

LCD Installation and Adjustment Instruction

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Installation Notes :

1. Majority of our liquid crystal display (LCD) assemblies are designed to be mounted on the original monitor chassis using the 4 screws/nuts that hold the old cathode ray tube (CRT) in place. This requires removing all the electronics, wiring and CRT inside the old monitor first then sent for recycling. Exercise caution when handling the boards and CRT as these items might keep residual high voltage even after the power supplied to them has been long removed.
2. If possible, power up the LCD assembly with the supplied power connector or wire nuts, hookup the video cable and adjust the screen before mounting everything back into the machine. This will make the installation process easier.
3. All of our LCD assemblies with built-in AC-DC power supply are designed to operate from 100-240VAC 50/60Hz.
4. Some applications don't have a clear plastic or glass in front of the original CRT so when you install the LCD assembly, the fragile LCD glass will be exposed to dirt and impact. We can supply a clear plexi glass for FREE if needed.
5. If you have other questions, please give us a call or email (monitor@cncrepair.com). To expedite troubleshooting with display issues (wrong size, location, etc) please provide us with the LCD mode. This is the 9-digit number on the upper right hand side of the on-screen display (OSD) menu.

WARNING !



Lethal or high voltages are present on the LCD assembly power supply and backlight inverter, please exercise extreme caution, safe practices and avoid touching any of these areas.

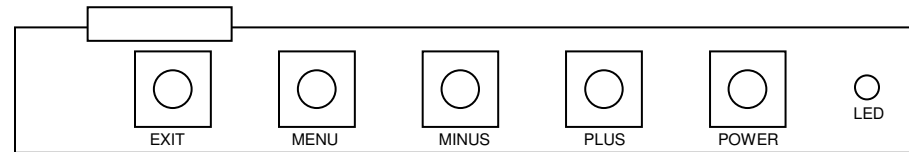


Figure 1. Keyboard Layout

Keyboard description :

EXIT : Leaves the current adjustment screen and moves back one hierarchy up the on-screen display (OSD) menu system.

MENU : Opens main OSD adjustment screen. Selects currently highlighted item.

MINUS : Highlights the item on the left. Moves adjustment slider to the left.

PLUS : Highlights the item on the right. Moves adjustment slider to the right.

POWER : Turns the LCD panel and backlight on or off and also exits the OSD menu arbitrarily without saving any of the user settings.

LED : If the light emitting diode (LED) is lit after initially powering up the unit, it indicates power is being supplied to the unit. The LED is used mainly for troubleshooting. A green light means a valid sync signal is being received by the LCD controller. Blinking amber light means invalid or absence of valid sync signal. Solid red light means sync signal is out of operating range.

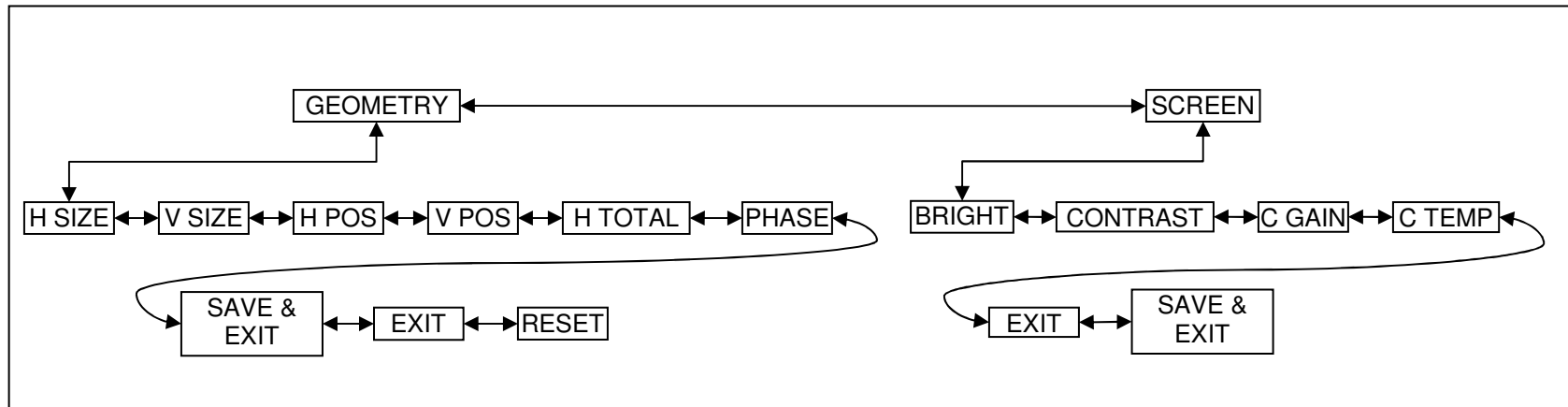


Figure 2. OSD Menu layout

Menu Items :

GEOMETRY (same icon as PHASE) : This is the default selected item when the OSD menu is invoked

H SIZE : Horizontal size adjustment, note that the action of plus and minus button for this item is reversed. Plus makes the screen narrower and vice versa.

V SIZE : Vertical height adjustment, minus makes the screen shorter, plus makes it taller.

H POS : Horizontal position, minus shifts the screen to the left and plus shifts the screen to the right.

V POS : Vertical position, minus shifts the screen down and plus shifts the screen up

H TOTAL : This is a special adjustment parameter that affects the clarity of the data on the screen and at the same time alters the horizontal width. In most cases, leave this adjustment alone. If you are having problems with excessive vertical artifacts, adjust this setting with a screen full of text until you get rid of the vertical color artifacts and achieve best text sharpness. You might also need to adjust **PHASE** to achieve this. Re-adjusting **H SIZE** might be necessary after these steps are done.

PHASE : This adjusts the controller's analog to digital converter sampling clock phase. Incorrect phase is manifested by text that are a soft and uneven brightness across the screen. In most cases, leave this adjustment alone.

SAVE & EXIT: Saves user settings settings into non-volatile memory and exits the OSD menu. User settings will be retained even if the power is turned off.

EXIT : Exits the OSD menu without saving user settings into non-volatile memory. Settings are retained until power is turned off

RESET : Resets all user setting and reverts to default settings.

SCREEN (combined icon of **BRIGHT** and **CONTRAST**)

BRIGHT : Adjust the LCD backlight intensity. In most cases, this setting is already optimal.

CONTRAST : Adjust the contrast of the displayed data. In most cases, this setting is already optimal.

C GAIN : Adjusts individual color channel gain. In most cases, this setting is already optimal.

C TEMP : Allows user to selects present color temperature or create custom color temperature. In most cases, this setting is already optimal.

EXIT : same as above

SAVE & EXIT : same as above