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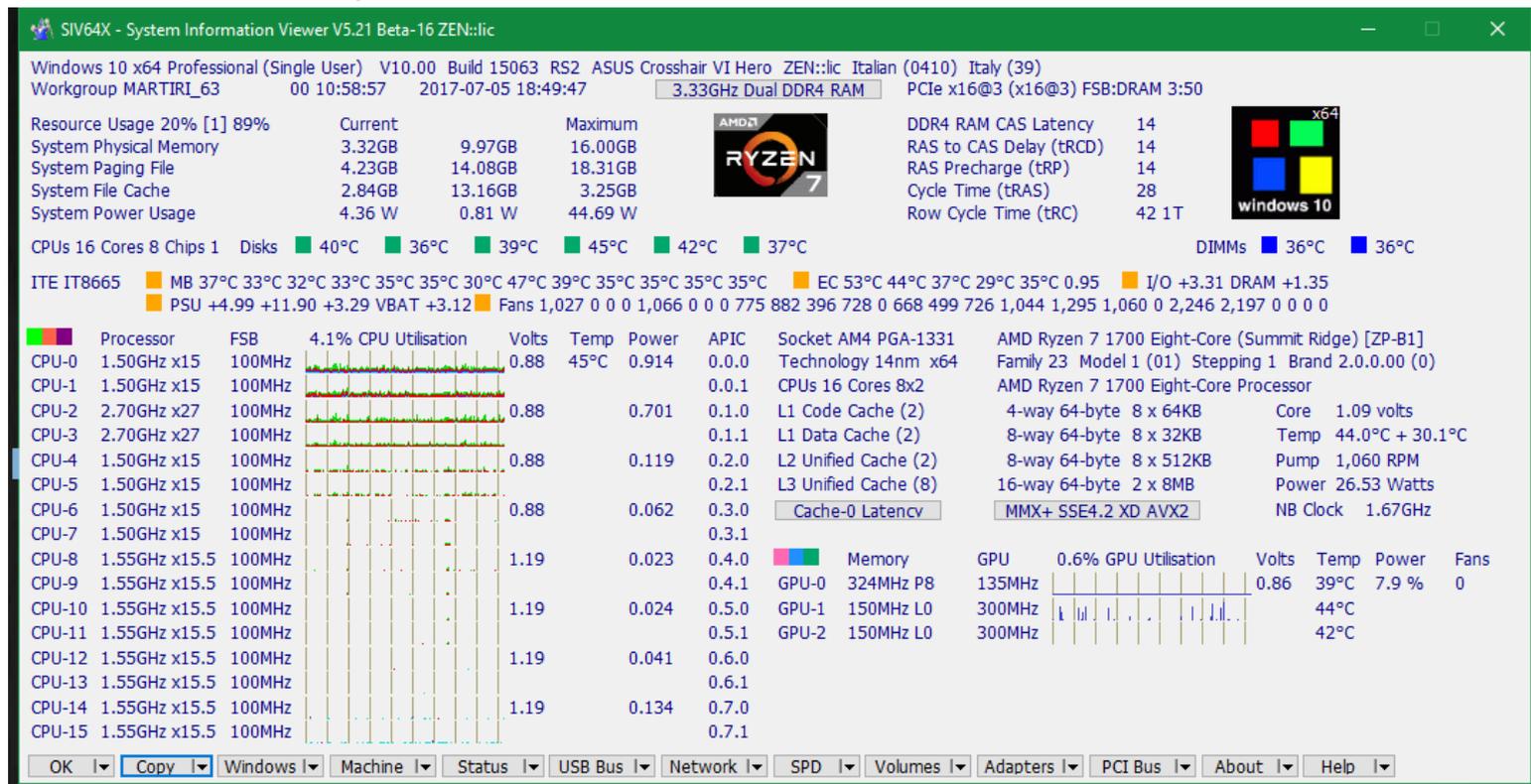
Run **SIV64X.exe**, or in the unlikely case of 32-bit Windows **SIV32X.exe**

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.
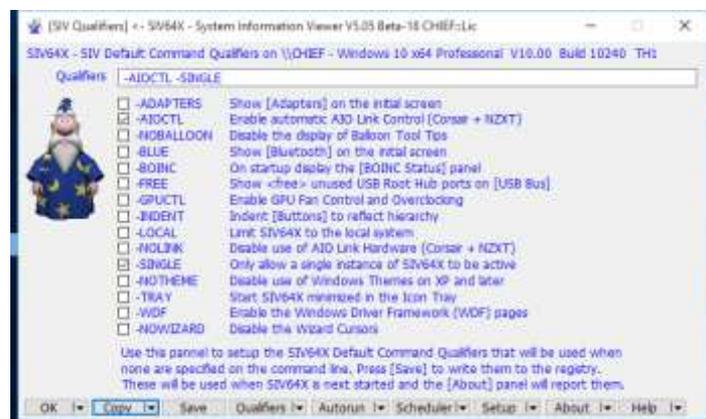
Next navigate to **[Sensors|▼]->Configure->Link Export**
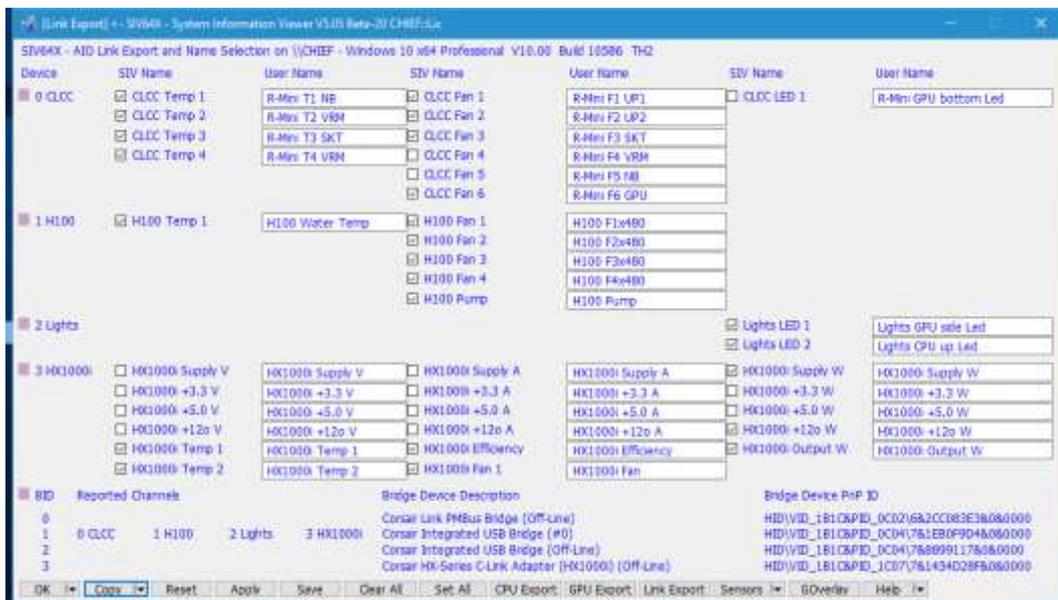
Use **[Link Export]** to set the names you wish to use then press **[Save]**.

Configuring Link Fan Control

Use **[Sensors|▼]->Link Fans** to setup the custom curves.
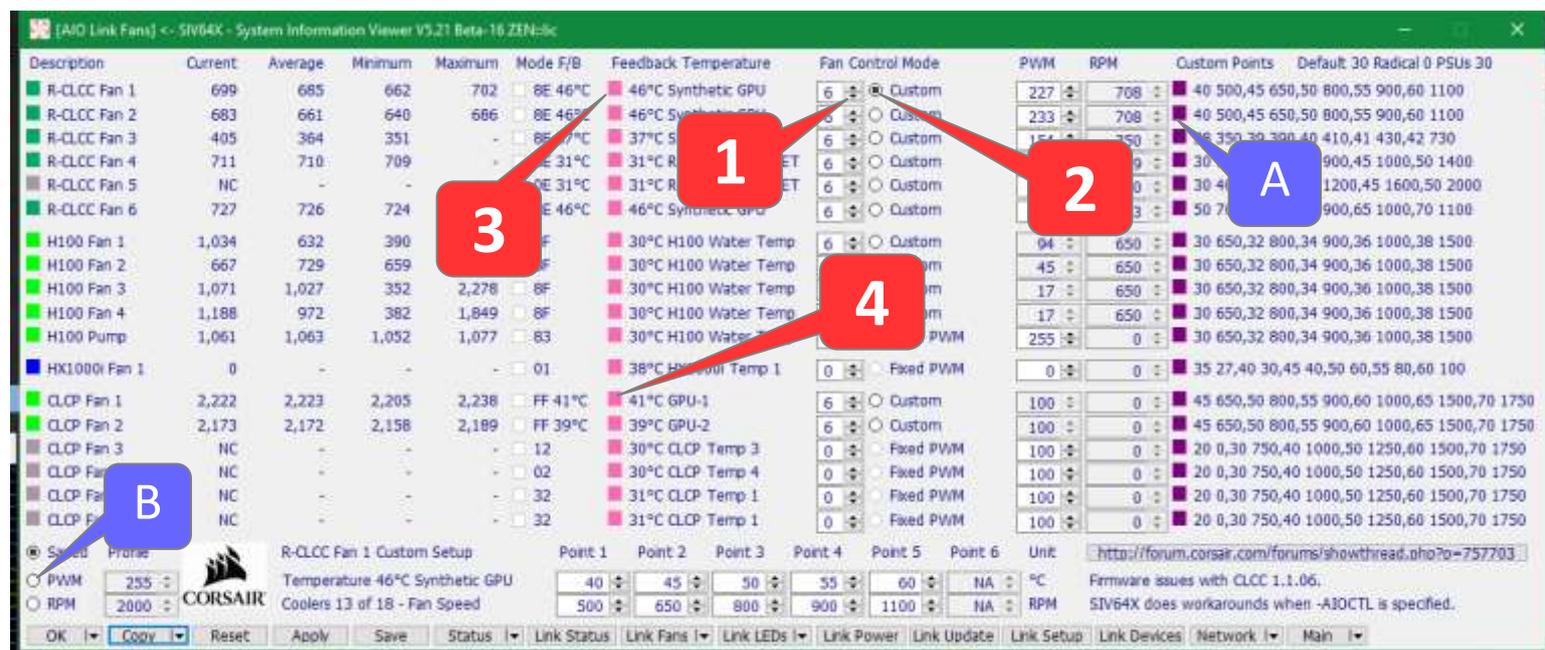
1 Select the Mode (**6=Custom**)

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.
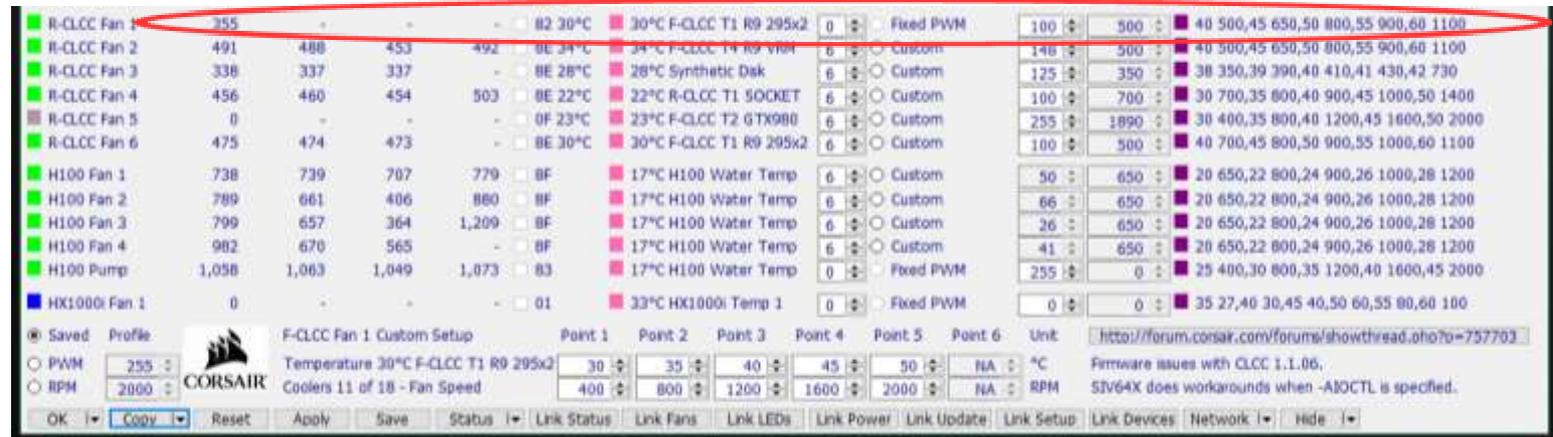

After finding a good PWM value switch back to **Custom** mode (6), confirm the PWM is correct and press **[Apply]** to test your settings. Finally press **[Save]** to save settings in the registry.

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.
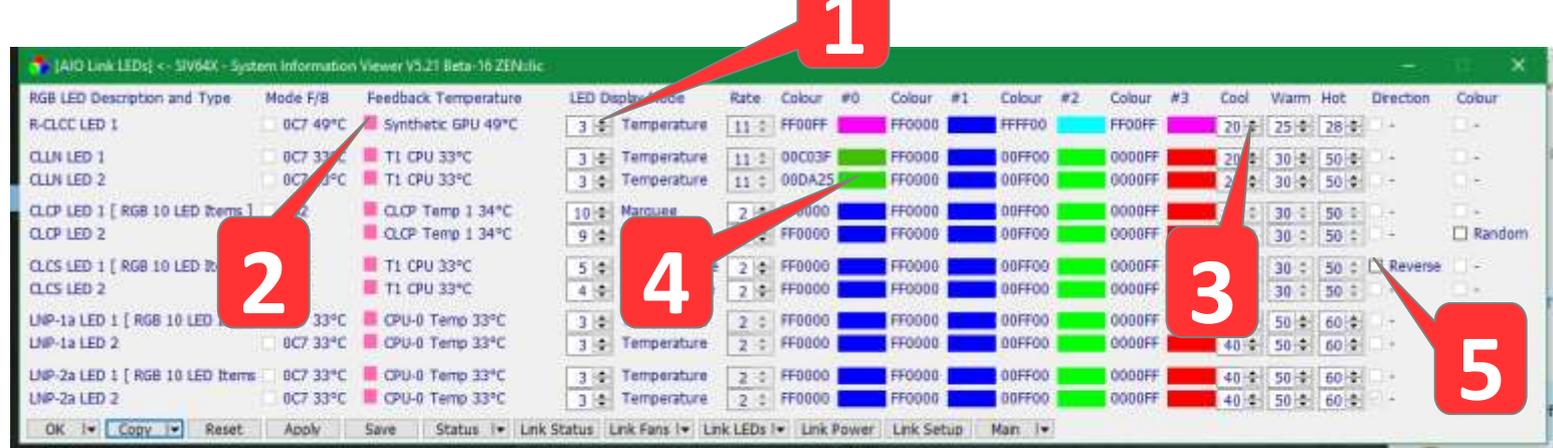
1 Select Mode (Temperature as example is 3) – With the right mouse button a popup menu will appear

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.
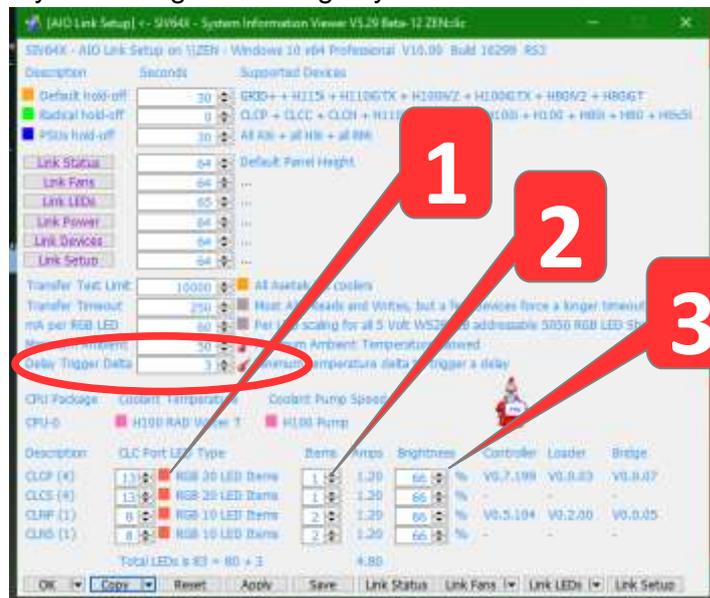
Configuring Synthetics

Click on **[Sensors|▼]->Configure->Synthetic Setup** to configure multiple sensors to control fan custom curves or LED colours.
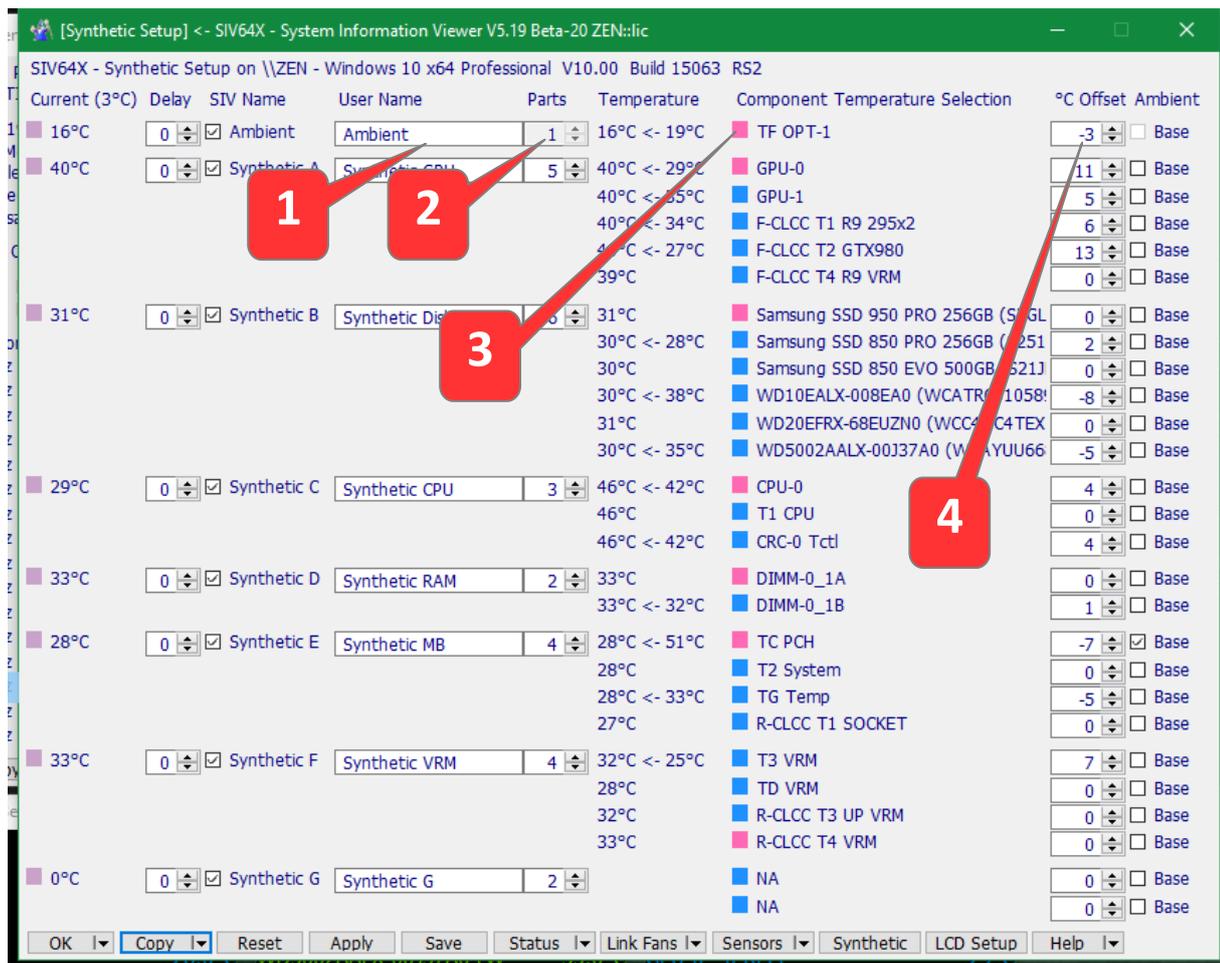
1 Set the group name

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 -> nn°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.

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

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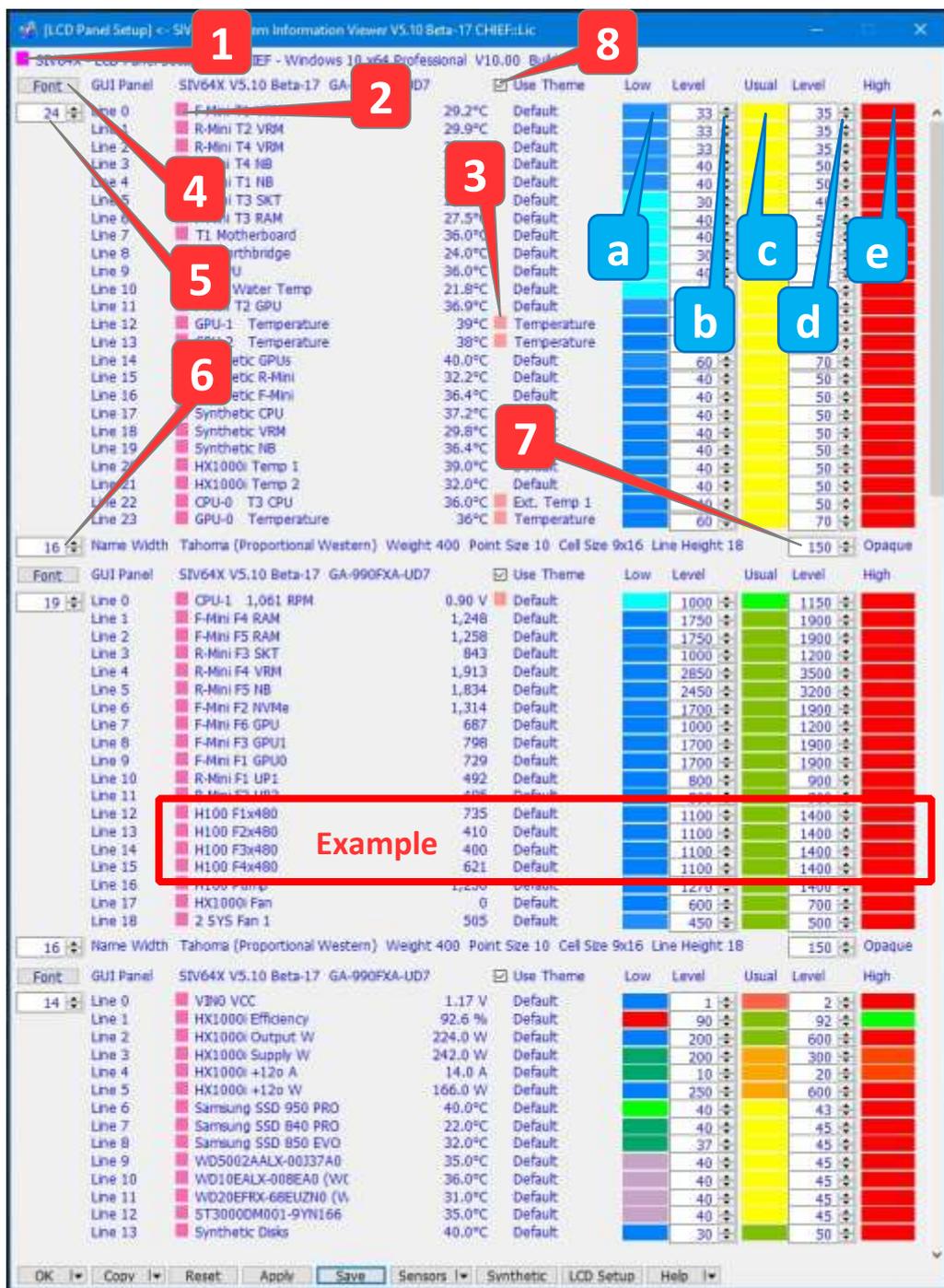
For every line is possible to set a colour range as follow:

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.

[AIO Link Limits] <- SIV64X - System Information Viewer V5.26 ZEN::lic

SIV64X - AIO Link Limits on \\ZEN - Windows 10 x64 Professional V10.00 Build 16299 RS3

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			

Total	Devices	Sensors	Delay	Usage %
Current	6	55	495ms	24 %
Estimated	6	52	468ms	23 %

Supported: USB + C-Link, USB Only, SMBus, C-Link Only — Display Only, Display + Full Control, Display + Fan Control

NZXT. GRID+   Tt

OK | Copy | Status | Link Status | Link Fans | Link LEDs | Link Power | Link Update | Link Limits | Link Devices | Main

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]**.

[SIV Autorun] <- SIV64X - System Information Viewer V5.21 Beta-16 ZEN::lic

SIV64X - SIV Autorun on Login on \\ZEN - Windows 10 x64 Professional V10.00 Build 15063 RS2

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"

OK | Copy | Tune | Qualifiers | Autorun | Scheduler | Setup | About | Help

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.

Press **[http://rh-software.com/downloads/siv.zip]** and the new release will be downloaded.
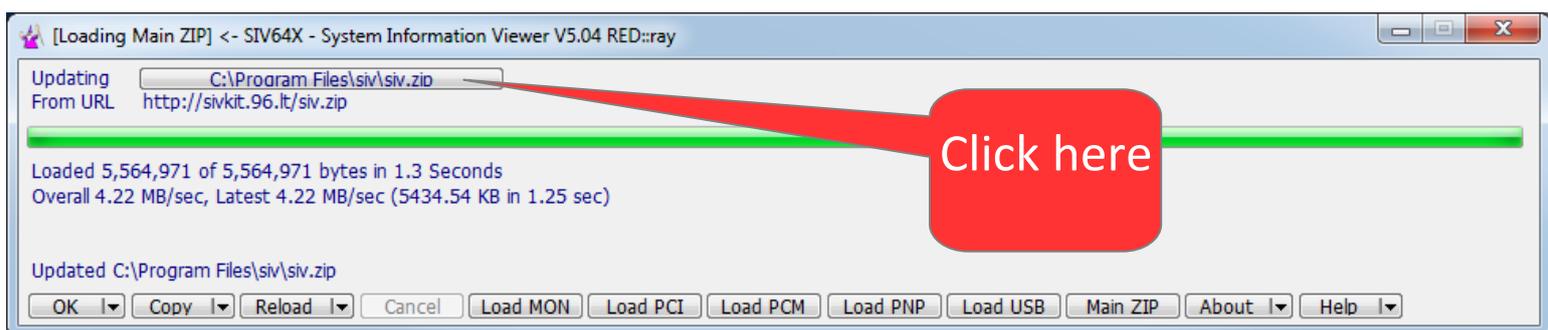
Once complete, press **[C:\Program Files\siv\siv.zip]** and the files will be extracted.
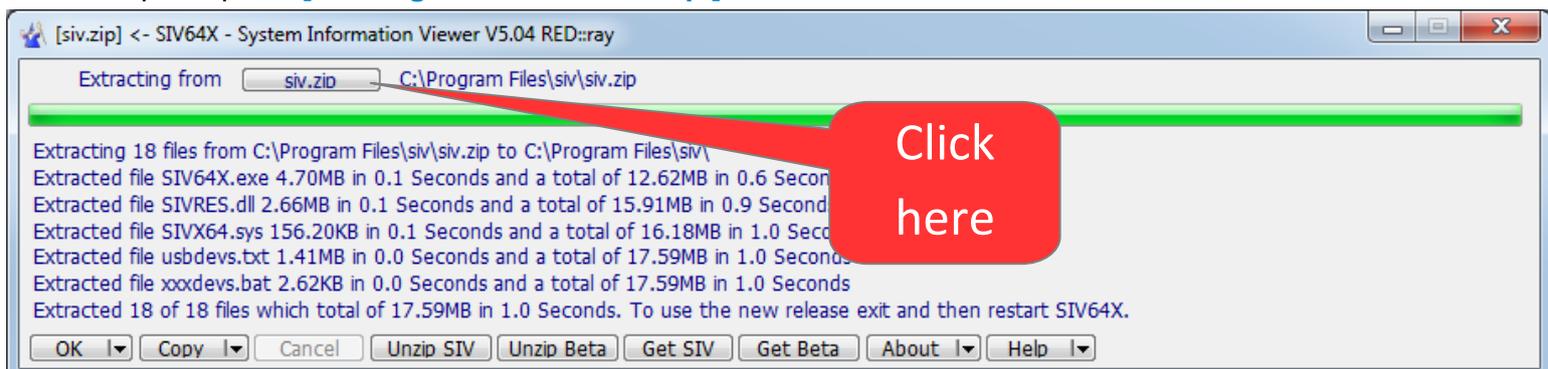
Finally to use the new release exit and then restart **SIV64X**.

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 >= 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 >= 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|▼]->...**