COLOR CRT MONITOR

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SERVICE *MANUAL*

KT-1982F / KT-1982DF

KT-1782F / KT-1782DF

KT-2182F

KORTEK CORPORATION

CONTENTS

1.Precautions

1-1. Safety precautions

Warnings : Service should not be attempted by anyone unfamiliar with the necessary on this Monitor.

The followings are the necessary precautions to be observed before servicing.

1) For continued safety, do not attempt to modify the circuit board.
2) Disconnect the AC power before servicing.
3) When the chassis is operating, semiconductor heat sinks are potential shock hazards.

1-1-1 Servicing the high voltage volume are CRT Warnings

A High Voltage volume replaced in the wrong direction may cause excessive X-Ray emissions.

1) Adjust in order to 26KV with signal at Anode.
2) When the troubleshooting a monitor with excessively High Voltage, avoid being unnecessarily close to the monitor. Do not operate the monitor for longer than is necessary to locate the cause of excessive voltage.
3) Excessive High Voltage can produce potentially hazardous X-Ray RADIATION. To avoid such hazards, the high voltage must be above the specified limit. The nominal value of the High voltage of this Monitor is 26KV ± 0.3KV at zero beam current(minimum brightness) under a 120V AC power source. The High Voltage must not (under any circumstances) exceed 29KV. Each time a monitor requires servicing, the High Voltage should be checked following the High Voltage check procedure on this manual. It is recommended the reading of the voltage be recorded as a part of the service record. It is important to use an accurate and reliable High Voltage meter.
4) When the High Voltage regulator is operating properly, there is no possibility of an X-Ray problem.
5) The CRT is especially designed to prohibit X-ray emission. To ensure continued X-ray protection, replace the CRT only with one that is the same or equivalent type as the original.
6) Handle the CRT only when wearing shatterproof goggles and after completely.
7) Do not lift the CRT by the neck.

1-1-2. Fire and Shock Hazard

Before returning the monitor to the user,perform the following safety checks:

1) Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.
2) Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment cover or shields isolation resistor-capacitor networks, mechanical insulations, etc.
3) To be sure that no shock hazard exists, check for leakage current in the following manner.
   a. Plug the AC line cord directly into a 120 or 230 Volt AC outlet. (Do not use an isolation transformer for this test)
   b. Using two clip leads, connect a 1.5KΩ, 10Watt resistor paralleled by a 0.15Uf capacitor in serial with an exposed metal chassis part and a known earth ground, such as an electrical conductor and electrical ground connected to a earth ground.
   c. Use a SSVM or VOM with 1000 ohms per-volt or sensitivity to measure the AC voltage drop across the resistor.
   d. Connect the resistor to an exposed metal part having a return path to the chassis(metal cabinet, screw heads, knobs, shafts, escutcheon,etc) and measure the AC voltage drop across the resistor.
   e. Any reading of 5.25 volt RMS(this corresponds to 3.5 milliampere AC) or more is excessive and indicates a potential shock hazard. Correct the shock hazard before returning the monitor to the user.

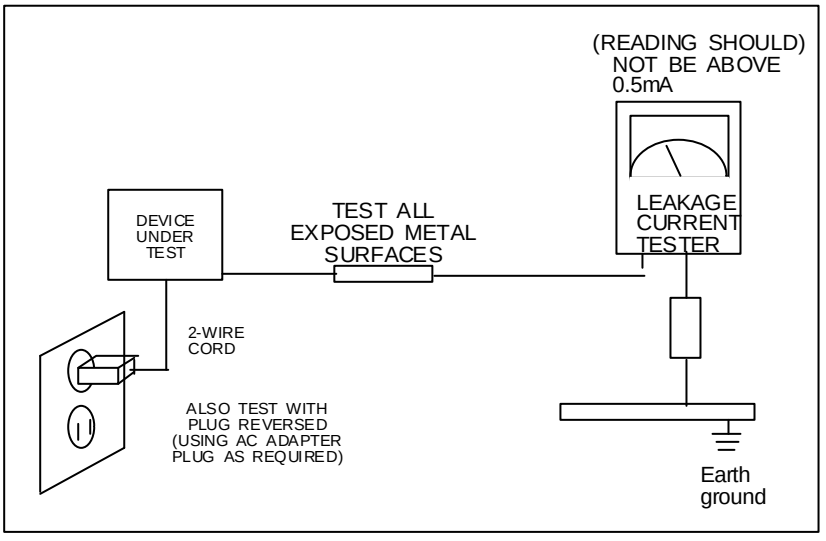


Figure 1-1. Leakage Current Test Circuit

1-1-3. Product safety notices:

Some electrical and mechanical parts have special safety related characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage,wattage,etc. Parts that have special safety characteristics are identified by △ on schematics and parts lists.

A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and or other hazards. Product safety is under review continuously and new instructions whenever appropriate.

1-2. Servicing Precautions

WARNING 1 : First read the "Safety Precaution" section of this manual. if unforeseen circumstances create conflict between the servicing precautions and safety precautions,always follow the safety precautions.

WARNING 2 : A High Voltage volume replaced in the wrong direction may cause excessive X-ray emissions.

WARNING 3 : An electrolytic capacitor installed with the wrong polarity might explode.

1) Servicing precautions are printed on the chassis, and should be followed closely
2) Always unplug the units AC power cord from the AC power source before attempting to :(a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors,(c) connect all test components in parallel with an electrolytic capacitor.
3) after servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4) Check the insulation between the blades of the AC plug and accessible conductive parts(examples:metal panels,input terminals and earphone jacks).
5) Never defeat any of the +B voltage interlocks. Do not apply AC power to the unit(or any of its assemblies) unless all solid-state heat sinks are correctly installed.
6) Always connect a test instruments ground lead to the instrument chassis ground before connecting the lead; always remove the instruments lead last.

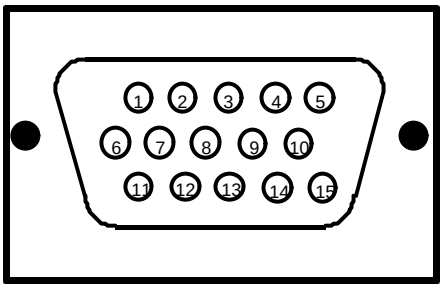
2. Product Specifications

2-1 SPECIFICATION

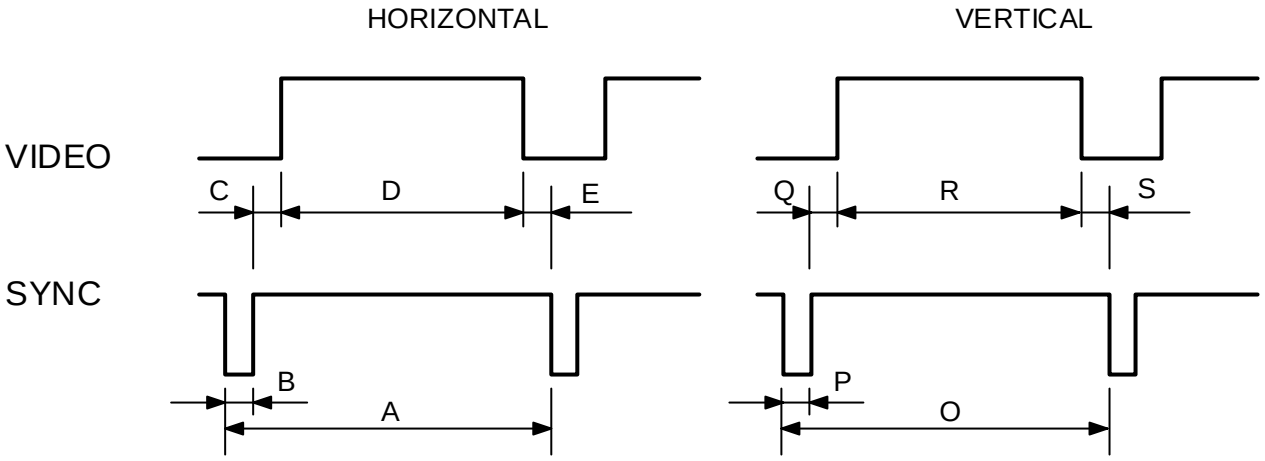
CDT		KT-1982F	KT-1982DF	KT-1782F	KT-1782DF	KT-2182F
	Tube	19"Normal flat	19"Dyna flat	17"Dyna flat	17"Normal flat	21"Normal flat
	Tube Size(Diagonal)	494.8mm	494.8mm	444.0mm	444.0mm	548.0mm
	Viewable Size(Diagonal)	457.2mm	457.2mm	406.7mm	401.0mm	508.0mm
	Dot Pitch	0.26㎜(H)	0.25㎜(H)	0.25㎜(H)	0.28㎜(H)	0.25㎜(H)
	Deflection Angle	90 °	90 °	90 °	90 °	90 °
	Focusing Method	Double	Double	Double	Double	Double
Display Area (mm)	Normal (H*V)	360*270	360*270	320*240	320*240	400*300
	Maximum (H*V)	370*278	370*278	330*248	330*248	410*308
Bandwidth	Maximum	140MHz				
Scanning Frequency (Auto Scanning)	Horizontal Vertical	30-82KHz 50-120Hz				
Microprocessor	User Saving Mode	13 Modes				
User Control Display	Digital Language	Position,Size,Pincushion,Trapezoid,H/Vcorner, Pin-B,Trapezoid,Parallel,Tilt,Moire,Zoom Color Temperature,Recall,Manual Degauss Eng/Ger/Fra/Esp/Port				
Display color	Color Temperature	9300 ˚K, 6500 ˚K, User Color				
Resolution	Maximum Mode	1280 X 1024 @ 75Hz				
Signal Input	Connect	15 pin D-sub(Female) or Option				
Safety & EMC	Safety EMC	UL,CSA,TUV,CB,DHHS FCC,CE				
Power	Voltage	AC 90-264V, 60 / 50±3Hz				
Power Consumption	Nomal Operation Input Current at 120V Input Current at 240V	≤100 Watts Operating :≤ 1.5Amps rms. Turn on :≤ 30Amps Peak. Operating :≤ 0.8Amps rms. Turn on :≤ 60Amps Peak.				
Linearity	Cross Pattern	Horizontal : 5% Vertical : 5%				
Environment	Temperature Humidity	Operating : 0 to +40℃ Storage : -40 to +60℃ Operating : 10 to 85% Storage : 5 to 95%				

2-2 D-SUB SIGNAL CABLE SPECIFICATION

	PIN NAME
1	RED
2	GREEN
3	BLUE
4	GND
5	GND (DDC)
6	R-GND
7	G-GND
8	B-GND
9	N.C
10	SELF RASTER
11	GND
12	SDA (DDC)
13	H-SYNC
14	V-SYNC
15	SCL (DDC)



2-3 TIMING CHART



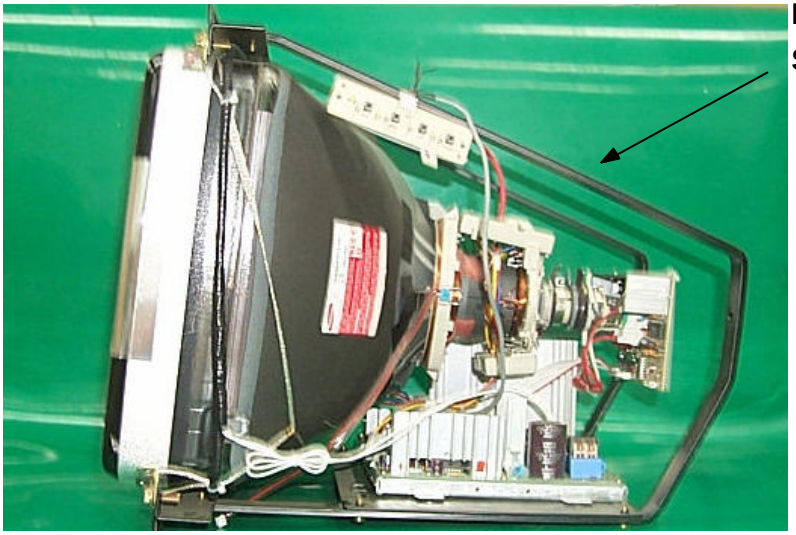
A : LINE TIME TOTAL
B :HORIZONTAL SYNC WIDTH
C : BACK PORCH
D : ACTIVE TIME
E : FRONT PORCH

O : FRAME TIME TOTAL
P : VERTICAL SYNC WIDTH
Q : BACK PORCH
R : ACTIVE TIME
S : FRONT PORCH

DESCRPTION		I.B.M		VESA											
		720*400	640*480	1024*768 (I)	640*480	800*600	800*600	800*600	1024*768	800*600	1024*768	1280*1024	1024*768	1280*1024	1024*768
H	f KHz	31.469	31.469	35.52	37.860	37.88	46.875	48.077	48.363	53.674	56.476	63.702	68.677	79.976	81.400
	A uS	31.778	31.778	28.15	26.413	26.40	21.333	20.800	20.677	18.631	17.707	15.698	14.561	12.504	12.285
	B uS	3.813	3.813	3.92	1.270	3.20	1.616	2.400	2.092	1.138	1.813	1.358	1.016	1.067	0.988
	C uS	1.907	1.907	1.25	4.603	2.20	3.232	1.280	2.262	2.702	1.920	1.812	2.201	1.837	1.624
	D uS	25.422	25.422	22.80	20.317	20.00	16.162	16.000	15.754	14.222	13.653	12.075	10.836	9.481	9.037
	E uS	0.636	0.636	0.18	0.762	1.00	0.323	1.120	0.369	0.569	0.320	0.453	0.508	0.119	0.635
	POL.	NEG	NEG	POS	POS	POS	POS	POS	NEG	POS	NEG	NEG	POS	NEG	POS
V	f Hz	70.087	59.940	86.906	72.809	60.317	75Hz	72.188	60.00	85.061	70.00	60.00	84.997	75.025	100.00
	O mS	14.268	16.683	11.50	13.735	16.58	13.333	13.853	16.667	11.756	14.272	16.640	11.765	13.329	10.000
	P mS	0.064	0.064	0.113	0.079	0.11	0.064	0.125	0.124	0.056	0.106	0.047	0.044	0.038	0.037
	Q mS	1.080	1.048	0.563	0.740	0.61	0.448	0.478	0.60	0.503	0.513	0.471	0.524	0.475	0.516
	R mS	12.711	15.253	10.81	12.678	15.84	12.8	12.480	15.88	11.179	13.599	16.075	11.183	12.804	9.435
	S mS	0.413	0.318	0.014	0.238	0.03	0.021	0.770	0.062	0.019	0.053	0.047	0.015	0.013	0.012
	POL.	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	NEG	NEG	POS	POS	POS

3. Operating Instruction

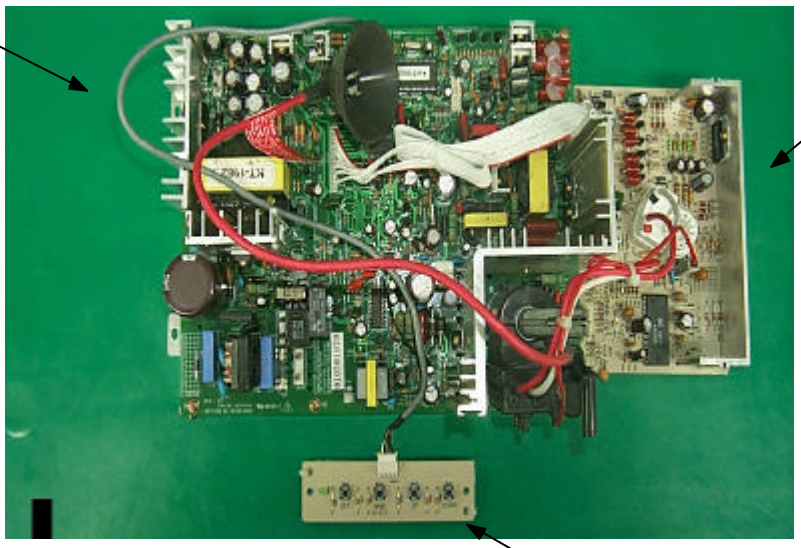
3-1 FRONT FRAME



KORTEK
STANDARD FRAME
(X-FRAM)

3.2 MAIN PCB ASS'Y

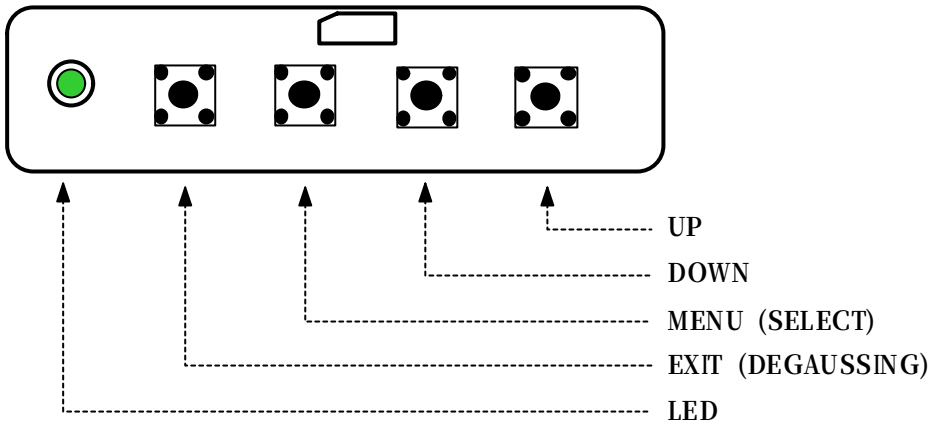
MAIN PCB



SOCKET PCB

CONTROL PCB

3-3. Function of Control



Control	Function
LED (Power Indicator)	The light of power LED changes according to each state. ◎ on mode : Green LED. ◎ power saving mode : green LED blinking.
MENU(Sellect)	When you press this button, the MENU appears.The MENU will disappear in 10 seconds if you don't operate any button. When you press EXIT button again, the MENU disappears. This button is used to select the control item on the MENU. In MENU, the control item could be selected and unselected by this button.
EXIT	This button is used to exit the value of any selected control.
UP	This button is used to increase the value of any selected control. This button is used to locate to the next control item for select.
DOWN	This button is used to decrease the value of any selected control. This button is used to locate to the previous control item for select.

4.Adjustments

4-1. Adjustment Control

4-1-1. Before making Adjustments

1) Orientation

When servicing, always face the monitor to east.

2) Warm-up time

The monitor must be on for 30 minutes before starting alignment. Warm-up time is especially critical in color temperature and white balance adjustments.

3) Signal

Analog, 0.714Vp-p positive at 75Ω, internal termination.

4) High Voltage Adjustment

Signal : without signal

Adjustment : 26KV ± 0.3KV.

PROCEDURE

① Disconnect the AC line cord from the power source.

② Connect positive end of High Voltage probe to anode cap of CRT, negative end of to GND(main chassis)

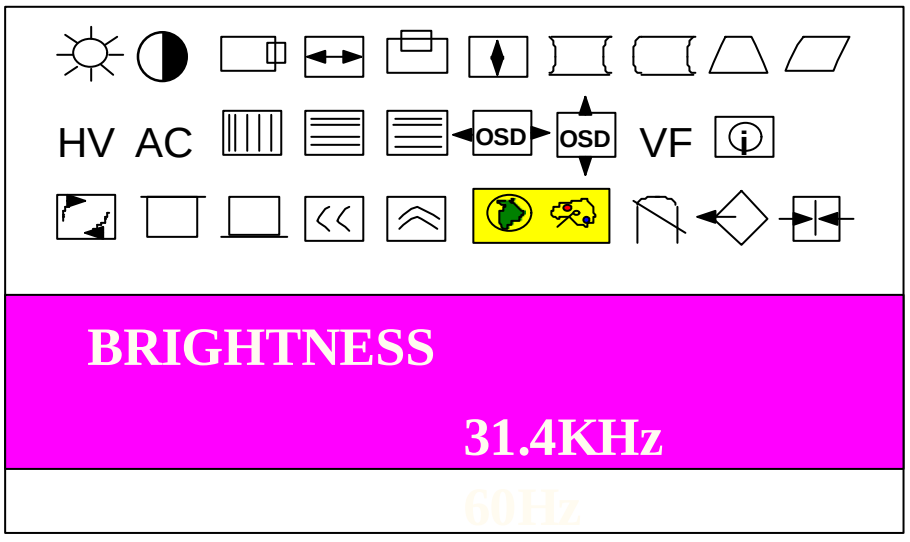
③ First of all Disconnect AC cord and than disconnect High voltage probe.

5) Screen Voltage

- signal : 1024 x 768 (48KHz) , Full white
- Bright : max
- Contrast : max
- Adjustment (SAMSUNG SDI) : 580±10V

4-1-2 TURN ON THE FACTORY OSD MANUAL METHOD

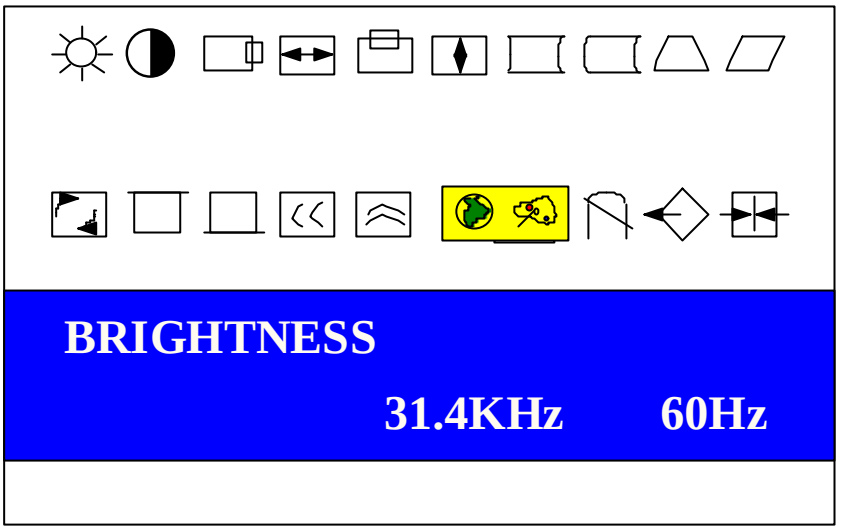
1) press on the "UP" key.
2) connect the AC line cord from the power source.
3) At this time OSD menu changed factory mode.



4-2. Display Control Adjustment

Click on the "MENU" button (OSD MENU).

This menu is user's OSD manual.(user's manual)



1) Click on the "MENU" button.
2) Click on the "UP"or "DOWN" and move any function control.
3) Press the "MENU(SELECT)" button.
4) "UP" or "DOWN" button is used to control the value of any function.
5) When you press exit button, the MENU disappears.

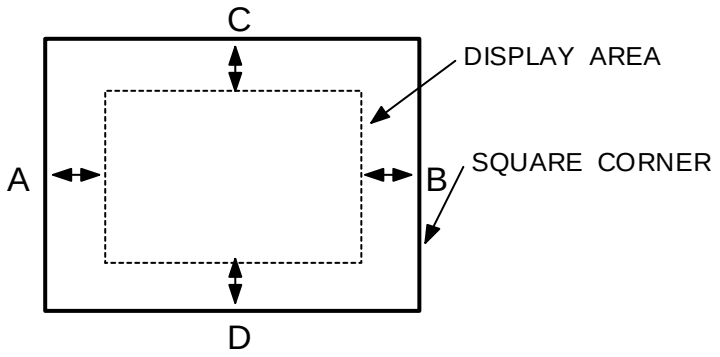
4-2-1 Screen center adjustment

width : 21"(400mm),19"(360mm),17"(320mm)

height : 21"(300mm),19"(270mm),17"(240mm)

signal : 1024 x 768 (48KHz)

$|A-B| \leq 4.0mm$, $|C-D| \leq 4.0mm$

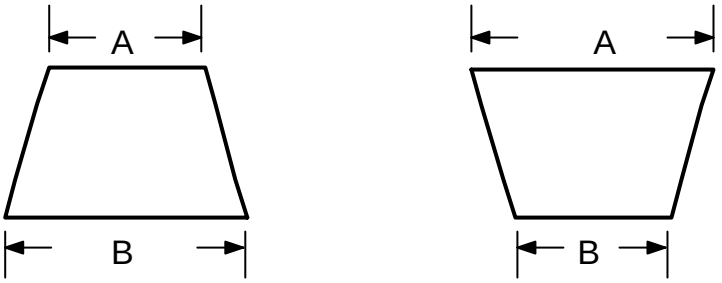


a) Horizontal size adjustment

adjustment : use to "H-SIZE"

b) Vertical size adjustment
adjustment : use to "V-SIZE"
c) Horizontal position adjustment
adjustment : use to "H-POS"
d) Vertical position adjustment

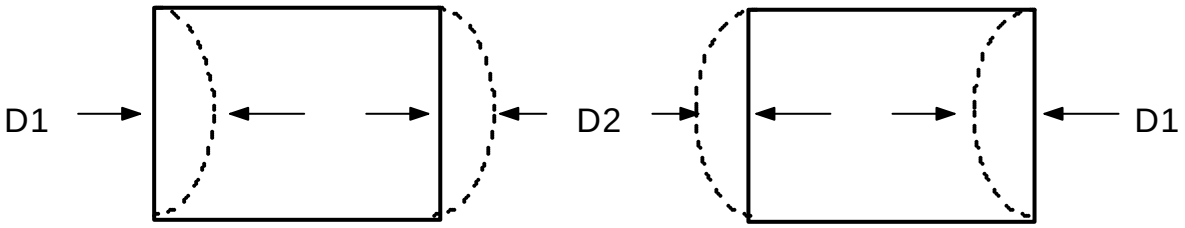
4-2-2 Trapezoid adjustment
frequency : all mode
signal pattern : cross hatch



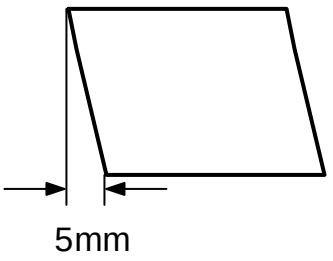
$|A-B| < 2.5mm$

4-2-3 Pin balance adjustment
frequency : all mode
signal pattern : cross hatch

$|D1|, |D2| \leq 1mm$



4-2-4 Parallelogram adjustment
frequency : all mode
signal pattern : cross hatch



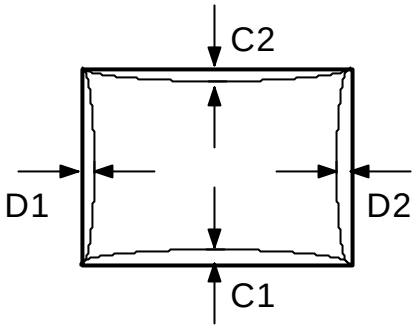
4-2-5 Side pin-cushion adjustment

frequency : all mode

signal pattern : cross hatch

brightness : MIN (cut-off)

contrast : MAX



$|C1|, |C2| \leq 2.0mm, \quad |D1|, |D2| \leq 2.0mm$

4-2-6 Tilt adjustment

frequency : all mode

signal pattern : cross hatch

brightness : MIN (cut-off)

contrast : MAX

4-2-7 Degaussing adjustment

Don't adjust the degaussing. Degaussing is possible in OSD adjustment menu. After using this function once, You must use again after at least 30minutes.

4-2-8 SAVE ADJUSTMENT CONDITION & REMOVE USER MODE.

4-3 Color adjustment

4-3-1 color temperature

※ Set condition

- measuring instrument : color analyzer (CA-100)
- frequency : 48KHz / 60Hz (1024 x 768)
- display pattern : full white , one square(20% window)
- brightness : cut off
- contrast : MAX

※ specification

- 9300K x=0.281±0.02 , y=0.311±0.02
- 6500K x=0.313±0.02 , y=0.329±0.02

4-3-2 color adjustment (9300K)

a) Back raster color adjustment

※ Set condition

- frequency : 48KHz / 60Hz (1024 x 768)
- display pattern : back raster pattern
- brightness : MIN (cut off)
- contrast : MAX

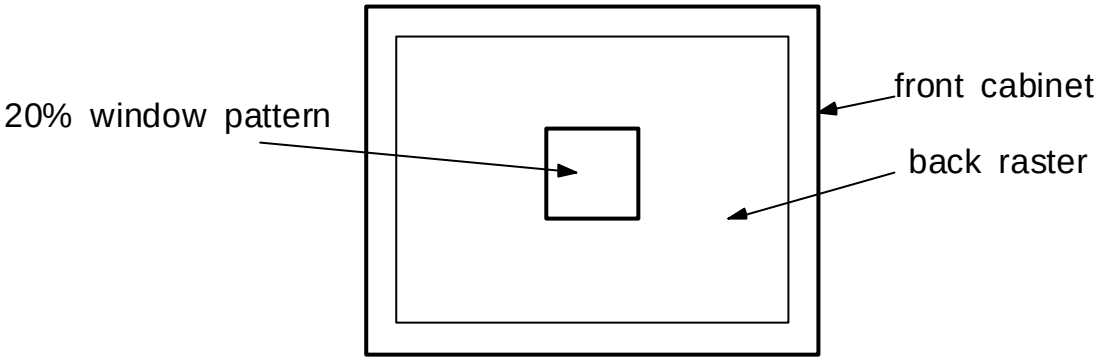
1. Select factory mode.
2. Select COLOR TEMP with UP.DOWN key.
3. Select 9300K.
4. Adjust back raster brightness to 0.2~0.8(F/L) with VR701.
5. Select B-B with UP,DOWN adjust y=0.311 and do the next selection with EXIT key.
6. Select R-B with UP,DOWN adjust y=0.281 and do the next selection with EXIT key.

a) white balance / ACL adjustment

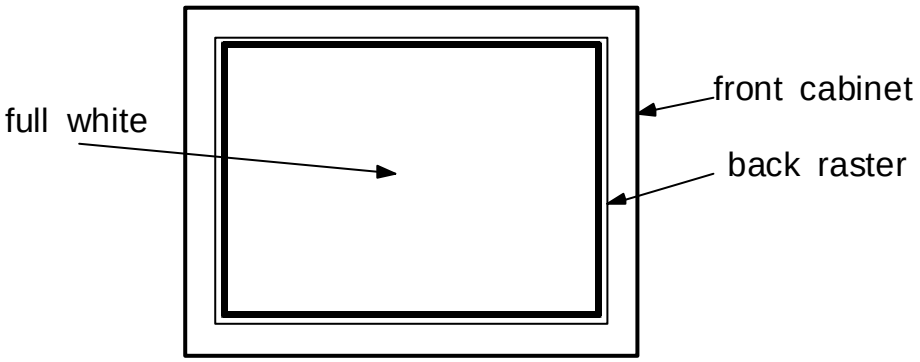
※ Set condition

- frequency : 48KHz / 60Hz (1024 x 768)
- display pattern : one square(20% window) , full white
- brightness : MIN (cut off)
- contrast : MAX

1. Select factory mode.
2. Select COLOR TEMP with UP,DOWN key.
3. Select 9300K.
4. Select B-G with UP,DOWN adjust y=0.311 and do the next selection with EXIT key.
6. Select R-G with UP,DOWN adjust y=0.281 and do the next selection with EXIT key.
7. Select contrast icon with UP,DOWN key, adjust contrast to 50~60f/l with UP,DOWN key.



8. Select ACL key(A/C) in full white pattern and adjust ACL to 28~30f/l.



※ attention : If 50f/l doesn't adjust in 20% window, adjust G-G again with DOWN key.

4-3-3 color adjustment (6500K)

a) white balance adjustment

1. Select factory mode.
2. Select COLOR TEMP with UP,DOWN key.
3. Select 6500K.

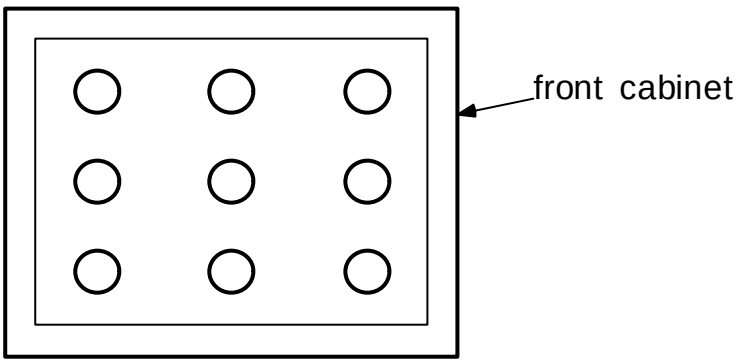
4. Select B-G with UP,DOWN adjust y=0.329 and do the next selection with EXIT key.
6. Select R-G with UP,DOWN adjust y=0.313 and do the next selection with EXIT key.

4-3-4 brightness uniformity adjustment

※ set condition

- frequency : 48KHz / 60Hz (1024x768)
- display pattern : 9ball pattern
- brightness : MIN (cut off)
- contrast : MAX

Measure nine brightness display in the screen.



4-3-5 Focus adjustment

※ set condition

- frequency : 48KHz / 60Hz (1024x768)
- display pattern : "H" character
- brightness : min (cut off)
- contrast : max

1. Adjust in focus of whole screen to be the best fitted with FOCUS V/R in FBT.

4-3-6 PURITY adjustment

Purity is that unnecessary colors appear in the screen except displayed color. Don't appear unnecessary colors divided with the naked eye at a distance of 50㎝ from CRT surface.

※ set condition

- direction : east
- frequency : included timing chart
- display pattern : full white
- brightness : MIN (cut off) - display center

RED	x=0.640 ± 0.015	y=0.323 ± 0.015
GREEN	x=0.295 ± 0.015	y=0.594 ± 0.015
BLUE	x=0.142 ± 0.015	y=0.066 ± 0.015

5. TROUBLESHOOTING GUIDE

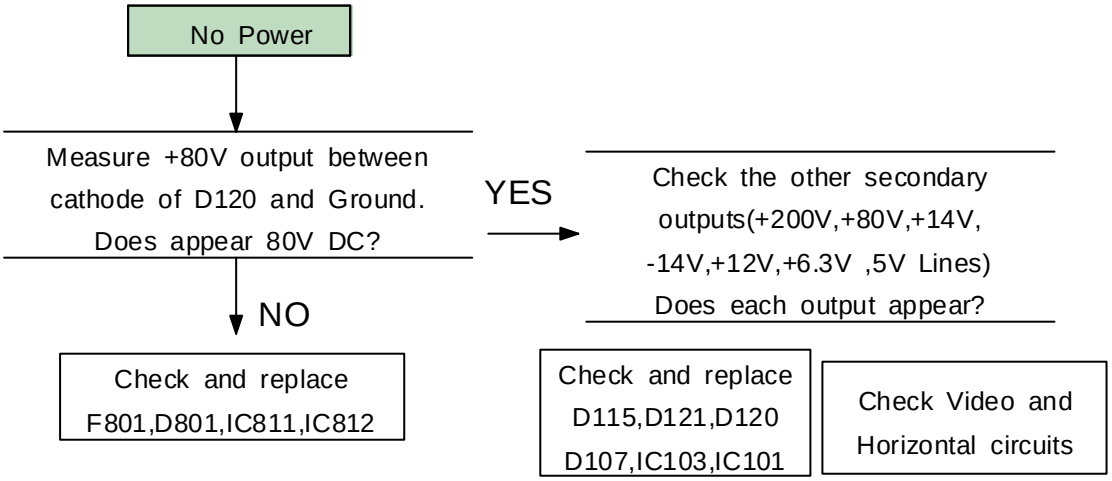
5-1. Troubleshooting Guide.

NOTES ;

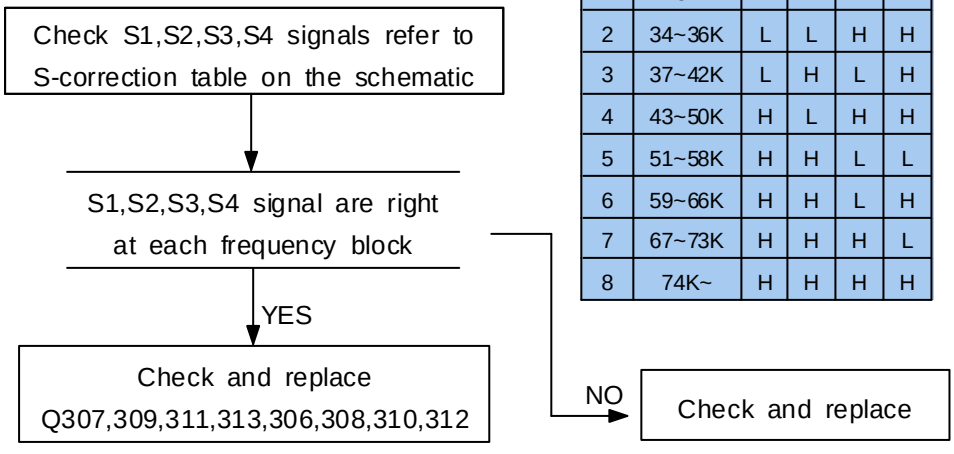
1. If picture does not appear, fully rotate the brightness and contrast controls clockwise.
2. Check the following circuits.

No raster appear : power circuit. Horizontal output circuit.
High voltage control circuit and output circuit.
High voltage develops but no raster appears : Video output circuit.
High voltage does not develop : Horizontal output circuit.

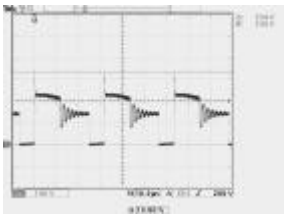
5-1-1. No Raster, No Video



5-1-2 S-Correction failure.

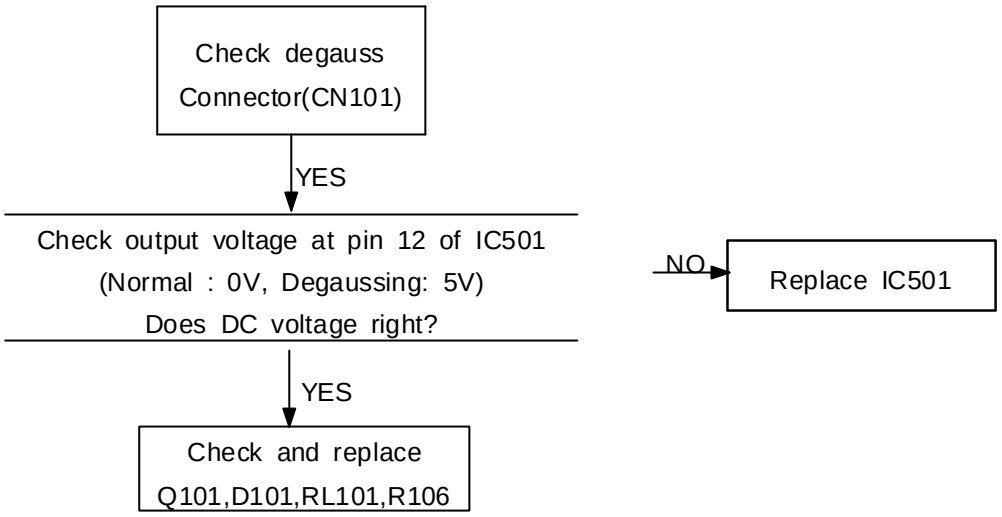


		S1	S2	S3	S4
1	~31K	L	L	L	L
2	34~36K	L	L	H	H
3	37~42K	L	H	L	H
4	43~50K	H	L	H	H
5	51~58K	H	H	L	L
6	59~66K	H	H	L	H
7	67~73K	H	H	H	L
8	74K~	H	H	H	H

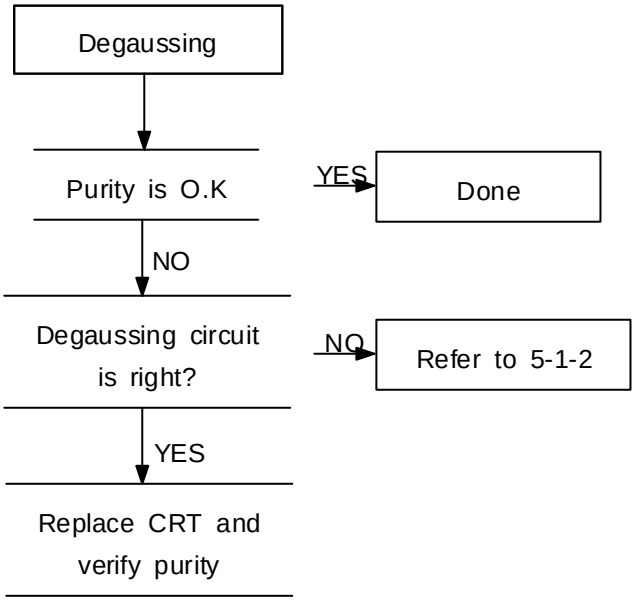


IC106 1pin

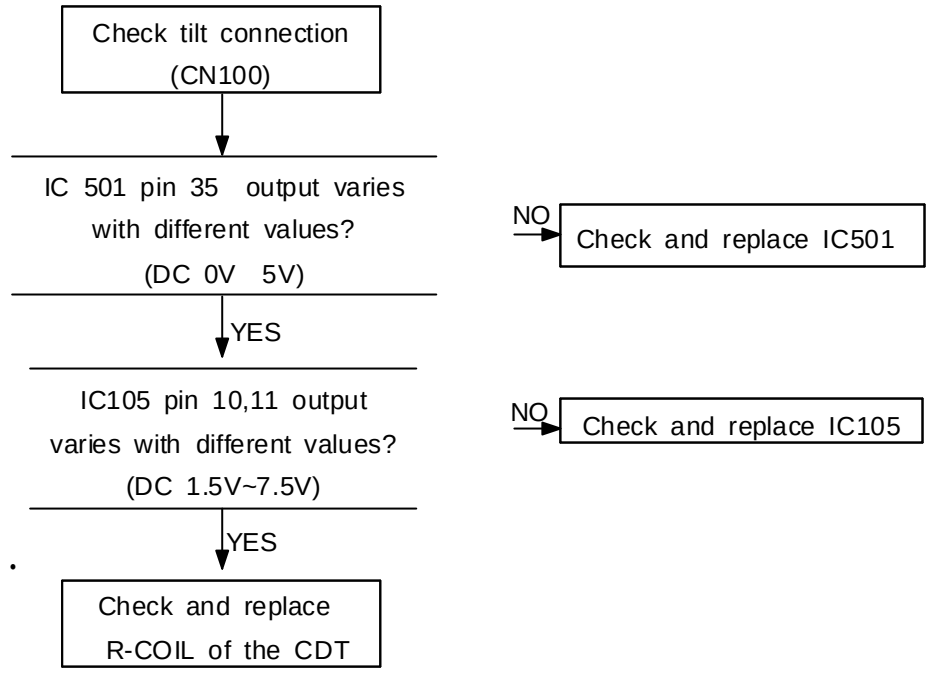
5-1-3 Degaussing failure



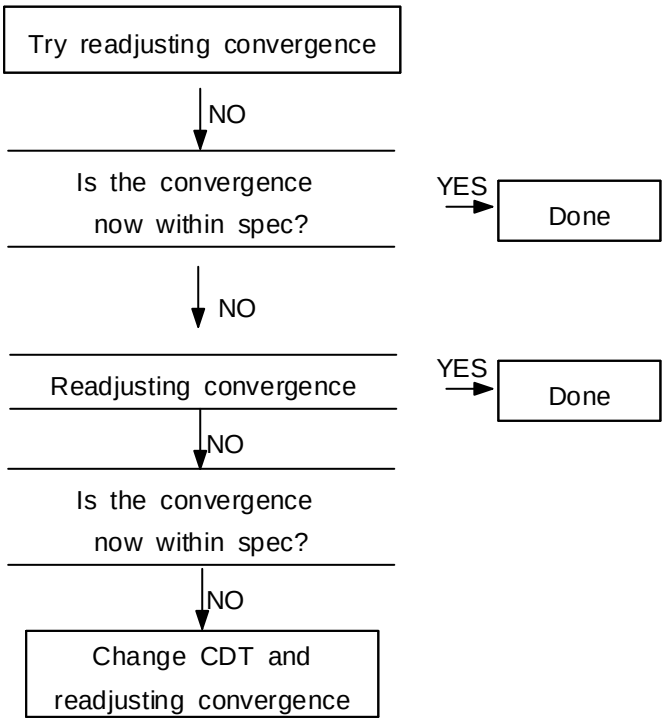
5-1-3 Purity failure



5-1-4 Tilt Failure



6-1-6 Misconvergence Failure



6-1-7 H-Linearity Failure

Check pin 36 of IC501 output varies with different value? (DC 0V 5V)

NO → Check and replace IC501

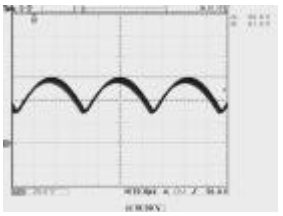
YES ↓

Check pin 7,8 of IC105 output varies with different value? (DC 1V ~ 6V)

NO → Check and replace IC105

YES ↓

Check L304 output varies with different value?



L304

6-1-8 High Voltage Failure

Does 900V p-p fly back pulse appear on pin 1 of FBT?

NO → Check and replace Q704,D708,R716

YES ↓

Q701,703 base driving pulse exist?

NO → Check +12V,Q701,703

YES ↓

Q704 drain pulse exist?

NO → Check and replace Q704

YES ↓

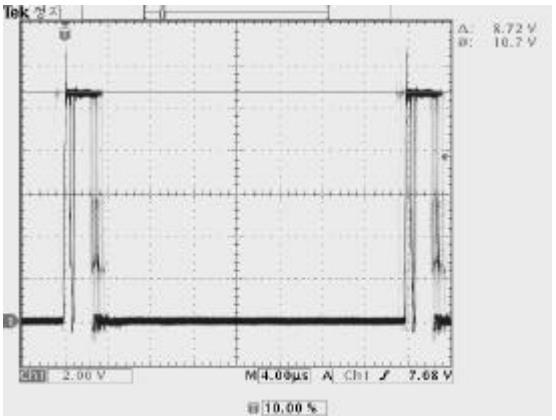
Q704 gate pulse exist?

NO → Check and replace D708,709

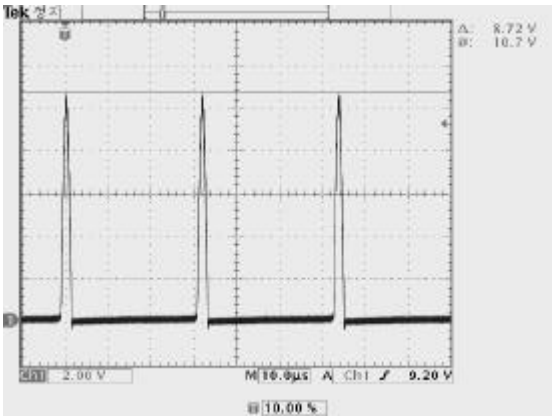
YES ↓

Pin 9 of IC701 pulse exist?

NO → Replace IC701

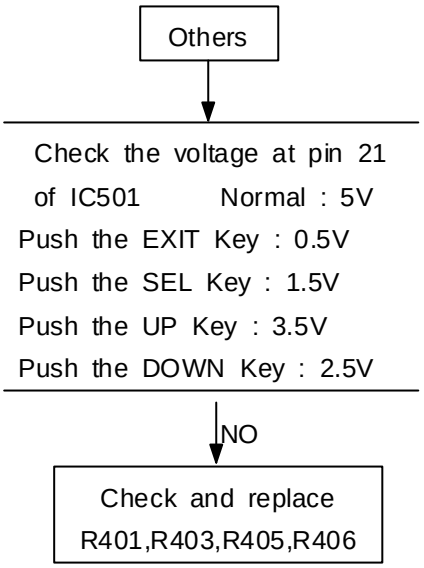


Q701,Q703 BASE

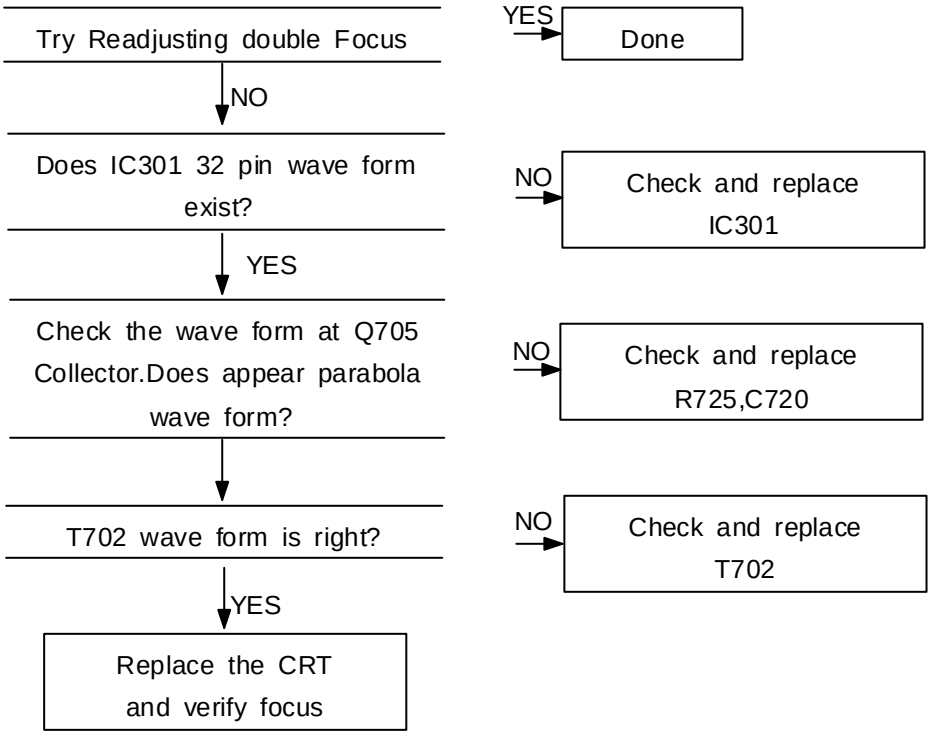


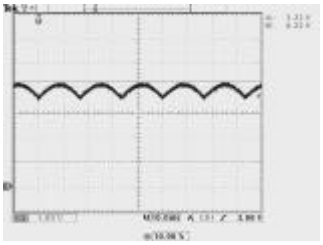
FBT 1pin

5-1-9 User control Failure

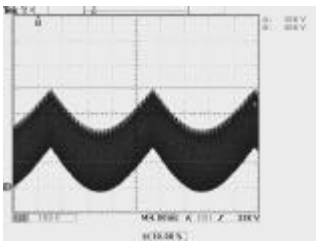


5-1-10 Dynamic Focus Failure or poor Focus



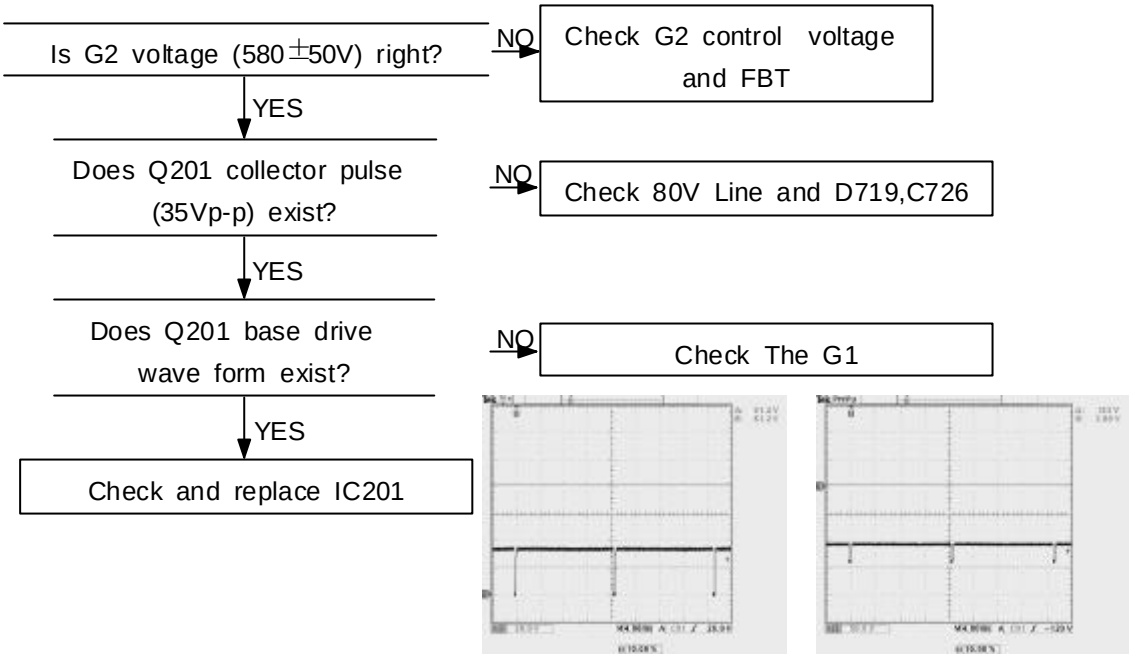


IC301 32 pin



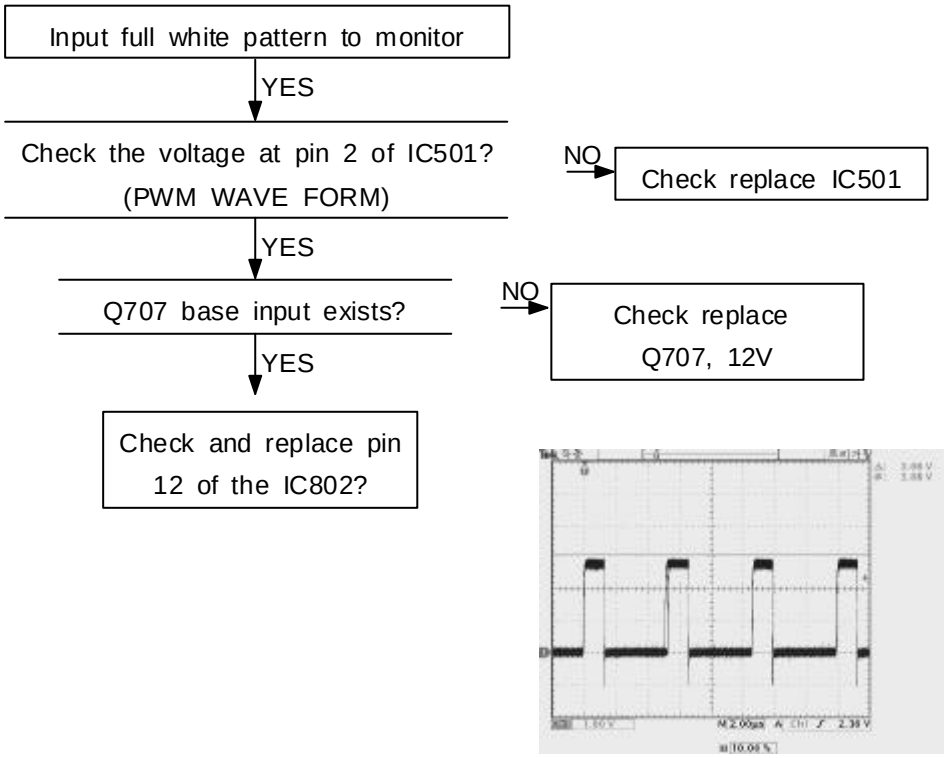
T702

5-1-11 Visible Retrace



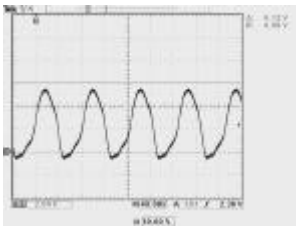
Q201 COLLECTOR G1

5-1-12 ACL Failure



IC501 2pin PWM

5-1-13 Micom Failure



X501

Does 5V appear Pin6 of IC501?

YES

IC501 Pin8 and pin8 wave form are right?

NO → Check and replace X501,C516,C517

YES

IC501 Pin 5 is over than 4.5Volt ?

NO → Check and replace R517

YES

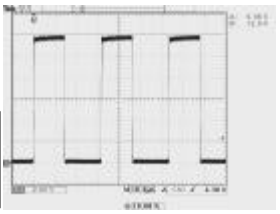
All input/output value are right?

NO → Check and replace IC502

YES

Done

5-1-14 No Raster



IC301 26pin

Does flyback pulse at collector of Q302 appear?

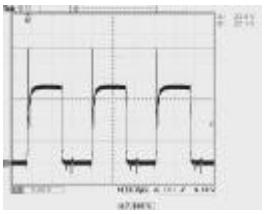
NO → Check D309,D311 and 80V Line

YES

Check the Pin 26 of IC301.Does 12Vp-p pulse appear?

NO → Check and replace IC301

YES



T302 8pin

Does the wave form at pin 8 of T302 appear?

NO → Check and replace Q304,Q303,Q305

YES

Check the voltage PIN 7 of IC302 Does 12V DC appear?

NO → Check the 12V line

YES

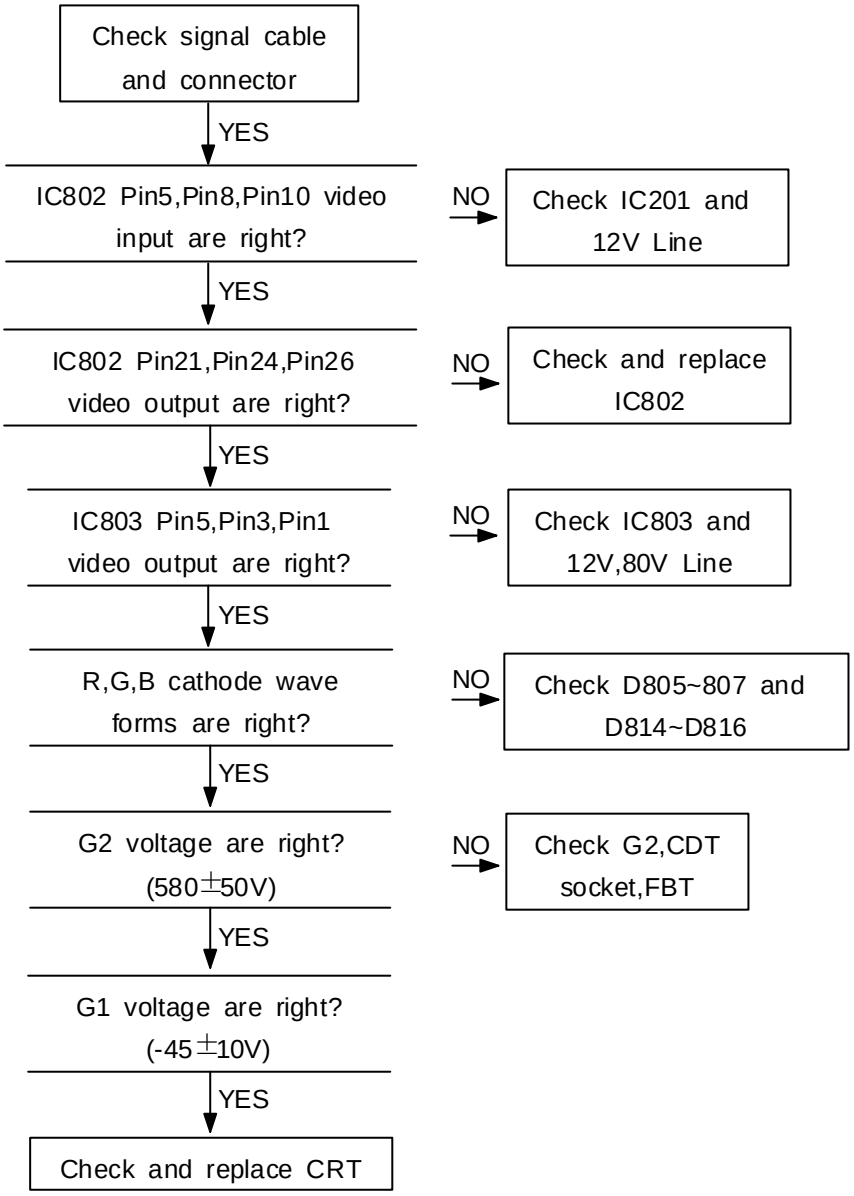
Does the wave form at pin 4 of IC302 appear?

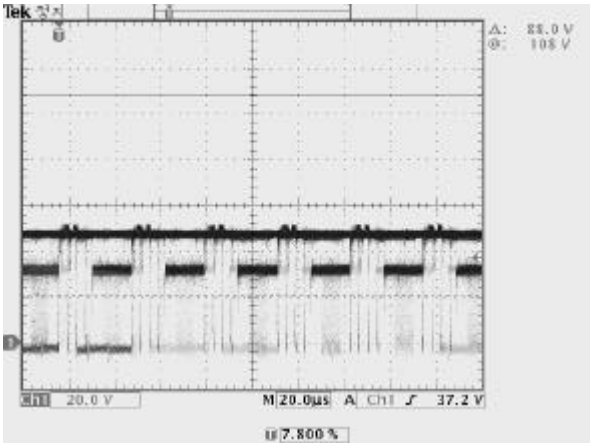
NO → Check and replace IC302

YES

Check heater voltage 6.3V

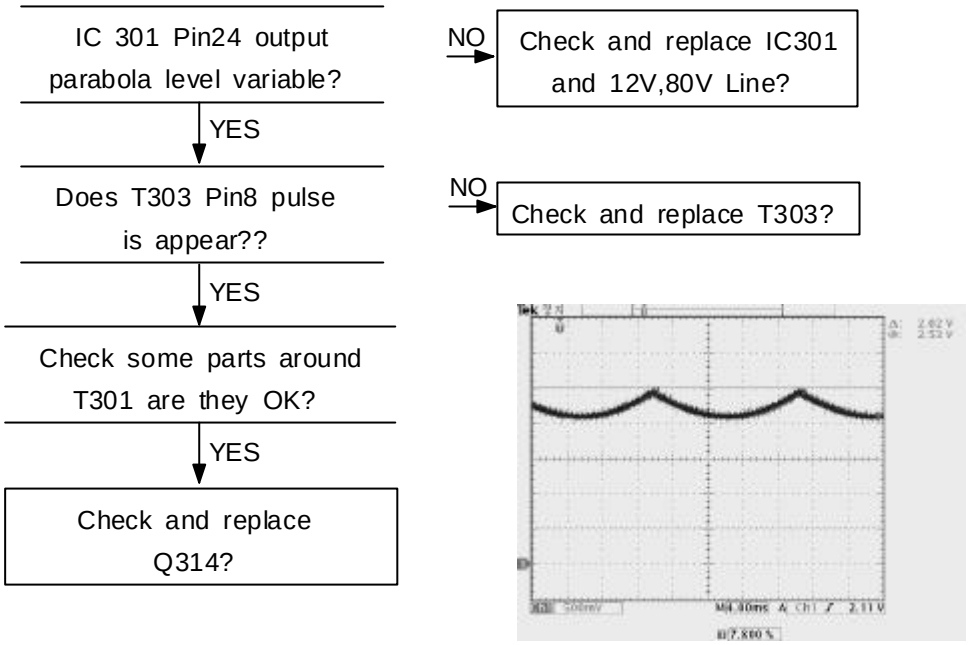
5-1-15 No Video





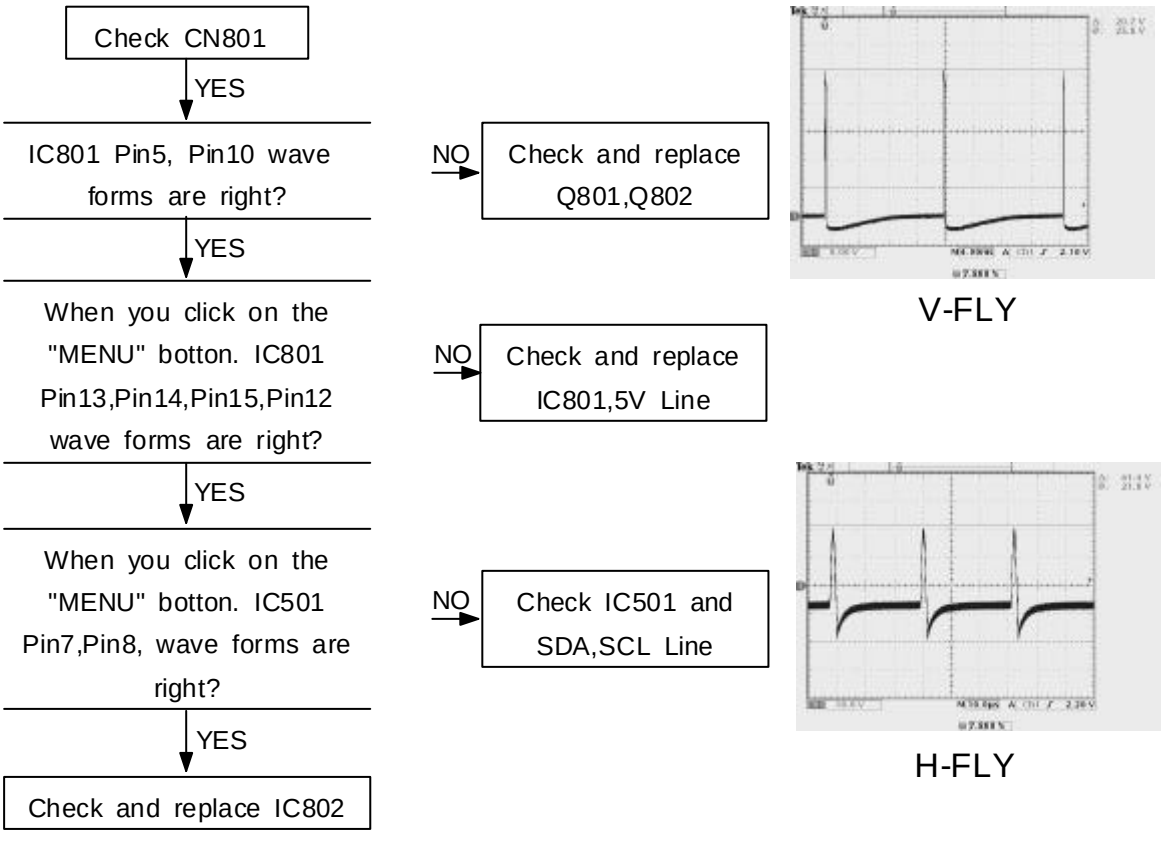
B-OUT Cathode wave form

5-1-16 Abnormal & Invariable H-size



IC301 24pin

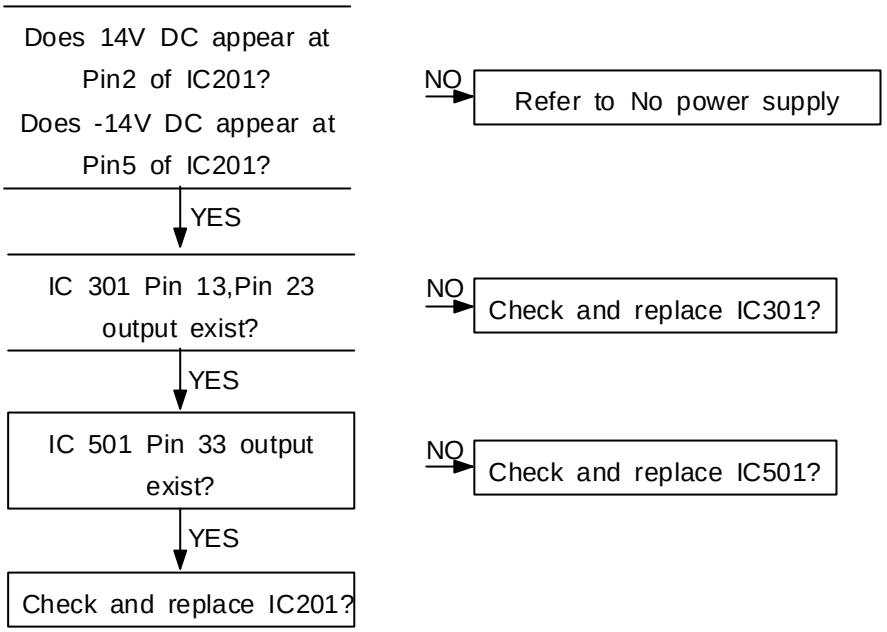
5-1-17 OSD failure

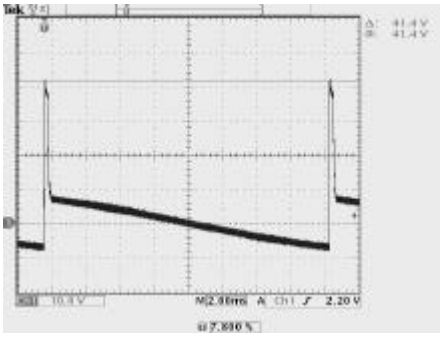


V-FLY

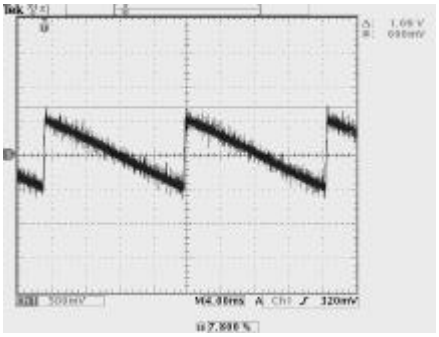
H-FLY

5-1-18 V-deflection failure





IC201 6 pin



IC201 1 pin

6. PART LIST

6-1. KT-1982F PART PIST

	02-198221180		MAIN MANUAL		PCS	
1	27-41023R38T	SMBP 50V 3.3 UF T/P	CAP. ELECT. 5*11	3	EA	C100,C308,C719
1	26-M22R0103T	DC500V-F-103PF(Z)T/P	CAP. CERAMIC	3	EA	C102,C117,C347
1	27-24040226T	KMG 35V 220 UF T/P	CAP. ELECT.	1	EA	C103
1	27-23040223T	KME 16V 220 UF T/P	CAP. ELECT. 8*11.5	4	EA	C103,C325,C331,C707
1	23-70B90153T	100V 153J T/P(DI,OY)	CAP. MYLAR	1	EA	C104
1	27-23040103T	KME 16V 100 UF T/P	CAP. ELECT. 5*11	1	EA	C105
1	27-24040473T	KMG 16V 470 UF T/P	CAP. ELECT.	6	EA	C106,C118,C119,C205,C207,C303
1	23-70B90103T	100V 103J T/P(DI,OY)	CAP. MYLAR	5	EA	C107,C109,C304,C307,C706
1	23-70B90223T	100V 223J T/P	CAP. MYLAR	2	EA	C108,C321
1	23-109C0224T	63V 224K T/P (DW,OY)	MP	3	EA	C110,C336,C704
1	26-F20A0102B	AC250V-B-102PF(K)	CAP. CERAMIC	3	EA	C111,C112,C128
1	27-24050103B	KMG 16V 1000 UF	CAP. ELECT. 10*16	1	EA	C113
1	27-2804033JT	KMH 400VN 330 UF	CAP. ELECT.	1	EA	C115
1	23-39G90154X	BOX AC 275V 154UF	CAP. BOX(PILKOR)	1	EA	C116
1	23-39G90104X	BOX AC 275V 104UF	CAP. BOX(PILKOR)	2	EA	C121.C130
1	26-822R0104T	DC50V-F-104PF(Z) T/P	CAP. CERAMIC	7	EA	C122,C206,C333,C502,C511,C513,C702
1	27-23030338T	KME 50V 33 UFT/P	CAP. ELECT. 6.3*11	1	EA	C123
1	27-2403047FB	KMG 250V 47 UF	CAP. ELECT.	2	EA	C124,C344
1	23-70B90104T	100V 104J T/P(DI,OY)	CAP. MYLAR	3	EA	C125,C134,C302
1	23-70B90472T	100V 472J T/P	CAP. MYLAR	2	EA	C126,C208
1	26-R20A0221T	DC2KV-B-221PF(K) T/P	CAP. CERAMIC	3	EA	C129,C712,C722
1	27-23020018T	KME 50V 1 UFT/P	CAP. ELECT.	6	EA	C131,C202,C312,C322,C505.C728
1	27-2304010BB	KMG 100V 100 UF	CAP. ELECT. 10*20	1	EA	C135
1	23-109C0105T	63V 105K T/P (DW,OY)	MP	1	EA	C209
1	26-81590101T	DC50V-SL-101PF(J)T/P	CAP. CERAMIC	3	EA	C210,C504,C506
1	27-23030108T	KME 50V 10 UFT/P	CAP. ELECT. 5*11	7	EA	C301,C324,C316,C501,C514,C515,C710
1	23-27B90102B	P.P,YPN 100V 102J	CAP. METAL	2	EA	C305,C335
1	27-23024R78T	KME 50V 4.7 UFT/P	CAP. ELECT.	2	EA	C306,C717
1	23-109A0474T	63V 474K T/P (DW,OY)	MP	4	EA	C309,C313,C319,C320
1	26-P20A0331T	DC1KV-B-331PF(K) T/P	CAP. CERAMIC	1	EA	C310
1	23-70B90154T	100V 154J T/P	CAP. MYLAR	1	EA	C311
1	27-23030478T	KME 50V 47 UFT/P	CAP. ELECT.	3	EA	C314,C703,C715
1	26-81590121T	DC50V-SL-121UF(J)T/P	CAP. CERAMIC	1	EA	C315
1	23-70B90332T	100V 332J T/P	CAP. MYLAR	1	EA	C317
1	23-70B90103T	100V 103J T/P(DI,OY)	CAP. MYLAR	1	EA	C318
1	23-70B90473T	100V 473J T/P	CAP. MYLAR	3	EA	C323,C346,C716
1	26-81590681T	DC50V-SL-681PF(J)T/P	CAP. CERAMIC	1	EA	C326
1	23-33R90272B	DTMS,YPN 1.6KV 272J	CAP. METAL	2	EA	C327,C328
1	23-70B90273T	100V 273J T/P	CAP. MYLAR	1	EA	C329
1	23-70B90222T	100V 222J T/P	CAP. MYLAR	1	EA	C330
1	26-M20A0102T	DC500V-B-102PF(K)T/P	CAP. CERAMIC	3	EA	C332,C342,C345
1	26-81590331T	DC50V-SL-331PF(J)T/P	CAP. CERAMIC	1	EA	C334
1	26-822R0103T	DC50V-F-103PF(Z) T/P	CAP. CERAMIC	2	EA	C337,C708
1	23-32F90824B	DTM,YMPP 250V 824J	CAP. METAL	1	EA	C338
1	23-32F90564B	DTM,YMPP 250V 564J	CAP. METAL	1	EA	C339
1	23-32F90254B	DTM,YMPP 250V 254J	CAP. METAL	1	EA	C340
1	23-32F90104B	DTM,YMPP 250V 104J	CAP. METAL	1	EA	C341
1	23-32F90274B	DTM,YMPP 250V 274J	CAP. METAL	1	EA	C343
1	26-P20A0101T	DC1KV-B-101PF(K) T/P	CAP. CERAMIC	1	EA	C348
1	26-820A0102T	DC50V-B-102PF(K) T/P	CAP. CERAMIC	1	EA	C503
1	26-81590033T	DC50V-SL-33PF(J) T/P	CAP. CERAMIC	2	EA	C507,C508
1	26-81590022T	DC50V-SL-22PF(J) T/P	CAP. CERAMIC	2	EA	C516,C517
1	27-23030228T	KME 50V 22 UFT/P	CAP. ELECT.	1	EA	C701
1	23-70B90563T	100V 563J T/P	CAP. MYLAR	1	EA	C705
1	26-R20A0152T	DC2KV-V-152PF(K) T/P	CAP. CERAMIC	1	EA	C709
1	23-33R90701B	DTMS,YPN 1.6KV 701J	CAP. METAL	1	EA	C711
1	27-24022R2KT	KMG 450V 2.2 UF T/P	CAP. ELECT. 10*12.5	1	EA	C713
1	27-2304022BB	KMG 100V 220 UF	CAP. ELECT. 12.5*25	1	EA	C714
1	27-4402001BT	KMEBP100V 1 UF T/P	CAP. ELECT. 6.3*11	1	EA	C718
1	26-R20A0221T	DC2KV-B-221PF(K) T/P	CAP. CERAMIC	1	EA	C720
1	23-34F90103B	DTN,YPN 250V 103J	CAP. METAL	1	EA	C724
1	23-10FA0104T	250V 104K T/P	MP	1	EA	C726
1	27-2403010FB	KMG 250V 10 UF	CAP. ELECT.	1	EA	C727
1	49-000002X00	3P (B3B-2H-A)	WAFER	1	EA	CN100
1	52-700006XXX	YFW 800-02 8 m/m	PIN BASE	2	EA	CN101,CN201
1	52-700007XXX	YFW 800-02 10m/m	PIN BASE (YEON HO)	2	EA	CN103,CN301
1	48-051303500	13P*13P*350mm	CONNECTOR KT-**82	1	EA	CN120
1	48-050405000	4P 500mm S/W 일반	CONNECTOR KT-XX82	1	EA	CN502
1	49-0526706XX	5267-06	WAFER	1	EA	CN503
1	35-E1N41482T	1N 4148	DIODE	23	EA	D101,D116,D117,D201,D301-D306,D310,D70 1-D704,D706,D707,D714,D716,D717,D551,D 554-D556

1	35-F1N52422T	1N 5242 1/2W 12V	DIODE ZENER	1	EA	D102
1	35-F1N52302T	1N 5230 1/2W 4.7V	DIODE ZENER	2	EA	D104,D715
1	35-BUF54042T	UF5404GI	DIODE	1	EA	D105
1	35-CGBU6JL1B	GBU6JL	DIODE	1	EA	D106
1	35-BUF40041T	UF4004GI	DIODE	7	EA	D107,D114,D202,D307,D311,D315,D711
1	35-BUF1GXX1T	UF-1G	DIODE	3	EA	D110,D112,D303
1	35-BUF40072T	UF4007GI	DIODE	6	EA	D111,D119,D710,D712,D721,D722
1	35-B31GF6X1B	31GF6	DIODE	3	EA	D115,D120,D121
1	35-HDTV56F1B	DTV 56F	DIODE	2	EA	D309.D315
1	35-A1N40072T	1N4007GP	DIODE	1	EA	D312
1	35-ABAV21X2T	BAV21	DIODE	2	EA	D316,D719
1	35-F1N52322T	1N 5232 1/2W 5.6V	DIODE ZENER	3	EA	D550,D552,D553
1	35-BMUR4601T	GUR460	DIODE	2	EA	D708,D709
1	50-21X215BDA	215 250V 3.15A	FUSE	1	EA	F101
1	52-300002XXX	FC-51F KT-1970/1982	FUSE CLIP TAPING	2	EA	F101
1	11-KA7805XEA	KA7805	IC-REGULATOR	1	EA	IC101
1	11-KA431AZGA	KA431AZ	IC-SCR	1	EA	IC102
1	11-KA78R12FA	KA78R12	IC-REGULATOR	1	EA	IC103
1	11-LTV817BAA	LTV817-B	IC-PHOTO COUPLER	1	EA	IC104
1	11-AN5452XBA	AN5452	IC-OPAMP	1	EA	IC105
1	11-6S1265RHA	FS6S1265-YDTU	IC-POWER	1	EA	IC106
1	11-KA2142XBA	KA2142A	IC-VERTICAL	1	EA	IC201
1	11-TDA9113AA	TDA9113(STV6888)	IC-TIMEBASE	1	EA	IC301
1	11-KA3883CAA	KA3883C	IC-PWM	1	EA	IC302
1	11-KS24C04AA	S524C80D41-DCB0	IC-I2C	1	EA	IC501
1	49-2IS42PXXX	42 PIN	IC SOCKET	1	EA	IC502
1	11-WT6291XAA	WT62P1	IC-MCU	1	EA	IC502
1	11-KA7500BAA	KA7500B	IC-PWM	1	EA	IC701
1	11-KA358AXAA	KA358A	IC-OPAMP	1	EA	IC702
1	34-413550001	ATS3550L(3.5X5mm)	BEAD CORE	13	EA	L103,L105,L106,L108,L109,L112,L302,L303,L308,L309,L705,L706.L110
1	34-22031510X	AL03 TB151K (150UH)	INDUCTORS	1	EA	L301
1	34-1803R5003	3.5 UH	LINEARITY KT-1982F	1	EA	L304
1	34-22034700X	AL03 TB470K (47UH)	INDUCTORS	1	EA	L701
1	34-413510001	ATS3510L(3.5X10mm)	BEAD CORE	1	EA	L702
1	34-1504R7001	4.7UH	COIL.CHOKE KT-1982	1	EA	L703
1	39-220510001	KT-XX82 REV NO.7	MAIN PCB	1	EA	MAIN PCB
1	30-3M1008TAX	KSC1008-Y	TR.	1	EA	Q101
1	30-3M0945TAX	KSC945C-Y	TR.	8	EA	Q103.Q105.Q201.Q303.Q307.Q309.Q311.Q313
1	30-2P1273TBX	KTA1273-Y	TR.	1	EA	Q104
1	30-1J0733TAX	KSA733C-Y	TR.	2	EA	Q301.Q305
1	30-4F5584BNX	2SC5584 (FJL6820TU)	TR.	1	EA	Q302.
1	30-8Z0008BDX	FQP4N20	FET	1	EA	Q304
1	30-8Z0007BDX	FQP19N20	FET	1	EA	Q306.Q308
1	30-8Z0007BDX	FQP19N20	FET	2	EA	Q310,Q312
1	30-8Z0006BDX	FQP11N40	FET	1	EA	Q314
1	30-3B3904TAX	2N3904-TA	TR.	4	EA	Q701.Q702.Q707.Q708
1	30-1B3906TAX	2N3906-TA	TR.	1	EA	Q703
1	30-3Z0032TAX	KSP44TA	TR.	1	EA	Q705
1	30-1B6520TAX	2N6520-TA	TR.	1	EA	Q706
1	30-8Z0027BEX	SSS10N60A(FQPF12N60)	FET	1	EA	Q714
1	21-341800FBB	1W 180 KOHM1%	RES. MOR	1	EA	R101
1	21-104700J5A	1/4W 47 OHM	RES. CARBON	2	EA	R102.R325
1	21-120100J4A	1/6W 1 KOHM	RES. CARBON	9	EA	R103.R123.R518.R520.R704.R706.R709.R734.R740
1	21-142200J4A	1/6W 220 KOHM	RES. CARBON	1	EA	R104
1	21-1206R8J4A	1/6W 6.8 KOHM	RES. CARBON	3	EA	R105.R316.R350
1	21-131000J4A	1/6W 10 KOHM	RES. CARBON	5	EA	R106.R210.R313.R501.R724
1	21-120200F5A	1/4W 2 KOHM1%	RES. METAL	2	EA	R107.R713
1	21-112400J4A	1/6W 240 OHM	RES. CARBON	1	EA	R108
1	21-113900J8A	1/2W 390 OHM	RES. CARBON	1	EA	R109
1	21-148200J4A	1/6W 820 KOHM	RES. CARBON	1	EA	R110
1	21-1204R7J4A	1/6W 4.7 KOHM	RES. CARBON	17	EA	R113,R130,R204,R305,R503-R513,R525,R743
1	21-1201R5J4A	1/6W 1.5 KOHM	RES. CARBON	2	EA	R114.R711
1	21-141000J8A	1/2W 100 KOHM	RES. CARBON	2	EA	R115.R353
1	21-141200J8A	1/2W 120 KOHM	RES. CARBON	1	EA	R116
1	21-142000J8A	1/2W 200 KOHM	RES. CARBON	2	EA	R117.R121
1	21-3001R2JEF	3W 1.2 OHM	RES. MOR	3	EA	R118.R321,R330
1	21-143300J8A	1/2W 330 KOHM	RES. CARBON	1	EA	R120
1	21-134700J4A	1/6W 47 KOHM	RES. CARBON	2	EA	R122,R357
1	21-142200J8A	1/2W 220 KOHM	RES. CARBON	2	EA	R125.R126
1	21-113300J4A	1/6W 330 OHM	RES. CARBON	1	EA	R127
1	21-112700J5A	1/4W 270 OHM	RES. CARBON	1	EA	R128

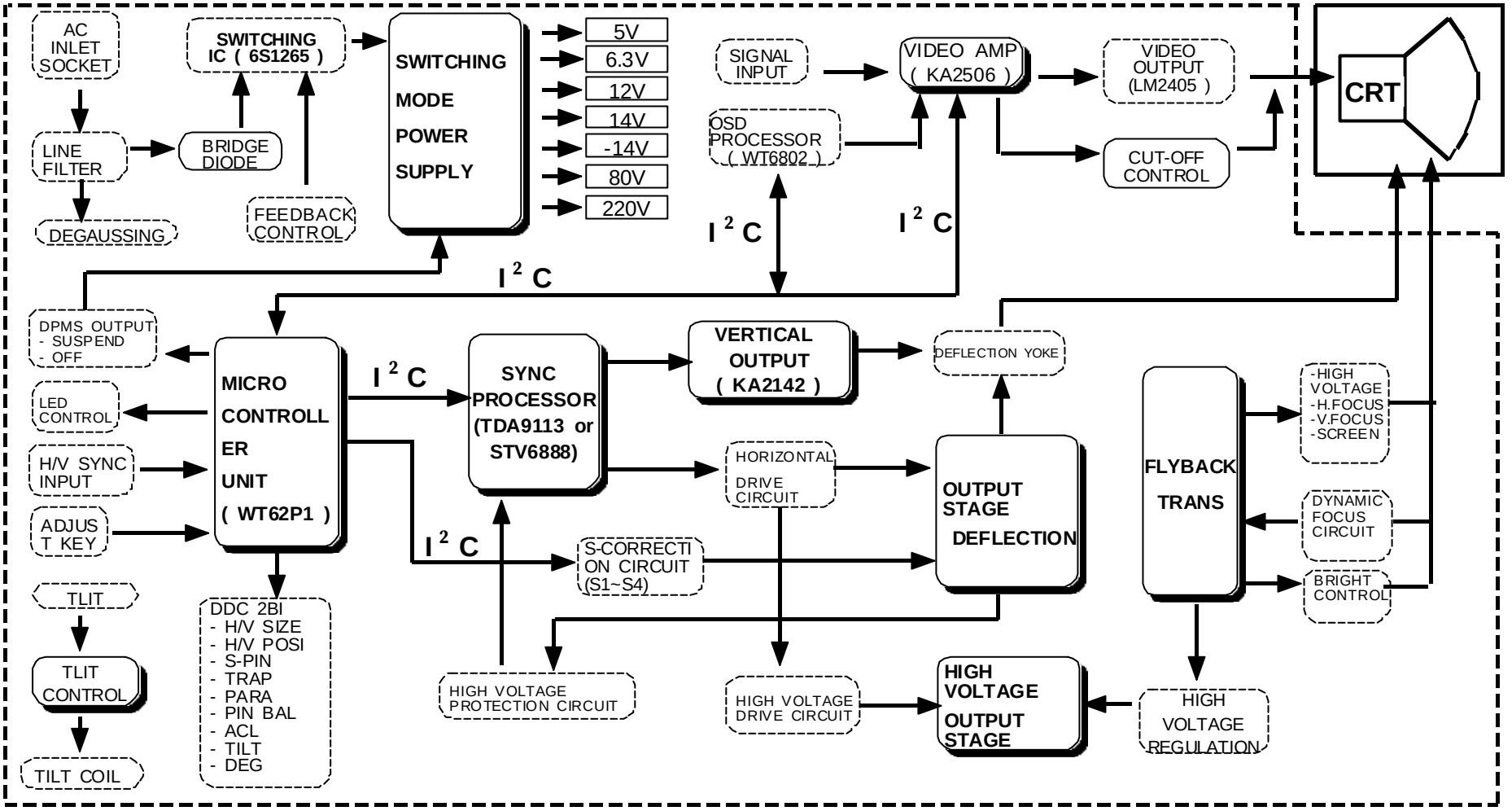
1	21-1004R7J5A	1/4W 4.7 OHM	RES. CARBON	2	EA	R131.R326
1	21-103300J8A	1/2W 33 OHM	RES. CARBON	2	EA	R133.R134
1	21-3206R8JEF	3W 6.8 KOHM	RES. MOR	1	EA	R136
1	21-133300J8A	1/2W 33 KOHM	RES. CARBON	1	EA	R137
1	21-132200J4A	1/6W 22 KOHM	RES. CARBON	3	EA	R201.R723.R730
1	21-1203R3J4A	1/6W 3.3 KOHM	RES. CARBON	2	EA	R202,R358
1	21-1208R2J4A	1/6W 8.2 KOHM	RES. CARBON	1	EA	R203
1	21-100R22J8A	1/2W 0.22OHM	RES. CARBON	1	EA	R205
1	21-111000J4A	1/6W 100 OHM	RES. CARBON	10	EA	R206.R302.R303.R324.R523.R527.R529.R534. R537.R744
1	21-112200J8A	1/2W 220 OHM	RES. CARBON	1	EA	R207
1	21-100100J8A	1/2W 1 OHM	RES. CARBON	2	EA	R208,R301
1	21-131000F4A	1/6W 10 KOHM1%	RES. METAL	2	EA	R209.R216
1	21-1203R3F4A	1/6W 3.3 KOHM1%	RES. METAL	2	EA	R211.R212
1	21-600R62JBT	1W 0.62OHM	RES. WIRE WOUND	1	EA	R213
1	21-132700F4A	1/6W 27 KOHM1%	RES. METAL	3	EA	R215.R522.R742
1	21-131500J4A	1/6W 15 KOHM	RES. CARBON	1	EA	R217
1	21-1001R2J8A	1/2W 1.2 OHM	RES. CARBON	1	EA	R218
1	21-115600J5A	1/4W 560 OHM	RES. CARBON	1	EA	R304
1	21-1205R1F4A	1/6W 5.1 KOHM1%	RES. METAL	1	EA	R306
1	21-1201R2J4A	1/6W 1.2 KOHM	RES. CARBON	9	EA	R307,R335.R336.R339.R340.R343.R344.R346. R348
1	21-132000F4A	1/6W 20 KOHM1%	RES. METAL	1	EA	R308
1	21-1202R7J4A	1/6W 2.7 KOHM	RES. CARBON	4	EA	R309.R310.R311.R722
1	21-1205R6J4A	1/6W 5.6 KOHM	RES. CARBON	2	EA	R312.R703
1	21-301500JEF	3W 15 OHM	RES. MOR	2	EA	R314,R732
1	21-107500J5A	1/4W 75 OHM	RES. CARBON	1	EA	R315
1	21-143300J4A	1/6W 330 KOHM	RES. CARBON	1	EA	R318
1	21-131800J4A	1/6W 18 KOHM	RES. CARBON	6	EA	R319.R329.R333.R337.R341.R345
1	21-137500J4A	1/6W 75 KOHM	RES. CARBON	2	EA	R320.R332
1	21-101000J8A	1/2W 10 OHM	RES. CARBON	1	EA	R322
1	21-301000JBB	1W 10 OHM	RES. MOR	1	EA	R323
1	21-1202R4J4A	1/6W 2.4 KOHM	RES. CARBON	1	EA	R327
1	21-1207R5J4A	1/6W 7.5 KOHM	RES. CARBON	3	EA	R331.R707.R726
1	21-141000J4A	1/6W 100 KOHM	RES. CARBON	4	EA	R334.R338.R342.R347
1	21-308200JCB	2W 82 OHM	RES. MOR	1	EA	R349
1	21-312200JEF	3W 220 OHM	RES. MOR	1	EA	R352
1	21-131200F4A	1/6W 12 KOHM1%	RES. METAL	2	EA	R355.R712
1	21-132200F5A	1/4W 22 KOHM1%	RES. METAL	1	EA	R356
1	21-117500J4A	1/6W 750 OHM	RES. CARBON	1	EA	R359
1	21-8002R2J8A	1/2W 2.2 OHM	RES. FUSEBLE	1	EA	R360
1	21-802200J8A	1/2W 22 OHM	RES. FUSEBLE	1	EA	R361
1	21-1202R2J4A	1/6W 2.2 KOHM	RES. CARBON	4	EA	R502.R514.R731.R735
1	21-112200J4A	1/6W 220 OHM	RES. CARBON	1	EA	R517
1	21-1203R9J4A	1/6W 3.9 KOHM	RES. CARBON	2	EA	R521.R526
1	21-105600J4A	1/6W 56 OHM	RES. CARBON	4	EA	R528.R530.R535.R536
1	21-1201R8J5A	1/4W 1.8 KOHM	RES. CARBON	1	EA	R532
1	21-1206R2J4A	1/6W 6.2 KOHM	RES. CARBON	1	EA	R701
1	21-1205R1J4A	1/6W 5.1 KOHM	RES. CARBON	2	EA	R702.R710
1	21-143900J4A	1/6W 390 KOHM	RES. CARBON	1	EA	R705
1	21-114700J4A	1/6W 470 OHM	RES. CARBON	1	EA	R708
1	21-903300JJV	7W 33 OHM	RES. CEMENT	1	EA	R714
1	21-1006R8J5A	1/4W 6.8 OHM	RES. CARBON	1	EA	R715
1	21-300R33JBB	1W 0.33 OHM	RES. MOR	1	EA	R716
1	21-331000JEF	3W 10 KOHM	RES. MOR	2	EA	R717,R718
1	21-131000F5A	1/4W 10 KOHM1%	RES. METAL	1	EA	R719
1	21-142000F5A	1/4W 200 KOHM1%	RES. METAL	1	EA	R720
1	21-1203R9F5A	1/4W 3.9 KOHM1%	RES. METAL	1	EA	R721
1	21-141500J8A	1/2W 150 KOHM	RES. CARBON	1	EA	R725
1	21-331000JBB	1W 10 KOHM	RES. MOR	1	EA	R727
1	21-141800J8A	1/2W 180 KOHM	RES. CARBON	2	EA	R728.R729
1	21-113900J5A	1/4W 390 OHM	RES. CARBON	1	EA	R733
1	21-133900J4A	1/6W 39 KOHM	RES. CARBON	1	EA	R736
1	21-142700J5A	1/4W 270 KOHM	RES. CARBON	1	EA	R737
1	21-141000J5A	1/4W 100 KOHM	RES. CARBON	1	EA	R738
1	21-150100J8A	1/2W 1 MOHM	RES. CARBON	1	EA	R739
1	41-HRCR71200	HR-CR7DC12V(HAN KUK)	RELAY (KT-XX82)	1	EA	RL101
1	38-4152A1021	1.5KV	SPARK GAP	1	EA	SG701
1	44-051500001	15P*1500mm	SIGNAL CABLE KT-**82	1	EA	SIGNAL CABLE
1	34-250082000	SPT-82	TRANS,SMPS	1	EA	T101
1	33-310082001	TGT-82	TRANS.SYNC (KT-1982)	1	EA	T102
1	34-160082001	LF-82	LINE FILTER KT-1982	1	EA	T103
1	43-880052R0T	52 mm TAPING	JUMP WIRE	2	EA	T104

1	33-340082002	GTT-82 (경인,삼흥)	TRANS.GATE KT-1982	1	EA	T301
1	33-260082001	HDT-82 (경인,삼흥)	TRANS.DRIVE KT-1982	1	EA	T302
1	33-210082003	SCT-82	TRANS.SCAN KT-1982	1	EA	T303
1	33-130001901	FQM19A002	F.B.T	1	EA	T701
1	33-360082001	DFT-82	TRANS.FOCUS KT-1982	1	EA	T702
1	38-2009A2024	2PIN-9OHM	THERMISTOR-PTC	1	EA	TH101
1	38-1013A1025	8D-13	THERMISTOR-NTC	1	EA	TH102
1	22-630V410NT	630VT 100 KOHM T/P	RES.VARIABLE	1	EA	VR701
1	31-100002MZX	ATS-49/U 12MHZ	CRISTAL	1	EA	X501
	05-198221010		V-MANUAL ASS'Y		PCS	
2	34-413550001	ATS3550L(3.5X5mm)	BEAD CORE	10	EA	BD801.BD802.BD803.BD804.BD805.BD806.BD807.BD808.BD809L807
2	23-70B90104T	100V 104J T/P(DI,OY)	CAP. MYLAR	6	EA	C802.C803.C804.C810.C811.C812
2	27-23040103T	KME 16V 100 UF T/P	CAP. ELECT. 5*11	1	EA	C805
2	26-822R0104T	DC50V-F-104PF(Z) T/P	CAP. CERAMIC	9	EA	C806.C817.C822.C825.C827.C831.C832.C833.C838
2	23-70B90472T	100V 472J T/P	CAP. MYLAR	1	EA	C807
2	23-70B90224T	100V 224J T/P	CAP. MYLAR	1	EA	C808
2	27-23040223T	KME 16V 220 UF T/P	CAP. ELECT. 8*11.5	4	EA	C809.C813.C815.C818
2	27-4402001BT	KMEBP100V 1 UF T/P	CAP. ELECT. 6.3*11	3	EA	C814.C824.C830
2	27-2303047BT	KME 100V 47 UFT/P	CAP. ELECT.	1	EA	C820
2	26-M22R0103T	DC500V-F-103PF(Z)T/P	CAP. CERAMIC	1	EA	C821
2	27-23023R38T	KME 50V 3.3 UFT/P	CAP. ELECT. 5*11	1	EA	C834
2	26-M22R0103T	DC500V-F-103PF(Z)T/P	CAP. CERAMIC	1	EA	C836
2	26-R20A0102T	DC2KV-B-102PF(K) T/P	CAP. CERAMIC	1	EA	C837
2	26-81590101T	DC50V-SL-101PF(J)T/P	CAP. CERAMIC	2	EA	C839.C840
2	49-0SMW25013	SMW 250-13	WAFER	1	EA	CN801
2	49-0526706XX	5267-06	WAFER	1	EA	CN802
2	52-700001XXX	1 PIN (2.36)	PIN BASE	2	EA	CN803.CN804
2	49-1ISDS01SX	ISDS-01S	CRT SOCKET KT-1970	1	EA	CRT801
2	35-E1N41482T	1N 4148	DIODE	7	EA	D801.D808.D809.D810.D817.D818.D819
2	35-ABAV21X2T	BAV21	DIODE	9	EA	D802.D803.D804.D805.D806.D807.D814.D815.D816
2	35-BUF40041T	UF4004GI	DIODE	1	EA	D823
2	11-WT6802XAA	WT6802	IC-OSD	1	EA	IC801
2	11-KA2506XAA	KA2506	IC-PREAMP	1	EA	IC802
2	11-LM2405TBA	LM2405T	IC-PREAMP	1	EA	IC803
2	43-880052R0T	52 mm TAPING	JUMP WIRE	21	EA	J801-J807,J811-J819,J821-J825
2	34-240470001	CFI06B1H470MF	EMI FILTER	3	EA	L801.L804.L806
2	34-22030R47X	AL03 TB0.47K(0.47UH)	INDUCTORS	3	EA	L802.L803.L805
2	30-3B3904TAX	2N3904-TA	TR.	2	EA	Q801.Q802
2	30-2Z0033TAX	KSP92	TR.	3	EA	Q803.Q804.Q805
2	30-3Z0032TAX	KSP44TA	TR.	3	EA	Q806.Q807.Q808
2	21-120100J4A	1/6W 1 KOHM	RES. CARBON	3	EA	R801.R807.R808
2	21-116800J4A	1/6W 680 OHM	RES. CARBON	2	EA	R802.R812
2	21-1203R9J4A	1/6W 3.9 KOHM	RES. CARBON	1	EA	R803
2	21-131000J4A	1/6W 10 KOHM	RES. CARBON	1	EA	R805
2	21-111000J4A	1/6W 100 OHM	RES. CARBON	8	EA	R806.R816.R817.R818.R833.R836.R855.R860
2	21-138200J5A	1/4W 82 KOHM	RES. CARBON	3	EA	R809.R810.R811
2	21-1202R2J4A	1/6W 2.2 KOHM	RES. CARBON	3	EA	R813.R814.R815
2	21-142200J5A	1/4W 220 KOHM	RES. CARBON	3	EA	R819.R821.R822
2	21-113900J4A	1/6W 390 OHM	RES. CARBON	7	EA	R820.R823.R824.R828.R844.R845.R846
2	21-104700J5A	1/4W 47 OHM	RES. CARBON	6	EA	R825.R826.R830.R831.R834.R841
2	21-101000J8A	1/2W 10 OHM	RES. CARBON	3	EA	R827.R832.R835
2	21-107500J4A	1/6W 75 OHM	RES. CARBON	6	EA	R829.R837.R843.R850.R851.R852
2	21-112200J8A	1/2W 220 OHM	RES. CARBON	1	EA	R848
2	21-131200J4A	1/6W 12 KOHM	RES. CARBON	1	EA	R854
2	38-3200M1021	WSA 201M	SUREG ABSORBER	3	EA	SP801.SP802.SP803
2	38-3400M1021	WSP 401M	SURGE ABSORBER	1	EA	SP804
2	38-4152A1021	1.5KV	SPARK GAP	1	EA	SP805
2	39-310520001	KT-**82	VIDEO PCB	1	EA	VIDEO PCB
3		KT-1982F,KORTEK		1		TACT CONTROL PCB ASS'Y
3	49-0526804XX	5268-04	WAFER	1	EA	CN401
3	37-110002GRA	DLL-30631,GREEN 3PI	LED,KT-XX82	1	EA	D401
3	21-111000J4A	1/6W 100 OHM	RES. CARBON	1	EA	R401
3	21-120100J4A	1/6W 1 KOHM	RES. CARBON	2	EA	R402,R406
3	21-114700J4A	1/6W 470 OHM	RES. CARBON	1	EA	R403
3	21-113300J4A	1/6W 330 OHM	RES. CARBON	1	EA	R404
3	21-1202R4J4A	1/6W 2.4 KOHM	RES. CARBON	1	EA	R405
3	58-311105002	RT1105TA TAPING	SWITCH TACT 1970	4	EA	SW401.SW402.SW403.SW404

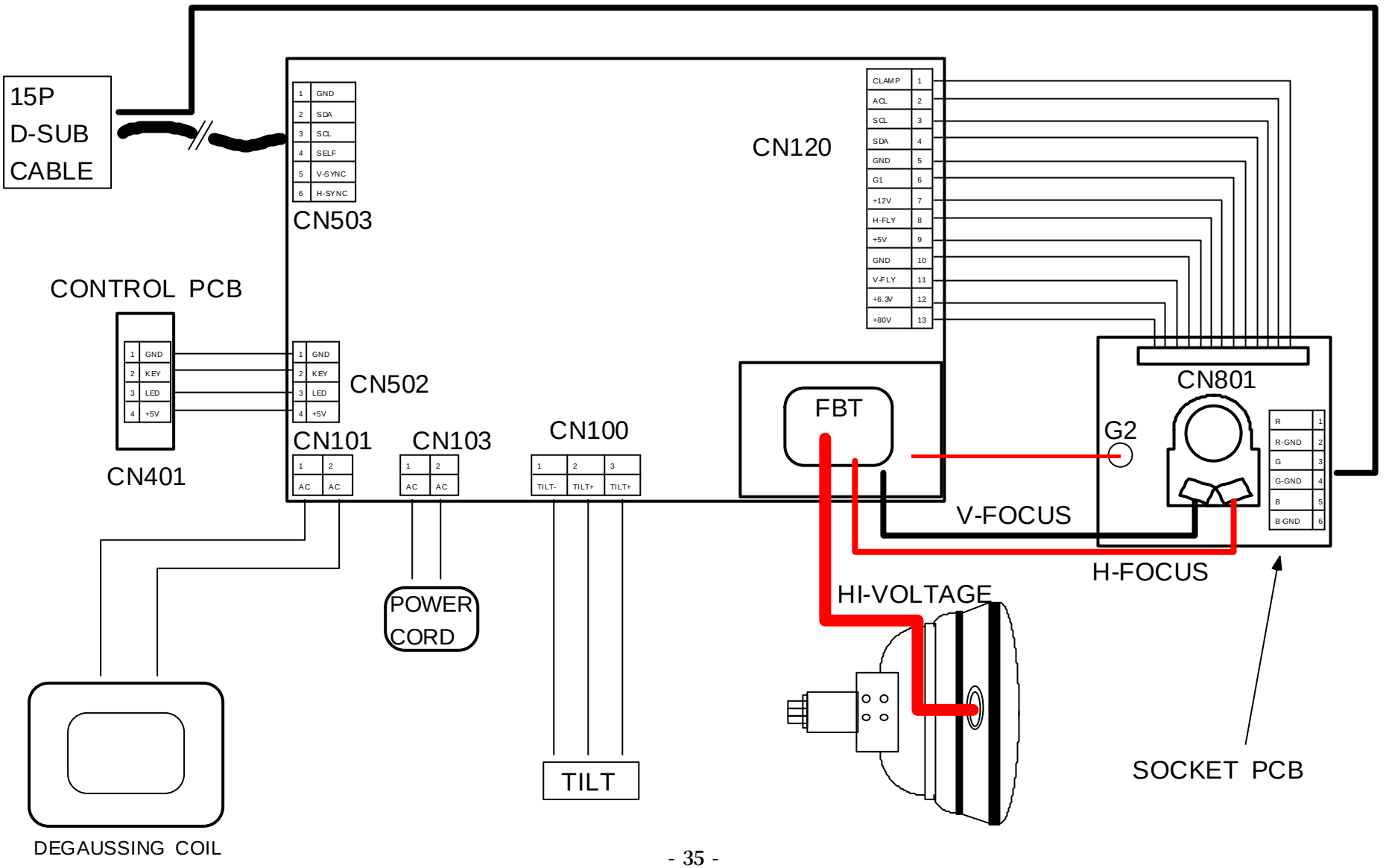
6-2. DIFFERENT PART LIST BY MODEL

NO	LOCATION	SPEC.	MODEL				
			KT-1982F	KT-1982DF	KT-1782F	KT-1782DF	KT-2182F
1	C338	CAP-MPP	824J ,250V	754J ,250V	564J ,250V	524J ,250V	105J ,250V
2	C339	CAP-MPP	564J ,250V	474J ,250V	474J ,250V	424J ,250V	684J ,250V
3	C340	CAP-MPP	254J ,250V	224J ,250V	204J ,250V	204J ,250V	254J ,250V
4	C341	CAP-MPP	104J ,250V	823J ,250V	104J ,250V	104J ,250V	104J ,250V
5	C343	CAP-MPP	274J ,250V	274J ,250V	204J ,250V	204J ,250V	394J ,250V
6	C724	CAP-MPP	103J ,250V	103J ,250V	103J ,250V	103J ,250V	473J ,250V
9	R321	RES-METAL F	1.2 , 3W	1.2 , 3W	1.2 , 3W	1.2 , 3W	1.0 , 3W
10	R314	RES-METAL F	15, 3W	15, 3W	15, 3W	15, 3W	4.7, 3W

7. BLOCK DIAGRAM

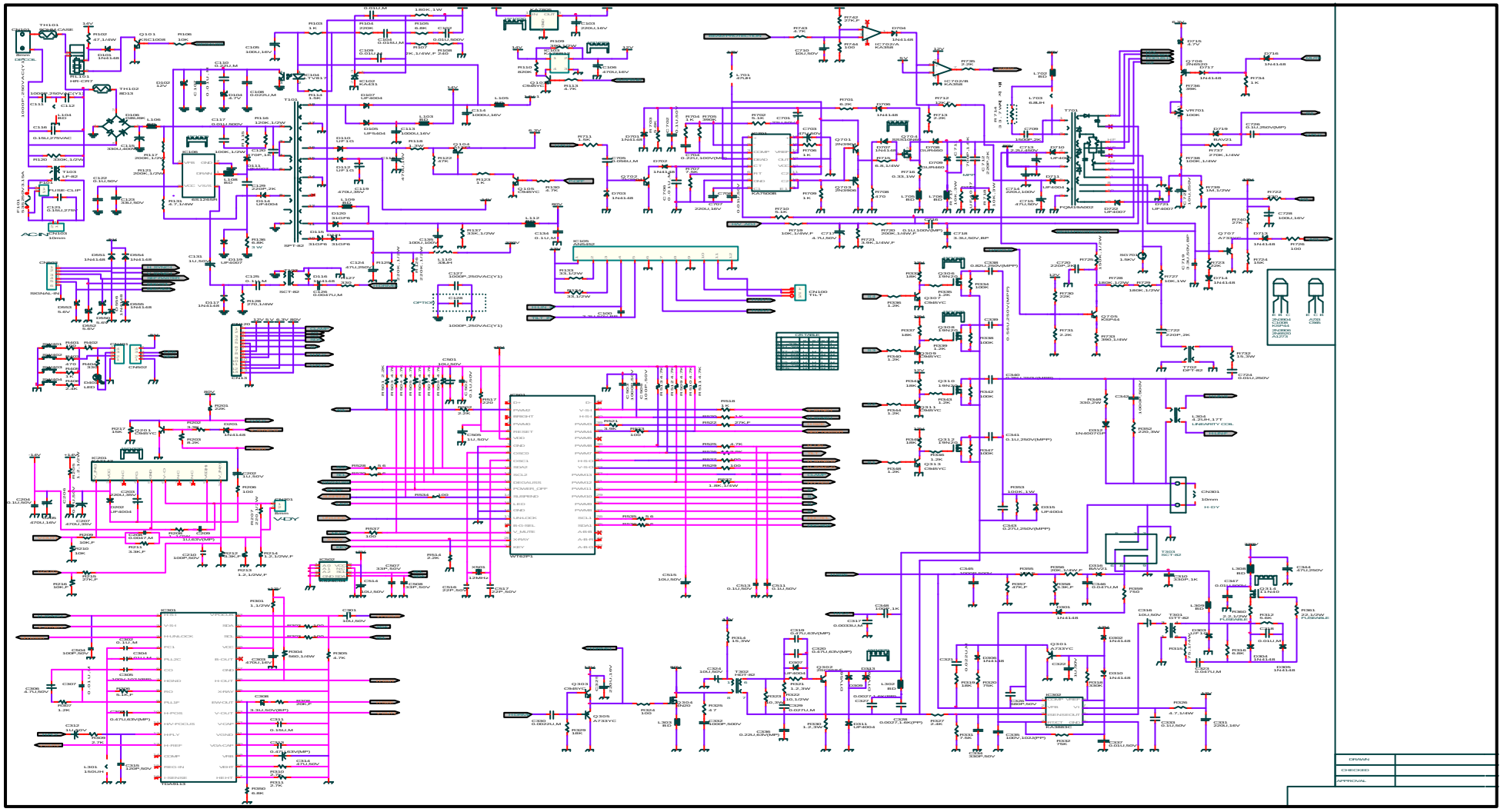


8. CONNECTING DIAGRAM



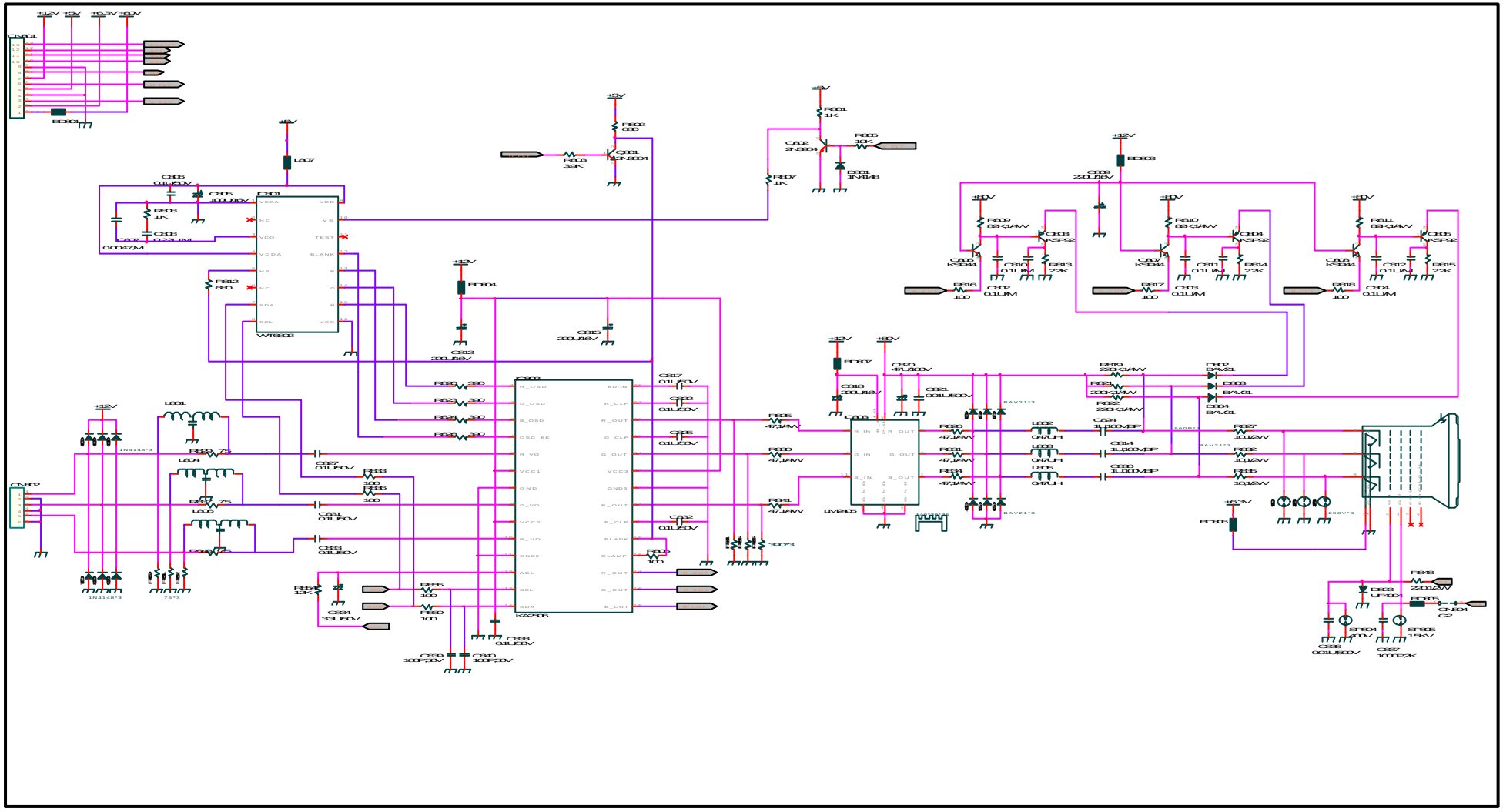
9. SCHEMATIC

9-1 MAIN



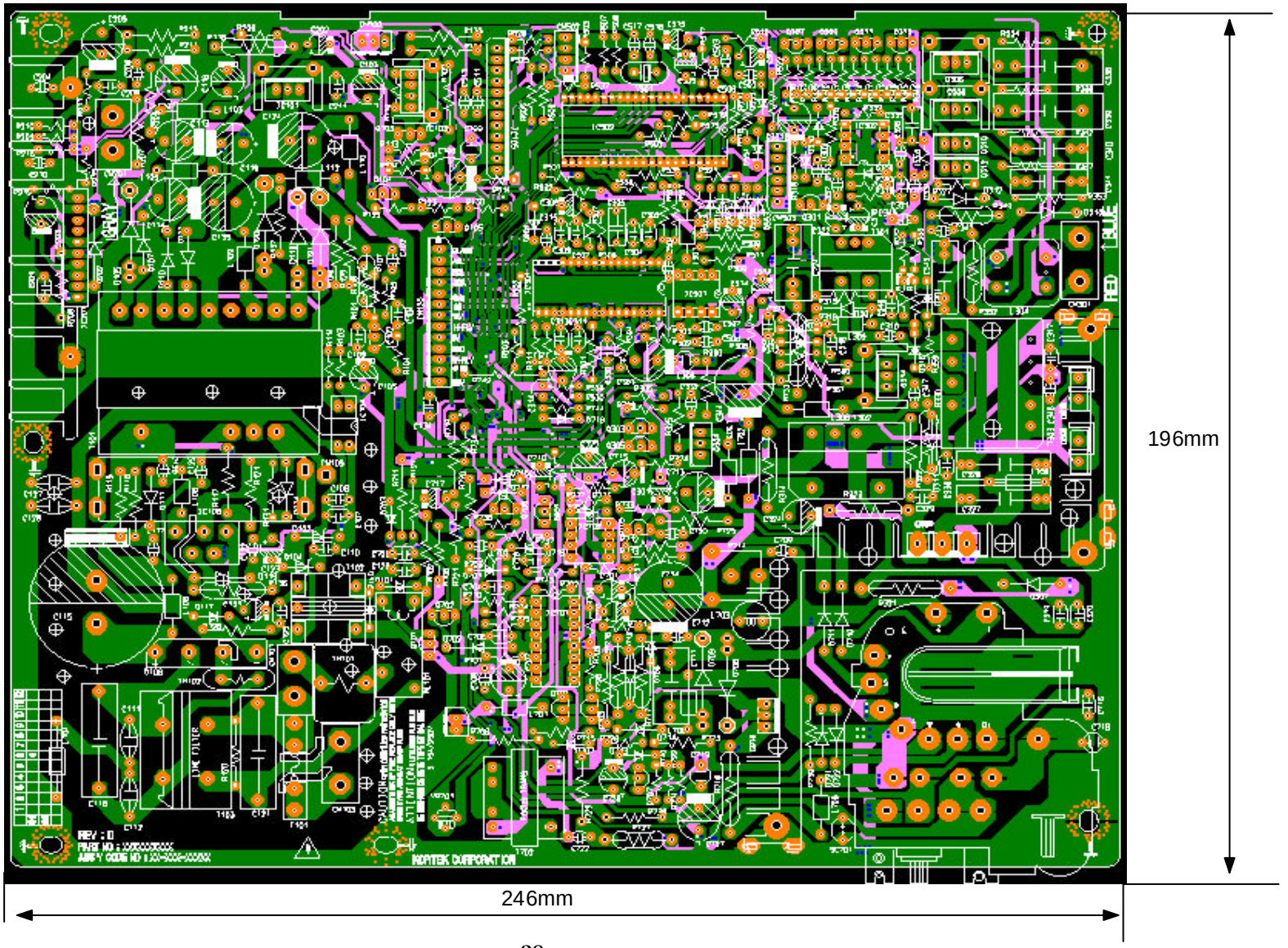
9. SCHEMATIC

9-2 VIDEO



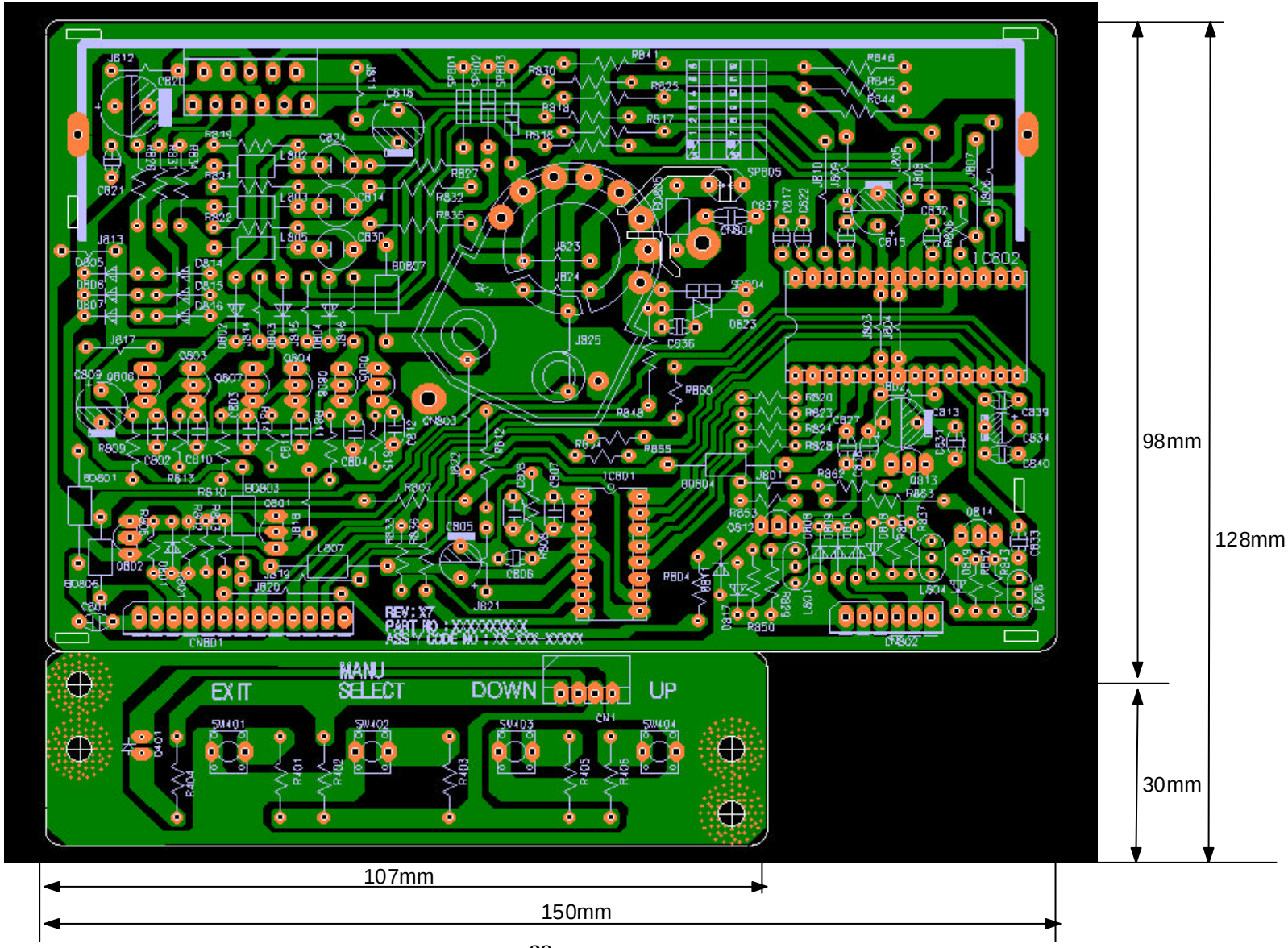
10. PRINT CIRCUIT BOARD

10-1 MAIN



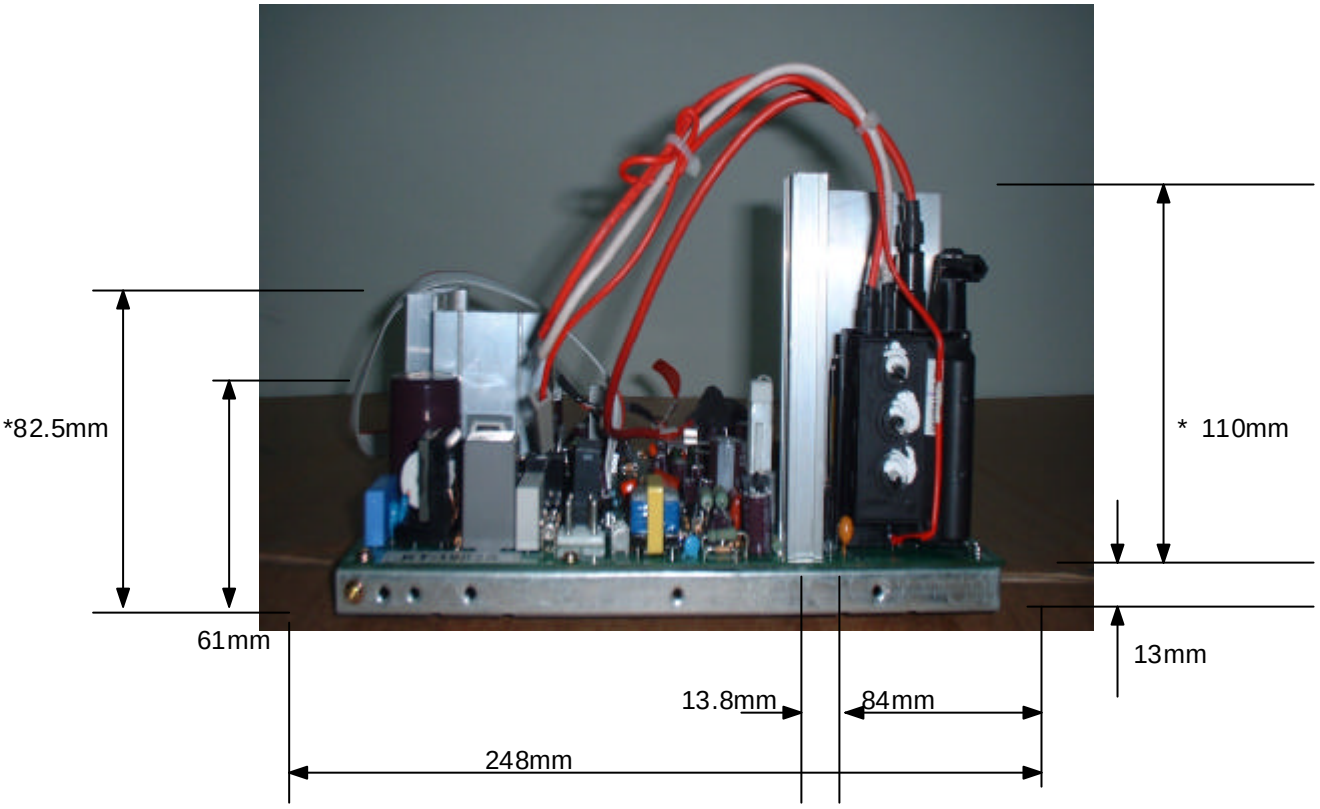
10. PRINT CIRCUIT BOARD

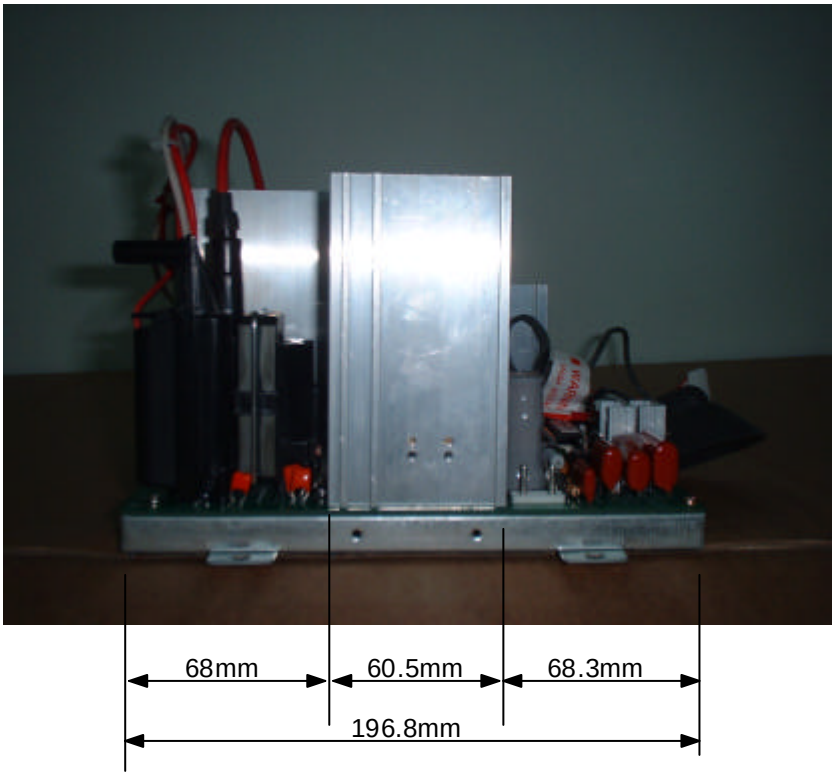
10-2 VIDEO

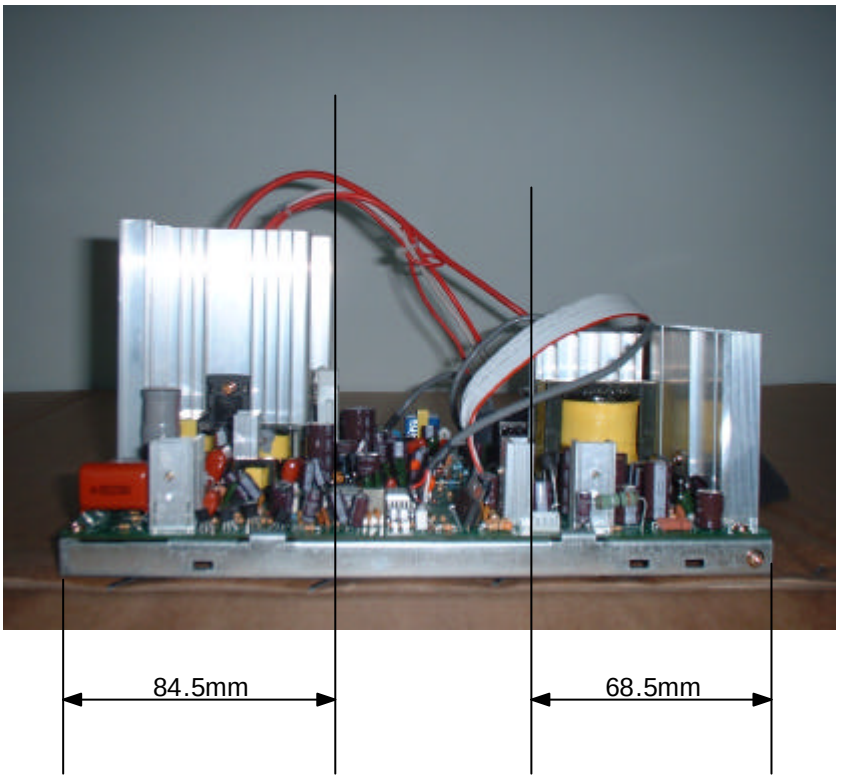


10. PRINT CIRCUIT BOARD

10-3 PCB DIMENSION






84.5mm
68.5mm