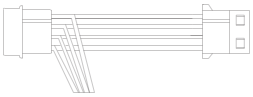
SILVERSTONE®
Designing Inspiration

SST-FP52



FP52
Thermal Controller User Guide

Cable Diagram:



Main power line connect to Power Supply 4 Pin molex connector.



CPU sensor

SYS sensor



HDD sensor



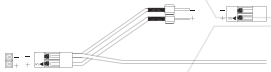
CPU fan connector



SYS fan connector



HDD fan connector



HDD LED



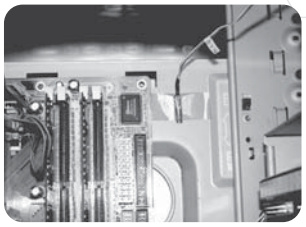
POWER LED

Pin & Cable Installation:

Please operate and install this device under static-free environment and take great care in the use of the glass LCD screen. The FP52 thermal controller is powered by both +12V and +5V rails from the power supply via one 4 pin connector. Connected fans are powered by +12V and the backlighting for the LCD is powered by +5V, A CR2032 battery (sold separately) is required to maintain the clock and system settings after the computer is powered off. When connecting or re-routing wires be sure to turn off your computer before proceeding.



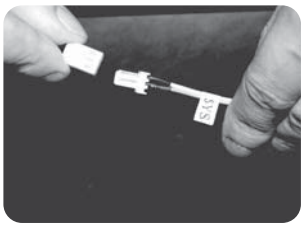
CPU sensor - Place the CPU sensor on the CPU cooler, preferably on the hottest part of the heatsink with the least airflow. It may also be possible to place it in-between the heatsink and the CPU for AMD Athlon XP/Duron users. Use tape to secure the sensor if needed.



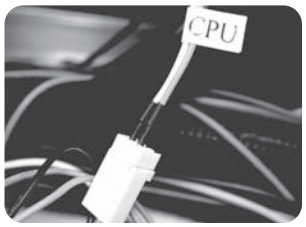
SYS sensor - Place the SYS sensor near the top of the system where the temperature should be slightly warmer than the rest of the case. Use tape to secure the sensor if needed.



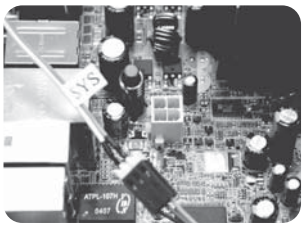
HDD sensor - Place the HDD sensor on top of the hard drive. If there is plenty of airflow over the top of hard drive, place the sensor in other possible hot area where free flowing air will not impinge on the sensor from detecting the correct surface temperature of the hard drive.



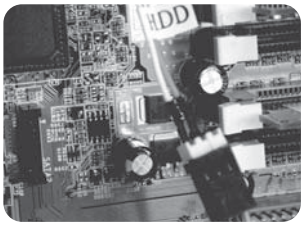
Remove plastic caps from all three fan connectors (CPU, SYS, and HDD)



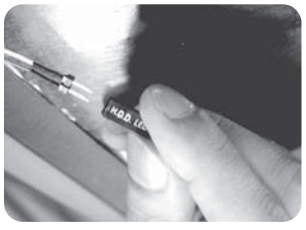
CPU fan connector - Connect the CPU fan connector to the CPU cooler's 3 pin wire. Some motherboards may require setting changes to prevent the system from shutting off automatically when no CPU fan is connected to the motherboard (please refer to your motherboard manual for more info).



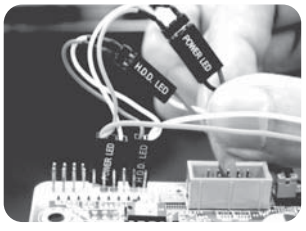
SYS fan connector - Connect the SYS fan connector to an available 3 pin case fan that will affect the system temperature the most.



HDD fan connector - Connect the HDD fan connector to an available 3 pin fan that has the most affect on cooling the hard drive whose temperature will be monitored by the HDD sensor.

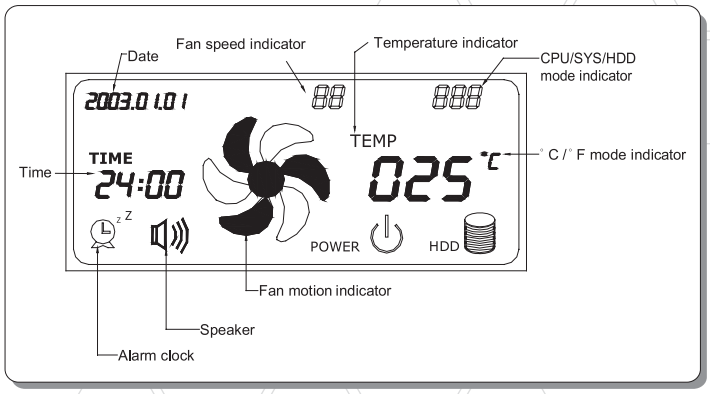


Remove plastic caps from both LED connectors (POWER and H.D.D.)



POWER LED/H.D.D. LED - Replace the POWER LED and H.D.D. LED connectors that are already hooked up to the motherboard from the case with the ones from the thermal controller. Case LED cables can be re-connected to the thermal controller's corresponding pass-thru pins.

Features/Functions:



1. Temperature Display Function

There are three sets of thermal sensor that can be used for detecting temperatures from CPU, system, and hard drive (CPU, SYS, and HDD). The LCD screen can display temperature range from 0 to 100 degrees Celsius or 32 to 212 degrees Fahrenheit. Additional temperature readouts also include the following:

- Temperature below 0°C Display = LO
- Temperature above 100°C Display = HI
- Thermal sensor disconnected Display = ---

Changing temperature display from CPU to SYS and to HDD is easily accomplished by pressing on the MODE button.

When enabled, an audible alarm sounds when the temperature reaches a predetermined level (default setting is 65°C)

2. Fan Speed Monitoring

Fan speed is automatically adjusted by the thermal controller in six levels depending on temperature detected for each respective CPU, SYS, and HDD areas.

Temperature	Fan Speed Level	Output Power	LCD Display
0 ~ 13°C	0	0V	No fan movement
14 ~ 19°C	1	6V	Very slow fan speed
20 ~ 25°C	2	7.5V	Slow fan speed
26 ~ 31°C	3	9V	Medium fan speed
32 ~ 37°C	4	10V	Fast fan speed
38 ~ 43°C	5	11V	Very fast fan speed
44 ~ 50°C	6	12V	Maximum fan speed

When the sensor is disconnected or damaged, fan speed will automatically be adjusted to level 6 and the LCD display will show no fan movement.

3. Time Display

The date and time status in the LCD screen is displayed in 24 hour format. An alarm clock function is included with the controller to provide extra convenience and versatility.

4. System Status Display

There are redundant "POWER LED" and "HDD LED" connectors included with the thermal controller. If connected, the LCD screen can display power and HDD activity.

Operating Instruction:

A. The MODE button is used to cycle through CPU, SYS, and HDD status displayed on the LCD screen.

B. The SET button is used to activate or deactivate alarm clock function.

C. Clock Setup

- To adjust year, press and hold MODE button for 3 seconds until the number indicating the year starts to flash, then press SET button to change desired year (range 2000 ~ 2019).
- To adjust month, press and hold MODE button for 3 seconds then press the MODE button one more time until the number indicating the month starts to flash, press SET button to change desired month.
- To adjust date, press and hold MODE button for 3 seconds then press the MODE button two more times until the number indicating the date starts to flash, press SET button to change desired date.
- To adjust hour, press and hold MODE button for 3 seconds then press the MODE button three more times until the number indicating the hour starts to flash, press SET button to change desired hour.
- To adjust minute, press and hold MODE button for 3 seconds then press the MODE button four more times until the number indicating the minute starts to flash, press SET button to change desired minute.

D. Alarm Clock Setup

- To adjust hour for alarm clock, press and hold MODE button for 3 seconds then press the MODE button five more times until the number indicating the alarm clock hour starts to flash, press SET button to change desired alarm clock hour.
- To adjust minute for alarm clock, press and hold MODE button for 3 seconds then press the MODE button six more times until the number indicating the alarm clock minute starts to flash, press SET button to change desired alarm clock minute.

E. Temperature Alarm Setup

- To adjust CPU alarm temperature, press and hold MODE button for 3 seconds then press the MODE button seven more times until the number indicating the CPU alarm temperature starts to flash, press SET button to change desired CPU alarm temperature.
- To adjust SYS alarm temperature, press and hold MODE button for 3 seconds then press the MODE button eight more times until the number indicating the SYS alarm temperature starts to flash, press SET button to change desired SYS alarm temperature.
- To adjust HDD alarm temperature, press and hold MODE button for 3 seconds then press the MODE button nine more times until the number indicating the HDD alarm temperature starts to flash, press SET button to change desired HDD alarm temperature.

F. °C/°F Setup

- To adjust temperature display symbol, press and hold MODE button for 3 seconds then press the MODE button ten more times until the °C or °F indicator starts to flash, press SET button to change desired temperature symbol.

G. To exit setup at any time, do not press either two buttons for more than 3 seconds. The LCD screen will automatically return to default system display.