C
	L901	EQL4004-270	INDUCTOR	D
	L901	EQL4004-270	INDUCTOR	E
	L901	EQL4004-270	INDUCTOR	F
	P111	EMV7124-015	CONNECTOR (15PIN)	
	P116	EMV7124-009	CONNECTOR (9PIN)	
	P117	EMV7124-013	CONNECTOR (13PIN)	
	P118	EMV7124-009	CONNECTOR (9PIN)	
	P119	EMV7124-011	CONNECTOR (11PIN)	
	X901	ECX0000-503KS	RESONATOR	

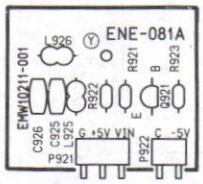
⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	X902	ECX1431-818DF	RESONATOR	A
	X902	ECX1773-447DF	RESONATOR	B
	X902	ECX1773-447DF	RESONATOR	C
	X902	ECX1773-447DF	RESONATOR	D
	X902	ECX1773-447DF	RESONATOR	E
	X902	ECX1773-447DF	RESONATOR	F
	BC303	EWS269-A455	SOCKET WIRE (9PIN)	
	BC304	EWS267-A955	SOCKET WIRE (7PIN)	
	BC305	EWS267-A270	SOCKET WIRE (7PIN)	
	BC901	EWS263-A435	SOCKET WIRE (3PIN)	
	BC902	EWS263-A920	SOCKET WIRE (3PIN)	
	BC903	EWS263-A920	SOCKET WIRE (3PIN)	
⚠	CP603	ICP-N5	I.C. PROTECTOR	A
⚠	CP604	ICP-N5	I.C. PROTECTOR	A
	FW901	EWR34B-13SST	FLAT WIRE (4PIN)	
	P1904	EMV5111-003	PLUG ASSY (3PIN)	
	P2904	EMV5111-007	PLUG ASSY (7PIN)	

⚠ : SAFETY PARTS

■ENE-081A YC Separation PC Board Ass'y for PAL Type (Except the U.S.A., Canada)



Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q921	2SC458 (C, D)	SILICON	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	C925	QCBB1HK-820	82PF 50V CERAMIC	
	C926	QCBB1HK-820	82PF 50V CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R921	QRD167J-102	1K 1/6W CARBON	
	R922	QRD167J-221	220 1/6W CARBON	
	R923	QRD167J-102	1K 1/6W CARBON	

⚠ : SAFETY PARTS

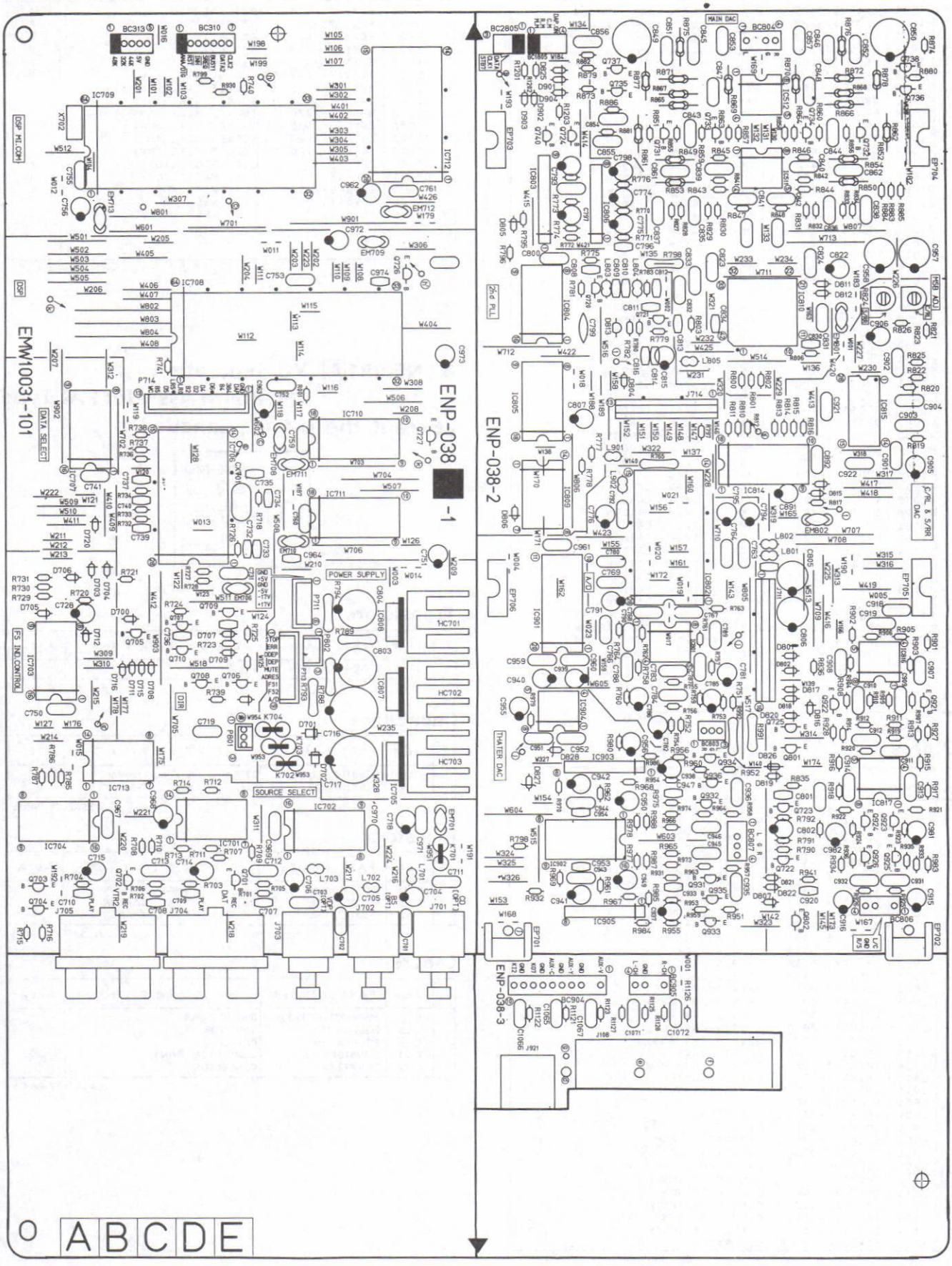
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10211-001 (S)	CIRCUIT BOARD	
	L925	EQL4004-150	INDUCTOR	
	L926	EQL4004-150	INDUCTOR	
	P921	EMV5101-003B	CONNECTOR (3PIN)	
	P922	E406872-001	CONNECTOR	

⚠ : SAFETY PARTS

■ENP-038□ DSP / Pro. Logic PC Board Ass'y

Note : ENP-038 □ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENP-038 A	the U.S.A., Canada
ENP-038 B	Continental Europe (with PAL)
ENP-038 C	Germany (with PAL)
ENP-038 D	the U.K. (with PAL)
ENP-038 E	Australia (with PAL)
ENP-038 F	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q701	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q702	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q703	DTA144ES	SILICON	ROHM	
	Q704	DTA144ES	SILICON	ROHM	
	Q705	DTC114YS	SILICON	ROHM	
	Q706	DTC114YS	SILICON	ROHM	
	Q707	DTC114YS	SILICON	ROHM	
	Q708	DTA144ES	SILICON	ROHM	
	Q709	DTC144ES	SILICON	ROHM	
	Q710	DTC114YS	SILICON	ROHM	
	Q720	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q721	2SC535(B,C)	SILICON	HITACHI	
	Q722	2SA933S(R,S)	SILICON	ROHM	
	Q723	DTC114YS	SILICON	ROHM	
	Q724	DTA144ES	SILICON	ROHM	
	Q725	DTA144ES	SILICON	ROHM	
	Q731	2SC3068	SILICON	SANYO	
	Q732	2SC3068	SILICON	SANYO	
	Q733	2SC3068	SILICON	SANYO	
	Q734	2SC3068	SILICON	SANYO	
	Q735	2SC3068	SILICON	SANYO	
	Q736	2SC3068	SILICON	SANYO	
	Q737	2SC3068	SILICON	SANYO	
	Q738	2SC3068	SILICON	SANYO	
	Q740	DTA144ES	SILICON	ROHM	
	Q801	DTC124ES	SILICON	ROHM	
	Q802	DTA144ES	SILICON	ROHM	
	Q921	2SC3068	SILICON	SANYO	
	Q922	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q923	2SC3068	SILICON	SANYO	
	Q924	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q925	2SC3068	SILICON	SANYO	
	Q926	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q931	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q932	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q933	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q934	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q935	2SD1302(S,T)	SILICON	MATSUSHITA	
	Q936	2SD1302(S,T)	SILICON	MATSUSHITA	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC701	TC74HCU04AP	I.C.	TOSHIBA	
	IC702	TC74HC151AP	I.C.	TOSHIBA	
	IC703	TC74HC138AP	I.C.	TOSHIBA	
	IC704	TC74HC138AP	I.C.	TOSHIBA	
	IC705	NJM78M05FA	I.C.	DAINICHI	
	IC706	YM3623B	I.C.	YAMAHA	
	IC707	TC74HC157AP	I.C.	TOSHIBA	
	IC708	LC83010N	I.C.	SANYO	
	IC709	MN17581JNO	I.C.	MATSUSHITA	
	IC710	MSM41464-12RS	I.C.	NIHON DENSO	
	IC711	MSM41464-12RS	I.C.	NIHON DENSO	
	IC712	LH535931	I.C.	SHARP	
	IC713	TC74HC74AP	I.C.	TOSHIBA	
	IC801	VC4580D	I.C.	DAINICHI	
	IC802	CS5339-KP	I.C.	ASAHI KASEI	
	IC803	TC5081AP	I.C.	TOSHIBA	
	IC804	TC74HC163AP	I.C.	TOSHIBA	
	IC805	TC74HC163AP	I.C.	TOSHIBA	
	IC806	VC4580L	I.C.	DAINICHI	
	IC807	NJM78M05FA	I.C.	DAINICHI	
	IC808	NJM79M05FA	I.C.	DAINICHI	
	IC809	TC74HC04AP	I.C.	TOSHIBA	
	IC810	JCE4302A	I.C.	MATSUSHITA	
	IC811	VC4580DD	I.C.	DAINICHI	
	IC812	VC4580DD	I.C.	DAINICHI	
	IC814	SM5840EP	I.C.	KANEMATSU	
	IC815	PCM1700U-J	I.C.	NIHONBARBURAUN	
	IC816	VC4580D	I.C.	DAINICHI	
	IC817	VC4580D	I.C.	DAINICHI	
	IC901	LC7881-C	I.C.	SANYO	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC902	TC9213P	I.C.	TOSHIBA	
	IC903	VC4580L	I.C.	DAINICHI	
	IC904	VC4580D	I.C.	DAINICHI	
	IC905	VC4580L	I.C.	DAINICHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D700	1SS133	SILICON	ROHM	
	D701	11ES2	SILICON	NIHONINTER	
	D702	11ES2	SILICON	NIHONINTER	
	D703	1SS133	SILICON	ROHM	
	D704	1SS133	SILICON	ROHM	
	D705	1SS133	SILICON	ROHM	
	D706	1SS133	SILICON	ROHM	
	D707	1SS133	SILICON	ROHM	
	D708	1SS133	SILICON	ROHM	
	D709	1SS133	SILICON	ROHM	
	D711	1SS133	SILICON	ROHM	
	D712	1SS133	SILICON	ROHM	
	D715	1SS133	SILICON	ROHM	
	D716	1SS133	SILICON	ROHM	
	D720	1SS133	SILICON	ROHM	
	D801	1SS133	SILICON	ROHM	
	D802	1SS133	SILICON	ROHM	
	D804	1SS133	SILICON	ROHM	
	D805	1SS133	SILICON	ROHM	
	D806	1SS133	SILICON	ROHM	
	D807	1SS133	SILICON	ROHM	
	D811	MA700	ZENER	MATSUSHITA	
	D812	MA700	ZENER	MATSUSHITA	
	D813	FC52M(5,6)	VARICAP	FUJITSU	
	D815	1SS133	SILICON	ROHM	
	D816	1SS133	SILICON	ROHM	
	D817	1SS133	SILICON	ROHM	
	D818	1SS133	SILICON	ROHM	
	D819	1SS133	SILICON	ROHM	
	D820	1SS133	SILICON	ROHM	
	D821	1SS133	SILICON	ROHM	
	D822	1SS133	SILICON	ROHM	
	D825	1SS133	SILICON	ROHM	
	D826	1SS133	SILICON	ROHM	
	D827	MTZ13JC	ZENER	ROHM	
	D828	MTZ13JC	ZENER	ROHM	
	D829	1SS133	SILICON	ROHM	
	D901	1SS133	SILICON	ROHM	
	D902	1SS133	SILICON	ROHM	
	D903	1SS133	SILICON	ROHM	
	D904	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C701	QFV81HJ-104	0.1MF	50V	T.FILM	
	C702	QFV81HJ-104	0.1MF	50V	T.FILM	
	C703	QFV81HJ-104	0.1MF	50V	T.FILM	
	C704	EETB1AM-107E	100MF	10V	ELECTRO	
	C705	EETB1AM-107E	100MF	10V	ELECTRO	
	C706	EETB1AM-107E	100MF	10V	ELECTRO	
	C707	QCSB1HJ-220	22PF	50V	CERAMIC	
	C708	QCSB1HJ-220	22PF	50V	CERAMIC	
	C709	QCBB1HK-121	120PF	50V	CERAMIC	
	C710	QCBB1HK-121	120PF	50V	CERAMIC	
	C711	QFV81HJ-223	0.022MF	50V	T.FILM	
	C712	QCZ0205-155	1.5MF	25V	CERAMIC	
	C713	QCZ0205-155	1.5MF	25V	CERAMIC	
	C714	EETB1HM-105E	1MF	50V	ELECTRO	
	C715	EETB1HM-105E	1MF	50V	ELECTRO	
	C716	EETB1CM-108E	1000MF	16V	ELECTRO	
	C717	EETB1CM-108E	1000MF	16V	ELECTRO	
	C718	EETB1AM-107E	100MF	10V	ELECTRO	
	C719	QFV81HJ-473	0.047MF	50V	T.FILM	
	C728	EETB1HM-105E	1MF	50V	ELECTRO	
	C731	QCZ0205-155	1.5MF	25V	CERAMIC	
	C732	QCBB1HK-471	470PF	50V	CERAMIC	
	C733	QCVB1CM-822	8200PF	16V	CERAMIC	
	C734	QCSB1HJ-220	22PF	50V	CERAMIC	
	C735	QCSB1HJ-220	22PF	50V	CERAMIC	
	C736	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C737	QCBB1HK-221	220PF	50V	CERAMIC	
	C739	QCBB1HK-221	220PF	50V	CERAMIC	
	C740	QCBB1HK-221	220PF	50V	CERAMIC	
	C741	QCZ0205-155	1.5MF	25V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C750	QFV81HJ-473	0.047MF	50V	T.FILM	
	C751	EETB1AM-107E	100MF	10V	ELECTRO	
	C752	QCZ0205-155	1.5MF	25V	CERAMIC	
	C753	QCZ0205-155	1.5MF	25V	CERAMIC	
	C755	QCZ0205-155	1.5MF	25V	CERAMIC	
	C756	EETB1AM-107E	100MF	10V	ELECTRO	
	C759	QCZ0205-155	1.5MF	25V	CERAMIC	
	C760	QCZ0205-155	1.5MF	25V	CERAMIC	
	C761	QCZ0205-155	1.5MF	25V	CERAMIC	
	C764	EETB1AM-107E	100MF	10V	ELECTRO	
	C767	QFV81HJ-103	0.01MF	50V	T.FILM	
	C768	QFV81HJ-103	0.01MF	50V	T.FILM	
	C769	QFV81HJ-104	0.1MF	50V	T.FILM	
	C774	EETB1EM-106E	10MF	25V	ELECTRO	
	C775	EETB1EM-106E	10MF	25V	ELECTRO	
	C779	QCZ0205-155	1.5MF	25V	CERAMIC	
	C780	QFV81HJ-104	0.1MF	50V	T.FILM	
	C781	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C782	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C783	QFLB1HK-471	470PF	50V	MYLAR	
	C784	QFLB1HK-471	470PF	50V	MYLAR	
	C785	EETB1EM-106E	10MF	25V	ELECTRO	
	C786	EETB1EM-106E	10MF	25V	ELECTRO	
	C787	QFN81HJ-122	1200PF	50V	MYLAR	
	C788	QFN81HJ-122	1200PF	50V	MYLAR	
	C789	QFLB1HK-101	100PF	50V	MYLAR	
	C790	QFLB1HK-101	100PF	50V	MYLAR	
	C791	EETB1EM-106E	10MF	25V	ELECTRO	
	C792	QFV81HJ-104	0.1MF	50V	T.FILM	
	C793	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C794	EETB1AM-107E	100MF	10V	ELECTRO	
	C795	EETB1AM-107E	100MF	10V	ELECTRO	
	C796	QCBB1HK-101	100PF	50V	CERAMIC	
	C797	EETB1EM-106E	10MF	25V	ELECTRO	
	C798	EETB1EM-476E	47MF	25V	ELECTRO	
	C799	QCS21HJ-150	15PF	50V	CERAMIC	
	C800	QCZ0205-155	1.5MF	25V	CERAMIC	
	C801	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C802	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C803	EETB1CM-107E	100MF	16V	ELECTRO	
	C804	EETB1CM-107E	100MF	16V	ELECTRO	
	C805	EETBOJM-477E	470MF	6.3V	ELECTRO	
	C806	EETBOJM-477E	470MF	6.3V	ELECTRO	
	C807	EETB1HM-474E	0.47MF	50V	ELECTRO	
	C808	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C809	QCBB1HK-221	220PF	50V	CERAMIC	
	C810	QCGB1HK-102	1000PF	50V	CERAMIC	
	C811	QCSB1HJ-560	56PF	50V	CERAMIC	
	C812	QCSB1HJ-470	47PF	50V	CERAMIC	
	C813	QCGB1HK-102	1000PF	50V	CERAMIC	
	C814	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C815	EETB1AM-107E	100MF	10V	ELECTRO	
	C816	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C822	EETBOJM-477E	470MF	6.3V	ELECTRO	
	C823	QFV81HJ-473	0.047MF	50V	T.FILM	
	C824	QFV81HJ-473	0.047MF	50V	T.FILM	
	C830	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C831	QCZ0205-155	1.5MF	25V	CERAMIC	
	C832	QCZ0205-155	1.5MF	25V	CERAMIC	
	C833	QCZ0205-155	1.5MF	25V	CERAMIC	
	C834	QCZ0205-155	1.5MF	25V	CERAMIC	
	C835	QFLB1HJ-271	270PF	50V	MYLAR	
	C836	QFLB1HJ-271	270PF	50V	MYLAR	
	C837	QFLB1HJ-271	270PF	50V	MYLAR	
	C838	QFLB1HJ-271	270PF	50V	MYLAR	
	C839	QCS21HJ-820	82PF	50V	CERAMIC	
	C840	QCS21HJ-820	82PF	50V	CERAMIC	
	C841	QCS21HJ-820	82PF	50V	CERAMIC	
	C842	QCS21HJ-820	82PF	50V	CERAMIC	
	C843	QFV81HJ-153	0.015MF	50V	T.FILM	
	C844	QFV81HJ-153	0.015MF	50V	T.FILM	
	C845	QFP81HJ-392	3900PF	50V	POLY	
	C846	QFP81HJ-392	3900PF	50V	POLY	
	C847	QFLB1HJ-331	330PF	50V	MYLAR	
	C848	QFLB1HJ-331	330PF	50V	MYLAR	
	C849	EETB1EM-226E	22MF	25V	ELECTRO	
	C850	EETB1EM-226E	22MF	25V	ELECTRO	
	C851	QFP81HJ-392	3900PF	50V	POLY	
	C852	QFP81HJ-392	3900PF	50V	POLY	
	C853	QFV81HJ-473	0.047MF	50V	T.FILM	
	C854	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C855	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C856	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C857	QFV81HJ-473	0.047MF	50V	T.FILM	
	C861	QFV81HJ-473	0.047MF	50V	T.FILM	
	C862	QFV81HJ-473	0.047MF	50V	T.FILM	
	C891	EETB1HM-106E	10MF	50V	ELECTRO	
	C892	QCZ0205-155	1.5MF	25V	CERAMIC	
	C901	QCZ0205-155	1.5MF	25V	CERAMIC	
	C902	QCZ0205-155	1.5MF	25V	CERAMIC	
	C903	QCZ0205-155	1.5MF	25V	CERAMIC	
	C904	QCZ0205-155	1.5MF	25V	CERAMIC	
	C905	EETB1AM-107E	100MF	10V	ELECTRO	
	C906	EETB1AM-107E	100MF	10V	ELECTRO	
	C907	QFLB1HK-181	180PF	50V	MYLAR	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C908	QFLB1HK-181	180PF	50V	MYLAR	
	C909	QFV81HJ-153	0.015MF	50V	T.FILM	
	C910	QFV81HJ-153	0.015MF	50V	T.FILM	
	C911	QFN81HJ-392	3900PF	50V	MYLAR	
	C912	QFN81HJ-392	3900PF	50V	MYLAR	
	C913	QFLB1HJ-331	330PF	50V	MYLAR	
	C914	QFLB1HJ-331	330PF	50V	MYLAR	
	C918	QFV81HJ-473	0.047MF	50V	T.FILM	
	C919	QFV81HJ-473	0.047MF	50V	T.FILM	
	C920	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C921	QFV81HJ-104	0.1MF	50V	T.FILM	
	C922	QFV81HJ-104	0.1MF	50V	T.FILM	
	C931	QFN81HJ-392	3900PF	50V	MYLAR	
	C932	QFN81HJ-392	3900PF	50V	MYLAR	
	C933	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C935	QFN81HJ-332	3300PF	50V	MYLAR	
	C936	QFN81HJ-332	3300PF	50V	MYLAR	
	C937	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C938	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C939	EETB1CM-476E	47MF	16V	ELECTRO	
	C940	EETB1CM-476E	47MF	16V	ELECTRO	
	C941	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C942	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C943	QFLB1HK-471	470PF	50V	MYLAR	
	C944	QFLB1HK-471	470PF	50V	MYLAR	
	C945	QFV81HJ-153	0.015MF	50V	T.FILM	
	C946	QFV81HJ-153	0.015MF	50V	T.FILM	
	C947	QCVB1CM-103	0.01MF	16V	CERAMIC	
	C949	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C950	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C951	QFN81HJ-392	3900PF	50V	MYLAR	
	C952	QFN81HJ-392	3900PF	50V	MYLAR	
	C953	QCXB1CM-392	3900PF	16V	CERAMIC	
	C954	QCXB1CM-392	3900PF	16V	CERAMIC	
	C955	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C956	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C957	EETB1CM-107E	100MF	16V	ELECTRO	
	C958	EETB1CM-107E	100MF	16V	ELECTRO	
	C959	QELB1HK-121	120PF	50V	MYLAR	
	C960	QFLB1HK-121	120PF	50V	MYLAR	
	C961	QCZ0205-155	1.5MF	25V	CERAMIC	
	C962	EETB1AM-107E	100MF	10V	ELECTRO	
	C963	EETB1AM-107E	100MF	10V	ELECTRO	
	C964	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C968	EETB1AM-107E	100MF	10V	ELECTRO	
	C969	QFV81HJ-223	0.022MF	50V	T.FILM	
	C970	QFV81HJ-223	0.022MF	50V	T.FILM	
	C971	QFV81HJ-223	0.022MF	50V	T.FILM	
	C972	EETB1AM-107E	100MF	10V	ELECTRO	
	C973	EETB1AM-107E	100MF	10V	ELECTRO	
	C981	EETB1HM-106E	10MF	50V	ELECTRO	
	C982	EETB1HM-106E	10MF	50V	ELECTRO	
	C1071	QFLB1HK-221	220PF	50V	MYLAR	
	C1072	QFLB1HK-221	220PF	50V	MYLAR	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R001	QRD167J-820	82	1/6W	CARBON	
	R701	QRD167J-100	10	1/6W	CARBON	
	R702	QRD167J-100	10	1/6W	CARBON	
	R703	QRD167J-750	75	1/6W	CARBON	
	R704	QRD167J-750	75	1/6W	CARBON	
	R705	QRD167J-820	82	1/6W	CARBON	
	R706	QRD167J-820	82	1/6W	CARBON	
	R707	QRD167J-221	220	1/6W	CARBON	
	R708	QRD167J-221	220	1/6W	CARBON	
	R709	QRD167J-301	300	1/6W	CARBON	
	R710	QRD167J-301	300	1/6W	CARBON	
	R711	QRD167J-183	18K	1/6W	CARBON	
	R712	QRD167J-183	18K	1/6W	CARBON	
	R713	QRD167J-472	4.7K	1/6W	CARBON	
	R714	QRD167J-472	4.7K	1/6W	CARBON	
	R715	QRD167J-103	10K	1/6W	CARBON	
	R716	QRD167J-103	10K	1/6W	CARBON	
	R718	QRD167J-105	1M	1/6W	CARBON	
	R720	QRD167J-103	10K	1/6W	CARBON	
	R721	QRD167J-103	10K	1/6W	CARBON	
	R723	QRD167J-103	10K	1/6W	CARBON	
	R724	QRD167J-103	10K	1/6W	CARBON	
	R725	QRD167J-103	10K	1/6W	CARBON	
	R726	QRD167J-271	270	1/6W	CARBON	
	R727	QRD167J-273	27K	1/6W	CARBON	
	R728	QRD167J-473	47K	1/6W	CARBON	
	R729	QRD167J-101	100	1/6W	CARBON	
	R730	QRD167J-101	100	1/6W	CARBON	
	R731	QRD167J-101	100	1/6W	CARBON	
	R732	QRD167J-101	100	1/6W	CARBON	
	R733	QRD167J-101	100	1/6W	CARBON	
	R734	QRD167J-102	1K	1/6W	CARBON	
	R736	QRD167J-470	47	1/6W	CARBON	
	R737	QRD167J-102	1K	1/6W	CARBON	
	R738	QRD167J-101	100	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R739	QRD167J-103	10K	1/6W	CARBON	
	R740	QRD167J-103	10K	1/6W	CARBON	
	R741	QRD167J-102	1K	1/6W	CARBON	
	R751	QRD167J-471	470	1/6W	CARBON	
	R752	QRD167J-471	470	1/6W	CARBON	
	R753	QRD167J-104	100K	1/6W	CARBON	
	R754	QRD167J-104	100K	1/6W	CARBON	
	R755	QRD167J-103	10K	1/6W	CARBON	
	R756	QRD167J-103	10K	1/6W	CARBON	
	R757	QRD167J-563	56K	1/6W	CARBON	
	R758	QRD167J-563	56K	1/6W	CARBON	
	R759	QRD167J-472	4.7K	1/6W	CARBON	
	R760	QRD167J-472	4.7K	1/6W	CARBON	
	R761	QRD167J-103	10K	1/6W	CARBON	
	R762	QRD167J-103	10K	1/6W	CARBON	
	R763	QRD167J-510	51	1/6W	CARBON	
	R764	QRD167J-510	51	1/6W	CARBON	
⚠	R765	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R765	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R765	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R765	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R765	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R765	QRZ0077-100	10	1/4W	FUSIBLE	F
	R770	QRD167J-103	10K	1/6W	CARBON	
	R771	QRD167J-105	1M	1/6W	CARBON	
	R772	QRD167J-201	200	1/6W	CARBON	
	R773	QRD167J-103	10K	1/6W	CARBON	
	R774	QRD167J-103	10K	1/6W	CARBON	
	R775	QRD167J-102	1K	1/6W	CARBON	
	R776	QRD167J-471	470	1/6W	CARBON	
	R777	QRD167J-222	2.2K	1/6W	CARBON	
	R778	QRD167J-222	2.2K	1/6W	CARBON	
	R779	QRD167J-103	10K	1/6W	CARBON	
	R780	QRD167J-103	10K	1/6W	CARBON	
	R781	QRD167J-223	22K	1/6W	CARBON	
	R782	QRD167J-683	68K	1/6W	CARBON	
	R783	QRD167J-561	560	1/6W	CARBON	
	R785	QRD167J-101	100	1/6W	CARBON	
	R786	QRD167J-101	100	1/6W	CARBON	
	R787	QRD167J-101	100	1/6W	CARBON	
⚠	R788	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R788	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R788	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R788	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R788	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R788	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R789	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R789	QRZ0077-220	22	1/4W	FUSIBLE	B
⚠	R789	QRZ0077-220	22	1/4W	FUSIBLE	C
⚠	R789	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R789	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R789	QRZ0077-220	22	1/4W	FUSIBLE	F
	R790	QRD167J-273	27K	1/6W	CARBON	
	R791	QRD167J-183	18K	1/6W	CARBON	
	R792	QRD167J-181	180	1/6W	CARBON	
⚠	R793	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R793	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R793	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R793	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R793	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R793	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R794	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R794	QRZ0077-220	22	1/4W	FUSIBLE	B
⚠	R794	QRZ0077-220	22	1/4W	FUSIBLE	C
⚠	R794	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R794	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R794	QRZ0077-220	22	1/4W	FUSIBLE	F
	R795	QRD167J-473	47K	1/6W	CARBON	
	R796	QRD167J-102	1K	1/6W	CARBON	
	R797	QRD167J-470	47	1/6W	CARBON	
	R798	QRD167J-102	1K	1/6W	CARBON	
	R799	QRD167J-223	22K	1/6W	CARBON	
	R800	QRD167J-181	180	1/6W	CARBON	
	R801	QRD167J-181	180	1/6W	CARBON	
	R802	QRD167J-181	180	1/6W	CARBON	
	R803	QRD167J-102	1K	1/6W	CARBON	
	R806	QRD167J-332	3.3K	1/6W	CARBON	
	R810	QRD167J-101	100	1/6W	CARBON	
	R811	QRD167J-101	100	1/6W	CARBON	
	R812	QRD167J-101	100	1/6W	CARBON	
	R813	QRD167J-101	100	1/6W	CARBON	
	R814	QRD167J-101	100	1/6W	CARBON	
	R815	QRD167J-101	100	1/6W	CARBON	
	R816	QRD167J-101	100	1/6W	CARBON	
	R817	QRD167J-223	22K	1/6W	CARBON	
	R819	QRD167J-184	180K	1/6W	CARBON	
	R820	QRD167J-184	180K	1/6W	CARBON	
	R821	QRD167J-102	1K	1/6W	CARBON	
	R822	QRD167J-102	1K	1/6W	CARBON	
	R823	QVZ3518-104	100K	0.1W	VARIABLE	
	R824	QVZ3518-104	100K	0.1W	VARIABLE	
	R825	QRD167J-102	1K	1/6W	CARBON	
	R826	QRD167J-102	1K	1/6W	CARBON	
⚠	R827	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R828	QRV144F-1802	18K	1/4W	M.FILM	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R829	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R830	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R831	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R832	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R833	QRV144F-1802	18K	1/4W	M.FILM	
⚠	R834	QRV144F-1802	18K	1/4W	M.FILM	
	R835	QRD167J-223	22K	1/6W	CARBON	
	R836	QRD167J-223	22K	1/6W	CARBON	
⚠	R841	QRV144F-2702	27K	1/4W	M.FILM	
⚠	R842	QRV144F-2702	27K	1/4W	M.FILM	
⚠	R843	QRV144F-2702	27K	1/4W	M.FILM	
⚠	R844	QRV144F-2702	27K	1/4W	M.FILM	
⚠	R845	QRV144F-3902A	39K	1/4W	M.FILM	
⚠	R846	QRV144F-3902A	39K	1/4W	M.FILM	
⚠	R847	QRV144F-3902A	39K	1/4W	M.FILM	
⚠	R848	QRV144F-3902A	39K	1/4W	M.FILM	
	R849	QRD167J-102	1K	1/6W	CARBON	
	R850	QRD167J-102	1K	1/6W	CARBON	
	R851	QRD167J-103	10K	1/6W	CARBON	
	R852	QRD167J-103	10K	1/6W	CARBON	
	R853	QRD167J-331	330	1/6W	CARBON	
	R854	QRD167J-331	330	1/6W	CARBON	
	R855	QRD167J-474	470K	1/6W	CARBON	
	R856	QRD167J-474	470K	1/6W	CARBON	
	R857	QRD167J-474	470K	1/6W	CARBON	
	R858	QRD167J-474	470K	1/6W	CARBON	
	R859	QRD167J-331	330	1/6W	CARBON	
	R860	QRD167J-331	330	1/6W	CARBON	
	R861	QRD167J-302	3K	1/6W	CARBON	
	R862	QRD167J-302	3K	1/6W	CARBON	
	R863	QRD167J-103	10K	1/6W	CARBON	
	R864	QRD167J-103	10K	1/6W	CARBON	
	R865	QRD167J-512	5.1K	1/6W	CARBON	
	R866	QRD167J-512	5.1K	1/6W	CARBON	
	R867	QRD167J-392	3.9K	1/6W	CARBON	
	R868	QRD167J-392	3.9K	1/6W	CARBON	
	R869	QRD167J-101	100	1/6W	CARBON	
	R870	QRD167J-101	100	1/6W	CARBON	
	R871	QRD167J-681	680	1/6W	CARBON	
	R872	QRD167J-681	680	1/6W	CARBON	
	R873	QRD167J-103	10K	1/6W	CARBON	
	R874	QRD167J-103	10K	1/6W	CARBON	
	R875	QRD167J-273	27K	1/6W	CARBON	
	R876	QRD167J-273	27K	1/6W	CARBON	
	R877	QRD167J-331	330	1/6W	CARBON	
	R878	QRD167J-331	330	1/6W	CARBON	
	R879	QRD167J-103	10K	1/6W	CARBON	
	R880	QRD167J-103	10K	1/6W	CARBON	
	R881	QRD167J-105	1M	1/6W	CARBON	
	R882	QRD167J-105	1M	1/6W	CARBON	
	R883	QRD167J-104	100K	1/6W	CARBON	
	R884	QRD167J-104	100K	1/6W	CARBON	
	R885	QRD167J-104	100K	1/6W	CARBON	
	R886	QRD167J-105	1M	1/6W	CARBON	
	R901	QRD167J-562	5.6K	1/6W	CARBON	
	R902	QRD167J-562	5.6K	1/6W	CARBON	
	R903	QRD167J-123	12K	1/6W	CARBON	
	R904	QRD167J-123	12K	1/6W	CARBON	
	R905	QRD167J-101	100	1/6W	CARBON	
	R906	QRD167J-101	100	1/6W	CARBON	
	R907	QRD167J-102	1K	1/6W	CARBON	
	R908	QRD167J-102	1K	1/6W	CARBON	
	R909	QRD167J-331	330	1/6W	CARBON	
	R910	QRD167J-331	330	1/6W	CARBON	
	R911	QRD167J-474	470K	1/6W	CARBON	
	R912	QRD167J-474	470K	1/6W	CARBON	
	R913	QRD167J-302	3K	1/6W	CARBON	
	R914	QRD167J-302	3K	1/6W	CARBON	
	R915	QRD167J-512	5.1K	1/6W	CARBON	
	R916	QRD167J-512	5.1K	1/6W	CARBON	
	R917	QRD167J-392	3.9K	1/6W	CARBON	
	R918	QRD167J-392	3.9K	1/6W	CARBON	
	R919	QRD167J-101	100	1/6W	CARBON	
	R920	QRD167J-101	100	1/6W	CARBON	
	R921	QRD167J-681	680	1/6W	CARBON	
	R922	QRD167J-681	680	1/6W	CARBON	
	R923	QRD167J-103	10K	1/6W	CARBON	
	R924	QRD167J-103	10K	1/6W	CARBON	
	R925	QRD167J-273	27K	1/6W	CARBON	
	R926	QRD167J-273	27K	1/6W	CARBON	
	R927	QRD167J-103	10K	1/6W	CARBON	
	R928	QRD167J-103	10K	1/6W	CARBON	
	R931	QRD167J-105	1M	1/6W	CARBON	
	R932	QRD167J-104	100K	1/6W	CARBON	
	R933	QRD167J-331	330	1/6W	CARBON	
	R934	QRD167J-331	330	1/6W	CARBON	
	R935	QRD167J-103	10K	1/6W	CARBON	
	R936	QRD167J-103	10K	1/6W	CARBON	
	R941	QRD167J-105	1M	1/6W	CARBON	
	R951	QRD167J-152	1.5K	1/6W	CARBON	
	R952	QRD167J-152	1.5K	1/6W	CARBON	
	R953	QRD167J-223	22K	1/6W	CARBON	
	R954	QRD167J-223	22K	1/6W	CARBON	
	R955	QRD167J-223	22K	1/6W	CARBON	
	R956	QRD167J-223	22K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R957	QRD167J-105	1M 1/6W CARBON	
	R958	QRD167J-105	1M 1/6W CARBON	
	R959	QRD167J-182	1.8K 1/6W CARBON	
	R960	QRD167J-182	1.8K 1/6W CARBON	
	R961	QRD167J-105	1M 1/6W CARBON	
	R962	QRD167J-105	1M 1/6W CARBON	
	R963	QRD167J-474	470K 1/6W CARBON	
	R964	QRD167J-474	470K 1/6W CARBON	
	R965	QRD167J-331	330 1/6W CARBON	
	R966	QRD167J-331	330 1/6W CARBON	
	R967	QRD167J-332	3.3K 1/6W CARBON	
	R968	QRD167J-332	3.3K 1/6W CARBON	
	R969	QRD167J-102	1K 1/6W CARBON	
	R970	QRD167J-102	1K 1/6W CARBON	
	R973	QRD167J-103	10K 1/6W CARBON	
	R974	QRD167J-103	10K 1/6W CARBON	
	R975	QRD167J-105	1M 1/6W CARBON	
	R977	QRD167J-223	22K 1/6W CARBON	
	R978	QRD167J-223	22K 1/6W CARBON	
	R979	QRD167J-222	2.2K 1/6W CARBON	
	R980	QRD167J-222	2.2K 1/6W CARBON	
	R983	QRD167J-104	100K 1/6W CARBON	
	R984	QRD167J-104	100K 1/6W CARBON	
	R985	QRD167J-303	30K 1/6W CARBON	
	R986	QRD167J-303	30K 1/6W CARBON	
	R987	QRD167J-103	10K 1/6W CARBON	
	R988	QRD167J-103	10K 1/6W CARBON	
⚠	R991	QRD14CJ-101S	100 1/4W UNF.CARBON	A
⚠	R991	QRZ0077-101	100 1/4W FUSIBLE	B
⚠	R991	QRZ0077-101	100 1/4W FUSIBLE	C
⚠	R991	QRZ0077-101	100 1/4W FUSIBLE	D
⚠	R991	QRZ0077-101	100 1/4W FUSIBLE	E
⚠	R991	QRZ0077-101	100 1/4W FUSIBLE	F
⚠	R992	QRD14CJ-101S	100 1/4W UNF.CARBON	A
⚠	R992	QRZ0077-101	100 1/4W FUSIBLE	B
⚠	R992	QRZ0077-101	100 1/4W FUSIBLE	C
⚠	R992	QRZ0077-101	100 1/4W FUSIBLE	D
⚠	R992	QRZ0077-101	100 1/4W FUSIBLE	E
⚠	R992	QRZ0077-101	100 1/4W FUSIBLE	F
	R1121	QRD167J-750	75 1/6W CARBON	
	R1122	QRD167J-750	75 1/6W CARBON	
	R1123	QRD167J-750	75 1/6W CARBON	
	R1125	QRD167J-224	220K 1/6W CARBON	
	R1126	QRD167J-224	220K 1/6W CARBON	
	R1127	QRD167J-221	220 1/6W CARBON	
	R1128	QRD167J-221	220 1/6W CARBON	
	R1203	QRD167J-102	1K 1/6W CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10031-101	CIRCUIT BOARD	
		EWT011-130	TERMINAL WIRE	
		E33754-001	TIE BAND	
		E3400-431	SPACER	
		E73525-001	SPECIAL SCREW	
	J108	EMN00YV-310A	3P PIN JACK	
	J701	TORX174	I.C(OPTICAL JACK)(CD)	
	J702	TORX174	I.C(OPTICAL JACK)(VDP1)	
	J703	TORX174	I.C(OPTICAL JACK)(VDP2)	
	J704	EMN00YV-212A	2P PIN JACK	
	J705	EMN00YV-212A	2P PIN JACK	
	J711	EMV5123-G210	PLUG ASSY(16PIN)	
	J714	EMV5123-D210	PLUG ASSY(13PIN)	
	J921	EMD0489-011G	MINI JACK	
	L701	EQL4004-560	INDUCTOR	
	L702	EQL4004-560	INDUCTOR	
	L703	EQL4004-560	INDUCTOR	
	L801	EQL4004-100	INDUCTOR	
	L802	EQL4004-100	INDUCTOR	
	L803	EQL4008-1R2	INDUCTOR	
	L804	EQL4008-1R0	INDUCTOR	
	L805	EQL4004-560	INDUCTOR	
	L901	EQL4004-100	INDUCTOR	
	P711	EMV7124-006	CONNECTOR(6PIN)	
	P713	EMV7124-009	CONNECTOR(9PIN)	
	P714	EMV7124-013	CONNECTOR(13PIN)	
	P801	EMV5109-003A	PLUG ASSY(3PIN)	
	P802	EMV5111-003	PLUG ASSY(3PIN)	
	BC310	EWS267-A925	SOCKET WIRE(7PIN)	
	BC313	EWS265-A930	SOCKET WIRE(5PIN)	
	BC803	EWS263-A230	SOCKET WIRE(3PIN)	
	BC804	EWS249-008	SOCKET WIRE(4PIN)	
	BC904	EWS247-009	SOCKET WIRE(10PIN)	
	BC905	EWS243-030	SOCKET WIRE(4PIN)	
	B1805	EWS264-A918	SOCKET WIRE(4PIN)	

⚠ : SAFETY PARTS

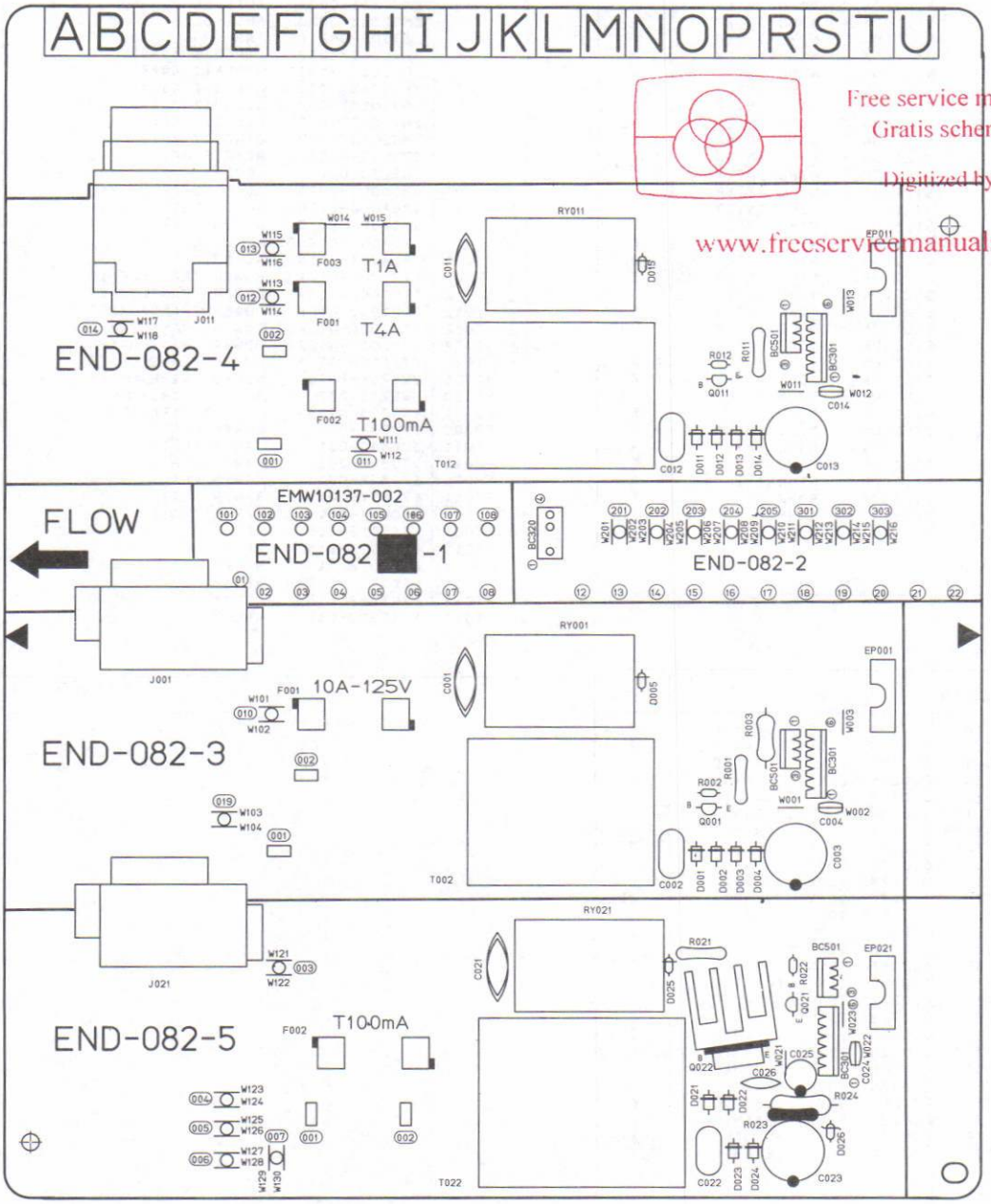
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	B2805	EWS263-A425	SOCKET WIRE(3PIN)	
	CX701	ECX0180-000EW	RESONATOR	
	CX702	ECX0072-000EM	RESONATOR	
	EM701	EQF0601-222	CERAMIC FILTER	
	EM706	EQF0601-222	CERAMIC FILTER	
	EM708	EQF0601-222	CERAMIC FILTER	
	EM709	EQF0601-222	CERAMIC FILTER	
	EM710	EQF0601-222	CERAMIC FILTER	
	EM711	EQF0601-222	CERAMIC FILTER	
	EM712	EQF0601-222	CERAMIC FILTER	
	EM713	EQF0601-222	CERAMIC FILTER	
	EM801	EQF0601-222	CERAMIC FILTER	
	EM802	EQF0601-222	CERAMIC FILTER	
	EP701	E70225-002	EARTH PLATE	
	EP702	E70225-002	EARTH PLATE	
	EP703	E70859-001	EARTH PLATE	
	EP704	E70859-001	EARTH PLATE	
	EP705	E70859-001	EARTH PLATE	
	EP706	E70859-001	EARTH PLATE	
	HC701	E70945-H25	HEAT SINK	
	HC702	E70945-H25	HEAT SINK	
	HC703	E70945-H25	HEAT SINK	

⚠ : SAFETY PARTS

■END-082☐ Power Primary PC Board Ass'y

Note : END-082 ☐ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
END-082 A	the U.S.A. , Canada
END-082 B	Continental Europe (with PAL)
END-082 C	Germany (with PAL)
END-082 D BS	the U.K. (with PAL)
END-082 E	Australia (with PAL)
END-082 F	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	Q001	2SC2235(O,Y)	SILICON TOSHIBA	A
	Q011	2SC2235(O,Y)	SILICON TOSHIBA	B
	Q011	2SC2235(O,Y)	SILICON TOSHIBA	C
	Q011	2SC2235(O,Y)	SILICON TOSHIBA	DBS
	Q011	2SC2235(O,Y)	SILICON TOSHIBA	E
	Q021	2SC2235(O,Y)	SILICON TOSHIBA	F
	Q022	2SD1944(J,K)	SILICON ROHM	F

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	D001	11ES2	SILICON NIHONINTER	A
	D002	11ES2	SILICON NIHONINTER	A
	D003	11ES2	SILICON NIHONINTER	A
	D004	11ES2	SILICON NIHONINTER	A
	D005	1SS133	SILICON ROHM	A
	D011	11ES2	SILICON NIHONINTER	B
	D011	11ES2	SILICON NIHONINTER	C
	D011	11ES2	SILICON NIHONINTER	DBS
	D011	11ES2	SILICON NIHONINTER	E
	D012	11ES2	SILICON NIHONINTER	B
	D012	11ES2	SILICON NIHONINTER	C
	D012	11ES2	SILICON NIHONINTER	DBS
	D012	11ES2	SILICON NIHONINTER	E
	D013	11ES2	SILICON NIHONINTER	B
	D013	11ES2	SILICON NIHONINTER	C
	D013	11ES2	SILICON NIHONINTER	DBS
	D013	11ES2	SILICON NIHONINTER	E
	D014	11ES2	SILICON NIHONINTER	B
	D014	11ES2	SILICON NIHONINTER	C
	D014	11ES2	SILICON NIHONINTER	DBS
	D014	11ES2	SILICON NIHONINTER	E
	D015	1SS133	SILICON ROHM	B
	D015	1SS133	SILICON ROHM	C
	D015	1SS133	SILICON ROHM	DBS
	D015	1SS133	SILICON ROHM	E
	D021	11ES2	SILICON NIHONINTER	F
	D022	11ES2	SILICON NIHONINTER	F
	D023	11ES2	SILICON NIHONINTER	F
	D024	11ES2	SILICON NIHONINTER	F
	D025	1SS133	SILICON ROHM	F
	D026	MTZ12JC	ZENER ROHM	F

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	C001	QCZ9050-103A	0.01MF CERAMIC	A
	C002	QFN82AK-473	0.047MF 100V MYLAR	A
	C003	EETB1EM-108E	1000MF 25V ELECTRO	A
	C004	QCHB1EZ-223	0.022MF 25V CERAMIC	A
⚠	C011	QCZ9050-103A	0.01MF CERAMIC	B
⚠	C011	QCZ9050-103A	0.01MF CERAMIC	C
⚠	C011	QCZ9050-103ABS	0.01MF CERAMIC	DBS
⚠	C011	QCZ9050-103A	0.01MF CERAMIC	E
	C012	QFN82AK-473	0.047MF 100V MYLAR	B
	C012	QFN82AK-473	0.047MF 100V MYLAR	C
	C012	QFN82AK-473	0.047MF 100V MYLAR	DBS
	C012	QFN82AK-473	0.047MF 100V MYLAR	E
	C013	EETB1EM-108E	1000MF 25V ELECTRO	B
	C013	EETB1EM-108E	1000MF 25V ELECTRO	C
	C013	EETB1EM-108E	1000MF 25V ELECTRO	DBS
	C013	EETB1EM-108E	1000MF 25V ELECTRO	E
	C014	QCHB1EZ-223	0.022MF 25V CERAMIC	B
	C014	QCHB1EZ-223	0.022MF 25V CERAMIC	C
	C014	QCHB1EZ-223	0.022MF 25V CERAMIC	DBS
	C014	QCHB1EZ-223	0.022MF 25V CERAMIC	E
⚠	C021	QCZ9050-103A	0.01MF CERAMIC	F
	C022	QFN82AK-473	0.047MF 100V MYLAR	F
	C023	QETB1JM-477	470MF 63V ELECTRO	F
	C024	QCHB1EZ-223	0.022MF 25V CERAMIC	F
	C025	EETB1CM-107E	100MF 16V ELECTRO	F
	C026	QCF21HP-472	4700PF 50V CERAMIC	F

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
⚠	R001	QRD14CJ-2R2S	2.2 1/4W UNF.CARBON	A
	R002	QRD167J-102	1K 1/6W CARBON	A
⚠	R003	QRD125J-560	56 1/2W UNF.CARBON	A
⚠	R011	QRD14CJ-100S	10 1/4W UNF.CARBON	B
⚠	R011	QRD14CJ-100S	10 1/4W UNF.CARBON	C
⚠	R011	QRD14CJ-220S	22 1/4W UNF.CARBON	DBS
⚠	R011	QRD14CJ-220S	22 1/4W UNF.CARBON	E
	R012	QRD167J-102	1K 1/6W CARBON	B
	R012	QRD167J-102	1K 1/6W CARBON	C
	R012	QRD167J-102	1K 1/6W CARBON	DBS
	R012	QRD167J-102	1K 1/6W CARBON	E
	R022	QRD167J-102	1K 1/6W CARBON	F
⚠	R023	QRD14CJ-2R2S	2.2 1/4W UNF.CARBON	F
⚠	R024	QRG022J-272A	2.7K 2W O.M.FILM	F

⚠ : SAFETY PARTS

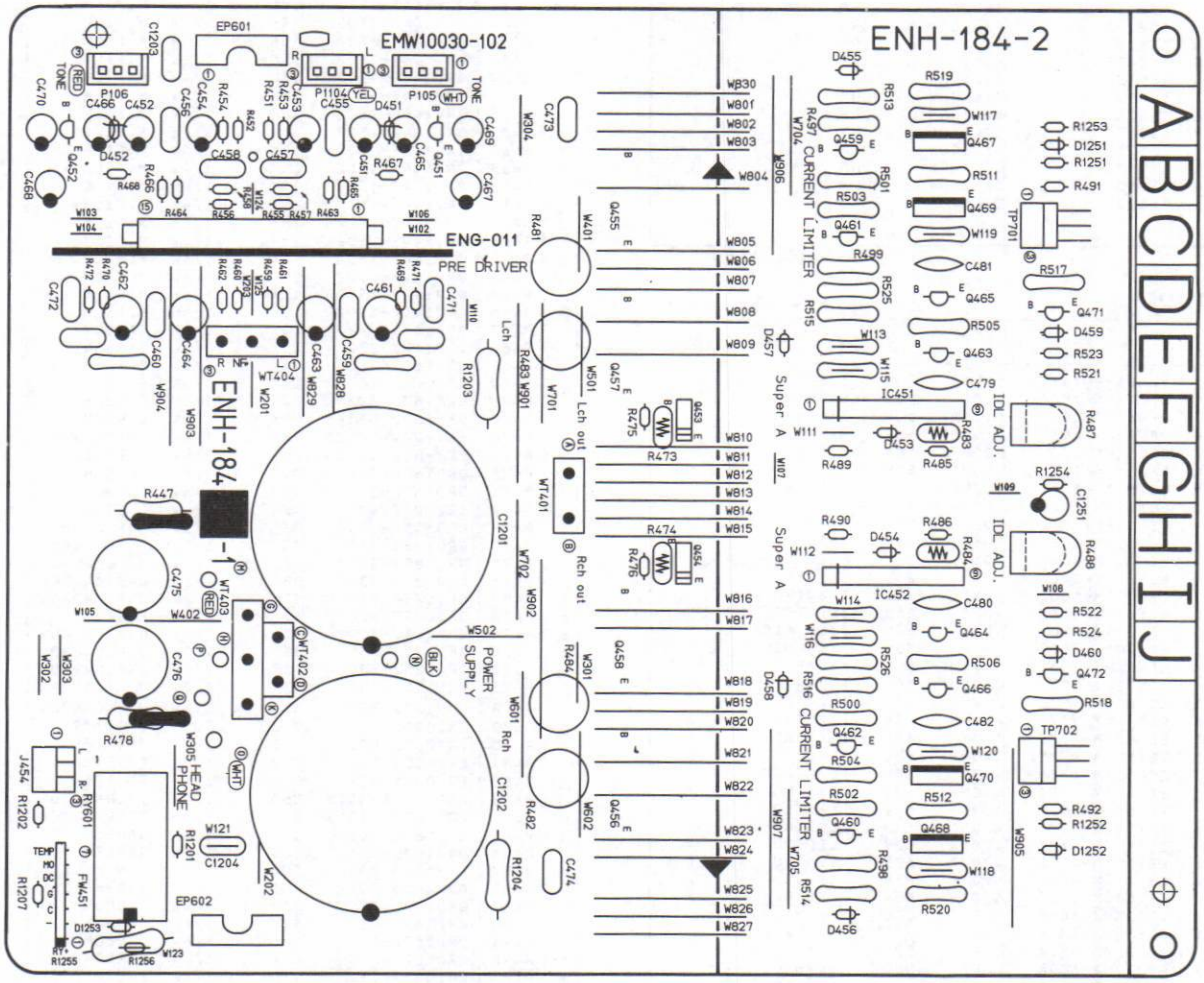
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002	FUSE CLIP	
		EMG7331-002U	FUSE CLIP	
		E65508-002	TAB	
		EMW10137-002	CIRCUIT BOARD	A
		EMW10137-002	CIRCUIT BOARD	B
		EMW10137-002	CIRCUIT BOARD	C
		EMW10137-002BS	CIRCUIT BOARD	DBS
		EMW10137-002	CIRCUIT BOARD	E
		EMW10137-002	CIRCUIT BOARD	F
		E70945-H40B	HEAT SINK	F
		SBSG3010CC	SCREW	F
⚠	J001	QMCA003-E02S	AC OUTLET	A
⚠	J011	QMCA004-E01G	AC OUTLET	B
⚠	J011	QMCA004-E01G	AC OUTLET	C
⚠	J011	QMCA004-E02GBS	AC OUTLET	DBS
⚠	J021	QMCA003-E01S	AC OUTLET	F
⚠	T002	ETP1000-42JA	POWER TRANSFORMER	A
⚠	T012	ETP1000-41EA	POWER TRANSFORMER	B
⚠	T012	ETP1000-41EA	POWER TRANSFORMER	C
⚠	T012	ETP1000-41EABS	POWER TRANSFORMER	DBS
⚠	T012	ETP1000-41EA	POWER TRANSFORMER	E
⚠	T022	ETP1000-41ZB	POWER TRANSFORMER	F
	BC301	EWS266-A944	SOCKET WIRE (6PIN)	
	BC320	EWS243-037	SOCKET WIRE (4PIN)	
	BC501	EWS263-A916	SOCKET WIRE (3PIN)	
	EP001	E70859-001	EARTH PLATE	A
	EP011	E70859-001	EARTH PLATE	B
	EP011	E70859-001	EARTH PLATE	C
	EP011	E70859-001	EARTH PLATE	DBS
	EP011	E70859-001	EARTH PLATE	E
	EP021	E70859-001	EARTH PLATE	F
⚠	RY001	ESK1D12-115	RELAY	A
	RY011	ESK1D12-113	RELAY	B
	RY011	ESK1D12-113	RELAY	C
	RY011	ESK1D12-113BS	RELAY	DBS
	RY011	ESK1D12-113	RELAY	E
	RY021	ESK1D12-113	RELAY	F

⚠ : SAFETY PARTS

■ENH-184☐ Main Amplifier PC Board Ass'y

Note : ENH-184☐ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENH-184 A	the U.S.A., Canada
ENH-184 B	Continental Europe (with PAL)
ENH-184 C	Germany (with PAL)
ENH-184 D	the U.K. (with PAL)
ENH-184 E	Australia (with PAL)
ENH-184 F	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q451	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q452	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q453	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q454	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q455	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q456	2SD2155LB(R,O)	SILICON	TOSHIBA	
	Q457	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q458	2SB1429LB(R,O)	SILICON	TOSHIBA	
	Q459	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q460	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q461	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q462	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q463	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q464	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q465	2SA970(GR,BL)	SILICON	TOSHIBA	

⚠ : SAFETY PARTS

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q466	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q467	2SD669A(B,C)	SILICON	HITACHI	
	Q468	2SD669A(B,C)	SILICON	HITACHI	
	Q469	2SB649A(B,C)	SILICON	HITACHI	
	Q470	2SB649A(B,C)	SILICON	HITACHI	
	Q471	2SC2389(S,E)	SILICON	ROHM	
	Q472	2SC2389(S,E)	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC451	VC5022(X,Y)	I.C.	ROHM	
	IC452	VC5022(X,Y)	I.C.	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	D451	MTZ5.6JC	ZENER		ROHM	
	D452	MTZ5.6JC	ZENER		ROHM	
	D453	1SS133	SILICON		ROHM	
	D454	1SS133	SILICON		ROHM	
	D455	1SS133	SILICON		ROHM	
	D456	1SS133	SILICON		ROHM	
	D457	1SS133	SILICON		ROHM	
	D458	1SS133	SILICON		ROHM	
	D459	1SS133	SILICON		ROHM	
	D460	1SS133	SILICON		ROHM	
	D1251	1SS133	SILICON		ROHM	
	D1252	1SS133	SILICON		ROHM	
	D1253	1SS133	SILICON		ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C453	EETB1HM-106E	10MF	50V	ELECTRO	
	C454	EETB1HM-106E	10MF	50V	ELECTRO	
	C455	QFN81HJ-103	0.01MF	50V	MYLAR	
	C456	QFN81HJ-103	0.01MF	50V	MYLAR	
	C457	QFLB1HK-221	220PF	50V	MYLAR	
	C458	QFLB1HK-221	220PF	50V	MYLAR	
	C461	EETB1AM-107E	100MF	10V	ELECTRO	
	C462	EETB1AM-107E	100MF	10V	ELECTRO	
	C465	EETB1EM-106E	10MF	25V	ELECTRO	
	C466	EETB1EM-106E	10MF	25V	ELECTRO	
	C467	EETB1EM-106E	10MF	25V	ELECTRO	
	C468	EETB1EM-106E	10MF	25V	ELECTRO	
	C469	EETB1EM-106E	10MF	25V	ELECTRO	
	C470	EETB1EM-106E	10MF	25V	ELECTRO	
	C471	EFF001J-7R0	7PF	50V	FILM MICA	
	C472	EFF001J-7R0	7PF	50V	FILM MICA	
	C473	QFN81HJ-103	0.01MF	50V	MYLAR	
	C474	QFN81HJ-103	0.01MF	50V	MYLAR	
	C475	EETB1JM-107E	100MF	63V	ELECTRO	A
	C475	EETB1JM-477E	470MF	63V	ELECTRO	B
	C475	EETB1JM-477E	470MF	63V	ELECTRO	C
	C475	EETB1JM-477E	470MF	63V	ELECTRO	D
	C475	EETB1JM-477E	470MF	63V	ELECTRO	E
	C475	EETB1JM-477E	470MF	63V	ELECTRO	F
	C476	EETB1JM-107E	100MF	63V	ELECTRO	A
	C476	EETB1JM-477E	470MF	63V	ELECTRO	B
	C476	EETB1JM-477E	470MF	63V	ELECTRO	C
	C476	EETB1JM-477E	470MF	63V	ELECTRO	D
	C476	EETB1JM-477E	470MF	63V	ELECTRO	E
	C476	EETB1JM-477E	470MF	63V	ELECTRO	F
	C479	QCS22HJ-680A	68PF	500V	CERAMIC	
	C480	QCS22HJ-680A	68PF	500V	CERAMIC	
	C481	QCS22HJ-680A	68PF	500V	CERAMIC	
	C482	QCS22HJ-680A	68PF	500V	CERAMIC	
	C1201	EEW6312-189E	18000MF		ELECTRO	A
	C1201	EEW5609-189E	18000MF		ELECTRO	B
	C1201	EEW5609-189E	18000MF		ELECTRO	C
	C1201	EEW5609-189E	18000MF		ELECTRO	D
	C1201	EEW5609-189E	18000MF		ELECTRO	E
	C1201	EEW5609-189E	18000MF		ELECTRO	F
	C1202	EEW6312-189E	18000MF		ELECTRO	A
	C1202	EEW5609-189E	18000MF		ELECTRO	B
	C1202	EEW5609-189E	18000MF		ELECTRO	C
	C1202	EEW5609-189E	18000MF		ELECTRO	D
	C1202	EEW5609-189E	18000MF		ELECTRO	E
	C1202	EEW5609-189E	18000MF		ELECTRO	F
	C1203	QFN81HJ-223	0.022MF	50V	MYLAR	
	C1204	QFN81HJ-223	0.022MF	50V	MYLAR	
	C1251	EETB1HM-106E	10MF	50V	ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R453	QRD167J-222	2.2K	1/6W	CARBON	
	R454	QRD167J-222	2.2K	1/6W	CARBON	
	R455	QRD167J-473	47K	1/6W	CARBON	
	R456	QRD167J-473	47K	1/6W	CARBON	
	R457	QRD167J-473	47K	1/6W	CARBON	
	R458	QRD167J-473	47K	1/6W	CARBON	
	R459	QRD167J-391	390	1/6W	CARBON	
	R460	QRD167J-391	390	1/6W	CARBON	
	R461	QRD167J-471	470	1/6W	CARBON	
	R462	QRD167J-471	470	1/6W	CARBON	
⚠	R463	QRV144F-1802	18K	1/4W	M.FILM	A
⚠	R463	QRV144F-1502	15K	1/4W	M.FILM	B
⚠	R463	QRV144F-1502	15K	1/4W	M.FILM	C
⚠	R463	QRV144F-1502	15K	1/4W	M.FILM	D
⚠	R463	QRV144F-1502	15K	1/4W	M.FILM	E

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R463	QRV144F-1502	15K	1/4W	M.FILM	F
⚠	R464	QRV144F-1802	18K	1/4W	M.FILM	A
⚠	R464	QRV144F-1502	15K	1/4W	M.FILM	B
⚠	R464	QRV144F-1502	15K	1/4W	M.FILM	C
⚠	R464	QRV144F-1502	15K	1/4W	M.FILM	D
⚠	R464	QRV144F-1502	15K	1/4W	M.FILM	E
⚠	R464	QRV144F-1502	15K	1/4W	M.FILM	F
⚠	R465	QRV144F-1802	18K	1/4W	M.FILM	A
⚠	R465	QRV144F-1502	15K	1/4W	M.FILM	B
⚠	R465	QRV144F-1502	15K	1/4W	M.FILM	C
⚠	R465	QRV144F-1502	15K	1/4W	M.FILM	D
⚠	R465	QRV144F-1502	15K	1/4W	M.FILM	E
⚠	R465	QRV144F-1502	15K	1/4W	M.FILM	F
⚠	R466	QRV144F-1802	18K	1/4W	M.FILM	A
⚠	R466	QRV144F-1502	15K	1/4W	M.FILM	B
⚠	R466	QRV144F-1502	15K	1/4W	M.FILM	C
⚠	R466	QRV144F-1502	15K	1/4W	M.FILM	D
⚠	R466	QRV144F-1502	15K	1/4W	M.FILM	E
⚠	R466	QRV144F-1502	15K	1/4W	M.FILM	F
	R467	QRD167J-272	2.7K	1/6W	CARBON	
	R468	QRD167J-272	2.7K	1/6W	CARBON	
	R469	QRD167J-163	16K	1/6W	CARBON	
	R470	QRD167J-163	16K	1/6W	CARBON	
	R471	QRD167J-823	82K	1/6W	CARBON	
	R472	QRD167J-823	82K	1/6W	CARBON	
	R473	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R474	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R475	QRD167J-391	390	1/6W	CARBON	
	R476	QRD167J-391	390	1/6W	CARBON	
⚠	R477	QRZ0077-470	47	1/4W	FUSIBLE	A
⚠	R477	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R477	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R477	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R477	QRD125J-330	33	1/2W	UNF.CARBON	E
⚠	R477	QRD125J-330	33	1/2W	UNF.CARBON	F
⚠	R478	QRZ0077-470	47	1/4W	FUSIBLE	A
⚠	R478	QRD125J-330	33	1/2W	UNF.CARBON	B
⚠	R478	QRD125J-330	33	1/2W	UNF.CARBON	C
⚠	R478	QRD125J-330	33	1/2W	UNF.CARBON	D
⚠	R478	QRD125J-330	33	1/2W	UNF.CARBON	E
⚠	R478	QRD125J-330	33	1/2W	UNF.CARBON	F
⚠	R479	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R480	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R481	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R482	ERZ0001-R22	0.22	3W	EMITTER	
	R483	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R484	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R485	QRD167J-101	100	1/6W	CARBON	
	R486	QRD167J-101	100	1/6W	CARBON	
	R487	QVPA603-501A	500		VARIABLE	
	R488	QVPA603-501A	500		VARIABLE	
	R489	QRD167J-511	510	1/6W	CARBON	
	R490	QRD167J-511	510	1/6W	CARBON	
	R491	QRD167J-104	100K	1/6W	CARBON	
	R492	QRD167J-823	82K	1/6W	CARBON	
⚠	R497	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R498	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R499	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R500	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R501	QRD14CJ-911S	910	1/4W	UNF.CARBON	A
⚠	R501	QRZ0077-681	680	1/4W	FUSIBLE	B
⚠	R501	QRZ0077-681	680	1/4W	FUSIBLE	C
⚠	R501	QRZ0077-681	680	1/4W	FUSIBLE	D
⚠	R501	QRZ0077-681	680	1/4W	FUSIBLE	E
⚠	R501	QRZ0077-681	680	1/4W	FUSIBLE	F
⚠	R502	QRD14CJ-911S	910	1/4W	UNF.CARBON	A
⚠	R502	QRZ0077-681	680	1/4W	FUSIBLE	B
⚠	R502	QRZ0077-681	680	1/4W	FUSIBLE	C
⚠	R502	QRZ0077-681	680	1/4W	FUSIBLE	D
⚠	R502	QRZ0077-681	680	1/4W	FUSIBLE	E
⚠	R502	QRZ0077-681	680	1/4W	FUSIBLE	F
⚠	R503	QRD14CJ-911S	910	1/4W	UNF.CARBON	A
⚠	R503	QRZ0077-681	680	1/4W	FUSIBLE	B
⚠	R503	QRZ0077-681	680	1/4W	FUSIBLE	C
⚠	R503	QRZ0077-681	680	1/4W	FUSIBLE	D
⚠	R503	QRZ0077-681	680	1/4W	FUSIBLE	E
⚠	R503	QRZ0077-681	680	1/4W	FUSIBLE	F
⚠	R504	QRD14CJ-911S	910	1/4W	UNF.CARBON	A
⚠	R504	QRZ0077-681	680	1/4W	FUSIBLE	B
⚠	R504	QRZ0077-681	680	1/4W	FUSIBLE	C
⚠	R504	QRZ0077-681	680	1/4W	FUSIBLE	D
⚠	R504	QRZ0077-681	680	1/4W	FUSIBLE	E
⚠	R504	QRZ0077-681	680	1/4W	FUSIBLE	F
⚠	R505	QRZ0077-182	1.8K	1/4W	FUSIBLE	
⚠	R506	QRZ0077-182	1.8K	1/4W	FUSIBLE	
⚠	R511	QRZ0077-271	270	1/4W	FUSIBLE	
⚠	R512	QRZ0077-271	270	1/4W	FUSIBLE	
⚠	R513	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R513	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R514	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R514	QRZ0077-100	10	1/4W	FUSIBLE	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R514	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R514	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R514	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R514	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R515	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R515	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R515	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R515	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R515	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R515	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R516	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R516	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R516	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R516	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R516	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R516	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R517	QRZ0077-272	2.7K	1/4W	FUSIBLE	
⚠	R518	QRZ0077-272	2.7K	1/4W	FUSIBLE	
⚠	R519	QRD14CJ-1R0S	1	1/4W	UNF.CARBON	A
⚠	R519	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R519	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R519	QRZ0077-4R7	4.7	1/4W	FUSIBLE	D
⚠	R519	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R519	QRZ0077-4R7	4.7	1/4W	FUSIBLE	F
⚠	R520	QRD14CJ-1R0S	1	1/4W	UNF.CARBON	A
⚠	R520	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R520	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R520	QRZ0077-4R7	4.7	1/4W	FUSIBLE	D
⚠	R520	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R520	QRZ0077-4R7	4.7	1/4W	FUSIBLE	F
	R521	QRD167J-223	22K	1/6W	CARBON	
	R522	QRD167J-223	22K	1/6W	CARBON	
	R523	QRD167J-153	15K	1/6W	CARBON	
	R524	QRD167J-153	15K	1/6W	CARBON	
⚠	R525	QRD14CJ-1R0S	1	1/4W	UNF.CARBON	A
⚠	R525	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R525	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R525	QRZ0077-4R7	4.7	1/4W	FUSIBLE	D
⚠	R525	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R525	QRZ0077-4R7	4.7	1/4W	FUSIBLE	F
⚠	R526	QRD14CJ-1R0S	1	1/4W	UNF.CARBON	A
⚠	R526	QRZ0077-4R7	4.7	1/4W	FUSIBLE	B
⚠	R526	QRZ0077-4R7	4.7	1/4W	FUSIBLE	C
⚠	R526	QRZ0077-4R7	4.7	1/4W	FUSIBLE	D
⚠	R526	QRZ0077-4R7	4.7	1/4W	FUSIBLE	E
⚠	R526	QRZ0077-4R7	4.7	1/4W	FUSIBLE	F
	R1201	QRD167J-333	33K	1/6W	CARBON	
	R1202	QRD167J-333	33K	1/6W	CARBON	
⚠	R1203	QRG022J-331A	330	2W	O.M.FILM	
⚠	R1204	QRG022J-331A	330	2W	O.M.FILM	
	R1207	QRD167J-102	1K	1/6W	CARBON	
	R1251	QRD167J-223	22K	1/6W	CARBON	
	R1252	QRD167J-223	22K	1/6W	CARBON	
	R1253	QRD167J-182	1.8K	1/6W	CARBON	
	R1254	QRD167J-562	5.6K	1/6W	CARBON	
⚠	R1255	QRG022J-391AM	390	2W	O.M.FILM	A
⚠	R1255	QRG022J-221AM	220	2W	O.M.FILM	B
⚠	R1255	QRG022J-221AM	220	2W	O.M.FILM	C
⚠	R1255	QRG022J-221AM	220	2W	O.M.FILM	D
⚠	R1255	QRG022J-221AM	220	2W	O.M.FILM	E
⚠	R1255	QRG022J-221AM	220	2W	O.M.FILM	F
	R1256	QRD167J-470	47	1/6W	CARBON	A

⚠ : SAFETY PARTS

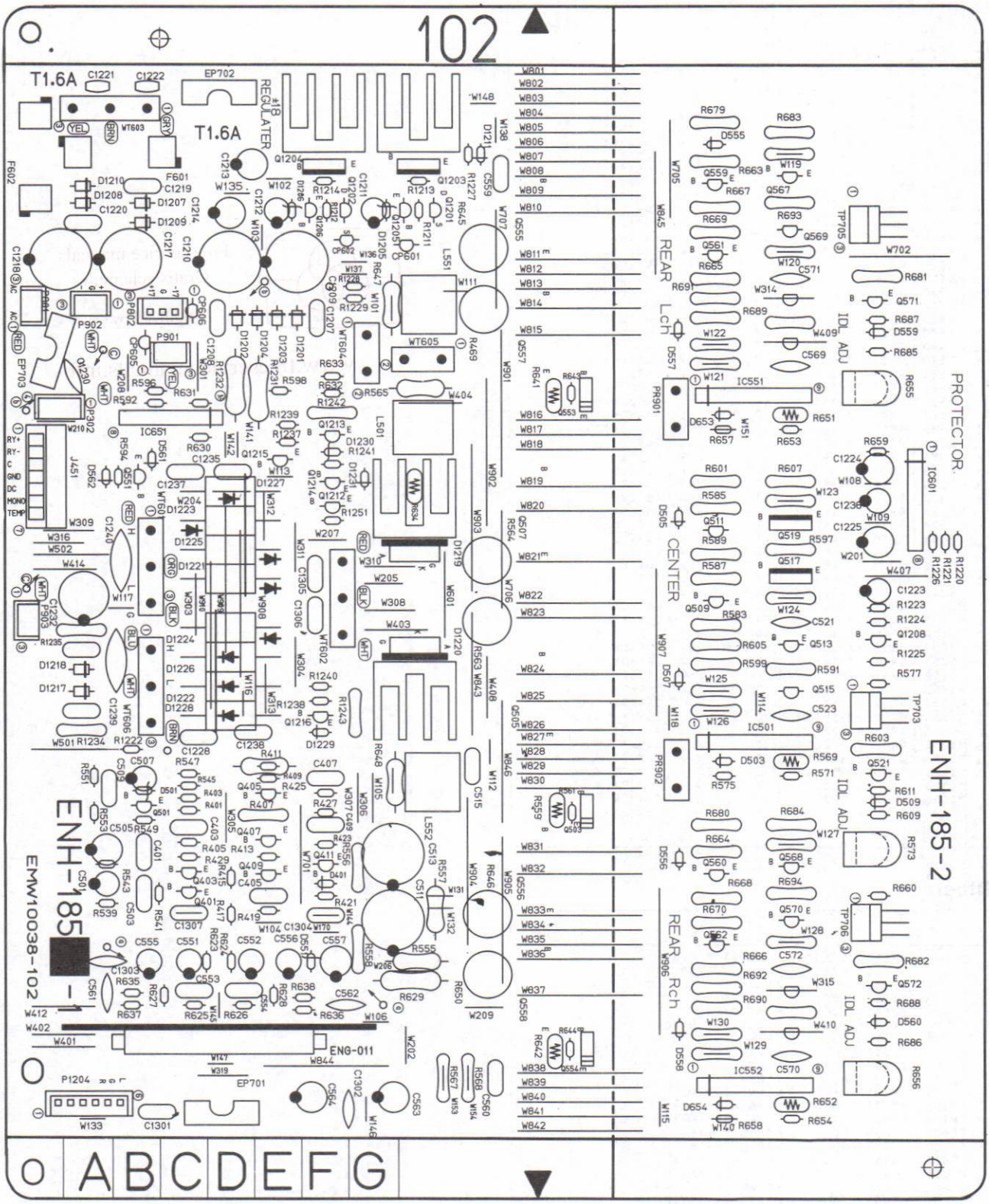
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10030-102	CIRCUIT BOARD	
		EWT011-073	TERMINAL WIRE	
		E306293-001	BRACKET	
		E306293-002	BRACKET	
		E306395-006	HEAT SINK	
		E406269-001	P.W.BOARD BRACKET	
		E73525-001	SPECIAL SCREW	
		E73525-002	SCREW	
		E74870-001	PLATE	
		GBSG3008CC	SCREW	
	J454	EMV7122-103	CONNECTOR (3PIN)	
	P105	EMV5111-003	PLUG ASSY (3PIN)	
	P106	EMV5111-003	PLUG ASSY (3PIN)	
	EP601	E70859-001	EARTH PLATE	
	EP602	E70859-001	EARTH PLATE	
	FW451	EWR37B-10LST	FLAT WIRE (7PIN)	
	P1104	EMV5111-003	PLUG ASSY (3PIN)	
	RY601	ESK7D24-2120	RELAY	
	TP701	QMV5004-003K	PLUG ASSY (3PIN)	
	TP702	QMV5004-003K	PLUG ASSY (3PIN)	
	WT401	E67764-502	WRAPPING TERMINAL	
	WT402	E67764-502	WRAPPING TERMINAL	
	WT403	E67764-503	WRAPPING TERMINAL	
	WT404	E67764-003	WRAPPING TERMINAL	

⚠ : SAFETY PARTS

■ENH-185☐ Rear / Center Amplifier PC Board Ass'y

Note : ENH-185 ☐ varies according to the areas employed. See note (1) when placing an order.



Note(1)

PC Board Ass'y	Designated Areas
ENH-185 A	the U.S.A., Canada
ENH-185 B	Continental Europe (with PAL)
ENH-185 C	Germany (with PAL)
ENH-185 D	the U.K. (with PAL)
ENH-185 E	Australia (with PAL)
ENH-185 F	Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q401	2SC2240(A,B)	SILICON	TOSHIBA	
	Q403	2SC2240(A,B)	SILICON	TOSHIBA	
	Q405	2SA1038(S,E)	SILICON	ROHM	
	Q407	2SA933LN(R,S)	SILICON	ROHM	
	Q409	2SA1038(S,E)	SILICON	ROHM	
	Q411	2SC2389(S,E)	SILICON	ROHM	
	Q501	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q503	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q505	2SD2155LB(R,O)	SILICON	TOSHIBA	A
	Q505	2SC3855LD(O,Y)	SILICON	SANKEN	B
	Q505	2SC3855LD(O,Y)	SILICON	SANKEN	C
	Q505	2SC3855LD(O,Y)	SILICON	SANKEN	D
	Q505	2SC3855LD(O,Y)	SILICON	SANKEN	E
	Q505	2SC3855LD(O,Y)	SILICON	SANKEN	F
	Q507	2SB1429LB(R,O)	SILICON	TOSHIBA	A
	Q507	2SA1491LD(O,Y)	SILICON	SANKEN	B
	Q507	2SA1491LD(O,Y)	SILICON	SANKEN	C
	Q507	2SA1491LD(O,Y)	SILICON	SANKEN	D
	Q507	2SA1491LD(O,Y)	SILICON	SANKEN	E
	Q507	2SA1491LD(O,Y)	SILICON	SANKEN	F
	Q509	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q511	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q513	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q515	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q517	2SD669A(B,C)	SILICON	HITACHI	
	Q519	2SB649A(B,C)	SILICON	HITACHI	
	Q521	2SC2389(S,E)	SILICON	ROHM	
	Q551	DTC124ES	SILICON	ROHM	
	Q553	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q554	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q555	2SD2155LB(R,O)	SILICON	TOSHIBA	A
	Q555	2SC3854LD(O,Y)	SILICON	SANKEN	B
	Q555	2SC3854LD(O,Y)	SILICON	SANKEN	C
	Q555	2SC3854LD(O,Y)	SILICON	SANKEN	D
	Q555	2SC3854LD(O,Y)	SILICON	SANKEN	E
	Q555	2SC3854LD(O,Y)	SILICON	SANKEN	F
	Q556	2SD2155LB(R,O)	SILICON	TOSHIBA	A
	Q556	2SC3854LD(O,Y)	SILICON	SANKEN	B
	Q556	2SC3854LD(O,Y)	SILICON	SANKEN	C
	Q556	2SC3854LD(O,Y)	SILICON	SANKEN	D
	Q556	2SC3854LD(O,Y)	SILICON	SANKEN	E
	Q556	2SC3854LD(O,Y)	SILICON	SANKEN	F
	Q557	2SB1429LB(R,O)	SILICON	TOSHIBA	A
	Q557	2SA1490LD(O,Y)	SILICON	SANKEN	B
	Q557	2SA1490LD(O,Y)	SILICON	SANKEN	C
	Q557	2SA1490LD(O,Y)	SILICON	SANKEN	D
	Q557	2SA1490LD(O,Y)	SILICON	SANKEN	E
	Q557	2SA1490LD(O,Y)	SILICON	SANKEN	F
	Q558	2SB1429LB(R,O)	SILICON	TOSHIBA	A
	Q558	2SA1490LD(O,Y)	SILICON	SANKEN	B
	Q558	2SA1490LD(O,Y)	SILICON	SANKEN	C
	Q558	2SA1490LD(O,Y)	SILICON	SANKEN	D
	Q558	2SA1490LD(O,Y)	SILICON	SANKEN	E
	Q558	2SA1490LD(O,Y)	SILICON	SANKEN	F
	Q559	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q560	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q561	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q562	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q567	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q568	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q569	2SA965(O,Y)	SILICON	TOSHIBA	
	Q570	2SA965(O,Y)	SILICON	TOSHIBA	
	Q571	2SC2389(S,E)	SILICON	ROHM	
	Q572	2SC2389(S,E)	SILICON	ROHM	
	Q1201	2SK301(Q)	F.E.T	MATSUSHITA	
	Q1202	2SK301(Q)	F.E.T	MATSUSHITA	
	Q1203	2SB1187(F,G)	SILICON	ROHM	
	Q1204	2SD2061(F,G)	SILICON	ROHM	
	Q1205	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q1206	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q1208	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q1212	2SC1815(GR,BL)	SILICON	TOSHIBA	
	Q1213	2SC2240(GR,BL)	SILICON	TOSHIBA	
	Q1214	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q1215	2SA970(GR,BL)	SILICON	TOSHIBA	
	Q1216	2SC2240(GR,BL)	SILICON	TOSHIBA	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	IC501	VC5022(X,Y)	I.C.	ROHM	
	IC551	VC5022(X,Y)	I.C.	ROHM	
	IC552	VC5022(X,Y)	I.C.	ROHM	
	IC601	UPC1237HA	I.C.	NEC	
	IC651	BA15218N	I.C.	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D401	1SS133	SILICON	ROHM	
	D501	MTZ5.6JC	ZENER	ROHM	
	D503	1SS133	SILICON	ROHM	
	D505	1SS133	SILICON	ROHM	
	D507	1SS133	SILICON	ROHM	
	D509	1SS133	SILICON	ROHM	
	D551	MTZ13JC	ZENER	ROHM	
	D553	1SS133	SILICON	ROHM	
	D554	1SS133	SILICON	ROHM	
	D555	1SS133	SILICON	ROHM	
	D556	1SS133	SILICON	ROHM	
	D557	1SS133	SILICON	ROHM	
	D558	1SS133	SILICON	ROHM	
	D559	1SS133	SILICON	ROHM	
	D560	1SS133	SILICON	ROHM	
	D561	1SS133	SILICON	ROHM	
	D562	1SS133	SILICON	ROHM	
	D1201	11ES2	SILICON	NIHONINTER	
	D1202	11ES2	SILICON	NIHONINTER	
	D1203	11ES2	SILICON	NIHONINTER	
	D1204	11ES2	SILICON	NIHONINTER	
	D1205	MTZ18JB	ZENER		
	D1206	MTZ18JB	ZENER		
	D1207	11ES2	SILICON	NIHONINTER	
	D1208	11ES2	SILICON	NIHONINTER	
	D1209	11ES2	SILICON	NIHONINTER	
	D1210	11ES2	SILICON	NIHONINTER	
	D1211	1SS133	SILICON	ROHM	
	D1217	11ES2	SILICON	NIHONINTER	
	D1218	11ES2	SILICON	NIHONINTER	
	D1219	SF8D41	THYRISTOR	TOSHIBA	
	D1220	SF8D41	THYRISTOR	TOSHIBA	
	D1221	30DF2SFC	SILICON	NIHONINTER	
	D1222	30DF2SFC	SILICON	NIHONINTER	
	D1223	30DF2SFC	SILICON	NIHONINTER	
	D1224	30DF2SFC	SILICON	NIHONINTER	
	D1225	30DF2SFC	SILICON	NIHONINTER	
	D1226	30DF2SFC	SILICON	NIHONINTER	
	D1227	30DF2SFC	SILICON	NIHONINTER	
	D1228	30DF2SFC	SILICON	NIHONINTER	
	D1229	1SS133	SILICON	ROHM	
	D1230	MTZ3.3JB	ZENER	ROHM	
	D1231	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C401	QFLB1HK-101	100PF	50V	MYLAR	
	C403	QFN81HJ-332	3300PF	50V	MYLAR	
	C405	QCS21HJ-330	33PF	50V	CERAMIC	
	C407	QCS21HJ-680	68PF	50V	CERAMIC	
	C409	QCS21HJ-680	68PF	50V	CERAMIC	
	C501	EETB1HM-106E	10MF	50V	ELECTRO	
	C503	QFLB1HK-221	220PF	50V	MYLAR	
	C505	EETB1AM-107E	100MF	10V	ELECTRO	
	C507	EETB1EM-106E	10MF	25V	ELECTRO	
	C509	QCS21HJ-7R0	7PF	50V	CERAMIC	
	C511	EETB1JM-477E	470MF	63V	ELECTRO	
	C513	EETB1JM-477E	470MF	63V	ELECTRO	
	C515	QFN81HJ-103	0.01MF	50V	MYLAR	
	C521	QCS22HJ-680A	68PF	500V	CERAMIC	
	C523	QCS22HJ-680A	68PF	500V	CERAMIC	
	C551	EETB1HM-106E	10MF	50V	ELECTRO	
	C552	EETB1HM-106E	10MF	50V	ELECTRO	
	C553	QFLB1HK-221	220PF	50V	MYLAR	
	C554	QFLB1HK-221	220PF	50V	MYLAR	
	C555	EETB1AM-107E	100MF	10V	ELECTRO	
	C556	EETB1AM-107E	100MF	10V	ELECTRO	
	C557	EETB1CM-107E	100MF	16V	ELECTRO	
	C559	QFN81HJ-103	0.01MF	50V	MYLAR	
	C560	QFN81HJ-103	0.01MF	50V	MYLAR	
	C561	QCS21HJ-7R0	7PF	50V	CERAMIC	
	C562	QCS21HJ-7R0	7PF	50V	CERAMIC	
	C563	EETB1JM-106E	10MF	63V	ELECTRO	
	C564	EETB1JM-106E	10MF	63V	ELECTRO	
	C569	QCS22HJ-680A	68PF	500V	CERAMIC	
	C570	QCS22HJ-680A	68PF	500V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C571	QCS22HJ-680A	68PF	500V	CERAMIC	
	C572	QCS22HJ-680A	68PF	500V	CERAMIC	
	C1207	QFN81HJ-103	0.01MF	50V	MYLAR	
	C1208	QFN81HJ-103	0.01MF	50V	MYLAR	
	C1209	EETB1VM-108E	1000MF	35V	ELECTRO	
	C1210	EETB1VM-108E	1000MF	35V	ELECTRO	
	C1211	EETB1EM-476E	47MF	25V	ELECTRO	
	C1212	EETB1EM-476E	47MF	25V	ELECTRO	
	C1213	EETB1CM-107E	100MF	16V	ELECTRO	
	C1214	EETB1CM-107E	100MF	16V	ELECTRO	
	C1217	EET1607-338E	3300MF		ELECTRO	
	C1218	EETB1CM-228E	2200MF	16V	ELECTRO	
	C1219	QFN81HJ-103	0.01MF	50V	MYLAR	
	C1220	QFN81HJ-103	0.01MF	50V	MYLAR	
	C1221	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C1222	QCHB1EZ-223	0.022MF	25V	CERAMIC	
	C1223	EETB1HM-226E	22MF	50V	ELECTRO	
	C1224	EETB1AM-227E	220MF	10V	ELECTRO	
	C1225	EETB1CM-226E	22MF	16V	ELECTRO	
	C1226	EETB1HM-475E	4.7MF	50V	ELECTRO	
	C1230	QCF21HP-103	0.01MF	50V	CERAMIC	
	C1232	EETB1HM-227E	220MF	50V	ELECTRO	
	C1235	QFN82AK-473	0.047MF	100V	MYLAR	
	C1236	QFN82AK-473	0.047MF	100V	MYLAR	
	C1237	QFN82AK-473	0.047MF	100V	MYLAR	
	C1238	QFN82AK-473	0.047MF	100V	MYLAR	
	C1239	QFH42EK-104	0.1MF	250V	M.MYLAR	
	C1240	QFH42EK-104	0.1MF	250V	M.MYLAR	
	C1301	QFN81HJ-223	0.022MF	50V	MYLAR	
	C1302	QCF21HP-223	0.022MF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R401	QRD167J-202	2K	1/6W	CARBON	
	R403	QRD167J-202	2K	1/6W	CARBON	
	R405	QRD167J-101	100	1/6W	CARBON	
⚠	R407	QRD14CJ-181S	180	1/4W	UNF.CARBON	
	R409	QRD167J-392	3.9K	1/6W	CARBON	
	R411	QRD167J-392	3.9K	1/6W	CARBON	
	R413	QRD167J-152	1.5K	1/6W	CARBON	
	R415	QRD167J-333	33K	1/6W	CARBON	
	R417	QRD167J-303	30K	1/6W	CARBON	
	R419	QRD167J-152	1.5K	1/6W	CARBON	
	R421	QRD167J-391	390	1/6W	CARBON	
	R423	QRD167J-391	390	1/6W	CARBON	
	R429	QRD167J-102	1K	1/6W	CARBON	
	R539	QRD167J-222	2.2K	1/6W	CARBON	
	R541	QRD167J-104	100K	1/6W	CARBON	
	R543	QRD167J-911	910	1/6W	CARBON	
⚠	R545	QRV144F-1502	15K	1/4W	M.FILM	
⚠	R547	QRV144F-1502	15K	1/4W	M.FILM	
	R549	QRD167J-272	2.7K	1/6W	CARBON	
	R551	QRD167J-513	51K	1/6W	CARBON	
	R553	QRD167J-513	51K	1/6W	CARBON	
⚠	R555	QRD125J-331	330	1/2W	UNF.CARBON	A
⚠	R555	QRD125J-391	390	1/2W	UNF.CARBON	B
⚠	R555	QRD125J-391	390	1/2W	UNF.CARBON	C
⚠	R555	QRD125J-391	390	1/2W	UNF.CARBON	D
⚠	R555	QRD125J-391	390	1/2W	UNF.CARBON	E
⚠	R555	QRD125J-391	390	1/2W	UNF.CARBON	F
⚠	R556	QRD14CJ-470S	47	1/4W	UNF.CARBON	A
⚠	R557	QRD125J-331	330	1/2W	UNF.CARBON	A
⚠	R557	QRD125J-391	390	1/2W	UNF.CARBON	B
⚠	R557	QRD125J-391	390	1/2W	UNF.CARBON	C
⚠	R557	QRD125J-391	390	1/2W	UNF.CARBON	D
⚠	R557	QRD125J-391	390	1/2W	UNF.CARBON	E
⚠	R557	QRD125J-391	390	1/2W	UNF.CARBON	F
⚠	R558	QRD14CJ-470S	47	1/4W	UNF.CARBON	A
	R559	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R561	QRD167J-391	390	1/6W	CARBON	
⚠	R563	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R564	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R565	QRD125J-100	10	1/2W	UNF.CARBON	
⚠	R567	QRD14CJ-151S	150	1/4W	UNF.CARBON	A
⚠	R568	QRD14CJ-151S	150	1/4W	UNF.CARBON	A
	R569	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R571	QRD167J-101	100	1/6W	CARBON	
	R573	QVPA603-501A	500		VARIABLE	
	R575	QRD167J-511	510	1/6W	CARBON	
	R577	QRD167J-104	100K	1/6W	CARBON	
⚠	R583	QRZ0077-331	330	1/4W	FUSIBLE	A
⚠	R583	QRZ0077-271	270	1/4W	FUSIBLE	B
⚠	R583	QRZ0077-271	270	1/4W	FUSIBLE	C
⚠	R583	QRZ0077-271	270	1/4W	FUSIBLE	D
⚠	R583	QRZ0077-271	270	1/4W	FUSIBLE	E
⚠	R583	QRZ0077-271	270	1/4W	FUSIBLE	F
⚠	R585	QRZ0077-331	330	1/4W	FUSIBLE	A
⚠	R585	QRZ0077-271	270	1/4W	FUSIBLE	B

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R585	QRZ0077-271	270	1/4W	FUSIBLE	C
⚠	R585	QRZ0077-271	270	1/4W	FUSIBLE	D
⚠	R585	QRZ0077-271	270	1/4W	FUSIBLE	E
⚠	R585	QRZ0077-271	270	1/4W	FUSIBLE	F
⚠	R587	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R589	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R591	QRZ0077-182	1.8K	1/4W	FUSIBLE	
	R592	QRD167J-684	680K	1/6W	CARBON	
	R594	QRD167J-222	2.2K	1/6W	CARBON	A
	R594	QRD167J-122	1.2K	1/6W	CARBON	B
	R594	QRD167J-122	1.2K	1/6W	CARBON	C
	R594	QRD167J-122	1.2K	1/6W	CARBON	D
	R594	QRD167J-122	1.2K	1/6W	CARBON	E
	R594	QRD167J-122	1.2K	1/6W	CARBON	F
	R596	QRD167J-103	10K	1/6W	CARBON	
⚠	R597	QRZ0077-271	270	1/4W	FUSIBLE	
	R598	QRD167J-562	5.6K	1/6W	CARBON	
⚠	R599	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R599	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R599	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R599	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R599	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R599	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R601	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R601	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R603	QRZ0077-272	2.7K	1/4W	FUSIBLE	
⚠	R605	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
⚠	R607	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
	R609	QRD167J-223	22K	1/6W	CARBON	
	R611	QRD167J-153	15K	1/6W	CARBON	
	R623	QRD167J-222	2.2K	1/6W	CARBON	
	R624	QRD167J-222	2.2K	1/6W	CARBON	
	R625	QRD167J-104	100K	1/6W	CARBON	
	R626	QRD167J-104	100K	1/6W	CARBON	
	R627	QRD167J-911	910	1/6W	CARBON	
	R628	QRD167J-911	910	1/6W	CARBON	
⚠	R629	QRG022J-222A	2.2K	2W	O.M.FILM	
	R630	QRD167J-153	15K	1/6W	CARBON	
	R631	QRD167J-104	100K	1/6W	CARBON	
	R632	QRD167J-182	1.8K	1/6W	CARBON	
	R633	QRD167J-472	4.7K	1/6W	CARBON	
	R634	PTH59F04BH222TS				
	R635	QRD167J-513	51K	1/6W	CARBON	
	R636	QRD167J-513	51K	1/6W	CARBON	
	R637	QRD167J-513	51K	1/6W	CARBON	
	R638	QRD167J-513	51K	1/6W	CARBON	
	R641	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R642	ERT-D2WHL202S	2K	1/4W	THERMISTOR	
	R643	QRD167J-821	820	1/6W	CARBON	
	R644	QRD167J-821	820	1/6W	CARBON	
⚠	R645	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R646	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R647	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R648	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R649	ERZ0001-R22	0.22	3W	EMITTER	
⚠	R650	ERZ0001-R22	0.22	3W	EMITTER	
	R651	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R652	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R653	QRD167J-101	100	1/6W	CARBON	
	R654	QRD167J-101	100	1/6W	CARBON	
	R655	QVPA603-501A	500		VARIABLE	
	R656	QVPA603-501A	500		VARIABLE	
	R659	QRD167J-104	100K	1/6W	CARBON	
	R660	QRD167J-823	82K	1/6W	CARBON	
⚠	R663	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R664	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R665	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R666	QRZ0077-151	150	1/4W	FUSIBLE	
⚠	R667	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R668	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R669	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R670	QRZ0077-391	390	1/4W	FUSIBLE	
⚠	R679	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R679	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R679	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R679	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R679	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R679	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R680	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R680	QRZ0077-100	10	1/4W	FUSIBLE	B
⚠	R680	QRZ0077-100	10	1/4W	FUSIBLE	C
⚠	R680	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R680	QRZ0077-100	10	1/4W	FUSIBLE	E
⚠	R680	QRZ0077-100	10	1/4W	FUSIBLE	F
⚠	R681	QRZ0077-272	2.7K	1/4W	FUSIBLE	
⚠	R682	QRZ0077-272	2.7K	1/4W	FUSIBLE	
⚠	R683	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
⚠	R684	QRZ0077-4R7	4.7	1/4W	FUSIBLE	
	R685	QRD167J-223	22K	1/6W	CARBON	
	R686	QRD167J-223	22K	1/6W	CARBON	
	R687	QRD167J-153	15K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R688	QRD167J-153	15K 1/6W CARBON	
⚠	R689	QRD14CJ-100S	10 1/4W UNF.CARBON	A
⚠	R689	QRZ0077-100	10 1/4W FUSIBLE	B
⚠	R689	QRZ0077-100	10 1/4W FUSIBLE	C
⚠	R689	QRZ0077-100	10 1/4W FUSIBLE	D
⚠	R689	QRZ0077-100	10 1/4W FUSIBLE	E
⚠	R689	QRZ0077-100	10 1/4W FUSIBLE	F
⚠	R690	QRD14CJ-100S	10 1/4W UNF.CARBON	A
⚠	R690	QRZ0077-100	10 1/4W FUSIBLE	B
⚠	R690	QRZ0077-100	10 1/4W FUSIBLE	C
⚠	R690	QRZ0077-100	10 1/4W FUSIBLE	D
⚠	R690	QRZ0077-100	10 1/4W FUSIBLE	E
⚠	R690	QRZ0077-100	10 1/4W FUSIBLE	F
⚠	R691	QRZ0077-4R7	4.7 1/4W FUSIBLE	
⚠	R692	QRZ0077-4R7	4.7 1/4W FUSIBLE	
⚠	R693	QRZ0077-471	470 1/4W FUSIBLE	
⚠	R694	QRZ0077-471	470 1/4W FUSIBLE	
	R1211	QRD167J-471	470 1/6W CARBON	
	R1212	QRD167J-471	470 1/6W CARBON	
	R1213	QRD167J-562	5.6K 1/6W CARBON	
	R1214	QRD167J-562	5.6K 1/6W CARBON	
	R1220	QRD167J-472	4.7K 1/6W CARBON	
	R1221	QRD167J-472	4.7K 1/6W CARBON	
	R1222	QRD167J-333	33K 1/6W CARBON	
	R1223	QRD167J-103	10K 1/6W CARBON	
	R1224	QRD167J-332	3.3K 1/6W CARBON	
	R1225	QRD167J-473	47K 1/6W CARBON	
	R1226	QRD167J-274	270K 1/6W CARBON	
	R1227	QRD167J-562	5.6K 1/6W CARBON	
	R1228	QRD167J-393	39K 1/6W CARBON	
	R1229	QRD167J-472	4.7K 1/6W CARBON	
⚠	R1231	QRX022J-4R7AM	4.7 2W M.FILM	
⚠	R1232	QRX022J-4R7AM	4.7 2W M.FILM	
⚠	R1234	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R1235	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
	R1237	QRD167J-472	4.7K 1/6W CARBON	
	R1238	QRD167J-472	4.7K 1/6W CARBON	
	R1239	QRD167J-103	10K 1/6W CARBON	
	R1240	QRD167J-103	10K 1/6W CARBON	
	R1241	QRD167J-122	1.2K 1/6W CARBON	
⚠	R1242	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
⚠	R1243	QRD14CJ-4R7S	4.7 1/4W UNF.CARBON	
	R1251	QRD167J-563	56K 1/6W CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002	FUSE CLIP	
		EMG7331-002U	FUSE CLIP	
		EMW10038-102	CIRCUIT BOARD	
		E306291-001	BRACKET	
		E306291-002	BRACKET	
		E406269-001	P.W.BOARD BRACKET	
		E70945-H35	HEAT SINK	
		E70945-H50B	HEAT SINK	
		E73525-001	SPECIAL SCREW	
		E73525-002	SCREW	
		E74870-001	PLATE	
		GBSG3008CC	SCREW	
		E307123-002	HEAT SINK	A
		E61380-032	FUSE LABEL	A
		E307123-001	HEAT SINK	B
		E307123-001	HEAT SINK	C
		E307123-001	HEAT SINK	D
		E307123-001	HEAT SINK	E
		E307123-001	HEAT SINK	F
	J451	VMC0107-007	CONNECT TERMINAL (7PIN)	
	L501	EQL0001-1R0	INDUCTOR	
	L551	EQL0001-1R0	INDUCTOR	
	L552	EQL0001-1R0	INDUCTOR	
	P302	EMV5109-004A	PLUG ASSY (4PIN)	
	P801	EMV5109-003A	PLUG ASSY (3PIN)	
	P802	EMV5111-003	PLUG ASSY (3PIN)	
	P901	EMV5109-003A	PLUG ASSY (3PIN)	
	P902	EMV5109-003A	PLUG ASSY (3PIN)	
	P903	EMV5109-003A	PLUG ASSY (3PIN)	
⚠	CP601	ICP-N20	I.C. PROTECTOR	
⚠	CP602	ICP-N20	I.C. PROTECTOR	
⚠	CP605	ICP-N5	I.C. PROTECTOR	A
⚠	CP606	ICP-N5	I.C. PROTECTOR	A
	EP701	E70859-001	EARTH PLATE	
	EP702	E70859-001	EARTH PLATE	
	EP703	E70859-001	EARTH PLATE	
	PR901	E67764-502	WRAPPING TERMINAL	
	PR902	E67764-502	WRAPPING TERMINAL	
	P2104	EMV5111-006	PLUG ASSY (6PIN)	
	TP703	QMV5004-003K	PLUG ASSY (3PIN)	
	TP705	QMV5004-003K	PLUG ASSY (3PIN)	
	TP706	QMV5004-003K	PLUG ASSY (3PIN)	
	WT601	E67764-103	WRAPPING TERMINAL	
	WT602	E67764-103	WRAPPING TERMINAL	
	WT603	E67764-103	WRAPPING TERMINAL	

⚠ : SAFETY PARTS

Others

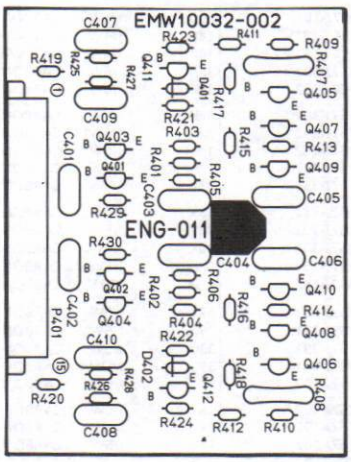
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	WT604	E67764-502	WRAPPING TERMINAL	
	WT605	E67764-502	WRAPPING TERMINAL	
	WT606	E67764-103	WRAPPING TERMINAL	

⚠ : SAFETY PARTS

■ENG-011☐ Pre-driver PC Board Ass'y

Note : ENG-011 ☐ varies according to the areas employed.
See note (1) when placing an order.

(for Main Amplifier PC Board Ass'y)



Note(1)

PC Board Ass'y	Designated Areas
ENG-011 C	the U.S.A., Canada
ENG-011 E	Continental Europe (with PAL) Germany (with PAL) the U.K. (with PAL) Australia (with PAL) Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q401	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q402	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q403	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q404	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q405	2SA1038 (S, E)	SILICON	ROHM	
	Q406	2SA1038 (S, E)	SILICON	ROHM	
	Q407	2SA933LN (R, S)	SILICON	ROHM	
	Q408	2SA933LN (R, S)	SILICON	ROHM	
	Q409	2SA1038 (S, E)	SILICON	ROHM	
	Q410	2SA1038 (S, E)	SILICON	ROHM	
	Q411	2SC2389 (S, E)	SILICON	ROHM	
	Q412	2SC2389 (S, E)	SILICON	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D401	1SS133	SILICON	ROHM	
	D402	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C401	QFLB1HK-101	100PF	50V	MYLAY	
	C402	QFLB1HK-101	100PF	50V	MYLAY	
	C403	QFN81HJ-332	3300PF	50V	MYLAY	
	C404	QFN81HJ-332	3300PF	50V	MYLAY	
	C405	QCS21HJ-330	33PF	50V	CERAMIC	
	C406	QCS21HJ-330	33PF	50V	CERAMIC	
	C407	QCS21HJ-680	68PF	50V	CERAMIC	
	C408	QCS21HJ-680	68PF	50V	CERAMIC	
	C409	QCS21HJ-680	68FP	50V	CERAMIC	
	C410	QCS21HJ-680	68PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R401	QRD167J-202	2K	1/6W	CARBON	
	R402	QRD167J-202	2K	1/6W	CARBON	
	R403	QRD167J-202	2K	1/6W	CARBON	
	R404	QRD167J-202	2K	1/6W	CARBON	
	R405	QRD167J-101	100	1/6W	CARBON	
	R406	QRD167J-101	100	1/6W	CARBON	
⚠	R407	QRD14CJ-181S	180	1/4W	UNF. CARBON	
⚠	R408	QRD14CJ-181S	180	1/4W	UNF. CARBON	
	R409	QRD167J-392	3.9K	1/6W	CARBON	
	R410	QRD167J-392	3.9K	1/6W	CARBON	
	R411	QRD167J-392	3.9K	1/6W	CARBON	
	R412	QRD167J-392	3.9K	1/6W	CARBON	
	R413	QRD167J-152	1.5K	1/6W	CARBON	
	R414	QRD167J-152	1.5K	1/6W	CARBON	
	R415	QRD167J-333	33K	1/6W	CARBON	
	R416	QRD167J-333	33K	1/6W	CARBON	
	R417	QRD167J-303	30K	1/6W	CARBON	
	R418	QRD167J-303	30K	1/6W	CARBON	
	R419	QRD167J-152	1.5K	1/6W	CARBON	
	R420	QRD167J-152	1.5K	1/6W	CARBON	
	R421	QRD167J-391	390	1/6W	CARBON	
	R422	QRD167J-391	390	1/6W	CARBON	
	R423	QRD167J-391	390	1/6W	CARBON	
	R424	QRD167J-391	390	1/6W	CARBON	
	R429	QRD167J-102	1K	1/6W	CARBON	C
	R429	QRD167J-102	1K	1/6W	CARBON	E
	R430	QRD167J-102	1K	1/6W	CARBON	C
	R430	QRD167J-102	1K	1/6W	CARBON	E

⚠ : SAFETY PARTS

Others

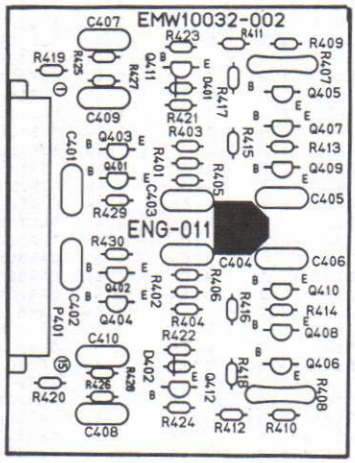
⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10032-101(S)	CIRCUIT BOARD	
	P401	EMV5112-015R	PLUG ASSY (15PIN)	

⚠ : SAFETY PARTS

■ENG-011☐ Pre-driver PC Board Ass'y

Note : ENG-011 ☐ varies according to the areas employed.
See note (1) when placing an order.

(for Rear / Center Amplifier PC Board Ass'y)



Note(1)

PC Board Ass'y	Designated Areas
ENG-011 D	the U.S.A., Canada
ENG-011 F	Continental Europe (with PAL) Germany (with PAL) the U.K. (with PAL) Australia (with PAL) Universal Type (with PAL)

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	Q401	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q402	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q403	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q404	2SC2240 (A, B)	SILICON	TOSHIBA	
	Q405	2SA1038 (S, E)	SILICON	ROHM	
	Q406	2SA1038 (S, E)	SILICON	ROHM	
	Q407	2SA933LN (R, S)	SILICON	ROHM	
	Q408	2SA933LN (R, S)	SILICON	ROHM	
	Q409	2SA1038 (S, E)	SILICON	ROHM	
	Q410	2SA1038 (S, E)	SILICON	ROHM	
	Q411	2SC2389 (S, E)	SILICON	ROHM	
	Q412	2SC2389 (S, E)	SILICON	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
	D401	1SS133	SILICON	ROHM	
	D402	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C401	QFLB1HK-101	100PF	50V	MYLAY	
	C402	QFLB1HK-101	100PF	50V	MYLAY	
	C403	QFN81HJ-332	3300PF	50V	MYLAY	
	C404	QFN81HJ-332	3300PF	50V	MYLAY	
	C405	QCS21HJ-330	33PF	50V	CERAMIC	
	C406	QCS21HJ-330	33PF	50V	CERAMIC	
	C407	QCS21HJ-680	68PF	50V	CERAMIC	
	C408	QCS21HJ-680	68PF	50V	CERAMIC	
	C409	QCS21HJ-680	68PF	50V	CERAMIC	
	C410	QCS21HJ-680	68PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R401	QRD167J-202	2K 1/6W CARBON	
	R402	QRD167J-202	2K 1/6W CARBON	
	R403	QRD167J-202	2K 1/6W CARBON	
	R404	QRD167J-202	2K 1/6W CARBON	
	R405	QRD167J-101	100 1/6W CARBON	
	R406	QRD167J-101	100 1/6W CARBON	
⚠	R407	QRD14CJ-181S	180 1/4W UNF. CARBON	
⚠	R408	QRD14CJ-181S	180 1/4W UNF. CARBON	
	R409	QRD167J-392	3.9K 1/6W CARBON	
	R410	QRD167J-392	3.9K 1/6W CARBON	
	R411	QRD167J-392	3.9K 1/6W CARBON	
	R412	QRD167J-392	3.9K 1/6W CARBON	
	R413	QRD167J-152	1.5K 1/6W CARBON	
	R414	QRD167J-152	1.5K 1/6W CARBON	
	R415	QRD167J-333	33K 1/6W CARBON	
	R416	QRD167J-333	33K 1/6W CARBON	
	R417	QRD167J-303	30K 1/6W CARBON	
	R418	QRD167J-303	30K 1/6W CARBON	
	R419	QRD167J-152	1.5K 1/6W CARBON	
	R420	QRD167J-152	1.5K 1/6W CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	R421	QRD167J-391	390 1/6W CARBON	
	R422	QRD167J-391	390 1/6W CARBON	
	R423	QRD167J-391	390 1/6W CARBON	
	R424	QRD167J-391	390 1/6W CARBON	
	R429	QRD167J-682	6.8K 1/6W CARBON	D
	R429	QRD167J-682	6.8K 1/6W CARBON	F
	R430	QRD167J-682	6.8K 1/6W CARBON	D
	R430	QRD167J-682	6.8K 1/6W CARBON	F

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMW10032-101 (S)	CIRCUIT BOARD	
	P401	EMV5112-015R	PLUG ASSY (15PIN)	

⚠ : SAFETY PARTS

Accessories List

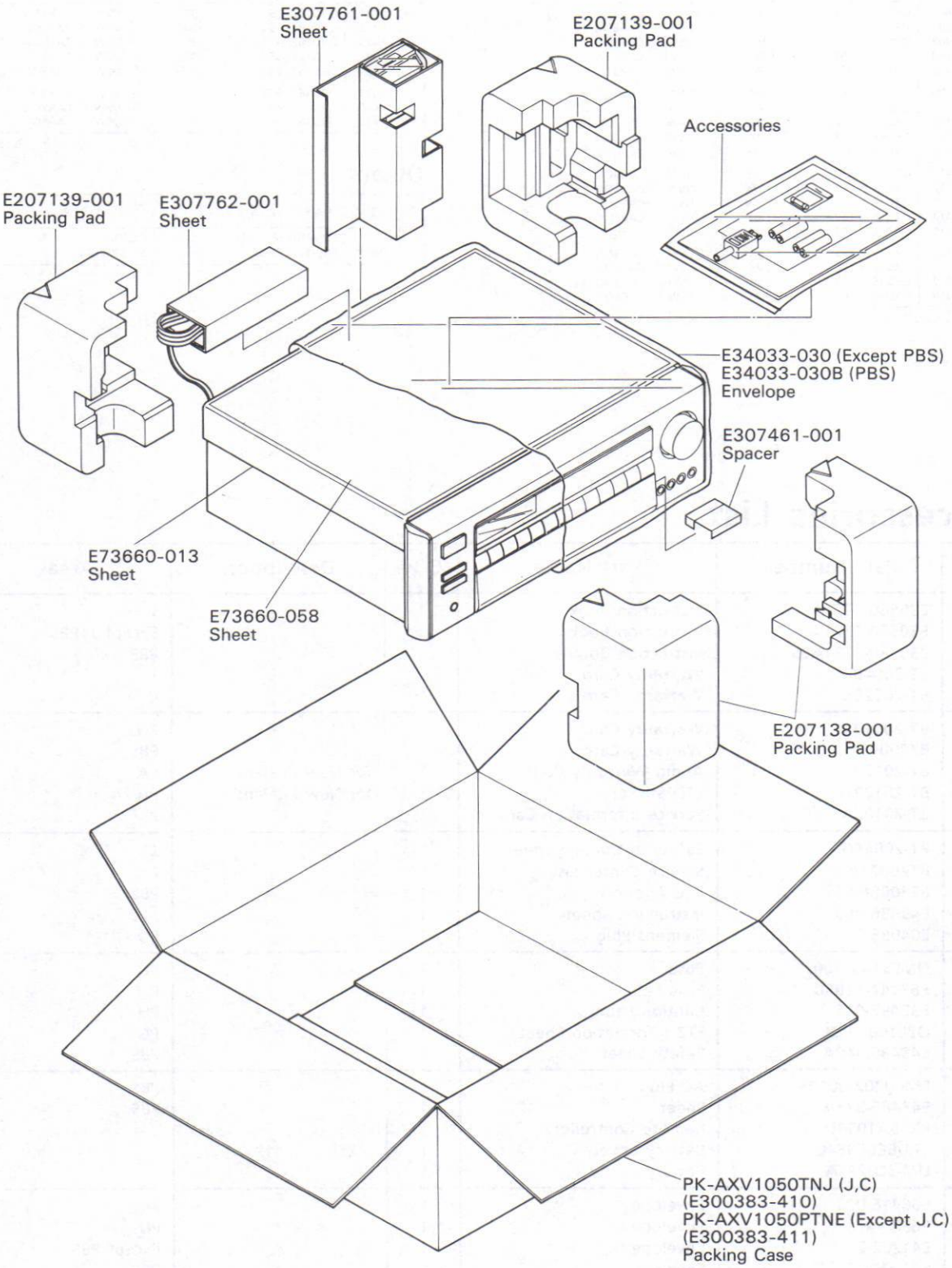
⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1777A	Instruction Book	1		J
	E30580-1771A	Instruction Book	1		Except J, PBS
	E30580-1771ABS	Instruction Book	1		PBS
	BT-20048E	Warranty Card	1		J
	BT-20025K	Warranty Card	1		C
	BT-20117	Warranty Card	1		PG
	BT20060	Warranty Card	1		PBS
	BT-20122	Audio Warranty Card	1	for New Zealand	PA
	BT-20122-1	LTD Sticker	1	for New Zealand	PA
	BT-20108A	Service Information Card	1		J
	BT-20044G	Safety Instruction Sheet	1		J
	BT20071A	Service Center List	1		C
	BT20066A	EEC Agency	1		PBS
	E43486-459	Instruction Sheet	1		J, C
⚠	E04056	Siemens Plug	1		PU
⚠	QMF51A2-100J1	Fuse	1		PU
	E67142-T10R0	Fuse Label	1		PU
	E35497-015	Caution Label	1		PU
	QZL1008-001	FTZ Information Sheet	1		PG
	E43486-340A	Safety Sheet	1		PBS
⚠	EMC0202-001BS	AC Plug	1		PBS
	E43486-371A	Sheet	1		PBS
	RM-SA1050U	Remote Controller	1		
	RU66EC364C	Battery Cover	1		
	UM-3DJ2PSA	Battery	1		
	E66416-003	Envelope	1		J
	E6581-4	Envelope	1		PU
	E41202-2	Envelope	1		Except PBS
	E41202-2B	Envelope	1		PBS

The Marks for Designated Areas

⚠ Safety Parts

J·····the U.S.A.
C·····Canada
PA·····Australia (with PAL)
PE,PEF·····Continental Europe (with PAL)
PG·····Germany (with PAL)
PBS·····the U.K. (with PAL)
PU·····Universal Type (with PAL)
No mark indicates all areas.

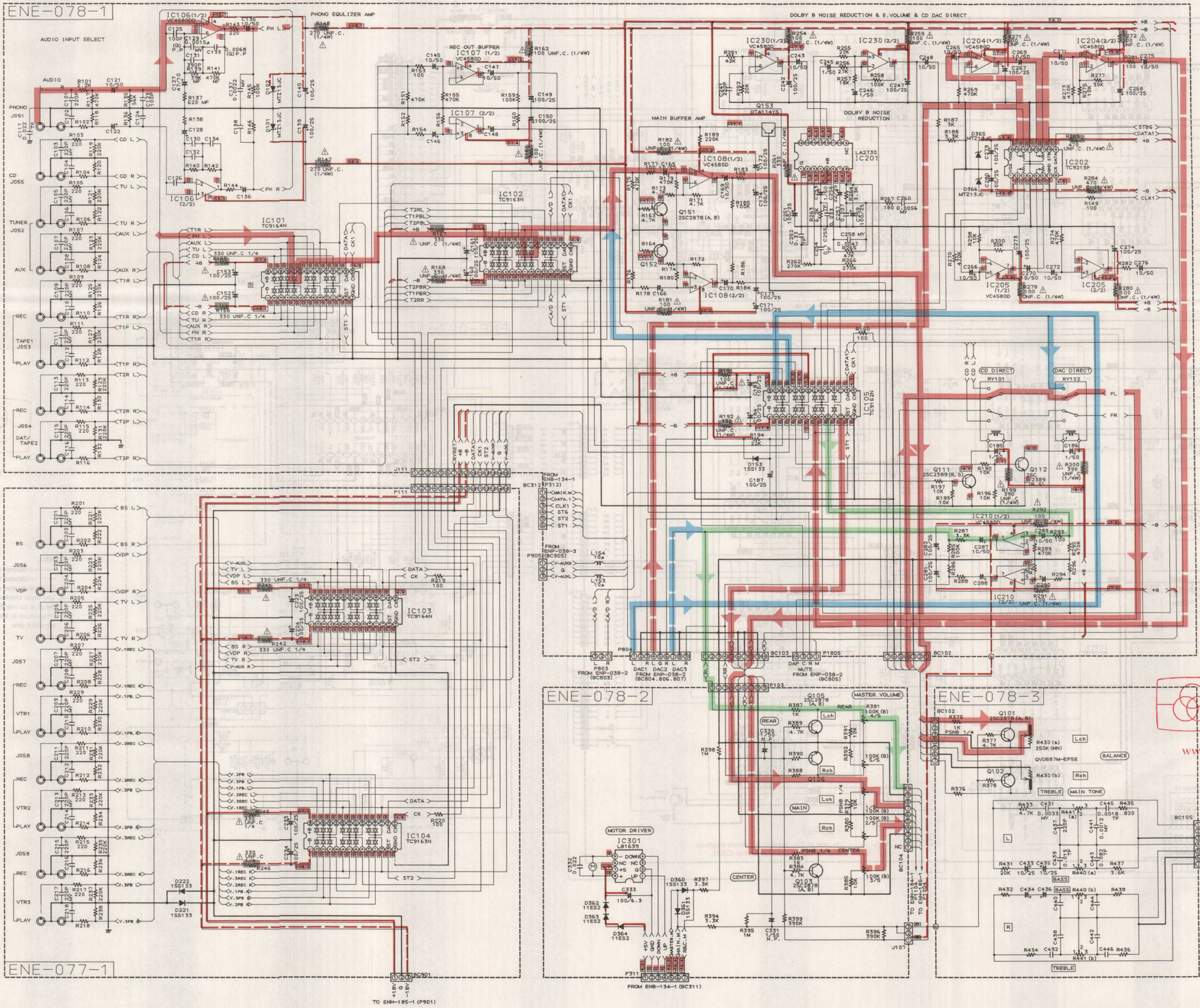
Packing Materials and Part Numbers



The Marks for Designated Areas	
J·····the U.S.A.	PG·····Germany (with PAL)
C·····Canada	PBS·····the U.K. (with PAL)
PA·····Australia (with PAL)	PU·····Universal Type (with PAL)
PE,PEF·····Continental Europe (with PAL)	**No mark indicates all areas.**

SCHEMATIC DIAGRAM

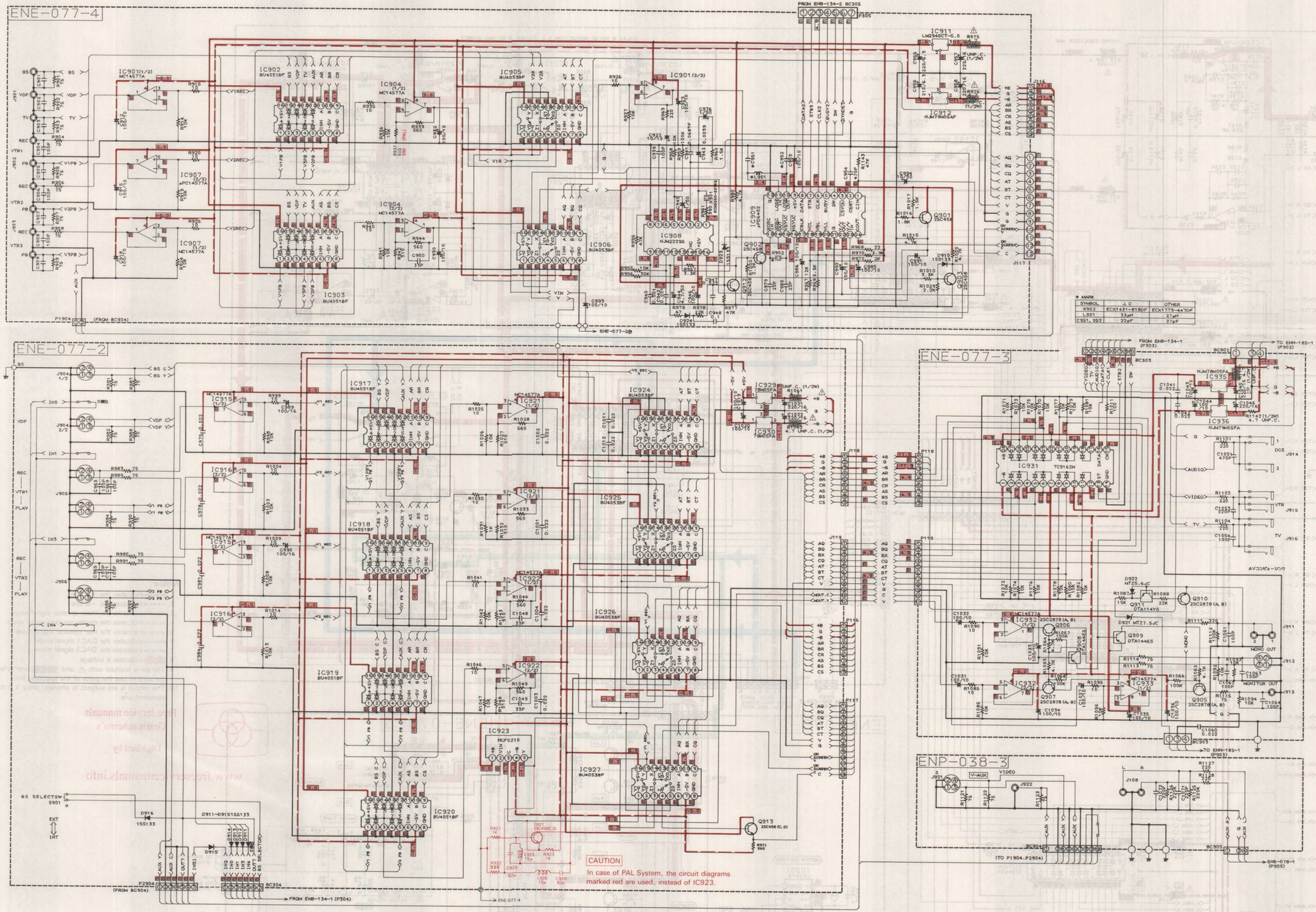
(1) Audio Selector Section



Notes:

1. indicates the +B line.
2. indicates the −B line.
3. indicates the main speaker signal route.
4. indicates the center speaker signal route.
5. indicates the rear speaker signal route.
6. indicates the DAC1 signal route.
7. indicates the DAC3 signal route.
8. indicates a voltage.
9. The parts marked with ⚠ and ( ) are safety parts. Be sure to use the parts of the specified No.
10. This circuit is are subject to change, since it is the standerd one.

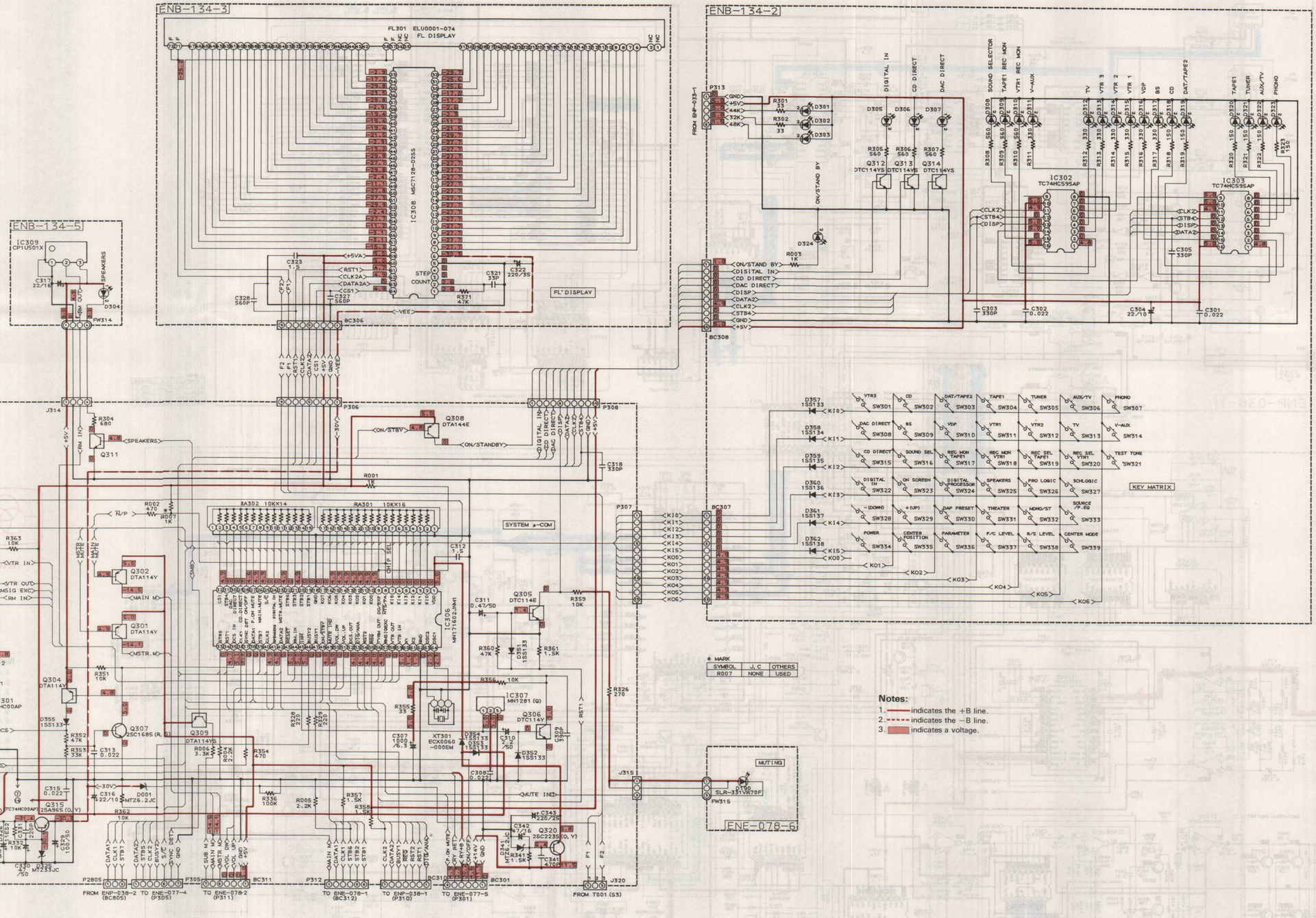
(2) Video Source Selector Section



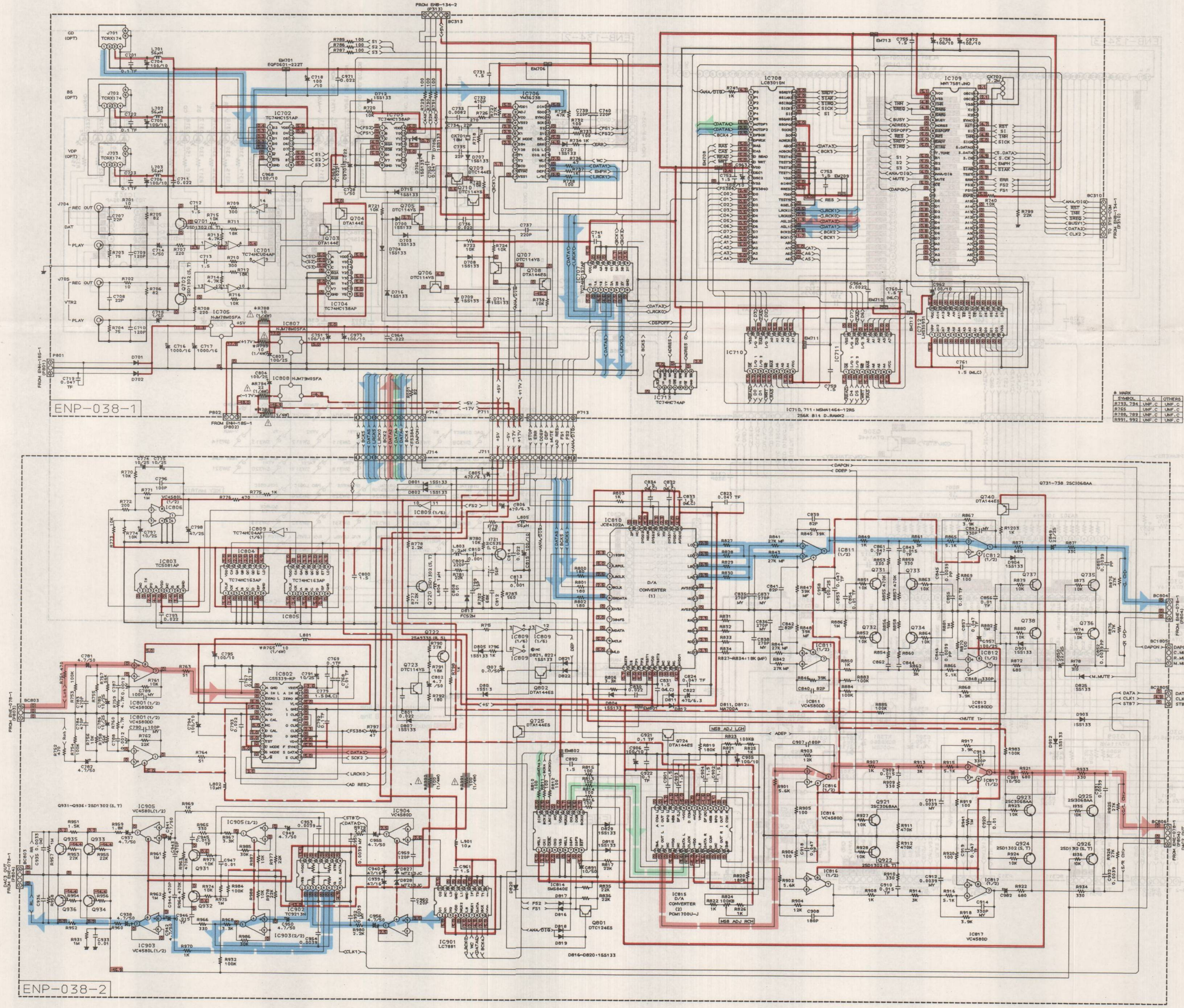
Notes:

1. ——— indicates the +B line.
2. - - - - indicates the −B line.
3. ▭ indicates a voltage.
4. The parts marked with ⚠ and (▭) are safety parts. Be sure to use the parts of the specified No.
5. This circuit is are sudject to change, since it is the standard one.

(3) Display & Microcomputer Section



(4) Dolby Prologic & Surround Pattern Selector Section



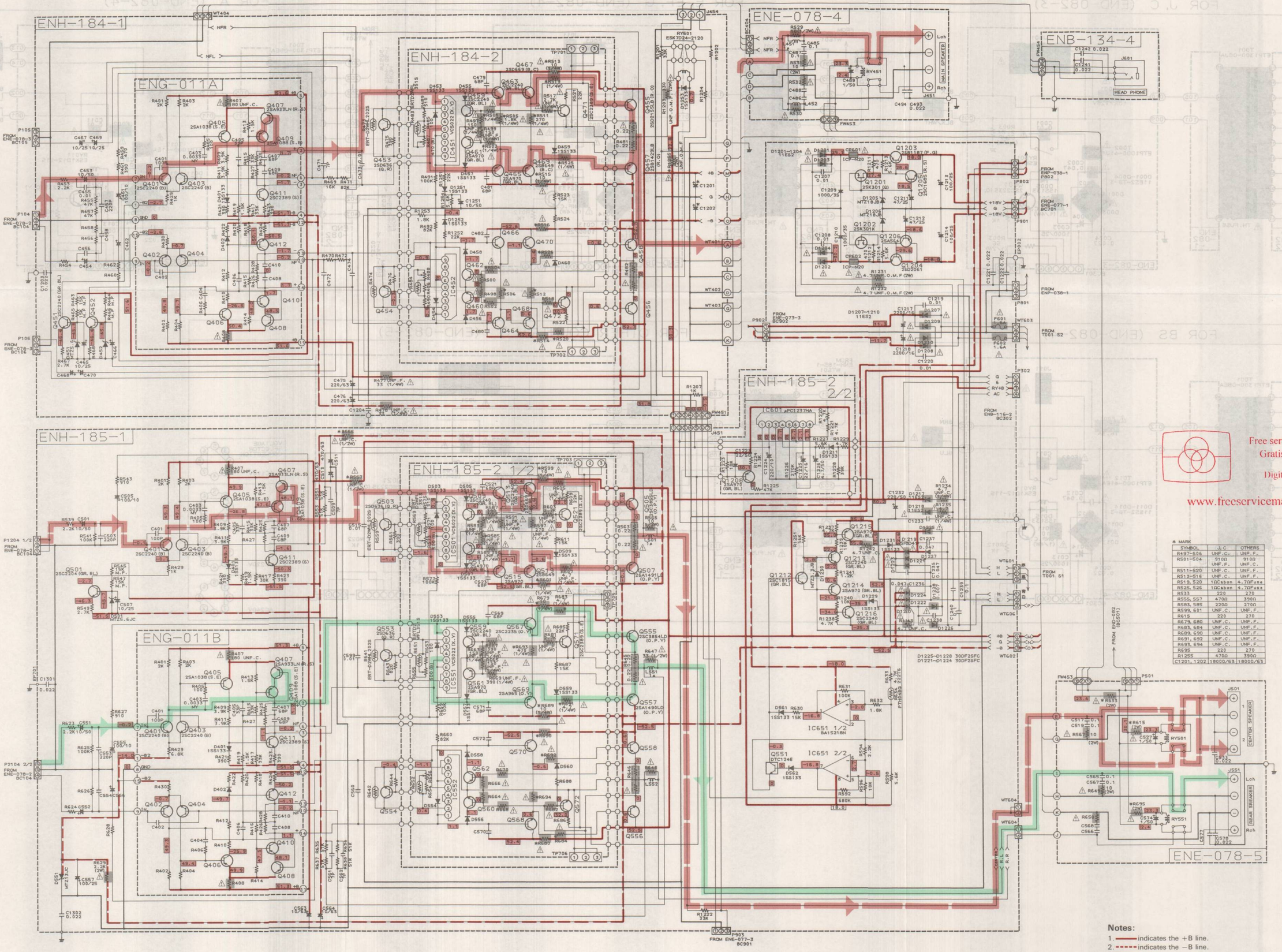
✱ MARK

SYMBOL	J.C	OTHERS
R793, 794	UNF.C	UNF.C
R765	UNF.C	UNF.C
R788, 789	UNF.C	UNF.C
R991, 992	UNF.C	UNF.C

Notes:

1. ——— indicates the +B line.
2. - - - - indicates the −B line.
3. (pink band) indicates the main speaker signal route.
4. (blue band) indicates the DAC1 signal route.
5. (blue dashed band) indicates the DAC3 signal route.
6. (pink dashed band) indicates the center speaker signal route.
7. (green dashed band) indicates the DAC2 signal route.
8. (red box) indicates a voltage.
9. The parts marked with ⚠ and (▒▒▒) are safety parts. Be sure to use the parts of the specified No.
10. This circuit is are subject to change, since it is the standard one.

(5) Main Amplifier Section



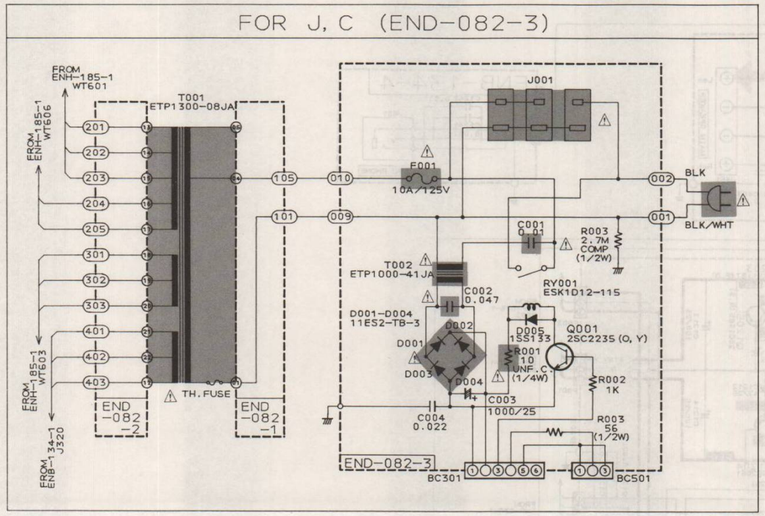
✱ MARK		
SYMBOL	J,C	OTHERS
R497~506	UNF.C.	UNF.F.
R501~504	910Ω UNF.F.	910Ω UNF.C.
R511~520	UNF.C.	UNF.F.
R513~516	UNF.C.	UNF.F.
R519, 520	10Ω5W	4.7ΩFuse
R525, 526	10Ω5W	4.7ΩFuse
R533	220	270
R555, 557	470Ω	390Ω
R583, 585	220Ω	270Ω
R599, 601	UNF.C.	UNF.F.
R615	220	270
R679, 680	UNF.C.	UNF.F.
R683, 684	UNF.C.	UNF.F.
R689, 690	UNF.C.	UNF.F.
R691, 692	UNF.C.	UNF.F.
R693, 694	UNF.C.	UNF.F.
R695	220	270
R1255	470Ω	390Ω
C1201, 1202	18000/63	18000/63

Notes:

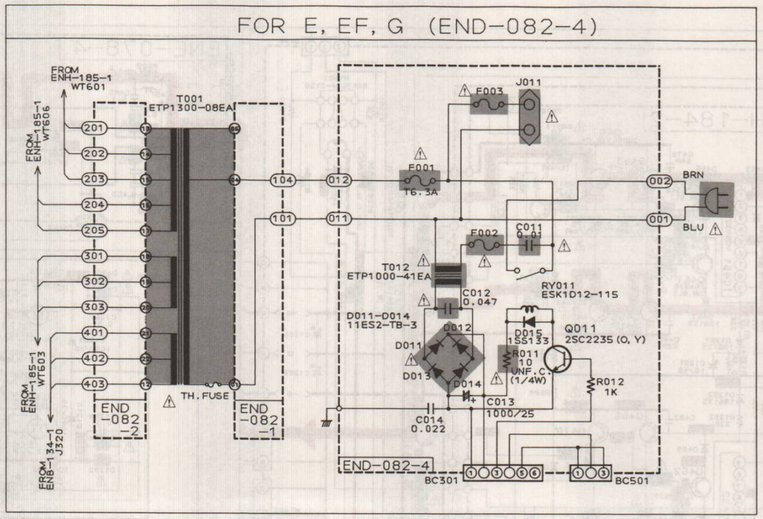
1. ——— indicates the +B line.
2. - - - - indicates the −B line.
3. ▬▬ indicates the main speaker signal route.
4. ▬▬ indicates the center speaker signal route.
5. ▬▬ indicates the rear speaker signal route.
6. ▭ indicates a voltage.
7. The parts marked with ⚠ and (▭) are safety parts. Be sure to use the parts of the specified No.
8. This circuit is are subject to change, since it is the standard one.

(6) Power Primary Section

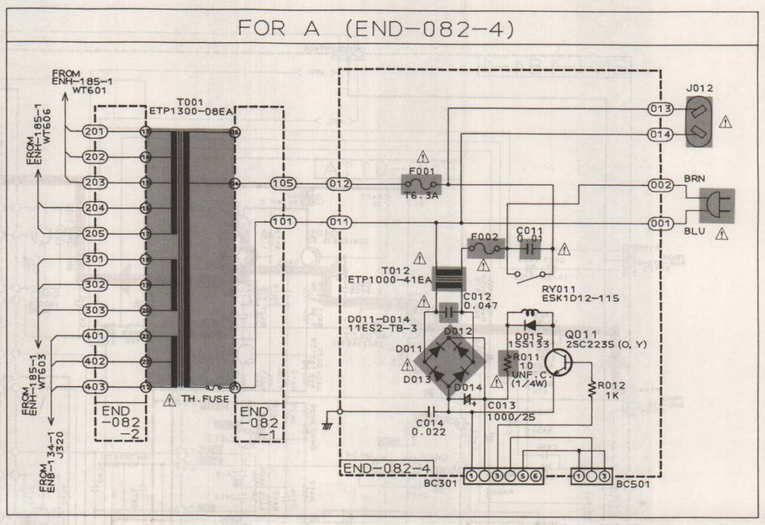
FOR J, C (END-082-3)



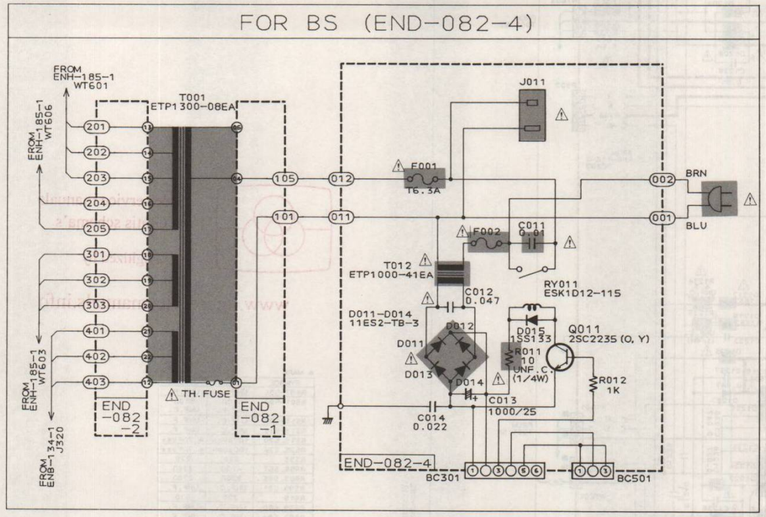
FOR E, EF, G (END-082-4)



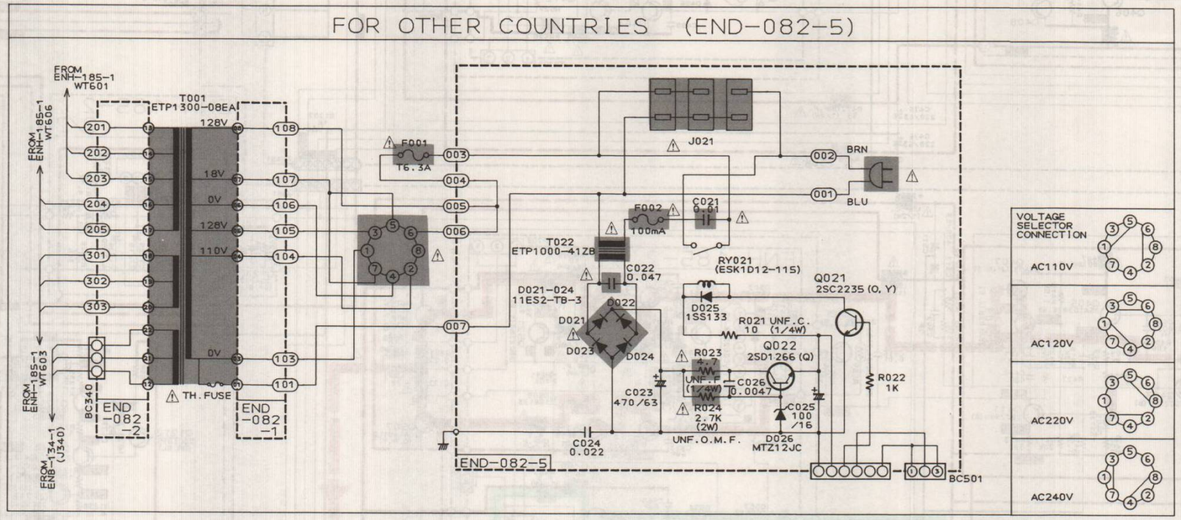
FOR A (END-082-4)



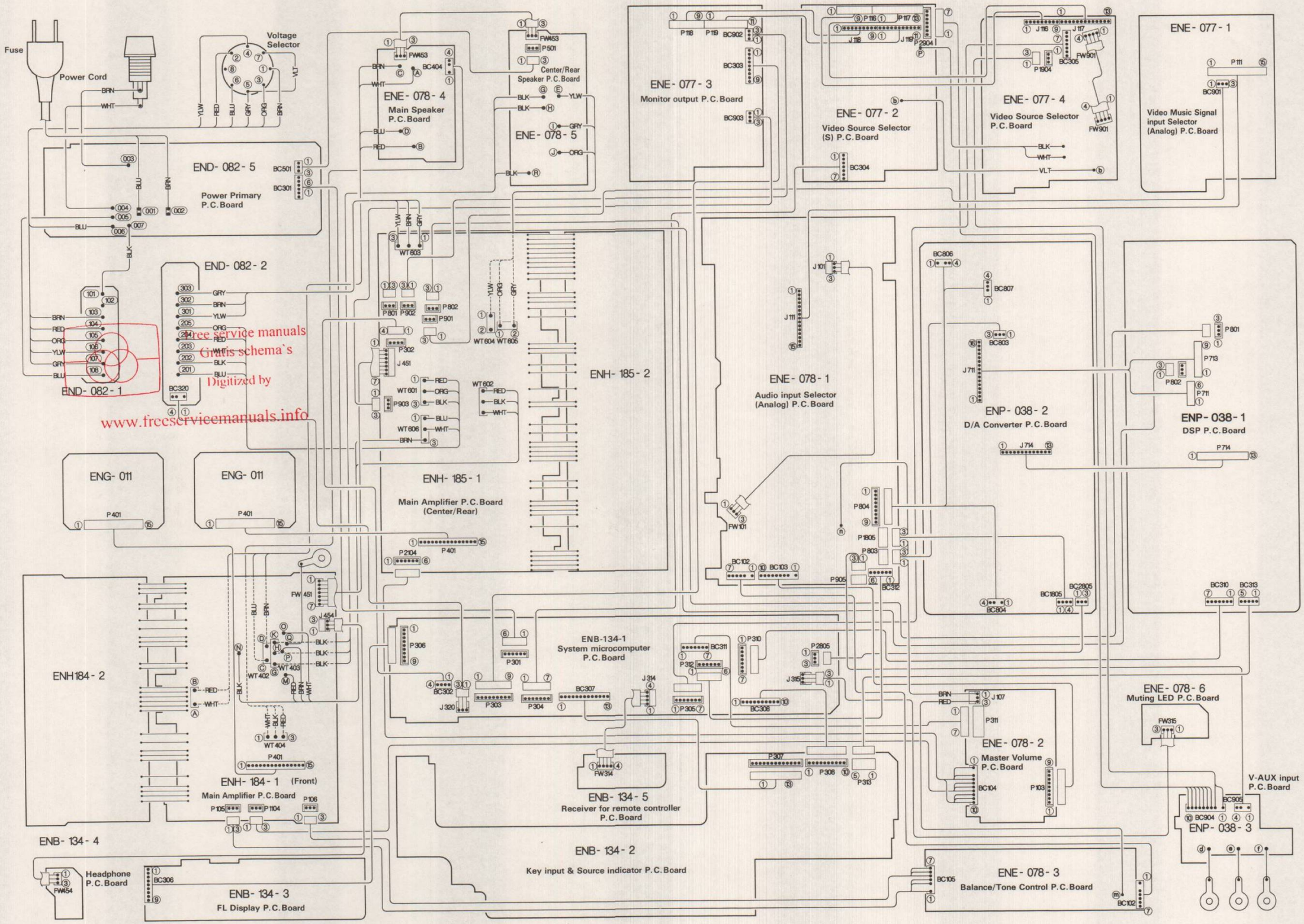
FOR BS (END-082-4)



FOR OTHER COUNTRIES (END-082-5)

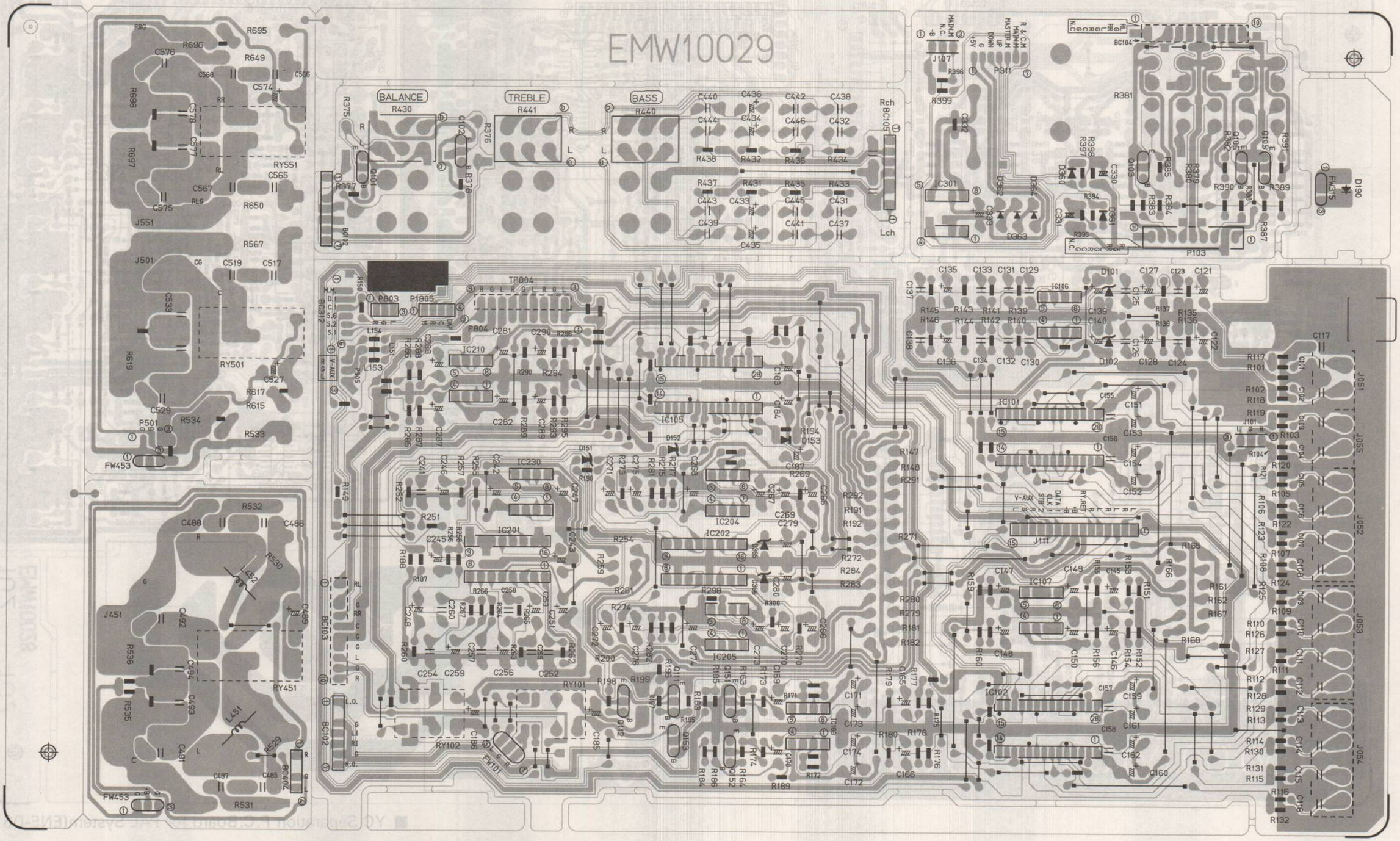


Connection Diagram



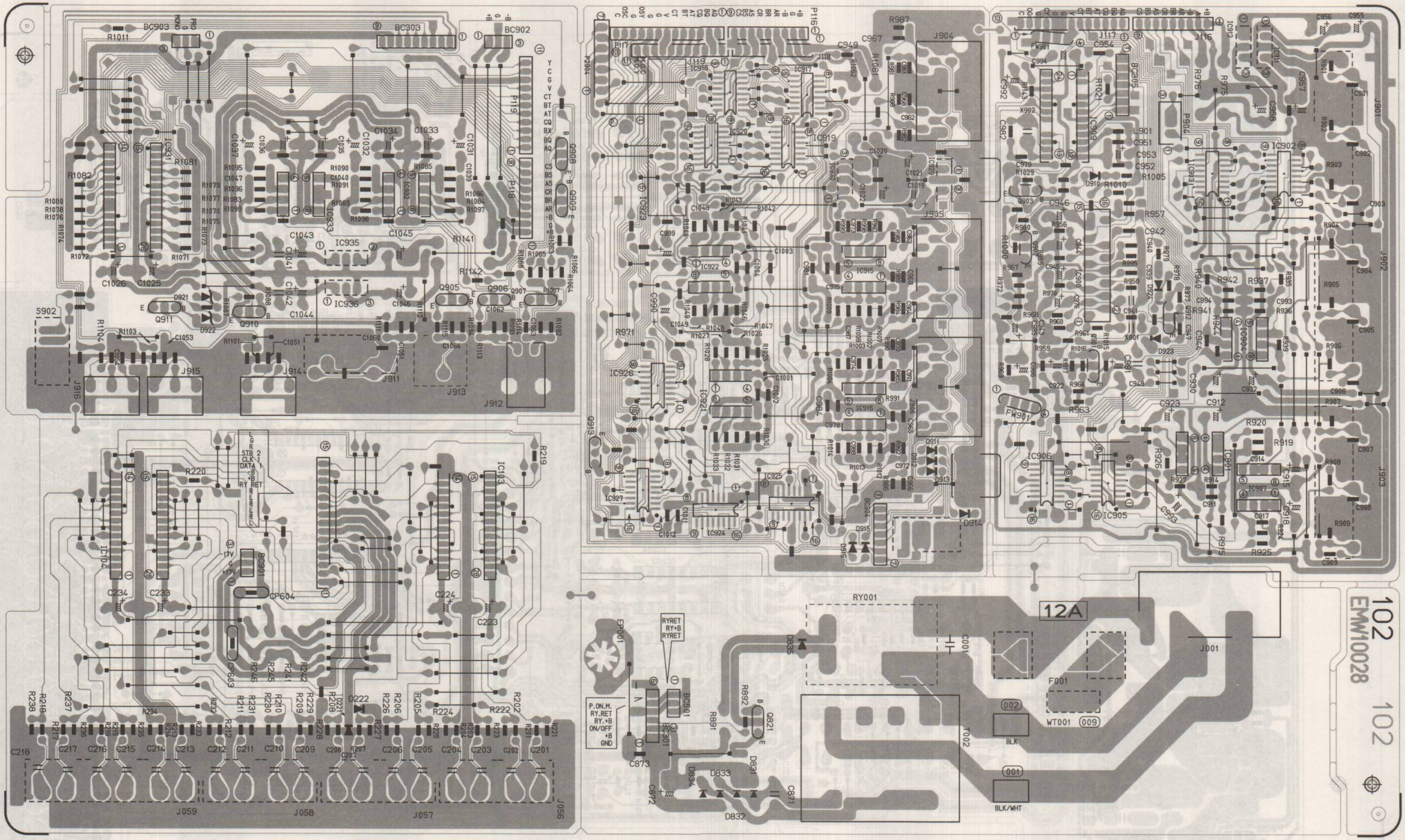
Printed Circuit Boards

■ Audio Selector P.C.Board (ENE-078)

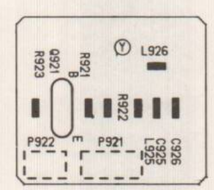


AX-V1050TN
AX-V1050PTN

■ Video Source Selector P.C. Board (ENE-077)

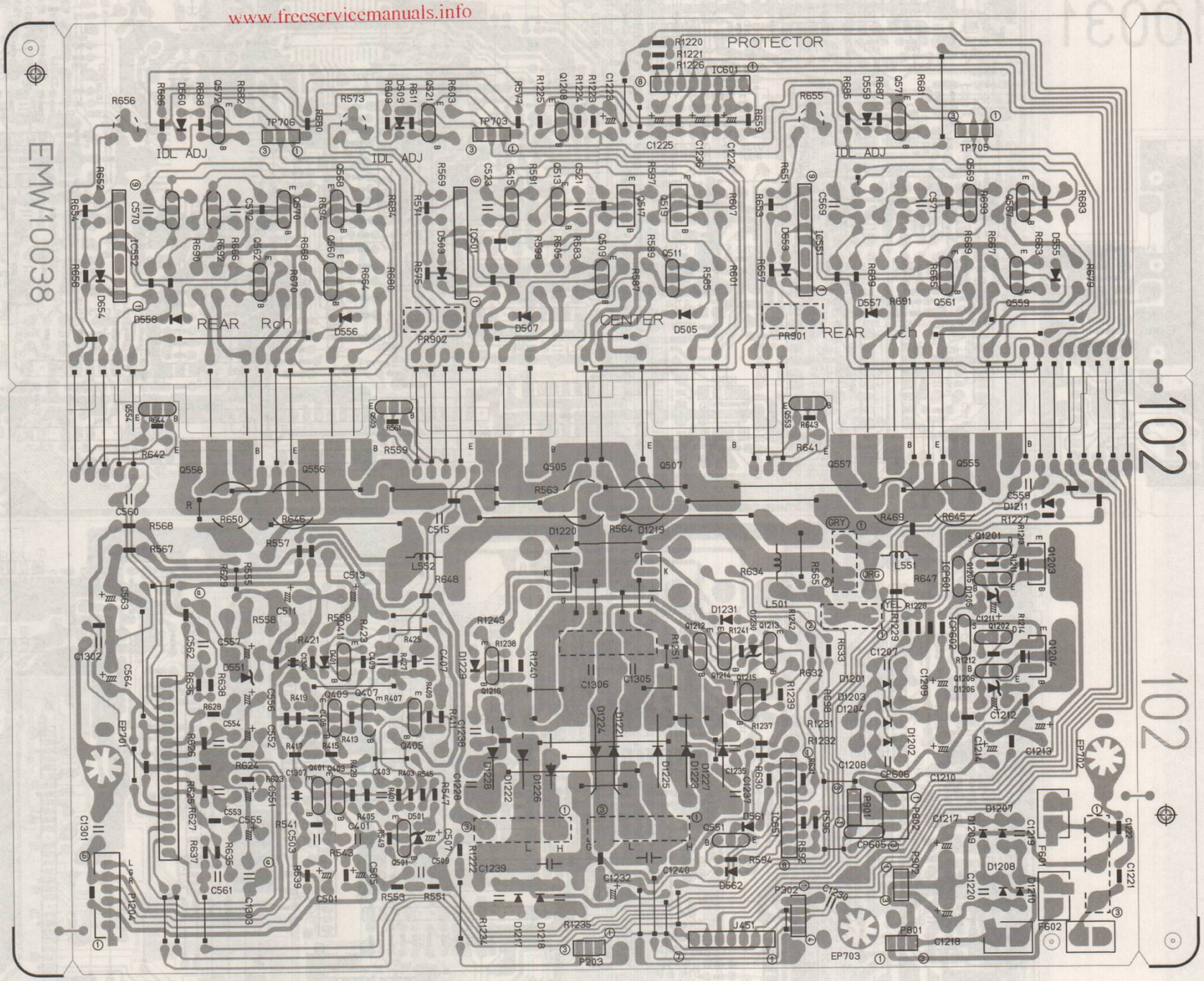


■ YC Separation P.C. Board for PAL System(ENE-081)

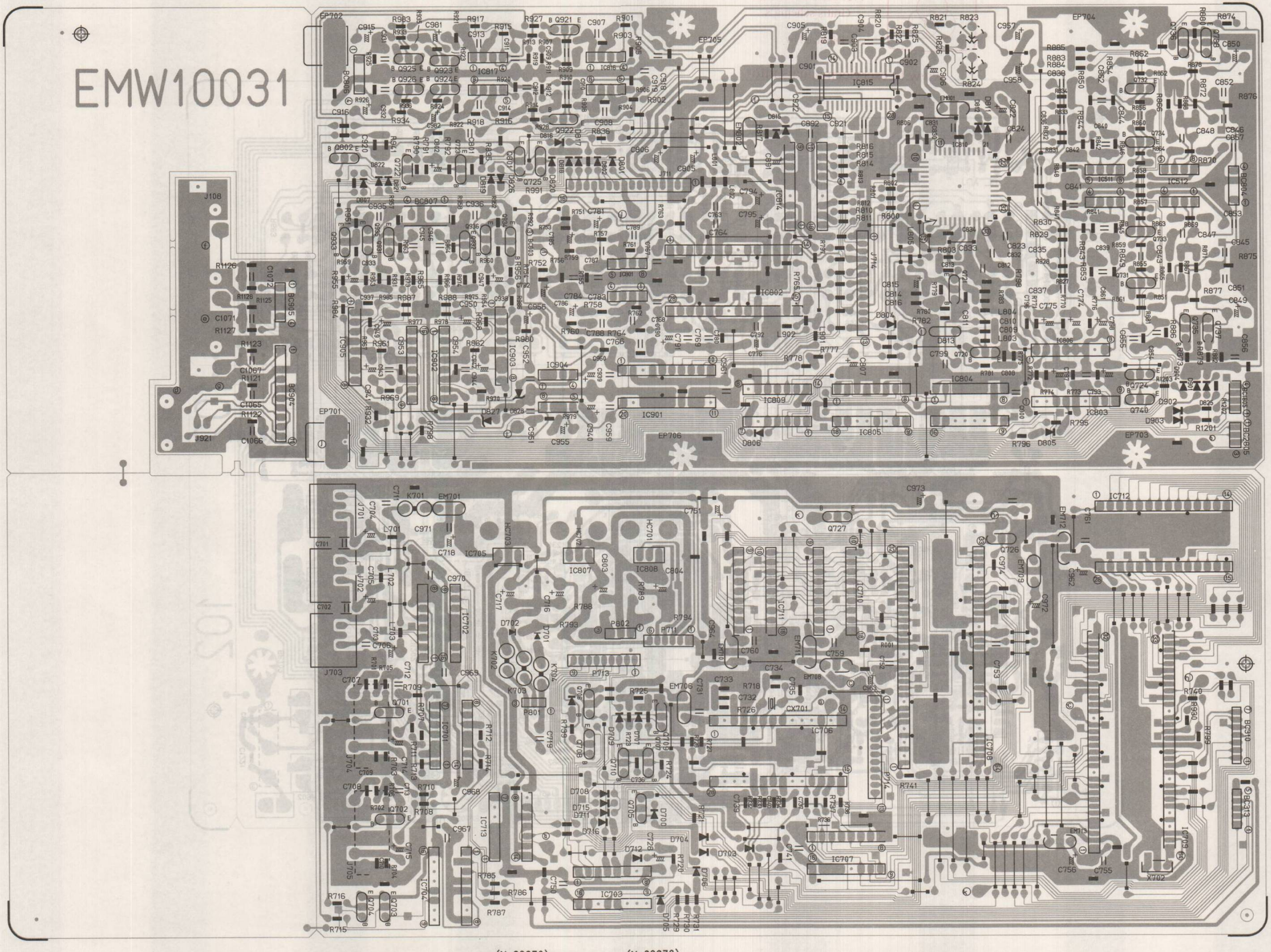


(No.20276)

■ Rear & Center Power Amplifier P.C.Board (ENH-185)

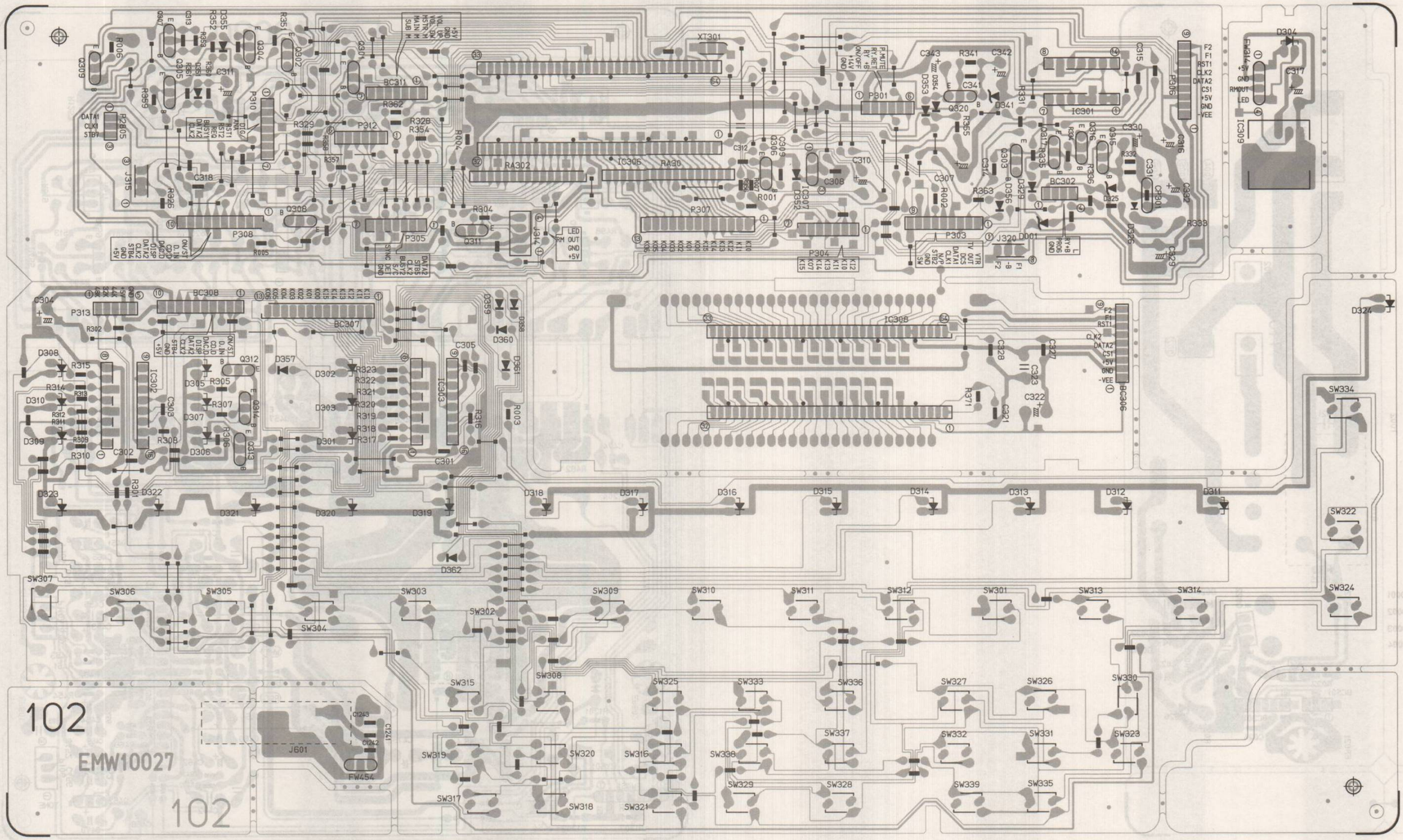


■ DAC/Prologic P.C.Board (ENP-038)



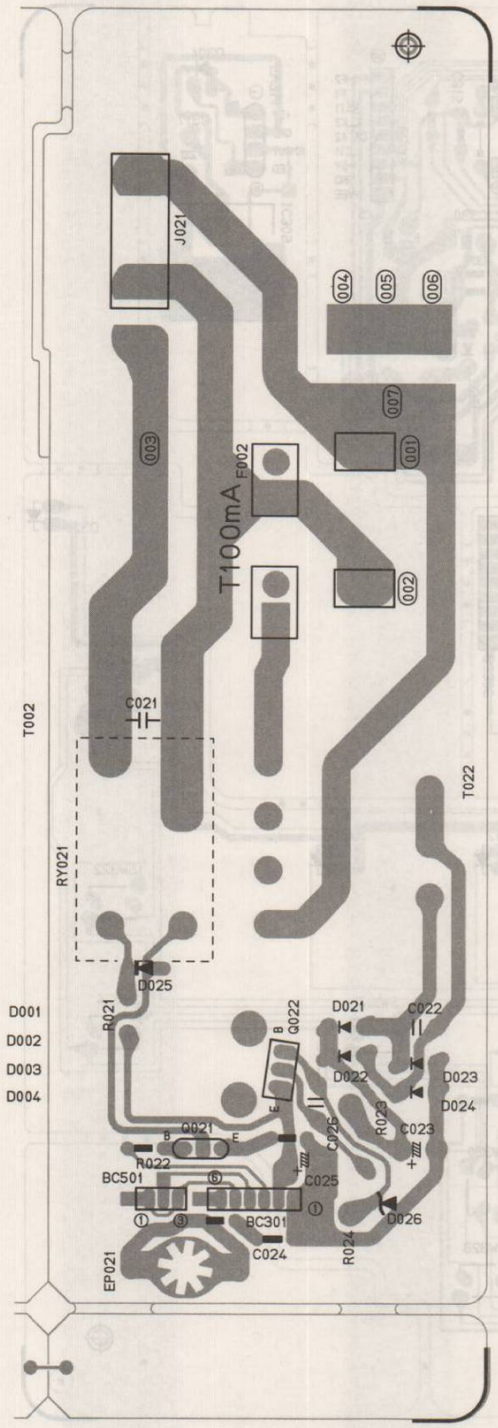
(No.20276) (No.20276)

■ System Control & FL Display P.C.Board (ENB-134)



ENB134 EMW10027-102

■ Power Primary P.C.Board (END-082)



■ Main Power Amplifier P.C.Board (ENH-184)