

TEAC



SERVICE MANUAL

DV-10D

DVD Player



For U.S.A.

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NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- \triangle Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

1 SPECIFICATIONS

DVD Player

Signal system	PAL/NTSC
Laser	Semiconductor laser, wavelength 650/790 nm
Frequency range	DVD: 4 Hz to 22 kHz (fs:48kHz)
	DVD: 4 Hz to 44 kHz (fs:96kHz)
	CD: 4 Hz to 20 kHz
Signal-to-noise rating (DVD)	105 dB
Audio dynamic range (DVD)	90 dB
Harmonic distortion (DVD)	0.006 %
Wow and flutter	Below measurable level
	(less than $\pm 0.001\%$ (W.PEAK))
Operating conditions	Temperature: 5°C to 35°C (40°F to 95°F)
	Operation status: Horizontal

Outputs

Video output	RCA jack x 1
	1.0 Vp-p, 75 Ω , negative sync.
S-video output	S-video jack x 1
	(Y) 1.0 Vp-p, 75 Ω , negative sync.
	(C) 0.286 Vp-p, 75 Ω
Component output	RCA jack x 1
	(Y) 1.0 Vp-p, 75 Ω , negative sync.
	(P _B , P _R) 0.7 Vp-p, 75 Ω
Audio output (digital audio)	RCA jack x 1, 1.15 Vp-p, 75 Ω
	OPTICAL digital jack x 1
Audio output (analog audio)	RCA jack x 1 (2CH)
	2.0 Vrms (1 kHz, 0 dB)
	RCA jack x 1 (6CH)

General

Power supply	AC 120 V, 60 Hz
Power consumption	18 W
Weight	3.3 kg (7.3 lb)
External dimensions (W x H x D)	435 x 62 x 327.5 mm
	(17-1/8" x 2-7/16" x 12-15/16")

Accessories

Audio cable (RCA) x 1
Video cable (RCA) x 1
Optical cable x 1
Owner's manual x 1
Remote control x 1
Battery (AAA) x 2
AC cord x 1

- Design and specifications are subject to change without notice.
- Weight and dimensions are approximate.

SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as a class 1 laser product. There is no hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown ①.

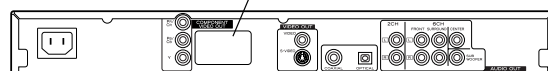
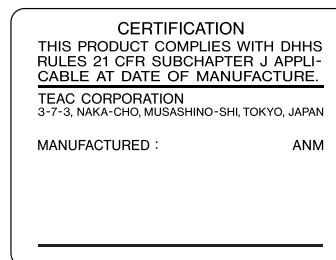
● CAUTION

USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

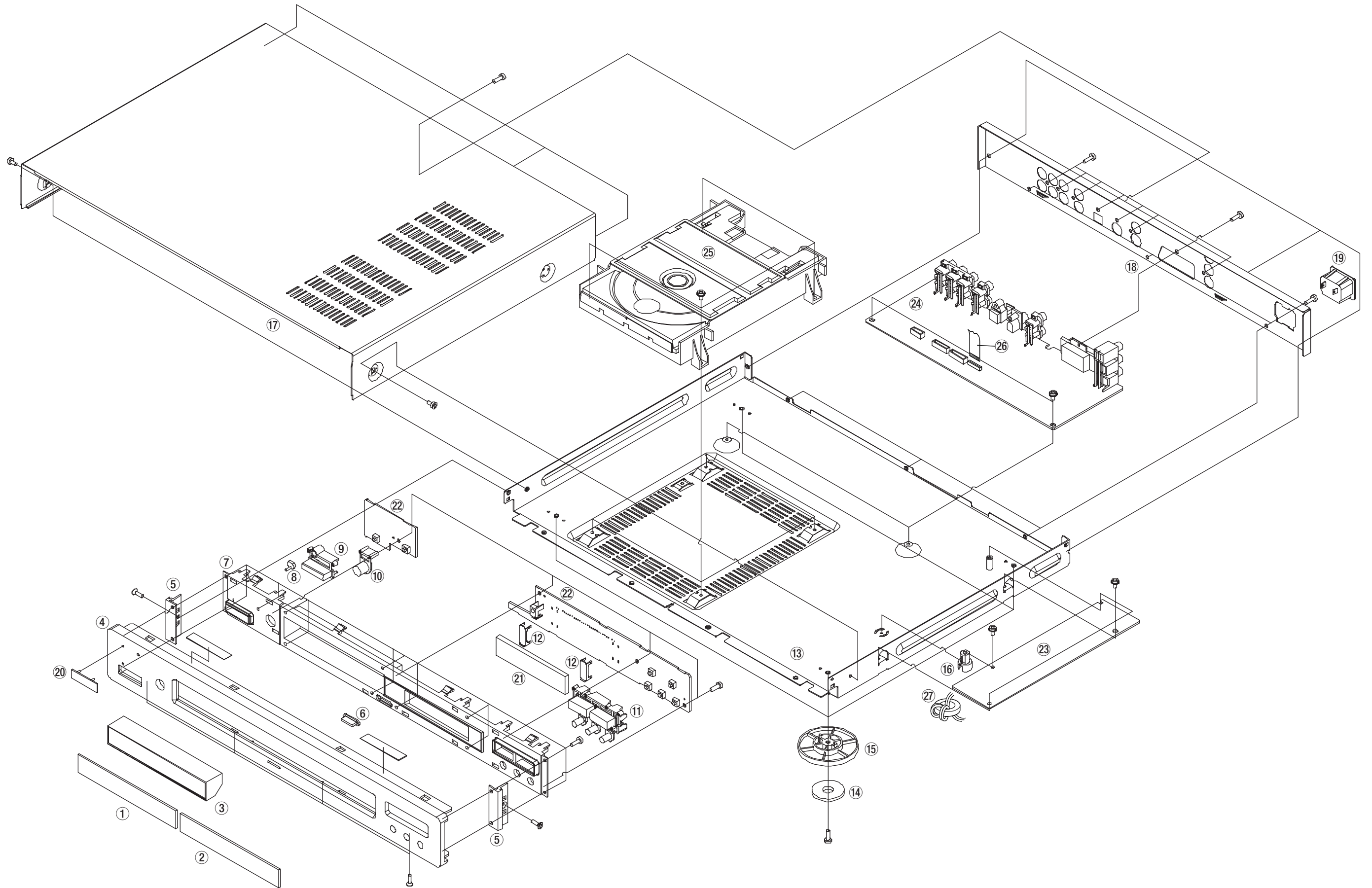
Optical pickup:

Type	: SF-HD60
Manufacturer	: SANYO Electronics Co., Ltd.
Laser output	: Less than 0.3 mW on the objective lens
Wavelength	: 780 \pm 25 nm (CD), 650 \pm 15 nm (DVD)

① For U.S.A.



2 EXPLODED VIEWS AND PARTS LIST

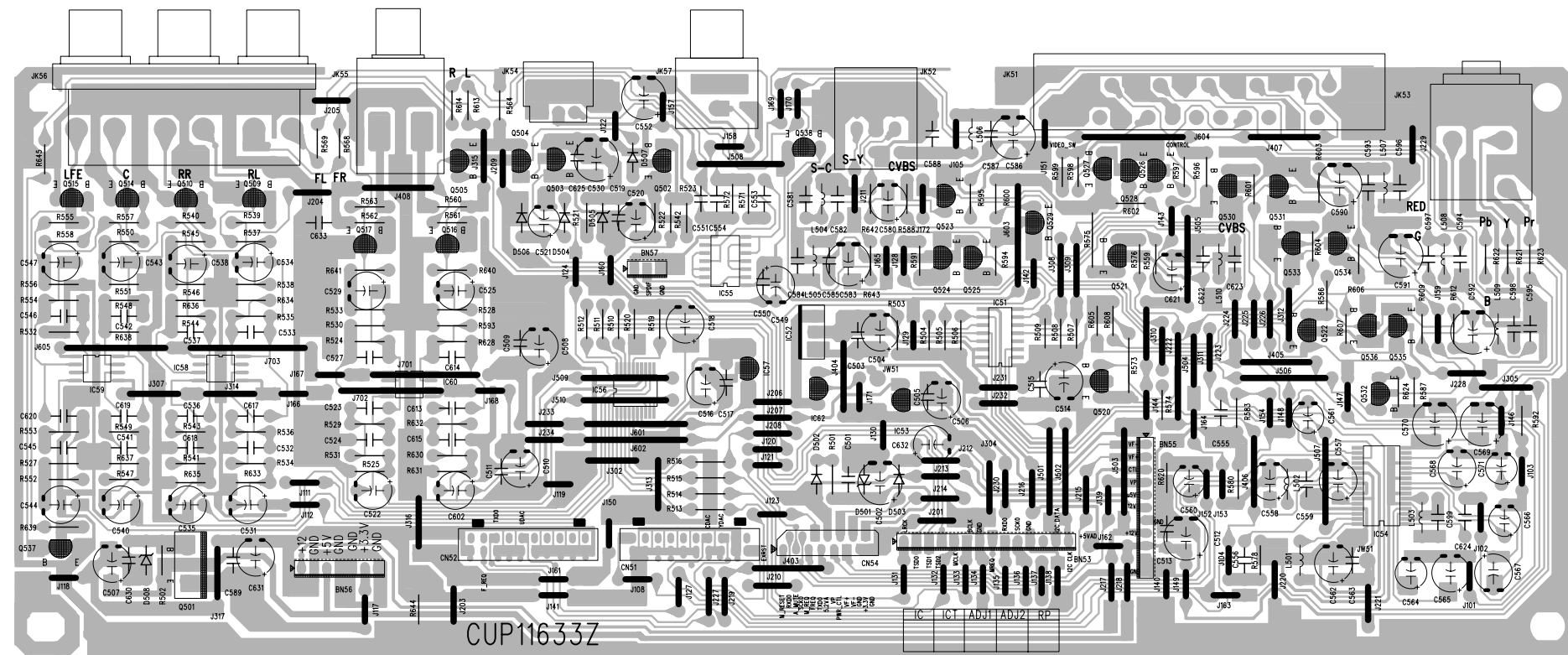


EXPLODED VIEW LIST

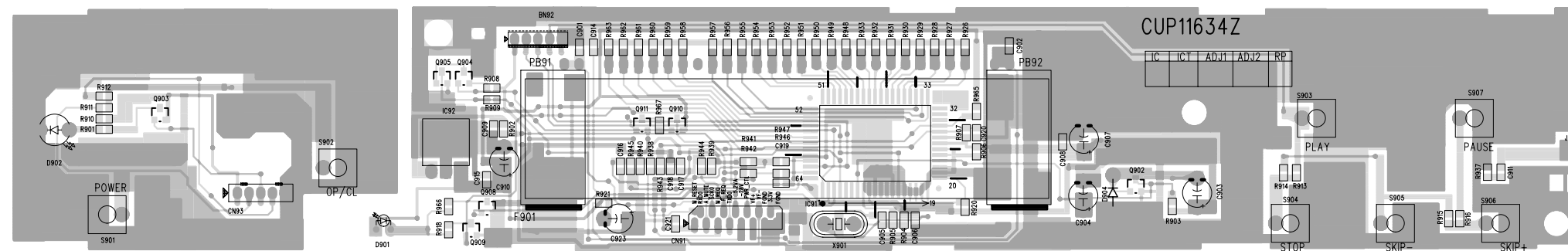
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1	CGU1A315Z	WINDOW, DOOR	
2	CGU1A315Y	WINDOW, FIP	
3	CGR1A304K122	BASE, DOOR	
4	CKM1A137ZC35	PANEL, FRONT (AL)	
5	CKM1A138C35	BAR, SIDE	
6	CGL1A218	INDICATER, POWER	
7	CGW1A365R6G5	PANEL, SUB	
8	CGL1A219	INDICATER, STAND-BY	
9	CBT1A900R6G5	KNOB, POWER	
10	CBT1A902R6ZG5	KNOB, OPEN	
11	CBT1A901R6ZG5	KNOB, PLAY	
12	CMD1A496	BRACKET, FIP	
13	CUA1A235	CHASSIS, BOTTOM	
14	KHG1A039Z	CUSHION, FOOT	
15	CKL1A081H30	FOOT	
16	CHE1A030	HOLDER, PCB	
17	CKC1A146S35	CABINET, TOP	
18	CKF2A267Z	PANEL, REAR	
19	△ HJJ8A002Z	RECEPTACLE	
20	KGB1A047Z	BADGE, TEAC	
21	HFLHNV06SC14T	F. I. P	
22	COP11634B	FRONT PCB ASSY	
23	COP11609BSMPS	SMPS PCB ASSY	
24	COP11633C	AV PCB ASSY	
25	HJDRL-S873	DVD MECHANISM	
26	CWC3B2A15A340B5	CARD CABLE (SHIELD)	
27	CLZ9W003Z	FERRITE, RING	

3 PC BOARDS AND PARTS LIST

AV PCB



FRONT PCB



AV PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	COP11633C	AV PCB ASSY
	CUP11633Z	AV PCB
CN51	CJP20GA147ZW	WAFER, 20 DUAL
CN52	CJP20GA147ZW	WAFER, 20 DUAL
CN54	KJP15GA117ZG	CARD CABLE, WAFER
D501	HVDMTZJ3. 3BT	DIODE, ZENER MTZJ3. 3BT
D502	HVD1SS133MT	DIODE, 1SS133MT
D503	HVD1SS133MT	DIODE, 1SS133MT
D504	HVD1SS133MT	DIODE, 1SS133MT
D505	HVDMTZJ4. 7BT	DIODE, ZENER MTZJ4. 7BT
D506	HVD1SS133MT	DIODE, 1SS133MT
D507	HVD1SS133MT	DIODE, 1SS133MT
D508	HVDMTZJ4. 3CT	DIODE, ZENER MTZJ4. 3CT
IC51	HV1BU2098F	IC, BU2098F
IC52	△ HV1KA7808A	IC, KA7808A
IC53	△ HV1KA79L08AZT	IC, KA79L08A
IC54	BV1BH7862FS	IC, BH7862FS
IC55	HV174VHC04MX	IC, 74VHC04MX
IC56	HV1PCM1606E	IC, PCM1606E
IC57	△ HV1KA78L05AZT	IC, KA78L05A
IC58	HVINJM2068MDTE1	IC, NJM2068MDTE1
IC59	HVINJM2068MDTE1	IC, NJM2068MDTE1
IC60	HVINJM2068MDTE1	IC, NJM2068MDTE1
JK52	CJJ9N003Z	JACK (S-VIDEO+VHS)
JK53	CJJ4S014Z	JACK, IN/OUT (R. G. B)
JK54	HJST0TX179L	MODULE, OPTICAL (TX)
JK55	CJJ4N067Z	JACK, 2P
JK56	CJJ4R041Z	JACK, BOARD 6P
JK57	CJJ4M044Z	JACK, BOARD
L501	HLQ02CR68KT	COIL, 0. 68UH
L502	HLQ02CR39KT	COIL, 0. 39UH
L503	HLQ02CR68KT	COIL, 0. 68UH
L507	HLQ02C1R8KT	COIL, 1. 8UH
L508	HLQ02C1R8KT	COIL, 1. 8UH
L509	HLQ02C1R8KT	COIL, 1. 8UH
L510	HLQ02C1R8KT	COIL, 1. 8UH
Q501	△ KVTKSD288Y	TR, KSD288Y
Q502	HVTKSA916YT	TR, KSA916YT
Q503	HVTKRC107MT	TR, KRC107MT
Q504	HVTKRA107MT	TR, KRA107MT
Q505	HVTKRA107MT	TR, KRA107MT
Q509	HVTKTD1302T	TR, KTD1302T
Q510	HVTKTD1302T	TR, KTD1302T
Q514	HVTKTD1302T	TR, KTD1302T
Q515	HVTKTD1302T	TR, KTD1302T
Q516	HVTKTD1302T	TR, KTD1302T
Q517	HVTKTD1302T	TR, KTD1302T
Q521	HVTKTA1268GRT	TR, KTA1268GRT
Q526	HVTKRC107MT	TR, KRC107MT
Q527	HVTKTA1268GRT	TR, KTA1268GRT
Q528	HVTKRC107MT	TR, KRC107MT
Q529	HVTKRA107MT	TR, KRA107MT
Q530	HVTKTA1268GRT	TR, KTA1268GRT
Q531	HVTKTD1302T	TR, KTD1302T
Q532	HVTKRA107MT	TR, KRA107MT

AV PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
Q533	HVTKTA1268GRT	TR, KTA1268GRT
Q534	HVTKTD1302T	TR, KTD1302T
Q535	HVTKTA1268GRT	TR, KTA1268GRT
Q536	HVTKTD1302T	TR, KTD1302T
Q537	HVTKTD1302T	TR, KTD1302T
Q538	HVTKRA107MT	TR, KRA107MT

FRONT PCB ASSY

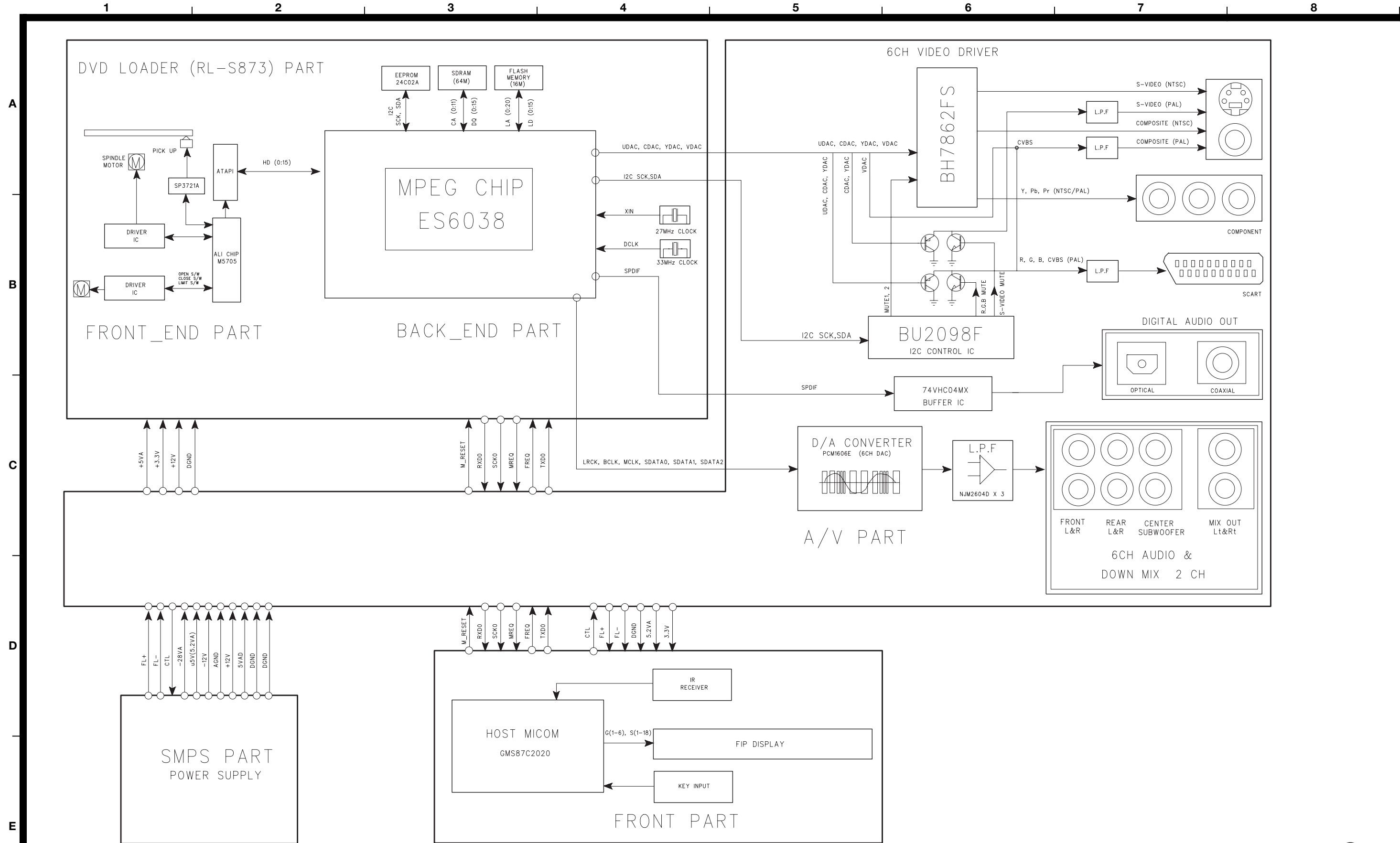
REF. NO.	PARTS NO.	DESCRIPTION
	COP11634B	FRONT PCB ASSY
	CUP11634Z	FRONT PCB
CN91	KJP15GA117ZG	CARD CABLE, WAFER
CN93	KJP05GA19ZM	WAFER
D901	CVD52CSBBCEAB2	LED, BLUE
D902	HVD342YCTB7T089	LED, YELLOW
D904	HVD1SS133MT	DIODE, 1SS133MT
ET91	CMC1A111	PLATE, EARTH
F901	HFLHNV06SC14T	F. I. P
IC91	HVIANAM1375DVD	IC, MICOM
IC92	HRVKSM603TH2	REMOCON SENSER
PB91	CMD1A496	BRACKET, FIP
PB92	CMD1A496	BRACKET, FIP
Q902	HVTKRC102S	TR, CHIP KRC102S
Q903	HVTKRA102S	TR, CHIP KRA102S
Q904	HVTKRA102S	TR, CHIP KRA102S
Q905	HVTKRC102S	TR, CHIP KRC102S
Q908	HVTKRC102S	TR, CHIP KRC102S
Q908	HVTKRC107MT	TR, KRC107MT
Q909	HVTKRC102S	TR, CHIP KRC102S
Q910	HVTKRA102S	TR, CHIP KRA102S
Q911	HVTKRC102S	TR, CHIP KRC102S
S901	CST1A012ZT	SW, TACT
S902	CST1A012ZT	SW, TACT
S903	CST1A012ZT	SW, TACT
S904	CST1A012ZT	SW, TACT
S905	CST1A012ZT	SW, TACT
S906	CST1A012ZT	SW, TACT
S907	CST1A012ZT	SW, TACT
X901	HOX04000E150C	CRYSTAL, 4MHZ

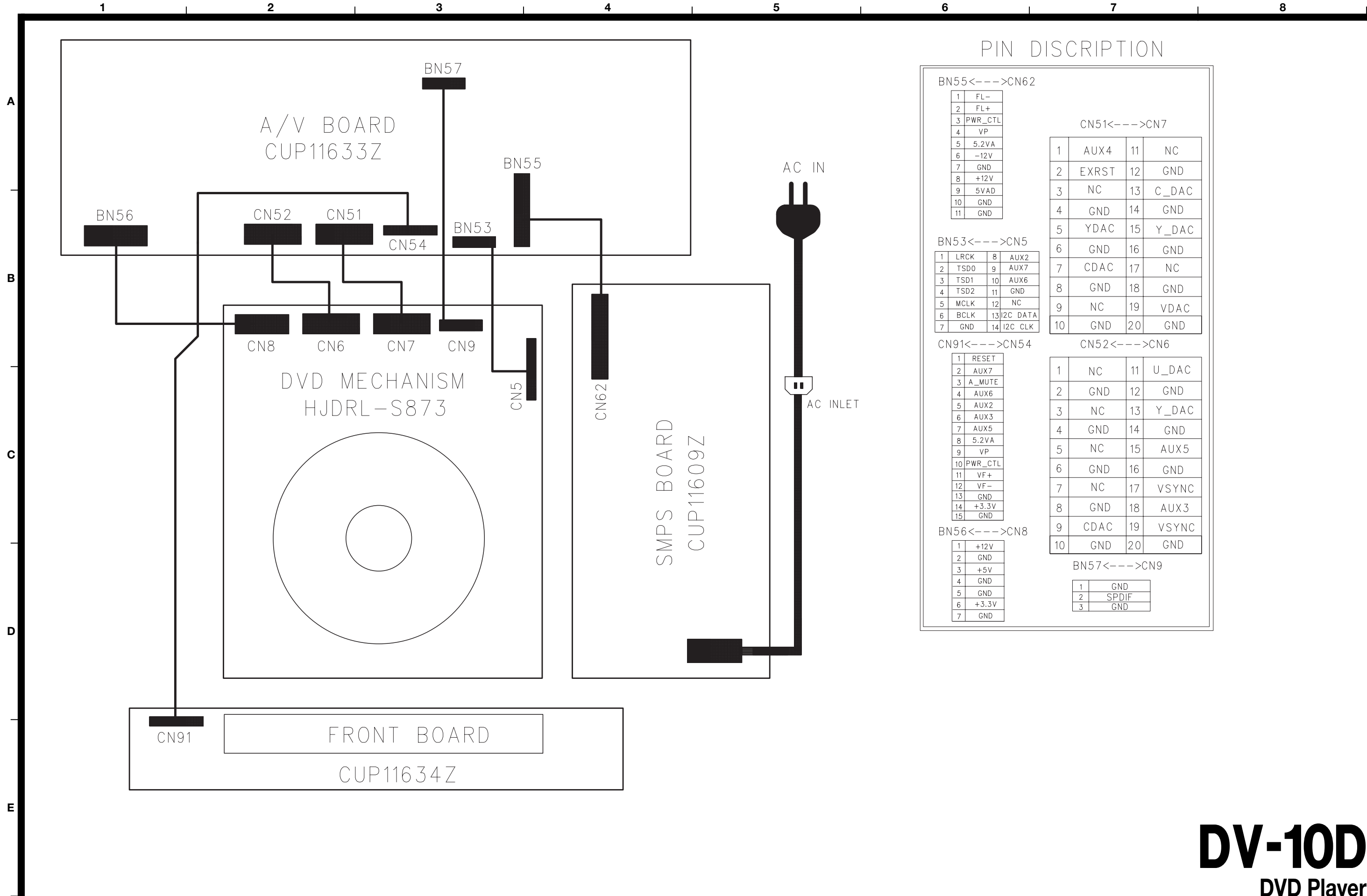
4 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	CQX1A848Z	OWNER'S MANUAL	
	CARTDV10D	REMOCON ASSY	
	HABAAAM1.5V	BATTERY	
	△ HJA2A070Z	CORD, POWER	
	CJS4M023Z	CORD, PIN (1P)	
	CJS4N014Z	CORD, PIN	
	CJS8H003Z	OPTICAL CABLE	

TEAC BLOCK DIAGRAM DV-10D





PIN DISCRPTION

BN55<--->CN62

1	FL-
2	FL+
3	PWR_CTL
4	VP
5	5.2VA
6	-12V
7	GND
8	+12V
9	5VAD
10	GND
11	GND

CN51<--->CN7

1	AUX4	11	NC
2	EXRST	12	GND
3	NC	13	C_DAC
4	GND	14	GND
5	YDAC	15	Y_DAC
6	GND	16	GND
7	CDAC	17	NC
8	GND	18	GND
9	NC	19	VDAC
10	GND	20	GND

BN53<--->CN5

1	LRCK	8	AUX2
2	TSD0	9	AUX7
3	TSD1	10	AUX6
4	TSD2	11	GND
5	MCLK	12	NC
6	BCLK	13	I2C DATA
7	GND	14	I2C CLK

CN91<--->CN54

1	RESET
2	AUX7
3	A_MUTE
4	AUX6
5	AUX2
6	AUX3
7	AUX5
8	5.2VA
9	VP
10	PWR_CTL
11	VF+
12	VF-
13	GND
14	+3.3V
15	GND

CN52<--->CN6

1	NC	11	U_DAC
2	GND	12	GND
3	NC	13	Y_DAC
4	GND	14	GND
5	NC	15	AUX5
6	GND	16	GND
7	NC	17	VSYNC
8	GND	18	AUX3
9	CDAC	19	VSYNC
10	GND	20	GND

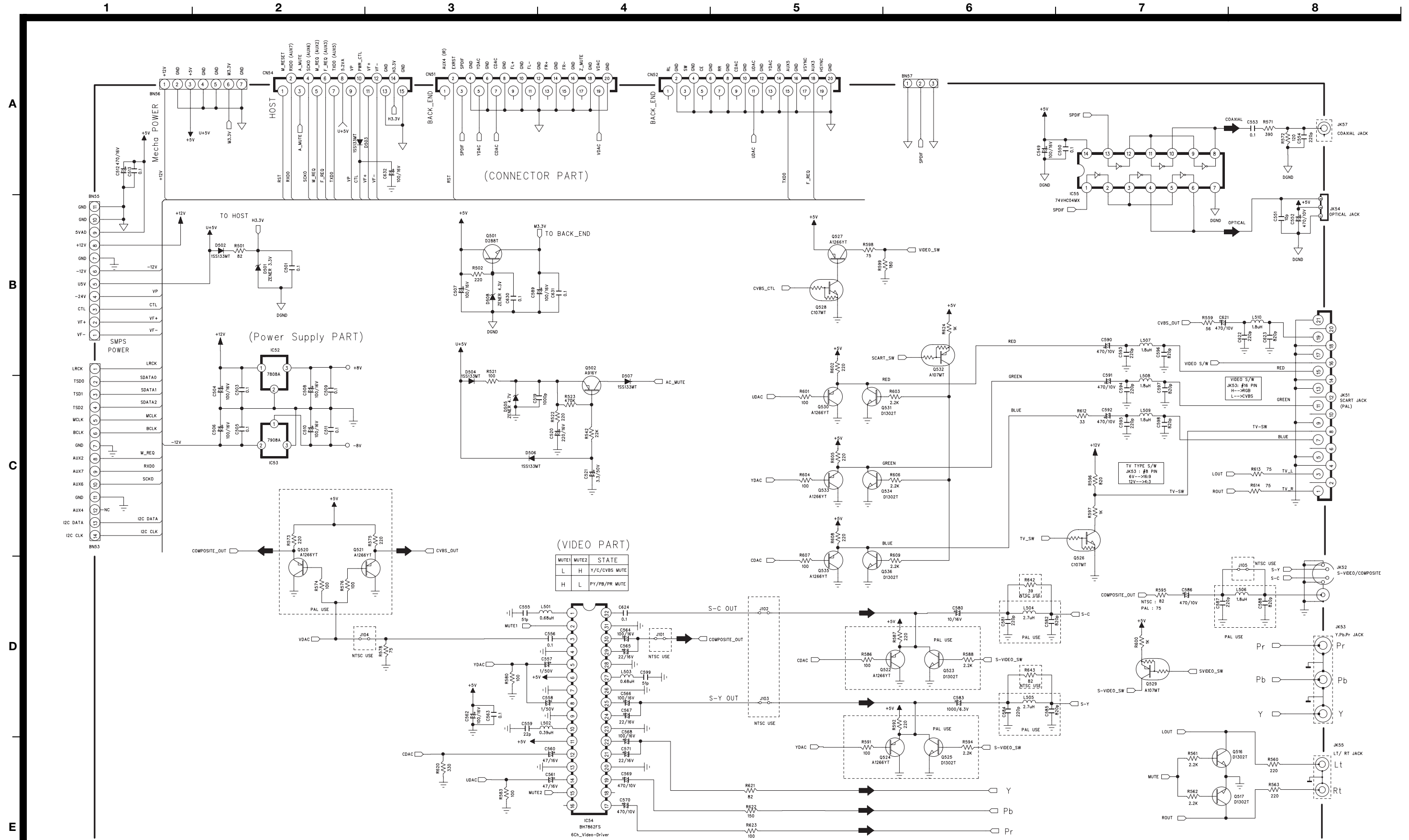
BN56<--->CN8

1	+12V
2	GND
3	+5V
4	GND
5	GND
6	+3.3V
7	GND

BN57<--->CN9

1	GND
2	SPDIF
3	GND

TEAC SCHEMATIC DIAGRAM DV-10D AV PCB (1/2)



INSTRUCTIONS FOR SERVICE PERSONNEL
BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

NOTES:
 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
 2. Capacitor values are in microfarads (p=picofarads).
 3. Δ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

TEAC SCHEMATIC DIAGRAM DV-10D AV PCB (2/2)

1 2 3 4 5 6 7 8

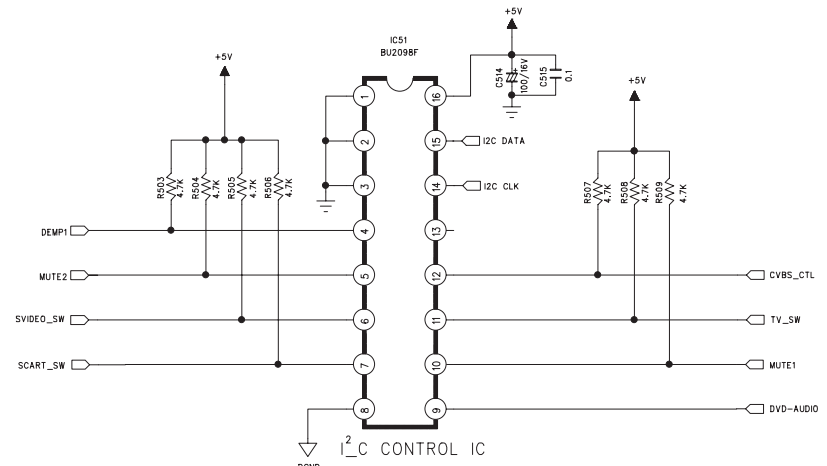
A

B

C

D

E



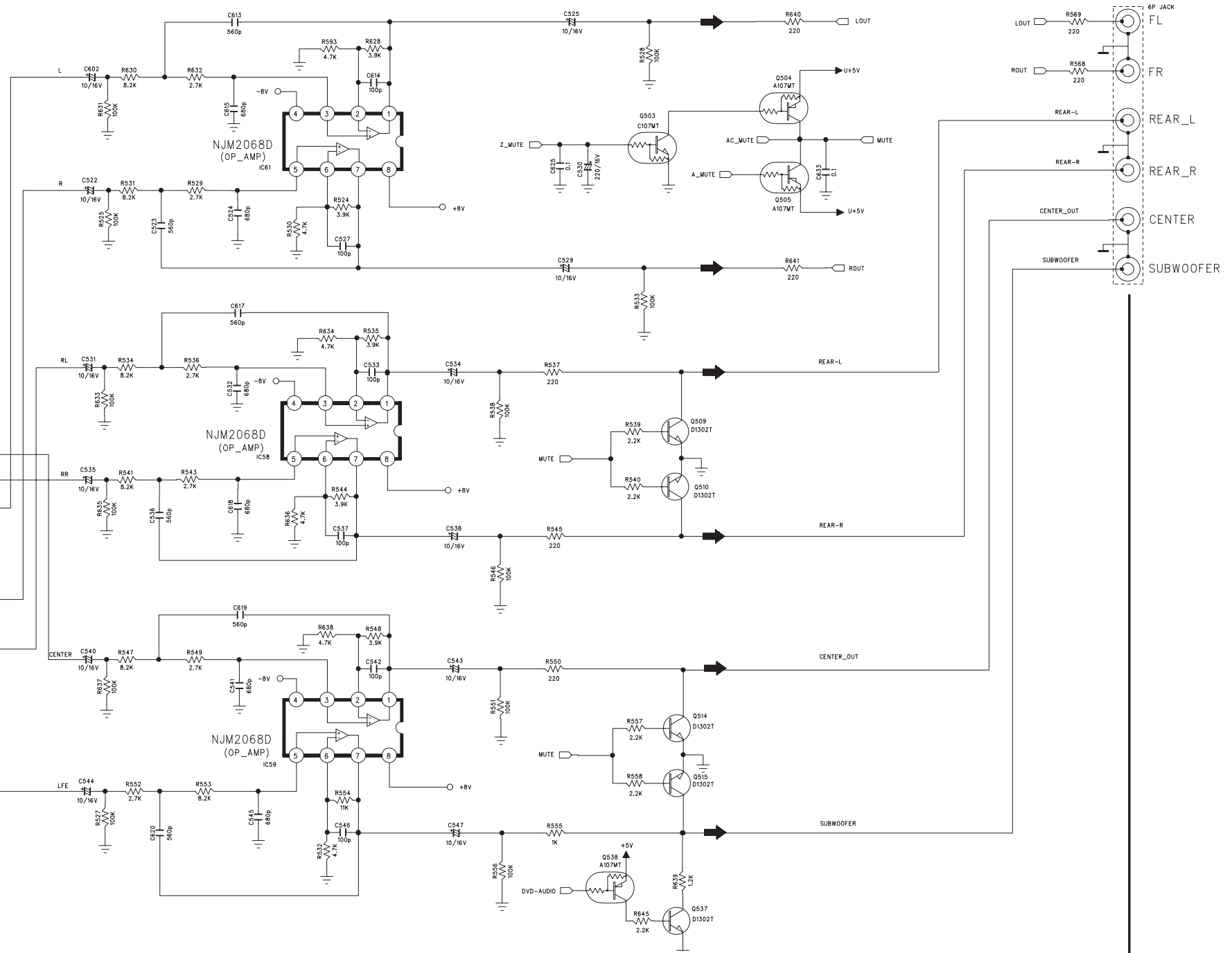
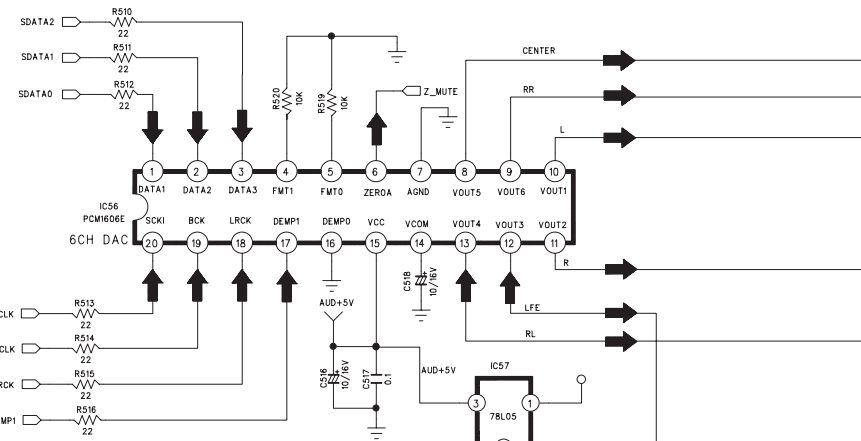
I2C CONTROL MODE

VALUE	DEMT1	DVD-AUDIO	TV_SW	CVBS_CTL
L	OFF	DVD AUDIO	4:3	CVBS
H	44.1kHz	DVD-AUDIO EXCEPT	16:9	RGB

PAL MODE

VIDEO_MODE	MUTE1	MUTE2	SVIDEO_SW	SCART_SW
S-VIDEO	L	L	H	L
RGB	L	L	L	H
COMPONENT	L	H	L	L

DAC OUT	PAL SVIDEO/RGB/COMPONENT	NTSC
YDAC	Y/G/Y	Y
CDAC	C/B/Pb	Pb
UDAC	NA/R/Pr	Pr
VDAC	CVBS	CHROMA



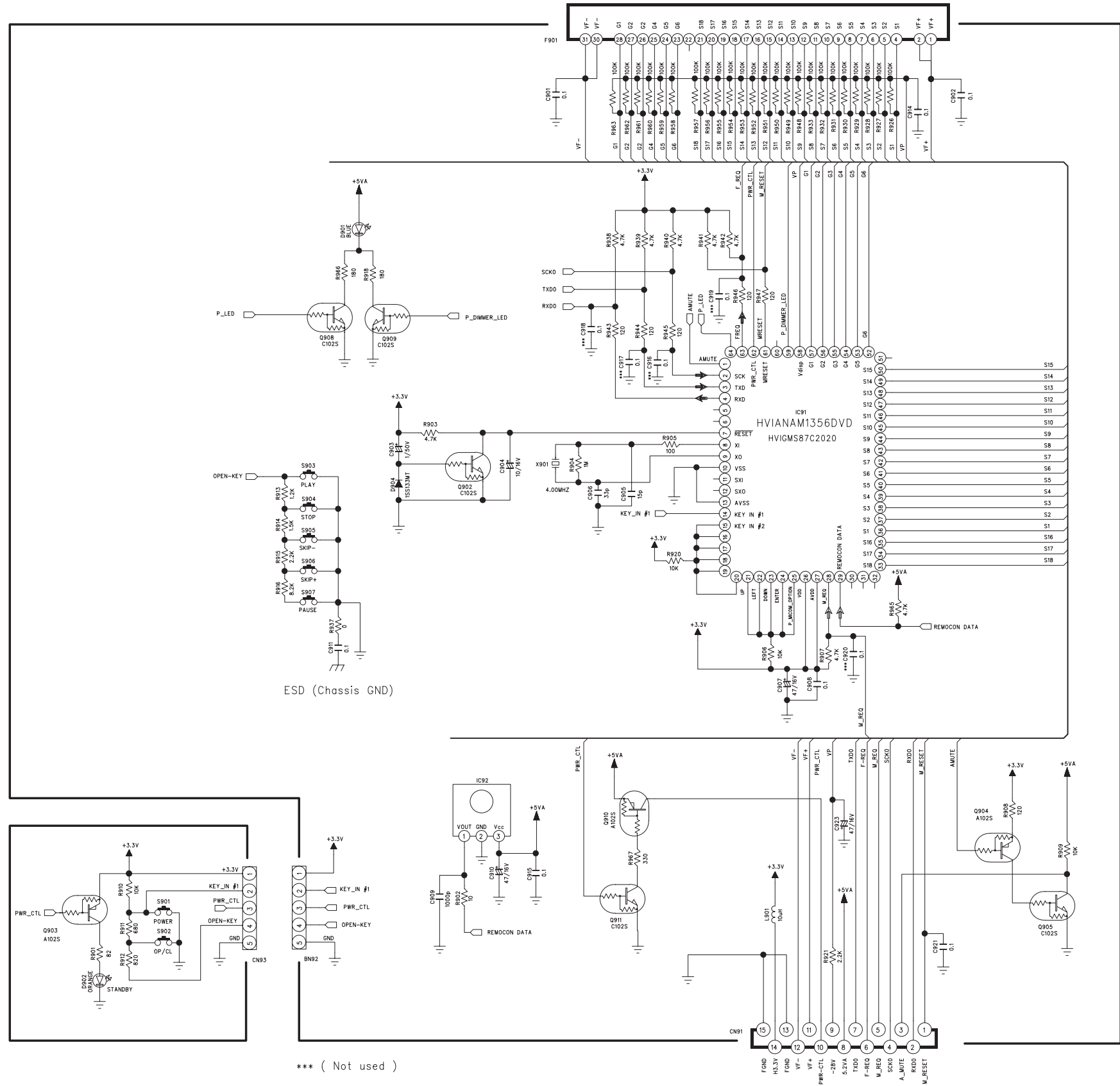
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TEAC SCHEMATIC DIAGRAM DV-10D FRONT PCB

1 2 3 4 5 6 7 8

A
B
C
D
E



*** (Not used)

INSTRUCTIONS FOR SERVICE PERSONNEL
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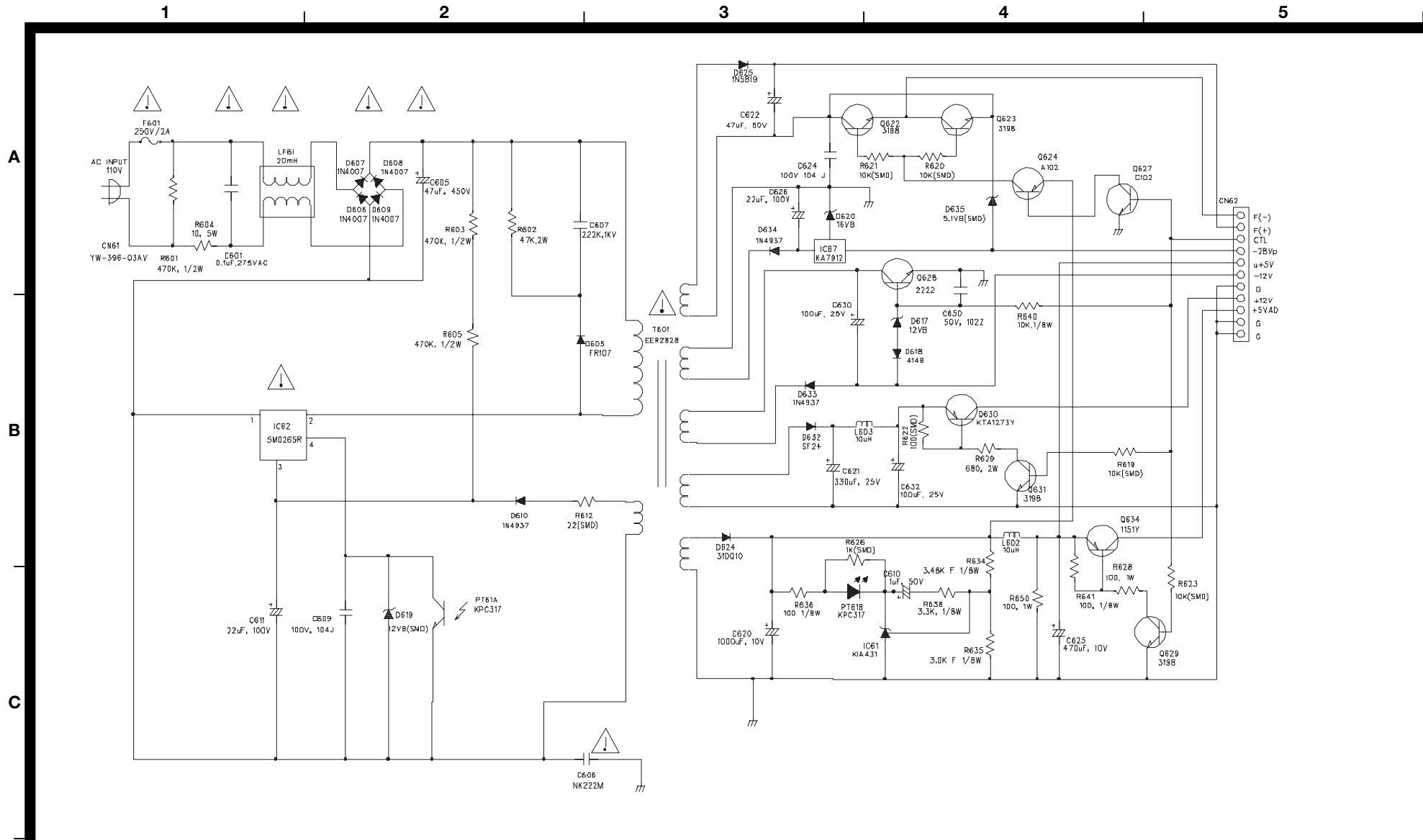
NOTES:
 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
 2. Capacitor values are in microfarads (p=picofarads).
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DV-10D

DVD Player

1 st Issue; September 2003

TEAC SCHEMATIC DIAGRAM DV-10D SMPS PCB



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NOTES:

△ Parts marked with this sign are safety critical components. They must always be replaced with identical components—refer to the appropriate parts list and ensure exact replacement.

DV-10D

DVD Player