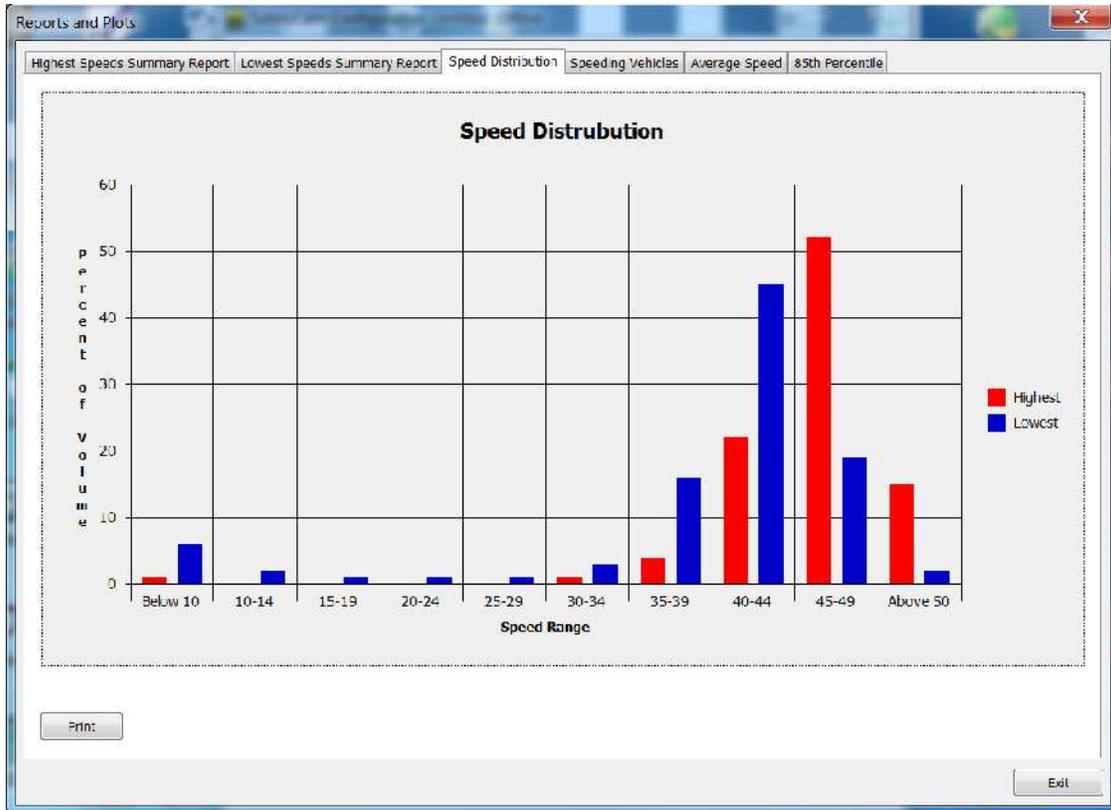


TraffiCalm Systems

SafetyCalm Software Data Collection Reports



SafetyCalm Configuration Software connects the display administrator or technician to a TrafficCalm display. It has tools for configuring the display with speed triggers, operation modes and schedules in addition to diagnostic tools and data collection and reporting functions. See the help file or software manual for additional information and tips on configuring and operating the display. SafetyCalm software can also be operated “offline” when no sign is connected to the software.

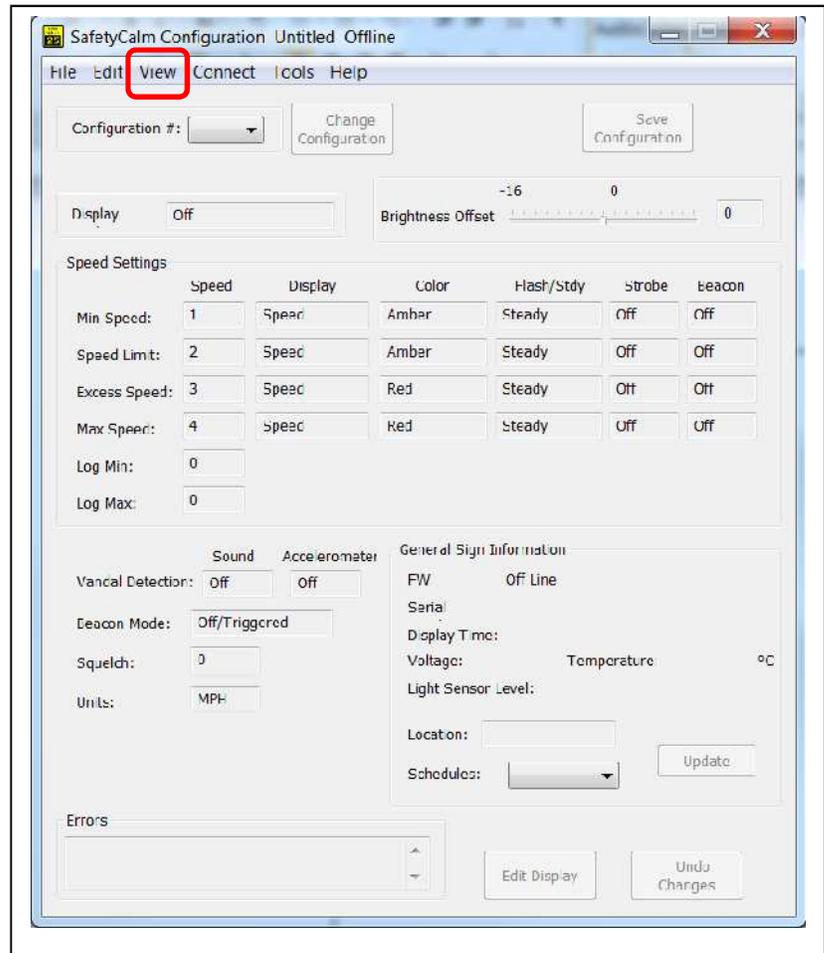
The displays maintain two types of data logs:

1. Speed Data
2. Display Performance Data

These are accessed through SafetyCalm software using the “View/Event Log” or “View/ Speed Log”. You can also view previously saved log files using the “View/ View Log” button.

Once a log has been downloaded from the display you have options to save it, print it, or “Show Chart”.

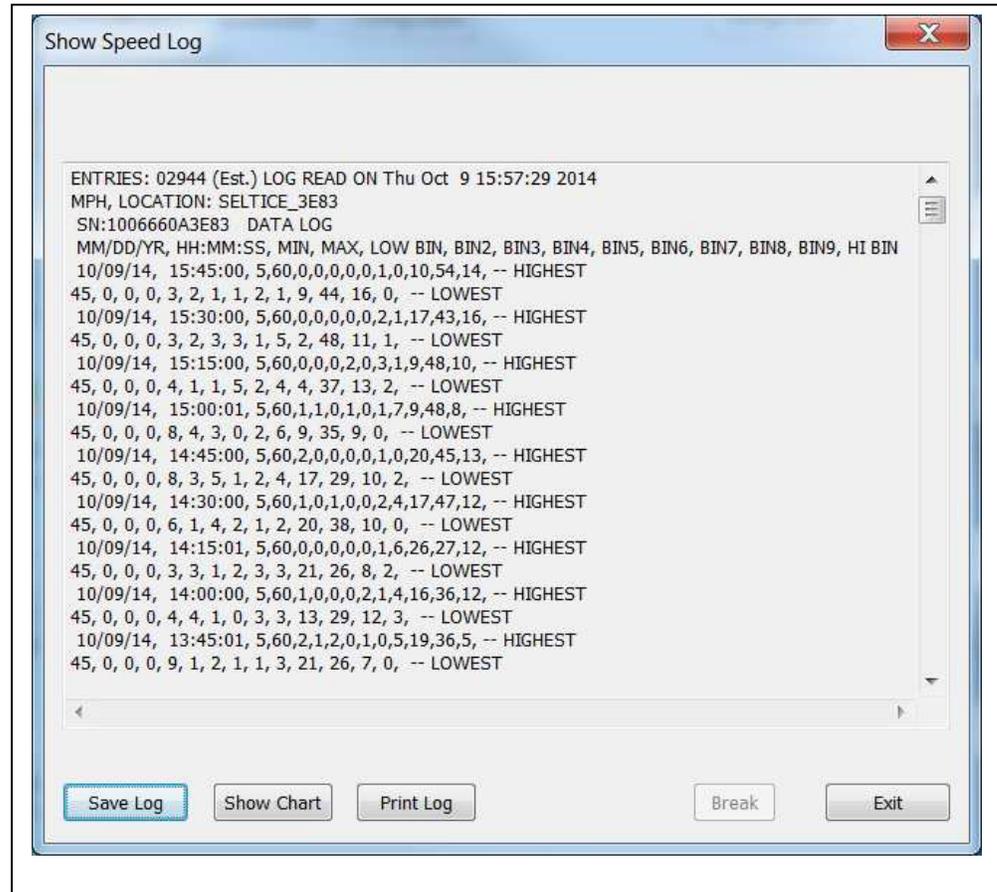
The files are comma delimited text files in native format. They can be opened in a Excel spreadsheet if additional processing is desired. SafetyCalm offers percentiles, speed distribution and average speed processing as a built in feature for evaluating the speed logs.



When you either open a saved Speed log file or down load a speed log from the sign the next dialog shows you the raw data. The scroll bar moves the data quickly through the viewable area allowing a quick search of the entire log if desired.

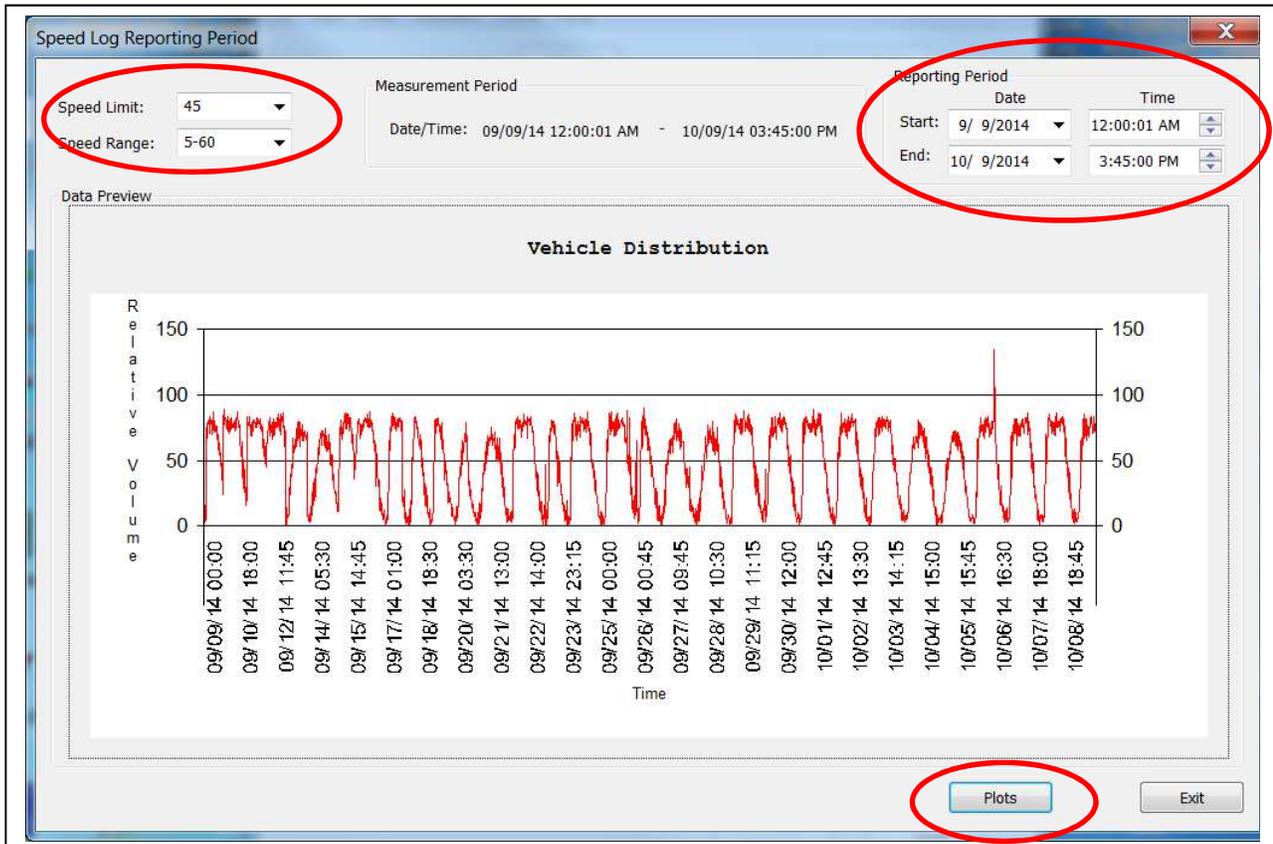
The speed log records a data and time stamp of when the record entry was made, the min and max bin settings, the bin counts from lowest speed to highest on one line for the highest speeds seen in a 10 second period, and on a second line, the speed limit setting, and the lowest bin count to highest of the lowest speeds seen in that same 10 second period.

An entry is made every 15 minutes of counts collected and the BIN counts are cleared for the next 15 minute period. This system does not yield an accurate count of traffic or vehicle classification, but it does offer a characterization of relative volumes and speeds as the display operates. Speed data is only collected when the sign is programmed to “Radar Mode” or “Stealth Mode” In “Stealth Mode” the radar operates but the display remains blank.



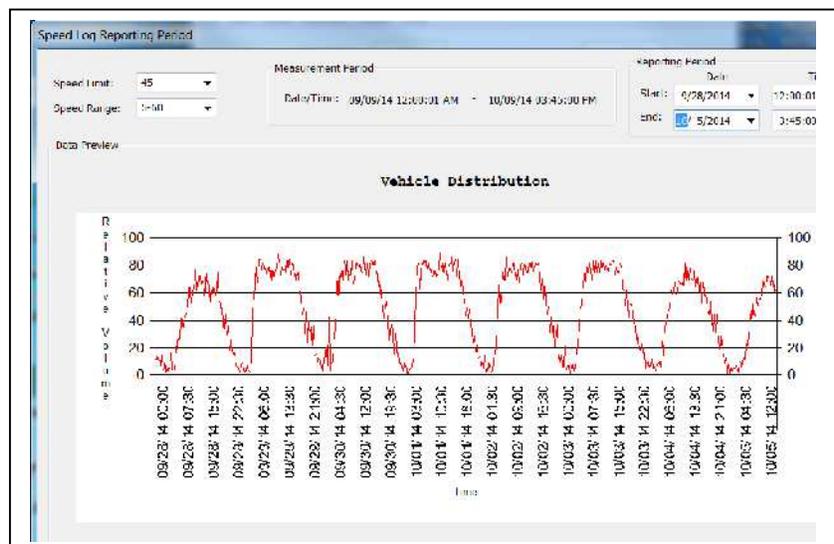
The Show Speed dialog has options to Save, or Print the log, or Show the Charts. When “Show Chart” is selected the “Speed Log Reporting Period” dialog opens to allow the user to select a period of time from within the log from which to calculate the statistics for the charts.

Notice also that there is a provision for selecting the speed range logged and speed limit. If the display is programmed to change the speed collection range or use a different speed limit at certain periods of the day (as may be the case with school zones) then the user can select which speed limit and collection range to use in the calculations. If no selection is made the software will default to one of any speed limit or range changes within the log and will never mix them up.

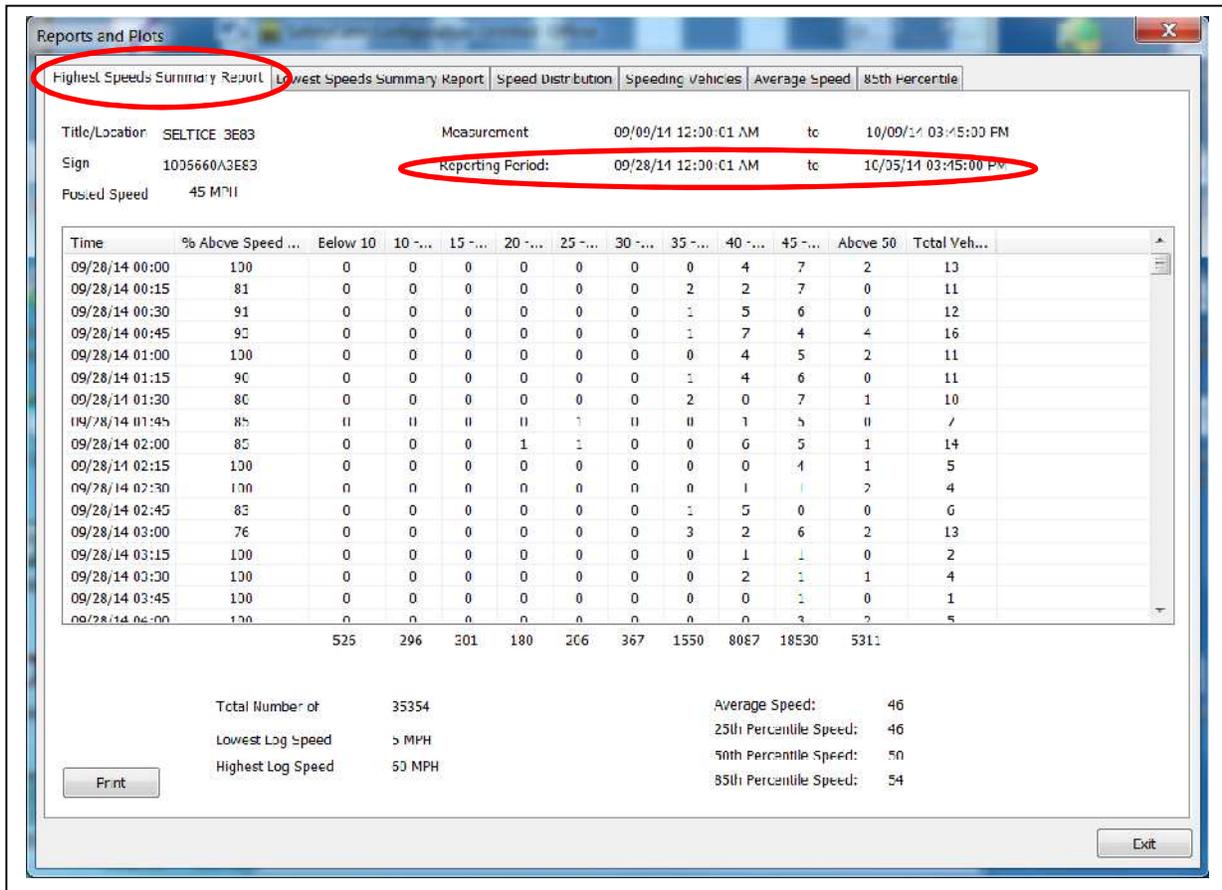


Using the reporting period fields a smaller range of time can be selected to improve the resolution of the chart or zero in on a particular day or week.

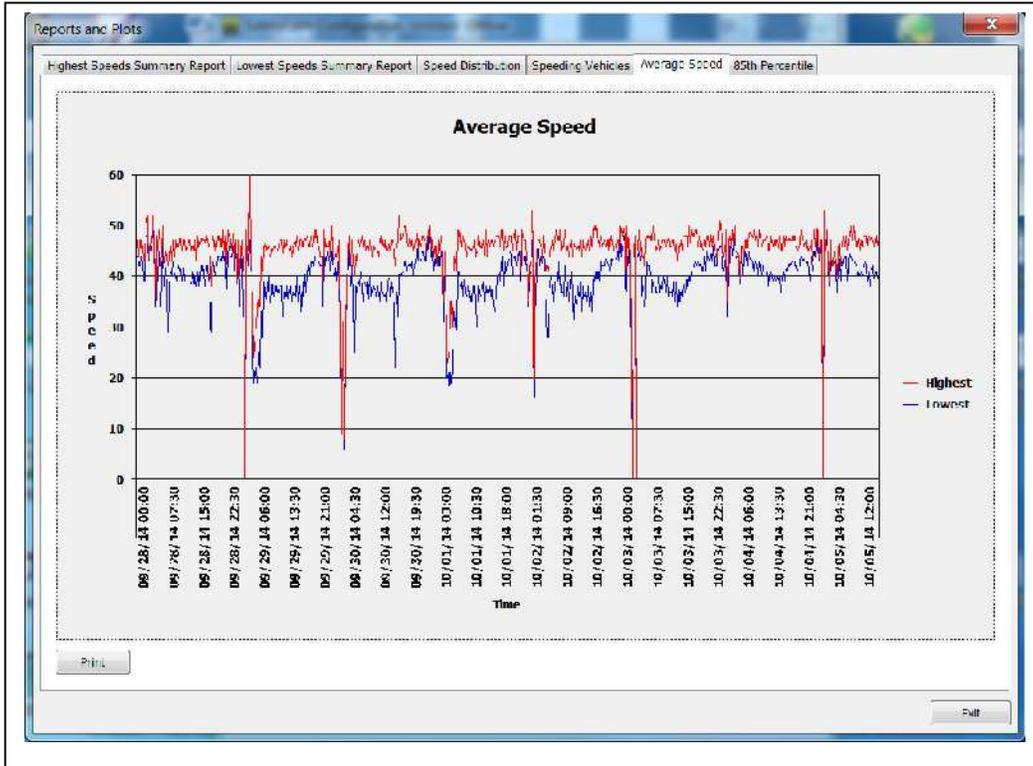
Now that the week has been selected press the “Plots” button to get the Statics plots and charts.



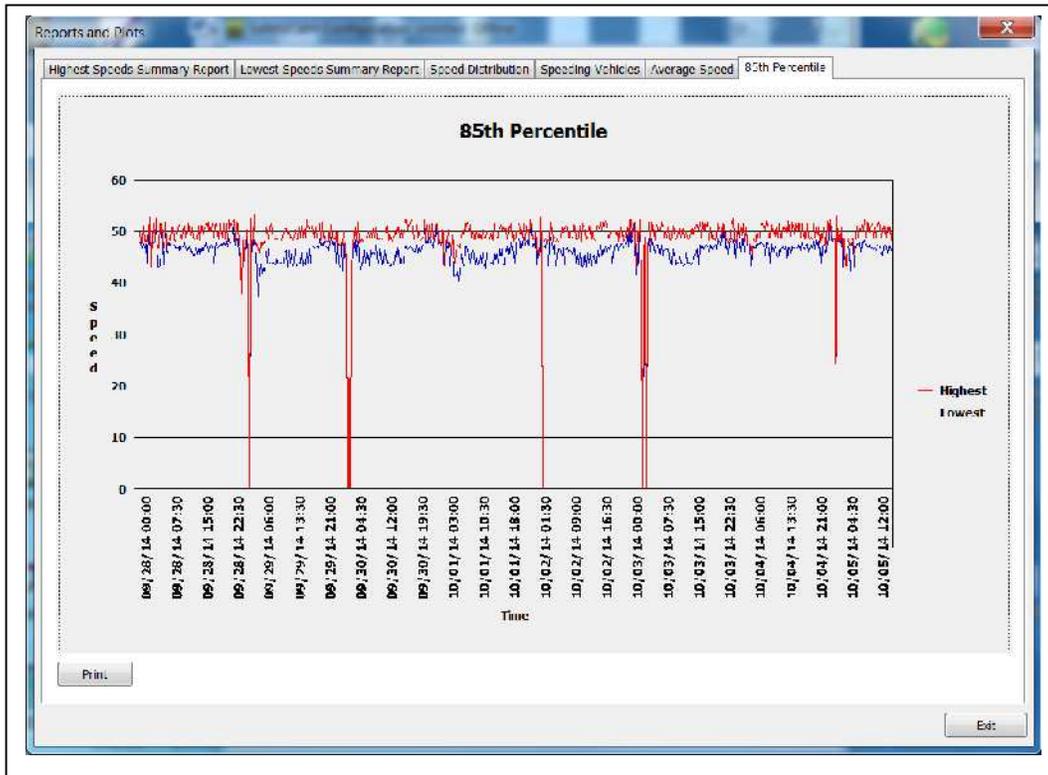
The first dialog that appears shows the speed bins in a tabular form with relative counts and statistics like average speeds and various percentiles, and with information about the display and configuration settings from which the log data was collected. Notice the tabs across the top of the dialog. As indicated, the first chart is a summary of the highest speeds collected and the statistics shown are calculated from that.



The Average Speed plot shows the highest vs. the lowest.



Finally, the 85th percentile plot shows the highest 85th percentile vs. the lowest 85th percentile.



The display performance is recorded in the event log.

This log makes a regular entry showing operating status, voltage applied, internal temperature, photocell level, and an event code in comma delimited format.

A chart has been devise to help visualize the data collected about the display performance.

The light, temperature and voltage are most useful for evaluating solar power performance.

The Event Change and ON/OFF state lines help evaluate programming and schedule activity.

