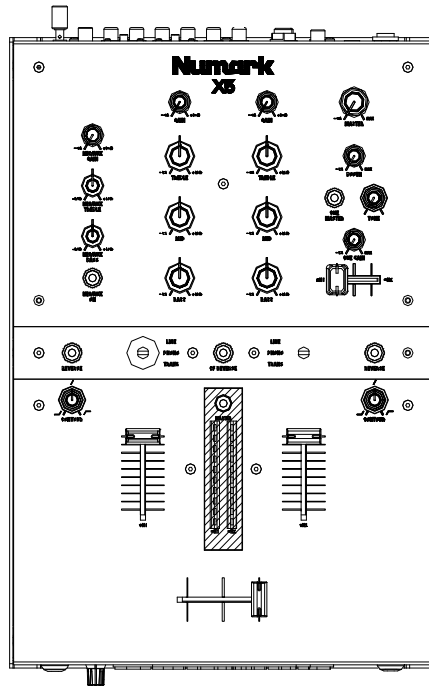


SERVICE MANUAL

MODEL:X5



SPECIFICATIONS

MIC – AUX GAIN (Microphone – Auxiliary Gain): This knob adjusts the volume of both the main microphone and auxiliary inputs.

“Treble “ (Microphone – Auxiliary High EQ): This knob adjusts the high-tone input sound of the microphone.

“Bass” (Microphone – Auxiliary Low EQ): This knob adjusts the low-tone input sound of the microphone.

“Gain knob” (Input Level Trim): This rotary control adjusts the pre - fader input signal levels of the inputs.

EQ:
“Treble” (Input Level High EQ): This rotary control adjusts the high – tone sound of the inputs.

“Middle” (Input Level Midrange EQ): This rotary control adjusts the high-tone sound of the inputs.

“Bass” (Input Level Low EQ): This rotary control adjusts the high – tone sound of the inputs.

“Phono(AUX)/Line Switch” (Input Selector Switch): These three – position toggles select what input source is engaged among the connected units and a flash position to allow rapid transforming effect.

“Input Level Slider” (VCA Fader): These slide faders adjust the level for CH-1 or CH-2 respectively.

“Slope knob” (Input Fader Curve Style Control): The position of this knob determines the rate of volume level increase of the fader.

“Reverse Button” (Input Fader Reverse Control): Activation of this switch can reverses the fader direction.

“Program/PFL Level Meter and Button”: Press to alternate display modes.

“Cue Gain Knob”(Headphone Level): This rotary control adjusts the levels of the headphones connected to the front panel input.

“Cue Tone Knob” (Headphone Tone Control): This rotary knob adjusts the tone of the headphone output.

“Channel Cue Slider”: Channels 1 and 2 can be previewed using this mini – crossfader.

“Cue Button” (MIC and MASTER Cue Buttons): When pressed, the CUE button illuminates green indicating that the source is being cued to the headphones.

“Crossfader Slider” (Digital VCA Crossfader): This slide fader blends audio between CH-1 and CH-2.

“Contour Knob” (Crossfader Rate/Slope Control): The position of this switch determines how quickly or intensely the crossfader will act depending upon mode setting.

“Direction Button” (Crossfader Reverse Control): Activation of this switch reverses the assignment of CH-1 and CH-2 on the crossfader.

“Master Knob” (Main Output Level Control): This rotary control adjusts the main output volume.

“Booth Knob” (Master/Split Style Headphone Cueing Switch): This rotary control adjusts the auxiliary (AKA booth) output volume.

“Digital Output” (Optical): 48kHz, 24-bit S/PDIF output.

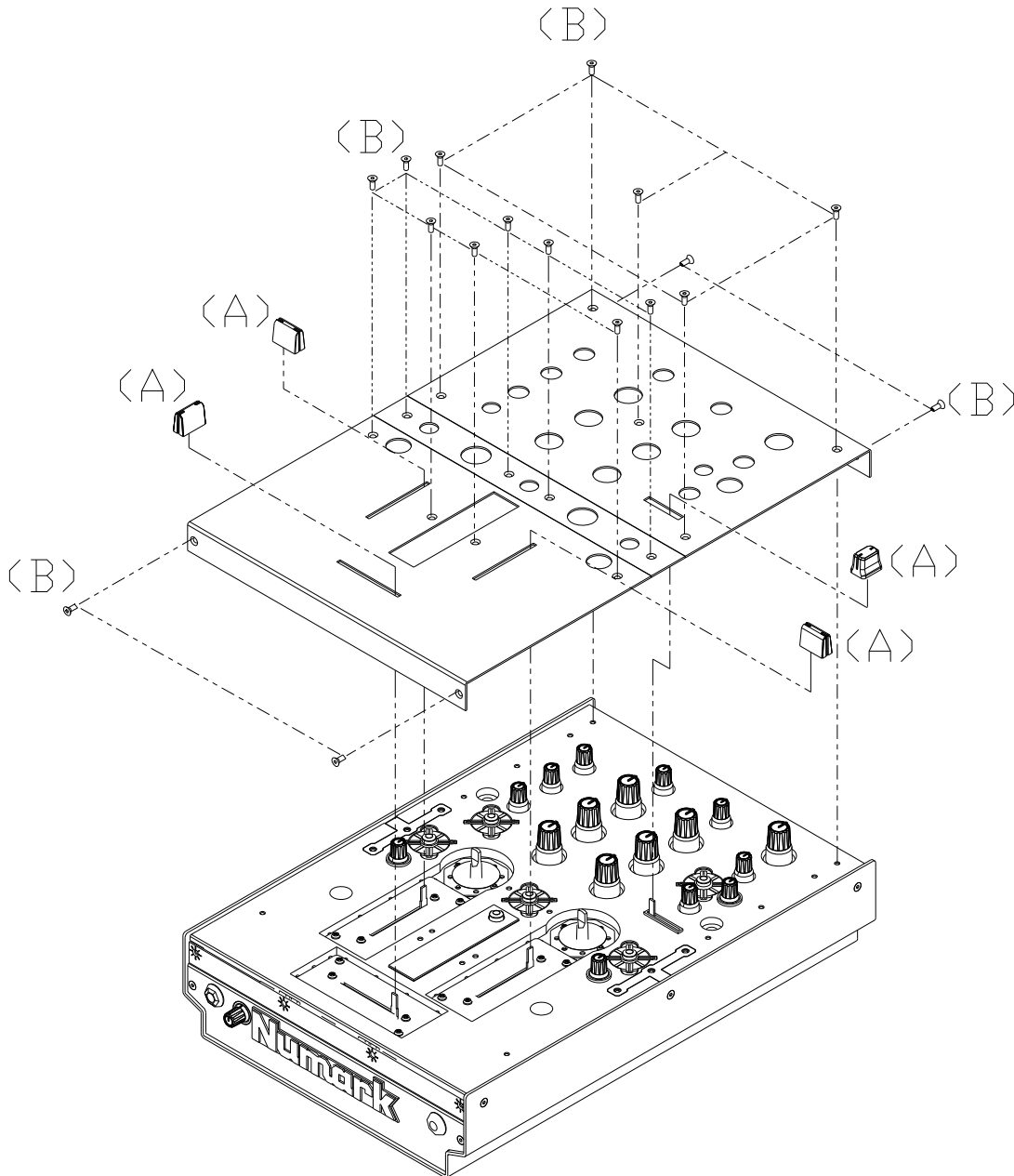
“Digital Output” (Coax): 48kHz, 24-bit S/PDIF output.

DISASSEMBLY PROCEDURES

1. REMOVING OF THE TOP PANELS (Fig1)

(A) REMOVE 4 CAPS.

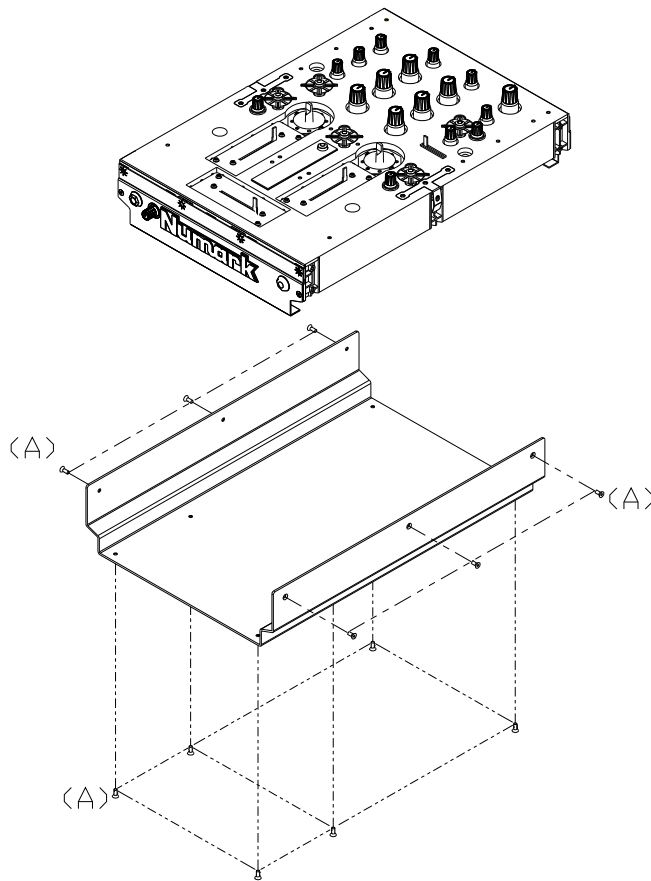
(B) REMOVE 17 SCREWS BEFORE REMOVING OF THE TOP PANELS, INCLUDED UPPER, MIDDLE AND LOWER PANEL.



(Fig1)

2. REMOVING OF THE BOTTOM CHASSIS (Fig2).

(A) REMOVE 12 SCREWS BEFORE REMOVING OF THE BOTTOM CHASSIS.

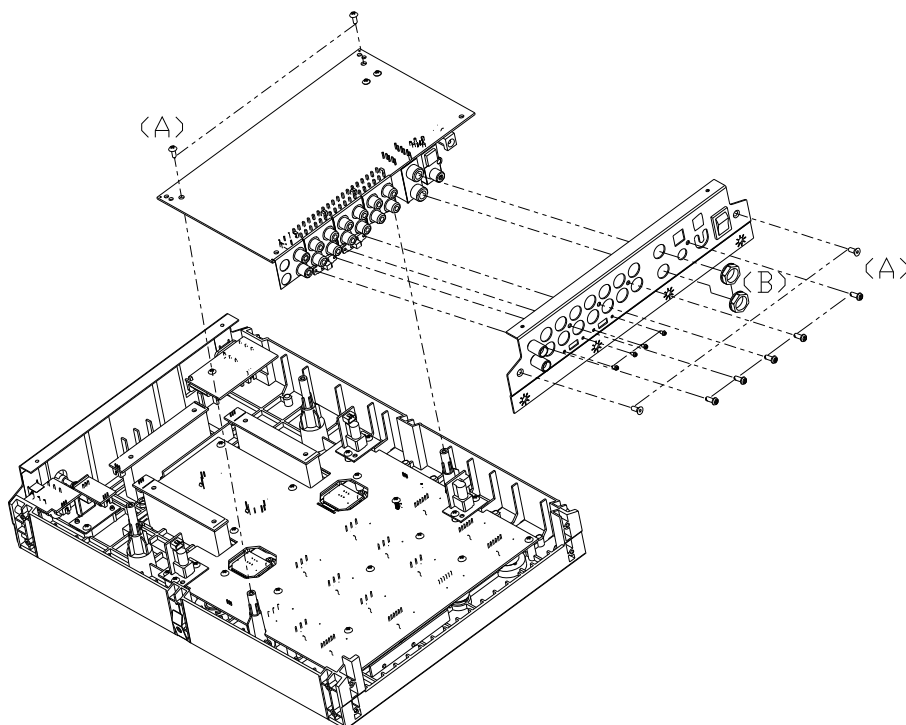


(Fig.2)

3. REMOVING OF THE REAR PANEL AND DISASSEMBLE THE I/O PCB ASSEMBLY. (Fig3).

(A) REMOVE 13 SCREWS.

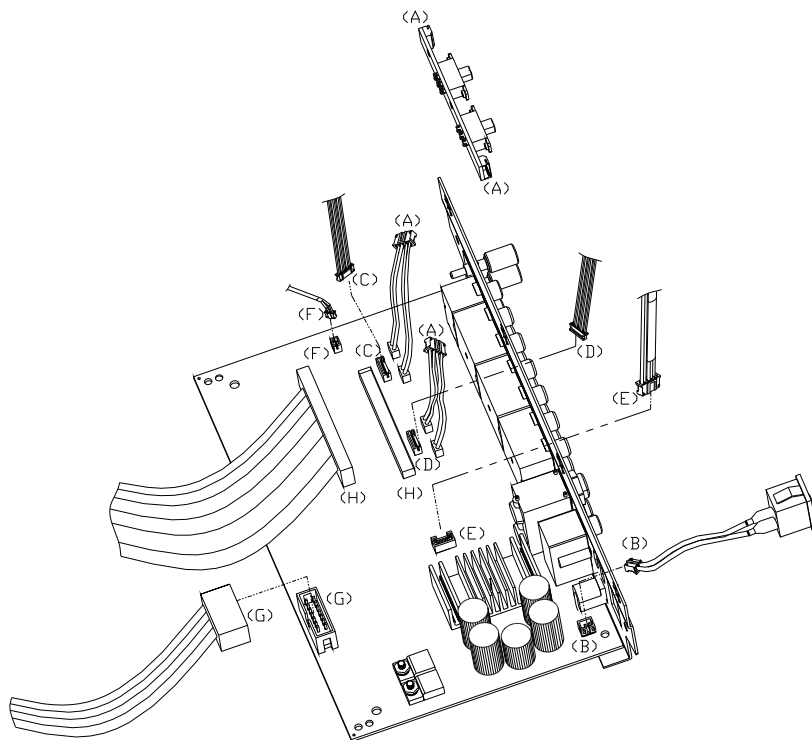
(B) REMOVE 2 NUTS TO DISSEMBLING THE REAR PANEL AND THE I/O PCB ASSEMBLY.



(Fig.3)

3-1.DISASSEMBLE THE I/O PCB ASSEMBLY . (Fig.3-1)

(A)(B)(C)(D)(E)(F)(G)(H)REMOVE 9 CABLES.

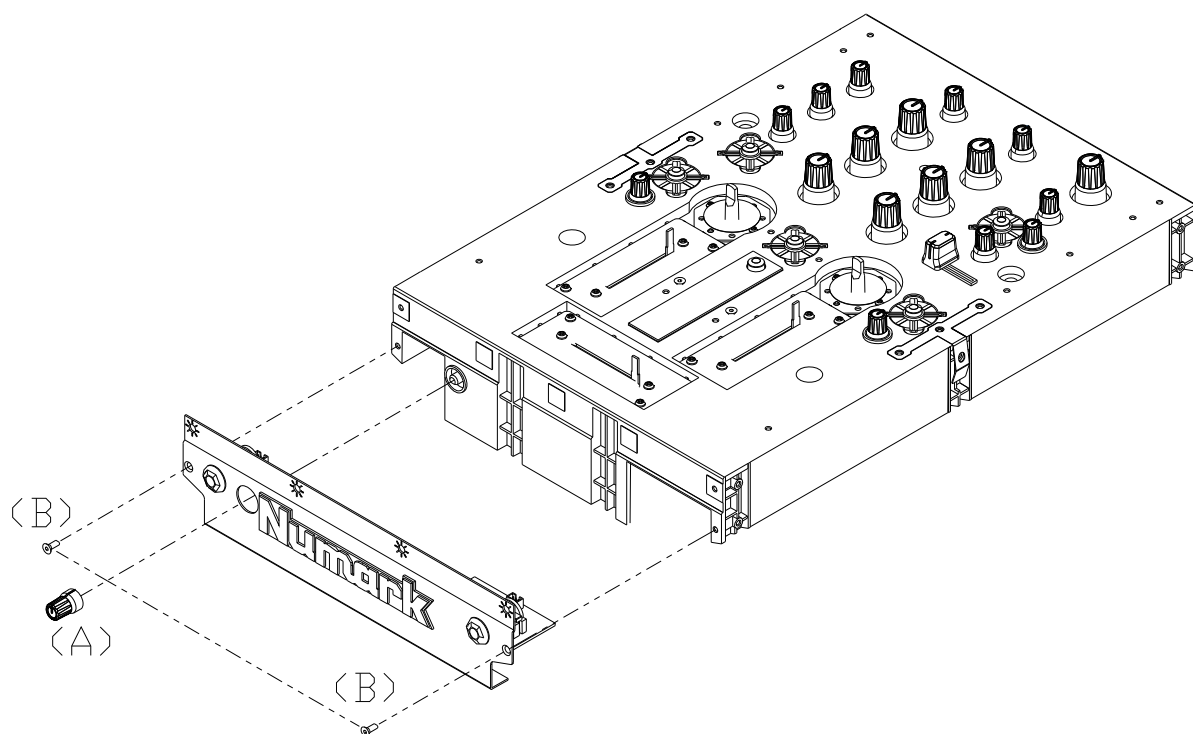


(Fig.3-1)

4. REMOVING OF THE FRONT PANEL (Fig4).

(A) REMOVE 1 KNOB.

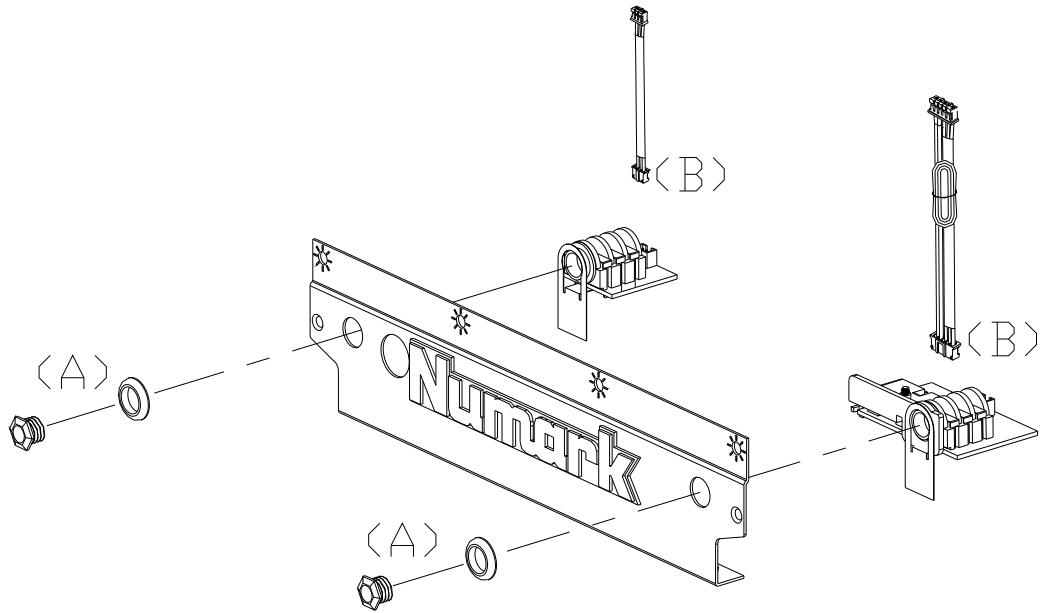
(B) REMOVE 2 SCREWS BEFORE MOVING OF THE FRONT PANEL..



(Fig.4)

4-1. DISASSEMBLE THE MIC AND PHONE PCB ASSEMBLY . (Fig.4-1)

- (A) REMOVE 2 NUTS AND 2 WASHERS BEFORE REMOVING OF THE MIC AND PHONE PCB ASSEMBLY.
- (B) REMOVE 2 CABLES ON THE MIC AND PHONE PCB ASSEMBLY.

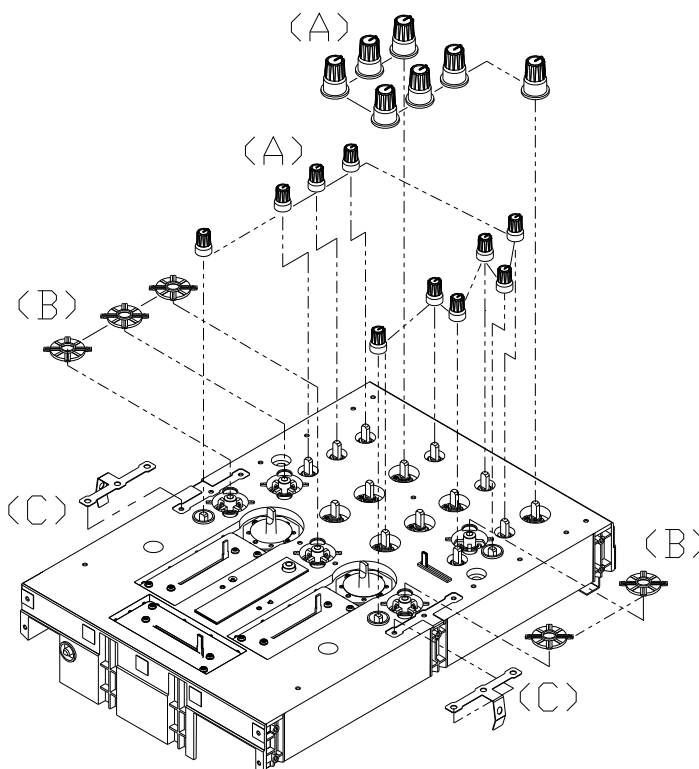


(Fig.4-1)

5. REMOVING OF THE MAIN PCB ASSEMBLY.

5-1. REMOVING OF THE KNOBS, FIXED HOLDERS AND GROUND PLATES. (Fig.5-1)

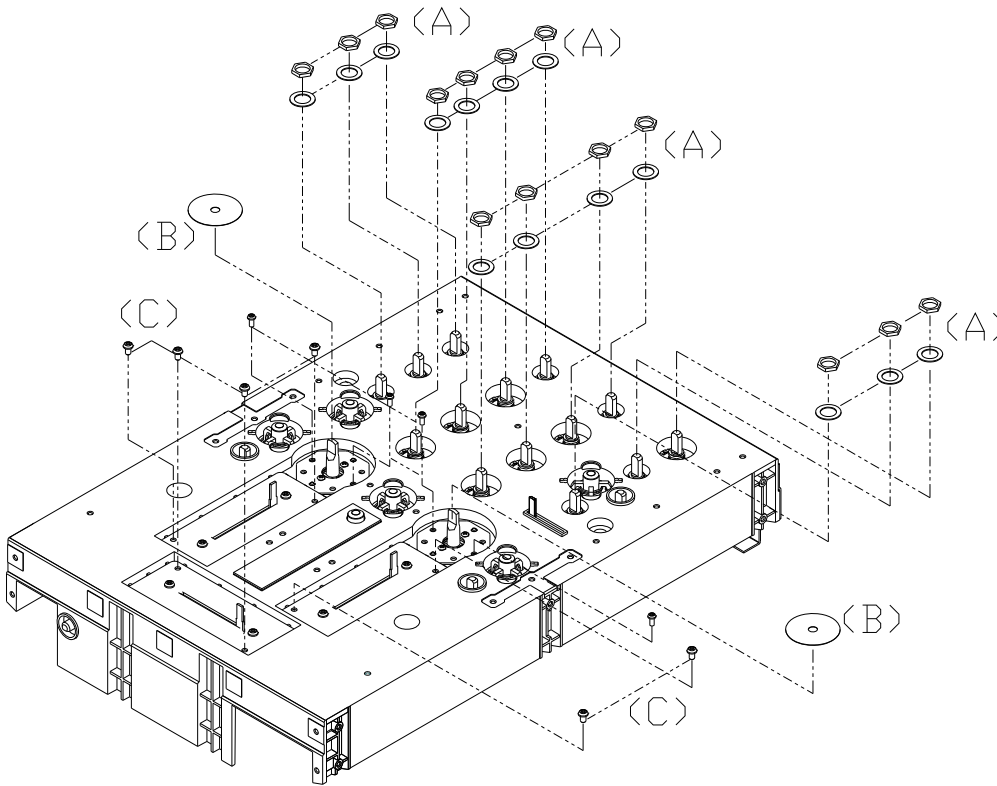
- (A) REMOVE 17 KNOBS.
- (B) REMOVE 5 FIXED HOLDERS.
- (C) REMOVE 2 GROUND PLATES.



(Fig.5-1)

5-2. REMOVING OF THE NUTS, WASHERS AND VELVET CARPETS ON THE CABINET . (Fig.5-2)

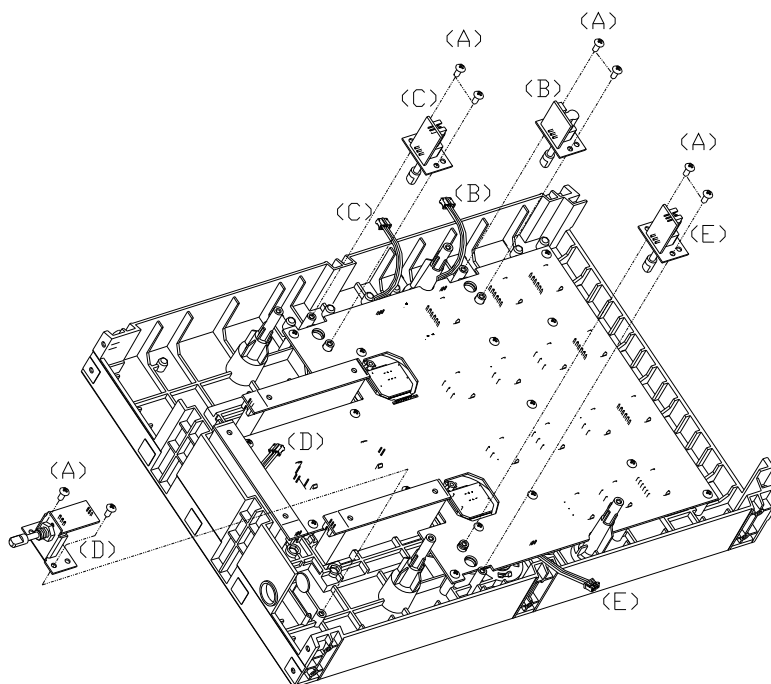
- (A) REMOVE 14 NUTS AND 14 WASHERS.
- (B) REMOVE 2 VELVET CARPET.
- (C) REMOVE 10 SCREWS.



(Fig.5-2)

5-3. REMOVING OF THE VR PCB ASS'Y . (Fig.5-3)

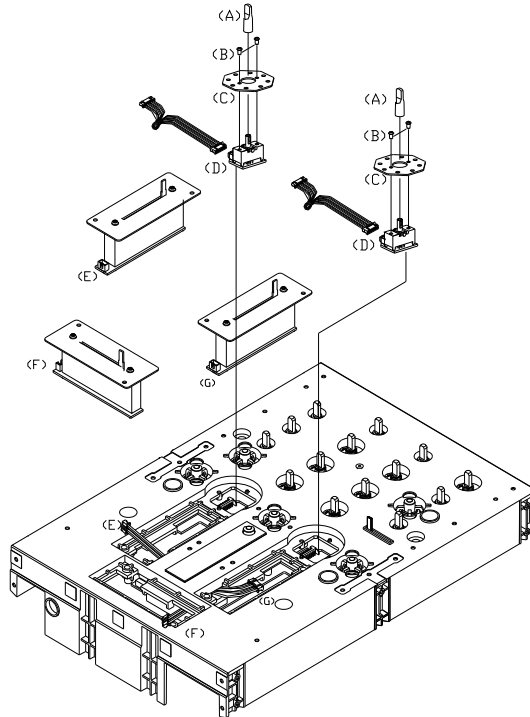
- (A) REMOVE 8 SCREWS.
- (B)(C)(D)(E) REMOVE 4 CABLES BEFORE REMOVING OF THE VR PCB ASSEMBLY.



(Fig.5-3)

5-4. DISASSEMBLE THE SWITCH PCB ASSEMBLY AND REMOVING OF THE FADERS . (Fig.5-4)

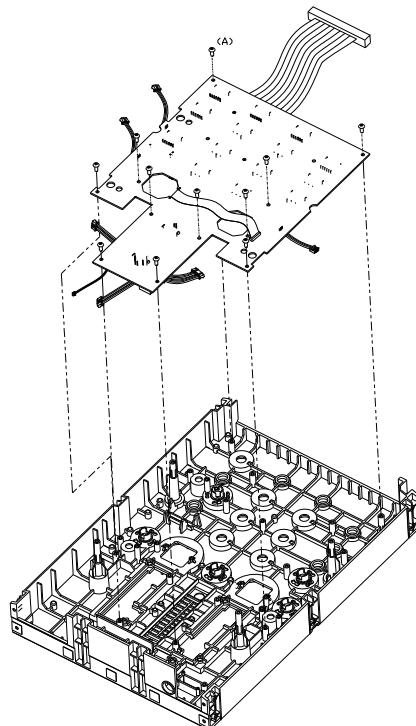
- (A) REMOVE 2 KNOBS.
- (B) REMOVE 4 SCREWS.
- (C) REMOVE 2 METAL PLATE.
- (D) REMOVE 2 CABLES ON SWITCH PCB ASSEMBLY.
- (E)(F)(G) REMOVE 3 CABLES CONNECTED TO THE FADERS BEFORE REMOVING OF THE FADERS.



(Fig.5-4)

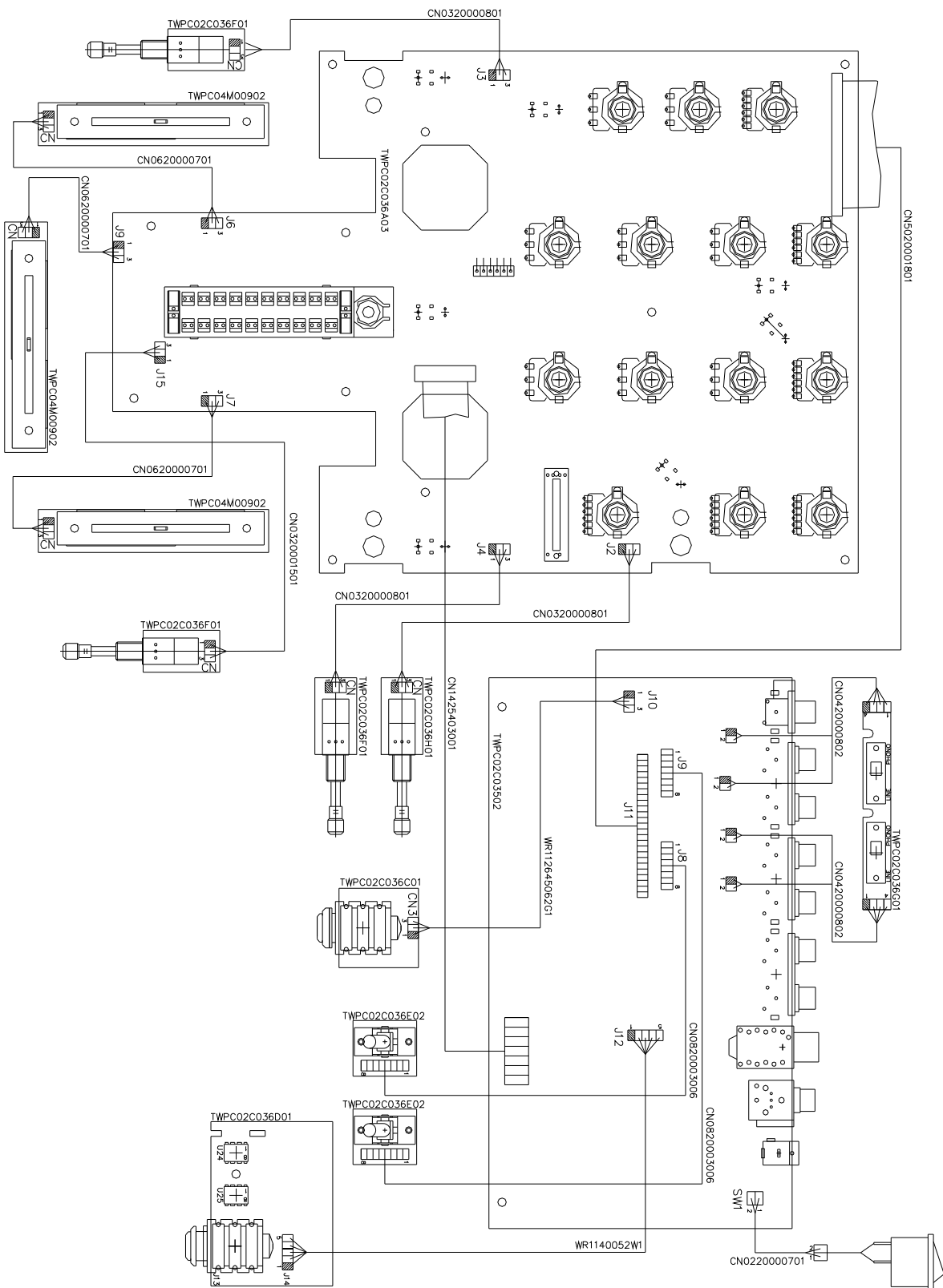
5-5. REMOVING OF THE MAIN PCB ASSEMBLY . (Fig.5-5)

- (A) REMOVE 11 SCREWS BEFORE MOVING OF THE MAIN PCB ASSEMBLY.



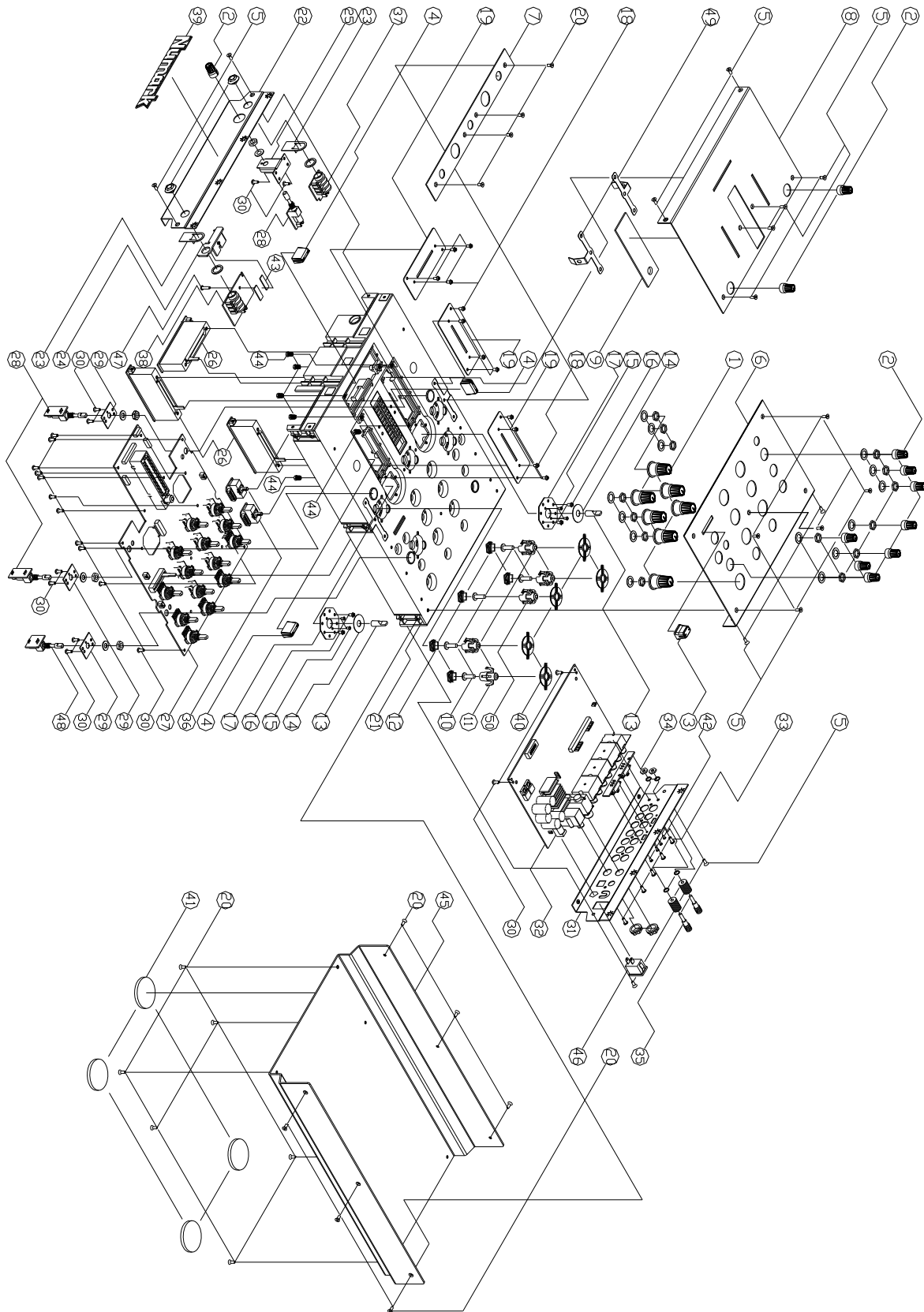
(Fig.5-5)

WIRING DIAGRAM



EXPLODE DIAGRAM

NMS9MAR01/02/03/04/05/06/07



SEQUENCE NO OF EXPLODE DIAGRAM WILL BE MARKED ON REF. COLUMN OF BOM LIST

PACKING DIAGRAM

NMS9MAR01

PE BAG

PE230370402B07

INSTRUCTION BOOK

0PNMS9MAR01

SAFE MANUAL

0PNK14MAR05

POLY FOAM

PLNMS901

VELVET CARPET

NM1104426

SOFT SHEET

SD35055000RJP

POLYFOAM BLOCK
PLNMS903

ADAPTER
TF48093201UL

POLY FOAM
PLNMS902

INNER BOX

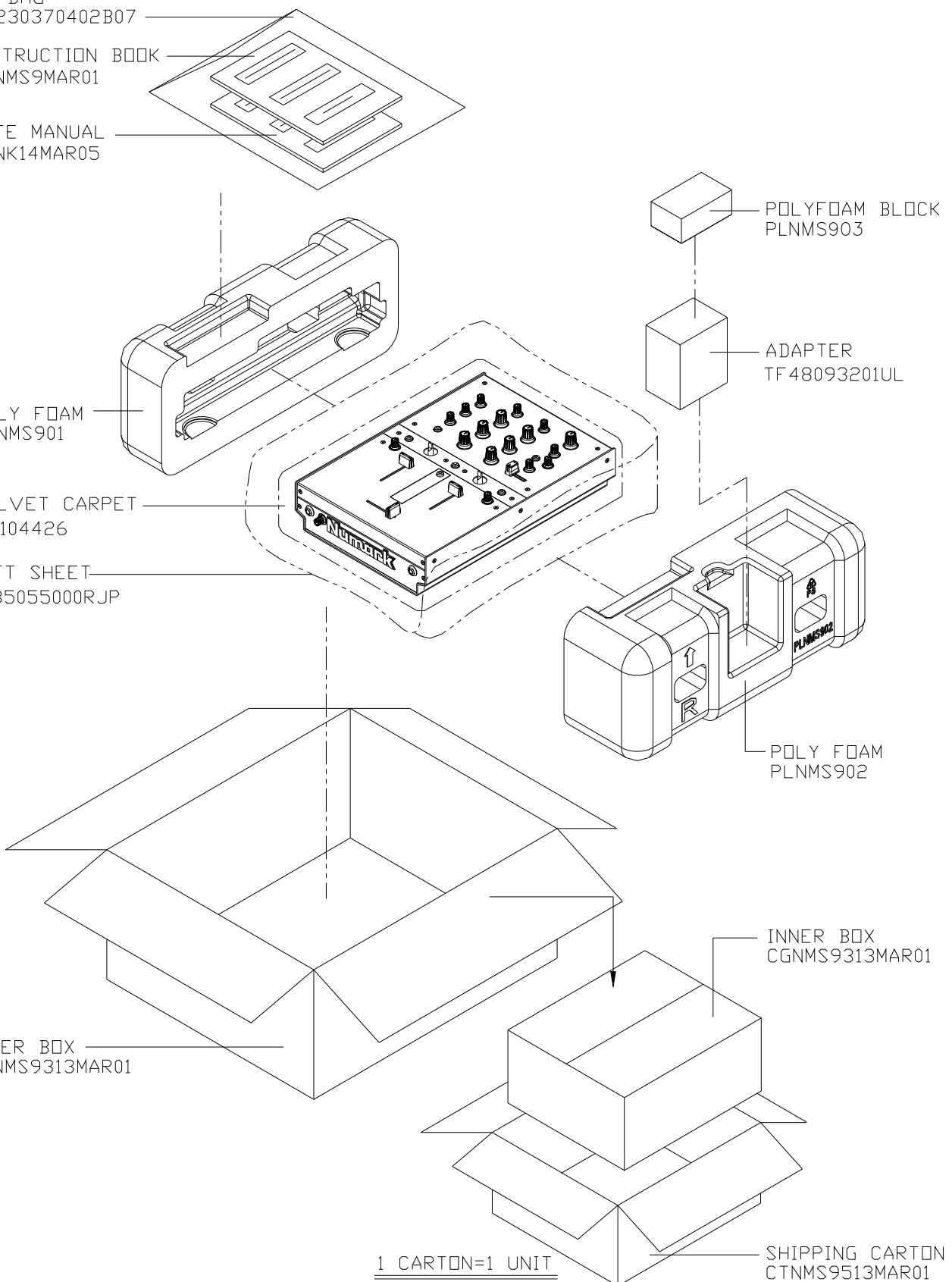
CGNMS9313MAR01

INNER BOX

CGNMS9313MAR01

1 CARTON=1 UNIT

SHIPPING CARTON
CTNMS9513MAR01



PACKING DIAGRAM

NMS9MAR02

PE BAG
PE230370402B07

INSTRUCTION BOOK
OPNMS9MAR01

SAFE MANUAL
OPNK14MAR05

POLY FOAM
PLNMS901

VELVET CARPET
NM1104426

SOFT SHEET
SD35055000RJP

POLYFOAM BLOCK
PLNMS904

ADAPTER
TF48093301EU

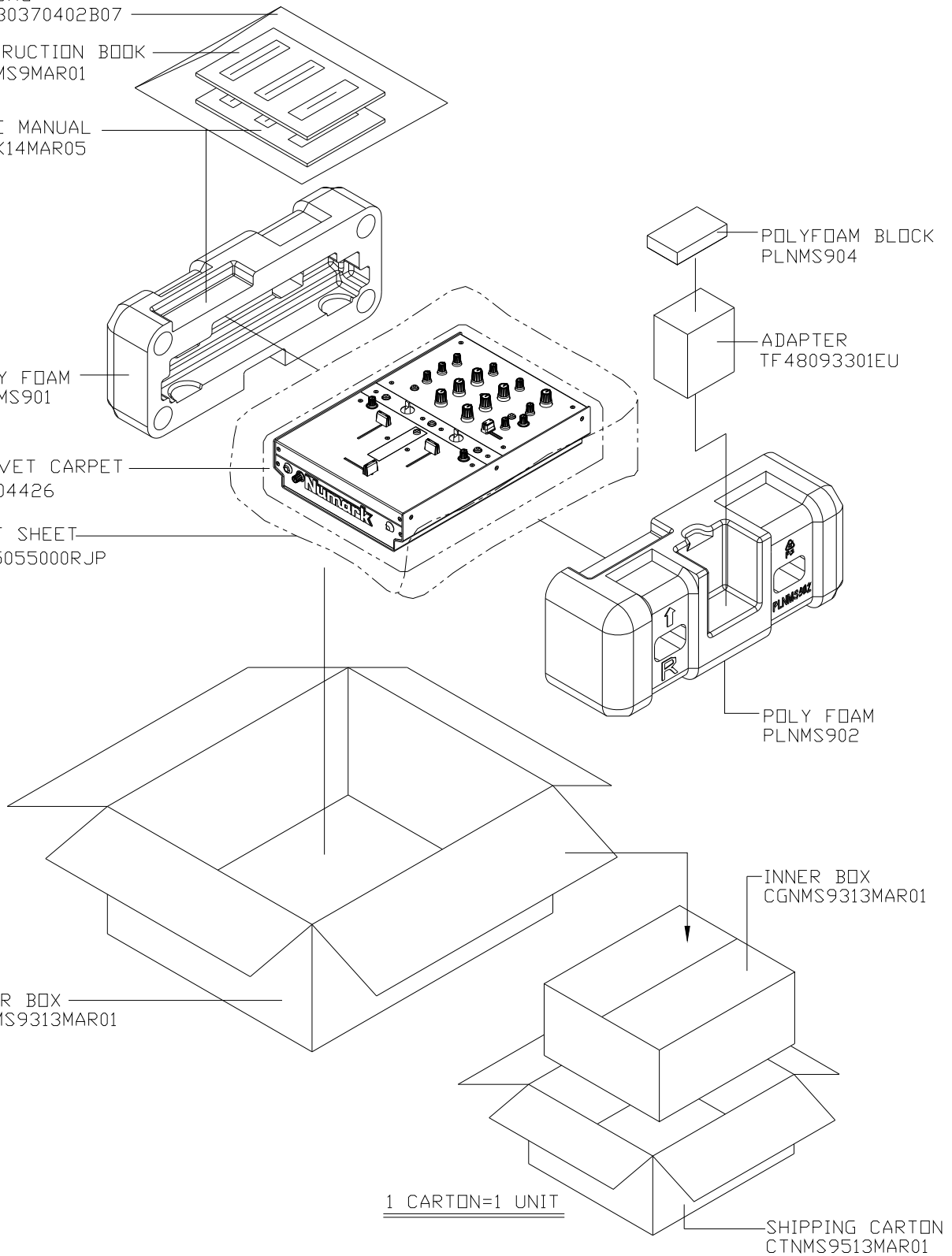
POLY FOAM
PLNMS902

INNER BOX
CGNMS9313MAR01

INNER BOX
CGNMS9313MAR01

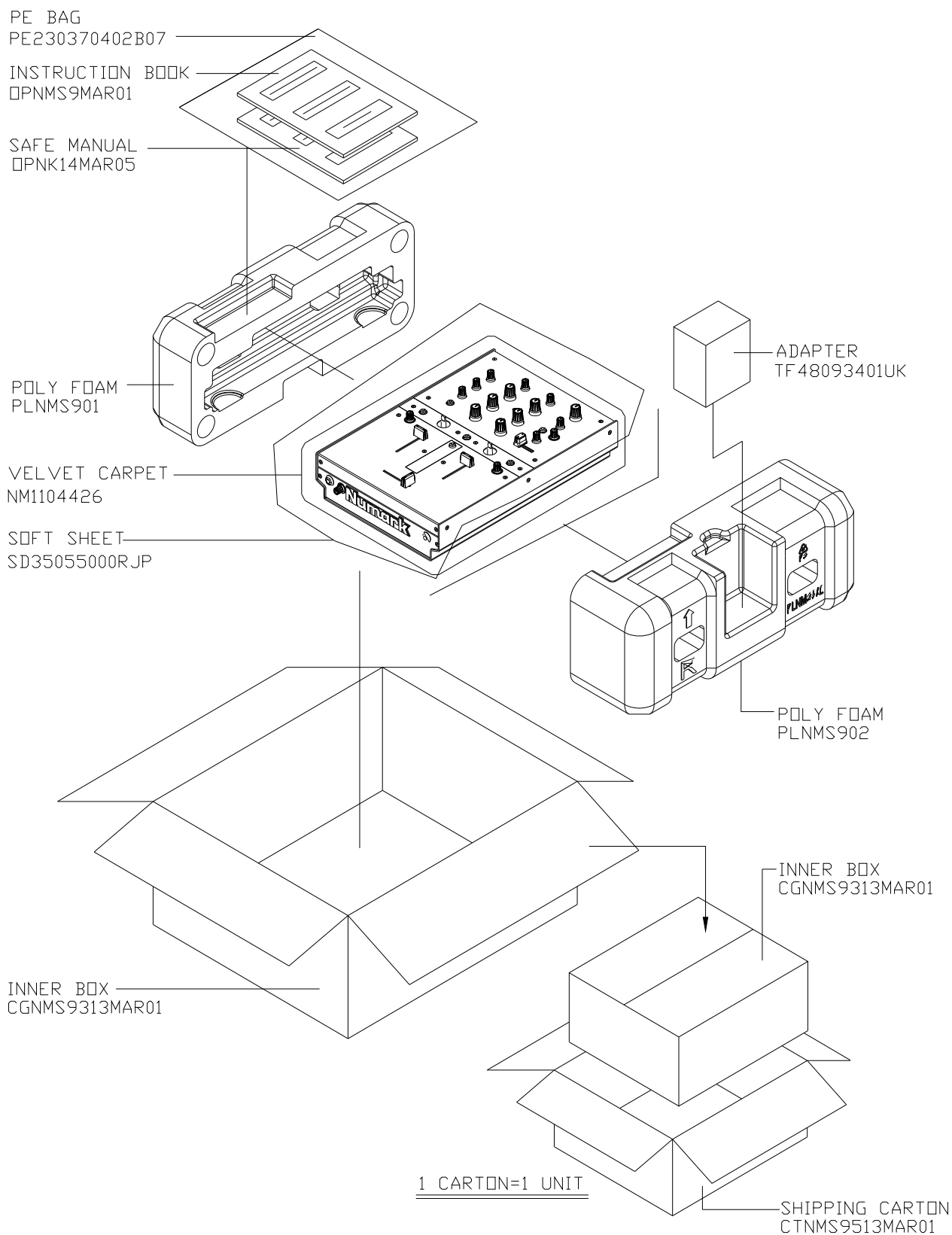
1 CARTON=1 UNIT

SHIPPING CARTON
CTNMS9513MAR01



PACKING DIAGRAM

NMS9MAR03



PACKING DIAGRAM

NMS9MAR04/05/06/07

PE BAG
PE230370402B07

INSTRUCTION BOOK
OPNMS9MAR01

SAFE MANUAL
OPNK14MAR05

POLY FOAM
PLNMS901

VELVET CARPET
NM1104426

SOFT SHEET
SD35055000RJP

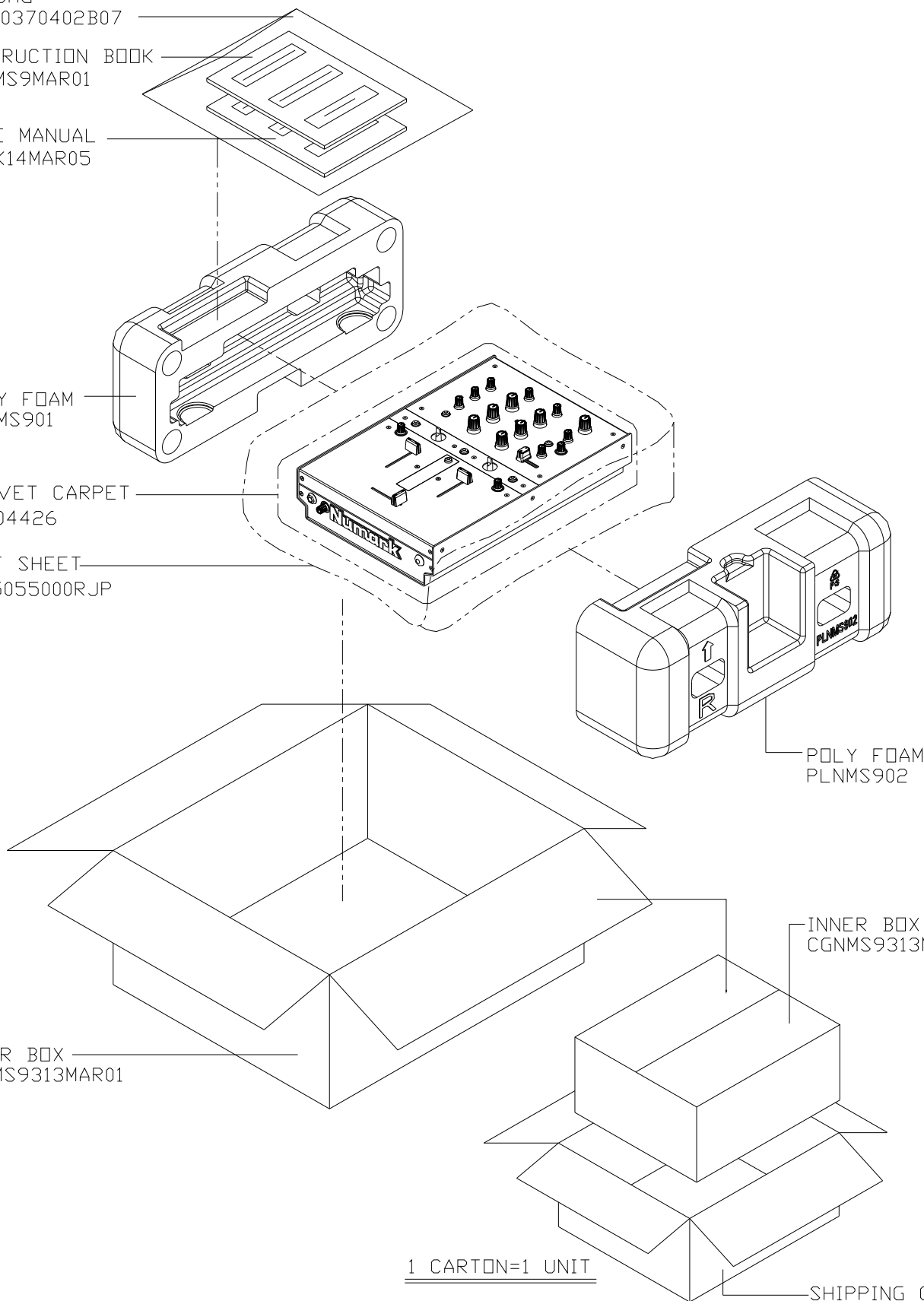
POLY FOAM
PLNMS902

INNER BOX
CGNMS9313MAR01

INNER BOX
CGNMS9313MAR01

1 CARTON=1 UNIT

SHIPPING CARTON
CTNMS9513MAR01



NMS9MAR01~07 BOM

LEVEL	P/N	DESCRIPTION	QTY	REF
0.1	CN0820003006	Flat Cable 8Pin Pitch 2.0mm Single row length 300mm	2	
0.1	K46-1	Cable Tie	5	
0.1	LAC62MAR631	Date Label	1	
0.1	LAC22MAR398	SERIAL LABEL	1	
0.1	LAC62MAR399	BAR COADE LABEL	2	
0.1	LAC62MAR492	Bar Code Label	1	
0.1	LAC63MAR410	SAFETY LABEL	1	
0.1	LAC67YAH261	Sticker ø8mm Green	1	
0.1	MT0705517	COPPER	6	44
0.1	MT1101806	EARTHER PLATE	2	23
0.1	MT1101809	Screw Ground Assembly	2	35
0.1	MT1101840	Ground Plate	2	49
0.1	MT1103205	DISSIPATING PLATE	1	24
0.1	MT1104410	HOLDER PLATE	3	29
0.1	MT11044109	HOLDER PLATE	1	25
0.1	MT1104432	VR HOLDER PLATE	3	19
0.1	MT1104434	METAL PLATE	2	17
0.1	MT112046902	Front Panel-Printing	1	22
..2	MT112046901	Front Panel-Painting	1	
...3	MT1120469	FRONT PLATE	1	
0.1	MT112047002	Rear Panel-Printing	1	31
..2	MT112047001	Rear Panel-Painting	1	
...3	MT1120470	BACK PLATE	1	
0.1	MT113008001	TOP PANEL-TOP (PRINT)	1	6
0.1	MT113008101	TOP PANEL-MID(PRINT)	1	7
0.1	MT113008201	TOP PANEL-BELOW(PRINT)	1	8
0.1	MT113034801	BOTTOM(PRINT/PAINT)	1	45
0.1	NM1104426	VELET CARPET	1	
0.1	NM1106111	VELVET CARPET	2	14
0.1	NP211MAR135	NAME PLATE	1	9
0.1	NP311MAR92	LOGO	1	39
0.1	PNMS9MAR01	PACK ASS'Y	1	
..2	CGNMS9313MAR01	Inner Box	1	
..2	CTNMS9513MAR01	CARTON	1	
..2	OPNK14MAR05	Operation Manual	1	
..2	OPNMS9MAR01	MANUAL	1	
..2	PE230370402B07	Poly Bag 230*370mm	1	
..2	PLNMS901	POLYFOAM(L)	1	
..2	PLNMS902	POLYFOAM(R)	1	
..2	PLNMS903	Polyfoam Block	1	
..2	SD35055000RJP	SOFT SHEET	1	
0.1	PT0710621101	KNOB	11	2
0.1	PT1104416401	FIXED HOLDER PAINT	5	40
..2	PT11044164	FIXED HOLDER	5	
0.1	PT1110611302	KNOB	1	3
..2	PT11106113	KNOB	1	
0.1	PT11106142	KNOB	7	1
0.1	PT11106163	VR KNOB	3	4
0.1	PT111062001	KNOB	4	11
..2	PT1110620	KNOB	4	
0.1	PT1110621	KNOB	5	10
0.1	PT111063702	KNOB	1	50
..2	PT1110637	KNOB	1	
0.1	PT111063801	KNOB	2	13
..2	PT1110638	KNOB	2	
0.1	PT1130208	CABINET	1	21
0.1	RU1104407	RUBBER	2	43

0.1	RU1330701	FOOT STAND	4	41
0.1	SC0204BIPI	Screw	4	42
0.1	SC0305PIBI	Screw	12	18
0.1	SC0308ABBI	Screw(FLAT)	17	5
0.1	SC0308ABNI	Screw	16	20
0.1	SC0308PBBI	Screw M3x8mm PPB TAPPING	5	33
0.1	SC0308RBNI	Screw M3*8mm Prn Tapping	21	30
0.1	SC0312RBNI	Screw	1	47
0.1	SC2604RIBI	SCREW	4	15
0.1	SC2606RBNI	SCREW	4	16
0.1	SP1110603	SPRING	5	12
0.1	TF48093201UL	ADAPTOR 9VAC 1.3A UL (01)	1	
	TF48093301EU	ADAPTOR 9VAC 1.3A EU (02)		
	TF48093401UK	ADAPTOR 9VAC 1.3A UK (03)		
0.1	WR112645062G1	Isolation Cable 3Pin Single Row 450mm	1	
0.1	WR1140052W1	WIRE 5P 400MM	1	
0.1	TWSWRA19-201-1	POWER SW ASS'Y	1	46
..2	CN0220000701	Flat Cable Multicolored 2P Pitch 2.0mm 70mm	1	
..2	HST050015BUL	Heat-Shrinkable Tube 5X15mm	2	
..2	SWR19A-2	POWER SWITCH	1	
0.1	TWPC02C03502	I/O PCB ASS'Y	1	32
..2	AL2-62-0245	IC 74AHC245	2	U25,26
..2	AL2-62-1004	IC AHCU04	1	U11
..2	AL2-71-0072	IC TL072CDR	1	U1
..2	AL2-71-0074	IC TL074	9	U2~5,9,10,12~14
..2	AL2-75-1101	IC CONVERTER A/D 24BIT AL1101G	3	U15~17
..2	AL2-75-1201	IC CONVERTER D/A 24BIT AL1201G	2	U19,20
..2	AL2-77-0095	IC DSP 1KS/AL3102	1	U18
..2	AL4-02-0902	JACK	1	J5
..2	AL5-00-0021	SCREW	4	(U22,23)
..2	AL5-02-4402	NUT	4	(U22,23)
..2	CN0420000802	Flat Cable Multicolored 4P Pitch 2.0mm 80mm	2	(SW2,SW3)(SW4,SW5)
..2	CS101J5005NPO	CERAMIC 100pF/50V 5% 0805 NPO	4	C5,6,10,11
..2	CS102K5005X7R	CERAMIC 1nF/50V 10% 0805 X7R	4	C113,115,116,118
..2	CS104K5005X7R	CERAMIC 0.1uF/50V 10% 0805 X7R	45	C4,9,19,21,22,33,39,42,47,59,84,85,95~97,100,105,110,114,117,119,120,122,125,128,130~142,144~147,180,181,183
..2	CS221J5005NPO	CERAMIC 220pF/50V 5% 0805 NPO	7	C20,46,48,90~93
..2	CS330J5005NPO	CERAMIC 33pF/50V 5% 0805 NPO	1	C83
..2	CS331J5005NPO	CERAMIC 330pF/50V 5% 0805 NPO	20	C2,3,7,8,12~18,28,34,35,62,86~89,148
..2	CS332K5005X7R	CERAMIC 3.3nF/50V 10% 0805 X7R	6	C121,123,124,126,127,129
..2	CS390J5005NPO	CERAMIC 39pF/50V 5% 0805 NPO	1	C94
..2	DIN4002	Diode DIN4002	5	D1~5
..2	DISDBAT54CSM	Zener Diode BAST54C	1	Q1
..2	EC10835	Capacitor Electrolytic 1000uF/35V 13*21mm	4	C44,45,71,72
..2	EC22816	Capacitor Electrolytic 2200uF/16V	1	C61
..2	EC47616T	Capacitor Electrolytic 47uF/16V 5*11mm	50	C1,23,36~38,40,41,43,49~58,60,63~68,70,73~82,98,99,101~104,106~109,111,112,143,182
..2	IC7805	IC 7805	2	U22,23
..2	IC7815	IC 7815	1	U6
..2	IC7915	IC 7915	1	U8
..2	ICBA03FP-E2	IC BA03FP	1	U7
..2	ICCS8406-CSZ	IC CS8406-CSZ	1	U21
..2	JKDJ-0702B-025	JACK	1	J7
..2	JKOC0806T	JACK	1	J6
..2	MC273100MM	MALYER CAPACITOR 0.027UF/100V TOLERAUCE 5%	4	C24~27
..2	MC822100MM	MALYER CAPACITOR 8200P/100V TOLERAUCE 5%	4	C29~32
..2	MT1101810	Ground Contact Slice	4	(J1~4)
..2	MT1103206	DISSIPATING PLATE	1	-

..2	PC02C035	I/O PCB 2Layer FR-4 1.6T 208*136.5MM	1	-
..2	RJ1106-09	RCA BASE 2P	1	J4
..2	RJ1107-09	RCA BASE 4P	3	J1~3
..2	RS000008J05	RESISTOR 0Ω 5% SMD 0805	2	R149,150
..2	RS001M08F05	RESISTOR 1M 1% SMD 0805	1	R94
..2	RS002K08F05	RESISTOR 2K 1% SMD 0805	5	R74,108,110,111,113
..2	RS010008F05	RESISTOR 100Ω 1% SMD 0805	13	R2,5,10,13,23,40~43,66,67,123,140
..2	RS010K08F05	RESISTOR 10K 1% SMD 0805	26	R1,24,36~39,44~49,59,60,82~93
..2	RS033008F05	RESISTOR 330Ω 1% SMD 0805	35	R18~22,29~31,95~106,132,133,135~139,141~148
..2	RS039008F05	RESISTOR 390Ω 1% SMD 0805	1	R81
..2	RS047008F05	RESISTOR 470Ω 1% SMD 0805	1	R160
..2	RS047K08F05	RESISTOR 47K 1% SMD 0805	25	R3,4,11,12,50~58,61,68~71,75~80,134
..2	RS07K508F05	RESISTOR 7.5K 1% SMD 0805	4	R107,109,112,114
..2	RS100K08F05	RESISTOR 100K 1% SMD 0805	8	R7,8,15,16,25~28
..2	RS13K708F05	RESISTOR 13.7K 1% SMD 0805	4	R115,117,120,122
..2	RS1K6508F05	RESISTOR 1.65K 1% SMD 0805	4	R116,118,119,121
..2	RS2K2108F05	RESISTOR 2.21K 1% SMD 0805	4	R6,9,14,17
..2	RS3K7408F05	RESISTOR 3.74K 1% SMD 0805	4	R124~127
..2	RS4K5308F05	RESISTOR 4.53K 1% SMD 0805	4	R128~131
..2	RS5K1108F05	RESISTOR 5.11K 1% SMD 0805	2	R64,65
..2	RS8K2508F05	RESISTOR 8.25K 1% SMD 0805	4	R32~35
..2	RU1104407	RUBBER	2	-
..2	SC0312RBNI	Screw	1	-
..2	TE10200502	5P CONNECTOR	1	(J12)
..2	TE612000202	2P CONNECTOR	1	SW1
..2	TE612000301	3P CONNECTOR	1	(J10)
..2	TE612000801	8P CONNECTOR	2	(J8,9)
..2	TE812000211	2P CONNECTOR	4	SW2~5
..2	TE962005002	50P CONNECTOR	1	J11
..2	TE962541401	14P CONNECTOR	1	(J13)
..2	WS073307IC	WASHER FLAT	4	(U22,23)
..2	WS663309IC	SPRING WASHER 3#	4	(U22,23)
..2	XTM12288X3	Crystal 12.288MHzMHz 49US DIP Fundamental	1	X1
0.1	TWPC02C03603	MAIN PCB ASS'Y	1	
..2	PC02C036	Function PCB Single Layer 1.6T 330*197MM	1	
..2	TWPC02C036A03	MAIN PCB ASS'Y	1	27
...3	AL0-17-0102	RESISTOR ARRAY 4X1K	2	R14,15
...3	AL0-17-0470	RESISTOR ARRAY 4X47 1/10W 0603	1	R12
...3	AL2-51-4403	TRANSISTOR 2N4403 PNP SOT-23	17	Q1~17
...3	AL2-62-0138	IC 74AHC138	1	U6
...3	AL2-72-0339	IC LM339	2	U3,4
...3	AL2-73-4052	IC CD4052	2	U1,2
...3	CN0320000801	Flat Cable Multicolored 3P Pitch 2.0mm 80mm	3	J2~4
...3	CN0320001501	Flat Cable Multicolored 3P Pitch 2.0mm 150mm	1	J15
...3	CN0620000701	Flat Cable 6Pin Pitch 2.0mm 70mm	3	J6,7,9
...3	CN1425403001	Flat Cable Type 7P*2 Pitch 2.54mm 300mm	1	J5
...3	CN5020001801	Flat Cable Type 25P*2 Pitch 2.0mm 180mm	1	J1
...3	CS104K5005X7R	CERAMIC 0.1uF/50V 10% 0805 X7R	8	C1~4,8~10,12
...3	CS330J5005NPO	CERAMIC 33pF/50V 5% 0805 NPO	2	C6,7
...3	CS474K2505X7R	CERAMIC 0.47uF/25V 10% 0805 X7R	1	C11
...3	CSF104J5012P	Film chip capacitor 0.1UF/50V 5% 1812 Panasonic	1	C5
...3	EC47616T	Capacitor Electrolytic 47uF/16V 5*11mm	3	C13~15
...3	ICYH92M02	IC YH92M02 MICONIC	1	U5
....4	AL2-70-0008	IC P87C51RC2BBD	1	-
...3	JW5206T	JUMP WIRE	101	JM1~JM100,L1
...3	LD-005HLV	RED LED	7	D3~8,29
...3	LD-241E4HR26S	RED LED	20	D9~28
...3	PT1104412	LED	1	(D8~29)
...3	RS000008J05	RESISTOR 0Ω 5% SMD 0805	19	JS1~19

...3	RS004708F05	RESISTOR 47Ω 1% SMD 0805	2	R6,9
...3	RS010008F05	RESISTOR 100Ω 1% SMD 0805	2	R4,5
...3	RS010K08F05	RESISTOR 10K 1% SMD 0805	8	R2,7,8,10,11,13,16,17
...3	RS015008F05	RESISTOR 150Ω 1% SMD 0805	1	R3
...3	RS3K3208F05	RESISTOR 3.32K 1% SMD 0805	1	R1
...3	SW-150	POWER SWITCH	5	S3~7
...3	SWSKHVBE3520	Switch Tact	1	S8
...3	TE812000311	3P CONNECTOR	4	(J2~4,15)
...3	TE812000611	6P CONNECTOR	3	(J6,7,9)
...3	VRR50202001	VARIABLE RESISTANCE	6	P1~4,7,12
...3	VRR50202003	VARIABLE RESISTANCE	8	P5,6,8~11,13,14
...3	VRS50202001	VARIABLE RESISTANCE	1	P15
...3	WCB6	WIRE	1	(A1,A2)
...3	XTM30000X3	Crystal 30MHZ 49US DIP Fundamental	1	X1
..2	TWPC02C036C01	MIC PCB ASS'Y	1	37
...3	CS103K5005X7R	CERAMIC 0.01uF/50V 10% 0805 X7R	1	C202
...3	CS331J5005NPO	CERAMIC 330pF/50V 5% 0805 NPO	2	C115,116
...3	JKSCJ644R5NG	PHONE JACK 6.3φ 6PIN	1	J11
...3	TE612000301	3P CONNECTOR	1	(J12)
..2	TWPC02C036D01	PHONE PCB ASS'Y	1	38
...3	CS103K5005X7R	CERAMIC 0.01uF/50V 10% 0805 X7R	3	C109,110,201
...3	CS104K5005X7R	CERAMIC 0.1uF/50V 10% 0805 X7R	2	C203,204
...3	ICNJM4556AD	IC NJM4556AD	2	U24,25
...3	JKSCJ644R5NG	PHONE JACK 6.3φ 6PIN	1	J13
...3	JW5206T	JUMP WIRE	3	JM101~103
...3	R47012	RESISTOR 47Ω 1/2W	4	R151~154
...3	TE10200502	5P CONNECTOR	1	(J14)
..2	TWPC02C036E02	SWITCH PCB ASS'Y	2	36
...3	SWLBCR23M-095	SWITCH	2	S1
...3	TE622000801	8P CONNECTOR	2	(J17)
..2	TWPC02C036F01	VR PCB ASS'Y	3	28
...3	TE612000301	3P CONNECTOR	3	CN
...3	VRR50203001	VARIABLE RESISTANCE	3	POT
..2	TWPC02C036G01	PCB ASS'Y	1	34
...3	JW5206T	JUMP WIRE	1	JM104
...3	SWSS70010-0202	SWITCH	2	D10,11
...3	TE622000401	4P CONNECTOR	2	(CN1,2)
..2	TWPC02C036H01	VR PCB ASS'Y	1	48
...3	TE622000302	3P CONNECTOR	1	(CN3)
...3	VRR50203001	VARIABLE RESISTANCE	1	POT1
0.1	TWPC04M00902	VR PCB ASS'Y	3	26
..2	PC04M009	VR PCB	3	-
..2	TE10200602	6P CONNECTOR	3	(TE1)
..2	VRS50304513	VARIABLE RESISTANCE	3	VR1

6

5

4

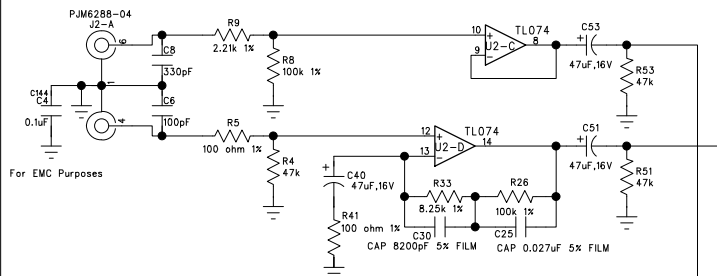
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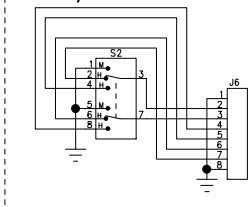
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LTR	ECO NO:	APPROVED:	DATE:

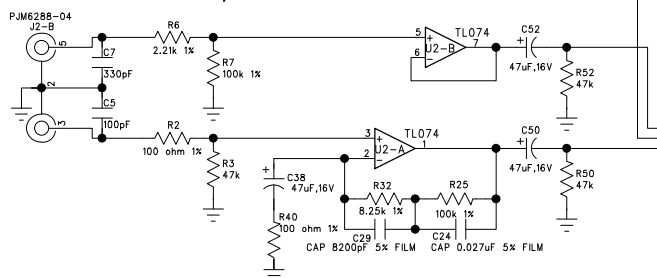
PHONO/LINE 1 LEFT INPUT



PHONO/LINE SWITCH 1

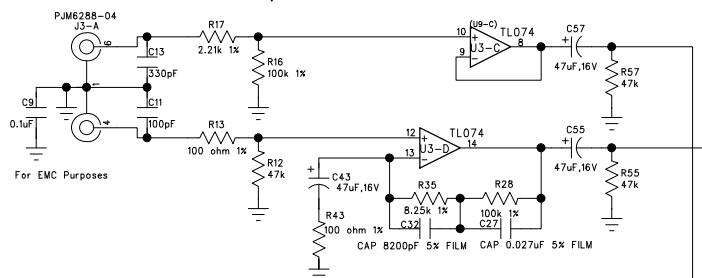


PHONO/LINE 1 RIGHT INPUT

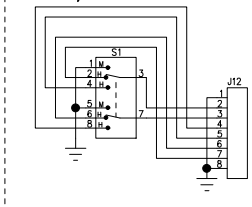


The Phono/Line Switch is removable and can be rotated into 8 different positions.

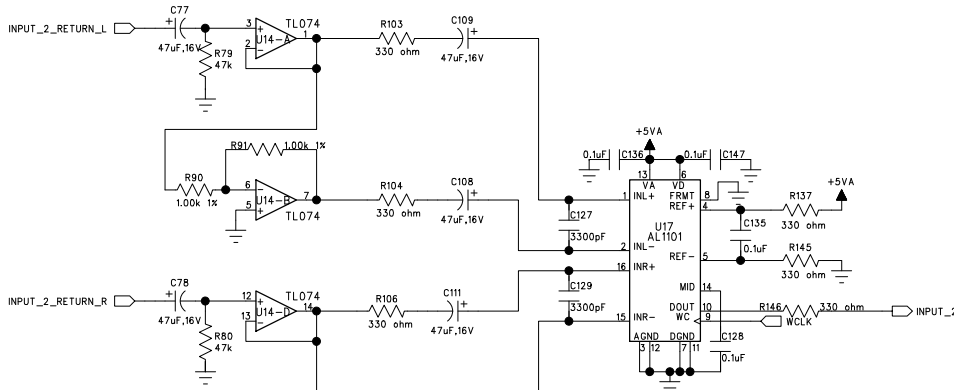
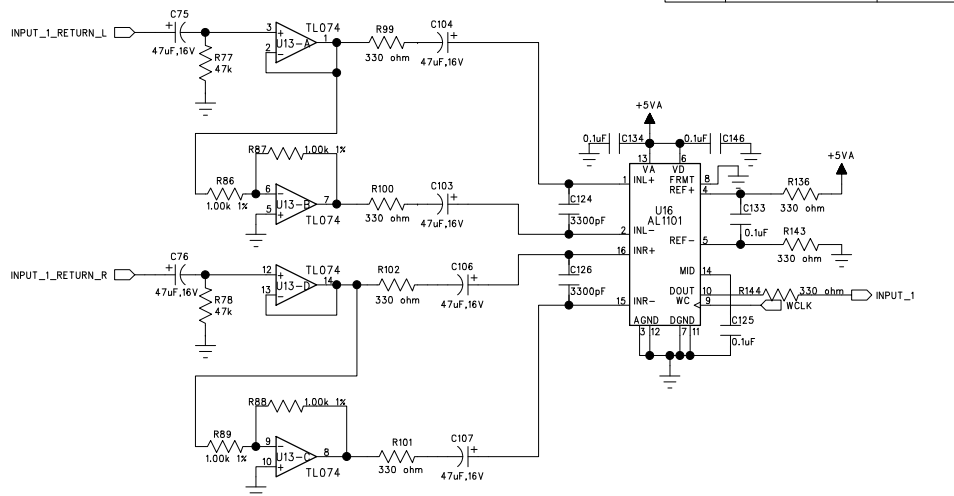
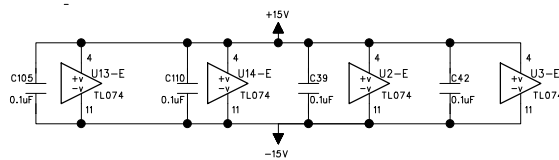
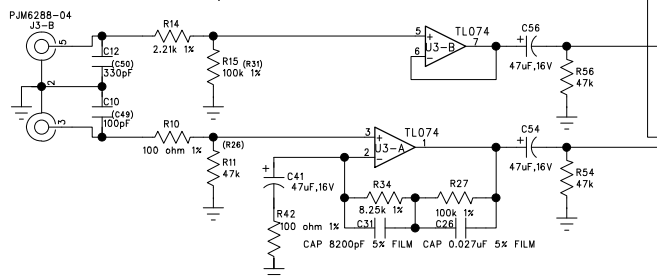
PHONO/LINE 2 LEFT INPUT



PHONO/LINE SWITCH 1



PHONO/LINE 2 RIGHT INPUT



COMPANY: Numark Corporation

TITLE: Digital DJ Rear Board
Channel 1&2 Input Circuit

PART NUMBER: REV: 2

ASSY NUMBER:

FILENAME: J11RP204A.sch SIZE: C

SCALE: SHEET: 1 OF 4

DRAWN: Aureliano Pisa
RELEASED:DATED: 12/28/06
DATED:

6

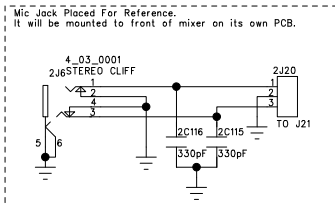
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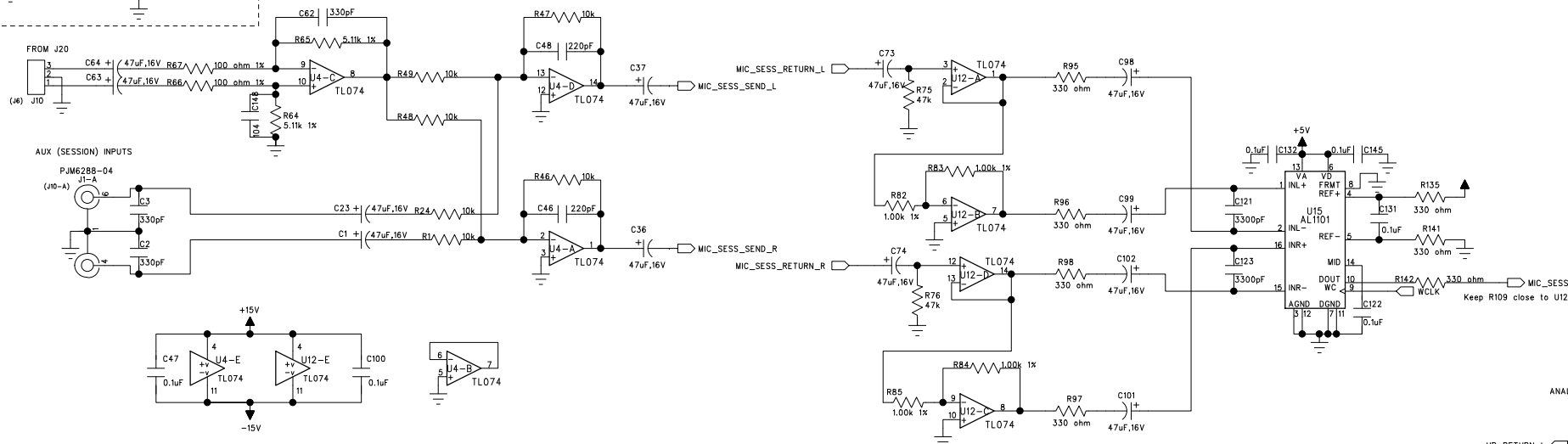
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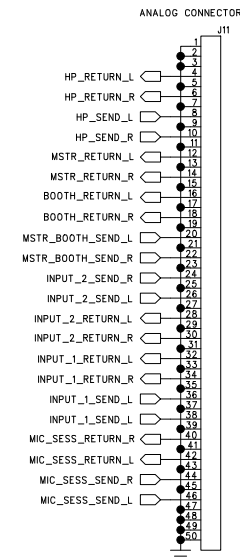
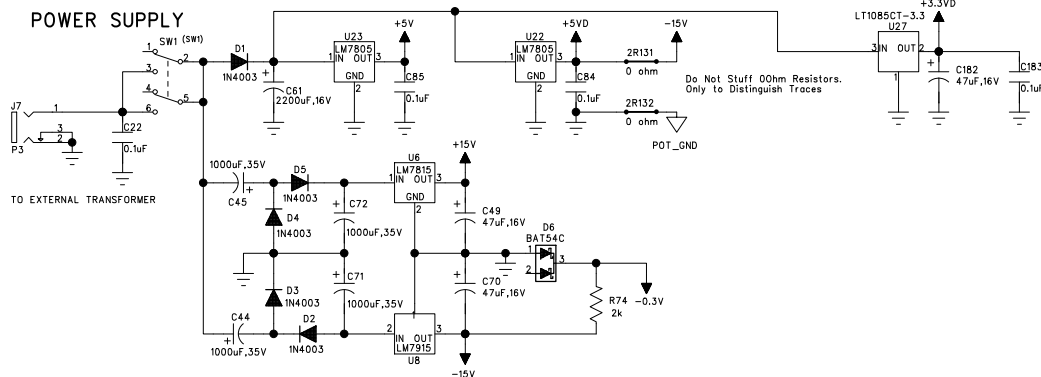
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MIC/LINE HYBRID AMP



POWER SUPPLY



COMPANY: Numark Corporation

TITLE: Digital DJ Rear Board
Mic/Session, Power

PART NUMBER:

REV: 1

ASSY NUMBER:

FILENAME: J11RP204A.sch

SIZE: C

SCALE:

SHEET: 2 OF 4

DRAWN:

DATED:

RELEASED:

12/28/06

DATED:

6

5

4

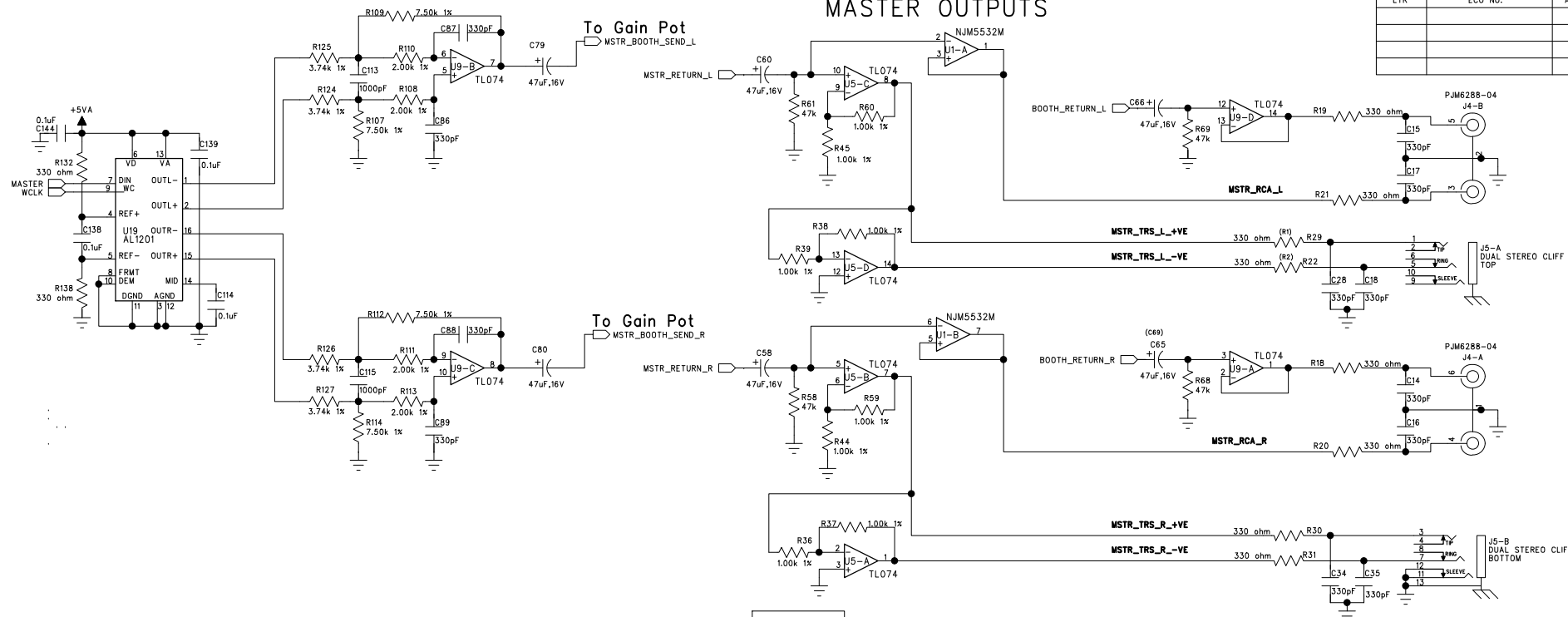
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REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

MASTER OUTPUTS



VOL. POT

DAC

Vmax= 8V p-p

FILTER STAGE

Gain=2
Vmax= 16V p-p
LP Filter Fc = 100kHz

VOL. POT

TRS OUTPUT STAGE
(BALANCED)
MAX GAIN=1
Vmax= 32V p-p
TO 1/4" TRS OUT

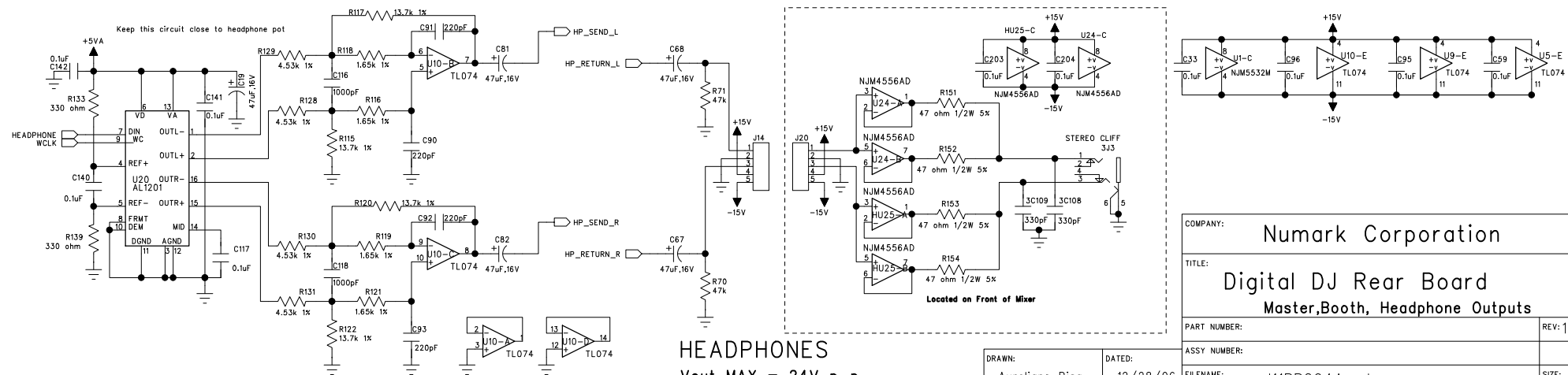
RCA OUTPUT STAGE
GAIN=1
Vmax= 16V p-p
TO RCA OUT

BOOTH AMP

GAIN=1
Vmax= 8V p-p

HEADPHONES

Vout MAX = 24V p-p



Located on Front of Mixer

COMPANY:

Numark Corporation

TITLE:

Digital DJ Rear Board
Master, Booth, Headphone Outputs

PART NUMBER:

REV: 1

ASSY NUMBER:

FILENAME:

J11RP204A.sch

SIZE:

C

SCALE:

SHEET: 3 OF 4

DRAWN:

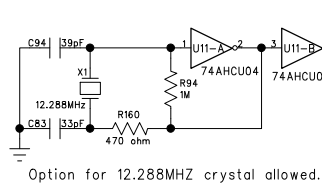
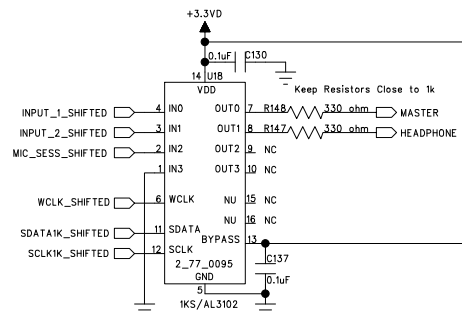
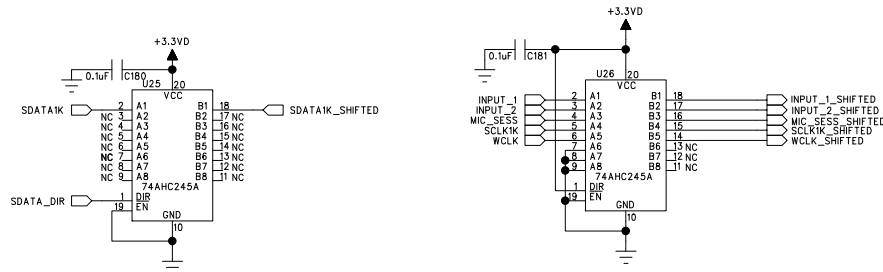
DATED:

RELEASED:

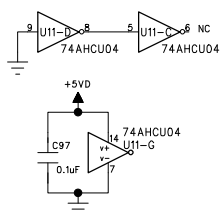
12/28/06

Route Separate Power/GND to this portion of the schematic

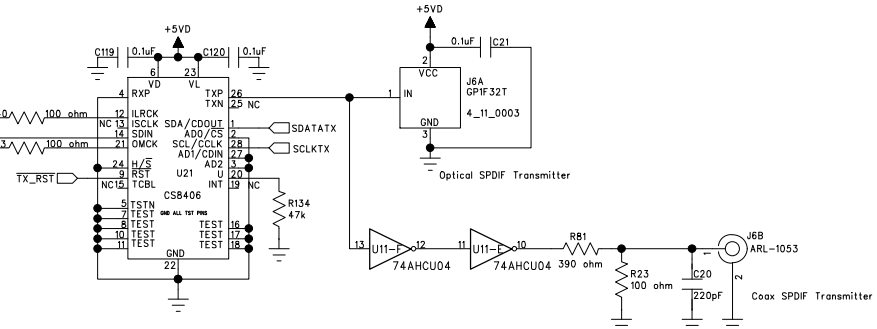
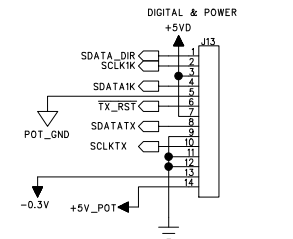
LEVEL SHIFTING SIGNALS TO 1K, AS IT IS NOW POWERED BY 3.3V INSTEAD OF 5V



Option for 12.288MHz crystal allowed.



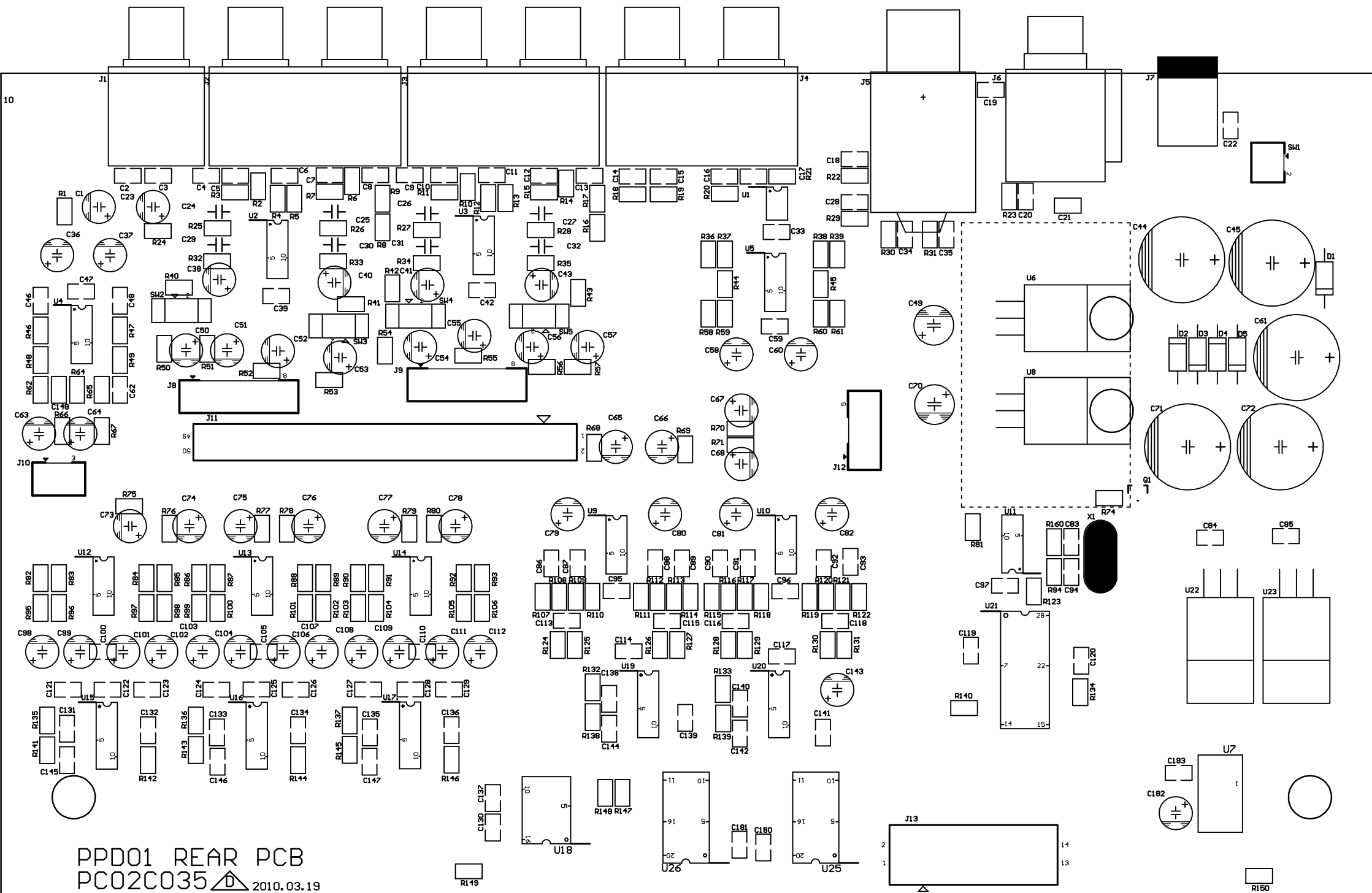
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

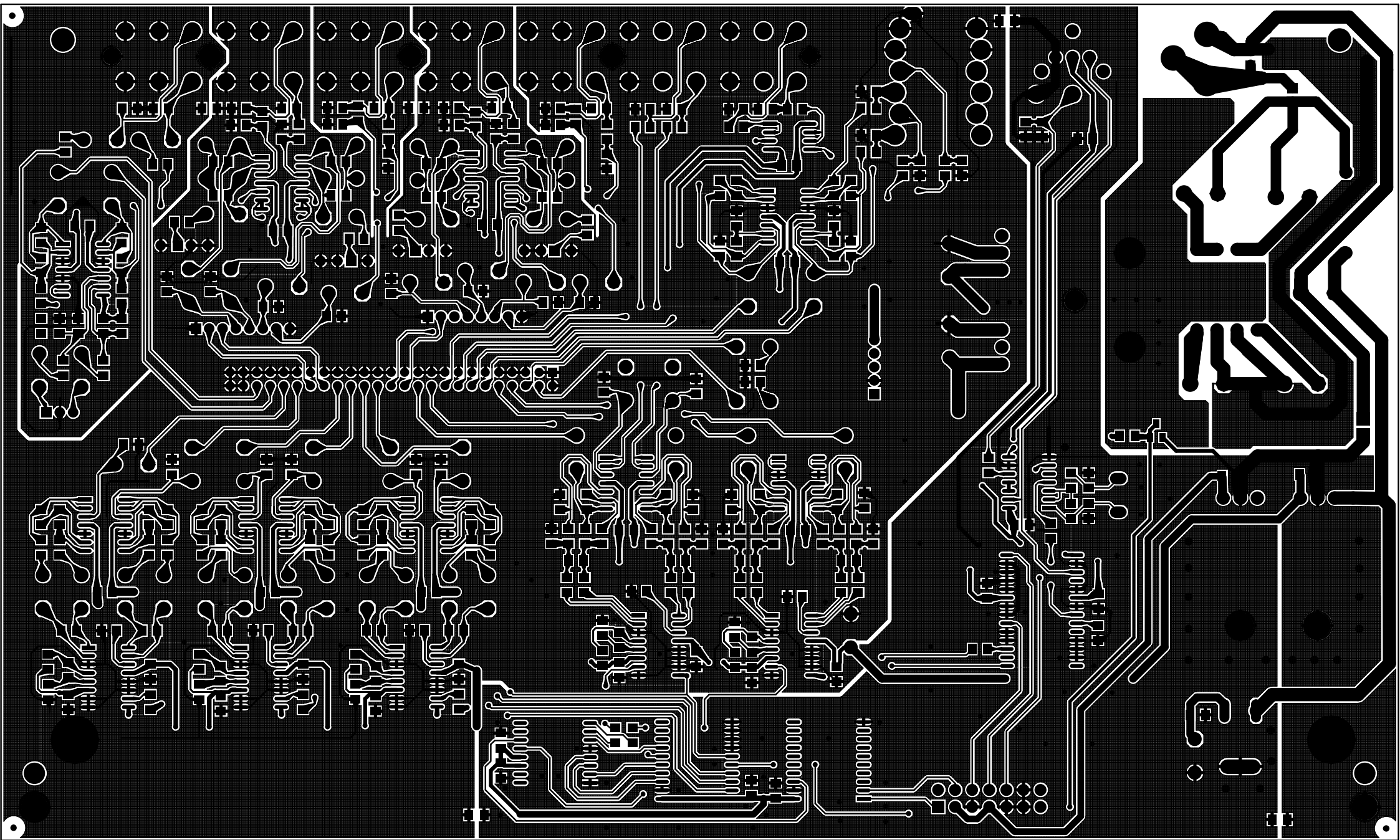


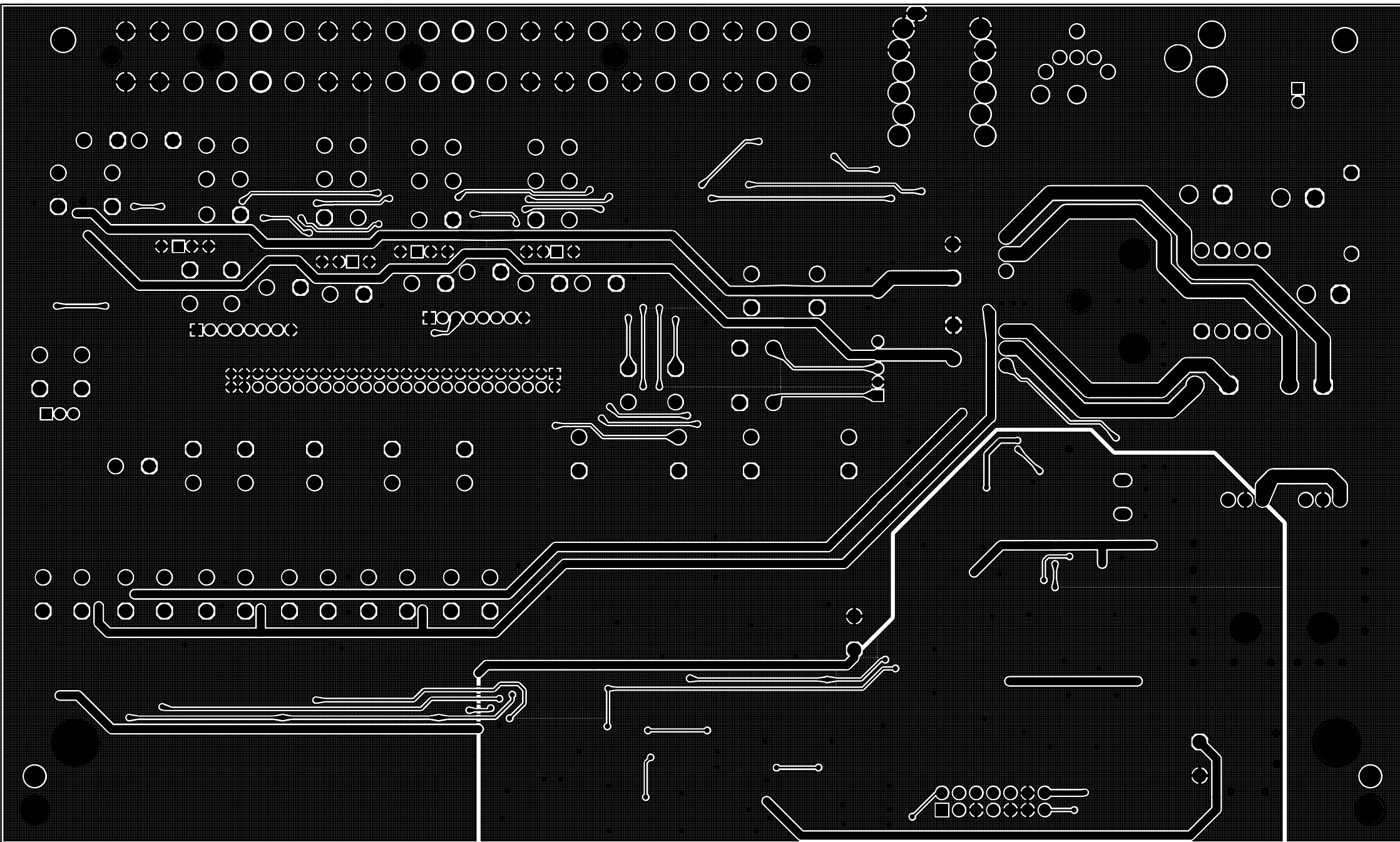
COMPANY:		Numark Corporation	
TITLE:		Digital DJ Rear Board DIGITAL PROCESSING	
PART NUMBER:		REV: 1	
ASSY NUMBER:			
FILENAME:		J11RP204A.sch	
SCALE:		SHEET: 4 OF 4	

DRAWN:	DATED:
Aureliano Pisa	12/28/06
RELEASED:	DATED:

10







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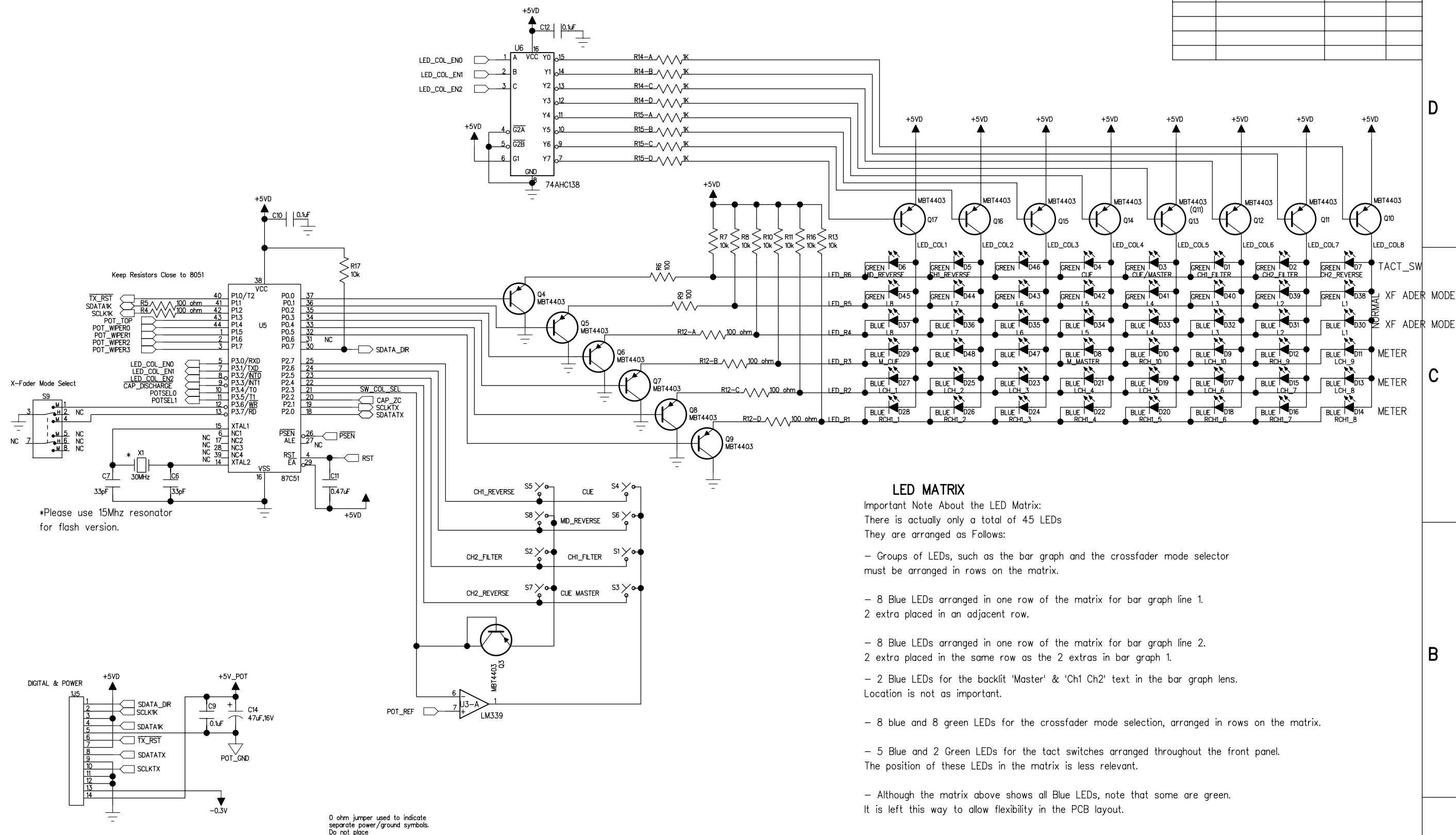
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2

1

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



LED MATRIX

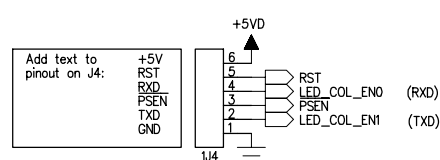
Important Note About the LED Matrix:

There is actually only a total of 45 LEDs

They are arranged as Follows:

- Groups of LEDs, such as the bar graph and the crossfader mode selector must be arranged in rows on the matrix.
- 8 Blue LEDs arranged in one row of the matrix for bar graph line 1. 2 extra placed in an adjacent row.
- 8 Blue LEDs arranged in one row of the matrix for bar graph line 2. 2 extra placed in the same row as the 2 extras in bar graph 1.
- 2 Blue LEDs for the backlit 'Master' & 'Ch1 Ch2' text in the bar graph lens. Location is not as important.
- 8 blue and 8 green LEDs for the crossfader mode selection, arranged in rows on the matrix.
- 5 Blue and 2 Green LEDs for the tact switches arranged throughout the front panel. The position of these LEDs in the matrix is less relevant.
- Although the matrix above shows all Blue LEDs, note that some are green. It is left this way to allow flexibility in the PCB layout.

DEVELOPMENT ONLY



All Resistors are 5% Tolerance
Unless Otherwise Stated

COMPANY: Numark Corporation	
TITLE: Digital DJ Mixer Main Board 8051, 1K, LED Matrix, Switches	
PART NUMBER: 9-40-0259-1	REV: 4
ASSY NUMBER:	
FILENAME: J01MNB03A.SCH	SIZE: C
SCALE:	SHEET: 1 OF 2

DRAWN: Aureliano Pisa	DATED: 12/28/06
RELEASED:	DATED:

6

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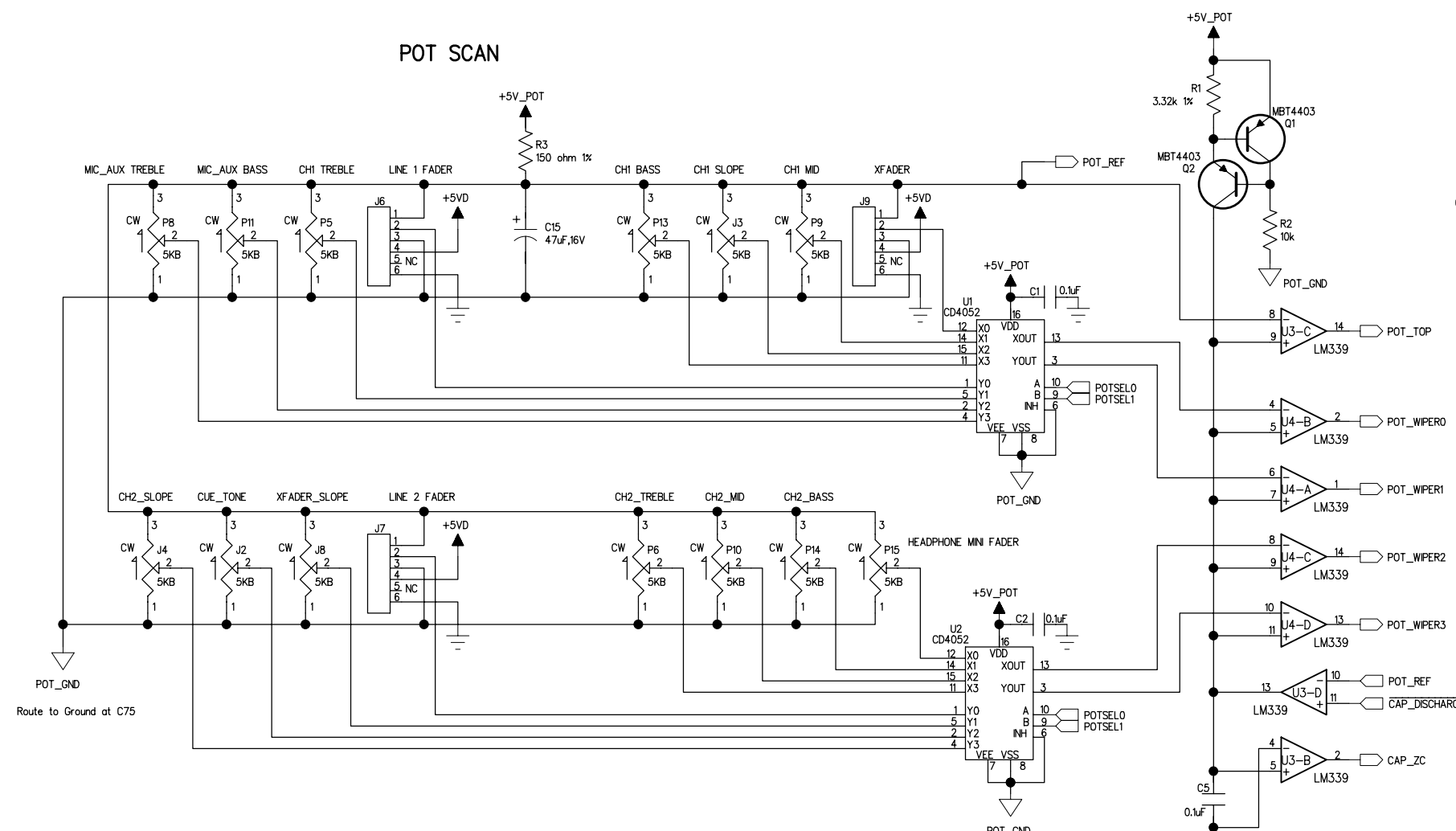
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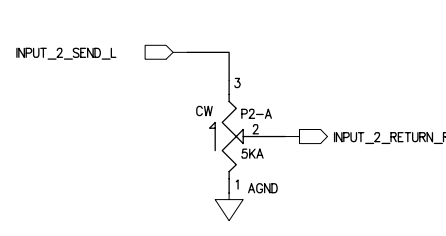
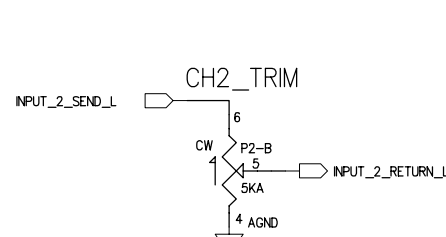
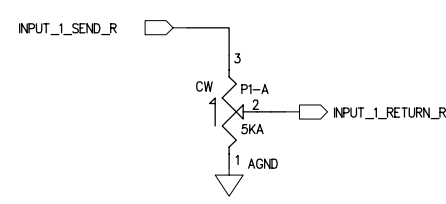
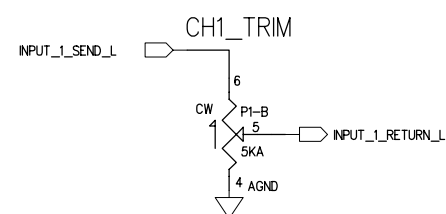
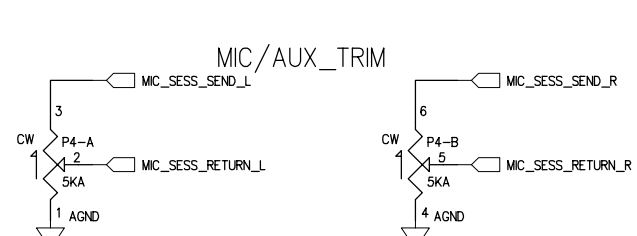
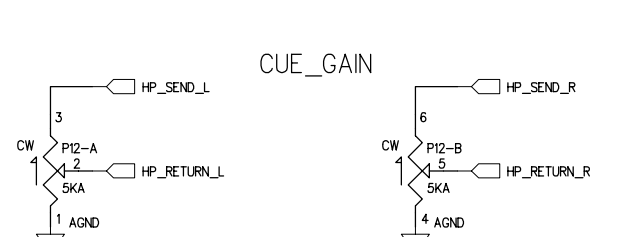
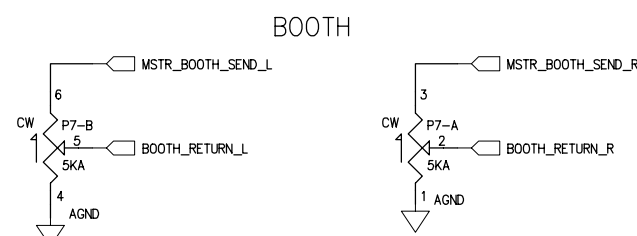
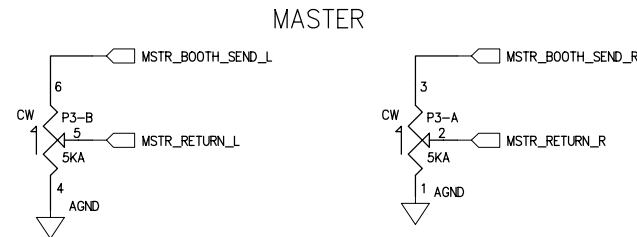
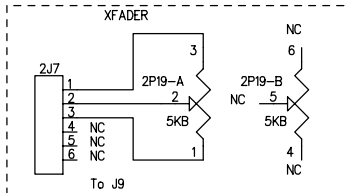
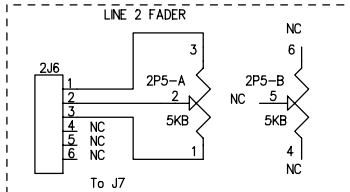
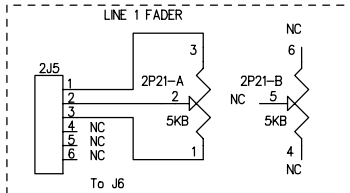
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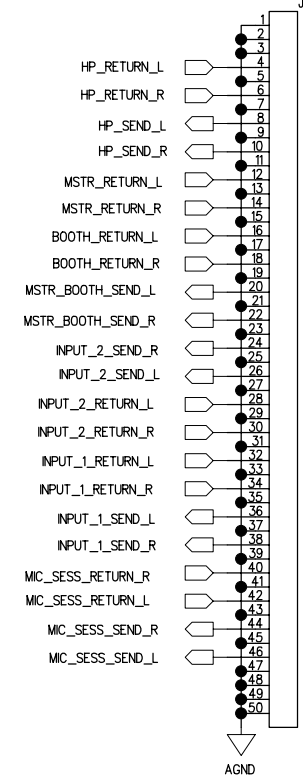
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



2P21, 2P19 and 2P5 are replaceable faders.
They will be ALPHA stereo 5KB 45mm faders.

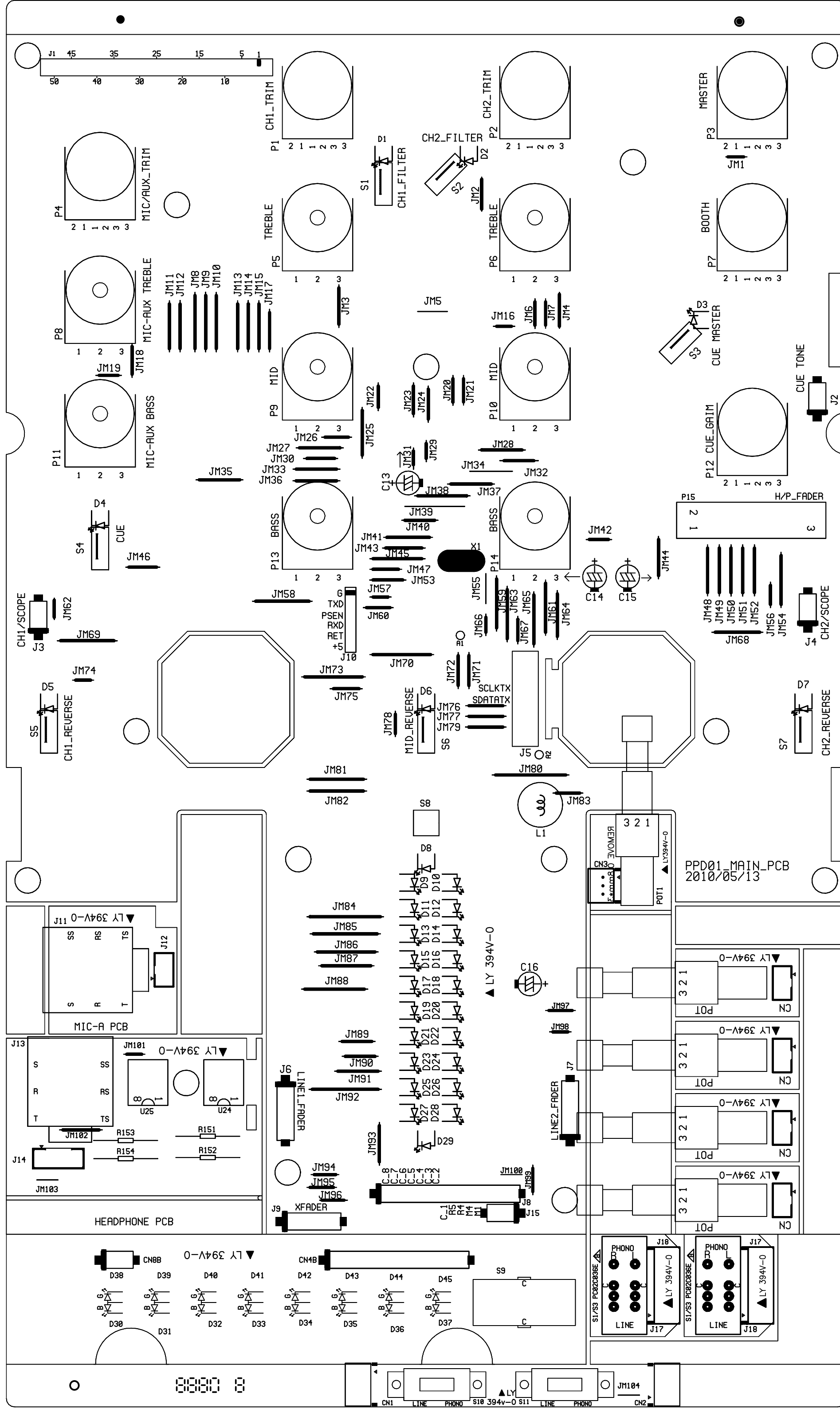


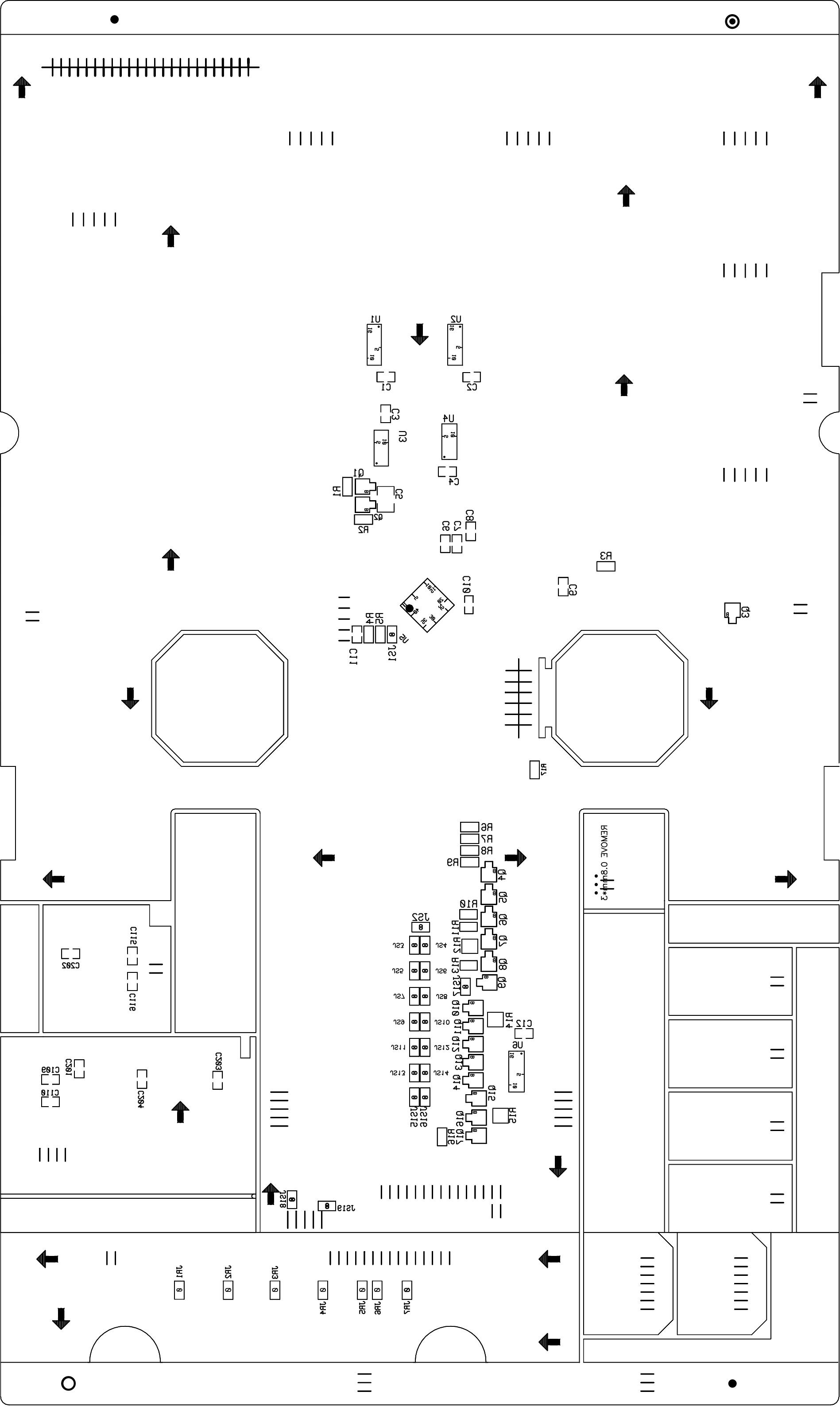
ANALOG CONNECTOR

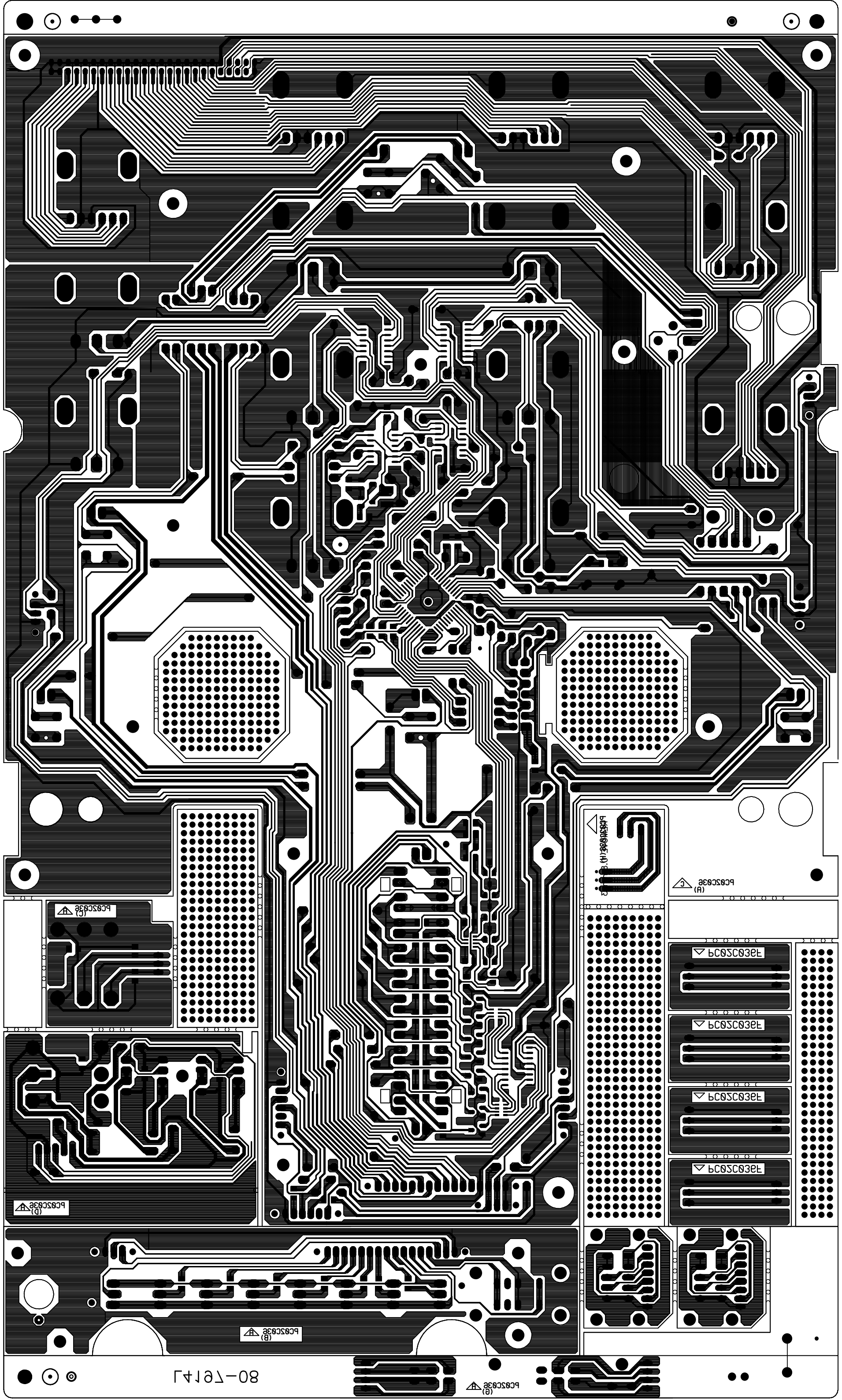


COMPANY: Numark Corporation	
TITLE: Digital DJ Mixer Main Board Pot Scan, Analog Pot Send/Return, Connector	
PART NUMBER: 9-40-0259-1	REV: 4
ASSY NUMBER:	
FILENAME: J01MNB03A.SCH	SIZE: C
SCALE:	SHEET: 2 OF 2

DRAWN: Aureliano Pisa	DATED: 12/06/06
RELEASED:	DATED:







80-10141

PC05C030E (6)

PC05C030E (8)

PC05C030E (9)

PC05C030E (5)

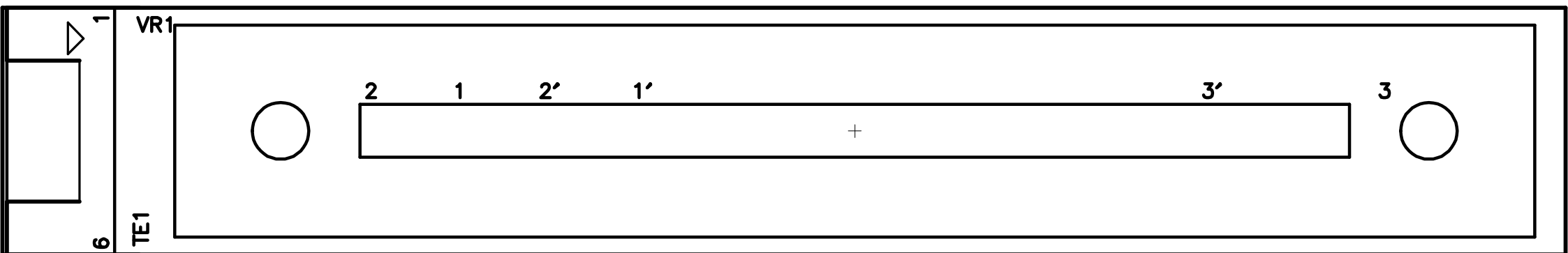
PC05C030E (A)

PC05C030E

PC05C030E

PC05C030E

PC05C030E



KO-01 VR PCB
PC04M003 

