

POWER AMPLIFIER

# KAC-PS301T/X301T

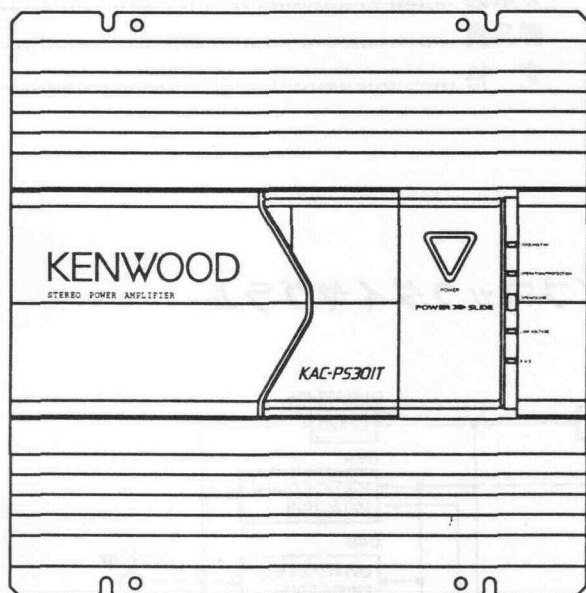
# KENWOOD

## SERVICE MANUAL

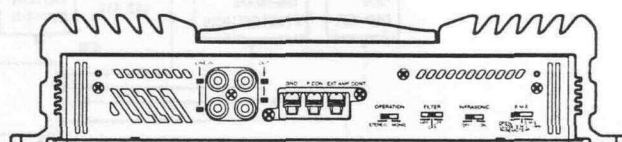
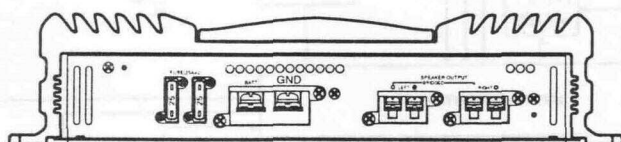
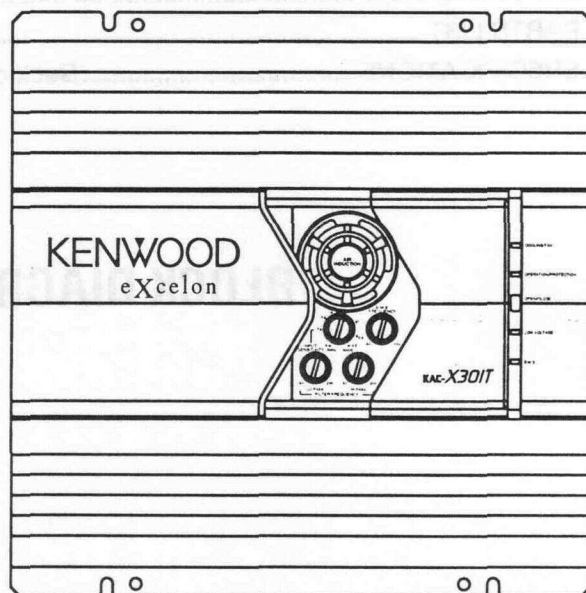
サービスマニュアル

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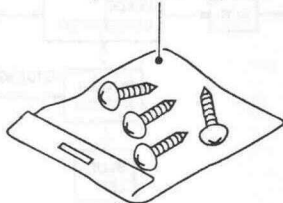
KAC-PS301T(J)(E)(M)



KAC-X301T(K)



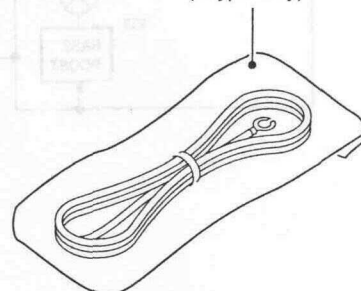
Screw set  
(N99-1577-15)



Accessory  
(W01-0747-05)



DCコードASSY  
(E30-4341-05)  
(J type only)



# KAC-PS301T/X301T

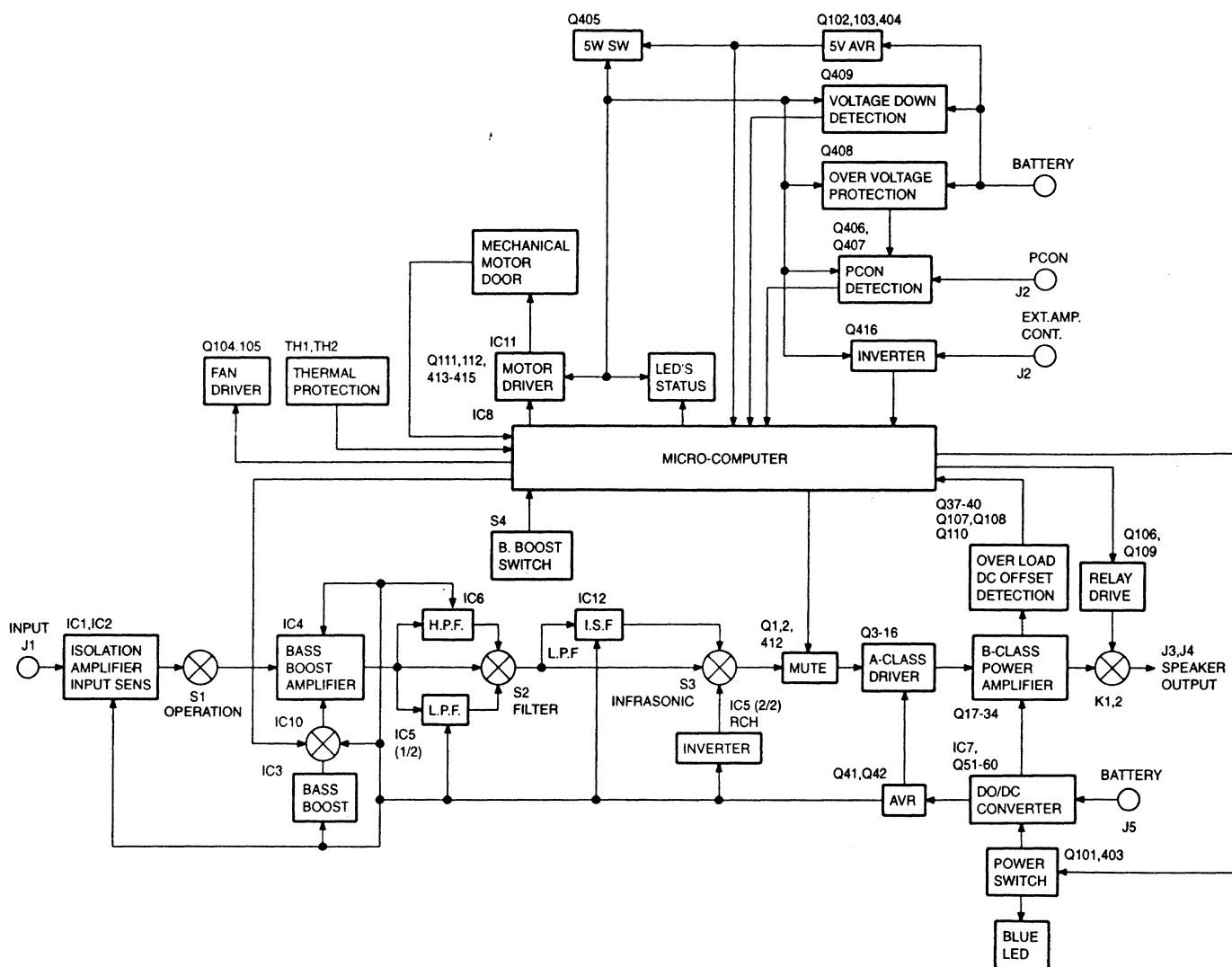
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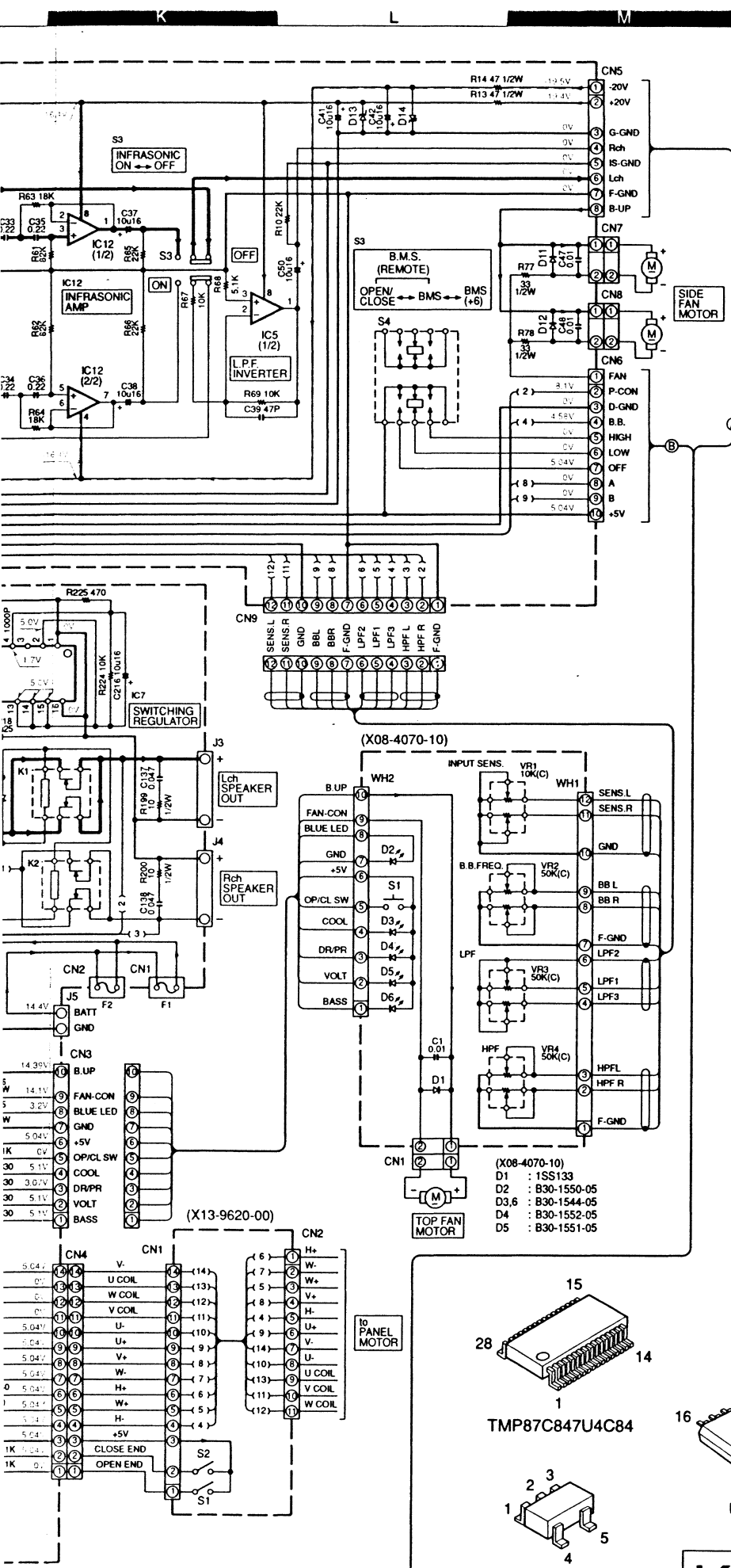
## BLOCK DIAGRAM / ブロックダイアグラム



## MICROCOMPUTER'S TERMINAL DESCRIPTION

## ● Terminal Description

Pin No.	Pin Name	I/O	Description	Processing Operation
1	MOTOR 2	O	Panel motor control 2 (M2)	Stop ... (M1, M2) = ("L", "L") Forward ... (M1, M2) = ("L", "H") Reverse ... (M1, M2) = ("H", "H")
2	MOTOR 1	O	Panel motor control 1 (M1)	
3	SIDE FAN	O	Side fan rotation control	Active "H"
4	TOP FAN	O	Ceiling fan rotation control	Active "H"
5	PROTECT	I	Protection detection	Active "H"
6	V DOWN	I	Voltage down detection	Active "H"
7	SIGMA	I	$\Sigma$ drive protection	Not used (Pull down to GND)
8	VM C	O	Panel motor power supply	Active "H"
9	LED COOL	O	LED indicator output (cooling fan)	Active "L"
10	LED DR/PR	O	LED indicator output (drive protection)	Active "L"
11	LED VOLT	O	LED indicator output (voltage down)	Active "L"
12	LED BASS	O	LED indicator output (bass boost)	Active "L"
13	TEST			Not used (Pull down to GND)
14	RESET		Reset pin	Active "L"
15	XIN		Main clock connection pin	
16	XOUT		Main clock connection pin	
17	VSS	—	GND pin	
18	VREF		A/D reference	
19	TH1	I	Temperature detection 1 (A/D input)	
20	TH2	I	Temperature detection 2 (A/D input)	
21	TH3	I	Temperature detection 3 (A/D input)	Not used (Pull down to GND)
22	TH4	I	Temperature detection 4 (A/D input)	Not used (Pull down to GND)
23	MUTE	O	Mute control	Active "L"
24	(HIGH)BASS SW1	I	Amp. bass boost switch input 1	Active "H"
25	(LOW)BASS SW2	I	Amp. bass boost switch input 2	Active "H"
26	(OFF)BASS SW3	I	Amp. bass boost switch input 3	Active "H"
27	NC			N.C
28	+5V-SW	O	Low current control	Active "L"
29	RY	O	Relay control	Active "H"
30	POWER ON	O	Amp. power control	Active "H"
31	COM HU	I	Pulse measurement from H/U communications	
32	MOTOR END	O	Motor voltage control	"H" at high speed "L" at low speed
33	A	O	Bass boost control 1 (A)	Boost OFF ... (A, B) = ("L", "L") Boost Low ... (A, B) = ("H", "L") Boost Hi ... (A, B) = ("H", "H")
34	B	O	Bass boost control 2 (B)	
35	F1	I	Fuse 1 detection	Active "L"
36	F2	I	Fuse 2 detection	Active "L"
37	STANDBY	I	Release of stop mode by P. CON. on (external interruption)	P. CON turns on when "H" P. CON turns off when "L"
38	XTIN		External clock connection pin	N.C
39	XTOUT		External clock connection pin	N.C
40	VDD	—	Power supply pin (+5V)	
41	CLOSE END	I	Panel closing completed detection	Active "H"
42	OPEN END	I	Panel opening completed detection	Active "H"
43	OP/CL SW	I	Open/close switch	Active "H"
44	A CLASS	O	A class control	N.C



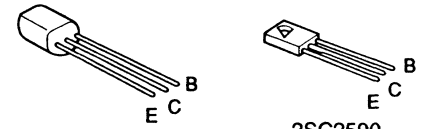
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).

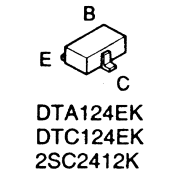
⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

注) DC電圧はハイインピーダンス型の電圧計で計った数値です。値は使用測定器、又は製品により多少異なる場合があります。

⚠ 印の部品は、安全上重要な部品です。交換をする時は、必ず指定の部品をご使用ください。この回路図は基本のものです。



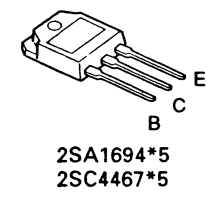
- 2SA1123
- 2SA1534A
- 2SA733(A)
- 2SA965
- 2SA992
- 2SC1845
- 2SC2235
- 2SC2631
- 2SC3940A
- 2SC945(A)



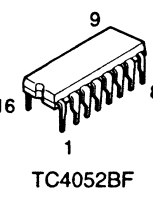
- 2SC2590
- DTA124EK
- DTC124EK
- 2SC2412K



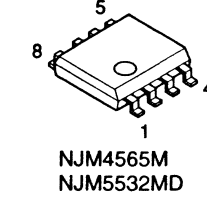
- 2SA1859A
- 2SC4883A



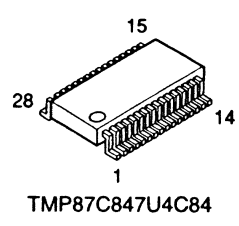
- 2SA1694\*5
- 2SC4467\*5



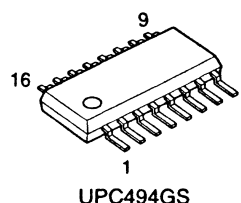
- TC4052BF



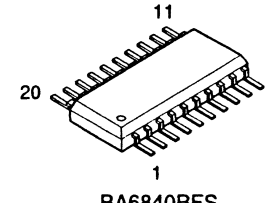
- NJM4565M
- NJM5532MD



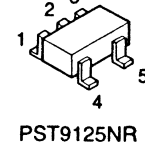
- TMP87C847U4C84



- UPC494GS



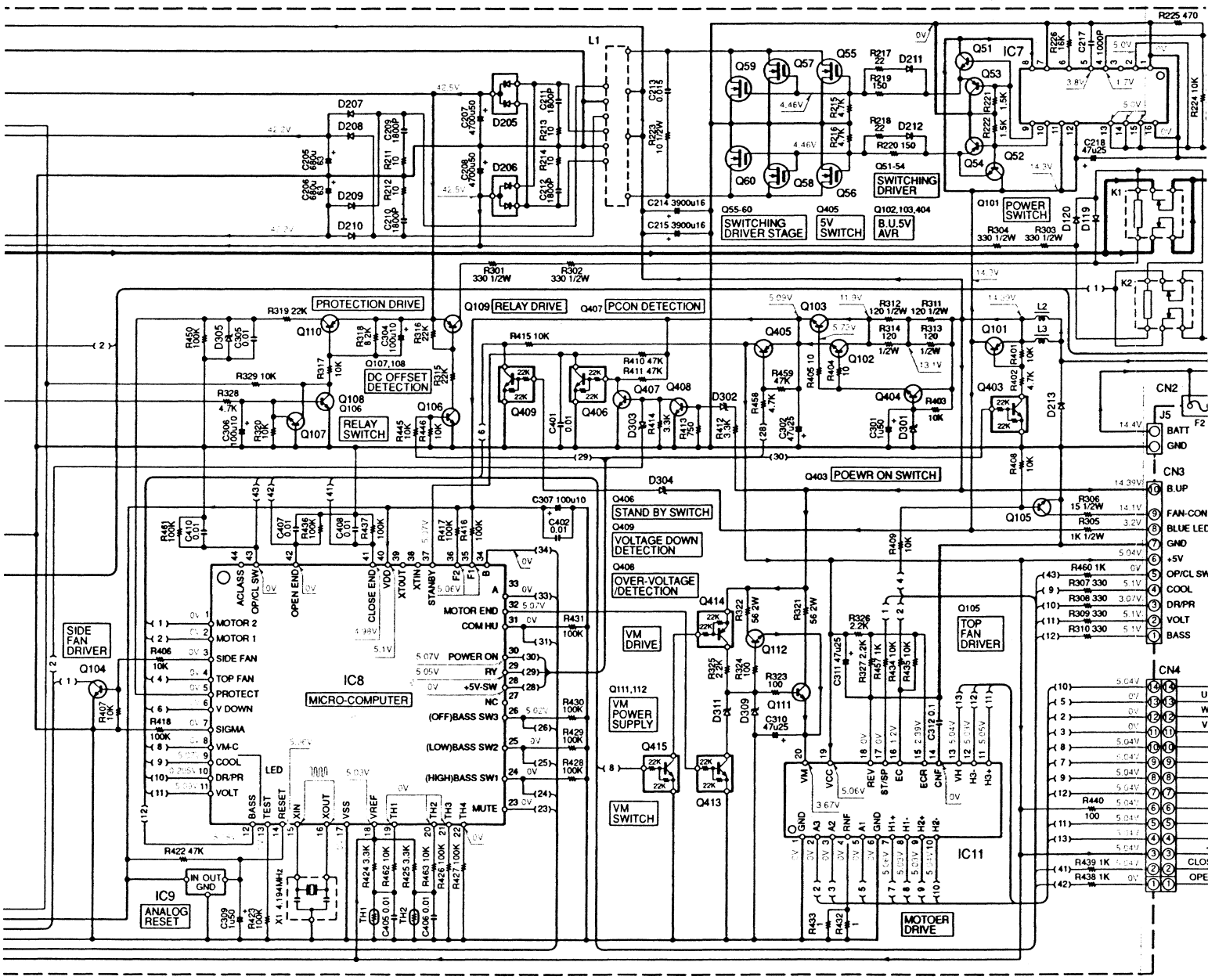
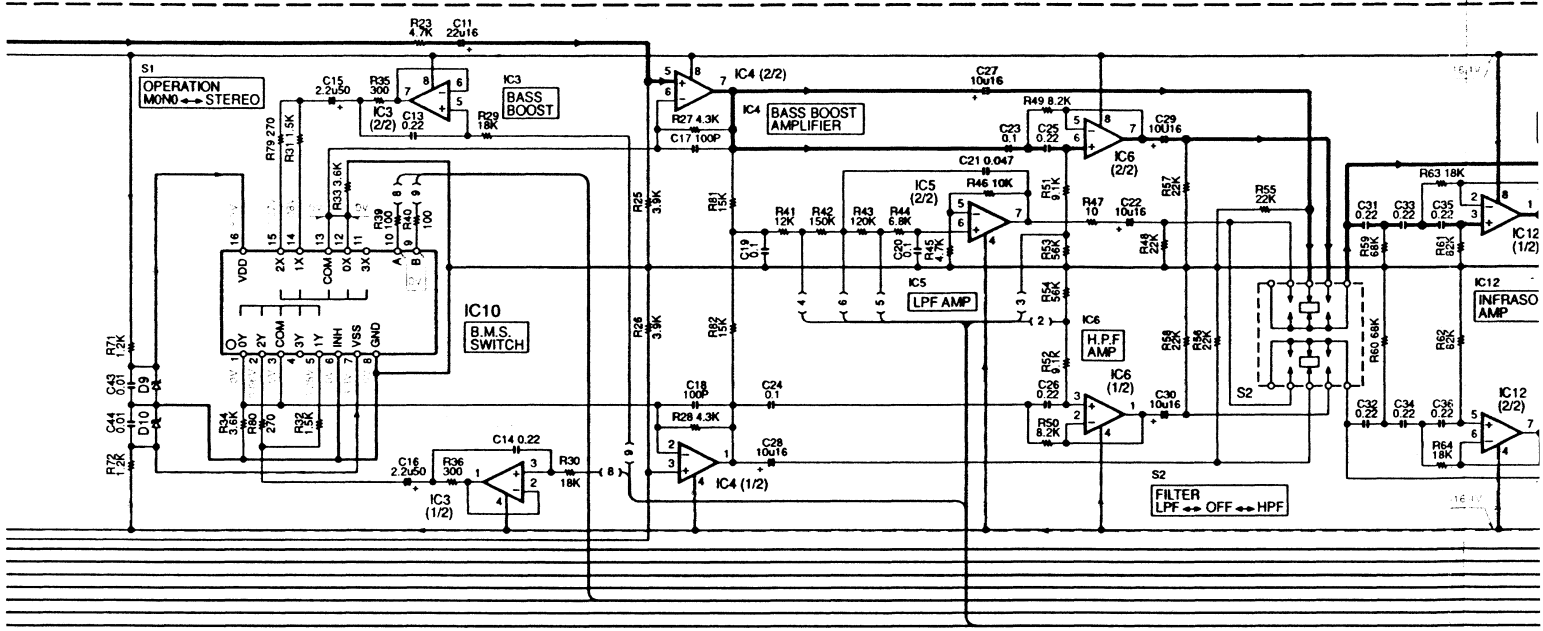
- BA6840BFS

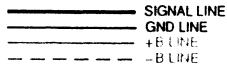


- PST9125NR

# KAC-PS301T/X301T

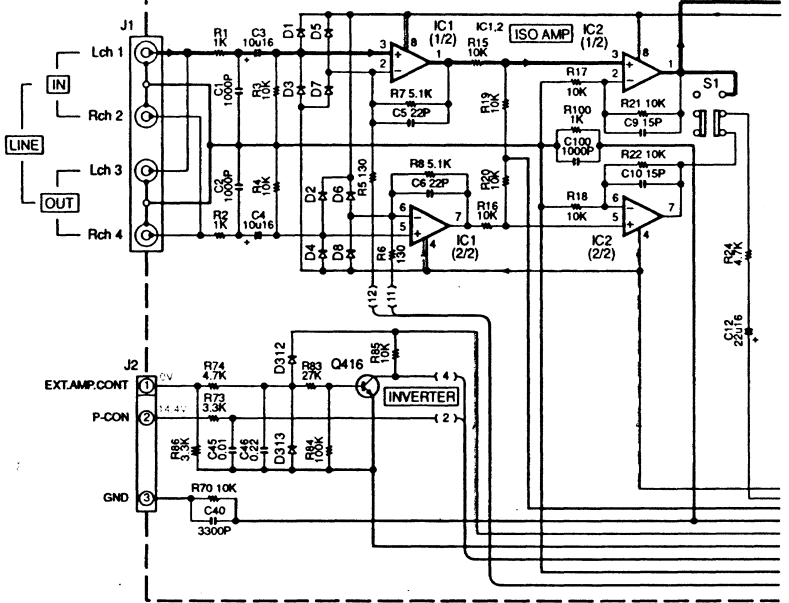
## KENWOOD



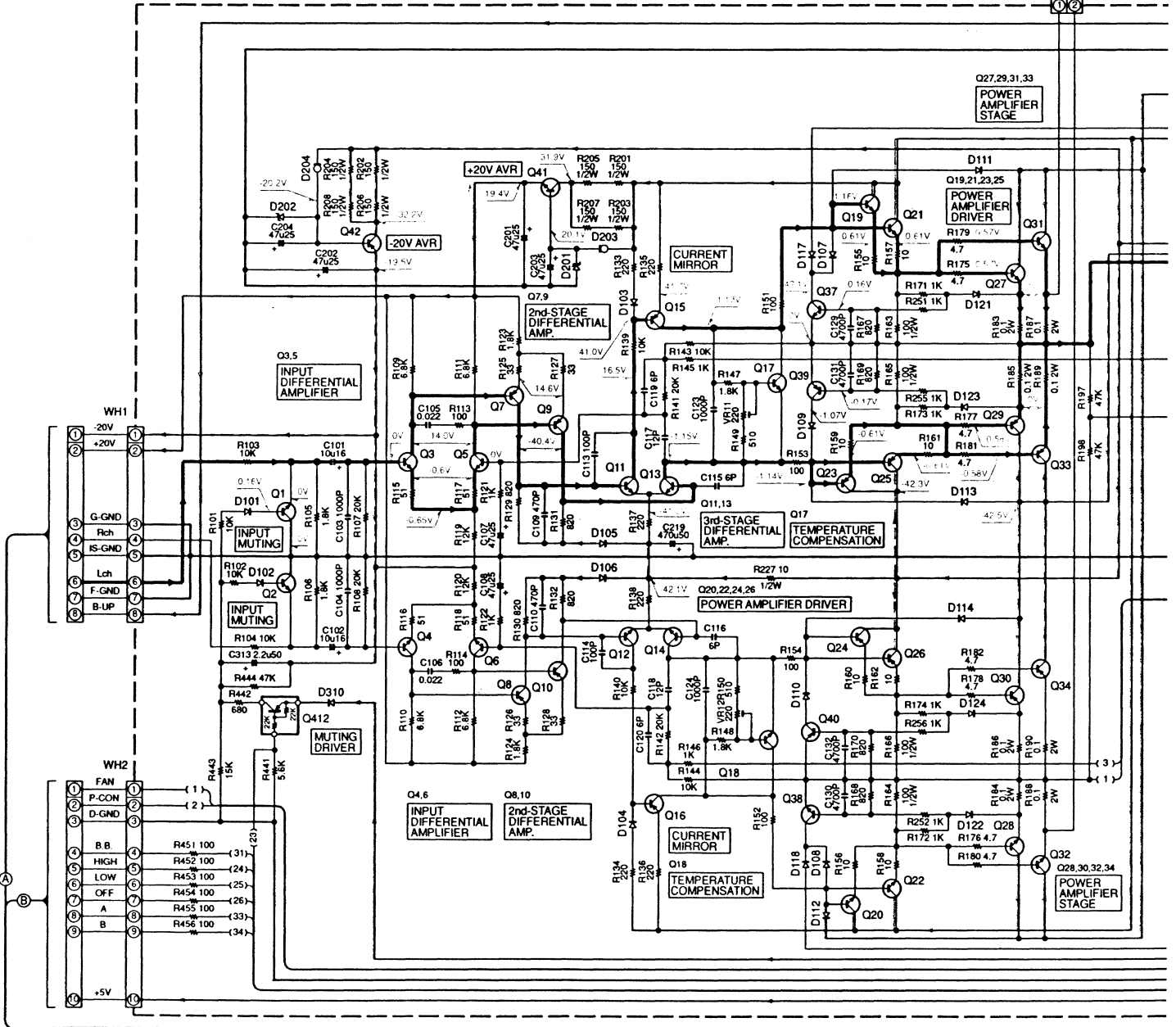


- |   |                                      |
|---|--------------------------------------|
| IC1,2,4,5 : NJM5532MD                                   | Q1,2,51,52 : 2SC945(A)(Q,P)          |
| IC3,6,12 : NJM4566M                                     | Q3-6,37,38,106-108 : 2SC1845(F,E)    |
| IC7 : UPC494GS  |                                      |
| IC8 : TMP87C847U4C84                                    | Q7-10,39,40,109,110 : 2SA992(F,E)    |
| IC9 : PST9125NR   | Q11-14 : 2SC2631(Q,R)                |
| IC10 : TC4052BF   | Q15,16 : 2SA1123(Q,R)                |
| IC11 : BA6840BFS  | Q17,18 : 2SA2590(Q,R)                |
|   | Q19-22 : 2SC2235                     |
| D1-8,11,12,101-114,117-124,211,212,310,312,313 : 1SS133 | Q23-26 : 2SA965                      |
| D9,10 : RD8.2JS(B)                                      | Q27,28,31,32 : 2SC4467*5             |
| D13,14 : RD16JS(B)                                      | Q29,30,33,34 : 2SA1694*5             |
| D201,202 : RD20JS(B)                                    | Q41 : 2SC4883A                       |
| D203,204 : E-562  | Q42 : 2SA1859A                       |
| D205 : FML22S   | Q53,54,405 : 2SA733(A)(Q,P)          |
| D206 : FML22R   | Q55-60 : MTAJ50N05HD                 |
| D207-210 : 1N4935                                       | Q101 : 2SA1534A(R,S)                 |
| D213 : 1N5406-M   | Q102-105,111,112 : DTC124EK          |
| D301 : RD6.2JS(B)                                       | Q403,406,409,413,415 : 2SC3940A(R,S) |
| D302 : RD15JS(B)  | Q404,407,408,416 : 2SC2412K          |
| D303 : RD7.5JS(B)                                       | Q412,414 : DTA124EK                  |
| D304 : RD10JS(B)  |                                      |
| D305 : RD5.1JS(B)                                       |                                      |
| D309 : RD4.7JS(B)                                       |                                      |
| D311 : RD3.9ES(B2)                                      |                                      |

(X09-5310-10) (B/2)



(X09-5310-10) (A/2)



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