

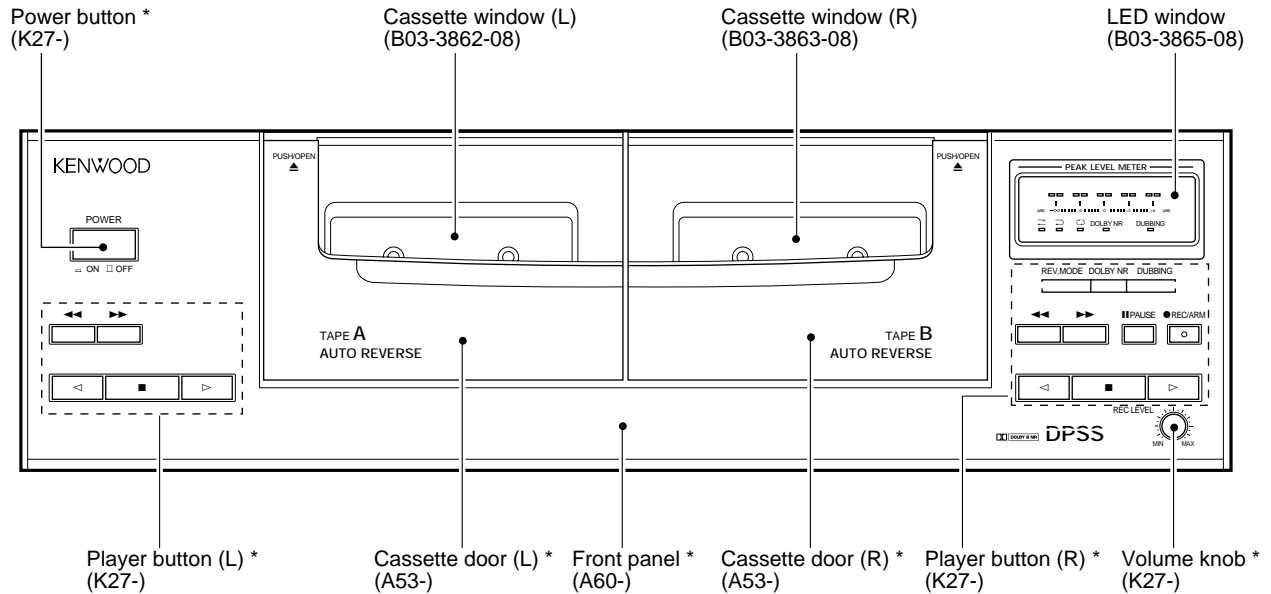
CT-401/403

KXF-W1030/W1030-S

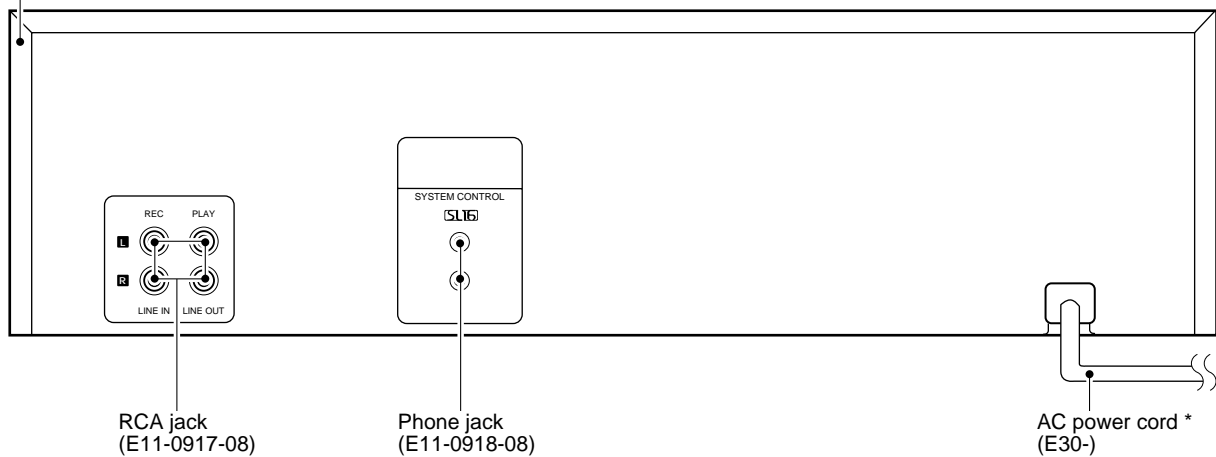
KXF-W3030/W3030E/W3030-S

SERVICE MANUAL

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Metallic cabinet \* (A01-)



\* Illustration is CT-403/KXF-W3030.

\* Refer to parts list on page 13.



# CT-401/403/KXF-W1030/W3030

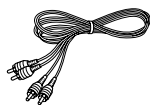
## CONTENTS / ACCESSORIES

### Contents

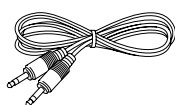
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### Accessories

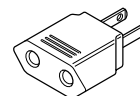
Audio cord..... (2)  
(E30-0505-05)



System control cord ... (1)  
(E30-2816-05)



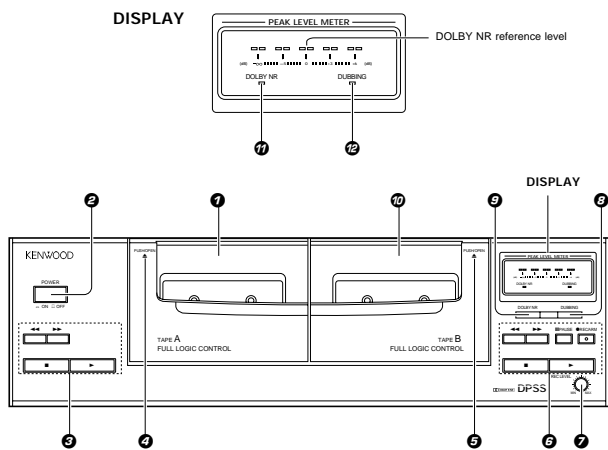
AC plug adaptor..... (1)  
(E03-0115-05)



(Except for Europe and Australia)  
For the unit with an European AC  
plug in areas other than Europe.

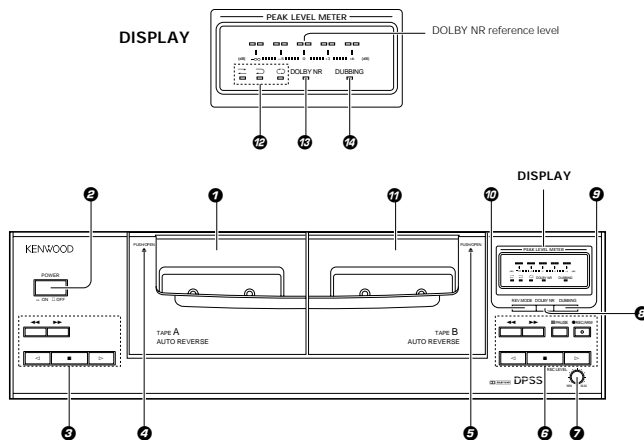
## CONTROLS

### CT-401/KXF-W1030



- 1 Deck A  
Playback-only tape deck.
- 2 POWER switch:  
Press to turn power ON and OFF.
- 3 Deck A operation keys  
▶ key:  
Play key.  
◀ key:  
Rewind key. (for fast winding of tape toward the left reel seen from you)  
▶▶ key:  
Fast forward key (for fast winding of tape toward the right reel seen from you)  
■ key:  
Stop key.
- 4 Cassette holder (Deck A)  
Press the area marked "PUSH/OPEN ▲" to load or eject a tape.
- 5 Cassette holder (Deck B)  
Press the area marked "PUSH/OPEN ▲" to load or eject a tape.
- 6 Deck B operation keys  
▶ key:  
Play key.  
◀ key:  
Rewind key (for fast winding of tape toward the left reel seen from you)  
▶▶ key:  
Fast forward key (for fast winding of tape toward the right reel seen from you)  
■ key:  
Stop key.  
● REC/ARM key:  
Press in stop mode to start recording or press in record mode to let the recording pause after leaving a non-recorded blank of 4 seconds.
- 7 Indicator : (Recording indicator)  
■ PAUSE key:  
Press to let recording pause temporarily.
- 8 REC LEVEL control:  
Adjusts the recording level.
- 9 DUBBING key:  
Press to start tape dubbing.
- 10 DOLBY NR key:  
Press to select the Dolby Noise Reduction mode.
- 11 Deck B  
Tape deck which is capable of both playback and recording.
- 12 DOLBY NR indicator  
● DUBBING indicator

### CT-403/KXF-W3030



- 1 Deck A  
Playback-only tape deck.
- 2 POWER switch:  
Press to turn power ON and OFF.
- 3 Deck A operation keys / indicators  
◀, ▶ keys : (Play keys)  
◀, ▶ indicators : (direction indicators)  
Tapes are played in the directions indicated by their respective indicators.
- 4 Deck B  
Tape deck which is capable of both playback and recording.
- 5 DOLBY NR indicator  
● DUBBING indicator
- 6 Deck B operation keys  
◀, ▶ keys : (direction indicators)  
● DUBBING key:  
Press to select the DUBBING mode.
- 7 REV.MODE key:  
Press to select the REVERS mode.
- 8 Deck B  
This deck is capable of both playback and recording.
- 9 Reverse mode indicators  
● DOLBY NR indicator  
● DUBBING indicator
- 10 DOLBY NR key:  
Press to select the Dolby Noise Reduction mode.
- 11 DUBBING key:  
Press to select the DUBBING mode.
- 12 REV.MODE key:  
Press to select the REVERS mode.
- 13 Deck B  
This deck is capable of both playback and recording.
- 14 Reverse mode indicators  
● DOLBY NR indicator  
● DUBBING indicator
- 15 Deck B operation keys  
◀, ▶ keys : (direction indicators)  
Tapes are played in the directions indicated by their respective indicators.
- 16 Deck B operation keys  
◀ key:  
Rewind key (for fast winding of tape toward the left reel seen from you)  
▶▶ key:  
Fast forward key (for fast winding of tape toward the right reel seen from you)  
■ key:  
Stop key.  
● REC/ARM key:  
Press in stop mode to start recording or press in record mode to let the recording pause after leaving a non-recorded blank of 4 seconds.
- 17 Indicator : (Recording indicator)  
■ PAUSE key:  
Press to let recording pause temporarily.
- 18 REC LEVEL control:  
Adjusts the recording level.
- 19 DOLBY NR key:  
Press to select the Dolby Noise Reduction mode.
- 20 DUBBING key:  
Press to select the DUBBING mode.
- 21 REV.MODE key:  
Press to select the REVERS mode.
- 22 Deck B  
This deck is capable of both playback and recording.
- 23 Reverse mode indicators  
● DOLBY NR indicator  
● DUBBING indicator

1. Pin description of microprocessor. LC865612A(IC302)

Pin No.	Pin Name	I/O	Description	Active	
				H	L
1	AC-CHK	I	Power failure input.	AC on	AC off
2,3	VSS	I	Connected to ground.		
4	SYS-DATA	I	System control data in.		
5	SYS-BUSY	I/O	System control busy output.		
6	DOLBY	O	Dolby NR output.	off	on
7	METER-GAIN	O	Meter amplifier gain control.	other	DPSS
8	REC/PB	O	Dolby NR REC/PB control.	PB	REC
9	PB-EQ/NORMAL	O	PB EQ. switch control.	70u	120u
10	REC-EQ-TYPE 1	O	Rec EQ. switch (TYPE 1) control.	○	
11	REC-EQ-TYPE 2	O	Rec EQ. switch (TYPE 2) control.	○	
12	SYS-DO	O	Connected with system data.		
13	LED-A-FWD PLAY	O	LED control port of A FWD PLAY.		○
14	LED-A-REV PLAY	O	LED control port of A REV PLAY.		○
15	LED-B-REV PLAY	O	LED control port of B REV PLAY.		○
16-20	NC	-	Unused.		
21	SOL-A	O	A deck solenoid control.		
22	SOL-B	O	B deck solenoid control.		
23	VSS	-	Connected to ground.		
24	VDD	-	Power supply(+5.0v).		
25	MECHA-VCC	-	Control port of power supply for deck.	Play	Stop
26	REC	O	Control port of REC/PLAY.	Rec	Other
27	REC-MUTE	O	Muting control port for recording.	Other	Rec
28	A/B	O	Control port of A or B deck.	A play	Other
29	DUBBING	O	Unused.		
30	BIAS	O	Bias control port.	Other	Rec
31	INPUT-MUT	O	Input muting control.	off	on
32	LINE-MUTE	O	Line muting control.	off	on
33	A-REEL	I	Reel puls input of A deck.		
34	HALF-SW	I	Half switch input of A deck.		
35	A-MODE-SW	I	Mode switch input of A deck.	Stop	Play
36	B-REEL	I	Reel puls input of B deck.		
37	B-HALF-SW	I	Half switch input of B deck.		
38	B-MODE-SW	I	Mode switch input of B deck.		
39	B-REC-FWD-SW	I	Forward rec detection switch input.		
40	B-REC-REV-SW	I	Reverse rec detection switch input.		
41	DO	O	Data output to IC601(BU2099FV).		
42	SI	-	Unused.		
43	CLK	O	Clock output to IC601(BU2099FV).		
44	LCK	O	IC601(BU2099FV) LCK.		
45	OE	O	IC601(BU2099FV) OE.		
46	NC	-	Unused.		
47	SDA	O	EE PROM(IC304) SDA.		
48	SCL	O	EE PROM(IC304) SCL.		
49	NC	-	Unused.		
50	RESET	I	Reset signal input.		○
51	VDD	-	Power supply(+5.0v).		
52	NC	-	Unused.		
53	VSS	-	Connected to ground.		
54	CF 6.0 MHz	-	Main system clock.		
55	CF- 6.0 MHz	-	Main system clock.		
56	VDD	-	Power supply(+5.0v).		
57-59	K1-K3	I	Key(1-3) input.		
60	MODE-SW	I	Mode switch input.		
61	NC	-	Unused.		
62	A-CRO2	I	A CrO2 switch input.	CrO2	Nor
63	B-CRO2	I	B CrO2 switch input.	CrO2	Nor
64	METER	I	Input port of level meter.		

2. Pin description of LED driver. ( BU2099FV ,IC601)

Pin No.	Pin Name	Description	Active		Remarks
			H	L	
6	L1	Level Meter	X	○	
7	L2	Level Meter	X	○	
8	L3	Level Meter	X	○	
9	L4	Level Meter	X	○	
10	L5	Level Meter	X	○	
11	A-REV	1 WAY/1WAY	X	○	W3030 only
12	B	1WAY/REV	X	○	W3030 only
13	C	REV/REV	X	○	W3030 only
14	B-FWD	B-FWD	X	○	W3030 only
15	REC	REC LED	X	○	
16	NR	DOLBY NR LED	off	on	
17	DUBBING	DUBBING LED	off	on	

○ : LED lights on X : LED lights off

4. Mode SW

Port	SW1	SW2	SW3
(Pin 60)	1 WAY + 1 WAY	1 WAY + REV.	REV. + REV.

( ) u-COM port

3. Key matrix

Port	SW1	SW2	SW3	SW4	SW5	SW6
K1 (Pin 57)	A FWD PLAY	* A REV PLAY	A STOP	A FF	A REW	-
K2 (Pin 58)	B FWD PLAY	* B REV PLAY	B STOP	B FF	B REW	REC/ARM
K3 (Pin 59)	* REV. MODE	DUBBING	DOLBY NR	B PAUSE	-	-

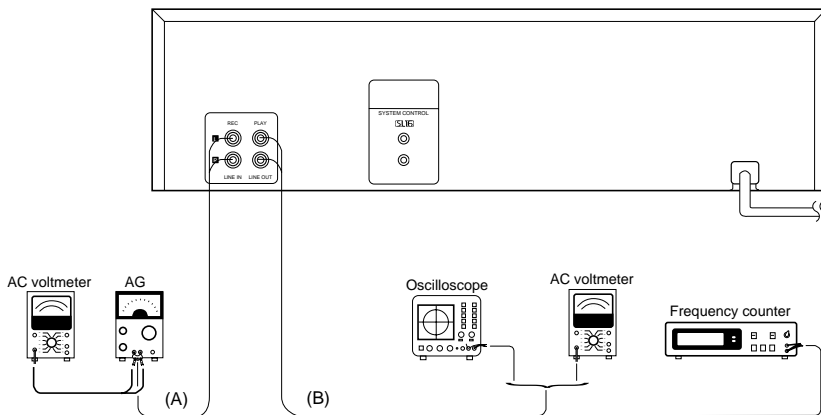
\* KXF-W3030 only  
( ) u-COM port

# CT-401/403/KXF-W1030/W3030

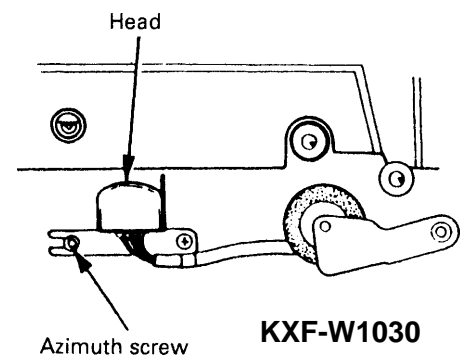
## ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINT	ALIGN FOR	FLG.
<b>CASSETTE DECK SECTION</b>		<b>TAPE: NORMAL, DOLBY: OFF, INPUT: LINE IN</b>			<b>0 dBs = 0.775 V</b>		
<b>I. REC/PLAY HEAD</b>							
[ 1 ]	DEMAGNETIZATION	-	-	POWER OFF Remove the cassette door.	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagnetizer.	
[ 2 ]	CLEANING	-	-	PLAY	REC/PLAY head, erase head, capstan pinch roller	Clean the REC/PLAY head, erase head, capstan and pinch roller using a cotton swab slightly dampened with alcohol.	
[ 3 ]	AZIMUTH	(A) MTT-114, TCC-153 0 kHz, -10 dB	(B)	PLAY	Azimuth adjustment screw	Maximum output.	(a) (b)
<b>II. DC BOARD</b>							
[ 1 ]	TAPE SPEED	(A) MTT-111, TCC-110 3 kHz	(B)	PLAY	SFR301	Adjust the tape speed so that a 3 kHz signal is produced at the center of the tape.	
<b>III. PC BOARD</b>							
< 1 >	PLAYBACK LEVEL	MTT-150 400 Hz (200 nWb)	(B)	PLAY	DECK B SFR101 (L) SFR102 (R)	Output level : $\pm 1$ dBs	
< 2 >	RECORD LEVEL	(A) 1 kHz, -20 dBs	(B)	Record 1kHz and 10kHz in alternation and playback.	SFR107 (L) SFR108 (R)	0 dBs $\pm 3$ dBs	
< 3 >	BIAS CURRENT	(A) 1 kHz, -20 dBs 10 kHz, -20 dBs	(B)	Record and playback at maximum REC volume position.	SFR105 (L) SFR106 (R)	Record 1 kHz and 10 kHz in alternation and adjust the variable resistors which control the bias current so that the playback level is obtained 0 dBs $\pm 3$ dBs.	
< 4 >	REC BIAS OSC FREQUENCY	-	-	Recording	L107	105 kHz $\pm 3$ kHz	(c)

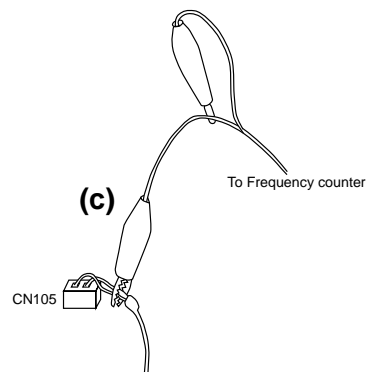
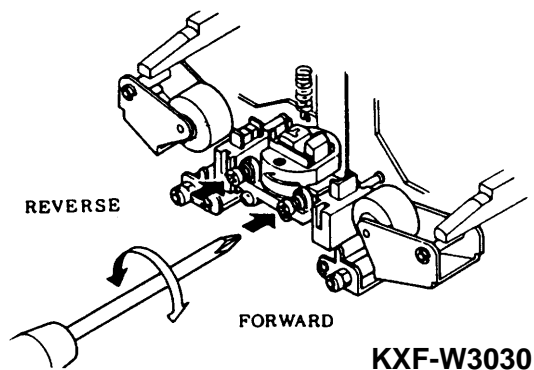
### SYSTEM CONNECTIONS



### (a) AZIMUTH ADJUSTMENT



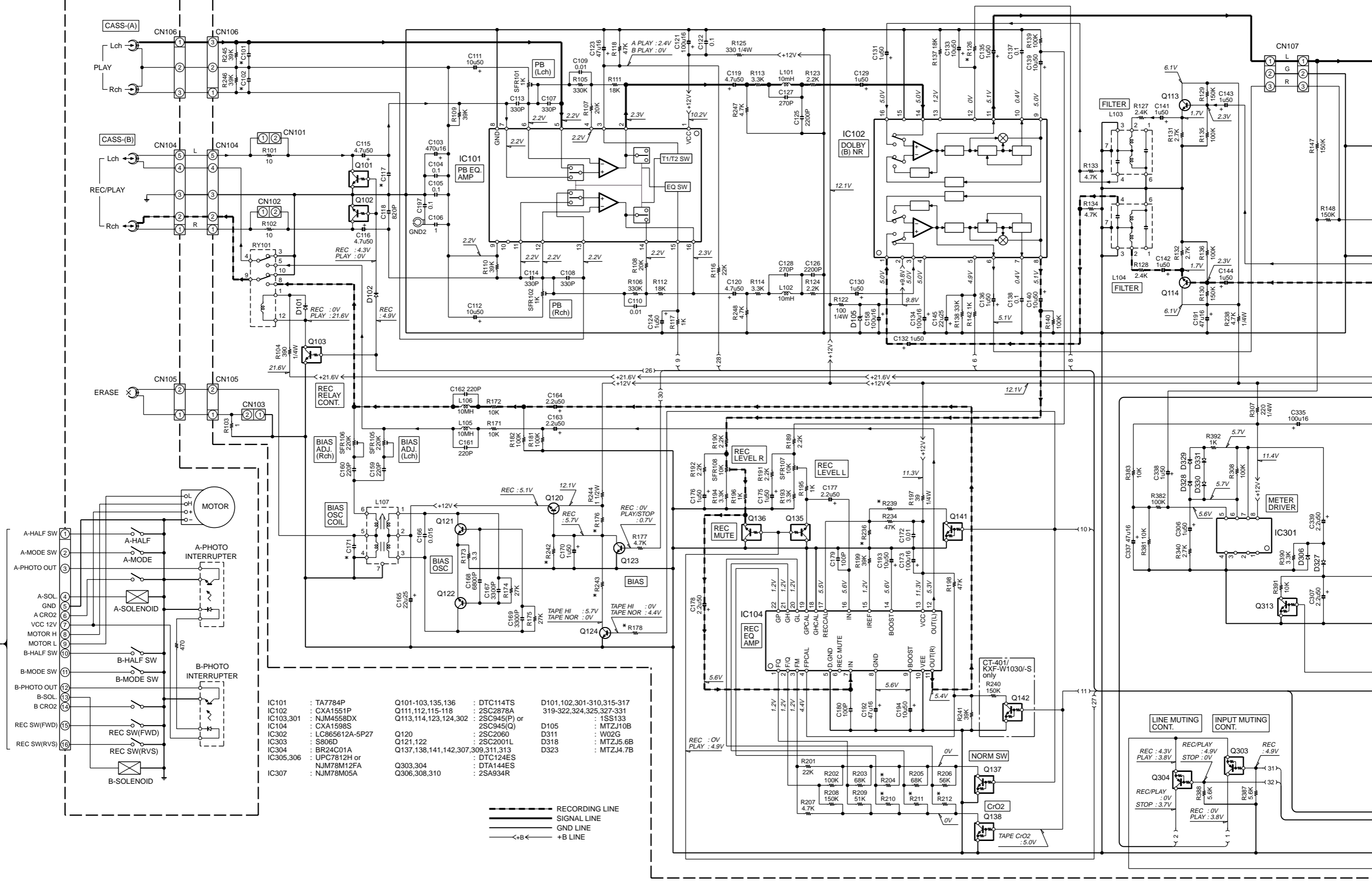
### (b) AZIMUTH ADJUSTMENT





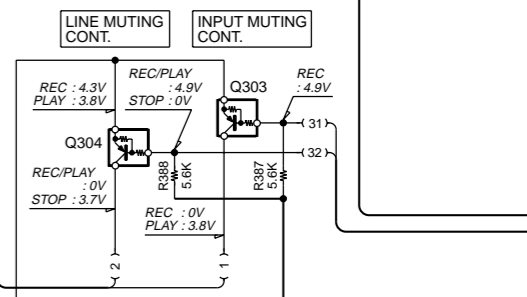
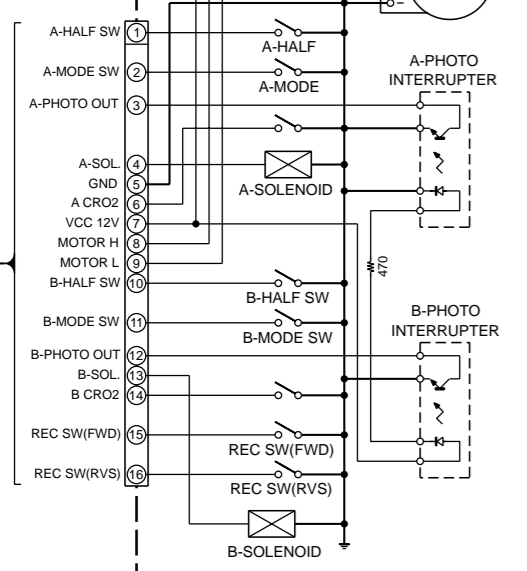
CASSETTE DECK MECHANISM ASS'Y

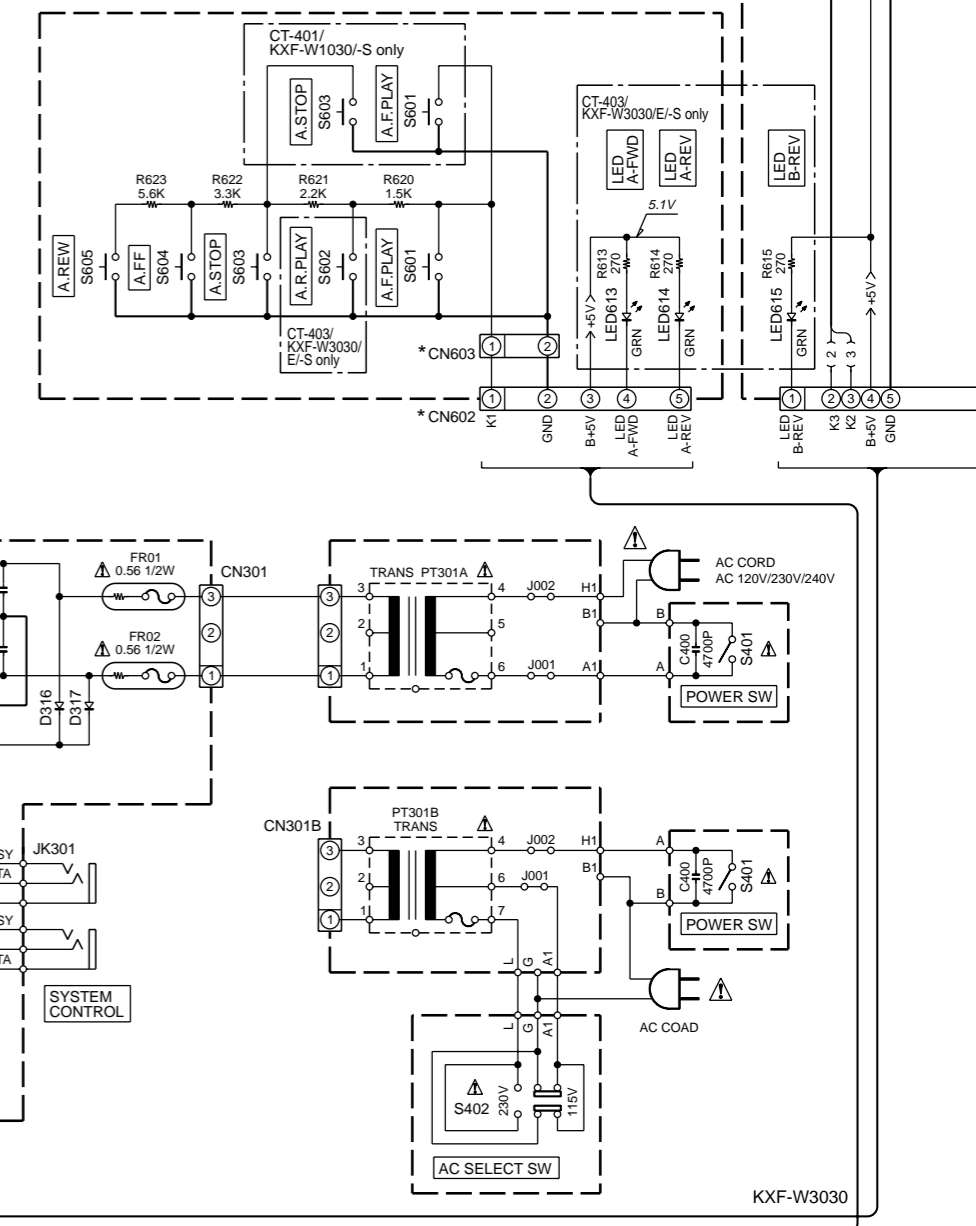
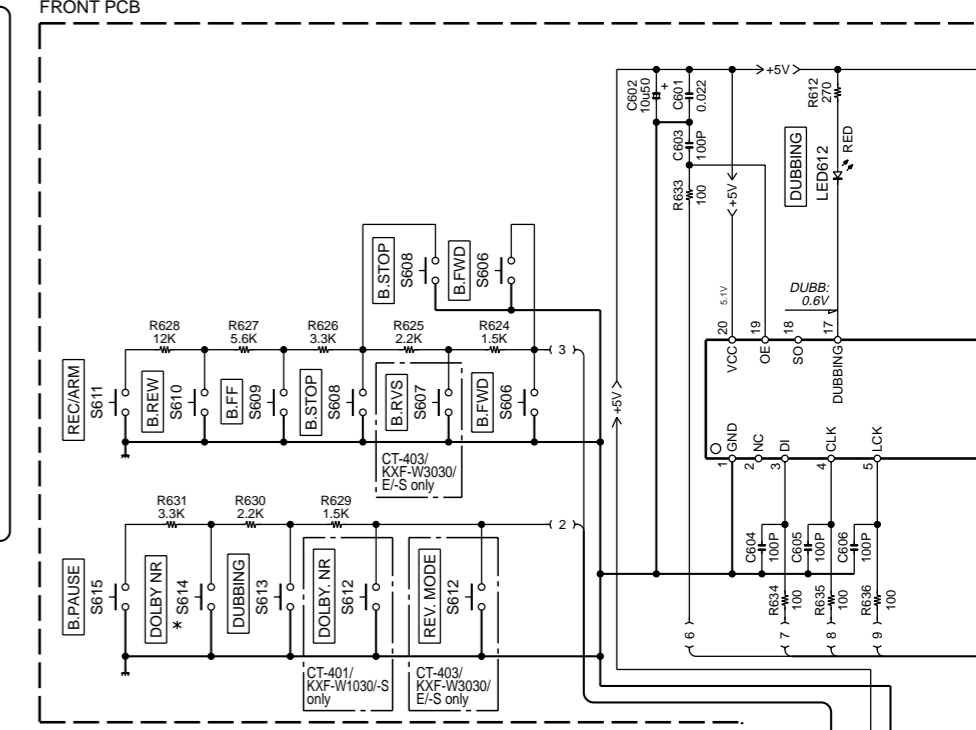
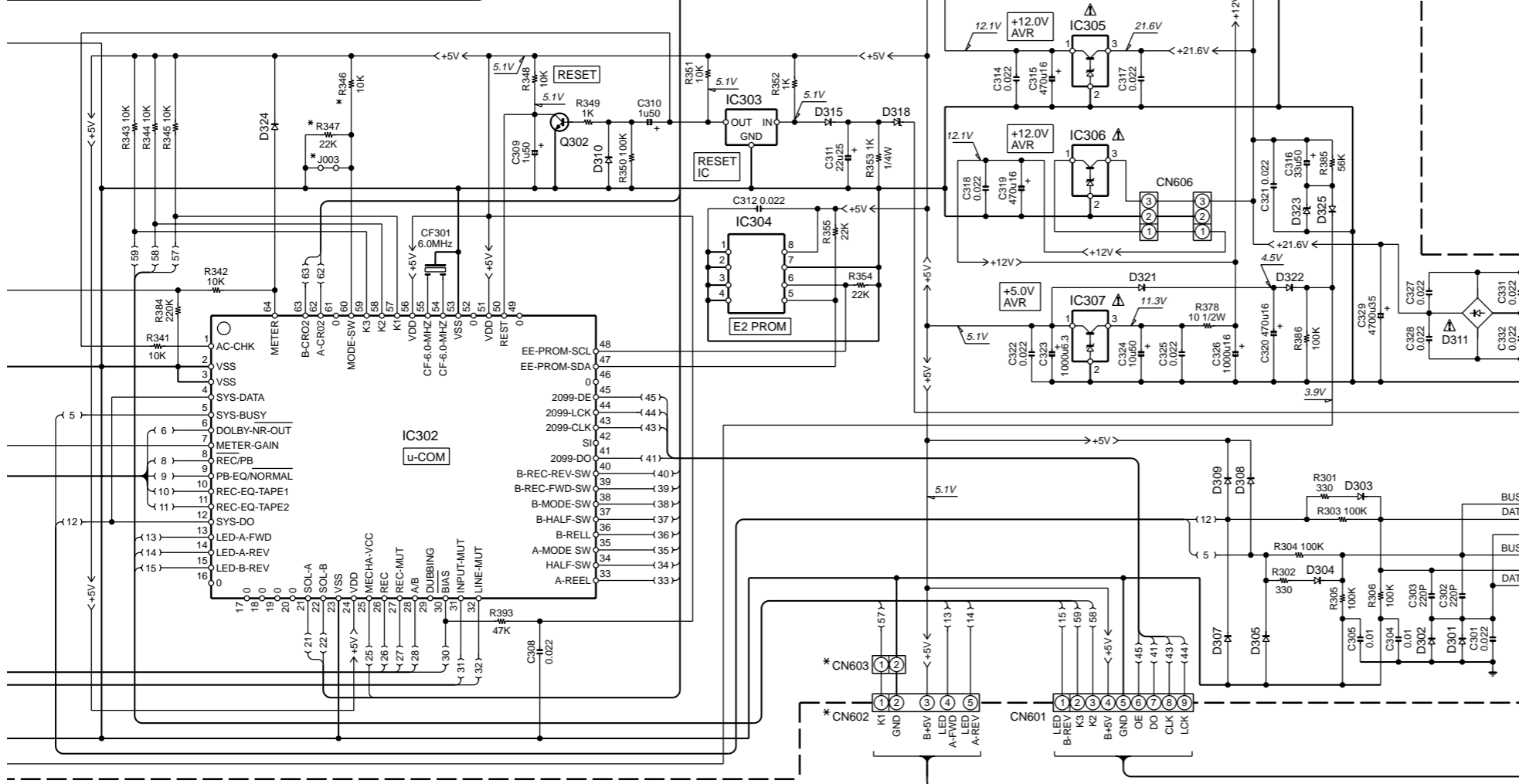
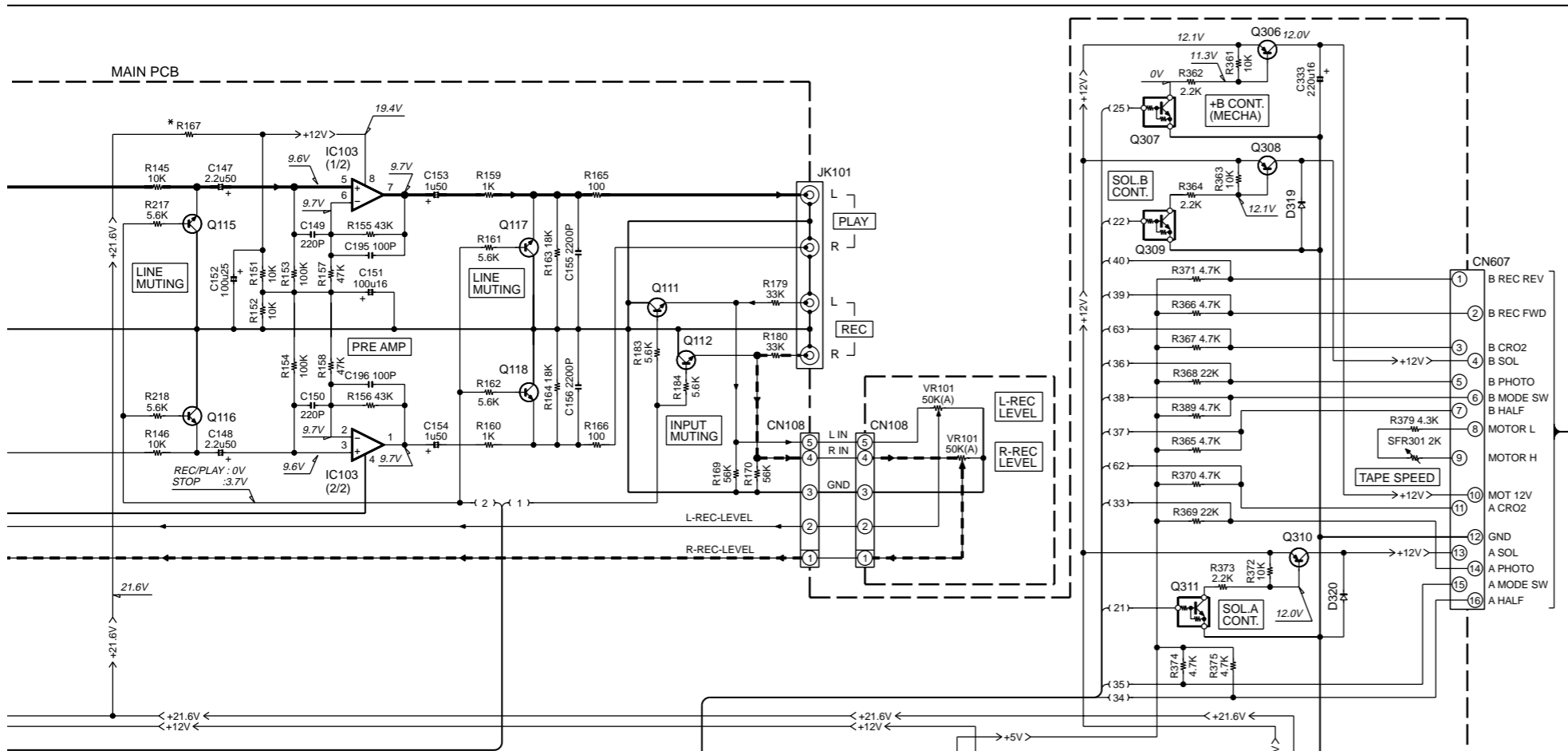
MAIN PCB

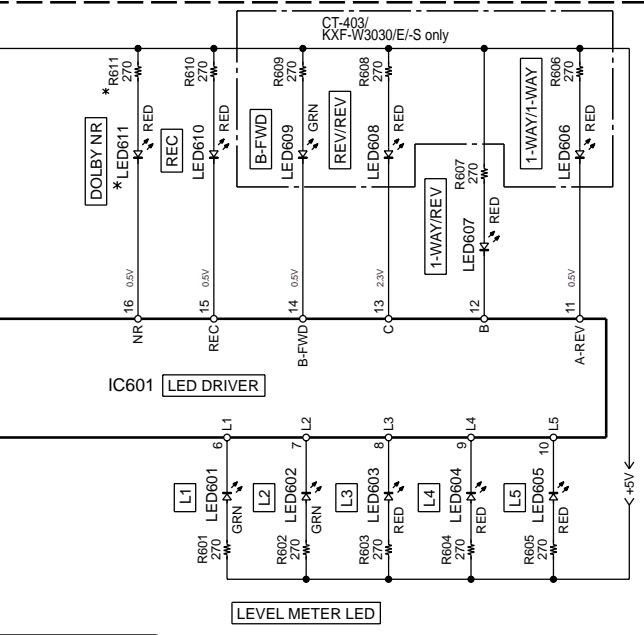


IC101	: TA7784P	Q101-103,135,136	: DTC114TS	D101,102,301-310,315-317	
IC102	: CXA1551P	Q111,112,115-118	: 2SC2878A	319-322,324,325,327-331	
IC103,301	: NJM4558DX	Q113,114,123,124,302	: 2SC945(P) or	: 1SS133	
IC104	: CXA1598S		: 2SC945(Q)	: MTZJ10B	
IC302	: LC865612A-5P27	Q120	: 2SC2060	: W02G	
IC303	: S806D	Q121,122	: 2SC2001L	: MTZJ5.6B	
IC304	: BR24C01A	Q137,138,141,142,307,309,311,313	: DTC124ES	: MTZJ4.7B	
IC305,306	: UPC7812H or NJM78M12FA	Q137,138,141,142,307,309,311,313	: DTA144ES		
IC307	: NJM78M05A	Q303,304	: 2SA934R		
		Q306,308,310			

- - - RECORDING LINE  
 ——— SIGNAL LINE  
 ——— GND LINE  
 <-B< — +B LINE

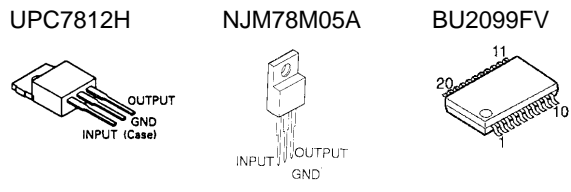
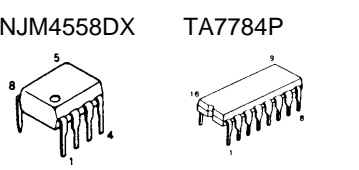
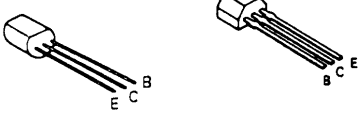






- IC601 : BU2099FV
  - LED601,602,609,613-615 : B30-2557-08
  - LED603-608,610-612 : B30-2578-08
- 2SA934R  
2SC2060  
2SC2878A  
2SC945

DTA144ES  
DTC114TS  
DTC124ES



DESTINATION		C101, 102	C117	C171	R126	R167	R176	R204	R210	R211			
COUNTRY	ABB.	K											
U.S.A.	K	560P	820P	3300P	10K	100 1/4W	2.7K 1/4W	13K	5.6K	15K			
CANADA	P												

DESTINATION		R212	R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.											
U.S.A.	K	39K	33K	82K	8.2K	3.3K	NO	YES	NO	NO	NO	YES
CANADA	P											

DESTINATION		C101, 102	C117	C171	R126	R167	R176	R204	R210	R211		
COUNTRY	ABB.	T										
U.K.	T	560P	820P	3300P	10K	100 1/4W	2.7K 1/4W	13K	5.6K	15K		
EUROPE	E											
PX	Y											

DESTINATION		R212	R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.	T										
U.K.	T	39K	33K	82K	8.2K	3.3K	NO	YES	NO	NO	NO	YES
EUROPE	E											
PX	Y											

DESTINATION		C101, 102	C117	C171	R126	R167	R176	R204	R210	R211		
COUNTRY	ABB.	M										
GENERAL MARKET	M	560P	820P	3300P	10K	100 1/4W	2.7K 1/4W	13K	5.6K	15K		
AUSTRALIA	X											

DESTINATION		R212	R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.	M										
GENERAL MARKET	M	39K	33K	82K	8.2K	3.3K	NO	YES	NO	NO	NO	YES
AUSTRALIA	X											

DESTINATION		C101, 102,117	C171	R126	R167	R176	R204	R210	R211, 212			
COUNTRY	ABB.	K										
U.S.A.	K	1000P	8200P	4.7K	470 1/4W	3.3K 1/4W	18K	10K	56K			

DESTINATION		R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.										
U.S.A.	K	82K	39K	3.3K	3.9K	YES	NO	YES	YES	YES	NO

DESTINATION		C101, 102,117	C171	R126	R167	R176	R204	R210	R211, 212		
COUNTRY	ABB.	E									
EUROPE	E	1000P	8200P	4.7K	470 1/4W	3.3K 1/4W	18K	10K	56K		
PX	Y										

DESTINATION		R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.										
EUROPE	E	82K	39K	3.3K	3.9K	YES	NO	YES	YES	YES	NO
PX	Y										

DESTINATION		C101, 102,117	C171	R126	R167	R176	R204	R210	R211, 212		
COUNTRY	ABB.	E2									
EUROPE	E2	1000P	8200P	4.7K	470 1/4W	3.3K 1/4W	18K	10K	56K		

DESTINATION		R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.										
EUROPE	E2	82K	39K	3.3K	3.9K	YES	NO	YES	YES	YES	NO

DESTINATION		C101, 102,117	C171	R126	R167	R176	R204	R210	R211, 212		
COUNTRY	ABB.	K1									
U.S.A.	K1	1000P	8200P	4.7K	470 1/4W	3.3K 1/4W	18K	10K	56K		
CANADA	P1										

DESTINATION		R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.										
U.S.A.	K1	82K	39K	3.3K	3.9K	YES	NO	YES	YES	YES	NO
CANADA	P1										

DESTINATION		C101, 102,117	C171	R126	R167	R176	R204	R210	R211, 212		
COUNTRY	ABB.	E3									
EUROPE	E3	1000P	8200P	4.7K	470 1/4W	3.3K 1/4W	18K	10K	56K		
GENERAL MARKET	M										

DESTINATION		R236	R239	R242	R243	R346, 347,611	J003	S614	LED611	CN602	CN603
COUNTRY	ABB.										
EUROPE	E3	82K	39K	3.3K	3.9K	YES	NO	YES	YES	YES	NO
GENERAL MARKET	M										

**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 with a cassette loaded at playback mode. The measurement value may vary depending on the measuring instruments used or on the product. Bias circuit DC voltage is measured while in the record mode.

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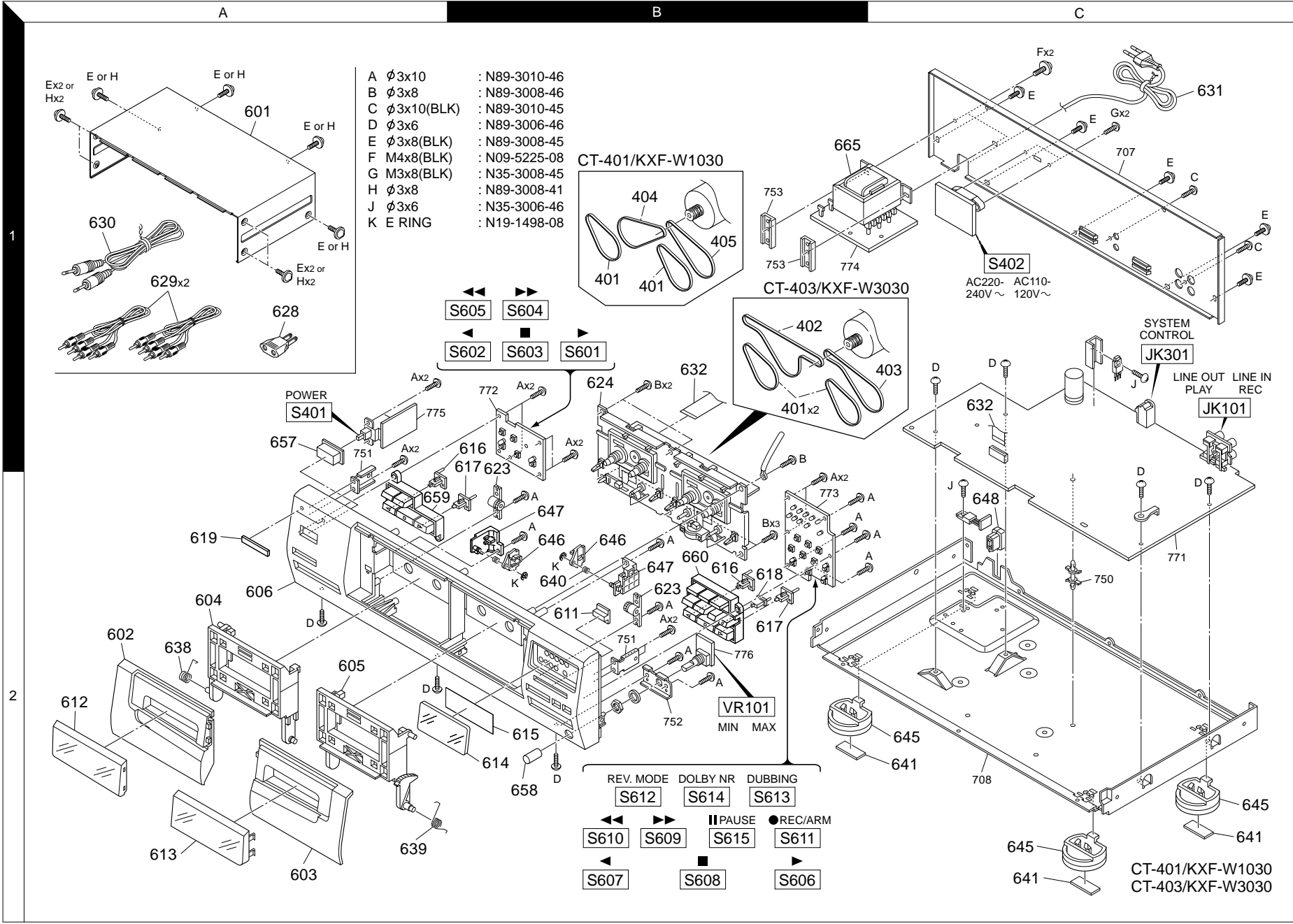
CT-401/403/KXF-W1030/W3030

KENWOOD

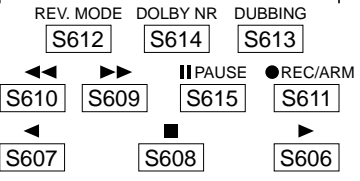
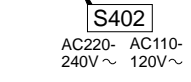
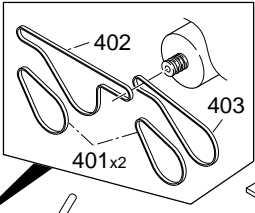
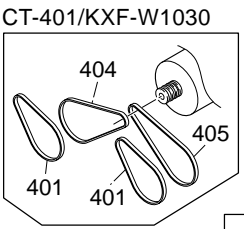


# CT-401/403/KXF-W1030/W3030

## EXPLODED VIEW (UNIT)



A	φ3x10	:	N89-3010-46
B	φ3x8	:	N89-3008-46
C	φ3x10(BLK)	:	N89-3010-45
D	φ3x6	:	N89-3006-46
E	φ3x8(BLK)	:	N89-3008-45
F	M4x8(BLK)	:	N09-5225-08
G	M3x8(BLK)	:	N35-3008-45
H	φ3x8	:	N89-3008-41
J	φ3x6	:	N35-3006-46
K	E RING	:	N19-1498-08



CT-401/KXF-W1030  
CT-403/KXF-W3030

Parts with exploded numbers larger than 700 are not supplied.



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③

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
660	2B	*	K27-2420-08	PLAYER BUTTON(R)100204002B	KEE2Y	3
660	2B	*	K27-2422-08	PLAYER BUTTON(R)100504002S	ME3	3
Δ 665	1B	*	L07-2882-08	POWER TRANS 420F542144	KP	
Δ 665	1B	*	L07-2883-08	POWER TRANS 420F544257	EE2E3T	
Δ 665	1B	*	L07-2884-08	POWER TRANS 420F549154	MY	
Δ 665	1B	*	L07-2885-08	POWER TRANS 420F547160	X	
K			N19-1498-08	E RING 2.0Q 3130000020		
<b>ELECTRICAL PARTS</b>						
C101,102			C91-0754-05	CERAMIC 560PF	J	1
C101,102			C91-0757-05	CERAMIC 1000PF	K	3
C103			CE04KW1C471M	ELECTRO 470UF	16VV	
C104-106			C91-1525-08	CERAMIC 0.1UF	Z	
C107,108			C91-0751-05	CERAMIC 330PF	K	
C109,110			C91-0769-05	CERAMIC 0.010UF	K	
C111,112			CE04KW1H100M	ELECTRO 10UF	50VV	
C113,114			C91-0751-05	CERAMIC 330PF	K	
C115,116			CE04KW1H4R7M	ELECTRO 4.7UF	50VV	
C117			C91-0756-05	CERAMIC 820PF	K	1
C117			C91-0757-05	CERAMIC 1000PF	K	3
C118			C91-0756-05	CERAMIC 820PF	K	
C119,120			CE04KW1H4R7M	ELECTRO 4.7UF	50VV	
C121			CE04KW1C101M	ELECTRO 100UF	16VV	
C122			C91-1525-08	CERAMIC 0.1UF	Z	
C123			CE04KW1C470M	ELECTRO 47UF	16VV	
C124			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C125,126			C91-0761-05	CERAMIC 2200PF	M	
C127,128			C91-0750-05	CERAMIC 270PF	K	
C129-132			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C133			CE04KW1H100M	ELECTRO 10UF	50VV	
C134			CE04KW1C101M	ELECTRO 100UF	16VV	
C135,136			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C137,138			C91-1525-08	CERAMIC 0.1UF	Z	
C139,140			CE04KW1H100M	ELECTRO 10UF	50VV	
C141-144			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C145			CE04KW1E220M	ELECTRO 22UF	25VV	
C147,148			CE04KW1H2R2M	ELECTRO 2.2UF	50VV	
C149,150			C91-0749-05	CERAMIC 220PF	K	
C151			CE04KW1C101M	ELECTRO 100UF	16VV	
C152			CE04DW1E102M	ELECTRO 1000UF	25VV	
C153,154			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C155,156			C91-0761-05	CERAMIC 2200PF	M	
C158			CE04KW1C101M	ELECTRO 100UF	16VV	
C159,160			CK45FB1H221K	CERAMIC 220PF	K	
C161,162			C91-0749-05	CERAMIC 220PF	K	
C163,164			CE04KW1H2R2M	ELECTRO 2.2UF	50VV	
C165			CE04KW1E220M	ELECTRO 22UF	25VV	
C166			CQ92FM1H153J	MYLAR 0.015UF	J	
C167			CQ92FM1H332J	MYLAR 3300PF	J	
C168			CQ92FM1H682J	MYLAR 6800PF	J	
C169			CQ92FM1H332J	MYLAR 3300PF	J	
C170			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C171		*	C91-1598-08	MF-C 8200PF	5091822513	3
C171		*	C91-1600-08	MF-C 3300PF	5091332513	1

L : Scandinavia K : USA P : Canada R : Mexico C : China I : Malaysia  
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④

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
C172			C91-0769-05	CERAMIC 0.010UF	K	
C173			CE04KW1C101M	ELECTRO 100UF	16VV	
C175,176			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C177,178			CE04KW1H2R2M	ELECTRO 2.2UF	50VV	
C179,180			C91-0745-05	CERAMIC 100PF	K	
C191,192			CE04KW1C470M	ELECTRO 47UF	16VV	
C193,194			CE04KW1H100M	ELECTRO 10UF	50VV	
C195,196			C91-0745-05	CERAMIC 100PF	K	
C197			C91-1525-08	CERAMIC 0.1UF	Z	
C301			C91-0085-05	CERAMIC 0.022UF	N	
C302,303			C91-0749-05	CERAMIC 220PF	K	
C304,305			C91-0769-05	CERAMIC 0.010UF	K	
C306			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C307			CE04KW1H2R2M	ELECTRO 2.2UF	50VV	
C308			CK45FB1H223J	CERAMIC 0.022UF	J	
C309,310			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C311			CE04KW1E220M	ELECTRO 22UF	25VV	
C312			CK45FB1H223J	CERAMIC 0.022UF	J	
C314			C91-0085-05	CERAMIC 0.022UF	N	
C315			CE04KW1C471M	ELECTRO 470UF	16VV	
C316			CE04KW1E330M	ELECTRO 33UF	50VV	
C317,318			C91-0085-05	CERAMIC 0.022UF	N	
C319,320			CE04KW1C471M	ELECTRO 470UF	16VV	
C321,322			C91-0085-05	CERAMIC 0.022UF	N	
C323			CE04KWOJ102M	ELECTRO 1000UF	6.3VV	
C324			CE04KW1H100M	ELECTRO 10UF	50VV	
C325			C91-0085-05	CERAMIC 0.022UF	N	
C326			CE04DW1C102M	ELECTRO 1000UF	16VV	
C327,328			CK45FB1H223J	CERAMIC 0.022UF	J	
C329			CE04KW1V472M	ELECTRO 4700UF	35VV	
C331,332			CK45FB1H223J	CERAMIC 0.022UF	J	
C333			CE04KW1C221M	ELECTRO 220UF	16VV	
C335			CE04KW1C101M	ELECTRO 100UF	16VV	
C337			CE04KW1C470M	ELECTRO 47UF	16VV	
C338			CE04KW1H010M	ELECTRO 1.0UF	50VV	
C339			CE04KW1H2R2M	ELECTRO 2.2UF	50VV	
C400		*	C91-1599-08	SPARK C 4700PF 400V 5106472P41		
C601		*	C91-0085-05	CERAMIC 0.022UF	N	
C602			CE04EW1H100M	ELECTRO 10UF	50VV	
C603-606			C91-0745-05	CERAMIC 100PF	K	
CN607			E35-2435-08	PIN ASSY(16P)	4491600263	
JK101		*	E11-0917-08	4P RCA JACK	4500800497	
JK301		*	E11-0918-08	2P JACK(3.5Q)	4500100492	
CF301		*	L78-0716-08	RESONATOR	416090600M	
L101,102			L40-1035-29	INDUCTANCE 10MH4329210311		
L103,104			L39-1329-08	MPX TRAP COIL	4360400720	
L105,106			L40-1035-29	INDUCTANCE	4329210311	
L107		*	L32-1027-08	BIAS OSC COIL	4330801370	
Δ FR01,02		*	R92-1962-08	FUSE R 1/2W 568	4180256857	
R244			RS14KB2H1R0J	FL-PROOF RS	1 J 1/2W	
R378			RS14DB2H100J	FL-PROOF RS	10 J 1/2W	
SFR101,102			R12-5652-05	SFR 1KB	5226102170	
SFR105,106			R12-1616-05	SFR 220KB	5226224170	

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5

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
SFR107,108			R12-1617-05	SFR 10KB 5226103170		
SFR301			R12-3685-05	SFR 2.2KB 5226222170		
VR101		*	R31-0106-08	VR 50KAX2 5023254335		
RY101		*	S76-0109-08	MAGNETIC REYAY 4390000068		
S401		*	S68-0041-08	SW PUSH POWER 4430102450	MY	
S401		*	S68-0129-08	SW PUSH POWER K611510101		
S402			S62-0083-08	AC SLIDE SW 4410206199		
S601			S68-0039-08	TACT SW 4400000156		
S602			S68-0039-08	TACT SW 4400000156		3
S603-605			S68-0039-08	TACT SW 4400000156		
S606			S68-0039-08	TACT SW 4400000156		
S607			S68-0039-08	TACT SW 4400000156		3
S608-613			S68-0039-08	TACT SW 4400000156		
S614			S68-0039-08	TACT SW 4400000156		3
S615			S68-0039-08	TACT SW 4400000156		
D101,102			1SS133	DIODE		
D105			MTZJ10B	ZENER DIODE		
D301-310			1SS133	DIODE		
D311			W02G	DIODE		
D315-317			1SS133	DIODE		
D318			MTZJ5.6B	ZENER DIODE		
D319-322			1SS133	DIODE		
D323			MTZJ4.7B	ZENER DIODE		
D324,325			1SS133	DIODE		
D327-331			1SS133	DIODE		
IC101			TA7784P	IC(PB AMP)		
IC102		*	CXA1551P	IC		
IC103			NJM4558DX	IC(OP AMP X2)		
IC104		*	CXA1598S	IC		
IC301			NJM4558DX	IC(OP AMP X2)		
IC302		*	LC865612A-5P27	IC		
IC303		*	S806D	IC		
IC304			BR24C01A	IC		
IC305,306			NJM78M12FA	IC(VOLTAGE REGULATOR/ +12V)		
IC305,306			UPC7812H	IC(VOLTAGE REGULATOR/ +12V)		
IC307			NJM78M05A	IC(VOLTAGE REGULATOR/+5V)		
IC601			BU2099FV	IC(OUT PUT EXPANDER)		
LED601,602		*	B30-2577-08	LED(GRN) 412061CHGE		
LED603-605		*	B30-2578-08	LED(RED) 412061CHE2		
LED606		*	B30-2578-08	LED(RED) 412061CHE2		3
LED607		*	B30-2578-08	LED(RED) 412061CHE2		
LED608		*	B30-2578-08	LED(RED) 412061CHE2		3
LED609		*	B30-2577-08	LED(GRN) 412061CHGE		3
LED610		*	B30-2578-08	LED(RED) 412061CHE2		
LED611		*	B30-2578-08	LED(RED) 412061CHE2		3
LED612		*	B30-2578-08	LED(RED) 412061CHE2		
LED613-615		*	B30-2577-08	LED(GRN) 412061CHGE		3
Q101-103			DTC114TS	TRANSISTOR		
Q111,112			2SC2878A	TRANSISTOR		
Q113,114			2SC945(P)	TRANSISTOR		
Q113,114			2SC945(Q)	TRANSISTOR		
Q115-118			2SC2878A	TRANSISTOR		
Q120			2SC2060	TRANSISTOR		

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6

Ref. No	Add-ress	New Parts	Parts No.	Description	Desti-nation	Re-marks
Q121,122			2SC2001L	TRANSISTOR		
Q123,124			2SC945(P)	TRANSISTOR		
Q123,124			2SC945(Q)	TRANSISTOR		
Q135,136			DTC114TS	TRANSISTOR		
Q137,138			DTC124ES	TRANSISTOR		
Q141			DTC124ES	TRANSISTOR		
Q142			DTC124ES	TRANSISTOR		1
Q302			2SC945(P)	TRANSISTOR		
Q302			2SC945(Q)	TRANSISTOR		
Q303,304			DTA144ES	TRANSISTOR		
Q306			2SA934R	TRANSISTOR		
Q307			DTC124ES	TRANSISTOR		
Q308			2SA934R	TRANSISTOR		
Q309			DTC124ES	TRANSISTOR		
Q310			2SA934R	TRANSISTOR		
Q311			DTC124ES	TRANSISTOR		
Q313			DTC124ES	TRANSISTOR		
<b>CASSETTE MECHANISM</b>						
401		*	D16-0750-08	BELT REV(A1,B1)02-083-4188		3
402		*	D16-0751-08	BELT REV(A2) 02-084-4203		3
403		*	D16-0752-08	BELT REV(B2) 02-083-4205		1
404		*	D16-0753-08	BELT 1-WAY(A2) 02-084-4202		1
405		*	D16-0754-08	BELT 1-WAY(B2) 02-084-4204		1

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**HOW TO READ THE PARTS LIST**

**ABBREVIATION OF MODEL AND MASS PRODUCTION'S DESTINATIONS**

MODEL	ABB.	Australia	Canada	China	England	Europe	Germany	Korea	Malaysia
CT-401	1	-	P	-	-	-	-	-	-
KXF-W1030	1	-	-	-	T	E	-	-	-
KXF-W1030-S	1	X	-	-	-	-	-	-	-
CT-403	3	-	-	-	-	-	-	-	-
KXF-W3030	3	-	-	-	-	E	-	-	-
KXF-W3030E	3	-	-	-	-	E2	-	-	-
CT-403-S	3	-	P1	-	-	-	-	-	-
KXF-W3030-S	3	-	-	-	-	E3	-	-	-
MODEL	ABB.	Mexico	PX/AAFES	Russia	Scandinavia	Shanghai	USA	Other area	
CT-401	1	-	-	-	-	-	K	-	-
KXF-W1030	1	-	Y	-	-	-	-	-	-
KXF-W1030-S	1	-	-	-	-	-	-	M	-
CT-403	3	-	-	-	-	-	K	-	-
KXF-W3030	3	-	Y	-	-	-	-	-	-
KXF-W3030E	3	-	-	-	-	-	-	-	-
CT-403-S	3	-	-	-	-	-	K1	-	-
KXF-W3030-S	3	-	-	-	-	-	-	M	-

PARTS LIST

CT-401/403/KXF-W1030/W3030

# CT-401/403/KXF-W1030/W3030

## SPECIFICATIONS

Track System ..... 4 track, 2 channel stereo  
Recording System ..... AC bias (Frequency: 105 kHz)  
Heads      A DECK  
            Playback heads ..... 1  
            B DECK  
            Playback / recording heads ..... 1  
            Erasing head ..... 1  
Motors      A and B DECK ..... 1  
Wow and Flutter ..... 0.3 % (W.RMS)  
Frequency Response  
    TYPE I Tape ..... 30 Hz to 13,000 Hz,  $\pm 3$  dB  
    TYPE II Tape ..... 30 Hz to 13,000 Hz,  $\pm 3$  dB  
Signal to Noise Ratio  
    Dolby NR OFF ..... 57 dB  
    Dolby B NR ON (3rd, H.D., 3 %, TYPE II Tape) ..... 66 dB

Input sensitivity / Impedance  
    LINE IN ..... 122.8 mV / 54 k $\Omega$   
Output Level / Impedance  
    LINE OUT ..... 775 mV / 1.1 k $\Omega$

### [General]

Power Consumption ..... 14 W  
Dimensions      W ..... :440mm (17-5/16")  
                    H ..... :128 mm (5-1/16")  
                    D ..... : 270 mm (10-5/8")  
Weight (Net) ..... 4.1 kg (9.0 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 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.

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