

Service Manual

Model: CLE4.0

Compressor / Limiter

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1. Specification

SPECIFICATIONS FOR CLE4.0

AUDIO INPUT		
Connectors	XLR and 1/4" TRS (Pin 2 and Tip hot)	
Type	Electronically balanced/unbalanced, RF filtered	
Impedance	Balanced >50Kohm, Unbalanced>25Kohm	
Nominal operating level	+4dBu/-10dBV switchable	
Max input level	>+24dBu balanced and unbalanced	
CMRR	Typically>50dB at 1KHz	

AUDIO OUTPUT		
Connectors	XLR and 1/4" TRS (Pin 2 and Tip hot)	
Type	Electronically balanced/unbalanced, RF filtered	
Impedance	Balanced 120ohm, Unbalanced>60ohm	
Max output level	>+21dBu,+20dBm balanced and unbalanced	

SYSTEM SPECIFICATIONS		
Bandwidth	22HZ to 22KHz, +0/-0.5dB	
Frequency Response	0.35Hz to 200kHz,+0/-3dB	
Noise	>-95dBu, unweighted, 22Hz to 22kHz	
THD	<0.008% Typical at +4dBu, 1kHz, unity gain <0.04% Typical at +20dBu, 1kHz, unity gain	
IMD	<0.1% Typical SMPTE	
Crosstalk	<-100dB, 22Hz to 22Khz	
Stereo Coupling	True RMS detection	

COMPRESSOR SECTION		
Type	Interactive Compressor (Interactive Knee Adaptation)	
Threshold	variable (-40dB to +20dB)	
Ratio	variable (1:1 to :1)	
Threshold Characteristic	variable (Interactive or Hard Knee)	
Manual Attack Time	variable (0.5ms to 100ms / 20dB)	
Manual Release Time	variable from 0.05 ms to 5s / 20dB	
Auto Attack Time	Typical 15ms at 10dB, 5ms at 20dB, 3ms at 30dB	
Auto Release Time	Program dependent, typical 125dB/s	
Output level	variable (-20dB to +20dB)	

PEAK LIMITER SECTION		
Type	Interactive Gain Control Peak Limiter	
Threshold	variable (+4dB to OFF (+22dBu))	
Ratio	:1	
Stage 1 Limiter Type	Clipper	
Attack Time	"zero"	
Release Time	"zero"	
Stage 2 Limiter Type	Program Limiter	

Attack	program dependent, typ. <5ms	
Release	Program dependent, typ. 20dB/s	

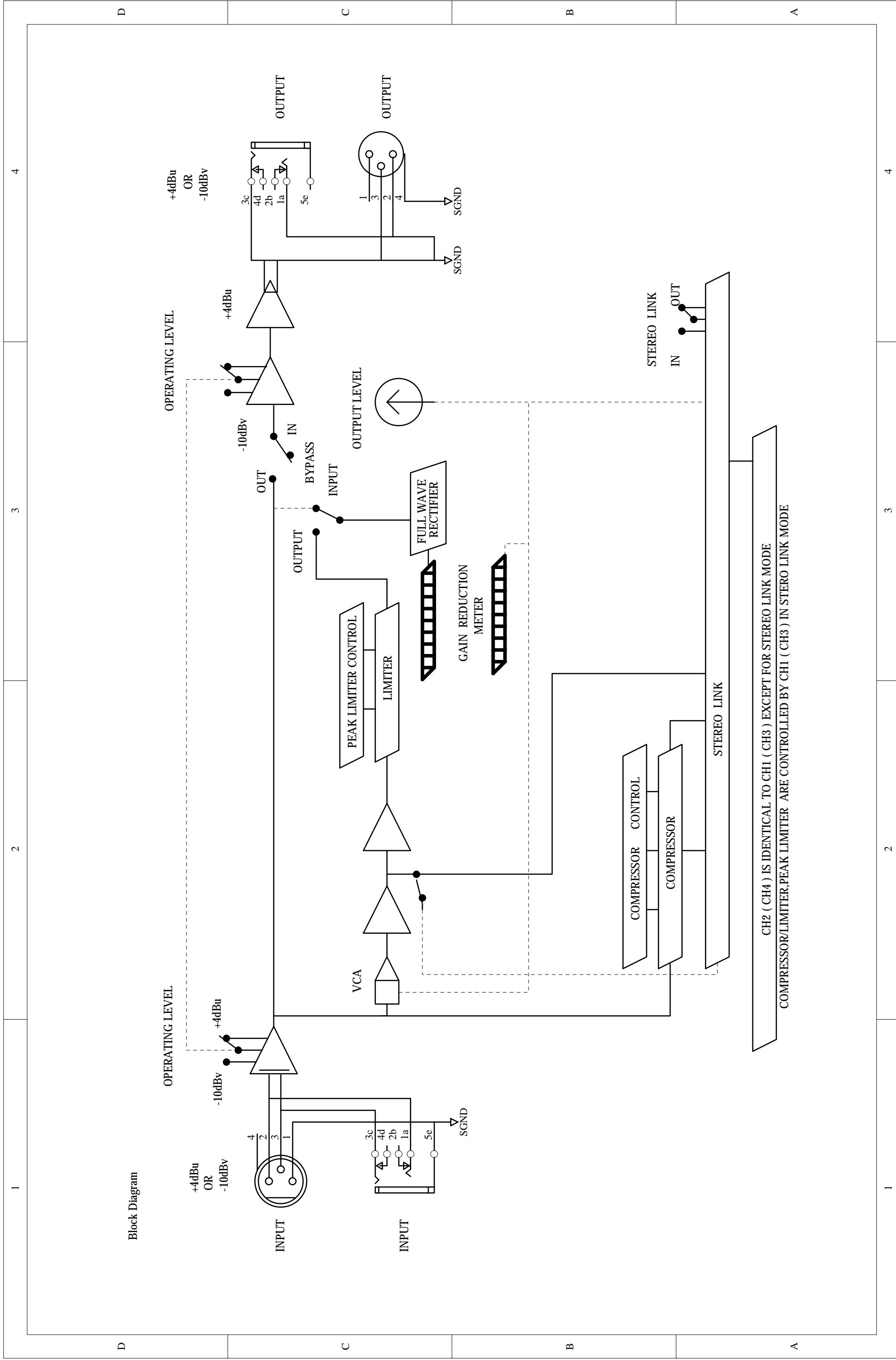
FUNCTION SWITCHES		
INTERACTIVE	Enables the "Interactive Knee Adaptation" characteristics.	
CONTOUR	Allows for frequency dependent detection.	
I/O METER	Switches between input and output for the Level Meter.	
BYPASS	Relay controlled hard-bypass	
OPERATING LEVEL	Changes the internal reference level from +4 dBu to – 10dBu.	
COUPLE	Linking channels 1&2 or 3&4 for stereo operation. Channel 1 (or 3) becomes master.	

INDICATORS		
GAIN REDUCTION	8 element LED display: 1/3/6/10/15/20/25/30 dB.	
INPUT/OUTPUT LEVEL	8 element LED display: -24/-18/-12/-6/0/+6/+12/+18 dB	
Peak Limiter Threshold	1 LED for indication of limiter function.	
Function switch	LED indicator for each	

POWER SUPPLY		
Mains Voltages	USA/Canada ~120VAC, 60Hz U.K./Australia ~240VAC, 50Hz Europe ~230VAC, 50Hz General Export Model ~100-120VAC, ~200-240VAC, 50-60Hz	
Fuse	100-120VAC : 630mA (SLOW-BLOW) 200-240VAC : 315mA (SLOW-BLOW)	
Power consumption	14Watts	
Mains Connection	Standard IEC receptacle	

PHYSICAL		
Dimension	W(483.0)*D(198.0)*H(44.2) mm	
Net Weight	3.3Kg	

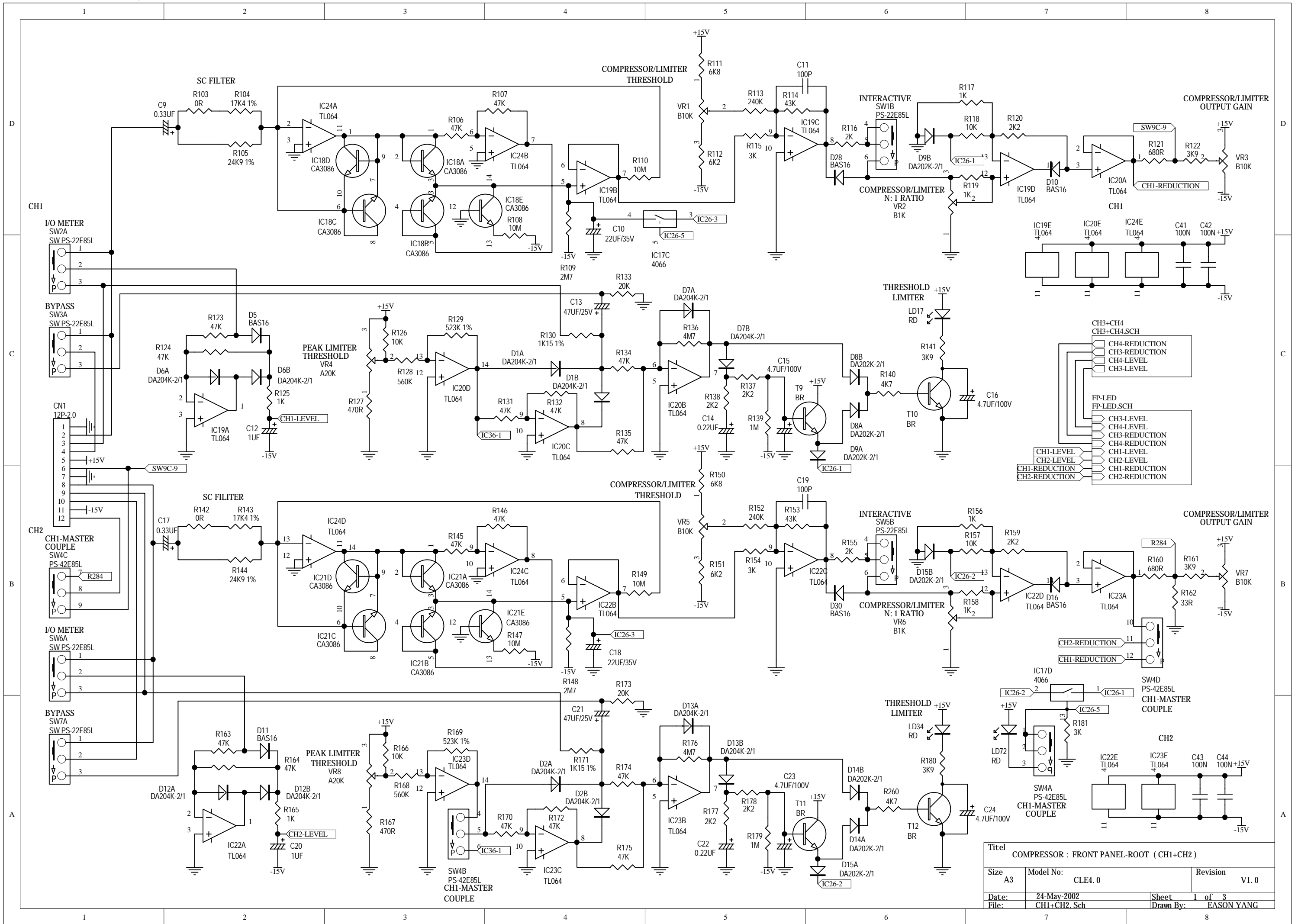
2. Block Diagram



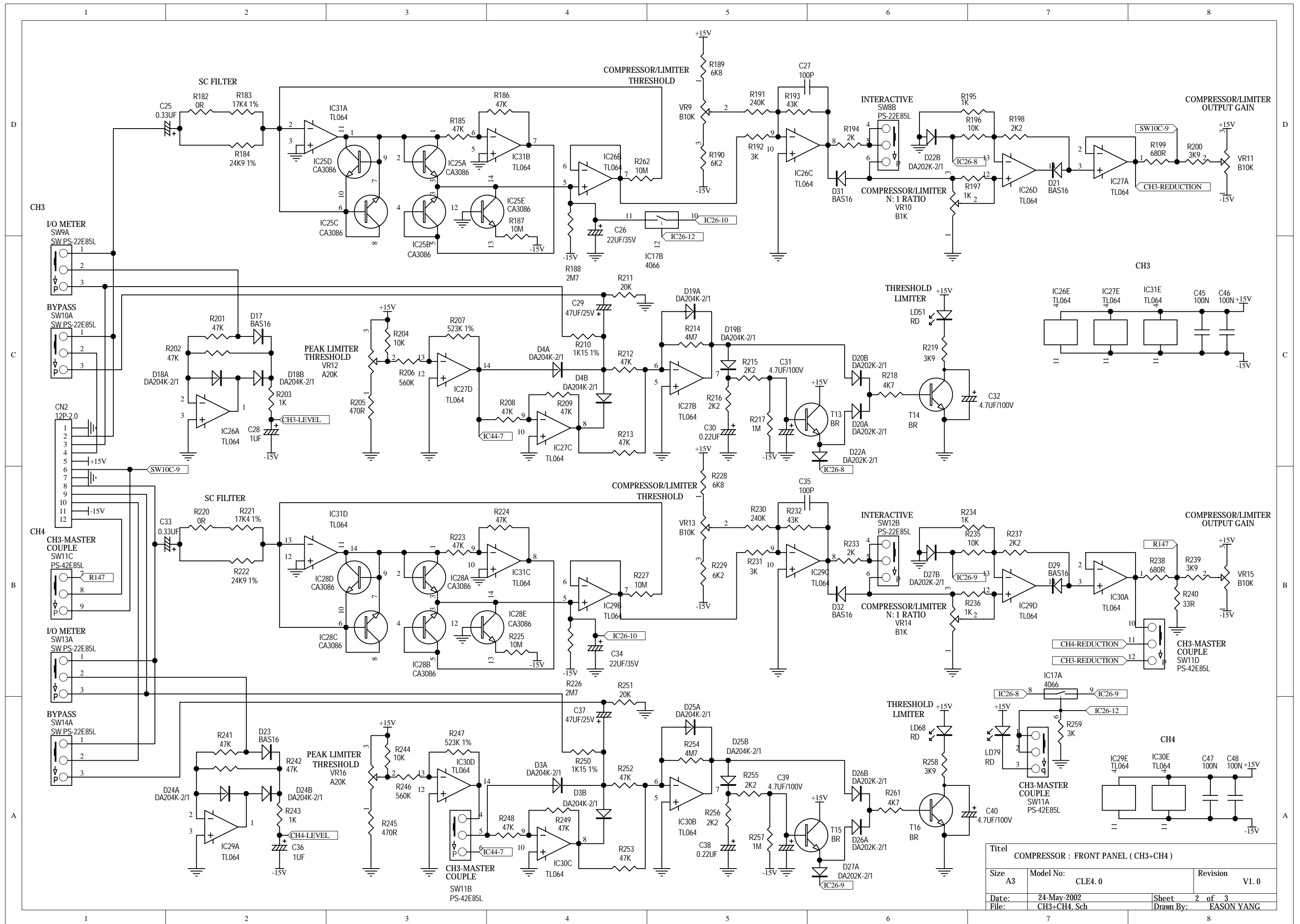
Block Diagram

CH2 (CH4) IS IDENTICAL TO CH1 (CH3) EXCEPT FOR STEREO LINK MODE
 COMPRESSOR/LIMITER, PEAK LIMITER ARE CONTROLLED BY CH1 (CH3) IN STEREO LINK MODE

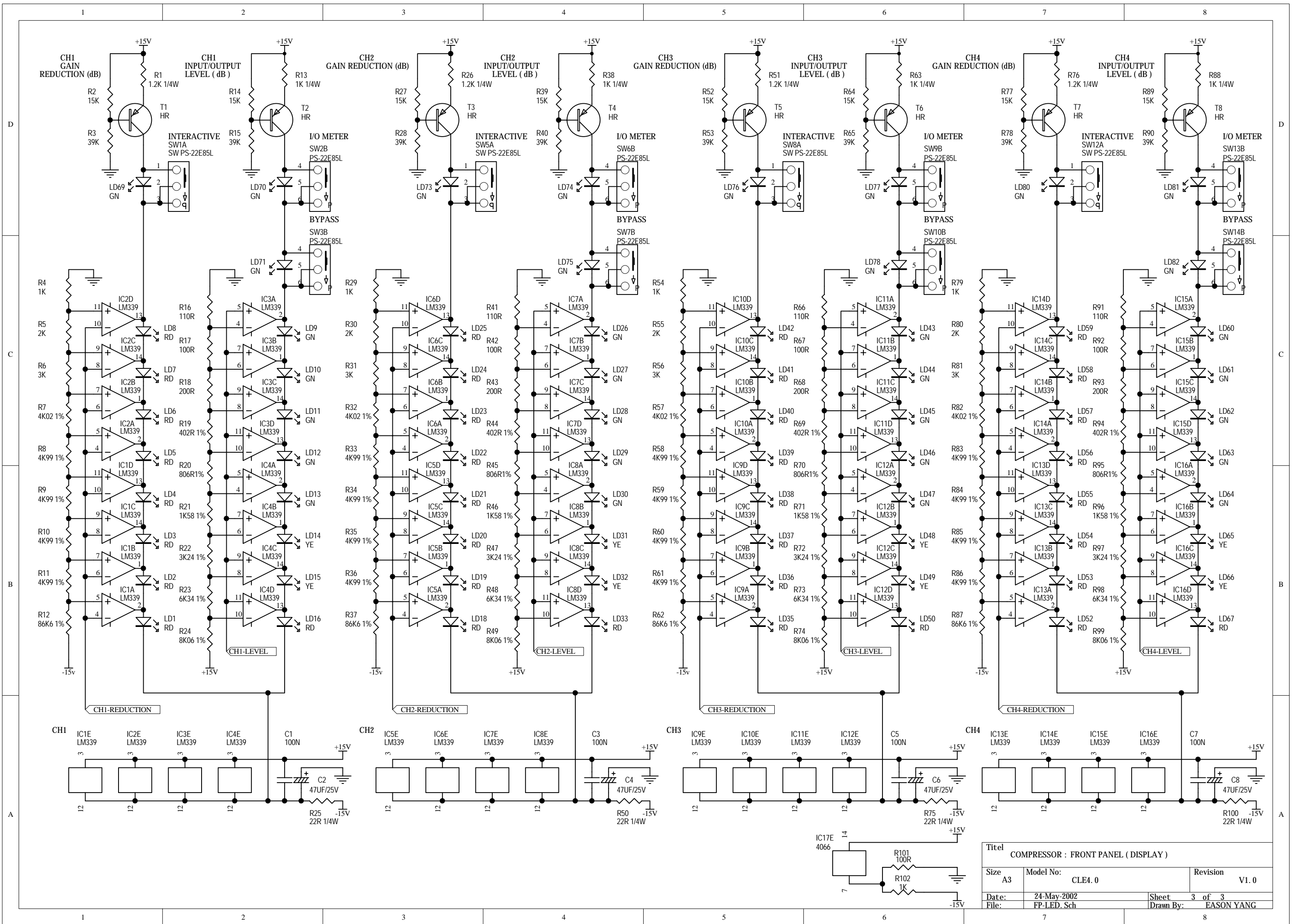
3. Schematic Diagram



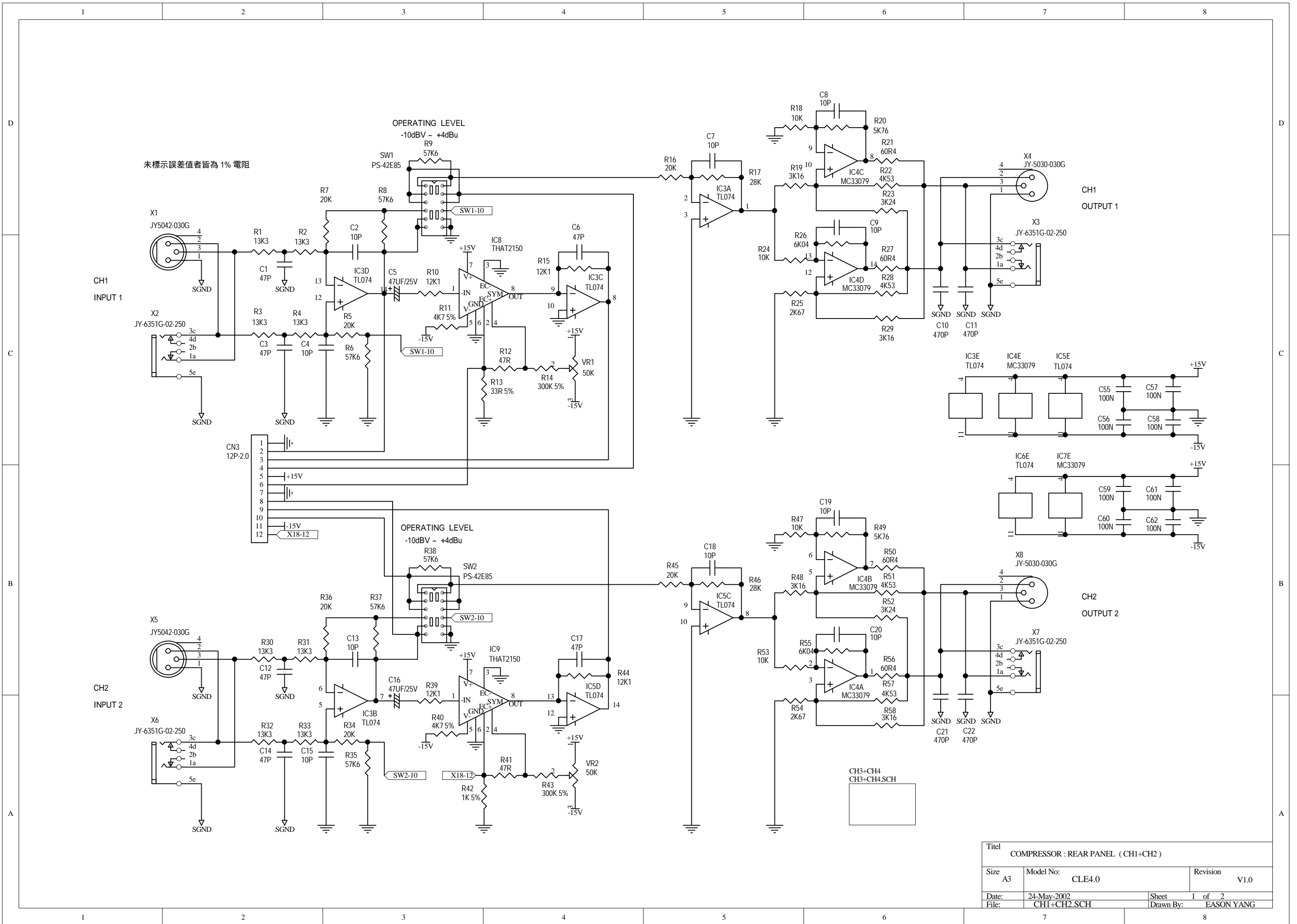
Titel		
COMPRESSOR : FRONT PANEL-ROOT (CH1+CH2)		
Size	Model No:	Revision
A3	CLE4.0	V1.0
Date:	24-May-2002	Sheet 1 of 3
File:	CH1+CH2. Sch	Drawn By: EASON YANG



Titel		
COMPRESSOR : FRONT PANEL (CH3+CH4)		
Size	Model No:	Revision
A3	CLE4.0	V1.0
Date:	24-May-2002	Sheet 2 of 3
File:	CH3+CH4. Sch	Drawn By: EASON YANG

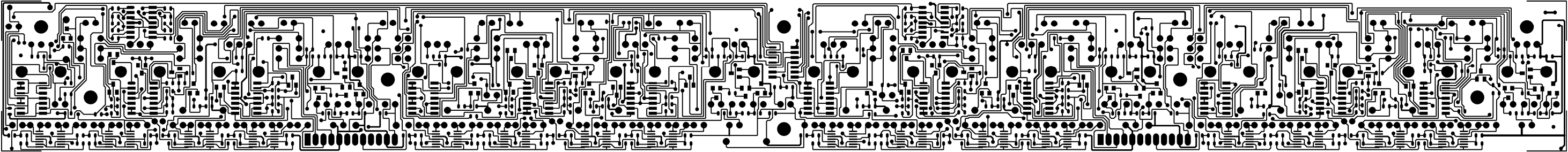


Titel			COMPRESSOR : FRONT PANEL (DISPLAY)		
Size	A3	Model No:	CLE4.0	Revision	V1.0
Date:	24-May-2002		Sheet	3 of 3	
File:	FP-LED. Sch		Drawn By:	EASON YANG	

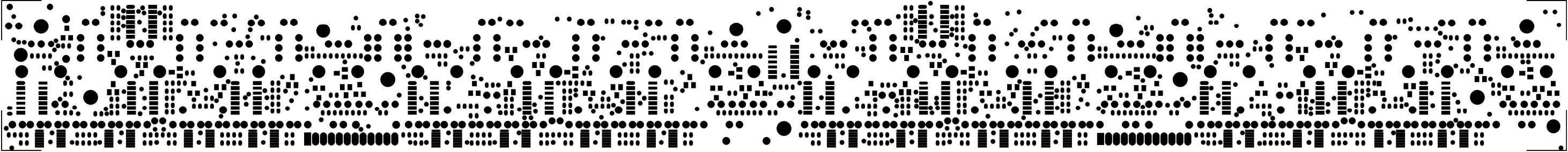


Titel		
COMPRESSOR : REAR PANEL (CH1+CH2)		
Size	Model No:	Revision
A3	CLE4.0	V1.0
Date:	24-May-2002	Sheet 1 of 2
File:	CH1+CH2.SCH	Drawn By: EASON YANG

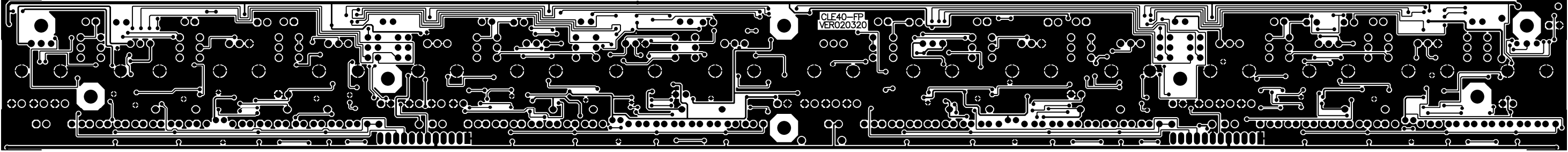
4. Printed Circuit Board



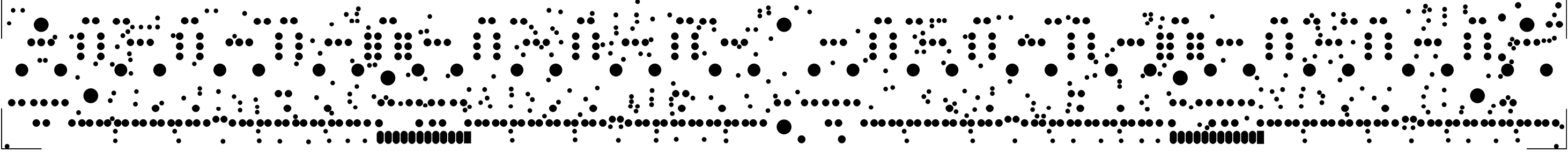
PCB : CLE40-FP TOP LAYER



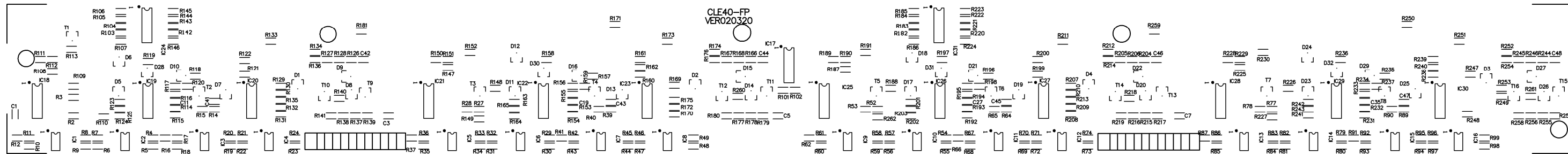
PCB : CLE40-FP TOP SOLDER MASK



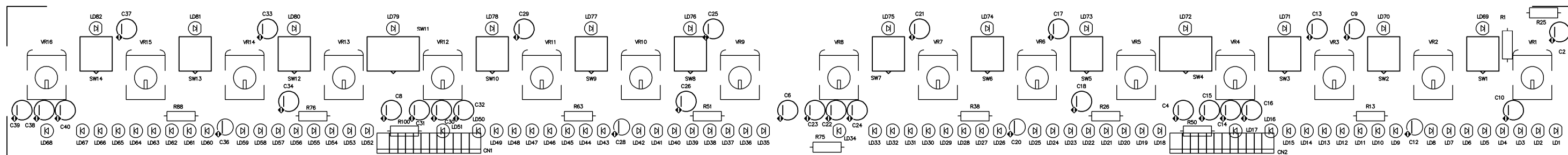
PCB : CLE40-FP BOTTOM LAYER



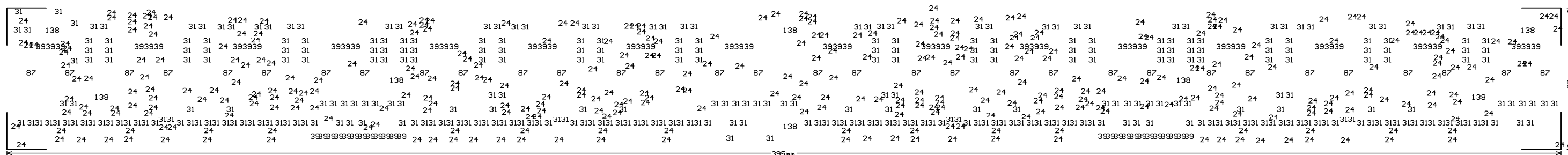
PCB : CLE40-FP BOTTOM SOLDER MASK



PCB : CLE40-FP TOP OVERLAY

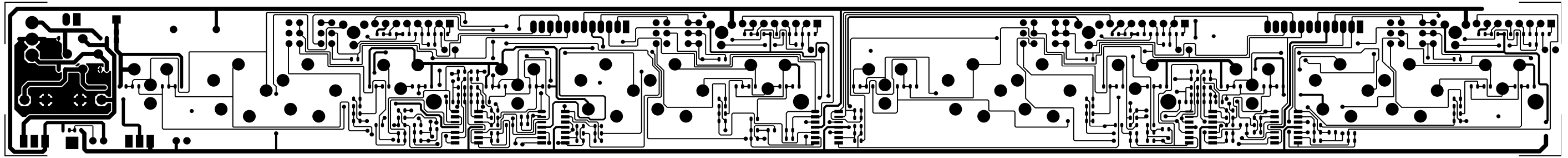


PCB : CLE40-FP BOTTOM OVERLAY

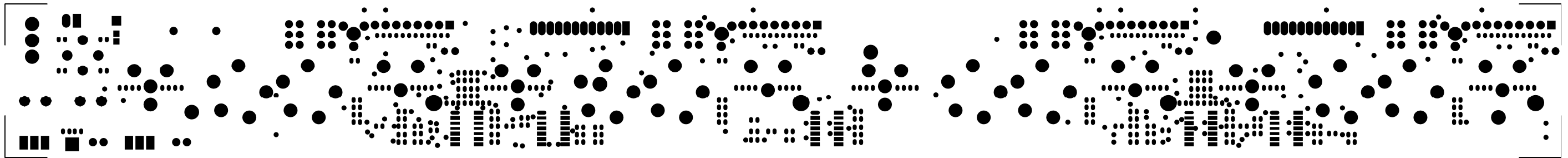


PCB : CLE40-FP DRILL DRAWING PLOTS

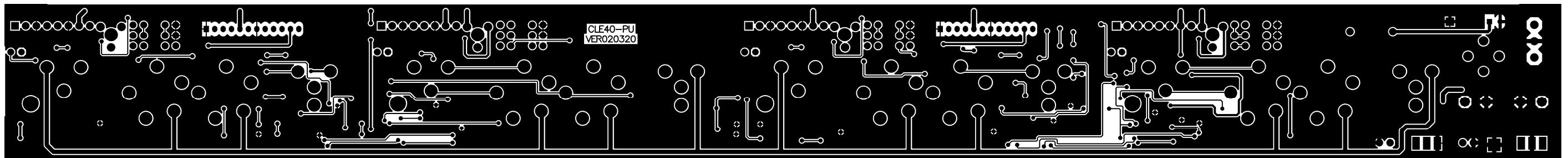
Tool	Hole Size	Hole Count Plated	Tool Travel
T1	24mil (0.6096mm)	354	93.34 Inch (2370.79 mm)
T2	31mil (0.7874mm)	348	73.87 Inch (1876.40 mm)
T3	39mil (0.9906mm)	72	35.33 Inch (897.40 mm)
T4	87mil (2.2098mm)	32	34.95 Inch (887.77 mm)
T5	138mil (3.5052mm)	8 NPTH	36.02 Inch (914.97 mm)
Totals		814	273.52 Inch (6947.33 mm)



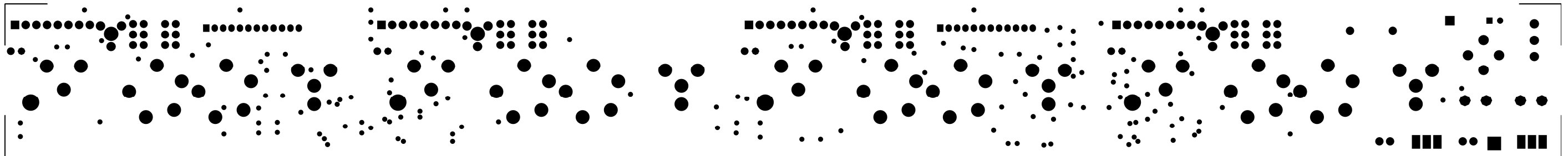
PCB : CLE40-PU TOP LAYER



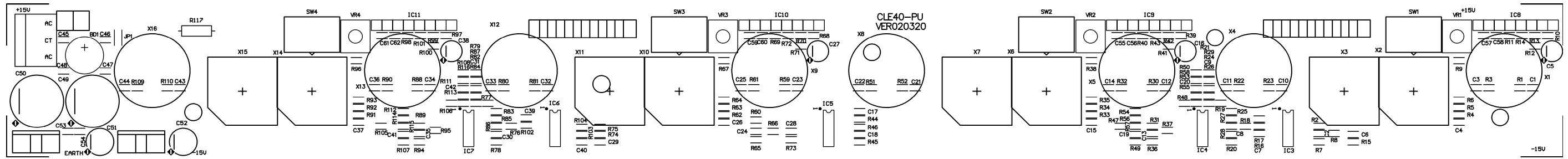
PCB : CLE40-PU TOP SOLDER MASK



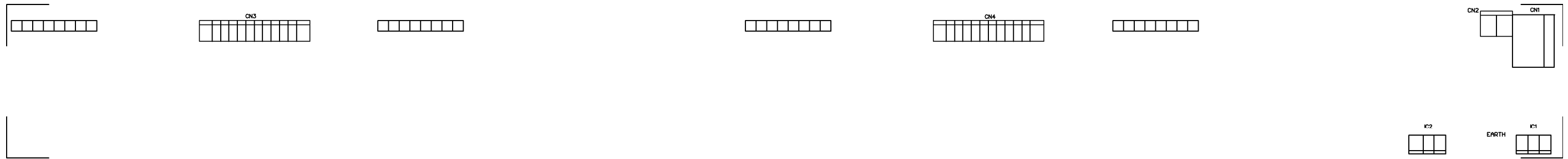
PCB : CLE40-PU BOTTOM LAYER



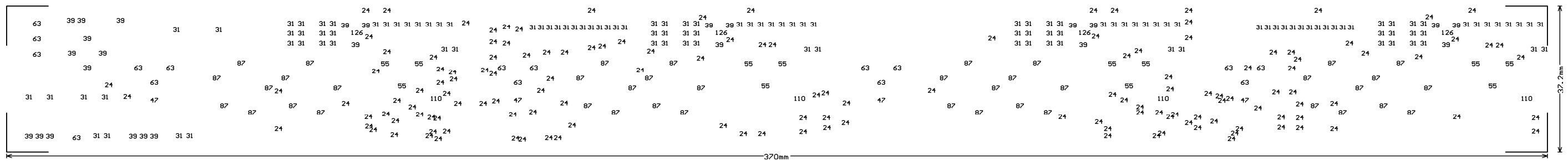
PCB : CLE40-PU BOTTOM SOLDER MASK



PCB : CLE40-PU TOP OVERLAY



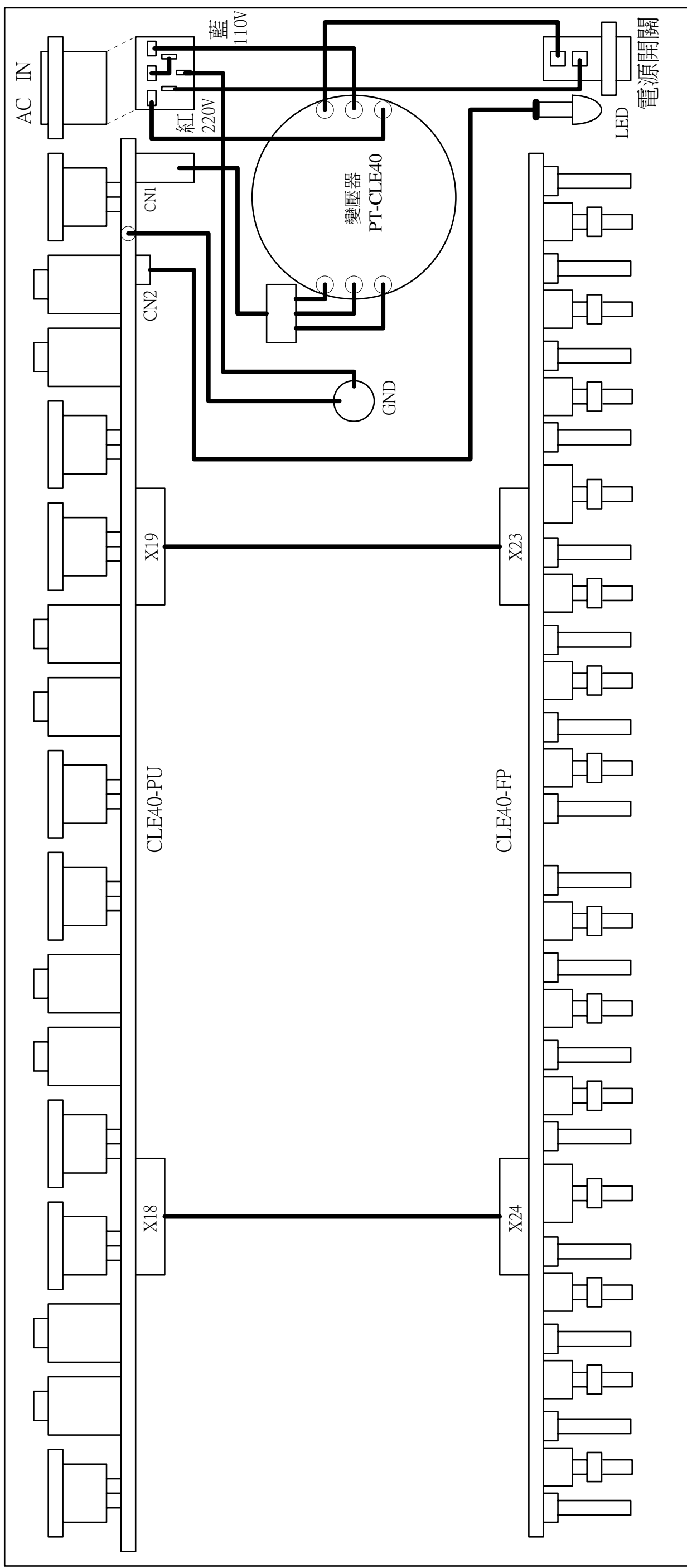
PCB : CLE40-PU BOTTOM OVERLAY



PCB : CLE40-PU DRILL DRAWING PLOTS

Tool	Hole Size	Hole Count Plated	Tool Travel
T1	24mil (0.6096mm)	144	50.44 Inch (1281.19 mm)
T2	31mil (0.7874mm)	122	41.70 Inch (1059.29 mm)
T3	39mil (0.9906mm)	25	34.36 Inch (872.72 mm)
T4	47mil (1.1938mm)	4	17.22 Inch (437.45 mm)
T5	55mil (1.397mm)	12	30.13 Inch (765.22 mm)
T6	63mil (1.6002mm)	16	29.45 Inch (747.94 mm)
T7	87mil (2.2098mm)	40	33.54 Inch (851.88 mm)
T8	110mil (2.794mm)	4	19.43 Inch (493.40 mm)
T9	126mil (3.2004mm)	4	NPTH 28.55 Inch (725.22 mm)
Totals		371	284.82 Inch (7234.30 mm)

CLE4.0 全機配線圖



Title: COMPRESSOR CLE4.0

Size A4	Model No: CLE4.0	Revision V1.0
Date: 24-May-2002	Sheet 1 of 1	Drawn By: EASON YANG
File: CLE40.Sch		

4

3

2

1

4

3

2

1

CLE4.0-ALTO-歐洲-230V**Structure Needing Material Detail List**

建檔日：2002/02/07 修正日：2002/09/26

<u>NO.</u>	<u>Midprod NO</u>	<u>Quantity</u>	<u>Unit</u>
1	A-CLE4.0-ALTO-歐洲-230V	1.000	PCS
2	A-CLE4.0前板組合	1.000	PCS
3	A-CLE4.0底后板組合	1.000	PCS
4	P-CLE4.0-FP-SMD	1.000	PCS
5	P-CLE4.0-FP-DIP	1.000	PCS
6	P-CLE4.0-PU-SMD	1.000	PCS
7	P-CLE4.0-PU-DIP	1.000	PCS

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
	1 MFR4019ZZ	panel (white)	CLE4.0	1.000	PCS	
MARK:						
	2 MBK418ZZ	rear board (spray black-	CLE4.0	1.000	PCS	
MARK:						
	3 MTP229ZZ	top cover-printing	CLE2.0	1.000	PCS	
MARK:						
	4 NI01862		5.5*5.5*14.5	4.000	PCS	
MARK:						
	5 NI01863		5.5*W10*6	4.000	PCS	
MARK:						
	6 NPL275	push putton	3*W6*18.3	14.000	PCS	
MARK:						
	7 NPL278	LED separating pillar	7.6*4.5*184	2.000	PCS	
MARK:						
	8 NPL325	LED spacer support	3.1*85	4.000	PCS	
MARK:						
	9 NMBP64	plastic knob double	1COOL GRAY 8C	16.000	PCS	
MARK:						
	10 NPL272	cover	8.5*4 blue 072C	16.000	PCS	
MARK:						
	11 HCSA16	AC outlett	(S)315-B (AC select)	1.000	PCS	
MARK:						
	12 HD00006	fuse TSD	315mA 250V 5.2*20mm CS	1.000	PCS	
MARK:						
	13 NMBA02	power push button	15*17	1.000	PCS	
MARK:						
	14 NPL285	switch cap	6*2.5 YELLOW C	1.000	PCS	
MARK:						
	15 HSWA13	alimentation SW	SDDL B 1007U	1.000	PCS	
MARK:						
	16 DL43RG	L.E.D	LG2043 green	1.000	PCS	
MARK:						
	17 MSCB34	black plated screw	pill 3*6	10.000	PCS	電源開關,前板
MARK:						
	18 MSCN19	Ni screw	pill 3*8	2.000	PCS	穩壓晶體
MARK:						
	19 MSCB13	black-plated screw	cross-head pan head 3*6	15.000	PCS	上蓋,后板,散熱
MARK:						
	20 MSCB35	black plated screw	cross-head pan head 3*10	2.000	PCS	AC座用
MARK:						
	21 MSCB38	black plated screw	3*7	4.000	PCS	面板
MARK:						
	22 MSCB58	black plated screw	iron-board pill 3*10	16.000	PCS	平衡座用
MARK:						
	23 MSCC40	colour screw	pill 4*30	1.000	PCS	環形PT
MARK:						
	24 MSTC04	colour nut	4m/m	2.000	PCS	環形PT與地線F
MARK:						
	25 ME00060	MIC stand nut	JY-6351G-02-250	8.000	PCS	
MARK:						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
	26 MF00061	mic stand washer	JY-6351G-02-250	8.000	PCS	
MARK:						
	27 MFSC02	washer	4* 12*1t	1.000	PCS	變壓器用
MARK:						
	28 MFSS04	washer	4* 7*1t	2.000	PCS	地線與變壓器用
MARK:						
	29 MFST01	washer	4* 8*0.5t	2.000	PCS	地線用
MARK:						
	30 NLXC07	rubber coil	20* 60*2tB	1.000	PCS	
MARK:						
	31 HLSF94	row-wire connector wirir2P 280m/m		1.000	PCS	
MARK:						
	32 HLSP164	P.V.C wiring	UL1617 AWG22 250mm black	1.000	PCS	
MARK:						
	33 HLSP71	P.V.C single wave wired	UL1617 22AWG 80m/m brown	1.000	PCS	
MARK:						
	34 HLSC76	single terminal wiring (green/yellow)	150m/m	2.000	PCS	
MARK:						
	35 HLSA31	power cord	Europe 3P LT-312+LT-501	1.000	PCS	
MARK:						
	36 NMCT16WW0010	sleeving flame retardant	2.5 *10m/m	2.000	PCS	
MARK:						
	37 NMCT19WW0020	sleeving flame retardant	4 *20m/m	8.000	PCS	
MARK:						
	38 MHLB15ZZ	heat-sink	65*18*4 SCX-P234	1.000	PCS	
MARK:						
	39 STR802-T2	silicone insulator	T0-220 square type	2.000		
MARK:						
	40 NI02249	caushion	TW-1(T0-220)	2.000	PCS	
MARK:						
	41 NMCR01	cable tie(black)	ALT-102SB	3.000	PCS	
MARK:						
	42 NLXM39	self-paste foot pad(SF-(12.7*9.0*3.0t	4.000	PCS	
MARK:						
	43 NWCP04	lockable bag	5*7	1.000	PCS	
MARK:						
	44 NWCP01WW0300*0580PE	bag	30*58cm	1.000	PCS	
MARK:						
	45 HEM083	desiccant	30g	1.000		
MARK:						
	46 NMLZ779	label	SCL-2020 black/white	1.000		
MARK:						
	47 NMLB1579-01ZZ	label	CLE4.0 ALTO	2.000		
MARK:						
	48 NB01720	box	ALTO 19"系列	1.000	PCS	
MARK:						
	49 PKMS153	sponge barrier	ALTO 19"	1.000	PCS	
MARK:						
	50 PKMS156	barrier	ALTO19"	1.000	PCS	
MARK:						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
51	POA182	paper outter case 4 hole	ALTO 19"	0.250	PCS	
MARK:						
52	NMCQA-444	instruction	CLE4.0 ALTO	1.000		
MARK:						
53	NMCQ-073	assurance book	ALTO	1.000		
MARK:						
54	TD00118	transformer	PT-CLE40	1.000	PCS	
MARK:						
55	NMLM384ZZ	label	CLE4.0	4.000		
MARK:						
56	NE05004	label	ALTO	4.000		
MARK:						
57	NMLH31	label	MADE IN P.R.C.	2.000		
MARK:						
58	NA00154	box	ALTO	2.000	PCS	
MARK:						
59	SIC719	integrated circuit	7915	1.000	PCS	
MARK:						
60	SIC717	integrated circuit	7815	1.000	PCS	
MARK:						
61	NI02085	power switch	22*9.69	1.000	PCS	
MARK:						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
1	MSDF38ZZ	front board	CLE4.0	1.000	PCS	
MARK:						
2	MMC013	iron pillar	hexagon 6.35*M3*6	8.000	PCS	
MARK:						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
1	MBT431ZZ	rear board black	CLE4.0	1.000	PCS	
MARK:						
2	MSC023	screw pillar	M4*10*0.7PH	1.000	PCS	
MARK:						
3	MAPR80ZZ	L-shape fixed bracket	1.2*28*20*10(CLE2.0)	1.000	PCS	
MARK:						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
1	NPC450	PC板-FR4-2L	CLE40-FP(1*4)_VER020320	1.000	PCS	
MARK:						
2	RPCA0402	SMD 1/10W precise resis	402 ±1% 0603	4.000	PCS	
MARK: R 19 44 69 94						
3	RPCA0806	SMD 1/10W precise resis	806 ±1% 0603	4.000	PCS	
MARK: R 20 45 70 95						
4	RPCA1150	SMD 1/10W precise resis	1.50K ±1% 0603	4.000	PCS	
MARK: R 130 171 210 250						
5	RPCA1158	SMD 1/10W precise resis	1.58K ±1% 0603	4.000	PCS	
MARK: R 21 46 71 96						
6	RD00285	resistor	3.24K ±1% 0603	4.000	PCS	
MARK: R 22 47 72 97						
7	RD00364	resistor	4.02K ±1% 0603	4.000	PCS	
MARK: R 32 57 7 82						
8	RPCA1499	SMD 1/10W precise resis	14.99K ±1% 0603	16.000	PCS	
MARK: R 10 11 33 34 35 36 58 59 60 61 8 83 84 85 86 9						
9	RD00287	resistor	6.34K ±1% 0603	4.000	PCS	
MARK: R 23 48 73 98						
10	RPCA1806	SMD 1/10W precise resis	8.06K ±1% 0603	4.000	PCS	
MARK: R 24 49 74 99						
11	RPCA2174	SMD 1/10W precise resis	17.4K ±1% 0603	4.000	PCS	
MARK: R 104 143 183 221						
12	RPCA2249	SMD 1/10W precise resis	24.9K ±1% 0603	4.000	PCS	
MARK: R 105 144 184 222						
13	RPCA2866	SMD 1/10W precise resis	86.6K ±1% 0603	4.000	PCS	
MARK: R 12 37 62 87						
14	RPCA3523	SMD 1/10W precise resis	523K ±1% 0603	4.000	PCS	
MARK: R 129 169 207 247						
15	RFCF000	SMD 1/10W fixed resistor	0 ±5% 0603	4.000	PCS	
MARK: R 103 142 182 220						
16	RFCF033	SMD 1/10W fixed resistor	33 ±5% 0603	2.000	PCS	
MARK: R 162 240						
17	RFCF110	SMD 1/10W fixed resistor	100 ±5% 0603	5.000	PCS	
MARK: R 101 17 42 67 92						
18	RFCF111	SMD 1/10W fixed resistor	110 ±5% 0603	4.000	PCS	
MARK: R 16 41 66 91						
19	RFCF120	SMD 1/10W fixed resistor	200 ±5% 0603	4.000	PCS	
MARK: R 18 43 68 93						
20	RFCF147	SMD 1/10W fixed resistor	470 ±5% 0603	4.000	PCS	
MARK: R 127 167 205 245						
21	RFCF168	SMD 1/10W fixed resistor	680 ±5% 0603	4.000	PCS	
MARK: R 121 160 199 238						
22	RFCF210	SMD 1/10W fixed resistor	1.0K ±5% 0603	17.000	PCS	
MARK: R 102 117 119 125 156 158 165 195 197 203 234 236 243 29 4 54 79						
23	RFCF220	SMD 1/10W fixed resistor	2.0K ±5% 0603	8.000	PCS	
MARK: R 116 155 194 233 30 5 55 80						
24	RFCF222	SMD 1/10W fixed resistor	2.2K ±5% 0603	12.000	PCS	
MARK: R 120 137 138 159 177 178 198 215 216 237 255 256						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
25	RFCF230	SMD 1/10W fixed resistor	3.0K ± 5% 0603	10.000	PCS	
MARK:	R 115 154 181 192 231 259 31 56 6 81					
26	RFCF239	SMD 1/10W fixed resistor	3.9K ± 5% 0603	8.000	PCS	
MARK:	R 122 141 161 180 200 219 239 258					
27	RFCF247	SMD 1/10W fixed resistor	4.7K ± 5% 0603	4.000	PCS	
MARK:	R 140 218 260 261					
28	RFCF262	SMD 1/10W fixed resistor	6.2K ± 5% 0603	4.000	PCS	
MARK:	R 112 151 190 229					
29	RFCF268	SMD 1/10W fixed resistor	6.8K ± 5% 0603	4.000	PCS	
MARK:	R 111 150 189 228					
30	RFCF310	SMD 1/10W fixed resistor	10K ± 5% 0603	8.000	PCS	
MARK:	R 118 126 157 166 196 204 235 244					
31	RFCF315	SMD 1/10W fixed resistor	15K ± 5% 0603	8.000	PCS	
MARK:	R 14 2 27 39 52 64 77 89					
32	RFCF320	SMD 1/10W fixed resistor	20K ± 5% 0603	4.000	PCS	
MARK:	R 133 173 211 251					
33	RFCF339	SMD 1/10W fixed resistor	39K ± 5% 0603	8.000	PCS	
MARK:	R 15 28 3 40 53 65 78 90					
34	RFCF343	SMD 1/10W fixed resistor	43K ± 5% 0603	4.000	PCS	
MARK:	R 114 153 193 232					
35	RFCF347	SMD 1/10W fixed resistor	47K ± 5% 0603	32.000	PCS	
MARK:	R 106 107 123 124 131 132 134 135 145 146 163 164 170 172 174 175 185 186 201 202 208 209 212 213 223 224 241 242 248 249 252 253					
36	RFCF424	SMD 1/10W fixed resistor	240K ± 5% 0603	4.000	PCS	
MARK:	R 113 152 191 230					
37	RD00307	resistor	560K ± 5% 0603	4.000	PCS	
MARK:	R 128 168 206 246					
38	RFCF510	SMD 1/10W fixed resistor	1.0M ± 5% 0603	4.000	PCS	
MARK:	R 139 179 217 257					
39	RFCF527	SMD 1/10W fixed resistor	2.7M ± 5% 0603	4.000	PCS	
MARK:	R 109 148 188 226					
40	RFCF547	SMD 1/10W fixed resistor	4.7M ± 5% 0603	4.000	PCS	
MARK:	R 136 176 214 254					
41	RD00309	resistor	10M ± 5% 0603	8.000	PCS	
MARK:	R 108 110 147 149 187 225 227 262					
42	CCE110B	SMD0603 ceramic capacitor	100PF NPO ± 5% -5C	4.000	PCS	
MARK:	C 11 19 27 35					
43	CI00128	capacitor	0.1uF/25V Y5V +80, -20%	12.000	PCS	
MARK:	C 1 3 41 42 43 44 45 46 47 48 5 7					
44	DRS0004	SMD rectifier diode	BAS16(SOT-23)	12.000	PCS	
MARK:	D 10 11 16 17 21 23 28 29 30 31 32 5					
45	DRS0003	SMD rectifier diode	DAN202K/T-146	8.000	PCS	
MARK:	D 14 15 20 22 26 27 8 9					
46	DRS0002	SMD rectifier diode	DA204K/T-146	12.000	PCS	
MARK:	D 1 12 13 18 19 2 24 25 3 4 6 7					
47	STRS201	SMD transistor	2SC2412K(R) (MMBT3904LT1)	8.000	PCS	
MARK:	T 10 11 12 13 14 15 16 9					

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
48	STRS103	SMD transistor	2SA1036K(R) (MMBT3906LT1)	8.000	PCS	
MARK:T 1 2 3 4 5 6 7 8						
49	SICS005	SMDintegrated circuit	TL064CDT	10.000	PCS	
MARK:IC 19 20 22 23 24 26 27 29 30 31						
50	SICS115	SMD integrated circuit	BA10339FV E2	16.000	PCS	
MARK:IC 1 10 11 12 13 14 15 16 2 3 4 5 6 7 8 9						
51	SICS309	SMD integrated circuit	CA3086M96	4.000	PCS	
MARK:IC 18 21 25 28						
52	SICS405	SMD integrated circuit	BU4066F	1.000	PCS	
MARK:IC 17						

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
1	RFB022S	1/4W fixed resistor	22 S type	4.000	PCS	
MARK:	R 100 25 50 75					
2	RFB168S	1/4W fixed resistor	680 S type	8.000	PCS	
MARK:	R 1 13 26 38 51 63 76 88					
3	CE422G	electrotytic capacitor	0.22/50V	4.000	PCS	
MARK:	C 14 22 30 38					
4	CE433G	electrotytic capacitor	0.33uF/50V 5*11	4.000	PCS	
MARK:	C 17 25 33 9					
5	CE510S	electrolytic capacitor	1/50V 4*7	4.000	PCS	
MARK:	C 12 20 28 36					
6	CE547J	electrotytic capacitor	4.7uF/100V	8.000	PCS	
MARK:	C 15 16 23 24 31 32 39 40					
7	CE622F	electrotytic capacitor	22/35V	4.000	PCS	
MARK:	C 10 18 26 34					
8	CE647E	electrotytic capacitor	47/25V	8.000	PCS	
MARK:	C 13 2 21 29 37 4 6 8					
9	DL50RG	L.E.D	LVG2340/A 3 green	32.000	PCS	
MARK:	LD 10 11 12 13 26 27 28 29 30 43 44 45 46 47 60 61 62 63 64 69 70 71 73 74 75 76 77 78 80 81 82 9					
10	DL50RR	L.E.D	LI2340/A 3 red	42.000	PCS	
MARK:	LD 1 16 17 18 19 2 20 21 22 23 24 25 3 33 34 35 36 37 38 39 4 40 41 42 5 50 51 52 53 54 55 56 57 58 59 6 67 68 7 72 79 8					
11	DL50RY	L.E.D	LVY2340/A 3 yellow	8.000	PCS	
MARK:	LD 14 15 31 32 48 49 65 66					
12	RC00214	potentiometer	B1K R0911NOB-V1B102FNC	4.000	PCS	
MARK:	VR 10 14 2 6					
13	RC00213	potentiometer	B10K R0911NOB-V1B103FN	8.000	PCS	
MARK:	VR 1 11 13 15 3 5 7 9					
14	RC00211	potentiometer	A20K R0911NOB-V1A203FN	4.000	PCS	
MARK:	VR 12 16 4 8					
15	NI01772	LED separating pillar	LEDS-7 7mm	14.000	PCS	
MARK:	LD 69 70 71 72 73 74 75 76 77 78 79 80 81 82					
16	NI01781	LED separating pillar	LEDS-8 8mm	68.000	PCS	
MARK:	LD 1 10 11 12 13 14 15 16 17 18 19 2 20 21 22 23 24 25 26 27 28 29 3 30 31 32 33 34 35 36 37 38 39 4 40 41 42 43 44 45 46 47 48 49 5 50 51 52 53 54 55 56 57 58 59 6 60 61 62 63 64 65 66 67 68 7 8 9					
17	HI00162	sw	PS-22E8552L(3.3x3.3)	12.000	PCS	
MARK:	SW 1 10 12 13 14 2 3 5 6 7 8 9					
18	HI00163	SW	PS-42E85L(3.3x3.3)	2.000	PCS	
MARK:	SW 11 4					
19	HA02078		12P-12P 220	2.000	PCS	
MARK:	CN 1 2					

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
	1 NPC451	PCB-FR4-2L	CLE40-PU(1*4)_VER020320	1.000	PCS	
MARK:						
	2 RPCAG470	SMD 1/10W precise resistor	47.0 ±1% 0603	4.000	PCS	
MARK:	R 100 12 41 71					
	3 RD00297	resistor	60.4 ±1% 0603	8.000	PCS	
MARK:	R 108 114 21 27 50 56 79 85					
	4 RD00271	SMD 1/10W precise resistor	2.67K ±1% 0603	4.000	PCS	
MARK:	R 112 25 54 83					
	5 RD00363	resistor	3.16K ±1% 0603	8.000	PCS	
MARK:	R 106 116 19 29 48 58 77 87					
	6 RD00285	resistor	3.24K ±1% 0603	4.000	PCS	
MARK:	R 110 23 52 81					
	7 RD00286	resistor	4.53K ±1% 0603	8.000	PCS	
MARK:	R 109 115 22 28 51 57 80 86					
	8 RD00299	resistor	5.76K ±1% 0603	4.000	PCS	
MARK:	R 107 20 49 78					
	9 RD00300	resistor	6.04K ±1% 0603	4.000	PCS	
MARK:	R 113 26 55 84					
	10 RPCA2100	SMD 1/10W precise resistor	10.0K ±1% 0603	8.000	PCS	
MARK:	R 105 111 18 24 47 53 76 82					
	11 RPCA2121	SMD 1/10W precise resistor	12.1K ±1% 0603	8.000	PCS	
MARK:	R 10 102 15 39 44 68 73 97					
	12 RPCA2133	SMD 1/10W precise resistor	13.3K ±1% 0603	16.000	PCS	
MARK:	R 1 2 3 30 31 32 33 4 59 60 61 62 88 89 90 91					
	13 RPCA2200	SMD 1/10W precise resistor	20.0K ±1% 0603	12.000	PCS	
MARK:	R 103 16 34 36 45 5 63 65 7 74 92 94					
	14 RPCA2280	SMD 1/10W precise resistor	28.0K ±1% 0603	4.000	PCS	
MARK:	R 104 17 46 75					
	15 RPCA2576	SMD 1/10W precise resistor	57.6K ±1% 0603	12.000	PCS	
MARK:	R 35 37 38 6 64 66 67 8 9 93 95 96					
	16 RFCF033	SMD 1/10W fixed resistor	33 ±5% 0603	2.000	PCS	
MARK:	R 13 70					
	17 RFCF210	SMD 1/10W fixed resistor	1.0K ±5% 0603	2.000	PCS	
MARK:	R 42 99					
	18 RFCF247	SMD 1/10W fixed resistor	4.7K ±5% 0603	4.000	PCS	
MARK:	R 11 40 69 98					
	19 RFCF430	SMD 1/10W fixed resistor	300K ±5% 0603	4.000	PCS	
MARK:	R 101 14 43 72					
	20 CCE010B	SMD0603 ceramic capacitor	10PF NPO ±5% -5C	20.000	PCS	
MARK:	C 13 15 18 19 2 20 24 26 29 30 31 35 37 4 40 41 42 7 8 9					
	21 CCE047B	SMD0603 ceramic capacitor	47PF NPO ±5% -5C	12.000	PCS	
MARK:	C 1 12 14 17 23 25 28 3 34 36 39 6					
	22 CCE147B	SMD0603 ceramic capacitor	470PF NPO ±5% -5C	8.000	PCS	
MARK:	C 10 11 21 22 32 33 43 44					
	23 CI00128	capacitor	0.1uF/25V Y5V +80, -20%	14.000	PCS	
MARK:	C 45 46 47 48 53 54 55 56 57 58 59 60 61 62					
	24 SICS307	SMD integrated circuit	MC33079DT(ST)MC33079D(ON)	2.000	PCS	
MARK:	IC 4 7					

Item No: CLE4.0

specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
25	SICS003	SMD integrated circuit	TL074CDT	3.000	PCS	

MARK:IC 3 5 6

Item No: CLE4.0

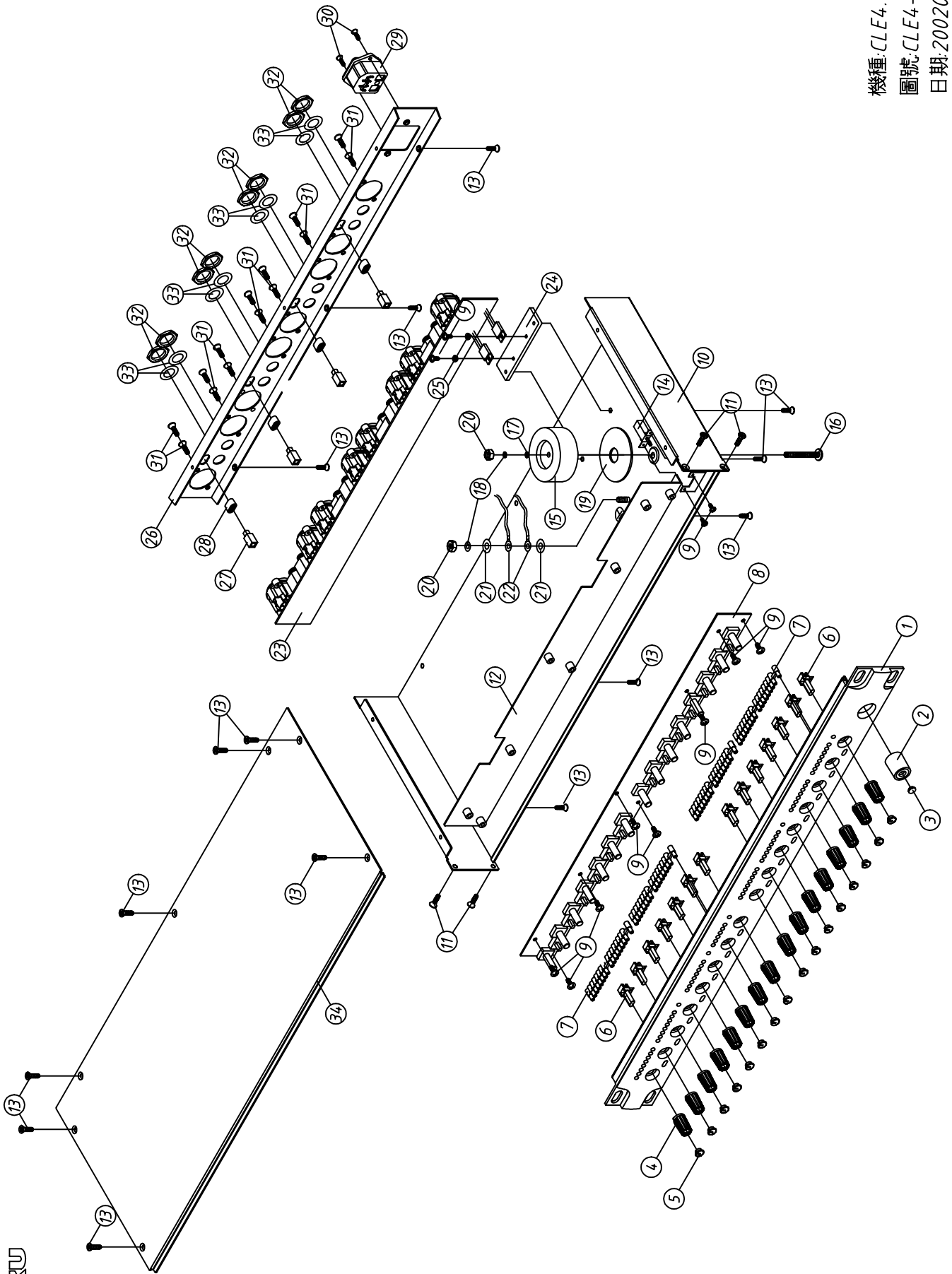
specify: AMP

Mid No: standard quantity:

NO	Material No	Item Name	Specific	Quantity	Unit	Ps
	1 RFB210S	1/4W fixed resistor	1.0K S type	1.000	PCS	
MARK:	R 117					
	2 RCB345E	carbon trimmer resistor	6FE horizontal EVND8A 5C	4.000	PCS	
MARK:	VR 1 2 3 4					
	3 CE610S	electrolytic capacitor	10/50V 6.3*7	2.000	PCS	
MARK:	C 51 52					
	4 CE647E	electrotytic capacitor	47/25V	4.000	PCS	
MARK:	C 16 27 38 5					
	5 CE810F	electrolytic capacitor	1000/35V	2.000	PCS	
MARK:	C 49 50					
	6 DB001A	bridge rectifier	RB154 1A/400V	1.000	PCS	
MARK:	BS 1					
	7 SIC208	integrated circuit	THAT2150A	4.000	PCS	
MARK:	IC 10 11 8 9					
	8 HI00163	SW	PS-42E85L(3.3x3.3)	4.000	PCS	
MARK:	SW 1 2 3 4					
	9 HC00392	balance mic socket	JY-5030-030G 公插插板式	4.000	PCS	
MARK:	X 12 16 4 8					
	10 HC5M61	MIC jack for balance	JY-5042-030G female plug	4.000	PCS	
MARK:	X 1 13 5 9					
	11 HC00125	MIC jack	JY-6351G-02-250	8.000	PCS	
MARK:	X 10 11 14 15 2 3 6 7					
	12 HCSI0202	row-wire header	2P 2.5mm 180 °	1.000	PCS	
MARK:	CN 2					
	13 HCSJ0203	row-wire header	3P 3.9mm 180 °	1.000	PCS	
MARK:	CN 1					
	14 HCSV0212	row-wire header	12P 2.0mm 180 °	2.000	PCS	
MARK:	CN 3 4					

8. Exploded Views

SEKAKU



機種: CLE4.0
圖號: CLE4-00
日期: 20020204