ADP-620/ ADP-640

User Manual

Ver 2.0

Copyright Notice

Table of Contents

Chapter 1 Product Information

1.1 Product Specifications and Information

The manufacturer is an expert in Industrial Computer solutions, manufacturer and system integrator. We specialize in single board computers, chassis, workstations, panel PC, flash disk, PC/104 products, power supply, and backplane. We operates a worldwide network of distributors and sales representatives to offer customer the best service.

Our LCD monitor brings information everywhere. Even under the most severe environments like steel plant or warehouse, The ADP-620 and ADP-640 are small size flat panel display specially designed to meet the applications for industrial environment.

- **Panel Interface:** Analog VGA signal (by **AV-9261** Analog VGA to Digital LCD Interface Board)
- Front OSD control keys to adjust the best display quality.
- Side cabling design to less the LCD monitor's total thickness

- **Display Model (ADP-640)**:
    PRIME VIEW 6.4" TFT V16C6448AC high brightness TFT LCD
    Resolution: 640X480
   MAX. Colors: 18 bits
    Brightness: 300 cd/m^2
     Hor. Frequency: 15-80KHz
     Ver. Frequency: 50-85Hz
    Operating Temperature: 0~55 ^{o}C
    Storage Temperature: -20~70 ^{o}C
    Viewing Angle(degree): R/L:180 U/D:30
   LCD MTBF: 50,000 hrs
   Backlight MTBF: 20,000 hrs

- **Display Model (ADP-620):**
     NAN YA VIEW 6.2" MONO LTBGCH191JK
     Resolution: 640X480
    MAX. Colors: Black/ White
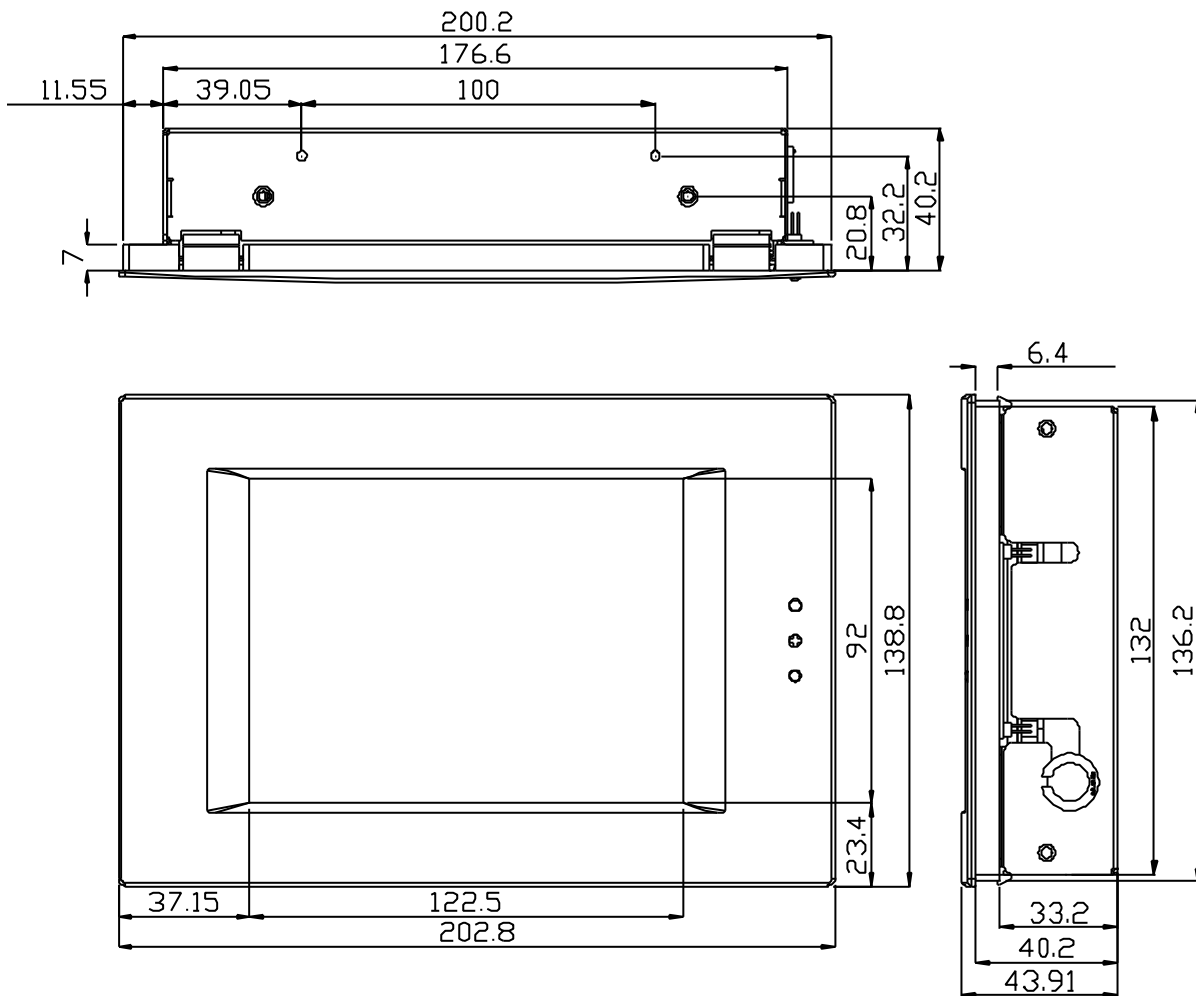   Brightness: 60 cd/m^2
     Hor. Frequency: 15-80KHz

1.2 ADP-620 Product Dimensions

The following diagrams indicate the dimensions of ADP-620.
Front Panel: 202.8mm x 138.8mm x 10.7mm (WxHxD)
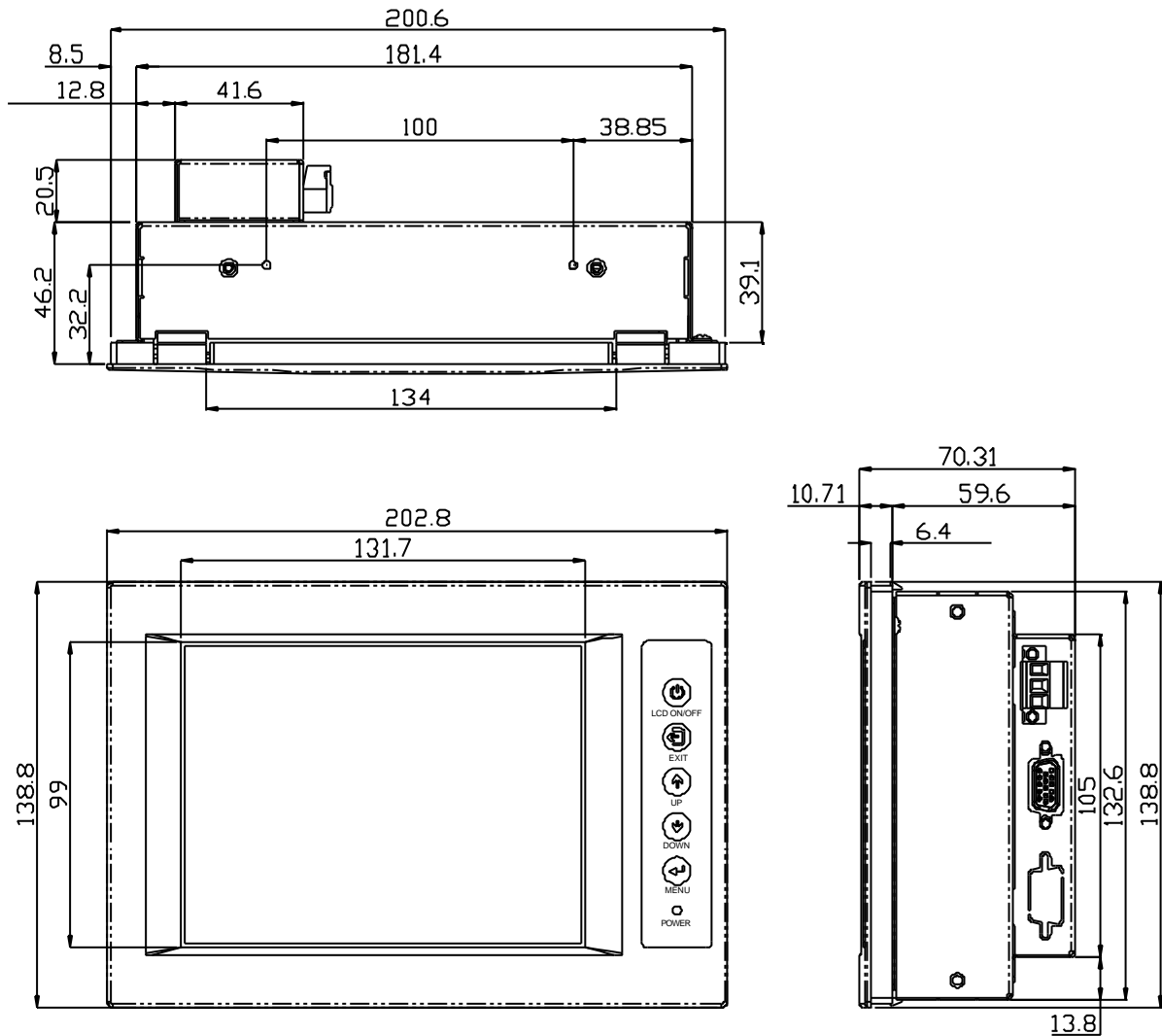Cabinet: 176.4mm x 132mm x33.2mm (WxHxD)

(UNIT:mm)

1.3 ADP-640 Product Dimensions

The following diagrams indicate the dimensions of ADP-640.
Front Panel: 202.8mm x 138.8mm x 10.7mm (WxHxD)
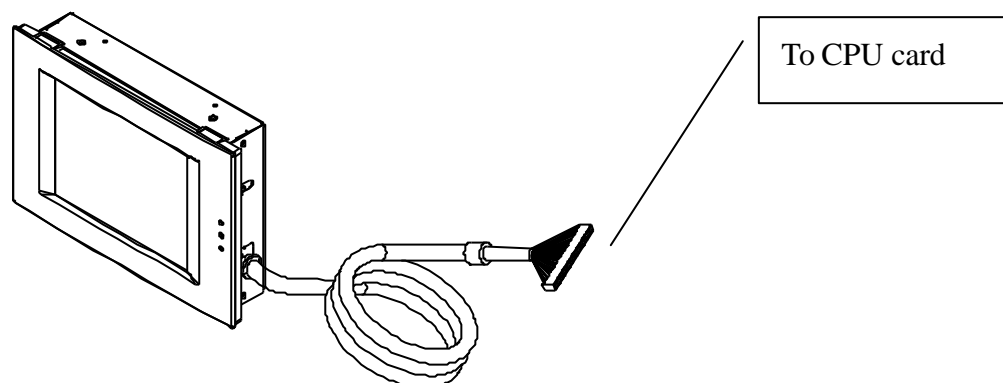Cabinet: 181.4mm x 132.6mm x 59.6mm (WxHxD)

**(UNIT:mm)**

2.2 LCD Installation

ADP-620 & ADP-640 provides two features for you're choosing: one is LCD only; the other is LCD with touch screen. You can use VGA cable connects from LCD panel to your system VGA interface.

2.2.1 ADP-620 LCD Without Touch Screen

To CPU card

2.2.2 ADP-620T LCD With Touch Screen

If you want to install LCD with Touch Screen, please connect RS232 connector from LCD to your COM port from CPU card. The driver for touch screen we used the CD disk with system shipping.
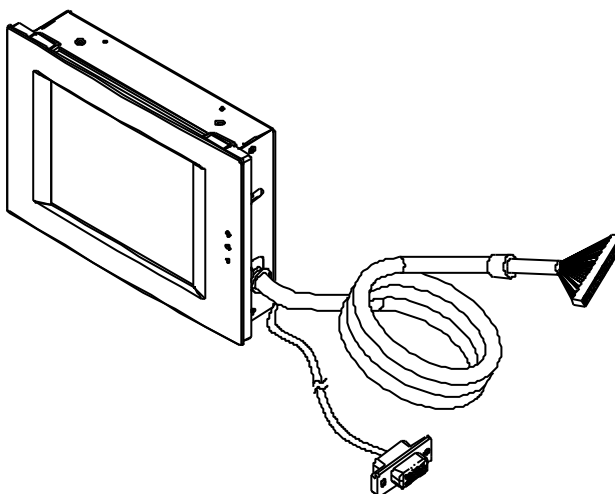
2.2.3 ADP-640 Without Touch Screen

There are two ports for VGA and RS-232. If you want to install LCD without Touch Screen, just connect the VGA Card to the VGA Signal Input port. The power connection you choose the terminal block use 12V DC input.
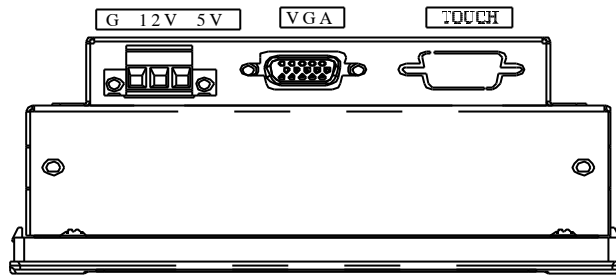
2.2.4 ADP-640T With Touch Screen

If you want to install LCD with Touch Screen, please connect RS232 connector from LCD to your COM port from CPU card. The driver for touch screen we used the CD disk with system shipping.
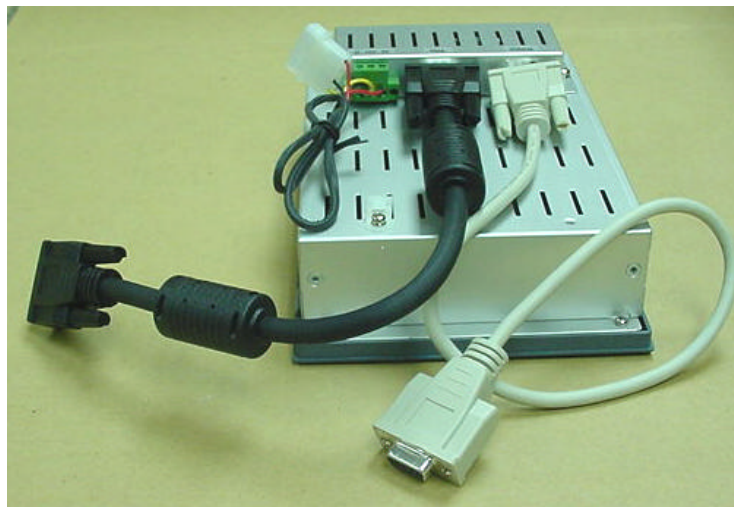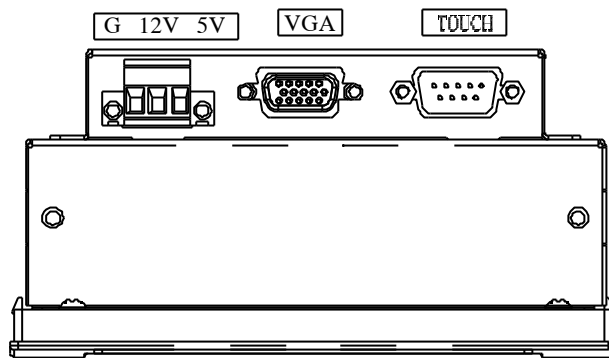
2.2.5 Touch Screen Controller

The optional touch screen provides RS-232 interface and the wire diagram of the controller is as the below figure shown.

Touch Panel
Control Board
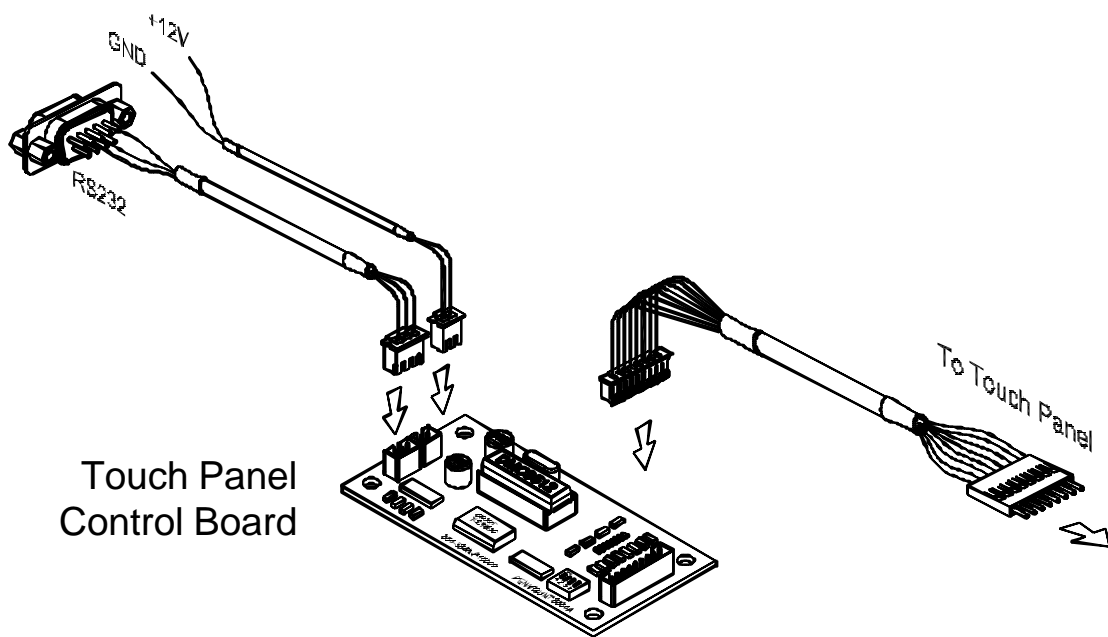
2.3 Panel Mounting

ADP-640

ADP-620

2-6#32

2-6#32

Mounting hole size:

200.0

136.0

UNIT:mm

Chapter 3 OSD function Description (for ADP-640)

3.1 OSD structure

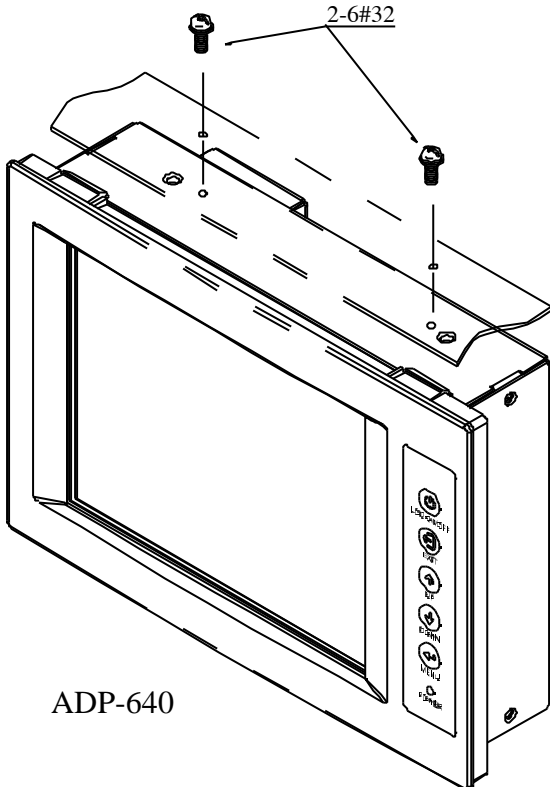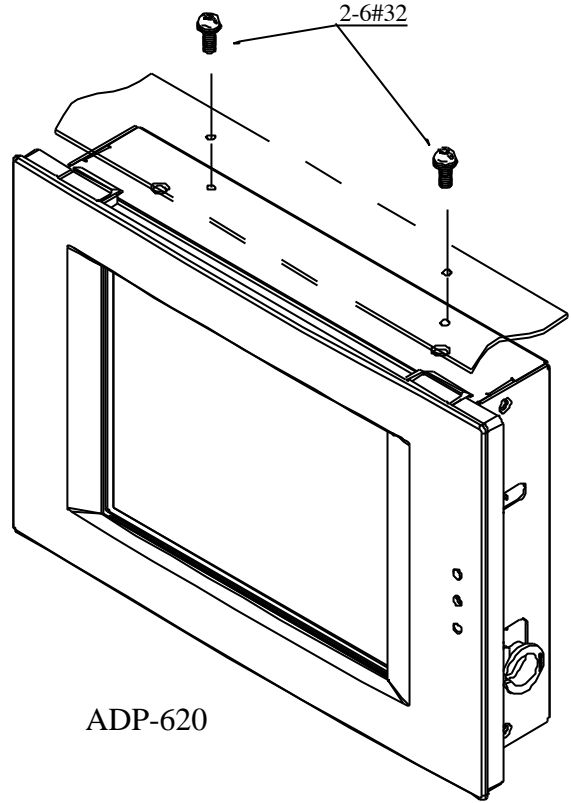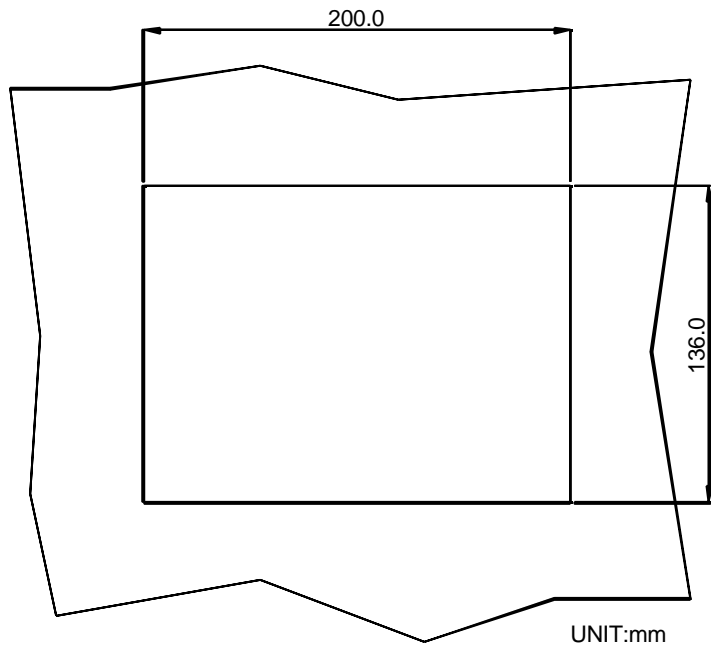| LEVEL 0	LEVEL 1	VALUE
RGB Menu	Brightness	Press Select Button
	Red	-127 ~ 127
	Green	-127 ~ 127
	Blue	-127 ~ 127
	Color Temp	0 ~ 7
	Sharpness	0 , 1
	Main Menu	Press Select Button
Geometry Menu	Auto-Adjustment	Press Select Button
	H. Position	0 ~ 252
	V. Position	1 ~ 26
	H. Total	1004 ~ 1108
	Auto Phase	Press Select Button
	Delay	0 ~ 61
	Main Menu	Press Select Button
Contrast Menu	Auto-Balance	Press Select Button
	Contrast	Press Select Button
	Red	0 ~ 511
	Green	0 ~ 511
	Blue	0 ~ 511
	Balance	Press Select Button
	Red	0 ~ 127
	Green	0 ~ 127
	Blue	0 ~ 127
	Main Menu	Press Select Button
Language Menu	English	Press Select Button
	Spanish	Press Select Button
	Main Menu	
Auto Training		ON/OFF
DOS/GFX		ON/OFF
NVRAM init		Press Select Button
Power Down		Press Select Button
Revert		Press Select Button
Save		Press Select Button

3.2 OSD function description

- **Auto-Adjustment**

    This item will automatically adjust the H/V position, frequency, phase, and black level.

- **Auto Phase**

    This item will automatically adjust the sampling Phase.

- **Brightness**

    It is used to adjust the brightness of screen. This function will adjust the offset value of ADC. Setting this value too high or too low will destroy the quality of image.

- **Contrast**

    It is used to adjust the contrast of screen; this function will adjust the gain value of ADC. Adjust this value too high or too low will destroy the quality of image.

- **DOS/GFX**

    It is used to chose VGA input signal that are text mode or graphic mode. (It is only selectable on resolution of 720/640x400 or 720/640x350.) 400 and 350 standard IBM mode have the same Hsync. and Vsync. value , AV-9261 MPU can not differentiate them automatically , user need to adjust them by manual to match proper VGA mode .

- **H. Position**

    It is used to adjust horizontal display position of image.

- **V. Position**

    It is used to adjust vertical display position of image.

- **Language**

    It is used to select the languages using on OSD display. AV-9261 now can support 2 languages on OSD display. English is the default language.
    English
    Spanish

- **Revert**

     It is used to reload original parameters from the factory' s OSD data area of the system EEPROM 24c16 device to re-initialize AV-9261 system device. When user adjust OSD data too much and cannot see better quality than before, user can select this item and MPU will reload default BIOS setting and re-initialize the system.

- **Save**

     It is used to save the parameters into the user OSD adjustment data area of the system EEPROM 24c16 device and close OSD. Whenever users adjust any parameters, it is needed to execute this item to save data into EEPROM. And next time power on, the MPU will use the storied data to initialize the AV-9261 system.

- **Main Menu**

    Every level of OSD have the item name **Main Menu ,** this item   let user leave current level and jump to upper level , or press the **Return** key.

- **Exit**

    Press the **EXIT** key to exit the OSD menu when the OSD menu is on top of the level.