



LITEMAX AD5621GA

AD Board

(1st Edition 8/06/2007)

All information is subject to change without notice.

Approved by	Checked by	Prepared by
David	Sharline	Eric

LITEMAX Electronics Inc.
8F-2, No.133, Lane 235, Bau-chiau Rd.,
Shin-dian City, Taipei County, Taiwan R.O.C.
Tel : 886-2-8919-1858
Fax: 886-2-8919-1300
Homepage: <http://www.litemax.com.tw>

Record of Revision

Version and Date	Page	Old description	New Description	Remark

Contents

Record of Revision	2
Contents.....	3
General Description	4
AD board outline and Dimension	5
Supported Timing (*by your panel resolution)	6
I/O connect define	7
Power Jack	7
OSD menu	11

We developed this A/D board to support industrial high brightness and commercial applications. This A/D board has many functions. It has external luminance sensor, a surface mounted VR button to control the brightness, fan rotation and thermal sensor.

General Description

- Max Resolution Up To WXGA 60Hz
- LVDS Output
- Support Panel DC5V or 3.3V Output
- Automatic External Fan Control
- OSD Control
- Inverter 0~5V Dimming Control
- 2Wx2 Audio Output
- Input Power 12V

- Analog signal Input(RGB)
- *External V.R. brightness control
- *External light sensor brightness control

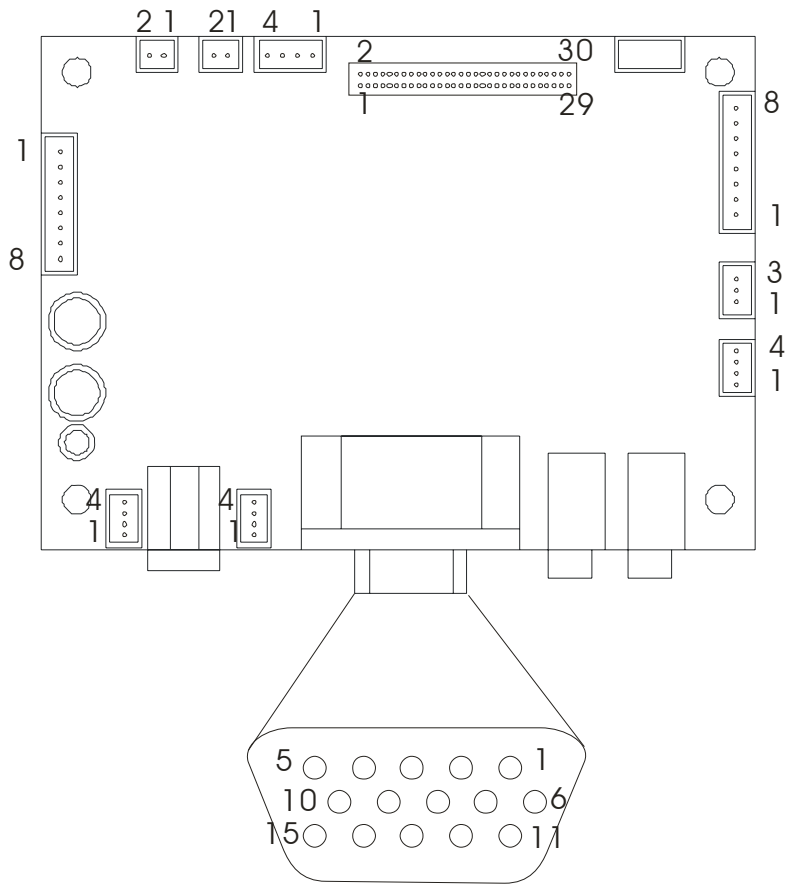
- cooling FAN power connector

Supported Timing (*by your panel resolution)

The following table displays optimum quality modes that the LCD monitor provides. If the other video modes are used, the monitor will stop working or display a poor quality picture.

TIMMING	
MODE	RESOLUTION
VGA	640x480@60Hz
	640x480@72Hz
	640x480@75Hz
SVGA	800x600@56Hz
	800x600@60Hz
	800x600@72Hz
	800x600@75Hz
XGA	1024x768@60Hz
	1024x768@70Hz
	1024x768@75Hz
SXGA	1280x1024@60Hz
	1280x1024@70Hz
	1280x1024@75Hz
WXGA	1366x768@60Hz

I/O connect define



Power Jack

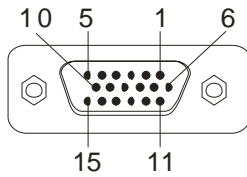
J1. DC12V :center +12V

J9. DC 12V I/O

Pin number.	descriptions
1	GND
2	GND
3	12V
4	12V

CN6. Video Input Pin Assignment

15pin Mini D-sub connector.



Pin No.	Signal Connector
1	Red Video Signal
2	Green Video Signal
3	Blue Video Signal
4	N.C.
5	Ground
6	Ground for red video signal
7	Ground for green video signal
8	Ground for blue video signal
9	TX
10	Ground
11	RX
12	DDC data
13	Horizontal sync signal
14	Vertical sync signal
15	DDC clock

J8. Phone Jack in

JP1. Speaker

Pin number.	descriptions
1	R
2	GND
3	L
4	GND

J7. V.R. brightness control

Pin number.	descriptions
1	3.3V
2	Linear voltage input
3	GND

J6. Light sensor

Pin number.	descriptions
1	Linear signal input
2	GND

CN4. Keypad control

Pin number.	descriptions
1	Power on
2	Led G
3	Led R
4	DOWN

5	UP
6	MENU/SELECT
7	AUTO TUNE
8	GND

J5. EXT. power

Pin number.	descriptions
1	+5V
2	+5V
3	GND
4	GND

J3.J4. FAN

Pin number.	descriptions
1	12V
2	GND

J2. Inverter control

Pin number.	descriptions
1	Inverter on/off 0/5V
2	Brightness control 0~5V
3	GND
4	GND
5	GND
6	+12V
7	+12V
8	+12V

CN3. LVDS output

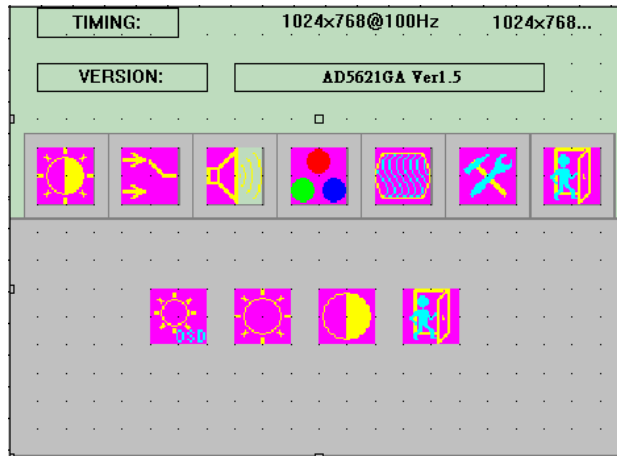
Pin number.	descriptions
1	RXO0+
2	RXO0-
3	RXO1+
4	RXO1-
5	RXO2+
6	RXO2-
7	RXOC+
8	RXOC-
9	RXO3+
10	RXO3-
11	GND
12	GND
13	RXE0+
14	RXE0-
15	RXE1+
16	RXE1-
17	RXE2+
18	RXE2-
19	RXEC+
20	RXEC-
21	RXE3+
22	RXE3-
23	GND

24	GND
25	GND
26	GND
27	GND
28	P_VCC
29	P_VCC
30	P_VCC

OSD menu

Here are some instructions for you to use the OSD (On Screen Display). By pressing the “menu”, you will see the below picture.

Timing shows resolution, H-frequency, and V-frequency of the panel. Version shows the firmware control version. This 2 information is not changeable by user.



There are 7 sub pages inside the OSD manual, Brightness, Signal select, Sound, Color, Image, Tools, and Exit.

When you press “menu” button, you enter the “Brightness” sub page. You will see 4 selections:

 press "menu"  press "menu"  press "menu"  press "menu"



OSD Brightness:



press "right" key



press "menu" once, you can go into adjust the brightness. Press "left" you can dim down the brightness to "0", while press "right" you can increase the brightness to "100".



Ambient light sensor: press this Icon, must to accompany with Litemax ambient light sensor to auto dimming.(optional)



Potentiometer: press this icon, adjust VR function.(optional)



Ambient light sensor with OSD offset: press this Icon



Press "right" key



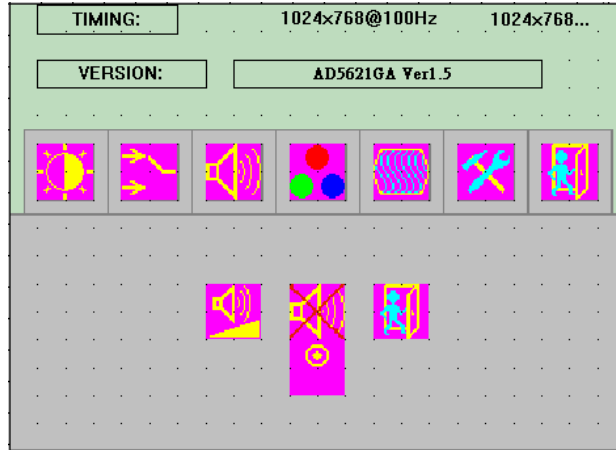
Press "menu" once, you can adjust min. luminance to to set the lowest level of brightness for light sensor. (optional)



Contrast: Press “menu” and “right” you can adjust the contrast from “0” to “100” by pressing the “left” and “right”.



Exit: You can exit this sub menu back to normal screen.



There are 3 options for “Sound” sub page.



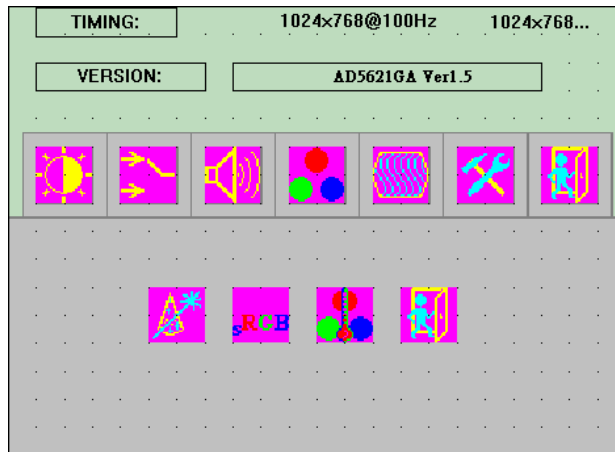
Audio Volume: Audio volume adjustment.



Mute: You can mute the speaker by pressing this option.



Exit: back to the normal screen.



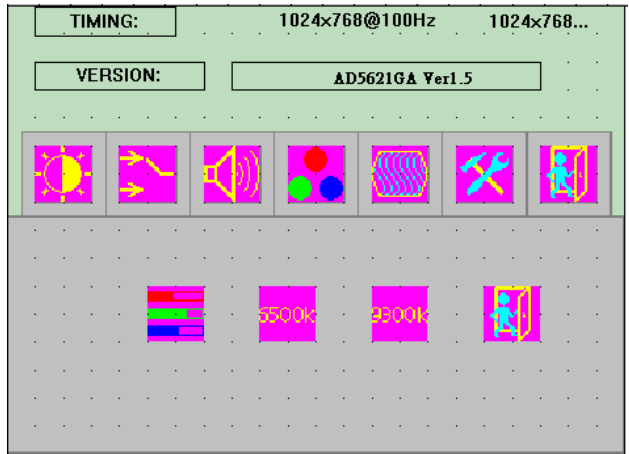
Pressing the “ menu” and “ right”, you can go to “ Color” sub page.



Auto Color: by press this “Auto Color” option, you can get the optimal color performance.



sRGB: Windows standard color setting.



Color Temperature: You can have 3 options in this selection.



Color Temperature User



Color Temperature_6500K



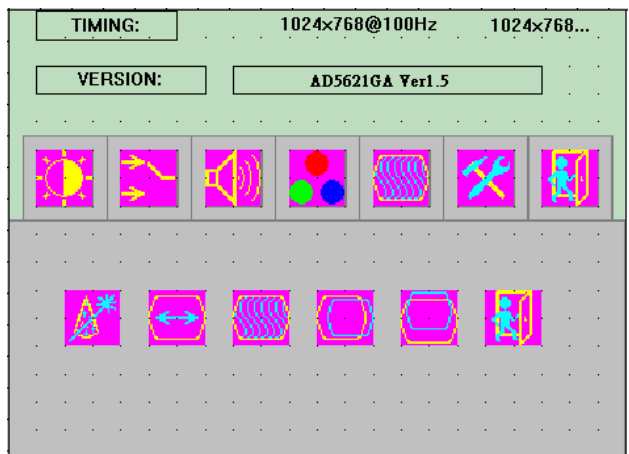
Color Temperature_9300K

“user mode”, “6500K” (Warm color scheme), “9300K (Cold color scheme).
Default is “user”, and inside all “R”, “G”, and “B” are set “100”



Exit: back to the normal screen.

Go into the “Image” page, you can see below picture.



Auto just: Pressing this option, the AD5621 will adjust the optimal frequency of horizontal and vertical. You will see “Auto tune....” On the screen for around 3 seconds.



Clock: If you are not satisfied about the Autotune result, you can adjust manually by “Clock”. The screen will be “wider” if you adjust this function.



Phase: If you see “double image” on characters, you can adjust “Phase” to make it perfect image.



HPos: You can shift the screen horizontally by this function.

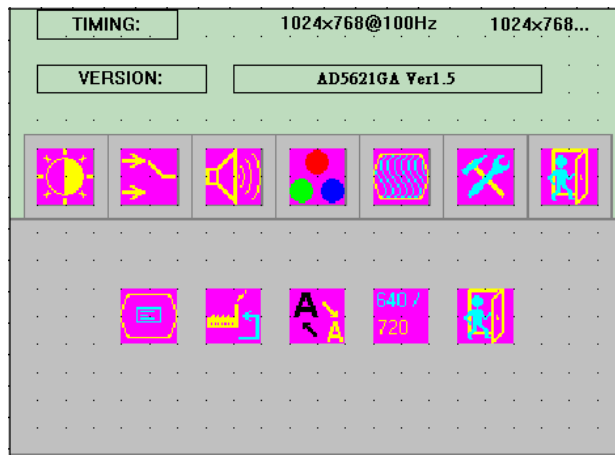


Vpos: You can shift the screen vertically by this function.

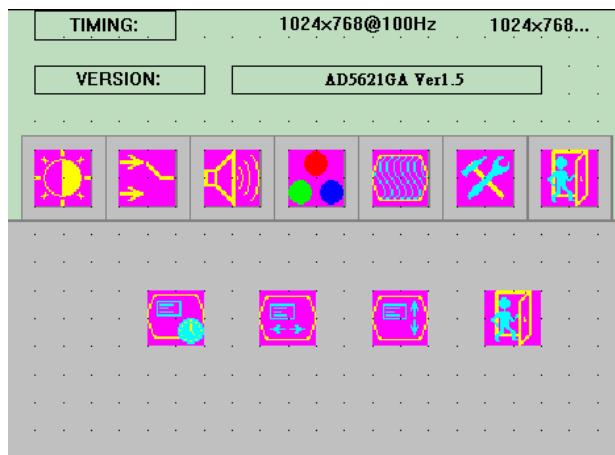


Exit: Back to normal screen.

On the “Tools” sub menu, you will see 5 icons.



Osd Control: Select this option, you will see 4 more options:



Osd_time: You can selection the time of OSD from 2 sec. to 16 sec.



Osd_HPos: You can move the OSD horizontally over the screen.



Osd_VPos: You can move the OSD Vertically over the screen.



Exit: back to main menu.



Factory_Reset: By pressing this, the screen will be back to the factory setting on very beginning and lost all the personal settings.



Sharpness: You can make the characters looks sharper.



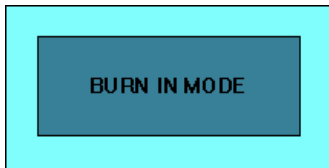
Dos_mode/Gxf_mode: Some old programs running over 640x400 and 720x400 (DOS Mode and graphics mode), you need to select this option manually.



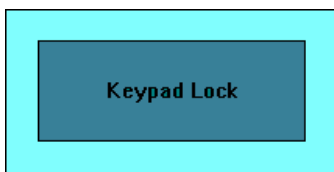
Exit

Factory Burn-in mode: While your VGA cable is connected on the monitor, press “Menu” and Left “<” simultaneously, you will see “BURN IN MODE” on the center of the screen for 3 sec. Then unplug the VGA cable, the screen will show Red, Green, Blue, White, and Black in sequence automatically.

You can plug in the VGA signal cable, and re-plug the power connector to exit the burn-in mode.



OSD Lock Function: It is possible to lock all the OSD buttons to prevent unauthorized changes to occur by pressing “Menu” and “right >” buttons simultaneously. You will see the “lock” icon below on the center of the screen for 3 seconds. If any button is pushed after the lock function is initiated, the below icon will appear on the screen.'



To release the OSD lock, press “Menu” and “Right >”. The below icon will appear on the center of the screen for 3 seconds. Now all OSD keys are active again.

