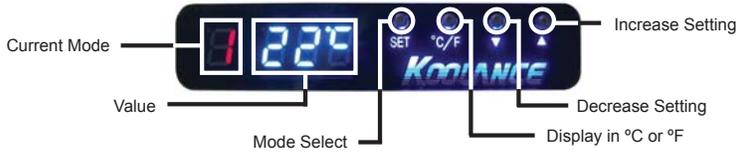




CAUTION: This product allows full user control of hardware safety settings, such as audio alarm, shutdown, fan, and pump speed. Please be sure to configure your LED Display Panel properly, or damage to your computer, data, and/or equipment could result.



Modes

The CTR-CD10 offers seven display options. All are reached by continually pressing the **SET** button:

1. Temperature sensor #1 is displayed
2. Temperature sensor #2 is displayed
3. Temperature sensor #3 is displayed
4. All temperature sensors are cycled automatically
5. Fan setting is displayed ("F" is shown as the mode)
6. Pump setting is displayed ("P" is shown as the mode)
7. All temperatures, fan, and pump settings are cycled automatically

Temperature Sensors

The CTR-CD10 can monitor up to 3 temperature sensors (included). The first LED digit indicates which sensor channel is currently displayed in the temperature reading. To cycle through sensors, press **SET**.

Fan Speed

This option adjusts connected fan speeds. Higher speeds can improve performance, but will produce more noise. There is 1 automatic and 10

manual fan settings (1-10). From the fan ("F") or any cycle mode, press the ▼ or ▲ buttons to adjust fan settings, or hold down an arrow to skip to the lowest or highest mode directly.

Automatic mode will adjust the fans for you based on temperature values from sensor #1. This mode is reached by lowering the fan setting to "0" (**Aut / A** will be displayed).

Pump Speed

There are 10 manual pump settings (1-10). From the pump ("P") mode, press the ▼ or ▲ buttons to adjust the pump settings, or hold down an arrow to skip to the lowest or highest mode directly. There is no automatic mode available for the pump setting.

Manual Mode	Auto Mode Temperature Range	Fan Power %	Pump Power %
1	0 - 35°C (32 - 95°F)	20	48
2	36 - 37°C (97 - 99°F)	24	52
3	38 - 39°C (100 - 102°F)	28	56
4	40 - 41°C (104 - 106°F)	36	60
5	42 - 43°C (108 - 109°F)	44	64
6	44 - 45°C (111 - 113°F)	52	68
7	46 - 47°C (115 - 117°F)	60	76
8	48 - 49°C (118 - 120°F)	72	84
9	50 - 51°C (122 - 124°F)	84	92
10	52 - 99°C (126 - 210°F)	100	100

Alarm & Shutdown Settings

By default, the Koolance audio alarm will sound if any sensor reaches 55°C (131°F). When the system alarm sounds, the appropriate LED temperature will flash in the display and the fans and pump will increase to 100% power.

To change this setting for an individual sensor, choose the desired channel with SET, and press and hold ▼ + ▲ together for 3 seconds. The alarm temperature will begin flashing. You may change this value from 0°C (32°F) up to 99°C (210°F). The normal temperature reading will resume if you do not press any buttons for 4 seconds.

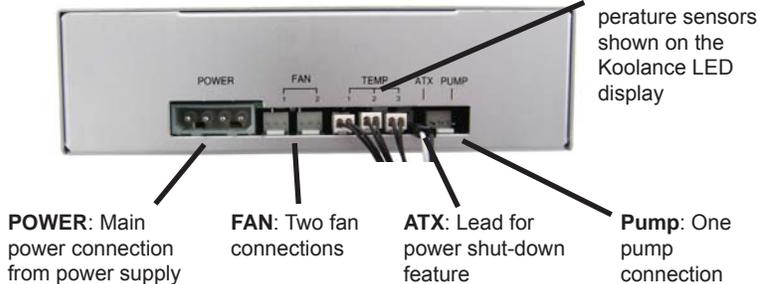
To reset all temperature alarms to their default (55°C / 131°F) setting, press and hold the °C/F button until "dEF" flashes in the display. NOTE: This will also reset the fan speed mode to "auto", and pump power to 100%.

If any temperature sensor reaches 3°C (5°F) above the alarm temperature, the system will shutdown power to the computer via the Koolance "ATX pass-through" wire. With default alarm settings, this means the system will shutdown if any sensor reaches 58°C (136°F).



CAUTION: Generally, sensors report liquid temperature at the water block, which is typically 5-10°C (9-18°F) lower than the actual heat source. This difference must be considered if adjusting alarm/shutdown temperatures. Activating alarm/shutdown modes at too high of temperature can cause hardware damage. Please see a Koolance CPU water block user manual for information on attaching this sensor.

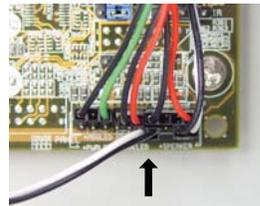
Connections



Connect a 12 Volt 4-pin Molex plug from the power supply to the power connection on the rear of the CTR-CD10. Without this important connection, the unit will NOT operate.

ATX Power Switch

The ATX "pass through" lead is responsible for shutting off your computer if sensor channel #1 reaches 3°C (5°F) above the preset alarm temperature. Connect the male ATX power lead from the CTR-CD10 to the chassis main power switch.



Connect the female ATX power lead from the CTR-CD10 to the motherboard's power switch connection (often marked "PWRSW", "PWSW", or "PWBT").

This is the connection that would normally receive the chassis power switch lead directly.



CAUTION: The auto shutdown safety features of your PC4-1000 will not function properly without connecting the ATX power switch lead.

NOTES: If the LED Display Panel shows 5 - 0 or 5 - 5...

5 - 0 ("S - O"): Sensor open. This indicates a temperature sensor can not be detected for a given channel. If there is no sensor connected to a channel, this is its normal status.

5 - 5 ("S - S"): Sensor short. This indicates that the sensor may be faulty or electrically bypassed. If the sensor is listed with an "S-S" status, the cooling system alarm will sound. The sensor will need to be replaced.