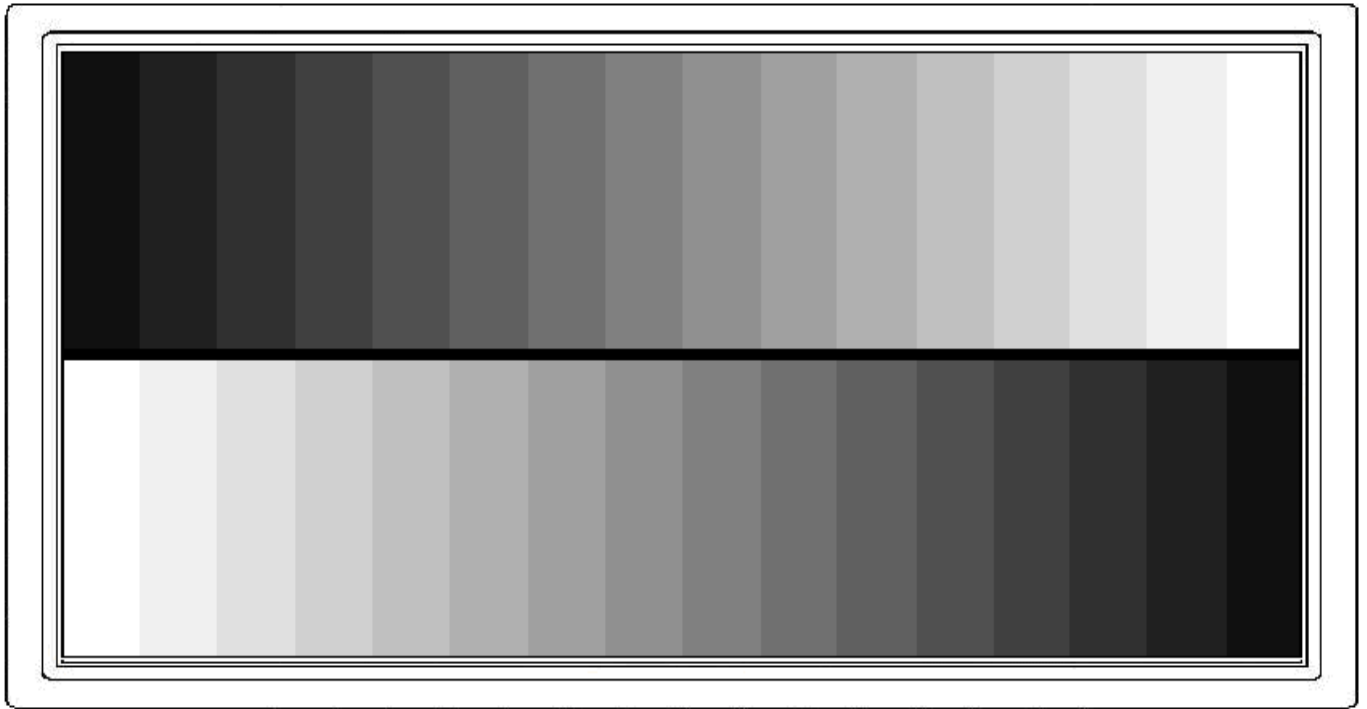


COLOR TFT-LCD MONITOR



YING TCHIN ELECTRONIC CO., LTD

Content

Record of Revision	2
Specifications	3~4
Operation Introduction	
OSD Buttons	5
OSD Operation Appearance	6~10
Signal Connecting and Connector Directions	
Input Instruction	11~12
Display Modes	13
Drawing	14

Record of Revision

Model Number	Date	Old Description	New Description
	2011/08/03	First Edition for Customer	All

Specification of 22 TFT-LCD MONITORS

Product Number: RLMV22-OFC3IPWE

Display Characteristics

Model Name		G220SW01 V0
ITEMS	Unit	SPECIFICATIONS
Screen diagonal	[inch]	22"
Outline dimension	[mm]	525.7(W) x320(H) x50.2(D)
Display Area	[mm]	473.76(H) x 296.1(V)
Resolution	[pixel]	1680 (H) x R,G, B x1050 (V)
Pixel Pitch	[mm]	0.282(H) x 0.282(V)
Pixel Arrangement		R,G, B vertical stripe
Display Mode		P-MVA Mode, Normally Black
Typical white Luminance	[cd/m ²]	300 (Typ)
Power Consumption	[Watt]	54
Contrast Ratio		1000:1 (Typ)
Electrical Interface		Dual Channel LVDS
Support Color		16.7 M colors
Surface Treatment		Anti-Glare, Hardness 3H
Optical Response Time	[msec]	8(Typ, Gray to Gray)
RoHS Compliance		RoHS Compliance
Temperature Range Operating Storage (shipping)	[°C]	0 ~ +50 -20 ~ +60

Optical Characteristics

ITEM	Unit	Conditions	Min.	Typ.	Max.
Viewing Angle	[degree]	Horizontal (Right)	75	89	-
		Horizontal (Left)	75	89	
		Vertical (Up)	75	89	-
		Vertical (Down)	75	89	
Response Time	[msec]	Rising+Falling	-	16	19
Color/Chromaticity Coordinates Coordinate (CIE)	-	Red x	Typ.-0.03	0.646	Typ.+0.03
		Red y		0.339	
		Green x		0.290	
		Green y		0.603	
		Blue x		0.145	
		Blue y		0.070	
		White x		0.313	
		White y		0.329	
White Luminan @CCFL=7.5mA	[cd/m]	-	240	300	-
Contrast Ratio	-	-	600	1000	-

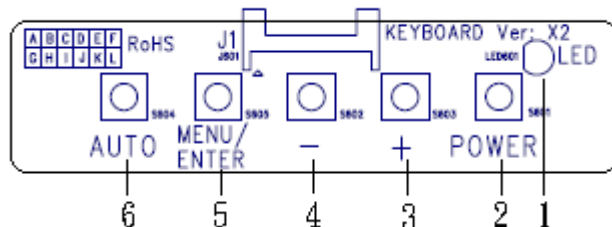
Monitor Characteristics

Resolution	Common	VGA/SVGA/XGA/SXGA/WXGA/WXGA+/WSXGA+
Operation	Function Button	5
	OSD Adjustment	Yes
Power	AC input	100 ~ 240V/ 50~60 Hz 1.7A
	DC input	N/A
Signal Cable	15pin D-sub / DVI (optional)	
Total Weight	5.3 kg	

Operation Instruction

OSD Buttons

Front View :



1. Power LED Light: Green Light is with the signal; Red Light is out of signal or extraordinary.
2. Power Switch: Press the button to turn on/off the display.
3. 「+」: Press the button to adjust the increasing value of selected OSD control option.
4. 「-」: Press the button to adjust the decreasing value of selected OSD control option.
5. 「MENU/ENTER(EXIT)」: 1. Call the Menu
2. Enter or exit the options.
6. 「AUTO」: Adjust the display to the best position.

Swift Keys

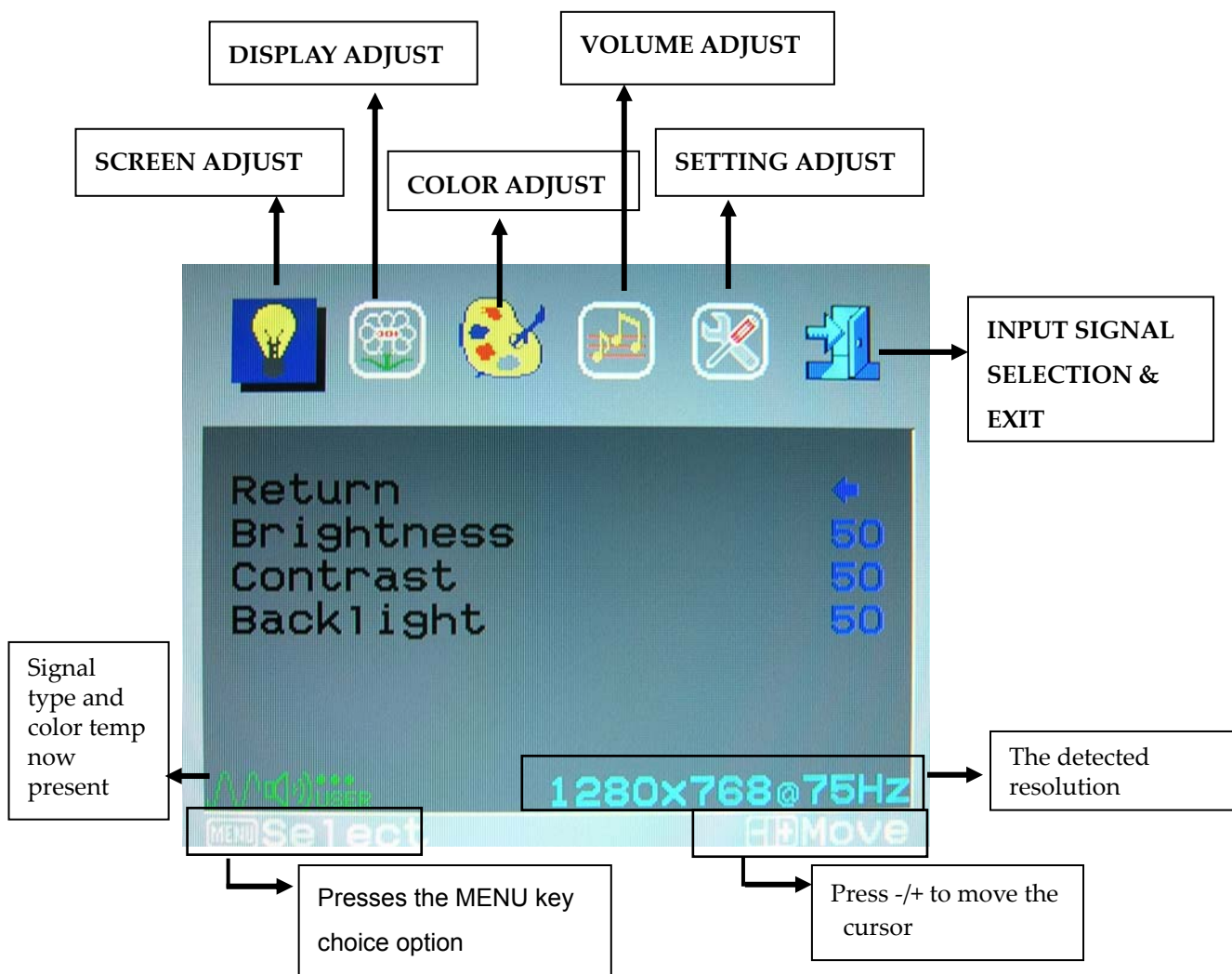
1. 「+」: Turn on/off the sound. (Automatically turn off in 8 seconds)
2. 「-」: Enter sound value adjustment.
 - (1) Select 「+」 to turn up the volume .
 - (2) Select 「-」 to turn down the volume
 - (3) Select MENU/ENTER can adjust Volume, Brightness and Contrast by pressing 「+」 or 「-」 to increase or decrease the values.

Key Board Connector

Type Part Number : for (J1/J601) STM M24268R			
Pin#	Signal Name	Pin#	Signal Name
1	GND	2	MENU
3	AUTO	4	UP(+)
5	DOWN(-)	6	LED(R)
7	LED(G)	8	MODE

OSD Operation Appearance

Press 「MENU」 and the screen will appear the following OSD icons:

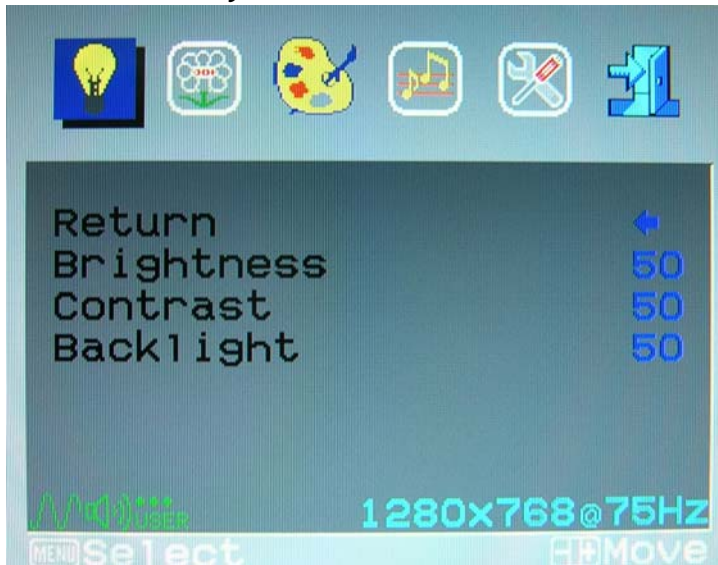


Adjustments

Press 「+」, 「-」 to increase or decrease the light bar for moving to the right icon you want to adjust. Press 「MENE ENTER/EXIT」 again to enter in the selected item. Then, the selected bar will become yellow under the item. Press 「+」 or 「-」 to select the item and press 「MENE ENTER/EXIT」 again, the value will turn red, press 「+」 or 「-」 to increase or decrease the value. When it is finished, press 「MENE ENTER/EXIT」 to exit; the red value will turn back to yellow. Then you can continue to next adjustment.

Content Explanations :

SCREEN ADJUS



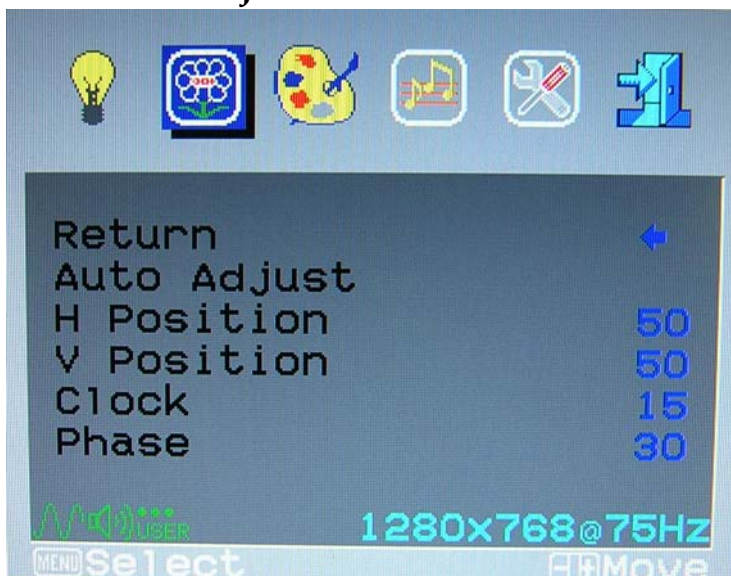
RETURN : Back to previous menu.

BRIGHTNESS : Adjust the brightness of the screen.

CONTRAST : Adjust the contrast level of brightness and darkness of the screen.

BACKLIGHT : Adjust the lightness of backlight.

DISPLAY ADJUST



RETURN : Back to previous menu.

AUTO ADJUST : Adjust the signal automatically.

H-POSITION : Move the screen image left or right

V-POSITION : Move the screen image up or down.

CLOCK : Adjust the size of horizontal image (left and right sides).

PHASE : Adjust the image distortion appearing as horizontal "noise" on the screen.

COLOR ADJUST



RETURN : Back to previous menu.

AUTO COLOR : Adjust the colors automatically.

COLOR : Adjust color temperature.

9300K : Asia Area

USER : User's setting.

6500K : Europe and North American Area

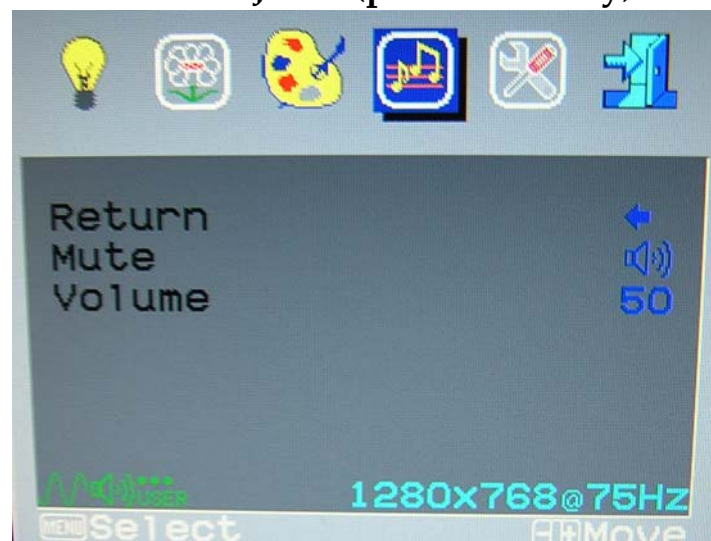
R : Red adjustment. User's setting Remark 1

G : Green adjustment. User's setting Remark1

B : Blue adjustment. User's setting Remark1

Remark 1.: When moving the light bar to the selected item, press ENTER (MENU ENTER/EXIT), the bar and value will become yellow (or red), then press 「+」 or 「-」 to adjust the value.

VOLUME ADJUST (pick out & buy)

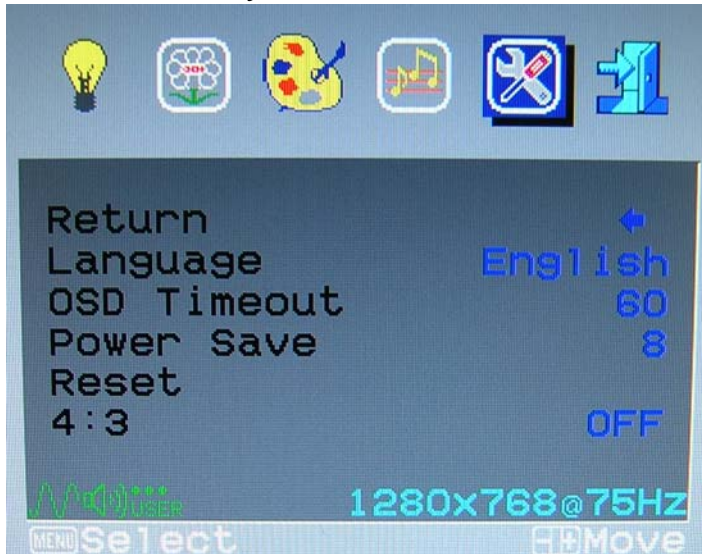


RETURN : Back to previous menu.

MUTE : Turn mute on/off

VOLUME : Volume Adjustment

SETTING ADJUST



RETURN : Back to previous menu.

LANGUAGE : Select Languages Remark2.

OSD TIMEOUT : Show the OSD menu time-out.

POWER SAVE : Time adjustment in standby mode. Remark3.

RESET : Return all the adjustment to original setting.

It can adjust the display to 4:3 (non-wide screen) or 16:9 (wide screen). Remark4.

Remark 2:

English

Deutsch : German

Français : French

Español : Spanish

Italiano : Italian

Portuguese : Portuguese

中文簡體 : Simplified Chinese

中文繁體 : Traditional Chinese

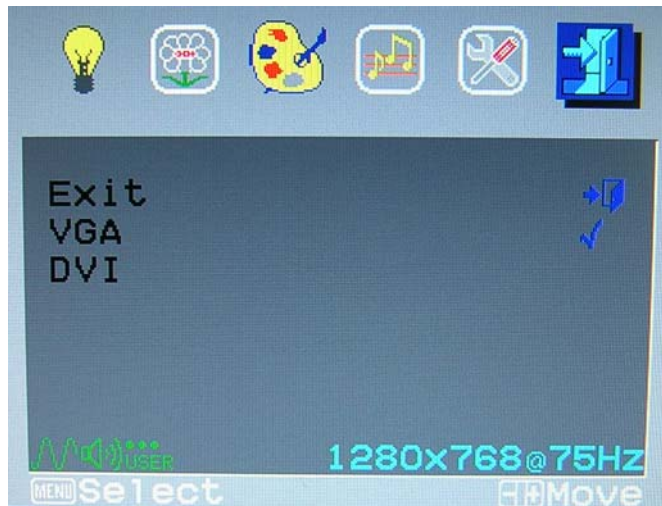
한국어 : Korean

日本語 : Japanese

Remark 3: When the power is on, input signal cannot be found or out of signal, the system will be in standby mode in few seconds.

Remark 4: In 4:3 mode, the image will retain the original 4:3 image, but there will be 2 extra bars shown at the right and left sides. The original 4:3 image will extend to full screen in 16:9 mode.

INPUT SIGNAL SELECTION & EXIT



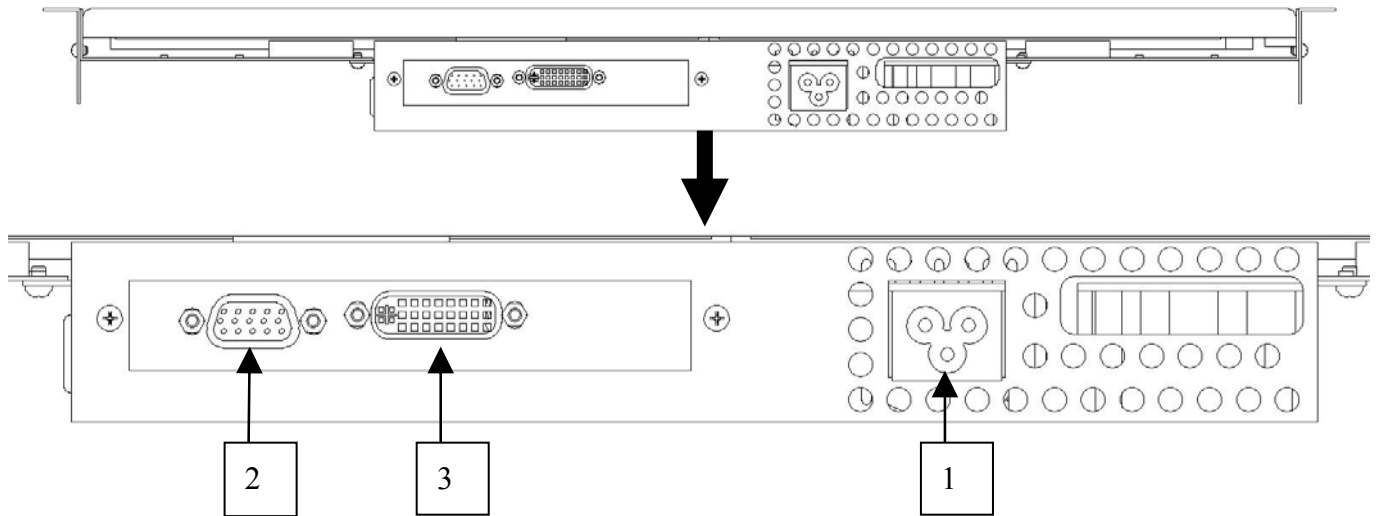
EXIT : Exit OSD menu.

VGA : Input analog signal.

DVI : Input digital signal.

Signal Connecting and Connector Directions

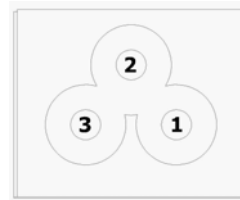
Input Instruction



1. AC power input : AC 90-240V IN/ input socket.

Terminal direction

1. AC – (N) neutral wire
2. AC – (G) ground wire
3. AC – (L) live wire



2. VGA signal input : connect VGA D-Sub connector

Terminal direction

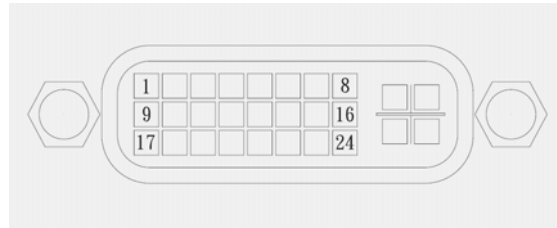
1. R-IN
2. G-IN
3. B-IN
4. NC
5. NC
6. GND
7. GND
8. GND
9. NC
10. GND
11. NC
12. SDA
13. H.SYNC
14. V.SYNC
15. SCL



3. DVI Signal input : connect digital DVI signal connector

Terminal direction

1. TMDS Data 2 –
2. TMDS Data 2 +
3. TMDS Data 2 / 4 Shield
4. TMDS Data 4 –
5. TMDS Data 4 +
6. TMDS Clock
7. DDC Data
8. Analog Vertical Sync
9. TMDS Data 1 –
10. TMDS Data 1 +
11. TMDS Data 1 / 3 Shield
12. TMDS Data 3 –
13. TMDS Data 3 +
14. +5V Power
15. Ground (+5, Analog H/V Sync)
16. Hot Plug Detect
17. TMDS Data 0 –
18. TMDS Data 0 +
19. TMDS Data 0 / 5 Shield
20. TMDS Data 5 –
21. TMDS Data 5 +
22. TMDS Clock Shield
23. TMDS Clock +
24. TMDS Clock –



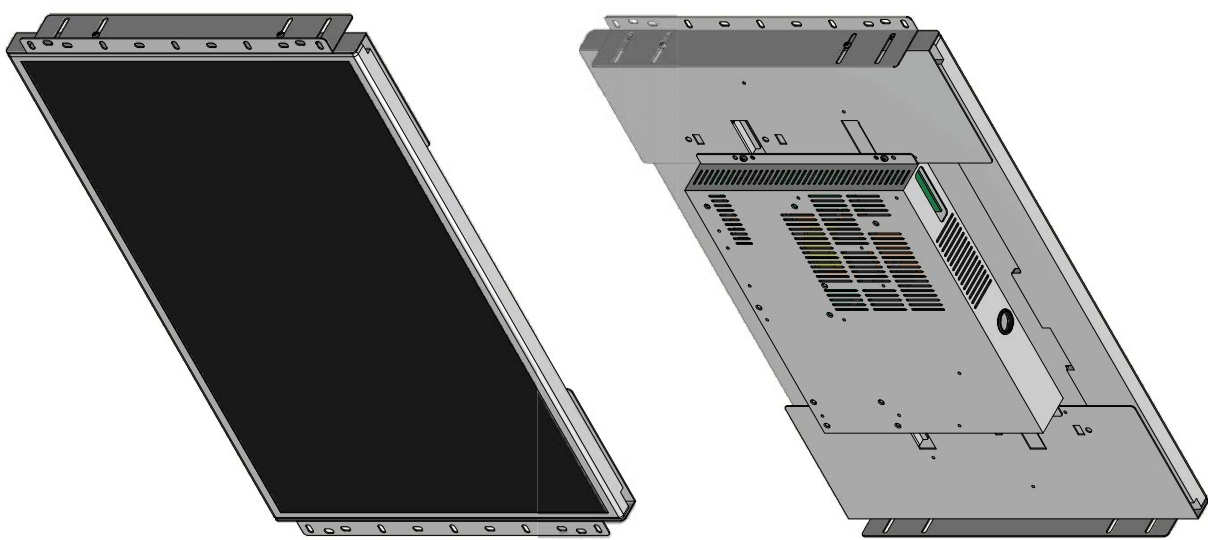
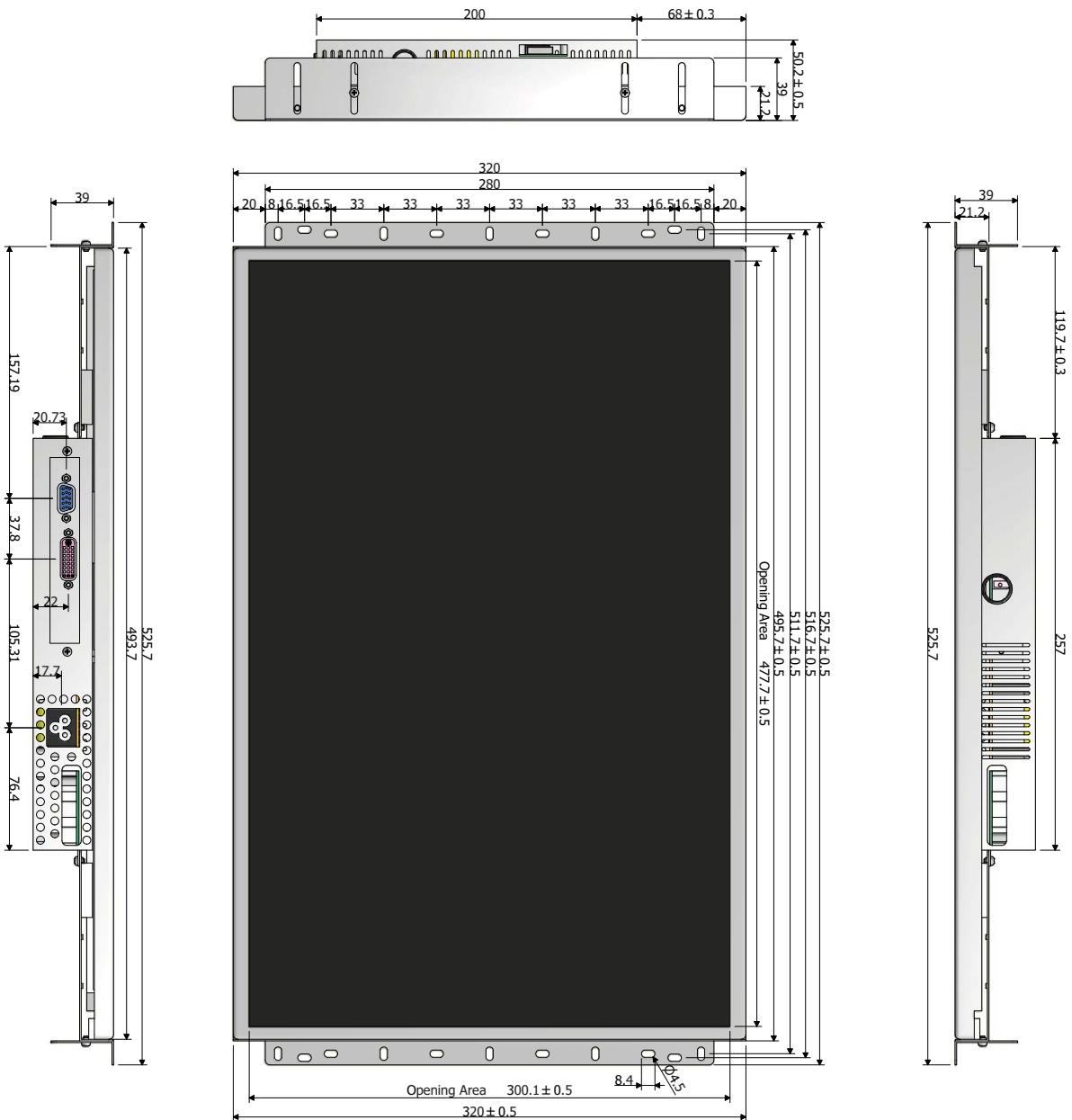
Display Mode (Timing table)

The original setting from factory is as follow :

Remark 1. As the chart shown, all the information is only for refernce. The range of the exact resolution depends on the panel and condition of selection.

LCD SIZE (16:10)	Model	Resolution	Horizontal Frequency	Refresh Rate	Pixel Frequency	Standard Type
2.2"	1	640X480/60	31.5 KHz	60.0 Hz	25.175 MHz	Industry Standard
	2	640X480/72	37.9 KHz	72.0 Hz	31.500 MHz	VESA Standard
	3	640X480/75	37.5 KHz	75.0 Hz	31.500 MHz	VESA Standard
	4	800X600/56	35.2 KHz	56.0 Hz	36.000 MHz	VESA Standard
	5	800X600/60	37.9 KHz	60.0 Hz	40.000 MHz	VESA Standard
	6	800X600/72	48.1 KHz	72.0 Hz	50.000 MHz	VESA Standard
	7	800X600/75	46.9 KHz	75.0 Hz	49.500 MHz	VESA Standard
	8	848X480/60	31.0 KHz	60.0 Hz	33.750 MHz	VESA Standard
	9	1024X768/60	48.4 KHz	60.0 Hz	65.000 MHz	VESA Standard
	10	1024X768/70	56.5 KHz	70.0 Hz	75.000 MHz	VESA Standard
	11	1024X768/75	60.0 KHz	75.0 Hz	78.750 MHz	VESA Standard
	12	1280X768/60	47.8 KHz	60.0 Hz	79.500 MHz	CVT
	13	1280X768/75	60.3 KHz	75.0 Hz	102.25 MHz	CVT
	14	1280X1024/60	64.0 KHz	60.0 Hz	108.00 MHz	VESA Standard
	15	1280X1024/75	80.0 KHz	75.0 Hz	135.00 MHz	VESA Standard
	16	1360X768/60	4.77 KHz	60.0 Hz	85.500 MHz	CVT
	17	1366X768/60	48.0 KHz	60.0 Hz	76.800 MHz	CVT
	18	1440X900/60	55.9 KHz	60.0 Hz	106.50 MHz	CVT
	19	1680X1050/60	65.3 KHz	60.0 Hz	146.25 MHz	CVT

Drawing



設計者	修改者	修改日期	日期	單位
Moore			2011/8/3	mm
Office: No.2-3Eassth St, Kaohsiung city 806, Taiwan, R.O.C				
TEL: +886-7-822-9987				
FAX: +886-7-822-9957				
web: www.yingtech.com.tw				
Mail: service@yingtech.com.tw				
名稱:			22" 3LE + POWER + L (we)	版本
圖號:			LM22-20110803	圖紙
			A	1 / 1