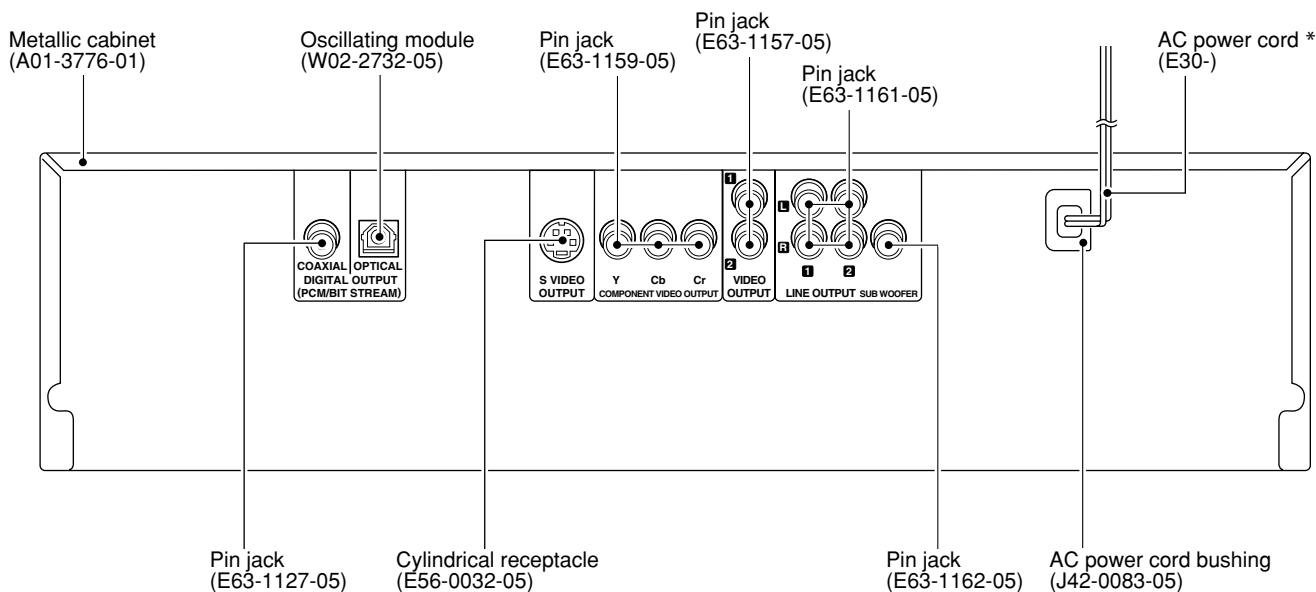
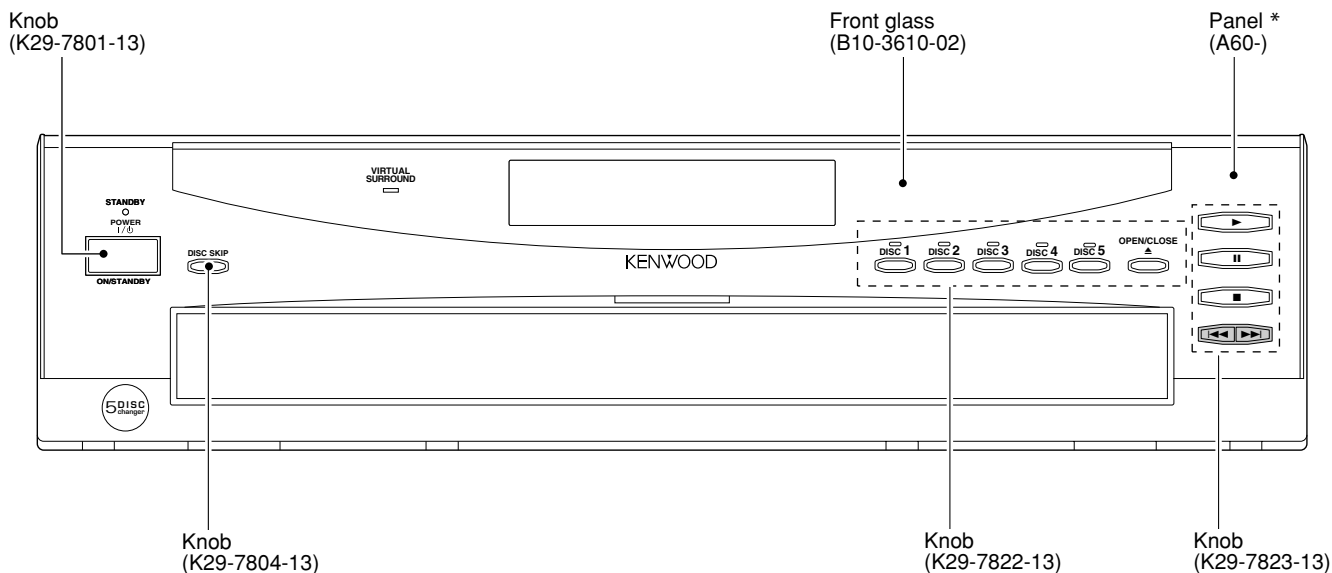


# DV-4050-B DVF-R6030-B SERVICE MANUAL

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\* Refer to parts list on page17.

In compliance with Federal Regulations, following are reproduction of labels on, or inside the product relating to laser product safety.

**Caution :** No connection of ground line if disassemble the unit. Please connect the ground line on rear panel, PCBs, Chassis and some others.

KENWOOD-Crop. certifies this equipment conforms to DHHS Regulations No.21 CFR 1040. 10, Chapter 1, subchapter J.

**DANGER :** Laser radiation when open and interlock defeated.  
**AVOID DIRECT EXPOSURE TO BEAM.**



# DV-4050-B/DVF-R6030-B

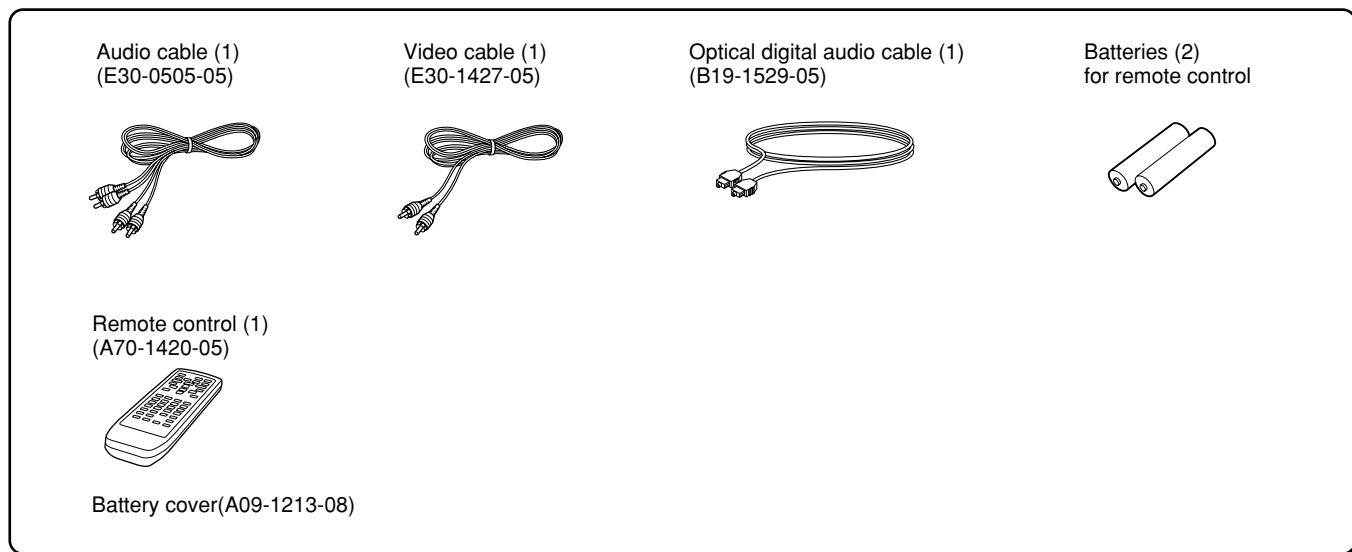
## CONTENTS / ACCESSORIES

### Contents

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PC BOARD .....	7	SPECIFICATIONS .....	20

**Note: Please contact our KENWOOD Service Department in your side if you want the information; Microprocessor(MN101C35D) ports explanation and full (previous) format parts list on this model. You can be available them by internet from us.**

### Accessories



**Note: Test Mode in detail is written in**

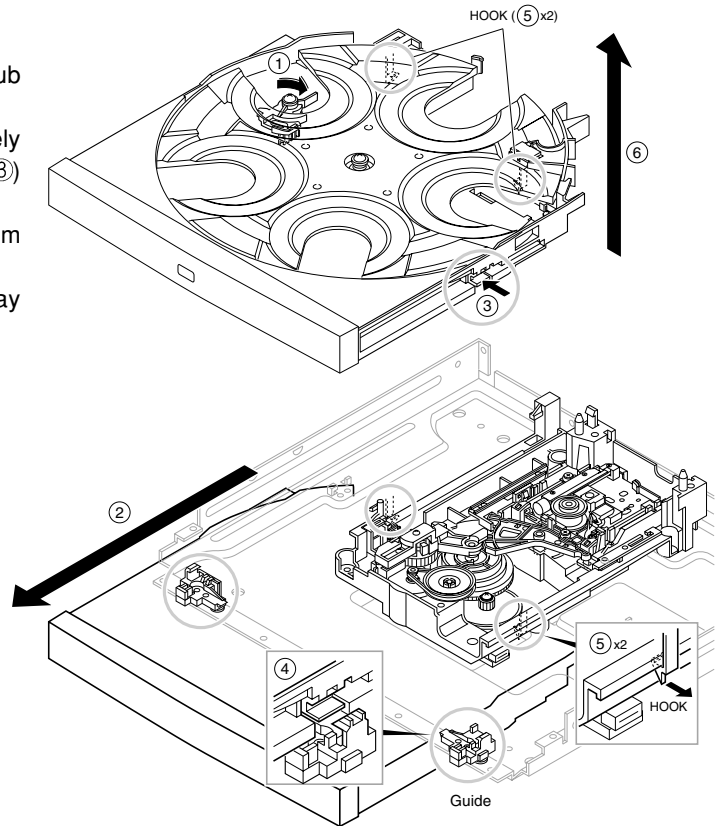
**DV-4900/DV-4700/DVF-R6030/DVF-R9030 Service Manual(B51-5665-00).**

# DV-4050-B/DVF-R6030-B

## DISASSEMBLY FOR REPAIR

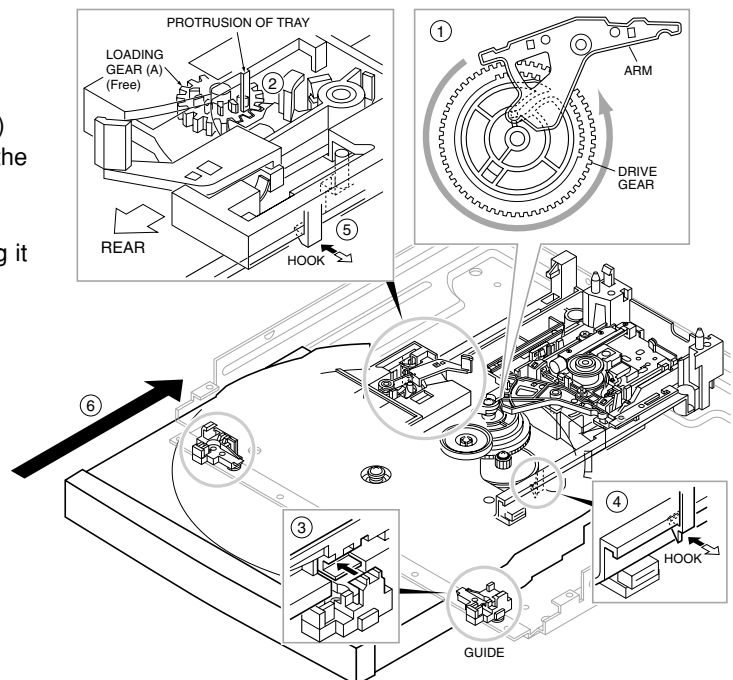
### 1. How to Remove Tray

1. Remove the front panel and flexible cable.  
Disassemble the X25 and power supply pcb with sub chassis if it is a difficult.
2. Push and hold the lever (1) to clockwise and pull barely out the tray to frontwards (2) where the hook of tray (3) meets with guide (4).
3. Push hooks (3), both sides, inwards and release them from guides (4).
4. Pull hooks of tray (5) outwards and remove the tray upwards (6).



### 2. How to Assemble Tray

1. Adjust the position of drive gear as figure (1).  
Check traverse unit is at the lowest position.
2. Load the tray on the loading mechanism.  
Check the position where the loading gear (A) is free (2).
3. Meet the hooks with guides and push hooks to load the tray (3).
4. Set the right side hook to loading mechanism (4).
5. Set the left side hook to loading mechanism with pulling it outwards (5).
6. Push the tray backwards (6).

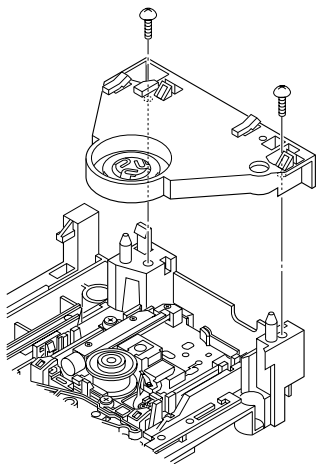


# DV-4050-B/DVF-R6030-B

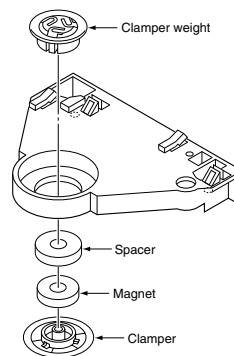
## DISASSEMBLY FOR REPAIR

### 3. How to Remove Clamper Ass'y

1. Remove screws.

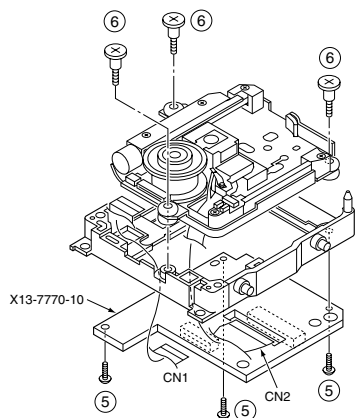
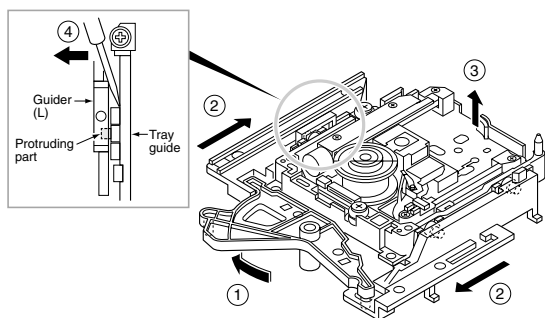


### 4. How to Disassemble Clamper Ass'y



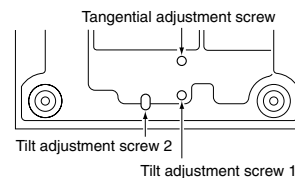
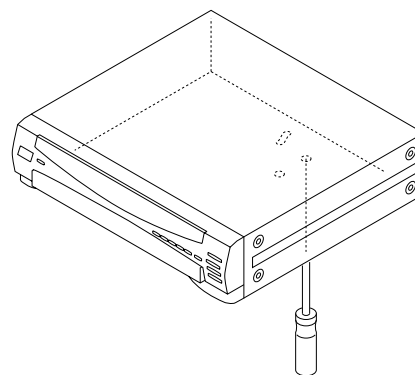
### 5. How to Disassemble Traverse Unit

1. Move the traverse to upward by turning motor pulley (①~③).
2. Make the gap between the tray guide and guider(L) with driver(④)
3. Remove the screws(⑤, ⑥).

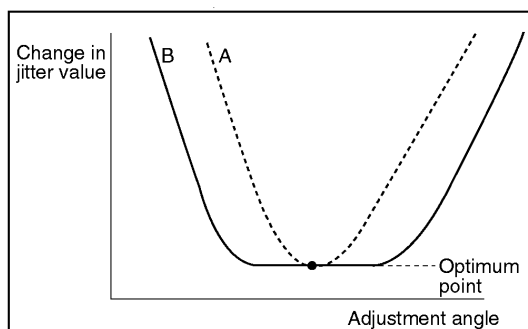


### 6. Tangential and Tilt Adjustment

1. Turn the power on with pressing the DISC 1 key. (Display shows "INSPECTION"; test mode.)
2. Press the DISC1 key in playback mode again. Display shows "Jitter \*\*\* %"
3. Turn off if cancel test mode.



REAR



- Jitter value depends on the model:
  - (1) If the jitter value changes like A, the optimum point is easy to find.
  - (2) If the jitter value changes like B, set the optimum point near the middle.

# DV-4050-B/DVF-R6030-B

## CIRCUIT DESCRIPTION

### Microprocessor pin description : MN101C35D(X14,IC1)

Pin No.	Pin Name	I/O	Description
1	CMD	O	Serial output for system communication.
2	STATUS	I	Serial input for system communication.
3	DSPCLK	I	Serial clock for system communication.
4	DATA	O	Data signal output to buffer.
5	STB	O	Strobe signal output to buffer.
6	CLK	O	Clock signal output to buffer.
7	CLR	O	Clear signal output to buffer.
8	VDD	-	+5.0V power supply.
9	OSC2	O	Main clock (8MHz) output.
10	OSC1	I	Main clock (8MHz) input.
11	VSS	-	Connected to ground.
12	XI	-	Connected to ground.
13	XO	-	Unused.
14	MMOD	-	Connected to ground.
15	VREF-	-	Connected to ground.
16~18	KEYIN0~2	I	Key signal input.
19,20	PA3,PA4	-	Unused.
21	CLOSE SW	I	Disc clamp control.
22	OPEN SW	I	Control port of tray open/close for changer mechanism.
23	PA7	-	Unused.
24	VREF+	-	A/D reference voltage.
25	TM+	O	Control port of tray motor.
26	RESET	I	Reset signal input.
27	RM+	O	Control port of tray motor.
28	TRM-	O	Control port of tray motor.
29	MECHA VR	O	Control port of tray motor.
30	POWER	O	Control port of power supply.
31	POWER MUTE	O	Power on/off control.
32	P15	-	Unused.
33	REMOCON	I	Input port of remote control signal.
34,35	P21,P22	-	Unused.
36	POSITION	I	Detection port of tray position.
37	SPEED	I	Detection port of rotation speed for tray.
38~ 4 1	P25,P30~P32	-	Unused.
42	STBY-LED	O	Control port of standby LED.
43	P51	-	Unused.
44	VSS-LED	O	Control port of VSS LED.
45,46	DESTINATION IN	I	Unused.
47~49	DESTINATION OUT	O	Unused.
50	DIGI 4	-	Unused.
51~63	1G~13G	O	FL grid output.
64~80	P17~P1	O	FL segment output.
81~98	SEG24~SEG41	-	Unused.
99	SW MUTE	O	Control port of sub woofer.
100	VFL	-	FL power supply.

# DV-4050-B/DVF-R6030-B

## ADJUSTMENT

No.	ITEM	INPUT SETTING	OUTPUT SETTING	ALIGNMENT POINT	ALIGNMENT FOR	FIG.
1	<i>BRIGHTNESS</i>	100% COLOR BAR DISC	Connect the oscilloscope to Y output with 75-ohms resistor	VR1	Y-signal = 1000mV±30mV	FIG.1.
2	<i>CHROM LEVEL</i>	100% COLOR BAR DISC	Connect the oscilloscope to COMPOSIT output with 75-ohms resistor	VR2	Chrom-signal = 285mV±14mV	FIG.2.
3	<i>Cb LEVEL</i>	100% COLOR BAR DISC	Connect the oscilloscope to Cb output with 75-ohms resistor	VR3	Cb-signal = 648mV±14mV	FIG.3.
4	<i>Cr LEVEL</i>	100% COLOR BAR DISC	Connect the oscilloscope to Cr output with 75-ohms resistor	VR4	Cr-signal = 648mV±14mV	FIG.4.

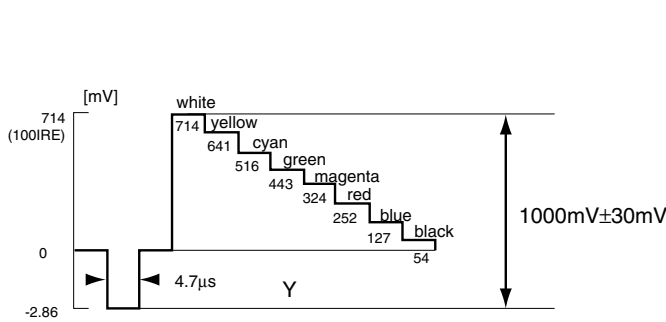


FIG. 1

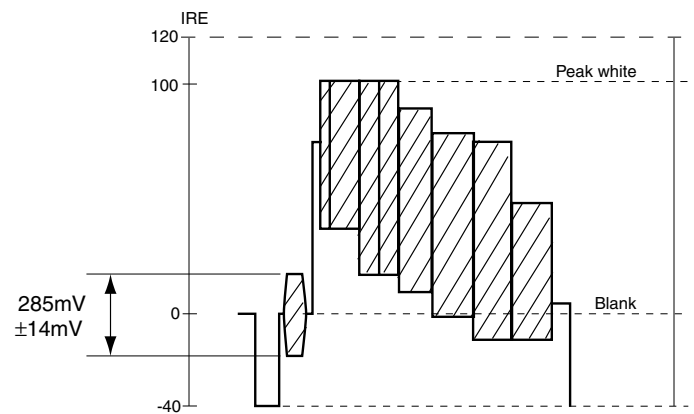


FIG. 2

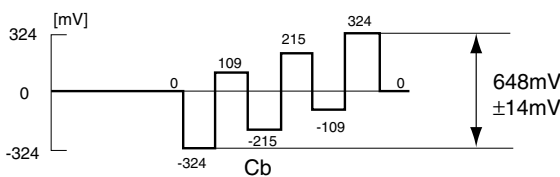


FIG. 3

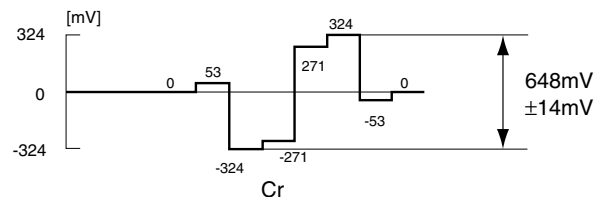
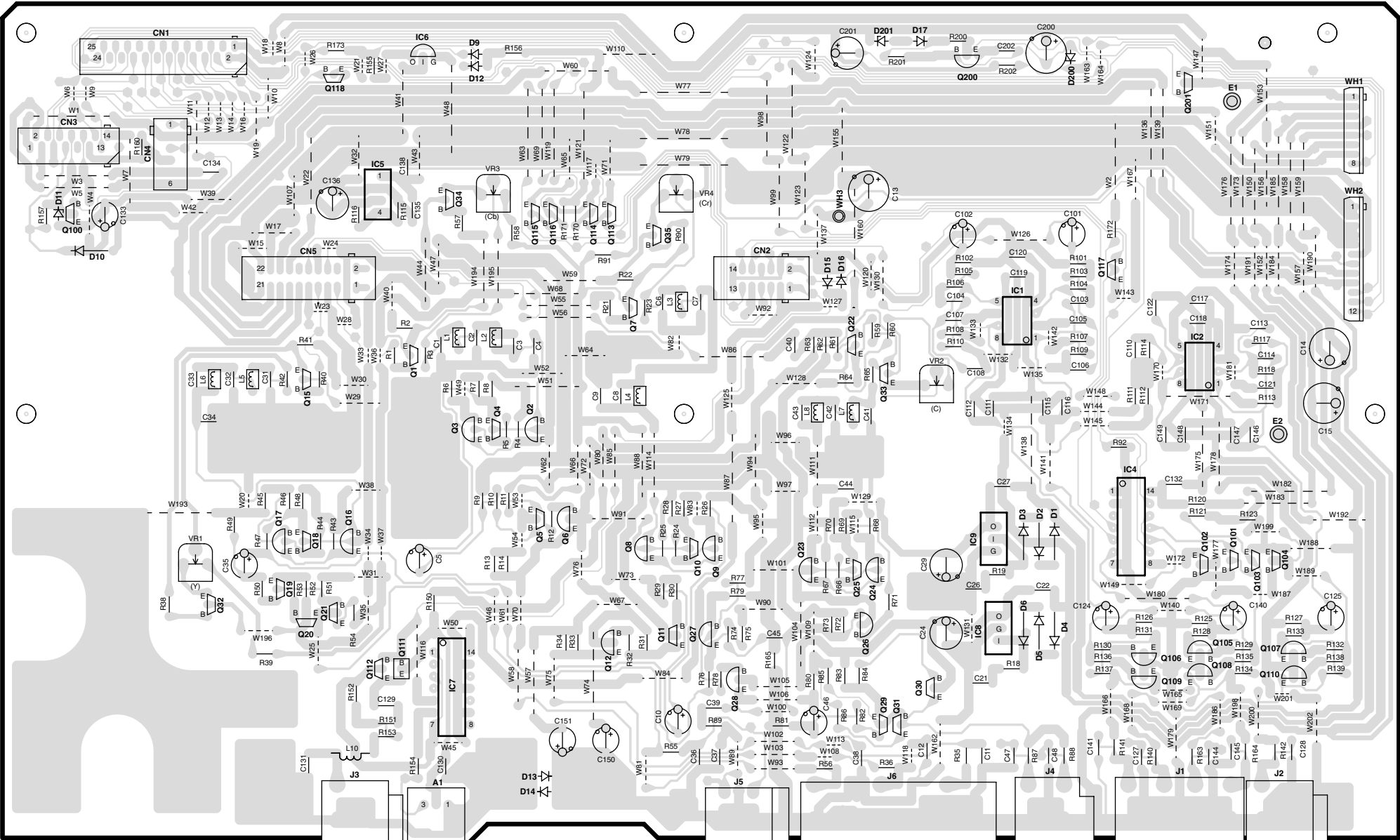


FIG. 4

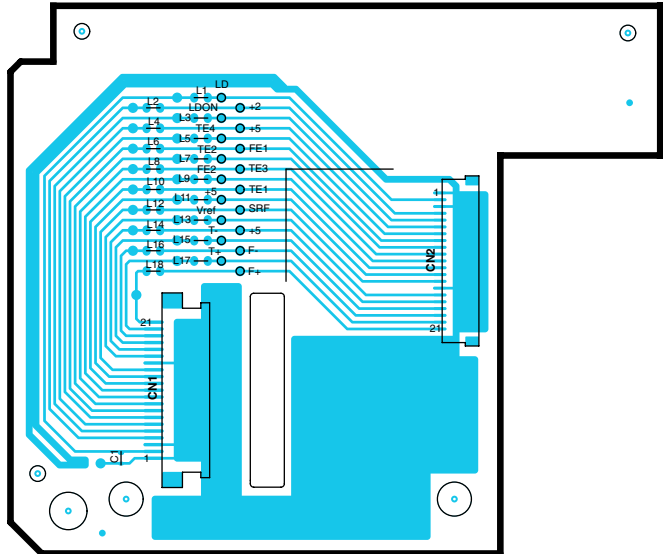
# PC BOARD(Component side view)

X25-6380-10 (J70-1428-11)

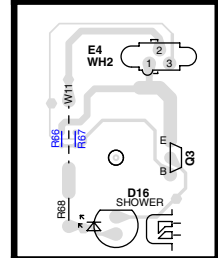


COAXIAL OPTICAL DIGITAL OUTPUT S VIDEO OUTPUT COMPONENT VIDEO OUTPUT VIDEO OUTPUT LINE OUTPUT SUB WOOFER

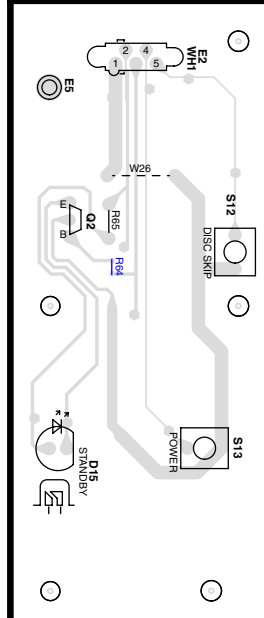
X13-7770-10 (J70-1426-12)



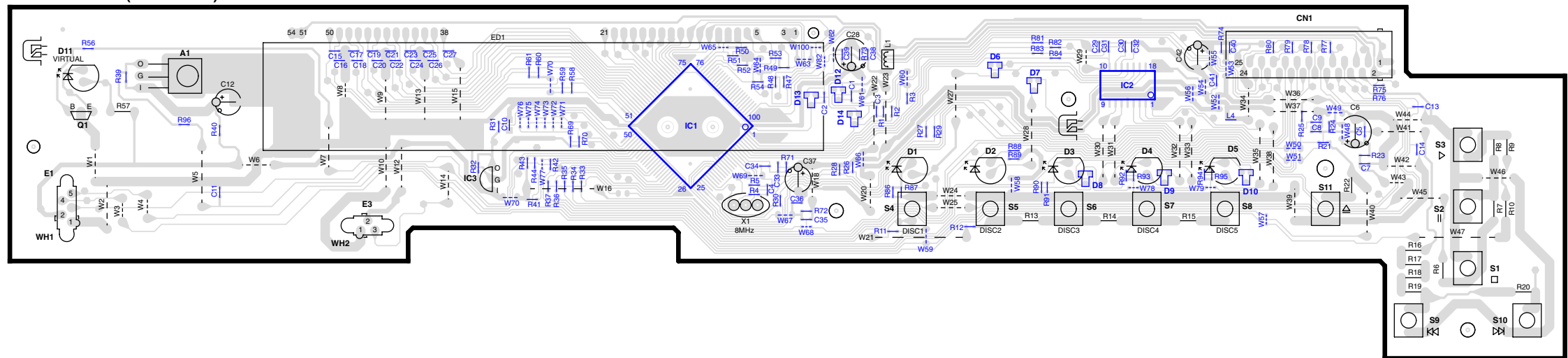
X14 C/3



X14 B/3



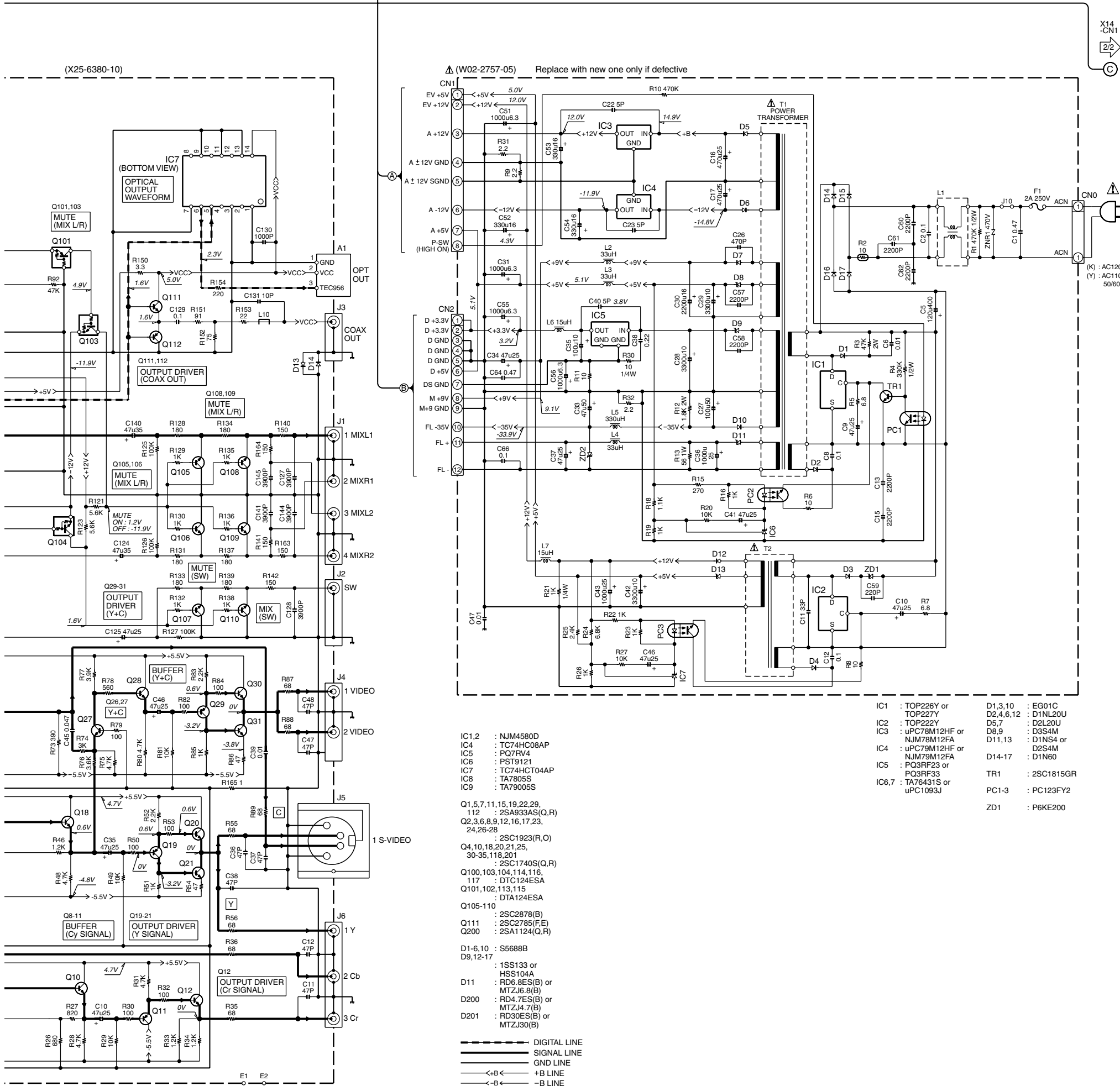
X14-7170-10 A/3 (J70-1427-11)



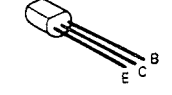
Refer to the schematic diagram for the value of resistors and capacitors.



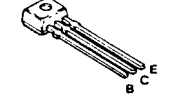




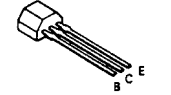
- 2SA1124
- 2SC1923
- 2SC2878



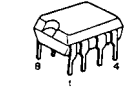
- 2SC2785



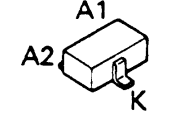
- DTA124ESA
- DTC124ESA
- 2SC1740S



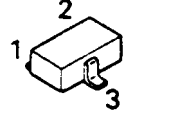
- NJM4580D



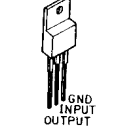
- DAN202U



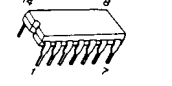
- DA204U



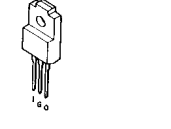
- TA79005S



- TC74HC08AP



- TA7805S



- IC1 : TOP226Y or TOP227Y
- IC2 : TOP222Y
- IC3 : uPC78M12HF or NJM78M12FA
- IC4 : uPC79M12HF or NJM79M12FA
- IC5 : PQ3RF23 or PQ3RF33
- IC6,7 : TA76431S or uPC1093J
- D1,3,10 : EG01C
- D2,4,6,12 : D1NL20U
- D5,7 : D2L20U
- D8,9 : D3S4M
- D11,13 : D1NS4 or D2S4M
- D14-17 : D1N60
- TR1 : 2SC1815GR
- PC1-3 : PC123FY2
- ZD1 : P6KE200

- IC1,2 : NJM4580D
- IC4 : TC74HC08AP
- IC5 : PQ7RV4
- IC6 : PST9121
- IC7 : TC74HCT04AP
- IC8 : TA7805S
- IC9 : TA79005S

- Q1,5,7,11,15,19,22,29,112 : 2SA933AS(Q,R)
- Q2,3,6,8,9,12,16,17,23,24,26-28 : 2SC1923(R,O)
- Q4,10,18,20,21,25,30-35,118,201 : 2SC1740S(Q,R)
- Q100,103,104,114,116,117 : DTC124ESA
- Q101,102,113,115 : DTA124ESA
- Q105-110 : 2SC2878(B)
- Q111 : 2SC2785(FE)
- Q200 : 2SA1124(Q,R)

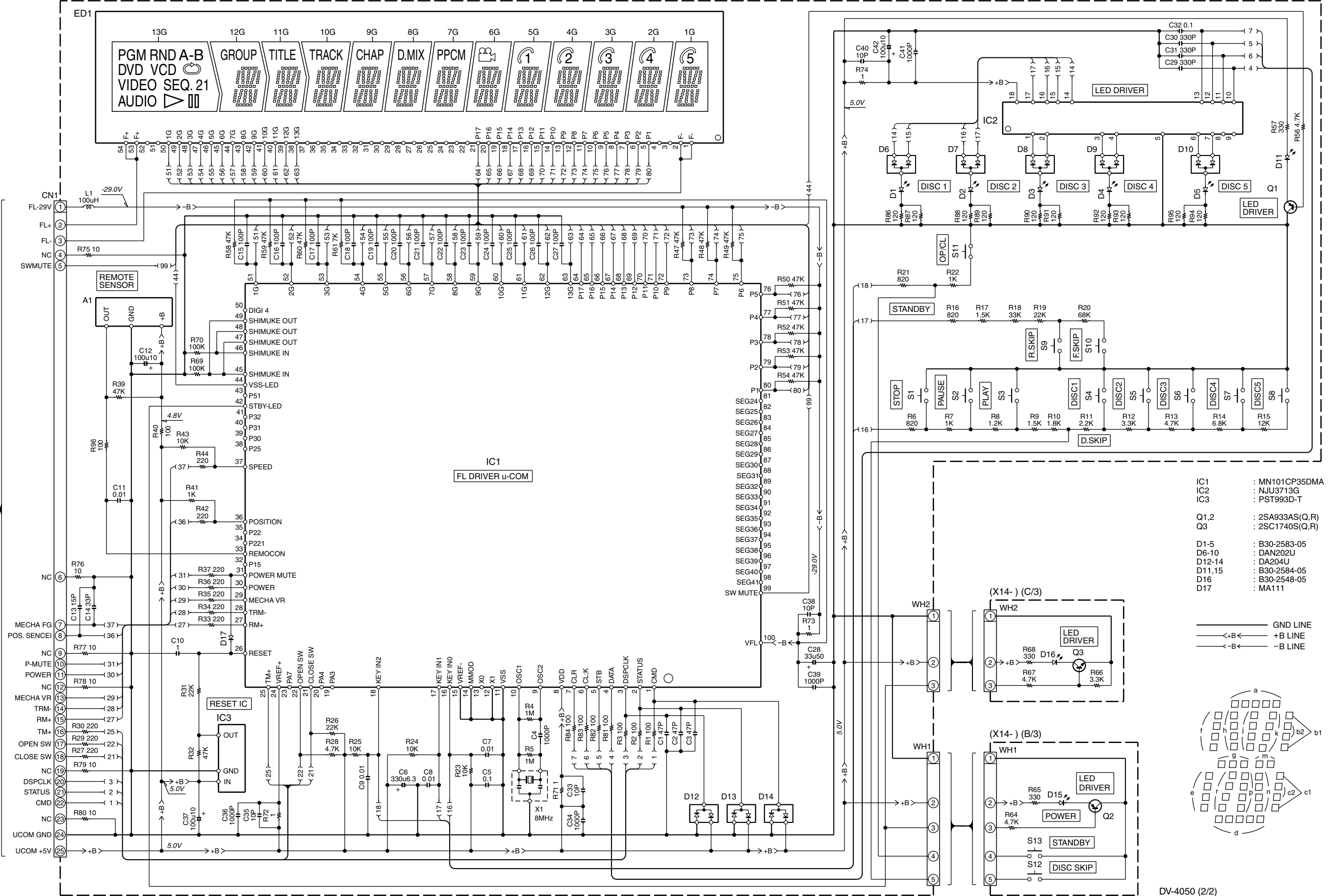
- D1-6,10 : S5688B
- D9,12-17 : 1S5133 or HSS104A
- D11 : RD6.8ES(B) or MTZJ6.8(B)
- D200 : RD4.7ES(B) or MTZJ4.7(B)
- D201 : RD30ES(B) or MTZJ30(B)

# DV-4050-B/DVF-R6030-B

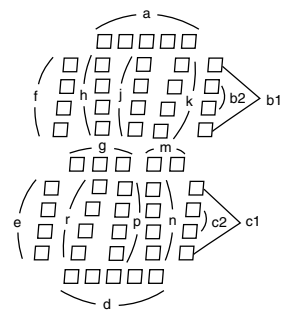
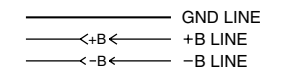
Y22-8320-10

KENWOOD

(X14-7170-10) (A/3)



- IC1 : MN101CP35DMA
- IC2 : NJU3713G
- IC3 : PST993D-T
- Q1,2 : 2SA933AS(Q,R)
- Q3 : 2SC1740S(Q,R)
- D1-5 : B30-2583-05
- D6-10 : DAN202U
- D12-14 : DA204U
- D11,15 : B30-2584-05
- D16 : B30-2548-05
- D17 : MA111



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage during PLAY unless otherwise specified; The value shown in ( ) is the voltage measured at the moment of STOP.

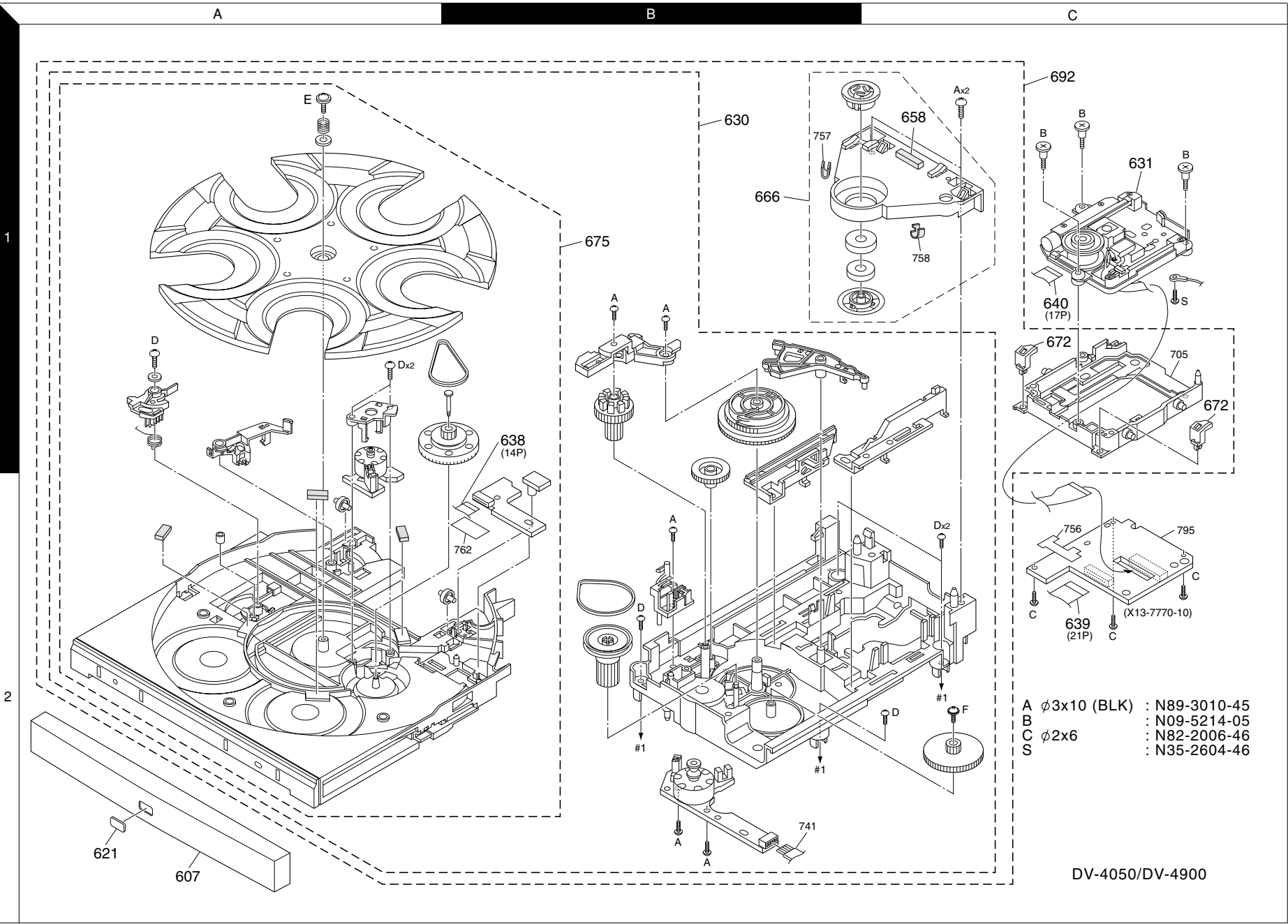
Y22-8320-10

# DV-4050-B/DVF-R6030-B

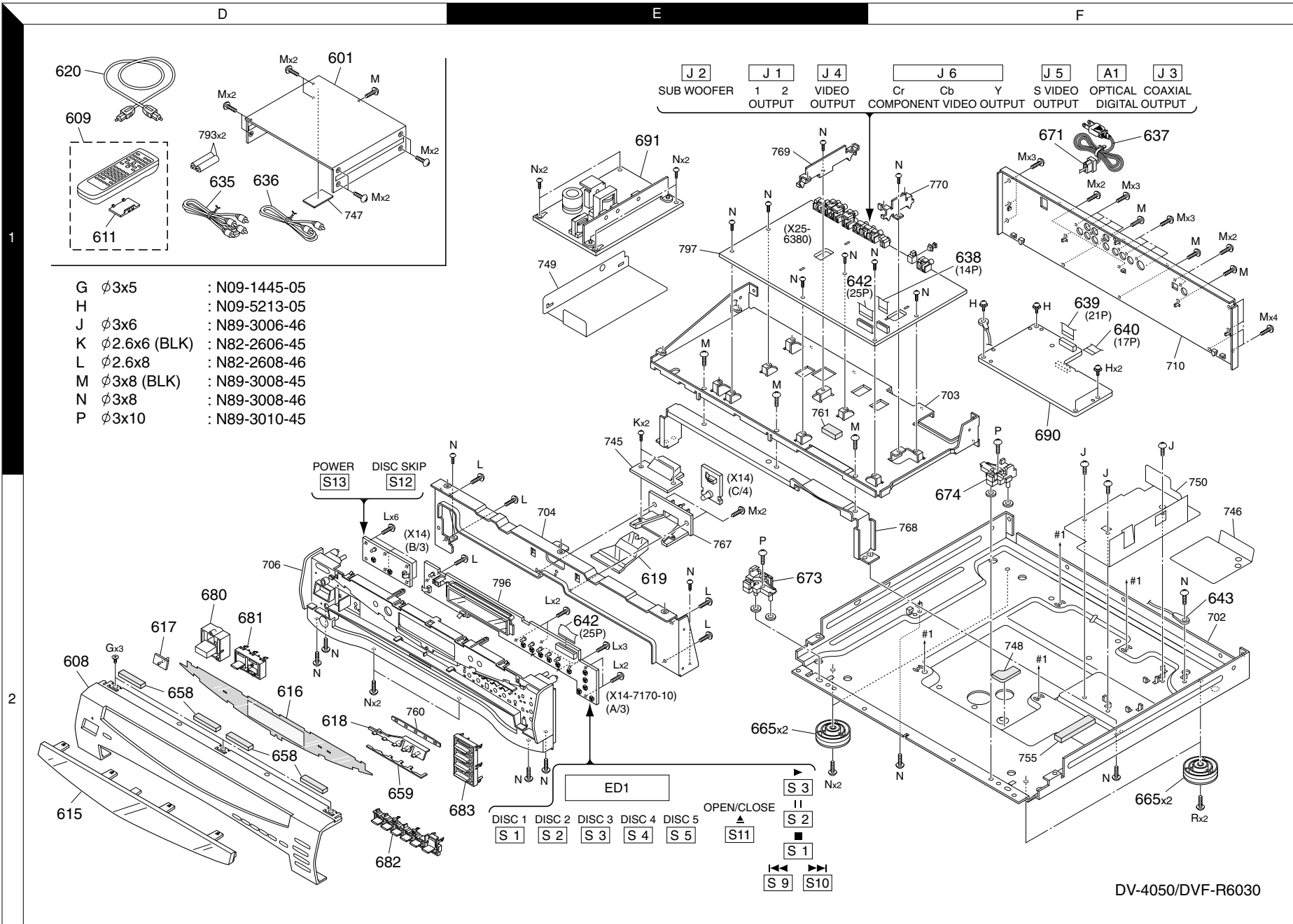
KENWOOD

DV-4050 (2/2)

# DV-4050-B/DVVF-R6030-B EXPLODED VIEW (MECHANISM)



Parts with exploded numbers larger than 700 are not supplied.



\* New Parts  
 Parts without **Parts No.** are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

①

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
<b>DV-4050-B(K), DVF-R6030-B(Y)</b>						
601	1D	*	A01-3776-01	METALLIC CABINET		
607	2A	*	A29-1113-22	PANEL TRAY	K	
607	2A	*	A29-1114-22	PANEL TRAY	Y	
608	2D	*	A60-1848-12	PANEL	K	
608	2D	*	A60-1849-12	PANEL	Y	
609	1D	*	A70-1420-05	REMOTE CONTROLLER ASSY		
611	1D	*	A09-1213-08	BATTERY COVER		
615	2D	*	B10-3610-02	FRONT GLASS		
616	2D	*	B11-1516-03	FILTER		
617	2D	*	B12-0399-14	INDICATOR POWER		
618	2D	*	B12-0400-03	INDICATOR 5-DISC		
619	2E	*	B12-0401-04	INDICATOR SHOWER		
620	1D	*	B19-1529-05	OPTICAL FIBER		
621	2A	*	B43-0316-04	BADGE DVD		
-	-	*	B46-0328-03	WARRANTY CARD		
-	-	*	B46-0347-03	WARRANTY CARD	K	
-	-	*	B58-1674-03	CAUTION CARD (P1,PRA,A4,1)	K	
-	-	*	B59-1104-00	SERVICE DIRECTORY	Y	
-	-	*	B60-4776-00	INSTRUCTION MANUAL(EN)		
-	-	*	B60-4777-00	INSTRUCTION MANUAL(FR)	K	
630	1B	*	D40-1682-08	MECHANISM ASSY,US50		
631	1C	*	D40-1695-05	MECHANISM ASSY,VT.U		
635	1D	*	E30-0505-05	AUDIO CORD		
636	1D	*	E30-1427-05	VIDEO CORD		
637	1F	*	E30-2789-05	AC POWER CORD	Y	
637	1F	*	E30-2909-05	AC POWER CORD	K	
638	2B,1F	*	E35-2609-05	FLAT CABLE 14P		
639	2C,1F	*	E35-2610-05	FLAT CABLE 21P		
640	1C,1F	*	E35-2611-05	FLAT CABLE 17P		
642	2E,1E	*	E35-2659-05	FLAT CABLE 25P		
643	2F	*	E30-2964-15	GROUND WIRE		
658	1C,2D	*	G11-2730-04	SOFT TAPE A60		
659	2D	*	G11-2783-04	CUSHION 5DISC		
-	-	*	H10-7681-02	POLYSTYRENE FOAMED FIXTURE		
-	-	*	H10-7682-02	POLYSTYRENE FOAMED FIXTURE		
-	-	*	H12-3473-04	PACKING FIXTURE		
-	-	*	H21-0303-04	PROTECTION SHEET		
-	-	*	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	*	H25-0661-04	PROTECTION BAG SET		
-	-	*	H50-3845-04	ITEM CARTON CASE		
-	-	*	H50-3846-04	ITEM CARTON CASE	K	
665	2E,2F	*	J02-1500-13	FOOT		
666	1B	*	J11-0859-05	CLAMPER ASSY		
671	1F	*	J42-0083-05	POWER CORD BUSHING		
672	1C	*	J90-0875-05	GUIDE		
673	2E	*	J90-0876-05	GUIDE		
674	2F	*	J90-0878-05	GUIDE		
675	1B	*	J99-0820-05	TRAY ASSY		
-	-	*	J61-0307-05	WIRE BAND	Y	
680	2D	*	K29-7801-13	KNOB POWER		

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia  
 Y : PX(Far East,Hawaii) T : England E : Europe G : Germany V : China(Shanghai)  
 Y : AAFES(Europe) X : Australia Q : Russia H : Korea M : Other Areas Δ indicates safety critical components .

\* New Parts  
 Parts without **Parts No.** are not supplied.  
 Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.  
 Teile ohne **Parts No.** werden nicht geliefert.

②

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
681	2D	*	K29-7804-13	KNOB AOP		
682	2D	*	K29-7822-13	KNOB 5-DISC		
683	2E	*	K29-7823-13	KNOB PLAY		
690	1F	*	W02-2756-05	ELECTRIC CIRCUIT MODULE,RF		
691	1E	*	W02-2757-05	ELECTRIC CIRCUIT MODULE,POWER		
692	1C	*	W04-0013-05	MECHANICAL MODULE		
<b>SUB (X13-7770-10)</b>						
C1			CK73GB1H103K	CHIP C 0.010UF	K	
CN1		*	E40-8542-05	FLAT CABLE CONNECTOR		
CN2			E40-5499-05	FLAT CABLE CONNECTOR		
L1 -18		*	L92-0521-05	FERRITE CORE		
<b>DISPLAY (X14-7170-10)</b>						
D1 -5		*	B30-2583-05	LED(GRN 5)		
D11		*	B30-2584-05	LED(RED5)		
D15		*	B30-2584-05	LED(RED5)		
D16		*	B30-2548-05	LED(GRN5,HI BRT)		
C1 -3			CC73GCH1H470J	CHIP C 47PF	J	
C4			CK73GB1H102K	CHIP C 1000PF	K	
C5			CK73GB1C104K	CHIP C 0.10UF	K	
C6			CE04KW0J331M	ELECTRO 330UF	6.3WV	
C7 -9			CK73GB1H103K	CHIP C 0.010UF	K	
C10			CK73FB1A105K	CHIP C 1.0UF	K	
C11			CK73GB1H103K	CHIP C 0.010UF	K	
C12			CE04KW1A101M	ELECTRO 100UF	10WV	
C13			CC73GCH1H150J	CHIP C 15PF	J	
C14			CC73GCH1H330J	CHIP C 33PF	J	
C15 -27			CC73GCH1H101J	CHIP C 100PF	J	
C28			CE04KW1H330M	ELECTRO 33UF	50WV	
C29 -31			CC73GCH1H331J	CHIP C 330PF	J	
C32			CK73GB1C104K	CHIP C 0.10UF	K	
C33			CC73GCH1H100D	CHIP C 10PF	D	
C34			CK73GB1H102K	CHIP C 1000PF	K	
C35			CC73GCH1H100D	CHIP C 10PF	D	
C36			CK73GB1H102K	CHIP C 1000PF	K	
C37			CE04KW1A101M	ELECTRO 100UF	10WV	
C38			CC73GCH1H100D	CHIP C 10PF	D	
C39			CK73GB1H102K	CHIP C 1000PF	K	
C40			CC73GCH1H100D	CHIP C 10PF	D	
C41			CK73GB1H102K	CHIP C 1000PF	K	
C42			CE04KW1A101M	ELECTRO 100UF	10WV	
CN1		*	E40-4950-05	FLAT CABLE CONNECTOR		
E5			J11-0808-05	WIRE CLAMPER		
L1			L40-1011-58	SMALL FIXED INDUCTOR(100UH,K)		
X1			L78-0290-05	RESONATOR (8MHZ)		
R1 -3			RK73GB1J101J	CHIP R 100	J 1/16W	
R4 ,5			RK73GB1J105J	CHIP R 1.0M	J 1/16W	
R11			RK73GB1J222J	CHIP R 2.2K	J 1/16W	
R12			RK73GB1J332J	CHIP R 3.3K	J 1/16W	
R21			RK73GB1J821J	CHIP R 820	J 1/16W	

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DV-4050-B/DVF-R6030-B

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③

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R23 -25			RK73GB1J103J	CHIP R 10K J 1/16W		
R26			RK73GB1J223J	CHIP R 22K J 1/16W		
R27			RK73GB1J221J	CHIP R 220 J 1/16W		
R28			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R29 ,30			RK73GB1J221J	CHIP R 220 J 1/16W		
R31			RK73GB1J223J	CHIP R 22K J 1/16W		
R32			RK73GB1J473J	CHIP R 47K J 1/16W		
R33 -37			RK73GB1J221J	CHIP R 220 J 1/16W		
R39			RK73GB1J473J	CHIP R 47K J 1/16W		
R40			RK73GB1J101J	CHIP R 100 J 1/16W		
R41			RK73GB1J102J	CHIP R 1.0K J 1/16W		
R42			RK73GB1J221J	CHIP R 220 J 1/16W		
R43			RK73GB1J103J	CHIP R 10K J 1/16W		
R44			RK73GB1J221J	CHIP R 220 J 1/16W		
R47 -54			RK73GB1J473J	CHIP R 47K J 1/16W		
R56			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R58 -61			RK73GB1J473J	CHIP R 47K J 1/16W		
R64			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R66			RK73GB1J332J	CHIP R 3.3K J 1/16W		
R67			RK73GB1J472J	CHIP R 4.7K J 1/16W		
R69 ,70			RK73GB1J104J	CHIP R 100K J 1/16W		
R71 -74			RK73GB1J1R0J	CHIP R 1 J 1/16W		
R75 -80			RK73GB1J100J	CHIP R 10 J 1/16W		
R81 -84			RK73GB1J101J	CHIP R 100 J 1/16W		
R86 -95			RK73GB1J271J	CHIP R 270 J 1/16W		
R96			RK73GB1J101J	CHIP R 100 J 1/16W		
W48 -56			R92-0679-05	CHIP R 0 OHM		
W57			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W58 -61			R92-0679-05	CHIP R 0 OHM		
W62			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W63 ,64			R92-0679-05	CHIP R 0 OHM		
W65			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W66 ,67			R92-0679-05	CHIP R 0 OHM		
W68			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W69 ,70			R92-0679-05	CHIP R 0 OHM		
W71 -79			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W80			R92-0679-05	CHIP R 0 OHM		
W81			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
W100			R92-1963-05	JUMPER WIRE (RESISTOR TYPE)		
S1 -13			S70-0031-05	TACT SWITCH		
D6 -10			DAN202U	DIODE		
D12 -14			DA204U	DIODE		
D17			MA111	DIODE		
ED1		*	13-BT-175GNK	FLUORESCENT INDICATOR TUBE		
IC1		*	MN101CP35DMA	MI-COM IC		
IC2			NJU3713G	MOS-IC		
IC3			PST993D-T	ANALOGUE IC		
Q1 ,2			2SA933AS(Q,R)	TRANSISTOR		
Q3			2SC1740S(Q,R)	TRANSISTOR		
A1			W02-2737-05	ELECTRIC CIRCUIT MODULE		
<b>ELECTRIC (X25-6380-10)</b>						
C1			CC45FSL1H070D	CERAMIC 7.0PF D		
C2			CC45FSL1H220J	CERAMIC 22PF J		

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④

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C3			CC45FSL1H050C	CERAMIC 5.0PF C		
C4			CC45FSL1H390J	CERAMIC 39PF J		
C5			CE04KW1E470M	ELECTRO 47UF 25WV		
C6			CC45FSL1H070D	CERAMIC 7.0PF D		
C7			CC45FSL1H220J	CERAMIC 22PF J		
C8			CC45FSL1H050C	CERAMIC 5.0PF C		
C9			CC45FSL1H390J	CERAMIC 39PF J		
C10			CE04KW1E470M	ELECTRO 47UF 25WV		
C11 ,12			CC45FSL1H470J	CERAMIC 47PF J		
C13			CE04KW0J471M	ELECTRO 470UF 6.3WV		
C14 ,15			CE04KW1C331M	ELECTRO 330UF 16WV		
C21			CQ93FMG1H224J	MYLAR 0.22UF J		
C22			CC45FSL1H050C	CERAMIC 5.0PF C		
C24			CE04KW1C101M	ELECTRO 100UF 16WV		
C26			CQ93FMG1H224J	MYLAR 0.22UF J		
C27			CC45FSL1H050C	CERAMIC 5.0PF C		
C29			CE04KW1C101M	ELECTRO 100UF 16WV		
C31			CC45FSL1H070D	CERAMIC 7.0PF D		
C32			CC45FSL1H180J	CERAMIC 18PF J		
C33			CC45FSL1H050C	CERAMIC 5.0PF C		
C34			CC45FSL1H220J	CERAMIC 22PF J		
C35			CE04KW1E470M	ELECTRO 47UF 25WV		
C36 -38			CC45FSL1H470J	CERAMIC 47PF J		
C39			CK45FF1H103Z	CERAMIC 0.010UF Z		
C40			CQ93FMG1H473J	MYLAR 0.047UF J		
C41			CC45FSL1H100D	CERAMIC 10PF D		
C42			CC45FSL1H470J	CERAMIC 47PF J		
C43			CC45FSL1H050C	CERAMIC 5.0PF C		
C44			CC45FSL1H680J	CERAMIC 68PF J		
C45			CQ93FMG1H473J	MYLAR 0.047UF J		
C46			CE04KW1E470M	ELECTRO 47UF 25WV		
C47 ,48			CC45FSL1H470J	CERAMIC 47PF J		
C101,102			CE04KW1V470M	ELECTRO 47UF 35WV		
C103,104			CK45FB1H471K	CERAMIC 470PF K		
C105			CC45FSL1H050C	CERAMIC 5.0PF C		
C106			CK45FB1H391K	CERAMIC 390PF K		
C107			CC45FSL1H060D	CERAMIC 6.0PF D		
C108			CK45FB1H391K	CERAMIC 390PF K		
C110			CQ93FMG1H333J	MYLAR 0.033UF J		
C111			CC45FSL1H270J	CERAMIC 27PF J		
C112			CC45FSL1H220J	CERAMIC 22PF J		
C113			CC45FSL1H120J	CERAMIC 12PF J		
C114			CQ93FMG1H103J	MYLAR 0.010UF J		
C115			CC45FSL1H270J	CERAMIC 27PF J		
C116			CC45FSL1H220J	CERAMIC 22PF J		
C117			CC45FSL1H101J	CERAMIC 100PF J		
C118,119			CC45FSL1H121J	CERAMIC 120PF J		
C120			CC45FSL1H101J	CERAMIC 100PF J		
C121			CF92FV1H104J	MF-C 0.10UF J		
C122			CC45FSL1H100D	CERAMIC 10PF D		
C124			CE04KW1V470M	ELECTRO 47UF 35WV		
C125			CE04KW1E470M	ELECTRO 47UF 25WV		
C127,128			CQ93FMG1H392J	MYLAR 3900PF J		
C129			CQ93FMG1H104J	MYLAR 0.10UF J		
C130			CK45FB1H102K	CERAMIC 1000PF K		

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# DV-4050-B/DVVF-R6030-B

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C131			CC45FSL1H100D	CERAMIC 10PF	D	
C132			CQ93FMG1H122J	MYLAR 1200PF	J	
C133			CE04KW1E470M	ELECTRO 47UF	25WV	
C134			CK45FF1H103Z	CERAMIC 0.010UF	Z	
C135			CC45FSL1H050C	CERAMIC 5.0PF	C	
C136			CE04KW1A221M	ELECTRO 220UF	10WV	
C138			CF92FV1H334J	MF-C 0.33UF	J	
C140			CE04KW1V470M	ELECTRO 47UF	35WV	
C141			CQ93FMG1H392J	MYLAR 3900PF	J	
C144,145			CQ93FMG1H392J	MYLAR 3900PF	J	
C146			CC45FSL1H270J	CERAMIC 27PF	J	
C147,148			CC45FSL1H220J	CERAMIC 22PF	J	
C149			CC45FSL1H270J	CERAMIC 27PF	J	
C153,154			CE04KW1A101M	ELECTRO 100UF	10WV	
C200			CE04KW1H101M	ELECTRO 100UF	50WV	
C201			CE04KW1H470M	ELECTRO 47UF	50WV	
C202			CC45FSL1H101J	CERAMIC 100PF	J	
CN1			E40-4912-05	FLAT CABLE CONNECTOR		
CN2		*	E40-8640-05	PIN ASSY		
CN3		*	E40-4901-05	FLAT CABLE CONNECTOR		
CN4		*	E40-8632-05	PIN ASSY		
CN5		*	E40-8639-05	PIN ASSY		
J1		*	E63-1161-05	PIN JACK		
J2		*	E63-1162-05	PIN JACK		
J3		*	E63-1127-05	PIN JACK		
J4		*	E63-1157-05	PIN JACK		
J5		*	E56-0032-05	CYLINDRICAL RECEPTACLE		
J6		*	E63-1159-05	PIN JACK		
E1 ,2			J11-0808-05	WIRE CLAMPER		
L1			L40-6891-58	SMALL FIXED INDUCTOR(6.8UH,K)		
L2			L40-1501-58	SMALL FIXED INDUCTOR(15UH,K)		
L3			L40-6891-58	SMALL FIXED INDUCTOR(6.8UH,K)		
L4			L40-1501-58	SMALL FIXED INDUCTOR(15UH,K)		
L5			L40-6891-58	SMALL FIXED INDUCTOR(6.8UH,K)		
L6			L40-2201-58	SMALL FIXED INDUCTOR(22UH,K)		
L7			L40-6891-58	SMALL FIXED INDUCTOR(6.8UH,K)		
L8			L40-1501-58	SMALL FIXED INDUCTOR(15UH,K)		
L10			L92-0017-05	FERRITE CORE		
VR1			R12-1616-05	TRIMMING POT.(1K)		
VR2			R12-0607-05	TRIMMING POT.(470)		
VR3 ,4			R12-1616-05	TRIMMING POT.(1K)		
D1 -6			S5688B	DIODE		
D9			HSS104A	DIODE		
D9			1SS133	DIODE		
D10			S5688B	DIODE		
D11			MTZJ6.8(B)	ZENER DIODE		
D11			RD6.8ES(B)	ZENER DIODE		
D12 -17			HSS104A	DIODE		
D12 -17			1SS133	DIODE		
D200			MTZJ4.7(B)	ZENER DIODE		
D200			RD4.7ES(B)	ZENER DIODE		
D201			MTZJ30(B)	ZENER DIODE		

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D201			RD30ES(B)	ZENER DIODE		
IC1 ,2			NJM4580D	ANALOGUE IC		
IC4			TC74HC08AP	MOS-IC		
IC5		*	PQ7RV4	ANALOGUE IC		
IC6		*	PST9121	ANALOGUE IC		
IC7		*	TC74HCT04AP	MOS-IC		
IC8			TA7805S	ANALOGUE IC		
IC9			TA79005S	IC(VOLTAGE REGULATOR/ -5V)		
Q1			2SA933AS(Q,R)	TRANSISTOR		
Q2 ,3			2SC1923(R,O)	TRANSISTOR		
Q4			2SC1740S(Q,R)	TRANSISTOR		
Q5			2SA933AS(Q,R)	TRANSISTOR		
Q6			2SC1923(R,O)	TRANSISTOR		
Q7			2SA933AS(Q,R)	TRANSISTOR		
Q8 ,9			2SC1923(R,O)	TRANSISTOR		
Q10			2SC1740S(Q,R)	TRANSISTOR		
Q11			2SA933AS(Q,R)	TRANSISTOR		
Q12			2SC1923(R,O)	TRANSISTOR		
Q15			2SA933AS(Q,R)	TRANSISTOR		
Q16 ,17			2SC1923(R,O)	TRANSISTOR		
Q18			2SC1740S(Q,R)	TRANSISTOR		
Q19			2SA933AS(Q,R)	TRANSISTOR		
Q20 ,21			2SC1740S(Q,R)	TRANSISTOR		
Q22			2SA933AS(Q,R)	TRANSISTOR		
Q23 ,24			2SC1923(R,O)	TRANSISTOR		
Q25			2SC1740S(Q,R)	TRANSISTOR		
Q26 -28			2SC1923(R,O)	TRANSISTOR		
Q29			2SA933AS(Q,R)	TRANSISTOR		
Q30 -35			2SC1740S(Q,R)	TRANSISTOR		
Q100			DTC124ESA	DIGITAL TRANSISTOR		
Q101,102			DTA124ESA	DIGITAL TRANSISTOR		
Q103,104			DTC124ESA	DIGITAL TRANSISTOR		
Q105-110			2SC2878(B)	TRANSISTOR		
Q111			2SC2785(F,E)	TRANSISTOR		
Q112			2SA933AS(Q,R)	TRANSISTOR		
Q113			DTA124ESA	DIGITAL TRANSISTOR		
Q114			DTC124ESA	DIGITAL TRANSISTOR		
Q115			DTA124ESA	DIGITAL TRANSISTOR		
Q116,117			DTC124ESA	DIGITAL TRANSISTOR		
Q118			2SC1740S(Q,R)	TRANSISTOR		
Q200			2SA1124(Q,R)	TRANSISTOR		
Q201			2SC1740S(Q,R)	TRANSISTOR		
A1			W02-2732-05	OSCILLATING MODULE		

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PARTS LIST

DV-4050-B/DVVF-R6030-B

# DV-4050-B/DVF-R6030-B

## SPECIFICATIONS

### [Audio section]

#### Frequency response

Sampling frequency; 44.1 kHz (CD only) ...4 Hz ~ 20 kHz  
Sampling frequency; 48 kHz .....4 Hz ~ 22 kHz  
Sampling frequency; 96 kHz .....4 Hz ~ 44 kHz  
Signal to noise ratio .....More than 115 dB  
Dynamic range .....More than 100 dB  
Total harmonic distortion .....Less than 0.003 % (1 kHz)

#### Audio output

Line output level / impedance : 2 Vrms / 510  $\Omega$   
Line output (L/R) : 2 systems  
Subwoofer output : 1 system  
Digital output level / impedance  
COAXIAL ..... 0.5 Vp-p / 75  $\Omega$   
OPTICAL ..... -21 dBm ~ -15 dBm (Wave length 660 nm)

### [Video Section]

Video output format .....NTSC  
Composite video output level  
.....1 Vp-p (75  $\Omega$  load, sync. negative)  
S-video output level  
Y-signal .....1 Vp-p (75  $\Omega$  load, sync. negative)  
C-signal .....0.286 Vp-p (75  $\Omega$ )  
Component video output level  
Y-signal .....1 Vp-p (75  $\Omega$ )  
Cb-signal .....0.648 Vp-p (75  $\Omega$ )  
Cr-signal .....0.648 Vp-p (75  $\Omega$ )  
Horizontal resolution .....More than 500 lines  
Video signal to noise ratio .....More than 65 dB

### [Laser]

Wave length .....660 nm - 676 nm  
Laser power class .....Class 2 (IEC)

### [General]

#### Power requirements

For U.S.A. ....AC 120 V, 60 Hz  
For U.S. Military .....AC 110 V - 240 V, 50Hz / 60 Hz  
Power consumption .....35 W

Dimensions .....W : 440 mm (17-5/16")  
H : 127 mm (5")  
D : 410 mm (16-1/8")

Weight (net ) .....6.3 kg (13.9 lb)

### Note:

Specifications are subject to change without notice.  
Mass and dimensions approximate.



# DV-4050-B/DVF-R6030-B

**Note:**

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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