



Sentry Control Software User Guide (USB)

Thank you for supporting Cyndr and purchasing a Sentry. You will now be able to take back your personal space!

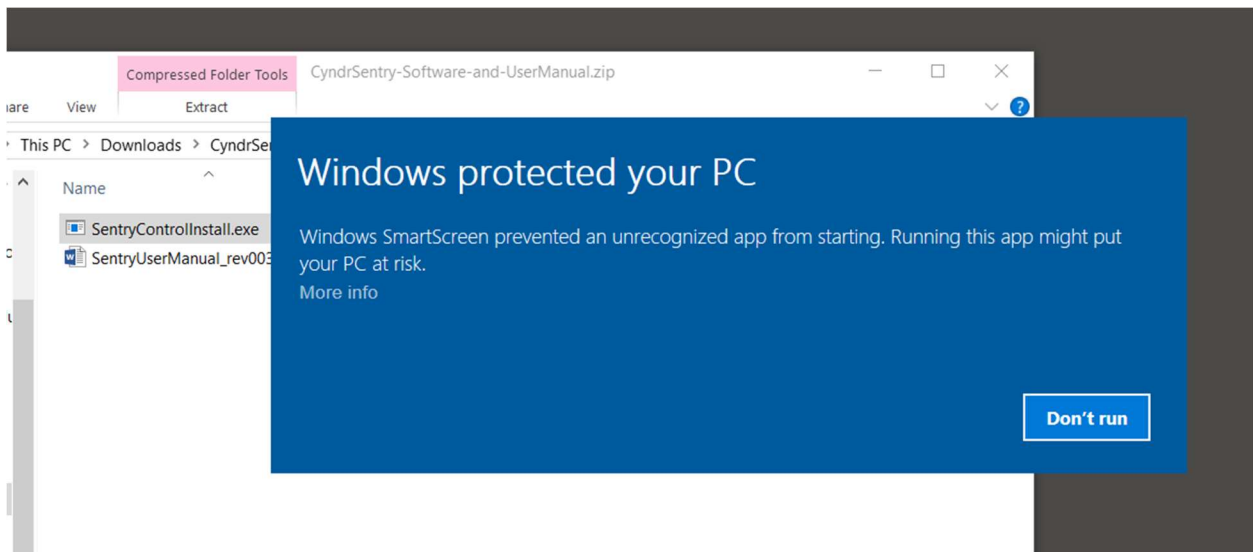
Contents

Getting Started.....	2
The User Interface.....	3
Tabs.....	3
Buttons.....	3
Notification Control Sliders, Menus, etc.....	4
System Tray Icon.....	4
Advanced Tab.....	4
Windows Video Player and Games Notes.....	5
Anti-Virus Considerations	6
FAQ.....	6
Troubleshooting.....	7

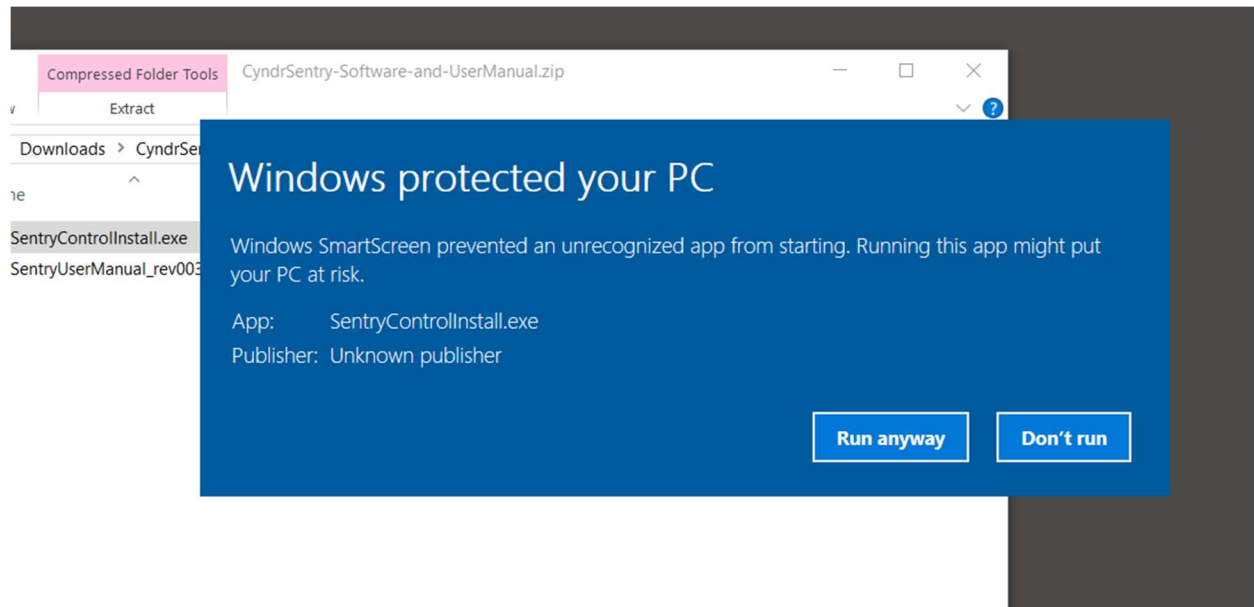
Getting Started

When you first connect the Sentry, Windows may need to install the proper USB drivers, and it should notify you it is doing so. After that process is complete, the Sentry will be both recognized and disengaged very quickly on connect/disconnect, with the Windows default USB device tones advising you of success.

The Sentry device and control application will work with Windows 7, 8, and 10. Run the installation executable SentryControlInstaller.exe to perform the installation. You may receive an alert from the Windows SmartScreen security application that offers a warning about installing the software.



This installation interrupt occurs on some systems due to the fact that the Sentry control software is new and unrecognized by Windows and the Windows application user community. If this occurs, **you will still be able to install the software.** Click on the “More info” tag beneath the text warning.



Now you'll see you have to option to continue the installation by clicking the "Run anyway" button. Running the installation **will not put your PC at risk – we stake our reputation on it.**

Once the installation is complete, you should be able to immediately run the Sentry control application from the Start Menu, which is installed to Programs->Cyndr->Sentry Control.

The unit is hot-swappable, meaning the control software will recognize the Sentry on attachment even in a running state. **Nevertheless, we recommend on first use that you connect the Sentry to your computer via your USB port before running the control software to allow the drivers to install.**

The User Interface

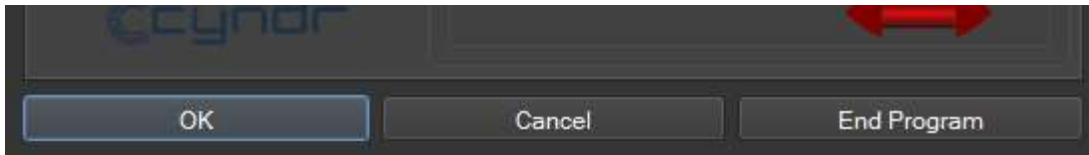
Tabs

The application has two tabs, a basic settings tab called Settings and an Advanced settings tab. On the Settings tab, you can enable or disable the alerts and select specific types of alerts. The sliders adjust the size and opacity of the notification popup. You can also set the popup screen location and it's duration. More on the Advanced tab follows.

The Window Switch alert option is a security feature setting that will cause all of your windows to minimize when the Sentry triggers. It will also open a Windows Explorer window.

Buttons

The OK button is visible on both tabs. It will save the current settings and minimize the application. Note that when the application is minimized, it minimizes to the system tray instead of the task bar to keep your task bar free of clutter.



The Cancel button will minimize the application and causes any unsaved settings to be lost. The End Program button will quit the application entirely, but if your settings are saved they will be restored when you open the application again.

If you'd like to save your current settings without minimizing the window, use the Apply Changes button. The Settings tab also has a Test Indicator button. This will immediately simulate an alert activation, which will behave according to the settings you have selected.

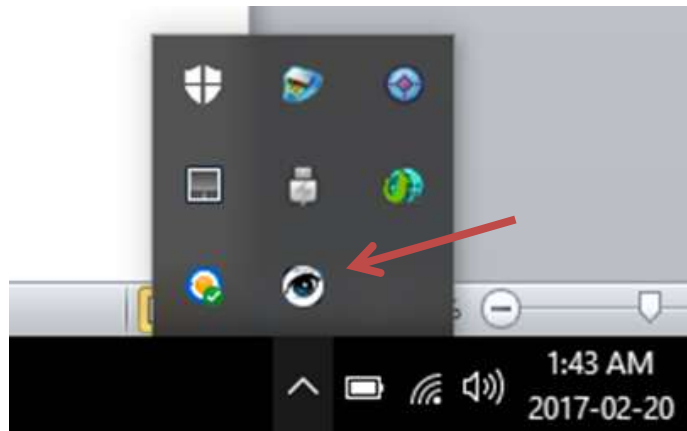
Notification Control Sliders, Menus, etc.

You can customize your desktop notification popup with these controls. The sliders adjust the popup size and opacity. You will be able to see a preview of the popup as you move the sliders. You can also adjust the screen location of the popup and the amount of time that the popup is visible.

Finally, you can also choose a popup image using the Image Select menu.

System Tray Icon

Once minimized, the application can be accessed via the system tray icon. Left click on the icon to restore the application window. Right click will give you the option to quit the application entirely.

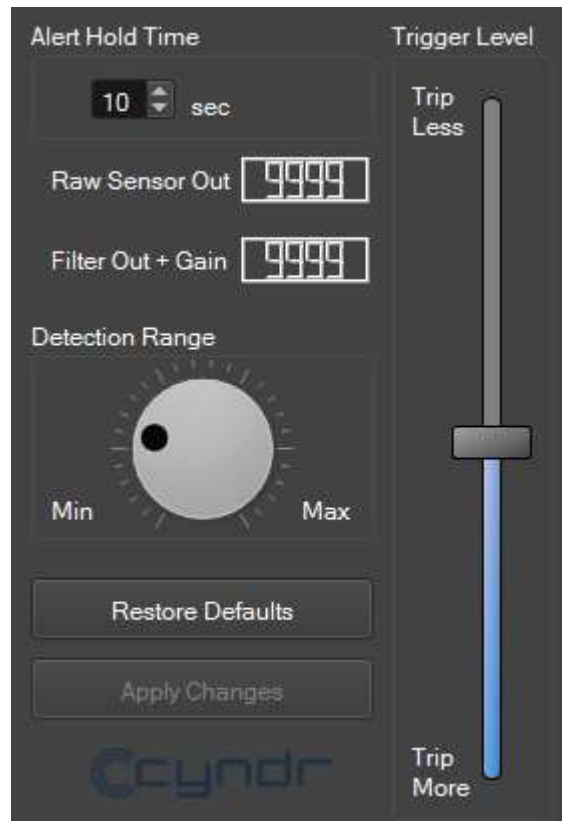


Advanced Tab

The Alert Hold Time setting tells the software how often to register new alerts. The maximum alert rate is one alert per second, which is a one second hold time. For less frequent alerts, increase the hold time.

There are two sensor data interfaces on this tab. The Detection Range knob will amplify or attenuate (shrink) the input signal from the Sentry. As you crank the knob higher, the Sentry will appear more and more sensitive, and vice versa. The Trigger Level sets the sensitivity of the alert. Note that adjustments

move bars on the sensor plot up and down. The further apart those bars are, thus further from the steady-state in the center of the plot, the harder it is to trigger an alert. An alert is only triggered when the amplified or attenuated sensor input value touches the sensitivity bars.



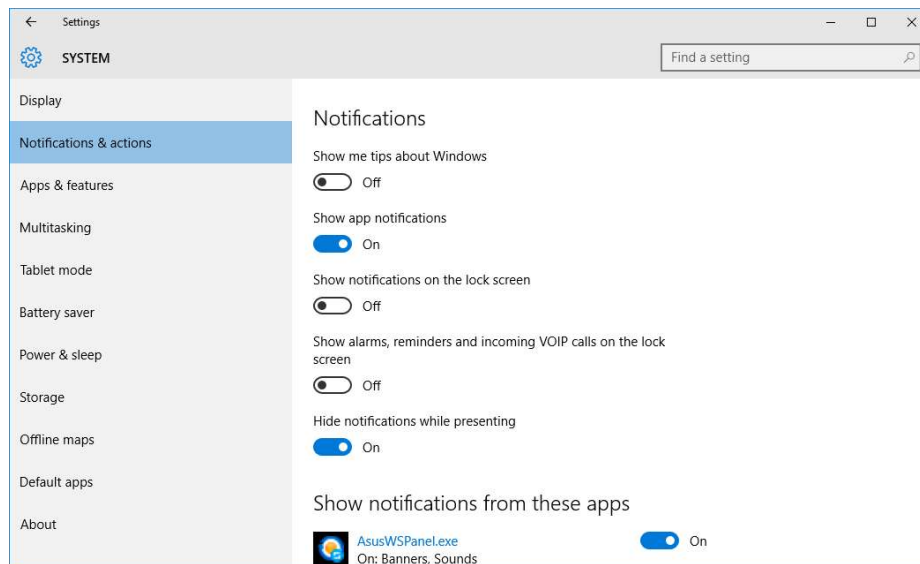
You can also restore the default settings with the Restore Defaults button on the Advanced tab (Advanced settings only).

The plot shows the filtered sensor readings in real time. You can click on the plot to pause it, and click again to continue running. Note that if your plot window is completely light blue in color and the Sensor and Filter Output boxes show 9999, there is no data being received from your Sentry. This is what you will see when the control software is started up but the unit is unplugged. If you disconnect the unit after the software has started, you'll see the plot grid lines stop moving as if paused.

Windows Video Player and Games Notes

Certain applications, such as Windows Media Player, the Windows 10 Movie Player, Windows 10 Gameloft games, etc, will sometimes prevent the Sentry alert popup from showing over top of a full screen maximized video by design. For that reason the control software includes the ability to detect such a maximized application and display a notification balloon instead of the usual Sentry popup image. This will appear in the bottom right corner of the screen as any Windows notification balloon, and will persist for the same number of seconds as specified in the Sentry control for the popup.

In order for this feature to work properly, you must have notification balloons enabled for your system.



This setting can be changed by right-click on the Taskbar and choosing Properties. Then click the Notification Area: Customize button.

Anti-Virus Considerations

Let us know if you have problems with your anti-virus disrupting Sentry functionality. You may need to temporarily disable it to run the control application, although we have yet to see any major problems of this kind.

FAQ

Can I move the popup location to another monitor, besides my main display?

Not at this time. However, that is a feature we would like to add, particularly if there is user interest. Please let us know via email if you think this would be a valuable feature to you.

What does the Detection Range knob actually do?

This is really a signal gain control. It simply amplifies or attenuates the filtered reading from the sensor.

Will the system work with my virtual reality headset?

We have not yet tested the system with any VR headsets. If your headset is configured as your main display and shows a Windows desktop and/or you are running software that uses a recent version of DirectX to drive the headset image, there's a good chance the alerts will work. Regardless, we are dedicated to bringing Sentry functionality to the VR world and hope to support it soon.

Are all notification popup customizations applied to the full screen exclusive mode applications, like games?

Not yet all. We have decided not to apply opacity customizations to the game screen overlay due to the increased processing power that would be needed to manipulate thousands of pixels and re-draw image

frames. This keeps the overlay as responsive as possible. We are currently working on adding the ability to apply image selection, image location, and image size to the full screen overlay.

Notification Control Parameter	Desktop Popup Support	Full Screen Overlay Support
Opacity	YES	NO
Size	YES	NO (future addition)
Image Selection	YES	NO (future addition)
Screen Location	YES	NO (future addition)
Visibility Time	YES	YES
Alert Hold Time	YES	YES

Will you be releasing an API so that I can integrate Sentry control and alerts into my own software projects?

We have discussed this, and we think it's a great idea. It's something we hope to do as soon as we can get to it, although we have a lot to do and not a lot of manpower. If we can expand our user base, increase our resources, and find there's a lot of interest in this feature, then it's more likely to happen sooner.

Troubleshooting

My alert is triggering over and over again when I have a visitor, although the trigger level is set to my desired position.

Change the Alert Hold Time on the Advanced tab. This tells the software how many seconds to wait after an alert before bugging you again.

My plot is not moving, or the entire plot is colored light blue.

The plot may be paused – click on it to find out. The Sentry may not be connected to your computer, or there could be a bad connection or problem with the driver. Try disconnecting and then re-connecting your Sentry. We haven't seen any persistent driver problems yet, but if you discover that is the issue please let us know. It's also remotely possible that you have a malfunctioning USB cable. We have actually seen this cause problems before. Please try using a different cable to see if you have better results.

Some of the text on the control GUI disappears off to the right of a label, as if too big for the size of the application window.

You may be experiencing display DPI scaling or resolution issues. We haven't been able to do exhaustive DPI testing yet ourselves, but it's possible that very high resolution monitors could have issues. We have attempted to fix the problem using proper settings functions in our graphics library but there may be something missing. Please provide us as much detail about the problem as you can, screenshots welcome.

The alert overlay is very slow to appear over my full screen exclusive mode game, or inconsistent in latency. Why?

Unfortunately, calling the library functions needed to draw the overlay on top of your full screen game is a very hardware intensive operation and performs best on the most powerful computers. We suspect if

you are experiencing this problem, it is because you are using an older or lower performance machine. We have found the response time to be worse in that case.

It also depends upon the application being run and how processor intensive it is. We regret to say we do not currently have a fix to speed up the delays caused by system hardware limitations, however we are working on finding ways we can reduce software related delays. Look for future updates that address this issue.

Fortunately, the Windows desktop popups in our testing seem to be consistently much less dependent on hardware capabilities. Please try running your application in windowed mode to enable desktop popup notifications if the problem is severe on your computer.

Is there a debug logging mode?

Yes. We may ask you to enable this mode if you contact us about problems you are having with your Sentry software. It can be enabled simply by running the control software in admin mode. The log files are written to the installation folder in your Program Files directory.

My control software sometimes crashes, or I'm seeing other strange problems.

We have occasionally seen issues with full screen game overlays that can cause some stability problems with the control software. We are active in trying to chase down any problems in our code and eliminate them. Please send us a description and the details regarding the problem you see, including the following:

- Windows version
- Name(s) of running application(s)
- Circumstances of the problem
- Frequency of the problem