



SERVICE MANUAL

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MODEL: C375BEE

SERVICE MANUAL

C375BEE C/AH

STEREO INTEGRATED AMPLIFIER

C375BEE C / A H
STEREO INTEGRATED AMPLIFIER



C375BEE C / A H
STEREO INTEGRATED AMPLIFIER

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NAD ELECTRONICS INTERNATIONAL
TORONTO




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SERVICE SAFETY PRECAUTIONS

1. Replacing the Fuses

CAUTION: FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

REFERENCE NO.	PART NUMBER	DESCRIPTION
Rear Panel		
AH 	A20-12103-00	Littelfuse618 T10AL/250V
C 	A20-12702-20	Littelfuse618 T5AL/250V
STANDBY Board		
F401 	A20-12102-00	Littelfuse618 T1AL/250V


NOTE:

*AH : North American version only

*C : European version only

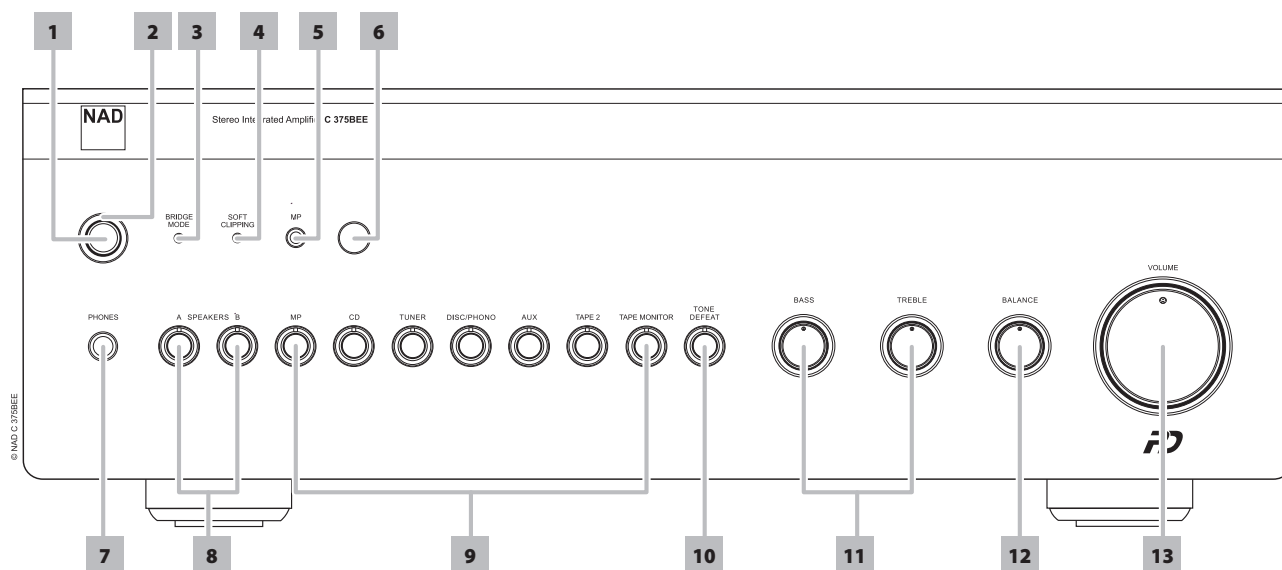
2. Safety-check out (North American model only)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit.

Parts marked with the symbol  are critical with regard to the risk of fire and electric shock. Replace only parts recommended by the manufacturer.

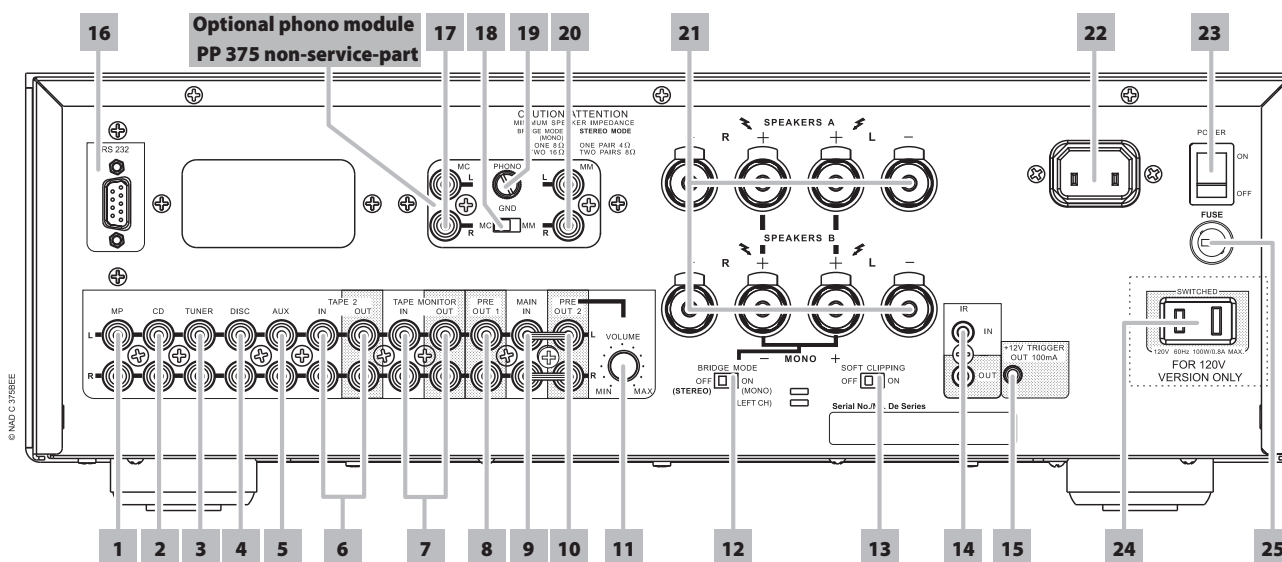
FRONT PANEL / REAR PANEL VIEW

FRONT PANEL CONTROLS



- | | | | |
|---|-------------------------|----|-----------------|
| 1 | STANDBY | 8 | SPEAKERS A, B |
| 2 | STANDBY LED | 9 | INPUT SELECTORS |
| 3 | BRIDGE MODE INDICATOR | 10 | TONE DEFEAT |
| 4 | SOFT CLIPPING INDICATOR | 11 | TONE CONTROLS |
| 5 | MP SOCKET | 12 | BALANCE |
| 6 | REMOTE SENSOR | 13 | VOLUME |
| 7 | PHONES | | |

REAR PANEL CONTROLS



- | | | | |
|----|---------------------|----|--|
| 1 | MP input | 14 | IR IN/OUT |
| 2 | CD INPUT | 15 | +12V TRIGGER OUT |
| 3 | TUNER INPUT | 16 | RS-232 |
| 4 | DISC INPUT | 17 | MC INPUT |
| 5 | AUX INPUT | 18 | MC-MM SWITCH |
| 6 | TAPE 2 IN/OUT | 19 | PHONO GROUND CONNECTOR |
| 7 | TAPE MONITOR IN/OUT | 20 | MM INPUT |
| 8 | PRE OUT 1 | 21 | SPEAKERS A, B |
| 9 | MAIN IN | 22 | AC MAINS INPUT |
| 10 | PRE OUT 2 | 23 | POWER SWITCH |
| 11 | VOLUME PRE OUT 2 | 24 | SWITCHED AC OUTLET (120V version only) |
| 12 | BRIDGE MODE | 25 | FUSE HOLDER |
| 13 | SOFT CLIPPING™ | | |

SPECIFICATIONS

PREAMPLIFIERS SECTION

THD(2V in 2V out,CCIF IMD,DIM 100)	< 0.004 %
Signal/Noise IHF re 500mV output A wtd.	> 102 dB
S/N re 2V output, max volume	> 110 dB
S/N re 100mV o/p (unity gain)	> 92 dB
Channel separation 1KHz	> 80 dB
10KHz	> 70 dB
Input impedance	100kohms+320pF
Max input, 0.1% thd	> 8 V rms
Output impedance pre out	75 ohms
Output impedance variable out	< 325 ohms
Output impedance tape out	source Z + 1k ohms
Input sensitivity for 500mV out	158 mV
Frequency response 20-20k tone defeat on	< +/- 0.1dB
tone defeat off	< +/- 0.5 dB
Max output (0.03% thd) IHF load	> 10 V
Max output 600 ohm,s load	> 10V
Tone controls Bass at 100Hz	+/- 8 dB
Treble at 10KHz	+/- 5dB

POWER AMPLIFIERS SECTION

Continuous average power , stereo,8 and 4 ohms at rated thd ,20-20k	> 150W
Continuous average power 8 ohms , bridge mode	> 330W
Rated thd, 20-20k, SMPTE and CCIF IMD, DIM 100	< 0.009%
Clipping power (1% thd at 1kHz)	>170W
IHF dynamic power 8 ohms	>250W
IHF dynamic power 4 ohms	>410W
IHF dynamic power 2 ohms	>600W
IHF dynamic power 8 ohms(Bridge Mode)	>800W
IHF dynamic power 4 ohms(Bridge Mode)	>1200W
Peak output current 1msec, 1 ohm	> 50A
S/N A wtd re 1 W	>102 dB
S/N A Wtd re 150W	>123 dB
Damping factor (re 8 ohms, 50 Hz and 1kHz)	> 200
Frequency response 20-20k	< +/- 0.1 dB
Frequency response - 3dB	3Hz – 70 kHz
Input impedance	10kohms+200pF
Input sensitivity for rated power	1.2 V
Voltage gain	29dB
Headphone output impedance	270 ohms
Channel separation. 1kHz	> 85 dB
10kHz	> 75 dB
Trigger out	
Output resistance	< 120 ohms
Output current	50mA
Output voltage	+12V

OVERALL CD In Speaker Out

THD 20-20k, CCIF IMD, DIM 100 , 0.25W to rated power	< 0.009%
S/N A wtd re 1 W	> 94dB
S/N A wtd re 150W (volume set for 2V input)	> 113 dB
Frequency response 20-20k Tone defeat in	< +/- 0.2 dB
Frequency response -3dB	10 - 65kHz
Channel separation 1KHz	> 80 dB
10KHz	> 70 dB
Rated power (230 or 120 V AC 50.60 Hz)	290 W
Standby power	<1W
Idle power	<120W
Net weight	15.3 kg
Shipping weight	18 kg
Dimensions	435x133x352 mm

ALIGNMENT PROCEDURE

A. DC OFFSET VOLTAGE

The DC OFFSET between OFFSET Test Point and AGND must be within 0+/-20mV.

B. IDLING CURRENT

The idling current in the output stage of the poweramp should be set to 30mA+/-5mA per pnp-npn transistor pair (This means the mid point voltage is 6.6mV with down limit of 5.5mV and up limit of 7.7mV). The alignment procedure is: At first, adjust RV102 (Marked as "Idling Current ADJ" in the drawing page 6) for a voltage of 6.6mV +/- 1mV between Test point 1 and 2. Then preheat the unit for 1 minutes, let idling current settled and then readjust to 6.6mV +/- 1mV. This is a no-load adjustment.

Pls note: Though the idling current is set as 6.6mV +/-1mV during the adjustment, due to the influence of varied ambient temperature and mains voltage etc., the idling current will drift after some time. During the normal checking of idling current in the service field, it's acceptable as long as the voltage is in the range of 5.5mV—7.7mV.

C. ISC SENSITIVITY

The ISC sensing voltage can allow 0mV+/-50mV. But, for the alignment process in our factory, we tighten the limit to 0mV+/-10mV. That is to adjust Pot RV103 (as marked as "ISC SENS ADJ" in the drawing page 6) to get a voltage between the "ISC SENSE TEST POINT" and AGND to be 0mV+/-10mV.

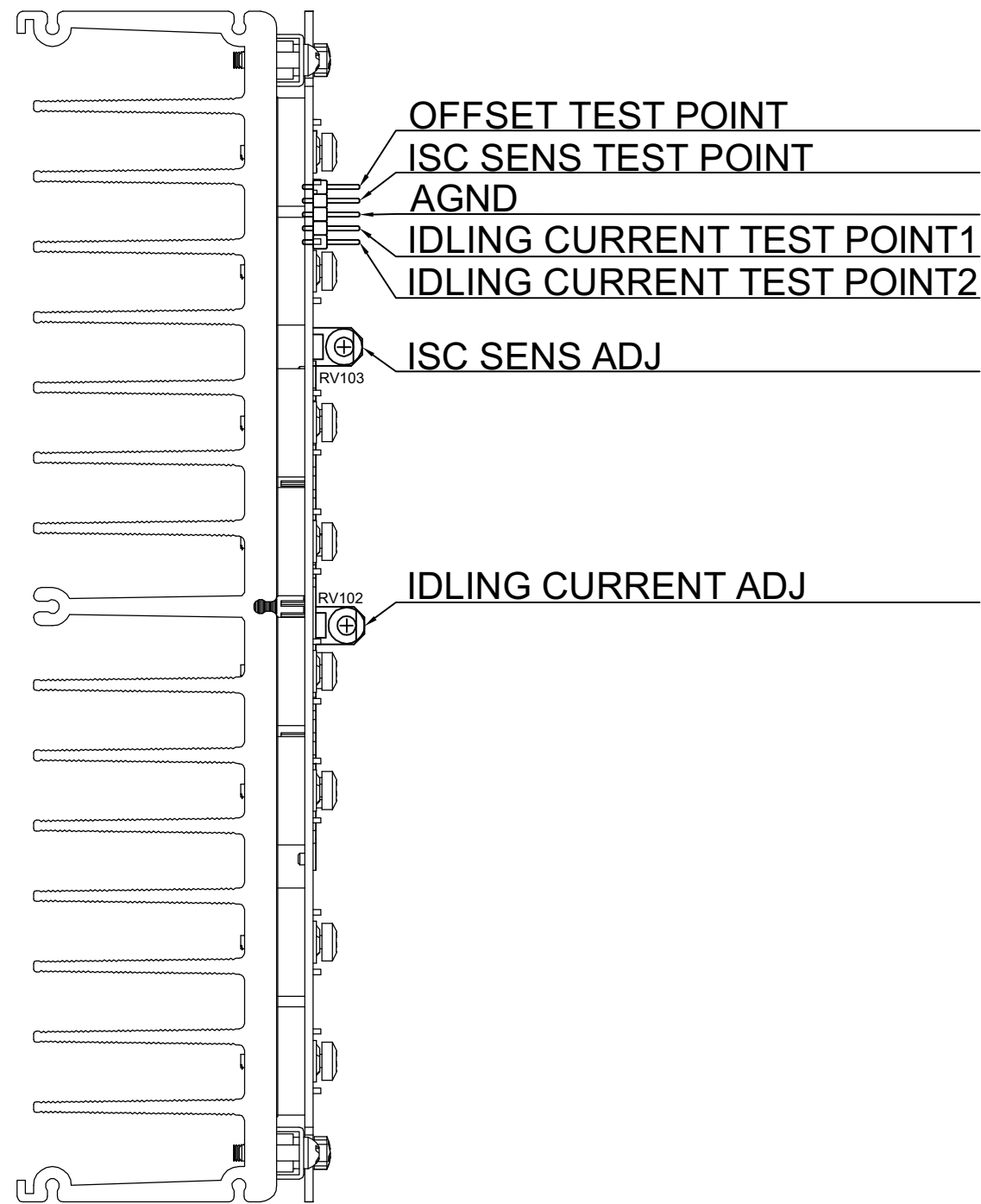
D. MINIMUM VOLUME LEAKAGE CANCELLATION

The volume control, 20k potentiometer has a finite end stop resistance, variable and about 7 ohms max, so at minimum volume there is some signal leakage to pre out, appearing 29 dB higher at poweramp out. The cancellation circuit applies a fraction of the signal to the negative input of the line out amp to cancel this leakage. The alignment procedure is: feed 1KHz/2V signal in CD. Set volume for 10V speaker out as 0 dB reference. Then set vol to minimum. Adjust RV307 (Marked as "LEFT MIN. LEAKAGE ADJ" in the drawing page 7) for a minimum at left speaker out, the reading should be < -86 dB, or 0.5mV. Adjust RV308 (Marked as "RIGHT MIN. LEAKAGE ADJ" in the drawing page 7) for a voltage minimum at right preout, the reading should be < -86 dB or 0.5 mV.

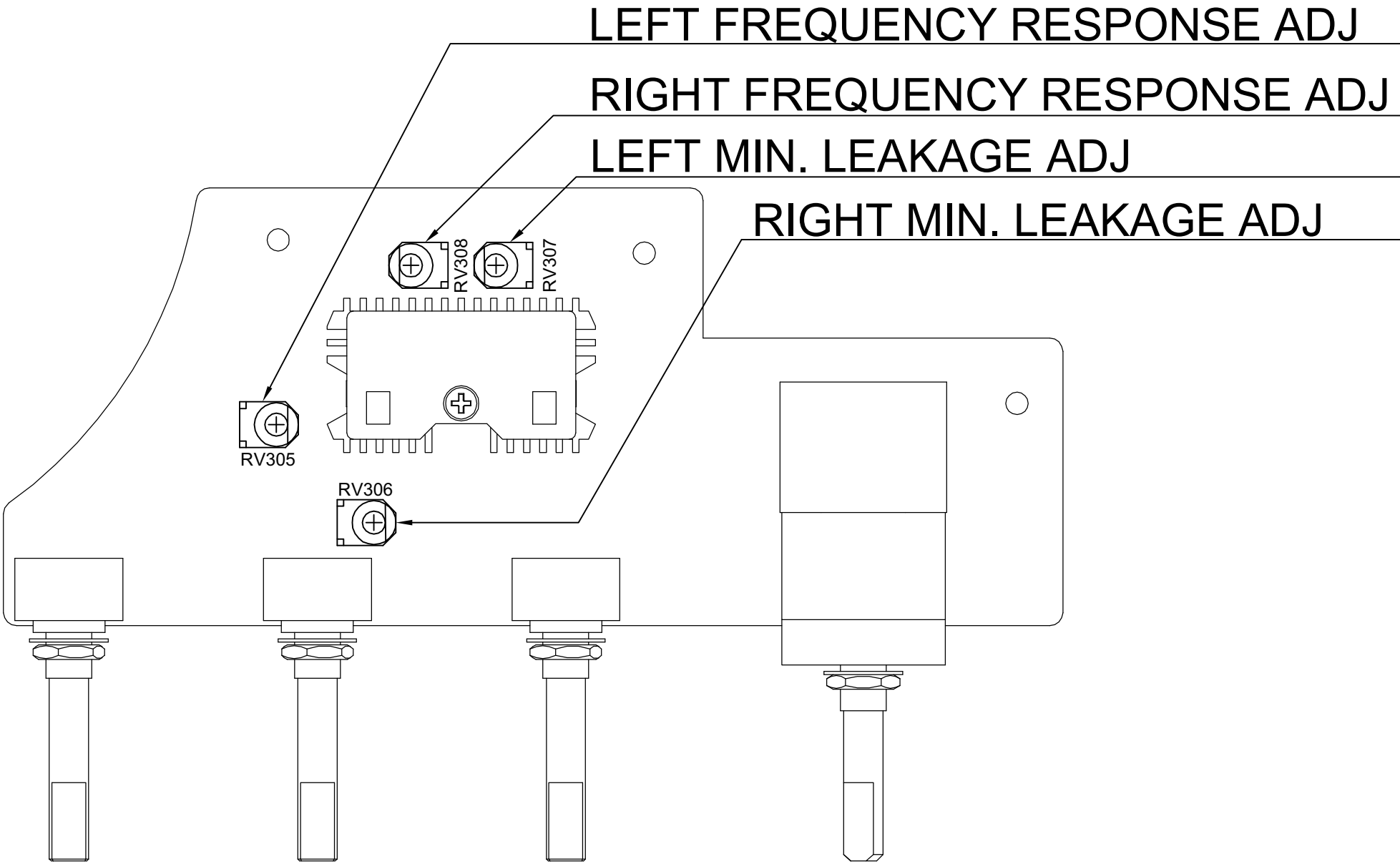
E. FREQUENCY RESPONSE

The frequency response should be set to 0+/-0.3dB. The alignment procedure is: Disable tone defaet first, feed 1KHz/2V to CD, Adjust Preout to 500mV as 0dB reference level. Change to 20Hz and set RV305 (Marked as "LEFT FREQUENCY RESPONSE ADJ" in the drawing on page 7) to within +/-0.1dB. Then repeate the above for the RHC, adjust RV306 (Marked as "RIGHT FREQUENCY RESPONSE ADJ" in the drawing below) to within +/-0.1dB.

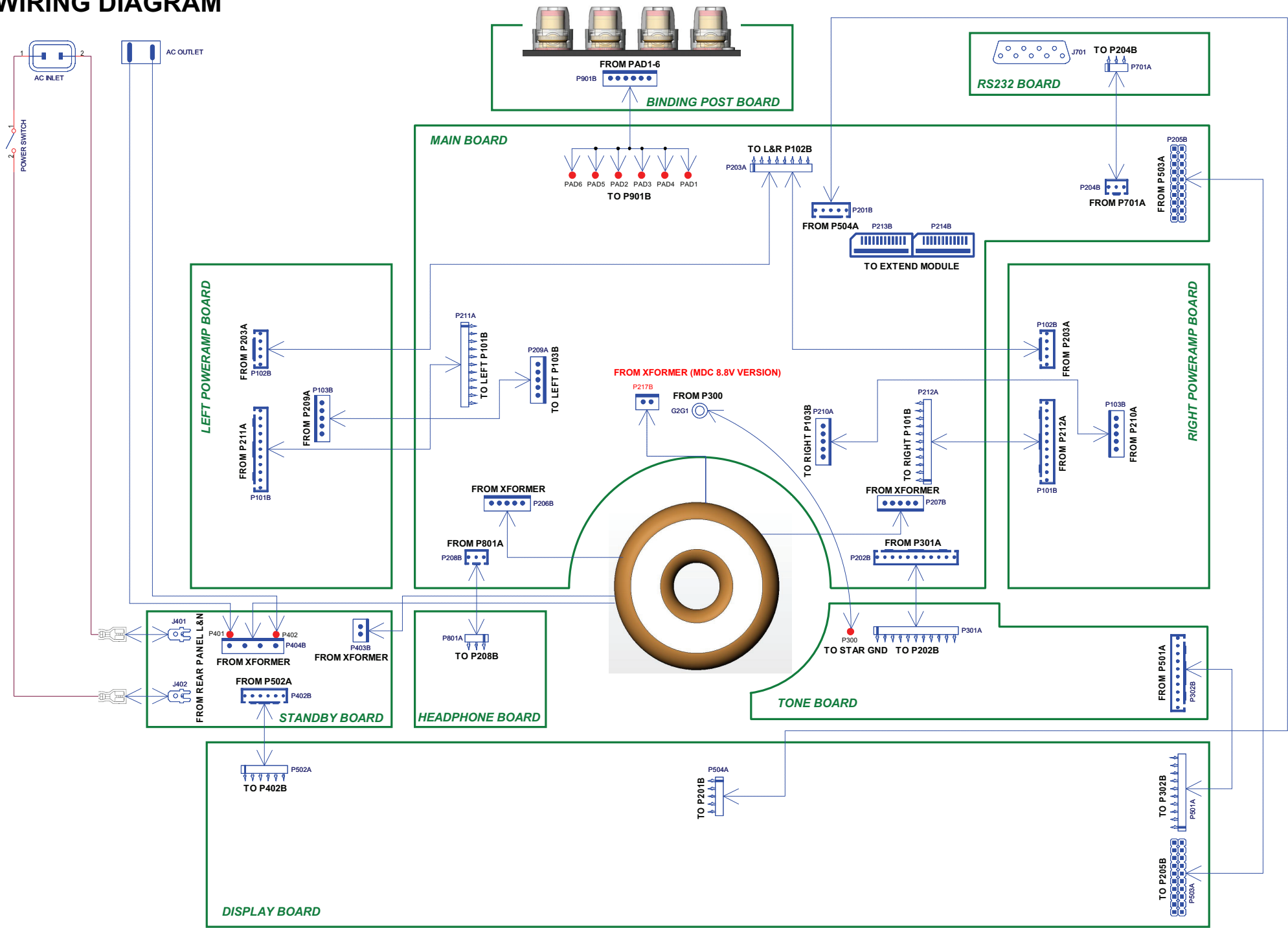
ALIGNMENT PROCEDURE



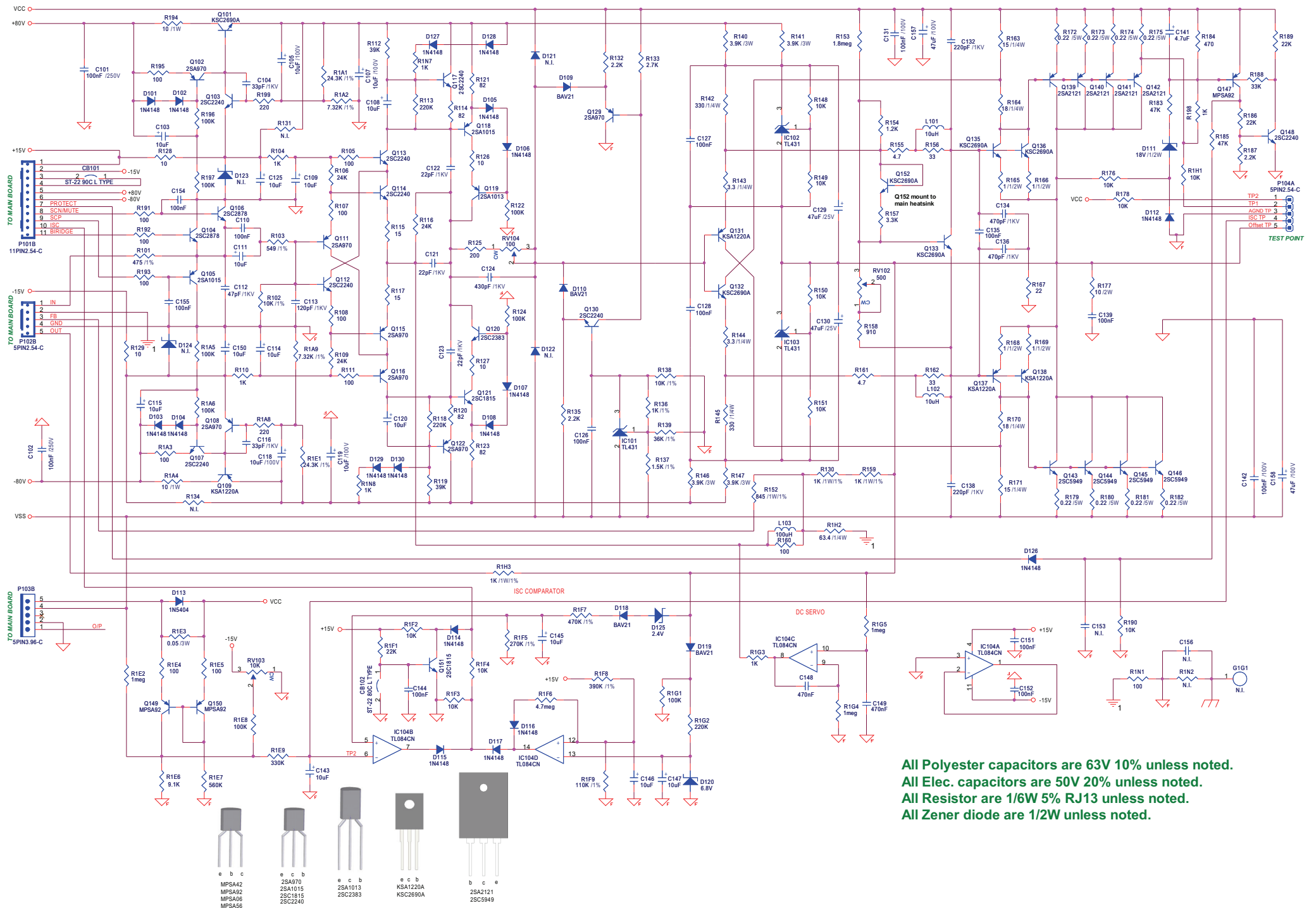
ALIGNMENT PROCEDURE

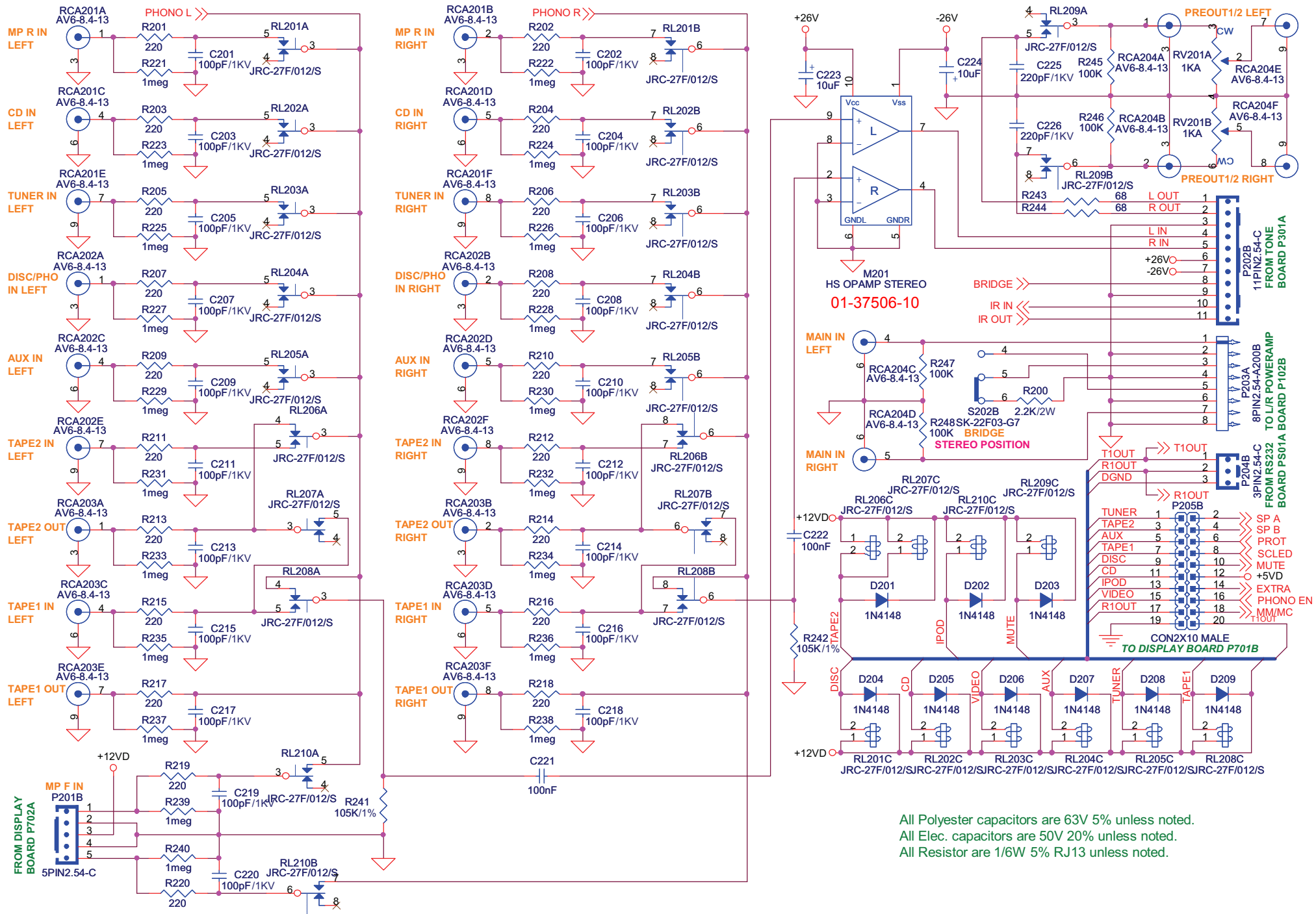


WIRING DIAGRAM



SCHEMATICS DIAGRAM POWER AMP SECTION





FROM MAIN TRANSFORMER

5PIN3.96-C

HS205
70-004003-1
FOR Q206&Q216

Q216
IRF5210

D222
15V

R2E5
100

R2E6
2.2K

D226
1N4007

C276
100nF

C277
1000uF

D224
1N4007

D225
1N4007

+18V

BR201
KBUD8

C227
10nF /250V

BR202
KBUD8

C228
10nF /250V

Q203
MPSA92

R250
22K

R252
1K

R256
1K

TH201
BT151-500R

C229
10uF /100V

C230
10uF /100V

TH202
BT151-500R

C231
100nF /100V

C232
100nF /100V

C233
2200uF /100V

C234
2200uF /100V

HS201
70-004003-1
FOR BR201&TH201

HS202
70-004003-1
FOR BR202&TH202

Q201
2SC1815

R249
10K

R251
22K

R253
1K

Q204
MPSA42

R254
1K

R257
100

HS203
70-004003-1
FOR IC201&IC202

HS204
70-004003-1
FOR IC203&IC204

5PIN3.96-AxxB

P209A

VCC

L.O.P

5PIN3.96-AxxB

P210A

VSS

R.O.P

5PIN3.96-AxxB

FROM MAIN TRANSFORMER

5PIN3.96-C

D210
1N4007

C239
10nF /250V

BR203
DB104G

C240
10nF /250V

BR204
DB104G

D227
1N4007

C241
2200uF /63V

C242
2200uF /63V

C243
100nF

R262
220K

G2G1

R267
220K

C259
1uF /100V

C278
10uF

D228
1N4148

IC201
NJM317F

R260
240 /1%

D220
1N4148

C249
100nF

R2E1
2.6K /1%

R2E2
240 /1%

C251
10uF

C253
100nF

C254
100nF

C255
1000uF /160V

C257
100nF /250V

IC202
LM337T

R261
240 /1%

IC203
NJM317F

R2E3
2.6K /1%

R2E4
240 /1%

C252
10uF

C254
100nF

C255
1000uF /160V

C257
100nF /250V

IC204
LM337T

R2E1
2.6K /1%

R2E2
240 /1%

C251
10uF

C253
100nF

C254
100nF

C255
1000uF /160V

C257
100nF /250V

TO HEADPHONE BOARD

P208B

3PIN2.54-C

PAD1

Solder Pad PAD2

Solder Pad PAD3

Solder Pad PAD4

Solder Pad PAD5

Solder Pad PAD6

Solder Pad

IC205
HS1237

R263
4.7K

R264
N.I.

C260
100uF /16V

C261
330uF /16V

C262
220nF

R265
56K

R266
56K

R267
24.9K /1%

R269
1K /1%

R270
1K /1%

R271
1K /1%

R272
1K /1%

R273
2.2K

R274
150K

R276
82K

R277
150K

R279
100

R2A1
1K

Q205
2SC1815

D214
1N4148

SK-22F03-G7
BRIDGE
STEREO POSITION

S201

S202A

C263
10uF

C264
10uF

D213
24V /1/2W

R268
24.9K /1%

L201
1uH

R282
3.3 /1W

L202
1uH

R283
3.3 /1W

RL215A

JRC-27F/036/S

RL215B

JRC-27F/036/S

RL211A

JQX-115F/036/1HS1

RL212A

JQX-115F/036/1HS1

RL213A

JQX-115F/036/1HS1

RL214A

JQX-115F/036/1HS1

RL215C

JRC-27F/036/S

RL211B

JQX-115F/036/1HS1

RL212B

JQX-115F/036/1HS1

RL214B

JQX-115F/036/1HS1

Q206
2SC4793

Q207
2SC1815

R288
4.99K /1%

R289
4.7K /1%

R291
4.7K

D211
1N4148

Q208
2SA1015

Q209
2SC1815

Q210
2SC1815

Q211
2SC1815

Q212
2SC1815

Q213
2SC1815

Q214
KSC2690

Q215
2SC1815

R284
270 /2W

R285
6.8K

R286
10 /1/4W

R287
10

R288
1K

R289
4.7K

R290
10K

R291
1K

R292
10K

R293
180 /2W

R294
820

R295
10K

R296
10K

R297
1K

R298
33

R299
1K

R300
10K

R301
10K

R302
10K

R303
10K

R304
10K

R305
10K

R306
10K

R307
10K

R308
10K

R309
10K

R310
10K

R311
10K

R312
10K

R313
10K

R314
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R315
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R316
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R317
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R318
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R319
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R320
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R321
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R322
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R357
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R358
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R359
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R360
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R361
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R362
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R363
10K

R364
10K

R365
10K

R366
10K

R367
10K

R368
10K

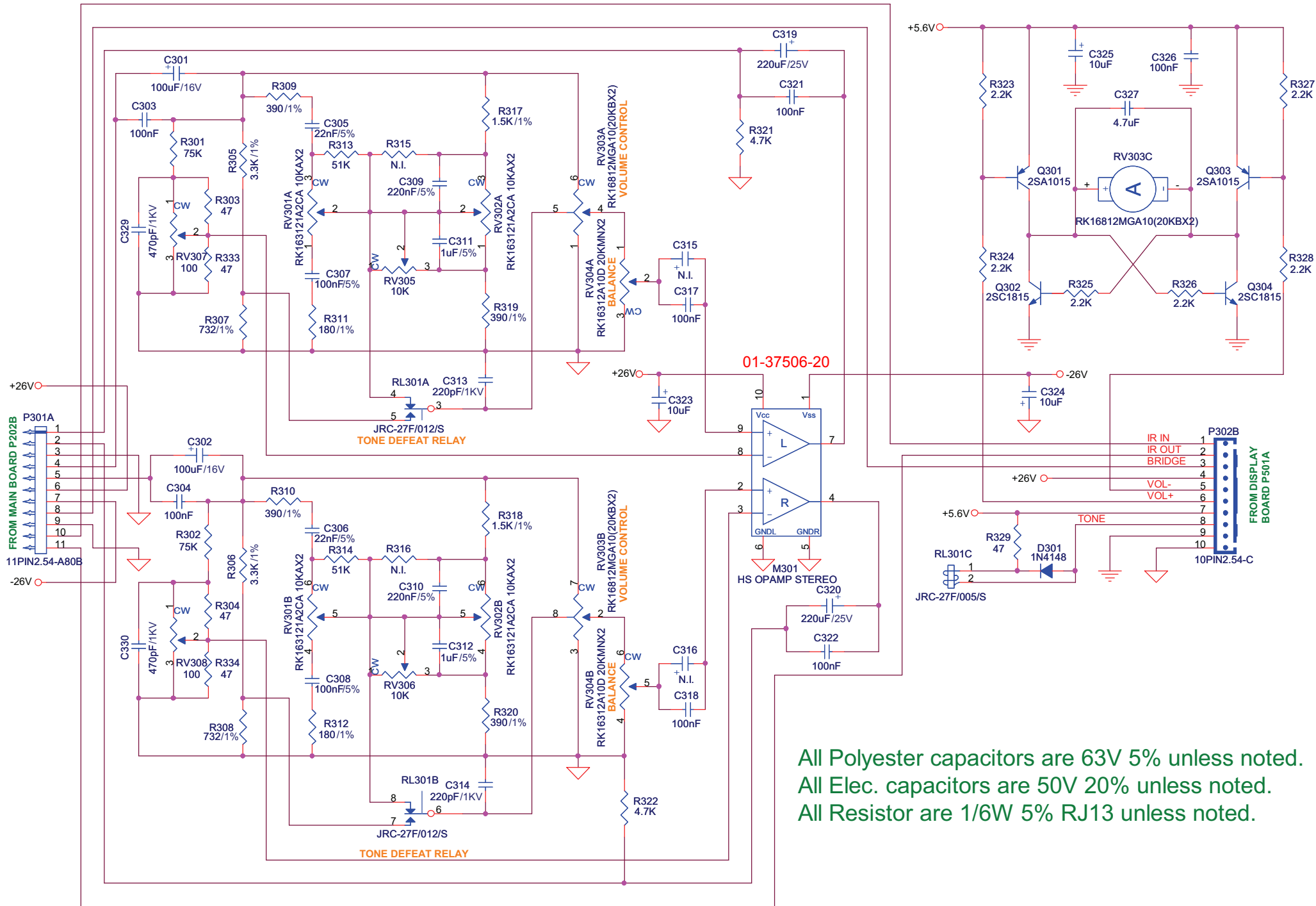
R369
10K

R370
10K

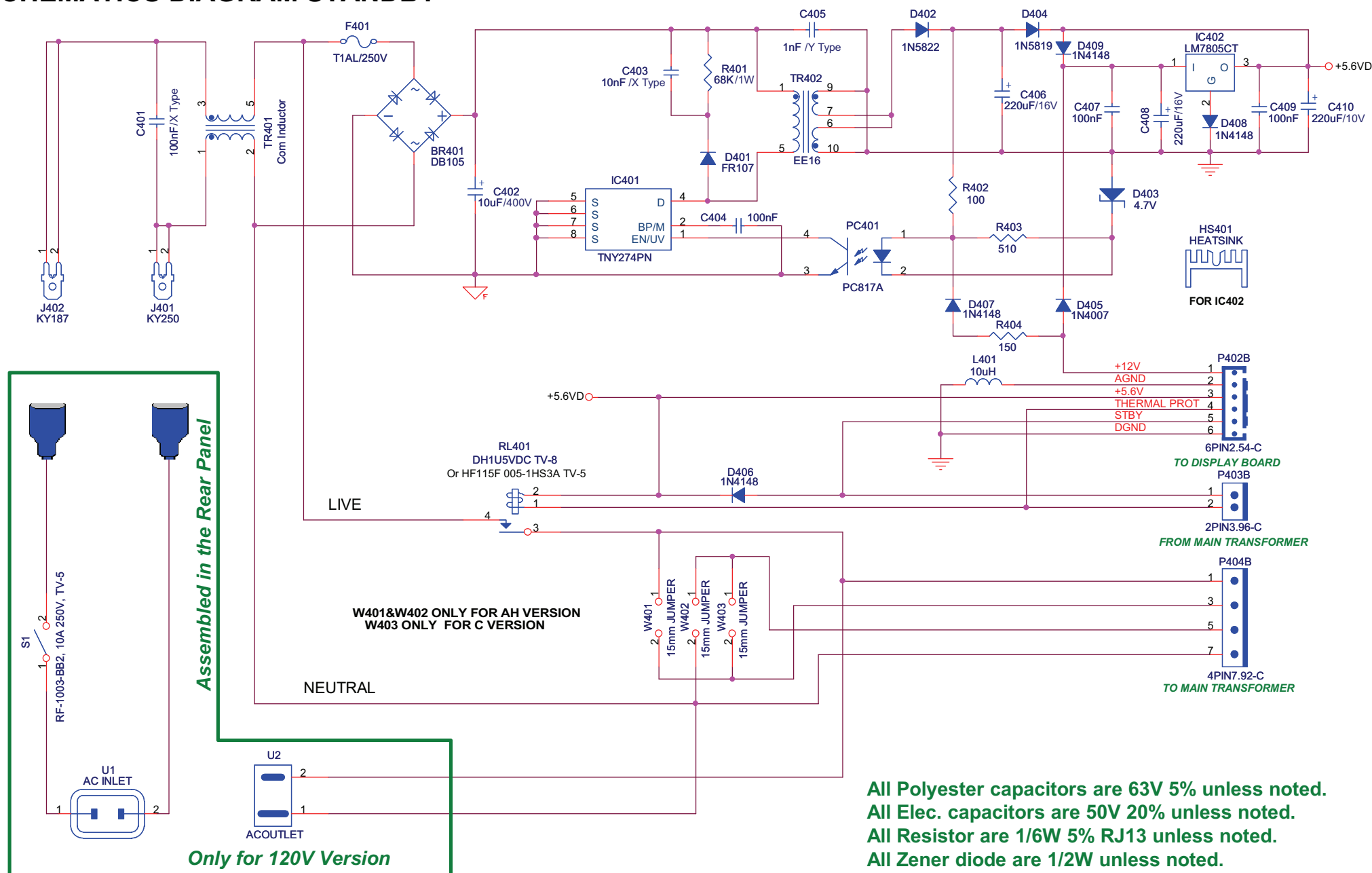
R371
10K

R372

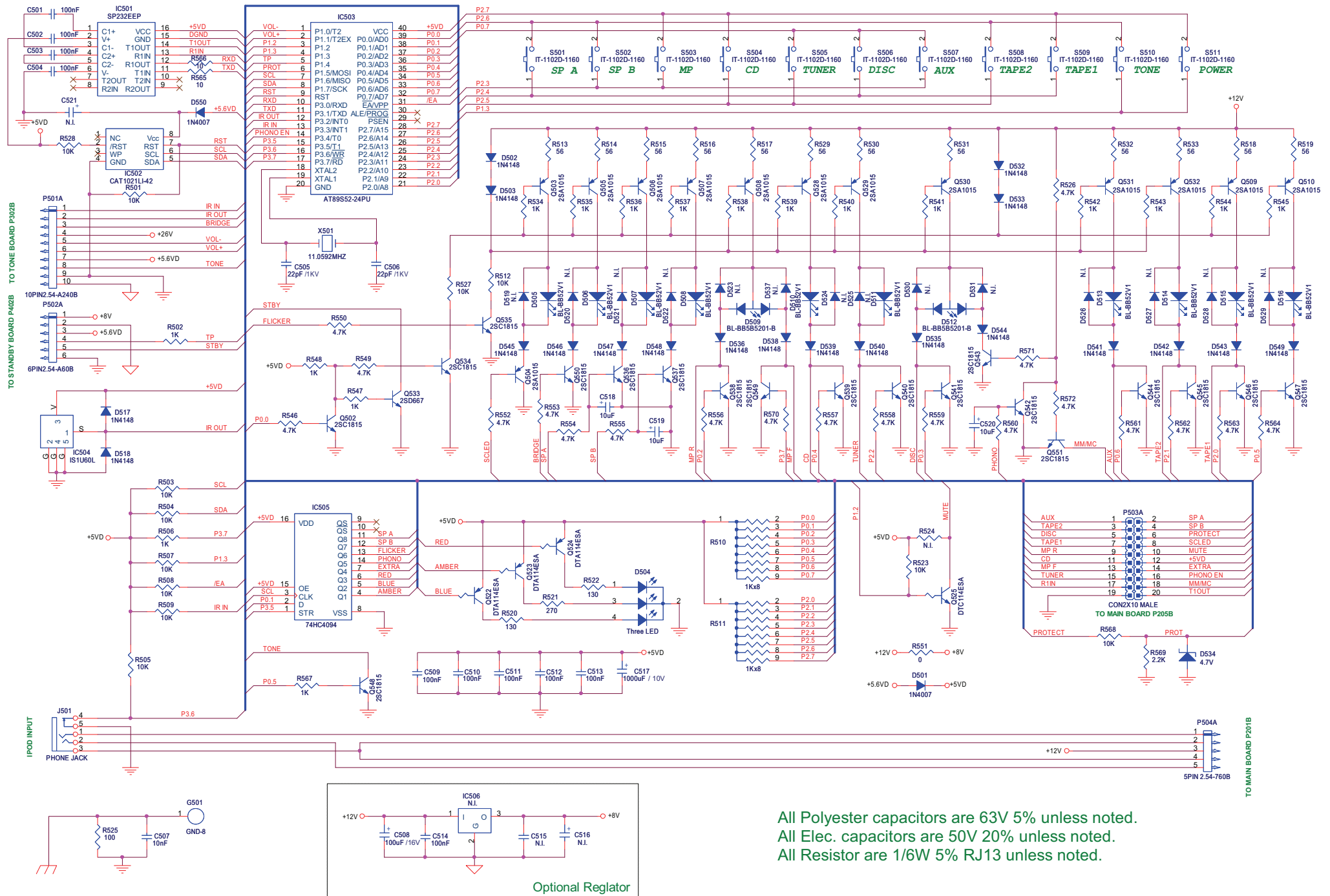
SCHEMATICS DIAGRAM TONE CONTROL



SCHEMATICS DIAGRAM STANDBY

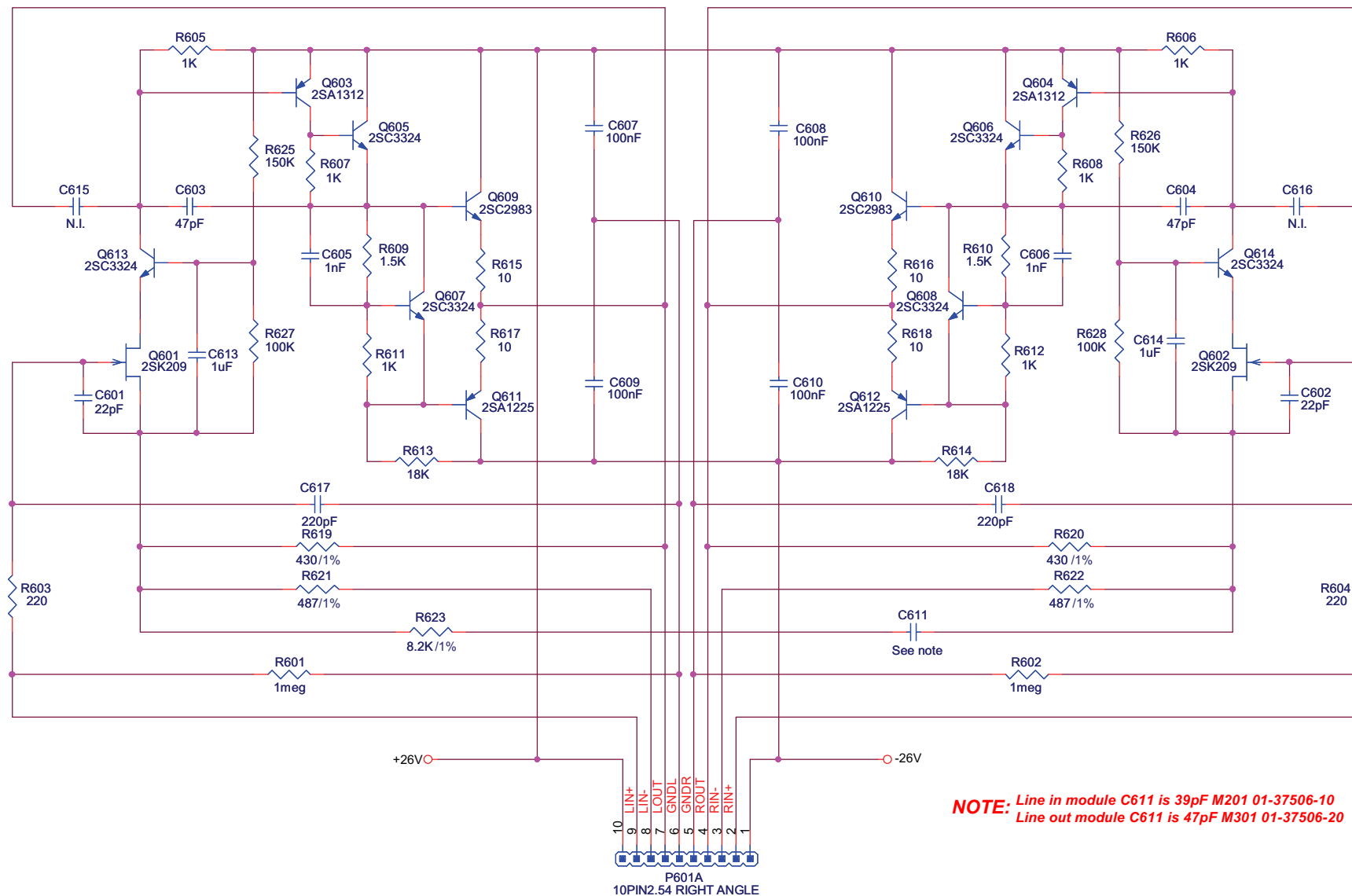


SCHEMATICS DIAGRAM KEYBOARD AND DISPLAY



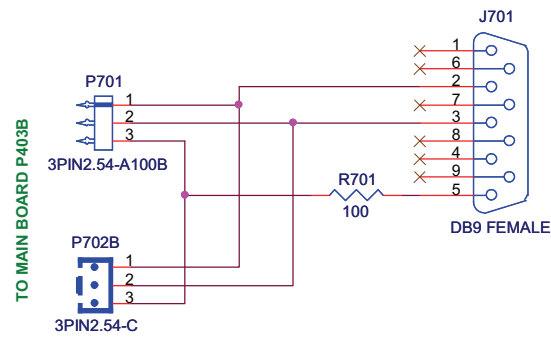
All Polyester capacitors are 63V 5% unless noted.
 All Elec. capacitors are 50V 20% unless noted.
 All Resistor are 1/6W 5% RJ13 unless noted.

SCHEMATICS DIAGRAM 01-37506-10 & 20

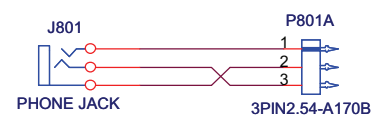


All Capacitors are SMD0805 5% unless noted.
All Resistor are SMD0805 1/10W 5% unless noted.

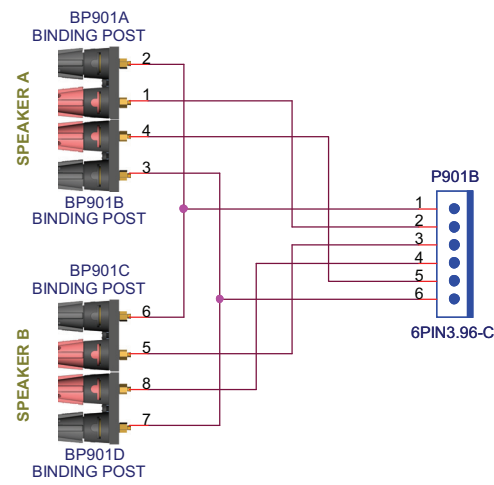
SCHEMATICS DIAGRAM



SCHEMATICS DIAGRAM

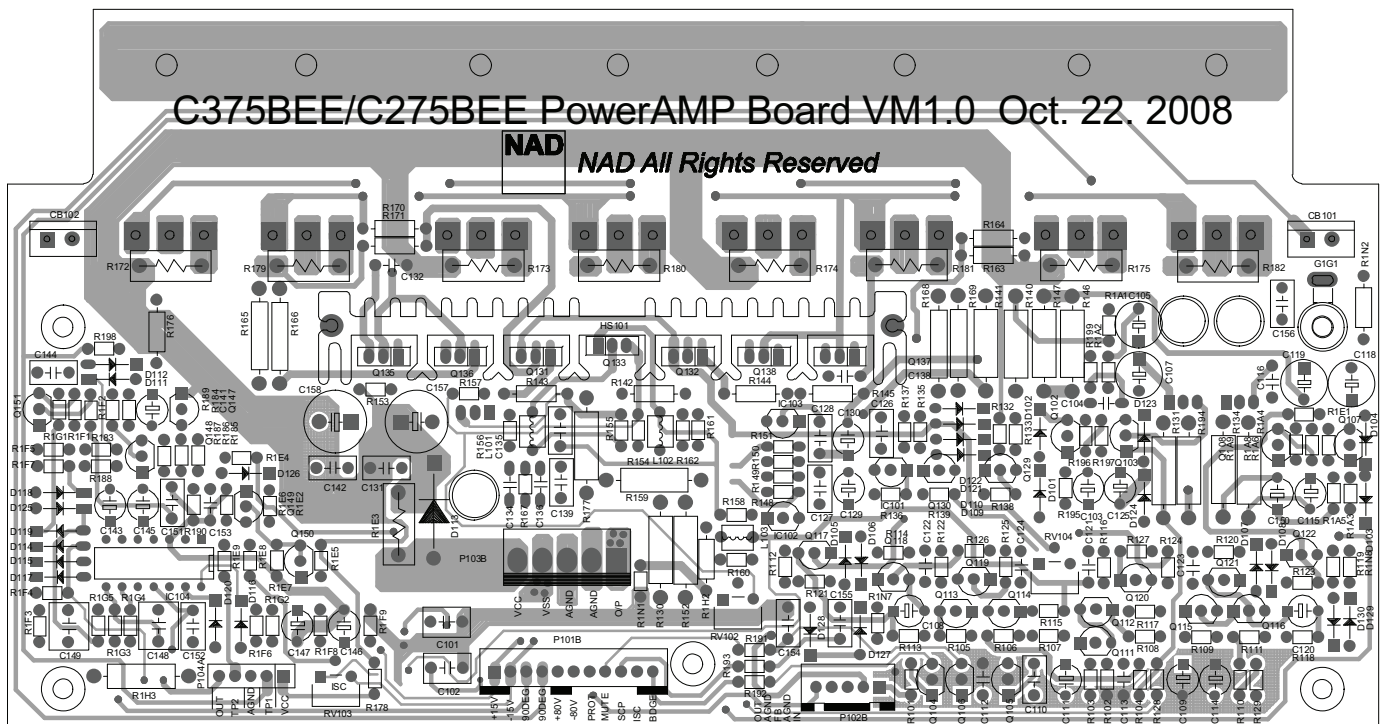


SCHEMATICS DIAGRAM

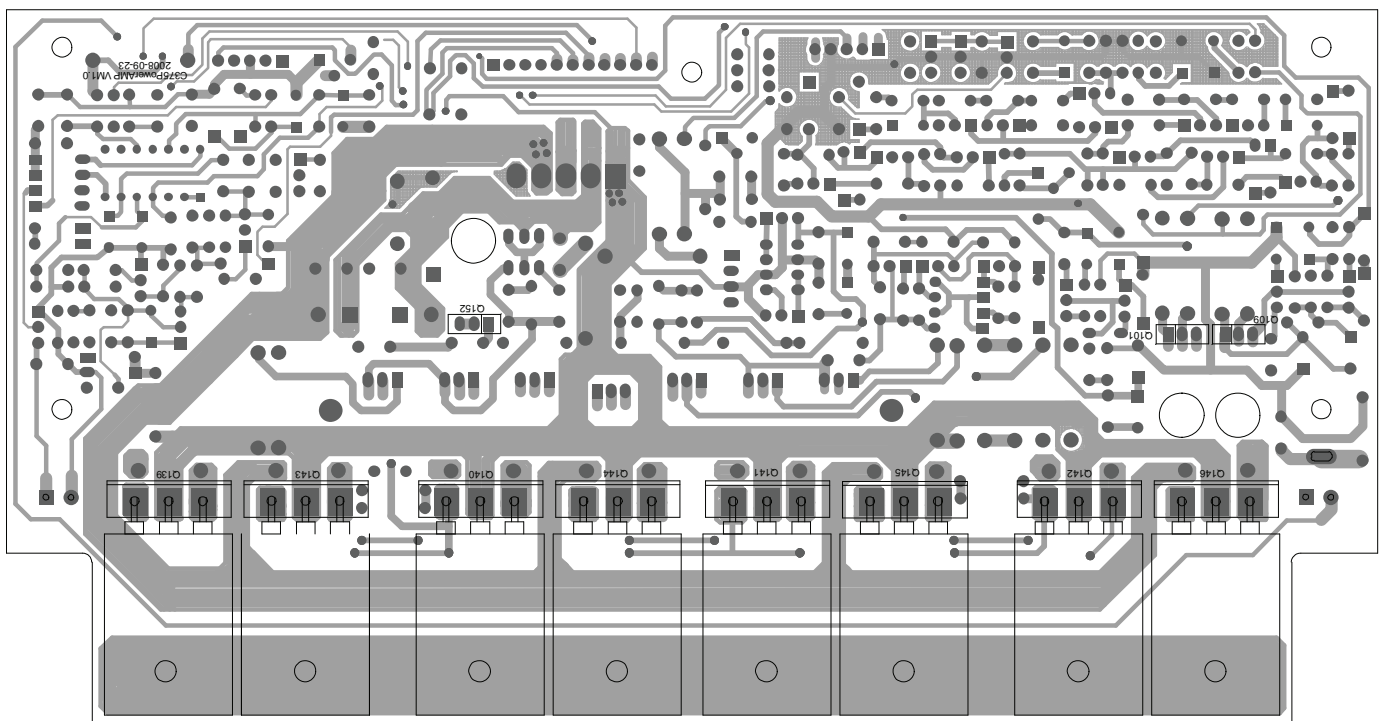


PCB LAYOUT

C375BEE/C275BEE AMP BOARD - COMPONENT SIDE

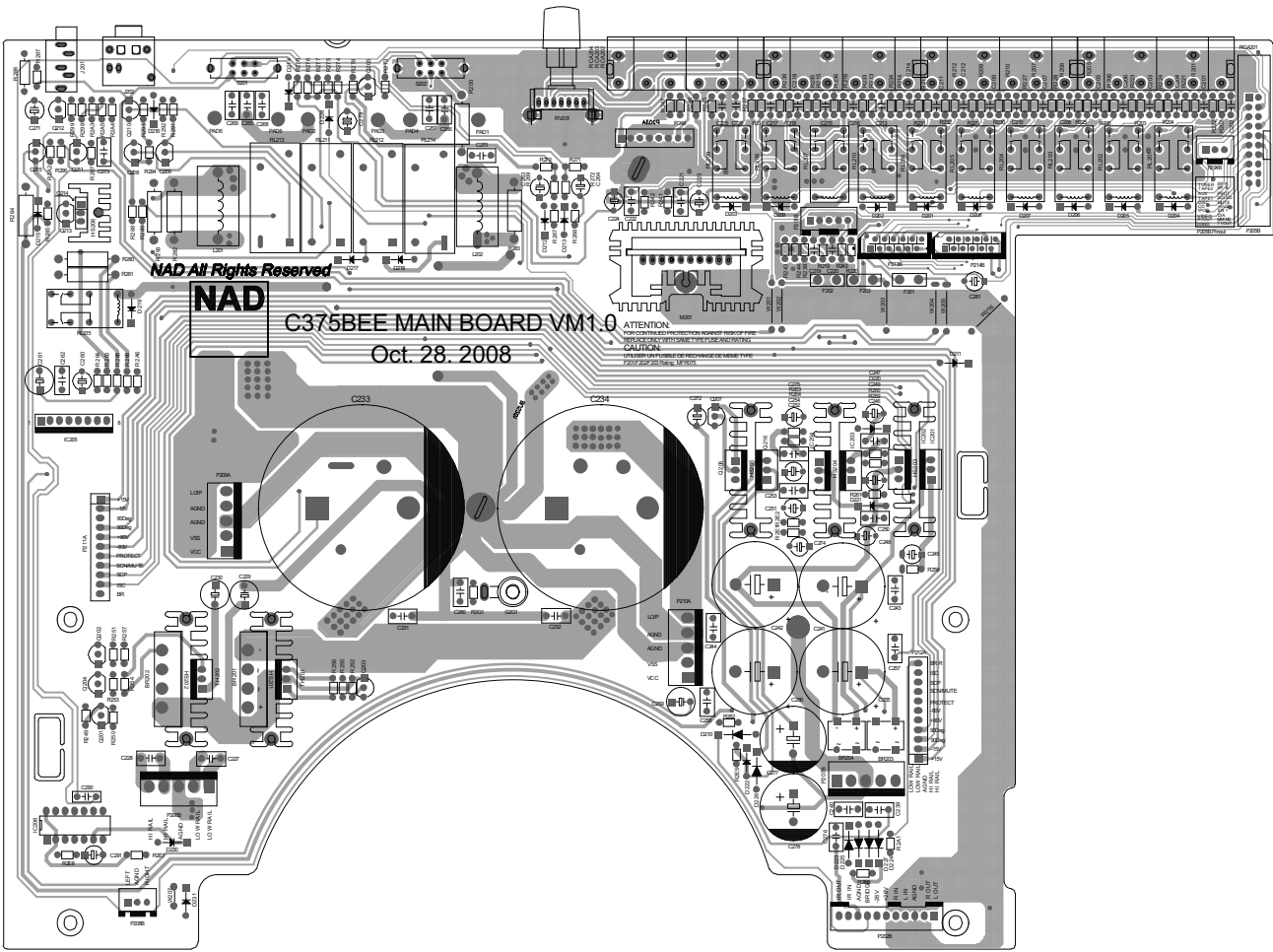


C375BEE/C275BEE AMP BOARD - SOLDER SIDE

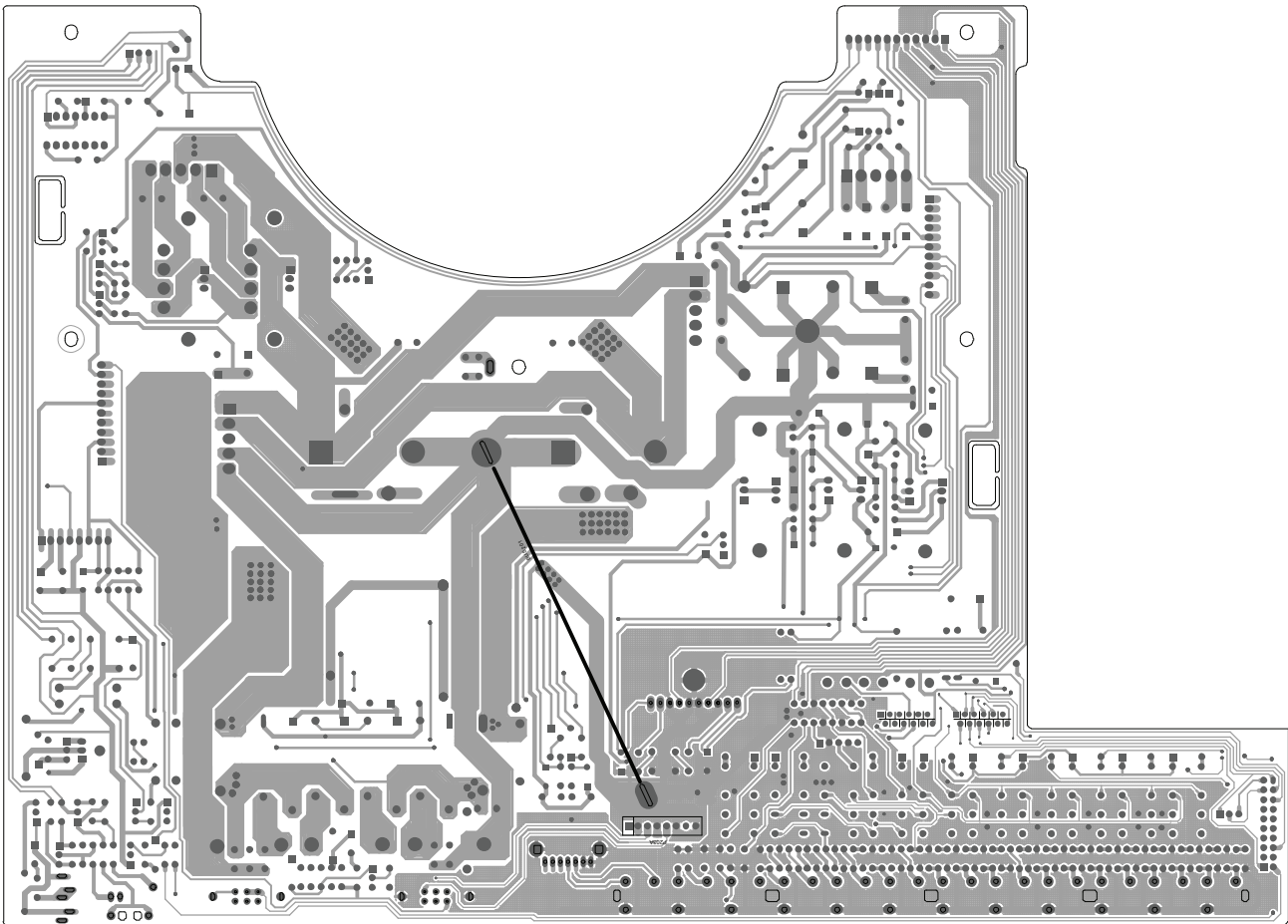


PCB LAYOUT

C375BEE MAIN BOARD - COMPONENT SIDE

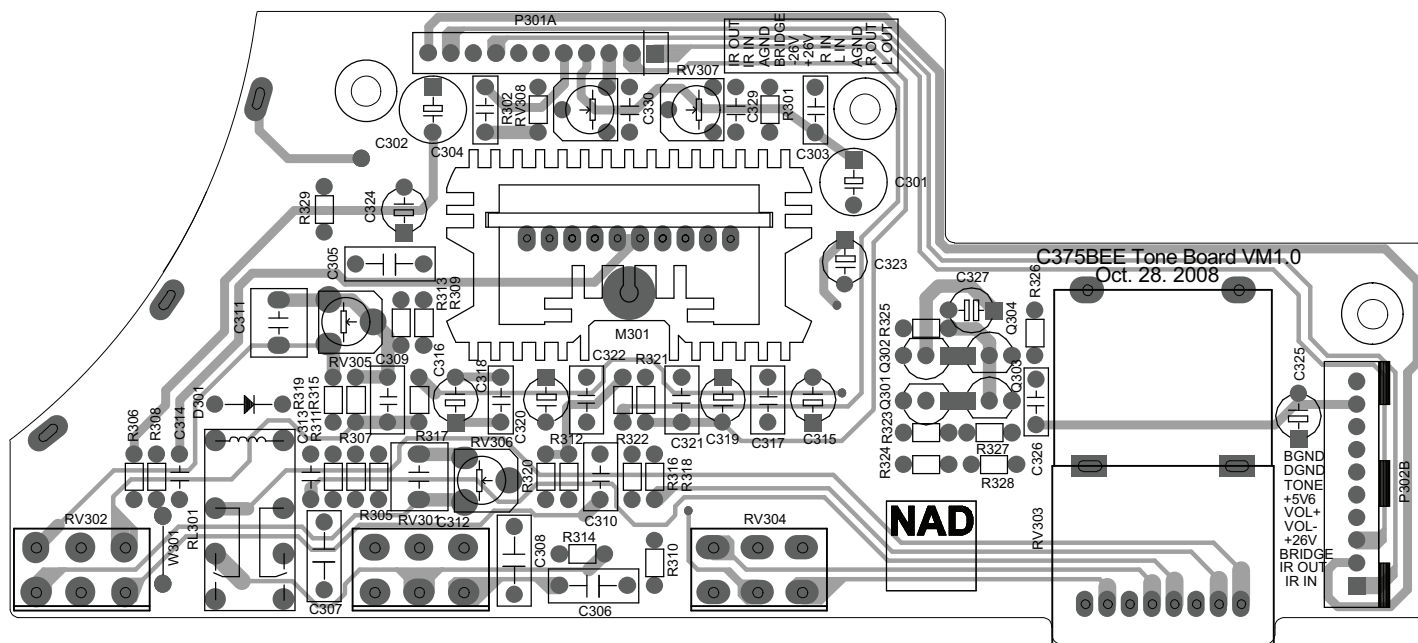


C375BEE MAIN BOARD - SOLDER SIDE

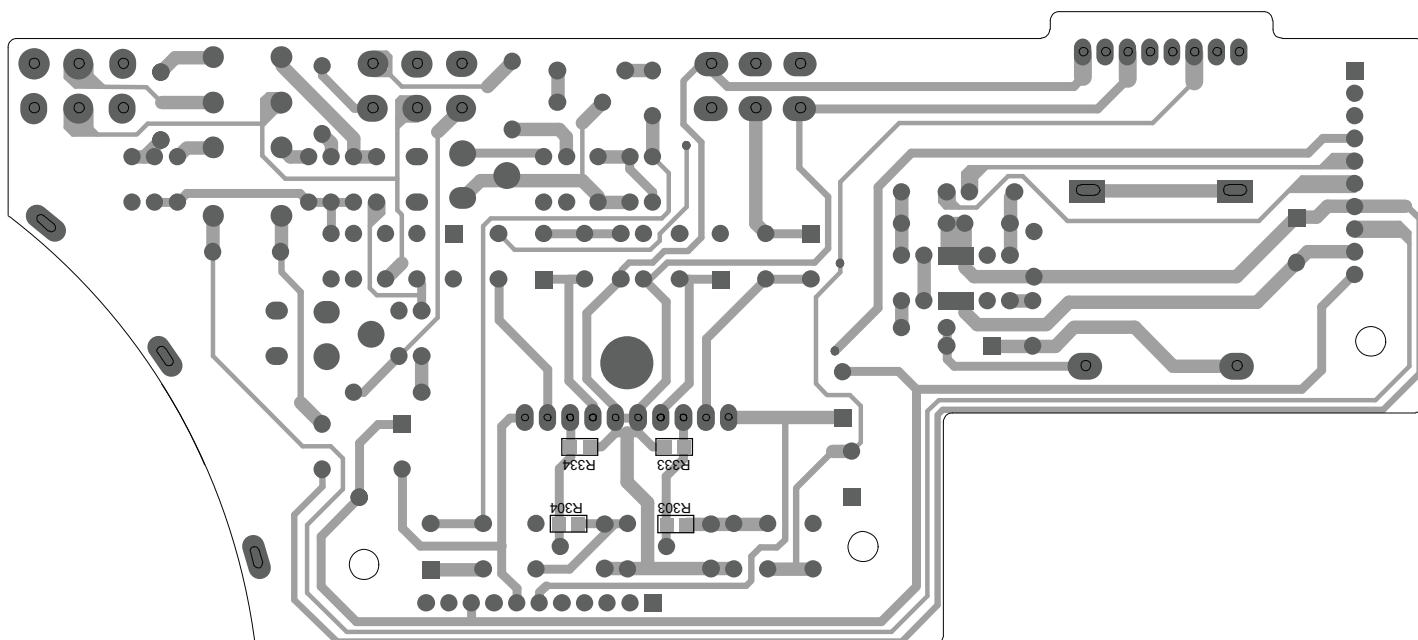


PCB LAYOUT

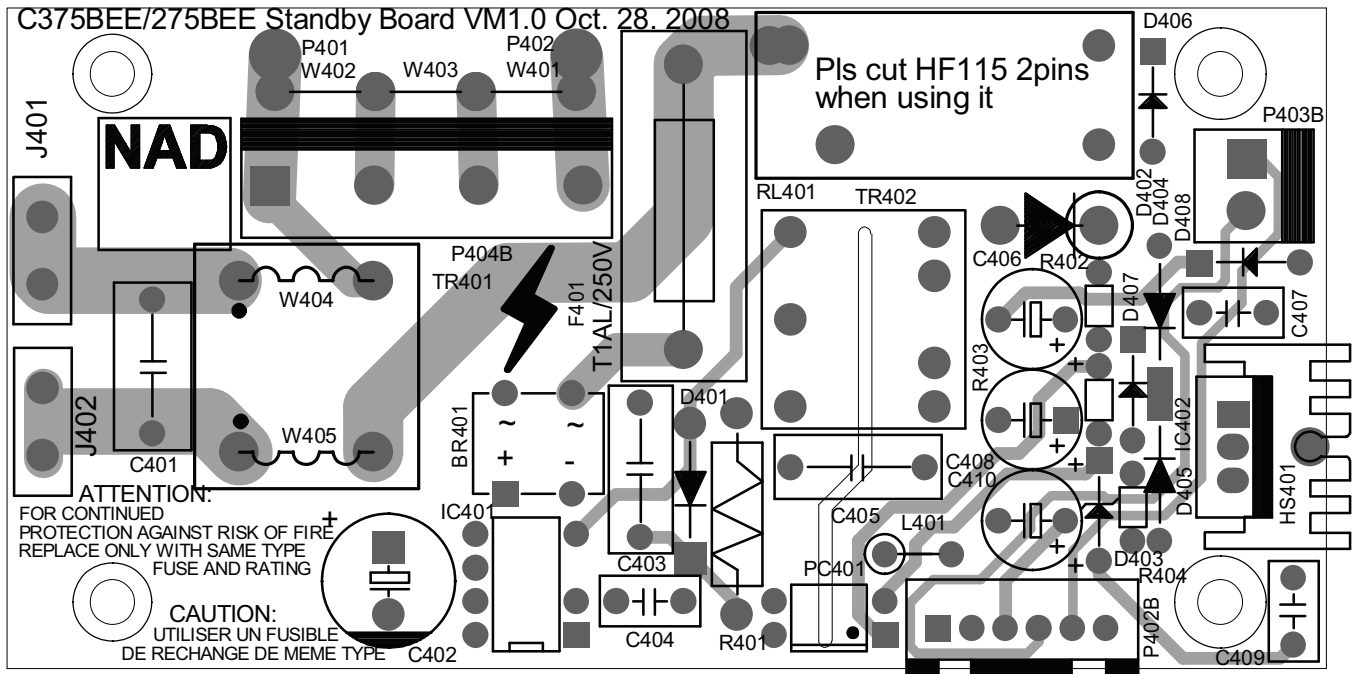
C375BEE TONE BOARD - COMPONENT SIDE



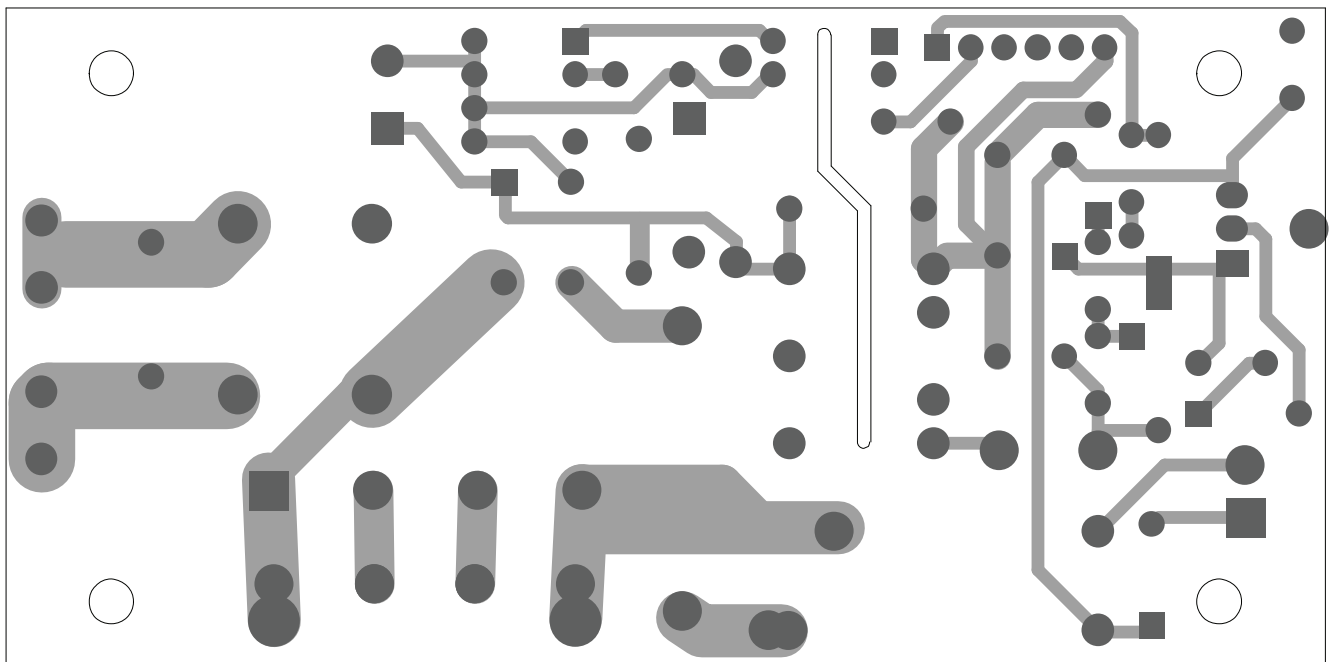
C375BEE TONE BOARD - SOLDER SIDE



C375BEE/275BEE STANDBY BOARD - COMPONENT SIDE

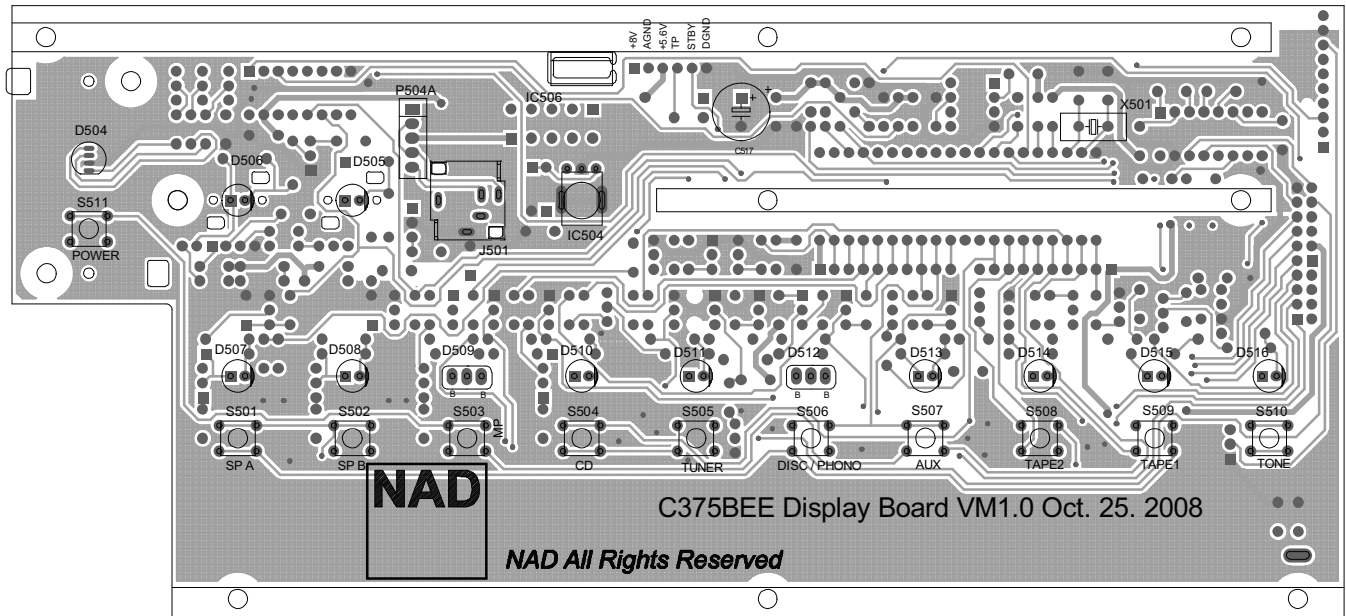


C375BEE/275BEE STANDBY BOARD - SOLDER SIDE

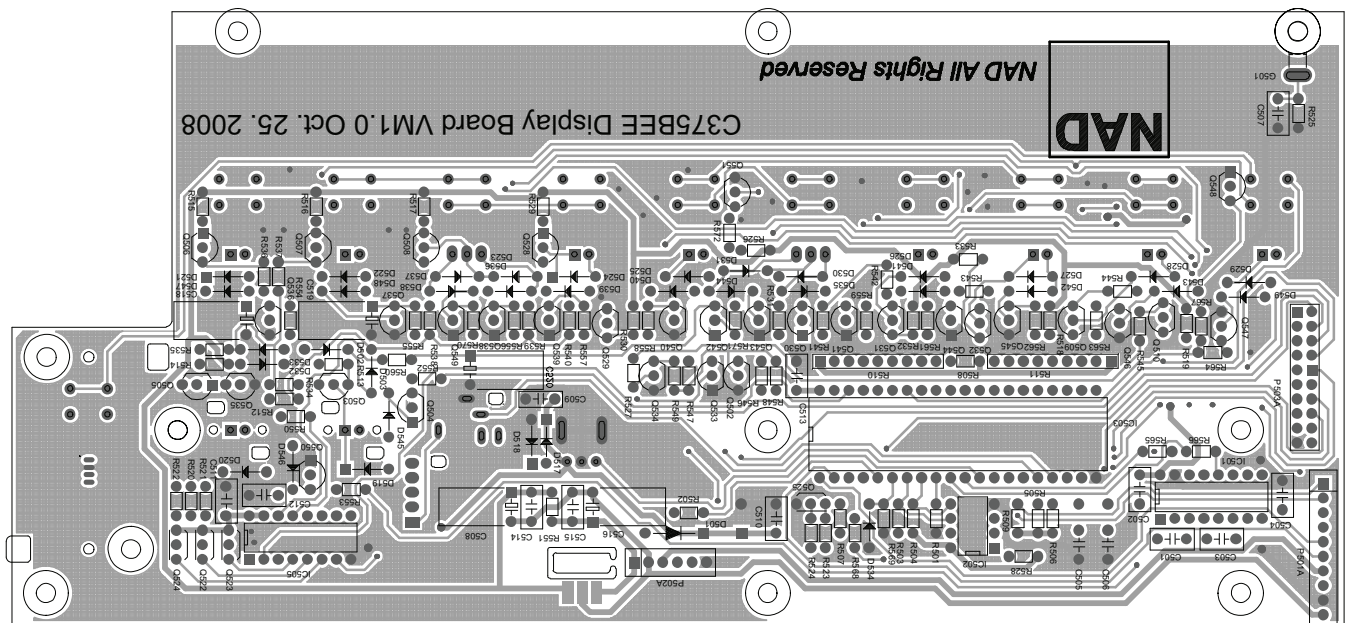


PCB LAYOUT

C375BEE DISPLAY BOARD - COMPONENT SIDE

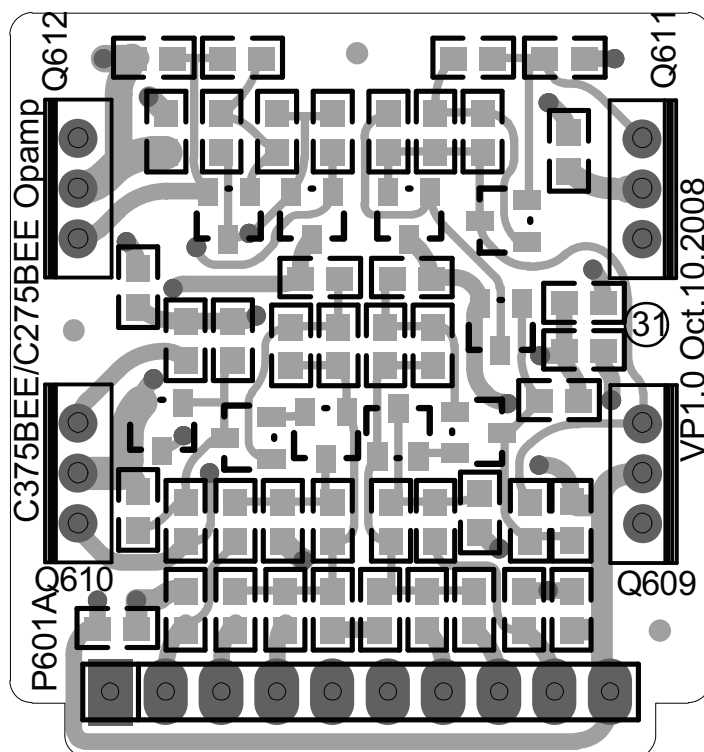


C375BEE DISPLAY BOARD - SOLDER SIDE



PCB LAYOUT (Only replace Line In or Line Out modules, do not repair)

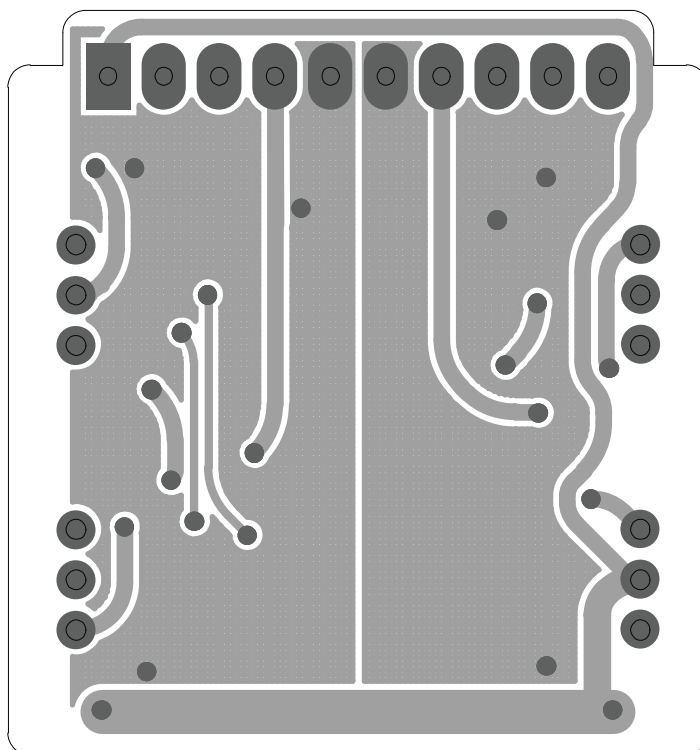
C375BEE/C275BEE Opamp BOARD - COMPONENT SIDE



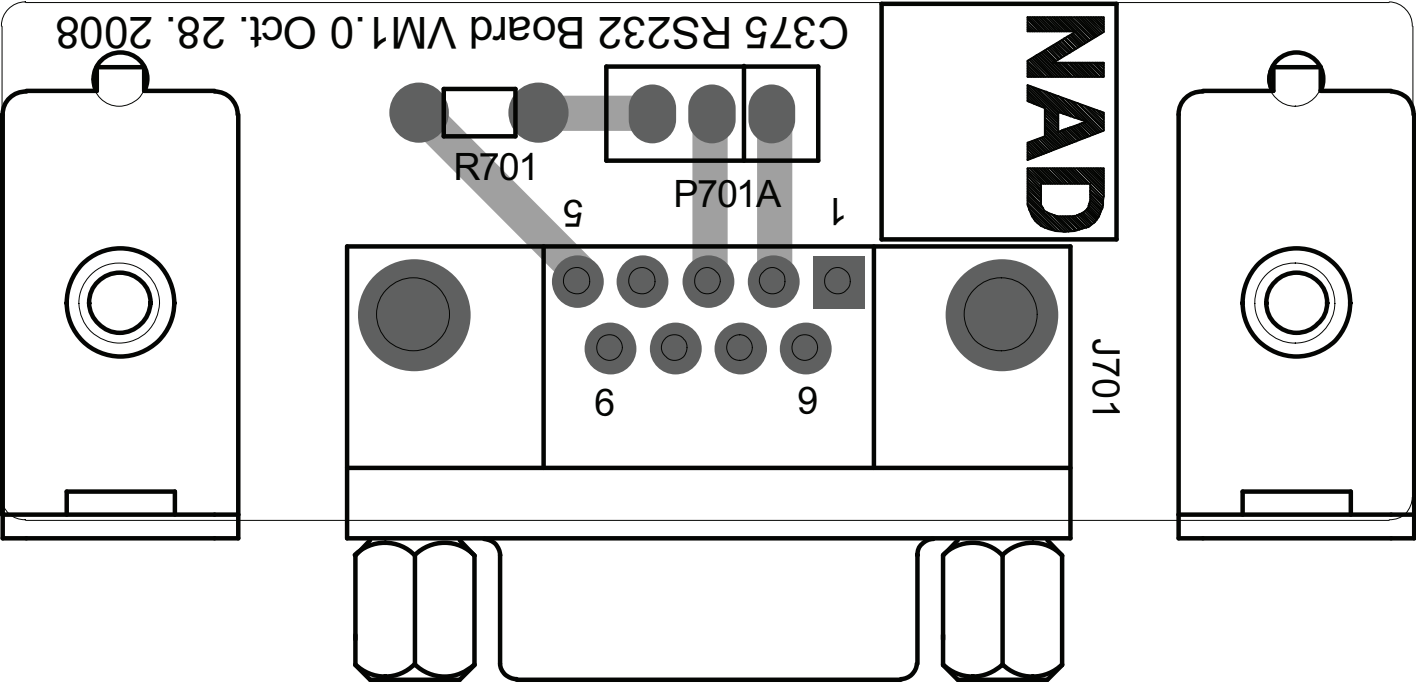
Line in module C611 is 39pF M201 01-37506-10

Line out module C611 is 47pF M301 01-37506-20

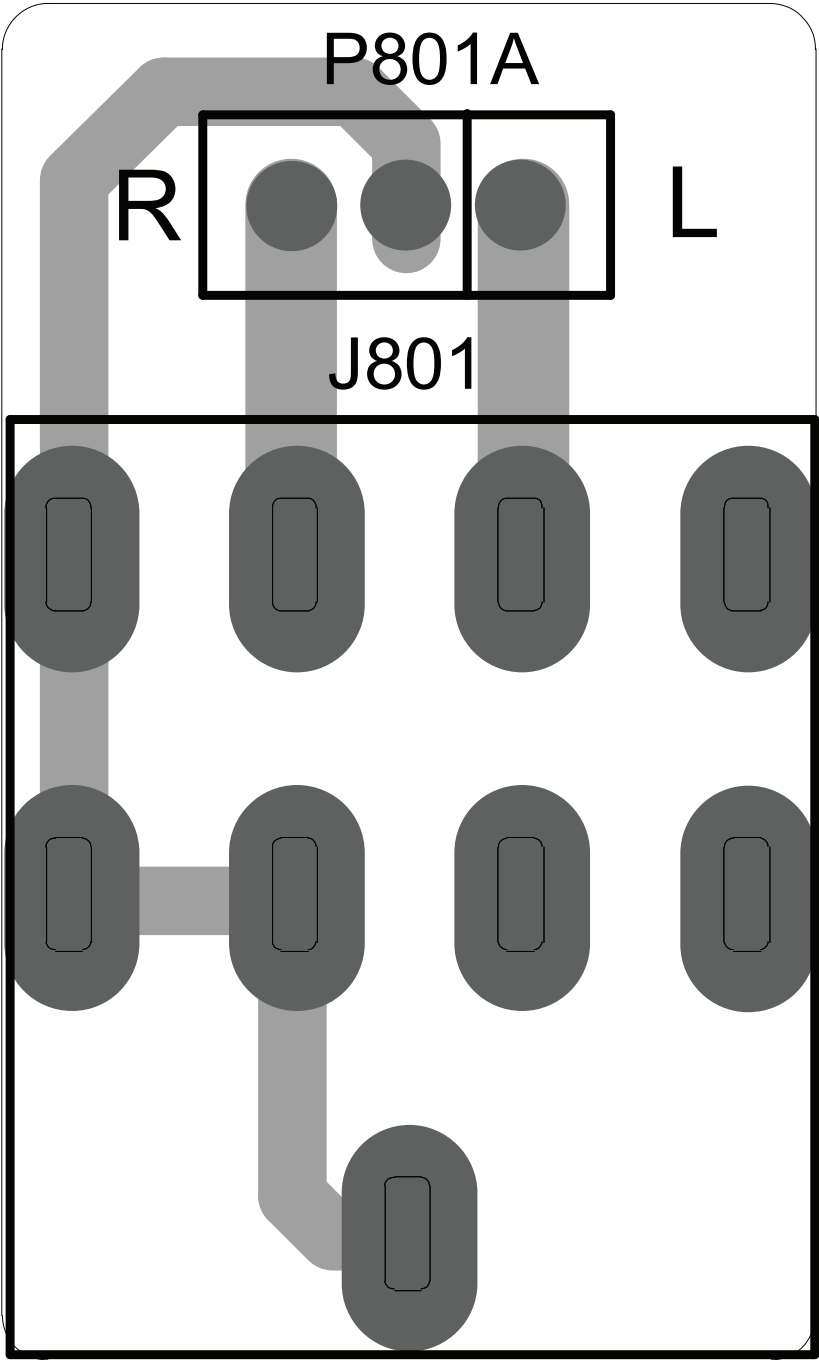
C375BEE/C275BEE Opamp BOARD - SOLDER SIDE



C375 RS232 BOARD

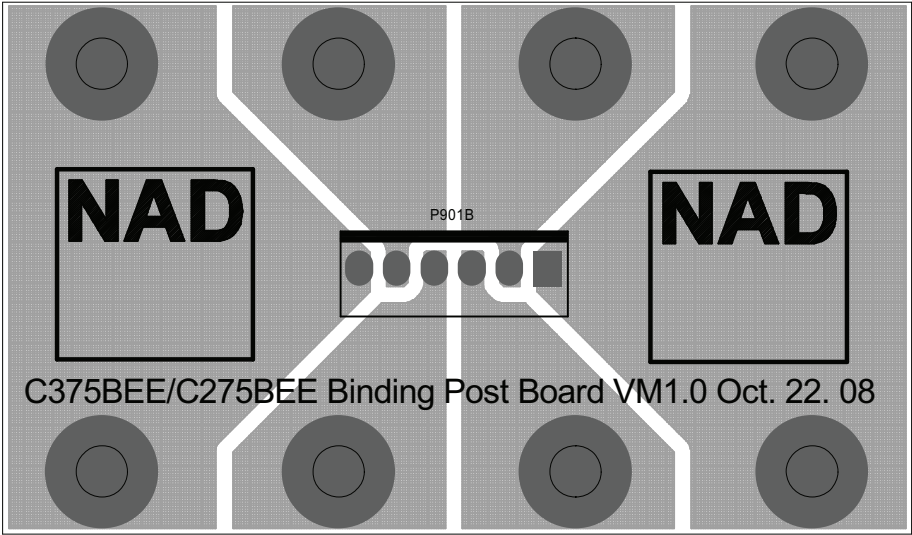


C375BEE HEADPHONE BOARD

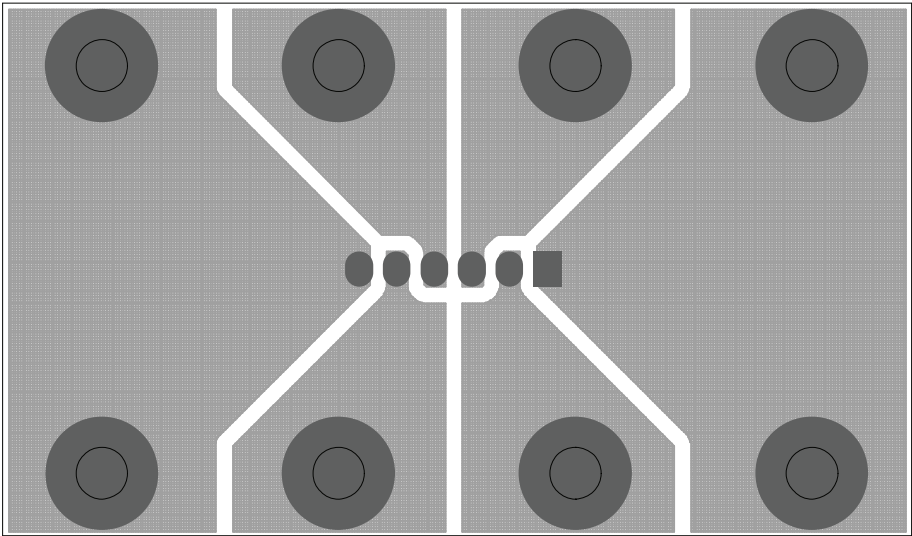


PCB LAYOUT

C375BEE/C275BEE Binding Post Board - COMPONENT SIDE



C375BEE/C275BEE Binding Post Board - SOLDER SIDE



ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
P/N 01-37501-00 PCB1 BOARD (POWERAMP MODULE)				
DIODE				
D101	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D102	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D103	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D104	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D105	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D106	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D107	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D108	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D109	Switch Diode	BAV21	33-40021-00	DAX/.300X.080/.031
D110	Switch Diode	BAV21	33-40021-00	DAX/.300X.080/.031
D111	Switch Diode	18V, 1/2W	33-11800-00	DAX/.300X.080/.031
D112	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D113	Rectifier Diode	1N5404	33-25404-02	DAX/.600X.200/.059
D114	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D115	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D116	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D117	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D118	Switch Diode	BAV21	33-40021-00	DAX/.300X.080/.031
D119	Switch Diode	BAV21	33-40021-00	DAX/.300X.080/.031
D120	Zener Diode	6.8V, 1/2W	33-16809-00	DAX/.300X.080/.031
D125	Switch Diode	2.4V, 1/2W	33-12409-00	DAX/.300X.080/.031
D126	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D127	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D128	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D129	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D130	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
TRANSISTOR				
Q101	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
Q102	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q103	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q104	Transistor	2SC2878	J31-02878-00	TO92/100/ECB
Q105	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q106	Transistor	2SC2878	J31-02878-00	TO92/100/ECB
Q107	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q108	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q109	Transistor	KSA1220AYSTU	31-01220-00	TO126/90/ECB
Q111	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q112	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q113	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q114	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q115	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q116	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q117	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q118	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q119	Transistor	2SA1013-O	J31-01013-00	TO92/100/ECB
Q120	Transistor	2SC2383-O	J31-02383-00	TO92/100/ECB
Q121	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q122	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q129	Transistor	2SA970-GR	J31-00970-00	TO92/100/ECB
Q130	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q131	Transistor	KSA1220AYSTU	31-01220-00	TO126/90/ECB
Q132	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
Q133	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
Q135	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
Q136	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
Q137	Transistor	KSA1220AYSTU	31-01220-00	TO126/90/ECB
Q138	Transistor	KSA1220AYSTU	31-01220-00	TO126/90/ECB
Q139	Transistor	2SA2121-O	J31-02121-00	TO264/215/BCE
Q140	Transistor	2SA2121-O	J31-02121-00	TO264/215/BCE
Q141	Transistor	2SA2121-O	J31-02121-00	TO264/215/BCE
Q142	Transistor	2SA2121-O	J31-02121-00	TO264/215/BCE
Q143	Transistor	2SC5949-O	J31-05949-00	TO264/215/BCE
Q144	Transistor	2SC5949-O	J31-05949-00	TO264/215/BCE
Q145	Transistor	2SC5949-O	J31-05949-00	TO264/215/BCE
Q146	Transistor	2SC5949-O	J31-05949-00	TO264/215/BCE
Q147	Transistor	MPSA92	31-00092-00	TO92/100/EBC
Q148	Transistor	2SC2240-GR	J31-02240-00	TO92/100/ECB
Q149	Transistor	MPSA92	31-00092-00	TO92/100/EBC
Q150	Transistor	MPSA92	31-00092-00	TO92/100/EBC
Q151	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q152	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
THERMAL SWITCH				
CB101	THERMAL BRAKE	ST-22 90C L TYPE	JA07-70022-09	TO220AC/SURFACE
CB102	THERMAL BRAKE	ST-22 80C L TYPE	JA07-70022-08	TO220AC/SURFACE
IC				
IC101	Shunt Regulator	TL431	03-00431-02	TO-92
IC102	Shunt Regulator	TL431	03-00431-02	TO-92
IC103	Shunt Regulator	TL431	03-00431-02	TO-92
IC104	QUAD OP-AMP	TL084CN	03-00084-00	DIP.100/14/W.300/L.750
RESISTOR				
R101	Metal Film Resistor	475Ω, 1/6W, ±1%	07-24750-50	AX/.200X.080/.031
R102	Metal Film Resistor	10KΩ, 1/6W, 1%	07-21002-50	AX/.200X.080/.031
R103	Metal Film Resistor	549Ω, 1/6W, ±1%	07-25490-50	AX/.200X.080/.031
R104	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R105	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R106	Metal Film Resistor	24KΩ, 1/6W, ±5%	07-20243-50	AX/.200X.080/.031
R107	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R108	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R109	Metal Film Resistor	24KΩ, 1/6W, ±5%	07-20243-50	AX/.200X.080/.031
R110	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R111	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R112	Metal Film Resistor	39KΩ, 1/6W, ±5%	07-20393-50	AX/.200X.080/.031
R113	Metal Film Resistor	220KΩ, 1/6W, 5%	07-20224-50	AX/.200X.080/.031
R114	Metal Film Resistor	82Ω, 1/6W, 5%	07-20820-50	AX/.200X.080/.031
R115	Metal Film Resistor	15Ω, 1/6W, ±5%	07-20150-50	AX/.200X.080/.031
R116	Metal Film Resistor	24KΩ, 1/6W, ±5%	07-20243-50	AX/.200X.080/.031
R117	Metal Film Resistor	15Ω, 1/6W, ±5%	07-20150-50	AX/.200X.080/.031
R118	Metal Film Resistor	220KΩ, 1/6W, 5%	07-20224-50	AX/.200X.080/.031
R119	Metal Film Resistor	39KΩ, 1/6W, ±5%	07-20393-50	AX/.200X.080/.031
R120	Metal Film Resistor	82Ω, 1/6W, 5%	07-20820-50	AX/.200X.080/.031
R121	Metal Film Resistor	82Ω, 1/6W, 5%	07-20820-50	AX/.200X.080/.031
R122	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R123	Metal Film Resistor	82Ω, 1/6W, 5%	07-20820-50	AX/.200X.080/.031
R124	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R125	Metal Film Resistor	200Ω, 1/6W, ±5%	07-20201-50	AX/.400X.100/.031
R126	Metal Film Resistor	10Ω, 1/6W, 5%	07-20100-50	AX/.200X.080/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R127	Metal Film Resistor	10Ω, 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R128	Metal Film Resistor	10Ω, 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R129	Metal Film Resistor	10Ω, 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R130	Metal Film Resistor	1KΩ, 1W, ±1%	07-21001-01	AX/.600X.125/.039
R132	Metal Film Resistor	2K2Ω, 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R133	Metal Film Resistor	2.7KΩ, 1/6W, ±5%	07-20272-50	AX/.200X.080/.031
R135	Metal Film Resistor	2K2Ω, 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R136	Metal Film Resistor	1KΩ, 1/6W, 1%	07-21001-50	AX/.200X.080/.031
R137	Metal Film Resistor	1.5KΩ, 1/6W, ±1%	07-21501-50	AX/.200X.080/.031
R138	Metal Film Resistor	10KΩ, 1/6W, 1%	07-21002-50	AX/.200X.080/.031
R139	Metal Film Resistor	36KΩ, 1/6W, ±1%	07-23602-50	AX/.200X.080/.031
R140	Metal Oxide Film Resistor	3.9KΩ, 3W, ±5%	07-30392-03	AX/.600X.125/.039
R141	Metal Oxide Film Resistor	3.9KΩ, 3W, ±5%	07-30392-03	AX/.600X.125/.039
R142	Metal Film Resistor	330Ω, 1/4W, ±5%	07-20331-51	AX/.400X.100/.031
R143	Metal Film Resistor	3.3Ω, 1/4W, ±5%	07-20339-51	AX/.400X.100/.031
R144	Metal Film Resistor	3.3Ω, 1/4W, ±5%	07-20339-51	AX/.400X.100/.031
R145	Metal Film Resistor	330Ω, 1/4W, ±5%	07-20331-51	AX/.400X.100/.031
R146	Metal Oxide Film Resistor	3.9KΩ, 3W, ±5%	07-30392-03	AX/.600X.125/.039
R147	Metal Oxide Film Resistor	3.9KΩ, 3W, ±5%	07-30392-03	AX/.600X.125/.039
R148	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R149	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R150	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R151	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R152	Metal Film Resistor	845Ω, 1W, ±1%	07-28450-01	AX/.600X.125/.039
R153	Metal Film Resistor	1.8MΩ, 1/6W, ±5%	07-20185-50	AX/.200X.080/.031
R154	Metal Film Resistor	1.2KΩ, 1/6W, ±5%	07-20122-50	AX/.200X.080/.031
R155	Metal Film Resistor	4.7Ω, 1/6W, ±5%	07-20479-50	AX/.200X.080/.031
R156	Metal Film Resistor	33Ω, 1/6W, 5%	07-20330-50	AX/.200X.080/.031
R157	Metal Film Resistor	3K3Ω, 1/6W, 5%	07-20332-50	AX/.200X.080/.031
R158	Metal Film Resistor	910Ω, 1/6W, ±5%	07-20911-50	AX/.200X.080/.031
R159	Metal Film Resistor	1KΩ, 1W, ±1%	07-21001-01	AX/.600X.125/.039
R160	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R161	Metal Film Resistor	4.7Ω, 1/6W, ±5%	07-20479-50	AX/.200X.080/.031
R162	Metal Film Resistor	33Ω, 1/6W, 5%	07-20330-50	AX/.200X.080/.031
R163	Metal Film Resistor	15Ω, 1/4W, ±5%	07-20150-51	AX/.400X.100/.031
R164	Metal Film Resistor	18Ω, 1/4W, ±5%	07-20180-51	AX/.400X.100/.031
R165	Metal Oxide Film Resistor	1Ω, 1/2W, ±5%	07-30109-00	AX/.600X.125/.039
R166	Metal Oxide Film Resistor	1Ω, 1/2W, ±5%	07-30109-00	AX/.600X.125/.039
R167	Metal Film Resistor	22Ω, 1/6W, ±5%	07-20220-50	AX/.200X.080/.031
R168	Metal Oxide Film Resistor	1Ω, 1/2W, ±5%	07-30109-00	AX/.600X.125/.039
R169	Metal Oxide Film Resistor	1Ω, 1/2W, ±5%	07-30109-00	AX/.600X.125/.039
R170	Metal Film Resistor	18Ω, 1/4W, ±5%	07-20180-51	AX/.400X.100/.031
R171	Metal Film Resistor	15Ω, 1/4W, ±5%	07-20150-51	AX/.400X.100/.031
R172	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R173	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R174	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R175	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R176	Metal Film Resistor	10KΩ, 1/4W, ±5%	07-20103-51	AX/.400X.100/.031
R177	Metal Oxide Film Resistor	10Ω, 2W, ±5%	07-30100-12	AX/.600X.125/.039
R178	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R179	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R180	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R181	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R182	Cement Resistor	0.22Ω, 5W, ±5%	07-40228-15	RAD/RES/.520X.200/LS.400/.039
R183	Metal Film Resistor	47KΩ, 1/6W, 5%	07-20473-50	AX/.200X.080/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R184	Metal Film Resistor	470Ω, 1/6W, 5%	07-20471-50	AX/.200X.080/.031
R185	Metal Film Resistor	47KΩ, 1/6W, 5%	07-20473-50	AX/.200X.080/.031
R186	Metal Film Resistor	22KΩ, 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R187	Metal Film Resistor	2K2Ω, 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R188	Metal Film Resistor	33KΩ, 1/6W, ±5%	07-20333-50	AX/.200X.080/.031
R189	Metal Film Resistor	22KΩ, 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R190	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R191	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R192	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R193	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R194	Fusible Resistor	10Ω, 1W, ±5%	07-50100-01	AX/.600X.125/.039
R195	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R196	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R197	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R198	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R199	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R1A1	Metal Film Resistor	24.3KΩ, 1/6W, ±1%	07-22432-50	AX/.200X.080/.031
R1A2	Metal Film Resistor	7.32KΩ, 1/6W, ±1%	07-27321-50	AX/.200X.080/.031
R1A3	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R1A4	Fusible Resistor	10Ω, 1W, ±5%	07-50100-01	AX/.600X.125/.039
R1A5	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R1A6	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R1A8	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R1A9	Metal Film Resistor	7.32KΩ, 1/6W, ±1%	07-27321-50	AX/.200X.080/.031
R1E1	Metal Film Resistor	24.3KΩ, 1/6W, ±1%	07-22432-50	AX/.200X.080/.031
R1E2	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R1E3	Cement Resistor	0.05Ω, 3W, ±5%	07-40507-03	RAD/RES/.520X.200/LS.400/.039
R1E4	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R1E5	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R1E6	Metal Film Resistor	9.1KΩ, 1/6W, ±5%	07-20912-50	AX/.200X.080/.031
R1E7	Metal Film Resistor	560KΩ, 1/6W, ±5%	07-20564-50	AX/.200X.080/.031
R1E8	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R1E9	Metal Film Resistor	330KΩ, 1/6W, ±5%	07-20334-50	AX/.200X.080/.031
R1F1	Metal Film Resistor	22KΩ, 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R1F2	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R1F3	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R1F4	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R1F5	Metal Film Resistor	270KΩ, 1/6W, ±1%	07-22703-50	AX/.200X.080/.031
R1F6	Metal Film Resistor	4.7MΩ, 1/6W, ±5%	07-20475-50	AX/.200X.080/.031
R1F7	Metal Film Resistor	470KΩ, 1/6W, ±1%	07-24703-50	AX/.200X.080/.031
R1F8	Metal Film Resistor	390KΩ, 1/6W, ±1%	07-23903-50	AX/.200X.080/.031
R1F9	Metal Film Resistor	110KΩ, 1/6W, ±1%	07-21103-50	AX/.200X.080/.031
R1G1	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R1G2	Metal Film Resistor	220KΩ, 1/6W, 5%	07-20224-50	AX/.200X.080/.031
R1G3	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R1G4	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R1G5	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R1H1	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R1H2	Metal Film Resistor	63.4Ω, 1/4W, ±1%	07-26349-51	AX/.400X.100/.031
R1H3	Metal Film Resistor	1KΩ, 1W, ±1%	07-21001-01	AX/.600X.125/.039
R1N1	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R1N7	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R1N8	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
CAPACITOR				
C101	Polyester capacitor	100nF, ±5%, 250V	25-10422-01	RAD/CAP/.300X.150/LS.200/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C102	Polyester capacitor	100nF, ±5%, 250V	25-10422-01	RAD/CAP/.300X.150/LS.200/.031
C103	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C104	Ceramic Capacitor	33pF, ±5%, 1KV	05-33013-02	CPAX/.200X.100/.031
C105	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.300/LS.200/.031
C107	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.300/LS.200/.031
C108	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C109	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C110	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C111	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C112	Ceramic Capacitor	47pF, ±5%, 1KV	05-47013-01	CPAX/.200X.100/.031
C113	Ceramic Capacitor	120pF, ±5%, 1KV	05-12113-00	CPAX/.200X.100/.031
C114	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C115	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C116	Ceramic Capacitor	33pF, ±5%, 1KV	05-33013-02	CPAX/.200X.100/.031
C118	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.300/LS.200/.031
C119	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.300/LS.200/.031
C120	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C121	Ceramic Capacitor	22pF, ±5%, 1KV	05-22013-02	CPAX/.200X.100/.031
C122	Ceramic Capacitor	22pF, ±5%, 1KV	05-22013-02	CPAX/.200X.100/.031
C123	Ceramic Capacitor	22pF, ±5%, 1KV	05-22013-02	CPAX/.200X.100/.031
C124	Ceramic Capacitor	430pF, ±5%, 1KV	05-43113-01	CPAX/.200X.100/.031
C125	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C126	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C127	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C128	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C129	ALU Electrolytic Capacitor	47uF/25V, ±20%, 105°C	06-47021-01	CPCYL1/D.300/LS.200/.031
C130	ALU Electrolytic Capacitor	47uF/25V, ±20%, 105°C	06-47021-01	CPCYL1/D.300/LS.200/.031
C131	Polyester capacitor	100nF, ±5%, 100V	25-10412-04	RAD/CAP/.300X.150/LS.200/.031
C132	Ceramic Capacitor	220pF, ±10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C134	Ceramic Capacitor	470pF, ±5%, 1KV	05-47113-02	CPAX/.200X.100/.031
C135	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C136	Ceramic Capacitor	470pF, ±5%, 1KV	05-47113-02	CPAX/.200X.100/.031
C138	Ceramic Capacitor	220pF, ±10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C139	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C141	ALU Electrolytic Capacitor	4.7uF/50V, ±20%, 105°C	06-47951-05	CPCYL/D.200/LS.200/.031
C142	Polyester capacitor	100nF, ±5%, 100V	25-10412-04	RAD/CAP/.300X.150/LS.200/.031
C143	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C144	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C145	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C146	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C147	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C148	Polyester capacitor	470nF, ±5%, 63V	25-47461-00	RAD/.300X.150/LS.200/.031
C149	Polyester capacitor	470nF, ±5%, 63V	25-47461-00	RAD/.300X.150/LS.200/.031
C150	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C151	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C152	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C154	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C155	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C157	ALU Electrolytic Capacitor	47uF/100V, ±20%, 105°C	06-47012-01	CPCYL1/D.300/LS.200/.031
C158	ALU Electrolytic Capacitor	47uF/100V, ±20%, 105°C	06-47012-01	CPCYL1/D.300/LS.200/.031
INDUCTOR				
L101	INDUCTOR	10uH	08-02100-01	
L102	INDUCTOR	10uH	08-02100-01	
L103	INDUCTOR	100uH, EMC421LTB-121NS	A08-01101-01	
POT				
RV102	SEMI POT	500Ω, vertical type	09-02501-02	VRES17
RV103	SEMI POT	10KΩ, vertical type	09-02103-02	VRES17
RV104	SEMI POT	100Ω, vertical type	09-02101-01	VRES17
CONNECTOR				
P101B	HOUSING	11PIN2.54-C	13-22511-01	BLKCON.100/VH/TM1SQS/W.300/11
P102B	HOUSING	5PIN2.54-C	13-22505-00	BLKCON.100/VH/TM1SQS/W.300/5
P103B	HOUSING	5PIN3.96-C	13-23905-00	BLKCON.156/VH/TM1SQB/W.355/5
P104A	CONNECTOR	5PIN2.54-C	13-12505-00	BLKCON.100/VH/TM1SQ/W.200/5
P106B	CONNECTOR	4PIN2.54-C	NOT USED	
P/N 01-37502-00 PCB2 BOARD (MAIN)				
DIODE				
D201	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D202	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D203	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D204	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D205	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D206	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D207	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D208	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D209	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D210	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D211	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D212	Zener Diode	24V, 1/2W	33-12400-00	DAX/.300X.080/.031
D213	Zener Diode	24V, 1/2W	33-12400-00	DAX/.300X.080/.031
D214	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D215	Zener Diode	13V, 1/2W	33-11300-00	DAX/.300X.080/.031
D216	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D217	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D218	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D220	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D221	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D222	Zener Diode	15V, 1/2W	33-11500-00	DAX/.300X.080/.031
D223	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D224	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D225	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D226	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
D227	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D228	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D230	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D231	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
TH201	Thyristor	BT151-500R	33-60116-00	TO-220
TH202	Thyristor	BT151-500R	33-60116-00	TO-220
BRIDGE				
BR201	Rectifier Bridge	KBU8D	33-30822-03	BRIDGE/1.010X.290/.063
BR202	Rectifier Bridge	KBU8D	33-30822-03	BRIDGE/1.010X.290/.063
BR203	BRIDGE	DB104G	33-30142-00	BRIDGE/.400X.500/.047
BR204	BRIDGE	DB104G	33-30142-00	BRIDGE/.400X.500/.047
TRANSISTOR				
Q201	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q202	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q203	Transistor	MPSA92	31-00092-00	TO92/100/EBC
Q204	Transistor	MPSA42	31-00042-00	TO92/100/ECB
Q205	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q206	Transistor	2SC4793	J31-04793-00	TO220AB/BCE
Q207	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q208	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q209	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q210	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q211	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q212	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q213	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q214	Transistor	KSC2690AYSTU	31-02690-00	TO126/90/ECB
Q215	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q216	MOSFET	IRF5210	31-05210-00	TO-220
IC				
IC201	RAGULATOR	NJM317F	03-00317-04	TO220AB
IC202	RAGULATOR	LM337T	03-00337-00	TO220AB
IC203	RAGULATOR	NJM317F	03-00317-04	TO220AB
IC204	RAGULATOR	LM337T	03-00337-00	TO220AB
IC205	AMP Protector IC	HS1237	01-01237-11	SIP.100/8/W.200/L.825
IC206	CMOS Logic	CD74HC86E	03-07486-00	DIP14
RESISTOR				
F201	Metal Oxide Film Resistor	FRX075	A07-70759-01	Pitch=5mm
F202	Metal Oxide Film Resistor	FRX075	A07-70759-01	Pitch=5mm
F203	Metal Oxide Film Resistor	FRX075	A07-70759-01	Pitch=5mm
R200	Metal Oxide Film Resistor	2.2KΩ, 2W, ±5%	07-30222-04	AX/.600X.200/.039
R201	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R202	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R203	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R204	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R205	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R206	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R207	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R208	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R209	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R210	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R211	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R212	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R213	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R214	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R215	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R216	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R217	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R218	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R219	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R220	Metal Film Resistor	220Ω, 1/6W, 5%	07-20221-50	AX/.200X.080/.031
R221	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R222	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R223	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R224	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R225	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R226	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R227	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R228	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R229	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R230	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R231	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R232	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R233	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R234	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R235	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R236	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R237	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R238	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R239	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R240	Metal Film Resistor	1megΩ, 1/6W, 5%	07-20105-50	AX/.200X.080/.031
R241	Metal Film Resistor	105KΩ, 1/6W, ±1%	07-21053-50	AX/.200X.080/.031
R242	Metal Film Resistor	105KΩ, 1/6W, ±1%	07-21053-50	AX/.200X.080/.031
R243	Metal Film Resistor	68Ω, 1/6W, ±5%	07-20680-50	AX/.200X.080/.031
R244	Metal Film Resistor	68Ω, 1/6W, ±5%	07-20680-50	AX/.200X.080/.031
R245	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R246	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R247	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R248	Metal Film Resistor	100KΩ, 1/6W, 5%	07-20104-50	AX/.200X.080/.031
R249	Metal Film Resistor	10KΩ, 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R250	Metal Film Resistor	22KΩ, 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R251	Metal Film Resistor	22KΩ, 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R252	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R253	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R254	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R255	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R256	Metal Film Resistor	1KΩ, 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R257	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R258	Metal Film Resistor	4.7KΩ, 1/6W, ±1%	07-24701-50	AX/.200X.080/.031
R259	Metal Film Resistor	4.7KΩ, 1/6W, ±1%	07-24701-50	AX/.200X.080/.031
R260	Metal Film Resistor	240Ω, 1/6W, ±1%	07-22400-50	AX/.200X.080/.031
R261	Metal Film Resistor	240Ω, 1/6W, ±1%	07-22400-50	AX/.200X.080/.031
R262	Metal Film Resistor	220KΩ, 1/6W, 5%	07-20224-50	AX/.200X.080/.031
R263	Metal Film Resistor	4.7KΩ, 1/6W, ±5%	07-20472-50	AX/.200X.080/.031
R265	Metal Film Resistor	56KΩ, 1/6W, ±5%	07-20563-50	AX/.200X.080/.031
R266	Metal Film Resistor	56KΩ, 1/6W, ±5%	07-20563-50	AX/.200X.080/.031
R267	Metal Film Resistor	24.9KΩ, 1/6W, ±1%	07-22492-50	AX/.200X.080/.031
R268	Metal Film Resistor	24.9KΩ, 1/6W, ±1%	07-22492-50	AX/.200X.080/.031
R269	Metal Film Resistor	1KΩ, 1/6W, 1%	07-21001-50	AX/.200X.080/.031
R270	Metal Film Resistor	1KΩ, 1/6W, 1%	07-21001-50	AX/.200X.080/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R271	Metal Film Resistor	1K Ω , 1/6W, 1%	07-21001-50	AX/.200X.080/.031
R272	Metal Film Resistor	1K Ω , 1/6W, 1%	07-21001-50	AX/.200X.080/.031
R273	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R274	Metal Film Resistor	150K Ω , 1/6W, $\pm 5\%$	07-20154-50	AX/.200X.080/.031
R275	Metal Film Resistor	22K Ω , 1/6W, 5%	07-20223-50	AX/.200X.080/.031
R276	Metal Film Resistor	82K Ω , 1/6W, $\pm 5\%$	07-20823-50	AX/.200X.080/.031
R277	Metal Film Resistor	150K Ω , 1/6W, $\pm 5\%$	07-20154-50	AX/.200X.080/.031
R278	Metal Film Resistor	33K Ω , 1/6W, $\pm 5\%$	07-20333-50	AX/.200X.080/.031
R279	Metal Film Resistor	100 Ω , 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R280	Metal Oxide Film Resistor	270 Ω , 2W, $\pm 5\%$	07-30271-12	AX/.600X.125/.039
R281	Metal Oxide Film Resistor	270 Ω , 2W, $\pm 5\%$	07-30271-12	AX/.600X.125/.039
R282	Metal Oxide Film Resistor	3.3 Ω , 1W, $\pm 5\%$	07-30339-04	AX/.600X.125/.039
R283	Metal Oxide Film Resistor	3.3 Ω , 1W, $\pm 5\%$	07-30339-04	AX/.600X.125/.039
R284	Metal Oxide Film Resistor	270 Ω , 2W, $\pm 5\%$	07-30271-12	AX/.600X.125/.039
R285	Metal Film Resistor	6.8K Ω , 1/6W, $\pm 5\%$	07-20682-50	AX/.200X.080/.031
R286	Metal Film Resistor	10 Ω , 1/4W, $\pm 5\%$	07-20100-51	AX/.400X.100/.031
R287	Metal Film Resistor	10 Ω , 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R288	Metal Film Resistor	4.99K Ω , 1/6W, $\pm 1\%$	07-24991-50	AX/.200X.080/.031
R289	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 1\%$	07-24701-50	AX/.200X.080/.031
R291	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R292	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R293	Metal Oxide Film Resistor	180 Ω , 2W, $\pm 5\%$	07-30181-02	AX/.600X.125/.039
R294	Metal Film Resistor	820 Ω , 1/6W, $\pm 5\%$	07-20821-50	AX/.200X.080/.031
R295	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R296	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R297	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R298	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R299	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R2A1	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R2A2	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R2A3	Metal Film Resistor	33 Ω , 1/6W, 5%	07-20330-50	AX/.200X.080/.031
R2A4	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R2A5	Metal Film Resistor	10 Ω , 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R2A6	Metal Film Resistor	47K Ω , 1/6W, 5%	07-20473-50	AX/.200X.080/.031
R2A7	Metal Film Resistor	330 Ω , 1/6W, 5%	07-20331-50	AX/.200X.080/.031
R2E1	Metal Film Resistor	2.67K Ω , 1/6W, $\pm 1\%$	07-22671-50	AX/.200X.080/.031
R2E2	Metal Film Resistor	240 Ω , 1/6W, $\pm 1\%$	07-22400-50	AX/.200X.080/.031
R2E3	Metal Film Resistor	2.67K Ω , 1/6W, $\pm 1\%$	07-22671-50	AX/.200X.080/.031
R2E4	Metal Film Resistor	240 Ω , 1/6W, $\pm 1\%$	07-22400-50	AX/.200X.080/.031
R2E5	Metal Film Resistor	100 Ω , 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R2E6	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R2E7	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R2E8	Metal Film Resistor	15K Ω , 1/6W, $\pm 5\%$	07-20153-50	AX/.200X.080/.031

CAPACITOR

C201	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C202	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C203	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C204	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C205	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C206	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C207	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C208	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C209	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C210	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031
C211	Ceramic Capacitor	100pF, $\pm 5\%$, 1KV	05-10113-04	CPAX/.200X.100/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C212	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C213	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C214	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C215	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C216	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C217	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C218	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C219	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C220	Ceramic Capacitor	100pF, ±5%, 1KV	05-10113-04	CPAX/.200X.100/.031
C221	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C222	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C223	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C224	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C225	Ceramic Capacitor	220pF, ±10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C226	Ceramic Capacitor	220pF, ±10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C227	Polyester capacitor	10nF, ±5%, 250V	25-10322-02	RAD/CAP/.300X.150/LS.200/.031
C228	Polyester capacitor	10nF, ±5%, 250V	25-10322-02	RAD/CAP/.300X.150/LS.200/.031
C229	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.200/LS.200/.031
C230	ALU Electrolytic Capacitor	10uF/100V, ±20%, 105°C	06-10012-01	CPCYL1/D.200/LS.200/.031
C231	Polyester capacitor	100nF, ±5%, 100V	25-10412-04	RAD/CAP/.300X.150/LS.200/.031
C232	Polyester capacitor	100nF, ±5%, 100V	25-10412-04	RAD/CAP/.300X.150/LS.200/.031
C233	ALU Electrolytic Capacitor	22000uF, ±20%, 100V, 105°C	06-22312-01	CPCYL1/D2.165/LS.965/.079
C234	ALU Electrolytic Capacitor	22000uF, ±20%, 100V, 105°C	06-22312-01	CPCYL1/D2.165/LS.965/.079
C239	Polyester capacitor	10nF, ±5%, 250V	25-10322-02	RAD/CAP/.300X.150/LS.200/.031
C240	Polyester capacitor	10nF, ±5%, 250V	25-10322-02	RAD/CAP/.300X.150/LS.200/.031
C241	ALU Electrolytic Capacitor	2200uF, 63V, ±20%, 105°C	06-22261-00	CPCYL1/D.900/LS.400/.062
C242	ALU Electrolytic Capacitor	2200uF, 63V, ±20%, 105°C	06-22261-00	CPCYL1/D.900/LS.400/.062
C243	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C244	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C245	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C246	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C247	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C248	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C249	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C250	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C251	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C252	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C253	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C254	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C255	ALU Electrolytic Capacitor	1000uF, ±20%, 160V, 105°C	06-10212-04	CPCYL1/D.900/LS.400/.062
C256	ALU Electrolytic Capacitor	1000uF, ±20%, 160V, 105°C	06-10212-04	CPCYL1/D.900/LS.400/.062
C257	Polyester capacitor	100nF, ±5%, 250V	25-10422-01	RAD/.300X.150/LS.200/.034

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C258	Polyester capacitor	100nF, ±5%, 250V	25-10422-01	RAD/.300X.150/LS.200/.034
C259	ALU Electrolytic Capacitor	1uF/50V, ±20%, 105°C	06-10951-03	CPCYL1/D.200/LS.200/.031
C260	ALU Electrolytic Capacitor	100uF/16V, ±20%, 105°C	06-10111-07	CPCYL1/D.200/LS.200/.031
C261	ALU Electrolytic Capacitor	330uF, ±20%, 16V, 105°C	06-33111-02	CPCYL1/D.300/LS.200/.031
C262	Polyester capacitor	220nF, ±5%, 63V	25-22461-02	RAD/CAP/.300X.250/LS.200/.031
C263	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C264	Bi-polarized Alu Electrolytic Capacitor	10uF, ±20%, 50V, 105°C	06-10051-11	CPCYL1/D.200/LS.200/.031
C269	Polyester capacitor	10nF, ±5%, 63V	25-10361-02	RAD/CAP/.300X.150/LS.200/.031
C270	Polyester capacitor	10nF, ±5%, 63V	25-10361-02	RAD/CAP/.300X.150/LS.200/.031
C271	ALU Electrolytic Capacitor	47uF/16V, ±20%, 105°C	06-47011-00	CPCYL1/D.200/LS.200/.031
C272	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C273	Polyester capacitor	10nF, ±5%, 63V	25-10361-02	RAD/CAP/.300X.150/LS.200/.031
C274	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C275	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C276	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C277	ALU Electrolytic Capacitor	1000uF, ±20%, 50V, 105°C	06-10251-01	CPCYL1/D.640/LS.300/.031
C278	ALU Electrolytic Capacitor	1000uF, ±20%, 50V, 105°C	06-10251-01	CPCYL1/D.640/LS.300/.031
C279	Bi-polarized Alu Electrolytic Capacitor	10uF, ±20%, 50V, 105°C	06-10051-11	CPCYL1/D.200/LS.200/.031
C281	ALU Electrolytic Capacitor	4.7uF/50V, ±20%, 105°C	06-47951-05	CPCYL/D.200/LS.200/.031
C290	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C291	ALU Electrolytic Capacitor	10uF/50V, ±20%, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031

JUMPER

R2G1	Link	L=5mm	21-06500-00	AX/.200X.080/.031
RL215	Link	L=10mm	21-06101-00	AX/.400X.100/.031
W201	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
W202	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
W203	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
W204	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
W205	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
W206	Link	L=12.5mm	21-06121-01	AX/.500X.100/.031
BUS201	BUSBAR	HS40-C375_B12V1-M025	69-124001-0	

INDUCTOR

L201	Inductor	0.7uH, horizontal type	08-01079-01	RAD/.850X.450/LS.700/.059
L202	Inductor	0.7uH, horizontal type	08-01079-01	RAD/.850X.450/LS.700/.059

RELAY

RL201	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL202	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL203	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL204	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL205	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL206	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL207	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL208	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL209	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
RL210	RELAYS	JRC-27F/012-S(555)	12-02101-02	RELAY_11
RL211	RELAYS	JQX-115F/036/1HS1	A12-03101-04	RELAY_1
RL212	RELAYS	JQX-115F/036/1HS1	A12-03101-04	RELAY_1
RL213	RELAYS	JQX-115F/036/1HS1	A12-03101-04	RELAY_1
RL214	RELAYS	JQX-115F/036/1HS1	A12-03101-04	RELAY_1
POT				
RV201	Stereo POT	1kΩB, RV142B-20-25A-B1K	09-02102-00	VRES20
CONNECTOR				
J201	HEADPHONE SOCKET	CKX-3.5-20A / LJE0366DS-5	17-07001-07	
J202	DUAL 3.5 HEADPHONE SOCKET	SCJ351P00YS0B00	J17-02002-02	
RCA201	RCA	6RCA, AV6-8.4-13	17-01006-00	RCA6A
RCA202	RCA	6RCA, AV6-8.4-13	17-01006-00	RCA6A
RCA203	RCA	6RCA, AV6-8.4-13	17-01006-00	RCA6A
RCA204	RCA	6RCA, AV6-8.4-13	17-01006-00	RCA6A
P201B	HOUSING	5PIN2.54-C	13-22505-00	BLKCON.100/VH/TM1SQS/W.300/5
P202B	HOUSING	11PIN2.54-C	13-22511-01	BLKCON.100/VH/TM1SQS/W.300/11
P203A	WIRE	UL2547#26AWG & UL2547#24AWG, 8PIN	14-37508-00	BLKCON.100/VH/TM1SQ/W.200/8
P204B	HOUSING	3PIN2.54-C	13-22503-00	BLKCON.100/VH/TM1SQ/W.200/3
P205B	CONNECTOR	CON2X10 MALE	13-22520-05	BLKCON.100/VH/TM2OE/W.200/20
P206B	HOUSING	5PIN3.96-C	13-23905-00	BLKCON.156/VH/TM1SQB/W.355/5
P207B	HOUSING	5PIN3.96-C	13-23905-00	BLKCON.156/VH/TM1SQB/W.355/5
P208B	HOUSING	3PIN2.54-C	13-22503-00	BLKCON.100/VH/TM1SQ/W.200/3
P209A	WIRE	UL1015#18AWG, yellow/black/black/blue/red, One terminal:VH-5Y, another terminal: SDN-5Y, L=150mm	14-37505-01	
P210A	WIRE	UL1015#18AWG, yellow/black/black/blue/red, One terminal:VH-5Y, another terminal: SDN-5Y, L=180mm	14-37505-02	
P211A	WIRE	UL2468#24AWG, One terminal:XHB-11Y, another terminal: SCN-11Y, L=130mm	14-37511-00	BLKCON.100/VH/TM1SQS/W.200/11
P212A	WIRE	UL2468#24AWG, One terminal:XHB-11Y, another terminal: SCN-11Y, L=130mm	14-37511-00	BLKCON.100/VH/TM1SQS/W.200/11
P213B	FPC	CNT-FPC125-12-TS, 1.25mm, 12pin	13-21212-01	
P214B	FPC	CNT-FPC125-12-TS, 1.25mm, 12pin	13-21212-01	
P215B	HOUSING	3PIN2.54-C	13-22503-00	BLKCON.100/VH/TM1SQ/W.200/3
To Binding Post Board	WIRE	UL1015#16AWG, L=100mm, 6PIN	14-37506-01	
G2G1	Ground Solder Tap	GND-8	32-28042-00	
SWITCH				
S201	SWITCH	SSSU122NA1	J11-05202-10	SLIDESWITCHES/SSSU141500
S202	SWITCH	SSSU122NA1	J11-05202-10	SLIDESWITCHES/SSSU141500
P/N 01-37503-00 PCB3 BOARD (TONE)				
DIODE				
D301	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
TRANSISTOR				
Q301	Transistor	2SB647-D	31-00647-01	TO-92
Q302	Transistor	2SD667-D	31-00667-01	TO-92
Q303	Transistor	2SB647-D	31-00647-01	TO-92

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
Q304	Transistor	2SD667-D	31-00667-01	TO-92
RESISTOR				
R301	Metal Film Resistor	75K Ω , 1/6W, \pm 5%	07-20753-50	AX/.200X.080/.031
R302	Metal Film Resistor	75K Ω , 1/6W, \pm 5%	07-20753-50	AX/.200X.080/.031
R303	Chip Resistor	47 Ω , \pm 5%,0805	07-90470-01	SM/R_0805
R304	Chip Resistor	47 Ω , \pm 5%,0805	07-90470-01	SM/R_0805
R305	Metal Film Resistor	3.3K Ω , 1/6W, \pm 1%	07-23301-50	AX/.200X.080/.031
R306	Metal Film Resistor	3.3K Ω , 1/6W, \pm 1%	07-23301-50	AX/.200X.080/.031
R307	Metal Film Resistor	732 Ω , 1/6W, \pm 1%	07-27320-50	AX/.200X.080/.031
R308	Metal Film Resistor	732 Ω , 1/6W, \pm 1%	07-27320-50	AX/.200X.080/.031
R309	Metal Film Resistor	390 Ω , 1/6W, \pm 1%	07-23900-50	AX/.200X.080/.031
R310	Metal Film Resistor	390 Ω , 1/6W, \pm 1%	07-23900-50	AX/.200X.080/.031
R311	Metal Film Resistor	180 Ω , 1/6W, \pm 1%	07-21800-50	AX/.200X.080/.031
R312	Metal Film Resistor	180 Ω , 1/6W, \pm 1%	07-21800-50	AX/.200X.080/.031
R313	Metal Film Resistor	51K Ω , 1/6W, \pm 5%	07-20513-50	AX/.200X.080/.031
R314	Metal Film Resistor	51K Ω , 1/6W, \pm 5%	07-20513-50	AX/.200X.080/.031
R317	Metal Film Resistor	1.5K Ω , 1/6W, \pm 1%	07-21501-50	AX/.200X.080/.031
R318	Metal Film Resistor	1.5K Ω , 1/6W, \pm 1%	07-21501-50	AX/.200X.080/.031
R319	Metal Film Resistor	390 Ω , 1/6W, \pm 1%	07-23900-50	AX/.200X.080/.031
R320	Metal Film Resistor	390 Ω , 1/6W, \pm 1%	07-23900-50	AX/.200X.080/.031
R321	Metal Film Resistor	4.7K Ω , 1/6W, \pm 5%	07-20472-50	AX/.200X.080/.031
R322	Metal Film Resistor	4.7K Ω , 1/6W, \pm 5%	07-20472-50	AX/.200X.080/.031
R323	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R324	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R325	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R326	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R327	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R328	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R329	Metal Film Resistor	47 Ω , 1/6W, \pm 5%	07-20470-50	AX/.200X.080/.031
R333	Chip Resistor	47 Ω , \pm 5%,0805	07-90470-01	SM/R_0805
R334	Chip Resistor	47 Ω , \pm 5%,0805	07-90470-01	SM/R_0805
CAPACITOR				
C301	ALU Electrolytic Capacitor	100uF/16V, 20%, 105 $^{\circ}$ C	06-10111-07	CPCYL1/D.300/LS.200/.031
C302	ALU Electrolytic Capacitor	100uF/16V, 20%, 105 $^{\circ}$ C	06-10111-07	CPCYL1/D.300/LS.200/.031
C303	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C304	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C305	Polyester capacitor	22nF, \pm 5%, 63V	25-22361-04	RAD/CAP/.400X.150/LS.300/.031
C306	Polyester capacitor	22nF, \pm 5%, 63V	25-22361-04	RAD/CAP/.400X.150/LS.300/.031
C307	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-04	RAD/CAP/.400X.150/LS.300/.031
C308	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-04	RAD/CAP/.400X.150/LS.300/.031
C309	Polyester capacitor	220nF, \pm 5%, 63V	25-22461-02	RAD/CAP/.300X.250/LS.200/.031
C310	Polyester capacitor	220nF, \pm 5%, 63V	25-22461-02	RAD/CAP/.300X.250/LS.200/.031
C311	Polyester capacitor	1uF, \pm 5%, 63V	25-10561-00	RAD/CAP/.300X.250/LS.200/.031
C312	Polyester capacitor	1uF, \pm 5%, 63V	25-10561-00	RAD/CAP/.300X.250/LS.200/.031
C313	Ceramic Capacitor	220pF, \pm 10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C314	Ceramic Capacitor	220pF, \pm 10%, 1KV	05-22113-01	CPAX/.200X.100/.031
C317	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C318	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C319	ALU Electrolytic Capacitor	220uF, \pm 20%, 25V, 105 $^{\circ}$ C	06-22121-03	CPCYL1/D.200/LS.200/.031
C320	ALU Electrolytic Capacitor	220uF, \pm 20%, 25V, 105 $^{\circ}$ C	06-22121-03	CPCYL1/D.200/LS.200/.031
C321	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C322	Polyester capacitor	100nF, \pm 5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C323	ALU Electrolytic Capacitor	10uF, \pm 20%, 50V, 105 $^{\circ}$ C	06-10021-04	CPCYL1/D.300/LS.200/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C324	ALU Electrolytic Capacitor	10uF, ±20%, 50V, 105°C	06-10021-04	CPCYL1/D.300/LS.200/.031
C325	ALU Electrolytic Capacitor	10uF, ±20%, 50V, 105°C	06-10021-04	CPCYL1/D.300/LS.200/.031
C326	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C327	Bi-polarized Alu Electrolytic Capacitor	4.7uF, 50V, ±20%, 85°C	06-47951-04	CPCYL1/D.200/LS.200/.031
C329	Ceramic Capacitor	470pF, ±5%, 1KV	05-47113-02	CPAX/.200X.100/.031
C330	Ceramic Capacitor	470pF, ±5%, 1KV	05-47113-02	CPAX/.200X.100/.031
JUMPER				
W301	Link	L=7.5mm	21-06750-00	
POT				
RV301	POT	RD163121A174-10KA×2	J09-01103-14	VPOT_4
RV302	POT	RD163121A174-10KA×2	J09-01103-14	VPOT_4
RV303	POT	RK16812MGA10(20KBX2)	J09-01203-05	VPOT_5
RV304	POT	RD163121A020 20KMN	J09-01203-06	VPOT_4
RV305	POT	10KΩ	09-02103-00	VRES21
RV306	POT	10KΩ	09-02103-00	VRES21
RV307	POT	100Ω	09-02101-00	VRES21
RV308	POT	100Ω	09-02101-00	VRES21
RELAY				
RL301	RELAYS	JRC-27F/005-S(555)	12-02202-03	RELAY_11
CONNECTOR				
P302B	HOUSING	10PIN2.54-C	13-22510-00	BLKCON.100/VH/TM1SQS/W.300/10
P301A	WIRE	UL1007#24AWG, L=40mm, 11PIN	14-37511-02	BLKCON.100/VH/TM1SQ/W.200/11
P300 to main board	WIRE	UL1015#18AWG, L=160mm, 1PIN	14-37501-08	
AH P/N : 01-37504-10 C P/N : 01-37504-20 PCB4 BOARD (STANDBY)				
DIODE				
D401	Super Fast Recovery Rectifier Diode	FR107	33-20107-00	DAX/.400X.100/.039
D402	Schottky Barrier Rectifier	1N5822	33-25822-00	DAX/.300X.200/.059
D403	Zener Diode	4.7V, 1/2W, ±2%	33-14709-05	DAX/.300X.080/.031
D404	Switch Diode	1N5819	33-25819-00	DAX/.400X.100/.039
D405	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D406	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D407	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D408	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D409	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
BRIDGE				
BR401	Rectifier Bridge	DB105	33-30162-00	DIP4
IC				
IC401	Power controller IC	TNY274PN	03-00274-00	DIP-8C
IC402	RAGULATOR	L7805CT	03-07805-00	TO220AB/123
PC401	Photocoupler	PC817A	03-00817-01	DIP4
RESISTOR				
R401	Metal Oxide Film Resistor	68KΩ, 1W, ±5%	07-30683-21	AX/.600X.125/.039
R402	Metal Film Resistor	100Ω, 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R403	Metal Film Resistor	510 Ω, 1/6W, 5%	07-20511-50	AX/.200X.080/.031
R404	Metal Film Resistor	150Ω, 1/6W, ±5%	07-20151-50	AX/.200X.080/.031
CAPACITOR				
C401	Interfernece Suppression Cap	0.1uF/275V, ±10%	A25-10422-07	RAD/CAP/.400X.200/LS.400/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
C402	ALU Electrolytic Capacitor	10uF,400V,±20%, 105℃	06-10042-00	CPCYL1/D.400/LS.200/.031
C403	X Capacitor	10nF/275V, ±10%	A25-10322-05	RAD/CAP/.400X.200/LS.400/.031
C404	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C405	Y Capacitor	1nF, Y Type	A05-10242-00	RAD/CAP/.400X.200/LS.400/.031
C406	ALU Electrolytic Capacitor	220uF, 16V, ±20%, 105℃	06-22111-21	CPCYL1/D.300/LS.200/.031
C407	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C408	ALU Electrolytic Capacitor	220uF, 16V, ±20%, 105℃	06-22111-21	CPCYL1/D.300/LS.200/.031
C409	Polyester capacitor	100nF, ±5%, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C410	ALU Electrolytic Capacitor	220uF, 10V, ±20%, 105℃	06-22111-20	CPCYL1/D.300/LS.200/.031
JUMPER				
W401(AH)	Link(φ1.0)	7.5mm	21-10750-00	7.5mm
W402(AH)	Link(φ1.0)	7.5mm	21-10750-00	7.5mm
W403(C)	Link(φ1.0)	7.5mm	21-10750-00	7.5mm
W404	Link(φ1.0)	10mm	21-10101-00	10mm
W405	Link(φ1.0)	10mm	21-10101-00	10mm
INDUCTOR				
L401	INDUCTOR	10uH	19-35980-00	AX/.400X.100/.031
TRANSFORMER				
TR402	Transformer	EE16 9V 5W	A18-37516-00	TRANS_2
RELAY				
RL401	RELAYS	DH1U5VDC TV-8 DH5D1-O	A12-02101-01	
FUSE				
F401	FUSE	T1AL/250V	A20-12102-00	
FUSE HOLDER				
F401	FUSE HOLDER	LS-PTF-78 (CQ-200C)	A20-20000-06	RAD/.1000X.400/LS.850/.066
CONNECTOR				
J401	JACK	HS4-CI9120-B009V1-M032	32-26304-00	
J402	JACK	KY187	32-24804-00	
P402B	HOUSING	6PIN2.54-C	13-22506-00	BLKCON.100/VH/TM1SQS/W.300/6
P403B	HOUSING	2PIN3.96-C	13-23902-00	BLKCON.156/VH/TM1SQB/W.355/2
P404B	HOUSING	4PIN7.92-C	13-23907-01	BLKCON.156/VH/TM1SQS/W.355/7
P401 to AC OUTLET(AH)	WIRE	UL1672#16AWG , L=420mm	A14-37501-03	
P402 to AC OUTLET(AH)	WIRE	UL1672#16AWG , L=420mm	A14-37501-04	
P/N : 01-37505-00 PCB5 BOARD (DISPLAY)				
DIODE				
D501	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
D502	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D503	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D504	LED (three color)	φ5, Blue/Red/Amber Three color BL-BUBJFB52C4V-1	33-50565-02	
D505	LED BLUE	φ3, BLUE, BL-BB52V1	33-50360-06	LED/D.225/LS.100/.039
D506	LED BLUE	φ3, BLUE, BL-BB52V1	33-50360-06	LED/D.225/LS.100/.039
D507	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D508	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D509	LED (Dual Color)	φ3,Blue/Blue,BL-BB5B5201-B	33-50366-00	
D510	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D511	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D512	LED (Dual Color)	φ3,Blue/Blue,BL-BB5B5201-B	33-50366-00	
D513	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
D514	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D515	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D516	LED BLUE	φ3, BLUE, BL-SB3248	33-50360-07	LED/D.225/LS.100/.039
D517	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D518	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D532	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D533	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D534	Zener Diode	4.7V, 1/2W	33-14709-00	DAX/.300X.080/.031
D535	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D536	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D538	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D539	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D540	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D541	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D542	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D543	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D544	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D545	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D546	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D547	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D548	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D549	Switch Diode	1N4148	33-44148-00	DAX/.300X.080/.031
D550	RECTIFY DIODES	1N4007	33-24007-00	DAX/.400X.100/.039
TRANSISTOR				
Q502	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q503	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q504	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q505	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q506	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q507	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q508	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q509	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q510	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q522	Digital Transistor	DTA114ESA	31-00114-03	TO-92
Q523	Digital Transistor	DTA114ESA	31-00114-03	TO-92
Q524	Digital Transistor	DTA114ESA	31-00114-03	TO-92
Q525	Digital Transistor	KRC102M-AT/P	31-00102-00	TO-92
Q528	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q529	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q530	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q531	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q532	Transistor	2SA1015-GR	31-01015-00	TO92/100/ECB
Q533	Transistor	2SD667-D	31-00667-01	TO-92
Q534	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q535	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q536	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q537	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q538	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q539	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q540	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q541	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q542	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q543	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q544	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q545	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
Q546	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q547	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q548	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q549	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q550	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
Q551	Transistor	2SC1815-GR	31-01815-00	TO92/100/ECB
IC				
IC501	Enhanced RS-232 Line Drivers/Receivers	SP232EEP	03-00232-00	DIP.100/16/W.300/L.775
IC502	Supervisory Circuits with I2C Serial 2k-bit CMOS EEPROM	CAT1021PI-42	03-01021-01	DIP.100/8/W.300/L.400
IC503	MICOM	AT89S52-24PU	03-08952-20	DIP.100/40/W.600/L2.050
IC504	IR Sensor	HS0038B4	03-00038-40	
IC505	Shift Registers	CD4094	03-04094-00	DIP.100/16/W.300/L.775
RESISTOR				
R501	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R502	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R503	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R504	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R505	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R506	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R507	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R508	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R509	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R510	Resistor NET	1K, $\pm 5\%$, 8R9P,A102J	07-00102-00	SIP/TM/L.900/9
R511	Resistor NET	1K, $\pm 5\%$, 8R9P,A102J	07-00102-00	SIP/TM/L.900/9
R512	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R513	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R514	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R515	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R516	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R517	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R518	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R519	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R520	Metal Film Resistor	130 Ω , 1/6W, $\pm 5\%$	07-20131-50	AX/.200X.080/.031
R521	Metal Film Resistor	270 Ω , 1/6W, $\pm 1\%$	07-22700-50	AX/.200X.080/.031
R522	Metal Film Resistor	130 Ω , 1/6W, $\pm 5\%$	07-20131-50	AX/.200X.080/.031
R523	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R525	Metal Film Resistor	100 Ω , 1/6W, 5%	07-20101-50	AX/.200X.080/.031
R526	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R527	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R528	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R529	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R530	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R531	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R532	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R533	Metal Film Resistor	56 Ω , 1/6W, 5%	07-20560-50	AX/.200X.080/.031
R534	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R535	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R536	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R537	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R538	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R539	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R540	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R541	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R542	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R543	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R544	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R545	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R546	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R547	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R548	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R549	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R550	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R552	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R553	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R554	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R555	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R556	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R557	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R558	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R559	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R560	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R561	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R562	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R563	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R564	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R565	Metal Film Resistor	10 Ω , 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R566	Metal Film Resistor	10 Ω , 1/6W, 5%	07-20100-50	AX/.200X.080/.031
R567	Metal Film Resistor	1K Ω , 1/6W, 5%	07-20102-50	AX/.200X.080/.031
R568	Metal Film Resistor	10K Ω , 1/6W, 5%	07-20103-50	AX/.200X.080/.031
R569	Metal Film Resistor	2K2 Ω , 1/6W, 5%	07-20222-50	AX/.200X.080/.031
R570	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R571	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031
R572	Metal Film Resistor	4.7K Ω , 1/6W, $\pm 5\%$	07-20472-50	AX/.200X.080/.031

CAPACITOR

C501	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C502	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C503	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C504	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C505	Ceramic Capacitor	22pF, $\pm 5\%$, 1KV	05-22013-02	CPAX/.200X.100/.031
C506	Ceramic Capacitor	22pF, $\pm 5\%$, 1KV	05-22013-02	CPAX/.200X.100/.031
C507	Polyester capacitor	10nF, $\pm 5\%$, 63V	25-10361-02	RAD/CAP/.300X.150/LS.200/.031
C508	ALU Electrolytic Capacitor	100uF/16V, 20%, 105°C	06-10111-07	CPCYL1/D.300/LS.200/.031
C509	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C510	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C511	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C512	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C513	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C514	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031
C517	ALU Electrolytic Capacitor	1000uF, 10V, $\pm 20\%$, 105°C	06-10211-05	CPCYL/D.400/LS.200/.031
C518	ALU Electrolytic Capacitor	10uF/50V, $\pm 20\%$, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C519	ALU Electrolytic Capacitor	10uF/50V, $\pm 20\%$, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C520	ALU Electrolytic Capacitor	10uF/50V, $\pm 20\%$, 105°C	06-10051-01	CPCYL1/D.200/LS.200/.031
C521	Polyester capacitor	100nF, $\pm 5\%$, 63V	25-10461-07	RAD/CAP/.300X.150/LS.200/.031

JUMPER

R551	Link	L=5mm	21-06500-00	AX/.200X.080/.031
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ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
CRYSTAL				
X501	Crystal	11.0592MHz,CL=15pF,HC-49U/S	04-11102-00	CRYSTAL/.450X.200/LS.200/.031
CONNECTOR				
X501	Crystal Washer	(QW-3)	75-040001-0	
J501	Phone Jack	SCJ340R0GBS0B00	J17-02001-02	
FOR IC503	IC Socket	DIP40	13-22540-00	DIP40
P501A	WIRE	UL2468#24AWG,L=240mm,10PIN	14-37510-01	BLKCON.100/VH/TM1SQ/W.200/10
P502A	WIRE	UL2468#24AWG,L=70mm,6PIN	14-37506-00	BLKCON.100/VH/TM1SQ/W.200/6
P503A	WIRE	UL2651#28AWG, L=580mm,20PIN	14-37520-00	BLKCON.100/VH/TM2OE/W.200/20
P504A	WIRE	UL1007#24AWG & UL1691#24AWG, L=790mm,5PIN	14-37505-00	BLKCON.100/VH/TM1SQ/W.200/5
G501	Ground Solder Tap	GND-8	32-28042-00	
SWITCH				
S501	Tact Switch	IT-1102A-1160	11-04101-05	
S502	Tact Switch	IT-1102A-1160	11-04101-05	
S503	Tact Switch	IT-1102A-1160	11-04101-05	
S504	Tact Switch	IT-1102A-1160	11-04101-05	
S505	Tact Switch	IT-1102A-1160	11-04101-05	
S506	Tact Switch	IT-1102A-1160	11-04101-05	
S507	Tact Switch	IT-1102A-1160	11-04101-05	
S508	Tact Switch	IT-1102A-1160	11-04101-05	
S509	Tact Switch	IT-1102A-1160	11-04101-05	
S510	Tact Switch	IT-1102A-1160	11-04101-05	
S511	Tact Switch	IT-1102A-1160	11-04101-05	
P/N 01-37506-10 & 20 PCB6 BOARD (HS OPAMP STEREO)				
TRANSISTOR				
Q601	MOSFET	2SK209	J31-00209-00	SM/SC59_SDG
Q602	MOSFET	2SK209	J31-00209-00	SM/SC59_SDG
Q603	Transistor	2SA1312	J31-01312-00	SM/SC59_BEC
Q604	Transistor	2SA1312	J31-01312-00	SM/SC59_BEC
Q605	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
Q606	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
Q607	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
Q608	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
Q609	Transistor	2SC2983	J31-02983-00	TO126/90/ECB
Q610	Transistor	2SC2983	J31-02983-00	TO126/90/ECB
Q611	Transistor	2SA1225	J31-01225-00	TO126/90/ECB
Q612	Transistor	2SA1225	J31-01225-00	TO126/90/ECB
Q613	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
Q614	Transistor	2SC3324	J31-03324-00	SM/SC59_BEC
RESISTOR				
R601	Chip Resistor	1megΩ ,1/8W,±5%	07-90105-00	SM/R_0603
R602	Chip Resistor	1megΩ ,1/8W,±5%	07-90105-00	SM/R_0603
R603	Chip Resistor	220Ω ,1/8W,±5%	07-90221-00	SM/R_0603
R604	Chip Resistor	220Ω ,1/8W,±5%	07-90221-00	SM/R_0603
R605	Chip Resistor	1KΩ ,1/8W,±5%	07-90102-00	SM/R_0603
R606	Chip Resistor	1KΩ ,1/8W,±5%	07-90102-00	SM/R_0603
R607	Chip Resistor	1KΩ ,1/8W,±5%	07-90102-00	SM/R_0603
R608	Chip Resistor	1KΩ ,1/8W,±5%	07-90102-00	SM/R_0603
R609	Chip Resistor	1.5KΩ ,1/8W,±5%	07-90152-00	SM/R_0603
R610	Chip Resistor	1.5KΩ ,1/8W,±5%	07-90152-00	SM/R_0603

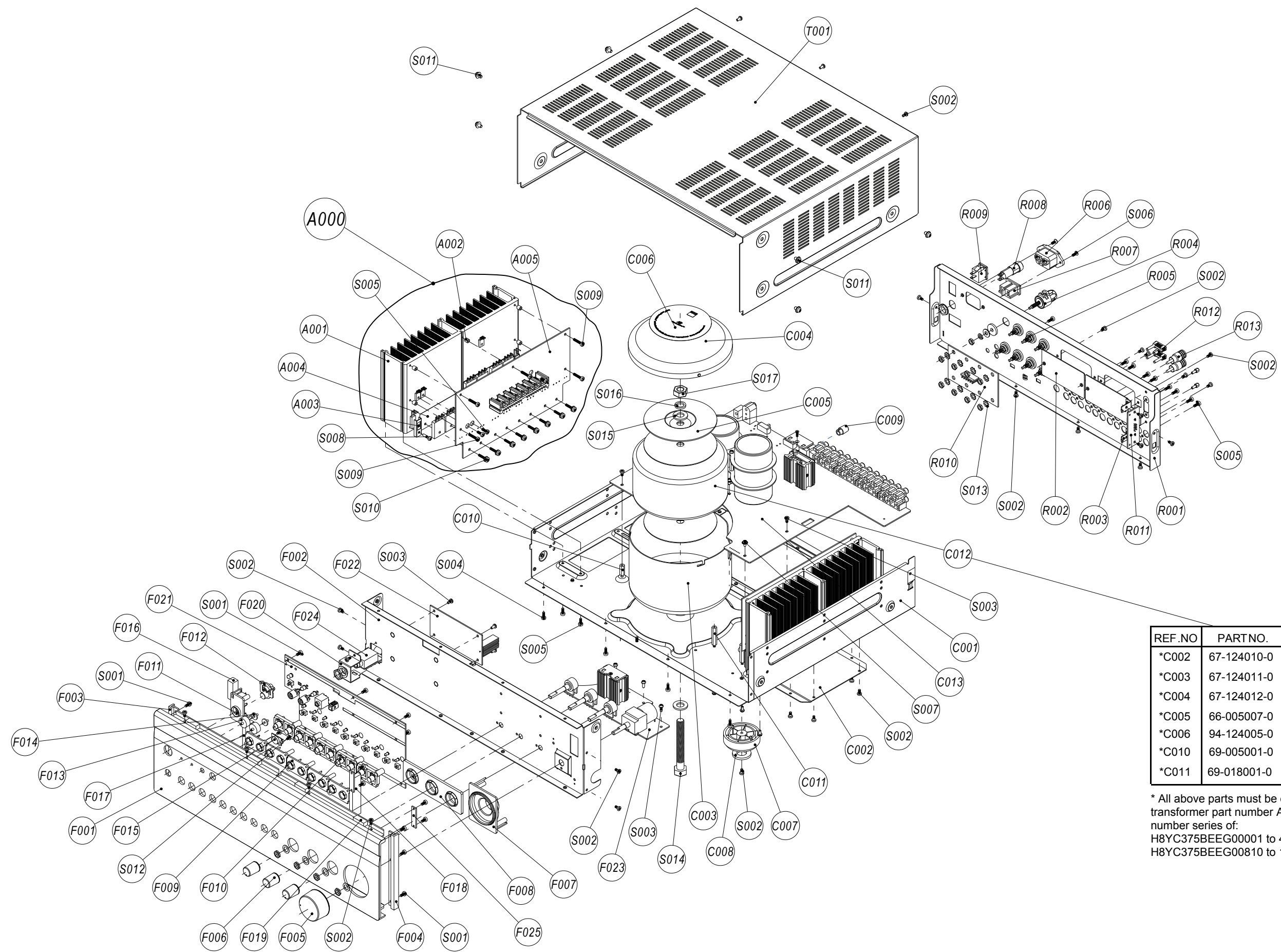
ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
R611	Chip Resistor	1K Ω ,1/8W,±5%	07-90102-00	SM/R_0603
R612	Chip Resistor	1K Ω ,1/8W,±5%	07-90102-00	SM/R_0603
R613	Chip Resistor	18K Ω ,1/8W,±5%	07-90183-00	SM/R_0603
R614	Chip Resistor	18K Ω ,1/8W,±5%	07-90183-00	SM/R_0603
R615	Chip Resistor	10 Ω ,1/8W,±5%	07-90100-00	SM/R_0603
R616	Chip Resistor	10 Ω ,1/8W,±5%	07-90100-00	SM/R_0603
R617	Chip Resistor	10 Ω ,1/8W,±5%	07-90100-00	SM/R_0603
R618	Chip Resistor	10 Ω ,1/8W,±5%	07-90100-00	SM/R_0603
R619	Chip Resistor	430 Ω ,1/8W,±1%	07-94300-00	SM/R_0603
R620	Chip Resistor	430 Ω ,1/8W,±1%	07-94300-00	SM/R_0603
R621	Chip Resistor	487 Ω ,1/8W,±1%	07-94870-00	SM/R_0603
R622	Chip Resistor	487 Ω ,1/8W,±1%	07-94870-00	SM/R_0603
R623	Chip Resistor	8.2K Ω ,1/8W,±1%	07-98201-00	SM/R_0603
R625	Chip Resistor	150K Ω ,1/10W,±5%	07-90154-00	SM/R_0603
R626	Chip Resistor	150K Ω ,1/10W,±5%	07-90154-00	SM/R_0603
R627	Chip Resistor	100K Ω ,1/10W,±5%	07-90104-00	SM/R_0603
R628	Chip Resistor	100K Ω ,1/10W,±5%	07-90104-00	SM/R_0603
CAPACITOR				
C601	Ceramic Chip Capacitor	22pF,50V,NPO	26-22051-00	SM/C_0603
C602	Ceramic Chip Capacitor	22pF,50V,NPO	26-22051-00	SM/C_0603
C603	Ceramic Chip Capacitor	47pF,50V,NPO	26-47051-00	SM/C_0603
C604	Ceramic Chip Capacitor	47pF,50V,NPO	26-47051-00	SM/C_0603
C605	Ceramic Chip Capacitor	1nF,50V,NPO	26-10251-10	SM/C_0603
C606	Ceramic Chip Capacitor	1nF,50V,NPO	26-10251-10	SM/C_0603
C607	Ceramic Chip Capacitor	100nF,50V,X7R	26-10451-10	SM/C_0603
C608	Ceramic Chip Capacitor	100nF,50V,X7R	26-10451-10	SM/C_0603
C609	Ceramic Chip Capacitor	100nF,50V,X7R	26-10451-10	SM/C_0603
C610	Ceramic Chip Capacitor	100nF,50V,X7R	26-10451-10	SM/C_0603
C611	Ceramic Chip Capacitor			SM/C_0603
C613	Ceramic Chip Capacitor	1uF,25V,Y5V	26-10521-00	SM/C_0603
C614	Ceramic Chip Capacitor	1uF,25V,Y5V	26-10521-00	SM/C_0603
C617	Ceramic Chip Capacitor	220pF,50V,NPO	26-22151-00	SM/C_0603
C618	Ceramic Chip Capacitor	220pF,50V,NPO	26-22151-00	SM/C_0603
CONNECTOR				
P601A	CONNECTOR	10PIN2.54 RIGHT ANGLE	13-12510-01	BLKCON.100/VH/TM1SQ/W.200/10
P/N 01-37507-00 PCB7 BOARD (RS232)				
RESISTOR				
R701	Metal Film Resistor	100 Ω , 1/6W, 5%	07-20101-50	AX/.200X.080/.031
CONNECTOR				
J701	DB9 Connector FEMALE	DB9 FEMALE	17-08009-00	DSUB9M-RA-RS
P701A	WIRE	UL2468#24AWG,L=80mm, 3PIN	14-37503-00	BLKCON.100/VH/TM1SQ/W.200/3
P702B	HOUSING	3PIN2.54C	13-22503-00	BLKCON.100/VH/TM1SQ/W.200/3
P/N 01-37508-00 PCB8 BOARD (HEADPHONE)				
CONNECTOR				
J801	Phone Jack	2P2.54-A150B 1569-26AWG	17-02001-00	
P801A	WIRE	UL2468#24AWG,L=170mm, 3PIN	14-37503-01	BLKCON.100/VH/TM1SQ/W.200/3
P/N 01-37512-00 PCB9 BOARD (BP BOARD)				
CONNECTOR				
P901B	CONNECTOR	VH 3.96-6A	13-23906-00	
Assembly Parts				
FUSE				
	FUSE	T10AL/250V (AH)	A20-12103-00	

ELECTRICAL PARTS LIST

DESIGNATOR	DESCRIPTION	PART TYPE	PART NUMBER	FOOTPRINT
	FUSE	T5AL/250V (C)	A20-12502-00	
CONNECTOR				
AC INLET to Switch	WIRE	UL1672#16AWG , red, L=100mm	A14-37501-00	
Switch to Fuse holder	WIRE	UL1672#16AWG , red, L=100mm	A14-37501-00	
AC INLET to J401	WIRE	UL1672#16AWG,blue, L=460mm	A14-37501-01	
Fuse holder to J402	WIRE	UL1672#16AWG , red, L=380mm	A14-37501-02	






EXPLODED VIEW



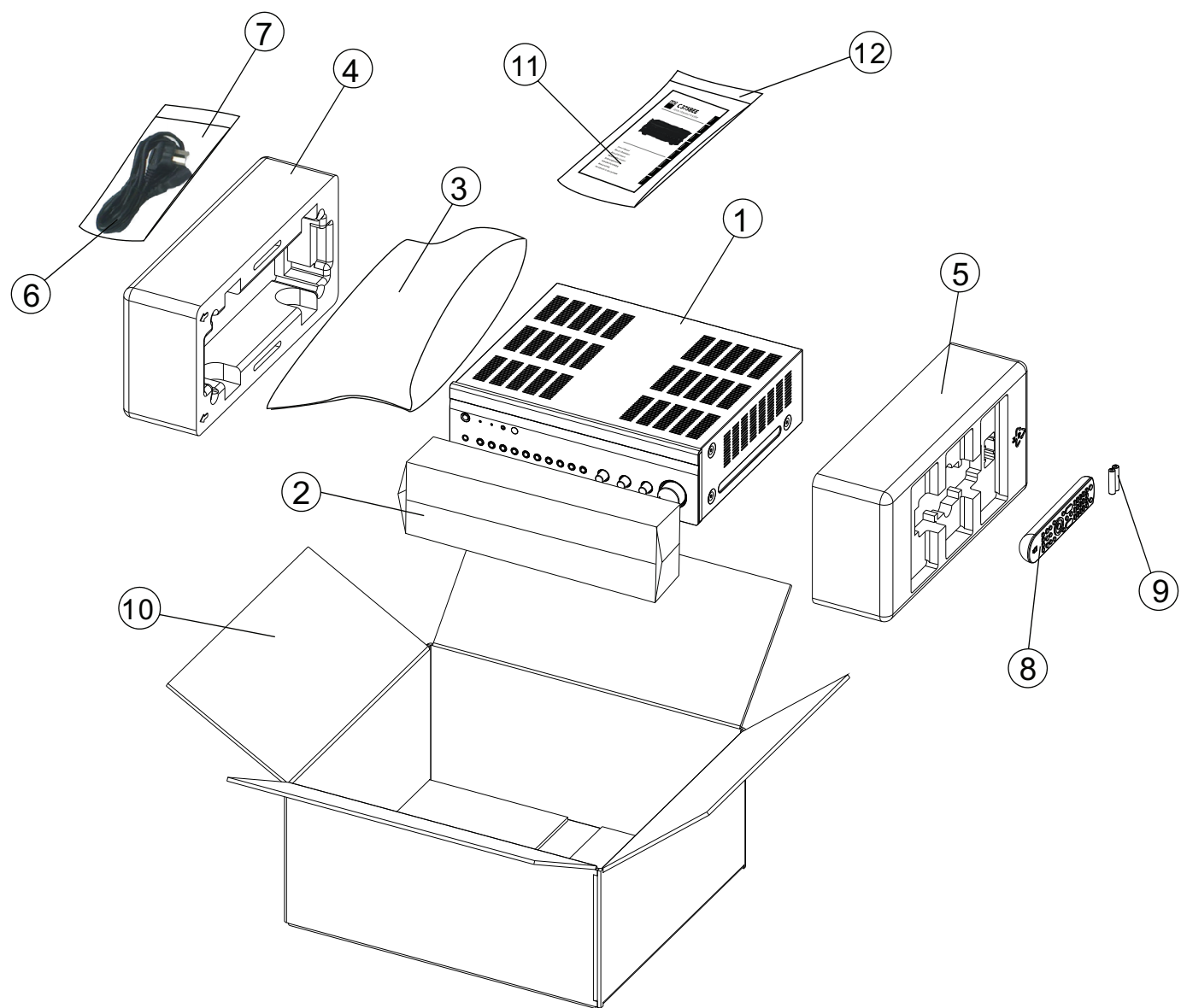
REF.NO	PARTNO.	DESCRIPTION	Qty.
*C002	67-124010-0	Base Cover	1
*C003	67-124011-0	Shielding Box	1
*C004	67-124012-0	Shielding Box Cover	1
*C005	66-005007-0	Metal Disc	1
*C006	94-124005-0	Transformer label	1
*C010	69-005001-0	Copper Spacer	5
*C011	69-018001-0	Copper Spacer B	3

* All above parts must be ordered when replacing the main transformer part number A18-37571-01 for all models with number series of:
H8YC375BEEG00001 to 400 and
H8YC375BEEG00810 to 1208

EXPLODED VIEW PARTS LIST

REF.NO	PART NO.	DESCRIPTION	Qty.	REF.NO	PART NO.	DESCRIPTION	Qty.
A000	01-37501-00	Poweramp Module Assembly	2	F013	77-062001-1	LED Lens Bezel	2
A001	70-124010-1	Main Heatsink	2		77-062011-1	LED Lens Bezel	Ti:2
A002	85-010001-0	Spacer	10	F014	76-062001-1	LED Lens	2
A003	66-018005-0	Thermal Switch Clamping	4	F015	76-076001-0	IR Lens	1
A004	78-124001-0	Insulated Cashion	4	F016	79-124003-0	CR Foam C	1
A005	02-37501-00	Poweramp Module Board NSP	2	F017	79-124002-0	CR Foam B	1
S005	61 023208 0	Self Taping Screws BTB3×8	20	F018	79 124001 0	CR Foam A	1
S008	61-023212-0	Self Taping Screw BTB3×12	4	F019	79-062001-0	Rubber Pad	4
S009	61-023215-0	Self Taping Screw BTB3×15	10	F020	66-123003-0	Phone Bracket	1
S010	61-353515-0	Taptite Screw 3×15	16	F021	01-37505-00	Display Board	1
C001	67-124004-2 67-124004-3 from S/N greater	Old Chassis New Chassis than H9XC375BEEG04119	1	F022	01-37504-10	Standby Board	AH:1
C002	67-124010-0	Base Cover	1		01-37504-20	Standby Board	C:1
C003	67-124011-0	Shielding Box	1	F023	01-37503-00	Tone Board	1
C004	67-124012-0	Shielding Box Cover	1	F024	01-37508-00	Headphone Board	1
C005	66-005007-0	Metal Disc	1	F025	16-37511-00	PCB Pad	2
C006	94-124005-0	Transformer label	1	R001	67-124002-1A	Rear Panel	AH:1
C007	75-124001-0	Foot	4		67-124001-1A	Rear Panel	C:1
C008	J78-001002-0	Foot Pad	4	R002	67-124007-0	Rear Panel Plate	2
C009	73-003001-0	Rotate Knob	1	R003	66-010010-0	PCB Bracket	2
C010	69-005001-0	Copper Spacer	5	R004	17-03001-17	Binding Post(Black)	4
C011	69-018001-0	Copper Spacer B	3	R005	17-03001-16	Binding Post(Red)	4
C012 	A18-37571-01	Main Transformer	1	R006 	A17-07002-07	AC Inlet	1
C013	01-37502-00	Main Board	1	R007 	A17-07002-10	AC Outlet	AH:1
F001	J70-124001-4A	Fascia	1	R008 	JA20-20000-10	Fuse Holder	1
	J70-124011-4A	Fascia	Ti:1	R009 	A11-01101-03	Rocker Switch	1
F002	67-124005-2 67-124005-3 from S/N greater	Subfascia New Subfascia than H9XC375BEEG04119	1	R010	01-37512-00	BP Board	1
F003	J70-124002-0	End Cap LL	1	R011	02-37507-00	RS232 Board	1
	J70-124012-0	End Cap L	Ti:1	R012	30-63200-00	Shorting Plug	2
F004	J70-124003-0	End Cap R	1	R013	30-63700-00	Shorting Plug	2
	J70-124013-0	End Cap R	Ti:1	T001	67-124003-1 67-124013-1 67-124003-2 67-124013-2 from S/N greater	Top Cover Graphite Top Cover Titanium Top Cover Graphite New Top Cover Titanium New than H9XC375BEEG04119	1 Ti:1
F005	J71-124004-0	Volume Knob	1	S001	61-023206-0	Self Taping Screws BTB3×6	19
	J71-124014-0	Volume Knob	Ti:1	S002	61-023106-0	Self Taping Screws STB3×6	35+3
F006	J71-124003-0	Tone Knob	3		61-023106-1	Self Taping Screws STB3×6	Ti:3
	J71-124013-0	Tone Knob	Ti:3	S003	61-023506-0	Machine Screws MB3×6	18
F007	77-124003-0	Volume Knob Bezel	1	S004	61-023108-0	Self Taping Screws STB3×8	5
	77-091013-1	Volume Knob Bezel	Ti:1	S005	61-023208-0	Self Taping Screws BTB3×8	21
F008	77-124001-1	Tone Knob Bezel	1	S006	61-073108-0	Self Taping Screws STO3×8	2
	77-124011-1	Tone Knob Bezel	Ti:1	S007	61-373506-0	Machine Screw M3×6	2
F009	77-124002-2	2P Input Button Bezel	5	S011	61-084108-0	Self Taping Screws STPW4X8	6
	77-124012-2	2P Input Button Bezel	Ti:5		61-084106-2	Self Taping Screws STPW4X6	Ti:6
F010	J71-124002-0	2P Input Button	5	S012	61-022204-6	Self Taping Screws BTB2.6×4	2
	J71-124012-0	2P Input Button	Ti:5	S013	63-040506-1	Serrated Lock Washer	8
F011	77-124004-0	Power Button Bezel	1	S014	64-110080-1	Bolts,M10×80	1
	77-123014-1	Power Button Bezel	Ti:1	S015	63-011020-3	Washers	2
F012	J71-124001-0	Power Button	1	S016	63-021030-0	Spring Washers	1
	J71-124011-0	Power Button	Ti:1	S017	62-011002-0	Nut,M10	1

PACKING DIAGRAM



REF.NO	Part No.	Description	Qty.
1	00-37500-10	C375Bee AH Version	AH:1
	00-37500-20	C375Bee C Version	C:1
	00-37500-30	C375Bee CT Version	CT:1
2	90-005002-3	Non-Woven Cloth	1
3	90-005001-0	Polybag	1
4	89-005002-5	Polyfoam End Cap(2)	1
5	89-005001-6	Polyfoam End Cap(1)	1
6	JA15-10125-01 or A15-10125-00	AC Cord	AH:1
	JA15-10250-20 or A15-10250-00	AC Cord	C/CT:1
7	90-001013-0	AC Cord Polybag	1
8	J30-17250-00	Remote Control	1
9	30-22100-10	Batteries	2
10	88-124001-0A	Carton Box	1
11	30-43750-00	Instruction Manual	1
12	90-001002-0	Manu Polybag	1

VERSION HISTORY

[illegible]

CHANGE DETAILS:

1. Main board change to VM4.0. PCBA PN changed from 01-37502-00 to 01-37502-01. Below are the changes on this board.

- a. Add D229 and D232 diode 1N5404
- b. Add C282 2200uF/25V electrolytic capacitor
- c. Add P217B socket
- d. Add P216B socket

2. Tone board. PCBA PN changed from 01-37503-00 to 01-37503-01. Below is the change on this board.

- a. R329 changed from 47ohms resistor to 5mm jumper wire.

3. Standby board change to VM3.0. PCBA part number changed from 01-37504-10 to 01-37504-11 for AH version and 01-37504-20 to 01-37504-21 for C version. Below are the changes on this board.

- a. D408 changed from 1N4148 to 1N4007
- b. R401 changed from 68K resistor to TVS P6KE-200A
- c. IC402 regulator changed from LM7805 to LM7806
- d. TR402 transformer change to PN: 22-01615-00
- e. D410 diode 1N4148 added
- f. R406 10-ohm resistor added
- g. R407 3.6K resistor added
- h. R408 10K resistor added
- i. R405 22K resistor added
- j. IC403 TL431 added
- k. C411 10uF/50V electrolytic capacitor added
- l. D409 1N4148 diode removed
- m. D403 4.7V zener diode removed
- n. D402 1N5822 diode removed
- o. C403 10nF capacitor removed
- p. C406 220uF/16V electrolytic capacitor removed

4. Display board change to VM4.0. PCBA PN changed from 01-37505-00 to 01-37505-01. Below are the changes on this board.

- a. IC502 changed from CAT1021LI-42 to STC12C5A16S2-35C-LQFP44
- b. IC501 changed from SP232EEP to SP3232EEN
- c. IC505 footprint changed from DIP16 to SO16
- d. R521 changed from 270-ohm to 330-ohm
- e. R506 changed from 1K to 10K
- f. R508 changed from 10K to 1K
- g. R548 changed from 1K to 4.7K
- h. R551 changed from 5mm jumper wire to 10K resistor
- i. D501 changed from 1N4007 to 10mm jumper wire
- j. D551 changed from 1N5819 to 10mm jumper wire
- k. R510-R511 changed from 1K to 10K
- l. C514 100nF capacitor removed
- m. R501, R503, R504 and R528 10K resistor removed
- n. D550 1N5819 diode removed
- o. IC503 AT89S52-24PU and IC socket removed
- p. C508 100uF/16V electrolytic capacitor removed
- q. C521 and C522 100uF/16V electrolytic capacitor added
- r. J502 in circuit program socket added

5. Main transformer changed from (PN: JA18-37571-01) to (PN: JA18-37571-11).

6. Change rear panel to show <0.5W star logo.

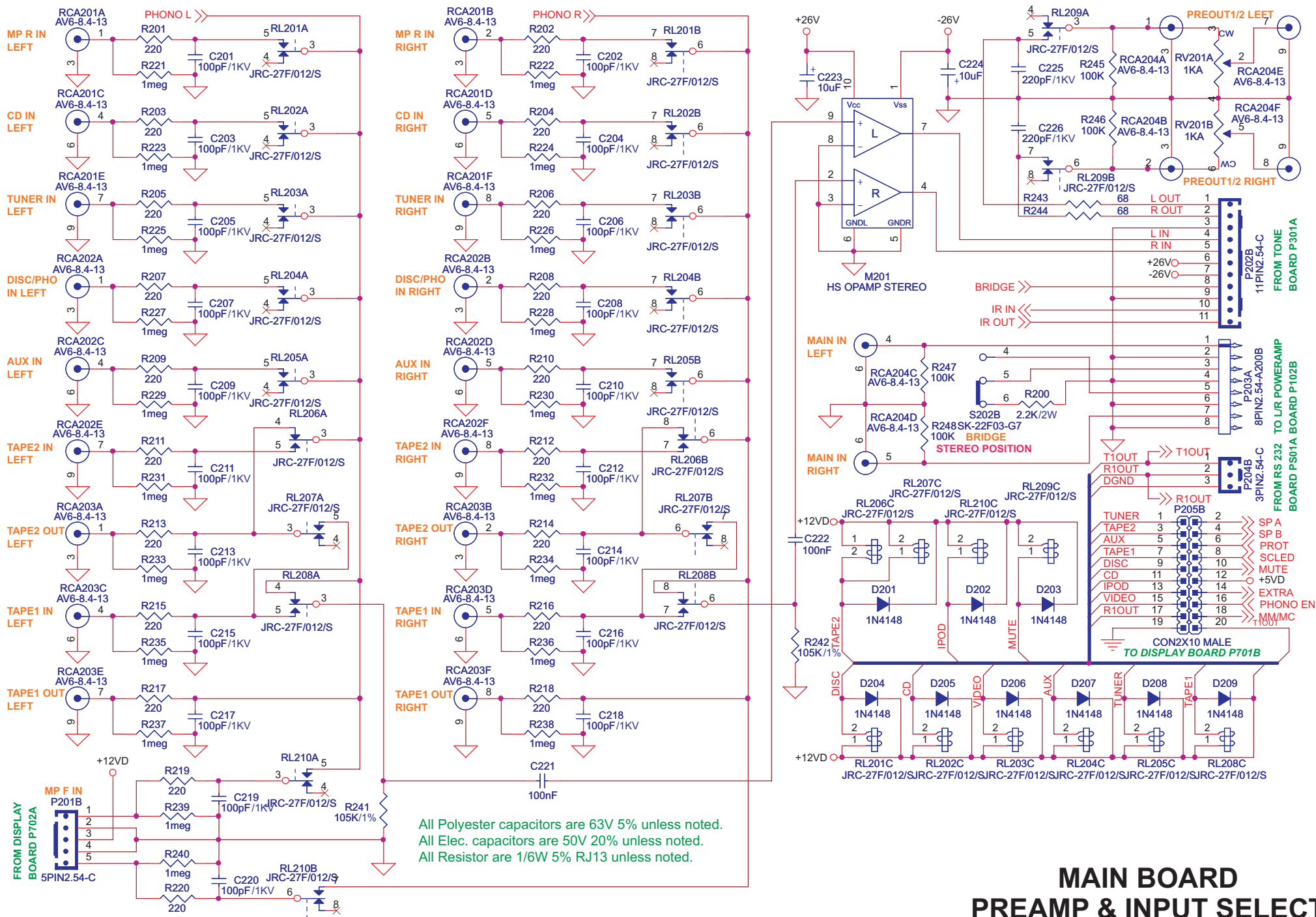
VERSION

AH Version PN: 67-124002-1B

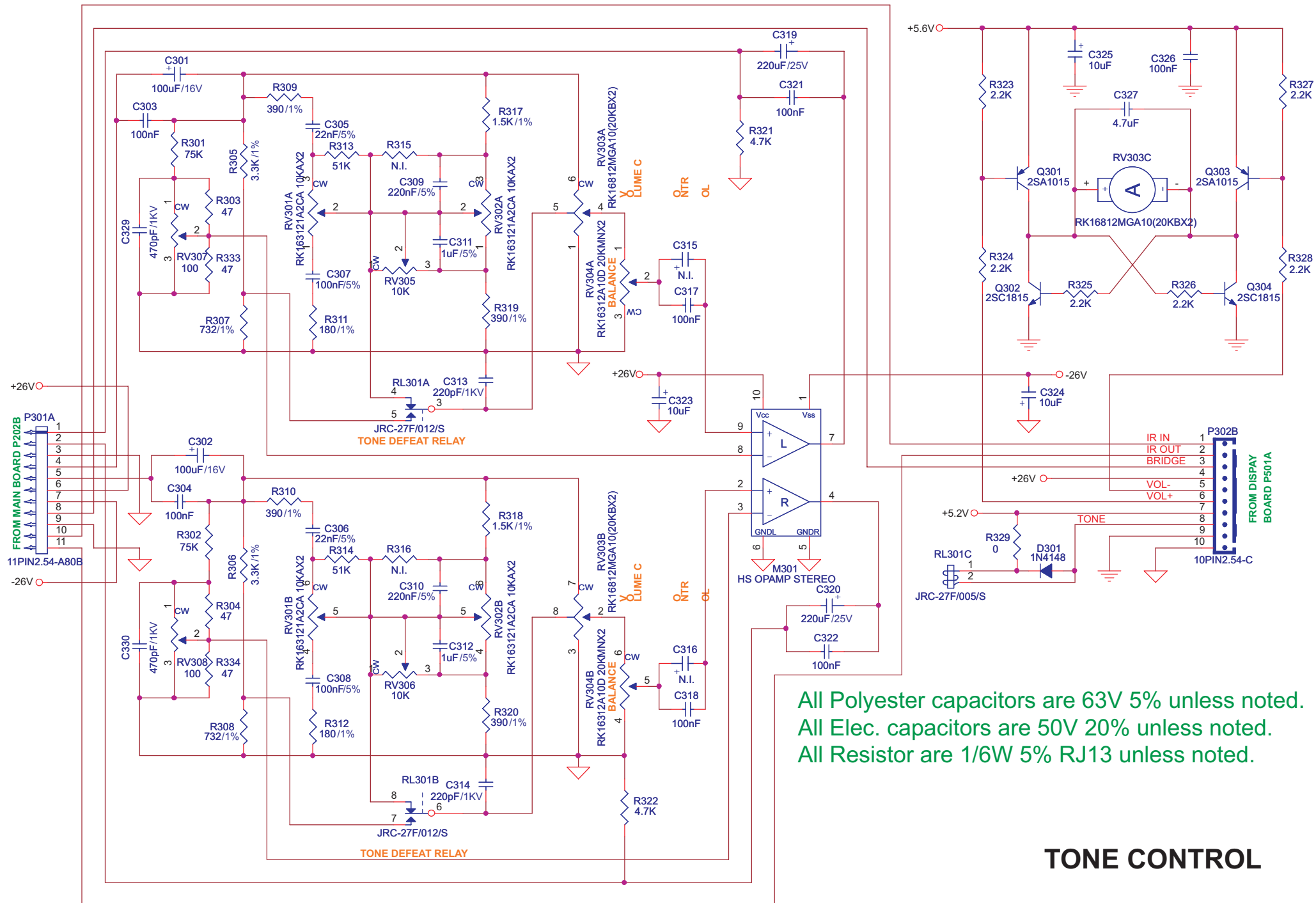
C Version PN: 67-124001-1C

OLD AND NEW PARTS COMPATIBILITY

		1W C375 Version	0.5W C375 Version
Standby Board	1W Version VM2.0 PN: 01-37504-10 (AH) PN: 01-37504-20 (C)		Can not use otherwise standby power consumption will be higher than 0.5W
	0.5W Version VM3.0 PN: 01-37504-11 (AH) PN: 01-37504-21(C)	Can be used after changing R407 from 3.6K to 6.8K	
Display Board	1W Version VM3.0 PN: 01-37505-00		Can not use otherwise standby power consumption will be higher than 0.5W
	0.5W Version VM4.0 PN: 01-37505-01	Can be used directly	
Tone Board	1W Version VM2.0 PN: 01-37503-00		Can be used after changing R329 from 47ohms to 5mm jumper wire
	0.5W Version VM2.0 PN: 01-37503-01	Can be used directly	
Main Board	1W Version VM3.0 PN: 01-37502-00		Not advisable because unit will lose the ability to accommodate MDC that requires 8.8V/0.3A supply
	0.5W Version VM4.0 PN: 01-37502-01	Can be used but unit still cannot accommodate MDC that requires 8.8V/0.3A supply	
Main Transformer	1W Version HA400 PN: JA18-37571-01		Not advisable because unit will lose the ability to accommodate MDC that requires 8.8V/0.3A supply
	0.5W Version HA400-A PN: JA18-37571-11	Can be used but unit still cannot accommodate MDC that requires 8.8V/0.3A supply	

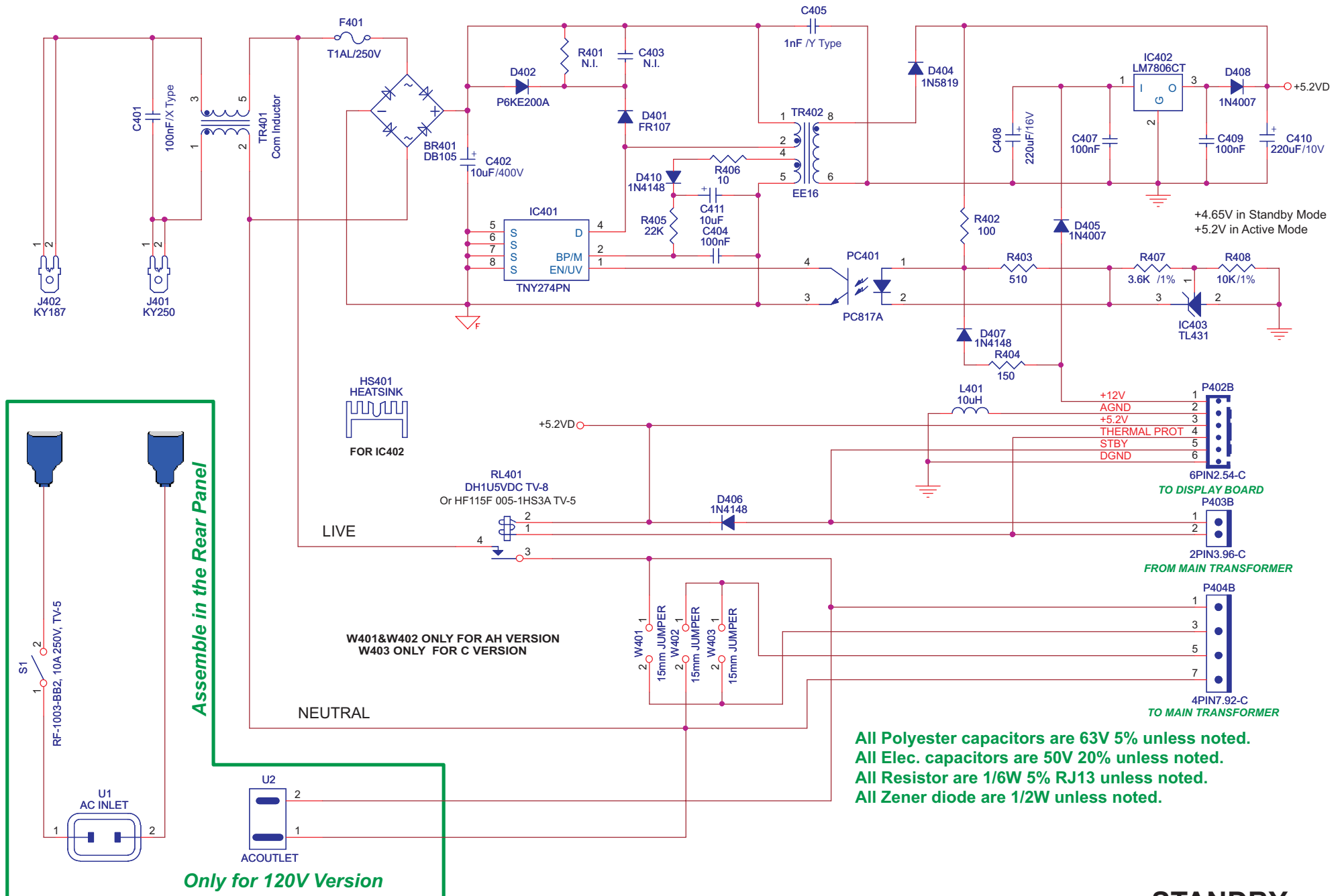


MAIN BOARD PREAMP & INPUT SELECT



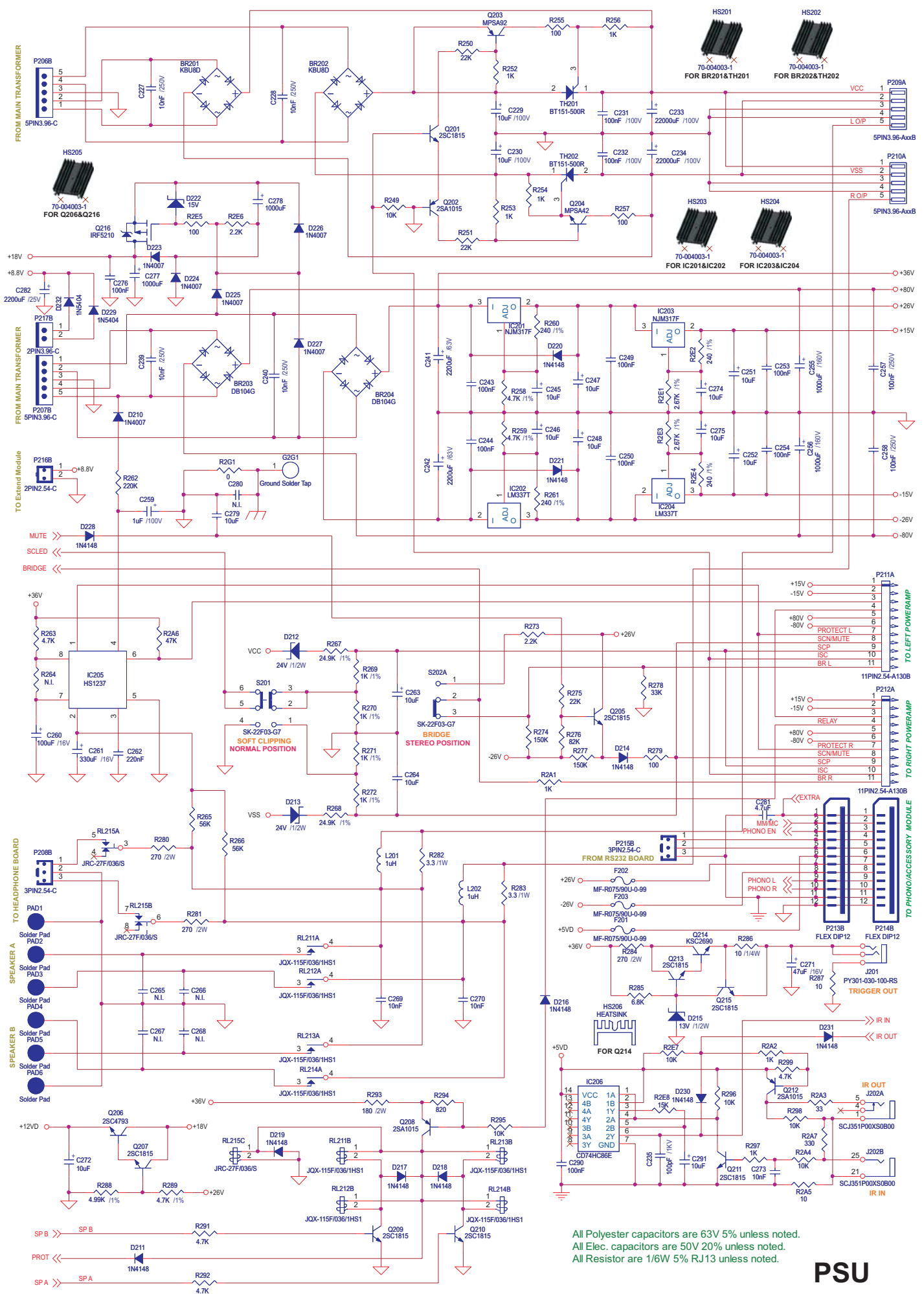
All Polyester capacitors are 63V 5% unless noted.
 All Elec. capacitors are 50V 20% unless noted.
 All Resistor are 1/6W 5% RJ13 unless noted.

TONE CONTROL



STANDBY

SCHEMATICS DIAGRAM PSU (WITH MDC +8.8V SUPPORT)



PSU

