

1 GENERAL FUNCTION

- A. TFT-LCD MODULE DRIVE BOARD.
- B. RESOLUTION UP TO 1440X900 @ 75 Hz.
- C. 15 PIN D-SUB VGA CONNECTOR INPUT.
- D. DVI (Digital Video Input) CONNECTOR INPUT (OPTION AL)
- E. LVDS INTERFACE OUTPUT TO PANEL.
- F. OSD (On Screen Display) CONTROL MENU.
- G. SUPPORTING HDCP PROTOCOL.(OPTIONAL)
- H. SUPPORTING DDC/CI PROTOCOL.
- I. SUPPORTING DCR FUNCTION (OPTIONAL)

2. Support PC Timing

Item	Description	H-Freq. (KHz)	V-Freq. (Hz)
1.	VGA640x400	31.480	70.000
2.	VGA640x480	31.649	60.000
3.	VGA720x400	37.469	70.000
4.	VESA 640x480	37.862	72.809
5.	VESA 640x480	37.500	75.000
6.	VESA 800x600	35.156	56.250
7.	VESA 800x600	48.077	72.188
8.	VESA 800x600	46.875	75.000
9.	VESA 1024x768	48.363	60.000
10.	VESA 1024x768	56.476	70.000
11.	VESA 1024x768	60.023	75.000
12.	VESA 1152x864	54.948	60.057
13.	VESA 1152x864	66.095	70.016
14.	VESA 1280 x 768	47.400	60.000
15.	VESA 1280 x 768	60.300	75.000
16.	VESA 1280x960	60.000	60.000
17.	VESA 1280x960	75.000	75.000
18.	VESA 1280x1024	63.981	60.000
19.	VESA 1280x1024	79.977	75.000
20.	VESA 1440x900	59.9	60.000
21.	VESA 1440x900	75	75.000

**** Display Resolution depends on panel spec.

3. Specification

Model	17RP
Panel Compatibility	Compatible with XGA, SVGA, VGA resolution TFT LCD panel from various panel manufactures by Changing some jumpers setting and specified BIOS.
Maximum Resolution	Up to 8 bits per color, total 16.7M Colors
Vertical Refresh Rate	VGA , SVGA ,XGA AND UXGA VESA standard up to 75Hz
Input Source	VGA analog (15 pin D-Sub) ,DVI (option) ,
Dot Clock Maximum (pixel clock)	165 MHz
User Controls	Power On/Off OSD Menu Adjust - Adjust + Auto VOL. + (OPTIONAL) VOL. - (OPTIONAL)
Board Dimension	110 mm x 56 mm
Voltage for LCD Panel	5V, 3.3V DC (Jump Select)
Storage Temperature Limits	Temperature -40C~70C
Operation Temperature Limits	Temperature 0C~40C Humidity : Less than 85%

4. Signal input connections

4-1 VGA Signal Input

Location J3 - 15 pin Hi-Density Female D-SUB

Pin Assign and Definition

Pin No.	SYMBOL	Pin No.	SYMBOL	Pin No.	SYMBOL
1	RED IN	6	R-GND	11	GND
2	GREEN IN	7	G-GND	12	SDA DDC
3	BLUE IN	8	B-GND	13	SYNC. H
4	GND	9	PC 5V	14	SYNC. V
5	GND	10	DET	15	SCL DDC

4-2 DVI Input

Location J4 - 30 pin DVI CONNECTOR

Pin Assign and Definition

Pin No.	SYMBOL	Pin No.	SYMBOL	Pin No.	SYMBOL
1	DATA2-	11	GND	21	NC
2	DATA2+	12	NC	22	GND
3	GND	13	NC	23	CLKa+
4	NC	14	DDC 5V	24	CLKa-
5	NC	15	GND	25	NC
6	DVI_DDC_SCL	16	GND	26	NC
7	DVI_DDC_SDA	17	DATA0-	27	NC
8	NC	18	DATA0+	28	NC
9	DATA1-	19	GND	29	GND
10	DATA1+	20	NC	30	NC

4-3 Power Input

Location – J1 : DC JACK DC=2.5mm OR DC=2.0mm
12V / 2A For 2 Light Inverter or 12V / 3A for 4 Light Inverter

4-4.LVDS OUTPUT

Location – CN3 :2X15 PIN, PITCH 2.0mm

Pin Assign and Definition

Pin No.	SYMBOL	Pin No.	SYMBOL	Pin No.	SYMBOL
1	VLCD for Panel	12	LVDS RXE_2+	23	LVDS RXO_2-
2	VLCD for Panel	13	GND	24	LVDS RXO_2+
3	VLCD For Panel	14	GND	25	GND
4	NC	15	LVDS RXE_CLK-	26	GND
5	GND	16	LVDS RXE_CLK+	27	LVDS RXO_CLK-
6	GND	17	LVDS RXE_3-	28	LVDS RXO_CLK+
7	LVDS RXE_0-	18	LVDS RXE_3+	29	LVDS RXO_3-
8	LVDS RXE_0+	19	LVDS RXO_0-	30	LVDS RXO_3+
9	LVDS RXE_1-	20	LVDS RXO_0+	----	-----
10	LVDS RXE_1+	21	LVDS RXO_1-	----	-----
11	LVDS RXE_2-	22	LVDS RXO_1+	----	-----

4-5 Key Output Connector

Location – CN2A: 8PIN WAFER PITCH 2.0mm 90D

All Key Active Low Level. , All LED Active HI Level , Output Current 10mA MAX

Pin assign and definition

Pin No.	SYMBOL	Pin No.	SYMBOL	Pin No.	SYMBOL
1	MENU KEY	4	UP KEY	7	LED_O
2	AUTO KEY	5	GND	8	POWER KEY
3	DOWN KEY	6	LED_G	9	
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4-6 Inverter Connector

Location – CN1: 6 PIN WAFER PITCH 2.0mm 90D

Pin assign and definition

Pin No.	SYMBOL	Pin No.	SYMBOL
1	GND	4	Inverter Control

2	GND	5	12V
3	Inverter Current Adjust	6	12V

4-6A. Inverter Current Adjust : Range 0 (Inverter Current Max) to 5V (Inverter Current Min)

4-6B. Inverter Control : 5V (Inverter ON) or 0V (Inverter OFF)

Note : If user the AC Power + Inverter SET ,CN1 is 8 PIN WAFER PITCH 2.0mm 90D

Pin assign and definition

Pin No.	SYMBOL	Pin No.	SYMBOL	Pin No.	SYMBOL
1	5V	4	GND	7	12V
2	5V	5	Inverter Current Adjust	8	12V
3	GND	6	Inverter Control		

4-7 Audio Input – CN4 , SCJ368R0NXS0G04G 3P Green or equiv.

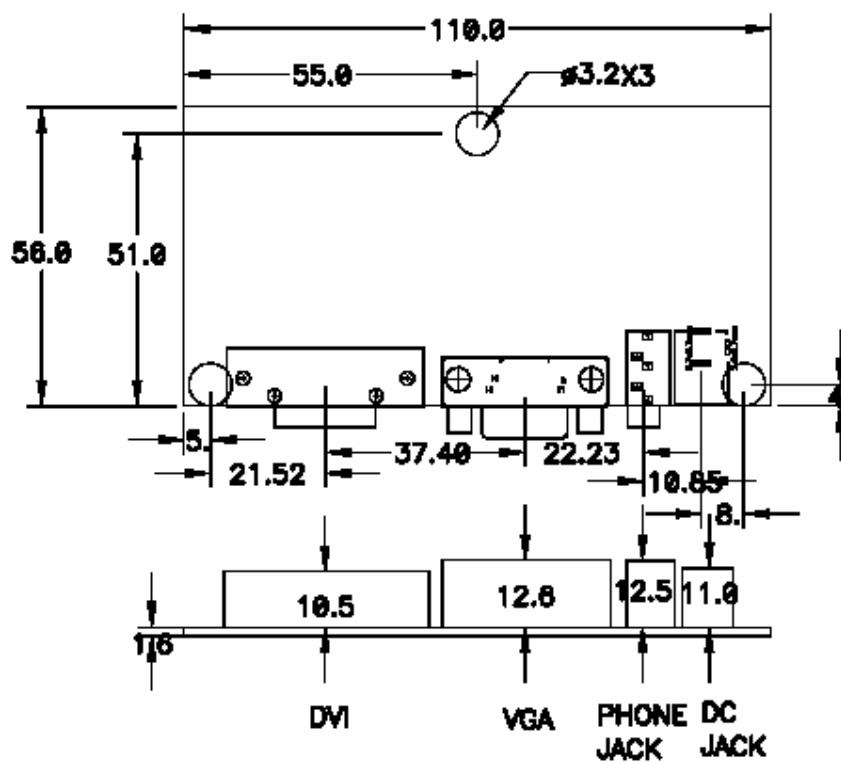
Audio Input 1Vp-p Max.

4-8 Audio Output : CN5, 4 PIN WAFER PITCH 2.0mm 180D

Audio Output 1.6W + 1.6W at 8 Ohm

Pin	Signal
1	R+
2	R-
3	L+
4	L-

5. PCB DIMENSION

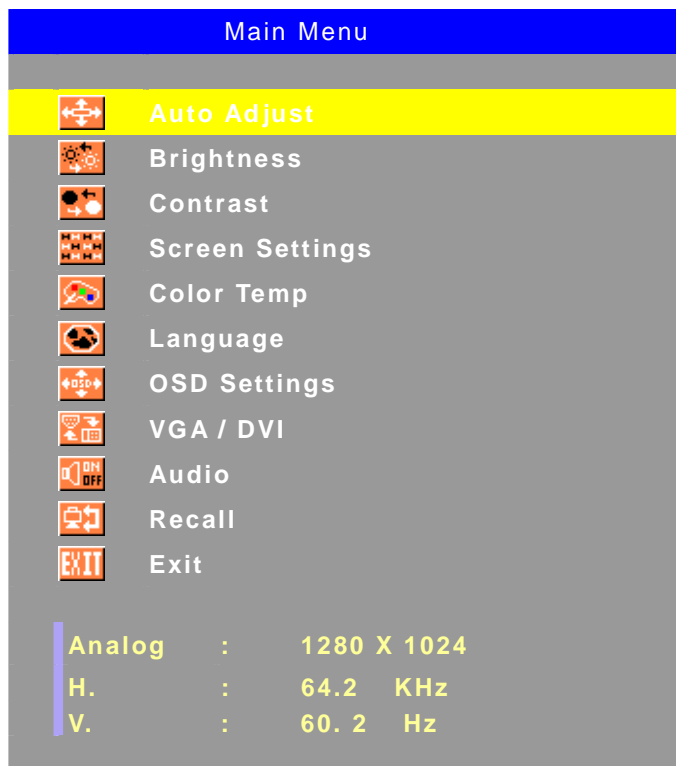


MODEL : 17RP UNIT :mm

6.OSD MENU

1. Main Menu :

If push the “MENU” key the screen will appear this main menu page, you can use the “UP” or“ADJ. +” AND “Down” or “ADJ. -“ key (Shown in Pic1) to select the function you need.



The end of this page will be shown the working resolution and frequency.

a. Auto Adjust

If select this function on OSD MAIN MENU and push the MENU key.

In this function, that will be activated the auto adjusting for the picture.



b. BRIGHTNESS

If select BRIGHTNESS Setting function, that will into the sub -page to adjust the display's function.



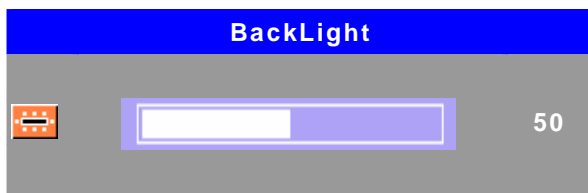
b-1. Brightness

If select Brightness function , you can push ADJ+ or ADJ- key to increase or decrease offset setting.



b-2 Backlight

If select BackLight function , you can push ADJ+ or ADJ- key to increase or decrease backlight current of the inverter.

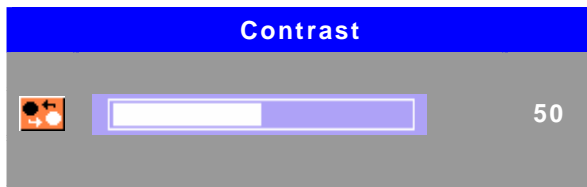


c. Contrast

If select CONTRAST function on OSD MAIN MENU and push the MENU key.

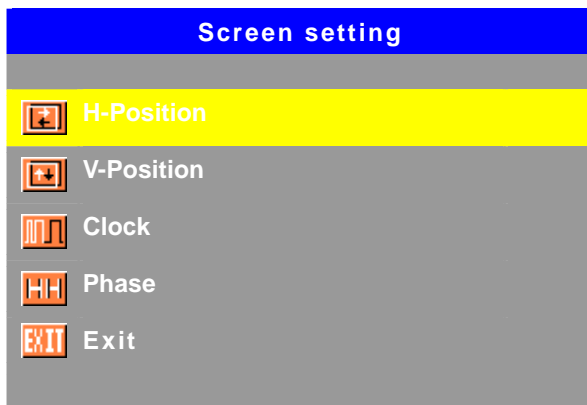
Contrast

If select the Contast function, you can push ADJ+ or ADJ- key to increase or decrease video gain of the picture.



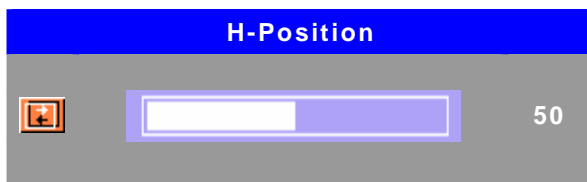
d. Screen Setting

If select Screen Setting function , that will into the sub-page to adjust display's function of the picture.



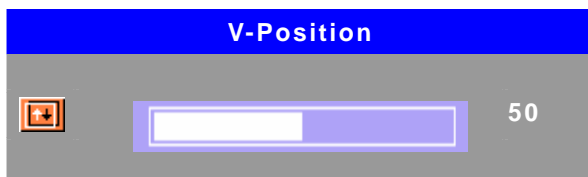
5-1 H-Position

If select H Position function, you can push ADJ+ or ADJ- key to shift to Right or Left of the picture.



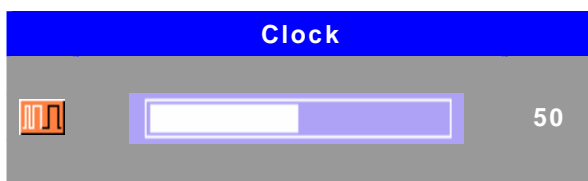
5-2 V-Position

If select V Position function, you can push ADJ+ or ADJ- key to shift to Up or Down of the picture.



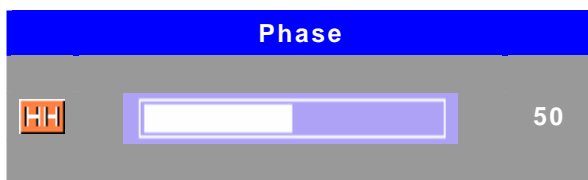
5-3 Clock

If select Clock function, you can push ADJ+ or ADJ- key to increase or decrease video H Size of the picture.



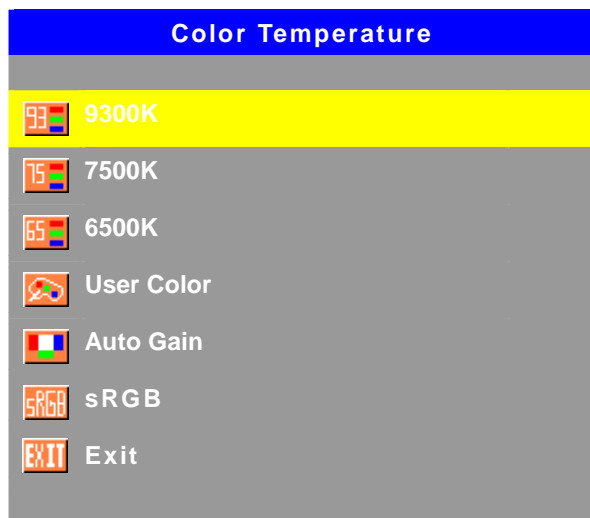
5-4 Phase

If select Phase function, you can push ADJ+ or ADJ- key to increase or decrease video Quality of the picture.



e. Color Temperature

If select COLOR TEMPERTURE function , that will into the sub-page to adjust the display color of the picture



6-1 9300K

If select 9300K function, you can select color temperature 9300K of the picture

6-2 7500K

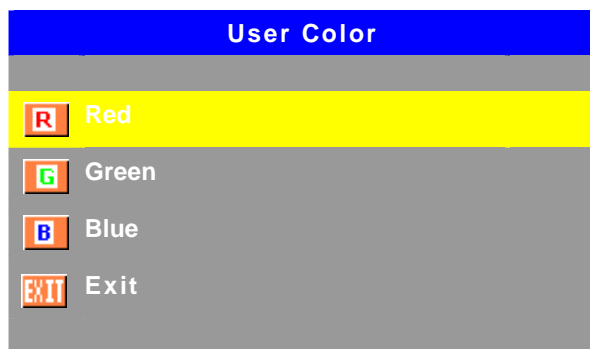
If select 7500K function, you can select color temperature 7500K of the picture

6-3 6500K

If select 6500K function, you can select color temperature 6500K of the picture

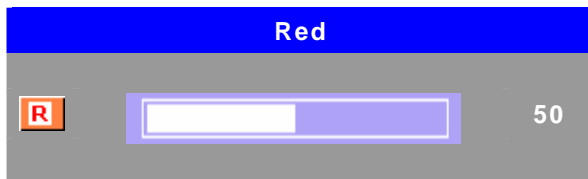
6-4 User Color

If You select User Color function, that will into the sub-page to adjust the display user color of the picture



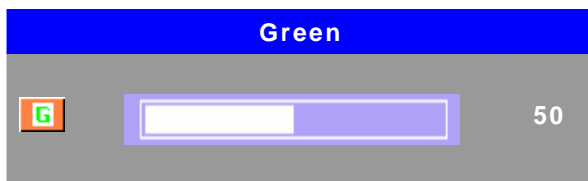
6-4-1 Red

If select Red function , you can push ADJ+ or ADJ- key to increase or decrease video Red contrast of the picture.



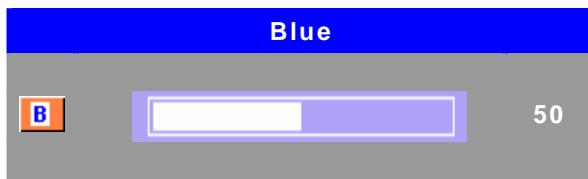
6-4-2 Green

If select Green function , you can push ADJ+ or ADJ- key to increase or decrease video Green contrast of the picture.



6-4-3 Blue

If select Blue function , you can push ADJ+ or ADJ- key to increase or decrease video Blue contrast of the picture.



6-5 Auto Gain

If select Auto Gain function , that will be activated the auto adjusting input video color level for the picture.

6-6 sRGB

If select sRGB function ,you can run sRGB function.

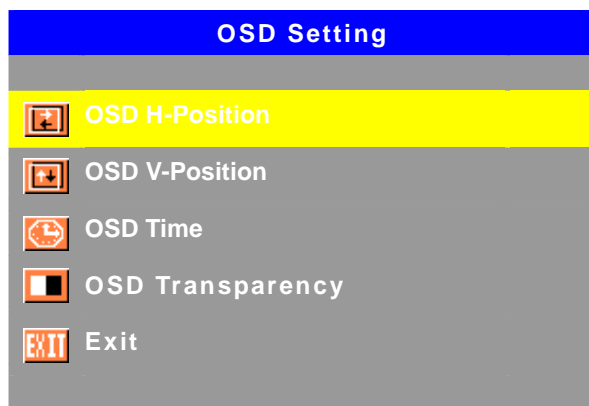
f. Language

In this mode, that could into the sub-page (Shown in Pic7) to select the language for display



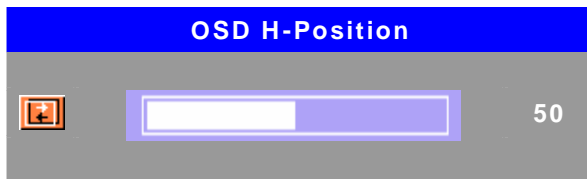
g. OSD Setting

If select OSD Setting function , that will into the sub-page to adjust the display's function for OSD.



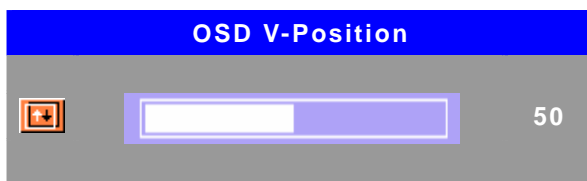
g-1 OSD H-Position

If select OSD H Position function , you can push ADJ+ or ADJ- key to shift to Right or Left OSD menu of the screen.



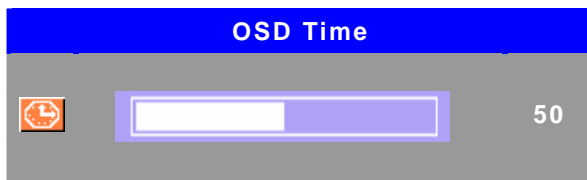
g-2 OSD V-Position

If select OSD V Position function , you can push ADJ+ or ADJ- key to shift to Up or Down OSD menu of the screen.



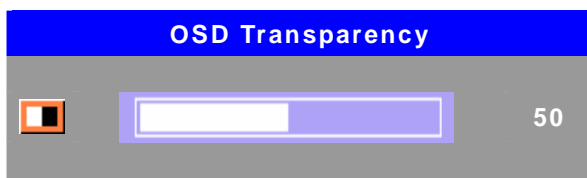
g-3 OSD Time

If select OSD V Position function , you can push ADJ+ or ADJ- key to increase or decrease OSD menu display time of the screen.



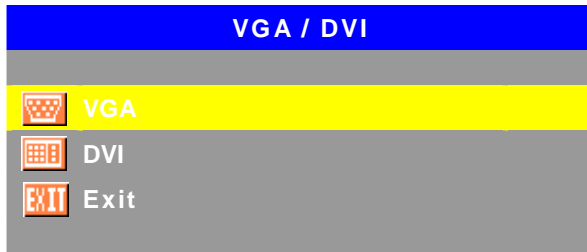
g-4 OSD Transparency

If select OSD V Position function , you can push ADJ+ or ADJ- key to increase or decrease OSD menu Transparency of the screen.



h. VGA/ DVI

If select VGA/DVI function , that will into the sub-page to select input Source



h-1 VGA :

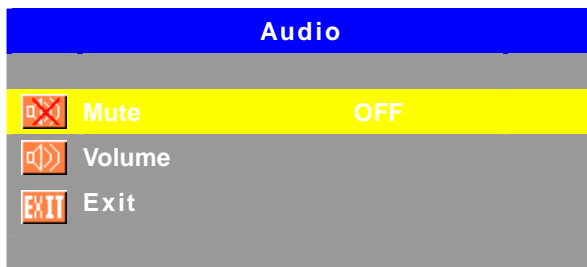
If select VGA function , you can change input source from VGA Connect.

h-2 DVI :

If select DVI function , you can change input source from DVI Connect.

i.Audio

If select AUDIO function , that will into the sub-page (Shown in Pic10) to adjust the audio function.



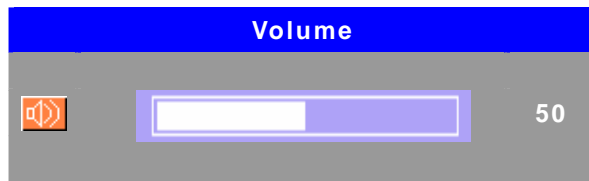
i-1 Mute

If select Mute function, you can select audio mute is ON or OFF.



i-2 Volume

If select Volume function, you can push ADJ+ or ADJ- key to shift to increase or decrease Audio volume.



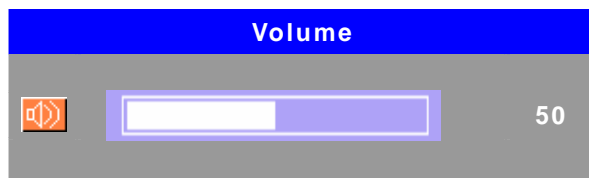
j Recall :

If select Recall function, that could recall all of pre-setting value.

k. Hot Key

k-1. Volume :

That could push the "Adj +" or "UP" key to switch the mode of audio mute.



k-2 : Mute

That could push the "Adj -" or "DOWN" key to adjust the volume of audio output.

