

# GENERAL SPECIFICATION

1. APPLICATION                    Model XDM-200
2. POWER SOURCE                AC 9V, 500mA
3. DIMENSIONS                  236 (W) X 192 (D) X 82 (H) mm
4. WEIGHT                         2.8Kgs

## 5. FUNCTION OF PARTS

NAME	Q' TY	TYPE
TOP PANEL		
(1) INPUT SELECTOR	2	SW, LEVER
(2) TREBLE	2	VR, ROTATING
(3) BASS	2	VR, ROTATING
(4) GAIN	2	VR, ROTATING
(5) MIC LEVEL	1	VR, ROTATING
(6) MASTER LEVEL.	1	VR, ROTATING
(7) CUE LEVEL	1	VR, ROTATING
(8) CUE	1	VR, ROTATING
(9) INPUT FADER	2	VR, SLIDE 45mm
(10) CROSS FADER	1	VR, SLIDE 45mm
(11) INDICATOR	1	LED (POWER)
BACK PANEL		
(12) POWER	1	SW, PUSH
(13) POWER IN	1	JACK, AC
(14) LINE IN	2 PAIRS	JACK, RCA
(15) PHONO IN	2 PAIRS	JACK, RCA
(16) MASTER OUT	1 PAIR	JACK, RCA
FRONT PANEL		
(17) MIC IN	1 PAIR	JACK, 1/4"
(18) PHONES	1 PAIR	JACK, 1/4"

## 7. AUDIO CHARACTERISTICS (LOAD=47K OHM)

### (1) SENSITIVITY OF INPUT (LEVEL/IMPEDANCE):

LINE                    -14dB/12K OHM    ±3dB  
 PHONO                -50dB /47K OHM   ±3dB  
 MIC                    -54dB /3K OHM    ±3dB

### (2) OUTPUT (LEVEL/IMPEDANCE):

MASTER (RCA)                    0dB/47K OHM                    ±3dB  
 PHONES (LOAD=32 OHM)        -3dB/33K OHM                   ±3dB

### (3) MAX. OUTPUT (LOAD=47K, THD=5%)

MASTER (RCA)                    MORE THAN 18dB (8V)  
 PHONES (LOAD=32 OHM)        MORE THAN 5dB (1.8V)

### (4) CHANNEL BALANCE    WITHIN 3dB

### (5) FREQUENCY RESPONSE:

LINE                    20-20KHz    +2, -3dB  
 PHONO                20-20KHz    +2, -3dB (RIAA)  
 MIC                    20-20KHz    +2/-3dB

### (6) OUTPUT NOISE (IEC-A WEIGHTED)

LINE                    LESS THAN -75dB  
 PHONO                LESS THAN -65dB  
 MIC                    LESS THAN -55dB

## GENERAL SPECIFICATION

### (7) TOTAL HARMONIC DISTORTION:

MASTER OUTPUT (LOAD=47K OHM) LESS THAN 0.2%

PHONES OUT (LOAD=32 OHM) LESS THAN 0.3%

(8) CROSSTALK MORE THAN 50dB AT 1KHz BETWEEN L AND R CHANNEL.

### (9) EQUALIZER:

LOW +15 /-22dB ±3dB AT 70Hz

HI +15 /-19dB ±3dB AT 13KHz

## 8.ENVIRONMENTAL CONDITION

(1) Operating Temperature 5 to 35 deg. C

(2) Humidity 25 to 85% RH (non-condensing)

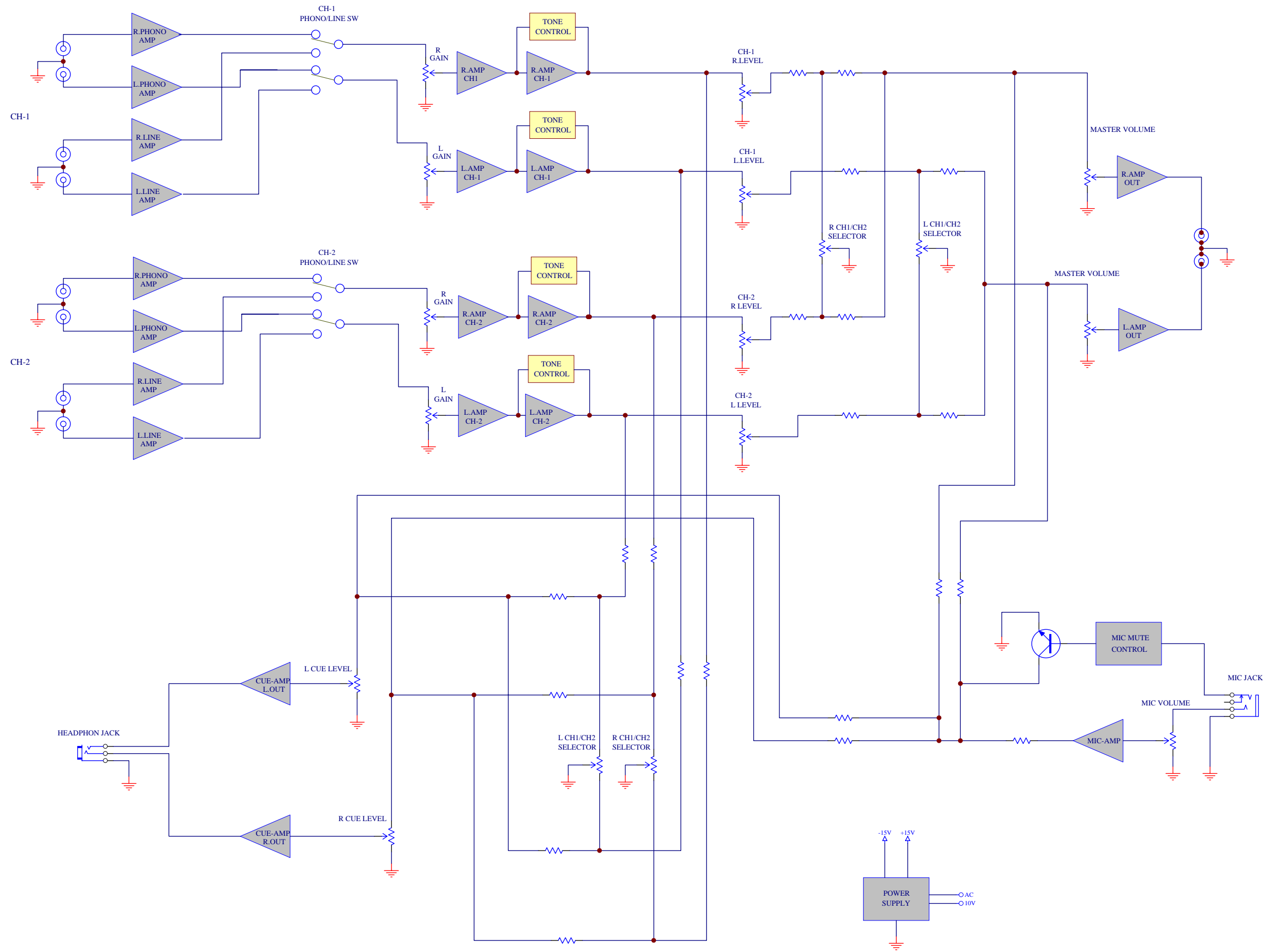
(3) Storage Temperature -20 to 60 deg. C

## 9.ACCESSORIES

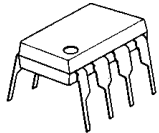
(1) Operating instruction 1 pc

(2) AC Adaptor 1 pc

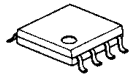
# BLOCK DIAGRAM



# IC BLOCK DIAGRAM



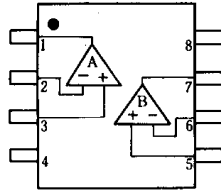
NJM4556AD



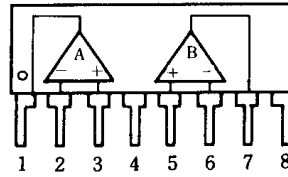
NJM4556AM

417-3113-018  
NJM-4556AD

D, M, Vタイプ  
(Top View)



Lタイプ

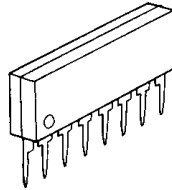


ピン配置

- 1. A OUTPUT
- 2. A-INPUT
- 3. A+INPUT
- 4. V-
- 5. B+INPUT
- 6. B-INPUT
- 7. B OUTPUT
- 8. V+

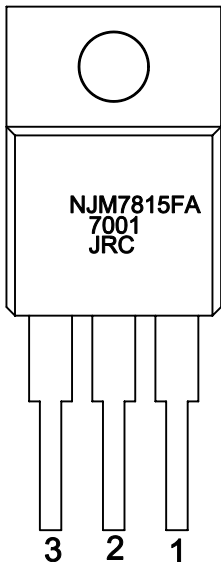
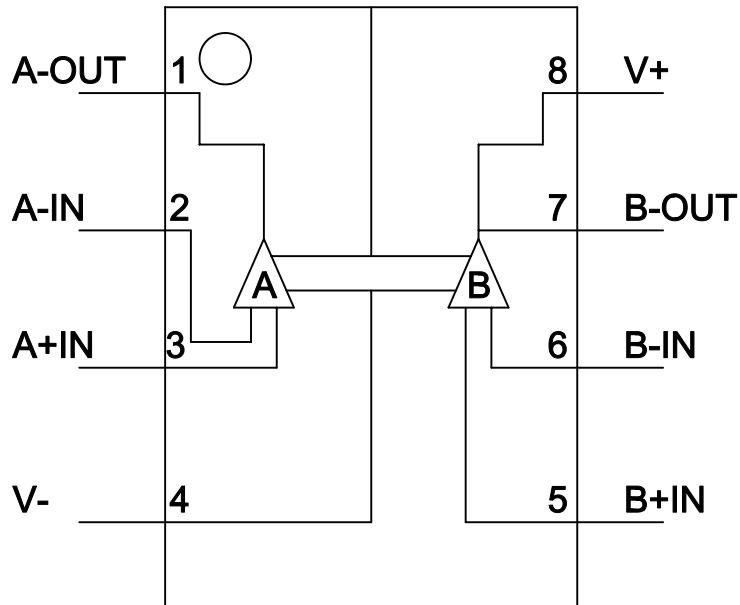


NJM4556AV



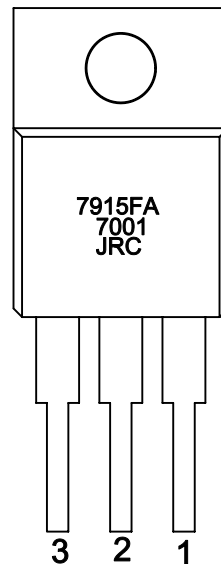
NJM4556AL

417-HDJ7000-261  
NJM4558D



417-DV330-216  
7915FA

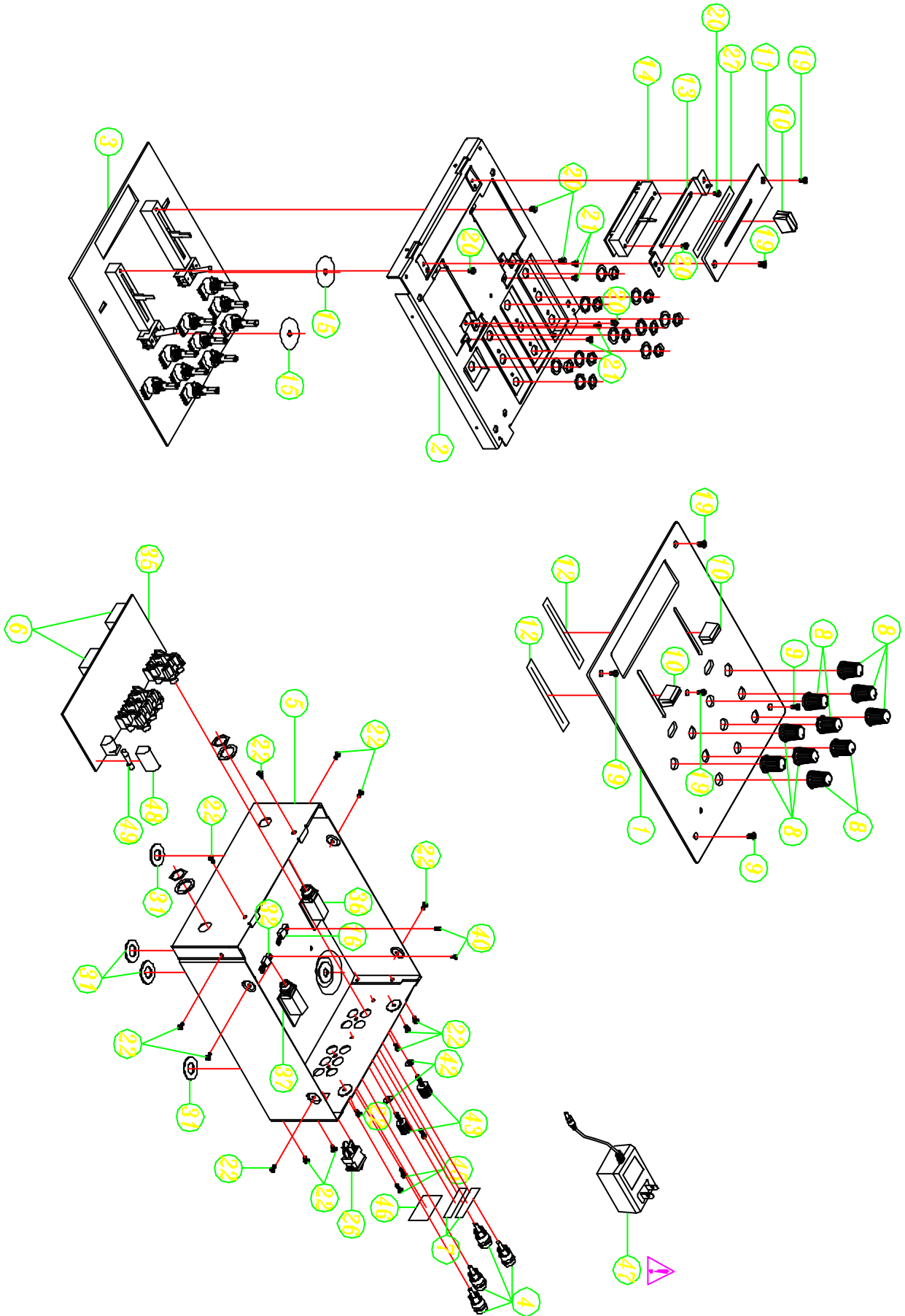
- 1. OUTPUT
- 2. COMMON
- 3. INPUT



417-RCC955A-291  
7915FA

- 1. OUTPUT
- 2. INPUT
- 3. COMMON

# EXPLODED VIEW



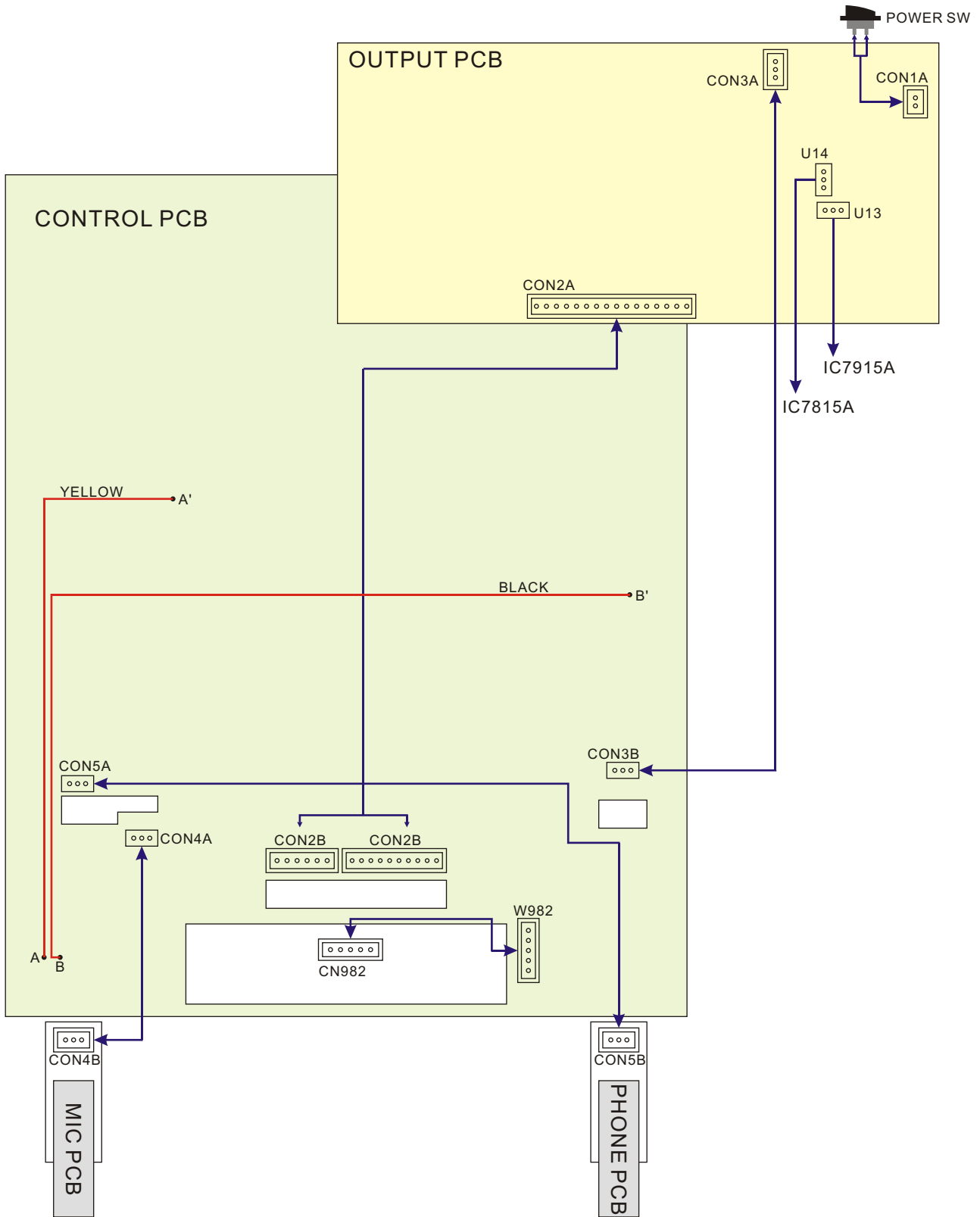
BP-M11

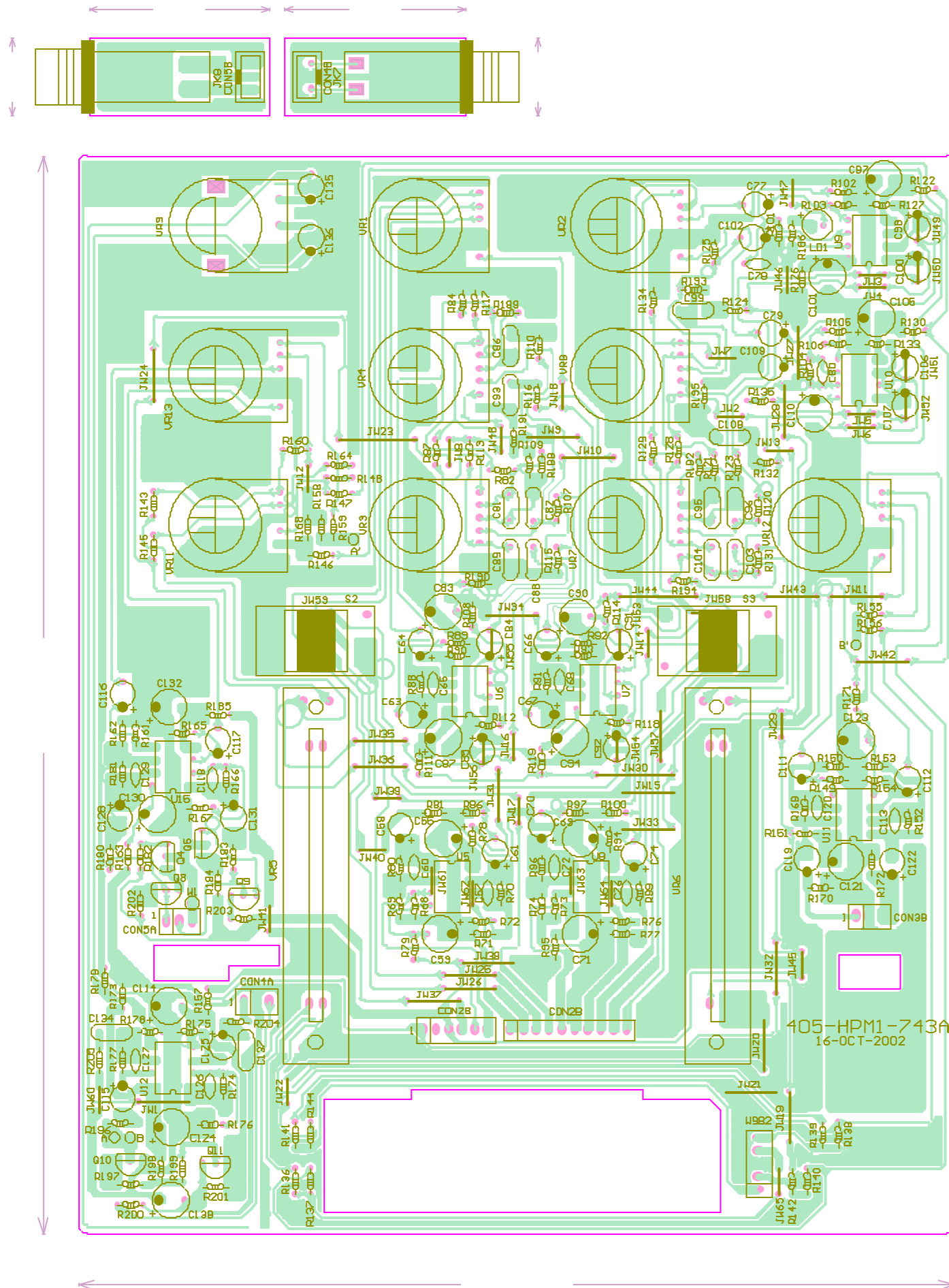
1-5

## EXPLODED VIEW PARTS LIST

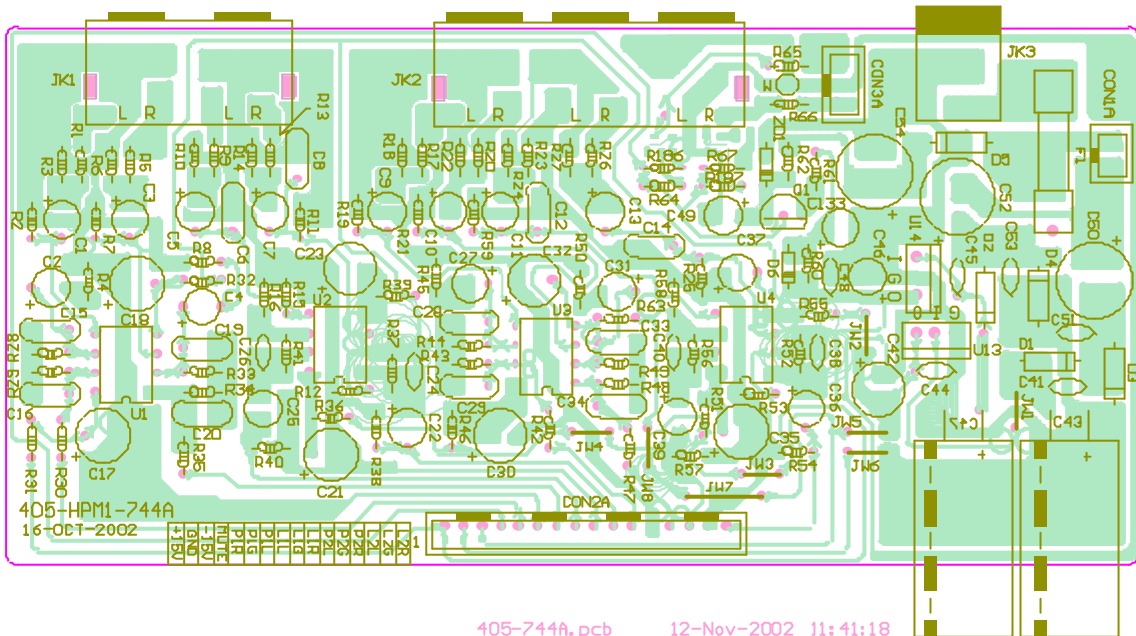
REF. NO.	DESCRIPTION	PART NO.	Q' TY	REMAKR
1	FRONT PANEL	300-HPM1I-842	1	
2	FRONT BOARD	300-HPM1-843	1	
3	CONTROL PCB ASS'Y	704-HPM1-3451	1	
4	RCA ADAPTOR PLUG	420-Q3433-106	4	
5	BOTTOM BASE	300-HPM1I-768	1	
6	VFD SHEET	612-CDT1000-105	2	
7	SERIES NO. LABEL	501-DV300-1067		
8	JOG TUNING KNOB	100-QD5-1970	10	
9	SCREW(M3*8BTF)	602-KMD510-161	2	
10	BUTTON	100-Q221-1969	3	
11	VR BOARD	300-HPM1-695	1	
12	SHEET	100-Q2221-1677	2	
13	FIXED PLATE	300-QMX2BPM-696	1	
14	FADER PCB ASS'Y	704-HPM1-2896	1	
15	CUSHION	612-Q2422-102	2	
16	IC(NJM7815FA 3PIN)	417-DV330-216	1	
19	SCREW	602-QMX2BPM-321	7	
20	SCREW	602-B300-041	6	
21	SCREW	602-MK7-134	4	
22	SCREW	602-QMX2BPM-322	14	
26	POWER SW	403-DJ1-107	1	
27	HIMILON	612-HDJ100-045	1	
31	FOOT	612-DCM370-067	4	
32	IC(NJM7915FA)	417-RCC955A-291	1	
35	OUTPUT PCB ASS'Y	704-HPM1-3452	1	
36	MIC PCB ASS'Y	704-HPM1-3453	1	
37	PHONE PCB ASS'Y	704-HPM1-3454	1	
40	SCREW	602-CDC2050-345	2	
42	WASHER	606-Q2221-122	2	
43	GROUND PIN	200-DJ100-231	2	
45	SCREW(3*10 ZK PTP)	602-MK7-131	3	
46	RATING LABEL	501-HPM1I-1459	1	
47	TRANSFORMER	411-HPM1-242	1	

# POINT TO POINT WIRING DIAGRAM









405-744A.pcb

12-Nov-2002 11:41:18

# CONTROL PCB PART LIST

REF. NO.	DESCRIPTION	PART NO.	QTY
	CONTROL PCB ASS'Y	704-HPM1I-4053	1
S2,3	LEVER SW(LBC22B-20K,6PIN)	403-CDMIX1-114B	2
CON3B,5A	CONNECTOR WIRE(L=220mm,AWM1007 AWG24 P=2.5mm)	404-HDJ9500-1076	2
CON2B	16P CONNECTOR WIRE(L=200mm,AWM2877 AWG26*6C/10C)	404-HPM1-1347	1
CON4A	3P CONNECTOR WIRE(L=160mm,AWM2547 AWG28)	404-HPM1-317	1
W982	5P CONNECTOR WIRE(L=70mm,AWM2468 AWG26,P=2.5mm)	404-Q2221-041	1
A-A'		406-D751-157	1
B-B'		406-M100-039	1
LD1	LED(RED)	410-CD6000-122	1
U15	INTEGRATED CIRCUIT(NJM-4556AD)	417-3113-018	1
U6,7,9-12	IC(4558D/6458DF/BA4558,DIP-8)	417-HDJ7000-261	6
VR3,4,7,8	ROTARY VR(100KB*2,RK16K124A014-100KB*2(HF))	418-HPM1-143	4
VR9	VR(10KB,RK16K1150014-10KB(HF))	418-Q2221-086	1
VR1,2	VR(10KB*2,RK16K12D0001-10KB*2(HF))	418-Q2422-091	2
VR11-13	VR(50KB*2,RK16K1240046-50KB*2(HF))	418-QMX1-077	3
VR5,6	SLIDE VR(10KB*2,RS45Y12G4502-10KB*2(HF))	418-QMX1-078	2
LD1	LED HOLDER(LED-16A,H=16.4mm,WHITE)	504-Q2221-077	1
C113,120	CERAMIC CAPACITOR(270pF/50V K Y5E TAPING)	413-1200SA-106	2
C118,129	CERAMIC CAPACITOR(180pF/50V K SL TAPING)	413-3113-030	2
C126	CERAMIC CAPACITOR(220pF/50V K Y5E TAPING)	413-3113-032	1
C58,61,64,66,77	ELEC. CAPACITOR(2.2uF/50V,M,TAPING 5*11)	413-3113-045	4
C79,111,112	ELEC. CAPACITOR(2.2uF/50V,M,TAPING 5*11)	413-3113-045	3
C116,117,125	ELEC. CAPACITOR(2.2uF/50V,M,TAPING 5*11)	413-3113-045	3
C70,74,115	ELEC. CAPACITOR(4.7uF/50V,M,TAPING 5*11)	413-3113-050	3
C119,122,135,136	ELEC. CAPACITOR(10uF/50V,M,TAPING 5*11)	413-DM1000-352	4
C81,82,88,89	M.C.(0.056uF J 50V TAPING)	413-HT8015-168	4
C95,96,103,104	M.C.(0.056uF J 50V TAPING)	413-HT8015-168	4
C65,68,78,80	CERAMIC CAPACITOR(330pF/50V K Y5E TAPING)	413-KC220-116	4
C128,131	ELEC. CAPACITOR(220uF/10V,M,TAPING 6.3*11)	413-KC220-119	2
C138	ELEC. CAPACITOR(220uF/16V,M,TAPING 8*11.5)	413-KT300-102	1
C63,67,102,109	ELEC. CAPACITOR(0.47uF/50V,M,TAPING 5*11)	413-KT350-093	4
C127	CERAMIC CAPACITOR(100pF/50V K NPO TAPING)	413-PMSE1-258	1
C137	MYLAR(0.001uF 100V J TAPING)	413-PMSE1-279	1
C86,93,99,108	MYLAR CAPACITOR(0.0027uF TAPING)	413-PXE90-108	4
C83,87,90,94,97	ELEC. CAPACITOR(100uF/16V,M,TAPING 6.3*11)	413-PXE90-109	5
C101,105,110,114	ELEC. CAPACITOR(100uF/16V,M,TAPING 6.3*11)	413-PXE90-109	4
C121,123,124	ELEC. CAPACITOR(100uF/16V,M,TAPING 6.3*11)	413-PXE90-109	3
C130,132	ELEC. CAPACITOR(100uF/16V,M,TAPING 6.3*11)	413-PXE90-109	2
Q4,5,8,9,10,11	TRANSISTOR(2SC1740R TAPING)	416-3113-007	6
	CONTROL PCB(BARE,94V0,190*209*1.6t)	405-HPM1-743A	1
R175,201	CARBON FILM RESISTOR(5.6K OHM J 1/6W TAPING 26mm)	412-3113-044	2
R200	CARBON FILM RESISTOR(33K OHM J 1/6W TAPING 26mm)	412-3113-045	1
R84,90,93,103	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	4
R106,112,117,118	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	4
R125,127,133,134	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	4
R149,154-156,158	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	5
R159,161,165	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	3
R170,172	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	2
R179	CARBON FILM RESISTOR(2.2K OHM J 1/6W TAPING 26mm)	412-3113-048	1
R109,115,123	CARBON FILM RESISTOR(15K OHM J 1/6W TAPING 26mm)	412-3113-053	3
R131,166,181	CARBON FILM RESISTOR(15K OHM J 1/6W TAPING 26mm)	412-3113-053	3
R174	CARBON FILM RESISTOR(4.7K OHM J 1/6W TAPING 26mm)	412-3113-055	1
R110,116,124,132	CARBON FILM RESISTOR(3.3K OHM J 1/6W TAPING 26mm)	412-3113-057	4
R108,111,114,119	CARBON FILM RESISTOR(220 OHM J 1/6W TAPING 26mm)	412-3113-058	4
R122,126,130,135	CARBON FILM RESISTOR(220 OHM J 1/6W TAPING 26mm)	412-3113-058	4

## CONTROL PCB PART LIST

REF. NO.	DESCRIPTION	PART NO.	Q'TY
R151,157,171,173	CARBON FILM RESISTOR(220 OHM J 1/6W TAPING 26mm)	412-3113-058	4
R136-148,160	CARBON FILM RESISTOR(22K OHM J 1/6W TAPING 26mm)	412-3113-059	14
R164,168,177	CARBON FILM RESISTOR(22K OHM J 1/6W TAPING 26mm)	412-3113-059	3
R176	CARBON FILM RESISTOR(100 OHM J 1/6W TAPING 26mm)	412-3113-060	1
R81,86,97,100	CARBON FILM RESISTOR(47K OHM J 1/6W TAPING 26mm)	412-3113-063	4
R152,169	CARBON FILM RESISTOR(10K OHM J 1/6W TAPING 26mm)	412-3113-068	2
R204	CARBON FILM RESISTOR(6.8K OHM J 1/6W TAPING 26mm)	412-3113-069	1
R82,87,88,91,101	CARBON FILM RESISTOR(2.7K OHM J 1/6W TAPING 26mm)	412-3113-073	5
R104,107,113,120	CARBON FILM RESISTOR(2.7K OHM J 1/6W TAPING 26mm)	412-3113-073	4
R121,128,129,182	CARBON FILM RESISTOR(2.7K OHM J 1/6W TAPING 26mm)	412-3113-073	4
R184,202,203	CARBON FILM RESISTOR(2.7K OHM J 1/6W TAPING 26mm)	412-3113-073	3
R205	CARBON FILM RESISTOR(1.8K OHM J 1/6W TAPING 26mm)	412-3113-075	1
R89,92,102,105	CARBON FILM RESISTOR(1K OHM J 1/6W TAPING 26mm)	412-3113-078	4
R150,153,162,167	CARBON FILM RESISTOR(1K OHM J 1/6W TAPING 26mm)	412-3113-078	4
R178,197,199	CARBON FILM RESISTOR(1K OHM J 1/6W TAPING 26mm)	412-3113-078	3
R163,185	CARBON FILM RESISTOR(47 OHM J 1/6W TAPING 26mm)	412-KC220-133	2
R196	CARBON FILM RESISTOR(150 OHM J 1/6W TAPING 26mm)	412-KE200S-137	1
R198	CARBON FILM RESISTOR(3.9K OHM J 1/6W TAPING 26mm)	412-KT300-107	1
R188-195	CARBON FILM RESISTOR(68K OHM J 1/6W TAPING 26mm)	412-KT350-101	8
R180,183	CARBON FILM RESISTOR(33 OHM J 1/6W TAPING 26mm)	412-MPG100-255	2

# OUTPUT PCB PART LIST

REF. NO.	DESCRIPTION	PART NO.	QTY
	OUTPUT PCB ASS'Y	704-HPM1-3452	1
U14 TO 7815	3P CONNECTOR WIRE(L=140mm,AWM1007 AWG26)	404-DJ3000-870	1
CON2A	16P SOCKET(JM24182-16)	404-HPM1-1346	1
CON3A	3P SOCKET(B3B-XH-A,P=2.5mm,180°)	404-HV3500K-623	1
CON1A	2P SOCKET(B2B-XH-A,P=2.5mm,180°)	404-KMD1500-608	1
U13 TO 7915	3P CONNECTOR	404-XDM250-1279	1
W TO W1		406-H400-015	1
C54	ELEC. CAPACITOR(470uF/25V,M,BULK 10*16)	413-DCM370E3-454	1
C43,47	ELEC. CAPACITOR(1000uF/35V,M,BULK 12.5*25)	413-DJ1900-110	2
C50,52	ELEC. CAPACITOR(470uF/16V,M,TAPING 8*11)	413-HT8015-164	2
D1-5	DIODE(1N4002,1A/100V,TAPING)	414-DV300-5014	5
Q2,3,6,7	CHIP TRANSISTOR(2SC2412KT146R)	416-CDN88-051	4
U1-4	IC(4558D/6458DF/BA4558,DIP-8)	417-HDJ7000-261	4
JK3	DC POWER JACK	420-CDMIX1-078	1
JK2	6P RCA JACK(RJ-1074-09-0300A)	420-HMJ1901-5037	1
F1	FUSE CLIPS(FC-1206/WL-210A,15A)	420-KT350A-004	2
JK1	4P RCA JACK(RJ-1073-09-0300A)	420-QMX1-094	1
F1	FUSE(1A/250V,T-MARK/UL/CSA)	422-CDN12F-028	1
F1	FUSE COVER	504-DJ2500J-046	1
	VFD SHEET(25*9*11mm)	612-CDT1000-105	2
C44,48	CERAMIC CAPACITOR(0.1uF/50V,Z,TAPING,Y5V)	413-3113-035	2
C49	ELEC. CAPACITOR(47uF/10V,M,TAPING 5*11)	413-3113-043	1
C1,3,5,7,9-11,13	ELEC. CAPACITOR(2.2uF/50V,M,TAPING 5*11)	413-3113-045	8
C2,4,27,31	ELEC. CAPACITOR(100uF/10V,M,TAPING 5*11)	413-3113-046	4
C22,25,36,39	ELEC. CAPACITOR(4.7uF/50V,M,TAPING 5*11)	413-3113-050	4
C41,45,51,53	CERAMIC CAPACITOR(0.022uF/50V,Z,TAPING,Z5V)	413-501-105	4
C24,26,38,40	CERAMIC CAPACITOR(330pF/50V,K,TAPING,Y5P)	413-KC220-116	4
C15,19,28,33	MYLAR CAPACITOR(0.015uF/100V,TAPING)	413-KT300-100	4
C16,20,29,34	MYLAR CAPACITOR(0.033uF/100V,J,TAPING)	413-KT350-088	4
C6,8,12,14	MYLAR(0.001uF 100V J TAPING)	413-PMSE1-279	4
C17,18,21,23	ELEC. CAPACITOR(100uF/16V,M,TAPING 5*11)	413-PXE90-109	11
C30,32,35,37	ELEC. CAPACITOR(100uF/16V,M,TAPING 5*11)	413-PXE90-109	11
C42,46,133	ELEC. CAPACITOR(100uF/16V,M,TAPING 5*11)	413-PXE90-109	11
Q1	TRANSISTOR(2SA1015/2SA1015-GR,TAPING)	416-KE200X-021	1
R2,7,11,15,19	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	5
R21,25,29,34	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	4
R43,48,59	CARBON FILM RESISTOR(100K OHM J 1/6W TAPING 26mm)	412-3113-047	3
R37,41,52,56	CARBON FILM RESISTOR(12K OHM J 1/6W TAPING 26mm)	412-3113-051	4
R60	CARBON FILM RESISTOR(15K OHM J 1/6W TAPING 26mm)	412-3113-053	1
R10,14,24,27	CARBON FILM RESISTOR(3.3K OHM J 1/6W TAPING 26mm)	412-3113-057	4
R31,32,36,39	CARBON FILM RESISTOR(220 OHM J 1/6W TAPING 26mm)	412-3113-058	4
R46,51,55,63	CARBON FILM RESISTOR(220 OHM J 1/6W TAPING 26mm)	412-3113-058	4
R1,5,17,20	CARBON FILM RESISTOR(100 OHM J 1/6W TAPING 26mm)	412-3113-060	4
R30,35,42,47	CARBON FILM RESISTOR(100 OHM J 1/6W TAPING 26mm)	412-3113-060	4
R9,13,23,26	CARBON FILM RESISTOR(47K OHM J 1/6W TAPING 26mm)	412-3113-063	4
R38,40,54,57	CARBON FILM RESISTOR(47K OHM J 1/6W TAPING 26mm)	412-3113-063	4
R61	CARBON FILM RESISTOR(10K OHM J 1/6W TAPING 26mm)	412-3113-068	1
R64,67,186,187	CARBON FILM RESISTOR(2.7K OHM J 1/6W TAPING 26mm)	412-3113-073	4
R12,16,53,58,65,66	CARBON FILM RESISTOR(1K OHM J 1/6W TAPING 26mm)	412-3113-078	6
R62	CARBON FILM RESISTOR(1.5K OHM J 1/6W TAPING 26mm)	412-D396-135	1
R4,8,45,50	CARBON FILM RESISTOR(180 OHM J 1/6W TAPING 26mm)	412-KC220-139	4
R28,33,44,49	CARBON FILM RESISTOR(8.2K OHM J 1/6W TAPING 26mm)	412-KM500-123	4
D6	SWITCHING DIODE(1SS132/1SS133,300mw,55V,T-77)	414-3113-005	1
ZD1	ZENER DIODE(MTZJ10-B,1/2W,T-77)	414-SPPW3-061	1

## ☰ MIC PCB PART LIST

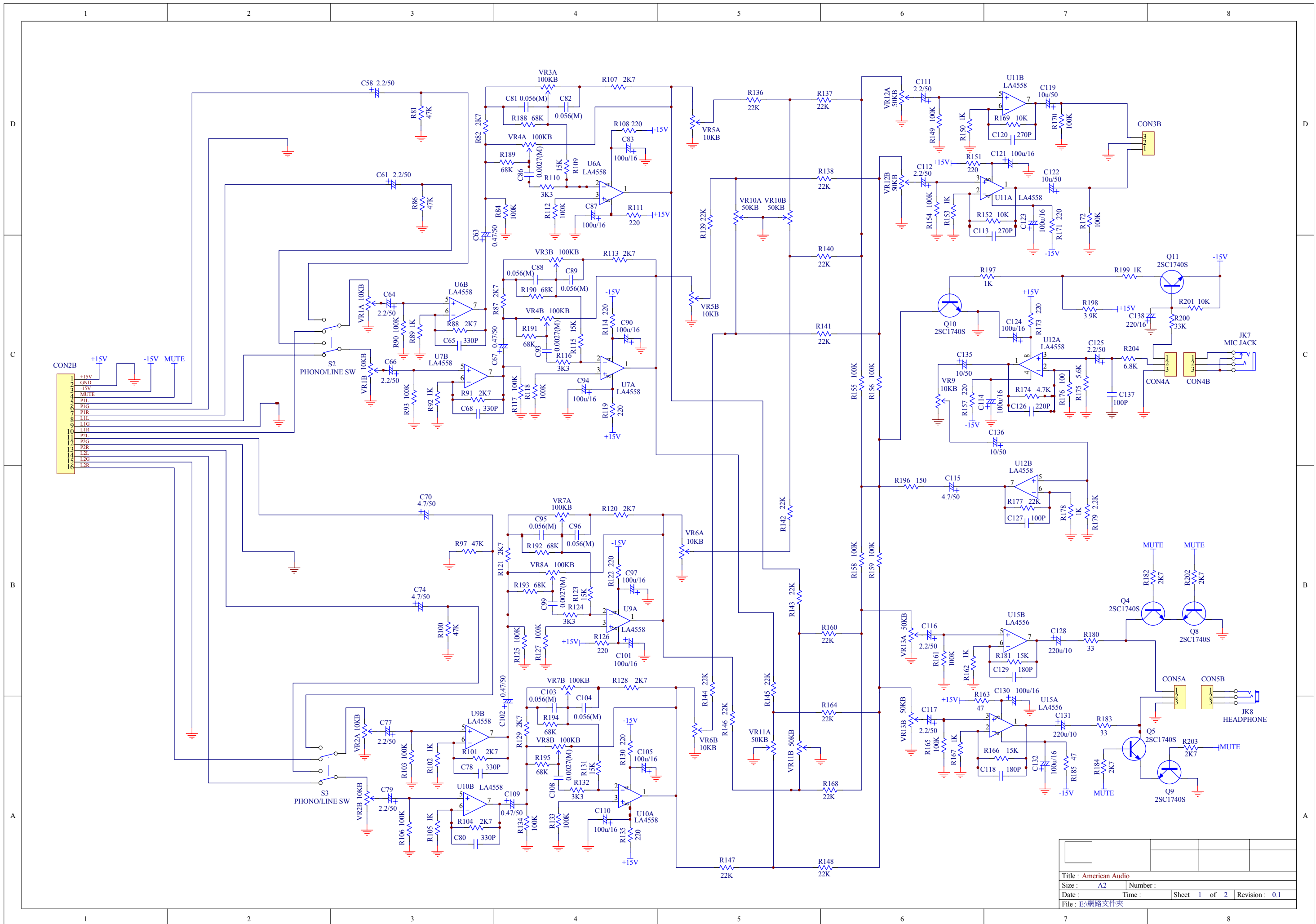
REF. NO.	DESCRIPTION	PART NO.	Q' TY
	MIC PCB ASS'Y	704-HPM1-3453	1
	MIC PCB (BARE)	405-HPM1-798	1
CN4B	3P SOCKET(B3B-XH-A,P=2.5mm)	404-HV3500K-623	1
JK7	MIC JACK( 6.4,JY-6313-02-340G)	420-Q3433-107	1

## ☰ PHONE PCB PART LIST

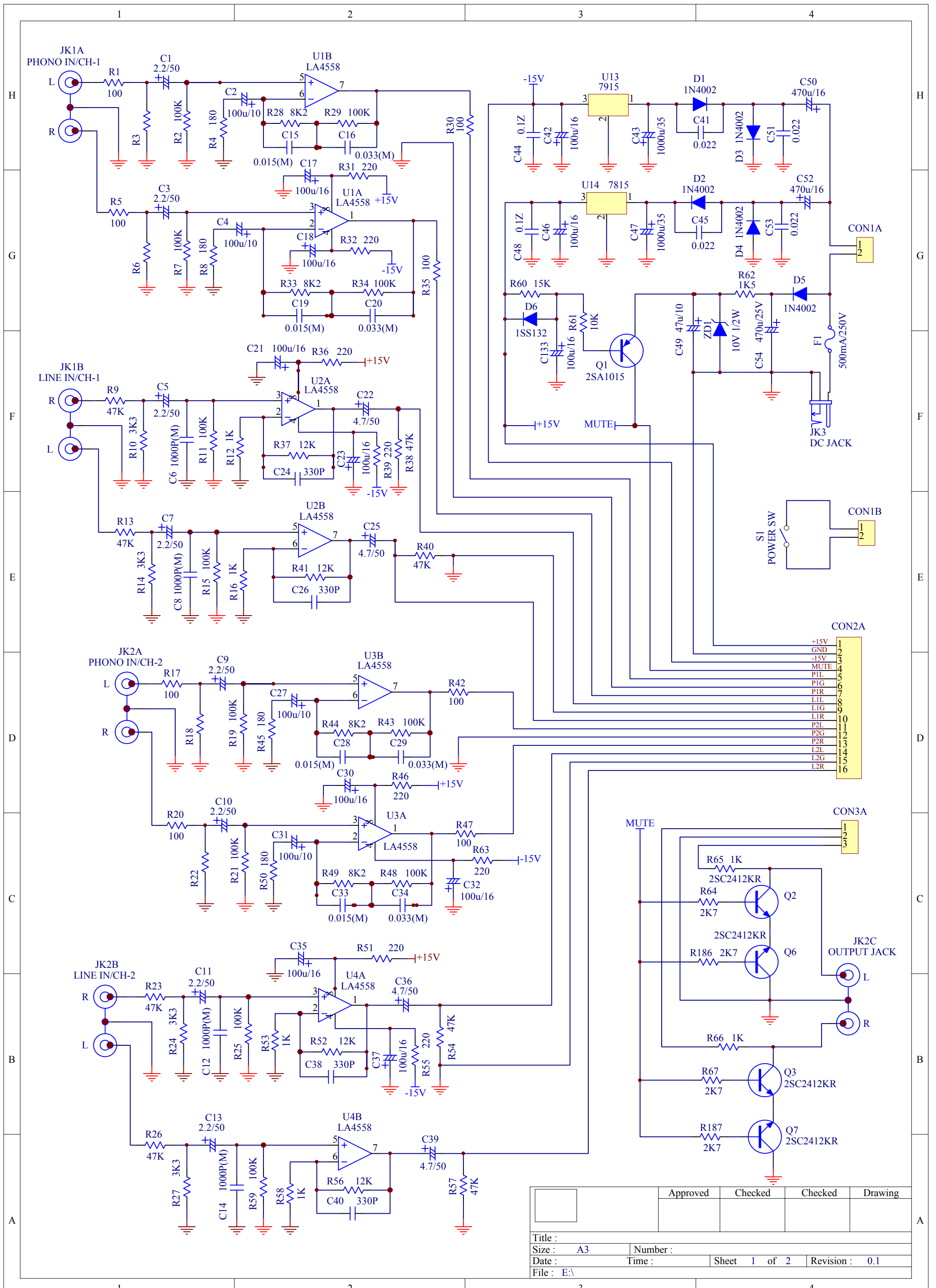
REF. NO.	DESCRIPTION	PART NO.	Q' TY
	PHONE PCB ASS'Y	704-HPM1-3454	1
	PHONE PCB(BARE)	405-HPM1-799	1
CN5B	3P SOCKET(B3B-XH-A,P=2.5mm)	404-HV3500K-623	1
JK8	HEADPHONE JACK( 6.4,JY-6313-02-030G)	420-CDMIX1-086	1

## ☰ FADER PCB PART LIST

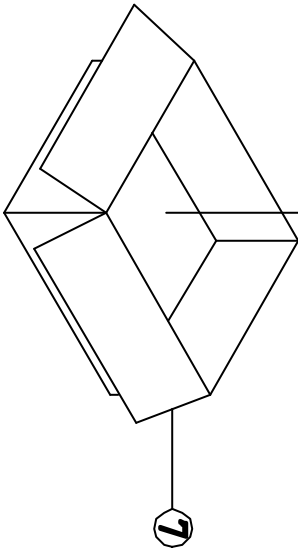
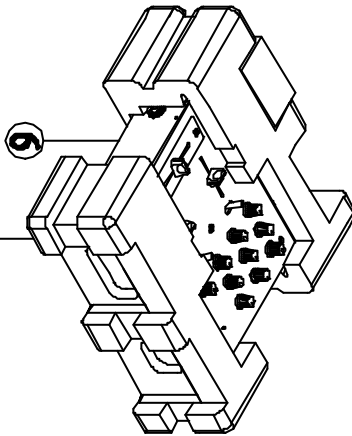
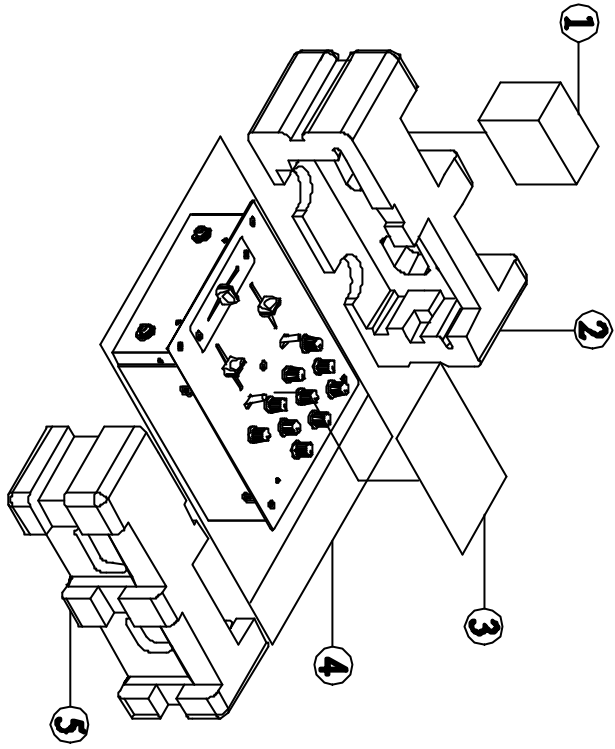
REF. NO.	DESCRIPTION	PART NO.	Q' TY
CN982	FADER PCB ASS' Y	704-HPM1E-2334	1
	5P SOCKET(S5B-XH-A,P=2.5mm)	404-SPPW3-513	1
FADER VR	FADER PCB(BARE,94V0,164*98*1.6t)	405-Q2221-654	1
	SLIDE VR(50KB*2,RF45E12G4501-50KB*2(HF))	418-HPM1E-100	1



Title : American Audio	
Size : A2	Number :
Date :	Time :
Sheet 1 of 2	Revision : 0.1
File : E:\網路文件夾	



Approved	Checked	Checked	Drawing
Title :			
Size : A3	Number :		
Date :	Time :	Sheet 1 of 2	Revision : 0.1
File : E:\			



REF. NO.	DESCRIPTION	PART NO.	Q'TY
1	TRANSFORMER	411-HPM1-241	1
2	POLYFOAM L	506-XDM250-277L	1
3	I/B ASS'Y	701-HPM11-2712	1
4	SOFT BAG	509-XDM250-115	1
5	POLYFOAM R	506-XDM250-277R	1
6	UNIT	XDM-200	1
7	GIFT BOX	507-HPM11-2215	1

HP-M11

1=11



## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	CORRECTION ACTION
Power LED is not bright	Board and iron rack in short connection The power fails	Re-lock the screw to avoid the short connection Without +5Vpower
The power fails to switch on	The transformer is broken Poor power plug connection	Change the transformer Re-assemble
Equalizer output is not function	The socket is soldered not well	Re-solder
No sound	Regulator is not well	Change regulator Re-assemble Re-plug