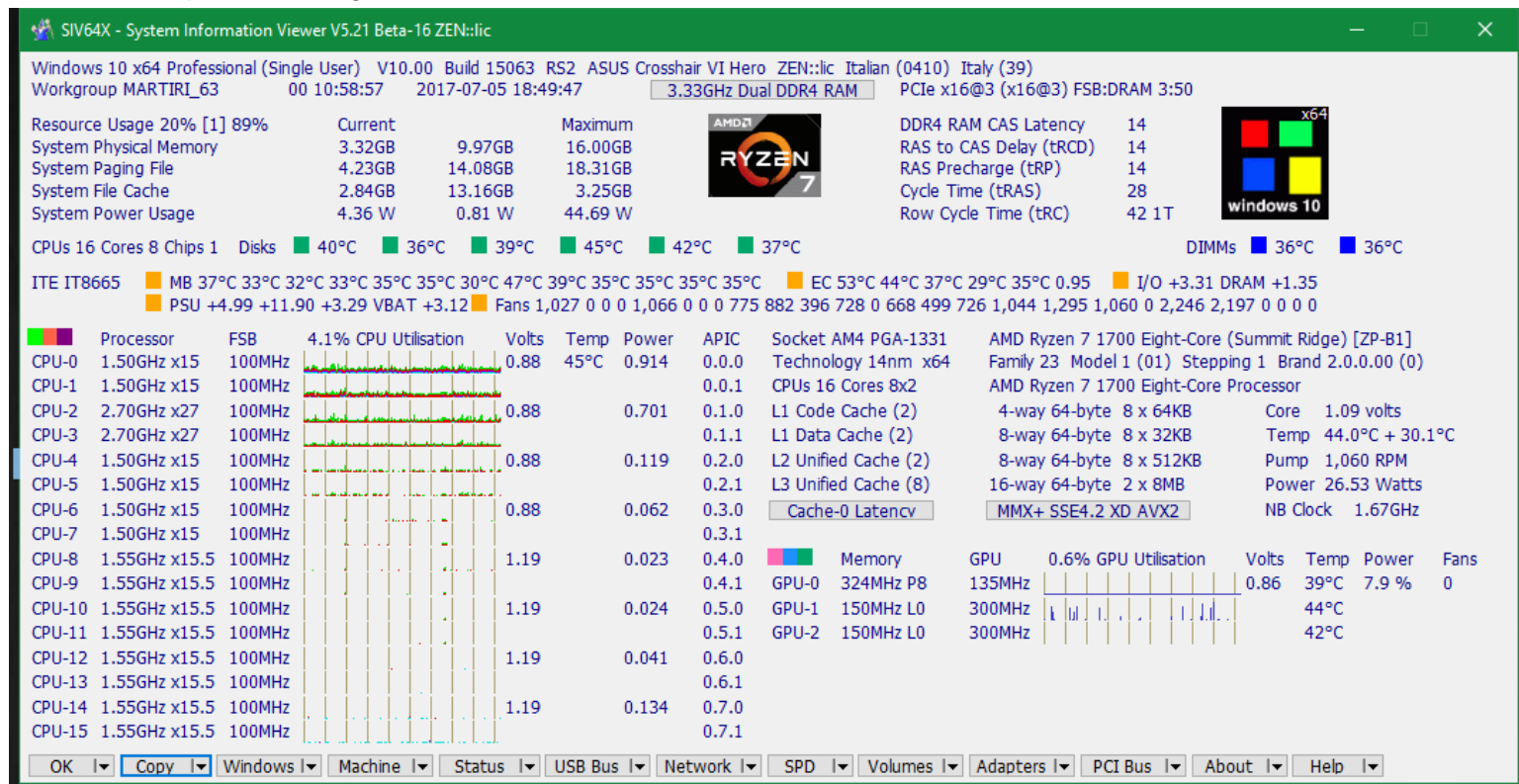


Installing and Configuring SIV

SIV should be downloaded from <http://rh-software.com/> and to setup SIV to control CL hardware do as follows:

Extract **SIV.zip** into C:\Program Files\SIV\ or similar.



Run **SIV64X.exe**, or in the unlikely case of 32-bit Windows **SIV32X.exe**

Press the (down arrow) ▼ in the **[Sensors] ▼** button and navigate to **[Sensors] ▼->Configure->SIV Qualifiers**.

Select **-AIOCTL**, **-SINGLE** and press **[Save]**.

Exit and restart SIV

Now SIV is running in CL control mode.

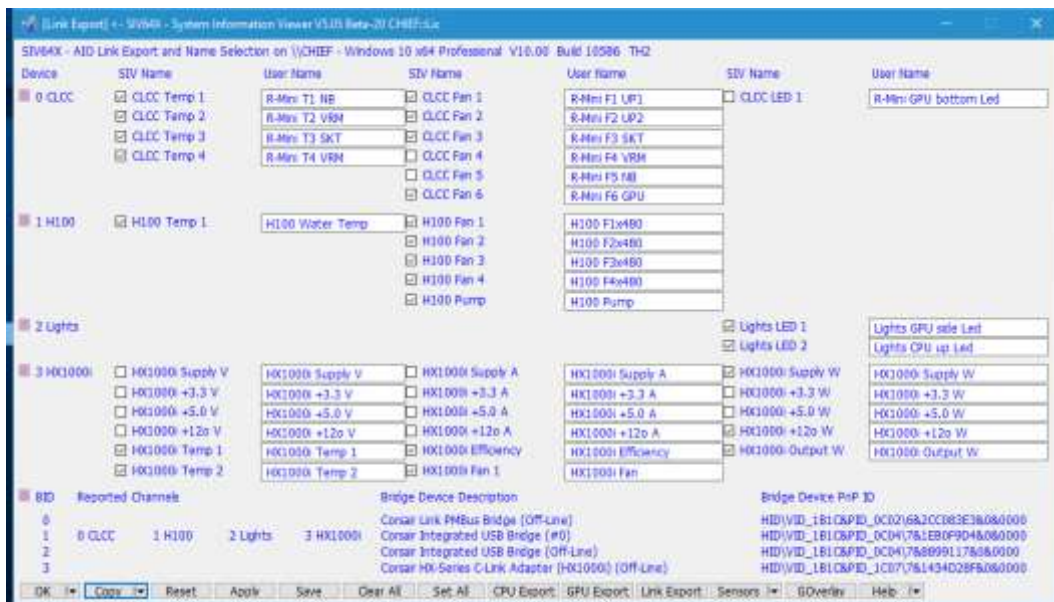
Note 1 When SIV **-AIOCTL** is used CL4 should not be run

Note 2 Prior to CL 4.2.4.25 and from 4.9 you **MUST** not have both SIV and CL4 active at the same time.

Next check **[Sensors] ▼->Link Status** to confirm SIV has detected all your CL hardware.



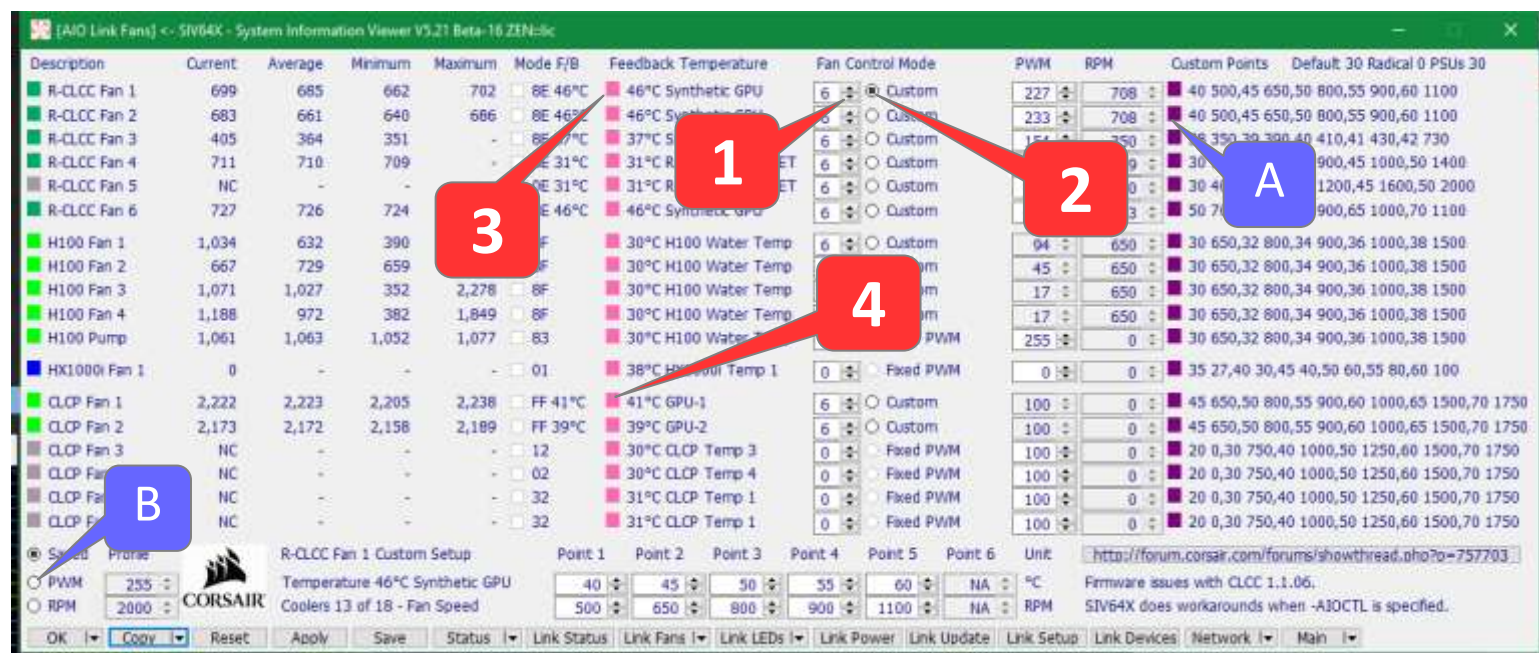
Next navigate to [Sensors|▼]->Configure->Link Export



Use [Link Export] to set the names you wish to use then press [Save].

Configuring Link Fan Control

Use [Sensors|▼]->Link Fans to setup the custom curves.



- 1 Select the Mode (**6=Custom**)
- 2 Select the fan to control
- 3 Select the Feedback Temperature source you wish to use
- 4 Set the Temperature points and the corresponding RPM or PWM value
- 5 Press [Apply] to test your settings. Press [Save] to save your settings to the registry

A: pressing the little square is possible to clone the selected (see point 2) settings

B: Selecting **PWM** or **RPM** allows all the fan speeds to be set by next pressing [Apply].

Press [Reset] then [Apply] to revert to the saved settings.

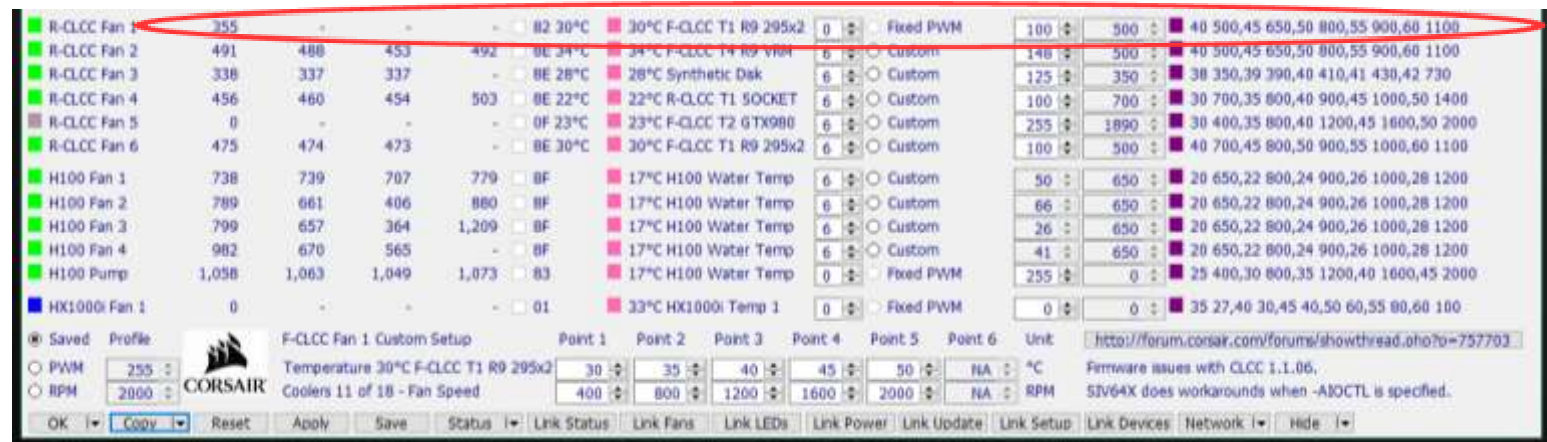
The maximum PWM value is 255. *Tip: Could be useful to know the maximum fan speed*

Are also available the common presets: **2=Default** **3=Quiet** **4=Balanced** **5=Performance**

The green squares on the left side (as in [Link Status]) distinguish the PWM fan (4 pins, light green) from the RPM fan (3 pins, dark green).

The firmware support for Custom Curves does not allow very low speeds and when the system is idle the fans are often running faster than needed. From SIV 5.19 for CoolIT V2 devices (CLCC, H110i, H110iGT, H100i, H80i) when the temperature is below Custom Point 1 the PWM value is used to set the fan speed so a lower speed can be achieved to work around the firmware limitation.

To best utilise this facility it is important to set a suitable PWM value. To do this set the fan to **PWM** mode (0), next set PWM values and press **[Apply]** to find the PWM value that runs the fan at the speed you wish to use. This should obviously be less than the Point 1 fan speed.

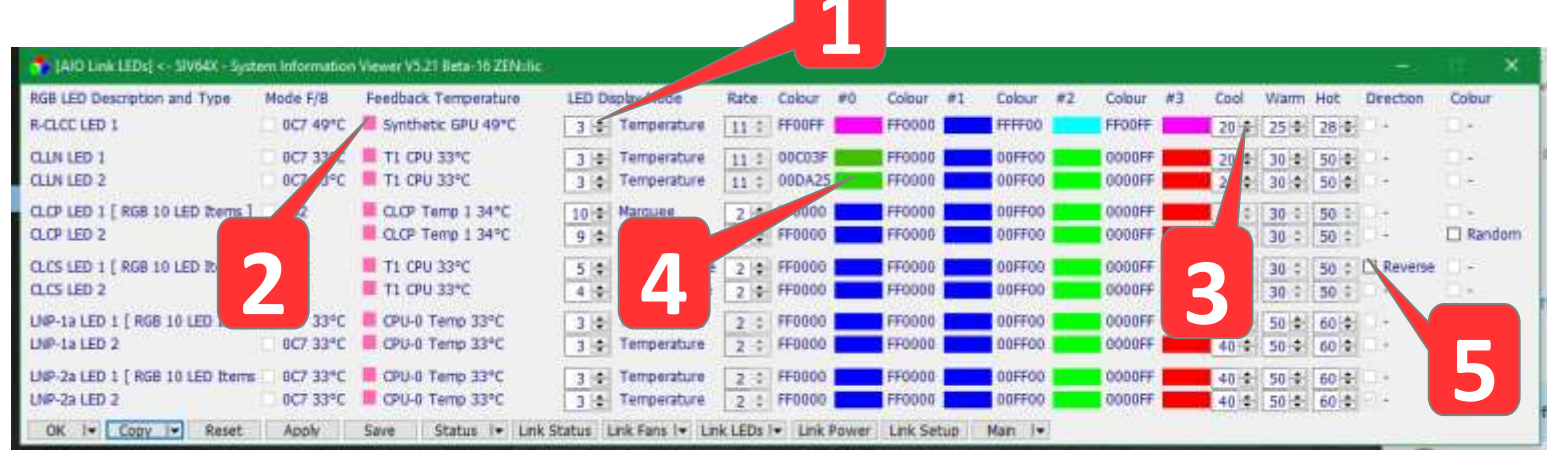


After finding a good PWM value switch back to **Custom** mode (6), confirm the PWM is correct and press **[Apply]** to test your settings. Finally press **[Save]** to save settings in the registry.

Tip: Typically when the PWM value is too low the fan will keep jumping to full speed.

Configuring LEDs

Use **[Sensors] ▼ -> Link LEDs** to setup the LED configuration



- 1 Select Mode (Temperature as example is 3) – With the right mouse button a popup menu will appear
- 2 Select the Temperature source to control the LEDs colour.
- 3 Set the temperatures for the colours changes.
- 4 Setup the RGB colour values for each colour by doing Right/Click on the colours.
- 5 The Corsair Link Commander Pro (CLCP) + Corsair Lighting Node Pro (CLNP) have more LED Modes.
- 6 Press **[Apply]** to test your settings. Press **[Save]** to save them in your registry.

SIV is now setup to control Corsair Link LED hardware.

For the CLCP + CLNP first set the port LED types and items.

See <http://forum.corsair.com/forums/showthread.php?p=892389> to update the CLNP firmware without CL4.

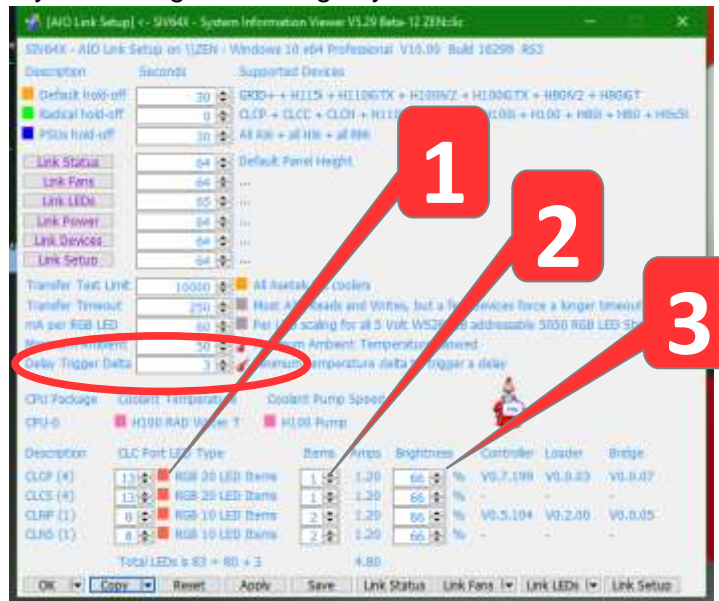
Configuring the CLCP + CLNP Port LED Types, Items and Brightness

Use [Sensors] ▼->Configure->Link Setup to setup the port LED types.

- 1 Select the CLCP or CLNP Port LED Type
- 2 Setup the number of items connected to the port.
- 3 Set the overall port brightness
- 4 Press [Apply] to test your settings. Press [Save] to save your settings to the registry

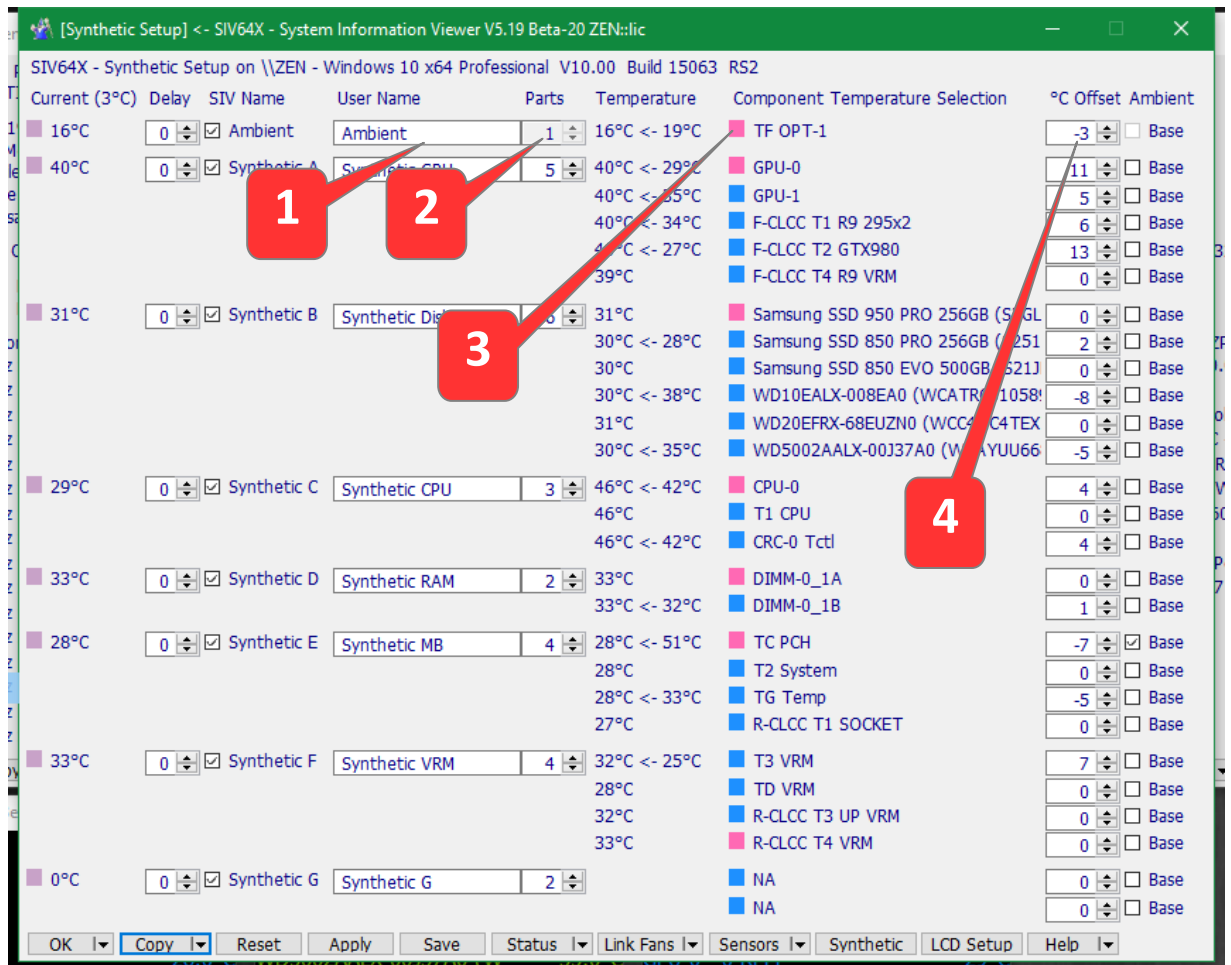
When a Delta time is specified and the temperature increase is greater than the Delay Trigger Delta, the temperature will not be updated until the Delta time has elapsed.

Tip: This is typically used to prevent fans increasing speed when a CPU temperature spikes for a few seconds.



Configuring Synthetics

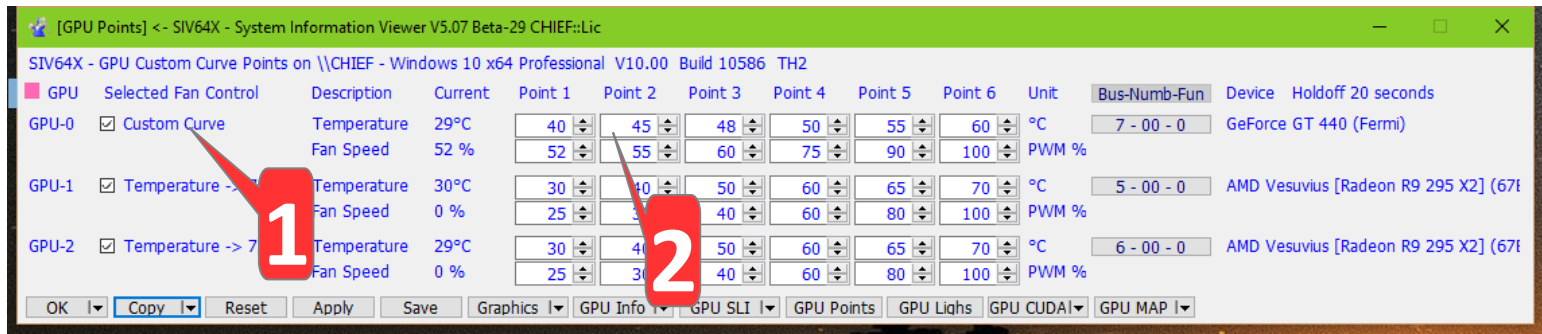
Click on [Sensors] ▼->Configure->Synthetic Setup to configure multiple sensors to control fan custom curves or LED colours.



- 1 Set the group name
- 2 Set the number of sensors in the group
- 3 Select the temperature sensors
- 4 Set the difference with the highest sensor temperature group's (optional)
- 5 Press [Apply] to test your settings. Press [Save] to save your settings to the registry

Configuring GPU Fan Control

Use [Machine]▼->GPU Detail->GPU Fans to setup the GPU fan.



- 1 Select the GPU and what kind of control you want, if a prefixed current or a custom (**Custom**)
- 2 Set the Temperature points and the corresponding PWM (0-100%) value for each point
- 3 Press [**Apply**] to test your settings by checking if the fan PWM % changes as expected. Press [**Save**] to save your settings to the registry

To setup Custom Curves you need to know the Minimum and Maximum PWM % for each GPU. These can be found in the **Cooler** section of the [GPU Info] panel clicking in [Machine]▼->GPU Info

As example, for this GT440 the minimum PWM % is 52% and a value lower then this will not change the PWM %.



It's recommended to use Custom Curves or keep in default mode [**Control Disabled**]

Temperature -> n°C set is only for backwards compatibility. When selected SIV will adjust the fan PWM % as required to try and keep the temperature on or below the specified value. This works best when the GPU load rarely changes.



Configuring LCD Panels

From release 5.09 SIV can report monitoring information in configurable panels.

The screenshot displays the SIV64X System Information Viewer V5.10 Beta-12 interface. The top section shows system information: Windows 10 x64 Professional (Single User), V10.00, Build 10586, TH2, Gigabyte GA-990FXA-UD7 CHIEF:LiC, Italian (0410) Italy (39), Workgroup MARTIRI_63, 00:00:29+43, 2016-05-16 20:48:27, 2.11GHz Dual DDR3 RAM, PCIe x16@2 (x16@2) FSB:DRAM 1:4. Resource Usage is 22% [1] 6.9%. Current memory is 3.65GB, maximum is 16.00GB. System paging file is 4.00GB, 14.37GB. System file cache is 1.69GB, 14.31GB. A table shows Cores 8, Chips 1, Disks 35°C, 34°C, 39°C, 41°C, 37°C, 40°C, 40°C. DIMMs are 4GB x4. A temperature bar shows MB 35°C, 23°C, 31°C, 29°C, 25°C, 29°C, 21°C, 39°C, 32°C, 28°C, 35°C, 27°C, 36°C. I/O is +3.2B DRAM +1.52, PSU is +4.97 +12.46 +3.60 VBAT +3.30. Fans are 1,074 527 0 0 519 509 856 1,921 1,825 727 485 522 656 670 1,250 508 706 1,745 838 1,188 1,191 689. A table lists Processor (AMD FX-8350 Eight-Core Vishera), FSB (263MHz), CPU Utilization (2.3%), Volts (1.03), Temp (10°C), Power (5.54), APIC (0.3), Socket (AM3+ PGA-942), Technology (32nm x64), Family (21 Model 2 (02) Stepping 0 Brand 1.0.0.00 (0)), AMD FX(tm)-8350 Eight-Core Processor, Core (1.15 volts), Temp (21.0°C + 21.3°C), Pump (1,250 RPM), HT Link (3.16GHz), NB Clock (2.63GHz). A table lists Memory (GPU-0 324MHz PB, GPU-1 150MHz LO), GPU (GPU-0 405MHz, GPU-1 300MHz), GPU Utilization (0.00%), Volts (0.90), Temp (35°C), Video (405MHz), Fans (52%), Memory (GPU-1 150MHz LO), GPU (GPU-1 300MHz), GPU Utilization (0.00%), Volts (0.90), Temp (39°C). The bottom section shows a list of sensors and their readings: F-Mini T1 VRM (28.2°C), F-Mini T2 VRM (29.3°C), F-Mini T4 VRM (28.8°C), F-Mini T4 NB (35.7°C), R-Mini T1 NB (30.8°C), R-Mini T3 SKT (24.7°C), F-Mini T3 RAM (27.5°C), T1 Motherboard (35.0°C), T2 Northbridge (23.0°C), T3 CPU (21.0°C), H100 Water Temp (21.3°C), F-Mini T2 GPU (35.4°C), GPU-1 (39°C), GPU-2 (38°C), Synthetic GPUs (39.0°C), Synthetic R-Mini (31.7°C), Synthetic F-Mini (33.7°C), Synthetic CPU (36.7°C), Synthetic VRM (28.3°C), Synthetic NB (35.7°C), HX1000 Temp 1 (38.8°C), HX1000 Temp 2 (31.8°C), CPU-0 1,250 RPM (18°C), CPU-0 32% (35°C). The LCD Panel Setup window shows: SIV64X - running on \\RED - Windows 7 x64 Ultimate V6.01 Build 7601 Service Pack 1, Logitech LCD Panel Not Found, Create an Emulated LCD Panel, Use SIV -LCDS=<n> to use <n> Emulated LCD Panels. The LCD Panel Setup window also shows: H100 Water Temp (21.3°C), T3 CPU (21.0°C), GPU-0 52% (35°C), GPU-1 (39°C), GPU-2 (38°C), Synthetic Disks (41.0°C), GPU-1 Core Clock (300MHz), GPU-1 Package Load (0.00%), GPU-2 Core Clock (300MHz), GPU-2 Package Load (0.00%).

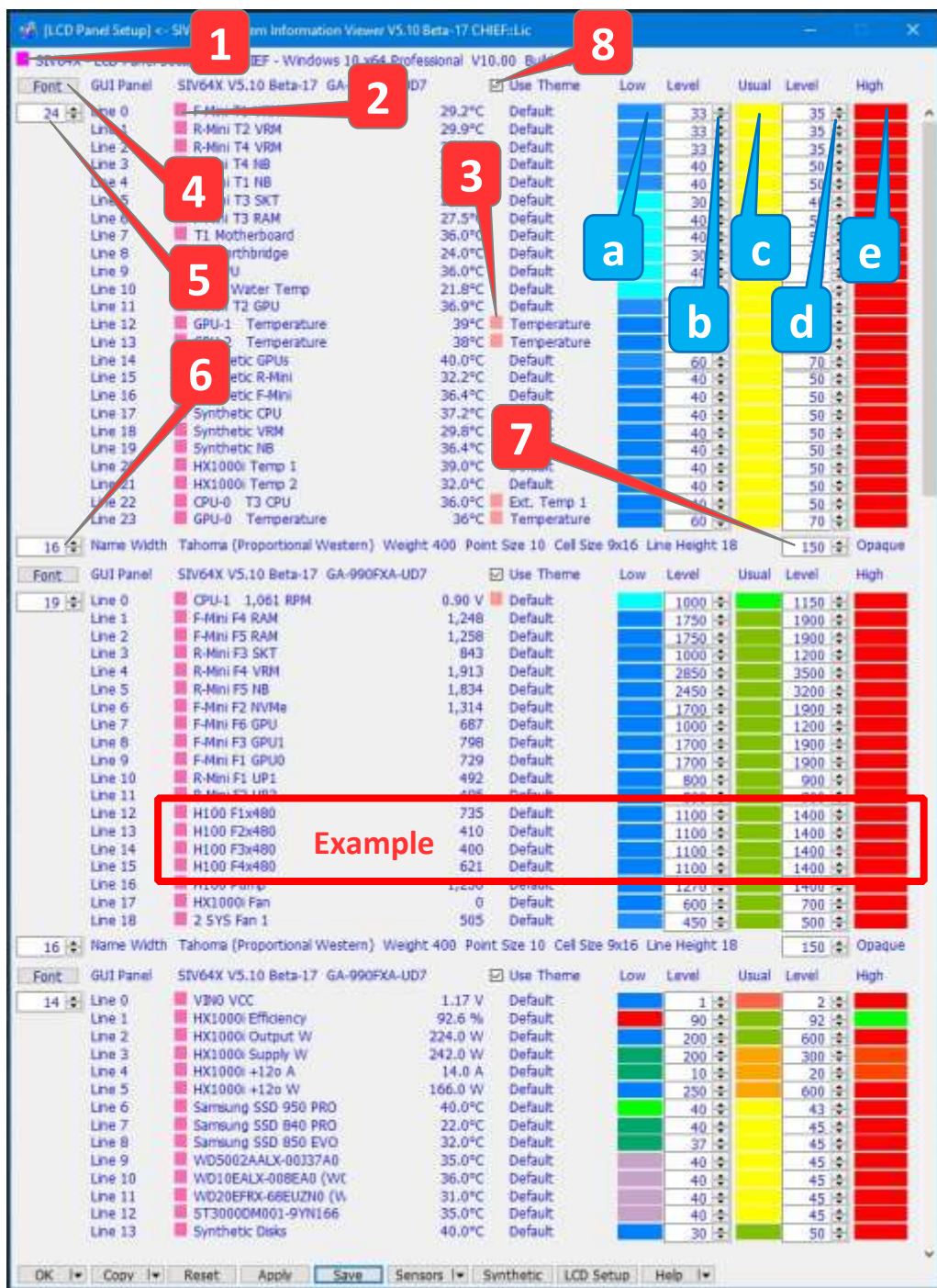
To start this feature, go to [\[Sensors\] ▼](#)->[Configure](#)->[LCD Panel Setup](#) and check the button to create an Emulated LCD Panel.

The screenshot shows the LCD Panel Setup dialog box. The title bar is "[LCD Panel Setup] <- SIV64X - System Information Viewer V5.10 Beta-12 RED:::ray". The main text reads: "SIV64X - running on \\RED - Windows 7 x64 Ultimate V6.01 Build 7601 Service Pack 1". Below this, it says "Logitech LCD Panel Not Found" and "Create an Emulated LCD Panel". There is a checkbox labeled "Use SIV -LCDS=<n> to use <n> Emulated LCD Panels". At the bottom, there are buttons for "OK", "Copy", "Sensors", "Synthetic", "LCD Setup", and "Help".

Each item has 3 colours associated it that are used depending on the current value.

To setup navigate to **[Sensors] ▼]->Configure->LCD Panel Setup**

- 1 Press the magenta blob to select the number of panels
- 2 Press the pink blob to set the information to be displayed
- 3 For CPU and GPU select the item by pressing the Salmon Pink blob to popup a selection menu
- 4 Press here to set the Font characteristics
- 5 Set the number of lines
- 6 Set the description width
- 7 Set panel opacity
- 8 Select to use a themed window



For every line is possible to set a colour range as follow:

- a Set the colour for the low level pressing the right mouse button
- b Set the value to have the colour change
- c Set the colour for the usual level
- d Set the value to have the colour change
- e Set the colour for the high level

Press **[Apply]** to test your settings. Press **[Save]** to save your settings to the registry

Tip: As example of configuration for the H100 fans I've set (fan range is 400 to 1800 RPM):

- When the RPM fan is in range MIN to 1100, the colour is light blue (low level)
- When the RPM fan is in range 1101 to 1400 the colour is green (usual level)
- When the RPM fan is in range 1401 to MAX the colour is red (high level)

Hardware Supported by SIV

The current hardware supported by SIV can be checked via the [\[Sensors\] ▼](#)->[Link Limits](#) panel which also indicates how busy the AIO Link worker thread is and allows you to check how much more Link Hardware can be supported.

Sensors	Instances	AIO Link Device	Sensors	Instances	AIO Link Device	Sensors	Instances	AIO Link Device	Sensors	Instances	AIO Link Device
3	0	AK-1250	2	1	CLNP	5	0	H110i	17	0	RM550i
4	0	Asetek-5	0	0	DIMM	5	0	H110iGT	17	0	RM650i
4	0	Asetek-6	18	0	EDF550AWN	4	0	H110iGTX	17	0	RM750i
32	0	AX760i	24	0	GRID+	4	0	H115i	17	0	RM850i
36	0	AX850i	4	0	H0x50iGT	5	0	H115iPro	17	0	RM1000i
32	0	AX860i	4	0	H80	6	0	H150iPro	2	0	RM PSU
36	0	AX1000i	7	0	H80i	2	0	HUE+	16	0	TPG-0450D
34	0	AX1200i	4	0	H80iGT	17	0	HX550i	16	0	TPG-0550D
38	0	AX1300i	5	0	H80iPro	17	0	HX650i	16	0	TPG-0650D
36	0	AX1500i	4	0	H80iV2	17	0	HX750i	16	0	TPG-0750D
38	0	AX1600i	6	1	H100	17	0	HX850i	16	0	TPG-0850D
1	0	CAFP	7	0	H100i	17	1	HX1000i	16	0	TPG-1050D
11	1	CLCC	5	0	H100iGT	17	0	HX1200i	16	0	TPG-1200D
9	0	CLCN	4	0	H100iGTX	3	0	Kraken	16	0	TPG-1250D
14	1	CLCP	5	0	H100iPro	0	0	Link	16	0	TPG-1600D
2	1	CLLN	4	0	H100iV2	1	0	O1000D	16	0	

Total Devices: 6, Sensors: 55, Delay: 495ms, Usage %: 24%, Supported: USB + C-Link, USB Only, SMBus, C-Link Only, Display Only, Display + Full Control, Display + Fan Control.

Starting SIV automatically

Once SIV is setup and controlling the hardware you may wish to run SIV automatically on system startup. To do this navigate to [\[Sensors\] ▼](#)->[Configure](#)->[SIV Autorun](#).

Typically select `-AIOCTL -SINGLE -TRAY` and then press [\[Create\]](#).

Command: "C:\SIV\SIV64X.exe"

Qualifiers: -AIOCTL -GPUCTL

- ADAPTERS Show [Adapters] on the initial screen
- AIOCTL Enable automatic AIO Link Control (Corsair + NZXT)
- AIOLED Enable DIMM LED Reporting and Control (Corsair)
- NOBALLOON Disable the display of Balloon Tool Tips
- BLUE Show [Bluetooth] on the initial screen
- BOINC On startup display the [BOINC Status] panel
- NOECR Disable Embedded Controller Reporting
- FREE Show <free> unused USB Root Hub ports on [USB Bus]
- GPUCTL Enable GPU Fan Control and Overclocking
- INDENT Indent [Buttons] to reflect hierarchy
- LOCAL Limit SIV64X to the local system
- NOLCD Disable use of LCD Panel Displays
- NOLINK Disable use of AIO Link Hardware (Corsair + NZXT)
- SINGLE Only allow a single instance of SIV64X to be active
- NOTHEME Disable use of Windows Themes on XP and later
- TRAY Start SIV64X minimised in the Icon Tray
- WDF Enable the Windows Driver Framework (WDF) pages
- NOWIZARD Disable the Wizard Cursors

Create: `schtasks /create /tn "Start SIV" /sc onlogon /rl highest /tr "\"C:\SIV\SIV64X.exe\" -AIOCTL -GPUCTL`

Delete: `schtasks /delete /tn "Start SIV"`

Updating to a new SIV release

When there is a new release or a beta release of SIV a panel will pop up to tell you this.

The screenshot shows the 'SIV64X - Latest Current and Beta Release Status' window. It features a table with columns for Item, Version, Description, and Download Links. A red callout bubble points to the 'Standard Release' link, and another points to the 'Latest Beta' link. Below the table, there are update frequency options and proxy settings.

Item	Version	Description	Download Links
SIV64X	V5.07	Beta-30 Built Feb 5 2016 at 18:26:57	
Release	V5.06	Released 14-Dec-2015	Standard Release http://rh-software.com/downloads/siv.zip Legacy add-on http://rh-software.com/downloads/siv32l.zip Itanium add-on http://rh-software.com/downloads/siv64i.zip Alpha add-on http://rh-software.com/downloads/siv32a.zip ARM add-on http://rh-software.com/downloads/siv32r.zip
Beta	V5.07	Beta-30 05-Feb-2016	Latest Beta http://rh-software.com/downloads/siv_beta.zip

Click here for standard

Click here for beta releases

Press [<http://rh-software.com/downloads/siv.zip>] and the new release will be downloaded.

The screenshot shows the 'Loading Main ZIP' window. A progress bar is at the top, and a red callout bubble points to the file path 'C:\Program Files\siv\siv.zip' in the 'Updating From URL' field.

Click here

Once complete, press [<C:\Program Files\siv\siv.zip>] and the files will be extracted.

The screenshot shows the 'Extracting from' window. A progress bar is at the top, and a red callout bubble points to the file path 'C:\Program Files\siv\siv.zip' in the 'Extracting from' field. Below the progress bar, a list of extracted files is shown.

Click here

Finally to use the new release exit and then restart **SIV64X**.

How to Switch and Save Profile Information

SIV supports saving of AIO + LCD configuration profiles and the small [\[Switching\]](#) panel can be used to quickly switch between these saved profiles.

Use [\[OK\] ▼](#)->[Profile->Export Profile](#) to export the configuration to a specified profile file and if you make further changes remember to save these.

Specification for Asetek Cooler fan control.

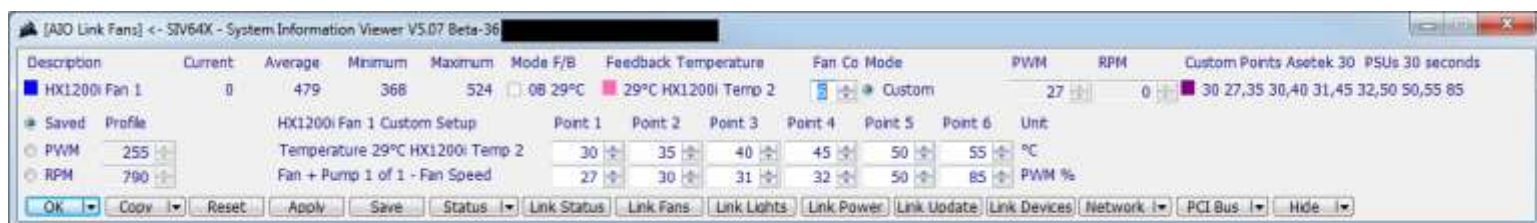
1. Every two seconds SIV calculates the target PWM % based on the temperature using the Custom Curve points. If the target PWM % is less than the current PWM % SIV will start counting down and if the countdown reaches zero will change the current PWM %. If the target PWM is \geq to the current PWM % SIV will change the current PWM % and reset the countdown. (same as for PSUs)
2. When the temperature drops below Point 1 the Point 1 PWM % will be used.

Asetek Pro

1. When the temperature is $<$ Point 1 0% PWM is used.

Specification for PSU fan control.

1. Every two seconds SIV calculates the target PWM % based on the temperature using the Custom Curve points. If the target PWM % is less than the current PWM % SIV will start counting down and if the countdown reaches zero will change the current PWM %. If the target PWM is \geq to the current PWM % SIV will change the current PWM % and reset the countdown (same as for Asetek Coolers).
2. The actual PWM % used is the maximum of the PWM % set by SIV and what the PSU firmware thinks the PWM % should be. So SIV can only ever make the fan spin faster than it would otherwise do.
3. When the temperature drops below Point 1 then SIV will effectively set 0% as is the situation below, note the fan has stopped. SIV does not actually set 0 %, but rather tells the PSU to use the default mode of fan control, so if you set Point 1 as say 80°C the fan would still spin.



Revision history

Date	ID	Comment
20-Nov-2015	1.11	Initial release
06-Feb-2016	1.13	Added Configuring GPU fan control
10-Feb-2016	1.14	Added specification for Asetek cooler and PSU Fan control
24-May-2016	1.15	Added LCD setup
17-Jan-2017	1.16	Added information and corrected some typos
28-Feb-2017	1.17	Update [AIO Link Limits] picture and corrected some typos
29-Apr-2017	1.18	Update [AIO Link Fans] Custom mode and added CLNP on [AIO Link LEDs]
14-Jul-2017	1.19	Added CLCP control, profile functions, updated [AIO Link LEDs], [AIO Link Fans], [AIO Link Setup] and [AIO Link Limits]
11-Dec-2017	1.20	Updated compatibility information for CL versions
14-Dec-2017	1.21	Updated picture of Link Limits for added hardware compatibility
29-Mar-2018	1.22	Updated picture of Link Setup
28-Aug-2018	1.23	Updated Asetek Pro section Fan cooler control
20-Feb-2023	1.24	Updated to say [Machine ▼]->GPU Detail->GPU Fans
04-Oct-2023	1.25	From SIV 5.72 [Status ▼]->... has been changed to [Sensors ▼]->...