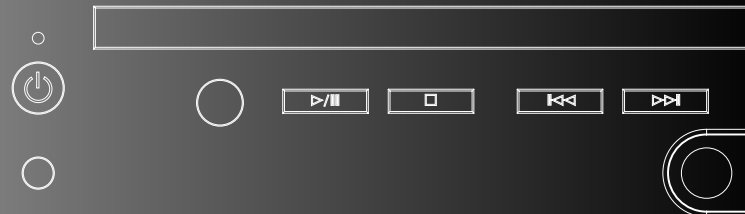


MYSTERY

MDV-30

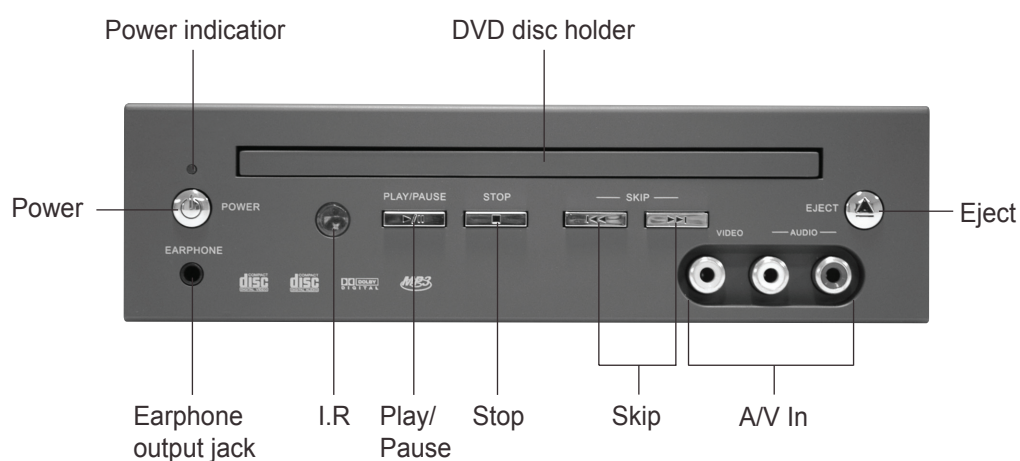


Contents

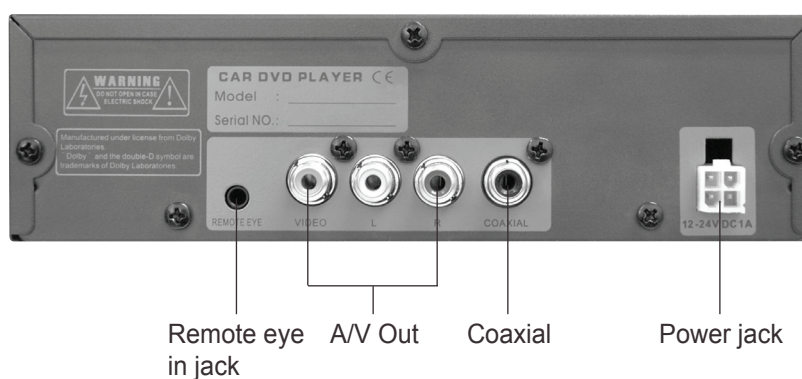
Appearance	06
Specification	07
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Block Diagram	16
Troubleshooting Guide	17
PCB Pattern	21
Assembly/Disassembly Drawing	24
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APPEARANCE

▶ FRONT



▶ REAR



SPECIFICATION

► INTRODUCTION

This DVD Player supports more 500 lines horizontal resolution, Dolby digital (AC-3) and outputs digital DTS so that it provides the video and sound quality of the effect like a real theater. It can also supports not only VIDEO CD but also CD, CD-R, CD-RW.

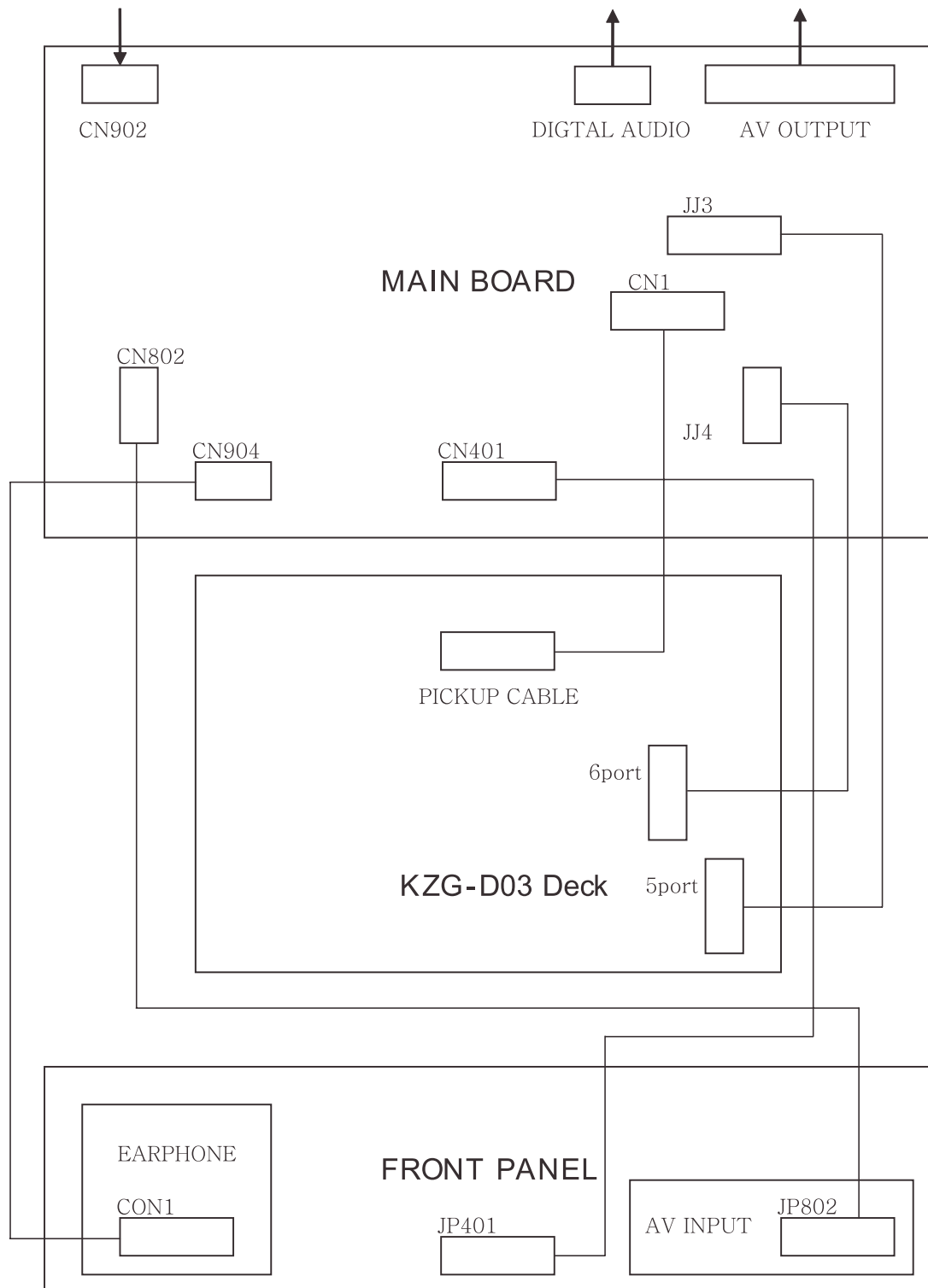
► FEATURES

- 500 and more horizontal resolution
- DVD, VCD, CD, CD-R, CD-RW
- Dolby Digital Decoding
- 2CH Analogue signal output
- DTS digital output
- ZOOM
- Special Play (Slow/Fast Play)
- Composite output

► SPECIFICATIONS

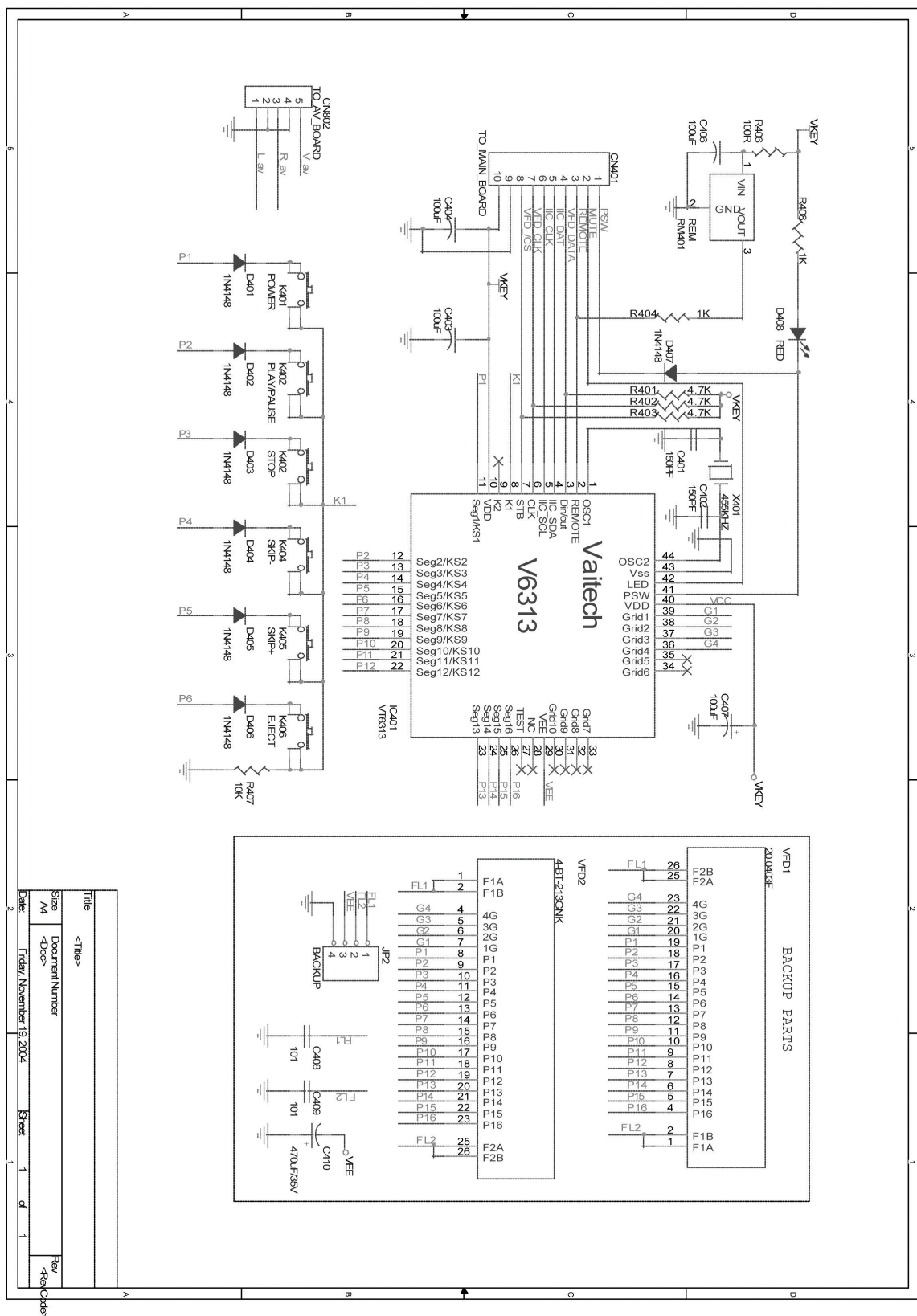
Basic Specification	Horizontal Resolution Compatible Disc		More than 500 lines DVD, VCD, CD, CD-R, CD-RW
Audio	Dolby Digital DTS		Analogue 2Ch output & Digital output Digital output
Convenience	ZOOM Volume control Special play MP3 Play		OK OK OK OK
Connection	Output	Video	1 Composite terminal
		Audio	2 2Ch RCA terminal (R/L, each) / 1 Coaxial terminal
	Input	Video	1 Composite terminal
		Audio	2 2Ch RCA terminal (R/L, 2 each)
Size			180 x 214 x 50 (W x D x H)
Weight			About 1.5 Kg

HARNESS CONNECTION DIAGRAM



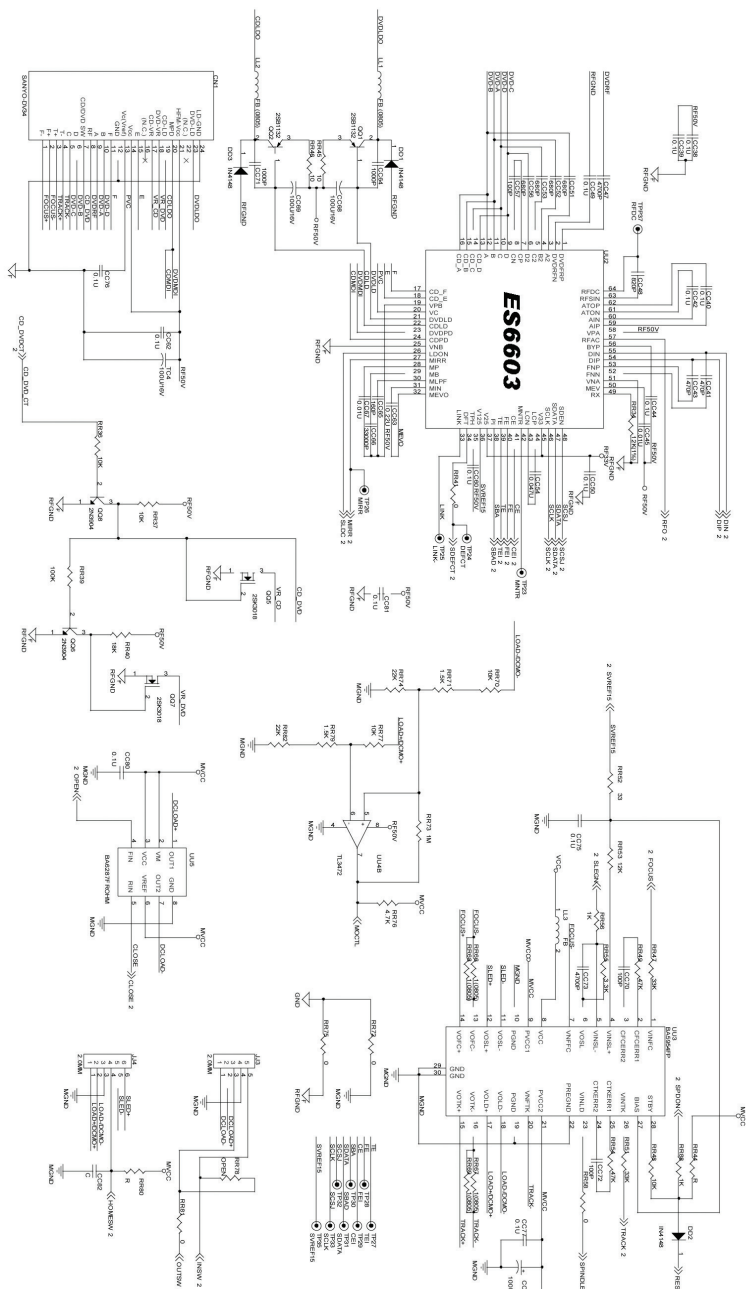
CIRCUIT DIAGRAM

FRONT

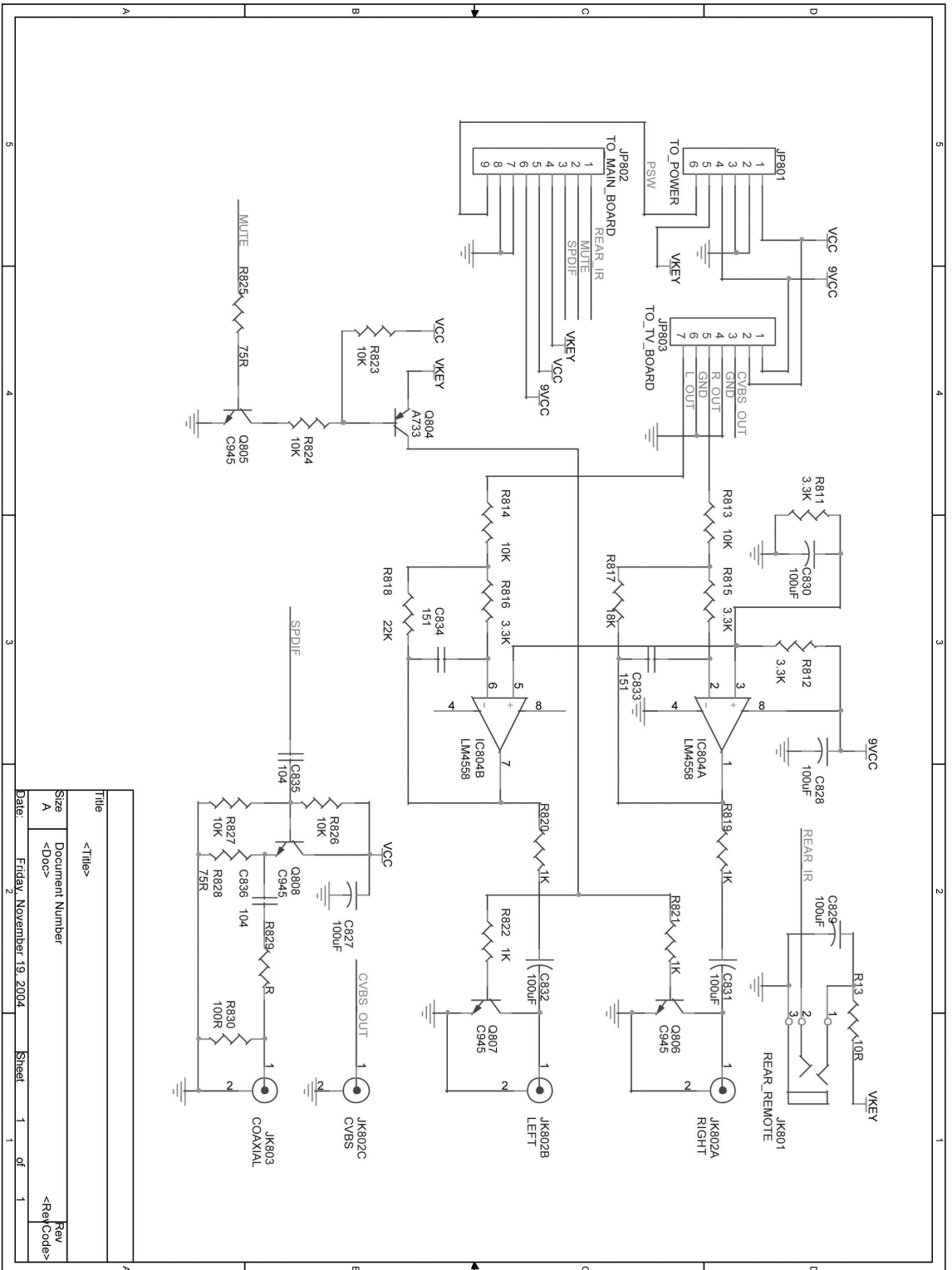




Title		E59603 and meter drivers	
Size	Document Number	Rev	
	Escher-Y1	A2	
Date	Friday, November 13, 2004	Block	3 of 6



► OUTPUT CONN



CIRCUIT OPERATING

► FRONT

VFD DRIVER : IC401 (V6313)

1. INTRODUCTION

With following functions, IC401 realizes the serial communication with MPEG (ES6629) according to software.

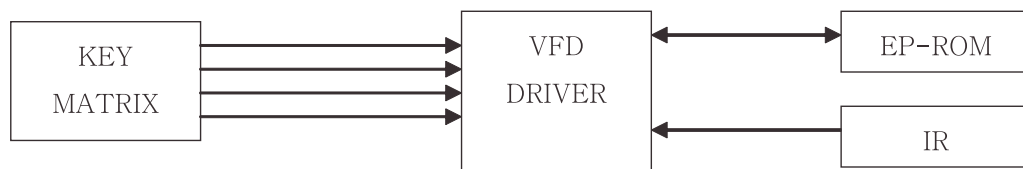
- CMOS Technology
- Key Scanning (12 x 2 matrix)
- 8-step Dimming Circuit
- Multi Display mode (10digit 16segment)
- LED port supportable (5Ch, max 20mA)
- I2C EPROM interface
- POWER SW 1Port

2. INPUT/OUTPUT TERMINAL

- INPUT : Receive VSTB, VCLK and VDAT from MPEG (ES6629) and scan key input at voltage level.
- OUTPUT : Output VDAT to MPEG (ES6629) and operate VFD.
- With key value stored at EPROM by direct I2C communication, power control by remote control signal is possible.

DESCRIPTION OF FRONT OPERATION

1. KEY SCAN & VFD DRIVER (V6313) INTERFACE



2. DESCRIPTION OF OPERATION

If a user presses a key while MPEG chip (ES6629) is scanning a key thru VFD Driver IC (V6313), V6313 receives key input and if it inputs serially the received data to MPEG chip (ES6629), it analyzes and proceed the command.

Operate the action according to an input command.

After EPROM reads and compares the remote control code received from IR remote control sensor, power is controlled using PSW in case of KEY code.

► AUDIO

2CH AUDIO

1. INTRODUCTION

Receive FR and FL signals from MPEG Chip (ES6629), amplify (IC804) them to output analogue signals to 2CH Jack (JK802).

Receive the output digital signal from MPEG Chip (ES6629) and output digital signal by coaxial Jack.

OP-AMP : IC804 (LM4558)

1. INTRODUCTION

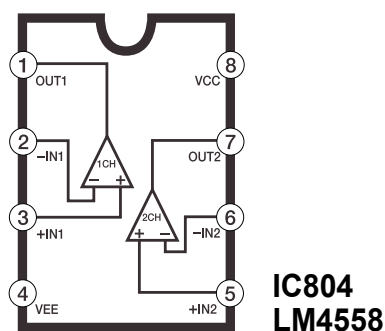
Dual Operating Amplifier

2. FUNCTIONS

Amplify the analogue voice signal from D/A converter IC.

Taking right/left channels each, amplify and output these two channels to AV OUTPUT.

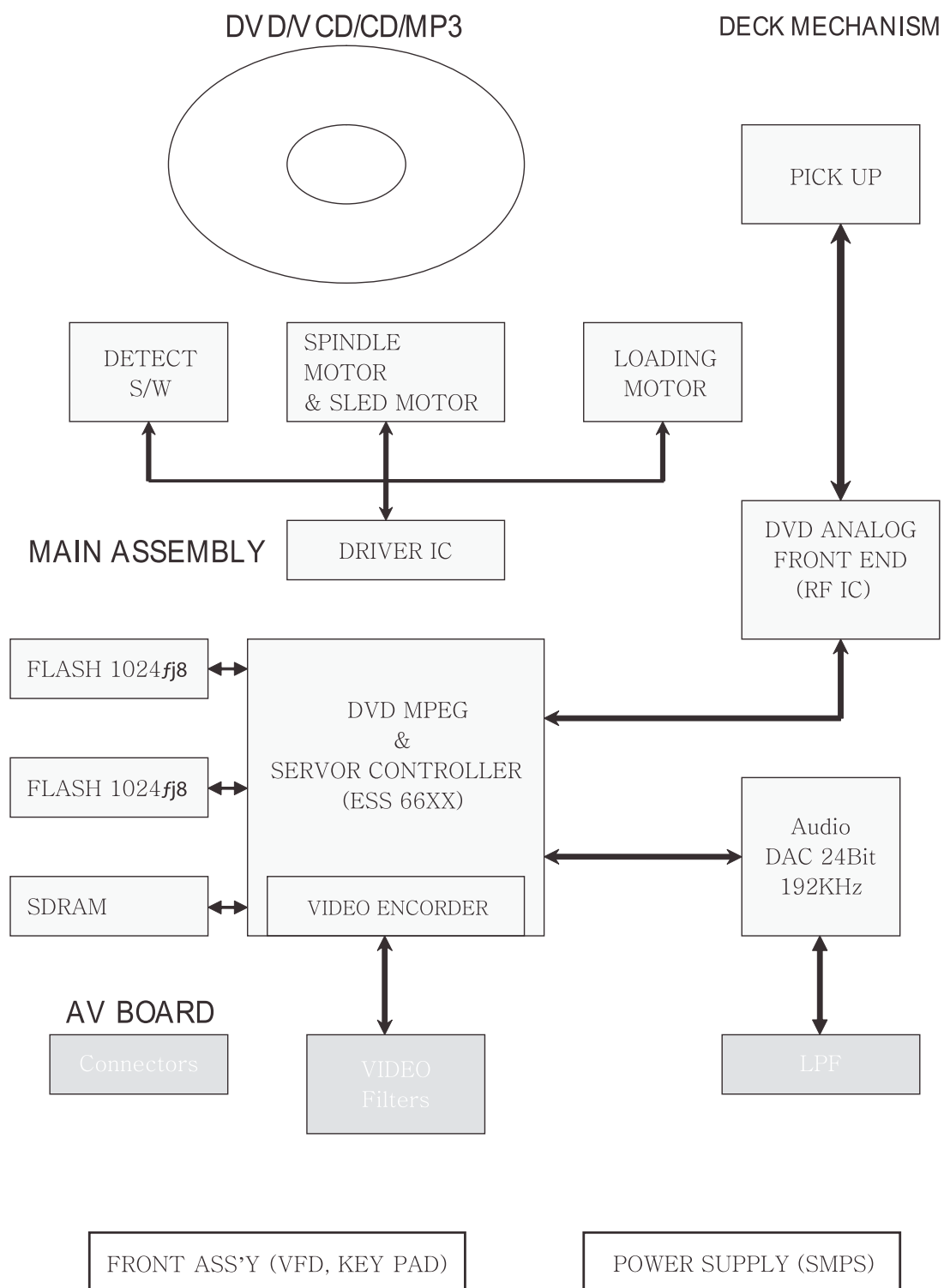
3. INTERNAL BLOCK DIAGRAM



4. TRUTH TABLE

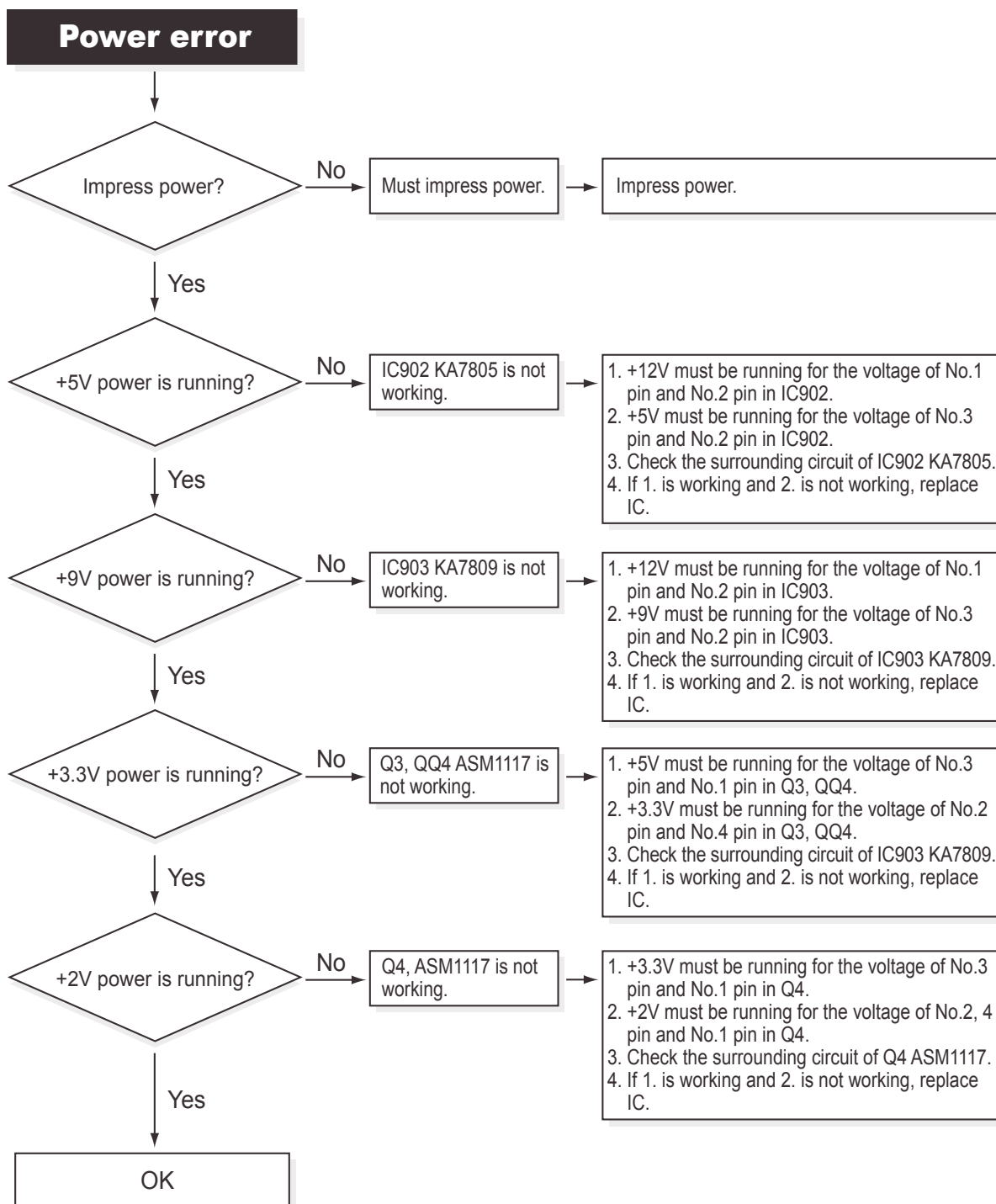
INH	A	B	C	ON SWITCH
L	L	L	L	X0 YD Z0
L	H	L	L	X1 YD Z0
L	L	H	L	X0 YD Z0
L	H	H	L	X1 Y1 Z0
L	L	L	H	X0 YD Z1
L	H	L	H	X1 YD Z1
L	L	H	H	XD Y1 Z1
L	H	H	H	X1 Y1 Z1
L	X	X	X	NONE

BLOCK DIAGRAM

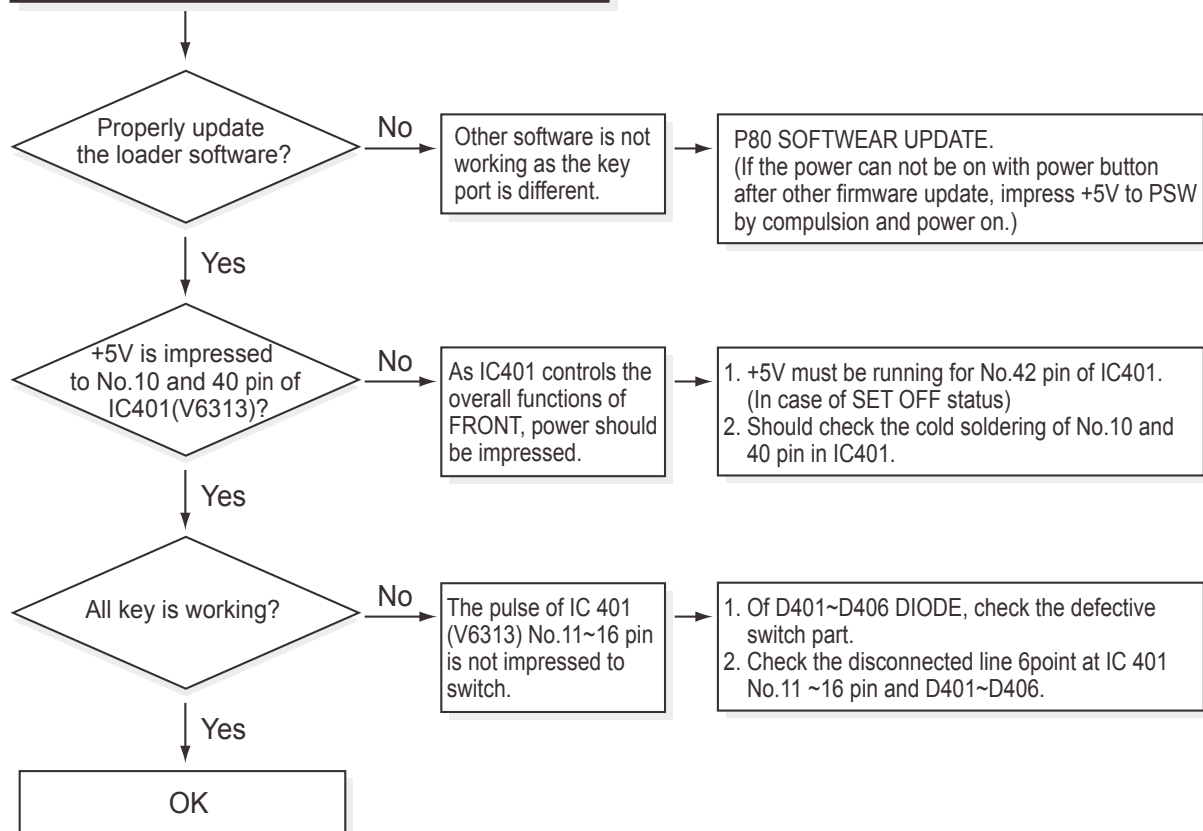


TROUBLESHOOTING GUIDE

► POWER CIRCUIT



► FRONT CIRCUIT

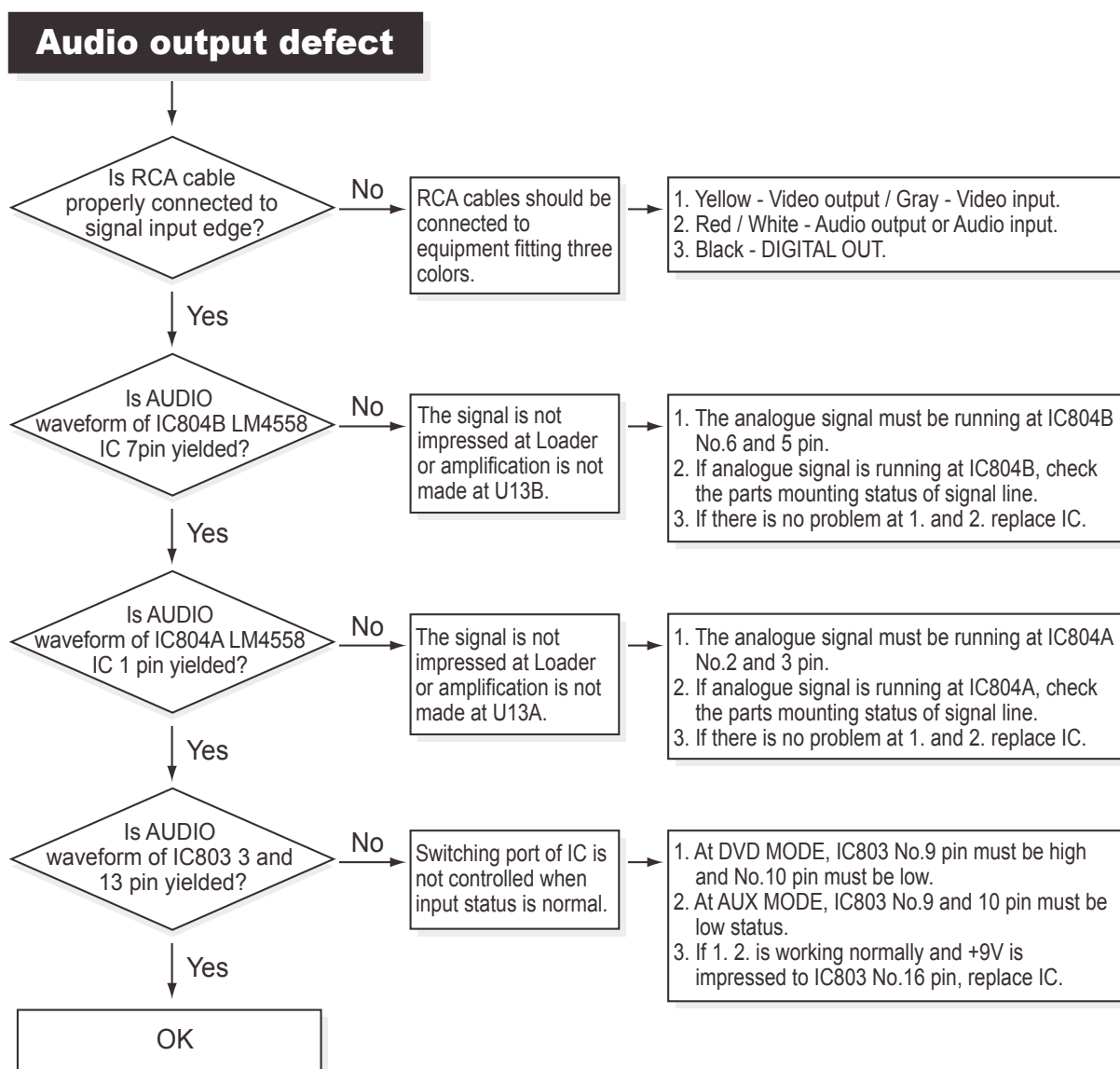
Front key operation defect

► AUDIO CIRCUIT

1. ANALOG OUT

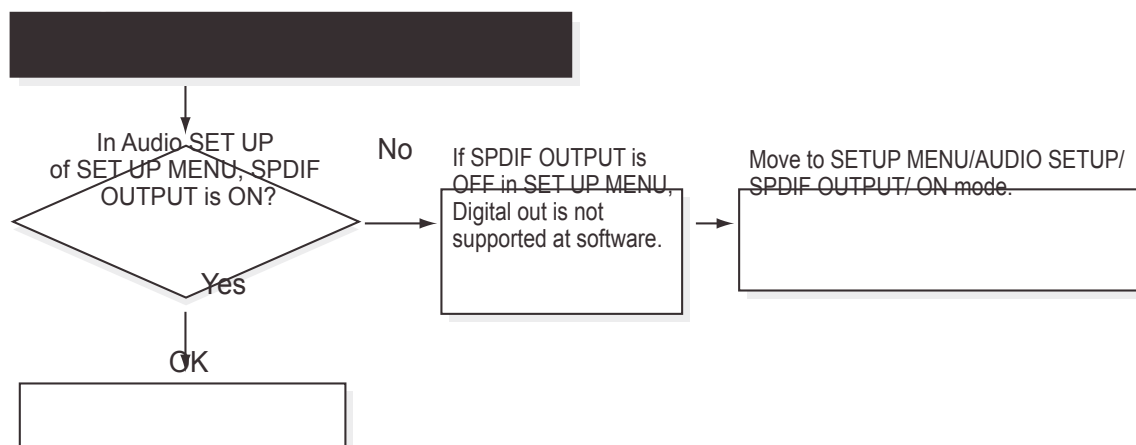
CAUTION :

Before checking audio circuit, check configurations on SET UP MENU with the remote control first.



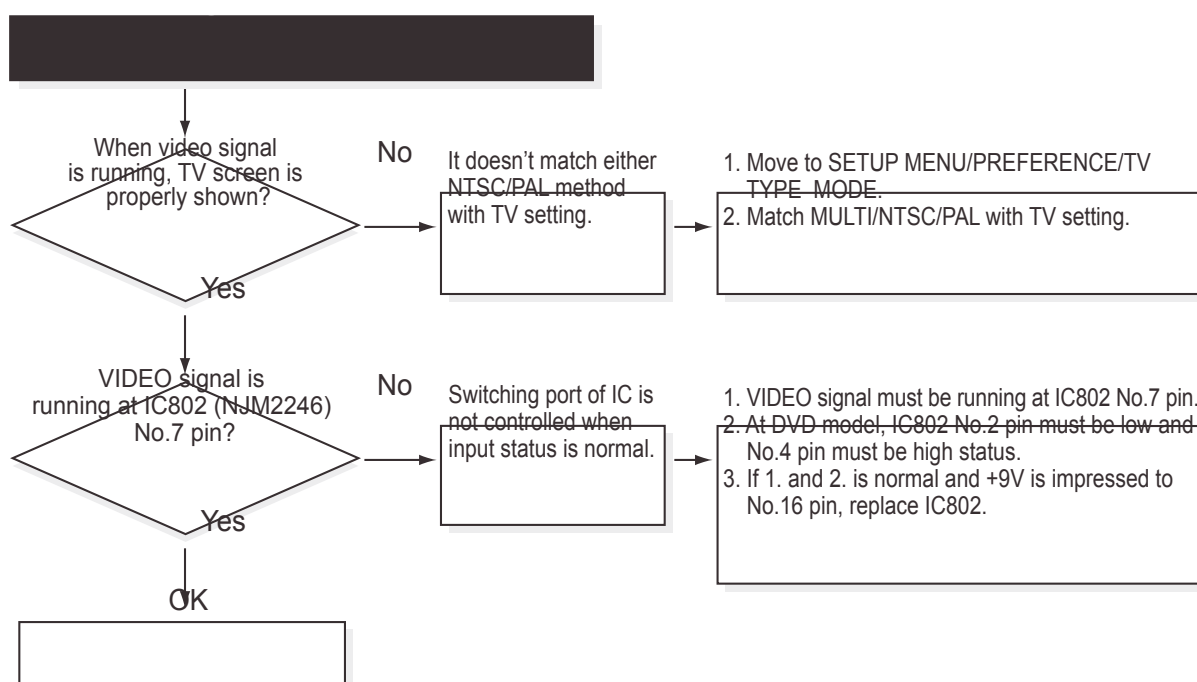
2. DIGITAL OUT

CAUTION : Before checking coaxial circuit, check its connection with Receiver first.



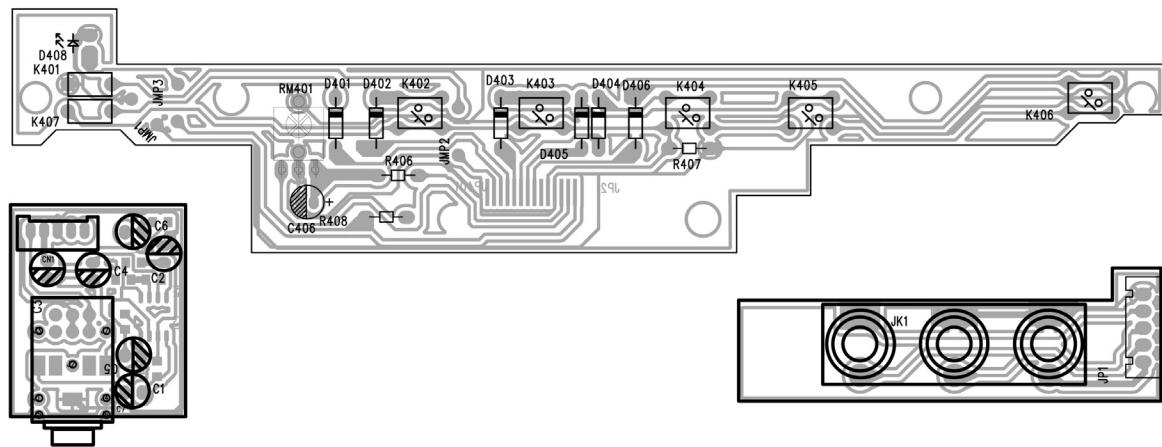
VIDEO CIRCUIT

► **CAUTION :**
Before checking video circuit, check configurations on SETUP MENU with the remote control first.

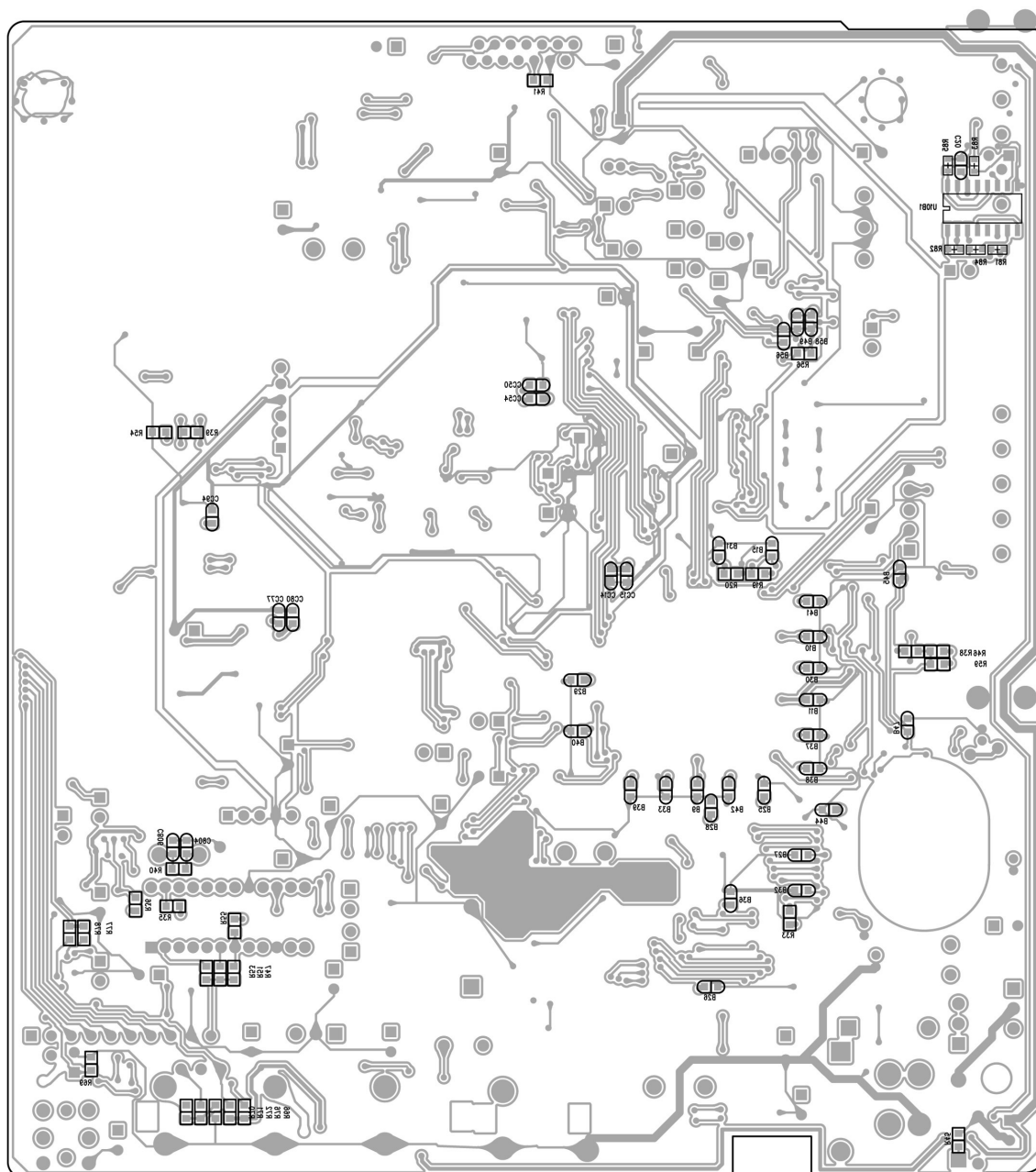


PCB PATTERN

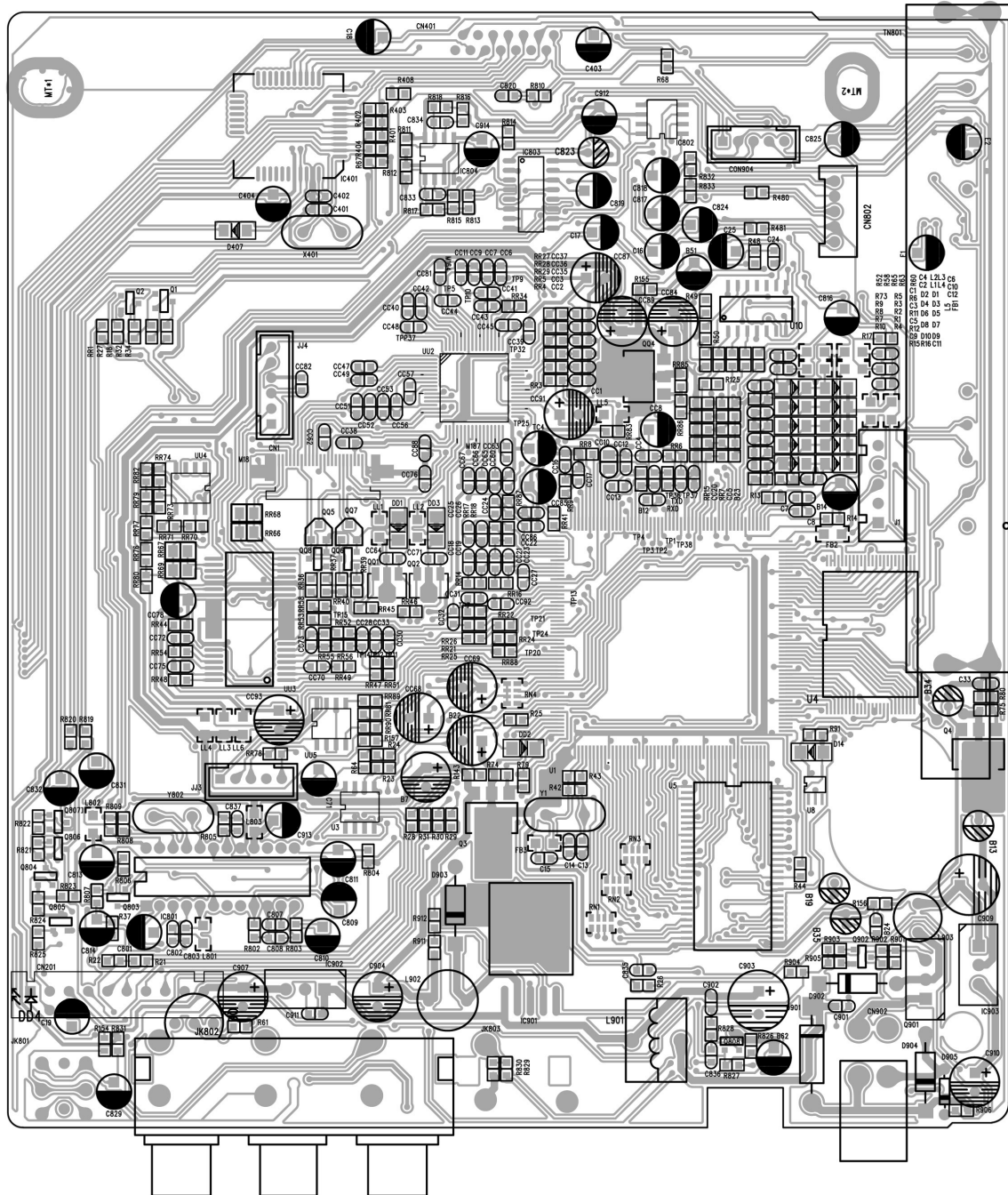
► FRONT PCB



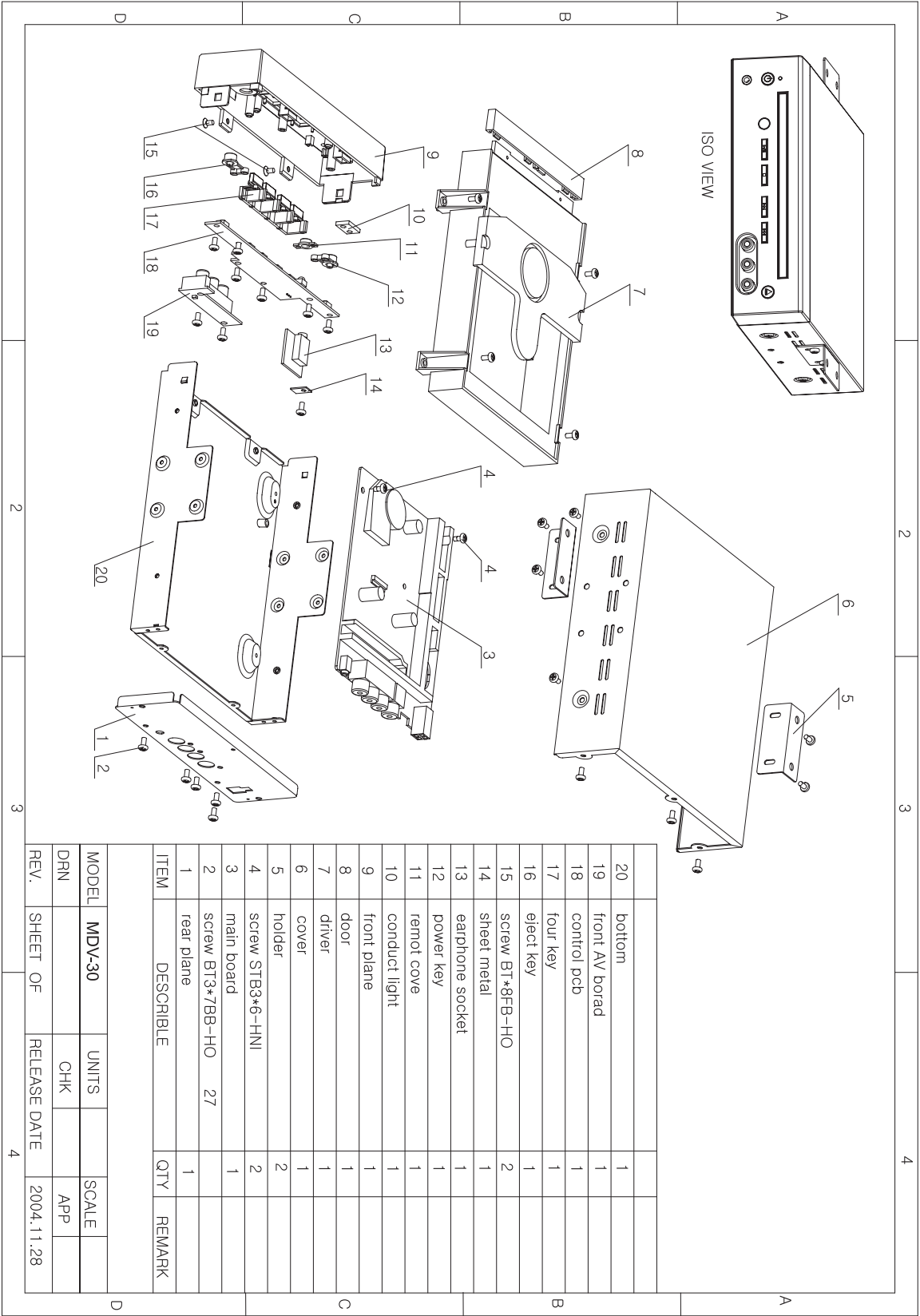
► BOTTOM PCB



► TOP PCB



ASSEMBLY/DISASSEMBLY DRAWING



PART LIST

EU-DP80T112-01	Mainboard	A	02	1 3 three colored output (horizontal)	1
		A	03	AVInput board P80/P80T	1
		A	04	Fibre cardboard	1
		B	01	Mainboard P80 2004-04-15	1
	P80 18-	B	02	0603 0.1uF 25V M Y5V	58
	P80T112-01	B	03	0603 1000PF K 25V COG	8
		B	04	0603 4700PF K 25V COG	4
		B	05	0603 1uF M 25V X7R	5
		B	06	0603 0.047uF M 25V Y5V	2
		B	07	0603 6800PF K 25V COG	1
		B	08	0603 560PF 25V J COG	3
		B	09	0603 47PF 25V J COG	1
		B	10	0603 0.015uF 25V M Y5V	3
		B	11	0603 33PF 25V J COG	5
		B	12	0603 470PF 25V J COG	7
		B	13	0603 0.01uF K 25V COG	3
		B	14	0603 820PF 25V J COG	1
		B	15	0603 680PF 25V J COG	4
		B	16	0603 100PF 25V J COG	3
		B	17	0603 0.22uF 10% 50V X7R	2
		B	18	0603 160PF 25V J COG	1
		B	19	0603 0.033uF 25V K Y5V	1
		B	20	0603 150PF 25V J COG	4
		B	25	CD110 220u/35V footstool lengh7mm	2
		B	26	CD110 10u/25V Dia.5mm 2.0mm footstool lengh7mm	3
		B	29	CD110 100u 16V 2.0MM footstool lengh7mm 5X11	17
		B	30	CD110 4.7uF/25V H5R4 2.5mm footstool lengh7mm	1
		B	31	CD110 220u 16V 2.0mm footstool lengh 7mm	2
		B	32	CD110 470uF/16V footstool lengh7mm	2
		B	33	CD110 10u/25V Dia.4mm height 5mm footstool lengh 7mm	12
		B	34	CD26C 100u 16V Dia.6mmheight 5mm footstool lengh7mm	4
		B	35	SRN10	3
		B	36	SRN4.7K	1
		B	37	0603 10K 5% 1/16W	20
		B	38	0603 3.3K 5% 1/16W	10
		B	39	0603 4.7K 5% 1/16W	12
		B	40	0603 68K 5% 1/16W	1
		B	41	0603 20K 5% 1/16W	1
		B	42	0603 33K 5% 1/16W	3
		B	43	0603 1.2K 5% 1/16W	1
		B	44	0603 5.1K 5% 1/16W	2
		B	45	0603 6.8K 5% 1/16W	4
		B	46	0603 33 5% 1/16W	21
		B	47	0603 12K 1% 1/16W	1

bf	bm1	bh	lm	mc	dh
		B	48	0603 12K 5% 1/16W	1
		B	49	0603 100K 5% 1/16W	2
		B	50	0603 18K 5% 1/16W	3
		B	51	0603 0 5% 1/16W	14
		B	52	0603 10 5% 1/16W	3
		B	53	0603 47K 5% 1/16W	2
		B	54	0603 1K 5% 1/16W	17
		B	55	0805 1 5% 1/10W	4
		B	56	0603 1.5K 5% 1/16W	3
		B	57	0603 1M 5% 1/16W	1
		B	58	0603 3.3 5% 1/16W	1
		B	59	0603 390 5% 1/16W	1
		B	60	0603 75 5% 1/16W	7
		B	61	0603 100 5% 1/16W	1
		B	62	0603 2.2K 5% 1/16W	2
		B	63	0603 3K 5% 1/16W	1
		B	64	0603 22K 5% 1/16W	2
		B	65	0603 180 5% 1/16W	1
		B	66	0603 470 5% 1/16W	1
		B	67	0603 120 5% 1/16W	2
		B	68	0603 200 5% 1/16W	2
		B	69	0603 330 5% 1/16W	2
		B	70	spool 0805 101	8
		B	71	spool 0805 3.3uH	1
		B	72	spool 0805 2.4uH	2
		B	74	Inductance 10uH/0.5A P80	1
		B	75	Inductance winding1mH/1A P80	1
		B	76	Inductance winding150uH 6mm 800mA	1
		B	77	diode 1N4148	6
		B	78	diode SB560	1
		B	79	diode SB240	1
		B	80	1N5819	1
		B	81	diode 1N4007 brede	1
		B	82	manostant Z3.6V 1/2W brede	1
		B	83	audion A733SOT-223	2
		B	84	audion C945 SOT-223	6
		B	85	audion 3904	2
		B	86	FHK3018	2
		B	87	2SB1132QR (SOT89EBC) ROMN SMD	2
		B	88	B772	1
		B	89	AMS1117 outside	3
		B	90	ST7805 TO-220 ST	1
		B	91	PQ1CY1032Z	1
		B	92	7809 TO220 ST	1
		B	93	VT6313	1

bf	bm1	bh	lm	mc	dh
		B	95	NJM2246	1
		B	96	CD4052BC SOP16 2 groups 1 in 4	1
		B	97	4558 SOP8 ST	1
		B	98	ES6629F	1
		B	99	BA5954FP ROMN	1
		B	A1	TL3472	1
		B	A2	ES6603S	1
		B	A3	29F800B TSOP -70	1
		B	A4	24C02	1
		B	A5	4M*16 SDRAM StarRam	1
		B	A6	WM8761	1
		B	A7	455E	1
		B	A8	27M diode 70 degree (low)	1
		B	B1	5PIN pedestal 2.0MM	2
		B	B2	6PIN pedestal 2.0 right angle	1
		B	B3	4PIN pedestal 2.0MM 90 degree	1
		B	B4	12Pin pedestal 2.0mm FFC (2.0/2) angle 90 degree	1
		B	B6	HOP-1200 JP24-0.5mm	1
		B	B7	single output (black)	1
		B	B8	1*3three colored output (horizontal)	1
		B	C1	4Pin power jack 5559-4AW	1
		B	C2	earphone faucet CKX-3.5-07 five stilts	1
		B	C3	6287	1
		B	D1	G686 SOT23	1
EU-EP80P80T-02	Earphone P80/P80T W/O 4PIN	C	01	0805 10K 5% 1/10W	6
		C	02	CD110 10u/25V dia.4mm high 5mm length 7mm	2
		C	03	CD110 47u/16V 5(W)*5(H)mm P80	2
		C	04	CD26C 100u 16V dia.6mm high 5mm length 7mm	2
		C	05	earphone faucet CKX-3.5-07 five stilts	1
		C	06	4PIN wiring2.0mm 60mm P80	1
		C	07	LM4808M SOP8	1
		C	08	earphone boardP80/P80T	1
EU-FP801-03	Front control panel P80/P80T 18- P80T114-01	D	01	RT13 100 J brede	1
		D	03	RT13 10K J brede	1
		D	04	Diode1N4148 brede	6
		D	05	color light (blue) 3004UB	1
		D	06	CD110 47u/16V 5(W)*5(H)mm P80	1
		D	07	horizontal touch power6*6*5	6
		D	08	5.5MM wire	1
		D	09	receiverPIC-331LM	1
		D	10	front panel P80/P80T 2004-04-15	1
		D	11	12Pin spool FCC 1.0mm 110mm P80	1
EU-FP80F004-01	Front unit P80/P80T(silver) AKI	E	01	front panel P80 (silver) AKI	1
		E	02	window P80 (silver)	1
		E	03	power button P80	1

bf	bm1	bh	lm	mc	dh
		E	04	tray buttonP80	1
		E	05	4 keys P80	1
		E	06	IR window P80	1
		E	07	light pole P80	1
		E	08	earphone underlay P80	1
		E	09	screwPTPW3*8-HO-9	1
P80		F	02	front control panel P80/P80T 18-P80T114-01	8
		F	03	Earphone P80/P80T without 4PIN pedestal	1
		F	04	AV input unit P80/P80T	1
		F	05	Mainboard P80 18-P80T112-01 2004-04-15	1
		F	06	front panel P80/P80T(silver) AKI	1
		F	10	loader(DV34) sanyo	1
		F	11	P80/P80T KZG-D03 39mm loader bracket SANYO DV34	1
		F	12	power cable P80/P80T(1.5m) with DC	1
		F	13	P80/P80T IR SENSOR AND CABLE (1.2M)	1
		F	14	P80/P80T AV cable (1.2m)	1
		F	15	rear P80 AKI (without RF) (electrolytical board)	1
		F	16	cover(silk)P80 RIFA	1
		F	17	base P80 (electrolytical board)	1
		F	18	bracket hook P80 RIFA (silk)	1
		F	19	remote controller P80/P80T B004-24 AKI	2
		F	21	24Pin wiring FCC 0.5mm 60mm P80	1
		F	22	5PIN linker 2.0mm 200mm P80	1
		F	23	5PINlinker 2.0mm 250mm P80	1
		F	25	footstool P80/P80T	1
		F	26	foam top P80/P80T	4
		F	27	foam bottom P80/P80T	1
		F	30	carton box P80/P80T with 5 sets AKI B004-24	1
		F	31	giftbox P80/P80T (neutral)	1
		F	33	screw BT3*7BB-HO round3*7(with higher-rigidity) black	1
		F	35	screwBT3*6BB-HNi round3*6(with higher-rigidity)nickel-plate	0.200
		F	36	screw (TA4*10-HNi) P80/P80T	1
		F	37	screwBT3*6FB-HNi 3*6(with higher-rigidity)nickel-plate	4
		F	38	6PIN wiring2.0mm 70mm P80	16
		F	39	plustic bag (90*60open)	4
		F	40	plastic bag (250*95 open)	2
		F	41	all paster (15mm)	1
		F	42	(80MM)	2
		F	45	product serial paster AP001-AP500	1
		F	46	Instruction manual P80/P80T neutral	1
		F	50	Av wire 1.3M	1
		F	51	rear label E4 P80 B004-24	1
		F	52	warranty seal :round	1

