

Service
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Service Manual

Horizontal Frequency
30 - 83kHz

Table of Contents

Description	Page	Description	Page
Table of Contents.....	1	6.Schematic.....	30
Revision List.....	2	6.1.Main Board.....	30
Important Safety Notice.....	3	6.2.Power Board.....	34
1.Monitor Specification.....	4	7.PCB Layout.....	36
2.LCD Monitor Description.....	5	7.1.Main Board.....	36
3.Operation Instruction.....	6	7.2.Power Board.....	38
3.1.General Instructions.....	6	7.3.Key Board.....	39
3.2.Control Buttons and Connections.....	6	8.Maintainability.....	40
3.3.OSD Setting.....	8	8.1.Equipments and Tools Requirement.....	40
4.Input/Output pecification.....	24	8.2.Trouble Shooting.....	41
4.1.Input Signal Connector.....	24	9.White-Balance,Luminance Adjustment.....	45
4.2.Preset Display Modes.....	25	10.Monitor Exploded View.....	47
4.3.Panel Specification.....	26	11.BOM List.....	48
5.Block Diagram.....	28		
5.1.Main Board.....	28		
5.2.Power Board.....	29		

SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

Revision List

Version	Release Date	Revision History	TPV Model Name
A00	Dec.-28-2011	Initial release	TIBMRV2BDFA2NNE
			TIBKRV2BDFA1NNE
A01	Feb.-20-2013	Add new models	TIA4RV2YAGACNNE
			TIB1RV2QAGA1NNE
			TIB2RV2BAGA1NNE
			TIB2RV2BDFA1NNE
			TIB2RV2YAGA1NNE
			TIBKRV2BAGA7NNE
			TIBKRV2QAGA12NE
			TIC1RV2BAGA1NNE
			TIC1RV2BAGA3NNE
			TIC1RV2BAGA7NNE
			TIC1RV2YAGA1NNE
			TICARV2BAGA1NNE
			TICARV2BAGA2NNE

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design. Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:

DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

1. Monitor Specifications

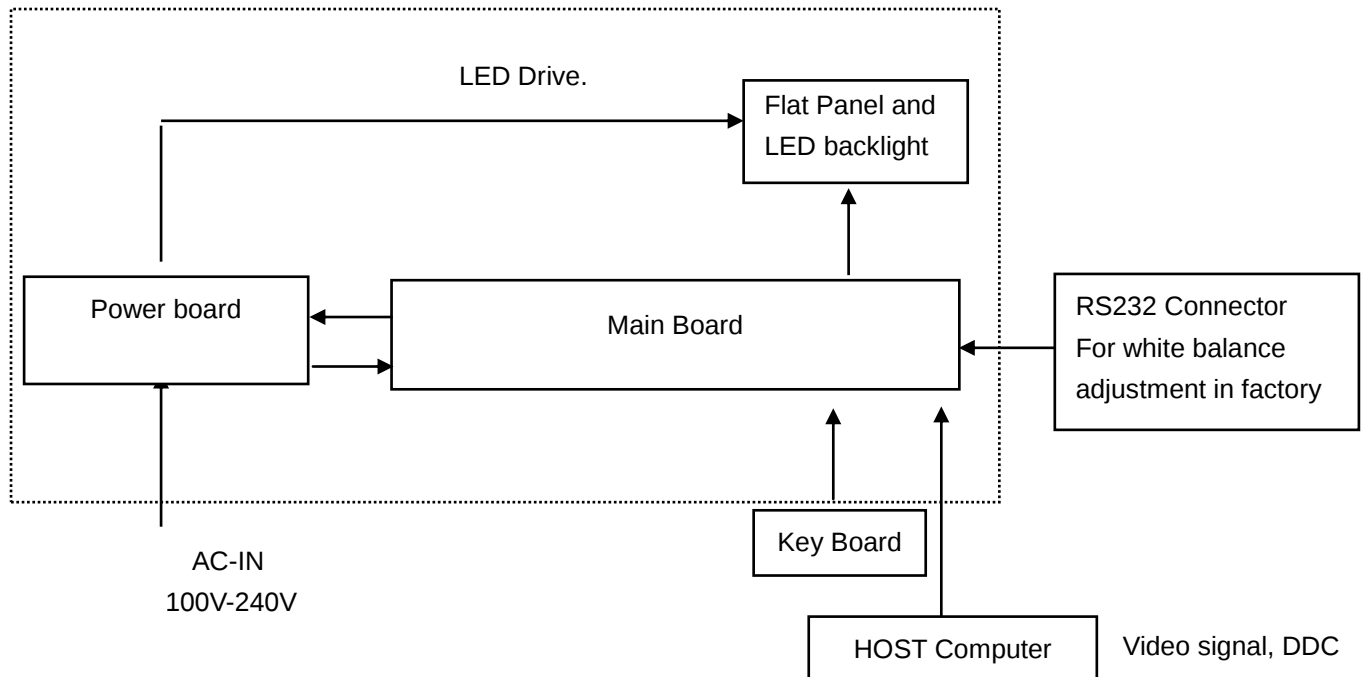
Panel	Model name	e2250Swn
	Driving system	TFT Color LCD
	Viewable Image Size	54.7cm diagonal
	Pixel pitch	0.2482mm(H) x 0.2482mm(V)
	Video	R, G, B Analog Interface
	Separate Sync.	H/V TTL
	Display Color	16.7M Colors
	Dot Clock	148.5 MHz
Resolution	Horizontal scan range	30 kHz - 83 kHz
	Horizontal scan Size(Maximum)	476.64mm
	Vertical scan range	50 Hz – 76 Hz
	Vertical scan Size(Maximum)	268.11mm
	Optimal preset resolution	1920 x 1080 (60 Hz)
	Plug & Play	VESA DDC2B
	Input Connector	D-Sub 15pin
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, Positive
	Power Source	100-240V~, 50/60Hz
	Power Consumption	Active 21 W
		Standby < 0.5 W
	Off timer	0-24 hrs
Physical Characteristics	Connector Type	15-pin Mini D-Sub
	Signal Cable Type	Detachable
	Dimensions & Weight:	
	Height (with base)	379.95 mm
	Width	511.18 mm
	Depth	190.00 mm
	Weight (monitor only)	3.28 kg
	Weight (with packaging)	4.06kg
Environmental	Temperature:	
	Operating	0° to 40°
	Non-Operating	-25°to 55°
	Humidity:	
	Operating	10% to 85% (non-condensing)
	Non-Operating	5% to 93% (non-condensing)
	Altitude:	
	Operating	0~ 3658m (0~ 12000 ft)
	Non-Operating	0~ 12192m (0~ 40000 ft)

2.LCD Monitor Description

The LCD monitor will contain a main board, a power board and a key board which house the flat panel control logic, brightness control logic and DDC.

The power part will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



3. Operating Instructions

3.1 General Instructions

Press the power button to turn the monitor on or off. The other control knobs are located at front panel of the monitor (See Figure). By changing these settings, the picture can be adjusted to your personal preferences.

* The power cord should be connected.

* Press the power button to turn on the monitor. The power indicator will light up.

3.2 Control Buttons and Connections



Power

Press the Power button to turn on/off the monitor.

Eco (DCR)/ -

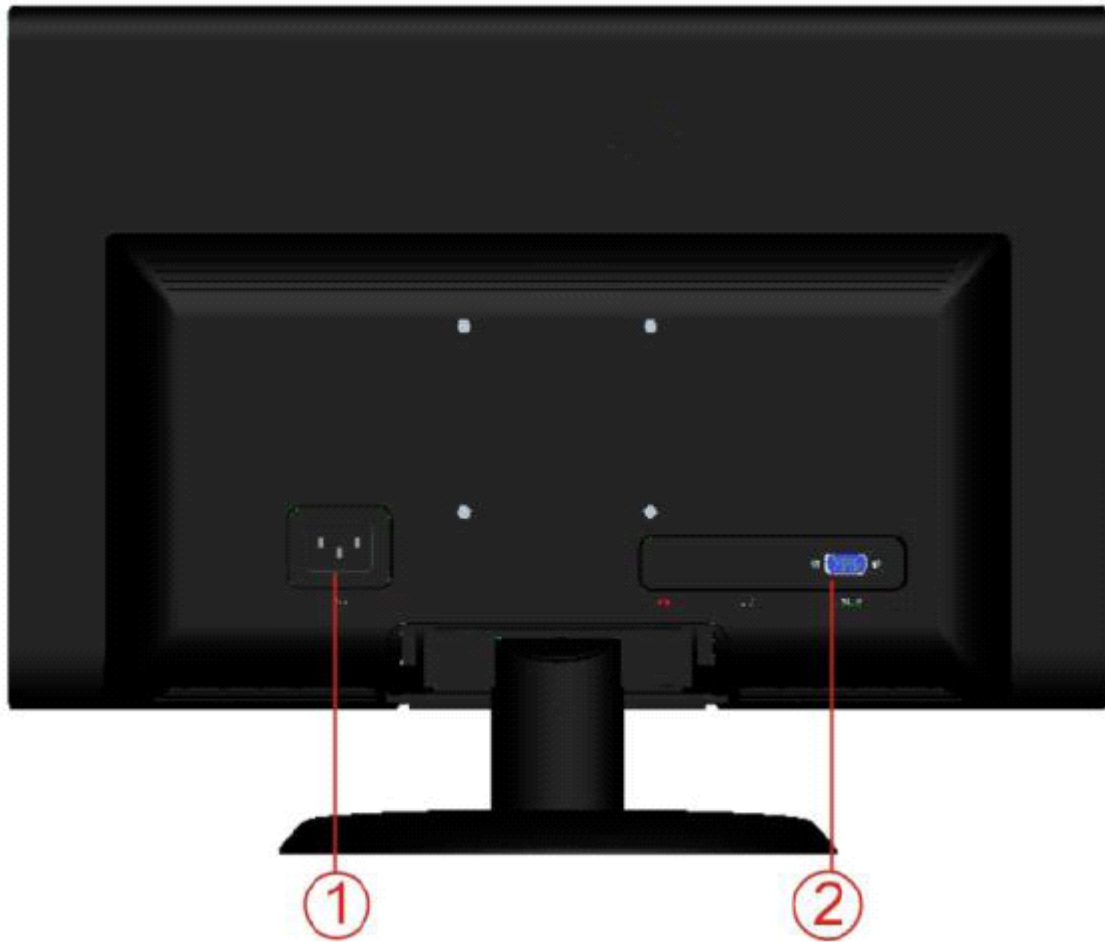
Press the Eco key continuously to select the Eco mode of brightness and DCR on when there is no OSD. (Eco mode hot key may not be available in all models).

4 : 3 or wide/+

When there is no OSD, press + continuously to change 4:3 or wide image ratio. (If the product screen size is 4:3 or input signal resolution is wide format, the hot key is disable to adjust.)

Auto / Exit

When the OSD is closed,. Press Auto button continuously to do auto configure (Only for the models with dual or more inputs).



1. Power
2. Analog (DB-15 VGA cable)

To protect equipment, always turn off the PC and LCD monitor before connecting.

1 Connect the power cable to the AC port on the back of the monitor.

2 Connect one end of the 15-pin D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.

3 Turn on your monitor and computer.

If your monitor displays an image, installation is complete. If it does not display an image, please refer Troubleshooting.

3.3 OSD Setting

Basic and simple instruction on the control keys.



- 1) Press the MENU-button to activate the OSD window.
- 2) Press - or + to navigate through the functions. Once the desired function is highlighted, press the MENU-button to activate it . press - or + to navigate through the sub-menu functions. Once the desired function is highlighted, press MENU-button to activate it.
- 3) Press - or + to change the settings of the selected function. Press AUTO to exit. If you want to adjust any other function, repeat steps 2-3.
- 4) OSD Lock Function: To lock the OSD, press and hold the MENU button while the monitor is off and then press power button to turn the monitor on. To un-lock the OSD - press and hold the MENU button while the monitor is off and then press power button to turn the monitor on.

Notes:

- 1) If the product has only one signal input, the item of "Input Select" is disable to adjust.
- 2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.
- 3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

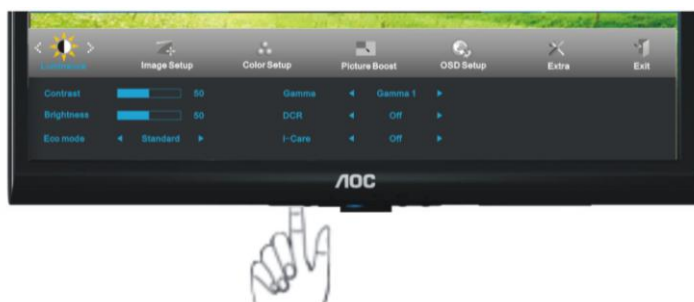
Luminance

1



Press **MENU** (Menu) to display menu.

2



Press **-** or **+** to select  (Luminance), and press **MENU** to enter.

3



Press **-** or **+** to select submenu, and press **MENU** to enter.

4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

	Brightness	0-100		Backlight Adjustment
	Contrast	0-100		Contrast from Digital-register.
	Eco mode	Standard		Standard Mode
		Text		Text Mode
		Internet		Internet Mode
		Game		Game Mode
		Movie		Movie Mode
		Sports		Sports Mode
	Gamma	Gamma1		Adjust to Gamma1
		Gamma2		Adjust to Gamma 2
		Gamma3		Adjust to Gamma 3
	DCR	Off		Disable dynamic contrast ratio
		On		Enable dynamic contrast ratio

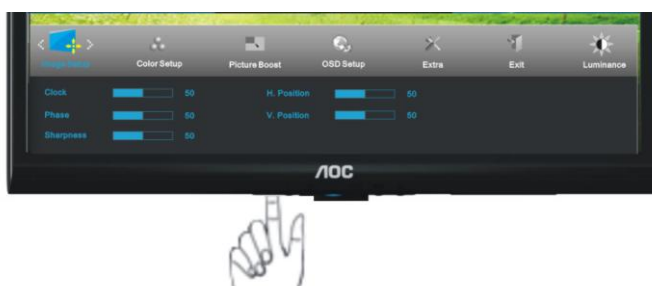
Image Setup

1



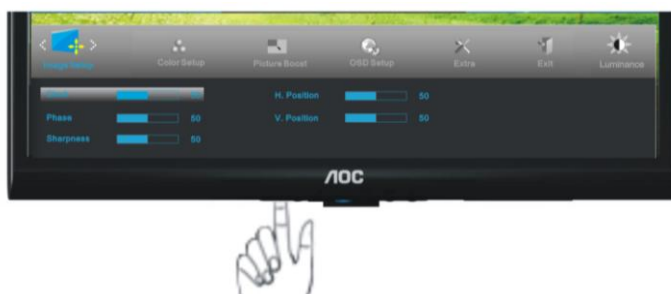
Press **MENU** (Menu) to display menu.

2



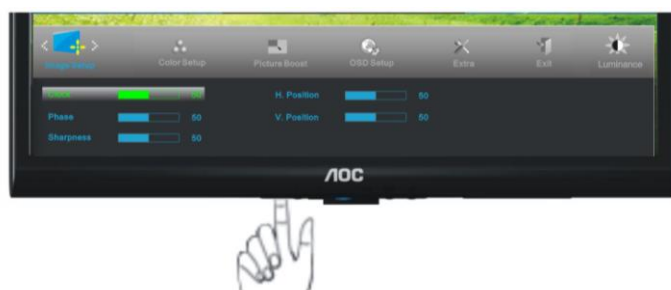
Press **-** or **+** to select  (Image Setup), and press **MENU** to enter.

3

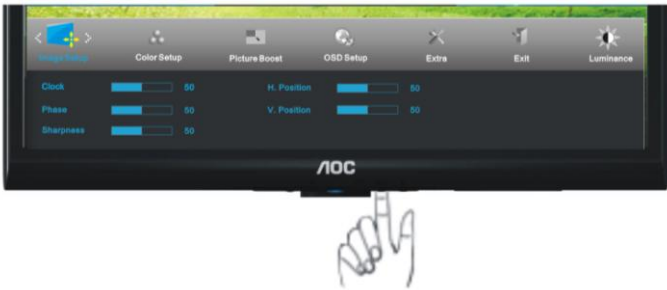


Press **-** or **+** to select submenu, and press **MENU** to enter.

4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	Sharpness	0-100	Adjust picture sharpness
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.

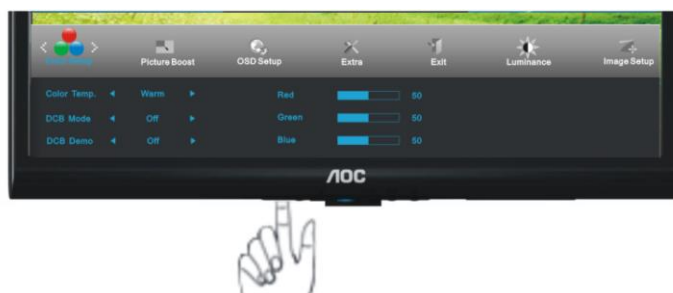
Color Setup

1



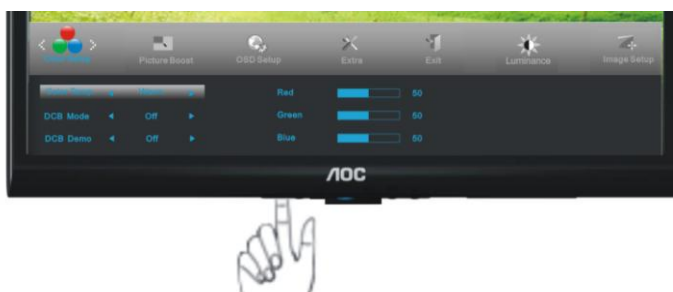
Press **MENU** (Menu) to display menu.

2



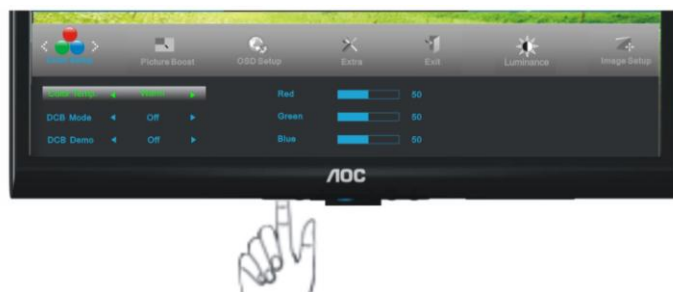
Press **-** or **+** to select  (Color Setup), and press **MENU** to enter.

3



Press **-** or **+** to select submenu, and press **MENU** to enter.

4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

	Color setup.	Warm		Recall Warm Color Temperature from EEPROM.
		Normal		Recall Normal Color Temperature from EEPROM.
		Cool		Recall Cool Color Temperature from EEPROM.
		sRGB		Recall SRGB Color Temperature from EEPROM.
		User	Red	Red Gain from Digital-register
			Green	Green Gain Digital-register.
			Blue	Blue Gain from Digital-register
	DCB Mode	Full Enhance	on or off	Disable or Enable Full Enhance Mode
		Nature Skin	on or off	Disable or Enable Nature Skin Mode
		Green Field	on or off	Disable or Enable Green Field Mode
		Sky-blue	on or off	Disable or Enable Sky-blue Mode
		AutoDetect	on or off	Disable or Enable AutoDetect Mode
	DCB Demo		On or off	Disable or Enable Demo

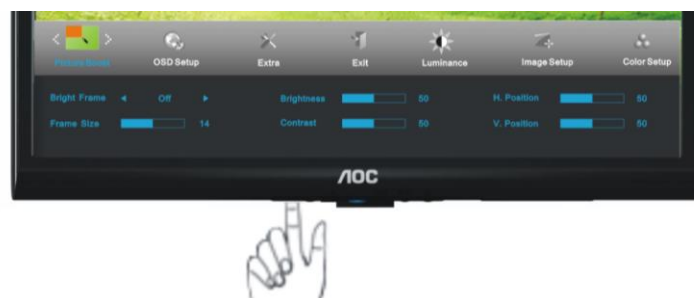
Picture Boost

1



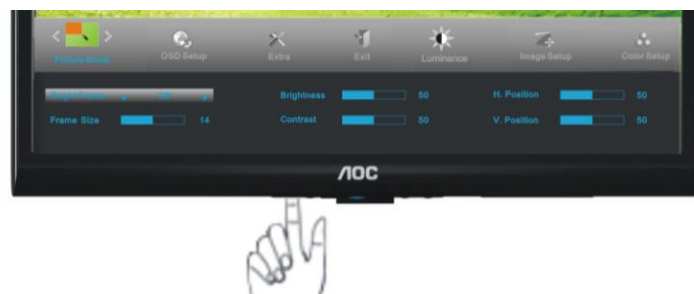
Press **MENU** (Menu) to display menu.

2



Press **-** or **+** to select  (Picture Boost), and press **MENU** to enter.

3

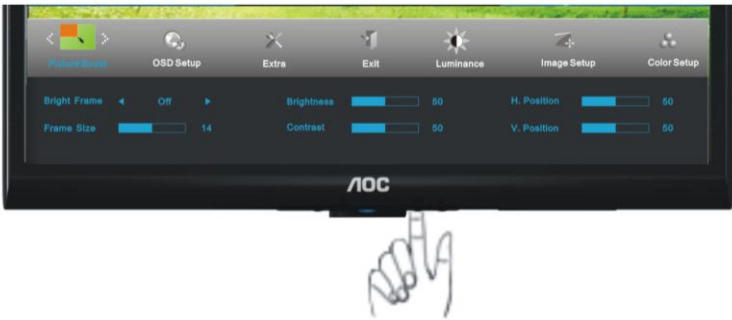


Press **-** or **+** to select submenu, and press **MENU** to enter.

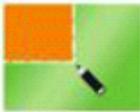
4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

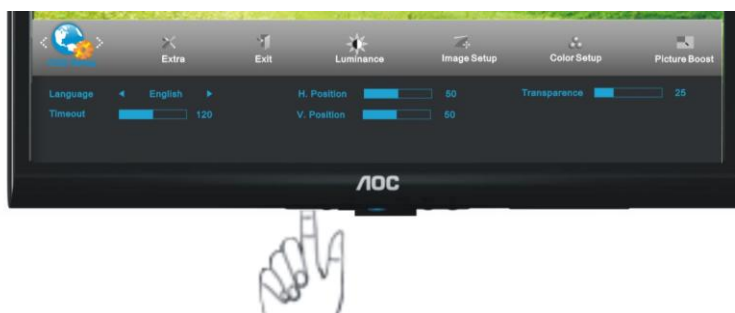
OSD Setup

1



Press **MENU** (Menu) to display menu.

2



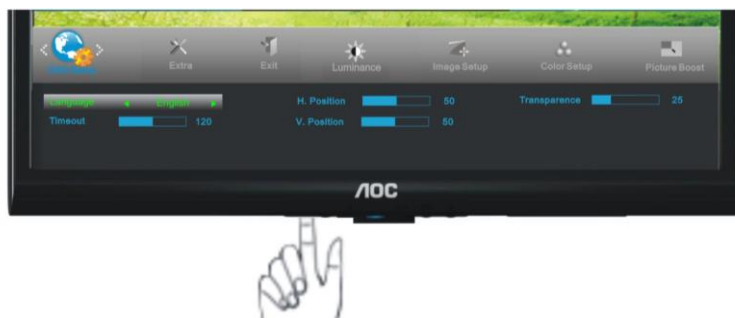
Press **-** or **+** to select  (OSD Setup), and press **MENU** to enter.

3

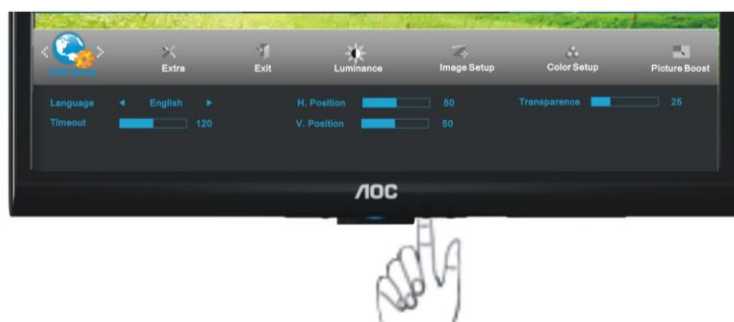


Press **-** or **+** to select submenu, and press **MENU** to enter.

4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

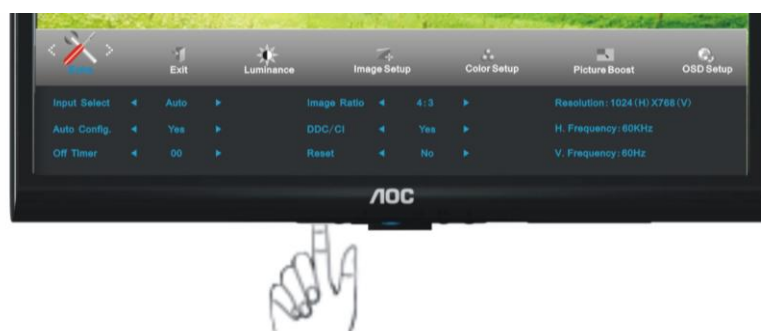
	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparence	0-100	Adjust the transparence of OSD
	Language		Select the OSD language

Extra 1



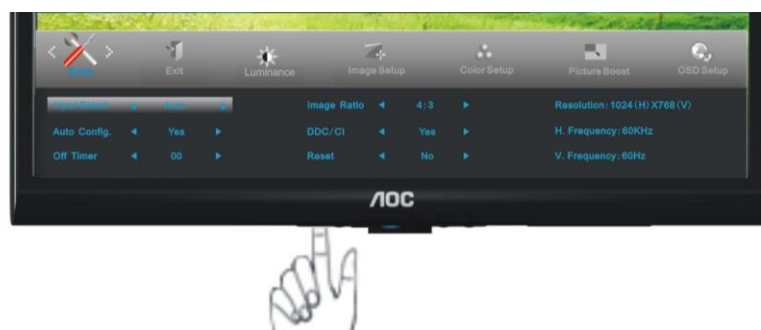
Press **MENU** (Menu) to display menu.

2



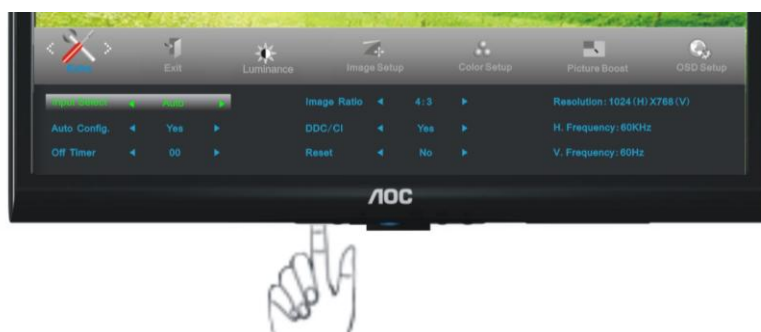
Press **-** or **+** to select  (Extra), and press **MENU** to enter.

3

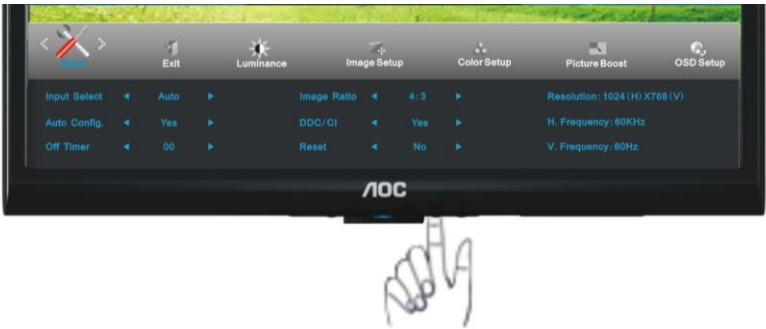


Press **-** or **+** to select submenu, and press **MENU** to enter.

4



Press **-** or **+** to adjust.



Press **AUTO** two times to exit.

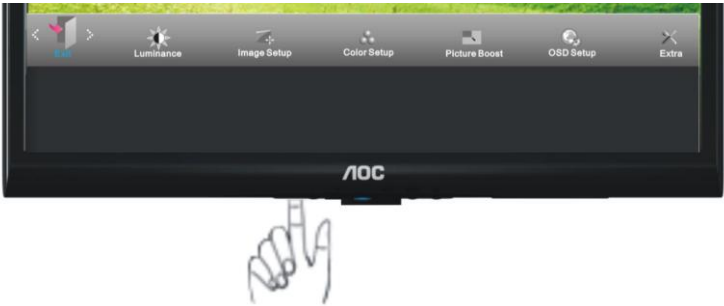
	Input Select	Analog	Select Analog Sigal Source as Input
	Auto Config	yes or no	Auto adjust the picture to default
	Off timer	0-24hrs	Select DC off time
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display
	DDC-CI	yes or no	Turn ON/OFF DDC-CI Support
	Reset	Yes or no	Reset the menu to default
	Information		Show the information of the main image and sub-image source

Exit
1



Press **MENU** (Menu) to display menu.

2



Press **-** or **+** to select  (Exit), and press **MENU** to enter.

3



Press **AUTO** two times to exit

	Exit		Exit the main OSD
---	------	--	-------------------

LED Indicators

Status	LED Color	
Full Power Mode	Green or Blue	
Active-off Mode	Orange or red	

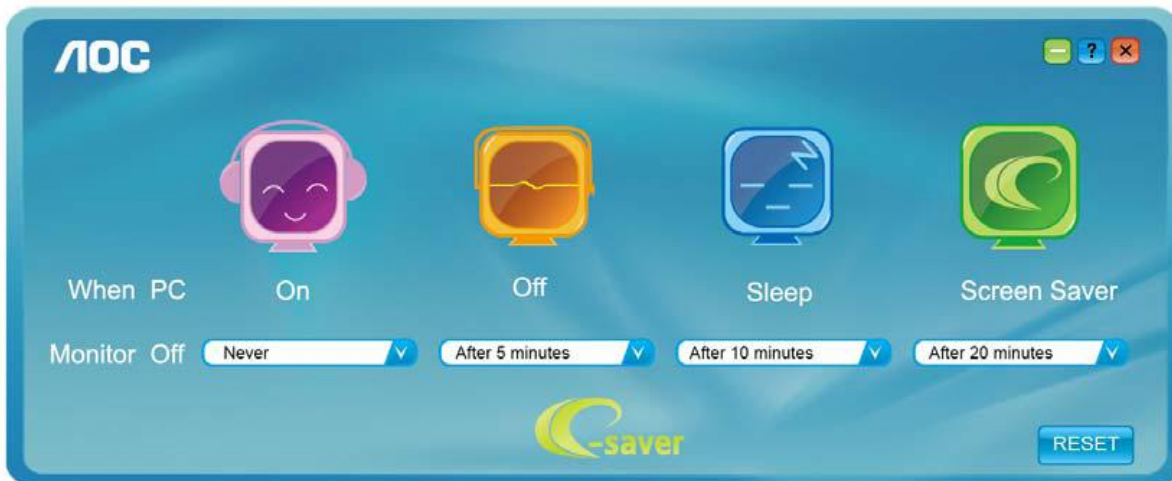
e-Saver



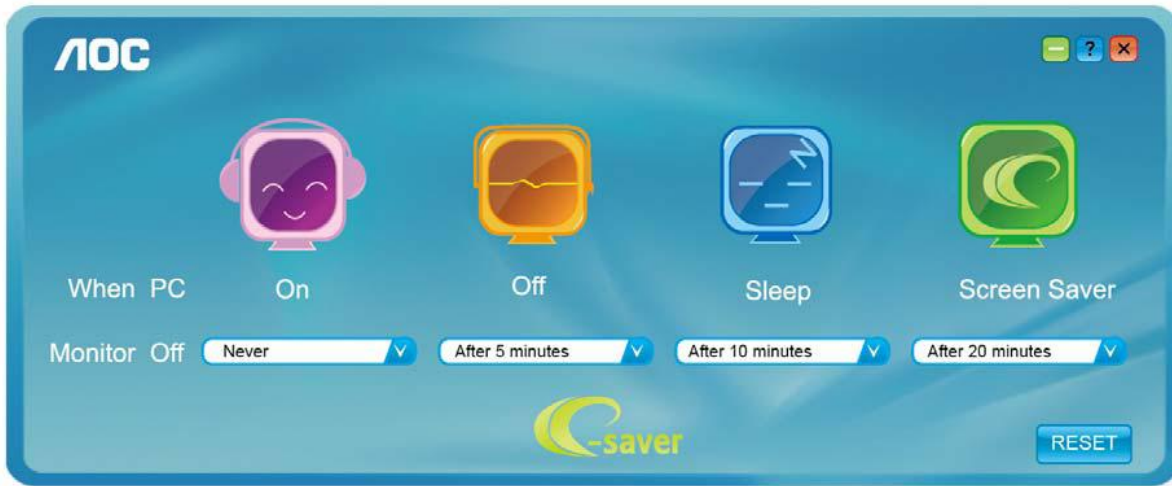
Welcome to use AOC e-Saver monitor power management software! The AOC e-Saver features Smart Shutdown functions for your monitors, allows your monitor to timely shutdown when PC unit is at any status (On, Off, Sleep or Screen Saver); the actual shutdown time depends on your preferences (see example below). Please click on "driver/e-Saver/setup.exe" to start installing the e-Saver software, follow the install wizard to complete software installation.

Under each of the four PC status, you may choose from the pull-down menu the desired time (in minutes) for your monitor to automatically shutdown. The example above illustrated:

- 1) The monitor will never shutdown when the PC is powered on.
- 2) The monitor will automatically shutdown 5 minutes after the PC is powered off.
- 3) The monitor will automatically shutdown 10 minutes after the PC is in sleep/stand-by mode.
- 4) The monitor will automatically shutdown 20 minutes after the screen saver appears.



You can click "RESET" to set the e-Saver to its default settings like below.



Screen+



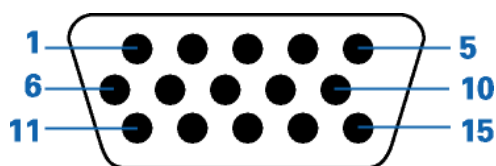
Welcome to "Screen+" software by AOC, Screen+ software is a desktop screen splitting tool, it splits the desktop into different panes, each pane displays a different window. You only need to drag the window to a corresponding pane, when you want to access it. It supports multiple monitor display to make your task easier. Please follow the installation software to install it.



4. Input/Output Specification

4.1 Input Signal Connector

Analog connector



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock

4.2 Preset Display Modes

STAND	RESOLUTION	HORIZONTAL FREQUENCY(KHZ)	VERTICAL FREQUENCY(Hz)
VGA	640×480@60Hz	31.469	59.940
VGA	640×480@72Hz	37.861	72.809
VGA	640×480@75Hz	37.500	75.000
SVGA	800×600@56Hz	35.156	56.250
SVGA	800×600@60Hz	37.879	60.317
SVGA	800×600@72Hz	48.077	72.188
SVGA	800×600@75Hz	46.875	75.000
XGA	1024×768@60Hz	48.363	60.004
XGA	1024×768@75Hz	60.023	75.029
SXGA	1280×1024@60Hz	63.981	60.020
SXGA	1280×1024@75Hz	79.976	75.025
WXGA	1440×900@60Hz	55.935	55.876
WSXGA+	1680×1050@60Hz	65.290	59.950
FHD	1920×1080@60Hz	67.500	60.000
IBM-MODE DOS	720×400@70Hz	31.469	70.087

4.3 Panel Specification

4.3.1 General Features

M215HGE-L23 is a 21.5" TFT Liquid Crystal Display module with WLED Backlight unit and 30 pins 2ch-LVDS interface. This module supports 1920 x 1080 Full HD mode and can display up to 16.7M colors. The converter module for Backlight is not built in.

4.3.2 General Specifications

Item	Specification	Unit	Note
Screen Size	21.53" real diagonal		
Driver Element	a-si TFT active matrix	-	-
Pixel Number	1920 x R.G.B. x 1080	pixel	-
Pixel Pitch	0.2482 (H) x 0.2482 (V)	mm	-
Pixel Arrangement	RGB vertical stripe	-	-
Display Colors	16.7M	color	-
Transmissive Mode	Normally white	-	-
Surface Treatment	AG type, 3H hard coating, Haze 25	-	-
Luminance, White	200	Cd/m2	
Color Gamut	72% of NTSC(Typ.)	-	-
Power Consumption	Total 18.02 W (Max.) @ cell 7.7W (Max.), BL:10.32 W (Max.)		(1)

4.3.3 Electrical Characteristics

Electrical characteristics

Vcc = 5.0 V, Ta = 25 ± 2 °C, Fr = 60Hz

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Power Supply Voltage	Vcc	4.5	5.0	5.5	V
Ripple Voltage	V _{RP}	--	--	300	mV
Rush Current	I _{RUSH}	--	--	3	A
AC off Rush Current	I _{off_RUSH}	-	--	4	A
Power Supply Current	White	-	0.42	0.47	A
	Black	-	1.2	1.4	A
	Vertical Stripe	-	0.69	0.71	A
Power Consumption	PLCD	-	6.0	7.7	Watt
LVDS differential input voltage	V _{id}	100	-	600	mV
LVDS common input voltage	V _{ic}	0.05	--	2.85	V

Backlight Unit

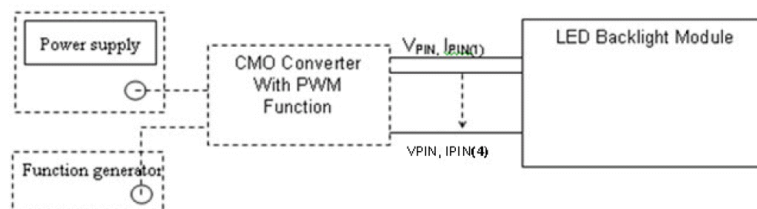
Parameter	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
LED Light Bar Input Voltage Per Input Pin	VPIN	--	34.1	37.4	V	(1), Duty=100%, IPIN=(65mA)
LED Light Bar Current Per Input Pin	IPIN	--	65	69	mA	(1), (2) Duty=100%
LED Life Time	LLED	40000	--	--	Hrs	(3)
Power Consumption	PBL	--	8.87	10.32	W	(1) Duty=100%, IPIN=(65mA)

Note (1) LED light bar input voltage and current are measured by utilizing a true RMS multimeter as shown below:

Note (2) PBL = IPIN × VPIN × (4) input pins ,

Note (3) The lifetime of LED is defined as the time when LED packages continue to operate under the conditions at Ta = 25 ±2°C and I= (65)mA (per chip) until the brightness becomes ≤ 50% of its

original value.

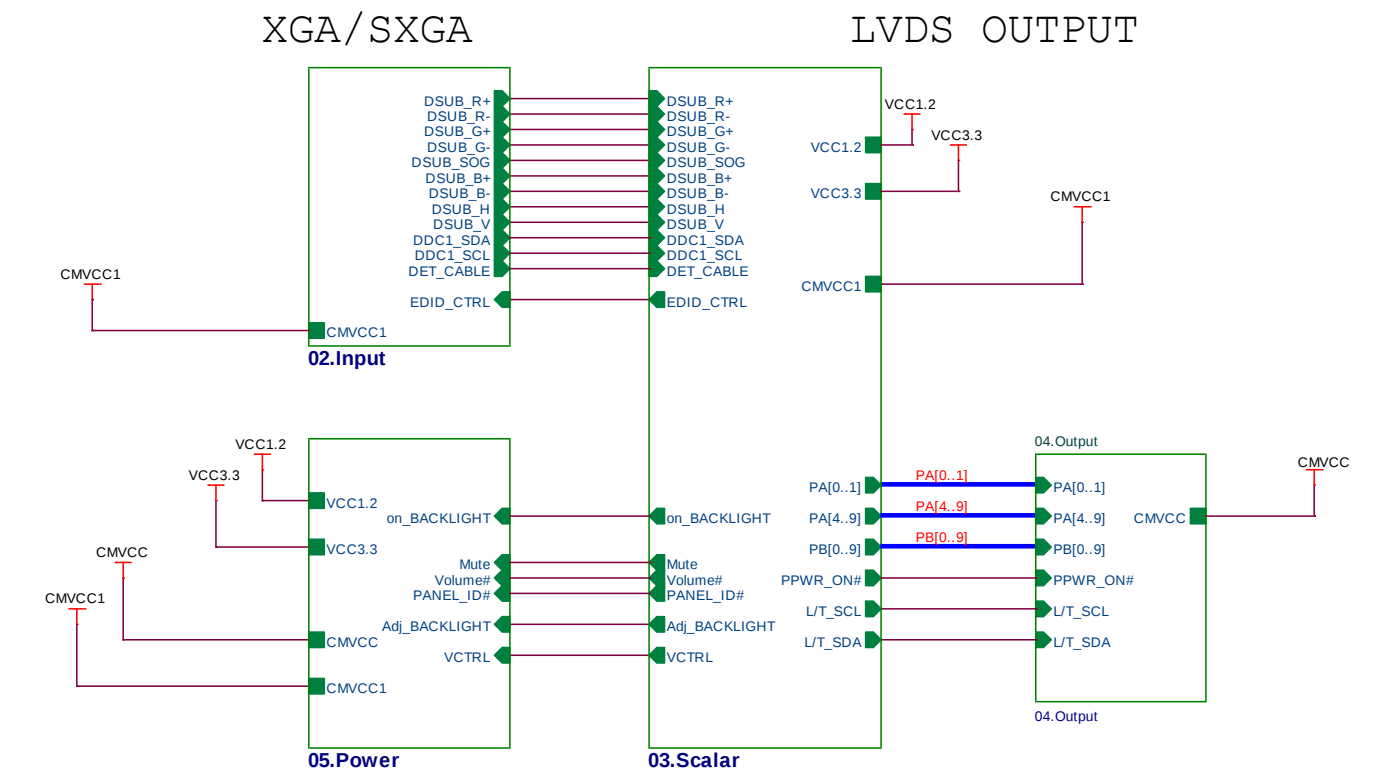


4.3.4 Optical Characteristics

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Color Chromaticity (CIE 1931)	Red	R _x	$\theta_x=0^\circ, \theta_Y=0^\circ$ CS-2000 R=G=B=255 Gray scale	Typ – 0.03	0.633	Typ + 0.03	-
		R _y			0.351		
	Green	G _x			0.322		
		G _y			0.630		
	Blue	B _x			0.152		
		B _y			0.050		
	White	W _x			0.313		
		W _y			0.329		
Center Luminance of White (Center of Screen)		L _c		150	200	-	cd/m ²
Contrast Ratio		CR		500	700	-	-
Response Time		T _R	$\theta_x=0^\circ, \theta_Y=0^\circ$	-	1.5	2.5	ms
		T _F		-	3.5	5.5	
White Variation		δW	$\theta_x=0^\circ, \theta_Y=0^\circ$	70	-	-	%
Viewing Angle	Horizontal	θ _x - + θ _x +	CR ≥ 10		90	-	Deg.
	Vertical	θ _y - + θ _y +			65	-	

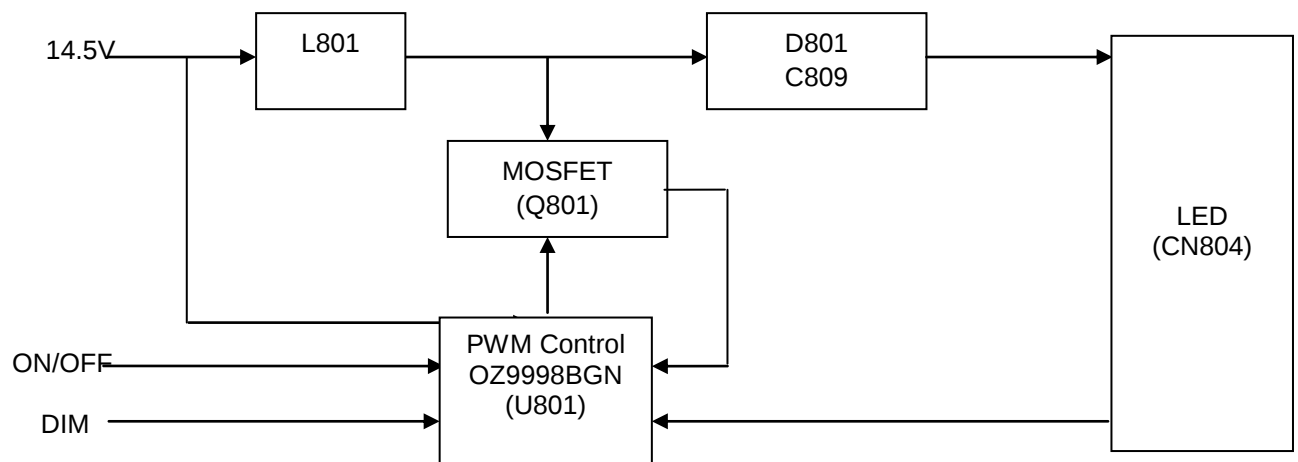
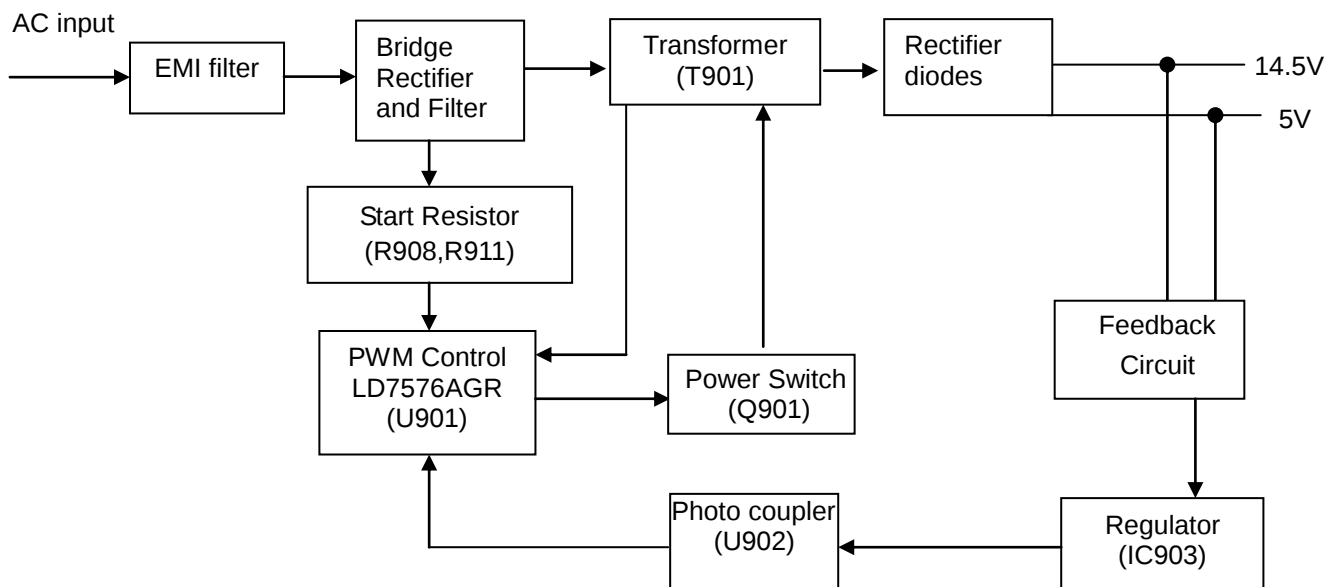
5. Block Diagram

5.1 Main Board

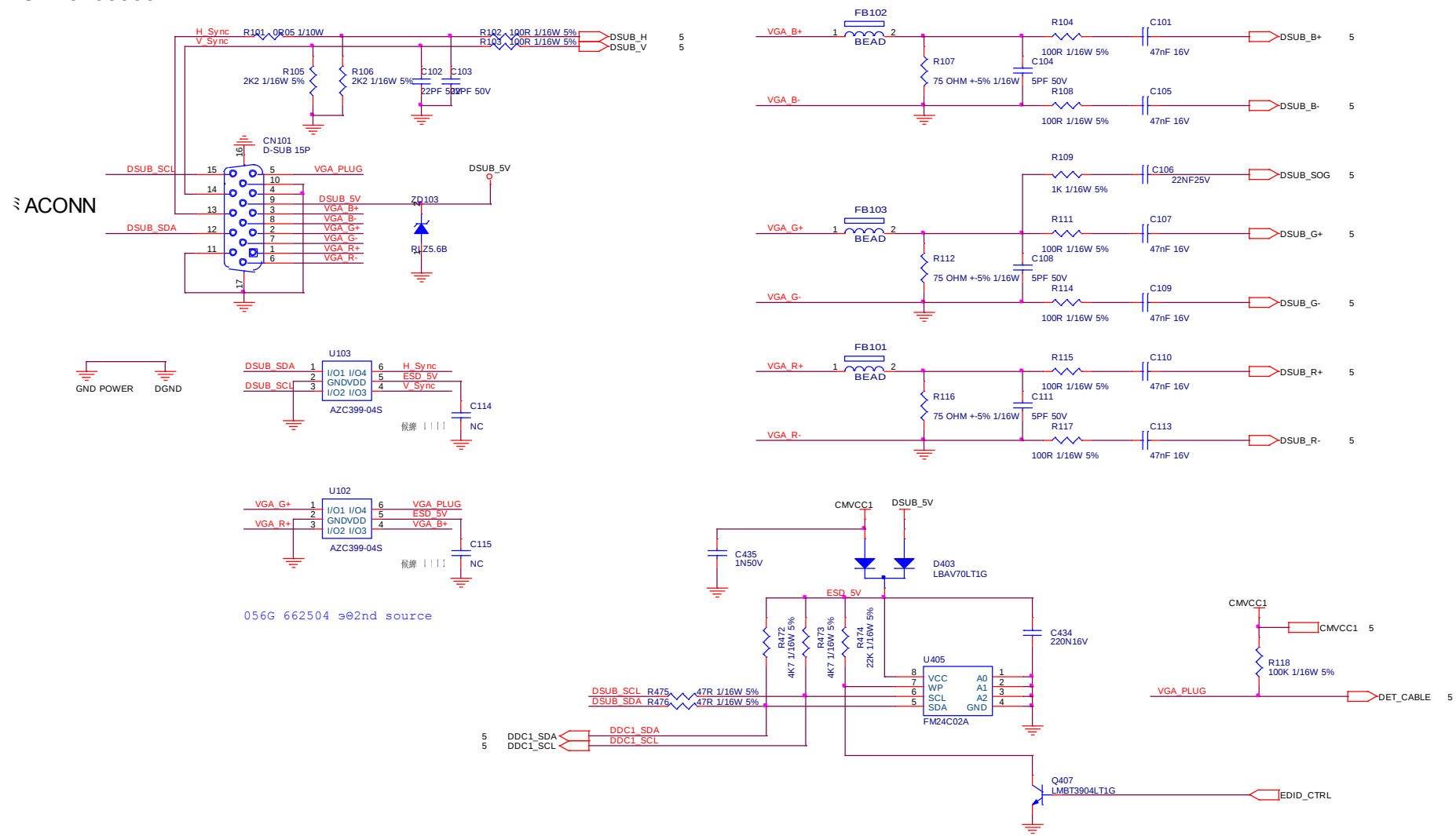


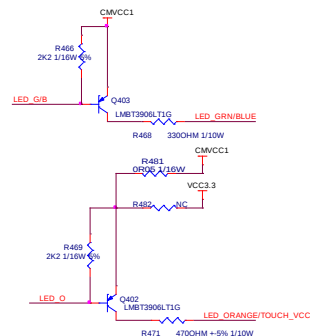
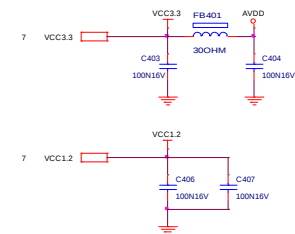
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC 50 ID(1A)	Size	A
銘 隔 瓜 網 廠	715G4737-M0B-000-0040_101028	TPV MODEL	AOC 50 ID(1A)	Rev
Key Component	01.Top	PCB NAME	715G4737-M0B	稱 爹
Date	Friday, November 12, 2010	Sheet	3 of 7	<路 爹>

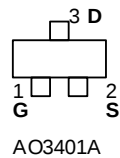
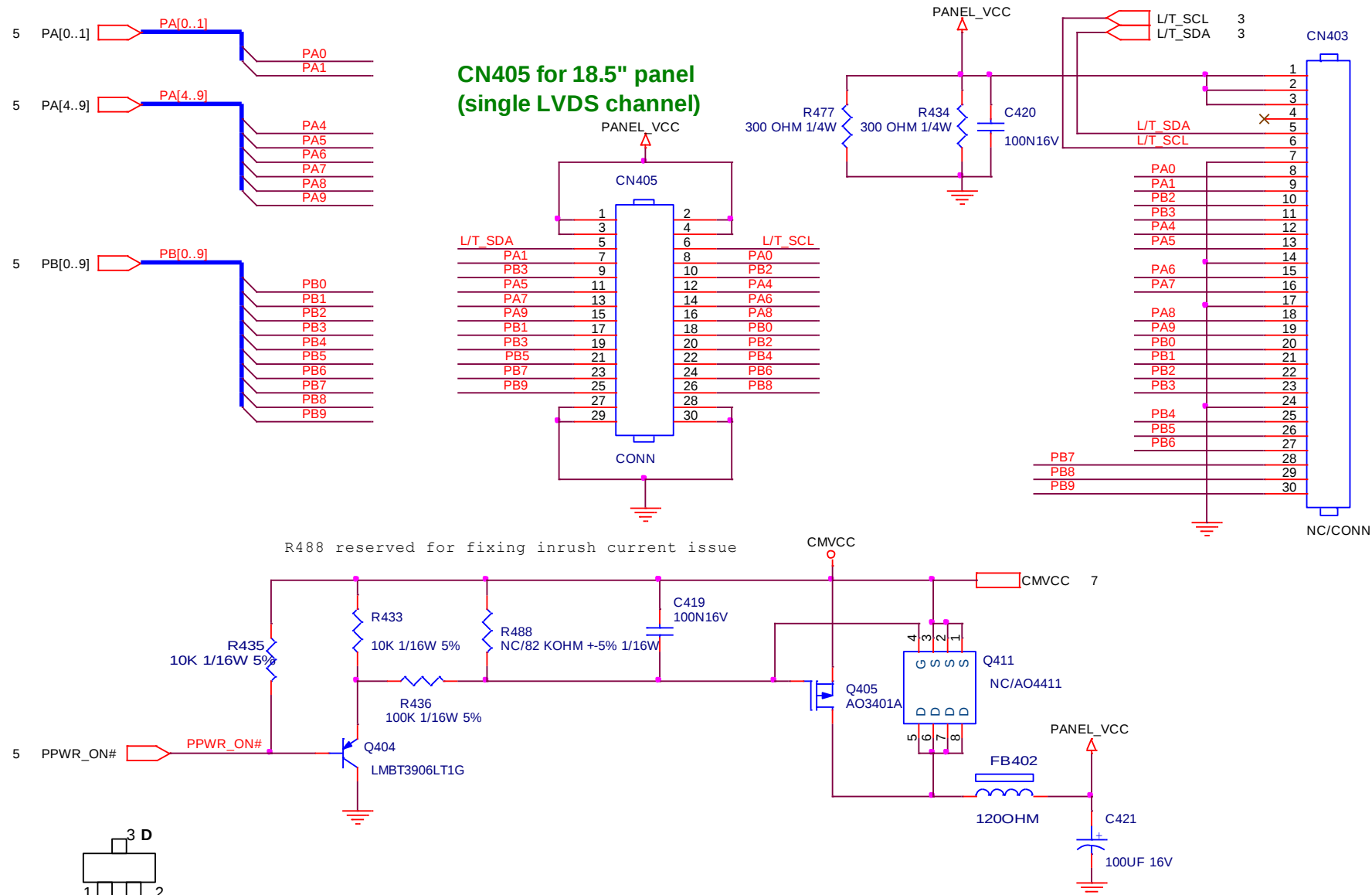
5.2 Power Board



6. Schematic
6.1 Main Board
715G4737M02000004I

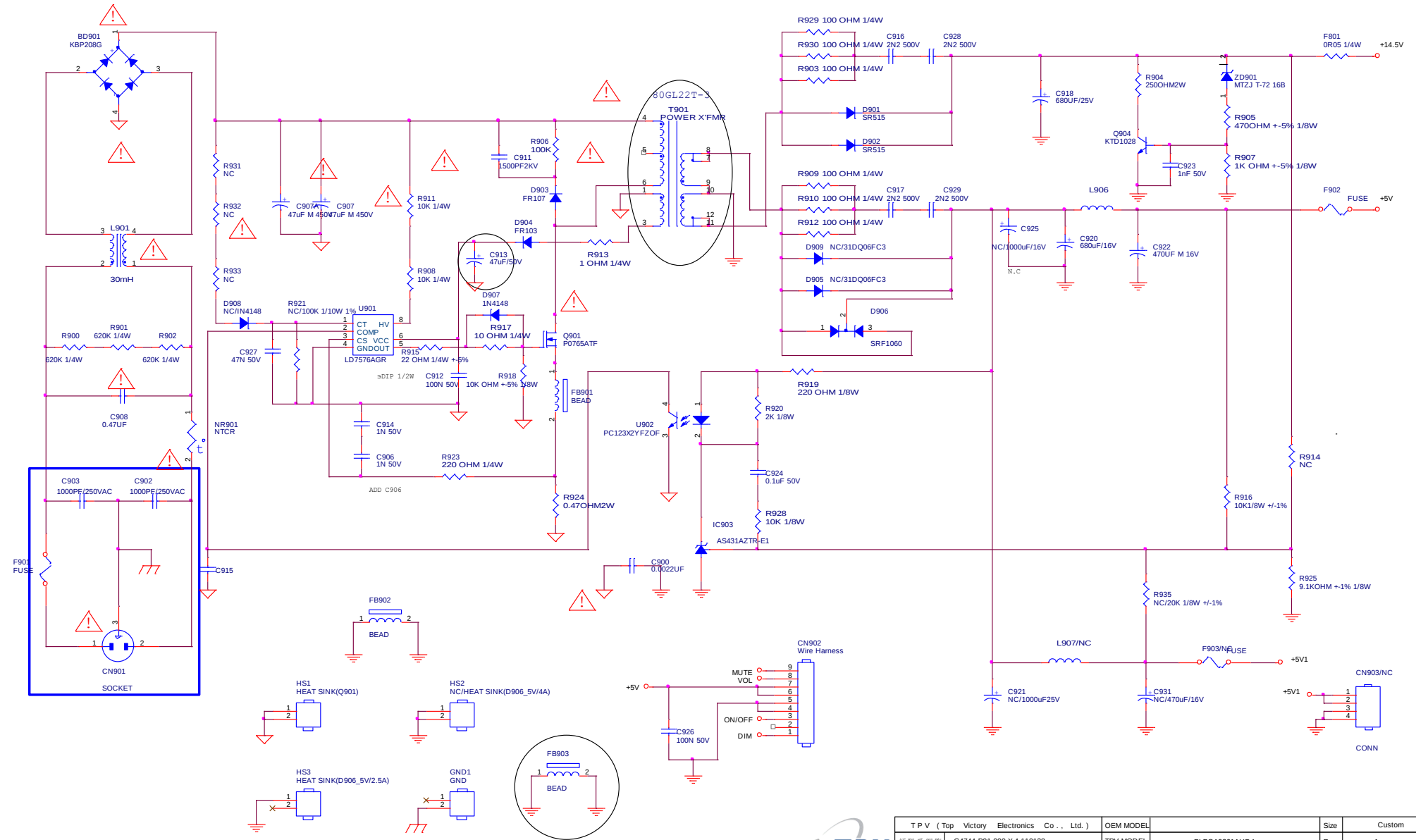


31

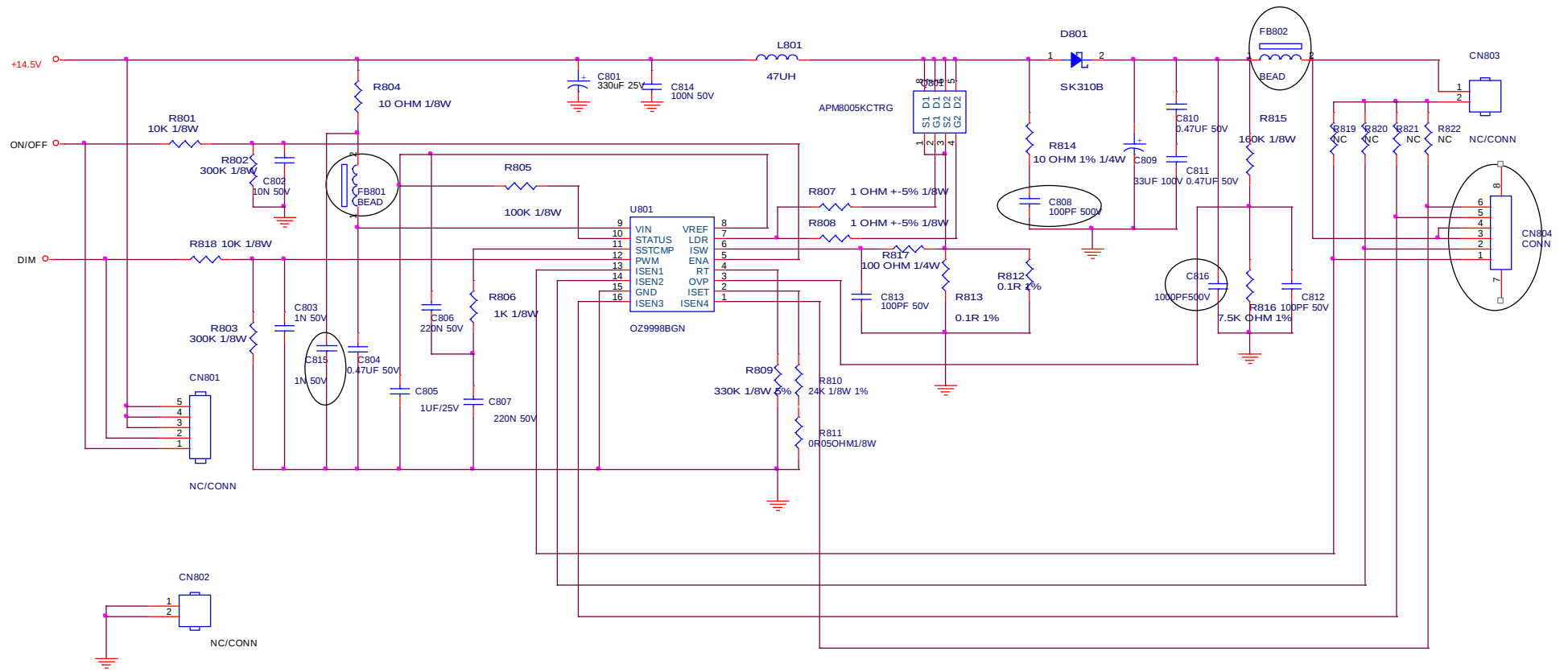


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	AOC 50 ID(1A)	Size	A
結隔瓜網腹	715G4737-M02-000-0040_110620	TPV MODEL	Rev	A
Key Component	04.Output	PCB NAME	715G4737-M02	称爹
Date	Friday, June 24, 2011	Sheet	6 of 7	<称爹>

6.2 Power Board
715G4744P01000001C



TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	Custom
結構瓜銀膜	G4744-P01-000-X-4-110128	Rev	1
Key Component	01.POWER	PCB NAME	715G4744-P01-000-0010
Date	Friday, January 28, 2011	Sheet	1 of 2
		称差	ODM MODEL

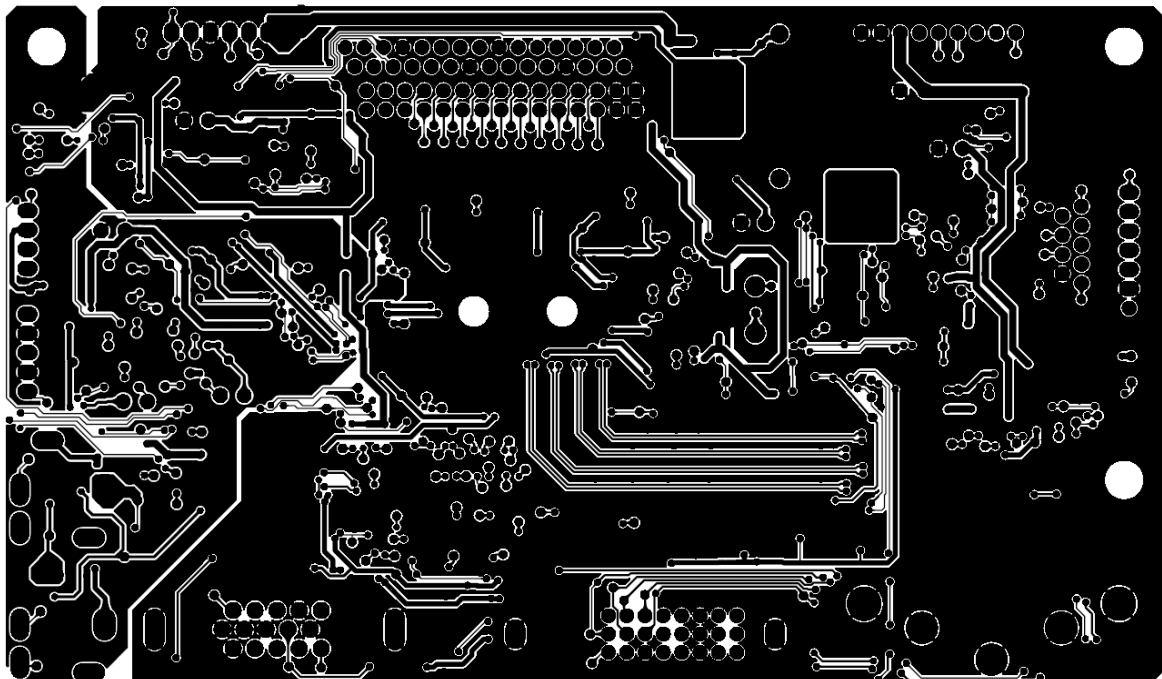
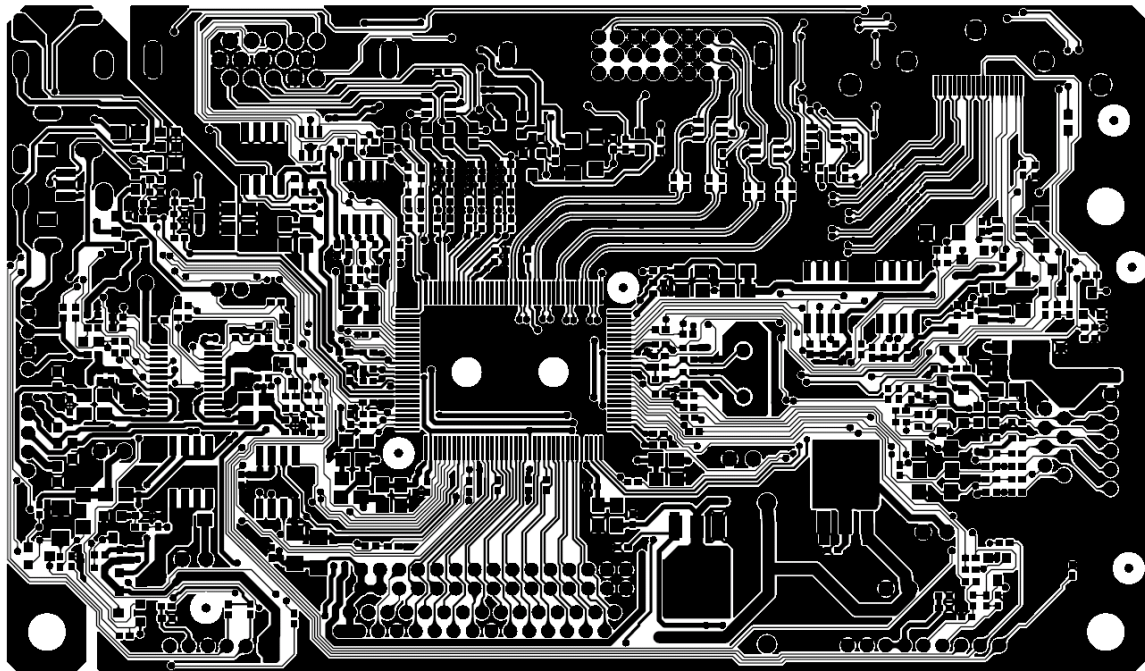


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL		Size	Custom
話隔瓜爾	G4744-P01-000-X4-110128	TPV MODEL	PLPCA9361AHD4	Rev 1
Key Component	02.INVERTER	PCB NAME	715G4744-P01-000-0010	称爹
Date	Friday, January 28, 2011	Sheet	2 of 2	ODM MODEL

7. PCB Layout

7.1 Main Board

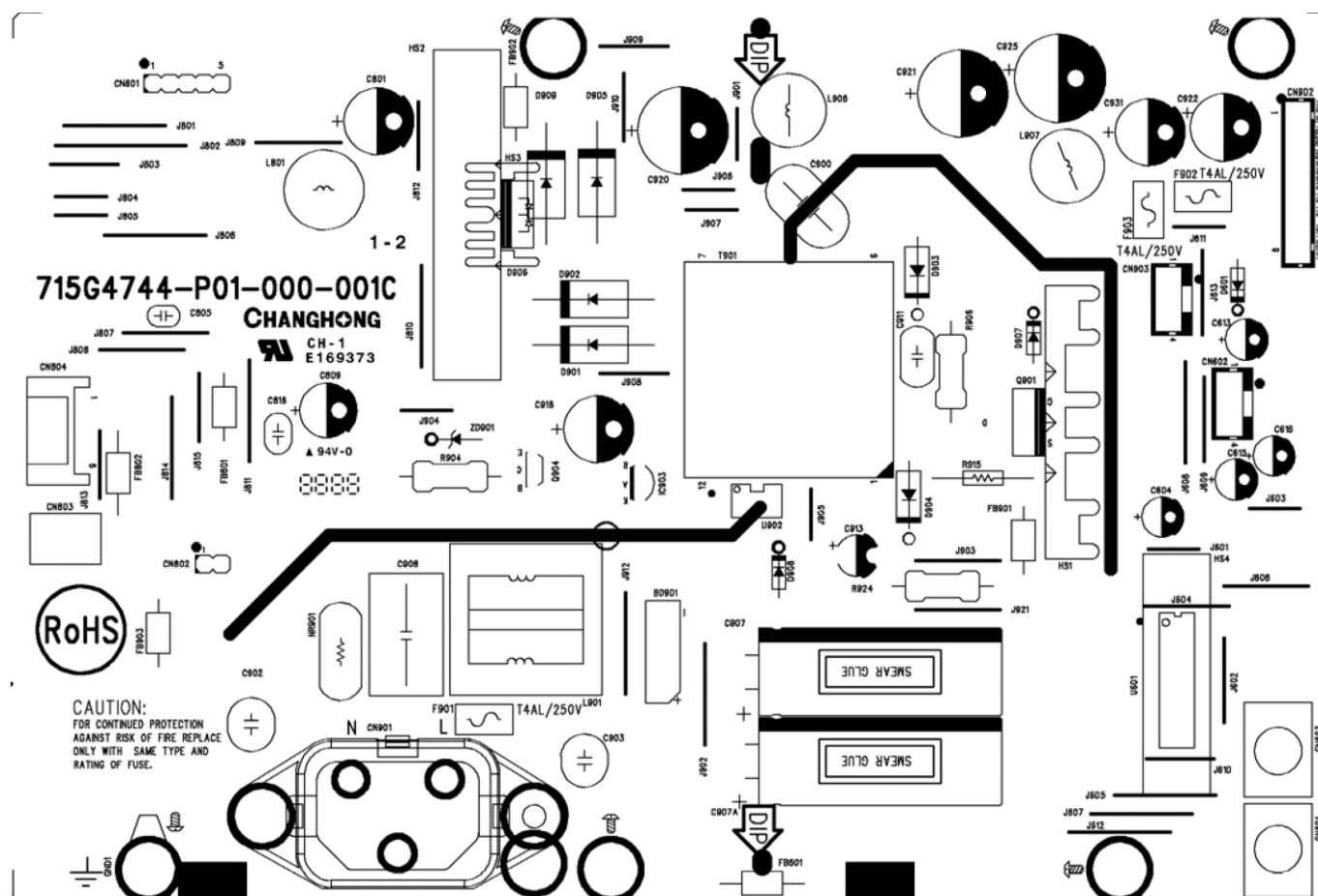
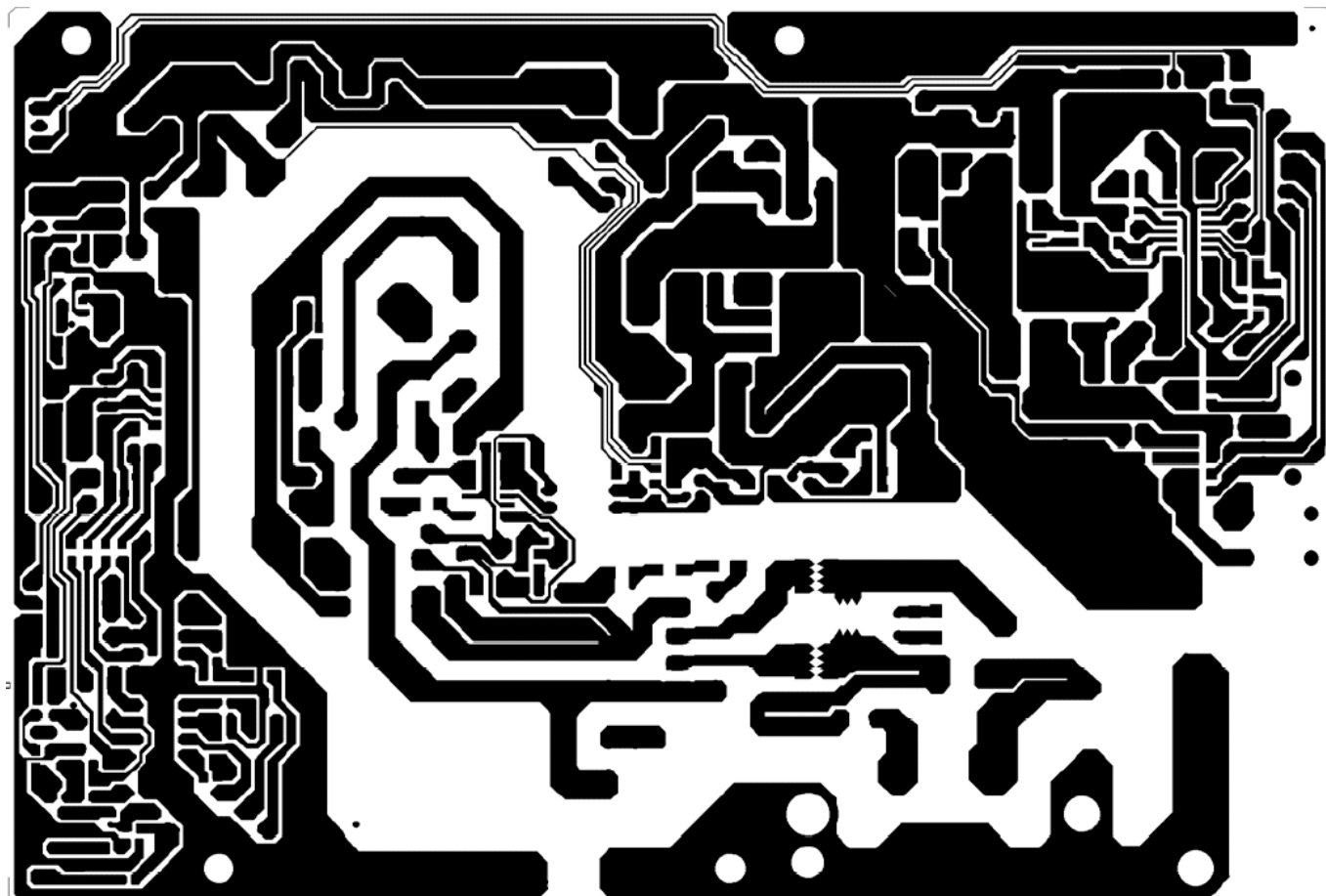
715G4641M01000004S





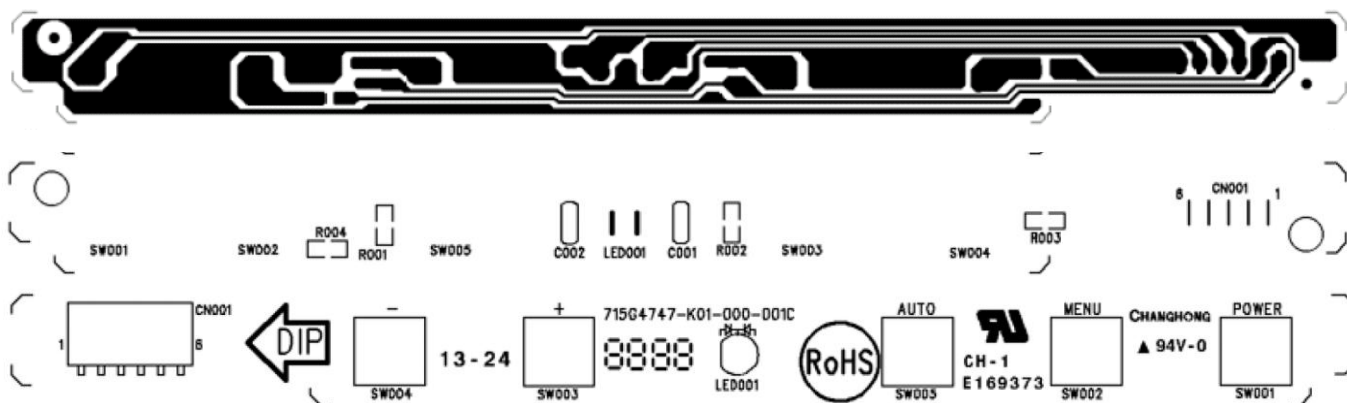
7.2 Power Board

715G4744P01000001C



7.3 Key Board

715G4747K01000001C



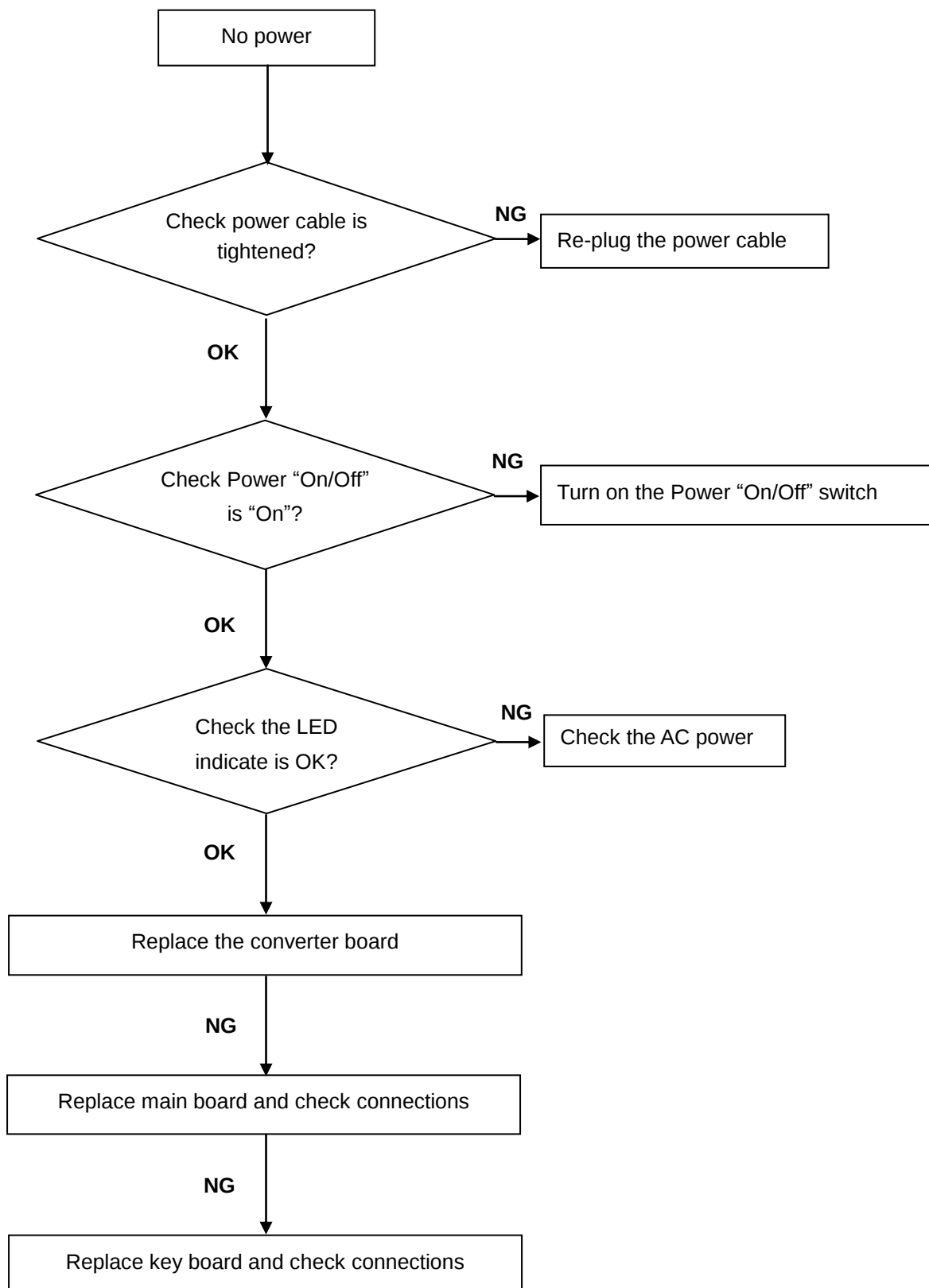
8. Maintainability

8.1 Equipments and Tools Requirement

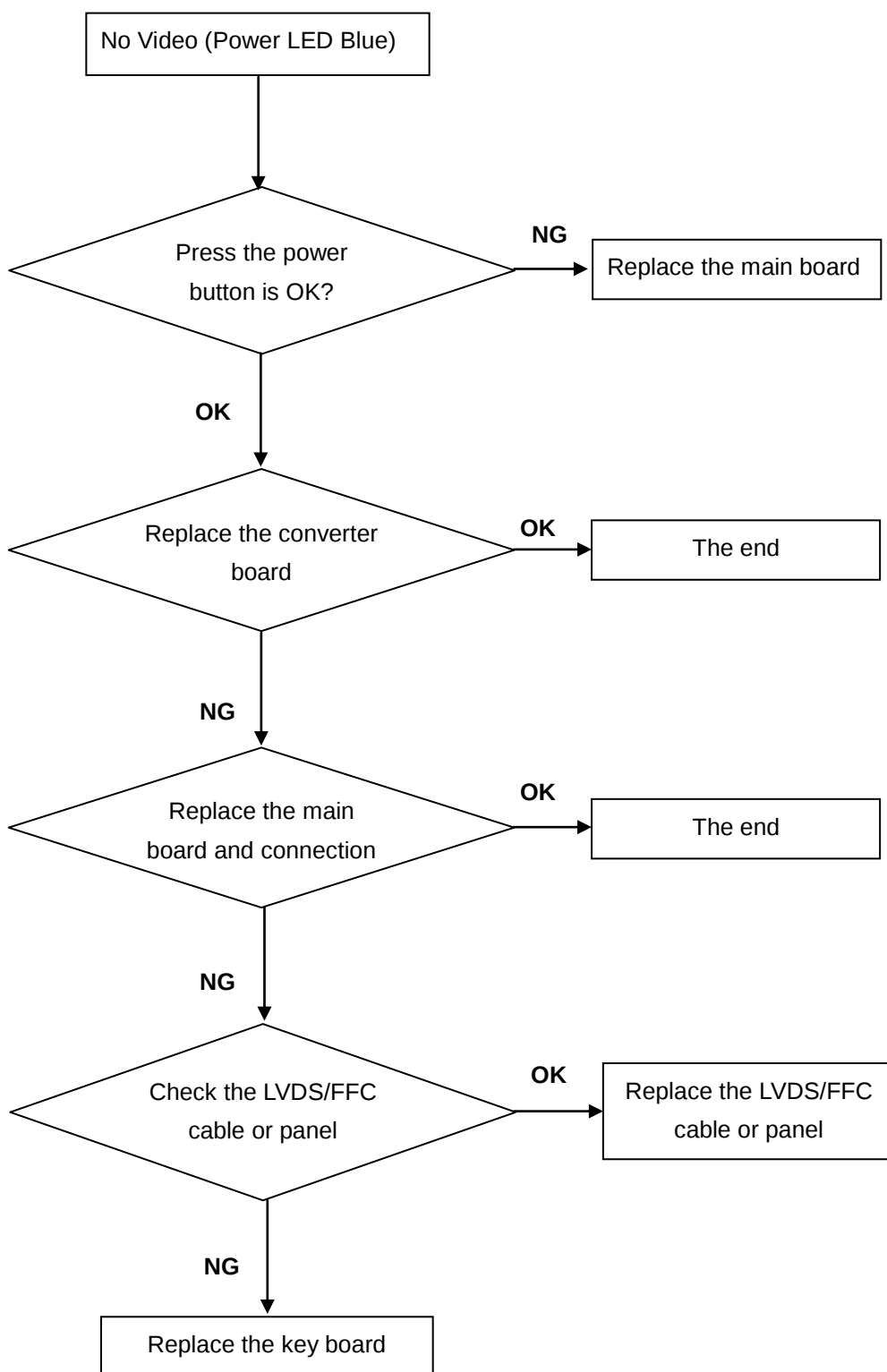
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

8.2 Trouble Shooting

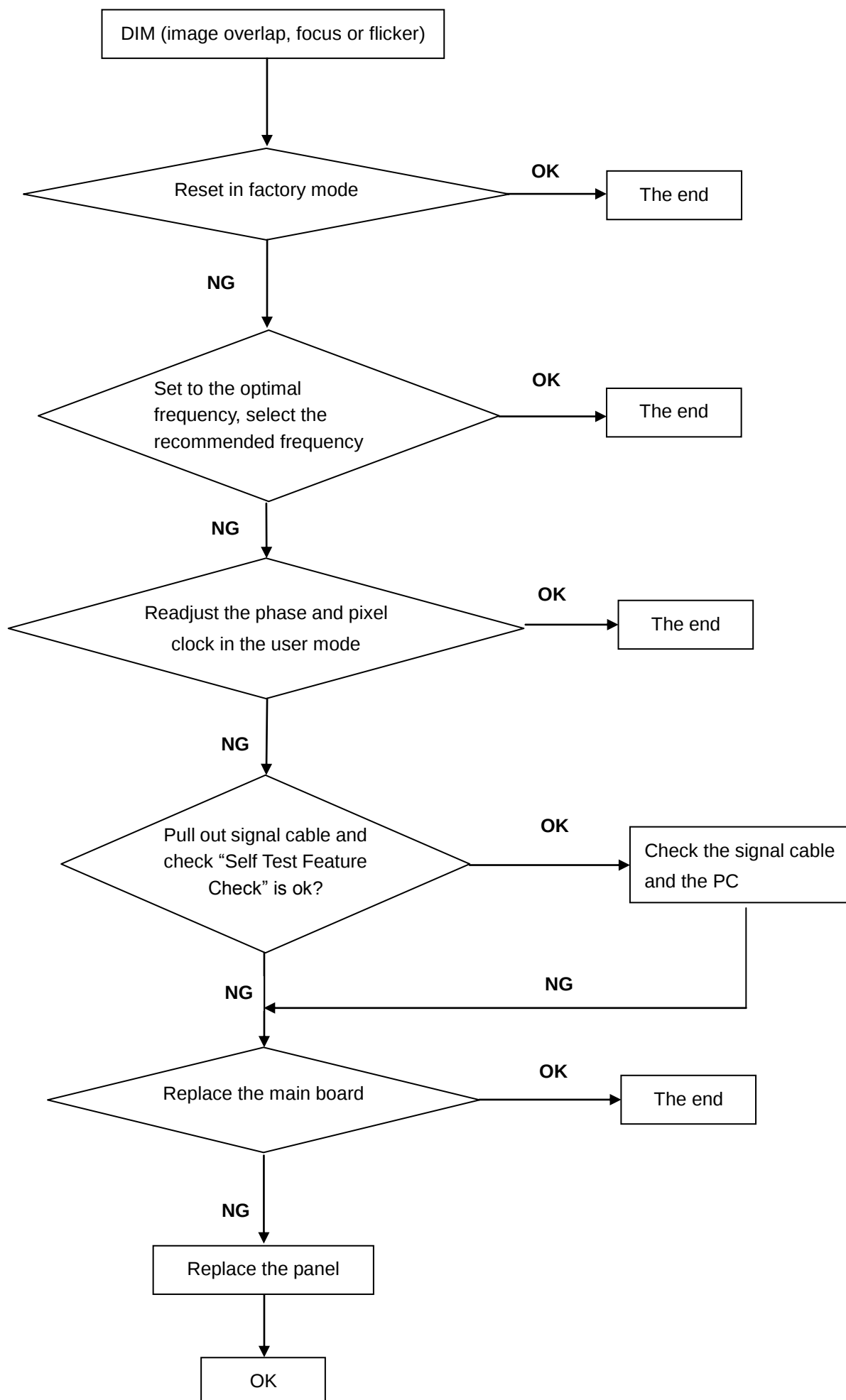
1. No Power



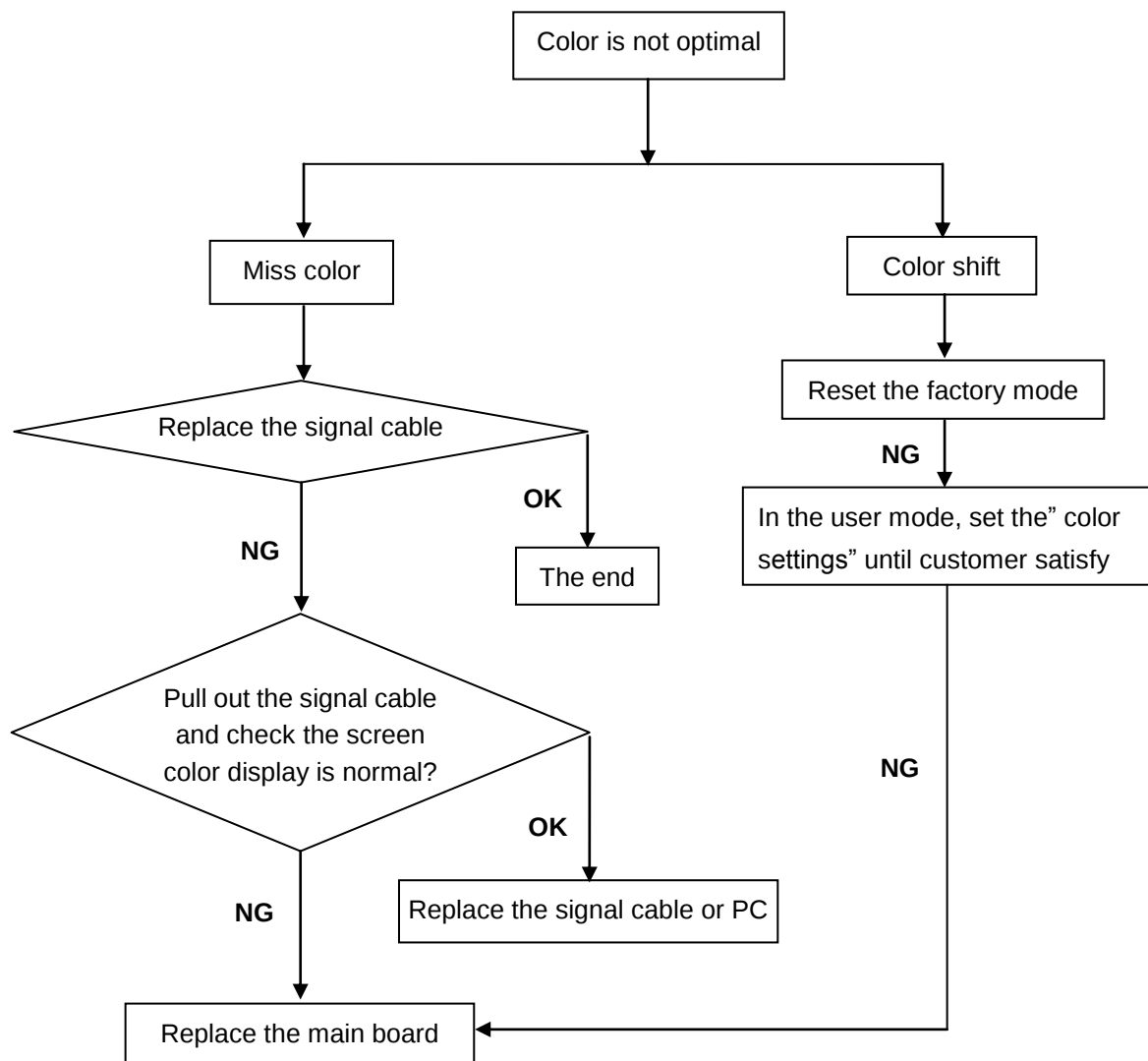
2. No Video (Power LED Blue)



3. DIM



4. Color is not optimal



9.White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

How to setting MEM channel you can reference to chroma 7120 user guide or simple use “SC” key and “NEXT” Key to modify xyY value and use “ID” key to modify the TEXT description Following is the procedure to do white-balance adjust .

1. Setting the color temp.

A. 6500K:

Warm color temp. parameter is $x=313\pm30$, $y=329\pm30$

B. 7300K

Normal color temp. parameter is $x=302\pm30$, $y=318\pm30$

C. 9300K

Cool color temp. parameter is $x=283\pm30$, $y=297\pm30$

D. sRGB

sRGB color temp. parameter is $x=313\pm30$, $y=329\pm30$

2. Enter into the factory mode:

Press the MENU button, Pull out the power cord, then plug the power cord. Then the factory OSD will be at the left top of the panel.

3. Biase adjustment:

Set the Contrast  to 50; Adjust the Brightness  to 90.

4. Gain adjustment:

A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press “MODE” button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=313\pm30$, $y=329\pm30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

B. Adjust Normal (7300K) color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 4(with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=302\pm30$, $y=318\pm30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

C. Adjust Cool (9300K) color-temperature

1. Switch the Chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=283\pm30$, $y=297\pm30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

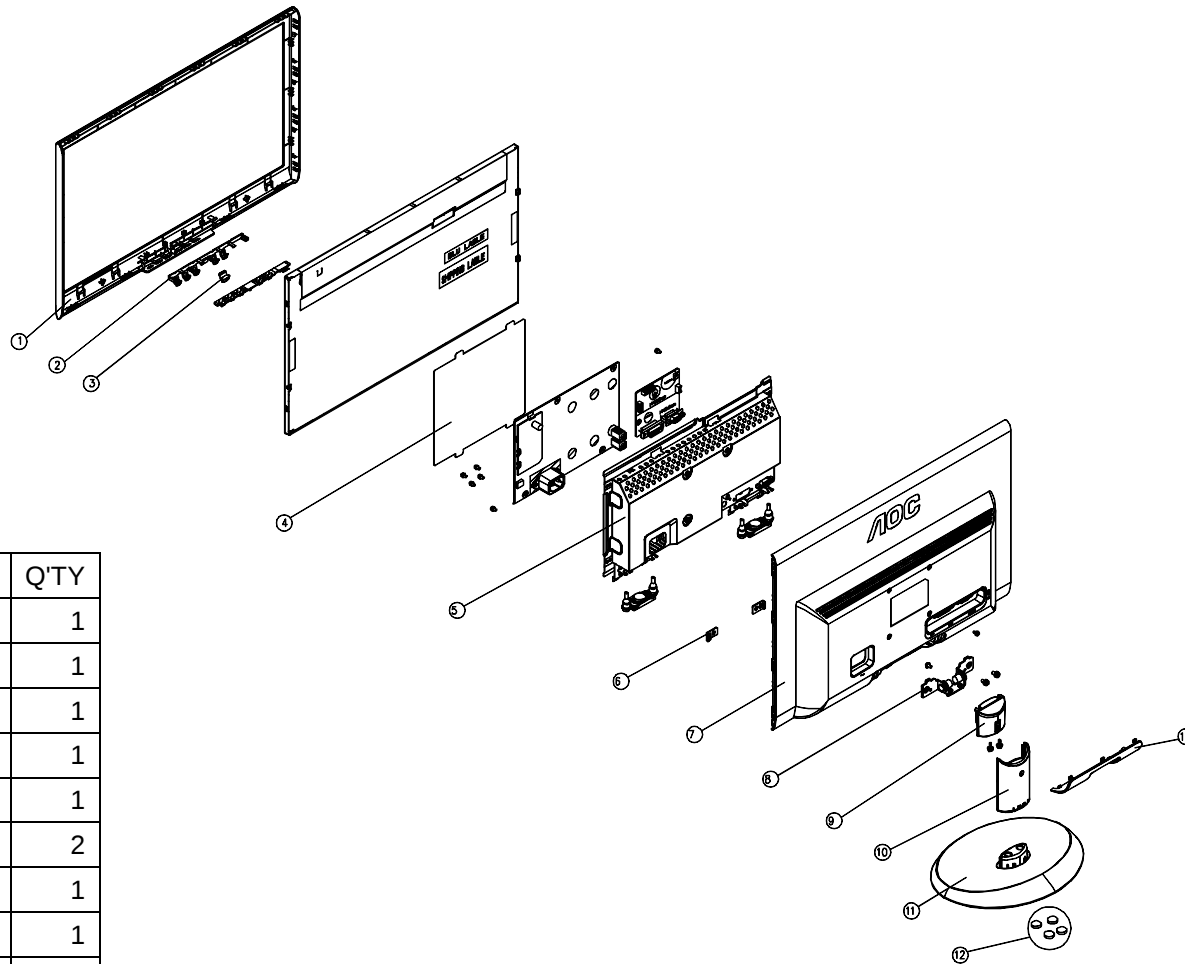
D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to RGB-Mode (with press "MODE" button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show $x=313\pm30$, $y=329\pm30$
4. Adjust the RED on factory window until chroma 7120 indicator reached the value $R=100$
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value $G=100$
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value $B=100$
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance $=100\pm2$

E. Turn the Power-button off to quit from factory mode.

10. Monitor Exploded Views

NO	PART NAME	Q'TY
1	BEZEL	1
2	FUNCTION BUTTON	1
3	POWER LENS	1
4	MYLAY	1
5	MAIN FRAME	1
6	HINGE PLATE	2
7	REAR COVER	1
8	HINGE	1
9	STAND	1
10	STAND COVER	1
11	BASE	1
12	RUBBER FOOT	4



11. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to <http://cs.tpvaoc.cn/hello1.asp> for the latest information.

TIBMRV2BDFA2NNE

Location	Part No.	Description	Remark
	040G 58162461A	EPA LABEL	
	050G 600 1 W	WHITE STRAP (1G004991)	
	052G 2191 A	PAPER TAPE	
	052G6019 1	INSULATING TAPE	
E08902	089G 715CAAE01	SIGNAL CABLE	2nd source
E08902	089G 715GAAE01	SIGNAL CABLE	2nd source
E08902	089G 715HAAE01	SIGNAL CABLE	
E08901	089G404A15N HL	AC POWER CORD 1500mm	
E08901	089G404A15N IS	AC POWER CORD 1500	2nd source
E08907	095G179J30NE34	FFC CABLE 30pin 190mm 1.0mm	
E09504	095G8014 6DE45	HARNESS 6P(CI1406)-6P(2008) 140	2nd source
E09504	095G8014 6TE45	HARNESS 6P(CI1406)--6P(2008) 140	
E09504	095G8014 6WE45	HARNESS 6P(CI1406S)-6P(2008) 140	2nd source
	0D1G1030 8120	screw	
	0M1G 930 8 47 CR3	SCREW 3x8	
	0M1G1140 8120	SCREW 4x8	
	0Q1G 140 12120	SCREW 4X12	
	0Q1G 930 10120	SCREW (T3X10)	
E750	750GBM215HGN12N000	LCD M215HGE-L23 C1(YY) NB CMI	
	A15G1587101	BKT_HINGE SGCC	
	A15G1597101803	MAIN FRAME FOR 50TH 21.5W	
	A33G1181ABJ 1L0100	FUNCTION BUTTON FOR 50TH	
	A33G1182 1 1L0100	POWER LENS FOR 50TH	
	A33G1183ABJ 1L0100	STAND TOP FOR 50TH 18.5W	
	A33G1184ABJ 1L0100	HINGE COVER FOR 50TH 18.5W	
	A34G2530ABJ 1B0100	STAND COVER	
	A34G2547ABJDAB0105	BEZEL	
	A34G2548ABJ NB0100	REAR COVER CKD	
	A34G2549ABJ 2B0130	BASE	
	AM1G1740 10125	SCREW	
	H37G0030014	HINGE 21.5	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 20N61544A	E2050SN ID LABEL-EU	
	H40G 45762413B	P/N LABEL FOR BASE	
	H44GB018103	EPS	
	H44GB018203	EPS	
	H44GB018615 6B	ARTWORK CARTON e2250Swn	
	H45G 77 6	PE PACKING	

	H45G 87 1 25	EPE COVER	
	H52G1801 16006	insulating sheet	
	H70G21C1615 6A	e2250Swm CD MANUAL	
	KEPCAHB5	KEY BOARD	
	PLPCBB381MHD1	POWER BOARD	
	Q40G 58162435A	LABEL	
	Q45G 76 28 H A	P.E. BAGx320x210x0.04	
	Q52G 1185 99	BIG CARTON TAPE FOR AOC	
	Q52G1001207 A JY	AL FOIL	
	Q52G1001211 B JY	AL FOIL	
	Q52G6019 14	TAPE	
E08907	S95G179T30NE34	FFC CABLE 30P 190mm P1.0MM	2nd source
	756GHBCB A1082	MAIN BOARD-CBPCBRVA1H1	
SMTCB-U402	100GARM1002W11	MCU ASS'Y-056G2233 11	
CN408	033G3802 6B Y L	WAFER	
CN404	033G3802 9B Y L	CONN 2.0 9P	
CN403	033G801930F CH JS	FFC CONN 1.0mm 30P R/A 34mm 6.3mm	
CN101	088G 35315FVCL	D-SUB CONN V/T 15P BLUE H=10.4	
X401	093G 2253B J	NXS14.31818AC32F-KAB10	
	709G4737 HM002	COMSUPTIVE ASS'Y	
	H40G 45762429A	LABEL	
LED001	081G 12 1F GH	LED GREEN/YELLOW GHZYG603D2-5B	
CN001	095G820H 6TE10	HARNESS 6P(SANW)-6P(2008) 120	
CN001	095G820H 6WE10	HARNESS 6P(SANW)-6P(2008) 120	2nd source
	709G4747 HM001	COMSUPTIVE ASS'Y	
GND1	009G6005 1	GND TERMINAL	
U902	056G 139 3A	PC123Y22FZOF SHARP	
NR901	061G 5810T	NTCR 8R 20% 3.1W SCK13084MMY501	
C908	063G107K474 6S	0.47UF +-10%	
C809	067G 415330 9K	EC 33UF 20% 100V ED 8*12	
C907	067G 42Z68015K	EC 68UF 20% 450V 12.5*50 2000 hr	
L901	073G 174 65 H2	LINE FILTER 30mH MIN	
L906	073G 253191 H	IND CHOKE 1.1uH DADON	
L801	073G 253214 DN	CHOKE COIL 47UH 10% LZ.CC013.G01 2.5A	
T901	080GL22T 3 N3	X'FMR 490UH 7% 4UH YUVA-1656	
CN901	087G 501 48 S	AC SOCKET 3PIN + 3 Hole	
D902	093G 60335	DIODE SR515 5A/150V DO-201AD	
D901	093G 60335	DIODE SR515 5A/150V DO-201AD	
CN902	095G 825 9T518	HARNESS 9P-9P 120MM	
CN902	095G 825 9W518	HARNESS 9P-9P 120MM	2nd source
	0Q1G 340 8140	SCREW 4.0x8.0	
CN804	311GW200A06ABX	WAFER 2.0mm 6P	
	705GHA57006	Q901 ASS'Y	
	705GHA93006	D906 ASS'Y	
	709G4744 HM001	CONSUMPTIVE ASS'Y	

	H40G 45762429A	LABEL	
BD901	093G 50460515	BRIDGE KBP308G-C 3A 800V KBP	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
C423	067G305M1013PB	EC 100uF M 16V 6.3*7mm JH CD70H	
C421	067G305M1013PB	EC 100uF M 16V 6.3*7mm JH CD70H	
C427	067G305M1013PB	EC 100uF M 16V 6.3*7mm JH CD70H	
C426	067G305M1013PB	EC 100uF M 16V 6.3*7mm JH CD70H	
U401	056G 562432	SCALER RTD2280LW-CG LQFP-64	
U406	056G 563149	IC G903T63UF 0.6A/3.3V SOT-223	
U102	056G 662 48	ESD PROTECT AZC399-04S.R7G SOT23-6L	
U103	056G 662 48	ESD PROTECT AZC399-04S.R7G SOT23-6L	
U405	056G1133531	EEPROM FM24C02A-SO-T-G 2K SOP-8	
U402	056G2233 11	IC Pm25LD020C-SCE SIOC-8(150mil) 2M	
U402	056G2233501	FLASH MX25L2026DM1I-12G 2Mb SOP-8	2nd source
Q402	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q403	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q404	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q406	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q407	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q409	057G 417527	SMALLTRAN MMBT2907A -0.6 -60V SOT-23	
Q410	057G 417527	SMALLTRAN MMBT2907A -0.6 -60V SOT-23	
Q405	057G 763940	MOSFET AO3401A SOT-23	
R481	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R402	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R401	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R420	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R413	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R412	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R411	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R405	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R117	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R115	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R114	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R111	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R108	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R104	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R103	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R102	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R442	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R109	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R487	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R441	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R440	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R439	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R437	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	

R435	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R433	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R414	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R410	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R408	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R118	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R436	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R492	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R491	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R490	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R489	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R469	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R466	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R106	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R105	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R474	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R403	061G04023900FT	RST CHIP 390R 1/16W 1%	
R421	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R427	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R428	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R476	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R475	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R472	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R473	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R485	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R107	061G0402750 JT	RST 0402 75R 5% 1/16W	
R112	061G0402750 JT	RST 0402 75R 5% 1/16W	
R116	061G0402750 JT	RST 0402 75R 5% 1/16W	
R101	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R468	061G0603331 JT	RST 0603 330R 5% 1/10W	
R471	061G0603471 JT	RST CHIPR 470OHM +/-5% 1/10W TZAI YUAN	
R479	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
R434	061G1206301 JT	RST CHIPR 300 OHM +/-5% 1/4W TZAI YUAN	
R477	061G1206301 JT	RST CHIPR 300 OHM +/-5% 1/4W TZAI YUAN	
C436	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C432	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C428	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C422	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C420	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C419	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C417	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C416	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C415	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C414	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C413	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	

C407	065G040210412K	A	CAP CHIP 0402 100nF K 16V X7R	
C406	065G040210412K	A	CAP CHIP 0402 100nF K 16V X7R	
C403	065G040210412K	A	CAP CHIP 0402 100nF K 16V X7R	
C401	065G040210412K	A	CAP CHIP 0402 100nF K 16V X7R	
C404	065G0402105A5K	A	CAP CHIP 0402 1UF K 10V X5R	
C411	065G040220031J	Y	CAP 0402 20PF 5% 50V NP0	
C412	065G040220031J	Y	CAP 0402 20PF 5% 50V NP0	
C103	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C102	065G040222031J	A	CAP 0402 22PF J 50V NPO	
C106	065G040222322K	T	CAP MLCC 0402 22nF K 25V X7R	
C408	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R	
C434	065G040222415K	T	CAP CHIP 0402 220nF K 16V X5R	
C113	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C110	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C109	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C107	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C105	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C101	065G040247312K	A	CAP 0402 47NF 10% 16V X7R	
C104	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0	
C108	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0	
C111	065G040250931C	Y	CAP 0402 5PF 0.25pF 50V NP0	
FB402	071G 56K121	M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB401	071G 59B300	M	CHIP BEAD 0603 30ohm 25% 1000mA	
FB101	071G 59K190	M	CHIP BEAD 0603 19R/500mA	
FB102	071G 59K190	M	CHIP BEAD 0603 19R/500mA	
FB103	071G 59K190	M	CHIP BEAD 0603 19R/500mA	
D403	093G 64 42	L	DIODE LBAV70LT1G SOT-23 LRC	
ZD103	093G 39GA01	T	RLZ5.6B	
	709G4737 HS002		COMSUPTIVE ASS'Y	
E715	715G4737M02000004C		MAIN BOARD PCB	2nd source
E715	715G4737M02000004I		MAIN BOARD PCB	
	H52G1701 1		MESH PRINTTING_PAPER	
R002	061G0603000 FF		RST CHIPR MAX0R01 1/10W FENGHUA	
R004	061G06031001FF		RST CHIPR 1 KOHM +-1% 1/10W FENGHUA	
R003	061G06032001FF		RST CHIP 2KOHM 1% 1/10W FENGHUA	
R001	061G06032001FF		RST CHIP 2KOHM 1% 1/10W FENGHUA	
Q901	057G 667941		MOSFET P0765ATF 7 650 TO-220F	
HS1	090G6064 1		HEAT SINK	
	0M1G 930 8120		SCREW 3x8	
HS3	090G6084 1	GP	HEAT SINK	
D906	093G 60507		SCHOTTKY SRF1060 C0 10A 60V ITO-220AB	
	0M1G 930 8120		SCREW 3x8	
	055G 23524		WELDING FLUX WITHOUT PB	
	Q51G 6 4509		GLUE_RTV	
	Q55G 100625		TIN STICK_LOW ARGENTUM	

U901	056G 379529	AC/DC CONVERTER IC LD7576AGR SOP-7	
U801	056G 700 11	LED DRIVER OZ9998BGN-A1-0-TR SOP-16	
Q801	057G 763 92	FET P8008HV 4A/80V SOP-8	
RJ801	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R804	061G0805100 JF	RST CHIPR 10 OHM +-5% 1/8W FENGHUA	
R916	061G08051002FT	RST CHIP 10K 1/8W 1%	
R806	061G0805102 JF	RST CHIPR 1K OHM +-5% 1/8W FENGHUA	
R907	061G0805102 JT	RST CHIPR 1K OHM +- 5% 1/8W TZAI YUAN	
R801	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R818	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R928	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R918	061G0805103 JT	RST 0805 10K 5% 1/8W	
R805	061G0805104 JT	RST CHIPR 100KOHM +- 5% 1/8W TZAI YUAN	
R810	061G08051052FT	RST CHIP 10.5K OHM 1/8W 1% TZAI YUAN	
R808	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R807	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R815	061G0805164 JF	RST 0805 160K 5% 1/8W	
R920	061G0805202 JF	RST CHIPR 2KOHM +-5% 1/8W FENGHUA	
R919	061G0805221 JF	RST CHIPR 220 OHM +-5% 1/8W FENGHUA	
R803	061G0805304 JF	RST CHIPR 300KOHM +-5% 1/8W FENGHUA	
R802	061G0805304 JF	RST CHIPR 300KOHM +-5% 1/8W FENGHUA	
R809	061G08053303FT	RST CHIP 330K 1% 1/8W	
R905	061G0805471 JT	RST CHIPR 470OHM +-5% 1/8W TZAI YUAN	
R816	061G08057501FT	RST CHIP R 7K5 1/8W +/-1%	
R811	061G08058201FT	RST CHIP 8K2 1/8W 1%	
R925	061G08059101FF	RST CHIPR 9.1KOHM +-1% 1/8W FENGHUA	
F801	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
R917	061G1206100 JT	RST CHIPR 10 OHM +-5% 1/4W TZAI YUAN	
R814	061G12061009FF	RST CHIP 10 OHM 1% 1/4W FENGHUA	
R903	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R909	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R910	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R930	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R929	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R912	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R911	061G1206103 JF	RST CHIPR 10KOHM +-5% 1/4W FENGHUA	
R908	061G1206103 JT	RST CHIPR 10KOHM +-5% 1/4W TZAI YUAN	
R913	061G1206109 JT	RST CHIPR 1 OHM +-5% 1/4W TZAI YUAN	
R813	061G12062007FT	RST CHIPR 0.2 OHM +-1% 1/4W	
R812	061G12062007FT	RST CHIPR 0.2 OHM +-1% 1/4W	
R923	061G1206221 JT	RST CHIPR 220 OHM +-5% 1/4W TZAI YUAN	
R900	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R901	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R902	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R817	061G1206681 JT	RST CHIPR 680 OHM +-5% 1/4W TZAI YUAN	

C813	065G080510131J	F	CAP CHIP 0805 100PF J 50V NPO	
C812	065G080510131J	F	CAP CHIP 0805 100PF J 50V NPO	
C923	065G080510232K	F	CAP 0805 1000PF 10% 50V X7R	
C803	065G080510232K	Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C914	065G080510232K	Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C906	065G080510232K	Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C815	065G080510232K	Y	CAP CHIP 0805 1N 50V X7R +/-10%	
C802	065G080510332K	Y	CAP CHIP 0805 10N 50V X7R +/-10%	
C915	065G080510332K	Y	CAP CHIP 0805 10N 50V X7R +/-10%	
C814	065G080510432K	F	CAP CHIP 0805 0.1UF K 50V X7R	
C924	065G080510432K	F	CAP CHIP 0805 0.1UF K 50V X7R	
C912	065G080510432K	Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C926	065G080510432K	Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C807	065G080522432K	Y	CAP CHIP 0805 220N 50V X7R +/-10%	
C806	065G080522432K	Y	CAP CHIP 0805 220N 50V X7R +/-10%	
C927	065G080547332K	F	CAP CHIP 0805 47NF K 50V X7R	
C811	065G080547432K	T	CAP CHIP 0805 0.47UF K 50V X7R	
C810	065G080547432K	T	CAP CHIP 0805 0.47UF K 50V X7R	
C804	065G080547432K	T	CAP CHIP 0805 0.47UF K 50V X7R	
C808	065G120610171J	Y	CAP 1206 100PF 5% 500V NPO	
C916	065G120622272K	Y	CER 1206 2N2 500V X7R 10%	
C917	065G120622272K	Y	CER 1206 2N2 500V X7R 10%	
C928	065G120622272K	Y	CER 1206 2N2 500V X7R 10%	
C929	065G120622272K	Y	CER 1206 2N2 500V X7R 10%	
D801	093G 60S907	T	SCHOTTKY B3100B 3A 100V SMB	
	709G4744 HS001		CONSUMPTIVE ASS'Y	
SW005	077G603S AI CJ		TACT SWITCH AI 2PIN SEALED	
SW004	077G603S AI CJ		TACT SWITCH AI 2PIN SEALED	
SW003	077G603S AI CJ		TACT SWITCH AI 2PIN SEALED	
SW002	077G603S AI CJ		TACT SWITCH AI 2PIN SEALED	
SW001	077G603S AI CJ		TACT SWITCH AI 2PIN SEALED	
E715	715G4747K02000001C		KEY BOARD PCB	
C805	065G250K1052HT		CAP CER 1UF 10% 25V X7R	
C816	065G517K102 2T6921		CAP CER 1000PF K 500V Y5P	
C911	065G 2K152 2T6921		CAP CER 1500pF K 2KV Y5P	
C913	067G215Y4707KT		EC 47uF 20% 50V 6.3*11mm EG	
D903	093G 6026T52T		CTIFIER DIODE FR107	
F901	084G 56 4 B		FUSE 4A 250V	
F902	084G 56 4 B		FUSE 4A 250V	
FB801	071G 55 29		FERRITE BEAD	
FB802	071G 55 29		FERRITE BEAD	
FB901	071G 55 29		FERRITE BEAD	
FB902	071G 55 29		FERRITE BEAD	
FB903	071G 55 29		FERRITE BEAD	
R924	061G152M47852T	SY	RST MOFR 0.47 OHM +/-5% 2WS FUTABA	

Q904	057G 530503 T	2SD1207T	
J801	095G 90 23	JUMPER WIRE	
J802	095G 90 23	JUMPER WIRE	
J803	095G 90 23	JUMPER WIRE	
J804	095G 90 23	JUMPER WIRE	
J805	095G 90 23	JUMPER WIRE	
J806	095G 90 23	JUMPER WIRE	
J807	095G 90 23	JUMPER WIRE	
J808	095G 90 23	JUMPER WIRE	
J809	095G 90 23	JUMPER WIRE	
J810	095G 90 23	JUMPER WIRE	
J811	095G 90 23	JUMPER WIRE	
J812	095G 90 23	JUMPER WIRE	
J813	095G 90 23	JUMPER WIRE	
J814	095G 90 23	JUMPER WIRE	
J815	095G 90 23	JUMPER WIRE	
J901	095G 90 23	JUMPER WIRE	
J902	095G 90 23	JUMPER WIRE	
J903	095G 90 23	JUMPER WIRE	
J904	095G 90 23	JUMPER WIRE	
J905	095G 90 23	JUMPER WIRE	
J906	095G 90 23	JUMPER WIRE	
J907	095G 90 23	JUMPER WIRE	
J909	095G 90 23	JUMPER WIRE	
J910	095G 90 23	JUMPER WIRE	
J921	095G 90 23	JUMPER WIRE	
CN901	006G 31500	EYELET	
IC903	056G 158 10 T	DC/DC AS431AZTR-E1 150MA 40V TO-92	
R915	061G 17222052T TZ	RST CFR 22R 5% 1/4W	
R906	061G152M10452T SY	RST MOFR 100KOHM +-5% 2WS FUTABA	
R904	061G152M25152T SY	RST MOF 250R 5% 2W	
C903	065G305M1023WR	CAP Y2 1NF 20% 250V Y5U	
C902	065G305M1023WR	CAP Y2 1NF 20% 250V Y5U	
C900	065G306M2223PR	CAP Y1 2200PF 20% 250V Y5U	
C920	067G 2046812KT	CS CAP 680uF 10V 8*11 mm	
C801	067G215D3314KT	EC 330UF 20% 25V 10*12 ED	
C918	067G215D6814KT	EC 680UF 20% 25V 10*20 ED	
C922	067G215S4713KT	EC 470uF 20% 16V 10*13 ED	
ZD901	093G 39A6852T	ZENER DIODES MTZJ22B DO-34	
D907	093G 6452452T	SWITCHING 1N4148-B4006 0.2A 100V DO-35	
J908	095G 90 23	JUMPER WIRE	
	709G4744 HA001	CONSUMPTIVE ASS'Y	
	715G4744P01000001C	POWER BOARD PCB	
D904	093G 6026T52T	CTIFIER DIODE FR107	