

LG

COLOR MONITOR

SERVICE MANUAL

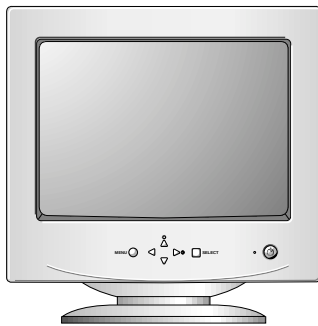
CHASSIS NO. : CA-95

FACTORY MODEL: EB990E

MODEL: StudioWorks E900B (EB990E-EP)
StudioWorks E900B (EB990E-EA)

CAUTION

BEFORE SERVICING THE UNIT,
READ THE **SAFETY PRECAUTIONS** IN THIS MANUAL.



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SPECIFICATIONS

1. PICTURE TUBE

Size	: 19 inch (Flat Square Tube)
Deflection Angle	: 90°
Neck Diameter	: 29.1mm
Diagonal Size	: 457.2mm
Dot Pitch	: 0.25mm
Face Treatment	: Anti-Glare

2. SIGNAL

2-1. Horizontal & Vertical Sync

- 1) Input Voltage Level : Low=0~1.2V, High=2.5~5.5V
- 2) Sync Polarity : Positive or Negative
- 3) Composite Sync Signal

2-2. Video Input Signal

- 1) Voltage Level : 0 ~ 0.7 Vp-p
 - a) Color 0, 0 : 0 Vp-p
 - b) Color 7, 0 : 0.467 Vp-p
 - c) Color 15, 0 : 0.7 Vp-p
- 2) Input Impedance : 75 Ω
- 3) Video Color : R, G, B Analog
- 4) Signal Format : Refer to the Timing Chart

2-3. Signal Connector

15-pin Attached Connector

2-4. Scanning Frequency

Horizontal	: 30 ~ 96kHz
Vertical	: 50 ~ 160Hz

3. POWER SUPPLY

3-1. Power Range

- AC 100~240V, 50/60HZ, 2.5A Max.(Free Voltage)
AC 200~240V, 50Hz, 1.5A Max.(PFC version)

3-2. Power Consumption

MODE	VIDEO	POWER CONSUMPTION	LED COLOR
MAX	YES	less than 115W	GREEN
NORMAL (ON)	YES	less than 95W	GREEN
STAND-BY	NO	less than 8W	YELLOW
SUSPEND	NO	less than 8W	
OFF	NO	less than 3W	YELLOW

4. DISPLAY AREA

4-1. Active Video Area :

- Max Image Size - 365.8 x 274.3mm (14.40" x 10.80")
- Preset Image Size - 350x 262 mm (13.78" x 10.31")

4-2. Display Color : Full Colors

4-3. Display Resolution : 1600 x 1200 / 75Hz (Non-Interlace)

4-4. Video Bandwidth : 203 MHz

5. ENVIRONMENT

5-1. Operating Temperature: 0°C ~ 40°C (Ambient)

5-2. Relative Humidity : 8%~ 80% (Non-condensing)

5-3. Altitude : 5,000m

6. DIMENSIONS (with TILT/SWIVEL)

Width	: 448.0mm (17.64 inch)
Depth	: 474mm (18.66 inch)
Height	: 453mm (17.83 inch)

7. WEIGHT (with TILT/SWIVEL)

Net Weight	: 21.7 kg (47.84 lbs.)
Gross Weight	: 25.2 kg (55.56 lbs.)

SAFETY PRECAUTIONS

SAFETY-RELATED COMPONENT WARNING!

There are special components used in this color monitor which are important for safety. ***These parts are marked  on the schematic diagram and the replacement parts list.*** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without obtaining written permission from LG or you will void the original parts and labor guarantee.

CAUTION: No modification of any circuit should be attempted.

Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

SAFETY CHECK

Care should be taken while servicing this color monitor because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

FIRE & SHOCK HAZARD

An isolation transformer must be inserted between the color monitor and AC power line before servicing the chassis.

- In servicing, attention must be paid to the original lead dress specially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.
- All the protective devices must be reinstalled per the original design.
- Soldering must be inspected for the cold solder joints, frayed leads, damaged insulation, solder splashes, or the sharp points. Be sure to remove all foreign materials.

IMPLOSION PROTECTION

All used display tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only same type display tubes.

X-RADIATION

The only potential source of X-radiation is the picture tube. However, when the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. The basic precaution which must be exercised is keep the high voltage at the factory recommended level; the normal high voltage is about 27kV. The following steps describe how to measure the high voltage and how to prevent X-radiation.

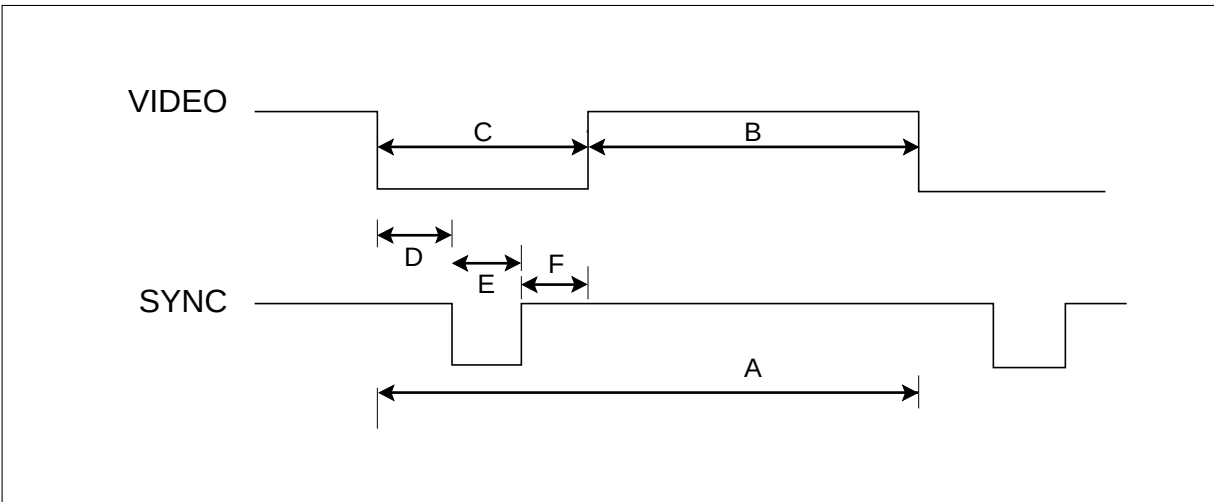
Note : It is important to use an accurate high voltage meter calibrated periodically.

- To measure the high voltage, use a high impedance high voltage meter, connect (–) to chassis and (+) to the CDT anode cap.
- Set the brightness control to maximum point at full white pattern.
- Measure the high voltage. The high voltage meter should be indicated at the factory recommended level.
- If the meter indication exceeds the maximum level, immediate service is required to prevent the possibility of premature component failure.
- To prevent X-radiation possibility, it is essential to use the specified picture tube.

CAUTION:

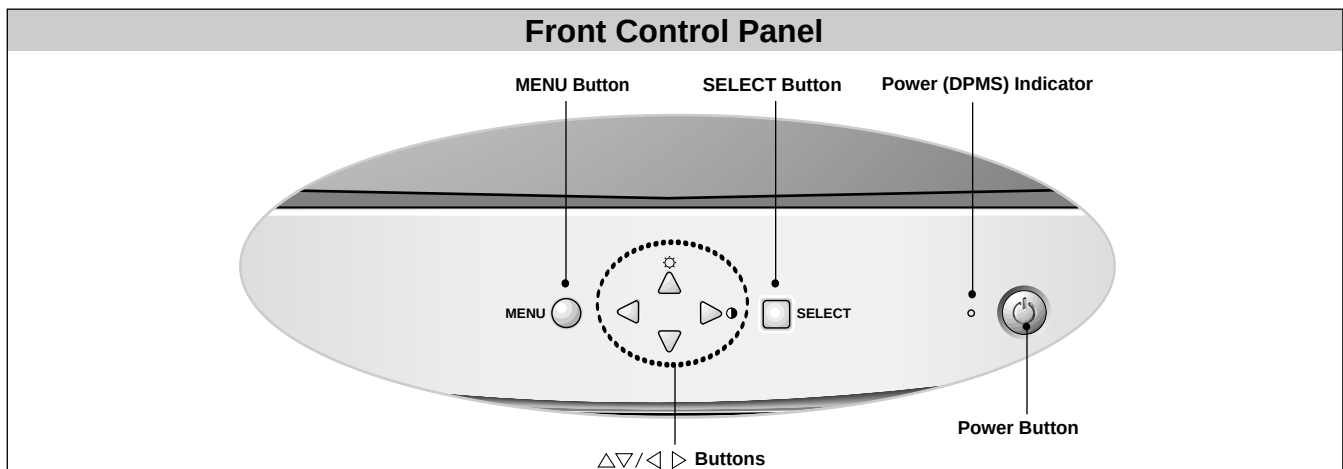
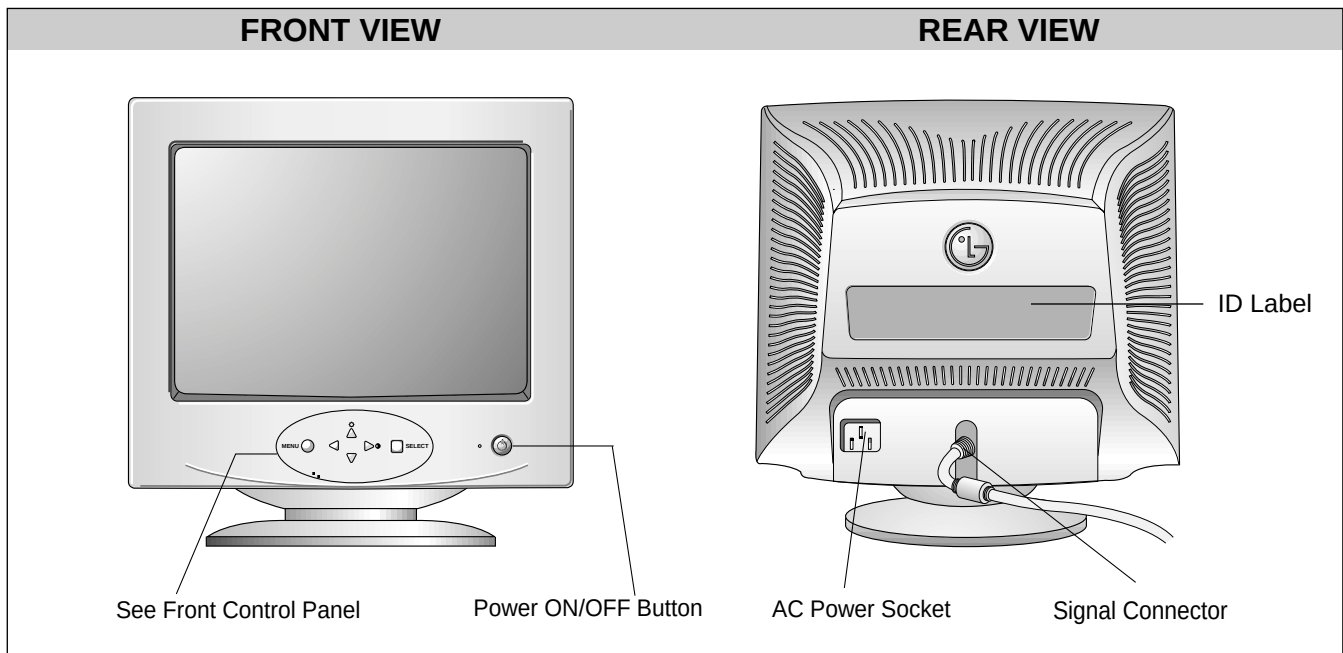
Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

TIMING CHART



MODE			FACTORY PRESET MODE					
			MARK	MODE 1	MODE 2	MODE 3	MODE 4	MODE 5
				VESA				
H O R I Z O N T A L	Sync Polarity			—	+	+	+	+
	Frequency	kHz		43.269	53.674	68.677	91.146	93.750
	Total Period	μs	A	23.112	18.631	14.561	10.971	10.666
	Video Active Time	μs	B	17.778	14.222	10.836	8.127	7.901
	Blanking Time	μs	C	5.334	4.409	3.725	2.844	2.765
	Front Porch	μs	D	1.556	0.569	0.508	0.406	0.316
	Sync Duration	μs	E	1.556	1.138	1.016	1.016	0.948
	Back Porch	μs	F	2.222	2.702	2.201	1.422	1.501
V E R T I C A L	Sync Polarity			—	+	+	+	+
	Frequency	Hz		85.008	85.061	84.997	85.024	75.000
	Total Period	ms	A	11.763	11.756	11.765	11.762	13.333
	Video Active Time	ms	B	11.093	11.178	11.183	11.235	12.800
	Blanking Time	ms	C	0.670	0.578	0.582	0.527	0.533
	Front Porch	ms	D	0.023	0.019	0.015	0.011	0.011
	Sync Duration	ms	E	0.069	0.056	0.044	0.033	0.032
	Back Porch	ms	F	0.578	0.503	0.523	0.483	0.490
Resolution				640 X 480 85Hz	800 X 600 85Hz	1024 X 768 85Hz	1280 X 1024 85Hz	1600 X 1200 75Hz
Recall				Yes	Yes	Yes	Yes	

OPERATING INSTRUCTIONS



1. Power ON/OFF Button

Use this button to turn the monitor ON or OFF.

2. Power Indicator

This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, - stand-by, suspend, or power off mode - its color changes to orange, and if abnormal or damaging circuit turns out orange blink.

3. Select Button

Use this button to enter a selection in the on screen display.

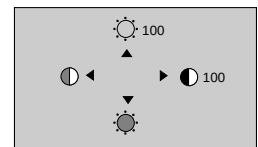
4. Δ▽/◀▶ Button

Use these buttons to choose or adjust items in the on screen display.

<Shortcut Keys>

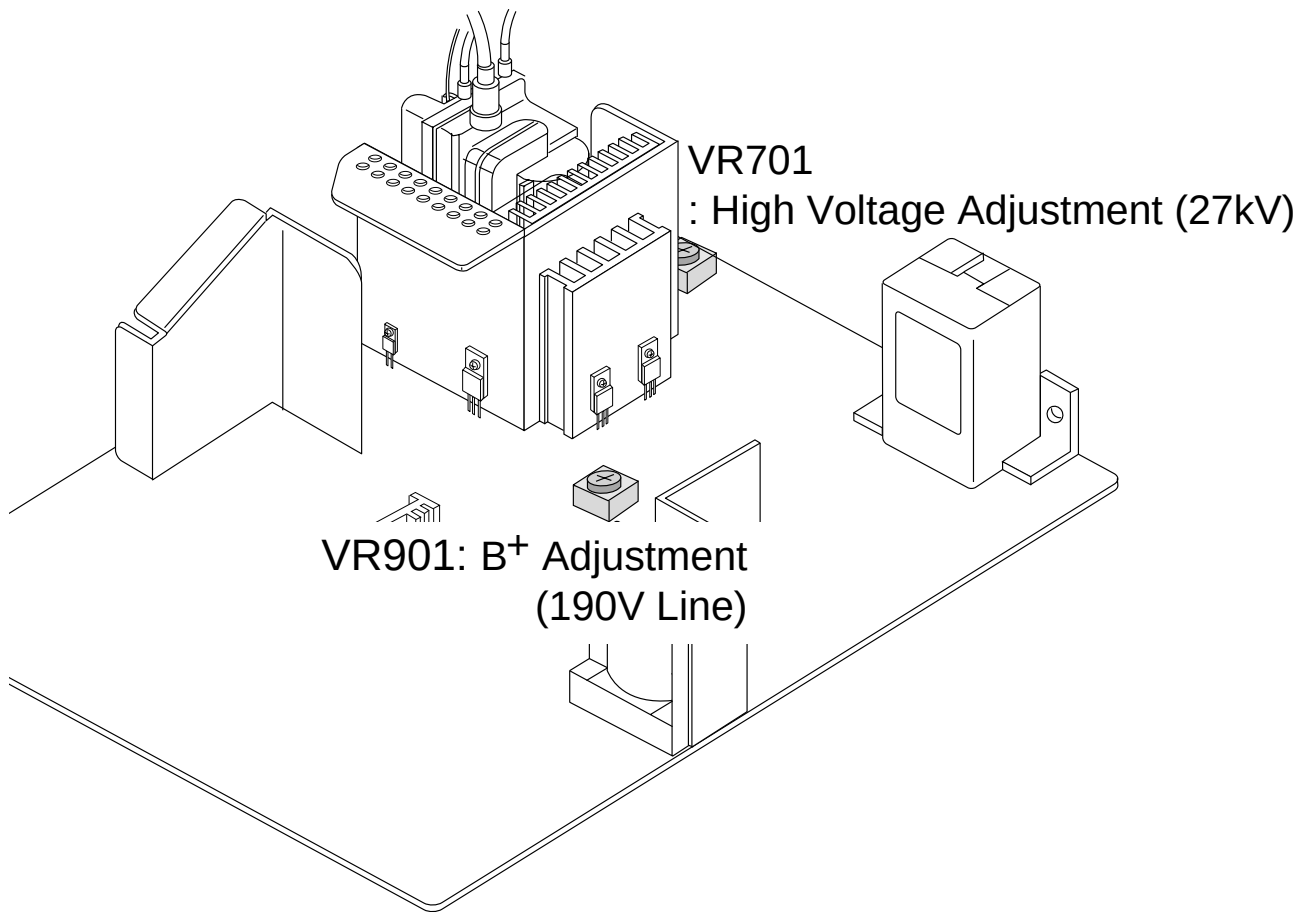
- Brightness and Contrast can be adjusted directly without entering the On Screen Display (OSD) system.

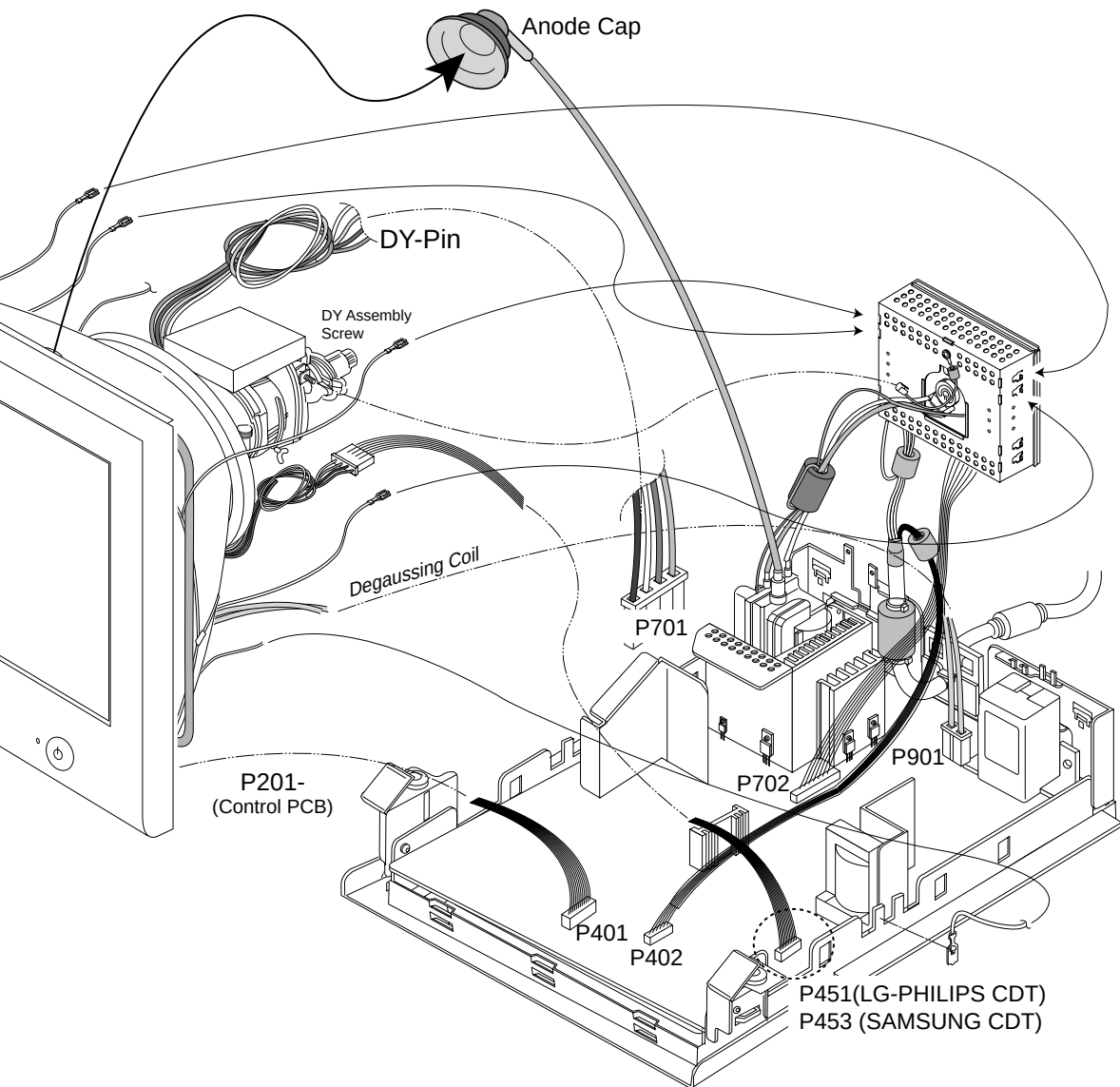
Press the Δ/▶ buttons to adjust the settings and then the **MENU button** to save all changes. The Brightness and Contrast functions are also available in the On Screen Display (OSD) menu.



5. MENU Button

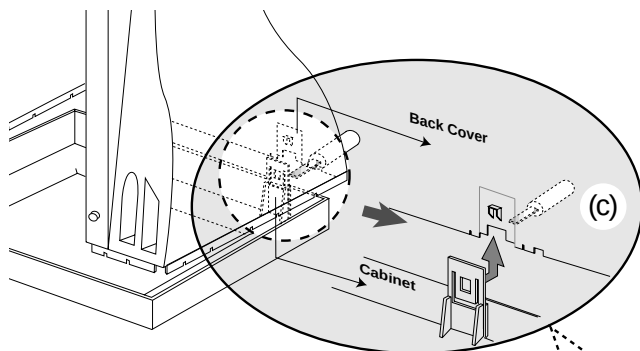
Use this button to enter or exit the on screen display.





1. TILT/SWIVEL & BACK COVER REMOVAL

- 1) Set the monitor face downward.
- 2) Pull the latch (a), carefully remove the Tilt/Swivel by pulling it upward.
- 3) Pressing the latch (b), Back cover by pushing it upward.
- 4) Release the latch (c).
- 5) Slide the Back Cover away from the Front Cabinet of the monitor.

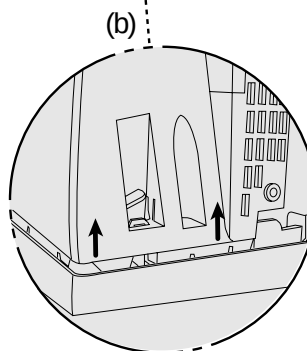
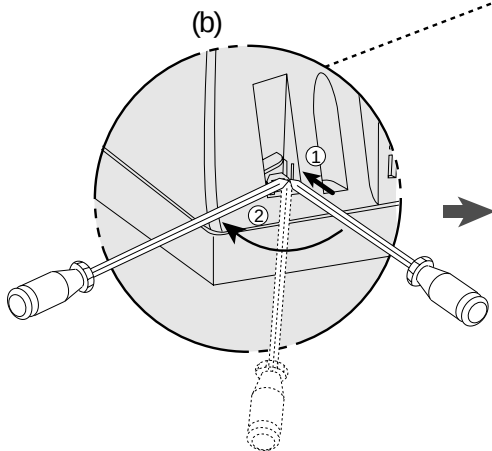
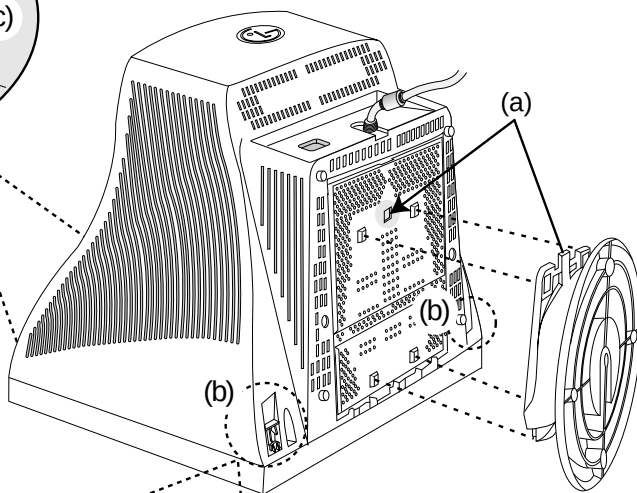
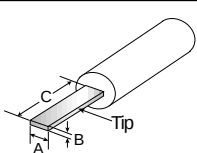


Tip Spec.

A(Width) : 5.0~15.0mm

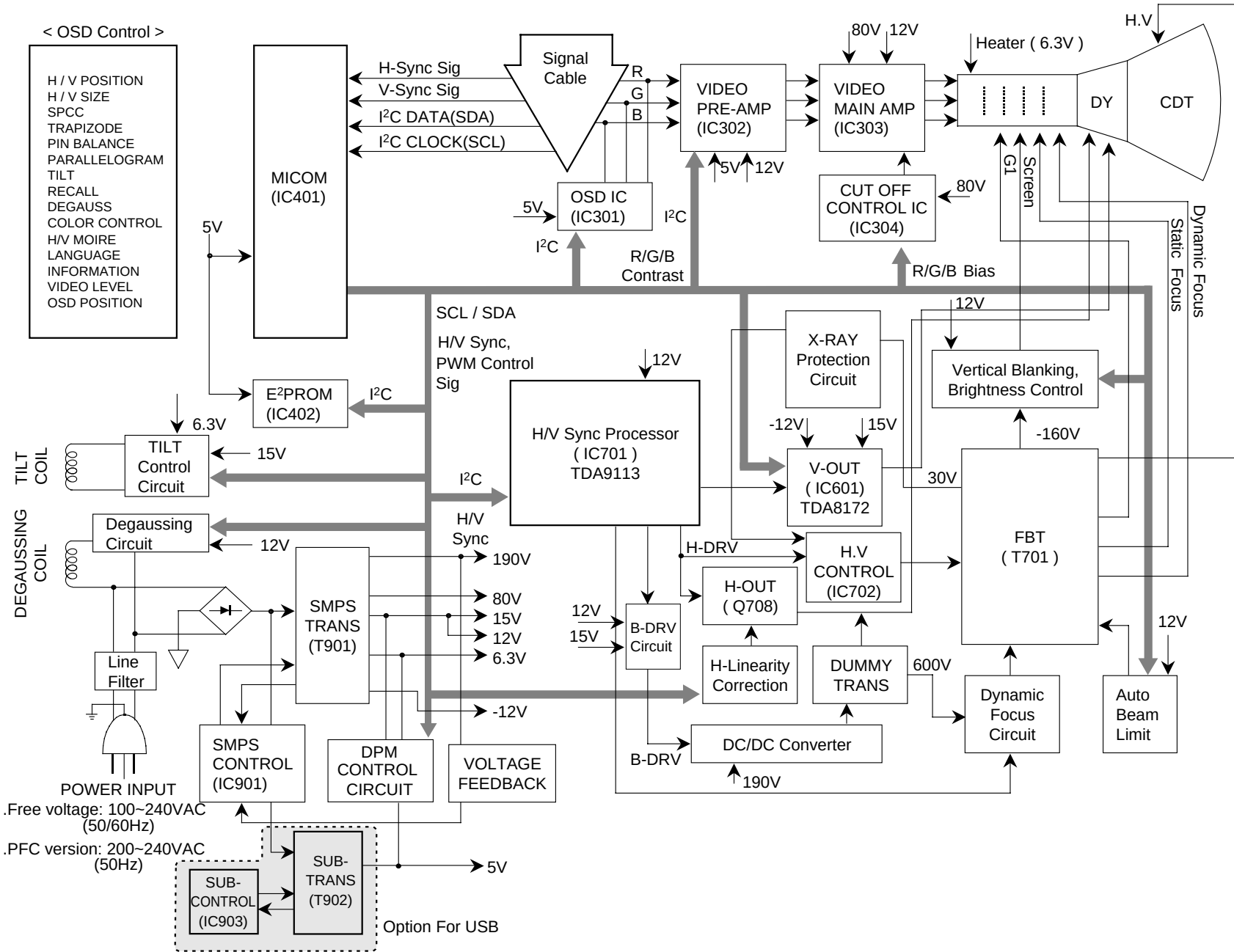
B(Depth) : 0.6~0.9mm

C(Height) : 12.0mm



< OSD Control >

H / V POSITION
H / V SIZE
SPCC
TRAPIZODE
PIN BALANCE
PARALLELOGRAM
TILT
RECALL
DEGAUSS
COLOR CONTROL
H/V MOIRE
LANGUAGE
INFORMATION
VIDEO LEVEL
OSD POSITION



DESCRIPTION OF BLOCK DIAGRAM

1. Line Filter & Associated Circuit.

This is used for suppressing noise of power input line flowing into the monitor and/or some noise generated in this monitor flowing out through the power input line. That is to say, this circuit prevents interference between the monitor and other electric appliances.

2. Degauss Circuit & Coil.

The degauss circuit consists of the degaussing coil, the PTC (Positive Temperature Coefficient) thermistor (TH901), and the relay (RL901). This circuit eliminates abnormal color of the screen automatically by degaussing the slot mask in the CDT when turn on the power switch.

When you need to degauss while using the monitor, select DEGAUSS on the OSD menu.

3. SMPS (Switching Mode Power Supply).

This circuit works with power of 100~240V or 200~240V (50/60Hz) specially for PFC version.

The operation procedure is as follows:

- 1) AC input voltage is rectified and smoothed by the bridge diode (D901) and the capacitor (C907).
- 2) The rectified voltage (DC voltage) is applied to the primary coil of the transformer (T901).
- 3) The control IC (IC901) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
- 4) Depending on the turn ratio of the transformer, the secondary voltages appear at the secondary coil of the transformer (T901).
- 5) These secondary voltages are rectified by each diode (D906, D907, D928, D912, D913) and operate the other circuits. (Deflection, Video Amplifier, etc.)

4. Display Power Management Circuit.

This circuit control power consumption of the monitor by detecting H and V sync signal. There are stand-by and suspend mode. When no horizontal or vertical sync signal input, the circuit consists of IC906 and Q904 becomes stand-by and suspend mode. It's power consumption is below 8W. When no horizontal and vertical sync signal input, it's power consumption is below 3W.

5. X-ray Protection.

This circuit detects the rectified DC voltage comes from the FBT pin 4. If the high voltage of the FBT reaches up to about 30kV (abnormal state), H.V control (IC702) detects. It stops B⁺ voltage supplied to the FBT (T701), and high voltage is not be generated, (In the normal state, the high voltage is about 27kV.)

6. Micom(Microprocessor) Circuit.

The operating procedure of Micom (Microprocessor) and its associated circuit is as follows:

- 1) H and V sync signal is supplied from Signal Cable to the Micom (IC401).
- 2) The Micom (IC401) distinguishes polarity and frequency of H and V sync.
- 3) The Micom controls each OSD function signals. (H-size, H-position, V-size, etc.)
- 4) The controlled data of each mode is stored in IC402. User can adjust screen condition by each OSD function. The data of the adjust screen condition is stored automatically.

7. Horizontal and Vertical Synchronous Processor.

This circuit generates the horizontal drive pulse and the vertical drive pulse by taking sync-signal from Signal Cable. This circuit consists of the TDA9113(IC701) and the associated circuit.

8. Oscillating Circuit for D/D Converter.

This circuit generates the pulse wave which has the horizontal period by taking the output of the TDA9113 (IC701).

9. D/D (DC to DC) Converter.

This circuit supplies DC voltage to the horizontal deflection output circuit by decreasing DC 190V which is the secondary voltage of the SMPS in accordance with the input horizontal sync signal.

10. Side-Pincushion Correcting Circuit.

This circuit improves the Side-pincushion of the screen by mixing east-west wave to the output of the horizontal deflection D/D converter which is used for the supply voltage source (B⁺) of the deflection circuit.

11. D/D Drive & Convert Circuit.

This circuit is used for supplying B^+ voltage to horizontal deflection output transistor (Q708). This circuit makes to add side-pincushion correcting signal to B^+ voltage.

12. Horizontal Deflection Output Circuit.

This circuit makes the horizontal deflection by supplying the saw-tooth current to the horizontal deflection yoke.

13. High Voltage Output & FBT (Flyback Transformer).

The high voltage output circuit is used for generating pulse wave to the primary coil of the FBT (Flyback Transformer (T701)). A boosted voltage (about 27kV) appears at the secondary of the FBT and it is supplied to the anode of the CDT.

And there are another output voltages such as the dynamic focus voltage.

14. H-Linearity Correction Circuit.

This circuit corrects the horizontal linearity for each horizontal sync frequency.

15. Vertical Output Circuit.

This circuit takes the vertical wave from the TDA9113 (IC701) and performs the vertical deflection by supplying the saw-tooth wave current from the TDA8172 (IC601) to the vertical deflection yoke.

17. Dynamic Focus Output Circuit.

This circuit takes H and V parabola wave from the TDA9113 (IC701), and amplifies these waves to offer to the FBT (T701).

18. H & V Blanking and Brightness Control.

This circuit eliminates the retrace line by supplying a negative pulse to the G1 of the CDT. The brightness control circuit is used to control of the screen brightness by changing the DC level of G1.

19. Image Rotation (Tilt) Circuit.

This circuit corrects the tilt of the screen by supplying the image rotation signal to the tilt coil which is attached to the CDT near the deflection.

20. Moire Reduction Circuit

This circuit reduce interference between the periodical display pattern and the CDT's slot (or dot).

The positions of every other one dot video signal beams (red, green, and blue beam) are shifted finely, thus reducing interference.

21. OSD Circuit.

This circuit is used for performing the OSD (On-Screen- Display) function.

When a user selects the OSD Select/Adjustment control, the adjustment status displays on the screen.

22. Video Pre-Amp Circuit.

This circuit amplifies the analog video signal from 0-0.7V to 0-4V. This circuit is operated by taking the clamp, R, G, B drives, and contrast signals from the Micom (IC401).

23. Video Output Amp Circuit.

This circuit amplifies the video signal which comes from the video pre-amp circuit and amplified video signal is applied to the CDT cathode.

ADJUSTMENT

GENERAL INFORMATION

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several adjustments may be required.

Adjustment should be following procedure and after warming up for a minimum of 30 minutes.

- Alignment appliances and tools.
 - IBM compatible PC.
 - Programmable Signal Generator.
(eg. VG-819 made by Astrodesign Co.)
 - EPROM or EEPROM with saved each mode data.
 - Alignment Adaptor and Software.
 - Digital Voltmeter.
 - White Balance Meter.
 - Luminance Meter.
 - High-voltage Meter.

AUTOMATIC AND MANUAL DEGAUSSING

The degaussing coil is mounted around the CDT so that automatic degaussing when turn on the monitor. But a monitor is moved or faced in a different direction, become poor color purity cause of CDT magnetized, then press DEGAUSSING on the OSD menu.

ADJUSTMENT PROCEDURE & METHOD

- Install the cable for adjustment such as Figure 1 and run the alignment program on the DOS for IBM compatible PC.
- Set external Brightness and Contrast volume to max position.

1. Adjustment for B⁺ Voltage.

- 1) Display cross hatch pattern at Mode 4.
- 2) Adjust C913 (+) voltage to $190V \pm 0.2V$ with **VR901**.

2. Adjustment for High-Voltage.

- 1) Display cross hatch pattern at Mode 4.
- 2) Adjust CDT Anode voltage to $27kV \pm 0.2kV$ with **VR701**.

3. Adjustment for Factory Mode (Preset Mode).

- 1) Display cross hatch pattern at Mode 1~4.
- 2) Run alignment program for EB990E on the IBM compatible PC.
- 3) EEPROM → ALL CLEAR → Y(Yes) command.
<Caution> Do not run this procedure unless the EEPROM is changed. All data in EEPROM (mode data and color data) will be erased.
- 4) COMMAND → PRESET START → Y(Yes) command.
- 5) DIST. ADJ. → FOS. ADJ command.

- 6) Adjust H-POSITION as arrow keys to center of the screen.
- 7) Adjust H-SIZE as arrow keys to $350 \pm 2mm$.
- 8) Adjust V-POSITION as arrow keys to center of the screen.
- 9) Adjust V-SIZE as arrow keys to $262 \pm 2mm$.
- 10) Adjust TILT as arrow keys to be the best condition.
- 11) Adjust SIDE-PIN(Side-Pincushion) as arrow keys to be the best condition.
- 12) Adjust TRAPEZOID as arrow keys to be the best condition.
- 13) Display cross hatch pattern at Mode 4.
- 14) DIST. ADJ. → BALANCE DATA command.
- 15) Adjust balance of Pin-Balance as arrow keys to be the best condition.
- 16) Adjust parallelogram as arrow keys to be the best condition.
- 17) Save of the Mode.
- 18) Save of the System.
- 19) Display from Mode 4 and repeat above from number 5) to 16).
- 20) COMMAND → PRESET EXIT → Y (Yes) command.

5. Adjustment for White Balance and Luminance.

- 1) Set the White Balance Meter.
- 2) Press the DEGAUSSING on the OSD menu for demagnetization of the CDT.
- 3) Display color 0,0 pattern at Mode 4.
- 4) COMMAND → PRESET START → Y(Yes) command.
- 5) Set Bightness and Contrast to max position.
- 6) COLOR ADJ. → BIAS ADJ. command of the alignment program.
- 7) Check whether blue color or not at R-BIAS and G-BIAS to min position, B-BIAS to 130 (decimal) position and Sub-Bightness to max(140) position. If it's not blue color, the monitor must repair.
- 8) Adjust Screen control on the FBT to $0.15 \pm 0.02FL$ of the raster luminance.
- 9) Adjust R-BIAS and G-BIAS command to $x=0.283 \pm 0.006$ and $y=0.298 \pm 0.006$ on the White Balance Meter with PC arrow keys.
- 10) Adjust SUB-Brightness command to $0.40 \pm 0.05FL$ of the raster luminance.
- 11) Display color 15,0 box pattern(70x70mm) at mode 4.
- 12) DRIVE ADJ command.
- 13) Set B-DRIVE to 100(decimal) at DRIVE of the alignment program.
- 14) Adjust R-DRIVE and G-DRIVE command to white balance $x=0.283 \pm 0.003$ and $y=0.298 \pm 0.003$ on the White Balance Meter with PC arrow keys.

- 15) Adjust SUB-CONTRAST command to $47 \pm 1\text{FL}$ of the raster luminance.
- 16) Display color 15,0 full white pattern at Mode 4.
- 17) Set the Brightness and Contrast to max.
- 18) COLOR ADJ. → LUMINANCE → ABL command.
- 19) Adjust ABL to $32 \pm 1\text{FL}$ of the luminance.
- 20) Exit from the program.

5. Input EDID Data.

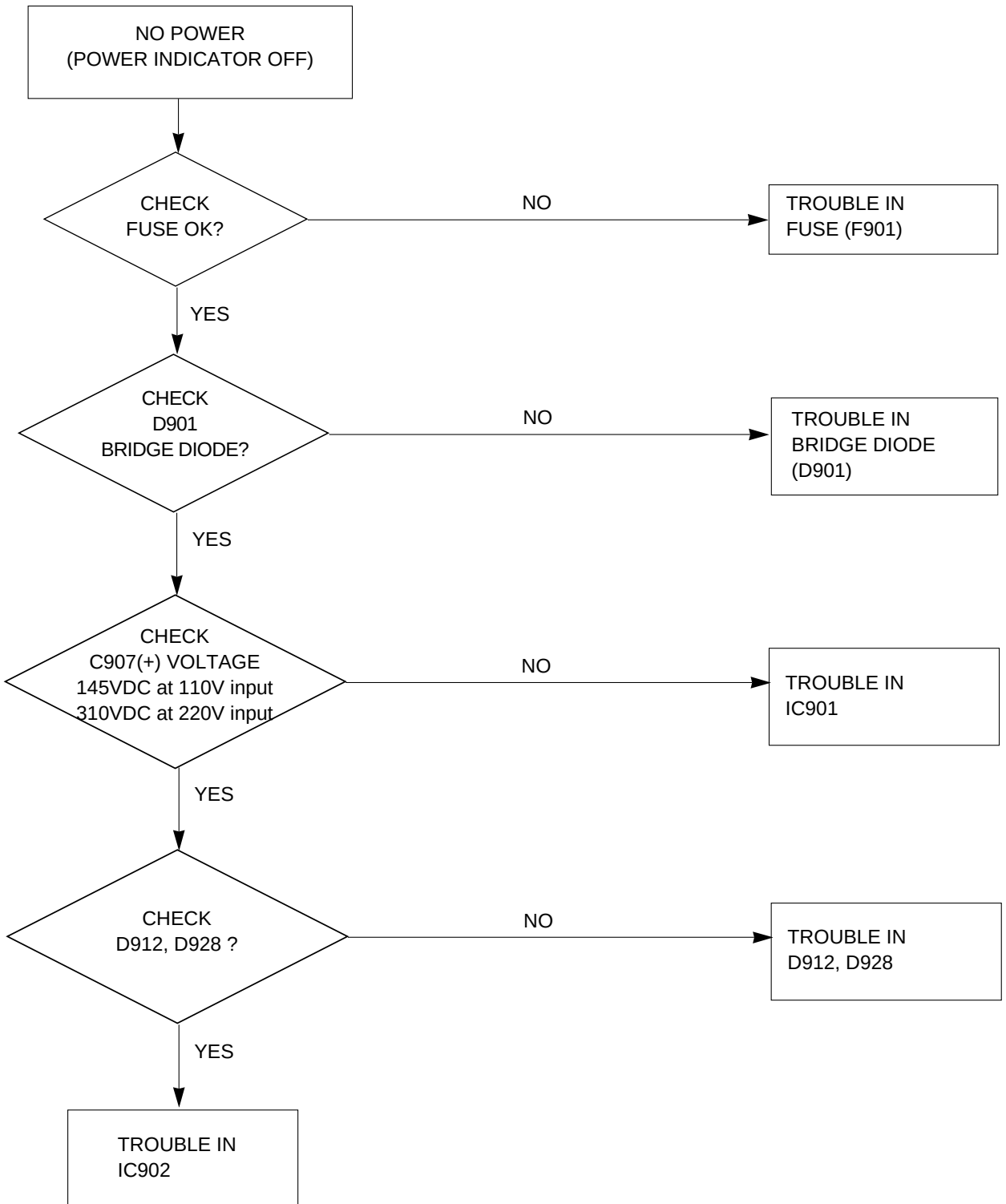
- 1) Display color 15,0 cross hatch pattern at Mode 4.
- 2) EEPROM → Write EDID command and confirm
"EDID Write OK!!" message of monitor.
- 3) Exit from the alignment program.
- 4) Power switch OFF/ON for EDID data save.

6. Adjustment for Focus.

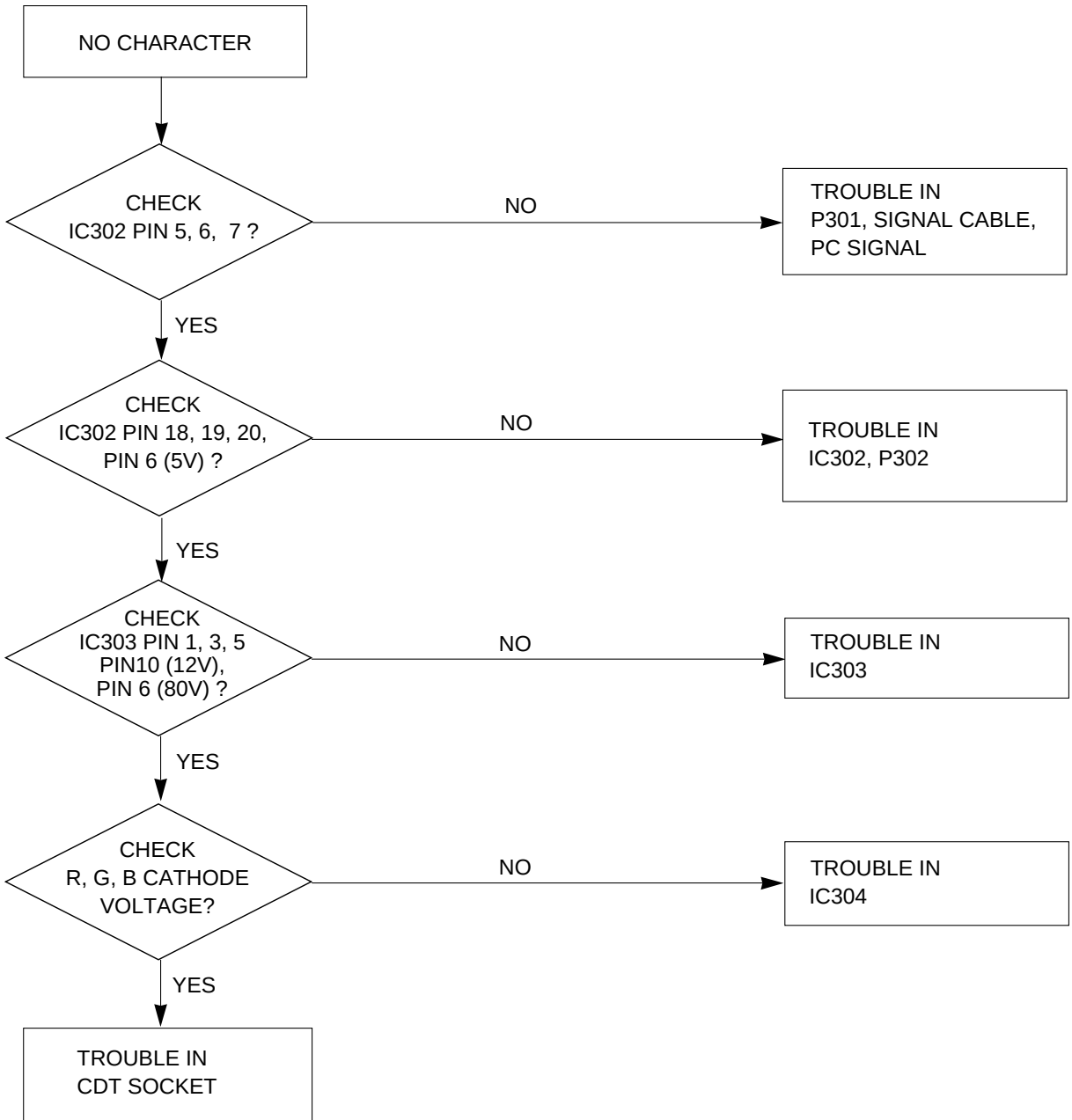
- 1) Display H character in full screen at Mode 4.
- 2) Adjust two Focus control on the FBT that focus should be the best condition.

TROUBLESHOOTING GUIDE

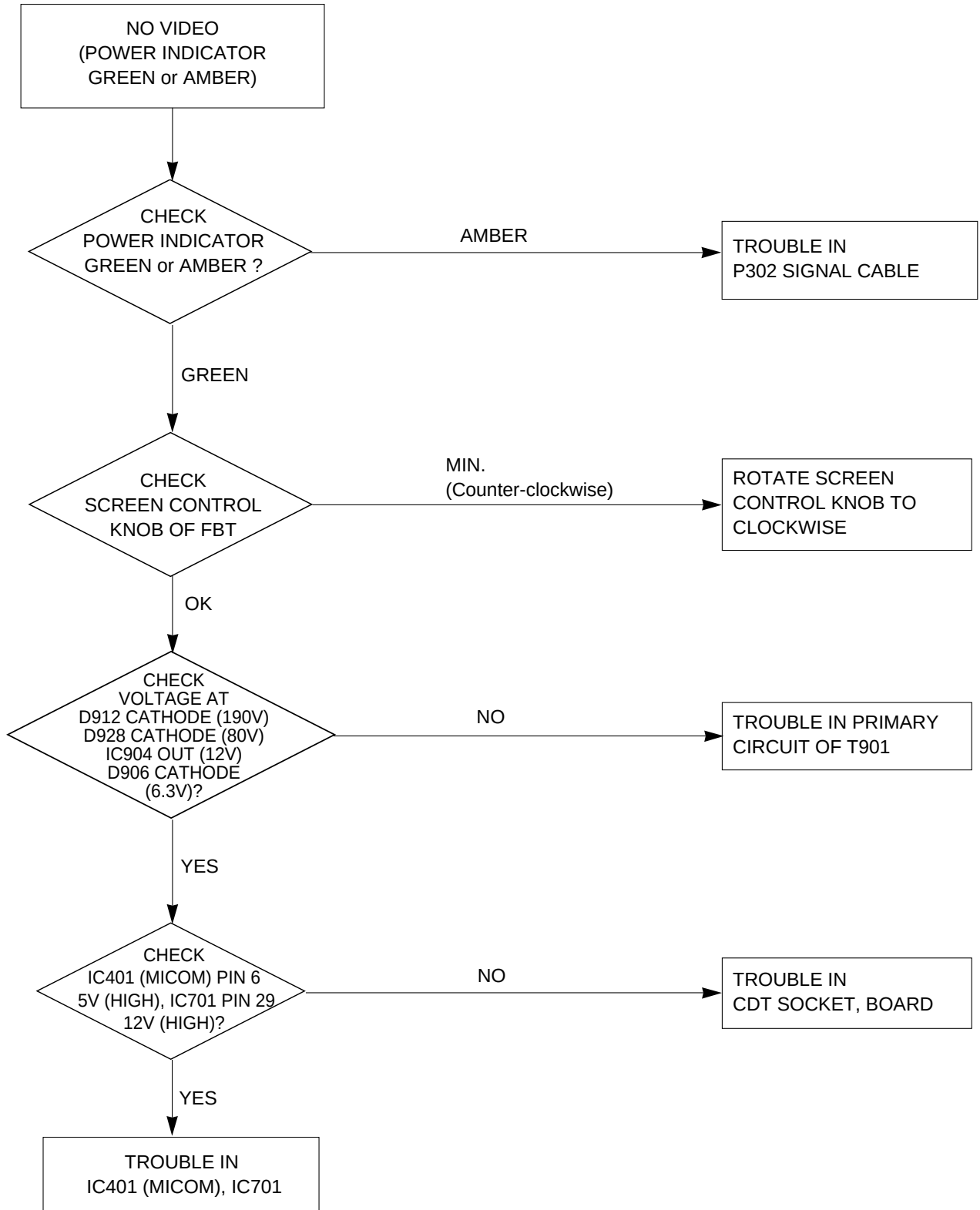
1. NO POWER



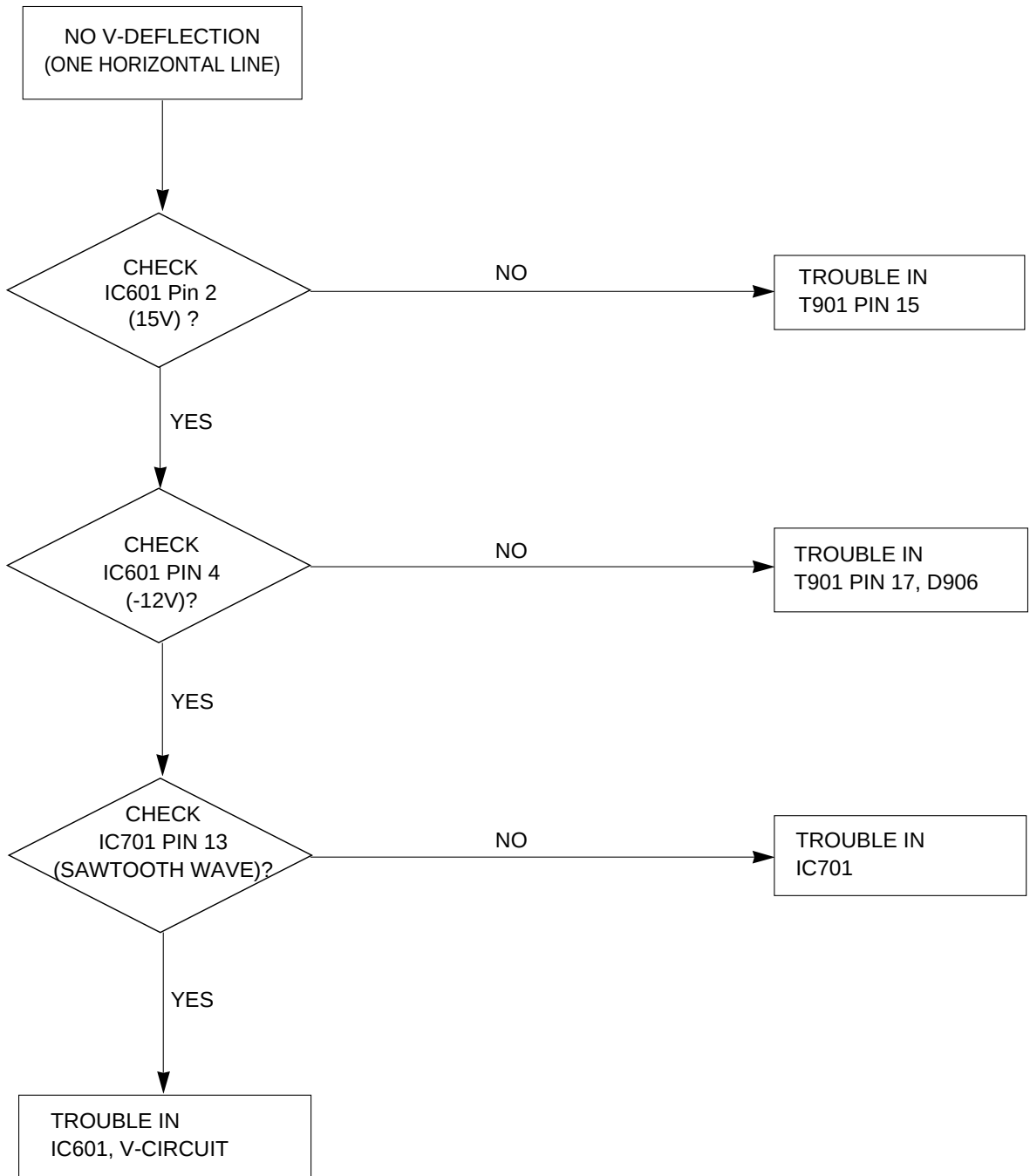
2. NO CHARACTER



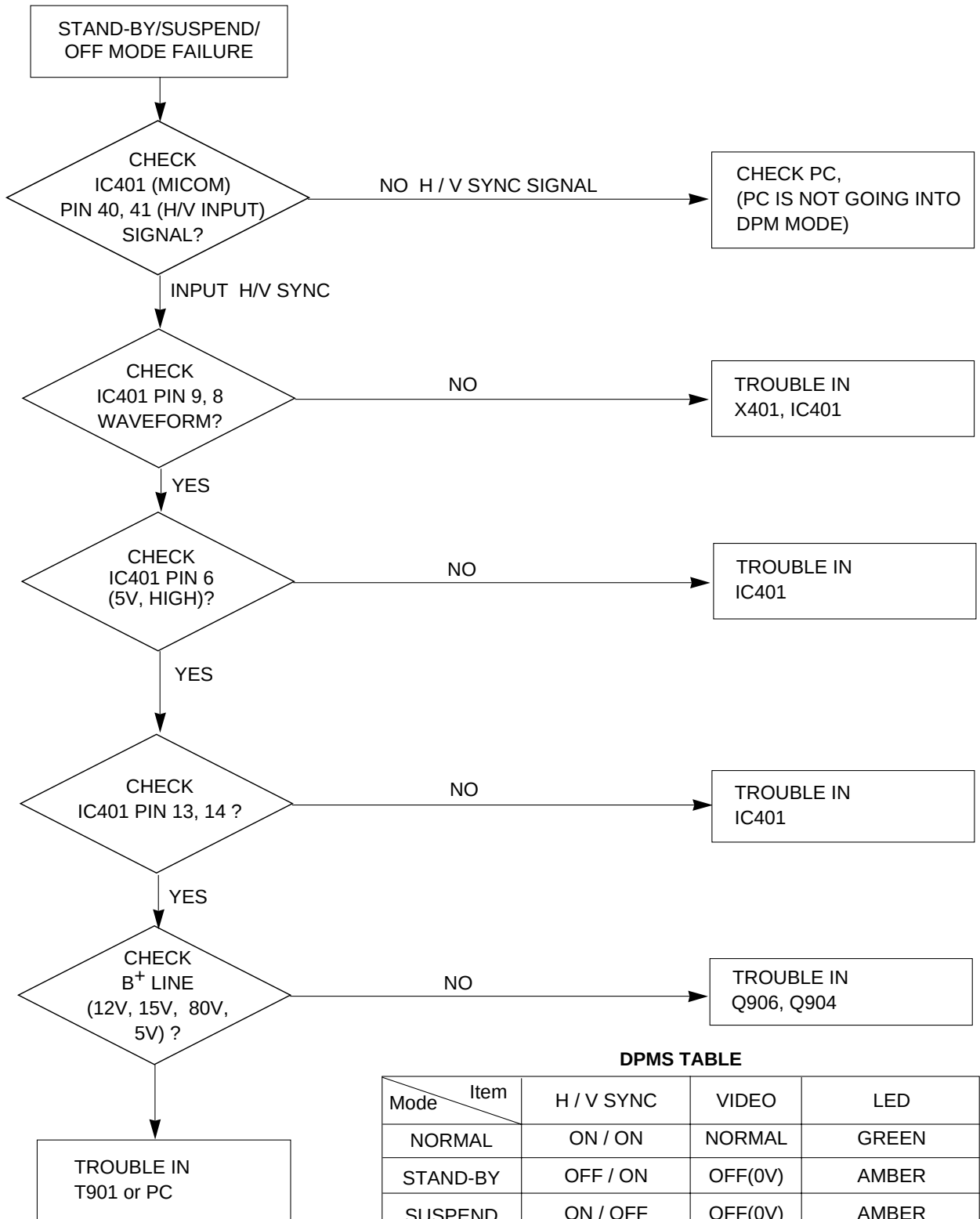
3. NO RASTER



4. NO VERTICAL DEFLECTION



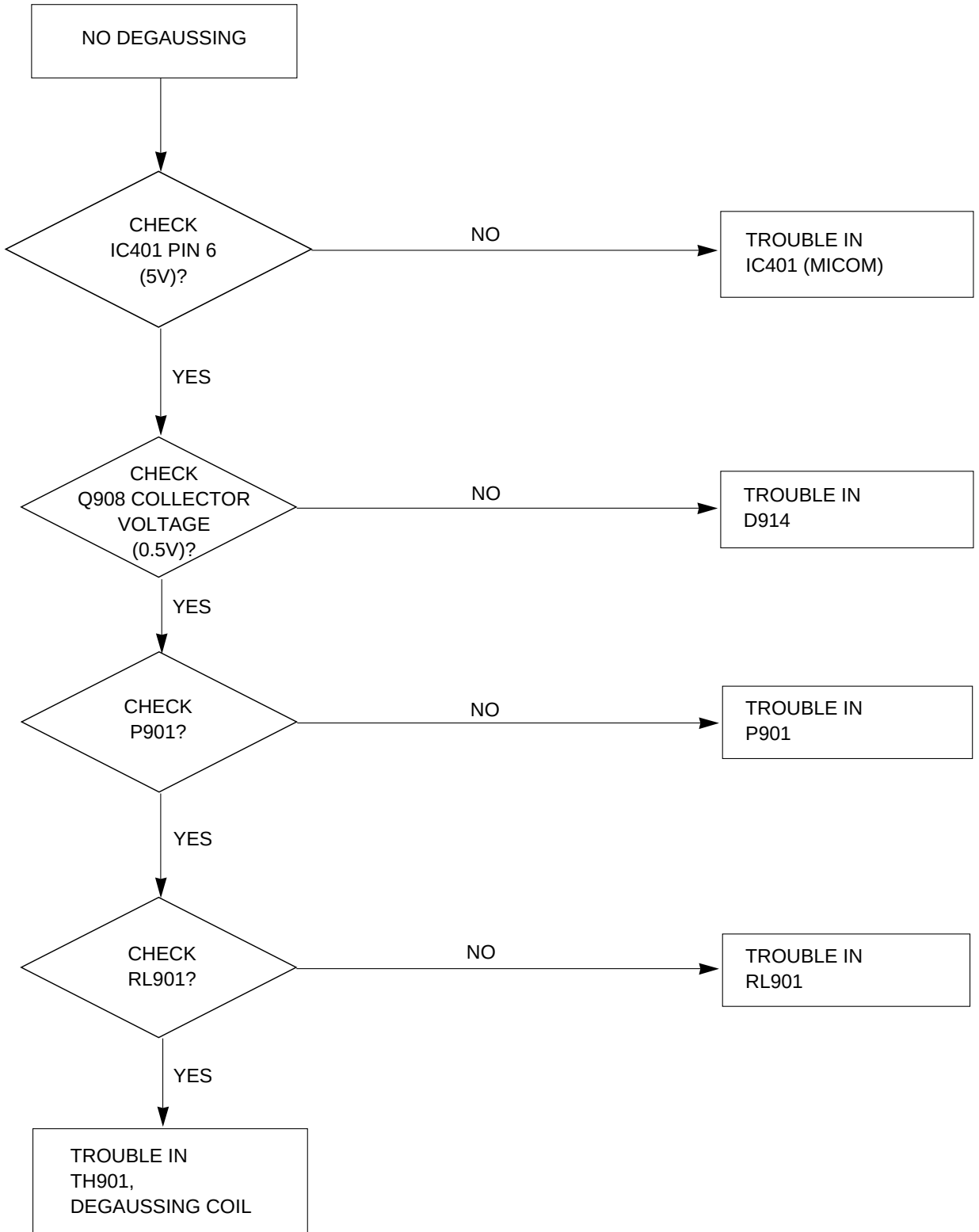
5. TROUBLE IN DPM



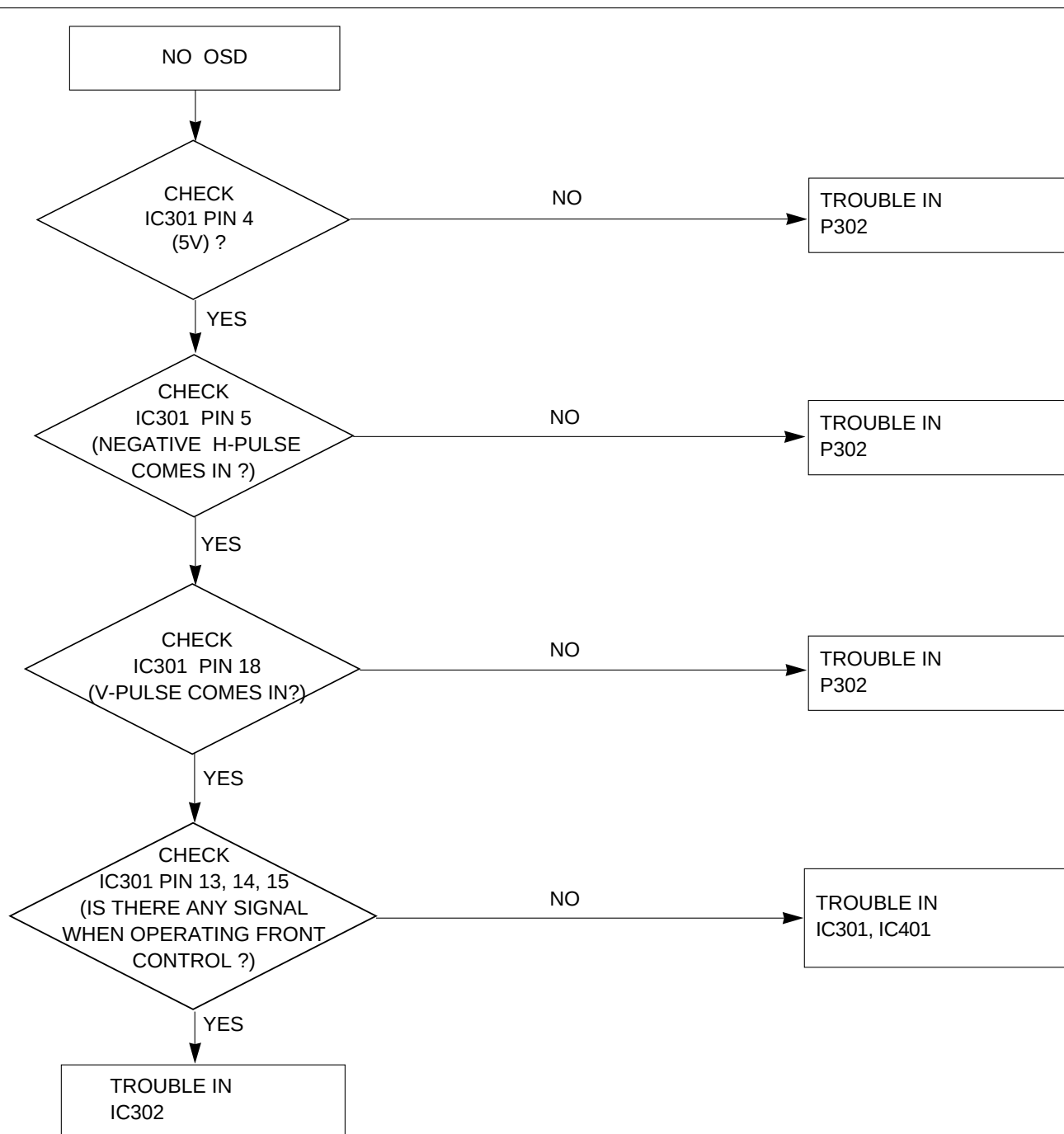
DPMS TABLE

Mode \ Item	H / V SYNC	VIDEO	LED
NORMAL	ON / ON	NORMAL	GREEN
STAND-BY	OFF / ON	OFF(0V)	AMBER
SUSPEND	ON / OFF	OFF(0V)	AMBER
OFF	OFF / OFF	OFF(0V)	AMBER

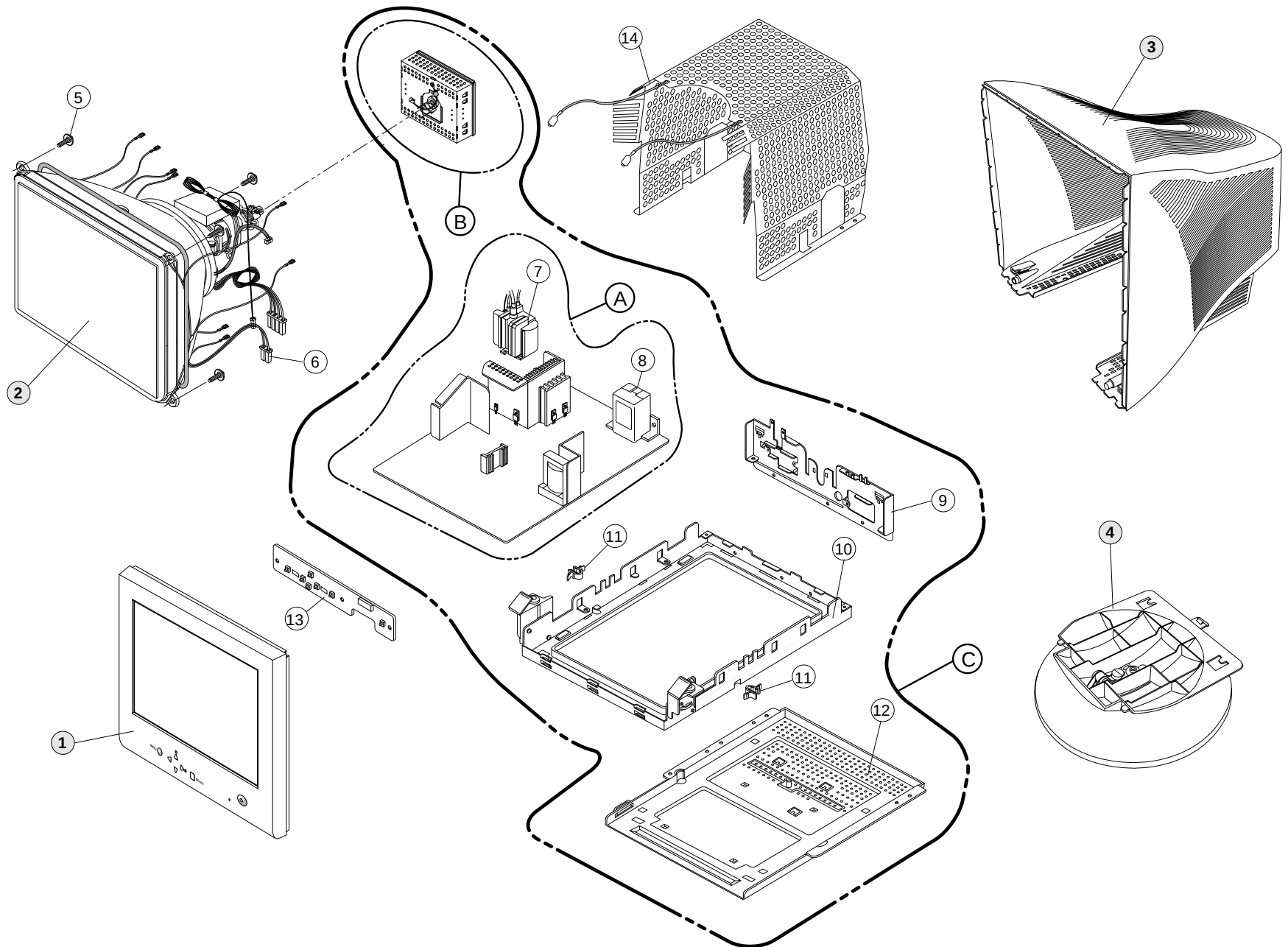
6. NO DEGAUSSING



7. TROUBLE IN OSD



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Ref. No.	Part No.	Description
1	3091TKC069B	CABINET ASSEMBLY, EB990E BRAND C063 TCO99(85964)
2	6318G19001A	CDT(CIRC), M46QCK761X123 SAMSUNG 95KHZ 29.1MM FLAT CDT
	6318L19001B	CDT(CIRC), M46QEF903X 03N6LD LG-PHILIPS 95KHZ 29.1MM FLAT
3	3809TKC038C	BACK COVER ASSY, CB997E TKC036 85964-PFC FOR EUROPE (EB990E-EP)
	3809TKC038A	BACK COVER ASSY, CB997E TKC036 85964 FOR W/WIDE (EB990E-EA)
4	3043TKK079A	TILT SWIVEL ASSY, CB997E TKT054/TKB048 85964
5	339-002H	SCREW ASSY PHP+5*20(FZMY)+GW18 NEW TYPE
6	6140TC4002A	COIL,DEGAUSSING, 1290MM 16.5OHM 0.45MM 115T 19" CB997E
7	6174T11002E	FBT (FLY BACK TRANSFORMER), Y268201 (HFL1127AD-RC) HITACHI 19"
	or 6174Z-1042B	FBT (FLY BACK TRANSFORMER), FMMTC94 AM1042B (LIM SANG IL) T701
8	6200TJB001H	FILTER(CIRC),EMC, 02MD1 DELTA BK W/O GND#
9	4950TKK292A	METAL REAR CB997E
10	4951TKK057A	METAL ASSY, FRAME BOTTOM
11	4930TKK031C	HOLDER, PCB FIX , PC+ABS
12	4950TKK289A	METAL SHIELD BOTTOM 997E
13	6871TST250A	PWB(PCB) ASSEMBLY,SUB, EB990E XIGU CONTROL TOTAL BRAND CA-91
14	4815TKT015A	SHIELD ASSY, TOP CB997E
A	6871TMT259B	PWB(PCB) ASSEMBLY,MAIN, EB990E PFC XIGP BRAND CA-95 TOTAL FOR EUROPE (EB990E-EP)
	6871TMT259C	PWB(PCB) ASSEMBLY,MAIN, EB990E NORMAL AXLTE BRAND CA-95 TOTAL FOR W/WIDE (EB990E-EA)
B	6871TVT242A	PWB(PCB) ASSEMBLY,VIDEO, EB990E XIGU VIDEO TOTAL BRAND CA-91
C	3313T19041B	MAIN TOTAL ASSEMBLY, EB990E PFC BRAND CA-95 FOR EUROPE (EB990E-EP)
	3313T19041C	MAIN TOTAL ASSEMBLY, EB990E NORMAL BRAND CA-95 FOR W/WIDE (EB990E-EA)

Comparison table of CDT

LOC. P/NO.	SAMSUNG CDT P/No.: 6318G19001A		LG-PHILIPS CDT P/No.: 6318L19001B	
	Part No.	Description	Part No.	Description
P451	.	.	6602T25008E	WAFER, SMW250-06 YEONHO 2.5MM LOCK S/T (6Pin)
P453	6602T25005A	WAFER, B3B-EH-A JST 2.5mm S/T (3Pin)	.	.
P704	ORN2702F409	RESISTOR, FIXED METAL FILM, 27K 1/6W 1% TA52	ORN3002F409	RESISTOR, FIXED METAL FILM, 30K 1/6W 1% TA52
J400	971-0054	WIRE, JUMP, TIN 50MM TAPING	.	.
J401	971-0054	WIRE, JUMP, TIN 50MM TAPING	.	.
R471	971-0054	WIRE, JUMP, TIN 50MM TAPING	.	.

REPLACEMENT PARTS LIST

CAUTION: BEFORE REPLACING ANY OF THESE COMPONENTS,
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

* NOTE : **S** SAFETY Mark 
AL ALTERNATIVE PARTS

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
MAIN BOARD				
CAPACITORS				
		C201	0CN1040K949	0.1M 50V Z F TA52
		C301	OCE477CF618	470UF SHL 16V M FL TP5
		C302	OCE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C303	OCK1040K945	0.1UF 50V Z F TR
		C304	181-288N	MKT 100V 103JTR PHS86103
		C305	181-288N	MKT 100V 103JTR PHS86103
		C306	0CN1040K949	0.1M 50V Z F TA52
		C307	0CN1040K949	0.1M 50V Z F TA52
		C308	0CN1040K949	0.1M 50V Z F TA52
		C309	181-288B	MKT 100V 104JTR PHS26104
		C310	OCK1040K945	0.1UF 50V Z F TR
		C312	181-288B	MKT 100V 104JTR PHS26104
		C313	181-288B	MKT 100V 104JTR PHS26104
		C314	181-288B	MKT 100V 104JTR PHS26104
		C315	181-288B	MKT 100V 104JTR PHS26104
		C316	OCK10302940	0.01M 2KV Z F S
		C317	OCE106CN638	"10UF SHL,SD 100V M FM5 TP 5"
		C318	181-288B	MKT 100V 104JTR PHS26104
		C319	OCK10302940	0.01M 2KV Z F S
		C320	OCE107CN630	100U SHL 100V M FM5
		C321	OCE107EF638	100UF KMG 16V M FM5 TP 5
		C322	0CN1040K949	0.1M 50V Z F TA52
		C323	OCE476EN618	47UF KMG 100V M FL TP 5
		C324	181-288B	MKT 100V 104JTR PHS26104
		C325	OCC3300K415	33P 50V J NP0 TP
		C326	181-288B	MKT 100V 104JTR PHS26104
		C327	181-288B	MKT 100V 104JTR PHS26104
		C329	181-288B	MKT 100V 104JTR PHS26104
		C330	181-288B	MKT 100V 104JTR PHS26104
		C332	181-288E	MKT 100V 474JTR PHS 26474
		C333	181-288E	MKT 100V 474JTR PHS 26474
		C334	181-288E	MKT 100V 474JTR PHS 26474
		C336	OCK1010W515	100P 500V K B TS
		C337	181-288B	MKT 100V 104JTR PHS26104
		C340	OCE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C341	181-288B	MKT 100V 104JTR PHS26104
		C342	OCC1800W405	18PF D 500V 5% TR SL
		C343	OCK1010K515	100PF 50V K B TR
		C345	OCK22202510	2200P 2KV K B S
		C346	OCC47001505	47PF 1KV K SL TR
		C347	OCC47001505	47PF 1KV K SL TR
		C348	OCK1040K945	0.1UF 50V Z F TR
		C349	181-288E	MKT 100V 474JTR PHS 26474
		C350	OCK2210K515	220P 50V K B TS
		C355	OCK1040K945	0.1UF 50V Z F TR
		C356	0CN6810K519	680P 50V K B TA52
		C401	OCK1010K515	100PF 50V K B TR
		C402	OCE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C403	0CN2710K519	270P 50V K B TA52
		C404	0CN2710K519	270P 50V K B TA52
		C405	0CN2710K519	270P 50V K B TA52
		C406	OCC0400K115	4P 50V D NP0 TS

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C407	OCC0400K115	4P 50V D NP0 TS
		C410	OCK1040K945	0.1UF 50V Z F TR
		C417	OCK1040K945	0.1UF 50V Z F TR
		C418	0CN1040K949	0.1M 50V Z F TA52
		C420	OCE224CK638	"0.22UF SHL,SD 50V M FM5 TP 5"
		C452	OCE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C453	OCE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C454	OCK1040K945	0.1UF 50V Z F TR
		C455	OCK1040K945	0.1UF 50V Z F TR
		C601	OCQ1531N419	0.015U 100V J POLY NI TP
		C602	OCE225CK638	"2.2UF SHL,SD 50V M FM5 TP 5"
		C603	0CN2220K519	2200PF 50V K B TA52
		C604	0CN1040K949	0.1M 50V Z F TA52
		C605	181-288Q	MKT 100V 154JTR PHS26154
		C606	OCK2220K515	2200P 50V K B TS
		C608	OCE108CF618	1000UF SHL 16V M FL TP5
		C609	0CN1020K519	1000P 50V K B TA52
		C610	OCE227EK618	220UF KMG 50V M FL TP 5
		C611	OCE108CH618	1000UF SHL 25V M FL TP5
		C616	181-477W	473J 19.5*15.0*8.5*7.5 250V J
		C617	181-288N	MKT 100V 103JTR PHS86103
		C618	181-288K	MKT 100V 683JTR PHS26683
		C619	OCE475CK638	"4.7UF SHL,SD 50V M FM5 TP 5"
		C701	OCE477CF618	470UF SHL 16V M FL TP5
		C702	OCE475CK638	"4.7UF SHL,SD 50V M FM5 TP 5"
		C703	OCK1040K945	0.1UF 50V Z F TR
		C704	181-288E	MKT 100V 474JTR PHS 26474
		C705	OCE477CF618	470UF SHL 16V M FL TP5
		C706	181-288B	MKT 100V 104JTR PHS26104
		C707	181-288N	MKT 100V 103JTR PHS86103
		C708	181-288N	MKT 100V 103JTR PHS86103
		C709	OCK8210W515	820P 500V K B TS
		C710	OCK47101515	470P 1KV K B TS
		C711	OCK8210W515	820P 500V K B TS
		C712	OCBZTTA002A	2000F D 2.5KV J M/PP NI TP7.5
		C713	0CN1040K949	0.1M 50V Z F TA52
		C714	181-477U	333J 19.5*13.0*7.5*7.5 250V J
		C715	OCE107CR650	100UF SHL 250V M FM7.5 BULK
		C717	OCE105CK638	"1UF SHL,SD 50V M FM5 TP 5"
		C718	OCBZTTA002A	2000F D 2.5KV J M/PP NI TP7.5
		C719	181-305M	824J 26.0*21.5*13.0*15.0 250V
		C720	181-477Y	683JF 20.0*16.5*9.5*7.5 250V J
		C721	181-482J	394J 18.0*19.0*12.0*7.5 250V J
		C722	181-305Y	MPP 250 204J S=10.0
		C723	181-303C	154J 30.0*17.5*10.5*20.0 250V
		C724	0CN1040K949	0.1M 50V Z F TA52
		C725	0CN1040K949	0.1M 50V Z F TA52
		C726	0CN1040K949	0.1M 50V Z F TA52
		C727	0CN1040K949	0.1M 50V Z F TA52
		C728	OCE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C729	OCK1040K945	0.1UF 50V Z F TR
		C730	OCE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C731	181-288B	MKT 100V 104JTR PHS26104
		C732	181-310U	2.2UF SHL-BP/NP 50V FM5 BP(D)
		C733	0CN1040K949	0.1M 50V Z F TA52

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C734	0CK1040K945	0.1UF 50V Z F TR
		C735	0CK10102515	100PF 2KV K B TR
		C736	0CQ3321N419	3300P 100V J POLY NI TP
		C737	0CK47101515	470P 1KV K B TS
		C738	0CK10102515	100PF 2KV K B TR
		C739	181-478A	104J 20.0*18.5*10.5*7.5 250V J
		C740	0CN1040K949	0.1M 50V Z F TA52
		C741	181-482J	394J 18.0*19.0*12.0*7.5 250V J
		C742	0CK47101515	470P 1KV K B TS
		C743	0CK6810W515	680P 500V K B TS
		C744	0CE6866F638	68UF SMS 16V M FM5 TP5
		C745	0CE476CH638	"47UF SHL,SD 25V M FM5 TP 5"
		C747	0CE107CN618	100UF SHL 100V M FL TP5
		C748	181-477A	102J 19.5*12.0*7.0*7.5 250V J
		C749	0CK1040K945	0.1UF 50V Z F TR
		C750	181-477F	272J 19.5*12.0*7.0*7.5 250V J
		C751	0CQ2221N419	2200PF 100V J PE NI TP
		C752	0CBZTB003D	182J 20.0*10.0*6.0*10.0 800V J
		C753	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C754	0CE107CQ650	100UF SHL 200V M FM7.5 BULK
		C755	0CE105CK638	"1UF SHL,SD 50V M FM5 TP 5"
		C757	0CE226CK638	"22UF SHL,SD 50V M FM5 TP 5"
		C758	0CK10302945	0.01UF 2KV Z F TR
		C759	0CQ1021N419	1000P 100V J POLY NI TP
		C761	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C762	0CE685CK638	"6.8UF SHL,SD 50V M FM5 TP 5"
		C763	181-475A	102J 11.5*10.0*6.0*5.0 100V J
		C764	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C766	0CN1210K519	120P 50V K B TA52
		C767	0CN1210K519	120P 50V K B TA52
		C768	0CN1040K949	0.1M 50V Z F TA52
		C769	0CE224CK638	"0.22UF SHL,SD 50V M FM5 TP 5"
		C770	0CQ1021N419	1000P 100V J POLY NI TP
		C771	181-288J	MKT 100V 563JTR PHS26563
		C772	181-288N	MKT 100V 103JTR PHS86103
		C773	181-288G	MKT 100V 334JTR PHS26334
		C779	0CE105CK638	"1UF SHL,SD 50V M FM5 TP 5"
		C780	0CE227EN630	220UF KMG 100V M FM5 BULK
		C787	181-288Q	MKT 100V 154JTR PHS26154
		C788	0CN2220K519	2200PF 50V K B TA52
		C795	0CK1040K945	0.1UF 50V Z F TR
		C800	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C801	0CE227CH638	"220UF SHL,SD 25V M FM5 TP 5"
		C803	0CK22101515	220P 1KV K B TP5
		C804	0CE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C805	0CK5610K515	560P 50V K B TS
		C806	0CK1010K515	100PF 50V K B TR
		C807	0CE476CH638	"47UF SHL,SD 25V M FM5 TP 5"
		C808	0CK1020K515	1000PF 50V K B TR
		C809	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C810	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C811	0CC3300K415	33P 50V J NP0 TS
		C812	181-288Q	MKT 100V 154JTR PHS26154
		C813	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C814	181-310A	10UF SM-BP(D) 5*11 16V M RADIA
		C815	0CK1010K515	100PF 50V K B TR
		C817	0CK68101515	680P 1KV K B TS
		C818	0CC1000K115	10P 50V D NP0 TS
		C819	0CE105CP638	"1UF SHL,SD 160V M FM5 TP 5"
		C820	0CC47001505	47PF 1KV K SL TR
		C821	0CC47001505	47PF 1KV K SL TR
		C901	0CK33101515	330P 1KV K B TS

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		C902	0CQ1831N419	0.018UF 100V J PE NI TP
		C903	0CK8210W515	820P 500V K B TS
		C905	0CE476EH638	47UF KMG 25V M FM5 TP 5
		C906	0CE226ER618	22UF KMG 250V M FL TP 5
		C907	181-296F	330UF SMH(30*40) 400V M VNSN
		C908	181-288D	MKT 100V 473JTR PHS26473
		C909	0CE108CF618	1000UF SHL 16V M FL TP5
		C910	0CE108CF618	1000UF SHL 16V M FL TP5
		C911	0CE227EN630	220UF KMG 100V M FM5 BULK
		C912	0CK1040K945	0.1UF 50V Z F TR
		C913	0CE227CR650	220UF SHL 250V M FM7.5 BULK
		C915	0CK22201510	2200P 1KV K B S
		C917	0CE227CH638	"220UF SHL,SD 25V M FM5 TP 5"
		C918	0CK6810W515	680P 500V K B TS
		C919	0CC47001505	47PF 1KV K SL TR
		C921	0CE476CH638	"47UF SHL,SD 25V M FM5 TP 5"
		C922	0CKZTTA003C	SC E 472M 14.0FF7 250V TP7.5 S
		C923	0CK33101515	330P 1KV K B TS
		C927	0CE228EH630	2200UF KMG 25V M FM5 BULK
		C928	0CE476CN618	47UF SHL 100V M FL TP5
		C931	0CE108CF618	1000UF SHL 16V M FL TP5
		C934	181-288B	MKT 100V 104JTR PHS26104
		C936	0CK1020K515	1000PF 50V K B TR
		C939	0CK1040K945	0.1UF 50V Z F TR
		C940	181-305A	MPP 250V 104J S=10.0
		C942	0CK2710W515	270P 500V K B TS
		C947	0CE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
DIODES				
		D201	0DL305029BA	LTL-305DJ-0C2 TP LITEON GREEN/
		D301	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D302	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D303	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D304	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D305	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D306	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D307	0DS124409AA	1SS244 TP ROHM KOREA
		D308	0DS124409AA	1SS244 TP ROHM KOREA
		D309	0DS124409AA	1SS244 TP ROHM KOREA
		D310	0DS124409AA	1SS244 TP ROHM KOREA
		D311	0DS124409AA	1SS244 TP ROHM KOREA
		D312	0DS124409AA	1SS244 TP ROHM KOREA
		D313	0DS124409AA	1SS244 TP ROHM KOREA
		D314	0DS124409AA	1SS244 TP ROHM KOREA
		D315	0DS124409AA	1SS244 TP ROHM KOREA
		D318	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D319	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D401	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D402	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D451	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D452	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D453	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D454	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D455	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D601	0DD100009DE	RGP10G TP G.I DO204AL 400V 1A
		D610	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D611	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D702	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D703	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D704	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D705	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		D708	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D710	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D712	0DD140009AA	EK14 V(1) TP SANKEN E/EO-TMD 4
		D713	0DR200000EA	FMQ-G2FMS BK SANKEN NON 1500V
		D714	0DR260400AA	S2L60-4004P15 BK SHINDENGEN NO
		D719	0DRFJ00011A	YG339D6F208 FUJI ST TO220 -400
		D720	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D721	0DR400409AB	UF4004 TP G.I DO204AL 400V 1A
		D722	0DR400409AB	UF4004 TP G.I DO204AL 400V 1A
		D723	0DD100009DA	RGP10J TP G.I DO204AL 600V 1A
		D724	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D725	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D726	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D727	0DD140009AA	EK14 V(1) TP SANKEN E/EO-TMD 4
		D729	0DD100009DE	RGP10G TP G.I DO204AL 400V 1A
		D730	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D731	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D733	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D741	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D742	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D743	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D744	0DD400709CB	UF4007 TP G.I DO204AL 1000V 1
		D745	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D746	971-0054	TIN 50MM TAPING
		D751	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D752	0DD100009DA	RGP10J TP G.I DO204AL 600V 1A
		D753	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D754	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D755	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D760	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D761	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D901	0DD360000DB	D3SB60 SHINDENKEN
		D902	0DD400709CB	UF4007 TP G.I DO204AL 1000V 1
		D903	0DD400709CB	UF4007 TP G.I DO204AL 1000V 1
		D904	0DD100009DA	RGP10J TP G.I DO204AL 600V 1A
		D905	0DR153979AA	1N5397GP TP G.I DO201AD 600V 1
		D906	0DD150009CB	RGP15D TP G.I DO204AC 200V 1.
		D907	0DD200009AJ	RL2Z V(1) TP SANKEN A-TMD 200
		D912	0DR210009AB	RL2AV(1) TP SANKEN A-TMD 600
		D913	0DR240000DA	RL2Z(LF-C4) BK SANKEN NON 200V
		D914	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D917	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D921	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D922	0DR140059DA	1N4005TB52 TP LITEON DO41 600V
		D923	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D924	0DS113309AA	1SS133 TP ROHM KOREA DO34 90V
		D928	0DR360000AB	D3L60 BK SHINDENGEN ITO220 6
		D933	0DR140049AC	1N4004A T-81 TP ROHM-KOREA DO4
		D940	0DD100009DA	RGP10J TP G.I DO204AL 600V 1A
		ZD201	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD202	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD203	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD303	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD306	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD402	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD403	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD404	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD405	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD407	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD408	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD409	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD410	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		ZD701	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500MW
		ZD702	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500MW
		ZD703	0DZ130009CJ	MTZJ13B TP ROHM-K DO34 0.5W 13
		ZD704	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD705	0DZ910009AH	MTZJ9.1B TP ROHM-K DO34 500MW
		ZD706	0DZ180009AG	MTZJ18B TP ROHM-K DO34 500MW
		ZD901	0DZ150009AD	MTZJ15B TP ROHM-K DO34 500MW 1
		ZD904	0DZ560009CE	MTZJ5.6B TP ROHM-K DO34 500MW
		ZD905	0DZ110009AD	MTZJ11B TP ROHM-K DO34 500MW 1
		ZD907	0DZ820009AH	MTZJ8.2B TP ROHM-K DO34 500MW
ICs				
		IC301	0IPRPNV007A	"NT68275-00015 NOVATEK 16.DIP S"
		IC302	0IPRPN008A	LM1267NA NATIONAL SEMICONDUCTO
		IC303	0IPRPN007A	LM2463TA NATIONAL SEMICONDUCTO
		IC304	0IPRPN005A	LM2480NA NATIONAL SEMICONDUCTO
		IC401	0IZZTSZ171A	WELTEREND 42PIN BK EB990E
		IC402	0ISG240860A	M24C08-BN6 8DIP BK 8K SERIAL I
		IC601	0ISG817200A	TDA8172
		IC701	0ISG911300C	TDA9113(H) SGS-THOMSON 32SDIP
		IC702	0IMI625010A	M62501P 16P4 BK INTERFACE PWM
		IC703	0ISS358000C	KA358 OP AMP
		IC704	0ISS393000F	KA393
		IC901	0ISK645413A	STR-F6454R[LF1351] 5PIN BK SWI
△		IC902	0ILI817000E	LTV-817M B 4P BK PHOTO COUPLER
		IC904	0ISS781200F	KA7812
		IC905	0ISS780500F	KA7805
△		IC907	0IKE431000B	KIA431 (TP)
COILS & COREs				
		L304	0LA1000K119	100UH K 2.3*3.4 TP
		L305	0LA0270K119	0.27UH K 2.3*3.4 TP
		L306	0LA0270K119	0.27UH K 2.3*3.4 TP
		L307	0LA0270K119	0.27UH K 2.3*3.4 TP
		L308	971-0054	TIN 50MM TAPING
		L309	971-0054	TIN 50MM TAPING
		L310	971-0054	TIN 50MM TAPING
		L702	150-985N	DR10*10 4.7UH 0.16MM 322.5T
		L703	6140TYZ009A	DR 14*15-C5.2 14*9T 2.5UH 0.12
		L706	6140TBZ009C	NO CORE 10UH 0.12*15MM 50.5T F
		L901	150-235C	DR8*11 100UH 0.4MM 53.5T
		FB201	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB301	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB302	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB303	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB304	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB305	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB309	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB310	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB312	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB314	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB315	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB316	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB317	125-155A	BFD3510R2FG SAMWHA 3.5*10MM RA
		FB401	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB402	125-155N	BFD3565R2FG SAMWHA 3.5*6.5MM R
		FB403	125-155L	BFS3580A0FG SAMWHA 3.5*8.0MM A
		FB701	125-155P	BFS2550R2FG SAMWHA 2.5*5.0MM R
		FB702	971-0054	TIN 50MM TAPING
		FB901	125-155L	BFS3580A0FG SAMWHA 3.5*8.0MM A
		FB902	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		FB903	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB904	125-155J	BFS2550A0FG SAMWHA 2.5*5.0MM A
		FB905	125-155L	BFS3580A0FG SAMWHA 3.5*8.0MM A
TRANSISTOR				
		Q300	0TR114009AA	DTA114ES TP ROHM-K SPT PNP
		Q301	0TR390409CA	2N3904 TP SAMSUNG TO92 NPN
		Q302	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q451	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q452	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q453	0TR320209AA	KTC3202-Y(KTC1959) TP KEC TO92
		Q454	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q455	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q456	0TR320209AA	KTC3202-Y(KTC1959) TP KEC TO92
		Q604	0TR320709AA	KTC3207(KTC2482) TP KEC TO92L
		Q701	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q702	0TR390409CA	2N3904 TP SAMSUNG TO92 NPN
		Q703	0TR471009AA	KSD471AC-Y TP SAMSUNG TO92 NP
		Q704	0TR564009AB	KSB564AC-YTA TP SANSUNG TO92 P
		Q705	0TR471009AA	KSD471AC-Y TP SAMSUNG TO92 NP
		Q706	0TR564009AB	KSB564AC-YTA TP SANSUNG TO92 P
		Q707	0TR216101AA	KTD2161-Y ST KEC TO220AB NPN T
		Q708	0TR558900BA	"2SC5589(LG,W/M) BK TOSHIBA TO3"
		Q709	0TF306000AA	2SJ306 BK SANYO -250V -3A TO2
		Q710	0TFFJ10001A	FUJI 2SK2761-01MR ST TO220F 60
		Q711	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q712	0TR320209AA	KTC3202-Y(KTC1959) TP KEC TO92
		Q713	0TR390409CA	2N3904 TP SAMSUNG TO92 NPN
		Q714	0TR390409CA	2N3904 TP SAMSUNG TO92 NPN
		Q715	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC TO9
		Q716	0TR390600CA	2N3906 TP SAMSUNG TO92 NPN
		Q717	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q718	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q719	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q720	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q721	0TF640000CA	IRFS640A BK SAMSUNG 200V 9A T
		Q722	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q725	0TR920009AB	KSP92 TP SAMSUNG TO92 HIGH VOL
		Q726	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q727	0TF630000CA	IRFS630A BK SAMSUNG 200V 6.5A
		Q741	0TR440009CA	KSP44 TP SAMSUNG
		Q743	0TR555109AB	2N5551 TP SAMSUNG TO92 AMP T
		Q750	0TF283509AA	2SK2835(TP) TP TOSHIBA 200V 5A
		Q751	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q752	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q753	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q754	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q755	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q761	0TR114009AB	DTC114ES TP ROHM-K SPT NPN
		Q801	0TRFC10005A	FAIRCHILD TIP30C ST TO220 -100
		Q802	0TRFC10004A	FAIRCHILD TIP29C ST TO220 100V
		Q901	0TR320709AA	KTC3207(KTC2482) TP KEC TO92L
		Q902	0TR320709AA	KTC3207(KTC2482) TP KEC TO92L
		Q904	0TR320609AB	KTC3206-Y(KTC2229) TP KEC TO92
		Q905	0TR127509AC	KTA1275-Y(KTA1013) TP KEC TO92
		Q906	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q907	0TR320609AB	KTC3206-Y(KTC2229) TP KEC TO92
		Q908	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q909	0TR319809AB	KTC3198-GR(KTC1815) TP KEC TO9
		Q911	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO92
		Q931	0TR127509AC	KTA1275-Y(KTA1013) TP KEC TO92

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
RESISTORS				
		R201	0RD1001Q609	1K 1/4W(3 5% TA52
		R202	0RD1600Q609	160 1/4W(3 5% TA52
		R203	0RD2200Q609	220 1/4W(3 5% TA52
		R204	0RD2200Q609	220 1/4W(3 5% TA52
		R205	0RD1001Q609	1K 1/4W(3 5% TA52
		R206	0RD1600Q609	160 1/4W(3 5% TA52
		R207	0RD3300Q609	330 1/4W(3 5% TA52
		R208	0RD3300Q609	330 1/4W(3 5% TA52
		R209	0RD5600Q609	560 1/4W(3 5% TA52
		R210	0RD2000Q609	200 1/4W(3 5% TA52
		R211	971-0054	TIN 50MM TAPING
		R300	0RD1001Q609	1K 1/4W(3 5% TA52
		R301	0RD2202Q609	22K 1/4W(3 5% TA52
		R301	0RD0752Q609	75 1/4W(3 5% TA52
		R302	0RD0752Q609	75 1/4W(3 5% TA52
		R303	0RD0752Q609	75 1/4W(3 5% TA52
		R304	0RD0332Q609	33 1/4W(3 5% TA52
		R305	0RD0332Q609	33 1/4W(3 5% TA52
		R306	0RD0332Q609	33 1/4W(3 5% TA52
		R307	0RD5601Q609	5.60K 1/4W(3 5% TA52
		R308	0RD1002Q609	10K 1/4W(3 5% TA52
		R309	0RD5601Q609	5.60K 1/4W(3 5% TA52
		R310	0RD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R311	0RN1002F409	10K 1/6W 1 TA52
		R312	0RD0472Q609	47 1/4W(3 5% TA52
		R313	0RD1000Q609	100 1/4W(3 5% TA52
		R314	0RD1001Q609	1K 1/4W(3 5% TA52
		R315	0RD1000Q609	100 1/4W(3 5% TA52
		R316	0RD1000Q609	100 1/4W(3 5% TA52
		R317	0RD1002Q609	10K 1/4W(3 5% TA52
		R318	0RD1001Q609	1K 1/4W(3 5% TA52
		R319	0RD1000Q609	100 1/4W(3 5% TA52
		R320	0RD1000Q609	100 1/4W(3 5% TA52
		R321	0RD1002Q609	10K 1/4W(3 5% TA52
		R322	0RD4701Q609	4.70K 1/4W(3 5% TA52
		R323	0RD1102Q609	11K 1/4W(3 5% TA52
		R324	0RD1000Q609	100 1/4W(3 5% TA52
		R325	0RD1502Q609	15K 1/4W(3 5% TA52
		R326	0RD1000Q609	100 1/4W(3 5% TA52
		R327	0RD1001Q609	1K 1/4W(3 5% TA52
		R328	0RD1001Q609	1K 1/4W(3 5% TA52
		R329	0RD1001Q609	1K 1/4W(3 5% TA52
		R330	0RD1001Q609	1K 1/4W(3 5% TA52
		R331	0RD0472Q609	47 1/4W(3 5% TA52
		R332	0RD0472Q609	47 1/4W(3 5% TA52
		R333	0RD0472Q609	47 1/4W(3 5% TA52
		R334	0RD1000Q609	100 1/4W(3 5% TA52
		R335	0RD1000Q609	100 1/4W(3 5% TA52
		R336	0RD1000A609	100 OHM 1/2 W (7.0) 5% TA52
		R337	0RD1300Q609	130 1/4W(3 5% TA52
		R338	0RD1200Q609	120 1/4W(3 5% TA52
		R339	0RD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R340	0RD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R341	0RD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R342	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R343	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R344	0RD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R347	0RD1000Q609	100 1/4W(3 5% TA52
		R351	971-0054	TIN 50MM TAPING
		R352	971-0054	TIN 50MM TAPING
		R353	971-0054	TIN 50MM TAPING

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R359	ORD0102Q609	10 1/4W(3 5% TA52
		R401	ORD3000Q609	300 1/4W(3 5% TA52
		R402	ORD8201Q609	8.20K 1/4W(3 5% TA52
		R404	ORD1001Q609	1K 1/4W(3 5% TA52
		R405	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R406	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R407	ORD1000Q609	100 1/4W(3 5% TA52
		R408	ORD1001Q609	1K 1/4W(3 5% TA52
		R409	ORD1001Q609	1K 1/4W(3 5% TA52
		R412	ORD1000Q609	100 1/4W(3 5% TA52
		R413	ORD2202Q609	22K 1/4W(3 5% TA52
		R414	ORD2202Q609	22K 1/4W(3 5% TA52
		R415	ORD2202Q609	22K 1/4W(3 5% TA52
		R416	ORD2202Q609	22K 1/4W(3 5% TA52
		R417	ORD1000Q609	100 1/4W(3 5% TA52
		R418	ORD1000Q609	100 1/4W(3 5% TA52
		R420	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R421	ORD2001Q609	2K 1/4W(3 5% TA52
		R422	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R423	ORD1000Q609	100 1/4W(3 5% TA52
		R425	ORD2001Q609	2K 1/4W(3 5% TA52
		R426	ORD7501Q609	7.50K 1/4W(3 5% TA52
		R427	ORD1002Q609	10K 1/4W(3 5% TA52
		R428	ORD1000Q609	100 1/4W(3 5% TA52
		R429	ORD1000Q609	100 1/4W(3 5% TA52
		R430	ORD1801Q609	1.80K 1/4W(3 5% TA52
		R431	ORD1801Q609	1.80K 1/4W(3 5% TA52
		R432	ORD2001Q609	2K 1/4W(3 5% TA52
		R433	ORD1002Q609	10K 1/4W(3 5% TA52
		R435	971-0054	TIN 50MM TAPING
		R440	ORD1000Q609	100 1/4W(3 5% TA52
		R443	ORD1001Q609	1K 1/4W(3 5% TA52
		R451	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R452	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R453	ORD1500Q609	150 1/4W(3 5% TA52
		R454	ORD6201Q609	6.20K 1/4W(3 5% TA52
		R455	ORD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R456	ORD0622A609	62 OHM 1/2 W (7.0) 5% TA52
		R457	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R458	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R459	ORD1500Q609	150 1/4W(3 5% TA52
		R460	ORD8201Q609	8.20K 1/4W(3 5% TA52
		R471	971-0054	TIN 50MM TAPING
		R473	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R493	ORD1000Q609	100 1/4W(3 5% TA52
		R494	ORD1000Q609	100 1/4W(3 5% TA52
		R522	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R601	ORN1202F409	12K 1/6W 1% TA52
		R603	ORN1102F409	11K 1/6W 1% TA52
		R604	ORN2001F409	2K 1/6W 1% TA52
		R605	ORN4701F409	4.70K 1/6W 1% TA52
		R606	ORN1801F409	1.80K 1/6W 1% TA52
		R607	ORD0151A609	1.5 OHM 1/2 W (7.0) 5% TA52
		R608	ORD3300A609	330 OHM 1/2 W (7.0) 5% TA52
		R609	ORN0121H509	1.2 1/2W 2 TA52
		R613	ORN1802F409	18K 1/6W 1% TA52
		R617	ORD4700Q609	470 OHM 1/4 W (3.4) 5% TA52
		R618	ORD3001Q609	3K 1/4W(3 5% TA52
		R619	ORD2001Q609	2K 1/4W(3 5% TA52
		R620	ORD0152Q609	15 1/4W(3 5% TA52
		R621	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R701	ORD1001Q609	1K 1/4W(3 5% TA52

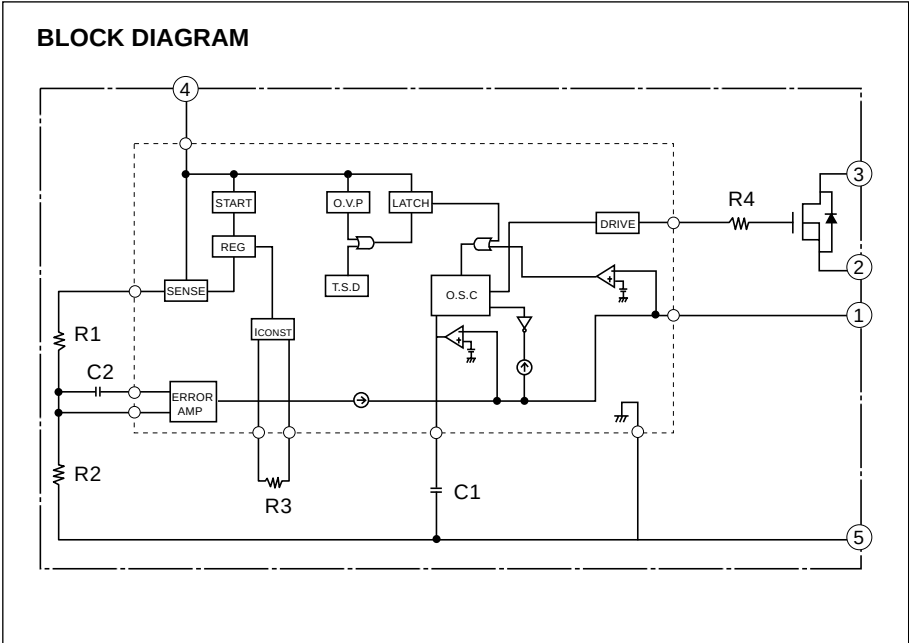
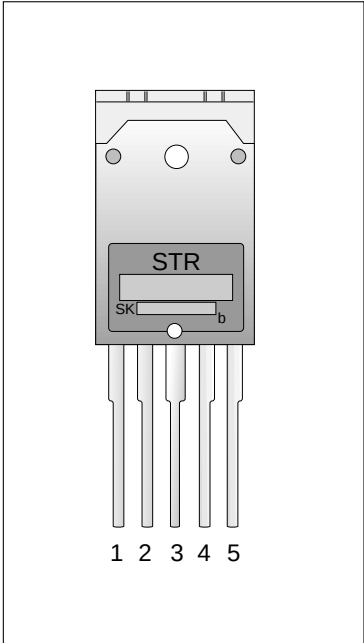
MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R702	ORD1503Q609	150K 1/4W(3 5% TA52
		R703	ORD3601Q609	3.60K 1/4W(3 5% TA52
		R704	ORN2702F409	27K 1/6W 1% TA52 (SAMSUNG CDT)
		R704	ORN3002F409	30K 1/6W 1% TA52 (LG-PHILIPS CDT)
		R705	ORD1001Q609	1K 1/4W(3 5% TA52
		R706	ORN3602F409	36K 1/6W 1 TA52
		R707	ORD6202Q609	62K OHM 1/4 W (3.4) 5% TA52
		R708	ORN6202F409	62KOHM 1/6 W 1% TA52
		R709	ORD3302Q609	33K 1/4W(3 5% TA52
		R710	ORD4302Q609	43K 1/4W(3 5% TA52
		R711	ORD0102Q609	10 1/4W(3 5% TA52
		R712	ORD2000Q609	200 1/4W(3 5% TA52
		R713	ORD4700Q609	470 OHM 1/4 W (3.4) 5% TA52
		R714	ORD1002Q609	10K 1/4W(3 5% TA52
		R715	ORD3902Q609	39K 1/4W(3 5% TA52
		R716	971-0054	TIN 50MM TAPING
		R717	ORD1000Q609	100 1/4W(3 5% TA52
		R718	ORD1000Q609	100 1/4W(3 5% TA52
		R719	ORD1000Q609	100 1/4W(3 5% TA52
		R720	ORD1001Q609	1K 1/4W(3 5% TA52
		R721	ORD6201Q609	6.20K 1/4W(3 5% TA52
		R722	ORD1002Q609	10K 1/4W(3 5% TA52
		R723	ORD1001Q609	1K 1/4W(3 5% TA52
		R724	ORN1301F409	1.30K 1/6W 1% TA52
		R725	ORN2202F409	22K 1/6W 1% TA52
		R726	ORD8201Q609	8.20K 1/4W(3 5% TA52
		R727	ORD1002Q609	10K 1/4W(3 5% TA52
		R728	ORD1002Q609	10K 1/4W(3 5% TA52
		R729	ORD1002Q609	10K 1/4W(3 5% TA52
		R730	ORD3001Q609	3K 1/4W(3 5% TA52
		R731	ORD5601Q609	5.60K 1/4W(3 5% TA52
		R732	ORD1301Q609	1.30K 1/4W(3 5% TA52
		R733	ORD1504Q609	1.5M OHM 1/4 W (3.4) 5% TA52
		R734	ORN6201F409	6.20K 1/6W 1% TA52
		R735	ORN1302F409	13K 1/6W 1% TA52
		R736	ORD4703Q609	470K 1/4W(3 5% TA52
		R737	ORD1201Q609	1.20K 1/4W(3 5% TA52
		R738	ORD3303Q609	330K 1/4W(3 5% TA52
		R739	ORD4301Q609	4.30K 1/4W(3 5% TA52
		R740	ORD5102Q609	51K 1/4W(3 5% TA52
		R741	ORD1000Q609	100 1/4W(3 5% TA52
		R742	ORN2401F409	2.40K 1/6W 1% TA52
		R743	ORD2001Q609	2K 1/4W(3 5% TA52
		R744	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R745	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R746	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R747	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R748	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R749	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R750	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R751	ORD3001Q609	3K 1/4W(3 5% TA52
		R752	ORN7502F409	75000 OHM 1/6 W 1% TA52
		R753	ORD1001Q609	1K 1/4W(3 5% TA52
		R754	ORD1002Q609	10K 1/4W(3 5% TA52
		R756	ORN8201F409	8.20K 1/6W 1% TA52
		R757	ORD3901Q609	3.90K 1/4W(3 5% TA52
		R758	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R759	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R760	ORD1002Q609	10K 1/4W(3 5% TA52
		R761	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R762	ORD8200Q609	820 1/4W(3 5% TA52
		R763	ORD5601Q609	5.60K 1/4W(3 5% TA52
		R764	180-465Y	RWR 1.2OHM 7W.(V-TYPE)

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R765	ORD1001Q609	1K 1/4W(3 5% TA52
		R766	ORD0332A609	33 OHM 1/2 W (7.0) 5% TA52
		R767	ORD1000A609	100 OHM 1/2 W (7.0) 5% TA52
		R768	ORX0472J609	47 OHM 1 W 5% TA52
		R770	ORX1800K607	180 OHM 2 W 5% TA62
		R771	ORD1000Q609	100 1/4W(3 5% TA52
		R772	ORD1001Q609	1K 1/4W(3 5% TA52
		R773	ORX0122K607	12 OHM 2 W 5% TA62
		R774	ORMZTWD001C	47 OHM 7 W 5% RWR PD-TYPE
		R777	ORX0331K607	3.3 OHM 2 W 5% TA62
		R778	ORMZTWD001F	3.3 OHM 5W +/-5% RWR PD-TYPE
		R780	ORD1001Q609	1K 1/4W(3 5% TA52
		R781	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R782	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R783	ORD1802Q609	18K 1/4W(3 5% TA52
		R784	ORD1001Q609	1K 1/4W(3 5% TA52
		R785	ORD1000Q609	100 1/4W(3 5% TA52
		R789	971-0054	TIN 50MM TAPING
⚠		R790	ORN1503F409	150K 1/6W 1% TA52
		R791	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R792	ORD3301Q609	3.30K 1/4W(3 5% TA52
		R793	ORX0182K607	18 OHM 2 W 5% TA62
		R794	ORX0182K607	18 OHM 2 W 5% TA62
		R795	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R796	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R797	ORB0150K609	0.15 OHM 2 W 5% TA52
		R798	ORD1803Q609	180K 1/4W(3 5% TA52
		R799	ORD1002Q609	10K 1/4W(3 5% TA52
		R803	ORD2001Q609	2K 1/4W(3 5% TA52
		R804	ORD1002Q609	10K 1/4W(3 5% TA52
		R806	ORD0472Q609	47 1/4W(3 5% TA52
		R807	ORD1002Q609	10K 1/4W(3 5% TA52
		R808	ORN0390J607	0.39 1W 5% TA62
		R809	ORD5601Q609	5.60K 1/4W(3 5% TA52
		R811	ORD1002Q609	10K 1/4W(3 5% TA52
		R812	ORD1803A609	180K OHM 1/2 W (7.0) 5% TA52
		R813	ORD1003Q609	100K 1/4W(3 5% TA52
		R814	ORD1501Q609	1.50K 1/4W(3 5% TA52
		R816	ORD8200Q609	820 1/4W(3 5% TA52
⚠		R817	ORN1502F409	15K 1/6W 1% TA52
		R818	ORD1002A609	10K OHM 1/2 W (7.0) 5% TA52
		R819	ORD2703Q609	270K 1/4W(3 5% TA52
⚠		R820	ORN4700F409	470 1/6W 1 TA52
⚠		R821	ORN1002F409	10K 1/6W 1 TA52
		R823	ORD3302Q609	33K 1/4W(3 5% TA52
		R824	ORD5102Q609	51K 1/4W(3 5% TA52
		R825	ORX1003K607	100KOHM 2 W 5% TA62
		R826	ORD1803A609	180K OHM 1/2 W (7.0) 5% TA52
		R827	ORX6201J609	6.2K OHM 1 W 5.00% TA52
		R828	ORD0222Q609	22 1/4W(3 5% TA52
		R829	ORX1003J609	100KOHM 1 W 5% TA52
		R830	ORX0472J609	47 OHM 1 W 5% TA52
⚠		R831	ORN7501F409	7.50K 1/6W 1% TA52
⚠		R833	ORN3601F409	3.6K 1/6W 1 TA52
		R834	ORD1003Q609	100K 1/4W(3 5% TA52
		R835	ORD5100Q609	510 1/4W(3 5% TA52
		R836	ORD3301Q609	3.30K 1/4W(3 5% TA52
		R837	ORD4301Q609	4.30K 1/4W(3 5% TA52
		R838	971-0054	TIN 50MM TAPING
		R839	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R840	ORX2703K607	270KOHM 2 W 5% TA62
		R841	ORD4702Q609	47K 1/4W(3 5% TA52

MODEL: StudioWorks E900B (EB990E-EP), (EB990E-EA) DATE: 2001. 12. 11.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R842	ORD0472Q609	47 1/4W(3 5% TA52
		R843	ORD0751Q609	7.5 OHM 1/4 W (3.4) 5% TA52
		R844	ORD1803A609	180K OHM 1/2 W (7.0) 5% TA52
		R845	ORD5601Q609	5.60K 1/4W(3 5% TA52
		R846	ORD1202Q609	12K 1/4W(3 5% TA52
		R847	ORN1502F409	15K 1/6W 1% TA52
		R848	ORD1003Q609	100K 1/4W(3 5% TA52
		R903	ORX7502J609	75K OHM 1 W 5% TA52
		R904	ORD1001Q609	1K 1/4W(3 5% TA52
		R905	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R906	ORB0100K607	0.1 OHM 2 W 5% TA62
		R908	ORD1303A609	130K OHM 1/2 W (7.0) 5% TA52
		R910	ORN8201F409	8.20K 1/6W 1% TA52
		R911	ORN8201F409	8.20K 1/6W 1% TA52
⚠		R912	ORC1303H409	130K OHM 1/2 W 1% TA52
		R913	ORD1501Q609	1.50K 1/4W(3 5% TA52
		R914	ORD1001Q609	1K 1/4W(3 5% TA52
⚠		R915	ORN1801F409	1.80K 1/6W 1% TA52
		R919	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R920	ORD1003Q609	100K 1/4W(3 5% TA52
		R921	ORD5101Q609	5.10K 1/4W(3 5% TA52
		R922	ORD0101A609	1 OHM 1/2 W (7.0) 5% TA52
		R923	ORD1003A609	100K OHM 1/2 W (7.0) 5% TA52
		R924	ORD1003A609	100K OHM 1/2 W (7.0) 5% TA52
		R925	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R926	ORD0332Q609	33 1/4W(3 5% TA52
		R927	ORD0472A609	47 OHM 1/2 W (7.0) 5% TA52
		R932	ORD0102Q609	10 1/4W(3 5% TA52
		R934	ORD2703Q609	270K 1/4W(3 5% TA52
		R935	ORD0102A609	10 OHM 1/2 W (7.0) 5% TA52
		R936	ORD3901Q609	3.90K 1/4W(3 5% TA52
		R937	ORD1002Q609	10K 1/4W(3 5% TA52
		R938	ORD1200Q609	120 1/4W(3 5% TA52
		R939	971-0054	TIN 50MM TAPING
		R940	ORD0102A609	10 OHM 1/2 W (7.0) 5% TA52
		R941	ORX0471K607	4.7 OHM 2 W 5% TA62
		R942	ORD1001Q609	1K 1/4W(3 5% TA52
		R943	ORD4700A609	470 OHM 1/2 W (7.0) 5% TA52
		R944	ORX0331K607	3.3 OHM 2 W 5% TA62
		R947	ORD2001Q609	2K 1/4W(3 5% TA52
		R949	ORD1002Q609	10K 1/4W(3 5% TA52
		R950	971-0054	TIN 50MM TAPING
		R951	971-0054	TIN 50MM TAPING
		R952	ORD1002Q609	10K 1/4W(3 5% TA52
		R953	ORX0471K607	4.7 OHM 2 W 5% TA62
		R954	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R955	ORX0152J609	15 OHM 1 W 5% TA52
		R956	ORD1002Q609	10K 1/4W(3 5% TA52
		R957	ORD1002Q609	10K 1/4W(3 5% TA52
		R958	ORD2001Q609	2K 1/4W(3 5% TA52
		R959	971-0054	TIN 50MM TAPING
		R960	ORD2402A609	24K OHM 1/2 W (7.0) 5% TA52
		R961	ORD1002Q609	10K 1/4W(3 5% TA52
		R962	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R965	ORD5100Q609	510 1/4W(3 5% TA52
		R966	ORD1301Q609	1.30K 1/4W(3 5% TA52
		R967	ORD1002Q609	10K 1/4W(3 5% TA52
		R971	ORN0560H609	0.56 1/2W 5 TA52
		R972	971-0054	TIN 50MM TAPING

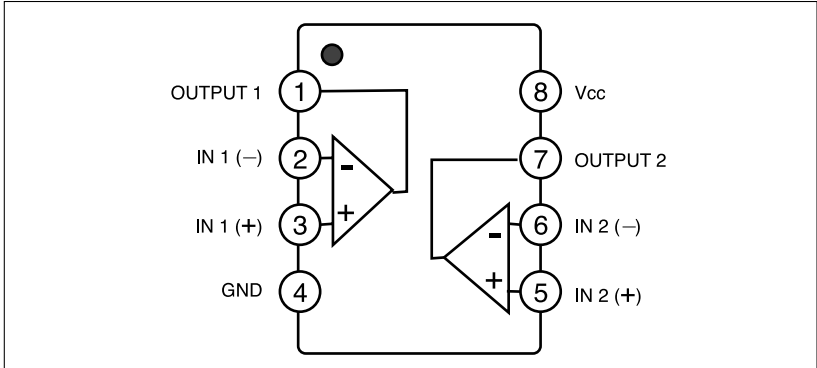
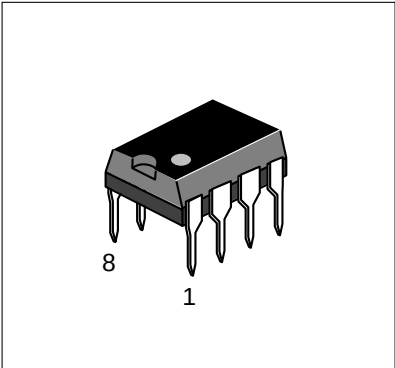
PIN CONFIGURATION

STR-F6454(LF1351)5P BK SWITCHING REGULAATOR POWER



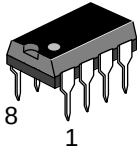
Terminal NO	Symbols	Description	Functions
1	O.C.P/F.B	Overcurrent/Feedback terminal	Input of overcurrent detection signal and constant voltage control signal
2	S	Source terminal	MOS FET source
3	D	Drain terminal	MOS FET drain
4	VIN	Power supply terminal	CONTROL CIRCUIT VOLTAGE INPUT
5	GND	Ground terminal	Ground

KA393 Dual Differential Comparator



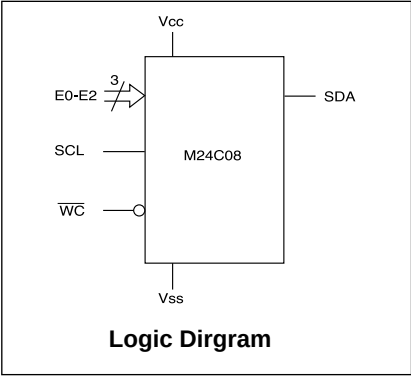
M24C08 Serial I²C BUS EEPROM

PSDIP8 (BN)
0.25mm Frame



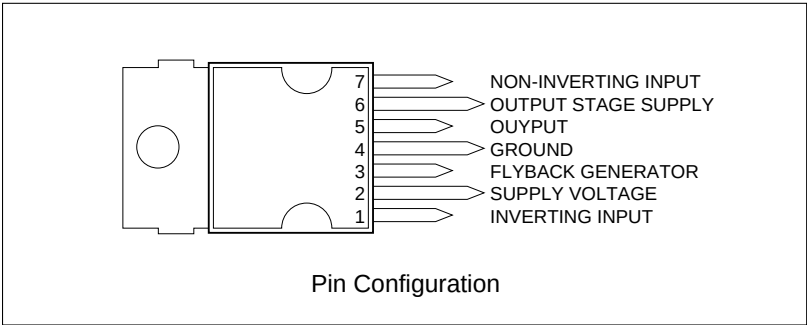
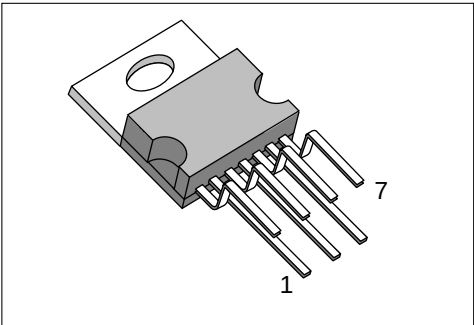
SO8 (MN)
150mil Width

TSSOP8 (DW)
169mil Width



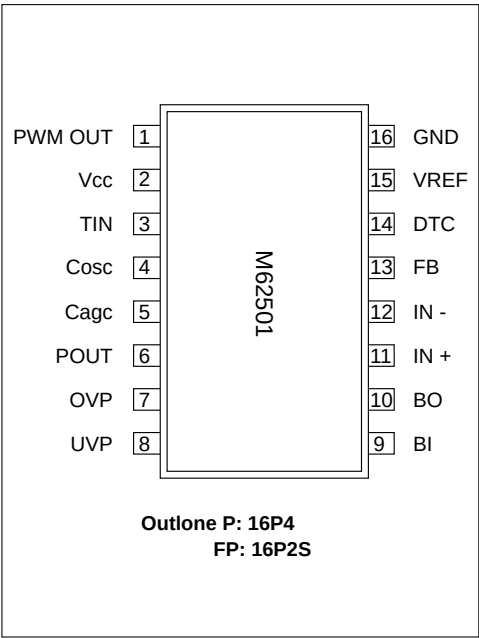
SYMBOL	DESCRIPTION
E0-E2	Chip Enable Input
SDA	Serial Data Address Input/Output
SCL	Serial Clock
WC	Write Control
Vcc	Supply Voltage
Vss	Ground

TDA8172 Vertical Deflection Output Circuit



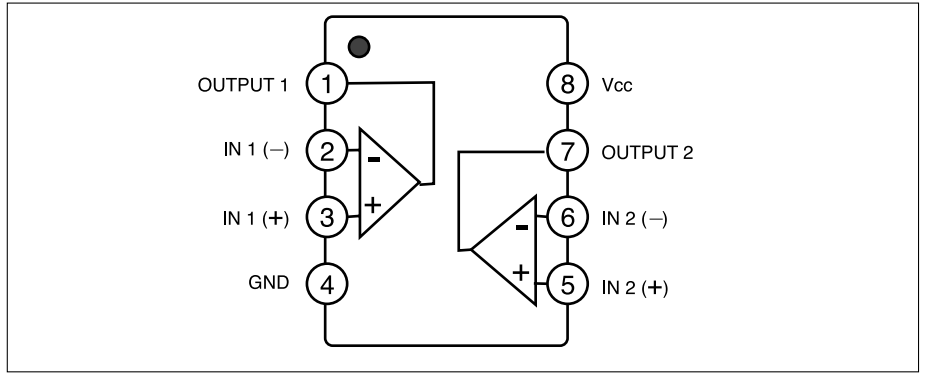
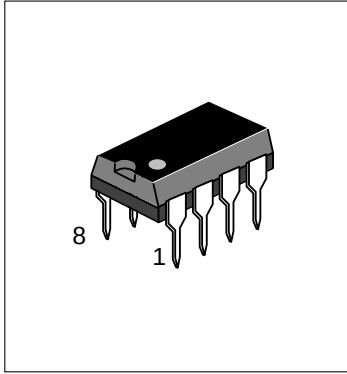
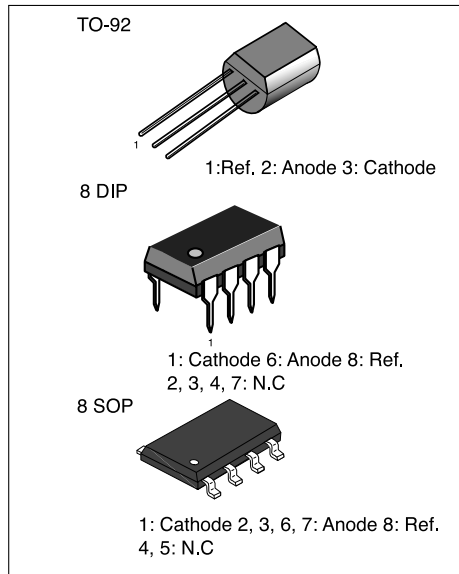
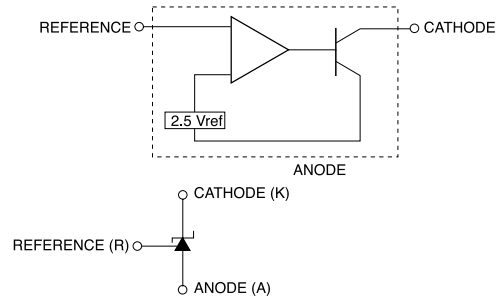
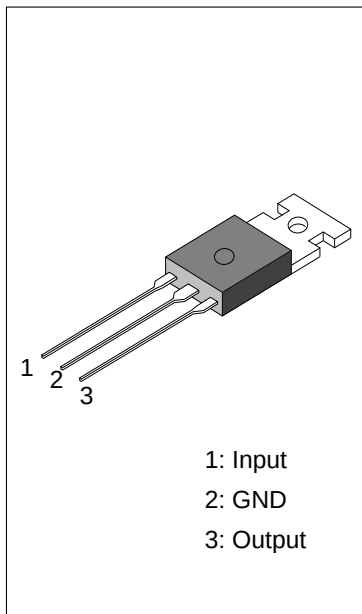
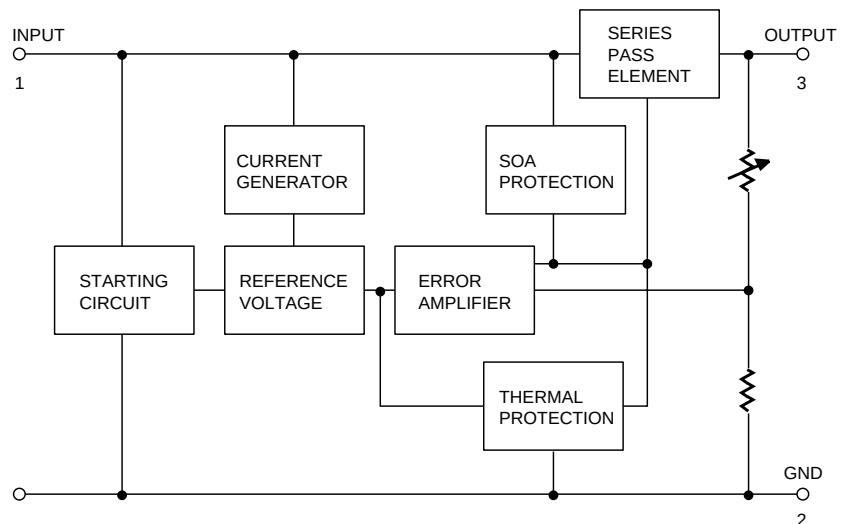
M62501P /FP

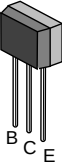
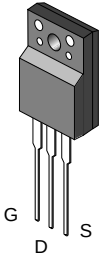
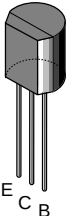
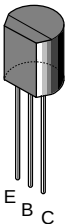
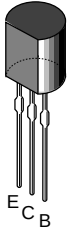
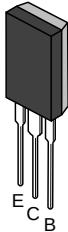
PIN CONFIGURATION(TOP VIEW)



Teerminal Number and The facility

PIN NO.	Symbol	Functional Description
1	PWM OUT	PWM output terminal
2	Vcc	Power supply terminal
3	TIN	Trigger Input terminal
4	CAGC	This pin is used to set oscillating frequency
5	CAGC	This pin is used for AGC setting
6	P.OUT	Output terminal of error signal
7	OVP	Input terminal of Over Voltage Protection
8	UVP	Input terminal of Under Voltage Protection
9	BI	Postive Input terminal of Buffer Amp
10	BO	Output terminal of Buffer Amp
11	IN ⁺	Postive Input terminal of OP Amp
12	IN ⁻	Negative Input terminal of OP Amp
13	FB	Output terminal of OP Amp
14	DTC	Dead time control terminal(Soft start function)
15	VREF	Output terminal of reference voltage (5V)
16	GND	Ground terminal

KA358**Dual Operational Amplifier****KA431/A****BLOCK DIAGRAM****KA7812 (KA7805)****Positive Voltage Regulator 5V (8V, 12V)****BLOCK DIAGRAM**

TYPE	PARTS	TYPE	PARTS
	DTC114E		IRFS640A IRFS630A
	KSB564AC		2N3904
	KTA1270 KTC3198 KTC3202		KTA1275 KTC3206 KTC3207

