SERVICE MANUAL

COLOR MONITOR

P774B-2NT Series

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MANUFACTURE DATE: MAR.2005

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1. SPECIFICATIONS FOR E70f SERIES COLOR MONITOR

1. CRT : 43.2 cm (17") F&S high contrast CRT, 0.25mm dot pitch, Non-Glare Screen

2. Viewable image Size: 40.6CM (16") diagonal

3. Display Color: Unlimited Colors

4. External Controls:
   Power On/Off, OSD key, Function knob: Contrast, Brightness, Degauss, H-Size, H-Center, V-Center, V-Size, ZOOM, Pincushion, Trapezoid, Pin-Balance, Parallelogram, Rotation, Color Temperature, Moire Reduce, Recall, Language select, OSD EXIT,User's Color,pincushion.

5. Input Video Signal

Factory Preset	#1	#2	#3	#4
Resolution	720*400	640*480	640*480	800*600
H (KHz)	31.327	31.469	43.3	53.674
V (Hz)	69.616	59.943	85.00	85.061
Factory Preset	#5	#6	#7	
Resolution	1024*768	1152*864	1280*1024	
H (KHz)	68.677	67.500	63.981	
V (Hz)	84.997	7500	60.020	

6. Display Size
   Horizontal: 316 mm +/-4mm
   Vertical: 236 mm +/-4mm

7. Scanning Frequencies
   Horizontal: 30KHz ~ 72KHz
   Vertical: 50 Hz ~ 160 Hz

8. Factory Preset Timings: 7
   User Timings: 20

9. Misconvergence
   A Zone: 0.30mm Max.
   B Zone: 0.40 mm Max.

10. Video Bandwidth: 120 MHz

11. Power Source:
    Switching Mode Power Supply
    AC 100 ~240V, 50/60Hz Universal Type

12. Operating Temperature: 0°C to 40°C Ambient

13. Humidity: 5% to 85% Relative, Non-Condensing

14. Weight: 17. Kgs(Net), 20.5Kgs(Gross)

15. Package Specifications
    Width: 540 mm
    Height: 537 mm
    Depth: 570mm

16. External Connection:
    15 Pin D-sub Connector
    AC Power Cord

17. Regulatiory/Safety

- EN 60950 + EKI-ITB 2000: GS-mark
- UL60950
- CSA 22.2 No.60950
- VDE 0860 (implosion protection)
- CE-mark
- CB-certificate and test report according to IEC60950

The model is designed to reach following approvals:			
- EN 55022 class B and EN 50024 → CE-mark			
- FCC class B part 15			
Test procedures	Standards	Requirements frequency range	Remarks
Conducted power-line emission	EN 55022 Class B FCC Part 15, Subq.B	150 kHz ~ 30 MHz 450 kHz ~ 30 MHz	
Radiation emission	EN55022 Class B FCC Part 15,Subq.B	30 MHz ~ 1 GHz 30 MHz ~ 1 GHz	30 MHz ~ 2 GHz if clock > 108 MHz
Electrostatic (ESD)	EN 55024	- no functional - disturbance: - 8 kV air discharge	
Immunity to RF field strength	EN55024	80 MHz ~ 1 GHz 3V/m	Modulation
Electrical fast transient	EN 55024	- no functional disturbance: 1 kV power cord 0.5kV signal cable	
Disturbance measurement	EN 55024		
Electrostatic field magnetic field electric field	MPR II TCO(option)		

2. PRECAUTIONS AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.
2. Operation of the display with the cover removed, may cause a serious shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with precautions necessary when working on high voltage equipment.
3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.
4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.
5. Symbol "⚠ " means safety relative parts. The use of substitute replacement parts which do not have the same characteristics as specified in the parts list may create shock, fire or explode etc.

6. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads.
   Test method for current leakage is described as follow.
   (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).
   (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15UF, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15UF capacitor.
   (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.
   (d) Voltage measured must not exceed 0.5 volts RMS. This corresponds to 0.35 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1/2W of metal oxide film resistor) in circuit board, keep the resistor about 10mm (1/2 in) away from circuit board.
3. Keep wires away from high voltage or high temperature components.
4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on this model should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnecting ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

25.0KV ± 1KV

with a line voltage of 120/240 VAC. Higher voltage may also increase possibility of failure in HV supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

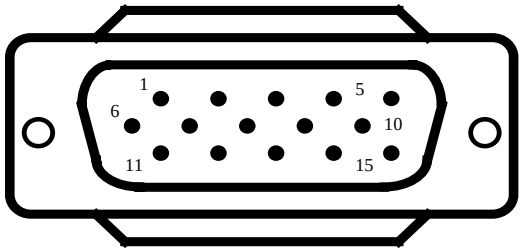
To determine the presence of high voltage, use accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device. When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead.(AC line cord disconnected from AC power outlet.)

The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continue safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

3. OPERATING INSTRUCTIONS

This procedure gives you instructions for installing and using the Color display.

1. Position the display on the desired operation and plug the power cord into a convenient AC outlet. Three-wire power cord must be shielded and is provided as a safety precaution as it connects the chassis and cabinet to the electrical conduit ground. If the AC outlet in your location does not have provisions for the grounded type plug, the installer should attach the proper adapter to ensure a safe ground potential.
2. Connect the 15-pin color display shielded signal cable to your signal system device and lock both screws on the connector to ensure firm grounding. The connector information is as follow:



15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	RED	**9.**	5V From PC
2.	GREEN	**10.**	Sync GND
3.	BLUE	**11.**	NC
4.	GND	**12.**	SDA
5.	GND	**13.**	HORIZ. SYNC
6.	GND-R	**14.**	VERT. SYNC (＊VCLK)
7.	GND-G	**15.**	SCL (DDC CLOCK)
8.	GND-B		

3. Apply power to the display by turning the power switch to the "ON" position and allow about thirty seconds for display tube warm-up. The Power-On indicator lights when the display is on.
4. With proper signals feed to the display, a pattern or data should appear on the screen, adjust the brightness and contrast to the most pleasing display.
5. This monitor has power saving function following the VESA DPMS. Be sure to connect the signal cable to the PC.
6. If your color display requires service, it must be returned with the power cord.

4. ADJUSTMENT

4-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

4.1.1. Approximately 30 minutes should be allowed for warm up before proceeding.

4.1.2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

4-2 MAIN ADJUSTMENTS

NO.	FUNCTION		LOCATION	DESIGNATION
1.	14V ADJ		PCB - MAIN	VR903
2.	B + ADJ		PCB - MAIN	VR902
3.	SCREEN ADJ		FLY BACK TRANS	T402 SCREEN VR
4.	FOCUS ADJ		FLY BACK TRANS	T402 FOCUS VR1&VR2
5.	ABL ADJ		PCB - MAIN	AB in factory OSD
6.	FUNCTION ADJ	-MENU	PCB - MAIN	<SW104>
		-UP ▶	PCB - MAIN	SW104
		-DOWN ◀	PCB - MAIN	<SW103>
		-EXIT	PCB - MAIN	SW103
		-RECALL	PCB - MAIN	(SW103)

4-3 ADJUSTMENT METHOD

4.3.1. 14V, B + & HV voltage adjustment:

A. Chroma-2000 Signal generator or PC equivalent set mode 1, VGA 640X480 pattern 1.0.

B. Connect a DC Volt meter between TP901 and ground, then adjust VR903to be 14VDC.

C. Connect a DC Volt meter between TP902 and ground, then adjust VR902 to be 64 VDC.

4.3.2. Factory preset Timings Adjustment:

A. Press MENU Key to show OSD window press Up or Down Key to switch the functional controls.

B. Press the Up Key to select the "ZOOM" function, then press the MENU Key. While do not release the MENU Key until the OSD window changed to the Factory preset window.

C. The Factory preset window contains the following functional controls. Select one of the control. Then press the Up/Down Key to adjust its value for the optimum picture.

CONTRAST	H-MOIRE REDUCE
BRIGHTNESS	V-MOIRE REDUCE
H-CENTER	R-GAIN
H-SIZE	G-GAIN
V-CENTER	B-GAIN
V-SIZE	R-BIAS
Tm BURN IN TIME	G-BIAS
PINCUSHION	R-BIAS
TRAPEZOID	DEGAUSS
PIN-BALANCE	OSD EXIT
PARALLELOGRAM	**SH** OSD H-SIZE
ROTATION	**DC** video ic dc off set
Top corner	V-LINEARITY
Bottom corner	**FM** Frequency select
93 9300 COLOR TEMPERATURE	**KY** Select four key or five key
65 6500 COLOR TEMPERATURE	**HP** H-SIZE-PHASE
OH OSD H-CENTER	**OV** OSD V-CENTER
BI SET BURN-IN	**HL** H-Linearity Modify
HS SUB-H-SIZE	**SB** Brightness Select
SV OSD V-SIZE	**LH** Brightness Save
SAVE BURN IN GEO	Language select
AB ABL	RETURN
VR V-HV Variation rate ajust	**HR** H-HV Variation rate ajust
Adjust the linearity of V-both sides to center	

D. To switches the input signal to the other Timing Mode. Please follow step C ~ D to get the optimum picture.

E. Select the "  " RETURN function and press the MENU Key, then the Factor Preset window will be returned to the original OSD window.(user's operating condition)

F. The setting data of the CONTRAST, BRIGHTNESS, PIN-BALANCE, PARALLELOGRAM, ROTATION, COLOR TEMPERATURE are common mode saved in the memory. Don't needed adjust it individual at every timing Mode and save in the memory.

4.3.3. White Balance adjustment:

A. Choose key X of OSD and press it for above 10s,then enter into factory setting area for modulation.

B. Brightness & contrast ratio MAX, fix to G-BIAS,fix to 47.

C. Raster Max modulation: Raster Pattern, adjust R or B bias and G2, make x=271, y+301, Y=3.0±0.2 cd/m2

D. Raster cut off modulation: Raster Pattern, adjust brightness to make Cut off: 0.08±0.02 cd/m2,and then put 9300K & 6500K into it.

E. Choose 3 for LH,set R or G or B gain,make x=281, y=311，Y=260,then save it into 9300K color temperature,set R or G or B gain, make x=313, y=329 Y=240,then save it into 6500K color temperature,in the end exit the factory setting area.

F. Choose 2 for LH,set R or G or B gain,make x=281, y=311，Y=200,then save it into 9300K color temperature,set R or G or B gain, make x=313, y=329 Y=180,then save it into 6500K color temperature,in the end exit the factory setting area.

G. Choose 1 for LH,set R or G or B gain,make x=281, y=311，Y=140,then save it into 9300K color temperature,set R or G or B gain, make x=313, y=329 Y=140,then save it into 6500K color temperature,in the end exit the factory setting area.

H. Exit factory setting area, white screen appears, the brightness cuts off, adjust factory AB value, make it 9300K, color temperature Y=95±1 cd/m2

I. After modulation, it’s necessary to check if the white balance accords with the normal specification. If not, which needs reset.

4.3.5. Purity Adjustment:

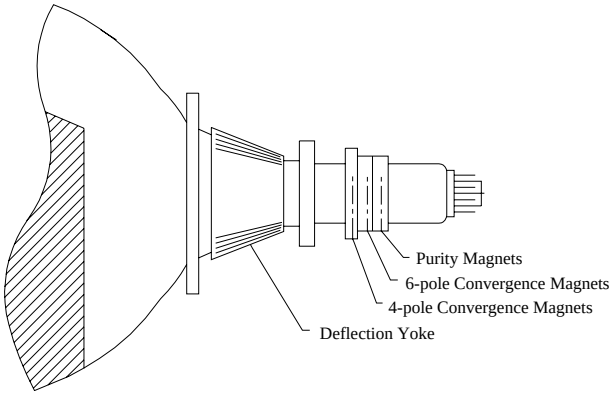
A. Be sure that the display is not being exposed to any external magnetic fields.

B. Ensure that the spacing between the Purity, Convergence, Magnet, (PCM), assembly and the CRT stem is 29mm. (See below diagram)

C. Produce a complete, red pattern on the display. Adjust the purity magnet rings on the PCM assembly to obtain a complete field of the color red. This is done by moving the two tabs in such a manner that they advance in an opposite direction but at the same time to obtain the same angle between the two tabs, which should be approximately 180'.

D. Check the complete blue and complete green patterns to observe their respective color purity. Make minor adjustments if needed.

RELATIVE PLACEMENT OF TYPICAL COMPONENTS



4.3.6 Convergence adjustment:

A. Produce a magenta crosshatch on the display.
B. Adjust the focus for the best overall focus on the display.
   Also adjust the brightness to the desired condition.
C. Vertical red and blue lines are converged by varying the angle between the two tabs of the 4 pole magnets on the PCM assembly. (See above diagrams)
D. Horizontal red and blue lines are converged by varying the two tabs together, keeping the angle between them constant.
E. Produce a white crosshatch pattern on the display.
F. Vertical green and magenta lines are converged by varying the angle between the two tabs of the 6-pole magnets.
G. Horizontal green and magenta lines are converged by varying the two tabs together, keeping the angle between them constant.

4.4 EDID CONTENTS

	x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	xA	xB	xC	xD	xE	xF
00:	00	FF	FF	FF	FF	FF	FF	00	05	E3	00	C7	*	*	*	*
10:	*	*	01	03	68	20	18	78	2A	4F	29	A0	57	49	9B	26
20:	10	48	4C	A4	42	00	31	59	45	59	61	59	81	80	01	01
30:	01	01	01	01	01	01	EA	24	00	60	41	00	28	30	30	60
40:	13	00	36	E6	10	00	00	1E	F9	15	20	F8	30	58	1F	20
50:	20	40	13	00	36	E6	10	00	00	1E	00	00	00	FC	00	48
60:	54	37	30	30	0A	20	20	20	20	20	20	20	00	00	00	FD
70:	00	32	A0	1E	48	0B	00	0A	20	20	20	20	20	20	00	**

5. CIRCUIT DESCRIPTION

5-1 MICRO CONTROLLER CIRCUIT

MICRO Controller

The IC101 contains a 8031 8-bit CPU core, 60K bytes of RAM, 16K bytes of ROM,14 channel 8 bit PWM D/A converters, 2 channel A/D converters for key detection,0.5sec watch-dog timer, internal H-sync and V-sync signals processor providing mode detection, watch- dog timer preventing system from abnormal operation, and an I²C bus interface.

H/V sync signals processor

The functions of the sync processor include polarity detection, H-SYNC & V-SYNC signals counting, Programmable SYNC signals output, free running signal generator. Pin41/Pin42 are for the H-SYNC and V-SYNC input, Pin34/Pin33 will output the same signal as input sync signal without delay, and the polarity are setting in the positive. When no signal input, the Pin32 will output a 60Hz V-SYNC free run signal. The Pin33 will output a 48KHz H-SYNC free run signal. for the monitor testing use.

5-2 DEFLECTION CIRCUIT

The deflection circuit is achieved by a high performance and efficient solution IC 401 (STV 9118) for this monitor. The concept is fully DC controllable and can be used in applications with a micro-controller solutions.
The STV9118 provides sync. Processing with full auto sync. Capability, a flexible SMPS block and an extensive set of geometry control facilities. Further the IC generates the drive waveforms for DC coupled vertical boosters to the STV9118.

Horizontal Oscillator

The oscillator is of the relaxation type and requires a capacitor of 1nF C405 at pin29.

PLL 1 Phase Detector

The phase detector is a standard one using switched current sources. It compares the middle of H-sync. with a fixed point on the oscillator saw-tooth voltage. The PLL loop filter R411,C437,C435 is connected to Pin9.

PLL2 Phase Detector

The PLL2 detector thus compensates for the delay in the external H-deflection circuit by adjusting the phase of the HDRV output pulses. The phase between H-flyback and H-sync can be controlled at pin5.

X-ray Protection

The X-ray protection input pin25 provides a voltage detector with a precise threshold. If the voltage exceeds this threshold for a certain time, an internal latch switches the whole IC into protection mode. In this mode several pins are forced into defined states:

Vertical Oscillator

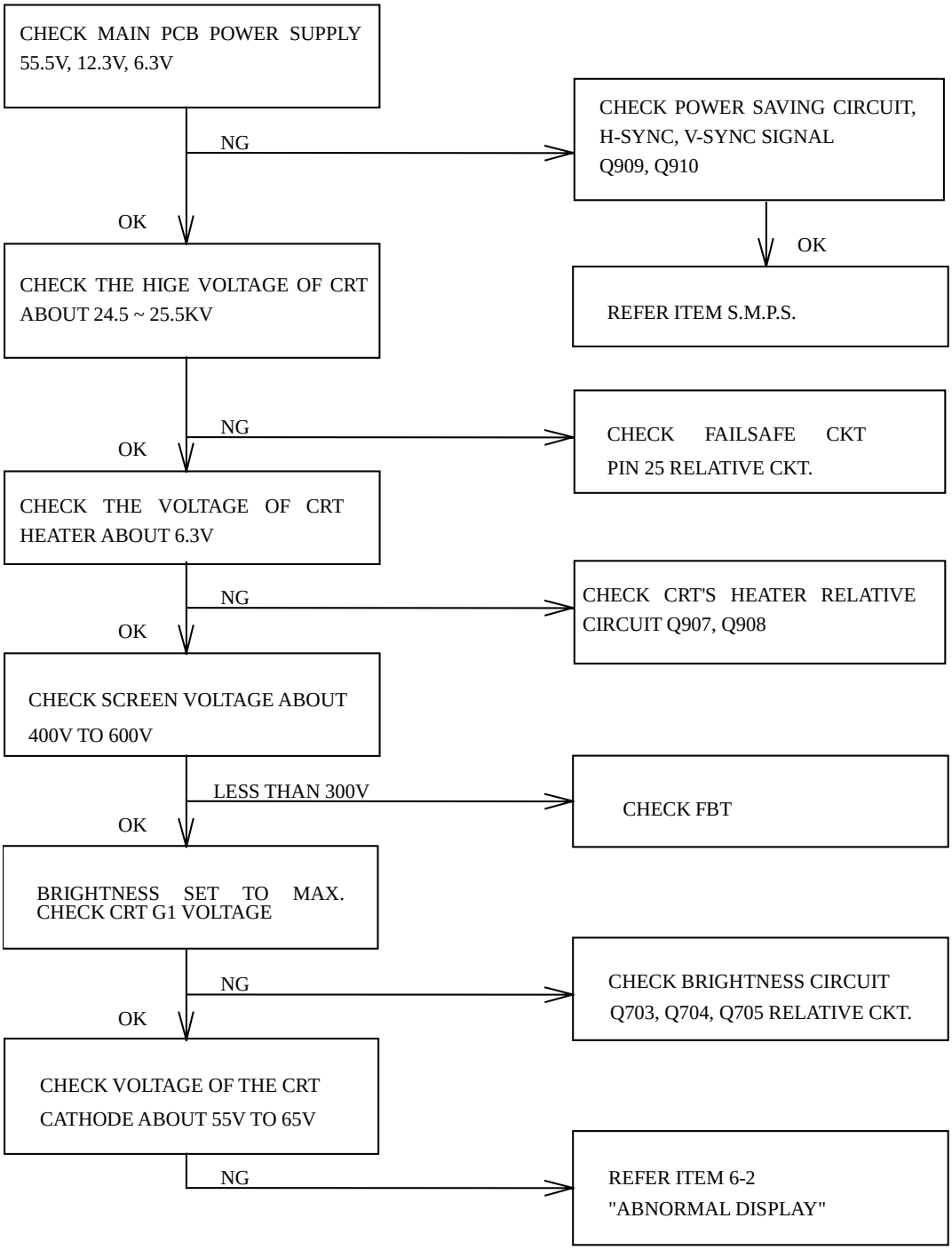
The vertical free –running frequency is determined by the resistor C610 at pin19. Usually the free-running frequency should be lower than the minimum trigger frequency.

5-3 TRANSISTOR & DIODE CIRCUIT

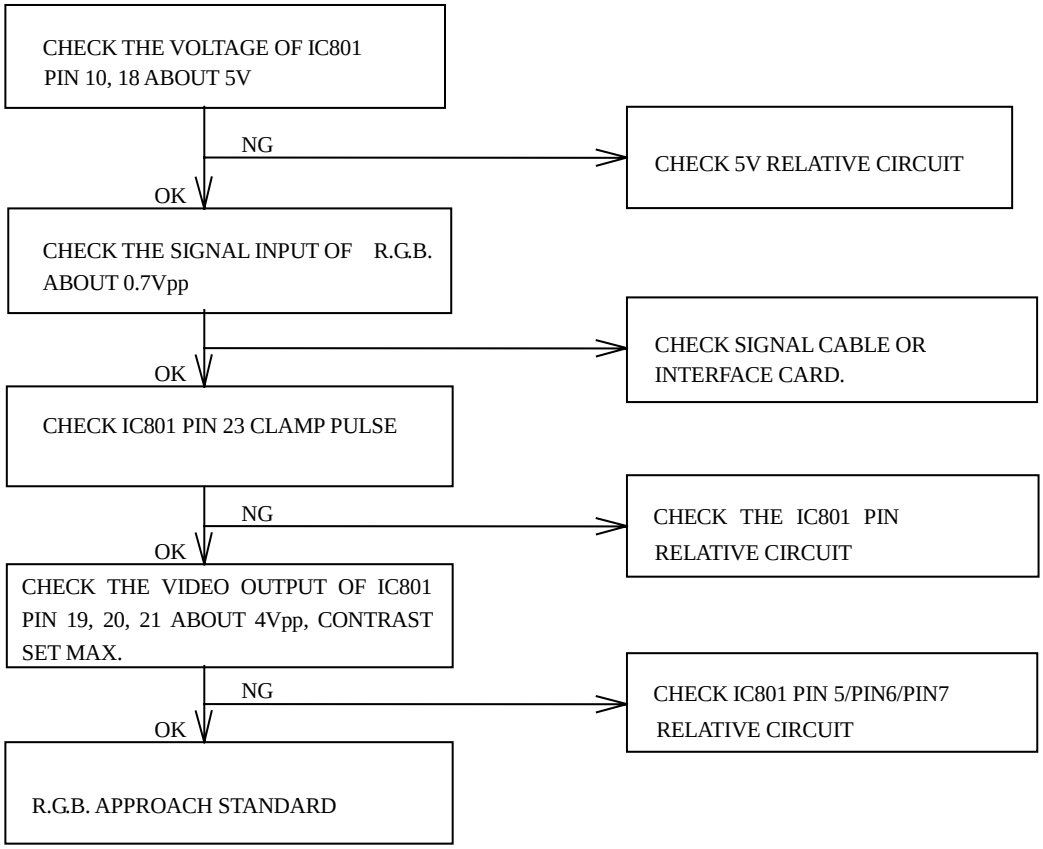
LOCATION	CIRCUIT FUNCTION DESCRIPTION
D901 ~ D904	Bridge Rectifier for AC Source
D910	Clamp Diode for Snubber CKT
D918, D919	Rectifier for Output Voltage
D922	Rectifier for Output Voltage
D923	Rectifier for Output Voltage
D925	Rectifier for B+ Supply
Q901	MOS FET for Switching Power Control.
Q907, Q908	Use for Off-Mode to Cut-off 6.3V Supply Voltage
Q909, Q918	Use for Standy-By or Suspend Mode to Cut-off 12V Supply Voltage
Q912, Q920	Push-Pull Topology to Drive Q911
Q913	Degaussing Switcher Transistor
Q921	5V Regulator Transistor
Q701	Turn-on at Power ON/OFF and Change Mode to Protect Hor.Block
Q402	HOR. Driver Transistor
Q426	Horizontal s correction control MOSFET
Q404, Q405	As Differential Amp. to Drive Q406
Q406	Transistor for H-Size Control
Q705	Brightness Control CKT

6.TROUBLE SHOOTING CHART

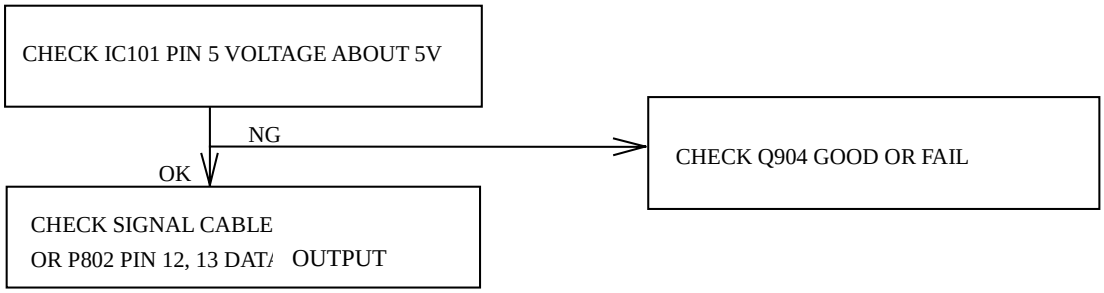
6-1 NO RASTER, CRT RELATIVE CIRCUIT PROBLEMS



2.ABNORMAL VIDEO LEVEL ON SCREEN

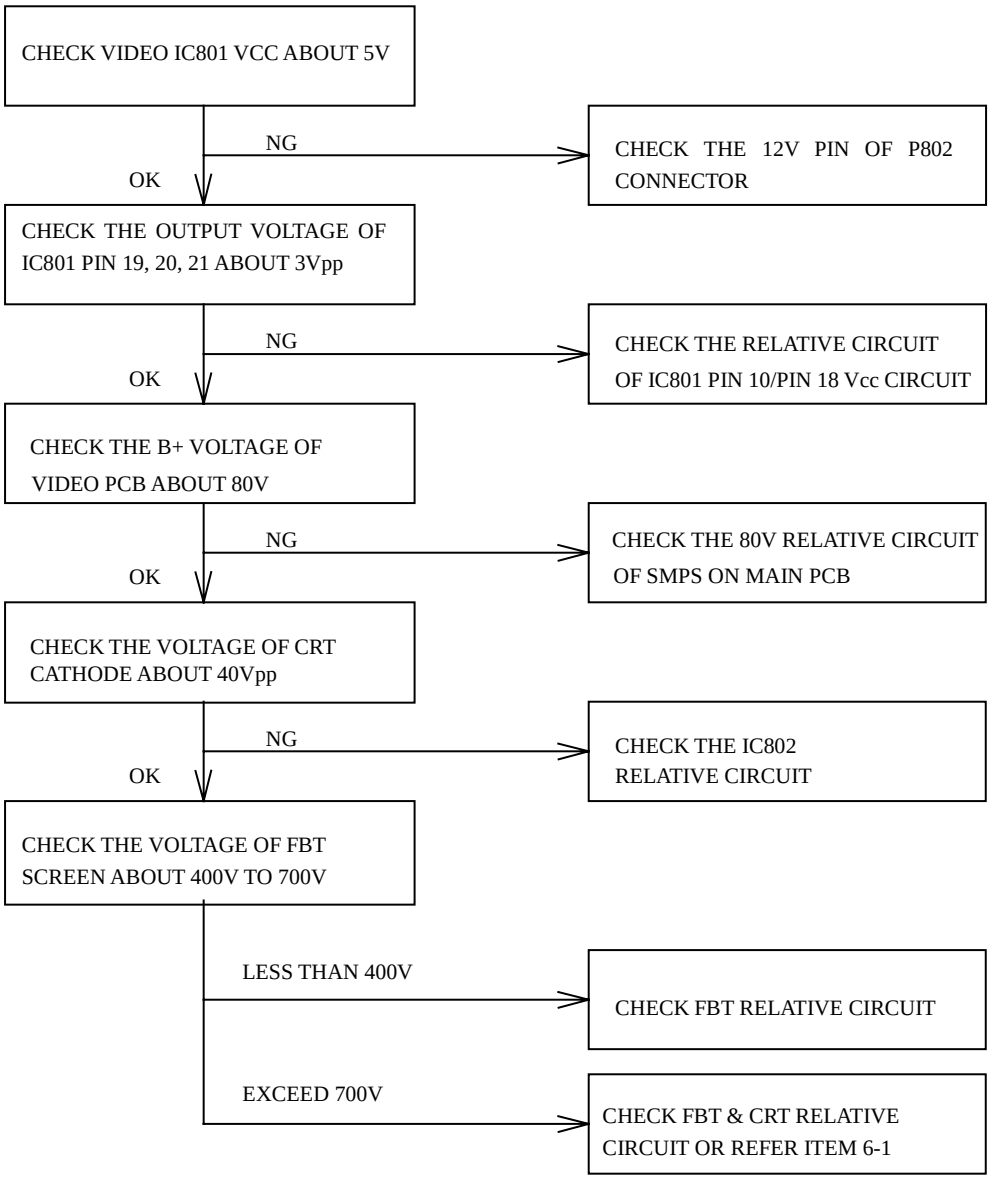


3. ABNORMAL DDC (PLUG & PLAY)

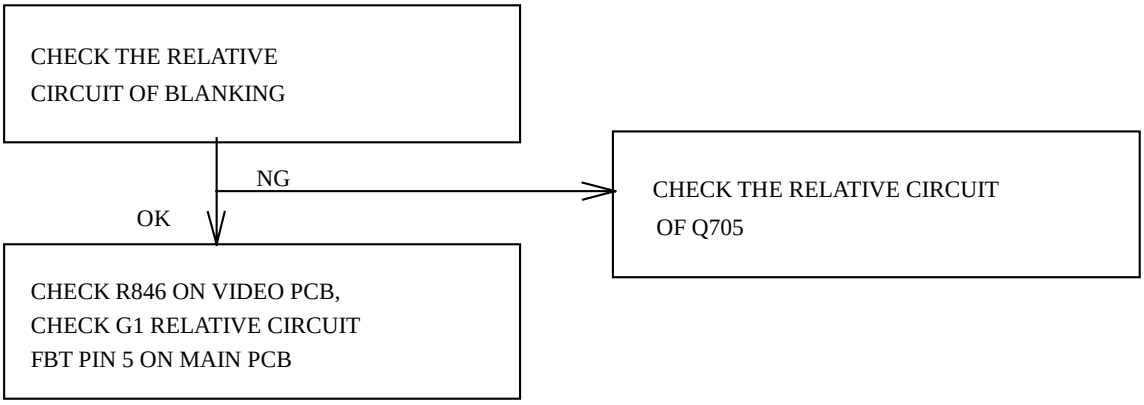


6-2 ABNORMAL DISPLAY

1.NO SIGNAL ON SCREEN

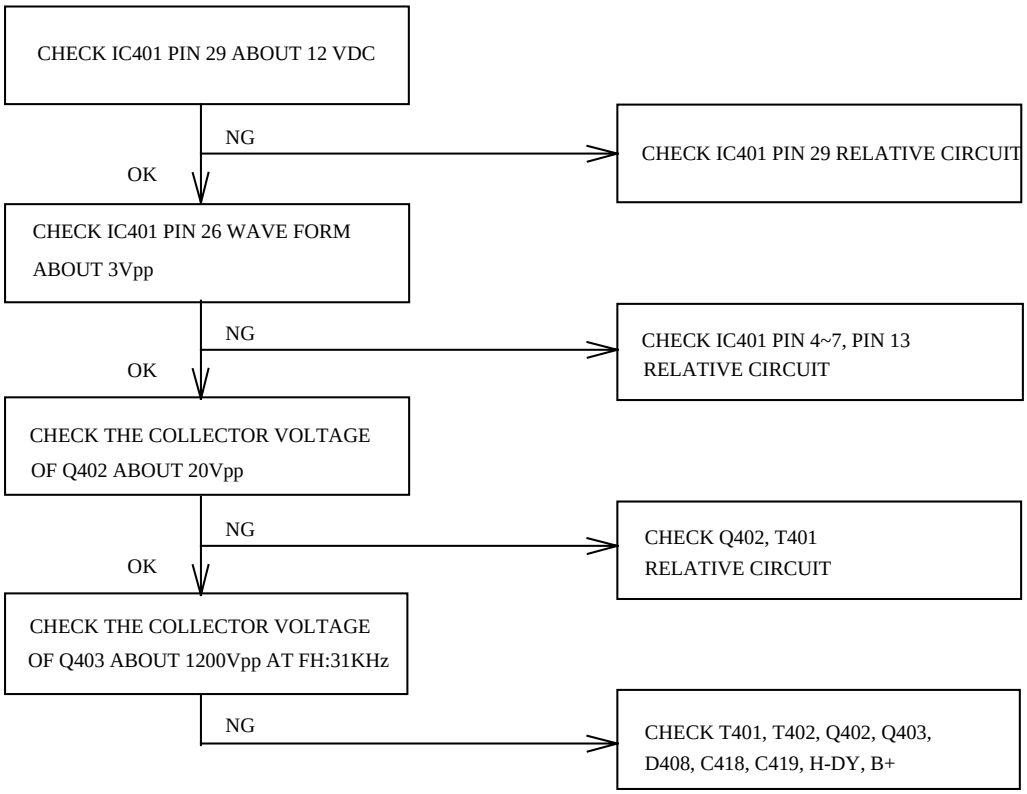


6-3 NO BLANKING



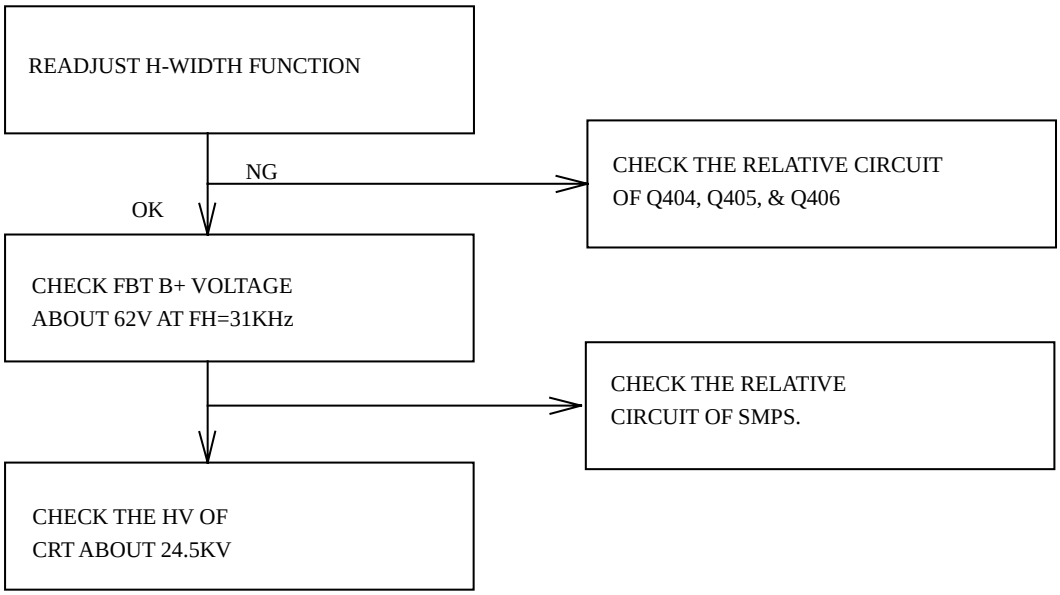
6-4 HOR./OSC/DEF/HV CIRCUIT FAULT

1. NO RASTER (DISCONNECT WITH SIGNAL CABLE)



6-5 ABNORMAL HORIZONTAL DEFLECTION

1. ABNORMAL HORIZONTAL WIDTH OF VIDEO



2. ABNORMAL HORIZONTAL VIDEO CENTER

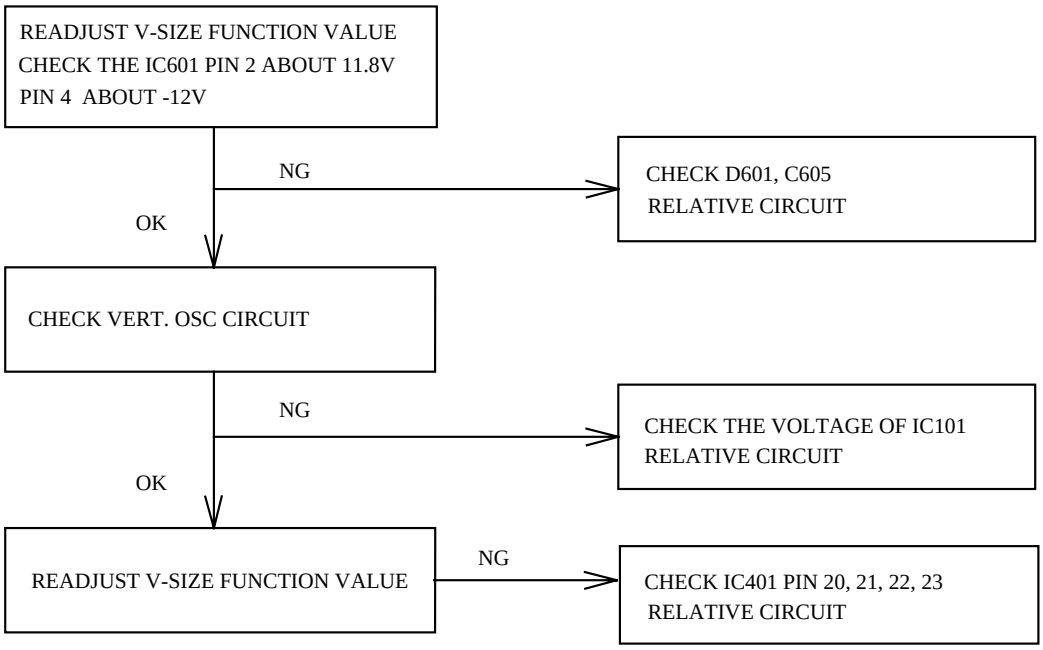
CHECK IC401 PIN 4, 7
RELATIVE CIRCUIT

3. ABNORMAL HORIZONTAL LINEARITY

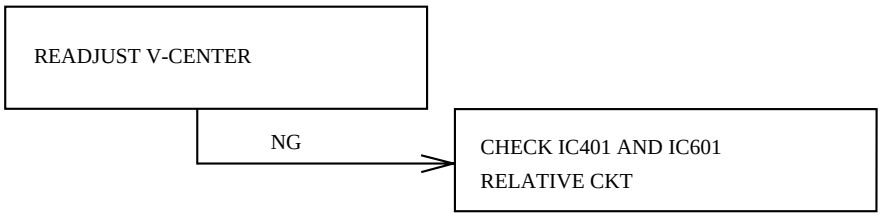
CHECK L401,Q426,Q428
AND IC101 PIN 36, 40

6-6 ABNORMAL VERTICAL SCANNING

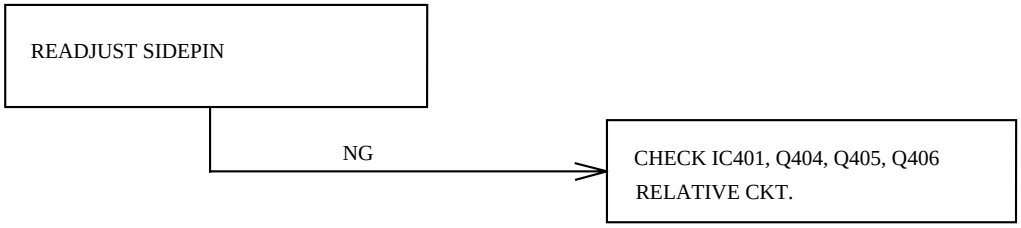
1. ABNORMAL VERTICAL SIZE



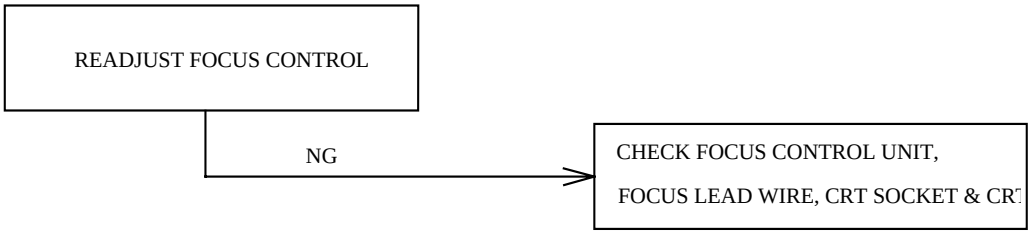
2. VERTICAL CENTER



6-7 SIDE-PIN CUSHION DISTORTION



6-8 POOR FOCUS



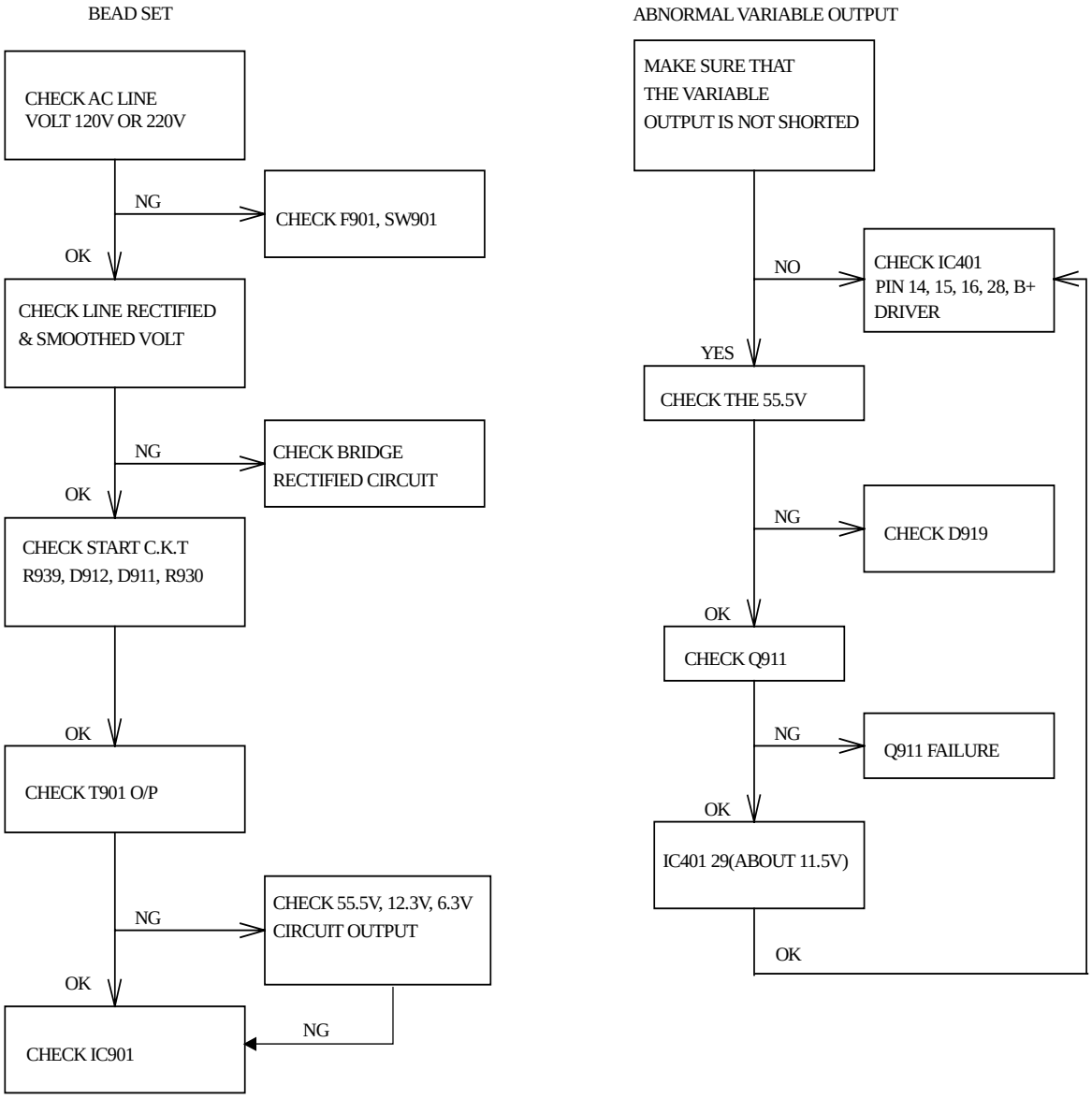
6-9 POWER SUPPLY TROUBLE SHOOTING CHART

BEFORE CHECK SW.REG. PLEASE REFER TO THE POWER SUPPLY BLOCK DIAGRAM

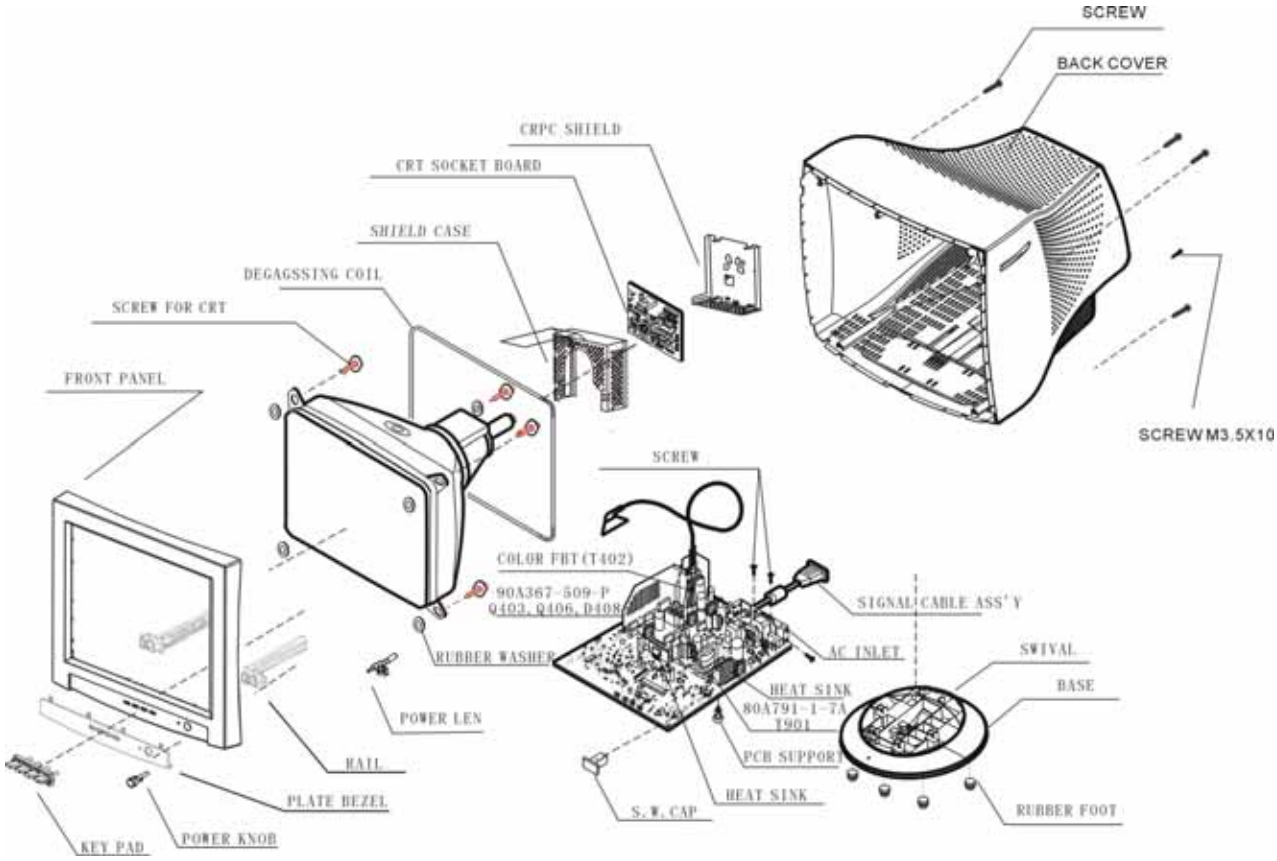
POWER SUPPLY OUTPUT: (A) VARIABLE OUTPUT : 58V - 145V

(DEPENDING EPENDING UPON H.SYNC FREQUENCY)

(B) CONSTANT OUTPUT : 6.3V, 14V, -12V, 78V



7. MECHANICAL OF CABINET FRONT DIS-ASSEMBLY



8. BOM LIST

LOCATION	PARTS No.	SPECIFICATION	NUMBER	UNIT
	CKB774B2NT	KEPC BOARD	1	PCS
	CMB774B2NT	CHASSIS FOR B774B-2NT	1	PCS
	1A 503503 47	SCREW FOR CRT	4	PCS
	5A600604075S	CRT WASHER	2	PCS
	5A600605075S	CRT WASHER	2	PCS
	11A 112500	WIRE MOUNT	1	PCS
	11A 115500	FBT CLIP	1	PCS
	19A 403 7	STEEL	1	PCS
	33A6166 MN A	KEY PAD LEFT	1	PCS
	33A6167 MN A	KEY PAD RIGHT	1	PCS
	33A6168 MN A	PLATE POWER	1	PCS
	33A6169 MP C	POWER KNOB	1	PCS
	33A6170 MO C	SMALL PLATE BEZEL	1	PCS
	33A6920 1	CRT SUPPORT	2	PCS
	34A6107 N4 A	FRONT PANEL	1	PCS
	40A 58160213A	S/N LABEL 80X23MM	4	PCS
	40A 58162435A	MANUAL P/N LABEL	1	PCS
	40A 581654 3A	CARTON LABEL	2	PCS
	40A206865414A	ID LABEL	1	PCS
	41A 765654 6A	MANUAL	1	PCS
	44A670365411A	CARTON	1	PCS
	44A6781 1	EPS CUSHION	1	PCS
	44A6781 2	EPS CUSHION	1	PCS
	45A 76 28 RN	PE BAG FOR MANUAL	1	PCS
	45A 88 7 RN	Monitor PE BAG	1	PCS
	45A 88507	17" OUT PE BAG	1	PCS
	45A 88601	EPE COVER	1	PCS
	50A 500500	CABLE TIE	1	PCS
	50A 502 2	PLASTIC TIE	2	PCS
	50A 502 5	CABLE TIE	1	PCS
	51A 6 4	SILICON	9	G
	52A 1150 C	TAPE	12	CM
	52A 1185	MIDDLE TAPE FOR CARTON	150	CM
	85A6028500	SHIELD CASE	1	PCS
	85C6027604	SHIELD CASE	1	PCS
	89A414G15N YH	POWER CORD WALL-OUT FOR	1	PCS
	89C 71B5MY LJ	SIGNAL CABLE	1	PCS
	B1A1035 10120	SCREW	1	PCS
	D1A1140 7128	SCREW 4X7(FOR AC)	1	PCS
	Q1A 330 10128	SCREW $ 3x10	3	PCS
	Q1A 340 16120	SCREW 4X16	4	PCS

	Q1A 340 16128	SCREW	4	PCS
	750A1697504 JA	0.35*90Ts Deg.coil	1	PCS
	W33A4461 Y 1A	RAIL	1	PCS
	W33A4461 Y 2A	RAIL	1	PCS
	W33A6171AMN A	BIG PLATE BEZEL	1	PCS
	CKB774B2NTAI	KEPC AI	1	PCS
H105	95C8013 5614	WIRE HARNESS	1	PCS
LED1	81A 10 4 BH	BL-BYG274-DP-1.6%-LC4-A	1	PCS
SW101	77A 600 1GCJ	TACT SWITCH TSPB-2	1	PCS
SW102	77A 600 1GCJ	TACT SWITCH TSPB-2	1	PCS
SW103	77A 600 1GCJ	TACT SWITCH TSPB-2	1	PCS
SW104	77A 600 1GCJ	TACT SWITCH TSPB-2	1	PCS
SW105	77A 600 1GCJ	TACT SWITCH TSPB-2	1	PCS
	715C1340 A 1	KEPC BOARD	1	PCS
R127	61A 60243352T	CFR 43K OHM +-5% 1/6W	1	PCS
R128	61A 60216352T	CFR 16K OHM +-5% 1/6W	1	PCS
R181	61C 21025252T	MFR 2.5KOHM +-1% 1/6W	1	PCS
R182	61A 60262252T	CFR 6.2K OHM +-5% 1/6W	1	PCS
	AMB774B2NT	MAIN BOARD B774B-2NT	1	PCS
	CRB774B2NT	CRT BOARD B774B-2NT	1	PCS
	11A6033 2	PCB SUPPORT	2	PCS
	15A5640 1 A	B AL GND LUG	1	PCS
	40A 581624 2B	CHASSIS LABEL	1	PCS
	55A 1 4	SOLDER BAR	22	G
	71A 100 8	FERRITE CORE 12*25*15	1	PCS
	71A 100 9	FERRIRE CORE 28.5*17.5*	1	PCS
	B1A1040 12128	SCREW	1	PCS
	B1A1140 7128	SCREW	1	PCS
	M1A1140 6128	SCREW	1	PCS
	705A773ZC57 6A	Q428 ASS'Y	1	PCS
	705A774BC5602N	IC901 ASS'Y	1	PCS
	705A774BC57 6A	Q426 ASS'Y	1	PCS
	705A774BC5701N	Q403 ASS'Y	1	PCS
	705A774BC5703H	Q911 ASS'Y	1	PCS
	705A774BC6101H	NR901 ASS'Y	1	PCS
	705A774BC84 1H	F901 ASS'Y	1	PCS
	705A774BC8702H	CN901 ASS'Y	1	PCS
	705A774BC9301N	D919 ASS'Y	1	PCS
C401	67A 309102 3	1000UF +-20% 16V	1	PCS
C402	67A 305470 9	47UF +-20% 100V	1	PCS
C405	67A 309102 3	1000UF +-20% 16V	1	PCS
C418	63A210J5628FC	5600P	1	PCS
C419	63A210J4325CU	4.3nF/1KV +-5%	1	PCS

C422	64A100J225 59	2.2UF +-5% 100V	1	PCS
C425	63A210J2443CC	0.24uF 400V	1	PCS
C426	63A210J6842CC	0.68UF 250V +-5% MPP	1	PCS
C428	63A210J2442CC	0.24uF 250V	1	PCS
C432	67A 21547011J	47UF +-20% 200V JAMICON	1	PCS
C482	67A 21547011J	47UF +-20% 200V JAMICON	1	PCS
C488	65A 2K470 6A6921	47PF 2KV	1	PCS
C489	65A 2K470 6A6921	47PF 2KV	1	PCS
C603	67A 305102 3	1000 UF +-20% 16V	1	PCS
C605	67A 305102 3	1000 UF +-20% 16V	1	PCS
C713	67A 305100 12	10UF +-20% 250V	1	PCS
C900	63A107K105 US	1.0UF 300VAC	1	PCS
C907	67A 3015115X	150UF 450V	1	PCS
C919	65A 2M103 3B6921	0.01UF 2KV 20% Z5U	1	PCS
C931	67A 215221 9J	220UF +-20% 100V JAMICO	1	PCS
C936	67A 305102 4	1000UF +-20% 25V	1	PCS
C960	65A305M3322B2	3300PF 250VAC/400VAC	1	PCS
C961	65A305M3322BH	Y2 3300PF +-20% 250VAC/	1	PCS
C962	65A305M4722B2	4700PF +-20% 400VAC ACF	1	PCS
C963	65A305M4722B2	4700PF +-20% 400VAC ACF	1	PCS
CN902	33A3074 1	2P PLUG	1	PCS
CN903	33A3803 3	WAFER EH-E	1	PCS
D901	93A 5255P52T	1N5408 PEC	1	PCS
D902	93A 5255P52T	1N5408 PEC	1	PCS
D903	93A 5255P52T	1N5408 PEC	1	PCS
D904	93A 5255P52T	1N5408 PEC	1	PCS
D922	93A30408AT	RG-4S	1	PCS
D925	93A30408AT	RG-4S	1	PCS
DF925	71A 55 2 A	FERRITE BEAD 3*5*1.5	1	PCS
FB907	71A 55503	BEAD	1	PCS
FD901	71A 55 2	A FERRITE BEAD 6.5*5*1.7	2	PCS
FD902	71A 55 2	A FERRITE BEAD 6.5*5*1.7	2	PCS
FD903	71A 55 2	A FERRITE BEAD 6.5*5*1.7	2	PCS
FD904	71A 55 2	A FERRITE BEAD 6.5*5*1.7	2	PCS
GND1	9A 203 8	BRASS PIN	1	PCS
GND2	9A 203 8	BRASS PIN	1	PCS
H802	95C8013 13609	WIRE	1	PCS
IC101	56A1125107 X	NT68T-65U	1	PCS
IC102	56C1133 13	24LC08B/PG	1	PCS
IC401	56C 573513	E-STV9118	1	PCS
J036	71A 55 29	FERRITE BEAD 2.2*3.5*0.	1	PCS
L400	73C 147541 HB	COIL	1	PCS
L405	73A 253 69 T	150UH +-10% FOR TDK	1	PCS

L901	73A 174 7 S3	LINE FILTER	1	PCS
L903	73C 174502 6010	COIL	1	PCS
L906	73A 253 88 HB	CHOCK	1	PCS
P106	33A3278 5D	PLUG	1	PCS
P402	33A3192 4	4P PLUG	1	PCS
P803	33A3278 5D	PLUG	1	PCS
PR901	61A 52 27 4T	PTCR 9OHM+-20% 220V THI	1	PCS
Q907	57C2015 1A	2SB772-P	1	PCS
Q909	57C2015 1A	2SB772-P	1	PCS
R401	61A152M109 64	MOFR 1 OHM +-5% 2W	1	PCS
R407	61A152M158 64	MOFR 0.15 OHM+-5% 2W	1	PCS
R426	61A153M330 59	MOFR 33 OHM +-5% 3W	1	PCS
R428	61A153M688 59	MOFR 0.68 OHM +-5% 3W	1	PCS
R456	61A153M271 59	MOFR 270 OHM+-5% 3W	1	PCS
R607	61A 208109 64	MOFR 1 OHM +-5% 1W	1	PCS
R751	61A 60268152T	CFR 680 OHM +-5% 1/6W	1	PCS
R907	61A 208681 64	MOFR 680 OHM +-5% 1W	1	PCS
R914	61A 208680 64	MOFR 68 OHM +-5% 1W	1	PCS
R927	61A 208104 64	MOFR 100K OHM +-5% 1W	1	PCS
R929	61A152M228 64	MOFR 0.22 OHM+-5% 2W	1	PCS
R939	61A212Y75452T	750KOHM 1/2W	1	PCS
RY901	77A 260 5 2W	RELAY OSA-SS-212DM5	1	PCS
SG489	62A 10 16 W	SPARK GAP	1	PCS
SS1	95C2070548	WIRE	1	PCS
T401	79A 167125 H	DRIVER TRANSFORMER	1	PCS
T402	79A 774 1 CG	N FBT	1	PCS
T403	79A 167124 H	DRIVER TRANSFORMER	1	PCS
T901	80AS774 2T2G	TRANSFORMER	1	PCS
TP402	9A 211 2	PIN 1.2X15MM	1	PCS
VR902	75A 334303	CFVR 30K OHM +-20%	1	PCS
X101	93A 2243A PT	CRYSTAL	1	PCS
XGND	95A 90 23	TIN COATED	1	PCS
	715C1316 H L1	CMPC	1	PCS
C100	67A 309470 3T	47UF +-20% 16V	1	PCS
C101	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C102	67A 309470 3T	47UF +-20% 16V	1	PCS
C103	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C104	67A 309101 3T	100UF +-20% 16V	1	PCS
C105	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C106	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C107	65A 44222013T	22PF +-5% NPO 50V	1	PCS
C108	65A 44222013T	22PF +-5% NPO 50V	1	PCS
C110	67A 309100 3T	10UF +-20% 16V	1	PCS

C111	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C112	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C113	67A 309101 3T	100UF +-20% 16V	1	PCS
C116	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C117	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C118	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C119	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C130	65A 444102 5T	1000 PF 10% 50V Y5P	1	PCS
C131	65A 44233013T	33PF +-5% NPO 50V	1	PCS
C146	67A 309470 3T	47UF +-20% 16V	1	PCS
C403	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C404	67A 305100 7T	10UF +-20% 50V	1	PCS
C406	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C407	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C409	64A700J1020AT	PEN 0.001UF/50V +-5%	1	PCS
C410	64A178J154 1T	C121X 0.15UF 100V +-5%	1	PCS
C412	65A 44215113T6213	150PF +-5% NPO 50V	1	PCS
C413	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C414	64A178J474 1T	C121X 0.47UF 100V +-5%	1	PCS
C415	64A 44J4721AT	4700PF 100V PEI	1	PCS
C417	64A178J224 1T	C121X 0.22UF 100V +-5%	1	PCS
C421	65A517K102 2T	1000PF 10% Z5P 500V	1	PCS
C423	64A178J823 1T	CL21X 0.082UF 100V +-5%	1	PCS
C429	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C430	65A517K152 5T	1.5NF/500V,Y5P +-10%	1	PCS
C434	67A 309479 7T	4.7UF +-20% 50V	1	PCS
C435	64A178J103 1T	CL21X 0.01UF 100V +-5%	1	PCS
C436	67A 309220 7T	22UF +-20% 50V	1	PCS
C437	67A 309479 7T	4.7UF +-20% 50V	1	PCS
C443	67A 309470 3T	47UF +-20% 16V	1	PCS
C444	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C446	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C447	64A178J822 1T	CL21X 8200PF 100V +-5%	1	PCS
C449	64A178J473 1T	47NF +-5% 100V	1	PCS
C460	64A178J473 1T	47NF +-5% 100V	1	PCS
C463	64A 44J1031AT	.01UF +-5% 100V	1	PCS
C470	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C480	65A 1K470 5T6921	47P/1KV	1	PCS
C483	67A 305221 3T	220UF +-20% 16V	1	PCS
C601	64A178J152 1T	"1500PF 100V +-5%"	1	PCS
C602	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C604	65A 44468213T	6800PF +-10% Z5P 50V	1	PCS
C606	64A178J474 1T	C121X 0.47UF 100V +-5%	1	PCS

C608	64A178J474 1T	C121X 0.47UF 100V +-5%	1	PCS
C609	67A 309470 7T	47UF +-20% 50V	1	PCS
C610	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C611	64A178J474 0T	CL21X. 0.47UF 63V +-5%	1	PCS
C613	64A701J1540AT	0.15UF 50V +-5%	1	PCS
C614	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C703	64A178J472 1T	4700PF 100V	1	PCS
C710	64A178J103 2T	MPE 0.01UF 250V +-5%	1	PCS
C720	65A 1K102 5T6921	1NF/1KV Y5P+-10%	1	PCS
C740	65A 2K102 5T6921	1000PF/2KV	1	PCS
C741	65A 444331 5T	330PF 10% 50V	1	PCS
C743	67A 309100 7T	10UF +-20% 50V	1	PCS
C908	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C910	67A 305470 7T	47UF +-20% 50V	1	PCS
C911	65A 1K101 5T6921	100PF/1KV Y5P+-10%	1	PCS
C913	65A 1K221 5T6921	220PF/1KV Y5P+-10%	1	PCS
C914	64A 44J2231AT	22NF 100V	1	PCS
C920	64A 45G1521AT	1500PF 2% 100V	1	PCS
C921	64A178J104 1T	C121X 0.1UF 100V +-5%	1	PCS
C922	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C923	65A 1K820 5T6921	CAP C 82P 10% 1KV Y5P	1	PCS
C934	65A 1K101 5T6921	100PF/1KV Y5P+-10%	1	PCS
C937	67A 309471 3T	470UF +-20% 16V	1	PCS
C939	67A 305471 3T6371	470UF +-20% 16V	1	PCS
C941	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C943	64A 44J1521AT	1500PF/100V	1	PCS
C944	67A 305100 7T	10UF +-20% 50V	1	PCS
C945	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C946	63A212J1042AT	MPE 0.1UF/250V +-5%	1	PCS
C947	67A 309470 7T	47UF +-20% 50V	1	PCS
D103	93A1002 1W52T	1N5817	1	PCS
D104	93A 64 1152T	DIODE 1N4148	1	PCS
D105	93A 64 1152T	DIODE 1N4148	1	PCS
D400	93A 64 1152T	DIODE 1N4148	1	PCS
D402	93A 64 1152T	DIODE 1N4148	1	PCS
D403	93A1040 252T	F.R.D UF4004/GIT	1	PCS
D404	93A1040 252T	F.R.D UF4004/GIT	1	PCS
D405	93A1002 1W52T	1N5817	1	PCS
D406	93A 6021P52T	PS156R	1	PCS
D407	93A 6021P52T	PS156R	1	PCS
D409	93A 5247T52T	1N4004	1	PCS
D411	93A 64 1152T	DIODE 1N4148	1	PCS
D420	93A 64 1152T	DIODE 1N4148	1	PCS

D450	93A 64 1152T	DIODE 1N4148	1	PCS
D463	93A 6026T52T	RECTIFIER DIODE FR107	1	PCS
D470	93A 6026T52T	RECTIFIER DIODE FR107	1	PCS
D471	93A 5247T52T	1N4004	1	PCS
D601	93A 5247T52T	1N4004	1	PCS
D602	93A 64 1152T	DIODE 1N4148	1	PCS
D603	93A 64 1152T	DIODE 1N4148	1	PCS
D701	93A 60210	1N5819	1	PCS
D706	93A 6044T52T	RECTIFIER DIODE FR157S	1	PCS
D740	93A1040 252T	F.R.D UF4004/GIT	1	PCS
D910	93A 6026W52T	FR107	1	PCS
D911	93A1040 252T	F.R.D UF4004/GIT	1	PCS
D912	93A 64 1152T	DIODE 1N4148	1	PCS
D916	93A 64 1152T	DIODE 1N4148	1	PCS
D923	93A202050052T	BYV27-200	1	PCS
D926	93A 64 1152T	DIODE 1N4148	1	PCS
D929	93A1040 252T	F.R.D UF4004/GIT	1	PCS
D939	93A 64 1152T	DIODE 1N4148	1	PCS
FB401	93A1002 1W52T	1N5817	1	PCS
FB402	71A 55 29	FERRITE BEAD 2.2*3.5*0.	1	PCS
FB403	71A 55 19 T	FERRITE BEAD 9X3.5X0.8	1	PCS
FB901	71A 55 19 T	FERRITE BEAD 9X3.5X0.8	1	PCS
J001	71A 55 29	FERRITE BEAD 2.2*3.5*0.	1	PCS
J002	71A 55 29	FERRITE BEAD 2.2*3.5*0.	1	PCS
J065	61A175L10052T	CFR 10 OHM +-5% 1/2W	1	PCS
NR601	61A 58251 UT	NTCR350OHM+-15%3000K UP	1	PCS
Q402	57C 530503 T	2SD1207T	1	PCS
Q404	57C 420502 T	2SA733P	1	PCS
Q405	57C 420502 T	2SA733P	1	PCS
Q407	57C 420502 T	2SA733P	1	PCS
Q408	57C 419503 T	2SC945P	1	PCS
Q410	57C 446501 T	2SC2120-Y	1	PCS
Q411	57C 419503 T	2SC945P	1	PCS
Q705	57C 498 3 T	HBF423	1	PCS
Q742	57A 493 12 T	BF420	1	PCS
Q902	57C 446501 T	2SC2120-Y	1	PCS
Q903	57C 419503 T	2SC945P	1	PCS
Q904	57C 446501 T	2SC2120-Y	1	PCS
Q905	57C 420502 T	2SA733P	1	PCS
Q908	57C 419503 T	2SC945P	1	PCS
Q910	57C 419503 T	2SC945P	1	PCS
Q912	57C 419503 T	2SC945P	1	PCS
Q913	57C 419503 T	2SC945P	1	PCS

Q920	57C 420502 T	2SA733P	1	PCS
R100	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R101	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R102	61A 60262152T	CFR 620 OHM+-5% 1/6W	1	PCS
R103	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R104	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R105	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R108	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	1	PCS
R109	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	1	PCS
R112	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R115	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R116	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R117	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R118	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R119	61A 60210052T	CFR 10 OHM +-5% 1/6W	1	PCS
R120	61A 60210052T	CFR 10 OHM +-5% 1/6W	1	PCS
R121	61A 60247152T	CFR 470 OHM +-5% 1/6W	1	PCS
R124	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R125	61A 60247052T	CFR 47 OHM +-5% 1/6W	1	PCS
R126	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R129	61A 60247152T	CFR 470 OHM +-5% 1/6W	1	PCS
R130	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R131	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R132	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R133	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R134	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R135	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	1	PCS
R136	61A 60212352T	CFR 12K OHM+-5% 1/6W	1	PCS
R137	61C 21033352T	MFR 33K OHM +- 1% 1/6W	1	PCS
R143	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R153	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R156	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R157	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R172	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R402	61A 17212252T	CFR 1.2K OHM +-5% 1/4W	1	PCS
R403	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R404	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R405	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R406	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R410	61A175L10052T	CFR 10 OHM +-5% 1/2W	1	PCS
R411	61A 60256252T	CFR 5.6KOHM+-5% 1/6W	1	PCS
R412	61C 21051252T	MFR 5.1KOHM +-1% 1/6W	1	PCS
R414	61A 60227252T	CFR 2.7K OHM+-5% 1/6W	1	PCS

R415	61A 17247352T	CFR 47K OHM +-5% 1/4W	1	PCS
R416	61A 17247252T	CFR 4.7K OHM +-5% 1/4W	1	PCS
R418	61A 17212252T	CFR 1.2K OHM +-5% 1/4W	1	PCS
R421	61A 17210052T	CFR 10OHM+-5% 1/4W	1	PCS
R422	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R424	61A 17210052T	CFR 10OHM+-5% 1/4W	1	PCS
R425	61A 17210152T	CFR 100OHM+-5% 1/4W	1	PCS
R429	61C 20710052T	10 OHM 1/2W	1	PCS
R430	61A 17218452T	CFR 180KOHM+-5% 1/4W	1	PCS
R431	61A 17262252T	CFR 6.2K OHM +-5% 1/4W	1	PCS
R432	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R433	61C 21010252T	MFR 1K OHM +- 1% 1/6W	1	PCS
R434	61C 20039252T	MFR 3.9KOHM +-1% 1/4W	1	PCS
R436	61A 60222252T	CFR 2.2K OHM +-5% 1/6W	1	PCS
R437	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R440	61A 17233252T	CFR 3.3KOHM+-5% 1/4W	1	PCS
R441	61A175L82352T	CFR 82K OHM +-5% 1/2W	1	PCS
R442	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R443	61A 17210252T	CFR 1KOHM +-5% 1/4W	1	PCS
R446	61A175L10052T	CFR 10 OHM +-5% 1/2W	1	PCS
R447	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R448	61A 17210252T	CFR 1KOHM +-5% 1/4W	1	PCS
R449	61A 17233152T	CFR 330OHM+-5% 1/4W	1	PCS
R460	61A 17247252T	CFR 4.7K OHM +-5% 1/4W	1	PCS
R462	61A 17220352T	CFR 20KOHM+-5% 1/4W	1	PCS
R463	61A 17220552T	CFR 2MOHM+-5% 1/4W	1	PCS
R471	61A 17247352T	CFR 47K OHM +-5% 1/4W	1	PCS
R472	61A 17222452T	CFR 220KOHM+-5% 1/4W	1	PCS
R473	61A 17247252T	CFR 4.7K OHM +-5% 1/4W	1	PCS
R474	61A 17247352T	CFR 47K OHM +-5% 1/4W	1	PCS
R476	61A 17222452T	CFR 220KOHM+-5% 1/4W	1	PCS
R490	61C 20012352T	MFR 12KOHM+-1% 1/4W	1	PCS
R601	61A 17224352T	CFR 24KOHM+-5% 1/4W	1	PCS
R602	61C 20039252T	MFR 3.9KOHM +-1% 1/4W	1	PCS
R603	61A 17212352T	CFR 12K OHM +-5% 1/4W	1	PCS
R604	61C 20056252T	MFR 5.6KOHM+-1% 1/4W	1	PCS
R605	61A175L15952T	CFR 1.5 OHM +-5% 1/2W	1	PCS
R606	61A175L12152T	CFR 120 OHM +-5% 1/2W	1	PCS
R608	61A175L22952T	CFR 2.2 OHM 1/2W +-5%	1	PCS
R609	61A 17227352T	CFR 27KOHM+-5% 1/4W	1	PCS
R610	61A 17212452T	CFR 120K OHM +-5% 1/4W	1	PCS
R611	61A 60233352T	CFR 33K OHM+-5% 1/6W	1	PCS
R612	61A 17222252T	CFR 2.2KOHM+-5% 1/4W	1	PCS

R613	61A 17210252T	CFR 1KOHM +-5% 1/4W	1	PCS
R615	61A 17212452T	CFR 120K OHM +-5% 1/4W	1	PCS
R617	61A 60291352T	CFR 91K OHM +-5% 1/6W	1	PCS
R621	61A 17213452T	CFR 130K OHM +-5% 1/4W	1	PCS
R703	61A 17215152T	CFR 150 OHM +-5% 1/4W	1	PCS
R713	61A 60256252T	CFR 5.6KOHM+-5% 1/6W	1	PCS
R715	61A 60247352T	CFR 47K OHM+-5% 1/6W	1	PCS
R720	61A 17239252T	CFR 3.9K OHM +-5% 1/4W	1	PCS
R721	61A175L10252T	CFR 1K OHM +-5% 1/2W	1	PCS
R725	61A212Y18452T	MGFR 180K OHM +-5% 1/2W	1	PCS
R726	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R740	61A175L56352T	CFR 56K OHM +-5% 1/2W	1	PCS
R741	61A175L12452T	CFR 120K OHM +-5% 1/2W	1	PCS
R748	61A 60282252T	CFR 8.2K OHM +-5% 1/6W	1	PCS
R749	61A 17210452T	CFR100K OHM +-5% 1/4W	1	PCS
R776	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R901	61A175L10552T	CFR 1M OHM +-5% 1/2W	1	PCS
R902	61A 60239252T	CFR 3.9K OHM+-5% 1/6W	1	PCS
R904	61A 17212252T	CFR 1.2K OHM +-5% 1/4W	1	PCS
R905	61A 60251252T	CFR 5.1K OHM+-5% 1/6W	1	PCS
R906	61A 17210052T	CFR 10OHM+-5% 1/4W	1	PCS
R908	61A175L75952T	CFR 7.5 OHM +-5% 1/2W	1	PCS
R909	61A 17210152T	CFR 100OHM+-5% 1/4W	1	PCS
R910	61A 60291352T	CFR 91K OHM +-5% 1/6W	1	PCS
R913	61A 17220452T	CFR 200KOHM+-5% 1/4W	1	PCS
R921	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R930	61A 17268152T	CFR 680 OHM +-5% 1/4W	1	PCS
R933	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R941	61A 17251152T	CFR 510 OHM +-5% 1/4W	1	PCS
R951	61A 17247152T	CFR 470OHM +-5% 1/4W	1	PCS
R952	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R953	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R957	61A 60247352T	CFR 47K OHM+-5% 1/6W	1	PCS
R958	61A 17210252T	CFR 1KOHM +-5% 1/4W	1	PCS
R959	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R960	61A 17247352T	CFR 47K OHM +-5% 1/4W	1	PCS
R962	61A 17247052T	CFR 47 OHM +-5% 1/4W	1	PCS
R965	61A 17247952T	CFR 4.7 OHM +-5% 1/4W	1	PCS
R966	61A 17230252T	CFR 3KOHM+-5% 1/4W	1	PCS
R967	61A214Y10452T	MGFR 100K OHM +-5% 1/4W	1	PCS
R968	61A 17216452T	CFR 160KOHM +-5% 1/4W	1	PCS
R969	61A 17211452T	CFR 110K OHM +-5% 1/4W	1	PCS
R972	61A 17220352T	CFR 20KOHM+-5% 1/4W	1	PCS

R980	61A 17222152T	CFR 220OHM+-5% 1/4W	1	PCS
R981	61A175L10152T	CFR 100 OHM +-5% 1/2W	1	PCS
R982	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R983	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R994	61A 17220352T	CFR 20KOHM+-5% 1/4W	1	PCS
RV1	6A 31500	EYELET	1	PCS
RV10	6A 31 4	BRASS	1	PCS
RV11	6A 31 4	BRASS	1	PCS
RV12	6A 31 4	BRASS	1	PCS
RV15	6A 31 4	BRASS	1	PCS
RV16	6A 31 4	BRASS	1	PCS
RV17	6A 31 4	BRASS	1	PCS
RV18	6A 31 4	BRASS	1	PCS
RV19	6A 31 4	BRASS	1	PCS
RV2	6A 31500	EYELET	1	PCS
RV20	6A 31 4	BRASS	1	PCS
RV21	6A 31 4	BRASS	1	PCS
RV22	6A 31 4	BRASS	1	PCS
RV23	6A 31 4	BRASS	1	PCS
RV24	6A 31502	BRASS	1	PCS
RV25	6A 31502	BRASS	1	PCS
RV26	6A 31502	BRASS	1	PCS
RV27	6A 31502	BRASS	1	PCS
RV28	6A 31502	BRASS	1	PCS
RV29	6A 31502	BRASS	1	PCS
RV3	6A 31500	EYELET	1	PCS
RV30	6A 31502	BRASS	1	PCS
RV31	6A 31502	BRASS	1	PCS
RV32	6A 31502	BRASS	1	PCS
RV33	6A 31501	BRASS	1	PCS
RV4	6A 31500	EYELET	1	PCS
RV5	6A 31501	BRASS	1	PCS
RV6	6A 31501	BRASS	1	PCS
RV7	6A 31 4	BRASS	1	PCS
RV8	6A 31 4	BRASS	1	PCS
RV9	6A 31 4	BRASS	1	PCS
ZD101	93A 3951352T	HZ6C2/HITACHI	1	PCS
ZD102	93A 3951352T	HZ6C2/HITACHI	1	PCS
ZD103	93A 3951352T	HZ6C2/HITACHI	1	PCS
ZD104	93A 3951352T	HZ6C2/HITACHI	1	PCS
ZD702	93A 3951652T	TELEFUNKEN TZX5V1B	1	PCS
ZD703	93A 3952952T	HZ2B2	1	PCS
ZD902	93A 396V1 V	TZX6V2B	1	PCS

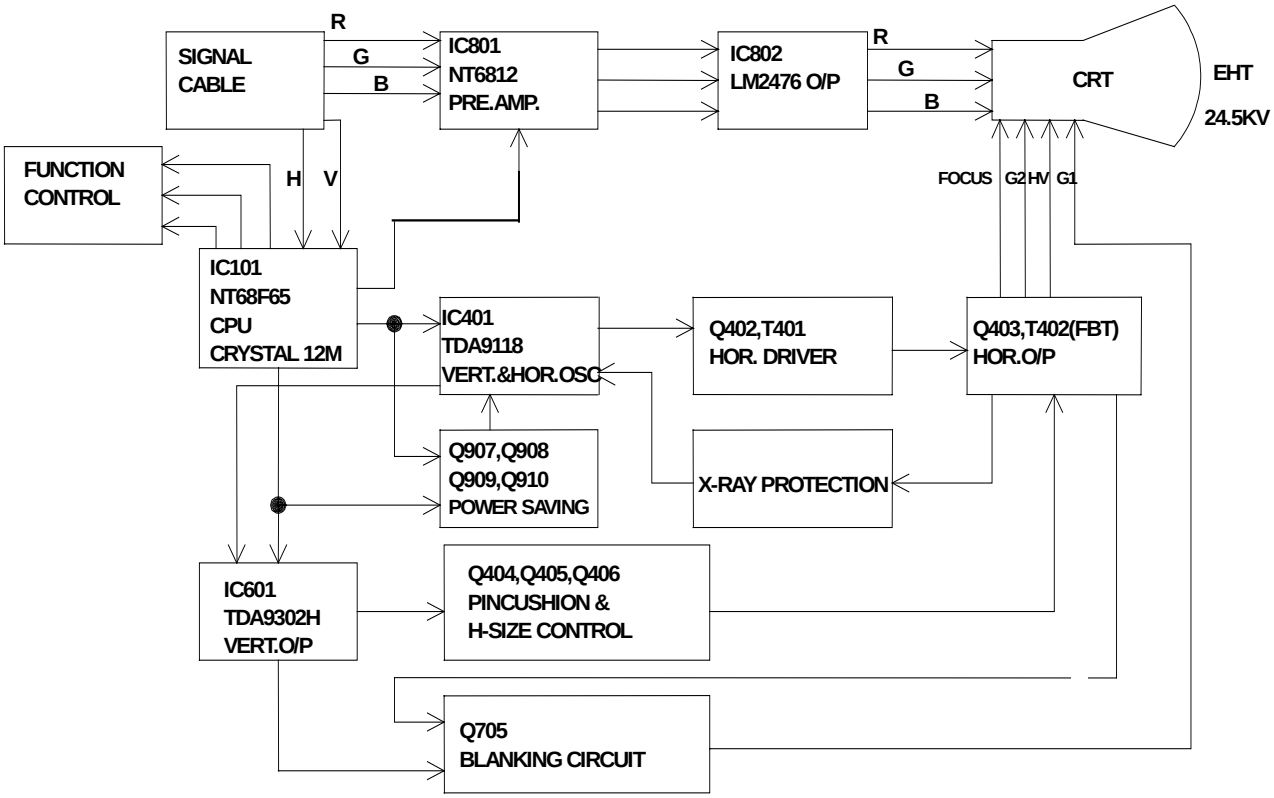
ZD903	93A 3953252T	TZX24B TFK	1	PCS
	ARB774B2NT	CRT BOARD B774B-2NT	1	PCS
	40A 45762412B	LABEL	1	PCS
	87A3504 DL	CRT SOCKET	1	PCS
	90C6113 4	HEAT SINK	1	PCS
	705A774BR5601A	IC802 ASS'Y B774B-2NT	1	PCS
C805	67A 305470 9	47UF +-20% 100V	1	PCS
C806	65A 2M1033FB6921	10000PF -20%~+18% 2KV	1	PCS
C811	67A 305470 9	47UF +-20% 100V	1	PCS
FB801	53A 40 8	FILTER	1	PCS
FB802	53A 40 8	FILTER	1	PCS
FB803	53A 40 8	FILTER	1	PCS
G2	9A 203 8	BRASS PIN	1	PCS
IC801	56A 366505	NT6812K-20026	1	PCS
P801	33A3278 6D	WAFER	1	PCS
P802	33A327813D	WAFER	1	PCS
	6A 31 4	BRASS	3	PCS
	715C1451 L	CRPC	1	PCS
C801	65A517K561 2T6921	560PF 500V Z5P +-10%	1	PCS
C804	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C807	67A 309470 3T	47UF +-20% 16V	1	PCS
C808	67A 309100 3T	10UF +-20% 16V	1	PCS
C810	67A 309220 3T	22UF +-20% 16V	1	PCS
C813	65A251K104 2T	0.1UF 250V	1	PCS
C814	65A 450104 7T	0.1UF +80-20% 50V Y5V	1	PCS
C815	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C816	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C817	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C818	65A 444101 5T	100 PF 10% 50V Y5P	1	PCS
C819	67A 305470 3T	47UF +-20% 16V	1	PCS
C820	67A 70109 9T	1UF +-20% 100V	1	PCS
C821	67A 70109 9T	1UF +-20% 100V	1	PCS
C822	67A 70109 9T	1UF +-20% 100V	1	PCS
C823	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C824	64A178J104 0T	CL21X0.1UF 63V +-5%	1	PCS
C826	67A 309471 3T	470UF +-20% 16V	1	PCS
C827	65A251K104 2T	0.1UF 250V	1	PCS
C828	67A 309470 3T	47UF +-20% 16V	1	PCS
C829	65A251K104 2T	0.1UF 250V	1	PCS
C830	64A700J3330AT	0.033UF 63V +-5%	1	PCS
C831	65A251K104 2T	0.1UF 250V	1	PCS
C832	65A251K104 2T	0.1UF 250V	1	PCS
C833	65A 444152 5T	1500PF 10% Y5P 50V	1	PCS

C837	65A 44447113T	470PF +-10% Z5P 50V	1	PCS
C839	65A 44210013T	10PF +-5% NPO 50V	1	PCS
D802	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D803	93A 64 1152T	DIODE 1N4148	1	PCS
D804	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D805	93A 64 1152T	DIODE 1N4148	1	PCS
D806	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D807	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D808	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D809	93A 6021P52T	PS156R	1	PCS
D810	93A 6450152T	SWITCHING DIODE BAV21	1	PCS
D811	93A 64 1152T	DIODE 1N4148	1	PCS
D812	93A 64 1152T	DIODE 1N4148	1	PCS
D813	93A 64 1152T	DIODE 1N4148	1	PCS
D814	93A 64 1152T	DIODE 1N4148	1	PCS
FB804	61A175L56452T	CFR 560K OHM +-5% 1/2W	1	PCS
J816	71A 55 9 T	C CORE RF BEAD RH 3.5X6X0	1	PCS
L807	73A 5468810T	0.68UH +-10%	1	PCS
L808	73A 5468810T	0.68UH +-10%	1	PCS
L809	73A 5468810T	0.68UH +-10%	1	PCS
R802	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R804	61A175L10152T	CFR 100 OHM +-5% 1/2W	1	PCS
R805	61A 60210152T	CFR 100 OHM+-5% 1/6W	1	PCS
R806	61C 21019252T	MFR 1.9KOHM +- 1% 1/6W	1	PCS
R807	95A 90 23	TIN COATED	0	PCS
R808	95A 90 23	TIN COATED	0	PCS
R810	61C 21033352T	MFR 33K OHM +- 1% 1/6W	1	PCS
R811	61A 60256252T	CFR 5.6KOHM+-5% 1/6W	1	PCS
R812	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R813	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R814	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R815	61A 17215152T	CFR 150 OHM +-5% 1/4W	1	PCS
R816	61A 60210252T	CFR 1K OHM+-5% 1/6W	1	PCS
R818	61A 60233052T	CFR 33 OHM +-5% 1/6W	1	PCS
R819	61A 17233452T	CFR 330K OHM +-5% 1/4W	1	PCS
R820	61A 60210052T	CFR 10 OHM +-5% 1/6W	1	PCS
R821	61A 60233052T	CFR 33 OHM +-5% 1/6W	1	PCS
R822	61A 60247252T	CFR 4.7K OHM+-5% 1/6W	1	PCS
R824	61A 60275052T	CFR 75 OHM+-5% 1/6W	1	PCS
R825	61A 60210352T	CFR 10K OHM+-5% 1/6W	1	PCS
R826	61A 60275052T	CFR 75 OHM+-5% 1/6W	1	PCS
R828	61A 17233052T	CFR 33OHM+-5% 1/4W	1	PCS
R829	61A 17233052T	CFR 33OHM+-5% 1/4W	1	PCS

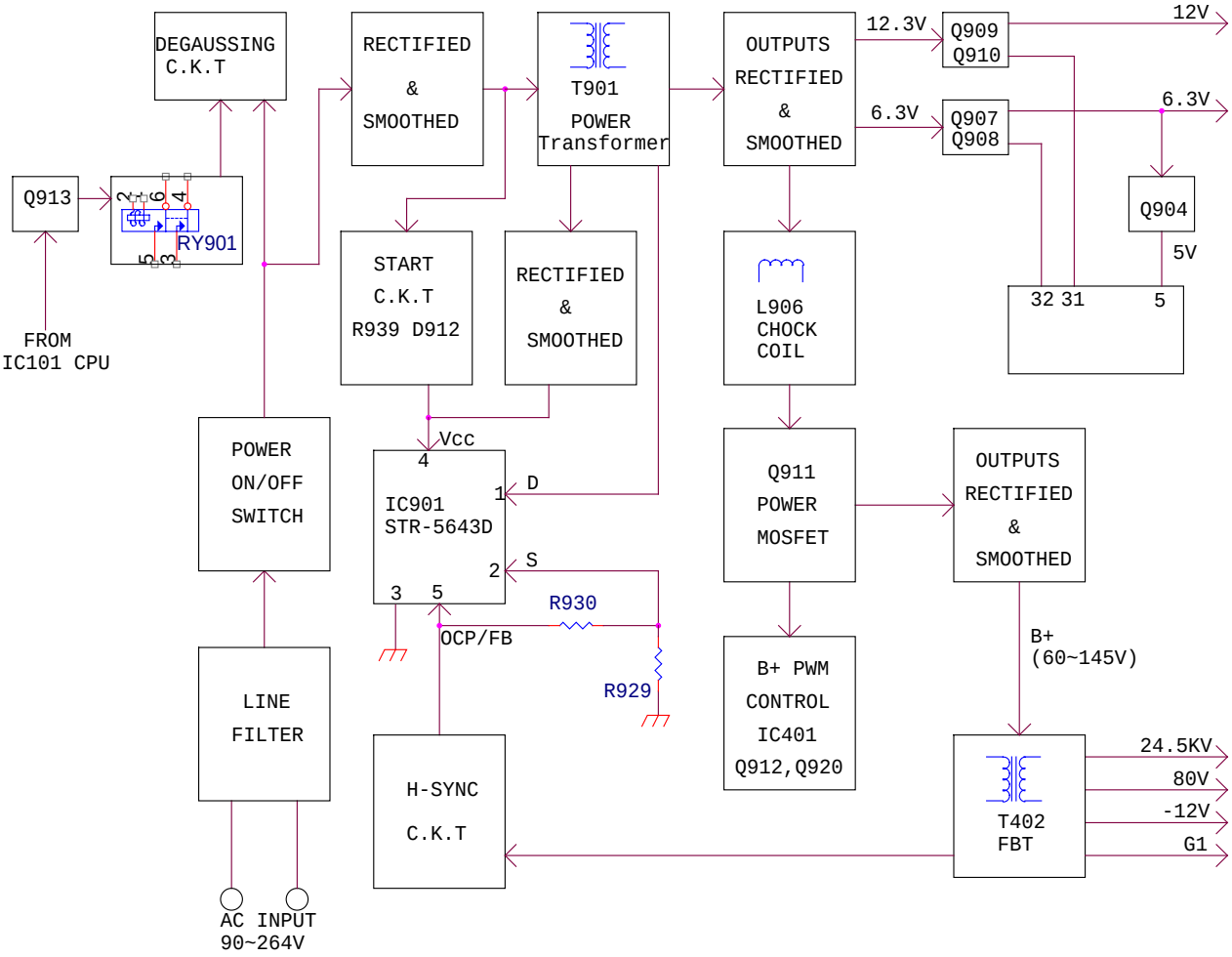
R832	61A 60210052T	CFR 10 OHM +-5% 1/6W	1	PCS
R833	61A175L51952T	MOFR 5.1 OHM+-5% 1/2W	1	PCS
R834	61A 60275052T	CFR 75 OHM+-5% 1/6W	1	PCS
R835	61A 60210052T	CFR 10 OHM +-5% 1/6W	1	PCS
R836	61A 60233052T	CFR 33 OHM +-5% 1/6W	1	PCS
R837	61A 17233452T	CFR 330K OHM +-5% 1/4W	1	PCS
R840	61A 17233052T	CFR 33OHM+-5% 1/4W	1	PCS
R841	61A 17210152T	CFR 100OHM+-5% 1/4W	1	PCS
R842	61A 17210152T	CFR 100OHM+-5% 1/4W	1	PCS
R843	61A 17210152T	CFR 100OHM+-5% 1/4W	1	PCS
R844	61A 17233452T	CFR 330K OHM +-5% 1/4W	1	PCS
R845	61A 60233252T	CFR 3.3K OHM+-5% 1/6W	1	PCS
R846	61A175L82852T	CFR 0.82 OHM +-5% 1/2W	1	PCS
ZD804	93A 3951452T	HZ9A3 ZENER DIODE	1	PCS
	2A6003 1	SCREW NUT	2	PCS
	90C6026506	HEAT SINK	1	PCS
	M1A1730 6128	SCREW M3x6	2	PCS
IC802	56C 551525	LM2476	1	PCS
	90A6118 1	HEAT SINK	1	PCS
	M1A1730 6128	SCREW M3x6	1	PCS
Q428	57A 600 21	IRF630M/S.T	1	PCS
	15A5659503	REAR BRACKET	1	PCS
	B1A1140 6128	SCREW	2	PCS
AS1	95A205T 3006A	Wire Harness	1	PCS
	90A 339509 PA	HEAT SINK	1	PCS
	M1A1730 101286175	SCREW M3X10	1	PCS
IC901	56A 379504	STR-G5643D	1	PCS
	90A6118 1	HEAT SINK	1	PCS
	M1A1730 6128	SCREW M3x6	1	PCS
Q426	57A 600 21	IRF630M/S.T	1	PCS
	5A 71 1	TRANSISTOR HOUSING	2	PCS
	32A3028504	MICA	2	PCS
	90A6069505	HEAT SINK	1	PCS
	M1A1130 8128	SCREW 3.0X8	2	PCS
	M1A1730 8128	SCREW M3x8	1	PCS
	M1A1730 10128	SCREW M3x10	1	PCS
	M1A1730 12128	SCREW	2	PCS
D408	93A 220505	DMV1500M-AOC	1	PCS
HV1	95A205T 30062	UL1015#18BLK.TOPCOAT	1	PCS
IC601	56C 574501	E-STV9302A	1	PCS
Q403	57A 741 2A 1	2SC5855	1	PCS
Q406	57A 415 1	A TR.NPN TIP122/FAIRCHILD	1	PCS
	2A6003 1	SCREW NUT	1	PCS

	32A3028 8	MICA	1	PCS
	90A6209 1	HEAT SINK	1	PCS
	M1A1730 8128	SCREW M3x8	1	PCS
Q911	57A 600512	STP8NS25	1	PCS
	9A 203 8	BRASS PIN	1	PCS
NR901	61A 58 8T L	NTCR 15OHM+-15%2.5A THI	1	PCS
	84A 33 10	FUSE CLIP	2	PCS
F901	84A 7H400 SL	FUSE 4A 250V LF-618 004	1	PCS
	87A 501 6 6425	RECEPTACLES	1	PCS
CN901	95C 800 2 2	WIRE	1	PCS
	90A 360504	HEAT SINK	1	PCS
D919	93A306050252T	RG4AS	1	PCS
DF919	71A 55 2 A	FERRITE BEAD 3*5*1.5	1	PCS
	750A57125AV	CPT 17" RF TINT CRT	1	PCS
C450	65A 1K331 5T6921	330PF/1KV Y5P+-10%	1	PCS
	750A57125AV	CPT 17" RF TINT CRT	1	PCS
C450	95A 90 23	TIN COATED	1	PCS

9. BLOCK DIAGRAM

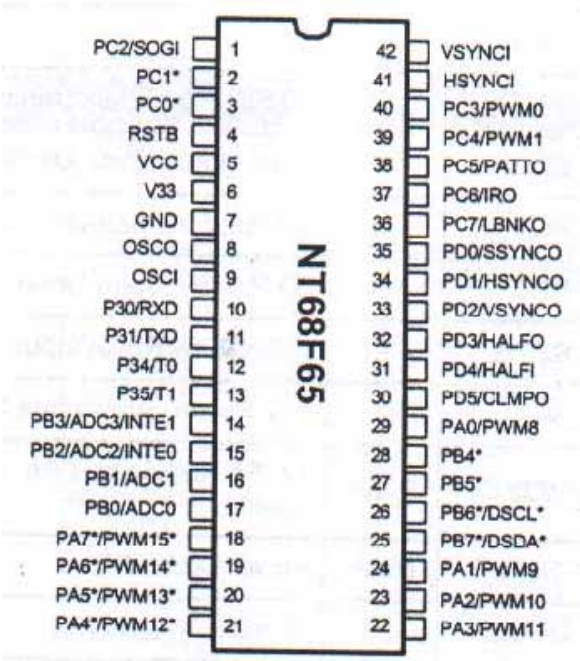


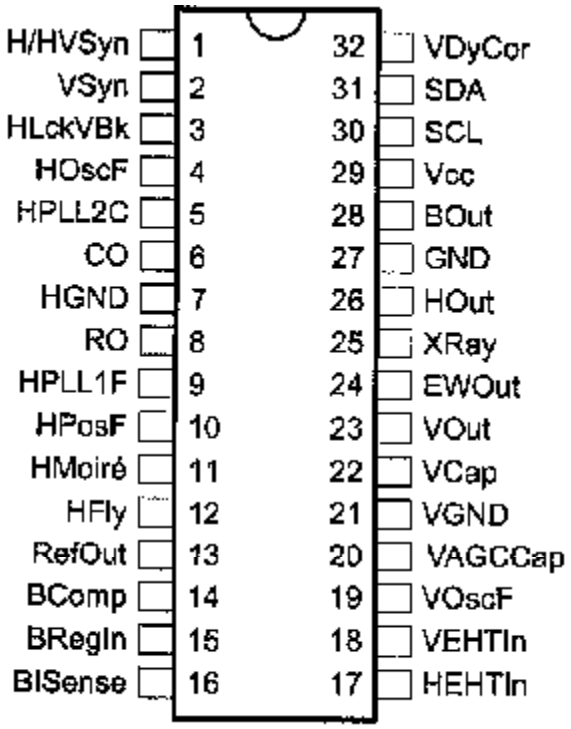
9-1 BLOCK DIAGRAM (SMPS)



10. IC BLOCK DIAGRAM

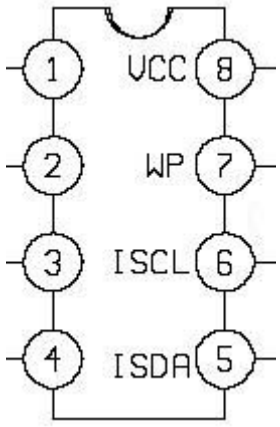
IC101 NT6865

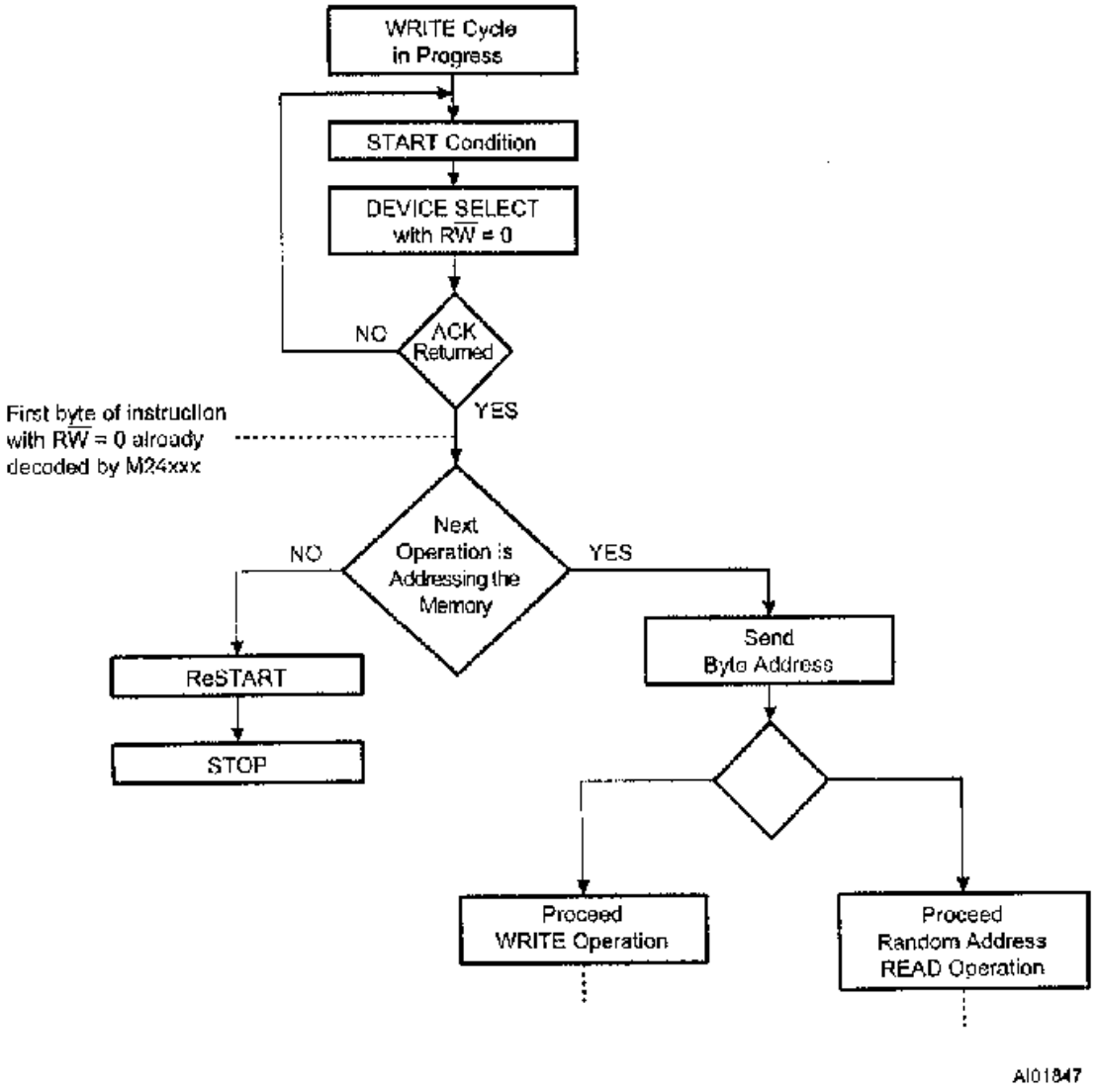


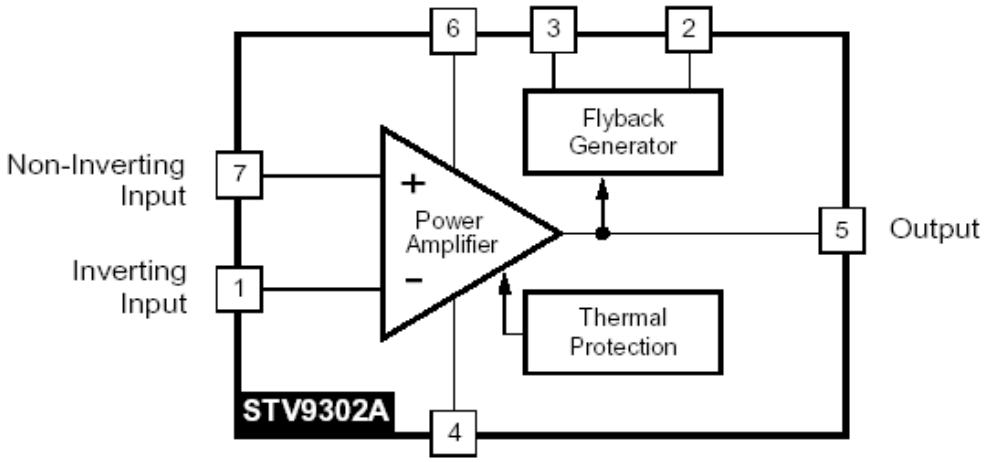


IC401 STV9118

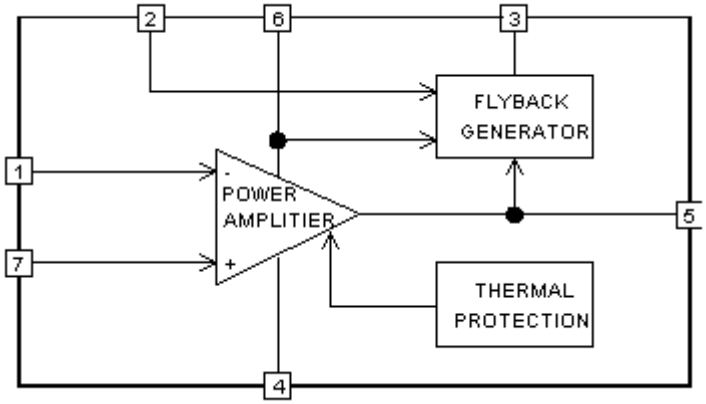
IC102
24LC08

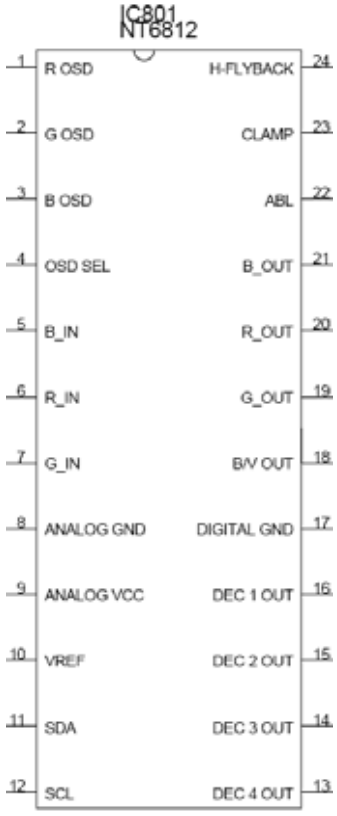






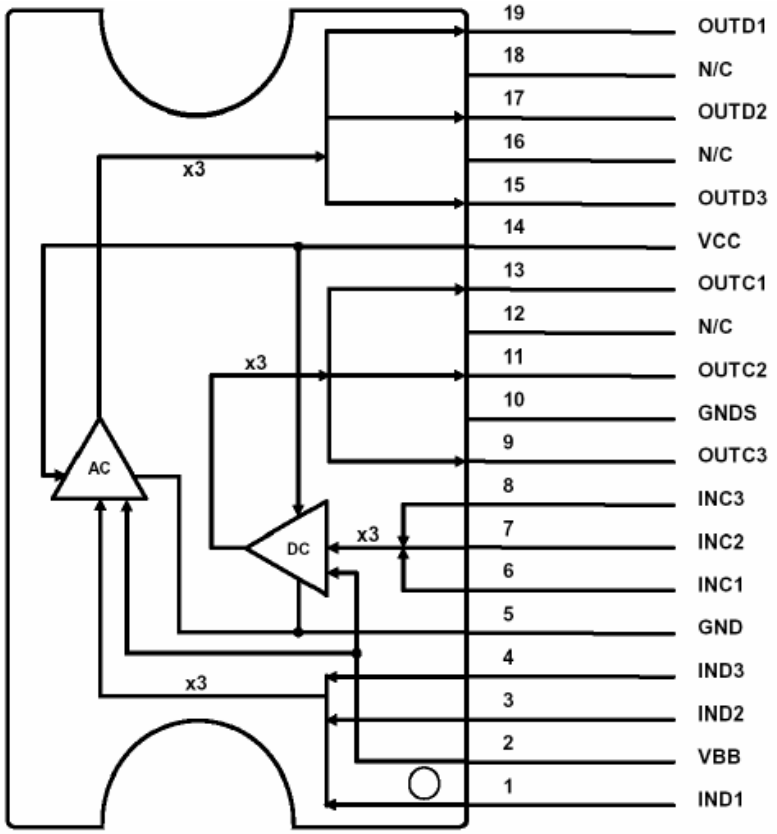
IC601
STV9302A

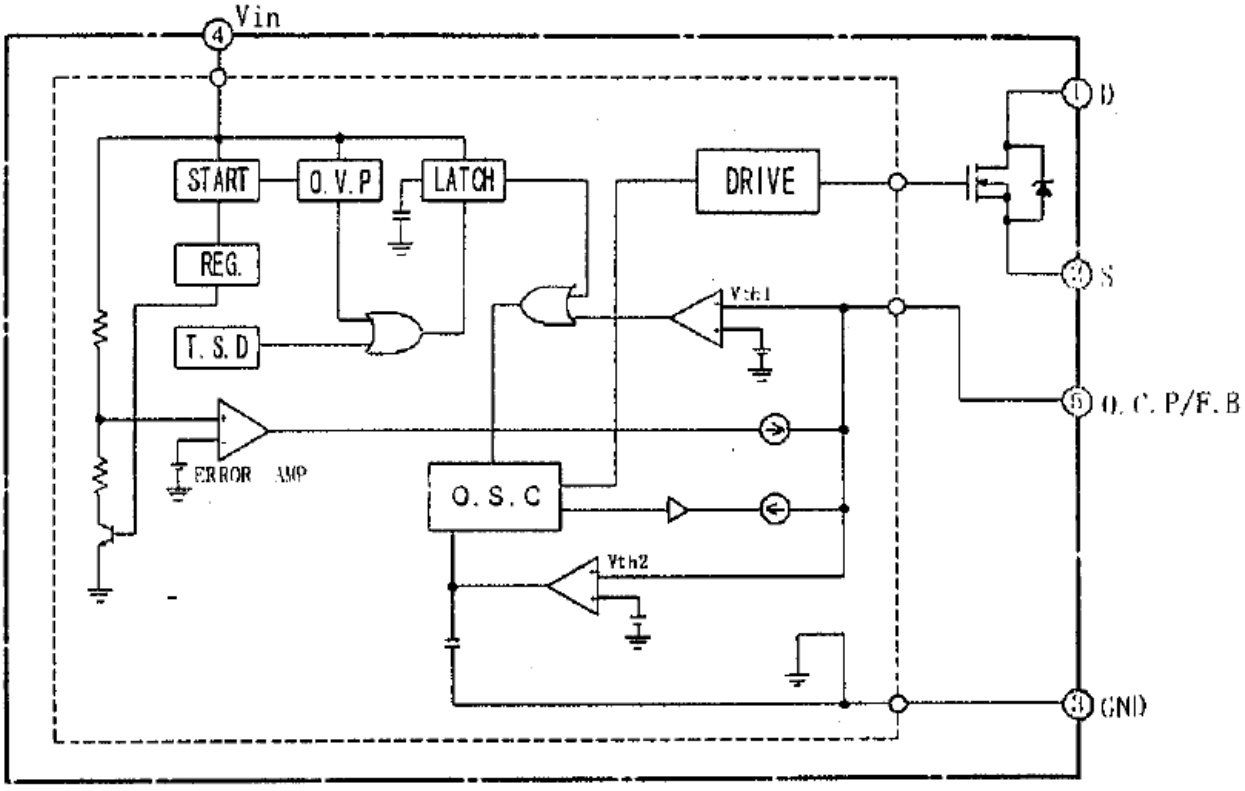




IC801
NT6812K

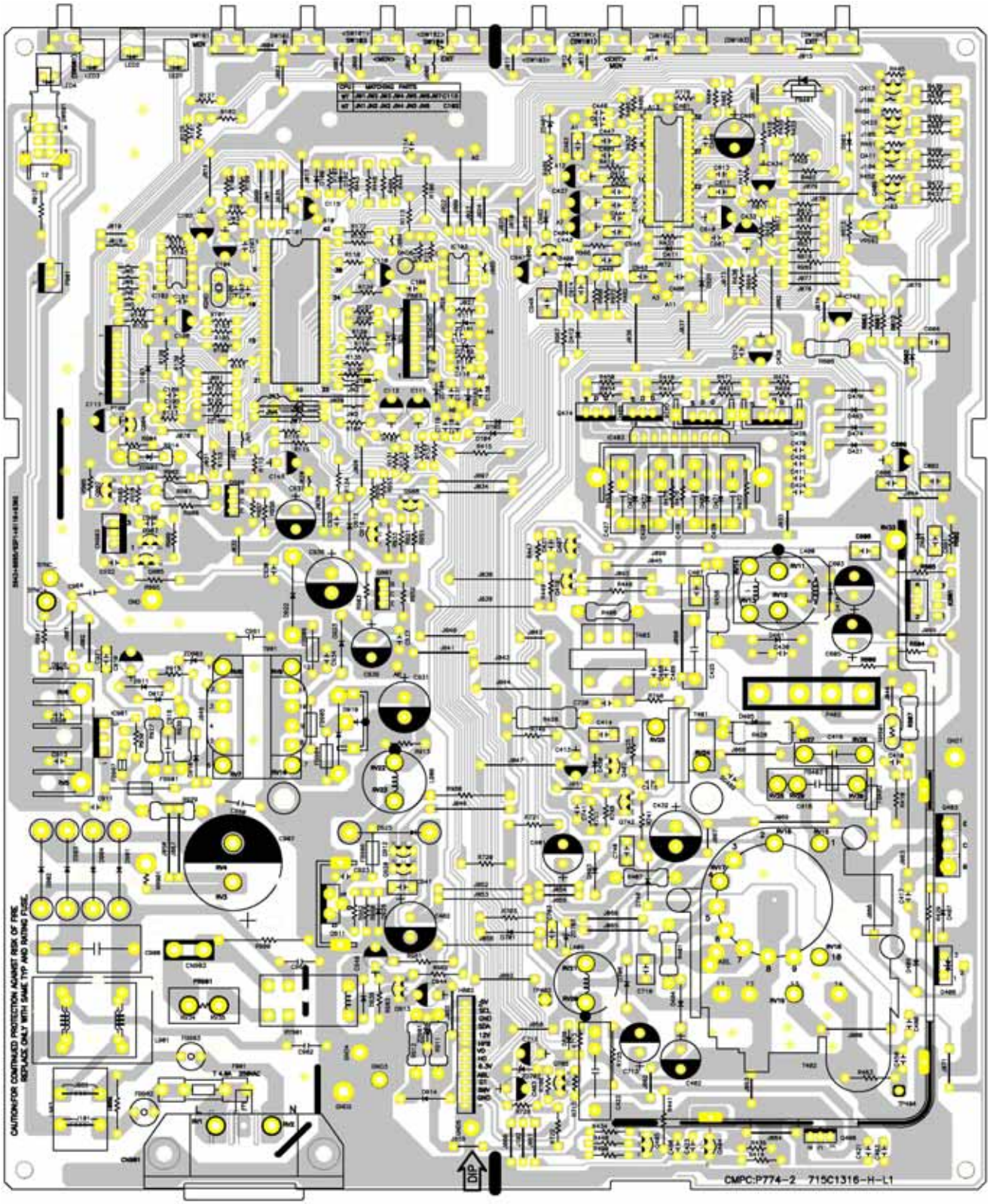
IC802
LM2476



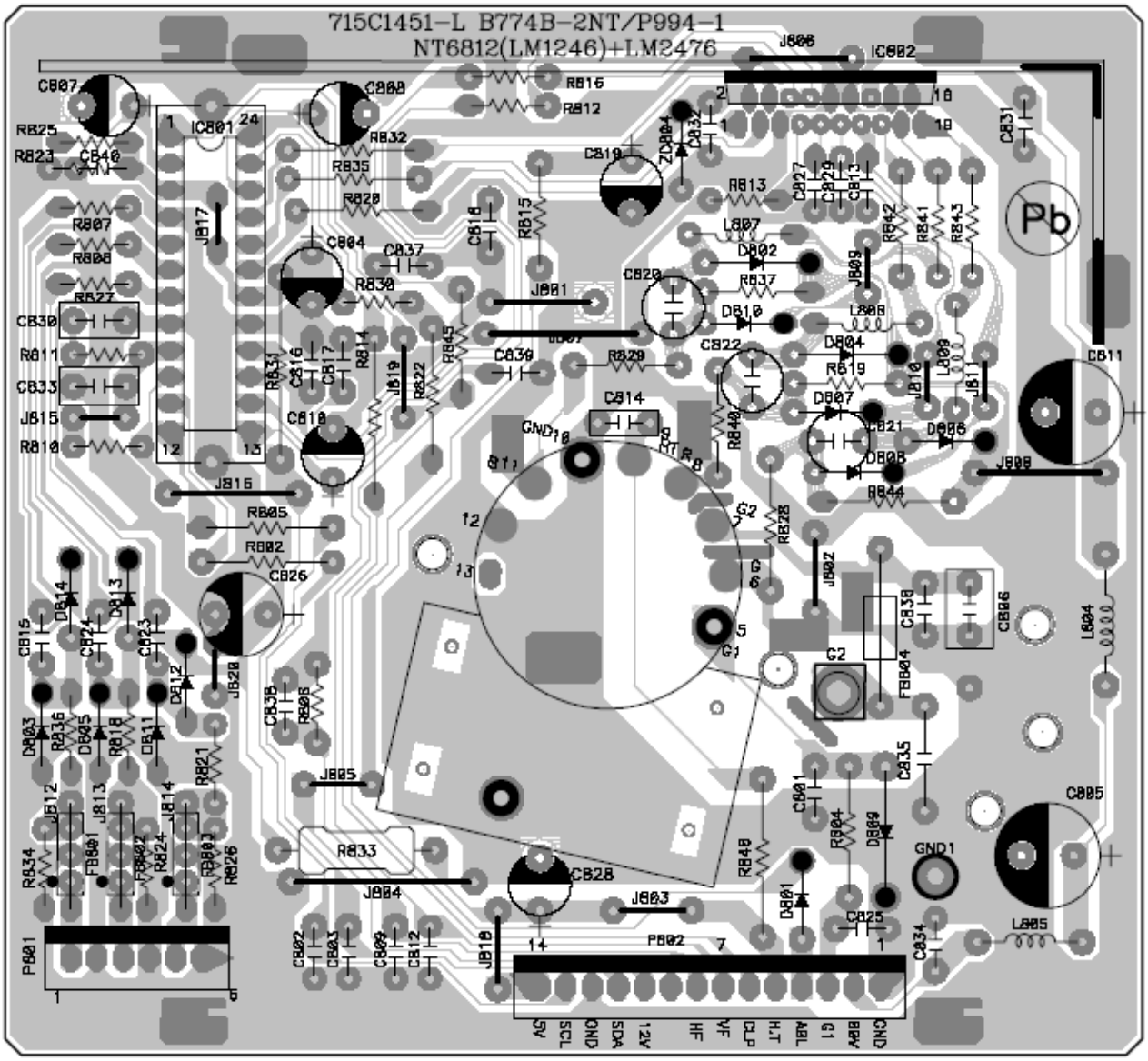


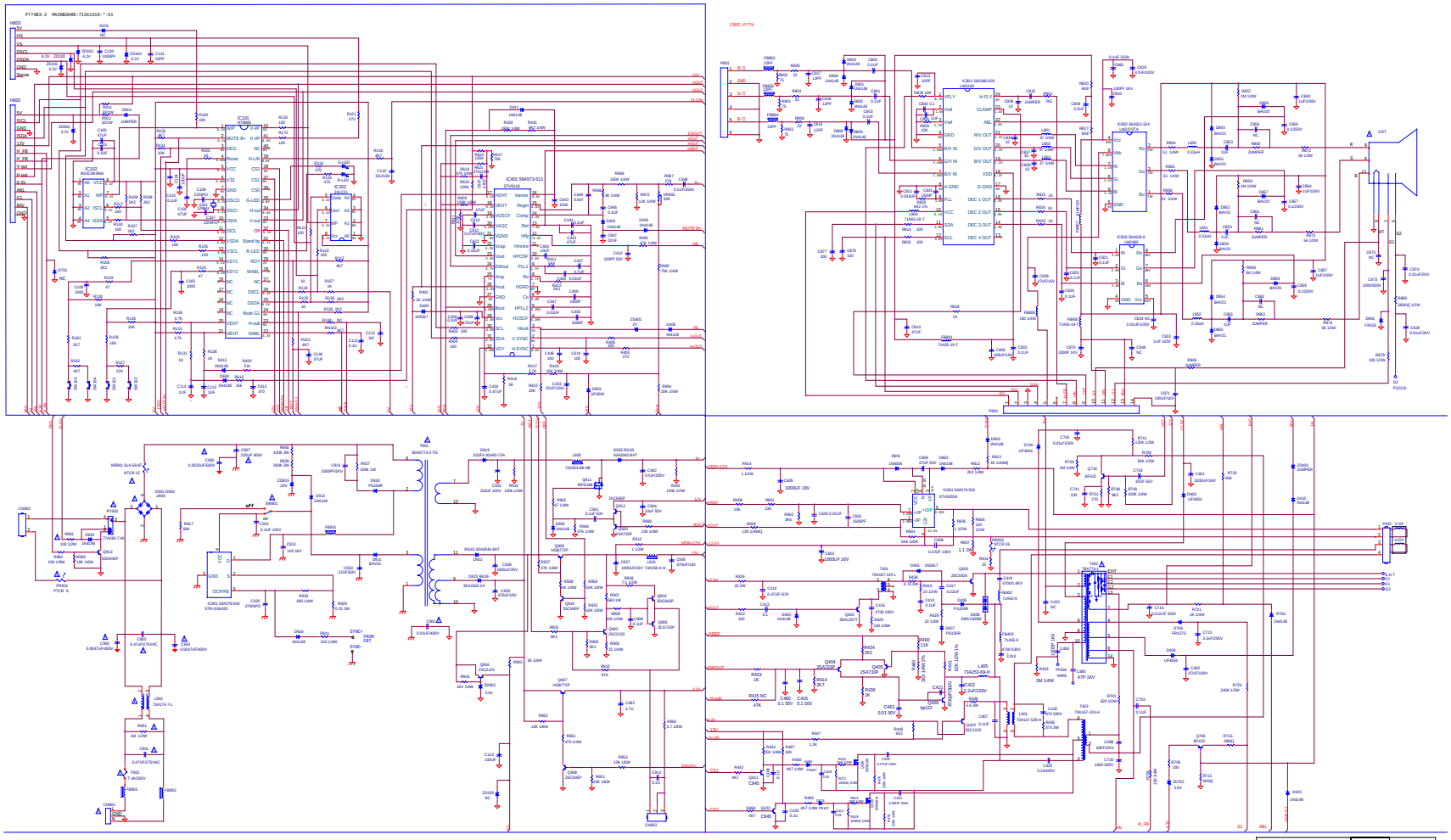
IC901 STR-G5643D

11 PCB LAYOUT
11-1 MAIN PCB LAYOUT



11-2 CRT BOARD LAYOUT





NOTES:

This schematic.We cannot guarantee the accuracy of this information, after the date of publication and disclaims liability for changes, errors or ommissions.

THE 1/4W RESISTANCE NOT TO LABEL POWER.

THE 50V CAPACITANCE NOT TO LABLE VOLTAGE.

CS ÕæÖµ±í

FH(KHz)	< 41	41≤<55	55≤<72	> 72
CS1	0	0	1	1
CS2	0	1	1	1

TOP VICTORY ELECTRONICS(FUJIAN)CO.LTD		DRAWER	
		Electric Engineer	
MODEL: P774B3-2	P/N: P774B3-2-01-B	Safety Engineer	
Date: Wednesday, November 24, 2004		APPROVED	