

OMATIC DIAGRAM

WAVE FORMS

INPUT SIGNAL : PAL SYSTEM
 VIDEO : 8 STEP COLOR BAR 87.5% AM
 AUDIO : 1KHz SINE WAVE 60% FM

- B/G
 /SECAM - B/G, D/K
 TSC - 3.58/4.43 (AV)
 /SECAM - B/G, D/K
 ECAM - L

NO.4 JUN . 1996

OTES :

OF RESISTANCE "OHM" IS OMITTED.
 000 OHMS = 100000 OHMS)
 TORS ARE 1/6 WATT UNLESS
 NOTED.
 CE VALUES 1.0 AND ABOVE ARE IN pF
 OW ARE IN uF EXCEPT AS INDICATED.
 00000 pF)
 VALUES ARE IN uH EXCEPT AS INDICATED.
 ARE 1N4148 EXCEPT AS INDICATED.

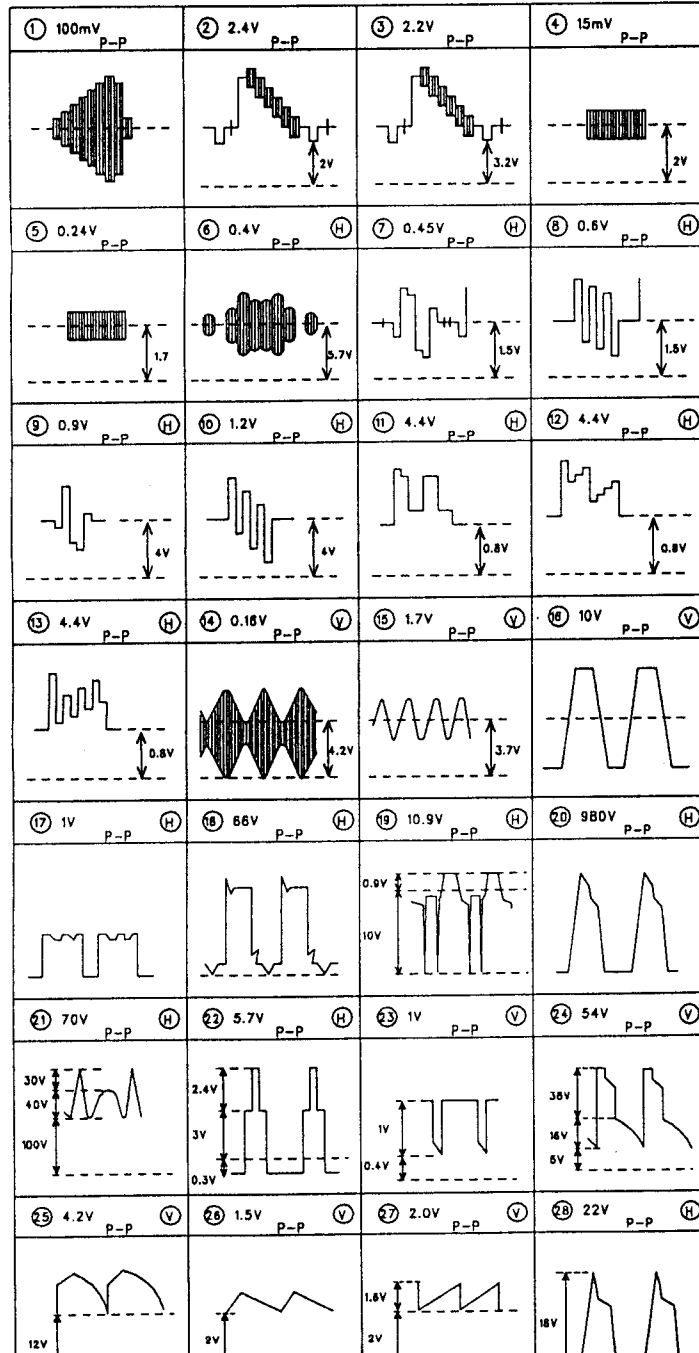
TRANSISTOR ARE KTC3198Y ALL PNP TRANSISTER
 266Y EXCEPT AS INDICATED.

GE AND AC WAVEFORM MEASUREMENT CONDITIONS.
 VOLTAGES IN EACH POINT ARE MEASURED
 E STANDARD COLOUR BAR SIGNAL INPUT
 NEL) AND ALL CONTROLS SET TO THE
 POSITION.
 AGES WITH VTVM AND AC WAVEFORMS
 LOSCOPE)
 NOMINAL LINE VOLTAGE ; AC 230V 50HZ)

S SCHEMATIC DIAGRAM IS A STANDARD ONE
 IT AND CIRCUIT CONSTANTS MAY BE SUBJECT TO
 OR IMPROVEMENT WITHOUT ANY NOTICE.

TY CAUTION :

ICING THIS CHASSIS IT IS IMPORTANT THAT
 TECHNICIAN READ AND FOLLOW THE



NO	LOC	P-B/G(FT2) [TF]	P/S-B/G/D/K N-3/4 (AV) [TK]	P/S-B/G S-L/L' [VA]	P-I [TU]
1	VT101	TEKE-120A	←	VTSS-7S23	DT2-IV15P
2	SF101	G1966M	K2950M	G1966M	J195M
3	Z701	TPS5.5MB	←	←	TPS6.0MB
4	Z702		TPS6.5MB		
5	Z801	SFE5.5MB	←	←	SFE6.0MB
6	Z802		SFE6.5MB		
7	I502		TDAB395	←	
8	I701	TDAB362B	←	TDAB362	TDAB362B
9	P801A	CW-4232	KKP-419C	CW-4232	CW-3222
10	C105	10u	←	33u	10u
11	C107	4.7u	←	←	
12	C108	0.01	←	←	
13	C109	4.7u	←	←	
14	C110	0.01	←	←	
15	C111	4.7u	←	←	16V 100u
16	C801	200V 0.47	200V 0.1	200V 0.47	←
17	C802	200V 0.47	200V 0.1	200V 0.47	←
18	J801	JUMPER	←	OPEN	JUMPER
19	J802	JUMPER	←	OPEN	JUMPER
20	JK01	JUMPER	OPEN	JUMPER	←
21	R108	18K	←	←	JUMPER
22	R110	OPEN	←	100K	8.2V
23	R113	470	←	220	470
24	R116	OPEN	←	100K	OPEN
25	R501	47K		47K	←
26	CA01		10u	←	
27	DA01		1N4148	←	
28	IA01		4053	←	
29	QA01		KTC3198Y	←	
30	QA02		KTA1266Y	←	
31	QA03		KTC3198Y	←	
32	RA01		47K	←	
33	RA02		10K	←	
34	RA03		10K	←	
35	RA04		22K	←	
36	RA05		10K	←	
37	RA06		47K	←	
38	RA07		1K	←	
39	RA08		1/4W1	←	
40	RA09		820K	←	
41	CU01				1000
42	CU02				1000
43	CU03				100
44	CU04				100
45	CL02			0.01	
46	CL03			33u 16V	
47	CL04			4.7u	
48	CL05			4.7u	
49	CL06			1u	
50	CL07			2200	
51	CL08			10	

NO	LOC	P
67	QL04	
68	QL05	
69	QL06	
70	SL01	
71	RL01	
72	RL02	
73	RL03	
74	RL04	
75	RL05	
76	RL08	
77	RL07	
78	RL08	
79	RL09	
80	RL10	
81	RL11	
82	RL12	
83	RL13	
84	RL14	
85	RL15	
86	RL17	
87	RL24	
88	RL25	
89	RL26	
90	CND1	
91	CND2	
92	LN01	
93	QN01	
94	RN01	
95	RN02	
96	XN01	
97	DV04	
98	DV05	
99	DV08	
100	DV09	
101	DV12	
102	DV13	1
103	QV03	K
104	OV04	K
105	RV29	4
106	RV30	4
107	DT05	1
108	IT01	5
109	IT02	K
110	XT01	2
111	F80IC	
112	LA02	
113	MS11	5
114	MS12A	5
115	PA01A	
116	PA01B	
117	P805	1
118	OS01	

NOTES :

RESISTANCE *OHM* IS OMITTED.
 100 OHMS = 100000 OHMS)

RESISTORS ARE 1/6 WATT UNLESS
 NOTED.

RESISTANCE VALUES 1.0 AND ABOVE ARE IN pF
 BELOW ARE IN uF EXCEPT AS INDICATED.
 (0.00000 pF)

INDUCTIVE VALUES ARE IN uH EXCEPT AS INDICATED.

TRANSISTORS ARE IN4148 EXCEPT AS INDICATED.

TRANSISTORS ARE KTC3198Y ALL PNP TRANSISTERS
 KTC3198Y EXCEPT AS INDICATED.

DC AND AC WAVEFORM MEASUREMENT CONDITIONS.

VOLTAGES IN EACH POINT ARE MEASURED
 WITH STANDARD COLOUR BAR SIGNAL INPUT
 (CHANNEL 1) AND ALL CONTROLS SET TO THE
 NORMAL POSITION.

WAVEFORMS WITH VTVM AND AC WAVEFORMS
 (OSCILLOSCOPE)

NOMINAL LINE VOLTAGE ; AC 230V 50HZ)

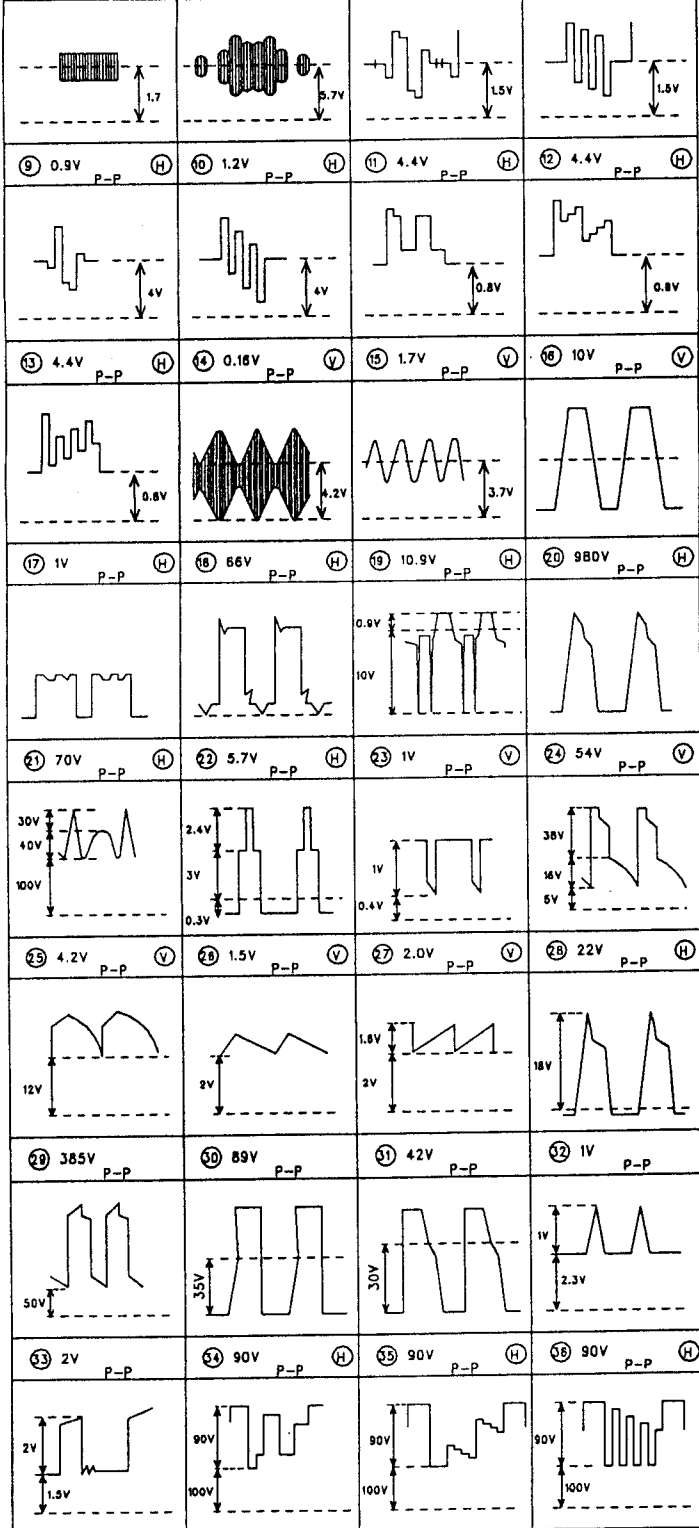
THIS SCHEMATIC DIAGRAM IS A STANDARD ONE
 AND CIRCUIT CONSTANTS MAY BE SUBJECT TO
 CHANGE FOR IMPROVEMENT WITHOUT ANY NOTICE.

SAFETY CAUTION :

WHEN WORKING THIS CHASSIS IT IS IMPORTANT THAT
 THE TECHNICIAN READ AND FOLLOW THE
 SAFETY PRECAUTION. "SAFETY PRECAUTIONS"
 AND "SAFETY NOTICE" IN THE SERVICE MANUAL.

PRODUCT SAFETY NOTE :

COMPONENTS MARKED WITH A \triangle ARE IMPORTANT FOR MAINTAINING
 SAFETY OF THE SET AND SHOULD BE REPLACED ONLY
 WITH IDENTICAL TO THOSE IN THE ORIGINAL OR
 LISTED IN THE PARTS LIST.
 TO MAINTAIN THE SAFETY OF THE SET THROUGHOUT
 THE SERVICE LIFE.



13	C109	4.7u			
14	C110	0.01			
15	C111	4.7u			16V 100u
16	C801	200V 0.47	200V 0.1	200V 0.47	←
17	C802	200V 0.47	200V 0.1	200V 0.47	←
18	J801	JUMPER	←	OPEN	JUMPER
19	J802	JUMPER	←	OPEN	JUMPER
20	JK01	JUMPER	OPEN	JUMPER	←
21	R108	18K	←	←	JUMPER
22	R110	OPEN	←	100K	8.2M
23	R113	470	←	220	470
24	R116	OPEN	←	100K	OPEN
25	R501	47K		47K	←
26	CA01		10u	←	
27	DA01		IN4148	←	
28	IA01		4053	←	
29	QA01		KTC3198Y	←	
30	QA02		KTA1288Y	←	
31	QA03		KTC3198Y	←	
32	RA01		47K	←	
33	RA02		10K	←	
34	RA03		10K	←	
35	RA04		22K	←	
36	RA05		10K	←	
37	RA06		47K	←	
38	RA07		1K	←	
39	RA08		1/4W1	←	
40	RA09		820K	←	
41	CU01				1000
42	CU02				1000
43	CU03				100
44	CU04				100
45	CL02			0.01	
46	CL03			33u 16V	
47	CL04			4.7u	
48	CL05			4.7u	
49	CL06			1u	
50	CL07			2200	
51	CL08			10	
52	CL09			T203R300B	
53	CL12			25V 10u	
54	DL01			IS2188	
55	DL02			IS2188	
56	DL03			IN4148	
57	DL04			IS2188	
58	DL05			IN4148	
59	DL06			IN4148	
60	DL08	IN4148	←	←	
61	IL01			TDA3843	
62	LL01			10uH	
63	LL02			10uH	
64	QL01			KTC3198Y	
65	QL02			KTC3198Y	
66	QL03			KTC3198Y	

79	RL09
80	RL10
81	RL11
82	RL12
83	RL13
84	RL14
85	RL15
86	RL17
87	RL24
88	RL25
89	RL26
90	CND1
91	CND2
92	LN01
93	QN01
94	RN01
95	RN02
96	XN01
97	DV04
98	DV05
99	DV08
100	DV09
101	DV12
102	DV13
103	QVD3
104	QV04
105	RV29
106	RV30
107	DT05
108	ITD1
109	ITD2
110	XT01
111	F801C
112	LA02
113	W511
114	W512A
115	PA014
116	PA018
117	P805
118	Q801L
119	Z101
120	Z102

STEM (!)

DIFFERENT PART FOR SIZE

P-B/G(FTZ) [TF]	P/S-B/G.D/K N-3/4 (AV) [TK]	P/S-B/G S-L/L' [VA]	P-I [TU]
		KTC319BY	
		KTC319BY	
		KTC319BY	
		L9481W	
		2.2K	
		10K	
		10K	
		10K	
		22K	
		88K	
		3K	
		1K	
		1K	
		4.7K	
		39K	
		100K	
		4.7K	
		22K	
		39K	
		4.7K	
		22K	
		43K	
		4.7K	
	220		
	1000		
	100uH		
	KTC319BY		
	47K		
	1K		
	3.58MHz		
	1N414B		
	1N414B		
			1N414B
		1N414B	
		1N414B	
13	1N414B	←	←
03	KTA126BY	←	←
04	KTA126BY	←	←
29	4.7K	←	←
30	4.7K	←	←
05	1N414B	←	1N414B
01	SAAS2B1PE	SAAS2B1PH	SAAS2B1PE
02	KA2186	←	KA2186
01	27MHz	←	27MHz
			FUSE COVER
02			CRT BS LABEL
11	SHIELD CASE		SHIELD CASE ←
12A	SHIELD PLATE		SHIELD PLATE ←
01A		CONN WAFER	←
01B		CONN AS	←
		TUNER GND AS	←

NO.	LOC.	14"						20"				21"		
		ORION		PHILIPS		POLKOLOR	ORION	SAMSUNG	POLKOLOR		ORION	PHILIPS	POLKOLOR	
1	CRT	A34JLL90X		A34EAC01X		A33EFU13X	A48JLL90X	A48ECR11X	A48EEV33X01		A51J5W90X	A51EAL55X	A51EEV1	
2	CRT SOCKET	ISM-01S		←		ISH-04S	ISM-03S	ISH-04S	←		ISM-03S	ISH-04S	←	
3	D/COIL	DC-1450						←				DC-2050	←	
4	T402	DCF2077D	1142.5037	F5A24008S	1142.5034	1142.5025B	DCF-2217J	1142.5037	F5A-17013M	F5A26012W	1142.5056	DCF-2217L	F5A-17013M	←
5	C409	1.6KV 6000	←	1.6KV 6200	←	1.6KV 8000	1.6KV 6900	1.6KV 7500	1.6KV 8200	←	←	1.6KV 7500	1.6KV 8200	1.6KV 75
6	C410	2KV 470	←	2KV 680	←	2KV 220	2KV 470	-	2KV 1000	←	←	2KV 470	←	←
7	C411	200V 0.47u	200V 0.33u	200V 0.51u	←	←	200V 0.47u	200V 0.51u	200V 0.51u	←	←	200V 0.36u	200V 0.47u	←
8	L403	L-125	←	L-102	L-76	←	L-102	L-76	L-62	L-76	←	L-102	L-76	←
9	L405	AZ-9004Y	←	←	←	←	AZ-9004Y	←	JUMPER	←	←	AZ-9004Y	JUMPER	←
10	R308	2W 270	←	2W 180	←	←	2W 270	←	2W 180	←	←	2W 270	2W 180	←
11	R411	1/2W 160K	←	←	←	←	1/2W 110K	←	←	←	←	←	←	←
12	R421	1W 5.6 (F)	2W 2.4 (F)	1W 3.9 (F)	1W 2.0 (F)	1W 0.68(F)	1W 5.2 (F)	2W 2.4 (F)	2W 2.7 (F)	2W 2.4 (F)	1W 1.0 (F)	1W 6.2 (F)	1W 6.8 (F)	2W 2.4
13	R423	2W 56	←	←	←	←	2W 56	←	JUMPER	←	←	2W 56	JUMPER	←
14	R501	2W 9.1K	←	←	←	←	2W 12K	←	←	←	←	←	←	←
15	R511	2W 9.1K	←	←	←	←	2W 12K	←	←	←	←	←	←	←
16	R521	2W 9.1K	←	←	←	←	2W 12K	←	←	←	←	←	←	←
17	R525	220	←	120	←	←	220	←	120	←	←	220	120	←
18	RV09	2.2K	←	←	←	←	2.7K	←	←	←	←	←	←	←
19	RV17	11K	←	←	←	←	4.7K	←	←	←	←	←	←	←
20	Q402	KSD5072-TU	←	←	←	←	←	←	←	←	←	2SD1555	←	←
21	Q801	KSD5072-TU	←	←	←	←	←	←	←	←	←	2SD1555	←	←
22	P401	YFW500-05	←	YFW500-06	←	←	YFW500-05	←	YFW500-06	←	←	YFW500-06	←	←
23	RB01	ECPAC 180W270	←	←	←	←	←	←	←	←	←	140W290L	←	←

DIFFERENT PART FOR SMPS (OPTION)

NO.	LOC.	230V 50HZ	110-260V 50/60Hz
1	TB01	TSM-4020	
2	CB07	150u 400V	220u 400V
3	DF03	—	BYV95C
4	RF05	—	5.1K
5	DF04	—	ZPD12
6	CF01	—	1u 160V
7	QF01	—	KTC3207
8	DF05	—	ZPD18
9	RF06	—	33K
10	RB12	1/4W 15K	1/4W 13K
11	RB14	1/4W 2.7K	

DIFFERENT PART FOR SPEAKER (OPTION)

NO.	LOC.	20W	30W

		4.7K	
		39K	
		100K	
		4.7K	
		22K	
		39K	
		4.7K	
		22K	
		43K	
		4.7K	
		220	
		1000	
		100uH	
		KTC3198Y	
		47K	
		1K	
		3.58MHz	
		1N4148	
		1N4148	
			1N4148
		1N4148	
		1N4148	
13	1N4148	←	←
03	KTA1266Y	←	←
04	KTA1266Y	←	←
29	4.7K	←	←
30	4.7K	←	←
05	1N4148	←	1N4148
01	SAAS281PE	SAAS281PH	SAAS281PE
02	KA2186	←	KA2186
01	27MHz	←	27MHz
01C			FUSE COVER
02			CRT BS LABEL
011	SHIELD CASE		SHIELD CASE ←
012A	SHIELD PLATE		SHIELD PLATE ←
01A		CONN WAFER	←
01B		CONN AS	←
005	TUNER GND AS		TUNER GND AS ←
001L			LABEL WARNING
001			40.4MHz TRAP
002			40.4MHz TRAP

14	R501	2W 9.1K	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
15	R511	2W 9.1K	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
16	R521	2W 9.1K	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←
17	R525	220	←	120	←	←	←	←	←	220	←	120	←	←	←	←	←	220	120
18	RV09	2.2K	←	←	←	←	←	←	←	2.7K	←	←	←	←	←	←	←	←	←
19	RV17	11K	←	←	←	←	←	←	←	4.7K	←	←	←	←	←	←	←	2SD1555	←
20	Q402	KSD5072-TU	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	2SD1555	←
21	Q801	KSD5072-TU	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	YFW500-06	←
22	P401	YFW500-05	←	YFW500-06	←	←	←	←	←	YFW500-05	←	YFW500-06	←	←	←	←	←	YFW500-06	←
23	R801	ECPAC 180W270	←	←	←	←	←	←	←	←	←	←	←	←	←	←	←	J503P53D 140M290L	←

DIFFERENT PART FOR SMPS (OPTION)

NO.	LOC.	230V 50HZ	110-260V 50/60Hz
1	TB01	TSM-4020	
2	CB07	150u 400V	220u 400V
3	DF03	—	BYV95C
4	RF05	—	5.1K
5	DF04	—	ZPD12
6	CF01	—	1u 160V
7	QF01	—	KTC3207
8	DF05	—	ZPD18
9	RF06	—	33K
10	RB12	1/4W 15K	1/4W 13K
11	RB14	1/4W 2.7K	

DIFFERENT PART FOR SPEAKER (OPTION)

NO.		1SPK (2W)	2SPK(2W + 2W)
1	SPK	8 ohm	16 ohm
2	SPK	-	16 ohm
3	RB20	15K	8.2K

CAPACITOR

ELECTRO	—+ ←
CERAMIC	— —
CERAMIC CH	— — (CH)
TANTAL	—+ ← (T)
ELECTRO NONPOLAR	— — (NP)
MYLAR	— — (M)

RESISTOR

CARBON FILM	—W—
V-OXIDE FILM	—W— (W)
CARBON COMP	—W— (CC)
FUSIBLE	—W— (F)
CEMENT	—W— (C)

COIL

PEAKING	—W—
CHOKE	—W— (C)
BEAD	—W— (B)