Service Manual

ViewSonic VE150m/mb

Model No.VLCDS22574-1/-1b

15” Color TFT LCD Display

(VE150m/VE150mb-1_SM_399 - Rev. 1a – Dec 2002)

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Revision History

Revision	Date	Description	Approval
1a	11/17/02	Initial Release DCN-2806	C.Shen

TABLE OF CONTENT

WARNING

This service information is designed for experienced repair technicians, do not attempt to do any form of disassembling or adjustment for the product.
It does not contain warnings or cautions to advise non-technical individuals of the potential dangers in attempting to service the product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians.
Any attempts to service or repair the inner products may cause serious injury.

SAFETY PRECAUTIONS

Warning: This device must be operated with the original power supply

CAUTION: Use a power cable that is properly grounded. Always use the appropriate AC cord that is certified for the individual
country. Some examples are listed below:

USA .....UL
Canada .....CSA
Germany .....VDE
Switzerland..... SEV
Britain.....BASE/BS
Japan.....Electric Appliance Control Act

IMPORTANT NOTICE CONCERNING POWER CORD SELECTION

The power cord set for this unit has been enclosed and has been selected according to the country of destination and must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed. The female receptacle of the cord set must meet IEC-60320 requirements and will look like (Figure A1 below):

Figure A1  Figure A2 

For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2), UL Listed, and CSA Labeled. For units which are mounted on a desk or table, type SVT or SJT cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult the table below for the selection criteria for power cords used in the United States and Canada.

Cord Type	Size of Conductors in Cord	Maximum Current Rating of Unit
SJT	18 AWG 16 AWG 14 AWG	10 Amps 12 Amps 12 Amps
SVT	18 AWG 17 AWG	10 Amps 12 Amps

For European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

For your safety please read the following text carefully.

If the fitted moulded plug is unsuitable for the socket outlet then the plug should be cut off and safely disposed. There is a danger of serving, electronically shock, if the cut off plug is inserted into and appropriate socket.

If a new plug is to be fitted, please observe the wiring code as shown below. If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE CONNECTED TO EARTH GROUND.

IMPORTANT: The wires in this mains lead are colored in accordance with the following code:

Green-and-Yellow: Earth
Blue: Neutral
Brown: Live

If the colored wires of the mains lead of this appliance do not correspond with the colored markings identifying the terminals in your plug, proceed as follows:

The wire which is colored GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol or colored GREEN or GREEN-AND-YELLOW.

The wire which is colored BLUE must be connected to the terminal in the plug which is marked with the letter N or colored BLACK. The wire which is colored

BROWN must be connected to the terminal in the plug which is marked with the letter L or colored RED.
If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you have purchased the product.

PRECAUTION

- For best viewing conditions sit at least 18" from the LCD Display.
- AVOID TOUCHING THE SCREEN WITH YOUR FINGERS. Oils from the skin are difficult to remove.
- NEVER REMOVE THE REAR COVER. The LCD Display contains high-voltage parts. You may suffer serious injury if you touch these parts.
- Avoid exposing the LCD Display to direct sunlight or another heat source. The ViewPanel should be facing away from direct sunlight to reduce glare.
- Always handle your LCD Display with care when moving it.
- Place your LCD Display in a well-ventilated area. Do not place anything on the ViewPanel that prevents adequate dissipation of heat.
- Ensure the area around the LCD Display is clean and free of moisture.
- Do not place heavy objects on the LCD Display, video cable, or power cord.
- If smoke, abnormal noise, or strange odor is present, immediately switch the LCD Display off and call your dealer or ViewSonic. It is dangerous to continue using the LCD Display.

Chapter 1 PREFACE

The purpose of this manual provides integral information you need to maintain the LCD Monitor. And this manual is applied to the mode of **1024 x 768** pixels color TFT LCD Monitor.
This manual is for the experienced electronic technicians and those with similar backgrounds. Send the products back to the local distributor or repair center. Do not attempt any disassembling actions that are complex or aren't mentioned in the troubleshooting chapter.

The manual includes **Engineering Specification**, **Front Panel Control** description, **Circuit Description**, **Troubleshooting**, **Theory of Operation**, **Mechanical Assembly**, **Service Parts List**, and **Circuit Diagram**. Each section will be briefly discussed below.

ENGINEERING SPECIFICATIONS

This CHAPTER provides the engineering specification for the designated Display. Since we only provide a reference engineering specification in this service manual, Please refer to **ViewSonic® Engineering Product Specification** for detailed product specification.

FRONT PANEL CONTROL

This CHAPTER provides User Control Panel functions and descriptions. Access to OSD (On Screen Display) setting, (eg. timing adjustment, default setting, restoring to factory mode can be referenced in this CHAPTER.

CIRCUIT DESCRIPTIONS

The first part of this CHAPTER provides a functional block diagram for the Display. The second part of this CHAPTER consists of a detailed I/O connector PIN ASSIGNMENT for the PCBs.

TROUBLESHOOTING

Maintenance procedures described in this chapter are intended to isolate faulty parts and replace them in the field. The chapter makes explanations on how to detect errors, through a series of sequential flow chart for fault detection and means of corrections. The material contained in this chapter provides basic troubleshooting techniques on the module level.

THEORY OF OPERATION

This chapter is written and designed for use on in-lab troubleshooting. The chapter contains the detailed description on the operations of parts, which are labeled on the Functional Block Diagram. The chapter is intended for in-lab repair personnel who would conduct an in-lab troubleshooting of the system.

MECHANICAL ASSEMBLY

This chapter contains an Exploded Drawing for the system, for which can be used by the repair personnel for parts identity.

SERVICE PARTS LIST

This chapter aims to serve as a guide in procuring replacement parts for this product.

CIRCUIT DIAGRAM

This CHAPTER provides functional circuits diagram of the LCD Display.

PCB LAYOUT

This CHAPTER provides PCB Layout of the LCD Display.

Chapter 2 SPECIFICATIONS

2.1 SCOPE

2.1.1 Introduction

Product Configuration	This specification defines the configuration and performance requirements for the following monitors:
Worldwide product	Product Name: **VE150m / VE150mb** Model Number: **VLCDS22574 - XYZ** Panel: **CMO M150X3**
	** - 1st "*" is designated series from 0~9, 2nd "*" is designated for region A~Z, 3RD "*" referred to color or new technology

2.1.2 Product Definition

Top Level Assembly Notes: a. All Power cables connect into Power Supply. b. All quantities are n=1 unless otherwise specified. c. All Items go into 'All' versions (-M/-E/-P) unless otherwise specified.	1. VE150m Product Assembly (Beige for VE150m, Midnight Gray for VE150mb) 2. 1.8m US Power Cable 3. 1.8m Euro Power Cable, "Schuko" 4. 40 W DC Power Supply w/ 1.5m DC Cable lead to Monitor. 5. Attached analog VGA Cable, 1.8 m w/Blue connectors. DDC Compliant HPD (hot plug detection). 6. Audio cable, 1.8 m with lime green (pantone color# 577C) connector stereo mini 7. Quick Start guide / ViewSonic System wizard CD-ROM. (No E-Color). 8. Warranty sticker (For J model and G model) 9. Warranty card (For J model and G model) 10. Carton sticker. (G model only)

Product Assembly	1. VE150m / VE150mb unit 2. Attached base and neck

2.2 GENERAL REQUIREMENTS

2.2.1 General Specifications

Test Resolution & Frequency	1024 x 768 @ 60Hz
Test Image Size	Full Size
Contrast and Brightness Controls	Factory Default – Contrast = 70% (center), Brightness = 100%

2.3 SIGNAL INTERFACE

2.3.1 RGB Input Video Interface

Connector(s)	1 DB-15
Default Input Connector	DB-15 Connector if both inputs are active. If only one input is active, the display should auto-select the active input.
Video Cable Color	VE150m (Beige), VE150mb (Black)
Video Cable Strain Relief	Twice the weight of the monitor or 18 kg for

	five minutes.
Video Cable Connector DB-15 Pinout	Compliant with IBM 8513 and VESA DDC 1/2B.
Video Signals	700 mV full scale, 1,000 mV full scale
Video Impedance	75 Ohms
Maximum PC Video Signal	950 mV with no damage to monitor
Maximum Mac Video Signal	1250 mV with no damage to monitor
Sync Signals	TTL
Sync Level	2.5 Volts – 5.25 Volts
DDC 1/2B	Compliant with Revision 1.3, supports GTF
Sync Compatibility	Separate Sync
Video Compatibility	All PC type computers Macintosh computers After market video cards
Exclusions	None

Table 1: 15 pin D-sub connector pin assignment

Pin Function	Pin Number
Red video input	**1**
Green video input	**2**
Blue video input	**3**
Ground	**4**
Ground	**5**
Red video ground	**6**
Green video ground	**7**
Blue video ground	**8**
+5V	**9**
Ground	**10**
No connection	**11**
(SDA)	**12**
Horizontal sync (Composite sync)	**13**
Vertical sync	**14**
(SCL)	**15**

2.4 Power

2.4.1 Power Supply

External Power Supply	Primary: CHI, CH-1234X (12V - 40W) 2nd Sources : HJC, HASU05F (12V - 48W).
Input Voltage Range	90 to 264 VAC
Input Frequency Range	47.5 to 63 Hertz

Output Voltage @0-3.58A Load	12V DC +/- 5%
Short Circuit Protection	Output can be shorted without damage.
Over Current Protection	4.5A typical at 12VDC
Leakage Current	3.5mA (Max) at 254VAC / 60Hz
Efficiency	78% typical at 115VAC Full Load
Fuse	Internal and not user replaceable
Power Dissipation – max	40W (CHI) / 48W (HJC)
Max Input AC Current	1.5Arms @90VAC, 0.75Arms @180VAC
Inrush Current (Cold Start)	40A@ 120VAC and 80A(max) @220VAC
Power Supply Cold Start	Shall start and function properly when under full load, with all combinations of input voltage, input frequency, and operating temperature.
Power Supply Transient Immunity	Shall be able to withstand an ANSI/IEEE C62.41-1980 6000V 200 ampere ring wave transient test with no damage.
Power Supply Line Surge Immunity	Shall be able to withstand 1.5 times nominal line voltage for one cycle with no damage.
Power Supply Missing Cycle Immunity	Shall be able to function properly, without reset or visible screen artifacts, when ½ cycle of AC power is randomly missing at nominal input
Power Supply Acoustics	The power supply shall not produce audible noise that would be detectable by the user. Audible shall define to comply with ISO 7779 (DIN EN27779:1991) Noise measurements of machines acoustics. Power Switch noise shall not be considered.
2.4.2 Power Interface	
AC input to DC Power Supply	3 Prong Socket Assembly,
DC Power Connector	2.5mm DIN DC Power Connector w/ 1.5m VE150m (beige), VE150mb (black).
AC Power Cable Length	1.8 m (6 feet)
Power Cable Color	VE150m (beige), VE150mb (black).
US Type Power Cable	Separate 3-prong NEMA 5-15P type plug.

	Length = 1.8m. Connects to DC Adapter. VE150m (beige), VE150mb (black).
European Type Power Cable	Schuko CEE7-7. Length = 1.8m, Connects to DC Adapter. VE150m (beige), VE150mb (black).
2.4.3 Power Saving Operation	
Method	VESA DPMS Signaling
Power Consumption	ON Mode < 30 W (max) ACTIVE OFF < 2 W
Recovery Time	ON Mode = N/A OFF < 3 sec

2.5 FRONT PANEL CONTROLS AND INDICATORS

2.5.1 Front Panel Hardware Controls

Power Switch (Front Head)	Power Control, soft Power Switch.
Power LED (Front Head)	Green – ON Orange – DPMS Active Off Dark = Soft Power Switch OFF
Front Panel Controls (Head)	Button 1 Down arrow button Up arrow button Button 2 Audio buttons: Mute, volume down and up Power
Short Cuts Function from the button(s)	[DOWN] or [UP] arrow = to activate contrast and brightness [2] = Auto Tune (Auto Image Adjust) [DOWN] and [UP] arrows = recall at specific function or adjustment

OSD Lock short cuts function for the buttons

1. The OSD lock will be activated by pressing the front panel control buttons "(1), & (up)" for 10 seconds. If the user then tries to access the OSD by pressing any of the buttons "1", "down", "up", "2" a message will appear on the screen for 5 seconds showing "OSD Locked". The OSD lock will be deactivated by pressing the front panel control buttons "(1), & (up)" again for 10 seconds.

Note: Status bar and the statement showing OSD Locking or OSD Unlocking

is in progress and when it is completed then the final message will indicate "OSD Locked or OSD Unlocked".

2. The power button lock will be activated by pressing the front panel control buttons "(1), & (down)" for 10 seconds. Locking the power button means that the user won't be able to turn off the LCD while the power button is locked. If the user presses the power button while it is locked, a message will appear on the screen for 5 seconds showing "Power Button Locked". It also means that with the power button locked, the LCD would automatically turn back "On" when power is restored after a power failure. If the power button is not in the locked mode, then power should return to its previous state when power is restored after a power failure. The power button lock will be deactivated by pressing the front panel control buttons "(1), & (down)" again for 10 seconds.

Note: Status bar and the statement showing Power Button Locking or Power Button Unlocking is in progress and when it is completed then the final message will indicate "Power Button Locked or Power Button Unlocked"

Control Type	Digital with an OSD.
OSD Controls OSD Functions - Contrast, Brightness, Auto Image Adjust, H/V Position, H. Size, Fine Tune, Color Adjust (9300, 6500, Video Enhanced Mode 1, 2, 3, user adjustment), sharpness (on/off), information, Language (English, French, Deutsch, Espanola, Italian, Suomi, Japanese, Traditional Chinese, Simplified Chinese), OSD position, OSD time out, Resolution Notified, Memory Recall. **Memory Recall is to recall the following functions to factory setting:** Contrast, brightness, auto tune (h/v size, h position), color temperature @ 6500K, OSD position, sharpness, and OSD timeout.	
OSD Auto Save	The OSD shall save new settings when it is turned off by the user or when it is time out. There shall not be a separate save.

2.6 ELECTRICAL REQUIREMENTS

2.6.1 Horizontal / Vertical Frequency

Horizontal Frequency	30 – 60kHz
Vertical Refresh Rate	50 – 75 Hz.

Maximum Pixel Clock	80 MHz
Sync Polarity	Independent of sync polarity.
2.6.2 **Primary Presets**	
Primary Preset	VESA 1024 x 768 @ 75 Hz
2.6.3 Look up table timing	
1. IND 640 x 350 @ 70Hz, 31.47kHz, -/+ 2. IND 720 x 400 @ 70Hz, 31.467kHz, +/- 3. VESA 640 x 480 @ 60 Hz, 31.5 kHz 4. MAC 640 x 480 @67Hz, 35kHz 5. VESA 640 x 480 @72Hz, 37.861kHz, -/- 6. VESA 640 x 480 @75Hz, 37.5kHz, -/-	1. VESA 800 x 600 @56Hz, 35.156kHz, +/+ 2. VESA 800 x 600 @60Hz, 37.879kHz, +/+ 3. VESA 800 x 600 @72Hz, 48.077kHz, +/+ 4. VESA 800 x 600 @75Hz, 46.875kHz, +/+ 5. MAC 832 x 624 @75Hz, 49.725kHz 6. VESA 1024 x 768 @70Hz, 56.476kHz, -/- 7. VESA 1024 x 768 @72Hz, 58.036kHz, -/- 8. VESA 1024 x 768 @75Hz, 60.023kHz, +/+
2.6.4 **User Presets**	
Number of User Presets (recognized timings) Available	**20 presets total**.
2.6.5 **Changing Modes**	
Maximum Mode Change Blank Time for image stability.	3 seconds (Max), 1-2 seconds (Typ) for unrecognized timing. 2 seconds (Typ) for recognized timings
Mode Change Image	The image shall blank while the monitor changes modes.
2.6.6 **GTF**	
GTF	The system shall recognize GTF timings which are allowable within horizontal/ vertical / dot rate / and resolution specifications.

2.7 Audio

2.7.1 Speaker specification

Line input connection	3.5 mm stereo jack
Line input signal	1 Vrms
Line input impedance	10kOhm
Maximum Power Output (Electric)	1.5W @ < 5% distortion
Signal to Noise Ratio	72dB
Frequency Response	200 Hz – 20 KHz

Distortion	< 1 % THD @ 1kHz
Connector color PC99 requirement Audio in	Lime Green pantone # 577C
Cable length	1.8 m

2.8 LCD Panel

2.8.1 Panel Characteristics

Panel Type	CMO M150X3
Type	Active Matrix TFT, (**TN technology**)
Active Size	304.1mm (H) x 228.1 mm (V)
Pixel Arrangement	RGB Vertical Stripe
Pixel Pitch	0.297 mm
Glass Treatment	Anti Glare (Hard coating 3H)
# of Backlights	4 CCFL edge-light (2 top/2 bottom)
Backlight Life	50,000 hours (typ) / 40,000 hours (min)
Interface	TTL Method
2.8.2 Panel Performance	
Luminance - Condition: 6500K and Brightness @ Max	300 cd/m2 (typ) / 240 cd/m2 (min)
Brightness Uniformity	85% Adjacent Area 70% Entire Area
Contrast Ratio	300:1 (typ) / 250:1(min)
Color Depth	6 bits reproduce 262,144 colors
Viewing Angle (Horizontal)	120 deg (typ) / 100 deg (min) @ CR>=10
Viewing Angle (Vertical)	100 deg (typ) / 80 deg (min) @ CR>=10
Response	30ms(Tr+Tf) (typ.) / 60ms (max)
Pixel Defects	For further detail, refer to Panel Acceptance Specification.
Image Sticking Using White Window Icon Image.	No visible image sticking longer than 5 seconds after the following: 24Hr full screen checkerboard pattern, then switch to full white screen.
Mura Defect	Not visible with visible inspection Please see Panel Acceptance Specification.
Photo Etch Lines	Not visible with visible inspection

	Please see Panel Acceptance Specification.
Other Panel Defects	Please see Panel Acceptance Specification.
Panel Defects	Please see Panel Acceptance Specification.

2.9 IMAGE PERFORMANCE

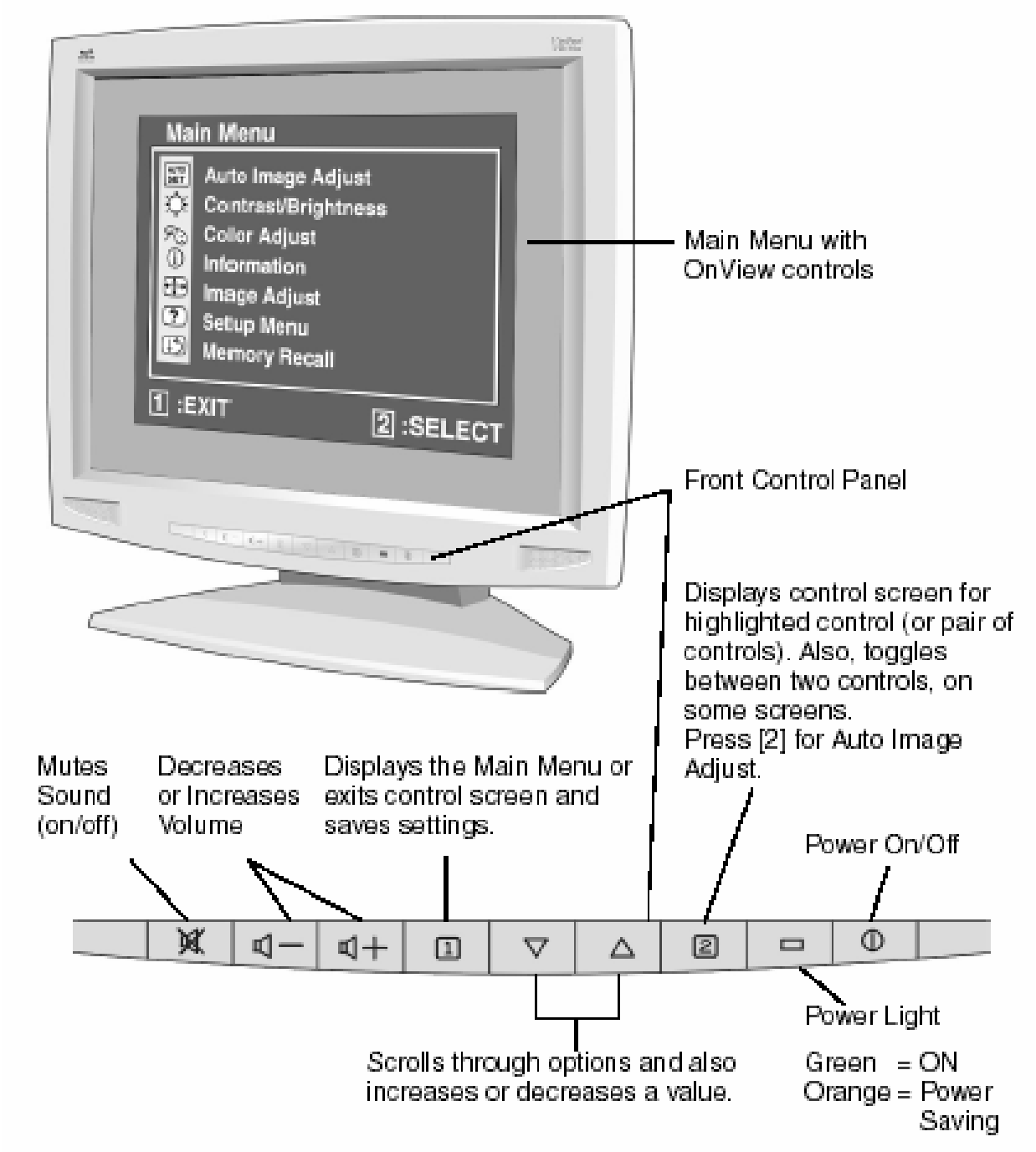
2.9.1 Factory Defaults

Preset Color	6500K (Primary 1)
Contrast Control	Factory Default
Brightness Control	Factory Default
2.9.2 **Display Size**	
Horizontal Display Size, Primary Preset	Full Screen
Vertical Display Size, Primary Preset	Full Screen
2.9.3 Frame Refresh Rate	
Frame Frequency	Scan rate conversion shall be performed to match input signal frame rates to VESA 1024 x 768 @ 75Hz
2.9.4 Preset Color Temperatures	
Preset 1 9300K	x= 0.283 +/- 0.025, y=0.298+/-0.025
Preset 2 6500K (Default)	x= 0.310 +/- 0.025, y=0.330+/-0.025
Preset Color Temperature Adjustability	Each color preset shall be adjustable. Red, Green, and Blue shall be individually controlled.
2.9.5 Video Cards Compatibility	
Peaking Performance	Peaking is not adjustable.
2.9.6 **Raster Artifacts**	
Video Artifacts	No Visible Streaking, Sag, or Smearing Artifacts when driven by the specified video cards in the primary mode and after user adjustment to best condition.
Power Supply, and Grounding Artifacts	No visible artifacts in any specified video mode within the horizontal or vertical frequency range of the monitor
Temperature Drift	Image shall not drift or lose fine-tune adjustment.

Chapter 3 FRONT PANEL CONTROLS

3.1 Adjusting the Screen Image

Use the buttons on the front control panel to adjust the OnView® controls which display on the screen.



3.2 Do the following to adjust the screen image:

1. To display the Main Menu, press button [1]. From the Main Menu you can also navigate to the other menus shown below:

NOTE: All OnView menus and adjustment screens disappear automatically after about 15 seconds.

2. To select a control you want to adjust, press ▲ or ▼ to scroll up or down the Main Menu.
3. After the control is selected, press button [2].
4. To adjust the control, press the up ▲ or down ▼ buttons.
5. To save the adjustments and exit the menu, press button [1] twice.

The following tips may help you optimize your display:

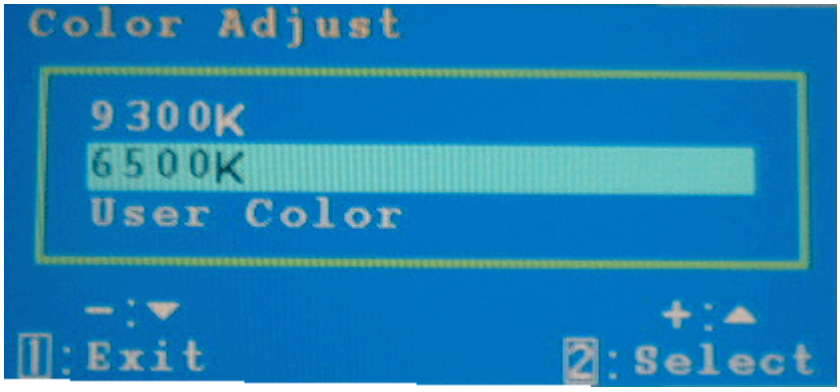
- Adjust your computer's graphic card so that it outputs a video signal 1024 x 768 @ 60Hz to the VE150m. (Look for instructions on "changing the refresh rate" in your graphic card's user guide.)

- Select Image Adjust. (Button [2] on the LCD Display control.)

- If necessary, make small adjustments using H POSITION and V POSITION until the screen image is completely visible. (The black border around the edge of the screen should barely touch the illuminated "active area" of the LCD Display.)

3.3 Main Menu Controls

The menu items shown below can be adjusted by using the up ▲ and down▼ buttons on the front of the LCD Display.

Control	Explanation
	**Auto Image Adjust** automatically sizes, centers, auto-contrasts and fine-tunes the video signal to eliminate waviness and distortion. Press the [2] button to obtain a sharper image. **NOTE:** Auto tune works with most common video cards. If this function does not work on your LCD Display, then lower the video refresh rate to 60 Hz and set the resolution to its preset value.
	**Contrast/Brightness** Contrast adjusts the difference between the image background (black level) and the foreground (white level). Brightness adjusts background black level of the screen image. Press button [2] to toggle between Contrast and Brightness.
	**Color Adjust** displays the Color Adjust Menu explained below.  **Color Adjust** provides four color adjustment modes. **9300k** – for a cooler, bluer image. **6500k** – for a warmer, redder image. **User Color** – Individual adjustments for red, green, and blue. **1** To select color (R, G or B) press button [2]. **2** To adjust selected color, press ▲ or▼. To deactivate Video Enhanced Mode, press the up and down arrows ▲ ▼ simultaneously. When you are finished making all color adjustments, press button [1] *twice*.

Control	Explanation

Information displays an information menu showing technical information and the product serial number. See below.

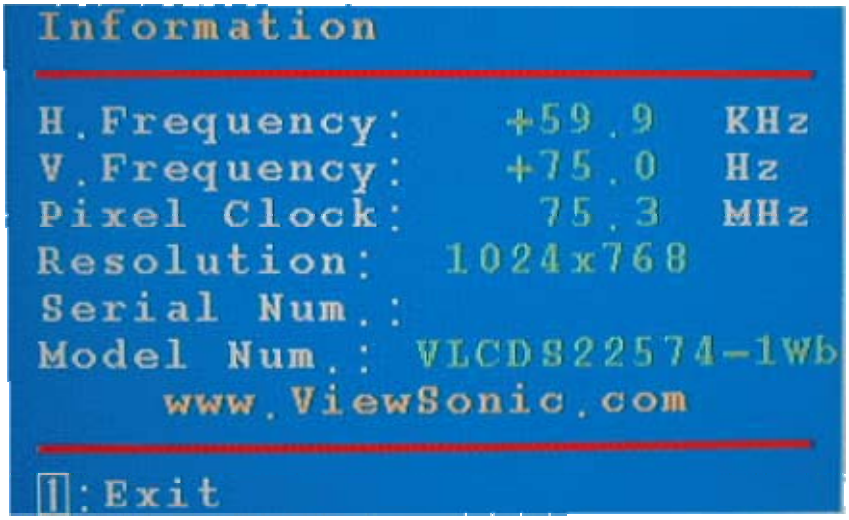
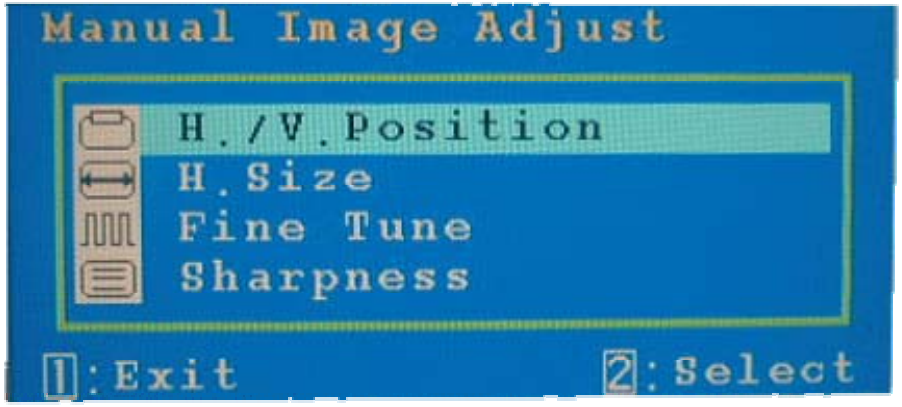


Image Adjust displays the Image Adjust menu.



The Image Adjust controls are explained below:

H. /V. Position adjusts horizontal and vertical position of the screen image. You can toggle between Horizontal and Vertical by pressing button [2]. Horizontal moves the screen image to the left or to the right. Vertical moves the screen image up and down.

H. Size (Horizontal Size) adjusts the width of the screen image.
(Note: Vertical size is automatic with your LCD Display.)

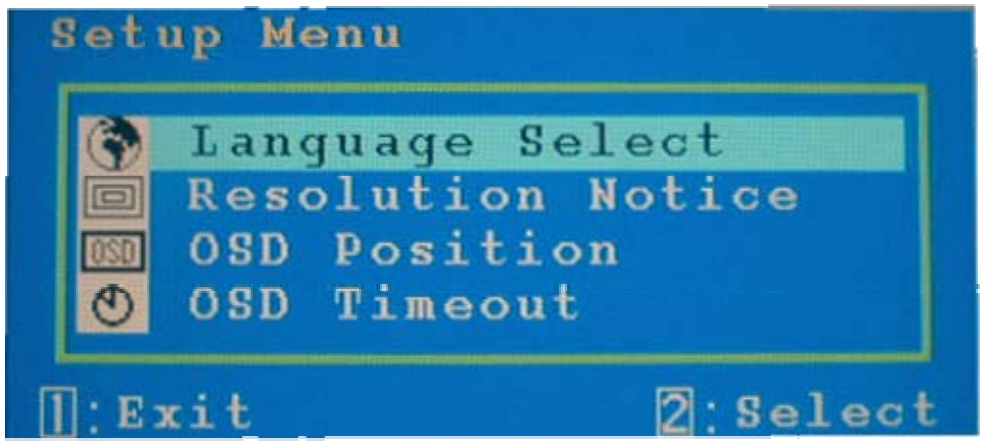
Control	Explanation

Fine Tune eliminates any remaining video artifacts (noise, banding, out-of-phase, etc.)

Note: Try Auto Image Adjust first.

Sharpness adjusts the clarity and focus of the screen image...

Setup Menu displays the menu shown below.



The Setup Menu controls are explained below.

Language Select allows you to choose the language used in the menus and control screens.

Resolution Notifier displays the Resolution Notice menu shown below.

Resolution Notice advises the optimal resolution to use.

OSD Position allows you to move the on-screen display menus and control screens.

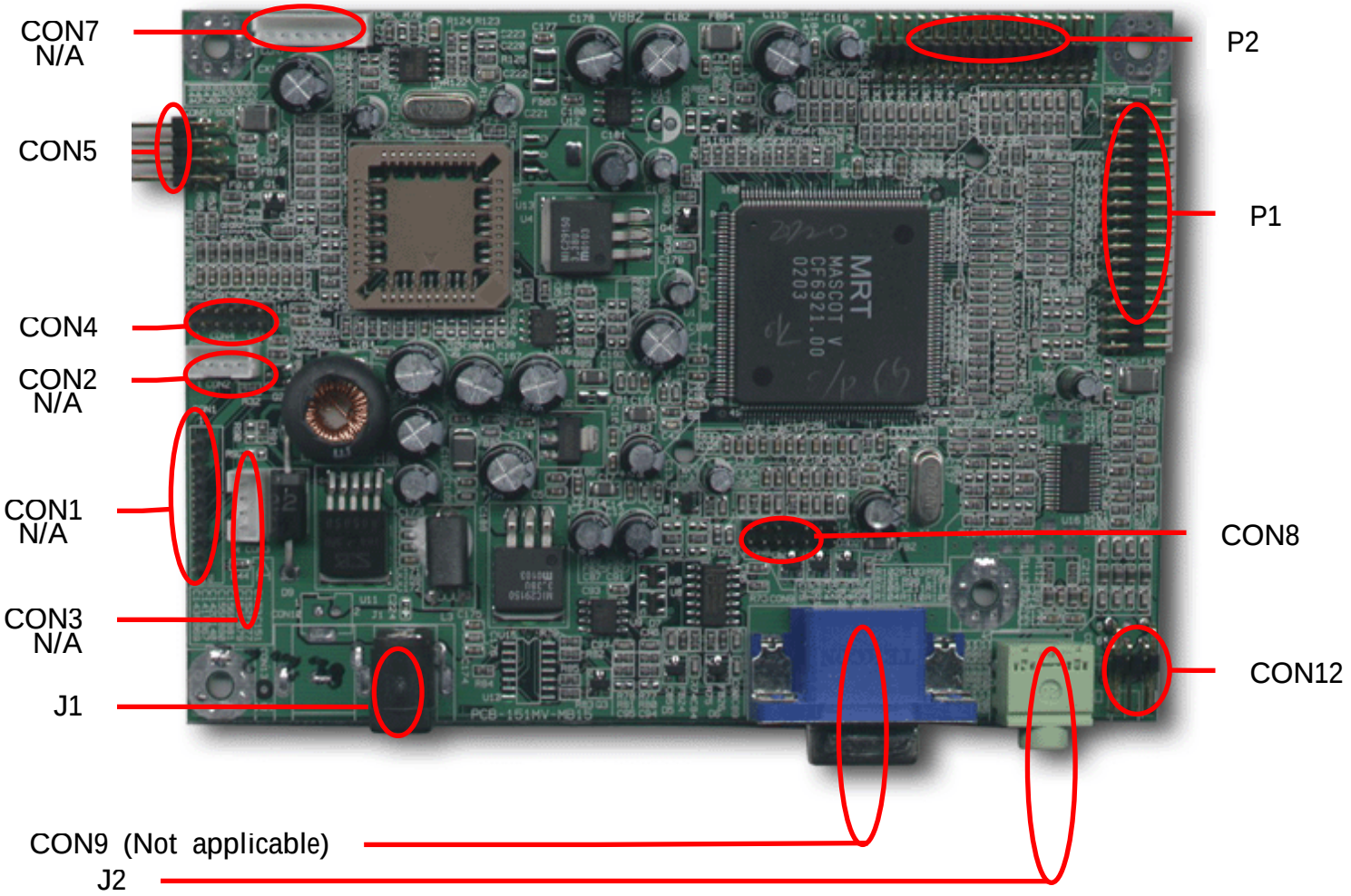
OSD Timeout sets the length of time an on-screen display screen is displayed. For example, with a “15 second” setting, if a control is not pushed within 15 seconds, the display screen disappears.

Control	Explanation
	**Memory Recall** returns adjustments to the original factory settings if the display is operating in factory Preset Timing Mode listed in this user guide. Exception: This control does not affect changes made with the User Color control.

Chapter 4 CIRCUIT DESCRIPTION

4.1 Main Board

4.1.1 Position



NOTE: N/A INDICATES PIN-HEADER/CONNECTOR NOT IN USE.

4.1.2 CON4: Switch Board Pin Header

Pin #	Signal Name	Function
1	GND	GROUND
2	RX1 - SW7	Volume Down
3	R120 - SW1	OSD Key
4	R121 – SW2	ADDITION Key
5	R122 – SW3	SUBTRACTION Key
6	R123 – SW4	DOWN Key
7	RX2 – SW6	MUTE
8	NC	No Connect
9	R53 – SW5	Volume Up
10	R308 - LED	LED
11	R309 – LED	LED
12	R54 - PWR	Power Switch

4.1.3 CON 5 Inverter Connector

Pin #	Signal Name	Function
1	VCC	+12 V power supply
2	VCC	+12 V power supply
3	GND	GROUND
4	GND	GROUND
5	INV-PWR	INVERTER POWER
6	GND	GROUND
7	BRINS	Dimming (Brightness) Control
8		
	PWM0	
	NC	No Connect
	PENBKL	On/Off control
	GND	GROUND

4.1.4 P2: LCD Panel

Pin #	Signal Name	Function
1	GND	GROUND
2	RB2	RED EVEN DATA SIGNAL 2
3	RB3	RED EVEN DATA SIGNAL 3
4	RB4	RED EVEN DATA SIGNAL 4
5	GND	GROUND
6	RB5	RED EVEN DATA SIGNAL 5
7	RB6	RED EVEN DATA SIGNAL 6
8	RB7	RED EVEN DATA SIGNAL 7
9	GND	Ground
10	GB2	GREEN EVEN DATA SIGNAL 2
11	GB3	GREEN EVEN DATA SIGNAL 3
12	GB4	GREEN EVEN DATA SIGNAL 4
13	GND	GROUND
14	GB5	GREEN EVEN DATA SIGNAL 5
15	GB6	GREEN EVEN DATA SIGNAL 6
16	GB7	GREEN EVEN DATA SIGNAL 7
17	GND	GROUND
18	BB2	BLUE EVEN DATA SIGNAL 2
19	BB3	BLUE EVEN DATA SIGNAL 3
20	BB4	BLUE EVEN DATA SIGNAL 4
21	GND	GROUND
22	BB5	BLUE EVEN DATA SIGNAL 5
23	BB6	BLUE EVEN DATA SIGNAL 6
24	BB7	BLUE EVEN DATA SIGNAL 7
25	GND	GROUND
26	GND	GROUND
27	RB0	RED EVEN DATA SIGNAL 0
28	RB1	RED EVEN DATA SIGNAL 1
29	GB0	GREEN EVEN DATA SIGNAL 0
30	GB1	GREEN EVEN DATA SIGNAL 1
31	BB0	BLUE EVEN DATA SIGNAL 0
32	BB1	BLUE EVEN DATA SIGNAL 1

4.1.5 P1 LCD Panel

Pin #	Signal Name	Function
1	LCD VDD	+3.3 V POWER SUPPLY
2	LCD VDD	+3.3 V POWER SUPPLY
3	GND	GROUND
4	D-SHCLK	
5	GND	GROUND
6	D-VSYNC	VERTICAL SYNC SIGNAL
7	D-HSYNC	HORIZONTAL SYNC SIGNAL
8	D-DE	DATA ENABLE SIGNAL
9	GND	GROUND
10	RA2	RED ODD DATA SIGNAL 2
11	RA3	RED ODD DATA SIGNAL 3
12	RA4	RED ODD DATA SIGNAL 4
13	RA5	RED ODD DATA SIGNAL 5
14	RA6	RED ODD DATA SIGNAL 6
15	RA7	RED ODD DATA SIGNAL 7
16	GND	GROUND
17	GA2	GREEN ODD DATA SIGNAL 2
18	GA3	GREEN ODD DATA SIGNAL 3
19	GA4	GREEN ODD DATA SIGNAL 4
20	GA5	GREEN ODD DATA SIGNAL 5
21	GA6	GREEN ODD DATA SIGNAL 6
22	GA7	GREEN ODD DATA SIGNAL 7
23	GND	GROUND
24	BA2	BLUE ODD DATA SIGNAL 2
25	BA3	BLUE ODD DATA SIGNAL 3
26	BA4	BLUE ODD DATA SIGNAL 4
27	BA5	BLUE ODD DATA SIGNAL 5
28	BA6	BLUE ODD DATA SIGNAL 6
29	BA7	BLUE ODD DATA SIGNAL 7
30	GND	GROUND
31	RA0	RED ODD DATA SIGNAL 0
32	RA1	RED ODD DATA SIGNAL 1
33	GA0	GREEN ODD DATA SIGNAL 0
34	GA1	GREEN ODD DATA SIGNAL 1

35	BA0	BLUE ODD DATA SIGNAL 0
36	BA1	BLUE ODD DATA SIGNAL 1

4.1.6 CON8: VGA TERMINAL

Pin #	Signal Name	Function
1	SCL-DDC	DDC DATA CLOCK Line (SCL)
2	GND	GROUND
3	VSYNC	V-SYNC
4	HSYNC	H-Sync
5	GND	Ground
6	SDA-DDC	DDC SERIAL DATA LINE (SDA)
7	VCC-DDC	Green Video Ground
8	GND	GROUND
9	GND	GROUND
10	BLUE	Blue Video
11	GND	Ground
12	GREEN	GREEN VIDEO
13	GND	Ground
14	RED	RED VIDEO

4.1.7 CON12: SPEAKER Connector

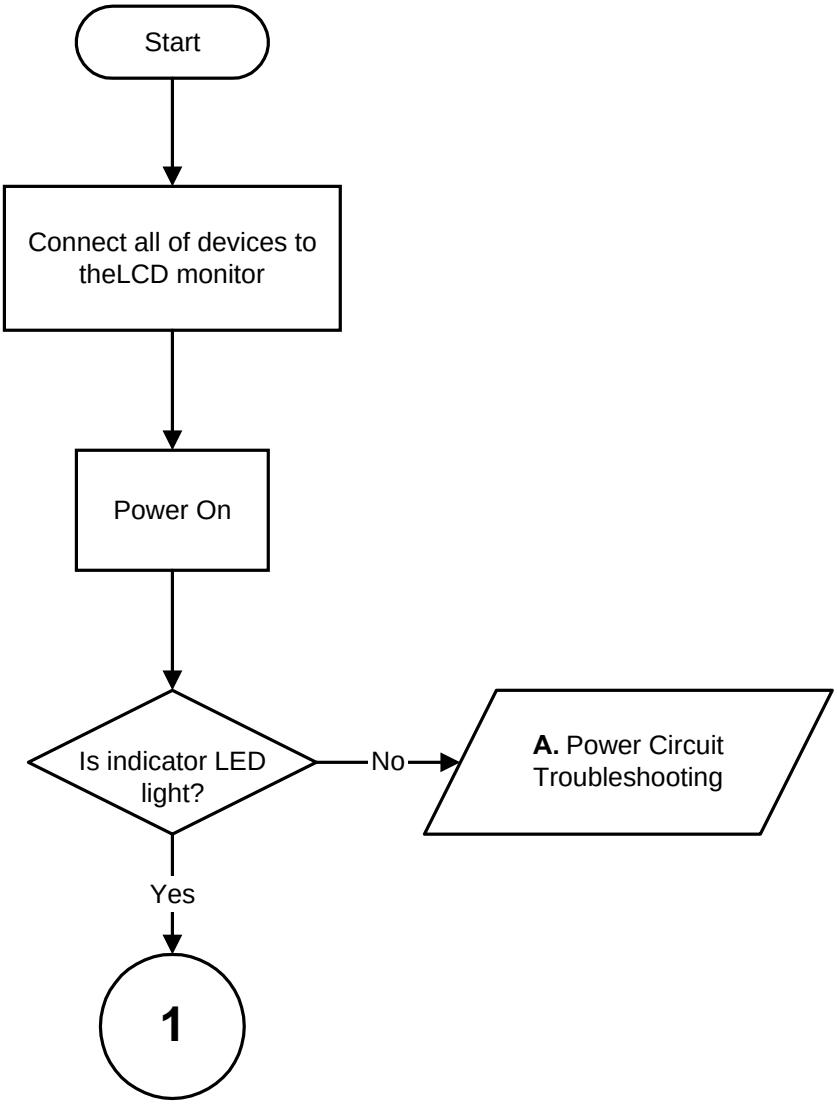
Pin #	Signal Name	Function
1	RIGHT-P	RIGHT POSITIVE (VOLUME INCREASE_
2	RIGHT-M	RIGHT MINUS (VOLUME DECREASE)
3	LEFT-P	LEFT POSITIVE (VOLUME INCREASE_
4	LEFT-M	LEFT MINUS (VOLUME DECREASE)

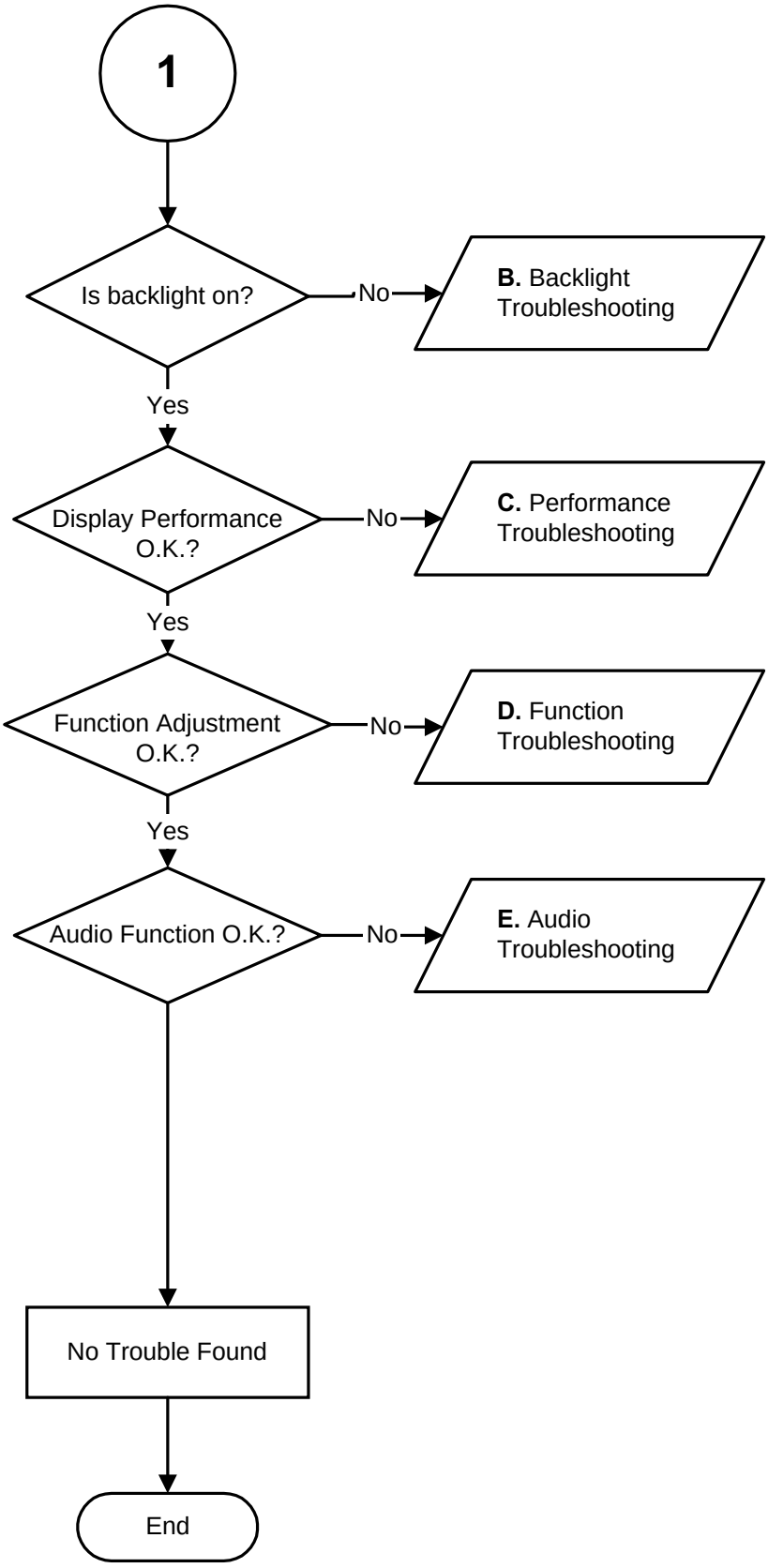
Chapter 5 TROUBLESHOOTING

5.1 Equipment

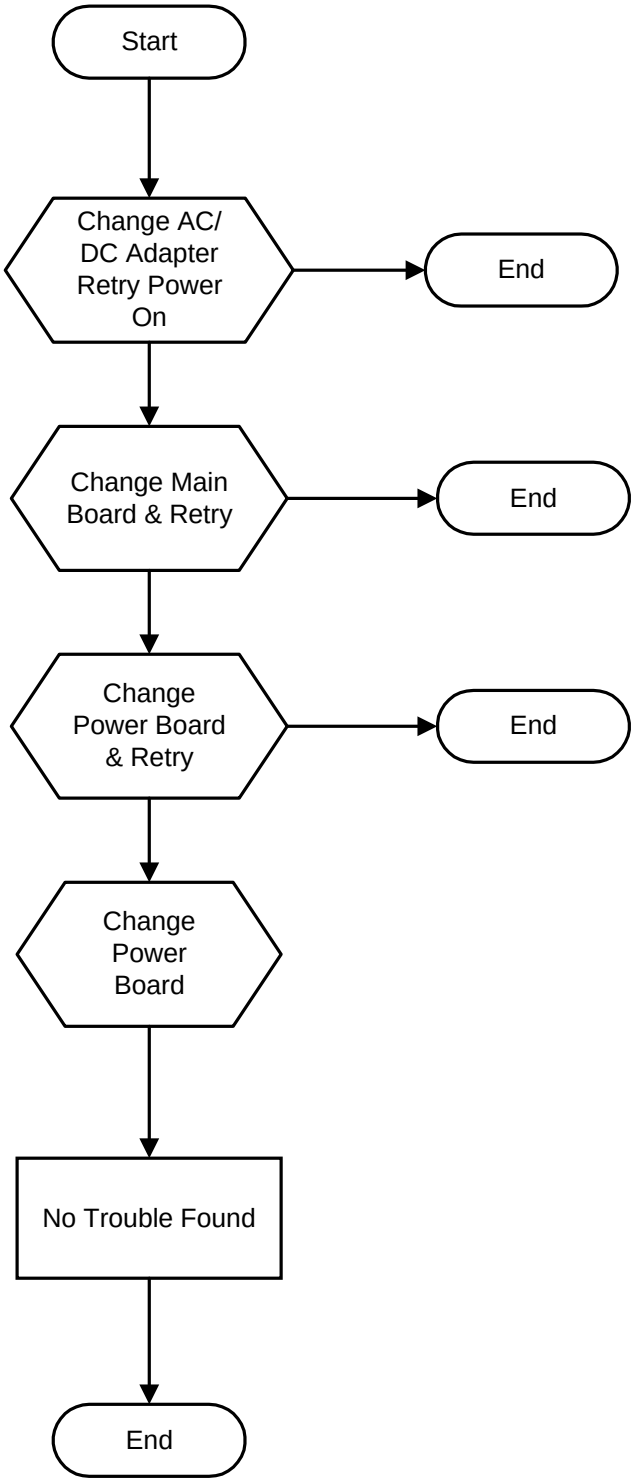
- **ViewSonic VE150m/VE150mb/VA500 LCD Monitor**
- **Personal Computer**
- **Screw Driver**

5.2 Main Procedure

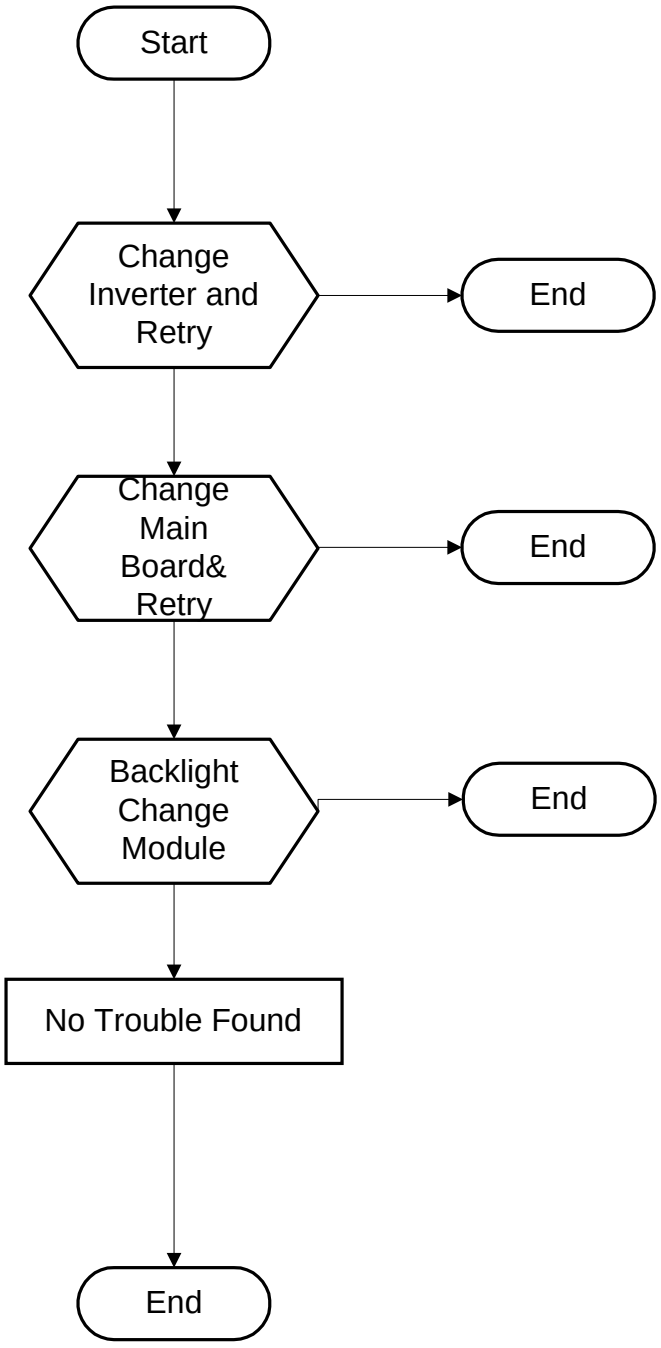



1
Is backlight on?
No
B. Backlight Troubleshooting
Yes
Display Performance O.K.?
No
C. Performance Troubleshooting
Yes
Function Adjustment O.K.?
No
D. Function Troubleshooting
Yes
Audio Function O.K.?
No
E. Audio Troubleshooting
No Trouble Found
End

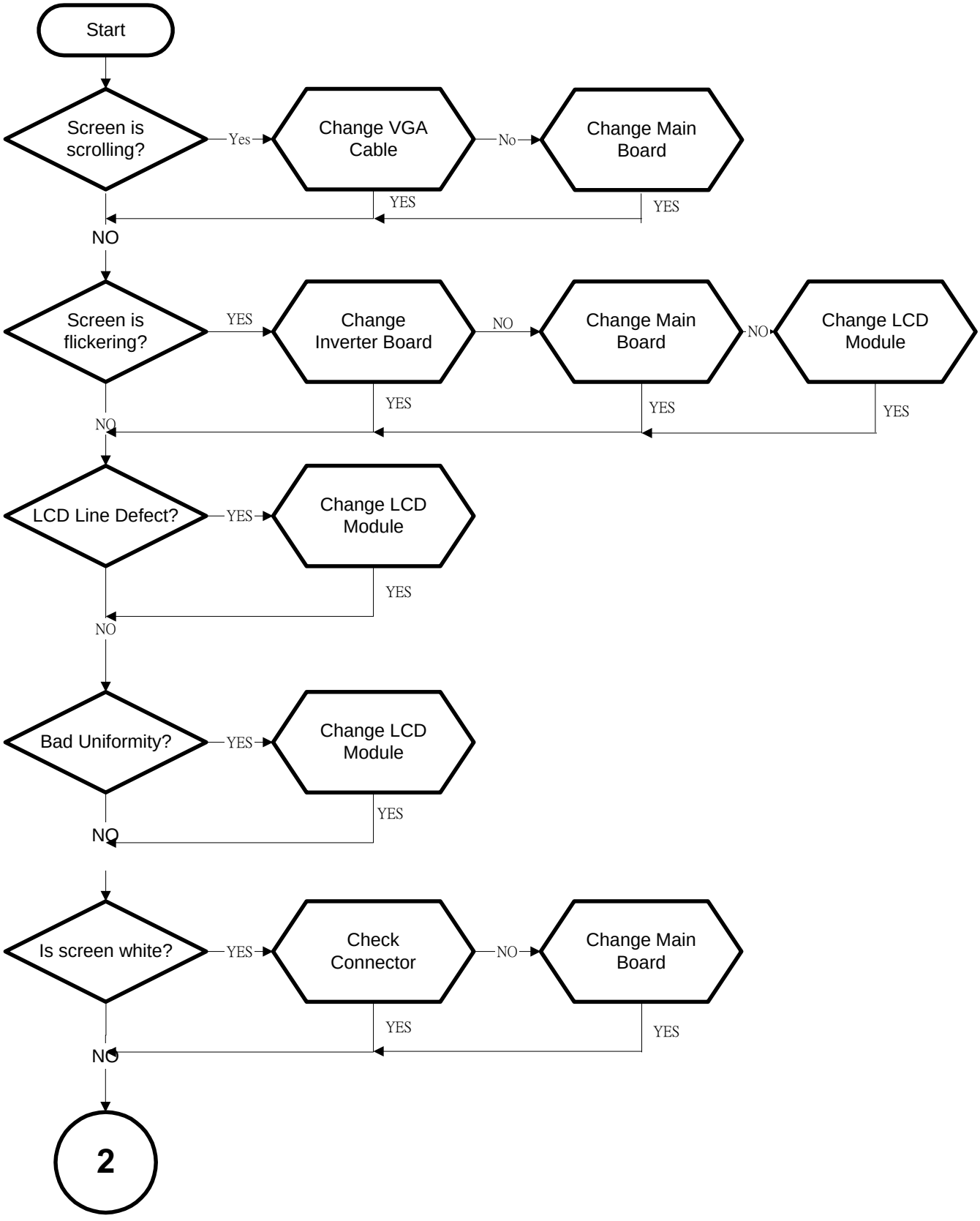
5.2.1 . Power Circuit Troubleshooting

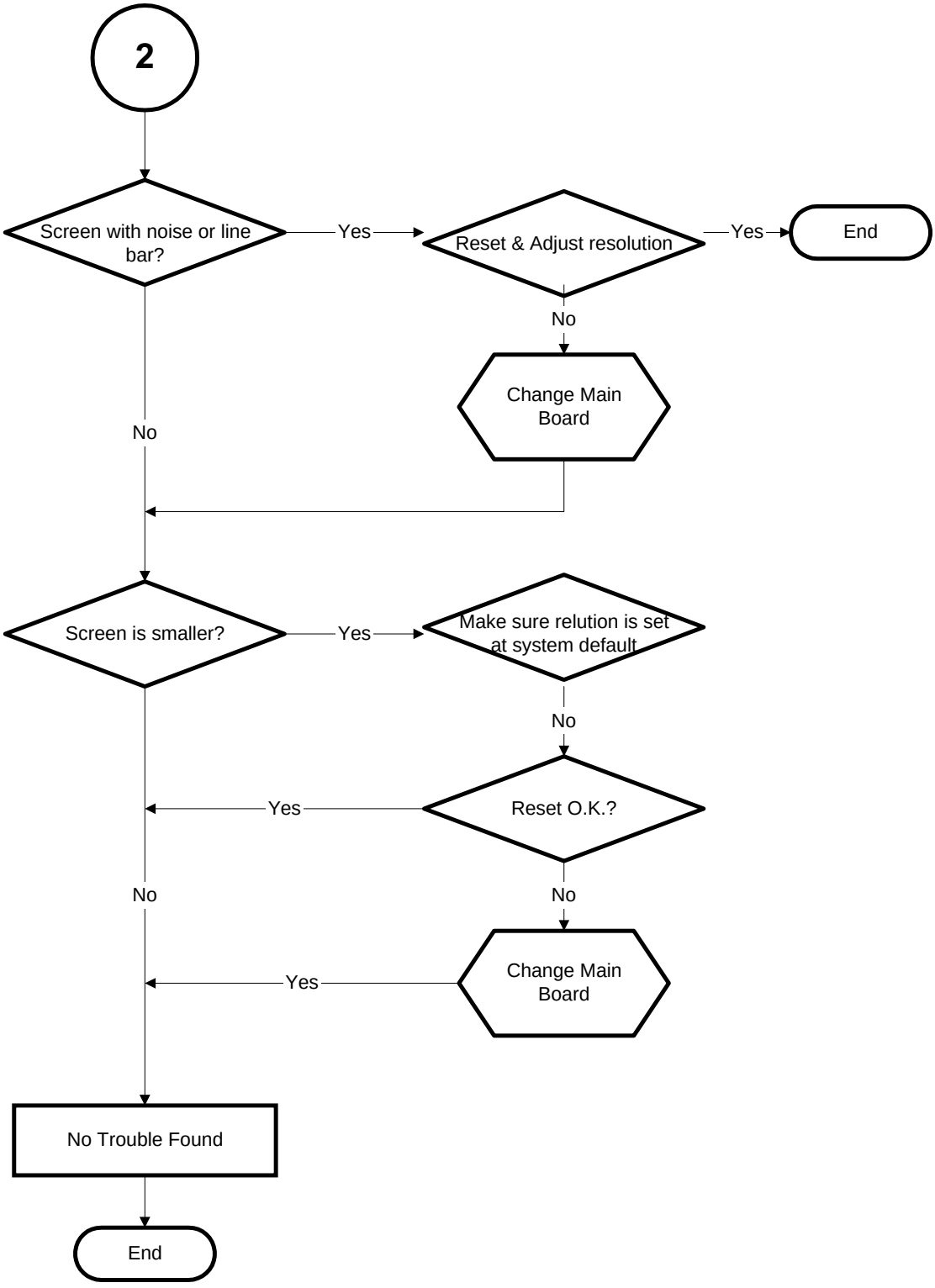


5.2.2 B. Backlight Troubleshooting

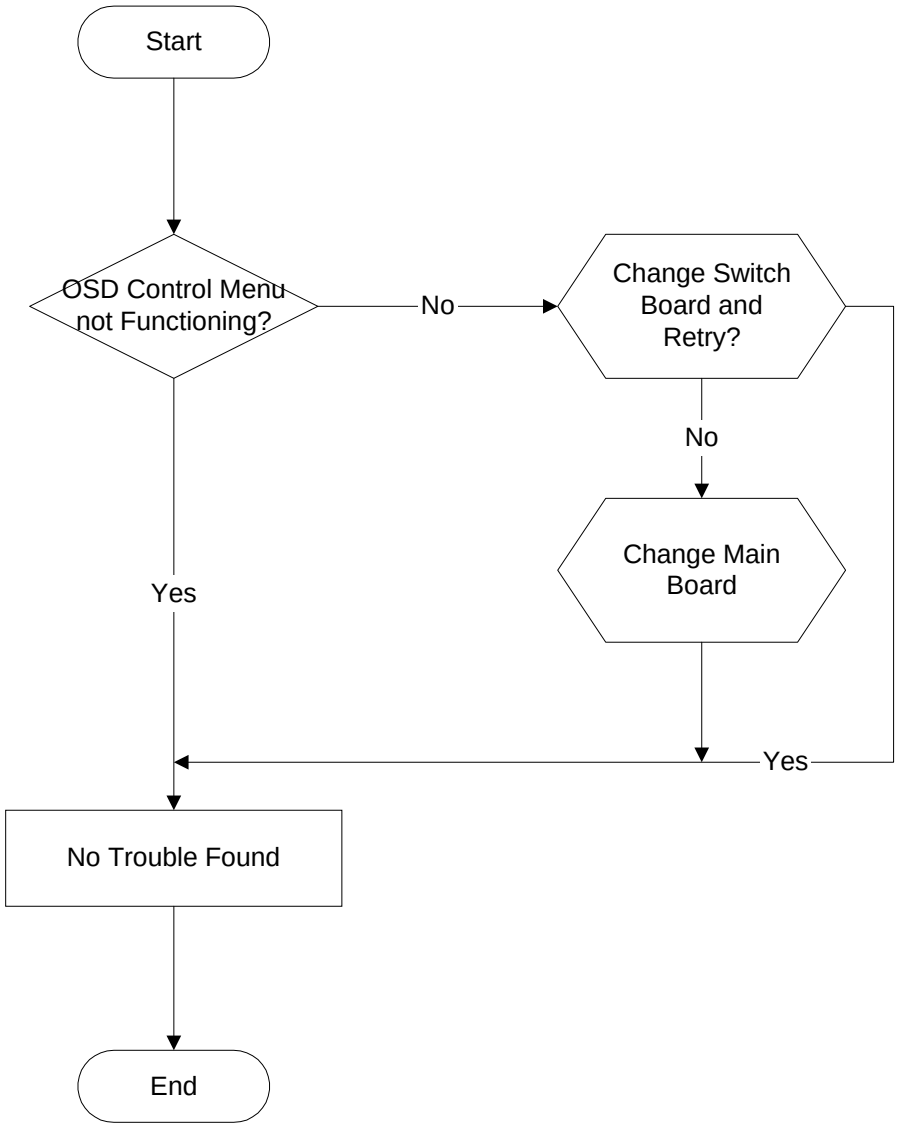


5.2.3 C. Performance Troubleshooting

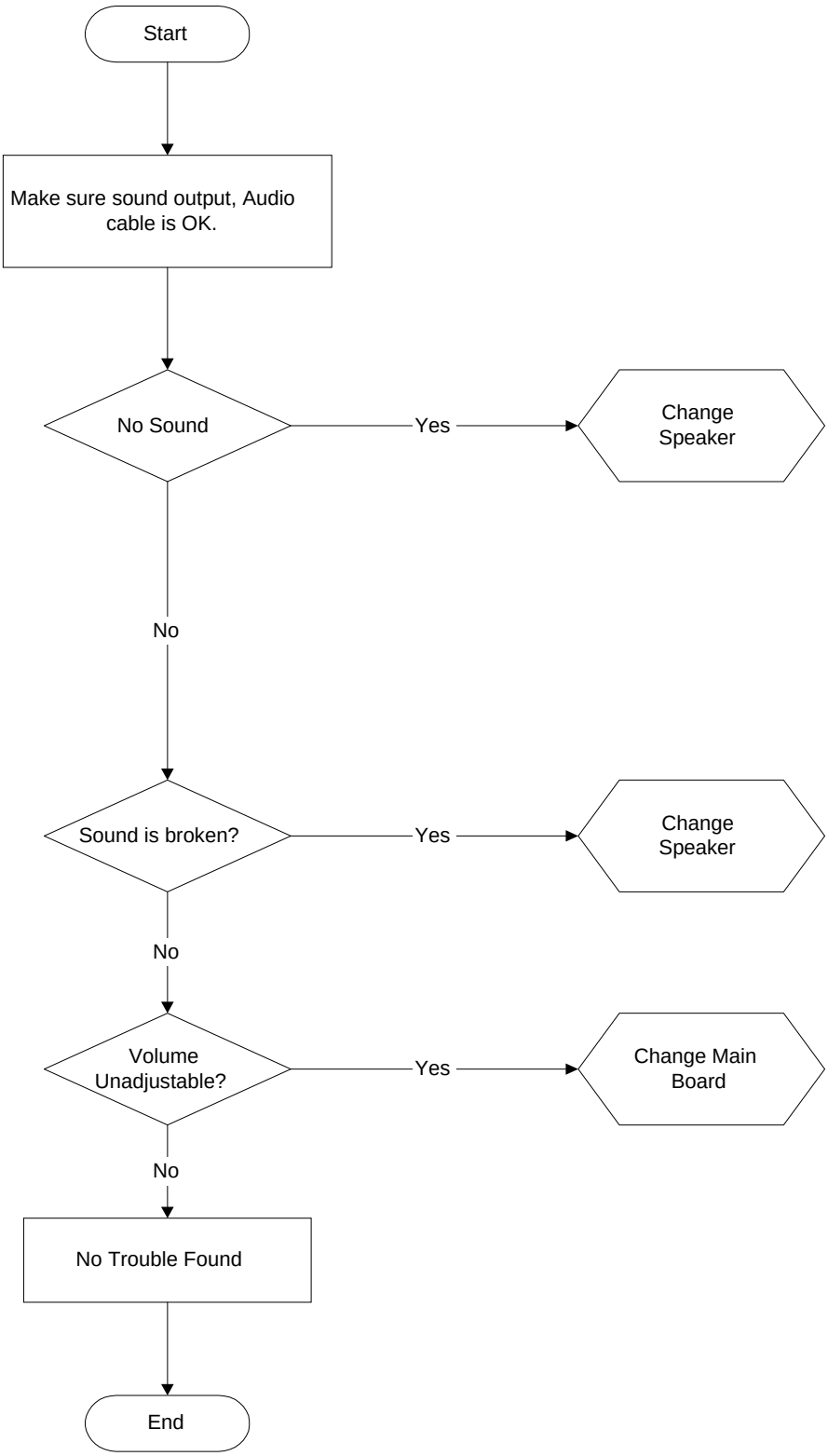



2
Screen with noise or line bar?
Yes
Reset & Adjust resolution
Yes
End
No
Change Main Board
No
Screen is smaller?
Yes
Make sure relution is set at system default
No
Yes
Reset O.K.?
No
No
Yes
Change Main Board
No Trouble Found
End

5.2.4 D. OSD Function Troubleshooting

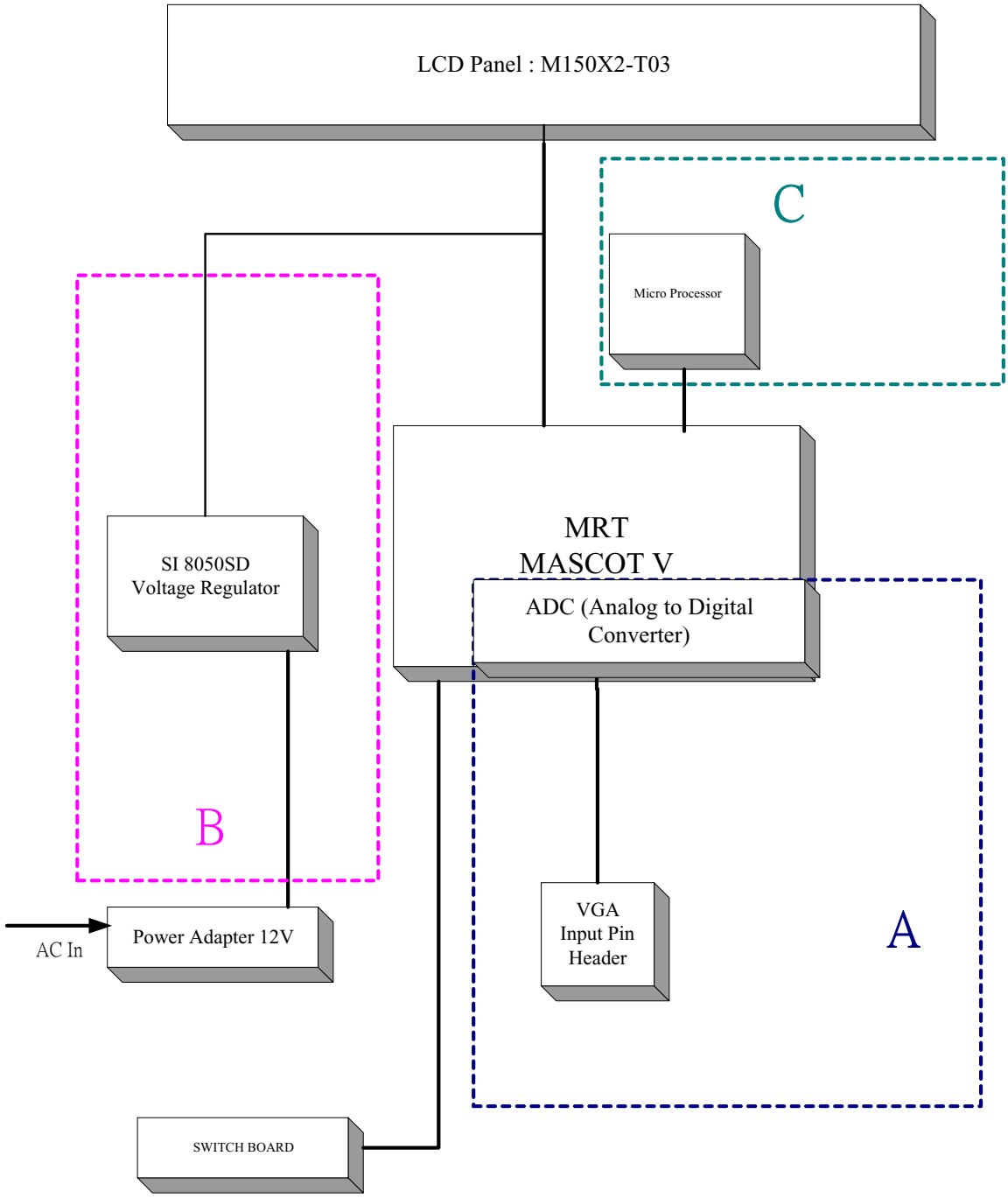


5.2.5 E. Audio Troubleshooting



Chapter 6 THEORY OF OPERATION

6.1 System Block Diagram



6.2 System Circuitry Description

BLOCK A.

In reference to the system block diagram of the monitor's circuitry shown on the previous page, the analog RGB inputs are amplified and sent through an analog-to-digital converter (ADC) to a digital signal processor (DSP) that generates digital RGB signals for controlling LCA panel.

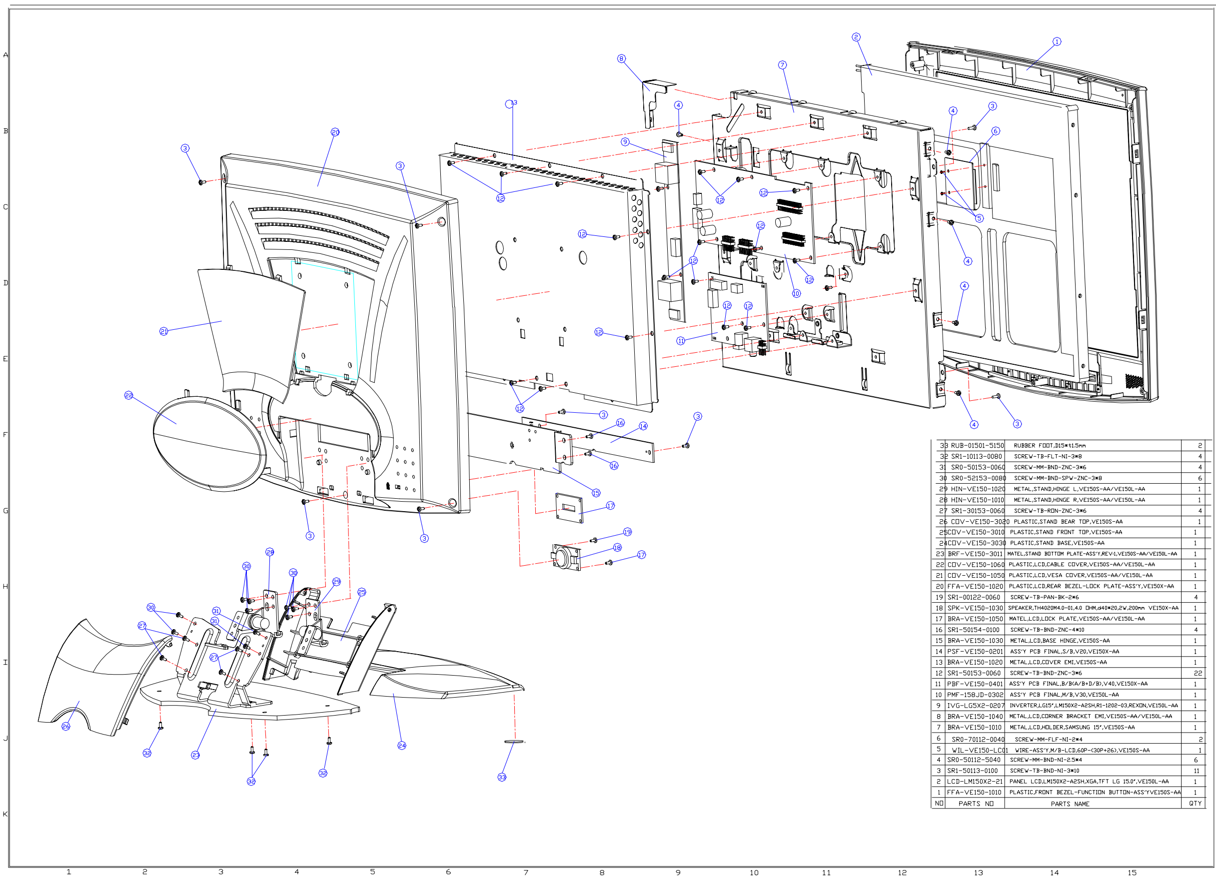
BLOCK B.

A second power supply converts a single 12V supply to the various voltages needed to run the LCD panel and the inverter driving the display's backlights.

BLOCK C.

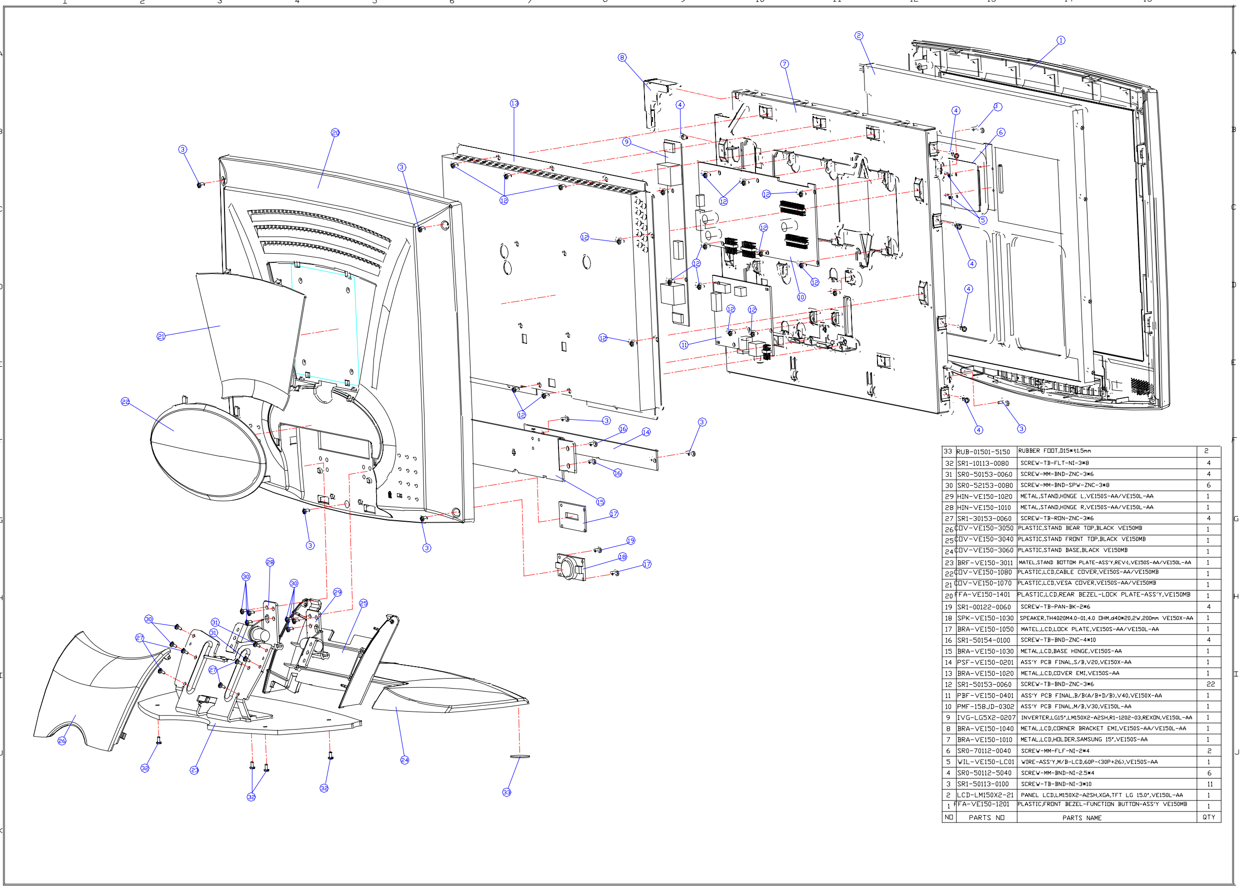
SYNC SIGNAL PROCESSOR. This processor determines the polarity of the horizontal and vertical sync signals, generates a fixed-polarity synchronized clock signal and provides data for use by the microprocessor in selecting circuit control parameters from EEPROM tables.

Chapter 7 MECHANICAL ASSEMBLY



NO	PARTS NO	PARTS NAME	QTY
33	RUB-01501-5150	RUBBER FOOT,D15*t1.5mm	2
32	SR1-10113-0080	SCREW-TB-FLT-NI-3*8	4
31	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	4
30	SR0-52153-0080	SCREW-MM-BND-SPW-ZNC-3*8	6
29	HIN-VE150-1020	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	1
28	HIN-VE150-1010	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	1
27	SR1-30153-0060	SCREW-TB-RON-ZNC-3*6	4
26	COV-VE150-3020	PLASTIC,STAND BEAR TOP,VE150S-AA	1
25	COV-VE150-3010	PLASTIC,STAND FRONT TOP,VE150S-AA	1
24	COV-VE150-3030	PLASTIC,STAND BASE,VE150S-AA	1
23	BRF-VE150-3011	MATEL,STAND BOTTOM PLATE-ASS'Y,REV:1,VE150S-AA/VE150L-AA	1
22	COV-VE150-1060	PLASTIC,LCD,CABLE COVER,VE150S-AA/VE150L-AA	1
21	COV-VE150-1050	PLASTIC,LCD,VESA COVER,VE150S-AA/VE150L-AA	1
20	FFA-VE150-1020	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,VE150X-AA	1
19	SR1-00122-0060	SCREW-TB-PAN-BK-2*6	4
18	SPK-VE150-1030	SPEAKER,TH4020M4.0-01,4.0 OHM,d40*20,2W,200mm VE150X-AA	1
17	BRA-VE150-1050	MATEL,LCD,LOCK PLATE,VE150S-AA/VE150L-AA	1
16	SR1-50154-0100	SCREW-TB-BND-ZNC-4*10	4
15	BRA-VE150-1030	METAL,LCD,BASE HINGE,VE150S-AA	1
14	PSF-VE150-0201	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	1
13	BRA-VE150-1020	METAL,LCD,COVER EMI,VE150S-AA	1
12	SR1-50153-0060	SCREW-TB-BND-ZNC-3*6	22
11	PBF-VE150-0401	ASS'Y PCB FINAL,B/B(A/B+D/B),V40,VE150X-AA	1
10	PMF-158JD-0302	ASS'Y PCB FINAL,M/B,V30,VE150L-AA	1
9	IVG-LG5X2-0207	INVERTER,LG15",LM150X2-A2SH,R1-1202-03,REXON,VE150L-AA	1
8	BRA-VE150-1040	METAL,LCD,CORNER BRACKET EMI,VE150S-AA/VE150L-AA	1
7	BRA-VE150-1010	METAL,LCD,HOLDER,SAMSUNG 15",VE150S-AA	1
6	SR0-70112-0040	SCREW-MM-FLF-NI-2*4	2
5	WIL-VE150-LC01	WIRE-ASS'Y,M/B-LCD,60P-(30P+26),VE150S-AA	1
4	SR0-50112-5040	SCREW-MM-BND-NI-2.5*4	6
3	SR1-50113-0100	SCREW-TB-BND-NI-3*10	11
2	LCD-LM150X2-21	PANEL LCD,LM150X2-A2SH,XGA,TFT LG 15.0",VE150L-AA	1
1	FFA-VE150-1010	PLASTIC,FRONT BEZEL-FUNCTION BUTTON-ASS'YVE150S-AA	1

VE150MB



NO	PARTS NO	PARTS NAME	QTY
33	RUB-01501-5150	RUBBER FOOT,D15*t1.5mm	2
32	SR1-10113-0080	SCREW-TB-FLT-NI-3*8	4
31	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	4
30	SR0-52153-0080	SCREW-MM-BND-SPW-ZNC-3*8	6
29	HIN-VE150-1020	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	1
28	HIN-VE150-1010	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	1
27	SR1-30153-0060	SCREW-TB-RON-ZNC-3*6	4
26	COV-VE150-3050	PLASTIC,STAND BEAR TOP,BLACK VE150MB	1
25	COV-VE150-3040	PLASTIC,STAND FRONT TOP,BLACK VE150MB	1
24	COV-VE150-3060	PLASTIC,STAND BASE,BLACK VE150MB	1
23	BRF-VE150-3011	MATEL,STAND BOTTOM PLATE-ASS'Y,REV:1,VE150S-AA/VE150L-AA	1
22	COV-VE150-1080	PLASTIC,LCD,CABLE COVER,VE150S-AA/VE150MB	1
21	COV-VE150-1070	PLASTIC,LCD,VESA COVER,VE150S-AA/VE150MB	1
20	FFA-VE150-1401	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,VE150MB	1
19	SR1-00122-0060	SCREW-TB-PAN-BK-2*6	4
18	SPK-VE150-1030	SPEAKER,TH4020M4.0-01,4.0 OHM,d40*20,2W,200mm VE150X-AA	1
17	BRA-VE150-1050	MATEL,LCD,LOCK PLATE,VE150S-AA/VE150L-AA	1
16	SR1-50154-0100	SCREW-TB-BND-ZNC-4*10	4
15	BRA-VE150-1030	METAL,LCD,BASE HINGE,VE150S-AA	1
14	PSF-VE150-0201	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	1
13	BRA-VE150-1020	METAL,LCD,COVER EMI,VE150S-AA	1
12	SR1-50153-0060	SCREW-TB-BND-ZNC-3*6	22
11	PBF-VE150-0401	ASS'Y PCB FINAL,B/B(A/B+D/B),V40,VE150X-AA	1
10	PMF-158JD-0302	ASS'Y PCB FINAL,M/B,V30,VE150L-AA	1
9	IVG-LG5X2-0207	INVERTER,LG15",LM150X2-A2SH,R1-1202-03,REXON,VE150L-AA	1
8	BRA-VE150-1040	METAL,LCD,CORNER BRACKET EMI,VE150S-AA/VE150L-AA	1
7	BRA-VE150-1010	METAL,LCD,HOLDER,SAMSUNG 15",VE150S-AA	1
6	SR0-70112-0040	SCREW-MM-FLF-NI-2*4	2
5	WIL-VE150-LC01	WIRE-ASS'Y,M/B-LCD,60P-(30P+26),VE150S-AA	1
4	SR0-50112-5040	SCREW-MM-BND-NI-2.5*4	6
3	SR1-50113-0100	SCREW-TB-BND-NI-3*10	11
2	LCD-LM150X2-21	PANEL LCD,LM150X2-A2SH,XGA,TFT LG 15.0",VE150L-AA	1
1	FFA-VE150-1201	PLASTIC,FRONT BEZEL-FUNCTION BUTTON-ASS'Y VE150MB	1

MECHANICAL PARTS LIST

ITEM NO.	VIEWSONIC P/N	REFERENCE NUMBER	DESCRIPTION	QTY
1	C-FP-0301-0774	FFA-VE150-1010	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y,VE150S-AA	1
2	M-LCD-0826-0151	LCD-M150X3T-41	PANEL LCD,M150X3-T03,CMO 15",TRADITIONAL PANE (TN+FILM)	1
3	M-SCW-0824-0730	SR0-50113-0080	SCREW-MM-BND-NI-3*8	4
4	M-WR-0828-0674	WIL-VE150-LC31	WIRE-ASS'Y,M/B-LCD,60P-(30P+26P),CMO,MRT V,JHEN VEI,VE150M-M	1
5	PL-PD-0714-0079	RUB-VE150-1010	RUBBER FOOT,W13*L20*T10mm,VE150M-M	1
6	B-SB-0221-0504	IVC-150X3-0473	INVERTER,M150X3-T03,CMO 15",7PIN 180°,4LAMP(1L),DAC-12C043,DELTA,VE150M-M	1
7	B-MB-0201-0727	PMF-151MV-0101	ASS'Y PCB FINAL,M/B (MRT/Mascot V),V10,CMO,FOR VIEWSONIC,VE150M-M	1
8	M-SCW-0824-0534	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	6
9	M-SCW-0824-0541	SR1-50113-0100	SCREW-TB-BND-NI-3*10	11
10		INS-VE150-1060	INSULATION,INVERTER,VE150M-M	1
11		BRA-VE150-1080	METAL,LCD,BRACKET,FRAME,CMO 15",VE150M-M	1
12	A-VC-0101-0288	CAB-VE150-VG31	CABLE VGA,PC99,200CM,H89B42B4,15P-14P,W/SR,JHEN VEI,VE150M-M	1
13	M-SCW-0824-0731	SR1-31153-0060	SCREW-TB-RON-STW-ZNC-3*6	1
14	B-SB-0221-0325	PSF-VE150-0201	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	1
15	M-SCW-0824-0543	SR1-50154-0100	SCREW-TB-BND-ZNC-4*10	4
16	M-MS-0808-6838	BRA-VE150-1030	METAL,LCD,BASE HINGE,VE150S-AA	1
17	C-BC-0302-0471	FFA-VE150-1050	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,CMO 15",MADE IN CHINA,VE150M-M	1
18	M-MS-0808-6840	BRA-VE150-1050	METAL,LCD,LOCK PLATE,VE150S-AA/VE150L-AA	1
19	E-SK-0412-0068	SPK-VE150-1050	SPEAKER,4.0 OHM,2W,D40*20,R340*L140mm,FG-40N020A4,FORTUN,VE150M-M	1
20	M-SCW-0824-0537	SR1-00122-0060	SCREW-TB-PAN-BK-2*6	4
21	M-CV-0830-0238	COV-VE150-1050	PLASTIC,LCD,VESA COVER,VE150S-AA/VE150L-AA	1
22	M-CV-0830-0239	COV-VE150-1060	PLASTIC,LCD,CABLE COVER,VE150S-AA/VE150L-AA	1
23	M-MS-0808-6843	BRF-VE150-3011	METAL,STAND BOTTOM PLATE-ASS'Y,REV1,VE150S-AA/VE150L-AA	1
24	PL-PS-0715-0176	COV-VE150-3031	PLASTIC,STAND BASE,VE150S-AA	1
25	M-CV-0830-2282	COV-VE150-3010	PLASTIC,STAND FRONT TOP,VE150S-AA	1
26	M-CV-0830-2283	COV-VE150-3020	PLASTIC,STAND BEAR TOP,VE150S-AA	1
27	M-SCW-0824-0539	SR1-30153-0060	SCREW-TB-RON-ZNC-3*6	4
28	M-MS-0808-6863	HIN-VE150-1010	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	1
29	M-MS-0808-6864	HIN-VE150-1020	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	1
30	M-SCW-0824-0535	SR0-52153-0080	SCREW-MM-BND-SPW-ZNC-3*8	6
31	M-SCW-0824-0534	SR0-50153-0060	SCREW-MM-BND-ZNC-3*8	4
32	M-SCW-0824-0538	SR1-10113-0080	SCREW-TB-FLT-NI-3*8	4
33	M-MS-0808-7236	RUB-IY151-1503	RUBBER FOOT,D15*t3.0mm	2

Chapter 8 RECOMMENDED SPARE PARTS LIST

Name **M0M-1557GC-031**

Item	ViewSonic P/N	Description	Reference Number
1	A-AD-0114-0173	ADAPTER,12V,40W,3.33A(BIG)3P,S-CORE,BLACK,tunning fork XCH1234P51525,CHI,VIEW SONIC(LABEL	ADT-A333V-1211
2	M-MS-0808-6808	BAG W680*H750*t0.03mm,PRINTING(ENG/JAP/GER/FRA/ITA/SPA/BABY)	BAG-48065-035A
3	M-MS-0808-6811	BARCODE SHEET,W90mm,300M/ROLL,ALL MODEL	BAR-IY151-1002
4	M-LB-0813-0562	BARCODE LABEL,W82*122mm,VE150L-AA	BAR-VE150-1202
5	M-MS-0808-7716	BAG PP,OUTSIDE COVER,W155*L225mm,VE150M-M	BAG-16022-0C00
6	A-CD-VE150MB	CD-ASS'Y,(CD-USER MANUAL 15 languages-JACKET W/NATURE),CHINA,VIEW SONIC,VE150MB-M	CDA-VE150-3050
7	M-MS-0808-7718	MANUAL,QUICK START GUIDE,15 languages,MADE IN CHINA,WITH TCO 95,VE150MB-M	MAU-VE150-A430
8	A-AU-0120-0040	CABLE AUDIO,PC99 GREEN HEAD,180cm,BLACK,VE150MB/VE150CB	CAB-150XA-AUD2
9	M-MS-0808-6809	BARCODE SHEET,W40mm,300M/ROLL,ALL MODEL	BAR-11111-1010
10	M-LB-0813-0561	BARCODE LABEL,W35*L20mm,100M/ROLL	BAR-158AL-2010
11	A-VC-0101-0289	CABLE VGA,PC99,180cm,BLACK,15P-14P,W/SR,JHEN VEI,VE150MB-M	CAB-VE150-VG41
12	M-CV-0830-2373	PLASTIC,LCD,VESA COVER,BLACK,VE150MB/VE150CB	COV-VE150-1070
13	M-CV-0830-2374	PLASTIC,LCD,CABLE COVER,BLACK,VE150MB/VE150CB	COV-VE150-1080
14	C-FP-0301-0775	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y,BLACK,VE150MB	FFA-VE150-1201
15	C-BC-0302-0473	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,BLACK,MADE IN CHINA,VE150MB-M	FFA-VE150-1430
16	B-SB-0221-0504	INVERTER,M150X3-T03,CMO 15",7 PIN 180 ◦ ,4LAMP(1L),DAC-12C043,DELTA,VE150M-M	IVC-150X3-0473
17	M-LB-0813-0749	LABEL,FCC,REV.:B,VIEW SONIC,MADE IN CHINA,VE150mb	LAB-VE150-F08B
18	M-LB-0813-0570	LABEL,LOGO(SMALL),VIEW SONIC,E015-001,VP180M	LAB-VP180-N010
19	M-LCD-0826-0151	PANEL LCD,M150X3-T03,CMO 15",TRADITIONAL PANEL (TN+FILM)	LCD-M150X3T-41
20	B-SB-0221-0325	ASS'Y PCB FINAL, S/B, V20	PSF-VE150-0201
20	B-MB-0201-0727	ASS'Y PCB FINAL,M/B(MRT/MascotV),V10,CMO,FOR VIEW SONIC,VE150M-M	PMF-151MV-0101
21	PL-PD-0714-0079	RUBBER FOOT,W13*L20*t10mm,VE150M-M	RUB-VE150-1010
22	E-SK-0412-0068	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,FG-4	SPK-VE150-1050
23	M-WR-0828-0674	WIRE-ASS'Y,M/B-LCD,60P-(30P+26P),CMO,MRT V,JHEN VEI,VE150M-M	WIL-VE150-LC31
24	M-WR-0828-0675	WIRE-ASS'Y,M/B-S/B,12P-12P,2.54-2.0mm,CMO15",JHEN VEI,VE150M-M	WIL-VE150-SW11
25	C-FP-0301-0321	PLASTIC,STAND,FRONT TOP,BLACK,VE150MB/VE150CB	COV-VE150-3040
26	C-BC-0302-0472	PLASTIC,STAND,REAR TOP,BLACK,VE150MB/VE150CB	COV-VE150-3050
27	PL-PS-0715-0175	PLASTIC,STAND,BASE,BLACK,VE150MB/VE150CB	COV-VE150-3061
28	M-MS-0808-6863	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	HIN-VE150-1010
29	M-MS-0808-6864	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	HIN-VE150-1020
30	M-MS-0808-7236	RUBBER FOOT,D15*3.0	RUB-IY151-1503
31	P-FM-0602-0663	CUSHION,B,VE150X-AA	CUS-VE150-B001
32	P-FM-0602-0664	CUSHION,T,VE150X-AA	CUS-VE150-T001
33	P-BX-0601-0567	CARTON,KRAFT,BLACK,REV.:A,VIEW SONIC,MADE IN CHINA,VE150MB/VE150CB	PAK-VE150-116A
34	A-PC-0106-0146	CORD POWER,(BIG)3P,10A,180cm,BLACK,EUROPE,I-SHENG	PWC-M15A1-EU01
35	A-PC-0106-0147	CORD POWER,(BIG)3P-3P,180cm,BLACK,USA,WS-001,WELL SHIN	PWC-WS001-US02

Name M0M-1557GC-02

No	ViewSonic P/N	Description	Reference Number
1	A-AD-0114-0175	ADAPTER,12V,40W,3.33A(BIG)3P,S-CORE,IBM GRAY,tunning fork, XCH1234P51526,CHI,VIEWSONIC(LBL	ADT-A333V-1221
2	M-MS-0808-6808	BAG W680*H750*t0.03mm,PRINTING(ENG/JAP/GER/FRA/ITA/SPA/BABY)	BAG-48065-035A
3	M-LB-0813-0562	BARCODE LABEL,W82*122mm,VE150L-AA	BAR-VE150-1202
4	M-MS-0808-7716	BAG PP,OUTSIDE COVER,W155*L225mm,VE150M-M	BAG-16022-0C00
5	A-CD-VE150M	CD-ASS'Y,(CD-USER MANUAL 15 languages-JACKET W/NATURE),CHINA,VIEW SONIC,VE150M-M	CDA-VE150-3040
6	M-MS-0808-7717	MANUAL,QUICK START GUIDE,15 languages,MADE INCHINA,VE150M-M	MAU-VE150-A420
7	A-AU-0120-0039	CABLE AUDIO,PC99 GREEN HEAD,180cm,VE150S-AA/VE150L-AA	CAB-VE150-AUD3
8	A-VC-0101-0288	CABLE VGA,PC99,180cm,H89B42B4,15P-14P,W/SR,JHEN VEI,VE150M-M	CAB-VE150-VG31
9	M-CV-0830-0238	PLASTIC,LCD,VESA COVER,VE150S-AA/VE150L-AA	COV-VE150-1050
10	M-CV-0830-0239	PLASTIC,LCD,CABLE COVER,VE150S-AA/VE150L-AA	COV-VE150-1060
11	C-FP-0301-0774	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y,VE150S-AA	FFA-VE150-1010
12	C-BC-0302-0471	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,CMO 15",MADE IN CHINA,VE150M-M	FFA-VE150-1050
13	B-SB-0221-0504	INVERTER,M150X3-T03,CMO 15",7 PIN 180◦,4LAMP(1L),DAC-12C043,DELTA,VE150M-M	IVC-150X3-0473
14	M-LB-0813-0567	LABEL,PROCESS CARD,WHITE,ALL MODEL	LAB-11111-P010
15	M-LB-0813-0751	LABEL,FCC,REV.:C,VIEW SONIC,MADE IN CHINA,VE150m	LAB-VE150-F07C
16	M-LB-0813-0570	LABEL,LOGO(SMALL),VIEW SONIC,E015-001,VP180M	LAB-VP180-N010
17	M-LCD-0826-0151	PANEL LCD,M150X3-T03,CMO 15",TRADITIONAL PANEL (TN+FILM)	LCD-M150X3T-41
18	B-MB-0201-0727	ASS'Y PCB FINAL,M/B(MRT/MascotV),V10,CMO,FOR VIEW SONIC,VE150M-M	PMF-151MV-0101
20	B-SB-0221-0325	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	PSF-VE150-0201
21	PL-PD-0714-0079	RUBBER FOOT,W13*L20*t10mm,VE150M-M	RUB-VE150-1010
22	E-SK-0412-0068	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,FG-4	SPK-VE150-1050
23	M-WR-0828-0674	WIRE-ASS'Y,M/B-LCD,60P-(30P+26P),CMO,MRT V,JHEN VEI,VE150M-M	WIL-VE150-LC31
24	M-WR-0828-0675	WIRE-ASS'Y,M/B-S/B,12P-12P,2.54-2.0mm,CMO15",JHEN VEI,VE150M-M	WIL-VE150-SW11
25	M-CV-0830-2282	PLASTIC,STAND,FRONT TOP,VE150S-AA	COV-VE150-3010
26	M-CV-0830-2283	PLASTIC,STAND,REAR TOP,VE150S-AA	COV-VE150-3020
27	PL-PS-0715-0176	PLASTIC,STAND,BASE,VE150S-AA	COV-VE150-3031
28	M-MS-0808-6863	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	HIN-VE150-1010
29	M-MS-0808-6864	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	HIN-VE150-1020
30	M-MS-0808-7236	RUBBER FOOT,D15*3.0	RUB-IY151-1503
31	P-FM-0602-0663	CUSHION,B,VE150X-AA	CUS-VE150-B001
32	P-FM-0602-0664	CUSHION,T,VE150X-AA	CUS-VE150-T001
33	M-LB-0813-0566	LABEL,SHIPPING MARK,A4 PAPER SHEET,500PCS/PACK	LAB-11111-M010
34	M-LB-0813-0750	LABEL,CARTON,VIEW SONIC,VE150C	LAB-VE150-C040
35	P-BX-0601-0568	CARTON,KRAFT,REV.B,VIEW SONIC,MADE IN CHINA,VE150X-AA	PAK-VE150-115B
36	A-PC-0106-0144	CORD POWER,(BIG)3P-2P,10A,180cm,PN427C,EUROPE,I-SHENG	PWC-IY151-EU01
37	A-PC-0106-0145	CORD POWER,(BIG)3P-3P,10A,180cm,PN427C,USA,I-SHENG	PWC-IY151-US01

Chapter 9 COMPLETE PARTS LIST

Name VLCD22574-XYZ VE150m

Items	ViewSonic P/N	Description	Parts Number	Location	Qty	Unit
1	A-AD-0114-0175	ADAPTER,12V,40W,3.33A(BIG)3P,S-CORE,IBM GRAY,XCH1234P51526,CHI,VIEWSONIC(LBL	ADT-A333V-1221	ADAPTER	1	PS
	A-AD-0114-0174	ADAPTER,AC/CD,12V,48W,4A(BIG)3P,S-CORE,IBM GRAY	*ADT-A040V-1271	ADAPTER		
2	M-MS-0808-6808	BAG W680*H750*t0.03mm,PRINTING(ENG/JAP/GER/FRA/ITA/SPA/BABY)	BAG-48065-035A	BAG W680*H750*t0.03mm	1	PS
3		ASS'Y PACKAGE, (BAG PE/CD MANUAL-QUICK START GUIDE), CHINA, VE150M-M	CA1-VE150-1090	ASS'Y PACKAGE, BAG PE/CD MANUAL-QUICK START GUIDE		
4	A-AU-0120-0039	CABLE AUDIO,PC99 GREEN HEAD,180cm,VE150S-AA/VE150L-AA	CAB-VE150-AUD3	CABLE AUDIO	1	PS
	A-AU-0120-0026	CABLE AUDIO,PC99 GREEN HEAD,180cm,JCE,VE150S-AA/VE	*CAB-VE150-AUD1	CABLE AUDIO		
8	M-MS-0808-6838	METAL,LCD,BASE HINGE,VE150S-AA	BRA-VE150-1030	METAL,LCD,BASE HINGE	1	PS
9	M-MS-0808-6840	METAL,LCD,LOCK PLATE,VE150S-AA/VE150L-AA	BRA-VE150-1050	METAL,LCD,LOCK PLATE	1	PS
10		METAL,LCD,BRACKET,FRAME,CMO 15",VE150M-M	BRA-VE150-1080	METAL,LCD,BRACKET,FRAME	1	PS
11	A-VC-0101-0284	CABLE VGA,PC99,180cm,H89625B4,15P-14P,JCE,EZ15C	CAB-TO15C-VG01	CABLE VGA	1	PS
12	M-CV-0830-0238	PLASTIC,LCD,VESA COVER,VE150S-AA/VE150L-AA	COV-VE150-1050	PLASTIC,LCD,VESA COVER	1	PS
13	M-CV-0830-0239	PLASTIC,LCD,CABLE COVER,VE150S-AA/VE150L-AA	COV-VE150-1060	PLASTIC,LCD,CABLE COVER	1	PS
14	C-FP-0301-0774	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y,VE150S-AA	FFA-VE150-1010	PLASTIC,LCD,FRONT BEZEL	1	PS
15	C-BC-0302-0471	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,CMO 15",MADE IN CHINA,VE150M-M	FFA-VE150-1050	PLASTIC,LCD,REAR BEZEL-LOCK PLATE	1	PS
16		GASKET,EMI,W10*L55*H10mm	GAS-M17C1-1010	GASKET,EMI	1	PS
17		INSULATION,INVERTER,VE150M-M	INS-VE150-1060	INSULATION,INVERTER	1	PS
18	B-SB-0221-0504	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4LAMP(1L),DAC-12C043,DELTA,VE150M-M	IVC-150X3-0473	INVERTER	1	PS
	B-SB-0221-0501	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4 LAMP(2L)	*IVC-150X3-0471	INVERTER		
	B-SB-0221-0472	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4 LAMP(1L)	*IVC-150X3-0472	INVERTER		
19	M-LB-0813-0751	LABEL,FCC,REV.:C,VIEW SONIC,MADE IN CHINA,VE150m	LAB-VE150-F07C	LABEL,FCC	1	PS
20	M-LB-0813-0570	LABEL,LOGO(SMALL),VIEW SONIC,E015-001,VP180M	LAB-VP180-N010	LABEL,LOGO	1	PS
21	M-LCD-0826-0151	PANEL LCD,M150X3-T03,CMO 15",TRADITIONAL PANEL (TN+FILM)	LCD-M150X3T-41	PANEL LCD	1	PS
22	B-MB-0201-0727	ASS'Y PCB FINAL,M/B(MRT/MascotV),V10,CMO, FOR VIEW SONIC,VE150M-M	PMF-151MV-0101	ASS'Y PCB FINAL,M/B	1	ST

23	B-SB-0221-0325	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	PSF-VE150-0201	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	1	ST
24	PL-PD-0714-0079	RUBBER FOOT,W13*L20*t10mm,VE150M-M	RUB-VE150-1010	RUBBER FOOT,W13*L20*t10mm,VE150M-M	1	PS
25	E-SK-0412-0068	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,FG-40N020A4,FORTUN,VE150M-M	SPK-VE150-1050	SPEAKER	1	PS
	E-SK-0412-0069	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,TH4020M4-01,	*SPK-VE150-1060	SPEAKER		
26	M-SCW-0824-0730	SCREW-MM-BND-NI-3*8	SR0-50113-0080	SCREW-MM-BND-NI-3*8	4	PS
27	M-SCW-0824-0534	SCREW-MM-BND-ZNC-3*6	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	6	PS
28	M-SCW-0824-0535	SCREW-MM-BND-SPW-ZNC-3*8	SR0-52153-0080	SCREW-MM-BND-SPW-ZNC-3*8	6	PS
29	M-SCW-0824-0537	SCREW-TB-PAN-BK-2*6	SR1-00122-0060	SCREW-TB-PAN-BK-2*6	4	PS
30	M-SCW-0824-0731	SCREW-TB-RON-STW-ZNC-3*6	SR1-31153-0060	SCREW-TB-RON-STW-ZNC-3*6	1	PS
31	M-SCW-0824-0541	SCREW-TB-BND-NI-3*10	SR1-50113-0100	SCREW-TB-BND-NI-3*10	11	PS
32	M-SCW-0824-0543	SCREW-TB-BND-ZNC-4*10	SR1-50154-0100	SCREW-TB-BND-ZNC-4*10	4	PS
33	M-SCW-0824-0551	SCREW-TS-BND-ZNC-3*4	SR4-50153-0040	SCREW-TS-BND-ZNC-3*4	1	PS
34		TAPE,EMI,CONDUCTIVE,W15*L20mm	TAP-VE150-0010	TAPE,EMI,CONDUCTIVE,W15*L20mm	4	PS
35	M-WR-0828-0674	WIRE-ASS'Y,M/B-LCD,60P-(30P+26P),CMO,MRT V,JHEN VEI,VE150M-M	WIL-VE150-LC31	WIRE-ASS'Y,M/B-LCD,	1	PS
36	M-WR-0828-0675	WIRE-ASS'Y,M/B-S/B,12P-12P,2.54-2.0mm,CMO15",JHEN VEI,VE150M-M	WIL-VE150-SW11	WIRE-ASS'Y,M/B-S/B,	1	PS
37	M-MS-0808-6843	METAL,STAND BOTTOM PLATE-ASS'Y,REV:1,VE150S-AA/VE150L-AA	BRF-VE150-3011	METAL,STAND BOTTOM	1	PS
38	M-CV-0830-2282	PLASTIC,STAND,FRONT TOP,VE150S-AA	COV-VE150-3010	PLASTIC,STAND,FRONT	1	PS
39	M-CV-0830-2283	PLASTIC,STAND,REAR TOP,VE150S-AA	COV-VE150-3020	PLASTIC,STAND,REAR	1	PS
40	PL-PS-0715-0176	PLASTIC,STAND,BASE,VE150S-AA	COV-VE150-3031	PLASTIC,STAND,BASE	1	PS
41	M-MS-0808-6863	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	HIN-VE150-1010	METAL,STAND,HINGE R	1	PS
42	M-MS-0808-6864	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	HIN-VE150-1020	METAL,STAND,HINGE L	1	PS
43	M-MS-0808-7236	RUBBER FOOT,D15*3.0	RUB-IY151-1503	RUBBER FOOT,D15*3.0	2	PS
44	M-SCW-0824-0534	SCREW-MM-BND-ZNC-3*6	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	4	PS
45	M-SCW-0824-0538	SCREW-TB-FLT-NI-3*8	SR1-10113-0080	SCREW-TB-FLT-NI-3*8	4	PS
46	M-SCW-0824-0539	SCREW-TB-RON-ZNC-3*6	SR1-30153-0060	SCREW-TB-RON-ZNC-3*6	4	PS
47	P-FM-0602-0663	CUSHION,B,VE150X-AA	CUS-VE150-B001	CUSHION,B,VE150X-AA	1	PS
48	P-FM-0602-0664	CUSHION,T,VE150X-AA	CUS-VE150-T001	CUSHION,T,VE150X-AA	1	PS
49		HANDLE(HANDER PLATE +HANDER CLIP)	HAN-157AL-M100	HANDLE	1	PS
50	M-LB-0813-0750	LABEL,CARTON,VIEW SONIC,VE150C	LAB-VE150-C040	LABEL,CARTON	1	PS

51	P-BX-0601-0568	CARTON,KRAFT,REV.A,VIEW SONIC,MADE IN CHINA,VE150X-AA	PAK-VE150-115A	CARTON,	1	PS
52	A-PC-0106-0144	CORD POWER,(BIG)3P-2P,10A,180cm,PN427C,EUROPE,I-SHENG	PWC-IY151-EU01	CORD POWER	1	PS
53	A-PC-0106-0145	CORD POWER,(BIG)3P-3P,10A,180cm,PN427C,USA,I-SHENG	PWC-IY151-US01	CORD POWER	1	PS
	A-PC-0106-0160	CORD POWER,(BIG)3P-3P,10A,180cm,PN427C,USA	*PWC-IY151-US04	CORD POWER		
54	M-MS-0808-6811	BARCODE SHEET,W90mm,300M/ROLL,ALL MODEL	BAR-IY151-1002	BARCODE SHEET	4E-04	ROL
55	M-LB-0813-0562	BARCODE LABEL,W82*122mm,VE150L-AA	BAR-VE150-1202	BARCODE LABEL	0.001	PS
57	M-LB-0813-0561	BARCODE LABEL,W35*L20mm,100M/ROLL	BAR-158AL-2010	BARCODE LABEL,W35*L20mm,100M/ROLL	2E-04	ROL
70	M-LB-0813-0566	LABEL,SHIPPING MARK,A4 PAPER SHEET,500PCS/PACK	LAB-11111-M010	LABEL,SHIPPING MARK,A4 PAPER SHEET,500PCS/PACK	1E-04	PAC
75	M-LB-0813-0567	LABEL,PROCESS CARD,WHITE,ALL MODEL	LAB-11111-P010	LABEL,PROCESS CARD,WHITE,ALL MODEL	1	PS

Name VLCD22574-XYZ VE150mb

Items	ViewSonic P/N	Description	Parts Number	Location	Qty	Unit
1	A-AD-0114-0173	ADAPTER,12V,40W,3.33A(BIG)3P,S-CORE,BLACK,XCH1234P51525,CHI,VIEW SONIC(LABEL	ADT-A333V-1211	ADAPTER	PS	1
	A-AD-0114-0172	ADAPTER,AC/CD,12V,48W,4A(BIG)3P,S-CORE,BLACK,H	*ADT-A040V-1261	ADAPTER		
2	M-MS-0808-6808	BAG W680*H750*t0.03mm,PRINTING(ENG/JAP/GER/FRA/ITA/SPA/BABY)	BAG-48065-035A	BAG W680*H750*t0.03mm for Whole set	PS	1
3	M-MS-0808-7677	ASS'Y PACKAGE, (BAG PE/CD MANUAL-QUICK START GUIDE), CHINA, VE150MB-M	CA1-VE150-1100	ASS'Y PACKAGE Manual and CDR		
4	A-AU-0120-0040	CABLE AUDIO,PC99 GREEN HEAD,180cm,BLACK,VE150MB/VE150CB	CAB-150XA-AUD2	CABLE AUDIO,PC99 GREEN HEAD,180cm,BLACK,VE150MB/VE150CB	PS	1
	A-AU-0120-0028	CABLE AUDIO,PC99 GREEN HEAD,180cm,BLACK,JCE,VE150M	*CAB-150XA-AUD1	CABLE AUDIO,PC99 GREEN HEAD,180cm,BLACK,JCE,VE150M		
6	M-MS-0808-6805	TAPE AL,EMI,W35*L40*t0.05mm	ALT-03504-0050	TAPE AL,EMI,W35*L40*t0.05mm	PS	2
7		TAPE AL,EMI,W50*L50*t0.05mm	ALT-05005-0050	TAPE AL,EMI,W50*L50*t0.05mm	PS	1
8	M-MS-0808-6838	METAL,LCD,BASE HINGE,VE150S-AA	BRA-VE150-1030	METAL,LCD,BASE HINGE	PS	1
9	M-MS-0808-6840	METAL,LCD,LOCK PLATE,VE150S-AA/VE150L-AA	BRA-VE150-1050	METAL,LCD,LOCK PLATE	PS	1
10		METAL,LCD,BRACKET,FRAME,CMO 15",VE150M-M	BRA-VE150-1080	METAL,LCD,BRACKET,FRAME	PS	1
11	A-VC-0101-0285	CABLE VGA,PC99,180cm,BLACK,15P-14P,JCE,EZ15C	CAB-TO15C-VG11	CABLE VGA,PC99,180cm,BLACK	PS	1
	A-VC-0101-0286	CABLE VGA,PC99,180cm,BLACK,15P-14P,EZ15C	*CAB-TO15C-VG12	CABLE VGA,PC99,180cm,BLACK		
	A-VC-0101-0287	CABLE VGA,PC99,180cm,BLACK,15P-14P,JHEN VEI,EZ15C	*CAB-TO15C-VG13	CABLE VGA,PC99,180cm,BLACK		
12	M-CV-0830-2373	PLASTIC,LCD,VESA COVER,BLACK,VE150MB/VE150CB	COV-VE150-1070	PLASTIC,LCD,VESA COVER,BLACK,VE150MB/VE150CB	PS	1
13	M-CV-0830-2374	PLASTIC,LCD,CABLE COVER,BLACK,VE150MB/VE150CB	COV-VE150-1080	PLASTIC,LCD,CABLE COVER,BLACK,VE150MB/VE150CB	PS	1
14	C-FP-0301-0775	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y,BLACK,VE150MB	FFA-VE150-1201	PLASTIC,LCD,FRONT BEZEL-FUNCTION BUTTON-LENS-ASS'Y	PS	1
15	C-BC-0302-0473	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,BLACK,MADE IN CHINA,VE150MB-M	FFA-VE150-1430	PLASTIC,LCD,REAR BEZEL-LOCK PLATE-ASS'Y,BLACK	PS	1
16		GASKET,EMI,W10*L55*H10mm	GAS-M17C1-1010	GASKET,EMI	PS	1

17		INSULATION,INVERTER,VE150M-M	INS-VE150-1060	INSULATION,INVERTER,VE150M-M	PS	1
18	B-SB-0221-0504	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4LAMP(1L),DAC-12C043,DELTA,VE150M-M	IVC-150X3-0473	INVERTER	PS	1
	B-SB-0221-0501	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4 LAMP(2L)	*IVC-150X3-0471	INVERTER		
	B-SB-0221-0472	INVERTER,M150X3-T03,CMO 15",7 PIN 180。,4 LAMP(1L)	*IVC-150X3-0472	INVERTER		
19	M-LB-0813-0749	LABEL,FCC,REV.:B,VIEW SONIC,MADE IN CHINA,VE150mb	LAB-VE150-F08B	LABEL,FCC	PS	1
20	M-LB-0813-0570	LABEL,LOGO(SMALL),VIEW SONIC,E015-001,VP180M	LAB-VP180-N010	LABEL,LOGO(SMALL)	PS	1
21	M-LCD-0826-0151	PANEL LCD,M150X3-T03,CMO 15",TRADITIONAL PANEL (TN+FILM)	LCD-M150X3T-41	PANEL LCD,M150X3-T03,CMO 15"	PS	1
22	B-MB-0201-0727	ASS'Y PCB FINAL,M/B(MRT/MascotV),V10,CMO ,FOR VIEW SONIC,VE150M-M	PMF-151MV-0101	ASS'Y PCB FINAL,M/B	ST	1
23	B-SB-0221-0325	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	PSF-VE150-0201	ASS'Y PCB FINAL,S/B,V20,VE150X-AA	ST	1
24	PL-PD-0714-0079	RUBBER FOOT,W13*L20*t10mm,VE150M-M	RUB-VE150-1010	RUBBER FOOT,W13*L20*t10mm,VE150M-M	PS	1
25	E-SK-0412-0068	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,FG-40N020A4,FORTUN,VE150M-M	SPK-VE150-1050	SPEAKER	PS	1
	E-SK-0412-0069	SPEAKER,4.0 OHM,2W,d40*20,R340*L140mm,TH 4020M4-01,	*SPK-VE150-1060	SPEAKER		
26	M-SCW-0824-0730	SCREW-MM-BND-NI-3*8	SR0-50113-0080	SCREW-MM-BND-NI-3*8	PS	4
27	M-SCW-0824-0534	SCREW-MM-BND-ZNC-3*6	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	PS	6
28	M-SCW-0824-0535	SCREW-MM-BND-SPW-ZNC-3*8	SR0-52153-0080	SCREW-MM-BND-SPW-ZNC-3*8	PS	6
29	M-SCW-0824-0537	SCREW-TB-PAN-BK-2*6	SR1-00122-0060	SCREW-TB-PAN-BK-2*6	PS	4
30	M-SCW-0824-0731	SCREW-TB-RON-STW-ZNC-3*6	SR1-31153-0060	SCREW-TB-RON-STW-ZNC-3*6	PS	1
31	M-SCW-0824-0541	SCREW-TB-BND-NI-3*10	SR1-50113-0100	SCREW-TB-BND-NI-3*10	PS	11
32	M-SCW-0824-0543	SCREW-TB-BND-ZNC-4*10	SR1-50154-0100	SCREW-TB-BND-ZNC-4*10	PS	4
33	M-SCW-0824-0551	SCREW-TS-BND-ZNC-3*4	SR4-50153-0040	SCREW-TS-BND-ZNC-3*4	PS	1
34		TAPE,EMI,CONDUCTIVE,W15*L20mm	TAP-VE150-0010	TAPE,EMI,CONDUCTIVE,W15*L20mm	PS	4
35	M-WR-0828-0674	WIRE-ASS'Y,M/B-LCD,60P-(30P+26P),CMO,MRT V,JHEN VEI,VE150M-M	WIL-VE150-LC31	WIRE-ASS'Y,M/B-LCD	PS	1
36	M-WR-0828-0675	WIRE-ASS'Y,M/B-S/B,12P-12P,2.54-2.0mm,CMO15",JHEN VEI,VE150M-M	WIL-VE150-SW11	WIRE-ASS'Y,M/B-S/B	PS	1
37	M-MS-0808-6843	METAL,STAND BOTTOM PLATE-ASS'Y,REV:1,VE150S-AA/VE150L-AA	BRF-VE150-3011	METAL,STAND BOTTOM	PS	1
38	C-FP-0301-0321	PLASTIC,STAND,FRONT TOP,BLACK,VE150MB/VE150CB	COV-VE150-3040	PLASTIC,STAND,FRONT	PS	1
39	C-BC-0302-0472	PLASTIC,STAND,REAR TOP,BLACK,VE150MB/VE150CB	COV-VE150-3050	PLASTIC,STAND,REAR	PS	1
40	PL-PS-0715-0175	PLASTIC,STAND,BASE,BLACK,VE150MB/VE150CB	COV-VE150-3061	PLASTIC,STAND,BASE	PS	1

41	M-MS-0808-6863	METAL,STAND,HINGE R,VE150S-AA/VE150L-AA	HIN-VE150-1010	METAL,STAND,HINGE R	PS	1
42	M-MS-0808-6864	METAL,STAND,HINGE L,VE150S-AA/VE150L-AA	HIN-VE150-1020	METAL,STAND,HINGE L	PS	1
43	M-MS-0808-7236	RUBBER FOOT,D15*3.0	RUB-IY151-1503	RUBBER FOOT,D15*3.0	PS	2
44	M-SCW-0824-0534	SCREW-MM-BND-ZNC-3*6	SR0-50153-0060	SCREW-MM-BND-ZNC-3*6	PS	4
45	M-SCW-0824-0538	SCREW-TB-FLT-NI-3*8	SR1-10113-0080	SCREW-TB-FLT-NI-3*8	PS	4
47	M-SCW-0824-0539	SCREW-TB-RON-ZNC-3*6	SR1-30153-0060	SCREW-TB-RON-ZNC-3*6	PS	4
48	P-FM-0602-0663	CUSHION,B,VE150X-AA	CUS-VE150-B001	CUSHION,B,VE150X-AA	PS	1
49	P-FM-0602-0664	CUSHION,T,VE150X-AA	CUS-VE150-T001	CUSHION,T,VE150X-AA	PS	1
50		HANDLE(HANDER PLATE +HANDER CLIP)	HAN-157AL-M100	HANDLE(HANDER PLATE +HANDER CLIP)	PS	1
51	M-LB-0813-0748	LABEL,CARTON,BLACK,VE150CB	LAB-VE150-C030	LABEL,CARTON,BLACK,VE150CB	PS	1
52	P-BX-0601-0567	CARTON,KRAFT,BLACK,VIEW SONIC,MADE IN CHINA,VE150MB/VE150CB	PAK-VE150-1160	CARTON	PS	1
53	A-PC-0106-0146	CORD POWER,(BIG)3P,10A,180cm,BLACK,EUROPE,I-SHENG	PWC-M15A1-EU01	CORD POWER	PS	1
54	A-PC-0106-0147	CORD POWER,(BIG)3P-3P,180cm,BLACK,USA,WS-001,WELL SHIN	PWC-WS001-US02	CORD POWER	PS	1
60	M-MS-0808-6834	TAPE ACE,EMI,W10*t0.18mm,45M/ROLL	TAP-ME151-4010	TAPE ACE,EMI,W10*t0.18mm,45M/ROLL	ROL	0
61		TAPE ACE,EMI,15mm,45M/ROLL,ALL MODEL	TPT-157AL-E050	TAPE ACE,EMI,15mm,45M/ROLL,ALL MODEL	ROL	0
71		TAPE,CARTON,W7.5cm*t0.04mm,45M/ROLL	CTP-157AL-E100	TAPE,CARTON,W7.5cm*t0.04mm,45M/ROLL	ROL	0.01
72	M-LB-0813-0566	LABEL,SHIPPING MARK,A4 PAPER SHEET,500PCS/PACK	LAB-11111-M010	LABEL,SHIPPING MARK,A4 PAPER SHEET,500PCS/PACK	PAC	0

VLCD22574-XYZ Main Board

Item	ViewSonic P/N	Description	Parts Number	Location	QTY	UNI
1.	E-L-0407-1413	BEAD,K5BR6H63X10X0.85-3Ts-B,DIP 90 ◦ ,KING-CORE	BED-R6H63-TS12	L3	1	PS
2.	E-C-0404-4524	CAP,100uF,+/-20%,DIP 6.3*7,EC,16V,LEG=3-3.5mm	CAP-100U0-36A3	C1,C7,C8,C12,C160,C181	6	PS
3.		CAP,10uF,+/-20%,DIP 180 ◦ ,EC,25V,LEG=3-3.5mm	CAP-10U00-32A4	C33,C49,C71,C116,C179,C185,C193,	8	PS
4.	E-C-0404-4472	CAP,220uF,+/-20%,DIP 180 ◦ 8*7,EC,16V,LEG=3-3.5mm	CAP-220U0-3NA3	CX1,C115,C161,C162,C166,C167,C178,C182,C188,C189	10	PS
5.		CNN,AUDIO(EARPHONE)JACK,LIME	CNN-P001H-3412	J2	1	PS
	M-MS-0808-6847	CNN,AUDIO(EARPHONE)JACK,LIME GREEN(577C),D7,d3.5,H	CNN-P001H-3402			
6.		CNN,DC JACK,2.5,DIP	CNN-P001H-3431	J1	1	PS
	M-MS-0808-6921	CNN,DC JACK,2.5,DIP 90 ◦ ,L9*H11,DJ-0702-025,JT	CNN-P001H-3401			
		CNN,DC JACK,2.5,DIP	CNN-P001H-3441			
7.		CNN,4 PIN,2.0,DIP 180 ◦ ,1 ROW	CNN-P004W-	CON2,CON3	2	PS
		CNN,4 PIN,2.0,DIP 180 ◦ ,1 ROW,2002-04,UNEMAC	CNN-P004W-2204			
8.		CNN,HEADER,6 PIN,2.54,DIP 90 ◦ ,2 ROW,6P-N4	CNN-P006W-3402	CON11	1	PS
		CNN,HEADER,6 PIN,2.54,DIP 90 ◦ ,2 ROW,6P-N4,UNEMAC	CNN-P006W-3401			
9.		CNN,HEADER,10 PIN,2.0,DIP 180 ◦ ,1 ROW	CNN-P010W-2211	CON1	1	PS
		CNN,HEADER,10 PIN,2.0,DIP 180 ◦ ,1 ROW	CNN-P010W-2201			
10.		CNN,HEADER,12 PIN,2.0,DIP 180 ◦ ,2 ROW,12P-N8	CNN-P012W-2214	CON4	1	PS
11.		CNN,HEADER,14 PIN,2.0,DIP 180 ◦ ,2 ROW,14P-N8	CNN-P014W-2214	CON8	1	PS
		CNN,HEADER,14 PIN,2.0,DIP 180 ◦ ,2 ROW,14P-N8,UNEMA	CNN-P014W-2204			
12.		CNN,HEADER,26 PIN,2.0,DIP 90 ◦ ,2 ROW,26P-N9	CNN-P026W-2411	P2	1	PS
13.		CNN,HEADER,30 PIN,2.0,DIP 90 ◦ ,2 ROW,30P-N16	CNN-P030W-2411	P1	1	PS
14.	E-D-0403-1895	DIODE,1N5822,40V,3A,DIP,2PIN,GO TOP	DID-N5822-2601	D9	1	PS
15.		IC,SM2965,44PIN,PLCC,5V,SMD,SYNCMOS	IC7-0SM2965-31	U4	1	PS
16.		INDUCTOR,150uH,0.5*60.5 TS,DIP,TCL5052-151M050,SPORTON	IND-0150U-2601	L1	1	PS
		INDUCTOR,150uH,0.5*66.5 TS,DIP,TBC1609-151K	IND-0150U-2602			
17.	B-MB-0201-0731	ASS'Y PCB SMT,M/B(MRT/MascotV),V10,FOR VIEW SONIC,VE150M-M	PMS-151MV-0101		1	ST
18.	E-L-0407-1414	BEAD,FBM-10-160808-102,SMD,0603,MID,KING-CORE	BED-102M1-1001	FB7,FB8,FB9,FB10,FB11,FB12,FB13,	13	PS
19.	E-L-0407-1415	BEAD,FBM-11-160808-121T,SMD,0603,LOW,KING-	BED-121L1-1001	FB5	1	PS
20.	E-L-0407-1410	BEAD,GT4532GA121H,SMD,4532,MID,GOTOP	BED-121M1-6601	FB20,FB82,FB84,FB86	4	PS

21.	E-L-0407-1411	BEAD,ACM321611A151H,SMD,1206,MID,GOTREND	BED-151M1-3501	FB2,FB3,FB4,FB85	4	PS
22.	E-C-0404-4439	CAP,0.01uF,+/-10%,SMD 0603,CHIP,50V	CAP-0R01U-2125	C81	1	PS
23.	E-C-0404-4440	CAP,0.1uF,+80/-20%,SMD 0603,CHIP,50V,Y5V	CAP-0R1U0-4125	C2,C5,C6,C9,C13,C16,C18,C19,C20,	65	PS
24.		CAP,100pF,+/-10%,SMD 0603,CHIP,50V	CAP-100P0-2125	C219,C197	2	PS
25.	E-C-0404-4444	CAP,10pF,+/-10%,SMD 0603,CHIP,50V	CAP-10P00-2125	C4,C11,C15,C40,C74,C78,C82,C84,	22	PS
26.	E-C-0404-4447	CAP,150pF,+/-10%,SMD	CAP-150P0-2120	C34	1	PS
27.	E-C-0404-4448	CAP,15pF,+/-10%,SMD 0603,CHIP,50V	CAP-15P00-2125	C45,C47	2	PS
28.	E-C-0404-4526	CAP,180pF,+/-10%,SMD	CAP-180P0-2120	C212,C213,C214,C215	4	PS
29.	E-C-0404-4733	CAP,1uF,+/-10%,SMD 0805,CHIP,16V	CAP-1U000-2323	C72,C218,C222	3	PS
30.		CAP,20pF,+/-5%,SMD 0603,CHIP,50V,NPO	CAP-20P00-1125	C97,C96	2	PS
31.	E-C-0404-4531	CAP,22pF,+/-5%,SMD 0603,CHIP,NPO	CAP-22P00-1120	C41,C42	2	PS
32.		CAP,33pF,+/-5%,0603,SMD,CHIP,NPO	CAP-33P00-1120	C148	1	PS
33.	E-C-0404-4452	CAP,33pF,+/-10%,SMD 0603,CHIP,50V	CAP-33P00-2125	C39,C85,C90,C202,C203,C204,C205,C206,C207,C208,C209	11	PS
34.		CAP,3pF,+/-0.25pF,SMD 0603,CHIP,50V	CAP-3P000-6125	C43	1	PS
35.	E-C-0404-4453	CAP,4700pF,+/-10%,SMD 0603,CHIP,50V	CAP-4700P-2125	C31,C36,C38	3	PS
36.	E-C-0404-4460	CAP,4.7pF,+/-10%,SMD 0603,CHIP,50V	CAP-4R7P0-2125	C75,C79,C83	3	PS
37.		CAP,56pF,+/-5%,NPO,SMD 0603,CHIP	CAP-56P00-1120	C98,C99,C100,C101,C102,C103,C104	48	PS
38..		CAP,0.001uF,+/-10%,SMD 0603,CHIP,50V	CAP-R001U-2125	C3,C10,C14,C17,C164,C172,C175,	11	PS
39.		CAP,0.039uF,+/-10%,SMD 0603,CHIP,25V	CAP-R039U-2124	C35	1	PS
40.		CAP,0.068uF,+/-10%,SMD 0603,CHIP,10V	CAP-R068U-2122	C216,C201	2	PS
		CNN,PLCC SOCKET,SQUARE,44 PIN,SMD	CNN-P044H-0A03	U4	1	PS
41.	M-MS-0808-6859	CNN,PLCC SOCKET,SQUARE,44 PIN,SMD	CNN-P044H-0A01			
42.	E-D-0403-1907	DIODE,BAV99L,3PIN,SMD,3mA,5	DID-AV99L-1601	D2,D3,D4,D5,D6	5	PS
43.		DIODE,1N4148,3PIN,SOT23-	DID-N4148-0001	D7,D8	2	PS
44.		IC,REGULATOR,TL431ACUN,3PIN,SOT-23,SMD,2.495V+/-1%,AIC	IC1-431ACUN-21	U3	1	PS
45.		IC,REGULATOR,AIC1117-33CY,SOT223,3PIN,SMD,3.3V,ANALOG	IC1-AIC1117-21	U2	1	PS
	E-IC-0401-2372	IC,LM1117MPX-	IC1-117MPX3-21			
46.		IC,RESET(HI RESET),MCP810-450,SOT23,3PIN,4.35V,MICROC	IC1-P810450-31	U5	1	PS
47.		IC,AMC7622-33ST,TO263,3PIN,3.3V,AMC	IC4-62233ST-01	U15	1	PS
48.		IC,SI-8050SD,TO263,5PIN,5V,SMD,SANKEN	IC4-I8050SD-31	U11	1	PS
49.	E-IC-0401-2397	IC,MIC29150,TO263,3PIN,3.3V,SMD,MICREL	IC4-MIC2915-21	U13	1	PS

50.	E-IC-0401-2374	IC,LM358,SOP-8PIN,28V,SMD,SANYO	IC5-00LM358-71	U7	1	PS
51.		IC,24LC21,SOP-8PIN,5V,SMD,MICROCHIP	IC5-024LC21-32	U9	1	PS
52.	IC-0401-2376	IC,SI9433DY,SOP-8PIN,20V,SMD,SILIC	IC5-0SI9433-51	U14	1	PS
53.	E-IC-0401-2657	IC,EPPROM,24LC16B,SOP-8PIN,2.5V-	IC5-24LC16B-22	U6	1	PS
54.	E-IC-0401-2425	IC,74LVC14,SOP-14PIN,3.3V,PHILIPS	IC6-74LVC14-22	U8	1	PS
	E-IC-0401-2381	IC,NOT GATE,SN74LVC14ADR,SOP-14PIN,SMD,3.3V,TI	IC6-74LVC14-21			
55.		IC,MASCOT V,PQFP-160PIN,SMD,3.3V,MRT	IC8-MASCOTV-21	U1	1	PS
56.		IC,APA4835,TSSOP-28PIN,5V,SMD,ANPEC	IC9-APA4835-31	U16	1	PS
57.	B-MB-0201-0728	PCB,M/B(MRT/MascotV),V10,GBM,EZ 15" SERIES	PCB-151MV-MB1B		1	PS
	B-MB-0201-0729	PCB,M/B(MRT/MascotV),V10,K-BRIDGE,EZ 15" SERIES	PCB-151MV-MB11			
	B-MB-0201-0730	PCB,M/B(MRT/MascotV),V10,Y-FA,EZ 15" SERIES	PCB-151MV-MB15			
58.	E-R-0405-6622	RES,0 OHM,+/-5%,SMD,CHIP,0603	RES-00000-1121	R30,R84,R85,R91,R100,R104,R116,	11	PS
59.	E-R-0405-6623	RES,1K,+/-5%,SMD,CHIP,0603	RES-0001K-1121	R36,R43,R82,R83,R112,R113,R74,R75	8	PS
60.	E-R-0405-6624	RES,22 OHM,+/-5%,SMD,CHIP,0603	RES-00022-1121	FB73	1	PS
61.	E-R-0405-6708	RES,33 OHM,+/-5%,SMD,CHIP,0603	RES-00033-1121	FB25,FB27,R34,R35,R44,R45,R47,R49	20	PS
62.		RES,5K,+/-5%,SMD,CHIP,0603	RES-0005K-1121	R122,R68	2	PS
63.	E-R-0405-6709	RES,75 OHM,+/-5%,SMD,CHIP,0603	RES-00075-1121	R71,R72,R73,R95	4	PS
64.	E-R-0405-6627	RES,100 OHM,+/-5%,SMD,CHIP,0603	RES-00100-1121	FB24,FB26,R3	3	PS
65.	E-R-0405-6628	RES,10K,+/-5%,SMD,CHIP,0603	RES-0010K-1121	R2,R4,R5,R6,R12,R15,R16,R17,R18,	28	PS
66.	E-R-0405-6632	RES,150 OHM,+/-5%,SMD,CHIP,0603	RES-00150-1121	R9,R10,R11	3	PS
.67.	E-R-0405-6647	RES,20K,+/-5%,SMD,CHIP,0603	RES-0020K-1121	R106,R107,R109,R111,R119,R96	6	PS
68.	E-R-0405-6711	RES,330 OHM,+/-5%,SMD,CHIP,0603	RES-00330-1121	R32,R33,R94	3	PS
69.	E-R-0405-6648	RES,33K,+/-5%,SMD,CHIP,0603	RES-0033K-1121	R120,R97	2	PS
70.	E-R-0405-6712	RES,510 OHM,+/-5%,SMD,CHIP,0603	RES-00510-1121	R25	1	PS
71.	E-R-0405-6640	RES,100K,+/-5%,SMD,CHIP,0603	RES-0100K-1121	R108,R7,R8,R124	4	PS
72.	E-R-0405-6713	RES,2.2K,+/-5%,SMD,CHIP,0603	RES-02R2K-1121	R13	1	PS
73.	E-R-0405-6642	RES,4.7K,+/-5%,SMD,CHIP,0603	RES-04R7K-1121	R60,R61,R70,R77,R78,R79,R93,R125	8	PS
74.		RES,6.8K,+/-5%,SMD,CHIP,0603	RES-06R8K-1121	R23	1	PS
75.	E-R-0405-6651	RES,1M,+/-5%,SMD,CHIP,0603	RES-1000K-1121	R14	1	PS
76.	E-Q-0402-1465	TRANSISTOR,2N3904,NPN,SOT23,SMD,LITE-ON	TRS-N3904-1101	Q1,Q2,Q3,Q4	4	PS
.77.	M-WR-0828-0676	WIRE-ASS'Y,M/B-INVERTER,7P-7P,48mm,EZX15F	WIL-EZ15F-IV01	CON7	1	PS
	M-WR-0828-0677	WIRE-ASS'Y,M/B-INVERTER,7P-7P,48mm,JHEN VEI,EZ15F	WIL-EZ15F-IV02			

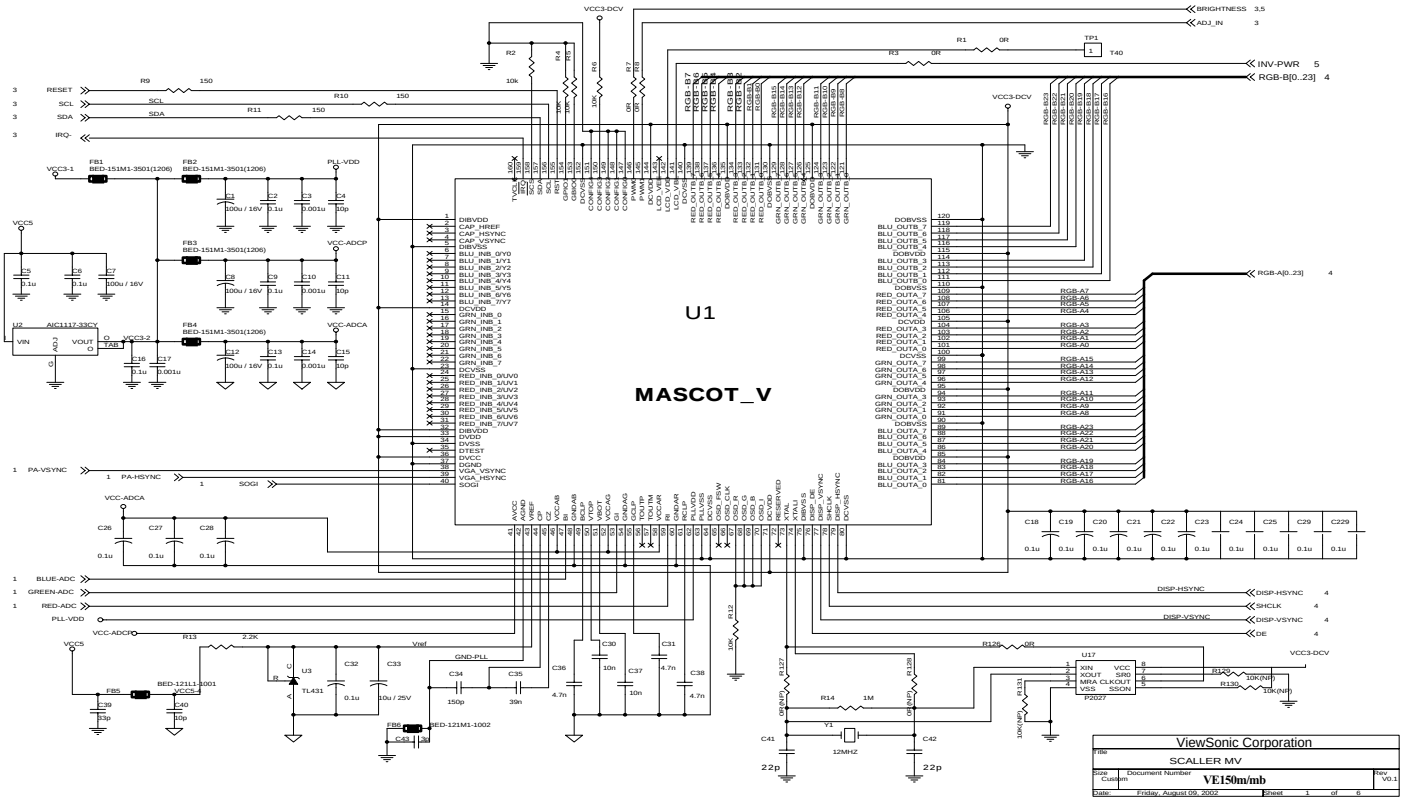
78.	E-X-0415-0129	CRYSTAL,12.00 MHz,49/US,+/-30ppm,JEN JAAN	XT1-000012M-11	Y2,Y1	2	PS
*	E-X-0415-0130	CRYSTAL,12.00 MHz,49/US,+/-30ppm,32pF,KDS(HARMONY/	XT1-000012M-12			

Name VLCD22574-XYZ SB

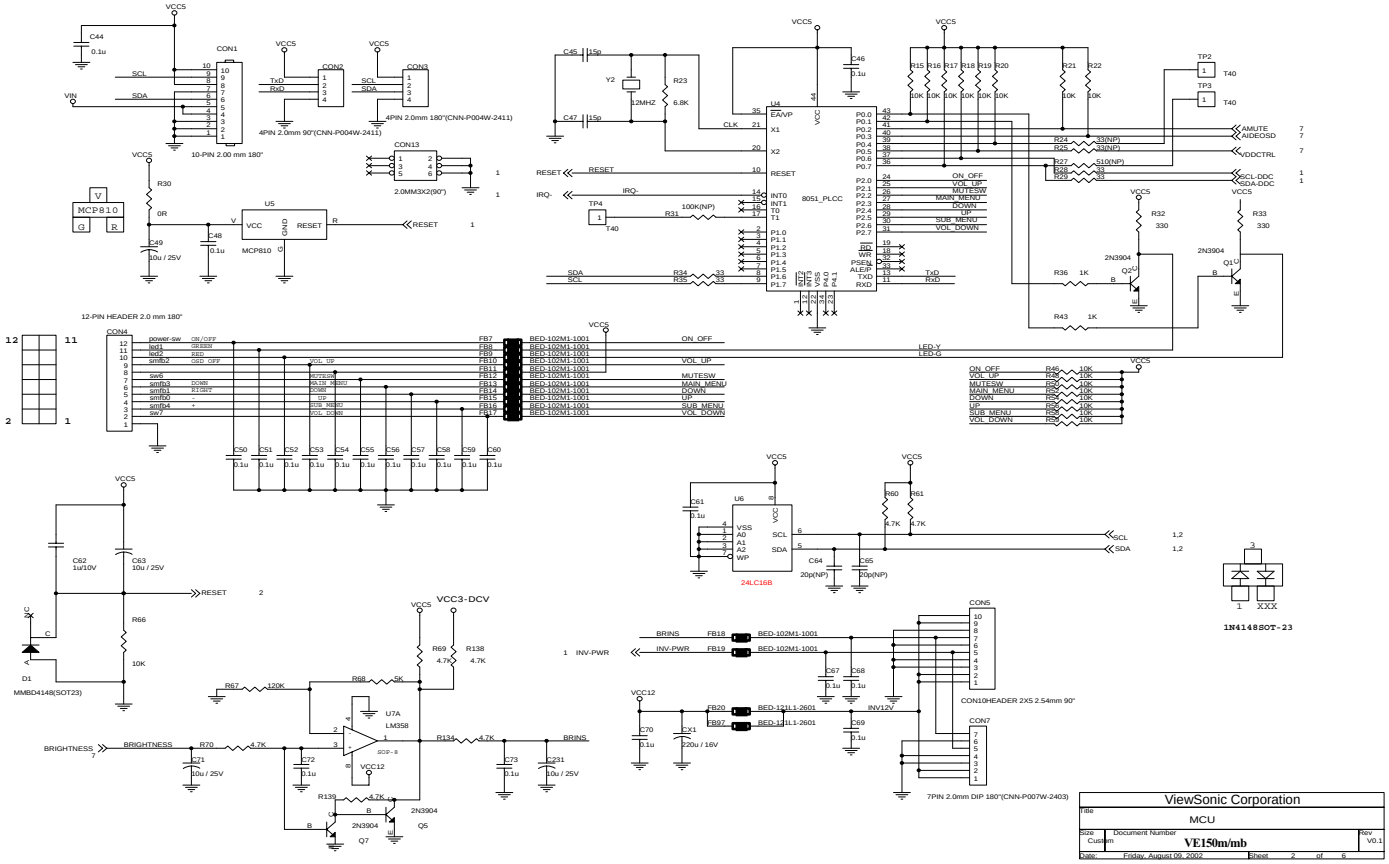
ViewSonic P/N	Description	Parts Number	Location	QTY	UNIT
PL-BT-0706-012	Button Tact SW	BTN-PT002B1-21	Botton	1	PS
	Connector Header 12 pin, 2.5	CNN-P012W-3433	cnnECTOR	6	PS
	LED 2 COLOR	LED-02032-2601	LED	8	PS
B-SWB-0210-00	PCB, S/B V20	PCB-VE150-SB27	Switch Board	10	PS

Chapter 10 CIRCUIT DIAGRAMS

10 1 Micro-Controller MRT MV

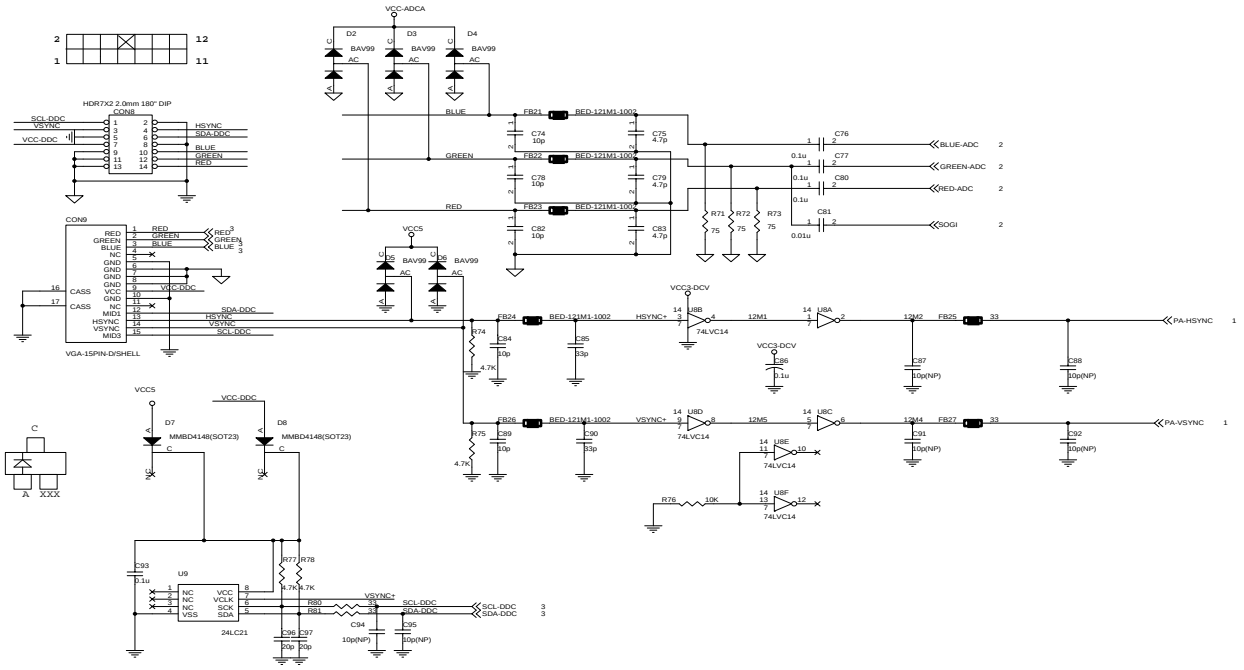


10.2 Micro Controller and LCD power control



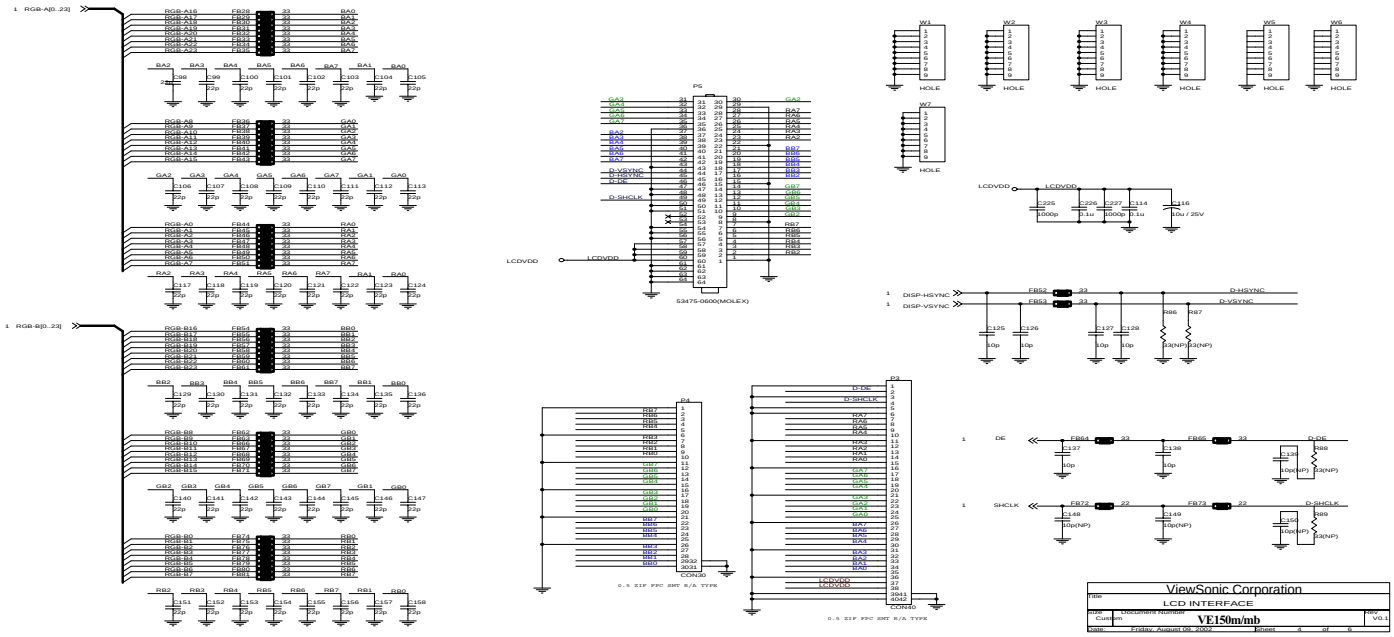
ViewSonic Corporation			
Title: MCU			
Size: Custom	Document Number: VE150m/mb		Rev: V0.1
Date: Friday, August 09, 2002	Sheet 2 of 6		

10.3 VGA input



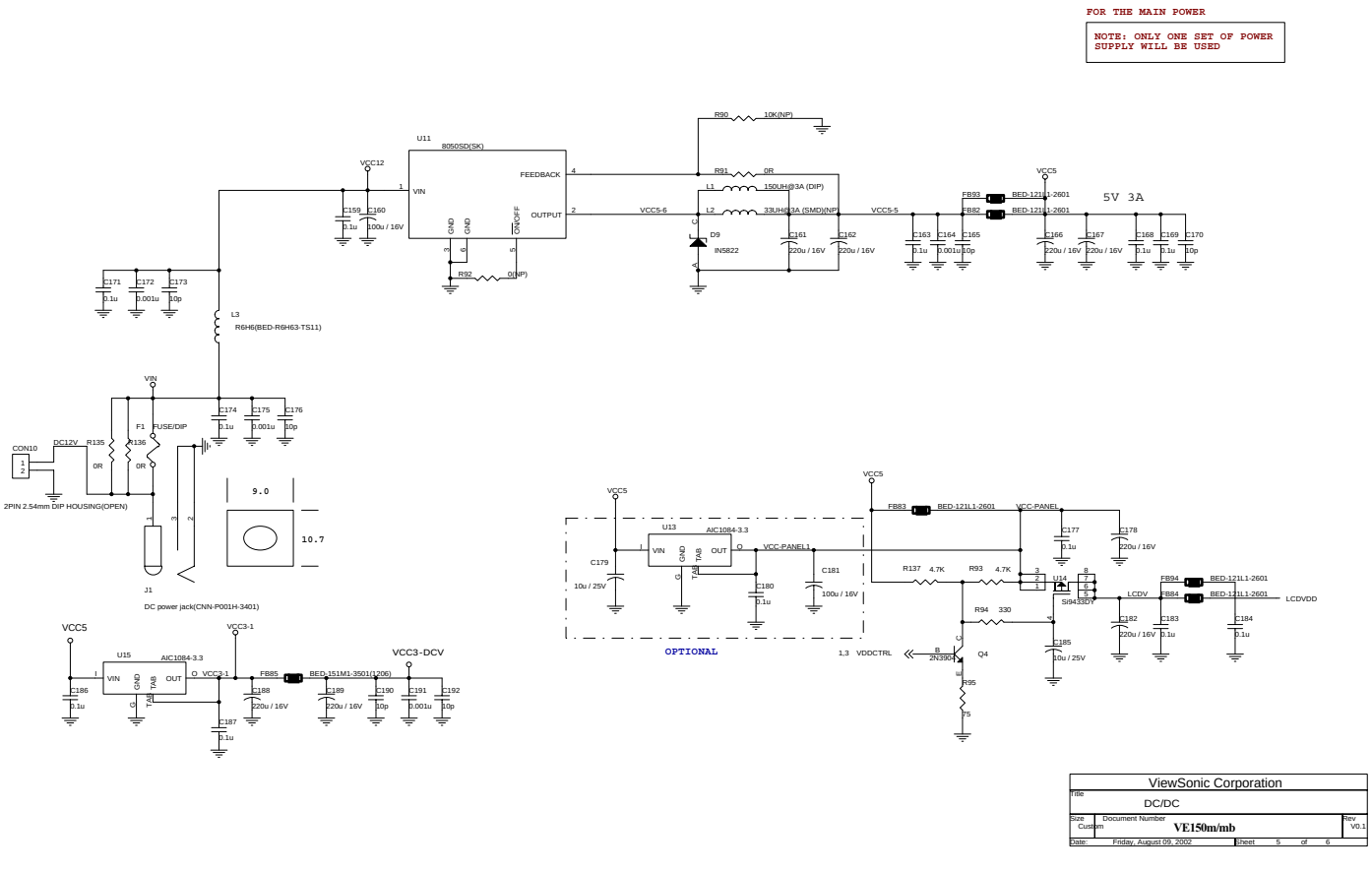
ViewSonic Corporation			
Title: VGA INPUT			
Size: Custom	Document Number: VE150m/mb		Rev: V0.1
Date: Friday, August 09, 2002	Sheet 3 of 8		

10.4 Output connector

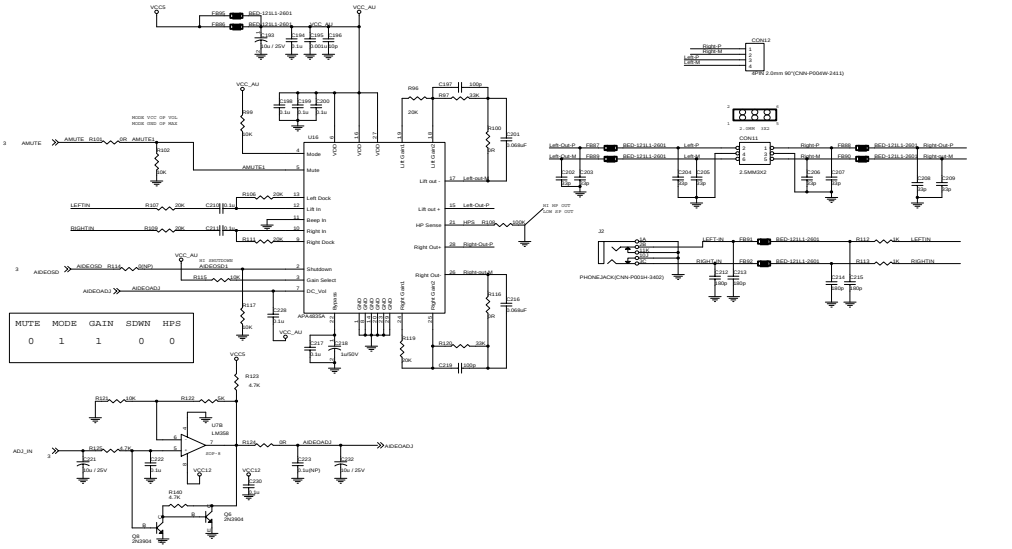


TTL OUTPUT

10.5 DC-DC

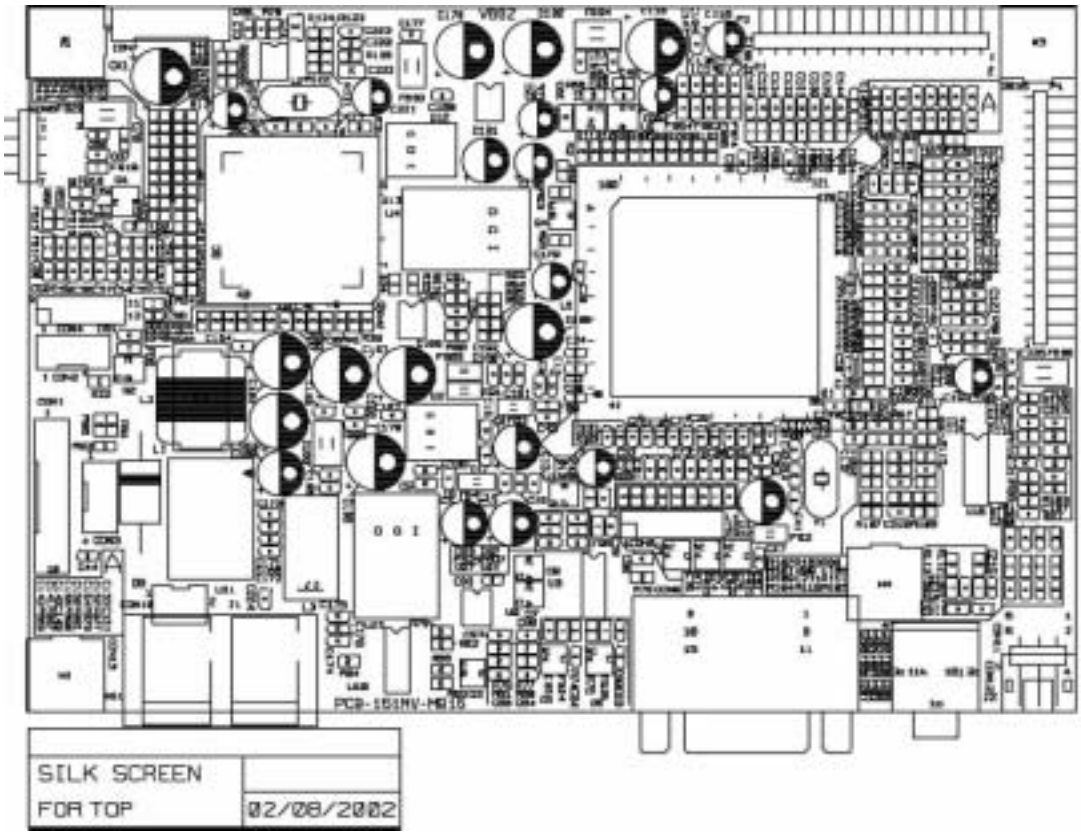

FOR THE MAIN POWER
NOTE: ONLY ONE SET OF POWER SUPPLY WILL BE USED
U11
8050SD(SK)
VCC12
VIN
FEEDBACK
OUTPUT
GND
ON/OFF
R90 10K(NP)
R91 0R
R92 0(NP)
L1 150UH@3A (DIP)
L2 33UH@3A (SMD)(NP)
VCC5-6
VCC5-5
D9 IN5822
C159 0.1u
C160 100u / 16V
C161 220u / 16V
C162 220u / 16V
C163 0.1u
C164 0.001u
C165 10p
C166 220u / 16V
C167 220u / 16V
C168 0.1u
C169 0.1u
C170 10p
FB93 BED-121L1-2601
FB82 BED-121L1-2601
VCC5
5V 3A
C171 0.1u
C172 0.001u
C173 10p
L3
R6H6(BED-R6H63-TS11)
VIN
C174 0.1u
C175 0.001u
C176 10p
F1 FUSE/DIP
R135 0R
R136 0R
CON10
DC12V
2PIN 2.54mm DIP HOUSING(OPEN)
9.0
10.7
J1
DC power jack(CNN-P001H-3401)
VCC5
U13
AIC1084-3.3
VIN
GND
TAB
OUT
VCC-PANEL1
C179 10u / 25V
C180 0.1u
C181 100u / 16V
FB83 BED-121L1-2601
VCC-PANEL
C177 0.1u
C178 220u / 16V
R137 4.7K
R93 4.7K
U14
SI9433DY
FB94 BED-121L1-2601
FB84 BED-121L1-2601
LCDV
LCDVDD
C182 220u / 16V
C183 0.1u
C184 0.1u
R94 330
C185 10u / 25V
Q4
2N3904
R95 75
1,3 VDDCTRL
OPTIONAL
VCC5
VCC3-1
VCC3-DCV
U15
AIC1084-3.3
VCC3-1
FB85 BED-151M1-3501(1206)
C186 0.1u
C187 0.1u
C188 220u / 16V
C189 220u / 16V
C190 10p
C191 0.001u
C192 10p
ViewSonic Corporation
DC/DC
Size: Custom
Document Number: VE150m/mb
Rev: V0.1
Date: Friday, August 09, 2002
Sheet 5 of 6

10.6 Audio



ViewSonic Corporation		
Title: AUDIO		
Size: C	Document Number: **VE150m/mb**	Rev: V0.1
Date: Friday, August 09, 2002	Sheet: 6 of 8	

Chapter 11 PCB LAYOUT



Reader's Response

Dear Readers:

Thank you in advance for your feedback on our Service Manual,which allows continuous improvement of our products. We would appreciate your completion of the Assessment Matrix below, for return to ViewSonic corporation.

Assessment

A. What do you think about the content after reading **VE150m/mb** series Service Manual?

Unit	*Excellent*	*Good*	*Fair*	*Bad*
SPECIFICATIONS				
FRONT PANEL CONTROLS				
CIRCUIT DESCRIPTION				
TROUBLE SHOOTING				
THEORY OF OPERATION				
MECHANICAL ASSEMBLY				
RECOMMENDED SPARE PARTS LIST				
COMPLETE PARTS LIST				
CIRCUIT DIAGRAMS				

B. Are you satisfied with the **VE150m/mb** service manual?

Item	*Excellent*	*Good*	*Fair*	*Bad*
1. Service Manual Content				
2. Service Manual Layout				
3. The form and listing				

C. Do you have any other opinion or suggestion about this service manual?

Reader's basic data:

Name:		Title:	
Company:			
Add:			
Tel:		Fax:	
E-mail:			

After completing this form, please return it to ViewSonic Quality Assurance in the USA at facsimile 1-909-444-8654. You may also e-mail any suggestions to the Director of Quality Assurance (marc.maupin@viewsonic.com)