Service

Service

Service

170S8FS/00
170S8FB/00
170S8FB/27
170S8FS/62
170S8FB/62
170S8FB/78

Service Manual

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 TRANSFOMER FOR THIS UNIT WHEN SERVICING

REFER TO BACK COVER FOR IMPORTANT SAFETY GUIDELINES

Published by Philips CE Subject to modification ® Aug, 22, 2007 GB 312278517290

飛利浦 PHILIPS

Revision List

Version	Release Date	Revision History
A00	Jul.05, 2007	Initial release, Draft Version
A01	Jul.17,2007	Add new BOM
A02	Jul.27,2007	Add new BOM
A03	Sep.12,2007	Add new BOM
A04	Nov.07,2007	Add Second Panel Source
		Update C907
A05	Nov.24,2007	Add Philips 12NC for 715GT039 A
A06	Dec.22,2007	Add Philips 12NC for Model 170S8FB/00 and 170S8FS/00
A07	Feb.02,2007	Add new BOM
A08	Mar.05,2008	Add Second Panel Source
A09	Apr.11,2008	Add a new BOM for CTV Model 170S8FS/00
		Add a new BOM for CTV Model 170S8FB/00
A10	Nov 11,2008	Add M24C16-WMN6TP to U204 for 170S8FB/00
A11	Nov 21 ,2008	Add 056T1133 24 1 to U204 for 170S8FB/00
A12	Feb.6,2009	Add the 12NC for PWPC942GR1P and 750GLC70A7P43M000F

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all Philips Company Equipment. The service procedures recommended by Philips 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. Philips 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, Philips has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Philips 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, Philips Company will be referred to as Philips.

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 Philips. Philips 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

LCD PANEL	
• Type	TFT LCD
• Screen size	17" visual
• Pixel Pitch	0.264 x 0.264 mm
• LCD Panel type	1280 x 1024 pixels R.G.B. vertical stripe Anti-glare polarizer, hard coated
• Effective viewing area	337.9 x 270.3 mm
SCANNING	
• Vertical refresh rate	56 Hz-75 Hz
• Horizontal Frequency	30 kHz - 83 kHz
VIDEO	
• Video dot rate	140 MHz
• Input impedance	
- Video	75 ohm
- Sync	2.2K ohm
• Input signal levels	0.7 Vpp
• Sync input signal	Separate sync Composite sync Sync on green
• Sync polarities	Positive and negative

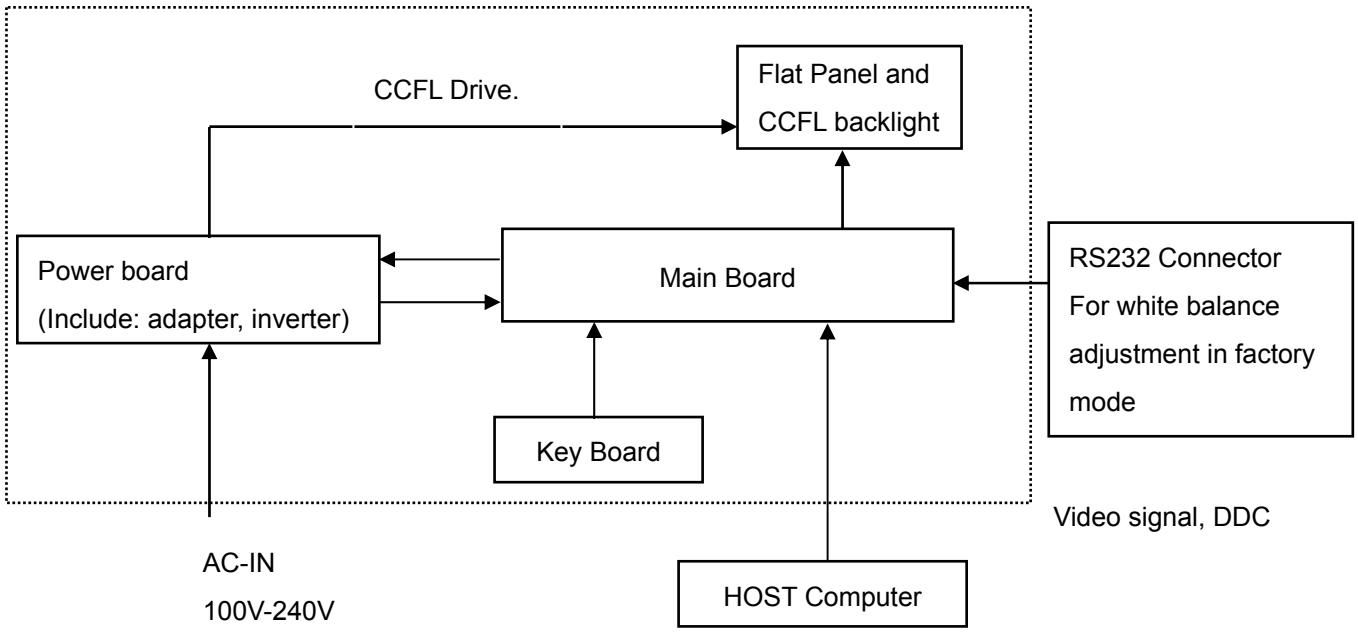
• Tilt	-5°+2/-0 ~+ 20°+3/-0
• Power supply	100 ~ 240 VAC, 50/60 Hz
• Power consumption	33W* (typ.)
• Temperature	0° C to 40 ° C (operating) -20° C to 60° C (storage)
• Relative humidity	20% to 80%
• System MTBF	50K hours (CCFL 40K hours)

2. LCD Monitor Description

The LCD monitor will contain a scalar 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



3. Operating Instructions

3.1 General Instructions

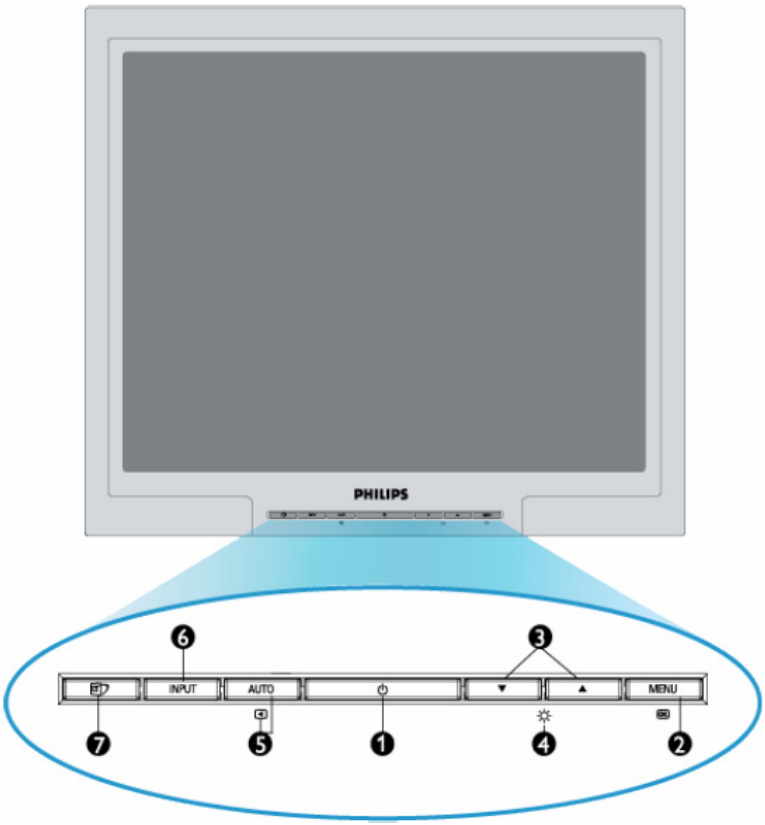
Press the power button to turn the monitor on or off. The other control buttons are located at the front of the panel of the monitor.

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.

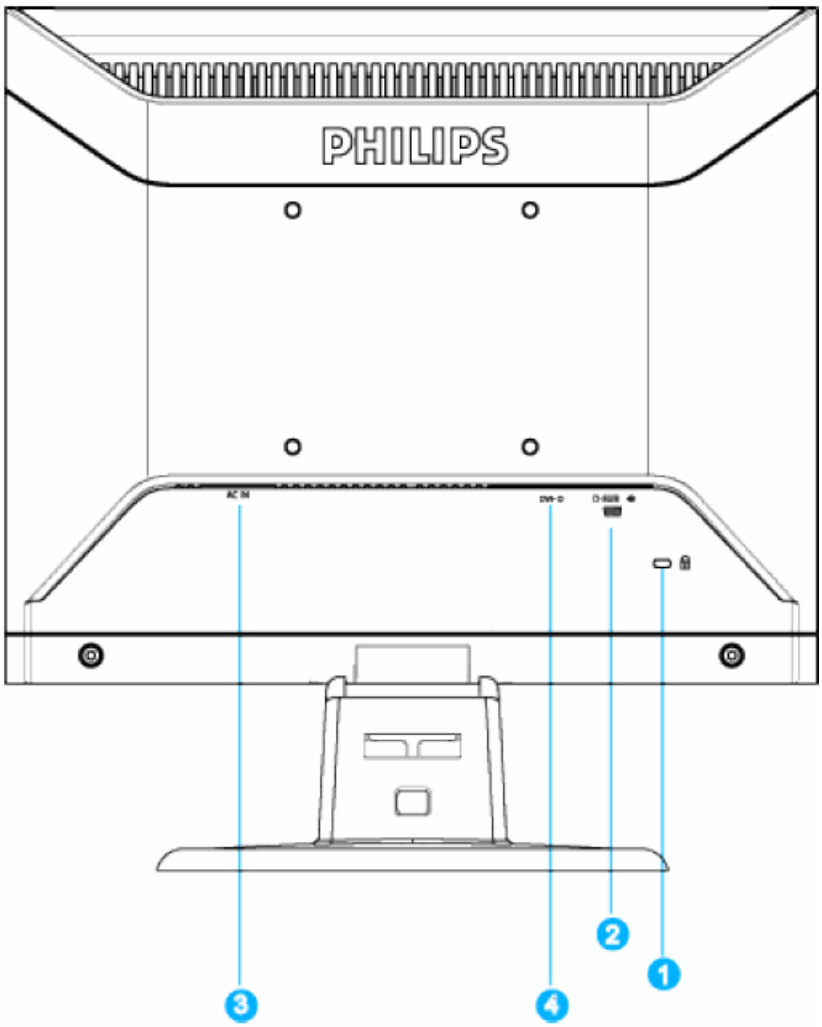
3.2 Control Buttons

Front View



1	⏻	To switch monitor's power On and Off
2	MENU / OK	To access OSD menu
3	▲▼	To adjust the OSD menu
4	☼	To adjust brightness of the display
5	AUTO / ◀	Automatically adjust the horizontal position, vertical position, phase and clock settings / Return to previous OSD level.
6	Input	To change the signal input source.
7		SmartImage.There are five modes to be selected: Office Work, Image Viewing, Entertainment, Economy, and Off.

Rear View

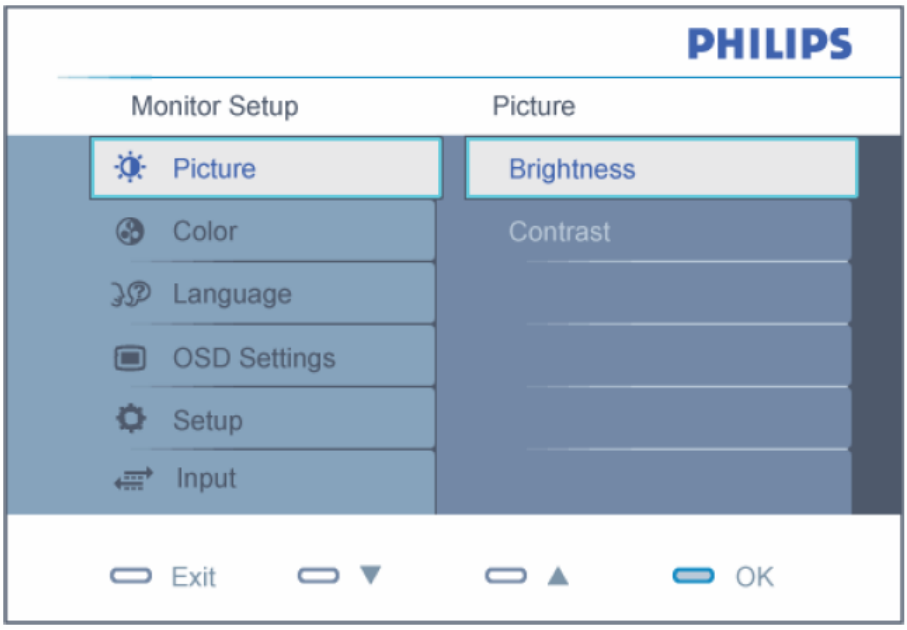


1 Kensington anti-thief lock
2 VGA input
3 AC power input
4 DVI-D input *

3.3 Adjusting the Picture

Description of the On Screen Display

On-Screen Display (OSD) is a feature in all Philips LCD monitors. It allows an end user to adjust screen performance or select functions of the monitors directly through an on-screen instruction window. A user friendly on screen display interface is shown as below:



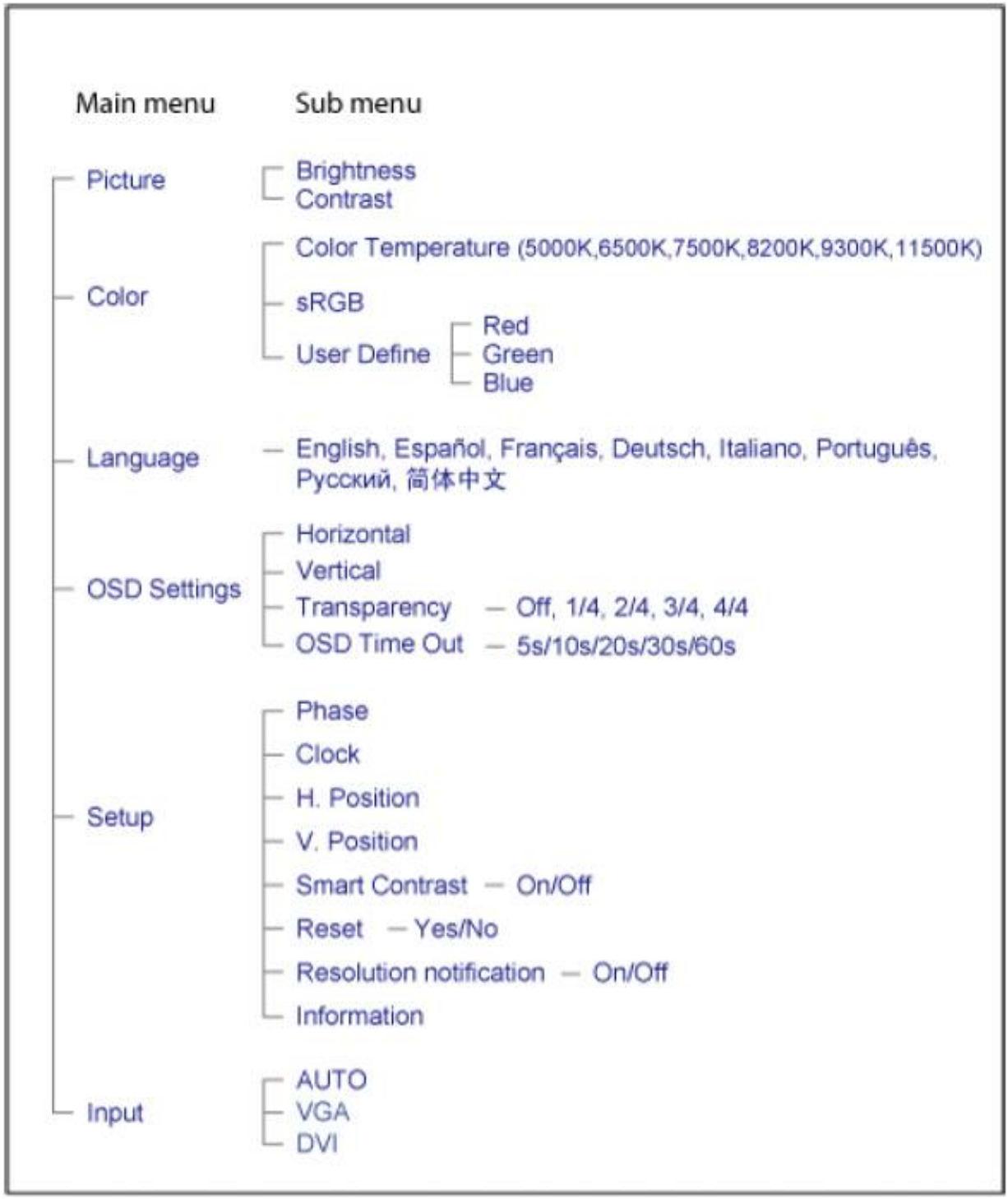
In the OSD shown above users can press ▼▲ buttons at the front bezel of the monitor to move the cursor, OK to confirm the choice or change.

To Lock/Unlock OSD function (User Mode)

The OSD function can be locked by pressing “MENU” button for more than 10 seconds.
Locked OSD function can be released by pressing “MENU” button for more than 10 seconds again.

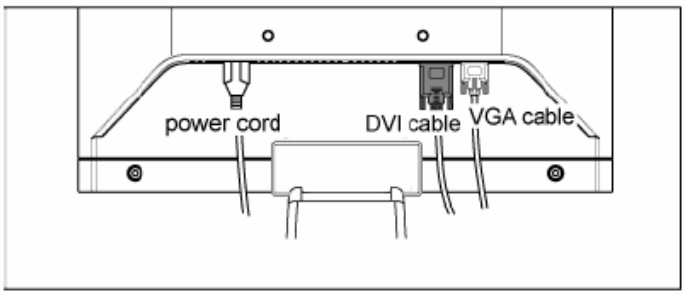
The OSD Tree

Below is an overall view of the structure of the On-Screen Display. You can use this as a reference when you want to work your way around the different adjustments later on.

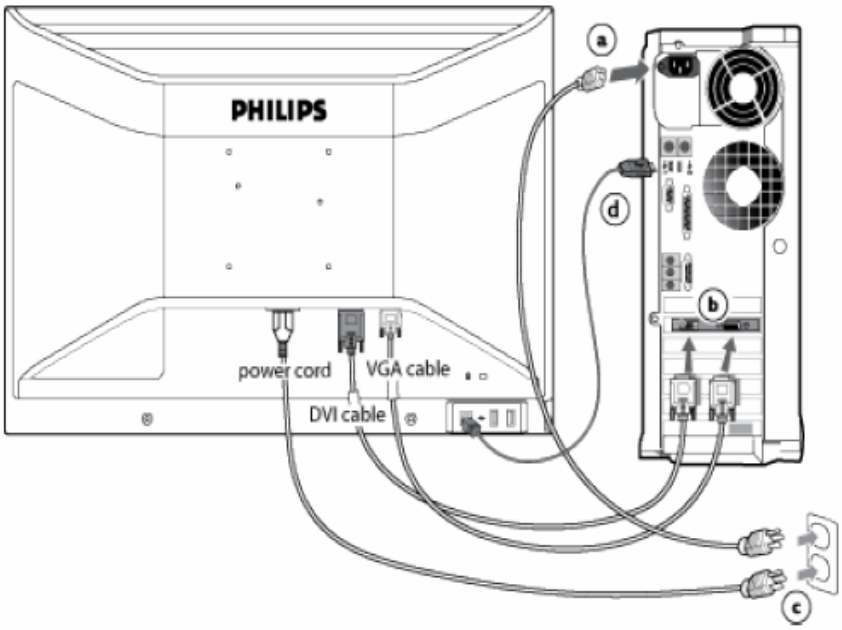


3.4 Connecting to the PC

1) Connect the power cord to the back of the monitor firmly. (Philips has pre-connected VGA cable for the first installation.



*available for selective models



2) Connect to PC

(a) Turn off your computer and unplug its power cable.

(b) Connect the monitor signal cable to the video connector on the back of your computer.

(c) Plug the power cord of your computer and your monitor into a nearby outlet.

(d) Turn on your computer and monitor. If the monitor displays an image, installation is complete.

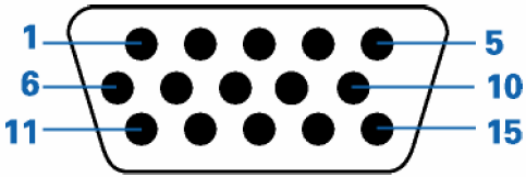
4. Input/Output Specification

4.1 Input Signal Connector

Analog connectors

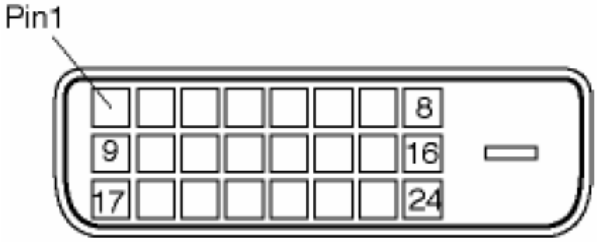
Pin No.	Description	Pin No.	Description
1.	Red video input	9.	DDC +3.3V or +5V
2.	Green video input	10.	Logic Ground
3.	Blue video input	11.	Ground
4.	Sense (GND)	12.	Serial data line (SDA)
5.	Cable detect (GND)	13.	H. Sync
6.	Red video ground	14.	V. Sync
7.	Green video ground	15.	Data clock line (SCL)
8.	Blue video ground		

VGA connector layout



DVI connectors

Pin No.	Description	Pin No.	Description	Pin No.	Description
1.	T.M.D.S Data2-	9.	T.M.D.S Data1-	17.	T.M.D.S Data0-
2.	T.M.D.S Data2+	10.	T.M.D.S Data1+	18.	T.M.D.S Data0+
3.	T.M.D.S Data2 Shield	11.	T.M.D.S Data1 Shield	19.	T.M.D.S Data0 Shield
4.	No connector	12.	No connector	20.	No connector
5.	No connector	13.	No connector	21.	No connector
6.	DDC Clock	14.	+5V Power	22.	T.M.D.S Clock Shield
7.	DDC Data	15.	Ground (for +5V)	23.	T.M.D.S Clock+
8.	No connector	16.	Hot Plug Detection	24.	T.M.D.S Clock-



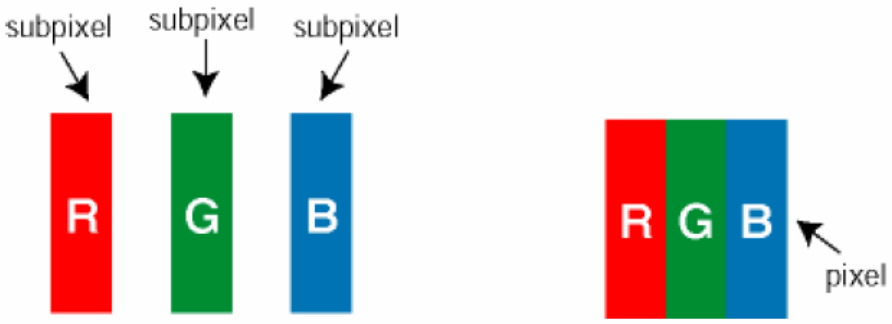
4.2 Factory Preset Display Modes

H. freq (kHz)	Resolution	V. freq (Hz)
31.469	720*400	70.087
31.469	640*480	59.940
35.000	640*480	67.000
37.500	640*480	75.000
35.156	800*600	56.250
37.879	800*600	60.317
46.875	800*600	75.000
48.363	1024*768	60.004
60.023	1024*768	75.029
63.981	1280*1024	60.020
79.976	1280*1024	75.025

4.3 Pixel Defect Policy

Philips' Flat Panel Monitors Pixel Defect Policy

Philips strives to deliver the highest quality products. We use some of the industry's most advanced manufacturing processes and practice stringent quality control. However, pixel or sub pixel defects on the TFT LCD panels used in flat panel monitors are sometimes unavoidable. No manufacturer can guarantee that all panels will be free from pixel defects, but Philips guarantees that any monitor with an unacceptable number of defects will be repaired or replaced under warranty. This notice explains the different types of pixel defects and defines acceptable defect levels for each type. In order to qualify for repair or replacement under warranty, the number of pixel defects on a TFT LCD panel must exceed these acceptable levels. For example, no more than 0.0004% of the sub pixels on a 17" XGA monitor may be defective. Furthermore, Philips sets even higher quality standards for certain types or combinations of pixel defects that are more noticeable than others. This policy is valid worldwide.



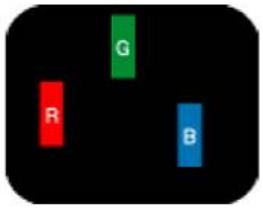
Pixels and Sub pixels

A pixel, or picture element, is composed of three sub pixels in the primary colors of red, green and blue. Many pixels together form an image. When all sub pixels of a pixel are lit, the three colored sub pixels together appear as a single white pixel. When all are dark, the three colored sub pixels together appear as a single black pixel. Other combinations of lit and dark sub pixels appear as single pixels of other colors.

Types of Pixel Defects

Pixel and sub pixel defects appear on the screen in different ways. There are two categories of pixel defects and several types of sub pixel defects within each category.

Bright Dot Defects Bright dot defects appear as pixels or sub pixels that are always lit or 'on'. That is, a *bright dot* is a sub-pixel that stands out on the screen when the monitor displays a dark pattern. There are the types of bright dot defects:



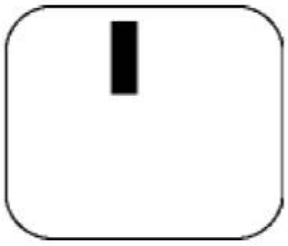
One lit red, green or blue sub pixel

Two adjacent lit sub pixels:
- Red + Blue = Purple
- Red + Green = Yellow
- Green + Blue = Cyan (Light Blue)

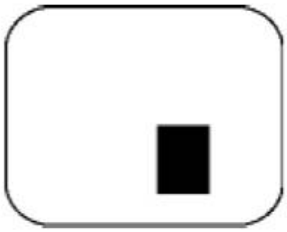
Three adjacent lit sub pixels (one white pixel)

A red or blue *bright dot* must be more than 50 percent brighter than neighboring dots while a green bright dot is 30 percent brighter than neighboring dots.

Black Dot Defects Black dot defects appear as pixels or sub pixels that are always dark or 'off'. That is, a *dark dot* is a sub-pixel that stands out on the screen when the monitor displays a light pattern. These are the types of black dot defects:



One dark sub pixel



Two or three adjacent dark sub pixels

Proximity of Pixel Defects

Because pixel and sub pixels defects of the same type that are near to one another may be more noticeable, Philips also specifies tolerances for the proximity of pixel defects.

Pixel Defect Tolerances

In order to qualify for repair or replacement due to pixel defects during the warranty period, a TFT LCD panel in a Philips flat panel monitor must have pixel or sub pixel defects exceeding the tolerances listed in the following tables.

BRIGHT DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	**170S8**
1 lit subpixel	3
2 adjacent lit subpixels	1
3 adjacent lit subpixels (one white pixel)	0
Distance between two bright dot defects*	>25mm
Total bright dot defects of all types	3

BLACK DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	**170S8**
1 dark subpixel	5
2 adjacent dark subpixels	2
3 adjacent dark subpixels	0
Distance between two black dot defects*	>15mm
Total black dot defects of all types	5

TOTAL DOT DEFECTS	ACCEPTABLE LEVEL
MODEL	**170S8**
Total bright or black dot defects of all types	5

Note:

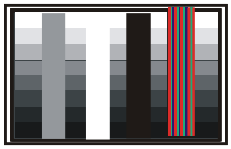
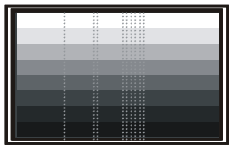
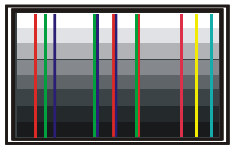
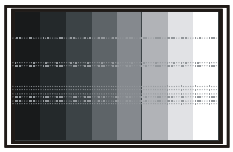
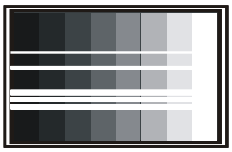
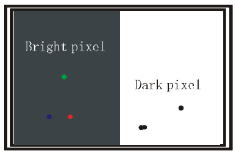
** 1 or 2 adjacent sub pixel defects = 1 dot defect*

Your Philips monitor is ISO13406-2 Compliant

4.4 Failure Mode Of Panel

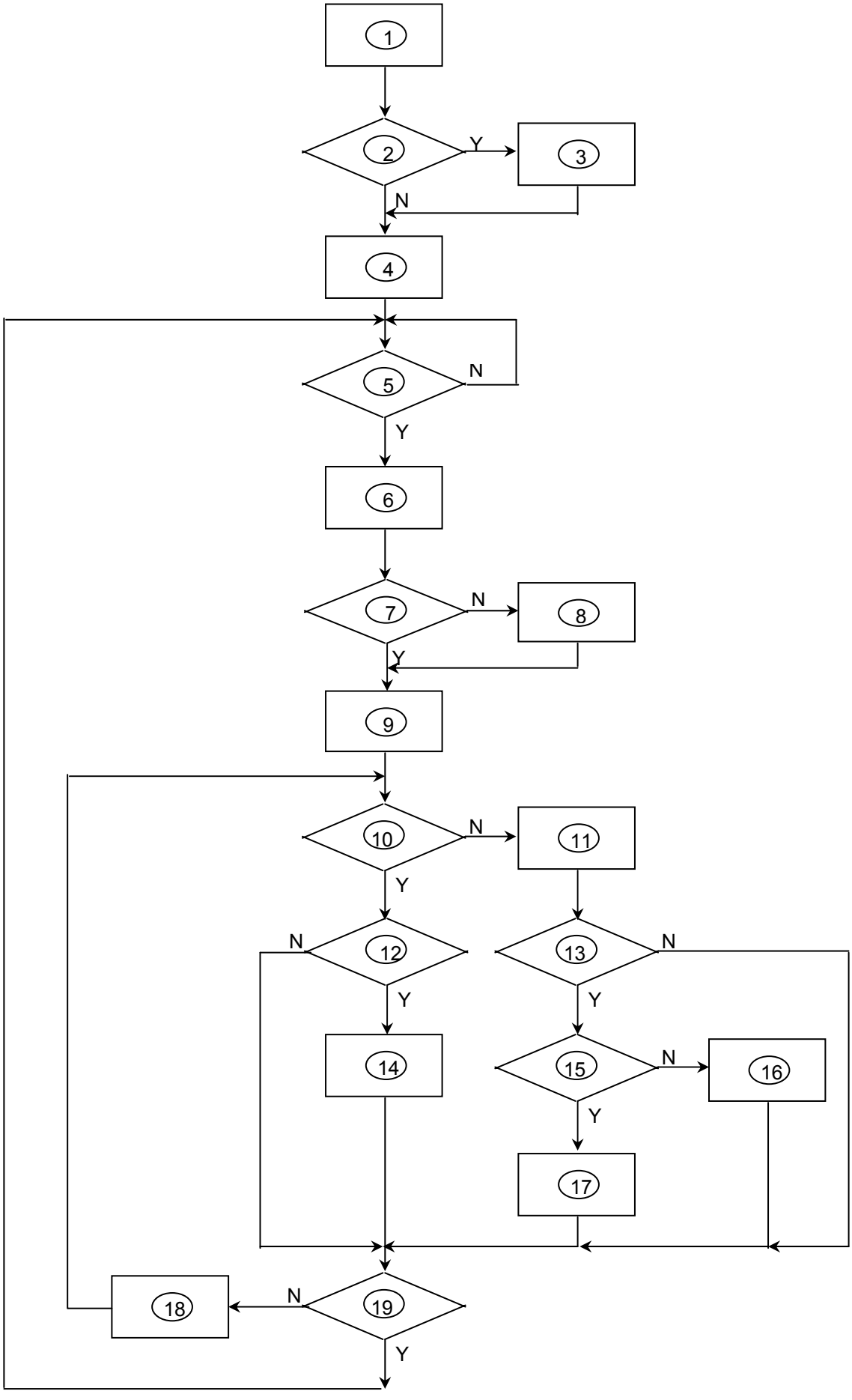
Quick reference for failure mode of LCD panel

this page presents problems that could be made by LCD panel.
It is not necessary to repair circuit board. Simply follow the mechanical instruction on this manual to eliminate failure by replace LCD panel.

Failure description	Phenomenon
Vertical block defect	
Vertical dim lines	
Vertical lines defect (Always bright or dark)	
Horizontal block defect	
Horizontal dim lines	
Horizontal lines defect (Always bright or dark)	
Has bright or dark pixel	
Polarizer has bubbles	
Polarizer has bubbles	
Foreign material inside polarizer. It shows liner or dot shape.	
Concentric circle formed	
Bottom back light of LCD is brighter than normal	
Back light un-uniformity	
Backlight has foreign material. Black or white color, liner or circular type	

5. Block Diagram

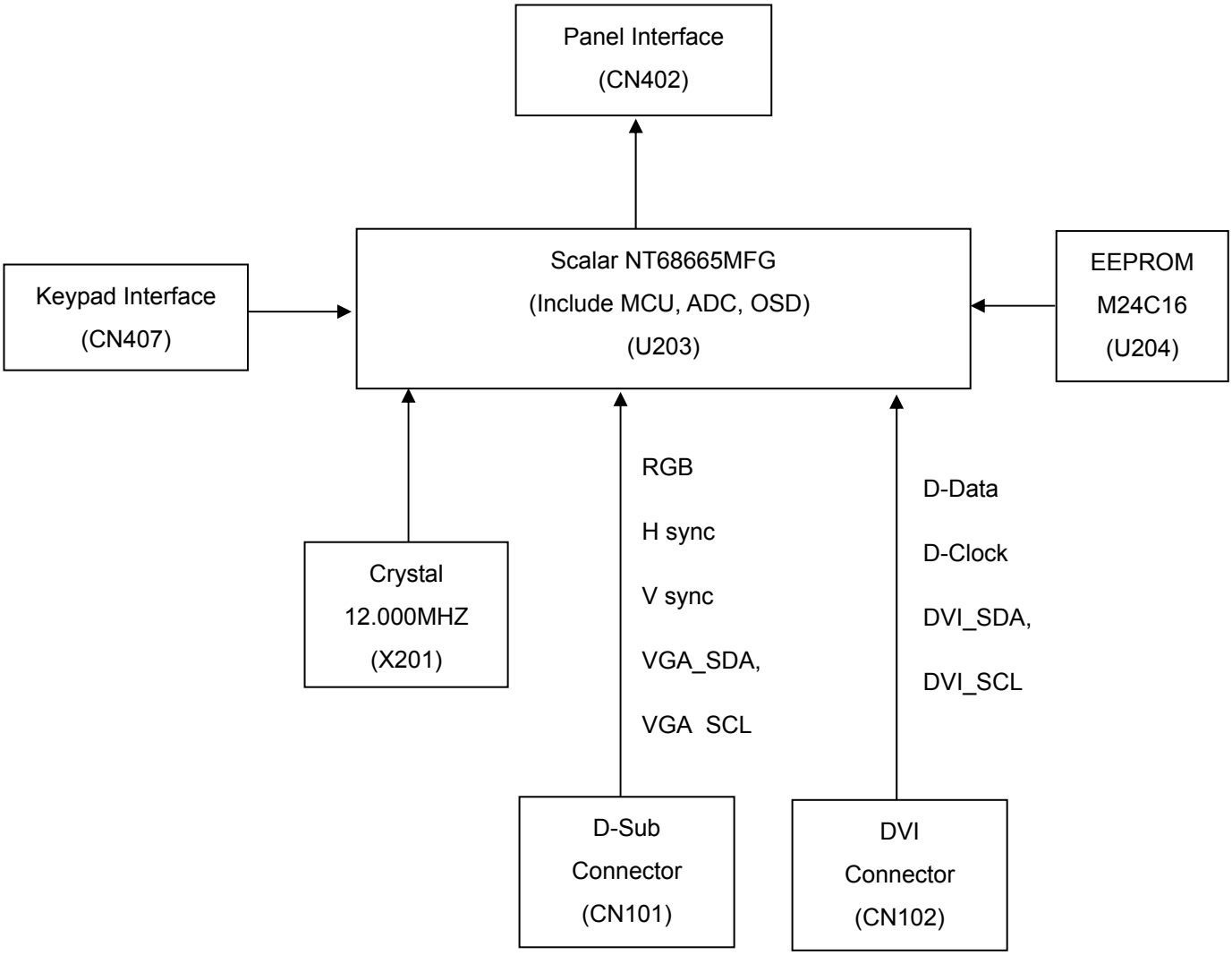
5.1 Software Flow Chat



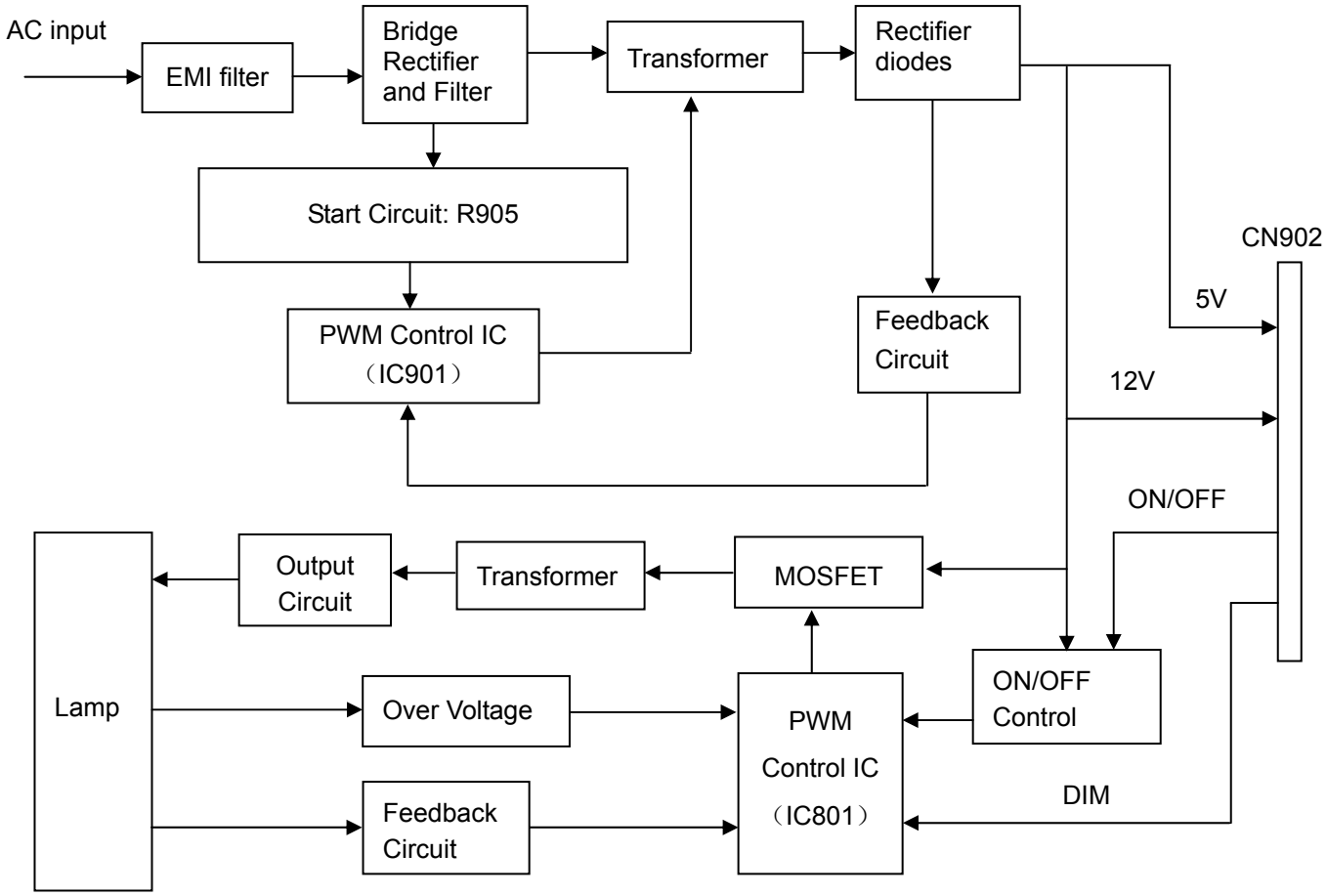
1) MCU initializes.
2) Is the EPROM blank?
3) Program the EPROM by default values.
4) Get the PWM value of brightness from EPROM.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EPROM. Turn on the 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 disappears.
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?

5.2 Electrical Block Diagram

5.2.1 Main Board



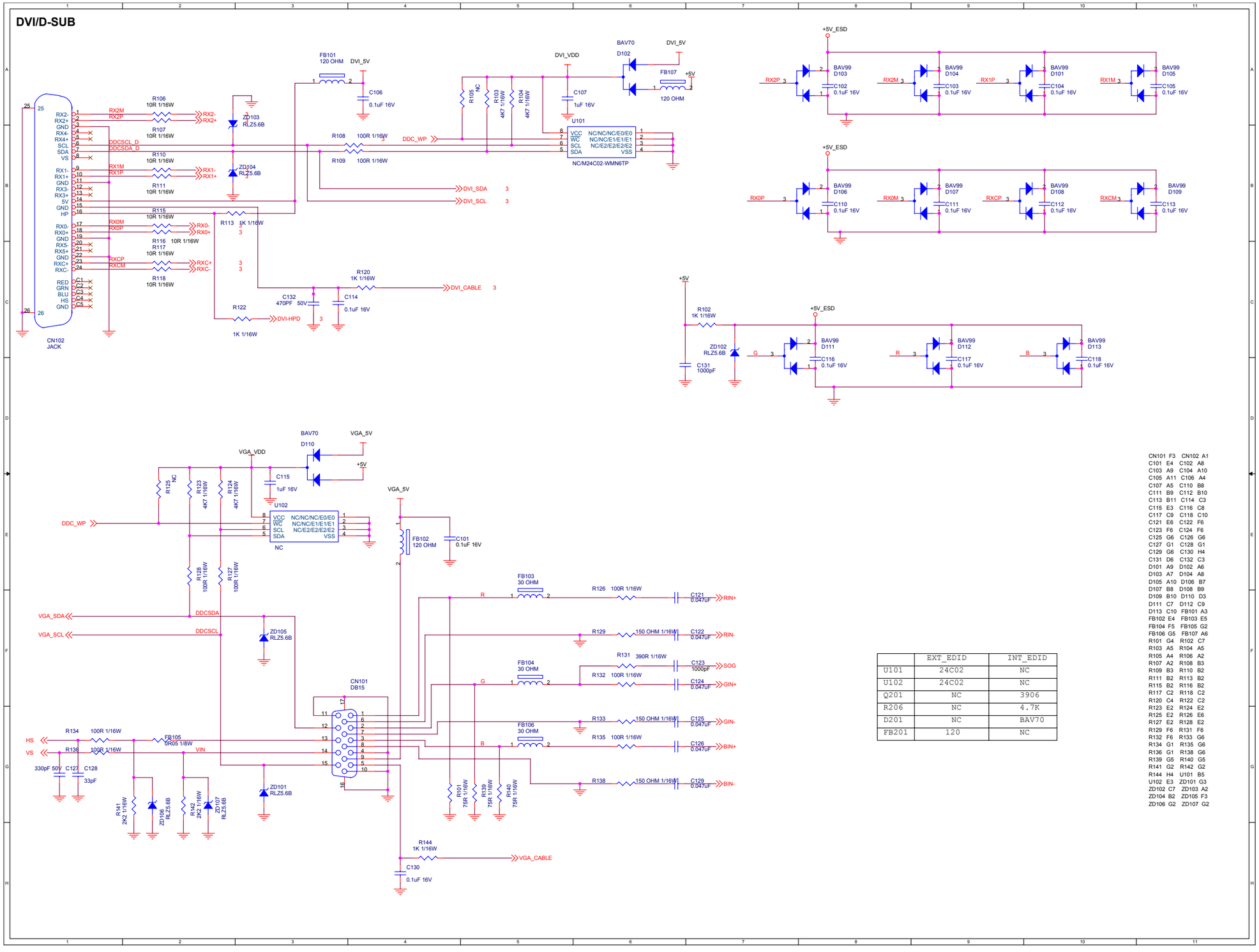
5.2.2 Inverter/Power Board



6. Schematic

6.1 Scalar Board

715G2561-1



CN101 F3 CN102 A1
C101 E4 C102 A8
C103 A9 C104 A10
C105 A11 C106 A4
C107 A5 C110 B8
C111 B9 C112 B10
C113 B11 C114 C3
C115 E3 C116 C8
C117 C9 C118 C10
C121 E6 C122 F6
C123 F6 C124 F6
C125 G6 C126 G6
C127 G1 C128 G1
C129 G6 C130 H4
C131 D6 C132 C3
D101 A9 D102 A6
D103 A7 D104 A8
D105 A10 D106 B7
D107 B8 D108 B9
D109 B10 D110 D3
D111 C7 D112 C9
D113 C10 FB101 A3
FB102 E4 FB103 E5
FB104 F5 FB105 G2
FB106 G5 FB107 A6
R101 G4 R102 C7
R103 A5 R104 A5
R105 A4 R106 A2
R107 A2 R108 B3
R109 B3 R110 B2
R111 B2 R113 B2
R115 B2 R116 B2
R117 C2 R118 C2
R120 C4 R122 C2
R123 E2 R124 E2
R125 E2 R126 E6
R127 E2 R128 E2
R129 F6 R131 F6
R132 F6 R133 G6
R134 G1 R135 G6
R136 G1 R138 G6
R139 G5 R140 G5
R141 G2 R142 G2
R144 H4 U101 B5
U102 E3 ZD101 G3
ZD102 C7 ZD103 A2
ZD104 B2 ZD105 F3
ZD106 G2 ZD107 G2

	EXT_EDID	INT_EDID
U101	24C02	NC
U102	24C02	NC
Q201	NC	3906
R206	NC	4.7K
D201	NC	BAV70
FB201	120	NC

MCU+SCALAR

NO.	PARTS	NONE OD	OD
1	U203	NT68665	NT68670
2	R209	NC	0R
3	R228	0R	NC
4	R218	22R	NC
5	C212	NC	0.1u
6	C211	NC	0.1u

modify part-070102

modify parts 1/18

modify parts 1/18

EXT_EDID MCU POWER

INT_EDID MCU POWER

SMT TYPE

SMT TYPE

OPTION(HDCP)

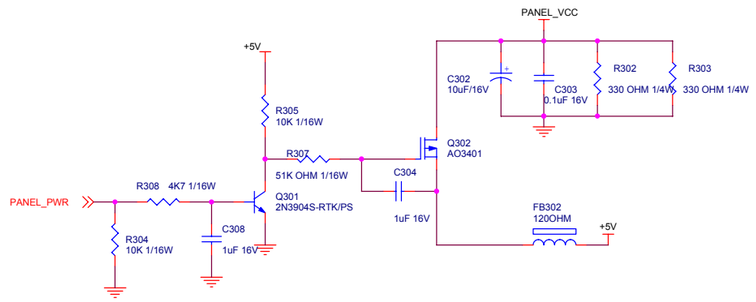
TO RS232

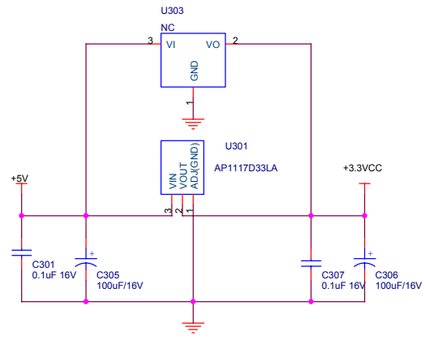
U203
NT68665MFG-128

U204
24C16

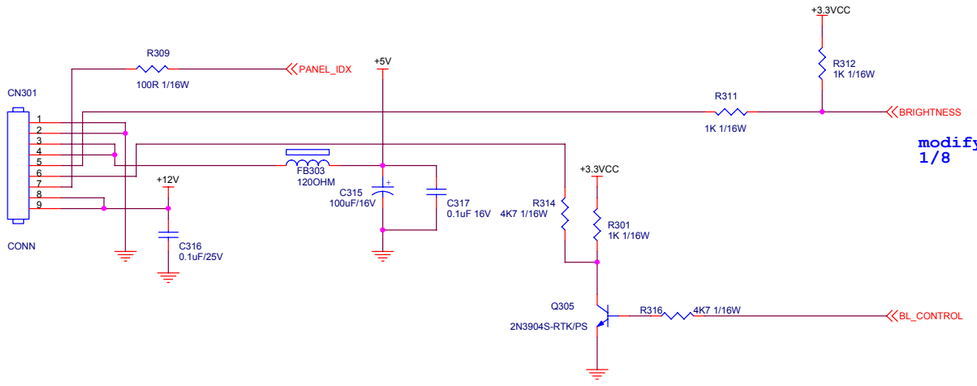
U201

DC-DC

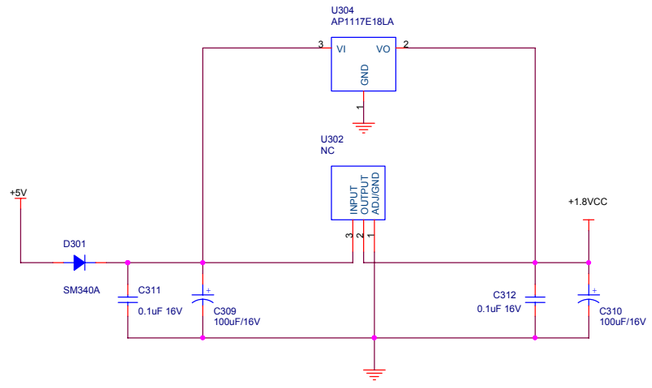




CN301	D1
C301	B7
C302	A3
C303	A4
C304	B3
C305	B7
C306	B9
C307	B8
C308	B2
C309	E7
C310	E9
C311	E7
C312	E9
C315	D3
C316	E1
C317	D3
D301	E6
FB302	B4
FB303	D2
Q301	B2
Q302	B3
Q305	E4
R301	E4
R302	A4
R303	A4
R304	B1
R305	B2
R307	B2
R308	B2
R309	D1
R311	D4
R312	D5
R314	D3
R316	E4
U301	B8
U302	D8
U303	A8
U304	D8



modify
1/8



CONNECTOR

CN402
T0M 30
T0P 29
T1M 28
T1P 27
T2M 26
T2P 25
TCLK1M 24
TCLK1P 23
T3M 22
T3P 21
T4M 20
T4P 19
T5M 18
T5P 17
T6M 16
T6P 15
TCLK2M 14
TCLK2P 13
T7M 12
T7P 11
9
8
7
6
5
4
3
2
1
CONN

modify
1/18

BRIGHTNESS
R411 NC
PANEL_VCC
C405 0.1uF 16V
R430 NC
R413 NC
R414 NC

CN401
1 KEY1_PAD
2 KEY2_PAD
3 POWER
4 LED_G
5 LED_O
6
7 LF_B
8 LIGHT_SEN
9 5V_FB
10 OUT-L+
11 OUT-L-
12 EAR-R
13 EAR-L
NC/CONN

+3.3VCC
R402 3.9K OHM 1/16W
R403 3.9K OHM 1/16W
R407 100R 1/16W
C402 0.1uF 16V
KEY1
Auto/Left/Right key
R410 100R 1/16W
C403 0.1uF 16V
KEY2
Menu/Up/Down key
R412 1K 1/16W
C404 0.1uF 16V
KEY_PWR

+5V
CN406
1
2
3
4
5
6
NC
R437 NC
R438 NC
R433 NC
+3.3VCC
R436 NC

T0P
T0M
T1P
T1M
T2P
T2M
TCLK1P
TCLK1M
T3P
T3M
T4P
T4M
T5P
T5M
T6P
T6M
TCLK2P
TCLK2M
T7P
T7M
LVDS OUTPUT

CN407
1 KEY1_PAD
2 KEY2_PAD
3 POWER
4 LED_G
5 LED_O
6
7 LF_B
CONN

+3.3VCC
R416 100R 1/16W
C406 0.1uF 16V
Q402 2N3906S-RTK/PS
R415 10K 1/16W
LED_R
+3.3VCC
R418 100R 1/16W
C407 0.1uF 16V
Q403 2N3906S-RTK/PS
R417 10K 1/16W
LED_B/G

R404 NC
R432 NC/0R05 1/16W
R431 NC
FB403
+12V
NC
+5V
R421 NC/10K 1/16W

CN404
1 KEY1_PAD
2 KEY2_PAD
3 POWER
4 LED_G
5 LED_O
6
7 LF_B
8
9 5V_FB
NC
LIGHT_SEN
R424 NC
+5V
C401 NC
FB401 NC
+3.3VCC
Q404 NC
R423 NC
LF_LED

CN403
11 9 7 5 3 1
12 10 8 6 4 2
VOLUME
OUT-L+
OUT-L-
EAR-L
EAR-SENSE
OUT-R+
OUT-R-
EAR-R
AUDIO_STDBY
NC/CONN
R434 NC
R435 NC

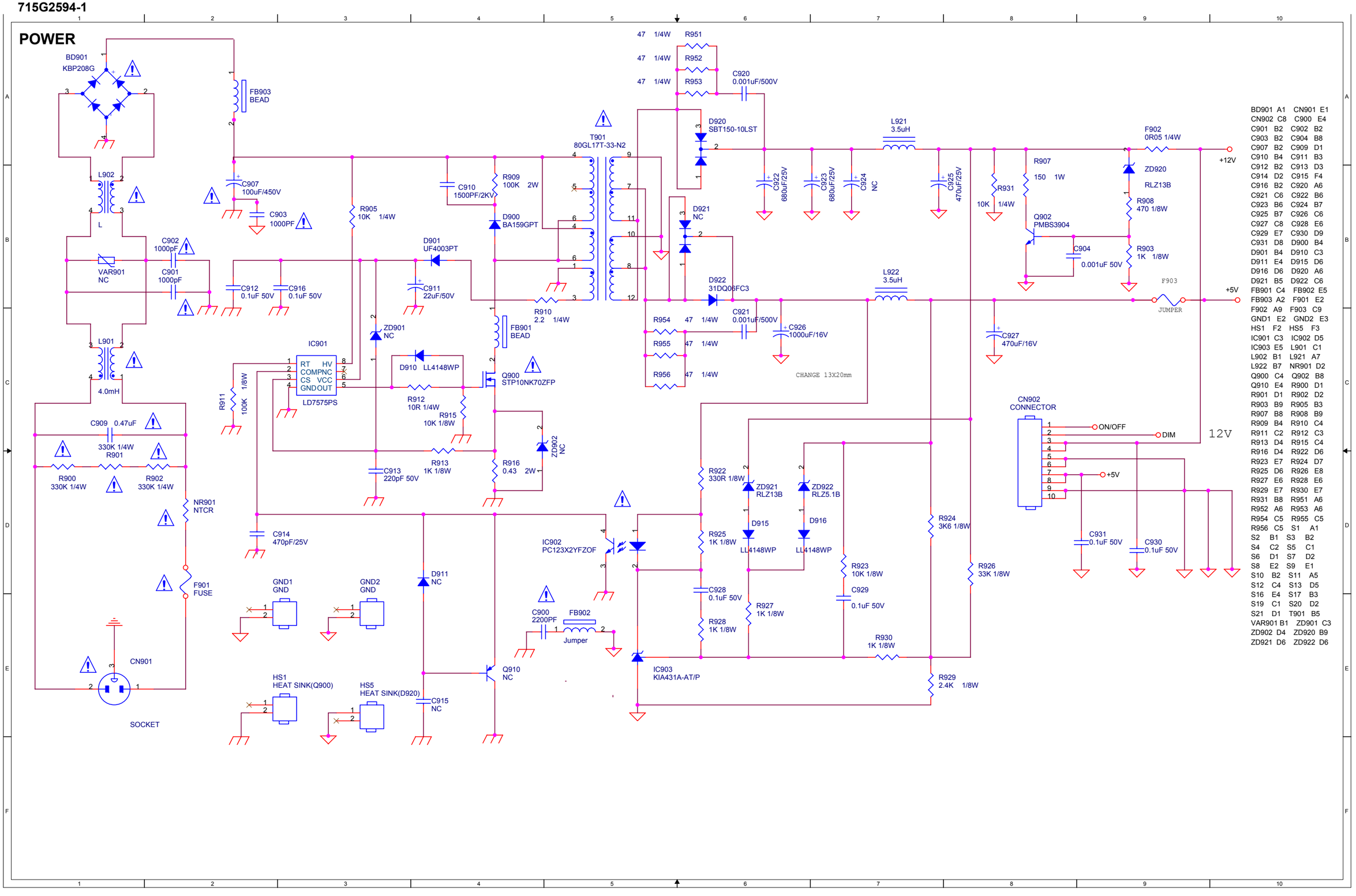
CN405
1 KEY1_PAD
2 KEY2_PAD
3 POWER
4 LED_G
5 LED_O
6
7 LF_B
NC

OPTION(AUDIO CONTROL)

CN401	B4	CN402	A4
CN403	F2	CN404	E6
CN405	F5	CN406	D1
CN407	D4	C401	F8
C402	C8	C403	C8
C404	D8	C405	C2
C406	D8	C407	E8
FB401	F7	FB403	E3
Q402	D8	Q403	E8
Q404	E8	R402	B9
R403	B9	R404	E4
R407	B8	R410	C8
R411	C2	R412	C8
R413	C3	R414	C3
R415	D9	R416	D8
R417	E9	R418	E8
R421	F3	R423	E9
R424	F8	R430	C2
R431	E5	R432	E4
R433	D2	R434	F2
R435	F2	R436	E2
R437	D2	R438	D2

6.2 Power Board

715G2594-1



BD901 A1 CN901 E1
CN902 C8 C900 E4
C901 B2 C902 B2
C903 B2 C904 B8
C907 B2 C909 D1
C910 B4 C911 B3
C912 B2 C913 D3
C914 D2 C915 F4
C916 B2 C920 A6
C921 C6 C922 B6
C923 B6 C924 B7
C925 B7 C926 C6
C927 C8 C928 E6
C929 E7 C930 D9
C931 D8 D900 B4
D901 B4 D910 C3
D911 E4 D915 D6
D916 D6 D920 A6
D921 B5 D922 C6
FB901 C4 FB902 E5
FB903 A2 F901 E2
F902 A9 F903 C9
GND1 E2 GND2 E3
HS1 F2 HS5 F3
IC901 C3 IC902 D5
IC903 E5 L901 C1
L902 B1 L921 A7
L922 B7 NR901 D2
Q900 C4 Q902 B8
Q910 E4 R900 D1
R901 D1 R902 D2
R903 B9 R905 B3
R907 B8 R908 B9
R909 B4 R910 C4
R911 C2 R912 C3
R913 D4 R915 C4
R916 D4 R922 D6
R923 E7 R924 D7
R925 D6 R926 E8
R927 E6 R928 E6
R929 E7 R930 E7
R931 B8 R951 A6
R952 A6 R953 A6
R954 C5 R955 C5
R956 C5 S1 A1
S2 B1 S3 B2
S4 C2 S5 C1
S6 D1 S7 D2
S8 E2 S9 E1
S10 B2 S11 A5
S12 C4 S13 D5
S16 E4 S17 B3
S19 C1 S20 D2
S21 D1 T901 B5
VAR901 B1 ZD901 C3
ZD902 D4 ZD920 B9
ZD921 D6 ZD922 D6

INVERTER

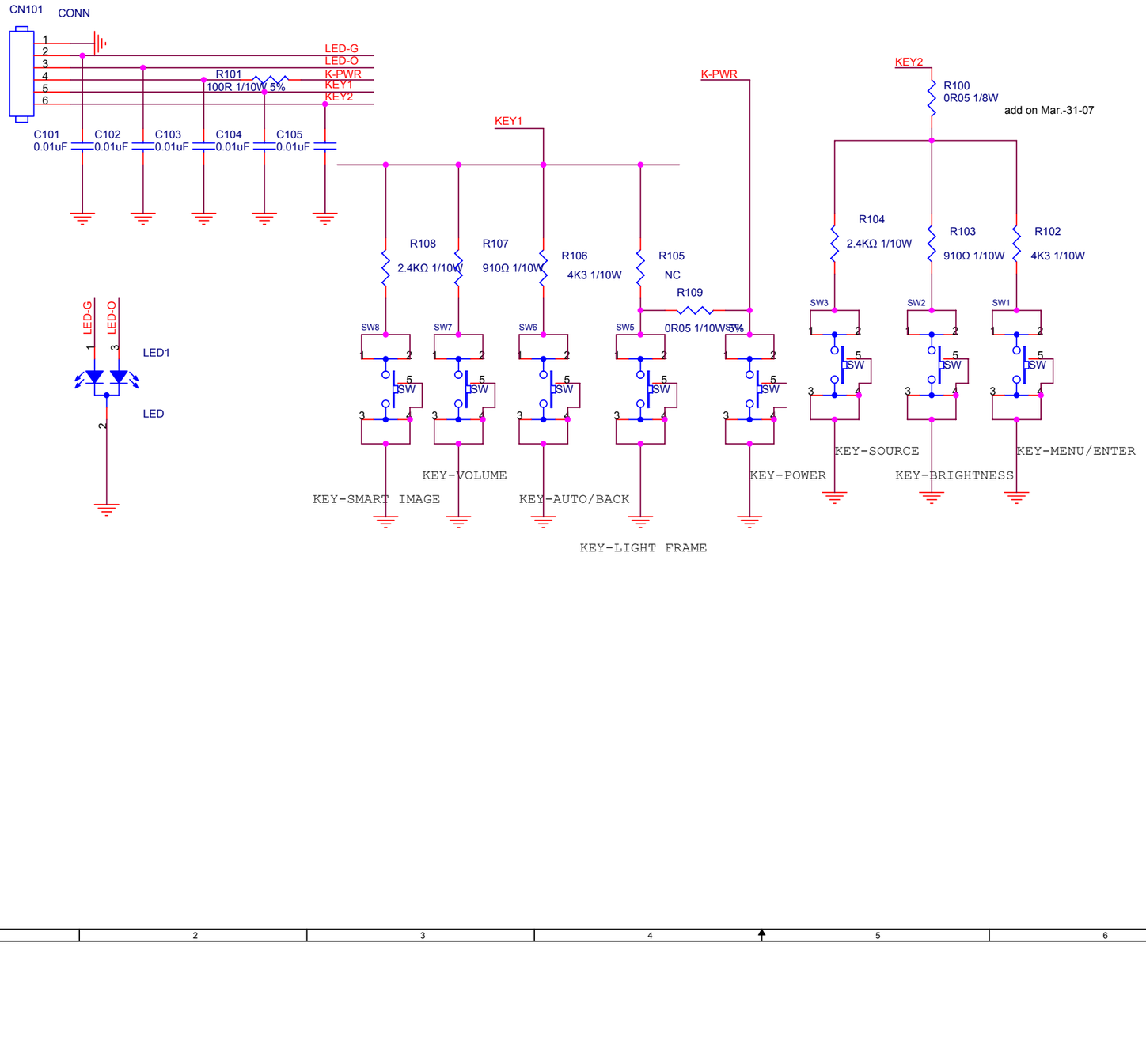
+12V
ON/OFF
DIM
DTC
FB
R802 100R 1/8W 5%
Q801 PDTA144WK
Q802 PDTC144WK
R808 10K 1/10W 1%
R809 NC
C802 1uF 16V
R813 100 1/10W 5%
D803 LL4148WP
R814 75K 1/10W 1%
R805 4.7K 1/10W 5%
D813 LL4148WP
ZD801 10K 1/4W 5%
Q812 RK7002
R803 2.4K 1/10W
Q803 PMBS3904
C819 NC
R816 68K 1% 1/10W
R817 NC
R815 47K 1/10W 1%
C804 0.1uF/16V
PT801 POWER X'FMR
R850 15 1/4W
R810 15 1/4W
C821 1500PF/50V
C803 1500PF/50V
Q804 AM9945N-T1-PF
C805 470uF/25V
C823 0.1uF/25V
R801 0R05 1/10W 5%
L801 NC
CN801 CONN
C801 10pF/3KV
R804 0R05 1/10W 5%
CN802 CONN
R806 1K 1/10W 1%
R807 1K 1/10W 1%
OLP1
OLP2
D801 BAV99
D802 BAV99
R811 1K 1/10W 1%
R812 1K 1/10W 1%
R818 NC
C806 1uF/16V
R819 10K 1/10W 1%
R820 560K 1/10W 5%
D811 LL4148WP
D812 LL4148WP
C807 0.1uF/16V
R842 47K 1/10W 1%
IC801
1IN+ 1IN- FEEDBACK DTC CT RT GND C1
2IN+ 2IN- REF OUTPUT CTRL VCC C2 E2 E1
TL494IDR
R853 10K 1/10W 1%
Q810 PMBS3904
Q805 PMBS3906
R845 22R 1/10W 5%
R844 22R 1/10W 5%
R847 22R 1/10W 5%
R846 22R 1/10W 5%
Q811 PMBS3904
Q806 PMBS3906
R827 1K 1/10W 1%
R821 1M 1/10W 5%
C808 2.2uF/16V
R823 10K 1/10W
R822 47K 1/10W 1%
R824 10K 1/10W 1%
C809 220pF
R825 51K 1% 1/8W
R843 NC
R826 180K 1% 1/8W
C810 0.1uF/25V
R852 10K 1/10W 1%
R848 1K 1/10W 1%
R849 1K 1/10W 1%
R828 47K 1/10W 1%
R829 68K 1% 1/10W
Q807 PMBS3904
C820 NC
D806 BAW56
D807 LL4148WP
D808 BAW56
Q808 RK7002
R831 10K 1/10W 1%
R833 10K 1/10W 1%
R838 10K 1/10W 1%
R840 10K 1/10W 1%
C815 0.0022uF
C813 0.0022uF
C818 0.0022uF
C817 0.0022uF
C814 0.1uF/16V
R836 1M 1/10W 5%
Q809 AM9945N-T1-PF
C824 0.1uF/25V
C816 1500PF/50V
R837 15 1/4W
C811 470uF/25V
R851 15 1/4W
C822 1500PF/50V
PT802 POWER X'FMR
C812 10pF/3KV
R830 0R05 1/10W 5%
L802 NC
CN803 CONN
R832 0R05 1/10W 5%
CN804 CONN
R834 1K 1/10W 1%
R835 1K 1/10W 1%
R839 1K 1/10W 1%
R841 1K 1/10W 1%
D809 BAV99
D810 BAV99

CN801 A10 CN802 A10 CN803 D10
CN804 E10 C801 A8 C802 A2
C803 B7 C804 B4 C805 B7
C806 C3 C807 C3 C808 C2
C809 D3 C810 D6 C811 E7
C812 D8 C813 E3 C814 E1
C815 E3 C816 D7 C817 E3
C818 E3 C819 B2 C820 D4
C821 B6 C822 E7 C823 B7
C824 E7 D801 B8 D802 B9
D803 B3 D806 D2 D807 D1
D808 E2 D809 E8 D810 E9
D811 C2 D812 C3 D813 B5
IC801 C4 L801 A9 L802 D9
PT801 A7 PT802 D7 Q801 A3
Q802 A2 Q803 B2 Q804 B6
Q805 C6 Q806 C7 Q807 D4
Q808 D1 Q809 E6 Q810 C6
Q811 C7 Q812 B5 R801 A9
R802 A3 R803 B5 R804 A9
R805 A5 R806 A8 R807 A9
R808 A2 R809 A2 R810 A6
R811 B8 R812 B9 R813 B2
R814 B4 R815 B3 R816 B2
R817 B3 R818 C3 R819 C3
R820 C2 R821 C2 R822 C3
R823 C3 R824 C3 R825 D4
R826 D4 R827 D1 R828 D2
R829 D3 R830 D9 R831 D3
R832 D9 R833 D3 R834 E8
R835 E9 R836 E1 R837 D7
R838 E3 R839 E8 R840 E3
R841 E9 R842 C4 R843 D4
R844 C6 R845 C6 R846 C7
R847 C7 R848 D6 R849 D7
R850 A6 R851 E7 R852 D5
R853 C5 S14 A8 S15 D8

CHANGE UPDATE

6.3 Key Board

715G1755-2

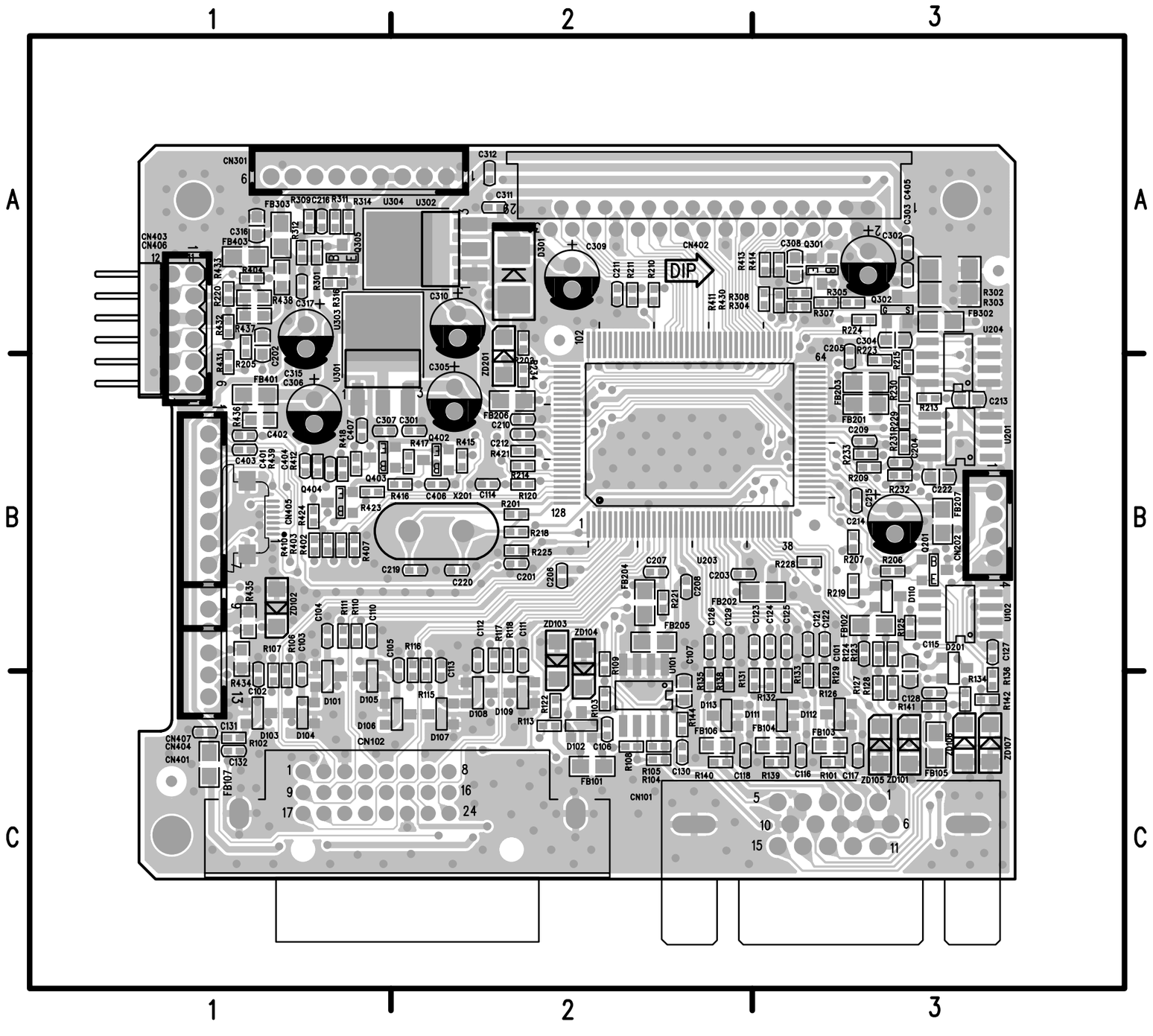


CN101	B1
C101	B1
C102	B2
C103	B2
C104	B2
C105	B3
LED1	C1
R100	B5
R101	B2
R102	B6
R103	B5
R104	B5
R105	C4
R106	C3
R107	C3
R108	C3
R109	C4
SW1	C6
SW2	C5
SW3	C5
SW4	C4
SW5	C4
SW6	C3
SW7	C3
SW8	C3

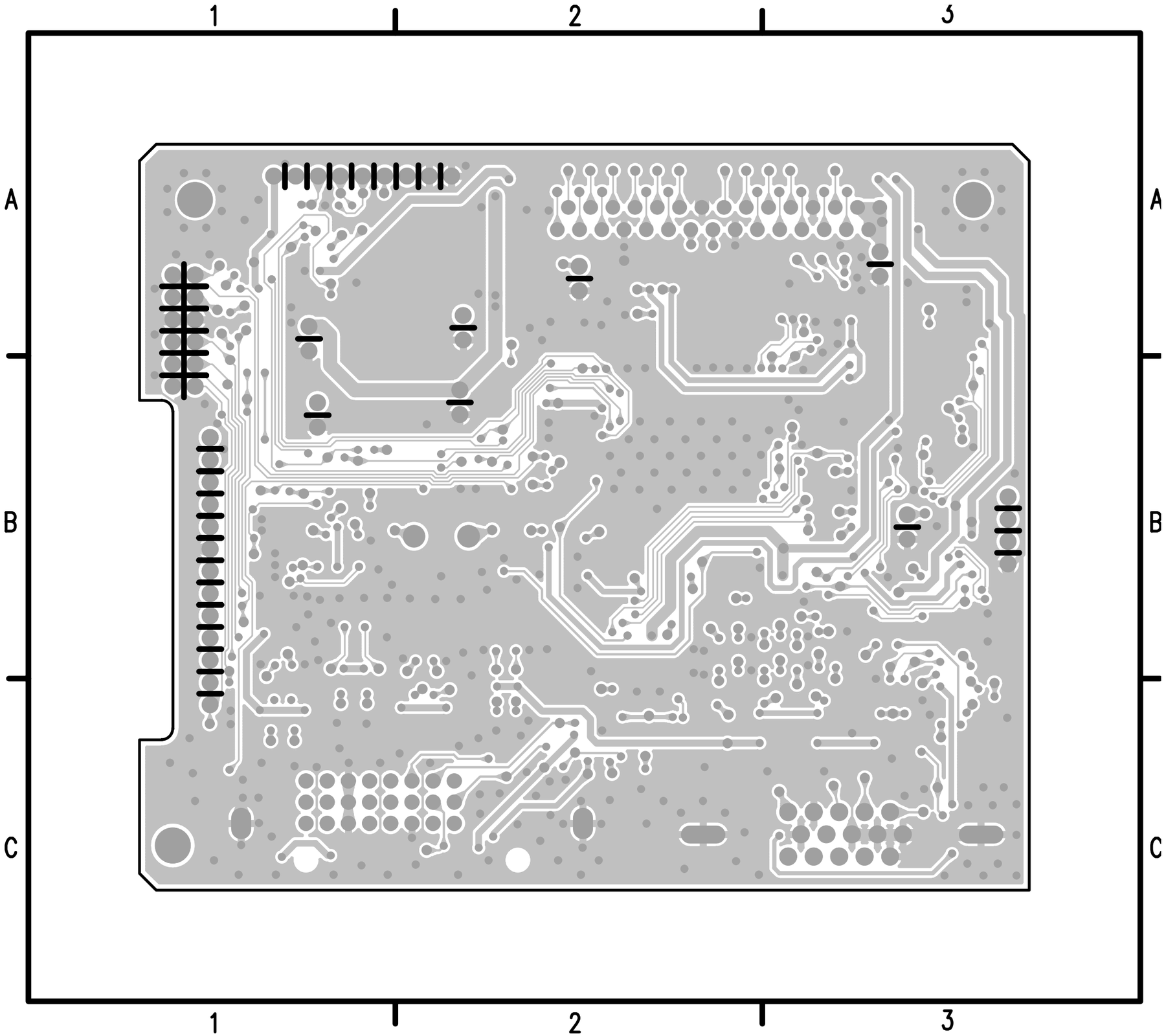
7. PCB Layout

7.1 Scalar Board

715G2561-1

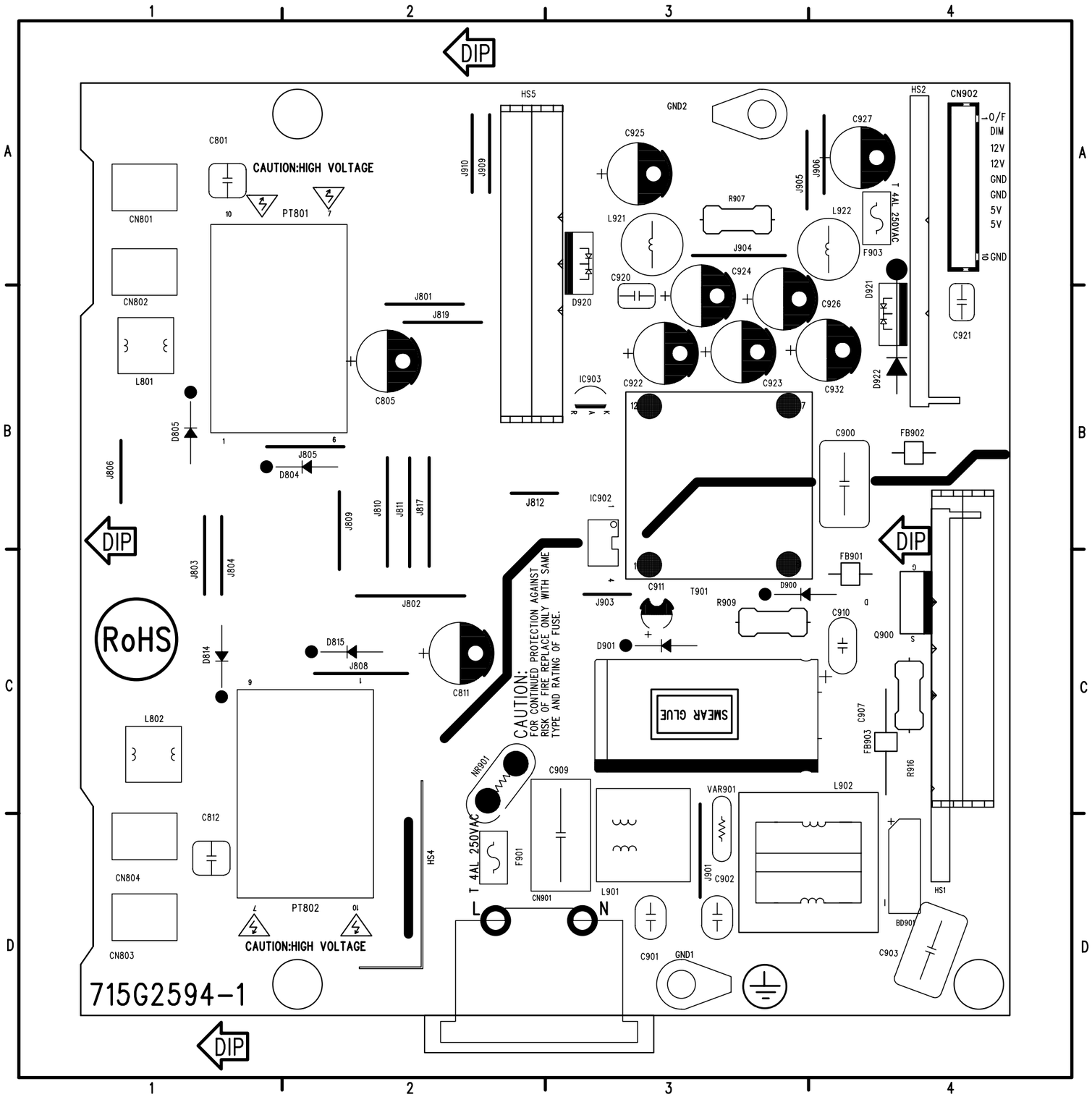


C101	B3	C215	B3	D105	C1	Q301	A3	R144	C2	R410	B1
C102	C1	C216	A1	D106	C2	Q302	A3	R201	B2	R411	A3
C103	C1	C219	B2	D107	C2	Q305	A1	R202	A2	R412	B1
C104	B1	C220	B2	D108	C2	Q402	B2	R205	A1	R413	A3
C105	C2	C222	B3	D109	C2	Q403	B2	R206	B3	R414	A3
C106	C2	C301	B2	D110	B3	Q404	B1	R207	B3	R415	B2
C107	C2	C302	A3	D111	C3	R101	C3	R209	B3	R416	B2
C110	B1	C303	A3	D112	C3	R102	C1	R210	A2	R417	B2
C111	B2	C304	A3	D113	C2	R103	C2	R211	A2	R418	B1
C112	B2	C305	B2	D201	B3	R104	C2	R213	B3	R421	B2
C113	C2	C306	B1	D301	A2	R105	C2	R214	B2	R423	B1
C114	B2	C307	B1	FB101	C2	R106	C1	R215	B3	R424	B1
C115	C3	C308	A3	FB102	B3	R107	C1	R218	B2	R430	A3
C116	C3	C309	A2	FB103	C3	R108	C2	R219	B3	R431	B1
C117	C3	C310	A2	FB104	C3	R109	B2	R220	A1	R432	A1
C118	C2	C311	A2	FB105	C3	R110	B1	R221	B2	R433	A1
C121	B3	C312	A2	FB106	C2	R111	B1	R223	B3	R434	B1
C122	B3	C315	A1	FB107	C1	R113	C2	R224	A3	R435	B1
C123	B2	C316	A1	FB201	B3	R115	C2	R225	B2	R436	B1
C124	B3	C317	A1	FB202	B3	R116	C2	R228	B3	R437	A1
C125	B3	C401	B1	FB203	B3	R117	B2	R229	B3	R438	A1
C126	B2	C402	B1	FB204	B2	R118	B2	R230	B3	R439	B1
C127	B3	C403	B1	FB205	B2	R120	B2	R231	B3	U101	B2
C128	C3	C404	B1	FB206	B2	R122	C2	R232	B3	U102	B3
C129	B2	C405	A3	FB207	B3	R123	B3	R233	B3	U201	B3
C130	C2	C406	B2	FB302	A3	R124	B3	R234	B2	U203	B2
C131	C1	C407	B1	FB303	A1	R125	B3	R301	A1	U204	B3
C132	C1	CN101	C3	FB401	B1	R126	C3	R302	A3	U301	B1
C201	B2	CN102	C2	FB403	A1	R127	C3	R303	A3	U302	A2
C202	A1	CN202	B3	FDT1	B3	R128	C3	R304	A3	U303	B1
C203	B2	CN301	A2	FDT10	<1	R129	C3	R305	A3	U304	A2
C204	B3	CN401	B1	FDT11	C8	R131	C2	R307	A3	X201	B2
C205	B3	CN402	A2	FDT12	<8	R132	C3	R308	A3	ZD101	C3
C206	B2	CN403	B1	FDT13	C1	R133	C3	R309	A1	ZD102	B1
C207	B2	CN404	B1	FDT2	A2	R134	C3	R311	A1	ZD103	B2
C208	B2	CN405	B1	FDT3	A3	R135	C2	R312	A1	ZD104	B2
C209	B3	CN406	A1	FDT4	C1	R136	C3	R314	A1	ZD105	C3
C210	B2	CN407	B1	FDT5	C1	R138	C2	R316	A1	ZD106	C3
C211	A2	D101	C1	FDT6	<1	R139	C3	R402	B1	ZD107	C3
C212	B2	D102	C2	FDT7	C8	R140	C2	R403	B1	ZD201	B2
C213	B3	D103	C1	FDT8	<8	R141	C3	R404	A1		
C214	B3	D104	C1	Q201	B3	R142	C3	R407	B1		

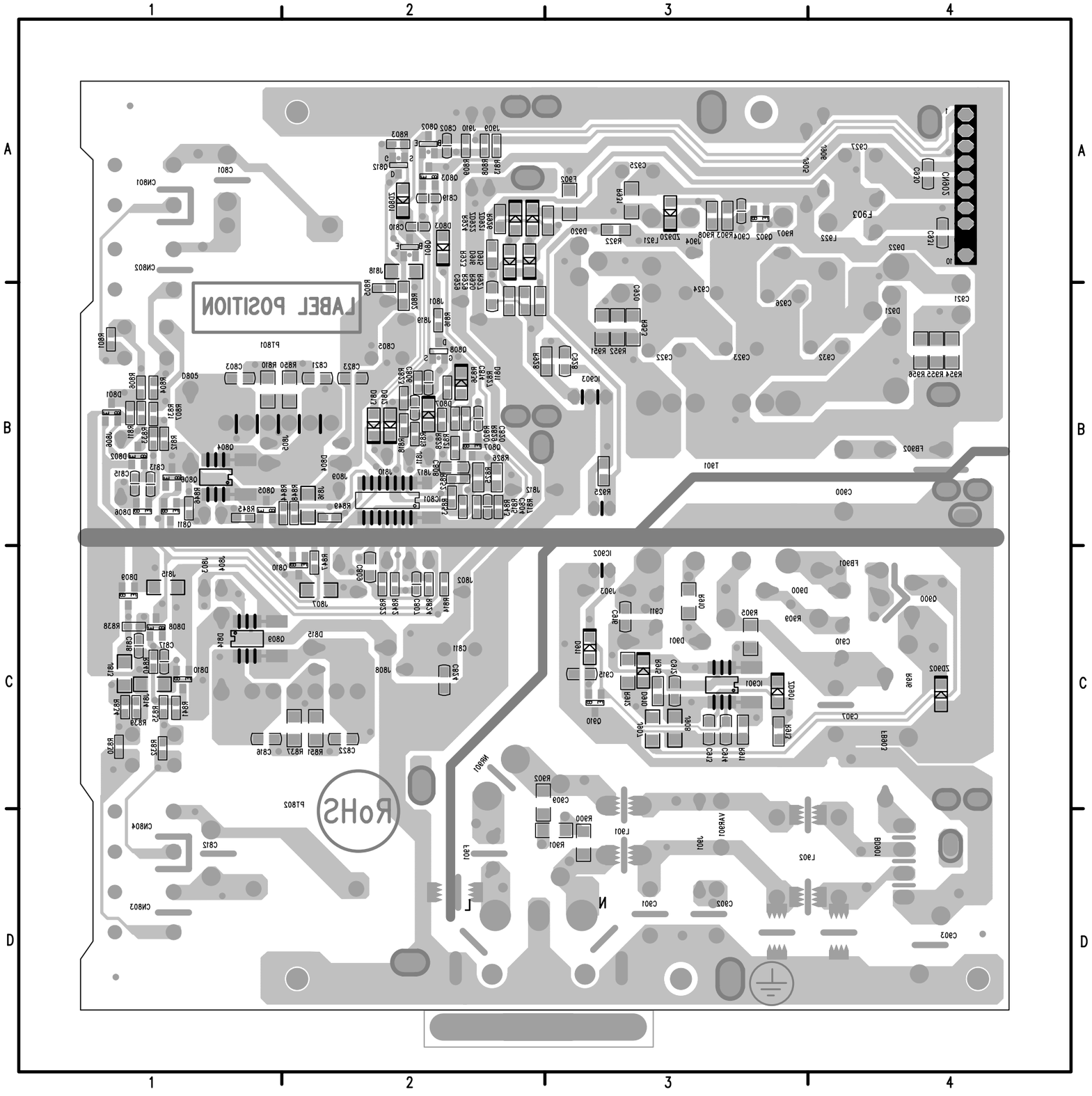

1
2
3
A
B
C

7.2 Power Board

715G2594-1



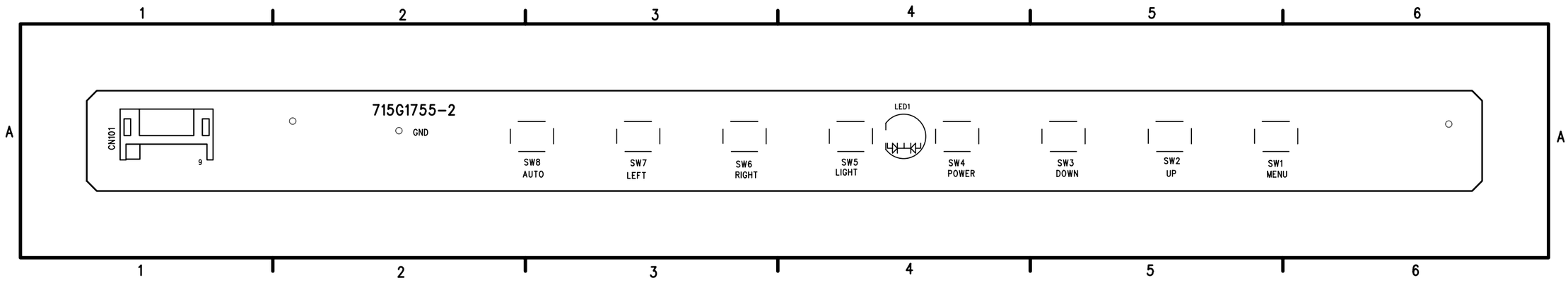
BD901	D4	J802	C2
C801	A1	J803	B1
C805	B2	J804	B1
C811	C2	J805	B2
C812	D1	J806	B1
C900	B4	J808	C2
C901	D3	J809	C2
C902	D3	J810	C2
C903	D4	J811	C2
C907	C4	J812	B2
C909	D3	J817	C2
C910	C4	J819	B2
C911	C3	J901	D3
C920	B3	J903	C3
C921	B4	J904	A3
C922	B3	J905	A3
C923	B3	J906	A4
C924	B3	J909	A2
C925	A3	J910	A2
C926	B3	L801	B1
C927	A4	L802	C1
C932	B4	L901	D3
CN801	A1	L902	D4
CN802	A1	L921	A3
CN803	D1	L922	A4
CN804	D1	NR901	C2
CN901	D2	PT801	B1
CN902	A4	PT802	C2
D804	B1	Q900	C4
D805	B1	R907	A3
D814	C1	R909	C3
D815	C2	R916	C4
D900	C3	SG11	C4
D901	C3	SG12	D2
D920	A3	SG19	D2
D921	B4	SG22	D4
D922	A4	SG25	D4
F901	D2	SG27	D3
F903	A4	SG28	C3
FB901	C4	SG31	D3
FB902	B4	SG33	A1
FB903	C4	SG34	A1
HS10	A3	SG35	A1
HS13	A3	SG36	A1
HS14	A2	SG39	A1
HS16	A2	SG40	D1
HS17	B4	SG42	D1
HS20	A8	SG44	D1
HS28	A7	SG45	D1
HS29	B1	SG46	C4
HS31	B4	SG47	C4
IC902	B3	SG49	C4
IC903	B3	T901	C3
J801	B2	VAR901	D3



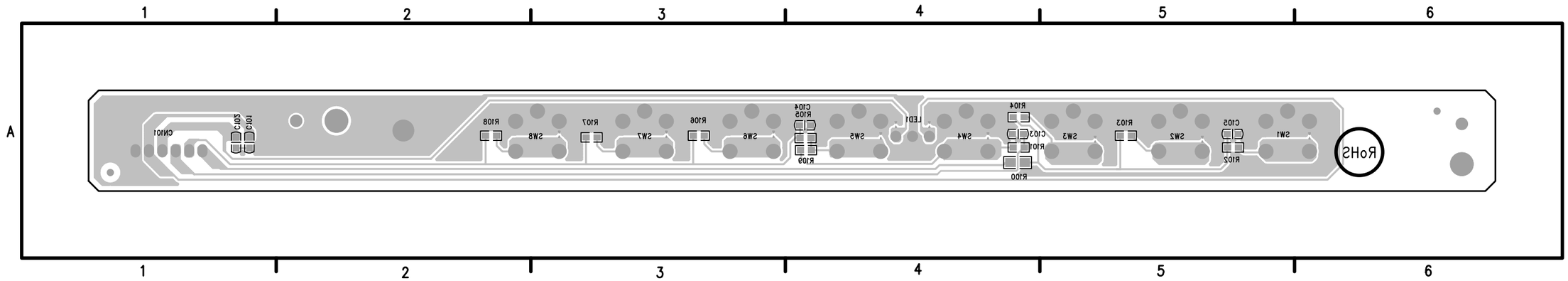
C802	A2	J907	C3	R843	B2
C803	B1	J908	C3	R844	B2
C804	B2	Q801	A2	R845	B1
C806	B2	Q802	A2	R846	B1
C807	C2	Q803	A2	R847	C2
C808	B2	Q804	B1	R848	B2
C809	C2	Q805	B1	R849	B2
C810	A2	Q806	B1	R850	B2
C813	B1	Q807	B2	R851	C2
C814	B2	Q808	B2	R852	B2
C815	B1	Q809	C1	R853	B2
C816	C1	Q810	C2	R900	D3
C817	C1	Q811	B1	R901	D3
C818	C1	Q812	A2	R902	C2
C819	A2	Q902	A3	R903	A3
C820	B2	Q910	C3	R905	C3
C821	B2	R801	B1	R908	A3
C822	C2	R802	B2	R910	C3
C823	B2	R803	A2	R911	C3
C824	C2	R804	B1	R912	C3
C904	A3	R805	B2	R913	C3
C912	C3	R806	B1	R915	C3
C913	C3	R807	B1	R922	A3
C914	C3	R808	A2	R923	A2
C915	C3	R809	A2	R924	A2
C916	C3	R810	B1	R925	B3
C928	B3	R811	B1	R926	A3
C929	B2	R812	B1	R927	B2
C930	A4	R813	A2	R928	B3
C931	A4	R814	C2	R929	B2
D801	B1	R815	B2	R930	B2
D802	B1	R816	B2	R931	A3
D803	A2	R817	B2	R951	B3
D806	B1	R818	B2	R952	B3
D807	B2	R819	B2	R953	B3
D808	C1	R820	B2	R954	B4
D809	C1	R821	B2	R955	B4
D810	C1	R822	C2	R956	B4
D811	B2	R823	B2	SG10	C3
D812	B2	R824	C2	SG15	D3
D813	B2	R825	B2	SG17	D3
D910	C3	R826	B2	SG18	D4
D911	C3	R827	B2	SG20	D4
D915	A2	R828	B2	SG21	D3
D916	A2	R829	B2	SG23	D4
F902	A3	R830	C1	SG24	D3
HS11	D4	R831	B1	SG26	D4
HS15	A1	R832	C1	SG29	C3
HS21	A7	R833	B1	SG30	D3
HS22	A1	R834	C1	SG32	D3
IC801	B2	R835	C1	SG37	D2
IC901	C3	R836	B2	SG38	D2
J807	C2	R837	C2	ZD801	A2
J813	C1	R838	C1	ZD901	C3
J814	C1	R839	C1	ZD902	C4
J815	C1	R840	C1	ZD920	A3
J816	B2	R841	C1	ZD921	A2
J818	A2	R842	C2	ZD922	A2

7.3 Key Board

715G1755-2

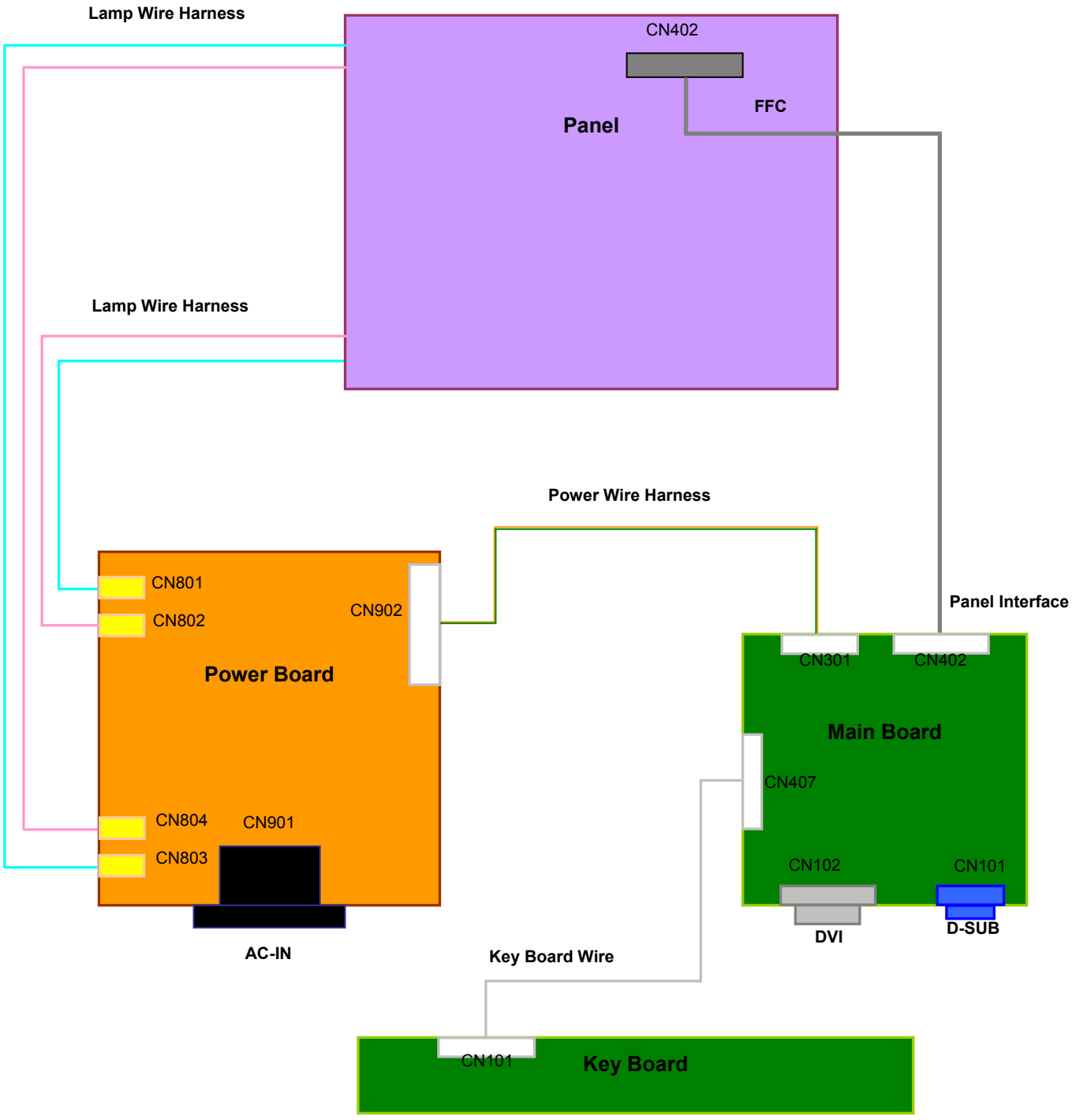


CN101	A1
LED1	A4
SW1	A5
SW2	A5
SW3	A5
SW4	A4
SW5	A4
SW6	A3
SW7	A3
SW8	A3
GND	A2



C101	A1
C102	A1
C103	A4
C104	A4
C105	A5
R100	A4
R101	A4
R102	A5
R103	A5
R104	A4
R105	A4
R106	A3
R107	A3
R108	A2
R109	A4

8. Wiring Diagram



9. Mechanical Instructions

1. Back View as Fig1

Place the monitor face down on a smooth surface as Fig 1. Be careful to avoid scratch and injury during the uninstallation.

Fig1

2. Remove the cable management as Fig2.

Fig2

3. Remove the base as Fig3~Fig4.

Fig3

Fig4

4. Remove the stand as Fig5 and Fig6.

Remove the four screws to remove the stand.

Fig5

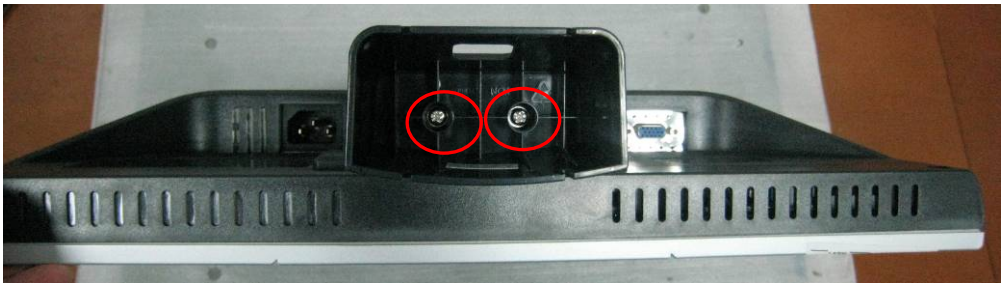


Fig6

5. Remove the hinge as Fig7.

Remove the three screws to remove the hinge.

Fig7

6. Remove rear cover as Fig8~Fig11

a. Remove 2 screws to remove rear cover as Fig8.

b. Use plastic putty knife to release 3 snaps on the bottom as Fig. 9 - Fig.11

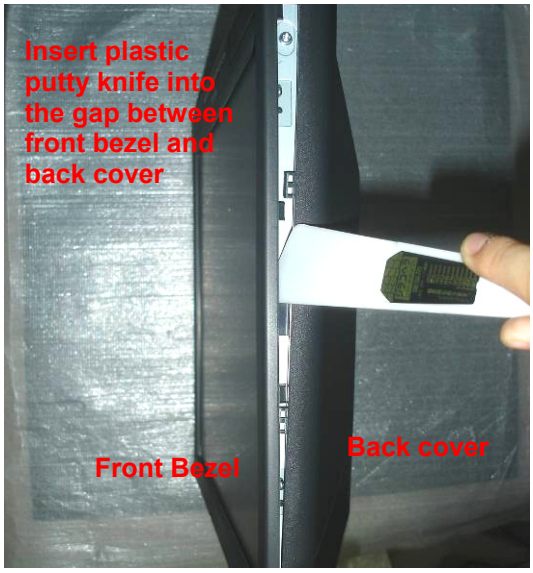
Fig8

Fig9

Fig.10

Fig11

c. Insert plastic putty knife into the gap between front bezel and back cover to release 4 snaps on the left, 4 snaps on the right and 4 snaps on the top as Fig12 - Fig15



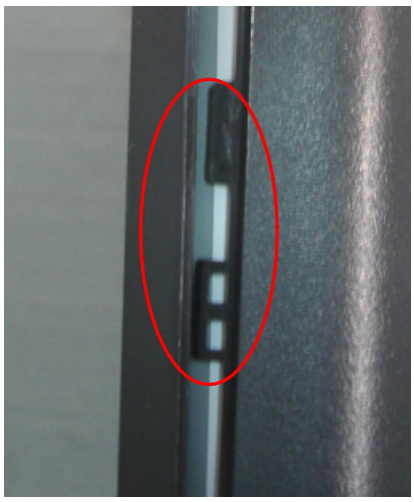


Fig12

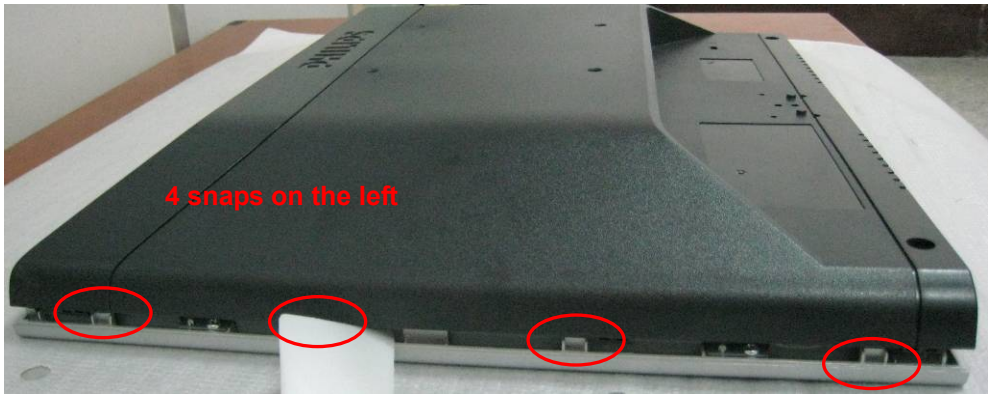


Fig13

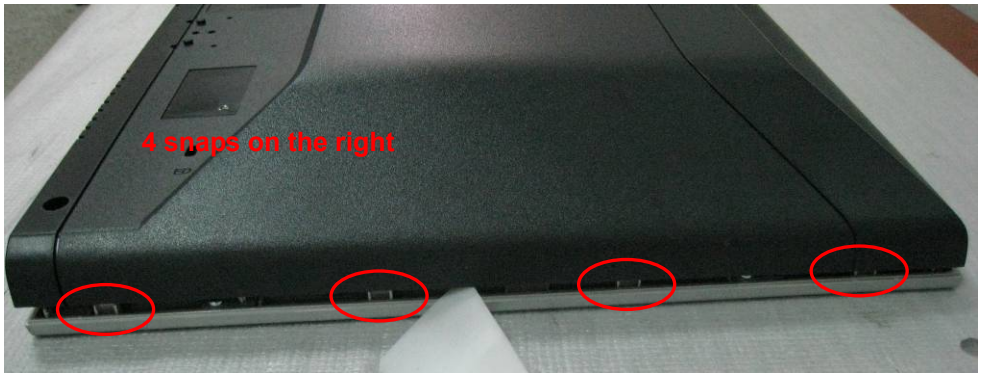


Fig14

Fig15

7. Remove shielding as Fig16.

Remove 8 screws as Fig16.

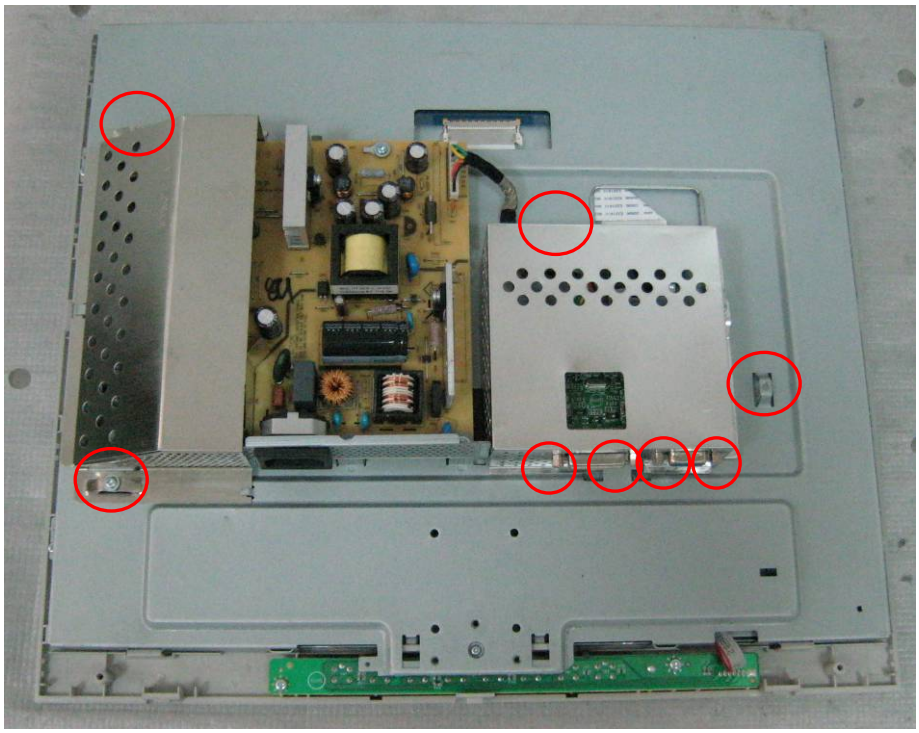


Fig16

8. Remove main board and power board as Fig17.

Remove 7 screws to remove main board and power board as Fig17.

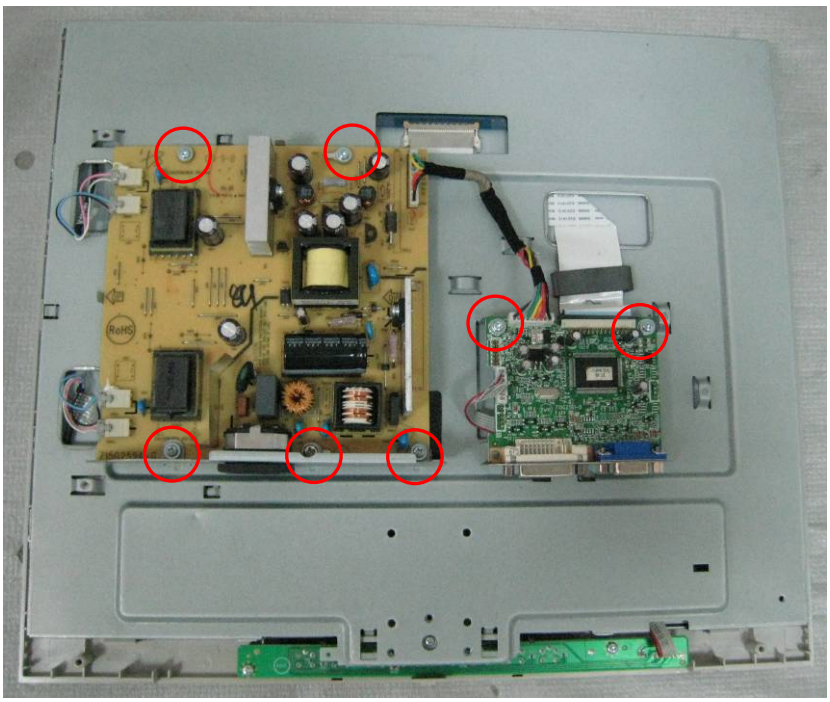


Fig17

9. Remove the bezel as Fig18- Fig20

a. Remove 2 screws to remove the key board as Fig18

b. Remove 2 screws at the left of bezel as Fig19

c. Remove 2 screws at the right of bezel as Fig20

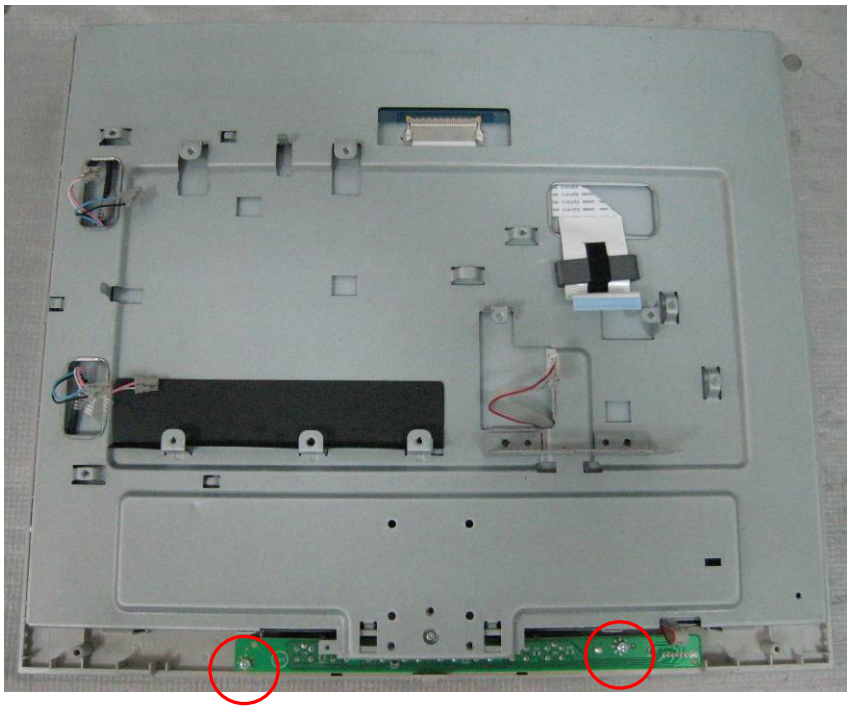


Fig18

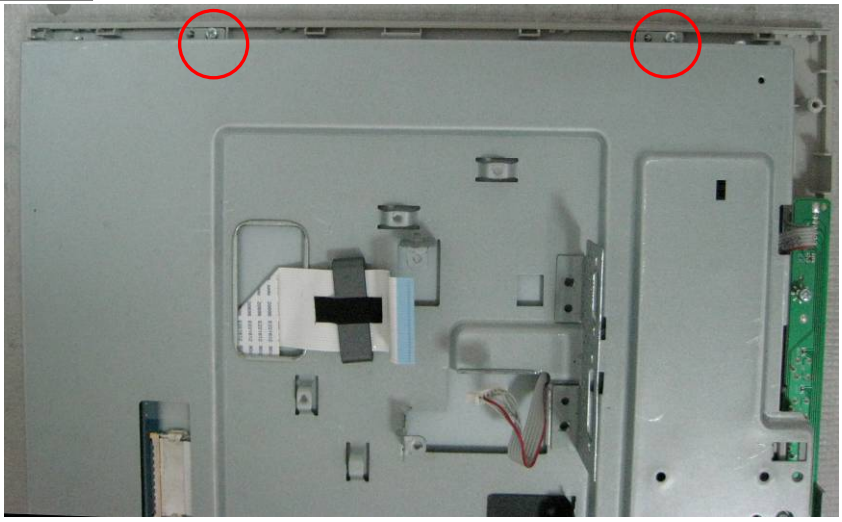


Fig19

Fig20

10. Remove the main frame as Fig21- Fig22

a. Remove 2 screws at the right of main frame Fig21.

b. Remove 2 screws at the left and 1screw at the bottom of the main frame Fig22.

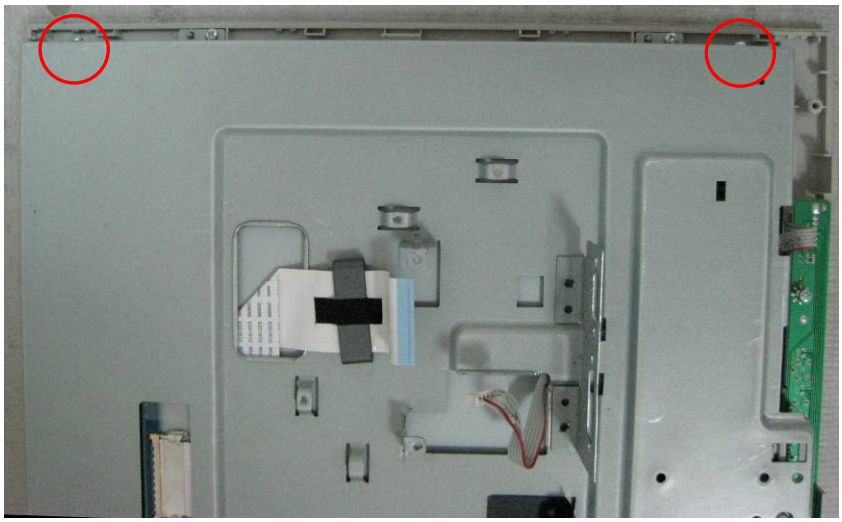


Fig21

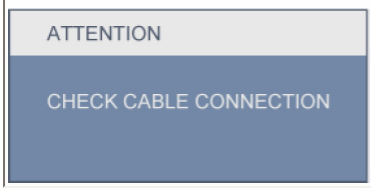
Fig22

11. The end as Fig23.

Fig23

10. Trouble Shooting

This page deals with problems that can be corrected by a user. If the problem still persists after you have tried these solutions, contact Philips customer service representative.

Common Problems	
Having this problem	Check these items
No Picture (Power LED not lit)	• Make sure the power cord is plugged into the power outlet and into the back of the monitor. • First, ensure that the power button on the front of the monitor is in the OFF position, then press it to the ON position.
No Picture (Power LED is amber or yellow)	• Make sure the computer is turned on. • Make sure the signal cable is properly connected to your computer. • Check to see if the monitor cable has bent pins. • The Energy Saving feature may be activated
Screen says  	• Make sure the monitor cable is properly connected to your computer. (Also refer to the Quick Set-Up Guide). • Check to see if the monitor cable has bent pins. • Make sure the computer is turned on.
AUTO button not working properly	• The Auto Function is designed for use on standard Macintosh or IBM-compatible PCs running Microsoft Windows. • It may not work properly if using nonstandard PC or video card.
Imaging Problems	
Display position is incorrect	• Press the Auto button. • Adjust the image position using the Phase/Clock of More Settings in OSD Main Controls.
Image vibrates on the screen	• Check that the signal cable is properly connected to the graphics board or PC.

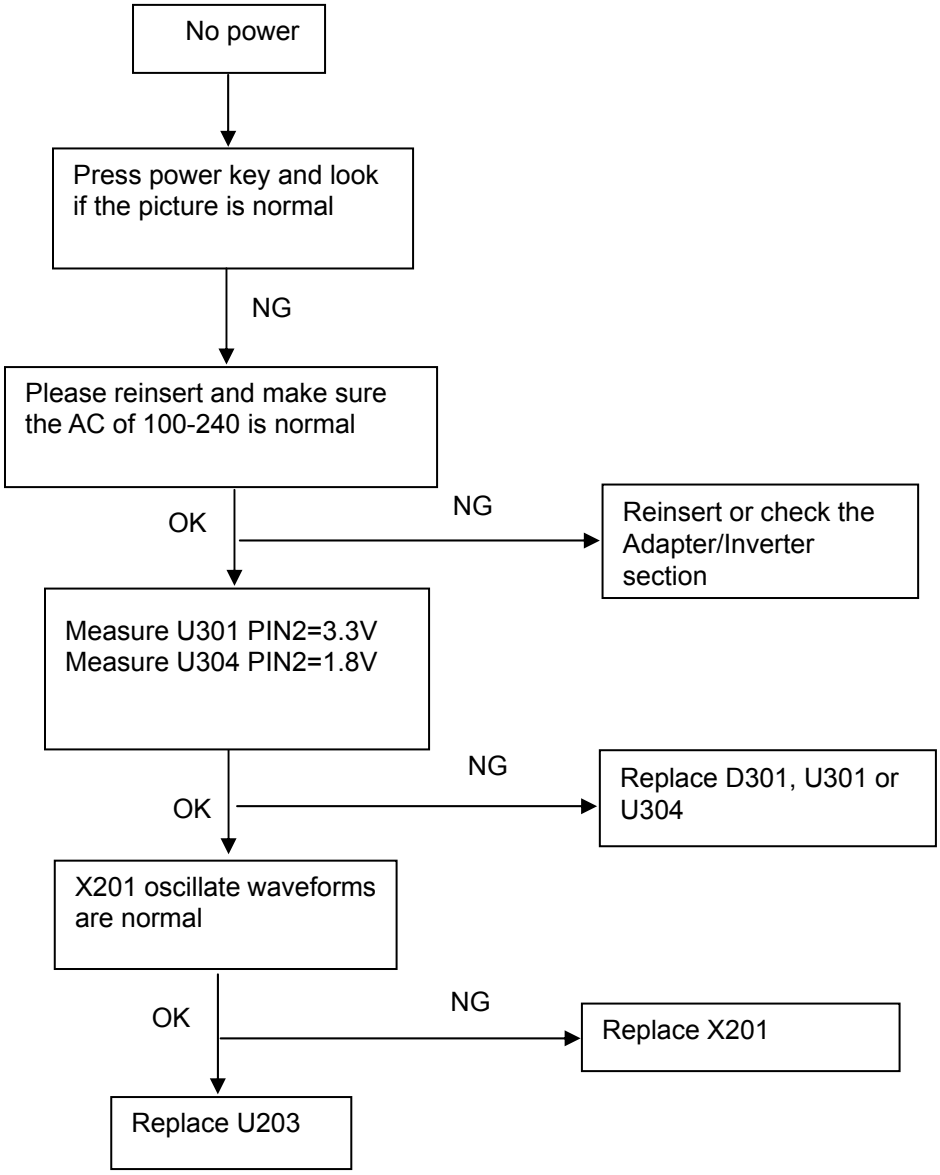
Vertical flicker appears 	• Press the Auto button. • Eliminate the vertical bars using the Phase/Clock of More Settings in OSD Main Controls.
Horizontal flicker appears 	• Press the Auto button. • Eliminate the vertical bars using the Phase/Clock of More Settings in OSD Main Controls.
The screen is too bright or too dark	• Adjust the contrast and brightness on On-Screen Display. (The backlight of the LCD monitor has a fixed life span. When the screen becomes dark or begins to flicker, please contact your sales representative).
An after-image appears	• If an image remains on the screen for an extended period of time, it may be imprinted in the screen and leave an after-image. This usually disappears after a few hours
An after-image remains after the power has been turned off.	• This is characteristic of liquid crystal and is not caused by a malfunction or deterioration of the liquid crystal. The after-image will disappear after a peroid of time.
Green, red, blue, dark, and white dots remains	• The remaining dots are normal characteristic of the liquid crystal used in today's technology.
For further assistance, refer to the Consumer Information Centers list and contact Philips customer service representative.	

RETURN TO TOP OF THE PAGE

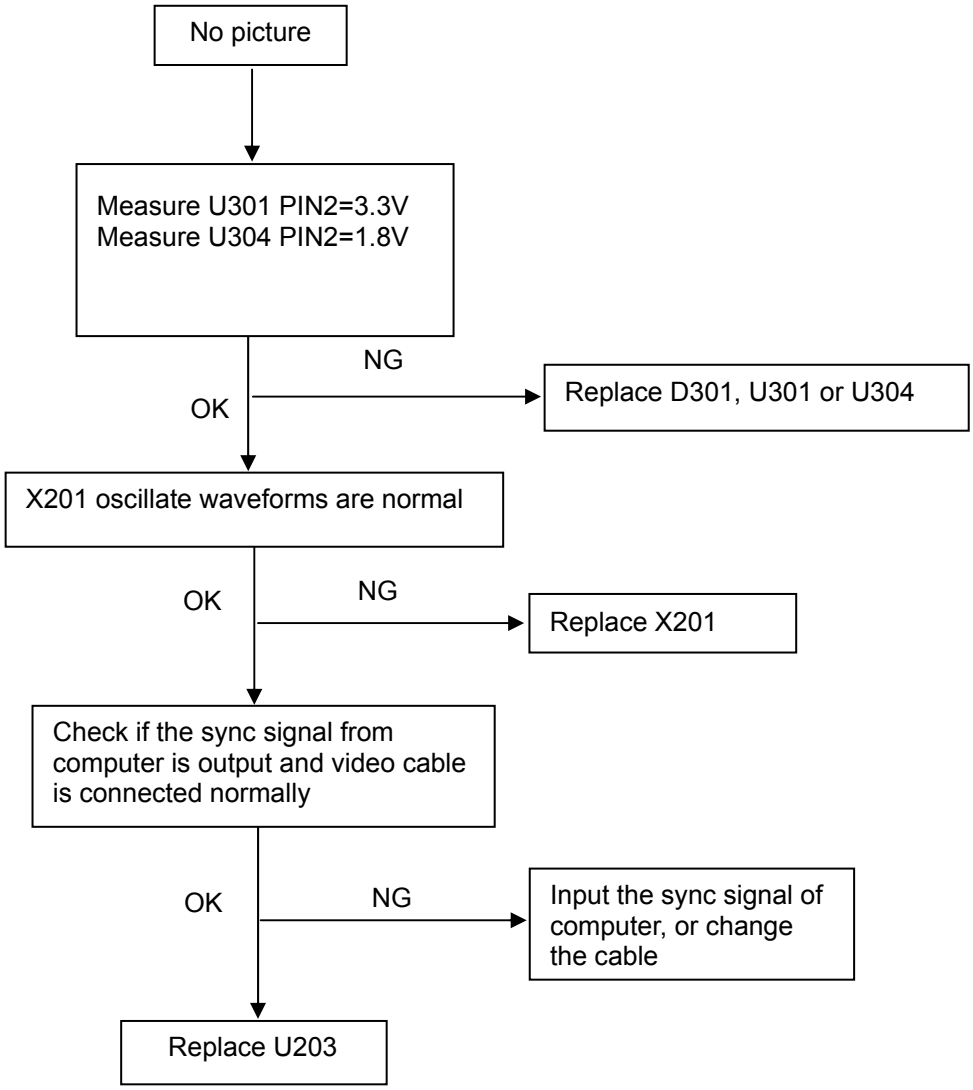
11. Repair Flow Chart

11.1 Main Board

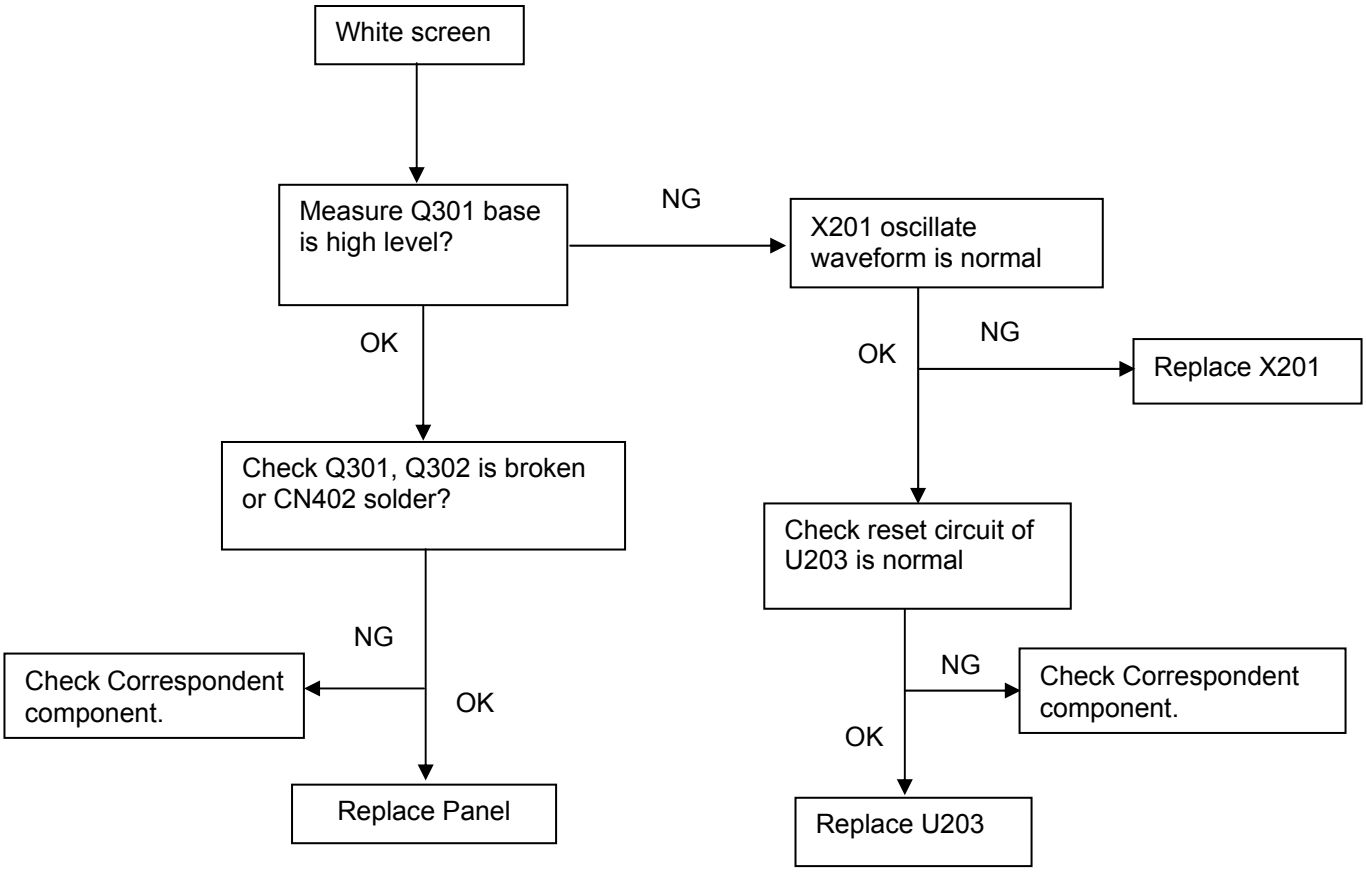
(1). No Power



(2). No Picture

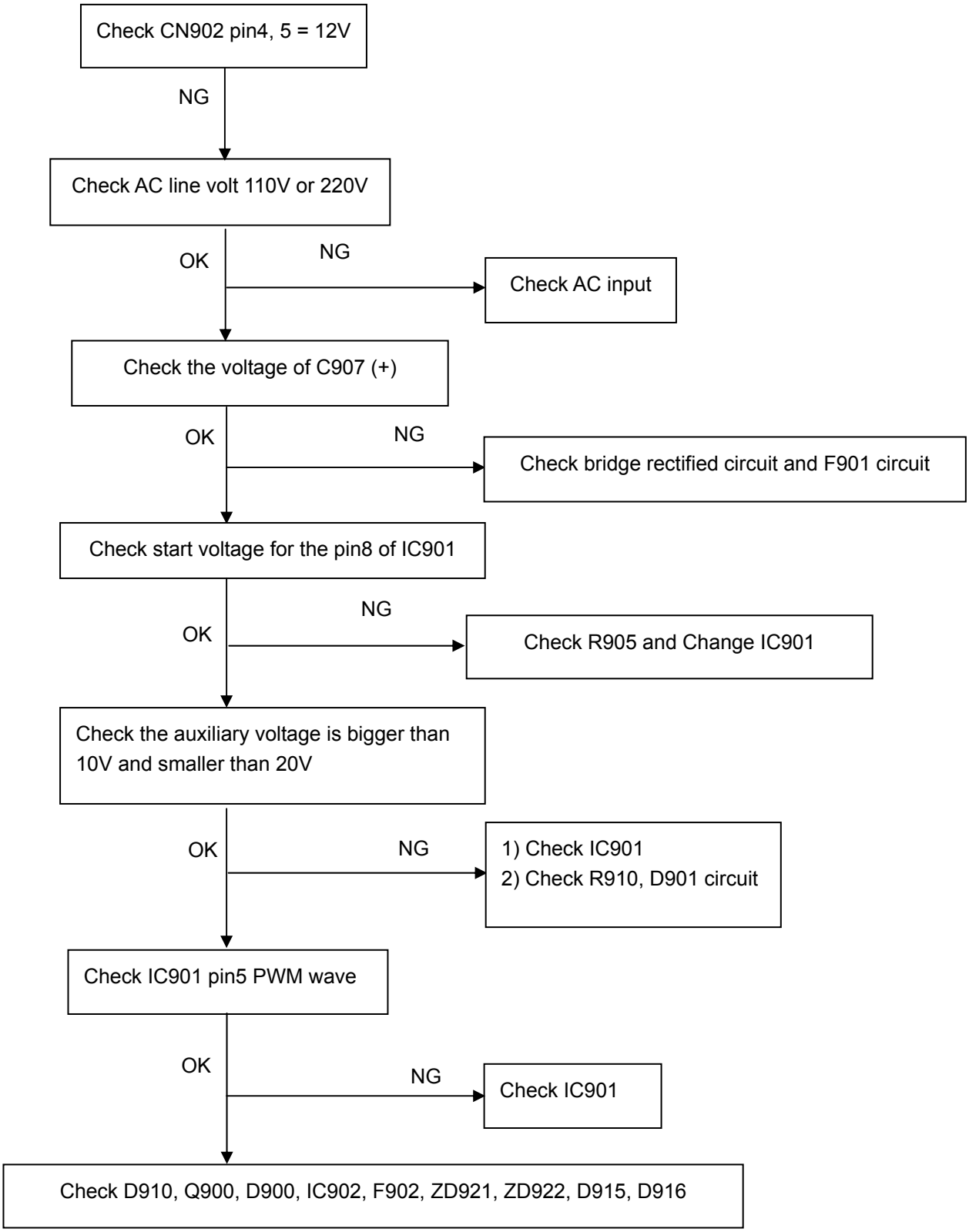

No picture
Measure U301 PIN2=3.3V
Measure U304 PIN2=1.8V
NG
OK
Replace D301, U301 or U304
X201 oscillate waveforms are normal
OK
NG
Replace X201
Check if the sync signal from computer is output and video cable is connected normally
OK
NG
Input the sync signal of computer, or change the cable
Replace U203

(3). White screen

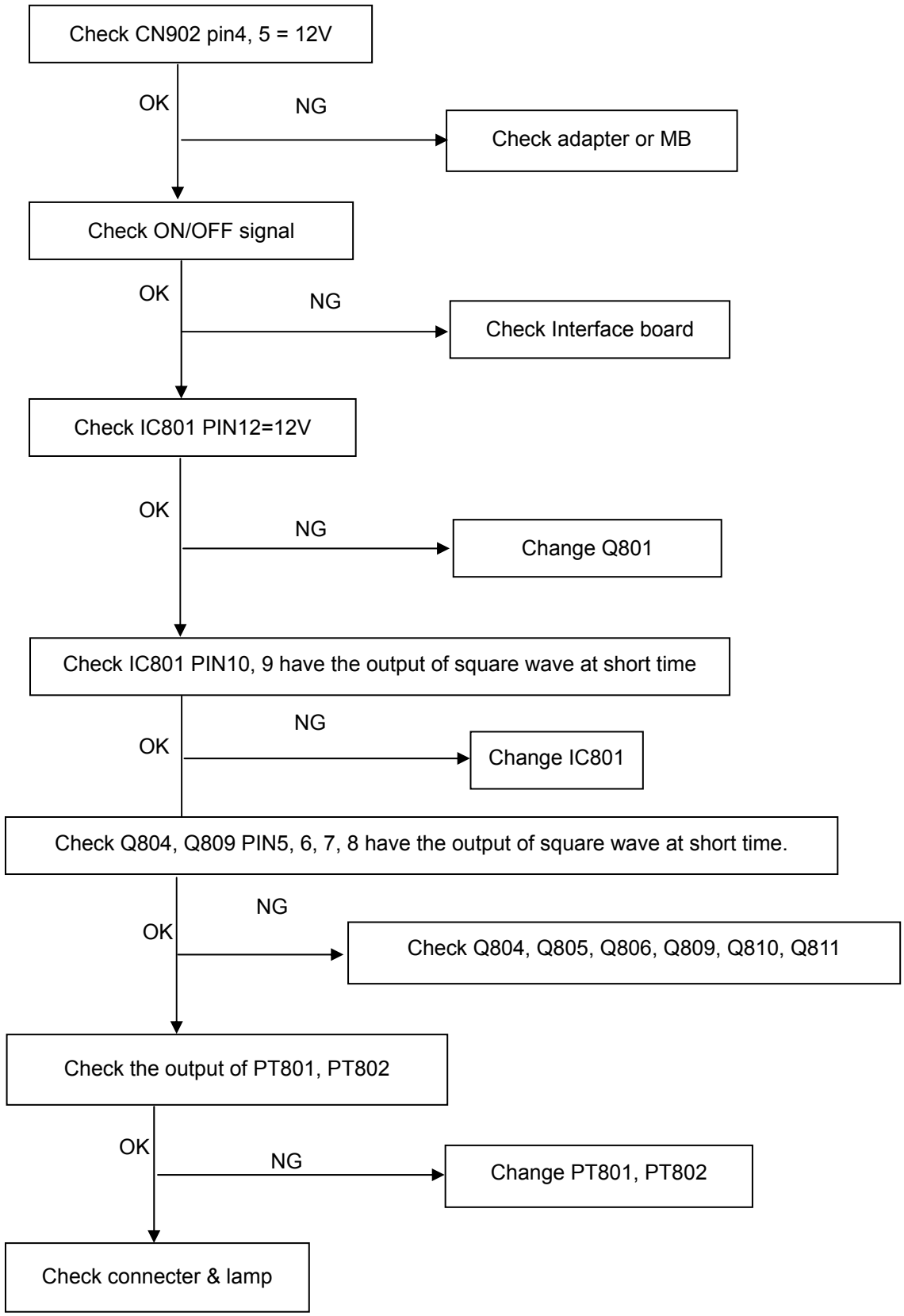


11.2. Power/Inverter Board

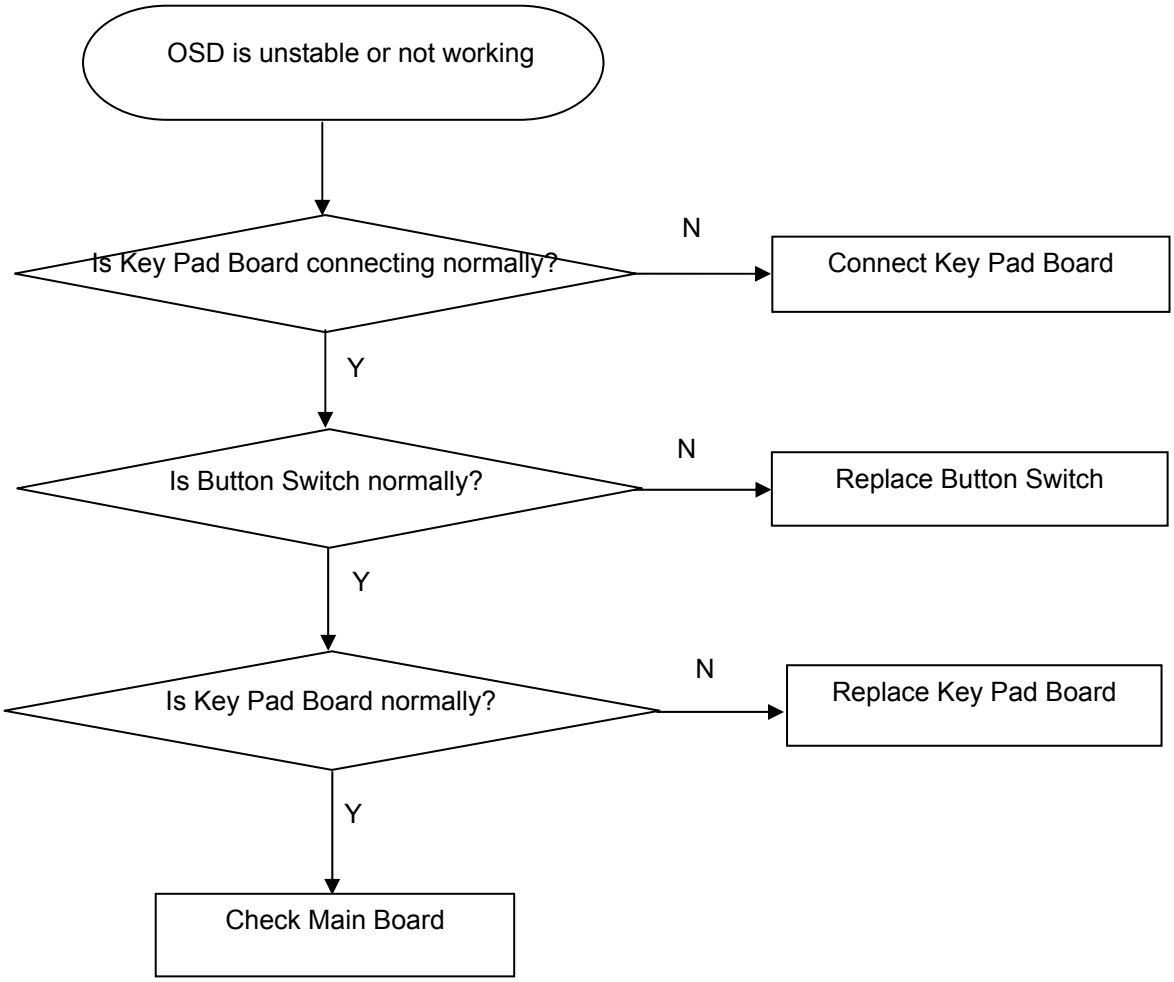
(1) No power



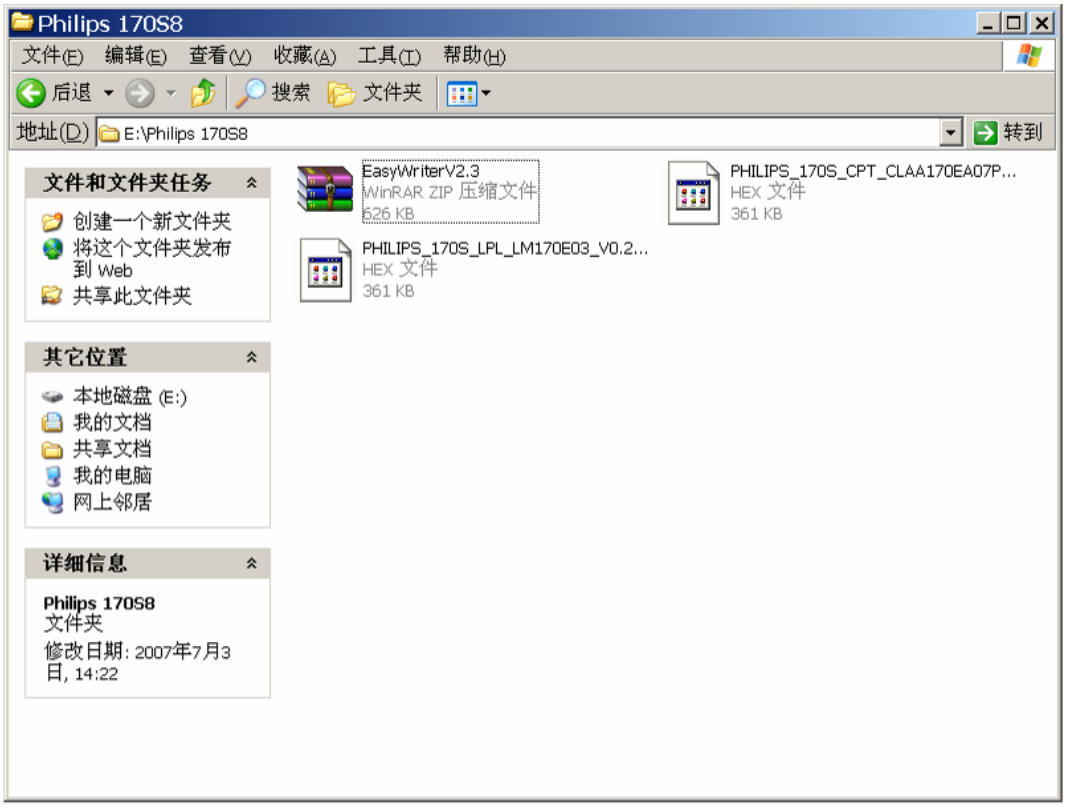
(2) W / LED, No Backlight



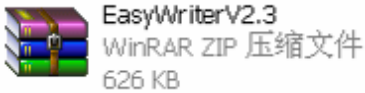
11.3 Key Board



12. ISP Instruction

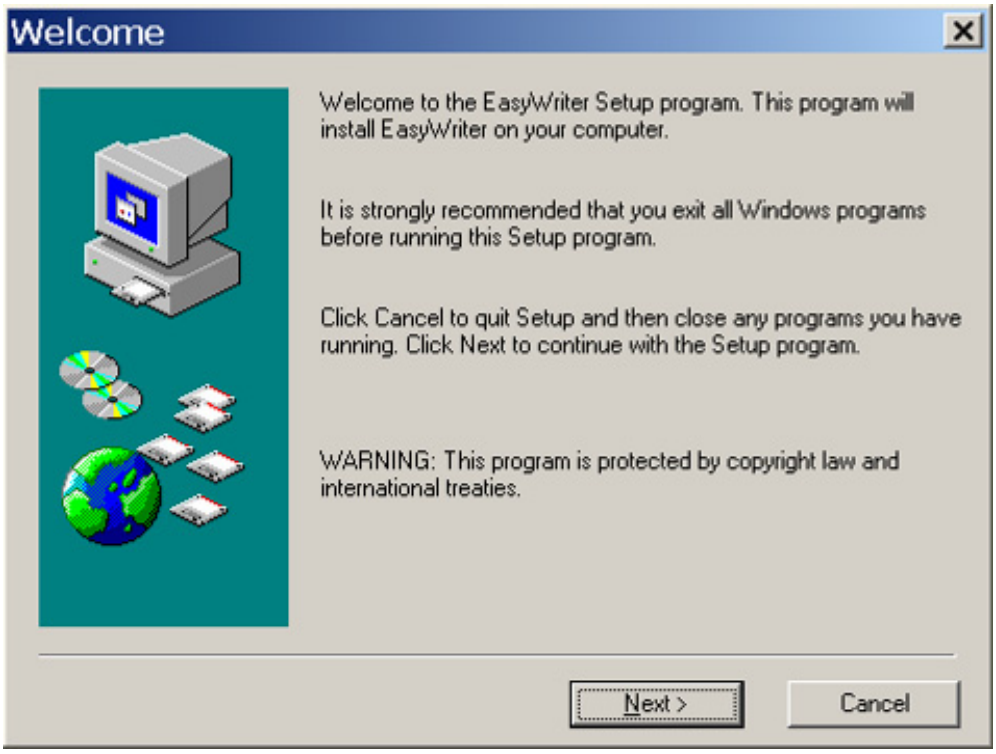


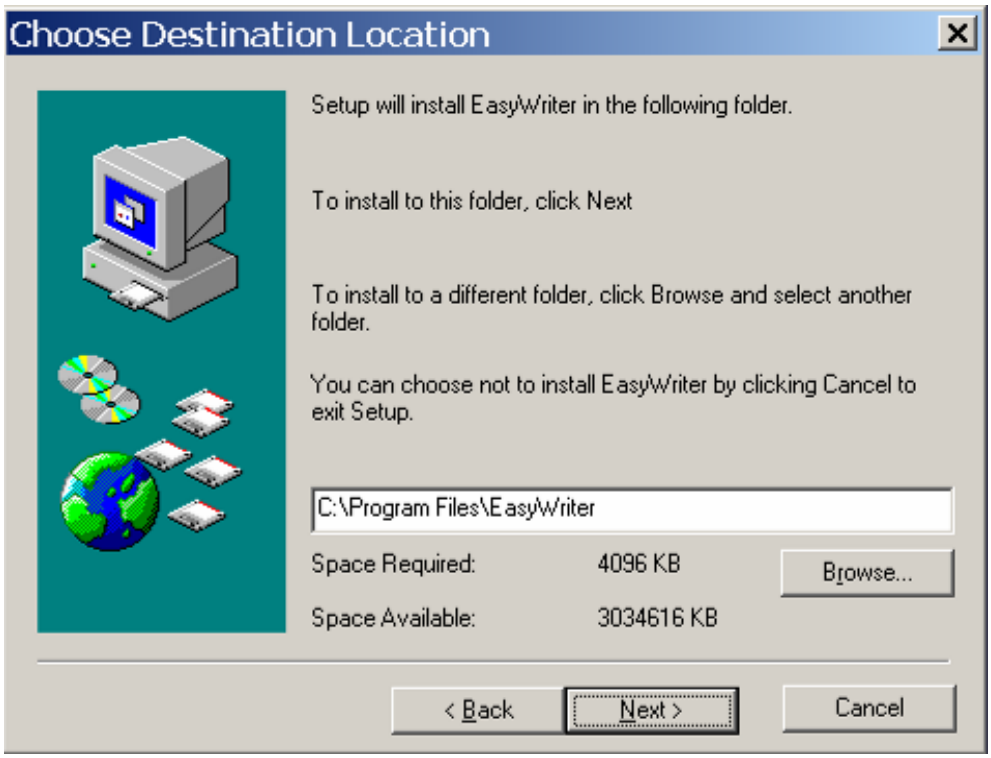
(1). Install the program software

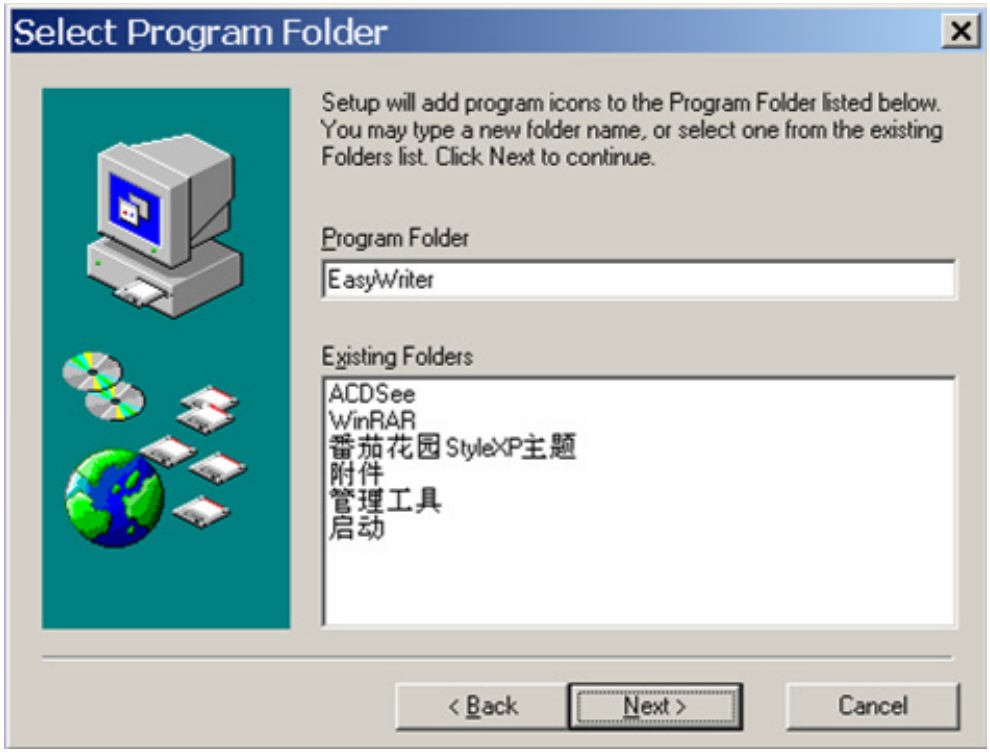
a. First decompressing files 

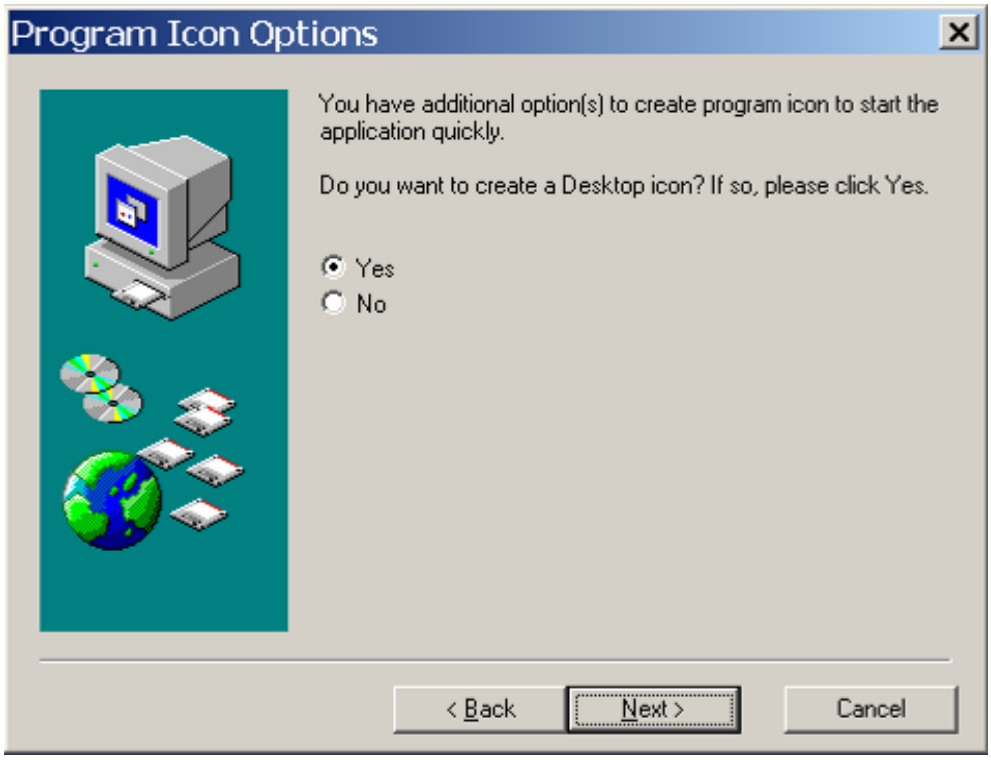
, as follow:

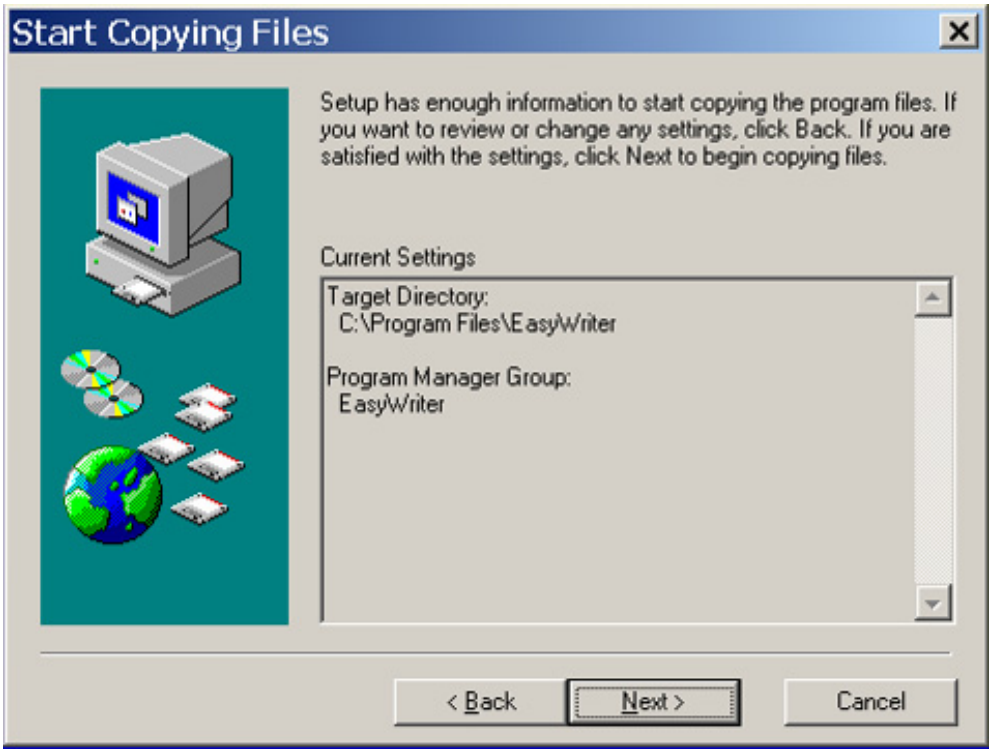
b. Double – click EasyWriterV2...., start to install as follows:

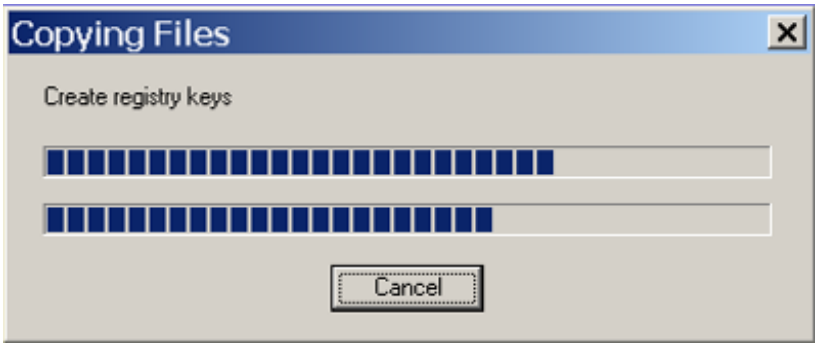


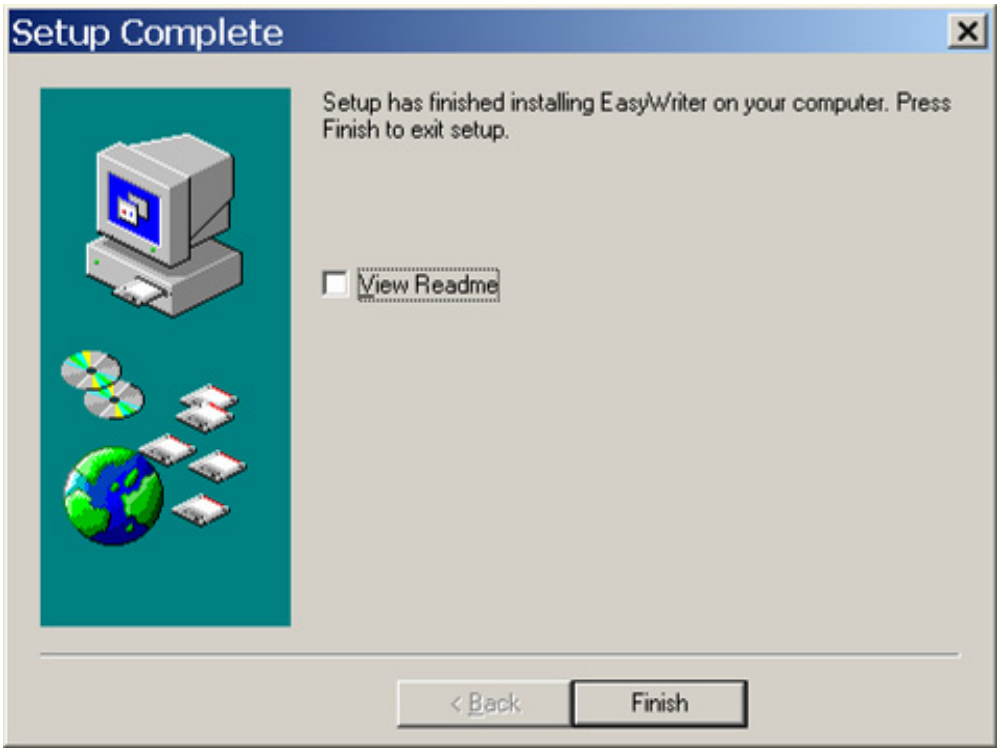



Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folder
EasyWriter
Existing Folders
ACDSee
WinRAR
番茄花园 StyleXP主题
附件
管理工具
启动
< Back
Next >
Cancel


Program Icon Options
You have additional option(s) to create program icon to start the application quickly.
Do you want to create a Desktop icon? If so, please click Yes.
Yes
No
< Back
Next >
Cancel


Start Copying Files
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.
Current Settings
Target Directory:
C:\Program Files\EasyWriter
Program Manager Group:
EasyWriter
< Back
Next >
Cancel

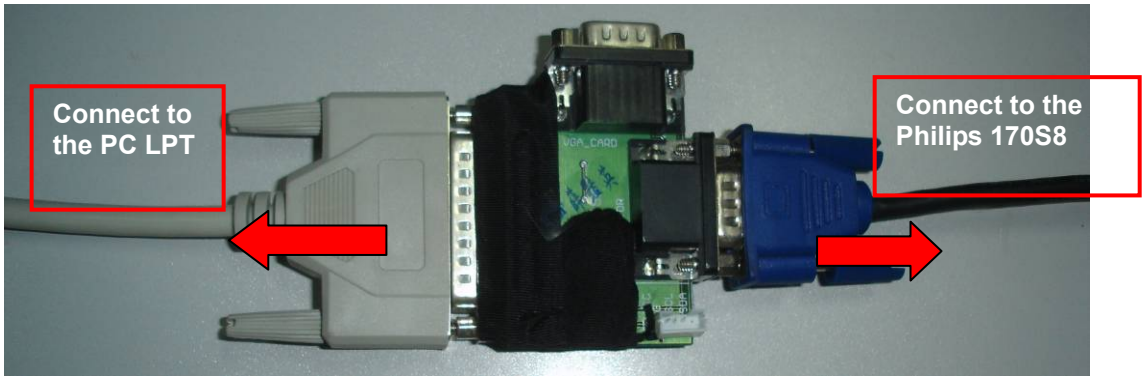

Copying Files
Create registry keys
Cancel


Setup Complete
Setup has finished installing EasyWriter on your computer. Press Finish to exit setup.
View Readme
< Back
Finish

c. There will be a shortcut key 

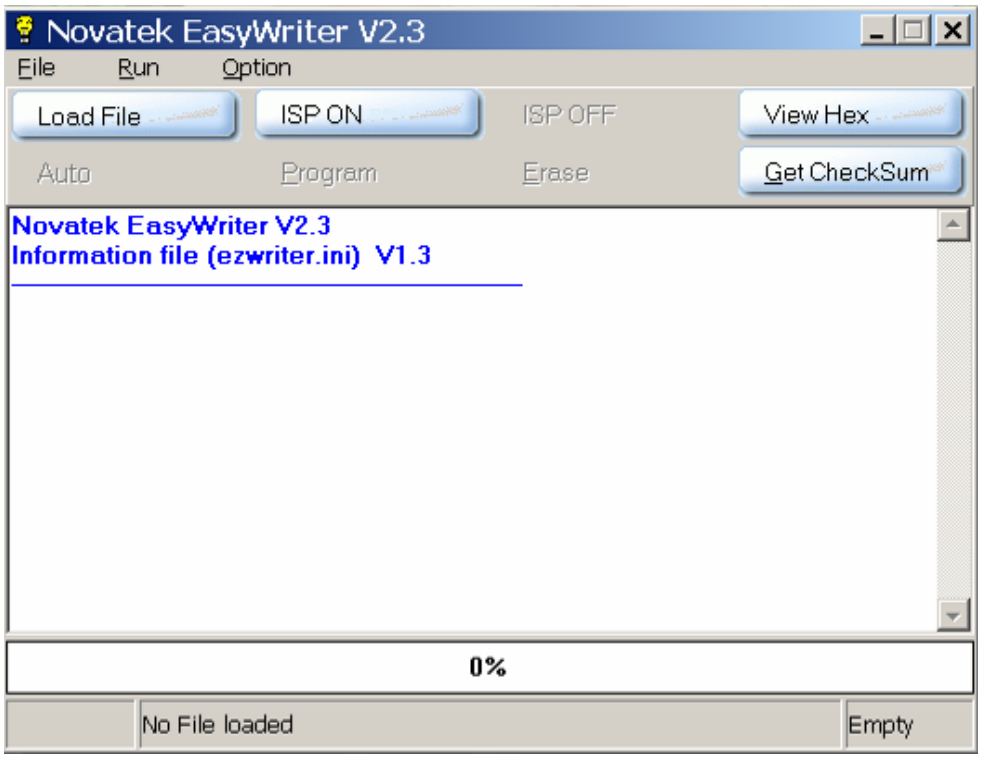
appears on the desktop.

(2). Connect the ISP board as follow:



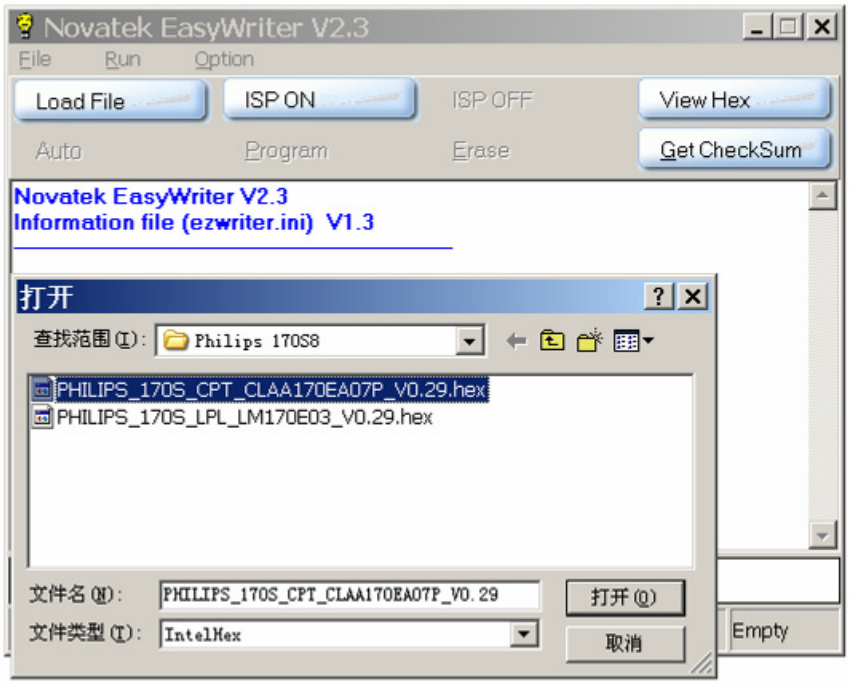
a. Double-click 

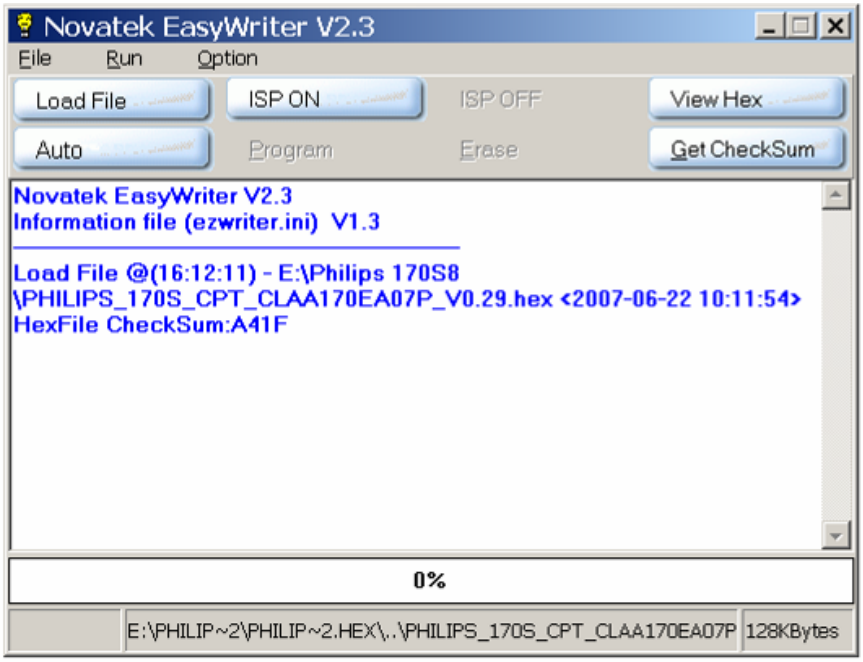
，running the program as follows:



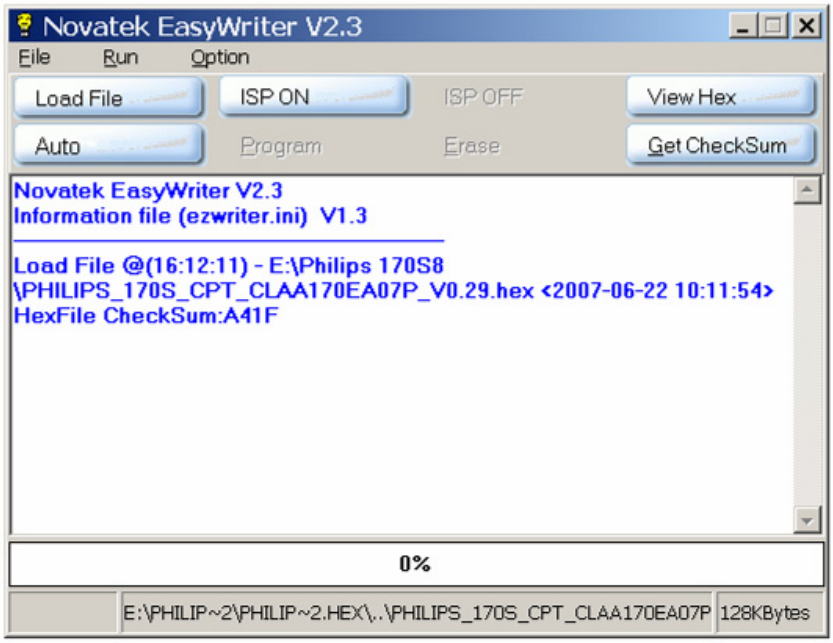
b. Click 

icon, search the program" PHILIPS_170S_CPT_CLAA170EA07P_V.29.hex", and click **open:**

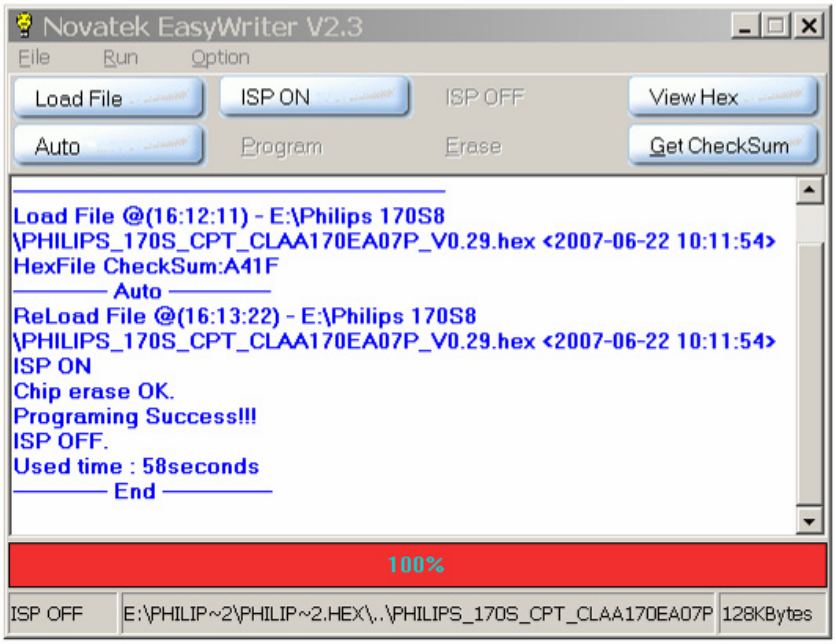




c. Click Auto icon, the writer is in processing…



d. Until appears the follow Fig, writer completed.



13. 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

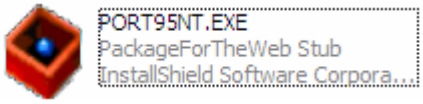
b. Printer cablex1

c. VGA cable x1

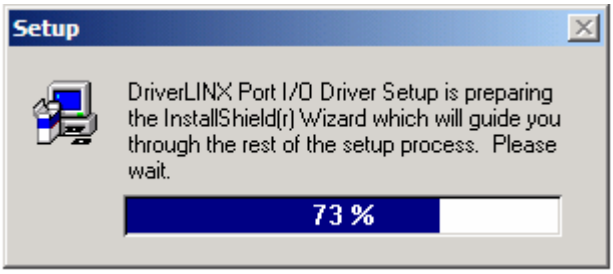
d. Digital cable x1

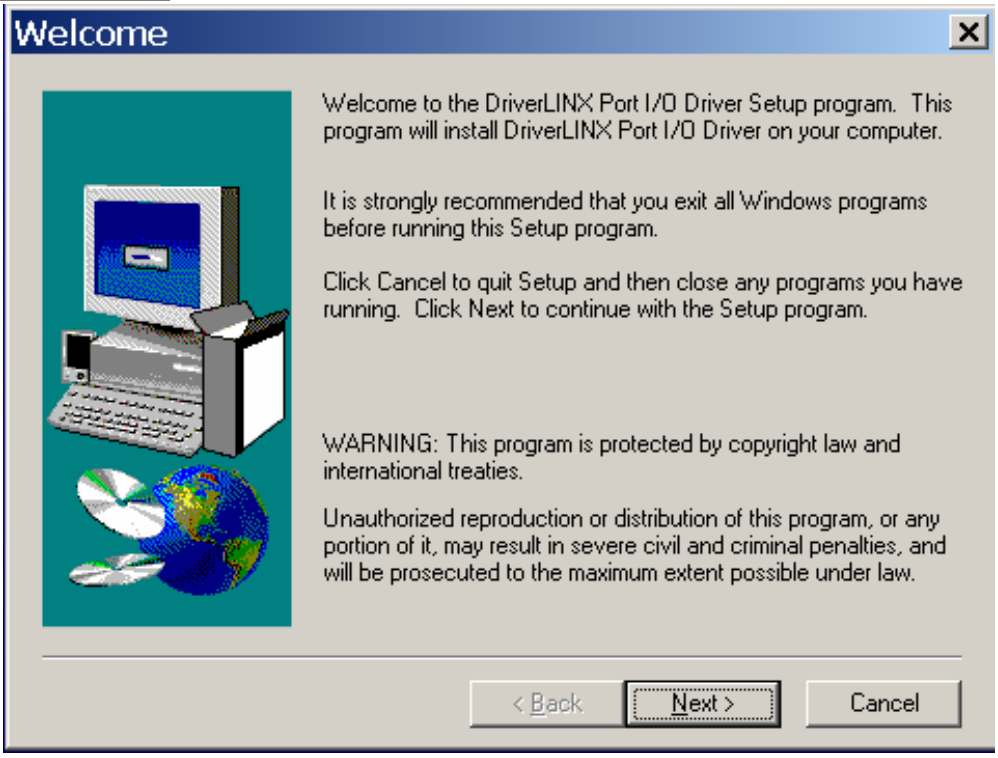
e. 12V DC power source

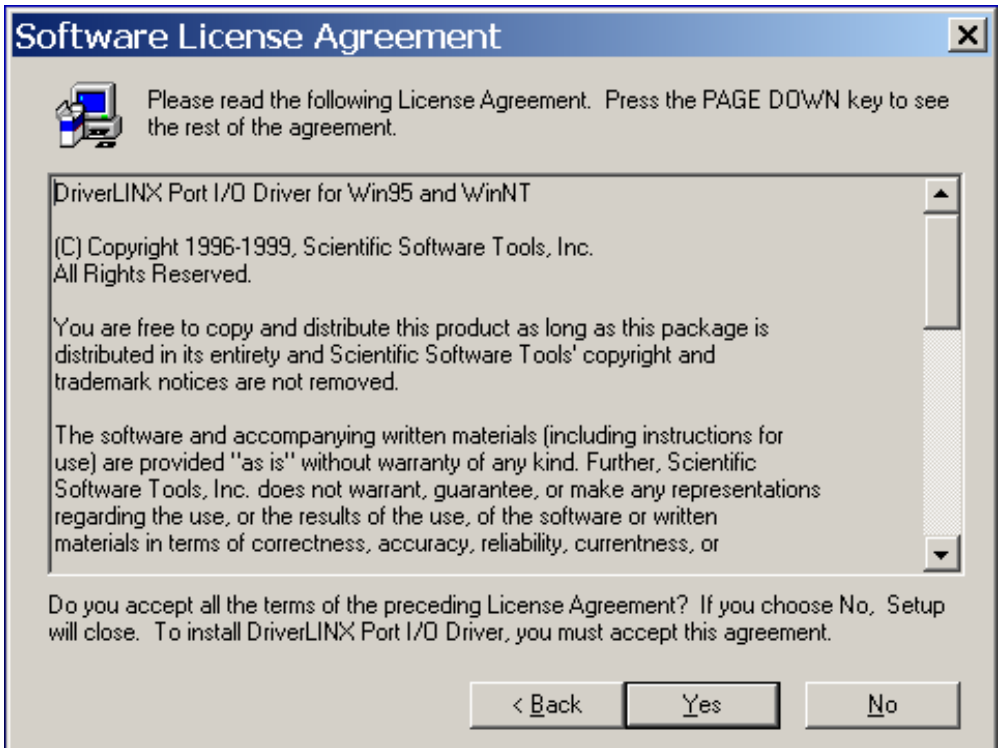
1. Install the "PORT95NT.EXE", and restart the computer.

You must install the 

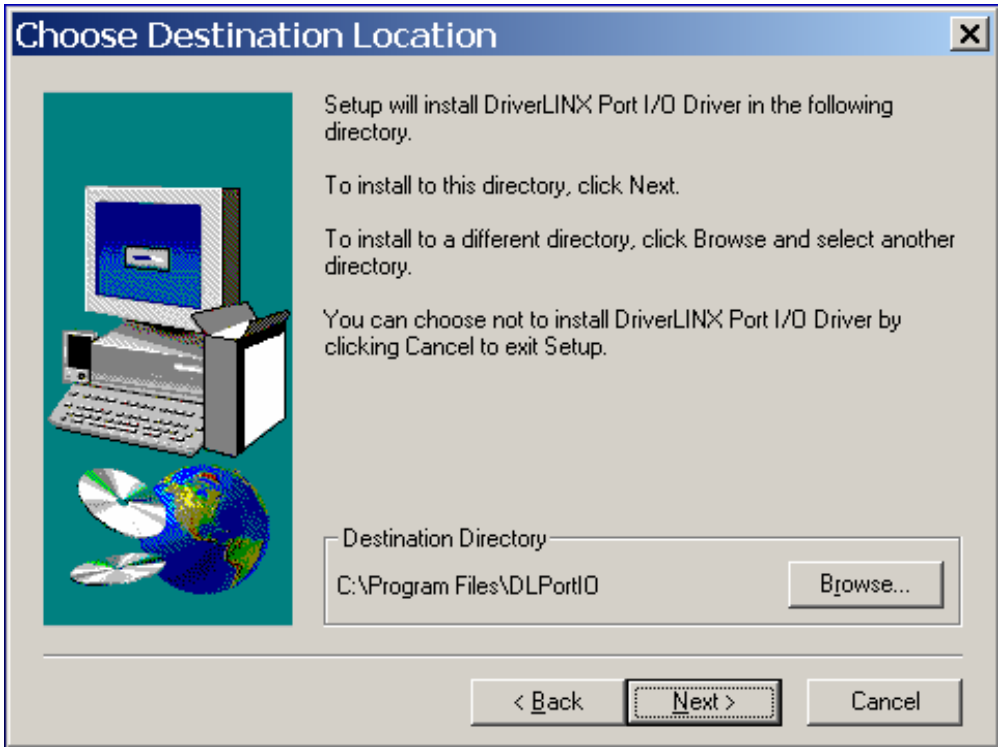
at the first. The processing as follows:

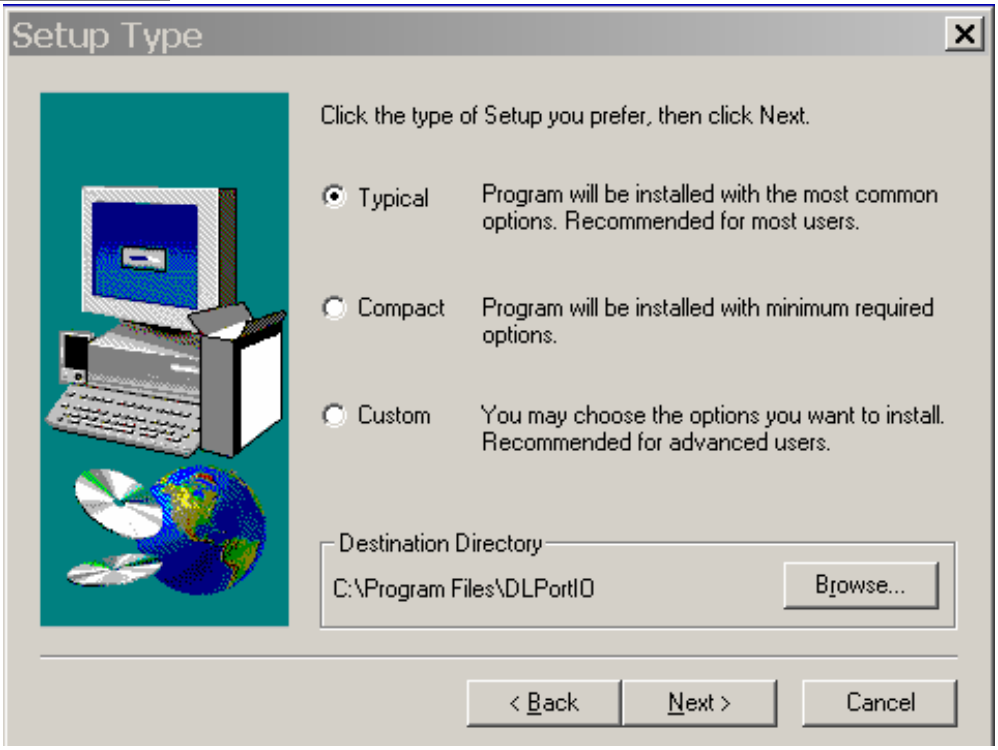


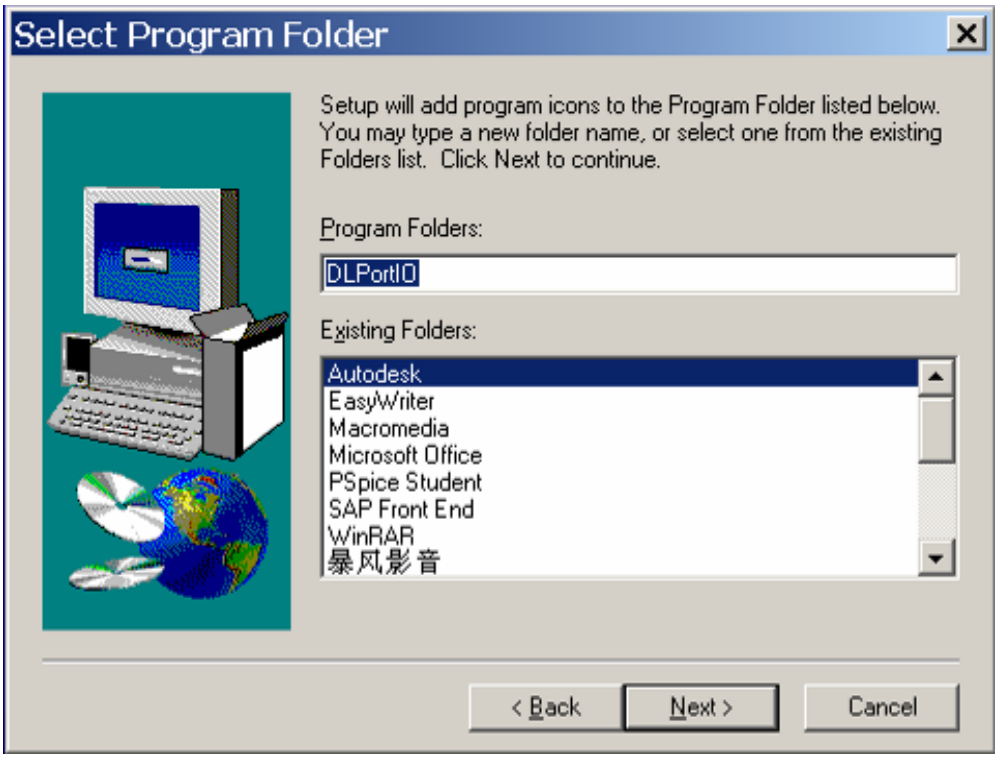

Welcome
Welcome to the DriverLINX Port I/O Driver Setup program. This program will install DriverLINX Port I/O Driver on your computer.
It is strongly recommended that you exit all Windows programs before running this Setup program.
Click Cancel to quit Setup and then close any programs you have running. Click Next to continue with the Setup program.
WARNING: This program is protected by copyright law and international treaties.
Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.
< Back
Next >
Cancel

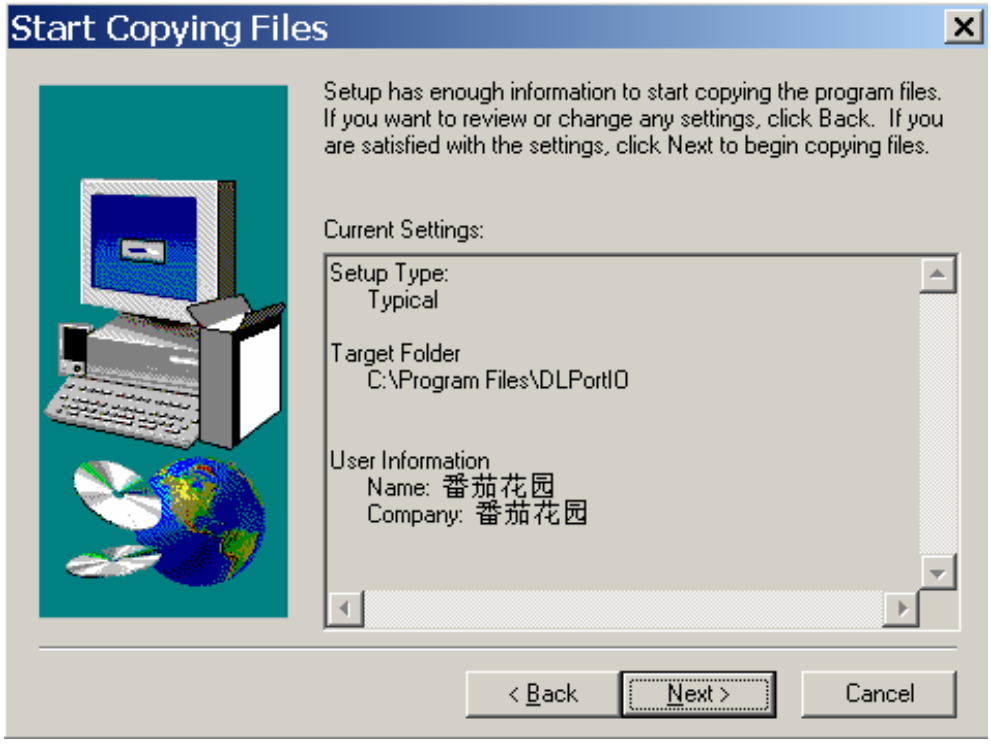

Software License Agreement
Please read the following License Agreement. Press the PAGE DOWN key to see the rest of the agreement.
DriverLINX Port I/O Driver for Win95 and WinNT
(C) Copyright 1996-1999, Scientific Software Tools, Inc.
All Rights Reserved.
You are free to copy and distribute this product as long as this package is distributed in its entirety and Scientific Software Tools' copyright and trademark notices are not removed.
The software and accompanying written materials (including instructions for use) are provided "as is" without warranty of any kind. Further, Scientific Software Tools, Inc. does not warrant, guarantee, or make any representations regarding the use, or the results of the use, of the software or written materials in terms of correctness, accuracy, reliability, currentness, or
Do you accept all the terms of the preceding License Agreement? If you choose No, Setup will close. To install DriverLINX Port I/O Driver, you must accept this agreement.
< Back
Yes
No

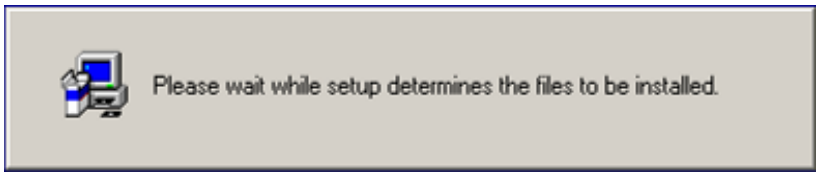

Readme Information
Information:
DriverLINX Port I/O Driver for Win95 and WinNT
(C) Copyright 1996-1999, Scientific Software Tools, Inc.
All Rights Reserved.
If you're installing this product for Windows NT,
you MUST install while logged on as an ADMINSTRATOR
account. Otherwise, NT's security will prevent
the setup program from correctly registering and
installing the NT kernel device driver.
If this is not an administrator account, please
cancel setup, log off NT, and relog on as
an adminstrator.
< Back
Next >
Cancel


Choose Destination Location
Setup will install DriverLINX Port I/O Driver in the following directory.
To install to this directory, click Next.
To install to a different directory, click Browse and select another directory.
You can choose not to install DriverLINX Port I/O Driver by clicking Cancel to exit Setup.
Destination Directory
C:\Program Files\DLPortIO
Browse...
< Back
Next >
Cancel

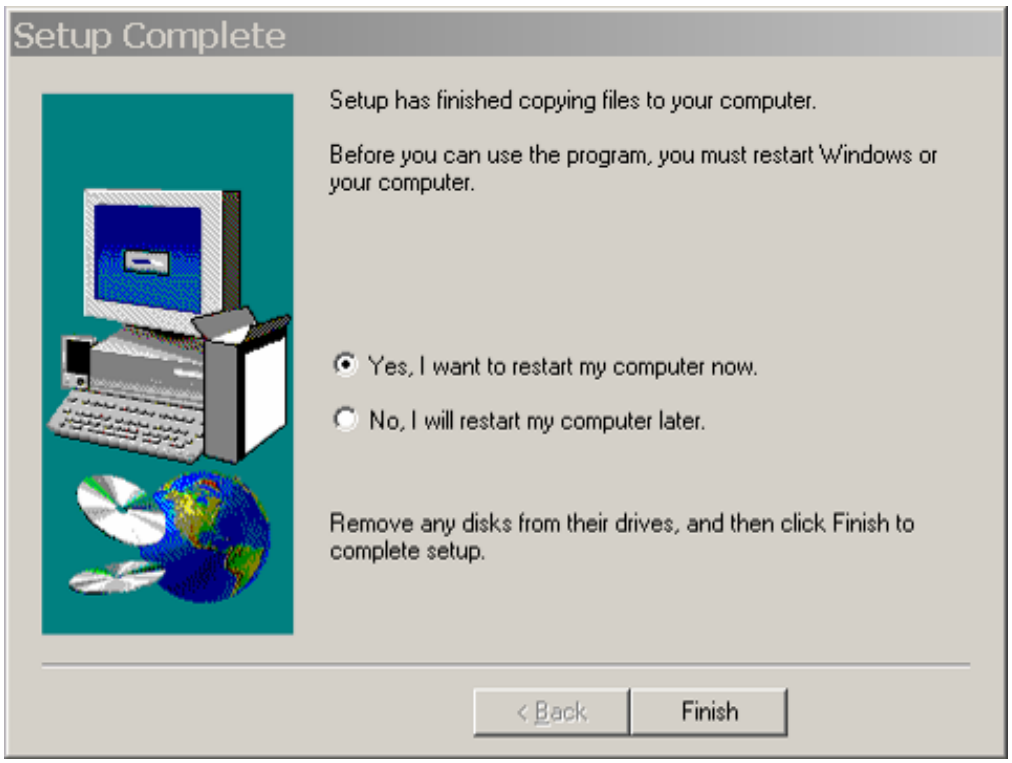

Setup Type
Click the type of Setup you prefer, then click Next.
Typical
Program will be installed with the most common options. Recommended for most users.
Compact
Program will be installed with minimum required options.
Custom
You may choose the options you want to install. Recommended for advanced users.
Destination Directory
C:\Program Files\DLPortIO
Browse...
< Back
Next >
Cancel


Select Program Folder
Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
Program Folders:
DLPortIO
Existing Folders:
Autodesk
EasyWriter
Macromedia
Microsoft Office
PSpice Student
SAP Front End
WinRAR
暴风影音
< Back
Next >
Cancel





Click Finish to complete the installation.

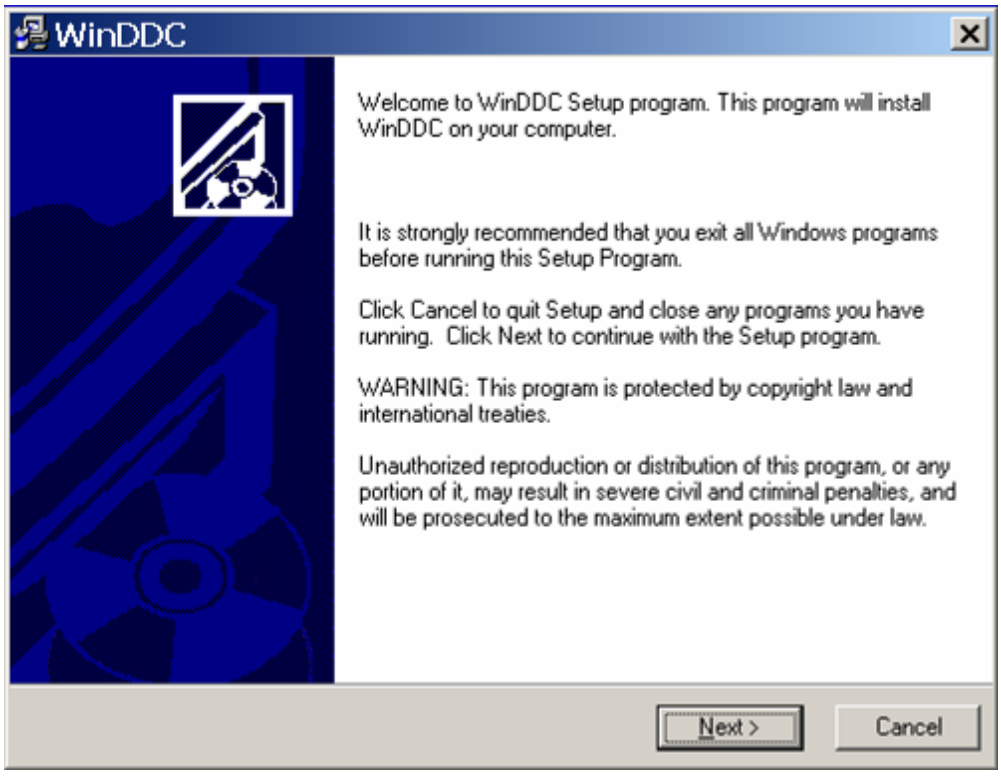


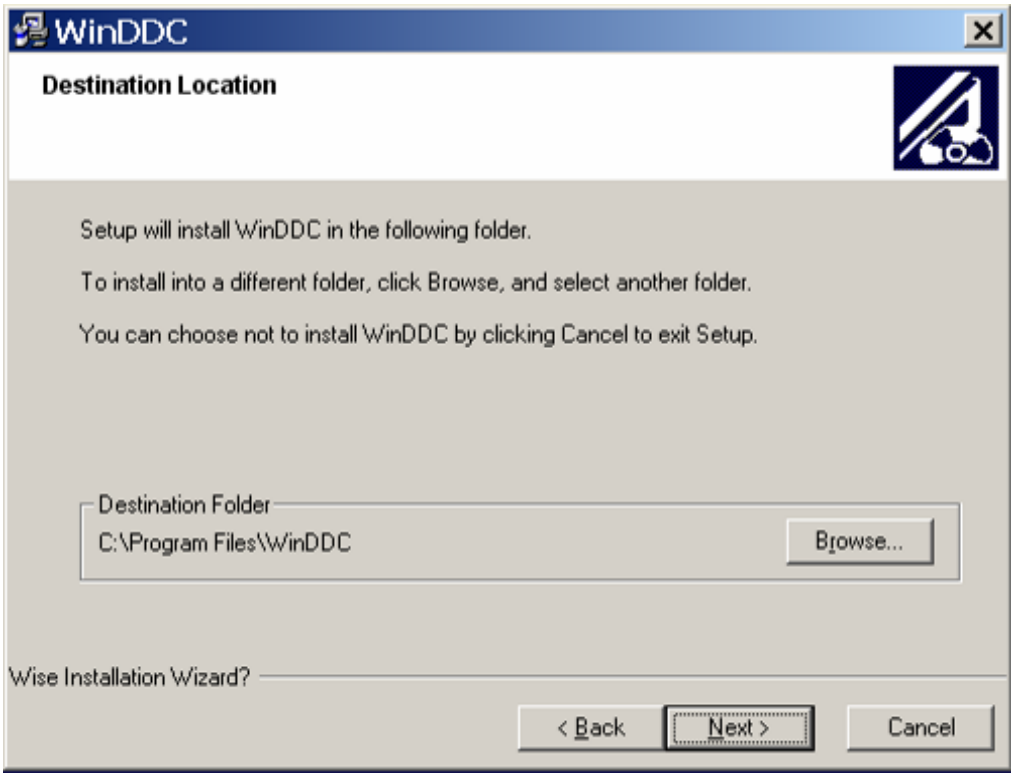
Note: After installation, you must restart the PC to take the setup to effect.

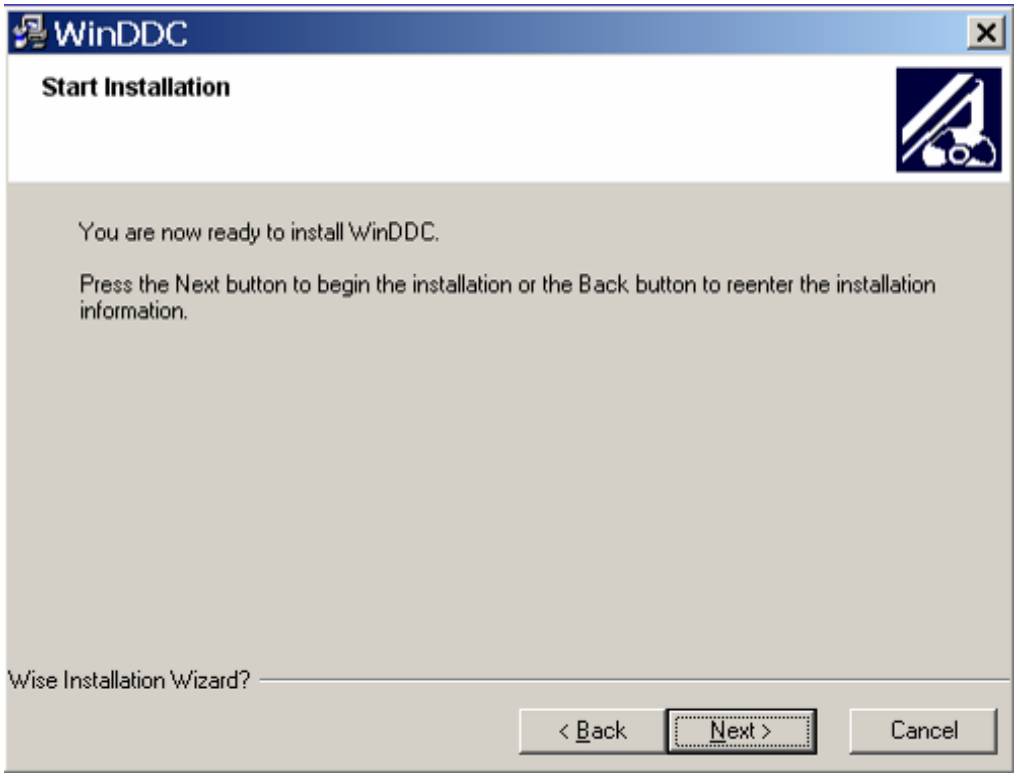
2. Install the "WinDDC_ setup"

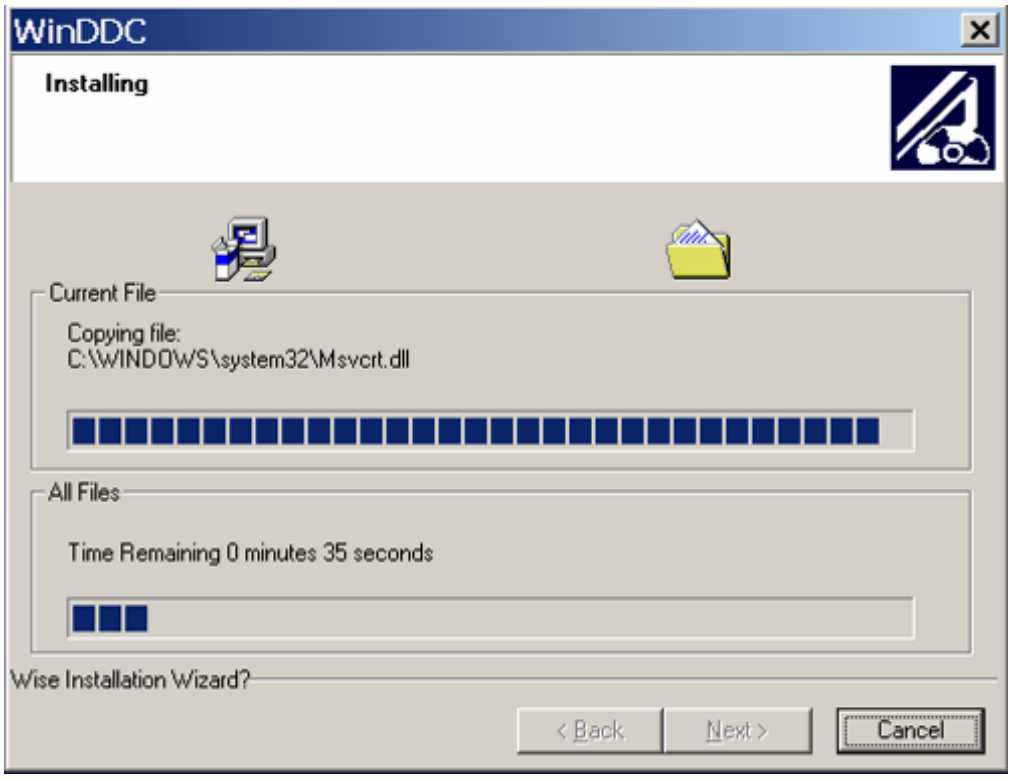
Second, you must install the 

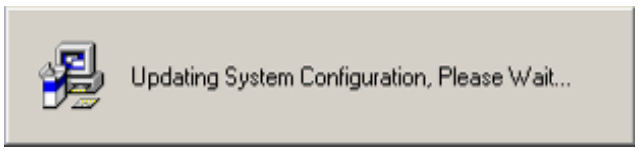
. The processing as follows:



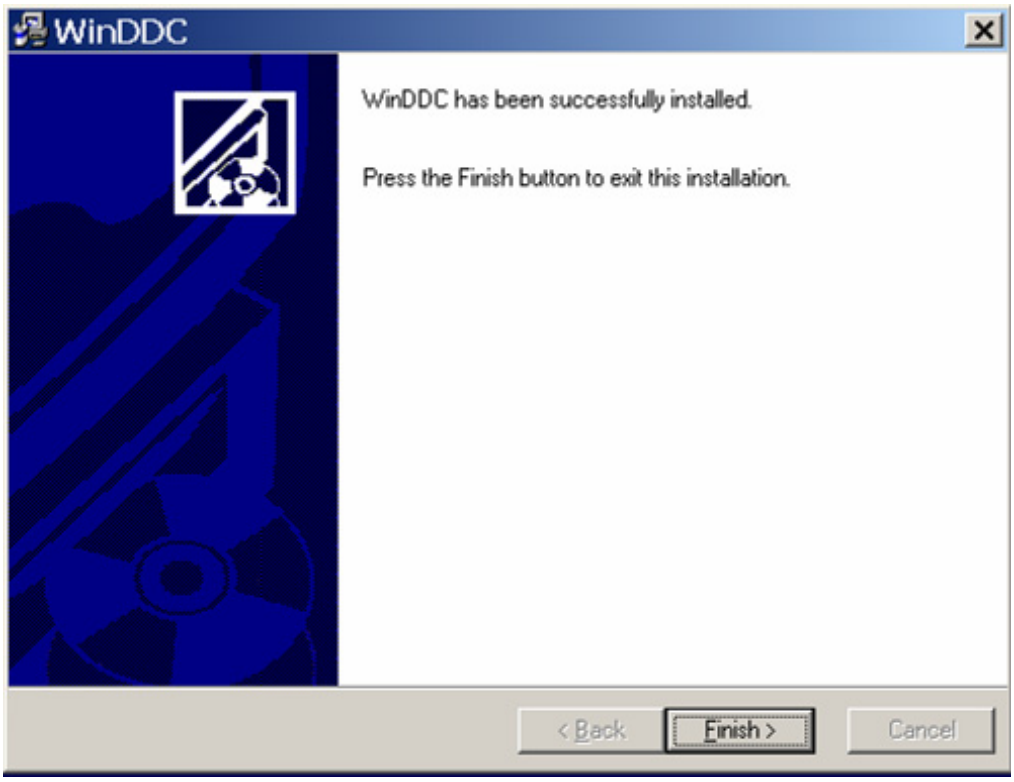



WinDDC
Start Installation
You are now ready to install WinDDC.
Press the Next button to begin the installation or the Back button to reenter the installation information.
Wise Installation Wizard?
< Back
Next >
Cancel

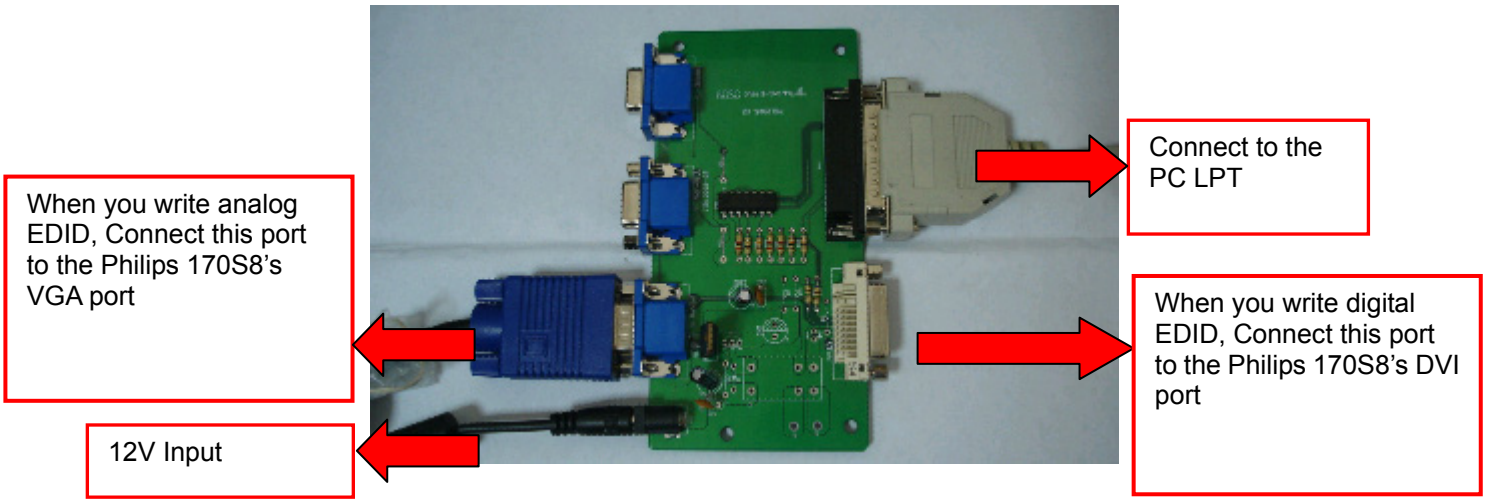

WinDDC
Installing
Current File
Copying file:
C:\WINDOWS\system32\Msvcrt.dll
All Files
Time Remaining 0 minutes 35 seconds
Wise Installation Wizard?
< Back
Next >
Cancel


Updating System Configuration, Please Wait...

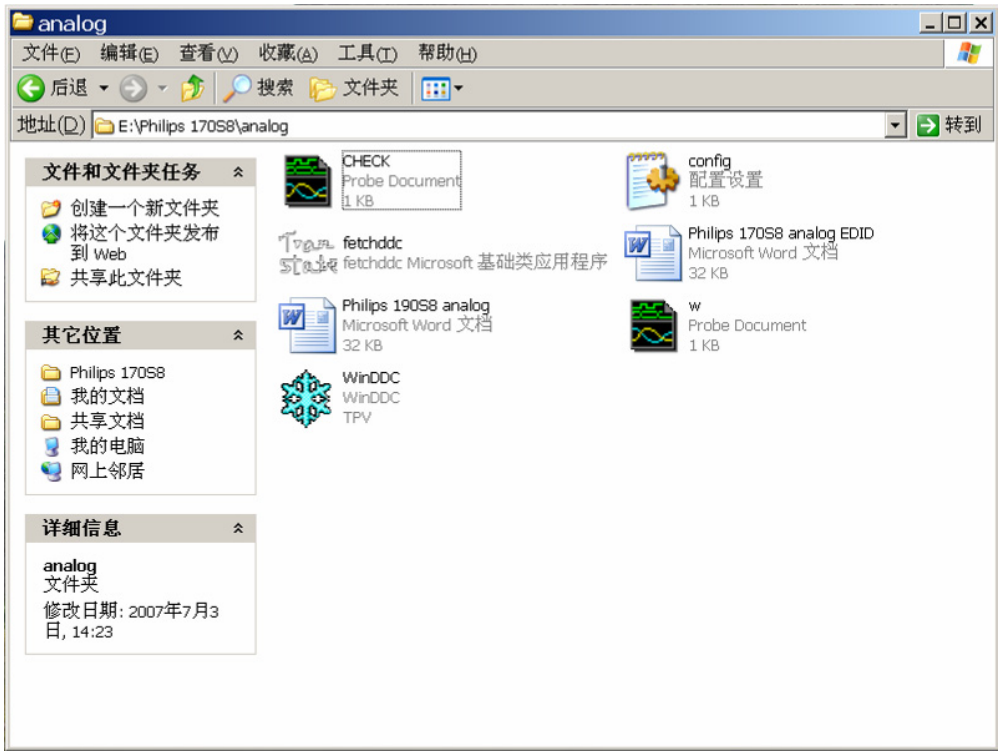
Click Finish to complete the installation.



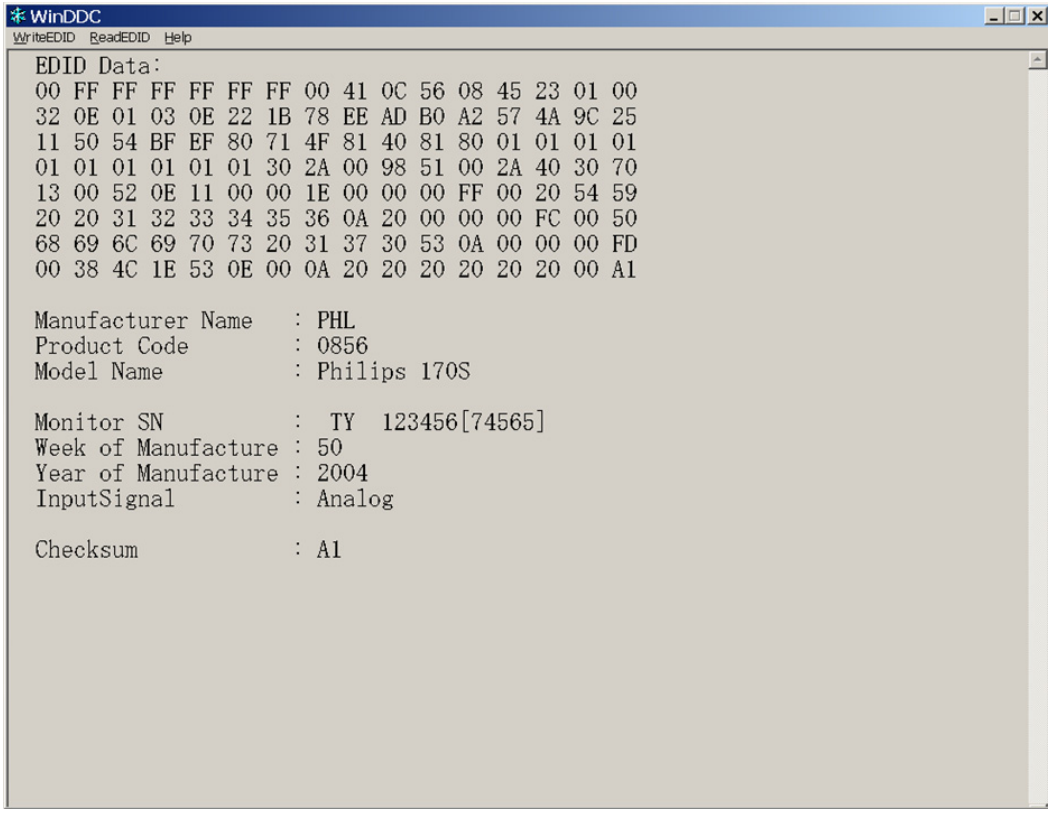
3. Connect the DDC board as follow:



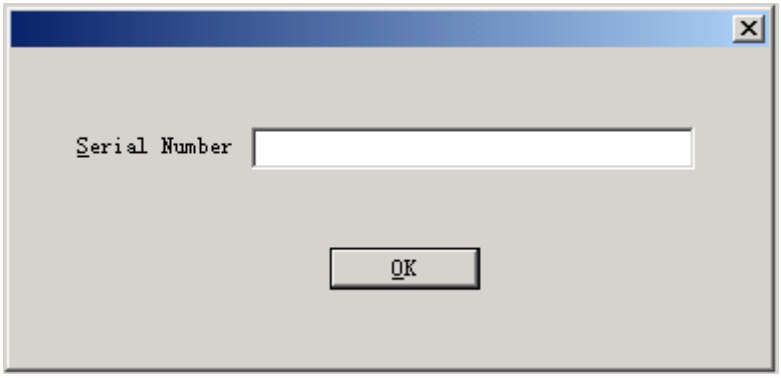
4. Take analog DDC write for example, as follow



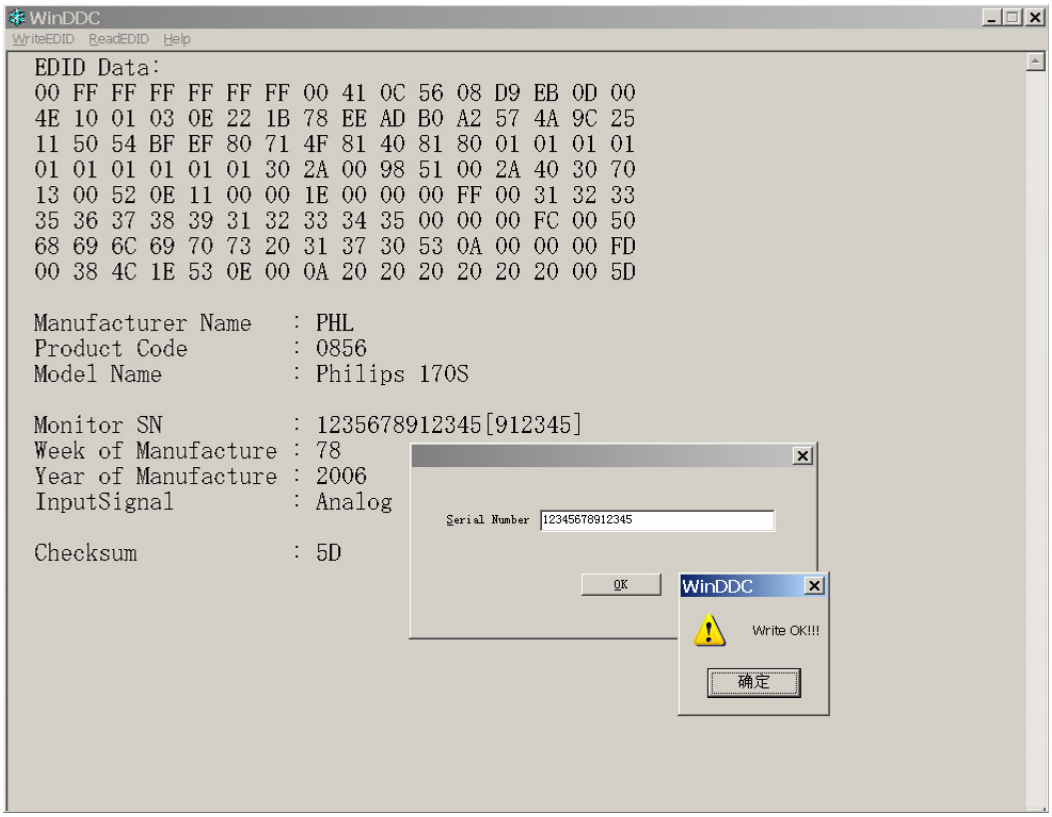
a. Double-click WinDDC.exe，appear as follow Figs：



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.

170S8 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 41 0C 59 08 01 01 01 01
16:     0C 0D 01 03 0E 26 1E 78 EE A1 50 A3 57 4C 9D 25
32:     11 50 54 BF EF 80 71 4F 81 40 81 80 01 01 01 01
48:     01 01 01 01 01 01 30 2A 00 98 51 00 2A 40 30 70
64:     13 00 78 2D 11 00 00 1E 00 00 00 FF 00 32 31 33
80:     32 33 31 32 33 32 31 33 32 33 00 00 00 FC 00 50
96:     68 69 6C 69 70 73 20 31 39 30 53 0A 00 00 00 FD
112:    00 38 4C 1E 53 0E 00 0A 20 20 20 20 20 20 00 A2
```

Decoded EDID data

```
        <---Header--->

                Header: 00 FF FF FF FF FF FF 00

        <-x-Header-x->

        <---Vendor/Product Identification--->
                ID Manufacturer Name:       PHL
                ID Product Code:            0859
                ID Serial Number:           01010101
                Week of Manufacture:        12
                Year of Manufacture:        2003
        <-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:     Yes
                Sync. on green video supported:Yes
                Serration of the Vsync.Pulse is not required.
                Max. H. Image Size :        38cm.
                Max. V. Image Size :        30cm.
                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.
                Standard Default Color Space:   Yes.
                Preferred Timing Mode:          Yes.
        <---Basic Display Parameters/Features--->

        <---Color Characteristics--->
                Red x:              0.6386718750
                Red y:              0.3417968750
                Green x:            0.2968750000
                Green y:            0.6142578125
                Blue x:             0.1455078125
                Blue y:             0.0673828125
```

```
        White x:            0.3125000000
        White y:            0.3291015625
    <-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--->
           -1152x864@75
           -1280x960@60
           -1280x1024      @60
    <-x-Standard Timing Identification-x->

    <---Detailed Timing Descriptions--->
    Detailed Timing:            1280x1024 @   60Hz.
    <-x-Detailed Timing Descriptions-x->

    <---Detailed Timing Descriptions--->
    Detailed Timing:        FF (Monitor SN) '213231232132'
    Detailed Timing:        FC (Monitor Name) 'Philips 190S'
    Detailed Timing:        FD (Monitor limits)
           Min. V. rate:    56Hz
           Max. V. rate:    76Hz
           Min. H. rate:    30KHz
           Max. H. rate:    83KHz
           Max. Pixel Clock:           140MHz
    <-x-Detailed Timing Descriptions-x->

    Extension Flag:             00
    Checksum:                   A2
```

170S8 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 41 0C 56 08 FD E0 01 00
16:   17 0B 01 03 80 22 1B 78 EE AD B0 A2 57 4A 9C 25
32:   11 50 54 BF EF 80 71 4F 81 40 81 80 01 01 01 01
48:   01 01 01 01 01 01 30 2A 00 98 51 00 2A 40 30 70
64:   13 00 52 0E 11 00 00 1E 00 00 00 FF 00 32 33 31
80:   33 31 32 33 31 32 33 31 33 33 00 00 00 FC 00 50
96:   68 69 6C 69 70 73 20 31 37 30 53 0A 00 00 00 FD
112:  00 38 4C 1E 53 0E 00 0A 20 20 20 20 20 20 00 36
```

Decoded EDID data

```
        <---Header--->

                Header: 00 FF FF FF FF FF FF 00

        <-x-Header-x->

        <---Vendor/Product Identification--->
                ID Manufacturer Name:       PHL
                ID Product Code:            0856
                ID Serial Number:           0001e0fd
                Week of Manufacture:        23
                Year of Manufacture:        2001
        <-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 :        34cm.
                Max. V. Image Size :        27cm.
                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.
                Standard Default Color Space:   Yes.
                Preferred Timing Mode:          Yes.
        <---Basic Display Parameters/Features--->

        <---Color Characteristics--->
                Red x:              0.6347656250
                Red y:              0.3417968750
                Green x:            0.2929687500
                Green y:            0.6103515625
                Blue x:             0.1464843750
                Blue y:             0.0693359375
                White x:            0.3125000000
                White y:            0.3291015625
        <-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--->
-1152x864@75
-1280x960@60
-1280x1024 @60
<-x-Standard Timing Identification-x->

<---Detailed Timing Descriptions--->
Detailed Timing: 1280x1024 @ 60Hz.
<-x-Detailed Timing Descriptions-x->

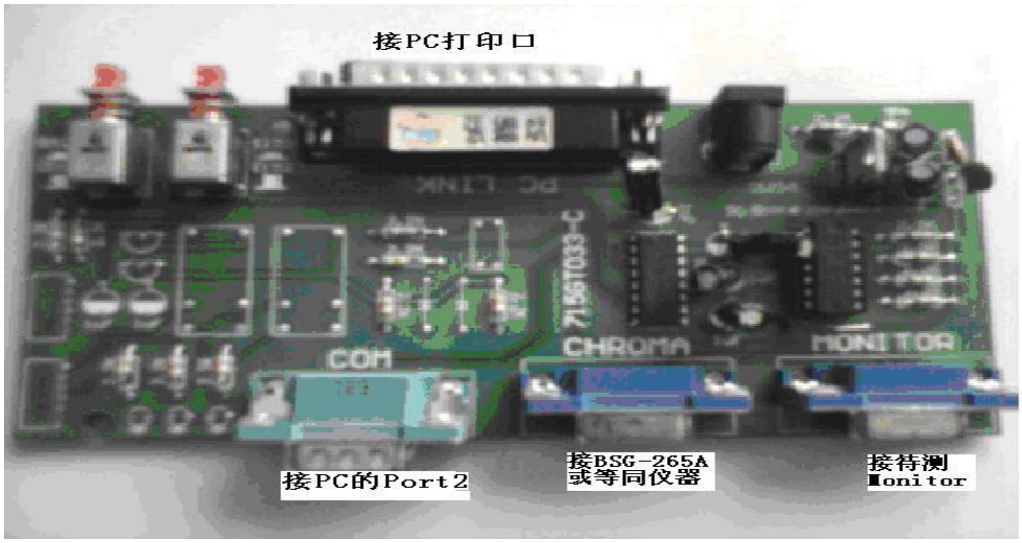
<---Detailed Timing Descriptions--->
Detailed Timing: FF (Monitor SN) '231312312313'
Detailed Timing: FC (Monitor Name) 'Philips 170S'
Detailed Timing: FD (Monitor limits)
Min. V. rate: 56Hz
Max. V. rate: 76Hz
Min. H. rate: 30KHz
Max. H. rate: 83KHz
Max. Pixel Clock: 140MHz
<-x-Detailed Timing Descriptions-x->

Extension Flag: 00
Checksum: 36

14. White Balance, Luminance Adjustment

1. Apparatuses and program: analyzer CA-210, PC, tool, FGA adjustment program (FGAWB0.15SN), Pattern generator.
2. Equipment installation:
   a. Connect analyzer CA-210 to PC by USB connector, install drive program CA-SDK Ver4.00 for CA-210 and restart PC after finish installing.
   b. Install Port95NT drive program, set PC printer connector mode as ECP mode and restart PC after finish installing.
   c. Connect tools as follow:

   (Note: It is not necessary to connect Port2)



3. Adjustment

Preparation before adjustment:

(1) Monitor should be warmed up for more than half an hour.

(2) Make sure that the tools are connected right and drive programs have been installed OK.

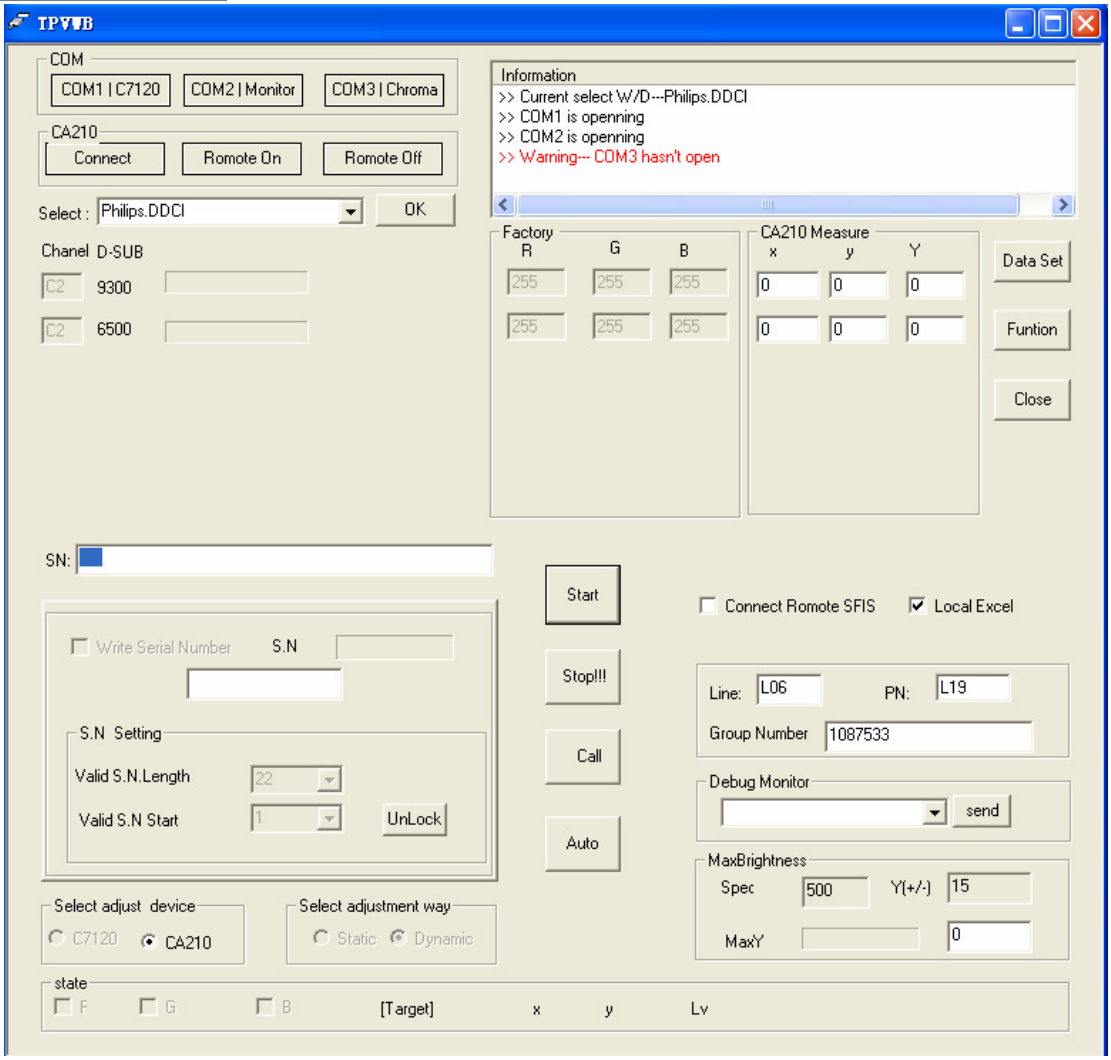
Adjustment process:

(1) Press the power of CA-210, shut off the lens, press 0-Cal and open the lens after analyzer reset.

(2) Start white balance adjustment program, select the right parameter according with the program and click OK.

(3) Make sure that the lens of CA-210 aims at the center of the screen, then click Start and start adjusting.

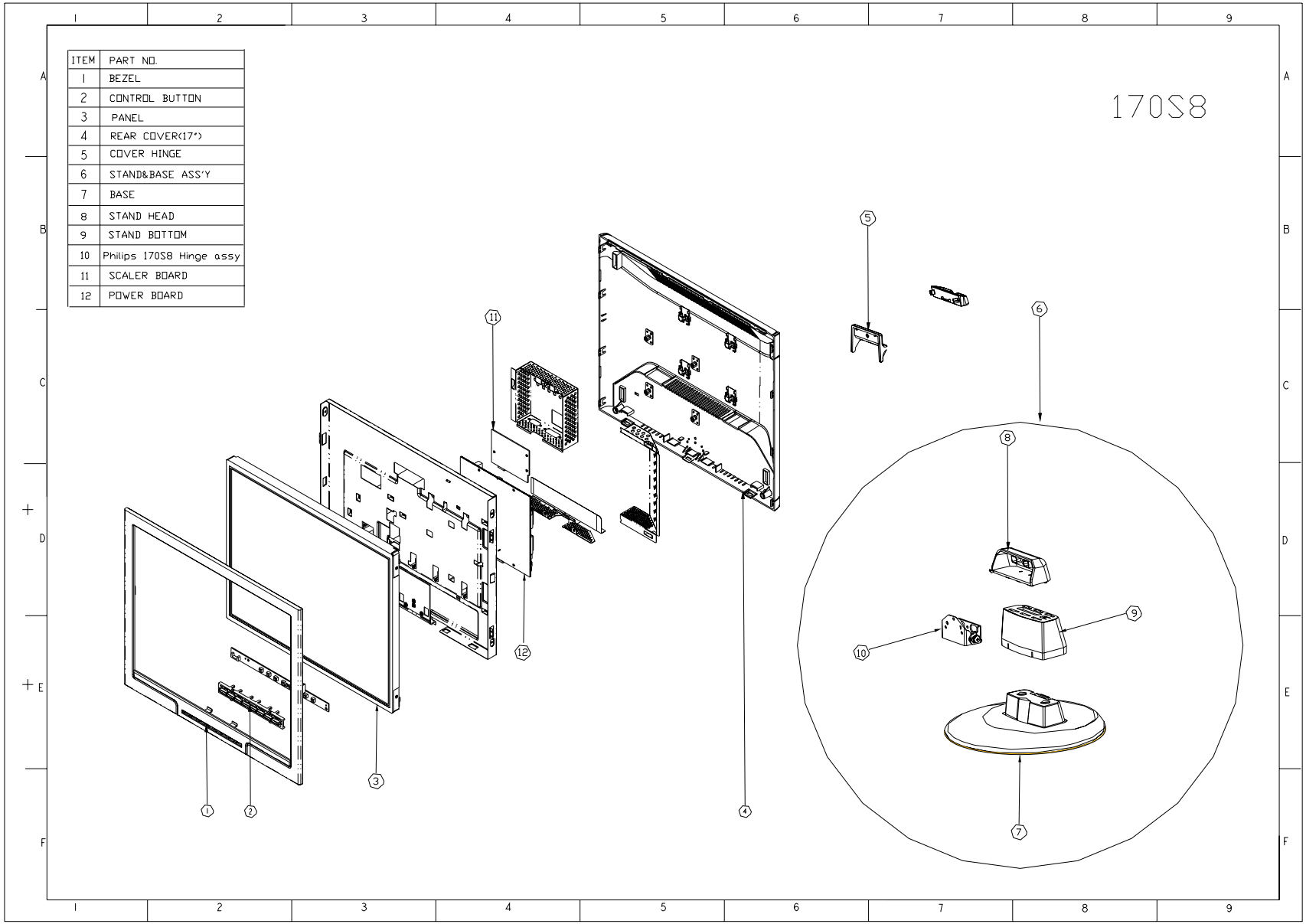
(4) After finish adjusting, the adjustment program displays pass, and the Start Button is changed to Next, which means you can adjust another monitor.



4. Color Temp confirmation

Connect the signal to the monitor, the monitor display white-picture, use CA-210 to measure the Color Temp of the screen center and select the OSD to make sure whether the Color Temps accord with the SPEC.

15. Monitor Exploded View



16. Recommended & Spare Parts List

Recommended Parts List

170S8FS/00

Item	Location	Part No.	Description	Philips 12NC	Remark
1	FQ010	P34G1846 VOE1T	BEZEL L17-7phb1	996510010270	
1	FQ010	P34G1846 VOE1B	BEZEL L17-7phb1		
2	FQ009	P33G4989 VPB1C	CONTROL BUTTON	996510010269	
3	FQ005	750GLG70E3L12M000F	PANEL LM170E03-TLL1 PHILIPS	996510006277	
3	FQ006	750GLG70E3L42M000F	PANEL LM170E03-TLL4 PHILIPS LPL	996510006278	
3	FQ005	750GLG170E3G23M0PH	PANEL LM170E03-TLG2 GZ LPL		2nd Source
3	FQ006	750GLG170E3G43M0PH	PANEL LM170E03-TLG4 GZ LPL		2nd Source
3	FQ006	750GLC70A7P43M000F	PANEL CLAA170EA07P 040 FZ	996510006441	
3	FQ022	750GLB70A7P41M000F	PANEL CLAA170EA07P 040 FQ CTOC	996510010276	2nd Source
3	FQ022	750GLC70A7P43N	CPT-CLAA170EA07P-040		2nd Source
3	FQ022	750GLB70A7P41N	CTOC-CLAA170EA07P-040		2nd Source
3	FQ023	750GLB70A7P51M000F	PANEL CLAA170EA07P 050 FQ CTOC	996510010261	2nd Source
3	FQ023	750GLC70A7P53N	CPT-CLAA170EA07P-050		2nd Source
3	FQ023	750GLB70A7P51N	CTOC-CLAA170EA07P-050		2nd Source
4	FQ011	P34G1850 VB 2T	REAR COVER(17")	996510008030	
4	FQ011	P34G1850 VB 2B	REAR COVER(17")		
5	FQ008	A33G0259 VB 1L0100	COVER HINGE	996510006443	
6	FQ004	705GQ734307	STAND&BASE ASS'Y	996510006439	
7	FQ029	A34G0484 VB 1B0133	BASE_170A8/170S8		
8	FQ030	A34G0443 VB 1B0100	STAND HEAD		
9	FQ031	A34G0461 VB 1B0100	STAND BOTTOM		

10	FQ032	A37G0045 1	PHILIPS 170S8 HINGE ASSY		
11	FQ017	CBPC7CNAPHQ4	SCALAR BOARD ASSY (CPT)	996510010263	
11	FQ018	CBPC7GNAPHQ6	SCALAR BOARD ASSY (LG)	996510010260	
11	FQ017	CBPC7GNAPHQ1	SCALER BOARD ASSY		
12	FQ020	PWPC942GR1P	POWER BOARD ASSY (CPT)	996500041051	
12	FQ021	PWPC742GR3	POWER BOARD ASSY (LG)	996510010274	
	E089B	089G 728LAA 21	SIGNAL CABLE	996510005683	
	FQ001	089G179E30H 4	FFC CABLE	996500042351	
	FQ002	089G404A18N YH	POWER CABLE	996500037502	
	E08901	089G404A18N IS	POWER CORD 32E1818018		
	FQ003	095G8014 7D514	WIRE HARNESS		
	E09502	095G8014 7X514	WIRE HARNESS		
	E089B	089G 728HAA 21	SIGNAL CABLE	996510005679	
	FQ012	Q40G 17N81322A	RATING LABEL		
	FQ012	Q40G 17N81322B	RATING LABEL		
	FQ013	Q44G7057 1	EPS	996510010257	
	FQ014	Q44G7057 2	EPS	996510010258	
	FQ028	705TQ7CS067	CUSHION ASSY		
	FQ027	P45G 88609 36 R	EPE BAG FOR MONITOR		
	FQ015	Q44G7057813 1A	CARTON		
	FQ015	Q44G7057813 1C	CARTON		
	FQ016	Q70G170081312A	170S8 DVI CD		
	FQ016	Q70G170081312B	CD MANUAL		
	FQ019	KEPC7QS5	KEY BOARD ASSY	996510010272	
	U301	056G 563 52	IC AP1117D33LA TO252-3L ATC	996510005697	

	U304	056G 56327A	IC AP1117E18LA SOT223-3L	996510005698	
	U204	056G1133 56	M24C16-WMN6TP	996500037783	
	U203	705GQ756024	MCU ASS'Y	996510010271	
	IC902	056G 139 3A	IC PC123Y22FZ0F	996500036055	
	IC801	056G 379 22	IC TL494IDR SOIC-16	996510006256	
	IC901	056G 379 61	LD7575PS SOP-8	996500039747	
	IC903	056G 158 12	KIA431A-AT/P TO-92	996500036054	

Spare Parts List

Service Kit

170S8FS/00

Description	Part No.	Philips 12NC	Remark
DDC Kit	715L2005C2	9965 000 43197	for all model
OSD SN Kit	715GT033 C	9965 000 43252	for all model
NOVATEK ISP Kit	715LT035A	9965 000 43198	for all Hudson 7
			for 170A8, 190B8, 150S8, 170S8,190S8, 170V8,190V8
MSTAR ISP Kit	715GT039 A	996510010027	200CW8
REALTEK ISP Kit	715GT039 A	996510010027	170CW8

Panel

Location	Part No.	Description	Philips 12NC	Remark
FQ005	750GLG70E3L12M000F	PANEL LM170E03-TLL1 PHILIPS	996510006277	
FQ005	750GLG170E3G23M0PH	PANEL LM170E03-TLG2 GZ LPL		2nd Source
FQ006	750GLG70E3L42M000F	PANEL LM170E03-TLL4 PHILIPS LPL	996510006278	
FQ006	750GLG170E3G43M0PH	PANEL LM170E03-TLG4 GZ LPL		2nd Source
FQ006	750GLC70A7P43M000F	PANEL CLAA170EA07P 040 FZ	996510006441	
FQ022	750GLB70A7P41M000F	PANEL CLAA170EA07P 040 FQ CTOC	996510010276	2nd Source
FQ022	750GLC70A7P43N	CPT-CLAA170EA07P-040		2nd Source
FQ022	750GLB70A7P41N	CTOC-CLAA170EA07P-040		2nd Source
FQ023	750GLB70A7P51M000F	PANEL CLAA170EA07P 050 FQ CTOC	996510010261	2nd Source
FQ023	750GLC70A7P53N	CPT-CLAA170EA07P-050		2nd Source
FQ023	750GLB70A7P51N	CTOC-CLAA170EA07P-050		2nd Source

Board ASS'Y

Location	Part No.	Description	Philips 12NC
FQ017	CBPC7CNAPHQ4	SCALAR BOARD ASSY (CPT)	996510010263
FQ018	CBPC7GNAPHQ6	SCALAR BOARD ASSY (LG)	996510010260
FQ017	CBPC7GNAPHQ1	SCALER BOARD ASSY	
FQ020	PWPC942GR1P	POWER BOARD ASSY (CPT)	996500041051
FQ021	PWPC742GR3	POWER BOARD ASSY (LG)	996510010274
FQ019	KEPC7QS5	KEY BOARD ASSY	996510010272

Accessory and Mechanical

Location	Part No.	Description	Philips 12NC	Remark
E089B	089G 728LAA 21	SIGNAL CABLE	996510005683	
FQ001	089G179E30H 4	FFC CABLE	996500042351	
FQ002	089G404A18N YH	POWER CABLE	996500037502	
E08901	089G404A18N IS	POWER CORD 32E1818018		
FQ003	095G8014 7D514	WIRE HARNESS		
E09502	095G8014 7X514	WIRE HARNESS		
FQ004	705GQ734307	STAND&BASE ASS'Y	996510006439	
FQ005	750GLG70E3L12M000F	PANEL LM170E03-TLL1 PHILIPS	996510006277	
FQ005	750GLG170E3G23M0PH	PANEL LM170E03-TLG2 GZ LPL		2nd Source
FQ006	750GLG70E3L42M000F	PANEL LM170E03-TLL4 PHILIPS LPL	996510006278	
FQ006	750GLG170E3G43M0PH	PANEL LM170E03-TLG4 GZ LPL		2nd Source
FQ006	750GLC70A7P43M000F	PANEL CLAA170EA07P 040 FZ	996510006441	
FQ022	750GLB70A7P41M000F	PANEL CLAA170EA07P 040 FQ CTOC	996510010276	2nd Source
FQ022	750GLC70A7P43N	CPT-CLAA170EA07P-040		2nd Source
FQ022	750GLB70A7P41N	CTOC-CLAA170EA07P-040		2nd Source
FQ023	750GLB70A7P51M000F	PANEL CLAA170EA07P 050 FQ CTOC	996510010261	2nd Source

FQ023	750GLC70A7P53N	CPT-CLAA170EA07P-050		2nd Source
FQ023	750GLB70A7P51N	CTOC-CLAA170EA07P-050		2nd Source
E089B	089G 728HAA 21	SIGNAL CABLE	996510005679	
FQ008	A33G0259 VB 1L0100	COVER HINGE	996510006443	
FQ009	P33G4989 VPB1C	CONTROL BUTTON	996510010269	
FQ010	P34G1846 VOE1T	BEZEL L17-7phb1	996510010270	
FQ010	P34G1846 VOE1B	BEZEL L17-7phb1		
FQ011	P34G1850 VB 2T	REAR COVER(17")	996510008030	
FQ011	P34G1850 VB 2B	REAR COVER(17")		
FQ012	Q40G 17N81322A	RATING LABEL		
FQ012	Q40G 17N81322B	RATING LABEL		
FQ013	Q44G7057 1	EPS	996510010257	
FQ014	Q44G7057 2	EPS	996510010258	
FQ028	705TQ7CS067	CUSHION ASSY		
FQ015	Q44G7057813 1A	CARTON		
FQ015	Q44G7057813 1C	CARTON		
FQ027	P45G 88609 36 R	EPE BAG FOR MONITOR		
FQ016	Q70G170081312A	170S8 DVI CD		
FQ016	Q70G170081312B	CD MANUAL		

Board Parts

Location	Part No.	Description	Philips 12NC
FQ017	CBPC7GNAPHQ6	SCALER BOARD ASSY(LPL)	996510010260
FQ017	CBPC7GNAPHQ1	SCALER BOARD ASSY	
CN402	033G801930F H	FPC CONN. 1.0MM 30P	
C101	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C102	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C103	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C104	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C105	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C106	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C107	065G060310517T	MLCC 0603 CAP 1UF Z 16V Y5V	996510005722
C110	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C111	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C112	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C113	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C115	065G060310517T	MLCC 0603 CAP 1UF Z 16V Y5V	996510005722
C116	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C117	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C118	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C121	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C122	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C123	065G0402102 32	1000PF +-10% 50V X7R	996510005715
C124	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C125	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C126	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C127	065G0402331 32	CHIP 330PF 50V X7R	996510005719
C128	065G0402330 31	33PF +-50% 50V NPO	996510005718
C129	065G0402473 12	CHIP 0.047UF 16V X7R	996510005721
C130	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C131	065G0402102 32	1000PF +-10% 50V X7R	996510005715
C132	065G040247132K T	CAP CHIP 0402 470PF 50V X7R	996510005720
C201	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C203	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C204	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C205	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C206	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C207	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C208	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C209	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C210	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C213	065G060310517T	MLCC 0603 CAP 1UF Z 16V Y5V	996510005722
C214	067G305V101 3	105C 10UF +-20% 16V	996510005694

C215	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C216	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C219	065G0402220 31	CHIP 22PF 50V NPO	996510005717
C220	065G0402220 31	CHIP 22PF 50V NPO	996510005717
C301	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C302	067G305V100 3	105DEG 10UF -20% 16V	996500037413
C303	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C304	065G060310517T	MLCC 0603 CAP 1UF Z 16V Y5V	996510005722
C305	067G305V101 3	105C 10UF +-20% 16V	996510005694
C306	067G305V101 3	105C 10UF +-20% 16V	996510005694
C307	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C308	065G060310517T	MLCC 0603 CAP 1UF Z 16V Y5V	996510005722
C309	067G305V101 3	105C 10UF +-20% 16V	996510005694
C310	067G305V101 3	105C 10UF +-20% 16V	996510005694
C311	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C312	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C315	067G305V101 3	105C 10UF +-20% 16V	996510005694
C316	065G0603104 22	CHIP 0.1UF 25V X7R	996500042674
C317	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C402	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C403	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
C405	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
D101	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D102	093G 64 42 PP	BAV70 SOT-23	996500035995
D103	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D104	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D105	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D106	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D107	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D108	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D109	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D110	093G 64 42 PP	BAV70 SOT-23	996500035995
D111	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D112	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D113	093G 6433S	DIODE BAV99 SEMTECH	996510005726
D201	093G 64 42 PP	BAV70 SOT-23	996500035995
D301	093G3004 3	SM340A	996510005728
Q201	057G 417 13 T	KEC 2N3906S-RTK/PS	996500035967
Q301	057G 417 12 T	PMBS3904 SOT23 CHIP	996510002429
Q302	057G 763 1	A03401 SOT23 BY AOS(A1)	996500035968
Q305	057G 417 12 T	PMBS3904 SOT23 CHIP	996510002429
Q402	057G 417 13 T	KEC 2N3906S-RTK/PS	996500035967
Q403	057G 417 13 T	KEC 2N3906S-RTK/PS	996500035967

R101	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	996510005713
R102	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R103	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R104	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R106	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R107	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R108	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R109	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R110	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R111	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R113	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R115	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R116	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R117	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R118	061G0402100	RST CHIPR 10 OHM +-5% 1/16W	996510005700
R120	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R122	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R123	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R124	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R126	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R127	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R128	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R129	061G0402151	RST CHIP 150R 1/16W 5%	996510005704
R131	061G0402391	RST CHIPR 390 OHM +-5% 1/16W	996510005708
R132	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R133	061G0402151	RST CHIP 150R 1/16W 5%	996510005704
R134	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R135	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R136	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R138	061G0402151	RST CHIP 150R 1/16W 5%	996510005704
R139	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	996510005713
R140	061G0402750	RST CHIPR 75 OHM +-5% 1/16W	996510005713
R141	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	996510005707
R142	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W	996510005707
R144	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R201	061G0402105	RST CHIPR 1MOHM +-5% 1/16W	996510005703
R202	061G0402103	RST CHIPR 10 KOHM -5% 1/16W	996500044984
R206	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R211	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	996510005699
R213	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R214	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R215	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R218	061G0402220	RST CHIPR 22 OHM +-5% 1/16W	996510005705

R221	061G0402471	RST CHIPR 470 OHM +-5% 1/16W	996510005710
R225	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R228	061G0402000	RST CHIPR 0 OHM +-5% 1/16W	996510005699
R234	061G0402221	RST CHIPR 220 OHM +-5% 1/16W	996510005706
R301	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R302	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	996510005714
R303	061G1206331	RST CHIPR 330 OHM +-5% 1/4W	996510005714
R304	061G0402103	RST CHIPR 10 KOHM -5% 1/16W	996500044984
R305	061G0402103	RST CHIPR 10 KOHM -5% 1/16W	996500044984
R307	061G0402513	RST CHIP 51K 1/16W 5%	996510005712
R308	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R309	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R311	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R312	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R314	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R316	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W	996510005711
R402	061G0402392	RST CHIP 3.9K 1/16W 5%	996510005709
R403	061G0402392	RST CHIP 3.9K 1/16W 5%	996510005709
R407	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R410	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R412	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W	996510005702
R415	061G0402103	RST CHIPR 10 KOHM -5% 1/16W	996500044984
R416	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
R417	061G0402103	RST CHIPR 10 KOHM -5% 1/16W	996500044984
R418	061G0402101	RST CHIPR 100 OHM +-5% 1/16W	996510005701
U203	705GQ756024	MCU ASSY(LPL)	996510010271
U203	705GQ756098	MCU ASS'Y(17")	
U204	056T1133 56	M24C16-WMN6TP	996500037783
U301	056G 563 52	IC AP1117D33LA TO252-3L ATC	996510005697
U304	056G 56327A	IC AP1117E18LA SOT223-3L	996510005698
X201	093G 2251B	MXS12.000AC20F-KAB5 HC-49/US	996510005696
CN101	088G 35315F H	D-SUB 15PIN	996500035960
CN102	088G 35424F N	DVI 24PIN CONN F	996510005695
FB101	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB102	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB103	071G 59B300 K	BEAD 30	996500036934
FB104	071G 59B300 K	BEAD 30	996500036934
FB105	061G0805000	0 OHM 1/10W	996500042284
FB106	071G 59B300 K	BEAD 30	996500036934
FB107	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB202	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB203	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB204	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725

FB205	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB206	071G 56D121 JA	CHIP BEAD 120 OHM 0805 1A	996510005725
FB207	071G 56D102 MA	CHIP HEAD 1000OHM 0805 1A	996510005723
FB302	071G 56K121 M	CHIP BEAD	996500036567
FB303	071G 56K121 M	CHIP BEAD	996500036567
ZD101	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD102	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD103	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD104	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD105	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD106	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD107	093G 39S 24 T	RLZ 5.6B LLDS	996510004052
ZD201	093G 39G586	RLZ2.2B	996510005727
FQ018	KEPC7QS5	KEY BOARD ASSY	996510010272
SW1	077G 600 1GCJ	TACT SWITCH	996510002796
SW2	077G 600 1GCJ	TACT SWITCH	996510002796
SW3	077G 600 1GCJ	TACT SWITCH	996510002796
SW4	077G 600 1GCJ	TACT SWITCH	996510002796
SW5	077G 600 1GCJ	TACT SWITCH	996510002796
SW6	077G 600 1GCJ	TACT SWITCH	996510002796
SW7	077G 600 1GCJ	TACT SWITCH	996510002796
SW8	077G 600 1GCJ	TACT SWITCH	996510002796
C101	065G0603103 32	0.01UF -10% 50V X7R	996500036004
C102	065G0603103 32	0.01UF -10% 50V X7R	996500036004
C103	065G0603103 32	0.01UF -10% 50V X7R	996500036004
C104	065G0603103 32	0.01UF -10% 50V X7R	996500036004
C105	065G0603103 32	0.01UF -10% 50V X7R	996500036004
LED1	081G 12 1F GP	LED GP32032M/G307-ZY-50	996510006457
R100	061G0805000	0 OHM 1/10W	996500042284
R101	061G0603101	RST CHIPR 100 OHM -5% 1/10W	996500042213
R102	061G0603432	RST CHIPR 4.3 KOHM -5% 1/10W	996500044045
R103	061G0603911	RST CHIPR 910 OHM +-5% 1/10W	996510006459
R104	061G0603242	RST CHIPR 2.4 KOHM +-5% 1/10W	996510006258
R106	061G0603432	RST CHIPR 4.3 KOHM -5% 1/10W	996500044045
R107	061G0603911	RST CHIPR 910 OHM +-5% 1/10W	996510006459
R108	061G0603242	RST CHIPR 2.4 KOHM +-5% 1/10W	996510006258
R109	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
CN101	033G3802 6H	WAFER 6P RIGHT ANGLE PITCH 2.0	996510010273
FQ019	PWPC742GR3	POWER BOARD ASSY(LPL)	996510010274
C801	065G 6J1006ET	10PF 5% SL 6KV	996500036942
C802	065G0603105 12	CHIP 1UF 16VX7R 0603	996510002499
C803	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C804	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918

C805	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C806	065G0603105 12	CHIP 1UF 16VX7R 0603	996510002499
C807	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918
C808	065G0805225 12	CHIP 2.2UF 16V X7R 0805	996510006267
C809	065G080522131G	220PF 50V NPO 2%	996510007400
C810	065G0603104 22	CHIP 0.1UF 25V X7R	996500042674
C811	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C812	065G 6J1006ET	10PF 5% SL 6KV	996500036942
C813	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C814	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918
C815	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C816	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C817	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C818	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C821	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C822	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C823	065G0805104 22	0.1UF -10% 25V X7R 080	996500036040
C824	065G0805104 22	0.1UF -10% 25V X7R 080	996500036040
C900	065G306M2222BP	2200PF -20% 400VAC	996500036050
C901	065G305M1022EM	Y2 1000PF -20% 250VAC	996500036006
C902	065G305M1022EM	Y2 1000PF -20% 250VAC	996500036006
C903	065G306M1022BP	1000PF Y1.CAP	996510006237
C904	065G0603102 32	1000PF -10% 50V X7R	996500037517
C907	067G 40Z10115K	CAP 105 J 100UF M 450V	996510007388
C909	063G107K474 US	0.47UF +-10%	996510007384
C910	065G 2K152 1T6921	CAP 1.5NF/2KV Y5P +-10%	996510006274
C911	067G 2152207NT	KY50VB22M-TP5 5*11	996510006275
C912	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C913	065G0805221 31	220PF 50V NPO	996500039769
C914	065G0805471 21	CHIP 470PF 25V NPO	996510002754
C916	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C920	065G517K102 5T	1000PF 10% Y5P 500V	996500036077
C921	065G517K102 5T	1000PF 10% Y5P 500V	996500036077
C922	067G215D6814KV	CAP 105_J 680UF M 25V	996510006240
C923	067G215D6814KV	CAP 105_J 680UF M 25V	996510006240
C925	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C926	067G215S1023KV	105 J 1000UF M 16V	996510007389
C927	067G215S4713KV	EC 105_J CAP 470UF M 16V	996510006242
C928	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C929	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C930	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C931	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C932	067G215S1023KV	105℃ 1000UF M 16V	

CN901	087G 501 32 DL	AC SOCKET DIP 3PIN+2PIN GROUND	
PT802	S80GL17T40V	TRANSFORMER ASSY	
PT801	S80GL17T40V	TRANSFORMER ASSY	
Q809	057G 600 55	P5506 HVG SO-8	
Q804	057G 600 55	P5506 HVG SO-8	
D900	093G1100 1152T	DIODE PR1007R 1A/1000V DO-41	
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D803	093G 64S511SEM	IN4148W	996500039779
D806	093G 64S 10	DIODE BAW56PT SOT-23 CHENMKO	996510006271
D807	093G 64S511SEM	IN4148W	996500039779
D808	093G 64S 10	DIODE BAW56PT SOT-23 CHENMKO	996510006271
D809	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D810	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D811	093G 64S511SEM	IN4148W	996500039779
D812	093G 64S511SEM	IN4148W	996500039779
D813	093G 64S511SEM	IN4148W	996500039779
D900	093G1100 1052T	BA159GPT DO-41 CHENMKO	996510007274
D901	093G 6038T52T	FR103	996500036095
D910	093G 64S511SEM	IN4148W	996500039779
D915	093G 64S511SEM	IN4148W	996500039779
D916	093G 64S511SEM	IN4148W	996500039779
D920	093G 60276	DIODE SBT150-10LST SANYO	996510006255
D922	093G3006 1 1	31DQ06FC3 NIHON INTER	996510006253
F901	084G 56 4W	FUSE 4.0A 250V	996510006276
F902	061G1206000 4	RST CHIPR 0 OHM +-5% 1/4W	996510010275
J807	061G1206000	0 OHM 1/8W	996500039751
J813	061G1206000	0 OHM 1/8W	996500039751
J814	061G1206000	0 OHM 1/8W	996500039751
J815	061G1206000	0 OHM 1/8W	996500039751
J816	061G1206000	0 OHM 1/8W	996500039751
J818	061G1206000	0 OHM 1/8W	996500039751
J907	061G1206000	0 OHM 1/8W	996500039751
J908	061G1206000	0 OHM 1/8W	996500039751
L901	S73G17476V	LINE FILTER ASSY	996510007403
L902	073G 174 65 H	LINE FILTER	996500036088
L921	073G 253 91 H	CHOKE COIL	996500036026
L922	073G 253 91 H	CHOKE COIL	996500036026
Q801	057G 760 4B	PDTA144WK SOT346	996500036962
Q802	057G 760 5B	PDTC144WK SOT346	996510006257
Q803	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q804	057G 763 14	AM9945N	996500036100
Q805	057G 417 6	PMBS3906/PHILIPS-SMT(06)	996510002478

Q806	057G 417 6	PMBS3906/PHILIPS-SMT(06)	996510002478
Q807	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q808	057G 759 2	RK7002 SOT-23 BY ROHM	996510003293
Q809	057G 763 14	AM9945N	996500036100
Q810	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q812	057G 759 2	RK7002 SOT-23 BY ROHM	996510003293
Q902	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
R801	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R802	061G0805101	RST CHIPR 100 OHM -5% 1/8W	996500043379
R803	061G0603362	RST CHIPR 3.6 KOHM -5% 1/10W	996500042734
R804	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R805	061G0603472	RST CHIPR 4.7KOHM -5% 1/10W	996500042225
R806	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R807	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R808	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R810	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R811	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R812	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R813	061G0603101	RST CHIPR 100 OHM -5% 1/10W	996500042213
R814	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W	996510006225
R815	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R816	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W	996510006225
R819	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R820	061G0603564	RST CHIPR 560 KOHM +-5% 1/10W	996510006224
R821	061G0603105	RST CHIPR 1 MOHM -5% 1/10W	996500042216
R822	061G0603473	RST CHIPR 47 KOHM -5% 1/10W	996500042277
R823	061G0603103	RST CHIPR 10 KOHM -5% 1/10W	996500042214
R824	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R825	061G0805510 2F	RST CHIPR 51 KOHM +-1% 1/8W	996510006262
R826	061G0805180 3F	RST CHIPR 180 KOHM +-1% 1/8W	996510006259
R827	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R828	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R829	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W	996510006225
R830	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R831	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R832	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R833	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R834	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R835	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R836	061G0603105	RST CHIPR 1 MOHM -5% 1/10W	996500042216
R837	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R838	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395

R839	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R840	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R841	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R842	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R844	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R845	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R846	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R847	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R848	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R849	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R850	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R851	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R852	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R853	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R900	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R901	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R902	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R903	061G0805102	CHIP 1KOHM 1/10W	996500043380
R905	061G1206103	10 KOHM 1/8W	996500040048
R907	061G 208151 64	RST MOFR 150 OHM +-5% 1W	996510006232
R908	061G0805471	470&8 1/10W	996500043397
R909	061G152M104 64	100KOHM 5% 2W	996500036939
R910	061G1206229	RST CHIP 2R2 1/4W 5%	996500044647
R911	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W	996510006227
R912	061G1206100	RST CHIP 10R 1/4W 5%	996500043976
R913	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R915	061G0805100 2F	RST CHIPR 10KOHM -1% 1/8W	996500044853
R916	061G152M43852T	RST MOF 0R43 5% 2W	996510009151
R922	061G0805331	RST CHIPR 330 OHM -5% 1/8W	996500043393
R923	061G0805100 2F	RST CHIPR 10KOHM -1% 1/8W	996500044853
R924	061G0805360 1F	RST CHIPR 3.6KOHM +-1% 1/8W	996510006261
R925	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R926	061G0805330 2F	RST CHIPR 33 KOHM +-1% 1/8W	996510006260
R927	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R928	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R929	061G0805240 1F	RST CHIPR 2.4 KOHM +-1% 1/8W	996510004364
R930	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R931	061G1206103	10 KOHM 1/8W	996500040048
R951	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R952	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R953	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R954	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R955	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265

R956	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
T901	080GL17T 33 N2	XFMR POWER 550UH YUVA	996510006247
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON	996500039742
FB901	071G 55 29	FERRITE BEAD	996500036053
FB903	071G 55 29	FERRITE BEAD	996500036053
IC801	056G 379 22	IC TL494IDR SOIC-16	996510006256
IC901	056G 379 61	LD7575PS SOP-8	996500039747
IC902	056G 139 3A	PC123Y22FZOF	996500036055
IC903	056G 158 12	KIA431A-AT/P TO-92	996500036054
NR901	061G 58100 W	RST NTCR 10 OHM +20% 5A	996510007230
PT801	080GL17T 40 DN	X'FMR TK.2001U.101	996510006252
PT802	080GL17T 40 DN	X'FMR TK.2001U.101	996510006252
ZD801	061G1206103	10 KOHM 1/8W	996500040048
ZD920	093G 39S 40 T	RLZ 13B LLDS	996500039777
ZD921	093G 39S 40 T	RLZ 13B LLDS	996500039777
ZD922	093G 39S 25 T	RLZ5.1B LLDS	996500037002
FQ020	750GLC70A7P43M000F	PANEL CLAA170EA07P 040 CPT	996510006441
FQ021	750GLB70A7P41M000F	PANEL CLAA170EA07P 040 FQ CTOC	996510010276
FQ022	750GLB70A7P51M000F	PANEL CLAA170EA07P 050 FQ CTOC	996510010261
FQ023	750GLC70A7P53M000F	PANEL CLAA170EA07P 050 FZ CPT	996510010262
FQ024	CBPC7CNAPHQ4	SCALER BOARD ASSY(CPT,CTOC)	996510010263
U203	705GQ756023	MCU ASSY(CPT,CTOC)	996510010264
FQ025	PWPC942GR1	POWER BOARD ASSY	996510010288
C802	065G0603105 12	CHIP 1UF 16VX7R 0603	996510002499
C803	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C804	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918
C805	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C806	065G0603105 12	CHIP 1UF 16VX7R 0603	996510002499
C807	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918
C808	065G0805225 12	CHIP 2.2UF 16V X7R 0805	996510006267
C809	065G080522131G	220PF 50V NPO 2%	996510007400
C810	065G0603104 22	CHIP 0.1UF 25V X7R	996500042674
C811	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C812	065G 6J1006ET	10PF 5% SL 6KV	996500036942
C813	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C814	065G0603104 12	CER2 0603 X7R 16V 100N PM10 R	996500036918
C815	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C816	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C817	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C818	065G0603222 22	CHIP 2200PF 25V X7R	996510006266
C821	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C822	065G0805152 32	CHIP 1500PF 50V X7R 0805	996500044871
C823	065G0805104 22	0.1UF -10% 25V X7R 080	996500036040

C824	065G0805104 22	0.1UF -10% 25V X7R 080	996500036040
C900	065G306M2222BP	2200PF -20% 400VAC	996500036050
C901	065G305M1022EM	Y2 1000PF -20% 250VAC	996500036006
C902	065G305M1022EM	Y2 1000PF -20% 250VAC	996500036006
C903	065G306M1022BP	1000PF Y1.CAP	996510006237
C904	065G0603102 32	1000PF -10% 50V X7R	996500037517
C907	067G 40Z10115K	CAP 105 J 100UF M 450V	996510007388
C909	063G107K474 US	0.47UF +-10%	996510007384
C910	065G 2K152 1T6921	CAP 1.5NF/2KV Y5P +-10%	996510006274
C911	067G 2152207NT	KY50VB22M-TP5 5*11	996510006275
C912	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C913	065G0805221 31	220PF 50V NPO	996500039769
C914	065G0805471 21	CHIP 470PF 25V NPO	996510002754
C916	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C920	065G517K102 5T	1000PF 10% Y5P 500V	996500036077
C921	065G517K102 5T	1000PF 10% Y5P 500V	996500036077
C922	067G215D6814KV	CAP 105_J 680UF M 25V	996510006240
C923	067G215D6814KV	CAP 105_J 680UF M 25V	996510006240
C925	067G215D4714KV	E.C 105_J CAP 470UF M 25V	996510006239
C926	067G215S1023KV	105 J 1000UF M 16V	996510007389
C927	067G215S4713KV	EC 105_J CAP 470UF M 16V	996510006242
C928	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C929	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C930	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
C931	065G0805104 32	CHIP 0.1U 50V X7R	996500036041
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D803	093G 64S511SEM	IN4148W	996500039779
D806	093G 64S 10	DIODE BAW56PT SOT-23 CHENMKO	996510006271
D807	093G 64S511SEM	IN4148W	996500039779
D808	093G 64S 10	DIODE BAW56PT SOT-23 CHENMKO	996510006271
D809	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D810	093G 64 33	DIO SIG SM BAV99 (PHSE)R	996500035994
D811	093G 64S511SEM	IN4148W	996500039779
D812	093G 64S511SEM	IN4148W	996500039779
D813	093G 64S511SEM	IN4148W	996500039779
D900	093G1100 1052T	BA159GPT DO-41 CHENMKO	996510007274
D901	093G 6038T52T	FR103	996500036095
D910	093G 64S511SEM	IN4148W	996500039779
D915	093G 64S511SEM	IN4148W	996500039779
D916	093G 64S511SEM	IN4148W	996500039779
D920	093G 60276	DIODE SBT150-10LST SANYO	996510006255
D922	093G3006 1 1	31DQ06FC3 NIHON INTER	996510006253

F901	084G 56 4W	FUSE 4.0A 250V	996510006276
F902	061G1206000 4	RST CHIPR 0 OHM +-5% 1/4W	996510010275
J807	061G1206000	0 OHM 1/8W	996500039751
J813	061G1206000	0 OHM 1/8W	996500039751
J814	061G1206000	0 OHM 1/8W	996500039751
J815	061G1206000	0 OHM 1/8W	996500039751
J816	061G1206000	0 OHM 1/8W	996500039751
J818	061G1206000	0 OHM 1/8W	996500039751
J907	061G1206000	0 OHM 1/8W	996500039751
J908	061G1206000	0 OHM 1/8W	996500039751
L901	S73G17476V	LINE FILTER ASSY	996510007403
L902	073G 174 65 H	LINE FILTER	996500036088
L921	073G 253 91 H	CHOKE COIL	996500036026
L922	073G 253 91 H	CHOKE COIL	996500036026
Q801	057G 760 4B	PDTA144WK SOT346	996500036962
Q802	057G 760 5B	PDTC144WK SOT346	996510006257
Q803	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q804	057G 763 14	AM9945N	996500036100
Q805	057G 417 6	PMBS3906/PHILIPS-SMT(06)	996510002478
Q806	057G 417 6	PMBS3906/PHILIPS-SMT(06)	996510002478
Q807	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q808	057G 759 2	RK7002 SOT-23 BY ROHM	996510003293
Q809	057G 763 14	AM9945N	996500036100
Q810	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
Q812	057G 759 2	RK7002 SOT-23 BY ROHM	996510003293
Q900	057G 667 21	STP10NK70ZFP	996500039743
Q902	057G 417 4	PMBS3904/PHILIPS-SMT(04)	996500035966
R801	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R802	061G0805101	RST CHIPR 100 OHM -5% 1/8W	996500043379
R803	061G0603362	RST CHIPR 3.6 KOHM -5% 1/10W	996500042734
R804	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R805	061G0603472	RST CHIPR 4.7KOHM -5% 1/10W	996500042225
R806	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R807	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R808	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R810	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R811	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R812	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R813	061G0603101	RST CHIPR 100 OHM -5% 1/10W	996500042213
R814	061G0603750 2F	RST CHIPR 75KOHM -1% 1/10W	996500042257
R815	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R816	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W	996510006225

R819	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R820	061G0603564	RST CHIPR 560 KOHM +-5% 1/10W	996510006224
R821	061G0603105	RST CHIPR 1 MOHM -5% 1/10W	996500042216
R822	061G0603473	RST CHIPR 47 KOHM -5% 1/10W	996500042277
R823	061G0603103	RST CHIPR 10 KOHM -5% 1/10W	996500042214
R824	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R825	061G0805510 2F	RST CHIPR 51 KOHM +-1% 1/8W	996510006262
R826	061G0805180 3F	RST CHIPR 180 KOHM +-1% 1/8W	996510006259
R827	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R828	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R829	061G0603680 2F	RST CHIPR 68 KOHM +-1% 1/10W	996510006225
R830	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R831	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R832	061G0603000	RST CHIPR 0 OHM -5% 1/10W	996500042212
R833	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R834	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R835	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R836	061G0603105	RST CHIPR 1 MOHM -5% 1/10W	996500042216
R837	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R838	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R839	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R840	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R841	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R842	061G0603470 2F	RSTR 47 KOHM +-1% 1/10W	996510005994
R844	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R845	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R846	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R847	061G0603220	RST CHIPR 22 OHM -5% 1/10W	996500042217
R848	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R849	061G0603100 1F	RST CHIPR 1 KOHM -1% 1/10W	996500043955
R850	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R851	061G1206150	RST CHIPR 15 OHM +-5% 1/4W	996510006263
R852	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R853	061G0603100 2F	RST CHIPR 10 KOHM -1% 1/10W	996500042395
R900	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R901	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R902	061G1206334	RST CHIPR 330KOHM +-5% 1/4W	996510006264
R903	061G0805102	CHIP 1KOHM 1/10W	996500043380
R905	061G1206103	10 KOHM 1/8W	996500040048
R907	061G 208151 64	RST MOFR 150 OHM +-5% 1W	996510006232
R908	061G0805471	470&8 1/10W	996500043397
R909	061G152M104 64	100KOHM 5% 2W	996500036939
R910	061G1206229	RST CHIP 2R2 1/4W 5%	996500044647

R911	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W	996510006227
R912	061G1206100	RST CHIP 10R 1/4W 5%	996500043976
R913	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R915	061G0805100 2F	RST CHIPR 10KOHM -1% 1/8W	996500044853
R916	061G152M43852T	RST MOF 0R43 5% 2W	996510009151
R922	061G0805331	RST CHIPR 330 OHM -5% 1/8W	996500043393
R923	061G0805100 2F	RST CHIPR 10KOHM -1% 1/8W	996500044853
R924	061G0805360 1F	RST CHIPR 3.6KOHM +-1% 1/8W	996510006261
R925	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R926	061G0805330 2F	RST CHIPR 33 KOHM +-1% 1/8W	996510006260
R927	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R928	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R929	061G0805240 1F	RST CHIPR 2.4 KOHM +-1% 1/8W	996510004364
R930	061G0805100 1F	RST CHIPR 1KOHM +-1% 1/8W	996510006226
R931	061G1206103	10 KOHM 1/8W	996500040048
R951	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R952	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R953	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R954	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R955	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
R956	061G1206470	RST CHIPR 47 OHM +-5% 1/4W	996510006265
T901	080GL17T 33 N2	XFMR POWER 550UH YUVA	996510006247
BD901	093G 50460 28	BRIDGE DIODE KBP208G LITEON	996500039742
FB903	071G 55 29	FERRITE BEAD	996500036053
IC801	056G 379 22	IC TL494IDR SOIC-16	996510006256
IC901	056G 379 61	LD7575PS SOP-8	996500039747
IC903	056G 158 12	KIA431A-AT/P TO-92	996500036054
NR901	061G 58100 W	RST NTCR 10 OHM +20% 5A	996510007230
PT801	080GL17T 40 DN	X'FMR TK.2001U.101	996510006252
PT802	080GL17T 40 DN	X'FMR TK.2001U.101	996510006252
ZD801	061G1206103	10 KOHM 1/8W	996500040048
ZD920	093G 39S 40 T	RLZ 13B LLDS	996500039777
ZD921	093G 39S 40 T	RLZ 13B LLDS	996500039777
ZD922	093G 39S 25 T	RLZ5.1B LLDS	996500037002
FQ026	CBPC7ANAPHQ1	SCALER BOARD ASSY(AUO)	996510010267
C404	065G0402104 12	CHIP 0.1UF 50V X7R	996510005716
Q900	057G 667 21	STP10NK70ZFP	996500039743
R814	061G0603750 2F	RST CHIPR 75KOHM -1% 1/10W	996500042257
U203	705GQ756048	MCU ASSY(AUO)	996510010268
E08902	089G 728HAA 21	SIGNAL CABLE	996510005679

17. Different Parts List

Diversity of 170S8FB/00 compared with 170S8FS/00						
Location	170S8FB/00			170S8FS/00		
	Part No.	Description	Philips 12NC	Part No.	Description	Philips 12NC
FQ009	P33G4989 VQB1C	CONTROL BUTTON	996510010255	P33G4989 VPB1C	CONTROL BUTTON	996510010269
FQ010	P34G1846 VBF1T	BEZEL L17-7PHB1	996510010256	P34G1846 VOE1T	BEZEL L17-7PHB1	996510010270
U204	056G1133 24 1	AT24C16B	996510015243	056G1133 56	M24C16-WMN6TP	996500037783
U204	056T1133 56	M24C16-WMN6TP				
U204	056T1133 24 1	AT24C16B				

Diversity of 170S8FB/27 compared with 170S8FS/00						
Location	170S8FB/27			170S8FS/00		
	Part No.	Description	Philips 12NC	Part No.	Description	Philips 12NC
FQ002	089G402A18N IS	POWER CORD		089G404A18N YH	POWER CABLE	996500037502
FQ009	P33G4989 VQB1C	CONTROL BUTTON		P33G4989 VPB1C	CONTROL BUTTON	996510010269
FQ010	P34G1846 VBF1T	BEZEL L17-7PHB1		P34G1846 VOE1T	BEZEL L17-7PHB1	996510010270
FQ012	Q40G 17N81325B	RATING LABEL		Q40G 17N81322A	RATING LABEL	
FQ012	Q40G 17N81325C	RATING LABEL (2nd Source)		Q40G 17N81322A	RATING LABEL	
FQ022	089G1748GAA AC	SIGNAL CABLE DVI GREATLAND				

Diversity of 170S8FS/62 compared with 170S8FS/00						
Location	170S8FS/62			170S8FS/00		
	Part No.	Description	Philips 12NC	Part No.	Description	Philips 12NC
FQ011	P34G1850 VB 1T	REAR COVER		P34G1850 VB 2T	REAR COVER(17")	996510008030
FQ015	Q44G7057813 4A	CARTON		Q44G7057813 1A	CARTON	
FQ015	Q44G7057813 5A	CARTON (2nd Source)		Q44G7057813 1A	CARTON	
FQ018	CBPC7GNAPHQ8	SCALAR BOARD ASSY(LPL)		CBPC7GNAPHQ6	SCALAR BOARD ASSY (LG)	996510010260
FQ017	CBPC7CNAPHQ8	SCALAR BOARD ASSY(CPT)		CBPC7CNAPHQ4	SCALAR BOARD ASSY(CPT)	996510010263
U203	705GQ756032	MCU ASS'Y (17")(LPL)		705GQ756024	MCU ASS'Y （LG）	996510010271
U203	705GQ756031	MCU ASS'Y (17")(CPT)		705GQ756023	MCU ASS'Y （CPT）	996510010264

Diversity of 170S8FB/62 compared with 170S8FS/00						
Location	170S8FB/62			170S8FS/00		
	Part No.	Description	Philips 12NC	Part No.	Description	Philips 12NC
FQ009	P33G4989 VQB1C	CONTROL BUTTON		P33G4989 VPB1C	CONTROL BUTTON	996510010269
FQ010	P34G1846 VBF1T	BEZEL L17-7phb1		P34G1846 VOE1T	BEZEL L17-7phb1	996510010270
FQ011	P34G1850 VB 1T	REAR COVER		P34G1850 VB 2T	REAR COVER(17")	996510008030
FQ015	Q44G7057813 4A	CARTON		Q44G7057813 1A	CARTON	
FQ018	CBPC7GNAPHQ8	SCALAR BOARD ASSY(LPL)		CBPC7GNAPHQ6	SCALAR BOARD ASSY (LG)	996510010260
FQ017	CBPC7CNAPHQ8	SCALAR BOARD ASSY(CPT)		CBPC7CNAPHQ4	SCALAR BOARD ASSY(CPT)	996510010263
U203	705GQ756032	MCU ASS'Y (17")(LPL)		705GQ756024	MCU ASS'Y （LG）	996510010271
U203	705GQ756031	MCU ASS'Y (17")(CPT)		705GQ756023	MCU ASS'Y （CPT）	996510010264

Diversity of 170S8FB/78 compared with 170S8FS/00						
Location	170S8FB/78			170S8FS/00		
	Part No.	Description	Philips 12NC	Part No.	Description	Philips 12NC
FQ004	705GQ734427	170S8 STAND&BASE SKD ASS'Y		705GQ734307	STAND&BASE ASS'Y	996510006439
FQ009	P33G4989 VQB1C	CONTROL BUTTON		P33G4989 VPB1C	CONTROL BUTTON	996510010269
FQ010	P34G1846 VBF1B	BEZEL L17-7phb1		P34G1846 VOE1T	BEZEL L17-7phb1	996510010270
FQ012	Q40G 17N81328A	RATING LABEL		Q40G 17N81322A	RATING LABEL	
FQ017	CBPC7CNAPHQA	SCALER BOARD		CBPC7CNAPHQ4	SCALER BOARD ASSY (CPT)	996510010263
FQ019	PWPC7942GQA8	POWER BOARD ASSY		PWPC942GR1P	POWER BOARD(CPT)	996500041051
C909	063G107K474 TS	CAP X2 0.47UF K 275VAC		063G107K474 HS	0.47UF +-10%	996510007384
L902	S73G17465VW	LINE FILTER ASS'Y		073G 174 65 H	LINE FILTER	996500036088
L921	S73G25391V	CHOKE COIL ASS'Y		073G 253 91 H	CHOKE COIL	996500036026
L922	S73G25391V	CHOKE COIL ASS'Y		073G 253 91 H	CHOKE COIL	996500036026
T901	S80GL17T33V2	TRANSFORMER ASS'Y		080GL17T 33 N2	XFMR POWER 550uH YUVA	996510006247
IC903	056G 158 10 T	IC AZ431AZ-AE1 TO-92 BY AAC		056G 158 12	KIA431A-AT/P TO-92	996500036054
FQ018	KEPC7QS6	KEY BOARD ASSY		KEPC7QS5	KEY BOARD ASSY	996510010272
CN801	033G8021 2E U	INVERT CONNECTOR				
CN802	033G8021 2E U	INVERT CONNECTOR		996500041051		
CN803	033G8021 2E U	INVERT CONNECTOR				
CN804	033G8021 2E U	INVERT CONNECTOR				
C907	067G305T10115H	ELCAP 105℃ 100UF M 450V				
L902	073G 174 65 T	LINE FILTER 7mH MIN TDK				
T901	080GL17T 33 T2	X'FMR 550uH SRW28EC-T147H015				
E08902	089G402A18NIS1	POWER CORD				
E08902	089G402A18NLS1	POWER CORD				

18. General Product Specification

CONTENTS

1. FOREWORD

This specification describes a 17" SXGA multi-scan color TFT LCD monitor with maximum resolution up to 1280 x 1024 /76 Hz non-interlaced. All optical characteristics (including WHITE-D, Brightness, and so on) are determined according to panel specification after warming up approximate 30 minutes that brightness stability is optimal, and follow strictly after panel specification.

2. PRODUCT PROFILE

This display monitor unit is a color display monitor enclosed in PHILIPS styling cabinet which has an integrated tilt base.

2.1 LCD

Priority : LPL/CPT/AUO

Type : TN + film

LPL LM170E03-TLL1/TLL4

Resolution	: 1280x1024 (SXGA)
Outside dimensions	:
Pitch (mm)	: 0.264 mm x 0.264 mm
Color pixel arrangement	: RGB vertical stripes
Display surface	: Hard coating (3H), Anti-glare treatment of the front polarizer
Color depth	: 16.7 M colors (with A-FRC)
Backlight	: CCFL edge light system
Active area(WxH)	: 337.9*270.3
View angle (CR>10)	: 160/160 (typ)
Contrast ratio	:800:1 (typ)
White luminance	: 300 nit (typ)
Color gamut	:72% (typ)
Gate IC	:
Source IC	:
Response time	: 5 ms

CPT CLAA170EA07P-040/050

Resolution	: 1280x1024 (SXGA)
Outside dimensions	:
Pitch (mm)	: 0.264 mm x 0.264 mm
Color pixel arrangement	: RGB vertical stripes
Display surface	: Anti-glare
Color depth	: 16.7 M (6 bits + Hi -FRC)
Backlight	: CCFL, 4 tables, edge-light(top*2/bottom*2)
Active area(WxH)	: 337.9*270.3
View angle (CR>10)	: 160/160 (typ)
Contrast ratio	: 700:1 (typ)
White luminance	: 300 nits (typ)
Color gamut	: 72% (typ)
Gate IC	:
Source IC	:
Response time	: 6ms

AUO M170EG01 VD

Resolution : 1280x1024 (SXGA)
Outside dimensions :
Pitch (mm) : 0.264 mm x 0.264 mm
Color pixel arrangement : RGB vertical stripes
Display surface : Anti-glare type, Hardness 3H
Color depth : 16.7 M color (RGB 6 bits + FRC data)
Backlight : CCFL
Active area(WxH) : 337.9*270.3
View angle (CR>10) : 160/160 (typ)
Contrast ratio : 800:1 (typ)
White luminance : 300 nits (typ)
Color gamut : 72% (typ)
Gate IC :
Source IC :
Response time : 5ms

2.2 Scanning frequencies

Hor. : 30 – 83 K Hz
Ver.: 56 - 76 Hz
Video dot rate: <140 MHz
Power input: 90-264 V AC, 50/60 ± 2 Hz
Power consumption : : 36 W typical
Functions:
(1)D-SUB analog R/G/B separate inputs, H/V sync separated, Composite (H+V) TTL level, SOG sync
(2) DVI digital Panel Link TMDS inputs

2.3 Ambient temperature: 0 °C - 40 °C

3. Electrical characteristics

3.1 Interface signals

1). D-Sub Analog
Input signal : Video, Hsync., Vsync
Video : 0.7 Vp-p, input impedance, 75 ohm @DC
Sync. : Separate sync TTL level , input impedance 2.2k ohm terminate
Hsync Positive/Negative
Vsync Positive/Negative
Composite sync TTL level, input impedance 2.2k ohm terminate (Positive/Negative)
Sync on green video 0.3 Vp-p Negative (Video 0.7 Vp-p Positive)
2). DVI-D Digital
Input signal: Single TMDS link (Three channels: RX0-/+, RX1-/+, RX2-/+)
3). Audio: NOTE
4). USB PLUG 2.0: NOTE

3.2 Interface

3.2.1 D-Sub Cable

Length : 1.8 M +/- 50 mm

Fix with monitor when packing, with transplant pin protective cover.

Connector type : D-Sub male with DDC2B pin assignments.

Blue connector thumb-operated jack screws

Pin assignment:

Pin No.	Signal
1	Red
2	Green/ SOG
3	Blue
4	Sense (GND)
5	Cable Detect (GND)
6	Red GND
7	Green GND
8	Blue GND
9	DDC +3.3V or +5V
10	Logic GND
11	Sense (GND)
12	Bi-directional data
13	H/H+V sync
14	V-sync
15	Data clock

3.2.2 DVI Cable

The input signals are applied to the display through DVI-D cable.

Length. : 1.8 M +/- 50 mm

Connector type . : DVI-D male with DDC-2B pin assignments

White connector thumb-operated jackscrews

Pin Assignment:

Pin No.	Description
1	T.M.D.S. data2-
2	T.M.D.S. data2+
3	T.M.D.S. data2 shield
4	No Connect
5	No Connect
6	DDC clock
7	DDC data
8	No Connect
9	T.M.D.S. data1-
10	T.M.D.S. data1+
11	T.M.D.S. data1 shield
12	No Connect
13	No Connect
14	+5V Power
15	Ground (for +5V)
16	Hot plug detect
17	T.M.D.S. data0-
18	T.M.D.S. data0+
19	T.M.D.S. data0 shield
20	No Connect
21	No Connect
22	T.M.D.S clock shield
23	T.M.D.S. clock+
24	T.M.D.S. clock-

3.2.3 USB Cable (High Full Speed): NOTE

3.2.4 Audio cable (suppliers to input the jack and cable color): NOTE

3.3 Timing requirement

Factory Preset mode definition :

1. Perfect FOS while presenting all required timings.
2. Required timings need to be specified in User's Manual

Preset mode definition :

1. Need to support those timings.
2. Perfect FOS after auto adjustment.

User mode

1. Can save those timing that not in Preset mode and can be showed (not over scalar or Panel spec.)
2. It needs to reserve the 12 timings space in memory size.

3.3.1 Mode storing capacity

Factory preset modes : 11

Preset modes : 45

User define modes : 12

Note: 1. Screen displays perfect picture at 11 factory-preset modes.

2. Screen displays visible picture with OSD warning when input modes are the 45 preset modes.

3.3.2 Factory preset modes (11 modes)

Factory modes and preset modes are defined in the enclosed timing table file.

Item	H.Freq. (KHz)	Mode	Resolution	V.Freq. (Hz)	BW(MHz)	
1	31.469	IBM VGA 10H	640x350	70.086	25.175	Y
2	31.469	IBM VGA 3H	720x400	70.087	28.322	Y
3	31.469	IBM VGA 12H	640x480	59.94	25.175	Y
4	35	MACINTOSH	640x480	66.667	30.24	Y
5	37.861	VESA	640x480	72.809	31.5	Y
6	37.5	VESA	640x480	75	31.5	Y
7	43.269	VESA	640x480	85.008	36	Y
8	35.156	VESA	800x600	56.25	36	Y
9	37.879	VESA	800x600	60.317	40	Y
10	48.077	VESA	800x600	72.188	50	Y
11	46.875	VESA	800x600	75	49.5	Y
12	53.674	VESA	800x600	85.061	56.25	Y
13	49.725	MACINTOSH	832x624	74.55	57.283	Y
14	56.4	-	960x720	75		N
15	44.75	-	960x720	60		N
16	48.363	VESA	1024x768	60.004	65	Y
17	56.476	VESA	1024x768	70.069	75	Y
18	60.023	VESA	1024x768	75.029	78.75	Y
19	61.08	IBM XGA-2	1024x768	75.782	86.001	Y
20	68.677	VESA	1024x768	84.997	94.5	Y
21	47.396	CVT 2.3MA	1280 x768	59.995	68.25	Y
22	60.289	CVT 2.3MA	1280 x768	74.893	102.25	Y
23	53.7		1152x864	60	81.624	Y
24	63.851	VESA	1152x864	70.012	94.5	Y
25	67.5	VESA	1152x864	75	108	Y
26	68.681	MACINTOSH	1152x870	75.62	100	Y
27	61.82	SUN WS	1152x900	65.977	92.978	Y
28	71.713	SUN WS	1152x900	76.047	105.561	Y
29	60	VESA	1280x960	60	108	Y

30	75.171	VESA	1280x960	75.021	129.895	Y
31	63.981	VESA	1280x1024	60.02	108	Y
32	71.691	SUN WS	1280x1024	67.189	117	Y
33	76.754	DOS/V	1280x1024	72.001	129.56	Y
34	79.976	VESA	1280x1024	75.025	135	Y
35	81.13	SUN WS	1280x1024	76.107	135	Y
36	91.146	VESA	1280x1024	85.24	157.5	Y
37	44.772	-	1280x720	59.855	74.5	Y
38	56.456	-	1280x720	74.777	95.75	Y
39	64.744	CVT-reduced	1400x1050	59.948	101	N
40	82.278	CVT	1400x1050	74.867	156	N
41	93.881	CVT	1400x1050	84.96	179.5	N
42	55.469	VESA-reduced	1440x900	59.901	88.75	Y
43	55.935	VESA	1440x900	59.887	106.5	Y
44	70.635	VESA	1440x900	74.984	136.75	Y
45	75	VESA	1600x1200	60	162	Y
46	66.587	CVT 2.3MA-R	1920x1080	59.934 (for	138.5	Y
47	65.29	CVT1.76MW	1680x1050	59.954	146.25	Y
48	64.674	CVT1.76MW-R	1680x1050	59.883	119	Y
49	74.038	CVT 2.3MA-R	1920x1200	59.95 (for	154	Y
50	61.648		1600x1000	59.91	108.5	Y

3.3.3 Software control functions via OSD / control adjustable functions:

Please refer to following Hudson8 OSD definitions

Reset - No: Exit

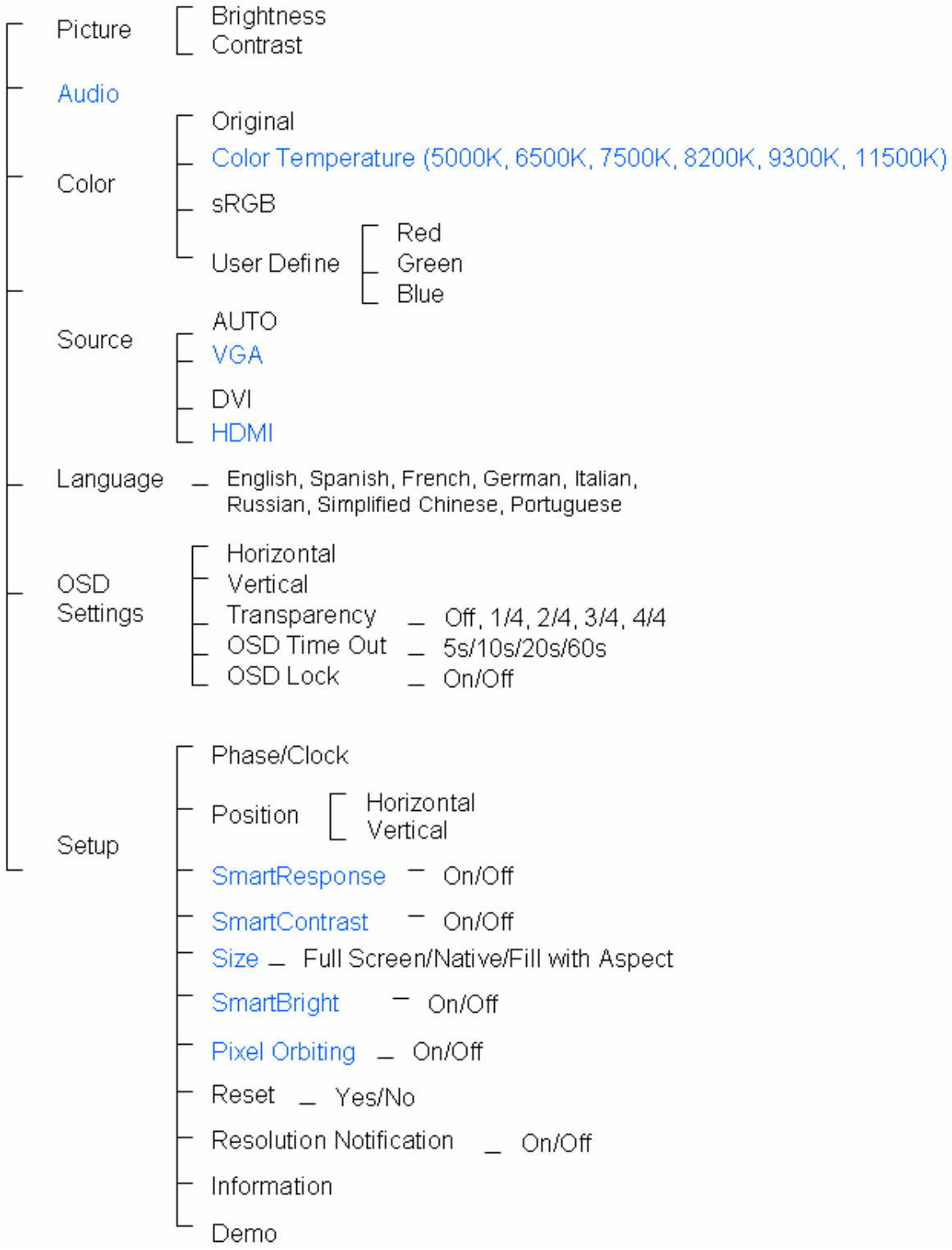
Yes: Auto adjustment for displaying timing mode and recall factory preset

OSD Languages –8

Power On Logo: Power On → show up Philips logo 3 second → change to input signal

This picture is reference only. The official drawing will send out by PM.

OSD Tree



3.4 Horizontal scanning

Sync polarity : Positive or Negative

Scanning frequency : **30 – 83 K Hz**

3.5 Vertical scanning

Sync polarity : Positive or Negative

Scanning frequency : **56 - 76 Hz**

3.6 Power input connection

Power cord length : 1.8 M

Power cord type : 3 leads power cord with protective earth plug.

3.7 Power management

The monitor must comply with the Microsoft On Now specification, and meet EPA requirements.

Mode	HSYNC	VSYNC	Video	Power-cons.	Indication	Rec. time
Power-On	On	On	active	36W typical	Green LED	--
Off	Off	Off	blanked	< 1 W	Amber LED	< 3 s
DC Power Off			N/A	< 1 W	LED Off	

3.8 Display identification

In accordance with VESA Display Channel Standard Ver.1.0 and DDC 2B capability

3.9 Display identification

In accordance with DVI requirement (DDWG digital Visual Interface revision 1.0)

use DDC-2B, DDC/CI, and EDID V1.3

3.10 USB support: NOTE

3.11 DDC/ CI Support

In accordance with VESA DDC/CI and MCCS ver.2.0, the monitor should be workable with Protrait Display Tune at least.

3.12 EDID

	Data for EDID & .inf file	
1	User visible strings on .inf file	Philips 170S (17inch LCD MONITOR 170S8)
2	Manufacturer ID (EDID data)	PHL
3	Product ID, "xxxx" 4 codes	MSB(byte 12): 08
		LSB (byte 11): 56
4	maximum resolution	1280x1024
5	Horizontal Frequency Range	30~83 KHz
6	Vertical Frequency Range	56~76Hz
7	Monitor Name (13 characteries max.)	Philips 170S8

3.13 Hot-key definition

	Key	Key Press Time	OSD Timeout
Monitor Controls Lock	OK(Menu)	6 sec (lock/unlock)	3 sec
Factory Mode	AUTO+ OK+ Power On	Keep pressing when power on	
Demo mode for smart image	Smart Image Key	3 sec (Enter/Quit)	
DDC/CI On/OFF for VISTA	MENU+DOWN	6 sec (lock/unlock)	3 sec

3.14 Smart contrast (Dynamic contrast ratio)

Smart Contrast is a kind of dynamic backlight control.

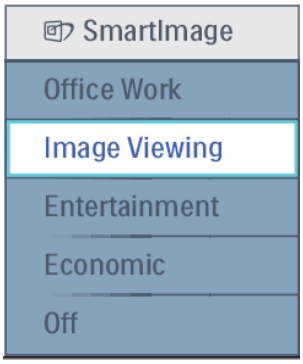
This function changes the panel backlight dynamically according to the frame brightness histogram.

the contrast ratio has to be **3000:1(typical).**

3.15 Smart Image

3.15.1Smart Image OSD outlook (Economic → Economy)

3.15.2Smart Image OSD outlook



3.15.2.1 Position

Pressing the “Smart Image” button, the position is in the bottom center of the screen.

3.15.2.2 Smart Image Logo & Banner

As design to keep the Light Frame logo at header but change the name to “SmartImage” with bitmap format.

3.15.2.3 Icon of each profile

Each profile will use text instead of icon & text before.

3.15.2.4 User Operation Procedure

A. 5 different modes are switched to next in the sequence from 1 to 5 then back to 1 while pressing this button: 1) Office Work 2) Image Viewing 3) Entertainment 4) Economy 5) Off. The default setting is ‘Off”.
B. The FOS optimization will be changed in real time by which profile to be scrolled, users don’t need to confirm to enable.
C. The Smart Image OSD will remain on screen for 5 seconds after user last action. Or user can also press [MENU] to close the Smart Image OSD immediately.
D. Except using [MENU] button to scroll down profile. If Smart Image OSD already launched onscreen. User is allowed to use up/down key to choose profile and press [MENU] to confirm selection and close the Smart Image OSD.
E. If the model has multiple inputs including VGA and DVI, each input has their own set of profiles. When user switch input, the profile to be applied will also change.
F. Each input can memorize their individual “Smart Image” profile status.

For example, Smart Image is on with “Office” profile at VGA input, when switch to DVI input, the Smart Image will revert to previous profile of DVI. In the input switching process the “Smart Image” OSD will also show up to present which profile is selected if “Smart Image” is enabled at that input. The Smart Image status will also be stored after the monitor is resumed from AC on/off or power switch on/off.

3.15.2.5Linkage between Smart Image OSD and main OSD

A. Settings within main OSD have linkage with Smart Image OSD.

i. Brightness

ii. Contrast

iii. Color Temperature

B. Because each preset profiles will define default setting of these 3 parameters. Users can understand what is the value of that in preset profile by open the main OSD.

C. When any SmartImage Lite profile had been enabled. The parameters in main OSD are still available for user to adjust. But these adjustments are temporary only. If users switch to another profile and then go back. The setting in main OSD will show preset values of that Smart Image profile enabled.

3.15.2.6 Profile Definitions (system integrators to input at design stages)

A. Office Work

i Purpose: Design for general office application, like word processing, Spreadsheet and email. The screen is dominated by text.

ii. Enhancement point:

1.A little sharpness for increasing the details of e.g. an excel grid. No other type of enancement as it won't bring value.

2. Color temperature remains in 6500°K.

3. Brightness level should be 70%.

4. Smart Response set to “Off”.

5. Smart Contrast set to “Off”.

B. Entertainment

i. Purpose: Design for video application, Like Microsoft Media Player or Real Player. The screen is dominated by video.

ii Enhancement Point:

1. Dynamic contrast enhancement by histogram analysis (DLC) should be implemented.

2. Sharpness enhanced 90%.

3. Color enhancement set as the same with Video.

4. Color temperature set to 7500° (Based on final PQ settings) (if higher)

5. Brightness level sets to maximum.

6. SmartResponse set to “High”.(N/A for this model)

7. Gamma Table turn off to achieve

8. Fastest response time. (N/A for this model)

9. Smart Contrast set to “On”

C. Image Viewing

i. Purpose: Design for image viewing application, especially in slide show. The screen is dominated by picture. Powerpoint presentation could use this profile also.

ii. Enhancement Point:

1.Dynamic contrast enhancement by histogram analysis (DLC) should be off.

2. Sharpness and color to be enhanced 75%.

3. Color temperature 6500°K

4. Brightness level sets to maximum.

5. Smart Response set to “Off”. (N/A for this model)

6. Smart Contrast set to “Off”.

D. Economy

i.Purpose: Adjust brightness level for reducing power consumptions

ii.No optimization by Smart Image.

iii.Design:

1. Brightness level set to 70%, a little higher brightness level than laptop PC, fine tune brightness level before DVT exit.
2. Color temperature set to 6500K.
3. Gamma Table is turn on.

E. Off

i. Purpose: No optimization by SmartImage.

ii. Design:

1. This will follow user OSD setting. If any change by user, it will be saved. When switch back from other SmartImage profiles, it will go back to last saved setting.
2. Gamma Table is turn on to reduce bad color tracking.

3.15.2.7Demo mode

A. Purpose: Built-in demo mode for sales in-store demo.

B. Design:

i. Dynamically split screen to 2 vertical frames with one vertical white line. The line width is 2 pixels. The left frame will be enhanced by SmartImage and right frame remains original performance.

ii. There is OSD showing “SmartImage On” in left frame and “SmartImage Off ” in right frame.

iii. The OSD word color is white with transparent background.

C. The demo profile will be “entertainment profile setting.

D. Hot keys to trigger:

Press [SmartImage] 3 seconds or more to trigger the demo mode. When demo mode is On, press 3 seconds or more to turn off the demo mode. When the demo mode is enabled, the blue LED will flash until demo mode disabled.(N/A for this model)

4. Visual characteristics

4.1 Test conditions

Unless otherwise specified, this specification is defined under the following conditions.

(1) Input signal : As defined in 3.3, 1280 x 1024 non-interlaced mode (1280 x 1024@60Hz 108MHz), signal sources must have 75 ohm output impedance.

(2) Luminance setting : controls to be set to 300 nits (typical) with full screen 100 % duty cycle white signal

(3) Warm up: more than 30 minutes after power on with signal supplied.

(4) Ambient light: 400 -- 600 lux.

(5) Ambient temperature: 20 ± 5 °C

4.2 Brightness

Follow Panel specification.

4.3 Image size

Actual display size 337.9 x 270.3 mm

4.4 Brightness uniformity

Set contrast at 100% and turn the brightness at 100%.

Apply the Fig 1, it should comply with the following formula:

$$\frac{B\_min}{B\_max} \times 100\% > 75\%$$

Where B_max =Maximum brightness, B_min = Minimum brightness

4.5 Check Cross talk (S)

Apply Pattern 2. Set contrast and brightness at 100 %.

Measure YA. Then output Pattern 3 and measure YB.

the cross talk value :

$$\frac{ABS(YA - YB)}{YA} \times 100\% < 1.5\ \%$$

4.6 White color adjustment

There are seven factory preset white color 11500K, 9300K, 8200K, 7500K, 6500K, sRGB, 5000K

Apply full gray64 pattern, with brightness in 100 % position and the contrast control at 50 % position.

The 1931 CIE Chromaticity (color triangle) diagram (x ,y) coordinate for the screen center should be:

Product specification

CIE coordinates	(x,y)	
11500K	x = 0.272 ± 0.02 y = 0.283 ± 0.02	
9300K	x = 0.283 ± 0.02 y = 0.297 ± 0.02	
8200K	x = 0.292 ± 0.02 y = 0.307 ± 0.02	
7500K	x = 0.299 ± 0.02 y = 0.315 ± 0.02	
6500K/sRGB	x = 0.313 ± 0.02 y = 0.329 ± 0.02	
sRGB	x = 0.313 ± 0.02 y = 0.329 ± 0.02	
5000K	x = 0.346 ± 0.02 y = 0.359 ± 0.02	

Production alignment spec.

CIE coordinates	(x,y)	
11500K	x = 0.272 ± 0.005 y = 0.283 ± 0.005	
9300K	x = 0.283 ± 0.005 y = 0.297 ± 0.005	
8200K	x = 0.292 ± 0.005 y = 0.307 ± 0.005	
7500K	x = 0.299 ± 0.005 y = 0.315 ± 0.005	
6500K/sRGB	x = 0.313 ± 0.005 y = 0.329 ± 0.005	
sRGB	x = 0.313 ± 0.005 y = 0.329 ± 0.005	
5000K	x = 0.346 ± 0.005 y = 0.359 ± 0.005	

Quality Inspection specification:

CIE coordinates	(x,y)	
9300K	x = 0.283 ± 0.015 y = 0.297 ± 0.015	
6500K/sRGB	x = 0.313 ± 0.015 y = 0.329 ± 0.015	
sRGB	x = 0.313 ± 0.015 y = 0.329 ± 0.015	

5. Mechanical characteristics

5.1 Cosmetic - Philips ID

5.2 Mechanical data files - ProE files required

5.3 Location of Philips logo - Per Philips make-up sheet

5.4 Gap between panel and front bezel < 0.8 (typ) mm

5.5 Location of Control icons - Per Philips Graphic sheet

5.6 Color for resin/paint - Per Philips make-up sheet

5.7 Resins

- RoHS required
- WEEE required.
- Resin type/selection refer to Project Book Section 7.2 Plastic material.

5.8 If paint is used

- RoHS required
- WEEE require
- If new painting type need to implement, refer to UN-D 1235.

5.9 Plastic mold tooling

- Tooling to be designed to minimize cosmetic defects induced by molding process (sink, blush, weld lines, gate marks, ejector marks, etc.). Refer to “TYV61-90007”.
- Painting to cover up cosmetic defects due to molding is strongly discouraged.

5.10 Plastics flammability

- All Plastics to be Flame Retardant UL 94-V0 or Better (if monitor weighs less than 18kg; UL94-V0 is OK).
- Base / Pedestal to be Flame Retardant UL 94-HB.
- All major plastic parts (bezel, back cover, base) need to be molded from same resin.
- ABS V0 is allowed to implement in China region for monitor body major plastic parts (bezel, back cover, base).
- Plastic resin type selection should be referred to “TY R83-2-9002-1”s.

5.11 Texture/Glossing of housing

- The texture area and texture no should follow Philips make-up sheet.
- The exterior surfaces shall have a uniform texture.
- Philips must approve the mold texturing.
- Detail document for texture refer to “UN-D249”, “UN-D 600”.
- < = 20 gloss units

5.12 Tilt and swivel base

- Tilt angle : -5 ° +2/- 0 ° (forward)
  +20 °+3/-0 ° (backward)
- Swivel angle : NA
- High Adjustment : NA
- Portrait Display : NA

5.13 Kensington Lock

- Must meet Kensington_slot.spec “TYE-M0004”.
- MMD request metal plate in Kinsington hole.

5.14 Label

- Regulatory label / Carton label should follow Philips requirement.
- China RoHS label
- Detail document refer to Philips Engineering Reference Book.

5.15 Product dimension / Weight (Refer to SHT 191)

- Unit dimension : 403mm (W) * 392.5 (H) * 171mm(D)
- Packed unit dimension : 482mm(W) * 189mm(H) * 488 mm(D) for WW
  : 490mm(W) * 191mm(H) * 497 mm(D) for China
- Net weight : 4.6Kg (Including I/F cable 300 g)
- Gross weight : 6.0 Kg for WW
  : 6.1 Kg for China

5.16 Transportation

Transportation standards refer to TYE-M0002.

5.16.1 Transportation packages

Packaging and wrapping shall be sufficient to protect the product against damage or loss during shipment from the supplier to the destination specified in the purchase order. All packaging materials are subject to test and evaluation per TYE-M0002. The cushion material shall be constructed using EPS material.

5.16.2 Transportation Test

The overall test refer to TYE-M0002.

Vibration, drop test should be performed at ambient temperature(20°C to 23oC) and relative humidity (40% to 65%).

A. Transportation test specification for all regions except China/India

- Package test
  1. Random Vibration test
  2. Drop test
  3. Cold Drop test (for design reference)
- Un-package test
  1. Half sine shock test (non operation)

B. Transportation test specification for China/India

- Package test
  1. Random Vibration test
  2. Drop test
  3. Cold Drop test (for design reference)
- Un-package test
  1. Sine vibration (operating)
  2. Half sine shock test (non operation)

5.17 Pallet / Container loading

Transportation standards refer to TYE-M0002.

- Air shipment -
- Sea container 20'(pallet/slip sheet)
- Sea container 40'(pallet/slip sheet)
- Sea container 40' High Cube (pallet/slip sheet)
- Truck shipment-

Transportation request for all region except China/India

A. Air shipment

B. Container loading for WW

Transportation request for China and India

A. Container loading for China and India

B. Truck loading

6. Environmental characteristics

The following sections define the interference and susceptibility condition limits that might occur between external environment and the display device.

6.1 Susceptibility of display to external environment

Operating

- Temperature : 0 to 40 degree C
- Humidity : 80% max
- Altitude : 0-3658m
- Air pressure : 600-1100 mBAR

Storage

- Temperature : -20 to 60 degree C
- Humidity : 95% max
- Altitude : 0-12192m
- Air pressure : 300-1100 mBAR

Note: recommend at 5 to 35°C, Humidity less than 60 %

6.2 Transportation tests

Refer to 5.15.2

6.3 Display disturbances from external environment

According to IEC 801-2 for ESD disturbances

6.4 Display disturbances to external environment

7. Reliability

7.1 Mean Time Between Failures

System MTBF (Including the LCD panel and CCFL) : 50,000 hrs

8. Quality assurance requirements

8.1 Acceptance test

According to MIL-STD-105D Control II level

AQL: 0.4 (major)

1.5 (minor)

(Please also refer to annual quality agreement)

Customer acceptance criteria: UAW0377/00

9. Philips' Flat Panel Monitors Pixel Defect Policy

Philips' Flat Panel Monitors Pixel Defect Policy

BRIGHT DOT DEFECTS	**ACCEPTABLE LEVEL**		
MODEL	**170S8**		
1 lit sub-pixel	3		
2 adjacent lit sub-pixels	1		
3 adjacent lit sub-pixels (one white pixel)	0		
Distance between two bright dots	15mm		
Bright dot defects within 20 mm circle	0		
Total bright dot defects of all type	3		

BLACK DOT DEFECTS	**ACCEPTABLE LEVEL**		
MODEL	**170S8**		
1 dark sub-pixel	5		
2 adjacent dark sub-pixels	2		
3 adjacent dark sub-pixels (one white pixel)	1		
Distance between two black dots	15mm		
Black dot defects within 20 mm circle*	1		
Total black dot defects of all type	5		

TOTAL DOT DEFECTS	**ACCEPTABLE LEVEL**		
MODEL	**170S8**		
Total bright or black dot defects of all type	5		

Fig 1: Measurement locations of Brightness Uniformity

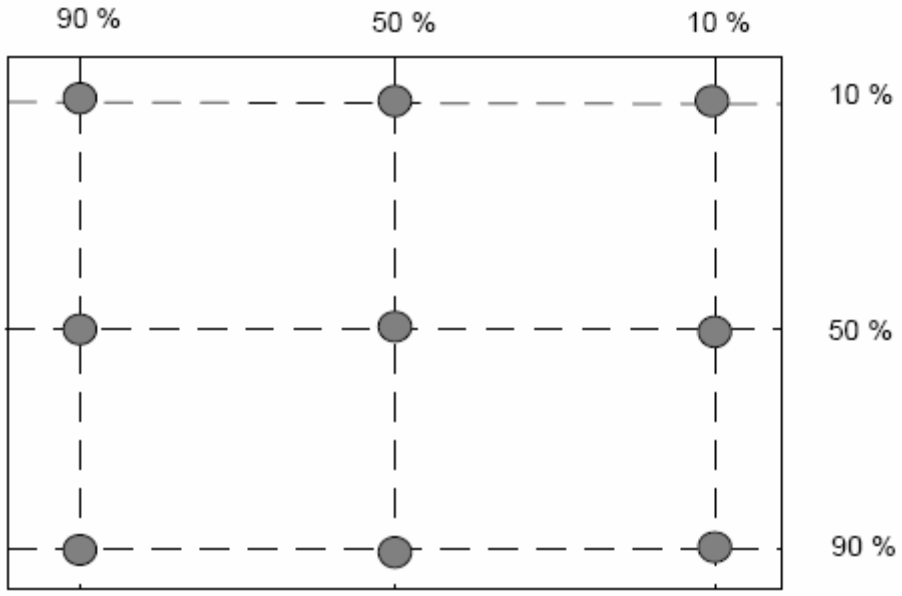


Fig 2: Cross talk pattern

Gray level 46 (64 Gray level)

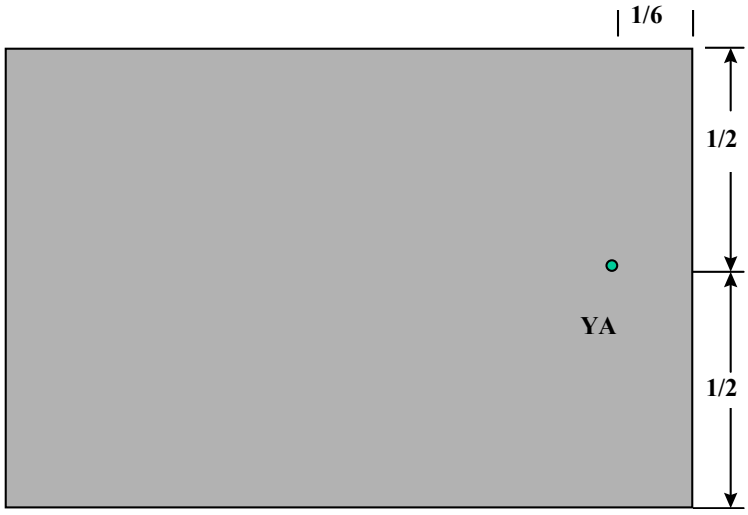
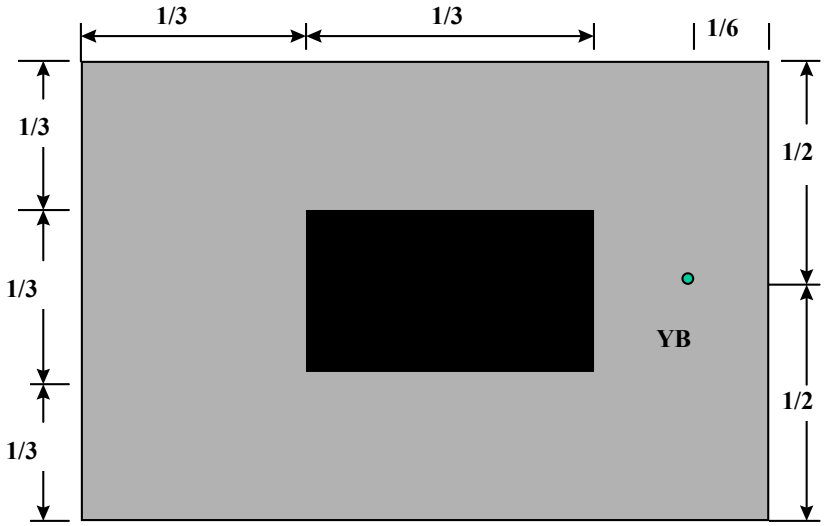
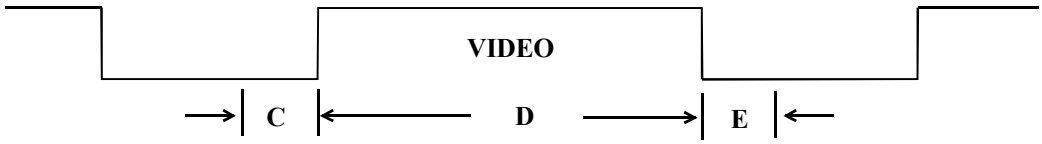


Fig 3: Cross talk Pattern

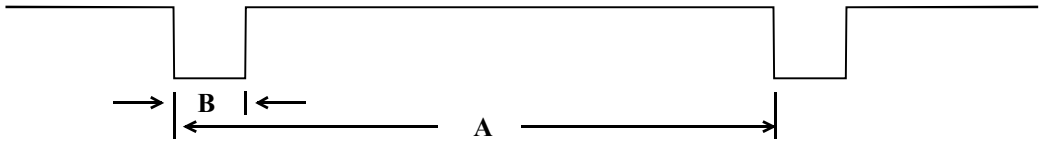
Center at Gray level 0 (Black)

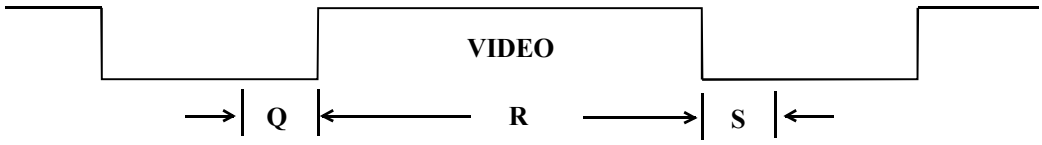


SEPARATE SYNC.

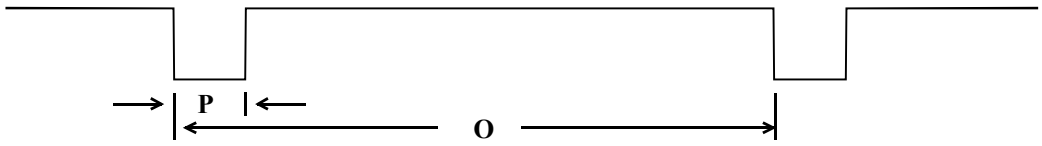


HORIZONTAL

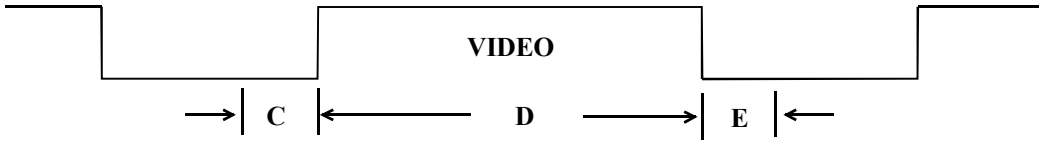




VERTICAL



COMPOSITE SYNC.



HORIZONTAL

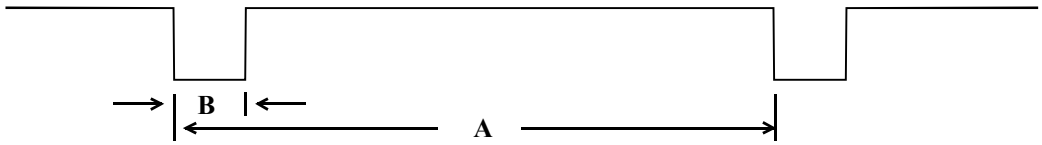


FIG-4 TIMING CHART -1

10. REGULATORY COMPLIANCE

10.1 Worldwide Regulatory

Country	Domain	Safety / EMC / Ergonomics / Standards	Documents
International	Sa	IEC60950-1:2001. Group -and national differences of all countries listed in CB Bulletin No. 107A	CB Report and CB certificate
Europe	Sa	European Low Voltage Directives 73/23/EEC and 93/68/EEC	Declaration of Conformity
	E	European Electromagnetic Compatibility Directive 89/336/EEC amended by the directive 93/68/EEC. EN 55022:1998 Class B	Declaration of Conformity and Full EMC/CE test report
		EN 55024: 1998	
		EN 61000-3-2: 2000	
		IEC 61000-3-3: 1994/EN61000-3-3: 1995	
		CISPR 22:1997 Class B International EMC standard	
Germany	Sa	EN60950-1:2001	TUV certificate
	O	ISO 13406-2: 2001 & prEN 50279:1998	TUV-ERG certificate
	O	GS-Mark / EK1-ITB 2000	TUV-GS certificate
Sweden	Sa	EN60950-1:2001	SEMKO certificate
	O	TCO 99 (TCO03)	TCO99 (TCO03) report + certificate
Russia	Sa	GOST R 50377-1992	GOST certificate

South Africa	Sa	SABS IEC 60950	Certificate of Conformity
USA	Sa	UL 60950-1: 2003	UL certificate
	E	FCC Part 15 Class B	FCC ID grant
	O	Energy Star	EPA registration
Canada	Sa	CSA C22.2 No 60950	CSA certificate
	E	ICES-003 issue 3	Statement on label
Mexico	Sa	NOM-019-SCFI-1994	NOM certificate
Korea	Sa	Korean Safety Control law IEC 60950	eK certificate
	E	Regulations laws: EMI 1996-78, 80. EMS 1996-79,81	MIC certificate
Singapore	Sa	IEC60950	PSB certificate
China	Sa	GB4943-2001	CCC certificate
	E	GB9254-1998; 17625.1-2003	
Taiwan	Sa	CNS-14336 (IEC 60950-1)	BSMI certificate
	E	CNS-13438 (CISPR22) Class B	

Sa = Safety

E = Electromagnetic Compatibility

O = Other which including recycling, energy saving, ergonomics

10.2 EMC Requirements

Supplier DVT EMI test result must be submitted prior to DVT samples delivery, and PVT EMI test result must be submitted again prior to PVT samples delivery, which also has to meet Philips' immunity testing specification.

10.3 RoHS

Restriction on the use of certain hazardous substances. Lead, Cadmium, Mercury, Hexavalent Chromium, Polybrominated Bipheny1 (PBB) and Polybrominated Bipheny1 Ether (PBDE)(flame retardant).

10.4 WEEE

Producer (Philips) responsible for retailer take back schemes and recycling.

--System implemented.

--Collection and recycle targets.

10.5 Ongoing Regulatory

There's a possibility that other regulatory certificates will be required during the life of the product. It is the responsibility of the supplier to provide related documentation.