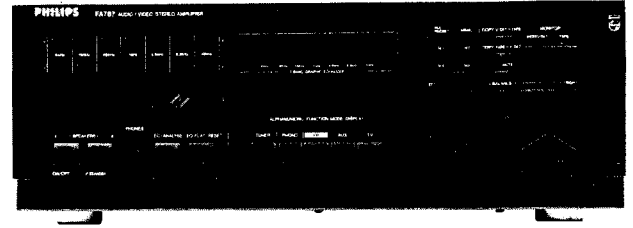


Service
Service
Service



Service Manual

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(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde worden toegepast.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden für Reparaturen sind Original-Ersatzteile zu verwenden.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati pezzi di ricambio identici a quelli specificati.



SPECIFICATION

General	Nominal value	Typical value
Mains voltage	: 220V ~ (/00R) : 240V ~ (/05R)	: 220V ~ (/00R) : 240V ~ (/05R)
Mains frequency	: 50 – 60 Hz	: 50 – 60 Hz
Power consumption	: 310W	: 380W max
Dimensions (WxHxD)	: 360 x 120 x 300 mm	: 360 x 120/128 x 300 mm
Weight	: 8.3 kg	: 8.3 kg
 Amplifier		
Output power	: 75W in 8Ω (IEC)	: 75W in 8Ω (IEC)
Distortion		
T.H.D.	: ≤ 0.05% at 1 kHz : ≤ 0.1% at 63 Hz–12.5 kHz } (IEC)	: ≤ 0.015% at 1 kHz : ≤ 0.1% at 65 Hz–12.5 kHz } (IEC)
Intermodulation	: ≤ 0.05% at 60/7000 Hz 4:1	: ≤ 0.02% at 60/7000 Hz 4:1
Frequency characteristic		
Phono input tone control	: from 20 Hz – 20 kHz ±1.5 dB (IEC)	: from 20 Hz – 20 kHz ±0.5 dB (IEC)
Other inputs neutral	: from 20 Hz – 20 kHz ±2 dB	: from 10 Hz – 30 kHz ±2 dB
Frequency equalizer control	: at 64 Hz +10 dB to –10 dB ±2 dB : at 150 Hz +10 dB to –10 dB ±2 dB : at 400 Hz +10 dB to –10 dB ±2 dB : at 1 kHz +10 dB to –10 dB ±2 dB : at 2.5 kHz +10 dB to –10 dB ±2 dB : at 6.3 kHz +10 dB to –10 dB ±2 dB : at 15 kHz +10 dB to –10 dB ±2 dB	: at 64 Hz +10 dB to –10 dB : at 150 Hz +10 dB to –10 dB : at 400 Hz +10 dB to –10 dB : at 1 kHz +10 dB to –10 dB : at 2.5 kHz +10 dB to –10 dB : at 6.3 kHz +10 dB to –10 dB : at 15 kHz +10 dB to –10 dB
Signal/noise ratio weighted (A-curve)		
Phono input	: for 75W output ≥ 77 dB (IEC)	: for 75W output ≥ 77 dB (IEC)
Other inputs	: for 75W output ≥ 95 dB (IEC)	: for 75W output ≥ 95 dB (IEC)
Channel separation	: at 1000 Hz ≥ 55 dB : at 250 Hz – 10 kHz ≥ 35 dB	: at 1000 Hz ≥ 65 dB : at 250 Hz – 10 kHz ≥ 45 dB
Input sensitivity/Input impedance		
Audio		
Phono	: 2.8 mV/ 47 kΩ	: 2.5 mV/ 47 kΩ
Tuner/CD/Aux/Tape	: 150 mV/ 25 kΩ	: 150 mV/ 25 kΩ
TV/Video	: 150 mV/ 25 kΩ	: 150 mV/ 25 kΩ
Output level/Output impedance		
Tape (Audio)	: 220 mV/ 3.5 kΩ (Phono 5.0 mV 1 kHz input)	: 220 mV/ 3.5 kΩ (Phono 5.0 mV 1 kHz input)

Pril. 3835

Service Information

1988-10-13

70FA787

A88-250

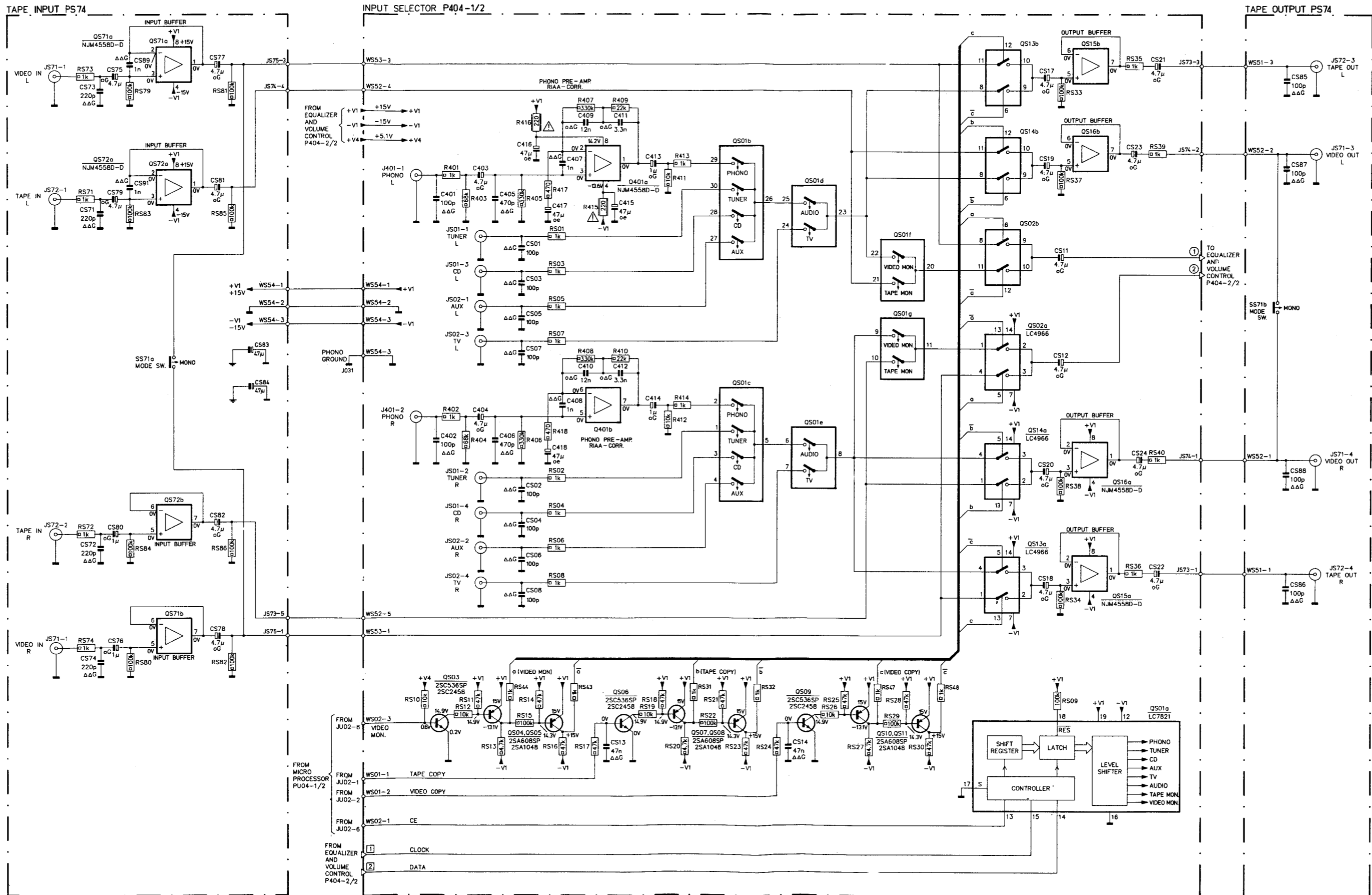
Product Service Group CE Audio

Previously published A88 - 246

* In this Service Information you will find the, adapted,
circuit diagrams for amplifier 70 FA 787.

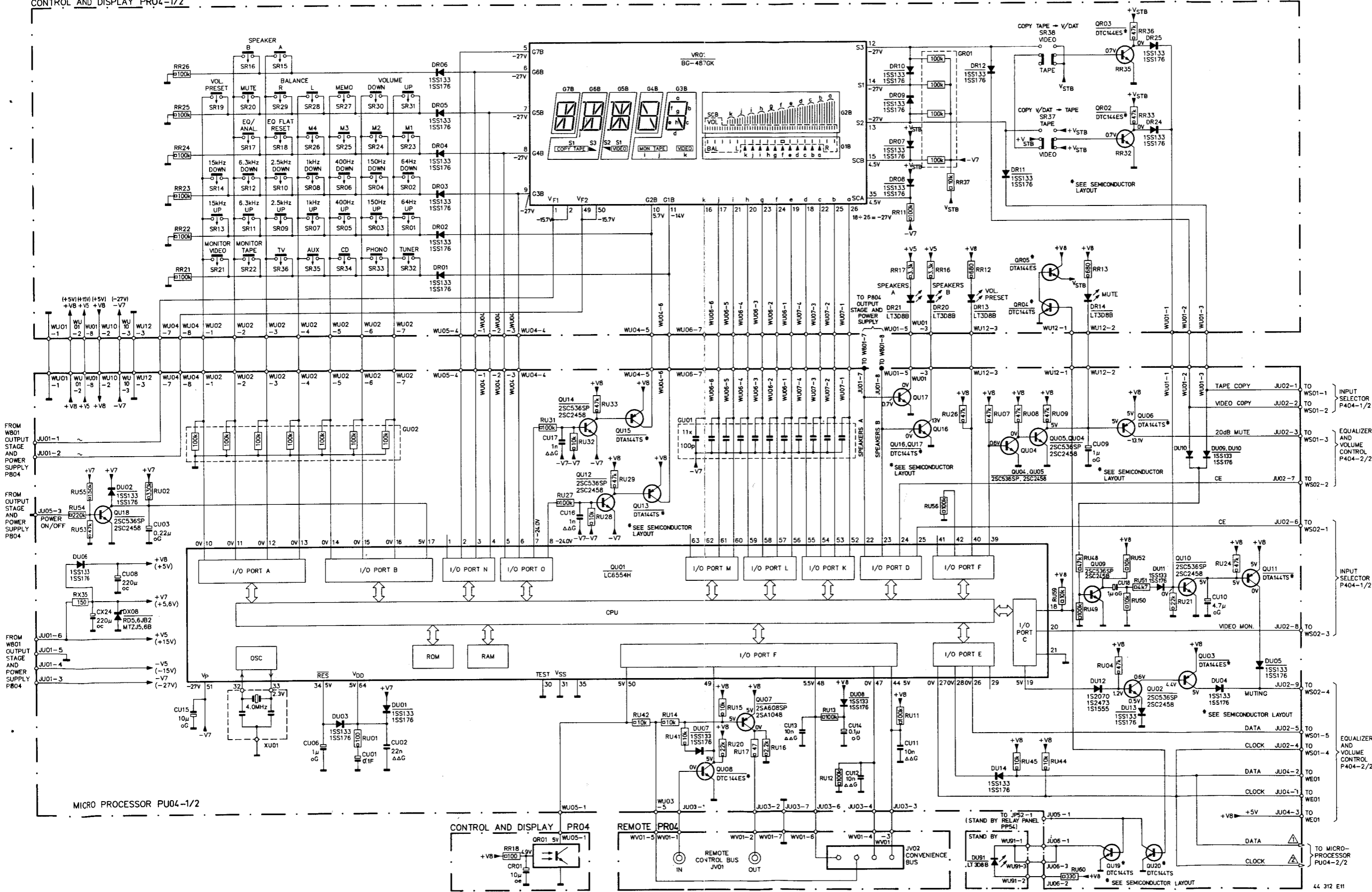
- INPUT SELECTOR **P404 1/2** - TAPE IN/OUT **PS 74**
- EQUALLIZER AND VOLUME CONTROL **P404**
- PRE AMPLIFIER **P704** - OUTPUT STAGE AND
POWER AMPLIFIER **P804**
- CONTROL AND DISPLAY **PR04 1/2** -
MICROPROCESSOR **PU04 1/2**
- CONTROL AND DISPLAY (spectrum analyzer)
PR04 2/2 - MICROPROCESSOR **PU04 2/2**.

Q-D	QS71, QS72	DS06	QS03, DS07	QS04	QS05	QS06	QS07	QS01b, QS01c, QS08	QS01d, QS01e, QS09	QS10	QS01f, QS01g, QS11	QS02, QS13, QS14	QS15, QS16	QS01a	Q-D
C	S71+S76, S79, S80, S89+S92	S77, S78, S81, S82, S83, S84	401, 402	403+406, S01+S08, 416+418	407+412, S13, 415	413, 414	411+414	S14	S17+S20, S11, S12	S21+S24	S17+S20, S11, S12	S33, S37, S38, S34	S35, S36, S39, S40	S85+S88	C
R	S79, S80, S83, S84	S81, S82, S85, S86	401+404, S44	405, 406, 416+418, S01+S08	407+410, 415				S24	S26, S25, S47, S27	S29, S28	S30, S48	S09		
S	SS71a		S10	S12, S11, S43, S13	S15, S14	S16	S17	S19, S18	S20, S31, S22, S21, S32, S23					SS71b	S



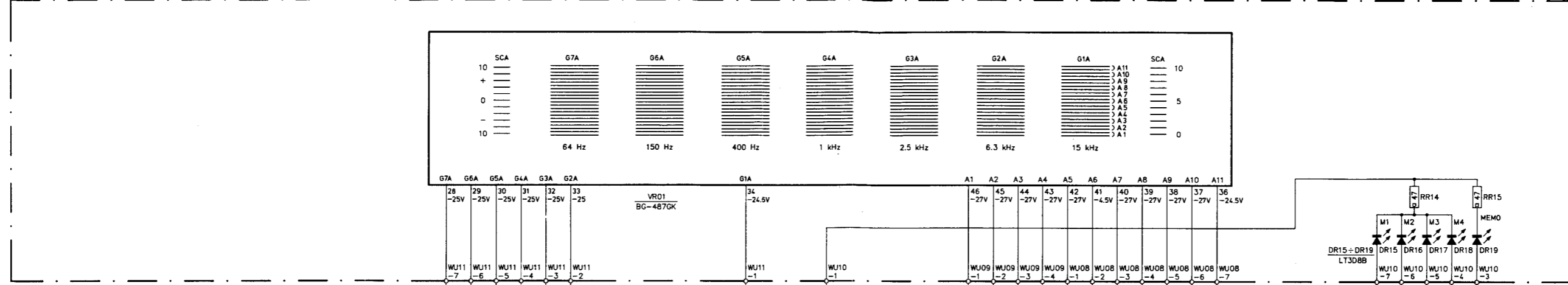
Q-D-V	DU06, QU18, DU02, DX08	U15	U04, U05	DU03, DU01, U02	DR01-DR06	DR01-DR06	DR01-DR06	VR01	DR07, QU08, QU07	U13	U12	DR07-DR10, DR21, DR20	DR13, DR12, DR11	SR38, SR37	DR14	QR03, QR02, DR25, DR24	QU10, QU03, DU04, QU11, DU05	Q-D-V
C	X24, U08	U03	R21-R26	U01	R01	U17, U16	U13	U12	U11	U13	U12	R11, R17, R16	R12	U09	R31-R36	U05, U21, U06	U25, U24	C
R	U53+U55, X35	U02		U01	R18	U27+U34	U42	U14, U41	U15+U20	U13	U12	U36, U35, U11	U43, U26	U07	U08, U45	U09, U44	U10, U04	R
G-L-S-F-X				XU01	SR1+SR36	QU02		GU01				GR01						G-L-S-F-X

CONTROL AND DISPLAY PR04-1/2

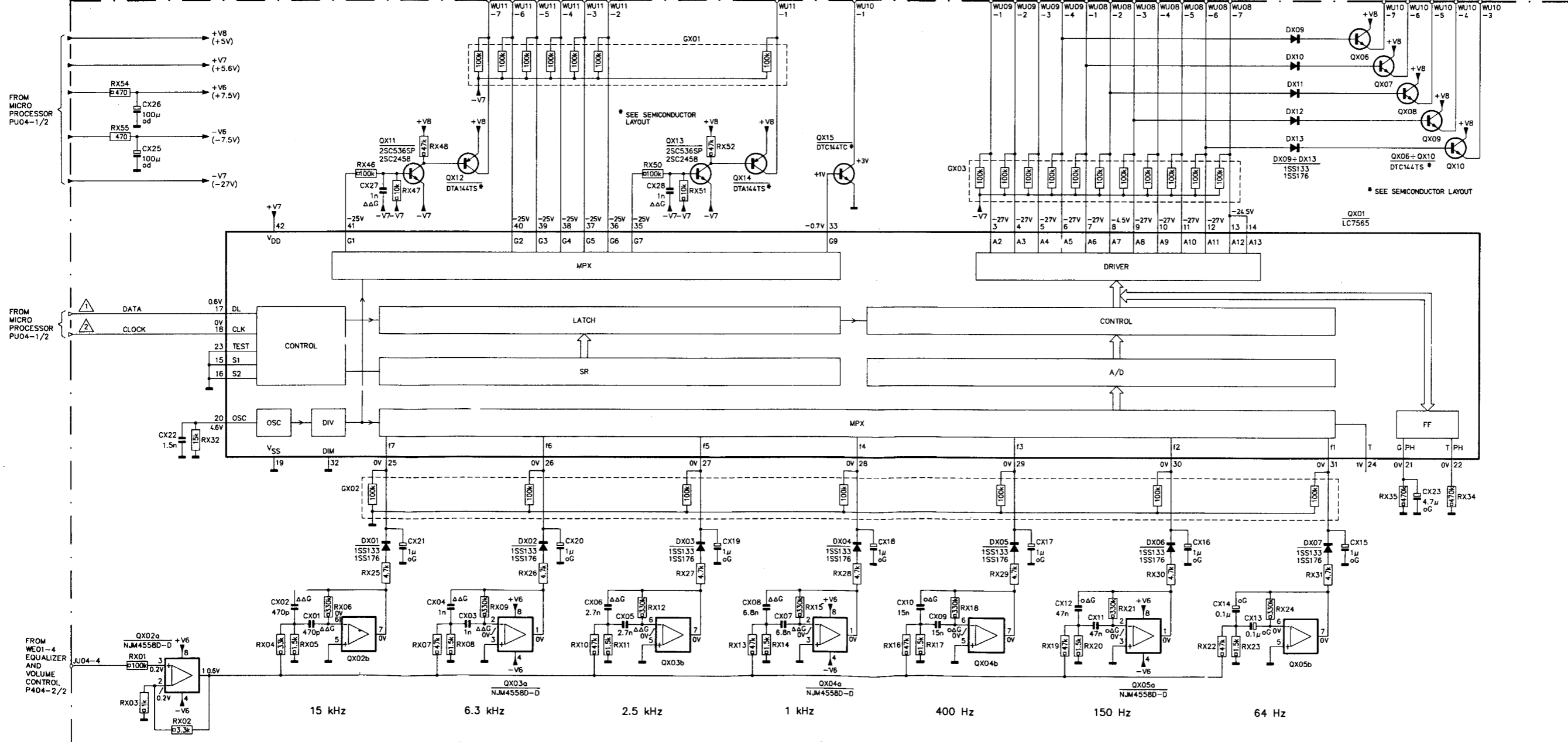


Q-D-V	QX02a	QX02b,DX01	QX11	QX12	QX03a,DX02	QX03b,VR01,QX13,DX03	QX14	QX04a,QX15,DX04	QX04b,DX05	QX06a,DX06	DX09 = DX13,QX05b,DX07,QX01	QX06 + QX10,DR15 + DR19	Q-D-V											
C	X25	X22	X02,X01	X27	X21	X04,X03	X20	X06,X05	X28	X19	X10,X09	X17	X12,X11	X16	X14,X13	X15	X23	C						
R	X54,X55	X01 + X03	X32	X04 + X06	X25,X46 + X49	X07 + X09	X26	X10 + X12	X50 + X53,X27	X13 + X15	X41	X28	X16 + X18	X29	X19 + X21	X30	X16	X22 + X24	X36 + X40	X31	X35,R14	X34	R15	R
G																								G

CONTROL AND DISPLAY (SPECTRUM ANALYZER) PR04-2/2

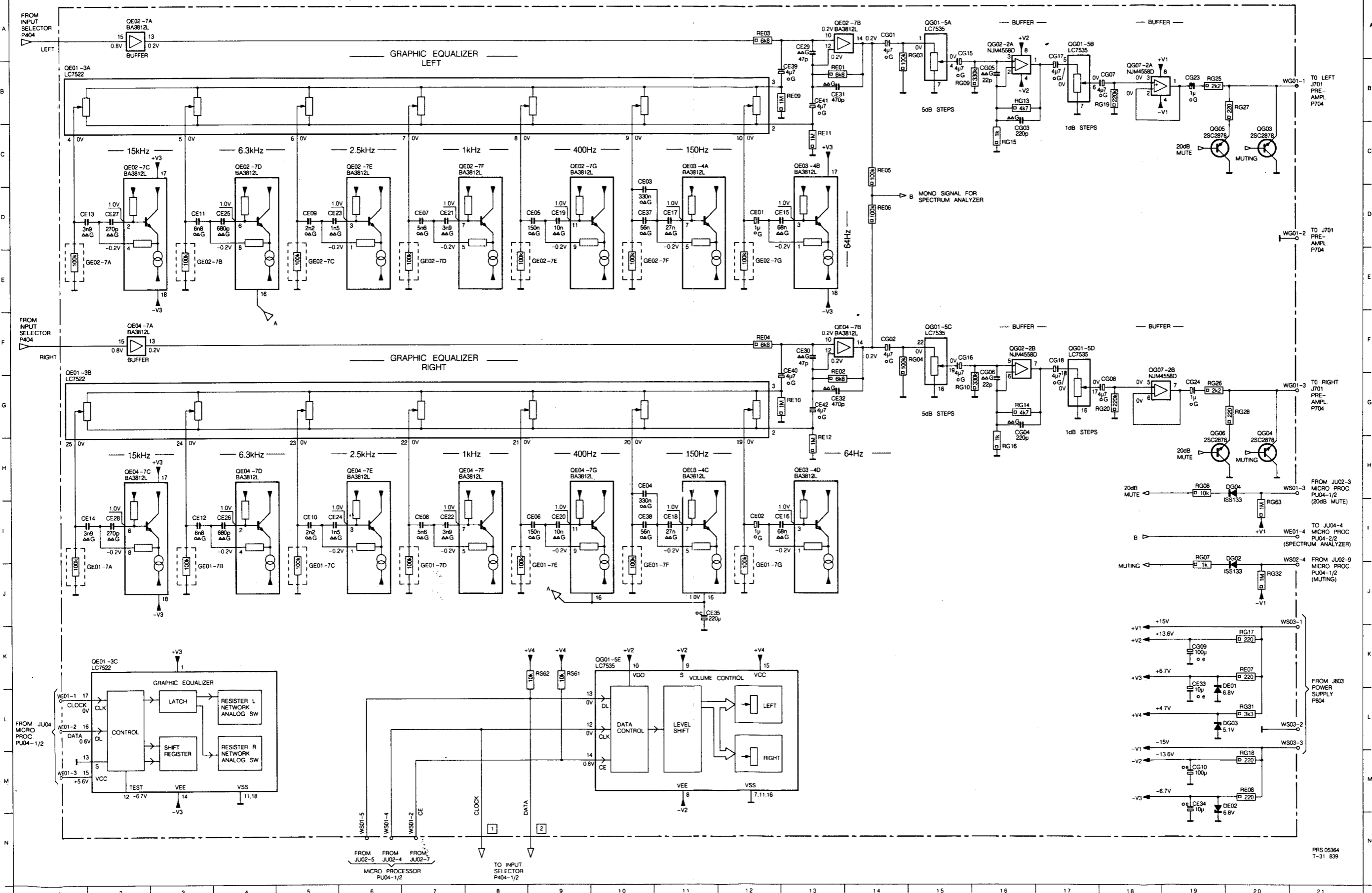


MICROPROCESSOR (SPECTRUM ANALYZER) PU04-2/2

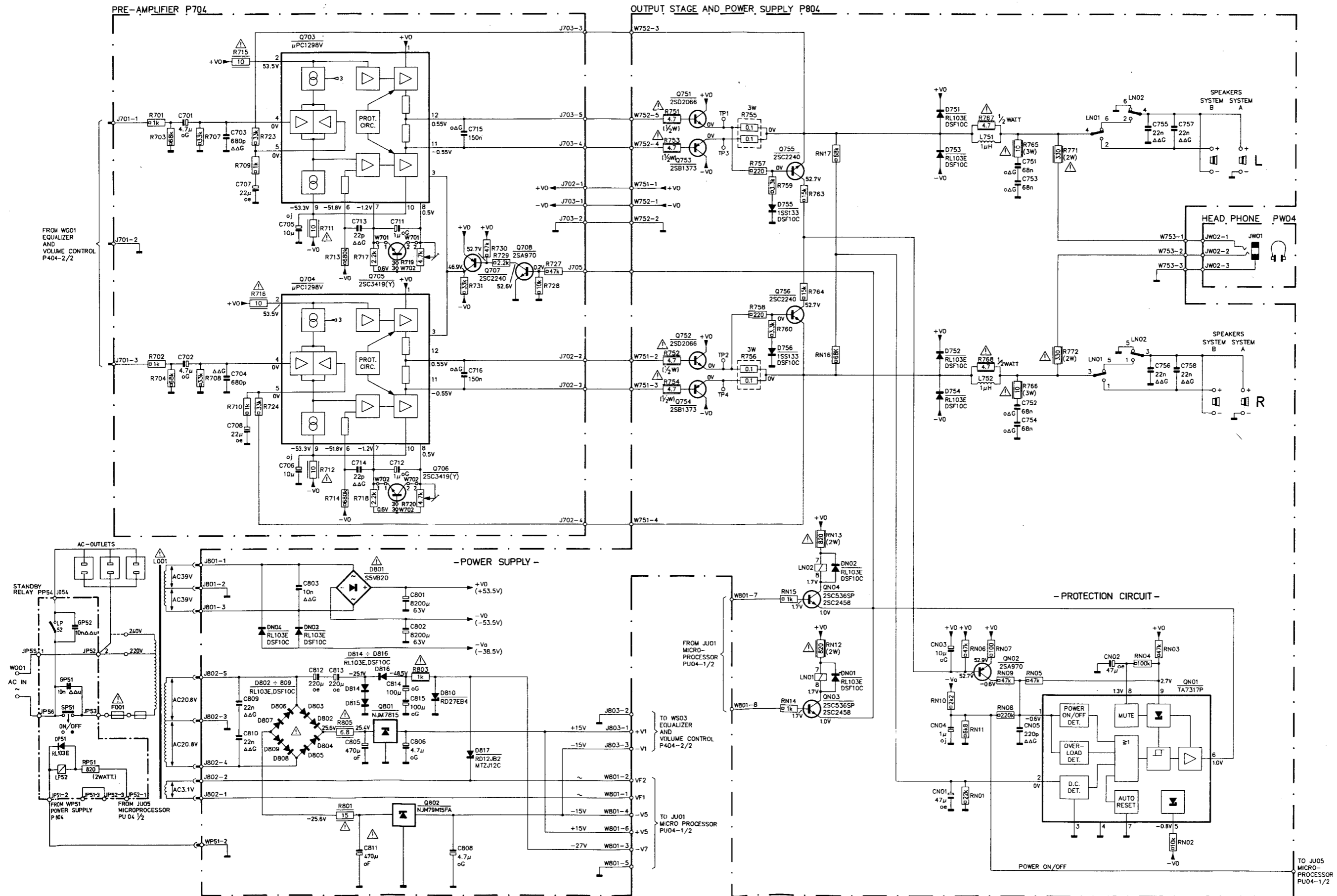


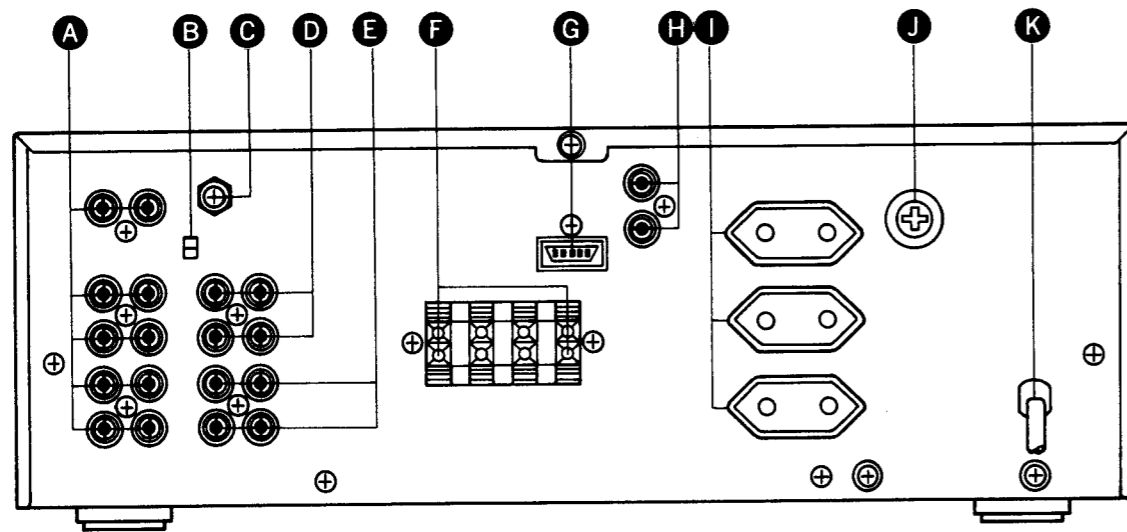
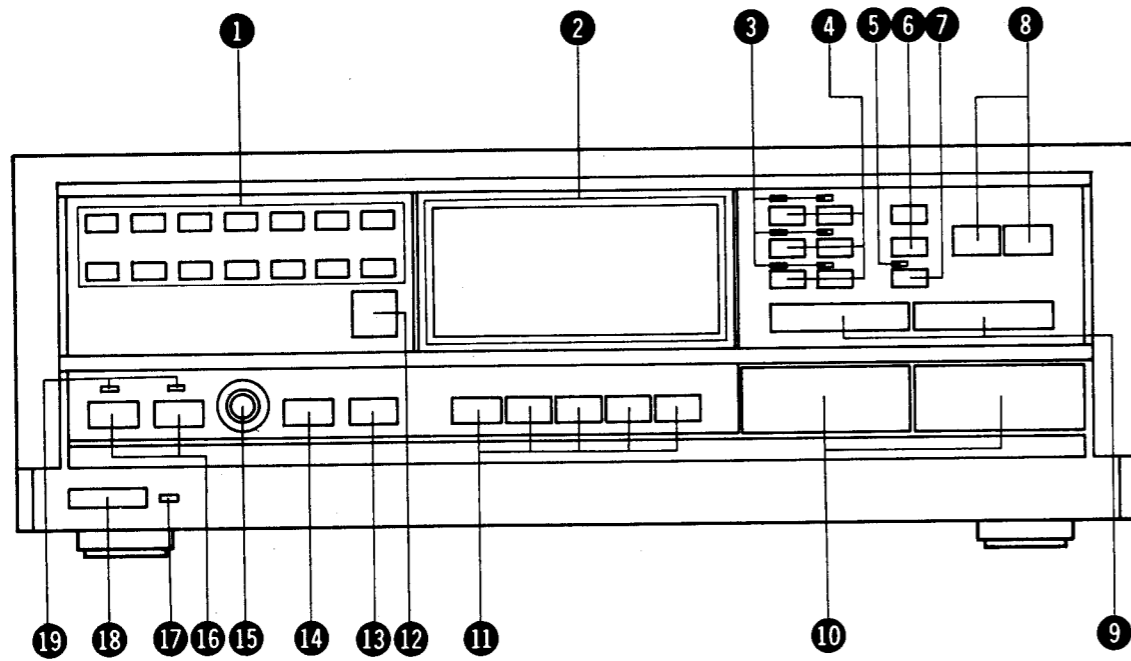
CE01 D12	CE06 I 9	CE11 D 3	CE16 I 13	CE21 D 7	CE26 I 4	CE31 B13	CE37 D10	CE42 G13	CG05 B16	CG10 M19	CG23 B19	DG03 L20	GE01 J 7	GE02 E 3	GE02 E12	OE02 C 8	OE03 H11	OE04 H 8	OG01 F15	OG03 C20	OG07 F18	RE05 C14	RE10 G13	RG07 I19	RG14 G18	RG19 B18	RG28 G20	RS62 K 9
CE02 I12	CE07 D 7	CE12 I 3	CE17 D11	CE22 I 7	CE27 D 2	CE32 G13	CE38 I10	CG01 A14	CG06 F16	CG15 A15	CG24 G19	DG04 H20	GE01 J 9	GE02 E 5	GE01 K 2	OE02 A13	OE04 H 2	OE04 F13	OG01 K10	OG05 C19	RE01 B13	RE06 D14	RE11 C13	RG08 H19	RG15 C16	RG20 G18	RG31 L20	
CE03 C10	CE08 I 7	CE13 D 2	CE18 I11	CE23 D 5	CE28 I 2	CE33 K19	CE39 B13	CG02 F14	CG07 B18	CG16 F15	DE01 K20	GE01 J 2	GE01 J10	GE02 E 7	OE02 C 2	OE03 C11	OE04 H 4	OG01 A15	OG02 A16	OG06 C19	RE02 F13	RE07 K20	RE12 H13	RG09 B15	RG16 H16	RG25 B19	RG32 J20	
CE04 H10	CE09 D 5	CE14 I 2	CE19 D 9	CE24 I 5	CE29 A13	CE34 M19	CE40 F13	CG03 C16	CG08 G18	CG17 A17	DE02 M20	GE01 J 3	GE01 J12	GE02 E 9	OE02 C 4	OE03 C13	OE04 H 6	OG01 A17	OG02 F16	OG07 B18	RE03 A12	RE08 M20	RG03 A15	RG10 G15	RG17 K20	RG26 G19	RG63 I20	
CE05 D 9	CE10 I 5	CE15 D13	CE20 I 9	CE25 D 4	CE30 F13	CE35 J11	CE41 B13	CG04 G16	CG09 K19	CG18 F17	DG02 I20	GE01 J 5	GE02 E 2	GE02 E10	OE02 C 6	OE03 C13	OE04 H 6	OG01 A17	OG02 F16	OG07 B18	RE04 F12	RE09 B13	RG04 F15	RG13 B16	RG18 M20	RG27 B20	RS61 K 9	

EQUALIZER AND VOLUME CONTROL P404 - 2/2



Q - D	Q703, Q704		Q705, Q706		Q707	Q708	Q751 + Q754		D755, 756, Q755, Q756		D751 + D754		Q - D					
C	DN03, DN04		D802 + D809		D801, D810, D812 + D816, D802, D810		D817	QN04, QN03, DN02, DN01		QN02		751 + 754	755 + 758	C				
R	701 + 704	707, 708	705, 706	809, 810	803	812, 813, 805, 811	804, 801, 802, 814, 815, 806, 808	711 + 714	715, 716	N03, N04, N01		N05	N02	R				
G-L-S-F	GP01, SP01	F001	L001	805, 801		802	803	727 + 731	751 + 754	755 + 760	763, 764	N16, N17	N12 + N15	N10, N11, N01	N05 + N09	N04, N03	N02	G-L-S-F





CONNECTIONS AND CONTROLS

1	Graphic equalizer switch	SR01~SR14	16	LS A/B switch	SR15, SR16
2	Display	VR01	17	P. standby indicator	DU91
3	Volume preset, memory indicator	DR13, DR15~DR19	18	Mains switch	SP51
4	Volume preset, memory switch	SR19, SR23~SR27	19	LS A/B indicator	DR20, DR21
5	Muting indicator	DR14			
6	Copy switch	SR37, SR38	A	Input	J401, JS01, JS02
7	Muting switch	SR20	B	Mode switch	SS71
8	Video/tape monitor switch	SR21, SR22	C	Ground terminal	J031
9	Balance left/right switch	SR28, SR29	D	Video input/output	JS71
10	Volume up/down switch	SR30, SR31	E	Tape input/output	JS72
11	Function switch	SR32~SR36	F	LS output A/B	J751
12	Remote control sensor	QR01	G	Convenient bus	JV02
13	EQ flat/reset switch	SR18	H	Remote control bus	JV01
14	EQ/analyse switch	SR17	I	AC outlet	J021~J023
15	Headphone socket	JW01	J	Fuse holder	J001
			K	Mains cord	W001

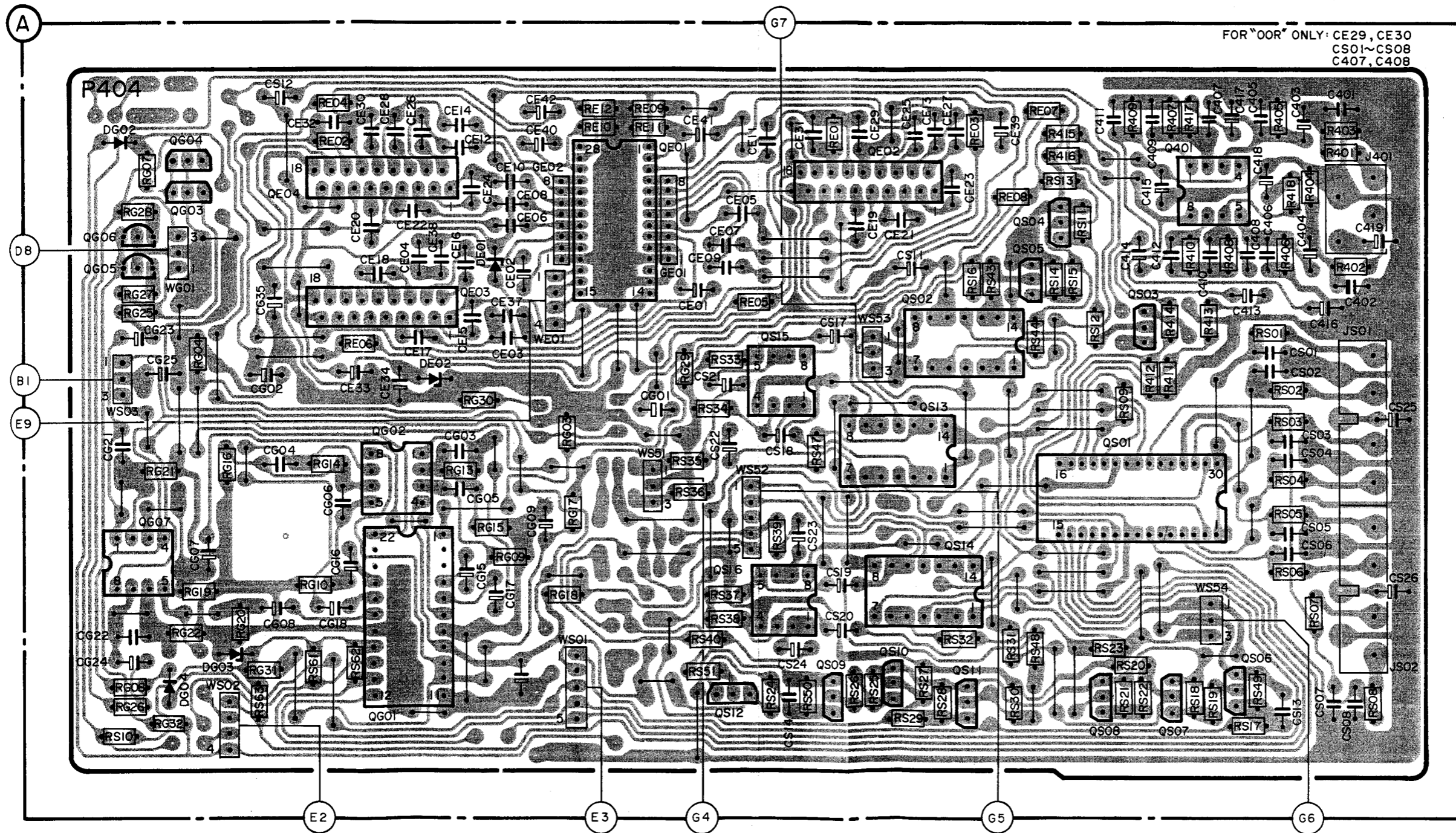
Idling Current

SK... SWITCH						
			Min.	Lch R719	Lch TP1(+), TP3(-) (Both ends of R755) DC3mV (15mA)	
				Rch R720	Rch TP2(+), TP4(-) (Both ends of R756) DC3mV (15mA)	

	Chip component					
	Carbon film 0.125 W or 0.2 W	70°C	5%		Ceramic plate Tuning ≤ 120 pF NP.0 2% Others -20/+80%	*a = 2.5 V b = 3.15 V or 4 V c = 6.3 V d = 10 V e = 16 V f = 25 V g = 40 V h = 63 V j = 100 V l = 125 V m = 150 V n = 160 V o = 200 V p = 250 V q = 300 V r = 350 V s = 400 V t = 500 V u = 630 V v = 800 V w = 1000 V x = 1500 V y = 2000 V z = 2500 V
	Carbon film 0.25 W or 0.33 W	70°C	5%		Polyester flat foil	10%
	Metal film 0.25 W or 0.33 W	70°C	5%		Metalized polyester flat film	10%
	Carbon film 0.5 W	70°C	5%		Polyester flat foil small size (Mylar)	10%
	Carbon film 0.67 W	70°C	5%		Polysterene film/foil	1%
	Carbon film 1 W or 1.15 W	70°C	5%		Tubular ceramic	
					Miniature single	
					Subminiature tantalum	± 20%

WIRING DIAGRAM

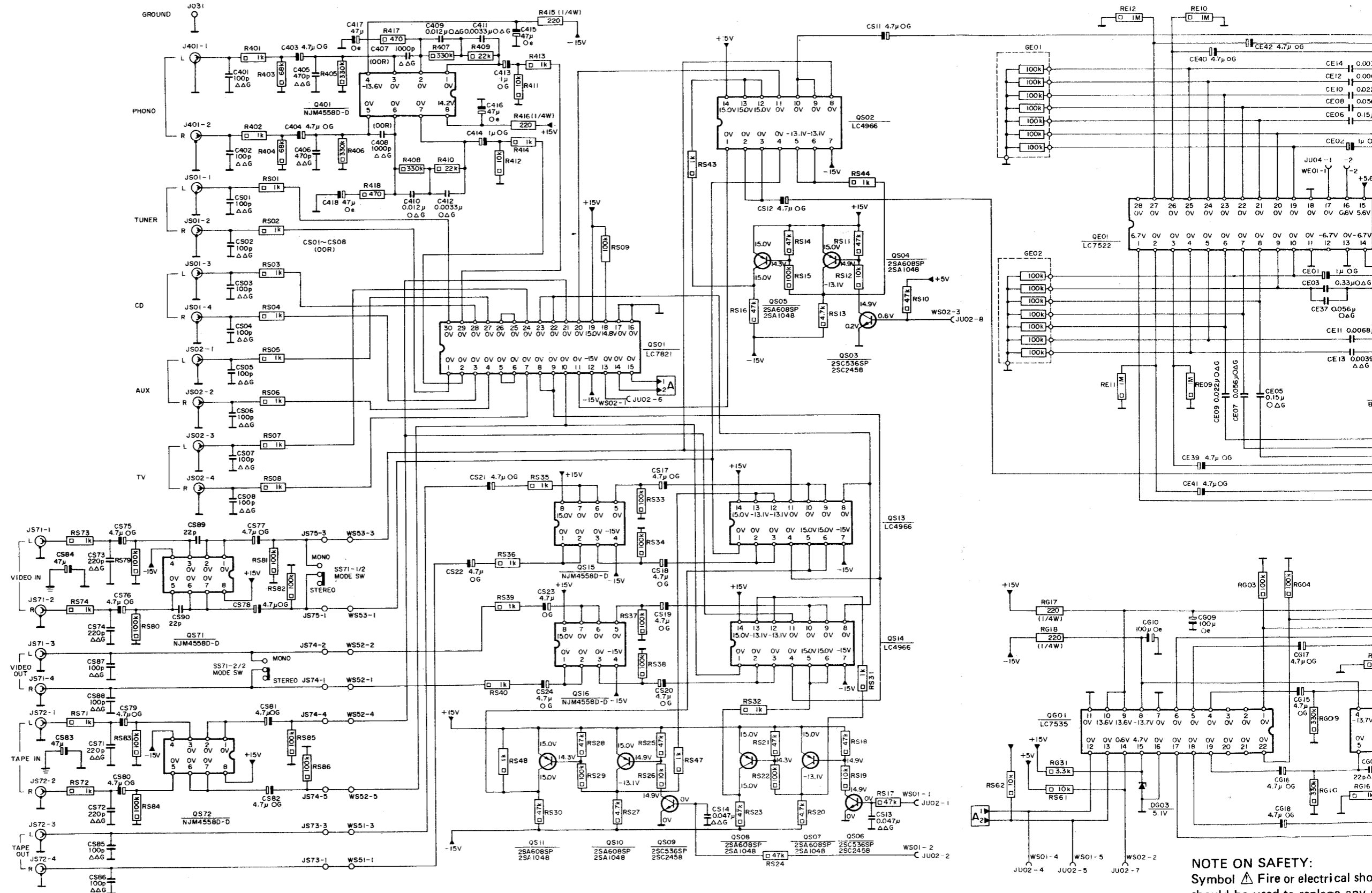
	RG19~RG22 RG16	RE04 RE06	RG15	RE09~RE12	RS33~RS40	RE01	RE03 RE08	RE07	R407~R414 R417	R401~R406
R	RG08 RG07 RG04	RG32 RG31 RE02	RG30	RG09 RG03	RG29	RE05 RS24 RS50	RS48 RS16 RS43 R415 R416 RS09			R418 RS01~RS08
	RG25~RG28	RS10 RG10 RG14	RS61 RS62	RG13	RG17 RG18	RS51	RS47	RS25~RS32	RS44 RS11~RS15	RS17~RS23 RS49
C		CS12 CE32~CE34 CE30 CE28 CE22 CE14~CE18 CE37	CG15 CG17	CE01 CE09 CE07 CE05 CE11	CS17~CS20	CS11 CE23 CE39			C409~C415 C417 C401~C408	C416 CS25
		CG07	CG04 CG06	CG18 CE20	CE26 CE38 CE12 CE10 CE03 CG03 CG10 CG01	CS21~CS24	CE25 CE13 CE27		C418	C419 C426
	CG21~CG25	CG02 CG08 CG16 CG35	CE04 CE24 CE08 CE06	CE02 CG05	CE40~CE42	CE31 CE29 CE19 CE21			CS13 CS01~CS08	
Q	QG03~QG07	QE04	QG02 QG01	QE03	QE01	QS12 QS16 QS15	QS09~QS11 QE02 QS13 QS14		QS01~QS05	Q401 QS06~QS08
D - G	DG02 DG04	DG03	DE02	GE02	GE01					




COPPER TRACK SIDE VIEW

SCHEMATIC DIAGRAM

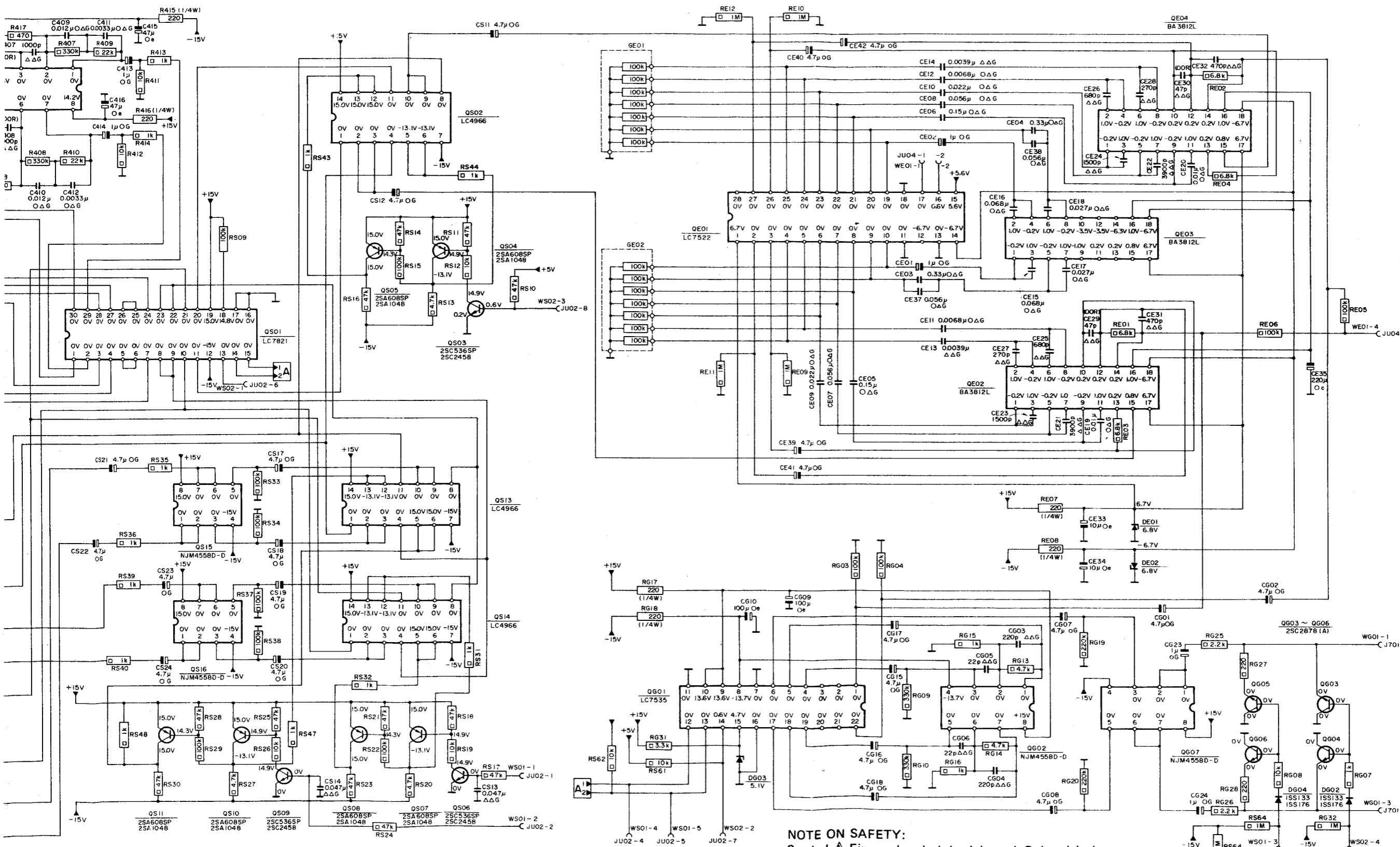
R	RS71~RS74	RS79~RS86	RS51~RS54	R418 R417	R407~R410	R411~R416	RS09	RS43	RS10~RS16 RS44	RG17 RG18	RE09~RE12	RG03 RG04	RG09 RG10 RG13~RG16	
C	CS01~CS08	C401~C406	C418 C417	C407~C410	C411~C416	CS21~CS24	CS17~CS20	CS14	CS12	CS13	CS11	CE39~CE42	CE37	CE01~CE14
Q - D	QS71	QS72	Q401	Q401	QS01	QS15 QS16	QS06~QS11	QS02 QS13	QS14	QS03~QS05	QS03	CG10 CG09	CG15~CG18	CG03~CG14
S - G	SS71	SS51	Q401	Q401	QS01	QS15 QS16	QS06~QS11	QS02 QS13	QS14	QS03~QS05	QS03	DG03	Q601	QE01



NOTE ON SAFETY:
 Symbol  Fire or electrical shock should be used to replace any other component substitution (type), may increase risk of fire.

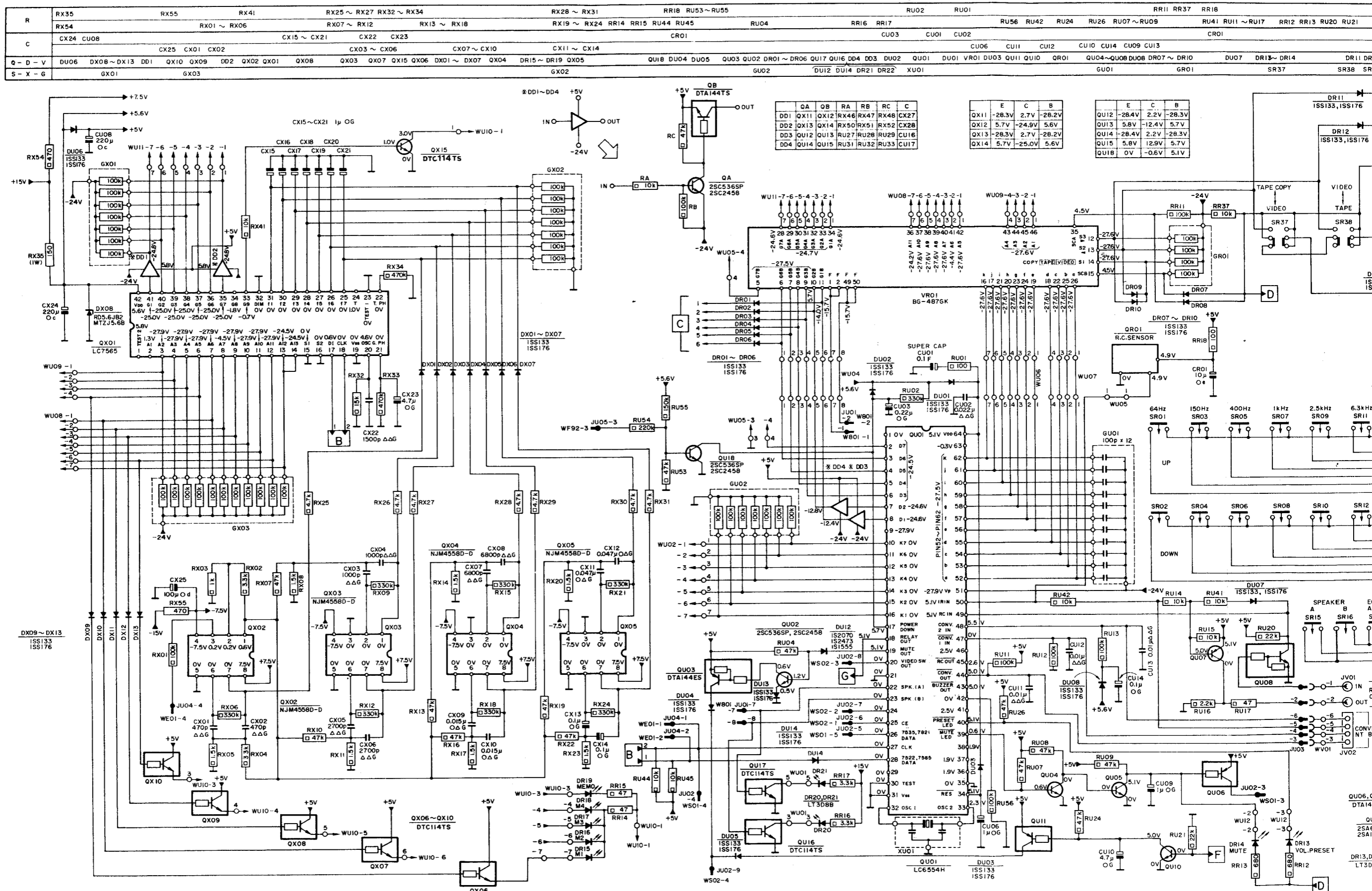
SCHEMATIC DIAGRAM

R417	R407 ~ R410	R411 ~ R416	RS09	RS43	RS10 ~ RS16 RS44	RG17 RG18	RE09 ~ RE12	RE03 RE01	RE02 RE04	RE06 RS64	RE05	R	
C417	C407 ~ C410	C411 ~ C416	RS25 ~ RS30 RS47	RS32	RS31 RS17 ~ RS24	RS62 RS61 RG31	RG03 RG04	RG09 RG10 RG13 ~ RG16	RG07 ~ RE12 RG19 RG20 RG26 RG25	RG27 RG28	RG08 RG32	RG07	C
Q401	CS21 ~ CS24	CS17 ~ CS20	CS14	CS12	CS13	CG10 CG09	CG15 ~ CG18	CG03 ~ CG08	CE33 CE34	CG23 CG24	CG01 CG02	CE35	Q - D
31	QS01	QS15 QS16	QS06 ~ QS11	QS02 QS13 QS14	QS03 ~ QS05	QS03	DG03 QG01	QE01	QG02	QE02 QE03	DE01 DE02	QE04 QG03 ~ QG07	S - G



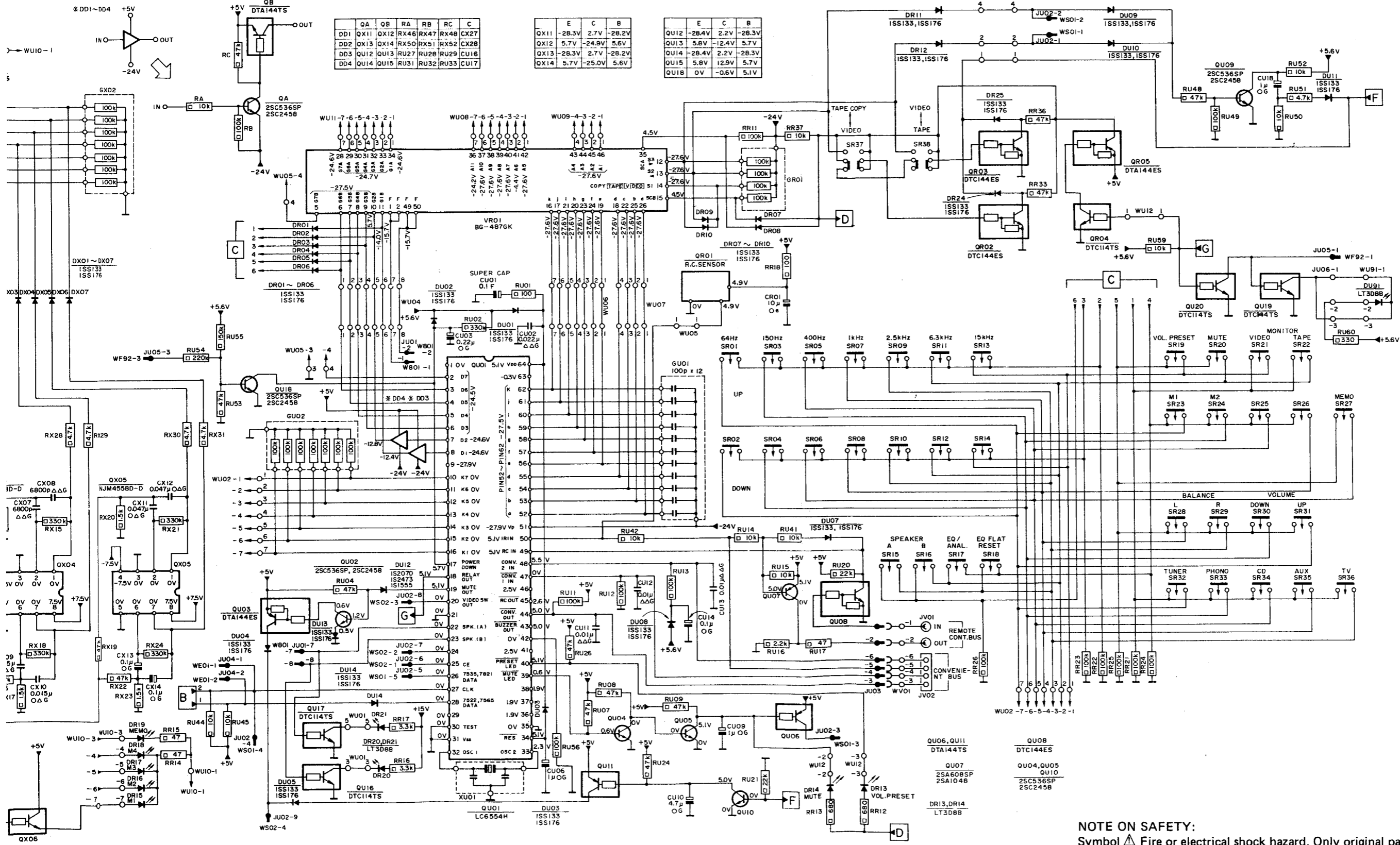
NOTE ON SAFETY:
 Symbol \triangle Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol \triangle . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM

RX28 ~ RX31	RR18 RU53~RU55	RU02	RU01	RR11 RR37	RR18	RR36 RR33	RU48 RU49	RR12 ~ RR17	RU50~RU52	R											
DX07 QX04	DR15 ~ DR19 QX05	QU18 DU04 DU05	QU03 QU02 DR01 ~ DR06	QU17 QU16 DD4 DD3	DU02	QU01	DU01 VR01 DU03	QU11 QU10	QR01	QU04~QU08 DU08 DR07 ~ DR10	DU07	DR13 ~ DR14	DR11 DR12	DR24 DR25	QR02 ~ QR05	DU09 DU10	QU19 QU20 QU09	DR13~DR21	DU11 DU91	Q - D - V	
GX02	CU01	CU03	CU01	CU02	CU06	CU11	CU12	CU10	CU14	CU09	CU13	CRO1								CU18	S - X - G



QA	QB	RA	RB	RC	C
DD1 QX11	QX12	RX46	RX47	RX48	CX27
DD2 QX13	QX14	RX50	RX51	RX52	CX28
DD3 QX12	QX13	RU27	RU28	RU29	CU16
DD4 QX14	QX15	RU31	RU32	RU33	CU17

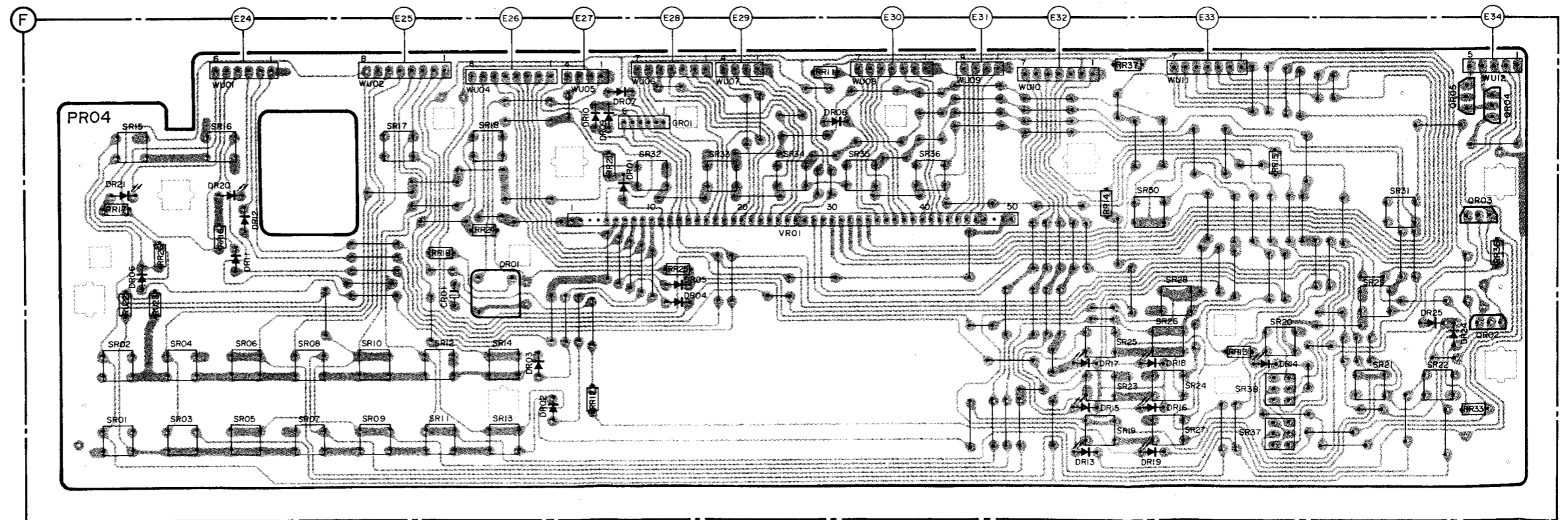
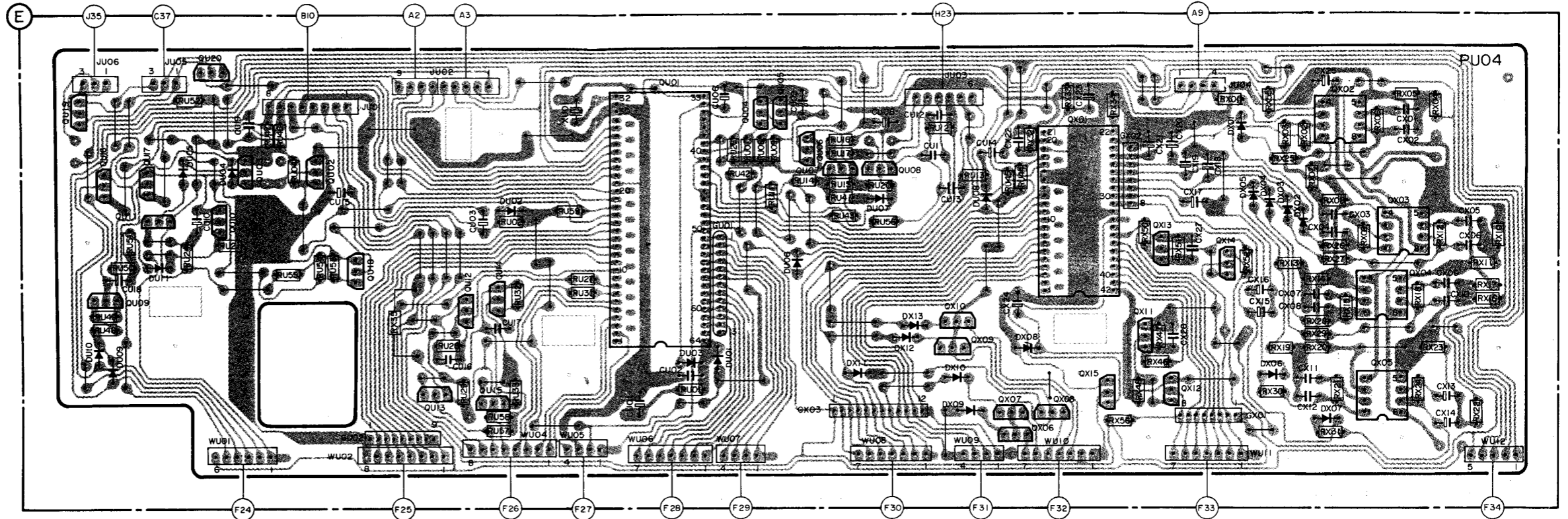
E	C	B	
QX11	-28.3V	2.7V	-28.2V
QX12	5.7V	-24.9V	5.6V
QX13	-28.3V	2.7V	-28.2V
QX14	5.7V	-25.0V	5.6V

E	C	B	
QU12	-28.4V	2.2V	-28.3V
QU13	5.8V	-24.4V	5.7V
QU14	-28.4V	2.2V	-28.3V
QU15	5.8V	2.9V	5.7V
QU18	0V	-0.6V	5.1V

NOTE ON SAFETY:
 Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

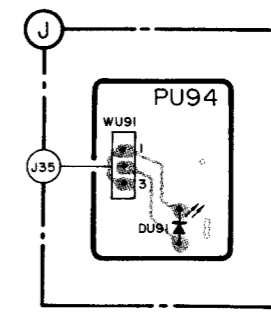
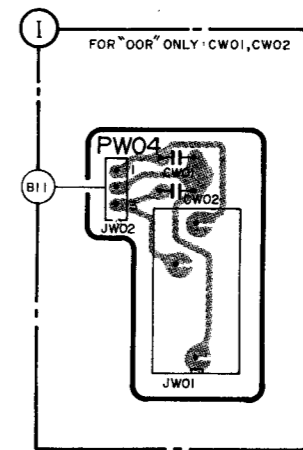
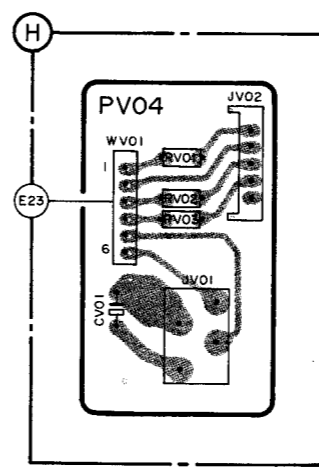
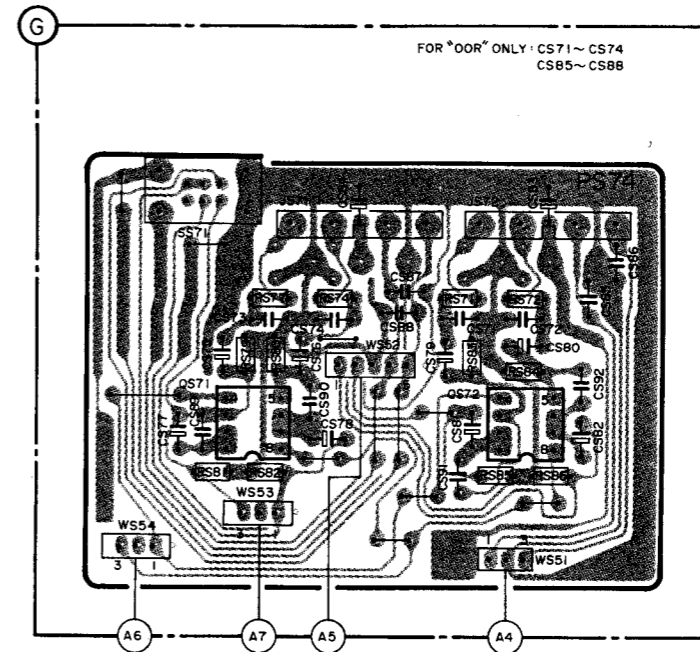
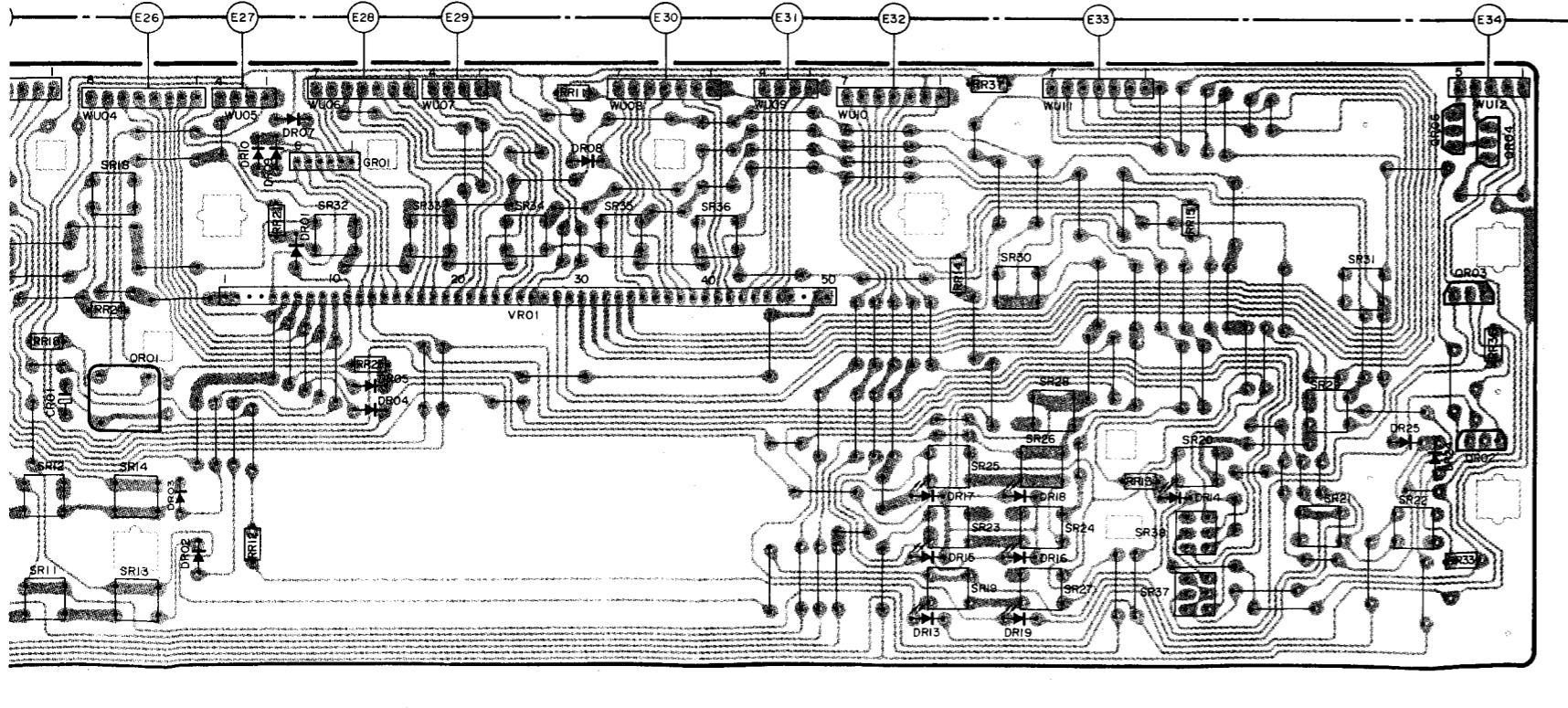
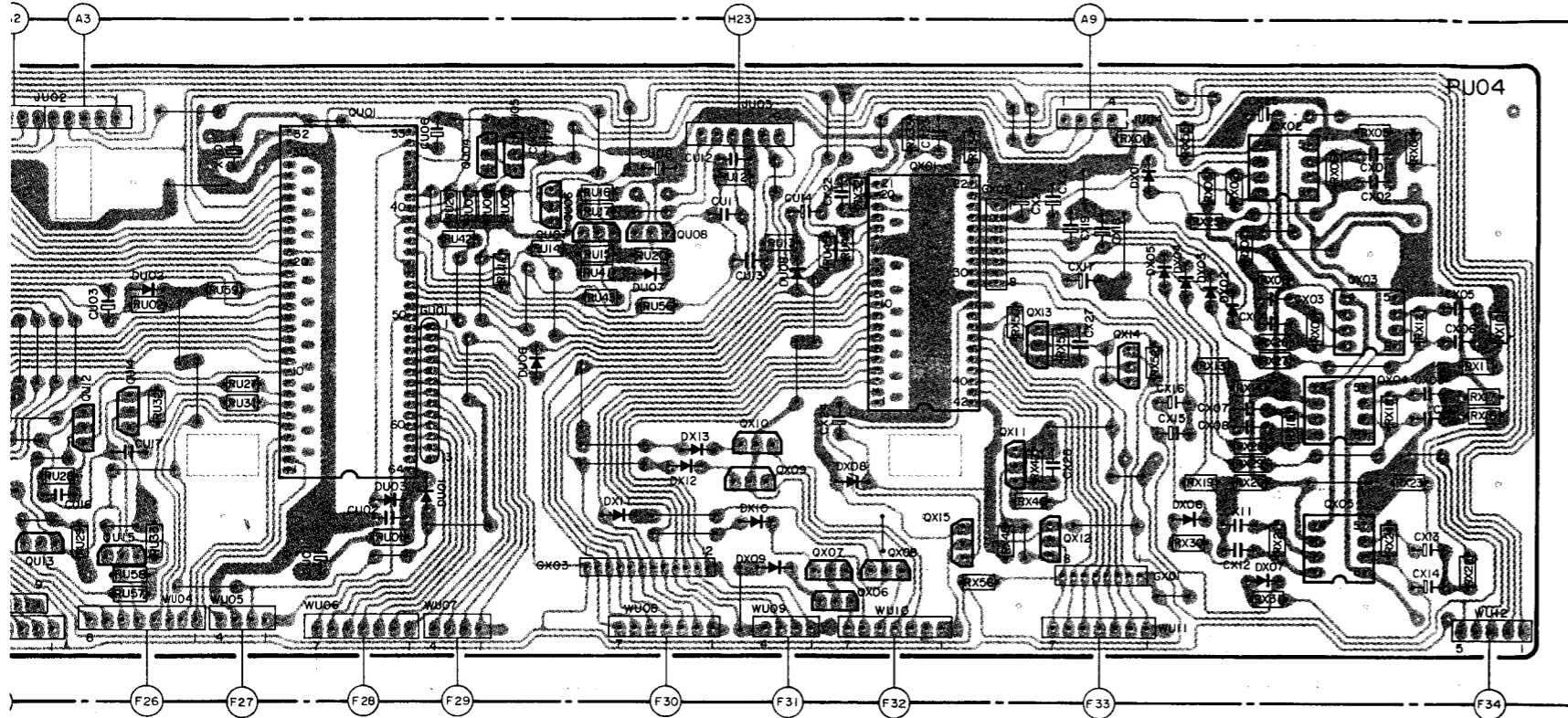
WIRING DIAGRAM

R	RU48~RU52	RU24	RU21	RU47	RU46	RX35	RU28~RU30	RU32~RU34	RU27	RU01	RU26	RU07~RU09	RU15~RU17	RU20	RU12	RU13	RU45	RU44	RX46~RX53	RX01~RX03	RX25~RX31	RX04~RX06	RX10~RX12											
	RU04					RU58					RU57	RU02	RU59	RU31	RU42	RU14	RU11	RU41	RU43	RX32	RX33	RX34	RX41	RX55	RX13	RX14	RX07~RX09	RR33	RR36	RX16~RX18				
C	RR17	RR26	RR23	RR22	RR16	CU18	CU10	CU19	CU15	RR18	RR24	RR12	RR21	RR25	RR11	RU56	RR14	RX56	RR37	RR13	RR15	RX19~RX21	RX15	RX54	RX22~RX24									
D-S-X	DU09~DU11	DR21	DR06	DU05	DU04	DR20	DR11	DR12	SR01~SR18	DU02	XU01	DR03	DR02	DR10	DR09	DR01	DU03	DU01	DR05	DR04	DU06	DR08	SR32~SR36	DU07	DX09~DX13	DU08	DX08	DR13~DR19	SR19~SR31	DX01~DX07	SR38	SR37	DR25	DR24
G-Q-V	QU19	QU16	QU09	QU17	QU11	QU20	QU10	QU03	QU02	GU2	QU8	QU12~QU15	QR01	GR01	QU01	GU01	VR01	QU04~QU08	GX03	QX06~QX10	QX01	QX15	GX02	QX11~QX14	GX01	QX02~QX05	QR02~QR05							



WIRING DIAGRAM

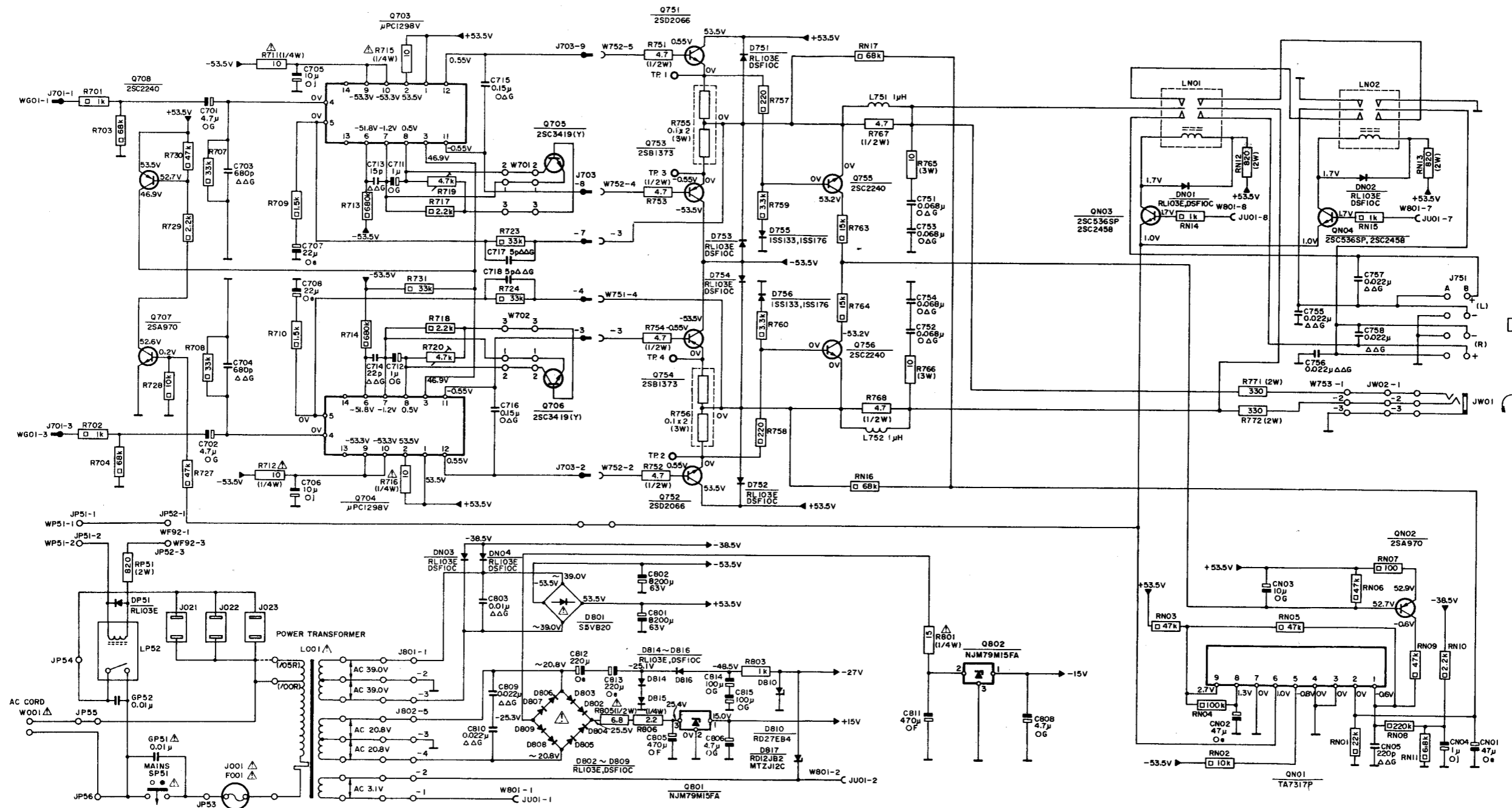
RX35	RU28~RU30	RU32~RU34	RU27	RU01	RU26	RU07~RU09	RU15~RU17	RU20	RU12	RU13	RU45	RU44	RX46~RX53	RX01~RX03	RX25~RX31	RX04~RX06	RX10~RX12	RS79~RS82	RS71	RS72								
RU58	RU57	RU02	RU59	RU31	RU42	RU14	RU11	RU41	RU43	RX32	RX33	RX34	RX41	RX55	RX13	RX14	RX07~RX09	RR33	RR36	RX16~RX18	RS77	RS74	RS83~RS86					
RR18	RR24	RR12	RR21	RR25	RR11	RU56	RR14	RX56	RR37	RR13	RR15	RX19~RX21	RX15	RX54	RX22~RX24	RV01~RV03	CS73~CS78	CS90	CS84	CS87	CS88	CS71	CS72	CS92	CS85	CS86		
CU16	CU03	CU17	CU04	CU05	CU01	CU02	CU06	CU09	CU08	CU11~CU14	CX22~CX24	CX17~CX21	CX16	CX15	CX11	CX12	CX26	CX05	CX06	CV01	CS89	CS74	CS79	CS91	CS80~CS83	CW01	CW02	
CR01	DU02	XU01	DR03	DR02	DR10	DR09	DR01	DU03	DU01	DR05	DR04	DU06	DR08	SR32~SR36	DU07	DX09~DX13	DU08	DX08	DR13~DR19	SR19~SR31	DX01~DX07	SR38	SR37	DR25	DR24	SS71	DU91	
QUI2~QUI5	QR01	GR01	QU01	GU01	VR01	QU04~QU08	GX03	QX06~QX10	QX01	QX15	GX02	QX11~QX14	GX01	QX02~QX05	QR02~QR05	QS71	QS72											



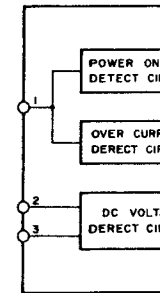
COPPER TRACK SIDE VIEW

SCHEMATIC DIAGRAM

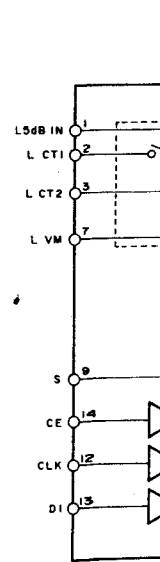
R	R701 ~ R704	R728 ~ R730 R727 R707 R708 R709 ~ R712	R713 ~ R720 R731	R723 R724	R751 ~ R754 R755 R756 R757 ~ R760	RN17 RN16 R765 ~ R768	RN13 RN12	RN14 RN12 R771 R772	RN15 RN13	R		
C	RP51	C701 ~ C704	C705 ~ C710	C711 ~ C714	C715 ~ C718	C751 ~ C754	CN03 CN04 CN02	CN05 CN04 CN01	C755 ~ C758	C		
Q - D	DP51	Q708 Q707	Q703 Q704 Q705 Q706 DN04 DN03	D802 ~ D809 D801	DB14 ~ DB16	Q751 ~ Q754 Q801 D751 ~ D756 D810 Q755 Q756	DB17	Q802	QN03 DN01	QN01 QN04 DN02	QN02	Q - D
G - L - S - F	LP52 GP52	GP51 SP51	F001	L001		L751 L752			LNO1		LNO2	G - L - S - F



TA7317P



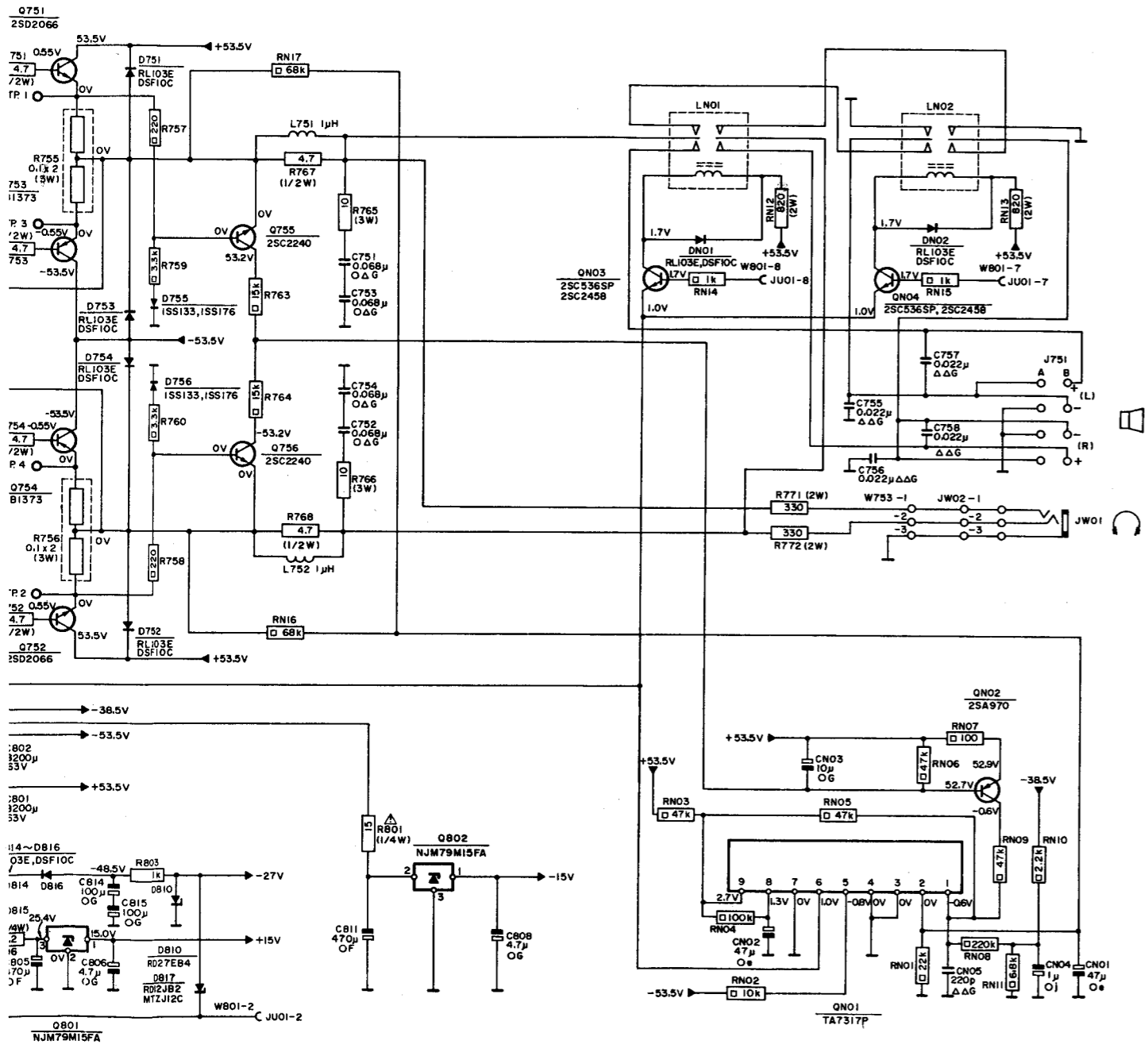
LC7535



NOTE ON SAFETY:
 Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

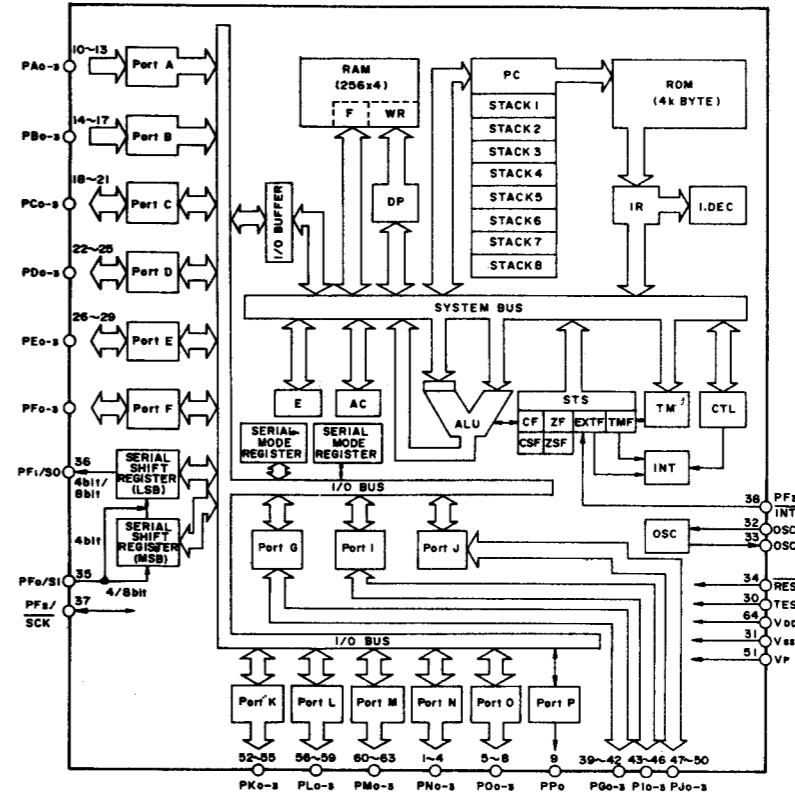
SCHEMATIC DIAGRAM

751 ~ R754 R755 R756 R757 ~ R760	RN17 RN16 R765 ~ R768	RN13 RN12	RN14 RN12 R771 R772	RN15 RN13	R
R803	R801	C751 ~ C754	RN03 RN04 RN02 RN05	RN06 RN01 RN07 RN08 ~ RN11	
C801 C805 C814 C815 C806	C811	C808	CN02 CN03	CN05 CN04 CN01	C
~ D816 Q751 ~ Q754 Q801 D751 ~ D756 D810 Q755 Q756 D817	Q802	QN03 DNO1	QN01 QN04 DNO2	QN02	Q - D
L751 L752	LNO1	LNO2			G - L - S - F

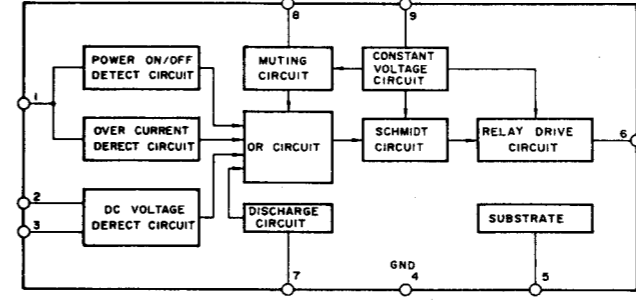


NOTE ON SAFETY:
 Symbol Δ Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol Δ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

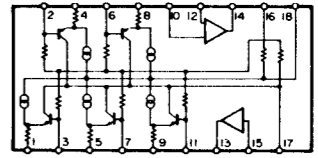
LC6554H



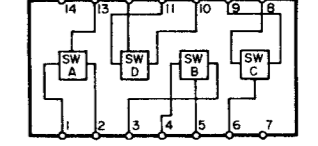
TA7317P



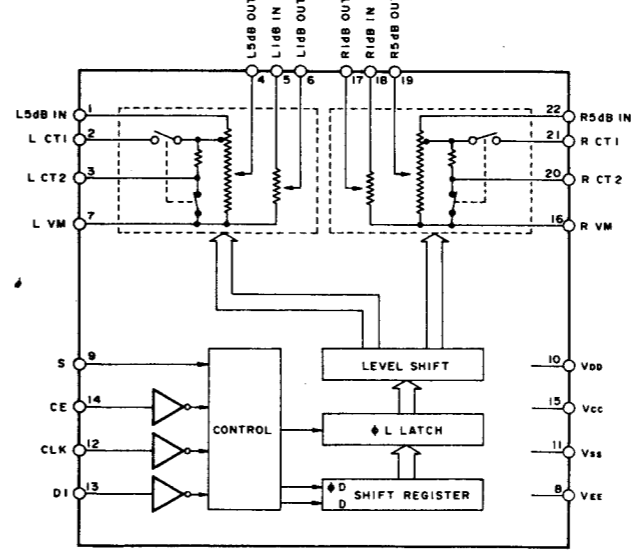
BA3812L



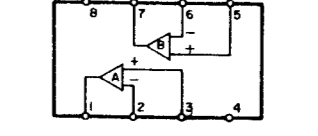
LC4966



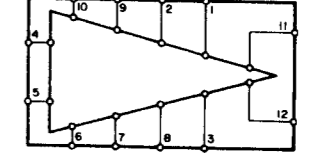
LC7535



NJM4558D-D



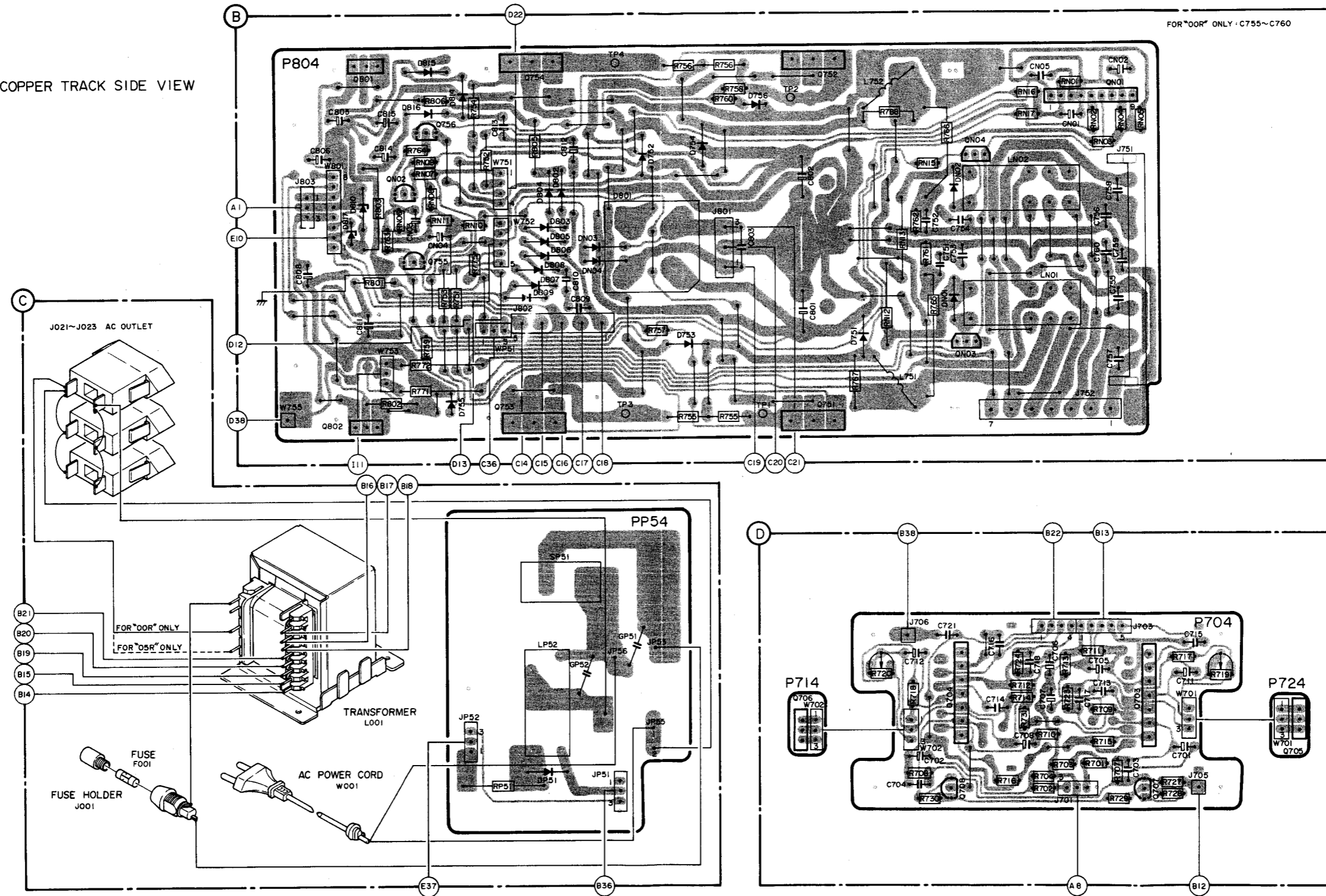
μPC1298V



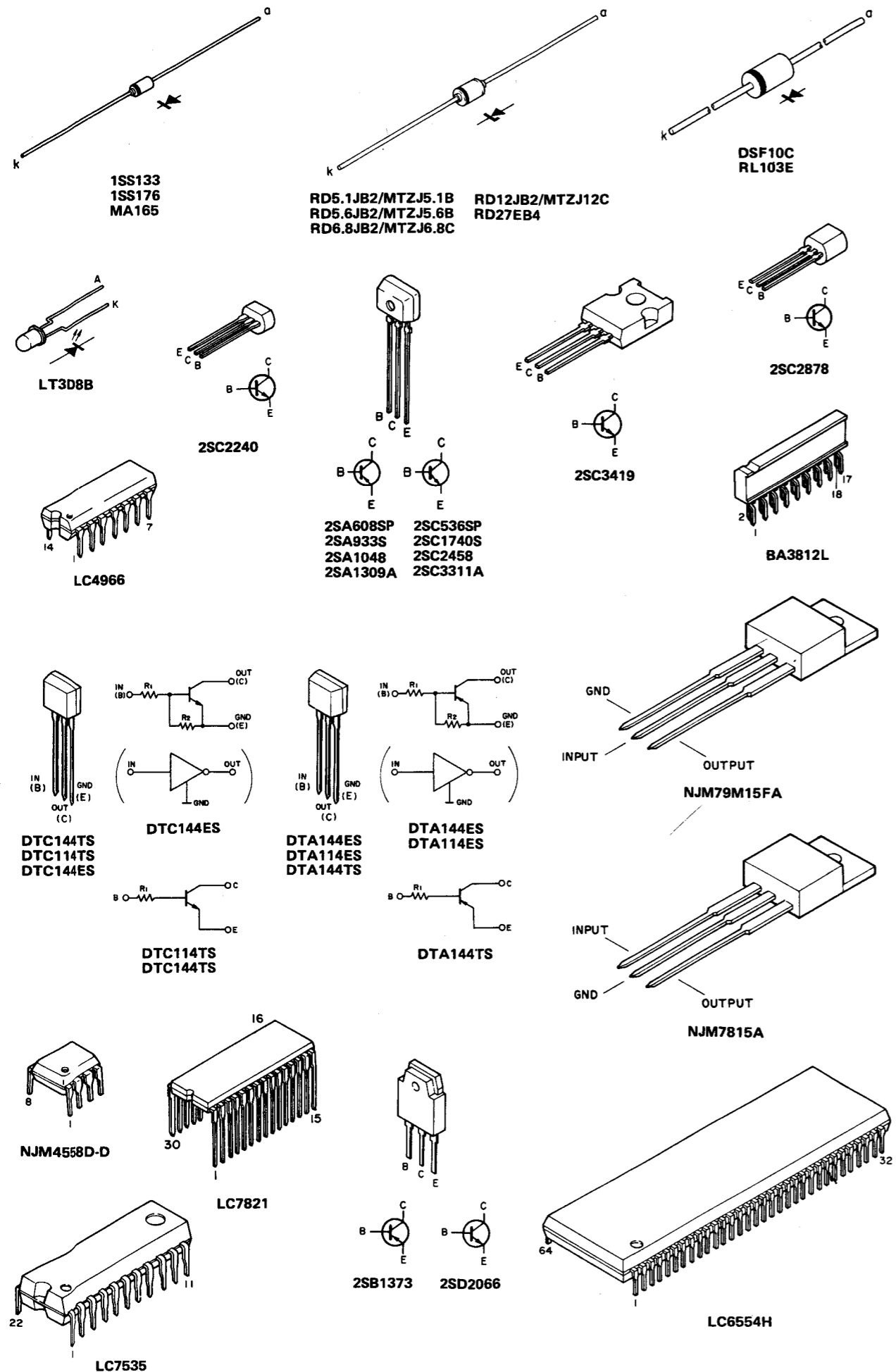
WIRING DIAGRAM

R	R801~R803 RNO6~RNI1 R775	R805	R755~R758 R760	R767 R788 RNI2 RNI3 RNI5 R765 R766 RNI6 RNI7	RNO1 RNO5 R713 R723	R717
C	C808 C805 C806 C815 C814	C813	C810 C809	C801~C803	C751~C754 C721	CNO5 CNO1 C755~C760 CNO2
D - S	DB17 DB10	DB15 DB16 D755 DB14 DP51 DB02~DB09 SP51 DN03 DN04 DB01	D752~D754	D756	D751	DN02 DN01
G - L - Q	L001 Q801 Q802	QNO2 Q755 Q756	Q754 Q753 LP52 GP52 GP51	Q752 Q751 Q706 L752 L751 Q704 Q708 QNO3 QNO4	LN02 LN01 QNO1 Q703 Q707	Q705

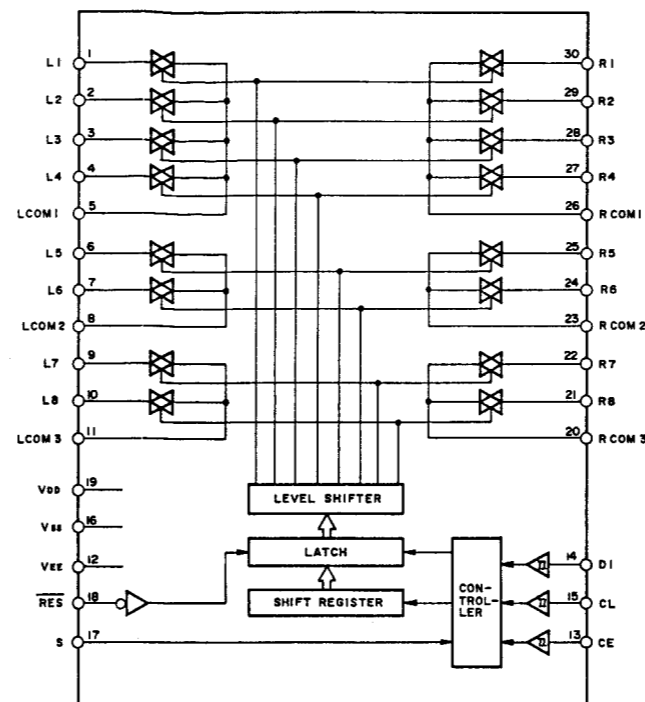
COPPER TRACK SIDE VIEW



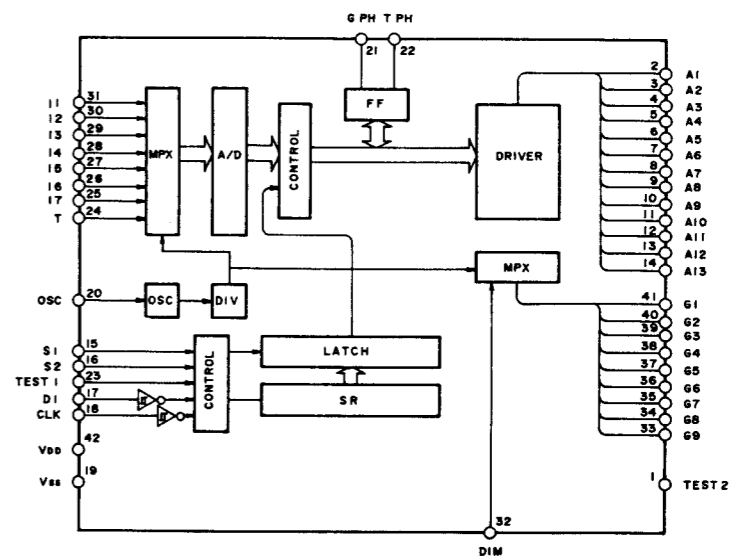
Semiconductor Layout



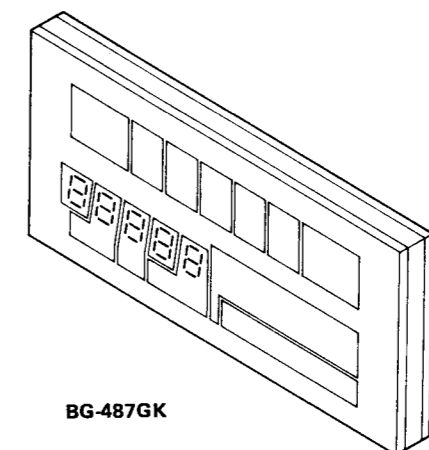
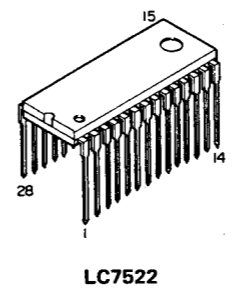
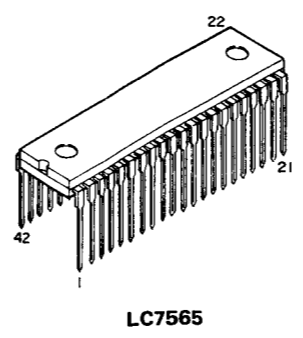
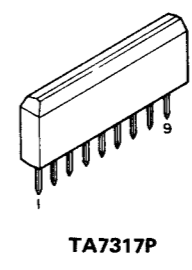
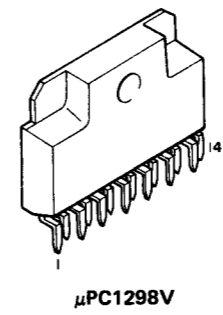
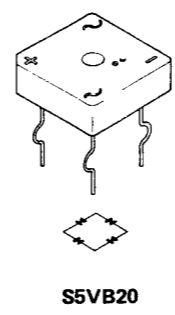
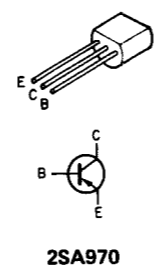
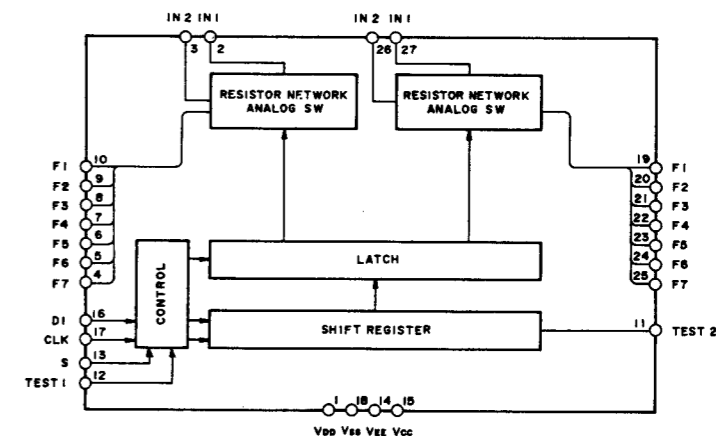
LC7821



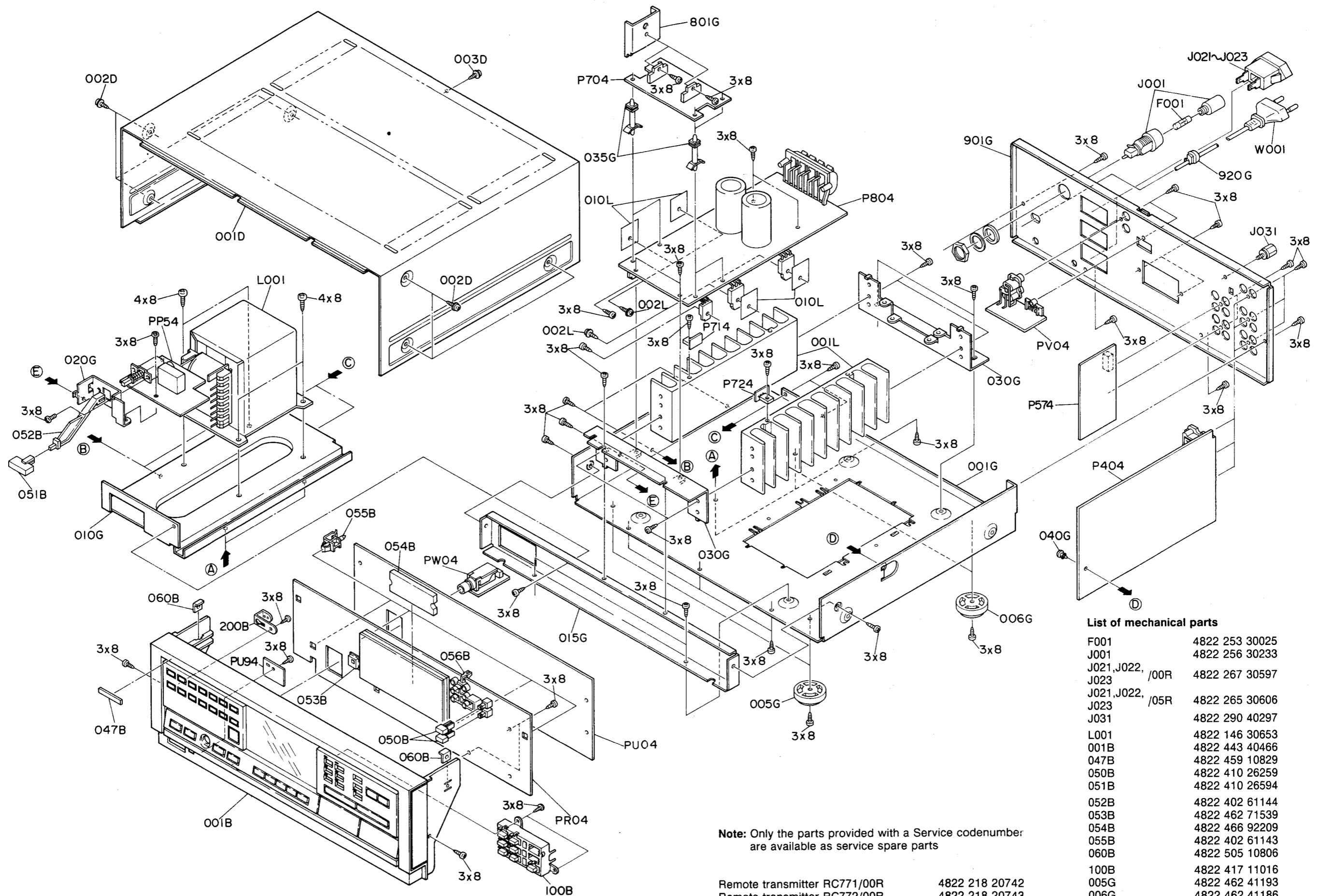
LC7565



LC7522



EXPLODED VIEW







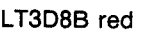

List of mechanical parts

F001	4822 253 30025
J001	4822 256 30233
J021, J022, /00R	4822 267 30597
J023	
J021, J022, /05R	4822 265 30606
J023	
J031	4822 290 40297
L001	4822 146 30653
001B	4822 443 40466
047B	4822 459 10829
050B	4822 410 26259
051B	4822 410 26594
052B	4822 402 61144
053B	4822 462 71539
054B	4822 466 92209
055B	4822 402 61143
060B	4822 505 10806
100B	4822 417 11016
005G	4822 462 41193
006G	4822 462 41186
920G	4822 532 51314

Note: Only the parts provided with a Service codenumber are available as service spare parts

Remote transmitter RC771/00R 4822 218 20742
 Remote transmitter RC772/00R 4822 218 20743

LIST OF ELECTRICAL PARTS

							
CU01	Super cap 0.1 F 5.5 V	4822 124 41592		BA3812L		4822 209 83338	
CU14	Cap. elect. 0.1 µF 50 V	4822 124 41604		LC4966		4822 209 83804	
GP51,GP52	Cap. cer. 0.01 µF 400 V	4822 122 33276		LC6554H-3761		4822 209 73289	
GU01	Cap. comp. 100 pF (5x)	4822 121 51191		LC7522		4822 209 71783	
C717,C718	Cap. cer. 5pF 50 V	4822 122 31447		LC7535VR		4822 209 71784	
C801,C802	Electr. cap. 8200 µF 63 V	4822 124 41296		LC7565FL		4822 209 71782	
							
GU02				NJM4558D		4822 209 80401	
GE01,GE02	Res. comp. 100k (7x)	4822 111 91398		NJM4558D-D		4822 209 83631	
GX01,GX02				NJM7815		4822 209 83317	
GR01	Res. comp. 100k (4x)	4822 111 91399		NJM79M15FA		4822 209 83828	
GX03	Res. comp. 100k (11x)	4822 116 90313		TA7317P		4822 209 83312	
RE07,RE08	Res. safety 220 Ω 1/4 W	4822 116 52849		UPC-1298V		4822 209 70382	
RG17,RG18							
RN12,RN13	Res. safety 820Ω 2 W	4822 116 60272					
RP51							
RX35	Res. safety 150 Ω 1 W	4822 116 60337		LT3D8B red		4822 130 80326	
R415,R416	Res. safety 220 Ω 1/4 W	4822 116 52849		RD5.1JB2,MTZJ5.1B		4822 130 80317	
R711,R712	Res. fuse 10 Ω 1/4 W	4822 115 90166		RD5.6JB2,MTZJ5.6B		4822 130 33948	
R715,R716							
R719,R720	Potm 4.7 k	4822 100 11373		RD6.8JB2,MTZJ6.8B		4822 130 80318	
R751,R752	Res. safety 4.7Ω 1/2 W	4822 116 52858		RD12JB2,MTZJ12C		4822 130 80091	
R753,R754							
R755,R756	Res. comp. 0.1 Ω (23x)	4822 111 91402		RD27EB4		4822 130 32757	
R765,R766	Res. safety 10 Ω 3 W	4822 116 60326		RL103E,DSF10C		4822 130 32508	
R767,R768	Res. safety 4.7 Ω 2 W	4822 116 52858		S5VB20		4822 130 30984	
R771,R772	Res. safety 330 Ω 2 W	4822 116 60262		1SS133,1SS176		4822 130 33305	
R801	Res. fuse 15 Ω 1/4 W	4822 116 60417		-Miscellaneous-			
R802	Res. safety 1.5 k 1/2 W	4822 111 50479		F001	Fuse 2A 250 V	4822 253 30025	
R803	Res. safety 1k 2 W	4822 116 60332		JS01,JS02	} Jack 4p.	4822 265 30397	
R805	Res. fuse 6.8 Ω 1/2 W	4822 111 20384		JS71,JS72			
R806	Res. safety 2.2 Ω 1/4 W	4822 116 52348		JV01	Jack 2p	4822 266 30274	
				JV02	Jack 5p	4822 267 40768	
DTA114ES		4822 130 61227		JW01	Headphone jack	4822 267 30596	
DTA144ES		4822 130 42682		J001	Fuse holder	4822 256 30233	
DTA144TS		4822 130 61187		J021,			
DTC114TS		4822 130 61189		J022, /00R	AC outlet	4822 267 30597	
DTC144ES		4822 130 42594		J023			
DTC144TS		4822 130 61188		J021			
2SA608SP, 2SA1048	}	4822 130 42715		J022, /05R	AC outlet	4822 265 30606	
2SA1309,A							
2SA970		4822 130 42951		J023			
2SA970 (GR)		4822 130 42949		J031	Ground terminal	4822 290 40297	
2SB1373 (Q-P)		4822 130 60928		J401	Socket 2p	4822 267 30741	
2SC536SP,2SC2458	}	4822 130 42298		J751	Speaker terminal	4822 290 60686	
2SC3311,C							
2SC2240 GR		4822 130 43231		LN01,LN02	Relay DC 24V	4822 280 60511	
2SC2240		4822 130 43233		LP52	Relay 250 V AC	4822 280 20222	
2SC2878 A		4822 130 43818		L001	Mains transformer	4822 146 30653	
2SC3419Y		4822 130 60117		L751,L752	Choke coil 1 µH	4822 157 51739	
2SD2066 (Q.P)		4822 130 60929		QR01	IR sensor for RC5	4822 130 10009	
				SP51	Push switch	4822 276 11654	
				SR01+SR36	Push switch	4822 276 11559	
				SR37,SR38	Push switch	4822 276 12336	
				SS71	Switch slide (stereo)	4822 277 21176	
				VR01	Display BG-487GK	4822 130 90494	
				XU01	Cer. filter 4 MHz	4822 242 72223	