

Service Manual

Mini Component System

Model: **XG-332V, 334V[K],
335V[K]/336V[K]**



XG-332V/334V/335V/336V



XG-334VK/335VK/336VK

DAEWOO DAT CO., LTD.

Feb. 2005



MINI COMPONENT SYSTEM

XG-332V

XG-334V[K]

XG-335V[K]

XG-336V[K]

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Safety Precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCKS DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.	
	THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.	

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

LASER SAFETY

THIS UNIT EMPLOYS A LASER. ONLY QUALIFIED SERVICE PERSONNEL SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE DUE TO POSSIBLE EYE INJURY.

CAUTION : USE OF ANY CONTROLS, ADJUSTMENTS, OR PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION : POUR EVITER LES CHOCs ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Important Safety Instructions

- All the safety and operating instructions should be read before the appliance is operated.
 - The safety and operating instructions should be retained for future reference.
 - All warnings on the appliance and in the operating instructions should be adhered to.
 - All operating and use instructions should be followed.
1. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink,

laundry tub, in a wet basement, or near a swimming pool, and the like.

PORTABLE CART

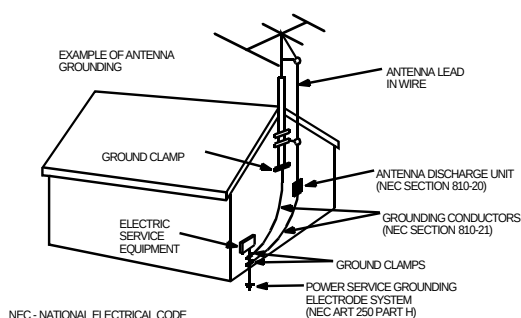


Figure 2

2. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.
3. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
4. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
5. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
6. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
7. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
8. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
9. Power - Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
10. Protective Attachment Plug - If the appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
11. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
12. Power Lines - An outdoor antenna should be located away from power lines.

Safety Precautions

13.Outdoor Antenna Grounding - If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors,location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure 1.



14.Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15.Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16.Damage Requiring Service - The appliance should be serviced by qualified service personnel when:

- a) The power-supply cord or the plug has been damaged; or
- b) Objects have fallen, or liquid has been spilled into the appliance; or
- c) The appliance has been exposed to rain; or
- d) The appliance does not appear to operate normally or exhibits a marked change in performance; or
- e) The appliance has been dropped, or the enclosure damaged.

17.Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Adjustments

1. TUNER SECTION

TEST EQUIPMENT

1. Signal Generator with a frequency range of FM broadcast.
2. Oscilloscope with a side amplifier of approximately 100 KHz.
3. FM 75/50Ω dummy antenna.
4. VTVM

FM ALIGNMENT

1. Turn on the FM signal generator and the VTVM allowing 15 minutes warming-up period.
2. Connect the VTVM across the headphone jack or speaker terminal.
3. Set signal generator frequency as listed in ALIGNMENT CHART and maintain a sufficient output level to provide an indication on VTVM.

NOTE

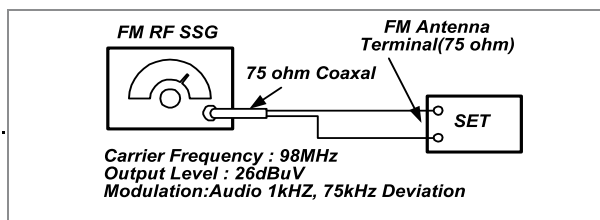
1. Use a screwdriver with plastic or ceramic grip for all adjustments.
2. Standard test frequency 1 KHz and deviation 75 KHz for FM.

- FM RF, IF ALIGNMENT CHART -

Item	Input Circuit Setup	Output Circuit Setup	S.S.G Setting	Adjust Point	Adjustment
FM IF Adjustment	Connect stereo signal generator to FM ANT terminal (J001)	Connect DC voltmeter to edge TP201,202	FM98MHz 75KHz Dev. 26dBμV	L203	Adjust for DC 0V± 50mV

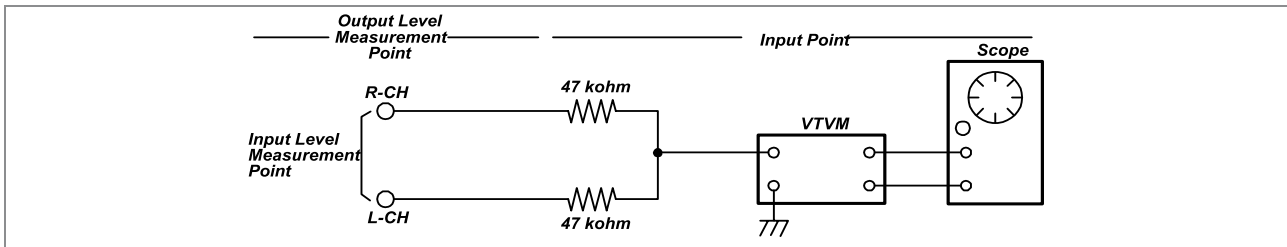
Unless other specified set being switched FM mode, adjust generator's frequency to center of the FM band where no FM broadcast exists. Otherwise adjustment of FM usable sensitivity, frequency range for FM band are not needed, but confirm these data are satisfied with specification.

CAUTION : When realigning the FM receiving frequency the highest end of the frequency range should not be more than 108 MHz and the lowest end of the frequency range should not be less than 87.5 MHz, in order to comply with FTZ regulation in Germany.



Adjustments

2. TAPE SECTION



Test Tape be used

Tape	Contents	Use
MTT-111N	3 KHz	Tape Speed Adjustment
MTT-114N	10 KHz	Head Azimuth Adjustment
MTT-5511	Blank	Record Frequency Property

HEAD ADJUSTMENT (AZIMUTH)

- 10KHz test tape(example: MTT-114N) must be used for this adjustment.
- Connect to VTVM or oscilloscope to the headphone jack or speaker terminal.
- Press the play button.
- Adjust the azimuth by using a screw driver to maintain the max. L&R output voltage.
- Adjust tape A(1), tape B(2) respectively, Please secure the azimuth position by using locking paint.

RECORDING BIAS OSCILLATOR FREQUENCY ADJUSTMENT

- Connect the frequency counter to TP603, TP602(GND).
- Press the REC button.
- Adjust L600 to obtain 80 KHz $\pm$ 500Hz

TAPE ALIGNMENT CHART								
Step	Item		Reference Value	Test Tape	Adjust Point	Test Point	Note	FIG.
1	Tape Speed Adjustment	Normal	3,015~3,025Hz	MTT-111N	RV600	Line Out L/R Channel	Confirm Wow & Flutter is within 0.35%	FIG.1
			3,000~3,010Hz	MTT-111N	RV600	Line Out L/R Channel	Confirm Tape Speed of end position after adjustment at tape start position	FIG.1
		High	5,820~6,180Hz	MTT-111N	-----	Line Out L/R Channel	Confirm High speed after normal speed adjustment	FIG.1
2	Azimuth Adjustment		Maximum Level Phase:Within90°	MTT-114N	Head Screw	Line Out L/R Channel		FIG.2,3,4
3	Recording Bias Oscillator Frequency Adjustment		80 KHz±0.5	MTT-5511	L600	TP603, TP602(GND)	Adjust with frequency counter connected.	FIG.1

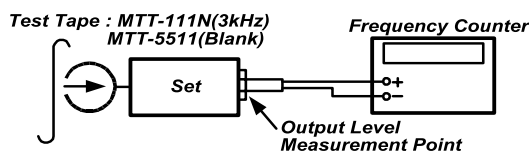


FIG. 1 : Tape Speed & Record Bias Oscillator Frequency Adjust Circuit

Adjust with Frequency Counter Connected

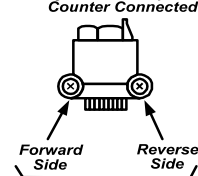


FIG. 2 : Tape Azimuth Adjust Location (Record/Playback Head)

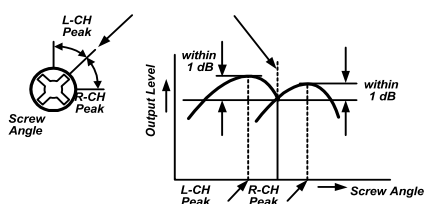


FIG. 3 : Tape Azimuth Adjust Head Screw & Waveform

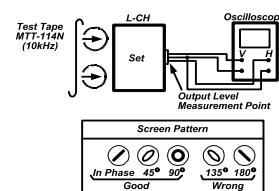
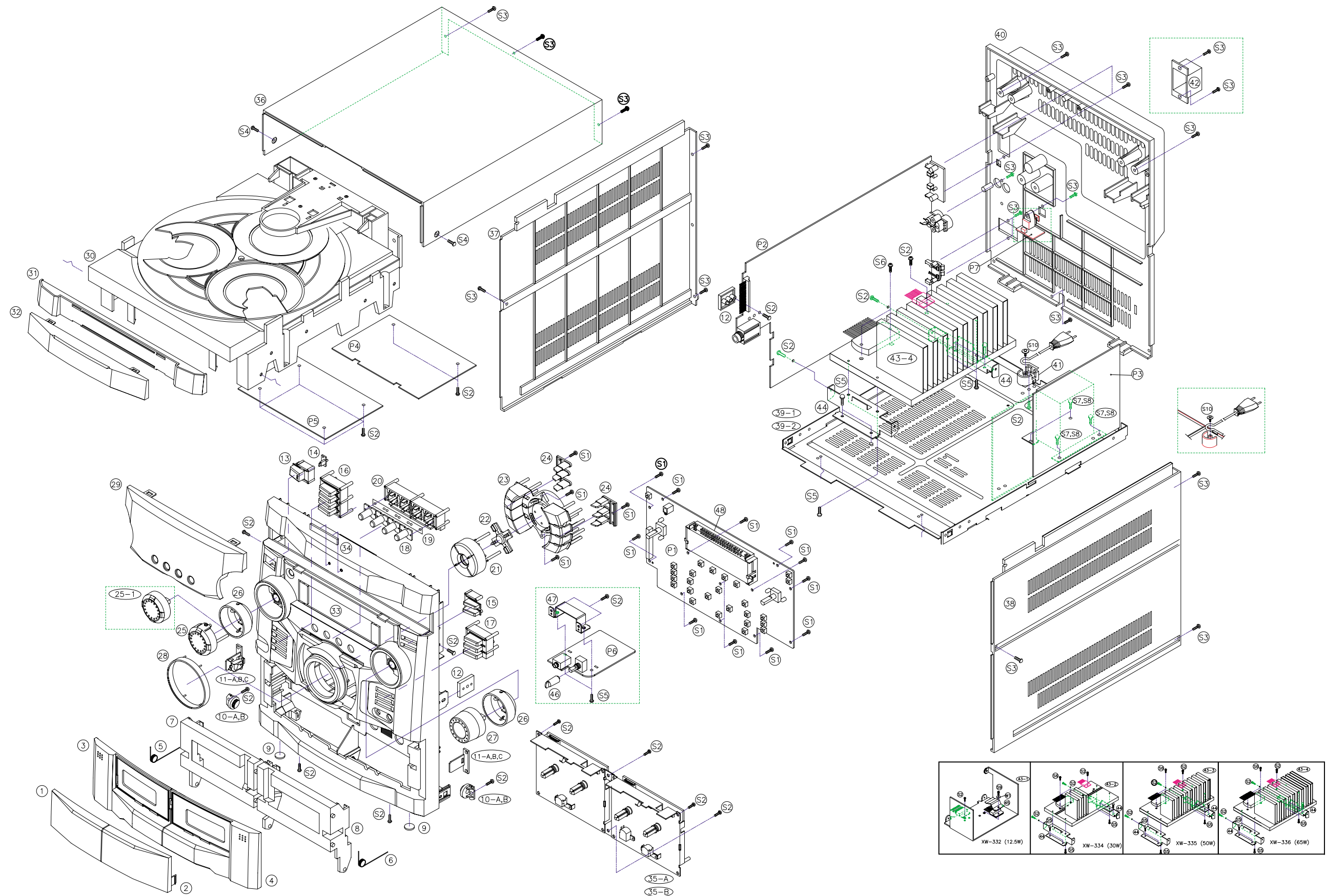


FIG. 4 : Tape Azimuth Adjust Circuit & Waveform

Exploded View and Mechanical Parts List



Exploded View and Mechanical Parts List

No.	Part Name	Part Code	Description	Q'ty	Remark
1	WINDOW DOOR A	9CD16206A0	ACRYL	1	
2	WINDOW DOOR B	9CD16206B0	ACRYL	1	
3	DOOR CASS A	9CD18141A0	HIPS	1	
4	DOOR CASS B	9CD18141B0	HIPS	1	
5	SRING DOOR EJECT L	9CD30080L0	STS 0.9	1	
6	SRING DOOR EJECT R	9CD30080R0	STS 0.9	1	
7	DOOR FRAME A	9CD18113A0	MIPS	1	
8	DOOR FRAME B	9CD18113B0	MIPS	1	
9	CUSHION FOOT	9CD4207700	URETHAN	2	
10-A	DAMPER GEAR B	9CD2603200	ACETAL	2	
10-B	DAMPER BASE B	9CD2603300	ABS	2	
11-A	LOCKER BASE	9CDOB01900	ABS	2	
11-B	LOCKER CAM	9CDOB02000	ABS	2	
11-C	LOCKER SPRING	9CDOB01600	STS	2	
12	BRKT SIDE	9CD2412900	ABS	2	
13	KNOB POWER	9CD1350100	HIPS	1	
14	LENS POWER	9CD1620900	ACRYL	1	
15	KNOB OPEN	9CD1350200	HIPS	1	
16	KNOB EQ	9CD1350700	HIPS	1	
17	KNOB DISC	9CD1350800	HIPS	1	
18	KNOB FUNCTION	9CD1351000	ACRYL	1	
19	PLATE FILTER	9CD0913200	MIPS	1	
20	GUIDE FUNCTION	9CD2507800	HIPS	1	
21	KNOB CAP	9CD1350600	HIPS	1	
22	DECO KNOB CAP	9CD1005200	ABS	1	CR COATING
23	KNOB PRESET	9CD1350900	HIPS	1	
24	DECO KNOB PRESET	9CD1005300	ABS	2	CR COATING
25	KNOB TUNING	9CD1350400	HIPS	1	332/334/335/336
25-1	KNOB JOG	9CD1350300	HIPS	1	option
26	DECO RING VR	9CD1005100	ACRYL	2	
27	KNOB VR	9CD1350500	HIPS	1	
28	DECO RING PRESET	9CD1005400	ACRYL	1	
29	WINDOW FLT	9CD1620700	ACRYL	1	
30	CD DECK MECHA	9CD6012900	DCC-01DA	1	
31	DOOR CD	9CD1814200	HIPS	1	
32	WINDOW CD DOOR	9CD1620800	ACRYL	1	
33	PANEL FRONT	9CD0312200	HIPS	1	
34	BADGE DAEWOO	9CD1500900	ABS	1	
35-A	CASSETTE DECK LOGIC	9CD6010000		1	332 option
35-B	CASSETTE DECK LOGIC	9CD6010100		1	334/335/336 option
36	COVER TOP	9CD0411400	MIPS	1	
37	COVER SIDE L	9CD04115L0	MIPS	1	
38	COVER SIDE R	9CD04115R0	MIPS	1	
39-1	CHASSIS BOTTOM	9CD0607500	ABS	1	332
39-2	CHASSIS BOTTOM	9CD0607100	SECC 1.0T	1	334/335/336
40	COVER BACK	9CD0409800	MIPS	1	332/334/335/336

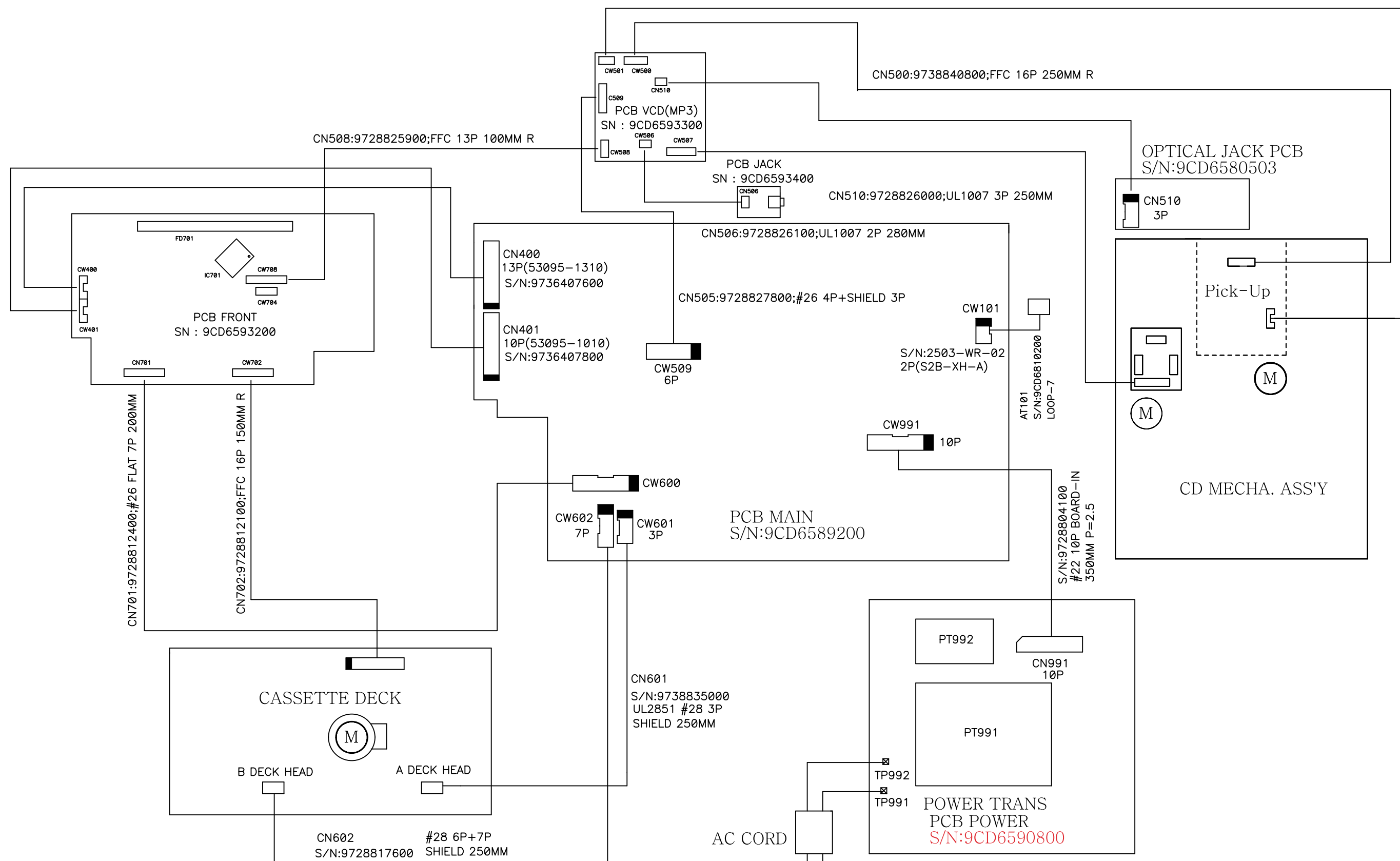
No.	Part Name	Part Code	Description	Q'ty	Remark
41	HOLDER AC CORD	9CD2303300	ABS	1	334/335/336
42	COVER ANT	9CD0410400	ABS	1	option
43-1	HEAT SINK 10	9CD4404500	AL	1	332
43-2	HEAT SINK N30	9CD4406200	AL	1	334
43-3	HEAT SINK N50	9CD4405800	AL	1	335
43-4	HEAT SINK N65	9CD4408200	AL	1	336
44	BRACKET HEAT TR	9CD2414600	SECC 1.0T	2	334/335/336
45	BRACKET HEAT TR	9CD2414600	SUS 0.5T	1	332
46	KNOB MIC	9CD1332000	MIPS	1	option
47	BRACKET MIC PCB	9CD2415500	SECC 1.0T	1	option
48	GUIDE FLT	9CD2506500	ABS	1	332/334/335/336

No.	Screw Type	Part Code	Description	Q'ty			
				332	334	335	336
S1	SCREW TAPTTITE	7173261011	TT2 BIN 2.6 X 10 MFZN	16	16	16	16
S2	SCREW TAPTTITE	7173301011	TT2 BIN 3.0X10 MFZN	16	15	15	15
S3	SCREW TAPTTITE	7173301212	TT2 BIN 3.0X12 BK	21	21	21	21
S4	SCREW TAPTTITE	7173301612	TT2 BIN 3.0X16 BK	2	2	2	2
S5	SCREW TAPTTITE	7173300411	TT2 BIN 3.0X6 MFZN	5	8	8	8
S6	SCREW TAPTTITE	7173301411	TT2 BIN 3.0X14 MFZN	*	4	4	4
S7	SCREW TAPTTITE	7173400611	TT2 BIN 4.0X6 MFZN	*	4	4	4
S8	SCREW TAPTTITE	7173401011	TT2 BIN 4.0X10 MFZN	4	*	*	*
S9	WASHER SCREW	9CD3102401	TT2 BIN 3.0X8 + D12	1	*	*	*
S10	WASHER SCREW	9CD3102400	TT2 BIN 3.0X10 + D14	1	1	1	1
W1	WASHER PLAIN			1	*	*	*

No.	Part Name	Q'ty	
P1	PCB FRONT	1	
P2	PCB MAIN	1	
P3	PCB POWER	1	
P4	PCB CD	1	
P5	PCB MP3	1	option
P6	PCB MIC	1	
P7	PCB JACK	1	option

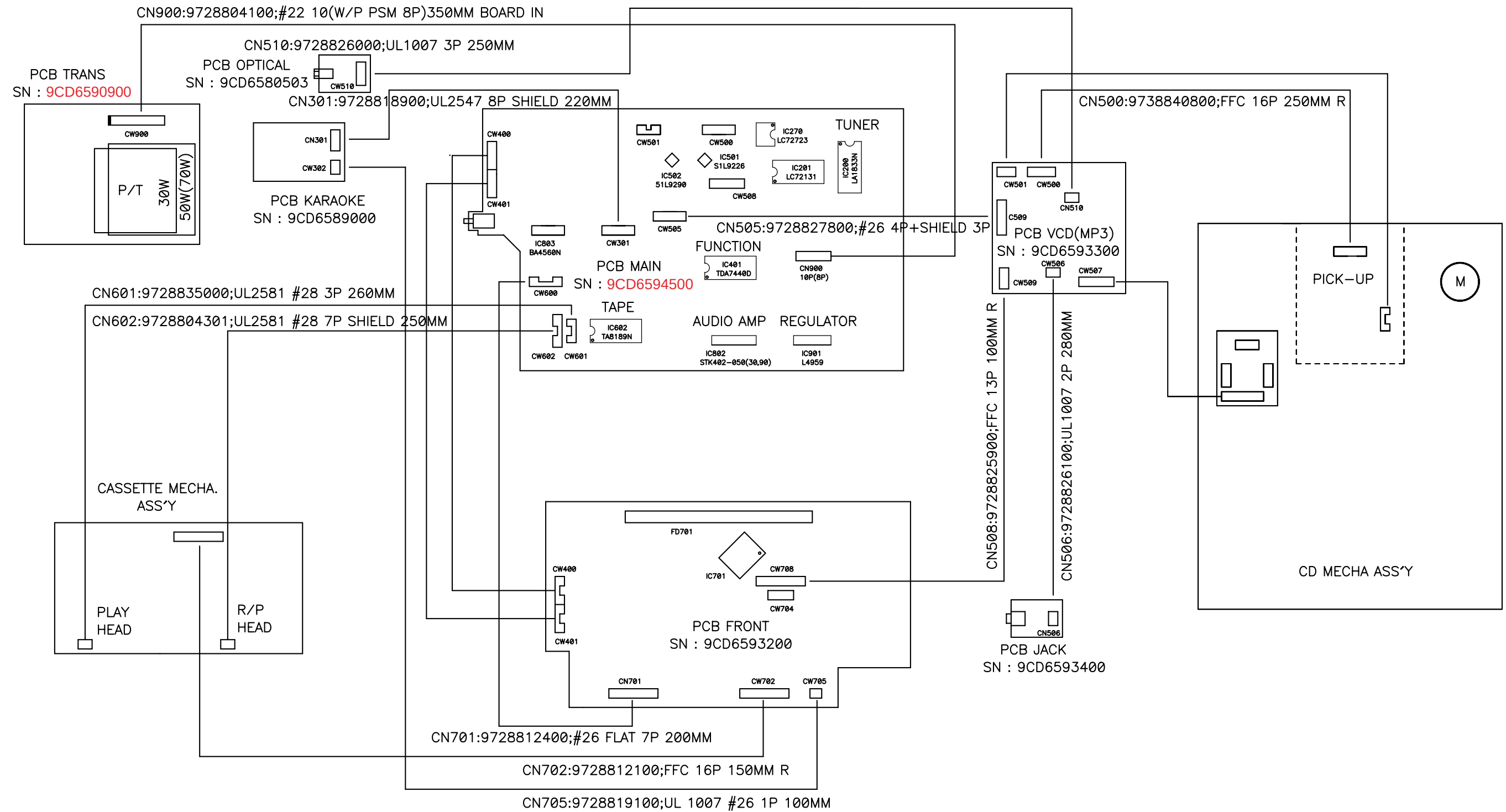
Wiring Diagram

● XG-332V Model only



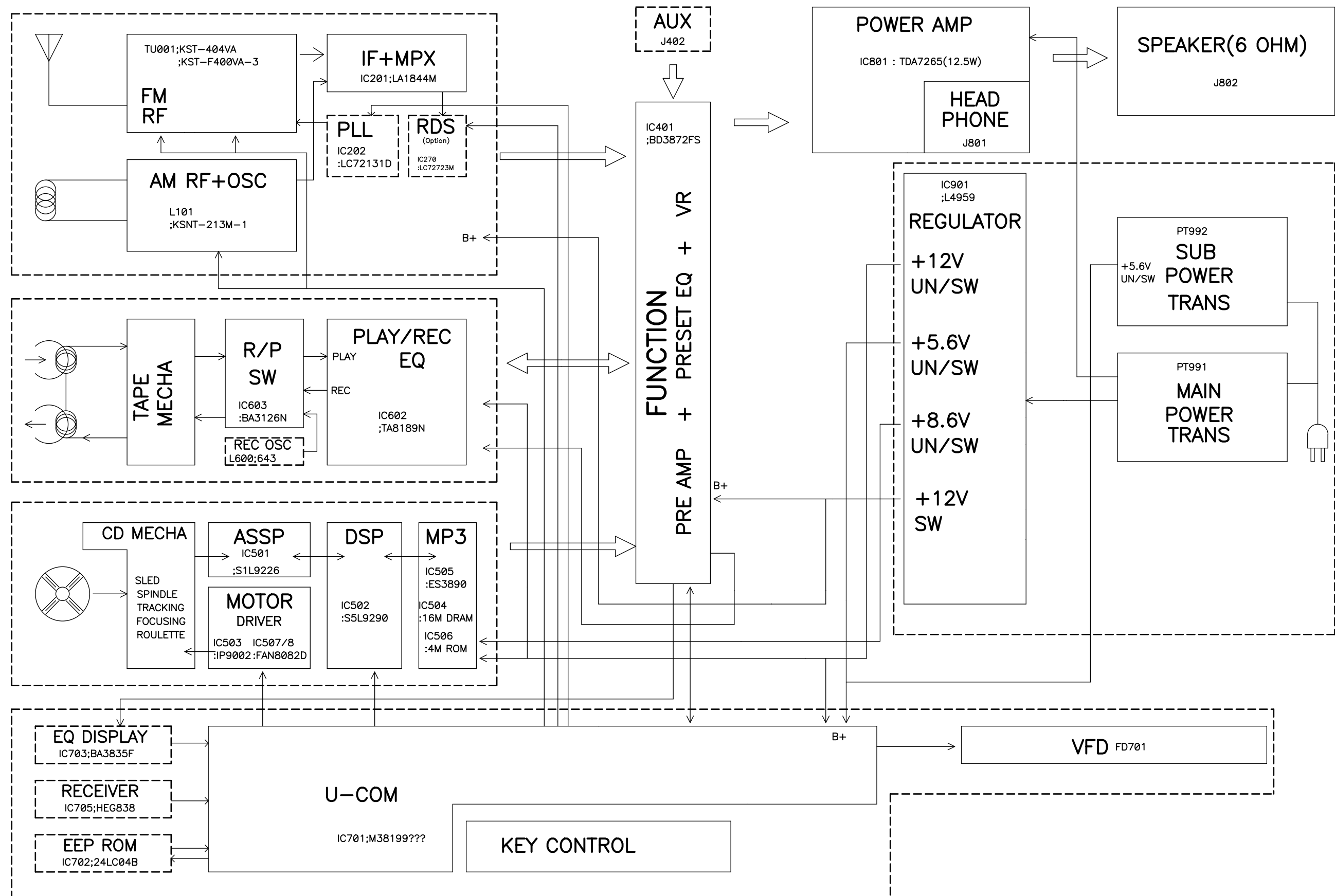
Wiring Diagram

● XG-334V[K]/335V[K]/336V[K] Model only



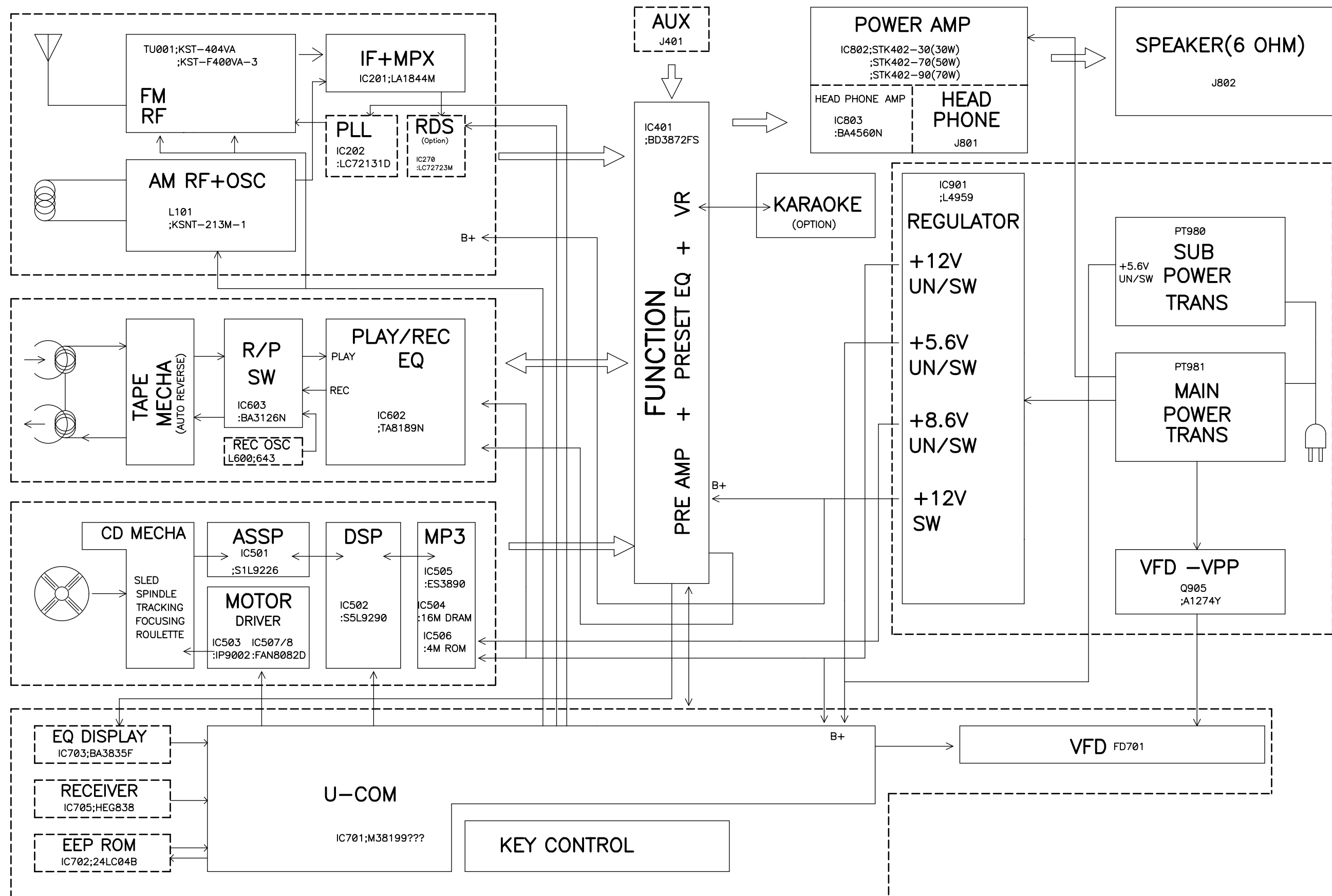
Block Diagram

● XG-332V Model only



Block Diagram

● XG-334V[K]/335V[K]/336V[K] Model only

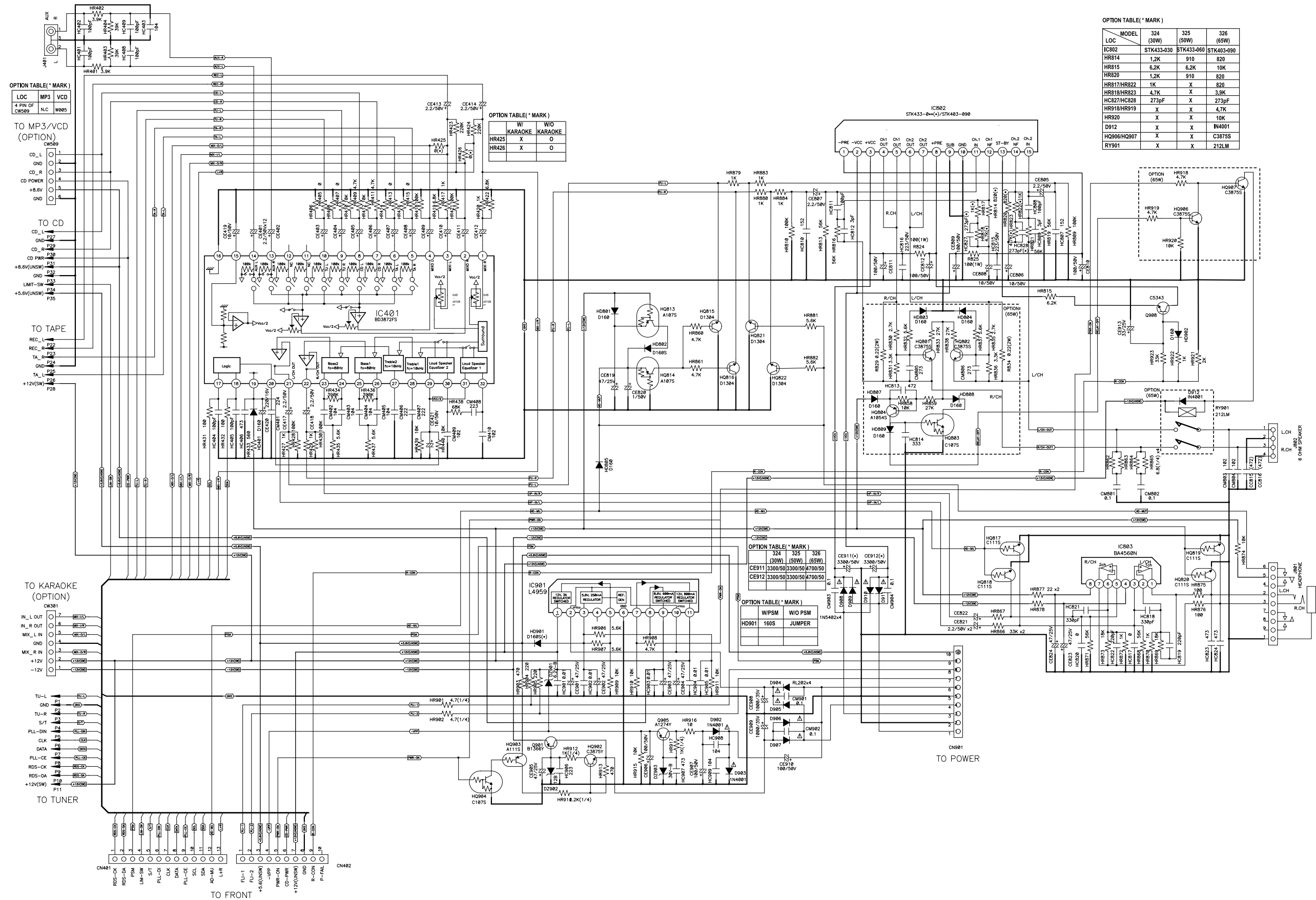


● MAIN/POWER Section : XG-332V Model only



Schematic Diagram

● MAIN Section : XG-334V[K]/335V[K]/336V[K] Models only



● **TUNER Section : XG-332V Model only**

IC201	Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
	Vtg(V)	2.1	4.8	2.1	2.1	GND	#1	#2	4.8	4.8	#3	#4	#5
	Pin No.	13	14	15	16	17	18	19	20	21	22	23	24
	Vtg(V)	3.2	3.2	2.1	2.1	2.1	4.5	#6	#7	#8	#9	4.8	3.5

#1: SD ON(0V) OTHERWISE(5V)	#3: NORMAL(V<= 0.5V) MUTE(1.4V<=V<=2.2V)	#4: FM(4V), AM(2.6V) #5: FM(4.1V), AM(3.0V)
#2: STEREO(0V) MONO(5V)	SEEK(V>=3.5V)	#6: FM(0V), AM(1.3V) #7: FM(3.6V), AM(1.0V) #8: FM(0.6V), AM(2.3V) #9: FM(?V), AM(?V)

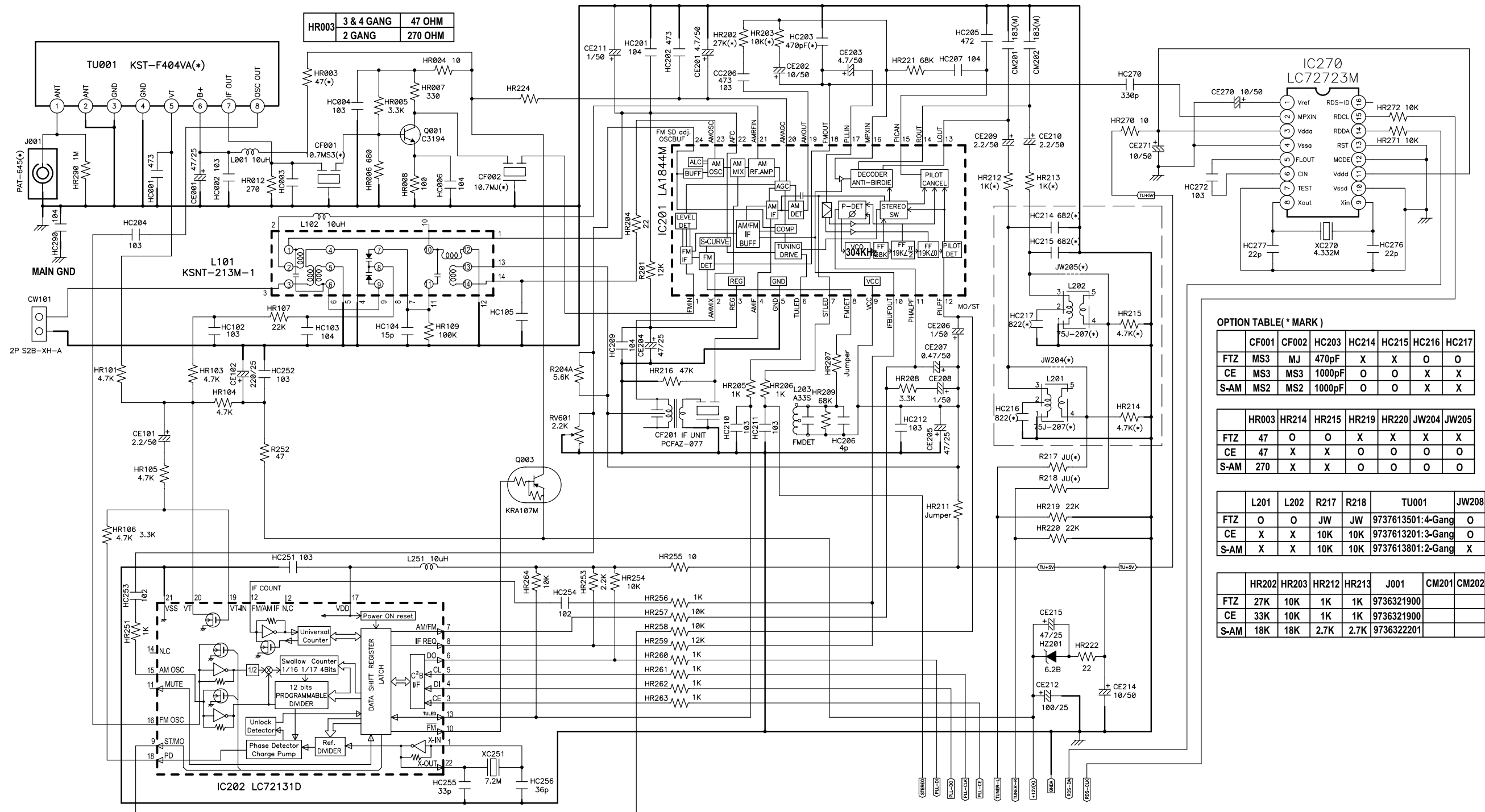
Name	Pin No.	1	2	3	4	5	6	7	8	9	10	11
IC202	Vtg(V)	2.5	N.C	0	0	0	VCC	#1	#2	#3	#4	N.C
	Pin No.	12	13	14	15	16	17	18	19	20	21	22
	Vtg(V)	#5	?	N.C	#6	#7	VCC	1.1	1.1	#8	GND	2.5

#1 : FM(3.7), AM(0)	#2 : TUNING ON(VCC)
#3 : FM(3.7), AM(0)	TUNING OFF(0V)
#5 : TUNING ON(VCC)	#4 : FM(0), AM(12)
TUNING OFF(0V)	#6 : FM(0V), AM(2.4V)
#7 : FM(2.4V), AM(0V)	#8 : VT

Name		Q001	Q003	Q104	IC205	REMARK
Vtg(V)	E(1)	0	12	0	12	BASIC : FM
	C(2)	0	12	0	GND	
	B(3)	0	0	12	5	

Schematic Diagram

TUNER Section : XG-334V[K]/335V[K]/336V[K] Models only



OPTION TABLE (* MARK)

	CF001	CF002	HC203	HC214	HC215	HC216	HC217
FTZ	MS3	MJ	470pF	X	X	O	O
CE	MS3	MS3	1000pF	O	O	X	X
S-AM	MS2	MS2	1000pF	O	O	X	X

	HR003	HR214	HR215	HR219	HR220	JW204	JW205
FTZ	47	O	O	X	X	X	X
CE	47	X	X	O	O	O	O
S-AM	270	X	X	O	O	O	O

	L201	L202	R217	R218	TU001	JW208
FTZ	O	O	JW	JW	9737613501:4-Gang	O
CE	X	X	10K	10K	9737613201:3-Gang	O
S-AM	X	X	10K	10K	9737613801:2-Gang	X

	HR202	HR203	HR212	HR213	J001	CM201	CM202
FTZ	27K	10K	1K	1K	9736321900		
CE	33K	10K	1K	1K	9736321900		
S-AM	18K	18K	2.7K	2.7K	9736322201		

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12
Vtg(V)	2.1	4.8	2.1	2.1	GND	#1	#2	4.8	4.8	#3	#4	#5
Pin No.	13	14	15	16	17	18	19	20	21	22	23	24
Vtg(V)	3.2	3.2	2.1	2.1	2.1	4.5	#6	#7	#8	#9	4.8	3.5

#1 : SD ON(0V)
OTHERWISE(5V)
#2 : STEREO(0V)
MONO(5V)
#3 : NORMAL(V=<0.5V)
MUTE(1.4V=<V=<2.2V)
SEEK(V>=3.5V)
#4 : FM(4V), AM(2.6V)
#5 : FM(4.1V), AM(3.0V)
#6 : FM(0V), AM(1.3V)
#7 : FM(3.6V), AM(1.0V)
#8 : FM(0.6V), AM(2.3V)
#9 : FM(?V), AM(?V)

Name	Pin No.	1	2	3	4	5	6	7	8	9	10	11
IC202	Vtg(V)	2.5	N.C	0	0	0	VCC	#1	#2	#3	#4	N.C
	Pin No.	12	13	14	15	16	17	18	19	20	21	22
	Vtg(V)	#5	?	N.C	#6	#7	VCC	1.1	1.1	#8	GND	2.5

#1 : FM(3.7V), AM(0)
#3 : FM(3.7V), AM(0)
#5 : TUNING ON(VCC)
TUNING OFF(0V)
#7 : FM(2.4V), AM(0V)
#2 : TUNING ON(VCC)
TUNING OFF(0V)
#4 : FM(0V), AM(12)
#6 : FM(0V), AM(2.4V)
#8 : VT

Name	Q001	Q003	Q104	IC205	REMARK
Vtg(V)	E(1)	0	12	0	12
	C(2)	0	12	0	GND
	B(3)	0	0	12	5

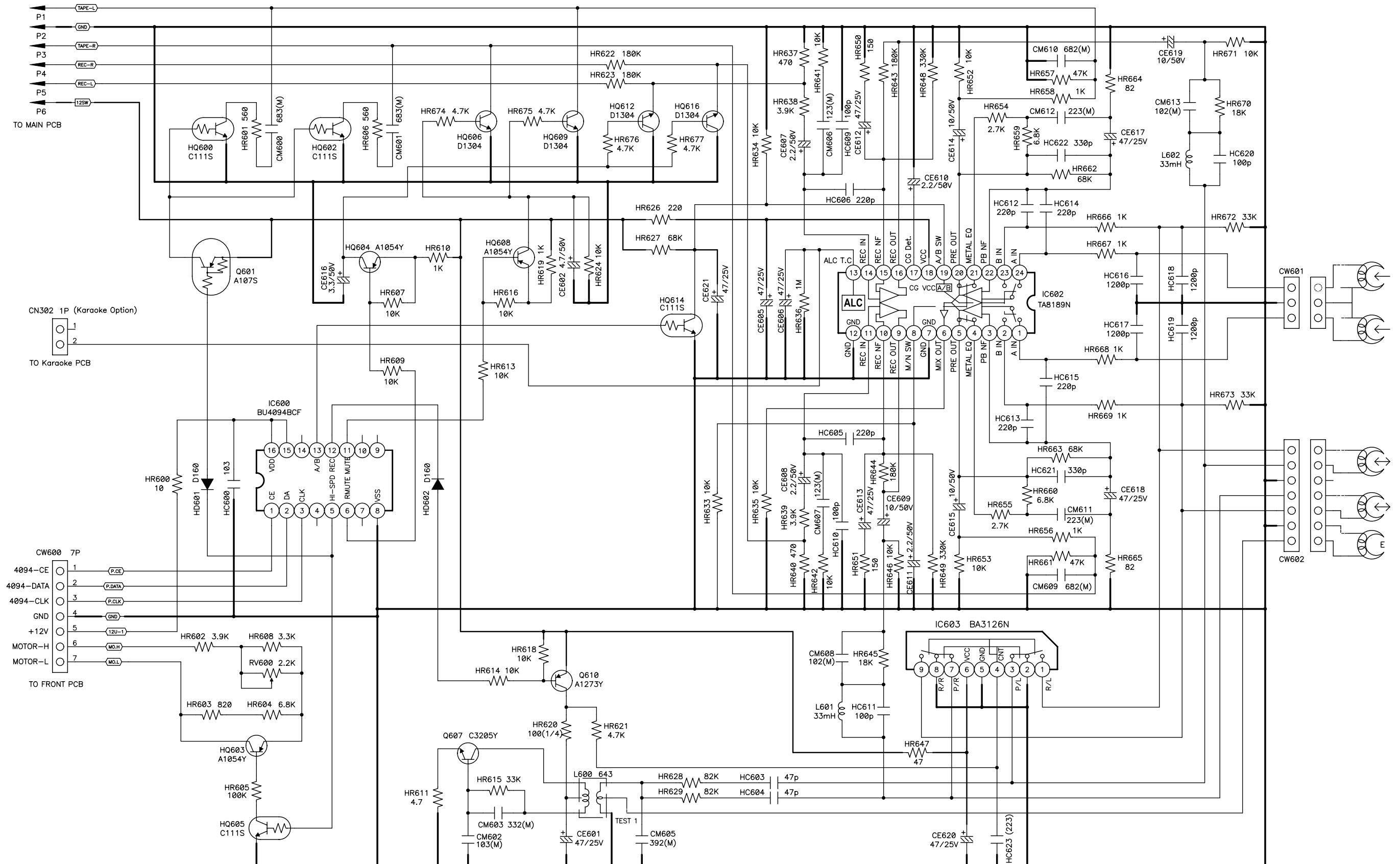
BASIC : FM

● **TAPE Section : XG-332V Model only**



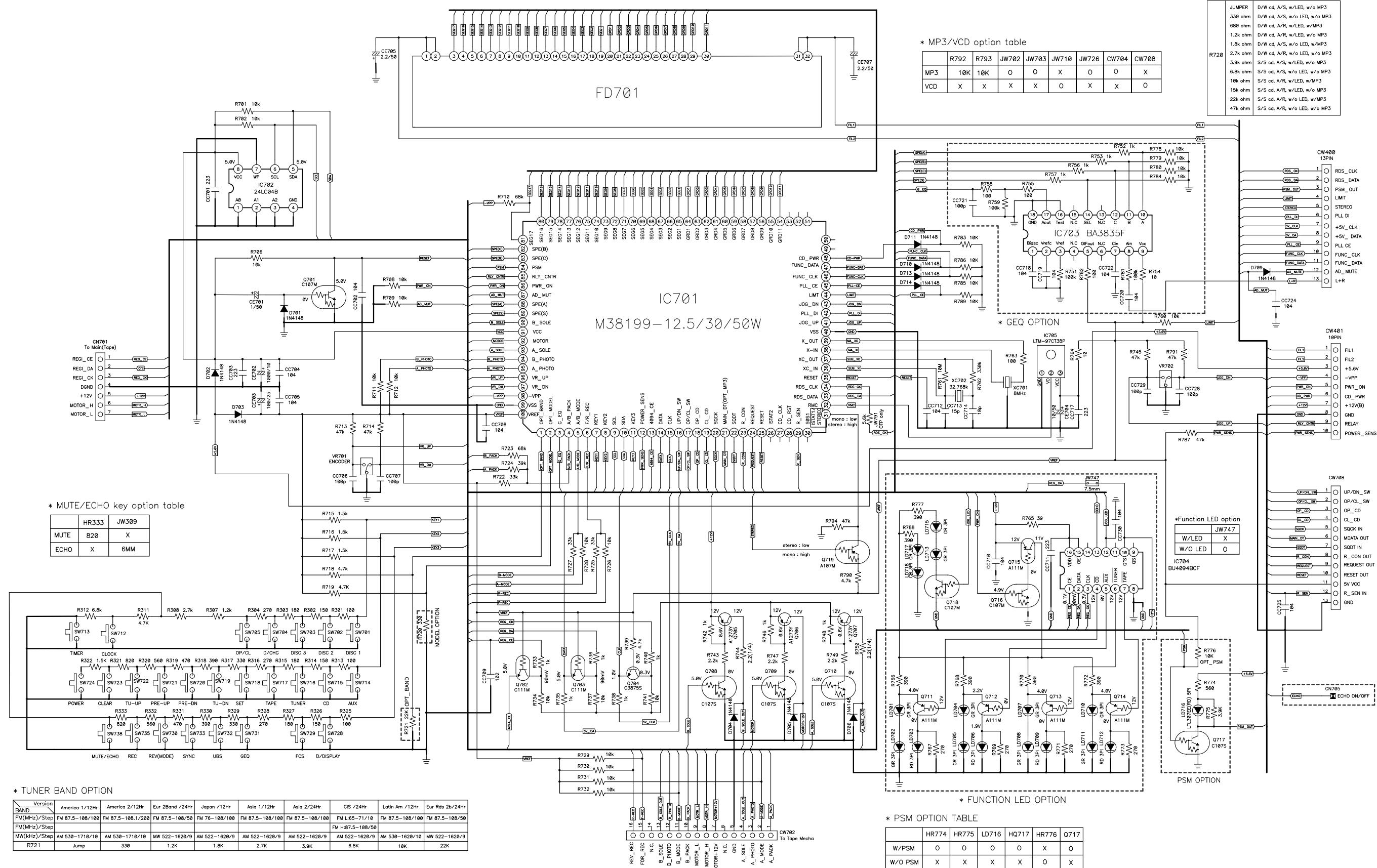
Schematic Diagram

● TAPE Section : XG-334V[K]/335V[K]/336V[K] Models only



Schematic Diagram

FRONT Section

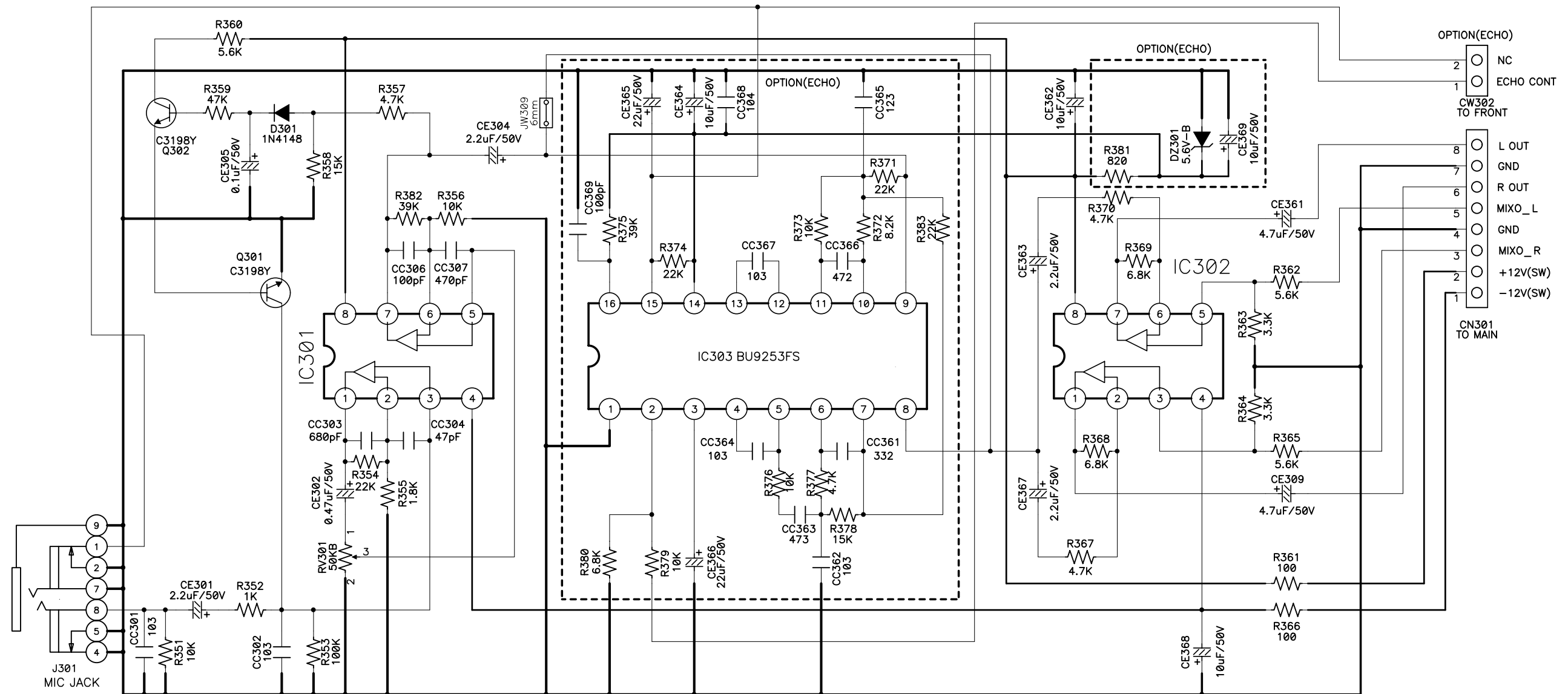


● MP3/VCD Section



Schematic Diagram

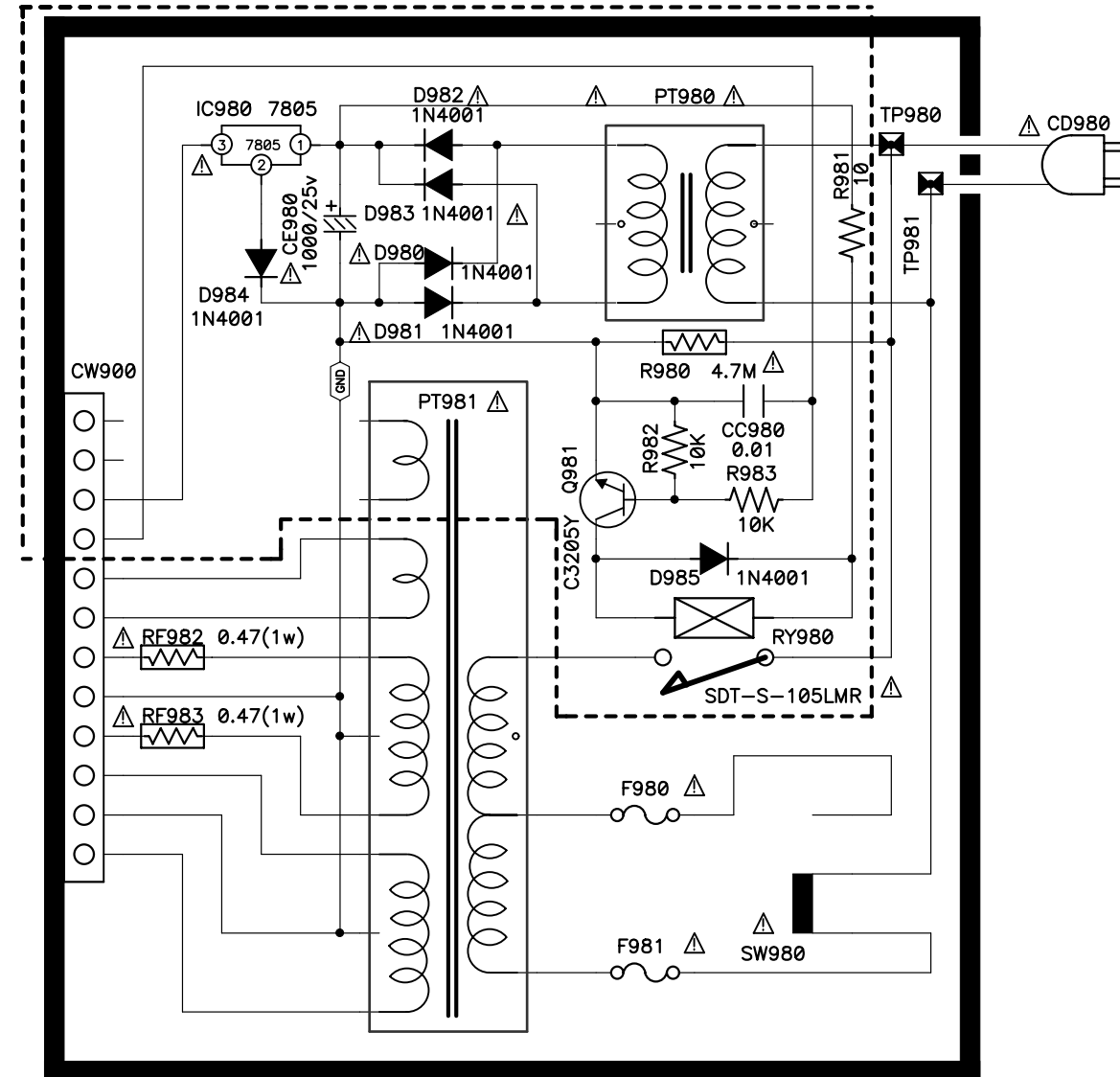
● KARAOKE Section : XG-334VK/335VK/336VK Karaoke Models only



Schematic Diagram

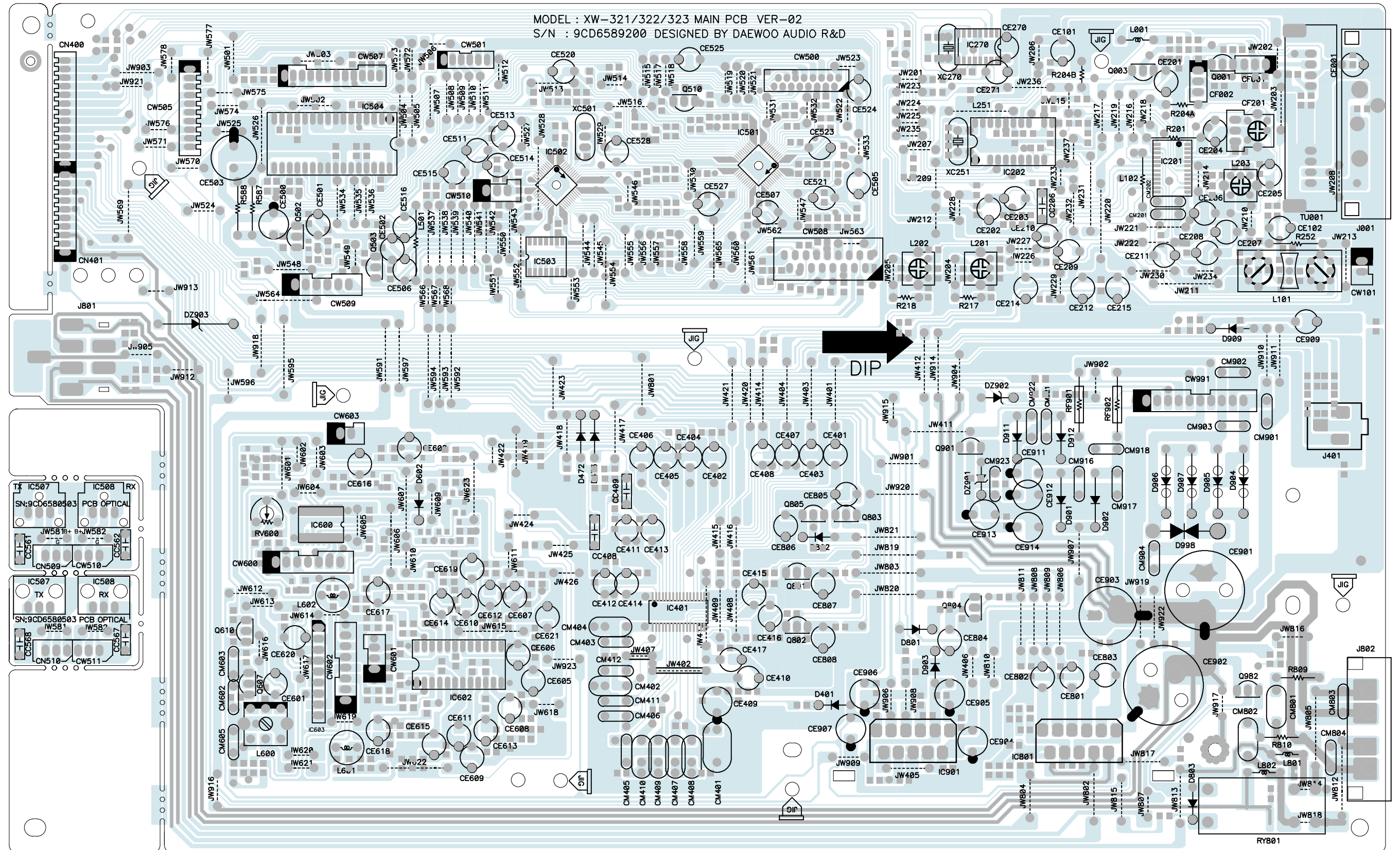
● POWER Section : XG-334V[K]/335V[K]/336V[K] Models only

POWER SAVE MODE OPTION



P.C.B Pattern Layout

● MAIN <Top View> : XG-332V Model only

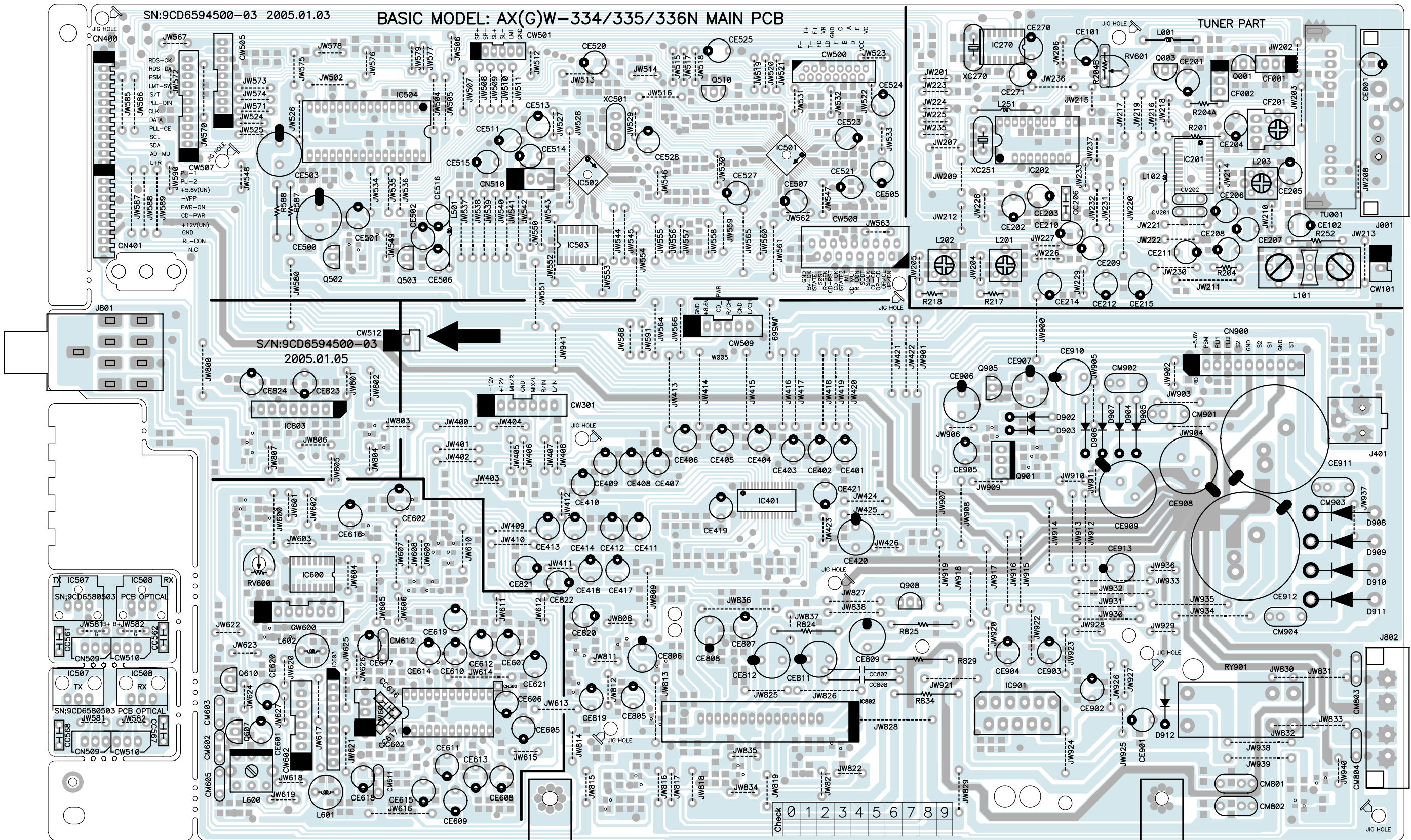


● MAIN <Bottom View> : XG-332V Model only



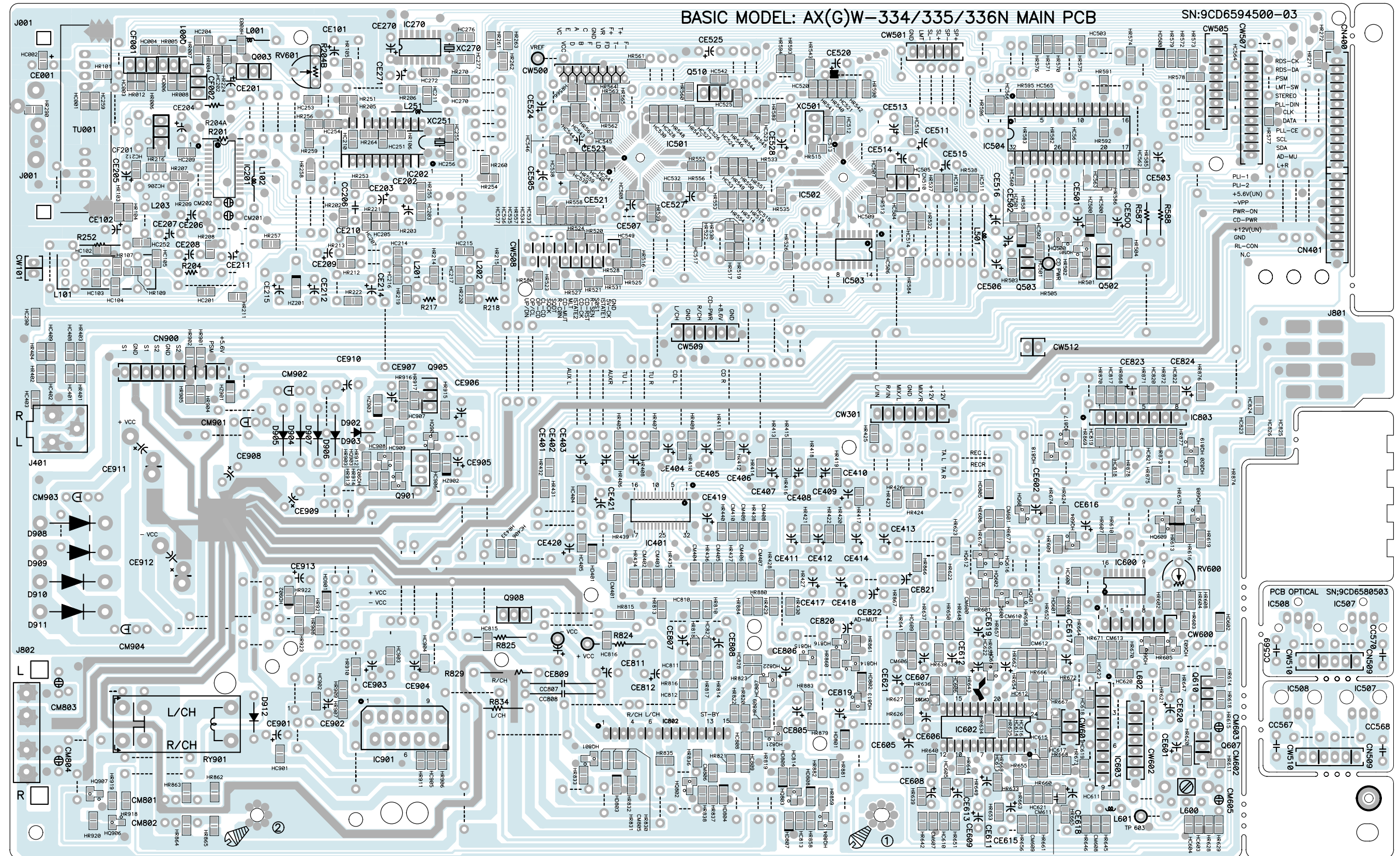
P.C.B Pattern Layout

● MAIN <Top View> : XG-334V[K]/335V[K]/336V[K] Models only



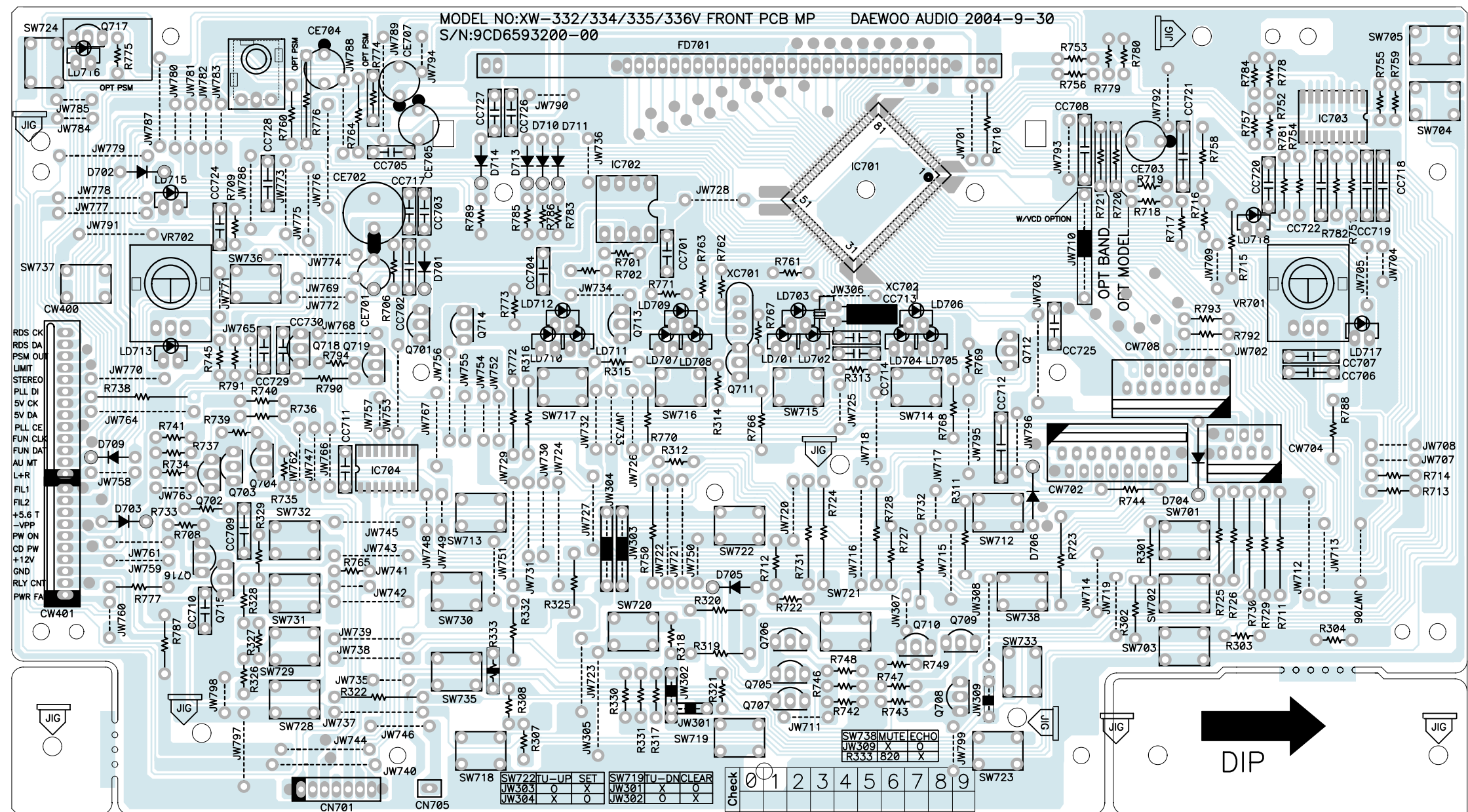
P.C.B Pattern Layout

- MAIN <Bottom View> : XG-334V[K]/335V[K]/336V[K] Models only



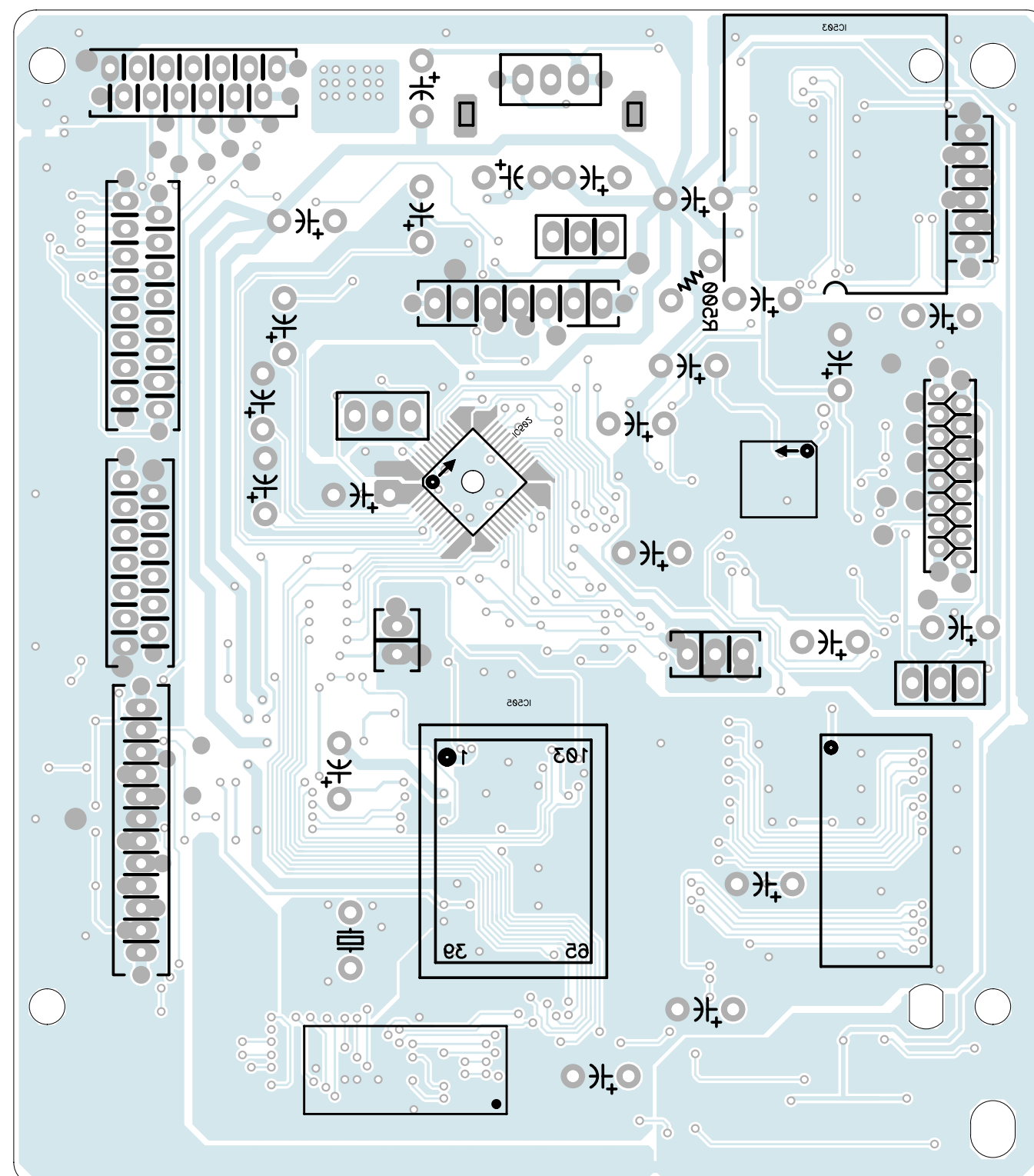
P.C.B Pattern Layout

● FRONT

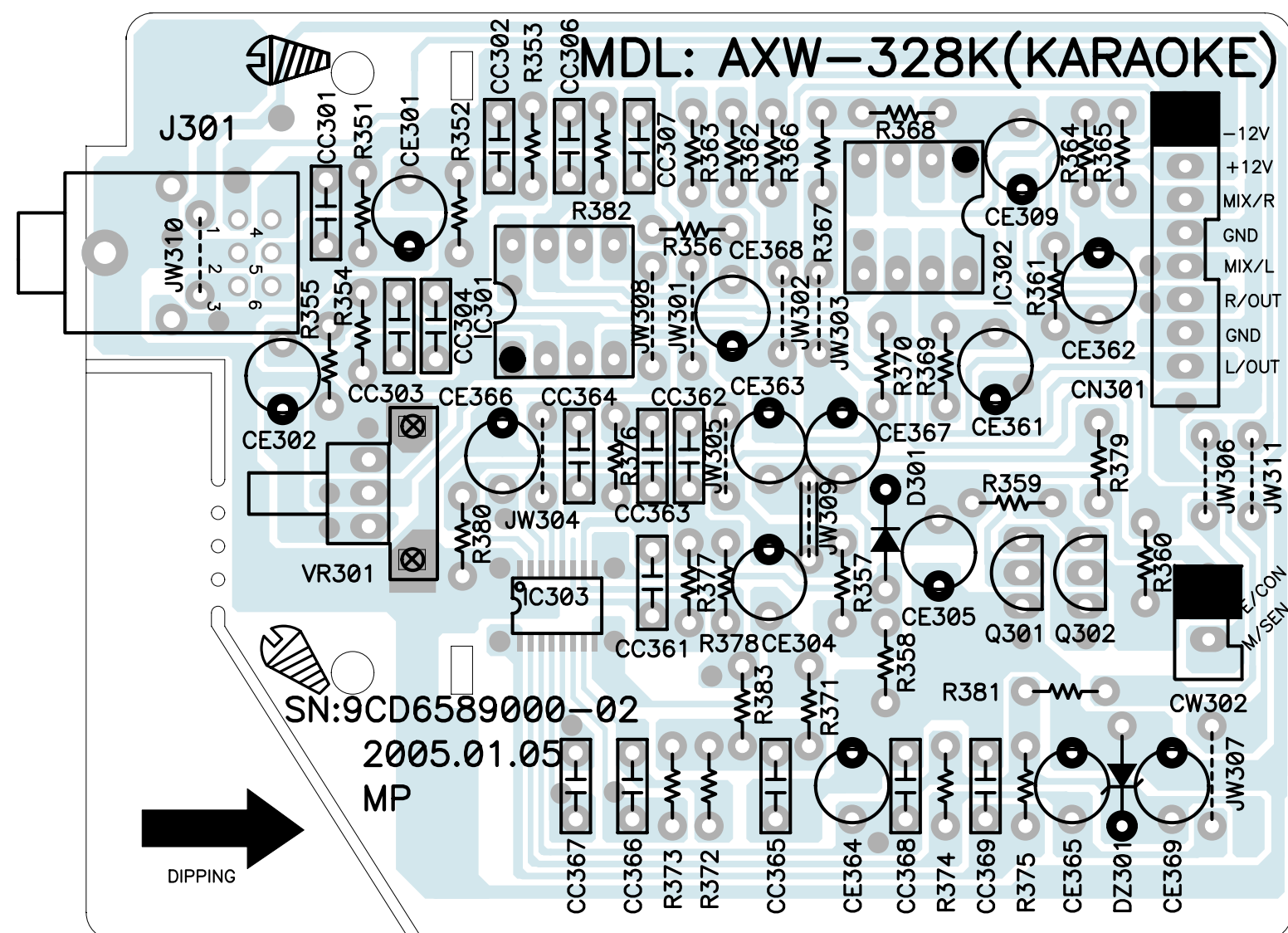


● **MP3/VCD**

<Bottom View>

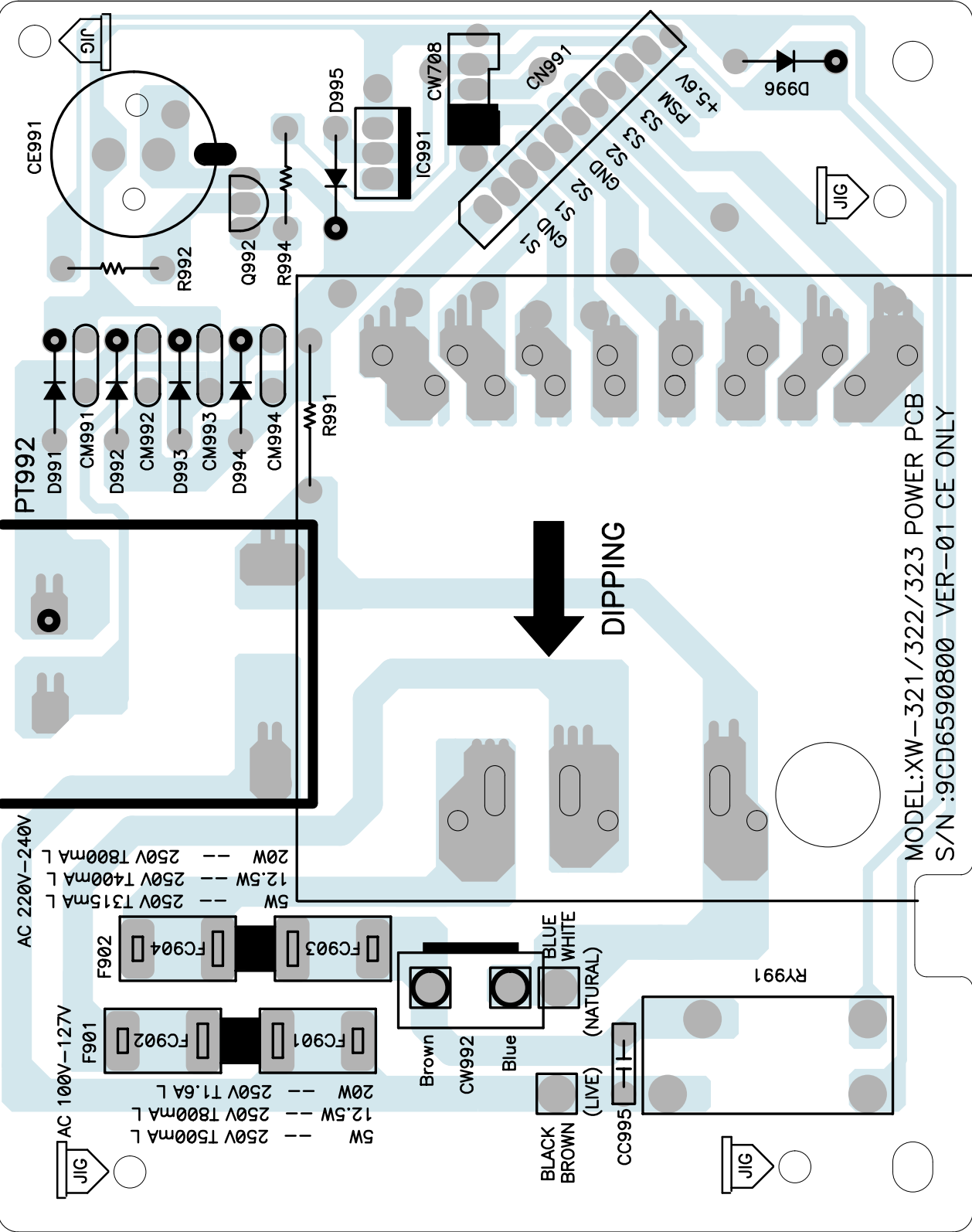


- **KARAOKE** : Karaoke Model Only - XG-334V[K]/335V[K]/336V[K]

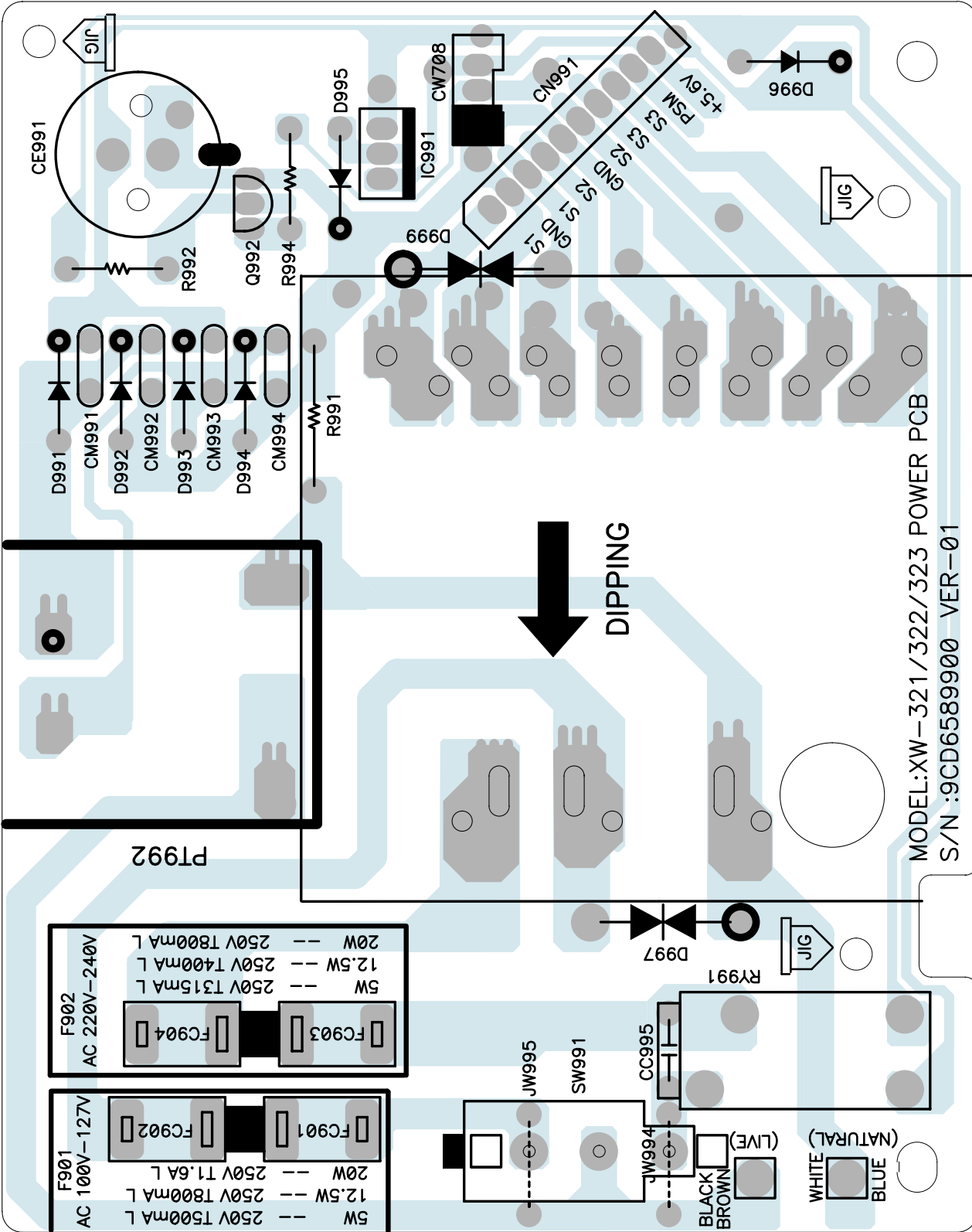


P.C.B Pattern Layout

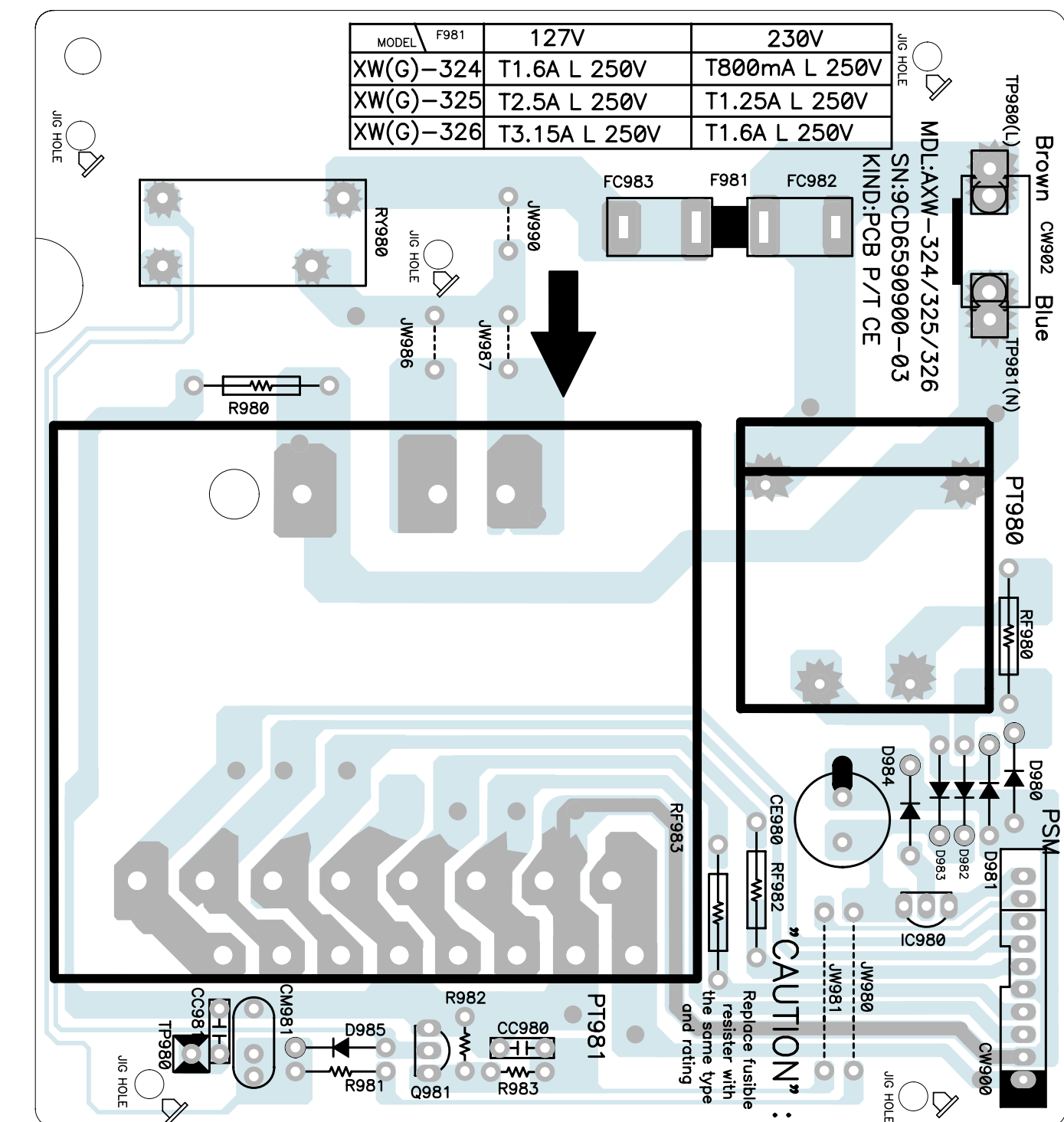
● POWER : XG-332V, CE Region only



● POWER : XG-332V, Other Region only



- **POWER : XG-324V[K]/325V[K]/326V[K], CE Region only**



- **POWER** : XG-324V[K]/325V[K]/326V[K], Other Region only

