Service Manual

Model Name:iH171D

Model No:HSG1033

17” Color TFT LCD Display

Revision History

Revision	SM Editing Date	ECR Number	Description of Changes	TPV Model
A00	Aug.-10-07		First Version Release	T77HM6MKWEHZN
A01	Sep.-18-07		Add new BOM	T77HM6MKWEHZNC
A02	May.-06-08		Add new BOM	T77HM6MKWEHZNN

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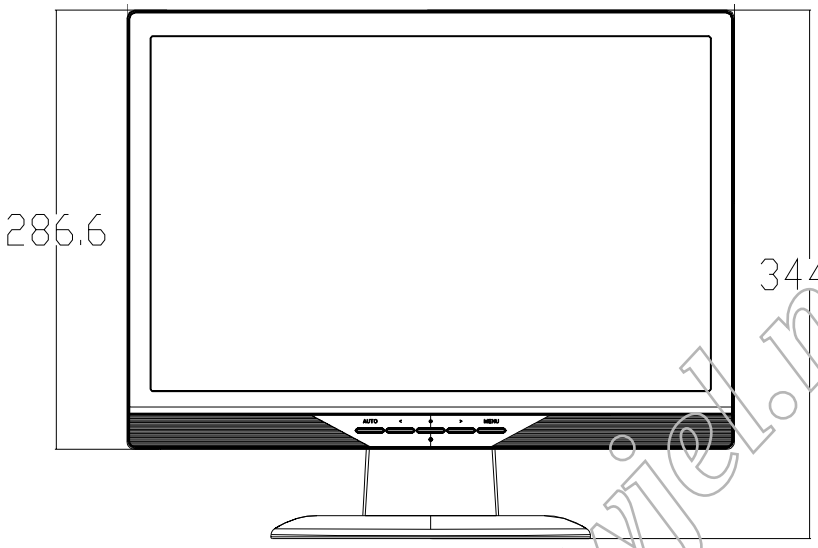
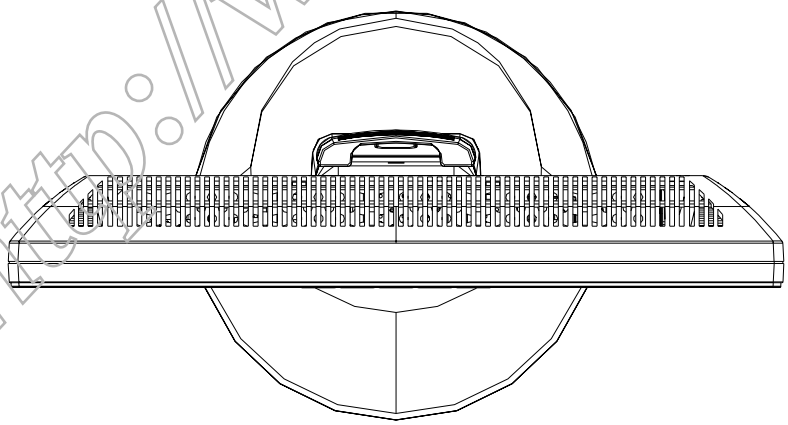
1. Dimensions

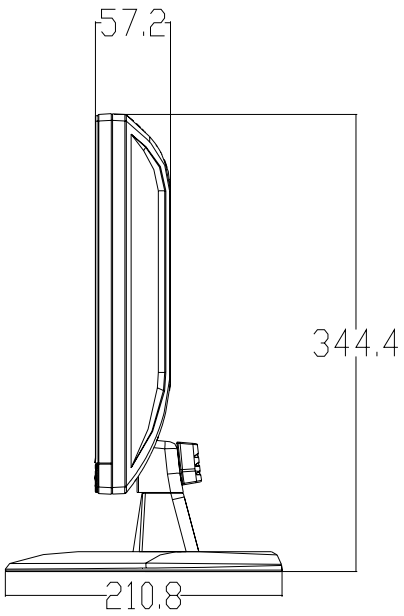
1.1 Front View



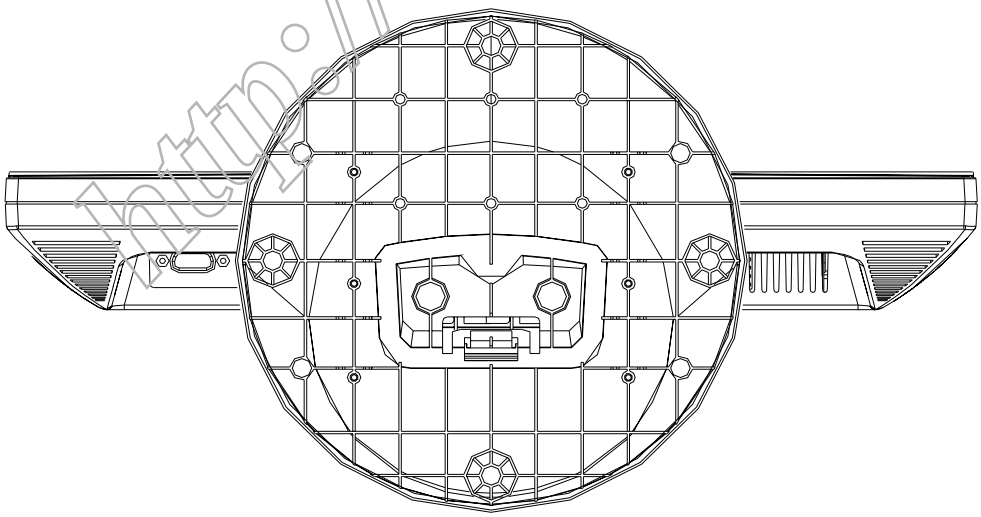
1.2 Top View



1.3 Rear View



1.4 Bottom View



2. Precautions and Safety Notices

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.)

3. Monitor Specifications

LCD Panel	Driving system	TFT Color LCD
	Size	17.0"
	Pixel pitch	0.255mm(H) x 0.255mm(V)
Video	H-Frequency	24KHz – 80KHz
	V-Frequency	55 – 75Hz
Display Colors		16.2M Colors
Max. Resolution		1440 x 900 @75Hz
Plug & Play		VESA DDC2B™
EPA ENERGY STAR®	ON Mode	≤36W
	Power Saving Mode	≤2W
	OFF Mode	≤1W
Input Terminal		D-Sub DVI-D **(Dual-input Model)**
Maximum Screen Size		Hor. :367.2mm Ver. :229.5mm
Power Source		100~240VAC,50±3Hz,60±3Hz
Environmental Considerations		Operating Temp: 0° to 50°C Storage Temp: -20° to 60°C Operating Humidity: 10% to 80%
Dimensions		401(W)×345(H)×211(D) mm 15.8"(W)×13.6"(H)×8.3"(D)
Weight (NW)		3.3kg (7.26 lb)

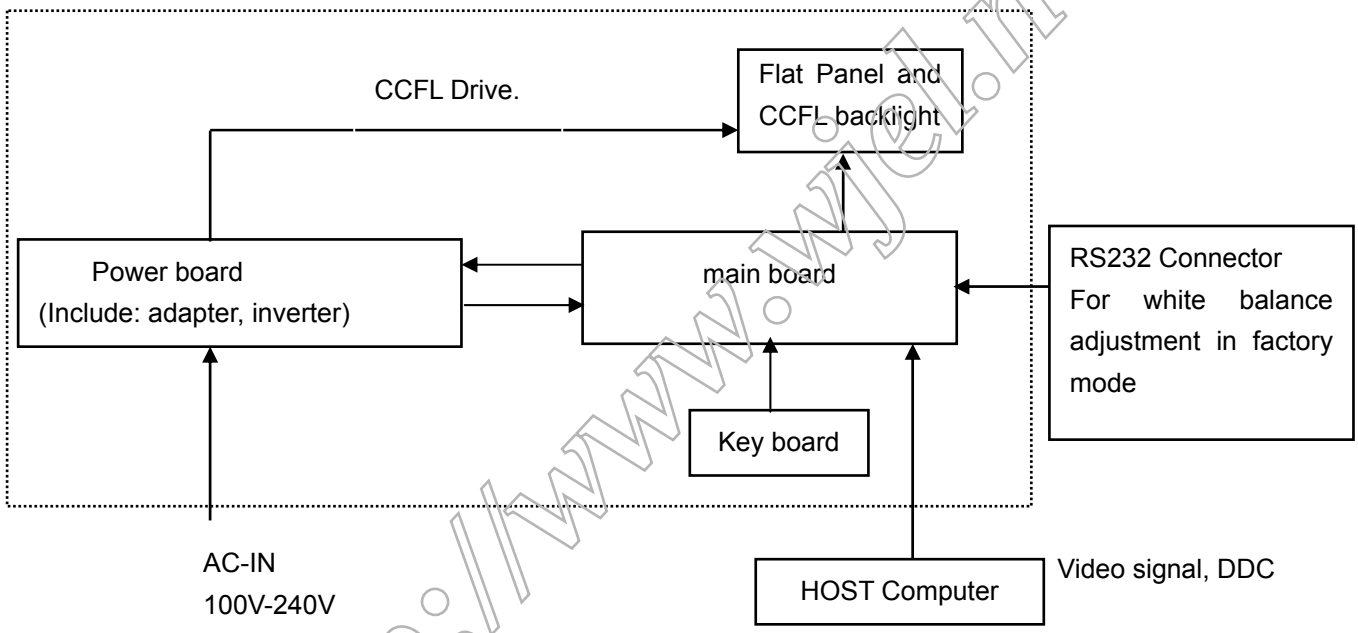
4. LCD Monitor Description

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

Monitor Block Diagram



5. Operating Instructions

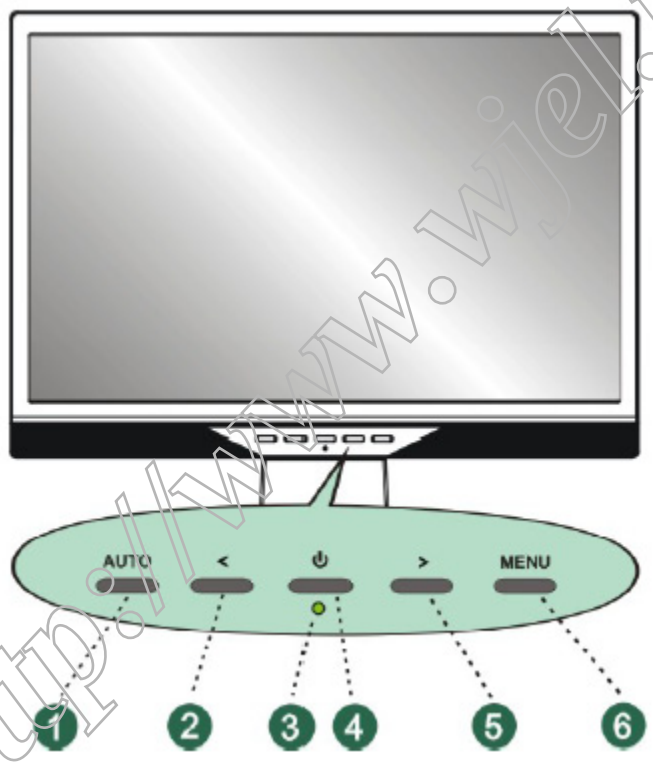
5.1 General Instructions

Press the power button to turn the monitor on or off. The control buttons are located in the front of the monitor.

By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor, the power indicator will light up.

5.2 Control Buttons



1.	Auto Adjustment	2.	Brightness <
3.	Power Indicator	4.	Power Button
5.	Brightness >	6.	Menu / Enter

FRONT PANEL CONTROL

• **Power Button:**

Press this button to switch ON/OFF of monitor's power.

• **Power Indicator:**

Green — Power On mode.

Orange — Power Saving mode.

• **MENU / ENTER:**

Activates the OSD menu or confirms adjustments to settings.

• **Adjust < >:**

Navigate through adjustment icons when OSD is ON or adjust a function when function is activated.

• **AUTO Button: (for D-sub only)**

When OSD menu is in off status, press and hold this button for more than two seconds to activate the Auto Adjustment function.

(The Auto Adjustment function is used to optimized the H-Position, V-Position, Clock and Phase.)

NOTES:

• Do not install the monitor in a location near heat sources such as radiators or air dusts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.

• Save the original shipping box and packing materials, as they will come in handy if you ever have to ship your monitor.

• For maximum protection, repackage your monitor as it was originally packed at the factory.

• To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.

• Function Key Lock:

Press the 「**<**」**,** 「**>**」 and the 「**Menu**」 buttons simultaneously to enable the Function Key Lock. When the Function Key Lock is enabled, only the Power button is active. Press the 「**<,** 「**>**」 and the 「**Menu**」buttons simultaneously again to unlock the function keys.

5.3 Adjusting the Picture

Main Menu

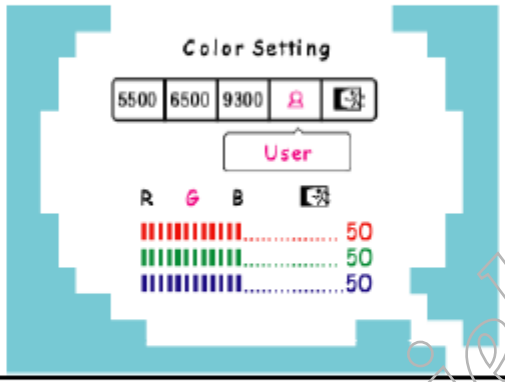
FUNCTION	DESCRIPTION
Brightness	Select the「Brightness」option on the「Main Menu」. Enter the option by pressing the 「**Menu**」 button again, and adjust the level.
Contrast	Select the「Contrast」option on the「Main Menu」. Enter the option by pressing the 「**Menu**」 button again, and adjust the level.
Image Setting	Select the「Image Setting」on the「Main Menu」, and then enter the option.
Color Setting	Select the「Color Setting」option on the 「Main Menu」, and then enter the option.
OSD Setting	Select the「OSD Setting」option on the 「Main Menu」, and then enter the option.
Other Setting	Select the「Other Setting」option on the 「Main Menu」, and then enter the option.
Input Setting	Select the「Input Setting」option to change between the analog (D-Sub) or Digital (DVI) source. Enter the option and select Analog or Digital.
Exit	Exit the OSD menu function.

Image Setting

FUNCTION	DESCRIPTION
H-position	Select the 「H-position」option to shift the screen image to the left or right. Enter the option and adjust the level.
V-position	Select the 「V-position」option to shift the screen image up or down. Enter the option and adjust the level.

Clock Adjustment	Select the 「Clock Adjustment」 option to reduce the vertical flicker of characters on the screen. Enter the option and adjust the level.
Phase Adjustment	Select the「Phase Adjustment」option to reduce the horizontal flicker of characters on the screen. Enter the option and adjust the level.
Exit	Exit the OSD menu function.

Color Setting

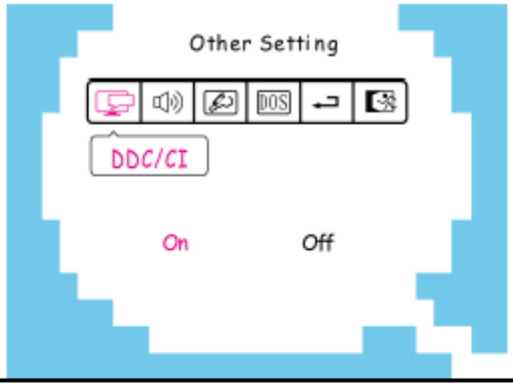


FUNCTION	DESCRIPTION
5500K/6500K/ 9300K	Move the cursor to one of the preset options and select it.
User	Move the cursor to the User option and select it 1. To adjust the red, enter the 「R」 option and adjust the level. 2. To adjust the green, enter the 「G」 option and adjust the level. 3. To adjust the blue, enter the 「B」 option and adjust the level.
Exit	Exit the OSD menu function.

OSD Setting

FUNCTION	DESCRIPTION
OSD H-Position	Select the 「OSD H-Position」option to adjust the horizontal position of the OSD. Enter the option and adjust the level.
OSD V-position	Select the 「OSD V-Position」option to adjust the vertical position of the OSD. Enter the option and adjust the level.
OSD Time-out	Select the 「OSD Time-out」option to set the OSD time out from 10 to 120 seconds. Enter the option and adjust the level.
OSD Transparency	Select the「OSD Transparency」option to adjust the transparency of the OSD. Enter the option and adjust the level.
OSD Color	Select the「OSD Color」setting option to adjust the color of the OSD. Enter the option and adjust the level.
Language	Select the 「Language」option to change the language of the OSD. Enter the option and select a language. (Reference only, the OSD Language is depended on selected model)
Exit	Exit the OSD menu function.

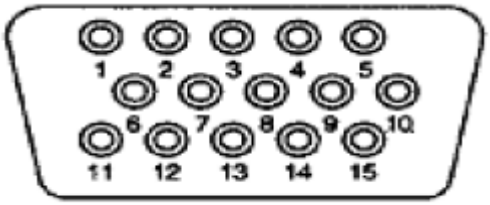
Other Setting



FUNCTION	DESCRIPTION
DDC/CI	Select the「DDC/CI」option to switch the function On or Off. **(dual input mode optional)**
Volume	Select the 「Volume」option to change the volume level. Enter the option and adjust the level.
Sharpness	Select the「Sharpness」option to adjust the sharpness of the display. Set the value from 0 to 6.
DOS mode	Select the「DOS mode」option to set the monitor for use with PC. Enter the option and select 720 × 400 or 640 × 400.
Factory Preset	Select the「Factory Preset」option to reset to the monitor's default setting. This will erase the current settings. Enter the option and select On or Off.
Exit	Exit the OSD menu function.

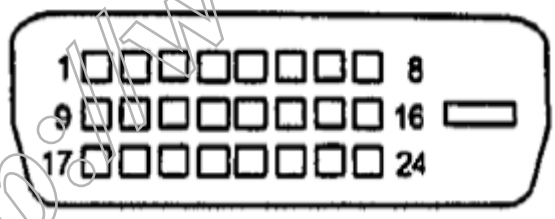
6. Input/output Specification

6.1 Input Signal Connector



D-SUB

Pin	Input signal	Pin	Input signal	Pin	Input signal
1	Red video	6	Red video ground	11	
2	Green video/Sync on green	7	Green video ground	12	Data line (SDA)
3	Blue video	8	Blue video ground	13	H-Sync
4		9	+5V	14	V-Sync
5	Ground	10	Ground	15	Clock line (SCL)



Pin	Input signal	Pin	Input signal	Pin	Input signal
1	T.M.D.S Data 2-	9	T.M.D.S Data 1-	17	T.M.D.S Data 0-
2	T.M.D.S Data 2+	10	T.M.D.S Data 1+	18	T.M.D.S Data 0+
3	T.M.D.S Data 2 Ground	11	T.M.D.S Data 1 Ground	19	T.M.D.S Data 0 Ground
4		12		20	
5		13		21	
6	Clock line (SCL)*	14	+5V	22	T.M.D.S Clock Ground
7	Data line (SDA)*	15	Ground	23	T.M.D.S Clock+
8		16	Hot Plug Detect	24	T.M.D.S Clock-

6.2 Factory Preset Display Modes

MODE	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)
1	640×350 @70Hz	31.469	70.087
2	640×400 @56Hz	24.827	56.424
3	640×400 @70Hz	31.469	70.090
4	640×480 @60Hz	31.469	59.940
5	640×480 @67Hz	35.000	66.667
6	640×480 @72Hz	37.861	72.809
7	640×480 @75Hz	37.500	75.000
8	720×400 @70Hz	31.469	70.087
9	800×600 @56Hz	35.156	56.250
10	800×600 @60Hz	37.879	60.317
11	800×600 @72Hz	48.077	72.188
12	800×600 @75Hz	46.875	75.000
13	832×624 @74.6Hz	49.725	74.500
14	1024×768 @60Hz	48.363	60.004
15	1024×768 @66Hz	53.964	66.132
16	1024×768 @70Hz	56.476	70.069
17	1024×768 @75Hz	60.023	75.029
18	1024×768 @75Hz	60.150	74.720
19	1152×864 @75Hz	67.500	75.000
20	1152×870 @75Hz	68.681	75.062
21	1152×900 @66Hz	61.846	66.004
22	1280×720 @60Hz	45.000	60.000
23	1280×768 @60Hz	47.776	59.870
24	1280×960 @60Hz	60.000	60.000
25	1280×1024 @60Hz	63.981	60.020
26	1280×1024 @75Hz	79.976	75.025
27	1360×768 @60Hz	47.712	60.015
28	1400×1050 @60Hz	64.744	59.948
29	1400×1050 @60Hz	65.317	59.978
30	1400×1050 @75Hz	82.278	74.867
31	1440×900 @60Hz	55.469	59.901
32	1440×900 @60Hz	55.935	59.887
33	1440×900 @75Hz	70.635	74.984

6.3 Panel Specification

HannStar Display model HSD170MGW1-A is a color active matrix thin film transistor (TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. This model is composed of a TFT LCD panel, a driving circuit and a back light system. This TFT LCD has a 17.0 inch diagonally measured active display area with XGA resolution (900 vertical by 1440 horizontal pixel array) and can display up to 262,144 colors.

6.3.1 Features

_ 17.0 WXGA+ for Monitor application
_ High Resolution: 1440*900
_ 2-ch LVDS interface system
_ LCD Timing Controller
_ Wide Viewing Angle
_ RoHS compliance

6.3.2 Display Characteristics

Item		Specification	Unit
Outline Dimension		389.2 x 254.5 x 11.5 (Typ)	mm
Display area		367.2 (H) x 229.5 (V)	mm
Number of Pixel		1440(H) x 900(V)	pixels
Pixel pitch		0.255(H) x 0.255(V)	mm
Pixel arrangement		RGB Vertical stripe	
Display color		6 Bits / 262,144	colors
Display mode		Normally white	
Surface treatment		Antiglare (3H)	
Weight		1370	g
Back-light		2-CCFLs, Top & bottom edge side	
Input signal		2-ch LVDS	
Power Consumption	Logic System	2.4	W
	B/L System	9.8	W

6.3.3 Electrical Characteristics

1. TFT LCD Module

Item	Symbol	Min.	Max.	Unit
Power supply voltage	V_{DD}	-0.3	6.0	V
Logic input voltage	V_{IN}	-0.3	VDD+0.3	V

2. Backlight Unit

Item	Symbol	Min.	Max.	Unit
Lamp current	I_L	3	9.0	mA
Lamp frequency	f_L	30	80	KHz

6.3.4 Optical Characteristics

Measuring Condition

_ Measuring surrounding: dark room

_ Lamp current IBL: 7.5±0.1mA, lamp freq. FL=50 KHz, Inverter: TDK TBD315NR-1

_ VDD=5.0V, fV=60Hz

_ Ambient temperature: 25±2oC

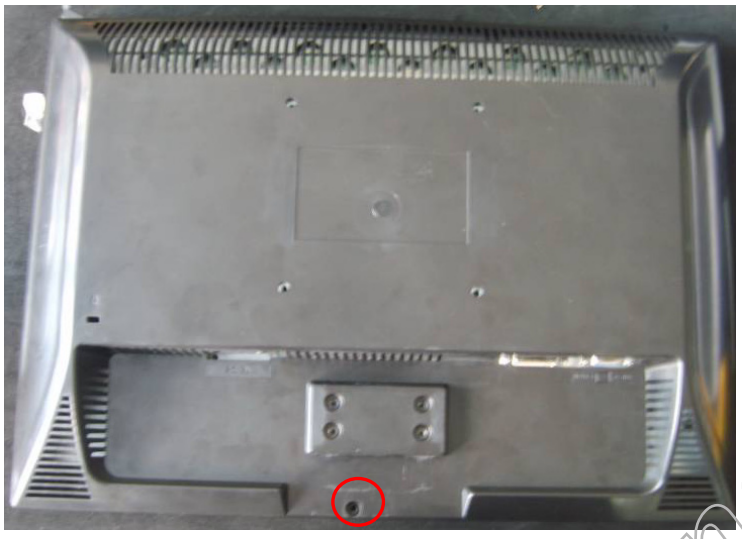
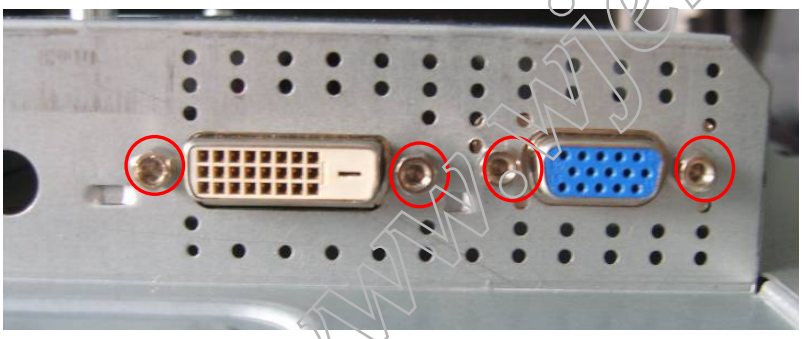
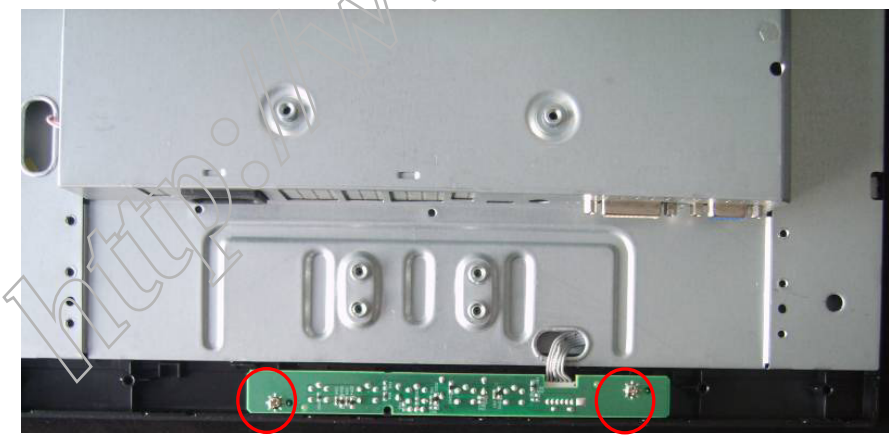
_ 30min. Warm-up time.

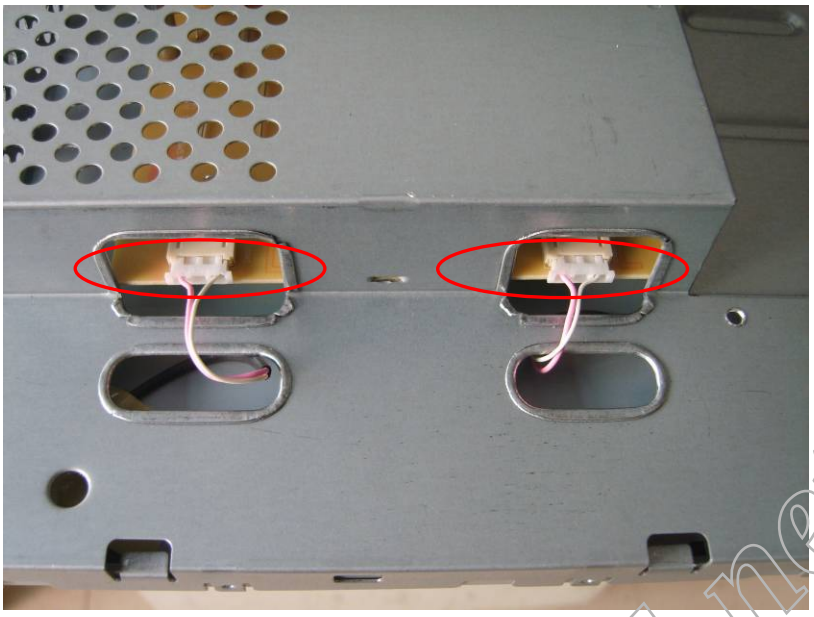
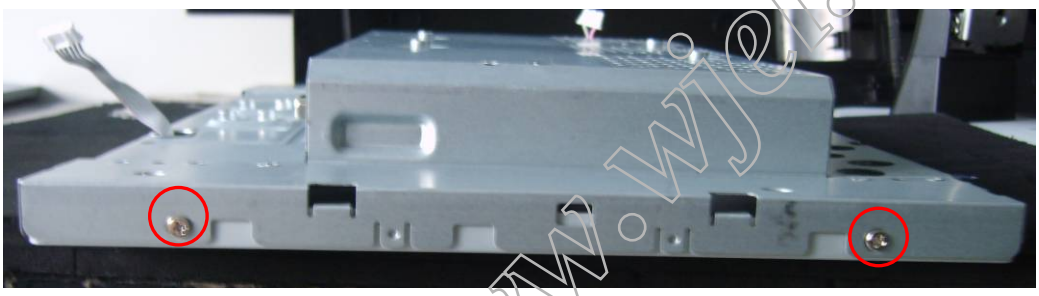
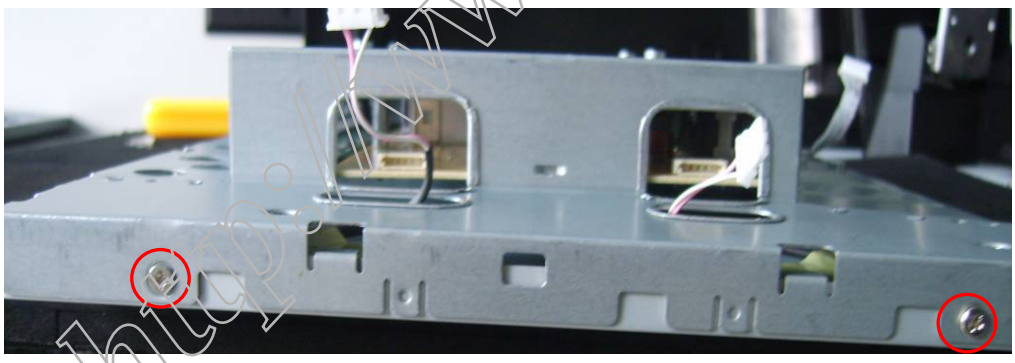
Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Contrast		CR	Θ=0 view angle	350	500	-	
Response time	Rising	T_R		-	3	5	msec
	Falling	T_F		-	5	7	
White luminance (Center)		Y_L		200	250	-	cd/m^2
		Y_L		(180)	(230)	-	cd/m^2
Color chromaticity (CIE1931)	Red	R_x		0.595	0.625	0.655	
		R_y		0.315	0.345	0.375	
	Green	G_x		0.295	0.325	0.355	
		G_y		0.525	0.555	0.585	
	Blue	B_x		0.125	0.155	0.185	
		B_y		0.115	0.145	0.175	
	White	W_x		0.280	0.310	0.340	
		W_y		0.300	0.330	0.360	

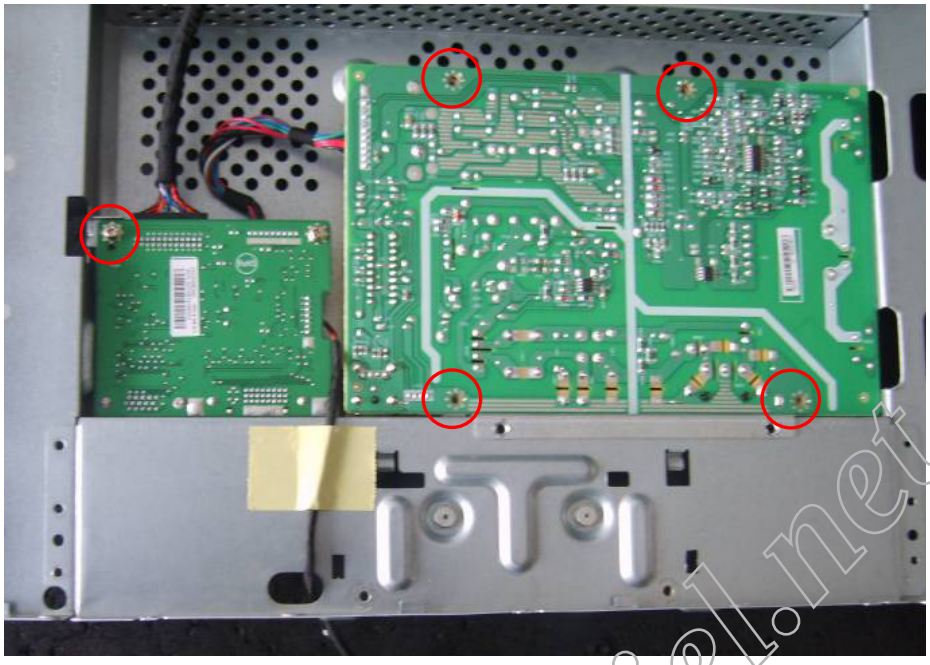
Viewing angle	Hor.	Θ_L	CR>10	65	70	-	
		Θ_R		65	70	-	
	Ver.	Θ_U		60	65	-	
		Θ_D		60	65	-	
Viewing angle	Hor.	Θ_L	CR>5	75	80	-	
		Θ_R		75	80		
	Ver.	Θ_U		75	80	-	
		Θ_D		75	80	-	
Brightness uniformity		B_{UNI}	Θ=0	70	75	-	%

7. Mechanical Instructions

Step	Figure	Description
Preparation		Lay the LCD on a flat, soft and clean surface.
Remove the base		Remove the screws remarked in red

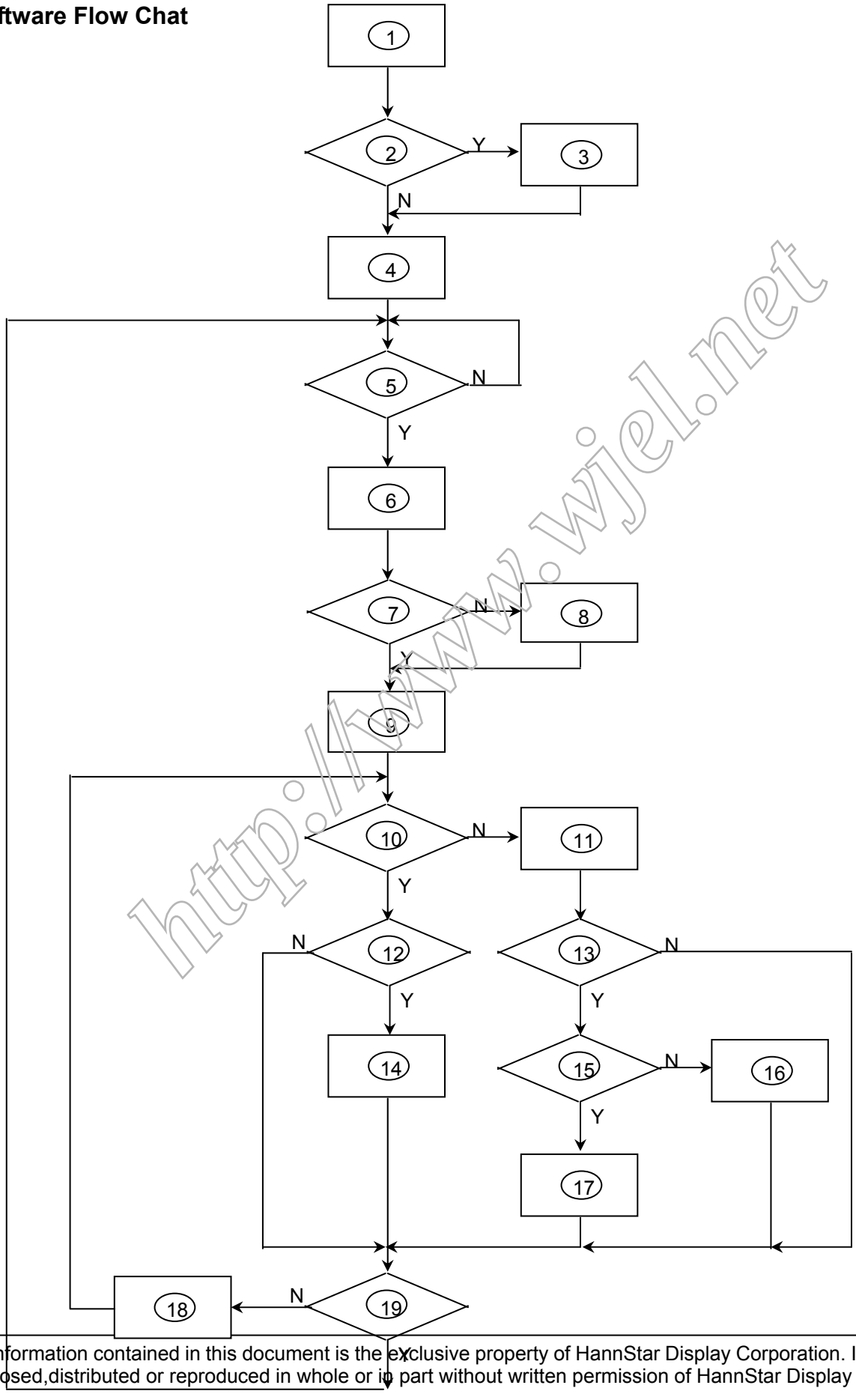
Remove rear cover		Remove the screws remarked in red
Remove the key board	 	Remove the screws remarked in red

remove the shield	  	Remove the screws remarked in red and disconnected the connecter remarked in red

Remove the boards		Remove the screws remarked in red
The end		The panel

8. Block Diagram

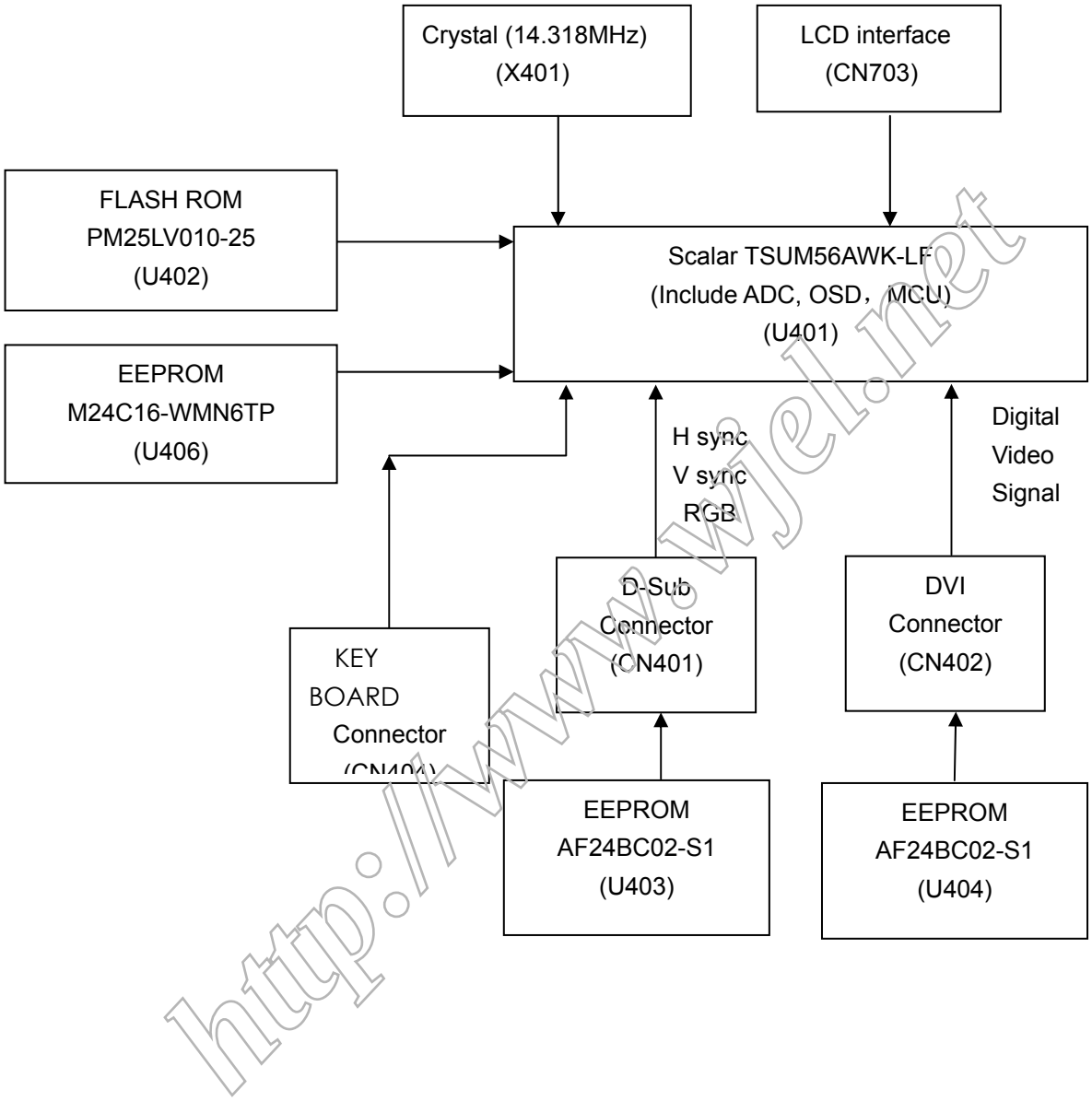
8.1 Software Flow Chat



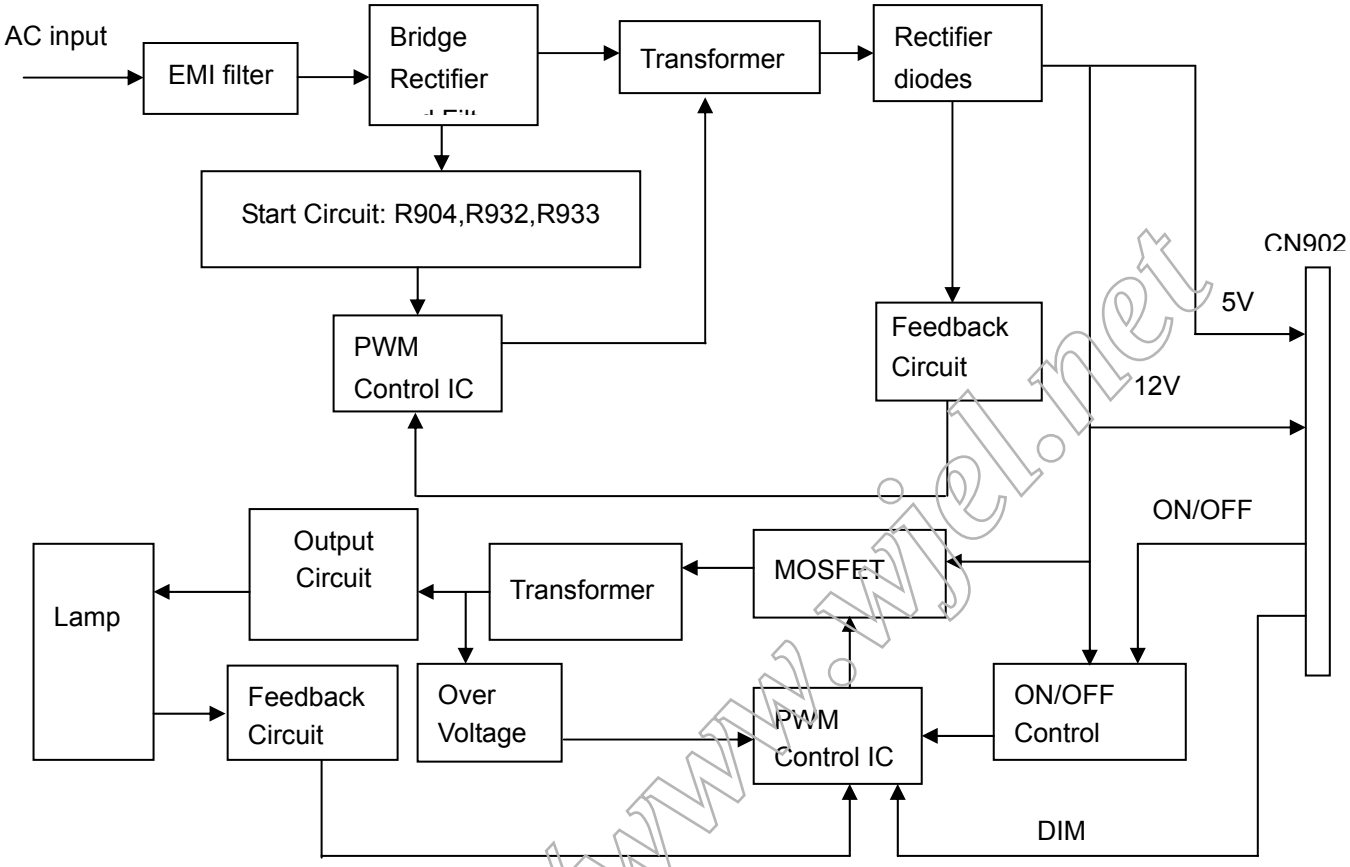
1) MCU initialize.
2) Is the EPROM blank?
3) Program the EPROM by default values.
4) Get the PWM value of brightness from EPROM.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EPROM.
   Turn on the LED and set it to green color.
   Scalar initializes.
10) In standby mode?
11) Update the lifetime of back light.
12) Check the analog port, are there any signals coming?
13) Does the scalar send out an interrupt request?
14) Wake up the scalar.
15) Are there any signals coming from analog port?
16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappear.
17) Program the scalar to be able to show the coming mode.
18) Process the OSD display.
19) Read the keyboard. Is the power key pressed?

8.2 Electrical Block Diagram

8.2.1 Main Board

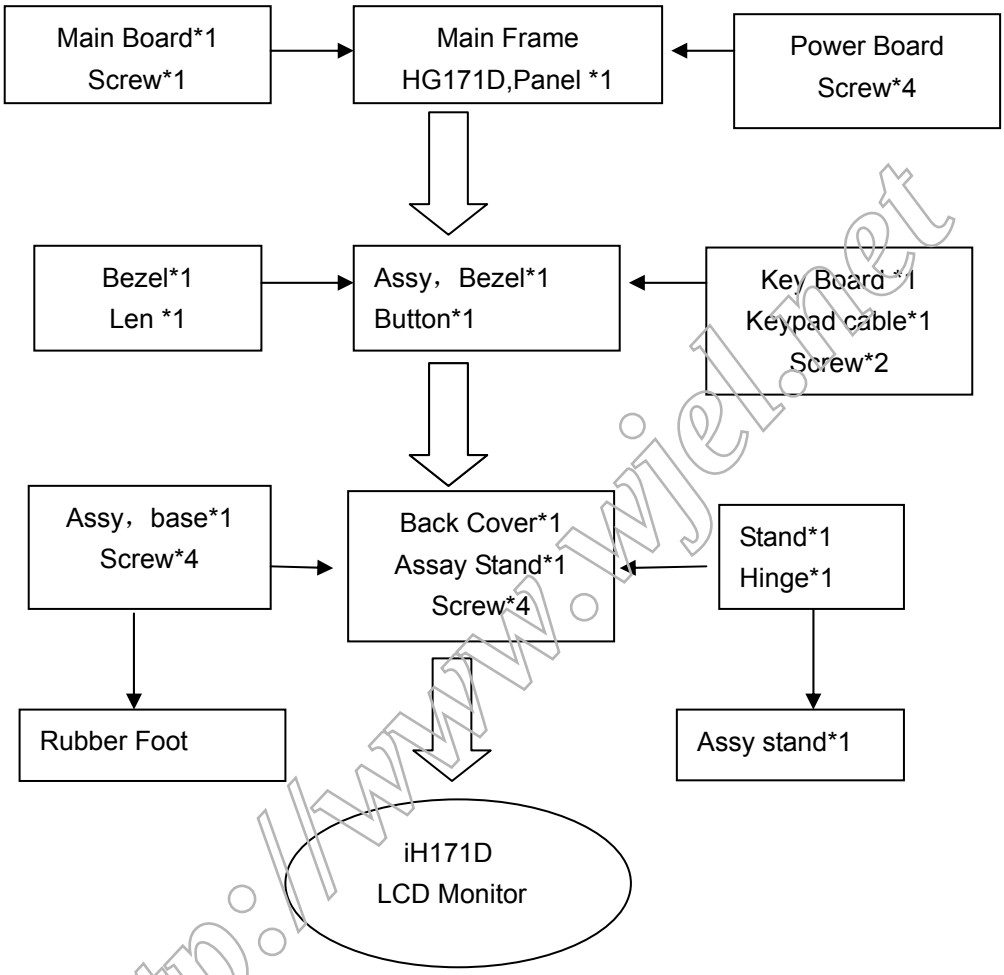


8.2.2 Power/Inverter Board

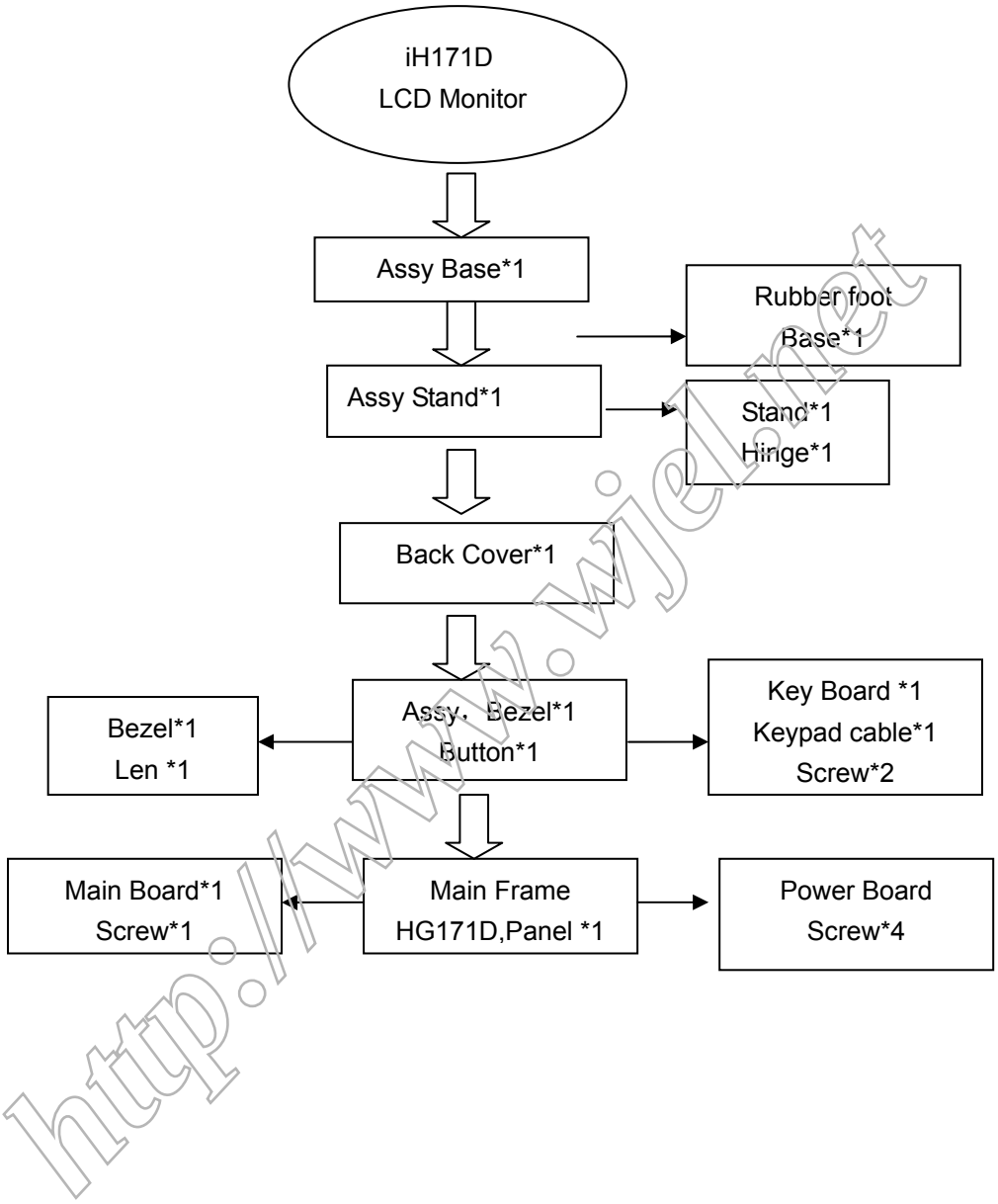


8.3 Mechanical Block Diagram

8.3.1 Assembly Block

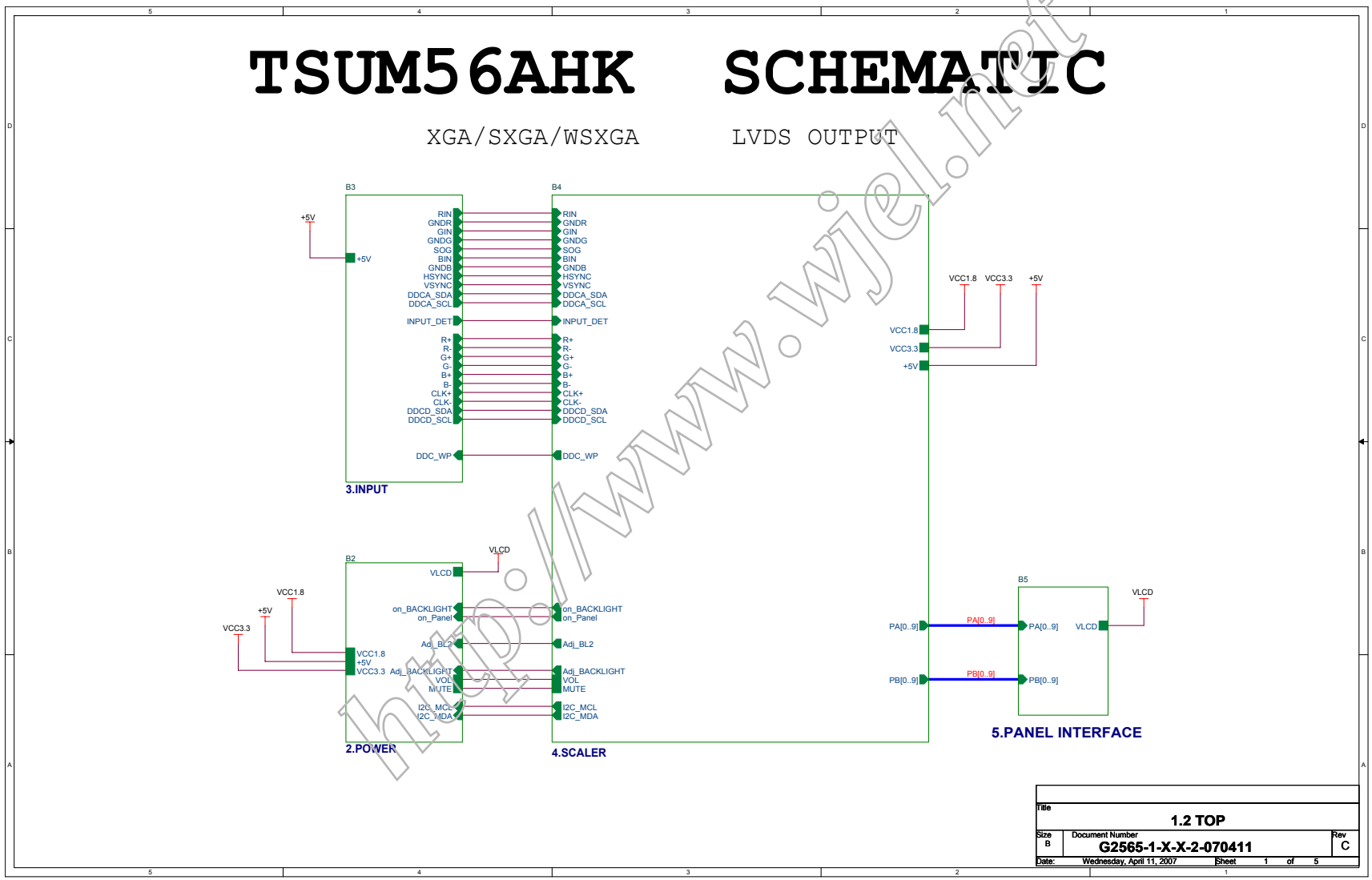


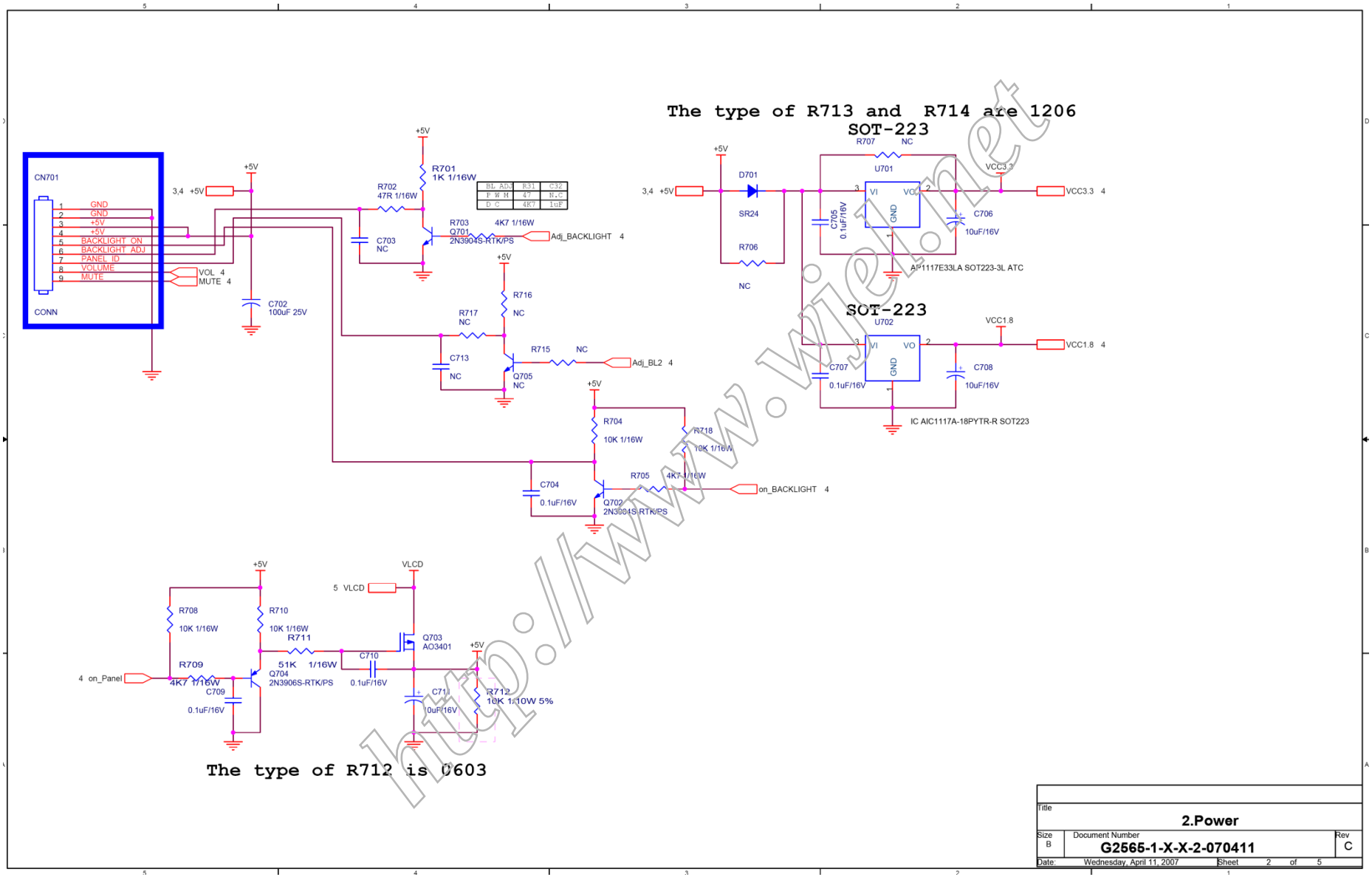
8.3.3 Disassembly Block

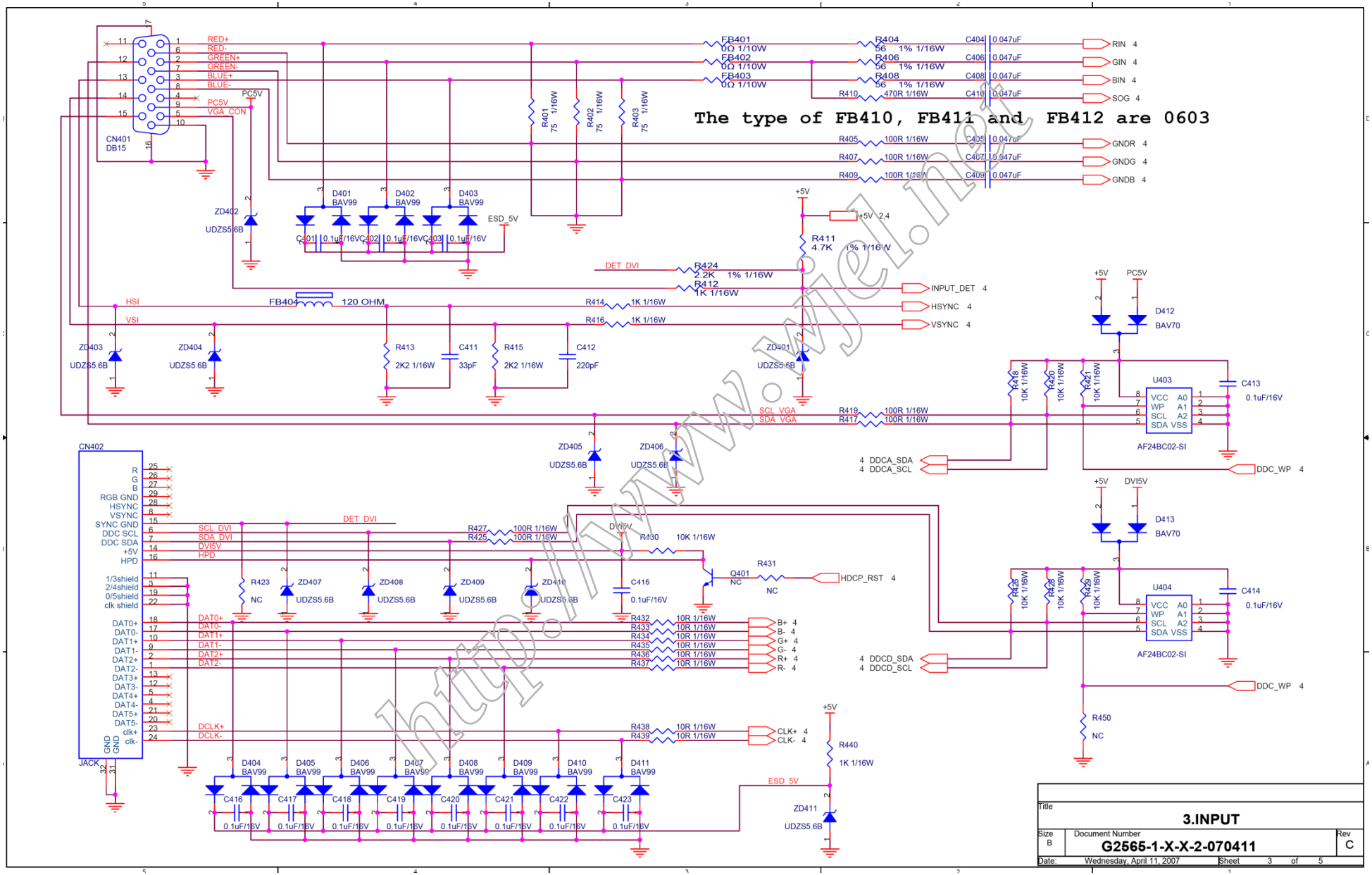


9. Schematic

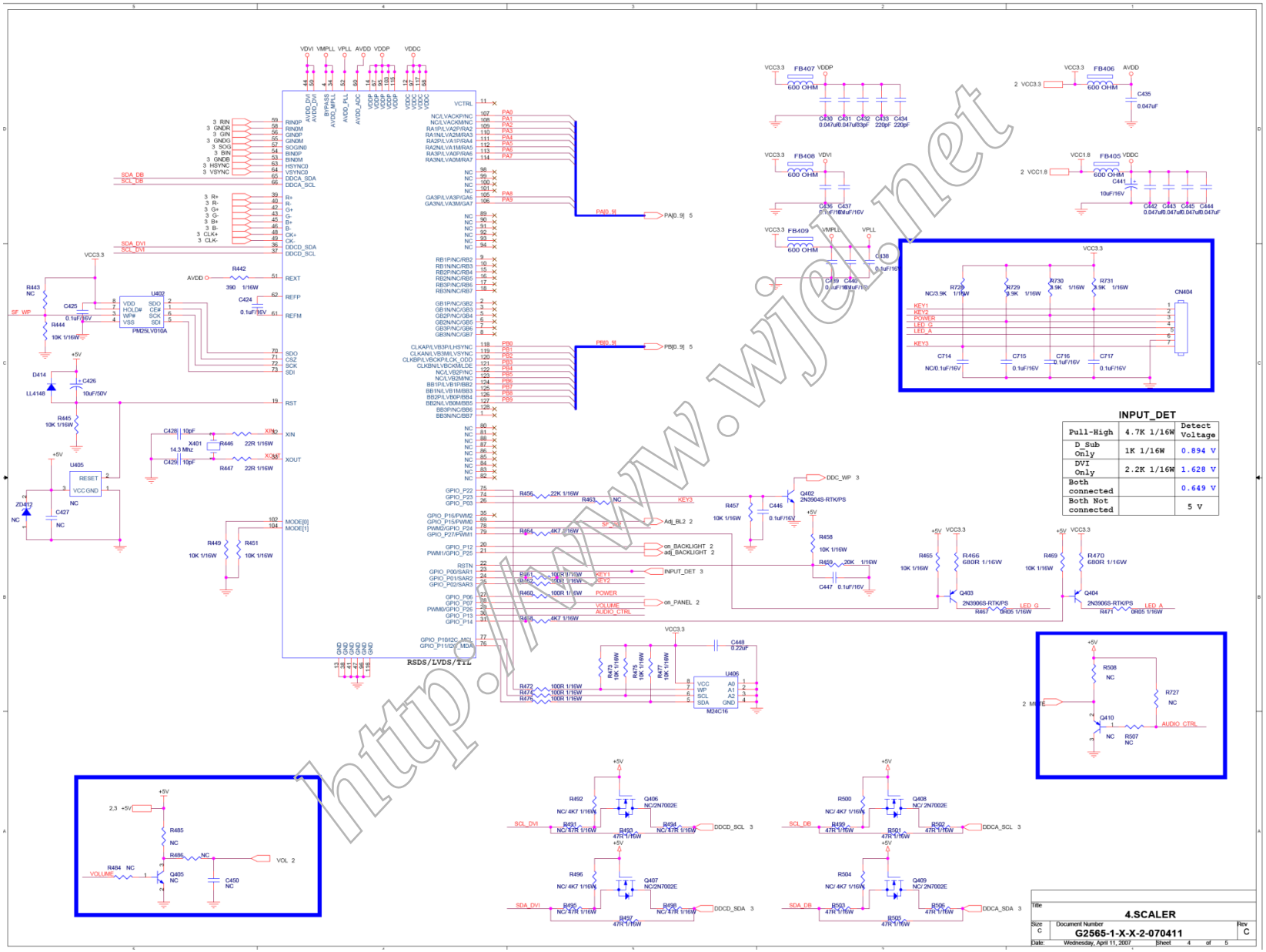
9.1 Main Board

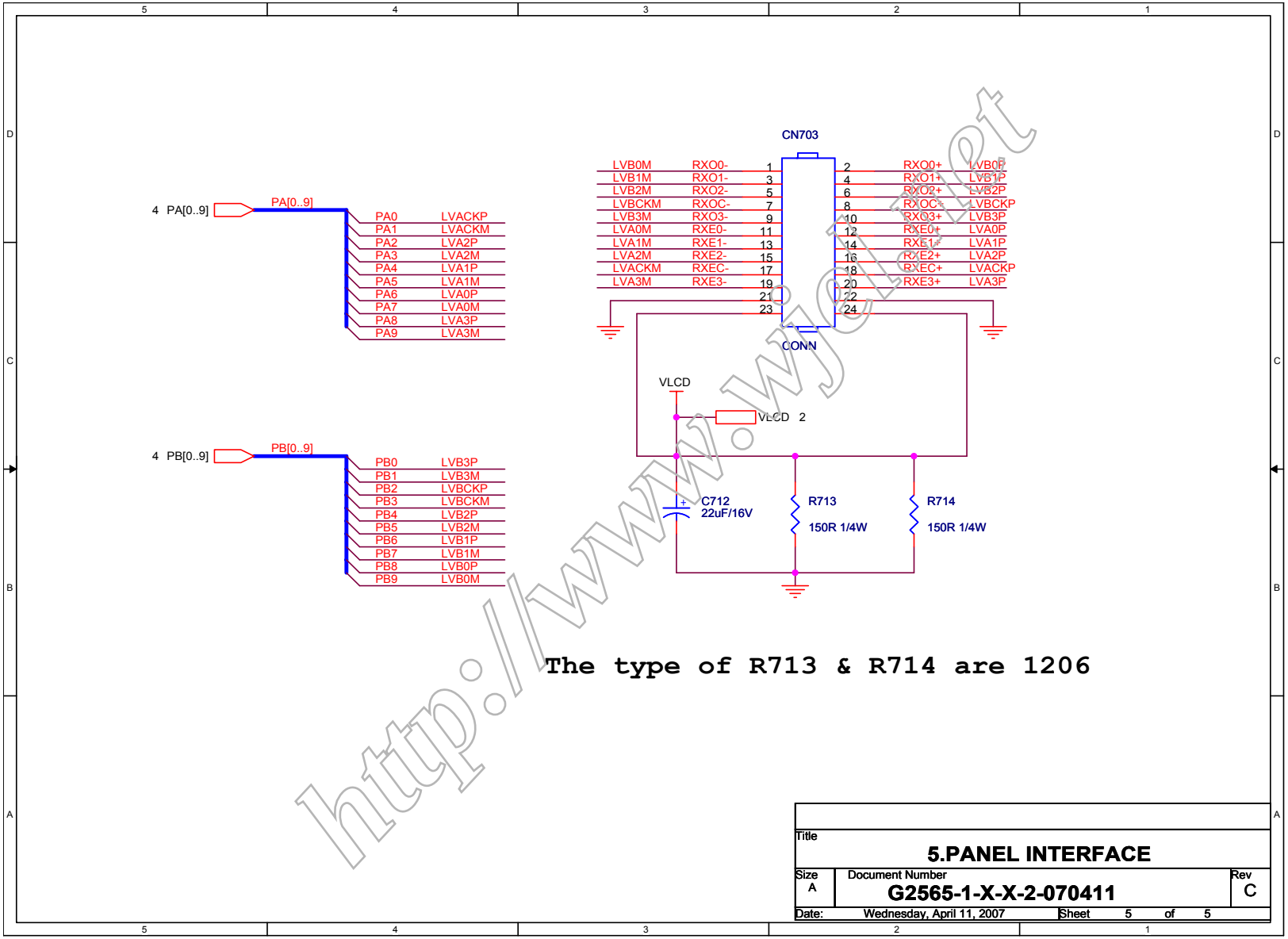




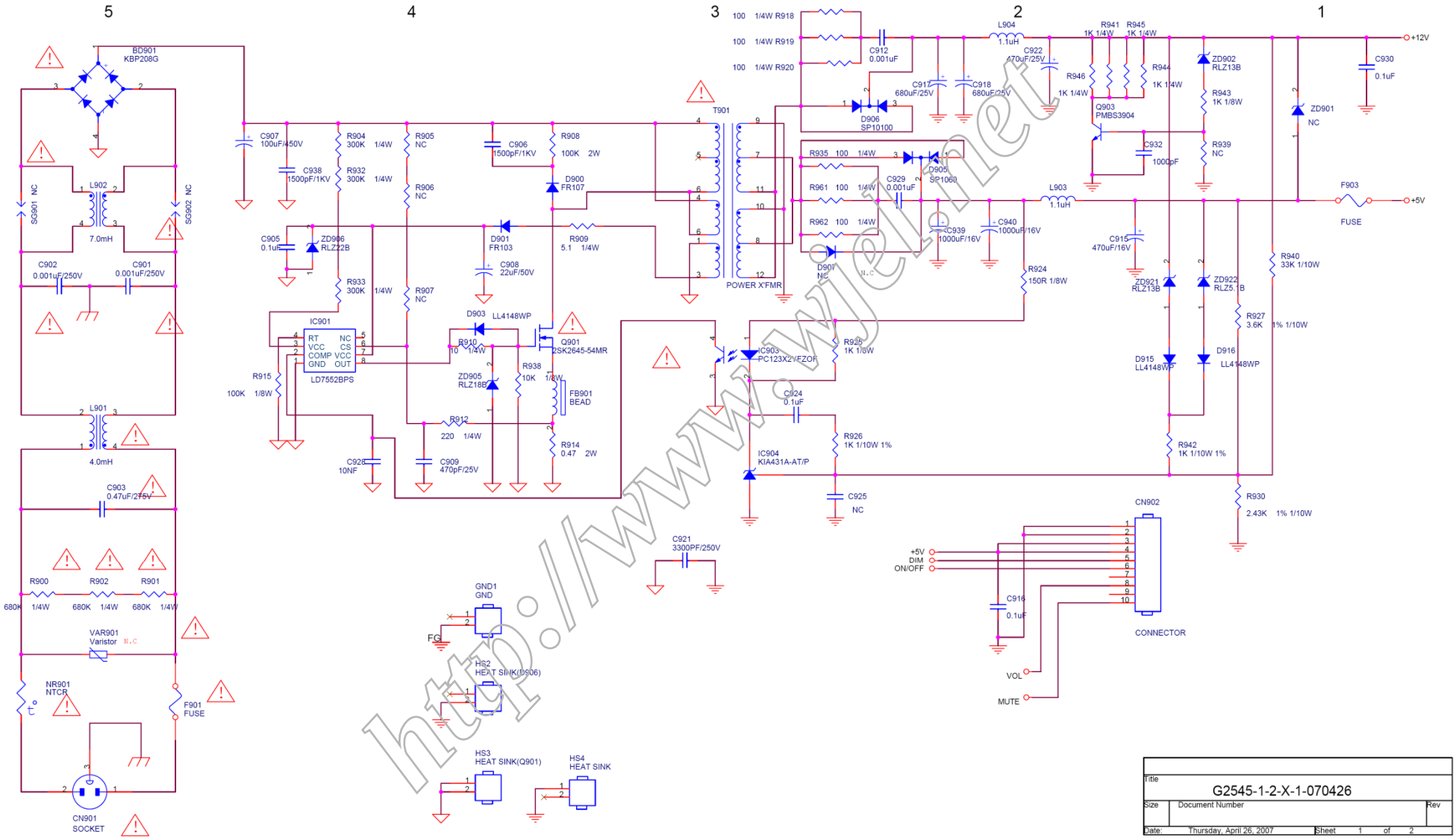


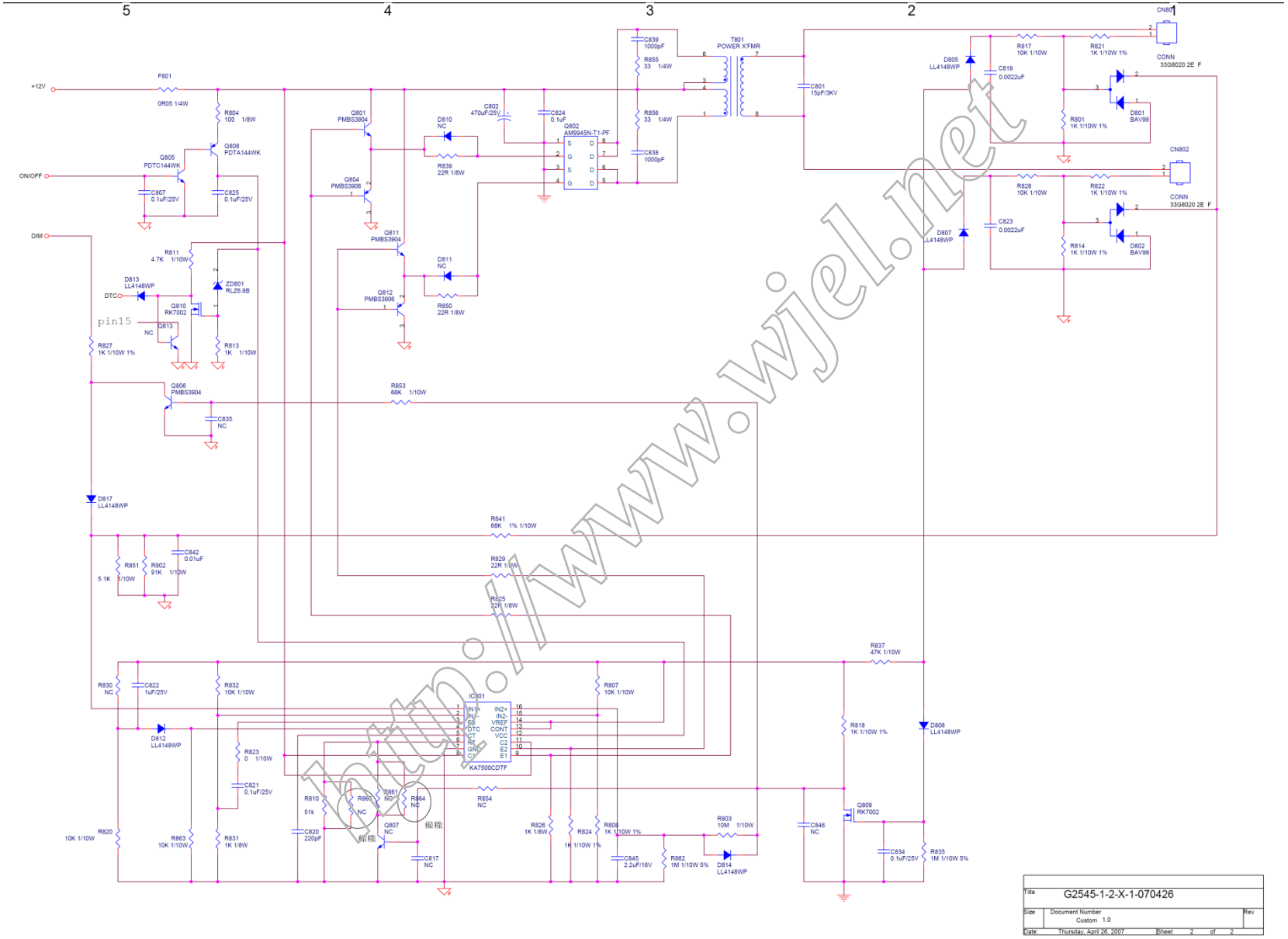
2007/08/03





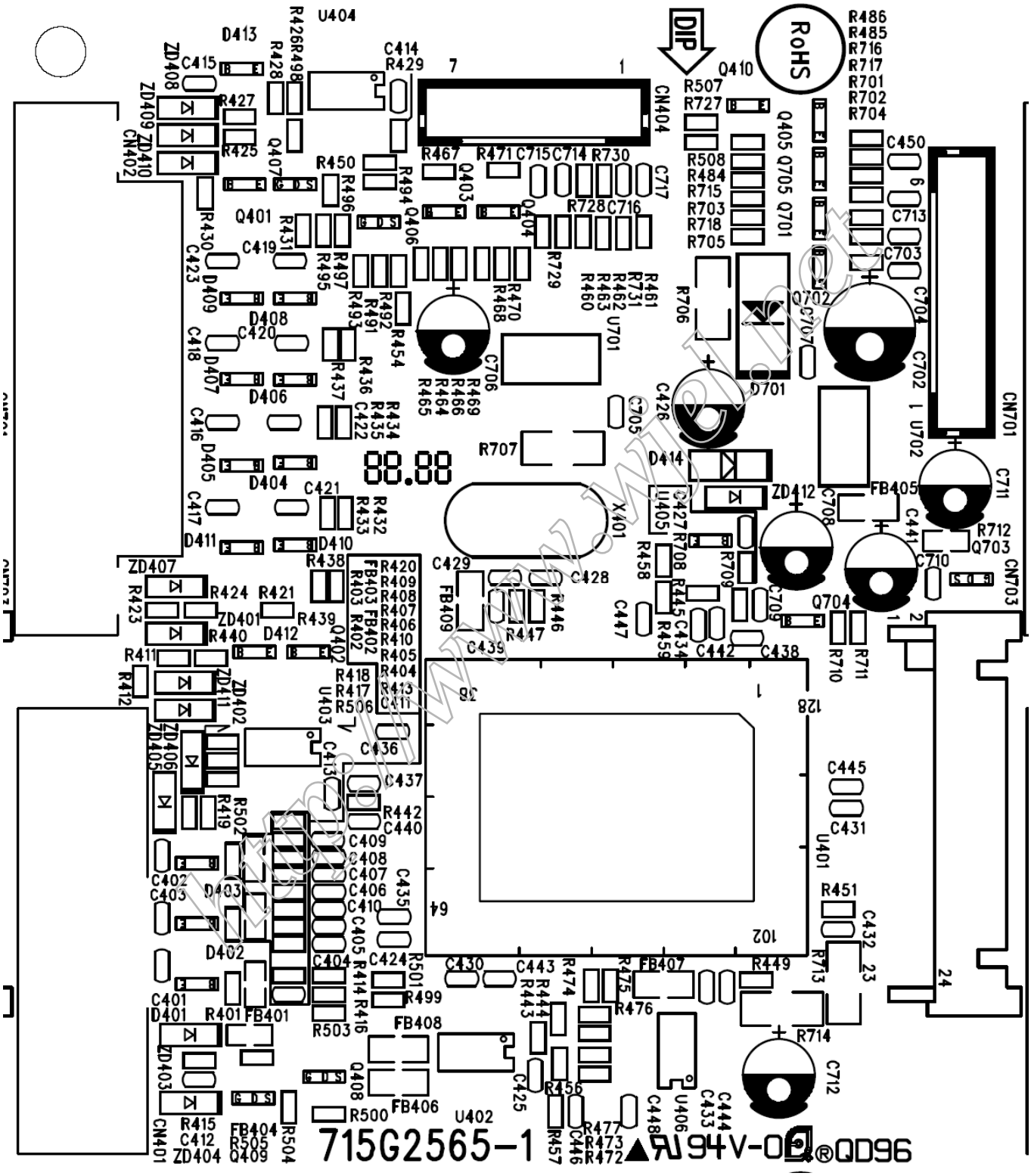
9.2 Power Board

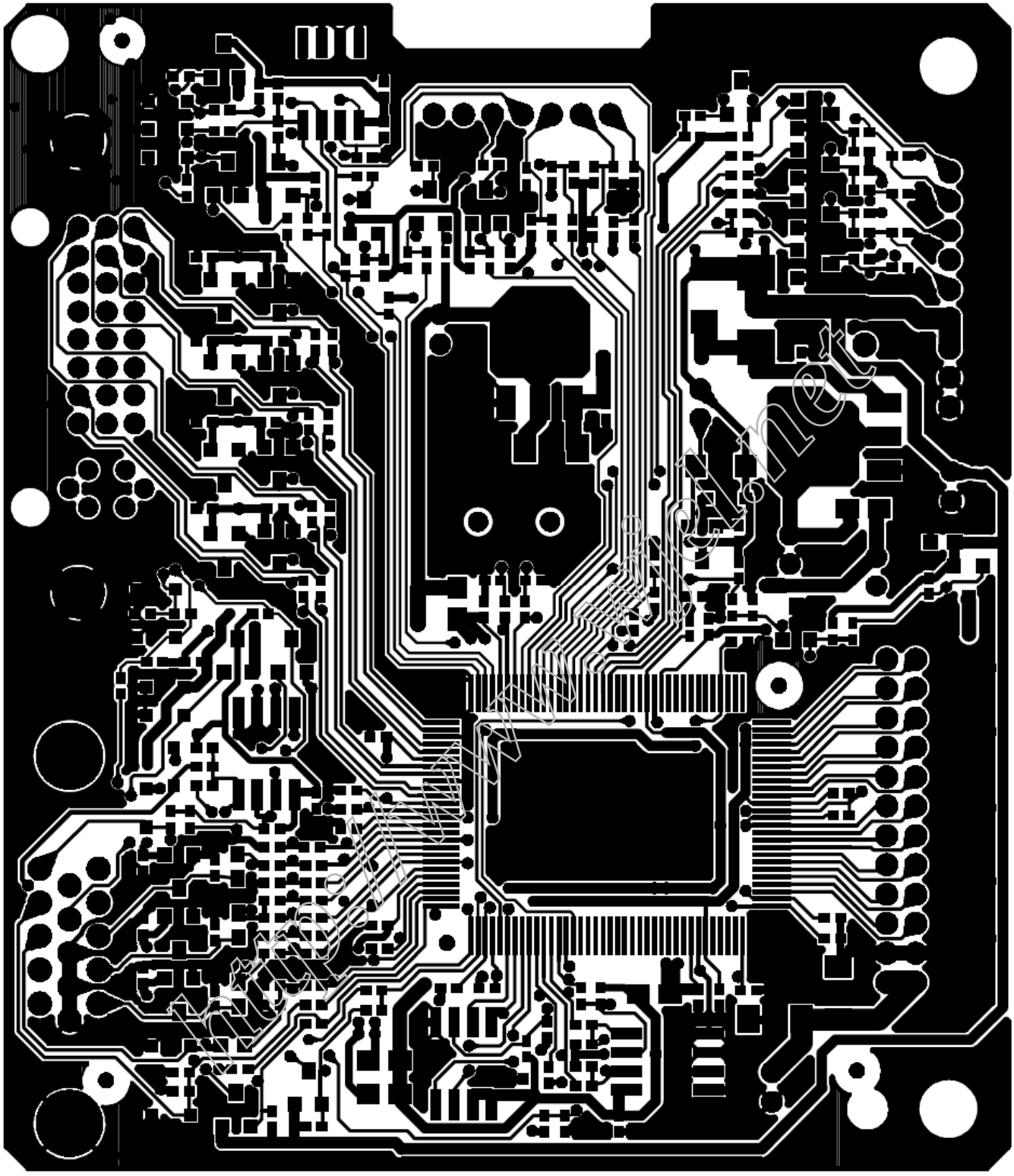




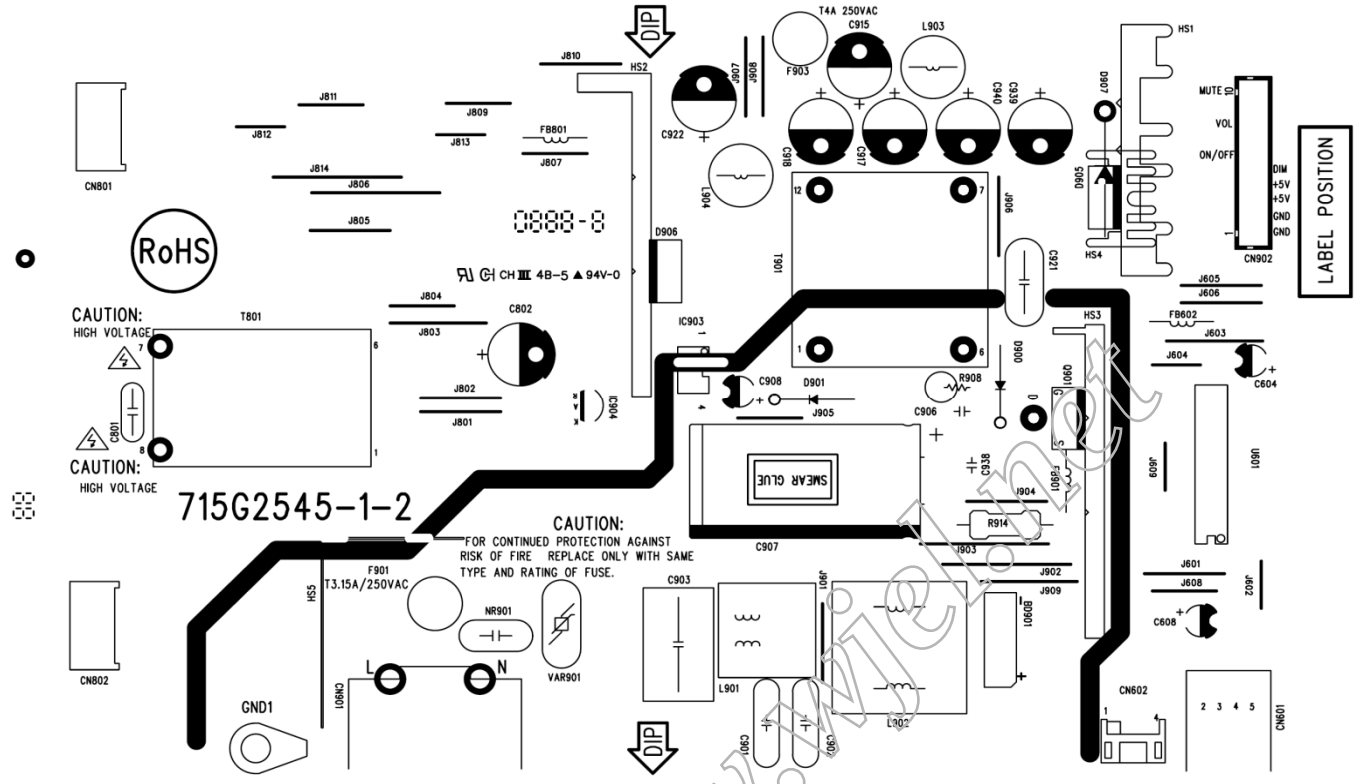
10. PCB Layout

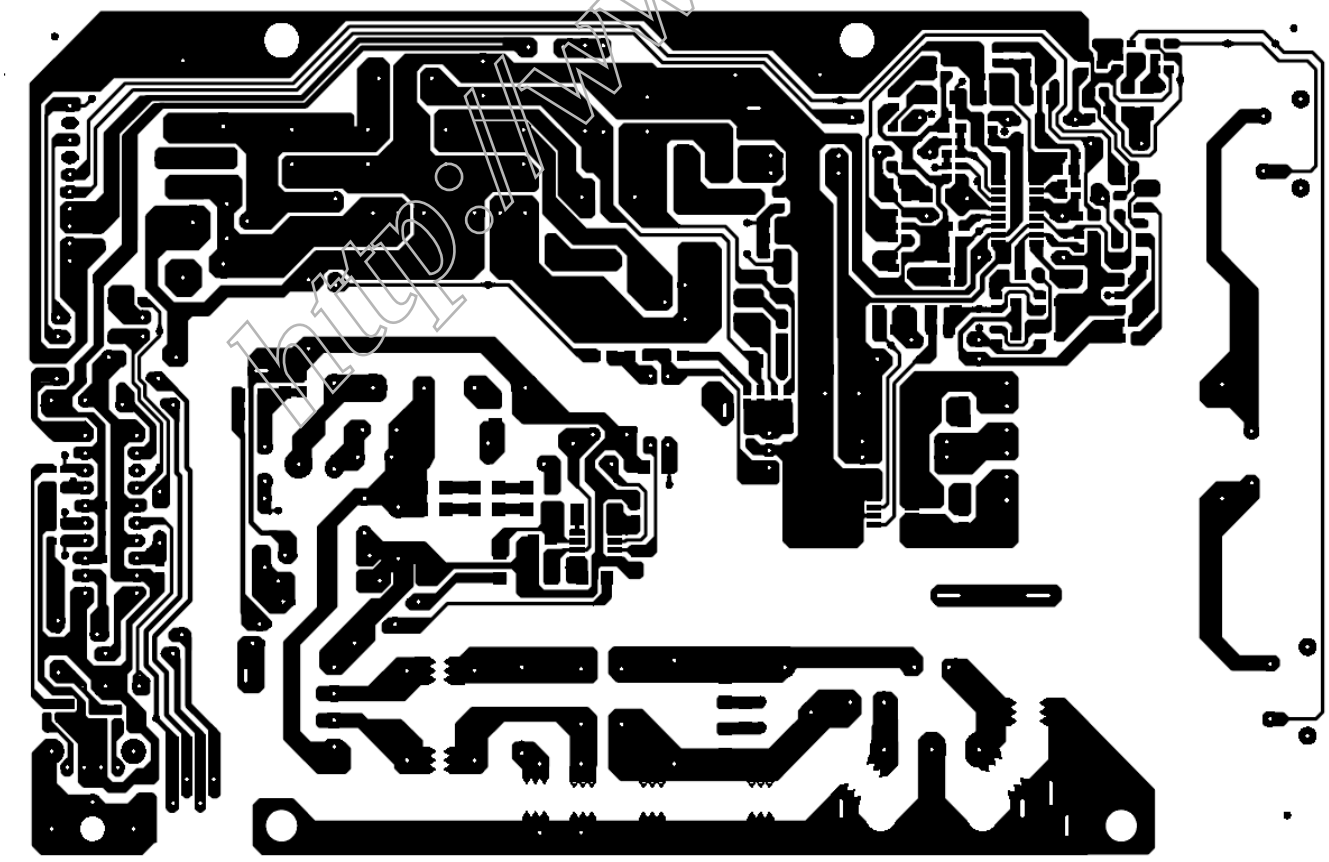
10.1 Main Board



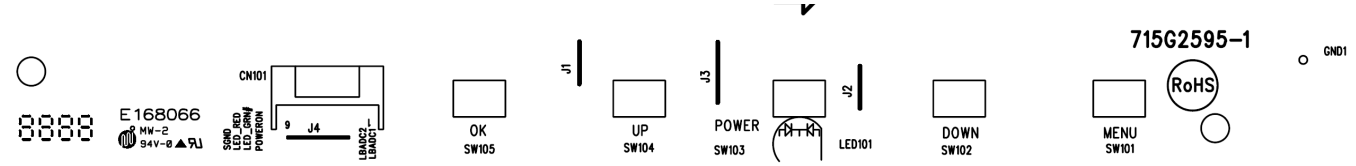


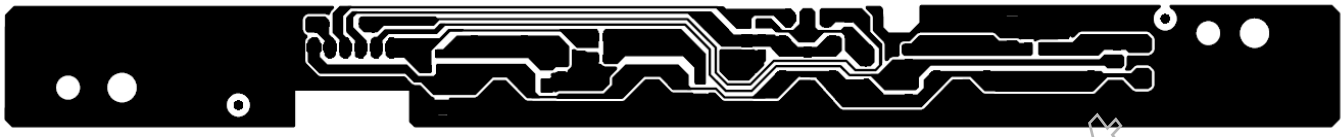
10.2 Power Board





10.3 key board





11. Maintainability

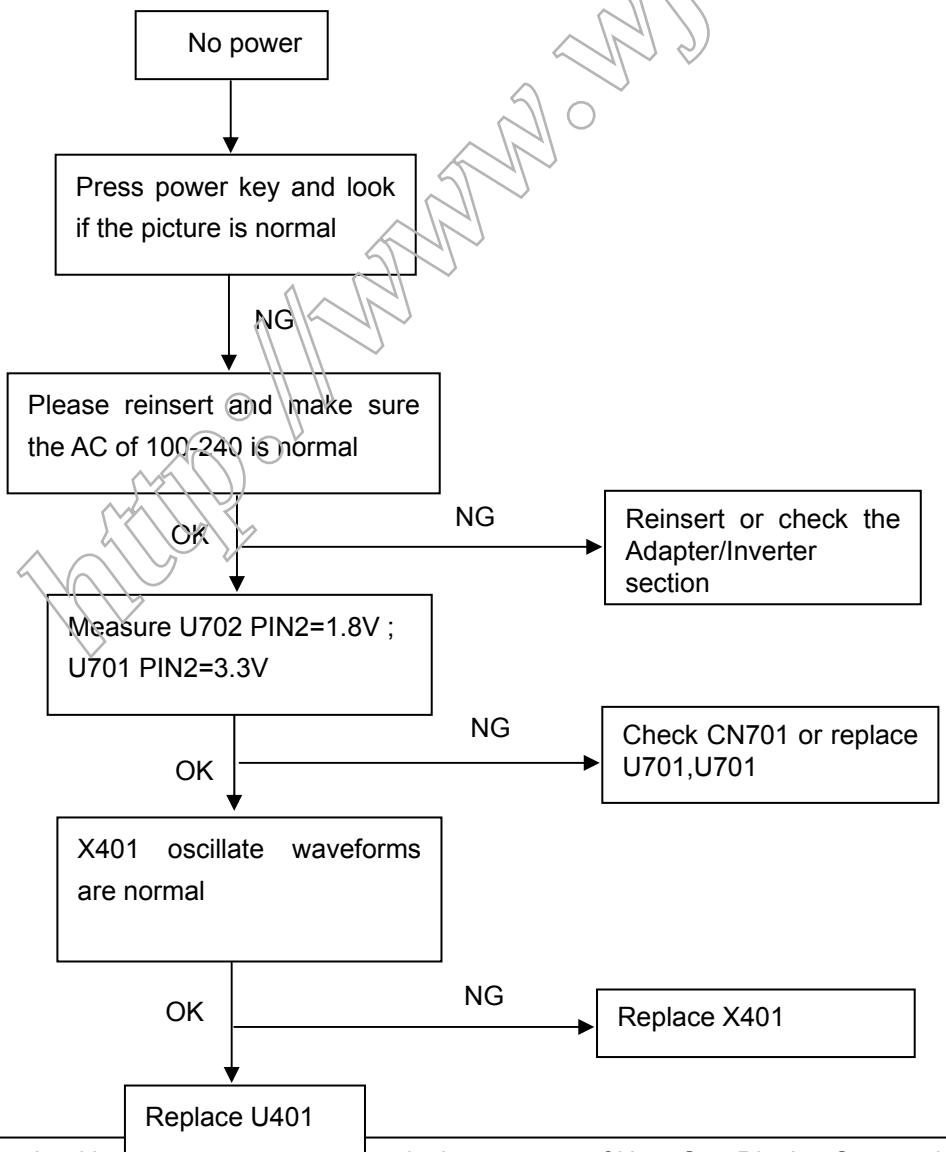
11.1 Equipments and Tools Requirement

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

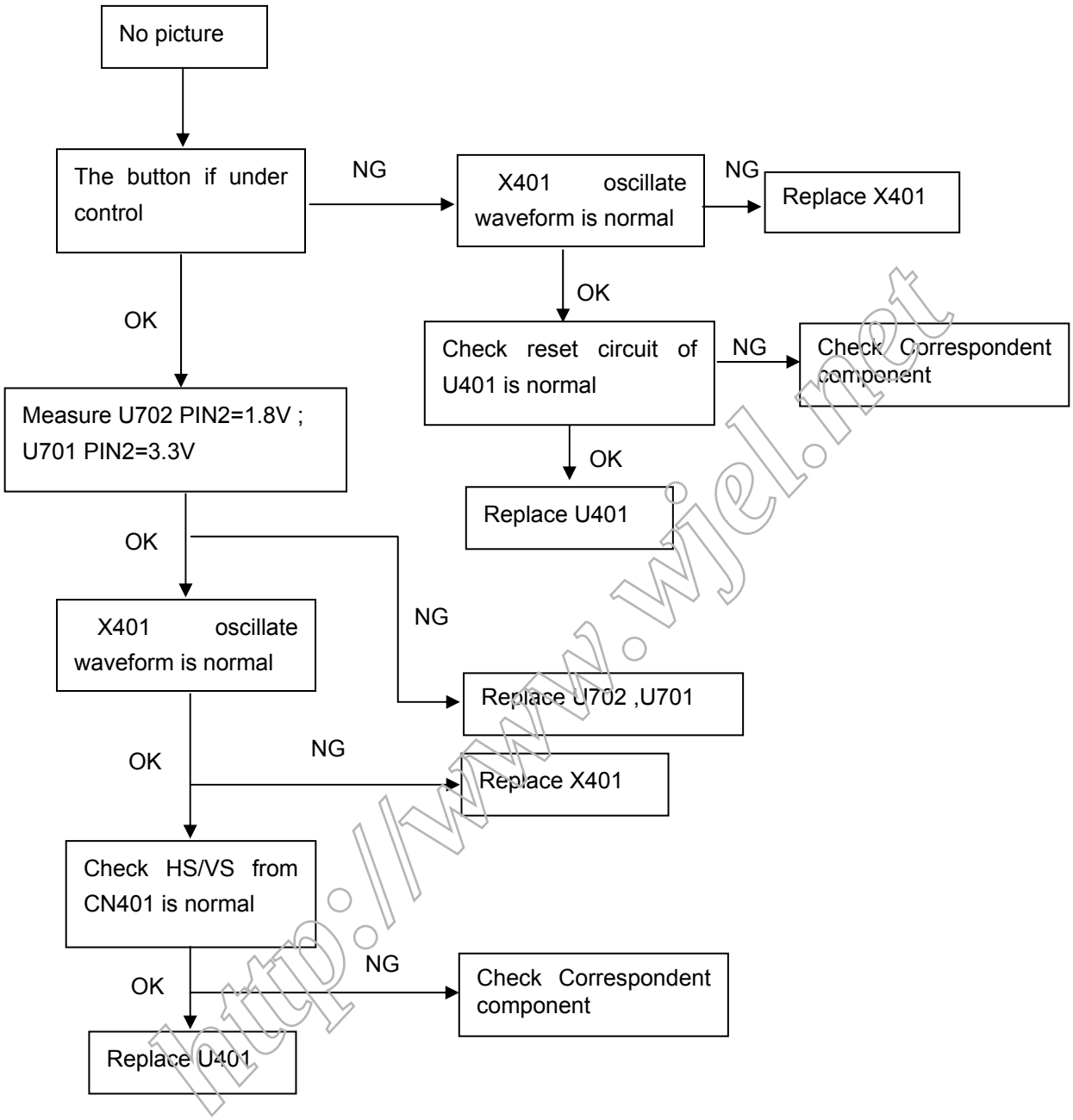
11.2 Trouble Shooting

11.2.1 Main Board

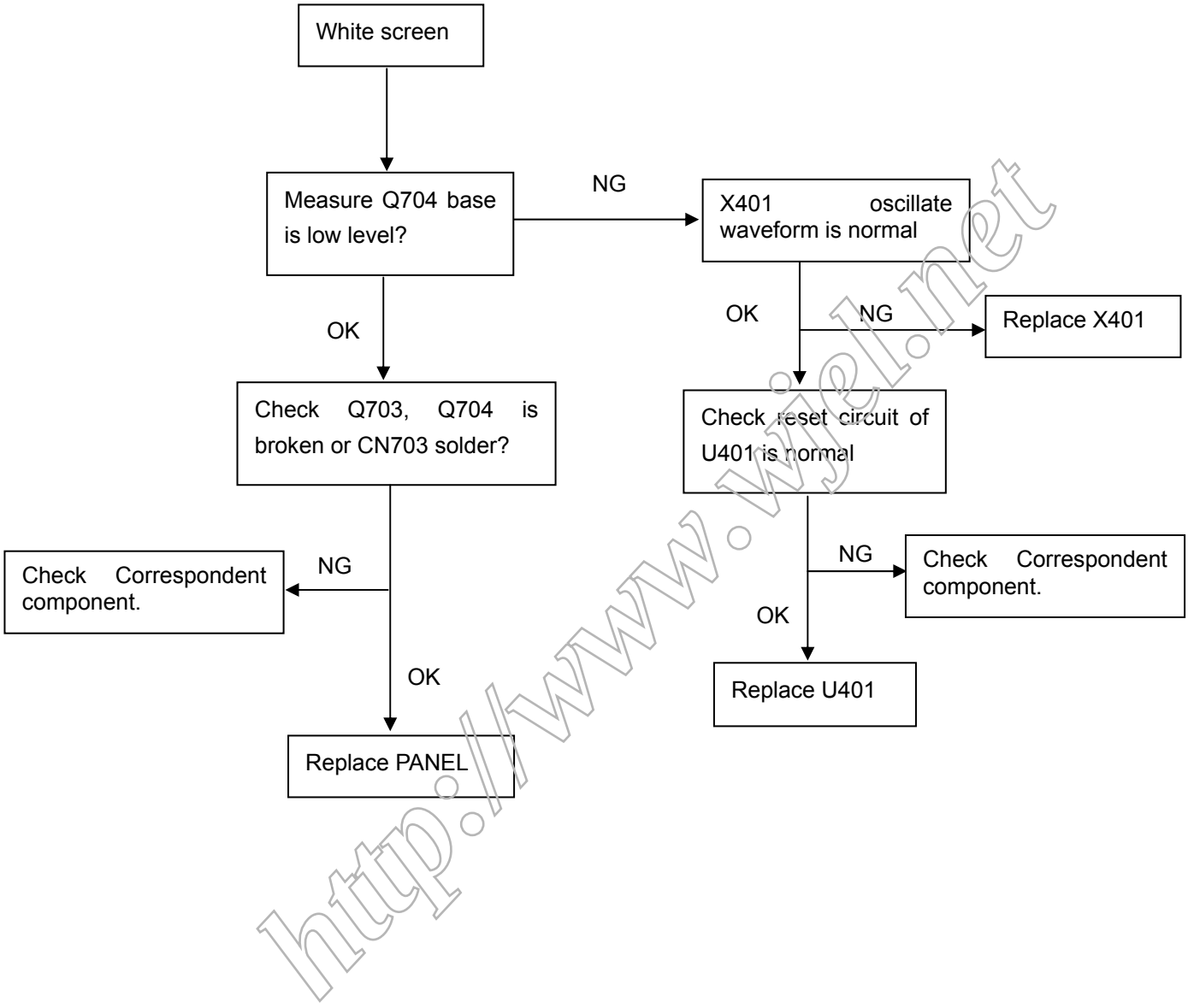
No power



No picture (LED orange)

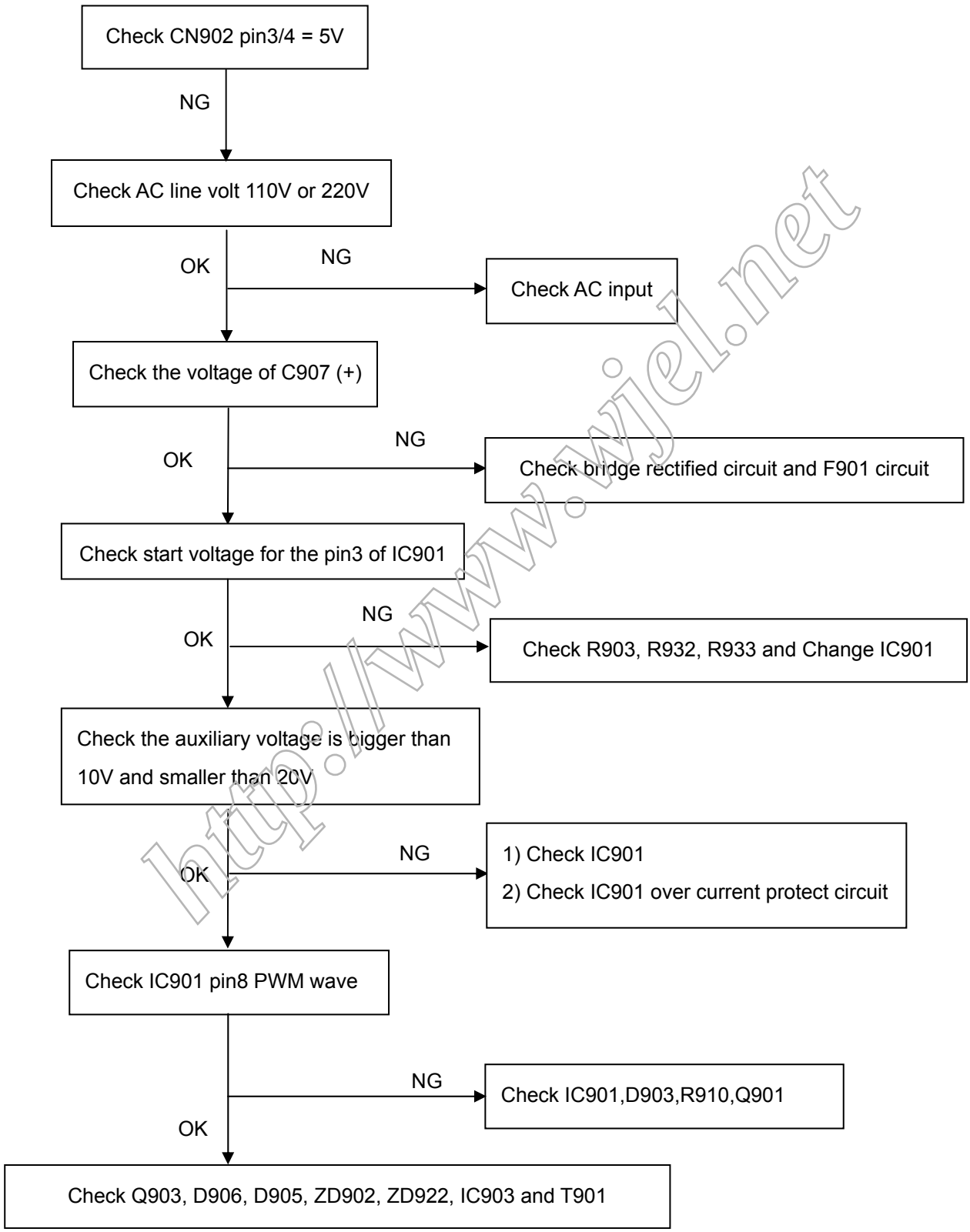


White screen

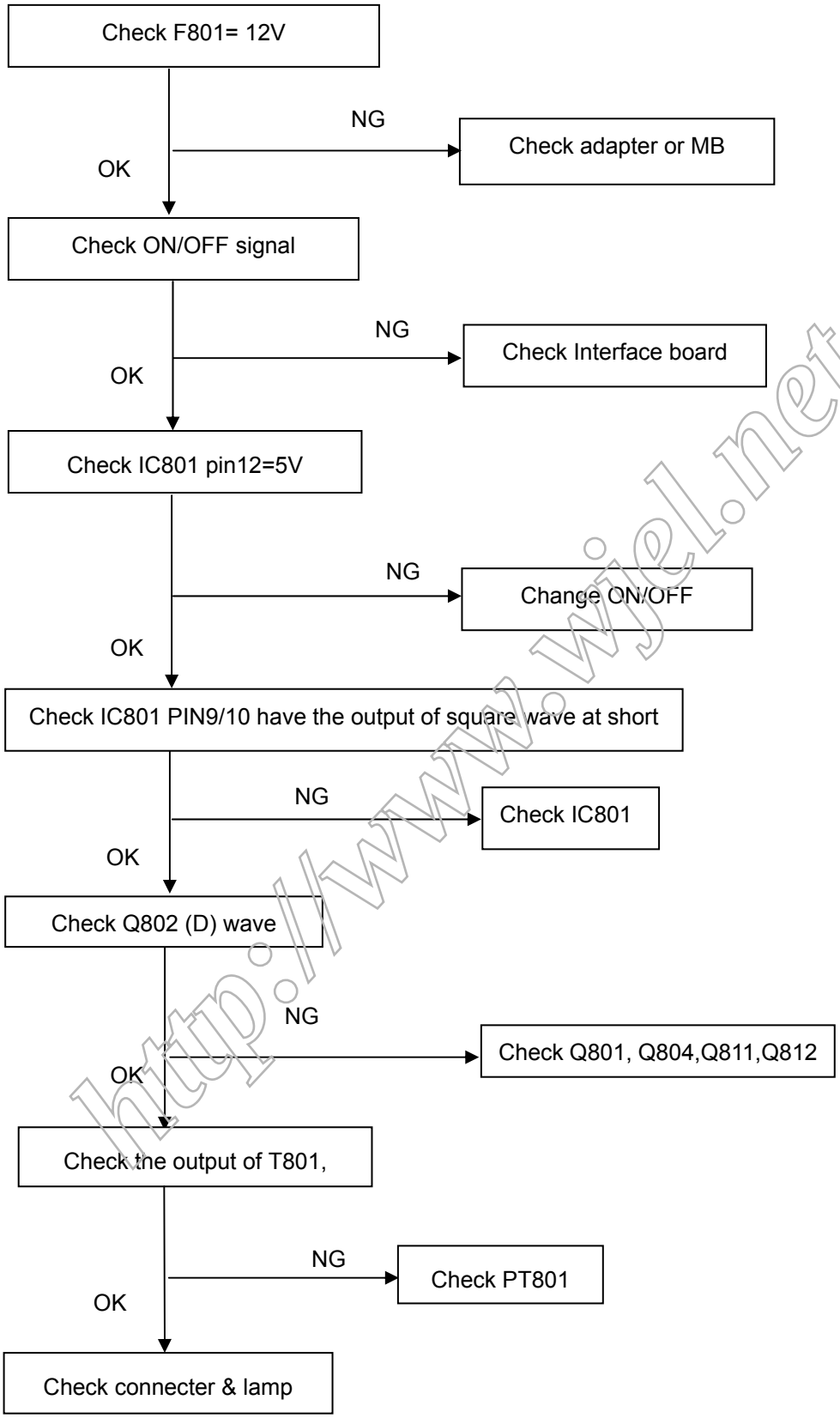


11.2.2 Power Board

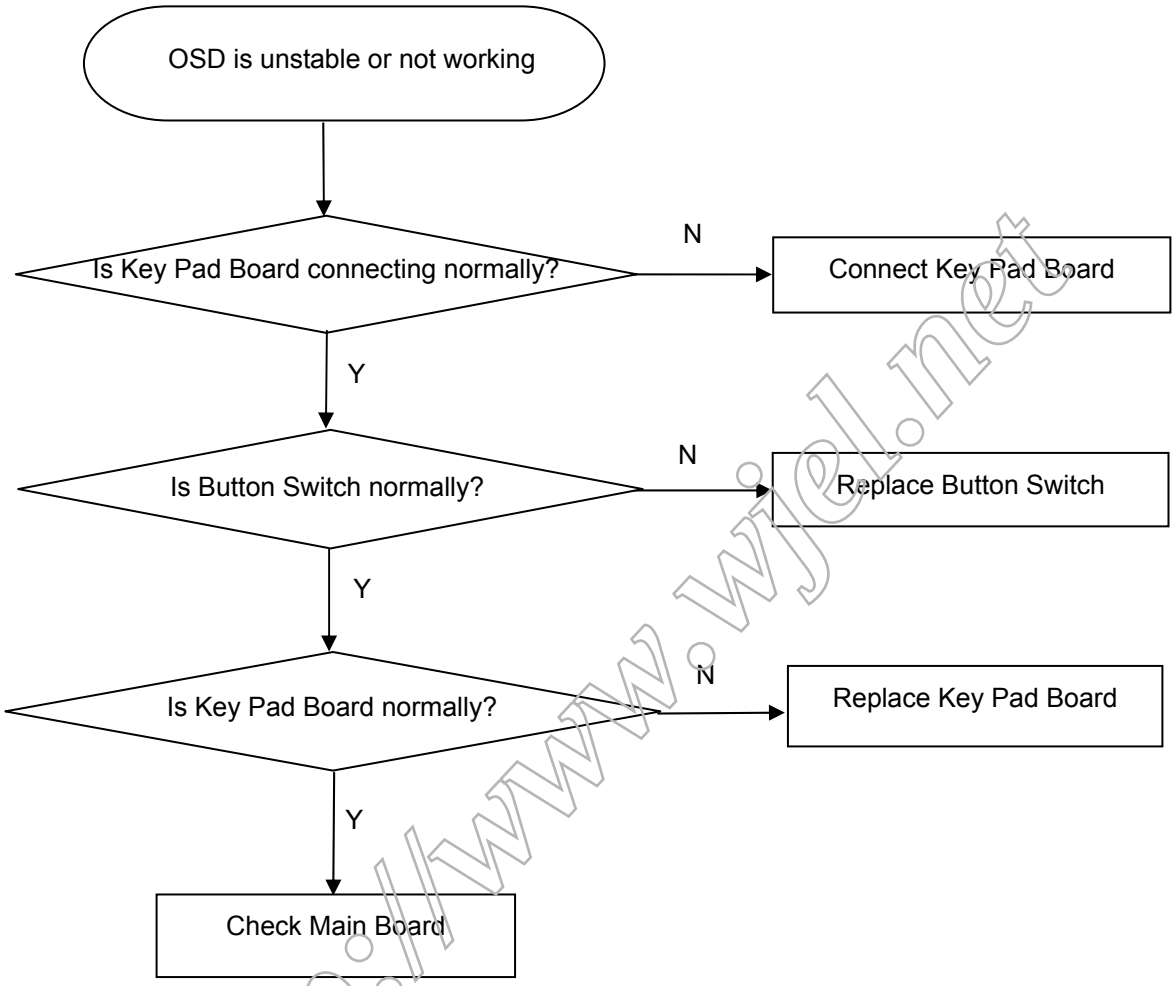
1) No power



2.) No Backlight



11.2.3 Key Board



12. DDC Instruction

General

DDC Data Re-programming

In case the main EEPROM with Software DDC which store all factory settings were replaced because a defect, repaired monitor' the serial numbers have to be re-programmed.

It is advised to re- soldered the main EEPROM with Software DDC from the old board onto the new board if circuit board have been replaced, in this case the DDC data does not need to be re-programmed.

Additional information about DDC (Display Data Channel) may be obtained from Video Electronics Standards Association (VESA). Extended Display Identification Data (EDID) information may be also obtained from VESA.

1. An i486 (or above) personal computer or compatible.
2. Microsoft operation system Windows 95/98/2000/XP.
3. " PORT95NT.exe, WinDDC_ setup" program.
4. Software OSD SN Alignment kits

The kit contents:

a. OSD SN BOARD x1

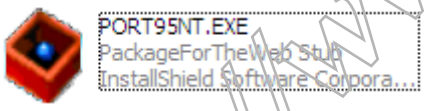
b. Printer cablex1

c. VGA cable x1

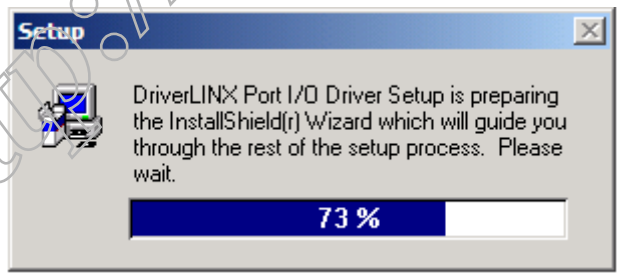
d. Digital cable x1

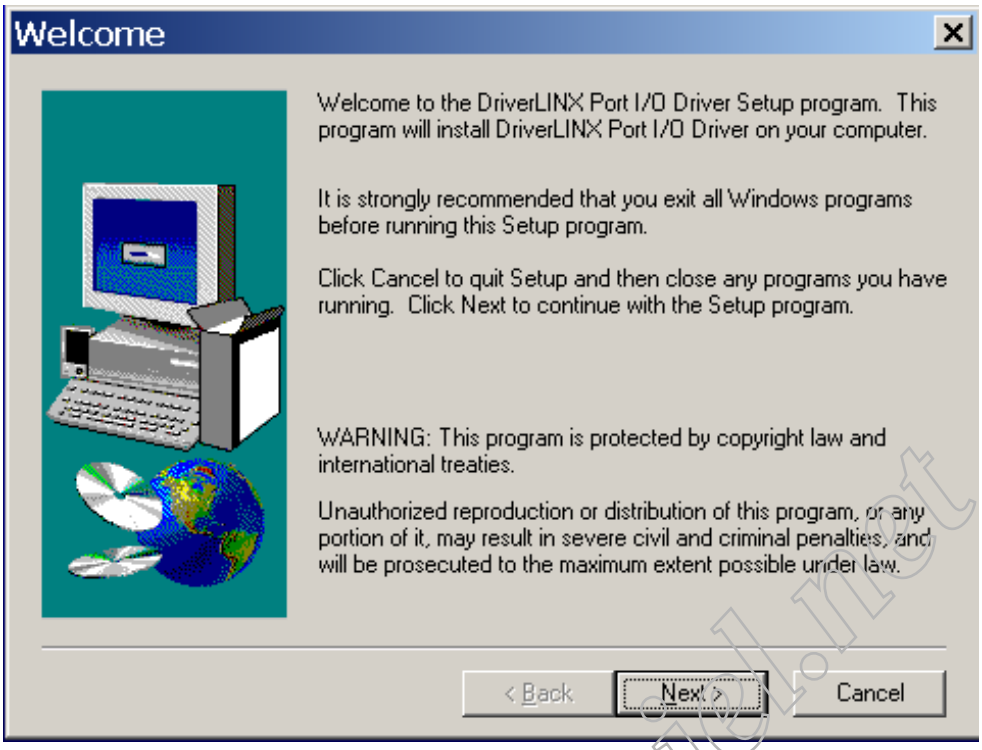
e. 12V DC power source

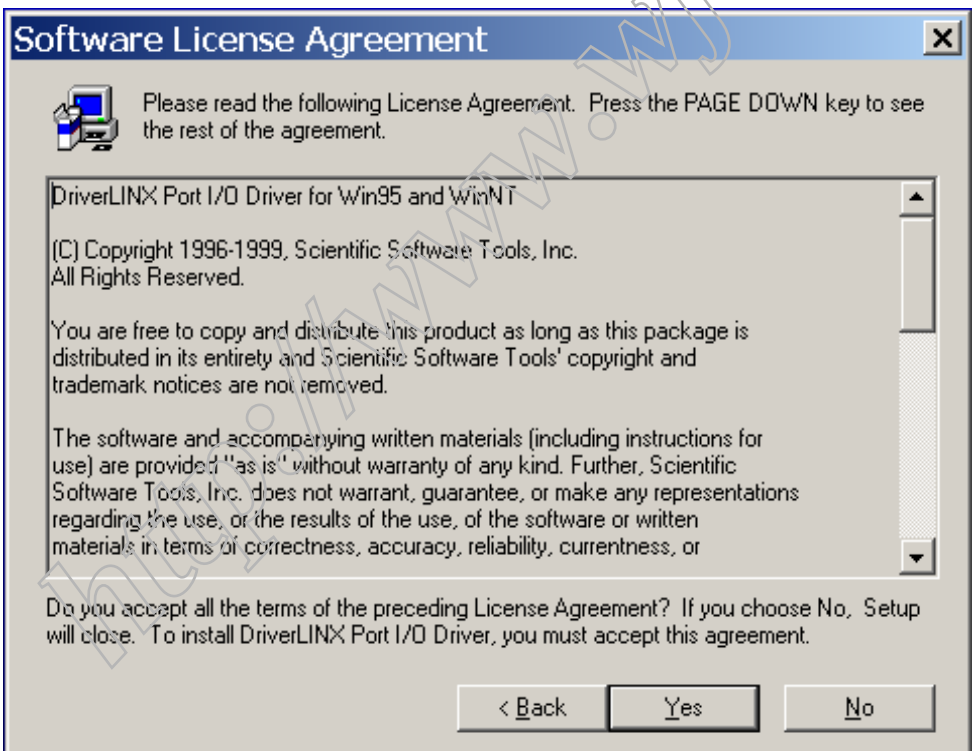
1. Install the "PORT95NT.EXE", and restart the computer.

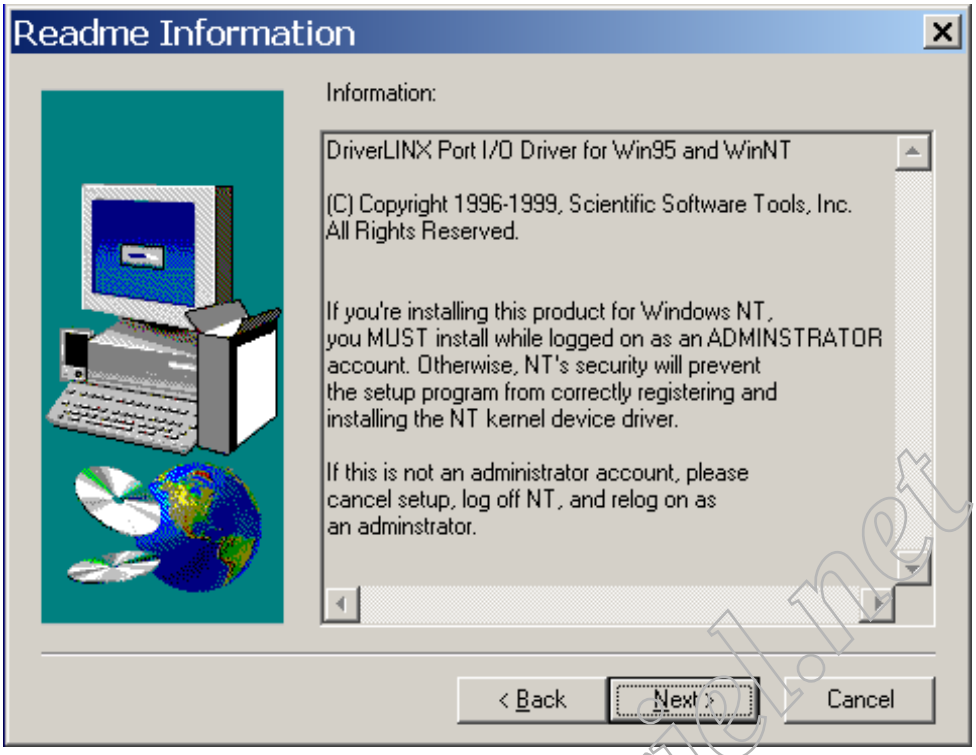
You must install the 

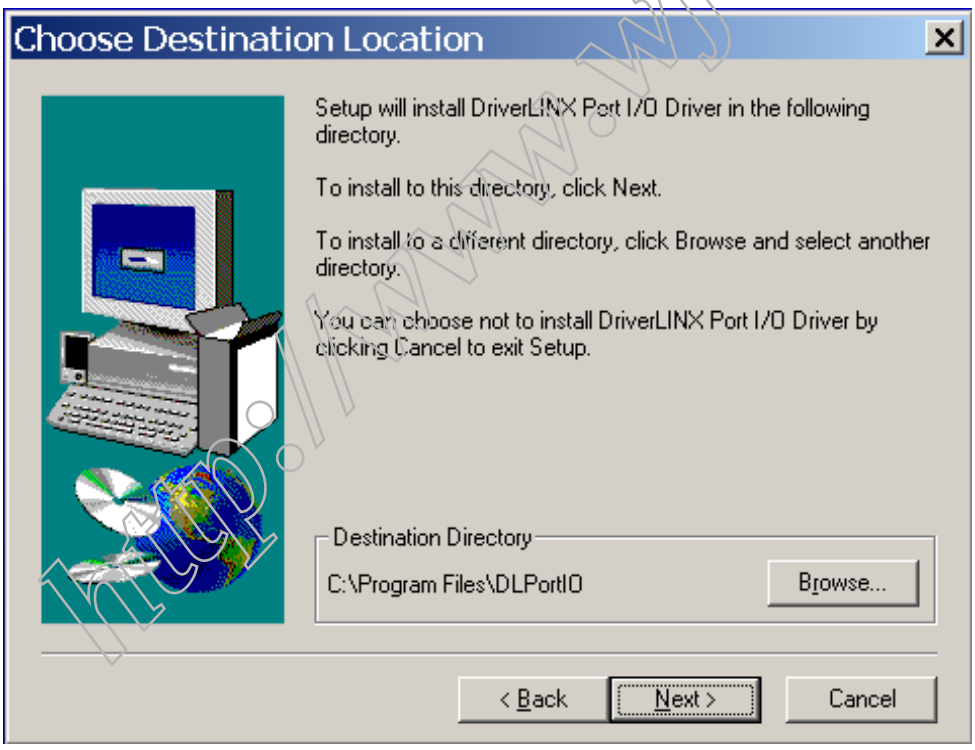
at the first. The processing as follows:

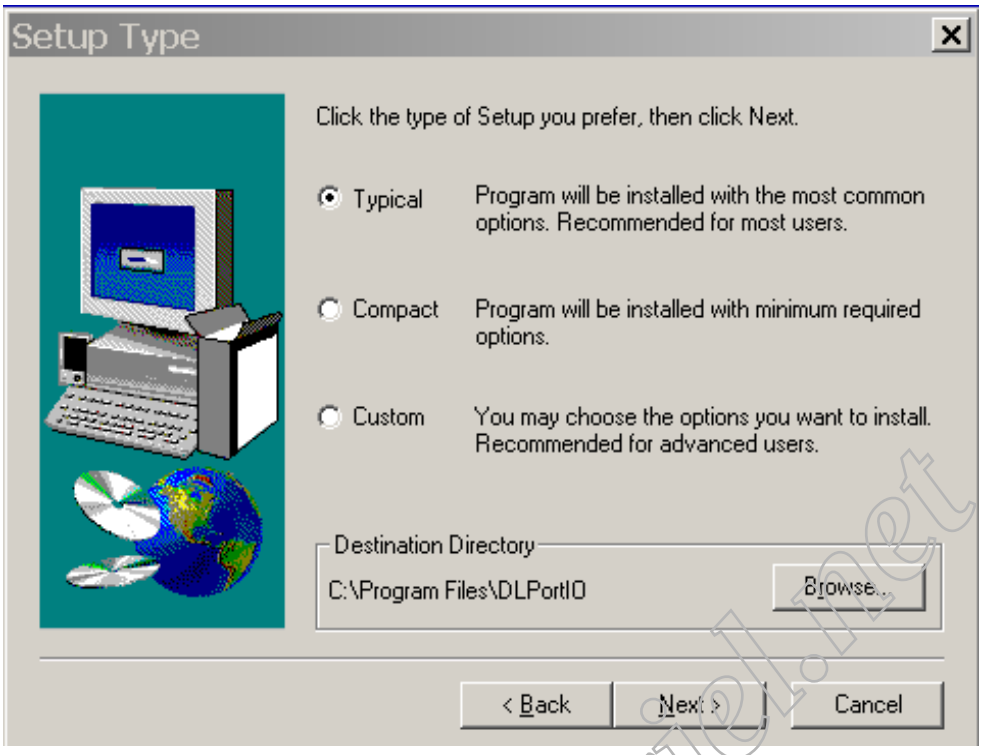


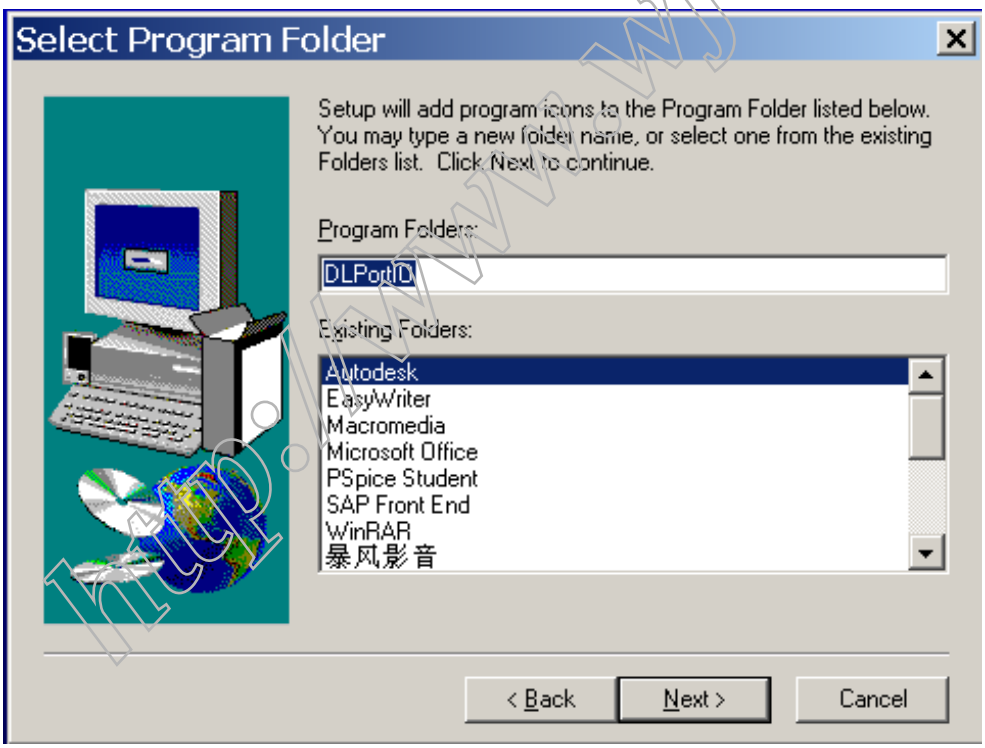


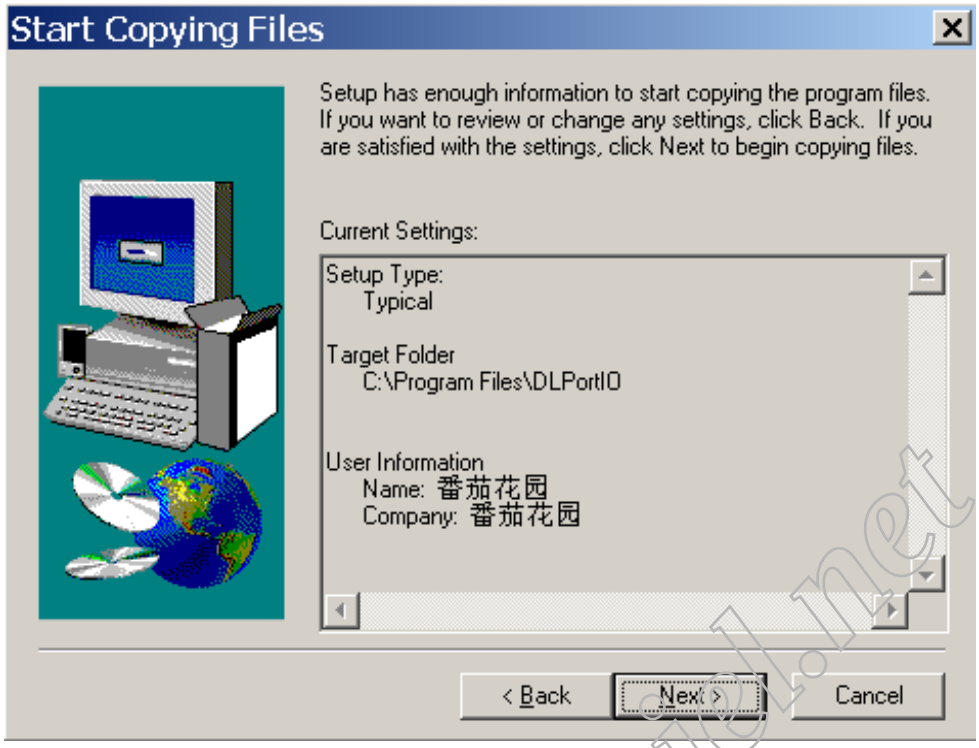


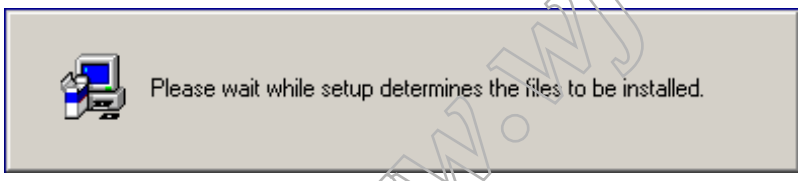




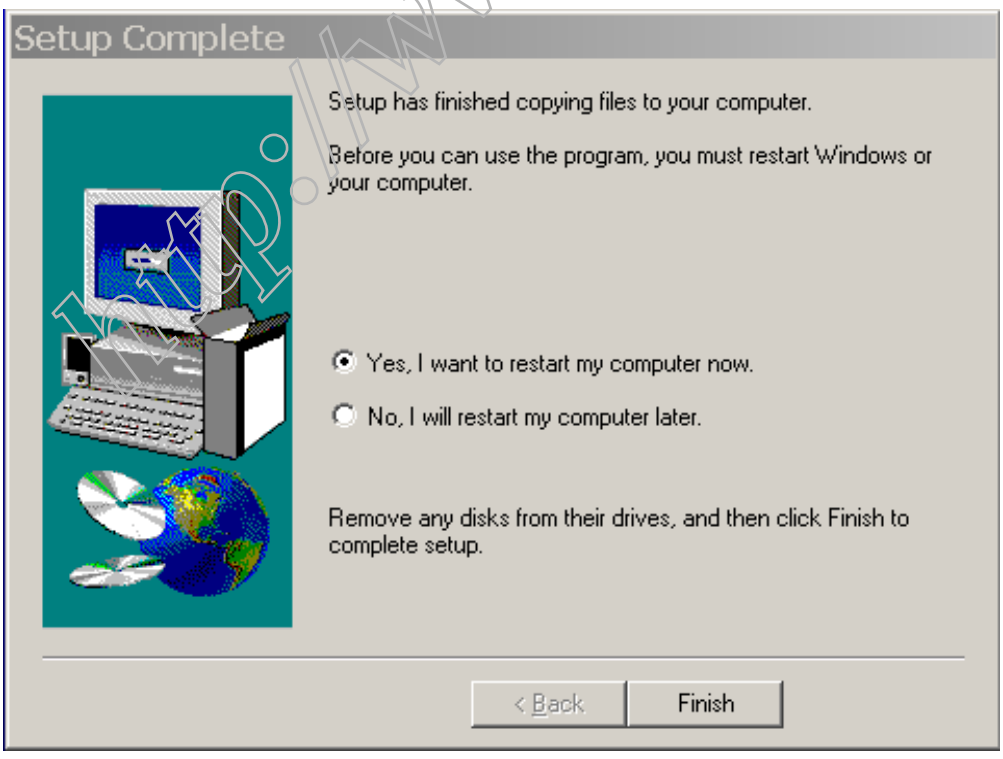








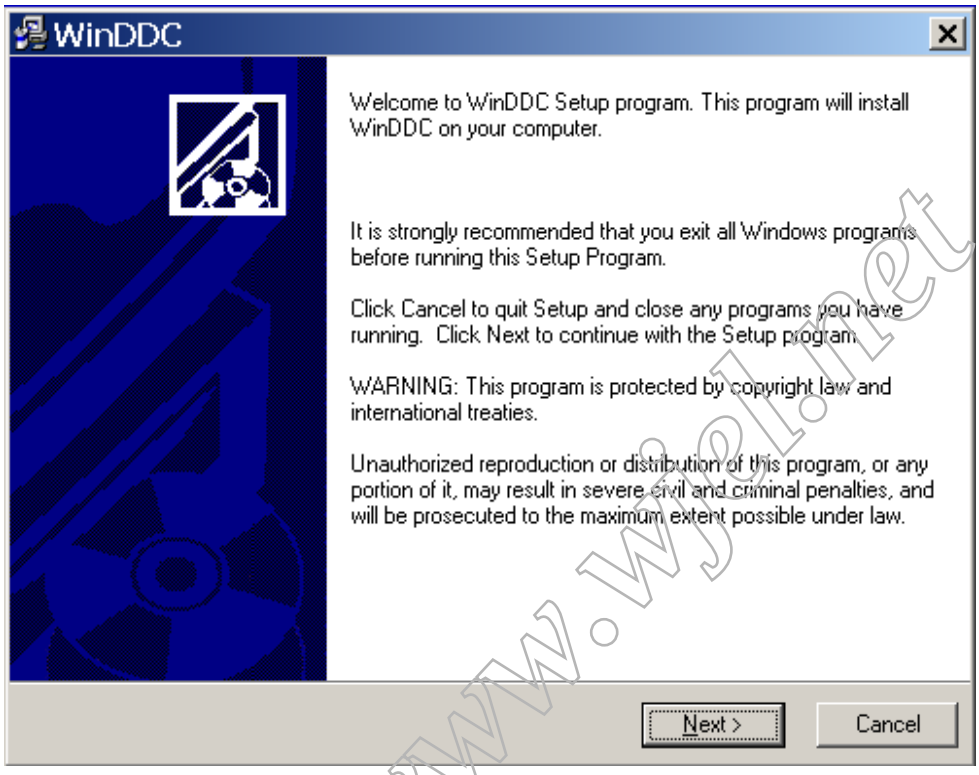
Click Finish to complete the installation.

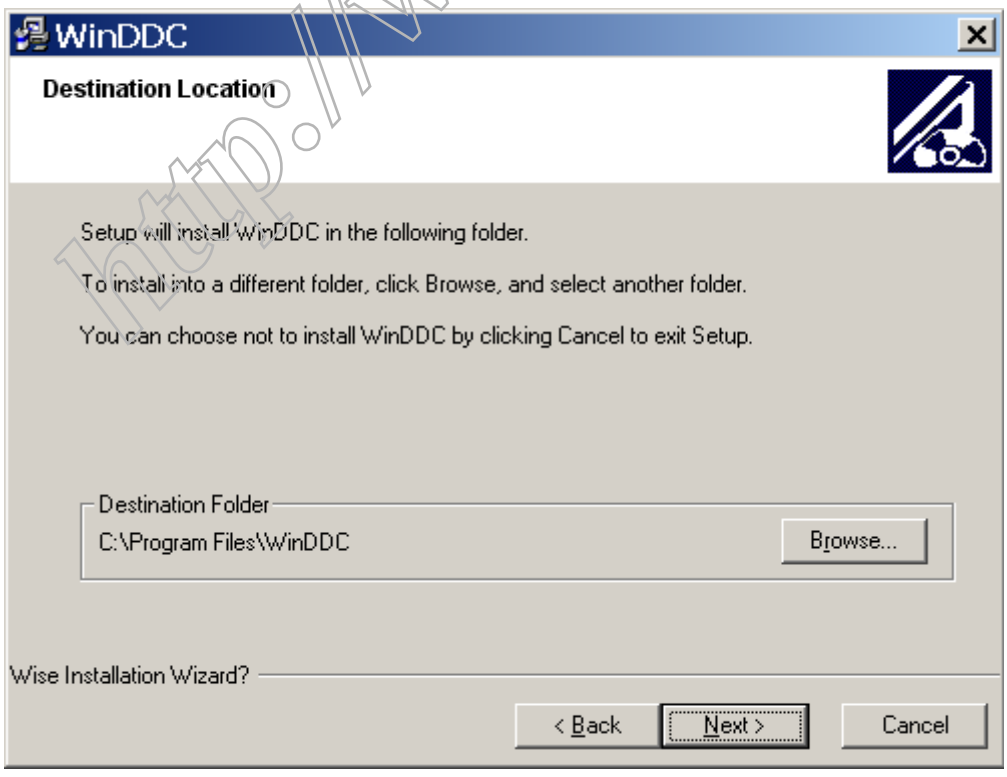


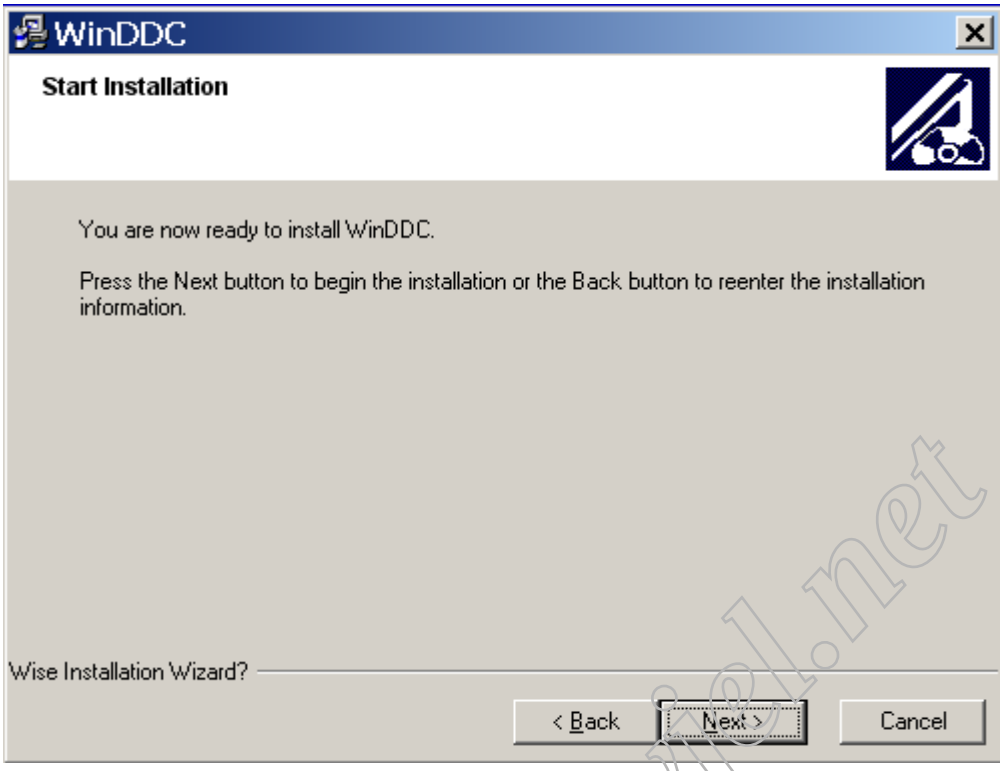
Note: After installation, you must restart the PC to take the setup to effect.

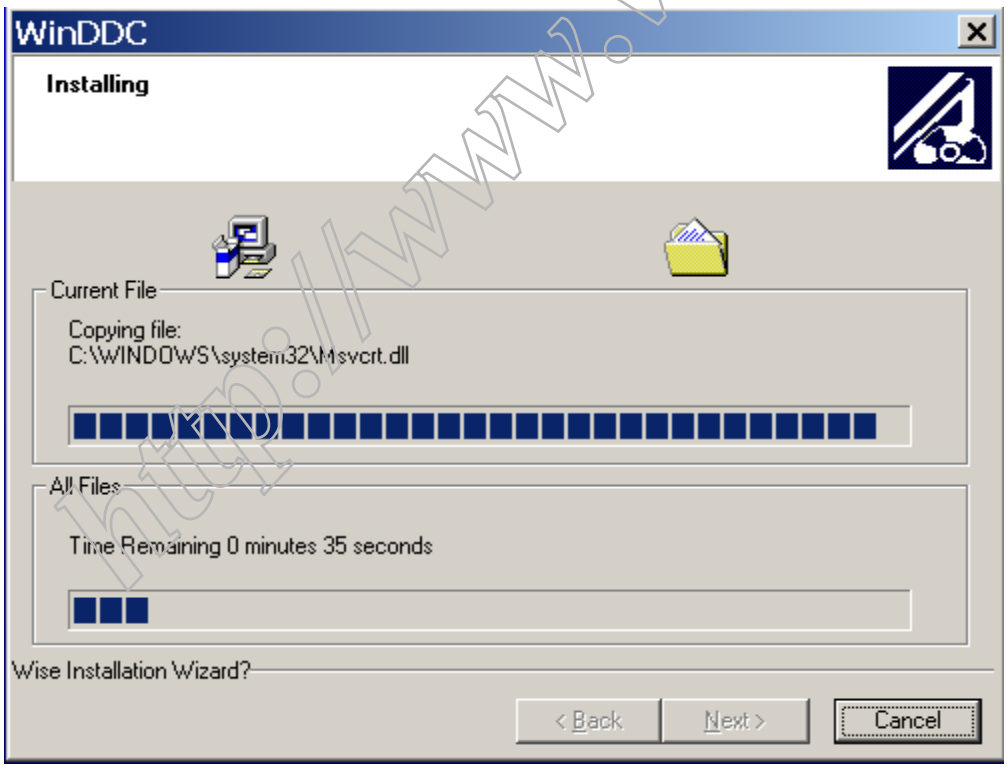
2. Install the "WinDDC_ setup"

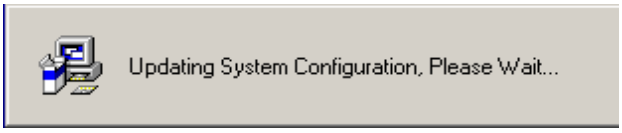
Second, you must install the  . The processing as follows:



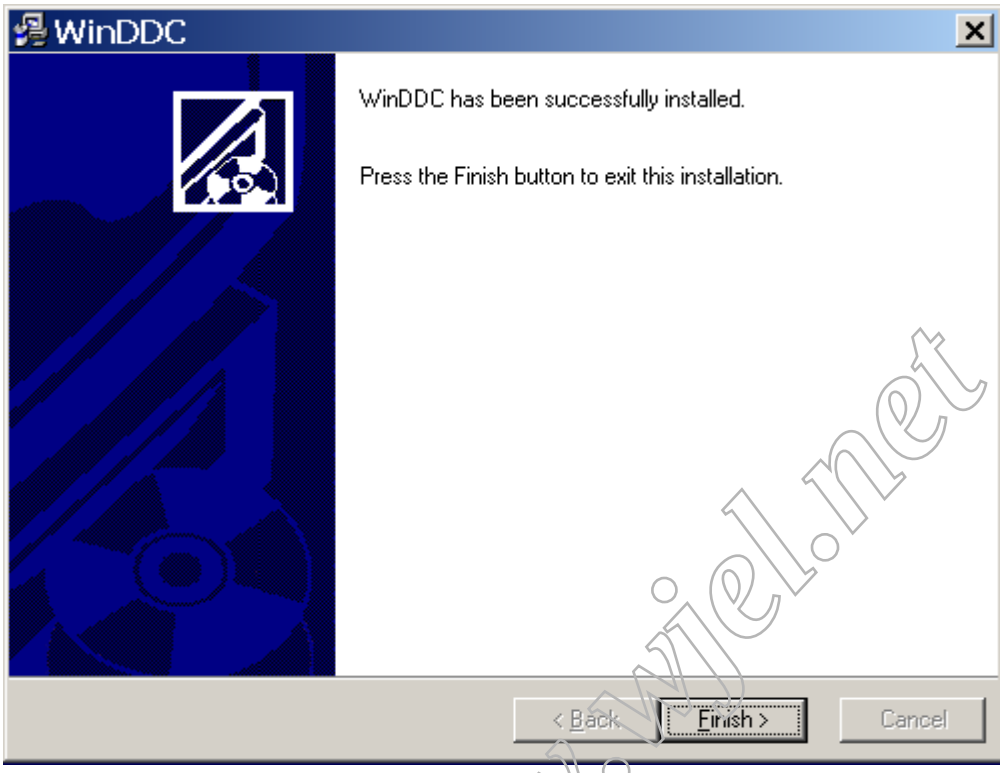




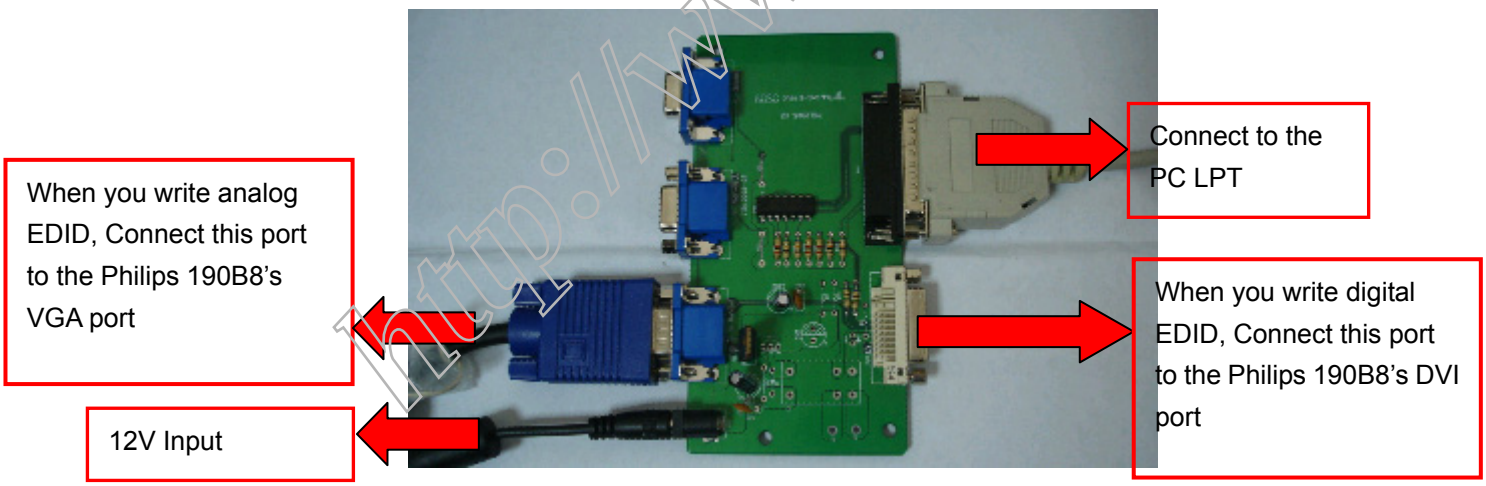




Click [Finish] to complete the installation.



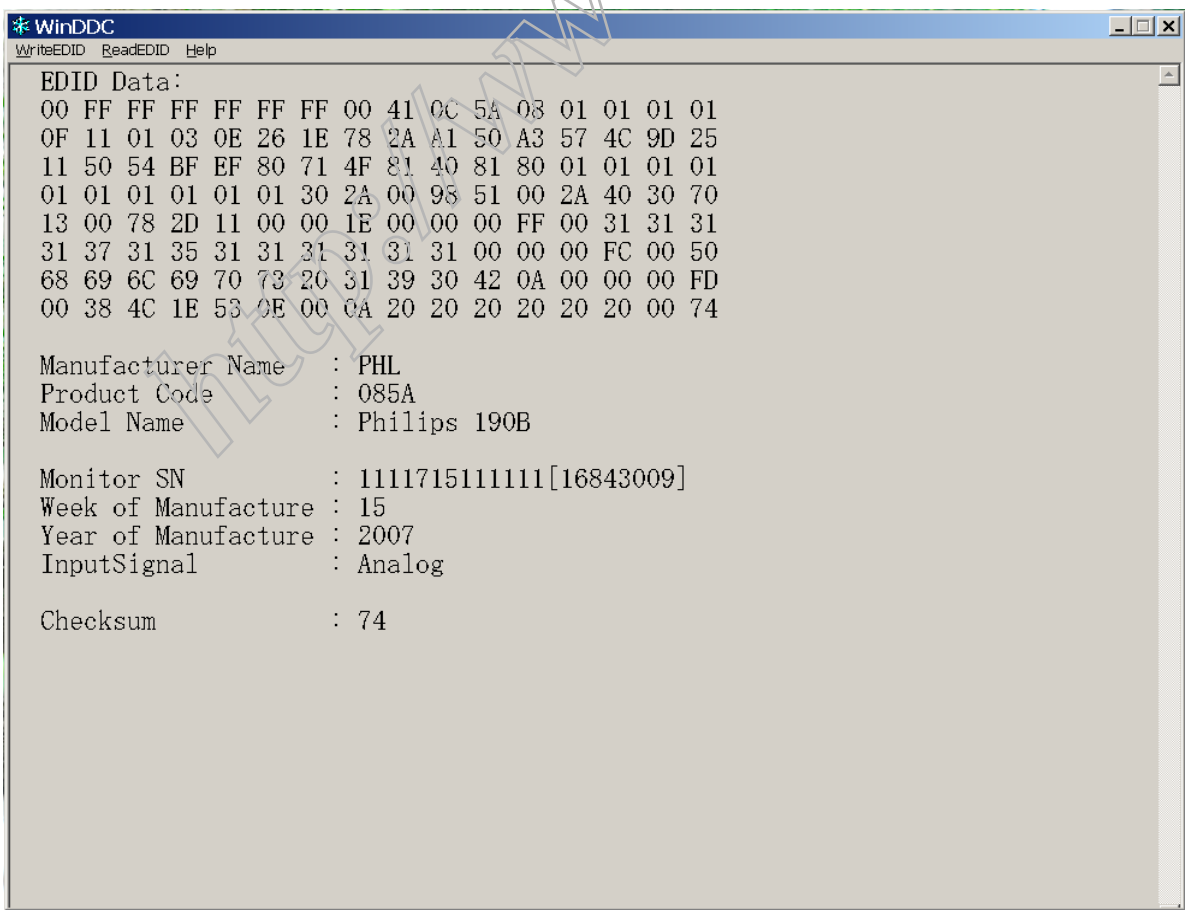
3. Connect the DDC board as follow:
Take Philips 190B8 for example



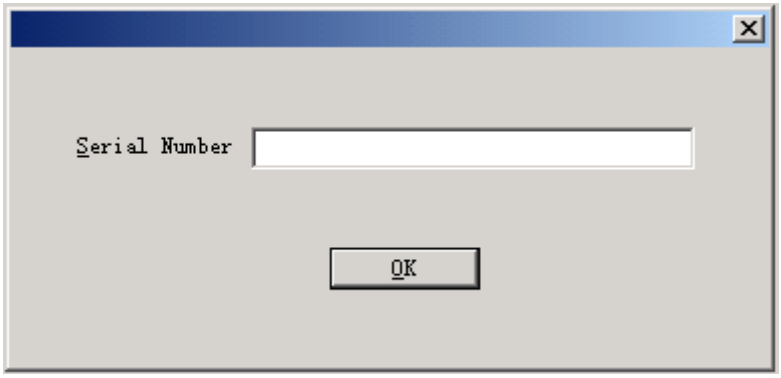
Note: Pin5 of the VGA cable which connects to the monitor should be cut off.

4. Take analog DDC write for example, as follow

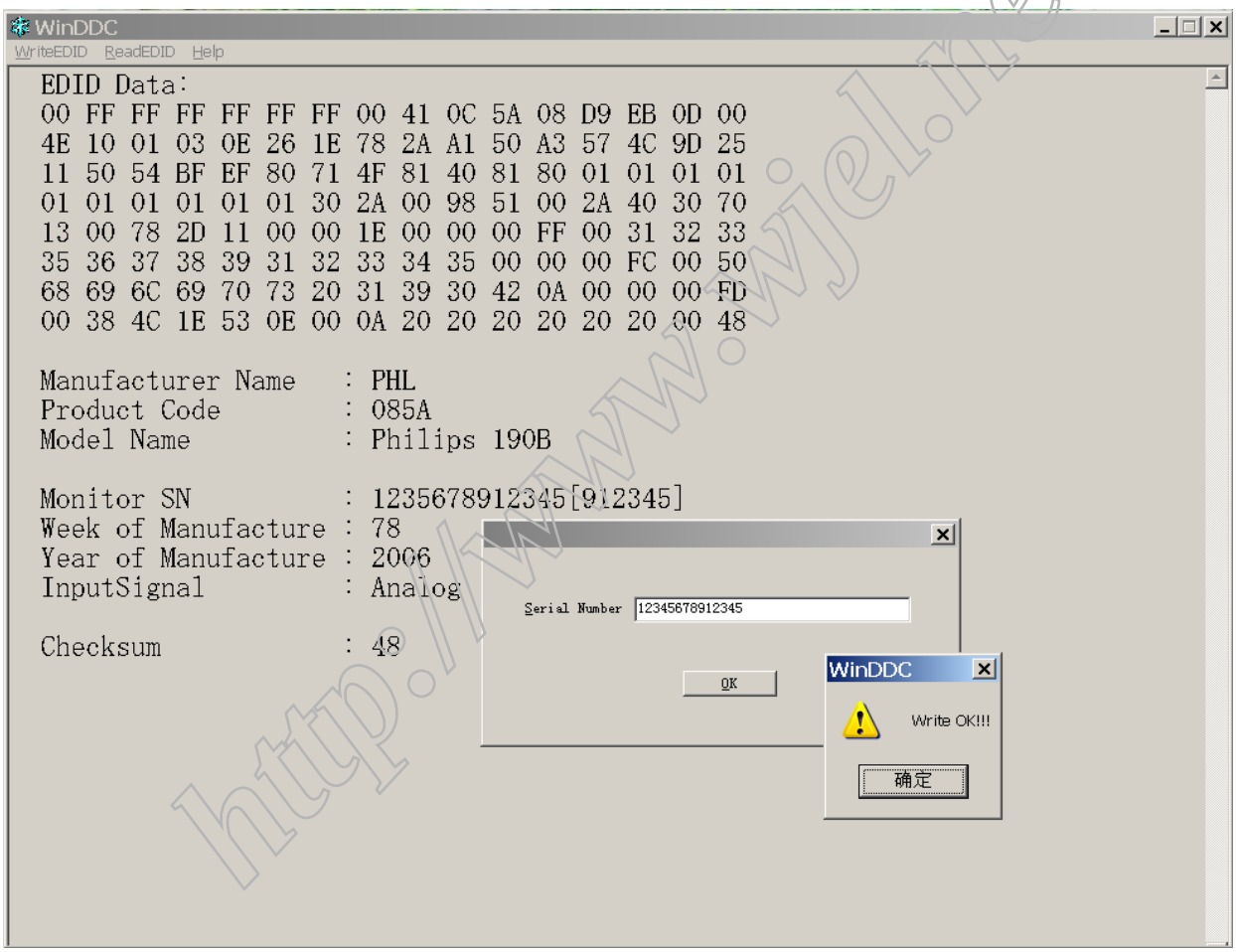
a. Double-click WinDDC.exe，appear as follow Figs：



b. Click WriteEDID.



c. Key 14 numbers in the Serial Number blank, then click “OK”. Now analog DDC Write completes, as follow.



Note: The way of digital DDC write is the same as analog DDC write.

Ih171D EDID

Analog

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 22 64 57 04 D1 04 00 00
16: 10 11 01 03 0A 25 17 78 EA 10 85 A0 58 53 8E 27
32: 25 4F 54 BF EF 80 81 80 81 C0 81 40 71 4F 61 46
48: 90 4F 95 0F 01 01 9A 29 A0 D0 51 84 22 30 50 98
64: 36 00 72 E6 10 00 00 1E 00 00 00 FD 00 37 4B 1E
80: 53 0E 00 0A 20 20 20 20 20 20 00 00 00 FF 00 32
96: 31 33 31 32 33 31 32 33 31 32 33 33 00 00 00 FC
112: 00 69 48 31 37 31 0A 20 20 20 20 20 20 20 00 89

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->
ID Manufacturer Name: HSD
ID Product Code: 0457
ID Serial Number: 000004d1
Week of Manufacture: 16
Year of Manufacture: 2007
<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->
EDID Version#: 01
EDID Revision#: 03
<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->
Video i/p definition: Analog
Signal Level Standard: 0.700V/0.300V(0.700Vpp)
Setup: Blank-to-Black not expected
Separate Sync Support: Yes
Composite Sync Support: No
Sync. on green video supported: Yes
Serration of the Vsync.Pulse is not required.
Max. H. Image Size : 37cm.
Max. V. Image Size : 23cm.
Display Gamma: 2.2
DPMS Features, Stand-by: Yes.
DPMS Features, Suspend: Yes.
DPMS Features, Active off: Yes.
Display Type: R/G/B color display.
Preferred Timing Mode: Yes.
<---Basic Display Parameters/Features--->

<---Color Characteristics--->
Red x: 0.6250000000
Red y: 0.3447265625
Green x: 0.3242187500
Green y: 0.5546875000
Blue x: 0.1542968750
Blue y: 0.1445312500
White x: 0.3085937500
White y: 0.3281250000

<-x-Color Characteristics-x->

<---Established Timings--->
Established Timings 1: BF
-720x400 @70Hz VGA,IBM
-640x480 @60Hz VGA,IBM
-640x480 @67Hz Apple,Mac II
-640x480 @72Hz VESA
-640x480 @75Hz VESA
-800x600 @56Hz VESA
-800x600 @60Hz VESA
Established Timings 2: EF
-800x600 @72Hz VESA
-800x600 @75Hz VESA
-832x624 @75Hz Apple,Mac II
-1024x768 @60Hz VESA
-1024x768 @70Hz VESA
-1024x768 @75Hz VESA
-1280x1024 @75Hz VESA
Established Timings 3: 80
-1152x870 @75Hz Apple,Mac II
<-x-Established Timings-x->

<---Standard Timing Identification--->
-1280x1024 @60
-1280x720 @60
-1280x960 @60
-1152x864 @75
-1024x768 @66
-1400x1050 @75
-1440x900 @75
<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->
Detailed Timing: 1440x900 @ 60Hz.
<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->
Detailed Timing: FD (Monitor limits)
Min. V. rate: 55Hz
Max. V. rate: 75Hz
Min. H. rate: 30KHz
Max. H. rate: 83KHz
Max. Pixel Clock: 140MHz
Detailed Timing: FF (Monitor SN) '213123123123'
Detailed Timing: FC (Monitor Name) 'iH171'
<-x-Detailed Timing Descriptions-x->

Extension Flag: 00
Checksum: 89

Ih171D EDID

Digital

128 bytes EDID Data (Hex):

00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

0: 00 FF FF FF FF FF FF 00 22 64 57 04 2B 05 00 00

16: 10 11 01 03 80 25 17 78 EA 10 85 A0 58 53 8E 27
32: 25 4F 54 BF EF 80 81 80 81 C0 81 40 71 4F 61 46
48: 90 4F 95 0F 01 01 9A 29 A0 D0 51 84 22 30 50 98
64: 36 00 72 E6 10 00 00 1E 00 00 00 FD 00 37 4B 1E
80: 53 0E 00 0A 20 20 20 20 20 20 00 00 00 FF 00 33
96: 31 32 31 33 32 31 32 33 31 33 32 33 00 00 00 FC
112: 00 69 48 31 37 31 0A 20 20 20 20 20 20 20 00 B8

Decoded EDID data

<---Header--->

Header: 00 FF FF FF FF FF FF 00

<-x-Header-x->

<---Vendor/Product Identification--->
ID Manufacturer Name: HSD
ID Product Code: 0457
ID Serial Number: 0000052b
Week of Manufacture: 16
Year of Manufacture: 2007
<-x-Vendor/Product Identification-x->

<---EDID Structure Version/Revision--->
EDID Version#: 01
EDID Revision#: 03
<-x-EDID Structure Version/Revision-x->

<---Basic Display Parameters/Features--->
Video i/p definition: Digital
Max. H. Image Size : 37cm.
Max. V. Image Size : 23cm.
Display Gamma: 2.2
DPMS Features, Stand-by: Yes.
DPMS Features, Suspend: Yes.
DPMS Features, Active off: Yes.
Display Type: R/G/B color display.
Preferred Timing Mode: Yes.
<---Basic Display Parameters/Features--->

<---Color Characteristics--->
Red x: 0.6250000000
Red y: 0.3447265625
Green x: 0.3242187500
Green y: 0.5546875000
Blue x: 0.1542968750
Blue y: 0.1445312500
White x: 0.3085937500
White y: 0.3281250000
<-x-Color Characteristics-x->

<---Established Timings--->
Established Timings 1: BF
-720x400 @70Hz VGA,IBM
-640x480 @60Hz VGA,IBM
-640x480 @67Hz Apple,Mac II

-640x480 @72Hz VESA
-640x480 @75Hz VESA
-800x600 @56Hz VESA
-800x600 @60Hz VESA
Established Timings 2: EF
-800x600 @72Hz VESA
-800x600 @75Hz VESA
-832x624 @75Hz Apple,Mac II
-1024x768 @60Hz VESA
-1024x768 @70Hz VESA
-1024x768 @75Hz VESA
-1280x1024 @75Hz VESA
Established Timings 3: 80
-1152x870 @75Hz Apple,Mac II
<-x-Established Timings-x->

<---Standard Timing Identification--->
-1280x1024 @60
-1280x720 @60
-1280x960 @60
-1152x864 @75
-1024x768 @66
-1400x1050 @75
-1440x900 @75
<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->
Detailed Timing: 1440x900 @ 60Hz.
<-x-Detailed Timing Descriptions-x->

<---Detailed Timing Descriptions--->
Detailed Timing: FD (Monitor limits)
Min. V. rate: 55Hz
Max. V. rate: 75Hz
Min. H. rate: 30KHz
Max. H. rate: 83KHz
Max. Pixel Clock: 140MHz
Detailed Timing: FF (Monitor SN) '312132123132'
Detailed Timing: FC (Monitor Name) 'iH171'
<-x-Detailed Timing Descriptions-x->

Extension Flag: 00
Checksum: B8

13. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding White-Balance adjustment.

1. How to do the Chroma-7120 MEM. Channel setting
   A. Reference to chroma 7120 user guide
   B. Use “SC” key and “NEXT” key to modify x,y,Y value and use “**ID**” key to modify the TEXT description Following is the procedure to do white-balance adjust

2. Setting the color temp. you want
   A. MEM.CHANNEL 3 (9300 color):
      9300 color temp. parameter is x = 283 ±28, y = 297 ±28,Y=220cd/㎡
   B. MEM.CHANNEL 4 (6500 color):
      6500 color temp. parameter is x = 313±28, y = 329 ±28, Y=220cd/㎡
   C. MEM.CHANNEL 9 (5500 color):
      5500 color temp. parameter is x = 333±28, y = 348 ±28, Y=220cd/㎡
3. Enter into factory mode of iH171D
   Turn on the power, press simultaneously the MENU and AUTO buttons, then the factory OSD will be at the left top of the panel.

4. Bias adjustment:

   Set the **Contrast** to 50; Adjust the **Brightness** to 80

5. Gain adjustment:

Move cursor to “-F-” and press MENU key

   A. Adjust 9300 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 = 283 ±28, y = 297 ±28, Y=220cd/㎡
      4. Adjust the RED of color 1 on factory window until chroma 7120 indicator reached the value R=100
      5. Adjust the GREEN of color 1 on factory window until chroma 7120 indicator reached the value G=100
      6. Adjust the BLUE of color 1 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±2

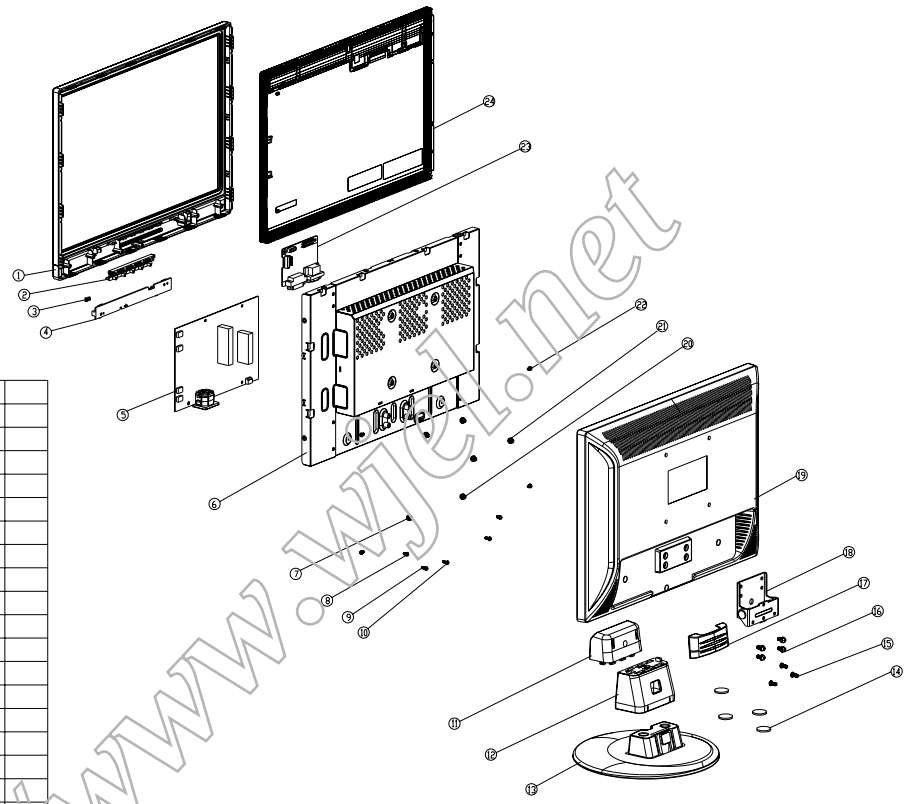
   B. Adjust 6500 color-temperature
      1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
      2. Switch the MEM.channel to Channel 4(with up or down arrow on chroma 7120)
      3. The LCD-indicator on chroma 7120 will show x = 313 ±28, y = 329 ±28, Y=220cd/㎡
      4. Adjust the RED of color 2 on factory window until chroma 7120 indicator reached the value R=100
      5. Adjust the GREEN of color 2 on factory window until chroma 7120 indicator reachedthe value G=100
      6. Adjust the BLUE of color 2 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±2

   C. Adjust 5500 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 = 333±28, y = 348 ±28, Y=220cd/㎡
4. Adjust the RED of color 3 on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN of color 3 on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE of color 3 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±2

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

15. Monitor Exploded View



ITEM	P/N		
1	BEZEL		
2	KEY PAD		
3	LENS		
4	KEY BOARD		
5	POWER BOARD		
6	MAIN FRAME		
7	SCREW(MAIN BOARD/MAIN FRAME)		
8	SCREW(REARCOVER/MAIN FRAME)		
9	SCREW(KEY BOARD/BEZEL)		
10	SCREW(REARCOVER/BEZEL)		
11	STAND TOP		
12	STAND BOTTOM		
13	BASE		
14	RUBBER FOOT		
15	SCREW(HINGE/STAND)		
16	SCREW(HINGE/MAIN FRAME)		
17	CABLE COVER		
18	HINGE		
19	REARCOVER		
20	SCREW(POWER BOARD/MAIN FRAME)		
21	SCREW(POWER BOARD/MAIN FRAME)		
22	SCREW(PANEL/MAIN FRAME)		
23	MAIN BOARD		
24	PANEL		

15. BOM List

T77HM6MKWEHZN

Location	Part No.	Description
	007G 5 L 65	COMPOUND PALLET
	040G 459625 5A	PALLET LABEL
	044G6002815 1A	PAPER BOARD
	050G 600 1 W	WHITE STRAP
	050G 600 2	HANDLE1
	050G 600 3	HANDLE2
	052G 1185	MIDDLE TAPE
	052G 1186	SMALL TAPE
	052G 1211 A	165MINIUM TAPE
	089G 725GAA DB	D-SUB
	089G402A18N IS	POWER CORD
	095G8018 3X660	LVDS CABLE 30P-24P 140MM
	0M1G 130 5120	SCREW
	0M1G 340 10225 CR3	SCREW
	0M1G1730 6120	SCREW
	0Q1G 330 8120	SCREW 3X8MM
	0Q1G 330 12 47 CR3	SCREW
	705GQ734177	STAND-BASE ASS'Y(17")
	A34G0053 ZT 1B	STAND TOP
	A34G0054 ZT 1B	STAND BOTTOM
	A34G0097 ZT 1B 33	BASE 06S4
	AQ1G1740 12120	SCREW
	Q37G0043 1	HINGE
	750GLH70GW112N	PANEL HSD170MGW1 A00 HSD
	A15G0207 H 2	MAIN FRAME
	A33G0030 ZT 1L 32	CABLE COVER
	A33G0073 ZT 1L	KEY PAD
	A33G0076 1 1C	POWER LENS
	CBPC7HMAHZQ2	MAIN BOARD
CN701	033G3802 9	WAFER 9P RIGHT ANELE PITCH
CN703	033G8027 24 H	CONN W TO B12P*2 P*2.0 4505-2
	040G 457624 1B	LABEL-CPU
	040G 45762412B	CBPC LABEL
C426	067G215V100 7N	KY50VB10-M-CC3 5*11.5MM
C702	067G215V101 4P	EC 105℃ CAP 100UF M 25V
C706	067G305S1003HV	10UF +-20% 16V
C708	067G305S1003HV	10UF +-20% 16V
C711	067G305S1003HV	10UF +-20% 16V
CN401	088G 35315F H	D-SUB 15PIN

CN402	088G 35424F C	DVI 24PIN C
X401	093G 2253B J	14.31818MHZ/85C
CN404	095G8014 6D646	WIRE HARNESS
	Q85G 583605	GASKET£¨ÂÁ²ÅÝÃÞ£©
U401	056G 562145	IC TSUM56AWK-LF-1 PQFP-128
U702	056G 563 27	IC AIC1117A-18PYTR-R SOT223
U701	056G 585 4A	AP1117E33LA
U406	056G1133 56	M24C16-WMN6TP
U403	056G1133 84	AF24BC02-S1
U404	056G1133 84	AF24BC02-S1
U402	056G1133713	IC PM25LV010A-100SCE SOIC-8
Q402	057G 417 12 T	KEC 2N3904S-RTK/PS
Q701	057G 417 12 T	KEC 2N3904S-RTK/PS
Q702	057G 417 12 T	KEC 2N3904S-RTK/PS
Q403	057G 417 13 T	KEC 2N3906S-RTK/PS
Q404	057G 417 13 T	KEC 2N3906S-RTK/PS
Q704	057G 417 13 T	KEC 2N3906S-RTK/PS
Q406	057G 758 1	2N7002ESOT23 SILICONIX
Q407	057G 758 1	2N7002ESOT23 SILICONIX
Q408	057G 758 1	2N7002ESOT23 SILICONIX
Q409	057G 758 1	2N7002ESOT23 SILICONIX
Q703	057G 763 1	A03401 SOT23 BY AOS(A1)
R467	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R471	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R439	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R438	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R437	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R436	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R435	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R434	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R433	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R432	061G0402100	RST CHIPR 10 OHM +-5% 1/16W
R412	061G0402100 1F	RST CHIPR 1KOHM +-1% 1/16W
R405	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R407	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R409	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R417	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R419	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R425	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R427	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R460	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R461	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R462	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R472	061G0402101	RST CHIPR 100 OHM +-5% 1/16W

R474	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R476	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R701	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R440	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R416	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R414	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R420	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R418	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R451	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R457	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R458	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R465	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R421	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R426	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R428	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R429	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R430	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R444	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R445	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R449	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R469	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R473	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R475	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R718	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R710	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R477	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R704	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R708	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R459	061G0402203	RST CHIP 20K 1/16W 5%
R446	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R447	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R424	061G0402220 1F	RST CHIPR 2.2KOHM +-1% 1/16W
R413	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R415	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R456	061G0402223	RST CHIPR 22 KOHM +-5% 1/16W
R442	061G0402390 0F	RST CHIP 390R 1/16W 1%
R728	061G0402392	RST CHIP 3.9K 1/16W 5%
R729	061G0402392	RST CHIP 3.9K 1/16W 5%
R730	061G0402392	RST CHIP 3.9K 1/16W 5%
R731	061G0402392	RST CHIP 3.9K 1/16W 5%
R501	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R502	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R503	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R505	061G0402470	RST CHIPR 47 OHM +-5% 1/16W

R506	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R702	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R494	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R493	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R491	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R499	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R498	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R497	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R495	061G0402470	RST CHIPR 47 OHM +-5% 1/16W
R411	061G0402470 1F	RST CHIPR 4.7KOHM +-1% 1/16W
R410	061G0402471	RST CHIPR 470 OHM +-5% 1/16W
R709	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R705	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R703	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R504	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R500	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R496	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R492	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R468	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R464	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R711	061G0402513	RST CHIP 51K 1/16W 5%
R404	061G0402560 9F	RST CHIPR 56 OHM +-1% 1/16W
R406	061G0402560 9F	RST CHIPR 56 OHM +-1% 1/16W
R408	061G0402560 9F	RST CHIPR 56 OHM +-1% 1/16W
R466	061G0402681	RST CHIPR 680 OHM +-5% 1/16W
R470	061G0402681	RST CHIPR 680 OHM +-5% 1/16W
R401	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%
R402	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%
R403	061G0402750 9F	RST CHIP 75 OHM 1/16W 1%
FB401	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB402	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB403	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R712	061G0603103	RST CHIPR 10 KOHM +-5% 1/10W
R713	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
R714	061G1206151	RST CHIPR 150 OHM +-5% 1/4W
C428	065G0402100 31	CAP 0402 10PF J 50V NPO
C429	065G0402100 31	CAP 0402 10PF J 50V NPO
C417	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C416	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C415	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C414	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C717	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C716	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C440	065G0402104 15	MLCC 0402 0.1UF K 16V X5R

C439	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C438	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C437	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C436	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C425	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C424	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C423	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C422	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C421	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C420	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C419	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C418	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C446	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C447	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C704	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C705	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C707	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C709	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C710	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C714	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C715	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C413	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C403	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C402	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C401	065G0402104 15	MLCC 0402 0.1UF K 16V X5R
C434	065G0402221 32	MLCC 0402 CAP 220PF J 50V X7R
C433	065G0402221 32	MLCC 0402 CAP 220PF J 50V X7R
C412	065G0402221 32	MLCC 0402 CAP 220PF J 50V X7R
C411	065G0402330 31	33PF +-50% 50V NPO
C432	065G0402330 31	33PF +-50% 50V NPO
C404	065G0402473 12	CHIP 0.047UF 16V X7R
C405	065G0402473 12	CHIP 0.047UF 16V X7R
C406	065G0402473 12	CHIP 0.047UF 16V X7R
C407	065G0402473 12	CHIP 0.047UF 16V X7R
C408	065G0402473 12	CHIP 0.047UF 16V X7R
C409	065G0402473 12	CHIP 0.047UF 16V X7R
C410	065G0402473 12	CHIP 0.047UF 16V X7R
C430	065G0402473 12	CHIP 0.047UF 16V X7R
C431	065G0402473 12	CHIP 0.047UF 16V X7R
C435	065G0402473 12	CHIP 0.047UF 16V X7R
C442	065G0402473 12	CHIP 0.047UF 16V X7R
C443	065G0402473 12	CHIP 0.047UF 16V X7R
C444	065G0402473 12	CHIP 0.047UF 16V X7R
C445	065G0402473 12	CHIP 0.047UF 16V X7R

C448	065G0603224 17	CAP:CER 0.22UF-20%-80% 16V
FB409	071G 56Z601	CHIP BEAD 600 OHM 0805
FB408	071G 56Z601	CHIP BEAD 600 OHM 0805
FB407	071G 56Z601	CHIP BEAD 600 OHM 0805
FB406	071G 56Z601	CHIP BEAD 600 OHM 0805
FB405	071G 56Z601	CHIP BEAD 600 OHM 0805
FB404	071G 59B121	TB160808B
D413	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D412	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D411	093G 6433P	BAV99
D410	093G 6433P	BAV99
D409	093G 6433P	BAV99
D408	093G 6433P	BAV99
D407	093G 6433P	BAV99
D406	093G 6433P	BAV99
D405	093G 6433P	BAV99
D404	093G 6433P	BAV99
D403	093G 6433P	BAV99
D402	093G 6433P	BAV99
D401	093G 6433P	BAV99
ZD401	093G 39S 34 T	UDZS5.6B
ZD402	093G 39S 34 T	UDZS5.6B
ZD403	093G 39S 34 T	UDZS5.6B
ZD404	093G 39S 34 T	UDZS5.6B
ZD405	093G 39S 34 T	UDZS5.6B
ZD406	093G 39S 34 T	UDZS5.6B
ZD407	093G 39S 34 T	UDZS5.6B
ZD408	093G 39S 34 T	UDZS5.6B
ZD409	093G 39S 34 T	UDZS5.6B
ZD410	093G 39S 34 T	UDZS5.6B
ZD411	093G 39S 34 T	UDZS5.6B
D414	093G 64S522SEM	LL4148
D701	093G2004 2	DIODE SR24
	715G2565 1	MAIN BOARD PCB
	KEPC7QB5	KEY BOARD
CN101	033G3802 6H	WAFER 6P RIGHT ANGLE PITCH 2.0
SW103	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW102	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW101	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW105	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW104	077G 600 1GCJ	TACT SWITCH TSPB-2 -NP
LED101	081G 12 1 GP	LED GP32032M/R003-ZY-33
R104	061G0603182	RST CHIPR 1.8 KOHM +-5% 1/10W
R103	061G0603182	RST CHIPR 1.8 KOHM +-5% 1/10W

R105	061G0603302	RST CHIPR 3 KOHM +-5% 1/10W
R102	061G0603302	RST CHIPR 3 KOHM +-5% 1/10W
C109	065G0603104 32	CHIP 0.1UF 50V X7R
C108	065G0603104 32	CHIP 0.1UF 50V X7R
C107	065G0603104 32	CHIP 0.1UF 50V X7R
C106	065G0603104 32	CHIP 0.1UF 50V X7R
C110	065G0603104 32	CHIP 0.1UF 50V X7R
FB101	071G 56K121 M	CHIP BEAD
ZD103	093G 39S 34 T	UDZS5.6B
ZD104	093G 39S 34 T	UDZS5.6B
ZD105	093G 39S 34 T	UDZS5.6B
ZD101	093G 39S 34 T	UDZS5.6B
ZD102	093G 39S 34 T	UDZS5.6B
	715G2595 1	KEY BOARD PCB
	PWPC721HE2	POWER BOARD
CN801	033G8020 2E F	CONNECTOR
CN802	033G8020 2E F	CONNECTOR
	040G 45762420A	LABEL 25X6MM
IC903	056G 139 3A	IC PC123Y22FZ0F
NR901	061G 58080 WT	8 OHM NCT
C903	063G 10747410V	0.47UF 275VAC ARCO
C801	065G 3J1506ET	15PF 5% CC45SL 3KV TDK
C901	065G305M1022BP	Y2 1000PF M 250VAC Y5P
C902	065G305M1022BP	Y2 1000PF M 250VAC Y5P
C921	065G306M3322BP	3300PF 20%
C907	067G 40Z10115K	CAP 105℃ 100UF M 450V
C922	067G215D4714KV	E.C 105℃ CAP 470UF M 25V ED SERIES
C802	067G215D4714KV	E.C 105℃ CAP 470UF M 25V ED SERIES
C918	067G215D6814KV	CAP 105℃ 680UF M 25V
C917	067G215D6814KV	CAP 105℃ 680UF M 25V
C940	067G215S1023KV	105℃ 1000UF M 16V
C939	067G215S1023KV	105℃ 1000UF M 16V
C915	067G215S4713KV	EC 105℃ CAP 470UF M 16V
L902	073G 174 65 H	LINE FILTER
T901	080GL17T 33 DN	XFMR FOR POWER DARFON
T801	080GL17T 40 DN	X'FMR TK.2001U.101
CN901	087G 501 32 S	AC SOCKET
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON
CN902	095G801410D 51	HARNESS 10P-9P 110MM
	705GQ7 57001	Q901 ASS'Y
Q901	057G 724 11	STP9NK65ZFP
HS3	090G6263 1	HEAT SINK
	0M1G1730 8120	SCREW
	705GQ7 93001	D905 ASS'Y

HS4	090G6084 1 GP	HEAT SINK
D905	093G 60278	DIODE SP1060 ITO-220 SECOS
	0M1G1730 8120	SCREW
	705GQ761006	R908 ASS'Y
R908	061G152M10458F	100K OHM 5% 2W
	096G 29 8	TUBE
	705GQ761007	R914 ASS'Y
R914	061G152M478 64	0.47 OHM 5% 2W
	096G 29 1	SHRINK TUBE UL/CSA
	705GQ793012	D906 ASS'Y
D906	093G 60267	SP10100
	0M1G1730 8120	SCREW
HS2	Q90G6263 2	HEAT SINK
IC801	056G 368 14	IC SMPS KA7500CDTF SOIC-16
IC901	056G 379 76	IC LD7552BPS SOP-8
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q806	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q804	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q812	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q809	057G 759 2	RK7002
Q810	057G 759 2	RK7002
Q808	057G 760 4B	PDTA144WK SOT346
Q805	057G 760 5B	PDTC144WK SOT346
Q802	057G 763 14	AM9945N
R823	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R801	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R808	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R814	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R818	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R821	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R822	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R824	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R827	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R926	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R942	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R863	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R832	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R828	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R820	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R817	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R807	061G0603100 2F	RST CHIPR 10 KOHM +-1% 1/10W
R813	061G0603102	RST CHIP 1K 1/10W 5%

R862	061G0603105	RST CHIPR 1 MOHM +-5% 1/10W
R835	061G0603105	RST CHIPR 1 MOHM +-5% 1/10W
R803	061G0603106	RST CHIPR 10 MOHM +-5% 1/10W
R930	061G0603243 1F	RST CHIPR 2.43 KOHM +-1% 1/10W
R940	061G0603330 2F	RST CHIPR 33 KOHM +-1% 1/10W
R927	061G0603360 1F	RST CHIPR 3.6 KOHM +-1% 1/10W
R811	061G0603472	RST CHIPR 4.7KOHM +-5% 1/10W
R851	061G0603510 1F	RST CHIPR 5.1 KOHM +-1% 1/10W
R841	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W
R853	061G0603683	RST CHIPR 68 KOHM +-5% 1/10W
R802	061G0603910 2F	RST CHIP 91K 1/10W 1%
R831	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W
R915	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W
R804	061G0805101	RST CHIPR 100 OHM +-5% 1/8W
R826	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R925	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R943	061G0805102	RST CHIPR 1KOHM +-5% 1/8W
R938	061G0805103	10 KOHM 1/10W
R924	061G0805151	RST CHIPR 150 OHM +-5% 1/8W
R850	061G0805220	22&8 1/10W
R839	061G0805220	22&8 1/10W
R829	061G0805220	22&8 1/10W
R825	061G0805220	22&8 1/10W
R837	061G0805473	RST CHIPR 47 KOHM +-5% 1/8W
R810	061G0805510 2F	RST CHIPR 51 KOHM +-1% 1/8W
F801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR801	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR901	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
JR902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R910	061G1206100	RST CHIP 10R 1/4W 5%
R962	061G1206101	100 1206
R961	061G1206101	100 1206
R935	061G1206101	100 1206
R920	061G1206101	100 1206
R919	061G1206101	100 1206
R918	061G1206101	100 1206
R941	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R944	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R945	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R946	061G1206102	RST CHIPR 1 KOHM +-5% 1/4W
R912	061G1206221	RST CHIPR 220 OHM +-5% 1/4W
R904	061G1206304	300 KOHM 1/8W
R933	061G1206304	300 KOHM 1/8W
R932	061G1206304	300 KOHM 1/8W

R855	061G1206330	RST CHIPR 33 OHM +-5% 1/4W
R856	061G1206330	RST CHIPR 33 OHM +-5% 1/4W
R909	061G1206519	RST CHIPR 5.1 OHM +-5% 1/4W
R900	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R901	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
R902	061G1206684	RST CHIPR 680 KOHM +-5% 1/4W
C842	065G0603103 32	0.01UF +-10% 50V X7R
C807	065G0603104 22	CHIP 0.1UF 25V X7R
C821	065G0603104 22	CHIP 0.1UF 25V X7R
C825	065G0603104 22	CHIP 0.1UF 25V X7R
C834	065G0603104 22	CHIP 0.1UF 25V X7R
C823	065G0603222 22	CHIP 2200PF 25V X7R
C819	065G0603222 22	CHIP 2200PF 25V X7R
C932	065G0805102 31	1000PF 50V NPO
C839	065G0805102 31	1000PF 50V NPO
C838	065G0805102 31	1000PF 50V NPO
C928	065G0805103 32	10NF/50V/0805/X7R
C930	065G0805104 32	CHIP 0.1U 50V X7R
C924	065G0805104 32	CHIP 0.1U 50V X7R
C916	065G0805104 32	CHIP 0.1U 50V X7R
C905	065G0805104 32	CHIP 0.1U 50V X7R
C824	065G0805104 32	CHIP 0.1U 50V X7R
C822	065G0805105 22	CHIP 1UF 25V X7R 0805
C820	065G0805221 31	220PF 50V NPO
C845	065G0805225 12	CHIP 2.2UF 16V X7R 0805
C909	065G0805471 21	CHIP 470PF 25V NPO
C912	065G1206102 72	CHIP 1000PF 500V X7R
C929	065G1206102 72	CHIP 1000PF 500V X7R
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D813	093G 6432S	IN4148W
D916	093G 6432S	IN4148W
D915	093G 6432S	IN4148W
D903	093G 6432S	IN4148W
D817	093G 6432S	IN4148W
D814	093G 6432S	IN4148W
D812	093G 6432S	IN4148W
D805	093G 6432S	IN4148W
D806	093G 6432S	IN4148W
D807	093G 6432S	IN4148W
ZD801	093G 39S 10 T	RLZ6.8B BY ROHM
ZD906	093G 39S 20 T	RLZ22B LLDS
ZD922	093G 39S 25 T	RLZ5.1B LLDS
ZD902	093G 39S 40 T	RLZ 13B LLDS

ZD921	093G 39S 40 T	RLZ 13B LLDS
ZD905	093G 39S 44 T	RLZ18B LLDS
CN901	006G 31500	EYELET
T801	006G 31502	1.5MM RIVET
Q901	006G 31502	1.5MM RIVET
T901	006G 31502	1.5MM RIVET
IC904	056G 158 12	KIA431A-AT/P TO-92
C938	065G 1K152 1T	1.5NF/1KV Z5F+-10%
C906	065G 2K152 1T GP	CERAMIC CAP
C908	067G215Y2207KT	CAP 105℃ 22UF M 50V KINGNICHI
FB801	071G 55 9 T	FERRITE BEAD
FB901	071G 55 29	FERRITE BEAD
F901	084G 55 7W	FUSE 3.15A 250V WICKMANN
F903	084G 56 4W	FUSE 4.0A 250V
D900	093G 6026T52T	RECTIFIER DIODE FR107
D901	093G 6038T52T	FR103
	715G2545 1 2	POWER BOARD PCB
L901	S73G17476V	LINE FILTER
	Q34G0163 ZTB5B 30	BEZEL L17W06-H5
	Q34G0164 ZT 1B	REAR COVER(17")
	Q40G 17N850 7B	RATING LABEL
	Q40G 58170931A	HT POT LABEL
	Q40G0001850 1B	CARTON LABEL
	Q40G000261563A	VISTA LABEL FOR AOC
	Q40G0002850 2A	EPA LABEL
	Q41G7800850 8A	WARRANTY CARD FOR INC USA
	Q41G780085020A	QSG IH171
	Q44G6002CP159A	PAPER CAP
	Q44G7047 1	EPS
	Q44G7047 2	EPS
	Q44G7047850 2A	CARTON
	Q44G9003220	CORNER PAPER
	Q45G 88607 35	PE BAG FOR BASE
	Q45G 88609102	EPE BAG FOR MONITOR
	Q52G6020 44	PROTECT FILM
	040G 58162435A	LABEL
	Q45G 76 28A32	PE BAG
	Q70G7006850 5B	CD MANUAL

12. Different Parts List

Diversity of T77HM6MKWEHZNC compared with T77HM6MKWEHZN		
Location	**Part No.**	**Description**
E750	750GLH70GW112N000R	PANEL HSD170MGW1 A00 NJ HSD

Diversity of T77HM6MKWEHZNN compared with T77HM6MKWEHZN		
Location	**Part No.**	**Description**
E750	750GLH70GW112M000R	PANEL HSD170MGW1 A00 NJ HSD