



**Release Note
February 2009**

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Version 2.1 includes new features and capabilities, and some significant performance gains in video rendering and logger data processing. A number of new and enhanced video format options greatly expand the range of video formats that TrackVision accepts straight from the camera or recorder. The video rendering in this version is faster and sharper than ever.

Here are some of the highlights. All new features are fully documented in the TrackVision User Guide, which is available from the TrackVision menu under Help/Help Topics.

If you are using TrackVision for the first time, click [The Sample Guide](#) to download a quick guide that will walk you through TrackVision using the video and data samples installed with the product. There's no easier way to get familiar with the product.

Enhanced Video Support:

Formats that TrackVision V2.1 opens straight from the camera:

- | | | | |
|---------|-----------------------------|----------|---------------------------|
| - H.264 | including Aiptek HD formats | - DV | standard and 16:9 formats |
| - AVCHD | including .mt2s forms | - MPEG 2 | |
| - DivX | standard and HD forms | - MPEG4 | |
| - XVID | POV-1 camera | - WMV | |
| - MJPEG | GoPro Hero camera | | |

What about .avi and .mov formats?

.avi and .mov are not actually video formats. They are multimedia container formats which can contain both video and audio files in a wide range of formats. For example, a file named myvideo.avi from your camera could contain a video file in DV, WMV, or MJPEG format. Similarly, a file named myvideo.mov from another camera could contain a video file in DV, MPEG1, MPEG4 or H.264 format. The good thing is that TrackVision deals with most of these cases. It opens the avi or mov container and extracts the video file for you.

TV Viewer - Fast DirectX Show Movie Viewer

TrackVision V2.1 introduces TV Viewer, a new high performance DirectX viewer that passes much of that load to the graphics processor. This is the first phase of a new generation of TrackVision features that will make increasing use of the graphics processor to unload the CPU, and to introduce some powerful new features in later versions.

TVMerge, TrackVision's original Show Movie viewer, has been significantly enhanced as well and is included for Mac users and others who cannot access the full power of DirectX. You can select the viewer in Preferences. TV Viewer has a pause button that many users have asked for.

Layered Dashboard Rendering

This new technology dramatically increases performance by selectively rendering static and dynamic dashboard elements. It also introduces new flexibility to control the rendering order of overlaid dashboard elements. For example, the dashboard properties file can now specify that a gauge with shift lights is rendered below the gauge pointer.

Frame Width selection in Save and Show Movie

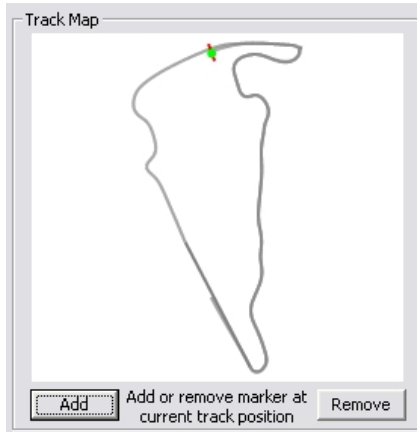
Frame size selection is now exclusively by Frame Width. When you select the frame width you want, TrackVision sets the frame height to match the aspect ratio of your input video.

Project Screen:

Faster logger data processing

Logger data is now processed once and stored in memory for fast access during Show and Save Movie operations. TrackVision no longer has to wait for busy disk drives to serve up the next block of logger data.

New Track Marker technology



Track markers for start/finish and sector markers are now discrete lines perpendicular to the track, and provide higher resolution than the track markers in previous versions. They resolve several issues with low sample rate loggers that could result in missed markers and with some loggers that could result in multiple hits on one pass of a marker at very low speeds.

Track markers can now be added and deleted very accurately by moving the data to a precise point on the track map, and clicking Add to place a new marker or Remove to delete an existing marker.

We've also added a mute button that mutes audio during Show Movie.

Movie Options:

The Dashboard can be adjusted to the size you want, and placed where you want it.



In previous versions, dashboard size and placement were fixed. In V2.1 you can choose where to place the dashboard, and you can adjust the size of the dashboard. All V2.1 dashboards have been updated to take advantage of this new capability. If you have a custom dashboard that you would like to update, just post a request in the Hackers Heaven section of the TrackVision forums, or email support@trackvision.net.

File Size estimate



Movie Options now shows the estimated size of your saved video based on format, frame size and quality you've selected.

New Dashboards

V2.1 includes new dashboard families. These and all V2.1 dashboards can be placed where you want them on the frame, and adjusted to the size that best suits your frame layout.

GaugesII is a dash family which includes versions for MPH and KPH both with 10K or 15K RPM. There's a Racepak GaugesII family as well.



RDGrid is another new family that includes a vertical version as well as the horizontal version shown here, each with 7K and 14K RPM options. All the Throttle and Brake displays are auto sensing. They will only appear if your logger provides data for these channels.



F430 is a special for the tifosi, who prefer something more, um, exclusive 😊



Racepak IQ3 is an analog of the actual display for IQ3 users who like the dashboard to match what they see on the track.



Other dashboard features especially for those that like to tweak their own dashboards:

The GCircle element is now reversible in both axes.

- New gcircle properties are 'scale_lat_accel' and 'scale_lon_accel'

Want lateral Gs to move in the opposite direction in your GCircle display?

Just add a line to the GCircle section of the properties file: `scale_lat_accel = -1;`

Dashboard colors have full alpha control, and support industry standard color formats.

Colors used in dashboard elements can now be partially or fully transparent. This includes text colors, as well as the color areas in sliders, indicators, and element backgrounds.

Making a background transparent is as simple as `background = transparent;`

Making a color transparent is as simple as adding an alpha value `background = <255,255,0,0>;` where `<ttt,rrr,ggg,bbb>` and `ttt` is the transparency value. 255 = opaque, 0 = transparent.

Colors can now be described using a wide range of industry standard color formats.

Full details on these new features, and layered rendering controls are coming in the V2.1 update of the Hackers Guide to Dashboards.

Auto Update Checking:

TrackVision checks for updated versions on startup. Your PC needs to be internet connected for this check, of course. This ensures that you will be notified as soon as an updated version is available.

Error Messages:

Error messages are more granular and more descriptive. Registration errors now distinguish between failure to connect with the registration server and failure due to bad registration data [email or activation key]. Project errors now identify specific files or paths, and describe each error in more detail.

V2.0 Bugs Fixed:

Some 16:9 DV formats that were a problem in V2.0 are correctly handled in V2.1

Aspect ratio and scaling issues that arose in some small number of cases in V2.0 are resolved.

Incorrect logger model was shown as selected when Preferences was opened.

When Preferences was opened, the logger model shown was not the selected logger.

Data files from loggers with very low sample rates cannot be positioned

These files could be run using the play control, but could not be positioned with the slider, or jogged using the >> and << controls.

Data file formats terminated with a CR character could cause TrackVision to crash.

Trackmap artifact on some XP systems

A second image of the track map, often in the form of a black rectangle, appeared on the upper left of the monitor screen.

Clicking outer boundary of track map causes a crash

Clicking in the bottom of the track map caused TrackVision to crash on some systems.

Track maps for tracks in certain latitude & longitude combinations were rendered incorrectly

Tracks in South America where GPS coordinates are negative values for both longitude and latitude were rendered incorrectly. This was also seen in some specific US locations.