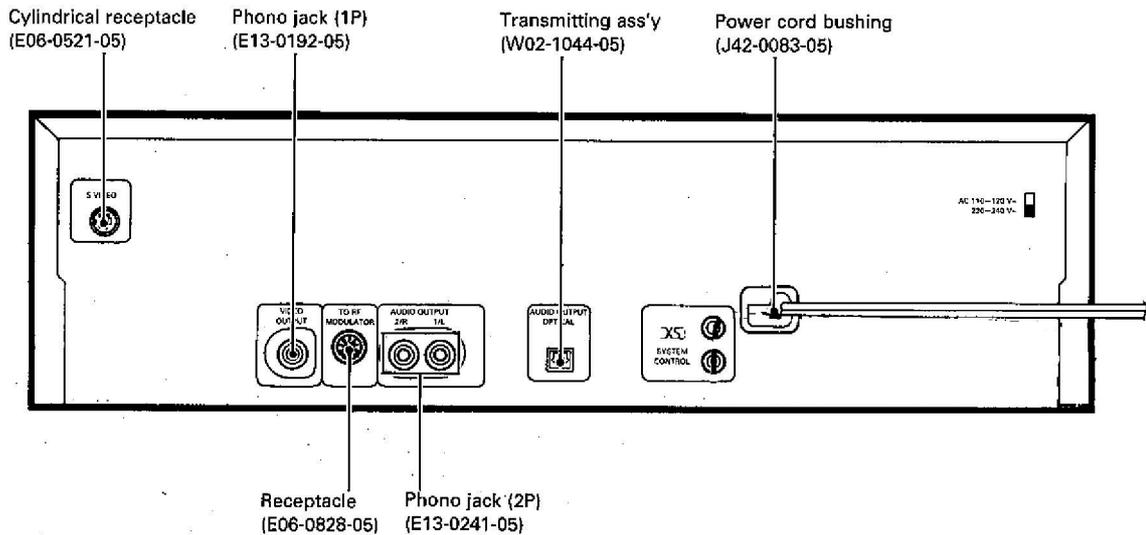
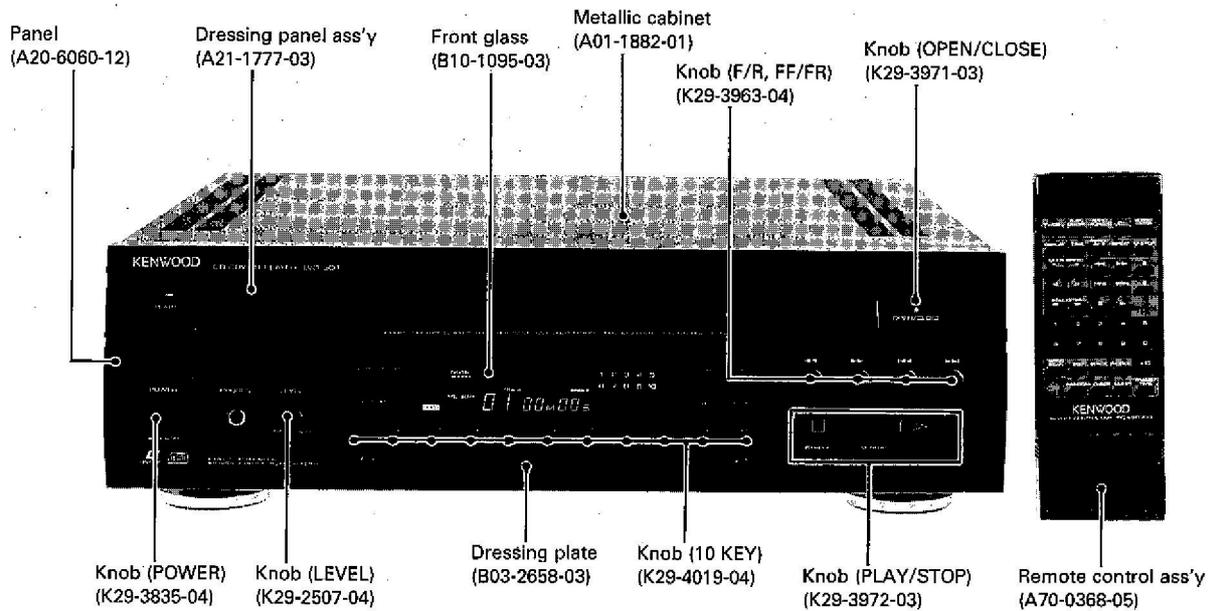


# LVD-300

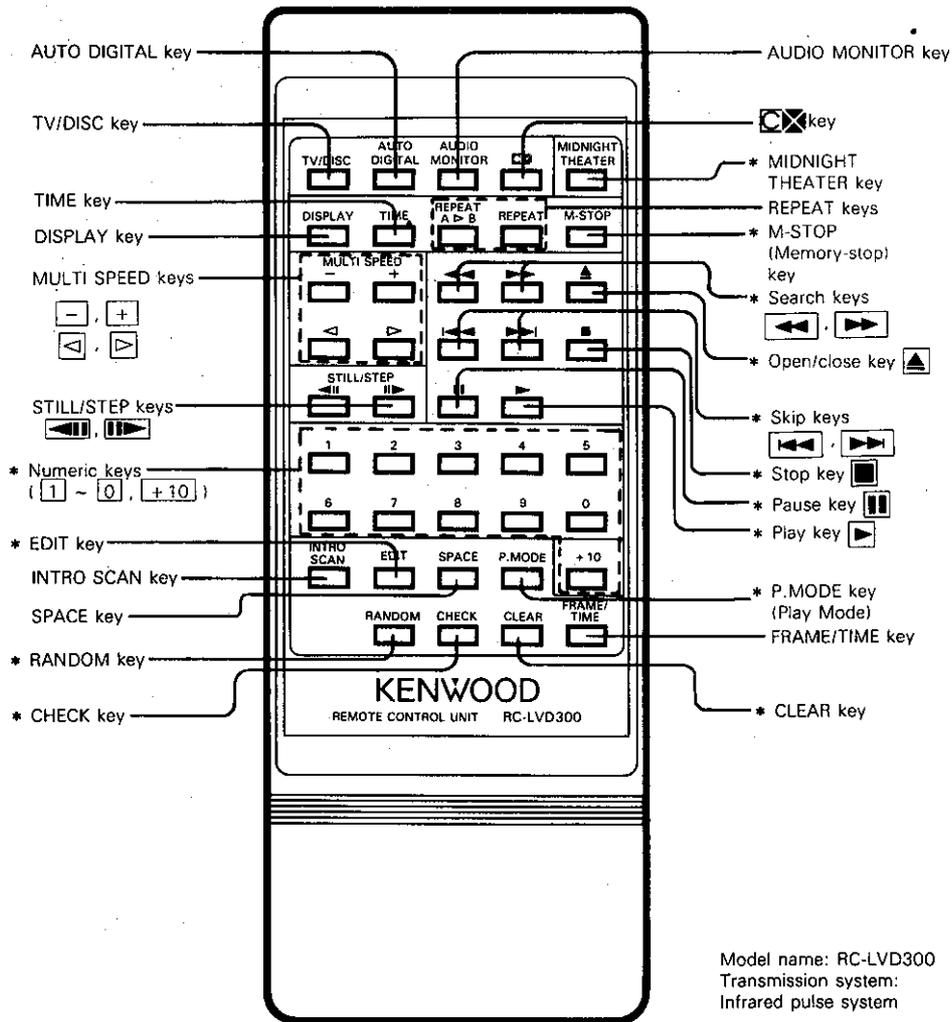
## SERVICE MANUAL

# KENWOOD



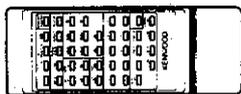
For a complete description of the circuits of this unit, refer to the Circuit Description manual (B51-4163-00).

## REMOTE CONTROL OPERATION



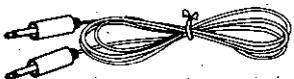
### Accessories

Remote control unit.....1

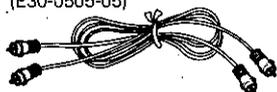


(A70-0368-05)  
(A09-0104-08) Battery Cover

System control cord.....1  
(E30-0977-05)



Audio cord.....1  
(E30-0505-05)



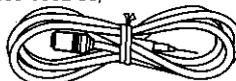
Antenna adapter.....1  
(Except for some areas.)  
(T90-0136-05)



Video cord.....1  
(E30-1427-05)



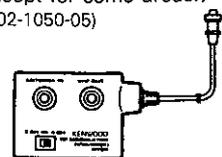
Coaxial cable.....1  
(Except for some areas.)  
(E30-0952-05)



Battery ("AA" or "R6").....2



RF Modulator (RFM-100).....1  
(Except for some areas.)  
(W02-1050-05)

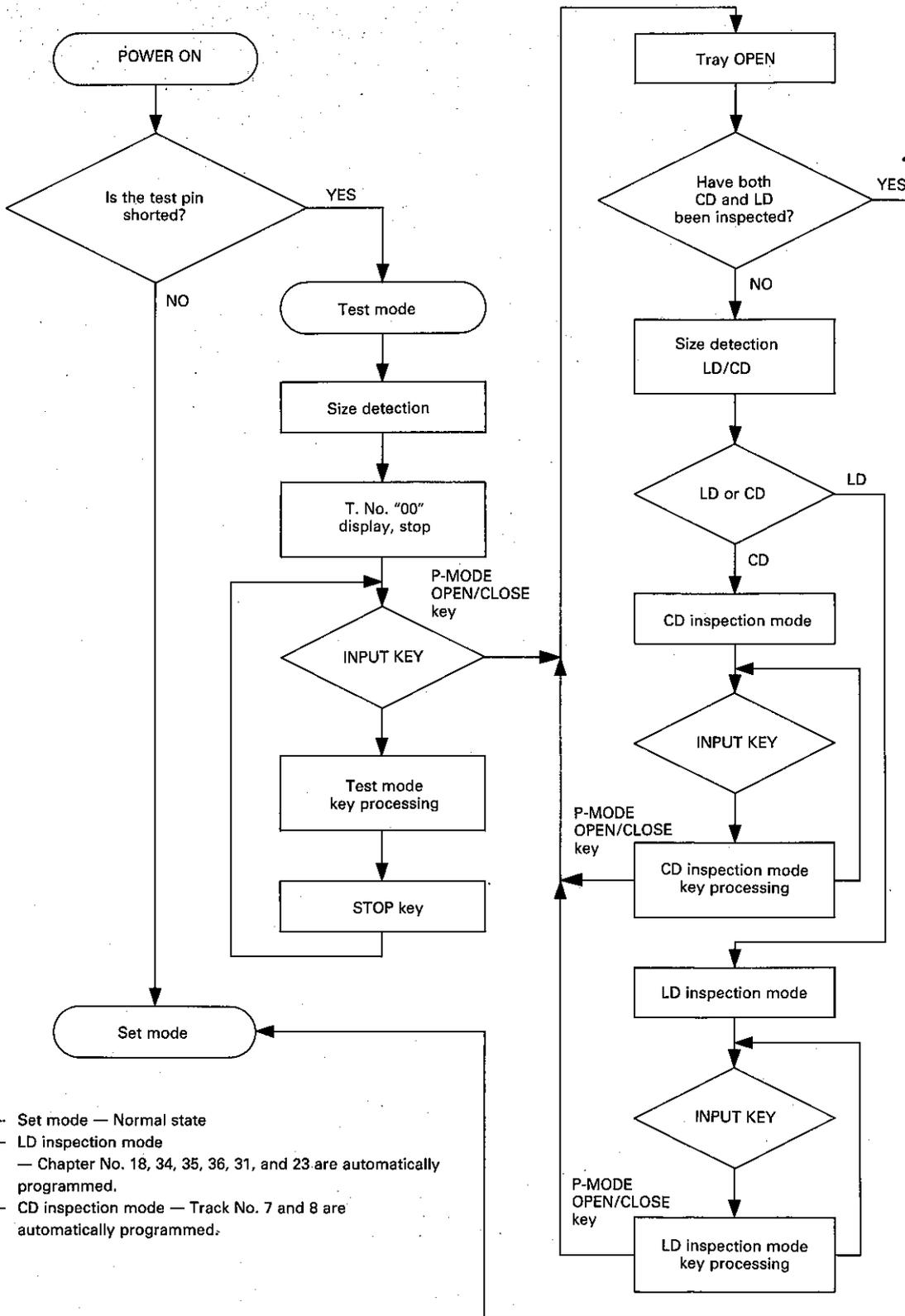


## ADJUSTMENT

### Valid keys in the test mode and their functions

No.	Key	Function	Track No. display
1	PLAY	Focus servo ..... ON Tracking servo ..... ON Feed servo ..... ON	▶
2	STOP	Focus servo ..... OFF      Stop with the disc clamped Tracking servo ..... OFF Feed servo ..... OFF	T. No. "00" or "01"
3	PAUSE	Focus servo ..... ON      Valid when PAUSE is pressed after Tracking servo ..... OFF      PLAY Feed servo ..... OFF	Display
4	▶▶	Feed (from inner periphery to outer periphery) Feeds while the key is held down.	
5	◀◀	Feed (from outer periphery to inner periphery) is while the key is held down.	
6	▶▶	All fluorescent elements light. Returns to the normal state when the key is pressed again.	All on ↓ NORMAL
7	◀◀	All fluorescent elements go off. Returns to the normal state when the key is pressed again.	All off ↓ NORMAL
8	EDIT	Open or close the tray without changing the mode.	TV
9	RANDOM or SPACE	Switch tilt on and off. Turns on and off alternately whenever this key is pressed.	When the tilt is on, SPACE lights.
10	OPEN/CLOSE	Change the mode and open or close the tray.	
11	P-MODE	Change the mode without opening or closing the tray.	PGM
12	10 KEY	Function as follows in the inspection mode. 1 KEY ..... Still forward 2 KEY ..... Still reverse 3 KEY ..... Multi-speed forward 4 KEY ..... Multi-speed reverse	

## ADJUSTMENT



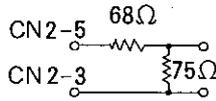
- Set mode — Normal state
- LD inspection mode  
— Chapter No. 18, 34, 35, 36, 31, and 23 are automatically programmed.
- CD inspection mode — Track No. 7 and 8 are automatically programmed.

## ADJUSTMENT

## PCB adjustment &lt;Fig. 1&gt;

No.	Item	Input side setting	Output side setting	Setting	Location	Adjustment method
1	Tilt balance	LD test disc	Connect the TV monitor to the video output.	F. No. 107 STILL (still image)	VR4	Minimize the crosstalk on the screen. After adjustment, set F. No. 23912 and F. No. 52007 to still image to verify that there is little crosstalk.
2	LD focus offset	LD test disc	Connect the oscilloscope to CN1-6 (RF OUT) on the video PCB.	N. No. 5000 STILL (still image)	VR1	Maximize the RF signal amplitude.
3	Tracking balance	LD test disc	Connect the oscilloscope to CN1-1 (TE) on the video PCB.	F. No. 5000 STILL (still image)	VR3	Make the positive and negative jump pulses equal. (Photograph 1)
4	CD focus offset	CD test disc	Connect oscilloscope to CN1-6 (RF OUT) on the video PCB.	PLAY	VR2	Maximize the RF signal (I pattern) amplitude. (Photograph 2)

## Video circuit unit (X35-2050) &lt;Fig. 2&gt;

No.	Item	Input side setting	Output side setting	Setting	Location	Adjustment method
1	4fsc frequency	Power ON	Connect the frequency counter to IC16 pin 9.	STOP	TC2	Within 14.31818 MHz $\pm$ 10 Hz
2	VCO free-run frequency	LD test disc	Connect the DC voltmeter to R113 (upper).	PLAY	TC2	2.5 V $\pm$ 0.1 V (f=14.2837 MHz)
3	FM detection level	LD test disc	Connect a resistor to CN2-5 pin 3. Connect the oscilloscope across a 75 $\Omega$ resistor. 	F. No. 5000 STILL (still image)	VR5	Set the video amplitude to 1.0 Vpp. (Photograph 3)
4	1H delay gain	LD test disc	Connect the oscilloscope to IC1 pins 18 and 20.	F. No. 111 STILL (still image)	VR4	Make the amplitudes at pins 18 and 20 equal. (Photograph 4)
5	Dropout detection	Power ON	Short C182 and apply a 5 MHz (1.0 Vpp/50 $\Omega$ sine wave to the Q2 base	Connect the oscilloscope to IC1 pin 22.	VR6	Set the DC voltage between 0.8 and 1.6 V.
6	RF level		Connect the oscilloscope to CN1-6 (RF OUT).			450 mVp-p $\pm$ 50 mV (Photograph 5)
7	Color signal phase compensation	LD test disc	Connect the TV monitor to the video output.	F. No. 9000 STILL (still image)	VR7	Turn VR7 fully counterclockwise, and adjust so that horizontal stripes decrease on the screen.
8	Horizontal sync VCO free-run frequency	Power ON	Connect a 1 k $\Omega$ resistor between IC15 pin 1 and the +5 V line. Connect the frequency counter to IC15 pin 8.	STOP	VR8	15.73 kHz $\pm$ 100 Hz
9	Focus gain	LD test disc Apply a sine wave (1.7 kHz/400 mVp-p) between CN1 pins 4 and	Connect the oscilloscope to CN1 pins 4 and 5.	PLAY	VR3	Make the outputs from CN1 pins 4 and 5 equal.
10	Tracking gain	LD test disc Apply a sine wave (3.5 kHz/200 mVp-p) between CN1 pins 1 and 2.	Connect the oscilloscope to CN1 pins 1 and 2.	PLAY	VR2	Make the outputs from CN1 pins 1 and 2 equal.

## ADJUSTMENT

### Processor unit (X32-1680) <Fig. 3>

Item	Input side setting	Output side setting	Setting	Location	Adjustment method
VCO free-run frequency	Power ON	Connect the frequency counter to TP1-1 (PLCK).	STOP	L5	4.315 MHz $\pm$ 2 kHz
VCO offset	Play the LD digital disc.	Connect the DC voltmeter to CN9-6 (CDME).	PLAY	VR1	2.4 V $\pm$ 0.1 V

### Y-C separation (X29-2150) <Fig. 4>

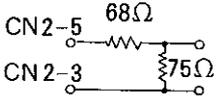
Item	Input side setting	Output side setting	Setting	Location	Adjustment method
C separation	LD test disc	Connect a 75 $\Omega$ resistor between the S terminal C output and GND. Connect the oscilloscope across the 75 $\Omega$ resistor.	Regenerate multi-burst.	VR1 L4	Adjust VR1 and L4 several times to minimize the 3.58 MHz amplitude. (Photographs 6 and 7)
Y separation	LD test disc	Connect a 75 $\Omega$ resistor between the S terminal Y output and GND. Connect the oscilloscope across the 75 $\Omega$ resistor.	F. No. 12400 STILL (still image)	VR2 VR3	Adjust VR2 and VR3 several times to minimize the color signal (3.58 MHz) amplitude. (Photographs 8 and 9)

## REGLAGE

## Réglage de la pré-PCI &lt;Fig. 1&gt;

N°	Article	Réglage du côté entrée	Réglage du côté sortie	Réglage	Emplacement	Méthode de réglage
1	Balace de la distorsion de trame	Disque d'essai de LD	Raccorder le récepteur de TV à la sortie vidéo.	F. No. 107 STILL (arrêt image)	VR4	Pour réduire la diaphonie à l'écran. Après le réglage, mettre F N°23912 et F N°52007 sur arrêt image pour vérifier l'absence de diaphonie.
2	Offset de mise au point sur LD	Disque d'essai de LD	Raccorder l'oscilloscope à CN1-6 (RF OUT) sur la PCI vidéo.	F. No. 5000 STILL (arrêt image)	VR1	Pour maximiser l'amplitude du signal RF.
3	Balace piste	Disque d'essai de LD	Raccorder l'oscilloscope à CN1-1 (TE) sur la PCI vidéo.	F. No. 5000 STILL (arrêt image)	VR3	Pour égaliser les impulsions de saut positives et négatives. (Photo 1)
4	Offset de mise au point sur CI-DESSOUS	Disque d'essai de CI-DESSOUS	Raccorder l'oscilloscope à CN1-6 (RF OUT) sur la PCI vidéo.	PLAY	VR2	Pour maximiser l'amplitude du signal RF (mire I) (Photo 2)

## Réglage de l'unité circuit vidéo (X35-2050) &lt;Fig. 2&gt;

N°	Article	Réglage du côté entrée	Réglage du côté sortie	Réglage	Emplacement	Méthode de réglage
1	Fréquence 4fsc	Power On	Raccorder le fréquencemètre à la fiche 9 de IC16.	STOP	TC2	Pas plus de 14,13818 MHz $\pm$ 10 Hz
2	Fréquence libre de l'oscillateur commandé par tension (VCO)	Disque d'essai de LD	Raccorder le voltmètre cc à R113 (supérieur)	PLAY	TC2	2,5 V $\pm$ 0,1 V (f=14,2837 MHz)
3	Niveau de détection de FM	Disque d'essai de LD	Raccorder une résistance à la fiche 3 de CN2-5. Raccorder l'oscilloscope aux bornes d'une résistance de 75 $\Omega$ . 	F. No. 5000 STILL (arrêt image)	VR5	Régler l'amplitude vidéo sur 1,0 Vpp. (Photo 3)
4	Gain sur retard 1H	Disque d'essai de LD	Raccorder l'oscilloscope aux fiches 18 et 20 de IC1.	F. No. 111 STILL (arrêt image)	VR4	Egaliser l'amplitude aux fiches 18 et 20. (Photo 4)
5	Détection de perte de niveau	Power ON	Mettre C182 en court-circuit et appliquer une onde sinusoïdale de 5 MHz (1,0 Vpp/50 $\Omega$ ) à la base de Q2.	Raccorder l'oscilloscope à la fiche 22 de IC1.	VR6	Régler la tension cc entre 0,8 et 1,6 V.
6	Niveau RF		Raccorder l'oscilloscope à CN1-6 (RF OUT).			
7	Compensation de phase du signal couleur	Disque d'essai de LD	Raccorder le récepteur de TV à la sortie vidéo.	F. No. 9000 STILL (arrêt image)	VR7	Tourner VR7 à fond dans le sens contraire au sens horloger et régler de sorte que les bandes horizontales diminuent sur l'écran.
8	Fréquence libre de l'oscillateur commandé par tension (VCO) de synchronisation horizontale.	Power ON	Raccorder une résistance de 1 k $\Omega$ entre la fiche 1 de IC15 et la ligne +5 V. Raccorder le fréquencemètre à la fiche 8 de IC15.	STOP	VR8	15,73 kHz $\pm$ 100 Hz
9	Gain de mise au point	Disque d'essai de LD Appliquer une onde sinusoïdale (1,7 kHz/400 mVpp) entre les fiches 4 et 5 de CN1.	Raccorder l'oscilloscope aux fiches 4 et 5 de CN1.	PLAY	VR3	Egaliser les sorties aux fiches 4 et 5 de CN1.
10	Gain de centrage sur piste	Disque d'essai de LD Appliquer une onde sinusoïdale (3,5 kHz/200 mVpp) entre les fiches 1 et 2 de CN1.	Raccorder l'oscilloscope aux fiches 1 et 2 de CN1.	PLAY	VR2	Egaliser les sorties aux fiches 4 et 5 de CN1.

## REGLAGE

### Réglage de l'unité de traitement (X32-1680) <Fig. 3>

Article	Réglage du côté entrée	Réglage du côté sortie	Réglage	Emplacement	Méthode de réglage
Fréquence libre de l'oscillateur commandé par tension (VCO)	Power ON	Raccorder le fréquencemètre à TP1-1 (PLCK).	STOP	L5	4,315 MHz±2 kHz
Offset de VCXO	Lire un vidéo-disque numérique.	Raccorder le voltmètre cc à CN9-6 (CDME).	PLAY	VR1	2,4 V±0,1 V

### Séparation Y-C (X29-2150) <Fig. 4>

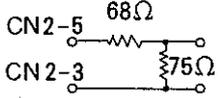
Article	Réglage du côté entrée	Réglage du côté sortie	Réglage	Emplacement	Méthode de réglage
Séparation de C	Disque d'essai de LD	Raccorder une résistance de 75 Ω entre la borne S de la sortie C et la terre (GND). Raccorder l'oscilloscope aux bornes de la résistance de 75 Ω.	Regénération de multi-burst	VR1 L4	Régler VR1 et L4 à volonté de sorte à minimiser l'amplitude 3,58 MHz. (Photos 6 et 7)
Séparation de Y	Disque d'essai de LD	Raccorder une résistance de 75 Ω entre la borne S de la sortie Y et la terre (GND). Raccorder l'oscilloscope aux bornes de la résistance de 75 Ω.	F. No. 12400 STILL (arrêt image)	VR2 VR3	Régler VR2 et VR3 à volonté de sorte à minimiser l'amplitude (3,58 MHz) du signal couleur. (Photos 8 et 9)

# ABGLEICH

## Leiterplatte-Voreinstellung <Abb. 1>

Nr.	Einzelheit	Eingangsseitige Einstellung	Ausgangsseitige Einstellung	Einstellung	Lage	Einstellverfahren
1	Neigungsabgleichung	LD-Testplatte	Den Bildkontrollempfänger an den Videoausgang anschließen.	F. No. 107 STILL (Stehbild)	VR4	Die Einstreuung auf dem Bildschirm auf das Minimum einstellen. Nach der Einstellung F. Nr. 23912 und F. Nr. 52007 auf das Stehbild einstellen, um zu bestätigen daß die bestehende Einstreuung sehr gering ist.
2	LD-Fokusversetzung	LD-Testplatte	Den Oszilloskop an CN1-6 (RF OUT) auf der Video-Leiterplatte anschließen.	F. No. 5000 STILL (Stehbild)	VR1	Die HF-Signalamplitude auf das Maximum einstellen.
3	Dynamische Hellesteuerungsabgleichung	LD-Testplatte	Den Oszilloskop an CN1-1 (TE) auf der Video-Leiterplatte anschließen.	F. No. 5000 STILL (Stehbild)	VR3	Den positiven und negativen Sprungimpuls gleichmachen. (Foto 1)
4	CD-Fokusversetzung	CD-Testplatte	Den Oszilloskop an CN1-6 (RF-OUT) auf der Video-Leiterplatte anschließen.	PLAY	VR2	Die HF-Signalamplitude (I-Muster) auf das Maximum einstellen. (Foto 2)

## Einstellung der Video-Schaltungseinheit (X35-2050) <Abb. 2>

Nr.	Einzelheit	Eingangsseitige Einstellung	Ausgangsseitige Einstellung	Einstellung	Lage	Einstellverfahren
1	4fsc-Frequenz	Power ON	Den Frequenzmesser an IC16 Pin 9 anschließen.	STOP	TC2	Innerhalb von 14,31818 MHz $\pm 10$ Hz
2	Freilauf-Frequenz des spannungsgesteuerten Oszillators	LD-Testplatte	Den GS-Voltmeter an R113 (oberen) anschließen.	PLAY	TC2	2,5 V $\pm 0,1$ V (f=14,2837 MHz)
3	FM-Erfassungspegel	LD-Testplatte	Einen Widerstand an CN2-5 Pin 3 anschließen. Den Oszilloskop über einen 75 Ohm-Widerstand anschließen.  	F. No. 500 STILL1 (Stehbild)	VR5	Die Videoamplitude auf 1,0 Vpp einstellen. (Foto 3)
4	1H Verzögerungsverstärkung	LD-Testplatte	Den Oszilloskop an IC1 Pin 18 und Pin 20 anschließen.	F. No. 111 STILL (Stehbild)	VR4	Die Amplitude an Pin 18 und Pin 20 gleichstellen (Foto 4)
5	Ausfallerkennung	Power ON	C182 kurzschließen und eine 5 MHz-Sinuswelle (1,0 Vpp/50 Ohm) an den Q2-Sockel anlegen.	Den Oszilloskop an IC1 Pin 22 anschließen.	VR6	Die GS-Spannung zwischen 0,8 bis 1,6 V einstellen.
6	HF-Pegel		Den Oszilloskop an CN1-6 to (RF OUT) anschließen.			
7	Farbsignalphasenabgleich	LD-Testplatte	Den Bildkontrollempfänger an den Videoausgang anschließen.	F. No. 9000 STILL (Stehbild)	VR7	Den VR7 ganz nach links drehen und so einstellen, daß die Horizontalstreifen am Bildschirm vermindert werden.
8	Horizontale synchronisierte VOC-Freilauf-frequenz	Power ON	Einen 1 Kohm-Widerstand zwischen IC15 Pin 1 und der +5 V Leitung anschließen. Den Frequenzmesser an IC15 Pin 8 anschließen.	STOP	VR8	15,73 kHz $\pm 100$ Hz
9	Focusverstärkung	LD-Testplatte Eine Sinuswelle (1,7 kHz/ 400 mVpp) zwischen CN1 Pin 4 und Pin 5 anlegen.	Den Oszilloskop an CN1 Pin 4 und Pin 5 anschließen.	PLAY	VR3	Die Ausgaben von CN1 Pin 4 und Pin 5 gleichmachen.
10	Hellesteuerungsverstärkung	LD-Testplatte Eine Sinuswelle (3,5 kHz/ 200 mVpp) zwischen CN1 Pin 1 und Pin 2 anlegen.	Den Oszilloskop an CN1 Pin 1 und Pin 2 anschließen.	PLAY	VR2	Die Ausgaben von CN1 Pin 1 und Pin 2 gleichmachen.

## ABGLEICH

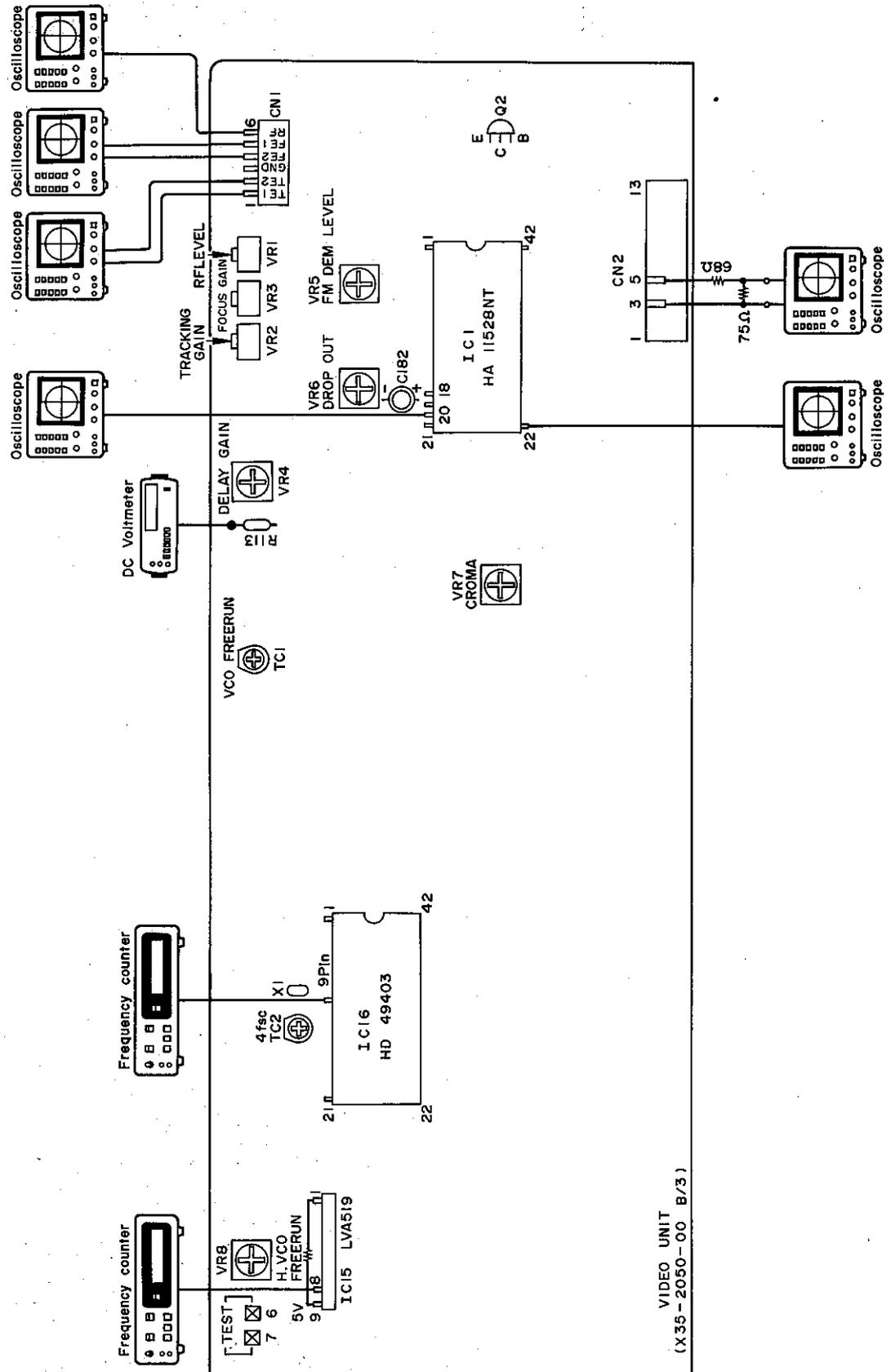
### Einstellung der Prozessor-Einheit (X32-1680) <Abb. 3>

Einzelheit	Eingangsseitige Einstellung	Ausgangsseitige Einstellung	Einstellung	Lage	Einstellverfahren
VCO-Freilauf-frequenz	Power ON	Den Frequenzmesser an TP1-1 (PLCK) anschließen.	STOP	L5	4,315 MHz±2 kHz
VCXO-Versetzung	Die LD-Digitalplatte abspielen.	Den GS-Voltmeter an CN9-6 (SDME) anschließen.	PLAY	VR1	2,4 V±0,1 V

### Y-C-Trennung (X29-2150) <Abb. 4>

Einzelheit	Eingangsseitige Einstellung	Ausgangsseitige Einstellung	Einstellung	Lage	Einstellverfahren
C-Trennung	LD-Testplatte	Einen 75-Ohm-Widerstand zwischen C-Ausgang und GND der S-Klemme anschließen. Den Oszilloskop über den 75-Ohm-Widerstand anschließen.	Multi-burst regenerieren.	VR1 L4	VR1 und L4 wiederholt einstellen, um die 3,58 MHz-Amplitude auf das Minimum zu setzen. (Fotos 6 und 7)
Y-Trennung	LD-Testplatte	Einen 75-Ohm-Widerstand zwischen Y-Ausgang und GND der S-Klemme anschließen. Den Oszilloskop über den 75-Ohm-Widerstand anschließen.	F. No. 12400 STILL (Stehbild)	VR2 VR3	VR2 und VR3 wiederholt einstellen, um die Farbsignal-Amplitude (3,58 MHz) auf das Minimum zu setzen. (Fotos 8 und 9)

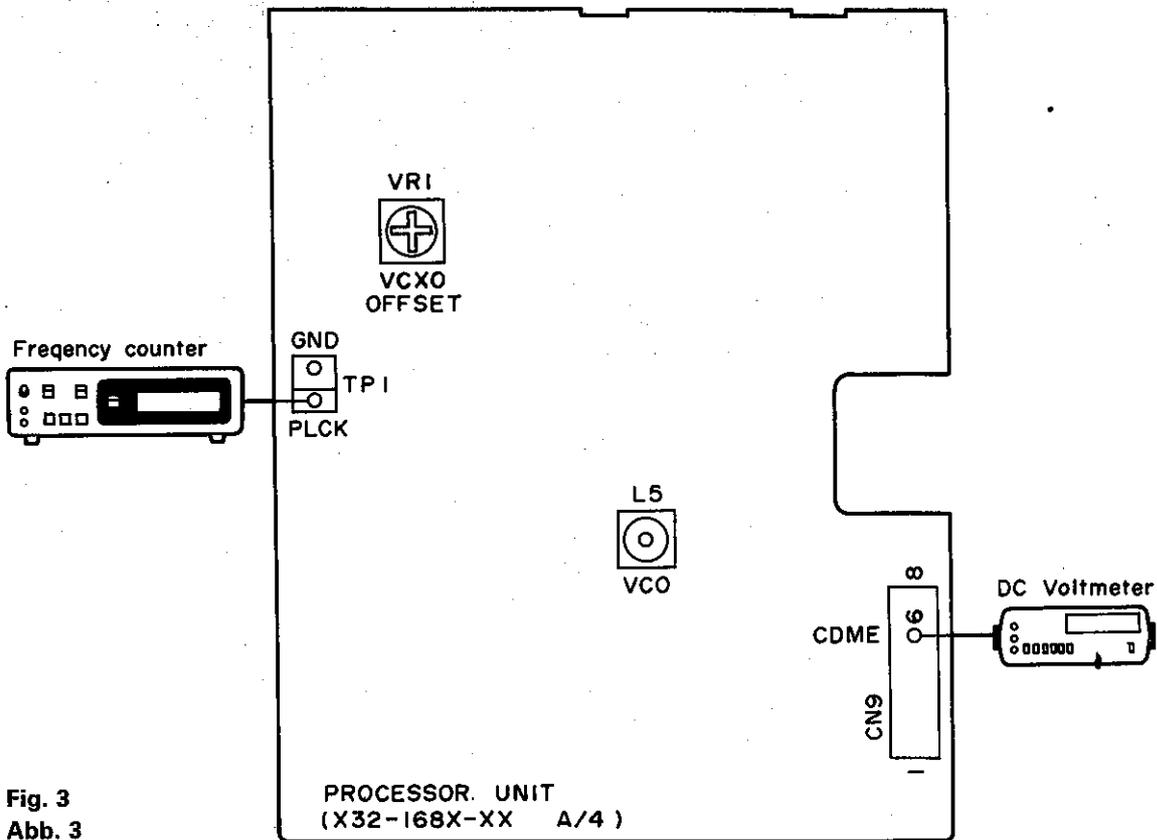
**Video circuit unit (X35-2050) adjustment**  
**Réglage de l'unité circuit vidéo (X35-2050)**  
**Einstellung der Video-Schaltungseinheit (X35-2050)**



**Fig. 2**  
**Abb. 2**

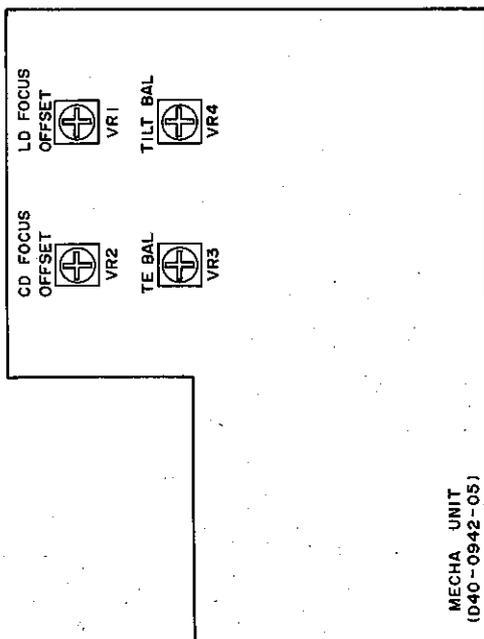
# LVD-300

**Processor unit (X32-1680) adjustment**  
**Réglage de l'unité de traitement (X32-1680)**  
**Einstellung der Prozessor-Einheit (X32-1680)**



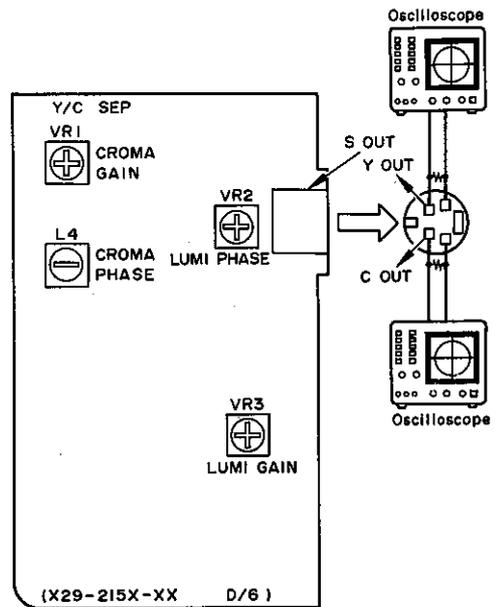
**Fig. 3**  
**Abb. 3**

**PCB adjustment**  
**Réglage de la pré-PCI**  
**Leiterplatte-Voreinstellung**



**Fig. 1**  
**Abb. 1**

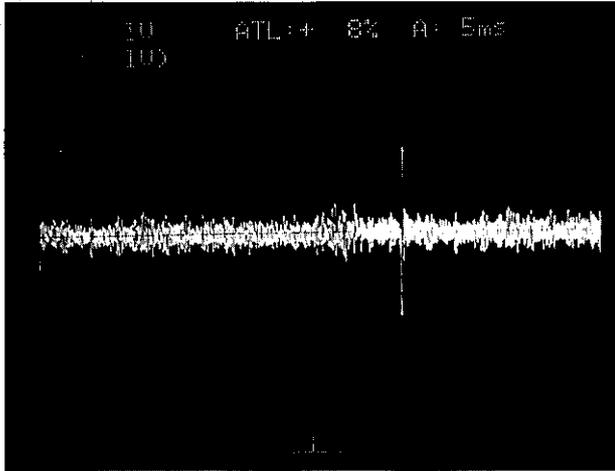
**Y-C separation (X29-2150)**  
**Séparation Y-C (X29-2150)**  
**Y-C Trennung (X29-2150)**



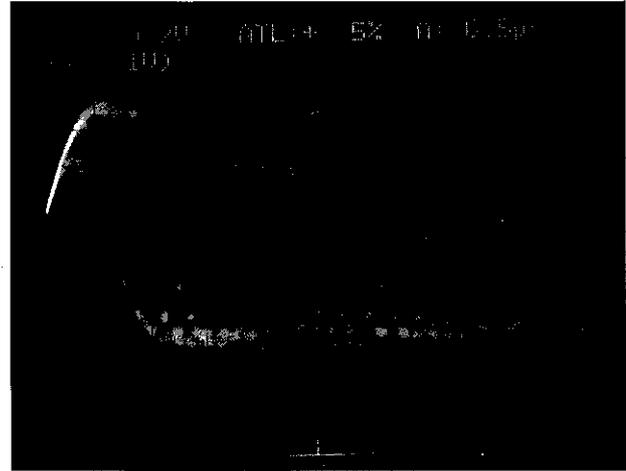
**Fig. 4**  
**Abb. 4**

## ADJUSTMENT/REGLAGE/ABGLEICH

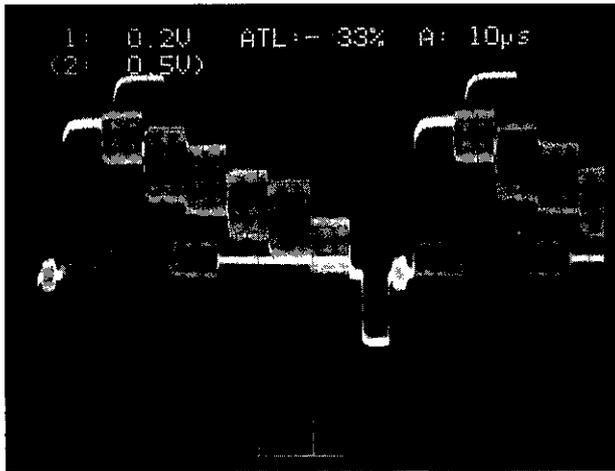
<Photo 1> Tracking balance



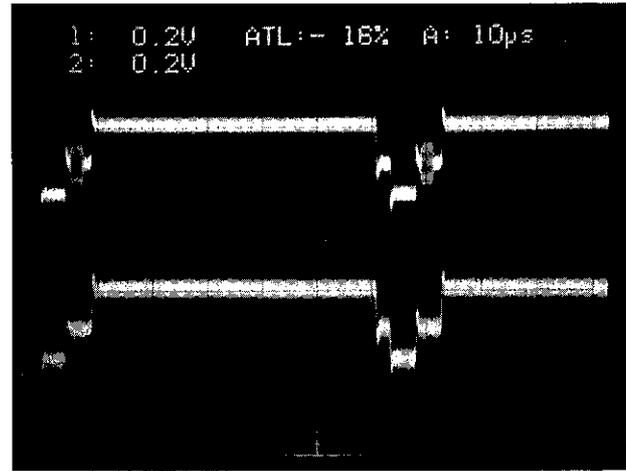
<Photo 2> CD focus offset



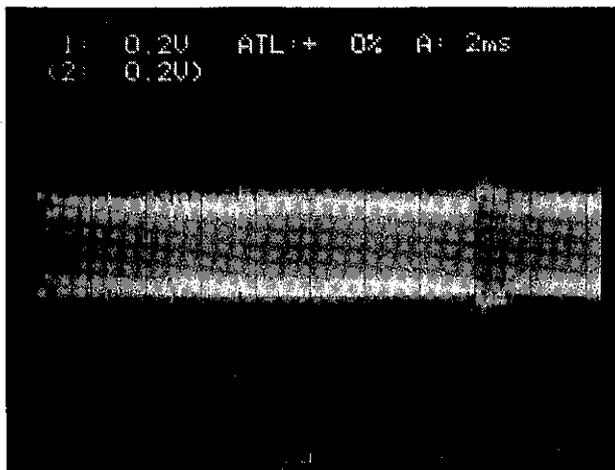
<Photo 3> FM detection level



<Photo 4> 1H delay gain

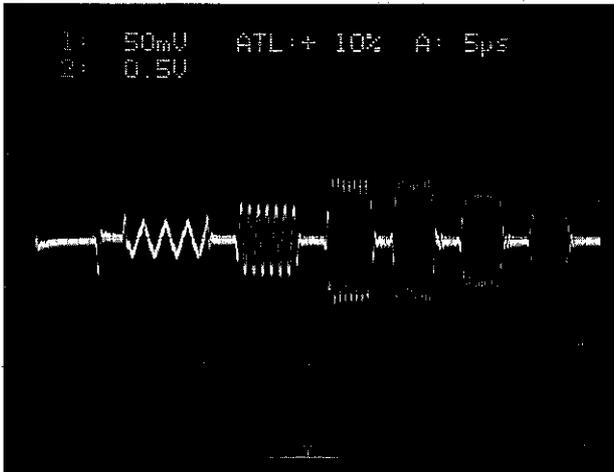


<Photo 5> RF level

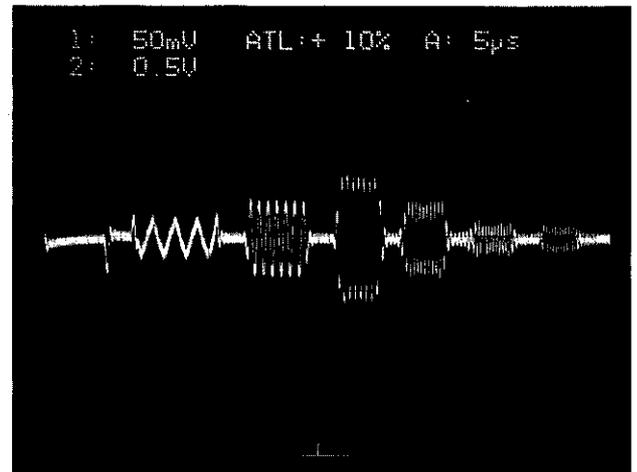


## ADJUSTMENT/REGLAGE/ABGLEICH

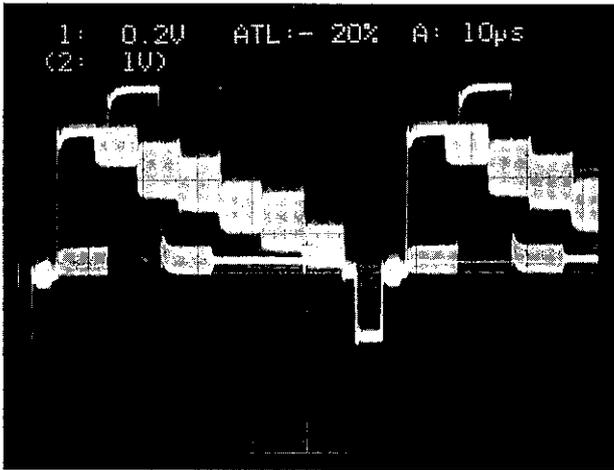
<Photo 6> Y/C separation (C) NG



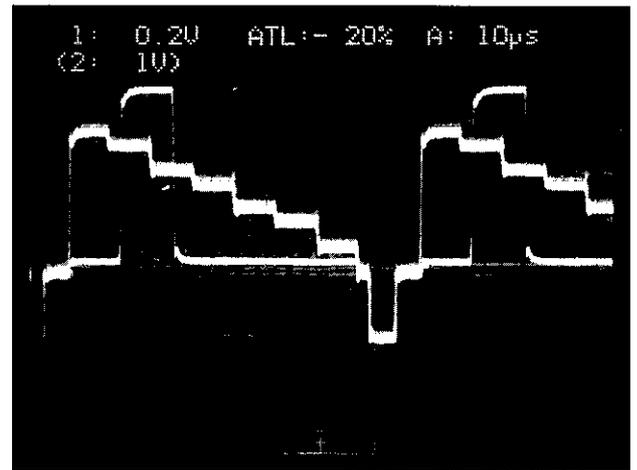
<Photo 7> Y/C separation (C) OK



<Photo 8> Y/C Separation (Y) NG

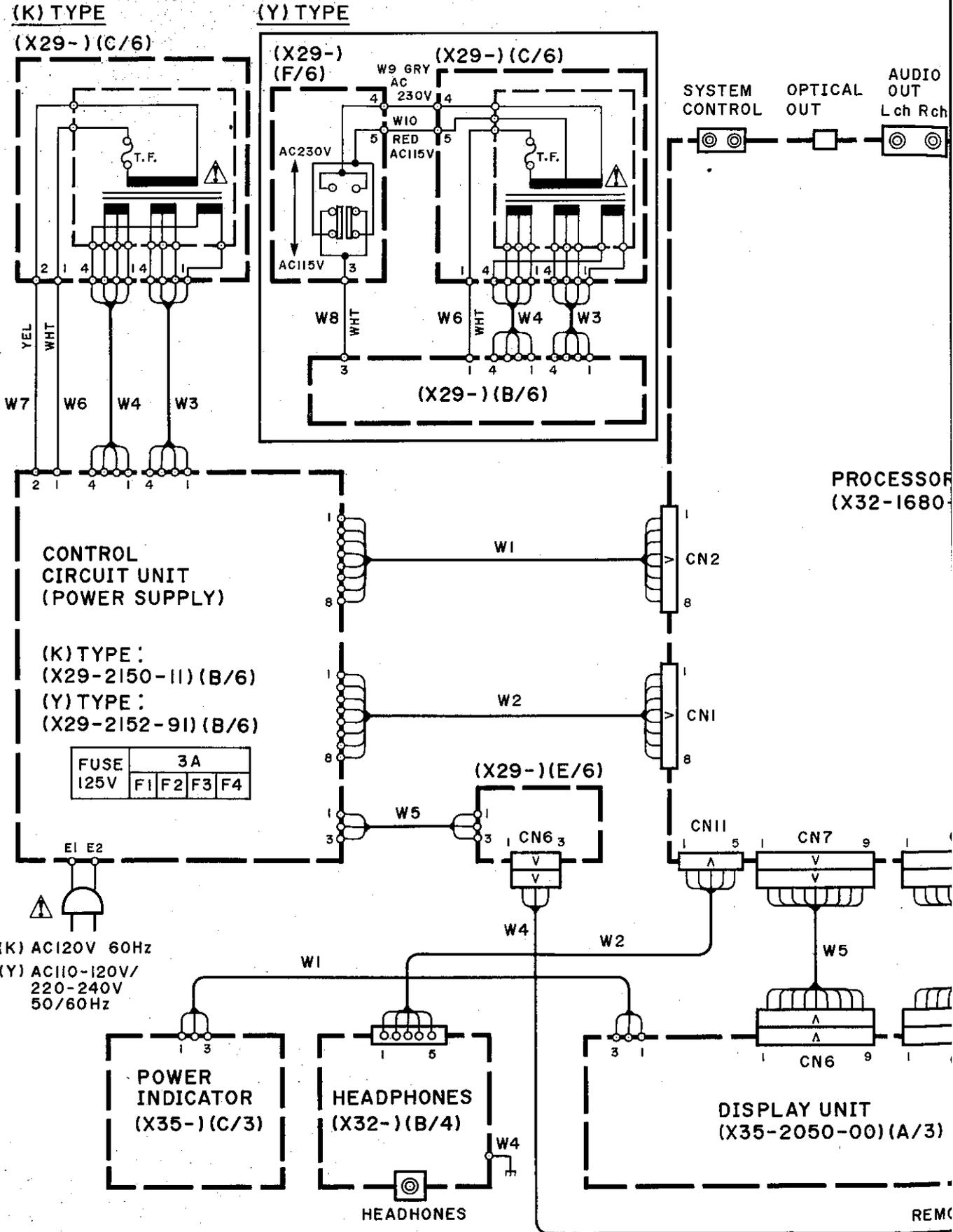


<Photo 9> Y/C separation (Y) OK



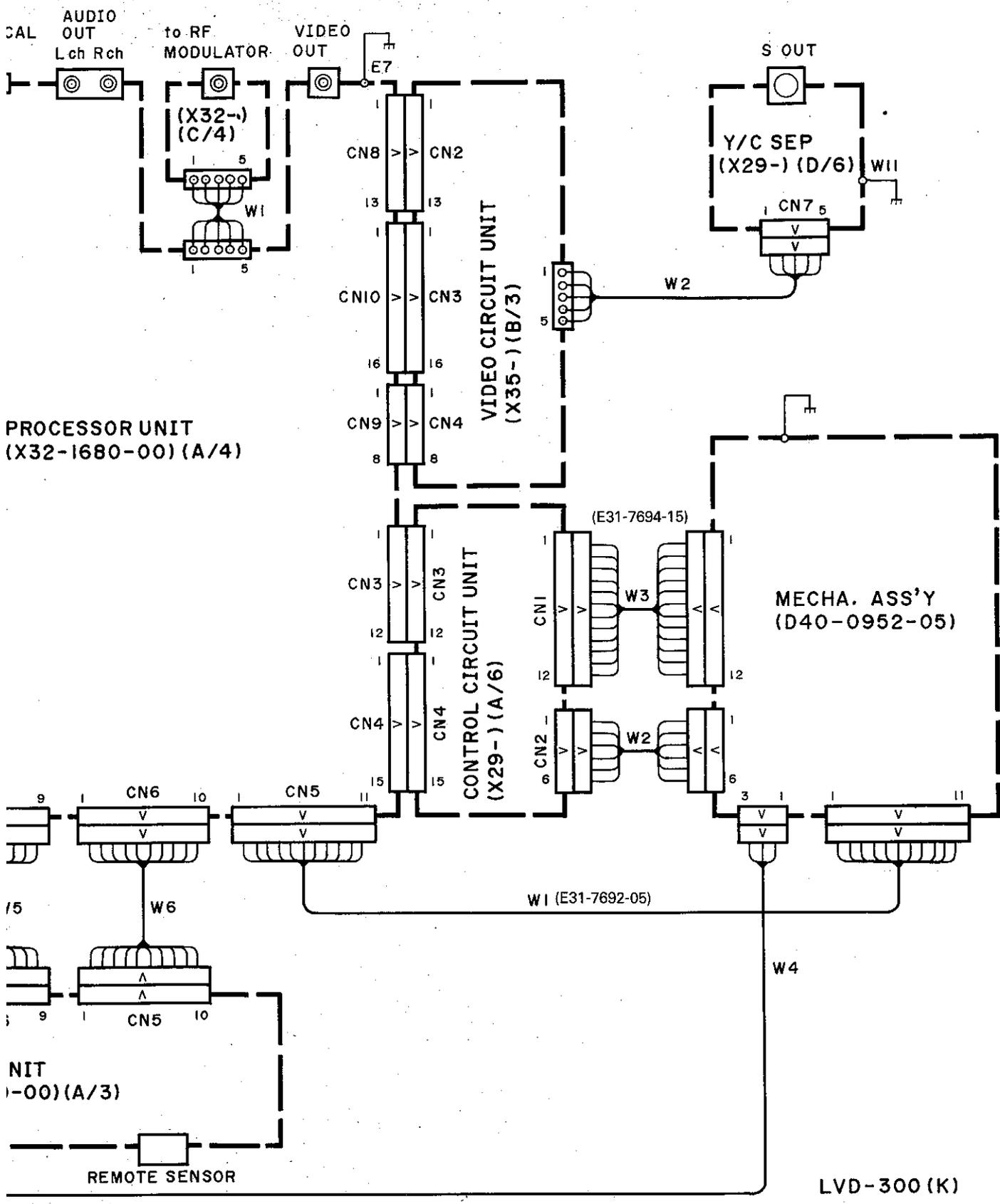
# LVD-300

## WIRING DIAGRAM



# LVD-300

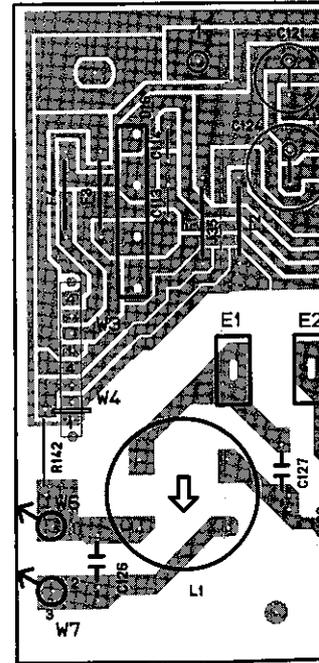
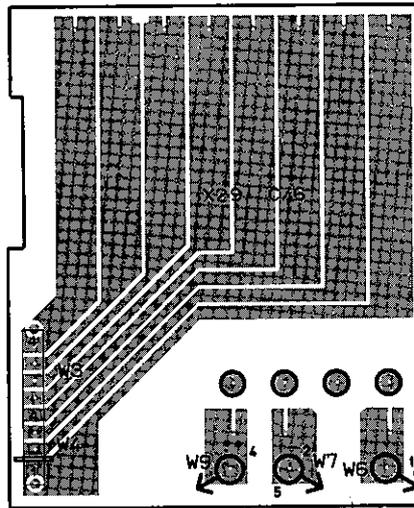
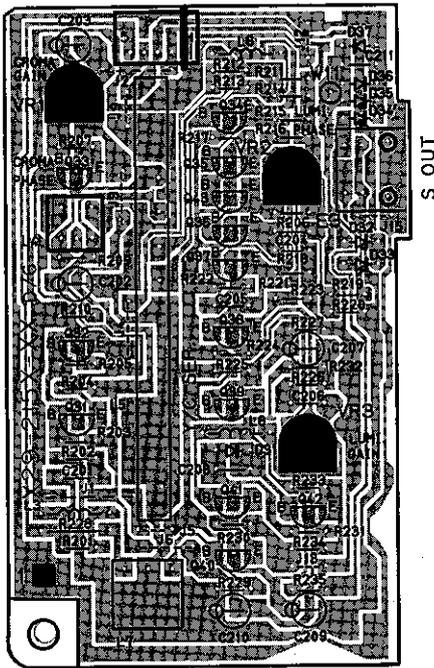
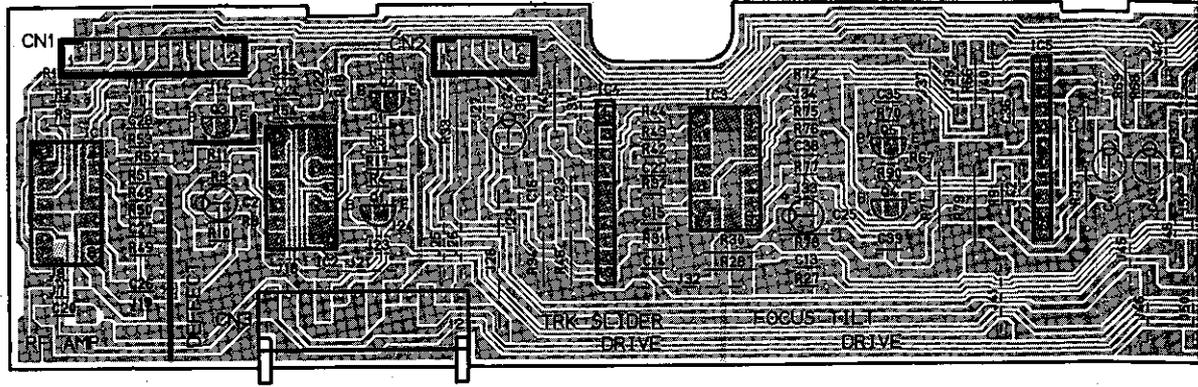
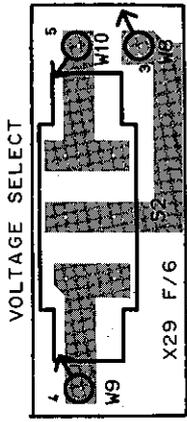
## DIAGRAM

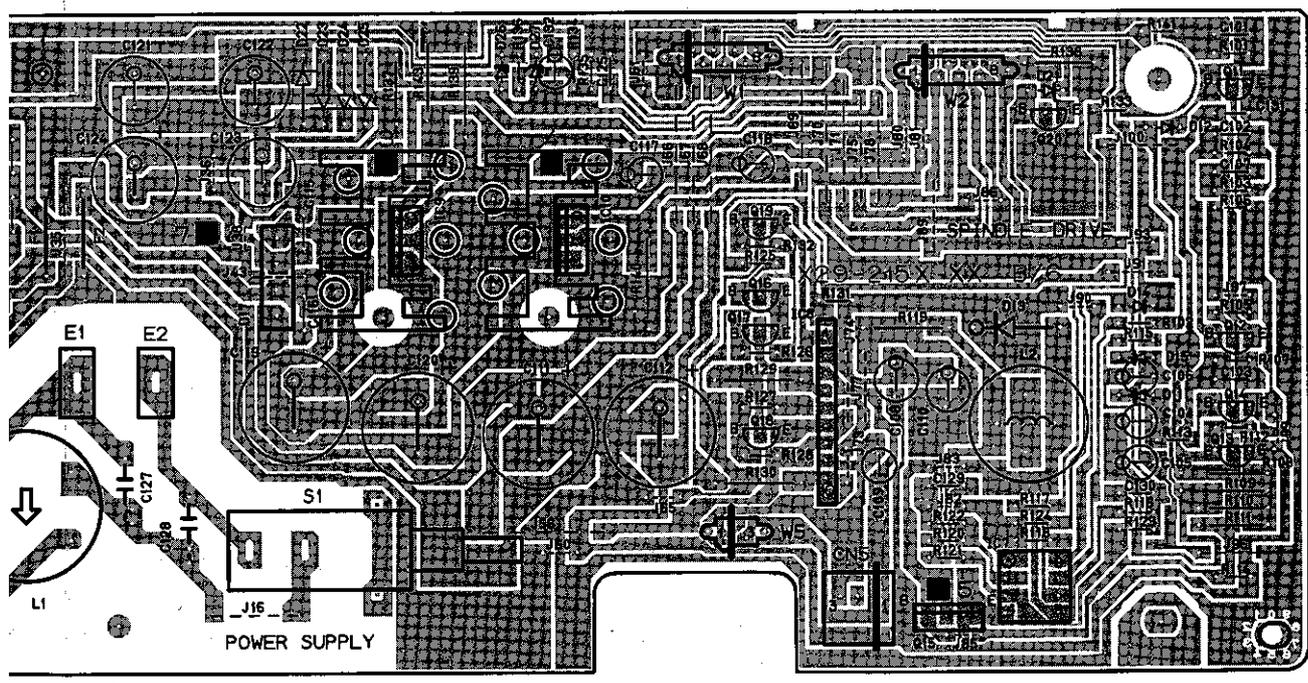
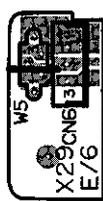
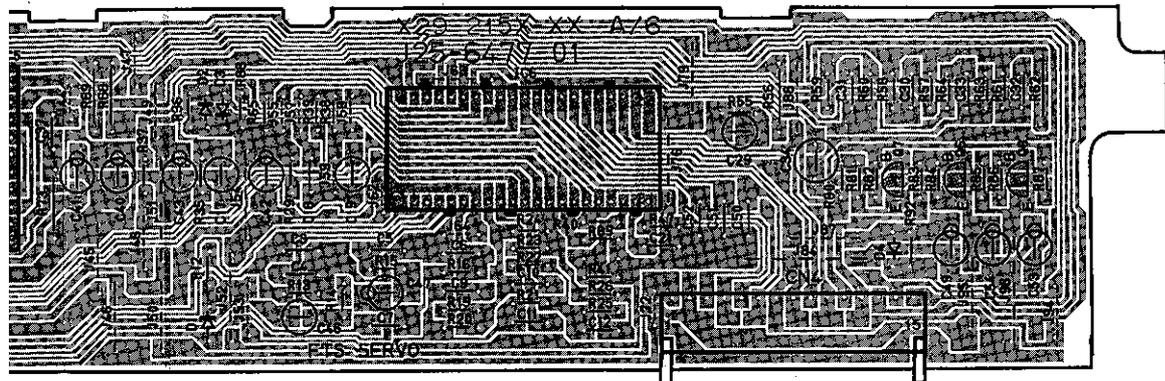


LVD-300 (K)

**PC BOARD (Component Side View)**

**CONTROL UNIT**

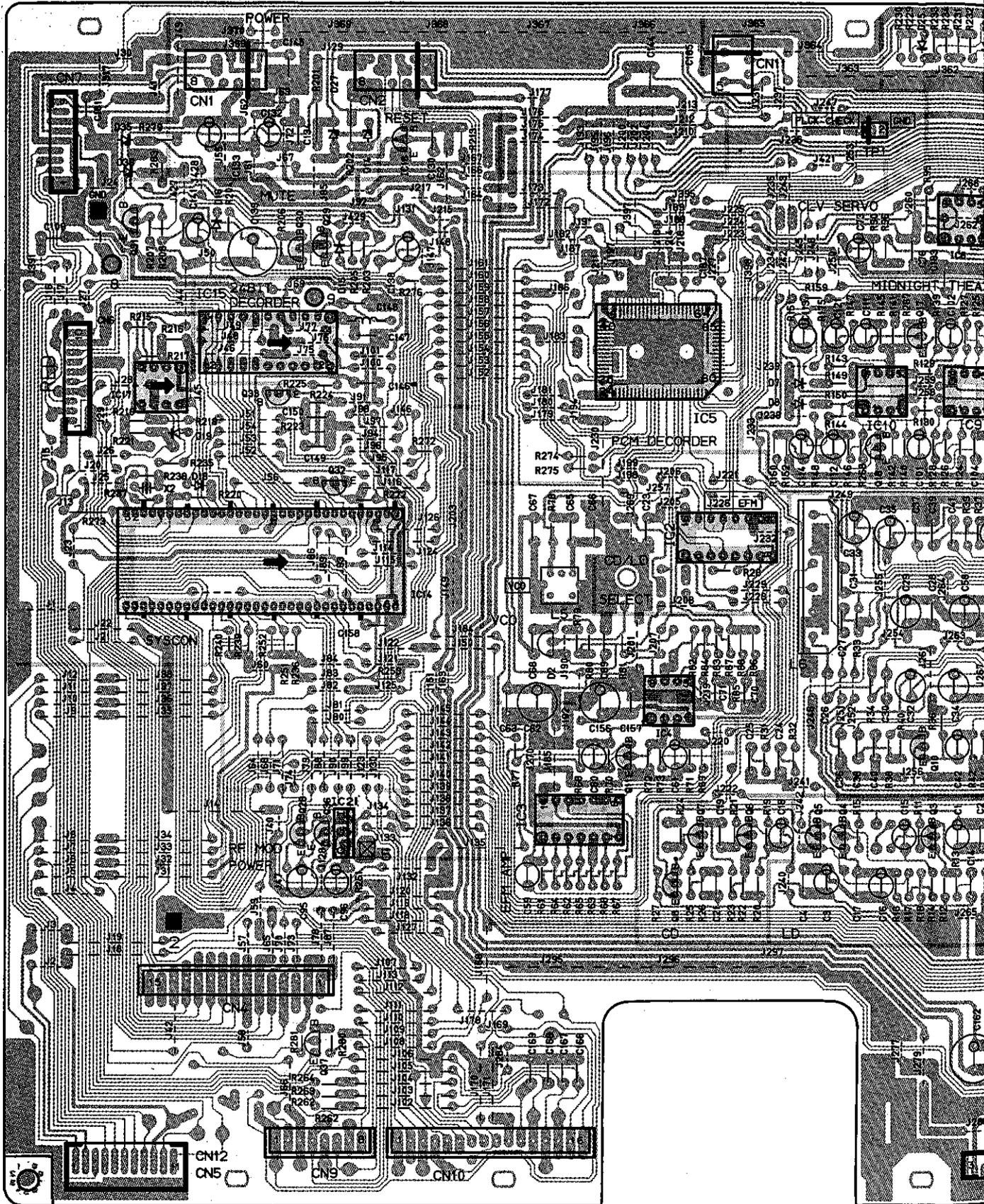


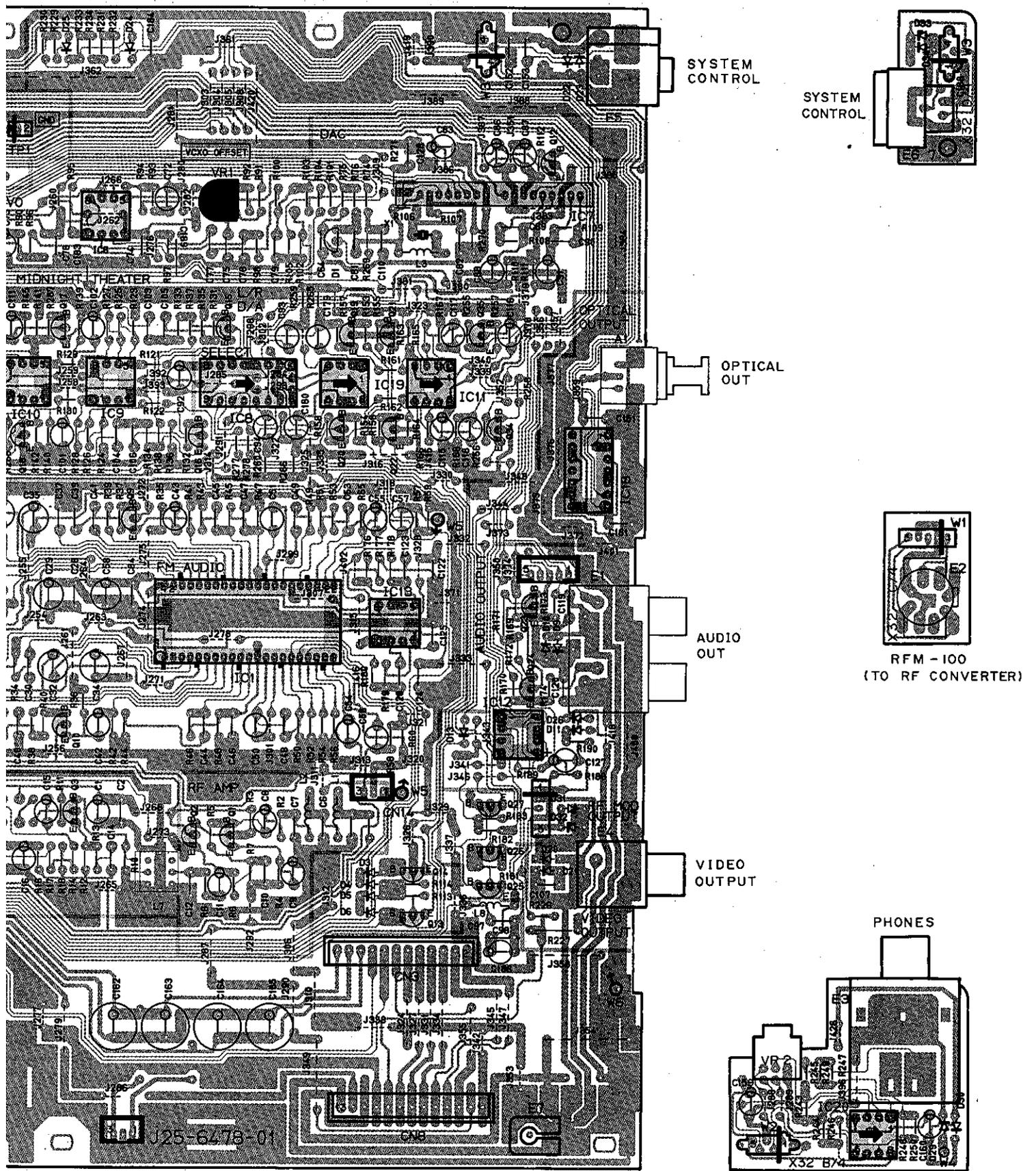


Refer to the schematic diagram for the values of resistors and capacitors.

# PC BOARD (Component Side View)

## SIGNAL PROCESSOR UNIT

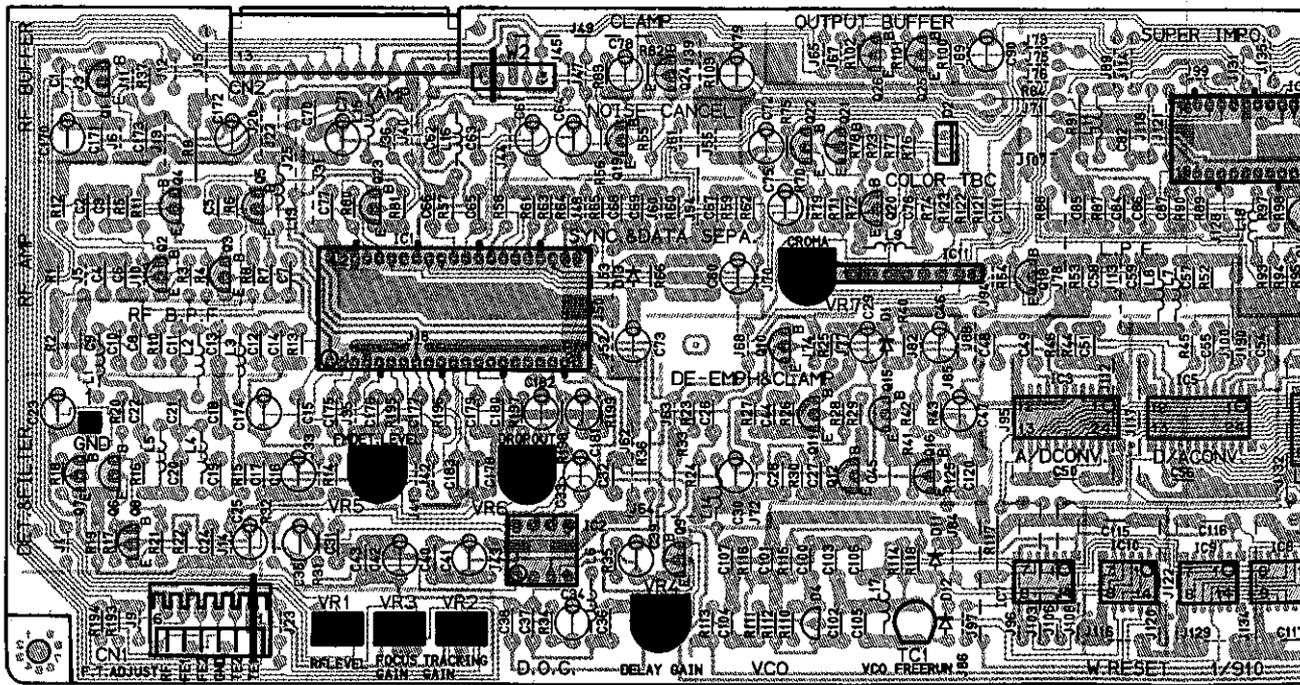
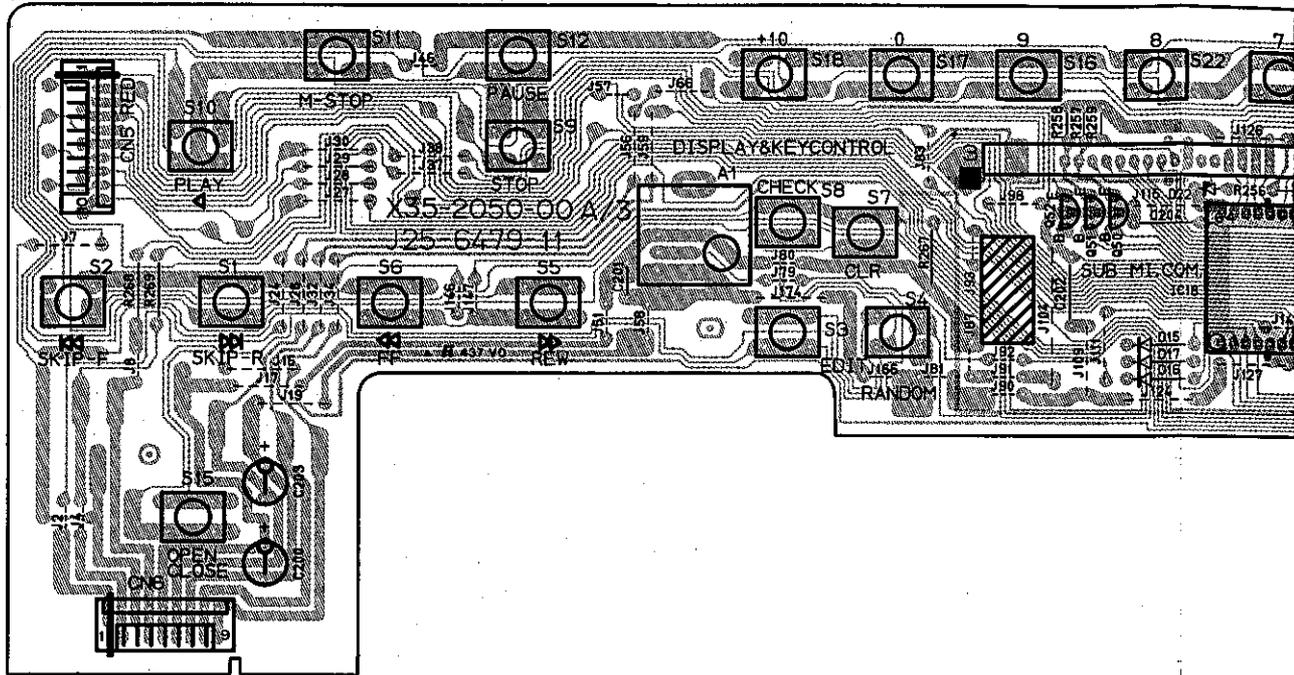


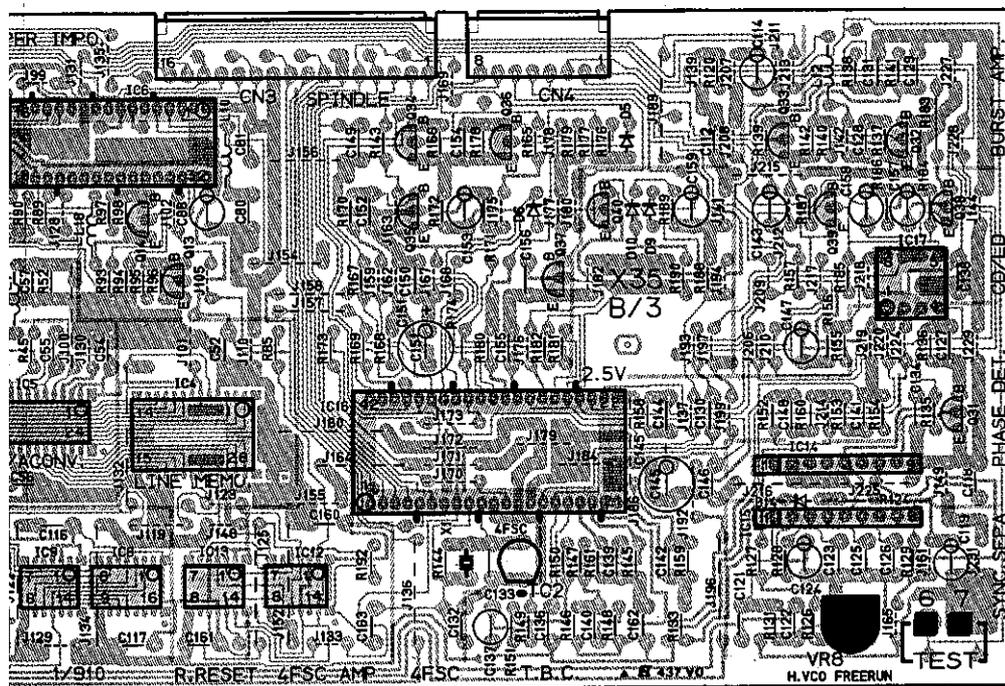
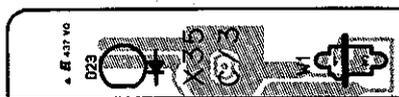
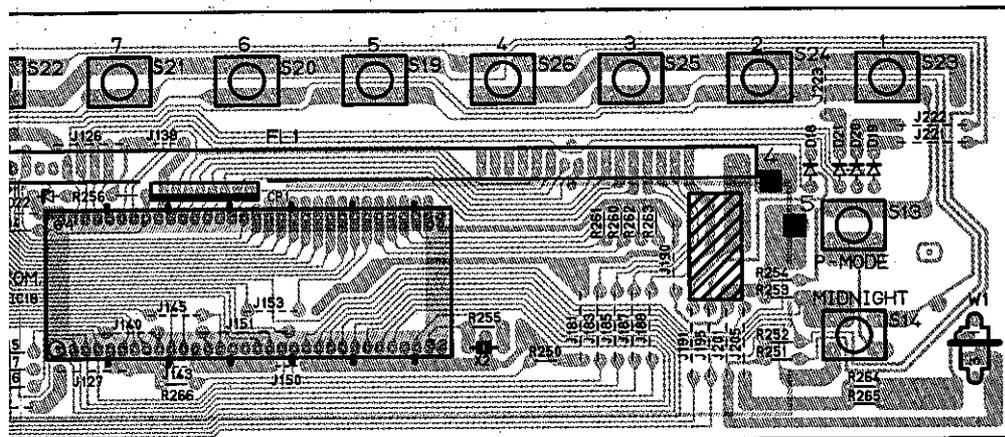


Refer to the schematic diagram for the values of resistors and capacitors.

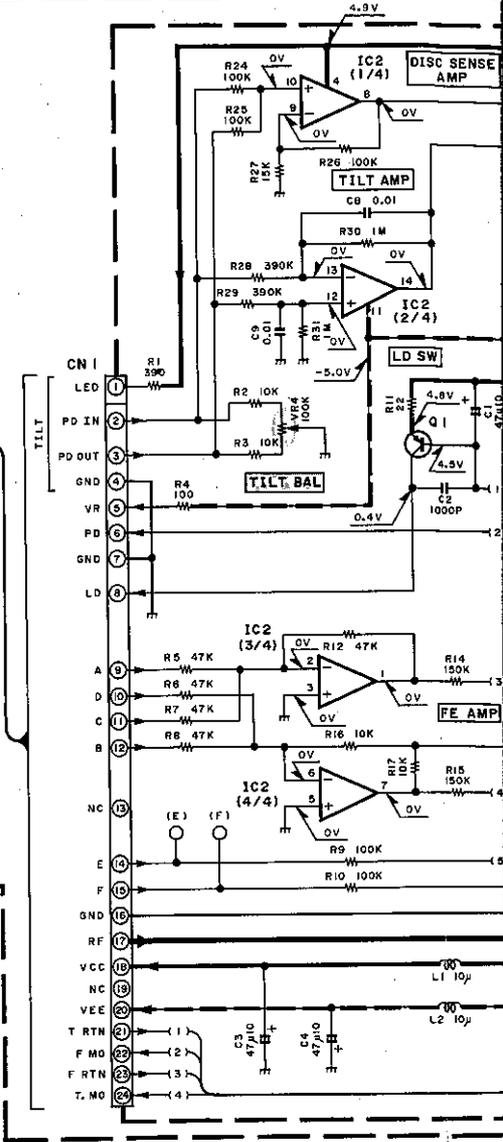
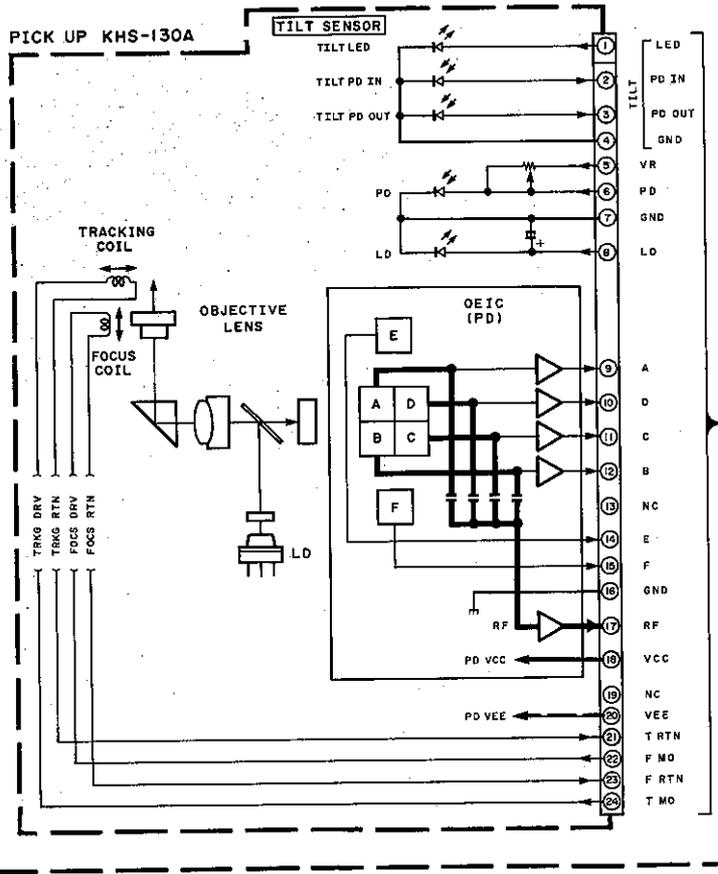
PC BOARD (Component Side View)

DISPLAY UNIT

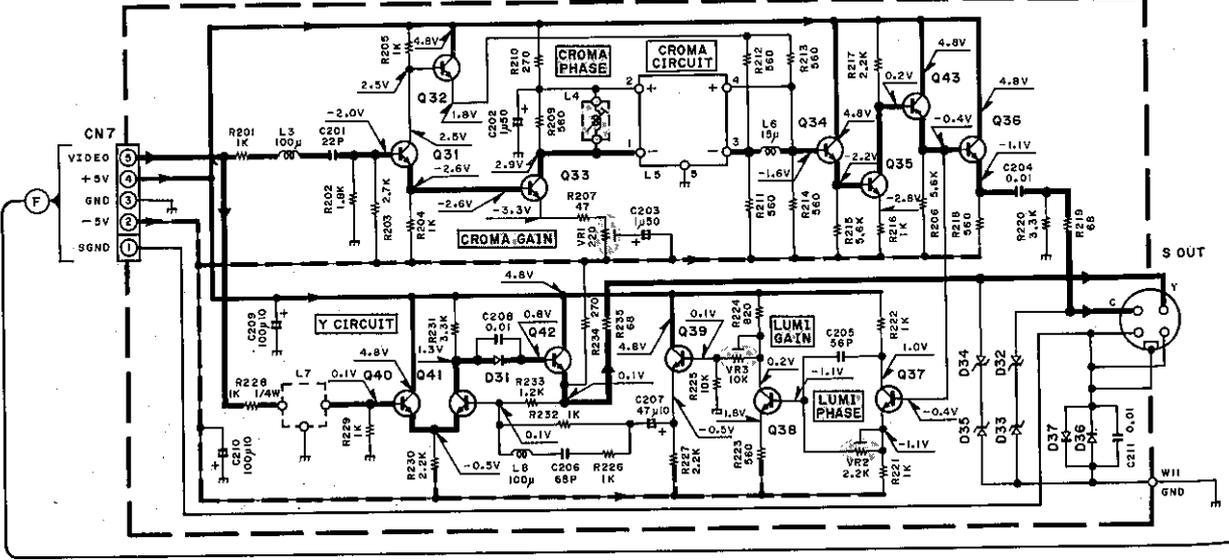




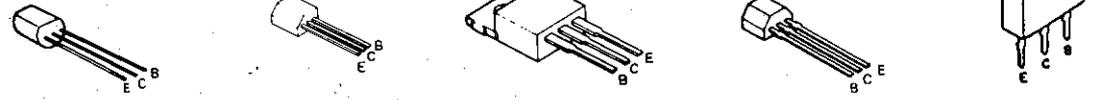
Refer to the schematic diagram for the values of resistors and capacitors.



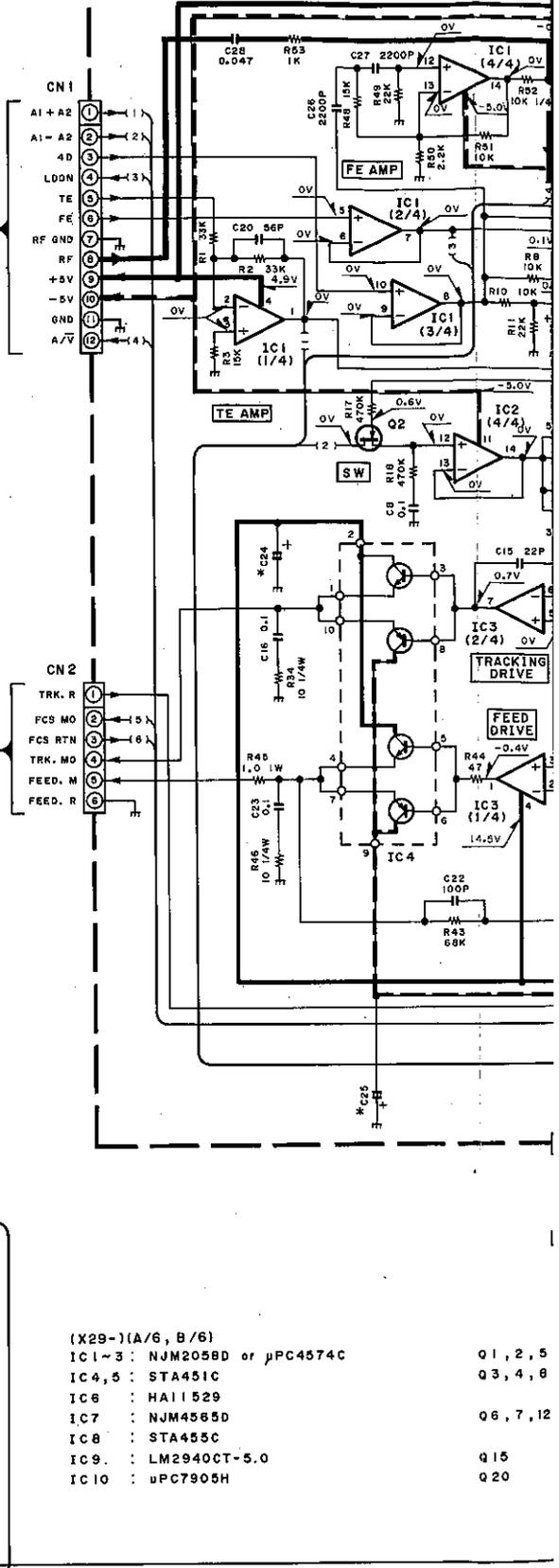
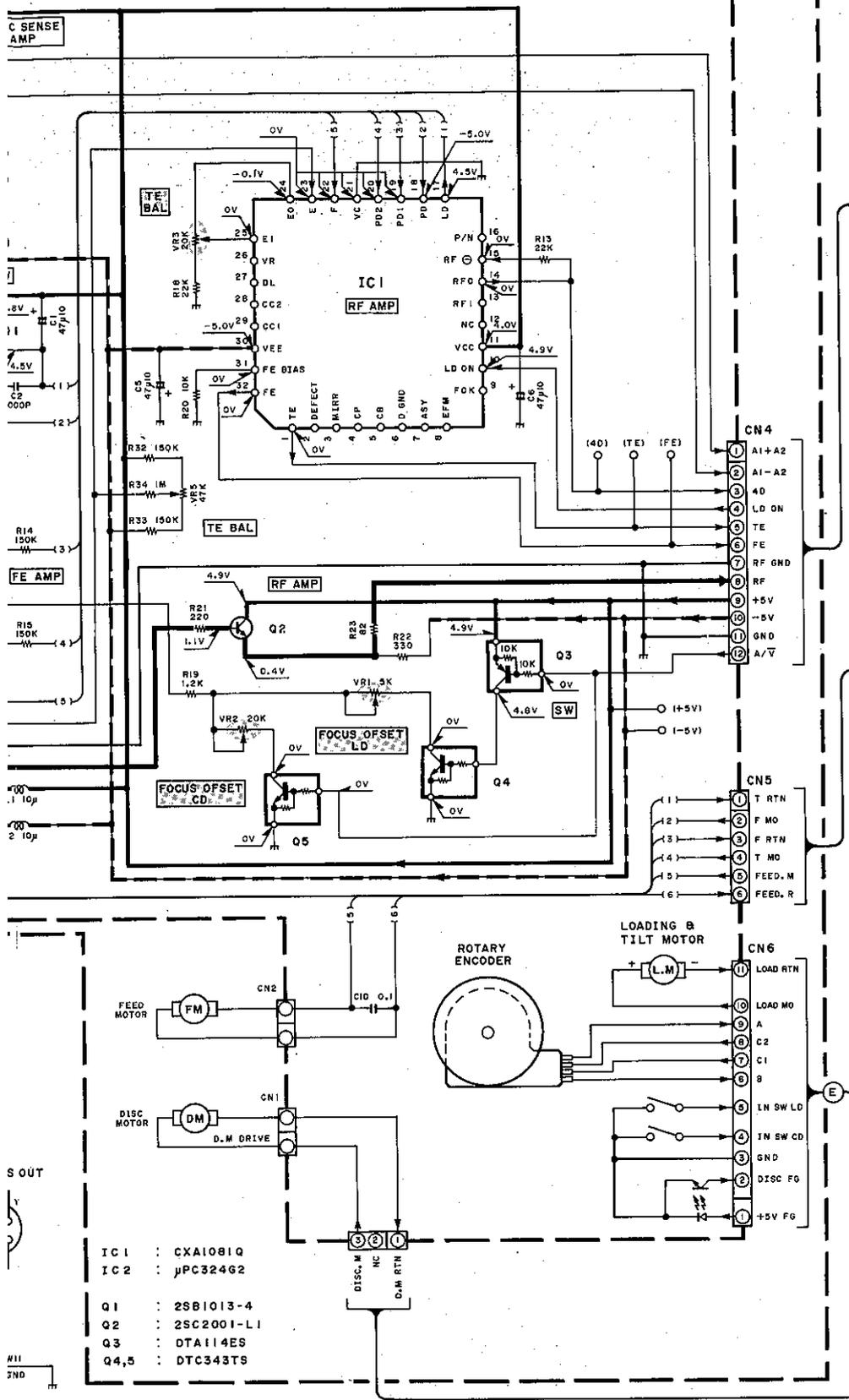
{ X29-(D/6)  
 Q31~43 : 2SC945(A)(Q,P) or 2SC1740S(Q,R)  
 Q31,36,37 : ISS133 or HSS104  
 Q32~35 : RD2.7ES(B) or HZS2.7N(B)  
 CONTROL CIRCUIT UNIT (Y/C SEP)  
 (X29-215X-XX) (D/6)



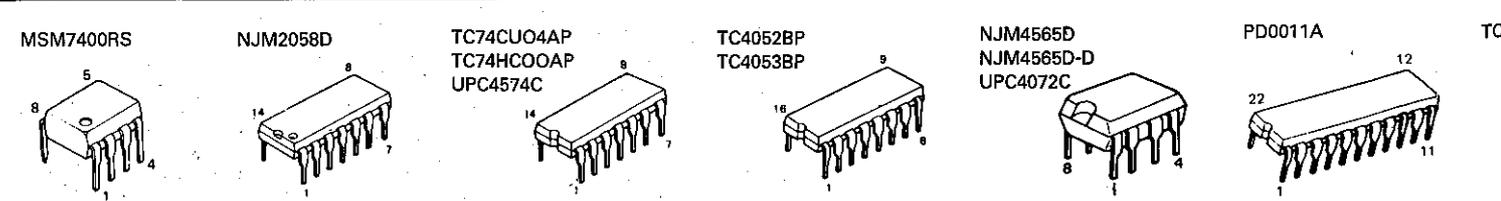
- 2SA733(A)
- 2SC1923
- 2SC2003
- 2SC2878
- 2SC945(A)
- DTC124ES
- 2SD1266
- DTA124ES
- 2SA933S
- 2SC1740S
- DTC144TFF

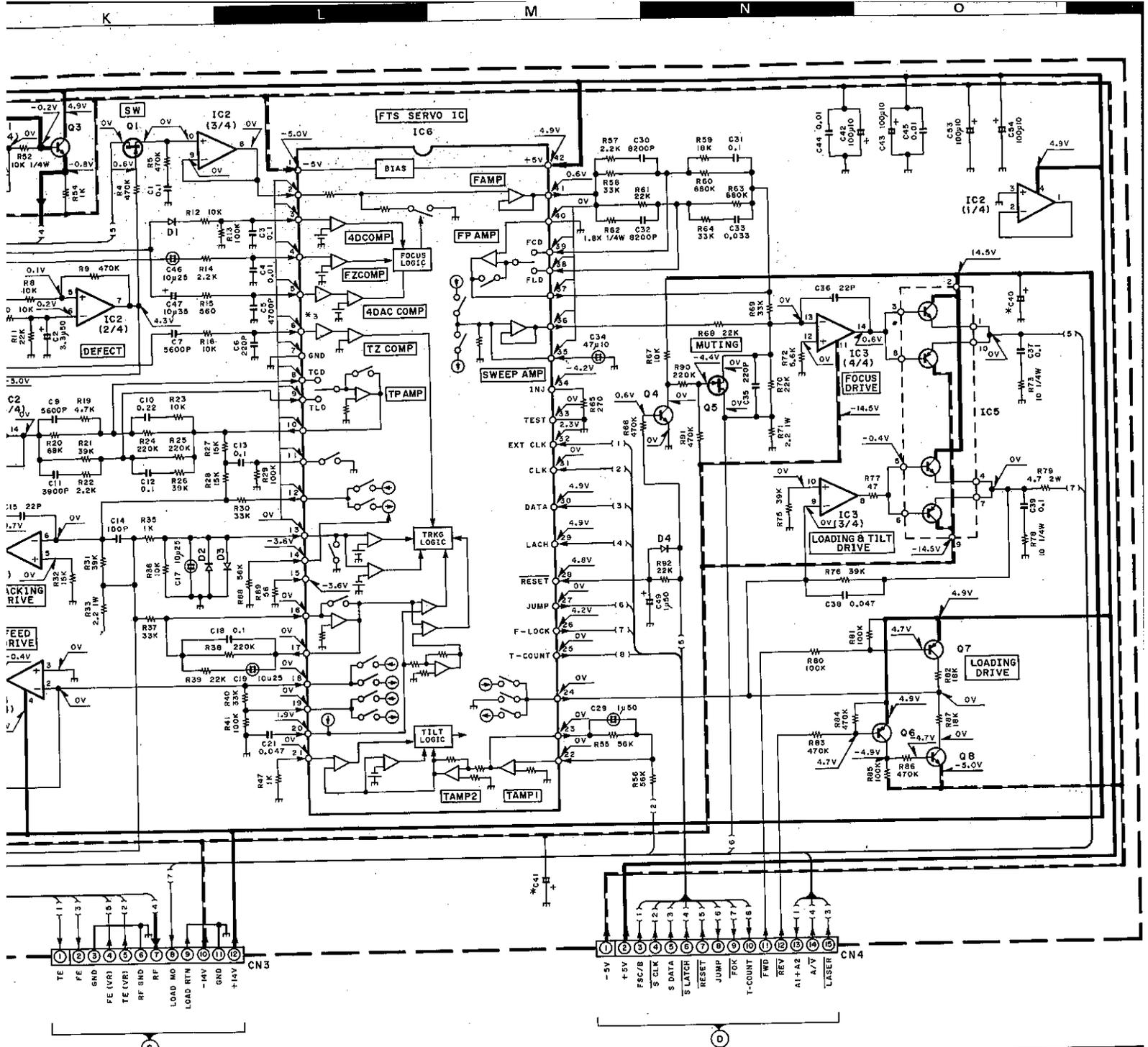


CONTROL CIRCUIT UNIT (F.T.S)  
(X29-215X-XX) (A/6)



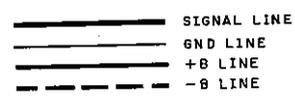
- (X29-)(A/6, B/6)
- IC1-3 : NJM2058D or  $\mu$ PC4574C
  - IC4,5 : STA451C
  - IC6 : HA11529
  - IC7 : NJM4565D
  - IC8 : STA455C
  - IC9 : LM2940CT-5.0
  - IC10 :  $\mu$ PC7905H
- Q1, 2, 5  
Q3, 4, 8  
Q6, 7, 12  
Q15  
Q20



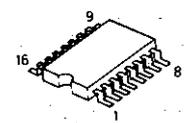


- 1, 2, 5 : 2SK105 (F, H)
- 3, 4, 8, 11, 13, 16, 17 : 2SC945 (A) (Q, P) or 2SC1740S (Q, R)
- 6, 7, 12, 14, 18, 19 : 2SA733 (A) (Q, P) or 2SA933S (Q, R)
- 15 : 2SD1226 (Q, P)
- 20 : 2SD2003 (L, K)
- D1-4, 11, 12, 14, 15, 21 : ISS133 or HSS104
- D13 : RK36
- D16 : RBV-402LFA
- D17 : KBP02ML-6127
- D22-25 : S5566B
- D26 : RD30ES (B) or HZS30N (B)
- D27 : RD5.6ES (B) or HZS5.6N (B)

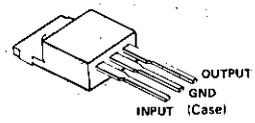
DESTINATION		UNIT NAME	R142	C24, 25 40, 41	C111, 112
COUNTRY	ABB.				
U.S.A.	K	X29-2150-11	YES	47μ16	3300μ16
PX	Y	X29-2152-91	NO	47μ25	3300μ25



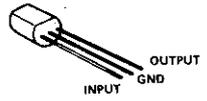
TC74HC74AF



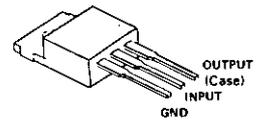
LM2940CT-5.0



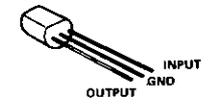
M51951ASL



UPC7905H

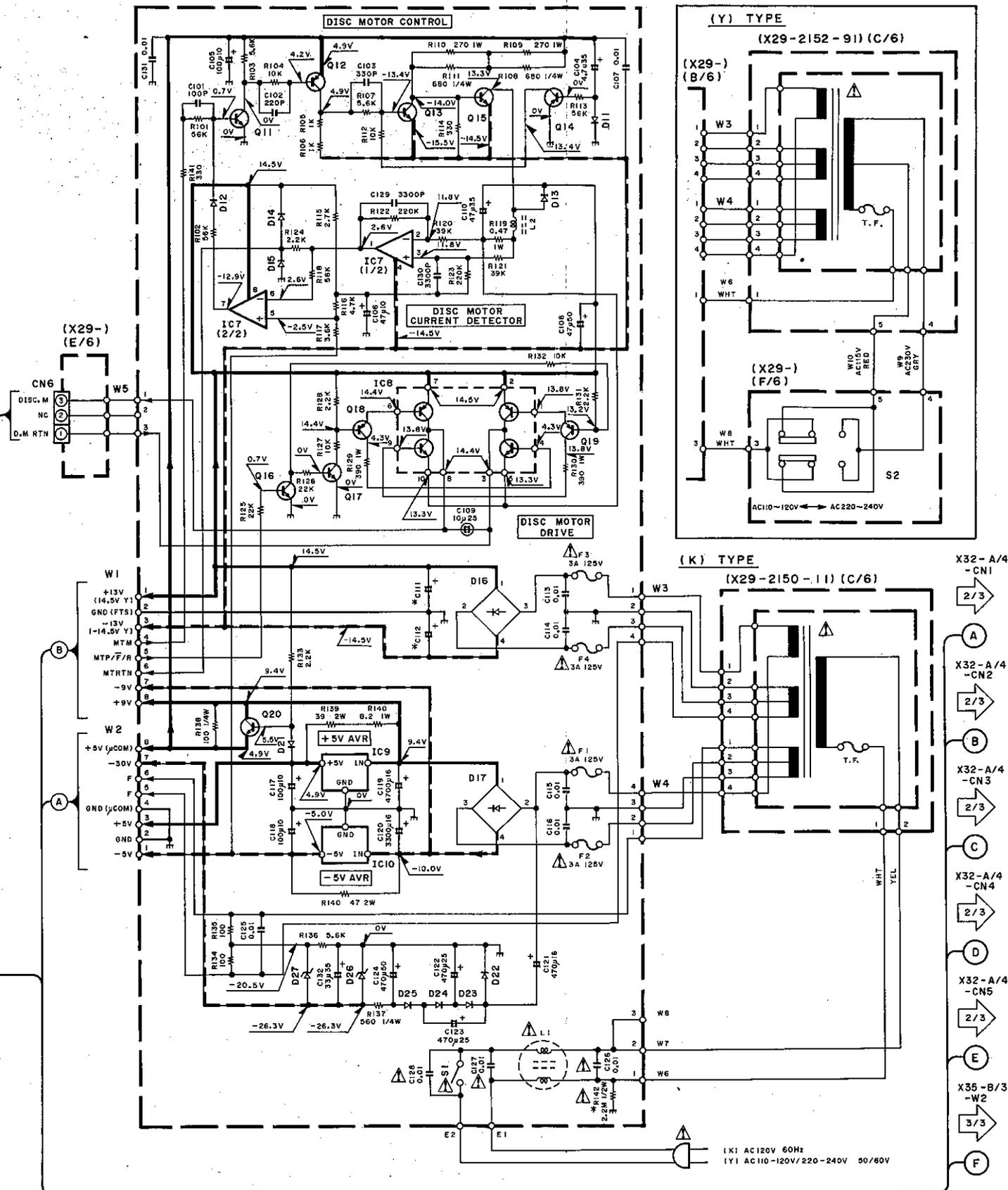


NJM78L05A



**CAUTION:** For parts only with parts list. ⚠️ In risk of electric shock shall be carried in the supply circuit or.

CONTROL CIRCUIT UNIT (POWER SUPPLY & DISC MOTOR DRIVER)  
(X29-215X-XX) (B/6)



**N:** For continued safety, replace safety critical components with manufacturer's recommended parts (refer to the manual). **⚠** Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements should be carried out (exposed parts are acceptably insulated from the circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

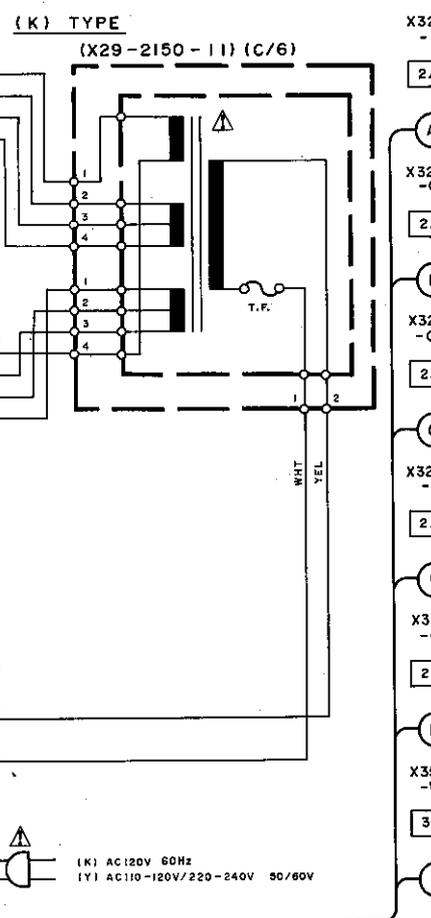
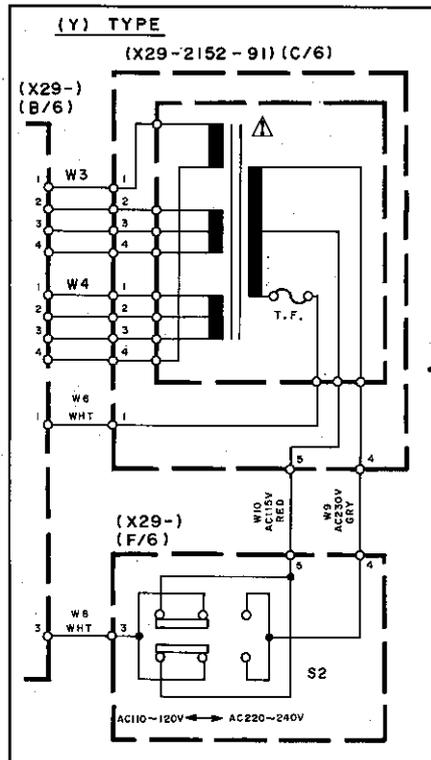
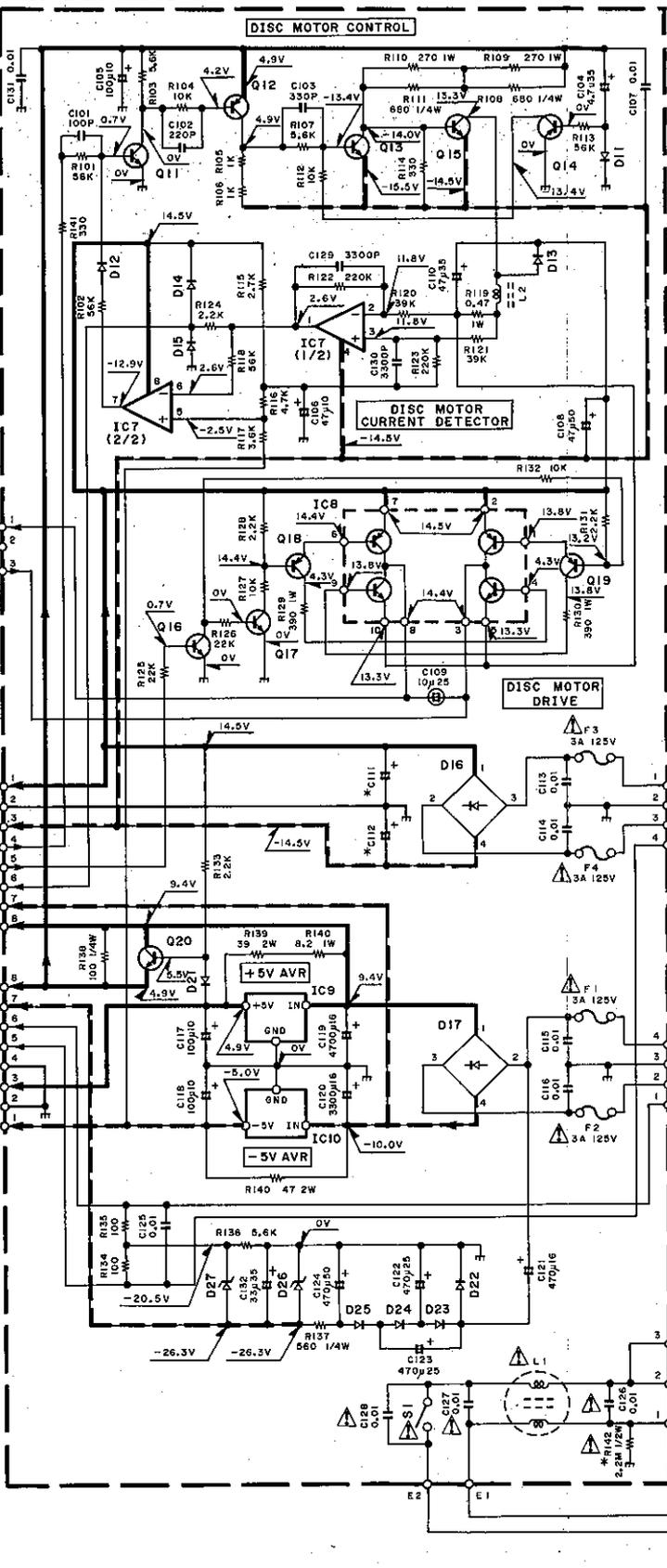
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

Y22-2210-11



CONTROL CIRCUIT UNIT (POWER SUPPLY & DISC MOTOR DRIVER)  
(X29-215X-XX) (B/6)



- X32-A/4 - CN1 (2/3) (A)
- X32-A/4 - CN2 (2/3) (B)
- X32-A/4 - CN3 (2/3) (C)
- X32-A/4 - CN4 (2/3) (D)
- X32-A/4 - CN5 (2/3) (E)
- X35-B/3 - W2 (3/3) (F)

Replace safety critical components with recommended parts (refer to the parts list). To reduce the risk of fire or resistance measurements are acceptably insulated from the chassis is returned to the customer.

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

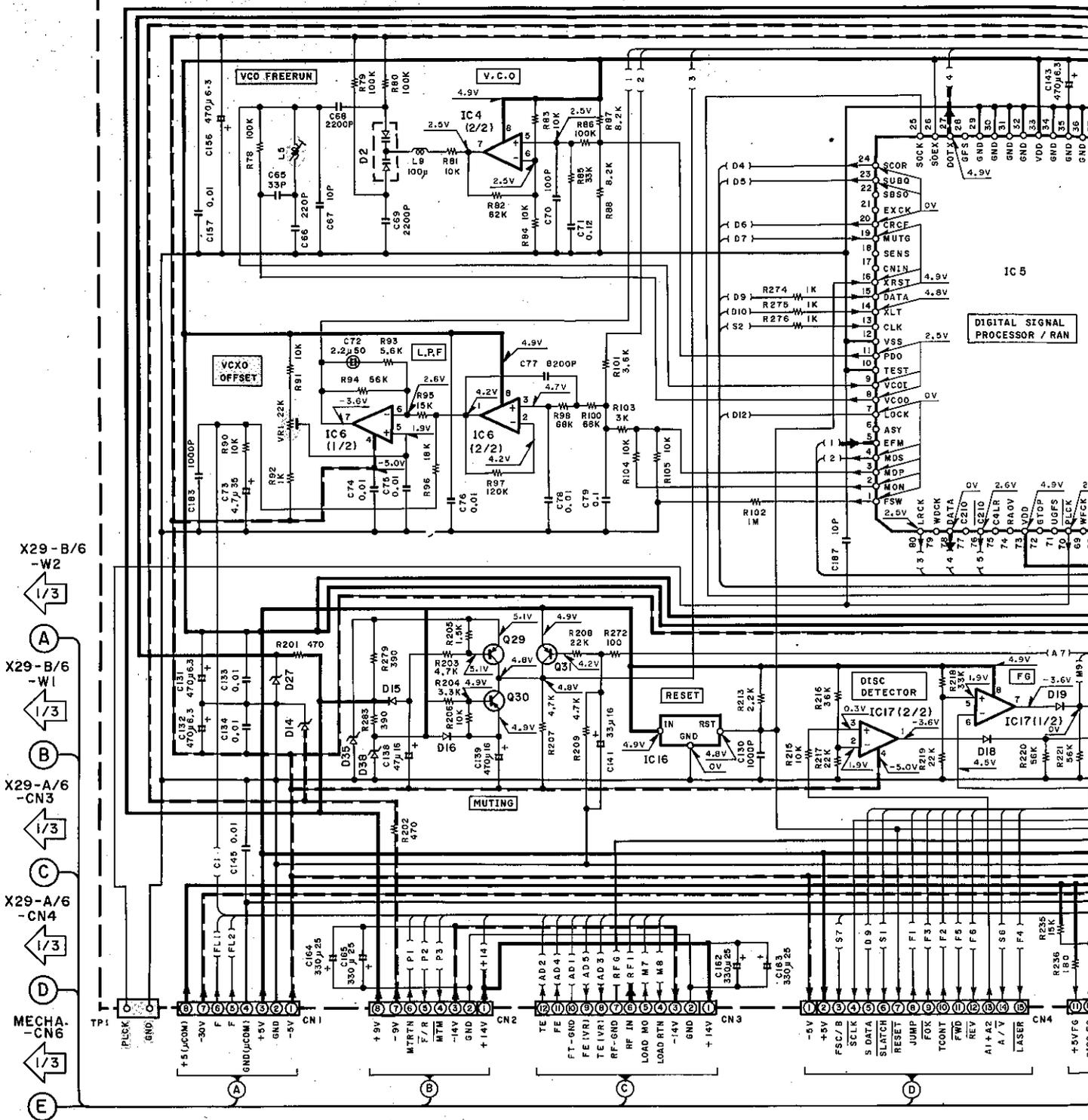
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

Y22-2210-11



PROCESSOR UNIT (X32-1680-00) (A/4)

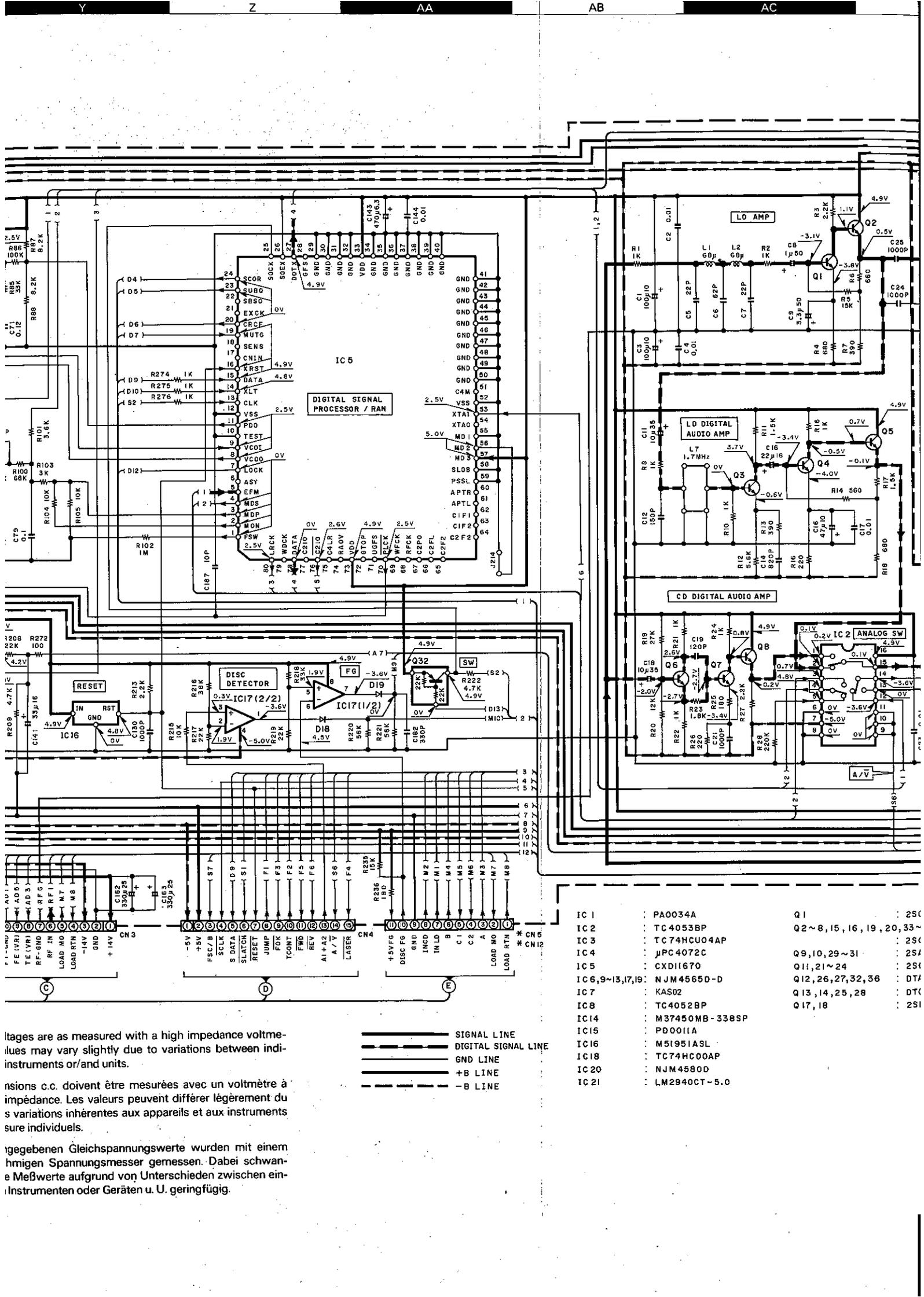


**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts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

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.



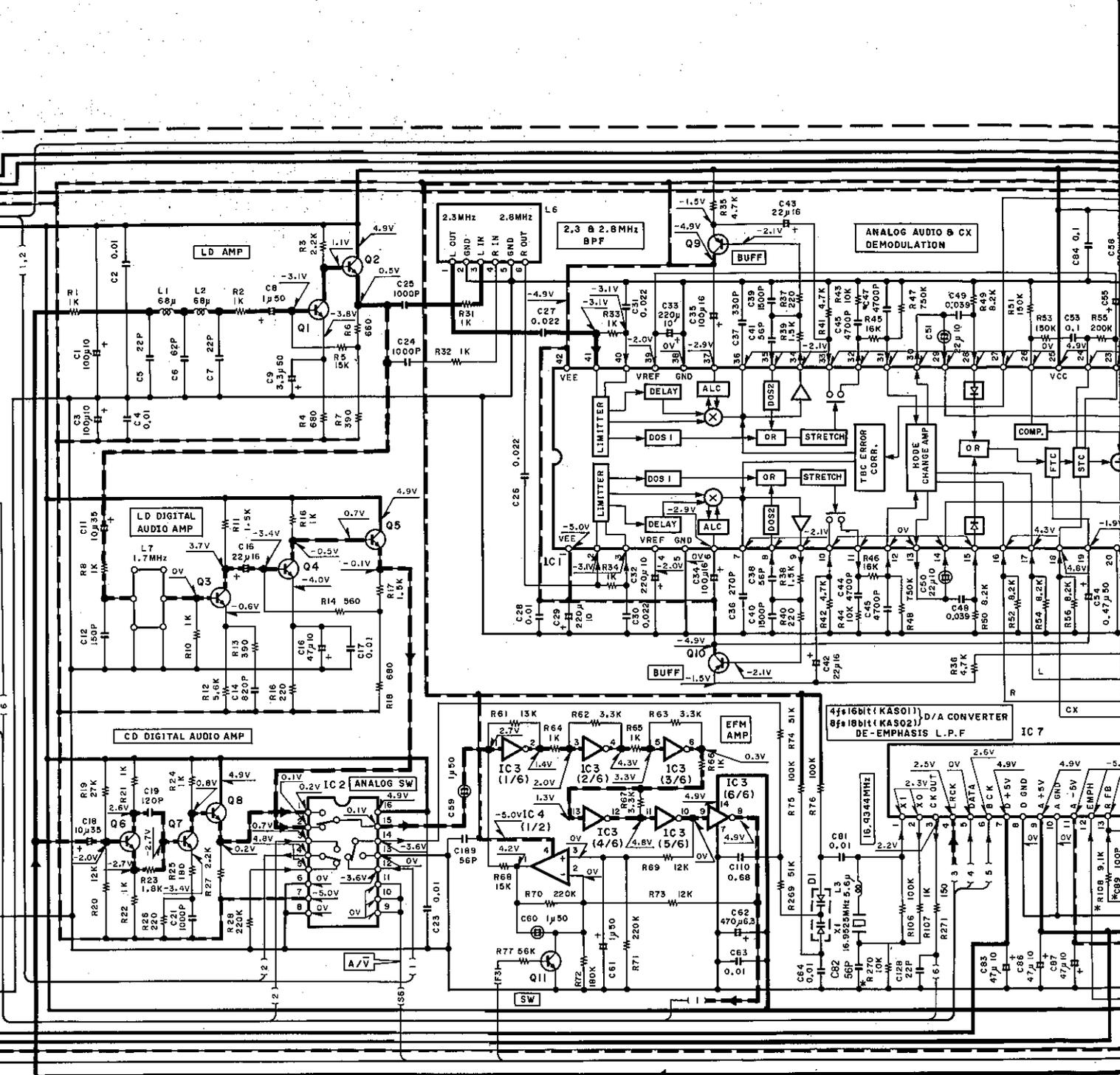
Measurements are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les mesures c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement de celles des variations inhérentes aux appareils et aux instruments de mesure individuels.

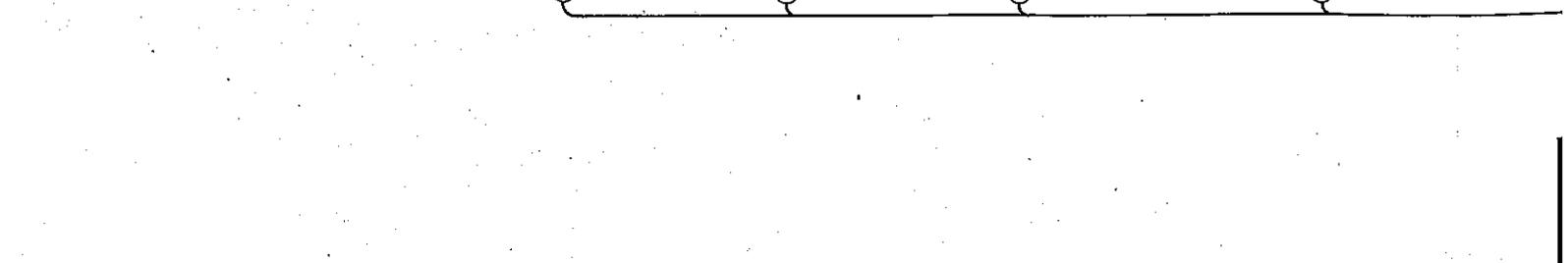
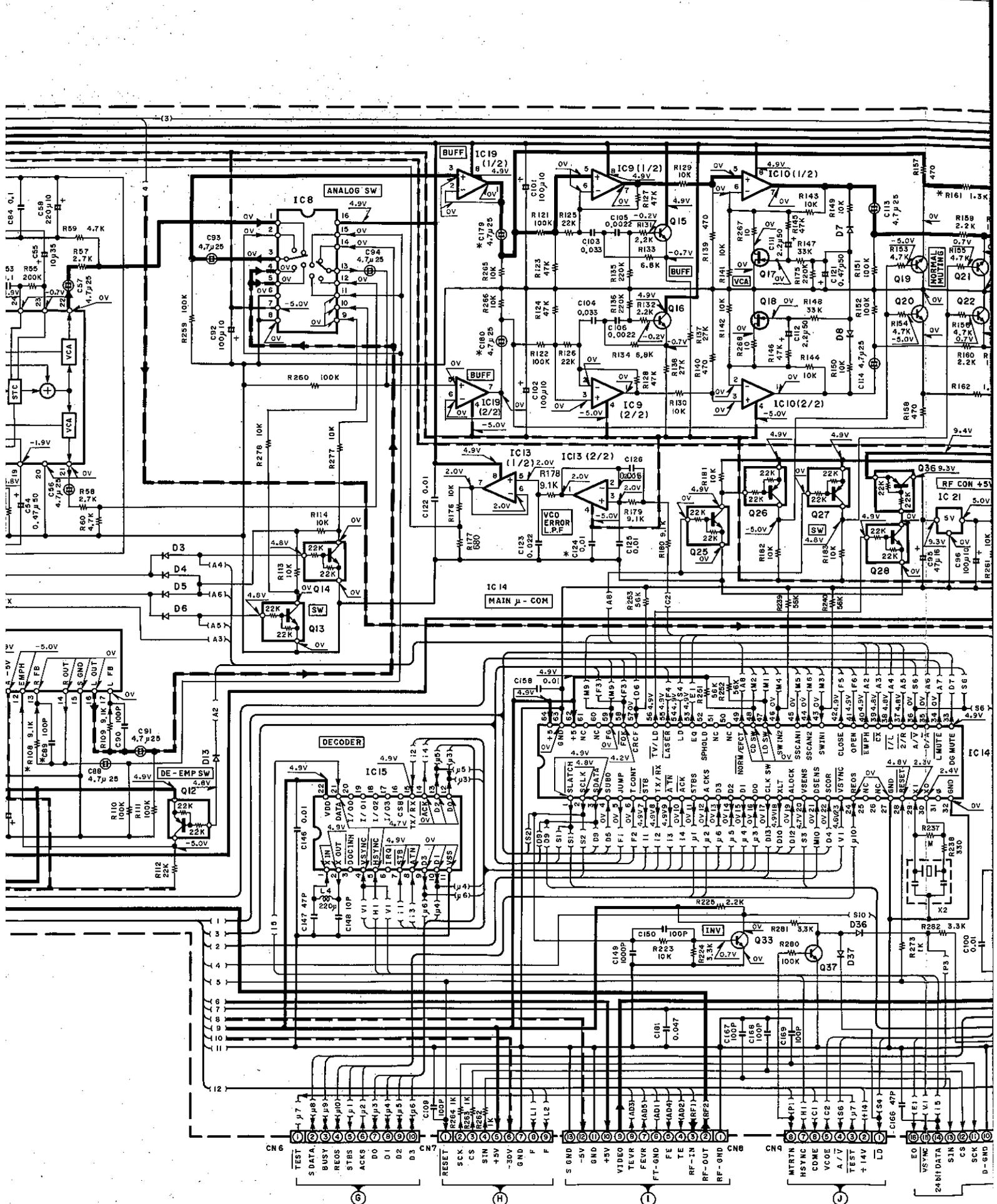
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig.

- SIGNAL LINE
- DIGITAL SIGNAL LINE
- GND LINE
- +B LINE
- -B LINE

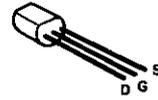
IC 1	: PA0034A	Q 1	: 2S1
IC 2	: TC 4053BP	Q 2 ~ 8, 15, 16, 19, 20, 33 ~	: 2S1
IC 3	: TC 74HC04AP	Q 9, 10, 29 ~ 31	: 2S1
IC 4	: µPC 4072C	Q 11, 21 ~ 24	: 2S1
IC 5	: CXD11670	Q 12, 26, 27, 32, 36	: DT7
IC 6, 9 ~ 13, 19, 17	: NJM 4565D-D	Q 13, 14, 25, 28	: DT7
IC 7	: KAS02	Q 17, 18	: 2S1
IC 8	: TC 4052BP		
IC 14	: M37450MB-3385P		
IC 15	: P9001A		
IC 16	: M51951ASL		
IC 18	: TC 74HC00AP		
IC 20	: NJM 4580D		
IC 21	: LM2940CT-5.0		



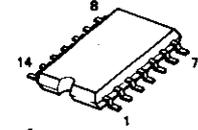
IC 1	: PA0034A	Q 1	: 2SC1923 (R, O)	D 1, 2	: 1SV147
IC 2	: TC4053BP	Q2~8, 15, 16, 19, 20, 33~35, 37	: 2SC945 (A) (Q, P) or 2SC1740S (Q, R)	D3~11, 13, 15, 16, 18~26, 29, 30, 36, 37	: 1SS133 or HSS104
IC 3	: TC74HC004AP	Q9, 10, 29~31	: 2SA733 (A) (Q, P) or 2SA933S (Q, R)	D14, 27	: RD6.8US (B) or HZS6.8S (B)
IC 4	: JPC4072C	Q11, 21~24	: 2SC2878 (B)	D35	: RD5.1ES (B) or HZS5.1N (B)
IC 5	: CXD11670	Q12, 26, 27, 32, 36	: DTA124ES	D38	: RD5.6ES (B2) or HZS5.6N (B2)
IC 6, 9-13, 17, 19	: NJM4565D-D	Q13, 14, 25, 28	: DTC124ES		
IC 7	: KAS02	Q17, 18	: 2SK105 (H)		
IC 8	: TC4052BP				
IC14	: M37450MB-338SP				
IC15	: PD0011A				
IC16	: M5195IASL				
IC18	: TC74HC00AP				
IC 20	: NJM4580D				
IC 21	: LM2940CT-5.0				



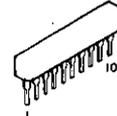
2SK105



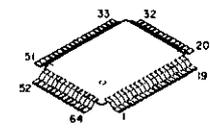
TC74HC00AF



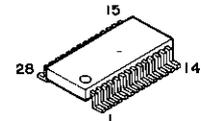
STA451C  
STA455C



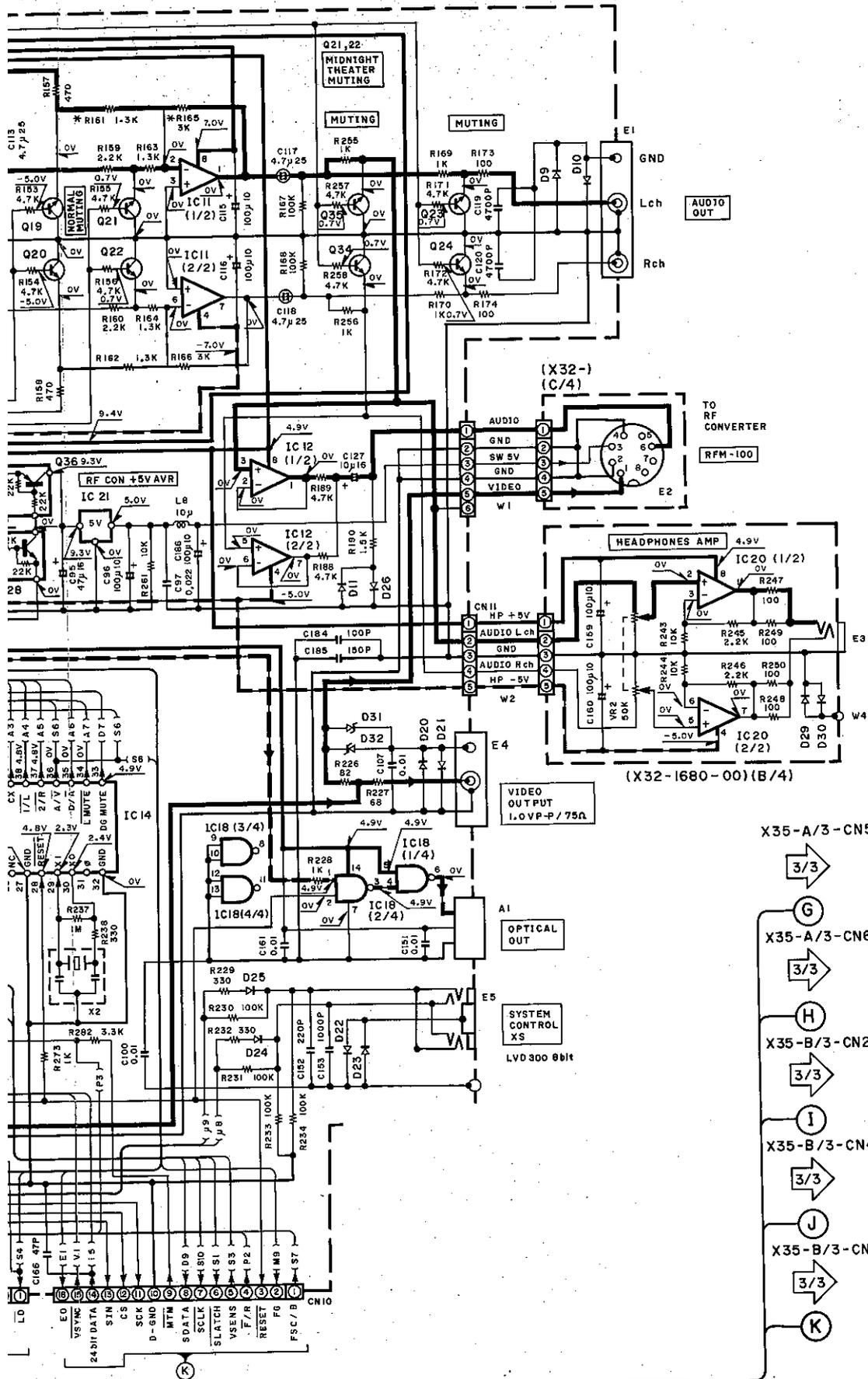
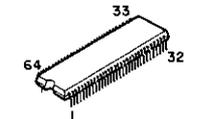
CXD1167Q



MN4760S



M37450M8-338SP  
UPD75216ACW-A95



X35-A/3-CN5



X35-A/3-CN6



X35-B/3-CN2



X35-B/3-CN4



X35-B/3-CN3



X35-B/3-CN3

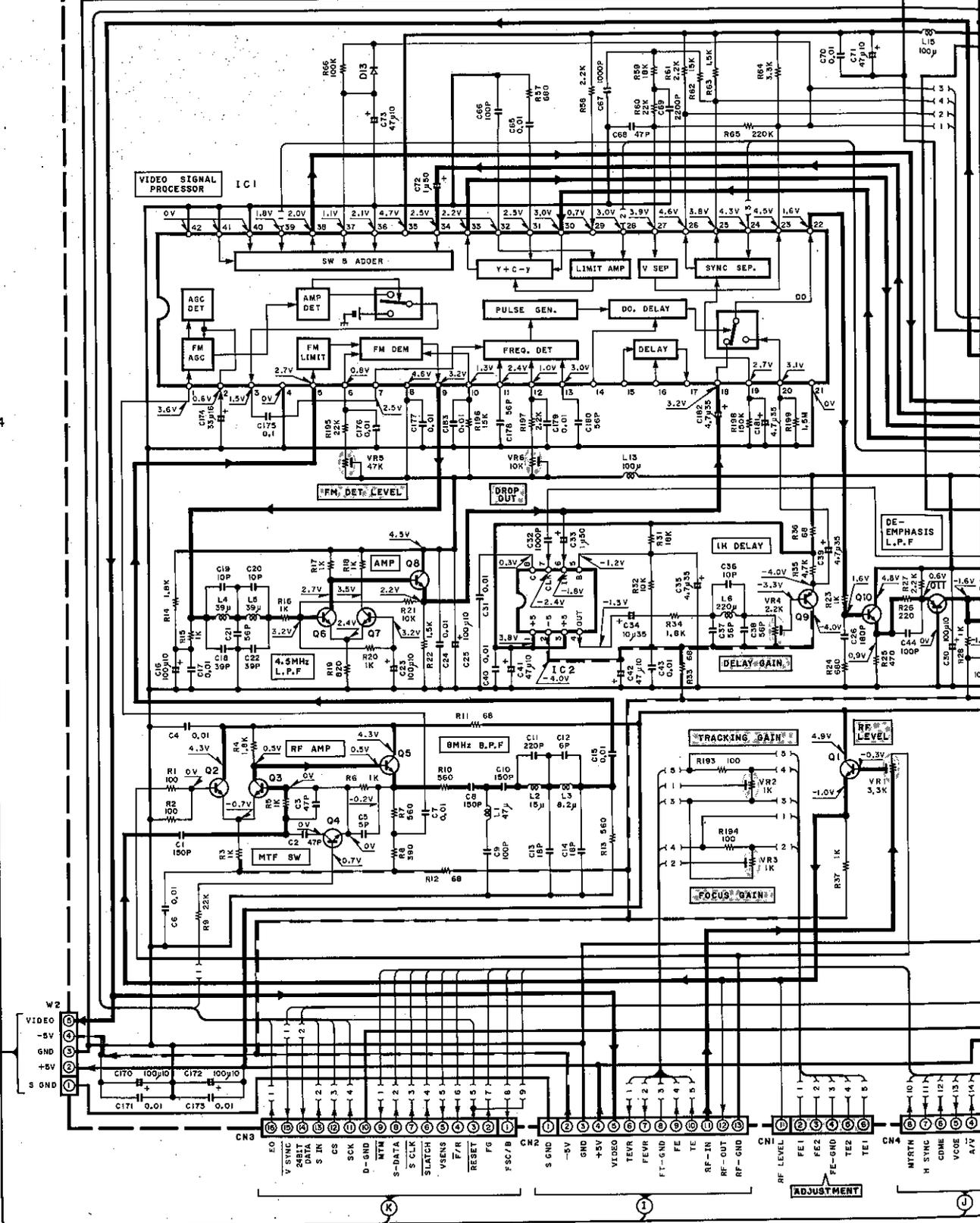


LVD-300  
KENWOOD

Y22-2210-11

VIDEO CIRCUIT UNIT (VIDEO)  
(X35-2050-00)(B/3)

- X32-A/4 -CN6  
2/3
- X32-A/4 -CN7  
2/3
- X32-A/4 -CN8  
2/3
- X32-A/4 -CN9  
2/3
- X32-A/4 -CN10  
2/3
- X29-D/6 -CN7  
1/3



2

3

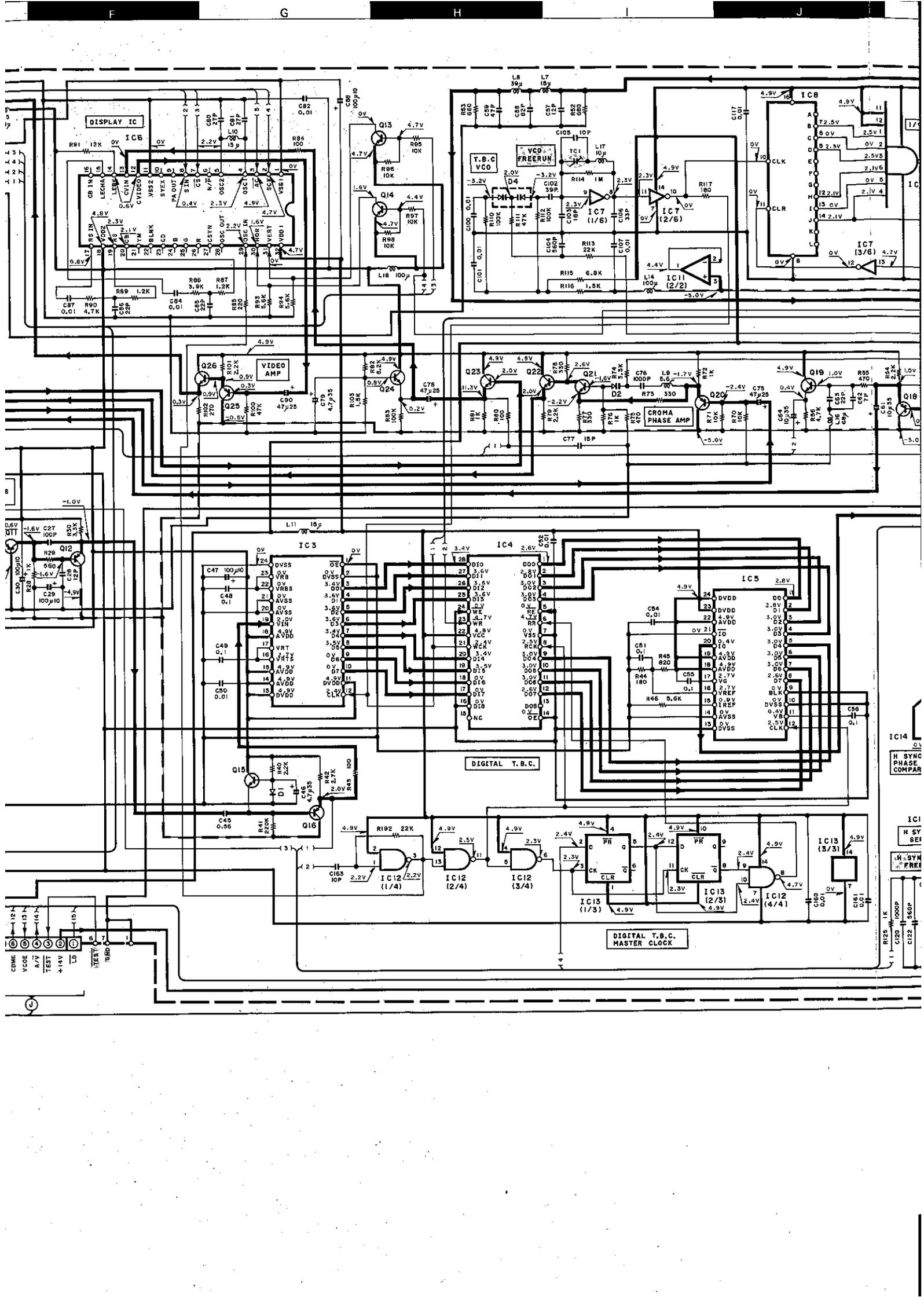
4

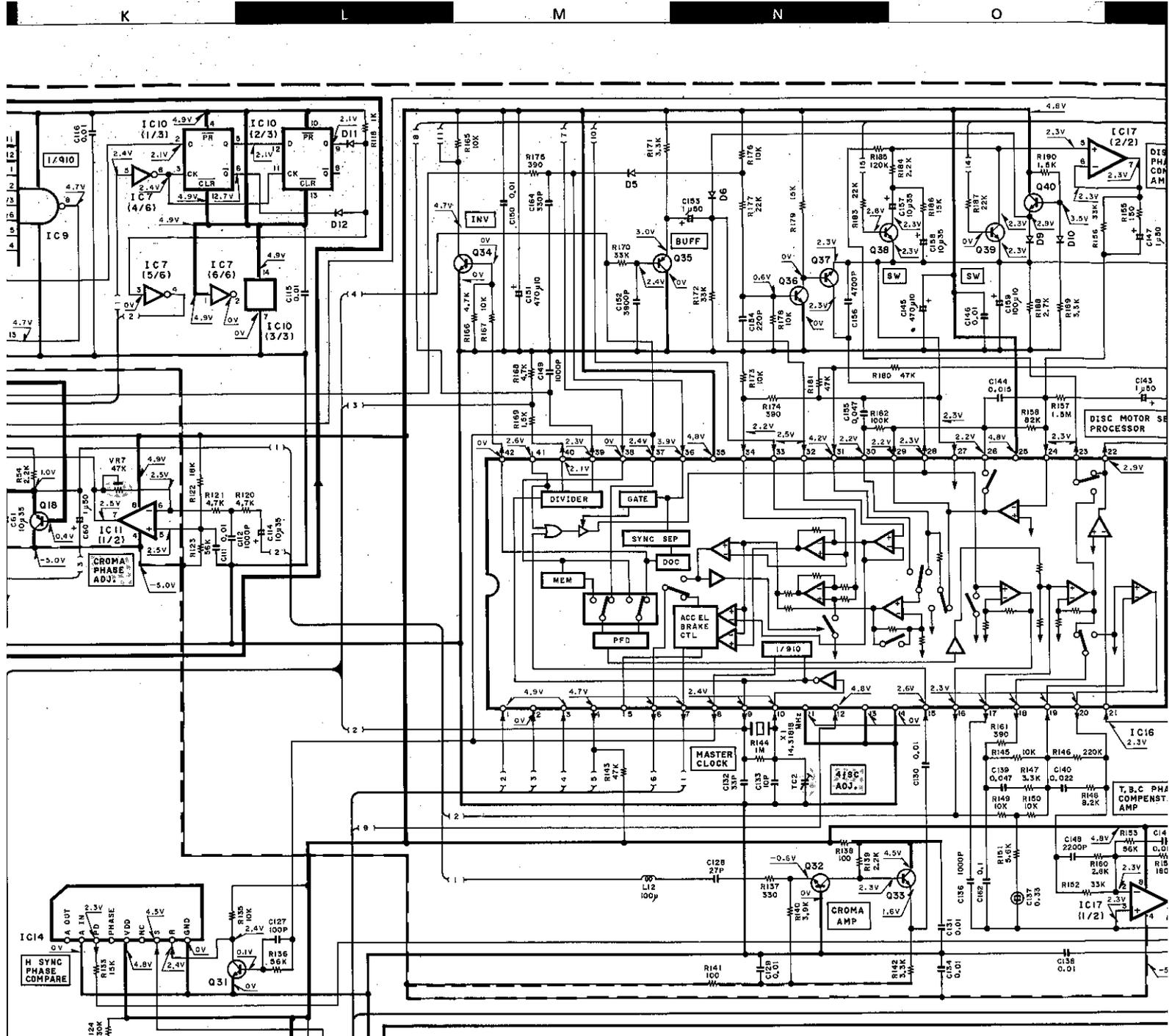
5

6

7

8



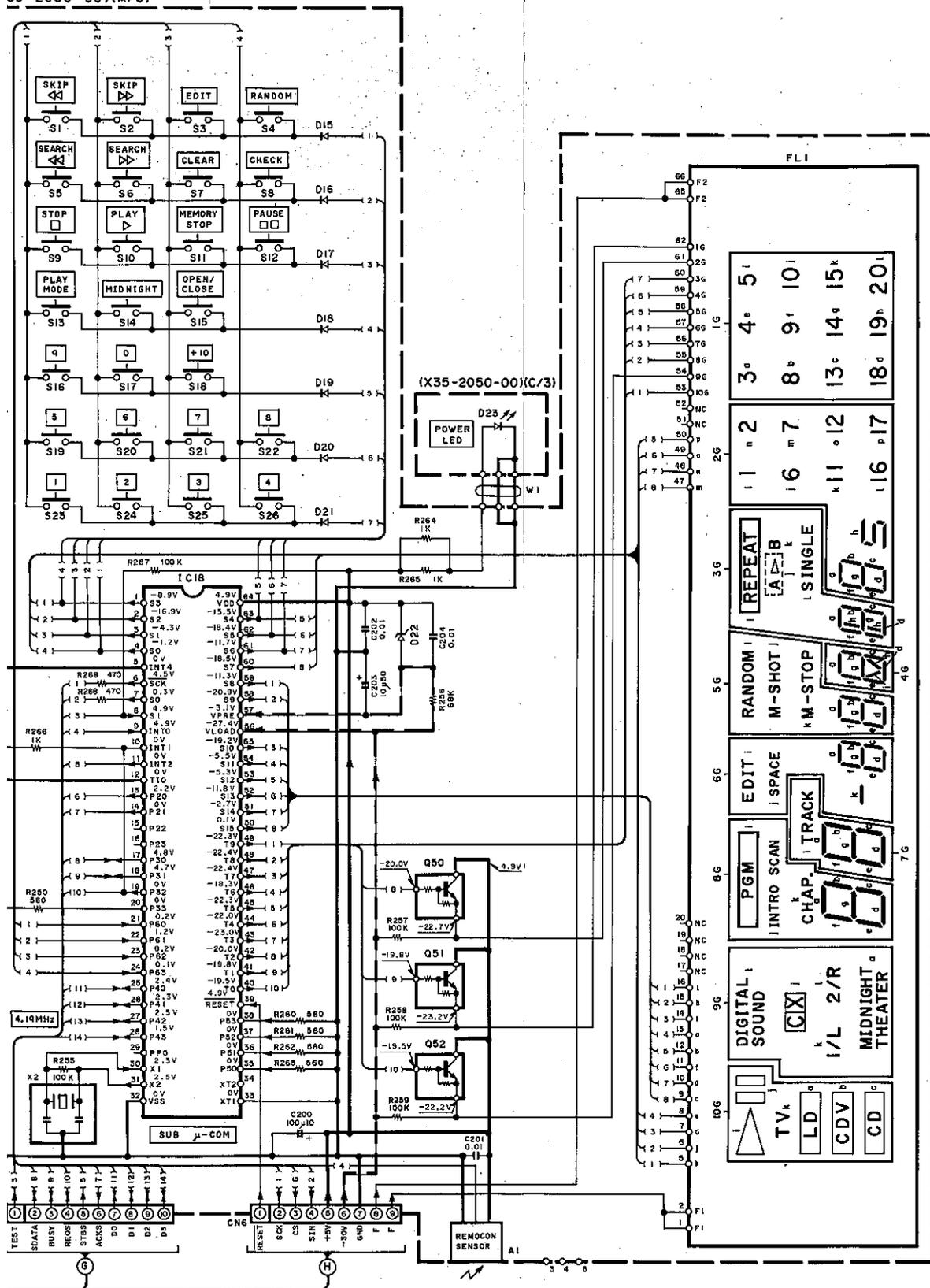


IC 1	: HA1152B	IC 16	: HD49403NT	D1, 5-21	: ISS133 or HSS104
IC 2	: MSM7400RS	IC 17	: NJM4565D	D2	: KV12302
IC 3	: CXD1175AM	IC 18	: $\mu$ PD75216ACW-A95	D4	: ISV147
IC 4	: MN4760S	Q1, 4, 5, 8, 10, 15, 19, 21-24		D22	: RD6, 2ES(B2) or HZS6.2N(B)
IC 5	: CXD1171M	26, 31-34, 36-40		D23	: B30-1289-05
IC 6	: M50554-0035P	Q2, 3, 6, 7	: 2SC945(A)(Q,P) or 2SC1740S(Q,R)		
IC 7	: TC74HC04AF	Q9, 11-14, 16, 18, 20, 25, 35	: 2SC1923(R,Q)		
IC 8	: TC74HC4040AF	Q50-52	: 2SA735(A)(Q,P) or 2SA933S(Q,R)		
IC 9	: TC74HC30AF	Q50-52	: DTC144TFF		
IC 10, 13	: TC74HC74AF				
IC 11	: NJM4565L				
IC 12	: TC74HC00AF				
IC 14	: TC5081AP				
IC 15	: LVA519S				

——— SIGNAL LINE  
 ——— GND LINE  
 ——— +8 LINE  
 - - - - - -8 LINE



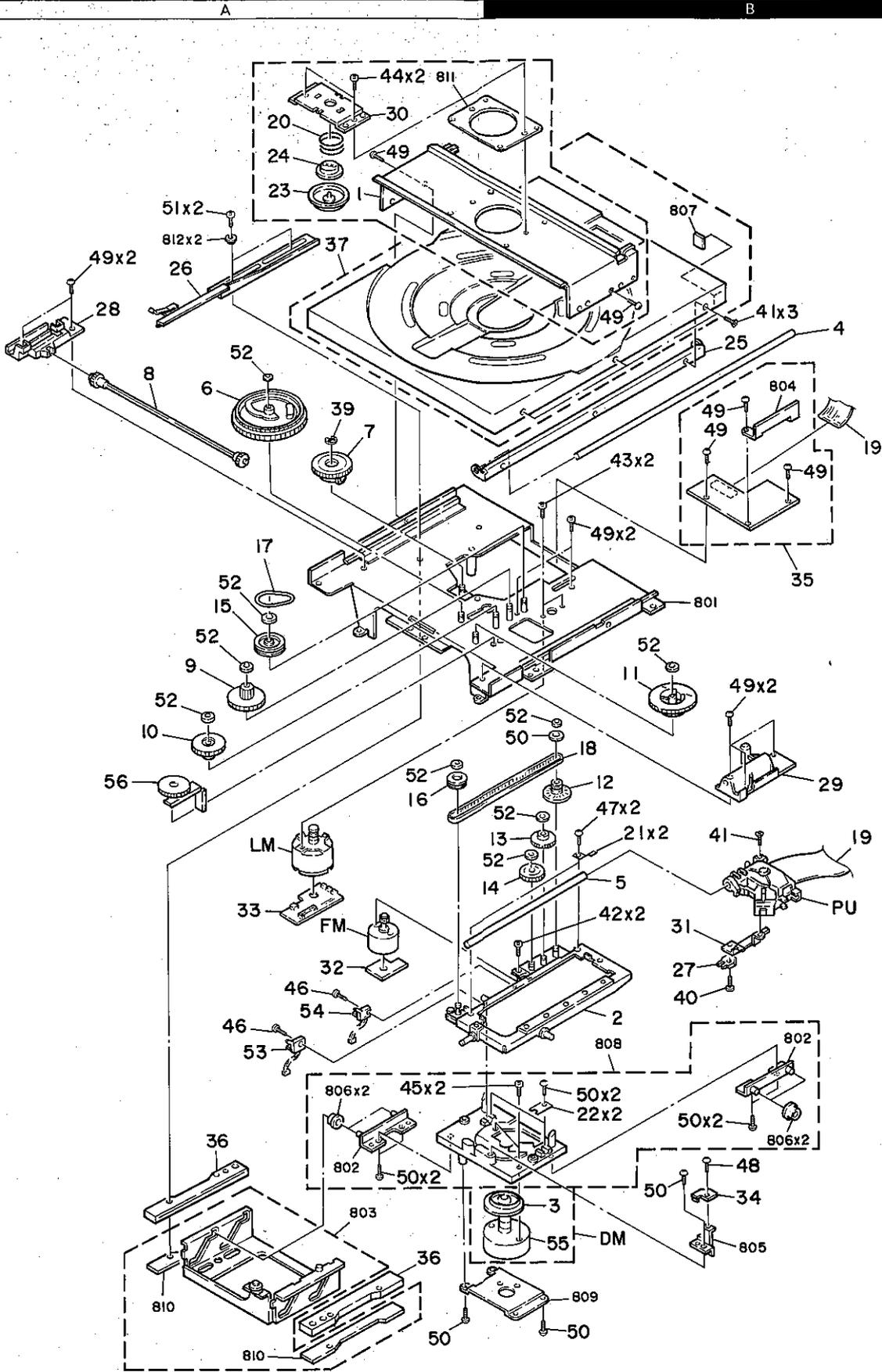
DEO CIRCUIT UNIT (DISPLAY)  
35-2050-00(A/3)



**LVD-300**  
**KENWOOD**

Y22-2210-11

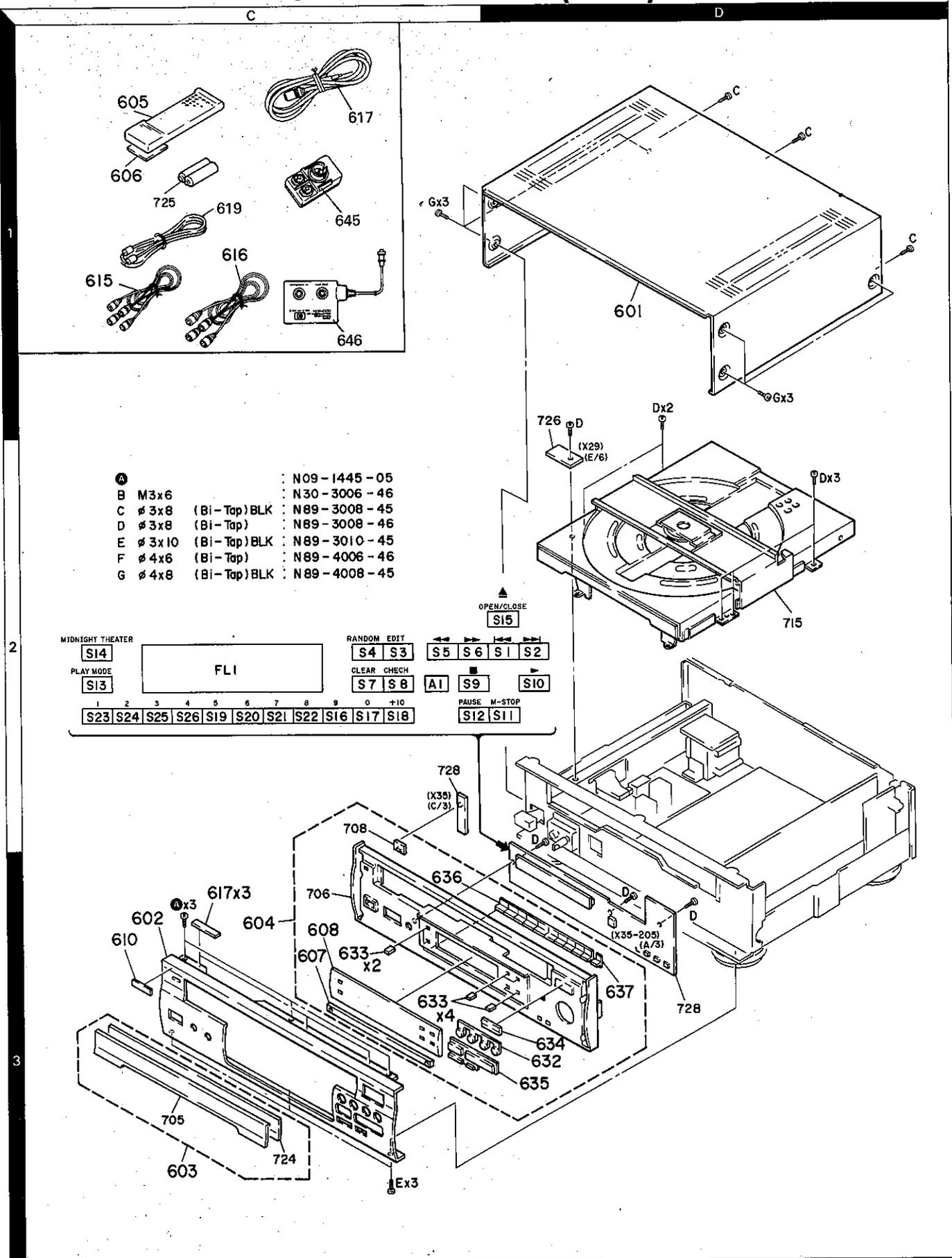
# EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

# LVD-300

## EXPLODED VIEW (UNIT)



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## PARTS LIST

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考	Desti- nation 仕
<b>LVD-300</b>						
601	1D	*	A01-1882-01	METALLIC CABINET, PANEL		
602	3C	*	A20-6060-12	DRESSING PANEL ASSY		
603	3C	*	A21-1777-03	SUB PANEL ASSY		
604	3C, 3D	*	A22-1407-02	REMOTE CONTROLLER ASSY		
605	1C	*	A70-0368-05	BATTERY COVER		
606	1C	*	A09-0104-08	DRESSING PLATE		
607	3C	*	B03-2658-03	FRONT GLASS		
608	3C	*	B10-1095-03	KENWOOD BADGE		
610	3C	*	B43-0287-04	WARRANTY CARD		
-	-	-	B46-0092-03	WARRANTY CARD		
-	-	-	B46-0094-03	WARRANTY CARD		
-	-	-	B46-0095-03	WARRANTY CARD		
-	-	-	B58-0513-04	CAUTION CARD		
-	-	-	B60-0164-10	INSTRUCTION MANUAL (ENGLISH)		
612	2E	*	D21-1621-03	EXTENSION SHAFT		
615	1C	*	E30-0505-05	AUDIO CORD		
616	1C	*	E30-1427-05	AUDIO CORD		
617	1C	*	E30-0952-05	CORD WITH PLUG		
618	2F	*	E30-0712-05	AC POWER CORD		
618	2F	*	E30-0974-05	AC POWER CORD		
619	1C	*	E30-0977-05	CORD WITH PLUG SYNCRO		
W1	2E	*	E31-7692-05	WIRING HARNESS		
W3	2E	*	E31-7694-15	WIRING HARNESS		
611	3C	*	G11-2001-04	SOFT TAPE		
-	-	-	H01-8820-04	ITEM CARTON CASE		
-	-	-	H10-5097-02	POLYSTYRENE FOAMED FIXTURE		
-	-	-	H10-5028-02	POLYSTYRENE FOAMED FIXTURE		
-	-	-	H25-0232-04	PROTECTION BAG (235X350X0.03)		
-	-	-	H25-0368-04	PROTECTION BAG		
620	3F	*	J02-1052-05	FOOT		
623	2E, 3F	*	J19-3178-05	UNIT HOLDER		
624	3E	*	J19-3179-05	UNIT HOLDER		
626	2F	*	J42-0083-05	POWER CORD BUSHING		
-	-	-	J11-0129-05	CLAMPER		
-	-	-	J61-0088-05	WIRE BAND		
630	3E	*	K29-2507-04	KNOB PHONES LEVEL		
631	2E	*	K29-3835-04	KNOB POWER		
632	3C, 3D	*	K29-3963-04	KNOB P/R FF/FR		
633	3C	*	K29-3969-04	KNOB SELECTOR		
634	3C, 3D	*	K29-3971-04	KNOB OPEN/CLOSE		
635	3C, 3D	*	K29-3972-03	KNOB PLAY/STOP		
636	3D	*	K29-4015-04	KNOB LOCK		
637	3D	*	K29-4020-04	KNOB +10		
640	1E, 1F	*	L07-0122-05	POWER TRANSFORMER		
640	1E, 1F	*	L07-0123-05	POWER TRANSFORMER		
A	3C	*	N09-1445-05	SET SCREW (M3X8)		
C	3C, 1D	*	N89-3008-45	BINDING HEAD TAPITTE SCREW		
D	1D, 2D	*	N89-3008-46	BINDING HEAD TAPITTE SCREW		
E	3C, 2F	*	N89-3010-45	BINDING HEAD TAPITTE SCREW		

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F	1E, 1F	*	N89-4006-46	BINDING HEAD TAPITTE SCREW		
G	1C, 1D	*	N89-4008-45	BINDING HEAD TAPITTE SCREW		
645	1C	*	N09-0301-05	TAPITTE SCREW		K
646	1C	*	T90-0136-05	ANTENNA ADAPTOR		K
646	1C	*	W02-1050-05	RF MODULATOR		K
<b>CONTROL UNIT (X29-2150-1, K, 2-91, Y)</b>						
C1			CF92FV1H104J	MF	0.10UF	J
C2			CF92FV1H392J	ELECTRO	3.3UF	50WV
C3			CF92FV1H393M	MF	0.10UF	J
C4			CF92FV1H104J	MF	0.010UF	J
C5			CF92FV1H105J	MF	4700PF	J
C6			CF92FV1H472J	MF	220PF	J
C7			CC45FSL1H221J	CERAMIC	8200PF	J
C8			CF92FV1H822J	MF	0.10UF	J
C9			CF92FV1H104J	MF	0.10UF	J
C10			CF92FV1H562J	MF	5600PF	J
C10			CF92FV1H224J	MF	0.22UF	J
C11			CF92FV1H392J	MF	3900PF	J
C12	13		CF92FV1H104J	MF	0.10UF	J
C13			CF92FV1H104J	MF	100PF	J
C14			CC45FSL1H101J	CERAMIC	100PF	J
C15			CC45FSL1H220J	CERAMIC	22PF	J
C16			CF92FV1H104J	MF	0.10UF	J
C17			C90-1332-05	NP-ELEC	10UF	25WV
C18			CF92FV1H104J	MF	0.10UF	J
C19			C90-1332-05	NP-ELEC	10UF	25WV
C20			CC45FSL1H101J	CERAMIC	100PF	J
C21			CF92FV1H473J	MF	0.047UF	J
C22			CC45FSL1H101J	CERAMIC	100PF	J
C23			CF92FV1H104J	MF	0.10UF	J
C24	25		CE04KW1C470M	ELECTRO	47UF	16WV
C24	25		CE04KW1E470M	ELECTRO	47UF	25WV
C26	27		CF92FV1H222J	MF	2200PF	J
C28			CK45FE1H473Z	CERAMIC	0.047UF	Z
C29			C90-1349-05	NP-ELEC	1UF	50WV
C30			CF92FV1H822J	MF	8200PF	J
C31			CF92FV1H104J	MF	0.10UF	J
C32			CF92FV1H822J	MF	8200PF	J
C33			CF92FV1H333J	MF	0.033UF	J
C34			C90-1334-05	NP-ELEC	47UF	10WV
C35			CC45FSL1H221J	CERAMIC	220PF	J
C36			CC45FSL1H220J	CERAMIC	22PF	J
C37			CF92FV1H104J	MF	0.10UF	J
C38			CK45FE1H473Z	CERAMIC	0.047UF	Z
C39			CF92FV1H104J	MF	0.10UF	J
C40	41		CE04KW1C470M	ELECTRO	47UF	16WV
C40	41		CE04KW1E470M	ELECTRO	47UF	25WV
C42	43		CE04KW1A101H	ELECTRO	100UF	18WV
C44	45		CK45FE1H103Z	CERAMIC	0.010UF	Z
C46			C90-1332-05	NP-ELEC	10UF	25WV
C47			CE04KW1V100M	ELECTRO	10UF	35WV
C49			CE04KW1H010M	ELECTRO	1.0UF	50WV
C53	54		CE04KW1A101H	ELECTRO	100UF	18WV
C101			CC45FSL1H101J	CERAMIC	100PF	J
C102			CC45FSL1H221J	CERAMIC	220PF	J

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C103		CC45FSL1H331J	CERAMIC		
C104		CE04KW1A47M	330PF J		
C105		CE01KH1A101M	4.7UF 35WV		
C106		CE04KW1A470M	100UF 10WV		
C107		CK45FF1H103Z	47UF 10WV		
			0.010UF Z		
C108		CE04KW1H470M	47UF 50WV		
C109		C90-1332-05	NP-ELEC		
C110		CE04KW1A470M	47UF 35WV		
C111,112		CE04KW1C332M	3300UF 16WV		
C111,112		CE04KW1E332M	3300UF 25WV		
C113-116		CK45FF1H103Z	0.010UF Z		
C117,118		CE04KW1A101M	100UF 10WV		
C120		CE04KW1C472M	4700UF 16WV		
C121		CE04KW1C332M	3300UF 16WV		
		CE04DW1C471M	4700UF 16WV		
C122,123		CE04KW1E471M	470UF 25WV		
C124		CE04KW1H471M	470UF 50WV		
C125		CK45FF1H103Z	0.010UF Z		
C126-128		C91-0647-05	CERAMIC		
C129,130		CK45FB1H332K	0.01UF P		
			3300PF K		
C131		CK45FF1H103Z	0.010UF Z		
C132		CE04KW1V330M	33UF 35WV		
C201		CC45FSL1H220J	CERAMIC		
C202,203		CE04KW1H010M	22PF J		
C204		CK45FF1H103Z	1.0UF 50WV		
			0.010UF Z		
C205		CC45FSL1H560J	CERAMIC		
C206		CC45FSL1H680J	56PF J		
C207		CE04KW1A470M	68PF J		
C208		CK45FF1H103Z	47UF 10WV		
C209,210		CE04KW1A101M	CERAMIC		
			0.010UF Z		
C211		CK45FF1H103Z	100UF 10WV		
			0.010UF Z		
E3		E06-0521-05	CYLINDRICAL RECEPTACLE S VIDEO		
F1-4		F53-0006-05	FUSE		
		J11-0098-05	WIRE CLAMPER		
L1		L79-0733-05	LINE FILTER		
L2		L33-0367-05	CHOKE COIL		
L3		L40-1011-17	SMALL FIXED INDUCTOR(100UH,K)		
L4		L39-0196-05	VARIABLE INDUCTOR		
L5		L76-0009-05	DELAY LINE		
L6		L40-1501-17	SMALL FIXED INDUCTOR(15UH,K)		
L7		L78-0010-05	DELAY LINE		
L8		L40-1011-17	SMALL FIXED INDUCTOR(100UH,K)		
B	2E	N30-3006-46	PAN HEAD MACHINE SCREW		
D	1E,1F	N89-3008-46	BINDING HEAD TAPTITE SCREW		
R33		RS14DB3A2R2J	FL-PROOF RS 2-2		
R45		RS14DB3A1R0J	FL-PROOF RS 1-0		
R71		RS14DB3A2R2J	FL-PROOF RS 2-2		
R79		RS14DB3A0R7J	FL-PROOF RS 4-7		
R109,110		RS14RB3A351J	FL-PROOF RS 350		
R119		RS14DB3A4R7J	FL-PROOF RS 0.47		
R129,130		RS14DB3A391J	FL-PROOF RS 390		

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R137		RD14AB2E561J	FL-PROOF RD 560		
R138		RD14AB2E101J	FL-PROOF RD 100		
R139		RS14DB3D330J	FL-PROOF RS 33		
R140		RS14DB3D560J	FL-PROOF RS 56		
R142		R92-0173-05	RC 2.2M M 1/2W		K
R143		RS14DB3A120J	FL-PROOF RS 12		
VR1		R12-0104-05	TRIM POT. 220		
VR2		R12-1085-05	TRIM POT. 2.2K		
VR3		R12-3126-05	TRIM POT. 10K		
S1		S40-1149-05	PUSH SWITCH POWER SW		
S2		S31-2128-05	SLIDE SWITCH VOLTAGE SELECTOR		Y
D1	-4	HSS104	DIODE		
D1	-4	SS133	DIODE		
D11,12		HSS104	DIODE		
D11,12		SS133	DIODE		
D13		RS36	DIODE		
D14,15		HSS104	DIODE		
D14,15		SS133	DIODE		
D16		RBV-402LFA	DIODE		
D17		KBPO2ML-6127	DIODE		
D21		HSS104	DIODE		
D22-25		SS133	DIODE		
D26		SS5686	DIODE		
D26		HZ50N(B)	ZENER DIODE		
D26		RD30ES(B)	ZENER DIODE		
D27		HZ55.6N(B)	ZENER DIODE		
D27		RD5.6ES(B)	ZENER DIODE		
D31		HSS104	DIODE		
D31		SS133	DIODE		
D32-35		HZ52.7N(B)	ZENER DIODE		
D32-35		RD2.7ES(B)	ZENER DIODE		
D36,37		HSS104	DIODE		
D36,37		SS133	DIODE		
IC1-3		NJM2058D	IC(OP AMP X4)		
IC1-3		UPC4574C	IC(OP AMP X4)		
IC4,5		STA451C	IC(TRANSISTOR ARRAY)		
IC6		HA11529	IC(CA/LD SERVØ IC)		
IC7		NJM4565D	IC(OP AMP X2)		
IC8		STA455C	IC(TRANSISTOR ARRAY)		
IC9		LM2940CT-5.0	IC(LOW VOLTAGE REGULATOR)		
IC10		UPC7905H	IC(VOLTAGE REGULATOR/ -5V)		
Q1,2		2SK105(F,H)	FET		
Q3,4		2SC1740S(Q,R)	TRANSISTOR		
Q3,4		2SC945(A)(Q,P)	TRANSISTOR		
Q5		2SK105(F,H)	FET		
Q6,7		2SA733(A)(Q,P)	TRANSISTOR		
Q6,7		2SA933S(Q,R)	TRANSISTOR		
Q8		2SC1740S(Q,R)	TRANSISTOR		
Q8		2SC945(A)(Q,P)	TRANSISTOR		
Q11		2SC1740S(Q,R)	TRANSISTOR		
Q11		2SC945(A)(Q,P)	TRANSISTOR		
Q12		2SA733(A)(Q,P)	TRANSISTOR		
Q12		2SA933S(Q,R)	TRANSISTOR		
Q13		2SC1740S(Q,R)	TRANSISTOR		

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Q13		25C945(A)(Q,P)	TRANSISTOR		
Q14		25A733(A)(Q,P)	TRANSISTOR		
Q15		25A933S(Q,R)	TRANSISTOR		
Q16	.17	25D1266(Q,P)	TRANSISTOR		
Q16	.17	25C945(A)(Q,P)	TRANSISTOR		
Q18	.19	25A733(A)(Q,P)	TRANSISTOR		
Q20		25A933S(Q,R)	TRANSISTOR		
Q20		25C2003(L,K)	TRANSISTOR		
Q31	-43	25C1740S(Q,R)	TRANSISTOR		
Q31	-43	25C945(A)(Q,P)	TRANSISTOR		
<b>SIGNAL PROCESSOR UNIT (X32-1680-00)</b>					
C1		CE04KW1A101M	ELECTRØ	10WV	
C2		CK45FF1H103Z	CERAMIC	0.010UF	Z
C3		CE04KW1A101M	ELECTRØ	10WV	
C4		CK45FF1H103Z	CERAMIC	0.010UF	Z
C5		CC45FF1R220J	CERAMIC	22PF	J
C6		CC45FSL1H820J	CERAMIC	82PF	J
C7		CC45FSL1H220J	CERAMIC	22PF	J
C8		CE04KW1H010M	ELECTRØ	1.0UF	50WV
C9		CE04KW1H3R3M	ELECTRØ	3.3UF	50WV
C11		CE04KW1V100M	ELECTRØ	10UF	35WV
C12		CC45FSL1H151J	CERAMIC	150PF	J
C14		CK45FB1H621K	CERAMIC	820PF	K
C15		CE04KW1C220M	ELECTRØ	22UF	16WV
C16		CE04KW1A470M	ELECTRØ	47UF	10WV
C17		CK45FF1H103Z	CERAMIC	0.010UF	Z
C18		CE04KW1V100M	ELECTRØ	10UF	35WV
C19		CC45FSL1H121J	CERAMIC	120PF	J
C21		CK45FB1H102K	CERAMIC	1000PF	K
C23		CK45FF1H103Z	CERAMIC	0.010UF	Z
C24	.25	CK45FB1H102K	CERAMIC	1000PF	K
C26	.27	CK45FF1H223Z	CERAMIC	0.022UF	Z
C28		CK45FF1H103Z	CERAMIC	0.010UF	Z
C29		CE04KW1A221M	ELECTRØ	220UF	10WV
C30	.31	CK45FF1H223Z	CERAMIC	0.022UF	Z
C32	.33	CE04KW1A221M	ELECTRØ	220UF	10WV
C34	.35	CE04KW1C101M	ELECTRØ	100UF	16WV
C36		CC45FSL1H271J	CERAMIC	270PF	J
C37		CC45FSL1H331J	CERAMIC	330PF	J
C38		CC45FSL1H560J	CERAMIC	56PF	J
C39	.40	CK45FB1H152K	CERAMIC	1500PF	K
C41		CC45FSL1H560J	CERAMIC	56PF	J
C42	.43	CE04KW1C220M	ELECTRØ	22UF	16WV
C44	-47	CF92FV1H472J	MF	4700PF	J
C48	.49	CF92FV1H593J	MF	0.039UF	J
C50	.51	C90-1335-05	NP-ELEC	22UF	10WV
C53		CF92FV1H104J	MF	0.10UF	J
C54		CE04KW1HR47M	ELECTRØ	0.47UF	50WV
C55		CE04KW1V100M	ELECTRØ	10UF	35WV
C56	.57	C90-1352-05	NP-ELEC	4.7UF	25WV
C58		CE04KW1A221M	ELECTRØ	220UF	10WV
C59	.60	C90-1349-05	NP-ELEC	1UF	50WV
C61		CE04KW1H010M	ELECTRØ	1.0UF	50WV

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C62		CE04KW0J471M	ELECTRØ	470UF	6.3WV
C63	.64	CK45FF1H103Z	CERAMIC	0.010UF	Z
C65		CC45FSL1H330J	CERAMIC	330PF	J
C66		CC45FSL1H221J	CERAMIC	220PF	J
C67		CC45FSL1H100D	CERAMIC	10PF	D
C68	.69	CK45FB1H222K	CERAMIC	2200PF	K
C70		CC45FSL1H101J	CERAMIC	100PF	J
C71		CF92FV1H124J	MF	0.12UF	J
C72		C90-1350-05	NP-ELEC	2.2UF	50WV
C73		CE04KW1V4R7M	ELECTRØ	4.7UF	35WV
C74	-76	CK45FF1H103Z	CERAMIC	0.010UF	Z
C77		CF92FV1H822J	MF	8200PF	J
C78		CF92FV1H103J	MF	0.010UF	J
C79		CF92FV1H104J	MF	0.10UF	J
C81		CK45FF1H103Z	CERAMIC	0.010UF	Z
C82		CC45FSL1H560J	CERAMIC	56PF	J
C83		CE04KW1A470M	ELECTRØ	47UF	10WV
C84	.87	CF92FV1H104J	MF	0.10UF	J
C86		CE04KW1A470M	ELECTRØ	47UF	10WV
C88		C90-1352-05	NP-ELEC	4.7UF	25WV
C89	.90	CC45FSL1H101J	CERAMIC	100PF	J
C91		C90-1352-05	NP-ELEC	4.7UF	25WV
C92		CE04KW1A101M	ELECTRØ	100UF	10WV
C93	.94	C90-1352-05	NP-ELEC	4.7UF	25WV
C95		CE04KW1C470M	ELECTRØ	47UF	16WV
C96		CE04KW1A101M	ELECTRØ	100UF	10WV
C97		CK45FF1H223Z	CERAMIC	0.022UF	Z
C100		CK45FF1H103Z	CERAMIC	0.010UF	Z
C101	.102	CE04KW1A101M	ELECTRØ	100UF	10WV
C103	.104	CF92FV1H333J	MF	0.033UF	J
C105	.106	CF92FV1H222J	MF	2200PF	J
C107	.108	CK45FF1H103Z	CERAMIC	0.010UF	Z
C109		CC45FSL1H101J	CERAMIC	100PF	J
C110		CF92FV1H684J	MF	0.68UF	J
C111	.112	CE04KW1R282M	ELECTRØ	2.2UF	50WV
C113	.114	C90-1352-05	NP-ELEC	4.7UF	25WV
C115	.116	CE04KW1A101M	ELECTRØ	100UF	10WV
C117	.118	C90-1352-05	NP-ELEC	4.7UF	25WV
C119	.120	CF92FV1H472J	MF	4700PF	J
C121		CE04KW1HR47M	ELECTRØ	0.47UF	50WV
C122		CK45FF1H103Z	CERAMIC	0.010UF	Z
C123		CF92FV1H233J	MF	0.022UF	J
C124		CK45FF1H103Z	CERAMIC	0.010UF	Z
C125		CF92FV1H103J	MF	0.010UF	J
C126		CF92FV1H473J	MF	0.047UF	J
C127		CE04KW1C100M	ELECTRØ	10UF	16WV
C128		CC45FSL1H220J	CERAMIC	22PF	J
C130		CK45FB1H102K	CERAMIC	1000PF	K
C131	.132	CE04KW0J471M	ELECTRØ	470UF	6.3WV
C133	.134	CK45FF1H103Z	CERAMIC	0.010UF	Z
C138		CE04KW1C470M	ELECTRØ	47UF	16WV
C139		CE04KW1C471M	ELECTRØ	470UF	16WV
C141		CE04KW1C30M	ELECTRØ	30UF	16WV
C143		CE04KW0J471M	ELECTRØ	470UF	6.3WV
C144	-146	CK45FF1H103Z	CERAMIC	0.010UF	Z

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Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名/規格	Destination 仕向
D18 -26			HSS104	DIODE	
D18 -26		*	1SS133	DIODE	
D27			HZS6.8S(B)	ZENER DIODE	
D27			R06.8JS(B)	ZENER DIODE	
D29 , 30			HSS104	DIODE	
D29 , 30			1SS133	DIODE	
D31 , 32			HZS2.7N(B)		
D31 , 32			R02.7BS(B)		
D33			HZS5.6N(B)		
D33			R05.6ES(B)		
D34			HSS104		
D34			1SS133		
D35			HZS5.1N(B)		
D35			R05.1ES(B)		
D36 , 37			HSS104		
D36 , 37			1SS133		
D38			HZS5.6N(B2)		
D38			R05.6ES(B2)		
D39			HSS104		
D39			1SS133		
IC1		*	PA0034A	IC(AUDIO SYSTEM IC FOR LD)	
IC2			TC4053BP	IC(3-INPUT ZCH MPX/DE-MPX)	
IC3			TC74HC004AP	IC(CHMS INVERTER)	
IC4			UPC4072C	IC(OP AMP X2)	
IC5			CX01167R	IC(DIGITAL SIGNAL PROCESSOR)	
IC6			NJM4565D-D	IC(OP AMP X2)	
IC7			KAS02	CUSTOM IC	
IC8			TC4052BP	IC(4CH MPX/DE-MPX)	
IC9 -13			NJM4565D-D	IC(OP AMP X2)	
IC14		*	H37450M8-3388P	IC(MICROPROCESSOR)	
IC15		*	P00011A	IC(DECODER)	
IC16			MS1951ASL	IC(SYSTEM RESET)	
IC17			NJM4565D-D	IC(OP AMP X2)	
IC18			TC74HC00AP	IC(QUAD 2-INPUT NAND GATE)	
IC19			NJM4565D-D	IC(OP AMP X2)	
IC20			NJM4580D	IC(LOW VOLTAGE REGULATOR)	
IC21			LM2940CT-S.0	IC(VOLTAGE REGULATOR/ +5V)	
IC21			NJM78L05A	TRANSISTOR	
Q1			2SC1925(R,0)	TRANSISTOR	
Q2 -8			2SC1740S(Q,R)	TRANSISTOR	
Q2 -8			2SC945(A)(Q,P)	TRANSISTOR	
Q9 , 10			2SA733(A)(Q,P)	TRANSISTOR	
Q9 , 10			2SA935(Q,R)	TRANSISTOR	
Q11			2SC2878(B)	TRANSISTOR	
Q12			DTA124ES	DIGITAL TRANSISTOR	
Q13 , 14			DTC124ES	DIGITAL TRANSISTOR	
Q13 , 16			2SC1740S(Q,R)	TRANSISTOR	
Q15 , 16			2SC945(A)(Q,P)	TRANSISTOR	
Q17 , 18			2SK105(H)	FET	
Q19 , 20			2SC1740S(Q,R)	TRANSISTOR	
Q19 , 20			2SC945(A)(Q,P)	TRANSISTOR	
Q21 -24			2SC2878(B)	TRANSISTOR	
Q25			DTA124ES	DIGITAL TRANSISTOR	
Q26 , 27			DTA124ES	DIGITAL TRANSISTOR	
Q28			DTA124ES	DIGITAL TRANSISTOR	

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C147			CC45FSL1H470J	CERAMIC	
C147			CC45FSL1H100J	CERAMIC	J
C149			CC45FB1H102K	CERAMIC	D
C150			CC45FSL1H101J	CERAMIC	K
C151			CC45FF1H103Z	CERAMIC	100PF
C151			CC45FF1H103Z	CERAMIC	0.010UF Z
C152			CC45FSL1H221J	CERAMIC	J
C153			CC45FB1H102K	CERAMIC	K
C156			CE04KW0J471M	ELECTRØ	6.3HV
C157 , 158			CC45FF1H103Z	CERAMIC	Z
C159 , 160			CE04KW1A101H	ELECTRØ	10WV
C161			CC45FF1H103Z	CERAMIC	Z
C162 -165		*	CE04DW1E351H	ELECTRØ	25WV
C166			CC45FSL1H101J	CERAMIC	J
C167 -169			CC45FSL1H101J	CERAMIC	100PF
C179 , 180			CE04KW1A470M	ELECTRØ	47UF 10WV
C181			CC45FSL1H473Z	CERAMIC	0.047UF Z
C182			CC45FSL1H331J	CERAMIC	J
C183			CC45FB1H102K	CERAMIC	K
C184		*	CF92FV1H101J	MF	1000PF
C185		*	CF92FV1H151J	MF	1500PF J
C186			CE04KW1A101M	ELECTRØ	100UF 10WV
C187			C91-0721-05	CERAMIC	10PF J
C189			C91-0739-05	CERAMIC	56PF J
E1		*	E02-0012-05	IC SOCKET	AUDIO ØUT
E2		*	E13-0241-05	PHONE JACK	RF MODULATOR
E3			E06-0628-05	RECEPTACLE	PHONE JACK
E4			E11-0189-05	PHONE JACK	PHONE JACK
E4			E13-0192-05	PHONE JACK	VIDEO ØUT
E5			E11-0188-05	PHONE JACK	SYSTEM CONTROL
-			J11-0098-05	WIRE CLAMPER	
L1 , 2			L40-6801-17	SMALL FIXED INDUCTØR(68UH,K)	
L3			L40-5691-17	SMALL FIXED INDUCTØR(5.6UH,K)	
L4			L40-2211-17	SMALL FIXED INDUCTØR(220UH,K)	
L5			L32-0528-15	OSCILLATING COIL	
L6		*	L79-0797-05	LC FILTER	
L7			L79-0764-05	LC FILTER	
L8			L40-1001-17	SMALL FIXED INDUCTØR(100UH,K)	
L9			L40-1011-17	SMALL FIXED INDUCTØR(101UH,K)	
X1			L77-1129-05	CRYSTAL RESONATOR 16.9525 MHZ	
X2			L78-0256-05	RESONATOR 10 MHZ	
C	3F		N89-3008-45	BINDING HEAD TAPITTE SCREW	
VR1		*	R12-3128-05	TRIMMING POT. 22K	
VR2		*	R10-4038-05	PØTENTIOMETER 5K B PHONES LEVE L	
D1 , 2			1SV147	VARIØTOR	
D3 -11			HSS104	DIODE	
D3 -11			1SS133	DIODE	
D13			HSS104	DIODE	
D13			1SS133	DIODE	
D14		*	HZS6.8S(B)	ZENER DIODE	
D14			R06.8JS(B)	ZENER DIODE	
D15 , 16			HSS104	DIODE	
D15 , 16			1SS133	DIODE	

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Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名/規格	Re- marks 向備考
Q29 -31			2SA733(A)(Q,P)	TRANSISTOR	
Q29 -31			2SA933S(Q,R)	DIGITAL TRANSISTOR	
Q32 -35			DTA124ES	DIGITAL TRANSISTOR	
Q33 -35			2SC1740S(Q,R)	TRANSISTOR	
Q35 -35			2SC6945(A)(Q,P)	TRANSISTOR	
Q36			DTA124ES	DIGITAL TRANSISTOR	
Q37			2SC1740S(Q,R)	TRANSISTOR	
Q38			2SC6945(A)(Q,P)	TRANSISTOR	
Q39			DTC124ES	TRANSISTOR	
A1			W02-1044-05	TRANSMITTING ASSY	
<b>VIDEO UNIT (X35-2050-00)</b>					
D23			830-1289-05	LED	
C1			CC45FSL1H151J	CERAMIC	J
C2			CC45FSL1H470J	CERAMIC	J
C3			CK45FF1H103Z	CERAMIC	Z
C4			CK45FF1H103Z	CERAMIC	Z
C5			CK45FF1H103Z	CERAMIC	Z
C6			CK45FF1H103Z	CERAMIC	Z
C7			CC45FSL1H151J	CERAMIC	J
C8			CC45FSL1H101J	CERAMIC	J
C9			CC45FSL1H151J	CERAMIC	J
C10			CC45FSL1H151J	CERAMIC	J
C11			CC45FSL1H221J	CERAMIC	J
C12			CC45FSL1H060D	CERAMIC	D
C13			CC45FSL1H180J	CERAMIC	J
C14			CK45FF1H103Z	CERAMIC	Z
C15			CE04KW1A101M	ELECTRO	10WV
C16			CK45FF1H103Z	CERAMIC	Z
C17			CK45FF1H103Z	CERAMIC	Z
C18			CC45FSL1H390J	CERAMIC	J
C19			CC45FSL1H100D	CERAMIC	D
C20			CC45FSL1H560J	CERAMIC	J
C21			CC45FSL1H390J	CERAMIC	J
C22			CC45FSL1H390J	CERAMIC	J
C23			CE04KW1A101M	ELECTRO	10WV
C24			CK45FF1H103Z	CERAMIC	Z
C25			CE04KW1A101M	ELECTRO	10WV
C26			CC45FSL1H181J	CERAMIC	J
C27			CC45FSL1H101J	CERAMIC	J
C28			CC45FSL1H120J	CERAMIC	J
C29			CE04KW1A101M	ELECTRO	10WV
C30			CK45FF1H103Z	CERAMIC	Z
C31			CK45FF1H103Z	CERAMIC	Z
C32			CK45FF1H102K	CERAMIC	K
C33			CE04KW1H010M	ELECTRO	50WV
C34			CE04KW1V100M	ELECTRO	35WV
C35			CE04KW1V4R7M	ELECTRO	4.7UF 35WV
C36			CC45FSL1H100D	CERAMIC	D
C37			CC45FSL1H560J	CERAMIC	J
C38			CE04KW1V4R7M	ELECTRO	4.7UF 35WV
C39			CK45FF1H103Z	CERAMIC	Z
C40			CE04KW1A101M	ELECTRO	10WV
C41			CE04KW1A470H	ELECTRO	47UF 10WV
C42			CK45FF1H103Z	CERAMIC	Z
C43			CC45FSL1H101J	CERAMIC	J
C44			CF92FV1H564J	MF	0.56UF 35WV
C45			CE04KW1V4R7M	ELECTRO	4.7UF 35WV
C46			CE04KW1A101M	ELECTRO	10WV
C47			CE04KW1A101M	ELECTRO	10WV
C48			CF92FV1H104J	MF	0.10UF J

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C50			CK45FF1H103Z	CERAMIC	Z
C51			CF92FV1H104J	MF	0.10UF Z
C52			CK45FF1H103Z	CERAMIC	Z
C53			CK45FF1H103Z	CERAMIC	Z
C54			CF92FV1H104J	MF	0.10UF J
C55			CF92FV1H104J	MF	0.10UF J
C56			CC45FSL1H120J	CERAMIC	J
C57			CC45FSL1H820J	CERAMIC	J
C58			CC45FSL1H470J	CERAMIC	J
C59			CC45FSL1H470J	CERAMIC	J
C60			CE04KW1H010M	ELECTRO	50WV
C61			CE04KW1V100M	ELECTRO	35WV
C62			CC45FCH1H070D	CERAMIC	D
C63			CC45FCH1H220J	CERAMIC	J
C64			CE04KW1V100M	ELECTRO	35WV
C65			CK45FF1H103Z	CERAMIC	Z
C66			CC45FSL1H101J	CERAMIC	J
C67			CF92FV1H102J	MF	1000PF J
C68			CC45FSL1H470J	CERAMIC	J
C69			CF92FV1H222J	MF	2200PF J
C70			CK45FF1H103Z	CERAMIC	Z
C71			CE04KW1A470M	ELECTRO	47UF 10WV
C72			CE04KW1H010M	ELECTRO	50WV
C73			CE04KW1A470M	ELECTRO	47UF 10WV
C74			CE04KW1E470M	ELECTRO	47UF 25WV
C75			CK45FF1H102K	CERAMIC	K
C76			CC45FSL1H121J	CERAMIC	J
C77			CE04KW1E470M	ELECTRO	47UF 25WV
C78			CE04KW1V4R7M	ELECTRO	4.7UF 35WV
C79			CE04KW1V4R7M	ELECTRO	4.7UF 35WV
C80			CC45FSL1H270J	CERAMIC	J
C81			CK45FF1H103Z	CERAMIC	Z
C82			CK45FF1H103Z	CERAMIC	Z
C83			CC45FSL1H220J	CERAMIC	J
C84			CC45FSL1H390J	CERAMIC	J
C85			CK45FF1H103Z	CERAMIC	Z
C86			CE04KW1A101M	ELECTRO	10WV
C87			CE04KW1E470M	ELECTRO	47UF 25WV
C88			CE04KW1E470M	ELECTRO	47UF 25WV
C89			CK45FF1H103Z	CERAMIC	Z
C90			CK45FF1H103Z	CERAMIC	Z
C100			CC45FSL1H390J	CERAMIC	J
C101			CC45FSL1H390J	CERAMIC	J
C102			CC45FSL1H180J	CERAMIC	J
C103			CK45FF1H561K	CERAMIC	K
C104			CK45FF1H561K	CERAMIC	K
C105			CC45FSL1H100D	CERAMIC	D
C106			CC45FSL1H390J	CERAMIC	J
C107			CK45FF1H103Z	CERAMIC	Z
C108			CK45FF1H103Z	CERAMIC	Z
C109			CF92FV1H102J	MF	1000PF Z
C110			CF92FV1H102J	MF	1000PF Z
C111			CE04KW1V100M	ELECTRO	35WV
C112			CK45FF1H103Z	CERAMIC	Z
C113			CE04KW1A101M	ELECTRO	10WV
C114			CE04KW1A101M	ELECTRO	10WV
C115			CE04KW1A101M	ELECTRO	10WV
C116			CK45FF1H102K	CERAMIC	K
C117			CF92FV1H104J	MF	0.10UF J
C118			CK45FF1H561K	CERAMIC	K
C119			CF92FV1H223J	MF	0.22UF J
C120			CE04KW1H010M	ELECTRO	50WV
C121			CF92FV1H392J	MF	3900PF J
C122			CC45FSL1H561J	CERAMIC	J
C123			CC45FSL1H101J	CERAMIC	J
C124			CE04KW1H010M	ELECTRO	50WV
C125			CF92FV1H392J	MF	3900PF J
C126			CC45FSL1H561J	CERAMIC	J
C127			CC45FSL1H101J	CERAMIC	J
C128			CC45FSL1H270J	CERAMIC	J

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L4 .5			L40-3901-17	SMALL FIXED INDUCTOR(39UH, K)		
L6			L40-2211-17	SMALL FIXED INDUCTOR(220UH, K)		
L7			L40-1501-17	SMALL FIXED INDUCTOR(15UH, K)		
L8			L40-3901-17	SMALL FIXED INDUCTOR(39UH, K)		
L9			L40-5691-17	SMALL FIXED INDUCTOR(5.6UH, K)		
L10 .11			L40-1501-17	SMALL FIXED INDUCTOR(15UH, K)		
L12 -15			L40-6801-17	SMALL FIXED INDUCTOR(68UH, K)		
L16			L40-8801-17	SMALL FIXED INDUCTOR(88UH, K)		
L17			L40-1001-17	SMALL FIXED INDUCTOR(10UH, K)		
L18			L40-1011-17	SMALL FIXED INDUCTOR(100UH, K)		
X1		*	L77-1182-05	CRYSTAL RESONATOR 14.31818 MHz		
X2			L78-0287-05	RESONATOR		
VR1			R12-1088-05	TRIM POT. 3.3K		
VR2 .3			R12-1084-05	TRIM POT. 1K		
VR4			R12-1085-05	TRIM POT. 2.2K		
VR5			R12-3132-05	TRIM POT. 47K		
VR6			R12-3126-05	TRIM POT. 10K		
VR7			R12-5058-05	TRIM POT. 100K		
VR8			R12-1087-05	TRIM POT. 4.7K		
S1 -26			S40-1064-05	PUSH SWITCH		
D1			HSS104	DIODE		
D2			SS133	DIODE		
D3			KW1230Z	VARIABLE CAPACITANCE DIODE		
D4			1SV147	VARIATOR		
D5 .6			HSS104	DIODE		
D6			SS133	DIODE		
D9 -14			HSS104	DIODE		
D9 -14			SS133	DIODE		
D15 -21			HSS104	DIODE		
D15 -21			SS133	DIODE		
D22			HZS8.2N(B2)	ZENER DIODE		
D22			RD8.2ES(B2)	ZENER DIODE		
FL1			10-MT-34GK	FLUORESCENT INDICATOR TUBE		
IC1		*	HA11528	IC(VIDEO PROCESSOR)		
IC2		*	HSM7400RS	IC(DELAY LINE)		
IC3		*	CX01175AH	IC		
IC4		*	MN4760S	IC(CLINE MEMORY)		
IC5		*	CX01171H	IC		
IC6		*	H50554-003SP	IC(CCHARACTER GENERATOR)		
IC7			TC74HC04AF	IC		
IC8		*	TC74HC4040AF	IC		
IC9		*	TC74HC30AF	IC		
IC10		*	TC74HC24AF	IC(DUAL D-TYPE FLIP FLOP)		
IC11			NJM4568L	IC		
IC12			TC74HC00AF	IC		
IC13			TC74HC74AF	IC(DUAL D-TYPE FLIP FLOP)		
IC14			TC5081AF	IC		
IC15			LVA5195	IC		
IC16		*	HD49403NT	IC		
IC17			NJM45650	IC(OP AMP X2)		
IC18		*	UP075216ACH-A95	IC(MICROPROCESSOR)		
Q1			2SC1740S(Q,R)	TRANSISTOR		
Q1			2SC945(A)(Q,P)	TRANSISTOR		

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C129-131			CK45FF1H103Z	CERAMIC		
C132			CC45FSL1H330J	CERAMIC		
C133			CC45FSL1H100D	CERAMIC		
C134			CK45FF1H103Z	CERAMIC		
C136			CF92FV1H102J	MF		
C137			C90-1398-05	MF-ELEC		50WV
C138			CK45FF1H103Z	CERAMIC		
C139			CF92FV1H473J	MF		
C140			CF92FV1H223J	MF		
C141			CF92FV1H823J	MF		
C142			CF92FV1H223J	MF		
C143			CE04KW1H101M	ELECTRO		50WV
C144			CF92FV1H153J	MF		
C145			CE04KW1A471M	ELECTRO		10WV
C146			CK45FF1H103Z	CERAMIC		
C147			CE04KW1H101M	ELECTRO		50WV
C148			CF92FV1H222J	MF		
C149			CK45FF1H102K	CERAMIC		
C150			CK45FF1H103Z	CERAMIC		
C151			CE04KW1A471M	ELECTRO		10WV
C152			CF92FV1H392J	MF		
C153			CE04KW1H101M	ELECTRO		50WV
C154			CC45FSL1H221J	CERAMIC		
C155			CF92FV1H473J	MF		
C156			CF92FV1H472J	MF		
C157, 158			CE04KW1V100M	ELECTRO		35WV
C159			CE04KW1A101M	ELECTRO		10WV
C160, 161			CK45FF1H103Z	CERAMIC		
C162			CF92FV1H104J	MF		
C163			CC45FSL1H100D	CERAMIC		
C164			CC45FSL1H331J	CERAMIC		
C170			CE04KW1A101M	ELECTRO		10WV
C171			CK45FF1H103Z	CERAMIC		
C172			CE04KW1A101M	ELECTRO		10WV
C173			CK45FF1H103Z	CERAMIC		
C174			CE04KW1C330M	ELECTRO		16WV
C175			C91-0700-05	CERAMIC		
C176			CK45FF1H103Z	CERAMIC		
C177			CF92FV1H103J	MF		
C178			CC45FSL1H560J	CERAMIC		
C179			CK45FF1H103Z	CERAMIC		
C180			CC45FSL1H560J	CERAMIC		
C181, 182			CE04KW1V4R7M	ELECTRO		35WV
C183			CK45FF1H103Z	CERAMIC		
C200			CE04JW1A101M	ELECTRO		10WV
C201			CK45FF1H103Z	CERAMIC		
C202			C91-0769-05	CERAMIC		
C203			CE04JW1H100M	ELECTRO		50WV
C204			C91-0769-05	CERAMIC		
TC1 .2			C05-0303-05	CERAMIC TRIMMER CAPACITOR(20PF)		
-			J19-2647-13	HOLDER		
L1			L40-4701-17	SMALL FIXED INDUCTOR(47UH, K)		
L2			L40-1501-17	SMALL FIXED INDUCTOR(15UH, K)		
L3			L40-8291-17	SMALL FIXED INDUCTOR(8.2UH, K)		

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△ indicates safety critical components.

## 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.

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Destination 仕向	Remarks 備考
Q2	3		25C1923(R,0)	TRANSISTOR		
Q4	5		25C1740S(Q,R)	TRANSISTOR		
Q4	5		25C945(A)(Q,P)	TRANSISTOR		
Q6	7		25C1923(R,0)	TRANSISTOR		
Q8			25C1740S(Q,R)	TRANSISTOR		
Q8			25C945(A)(Q,P)	TRANSISTOR		
Q9			25A733(A)(Q,P)	TRANSISTOR		
Q9			25A933S(Q,R)	TRANSISTOR		
Q9			25A933S(Q,R)	TRANSISTOR		
Q10			25C1740S(Q,R)	TRANSISTOR		
Q10			25C945(A)(Q,P)	TRANSISTOR		
Q11	14		25A733(A)(Q,P)	TRANSISTOR		
Q11	14		25A933S(Q,R)	TRANSISTOR		
Q15			25C1740S(Q,R)	TRANSISTOR		
Q15			25C945(A)(Q,P)	TRANSISTOR		
Q16			25A733(A)(Q,P)	TRANSISTOR		
Q16			25A933S(Q,R)	TRANSISTOR		
Q18			25A933S(Q,R)	TRANSISTOR		
Q19			25C1740S(Q,R)	TRANSISTOR		
Q19			25C945(A)(Q,P)	TRANSISTOR		
Q20			25A733(A)(Q,P)	TRANSISTOR		
Q20			25A933S(Q,R)	TRANSISTOR		
Q21	24		25C1740S(Q,R)	TRANSISTOR		
Q21	24		25C945(A)(Q,P)	TRANSISTOR		
Q25			25C945(A)(Q,P)	TRANSISTOR		
Q25			25A733(A)(Q,P)	TRANSISTOR		
Q25			25A933S(Q,R)	TRANSISTOR		
Q26			25C1740S(Q,R)	TRANSISTOR		
Q26			25C945(A)(Q,P)	TRANSISTOR		
Q31	34		25C1740S(Q,R)	TRANSISTOR		
Q31	34		25C945(A)(Q,P)	TRANSISTOR		
Q35			25A733(A)(Q,P)	TRANSISTOR		
Q35			25A933S(Q,R)	TRANSISTOR		
Q36	40		25C1740S(Q,R)	TRANSISTOR		
Q36	40		25C945(A)(Q,P)	TRANSISTOR		
Q50	52		D7C144TFF	DIGITAL TRANSISTOR		
A1			W02-1043-05	OPTIC RECEIVING MODULE		
<b>MECHANISM ASSY (D40-0952-05)</b>						
1	1A, 1B	*	A11-0704-08	CHUCKING SHASSIS ASSY(R)		
2	3B	*	A11-0705-08	PU SHASSIS ASSY		
3	1B	*	D02-0101-08	TURNTABLE ASSY		
4	2B	*	D10-3117-08	LOADING SHAFT		
5	2B	*	D10-3118-08	THRUST SHAFT		
6	1A	*	D12-0127-08	CONTROL CAM		
7	1A	*	D12-0128-08	TILT CAM		
8	1A	*	D13-0909-08	TRAY GEAR ASSY		
9	2A	*	D13-0910-08	GEAR (B)		
10	2A	*	D13-0911-08	GEAR (A)		
11	2B	*	D13-0912-08	LOADING GEAR		
12	2B	*	D13-0913-08	GEAR (V)		
13	2B	*	D13-0914-08	GEAR (A2)		
14	2B	*	D13-0915-08	GEAR (A1)		
15	2A	*	D15-0312-08	LOADING PULLEY		
16	2A	*	D15-0313-08	PULLEY		
17	2A	*	D16-0312-08	L.M. BELT		

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18	2A, 2B	*	D16-0313-08	TIMING BELT		
19	2B	*	E31-7939-08	FLAT CABLE		
20	1B	*	G01-3339-08	COMPRESSION SPRING		
21	3B	*	G02-0978-08	SHAFT CLAMPER		
22	3B	*	G02-0977-08	SHAFT STOPPER		
23	1B	*	J11-0169-08	CRUCKING PULLEY HOLDER ASSY		
24	1B	*	J19-3356-08	PULLEY HOLDER ASSY		
25	1B	*	J19-3357-08	SHAFT HOLDER ASSY		
26	1A	*	J19-3358-08	TRAY RAIL ASSY		
27	3B	*	J19-3359-08	BELT CLAMPER		
28	1A	*	J19-3360-08	LOADING GUIDE (B)		
29	2B	*	J19-3361-08	LOADING GUIDE (A)		
30	1B	*	J21-5680-08	SPRING HOLDER ASSY		
31	2B, 3B	*	J21-5681-08	FEED PLATE		
32	3A	*	J25-8013-08	FEED MOTOR UNIT ASSY		
33	2A	*	J25-8014-08	LOADING MOTOR UNIT ASSY		
34	3B	*	J25-8015-08	FG UNIT ASSY		
35	2B	*	J25-8016-08	PRESERBO UNIT ASSY		
36	3A	*	J90-0668-08	SLIDE GUIDE		
37	1A, 1B	*	J99-0097-08	TRAY ASSY (B)		
38	2B	*	N19-1253-08	HOLE PIECE		
39	3B	*	N24-3030-45	FASTENER (/ 3X7X0.6)		
40	1A, 1B	*	N30-2003-46	PAN HEAD MACHINE SCREW		
41	3A, 3B	*	N32-3005-45	FLAT HEAD MACHINE SCREW		
42	2B	*	N35-2003-45	BINDING HEAD MACHINE SCREW		
43	2B, 3B	*	N35-2604-45	BINDING HEAD MACHINE SCREW		
44	1B	*	N35-3003-45	BINDING HEAD MACHINE SCREW		
45	3B	*	N35-3005-45	BINDING HEAD MACHINE SCREW		
46	1A	*	N64-2008-46	SCREW		
47	1B, 2B	*	N64-2605-46	SCREW		
48	2B	*	N66-2605-46	SCREW		
49	3A	*	N66-3006-45	SCREW		
50	3B	*	N66-3008-46	SCREW		
51	1A	*	2-644-893-01	SCREW		
52	2A, 2B	*	3-588-708-21	WASHER		
53	3A	*	S59-1088-08	IN SW UNIT ASSY(CD)		
54	3A	*	S59-1089-08	IN SW UNIT ASSY(LD)		
55	3B	*	T42-0580-08	DISK MOTOR		
56	2A	*	T99-0506-08	MODE CHANGE SWITCH		
DM	3B	*	T42-0581-08	DISK MOTOR ASSY		
EM	2A, 3A	*	T42-0578-08	FEED MOTOR ASSY		
LW	2A	*	T42-0579-08	LOADING MOTOR ASSY		
PU	2B	*	T23-0012-08	PICKUP ASSY (KHS-130A)		

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# LVD-300

## SPECIFICATIONS

### [Type]

**Video disc format** ..... LaserVision format  
**Signal read system** ..... Semiconductor laser  
**Video output format** ..... NTSC  
**Video output lines** ..... 2 lines  
(S-VIDEO terminal,  
RCA pin jack)  
**Audio output lines** ..... 2 lines  
(optical terminal,  
RCA pin jack)

### [Characteristics]

**Video output level** ..... 1 Vp-p (75Ω load, sync.  
negative)  
**S-VIDEO output level** ..... Y output: 1 Vp-p (75Ω  
load, sync.  
negative)  
C output: 0.286 Vp-p  
75Ω load)

**Horizontal resolution** ..... 425 lines  
**Video signal to noise ratio** ... More than 49 dB

### Digital audio section

**Frequency response** ..... 4 Hz~20 kHz  
**Signal to noise ratio** ..... More than 105 dB  
**Dynamic range** ..... More than 98 dB  
**Total harmonic distortion**... Less than 0.007% (1 kHz)  
**Wow and flutter** ..... Below measurable limit  
(±0.001% W. PEAK)

**Output level/Impedance** ..... 2 V/1 kΩ

### Optical output (optical

**fiber output terminal)** ..... -15 dBm~-21 dBm

### RF modulator output

**channel** ..... VHF channel 3 or 4  
(Except for some areas) (Supplied modulator:  
RFM-100 switch type)

### Allowable operating

**temperature range** ..... 5°C~40°C  
**Allowable operating**  
**humidity range** ..... 5%~90%  
(condensation should not  
form)

### [General]

**Power consumption** ..... 40 W  
**Dimensions** ..... W: 440 mm (17-5/16")  
H: 138 mm (5-7/16")  
D: 374 mm (14-3/4")  
**Weight (Net)** ..... 10.0 kg (22.0 lb)

### Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) 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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