

Operating & Function Manual for Multi-Function LCD Control Panel (Rev. 10/2005)

FEATURES:

This multi-function controller can monitor the temperatures of CPU, HDD, VGA as well as alarming the user when the specified component reaches over a pre-defined temperature. In addition, it also alarms the user when the CPU fan fails to operate with a different alarm tone.

After setting up the pre-defined temperatures for the above three components, the unit will beep at different frequencies accordingly for these 3 components shall any particular component goes above the pre-defined temperature limit. At this time, that particular component's symbol will flash on the LCD screen.

During normal operation, the unit displays the temperatures of CPU, HDD, VGA one by one repeatedly (Press (UP) to show steady display). It also displays the symbols of CPU fan, HDD and POWER when they are all working properly. Note that the temperature reads "--,_" when the power is off. However, the unit still displays the time even when the power (or the PC) is turned off so long as the unit's internal battery is good.

NOTE: 1.Remove/Pull the white tape from the battery terminal allows you to maintain current time next time you reboot the PC.

2. "Don't Pull" warning message on the sensor cables simply meant not to pull/remove the amber shield on the sensors/probes. Nevertheless, you still need to remove the clear protective tubes in order to make the sensors to work.

INSTALLATION GUIDE:

To install the temperature sensors for cpu, hard drive, and video/VGA cards, you simply remove the clear protective tubes carefully and attach them to the corresponding devices with a scotch tape or hot glue to hold them in place. DO NOT attempt to pull/remove the amber protective shield (that embeds with 2-prong like metal sensor) as this would cause malfunction and void your warranty.

Following is a list of areas we recommend you to attach these sensors:

CPU sensor: You may simply bend the cpu sensor with care and insert it between the fins (i.e. fin gap) of the cpu's heat sink. Although some people would prefer to mount it between the surface of the cpu and the bottom of the heat sink. However, this **later method is NOT recommended** as the direct high heat generated from CPU may burn up the sensor/probe or the snapping force may cut the sensor and cause malfunction thus void your warranty..

Hard drive sensor: Mount the h.d. sensor from the LCD-9913 near the approximate center of the hard drive's motor.

Video card: Simply attach the video sensor to the main chipset of your video card with a tape or hot glue.

* The location of installing the sensor/probe spots can be very subjective; thus, it's hard for us to tell you where are the most appropriate spots. We simply provided you with some 'example' spots as indicated above. Feel free to experiment with other preferable spots. In addition, some people would use the h.d. sensor to determine temperature on other devices such as a sound card or a particular chip on the motherboard instead.

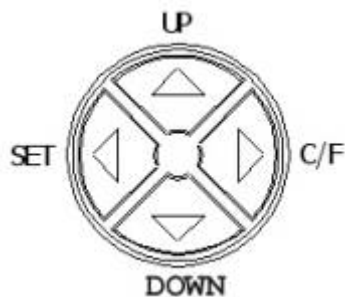
4 fan connectors: These are for auxiliary fans (some call them 'case fan') such as 8cm,9cm or 12 cm fans and shall be connected to the 4-pin power source connectors from your power supply. The chromed round knob on the LCD-9913 controls all the voltage of these 4 fans simultaneously and thus adjust the their fan speed accordingly. However, we recommend you NOT install more than two units of the 12cm fans to prevent current overloading on the LCD-9913 which could damage your LCD controller.

Main power source 4-pin connector (Yel-Blk-Blk-Red): The other end of this 4-pin connector shall be connected to a 3-pin (Red-Yel-Blk) connector that leads to the LCD unit. It is the main power source of LCD-9913 and shall be connected directly to the 4-pin power source connector from your power supply. Your LCD unit will not work if this 4-pin to 3-pin connector set is missing and you shall contact your supplier.

CPU fan connector: This 3-pin connector coming from LCD unit is dedicated for providing the power source and displaying the CPU fan speed and 'running' logo for the fan of your CPU cooler. Simply connect it to your CPU cooler's fan connector; since they only go in one-direction, do not force them to connect if you attach them in the wrong direction. Your LCD unit will alarm you when this connector is removed or if your CPU fan fails to run.

OPERATING / SET-UP STEPS:

There are four buttons on the unit, namely, (UP), (SET), (C/F), (DOWN) (*refer to the figure below*)



SET: (TIME adjustment) This button is used for current time & pre-defined component temperatures alarming settings. To adjust the current time, simply push and hold the (SET) button to adjust the HOUR and then press (SET) button again for MINUTE and press (SET) again for temperature setting adjustments respectively.

SET: (pre-set component temperatures) Press & hold SET button ~~while press DOWN button~~ for 2 seconds to adjust the temperature settings for alarming CPU's overheat problem. Then, press (UP)/(DOWN) button to incrementally adjust the pre-set temperature. Holding (UP)/(DOWN) continuously will speed up the increment. When done with the CPU temperature setting, simply press (SET) button to go to the next component, namely HDD & VGA respectively, adjustments with the same method as that of CPU temperature adjustment. Press the (SET) button again when you're done with all three settings. If you don't depress the (SET) button for 10 seconds, it will record the last changes done and go to regular displaying mode.

UP: Press this button during regular display mode will toggle between auto & steady displaying of CPU, HDD & VGA. Holding this (UP) button for 3 seconds to go back to auto monitoring/displaying mode. Pressing (UP) during Set-up mode will increment the time/temperature as described in 'SET' above.

DOWN: When pressing this button with (SET) button simultaneously, it functions as the switching mode button for CPU, HDD, & CPU temperatures threshold settings (see 'SET' above). Pressing (DOWN) during Set-up mode will decrement the time/temperature as described in 'SET' above.

C/F: Press it to toggle between Celsius and Fahrenheit degree displaying method.

RESET: Depress this 'internal' button (with a pin or similar pointed object) will reset all the data back to default which is 60 degree Celsius while the default time is 0 (hour) 0 (minute).

Turning chromed knob (on the left side of LCD panel): Turn this knob clockwise to speed up the fan speed on all 4 fans attached to the provided fan connectors (*turning it pass $\frac{3}{4}$ of a turn, maximum speed level, won't make fans go any faster.*). Turning it counter-clockwise to decrease the fan speed.