

# TC-Speed Connect Notes

4/15/24

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### **Please note the following:**

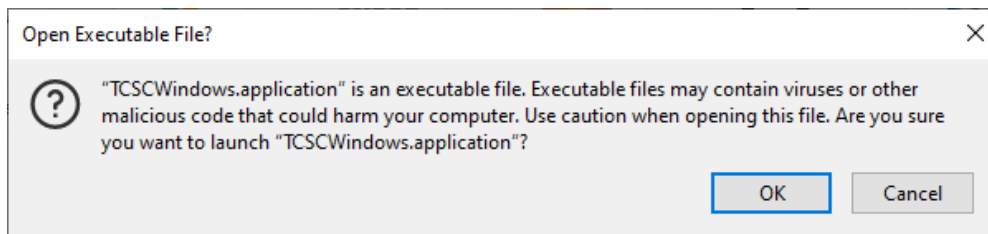
- **MUTCD compliance limits a lot of options. Deselect the checkbox in the profile page for more familiar configuration.**
- **The 'Inactivity Display State' (shows blank screen or zero when not detecting traffic) is not included due to its limited usage and some legacy OCAN firmware errors where the command conflicts with another command that affects Speed Logs.**
- **Any detected speed above Max Speed will be met with a blank screen as per current guidance.**
- **Control of the LogMin and LogMax variables has been taken away from the user to ensure that the posted speed limit falls on a boundary of the binned data. This way we can more accurately tell speeding vehicles from compliant ones.**

## Installing the program

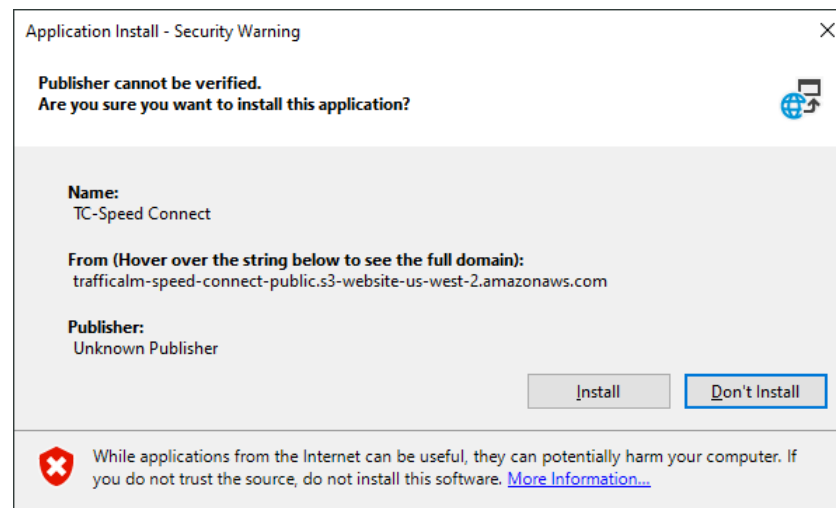
- Open the following link in your web browser:

<https://trafficalm-speed-connect-public.s3.us-west-2.amazonaws.com/TCSCWindows.application>

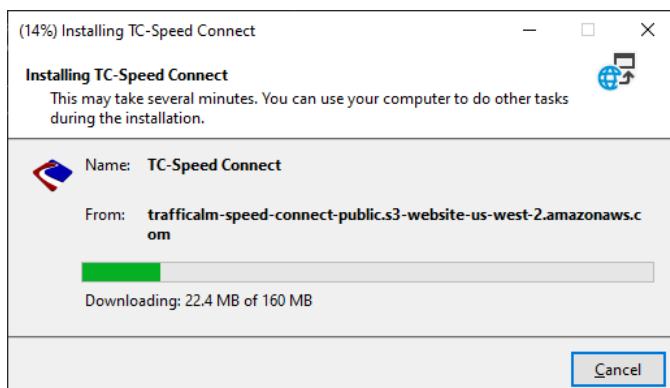
- Double-click the .application file that gets downloaded. If you see the following dialog, hit OK.



- Hit the Install button on the dialog that opens.



- The program will proceed to download and once completed will open itself.

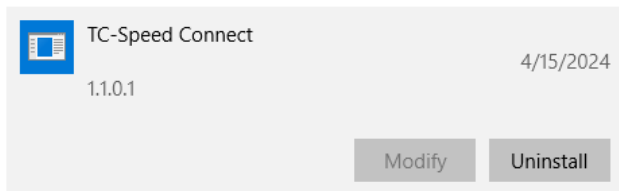


## Uninstalling the program

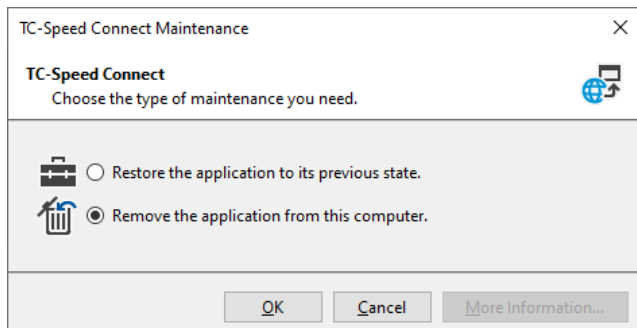
- Click the windows button in the bottom-left of the desktop and start typing 'Add or Remove Programs'.



- When the 'Add or Remove Programs' option is shown, click on it and find 'TC-Speed Connect' in the list. Then hit the Uninstall button.



- On the dialog that appears, select 'Remove the application from this computer' and hit OK.

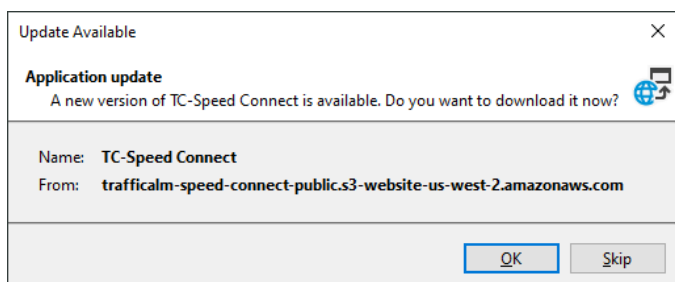


## Running the program

- The installer will place an icon on the desktop which can be double-clicked to start the program.



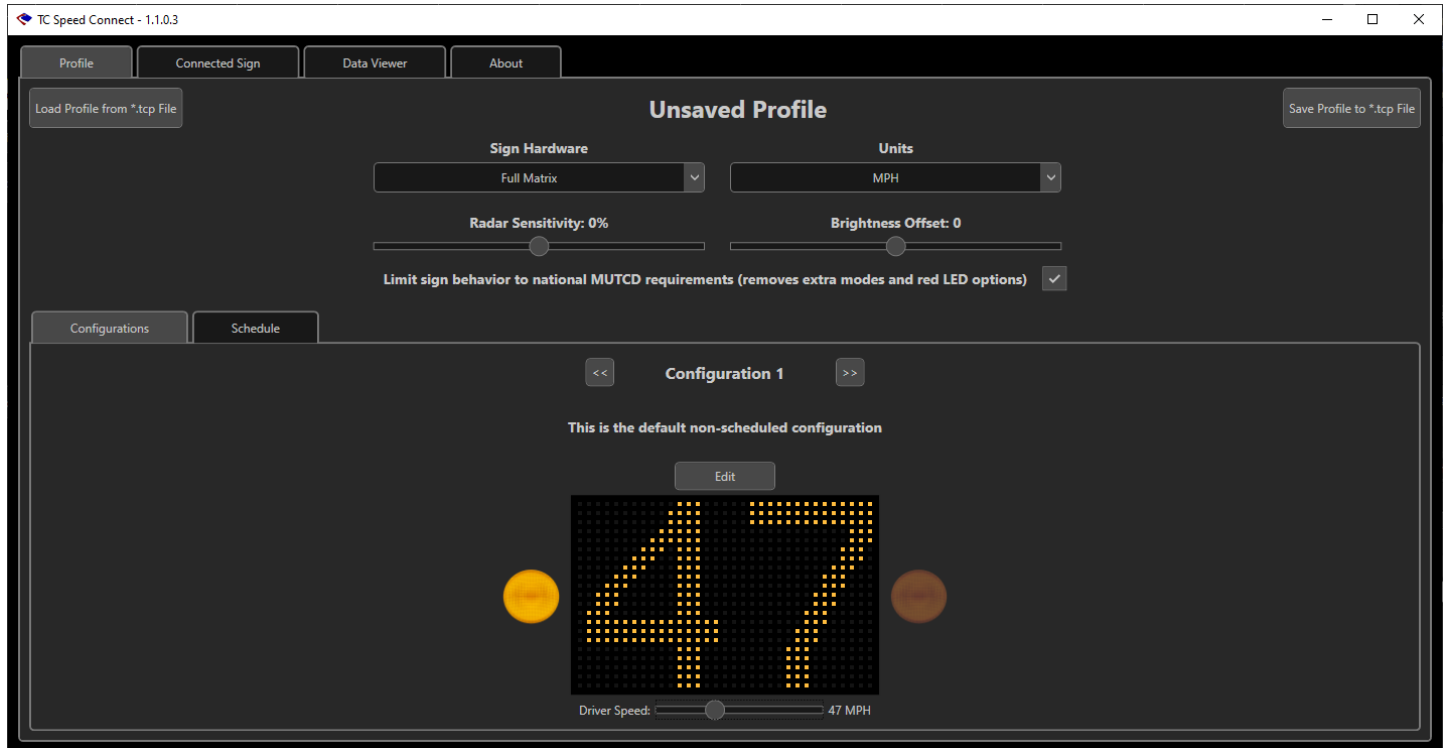
- Whenever you open the program and have internet access, it will check for an update and give you the option to download it.



## How the program works

There are four pages: **Profile**, **Connected Sign**, **Data Viewer** and **About**

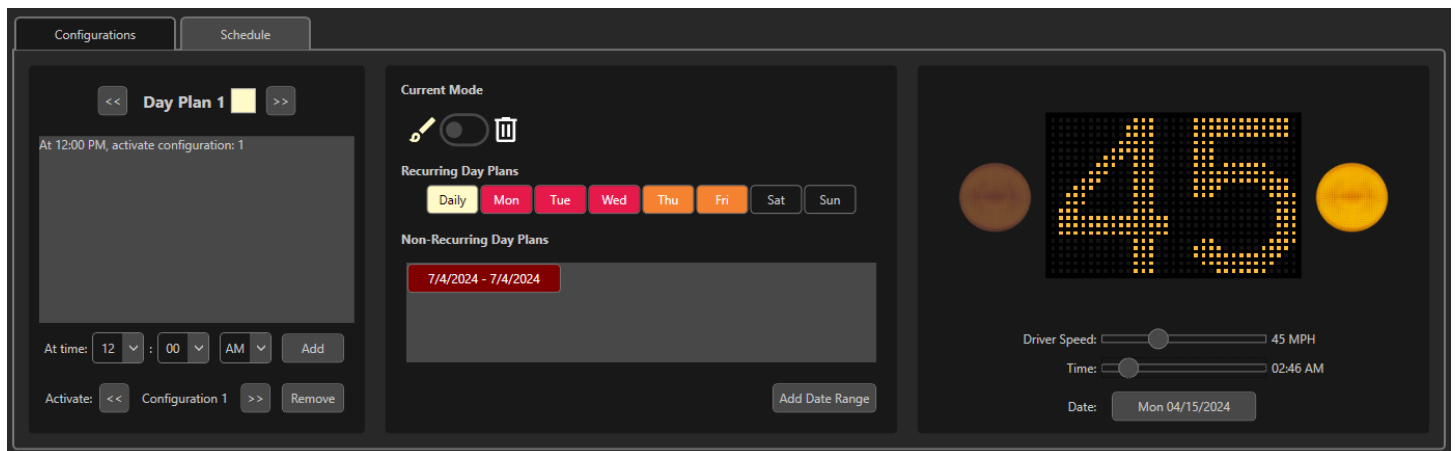
### Profile Page



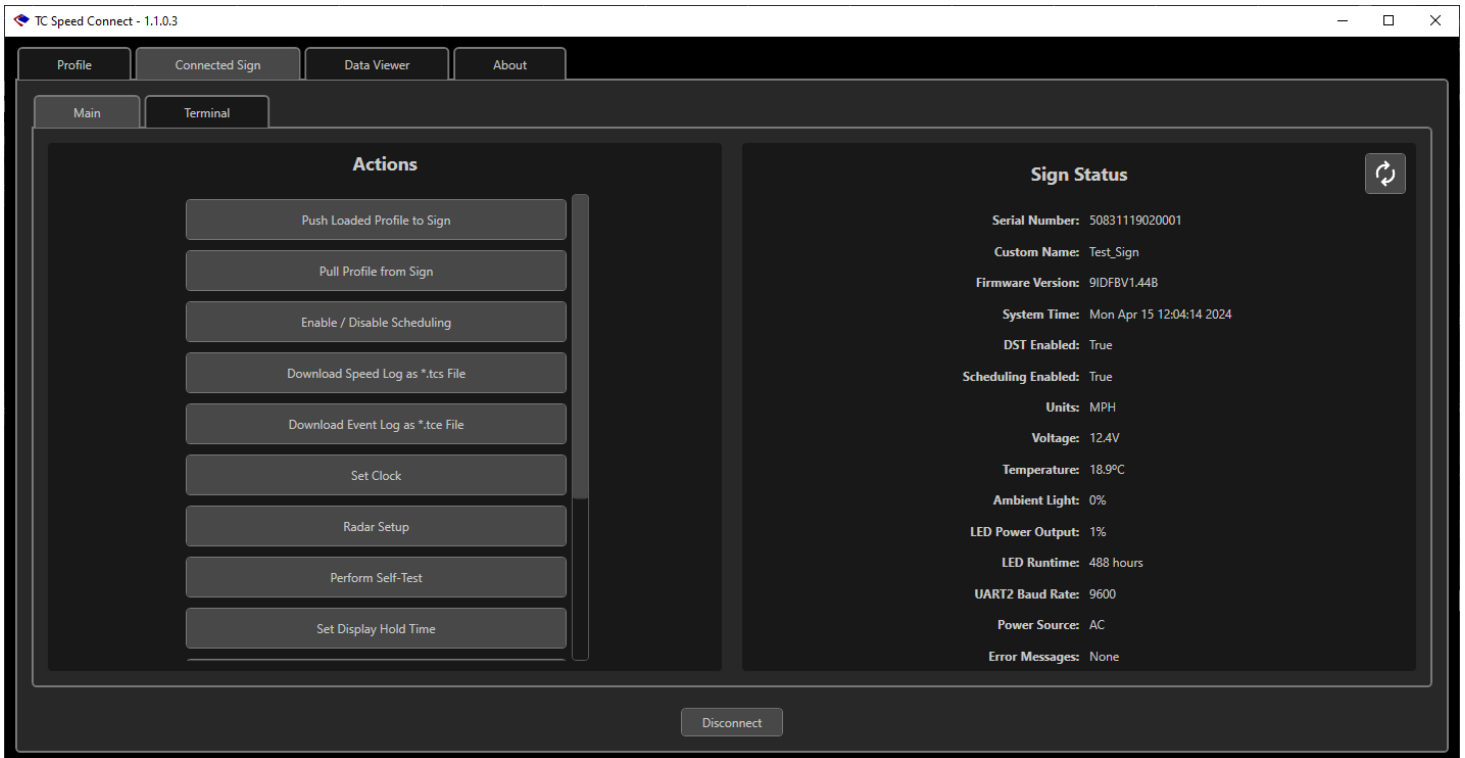
- Used for:

- creating sign profiles (which are a combination of configurations, day-plans and schedules).
- saving out profiles as .tcp files.
- loading in .tcp files.

- The configurations are now set up via a wizard which opens when you hit the Edit button on a given configuration.
- Schedules are set up with the assignment of day plans to a hierarchy mirroring the logic executed on the sign. A preview is included so you can test what you've set.



## Connected Sign Page



- Used for:

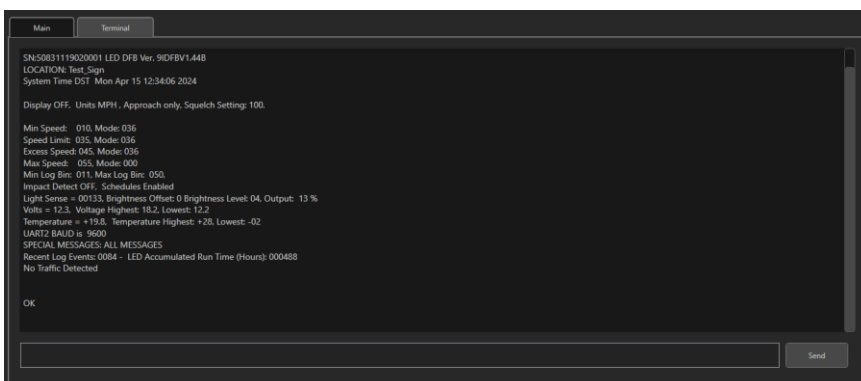
- Scanning for and logging into signs via Bluetooth or direct serial connection.
- Uploading and downloading sign profiles.
- Downloading speed logs as .tcs files.
- Downloading event logs as .tce files.
- Checking sign status and running tests.
- Setting per-sign options.

- The disconnect button is always present at the bottom of the screen when connected.

- If an action is greyed out on the left, it means you don't have current user rights on the sign to perform that action.

- To cut down on communication traffic between the sign and the device, there is now a refresh button for getting the most recent sign status (although some of the actions will prompt a refresh by themselves).

- A Terminal tab is included for direct AT command communication with the sign.



## Data Viewer Page

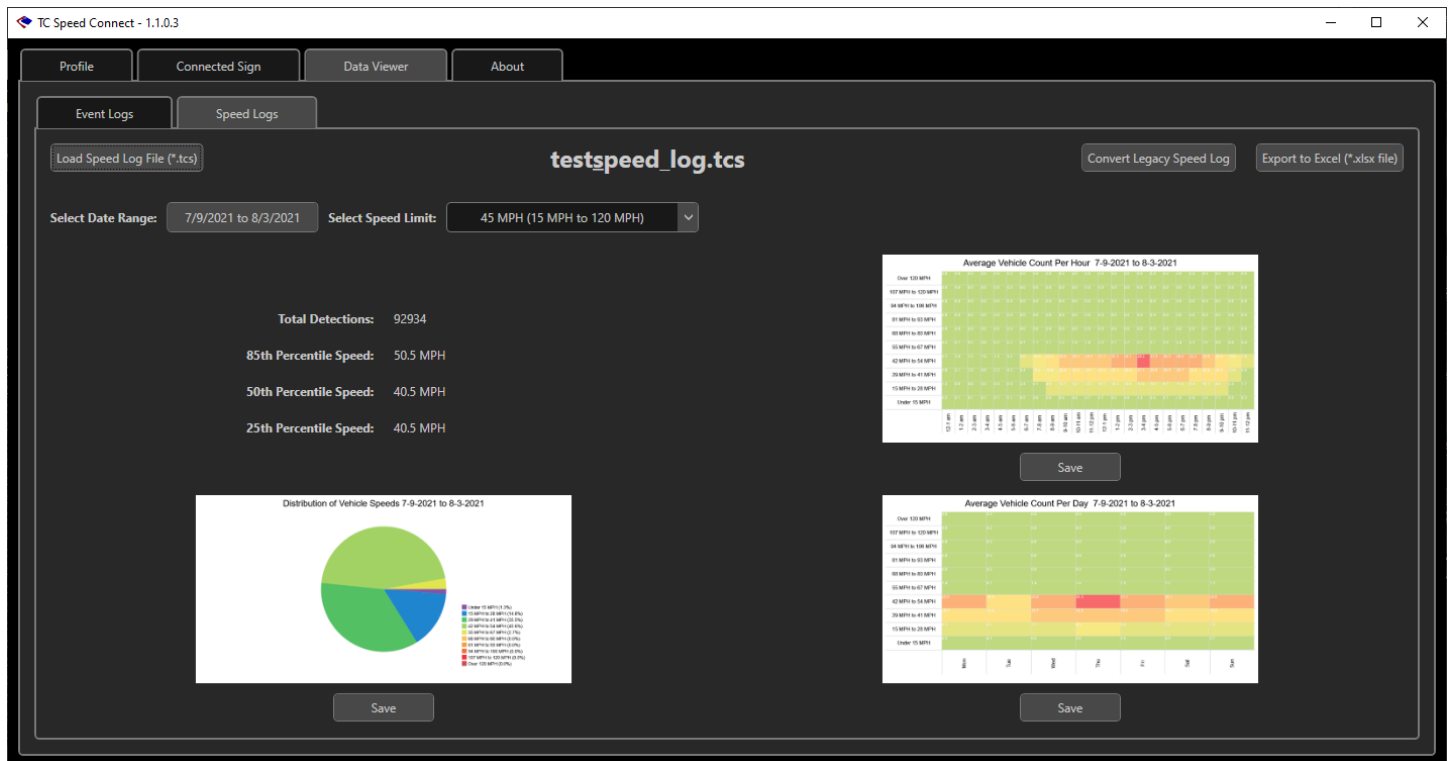
This page consists of two tabs:

### Event Logs

The screenshot shows the 'Data Viewer' window for 'TC Speed Connect - 1.1.0.3'. The 'Event Logs' tab is active, displaying a table of events for the file 'testevent\_log.tce'. The date range is set to '4/4/2024 to 4/15/2024'. The 'INTERACTION' category is selected. The table lists various events such as 'User cleared logs', 'Diagnostic command engaged', and 'Successful login: User 3' with associated status values for various system parameters.

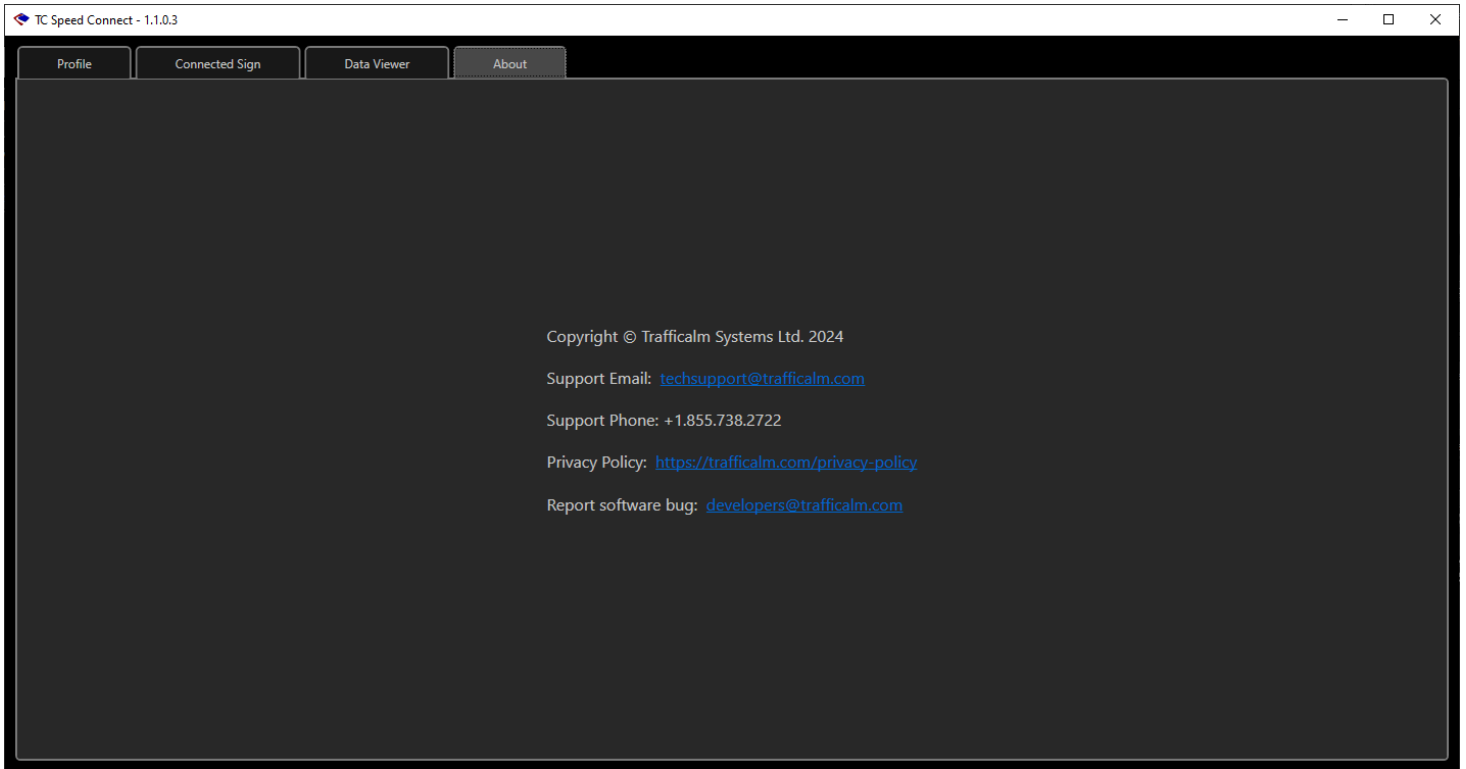
Date	Event Type	Display On	Stealth Mode	Test Mode	Demo Mode	Scheduling On	Units	Radar Tracking Approaching Only	Amber LEDs Powered	Red LEDs Powered	Automatic LED Dimming	Sensor Pov
4/4/2024 11:10 PM	User cleared logs.	True	False	False	False	False	MPH	True	False	False	True	False
4/4/2024 11:10 PM	Diagnostic command engaged.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:35 PM	Successful login: User 3.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:36 PM	Diagnostic command engaged.	False	False	True	False	False	MPH	True	False	False	True	False
4/5/2024 5:36 PM	User changed display mode.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:36 PM	Diagnostic command engaged.	False	False	True	False	False	MPH	True	False	False	True	False
4/5/2024 5:36 PM	User changed display mode.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:38 PM	Successful login: User 3.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:38 PM	Diagnostic command engaged.	False	False	True	False	False	MPH	True	False	False	True	False
4/5/2024 5:38 PM	User changed display mode.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:38 PM	User changed display mode.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:42 PM	Successful login: User 3.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:42 PM	Diagnostic command engaged.	False	False	True	False	False	MPH	True	False	False	True	False
4/5/2024 5:42 PM	User changed display mode.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:45 PM	Successful login: User 3.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:45 PM	Diagnostic command engaged.	False	False	True	False	False	MPH	True	False	False	True	False
4/5/2024 5:45 PM	User changed display mode.	False	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:45 PM	User changed display mode.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:47 PM	User failed to log in.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:47 PM	User failed to log in.	True	False	False	False	False	MPH	True	False	False	True	False
4/5/2024 5:47 PM	User failed to log in.	True	False	False	False	False	MPH	True	False	False	True	False

- Used for examining .tce event log files downloaded from signs via the program.
- These are loaded via the 'Load Event Log File' button in the top left.
- Legacy event logs (usually saved as \*.csv) can be converted to the .tce format via the 'Convert Legacy Event Log' button in the top right.
- Once loaded, logs can be filtered by date and by category using the checkboxes across the middle of the page.



- Used for examining .tcs speed logs downloaded from signs via the program.
- These are loaded via the 'Load Speed Log File' button in the top left.
- Legacy speed logs (usually saved as \*.csv) can be converted to the .tcs format via the 'Convert Legacy Speed Log' button in the top right.
- The data can be exported to an Excel file using the 'Export to Excel' button also in the top right.
- Once loaded, logs can be filtered by date and by posted speed limit using the controls at the top.
- Three charts are shown. Each of them has a 'Save' button that exports the chart to a high res .png file.
  - Distribution of vehicle speeds: percentage of vehicles travelling in each speed range)
  - Average vehicle count per hour: shows busiest hours of the day plus speeds via the heatmap.
  - Average vehicle count per weekday: shows busiest days of the week plus speeds via the heatmap.

## About Page



- Shows copyright, privacy policy and contact information