

FOR APPROVAL

MODEL : HC3501A1

Customer _____

RECEIPT STATUS







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By Date

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Name

Time

Approval Stamp	Approved	Checked	
			
 3 2 4 桃 園 縣 平 鎮 市 太 平 西 路 2 0 7 巷 3 3 弄 1 2 號 NO.12, ALLEY 33, LANE 207, TAI PING W. RD., PINGJEN CITY, TAOYUAN HSIEN, TAIWAN  		Model	HC3501A1
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1.Application

3.5 " Color TFT LCD Moniror Kits is subject to car monitor, TV monitor and other industrial equipment. The model name is HC3501A1.

2. Specifications

2-1 LCD Display

Display	3.5" Diagonal Color TFT
Resoulution	960(H) X 234(V) Total =224,640 dots
Active Area	71.6mmx52.65mm
Dot Pitch	0.0745(H)mmx0.225(V)mm
Pixel Configuration	R.G.B. Delta
View Angle	Top=15deg Bottom= 35deg Left/Right=50deg
Brightness	220 cd/m ² (TYP)
Contrast Ratio	350:1
Panel Dimension	83.5(W)mmx63.1(H)mmx3.6(D)mm

2-2 Back Light

6 LEDs Type

2-3 Video Input

NTSC & PAL (Auto Switch)

Composite Video signal
(1.0 Vp-p/75ohm.)

Sync.Negative :

NTSC: f_H : 15.75KHz
 f_V : 60 Hz
 f_C : 3.58MHz

PAL: f_H : 15.62KHz
 f_V : 50 Hz
 f_C : 4.43MHz

2-4 Input Voltage

DC 12V \pm 15%

2-5 Power Consumption

2.5W (Max.)

2-6 Temperature

Operation Temperature: 0°C ~ 60°C

Storage Temperature: -20°C ~70°C

2-7 Weight

75g

2-8 Over all Dimension

99.7(L)mmx 84.6(W)mmx 23.0(H)mm

3. Characteristics

3-1 Measure Method

- | | |
|-----------------------------|---|
| (1) Input Voltage | DC 12V±0.5V
(Ripple Voltage 0.5VMax.) |
| (2) Video Input | NTSC & PAL
Composite Signal Input 1.0 Vp-p / 75 ohm) |
| (3) User Control VR | At color signal ,each color is normally
present each VR adjustment (Bright,color,Tint)
is performed well.
VR1 = 50KΩ
VR2 = 10KΩ
VR3 = 50KΩ |
| (4) Environment Temperature | Normal Temperature(20~25℃)
Normal Humidity(60±5%RH) |
| (5) Others | Best Viewing 35cm from monitor kits
LCD should be set bottom up ($\theta = 90\text{deg}$) |

3-2 Optical Characteristics

- | | |
|----------------------|--|
| (1) Resolution pixel | 320(R.G.B.)x234 |
| (2) Gradation | Ten gradation is clearly identified. |
| (3) Brightness | Above 200 cd/m ² ;
Under full white , Power on to warm up
For 2 min. temperature = 25℃,
Contrast= 350 (Max.) |
| (4) Lamp Life | 10,000 hrs(Tamb=25℃) |

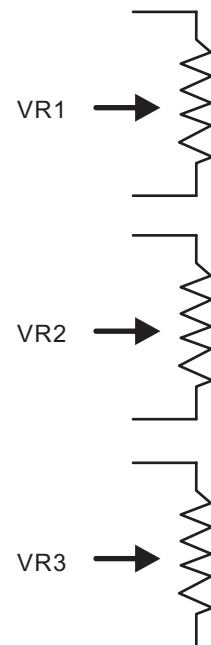
4. Connector

4-1 Video/Power Input(4 pin/1.0mm to 2 pin/1.0mm,and 2 pin/1.0mm)

Pin No.	Configuration
1	Video(Input)
2	Video GND
3	DC GND
4	DC +12 V

4-2 Finction control(9 pin/1.0mm to 9 pin /1.0mm)

Pin No.	Configuration
1	+
2	Brightness
3	-
4	+
5	Color
6	-
7	+
8	Tint
9	-



VR1=VR2=VR3=10KΩ

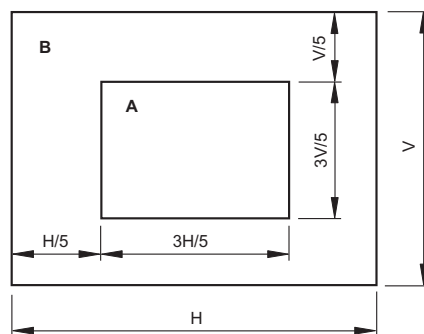
5. Inspection Standard

5-1 Inspection environment conditions

- (1) Room temperature : 20 ~ 25
- (2) Humidity : $60 \pm 5\%$ RH
- (3) The viewing line should be perpendicular to the surface of screen.

5-2 Dot Defects

- (1) Inspection distance : 35 ± 5 cm
- (2) Inspection illumination : 100 ~ 150 Lux
- (3) Panel temperature : 30 ± 5
- (4) Inspection pattern : full white, full black, red, green and blue screens.
- (5) Division



(6) Acceptable Criteria

Ltem	Area		Total
	A	B	
Blue Black	2	3	4
Red Green White	1	3	3
Total	2	5	7

5-3 Scratch on the polarizer

Number = 3 max.
Width = 0.1 mm, Length = 6 mm

5-4 Dent on the polarizer

Number = 3 max. , Average Diameter = 0.3 mm

5-5 Foreign material on the polarizer

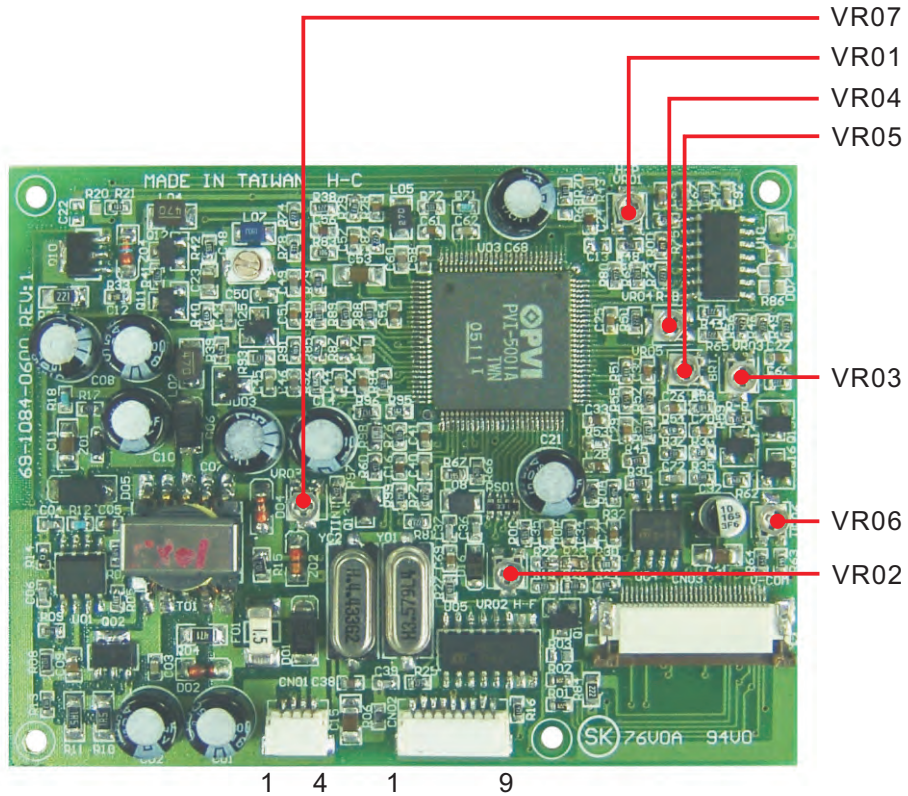
Number = 2 max. , Average Diameter = 0.5 mm

5-6 Afterimage

After displaying a pattern for 5 seconds then switch to a different pattern, the previous pattern should disappear within 10 seconds.

* Picture adjustment from serial number "H81U200001"

6.VR Descriptions



Location	Adjustment
VR01	H-Position
VR02	H-Frequency
VR03	B-Red
VR04	B-Blue
VR05	Brightness
VR06	V-Com
VR07	Tint

* Don't turning VR01/VR02,VR03,VR04,VR06.
Those VRs are turned by authorized engineer only.

7. Caution

7-1 Do not preserve or operate in the place where dewfall is easily formed

7-2 LCD should be preserved well to keep it's best performance.

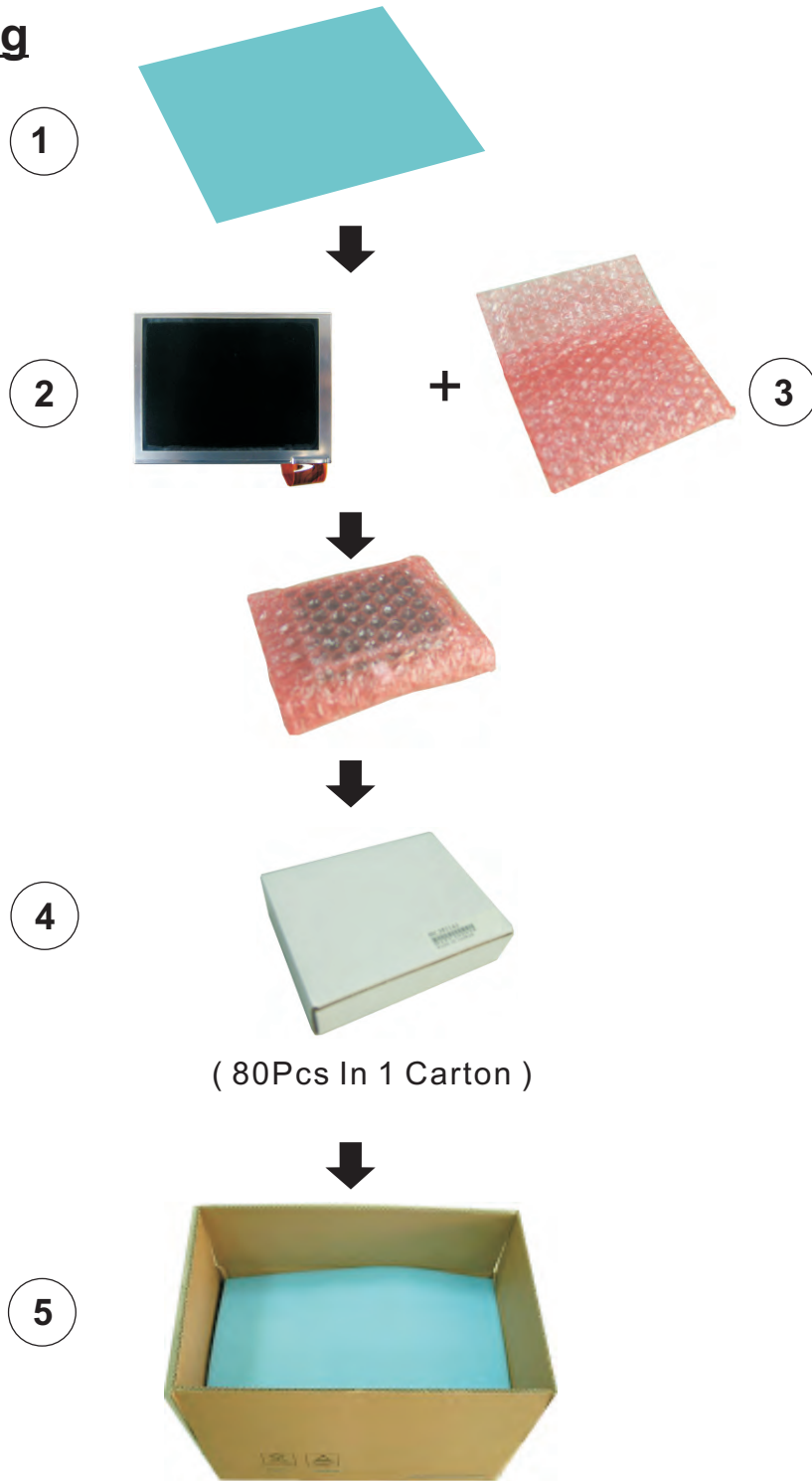
The Polarizing filter of LCD should prevent from exposing under ultra-violet ray or sunshine.the exposure might cause interior of the LCD.

7-3 The storage temerature of LCD should be at normaltemperature.

Liquefaction or damage might be possible when LCD module is exceeding the temperature listed in the specification.

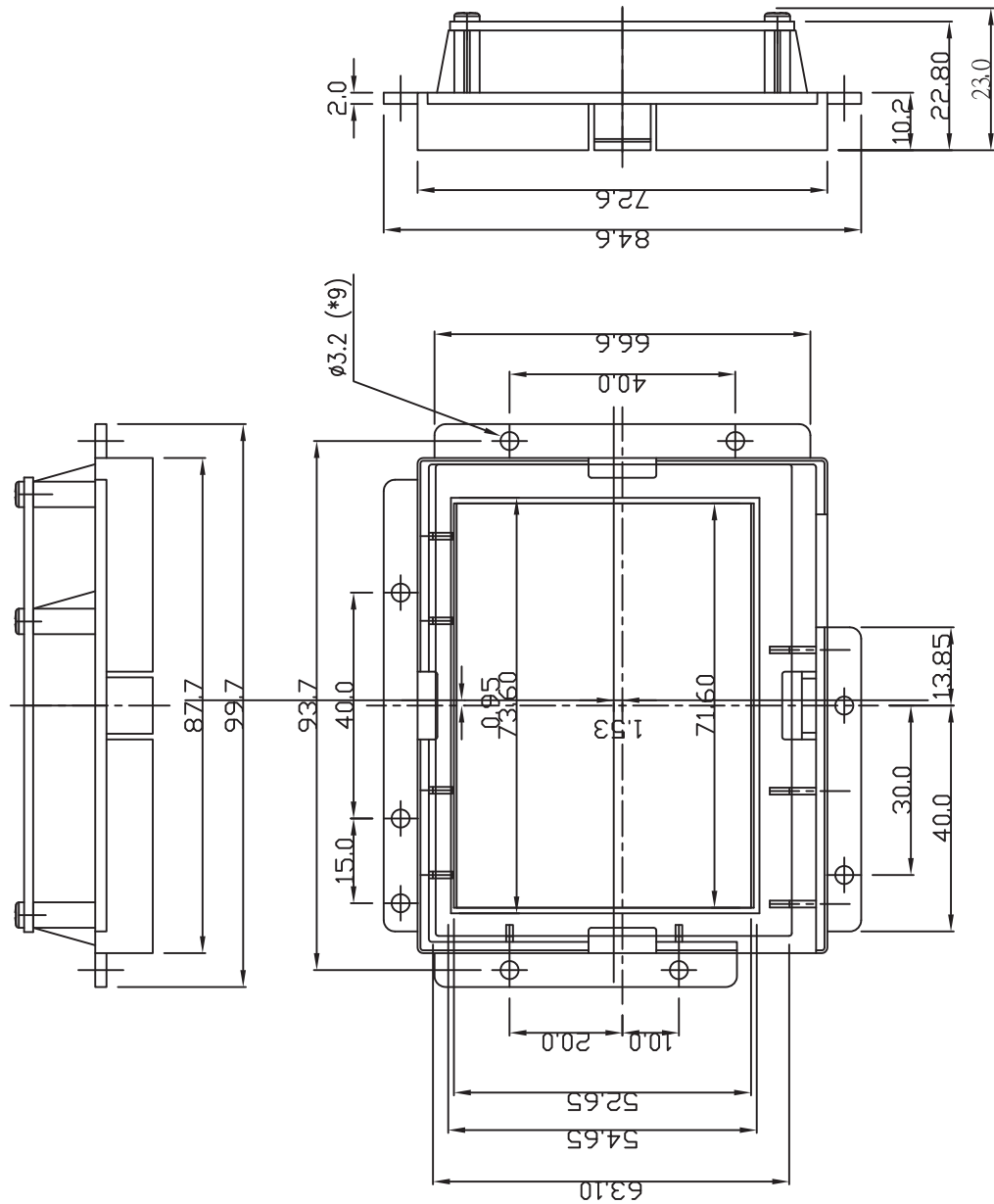
7-4 Please remove the foil on the LCD panel slowly and smoothly to avoid static electricy.

8.Packing



1.	58-1043-2520	SPONGE
2.	02-1084-xxxx	MODULE
3.	73-1018-0010	BUBBLE/ESD BAG
4.	70-1016-0010	BOX
5.	70-1011-0010	CARTON

9.Mechanical Drawing



僅供參考

REV.	HC3501A1	DWG NO. :	HC3501A1	Size	B
Sheet:	10	Date :	DEC-09-2010	Scale:	
REV.		DWG	PENG	ENG	
DATE		CHKD		APR	
		APPR		DATE	

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