

* Refer to parts list on page 18.

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

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.**

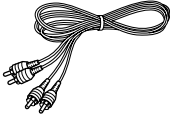
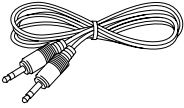
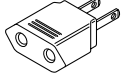
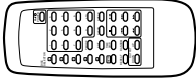
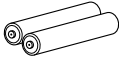


CONTENTS / ACCESSORIES / CAUTIONS

Contents

CONTENTS / ACCESSORIES / CAUTIONS.....	2	SCHEMATIC DIAGRAM	9
CIRCUIT DESCRIPTION	3	EXPLODED VIEW	16
ADJUSTMENT	5	PARTS LIST.....	18
PC BOARD	6	SPECIFICATIONS	Back cover

Accessories

<p>Audio cord (1) (E30-0505-05)</p> 	<p>System control cord (1) (E30-2816-05)</p> 	<p>AC plug adaptor (1) (E03-0115-05)</p> 
<p>Remote control unit (1) (Except for CD-403/DPF-R3030) (A70-1339-05): RC-P0711</p> 	<p>Batteries (R6/AA) (2) (Except for CD-403/DPF-R3030)</p> 	<p>Use to adapt the plug on the power cord to the shape of the wall outlet. (Accessory only for regions where use is necessary.)</p>
<p>Battery cover (A09-0356-08)</p>		

Cautions

Operation to reset

The microcomputer may malfunction (impossibility to operate, erroneous display, etc.) when the connection cords are unplugged while the unit is ON or due to an external factor. In this case, execute the following method to reset the microcomputer and return it to normal condition.

Unplug the power cord from the power socket and plug the power cord into the socket again.

CIRCUIT DESCRIPTION

1. Microprocessor pin description : uPD780206GF059 (X32, IC15)

Pin No.	Pin Name	I/O	Description	ACTIVE	
				H	L
1	VDD	-	Power supply(+5V).		
2	LDC	O	Laser signal output.	LD: ON	
3	STBY-LED	O	STANDBY LED control output.		
4	MON	O	Control terminal of spindle motor(ON/OFF).	ON	
5	SCLK	O	Sense serial data read clock.		
6	SENSE	I	Sense input from CXD2587Q.		
7	CLOCK	O	Serial data clock.		
8	XLAT	O	Latch output to CXD2587Q.		
9	DATA	O	Serial data output to CXD2587Q.		
10	RESET-1	I	Input terminal of system reset .		
11	X2	-	System clock(5MHz).		
12	X1	I	System clock(5MHz).		
13	NC	-	Connected to VSS.		
14	XT2	-	Unused.		
15	GFS	-	Unused.		
16	VDD	-	Power supply(+5V).		
17	SQCK	O	Q data reading clock output.		
18	NC	O	Unused.		
19	SUBQ	I	Q data input.		
20	SYSM	O	System muting control to CXD2587Q.	MUTE ON	
21	CE	O	Chip selector to dot driver.		
22	CLK	I/O	Clock in/out for dot driver.		
23	DATA	O	Data to dot driver.		
24	NC	I/O	Unused.		
25	AVSS	-	Connected to VSS.		
26	RMUTE	O	Analog muting control.		MUTE ON
27	SDA	I/O	EEPROM data input/output.		
28	SCLK	O	EEPROM clock output.		
29	SBUSY	I/O	Serial busy signal output.		
30-32	KEY2-O	I	Key input(key2-0).		
33	TYPE	I	Discrimination of model. 5V: CD-406 0V: CD-403/404		
34	AVDD	-	Power supply(+5V).		
35	AVREF	-	A/D reference power supply.		
36	POWER-K	I	Power key input.		KEY ON
37	S DATA	I/O	Serial data signal input/output.		
38	SCOR	I	Sub code frame sync detection.		
39	REM	I	Remote control signal input.		
40	VSS	-	Connected to VSS.		
41	SCK	O	Clock output to KAN03(IC9).		
42	SGATE	O	Enable output to KAN03(IC9).		
43	SDATA	O	Data output to KAN03(IC9).		
44,45	NC	-	Connected to VSS.		
46	VDD	-	Power supply(+5V).		
47,48	NC	-	Connected to VSS.		
49	OPEN SW	I	Detection input terminal of tray open switch.		TRAY OPEN
50	CLOSE SW	I	Detection input terminal of tray close switch.		TRAY CLOSE
51	UP SW	I	Detection input terminal of mecha. UP switch.		UP
52	DOWN SW	I	Detection input terminal of mecha. DOWN switch.		DOWN
53	SLTSW	I	Detection input terminal of start limit switch.		SW ON
54	CLOSE	O	Tray motor control.	CLOSE	
55	OPEN	O	Tray motor control.	OPEN	
56	RTR	O	Rotary tray motor control.	CW	
57	RTS	O	Rotary tray motor control.		DECELERATION
58	RTL	O	Rotary tray motor control.	CCW	
59	PSENSE	I	Input terminal of mecha.position sensor.		
60	DSENSE	I	Input terminal of mecha disc sensor.		
61	STANDBY	O	ON/STANDBY signal input.		STANDBY
62	RESET-0	O	Reset signal output.		RESET
63-73	NC	-	Connected to VSS.		

CIRCUIT DESCRIPTION

Pin No.	Pin Name	I/O	Description	ACTIVE	
				H	L
74	LED1/SEG15	O	CD-406: FL indication for DISC1. CD-403/404: FL segment control.	LED ON SEG. LIGHT ON	
75	LED2/SEG14	O	CD-406: FL indication for DISC2. CD-403/404: FL segment control.	LED ON SEG. LIGHT ON	
76	LED3/SEG13	O	CD-406: FL indication for DISC3. CD-403/404: FL segment control.	LED ON SEG. LIGHT ON	
77	LED4/SEG12	O	CD-406: FL indication for DISC4. CD-403/404: FL segment control.	LED ON SEG. LIGHT ON	
78	LED5/SEG11	O	CD-406: FL indication for DISC5. CD-403/404: FL segment control.	LED ON SEG. LIGHT ON	
79	VLOAD	-	Power supply(-35V).		
80-90	SEG10-SEG0	O	FL segment control.		
91-100	GRID9-GRID0	O	FL grid control.		

2. Test mode

2-1 How to set up the test mode.

While pressing the REPEAT key, insert the AC plug to the AC wall outlet.

2-2 Contents of the test mode.

KEY	FL INDICATION		DESCRIPTION
	CD-406	CD-403/404	
AC IN with pressing the REPEAT key.	TEST 03 --:--	tEST 03 --:--	The unit is entered to 03 mode if the disc is on the tray, and then the tray opens.
PLAY/PAUSE	05 xx:xx 03 --:--	05 xx:xx 03 --:--	05:F/T SERVO ON → 03:F-SERVO ON and T-SERVO OFF
UP	-	-	FL all light on → *Niagara mode → normal indication *CD-403/404: all light off
FF	FEED OUT	Fed Out	The pick up travels outwards.
FB	FEED IN	Fed In	The pick up travels inwards.
STOP	NG: BLINKING 07 XX:XX 08 XX:XX 09 XX:XX 10 XX:XX Indication value: HEX		Stop the function. Shows the result of self_adjustment. 07 EF/FB 08 TG/FG 09 FE/RF 10 TE/VC Mode changes alternately by the STOP key.
DOWN	-	-	Release the test mode.

2-3 Judgement extent for result of self-adjustment.

ITEMS		JUDGEMENT EXTENT(OK)
EF BALANCE adj.:	EF	NONE
AUTO-GAIN adj.	F- GAIN :FG T-GAIN :TG	0D~7EH 09~7EH
AVERAGE adj.	FE RF TE VC	NONE 80~CDH 3F~C0H 19~E6H

3. Initiallizing

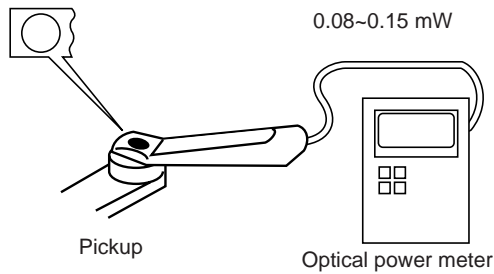
KEY	FL INDICATION		DESCRIPTION
	CD-406	CD-403/404	
While pressing the CLEAR key, insert the AC plug to the AC wall outlet.	INIT OK INIT MECH NG INIT EENG	Inl ○ ○ Inl - ○ Inl ○ -	<ul style="list-style-type: none"> • Traverse moves to down- ward. • Initialized EEPROM data. NORMAL MECHANISM NG EEPROM NG

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	PLAYER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Open the tray (Normal mode), then turn the power off.							
1	LASER POWER	-	Apply the sensor section of optical power meter on the pickup lens.	While pressing the REPEAT key, turn the AC ON. (Test mode) Press the PLAY/PAUSE key, then confirm that the display is "03".	-	On the power from 0.08 to 0.15 mW, when the diffraction grating is correctly aligned with the RF level of 1.0 Vp-p or more.	(a)
1. Load a disc on disc 1 tray. 2. Turn the power off. 3. While pressing the REPEAT. key, turn the power ON to enter the Test mode.							
1	FOCUS ERROR BIAS	Test disc Type 4	Connect an oscilloscope as follows. CH1:	Press the PLAY/PAUSE key, then confirm that the display is "05".	FE BIAS VR1	Optimum eye pattern	
2	LASER CURRENT CHECK	Test disc Type 4	Connect the DC voltmeter to CN3(pin3 and 4) on X32.	Press the PLAY/PAUSE key, then confirm that the display is 03 or 05.	-	0.5±0.2V	

Note:
 Type 4 disc : SONY YEDS-18 Test Disc or equivalent.
 LPF: Around 47 kΩ+ 390 pF or so.
 Step 1~4 are in Test Mode.

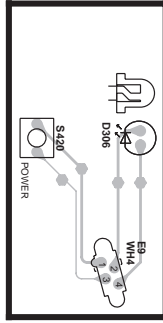
(a) Laser power



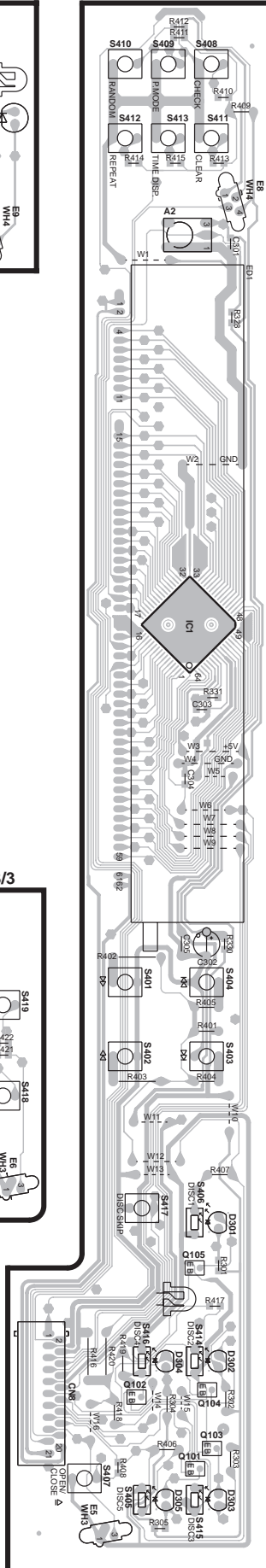
PC BOARD (Component side view)

1
2
3
4
5
6
7

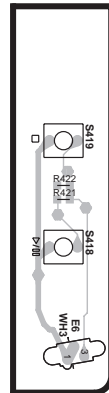
X25 C/3



X25-6310-10 A/3 (J70-1379-01)

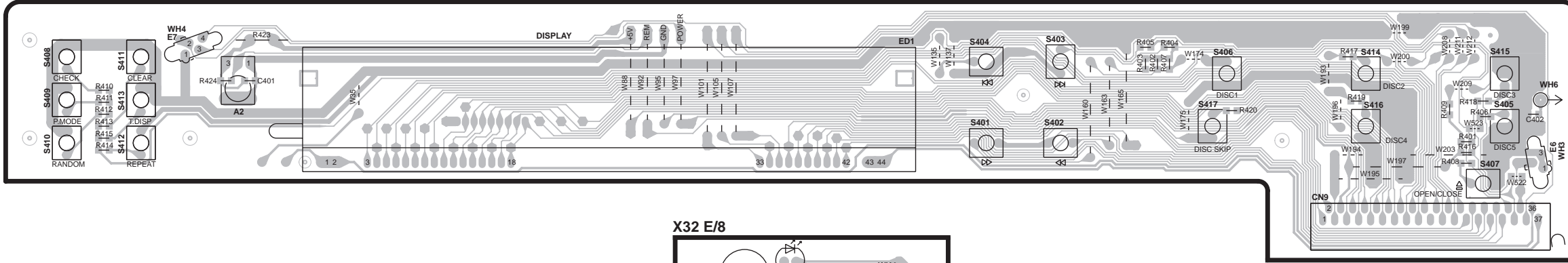


X25 B/3

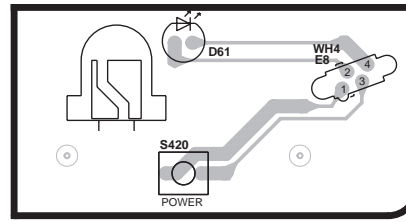


PC BOARD (Component side view)

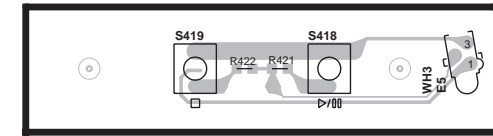
X32 D/8



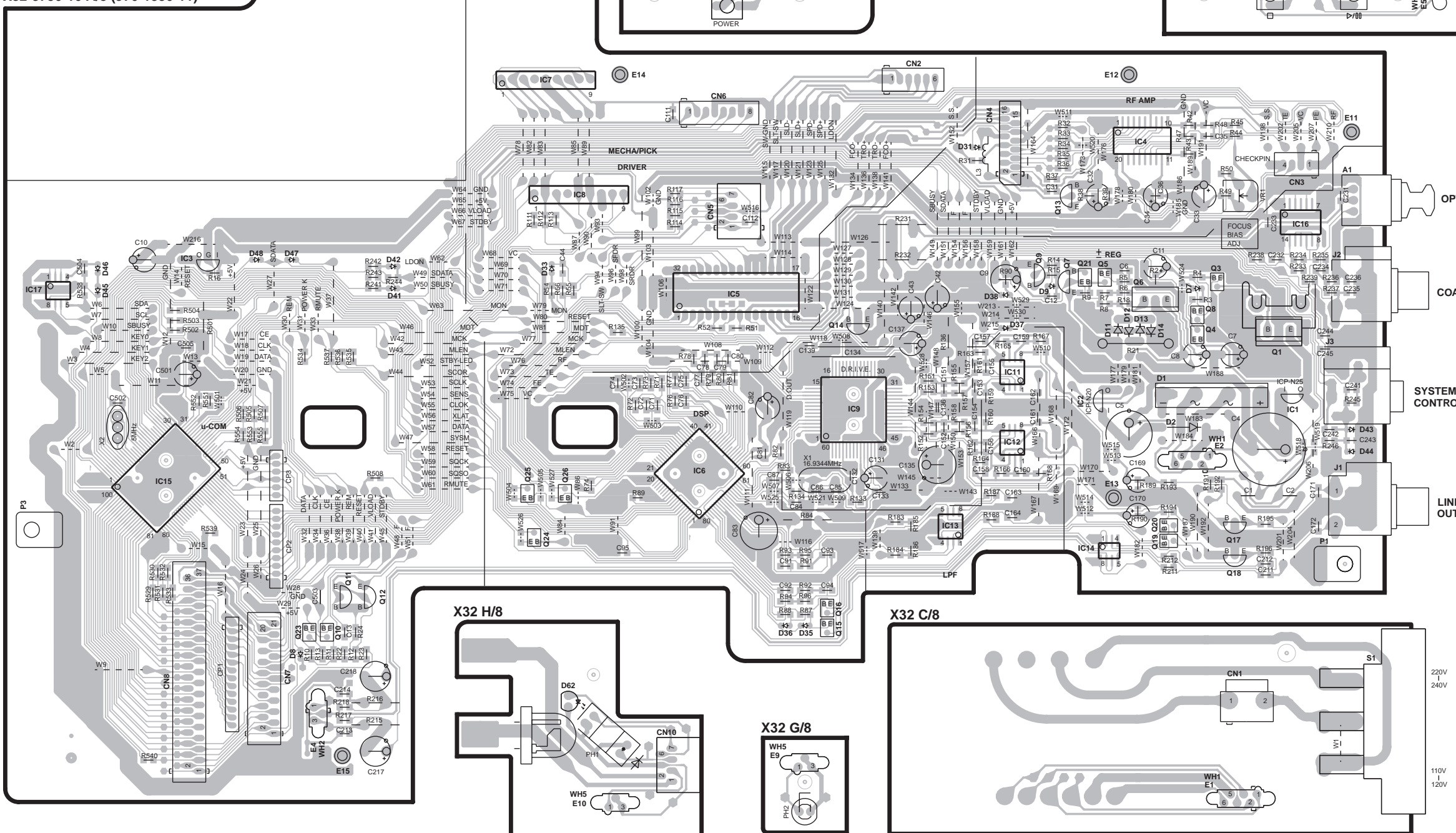
X32 E/8



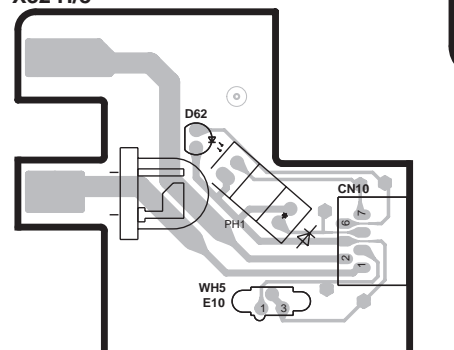
X32 F/8



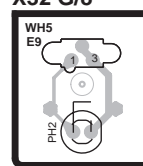
X32-3750-10 A/8 (J70-1350-11)



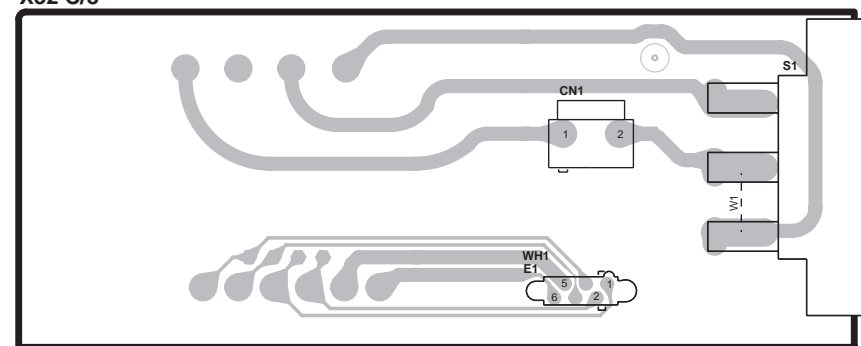
X32 H/8



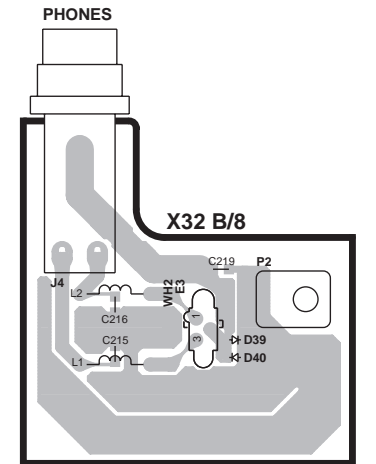
X32 G/8



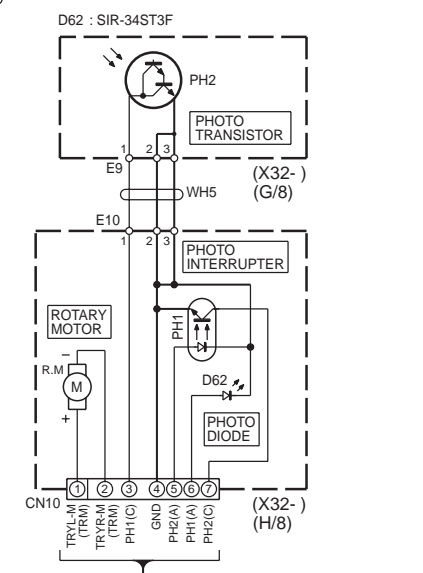
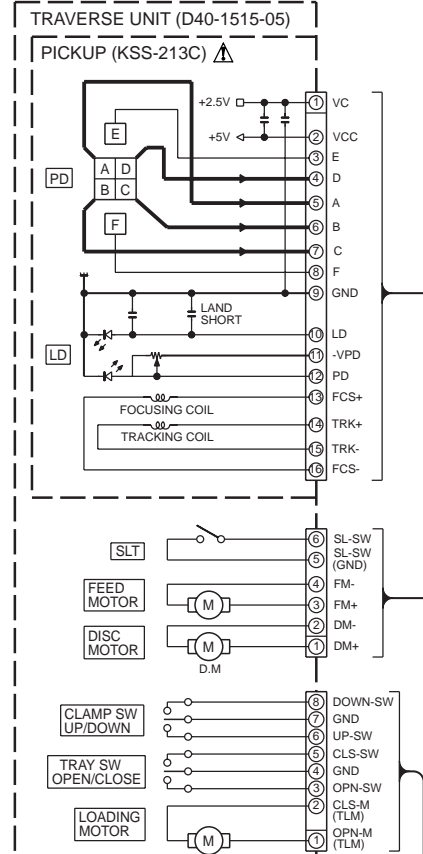
X32 C/8



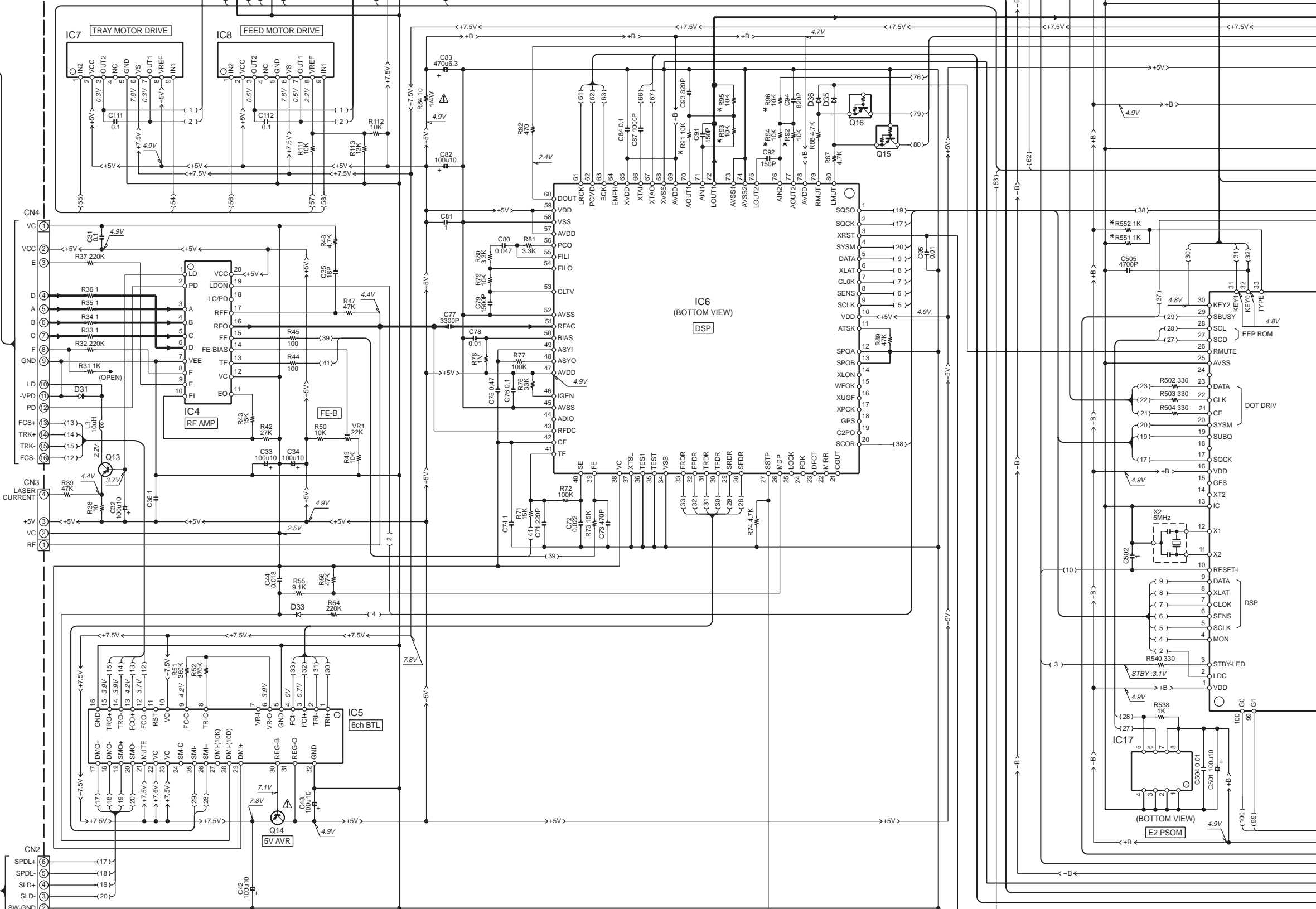
X32 B/8



MECHA. ASS'Y (CDM-25)
(X92-2150-10/X92-2160-21)

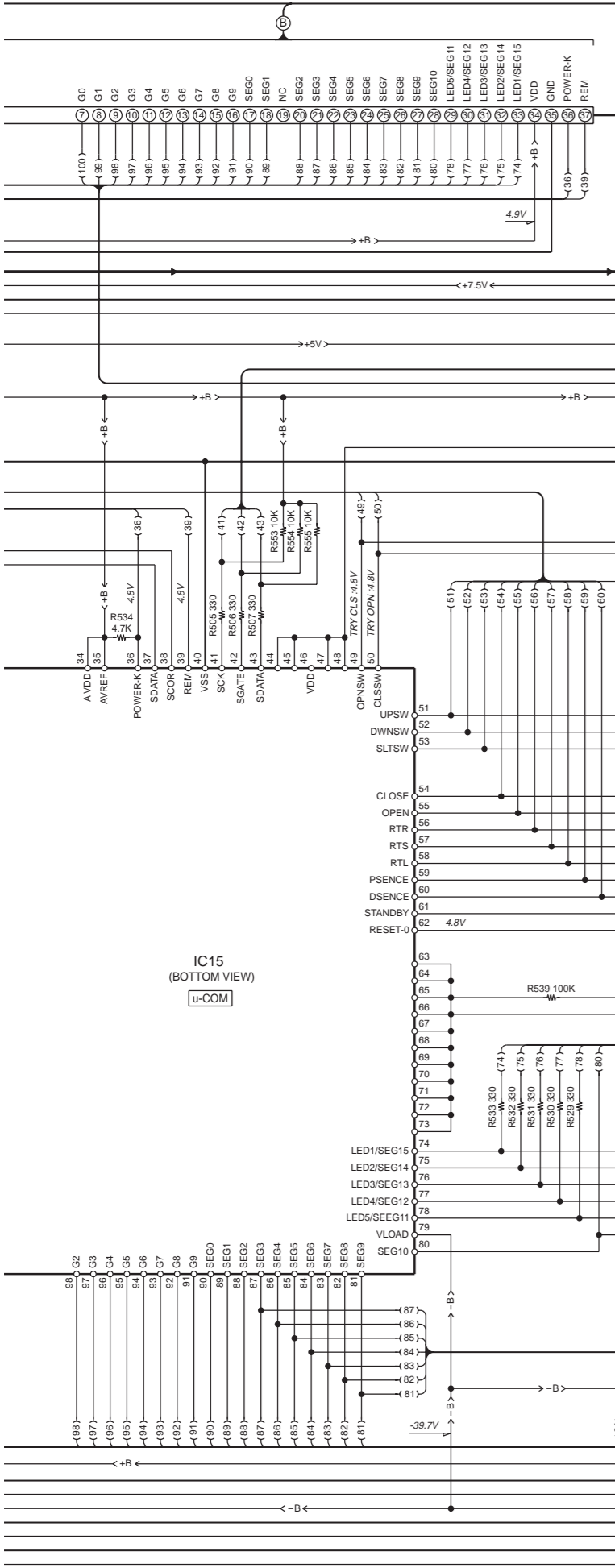


(X32-3750-XX) (A/8)

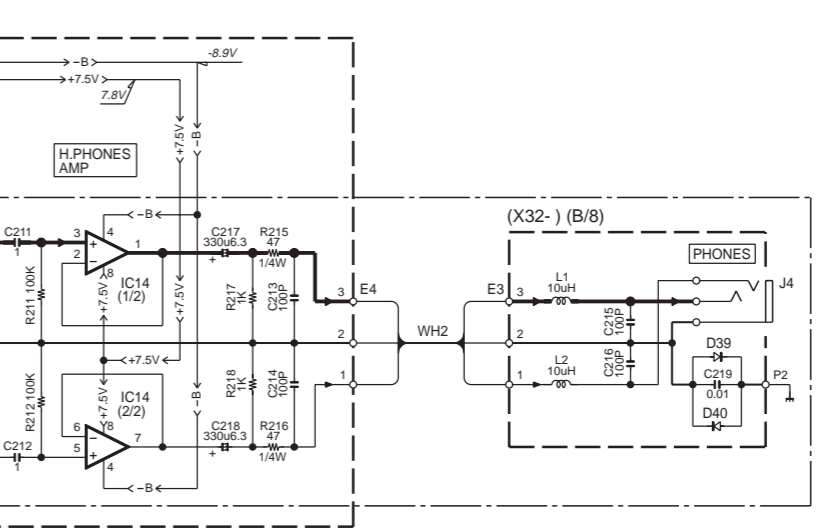
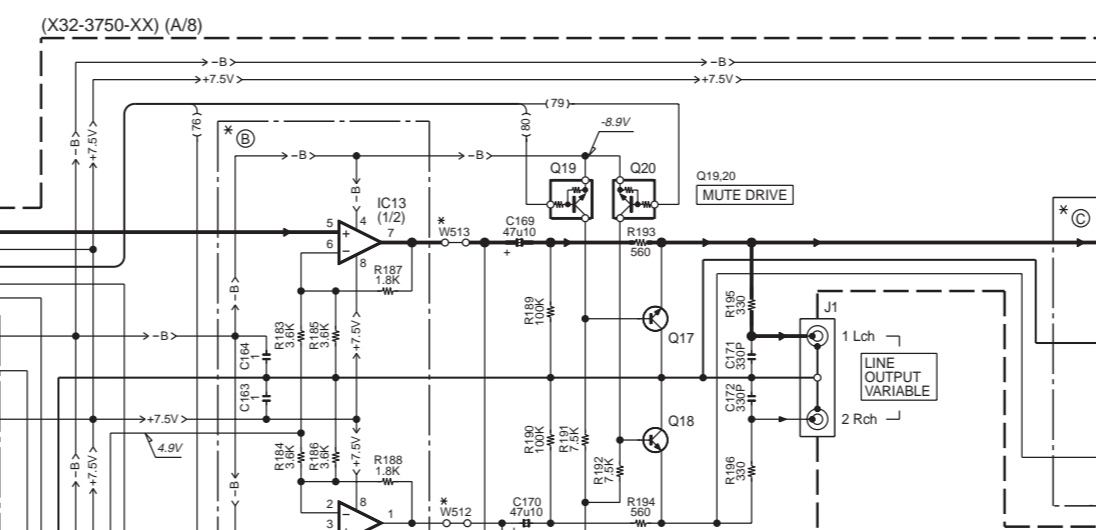
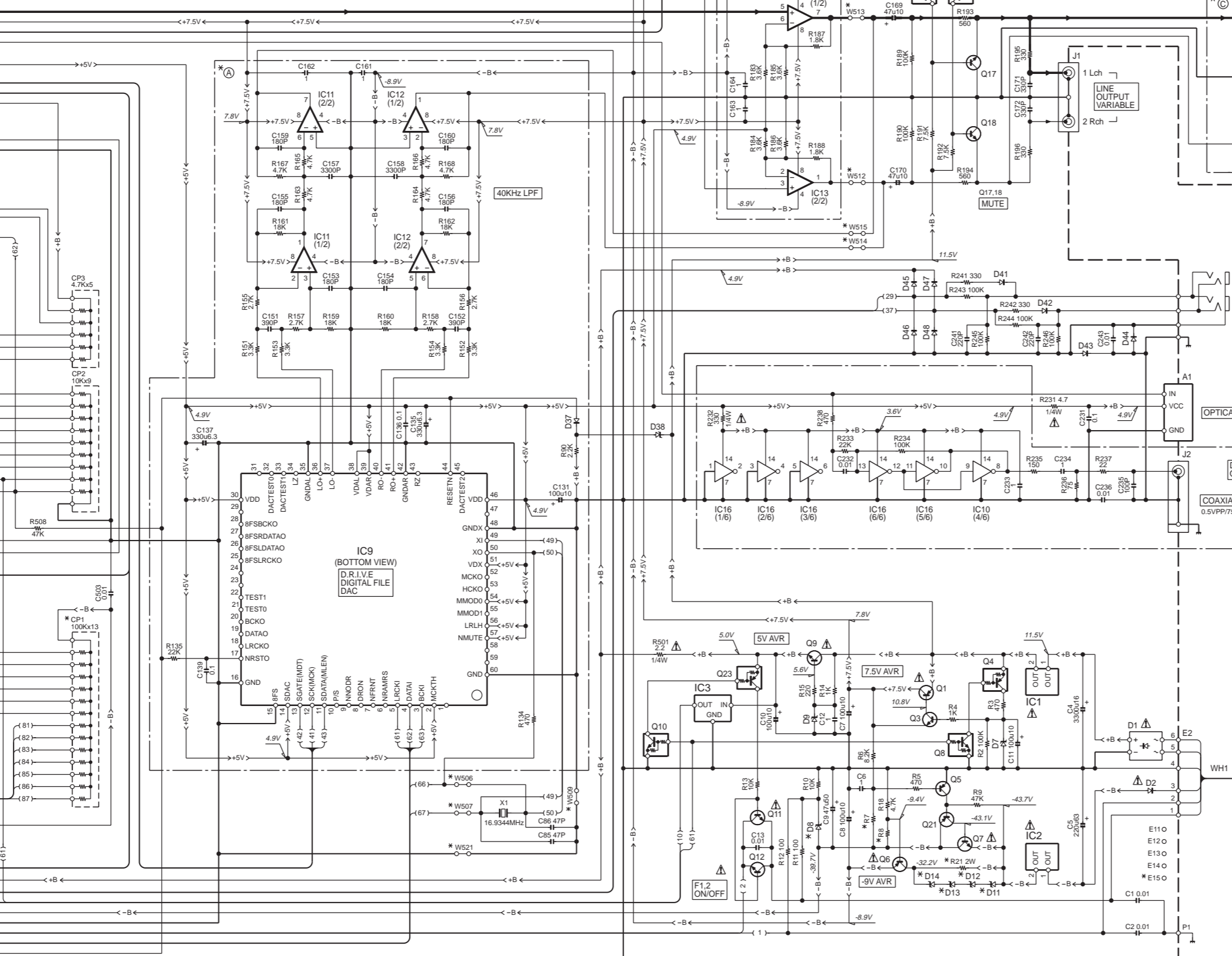


IC6 (BOTTOM VIEW)
[DSP]

(BOTTOM VIEW)
[E2 PSOM]



IC1	: ICP-N25	Q1,6	: 2SB1370 or 2SB1375	D1	: D3SBA20F03
IC2	: ICP-N20	Q3	: 2SC4081(R,S) or 2SC4116(Y,GR)	D2	: S5689B
IC3	: PST993D-T	Q4,15,16,23	: DTA124EUA or UN5112	D7	: UDZ8.2B
IC4	: CXA1821M	Q5,21	: 2SA1576A(R,S) or 2SA1586(Y,GR)	D8	: *
IC5	: BA5979S	Q7,9	: 2SC3940A(R,S)	D9	: UDZ5.6B
IC6	: CXD2587Q*	Q8,10,19,20	: DTC124EUA or UN5212	D11,13	: *
IC7,8	: TA8409S	Q11,12,17,18	: 2SD1450(S,T)	D12,14	: *
IC9	: KAN03	Q13	: 2SA954(L,K)	D31,33,35-37,39,41-48	: MA111
IC11-13	: NJM4565M	Q14	: 2SA1534A	D38	: UDZ4.7B
IC14	: NUM4580ED			A1	: W02-1114-15
IC15	: uPD780206GF059				
IC16	: TC74HC04AF				
IC17	: S-24C01B				



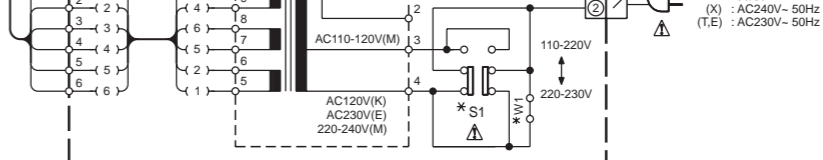
DESTINATION	UNIT No.	A	B	C	E	D8	D11,13	D12,14	R7	R8	R21	R91-96,551	R552	CN7	CN8	W1	W509,514,515	W506,507,512,513,521	S1	CP1	E15
U.S.A.	K	0-10	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO
CANADA	P	0-10	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO

DESTINATION	UNIT No.	A	B	C	E	D8	D11,13	D12,14	R7	R8	R21	R91-96,551	R552	CN7	CN8	W1	W509,514,515	W506,507,512,513,521	S1	CP1	E15
U.S.A.	K	0-10	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO
EUROPE	E	0-10	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO
EUROPE	E	0-10	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO

DESTINATION	UNIT No.	A	B	C	E	D8	D11,13	D12,14	R7	R8	R21	R91-96,551	R552	CN7	CN8	W1	W509,514,515	W506,507,512,513,521	S1	CP1	E15
U.S.A.	K	0-11	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO
EUROPE	E	0-11	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO
EUROPE	E	0-11	NO	YES	NO	UDZ5.6B	HTZJ3.9(B) or RD3.9E(S)(B)	MTZJ4.7(B) or RD4.7E(S)(B)	30K	10K	330	YES	NO	NO	YES	NO	NO	YES	NO	YES	NO

DESTINATION	UNIT No.	A	B	C	E	D8	D11,13	D12,14	R7	R8	R21	R91-96,551	R552	CN7	CN8	W1	W509,514,515	W506,507,512,513,521	S1	CP1	E15
U.S.A.	K	0-12	YES	NO	UDZ15B	HTZJ5.6(B) or RD5.6E(S)(B)	39K	15K	560	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO
U.S.A.	K	0-12	YES	NO	UDZ15B	HTZJ5.6(B) or RD5.6E(S)(B)	39K	15K	560	NO	YES	YES	NO	YES	NO	NO	NO	NO	NO	YES	NO

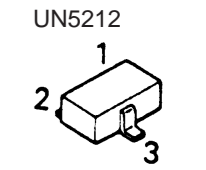
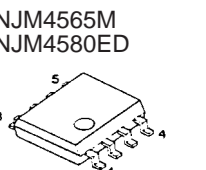
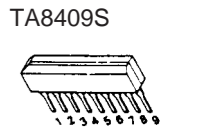
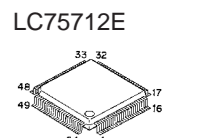
DESTINATION	UNIT No.	A	B	C	E	D8	D11-14	R7	R8	R21	R91-96,551	R552	CN7	CN8	W1	W509,514,515	W506,507,512,513,521	S1	CP1	E15	
U.S.A.	K	0-12	YES	NO	UDZ15B	HTZJ5.6(B) or RD5.6E(S)(B)	39K	15K	560	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES	NO	YES
U.S.A.	K	0-12	YES	NO	UDZ15B	HTZJ5.6(B) or RD5.6E(S)(B)	39K	15K	560	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES	NO	YES

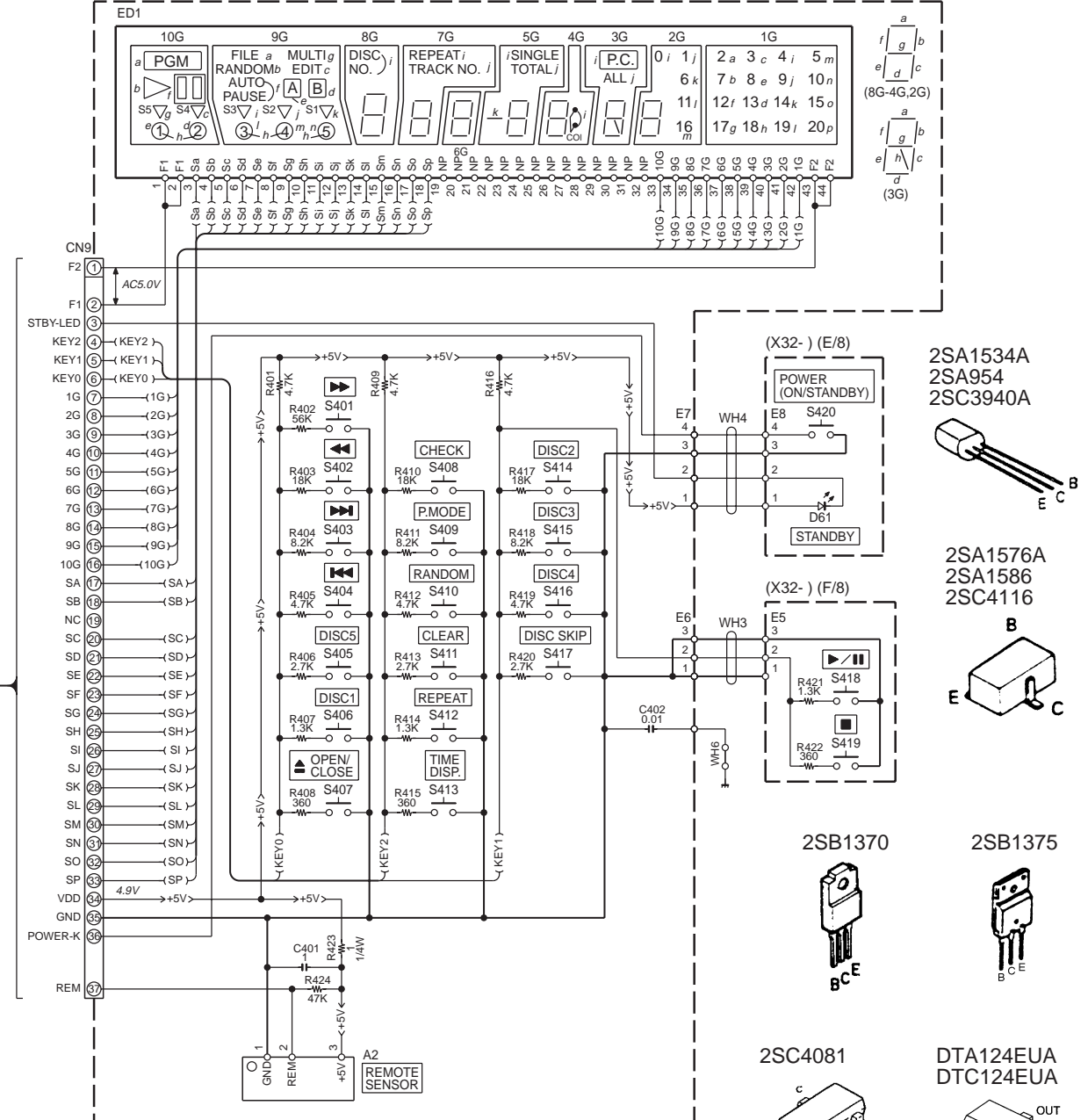
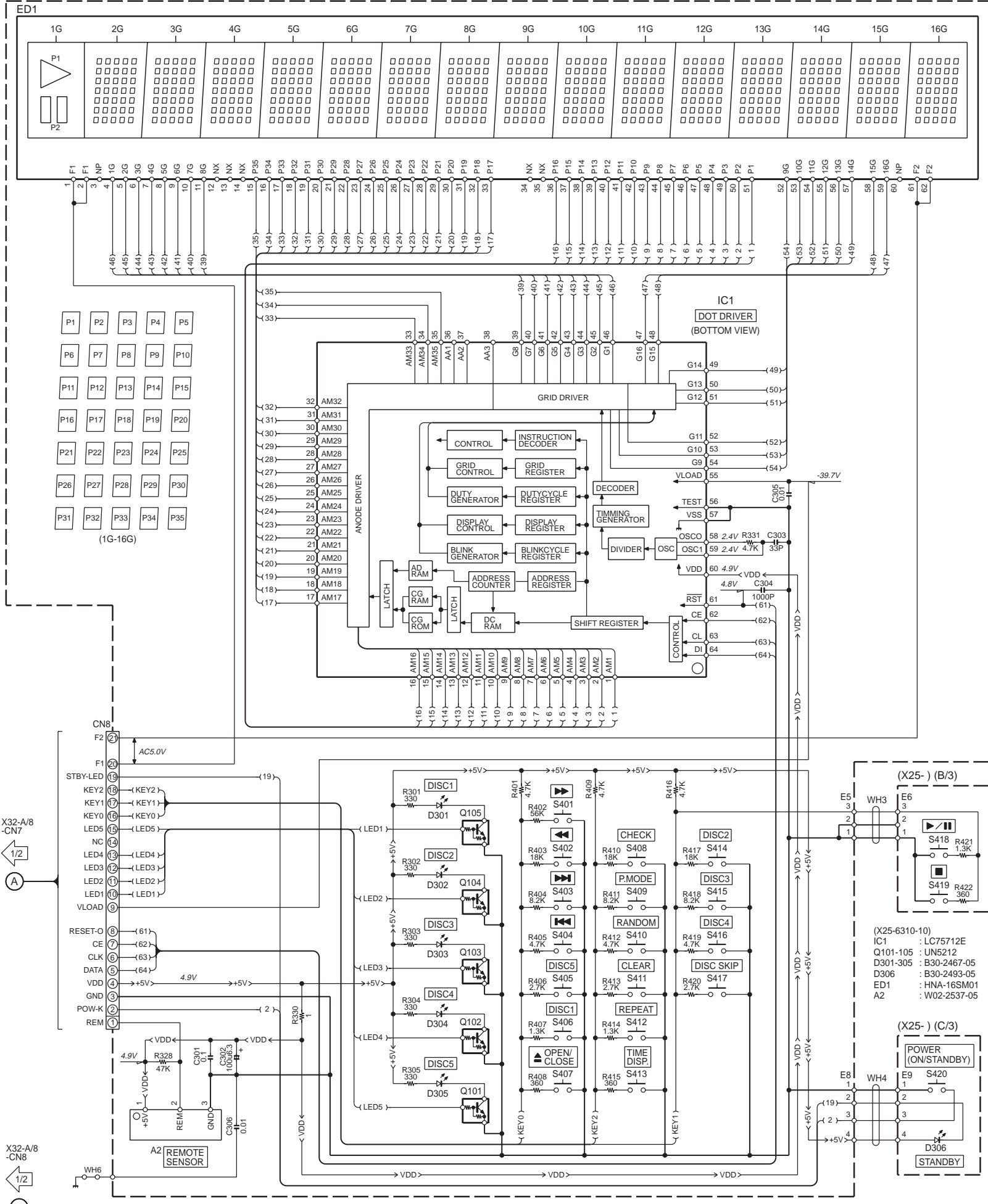


CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030 (E) (1/2)
 DPF-R3030/R3030-S/R4030/R4030-S/R6030 (E) (1/2)

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ 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 with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.

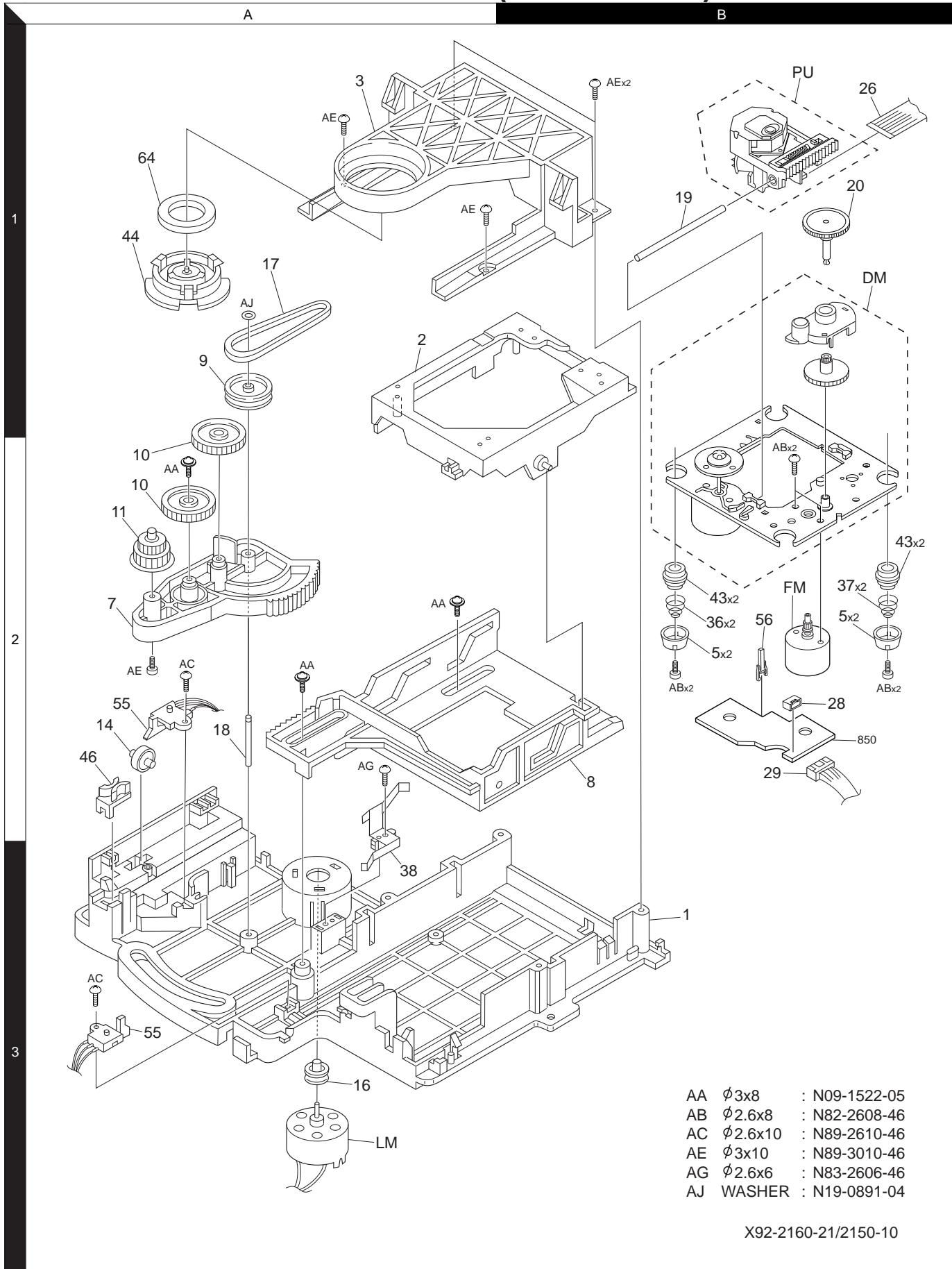




- (X32-375X-XX)**
 D61 : B30-2493-05
 ED1 : 10-BT-131GK
 A2 : W02-2537-05
- CD-403/403-S/404/406(K) (2/2)**
 DPF-R3030/3030-S/4030/4030-S/R6030(M) (2/2)
- CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates 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 with no signal input. The measurement value may vary depending on the measuring instruments used or on the product.
- 2SA1534A
 - 2SA954
 - 2SC3940A
 - 2SA1576A
 - 2SA1586
 - 2SC4116
 - 2SB1370
 - 2SB1375
 - 2SC4081
 - DTA124EUA
 - DTC124EUA
 - TC74HCU04AF
 - KAN03
 - ICP-N20
 - ICP-N25
 - BA5979S

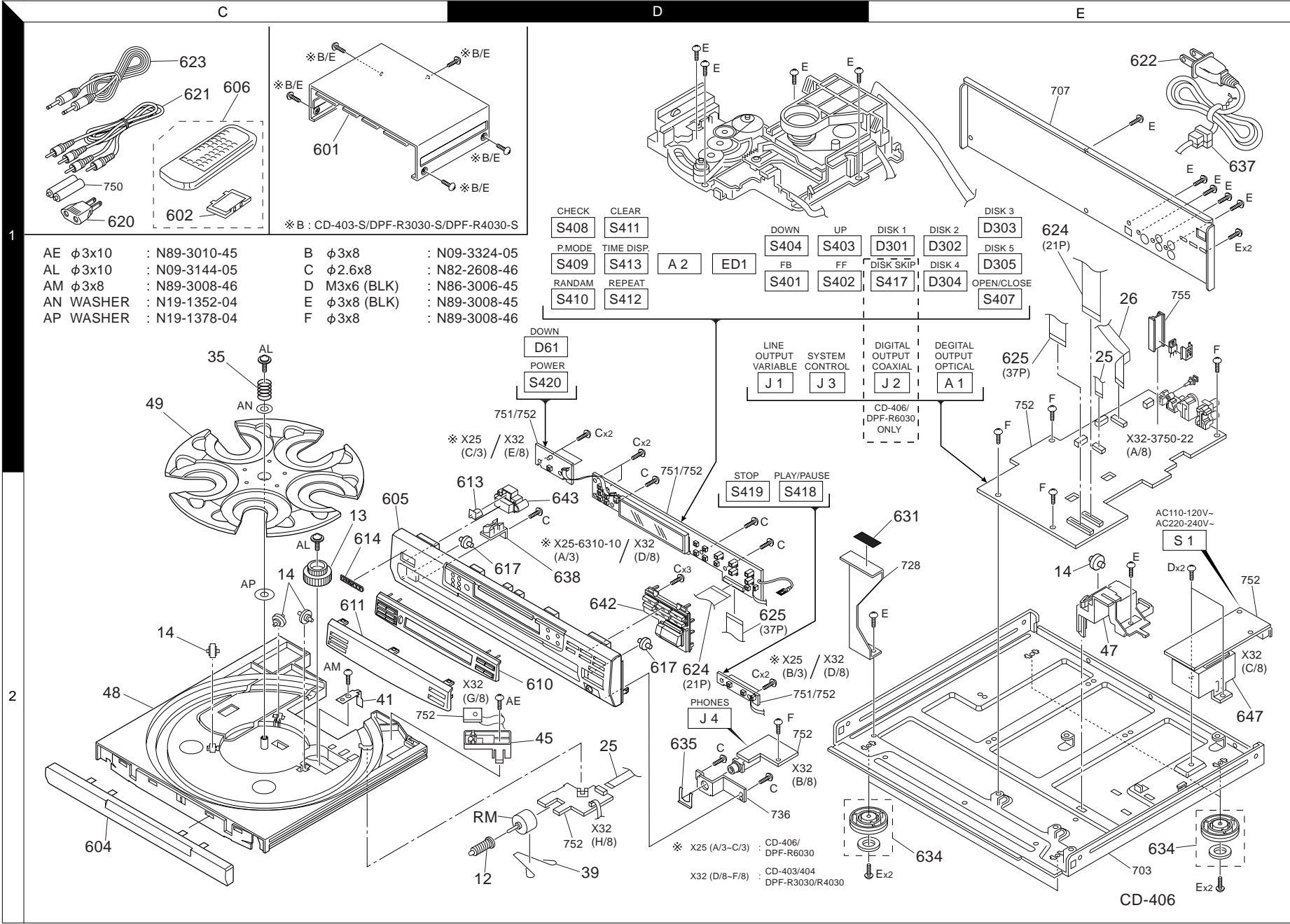
CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030

EXPLODED VIEW (MECHANISM)



CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030 EXPLODED VIEW (UNIT)

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.

7

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
J3 J4			E11-0347-05 E11-0127-05	MINIATURE PHONE JACK(2P) PHONE JACK (3P)		
- E11 -14 E15			J19-3647-14 J11-0808-05 J11-0808-05	HOLDER WIRE CLAMPER WIRE CLAMPER		
L1 ,2 L3 X1 X2			L40-1001-82 L40-1001-82 L77-2190-05 L78-0284-05	SMALL FIXED INDUCTOR(10UH) SMALL FIXED INDUCTOR(10UH) CRYSTAL RESONATOR(16.9344MHZ) RESONATOR (5MHZ)		
CP1 CP2 CP3 R2 R3			R90-0483-05 R90-0895-05 R90-0892-05 RK73FB2A104J RK73FB2A471J	MULTI-COMP 100KX13 J 1/6W MULTI-COMP 10KX9 MULTI-COMP 4.7KX5 CHIP R 100K J 1/10W CHIP R 470 J 1/10W		34
R4 R5 R6 R7 R7			RK73FB2A102J RK73FB2A471J RK73FB2A822J RK73FB2A303J RK73FB2A393J	CHIP R 1.0K J 1/10W CHIP R 470 J 1/10W CHIP R 8.2K J 1/10W CHIP R 30K J 1/10W CHIP R 39K J 1/10W		34 6
R8 R8 R9 R10 R11 ,12			RK73FB2A103J RK73FB2A153J RK73FB2A473J RK73FB2A103J RK73FB2A101J	CHIP R 10K J 1/10W CHIP R 15K J 1/10W CHIP R 47K J 1/10W CHIP R 10K J 1/10W CHIP R 100 J 1/10W		34 6
R13 R14 R15 R18 R21			RK73FB2A103J RK73FB2A102J RK73FB2A221J RK73FB2A472J RS14KB3D331J	CHIP R 10K J 1/10W CHIP R 1.0K J 1/10W CHIP R 220 J 1/10W CHIP R 4.7K J 1/10W FL-PROOF RS 330 J 2W		34
R21 R31 R32 R33 -36 R37			RS14KB3D561J RK73FB2A102J RK73FB2A224J RK73FB2A1R0J RK73FB2A224J	FL-PROOF RS 560 J 2W CHIP R 1.0K J 1/10W CHIP R 220K J 1/10W CHIP R 1.0 J 1/10W CHIP R 220K J 1/10W		6
R38 R39 R42 R43 R44 ,45			RK73FB2A100J RK73FB2A473J RK73FB2A273J RK73FB2A153J RK73FB2A101J	CHIP R 10 J 1/10W CHIP R 47K J 1/10W CHIP R 27K J 1/10W CHIP R 15K J 1/10W CHIP R 100 J 1/10W		
R47 R48 R49 ,50 R51 R52			RK73FB2A473J RK73FB2A472J RK73FB2A103J RK73FB2A364J RK73FB2A474J	CHIP R 47K J 1/10W CHIP R 4.7K J 1/10W CHIP R 10K J 1/10W CHIP R 360K J 1/10W CHIP R 470K J 1/10W		
R54 R55 R56 R71 R72			RK73FB2A224J RK73FB2A912J RK73FB2A473J RK73FB2A153J RK73FB2A104J	CHIP R 220K J 1/10W CHIP R 9.1K J 1/10W CHIP R 47K J 1/10W CHIP R 15K J 1/10W CHIP R 100K J 1/10W		
R73 R74 R76 R77 R78			RK73FB2A153J RK73FB2A472J RK73FB2A333J RK73FB2A104J RK73FB2A105J	CHIP R 15K J 1/10W CHIP R 4.7K J 1/10W CHIP R 33K J 1/10W CHIP R 100K J 1/10W CHIP R 1.0M J 1/10W		

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 .

3: CD-403/403-S/DPF-R3030/R3030-S 4: CD-404/DPF-R4030/R4030-S 6: CD-406/DPF-R6030

* 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.

8

Ref. No	Address	New Parts	Parts No.	Description	Destination	Remarks
R79 R80 ,81 R82 R84 R87 ,88			RK73FB2A103J RK73FB2A332J RK73FB2A471J RD14NB2E100J RK73FB2A472J	CHIP R 10K J 1/10W CHIP R 3.3K J 1/10W CHIP R 470 J 1/10W RD 10 J 1/4W CHIP R 4.7K J 1/10W		
R89 R90 R91 -96 R111,112 R113			RK73FB2A473J RK73FB2A222J RK73FB2A103J RK73FB2A103J RK73FB2A133J	CHIP R 47K J 1/10W CHIP R 2.2K J 1/10W CHIP R 10K J 1/10W CHIP R 10K J 1/10W CHIP R 13K J 1/10W		34
R114 R115,116 R117 R134 R135			RK73FB2A332J RK73FB2A181J RK73FB2A332J RK73FB2A471J RK73FB2A223J	CHIP R 3.3K J 1/10W CHIP R 180 J 1/10W CHIP R 3.3K J 1/10W CHIP R 470 J 1/10W CHIP R 22K J 1/10W		6 6
R151-154 R155-158 R159-162 R163-168 R183-186			RK73FB2A332J RK73FB2A272J RK73FB2A183J RK73FB2A472J RK73FB2A362J	CHIP R 3.3K J 1/10W CHIP R 2.7K J 1/10W CHIP R 18K J 1/10W CHIP R 4.7K J 1/10W CHIP R 3.6K J 1/10W		6 6 6 6 34
R187,188 R189,190 R191,192 R193,194 R195,196			RK73FB2A182J RK73FB2A104J RK73FB2A752J RK73FB2A561J RK73FB2A331J	CHIP R 1.8K J 1/10W CHIP R 100K J 1/10W CHIP R 7.5K J 1/10W CHIP R 560 J 1/10W CHIP R 330 J 1/10W		34
R211,212 R215,216 R217,218 R231 R232			RK73FB2A104J RD14NB2E470J RK73FB2A102J RD14NB2E4R7J RD14NB2E331J	CHIP R 100K J 1/10W RD 47 J 1/4W CHIP R 1.0K J 1/10W RD 4.7 J 1/4W RD 330 J 1/4W		46 46 46 6
R233 R234 R235 R236 R237			RK73FB2A223J RK73FB2A104J RK73FB2A151J RK73FB2A750J RK73FB2A220J	CHIP R 22K J 1/10W CHIP R 100K J 1/10W CHIP R 150 J 1/10W CHIP R 75 J 1/10W CHIP R 22 J 1/10W		6 6 6 6 6
R238 R241,242 R243-246 R401 R402			RK73FB2A471J RK73FB2A331J RK73FB2A104J RK73FB2A472J RK73FB2A563J	CHIP R 470 J 1/10W CHIP R 330 J 1/10W CHIP R 100K J 1/10W CHIP R 4.7K J 1/10W CHIP R 56K J 1/10W		6 34 34
R403 R404 R405 R406 R407			RK73FB2A183J RK73FB2A822J RK73FB2A472J RK73FB2A272J RK73FB2A132J	CHIP R 18K J 1/10W CHIP R 8.2K J 1/10W CHIP R 4.7K J 1/10W CHIP R 2.7K J 1/10W CHIP R 1.3K J 1/10W		34 34 34 34 34
R408 R409 R410 R411 R412			RK73FB2A361J RK73FB2A472J RK73FB2A183J RK73FB2A822J RK73FB2A472J	CHIP R 360 J 1/10W CHIP R 4.7K J 1/10W CHIP R 18K J 1/10W CHIP R 8.2K J 1/10W CHIP R 4.7K J 1/10W		34 34 34 34 34
R413 R414 R415 R416 R417			RK73FB2A272J RK73FB2A132J RK73FB2A361J RK73FB2A472J RK73FB2A183J	CHIP R 2.7K J 1/10W CHIP R 1.3K J 1/10W CHIP R 360 J 1/10W CHIP R 4.7K J 1/10W CHIP R 18K J 1/10W		34 34 34 34 34

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 .

3: CD-403/403-S/DPF-R3030/R3030-S 4: CD-404/DPF-R4030/R4030-S 6: CD-406/DPF-R6030

CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030
PARTS LIST

* 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.

9

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
R418			RK73FB2A822J	CHIP R 8.2K J 1/10W		34
R419			RK73FB2A472J	CHIP R 4.7K J 1/10W		34
R420			RK73FB2A272J	CHIP R 2.7K J 1/10W		34
R421			RK73FB2A132J	CHIP R 1.3K J 1/10W		34
R422			RK73FB2A361J	CHIP R 360 J 1/10W		34
R423			RD14NB2E1R0J	RD 1.0 J 1/4W		34
R424			RK73FB2A473J	CHIP R 47K J 1/10W		34
R501			RD14NB2E2R2J	RD 2.2 J 1/4W		
R502-507			RK73FB2A331J	CHIP R 330 J 1/10W		
R508			RK73FB2A473J	CHIP R 47K J 1/10W		
R529-533			RK73FB2A331J	CHIP R 330 J 1/10W		
R534			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R538			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R539			RK73FB2A104J	CHIP R 100K J 1/10W		
R540			RK73FB2A331J	CHIP R 330 J 1/10W		
R551			RK73FB2A102J	CHIP R 1.0K J 1/10W		34
R552			RK73FB2A102J	CHIP R 1.0K J 1/10W		6
R553-555			RK73FB2A103J	CHIP R 10K J 1/10W		
VR1			R32-0038-05	SEMI FIXED VARIABLE RESISTOR		
W501-505			R92-0670-05	CHIP R 0 OHM		
W508-511			R92-0670-05	CHIP R 0 OHM		
W514-520			R92-0670-05	CHIP R 0 OHM		
W522-530			R92-0670-05	CHIP R 0 OHM		
S1			S31-2131-05	SLIDE SWITCH (POWER TYPE)	Y1M1	
S401-420			S70-0031-05	TACT SWITCH		34
PH1			T95-0145-05	OPTO ISOLATOR		
D1			D3SBA20F03	DIODE		
D2			S5688B	DIODE		
D7			UDZ8.2B	ZENER DIODE		6
D8			UDZ15B	ZENER DIODE		34
D8			UDZ5.6B	ZENER DIODE		
D9			UDZ5.6B	ZENER DIODE		
D11			MTZJ3.9(B)	ZENER DIODE		34
D11			RD3.9ES(B)	ZENER DIODE		34
D11 -14			MTZJ5.6(B)	ZENER DIODE		6
D11 -14			RD5.6ES(B)	ZENER DIODE		6
D12			MTZJ4.7(B)	ZENER DIODE		34
D12			RD4.7ES(B)	ZENER DIODE		34
D13			MTZJ3.9(B)	ZENER DIODE		34
D13			RD3.9ES(B)	ZENER DIODE		34
D14			MTZJ4.7(B)	ZENER DIODE		34
D14			RD4.7ES(B)	ZENER DIODE		34
D31			MA111	DIODE		
D33			MA111	DIODE		
D35 -37			MA111	DIODE		
D38			UDZ4.7B	ZENER DIODE		
D39 ,40			MA111	DIODE		34
D41 -48			MA111	DIODE		
D62		*	SIR-34ST3F	INFRARED LED		
ED1			10-BT-131GK	FLUORESCENT INDICATOR TUBE		34
IC1			ICP-N25	ANALOGUE IC		
IC2			ICP-N20	ANALOGUE IC		
IC3			PST993D-T	ANALOGUE IC		

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 .

3: CD-403/403-S/DPF-R3030/R3030-S 4: CD-404/DPF-R4030/R4030-S 6: CD-406/DPF-R6030

* 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.

10

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
IC4			CXA1821M	ANALOGUE IC		
IC5			BA5979S	ANALOGUE IC		
IC6			CXD2587Q*	MOS-IC		
IC7 ,8			TA8409S	MOS-IC		
IC9			KAN03	CUSTOM IC		6
IC11,12			NJM4565M	ANALOGUE IC		6
IC13			NJM4565M	ANALOGUE IC		34
IC14			NJM4580ED	ANALOGUE IC		46
IC15		*	UPD780206GF059	MI-COM IC		
IC16			TC74HCU04AF	IC(HEX INVERTER SMD)		6
IC17		*	S-24C01BFJ	MEMORY IC		
PH2			RPT-38PT3F	PHOTO TRANSISTOR		
Q1			2SB1370	TRANSISTOR		
Q1			2SB1375	TRANSISTOR		
Q3			2SC4081(R,S)	TRANSISTOR		
Q3			2SC4116(Y,GR)	TRANSISTOR		
Q4			DTA124EUA	DIGITAL TRANSISTOR		
Q4			UN5112	DIGITAL TRANSISTOR		
Q5			2SA1576A(R,S)	TRANSISTOR		
Q5			2SA1586(Y,GR)	TRANSISTOR		
Q6			2SB1370	TRANSISTOR		
Q6			2SB1375	TRANSISTOR		
Q7			2SC3940A(R,S)	TRANSISTOR		
Q8			DTC124EUA	DIGITAL TRANSISTOR		
Q8			UN5212	DIGITAL TRANSISTOR		
Q9			2SC3940A(R,S)	TRANSISTOR		
Q10			DTC124EUA	DIGITAL TRANSISTOR		
Q10			UN5212	DIGITAL TRANSISTOR		
Q11 ,12			2SD1450(S,T)	TRANSISTOR		
Q13			2SA954(L,K)	TRANSISTOR		
Q14			2SA1534A	TRANSISTOR		
Q15 ,16			DTA124EUA	DIGITAL TRANSISTOR		
Q15 ,16			UN5112	DIGITAL TRANSISTOR		
Q17 ,18			2SD1450(S,T)	TRANSISTOR		
Q19 ,20			DTC124EUA	DIGITAL TRANSISTOR		
Q19 ,20			UN5212	DIGITAL TRANSISTOR		
Q21			2SA1576A(R,S)	TRANSISTOR		
Q21			2SA1586(Y,GR)	TRANSISTOR		
Q23			DTA124EUA	DIGITAL TRANSISTOR		
Q23			UN5112	DIGITAL TRANSISTOR		
A1			W02-1114-15	OSCILLATING MODULE		
A2			W02-2537-05	ELECTRIC CIRCUIT MODULE		34
MECHANISM ASSY (X92-2150-10/X92-2160-21)						
1	3B		A10-3360-01	CHASSIS		
2	1A		A11-1126-02	SUB CHASSIS		
3	1A		A11-1127-12	SUB CHASSIS		
5	2B		B09-0255-04	CAP		
7	2A		D10-3740-13	ARM		
8	2B		D10-3741-02	SLIDER		
9	1A		D13-1829-04	GEAR		
10	2A		D13-1830-14	GEAR		
11	2A		D13-1831-04	GEAR		
12	2D		D13-1833-04	WORM		
13	2C		D13-1832-04	GEAR		

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 .

3: CD-403/403-S/DPF-R3030/R3030-S 4: CD-404/DPF-R4030/R4030-S 6: CD-406/DPF-R6030

* 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.



Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
14	2A,2C		D14-0389-04	ROLLER		
16	3A		D15-0407-04	MOTOR PULLEY		
17	1A		D16-0355-03	BELT		
18	2A		D21-1763-14	SHAFT		
19	1B		D10-3606-08	RDD (TRAVERSE)		
20	1B		D13-1720-08	GEAR (TRAVERSE)		
25	1E,2D		E35-0747-25	FLAT CABLE (16P)		
26	1B,1E	*	E35-2538-05	FLAT CABLE		
28	2B		E40-3264-05	PIN ASSY (TRAVERSE)		
35	1C		G01-4130-04	COMPRESSION SPRING		
36	2B		G01-3753-04	COMPRESSION SPRING		
37	2B		G01-4124-04	COMPRESSION SPRING		
38	3A		G02-1049-04	FLAT SPRING		
39	2D		G09-0634-04	WIRE SPRING		
41	2C		G02-1631-04	FLAT SPRING		
43	2B	*	J02-1462-04	INSULATOR		
44	1A		J11-0835-04	CLAMPER ASSY		
45	2D		J19-5818-04	HOLDER		
46	2A		J90-0851-04	GUIDE		
47	2E		J90-0852-02	GUIDE		
48	2C		J99-0801-01	TRAY		
49	1C		J99-0596-01	TRAY		
55	2A		S33-2061-05	LEVER SWITCH		
56	2B		S74-0038-08	LEAF SWITCH (TRAVERSE)		
64	1A		T99-0544-15	MAGNET		
-			D40-1515-05	MECHA ASSY (TRAVERSE)		
-			G10-0489-04	NON-WOVEN FABRIC		
AA			N09-1522-05	SET SCREW (3X8)		
AB			N82-2608-46	BINDING HEAD TAPTITE SCREW		
AC			N89-2610-46	BINDING HEAD TAPTITE SCREW		
AE			N89-3010-46	BINDING HEAD TAPTITE SCREW		
AG			N89-3008-46	BINDING HEAD TAPTITE SCREW		
AJ			N19-0891-04	FLAT WASHER		
AL			N09-3144-05	SET SCREW (3X10,+,10)		
AN			N19-1352-04	FLAT WASHER		
AP			N19-1378-04	FLAT WASHER		
DM	1B		A11-1082-18	DISC MOTOR ASSY (TRAVERSE)		
FM	2B		T42-0817-08	FEED MOTOR (TRAVERSE)		
LM	3A		T42-0524-05	DC MOTOR		
PU	1B		T25-0061-08	PICKUP (KSS-213C)(TRAVERSE)		
RM	2D		T42-0670-15	DC MOTOR		

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 Indicates safety critical components.

3: CD-403/403-S/DPF-R3030/R3030-S 4: CD-404/DPF-R4030/R4030-S 6: CD-406/DPF-R6030

HOW TO READ THE PARTS LIST

ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS

MODEL	ABB.	Australia	Canada	China	England	Europe	Germany	Korea	Malaysia
CD-403	3	-	-	P1	-	-	-	-	-
CD-403-S	3	-	-	-	-	-	-	-	-
DPF-R3030	3	-	-	-	-	E1	-	-	-
DPF-R3030-S	3	X1	-	-	-	E2	-	-	-
CD-404	4	-	-	P1	-	-	-	-	-
DPF-R4030	4	-	-	-	T1	E1	-	-	-
DPF-R4030-S	4	X1	-	-	-	-	-	-	-
CD-406	6	-	-	-	-	-	-	-	-
DPF-R6030	6	-	-	-	T1	E1	-	-	-
MODEL	ABB.	Mexico	PX/AAFES	Russia	Scandinavia	Shanghai	USA	Other area	
CD-403	3	-	-	-	-	-	K	-	-
CD-403-S	3	-	-	-	-	-	K1	-	-
DPF-R3030	3	-	Y1	-	-	-	-	-	-
DPF-R3030-S	3	-	-	-	-	-	-	M1	-
CD-404	4	-	-	-	-	-	K	-	-
DPF-R4030	4	-	-	-	-	-	-	-	-
DPF-R4030-S	4	-	-	-	-	-	-	M1	-
CD-406	6	-	-	-	-	-	K	-	-
DPF-R6030	6	-	Y1	-	-	-	-	-	-

CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030
PARTS LIST

CD-403/403-S/404/406/DPF-R3030/R3030-S/R4030/R4030-S/R6030

SPECIFICATIONS

CD-406/DPF-R6030

[Format]

System Compact disc digital audio system
Laser Semiconductor laser

[D/A Convertors]

D/A Conversion 1 Bit (D.R.I.V.E.)
Oversampling 8 fs (352.8 kHz)

[Audio]

Frequency response 4 Hz ~ 20 kHz, ± 0.5 dB
Signal to noise ratio More than 105 dB
Dynamic range More than 95 dB
Total harmonic distortion + noise
..... Less than 0.005% (at 1 kHz)
Wow & flutter Unmeasurable Limit
Output level/impedance
Variable (Max.) 2 V/1 Ω
Digital output
Coaxial 0.5 V p-p / 75 Ω
Optical -15 dBm ~ -21 dBm
(Wave length 660 nm)
Headphone output (Max.) 20 mW (32 Ω)

[Laser]

Wave length 760 nm ~ 800 nm
Laser power class Class 1 (IEC)

[General]

Power consumption 14 W
Dimensions W : 440 mm (17-5/16")
H : 124.5 mm (4-15/16")
D : 398 mm (15-5/8")
Weight (Net) 5.1 kg (11.2 lb)

CD-404/403/DPF-R4030/3030

[Format]

System Compact disc digital audio system
Laser Semiconductor laser

[D/A Convertors]

D/A Conversion 1 Bit
Oversampling 8 fs (352.8 kHz)

[Audio]

Frequency response 4 Hz ~ 20 kHz, ± 0.5 dB
Signal to noise ratio More than 100 dB
Dynamic range More than 93 dB
Total harmonic distortion + noise
..... Less than 0.005% (at 1 kHz)
Wow & flutter Unmeasurable Limit
Output level/impedance
Fixed (CD-403/DPF-R3030) 2 V/1 Ω
Variable (CD-404/DPF-R4030) (Max.) 2 V/1 Ω
Headphone output (Max.)
(CD-404/DPF-R4030 only) 20 mW (32 Ω)

[Laser]

Wave length 760 nm ~ 800 nm
Laser power class Class 1 (IEC)

[General]

Power consumption 14 W
Dimensions W : 440 mm (17-5/16")
H : 124.5 mm (4-15/16")
D : 398 mm (15-5/8")
Weight (Net) 5.1 kg (11.2 lb)



1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. The full performance may not be exhibited in an extremely cold location (under a water-freezing temperature).

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.

KENWOOD CORPORATION

14-6, Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150-8501 Japan

KENWOOD SERVICE CORPORATION

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745, U.S.A.

KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 plaza Chase, Cl. 47 y Aquilino de la Guardia Panama, Republic de Panama

KENWOOD ELECTRONICS BRASIL LTDA.

Av. Moema, 170-17, Andar-Cobertura "B", Ed. Maximum Service Center, 04077-020 Moema, São Paulo-SP-Brasil

KENWOOD ELECTRONICS U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts., WD1 8EB., United Kingdom

KENWOOD ELECTRONICS BELGIUM N.V.

Meachelsesteenweg 418, B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

KENWOOD ELECTRONICS FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtori, 7/9 20129, Milano, Italy

KENWOOD IBÉRICA S.A.

Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD.

(A.C.N. 001 499 074)
16 Giffnock Avenue, North Ryde, N.S.W. 2113, Australia

KENWOOD ELECTRONICS (HONG KONG) LTD.

Unit 3712-3724, Level 37, Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong N.T., Hong Kong

KENWOOD ELECTRONICS GULF FZE

P.O. Box 61318, Jebel Ali, Dubai, U.A.E.

KENWOOD ELECTRONICS SINGAPORE PTE LTD.

No. 1 Genting Lane #02-02, KENWOOD Building, Singapore, 349544

KENWOOD ELECTRONICS (MALAYSIA) SDN BHD.

#4.01 Level 4, Wisma Academy Lot 4A, Jalan 19/1 46300 Petaling Jaya Selangor Darul Ehsan Malaysia

KENWOOD ELECTRONICS (THAILAND) CO., LTD.

2019 New Pechburi Road, Bangkok, Huaykwang, Bangkok, 10320 Thailand