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# Swiftech IRIS Eco Lighting and Fan Controller - V2

\$12.95

## **Product Images**



## **Short Description**

The Iris Eco controller operates as a multi-function Addressable RGB LED lighting controller and PWM hub

## Description

This multi-function Addressable RGB LED lighting controller and PWM hub operates as follows:

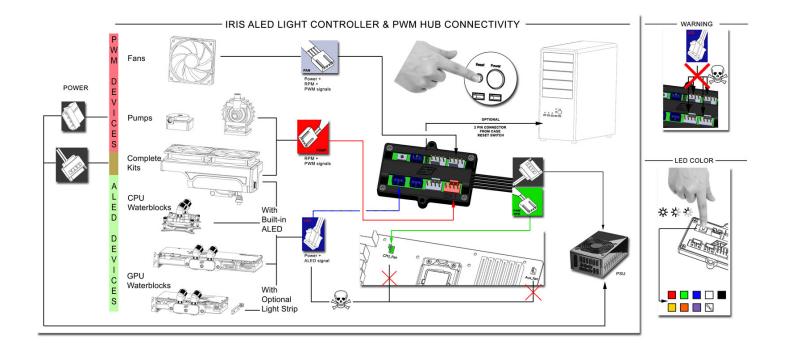
- Light control chip on-board, allowing to change the color and intensity of Addressable type RGB LED's (ALED) the chip provides 8 color choices + 3 dimming settings; the PCB is populated with three 3-pin ALED connectors, 1 push-button switch for light control, and one 2-pin connector for remote light control: by using the "reset" connector of your case control panel for example, you can change the lighting scheme of your entire system from the chassis reset button.
- PWM hub function: the PCB is populated with four 4-pin fan connectors providing control of up to four PWM devices (fans and/or pumps) from a single PWM fan connector on the motherboard we recommend using the CPU\_fan connector for that purpose. This allows users to control the speed of all the connected PWM devices <u>concurrently</u>. The PWM signal from the motherboard CPU\_fan controls the speed of the devices as a percentage of their maximum speed. For example, if you have a pump with a maximum speed of 3,000 RPM's, and 3 fans with a maximum speed of 1,000 RPM's connected to the hub, and if you set the CPU fan speed to 50% in your BIOS, then all devices will run at 50% of their maximum speed, i.e. the pump will run at 1500 RPM's, and the fans will run at 500 RPM's (please note that various PWM compatible devices may have different ramp-up speed curves, so these percentage will not necessarily result in the exact speeds described here).

Device speed: out of the four connectors on the PCB, one is identified by a Red Cap, and a "CH1" marking: this is the PWM master connector. In effect, since only one RPM signal can be read by one motherboard connector, only channel 1 of the PWM hub carries an RPM signal; thus the motherboard will only read the RPM signal of the PWM device that is connected to channel 1. For example, if you connect the pump to CH1, and it has a 3,000 RPM maximum speed, then the motherboard will read up to 3,000 RPM for the pump speed, even if fans with a lower maximum speed are connected to the hub. Conversely, if you connect a fan with a 1000 RPM maximum speed to CH1, and a 3000 RPM pump to one of the other connectors, the speed detected by the Motherboard will only be that of the 1000 RPM fan.

 Power to the IRIS controller is supplied by a SATA connector that must be connected to the Power supply for the fans to work. Regarding pumps, please note that due to the maximum power limitations allowed by 4-pin fan connectors, Swiftech pumps feature two connectors: one for power (either SATA or Molex 4-pin) and one for the PWM/RPM signal. When using a PWM hub to control the pump speed, the pump power connector must also be connected to the power supply for the pump to work.

#### **Features**

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## **Specifications**

#### Specifications summary:

- Junction housing including: (4) Male 4-pin connectors, (3) Male 3-pin ALED connectors, (1) 2-pin connector, (1) ALED controller with push-button switch
- (1) Female 4-pin mini-connector to be plugged into Motherboard CPU\_FAN connector
- (1) Male SATA connector to be connected to the power supply
- · Peel-off sticker
- Mounting screws
- RoHS compliant

#### Simple Troubleshooting

#### "All the devices connected to my splitter work at 100% but I cannot vary their speed"

- 1. Check that the splitter mini-4 pin PWM signal cable is correctly connected to the CPU\_Fan connector of the motherboard
- 2. Enable "Manual Fan Control" in the motherboard BIOS

#### "The device(s) connected to my splitter do not work"

- 1. Check that the splitter power cable is connected to the power supply
- 2. Check that the non-functioning device female 4-pin connector is correctly inserted in all 4 pins of the splitter connector: in effect, it may be possible to inadvertantly offset the female connector by one pin by slightly forcing its insertion, so be careful about this!

#### "I am getting a "CPU fan error" when I turn on the computer"

- 1. Make sure that a device is connected to channel 1 of the PWM splitter. If the motherboard CPU\_Fan header does not read an RPM signal, it will return such error by default.
- 2. Check that the device connected to Channel 1 of the PWM splitter is correctly inserted in its connector.
- 3. Check that the power cable of the PWM splitter is connected to power supply.

## "I connected the PWM splitter to an auxiliary 4-pin connector that was indicated as PWM capable by my Motherboard manual, but I can't vary the speed of my devices"

- 1. Other than the CPU\_Fan connector which is PWM enabled by default, most of the motherboards 4-pin connectors feature two methods of speed adjustment in order to allow control of both types of fans, the 3-pins which are voltage controlled, and the 4-pins which are PWM controlled. As a result, the PWM functionality must be enabled in the BIOS before it can actually work. Please consult your motherboard manual for a "how To".
- 2. Since the "CPU\_Fan" motherboard connector is PWM enabled by default, we recommend that you connect the splitter to the CPU\_Fan connector in order to ascertain its functionality.

#### "I am connecting the splitter to a PWM fan controller instead of the motherboard, and it doesn't work"

• Not all PWM fan controllers are compatible. Please read this white paper for further explanations and a list of compatible devices.

### Additional Information

Brand	Swiftech
SKU	IRIS-ECO-V2
Weight	0.2000
Color	Black
Msc Watercool	Controller

