

# FOR APPROVAL

MODEL : HC7031A1

Customer \_\_\_\_\_

RECEIPT STATUS


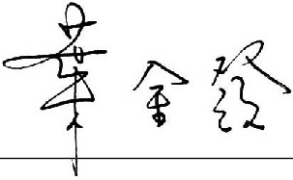




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Approval Stamp	Approved	Checked	
			
  		Model	HC7031A1
		Version	1
		Total Pages	6
		Date	MAR.21,2011

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## 1. Application

7 " Color TFT LCD Monitor Kits is subject to car monitor, TV monitor and other industrial Equipment. The model name is HC7031A1.

## 2. Specifications

2-1	Display	7" (16:9) color TFT LCD												
2-2	Resolution	480 (H) x (RGB) x 234(V)												
2-3	Action Area	154.08 (H) x 86.58 (V)												
2-4	Dot Pitch	0.321 (H) x 0.370 (V)												
2-5	Pixel Configuration	Stripe												
2-6	Back light	27-LED												
2-7	Input Signal	NTSC & PAL (auto-switch) composite video signal 1Vp-p / 75 ohm sync.Negative												
		<table> <thead> <tr> <th></th> <th>NTSC</th> <th>PAL</th> </tr> </thead> <tbody> <tr> <td><math>f_H</math></td> <td>15.75 KHz</td> <td>15.625 KHz</td> </tr> <tr> <td><math>f_V</math></td> <td>60 Hz</td> <td>50 Hz</td> </tr> <tr> <td><math>f_C</math></td> <td>3.58 MHz</td> <td>4.43 MHz</td> </tr> </tbody> </table>		NTSC	PAL	$f_H$	15.75 KHz	15.625 KHz	$f_V$	60 Hz	50 Hz	$f_C$	3.58 MHz	4.43 MHz
	NTSC	PAL												
$f_H$	15.75 KHz	15.625 KHz												
$f_V$	60 Hz	50 Hz												
$f_C$	3.58 MHz	4.43 MHz												
2-8	Power Source	DC 12V ~ 24V (ripple 0.5 Vp-p max.)												
2-9	Range of Operating Voltage	DC 10V ~ 24V												
2-10	Power Consumption	8W max.												
2-11	Operating Temperature	-20°C~70°C												
2-12	Storage Temperature	-30°C~80°C												
2-13	Operating Humidity	max.85% RH												
2-14	Storage Humidity	max.85% RH												
2-15	Overall Dimension	166 (W) x 100 (H) x 10 (D)												
2-16	Weight	TBD												

## 3. Optical Specifications

3-1	Lamp Life-time	20,000 hr min. (at Tamb=25°C)
3-2	Typ. Viewing Angle	Right 60 deg Left 60 deg Top 35 deg Bottom 50 deg
3-3	Brightness	Typ. 350 cd/m <sup>2</sup>
3-4	Contrast Ratio	Typ. 350

## 4. Connector

4-1 Harness connector : pitch 2mm, length 300mm

4-2 Pin Assignment

CN1 (5 pin)

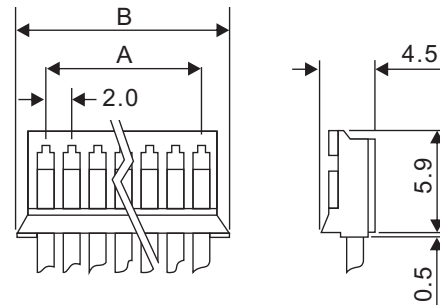
Pin	Parameter	Color of Wire	Voltage	
			Min.	Max.
1	DC input (Vcc)	Red	10V	24V
2	Ground	Black	-----	-----
3	(empty)	-----	-----	-----
4	(empty)	-----	-----	-----
5	(empty)	-----	-----	-----

CN2 (4 pin)

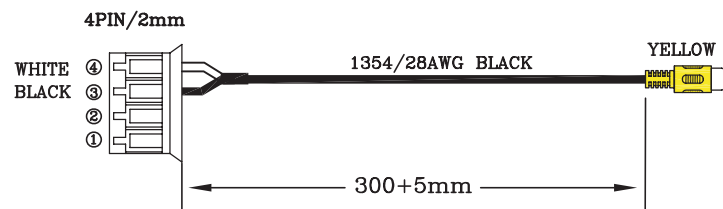
Pin	Parameter	Color of Wire	Voltage	
			Min.	Max.
1	(empty)	-----	-----	-----
2	(empty)	-----	-----	-----
3	Ground	Black	-----	-----
4	Signal	White	0.8Vp-p	1.2Vp-p

Dimension of Pins :

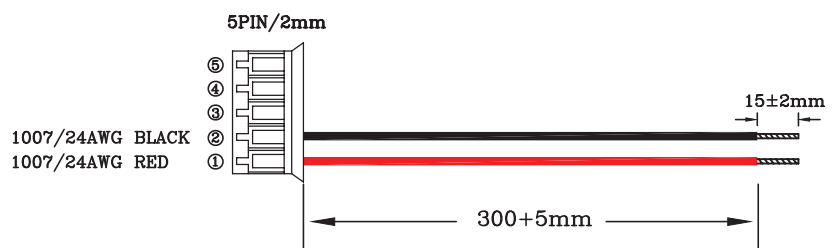
	A	B
CN1	8.0mm	11.8mm
CN10	6.0mm	9.8mm



■ Line (L-40)



■ Line (L-41)



## 5. Inspection Standard

### 5-1 Classification of Defects

#### 5-1-1 Dot defect

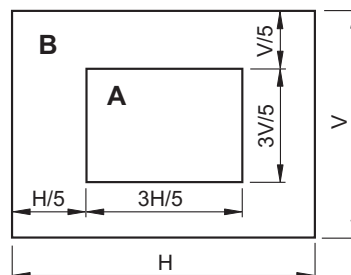
##### a). Inspection condition

- Inspection distance :  $35 \pm 5$  cm
- Inspection illumination : 100 ~ 150 Lux
- Panel temperature :  $30 \pm 5^\circ\text{C}$
- Inspection pattern : full white, full black, red, green and blue screens

##### b). Acceptable criteria

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

##### c). The definitions of A and B zone



#### 5-1-2 Scratch on the polarizer

Number = 3 max.

Width  $\leq 0.1$  mm , Length  $\leq 6$  mm

#### 5-1-3 Dent on the polarizer

Number = 3 max. , Average Diameter  $\leq 0.3$  mm

#### 5-1-4 Foreign material on the polarizer

Number = 2 max. , Average Diameter  $\leq 0.5$  mm

#### 5-1-5 Afterimage

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

# 6. Mechanical Drawing

