

# Specification

Product Model: JD43T30-C-MEX043TM-40D-HYO-CO

Driver Board Version: VER1.00

LCD Screen's Model: MEX043TM-40D-HYO-CO

USER			MANUFACTURER		
Quality	Project	Approved By	Prepared By	Checked By	Approved By

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## Version

<b>Date</b>	<b>Version</b>	<b>Content</b>
2012-11-02	RD001	The first version

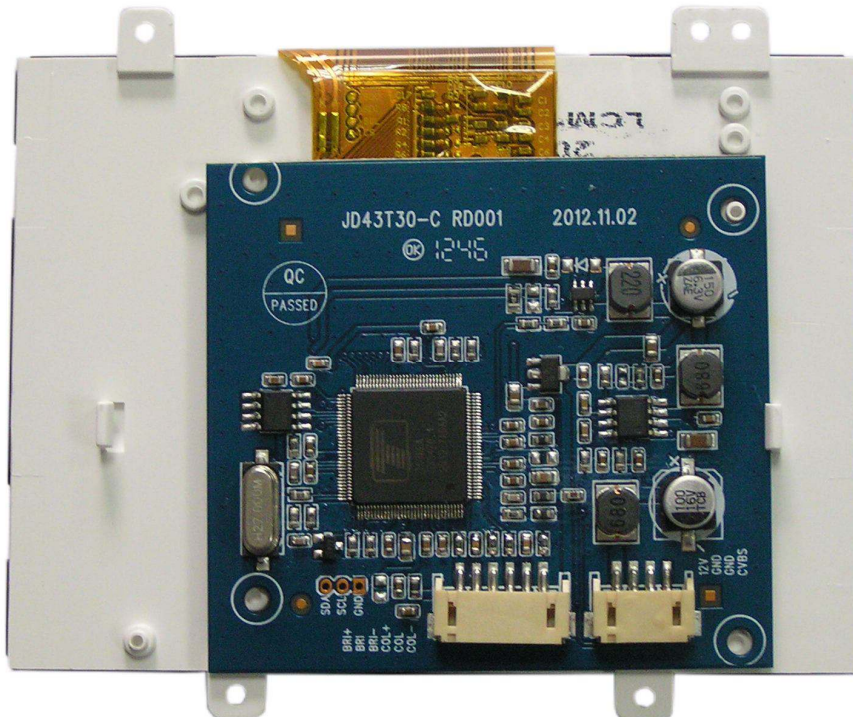
### 1. Profile

This is technical specification applies to JD43T30C–MEX- MEX043TM-40D-HYO-CO TFT LCD Color Digital Module. This product is composed of a JD43T30C VER:1.00 driver board and MEX043TM-40D-HYO-CO panel. This LCD Module support CVBS Signal, PAL and NTSC formats which two formats can be automatic identified. All the functions can be controlled by the potentiometer. This LCD Module is mainly used for video door phone and other display equipments.

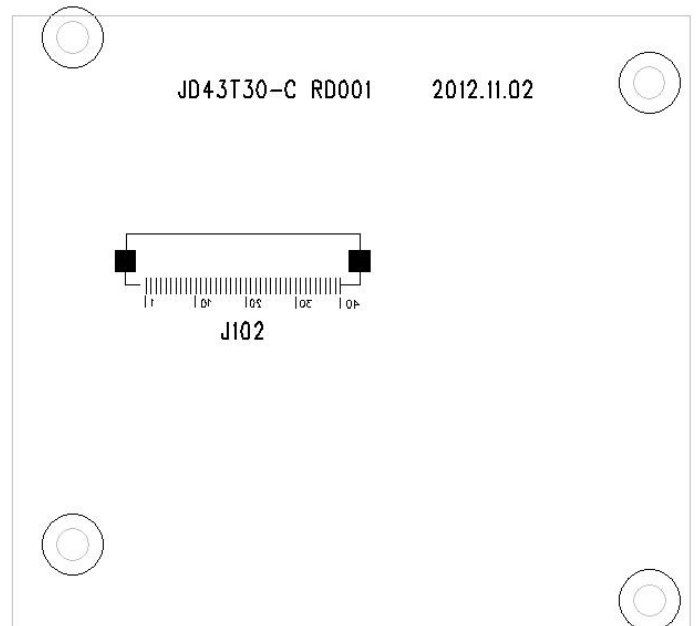
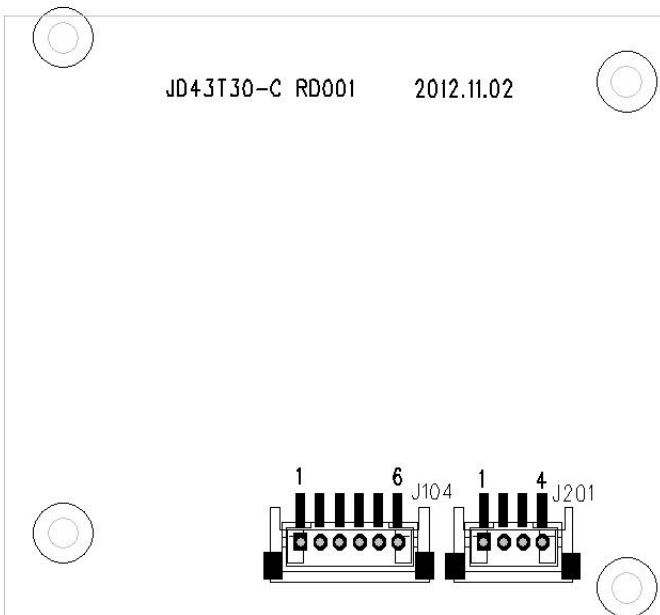
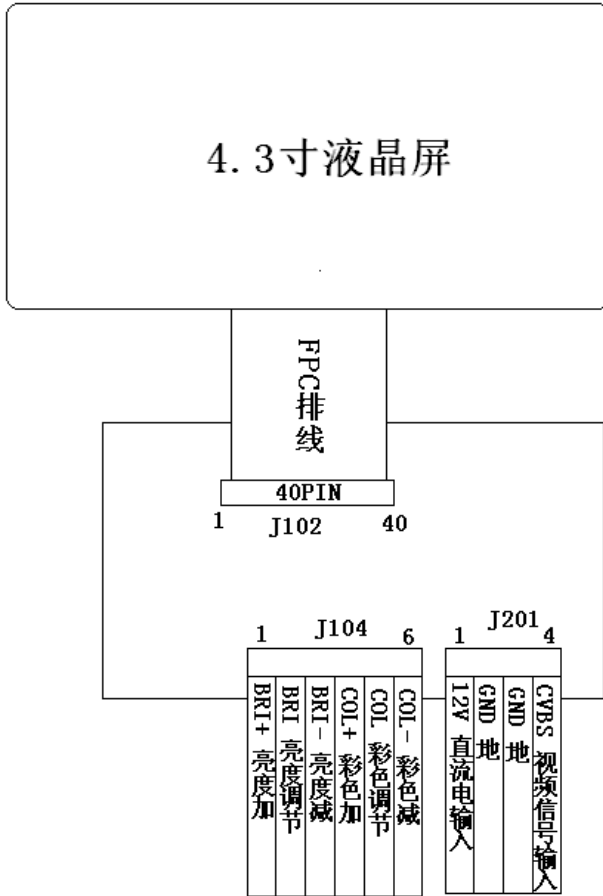
### 2. Main Parameter

No	Item	Description	Note
1	Screen Size	4.3 inch	
2	Contrast Ratio	16:9	
3	Backlight	LED	
4	Brightness	220±30 cd/m <sup>2</sup>	
5	Resolution	480 (RGB)×272	
6	Viewing Angle (U/D/R/L)	(60/55/60/55)	
7	Outline Dimension	103.9 (W) × 75.8 (H) × 7.3 (D) mm	
8	Active Area	95.04 (H) × 53.86 (V) mm	
9	Drive Board Size	68.0 (W) × 62.0 (H) × 9.7 (D) mm	
10	Working Voltage (Power supply ripple is less than 0.3vp-p)	Min: DC=9V Standard: DC=12V Max: DC=15V	
11	Working Current (DC= 12V)	DC110mA±30mA	
12	Power Consumption	1.32W (TYP)	
13	Start time	≤2.0 Sec	
14	Operating Temperature	0℃~60℃	
15	Storage Temperature	-20℃~70℃	
16	Relative Humidity	5~95%RH	

### 3. Product Picture:



### 4. Wiring Diagram:



### 5. Connector definition of driver board:

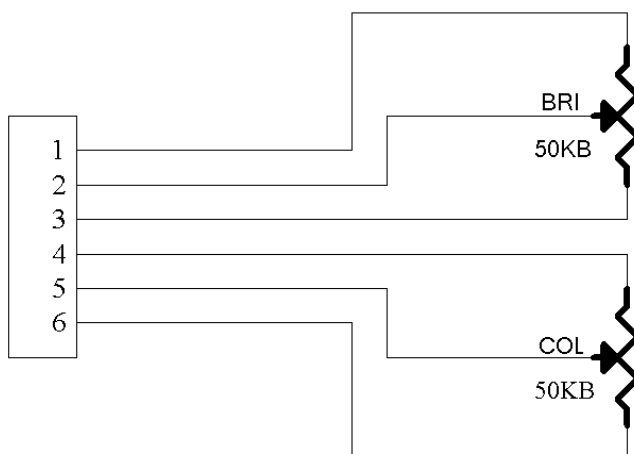
#### 5.1 J201 :

Pin	Symbol	I/O	Function	Remark
1	12V	I	+12V Power Input	
2	GND	-	GND	
3	GND	-	GND	
4	CVBS	I	Video Signal Input	

#### 5.2 J104 :

Pin	Symbol	I/O	Function	Remark
1	BRI+	I	Brightness +	
2	BRI	I	Brightness adjustment	
3	BRI-	I	Brightness -	
4	COL+	I	Color +	
5	COL	I	Color adjustment	
6	COL-	I	Color -	

potentionmeter spec: 10KB/50KB (Straight line)



### 5.3 J102 :

No	Symbol	I/O/P	Description
1	LED_Cathode	p	LED_Cathode
2	LED_Anode	p	LED_Anode
3	GND	P	Ground
4	VDD	P	power supply (3.3V)
5	R0	I	Red data
6	R1	I	Red data
7	R2	I	Red data
8	R3	I	Red data
9	R4	I	Red data
10	R5	I	Red data
11	R6	I	Red data
12	R7	I	Red data
13	G0	I	Green data
14	G1	I	Green data
15	G2	I	Green data
16	G3	I	Green data
17	G4	I	Green data
18	G5	I	Green data
19	G6	I	Green data
20	G7	I	Green data
21	B0	I	Blue data
22	B1	I	Blue data
23	B2	I	Blue data
24	B3	I	Blue data
25	B4	I	Blue data
26	B5	I	Blue data
27	B6	I	Blue data
28	B7	I	Blue data
29	GND	P	Ground
30	DOT CLK	I	Data Clock
31	DISP	I	Sstandby mode control pin
32	HSYNC	I	Horizontal Synchronous Signal
33	VSYN	I	Vertical Synchronous Signal
34	DEN	I	Data enabling signal
35	NC	-	No Connect
36	GND	P	Ground
37	XR	I/O	Right electrode - differential analog
38	YD	I/O	Bottom electrode - differential analog
39	XL	I/O	Left electrode - differential analog
40	YU	I/O	Top electrode - differential analog

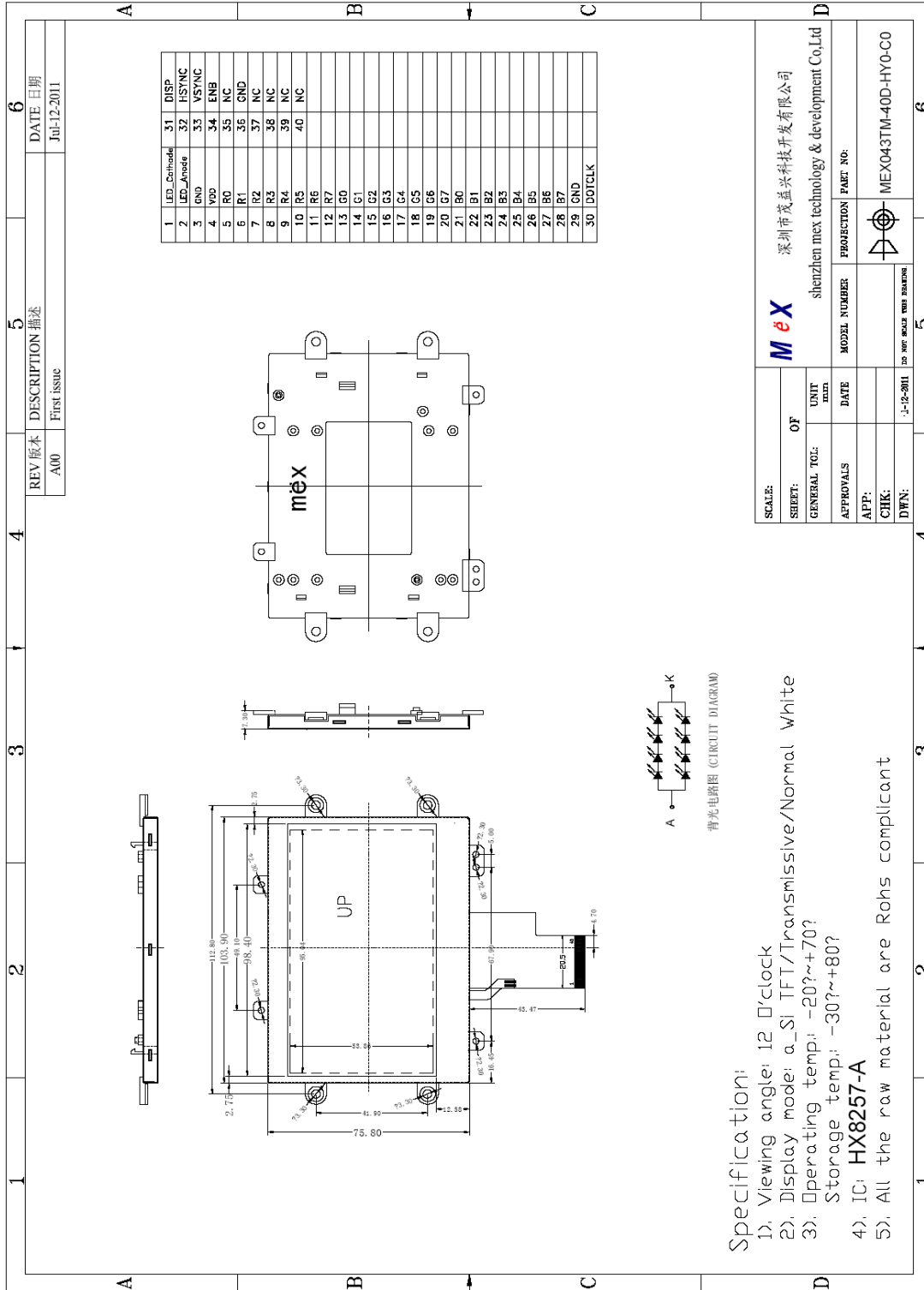
I/O: I: input, O: output, P: power



### 6. Structural Diagram:

#### 6.1 TFT LCD Panel:

1	2	3	4	5	6
REV 版本		DESCRIPTION 描述		DATE 日期	
A00		First Issue		Jul-12-2011	

The diagram shows a detailed view of the TFT LCD panel with dimensions in millimeters. Key dimensions include a total width of 112.90mm, a display area width of 103.50mm, and a height of 75.80mm. It also shows a top view with a 'UP' orientation and a bottom view with a 'mex' logo. A circuit diagram for the backlight is provided, showing a series connection of LEDs and a resistor.

1	LED_Cathode	31	RSP
2	LED_Anode	32	HSYNC
3	GND	33	VSYNC
4	VDD	34	ENB
5	R0	35	NC
6	R1	36	GND
7	R2	37	NC
8	R3	38	NC
9	R4	39	NC
10	R5	40	NC
11	R6		
12	R7		
13	G0		
14	G1		
15	G2		
16	G3		
17	G4		
18	G5		
19	G6		
20	G7		
21	B0		
22	B1		
23	B2		
24	B3		
25	B4		
26	B5		
27	B6		
28	B7		
29	GND		
30	DOTCLK		

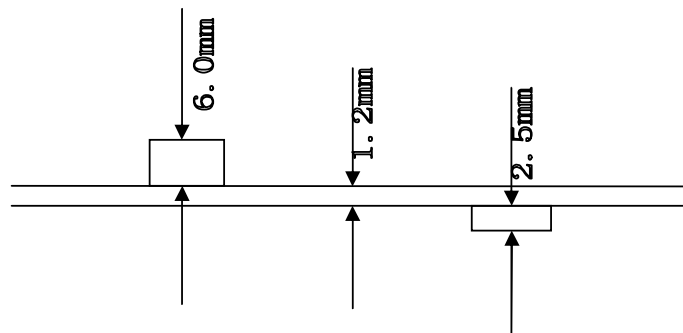
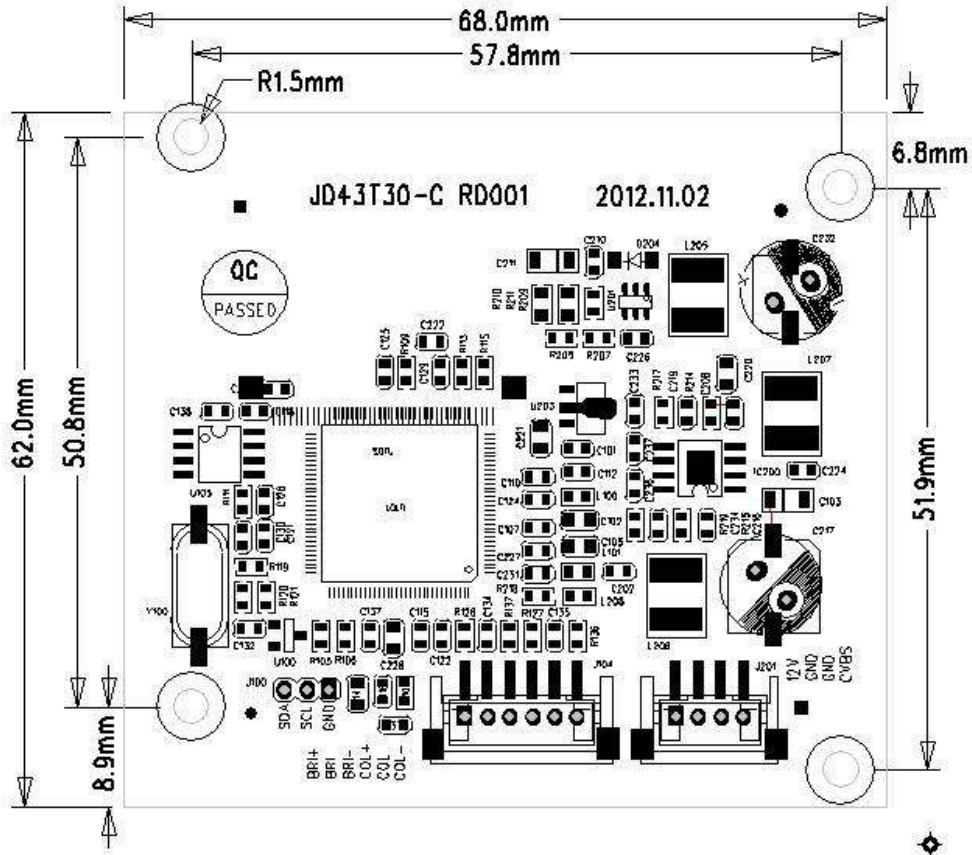
<b>MEX</b>		深圳市茂益兴科技开发有限公司 shenzhen mex technology & development Co.,Ltd	
SCALE:	OF	UNIT	PROJECTION
GENERAL TOL:	DATE	MODEL NUMBER	PAR. NO.
APPROVALS			
CHK:			
DWN:			

SCALE: 1:1-12-2011  
DWN: 1-12-2011

Specification:

- 1). Viewing angle: 12 °clock
- 2). Display mode: a\_Si TFT/Transmissive/Normal White
- 3). Operating temp: -20?~+70?  
Storage temp: -30?~+80?
- 4). IC: HX8257-A
- 5). All the raw material are Rohs compliant

6.2 PCBA dimension: 68.0 (W) × 62.0 (H) × 9.7 (D) mm



### 7. Product Labeling:

MEX043TM-40D-HYO-CO

### 8. Packing & Shipping

#### 1. Package

TBD

#### 2. Shipping & Storage

Avoid to crash and drench.

Do not store the module in surroundings containing organic solvent, chemical corrosive gas, high humidity.

### 9. Precaution

1. The TFT products were had precision testing and ageing test with the instrumentation before transport, so as it no need to adjust again.
2. Please correctly connect power and video signal before you adjust, should be on/off power and video signal to check the image's effect.
3. This Module is electronic product, please notice prevent static.
4. MEX043TM-40D-HYO-CO is made of glass. Place carefully, broken for fear.
5. Don't touch potentionmeter's pin feet when you use the potentionmeter control the product. Because the person have resistance, it will affect potentionmeter's function when touch it.

### 10.4.3 "TFT- LCD PANEL Inspection standard

Aim: Establish the standard of PANLE for inspecting material & progress and for clients' inspection.

Scope: Apply to 4.3"TFT LCD Panel

Content:

#### 10.1. Inspection standard and method

**10.1.1.** The method and determinant of inspecting the Scratch of panel of LCD:

**10.1.1.1.** Inspect vertically (or at 45°angle from left/right) under the light tube (the power is 20 W) in the distance of 30cm to the panel. If there is no scratch, it is "OK". Otherwise "NG".

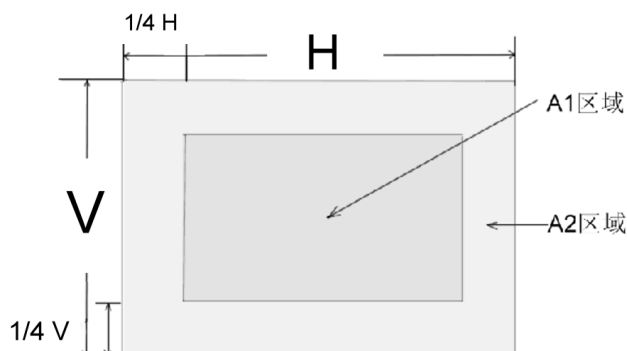
**10.1.2.** The method and determinative for black & white & color spots for the Panel of LCD:

**10.1.2.1** Inspection method

**10.1.2.1.1.** Black Dot: under status of denote light, set the MASK of black spot inspection near the black spot then compare the big and small by eyes.

**10.1.2.1.2.** White Dot: White & Color spots: under status of denote light, set the Mask of black spot inspection on the white spot (or color spot) then inspect them by eyes if it can hide.

#### 10.1.2.2 Division of LCD Panel



**Remark:** A1 Area: The center of the available area for the picture

A2 Area: The edge of the available area for the picture (around the central area)

### 10.1.3. The inspection standard for the spots:

Spot Diameter (mm)		Allowed Area	
		A1 Area	A2 Area
Black Spot	$d \leq 0.15$	Irrespective	Irrespective
	$0.15 < d \leq 0.3$	4	4
	$0.3 < d \leq 0.5$	2	3
	$0.5 < d < 0.8$	0	2
Bright Spot or Color Spot	$d \leq 0.15$	Irrespective	Irrespective
	$0.15 < d \leq 0.3$	3	3
	$0.3 < d \leq 0.5$	1	2
	$0.5 < d < 0.8$	0	1

**Note:**

1. Size: Average Diameter = (Max. Diameter + Min. Diameter) / 2
2. Using information above as a standard in order to judge while the spot is are dense.
3. Black & White spot: To judge the obvious spots through the change of voltage by comparison.
4. Total quantity of Black & white & color spot:  $A1 + A2 \leq 4$ .